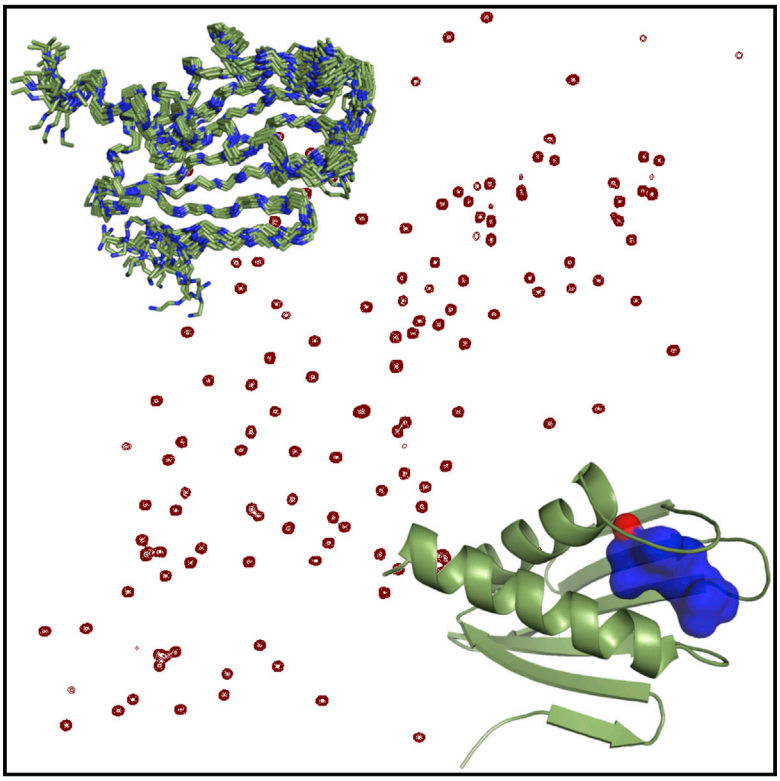
Short Article

Structure

NMR Structure of *Francisella tularensis* Virulence Determinant Reveals Structural Homology to Bet v1 Allergen Proteins

Graphical Abstract



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In Brief

Flpp3, a virulence determinant for the pathogen *F. tularensis*, is a possible target for vaccine and drug development. Zook et al. report the structure of Flpp3, revealing for the first time the internal binding cavity. Flpp3 is structurally homologous to the Bet v1 family of proteins, responsible for many allergic reactions.

Highlights

- Solution NMR structure of novel *F. tularensis* virulence determinant, Flpp3
- Flpp3 displays internal binding cavity for possible drug design
- Electrostatically polarized surface provides insight on membrane association
- Initial NMR relaxation studies suggest slow timescale protein dynamics

Accession Numbers

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Structure
Short Article

NMR Structure of *Francisella tularensis* Virulence Determinant Reveals Structural Homology to Bet v1 Allergen Proteins

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SUMMARY

Tularemia is a potentially fatal bacterial infection caused by *Francisella tularensis*, and is endemic to North America and many parts of northern Europe and Asia. The outer membrane lipoprotein, Flpp3, has been identified as a virulence determinant as well as a potential subunit template for vaccine development. Here we present the first structure for the soluble domain of Flpp3 from the highly infectious Type A SCHU S4 strain, derived through high-resolution solution nuclear magnetic resonance (NMR) spectroscopy; the first structure of a lipoprotein from the genus *Francisella*. The Flpp3 structure demonstrates a globular protein with an electrostatically polarized surface containing an internal cavity—a putative binding site based on the structurally homologous Bet v1 protein family of allergens. NMR-based relaxation studies suggest loop regions that potentially modulate access to the internal cavity. The Flpp3 structure may add to the understanding of *F. tularensis* virulence and contribute to the development of effective vaccines.

INTRODUCTION

Francisella tularensis is the causative agent of the severely debilitating disease tularemia. It is an aerobic, Gram-negative coccobacillus, and a potentially fatal bacterial pathogen that is highly infectious and easily aerosolized. Consequently, the bacterium is sufficiently dangerous to be classified as a class A bioterrorism agent. The type A subspecies, exemplified by the SCHU S4 strain, is an especially potent infectious pathogen given that fewer than ten cells can cause fatality in humans (Dennis et al., 2001). *F. tularensis* is endemic in North America and in many parts of Europe and Asia, but cases of tularemia are relatively low and outbreaks generally only occur in regions with poor sanitation and inaccessibility to modern health care. One of the largest outbreaks in recent history was in postwar Kosovo between October 1999 and May 2000, with 327 confirmed cases (Reintjes et al., 2002).

Development of a vaccine is desirable, since treatment of *F. tularensis* is intensive (Parra et al., 2010) and may be unavailable in undeveloped areas where outbreaks tend to occur. At present only live attenuated vaccines based on the type B live vaccine strain (LVS) are available for *F. tularensis* immunization. The limitations of the LVS vaccine preclude its use in the United States, due to cases of human infection as a result of the improper administration of the vaccine and insufficient acquired immunity. The lack of acquired immunity from the current LVS vaccines has been reported to leave 20%–30% of the population susceptible to infection (Isherwood et al., 2005; McCrumb, 1961; Saslaw et al., 1961).

The protein derived from *F. tularensis* LVS open reading frame (ORF) FTL_0645 was identified to cause an immunogenic response in mice through the toll-like receptor 2 pathway, and therefore is likely a target for a subunit vaccine (Parra et al., 2010). The amino acid sequences of the proteins FTL_0645 from LVS and FTT1416c from SCHU S4 are identical. FTL_0645/FTT1416c is a lipoprotein localized to the outer membrane. It possesses a signal sequence and a lipobox consensus sequence (Ile-Ser-Gly-Cys), and has been named Flpp3 (*Francisella* lipoprotein 3) (Parra et al., 2010). Flpp3 has also been identified as a virulence determinant via mutagenesis studies: a significant decrease in *F. tularensis* virulence via respiratory infection was observed upon insertion-mutation of the ORF encoding Flpp3 (FTT1416c) (Su et al., 2007). Structural information may also shed light on the precise function of Flpp3, which is currently unknown.

No atomic resolution structures yet exist for any lipoprotein from the genus *Francisella*. In this study, we obtained the structure of the entire soluble domain of Flpp3 (Flpp3sol), comprising residues D26 to the C-terminal residue T137. Structural determination of the soluble domain independently from the transmembrane region can provide the first important structural and potentially functional information on this membrane protein. Furthermore, still under discussion is the question whether the mature protein is anchored to the membrane by a single transmembrane domain or by a lipid. It has been proposed that the

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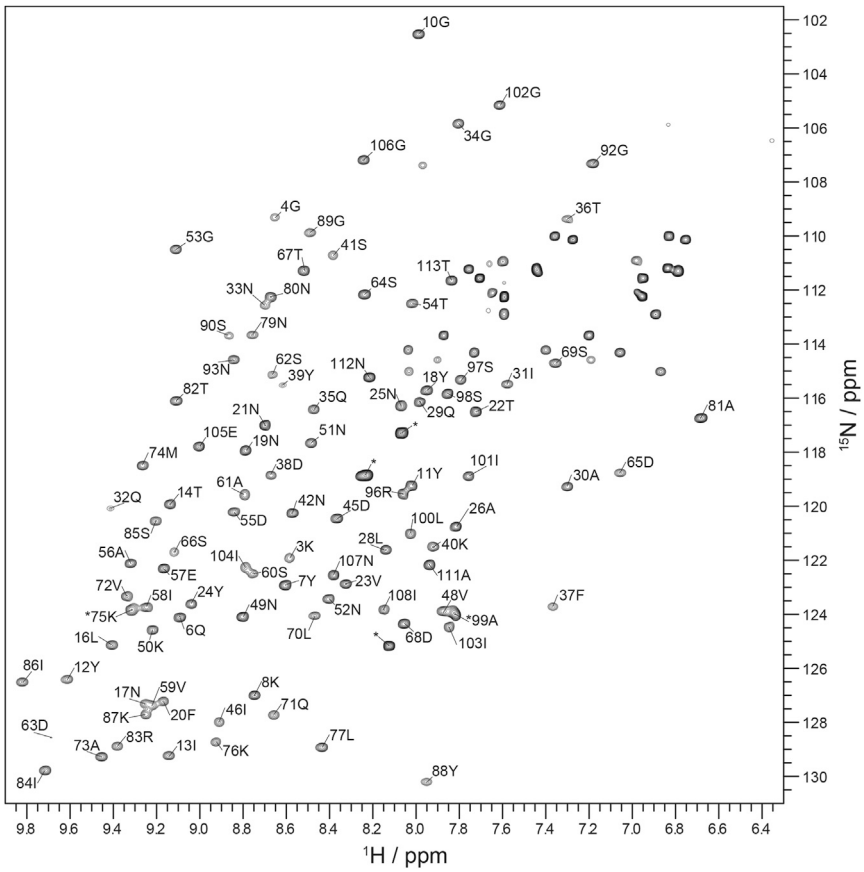


Figure 1. Assigned 2D ^{15}N-HSQC Spectrum of Flpp3sol

The NMR spectrum displays a wide proton dispersion with narrow peak widths, indicative of a protein with significant β-sheet and α-helix content.

transmembrane domain of Flpp3 could be removed by signal peptidase and the mature protein anchored by lipidation, as observed upon expression of recombinant Flpp3 in *Escherichia coli* (Parra et al., 2010). In this study, we report on the hydrophilic domain of Flpp3 at atomic resolution structure determined by multi-dimensional nuclear magnetic resonance (NMR) spectroscopy on isotopically enriched protein.

RESULTS

Purification and Biophysical Characterization of Flpp3sol

Final yields of pure Flpp3sol after size-exclusion chromatography averaged 3.4 mg of protein per liter of cell culture. Coomassie-stained and Western blotted SDS-PAGE (Figure S1A) analyses determined that the Flpp3sol purity was sufficient for biophysical characterization and structure determination. Circular dichroism (CD) spectroscopy revealed a peak maximum at 193 nm, a single minimum at 216 nm, and a slight negative shoulder at about 209 nm, suggesting a protein containing both α-helical and β-strand components (Figure S1B). Secondary structure content was estimated to 37%, 27%, and 14% for the α-helical, β-strand, and random coil, respectively, using CDPro software (described in Supplemental Information). Far-UV CD studies indicate that Flpp3sol is moderately thermally stable with a melting temperature (T_m) of 59.5°C (Figure S1C).

Dynamic light scattering (DLS) revealed a dominantly monodispersed protein (polydispersity [Pd] = 18.2%) with a Stokes radius of approximately 2.3 nm (Figure S1D). In addition, two-dimensional (2D) ^{15}N-labeled heteronuclear single quantum coherence (HSQC) experiments resulted in narrow peak widths and wide proton dispersion (Figure 1), indicating a well-structured protein with considerable β-strand content.

Three-dimensional (3D) NMR spectra feature well-resolved resonance peaks that allowed 96.7% and 75.0% completion for backbone and side-chain assignments, respectively. The quality of the assignment data is illustrated in Figure S2. While the core domain of Flpp3 is well ordered, the C and N termini are flexible and sample a wide range of electronic environments. As electrons are responsible for the chemical shift values, the averaged NMR signal for an atom experiencing many different electronic environments can be drastically reduced. This flexibility prevented assignment of the starting methionine and the five terminal histidine residues. The latter residues represent the hexahistidine tag added for protein purification. All assignments have been deposited in the Biological Magnetic Resonance Data Bank under accession number BMRB: 25168.

Structure of Flpp3sol

The final structure calculation utilized 1945 nuclear Overhauser effect (NOE)-based distance restraints: 306 intra-residue, 603 sequential, 397 medium-range, and 639 long-range. The ensemble of 20 structures demonstrated a backbone root-mean-square deviation (RMSD) of 0.6 Å and 1.2 Å for ordered residues (S(phi) + S(psi) > 1.8) and all residues, respectively (Figure 2A).

The calculated structure reveals that Flpp3 consists of a six-stranded β sheet supported with two crossing α helices (Figure 2B). Ramachandran analysis of ordered regions placed 98.9% of residues in the "most favored regions" with only 1.0% of residues in the "additional allowed regions" and only one residue from one structure of the ensemble (0.1%), T54, in the "generously allowed region." Global quality Z scores were −1.12, −0.54, 0.20, −1.06, and −1.33 for Verify3D, ProsaII (-ve), Procheck (phi-psi), Procheck (all), and MolProbity Clashscore, respectively, indicating a relatively well-resolved atomic resolution structure of Flpp3sol. The structure has been deposited under accession number PDB: 2MU4. A statistical summary

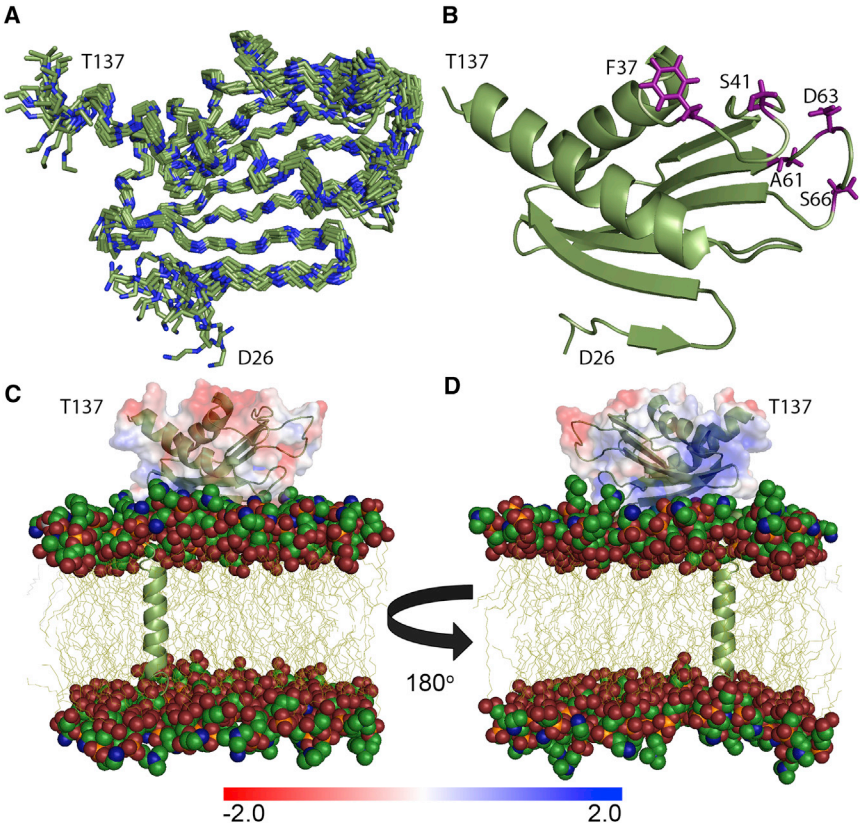


Figure 2. Structure of Flpp3sol and Model of Flpp3 Inserted into the Membrane

(A) Overlay of the 20 lowest-energy models after water bath refinement.

(B) Cartoon model of the lowest-energy model of Flpp3sol. Residues F37, S41, A61, D63, and S66 may be dynamically important as per initial relaxation results, and are shown in violet.

(C and D) The transmembrane helix (residues Met1 to Thr25) modeled onto the N terminus of Flpp3sol and inserted into a POPC/POPE membrane. MD production simulations were run for 1 ns with experimental restraints followed by another 1 ns without restraints. The hydrophobic region of the helix spans the entire length of the membrane with a positively charged N terminus (not seen). Model is rotated 180° to show both sides of the protein. An electrostatic surface is plotted onto the model to show polarity between the membrane proximal region (blue/positive) and the membrane distal region (red/negative).

of the data analysis and structural parameters is shown in Table S1.

The structure shows that Flpp3 is considerably polarized (Figures 2C and 2D). When an electrostatic surface was plotted onto Flpp3sol using PyMOL's Adaptive Poisson-Bolzmann Solver (APBS) (Baker et al., 2001), the protein featured a strongly positive area that is primarily localized to the β-sheet region, with a large electronegative area around the helices and elongated loops (Figures 2C and 2D). Another notable characteristic of the Flpp3sol structure is the presence of a hydrophobic internal cavity formed primarily by the elongated loop between helix 1 and sheet 3 (Figure 3E). The size and shape of this cavity is highly variable across the different members of the ensemble as calculated by tools provided by Swiss-PdbViewer (Guex and Peitsch, 1997), likely due to a limited number of structural constraints for that part of the protein. On average this cavity has a volume of 185 Å^3, but can range between 55 and 435 Å^3 between members of the structural ensemble.

Molecular dynamics (MD) simulations of the membrane-bound Flpp3 containing the modeled transmembrane helix placed the protein on the surface of the membrane with the lipophilic α helix spanning the entire length of the membrane (Figures 2C and 2D). Although longer MD simulations are required to observe large conformational changes and are thus beyond the scope of this study, shorter MD simulations provide insight into the behavior of the flexible loop regions on shorter timescales.

The cavity of Flpp3sol changes structurally throughout the MD run (detailed in Supplemental Experimental Procedures). The opening to the hydrophobic pocket widens to a size more accommodating for binding small molecules. In addition, the size of the pocket varies significantly between 0 and 150 ns, ranging between 601 and 200 Å^3, and appears to equilibrate to about 250 Å^3; the cavity at the end of the simulation run is illustrated in Figure S3A and observations are illustrated by Figure S3B. The root-mean-square fluctuation (RMSF) was also calculated for the last 200 ns of the unrestrained MD production run. Neglecting the termini that display large distance variations over time, the largest RMSF components are contributed to the transmembrane helix ranging from about 1.0 to 1.3 Å, and the loops between helix 1 and sheet 3 and between sheets 4 and 5, which demonstrated a greater range of RMSF values, are between 1.0 and 2.0 Å (Figure S3C). These two loops are also largely responsible for the formation of the pocket and contribute to the variation of the pocket volume.

We performed a homology search using the Dali server (Holm and Rosenstrom, 2010). The results indicate that Flpp3sol show structural similarities (Z score >7.5) to proteins belonging to the Bet v1 protein family (Figures 3A–3F). Interestingly, many of the proteins in this family are allergens, including the birch pollen allergen, for which this family is named after, and the peanut allergen. These proteins share only a 9% and 11% sequence identity to Flpp3sol, respectively, and are slightly larger (159 and 156 residues for birch pollen allergen and peanut allergen, respectively) due to two additional C-terminal β strands of the β sheet prior to the N-terminal α helix (Figure 3B). Similar to Flpp3sol, the Bet v1 proteins generally feature a hydrophobic cavity; the comparison shown in Figures 3E and 3F indicate that the cavity in the Bet v1 protein may be larger in size compared with Flpp3 (>1,000 Å^3 for the birch pollen allergen 1FM4). Cavities in the Bet v1 family of proteins are known to bind a wide variety of molecules (Radauer et al., 2008). Due to the low sequence homology, the structural similarity to the Bet v1 family and Flpp3 was not previously known and was first

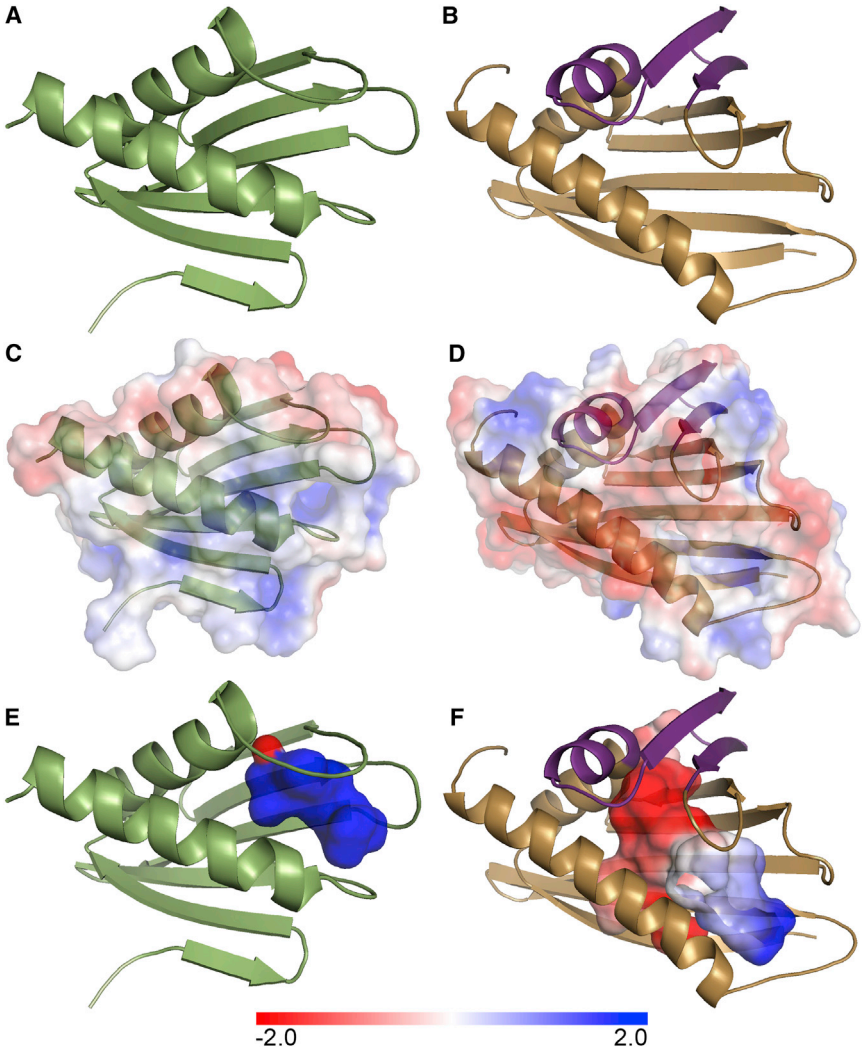


Figure 3. Comparison of Flpp3sol and Structurally Homologous Bet v1 Protein Birch Pollen Allergen

(A and B) Secondary structure and overall fold topology of Flpp3sol (A) and structurally homologous Bet v1 protein birch pollen allergen (1FM4) (B). The Bet v1 proteins are larger due to two extra β strands that distort the first α helix (purple).

(C and D) Electrostatic surface plotted onto Flpp3sol (C) and 1FM4 (D). Flpp3sol has a polarized surface with a negatively charged (red) side and a positively charged (blue) region compared with 1FM4.

(E and F) The internal cavity is shown for Flpp3sol (E) and 1FM4 (F). The two extra β strands (purple) in 1FM4 provide additional cavity space that is limited by Flpp3sol.

identified from our structural analysis. The fact that Flpp3 features a hydrophobic cavity is an interesting and novel finding, and may be the subject of broad drug screening in the future. The comparison of the Bet v1 protein and Flpp3 also reveals that the polarized electrostatic surface is unique to Flpp3sol, as it is not found on proteins of the Bet v1 family (Figures 3C and 3D).

Intramolecular Dynamics of Flpp3sol

NMR spectroscopy is the ideal tool to experimentally probe the dynamics of Flpp3 at an atomic level. For the study of the fast timescale protein dynamics, the ^{15}N longitudinal (R_1) and transverse (R_2) relaxation rates and heteronuclear NOE values were measured for all resolved, assigned resonances in the 2D ^{15}N-HSQC spectrum at a magnetic field strength of 500 MHz. The relaxation measurements are expressed in terms of rates where $R_1 = 1/T_1$ and $R_2 = 1/T_2$, with NOE values expressed in relative intensity ratio. The results are shown in Figures 4A–4C. Initial relaxation analysis of Flpp3sol revealed a highly rigid protein with dynamic termini, particularly the N terminus (Figure 4). The lack of NOEs in the extended loop regions contributes to an increase in C_α RMSD, which may suggest increased backbone flexibility. Additional evidence for this is illustrated by the increased C_α RMSF in those regions reported by the MD simulations. The increased R_2 values shown by specific residues in the loops (F37, S41, A61, D63, and S66 in Figure 2B) may indicate slower conformational changes by way of chemical exchange. The Stokes radius of Flpp3sol, determined from the relaxation experiments, was calculated to be 1.98 nm from a correlation time of 8.01 ns. This corresponds well with the radius calculated by DLS (2.3 nm).

DISCUSSION

The NMR studies resolved the structure and dynamics of the membrane extrinsic domain of the Flpp3 protein. It is the first structure of a lipoprotein from *F. tularensis*. The structural model determined by multidimensional NMR spectroscopy revealed that Flpp3 is a largely spherical protein that contains a six-stranded β sheet, two α helices, and three loops. The function of the loops and its interaction partners may provide additional information on the functional nature of the protein. Based on analysis of the R_2 and R_1 relaxation rates, we note that residues flanking the major loop (Gly34–Asp45), including residues Q32, N33, F34, D45, and I46, undergo conformational exchange (R_{ex}) on the biologically relevant microsecond to millisecond timescale. This major loop in the Flpp3 structure occludes access to the internal cavity. The relaxation data are consistent with loop-regulated access to the internal cavity, which is largely hydrophobic and sufficiently large to bind small molecules. While conformational exchange of these residues is qualitatively compelling, quantitative analysis from these data is complicated as there is no indication of the magnitude of these motions; as such, we cautiously note the correlation between loop conformational exchange and access to the internal cavity. Flpp3 shares strong structural homology with the Bet v1 family of proteins, which are responsible for

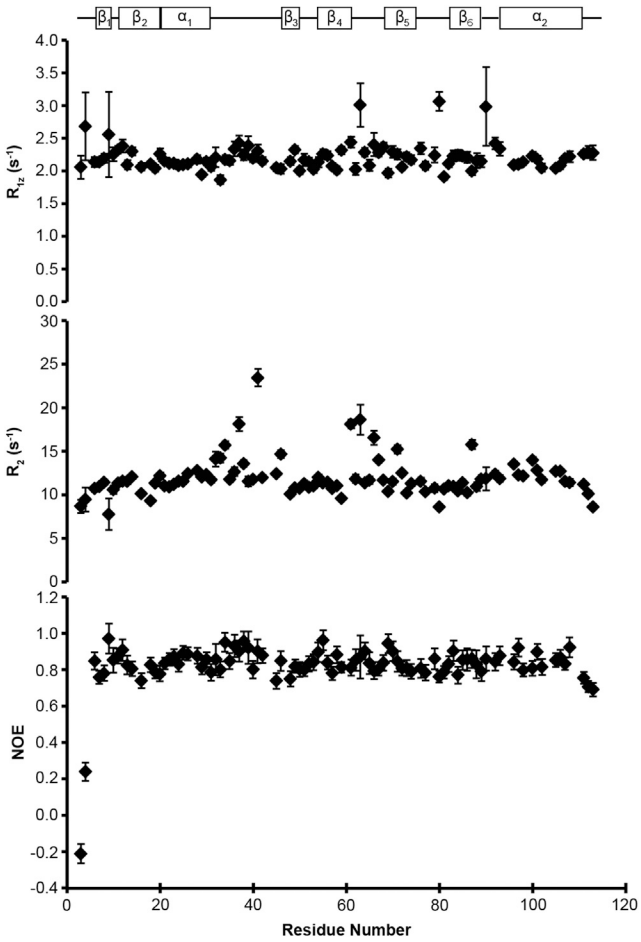


Figure 4. ^{15}N-NMR Relaxation Studies

R_1 data do not vary considerably between residues and demonstrates an overall constant rate of 2.2 ± 0.2 s^{-1}. R_2 data reveal a fairly constant relaxation rate throughout the structured regions of Flpp3sol. Flexible termini show slightly decreased values while several residues in the loop region reveal much greater R_2 relaxation rates, which may be the result of chemical exchange. In the steady-state heteronuclear NOE experiment, NOE values are relatively large and unchanging. The histidine tail did show a negative NOE value but was left out of the analysis because of inability to resolve individual histidine residues. Error bars reflect ±1 SD from the calculated mean.

binding relatively small organic molecules (Radauer et al., 2008), despite the fact that they show less than 10% sequence identity. The fact that members of this protein family are very strong allergens (including the birch and peanut allergens) indicates that the proteins of this family cause strong immune responses, which makes Flpp3 a very promising target for a vaccine development.

The structure of Flpp3 revealed for the first time that the protein is structurally homologous to the Bet v1 superfamily of proteins. These proteins share a similar fold, with a seven-stranded β sheet and two α helices. However, major structural differences exist, as the Bet v1 proteins have a seventh β strand to compose the β sheet and they do not feature the highly polarized surface that is a unique feature of Flpp3. Proteins from the Bet v1 family have been reported to bind a wide range of hydrophobic molecules (Radauer et al., 2008), from fairly large brassinosteroids (Markovic-Housley et al., 2003; Neudecker et al., 2001) (~480 Da) to smaller molecules such as dopamine (153 Da) (Liscombe et al., 2005) in addition to flavonoids and cytokinins (Koistinen et al., 2005; Mogensen et al., 2002).

The SVMProt algorithm suggests that Flpp3 belongs to a lipid-binding protein family (Cai et al., 2003). Therefore, it seems likely that the Flpp3 cavity functions as a binding pocket for small molecules. This is particularly interesting because of the involvement of Flpp3 in respiratory-induced tularemia, where it acts as a virulence determinant and possibly a virulence factor (Su et al., 2007). This cavity also provides an intriguing opportunity for therapeutic intervention, given that mutation of Flpp3sol leads to reduced virulence in a mouse model of lung infection (Su et al., 2007).

The relaxation studies by NMR show that Flpp3sol is a relatively rigid molecule with the exception of two fairly flexible loop regions. The relaxation data also suggest that several residues (including F37, S41, A61, D63, and S66) may be involved in slower, microsecond to millisecond timescale motions, which may prove useful in understanding protein function, given that these residues are located in loops in close proximity to the cavity. Perhaps the candidate residues are involved in gating access to the interior cavity. Efforts to understand the more detailed dynamics of Flpp3sol are under way and will involve coupling screening studies in addition to further NMR-based dynamics studies, such as CPMG-based relaxation dispersion, which will provide detailed information on how dynamics are affected by ligand binding and protein dynamics on longer timescales.

The polarized electrostatic potential suggests Flpp3 orientation with respect to the membrane. We speculate that the electropositive surface area of the protein serves as a means to orient the protein against the negatively charged surface of the inner leaflet of the outer membrane. This would orient the ligand-binding region of the protein away from the lipid bilayer.

Current efforts are being directed toward understanding the protein functionality, with special focus on experimental and computational drug-binding studies. We expect that the Flpp3 structure will add to the understanding of *F. tularensis* virulence and contribute to the development of effective vaccines.

EXPERIMENTAL PROCEDURES

Cloning of Flpp3sol

To allow T7 promoter-based expression of a C-terminally hexahistidine-tagged protein, the pRSETC6xHis vector was constructed by modification of the small *Bse*RI/*Eco*RI fragment of pRSET-natGFPHis (Martin-Garcia et al., 2014). The sequence corresponding to Asp26–Thr137 (Flpp3sol) of the ORF FTT1416c from SCHU S4 (Larsson et al., 2005) was amplified and cloned into *Bse*RI-digested pRSET-C6xHis to yield a C-terminal hexahistidine-tagged soluble domain of Flpp3 pRSET-FTT1416sol-6xHis. This construct allows expression of the Flpp3sol fragment plus an N-terminal methionine and a C-terminal hexahistidine. Construct integrity was confirmed by DNA sequencing. All vectors and their sequences are available from the PSI:Biology-Materials Repository at DNASU (http://dnasu.org) (Seiler et al., 2014).

Expression, Purification, and Biophysical Characterization of Flpp3sol

The Flpp3sol plasmid construct was expressed in Lemo21 (DE3) *E. coli* cells (New England BioLabs) and purified by Ni-NTA affinity chromatography followed by size-exclusion chromatography, detailed in the Supplemental Experimental Procedures. UV CD spectroscopy was used to probe thermostability, DLS was used to confirm a monodispersed protein solution, and 2D ^{15}N-HSQC was used to qualitatively evaluate protein structural integrity.

NMR Spectroscopy Experiments

All NMR experiments and structure calculations were performed using well-established methods and are detailed in Supplemental Experimental Procedures. In brief, triple-resonance HNCO, HNcaCO, HNCA, HNCACB, and CBCAcoNH experiments were carried out for backbone chemical shift assignments on 800 μM ^{15}N, ^{13}C, ^{1}H Flpp3sol. HCCH-TOCSY, CcoNH, and HccoNH were used for side-chain proton and carbon assignment. Data acquisition parameters are detailed in Supplemental Information and are outlined in Table S2 for each 3D experiment. NMR experimental data were processed using qMDD for non-uniform sampled data and NMRPipe for all uniformly collected experiments (Delaglio et al., 1995; Orekhov and Jaravine, 2011). The experiments were then analyzed using CcpNmr Analysis (Vranken et al., 2005).

Long-distance structural restraints were obtained through the use of assigned ^{13}C- and ^{15}N-edited NOE spectroscopy (NOESY) experiments. The automated assignment was performed via the CYANA Noeassign macro while supplying backbone torsion angles calculated from backbone chemical shift data (Guntert et al., 1991, 1997; Herrmann et al., 2002; Lopez-Mendez and Guntert, 2006).

Relaxation experiments were carried out to probe fast timescale dynamics studies. R_1, R_2, and steady-state heteronuclear NOE experiments were collected on ^{15}N nuclei. All relaxation NMR data were processed by NMRPipe (Delaglio et al., 1995) and relaxation data were analyzed by the program relax (Bieri et al., 2011; d'Auvergne and Gooley, 2008a, 2008b). Relaxation data analysis to probe residues experiencing significant (μs-ms) conformational exchange were identified using an established method from the Bax group (Tjandra et al., 1995).

Structural Restraints and Calculation of Flpp3sol

The chemical shift values were analyzed by TALOS+ to predict backbone torsion angles (Shen et al., 2009). After assignment of proton chemical shifts and subsequent NOESY spectra, NOE values were binned into short (1.8–2.4 Å), medium (1.8–3.0 Å), long (1.8–4.0 Å), and very long (1.8–5.0 Å) distances based on peak intensity. These distance restraints and torsion angle restraints were used for calculating an ensemble of structures using simulated annealing methods followed by structure refinement using explicit water protocols, described in detail in Supplemental Experimental Procedures. The 20 lowest-energy structures were analyzed by the Protein Structure Validation Suite (PSVS) (Bhattacharya et al., 2007) to assess the overall structure quality. MD simulations were performed using Amber 10 employing conventional techniques; these are described in detail in Supplemental Experimental Procedures (Case et al., 2005; Pearlman et al., 1995).

ACCESSION NUMBERS

Assignments have been deposited in the Biological Magnetic Resonance Data Bank (BMRB: 25168). The structure of Flpp3sol has been deposited in the PDB (PDB: 2MU4).

SUPPLEMENTAL INFORMATION

Supplemental Information includes Supplemental Experimental Procedures, three figures, two tables, and 3D molecular models and can be found with this article online at http://dx.doi.org/10.1016/j.str.2015.03.025.

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Structure, Volume *23*

Supplemental Information

NMR Structure of *Francisella tularensis* Virulence Determinant Reveals Structural Homology to Bet v1 Allergen Proteins

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Supplemental Data

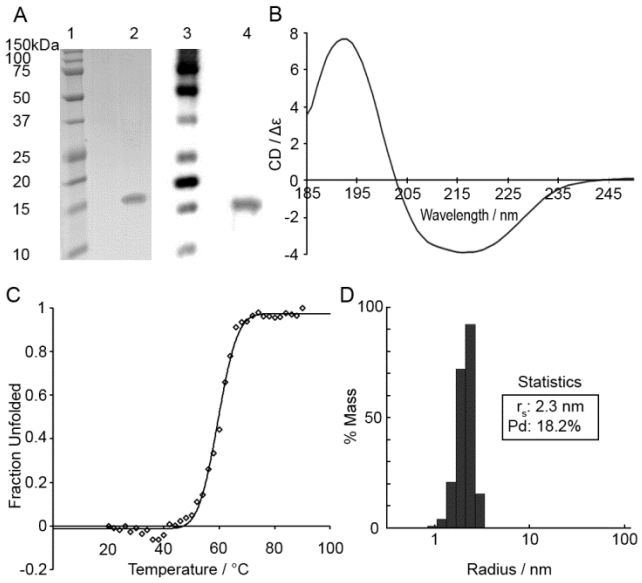


Figure S1, related to the expression, purification, and biophysical characterization in experimental procedures. Biophysical characterization of Flpp3sol. (A) Coomassie stained gel (left) and Western blot (right) using an anti-pentahistidine antibody (Qiagen). Molecular weights are indicated in kDa. (B) CD spectrum. (C) Thermal melt monitoring CD at 216 nm as a function of temperature. (D) DLS of 200 µM of Flpp3sol.

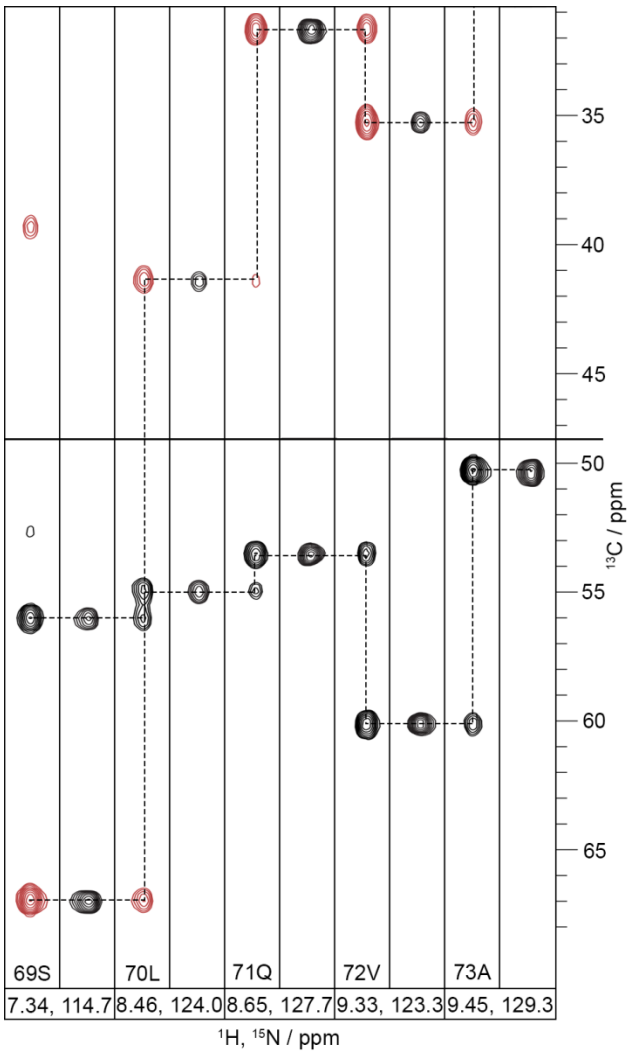


Figure S2, related to Figure 1. A Section of strip plots used to assign Flpp3sol chemical shifts. Residues were assigned using data from HNCACB (left) and CBCAcoNH (right) experiments. 3D NMR spectra demonstrated well resolved resonances resulting in nearly complete assignment of Flpp3sol backbone. Red resonances indicate HNCACB negative peaks for the C_β carbon.

NMR Structure of *F. tularensis* lipoprotein Flpp3

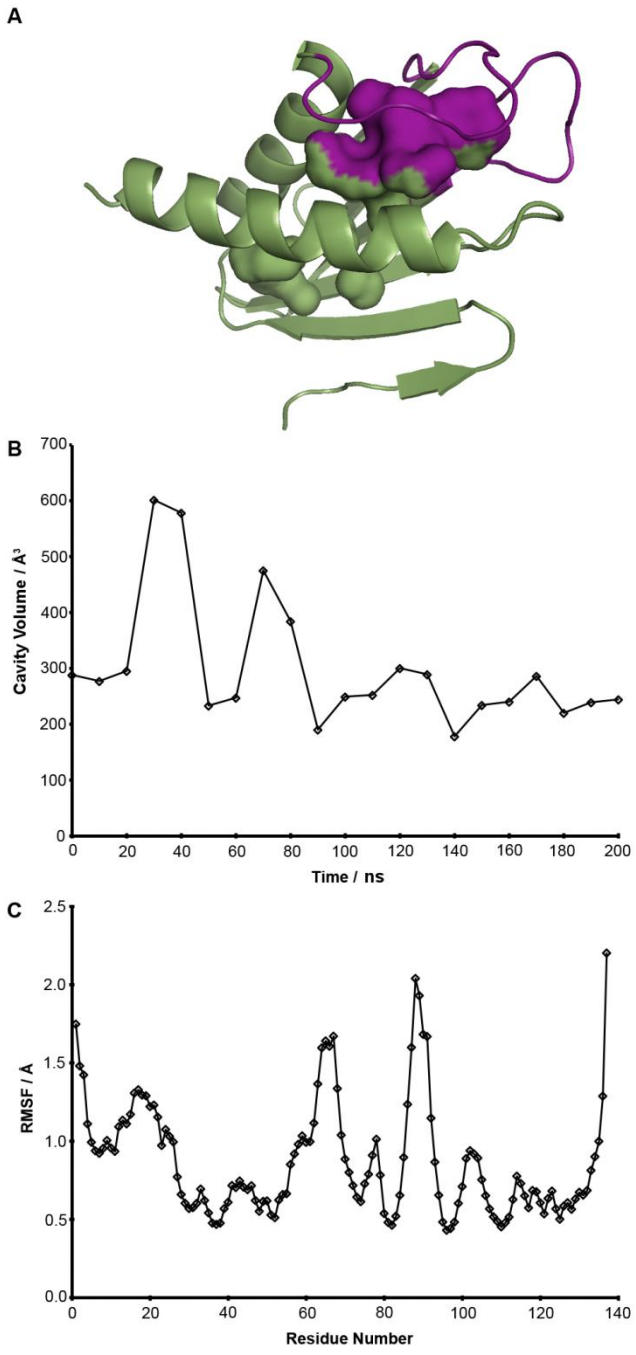


Figure S3, related to Figure 2. MD simulation results. (A) Final structure after the final production run. The flexible loops (as determined by MD RMSF) along with the surface of the cavity they adjoin are colored purple. These loops contribute to the majority of the cavity structure. (B) Cavity volume of Flpp3sol as a function of time over the last 200 ns of the final 1 μs production run. High variability is observed between 0 and 100 ns and then equilibrates to about 250 $Å^3$. (C) Root mean standard fluctuations show significant distance fluctuations in the loops surrounding the cavity opening (residues 60-70 and 85-95) as well as in the protein termini.

Table S1, related to Figure 2.

Summary of structural statistics for the soluble portion of lipoprotein Flpp3 of *Francisella tularensis*.

Completeness of resonance assignments [a]			
Backbone (%)			96.7
Side Chain (%)			75.0
Conformationally restricting restraints [b]			
Distance restraints:			
Total			1945
Intra-residue (*i*=*j*)			306
Sequential (|*i*—*j*|=1)			603
Medium range (1< |*i*—*j*|<5)			397
Long range (|*i*—*j*|≥)			639
Dihedral angle restraints			192
Hydrogen bond restraints			0
Disulfide bond restraints			0
No. of restraints per residue			19.1
No. of long range restraints per residue			5.7
Residual restraint violations [b]			
Average no. of distance violations per structure:			
0.1-0.2 Å			6.95
0.2-0.5 Å			0.25
>0.5 Å			0
Largest distance violation (Å)			0.23
Average no. of dihedral angle violations per structure:			
1-10°			35.8
>10°			0
Largest dihedral angle violation (°)			8.00
NOE completeness score			
Model quality [b]			
RMSD backbone atoms (Å) [c]			0.6
RMSD heavy atoms (Å) [c]			1.2
RMSD bond lengths (Å)			0.016
RMSD bond angles (°)			1.4
MolProbity Ramachandran statistics [b, c]			
Most favored regions (%)			98.9
Allowed regions (%)			1
Disallowed regions (%)			0.1
Global quality scores raw/Z-score) [c]			
Verfiy3D	0.39		-1.12
Prosall	0.52		-0.54
ProCheck (phi-psi) [c]	-0.03		0.20
ProCheck (all) [c]	-0.18		-1.06
MolProbity clash score	16.65		-1.33
Model contents			
Ordered residue range [c]		5-42, 44-51, 53-67, 69-77, 80-112	
Total no. of residues		119	
BMRB accession number	25168		
PDB ID	2MU4		

[a] These structural statistics were computed from an ensemble of 20 structures.
[b] Calculated using PSVS 1.5. Ramachandran statistics calculated by Molprobity. Distance violations calculated using sum over r^{-6}.
[c] Based on ordered residues with dihedral angle order parameter, S(phi) + S(psi) ≥ 1.8.

Table S2, related to NMR spectroscopy experiments in experimental procedures.
Summary of 3D NMR Experiments.

		Number of complex points and sweep width per dimension							
		F_3 (direct)		F_2 (indirect)		F_1 (indirect)			
Experiment	**Transients**	**Points**	**SW (Hz)**	**Points**	**SW (Hz)**	**Points**	**SW (Hz)**	**% NUS**	**Mixing time (ms)**
HNCO	8	1730	7211.5	64	1885.3	112	2716.7	35	
HNcaCO	16	1730	7211.5	56	1885.3	128	2716.7	35	
HNCA	16	1730	7211.5	64	1885.3	128	5281.9	35	
HNCACB	48	1730	7211.5	64	1885.3	112	9658.2	45	
CBCAcoNH	40	1730	7211.5	64	1885.3	112	9658.2	40	
HCCH-TOCSY	24	1682	8417.5	64	11318.2	192	8417.5	50	12
CcoNH	16	2048	9615.4	64	2128.6	192	11318.2	45	12
HccoNH	16	2048	9615.4	64	2128.6	192	9615.4	50	12
^{13}C-NOESY	16	2048	11904.8	96	16035.8	192	11904.8	50	150
^{15}N-NOESY	16	2048	11904.8	64	3102.4	192	11904.8	50	150

Supplemental Experimental Procedures

Cloning of Flpp3sol

Genomic DNA from *F. tularensis* subsp. *tularensis* strain SCHU S4 was provided by Dr. C. Rick Lyons, Dr. Terry H. Wu, and Dr. Jason Zsemlye, Center for Infectious Disease and Immunity, University of New Mexico. Sequence amplification was achieved using the Takara PrimeSTAR Max DNA Polymerase (Clontech Mountain View, CA) and cloned into *Bse*RI-digested pRSET-C6xHis using the ligation-independent In-Fusion HD Kit (Clontech). The forward and reverse primers for In-Fusion cloning of the FTT1416c fragment into pRSETC6xHis were GAAGGAGATATACATatg*GACAAAGGAACCCAGTAT* and GTGATGGTGGTGATG*TGTATTAGCGTAGCGAATATTTCC*, respectively. The sequence in the primers from pRSET-C6xHis is underlined, that from FTT1416c is italicized, and the methionine start codon is in lowercase. DNA sequence confirmation

was performed at the School of Life Sciences DNA Laboratory at Arizona State University.

Expression, Purification, and Biophysical Characterization of Flpp3sol

An overnight culture of 10 mL Terrific Broth (TB) with 100 µg/mL ampicillin was used to inoculate a 1 L culture of TB medium. Protein requiring isotope enrichment used 1 L of M9 Minimal medium supplying ^{15}N-ammonium and ^{13}C-glucose as the sole nitrogen and carbon sources, respectively. Cultures were incubated at 37 °C to OD_{600} = 0.8, induced with 1 mM IPTG, incubated for 5 hours, then the cells were pelleted and stored at -80 °C. The cell pellet was thawed on ice and suspended in 20 mL of ice-cold suspension buffer (300 mM sodium chloride, 50 mM Tris pH 8.0, and 10 mM imidazole). Cell suspension was lysed via sonication on ice for 10 second pulses, cooling for 10 seconds between pulses, repeating five times. Cell lysate was centrifuged for 30 minutes at 38,000 x g at 4° C. Supernatant was incubated with 3 mL of Ni-NTA Superflow resin (Qiagen) for 1 hour at 4° C. The slurry was then added to a gravity flow column and the flowthrough was discarded. Column was washed four times with 10 mL of wash buffer (300 mM sodium chloride, 50 mM Tris pH 8.0 and 20 mM imidazole). Flpp3sol was eluted with 10 mL of elution buffer (300 mM sodium chloride, 50 mM Tris pH 8.0 and 300 mM imidazole). Eluted protein was concentrated to 1 mL using a 10 kDa molecular weight cut-off (MWCO) spin filter, centrifuging at 2000 x g in 5 min increments. 500 µL of concentrated protein was injected onto a Superdex 200 10/200 GL column (GE Healthcare) equilibrated with sample buffer (100 mM sodium chloride, 20 mM sodium phosphate pH 6.8, and 1 mM ethylenediaminetetraacetic acid) via a 1

mL injection loop. Major peak was collected and concentrated using the 10 kDa MWCO spin-filter.

A Jasco J-710 CD spectropolarimeter was used to observe CD of 20 µM of Flpp3sol in 300 µL of low UV absorption buffer (20 mM sodium phosphate, pH 6.8, 100 mM sodium fluoride). Quantitative deconvolution of secondary structure was achieved by CDPro (Sreerama and Woody, 2000) employing the use of the CDSSTR algorithm with the SDP42 reference set. Thermal stability was also investigated by measuring CD_{216} as a function of temperature, ranging between 20 °C and 90 °C at a rate of 0.5 °C/min.

Dynamic light scattering (DLS) was performed using a Wyatt DynaPro NanoStar DLS instrument in 100 µL of 20 mM sodium phosphate, pH 6.8 and 100 mM sodium fluoride. Light intensity was monitored for 20 s to generate an autocorrelation plot. A histogram using 40 scans was used to calculate particle size and monodispersity.

The two-dimensional NMR experiment ^{15}N-HSQC was also used to qualitatively evaluate protein structural integrity. A susceptibility matched Shigemi tube was used to analyze 300 µL of 900 µM ^{15}N-enriched Flpp3sol in a buffer containing 20 mM sodium phosphate, pH 6.8, 90mM sodium chloride, 1 mM ethylenediaminetetraacetic acid (EDTA), 1 mM 4,4-dimethyl-4-silapentane-1-sulfonic acid (DSS), and 5% deuterium oxide (D_2O). A 500 MHz Agilent/Varian Inova 500 Instrument equipped with a triple resonance Z-gradient probe was used to collect data at 25 °C. This experiment was repeated at regular intervals over three weeks to validate protein stability.

NMR Spectroscopy Experiments

NMR Structure of *F. tularensis* lipoprotein Flpp3

All NMR measurements were carried out at 25 °C in a buffer containing 90 mM sodium chloride, 20 mM sodium phosphate, 1 mM EDTA, 1 mM DSS, and 5% D_2O; pH adjusted to 6.8. Sample integrity was verified by two dimensional ^{15}N-HSQC spectra collected after each three dimensional experiment. Data were collected on a Bruker 600 MHz and a Bruker 850 MHz Avance IIIHD spectrometers equipped with cryogenically nitrogen-cooled Prodigy triple-resonance TCl CryoProbe and a helium-cooled TCI CryoProbe, respectively. Triple resonance experiments were acquired with 1730-2048 complex points in the observed dimension, and 40-64 complex points in the ^{15}N dimension. Experiments with ^{13}CO ($^{13}C_\alpha$) as well as HCCH-TOCSY, CcoNH, and HccoNH were acquired with 96-128 complex points in the indirect dimensions using a mixing time of 12 ms. Triple-resonance experiments were collected using non-uniform sampling (NUS), of which 25-45% sparse sampling was applied with 8-48 transients. NOESY spectra were collected on the Bruker 850MHz instrument. The NOESY experiments were acquired with a 150 ms mixing time with 2048 complex points in observed dimensions and 64-192 complex points in indirect dimensions.

For relaxation experiments a Varian Inova 500 MHz instrument was used. R_1 data of ^{15}N nuclei were collected at delay times of 50 ms, 100 ms, 300 ms, 500 ms, 700 ms, 1000 ms, and 1400 ms. Similarly, R_2 data were collected at delay times of 10 ms, 30 ms, 50 ms, 70 ms, 90 ms, 110 ms, and 130 ms. Steady-state heteronuclear NOE data was additionally collected with a saturated mixing time of 2000 ms, sufficiently long enough compared to the longest calculated T_1 measurement.

Structural Restraints and Calculation of Flpp3sol

Assigned NOE values were binned into short (1.8-2.4 Å), medium (1.8-3.0 Å), long (1.8-4.0 Å), and very long (1.8-5.0 Å) distances based on peak intensity. These distance restrains, combined with the calculated torsion angles, were converted to CNS format to be used in simulated annealing methods using the PARALLELHDG 5.3 force field parameters (Linge et al., 2003a; Linge and Nilges, 1999; Linge et al., 2003b). Simulated annealing begins with an initial temperature of 10000 K cooled to 1000 K over 2000 steps, and then a slow cooling step, from 1000 K to 50 K over 8000 steps. The simulated annealing scripts used are ARIA based (Linge et al., 2003a) and directly interfaced with CNS (Brunger et al., 1998) to perform the calculations. The scripts were provided by RECOORD at the European Bioinformatics Institute and modified to utilize message passing interface (MPI) on a computer cluster to generate 200 randomly seeded structures.

One hundred of the lowest energy structures were refined by using explicit water protocols developed by Linge *et al* (Linge et al., 2003b). The annealed structures were immersed in a thin (7 Å) shell of water and minimized over 120 steps while restraining the distances of the protein heteroatoms. Subsequently, three sets of MD simulations were performed: the system was heated from 100 K to 500 K over 1000 steps, and then held at a constant temperature for 1000 steps to allow for structure refinement, followed by a 2000 step gradient cooling to 25 K. The system underwent one final 200 step conjugate gradient minimization as the last stage of the refinement. RECOORD provided scripts (again modified to utilize a computer cluster) utilizing CNS to perform the refinements.

Modelling Flpp3 in POPC/POPE bilayer and MD simulations

NMR Structure of *F. tularensis* lipoprotein Flpp3

The transmembrane helix of Flpp3 (Met1 to Thr25) was modeled onto the experimentally determined Flpp3 soluble domain using VMD (Humphrey et al., 1996) software followed by bond geometry idealization performed via ROSETTA software (Shen et al., 2008; Shen et al., 2009). Orientation of transmembrane helix relative to the soluble domain was designed to be normal to the protein surface and allow for electrostatic interaction between the positively charged protein surface and negatively charged membrane. The Flpp3 model was then inserted into a modeled 1:1 POPE/POPC membrane bilayer and hydrated with a 15 Å water layer on either side of the membrane (15 Å from the apex of Flpp3); 150 mM potassium chloride was included in the simulation as part of the hydration environment. This step of the modeling was performed using the CHARMM-GUI interface hosted by the University of Kansas Center for Bioinformatics (Jo et al., 2007; Jo et al., 2008; Jo et al., 2009).

The resulting protein model system was then subjected to two rounds of energy minimization by Amber 10 (Case et al., 2005; Pearlman et al., 1995) using General Amber Force Field parameters described by Dickson *et al.* (Dickson et al., 2012): one round using protein-restrained minimization to lower the energy of solvent and lipids; the second round using unrestrained minimization to lower the energy of the entire system. For both minimization steps, a steepest decent method (for 500 and 1000 steps respectively for restrained and unrestrained minimization) was applied prior to a conjugate gradient method (for 500 and 1500 steps respectively for restrained and unrestrained minimization). Four rounds of short MD simulations were performed (also using Amber 10) to equilibrate the system: round one warmed the system to 300K in a 20 ps simulation; rounds two and three were constant pressure simulations of 40 ps and

80 ps respectively, with round three having a greater time constant (tautp = 2.0) in order to more stabilize the system density; round four was a final 50 ps equilibrium simulation decreasing the harmonic restraint on the protein (from 5 to 0.5). The production run was an unrestrained one microsecond simulation in an attempt to minimize the energy on the entire system. All experimentally derived structural restraints were applied to the soluble domain of Flpp3 for this first production run. A sequential microsecond of molecular dynamics was employed without experimental restraints as a probe into the dynamics of the system on a fast timescale. This production run in all other respects was identical to the previous microsecond run. Energy minimizations and MD simulations were performed using the computing cluster at the Arizona State University Advanced Computing Center.

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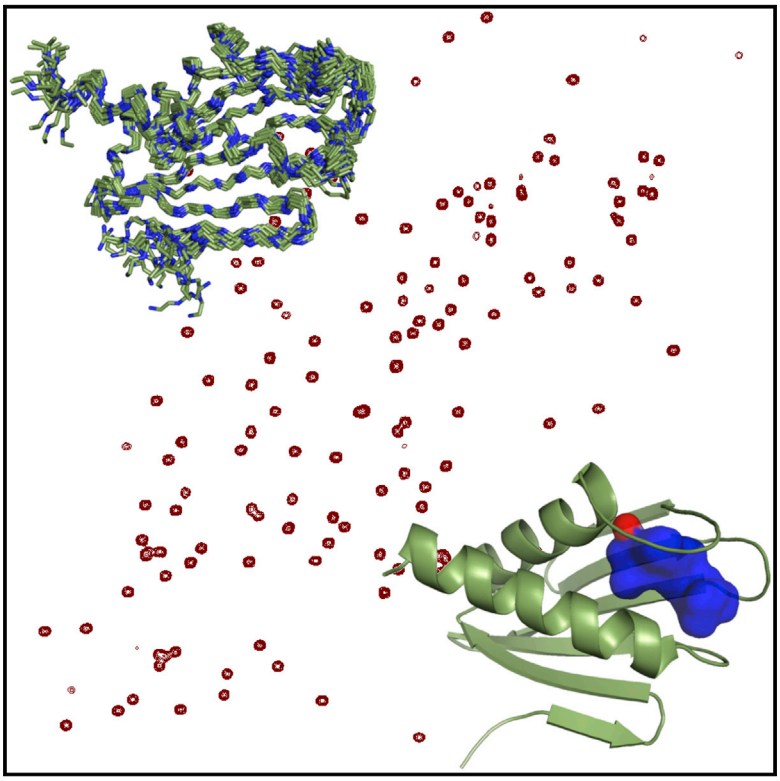
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Short Article

Structure

NMR Structure of *Francisella tularensis* Virulence Determinant Reveals Structural Homology to Bet v1 Allergen Proteins

Graphical Abstract



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In Brief

Flpp3, a virulence determinant for the pathogen *F. tularensis*, is a possible target for vaccine and drug development. Zook et al. report the structure of Flpp3, revealing for the first time the internal binding cavity. Flpp3 is structurally homologous to the Bet v1 family of proteins, responsible for many allergic reactions.

Highlights

- Solution NMR structure of novel *F. tularensis* virulence determinant, Flpp3
- Flpp3 displays internal binding cavity for possible drug design
- Electrostatically polarized surface provides insight on membrane association
- Initial NMR relaxation studies suggest slow timescale protein dynamics

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Structure
Short Article

NMR Structure of *Francisella tularensis* Virulence Determinant Reveals Structural Homology to Bet v1 Allergen Proteins

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SUMMARY

Tularemia is a potentially fatal bacterial infection caused by *Francisella tularensis*, and is endemic to North America and many parts of northern Europe and Asia. The outer membrane lipoprotein, Flpp3, has been identified as a virulence determinant as well as a potential subunit template for vaccine development. Here we present the first structure for the soluble domain of Flpp3 from the highly infectious Type A SCHU S4 strain, derived through high-resolution solution nuclear magnetic resonance (NMR) spectroscopy; the first structure of a lipoprotein from the genus *Francisella*. The Flpp3 structure demonstrates a globular protein with an electrostatically polarized surface containing an internal cavity—a putative binding site based on the structurally homologous Bet v1 protein family of allergens. NMR-based relaxation studies suggest loop regions that potentially modulate access to the internal cavity. The Flpp3 structure may add to the understanding of *F. tularensis* virulence and contribute to the development of effective vaccines.

INTRODUCTION

Francisella tularensis is the causative agent of the severely debilitating disease tularemia. It is an aerobic, Gram-negative coccobacillus, and a potentially fatal bacterial pathogen that is highly infectious and easily aerosolized. Consequently, the bacterium is sufficiently dangerous to be classified as a class A bioterrorism agent. The type A subspecies, exemplified by the SCHU S4 strain, is an especially potent infectious pathogen given that fewer than ten cells can cause fatality in humans (Dennis et al., 2001). *F. tularensis* is endemic in North America and in many parts of Europe and Asia, but cases of tularemia are relatively low and outbreaks generally only occur in regions with poor sanitation and inaccessibility to modern health care. One of the largest outbreaks in recent history was in postwar Kosovo between October 1999 and May 2000, with 327 confirmed cases (Reintjes et al., 2002).

Development of a vaccine is desirable, since treatment of *F. tularensis* is intensive (Parra et al., 2010) and may be unavailable in undeveloped areas where outbreaks tend to occur. At present only live attenuated vaccines based on the type B live vaccine strain (LVS) are available for *F. tularensis* immunization. The limitations of the LVS vaccine preclude its use in the United States, due to cases of human infection as a result of the improper administration of the vaccine and insufficient acquired immunity. The lack of acquired immunity from the current LVS vaccines has been reported to leave 20%–30% of the population susceptible to infection (Isherwood et al., 2005; McCrumb, 1961; Saslaw et al., 1961).

The protein derived from *F. tularensis* LVS open reading frame (ORF) FTL_0645 was identified to cause an immunogenic response in mice through the toll-like receptor 2 pathway, and therefore is likely a target for a subunit vaccine (Parra et al., 2010). The amino acid sequences of the proteins FTL_0645 from LVS and FTT1416c from SCHU S4 are identical. FTL_0645/FTT1416c is a lipoprotein localized to the outer membrane. It possesses a signal sequence and a lipobox consensus sequence (Ile-Ser-Gly-Cys), and has been named Flpp3 (*Francisella* lipoprotein 3) (Parra et al., 2010). Flpp3 has also been identified as a virulence determinant via mutagenesis studies: a significant decrease in *F. tularensis* virulence via respiratory infection was observed upon insertion-mutation of the ORF encoding Flpp3 (FTT1416c) (Su et al., 2007). Structural information may also shed light on the precise function of Flpp3, which is currently unknown.

No atomic resolution structures yet exist for any lipoprotein from the genus *Francisella*. In this study, we obtained the structure of the entire soluble domain of Flpp3 (Flpp3sol), comprising residues D26 to the C-terminal residue T137. Structural determination of the soluble domain independently from the transmembrane region can provide the first important structural and potentially functional information on this membrane protein. Furthermore, still under discussion is the question whether the mature protein is anchored to the membrane by a single transmembrane domain or by a lipid. It has been proposed that the

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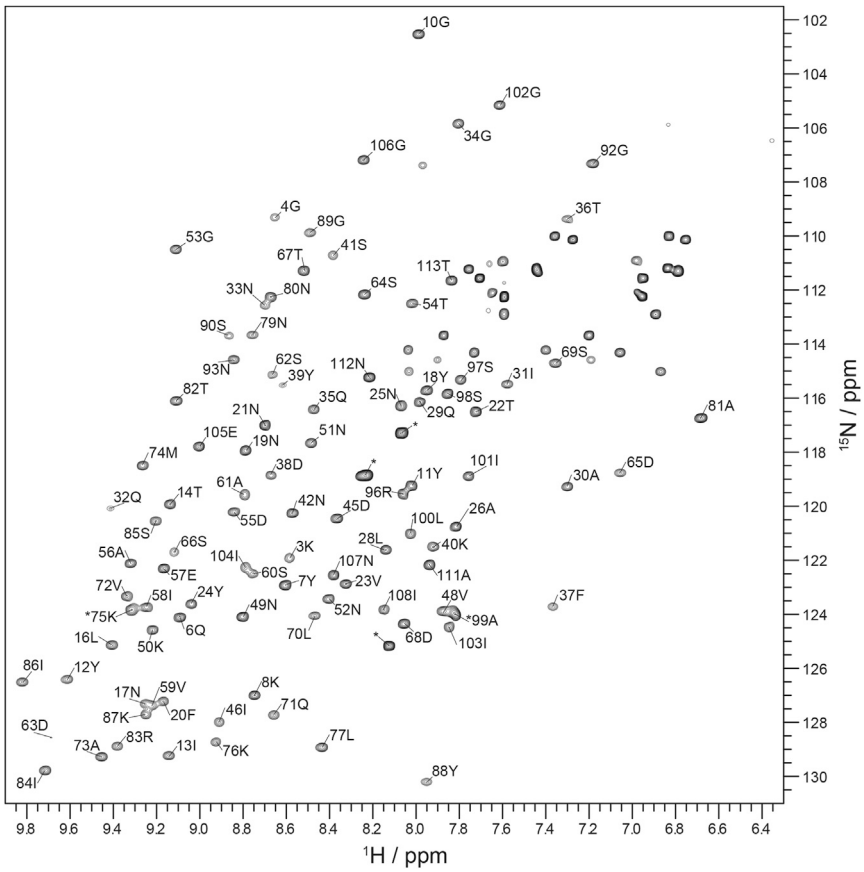


Figure 1. Assigned 2D ^{15}N-HSQC Spectrum of Flpp3sol

The NMR spectrum displays a wide proton dispersion with narrow peak widths, indicative of a protein with significant β-sheet and α-helix content.

transmembrane domain of Flpp3 could be removed by signal peptidase and the mature protein anchored by lipidation, as observed upon expression of recombinant Flpp3 in *Escherichia coli* (Parra et al., 2010). In this study, we report on the hydrophilic domain of Flpp3 at atomic resolution structure determined by multi-dimensional nuclear magnetic resonance (NMR) spectroscopy on isotopically enriched protein.

RESULTS

Purification and Biophysical Characterization of Flpp3sol

Final yields of pure Flpp3sol after size-exclusion chromatography averaged 3.4 mg of protein per liter of cell culture. Coomassie-stained and Western blotted SDS-PAGE (Figure S1A) analyses determined that the Flpp3sol purity was sufficient for biophysical characterization and structure determination. Circular dichroism (CD) spectroscopy revealed a peak maximum at 193 nm, a single minimum at 216 nm, and a slight negative shoulder at about 209 nm, suggesting a protein containing both α-helical and β-strand components (Figure S1B). Secondary structure content was estimated to 37%, 27%, and 14% for the α-helical, β-strand, and random coil, respectively, using CDPro software (described in Supplemental Information). Far-UV CD studies indicate that Flpp3sol is moderately thermally stable with a melting temperature (T_m) of 59.5°C (Figure S1C).

Dynamic light scattering (DLS) revealed a dominantly monodispersed protein (polydispersity [Pd] = 18.2%) with a Stokes radius of approximately 2.3 nm (Figure S1D). In addition, two-dimensional (2D) ^{15}N-labeled heteronuclear single quantum coherence (HSQC) experiments resulted in narrow peak widths and wide proton dispersion (Figure 1), indicating a well-structured protein with considerable β-strand content.

Three-dimensional (3D) NMR spectra feature well-resolved resonance peaks that allowed 96.7% and 75.0% completion for backbone and side-chain assignments, respectively. The quality of the assignment data is illustrated in Figure S2. While the core domain of Flpp3 is well ordered, the C and N termini are flexible and sample a wide range of electronic environments. As electrons are responsible for the chemical shift values, the averaged NMR signal for an atom experiencing many different electronic environments can be drastically reduced. This flexibility prevented assignment of the starting methionine and the five terminal histidine residues. The latter residues represent the hexahistidine tag added for protein purification. All assignments have been deposited in the Biological Magnetic Resonance Data Bank under accession number BMRB: 25168.

Structure of Flpp3sol

The final structure calculation utilized 1945 nuclear Overhauser effect (NOE)-based distance restraints: 306 intra-residue, 603 sequential, 397 medium-range, and 639 long-range. The ensemble of 20 structures demonstrated a backbone root-mean-square deviation (RMSD) of 0.6 Å and 1.2 Å for ordered residues (S(phi) + S(psi) > 1.8) and all residues, respectively (Figure 2A).

The calculated structure reveals that Flpp3 consists of a six-stranded β sheet supported with two crossing α helices (Figure 2B). Ramachandran analysis of ordered regions placed 98.9% of residues in the "most favored regions" with only 1.0% of residues in the "additional allowed regions" and only one residue from one structure of the ensemble (0.1%), T54, in the "generously allowed region." Global quality Z scores were −1.12, −0.54, 0.20, −1.06, and −1.33 for Verify3D, ProsaII (-ve), Procheck (phi-psi), Procheck (all), and MolProbity Clashscore, respectively, indicating a relatively well-resolved atomic resolution structure of Flpp3sol. The structure has been deposited under accession number PDB: 2MU4. A statistical summary

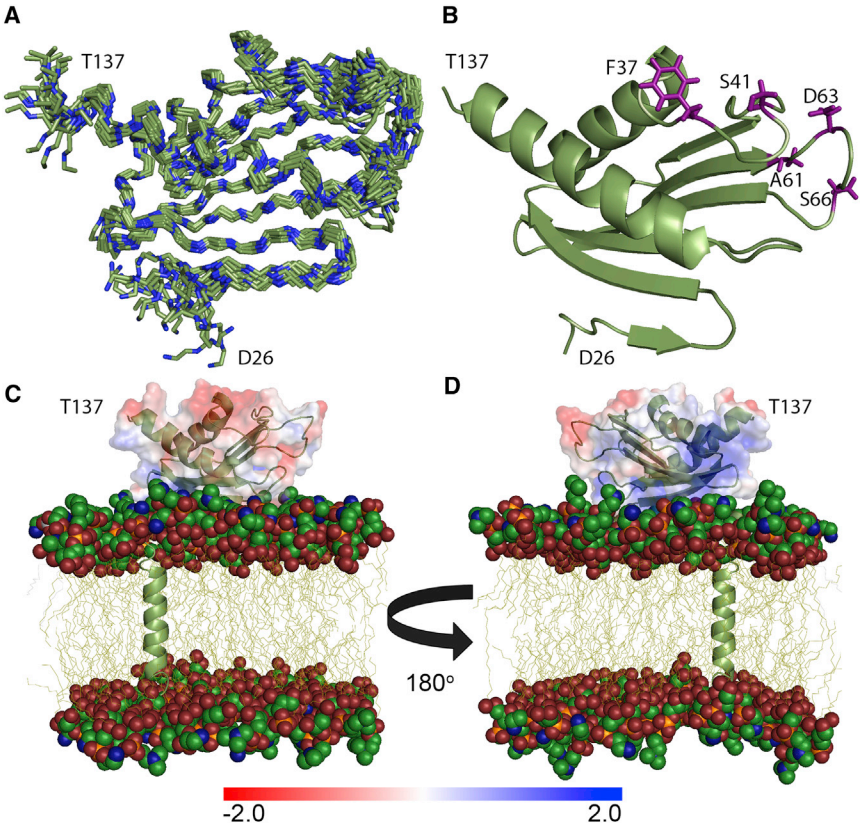


Figure 2. Structure of Flpp3sol and Model of Flpp3 Inserted into the Membrane

(A) Overlay of the 20 lowest-energy models after water bath refinement.

(B) Cartoon model of the lowest-energy model of Flpp3sol. Residues F37, S41, A61, D63, and S66 may be dynamically important as per initial relaxation results, and are shown in violet.

(C and D) The transmembrane helix (residues Met1 to Thr25) modeled onto the N terminus of Flpp3sol and inserted into a POPC/POPE membrane. MD production simulations were run for 1 ns with experimental restraints followed by another 1 ns without restraints. The hydrophobic region of the helix spans the entire length of the membrane with a positively charged N terminus (not seen). Model is rotated 180° to show both sides of the protein. An electrostatic surface is plotted onto the model to show polarity between the membrane proximal region (blue/positive) and the membrane distal region (red/negative).

of the data analysis and structural parameters is shown in Table S1.

The structure shows that Flpp3 is considerably polarized (Figures 2C and 2D). When an electrostatic surface was plotted onto Flpp3sol using PyMOL's Adaptive Poisson-Bolzmann Solver (APBS) (Baker et al., 2001), the protein featured a strongly positive area that is primarily localized to the β-sheet region, with a large electronegative area around the helices and elongated loops (Figures 2C and 2D). Another notable characteristic of the Flpp3sol structure is the presence of a hydrophobic internal cavity formed primarily by the elongated loop between helix 1 and sheet 3 (Figure 3E). The size and shape of this cavity is highly variable across the different members of the ensemble as calculated by tools provided by Swiss-PdbViewer (Guex and Peitsch, 1997), likely due to a limited number of structural constraints for that part of the protein. On average this cavity has a volume of 185 Å^3, but can range between 55 and 435 Å^3 between members of the structural ensemble.

Molecular dynamics (MD) simulations of the membrane-bound Flpp3 containing the modeled transmembrane helix placed the protein on the surface of the membrane with the lipophilic α helix spanning the entire length of the membrane (Figures 2C and 2D). Although longer MD simulations are required to observe large conformational changes and are thus beyond the scope of this study, shorter MD simulations provide insight into the behavior of the flexible loop regions on shorter timescales.

The cavity of Flpp3sol changes structurally throughout the MD run (detailed in Supplemental Experimental Procedures). The opening to the hydrophobic pocket widens to a size more accommodating for binding small molecules. In addition, the size of the pocket varies significantly between 0 and 150 ns, ranging between 601 and 200 Å^3, and appears to equilibrate to about 250 Å^3; the cavity at the end of the simulation run is illustrated in Figure S3A and observations are illustrated by Figure S3B. The root-mean-square fluctuation (RMSF) was also calculated for the last 200 ns of the unrestrained MD production run. Neglecting the termini that display large distance variations over time, the largest RMSF components are contributed to the transmembrane helix ranging from about 1.0 to 1.3 Å, and the loops between helix 1 and sheet 3 and between sheets 4 and 5, which demonstrated a greater range of RMSF values, are between 1.0 and 2.0 Å (Figure S3C). These two loops are also largely responsible for the formation of the pocket and contribute to the variation of the pocket volume.

We performed a homology search using the Dali server (Holm and Rosenstrom, 2010). The results indicate that Flpp3sol show structural similarities (Z score >7.5) to proteins belonging to the Bet v1 protein family (Figures 3A–3F). Interestingly, many of the proteins in this family are allergens, including the birch pollen allergen, for which this family is named after, and the peanut allergen. These proteins share only a 9% and 11% sequence identity to Flpp3sol, respectively, and are slightly larger (159 and 156 residues for birch pollen allergen and peanut allergen, respectively) due to two additional C-terminal β strands of the β sheet prior to the N-terminal α helix (Figure 3B). Similar to Flpp3sol, the Bet v1 proteins generally feature a hydrophobic cavity; the comparison shown in Figures 3E and 3F indicate that the cavity in the Bet v1 protein may be larger in size compared with Flpp3 (>1,000 Å^3 for the birch pollen allergen 1FM4). Cavities in the Bet v1 family of proteins are known to bind a wide variety of molecules (Radauer et al., 2008). Due to the low sequence homology, the structural similarity to the Bet v1 family and Flpp3 was not previously known and was first

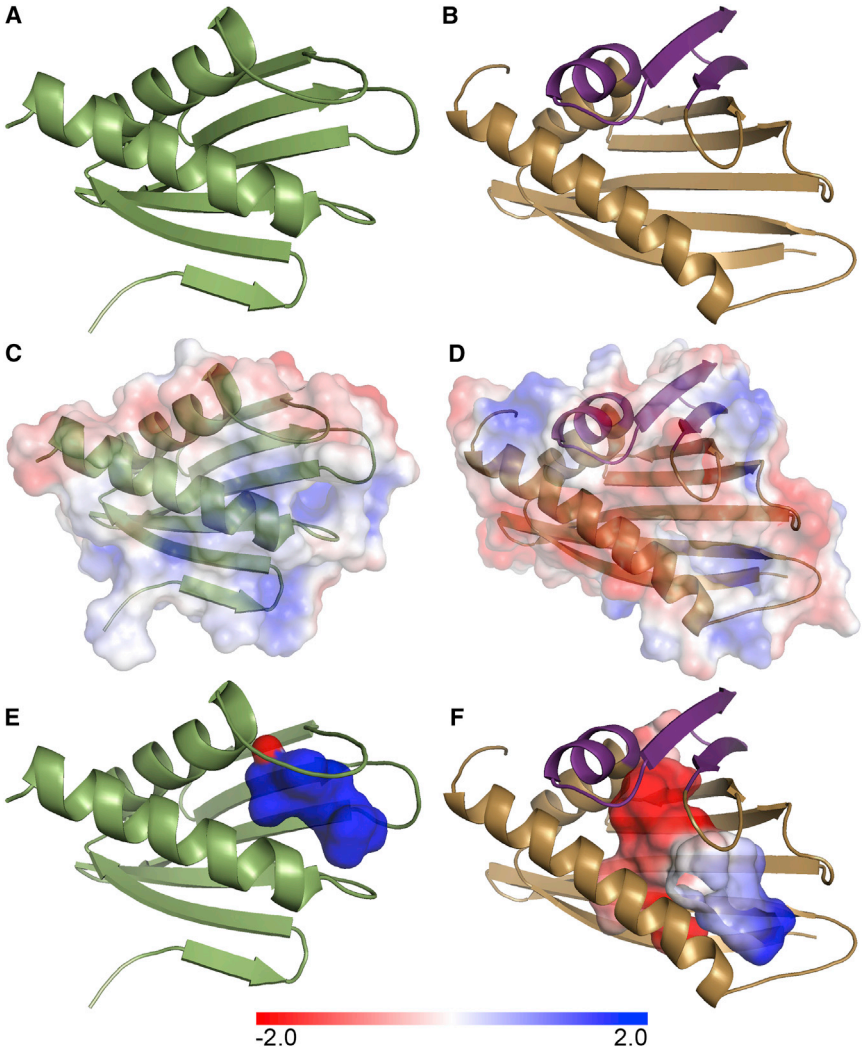


Figure 3. Comparison of Flpp3sol and Structurally Homologous Bet v1 Protein Birch Pollen Allergen

(A and B) Secondary structure and overall fold topology of Flpp3sol (A) and structurally homologous Bet v1 protein birch pollen allergen (1FM4) (B). The Bet v1 proteins are larger due to two extra β strands that distort the first α helix (purple).

(C and D) Electrostatic surface plotted onto Flpp3sol (C) and 1FM4 (D). Flpp3sol has a polarized surface with a negatively charged (red) side and a positively charged (blue) region compared with 1FM4.

(E and F) The internal cavity is shown for Flpp3sol (E) and 1FM4 (F). The two extra β strands (purple) in 1FM4 provide additional cavity space that is limited by Flpp3sol.

identified from our structural analysis. The fact that Flpp3 features a hydrophobic cavity is an interesting and novel finding, and may be the subject of broad drug screening in the future. The comparison of the Bet v1 protein and Flpp3 also reveals that the polarized electrostatic surface is unique to Flpp3sol, as it is not found on proteins of the Bet v1 family (Figures 3C and 3D).

Intramolecular Dynamics of Flpp3sol

NMR spectroscopy is the ideal tool to experimentally probe the dynamics of Flpp3 at an atomic level. For the study of the fast timescale protein dynamics, the ^{15}N longitudinal (R_1) and transverse (R_2) relaxation rates and heteronuclear NOE values were measured for all resolved, assigned resonances in the 2D ^{15}N-HSQC spectrum at a magnetic field strength of 500 MHz. The relaxation measurements are expressed in terms of rates where $R_1 = 1/T_1$ and $R_2 = 1/T_2$, with NOE values expressed in relative intensity ratio. The results are shown in Figures 4A–4C. Initial relaxation analysis of Flpp3sol revealed a highly rigid protein with dynamic termini, particularly the N terminus (Figure 4). The lack of NOEs in the extended loop regions contributes to an increase in C_α RMSD, which may suggest increased backbone flexibility. Additional evidence for this is illustrated by the increased C_α RMSF in those regions reported by the MD simulations. The increased R_2 values shown by specific residues in the loops (F37, S41, A61, D63, and S66 in Figure 2B) may indicate slower conformational changes by way of chemical exchange. The Stokes radius of Flpp3sol, determined from the relaxation experiments, was calculated to be 1.98 nm from a correlation time of 8.01 ns. This corresponds well with the radius calculated by DLS (2.3 nm).

DISCUSSION

The NMR studies resolved the structure and dynamics of the membrane extrinsic domain of the Flpp3 protein. It is the first structure of a lipoprotein from *F. tularensis*. The structural model determined by multidimensional NMR spectroscopy revealed that Flpp3 is a largely spherical protein that contains a six-stranded β sheet, two α helices, and three loops. The function of the loops and its interaction partners may provide additional information on the functional nature of the protein. Based on analysis of the R_2 and R_1 relaxation rates, we note that residues flanking the major loop (Gly34–Asp45), including residues Q32, N33, F34, D45, and I46, undergo conformational exchange (R_{ex}) on the biologically relevant microsecond to millisecond timescale. This major loop in the Flpp3 structure occludes access to the internal cavity. The relaxation data are consistent with loop-regulated access to the internal cavity, which is largely hydrophobic and sufficiently large to bind small molecules. While conformational exchange of these residues is qualitatively compelling, quantitative analysis from these data is complicated as there is no indication of the magnitude of these motions; as such, we cautiously note the correlation between loop conformational exchange and access to the internal cavity. Flpp3 shares strong structural homology with the Bet v1 family of proteins, which are responsible for

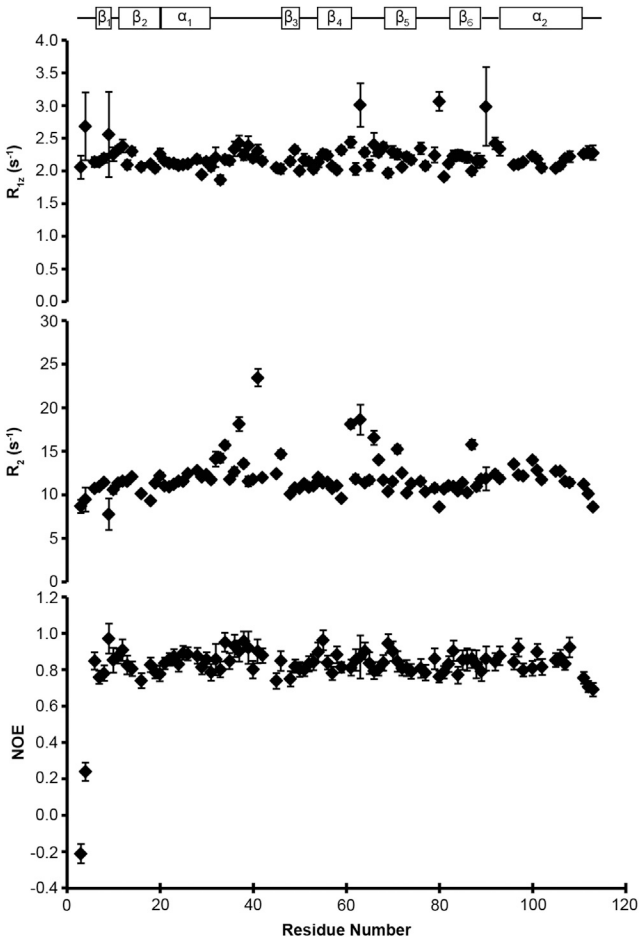


Figure 4. ^{15}N-NMR Relaxation Studies

R_1 data do not vary considerably between residues and demonstrates an overall constant rate of 2.2 ± 0.2 s^{-1}. R_2 data reveal a fairly constant relaxation rate throughout the structured regions of Flpp3sol. Flexible termini show slightly decreased values while several residues in the loop region reveal much greater R_2 relaxation rates, which may be the result of chemical exchange. In the steady-state heteronuclear NOE experiment, NOE values are relatively large and unchanging. The histidine tail did show a negative NOE value but was left out of the analysis because of inability to resolve individual histidine residues. Error bars reflect ±1 SD from the calculated mean.

binding relatively small organic molecules (Radauer et al., 2008), despite the fact that they show less than 10% sequence identity. The fact that members of this protein family are very strong allergens (including the birch and peanut allergens) indicates that the proteins of this family cause strong immune responses, which makes Flpp3 a very promising target for a vaccine development.

The structure of Flpp3 revealed for the first time that the protein is structurally homologous to the Bet v1 superfamily of proteins. These proteins share a similar fold, with a seven-stranded β sheet and two α helices. However, major structural differences exist, as the Bet v1 proteins have a seventh β strand to compose the β sheet and they do not feature the highly polarized surface that is a unique feature of Flpp3. Proteins from the Bet v1 family have been reported to bind a wide range of hydrophobic molecules (Radauer et al., 2008), from fairly large brassinosteroids (Markovic-Housley et al., 2003; Neudecker et al., 2001) (~480 Da) to smaller molecules such as dopamine (153 Da) (Liscombe et al., 2005) in addition to flavonoids and cytokinins (Koistinen et al., 2005; Mogensen et al., 2002).

The SVMProt algorithm suggests that Flpp3 belongs to a lipid-binding protein family (Cai et al., 2003). Therefore, it seems likely that the Flpp3 cavity functions as a binding pocket for small molecules. This is particularly interesting because of the involvement of Flpp3 in respiratory-induced tularemia, where it acts as a virulence determinant and possibly a virulence factor (Su et al., 2007). This cavity also provides an intriguing opportunity for therapeutic intervention, given that mutation of Flpp3sol leads to reduced virulence in a mouse model of lung infection (Su et al., 2007).

The relaxation studies by NMR show that Flpp3sol is a relatively rigid molecule with the exception of two fairly flexible loop regions. The relaxation data also suggest that several residues (including F37, S41, A61, D63, and S66) may be involved in slower, microsecond to millisecond timescale motions, which may prove useful in understanding protein function, given that these residues are located in loops in close proximity to the cavity. Perhaps the candidate residues are involved in gating access to the interior cavity. Efforts to understand the more detailed dynamics of Flpp3sol are under way and will involve coupling screening studies in addition to further NMR-based dynamics studies, such as CPMG-based relaxation dispersion, which will provide detailed information on how dynamics are affected by ligand binding and protein dynamics on longer timescales.

The polarized electrostatic potential suggests Flpp3 orientation with respect to the membrane. We speculate that the electropositive surface area of the protein serves as a means to orient the protein against the negatively charged surface of the inner leaflet of the outer membrane. This would orient the ligand-binding region of the protein away from the lipid bilayer.

Current efforts are being directed toward understanding the protein functionality, with special focus on experimental and computational drug-binding studies. We expect that the Flpp3 structure will add to the understanding of *F. tularensis* virulence and contribute to the development of effective vaccines.

EXPERIMENTAL PROCEDURES

Cloning of Flpp3sol

To allow T7 promoter-based expression of a C-terminally hexahistidine-tagged protein, the pRSETC6xHis vector was constructed by modification of the small *Bse*RI/*Eco*RI fragment of pRSET-natGFPHis (Martin-Garcia et al., 2014). The sequence corresponding to Asp26–Thr137 (Flpp3sol) of the ORF FTT1416c from SCHU S4 (Larsson et al., 2005) was amplified and cloned into *Bse*RI-digested pRSET-C6xHis to yield a C-terminal hexahistidine-tagged soluble domain of Flpp3 pRSET-FTT1416sol-6xHis. This construct allows expression of the Flpp3sol fragment plus an N-terminal methionine and a C-terminal hexahistidine. Construct integrity was confirmed by DNA sequencing. All vectors and their sequences are available from the PSI:Biology-Materials Repository at DNASU (http://dnasu.org) (Seiler et al., 2014).

Expression, Purification, and Biophysical Characterization of Flpp3sol

The Flpp3sol plasmid construct was expressed in Lemo21 (DE3) *E. coli* cells (New England BioLabs) and purified by Ni-NTA affinity chromatography followed by size-exclusion chromatography, detailed in the Supplemental Experimental Procedures. UV CD spectroscopy was used to probe thermostability, DLS was used to confirm a monodispersed protein solution, and 2D ^{15}N-HSQC was used to qualitatively evaluate protein structural integrity.

NMR Spectroscopy Experiments

All NMR experiments and structure calculations were performed using well-established methods and are detailed in Supplemental Experimental Procedures. In brief, triple-resonance HNCO, HNcaCO, HNCA, HNCACB, and CBCAcoNH experiments were carried out for backbone chemical shift assignments on 800 μM ^{15}N, ^{13}C, ^{1}H Flpp3sol. HCCH-TOCSY, CcoNH, and HccoNH were used for side-chain proton and carbon assignment. Data acquisition parameters are detailed in Supplemental Information and are outlined in Table S2 for each 3D experiment. NMR experimental data were processed using qMDD for non-uniform sampled data and NMRPipe for all uniformly collected experiments (Delaglio et al., 1995; Orekhov and Jaravine, 2011). The experiments were then analyzed using CcpNmr Analysis (Vranken et al., 2005).

Long-distance structural restraints were obtained through the use of assigned ^{13}C- and ^{15}N-edited NOE spectroscopy (NOESY) experiments. The automated assignment was performed via the CYANA Noeassign macro while supplying backbone torsion angles calculated from backbone chemical shift data (Guntert et al., 1991, 1997; Herrmann et al., 2002; Lopez-Mendez and Guntert, 2006).

Relaxation experiments were carried out to probe fast timescale dynamics studies. R_1, R_2, and steady-state heteronuclear NOE experiments were collected on ^{15}N nuclei. All relaxation NMR data were processed by NMRPipe (Delaglio et al., 1995) and relaxation data were analyzed by the program relax (Bieri et al., 2011; d'Auvergne and Gooley, 2008a, 2008b). Relaxation data analysis to probe residues experiencing significant (μs-ms) conformational exchange were identified using an established method from the Bax group (Tjandra et al., 1995).

Structural Restraints and Calculation of Flpp3sol

The chemical shift values were analyzed by TALOS+ to predict backbone torsion angles (Shen et al., 2009). After assignment of proton chemical shifts and subsequent NOESY spectra, NOE values were binned into short (1.8–2.4 Å), medium (1.8–3.0 Å), long (1.8–4.0 Å), and very long (1.8–5.0 Å) distances based on peak intensity. These distance restraints and torsion angle restraints were used for calculating an ensemble of structures using simulated annealing methods followed by structure refinement using explicit water protocols, described in detail in Supplemental Experimental Procedures. The 20 lowest-energy structures were analyzed by the Protein Structure Validation Suite (PSVS) (Bhattacharya et al., 2007) to assess the overall structure quality. MD simulations were performed using Amber 10 employing conventional techniques; these are described in detail in Supplemental Experimental Procedures (Case et al., 2005; Pearlman et al., 1995).

ACCESSION NUMBERS

Assignments have been deposited in the Biological Magnetic Resonance Data Bank (BMRB: 25168). The structure of Flpp3sol has been deposited in the PDB (PDB: 2MU4).

SUPPLEMENTAL INFORMATION

Supplemental Information includes Supplemental Experimental Procedures, three figures, two tables, and 3D molecular models and can be found with this article online at http://dx.doi.org/10.1016/j.str.2015.03.025.

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Structure, Volume *23*

Supplemental Information

NMR Structure of *Francisella tularensis* Virulence Determinant Reveals Structural Homology to Bet v1 Allergen Proteins

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Supplemental Data

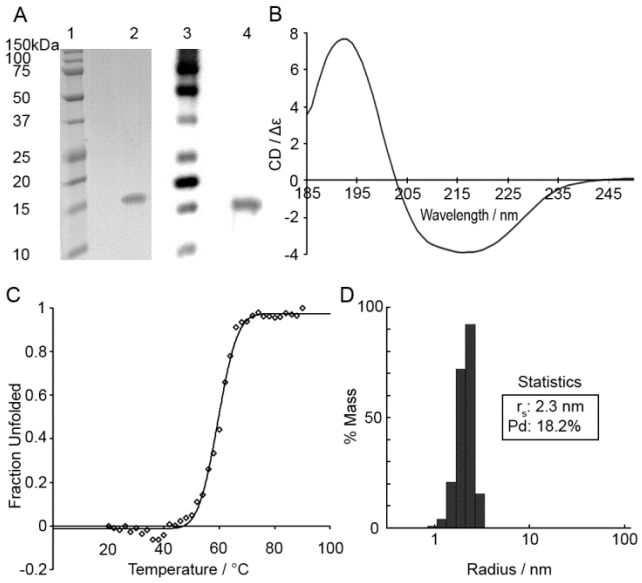


Figure S1, related to the expression, purification, and biophysical characterization in experimental procedures. Biophysical characterization of Flpp3sol. (A) Coomassie stained gel (left) and Western blot (right) using an anti-pentahistidine antibody (Qiagen). Molecular weights are indicated in kDa. (B) CD spectrum. (C) Thermal melt monitoring CD at 216 nm as a function of temperature. (D) DLS of 200 µM of Flpp3sol.

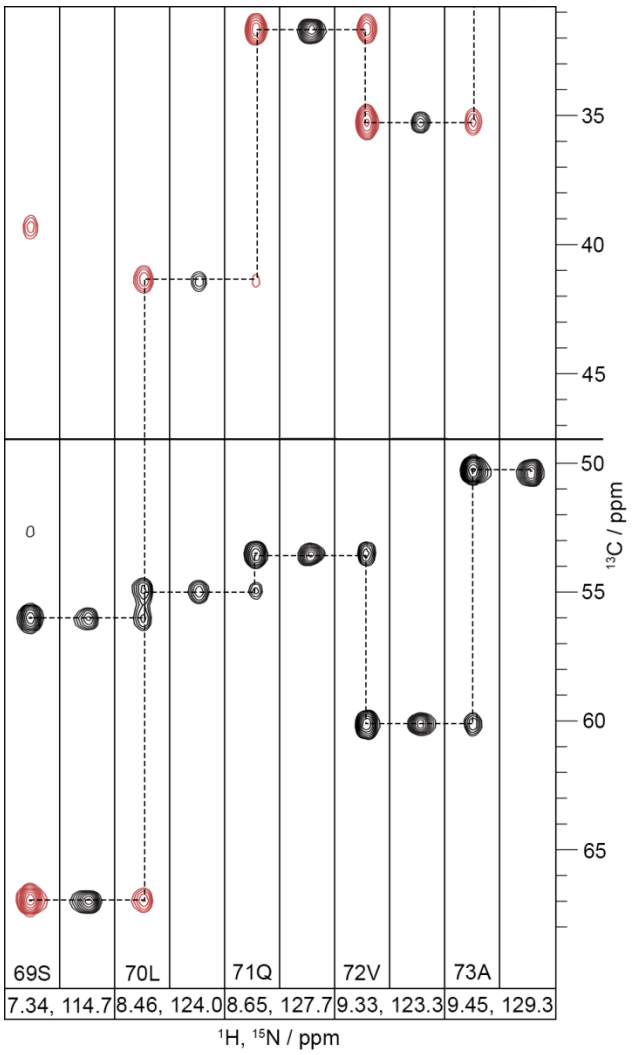


Figure S2, related to Figure 1. A Section of strip plots used to assign Flpp3sol chemical shifts. Residues were assigned using data from HNCACB (left) and CBCAcoNH (right) experiments. 3D NMR spectra demonstrated well resolved resonances resulting in nearly complete assignment of Flpp3sol backbone. Red resonances indicate HNCACB negative peaks for the C_β carbon.

NMR Structure of *F. tularensis* lipoprotein Flpp3

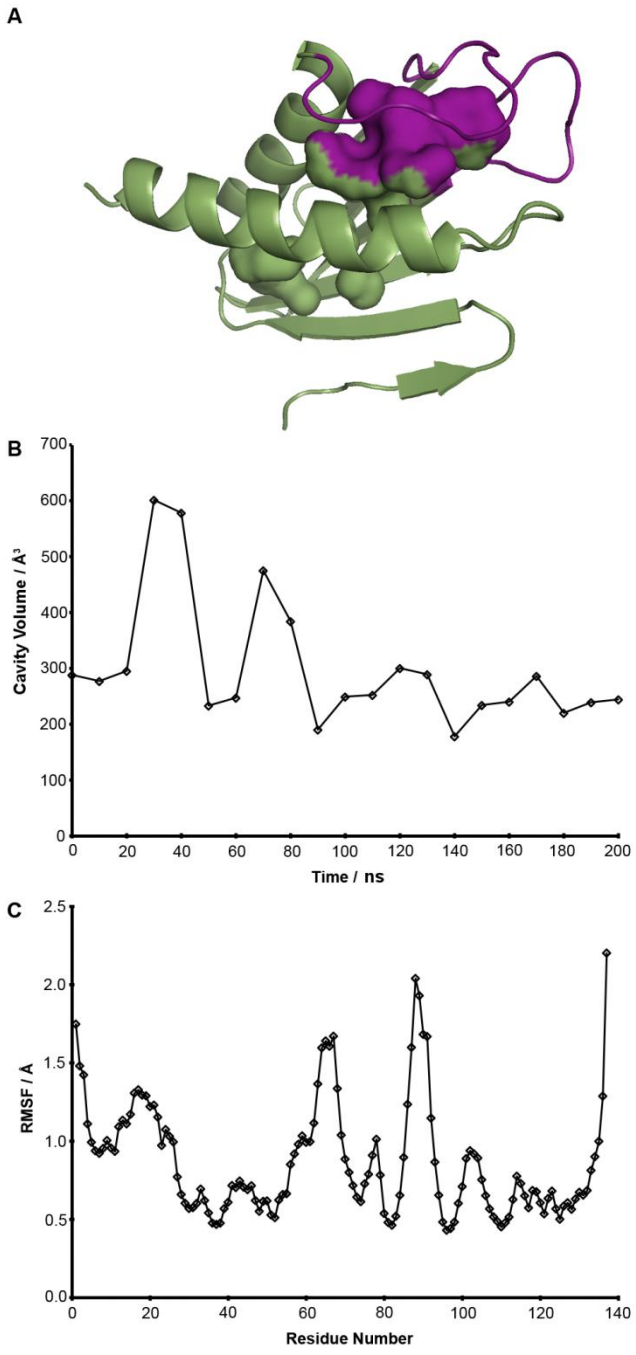


Figure S3, related to Figure 2. MD simulation results. (A) Final structure after the final production run. The flexible loops (as determined by MD RMSF) along with the surface of the cavity they adjoin are colored purple. These loops contribute to the majority of the cavity structure. (B) Cavity volume of Flpp3sol as a function of time over the last 200 ns of the final 1 μs production run. High variability is observed between 0 and 100 ns and then equilibrates to about 250 $Å^3$. (C) Root mean standard fluctuations show significant distance fluctuations in the loops surrounding the cavity opening (residues 60-70 and 85-95) as well as in the protein termini.

Table S1, related to Figure 2.

Summary of structural statistics for the soluble portion of lipoprotein Flpp3 of *Francisella tularensis*.

Completeness of resonance assignments [a]			
Backbone (%)			96.7
Side Chain (%)			75.0
Conformationally restricting restraints [b]			
Distance restraints:			
Total			1945
Intra-residue (*i*=*j*)			306
Sequential (|*i*—*j*|=1)			603
Medium range (1< |*i*—*j*|<5)			397
Long range (|*i*—*j*|≥)			639
Dihedral angle restraints			192
Hydrogen bond restraints			0
Disulfide bond restraints			0
No. of restraints per residue			19.1
No. of long range restraints per residue			5.7
Residual restraint violations [b]			
Average no. of distance violations per structure:			
0.1-0.2 Å			6.95
0.2-0.5 Å			0.25
>0.5 Å			0
Largest distance violation (Å)			0.23
Average no. of dihedral angle violations per structure:			
1-10°			35.8
>10°			0
Largest dihedral angle violation (°)			8.00
NOE completeness score			
Model quality [b]			
RMSD backbone atoms (Å) [c]			0.6
RMSD heavy atoms (Å) [c]			1.2
RMSD bond lengths (Å)			0.016
RMSD bond angles (°)			1.4
MolProbity Ramachandran statistics [b, c]			
Most favored regions (%)			98.9
Allowed regions (%)			1
Disallowed regions (%)			0.1
Global quality scores raw/Z-score) [c]			
Verfiy3D	0.39		-1.12
Prosall	0.52		-0.54
ProCheck (phi-psi) [c]	-0.03		0.20
ProCheck (all) [c]	-0.18		-1.06
MolProbity clash score	16.65		-1.33
Model contents			
Ordered residue range [c]		5-42, 44-51, 53-67, 69-77, 80-112	
Total no. of residues		119	
BMRB accession number	25168		
PDB ID	2MU4		

[a] These structural statistics were computed from an ensemble of 20 structures.
[b] Calculated using PSVS 1.5. Ramachandran statistics calculated by Molprobity. Distance violations calculated using sum over r^{-6}.
[c] Based on ordered residues with dihedral angle order parameter, S(phi) + S(psi) ≥ 1.8.

Table S2, related to NMR spectroscopy experiments in experimental procedures.
Summary of 3D NMR Experiments.

		Number of complex points and sweep width per dimension							
		F_3 (direct)		F_2 (indirect)		F_1 (indirect)			
Experiment	**Transients**	**Points**	**SW (Hz)**	**Points**	**SW (Hz)**	**Points**	**SW (Hz)**	**% NUS**	**Mixing time (ms)**
HNCO	8	1730	7211.5	64	1885.3	112	2716.7	35	
HNcaCO	16	1730	7211.5	56	1885.3	128	2716.7	35	
HNCA	16	1730	7211.5	64	1885.3	128	5281.9	35	
HNCACB	48	1730	7211.5	64	1885.3	112	9658.2	45	
CBCAcoNH	40	1730	7211.5	64	1885.3	112	9658.2	40	
HCCH-TOCSY	24	1682	8417.5	64	11318.2	192	8417.5	50	12
CcoNH	16	2048	9615.4	64	2128.6	192	11318.2	45	12
HccoNH	16	2048	9615.4	64	2128.6	192	9615.4	50	12
^{13}C-NOESY	16	2048	11904.8	96	16035.8	192	11904.8	50	150
^{15}N-NOESY	16	2048	11904.8	64	3102.4	192	11904.8	50	150

Supplemental Experimental Procedures

Cloning of Flpp3sol

Genomic DNA from *F. tularensis* subsp. *tularensis* strain SCHU S4 was provided by Dr. C. Rick Lyons, Dr. Terry H. Wu, and Dr. Jason Zsemlye, Center for Infectious Disease and Immunity, University of New Mexico. Sequence amplification was achieved using the Takara PrimeSTAR Max DNA Polymerase (Clontech Mountain View, CA) and cloned into *Bse*RI-digested pRSET-C6xHis using the ligation-independent In-Fusion HD Kit (Clontech). The forward and reverse primers for In-Fusion cloning of the FTT1416c fragment into pRSETC6xHis were GAAGGAGATATACATatg*GACAAAGGAACCCAGTAT* and GTGATGGTGGTGATG*TGTATTAGCGTAGCGAATATTTCC*, respectively. The sequence in the primers from pRSET-C6xHis is underlined, that from FTT1416c is italicized, and the methionine start codon is in lowercase. DNA sequence confirmation

was performed at the School of Life Sciences DNA Laboratory at Arizona State University.

Expression, Purification, and Biophysical Characterization of Flpp3sol

An overnight culture of 10 mL Terrific Broth (TB) with 100 µg/mL ampicillin was used to inoculate a 1 L culture of TB medium. Protein requiring isotope enrichment used 1 L of M9 Minimal medium supplying ^{15}N-ammonium and ^{13}C-glucose as the sole nitrogen and carbon sources, respectively. Cultures were incubated at 37 °C to OD_{600} = 0.8, induced with 1 mM IPTG, incubated for 5 hours, then the cells were pelleted and stored at -80 °C. The cell pellet was thawed on ice and suspended in 20 mL of ice-cold suspension buffer (300 mM sodium chloride, 50 mM Tris pH 8.0, and 10 mM imidazole). Cell suspension was lysed via sonication on ice for 10 second pulses, cooling for 10 seconds between pulses, repeating five times. Cell lysate was centrifuged for 30 minutes at 38,000 x g at 4° C. Supernatant was incubated with 3 mL of Ni-NTA Superflow resin (Qiagen) for 1 hour at 4° C. The slurry was then added to a gravity flow column and the flowthrough was discarded. Column was washed four times with 10 mL of wash buffer (300 mM sodium chloride, 50 mM Tris pH 8.0 and 20 mM imidazole). Flpp3sol was eluted with 10 mL of elution buffer (300 mM sodium chloride, 50 mM Tris pH 8.0 and 300 mM imidazole). Eluted protein was concentrated to 1 mL using a 10 kDa molecular weight cut-off (MWCO) spin filter, centrifuging at 2000 x g in 5 min increments. 500 µL of concentrated protein was injected onto a Superdex 200 10/200 GL column (GE Healthcare) equilibrated with sample buffer (100 mM sodium chloride, 20 mM sodium phosphate pH 6.8, and 1 mM ethylenediaminetetraacetic acid) via a 1

mL injection loop. Major peak was collected and concentrated using the 10 kDa MWCO spin-filter.

A Jasco J-710 CD spectropolarimeter was used to observe CD of 20 µM of Flpp3sol in 300 µL of low UV absorption buffer (20 mM sodium phosphate, pH 6.8, 100 mM sodium fluoride). Quantitative deconvolution of secondary structure was achieved by CDPro (Sreerama and Woody, 2000) employing the use of the CDSSTR algorithm with the SDP42 reference set. Thermal stability was also investigated by measuring CD_{216} as a function of temperature, ranging between 20 °C and 90 °C at a rate of 0.5 °C/min.

Dynamic light scattering (DLS) was performed using a Wyatt DynaPro NanoStar DLS instrument in 100 µL of 20 mM sodium phosphate, pH 6.8 and 100 mM sodium fluoride. Light intensity was monitored for 20 s to generate an autocorrelation plot. A histogram using 40 scans was used to calculate particle size and monodispersity.

The two-dimensional NMR experiment ^{15}N-HSQC was also used to qualitatively evaluate protein structural integrity. A susceptibility matched Shigemi tube was used to analyze 300 µL of 900 µM ^{15}N-enriched Flpp3sol in a buffer containing 20 mM sodium phosphate, pH 6.8, 90mM sodium chloride, 1 mM ethylenediaminetetraacetic acid (EDTA), 1 mM 4,4-dimethyl-4-silapentane-1-sulfonic acid (DSS), and 5% deuterium oxide (D_2O). A 500 MHz Agilent/Varian Inova 500 Instrument equipped with a triple resonance Z-gradient probe was used to collect data at 25 °C. This experiment was repeated at regular intervals over three weeks to validate protein stability.

NMR Spectroscopy Experiments

NMR Structure of *F. tularensis* lipoprotein Flpp3

All NMR measurements were carried out at 25 °C in a buffer containing 90 mM sodium chloride, 20 mM sodium phosphate, 1 mM EDTA, 1 mM DSS, and 5% D_2O; pH adjusted to 6.8. Sample integrity was verified by two dimensional ^{15}N-HSQC spectra collected after each three dimensional experiment. Data were collected on a Bruker 600 MHz and a Bruker 850 MHz Avance IIIHD spectrometers equipped with cryogenically nitrogen-cooled Prodigy triple-resonance TCl CryoProbe and a helium-cooled TCI CryoProbe, respectively. Triple resonance experiments were acquired with 1730-2048 complex points in the observed dimension, and 40-64 complex points in the ^{15}N dimension. Experiments with ^{13}CO ($^{13}C_\alpha$) as well as HCCH-TOCSY, CcoNH, and HccoNH were acquired with 96-128 complex points in the indirect dimensions using a mixing time of 12 ms. Triple-resonance experiments were collected using non-uniform sampling (NUS), of which 25-45% sparse sampling was applied with 8-48 transients. NOESY spectra were collected on the Bruker 850MHz instrument. The NOESY experiments were acquired with a 150 ms mixing time with 2048 complex points in observed dimensions and 64-192 complex points in indirect dimensions.

For relaxation experiments a Varian Inova 500 MHz instrument was used. R_1 data of ^{15}N nuclei were collected at delay times of 50 ms, 100 ms, 300 ms, 500 ms, 700 ms, 1000 ms, and 1400 ms. Similarly, R_2 data were collected at delay times of 10 ms, 30 ms, 50 ms, 70 ms, 90 ms, 110 ms, and 130 ms. Steady-state heteronuclear NOE data was additionally collected with a saturated mixing time of 2000 ms, sufficiently long enough compared to the longest calculated T_1 measurement.

Structural Restraints and Calculation of Flpp3sol

Assigned NOE values were binned into short (1.8-2.4 Å), medium (1.8-3.0 Å), long (1.8-4.0 Å), and very long (1.8-5.0 Å) distances based on peak intensity. These distance restrains, combined with the calculated torsion angles, were converted to CNS format to be used in simulated annealing methods using the PARALLELHDG 5.3 force field parameters (Linge et al., 2003a; Linge and Nilges, 1999; Linge et al., 2003b). Simulated annealing begins with an initial temperature of 10000 K cooled to 1000 K over 2000 steps, and then a slow cooling step, from 1000 K to 50 K over 8000 steps. The simulated annealing scripts used are ARIA based (Linge et al., 2003a) and directly interfaced with CNS (Brunger et al., 1998) to perform the calculations. The scripts were provided by RECOORD at the European Bioinformatics Institute and modified to utilize message passing interface (MPI) on a computer cluster to generate 200 randomly seeded structures.

One hundred of the lowest energy structures were refined by using explicit water protocols developed by Linge *et al* (Linge et al., 2003b). The annealed structures were immersed in a thin (7 Å) shell of water and minimized over 120 steps while restraining the distances of the protein heteroatoms. Subsequently, three sets of MD simulations were performed: the system was heated from 100 K to 500 K over 1000 steps, and then held at a constant temperature for 1000 steps to allow for structure refinement, followed by a 2000 step gradient cooling to 25 K. The system underwent one final 200 step conjugate gradient minimization as the last stage of the refinement. RECOORD provided scripts (again modified to utilize a computer cluster) utilizing CNS to perform the refinements.

Modelling Flpp3 in POPC/POPE bilayer and MD simulations

NMR Structure of *F. tularensis* lipoprotein Flpp3

The transmembrane helix of Flpp3 (Met1 to Thr25) was modeled onto the experimentally determined Flpp3 soluble domain using VMD (Humphrey et al., 1996) software followed by bond geometry idealization performed via ROSETTA software (Shen et al., 2008; Shen et al., 2009). Orientation of transmembrane helix relative to the soluble domain was designed to be normal to the protein surface and allow for electrostatic interaction between the positively charged protein surface and negatively charged membrane. The Flpp3 model was then inserted into a modeled 1:1 POPE/POPC membrane bilayer and hydrated with a 15 Å water layer on either side of the membrane (15 Å from the apex of Flpp3); 150 mM potassium chloride was included in the simulation as part of the hydration environment. This step of the modeling was performed using the CHARMM-GUI interface hosted by the University of Kansas Center for Bioinformatics (Jo et al., 2007; Jo et al., 2008; Jo et al., 2009).

The resulting protein model system was then subjected to two rounds of energy minimization by Amber 10 (Case et al., 2005; Pearlman et al., 1995) using General Amber Force Field parameters described by Dickson *et al.* (Dickson et al., 2012): one round using protein-restrained minimization to lower the energy of solvent and lipids; the second round using unrestrained minimization to lower the energy of the entire system. For both minimization steps, a steepest decent method (for 500 and 1000 steps respectively for restrained and unrestrained minimization) was applied prior to a conjugate gradient method (for 500 and 1500 steps respectively for restrained and unrestrained minimization). Four rounds of short MD simulations were performed (also using Amber 10) to equilibrate the system: round one warmed the system to 300K in a 20 ps simulation; rounds two and three were constant pressure simulations of 40 ps and

80 ps respectively, with round three having a greater time constant (tautp = 2.0) in order to more stabilize the system density; round four was a final 50 ps equilibrium simulation decreasing the harmonic restraint on the protein (from 5 to 0.5). The production run was an unrestrained one microsecond simulation in an attempt to minimize the energy on the entire system. All experimentally derived structural restraints were applied to the soluble domain of Flpp3 for this first production run. A sequential microsecond of molecular dynamics was employed without experimental restraints as a probe into the dynamics of the system on a fast timescale. This production run in all other respects was identical to the previous microsecond run. Energy minimizations and MD simulations were performed using the computing cluster at the Arizona State University Advanced Computing Center.

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ATOM     43 1HE  LYS A   3      -6.908  -3.774   8.237  1.00  0.00
ATOM     44 2HE  LYS A   3      -8.377  -4.166   9.123  1.00  0.00
ATOM     45  NZ  LYS A   3      -7.039  -5.778   8.873  1.00  0.00
ATOM     46 1HZ  LYS A   3      -7.751  -6.506   9.123  1.00  0.00
ATOM     47 2HZ  LYS A   3      -6.467  -5.603   9.719  1.00  0.00
ATOM     48 3HZ  LYS A   3      -6.416  -6.199   8.148  1.00  0.00
ATOM     49  C   LYS A   3     -10.152  -8.469   5.051  1.00  0.00
ATOM     50  O   LYS A   3     -10.471  -8.591   3.871  1.00  0.00
ATOM     51  N   GLY A   4      -9.137  -9.126   5.582  1.00  0.00
ATOM     52  H   GLY A   4      -8.869  -8.958   6.517  1.00  0.00
ATOM     53  CA  GLY A   4      -8.403 -10.086   4.804  1.00  0.00
ATOM     54 1HA  GLY A   4      -8.586 -11.072   5.204  1.00  0.00
ATOM     55 2HA  GLY A   4      -8.760 -10.051   3.785  1.00  0.00
ATOM     56  C   GLY A   4      -6.924  -9.825   4.810  1.00  0.00
ATOM     57  O   GLY A   4      -6.273  -9.911   3.760  1.00  0.00
ATOM     58  N   THR A   5      -6.395  -9.482   5.965  1.00  0.00
ATOM     59  H   THR A   5      -6.966  -9.390   6.767  1.00  0.00
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ATOM     60  CA  THR A   5      -4.986  -9.233   6.121  1.00  0.00
ATOM     61  HA  THR A   5      -4.639  -8.746   5.222  1.00  0.00
ATOM     62  CB  THR A   5      -4.738  -8.292   7.319  1.00  0.00
ATOM     63  HB  THR A   5      -5.088  -8.774   8.221  1.00  0.00
ATOM     64  OG1 THR A   5      -5.479  -7.068   7.112  1.00  0.00
ATOM     65  HG1 THR A   5      -5.560  -6.958   6.150  1.00  0.00
ATOM     66  CG2 THR A   5      -3.258  -7.959   7.457  1.00  0.00
ATOM     67 1HG2 THR A   5      -3.113  -7.303   8.304  1.00  0.00
ATOM     68 2HG2 THR A   5      -2.915  -7.466   6.559  1.00  0.00
ATOM     69 3HG2 THR A   5      -2.697  -8.869   7.605  1.00  0.00
ATOM     70  C   THR A   5      -4.211 -10.555   6.291  1.00  0.00
ATOM     71  O   THR A   5      -4.432 -11.310   7.239  1.00  0.00
ATOM     72  N   GLN A   6      -3.333 -10.824   5.355  1.00  0.00
ATOM     73  H   GLN A   6      -3.191 -10.177   4.626  1.00  0.00
ATOM     74  CA  GLN A   6      -2.545 -12.024   5.339  1.00  0.00
ATOM     75  HA  GLN A   6      -2.777 -12.646   6.189  1.00  0.00
ATOM     76  CB  GLN A   6      -2.834 -12.802   4.054  1.00  0.00
ATOM     77 1HB  GLN A   6      -2.386 -12.274   3.225  1.00  0.00
ATOM     78 2HB  GLN A   6      -2.370 -13.775   4.134  1.00  0.00
ATOM     79  CG  GLN A   6      -4.311 -13.002   3.740  1.00  0.00
ATOM     80 1HG  GLN A   6      -4.753 -13.608   4.517  1.00  0.00
ATOM     81 2HG  GLN A   6      -4.794 -12.036   3.723  1.00  0.00
ATOM     82  CD  GLN A   6      -4.537 -13.686   2.404  1.00  0.00
ATOM     83  OE1 GLN A   6      -5.525 -13.431   1.721  1.00  0.00
ATOM     84  NE2 GLN A   6      -3.639 -14.559   2.017  1.00  0.00
ATOM     85 2HE2 GLN A   6      -2.873 -14.722   2.603  1.00  0.00
ATOM     86 1HE2 GLN A   6      -3.779 -15.029   1.170  1.00  0.00
ATOM     87  C   GLN A   6      -1.074 -11.642   5.319  1.00  0.00
ATOM     88  O   GLN A   6      -0.677 -10.706   4.617  1.00  0.00
ATOM     89  N   TYR A   7      -0.285 -12.336   6.075  1.00  0.00
ATOM     90  H   TYR A   7      -0.654 -13.019   6.671  1.00  0.00
ATOM     91  CA  TYR A   7       1.145 -12.157   6.059  1.00  0.00
ATOM     92  HA  TYR A   7       1.356 -11.464   5.258  1.00  0.00
ATOM     93  CB  TYR A   7       1.668 -11.572   7.400  1.00  0.00
ATOM     94 1HB  TYR A   7       2.747 -11.552   7.371  1.00  0.00
ATOM     95 2HB  TYR A   7       1.308 -10.558   7.495  1.00  0.00
ATOM     96  CG  TYR A   7       1.263 -12.335   8.658  1.00  0.00
ATOM     97  CD1 TYR A   7       2.107 -13.282   9.230  1.00  0.00
ATOM     98  HD1 TYR A   7       3.063 -13.481   8.767  1.00  0.00
ATOM     99  CE1 TYR A   7       1.740 -13.968  10.373  1.00  0.00
ATOM    100  HE1 TYR A   7       2.409 -14.700  10.803  1.00  0.00
ATOM    101  CZ  TYR A   7       0.518 -13.713  10.959  1.00  0.00
ATOM    102  CE2 TYR A   7      -0.335 -12.779  10.413  1.00  0.00
ATOM    103  HE2 TYR A   7      -1.292 -12.580  10.873  1.00  0.00
ATOM    104  CD2 TYR A   7       0.038 -12.097   9.272  1.00  0.00
ATOM    105  HD2 TYR A   7      -0.631 -11.365   8.842  1.00  0.00
ATOM    106  OH  TYR A   7       0.149 -14.393  12.098  1.00  0.00
ATOM    107  HH  TYR A   7      -0.758 -14.696  12.006  1.00  0.00
ATOM    108  C   TYR A   7       1.800 -13.480   5.698  1.00  0.00
ATOM    109  O   TYR A   7       1.504 -14.508   6.314  1.00  0.00
ATOM    110  N   LYS A   8       2.636 -13.487   4.689  1.00  0.00
ATOM    111  H   LYS A   8       2.843 -12.653   4.207  1.00  0.00
ATOM    112  CA  LYS A   8       3.265 -14.723   4.277  1.00  0.00
ATOM    113  HA  LYS A   8       3.364 -15.369   5.136  1.00  0.00
ATOM    114  CB  LYS A   8       2.357 -15.415   3.229  1.00  0.00
ATOM    115 1HB  LYS A   8       1.347 -15.423   3.613  1.00  0.00
ATOM    116 2HB  LYS A   8       2.366 -14.807   2.336  1.00  0.00
ATOM    117  CG  LYS A   8       2.702 -16.868   2.825  1.00  0.00
ATOM    118 1HG  LYS A   8       2.092 -17.147   1.978  1.00  0.00
ATOM    119 2HG  LYS A   8       3.742 -16.904   2.537  1.00  0.00
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ATOM    120  CD  LYS A   8       2.461 -17.884   3.960  1.00  0.00
ATOM    121 1HD  LYS A   8       1.713 -17.485   4.629  1.00  0.00
ATOM    122 2HD  LYS A   8       2.091 -18.802   3.525  1.00  0.00
ATOM    123  CE  LYS A   8       3.720 -18.190   4.770  1.00  0.00
ATOM    124 1HE  LYS A   8       4.175 -17.262   5.083  1.00  0.00
ATOM    125 2HE  LYS A   8       3.443 -18.765   5.641  1.00  0.00
ATOM    126  NZ  LYS A   8       4.710 -18.957   3.981  1.00  0.00
ATOM    127 1HZ  LYS A   8       4.909 -18.451   3.082  1.00  0.00
ATOM    128 2HZ  LYS A   8       4.468 -19.933   3.737  1.00  0.00
ATOM    129 3HZ  LYS A   8       5.648 -18.937   4.442  1.00  0.00
ATOM    130  C   LYS A   8       4.626 -14.422   3.671  1.00  0.00
ATOM    131  O   LYS A   8       4.715 -13.712   2.692  1.00  0.00
ATOM    132  N   ASP A   9       5.668 -14.959   4.300  1.00  0.00
ATOM    133  H   ASP A   9       5.507 -15.433   5.139  1.00  0.00
ATOM    134  CA  ASP A   9       7.085 -14.900   3.827  1.00  0.00
ATOM    135  HA  ASP A   9       7.707 -15.268   4.629  1.00  0.00
ATOM    136  CB  ASP A   9       7.285 -15.813   2.602  1.00  0.00
ATOM    137 1HB  ASP A   9       6.761 -15.391   1.758  1.00  0.00
ATOM    138 2HB  ASP A   9       8.339 -15.872   2.373  1.00  0.00
ATOM    139  CG  ASP A   9       6.764 -17.200   2.838  1.00  0.00
ATOM    140  OD1 ASP A   9       5.862 -17.643   2.089  1.00  0.00
ATOM    141  OD2 ASP A   9       7.125 -17.839   3.859  1.00  0.00
ATOM    142  C   ASP A   9       7.532 -13.481   3.488  1.00  0.00
ATOM    143  O   ASP A   9       8.303 -13.268   2.569  1.00  0.00
ATOM    144  N   GLY A  10       7.089 -12.522   4.270  1.00  0.00
ATOM    145  H   GLY A  10       6.489 -12.749   5.007  1.00  0.00
ATOM    146  CA  GLY A  10       7.471 -11.154   4.032  1.00  0.00
ATOM    147 1HA  GLY A  10       7.666 -10.675   4.981  1.00  0.00
ATOM    148 2HA  GLY A  10       8.375 -11.141   3.441  1.00  0.00
ATOM    149  C   GLY A  10       6.401 -10.375   3.302  1.00  0.00
ATOM    150  O   GLY A  10       6.314  -9.152   3.450  1.00  0.00
ATOM    151  N   TYR A  11       5.595 -11.073   2.515  1.00  0.00
ATOM    152  H   TYR A  11       5.713 -12.046   2.432  1.00  0.00
ATOM    153  CA  TYR A  11       4.501 -10.451   1.795  1.00  0.00
ATOM    154  HA  TYR A  11       4.874  -9.555   1.324  1.00  0.00
ATOM    155  CB  TYR A  11       3.900 -11.368   0.714  1.00  0.00
ATOM    156 1HB  TYR A  11       3.673 -12.323   1.164  1.00  0.00
ATOM    157 2HB  TYR A  11       2.977 -10.926   0.370  1.00  0.00
ATOM    158  CG  TYR A  11       4.766 -11.640  -0.491  1.00  0.00
ATOM    159  CD1 TYR A  11       4.889 -10.693  -1.499  1.00  0.00
ATOM    160  HD1 TYR A  11       4.383  -9.745  -1.391  1.00  0.00
ATOM    161  CE1 TYR A  11       5.644 -10.941  -2.625  1.00  0.00
ATOM    162  HE1 TYR A  11       5.727 -10.190  -3.396  1.00  0.00
ATOM    163  CZ  TYR A  11       6.290 -12.149  -2.757  1.00  0.00
ATOM    164  CE2 TYR A  11       6.186 -13.110  -1.769  1.00  0.00
ATOM    165  HE2 TYR A  11       6.693 -14.057  -1.873  1.00  0.00
ATOM    166  CD2 TYR A  11       5.423 -12.853  -0.646  1.00  0.00
ATOM    167  HD2 TYR A  11       5.337 -13.600   0.128  1.00  0.00
ATOM    168  OH  TYR A  11       7.049 -12.397  -3.877  1.00  0.00
ATOM    169  HH  TYR A  11       6.896 -13.307  -4.147  1.00  0.00
ATOM    170  C   TYR A  11       3.403 -10.085   2.752  1.00  0.00
ATOM    171  O   TYR A  11       3.070 -10.857   3.671  1.00  0.00
ATOM    172  N   TYR A  12       2.864  -8.930   2.560  1.00  0.00
ATOM    173  H   TYR A  12       3.192  -8.351   1.840  1.00  0.00
ATOM    174  CA  TYR A  12       1.769  -8.470   3.335  1.00  0.00
ATOM    175  HA  TYR A  12       1.484  -9.228   4.052  1.00  0.00
ATOM    176  CB  TYR A  12       2.173  -7.172   4.043  1.00  0.00
ATOM    177 1HB  TYR A  12       3.208  -7.250   4.341  1.00  0.00
ATOM    178 2HB  TYR A  12       2.077  -6.356   3.343  1.00  0.00
ATOM    179  CG  TYR A  12       1.373  -6.824   5.280  1.00  0.00
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ATOM    180  CD1 TYR A  12       1.744  -7.336   6.518  1.00  0.00
ATOM    181  HD1 TYR A  12       2.592  -8.003   6.573  1.00  0.00
ATOM    182  CE1 TYR A  12       1.056  -7.011   7.667  1.00  0.00
ATOM    183  HE1 TYR A  12       1.365  -7.421   8.616  1.00  0.00
ATOM    184  CZ  TYR A  12      -0.023  -6.164   7.594  1.00  0.00
ATOM    185  CE2 TYR A  12      -0.417  -5.642   6.379  1.00  0.00
ATOM    186  HE2 TYR A  12      -1.267  -4.978   6.331  1.00  0.00
ATOM    187  CD2 TYR A  12       0.281  -5.968   5.229  1.00  0.00
ATOM    188  HD2 TYR A  12      -0.025  -5.562   4.277  1.00  0.00
ATOM    189  OH  TYR A  12      -0.709  -5.828   8.741  1.00  0.00
ATOM    190  HH  TYR A  12      -0.089  -5.593   9.444  1.00  0.00
ATOM    191  C   TYR A  12       0.658  -8.234   2.330  1.00  0.00
ATOM    192  O   TYR A  12       0.810  -7.436   1.413  1.00  0.00
ATOM    193  N   ILE A  13      -0.398  -8.962   2.438  1.00  0.00
ATOM    194  H   ILE A  13      -0.497  -9.580   3.200  1.00  0.00
ATOM    195  CA  ILE A  13      -1.468  -8.868   1.473  1.00  0.00
ATOM    196  HA  ILE A  13      -1.281  -8.034   0.812  1.00  0.00
ATOM    197  CB  ILE A  13      -1.582 -10.182   0.636  1.00  0.00
ATOM    198  HB  ILE A  13      -1.959 -10.967   1.274  1.00  0.00
ATOM    199  CG2 ILE A  13      -2.557  -9.983  -0.519  1.00  0.00
ATOM    200 1HG2 ILE A  13      -2.203  -9.186  -1.157  1.00  0.00
ATOM    201 2HG2 ILE A  13      -3.531  -9.725  -0.129  1.00  0.00
ATOM    202 3HG2 ILE A  13      -2.630 -10.896  -1.091  1.00  0.00
ATOM    203  CG1 ILE A  13      -0.205 -10.599   0.082  1.00  0.00
ATOM    204 1HG1 ILE A  13       0.126  -9.858  -0.630  1.00  0.00
ATOM    205 2HG1 ILE A  13       0.501 -10.644   0.898  1.00  0.00
ATOM    206  CD1 ILE A  13      -0.201 -11.943  -0.620  1.00  0.00
ATOM    207 1HD1 ILE A  13      -0.517 -12.705   0.079  1.00  0.00
ATOM    208 2HD1 ILE A  13       0.795 -12.163  -0.972  1.00  0.00
ATOM    209 3HD1 ILE A  13      -0.885 -11.915  -1.455  1.00  0.00
ATOM    210  C   ILE A  13      -2.746  -8.654   2.237  1.00  0.00
ATOM    211  O   ILE A  13      -2.950  -9.293   3.238  1.00  0.00
ATOM    212  N   THR A  14      -3.586  -7.770   1.803  1.00  0.00
ATOM    213  H   THR A  14      -3.416  -7.274   0.970  1.00  0.00
ATOM    214  CA  THR A  14      -4.792  -7.523   2.536  1.00  0.00
ATOM    215  HA  THR A  14      -5.113  -8.461   2.967  1.00  0.00
ATOM    216  CB  THR A  14      -4.543  -6.510   3.711  1.00  0.00
ATOM    217  HB  THR A  14      -3.743  -6.902   4.323  1.00  0.00
ATOM    218  OG1 THR A  14      -5.721  -6.364   4.538  1.00  0.00
ATOM    219  HG1 THR A  14      -6.350  -5.769   4.111  1.00  0.00
ATOM    220  CG2 THR A  14      -4.132  -5.143   3.182  1.00  0.00
ATOM    221 1HG2 THR A  14      -4.917  -4.753   2.551  1.00  0.00
ATOM    222 2HG2 THR A  14      -3.222  -5.236   2.609  1.00  0.00
ATOM    223 3HG2 THR A  14      -3.968  -4.468   4.010  1.00  0.00
ATOM    224  C   THR A  14      -5.882  -7.012   1.619  1.00  0.00
ATOM    225  O   THR A  14      -5.622  -6.614   0.486  1.00  0.00
ATOM    226  N   THR A  15      -7.079  -7.060   2.088  1.00  0.00
ATOM    227  H   THR A  15      -7.256  -7.464   2.964  1.00  0.00
ATOM    228  CA  THR A  15      -8.182  -6.495   1.414  1.00  0.00
ATOM    229  HA  THR A  15      -7.878  -6.121   0.448  1.00  0.00
ATOM    230  CB  THR A  15      -9.333  -7.516   1.262  1.00  0.00
ATOM    231  HB  THR A  15      -9.764  -7.700   2.236  1.00  0.00
ATOM    232  OG1 THR A  15      -8.825  -8.746   0.731  1.00  0.00
ATOM    233  HG1 THR A  15      -9.451  -9.404   1.059  1.00  0.00
ATOM    234  CG2 THR A  15     -10.421  -6.991   0.328  1.00  0.00
ATOM    235 1HG2 THR A  15     -10.823  -6.070   0.725  1.00  0.00
ATOM    236 2HG2 THR A  15     -11.211  -7.723   0.247  1.00  0.00
ATOM    237 3HG2 THR A  15     -10.000  -6.808  -0.650  1.00  0.00
ATOM    238  C   THR A  15      -8.637  -5.375   2.301  1.00  0.00
ATOM    239  O   THR A  15      -8.485  -5.466   3.524  1.00  0.00
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ATOM    240  N   LEU A  16      -9.058  -4.314   1.738  1.00  0.00
ATOM    241  H   LEU A  16      -9.014  -4.213   0.759  1.00  0.00
ATOM    242  CA  LEU A  16      -9.595  -3.269   2.507  1.00  0.00
ATOM    243  HA  LEU A  16      -9.619  -3.594   3.535  1.00  0.00
ATOM    244  CB  LEU A  16      -8.753  -2.010   2.383  1.00  0.00
ATOM    245 1HB  LEU A  16      -7.707  -2.273   2.439  1.00  0.00
ATOM    246 2HB  LEU A  16      -8.964  -1.604   1.403  1.00  0.00
ATOM    247  CG  LEU A  16      -9.049  -0.916   3.403  1.00  0.00
ATOM    248  HG  LEU A  16     -10.062  -0.568   3.266  1.00  0.00
ATOM    249  CD1 LEU A  16      -8.910  -1.465   4.821  1.00  0.00
ATOM    250 1HD1 LEU A  16      -7.912  -1.856   4.958  1.00  0.00
ATOM    251 2HD1 LEU A  16      -9.628  -2.256   4.980  1.00  0.00
ATOM    252 3HD1 LEU A  16      -9.090  -0.676   5.534  1.00  0.00
ATOM    253  CD2 LEU A  16      -8.105   0.249   3.200  1.00  0.00
ATOM    254 1HD2 LEU A  16      -8.234   0.651   2.207  1.00  0.00
ATOM    255 2HD2 LEU A  16      -7.089  -0.094   3.321  1.00  0.00
ATOM    256 3HD2 LEU A  16      -8.316   1.016   3.932  1.00  0.00
ATOM    257  C   LEU A  16     -10.984  -3.034   2.014  1.00  0.00
ATOM    258  O   LEU A  16     -11.188  -2.800   0.816  1.00  0.00
ATOM    259  N   ASN A  17     -11.935  -3.130   2.898  1.00  0.00
ATOM    260  H   ASN A  17     -11.710  -3.327   3.829  1.00  0.00
ATOM    261  CA  ASN A  17     -13.326  -2.968   2.524  1.00  0.00
ATOM    262  HA  ASN A  17     -13.414  -3.348   1.516  1.00  0.00
ATOM    263  CB  ASN A  17     -14.292  -3.764   3.435  1.00  0.00
ATOM    264 1HB  ASN A  17     -14.145  -3.448   4.457  1.00  0.00
ATOM    265 2HB  ASN A  17     -15.307  -3.540   3.143  1.00  0.00
ATOM    266  CG  ASN A  17     -14.095  -5.279   3.377  1.00  0.00
ATOM    267  OD1 ASN A  17     -12.993  -5.776   3.177  1.00  0.00
ATOM    268  ND2 ASN A  17     -15.161  -6.019   3.559  1.00  0.00
ATOM    269 2HD2 ASN A  17     -16.019  -5.574   3.719  1.00  0.00
ATOM    270 1HD2 ASN A  17     -15.035  -6.989   3.521  1.00  0.00
ATOM    271  C   ASN A  17     -13.700  -1.512   2.485  1.00  0.00
ATOM    272  O   ASN A  17     -14.405  -1.011   3.357  1.00  0.00
ATOM    273  N   TYR A  18     -13.111  -0.834   1.534  1.00  0.00
ATOM    274  H   TYR A  18     -12.470  -1.310   0.959  1.00  0.00
ATOM    275  CA  TYR A  18     -13.350   0.556   1.243  1.00  0.00
ATOM    276  HA  TYR A  18     -14.393   0.749   1.453  1.00  0.00
ATOM    277  CB  TYR A  18     -12.469   1.512   2.075  1.00  0.00
ATOM    278 1HB  TYR A  18     -11.467   1.114   2.122  1.00  0.00
ATOM    279 2HB  TYR A  18     -12.440   2.472   1.580  1.00  0.00
ATOM    280  CG  TYR A  18     -12.944   1.734   3.502  1.00  0.00
ATOM    281  CD1 TYR A  18     -12.269   1.189   4.591  1.00  0.00
ATOM    282  HD1 TYR A  18     -11.388   0.589   4.422  1.00  0.00
ATOM    283  CE1 TYR A  18     -12.713   1.408   5.885  1.00  0.00
ATOM    284  HE1 TYR A  18     -12.179   0.978   6.721  1.00  0.00
ATOM    285  CZ  TYR A  18     -13.844   2.177   6.102  1.00  0.00
ATOM    286  CE2 TYR A  18     -14.525   2.726   5.041  1.00  0.00
ATOM    287  HE2 TYR A  18     -15.406   3.327   5.210  1.00  0.00
ATOM    288  CD2 TYR A  18     -14.077   2.504   3.754  1.00  0.00
ATOM    289  HD2 TYR A  18     -14.613   2.934   2.920  1.00  0.00
ATOM    290  OH  TYR A  18     -14.288   2.406   7.394  1.00  0.00
ATOM    291  HH  TYR A  18     -15.251   2.460   7.344  1.00  0.00
ATOM    292  C   TYR A  18     -13.121   0.775  -0.227  1.00  0.00
ATOM    293  O   TYR A  18     -12.406  -0.021  -0.877  1.00  0.00
ATOM    294  N   ASN A  19     -13.691   1.834  -0.745  1.00  0.00
ATOM    295  H   ASN A  19     -14.166   2.461  -0.164  1.00  0.00
ATOM    296  CA  ASN A  19     -13.662   2.117  -2.154  1.00  0.00
ATOM    297  HA  ASN A  19     -13.968   1.210  -2.652  1.00  0.00
ATOM    298  CB  ASN A  19     -14.659   3.218  -2.545  1.00  0.00
ATOM    299 1HB  ASN A  19     -14.495   4.079  -1.914  1.00  0.00
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ATOM    300 2HB  ASN A  19     -14.477   3.493  -3.569  1.00  0.00
ATOM    301  CG  ASN A  19     -16.114   2.795  -2.399  1.00  0.00
ATOM    302  OD1 ASN A  19     -16.463   2.045  -1.518  1.00  0.00
ATOM    303  ND2 ASN A  19     -16.959   3.260  -3.284  1.00  0.00
ATOM    304 2HD2 ASN A  19     -16.656   3.857  -3.996  1.00  0.00
ATOM    305 1HD2 ASN A  19     -17.882   2.937  -3.193  1.00  0.00
ATOM    306  C   ASN A  19     -12.285   2.458  -2.647  1.00  0.00
ATOM    307  O   ASN A  19     -11.570   3.257  -2.046  1.00  0.00
ATOM    308  N   PHE A  20     -11.951   1.873  -3.770  1.00  0.00
ATOM    309  H   PHE A  20     -12.599   1.262  -4.177  1.00  0.00
ATOM    310  CA  PHE A  20     -10.663   2.020  -4.448  1.00  0.00
ATOM    311  HA  PHE A  20      -9.920   1.494  -3.869  1.00  0.00
ATOM    312  CB  PHE A  20     -10.797   1.307  -5.797  1.00  0.00
ATOM    313 1HB  PHE A  20     -10.835   0.248  -5.590  1.00  0.00
ATOM    314 2HB  PHE A  20     -11.732   1.581  -6.261  1.00  0.00
ATOM    315  CG  PHE A  20      -9.694   1.488  -6.795  1.00  0.00
ATOM    316  CD1 PHE A  20      -8.525   0.759  -6.703  1.00  0.00
ATOM    317  HD1 PHE A  20      -8.382   0.086  -5.872  1.00  0.00
ATOM    318  CE1 PHE A  20      -7.546   0.886  -7.657  1.00  0.00
ATOM    319  HE1 PHE A  20      -6.634   0.313  -7.576  1.00  0.00
ATOM    320  CZ  PHE A  20      -7.727   1.754  -8.718  1.00  0.00
ATOM    321  HZ  PHE A  20      -6.957   1.853  -9.470  1.00  0.00
ATOM    322  CE2 PHE A  20      -8.883   2.487  -8.821  1.00  0.00
ATOM    323  HE2 PHE A  20      -9.023   3.166  -9.650  1.00  0.00
ATOM    324  CD2 PHE A  20      -9.863   2.349  -7.869  1.00  0.00
ATOM    325  HD2 PHE A  20     -10.773   2.925  -7.948  1.00  0.00
ATOM    326  C   PHE A  20     -10.230   3.487  -4.603  1.00  0.00
ATOM    327  O   PHE A  20      -9.049   3.806  -4.472  1.00  0.00
ATOM    328  N   ASN A  21     -11.195   4.367  -4.823  1.00  0.00
ATOM    329  H   ASN A  21     -12.114   4.034  -4.884  1.00  0.00
ATOM    330  CA  ASN A  21     -10.924   5.794  -5.002  1.00  0.00
ATOM    331  HA  ASN A  21     -10.249   5.918  -5.836  1.00  0.00
ATOM    332  CB  ASN A  21     -12.228   6.545  -5.303  1.00  0.00
ATOM    333 1HB  ASN A  21     -12.865   6.504  -4.432  1.00  0.00
ATOM    334 2HB  ASN A  21     -11.997   7.576  -5.522  1.00  0.00
ATOM    335  CG  ASN A  21     -12.991   5.963  -6.472  1.00  0.00
ATOM    336  OD1 ASN A  21     -13.803   5.061  -6.294  1.00  0.00
ATOM    337  ND2 ASN A  21     -12.753   6.466  -7.656  1.00  0.00
ATOM    338 2HD2 ASN A  21     -12.098   7.189  -7.745  1.00  0.00
ATOM    339 1HD2 ASN A  21     -13.253   6.096  -8.413  1.00  0.00
ATOM    340  C   ASN A  21     -10.301   6.387  -3.738  1.00  0.00
ATOM    341  O   ASN A  21      -9.257   7.036  -3.795  1.00  0.00
ATOM    342  N   THR A  22     -10.926   6.130  -2.596  1.00  0.00
ATOM    343  H   THR A  22     -11.716   5.551  -2.595  1.00  0.00
ATOM    344  CA  THR A  22     -10.433   6.645  -1.342  1.00  0.00
ATOM    345  HA  THR A  22     -10.136   7.659  -1.569  1.00  0.00
ATOM    346  CB  THR A  22     -11.521   6.686  -0.199  1.00  0.00
ATOM    347  HB  THR A  22     -12.330   7.314  -0.548  1.00  0.00
ATOM    348  OG1 THR A  22     -10.990   7.280   0.990  1.00  0.00
ATOM    349  HG1 THR A  22     -10.396   7.997   0.750  1.00  0.00
ATOM    350  CG2 THR A  22     -12.072   5.310   0.133  1.00  0.00
ATOM    351 1HG2 THR A  22     -12.523   4.881  -0.749  1.00  0.00
ATOM    352 2HG2 THR A  22     -12.816   5.396   0.912  1.00  0.00
ATOM    353 3HG2 THR A  22     -11.267   4.674   0.472  1.00  0.00
ATOM    354  C   THR A  22      -9.141   5.930  -0.925  1.00  0.00
ATOM    355  O   THR A  22      -8.228   6.559  -0.383  1.00  0.00
ATOM    356  N   VAL A  23      -9.063   4.622  -1.207  1.00  0.00
ATOM    357  H   VAL A  23      -9.824   4.175  -1.638  1.00  0.00
ATOM    358  CA  VAL A  23      -7.878   3.831  -0.878  1.00  0.00
ATOM    359  HA  VAL A  23      -7.693   3.959   0.178  1.00  0.00
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ATOM    360  CB  VAL A  23      -8.072   2.317  -1.176  1.00  0.00
ATOM    361  HB  VAL A  23      -8.263   2.199  -2.232  1.00  0.00
ATOM    362  CG1 VAL A  23      -6.824   1.523  -0.818  1.00  0.00
ATOM    363 1HG1 VAL A  23      -6.998   0.477  -1.022  1.00  0.00
ATOM    364 2HG1 VAL A  23      -6.604   1.655   0.231  1.00  0.00
ATOM    365 3HG1 VAL A  23      -5.990   1.874  -1.408  1.00  0.00
ATOM    366  CG2 VAL A  23      -9.265   1.771  -0.409  1.00  0.00
ATOM    367 1HG2 VAL A  23     -10.159   2.298  -0.712  1.00  0.00
ATOM    368 2HG2 VAL A  23      -9.109   1.912   0.649  1.00  0.00
ATOM    369 3HG2 VAL A  23      -9.379   0.718  -0.620  1.00  0.00
ATOM    370  C   VAL A  23      -6.650   4.364  -1.615  1.00  0.00
ATOM    371  O   VAL A  23      -5.590   4.540  -1.007  1.00  0.00
ATOM    372  N   TYR A  24      -6.806   4.661  -2.908  1.00  0.00
ATOM    373  H   TYR A  24      -7.667   4.466  -3.343  1.00  0.00
ATOM    374  CA  TYR A  24      -5.721   5.241  -3.698  1.00  0.00
ATOM    375  HA  TYR A  24      -4.898   4.542  -3.681  1.00  0.00
ATOM    376  CB  TYR A  24      -6.154   5.471  -5.169  1.00  0.00
ATOM    377 1HB  TYR A  24      -6.291   4.515  -5.652  1.00  0.00
ATOM    378 2HB  TYR A  24      -7.089   6.011  -5.179  1.00  0.00
ATOM    379  CG  TYR A  24      -5.138   6.269  -5.984  1.00  0.00
ATOM    380  CD1 TYR A  24      -3.957   5.692  -6.415  1.00  0.00
ATOM    381  HD1 TYR A  24      -3.773   4.655  -6.183  1.00  0.00
ATOM    382  CE1 TYR A  24      -3.020   6.412  -7.121  1.00  0.00
ATOM    383  HE1 TYR A  24      -2.106   5.937  -7.445  1.00  0.00
ATOM    384  CZ  TYR A  24      -3.260   7.730  -7.417  1.00  0.00
ATOM    385  CE2 TYR A  24      -4.430   8.336  -7.010  1.00  0.00
ATOM    386  HE2 TYR A  24      -4.616   9.373  -7.244  1.00  0.00
ATOM    387  CD2 TYR A  24      -5.360   7.608  -6.296  1.00  0.00
ATOM    388  HD2 TYR A  24      -6.278   8.079  -5.974  1.00  0.00
ATOM    389  OH  TYR A  24      -2.321   8.452  -8.109  1.00  0.00
ATOM    390  HH  TYR A  24      -1.937   7.902  -8.805  1.00  0.00
ATOM    391  C   TYR A  24      -5.257   6.553  -3.082  1.00  0.00
ATOM    392  O   TYR A  24      -4.058   6.782  -2.906  1.00  0.00
ATOM    393  N   ASN A  25      -6.222   7.379  -2.728  1.00  0.00
ATOM    394  H   ASN A  25      -7.149   7.083  -2.860  1.00  0.00
ATOM    395  CA  ASN A  25      -5.972   8.700  -2.162  1.00  0.00
ATOM    396  HA  ASN A  25      -5.414   9.288  -2.875  1.00  0.00
ATOM    397  CB  ASN A  25      -7.322   9.389  -1.886  1.00  0.00
ATOM    398 1HB  ASN A  25      -7.973   9.212  -2.726  1.00  0.00
ATOM    399 2HB  ASN A  25      -7.760   8.915  -1.021  1.00  0.00
ATOM    400  CG  ASN A  25      -7.260  10.909  -1.624  1.00  0.00
ATOM    401  OD1 ASN A  25      -8.195  11.622  -1.944  1.00  0.00
ATOM    402  ND2 ASN A  25      -6.201  11.408  -1.034  1.00  0.00
ATOM    403 2HD2 ASN A  25      -5.459  10.826  -0.759  1.00  0.00
ATOM    404 1HD2 ASN A  25      -6.211  12.373  -0.880  1.00  0.00
ATOM    405  C   ASN A  25      -5.178   8.568  -0.863  1.00  0.00
ATOM    406  O   ASN A  25      -4.151   9.224  -0.687  1.00  0.00
ATOM    407  N   ALA A  26      -5.647   7.696   0.008  1.00  0.00
ATOM    408  H   ALA A  26      -6.453   7.191  -0.245  1.00  0.00
ATOM    409  CA  ALA A  26      -5.036   7.472   1.319  1.00  0.00
ATOM    410  HA  ALA A  26      -4.974   8.426   1.820  1.00  0.00
ATOM    411  CB  ALA A  26      -5.916   6.560   2.149  1.00  0.00
ATOM    412 1HB  ALA A  26      -5.982   5.593   1.671  1.00  0.00
ATOM    413 2HB  ALA A  26      -6.905   6.989   2.229  1.00  0.00
ATOM    414 3HB  ALA A  26      -5.491   6.446   3.135  1.00  0.00
ATOM    415  C   ALA A  26      -3.628   6.887   1.204  1.00  0.00
ATOM    416  O   ALA A  26      -2.698   7.357   1.858  1.00  0.00
ATOM    417  N   THR A  27      -3.483   5.883   0.365  1.00  0.00
ATOM    418  H   THR A  27      -4.272   5.532  -0.100  1.00  0.00
ATOM    419  CA  THR A  27      -2.208   5.226   0.131  1.00  0.00
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ATOM    420  HA  THR A  27      -1.834   4.847   1.069  1.00  0.00
ATOM    421  CB  THR A  27      -2.389   4.046  -0.841  1.00  0.00
ATOM    422  HB  THR A  27      -2.738   4.432  -1.787  1.00  0.00
ATOM    423  OG1 THR A  27      -3.374   3.155  -0.312  1.00  0.00
ATOM    424  HG1 THR A  27      -4.226   3.394  -0.697  1.00  0.00
ATOM    425  CG2 THR A  27      -1.082   3.294  -1.052  1.00  0.00
ATOM    426 1HG2 THR A  27      -0.729   2.905  -0.109  1.00  0.00
ATOM    427 2HG2 THR A  27      -0.353   3.983  -1.454  1.00  0.00
ATOM    428 3HG2 THR A  27      -1.239   2.483  -1.749  1.00  0.00
ATOM    429  C   THR A  27      -1.186   6.207  -0.434  1.00  0.00
ATOM    430  O   THR A  27      -0.015   6.205  -0.023  1.00  0.00
ATOM    431  N   LEU A  28      -1.641   7.067  -1.338  1.00  0.00
ATOM    432  H   LEU A  28      -2.586   7.031  -1.603  1.00  0.00
ATOM    433  CA  LEU A  28      -0.785   8.056  -1.936  1.00  0.00
ATOM    434  HA  LEU A  28       0.047   7.546  -2.399  1.00  0.00
ATOM    435  CB  LEU A  28      -1.554   8.842  -3.004  1.00  0.00
ATOM    436 1HB  LEU A  28      -1.922   8.137  -3.736  1.00  0.00
ATOM    437 2HB  LEU A  28      -2.406   9.305  -2.528  1.00  0.00
ATOM    438  CG  LEU A  28      -0.775   9.926  -3.743  1.00  0.00
ATOM    439  HG  LEU A  28      -0.378  10.616  -3.014  1.00  0.00
ATOM    440  CD1 LEU A  28       0.396   9.324  -4.507  1.00  0.00
ATOM    441 1HD1 LEU A  28       0.922  10.107  -5.031  1.00  0.00
ATOM    442 2HD1 LEU A  28       0.031   8.597  -5.218  1.00  0.00
ATOM    443 3HD1 LEU A  28       1.071   8.843  -3.815  1.00  0.00
ATOM    444  CD2 LEU A  28      -1.692  10.694  -4.680  1.00  0.00
ATOM    445 1HD2 LEU A  28      -2.483  11.158  -4.109  1.00  0.00
ATOM    446 2HD2 LEU A  28      -2.121  10.016  -5.403  1.00  0.00
ATOM    447 3HD2 LEU A  28      -1.124  11.456  -5.192  1.00  0.00
ATOM    448  C   LEU A  28      -0.268   8.984  -0.852  1.00  0.00
ATOM    449  O   LEU A  28       0.920   9.138  -0.696  1.00  0.00
ATOM    450  N   GLN A  29      -1.181   9.503  -0.056  1.00  0.00
ATOM    451  H   GLN A  29      -2.117   9.298  -0.259  1.00  0.00
ATOM    452  CA  GLN A  29      -0.865  10.384   1.070  1.00  0.00
ATOM    453  HA  GLN A  29      -0.445  11.300   0.682  1.00  0.00
ATOM    454  CB  GLN A  29      -2.129  10.729   1.852  1.00  0.00
ATOM    455 1HB  GLN A  29      -2.621   9.809   2.130  1.00  0.00
ATOM    456 2HB  GLN A  29      -1.843  11.250   2.754  1.00  0.00
ATOM    457  CG  GLN A  29      -3.129  11.580   1.110  1.00  0.00
ATOM    458 1HG  GLN A  29      -2.687  12.537   0.881  1.00  0.00
ATOM    459 2HG  GLN A  29      -3.379  11.080   0.185  1.00  0.00
ATOM    460  CD  GLN A  29      -4.402  11.771   1.909  1.00  0.00
ATOM    461  OE1 GLN A  29      -5.349  11.010   1.775  1.00  0.00
ATOM    462  NE2 GLN A  29      -4.425  12.763   2.761  1.00  0.00
ATOM    463 2HE2 GLN A  29      -3.637  13.338   2.841  1.00  0.00
ATOM    464 1HE2 GLN A  29      -5.230  12.858   3.312  1.00  0.00
ATOM    465  C   GLN A  29       0.126   9.740   2.029  1.00  0.00
ATOM    466  O   GLN A  29       1.097  10.369   2.434  1.00  0.00
ATOM    467  N   ALA A  30      -0.107   8.479   2.351  1.00  0.00
ATOM    468  H   ALA A  30      -0.875   8.023   1.936  1.00  0.00
ATOM    469  CA  ALA A  30       0.707   7.763   3.314  1.00  0.00
ATOM    470  HA  ALA A  30       0.607   8.272   4.260  1.00  0.00
ATOM    471  CB  ALA A  30       0.176   6.351   3.492  1.00  0.00
ATOM    472 1HB  ALA A  30      -0.868   6.389   3.764  1.00  0.00
ATOM    473 2HB  ALA A  30       0.734   5.851   4.271  1.00  0.00
ATOM    474 3HB  ALA A  30       0.288   5.809   2.564  1.00  0.00
ATOM    475  C   ALA A  30       2.183   7.725   2.918  1.00  0.00
ATOM    476  O   ALA A  30       3.061   8.034   3.736  1.00  0.00
ATOM    477  N   ILE A  31       2.454   7.375   1.681  1.00  0.00
ATOM    478  H   ILE A  31       1.715   7.174   1.065  1.00  0.00
ATOM    479  CA  ILE A  31       3.825   7.290   1.227  1.00  0.00
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ATOM    480  HA  ILE A  31       4.403   7.050   2.109  1.00  0.00
ATOM    481  CB  ILE A  31       4.031   6.137   0.196  1.00  0.00
ATOM    482  HB  ILE A  31       3.808   5.216   0.714  1.00  0.00
ATOM    483  CG2 ILE A  31       3.062   6.219  -0.980  1.00  0.00
ATOM    484 1HG2 ILE A  31       2.046   6.130  -0.626  1.00  0.00
ATOM    485 2HG2 ILE A  31       3.292   5.402  -1.650  1.00  0.00
ATOM    486 3HG2 ILE A  31       3.199   7.159  -1.491  1.00  0.00
ATOM    487  CG1 ILE A  31       5.475   6.071  -0.291  1.00  0.00
ATOM    488 1HG1 ILE A  31       5.748   7.014  -0.741  1.00  0.00
ATOM    489 2HG1 ILE A  31       6.129   5.882   0.549  1.00  0.00
ATOM    490  CD1 ILE A  31       5.706   4.990  -1.310  1.00  0.00
ATOM    491 1HD1 ILE A  31       5.085   5.193  -2.170  1.00  0.00
ATOM    492 2HD1 ILE A  31       5.445   4.032  -0.886  1.00  0.00
ATOM    493 3HD1 ILE A  31       6.744   4.996  -1.607  1.00  0.00
ATOM    494  C   ILE A  31       4.372   8.640   0.707  1.00  0.00
ATOM    495  O   ILE A  31       5.441   9.067   1.102  1.00  0.00
ATOM    496  N   GLN A  32       3.581   9.326  -0.093  1.00  0.00
ATOM    497  H   GLN A  32       2.668   9.002  -0.261  1.00  0.00
ATOM    498  CA  GLN A  32       3.984  10.573  -0.753  1.00  0.00
ATOM    499  HA  GLN A  32       4.923  10.400  -1.256  1.00  0.00
ATOM    500  CB  GLN A  32       2.935  10.931  -1.813  1.00  0.00
ATOM    501 1HB  GLN A  32       3.002  10.218  -2.620  1.00  0.00
ATOM    502 2HB  GLN A  32       1.956  10.844  -1.364  1.00  0.00
ATOM    503  CG  GLN A  32       3.062  12.303  -2.405  1.00  0.00
ATOM    504 1HG  GLN A  32       3.070  12.995  -1.575  1.00  0.00
ATOM    505 2HG  GLN A  32       3.983  12.347  -2.964  1.00  0.00
ATOM    506  CD  GLN A  32       1.899  12.653  -3.298  1.00  0.00
ATOM    507  OE1 GLN A  32       1.921  12.418  -4.496  1.00  0.00
ATOM    508  NE2 GLN A  32       0.853  13.190  -2.709  1.00  0.00
ATOM    509 2HE2 GLN A  32       0.883  13.328  -1.736  1.00  0.00
ATOM    510 1HE2 GLN A  32       0.095  13.422  -3.281  1.00  0.00
ATOM    511  C   GLN A  32       4.147  11.726   0.234  1.00  0.00
ATOM    512  O   GLN A  32       5.059  12.529   0.124  1.00  0.00
ATOM    513  N   ASN A  33       3.277  11.794   1.205  1.00  0.00
ATOM    514  H   ASN A  33       2.607  11.083   1.315  1.00  0.00
ATOM    515  CA  ASN A  33       3.293  12.905   2.142  1.00  0.00
ATOM    516  HA  ASN A  33       3.806  13.718   1.650  1.00  0.00
ATOM    517  CB  ASN A  33       1.873  13.364   2.473  1.00  0.00
ATOM    518 1HB  ASN A  33       1.308  12.490   2.757  1.00  0.00
ATOM    519 2HB  ASN A  33       1.911  14.053   3.304  1.00  0.00
ATOM    520  CG  ASN A  33       1.180  14.038   1.293  1.00  0.00
ATOM    521  OD1 ASN A  33       0.534  13.390   0.466  1.00  0.00
ATOM    522  ND2 ASN A  33       1.301  15.343   1.207  1.00  0.00
ATOM    523 2HD2 ASN A  33       1.823  15.801   1.898  1.00  0.00
ATOM    524 1HD2 ASN A  33       0.871  15.797   0.454  1.00  0.00
ATOM    525  C   ASN A  33       4.061  12.566   3.394  1.00  0.00
ATOM    526  O   ASN A  33       3.975  13.282   4.392  1.00  0.00
ATOM    527  N   GLY A  34       4.807  11.473   3.323  1.00  0.00
ATOM    528  H   GLY A  34       4.765  10.958   2.491  1.00  0.00
ATOM    529  CA  GLY A  34       5.677  11.049   4.407  1.00  0.00
ATOM    530 1HA  GLY A  34       6.147  10.117   4.129  1.00  0.00
ATOM    531 2HA  GLY A  34       6.446  11.795   4.543  1.00  0.00
ATOM    532  C   GLY A  34       4.950  10.852   5.711  1.00  0.00
ATOM    533  O   GLY A  34       5.307  11.437   6.720  1.00  0.00
ATOM    534  N   GLN A  35       3.929  10.027   5.696  1.00  0.00
ATOM    535  H   GLN A  35       3.689   9.563   4.864  1.00  0.00
ATOM    536  CA  GLN A  35       3.148   9.789   6.901  1.00  0.00
ATOM    537  HA  GLN A  35       3.211  10.682   7.505  1.00  0.00
ATOM    538  CB  GLN A  35       1.685   9.527   6.552  1.00  0.00
ATOM    539 1HB  GLN A  35       1.637   8.642   5.936  1.00  0.00
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ATOM    540 2HB  GLN A  35       1.140   9.341   7.467  1.00  0.00
ATOM    541  CG  GLN A  35       1.006  10.682   5.814  1.00  0.00
ATOM    542 1HG  GLN A  35       1.552  10.878   4.903  1.00  0.00
ATOM    543 2HG  GLN A  35      -0.003  10.390   5.567  1.00  0.00
ATOM    544  CD  GLN A  35       0.956  11.968   6.631  1.00  0.00
ATOM    545  OE1 GLN A  35       0.014  12.206   7.365  1.00  0.00
ATOM    546  NE2 GLN A  35       1.958  12.807   6.498  1.00  0.00
ATOM    547 2HE2 GLN A  35       2.706  12.603   5.891  1.00  0.00
ATOM    548 1HE2 GLN A  35       1.926  13.622   7.037  1.00  0.00
ATOM    549  C   GLN A  35       3.737   8.631   7.692  1.00  0.00
ATOM    550  O   GLN A  35       3.228   8.246   8.739  1.00  0.00
ATOM    551  N   THR A  36       4.801   8.078   7.179  1.00  0.00
ATOM    552  H   THR A  36       5.158   8.416   6.331  1.00  0.00
ATOM    553  CA  THR A  36       5.483   7.019   7.826  1.00  0.00
ATOM    554  HA  THR A  36       5.383   7.184   8.890  1.00  0.00
ATOM    555  CB  THR A  36       4.865   5.613   7.473  1.00  0.00
ATOM    556  HB  THR A  36       3.829   5.640   7.778  1.00  0.00
ATOM    557  OG1 THR A  36       5.509   4.551   8.218  1.00  0.00
ATOM    558  HG1 THR A  36       4.886   4.331   8.921  1.00  0.00
ATOM    559  CG2 THR A  36       4.932   5.305   5.973  1.00  0.00
ATOM    560 1HG2 THR A  36       4.383   6.058   5.425  1.00  0.00
ATOM    561 2HG2 THR A  36       4.500   4.334   5.783  1.00  0.00
ATOM    562 3HG2 THR A  36       5.964   5.309   5.653  1.00  0.00
ATOM    563  C   THR A  36       6.965   7.095   7.476  1.00  0.00
ATOM    564  O   THR A  36       7.337   7.261   6.312  1.00  0.00
ATOM    565  N   PHE A  37       7.790   7.048   8.483  1.00  0.00
ATOM    566  H   PHE A  37       7.443   6.983   9.395  1.00  0.00
ATOM    567  CA  PHE A  37       9.215   7.057   8.304  1.00  0.00
ATOM    568  HA  PHE A  37       9.434   7.086   7.247  1.00  0.00
ATOM    569  CB  PHE A  37       9.868   8.266   9.002  1.00  0.00
ATOM    570 1HB  PHE A  37       9.645   8.226  10.057  1.00  0.00
ATOM    571 2HB  PHE A  37      10.940   8.200   8.872  1.00  0.00
ATOM    572  CG  PHE A  37       9.422   9.611   8.493  1.00  0.00
ATOM    573  CD1 PHE A  37       8.373  10.288   9.100  1.00  0.00
ATOM    574  HD1 PHE A  37       7.869   9.839   9.942  1.00  0.00
ATOM    575  CE1 PHE A  37       7.971  11.526   8.638  1.00  0.00
ATOM    576  HE1 PHE A  37       7.153  12.042   9.119  1.00  0.00
ATOM    577  CZ  PHE A  37       8.614  12.102   7.561  1.00  0.00
ATOM    578  HZ  PHE A  37       8.301  13.070   7.198  1.00  0.00
ATOM    579  CE2 PHE A  37       9.659  11.439   6.949  1.00  0.00
ATOM    580  HE2 PHE A  37      10.163  11.886   6.106  1.00  0.00
ATOM    581  CD2 PHE A  37      10.058  10.201   7.415  1.00  0.00
ATOM    582  HD2 PHE A  37      10.875   9.684   6.935  1.00  0.00
ATOM    583  C   PHE A  37       9.751   5.793   8.902  1.00  0.00
ATOM    584  O   PHE A  37       9.130   5.229   9.820  1.00  0.00
ATOM    585  N   ASP A  38      10.843   5.321   8.387  1.00  0.00
ATOM    586  H   ASP A  38      11.276   5.783   7.640  1.00  0.00
ATOM    587  CA  ASP A  38      11.465   4.137   8.924  1.00  0.00
ATOM    588  HA  ASP A  38      10.738   3.638   9.550  1.00  0.00
ATOM    589  CB  ASP A  38      11.924   3.185   7.809  1.00  0.00
ATOM    590 1HB  ASP A  38      11.091   2.973   7.156  1.00  0.00
ATOM    591 2HB  ASP A  38      12.714   3.655   7.243  1.00  0.00
ATOM    592  CG  ASP A  38      12.445   1.874   8.365  1.00  0.00
ATOM    593  OD1 ASP A  38      13.676   1.729   8.492  1.00  0.00
ATOM    594  OD2 ASP A  38      11.614   1.018   8.752  1.00  0.00
ATOM    595  C   ASP A  38      12.638   4.558   9.783  1.00  0.00
ATOM    596  O   ASP A  38      13.085   5.705   9.691  1.00  0.00
ATOM    597  N   TYR A  39      13.149   3.646  10.579  1.00  0.00
ATOM    598  H   TYR A  39      12.794   2.732  10.530  1.00  0.00
ATOM    599  CA  TYR A  39      14.252   3.907  11.468  1.00  0.00
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ATOM    600  HA  TYR A  39      14.000   4.767  12.072  1.00  0.00
ATOM    601  CB  TYR A  39      14.467   2.695  12.397  1.00  0.00
ATOM    602 1HB  TYR A  39      13.552   2.499  12.935  1.00  0.00
ATOM    603 2HB  TYR A  39      14.705   1.834  11.789  1.00  0.00
ATOM    604  CG  TYR A  39      15.574   2.861  13.427  1.00  0.00
ATOM    605  CD1 TYR A  39      16.816   2.257  13.252  1.00  0.00
ATOM    606  HD1 TYR A  39      16.990   1.662  12.367  1.00  0.00
ATOM    607  CE1 TYR A  39      17.821   2.407  14.188  1.00  0.00
ATOM    608  HE1 TYR A  39      18.778   1.931  14.034  1.00  0.00
ATOM    609  CZ  TYR A  39      17.595   3.167  15.316  1.00  0.00
ATOM    610  CE2 TYR A  39      16.375   3.777  15.513  1.00  0.00
ATOM    611  HE2 TYR A  39      16.199   4.371  16.396  1.00  0.00
ATOM    612  CD2 TYR A  39      15.373   3.622  14.573  1.00  0.00
ATOM    613  HD2 TYR A  39      14.415   4.098  14.726  1.00  0.00
ATOM    614  OH  TYR A  39      18.594   3.318  16.252  1.00  0.00
ATOM    615  HH  TYR A  39      18.226   3.208  17.131  1.00  0.00
ATOM    616  C   TYR A  39      15.520   4.218  10.669  1.00  0.00
ATOM    617  O   TYR A  39      16.390   4.945  11.137  1.00  0.00
ATOM    618  N   LYS A  40      15.613   3.693   9.450  1.00  0.00
ATOM    619  H   LYS A  40      14.891   3.113   9.107  1.00  0.00
ATOM    620  CA  LYS A  40      16.798   3.947   8.651  1.00  0.00
ATOM    621  HA  LYS A  40      17.629   4.116   9.320  1.00  0.00
ATOM    622  CB  LYS A  40      17.110   2.722   7.781  1.00  0.00
ATOM    623 1HB  LYS A  40      18.084   2.850   7.332  1.00  0.00
ATOM    624 2HB  LYS A  40      17.123   1.844   8.409  1.00  0.00
ATOM    625  CG  LYS A  40      16.093   2.503   6.670  1.00  0.00
ATOM    626 1HG  LYS A  40      15.118   2.380   7.119  1.00  0.00
ATOM    627 2HG  LYS A  40      16.087   3.382   6.045  1.00  0.00
ATOM    628  CD  LYS A  40      16.394   1.279   5.827  1.00  0.00
ATOM    629 1HD  LYS A  40      15.807   1.323   4.921  1.00  0.00
ATOM    630 2HD  LYS A  40      17.444   1.281   5.574  1.00  0.00
ATOM    631  CE  LYS A  40      16.063  -0.011   6.550  1.00  0.00
ATOM    632 1HE  LYS A  40      16.624  -0.057   7.471  1.00  0.00
ATOM    633 2HE  LYS A  40      15.005  -0.031   6.769  1.00  0.00
ATOM    634  NZ  LYS A  40      16.403  -1.176   5.719  1.00  0.00
ATOM    635 1HZ  LYS A  40      16.015  -1.057   4.753  1.00  0.00
ATOM    636 2HZ  LYS A  40      15.991  -2.068   6.066  1.00  0.00
ATOM    637 3HZ  LYS A  40      17.428  -1.289   5.610  1.00  0.00
ATOM    638  C   LYS A  40      16.611   5.186   7.745  1.00  0.00
ATOM    639  O   LYS A  40      17.504   5.517   6.969  1.00  0.00
ATOM    640  N   SER A  41      15.453   5.867   7.882  1.00  0.00
ATOM    641  H   SER A  41      14.795   5.539   8.531  1.00  0.00
ATOM    642  CA  SER A  41      15.137   7.106   7.139  1.00  0.00
ATOM    643  HA  SER A  41      14.098   7.333   7.329  1.00  0.00
ATOM    644  CB  SER A  41      16.005   8.264   7.688  1.00  0.00
ATOM    645 1HB  SER A  41      15.848   8.354   8.752  1.00  0.00
ATOM    646 2HB  SER A  41      17.044   8.041   7.500  1.00  0.00
ATOM    647  OG  SER A  41      15.682   9.502   7.077  1.00  0.00
ATOM    648  HG  SER A  41      15.764   9.342   6.128  1.00  0.00
ATOM    649  C   SER A  41      15.316   6.933   5.593  1.00  0.00
ATOM    650  O   SER A  41      15.657   7.889   4.882  1.00  0.00
ATOM    651  N   ASN A  42      14.998   5.753   5.094  1.00  0.00
ATOM    652  H   ASN A  42      14.559   5.094   5.669  1.00  0.00
ATOM    653  CA  ASN A  42      15.226   5.398   3.686  1.00  0.00
ATOM    654  HA  ASN A  42      16.230   5.727   3.464  1.00  0.00
ATOM    655  CB  ASN A  42      15.172   3.865   3.478  1.00  0.00
ATOM    656 1HB  ASN A  42      15.378   3.661   2.437  1.00  0.00
ATOM    657 2HB  ASN A  42      15.939   3.394   4.072  1.00  0.00
ATOM    658  CG  ASN A  42      13.820   3.220   3.809  1.00  0.00
ATOM    659  OD1 ASN A  42      13.045   3.722   4.621  1.00  0.00
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ATOM    660  ND2 ASN A  42      13.584   2.063   3.263  1.00  0.00
ATOM    661 2HD2 ASN A  42      14.290   1.668   2.689  1.00  0.00
ATOM    662 1HD2 ASN A  42      12.727   1.628   3.438  1.00  0.00
ATOM    663  C   ASN A  42      14.264   6.109   2.721  1.00  0.00
ATOM    664  O   ASN A  42      13.116   6.410   3.080  1.00  0.00
ATOM    665  N   PRO A  43      14.752   6.456   1.500  1.00  0.00
ATOM    666  CD  PRO A  43      16.160   6.328   1.064  1.00  0.00
ATOM    667  CA  PRO A  43      13.936   7.065   0.449  1.00  0.00
ATOM    668  HA  PRO A  43      13.590   8.041   0.755  1.00  0.00
ATOM    669  CB  PRO A  43      14.898   7.204  -0.730  1.00  0.00
ATOM    670 1HB  PRO A  43      14.806   6.344  -1.378  1.00  0.00
ATOM    671 2HB  PRO A  43      14.711   8.117  -1.275  1.00  0.00
ATOM    672  CG  PRO A  43      16.231   7.273  -0.092  1.00  0.00
ATOM    673 1HG  PRO A  43      16.993   6.969  -0.797  1.00  0.00
ATOM    674 2HG  PRO A  43      16.422   8.272   0.272  1.00  0.00
ATOM    675 1HD  PRO A  43      16.385   5.320   0.746  1.00  0.00
ATOM    676 2HD  PRO A  43      16.839   6.649   1.839  1.00  0.00
ATOM    677  C   PRO A  43      12.719   6.213   0.071  1.00  0.00
ATOM    678  O   PRO A  43      12.826   5.125  -0.491  1.00  0.00
ATOM    679  N   TYR A  44      11.589   6.727   0.436  1.00  0.00
ATOM    680  H   TYR A  44      11.619   7.577   0.918  1.00  0.00
ATOM    681  CA  TYR A  44      10.295   6.124   0.227  1.00  0.00
ATOM    682  HA  TYR A  44      10.476   5.072   0.059  1.00  0.00
ATOM    683  CB  TYR A  44       9.408   6.256   1.485  1.00  0.00
ATOM    684 1HB  TYR A  44       8.401   5.959   1.232  1.00  0.00
ATOM    685 2HB  TYR A  44       9.784   5.594   2.249  1.00  0.00
ATOM    686  CG  TYR A  44       9.335   7.659   2.070  1.00  0.00
ATOM    687  CD1 TYR A  44      10.078   7.994   3.196  1.00  0.00
ATOM    688  HD1 TYR A  44      10.707   7.245   3.651  1.00  0.00
ATOM    689  CE1 TYR A  44      10.021   9.261   3.735  1.00  0.00
ATOM    690  HE1 TYR A  44      10.607   9.502   4.610  1.00  0.00
ATOM    691  CZ  TYR A  44       9.218  10.214   3.153  1.00  0.00
ATOM    692  CE2 TYR A  44       8.472   9.909   2.037  1.00  0.00
ATOM    693  HE2 TYR A  44       7.842  10.658   1.579  1.00  0.00
ATOM    694  CD2 TYR A  44       8.534   8.638   1.503  1.00  0.00
ATOM    695  HD2 TYR A  44       7.949   8.394   0.627  1.00  0.00
ATOM    696  OH  TYR A  44       9.161  11.478   3.687  1.00  0.00
ATOM    697  HH  TYR A  44      10.043  11.777   3.914  1.00  0.00
ATOM    698  C   TYR A  44       9.593   6.662  -1.016  1.00  0.00
ATOM    699  O   TYR A  44       8.524   6.204  -1.366  1.00  0.00
ATOM    700  N   ASP A  45      10.210   7.601  -1.697  1.00  0.00
ATOM    701  H   ASP A  45      11.164   7.752  -1.555  1.00  0.00
ATOM    702  CA  ASP A  45       9.503   8.381  -2.714  1.00  0.00
ATOM    703  HA  ASP A  45       8.519   8.579  -2.315  1.00  0.00
ATOM    704  CB  ASP A  45      10.205   9.727  -2.951  1.00  0.00
ATOM    705 1HB  ASP A  45      10.231  10.280  -2.024  1.00  0.00
ATOM    706 2HB  ASP A  45      11.216   9.542  -3.283  1.00  0.00
ATOM    707  CG  ASP A  45       9.503  10.575  -3.993  1.00  0.00
ATOM    708  OD1 ASP A  45      10.195  11.166  -4.830  1.00  0.00
ATOM    709  OD2 ASP A  45       8.246  10.603  -3.984  1.00  0.00
ATOM    710  C   ASP A  45       9.312   7.605  -4.026  1.00  0.00
ATOM    711  O   ASP A  45      10.116   6.737  -4.407  1.00  0.00
ATOM    712  N   ILE A  46       8.220   7.938  -4.669  1.00  0.00
ATOM    713  H   ILE A  46       7.840   8.818  -4.429  1.00  0.00
ATOM    714  CA  ILE A  46       7.610   7.197  -5.746  1.00  0.00
ATOM    715  HA  ILE A  46       7.604   6.153  -5.469  1.00  0.00
ATOM    716  CB  ILE A  46       6.130   7.638  -5.874  1.00  0.00
ATOM    717  HB  ILE A  46       6.102   8.680  -6.154  1.00  0.00
ATOM    718  CG2 ILE A  46       5.403   6.823  -6.938  1.00  0.00
ATOM    719 1HG2 ILE A  46       5.435   5.777  -6.674  1.00  0.00
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ATOM    720 2HG2 ILE A  46       5.883   6.966  -7.895  1.00  0.00
ATOM    721 3HG2 ILE A  46       4.375   7.147  -6.998  1.00  0.00
ATOM    722  CG1 ILE A  46       5.441   7.484  -4.507  1.00  0.00
ATOM    723 1HG1 ILE A  46       5.437   6.439  -4.235  1.00  0.00
ATOM    724 2HG1 ILE A  46       6.002   8.035  -3.768  1.00  0.00
ATOM    725  CD1 ILE A  46       4.016   7.962  -4.467  1.00  0.00
ATOM    726 1HD1 ILE A  46       3.980   9.011  -4.717  1.00  0.00
ATOM    727 2HD1 ILE A  46       3.623   7.800  -3.473  1.00  0.00
ATOM    728 3HD1 ILE A  46       3.444   7.389  -5.180  1.00  0.00
ATOM    729  C   ILE A  46       8.332   7.347  -7.078  1.00  0.00
ATOM    730  O   ILE A  46       8.644   8.437  -7.513  1.00  0.00
ATOM    731  N   SER A  47       8.570   6.229  -7.733  1.00  0.00
ATOM    732  H   SER A  47       8.280   5.369  -7.357  1.00  0.00
ATOM    733  CA  SER A  47       9.235   6.243  -9.002  1.00  0.00
ATOM    734  HA  SER A  47       9.721   7.199  -9.123  1.00  0.00
ATOM    735  CB  SER A  47      10.290   5.151  -8.985  1.00  0.00
ATOM    736 1HB  SER A  47       9.807   4.185  -9.003  1.00  0.00
ATOM    737 2HB  SER A  47      10.940   5.254  -9.840  1.00  0.00
ATOM    738  OG  SER A  47      11.071   5.263  -7.794  1.00  0.00
ATOM    739  HG  SER A  47      10.873   6.129  -7.412  1.00  0.00
ATOM    740  C   SER A  47       8.214   6.029 -10.144  1.00  0.00
ATOM    741  O   SER A  47       8.388   6.545 -11.242  1.00  0.00
ATOM    742  N   VAL A  48       7.131   5.287  -9.868  1.00  0.00
ATOM    743  H   VAL A  48       7.070   4.812  -9.007  1.00  0.00
ATOM    744  CA  VAL A  48       6.020   5.155 -10.807  1.00  0.00
ATOM    745  HA  VAL A  48       6.046   5.978 -11.506  1.00  0.00
ATOM    746  CB  VAL A  48       6.070   3.791 -11.610  1.00  0.00
ATOM    747  HB  VAL A  48       6.069   2.990 -10.886  1.00  0.00
ATOM    748  CG1 VAL A  48       4.825   3.600 -12.496  1.00  0.00
ATOM    749 1HG1 VAL A  48       4.741   4.416 -13.198  1.00  0.00
ATOM    750 2HG1 VAL A  48       3.930   3.557 -11.891  1.00  0.00
ATOM    751 3HG1 VAL A  48       4.901   2.670 -13.043  1.00  0.00
ATOM    752  CG2 VAL A  48       7.332   3.678 -12.457  1.00  0.00
ATOM    753 1HG2 VAL A  48       8.202   3.729 -11.819  1.00  0.00
ATOM    754 2HG2 VAL A  48       7.360   4.488 -13.170  1.00  0.00
ATOM    755 3HG2 VAL A  48       7.327   2.734 -12.985  1.00  0.00
ATOM    756  C   VAL A  48       4.719   5.169 -10.026  1.00  0.00
ATOM    757  O   VAL A  48       4.551   4.426  -9.056  1.00  0.00
ATOM    758  N   ASN A  49       3.838   6.014 -10.435  1.00  0.00
ATOM    759  H   ASN A  49       4.065   6.622 -11.165  1.00  0.00
ATOM    760  CA  ASN A  49       2.484   6.065  -9.956  1.00  0.00
ATOM    761  HA  ASN A  49       2.332   5.266  -9.246  1.00  0.00
ATOM    762  CB  ASN A  49       2.183   7.433  -9.305  1.00  0.00
ATOM    763 1HB  ASN A  49       2.877   7.574  -8.489  1.00  0.00
ATOM    764 2HB  ASN A  49       2.342   8.210 -10.037  1.00  0.00
ATOM    765  CG  ASN A  49       0.762   7.570  -8.729  1.00  0.00
ATOM    766  OD1 ASN A  49      -0.194   6.936  -9.176  1.00  0.00
ATOM    767  ND2 ASN A  49       0.613   8.416  -7.742  1.00  0.00
ATOM    768 2HD2 ASN A  49       1.390   8.910  -7.409  1.00  0.00
ATOM    769 1HD2 ASN A  49      -0.299   8.538  -7.398  1.00  0.00
ATOM    770  C   ASN A  49       1.624   5.850 -11.161  1.00  0.00
ATOM    771  O   ASN A  49       1.714   6.652 -12.092  1.00  0.00
ATOM    772  N   LYS A  50       0.861   4.806 -11.231  1.00  0.00
ATOM    773  H   LYS A  50       0.838   4.099 -10.555  1.00  0.00
ATOM    774  CA  LYS A  50       0.005   4.690 -12.352  1.00  0.00
ATOM    775  HA  LYS A  50      -0.103   5.704 -12.704  1.00  0.00
ATOM    776  CB  LYS A  50       0.650   3.895 -13.493  1.00  0.00
ATOM    777 1HB  LYS A  50      -0.216   3.517 -14.003  1.00  0.00
ATOM    778 2HB  LYS A  50       1.239   4.532 -14.137  1.00  0.00
ATOM    779  CG  LYS A  50       1.416   2.640 -13.119  1.00  0.00
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ATOM    780 1HG  LYS A  50       2.039   2.330 -13.943  1.00  0.00
ATOM    781 2HG  LYS A  50       2.026   2.904 -12.269  1.00  0.00
ATOM    782  CD  LYS A  50       0.498   1.515 -12.732  1.00  0.00
ATOM    783 1HD  LYS A  50       0.010   1.839 -11.827  1.00  0.00
ATOM    784 2HD  LYS A  50      -0.213   1.343 -13.525  1.00  0.00
ATOM    785  CE  LYS A  50       1.260   0.254 -12.427  1.00  0.00
ATOM    786 1HE  LYS A  50       1.918   0.057 -13.260  1.00  0.00
ATOM    787 2HE  LYS A  50       1.859   0.443 -11.546  1.00  0.00
ATOM    788  NZ  LYS A  50       0.351  -0.909 -12.198  1.00  0.00
ATOM    789 1HZ  LYS A  50      -0.094  -1.272 -13.061  1.00  0.00
ATOM    790 2HZ  LYS A  50      -0.471  -0.639 -11.613  1.00  0.00
ATOM    791 3HZ  LYS A  50       0.851  -1.691 -11.711  1.00  0.00
ATOM    792  C   LYS A  50      -1.380   4.212 -12.014  1.00  0.00
ATOM    793  O   LYS A  50      -1.580   3.395 -11.097  1.00  0.00
ATOM    794  N   ASN A  51      -2.324   4.758 -12.732  1.00  0.00
ATOM    795  H   ASN A  51      -2.077   5.443 -13.391  1.00  0.00
ATOM    796  CA  ASN A  51      -3.709   4.401 -12.626  1.00  0.00
ATOM    797  HA  ASN A  51      -3.807   3.745 -11.774  1.00  0.00
ATOM    798  CB  ASN A  51      -4.607   5.644 -12.403  1.00  0.00
ATOM    799 1HB  ASN A  51      -5.629   5.320 -12.280  1.00  0.00
ATOM    800 2HB  ASN A  51      -4.288   6.142 -11.499  1.00  0.00
ATOM    801  CG  ASN A  51      -4.568   6.656 -13.552  1.00  0.00
ATOM    802  OD1 ASN A  51      -3.728   7.537 -13.579  1.00  0.00
ATOM    803  ND2 ASN A  51      -5.491   6.548 -14.485  1.00  0.00
ATOM    804 2HD2 ASN A  51      -6.163   5.839 -14.424  1.00  0.00
ATOM    805 1HD2 ASN A  51      -5.444   7.199 -15.217  1.00  0.00
ATOM    806  C   ASN A  51      -4.143   3.644 -13.864  1.00  0.00
ATOM    807  O   ASN A  51      -3.733   3.961 -14.975  1.00  0.00
ATOM    808  N   ASN A  52      -4.922   2.641 -13.664  1.00  0.00
ATOM    809  H   ASN A  52      -5.090   2.371 -12.734  1.00  0.00
ATOM    810  CA  ASN A  52      -5.498   1.860 -14.746  1.00  0.00
ATOM    811  HA  ASN A  52      -5.099   2.222 -15.682  1.00  0.00
ATOM    812  CB  ASN A  52      -5.110   0.385 -14.581  1.00  0.00
ATOM    813 1HB  ASN A  52      -4.081   0.248 -14.877  1.00  0.00
ATOM    814 2HB  ASN A  52      -5.216   0.142 -13.534  1.00  0.00
ATOM    815  CG  ASN A  52      -5.977  -0.578 -15.390  1.00  0.00
ATOM    816  OD1 ASN A  52      -7.016  -1.053 -14.899  1.00  0.00
ATOM    817  ND2 ASN A  52      -5.571  -0.883 -16.599  1.00  0.00
ATOM    818 2HD2 ASN A  52      -4.737  -0.484 -16.924  1.00  0.00
ATOM    819 1HD2 ASN A  52      -6.123  -1.498 -17.123  1.00  0.00
ATOM    820  C   ASN A  52      -7.009   1.999 -14.752  1.00  0.00
ATOM    821  O   ASN A  52      -7.628   2.148 -15.790  1.00  0.00
ATOM    822  N   GLY A  53      -7.587   1.969 -13.576  1.00  0.00
ATOM    823  H   GLY A  53      -7.026   1.939 -12.772  1.00  0.00
ATOM    824  CA  GLY A  53      -9.025   1.997 -13.460  1.00  0.00
ATOM    825 1HA  GLY A  53      -9.330   2.931 -13.011  1.00  0.00
ATOM    826 2HA  GLY A  53      -9.470   1.904 -14.440  1.00  0.00
ATOM    827  C   GLY A  53      -9.481   0.851 -12.605  1.00  0.00
ATOM    828  O   GLY A  53     -10.444   0.951 -11.831  1.00  0.00
ATOM    829  N   THR A  54      -8.825  -0.265 -12.752  1.00  0.00
ATOM    830  H   THR A  54      -8.192  -0.374 -13.501  1.00  0.00
ATOM    831  CA  THR A  54      -9.066  -1.353 -11.864  1.00  0.00
ATOM    832  HA  THR A  54      -9.791  -0.995 -11.146  1.00  0.00
ATOM    833  CB  THR A  54      -9.637  -2.605 -12.598  1.00  0.00
ATOM    834  HB  THR A  54     -10.310  -2.249 -13.364  1.00  0.00
ATOM    835  OG1 THR A  54     -10.402  -3.385 -11.665  1.00  0.00
ATOM    836  HG1 THR A  54      -9.954  -4.226 -11.508  1.00  0.00
ATOM    837  CG2 THR A  54      -8.543  -3.474 -13.226  1.00  0.00
ATOM    838 1HG2 THR A  54      -7.994  -2.891 -13.950  1.00  0.00
ATOM    839 2HG2 THR A  54      -8.993  -4.325 -13.714  1.00  0.00
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ATOM    840 3HG2 THR A  54      -7.871  -3.814 -12.453  1.00  0.00
ATOM    841  C   THR A  54      -7.780  -1.640 -11.096  1.00  0.00
ATOM    842  O   THR A  54      -7.740  -2.453 -10.167  1.00  0.00
ATOM    843  N   ASP A  55      -6.766  -0.906 -11.479  1.00  0.00
ATOM    844  H   ASP A  55      -6.889  -0.269 -12.209  1.00  0.00
ATOM    845  CA  ASP A  55      -5.463  -0.949 -10.884  1.00  0.00
ATOM    846  HA  ASP A  55      -5.551  -1.479  -9.948  1.00  0.00
ATOM    847  CB  ASP A  55      -4.450  -1.701 -11.783  1.00  0.00
ATOM    848 1HB  ASP A  55      -4.542  -2.737 -11.495  1.00  0.00
ATOM    849 2HB  ASP A  55      -4.688  -1.595 -12.830  1.00  0.00
ATOM    850  CG  ASP A  55      -2.981  -1.333 -11.535  1.00  0.00
ATOM    851  OD1 ASP A  55      -2.429  -1.755 -10.521  1.00  0.00
ATOM    852  OD2 ASP A  55      -2.366  -0.644 -12.372  1.00  0.00
ATOM    853  C   ASP A  55      -4.989   0.443 -10.598  1.00  0.00
ATOM    854  O   ASP A  55      -5.332   1.396 -11.317  1.00  0.00
ATOM    855  N   ALA A  56      -4.332   0.552  -9.509  1.00  0.00
ATOM    856  H   ALA A  56      -4.276  -0.247  -8.938  1.00  0.00
ATOM    857  CA  ALA A  56      -3.634   1.719  -9.076  1.00  0.00
ATOM    858  HA  ALA A  56      -3.288   2.262  -9.943  1.00  0.00
ATOM    859  CB  ALA A  56      -4.485   2.600  -8.186  1.00  0.00
ATOM    860 1HB  ALA A  56      -3.876   3.409  -7.812  1.00  0.00
ATOM    861 2HB  ALA A  56      -4.874   2.021  -7.361  1.00  0.00
ATOM    862 3HB  ALA A  56      -5.304   3.009  -8.759  1.00  0.00
ATOM    863  C   ALA A  56      -2.472   1.181  -8.326  1.00  0.00
ATOM    864  O   ALA A  56      -2.644   0.441  -7.354  1.00  0.00
ATOM    865  N   GLU A  57      -1.318   1.472  -8.761  1.00  0.00
ATOM    866  H   GLU A  57      -1.202   2.141  -9.473  1.00  0.00
ATOM    867  CA  GLU A  57      -0.191   0.826  -8.202  1.00  0.00
ATOM    868  HA  GLU A  57      -0.466   0.430  -7.235  1.00  0.00
ATOM    869  CB  GLU A  57       0.138  -0.328  -9.113  1.00  0.00
ATOM    870 1HB  GLU A  57      -0.773  -0.877  -9.296  1.00  0.00
ATOM    871 2HB  GLU A  57       0.458   0.093 -10.056  1.00  0.00
ATOM    872  CG  GLU A  57       1.170  -1.319  -8.655  1.00  0.00
ATOM    873 1HG  GLU A  57       2.150  -0.871  -8.736  1.00  0.00
ATOM    874 2HG  GLU A  57       0.981  -1.615  -7.636  1.00  0.00
ATOM    875  CD  GLU A  57       1.102  -2.535  -9.540  1.00  0.00
ATOM    876  OE1 GLU A  57       1.728  -2.514 -10.622  1.00  0.00
ATOM    877  OE2 GLU A  57       0.336  -3.472  -9.213  1.00  0.00
ATOM    878  C   GLU A  57       0.927   1.800  -8.045  1.00  0.00
ATOM    879  O   GLU A  57       1.217   2.598  -8.960  1.00  0.00
ATOM    880  N   ILE A  58       1.520   1.767  -6.889  1.00  0.00
ATOM    881  H   ILE A  58       1.288   1.056  -6.250  1.00  0.00
ATOM    882  CA  ILE A  58       2.544   2.690  -6.539  1.00  0.00
ATOM    883  HA  ILE A  58       2.598   3.478  -7.276  1.00  0.00
ATOM    884  CB  ILE A  58       2.277   3.315  -5.139  1.00  0.00
ATOM    885  HB  ILE A  58       2.517   2.570  -4.396  1.00  0.00
ATOM    886  CG2 ILE A  58       3.199   4.496  -4.921  1.00  0.00
ATOM    887 1HG2 ILE A  58       4.226   4.165  -4.954  1.00  0.00
ATOM    888 2HG2 ILE A  58       2.985   4.959  -3.970  1.00  0.00
ATOM    889 3HG2 ILE A  58       3.028   5.204  -5.719  1.00  0.00
ATOM    890  CG1 ILE A  58       0.799   3.753  -4.958  1.00  0.00
ATOM    891 1HG1 ILE A  58       0.167   2.885  -5.073  1.00  0.00
ATOM    892 2HG1 ILE A  58       0.675   4.142  -3.958  1.00  0.00
ATOM    893  CD1 ILE A  58       0.299   4.801  -5.937  1.00  0.00
ATOM    894 1HD1 ILE A  58       0.886   5.702  -5.840  1.00  0.00
ATOM    895 2HD1 ILE A  58      -0.737   5.009  -5.710  1.00  0.00
ATOM    896 3HD1 ILE A  58       0.375   4.415  -6.942  1.00  0.00
ATOM    897  C   ILE A  58       3.847   1.928  -6.468  1.00  0.00
ATOM    898  O   ILE A  58       3.943   0.928  -5.742  1.00  0.00
ATOM    899  N   VAL A  59       4.825   2.366  -7.210  1.00  0.00
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ATOM    900  H   VAL A  59       4.692   3.156  -7.782  1.00  0.00
ATOM    901  CA  VAL A  59       6.114   1.724  -7.207  1.00  0.00
ATOM    902  HA  VAL A  59       6.119   0.985  -6.421  1.00  0.00
ATOM    903  CB  VAL A  59       6.431   1.021  -8.567  1.00  0.00
ATOM    904  HB  VAL A  59       6.525   1.790  -9.319  1.00  0.00
ATOM    905  CG1 VAL A  59       7.764   0.277  -8.502  1.00  0.00
ATOM    906 1HG1 VAL A  59       8.556   0.977  -8.279  1.00  0.00
ATOM    907 2HG1 VAL A  59       7.960  -0.197  -9.453  1.00  0.00
ATOM    908 3HG1 VAL A  59       7.720  -0.475  -7.728  1.00  0.00
ATOM    909  CG2 VAL A  59       5.310   0.069  -8.980  1.00  0.00
ATOM    910 1HG2 VAL A  59       5.558  -0.397  -9.922  1.00  0.00
ATOM    911 2HG2 VAL A  59       4.389   0.623  -9.085  1.00  0.00
ATOM    912 3HG2 VAL A  59       5.189  -0.692  -8.223  1.00  0.00
ATOM    913  C   VAL A  59       7.187   2.760  -6.922  1.00  0.00
ATOM    914  O   VAL A  59       7.381   3.696  -7.690  1.00  0.00
ATOM    915  N   SER A  60       7.823   2.618  -5.825  1.00  0.00
ATOM    916  H   SER A  60       7.557   1.905  -5.202  1.00  0.00
ATOM    917  CA  SER A  60       8.909   3.459  -5.439  1.00  0.00
ATOM    918  HA  SER A  60       9.024   4.256  -6.159  1.00  0.00
ATOM    919  CB  SER A  60       8.602   4.039  -4.067  1.00  0.00
ATOM    920 1HB  SER A  60       8.621   3.267  -3.317  1.00  0.00
ATOM    921 2HB  SER A  60       9.328   4.800  -3.824  1.00  0.00
ATOM    922  OG  SER A  60       7.319   4.639  -4.056  1.00  0.00
ATOM    923  HG  SER A  60       7.375   5.374  -3.435  1.00  0.00
ATOM    924  C   SER A  60      10.169   2.599  -5.403  1.00  0.00
ATOM    925  O   SER A  60      10.098   1.422  -5.066  1.00  0.00
ATOM    926  N   ALA A  61      11.295   3.145  -5.744  1.00  0.00
ATOM    927  H   ALA A  61      11.344   4.095  -5.987  1.00  0.00
ATOM    928  CA  ALA A  61      12.500   2.357  -5.766  1.00  0.00
ATOM    929  HA  ALA A  61      12.212   1.318  -5.700  1.00  0.00
ATOM    930  CB  ALA A  61      13.266   2.564  -7.063  1.00  0.00
ATOM    931 1HB  ALA A  61      13.583   3.593  -7.137  1.00  0.00
ATOM    932 2HB  ALA A  61      12.624   2.319  -7.896  1.00  0.00
ATOM    933 3HB  ALA A  61      14.128   1.915  -7.070  1.00  0.00
ATOM    934  C   ALA A  61      13.355   2.693  -4.578  1.00  0.00
ATOM    935  O   ALA A  61      13.367   3.825  -4.115  1.00  0.00
ATOM    936  N   SER A  62      14.025   1.706  -4.071  1.00  0.00
ATOM    937  H   SER A  62      13.997   0.811  -4.469  1.00  0.00
ATOM    938  CA  SER A  62      14.841   1.860  -2.920  1.00  0.00
ATOM    939  HA  SER A  62      14.621   2.813  -2.465  1.00  0.00
ATOM    940  CB  SER A  62      14.476   0.757  -1.935  1.00  0.00
ATOM    941 1HB  SER A  62      14.684  -0.198  -2.392  1.00  0.00
ATOM    942 2HB  SER A  62      15.050   0.846  -1.028  1.00  0.00
ATOM    943  OG  SER A  62      13.086   0.823  -1.621  1.00  0.00
ATOM    944  HG  SER A  62      12.868   1.748  -1.469  1.00  0.00
ATOM    945  C   SER A  62      16.317   1.800  -3.304  1.00  0.00
ATOM    946  O   SER A  62      16.811   0.771  -3.752  1.00  0.00
ATOM    947  N   ASP A  63      16.986   2.922  -3.189  1.00  0.00
ATOM    948  H   ASP A  63      16.533   3.762  -2.943  1.00  0.00
ATOM    949  CA  ASP A  63      18.421   3.015  -3.466  1.00  0.00
ATOM    950  HA  ASP A  63      18.667   2.378  -4.302  1.00  0.00
ATOM    951  CB  ASP A  63      18.781   4.463  -3.816  1.00  0.00
ATOM    952 1HB  ASP A  63      19.848   4.542  -3.964  1.00  0.00
ATOM    953 2HB  ASP A  63      18.268   4.754  -4.720  1.00  0.00
ATOM    954  CG  ASP A  63      18.370   5.404  -2.703  1.00  0.00
ATOM    955  OD1 ASP A  63      17.185   5.766  -2.672  1.00  0.00
ATOM    956  OD2 ASP A  63      19.189   5.700  -1.810  1.00  0.00
ATOM    957  C   ASP A  63      19.214   2.604  -2.238  1.00  0.00
ATOM    958  O   ASP A  63      20.300   2.038  -2.342  1.00  0.00
ATOM    959  N   SER A  64      18.644   2.854  -1.078  1.00  0.00
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ATOM    960  H   SER A  64      17.763   3.283  -1.076  1.00  0.00
ATOM    961  CA  SER A  64      19.304   2.561   0.157  1.00  0.00
ATOM    962  HA  SER A  64      20.361   2.729   0.015  1.00  0.00
ATOM    963  CB  SER A  64      18.792   3.500   1.240  1.00  0.00
ATOM    964 1HB  SER A  64      17.739   3.322   1.398  1.00  0.00
ATOM    965 2HB  SER A  64      19.331   3.319   2.158  1.00  0.00
ATOM    966  OG  SER A  64      18.977   4.866   0.861  1.00  0.00
ATOM    967  HG  SER A  64      19.114   4.987  -0.097  1.00  0.00
ATOM    968  C   SER A  64      19.082   1.103   0.522  1.00  0.00
ATOM    969  O   SER A  64      19.933   0.449   1.139  1.00  0.00
ATOM    970  N   ASP A  65      17.950   0.581   0.121  1.00  0.00
ATOM    971  H   ASP A  65      17.301   1.148  -0.341  1.00  0.00
ATOM    972  CA  ASP A  65      17.675  -0.804   0.331  1.00  0.00
ATOM    973  HA  ASP A  65      18.371  -1.164   1.073  1.00  0.00
ATOM    974  CB  ASP A  65      16.240  -1.071   0.811  1.00  0.00
ATOM    975 1HB  ASP A  65      15.536  -0.661   0.105  1.00  0.00
ATOM    976 2HB  ASP A  65      16.090  -2.139   0.861  1.00  0.00
ATOM    977  CG  ASP A  65      15.949  -0.491   2.166  1.00  0.00
ATOM    978  OD1 ASP A  65      16.013  -1.240   3.167  1.00  0.00
ATOM    979  OD2 ASP A  65      15.652   0.696   2.257  1.00  0.00
ATOM    980  C   ASP A  65      17.932  -1.528  -0.944  1.00  0.00
ATOM    981  O   ASP A  65      17.075  -1.621  -1.803  1.00  0.00
ATOM    982  N   SER A  66      19.122  -2.047  -1.046  1.00  0.00
ATOM    983  H   SER A  66      19.743  -1.900  -0.302  1.00  0.00
ATOM    984  CA  SER A  66      19.599  -2.775  -2.212  1.00  0.00
ATOM    985  HA  SER A  66      19.500  -2.120  -3.065  1.00  0.00
ATOM    986  CB  SER A  66      21.095  -3.115  -2.039  1.00  0.00
ATOM    987 1HB  SER A  66      21.654  -2.202  -1.901  1.00  0.00
ATOM    988 2HB  SER A  66      21.214  -3.740  -1.165  1.00  0.00
ATOM    989  OG  SER A  66      21.621  -3.797  -3.165  1.00  0.00
ATOM    990  HG  SER A  66      20.887  -4.079  -3.724  1.00  0.00
ATOM    991  C   SER A  66      18.773  -4.042  -2.478  1.00  0.00
ATOM    992  O   SER A  66      18.853  -4.625  -3.550  1.00  0.00
ATOM    993  N   THR A  67      18.016  -4.469  -1.490  1.00  0.00
ATOM    994  H   THR A  67      17.924  -3.893  -0.706  1.00  0.00
ATOM    995  CA  THR A  67      17.311  -5.709  -1.569  1.00  0.00
ATOM    996  HA  THR A  67      17.988  -6.423  -2.014  1.00  0.00
ATOM    997  CB  THR A  67      16.962  -6.256  -0.146  1.00  0.00
ATOM    998  HB  THR A  67      17.888  -6.471   0.368  1.00  0.00
ATOM    999  OG1 THR A  67      16.201  -7.473  -0.240  1.00  0.00
ATOM   1000  HG1 THR A  67      16.026  -7.609  -1.186  1.00  0.00
ATOM   1001  CG2 THR A  67      16.172  -5.230   0.667  1.00  0.00
ATOM   1002 1HG2 THR A  67      15.933  -5.644   1.636  1.00  0.00
ATOM   1003 2HG2 THR A  67      15.261  -4.981   0.145  1.00  0.00
ATOM   1004 3HG2 THR A  67      16.768  -4.339   0.795  1.00  0.00
ATOM   1005  C   THR A  67      16.040  -5.667  -2.433  1.00  0.00
ATOM   1006  O   THR A  67      15.580  -6.746  -2.807  1.00  0.00
ATOM   1007  N   ASP A  68      15.490  -4.465  -2.770  1.00  0.00
ATOM   1008  H   ASP A  68      15.900  -3.609  -2.519  1.00  0.00
ATOM   1009  CA  ASP A  68      14.246  -4.405  -3.598  1.00  0.00
ATOM   1010  HA  ASP A  68      14.476  -4.794  -4.578  1.00  0.00
ATOM   1011  CB  ASP A  68      13.117  -5.247  -2.971  1.00  0.00
ATOM   1012 1HB  ASP A  68      13.546  -6.065  -2.412  1.00  0.00
ATOM   1013 2HB  ASP A  68      12.584  -4.577  -2.311  1.00  0.00
ATOM   1014  CG  ASP A  68      12.157  -5.795  -4.031  1.00  0.00
ATOM   1015  OD1 ASP A  68      11.144  -5.120  -4.386  1.00  0.00
ATOM   1016  OD2 ASP A  68      12.390  -6.905  -4.547  1.00  0.00
ATOM   1017  C   ASP A  68      13.737  -2.955  -3.735  1.00  0.00
ATOM   1018  O   ASP A  68      14.511  -2.005  -3.687  1.00  0.00
ATOM   1019  N   SER A  69      12.434  -2.826  -3.899  1.00  0.00
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ATOM   1020  H   SER A  69      11.865  -3.631  -3.876  1.00  0.00
ATOM   1021  CA  SER A  69      11.739  -1.604  -4.104  1.00  0.00
ATOM   1022  HA  SER A  69      12.352  -0.778  -3.778  1.00  0.00
ATOM   1023  CB  SER A  69      11.478  -1.473  -5.607  1.00  0.00
ATOM   1024 1HB  SER A  69      10.783  -0.664  -5.780  1.00  0.00
ATOM   1025 2HB  SER A  69      12.408  -1.269  -6.117  1.00  0.00
ATOM   1026  OG  SER A  69      10.919  -2.683  -6.132  1.00  0.00
ATOM   1027  HG  SER A  69      11.061  -3.392  -5.489  1.00  0.00
ATOM   1028  C   SER A  69      10.412  -1.639  -3.316  1.00  0.00
ATOM   1029  O   SER A  69       9.972  -2.707  -2.872  1.00  0.00
ATOM   1030  N   LEU A  70       9.799  -0.498  -3.123  1.00  0.00
ATOM   1031  H   LEU A  70      10.186   0.324  -3.497  1.00  0.00
ATOM   1032  CA  LEU A  70       8.529  -0.428  -2.446  1.00  0.00
ATOM   1033  HA  LEU A  70       8.437  -1.293  -1.805  1.00  0.00
ATOM   1034  CB  LEU A  70       8.443   0.883  -1.588  1.00  0.00
ATOM   1035 1HB  LEU A  70       9.298   0.891  -0.927  1.00  0.00
ATOM   1036 2HB  LEU A  70       8.556   1.710  -2.270  1.00  0.00
ATOM   1037  CG  LEU A  70       7.170   1.156  -0.698  1.00  0.00
ATOM   1038  HG  LEU A  70       7.331   2.065  -0.136  1.00  0.00
ATOM   1039  CD1 LEU A  70       5.904   1.419  -1.513  1.00  0.00
ATOM   1040 1HD1 LEU A  70       5.068   1.594  -0.851  1.00  0.00
ATOM   1041 2HD1 LEU A  70       5.688   0.564  -2.139  1.00  0.00
ATOM   1042 3HD1 LEU A  70       6.049   2.285  -2.140  1.00  0.00
ATOM   1043  CD2 LEU A  70       6.946   0.028   0.298  1.00  0.00
ATOM   1044 1HD2 LEU A  70       7.811  -0.065   0.938  1.00  0.00
ATOM   1045 2HD2 LEU A  70       6.790  -0.898  -0.236  1.00  0.00
ATOM   1046 3HD2 LEU A  70       6.075   0.248   0.898  1.00  0.00
ATOM   1047  C   LEU A  70       7.447  -0.473  -3.512  1.00  0.00
ATOM   1048  O   LEU A  70       7.307   0.443  -4.310  1.00  0.00
ATOM   1049  N   GLN A  71       6.715  -1.534  -3.534  1.00  0.00
ATOM   1050  H   GLN A  71       6.893  -2.256  -2.896  1.00  0.00
ATOM   1051  CA  GLN A  71       5.639  -1.689  -4.467  1.00  0.00
ATOM   1052  HA  GLN A  71       5.502  -0.737  -4.958  1.00  0.00
ATOM   1053  CB  GLN A  71       5.989  -2.748  -5.527  1.00  0.00
ATOM   1054 1HB  GLN A  71       6.742  -2.335  -6.181  1.00  0.00
ATOM   1055 2HB  GLN A  71       6.407  -3.615  -5.041  1.00  0.00
ATOM   1056  CG  GLN A  71       4.826  -3.201  -6.397  1.00  0.00
ATOM   1057 1HG  GLN A  71       4.064  -3.631  -5.762  1.00  0.00
ATOM   1058 2HG  GLN A  71       4.420  -2.343  -6.912  1.00  0.00
ATOM   1059  CD  GLN A  71       5.245  -4.233  -7.421  1.00  0.00
ATOM   1060  OE1 GLN A  71       5.249  -5.430  -7.152  1.00  0.00
ATOM   1061  NE2 GLN A  71       5.570  -3.787  -8.604  1.00  0.00
ATOM   1062 2HE2 GLN A  71       5.528  -2.821  -8.760  1.00  0.00
ATOM   1063 1HE2 GLN A  71       5.814  -4.446  -9.284  1.00  0.00
ATOM   1064  C   GLN A  71       4.364  -2.026  -3.729  1.00  0.00
ATOM   1065  O   GLN A  71       4.317  -2.985  -2.941  1.00  0.00
ATOM   1066  N   VAL A  72       3.365  -1.201  -3.932  1.00  0.00
ATOM   1067  H   VAL A  72       3.504  -0.427  -4.526  1.00  0.00
ATOM   1068  CA  VAL A  72       2.063  -1.401  -3.357  1.00  0.00
ATOM   1069  HA  VAL A  72       2.068  -2.322  -2.792  1.00  0.00
ATOM   1070  CB  VAL A  72       1.660  -0.218  -2.422  1.00  0.00
ATOM   1071  HB  VAL A  72       1.682   0.689  -3.009  1.00  0.00
ATOM   1072  CG1 VAL A  72       0.255  -0.410  -1.857  1.00  0.00
ATOM   1073 1HG1 VAL A  72       0.217  -1.325  -1.287  1.00  0.00
ATOM   1074 2HG1 VAL A  72      -0.455  -0.462  -2.669  1.00  0.00
ATOM   1075 3HG1 VAL A  72       0.007   0.425  -1.216  1.00  0.00
ATOM   1076  CG2 VAL A  72       2.655  -0.068  -1.288  1.00  0.00
ATOM   1077 1HG2 VAL A  72       2.664  -0.970  -0.694  1.00  0.00
ATOM   1078 2HG2 VAL A  72       2.377   0.772  -0.671  1.00  0.00
ATOM   1079 3HG2 VAL A  72       3.639   0.096  -1.701  1.00  0.00
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ATOM   1080  C   VAL A  72       1.069  -1.501  -4.494  1.00  0.00
ATOM   1081  O   VAL A  72       0.954  -0.580  -5.314  1.00  0.00
ATOM   1082  N   ALA A  73       0.363  -2.585  -4.538  1.00  0.00
ATOM   1083  H   ALA A  73       0.497  -3.275  -3.849  1.00  0.00
ATOM   1084  CA  ALA A  73      -0.585  -2.829  -5.579  1.00  0.00
ATOM   1085  HA  ALA A  73      -0.475  -2.085  -6.350  1.00  0.00
ATOM   1086  CB  ALA A  73      -0.337  -4.194  -6.188  1.00  0.00
ATOM   1087 1HB  ALA A  73       0.672  -4.243  -6.571  1.00  0.00
ATOM   1088 2HB  ALA A  73      -1.038  -4.370  -6.990  1.00  0.00
ATOM   1089 3HB  ALA A  73      -0.466  -4.947  -5.426  1.00  0.00
ATOM   1090  C   ALA A  73      -1.983  -2.736  -5.048  1.00  0.00
ATOM   1091  O   ALA A  73      -2.337  -3.439  -4.111  1.00  0.00
ATOM   1092  N   MET A  74      -2.770  -1.868  -5.639  1.00  0.00
ATOM   1093  H   MET A  74      -2.438  -1.280  -6.356  1.00  0.00
ATOM   1094  CA  MET A  74      -4.151  -1.697  -5.250  1.00  0.00
ATOM   1095  HA  MET A  74      -4.423  -2.388  -4.465  1.00  0.00
ATOM   1096  CB  MET A  74      -4.430  -0.257  -4.813  1.00  0.00
ATOM   1097 1HB  MET A  74      -4.380   0.408  -5.662  1.00  0.00
ATOM   1098 2HB  MET A  74      -5.428  -0.247  -4.400  1.00  0.00
ATOM   1099  CG  MET A  74      -3.491   0.252  -3.729  1.00  0.00
ATOM   1100 1HG  MET A  74      -3.616  -0.326  -2.830  1.00  0.00
ATOM   1101 2HG  MET A  74      -2.478   0.121  -4.080  1.00  0.00
ATOM   1102  SD  MET A  74      -3.727   1.986  -3.330  1.00  0.00
ATOM   1103  CE  MET A  74      -2.997   2.747  -4.761  1.00  0.00
ATOM   1104 1HE  MET A  74      -1.987   2.384  -4.883  1.00  0.00
ATOM   1105 2HE  MET A  74      -2.961   3.814  -4.601  1.00  0.00
ATOM   1106 3HE  MET A  74      -3.579   2.519  -5.641  1.00  0.00
ATOM   1107  C   MET A  74      -5.021  -2.089  -6.405  1.00  0.00
ATOM   1108  O   MET A  74      -4.874  -1.599  -7.529  1.00  0.00
ATOM   1109  N   LYS A  75      -5.864  -3.008  -6.130  1.00  0.00
ATOM   1110  H   LYS A  75      -5.908  -3.330  -5.202  1.00  0.00
ATOM   1111  CA  LYS A  75      -6.750  -3.610  -7.078  1.00  0.00
ATOM   1112  HA  LYS A  75      -6.531  -3.281  -8.082  1.00  0.00
ATOM   1113  CB  LYS A  75      -6.549  -5.104  -6.994  1.00  0.00
ATOM   1114 1HB  LYS A  75      -6.177  -5.291  -5.997  1.00  0.00
ATOM   1115 2HB  LYS A  75      -7.515  -5.566  -7.065  1.00  0.00
ATOM   1116  CG  LYS A  75      -5.558  -5.790  -7.950  1.00  0.00
ATOM   1117 1HG  LYS A  75      -5.598  -6.820  -7.642  1.00  0.00
ATOM   1118 2HG  LYS A  75      -5.931  -5.706  -8.961  1.00  0.00
ATOM   1119  CD  LYS A  75      -4.087  -5.300  -7.871  1.00  0.00
ATOM   1120 1HD  LYS A  75      -3.907  -4.895  -6.886  1.00  0.00
ATOM   1121 2HD  LYS A  75      -3.428  -6.140  -8.038  1.00  0.00
ATOM   1122  CE  LYS A  75      -3.786  -4.212  -8.908  1.00  0.00
ATOM   1123 1HE  LYS A  75      -3.983  -4.608  -9.892  1.00  0.00
ATOM   1124 2HE  LYS A  75      -4.445  -3.376  -8.727  1.00  0.00
ATOM   1125  NZ  LYS A  75      -2.371  -3.727  -8.869  1.00  0.00
ATOM   1126 1HZ  LYS A  75      -1.626  -4.423  -9.082  1.00  0.00
ATOM   1127 2HZ  LYS A  75      -2.120  -3.261  -7.980  1.00  0.00
ATOM   1128 3HZ  LYS A  75      -2.261  -2.971  -9.587  1.00  0.00
ATOM   1129  C   LYS A  75      -8.184  -3.304  -6.684  1.00  0.00
ATOM   1130  O   LYS A  75      -8.535  -3.437  -5.517  1.00  0.00
ATOM   1131  N   LYS A  76      -9.004  -2.943  -7.639  1.00  0.00
ATOM   1132  H   LYS A  76      -8.697  -2.951  -8.572  1.00  0.00
ATOM   1133  CA  LYS A  76     -10.366  -2.563  -7.349  1.00  0.00
ATOM   1134  HA  LYS A  76     -10.402  -2.149  -6.353  1.00  0.00
ATOM   1135  CB  LYS A  76     -10.851  -1.497  -8.324  1.00  0.00
ATOM   1136 1HB  LYS A  76     -10.166  -0.663  -8.297  1.00  0.00
ATOM   1137 2HB  LYS A  76     -10.861  -1.918  -9.317  1.00  0.00
ATOM   1138  CG  LYS A  76     -12.251  -0.990  -7.999  1.00  0.00
ATOM   1139 1HG  LYS A  76     -12.905  -1.842  -7.891  1.00  0.00
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ATOM   1140 2HG  LYS A  76     -12.216  -0.464  -7.056  1.00  0.00
ATOM   1141  CD  LYS A  76     -12.836  -0.067  -9.060  1.00  0.00
ATOM   1142 1HD  LYS A  76     -13.686   0.459  -8.652  1.00  0.00
ATOM   1143 2HD  LYS A  76     -12.075   0.646  -9.343  1.00  0.00
ATOM   1144  CE  LYS A  76     -13.280  -0.820 -10.311  1.00  0.00
ATOM   1145 1HE  LYS A  76     -13.716  -1.741  -9.958  1.00  0.00
ATOM   1146 2HE  LYS A  76     -14.011  -0.233 -10.846  1.00  0.00
ATOM   1147  NZ  LYS A  76     -12.171  -1.204 -11.210  1.00  0.00
ATOM   1148 1HZ  LYS A  76     -11.568  -0.378 -11.412  1.00  0.00
ATOM   1149 2HZ  LYS A  76     -12.568  -1.537 -12.111  1.00  0.00
ATOM   1150 3HZ  LYS A  76     -11.587  -1.985 -10.841  1.00  0.00
ATOM   1151  C   LYS A  76     -11.307  -3.749  -7.442  1.00  0.00
ATOM   1152  O   LYS A  76     -11.365  -4.424  -8.473  1.00  0.00
ATOM   1153  N   LEU A  77     -12.054  -3.966  -6.396  1.00  0.00
ATOM   1154  H   LEU A  77     -11.941  -3.407  -5.592  1.00  0.00
ATOM   1155  CA  LEU A  77     -13.075  -4.987  -6.373  1.00  0.00
ATOM   1156  HA  LEU A  77     -12.886  -5.644  -7.208  1.00  0.00
ATOM   1157  CB  LEU A  77     -13.068  -5.809  -5.053  1.00  0.00
ATOM   1158 1HB  LEU A  77     -12.976  -5.105  -4.240  1.00  0.00
ATOM   1159 2HB  LEU A  77     -14.027  -6.299  -4.963  1.00  0.00
ATOM   1160  CG  LEU A  77     -11.961  -6.871  -4.868  1.00  0.00
ATOM   1161  HG  LEU A  77     -12.160  -7.395  -3.944  1.00  0.00
ATOM   1162  CD1 LEU A  77     -12.002  -7.916  -5.973  1.00  0.00
ATOM   1163 1HD1 LEU A  77     -11.234  -8.653  -5.796  1.00  0.00
ATOM   1164 2HD1 LEU A  77     -11.826  -7.444  -6.928  1.00  0.00
ATOM   1165 3HD1 LEU A  77     -12.968  -8.399  -5.979  1.00  0.00
ATOM   1166  CD2 LEU A  77     -10.586  -6.247  -4.772  1.00  0.00
ATOM   1167 1HD2 LEU A  77      -9.849  -7.032  -4.696  1.00  0.00
ATOM   1168 2HD2 LEU A  77     -10.536  -5.617  -3.897  1.00  0.00
ATOM   1169 3HD2 LEU A  77     -10.393  -5.655  -5.655  1.00  0.00
ATOM   1170  C   LEU A  77     -14.433  -4.328  -6.577  1.00  0.00
ATOM   1171  O   LEU A  77     -14.654  -3.200  -6.120  1.00  0.00
ATOM   1172  N   PRO A  78     -15.375  -5.013  -7.245  1.00  0.00
ATOM   1173  CD  PRO A  78     -15.230  -6.399  -7.754  1.00  0.00
ATOM   1174  CA  PRO A  78     -16.707  -4.459  -7.543  1.00  0.00
ATOM   1175  HA  PRO A  78     -16.643  -3.443  -7.905  1.00  0.00
ATOM   1176  CB  PRO A  78     -17.221  -5.382  -8.650  1.00  0.00
ATOM   1177 1HB  PRO A  78     -18.298  -5.456  -8.589  1.00  0.00
ATOM   1178 2HB  PRO A  78     -16.921  -5.014  -9.620  1.00  0.00
ATOM   1179  CG  PRO A  78     -16.564  -6.697  -8.393  1.00  0.00
ATOM   1180 1HG  PRO A  78     -17.181  -7.283  -7.728  1.00  0.00
ATOM   1181 2HG  PRO A  78     -16.407  -7.223  -9.323  1.00  0.00
ATOM   1182 1HD  PRO A  78     -15.047  -7.077  -6.932  1.00  0.00
ATOM   1183 2HD  PRO A  78     -14.425  -6.459  -8.468  1.00  0.00
ATOM   1184  C   PRO A  78     -17.632  -4.511  -6.325  1.00  0.00
ATOM   1185  O   PRO A  78     -18.793  -4.142  -6.384  1.00  0.00
ATOM   1186  N   ASN A  79     -17.080  -4.954  -5.225  1.00  0.00
ATOM   1187  H   ASN A  79     -16.136  -5.210  -5.273  1.00  0.00
ATOM   1188  CA  ASN A  79     -17.804  -5.095  -3.979  1.00  0.00
ATOM   1189  HA  ASN A  79     -18.860  -5.166  -4.194  1.00  0.00
ATOM   1190  CB  ASN A  79     -17.357  -6.375  -3.249  1.00  0.00
ATOM   1191 1HB  ASN A  79     -16.304  -6.300  -3.024  1.00  0.00
ATOM   1192 2HB  ASN A  79     -17.909  -6.464  -2.325  1.00  0.00
ATOM   1193  CG  ASN A  79     -17.572  -7.638  -4.064  1.00  0.00
ATOM   1194  OD1 ASN A  79     -16.710  -8.041  -4.836  1.00  0.00
ATOM   1195  ND2 ASN A  79     -18.706  -8.278  -3.891  1.00  0.00
ATOM   1196 2HD2 ASN A  79     -19.359  -7.924  -3.254  1.00  0.00
ATOM   1197 1HD2 ASN A  79     -18.840  -9.093  -4.417  1.00  0.00
ATOM   1198  C   ASN A  79     -17.537  -3.895  -3.090  1.00  0.00
ATOM   1199  O   ASN A  79     -17.856  -3.922  -1.911  1.00  0.00
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ATOM   1200  N   ASN A  80     -16.977  -2.831  -3.696  1.00  0.00
ATOM   1201  H   ASN A  80     -16.831  -2.884  -4.662  1.00  0.00
ATOM   1202  CA  ASN A  80     -16.575  -1.589  -2.983  1.00  0.00
ATOM   1203  HA  ASN A  80     -16.196  -0.916  -3.738  1.00  0.00
ATOM   1204  CB  ASN A  80     -17.754  -0.913  -2.227  1.00  0.00
ATOM   1205 1HB  ASN A  80     -18.206  -1.638  -1.567  1.00  0.00
ATOM   1206 2HB  ASN A  80     -17.366  -0.096  -1.636  1.00  0.00
ATOM   1207  CG  ASN A  80     -18.838  -0.375  -3.147  1.00  0.00
ATOM   1208  OD1 ASN A  80     -18.782   0.765  -3.608  1.00  0.00
ATOM   1209  ND2 ASN A  80     -19.843  -1.177  -3.405  1.00  0.00
ATOM   1210 2HD2 ASN A  80     -19.828  -2.063  -2.988  1.00  0.00
ATOM   1211 1HD2 ASN A  80     -20.547  -0.847  -3.997  1.00  0.00
ATOM   1212  C   ASN A  80     -15.431  -1.892  -2.039  1.00  0.00
ATOM   1213  O   ASN A  80     -15.330  -1.351  -0.951  1.00  0.00
ATOM   1214  N   ALA A  81     -14.542  -2.733  -2.505  1.00  0.00
ATOM   1215  H   ALA A  81     -14.632  -3.065  -3.422  1.00  0.00
ATOM   1216  CA  ALA A  81     -13.403  -3.147  -1.744  1.00  0.00
ATOM   1217  HA  ALA A  81     -13.315  -2.506  -0.880  1.00  0.00
ATOM   1218  CB  ALA A  81     -13.573  -4.582  -1.277  1.00  0.00
ATOM   1219 1HB  ALA A  81     -12.707  -4.864  -0.695  1.00  0.00
ATOM   1220 2HB  ALA A  81     -13.668  -5.229  -2.138  1.00  0.00
ATOM   1221 3HB  ALA A  81     -14.459  -4.654  -0.665  1.00  0.00
ATOM   1222  C   ALA A  81     -12.165  -3.013  -2.597  1.00  0.00
ATOM   1223  O   ALA A  81     -12.260  -2.920  -3.825  1.00  0.00
ATOM   1224  N   THR A  82     -11.031  -2.986  -1.974  1.00  0.00
ATOM   1225  H   THR A  82     -11.016  -3.043  -0.991  1.00  0.00
ATOM   1226  CA  THR A  82      -9.784  -2.859  -2.670  1.00  0.00
ATOM   1227  HA  THR A  82      -9.951  -3.003  -3.727  1.00  0.00
ATOM   1228  CB  THR A  82      -9.220  -1.444  -2.431  1.00  0.00
ATOM   1229  HB  THR A  82      -8.890  -1.370  -1.406  1.00  0.00
ATOM   1230  OG1 THR A  82     -10.255  -0.482  -2.679  1.00  0.00
ATOM   1231  HG1 THR A  82     -10.973  -0.603  -2.044  1.00  0.00
ATOM   1232  CG2 THR A  82      -8.056  -1.151  -3.362  1.00  0.00
ATOM   1233 1HG2 THR A  82      -7.252  -1.842  -3.160  1.00  0.00
ATOM   1234 2HG2 THR A  82      -7.712  -0.137  -3.217  1.00  0.00
ATOM   1235 3HG2 THR A  82      -8.385  -1.281  -4.381  1.00  0.00
ATOM   1236  C   THR A  82      -8.805  -3.921  -2.139  1.00  0.00
ATOM   1237  O   THR A  82      -8.740  -4.153  -0.934  1.00  0.00
ATOM   1238  N   ARG A  83      -8.078  -4.578  -3.016  1.00  0.00
ATOM   1239  H   ARG A  83      -8.153  -4.370  -3.979  1.00  0.00
ATOM   1240  CA  ARG A  83      -7.133  -5.592  -2.605  1.00  0.00
ATOM   1241  HA  ARG A  83      -7.335  -5.865  -1.581  1.00  0.00
ATOM   1242  CB  ARG A  83      -7.269  -6.829  -3.510  1.00  0.00
ATOM   1243 1HB  ARG A  83      -8.288  -7.175  -3.439  1.00  0.00
ATOM   1244 2HB  ARG A  83      -7.078  -6.533  -4.531  1.00  0.00
ATOM   1245  CG  ARG A  83      -6.371  -8.029  -3.179  1.00  0.00
ATOM   1246 1HG  ARG A  83      -6.472  -8.768  -3.959  1.00  0.00
ATOM   1247 2HG  ARG A  83      -5.346  -7.690  -3.141  1.00  0.00
ATOM   1248  CD  ARG A  83      -6.726  -8.684  -1.842  1.00  0.00
ATOM   1249 1HD  ARG A  83      -6.466  -8.009  -1.040  1.00  0.00
ATOM   1250 2HD  ARG A  83      -7.787  -8.883  -1.817  1.00  0.00
ATOM   1251  NE  ARG A  83      -5.995  -9.958  -1.656  1.00  0.00
ATOM   1252  HE  ARG A  83      -5.483 -10.231  -2.449  1.00  0.00
ATOM   1253  CZ  ARG A  83      -6.014 -10.731  -0.539  1.00  0.00
ATOM   1254  NH1 ARG A  83      -6.693 -10.357   0.541  1.00  0.00
ATOM   1255 1HH1 ARG A  83      -7.231  -9.503   0.574  1.00  0.00
ATOM   1256 2HH1 ARG A  83      -6.698 -10.887   1.395  1.00  0.00
ATOM   1257  NH2 ARG A  83      -5.357 -11.890  -0.524  1.00  0.00
ATOM   1258 1HH2 ARG A  83      -4.834 -12.232  -1.305  1.00  0.00
ATOM   1259 2HH2 ARG A  83      -5.381 -12.483   0.292  1.00  0.00
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ATOM   1260  C   ARG A  83      -5.750  -5.001  -2.716  1.00  0.00
ATOM   1261  O   ARG A  83      -5.393  -4.446  -3.754  1.00  0.00
ATOM   1262  N   ILE A  84      -4.996  -5.095  -1.659  1.00  0.00
ATOM   1263  H   ILE A  84      -5.306  -5.562  -0.851  1.00  0.00
ATOM   1264  CA  ILE A  84      -3.674  -4.560  -1.614  1.00  0.00
ATOM   1265  HA  ILE A  84      -3.506  -4.061  -2.558  1.00  0.00
ATOM   1266  CB  ILE A  84      -3.478  -3.501  -0.455  1.00  0.00
ATOM   1267  HB  ILE A  84      -4.150  -3.797   0.337  1.00  0.00
ATOM   1268  CG2 ILE A  84      -2.065  -3.487   0.115  1.00  0.00
ATOM   1269 1HG2 ILE A  84      -1.985  -2.723   0.873  1.00  0.00
ATOM   1270 2HG2 ILE A  84      -1.359  -3.297  -0.679  1.00  0.00
ATOM   1271 3HG2 ILE A  84      -1.868  -4.455   0.552  1.00  0.00
ATOM   1272  CG1 ILE A  84      -3.875  -2.102  -0.901  1.00  0.00
ATOM   1273 1HG1 ILE A  84      -3.561  -1.381  -0.160  1.00  0.00
ATOM   1274 2HG1 ILE A  84      -3.340  -1.930  -1.823  1.00  0.00
ATOM   1275  CD1 ILE A  84      -5.343  -1.907  -1.158  1.00  0.00
ATOM   1276 1HD1 ILE A  84      -5.509  -0.900  -1.507  1.00  0.00
ATOM   1277 2HD1 ILE A  84      -5.897  -2.075  -0.246  1.00  0.00
ATOM   1278 3HD1 ILE A  84      -5.662  -2.608  -1.915  1.00  0.00
ATOM   1279  C   ILE A  84      -2.675  -5.675  -1.497  1.00  0.00
ATOM   1280  O   ILE A  84      -2.853  -6.623  -0.725  1.00  0.00
ATOM   1281  N   SER A  85      -1.679  -5.586  -2.300  1.00  0.00
ATOM   1282  H   SER A  85      -1.663  -4.835  -2.935  1.00  0.00
ATOM   1283  CA  SER A  85      -0.602  -6.507  -2.292  1.00  0.00
ATOM   1284  HA  SER A  85      -0.719  -7.155  -1.437  1.00  0.00
ATOM   1285  CB  SER A  85      -0.637  -7.340  -3.569  1.00  0.00
ATOM   1286 1HB  SER A  85      -0.446  -6.705  -4.420  1.00  0.00
ATOM   1287 2HB  SER A  85       0.110  -8.117  -3.517  1.00  0.00
ATOM   1288  OG  SER A  85      -1.923  -7.945  -3.703  1.00  0.00
ATOM   1289  HG  SER A  85      -2.415  -7.669  -2.923  1.00  0.00
ATOM   1290  C   SER A  85       0.692  -5.725  -2.152  1.00  0.00
ATOM   1291  O   SER A  85       0.905  -4.728  -2.852  1.00  0.00
ATOM   1292  N   ILE A  86       1.486  -6.123  -1.210  1.00  0.00
ATOM   1293  H   ILE A  86       1.239  -6.892  -0.653  1.00  0.00
ATOM   1294  CA  ILE A  86       2.742  -5.492  -0.917  1.00  0.00
ATOM   1295  HA  ILE A  86       2.768  -4.521  -1.390  1.00  0.00
ATOM   1296  CB  ILE A  86       2.921  -5.310   0.629  1.00  0.00
ATOM   1297  HB  ILE A  86       2.853  -6.295   1.068  1.00  0.00
ATOM   1298  CG2 ILE A  86       4.300  -4.766   0.975  1.00  0.00
ATOM   1299 1HG2 ILE A  86       4.387  -4.661   2.046  1.00  0.00
ATOM   1300 2HG2 ILE A  86       4.431  -3.801   0.507  1.00  0.00
ATOM   1301 3HG2 ILE A  86       5.058  -5.446   0.616  1.00  0.00
ATOM   1302  CG1 ILE A  86       1.809  -4.419   1.254  1.00  0.00
ATOM   1303 1HG1 ILE A  86       0.848  -4.804   0.945  1.00  0.00
ATOM   1304 2HG1 ILE A  86       1.874  -4.482   2.328  1.00  0.00
ATOM   1305  CD1 ILE A  86       1.844  -2.951   0.861  1.00  0.00
ATOM   1306 1HD1 ILE A  86       1.682  -2.848  -0.201  1.00  0.00
ATOM   1307 2HD1 ILE A  86       2.807  -2.540   1.126  1.00  0.00
ATOM   1308 3HD1 ILE A  86       1.086  -2.406   1.405  1.00  0.00
ATOM   1309  C   ILE A  86       3.877  -6.365  -1.457  1.00  0.00
ATOM   1310  O   ILE A  86       3.770  -7.594  -1.474  1.00  0.00
ATOM   1311  N   LYS A  87       4.941  -5.736  -1.857  1.00  0.00
ATOM   1312  H   LYS A  87       4.937  -4.754  -1.839  1.00  0.00
ATOM   1313  CA  LYS A  87       6.114  -6.403  -2.340  1.00  0.00
ATOM   1314  HA  LYS A  87       5.906  -7.451  -2.493  1.00  0.00
ATOM   1315  CB  LYS A  87       6.572  -5.756  -3.645  1.00  0.00
ATOM   1316 1HB  LYS A  87       5.835  -5.936  -4.413  1.00  0.00
ATOM   1317 2HB  LYS A  87       6.639  -4.695  -3.457  1.00  0.00
ATOM   1318  CG  LYS A  87       7.924  -6.234  -4.144  1.00  0.00
ATOM   1319 1HG  LYS A  87       8.214  -5.634  -4.994  1.00  0.00
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ATOM   1320 2HG  LYS A  87       8.649  -6.101  -3.354  1.00  0.00
ATOM   1321  CD  LYS A  87       7.916  -7.693  -4.565  1.00  0.00
ATOM   1322 1HD  LYS A  87       7.439  -8.283  -3.797  1.00  0.00
ATOM   1323 2HD  LYS A  87       7.372  -7.791  -5.494  1.00  0.00
ATOM   1324  CE  LYS A  87       9.335  -8.190  -4.766  1.00  0.00
ATOM   1325 1HE  LYS A  87       9.824  -8.240  -3.804  1.00  0.00
ATOM   1326 2HE  LYS A  87       9.301  -9.176  -5.203  1.00  0.00
ATOM   1327  NZ  LYS A  87      10.112  -7.298  -5.645  1.00  0.00
ATOM   1328 1HZ  LYS A  87      10.078  -6.325  -5.262  1.00  0.00
ATOM   1329 2HZ  LYS A  87       9.884  -7.292  -6.653  1.00  0.00
ATOM   1330 3HZ  LYS A  87      11.125  -7.535  -5.508  1.00  0.00
ATOM   1331  C   LYS A  87       7.182  -6.207  -1.286  1.00  0.00
ATOM   1332  O   LYS A  87       7.331  -5.113  -0.739  1.00  0.00
ATOM   1333  N   TYR A  88       7.879  -7.262  -0.959  1.00  0.00
ATOM   1334  H   TYR A  88       7.792  -8.092  -1.470  1.00  0.00
ATOM   1335  CA  TYR A  88       8.805  -7.213   0.129  1.00  0.00
ATOM   1336  HA  TYR A  88       8.671  -6.275   0.642  1.00  0.00
ATOM   1337  CB  TYR A  88       8.509  -8.349   1.141  1.00  0.00
ATOM   1338 1HB  TYR A  88       8.965  -8.102   2.088  1.00  0.00
ATOM   1339 2HB  TYR A  88       7.439  -8.418   1.277  1.00  0.00
ATOM   1340  CG  TYR A  88       9.023  -9.736   0.732  1.00  0.00
ATOM   1341  CD1 TYR A  88      10.016 -10.365   1.473  1.00  0.00
ATOM   1342  HD1 TYR A  88      10.401  -9.873   2.355  1.00  0.00
ATOM   1343  CE1 TYR A  88      10.518 -11.595   1.108  1.00  0.00
ATOM   1344  HE1 TYR A  88      11.289 -12.062   1.703  1.00  0.00
ATOM   1345  CZ  TYR A  88      10.026 -12.222  -0.008  1.00  0.00
ATOM   1346  CE2 TYR A  88       9.046 -11.626  -0.761  1.00  0.00
ATOM   1347  HE2 TYR A  88       8.659 -12.119  -1.641  1.00  0.00
ATOM   1348  CD2 TYR A  88       8.549 -10.390  -0.394  1.00  0.00
ATOM   1349  HD2 TYR A  88       7.777  -9.923  -0.987  1.00  0.00
ATOM   1350  OH  TYR A  88      10.522 -13.447  -0.379  1.00  0.00
ATOM   1351  HH  TYR A  88      10.481 -14.022   0.391  1.00  0.00
ATOM   1352  C   TYR A  88      10.238  -7.329  -0.340  1.00  0.00
ATOM   1353  O   TYR A  88      10.511  -7.870  -1.405  1.00  0.00
ATOM   1354  N   GLY A  89      11.124  -6.797   0.463  1.00  0.00
ATOM   1355  H   GLY A  89      10.816  -6.235   1.200  1.00  0.00
ATOM   1356  CA  GLY A  89      12.525  -7.027   0.295  1.00  0.00
ATOM   1357 1HA  GLY A  89      12.725  -7.335  -0.722  1.00  0.00
ATOM   1358 2HA  GLY A  89      13.084  -6.136   0.537  1.00  0.00
ATOM   1359  C   GLY A  89      12.903  -8.119   1.264  1.00  0.00
ATOM   1360  O   GLY A  89      12.132  -8.377   2.191  1.00  0.00
ATOM   1361  N   SER A  90      14.078  -8.698   1.126  1.00  0.00
ATOM   1362  H   SER A  90      14.720  -8.341   0.471  1.00  0.00
ATOM   1363  CA  SER A  90      14.507  -9.874   1.920  1.00  0.00
ATOM   1364  HA  SER A  90      13.800 -10.663   1.713  1.00  0.00
ATOM   1365  CB  SER A  90      15.899 -10.345   1.449  1.00  0.00
ATOM   1366 1HB  SER A  90      15.865 -10.549   0.390  1.00  0.00
ATOM   1367 2HB  SER A  90      16.619  -9.561   1.635  1.00  0.00
ATOM   1368  OG  SER A  90      16.320 -11.521   2.119  1.00  0.00
ATOM   1369  HG  SER A  90      15.809 -11.633   2.929  1.00  0.00
ATOM   1370  C   SER A  90      14.492  -9.627   3.453  1.00  0.00
ATOM   1371  O   SER A  90      14.509 -10.567   4.234  1.00  0.00
ATOM   1372  N   GLN A  91      14.454  -8.372   3.848  1.00  0.00
ATOM   1373  H   GLN A  91      14.420  -7.686   3.156  1.00  0.00
ATOM   1374  CA  GLN A  91      14.457  -7.978   5.258  1.00  0.00
ATOM   1375  HA  GLN A  91      15.106  -8.650   5.797  1.00  0.00
ATOM   1376  CB  GLN A  91      15.022  -6.561   5.370  1.00  0.00
ATOM   1377 1HB  GLN A  91      15.055  -6.279   6.412  1.00  0.00
ATOM   1378 2HB  GLN A  91      16.025  -6.552   4.971  1.00  0.00
ATOM   1379  CG  GLN A  91      14.198  -5.523   4.614  1.00  0.00
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ATOM   1380 1HG  GLN A  91      14.043  -5.870   3.604  1.00  0.00
ATOM   1381 2HG  GLN A  91      13.242  -5.422   5.104  1.00  0.00
ATOM   1382  CD  GLN A  91      14.857  -4.168   4.550  1.00  0.00
ATOM   1383  OE1 GLN A  91      15.606  -3.768   5.445  1.00  0.00
ATOM   1384  NE2 GLN A  91      14.583  -3.448   3.495  1.00  0.00
ATOM   1385 2HE2 GLN A  91      13.974  -3.793   2.813  1.00  0.00
ATOM   1386 1HE2 GLN A  91      15.023  -2.565   3.404  1.00  0.00
ATOM   1387  C   GLN A  91      13.039  -8.033   5.870  1.00  0.00
ATOM   1388  O   GLN A  91      12.877  -7.886   7.070  1.00  0.00
ATOM   1389  N   GLY A  92      12.031  -8.239   5.031  1.00  0.00
ATOM   1390  H   GLY A  92      12.227  -8.390   4.081  1.00  0.00
ATOM   1391  CA  GLY A  92      10.664  -8.261   5.510  1.00  0.00
ATOM   1392 1HA  GLY A  92      10.090  -8.916   4.871  1.00  0.00
ATOM   1393 2HA  GLY A  92      10.627  -8.640   6.520  1.00  0.00
ATOM   1394  C   GLY A  92      10.042  -6.876   5.471  1.00  0.00
ATOM   1395  O   GLY A  92      10.196  -6.082   6.387  1.00  0.00
ATOM   1396  N   ASN A  93       9.324  -6.590   4.408  1.00  0.00
ATOM   1397  H   ASN A  93       9.182  -7.291   3.740  1.00  0.00
ATOM   1398  CA  ASN A  93       8.725  -5.261   4.216  1.00  0.00
ATOM   1399  HA  ASN A  93       9.397  -4.545   4.668  1.00  0.00
ATOM   1400  CB  ASN A  93       8.579  -4.944   2.718  1.00  0.00
ATOM   1401 1HB  ASN A  93       9.518  -5.142   2.223  1.00  0.00
ATOM   1402 2HB  ASN A  93       7.816  -5.592   2.314  1.00  0.00
ATOM   1403  CG  ASN A  93       8.186  -3.499   2.425  1.00  0.00
ATOM   1404  OD1 ASN A  93       8.488  -2.596   3.188  1.00  0.00
ATOM   1405  ND2 ASN A  93       7.569  -3.270   1.301  1.00  0.00
ATOM   1406 2HD2 ASN A  93       7.385  -4.015   0.680  1.00  0.00
ATOM   1407 1HD2 ASN A  93       7.303  -2.349   1.108  1.00  0.00
ATOM   1408  C   ASN A  93       7.379  -5.166   4.946  1.00  0.00
ATOM   1409  O   ASN A  93       6.781  -4.091   5.069  1.00  0.00
ATOM   1410  N   SER A  94       6.916  -6.299   5.438  1.00  0.00
ATOM   1411  H   SER A  94       7.437  -7.126   5.350  1.00  0.00
ATOM   1412  CA  SER A  94       5.661  -6.412   6.153  1.00  0.00
ATOM   1413  HA  SER A  94       4.873  -6.154   5.462  1.00  0.00
ATOM   1414  CB  SER A  94       5.474  -7.868   6.562  1.00  0.00
ATOM   1415 1HB  SER A  94       4.713  -7.934   7.326  1.00  0.00
ATOM   1416 2HB  SER A  94       5.182  -8.453   5.702  1.00  0.00
ATOM   1417  OG  SER A  94       6.694  -8.390   7.078  1.00  0.00
ATOM   1418  HG  SER A  94       6.536  -8.753   7.955  1.00  0.00
ATOM   1419  C   SER A  94       5.578  -5.453   7.366  1.00  0.00
ATOM   1420  O   SER A  94       4.496  -4.986   7.715  1.00  0.00
ATOM   1421  N   ILE A  95       6.730  -5.134   7.961  1.00  0.00
ATOM   1422  H   ILE A  95       7.555  -5.544   7.624  1.00  0.00
ATOM   1423  CA  ILE A  95       6.798  -4.204   9.097  1.00  0.00
ATOM   1424  HA  ILE A  95       6.102  -4.565   9.841  1.00  0.00
ATOM   1425  CB  ILE A  95       8.245  -4.119   9.736  1.00  0.00
ATOM   1426  HB  ILE A  95       8.935  -3.902   8.933  1.00  0.00
ATOM   1427  CG2 ILE A  95       8.344  -2.968  10.740  1.00  0.00
ATOM   1428 1HG2 ILE A  95       8.133  -2.035  10.240  1.00  0.00
ATOM   1429 2HG2 ILE A  95       9.340  -2.936  11.155  1.00  0.00
ATOM   1430 3HG2 ILE A  95       7.628  -3.123  11.534  1.00  0.00
ATOM   1431  CG1 ILE A  95       8.677  -5.446  10.421  1.00  0.00
ATOM   1432 1HG1 ILE A  95       9.584  -5.269  10.981  1.00  0.00
ATOM   1433 2HG1 ILE A  95       7.901  -5.742  11.112  1.00  0.00
ATOM   1434  CD1 ILE A  95       8.951  -6.617   9.492  1.00  0.00
ATOM   1435 1HD1 ILE A  95       8.054  -6.854   8.939  1.00  0.00
ATOM   1436 2HD1 ILE A  95       9.254  -7.476  10.072  1.00  0.00
ATOM   1437 3HD1 ILE A  95       9.739  -6.353   8.802  1.00  0.00
ATOM   1438  C   ILE A  95       6.330  -2.804   8.655  1.00  0.00
ATOM   1439  O   ILE A  95       5.422  -2.216   9.257  1.00  0.00
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ATOM   1440  N   ARG A  96       6.922  -2.313   7.562  1.00  0.00
ATOM   1441  H   ARG A  96       7.613  -2.858   7.132  1.00  0.00
ATOM   1442  CA  ARG A  96       6.566  -1.013   6.972  1.00  0.00
ATOM   1443  HA  ARG A  96       6.786  -0.214   7.664  1.00  0.00
ATOM   1444  CB  ARG A  96       7.361  -0.793   5.672  1.00  0.00
ATOM   1445 1HB  ARG A  96       7.200  -1.653   5.040  1.00  0.00
ATOM   1446 2HB  ARG A  96       6.939   0.067   5.172  1.00  0.00
ATOM   1447  CG  ARG A  96       8.876  -0.590   5.775  1.00  0.00
ATOM   1448 1HG  ARG A  96       9.259  -1.247   6.541  1.00  0.00
ATOM   1449 2HG  ARG A  96       9.324  -0.849   4.827  1.00  0.00
ATOM   1450  CD  ARG A  96       9.255   0.846   6.134  1.00  0.00
ATOM   1451 1HD  ARG A  96      10.272   1.018   5.814  1.00  0.00
ATOM   1452 2HD  ARG A  96       8.604   1.517   5.592  1.00  0.00
ATOM   1453  NE  ARG A  96       9.171   1.150   7.562  1.00  0.00
ATOM   1454  HE  ARG A  96       9.839   0.653   8.103  1.00  0.00
ATOM   1455  CZ  ARG A  96       8.423   2.105   8.125  1.00  0.00
ATOM   1456  NH1 ARG A  96       7.503   2.768   7.407  1.00  0.00
ATOM   1457 1HH1 ARG A  96       7.359   2.569   6.439  1.00  0.00
ATOM   1458 2HH1 ARG A  96       6.917   3.494   7.794  1.00  0.00
ATOM   1459  NH2 ARG A  96       8.609   2.399   9.406  1.00  0.00
ATOM   1460 1HH2 ARG A  96       9.301   1.896   9.932  1.00  0.00
ATOM   1461 2HH2 ARG A  96       8.130   3.142   9.878  1.00  0.00
ATOM   1462  C   ARG A  96       5.093  -1.021   6.584  1.00  0.00
ATOM   1463  O   ARG A  96       4.342  -0.086   6.859  1.00  0.00
ATOM   1464  N   SER A  97       4.706  -2.114   5.985  1.00  0.00
ATOM   1465  H   SER A  97       5.354  -2.846   5.914  1.00  0.00
ATOM   1466  CA  SER A  97       3.401  -2.299   5.407  1.00  0.00
ATOM   1467  HA  SER A  97       3.218  -1.478   4.732  1.00  0.00
ATOM   1468  CB  SER A  97       3.427  -3.556   4.592  1.00  0.00
ATOM   1469 1HB  SER A  97       3.531  -4.407   5.248  1.00  0.00
ATOM   1470 2HB  SER A  97       2.512  -3.635   4.027  1.00  0.00
ATOM   1471  OG  SER A  97       4.520  -3.510   3.699  1.00  0.00
ATOM   1472  HG  SER A  97       5.355  -3.654   4.158  1.00  0.00
ATOM   1473  C   SER A  97       2.279  -2.351   6.439  1.00  0.00
ATOM   1474  O   SER A  97       1.184  -1.860   6.179  1.00  0.00
ATOM   1475  N   SER A  98       2.545  -2.924   7.600  1.00  0.00
ATOM   1476  H   SER A  98       3.433  -3.308   7.769  1.00  0.00
ATOM   1477  CA  SER A  98       1.530  -3.021   8.621  1.00  0.00
ATOM   1478  HA  SER A  98       0.655  -3.465   8.168  1.00  0.00
ATOM   1479  CB  SER A  98       2.015  -3.912   9.777  1.00  0.00
ATOM   1480 1HB  SER A  98       2.473  -4.803   9.373  1.00  0.00
ATOM   1481 2HB  SER A  98       2.741  -3.370  10.365  1.00  0.00
ATOM   1482  OG  SER A  98       0.939  -4.299  10.620  1.00  0.00
ATOM   1483  HG  SER A  98       0.387  -3.533  10.812  1.00  0.00
ATOM   1484  C   SER A  98       1.168  -1.613   9.107  1.00  0.00
ATOM   1485  O   SER A  98      -0.002  -1.304   9.349  1.00  0.00
ATOM   1486  N   ALA A  99       2.177  -0.762   9.215  1.00  0.00
ATOM   1487  H   ALA A  99       3.086  -1.080   9.031  1.00  0.00
ATOM   1488  CA  ALA A  99       1.965   0.619   9.589  1.00  0.00
ATOM   1489  HA  ALA A  99       1.311   0.627  10.448  1.00  0.00
ATOM   1490  CB  ALA A  99       3.283   1.285   9.960  1.00  0.00
ATOM   1491 1HB  ALA A  99       3.751   0.737  10.765  1.00  0.00
ATOM   1492 2HB  ALA A  99       3.099   2.301  10.275  1.00  0.00
ATOM   1493 3HB  ALA A  99       3.937   1.288   9.101  1.00  0.00
ATOM   1494  C   ALA A  99       1.275   1.368   8.454  1.00  0.00
ATOM   1495  O   ALA A  99       0.379   2.171   8.688  1.00  0.00
ATOM   1496  N   LEU A 100       1.688   1.057   7.221  1.00  0.00
ATOM   1497  H   LEU A 100       2.405   0.397   7.110  1.00  0.00
ATOM   1498  CA  LEU A 100       1.153   1.672   6.016  1.00  0.00
ATOM   1499  HA  LEU A 100       1.379   2.726   6.038  1.00  0.00
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ATOM   1500  CB  LEU A 100       1.813   1.045   4.781  1.00  0.00
ATOM   1501 1HB  LEU A 100       2.872   0.962   4.963  1.00  0.00
ATOM   1502 2HB  LEU A 100       1.436   0.038   4.663  1.00  0.00
ATOM   1503  CG  LEU A 100       1.591   1.762   3.454  1.00  0.00
ATOM   1504  HG  LEU A 100       0.530   1.868   3.285  1.00  0.00
ATOM   1505  CD1 LEU A 100       2.202   3.154   3.490  1.00  0.00
ATOM   1506 1HD1 LEU A 100       3.258   3.069   3.702  1.00  0.00
ATOM   1507 2HD1 LEU A 100       1.726   3.735   4.265  1.00  0.00
ATOM   1508 3HD1 LEU A 100       2.063   3.636   2.536  1.00  0.00
ATOM   1509  CD2 LEU A 100       2.177   0.950   2.320  1.00  0.00
ATOM   1510 1HD2 LEU A 100       1.693  -0.015   2.283  1.00  0.00
ATOM   1511 2HD2 LEU A 100       3.235   0.813   2.491  1.00  0.00
ATOM   1512 3HD2 LEU A 100       2.022   1.470   1.387  1.00  0.00
ATOM   1513  C   LEU A 100      -0.352   1.465   5.946  1.00  0.00
ATOM   1514  O   LEU A 100      -1.106   2.416   5.779  1.00  0.00
ATOM   1515  N   ILE A 101      -0.771   0.225   6.138  1.00  0.00
ATOM   1516  H   ILE A 101      -0.089  -0.467   6.293  1.00  0.00
ATOM   1517  CA  ILE A 101      -2.189  -0.144   6.096  1.00  0.00
ATOM   1518  HA  ILE A 101      -2.565   0.156   5.130  1.00  0.00
ATOM   1519  CB  ILE A 101      -2.388  -1.686   6.251  1.00  0.00
ATOM   1520  HB  ILE A 101      -1.852  -1.988   7.139  1.00  0.00
ATOM   1521  CG2 ILE A 101      -3.856  -2.065   6.462  1.00  0.00
ATOM   1522 1HG2 ILE A 101      -3.941  -3.137   6.559  1.00  0.00
ATOM   1523 2HG2 ILE A 101      -4.441  -1.725   5.620  1.00  0.00
ATOM   1524 3HG2 ILE A 101      -4.209  -1.591   7.365  1.00  0.00
ATOM   1525  CG1 ILE A 101      -1.791  -2.441   5.049  1.00  0.00
ATOM   1526 1HG1 ILE A 101      -0.726  -2.266   5.010  1.00  0.00
ATOM   1527 2HG1 ILE A 101      -1.968  -3.498   5.180  1.00  0.00
ATOM   1528  CD1 ILE A 101      -2.368  -2.044   3.700  1.00  0.00
ATOM   1529 1HD1 ILE A 101      -1.932  -2.670   2.937  1.00  0.00
ATOM   1530 2HD1 ILE A 101      -2.128  -1.014   3.489  1.00  0.00
ATOM   1531 3HD1 ILE A 101      -3.441  -2.177   3.703  1.00  0.00
ATOM   1532  C   ILE A 101      -2.991   0.616   7.151  1.00  0.00
ATOM   1533  O   ILE A 101      -4.076   1.122   6.854  1.00  0.00
ATOM   1534  N   GLY A 102      -2.419   0.746   8.351  1.00  0.00
ATOM   1535  H   GLY A 102      -1.545   0.331   8.505  1.00  0.00
ATOM   1536  CA  GLY A 102      -3.074   1.476   9.430  1.00  0.00
ATOM   1537 1HA  GLY A 102      -4.001   0.989   9.675  1.00  0.00
ATOM   1538 2HA  GLY A 102      -2.432   1.474  10.298  1.00  0.00
ATOM   1539  C   GLY A 102      -3.375   2.909   9.049  1.00  0.00
ATOM   1540  O   GLY A 102      -4.445   3.444   9.350  1.00  0.00
ATOM   1541  N   ILE A 103      -2.443   3.508   8.361  1.00  0.00
ATOM   1542  H   ILE A 103      -1.622   3.008   8.162  1.00  0.00
ATOM   1543  CA  ILE A 103      -2.575   4.863   7.888  1.00  0.00
ATOM   1544  HA  ILE A 103      -2.888   5.485   8.714  1.00  0.00
ATOM   1545  CB  ILE A 103      -1.218   5.374   7.373  1.00  0.00
ATOM   1546  HB  ILE A 103      -0.873   4.706   6.599  1.00  0.00
ATOM   1547  CG2 ILE A 103      -1.349   6.784   6.778  1.00  0.00
ATOM   1548 1HG2 ILE A 103      -0.380   7.124   6.442  1.00  0.00
ATOM   1549 2HG2 ILE A 103      -1.737   7.463   7.521  1.00  0.00
ATOM   1550 3HG2 ILE A 103      -2.025   6.748   5.934  1.00  0.00
ATOM   1551  CG1 ILE A 103      -0.212   5.353   8.521  1.00  0.00
ATOM   1552 1HG1 ILE A 103      -0.431   6.167   9.196  1.00  0.00
ATOM   1553 2HG1 ILE A 103      -0.306   4.418   9.052  1.00  0.00
ATOM   1554  CD1 ILE A 103       1.211   5.498   8.083  1.00  0.00
ATOM   1555 1HD1 ILE A 103       1.341   6.428   7.551  1.00  0.00
ATOM   1556 2HD1 ILE A 103       1.440   4.657   7.444  1.00  0.00
ATOM   1557 3HD1 ILE A 103       1.844   5.470   8.958  1.00  0.00
ATOM   1558  C   ILE A 103      -3.613   4.931   6.779  1.00  0.00
ATOM   1559  O   ILE A 103      -4.486   5.799   6.794  1.00  0.00
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ATOM   1560  N   ILE A 104      -3.540   3.984   5.851  1.00  0.00
ATOM   1561  H   ILE A 104      -2.856   3.284   5.945  1.00  0.00
ATOM   1562  CA  ILE A 104      -4.437   3.962   4.709  1.00  0.00
ATOM   1563  HA  ILE A 104      -4.322   4.894   4.176  1.00  0.00
ATOM   1564  CB  ILE A 104      -4.077   2.796   3.741  1.00  0.00
ATOM   1565  HB  ILE A 104      -4.107   1.873   4.300  1.00  0.00
ATOM   1566  CG2 ILE A 104      -5.093   2.696   2.597  1.00  0.00
ATOM   1567 1HG2 ILE A 104      -5.087   3.615   2.030  1.00  0.00
ATOM   1568 2HG2 ILE A 104      -6.079   2.530   3.005  1.00  0.00
ATOM   1569 3HG2 ILE A 104      -4.825   1.872   1.951  1.00  0.00
ATOM   1570  CG1 ILE A 104      -2.666   2.991   3.185  1.00  0.00
ATOM   1571 1HG1 ILE A 104      -2.674   3.860   2.545  1.00  0.00
ATOM   1572 2HG1 ILE A 104      -1.983   3.160   4.005  1.00  0.00
ATOM   1573  CD1 ILE A 104      -2.151   1.819   2.373  1.00  0.00
ATOM   1574 1HD1 ILE A 104      -2.093   0.947   3.005  1.00  0.00
ATOM   1575 2HD1 ILE A 104      -1.171   2.050   1.982  1.00  0.00
ATOM   1576 3HD1 ILE A 104      -2.829   1.625   1.554  1.00  0.00
ATOM   1577  C   ILE A 104      -5.886   3.817   5.158  1.00  0.00
ATOM   1578  O   ILE A 104      -6.729   4.640   4.792  1.00  0.00
ATOM   1579  N   GLU A 105      -6.168   2.829   5.999  1.00  0.00
ATOM   1580  H   GLU A 105      -5.457   2.218   6.307  1.00  0.00
ATOM   1581  CA  GLU A 105      -7.520   2.657   6.466  1.00  0.00
ATOM   1582  HA  GLU A 105      -8.122   2.758   5.575  1.00  0.00
ATOM   1583  CB  GLU A 105      -7.805   1.286   7.087  1.00  0.00
ATOM   1584 1HB  GLU A 105      -8.845   1.246   7.376  1.00  0.00
ATOM   1585 2HB  GLU A 105      -7.634   0.540   6.325  1.00  0.00
ATOM   1586  CG  GLU A 105      -6.983   0.908   8.300  1.00  0.00
ATOM   1587 1HG  GLU A 105      -5.965   0.722   7.993  1.00  0.00
ATOM   1588 2HG  GLU A 105      -7.009   1.720   9.012  1.00  0.00
ATOM   1589  CD  GLU A 105      -7.537  -0.328   8.953  1.00  0.00
ATOM   1590  OE1 GLU A 105      -7.227  -1.440   8.511  1.00  0.00
ATOM   1591  OE2 GLU A 105      -8.348  -0.183   9.895  1.00  0.00
ATOM   1592  C   GLU A 105      -7.951   3.795   7.364  1.00  0.00
ATOM   1593  O   GLU A 105      -9.046   4.320   7.209  1.00  0.00
ATOM   1594  N   GLY A 106      -7.055   4.215   8.255  1.00  0.00
ATOM   1595  H   GLY A 106      -6.169   3.789   8.281  1.00  0.00
ATOM   1596  CA  GLY A 106      -7.353   5.269   9.201  1.00  0.00
ATOM   1597 1HA  GLY A 106      -8.181   4.954   9.818  1.00  0.00
ATOM   1598 2HA  GLY A 106      -6.491   5.429   9.832  1.00  0.00
ATOM   1599  C   GLY A 106      -7.718   6.571   8.528  1.00  0.00
ATOM   1600  O   GLY A 106      -8.685   7.222   8.924  1.00  0.00
ATOM   1601  N   ASN A 107      -6.995   6.911   7.472  1.00  0.00
ATOM   1602  H   ASN A 107      -6.252   6.328   7.192  1.00  0.00
ATOM   1603  CA  ASN A 107      -7.239   8.145   6.715  1.00  0.00
ATOM   1604  HA  ASN A 107      -7.205   8.977   7.403  1.00  0.00
ATOM   1605  CB  ASN A 107      -6.155   8.332   5.642  1.00  0.00
ATOM   1606 1HB  ASN A 107      -5.184   8.354   6.112  1.00  0.00
ATOM   1607 2HB  ASN A 107      -6.191   7.480   4.978  1.00  0.00
ATOM   1608  CG  ASN A 107      -6.325   9.598   4.803  1.00  0.00
ATOM   1609  OD1 ASN A 107      -5.856  10.668   5.168  1.00  0.00
ATOM   1610  ND2 ASN A 107      -6.963   9.476   3.663  1.00  0.00
ATOM   1611 2HD2 ASN A 107      -7.312   8.600   3.400  1.00  0.00
ATOM   1612 1HD2 ASN A 107      -7.023  10.279   3.103  1.00  0.00
ATOM   1613  C   ASN A 107      -8.612   8.092   6.068  1.00  0.00
ATOM   1614  O   ASN A 107      -9.358   9.080   6.067  1.00  0.00
ATOM   1615  N   ILE A 108      -8.961   6.919   5.561  1.00  0.00
ATOM   1616  H   ILE A 108      -8.320   6.176   5.598  1.00  0.00
ATOM   1617  CA  ILE A 108     -10.264   6.705   4.967  1.00  0.00
ATOM   1618  HA  ILE A 108     -10.415   7.459   4.208  1.00  0.00
ATOM   1619  CB  ILE A 108     -10.382   5.305   4.320  1.00  0.00
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ATOM   1620  HB  ILE A 108     -10.186   4.559   5.076  1.00  0.00
ATOM   1621  CG2 ILE A 108     -11.790   5.093   3.783  1.00  0.00
ATOM   1622 1HG2 ILE A 108     -12.501   5.171   4.593  1.00  0.00
ATOM   1623 2HG2 ILE A 108     -11.861   4.113   3.335  1.00  0.00
ATOM   1624 3HG2 ILE A 108     -12.008   5.846   3.040  1.00  0.00
ATOM   1625  CG1 ILE A 108      -9.372   5.147   3.193  1.00  0.00
ATOM   1626 1HG1 ILE A 108      -9.728   5.718   2.347  1.00  0.00
ATOM   1627 2HG1 ILE A 108      -8.401   5.502   3.505  1.00  0.00
ATOM   1628  CD1 ILE A 108      -9.233   3.733   2.704  1.00  0.00
ATOM   1629 1HD1 ILE A 108      -8.961   3.102   3.536  1.00  0.00
ATOM   1630 2HD1 ILE A 108      -8.448   3.693   1.966  1.00  0.00
ATOM   1631 3HD1 ILE A 108     -10.165   3.395   2.277  1.00  0.00
ATOM   1632  C   ILE A 108     -11.340   6.852   6.032  1.00  0.00
ATOM   1633  O   ILE A 108     -12.327   7.519   5.816  1.00  0.00
ATOM   1634  N   ARG A 109     -11.107   6.260   7.200  1.00  0.00
ATOM   1635  H   ARG A 109     -10.274   5.749   7.312  1.00  0.00
ATOM   1636  CA  ARG A 109     -12.067   6.310   8.296  1.00  0.00
ATOM   1637  HA  ARG A 109     -12.986   5.884   7.919  1.00  0.00
ATOM   1638  CB  ARG A 109     -11.600   5.477   9.496  1.00  0.00
ATOM   1639 1HB  ARG A 109     -10.716   5.937   9.913  1.00  0.00
ATOM   1640 2HB  ARG A 109     -12.382   5.477  10.242  1.00  0.00
ATOM   1641  CG  ARG A 109     -11.276   4.038   9.138  1.00  0.00
ATOM   1642 1HG  ARG A 109     -12.082   3.628   8.553  1.00  0.00
ATOM   1643 2HG  ARG A 109     -10.387   4.047   8.524  1.00  0.00
ATOM   1644  CD  ARG A 109     -11.010   3.179  10.365  1.00  0.00
ATOM   1645 1HD  ARG A 109     -10.230   3.644  10.950  1.00  0.00
ATOM   1646 2HD  ARG A 109     -11.915   3.127  10.952  1.00  0.00
ATOM   1647  NE  ARG A 109     -10.589   1.805  10.012  1.00  0.00
ATOM   1648  HE  ARG A 109      -9.623   1.603  10.095  1.00  0.00
ATOM   1649  CZ  ARG A 109     -11.404   0.796   9.664  1.00  0.00
ATOM   1650  NH1 ARG A 109     -12.700   1.019   9.403  1.00  0.00
ATOM   1651 1HH1 ARG A 109     -13.104   1.936   9.446  1.00  0.00
ATOM   1652 2HH1 ARG A 109     -13.331   0.293   9.131  1.00  0.00
ATOM   1653  NH2 ARG A 109     -10.901  -0.415   9.517  1.00  0.00
ATOM   1654 1HH2 ARG A 109      -9.899  -0.529   9.674  1.00  0.00
ATOM   1655 2HH2 ARG A 109     -11.408  -1.236   9.265  1.00  0.00
ATOM   1656  C   ARG A 109     -12.365   7.747   8.719  1.00  0.00
ATOM   1657  O   ARG A 109     -13.483   8.056   9.081  1.00  0.00
ATOM   1658  N   TYR A 110     -11.366   8.616   8.666  1.00  0.00
ATOM   1659  H   TYR A 110     -10.468   8.302   8.418  1.00  0.00
ATOM   1660  CA  TYR A 110     -11.594  10.020   8.979  1.00  0.00
ATOM   1661  HA  TYR A 110     -12.188  10.043   9.881  1.00  0.00
ATOM   1662  CB  TYR A 110     -10.285  10.788   9.234  1.00  0.00
ATOM   1663 1HB  TYR A 110      -9.631  10.650   8.385  1.00  0.00
ATOM   1664 2HB  TYR A 110     -10.513  11.839   9.330  1.00  0.00
ATOM   1665  CG  TYR A 110      -9.526  10.357  10.470  1.00  0.00
ATOM   1666  CD1 TYR A 110     -10.097  10.473  11.731  1.00  0.00
ATOM   1667  HD1 TYR A 110     -11.101  10.858  11.820  1.00  0.00
ATOM   1668  CE1 TYR A 110      -9.403  10.100  12.865  1.00  0.00
ATOM   1669  HE1 TYR A 110      -9.863  10.197  13.837  1.00  0.00
ATOM   1670  CZ  TYR A 110      -8.123   9.604  12.747  1.00  0.00
ATOM   1671  CE2 TYR A 110      -7.535   9.482  11.508  1.00  0.00
ATOM   1672  HE2 TYR A 110      -6.532   9.093  11.415  1.00  0.00
ATOM   1673  CD2 TYR A 110      -8.235   9.860  10.380  1.00  0.00
ATOM   1674  HD2 TYR A 110      -7.775   9.765   9.408  1.00  0.00
ATOM   1675  OH  TYR A 110      -7.428   9.233  13.872  1.00  0.00
ATOM   1676  HH  TYR A 110      -7.997   8.721  14.451  1.00  0.00
ATOM   1677  C   TYR A 110     -12.395  10.715   7.878  1.00  0.00
ATOM   1678  O   TYR A 110     -13.370  11.386   8.155  1.00  0.00
ATOM   1679  N   ALA A 111     -11.959  10.560   6.638  1.00  0.00
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ATOM   1680  H   ALA A 111     -11.176   9.988   6.479  1.00  0.00
ATOM   1681  CA  ALA A 111     -12.613  11.213   5.500  1.00  0.00
ATOM   1682  HA  ALA A 111     -12.695  12.263   5.739  1.00  0.00
ATOM   1683  CB  ALA A 111     -11.740  11.090   4.256  1.00  0.00
ATOM   1684 1HB  ALA A 111     -11.669  10.051   3.971  1.00  0.00
ATOM   1685 2HB  ALA A 111     -10.753  11.472   4.469  1.00  0.00
ATOM   1686 3HB  ALA A 111     -12.180  11.655   3.448  1.00  0.00
ATOM   1687  C   ALA A 111     -14.030  10.672   5.217  1.00  0.00
ATOM   1688  O   ALA A 111     -14.973  11.431   5.034  1.00  0.00
ATOM   1689  N   ASN A 112     -14.144   9.365   5.168  1.00  0.00
ATOM   1690  H   ASN A 112     -13.358   8.816   5.386  1.00  0.00
ATOM   1691  CA  ASN A 112     -15.393   8.674   4.824  1.00  0.00
ATOM   1692  HA  ASN A 112     -15.859   9.210   4.010  1.00  0.00
ATOM   1693  CB  ASN A 112     -15.052   7.234   4.340  1.00  0.00
ATOM   1694 1HB  ASN A 112     -14.279   7.305   3.590  1.00  0.00
ATOM   1695 2HB  ASN A 112     -14.646   6.692   5.183  1.00  0.00
ATOM   1696  CG  ASN A 112     -16.194   6.387   3.722  1.00  0.00
ATOM   1697  OD1 ASN A 112     -15.932   5.581   2.831  1.00  0.00
ATOM   1698  ND2 ASN A 112     -17.415   6.531   4.174  1.00  0.00
ATOM   1699 2HD2 ASN A 112     -17.629   7.174   4.884  1.00  0.00
ATOM   1700 1HD2 ASN A 112     -18.119   5.941   3.829  1.00  0.00
ATOM   1701  C   ASN A 112     -16.347   8.652   6.015  1.00  0.00
ATOM   1702  O   ASN A 112     -17.552   8.788   5.842  1.00  0.00
ATOM   1703  N   THR A 113     -15.788   8.519   7.213  1.00  0.00
ATOM   1704  H   THR A 113     -14.811   8.522   7.272  1.00  0.00
ATOM   1705  CA  THR A 113     -16.520   8.374   8.491  1.00  0.00
ATOM   1706  HA  THR A 113     -15.721   8.178   9.195  1.00  0.00
ATOM   1707  CB  THR A 113     -17.282   9.663   8.981  1.00  0.00
ATOM   1708  HB  THR A 113     -17.896   9.379   9.824  1.00  0.00
ATOM   1709  OG1 THR A 113     -18.141  10.212   7.971  1.00  0.00
ATOM   1710  HG1 THR A 113     -17.903   9.832   7.115  1.00  0.00
ATOM   1711  CG2 THR A 113     -16.299  10.723   9.446  1.00  0.00
ATOM   1712 1HG2 THR A 113     -16.838  11.599   9.776  1.00  0.00
ATOM   1713 2HG2 THR A 113     -15.645  10.988   8.629  1.00  0.00
ATOM   1714 3HG2 THR A 113     -15.710  10.333  10.264  1.00  0.00
ATOM   1715  C   THR A 113     -17.392   7.105   8.577  1.00  0.00
ATOM   1716  O   THR A 113     -17.066   6.175   9.325  1.00  0.00
ATOM   1717  N   HIS A 114     -18.449   7.063   7.810  1.00  0.00
ATOM   1718  H   HIS A 114     -18.644   7.798   7.191  1.00  0.00
ATOM   1719  CA  HIS A 114     -19.352   5.945   7.775  1.00  0.00
ATOM   1720  HA  HIS A 114     -18.806   5.115   8.199  1.00  0.00
ATOM   1721  CB  HIS A 114     -20.640   6.195   8.631  1.00  0.00
ATOM   1722 1HB  HIS A 114     -21.347   5.403   8.429  1.00  0.00
ATOM   1723 2HB  HIS A 114     -20.369   6.153   9.676  1.00  0.00
ATOM   1724  CG  HIS A 114     -21.367   7.508   8.389  1.00  0.00
ATOM   1725  ND1 HIS A 114     -21.719   7.969   7.154  1.00  0.00
ATOM   1726  CD2 HIS A 114     -21.794   8.448   9.269  1.00  0.00
ATOM   1727  HD1 HIS A 114     -21.467   7.489   6.323  1.00  0.00
ATOM   1728  CE1 HIS A 114     -22.337   9.137   7.294  1.00  0.00
ATOM   1729  NE2 HIS A 114     -22.413   9.482   8.568  1.00  0.00
ATOM   1730  HD2 HIS A 114     -21.679   8.412  10.343  1.00  0.00
ATOM   1731  HE1 HIS A 114     -22.726   9.726   6.476  1.00  0.00
ATOM   1732  C   HIS A 114     -19.663   5.575   6.324  1.00  0.00
ATOM   1733  O   HIS A 114     -19.154   4.554   5.863  1.00  0.00
TER    1734      HIS A 114
ENDMDL
MODEL        2
ATOM      1  N   MET A   1     -16.114  -8.299   4.129  1.00 13.45
ATOM      2  CA  MET A   1     -16.630  -9.361   5.019  1.00 62.15
ATOM      3  HA  MET A   1     -16.772  -8.962   6.012  1.00 65.32
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ATOM      4  CB  MET A   1     -17.965  -9.896   4.461  1.00 70.31
ATOM      5 1HB  MET A   1     -18.317 -10.681   5.113  1.00  4.22
ATOM      6 2HB  MET A   1     -18.687  -9.094   4.460  1.00 74.15
ATOM      7  CG  MET A   1     -17.874 -10.465   3.038  1.00 41.23
ATOM      8 1HG  MET A   1     -17.493  -9.695   2.383  1.00 24.44
ATOM      9 2HG  MET A   1     -17.188 -11.298   3.043  1.00 65.25
ATOM     10  SD  MET A   1     -19.467 -11.021   2.395  1.00 22.53
ATOM     11  CE  MET A   1     -19.841 -12.387   3.502  1.00 62.02
ATOM     12 1HE  MET A   1     -19.905 -12.027   4.517  1.00  0.42
ATOM     13 2HE  MET A   1     -19.059 -13.129   3.433  1.00 53.34
ATOM     14 3HE  MET A   1     -20.782 -12.832   3.217  1.00 35.43
ATOM     15  C   MET A   1     -15.607 -10.456   5.049  1.00 12.22
ATOM     16  O   MET A   1     -15.899 -11.603   5.361  1.00 12.21
ATOM     17  N   ASP A   2     -14.402 -10.059   4.804  1.00  5.42
ATOM     18  H   ASP A   2     -14.093  -9.126   4.834  1.00 74.14
ATOM     19  CA  ASP A   2     -13.336 -10.929   4.493  1.00 13.40
ATOM     20  HA  ASP A   2     -13.374 -11.829   5.085  1.00 72.45
ATOM     21  CB  ASP A   2     -13.457 -11.289   3.000  1.00 71.23
ATOM     22 1HB  ASP A   2     -12.595 -11.868   2.701  1.00  2.41
ATOM     23 2HB  ASP A   2     -14.352 -11.872   2.842  1.00 74.21
ATOM     24  CG  ASP A   2     -13.533 -10.033   2.117  1.00 32.31
ATOM     25  OD1 ASP A   2     -12.538  -9.698   1.480  1.00 13.25
ATOM     26  OD2 ASP A   2     -14.630  -9.333   2.124  1.00 21.35
ATOM     27  C   ASP A   2     -12.082 -10.151   4.714  1.00 23.01
ATOM     28  O   ASP A   2     -12.151  -8.936   4.924  1.00 13.33
ATOM     29  N   LYS A   3     -10.971 -10.828   4.709  1.00 61.44
ATOM     30  H   LYS A   3     -11.013 -11.800   4.599  1.00 33.53
ATOM     31  CA  LYS A   3      -9.682 -10.212   4.842  1.00 30.22
ATOM     32  HA  LYS A   3      -9.611  -9.414   4.120  1.00 71.52
ATOM     33  CB  LYS A   3      -9.451  -9.649   6.258  1.00 30.42
ATOM     34 1HB  LYS A   3     -10.297  -9.034   6.529  1.00 33.42
ATOM     35 2HB  LYS A   3      -9.381 -10.476   6.949  1.00 31.33
ATOM     36  CG  LYS A   3      -8.187  -8.810   6.386  1.00 13.03
ATOM     37 1HG  LYS A   3      -7.348  -9.381   6.018  1.00 11.01
ATOM     38 2HG  LYS A   3      -8.299  -7.914   5.794  1.00 45.43
ATOM     39  CD  LYS A   3      -7.922  -8.422   7.831  1.00 30.14
ATOM     40 1HD  LYS A   3      -8.770  -7.867   8.207  1.00 60.22
ATOM     41 2HD  LYS A   3      -7.797  -9.322   8.414  1.00 71.43
ATOM     42  CE  LYS A   3      -6.666  -7.562   7.971  1.00 24.54
ATOM     43 1HE  LYS A   3      -6.839  -6.656   7.409  1.00 63.24
ATOM     44 2HE  LYS A   3      -6.504  -7.330   9.014  1.00 62.14
ATOM     45  NZ  LYS A   3      -5.451  -8.216   7.406  1.00 54.30
ATOM     46 1HZ  LYS A   3      -5.462  -8.064   6.373  1.00 42.20
ATOM     47 2HZ  LYS A   3      -5.493  -9.252   7.528  1.00 12.14
ATOM     48 3HZ  LYS A   3      -4.553  -7.848   7.781  1.00 12.53
ATOM     49  C   LYS A   3      -8.635 -11.252   4.524  1.00 31.44
ATOM     50  O   LYS A   3      -8.259 -12.060   5.391  1.00 44.51
ATOM     51  N   GLY A   4      -8.202 -11.274   3.286  1.00 44.22
ATOM     52  H   GLY A   4      -8.544 -10.605   2.648  1.00  4.35
ATOM     53  CA  GLY A   4      -7.217 -12.243   2.849  1.00  0.32
ATOM     54 1HA  GLY A   4      -7.492 -13.219   3.221  1.00 51.44
ATOM     55 2HA  GLY A   4      -7.189 -12.264   1.769  1.00 24.54
ATOM     56  C   GLY A   4      -5.857 -11.884   3.365  1.00 12.54
ATOM     57  O   GLY A   4      -5.090 -11.253   2.677  1.00 53.23
ATOM     58  N   THR A   5      -5.591 -12.273   4.580  1.00 42.42
ATOM     59  H   THR A   5      -6.242 -12.843   5.037  1.00 20.03
ATOM     60  CA  THR A   5      -4.379 -11.921   5.262  1.00 22.34
ATOM     61  HA  THR A   5      -4.013 -10.981   4.880  1.00 44.33
ATOM     62  CB  THR A   5      -4.676 -11.746   6.761  1.00 11.24
ATOM     63  HB  THR A   5      -4.918 -12.712   7.182  1.00  2.52
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ATOM     64  OG1 THR A   5      -5.811 -10.865   6.918  1.00 65.24
ATOM     65  HG1 THR A   5      -6.570 -11.356   6.575  1.00 34.35
ATOM     66  CG2 THR A   5      -3.477 -11.156   7.497  1.00 55.43
ATOM     67 1HG2 THR A   5      -3.241 -10.187   7.082  1.00 51.24
ATOM     68 2HG2 THR A   5      -2.627 -11.812   7.383  1.00 61.43
ATOM     69 3HG2 THR A   5      -3.712 -11.050   8.545  1.00 21.35
ATOM     70  C   THR A   5      -3.331 -13.005   5.092  1.00 52.14
ATOM     71  O   THR A   5      -3.514 -14.119   5.571  1.00 60.42
ATOM     72  N   GLN A   6      -2.270 -12.687   4.389  1.00 53.44
ATOM     73  H   GLN A   6      -2.226 -11.801   3.964  1.00 23.23
ATOM     74  CA  GLN A   6      -1.149 -13.592   4.223  1.00 75.13
ATOM     75  HA  GLN A   6      -1.170 -14.291   5.045  1.00 23.01
ATOM     76  CB  GLN A   6      -1.242 -14.378   2.901  1.00 53.42
ATOM     77 1HB  GLN A   6      -1.485 -13.688   2.106  1.00 35.12
ATOM     78 2HB  GLN A   6      -0.278 -14.820   2.695  1.00 13.42
ATOM     79  CG  GLN A   6      -2.286 -15.484   2.901  1.00  4.54
ATOM     80 1HG  GLN A   6      -3.248 -15.054   3.137  1.00 75.34
ATOM     81 2HG  GLN A   6      -2.321 -15.939   1.923  1.00 63.23
ATOM     82  CD  GLN A   6      -1.969 -16.559   3.930  1.00  3.12
ATOM     83  OE1 GLN A   6      -0.814 -16.821   4.237  1.00 31.01
ATOM     84  NE2 GLN A   6      -2.984 -17.171   4.479  1.00 51.11
ATOM     85 2HE2 GLN A   6      -3.888 -16.911   4.209  1.00 21.33
ATOM     86 1HE2 GLN A   6      -2.774 -17.857   5.146  1.00 51.44
ATOM     87  C   GLN A   6       0.147 -12.826   4.274  1.00 54.41
ATOM     88  O   GLN A   6       0.241 -11.718   3.748  1.00 73.04
ATOM     89  N   TYR A   7       1.109 -13.383   4.951  1.00 14.31
ATOM     90  H   TYR A   7       0.942 -14.235   5.406  1.00 21.34
ATOM     91  CA  TYR A   7       2.435 -12.831   5.027  1.00 53.53
ATOM     92  HA  TYR A   7       2.450 -12.000   4.336  1.00 12.55
ATOM     93  CB  TYR A   7       2.768 -12.311   6.458  1.00 12.52
ATOM     94 1HB  TYR A   7       3.803 -12.004   6.483  1.00 70.12
ATOM     95 2HB  TYR A   7       2.153 -11.447   6.661  1.00 13.50
ATOM     96  CG  TYR A   7       2.567 -13.307   7.600  1.00 15.04
ATOM     97  CD1 TYR A   7       3.631 -14.047   8.107  1.00 74.31
ATOM     98  HD1 TYR A   7       4.612 -13.920   7.675  1.00 52.34
ATOM     99  CE1 TYR A   7       3.448 -14.941   9.146  1.00 43.10
ATOM    100  HE1 TYR A   7       4.286 -15.507   9.525  1.00 64.01
ATOM    101  CZ  TYR A   7       2.194 -15.104   9.695  1.00 55.14
ATOM    102  CE2 TYR A   7       1.123 -14.382   9.213  1.00 11.15
ATOM    103  HE2 TYR A   7       0.141 -14.509   9.644  1.00 52.43
ATOM    104  CD2 TYR A   7       1.312 -13.490   8.176  1.00 42.12
ATOM    105  HD2 TYR A   7       0.475 -12.923   7.796  1.00 41.22
ATOM    106  OH  TYR A   7       2.011 -15.991  10.733  1.00 10.54
ATOM    107  HH  TYR A   7       2.726 -15.895  11.365  1.00 62.45
ATOM    108  C   TYR A   7       3.436 -13.854   4.516  1.00 51.23
ATOM    109  O   TYR A   7       3.591 -14.918   5.101  1.00 71.14
ATOM    110  N   LYS A   8       4.082 -13.562   3.426  1.00 21.41
ATOM    111  H   LYS A   8       3.958 -12.688   2.985  1.00 14.30
ATOM    112  CA  LYS A   8       4.995 -14.510   2.836  1.00 50.21
ATOM    113  HA  LYS A   8       5.262 -15.276   3.546  1.00  1.24
ATOM    114  CB  LYS A   8       4.303 -15.160   1.639  1.00  2.34
ATOM    115 1HB  LYS A   8       3.307 -15.475   1.910  1.00 74.54
ATOM    116 2HB  LYS A   8       4.245 -14.380   0.894  1.00 15.44
ATOM    117  CG  LYS A   8       5.045 -16.331   1.012  1.00 31.02
ATOM    118 1HG  LYS A   8       6.074 -16.046   0.853  1.00 45.10
ATOM    119 2HG  LYS A   8       5.005 -17.171   1.691  1.00 73.45
ATOM    120  CD  LYS A   8       4.424 -16.739  -0.330  1.00 51.31
ATOM    121 1HD  LYS A   8       4.924 -17.623  -0.694  1.00 61.11
ATOM    122 2HD  LYS A   8       3.377 -16.958  -0.176  1.00 40.42
ATOM    123  CE  LYS A   8       4.553 -15.625  -1.389  1.00 53.50
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ATOM    124 1HE  LYS A   8       4.041 -15.951  -2.284  1.00 50.13
ATOM    125 2HE  LYS A   8       4.080 -14.722  -1.032  1.00 63.44
ATOM    126  NZ  LYS A   8       5.967 -15.332  -1.746  1.00 70.23
ATOM    127 1HZ  LYS A   8       6.434 -16.068  -2.305  1.00 34.13
ATOM    128 2HZ  LYS A   8       6.563 -15.309  -0.880  1.00 33.41
ATOM    129 3HZ  LYS A   8       6.152 -14.406  -2.175  1.00 55.14
ATOM    130  C   LYS A   8       6.208 -13.771   2.326  1.00 22.02
ATOM    131  O   LYS A   8       6.060 -12.892   1.504  1.00  3.11
ATOM    132  N   ASP A   9       7.388 -14.104   2.860  1.00 11.42
ATOM    133  H   ASP A   9       7.389 -14.744   3.600  1.00  4.23
ATOM    134  CA  ASP A   9       8.708 -13.583   2.374  1.00 64.33
ATOM    135  HA  ASP A   9       9.363 -13.758   3.216  1.00 12.42
ATOM    136  CB  ASP A   9       9.287 -14.390   1.165  1.00 24.42
ATOM    137 1HB  ASP A   9      10.115 -13.849   0.740  1.00 24.43
ATOM    138 2HB  ASP A   9       9.642 -15.337   1.546  1.00 72.31
ATOM    139  CG  ASP A   9       8.317 -14.678   0.036  1.00 63.20
ATOM    140  OD1 ASP A   9       7.971 -13.793  -0.764  1.00 33.32
ATOM    141  OD2 ASP A   9       7.856 -15.836  -0.066  1.00 32.33
ATOM    142  C   ASP A   9       8.781 -12.068   2.155  1.00 72.11
ATOM    143  O   ASP A   9       9.467 -11.591   1.279  1.00 40.33
ATOM    144  N   GLY A  10       8.132 -11.317   3.031  1.00 64.44
ATOM    145  H   GLY A  10       7.611 -11.767   3.724  1.00 11.13
ATOM    146  CA  GLY A  10       8.180  -9.870   2.938  1.00 24.33
ATOM    147 1HA  GLY A  10       8.216  -9.465   3.939  1.00 44.31
ATOM    148 2HA  GLY A  10       9.076  -9.573   2.414  1.00 63.05
ATOM    149  C   GLY A  10       6.974  -9.290   2.227  1.00 34.25
ATOM    150  O   GLY A  10       6.674  -8.107   2.369  1.00 51.24
ATOM    151  N   TYR A  11       6.289 -10.117   1.508  1.00 41.33
ATOM    152  H   TYR A  11       6.625 -11.036   1.444  1.00 63.43
ATOM    153  CA  TYR A  11       5.076  -9.770   0.782  1.00 12.31
ATOM    154  HA  TYR A  11       5.096  -8.728   0.503  1.00 33.31
ATOM    155  CB  TYR A  11       5.010 -10.640  -0.493  1.00 41.43
ATOM    156 1HB  TYR A  11       5.920 -10.491  -1.055  1.00 24.50
ATOM    157 2HB  TYR A  11       4.965 -11.677  -0.192  1.00 11.04
ATOM    158  CG  TYR A  11       3.860 -10.376  -1.448  1.00 72.32
ATOM    159  CD1 TYR A  11       2.925 -11.365  -1.719  1.00 51.32
ATOM    160  HD1 TYR A  11       3.010 -12.318  -1.221  1.00 53.31
ATOM    161  CE1 TYR A  11       1.894 -11.147  -2.614  1.00 13.14
ATOM    162  HE1 TYR A  11       1.176 -11.929  -2.813  1.00 22.44
ATOM    163  CZ  TYR A  11       1.779  -9.935  -3.244  1.00  4.30
ATOM    164  CE2 TYR A  11       2.694  -8.931  -2.993  1.00 15.25
ATOM    165  HE2 TYR A  11       2.605  -7.976  -3.488  1.00 14.20
ATOM    166  CD2 TYR A  11       3.728  -9.157  -2.102  1.00  2.43
ATOM    167  HD2 TYR A  11       4.446  -8.375  -1.903  1.00 32.13
ATOM    168  OH  TYR A  11       0.746  -9.724  -4.143  1.00 73.22
ATOM    169  HH  TYR A  11       1.124  -9.301  -4.920  1.00 72.10
ATOM    170  C   TYR A  11       3.855  -9.986   1.696  1.00 60.40
ATOM    171  O   TYR A  11       3.697 -11.050   2.306  1.00 43.02
ATOM    172  N   TYR A  12       3.038  -8.966   1.828  1.00 30.22
ATOM    173  H   TYR A  12       3.231  -8.150   1.310  1.00 31.14
ATOM    174  CA  TYR A  12       1.858  -9.008   2.686  1.00 64.44
ATOM    175  HA  TYR A  12       1.813  -9.980   3.154  1.00 31.21
ATOM    176  CB  TYR A  12       1.930  -7.929   3.772  1.00 21.32
ATOM    177 1HB  TYR A  12       2.873  -8.014   4.294  1.00 74.53
ATOM    178 2HB  TYR A  12       1.890  -6.963   3.295  1.00 50.23
ATOM    179  CG  TYR A  12       0.818  -7.980   4.823  1.00 12.44
ATOM    180  CD1 TYR A  12       0.926  -8.798   5.942  1.00 44.41
ATOM    181  HD1 TYR A  12       1.804  -9.416   6.050  1.00  2.22
ATOM    182  CE1 TYR A  12      -0.068  -8.829   6.910  1.00 54.11
ATOM    183  HE1 TYR A  12       0.036  -9.472   7.771  1.00 13.33
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ATOM    184  CZ  TYR A  12      -1.192  -8.033   6.763  1.00  4.32
ATOM    185  CE2 TYR A  12      -1.317  -7.219   5.665  1.00 30.51
ATOM    186  HE2 TYR A  12      -2.191  -6.596   5.550  1.00 63.42
ATOM    187  CD2 TYR A  12      -0.321  -7.191   4.705  1.00 14.12
ATOM    188  HD2 TYR A  12      -0.426  -6.550   3.843  1.00 74.11
ATOM    189  OH  TYR A  12      -2.197  -8.053   7.735  1.00 31.23
ATOM    190  HH  TYR A  12      -1.736  -7.990   8.580  1.00 51.13
ATOM    191  C   TYR A  12       0.622  -8.796   1.856  1.00 70.43
ATOM    192  O   TYR A  12       0.573  -7.892   1.020  1.00 31.24
ATOM    193  N   ILE A  13      -0.345  -9.622   2.079  1.00 52.40
ATOM    194  H   ILE A  13      -0.220 -10.319   2.762  1.00 43.30
ATOM    195  CA  ILE A  13      -1.598  -9.571   1.383  1.00 22.35
ATOM    196  HA  ILE A  13      -1.569  -8.800   0.629  1.00 35.40
ATOM    197  CB  ILE A  13      -1.866 -10.941   0.704  1.00 60.11
ATOM    198  HB  ILE A  13      -1.970 -11.686   1.479  1.00 54.12
ATOM    199  CG2 ILE A  13      -3.159 -10.906  -0.105  1.00 42.42
ATOM    200 1HG2 ILE A  13      -3.323 -11.869  -0.565  1.00 53.34
ATOM    201 2HG2 ILE A  13      -3.084 -10.150  -0.873  1.00 12.41
ATOM    202 3HG2 ILE A  13      -3.988 -10.672   0.548  1.00  4.25
ATOM    203  CG1 ILE A  13      -0.680 -11.321  -0.189  1.00  2.44
ATOM    204 1HG1 ILE A  13      -0.634 -10.634  -1.020  1.00 64.23
ATOM    205 2HG1 ILE A  13       0.232 -11.233   0.384  1.00 12.31
ATOM    206  CD1 ILE A  13      -0.739 -12.719  -0.760  1.00  4.21
ATOM    207 1HD1 ILE A  13       0.167 -12.891  -1.323  1.00 31.30
ATOM    208 2HD1 ILE A  13      -1.597 -12.811  -1.409  1.00 53.31
ATOM    209 3HD1 ILE A  13      -0.800 -13.434   0.046  1.00 55.20
ATOM    210  C   ILE A  13      -2.702  -9.300   2.400  1.00 25.22
ATOM    211  O   ILE A  13      -2.670  -9.859   3.510  1.00 14.14
ATOM    212  N   THR A  14      -3.621  -8.412   2.066  1.00 40.25
ATOM    213  H   THR A  14      -3.510  -7.870   1.253  1.00 12.53
ATOM    214  CA  THR A  14      -4.773  -8.167   2.892  1.00 41.25
ATOM    215  HA  THR A  14      -5.128  -9.123   3.245  1.00 31.24
ATOM    216  CB  THR A  14      -4.430  -7.283   4.125  1.00 52.33
ATOM    217  HB  THR A  14      -3.671  -7.795   4.698  1.00 34.02
ATOM    218  OG1 THR A  14      -5.597  -7.109   4.959  1.00 41.04
ATOM    219  HG1 THR A  14      -6.209  -6.516   4.499  1.00  2.24
ATOM    220  CG2 THR A  14      -3.901  -5.914   3.704  1.00 71.11
ATOM    221 1HG2 THR A  14      -3.700  -5.329   4.589  1.00 51.14
ATOM    222 2HG2 THR A  14      -4.642  -5.412   3.098  1.00 61.44
ATOM    223 3HG2 THR A  14      -2.991  -6.036   3.136  1.00 13.41
ATOM    224  C   THR A  14      -5.882  -7.508   2.082  1.00  2.13
ATOM    225  O   THR A  14      -5.615  -6.745   1.153  1.00 24.23
ATOM    226  N   THR A  15      -7.104  -7.831   2.400  1.00 42.10
ATOM    227  H   THR A  15      -7.282  -8.542   3.044  1.00 74.42
ATOM    228  CA  THR A  15      -8.226  -7.188   1.790  1.00 14.20
ATOM    229  HA  THR A  15      -7.927  -6.778   0.838  1.00 62.34
ATOM    230  CB  THR A  15      -9.392  -8.177   1.580  1.00 25.01
ATOM    231  HB  THR A  15      -9.937  -8.286   2.505  1.00 44.05
ATOM    232  OG1 THR A  15      -8.883  -9.455   1.142  1.00 50.51
ATOM    233  HG1 THR A  15      -9.668  -9.884   0.775  1.00 31.43
ATOM    234  CG2 THR A  15     -10.340  -7.638   0.513  1.00 44.55
ATOM    235 1HG2 THR A  15     -11.160  -8.329   0.378  1.00 22.13
ATOM    236 2HG2 THR A  15      -9.805  -7.525  -0.420  1.00 33.34
ATOM    237 3HG2 THR A  15     -10.724  -6.679   0.825  1.00  0.12
ATOM    238  C   THR A  15      -8.714  -6.069   2.719  1.00 41.20
ATOM    239  O   THR A  15      -8.632  -6.196   3.947  1.00 54.41
ATOM    240  N   LEU A  16      -9.109  -4.972   2.139  1.00  2.24
ATOM    241  H   LEU A  16      -8.977  -4.850   1.170  1.00 63.45
ATOM    242  CA  LEU A  16      -9.753  -3.887   2.834  1.00 52.44
ATOM    243  HA  LEU A  16      -9.842  -4.132   3.881  1.00 12.43
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ATOM    244  CB  LEU A  16      -8.982  -2.549   2.661  1.00 11.20
ATOM    245 1HB  LEU A  16      -8.648  -2.514   1.635  1.00 62.40
ATOM    246 2HB  LEU A  16      -9.694  -1.749   2.793  1.00 64.15
ATOM    247  CG  LEU A  16      -7.747  -2.272   3.550  1.00 41.21
ATOM    248  HG  LEU A  16      -7.403  -1.273   3.319  1.00 10.02
ATOM    249  CD1 LEU A  16      -8.116  -2.260   5.027  1.00 11.14
ATOM    250 1HD1 LEU A  16      -7.236  -2.058   5.620  1.00 22.15
ATOM    251 2HD1 LEU A  16      -8.538  -3.213   5.312  1.00 73.32
ATOM    252 3HD1 LEU A  16      -8.846  -1.482   5.205  1.00 60.11
ATOM    253  CD2 LEU A  16      -6.609  -3.243   3.272  1.00 33.11
ATOM    254 1HD2 LEU A  16      -6.947  -4.251   3.464  1.00 21.24
ATOM    255 2HD2 LEU A  16      -5.773  -3.011   3.915  1.00 44.10
ATOM    256 3HD2 LEU A  16      -6.308  -3.155   2.239  1.00 23.14
ATOM    257  C   LEU A  16     -11.116  -3.728   2.214  1.00 23.10
ATOM    258  O   LEU A  16     -11.218  -3.519   1.000  1.00 21.41
ATOM    259  N   ASN A  17     -12.161  -3.828   2.990  1.00 51.32
ATOM    260  H   ASN A  17     -12.057  -4.012   3.944  1.00 24.44
ATOM    261  CA  ASN A  17     -13.481  -3.660   2.418  1.00 50.11
ATOM    262  HA  ASN A  17     -13.389  -3.956   1.382  1.00 33.14
ATOM    263  CB  ASN A  17     -14.580  -4.505   3.075  1.00 20.04
ATOM    264 1HB  ASN A  17     -14.624  -4.221   4.117  1.00 54.03
ATOM    265 2HB  ASN A  17     -15.526  -4.285   2.606  1.00 40.21
ATOM    266  CG  ASN A  17     -14.339  -6.000   3.025  1.00 21.41
ATOM    267  OD1 ASN A  17     -13.903  -6.600   4.007  1.00  5.31
ATOM    268  ND2 ASN A  17     -14.617  -6.621   1.901  1.00 55.35
ATOM    269 2HD2 ASN A  17     -14.972  -6.112   1.141  1.00 23.13
ATOM    270 1HD2 ASN A  17     -14.423  -7.592   1.829  1.00 52.14
ATOM    271  C   ASN A  17     -13.874  -2.214   2.419  1.00 52.04
ATOM    272  O   ASN A  17     -14.604  -1.754   3.291  1.00  4.31
ATOM    273  N   TYR A  18     -13.298  -1.493   1.500  1.00 13.21
ATOM    274  H   TYR A  18     -12.658  -1.927   0.895  1.00 45.12
ATOM    275  CA  TYR A  18     -13.573  -0.098   1.287  1.00 53.00
ATOM    276  HA  TYR A  18     -14.579   0.106   1.622  1.00 55.24
ATOM    277  CB  TYR A  18     -12.573   0.823   2.026  1.00 63.35
ATOM    278 1HB  TYR A  18     -11.574   0.579   1.700  1.00 25.41
ATOM    279 2HB  TYR A  18     -12.782   1.848   1.754  1.00  0.11
ATOM    280  CG  TYR A  18     -12.594   0.722   3.541  1.00  1.40
ATOM    281  CD1 TYR A  18     -11.591   0.050   4.224  1.00 23.24
ATOM    282  HD1 TYR A  18     -10.787  -0.401   3.663  1.00 50.33
ATOM    283  CE1 TYR A  18     -11.603  -0.049   5.599  1.00 53.30
ATOM    284  HE1 TYR A  18     -10.813  -0.576   6.110  1.00 21.34
ATOM    285  CZ  TYR A  18     -12.627   0.528   6.313  1.00 52.03
ATOM    286  CE2 TYR A  18     -13.637   1.205   5.662  1.00 71.41
ATOM    287  HE2 TYR A  18     -14.442   1.657   6.223  1.00  2.14
ATOM    288  CD2 TYR A  18     -13.617   1.297   4.283  1.00 50.21
ATOM    289  HD2 TYR A  18     -14.407   1.825   3.767  1.00 32.34
ATOM    290  OH  TYR A  18     -12.640   0.431   7.686  1.00 22.42
ATOM    291  HH  TYR A  18     -11.756   0.651   8.001  1.00 32.32
ATOM    292  C   TYR A  18     -13.482   0.143  -0.193  1.00 50.43
ATOM    293  O   TYR A  18     -12.853  -0.660  -0.913  1.00 10.03
ATOM    294  N   ASN A  19     -14.055   1.236  -0.647  1.00 61.10
ATOM    295  H   ASN A  19     -14.476   1.861  -0.020  1.00 65.12
ATOM    296  CA  ASN A  19     -14.105   1.557  -2.054  1.00 13.11
ATOM    297  HA  ASN A  19     -14.532   0.724  -2.593  1.00 25.13
ATOM    298  CB  ASN A  19     -14.967   2.801  -2.294  1.00 34.32
ATOM    299 1HB  ASN A  19     -14.451   3.668  -1.908  1.00 52.32
ATOM    300 2HB  ASN A  19     -15.101   2.918  -3.356  1.00 14.05
ATOM    301  CG  ASN A  19     -16.331   2.738  -1.641  1.00 31.01
ATOM    302  OD1 ASN A  19     -16.488   3.155  -0.507  1.00 31.22
ATOM    303  ND2 ASN A  19     -17.314   2.220  -2.330  1.00 51.44
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ATOM    304 2HD2 ASN A  19     -17.174   1.880  -3.244  1.00 33.42
ATOM    305 1HD2 ASN A  19     -18.186   2.195  -1.884  1.00  3.43
ATOM    306  C   ASN A  19     -12.710   1.837  -2.551  1.00 11.30
ATOM    307  O   ASN A  19     -11.965   2.588  -1.916  1.00 23.44
ATOM    308  N   PHE A  20     -12.388   1.281  -3.705  1.00 44.51
ATOM    309  H   PHE A  20     -13.041   0.732  -4.192  1.00 54.42
ATOM    310  CA  PHE A  20     -11.059   1.366  -4.311  1.00 70.23
ATOM    311  HA  PHE A  20     -10.395   0.736  -3.741  1.00 62.30
ATOM    312  CB  PHE A  20     -11.149   0.784  -5.725  1.00 12.12
ATOM    313 1HB  PHE A  20     -10.184   0.699  -6.196  1.00 52.30
ATOM    314 2HB  PHE A  20     -11.547  -0.200  -5.552  1.00 40.13
ATOM    315  CG  PHE A  20     -12.134   1.472  -6.678  1.00 73.14
ATOM    316  CD1 PHE A  20     -13.497   1.197  -6.616  1.00 13.13
ATOM    317  HD1 PHE A  20     -13.866   0.504  -5.874  1.00 24.45
ATOM    318  CE1 PHE A  20     -14.383   1.804  -7.482  1.00 72.34
ATOM    319  HE1 PHE A  20     -15.438   1.582  -7.423  1.00 24.11
ATOM    320  CZ  PHE A  20     -13.919   2.694  -8.429  1.00 24.04
ATOM    321  HZ  PHE A  20     -14.609   3.171  -9.110  1.00 21.43
ATOM    322  CE2 PHE A  20     -12.570   2.975  -8.506  1.00 71.32
ATOM    323  HE2 PHE A  20     -12.204   3.670  -9.247  1.00 10.24
ATOM    324  CD2 PHE A  20     -11.689   2.363  -7.638  1.00 31.04
ATOM    325  HD2 PHE A  20     -10.635   2.581  -7.695  1.00 22.11
ATOM    326  C   PHE A  20     -10.494   2.782  -4.332  1.00 53.14
ATOM    327  O   PHE A  20      -9.365   3.019  -3.918  1.00 24.00
ATOM    328  N   ASN A  21     -11.320   3.701  -4.739  1.00 14.11
ATOM    329  H   ASN A  21     -12.198   3.346  -4.984  1.00 71.35
ATOM    330  CA  ASN A  21     -10.943   5.116  -4.881  1.00 53.12
ATOM    331  HA  ASN A  21     -10.148   5.154  -5.612  1.00 11.43
ATOM    332  CB  ASN A  21     -12.128   5.939  -5.419  1.00 33.04
ATOM    333 1HB  ASN A  21     -12.445   5.523  -6.363  1.00 60.42
ATOM    334 2HB  ASN A  21     -12.943   5.877  -4.714  1.00 73.13
ATOM    335  CG  ASN A  21     -11.787   7.412  -5.637  1.00 21.21
ATOM    336  OD1 ASN A  21     -11.295   7.786  -6.680  1.00 33.30
ATOM    337  ND2 ASN A  21     -12.092   8.254  -4.673  1.00 12.30
ATOM    338 2HD2 ASN A  21     -12.523   7.937  -3.855  1.00 13.15
ATOM    339 1HD2 ASN A  21     -11.861   9.191  -4.840  1.00 12.53
ATOM    340  C   ASN A  21     -10.409   5.727  -3.575  1.00 34.44
ATOM    341  O   ASN A  21      -9.359   6.370  -3.569  1.00 10.32
ATOM    342  N   THR A  22     -11.102   5.491  -2.465  1.00 43.32
ATOM    343  H   THR A  22     -11.874   4.890  -2.488  1.00 74.13
ATOM    344  CA  THR A  22     -10.679   6.064  -1.200  1.00  3.23
ATOM    345  HA  THR A  22     -10.408   7.083  -1.440  1.00 13.03
ATOM    346  CB  THR A  22     -11.805   6.091  -0.096  1.00 33.51
ATOM    347  HB  THR A  22     -12.655   6.619  -0.505  1.00 44.00
ATOM    348  OG1 THR A  22     -11.353   6.801   1.060  1.00 53.42
ATOM    349  HG1 THR A  22     -10.517   7.240   0.872  1.00 75.35
ATOM    350  CG2 THR A  22     -12.243   4.694   0.326  1.00 13.24
ATOM    351 1HG2 THR A  22     -11.396   4.164   0.736  1.00 60.45
ATOM    352 2HG2 THR A  22     -12.621   4.158  -0.531  1.00 23.24
ATOM    353 3HG2 THR A  22     -13.018   4.768   1.076  1.00 65.52
ATOM    354  C   THR A  22      -9.388   5.403  -0.699  1.00 61.12
ATOM    355  O   THR A  22      -8.521   6.071  -0.124  1.00 54.10
ATOM    356  N   VAL A  23      -9.259   4.106  -0.943  1.00 15.34
ATOM    357  H   VAL A  23      -9.964   3.632  -1.436  1.00  2.31
ATOM    358  CA  VAL A  23      -8.098   3.354  -0.507  1.00 74.41
ATOM    359  HA  VAL A  23      -7.960   3.565   0.544  1.00 73.53
ATOM    360  CB  VAL A  23      -8.305   1.831  -0.685  1.00 52.22
ATOM    361  HB  VAL A  23      -8.404   1.621  -1.740  1.00 71.41
ATOM    362  CG1 VAL A  23      -7.117   1.062  -0.149  1.00 12.54
ATOM    363 1HG1 VAL A  23      -7.295   0.004  -0.269  1.00 71.03
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ATOM    364 2HG1 VAL A  23      -6.985   1.290   0.898  1.00 35.03
ATOM    365 3HG1 VAL A  23      -6.229   1.344  -0.694  1.00 63.42
ATOM    366  CG2 VAL A  23      -9.574   1.377   0.014  1.00 51.22
ATOM    367 1HG2 VAL A  23     -10.421   1.906  -0.398  1.00 72.43
ATOM    368 2HG2 VAL A  23      -9.499   1.585   1.071  1.00 72.04
ATOM    369 3HG2 VAL A  23      -9.707   0.315  -0.136  1.00 14.13
ATOM    370  C   VAL A  23      -6.832   3.812  -1.254  1.00 74.24
ATOM    371  O   VAL A  23      -5.759   3.937  -0.643  1.00 42.02
ATOM    372  N   TYR A  24      -6.965   4.089  -2.563  1.00 61.24
ATOM    373  H   TYR A  24      -7.819   3.943  -3.023  1.00 54.20
ATOM    374  CA  TYR A  24      -5.843   4.577  -3.356  1.00 12.01
ATOM    375  HA  TYR A  24      -5.055   3.840  -3.336  1.00  0.03
ATOM    376  CB  TYR A  24      -6.251   4.844  -4.807  1.00 71.30
ATOM    377 1HB  TYR A  24      -7.011   5.610  -4.813  1.00  0.31
ATOM    378 2HB  TYR A  24      -5.383   5.223  -5.320  1.00 63.51
ATOM    379  CG  TYR A  24      -6.797   3.675  -5.601  1.00 21.24
ATOM    380  CD1 TYR A  24      -7.672   3.906  -6.644  1.00 54.53
ATOM    381  HD1 TYR A  24      -7.955   4.923  -6.875  1.00 34.22
ATOM    382  CE1 TYR A  24      -8.188   2.877  -7.385  1.00 60.15
ATOM    383  HE1 TYR A  24      -8.864   3.094  -8.199  1.00 33.55
ATOM    384  CZ  TYR A  24      -7.837   1.581  -7.097  1.00 70.22
ATOM    385  CE2 TYR A  24      -6.965   1.310  -6.067  1.00 55.54
ATOM    386  HE2 TYR A  24      -6.687   0.292  -5.840  1.00 33.21
ATOM    387  CD2 TYR A  24      -6.448   2.355  -5.322  1.00  3.34
ATOM    388  HD2 TYR A  24      -5.763   2.149  -4.512  1.00 64.25
ATOM    389  OH  TYR A  24      -8.359   0.557  -7.847  1.00 34.31
ATOM    390  HH  TYR A  24      -8.518   0.858  -8.749  1.00 62.43
ATOM    391  C   TYR A  24      -5.338   5.885  -2.768  1.00 20.33
ATOM    392  O   TYR A  24      -4.138   6.080  -2.583  1.00  2.12
ATOM    393  N   ASN A  25      -6.290   6.755  -2.460  1.00 62.31
ATOM    394  H   ASN A  25      -7.218   6.484  -2.634  1.00 52.31
ATOM    395  CA  ASN A  25      -6.034   8.075  -1.878  1.00 52.25
ATOM    396  HA  ASN A  25      -5.518   8.700  -2.591  1.00 35.00
ATOM    397  CB  ASN A  25      -7.384   8.720  -1.548  1.00 14.53
ATOM    398 1HB  ASN A  25      -7.956   8.819  -2.456  1.00  3.05
ATOM    399 2HB  ASN A  25      -7.919   8.039  -0.900  1.00 50.41
ATOM    400  CG  ASN A  25      -7.294  10.075  -0.844  1.00 71.20
ATOM    401  OD1 ASN A  25      -8.141  10.397  -0.018  1.00 74.22
ATOM    402  ND2 ASN A  25      -6.318  10.876  -1.182  1.00 63.22
ATOM    403 2HD2 ASN A  25      -5.676  10.616  -1.872  1.00 35.20
ATOM    404 1HD2 ASN A  25      -6.244  11.717  -0.676  1.00  1.22
ATOM    405  C   ASN A  25      -5.236   7.949  -0.592  1.00 52.30
ATOM    406  O   ASN A  25      -4.185   8.584  -0.422  1.00 12.45
ATOM    407  N   ALA A  26      -5.719   7.093   0.262  1.00 62.21
ATOM    408  H   ALA A  26      -6.528   6.608  -0.017  1.00 10.43
ATOM    409  CA  ALA A  26      -5.142   6.868   1.571  1.00 25.25
ATOM    410  HA  ALA A  26      -5.121   7.816   2.087  1.00 33.24
ATOM    411  CB  ALA A  26      -6.030   5.934   2.356  1.00 43.04
ATOM    412 1HB  ALA A  26      -7.046   6.299   2.328  1.00  0.01
ATOM    413 2HB  ALA A  26      -5.696   5.916   3.382  1.00 34.42
ATOM    414 3HB  ALA A  26      -5.983   4.943   1.932  1.00 75.14
ATOM    415  C   ALA A  26      -3.716   6.322   1.494  1.00  2.21
ATOM    416  O   ALA A  26      -2.809   6.826   2.167  1.00  4.44
ATOM    417  N   THR A  27      -3.519   5.329   0.652  1.00 43.33
ATOM    418  H   THR A  27      -4.273   4.979   0.128  1.00 34.53
ATOM    419  CA  THR A  27      -2.223   4.702   0.483  1.00 41.31
ATOM    420  HA  THR A  27      -1.876   4.378   1.453  1.00 34.24
ATOM    421  CB  THR A  27      -2.351   3.474  -0.429  1.00 33.24
ATOM    422  HB  THR A  27      -2.647   3.806  -1.414  1.00 32.51
ATOM    423  OG1 THR A  27      -3.364   2.600   0.095  1.00 63.51
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ATOM    424  HG1 THR A  27      -4.194   2.795  -0.356  1.00 74.42
ATOM    425  CG2 THR A  27      -1.032   2.724  -0.527  1.00 11.24
ATOM    426 1HG2 THR A  27      -1.146   1.871  -1.179  1.00 23.22
ATOM    427 2HG2 THR A  27      -0.725   2.398   0.456  1.00 32.31
ATOM    428 3HG2 THR A  27      -0.294   3.399  -0.937  1.00 20.23
ATOM    429  C   THR A  27      -1.207   5.695  -0.109  1.00  3.21
ATOM    430  O   THR A  27      -0.045   5.760   0.330  1.00 64.15
ATOM    431  N   LEU A  28      -1.667   6.491  -1.069  1.00 64.31
ATOM    432  H   LEU A  28      -2.605   6.398  -1.343  1.00 40.44
ATOM    433  CA  LEU A  28      -0.838   7.486  -1.726  1.00 42.42
ATOM    434  HA  LEU A  28      -0.013   6.985  -2.208  1.00 21.32
ATOM    435  CB  LEU A  28      -1.661   8.232  -2.786  1.00 62.03
ATOM    436 1HB  LEU A  28      -2.046   7.504  -3.484  1.00 54.23
ATOM    437 2HB  LEU A  28      -2.500   8.694  -2.287  1.00 30.12
ATOM    438  CG  LEU A  28      -0.928   9.314  -3.583  1.00 61.04
ATOM    439  HG  LEU A  28      -0.447   9.971  -2.871  1.00 70.42
ATOM    440  CD1 LEU A  28       0.146   8.705  -4.477  1.00 13.01
ATOM    441 1HD1 LEU A  28       0.871   8.180  -3.872  1.00 74.45
ATOM    442 2HD1 LEU A  28       0.644   9.484  -5.035  1.00  4.44
ATOM    443 3HD1 LEU A  28      -0.307   8.013  -5.172  1.00 65.04
ATOM    444  CD2 LEU A  28      -1.910  10.134  -4.400  1.00 53.35
ATOM    445 1HD2 LEU A  28      -2.620  10.610  -3.740  1.00 54.10
ATOM    446 2HD2 LEU A  28      -2.435   9.487  -5.089  1.00 43.01
ATOM    447 3HD2 LEU A  28      -1.374  10.890  -4.957  1.00  2.14
ATOM    448  C   LEU A  28      -0.306   8.479  -0.699  1.00 72.53
ATOM    449  O   LEU A  28       0.894   8.711  -0.606  1.00 12.50
ATOM    450  N   GLN A  29      -1.204   9.008   0.105  1.00 14.24
ATOM    451  H   GLN A  29      -2.142   8.739  -0.015  1.00 73.41
ATOM    452  CA  GLN A  29      -0.854   9.979   1.130  1.00 32.33
ATOM    453  HA  GLN A  29      -0.312  10.765   0.625  1.00 32.35
ATOM    454  CB  GLN A  29      -2.097  10.597   1.763  1.00 53.52
ATOM    455 1HB  GLN A  29      -2.729   9.804   2.137  1.00 11.23
ATOM    456 2HB  GLN A  29      -1.790  11.223   2.587  1.00 41.20
ATOM    457  CG  GLN A  29      -2.909  11.443   0.794  1.00 53.13
ATOM    458 1HG  GLN A  29      -2.264  12.187   0.352  1.00 15.24
ATOM    459 2HG  GLN A  29      -3.264  10.792   0.006  1.00  4.12
ATOM    460  CD  GLN A  29      -4.114  12.121   1.437  1.00 70.32
ATOM    461  OE1 GLN A  29      -5.113  12.375   0.782  1.00 22.01
ATOM    462  NE2 GLN A  29      -4.030  12.422   2.708  1.00  3.31
ATOM    463 2HE2 GLN A  29      -3.214  12.221   3.206  1.00 61.53
ATOM    464 1HE2 GLN A  29      -4.832  12.811   3.117  1.00 61.11
ATOM    465  C   GLN A  29       0.078   9.408   2.198  1.00 30.42
ATOM    466  O   GLN A  29       0.913  10.133   2.737  1.00 40.33
ATOM    467  N   ALA A  30      -0.062   8.125   2.495  1.00  1.34
ATOM    468  H   ALA A  30      -0.760   7.604   2.043  1.00 14.11
ATOM    469  CA  ALA A  30       0.778   7.456   3.488  1.00 24.14
ATOM    470  HA  ALA A  30       0.677   7.958   4.441  1.00 72.33
ATOM    471  CB  ALA A  30       0.334   6.005   3.661  1.00 61.41
ATOM    472 1HB  ALA A  30       0.477   5.472   2.733  1.00 52.13
ATOM    473 2HB  ALA A  30      -0.710   5.967   3.933  1.00 31.35
ATOM    474 3HB  ALA A  30       0.922   5.536   4.436  1.00 75.11
ATOM    475  C   ALA A  30       2.250   7.513   3.089  1.00 15.24
ATOM    476  O   ALA A  30       3.111   7.890   3.894  1.00 22.35
ATOM    477  N   ILE A  31       2.532   7.192   1.844  1.00 64.24
ATOM    478  H   ILE A  31       1.803   6.988   1.219  1.00 51.22
ATOM    479  CA  ILE A  31       3.905   7.163   1.385  1.00 44.21
ATOM    480  HA  ILE A  31       4.503   6.888   2.243  1.00 13.44
ATOM    481  CB  ILE A  31       4.142   6.089   0.273  1.00 42.21
ATOM    482  HB  ILE A  31       4.039   5.118   0.735  1.00 70.04
ATOM    483  CG2 ILE A  31       3.097   6.173  -0.841  1.00 23.24
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ATOM    484 1HG2 ILE A  31       3.317   5.414  -1.578  1.00 53.14
ATOM    485 2HG2 ILE A  31       3.143   7.149  -1.301  1.00 42.02
ATOM    486 3HG2 ILE A  31       2.112   6.009  -0.432  1.00 54.12
ATOM    487  CG1 ILE A  31       5.568   6.211  -0.285  1.00 23.10
ATOM    488 1HG1 ILE A  31       5.728   7.220  -0.635  1.00 50.52
ATOM    489 2HG1 ILE A  31       6.275   6.008   0.506  1.00 22.51
ATOM    490  CD1 ILE A  31       5.881   5.291  -1.431  1.00 61.50
ATOM    491 1HD1 ILE A  31       6.876   5.511  -1.788  1.00 23.31
ATOM    492 2HD1 ILE A  31       5.160   5.434  -2.223  1.00  4.35
ATOM    493 3HD1 ILE A  31       5.851   4.275  -1.072  1.00 65.13
ATOM    494  C   ILE A  31       4.394   8.539   0.919  1.00 63.42
ATOM    495  O   ILE A  31       5.454   8.989   1.331  1.00 50.10
ATOM    496  N   GLN A  32       3.570   9.229   0.149  1.00 12.32
ATOM    497  H   GLN A  32       2.664   8.887  -0.021  1.00 61.21
ATOM    498  CA  GLN A  32       3.961  10.480  -0.488  1.00 43.43
ATOM    499  HA  GLN A  32       4.884  10.300  -1.017  1.00 65.21
ATOM    500  CB  GLN A  32       2.898  10.891  -1.510  1.00 13.44
ATOM    501 1HB  GLN A  32       2.741  10.068  -2.191  1.00  2.30
ATOM    502 2HB  GLN A  32       1.974  11.080  -0.981  1.00 62.00
ATOM    503  CG  GLN A  32       3.236  12.117  -2.332  1.00 54.41
ATOM    504 1HG  GLN A  32       2.371  12.341  -2.937  1.00 51.31
ATOM    505 2HG  GLN A  32       3.424  12.926  -1.643  1.00 23.15
ATOM    506  CD  GLN A  32       4.445  11.924  -3.246  1.00 52.14
ATOM    507  OE1 GLN A  32       4.293  11.510  -4.382  1.00 43.25
ATOM    508  NE2 GLN A  32       5.628  12.222  -2.754  1.00 73.15
ATOM    509 2HE2 GLN A  32       5.699  12.552  -1.835  1.00 24.55
ATOM    510 1HE2 GLN A  32       6.432  12.110  -3.327  1.00  1.53
ATOM    511  C   GLN A  32       4.201  11.602   0.531  1.00 71.13
ATOM    512  O   GLN A  32       5.005  12.497   0.296  1.00 74.10
ATOM    513  N   ASN A  33       3.522  11.536   1.664  1.00 41.35
ATOM    514  H   ASN A  33       2.909  10.785   1.817  1.00  1.20
ATOM    515  CA  ASN A  33       3.681  12.570   2.690  1.00 45.10
ATOM    516  HA  ASN A  33       4.009  13.478   2.207  1.00  5.53
ATOM    517  CB  ASN A  33       2.330  12.821   3.405  1.00 62.30
ATOM    518 1HB  ASN A  33       1.552  12.891   2.659  1.00 41.15
ATOM    519 2HB  ASN A  33       2.119  11.977   4.044  1.00 33.41
ATOM    520  CG  ASN A  33       2.278  14.096   4.255  1.00 43.51
ATOM    521  OD1 ASN A  33       1.900  15.152   3.771  1.00 74.41
ATOM    522  ND2 ASN A  33       2.637  14.007   5.513  1.00 75.22
ATOM    523 2HD2 ASN A  33       2.932  13.143   5.866  1.00 61.24
ATOM    524 1HD2 ASN A  33       2.609  14.832   6.039  1.00 52.30
ATOM    525  C   ASN A  33       4.746  12.119   3.700  1.00 62.32
ATOM    526  O   ASN A  33       5.073  12.831   4.637  1.00 61.40
ATOM    527  N   GLY A  34       5.293  10.926   3.469  1.00 71.33
ATOM    528  H   GLY A  34       5.040  10.431   2.660  1.00 32.33
ATOM    529  CA  GLY A  34       6.299  10.362   4.348  1.00 72.14
ATOM    530 1HA  GLY A  34       6.628   9.419   3.938  1.00 20.45
ATOM    531 2HA  GLY A  34       7.141  11.036   4.389  1.00 30.43
ATOM    532  C   GLY A  34       5.780  10.136   5.750  1.00 13.25
ATOM    533  O   GLY A  34       6.377  10.592   6.716  1.00 35.42
ATOM    534  N   GLN A  35       4.674   9.408   5.871  1.00  5.33
ATOM    535  H   GLN A  35       4.251   9.016   5.076  1.00 73.21
ATOM    536  CA  GLN A  35       4.075   9.180   7.185  1.00 15.33
ATOM    537  HA  GLN A  35       4.273  10.065   7.770  1.00  2.23
ATOM    538  CB  GLN A  35       2.564   8.986   7.076  1.00 62.45
ATOM    539 1HB  GLN A  35       2.372   8.063   6.547  1.00  3.14
ATOM    540 2HB  GLN A  35       2.142   8.921   8.068  1.00 25.24
ATOM    541  CG  GLN A  35       1.866  10.116   6.333  1.00 42.52
ATOM    542 1HG  GLN A  35       2.189  11.060   6.745  1.00 10.33
ATOM    543 2HG  GLN A  35       2.151  10.064   5.294  1.00 43.45
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ATOM    544  CD  GLN A  35       0.360  10.048   6.422  1.00 71.10
ATOM    545  OE1 GLN A  35      -0.196   9.600   7.403  1.00 51.25
ATOM    546  NE2 GLN A  35      -0.305  10.455   5.378  1.00 42.30
ATOM    547 2HE2 GLN A  35       0.200  10.775   4.598  1.00 35.41
ATOM    548 1HE2 GLN A  35      -1.281  10.411   5.437  1.00 43.53
ATOM    549  C   GLN A  35       4.740   7.999   7.896  1.00 31.12
ATOM    550  O   GLN A  35       4.371   7.625   9.006  1.00  4.13
ATOM    551  N   THR A  36       5.706   7.424   7.243  1.00 52.53
ATOM    552  H   THR A  36       5.947   7.752   6.353  1.00 54.24
ATOM    553  CA  THR A  36       6.476   6.369   7.789  1.00 64.32
ATOM    554  HA  THR A  36       6.428   6.454   8.865  1.00 32.33
ATOM    555  CB  THR A  36       5.942   4.960   7.335  1.00 13.12
ATOM    556  HB  THR A  36       4.883   4.942   7.562  1.00 32.13
ATOM    557  OG1 THR A  36       6.595   3.903   8.072  1.00 22.51
ATOM    558  HG1 THR A  36       6.105   3.812   8.895  1.00 22.34
ATOM    559  CG2 THR A  36       6.130   4.722   5.833  1.00  2.53
ATOM    560 1HG2 THR A  36       7.181   4.777   5.592  1.00 23.15
ATOM    561 2HG2 THR A  36       5.595   5.477   5.279  1.00 72.13
ATOM    562 3HG2 THR A  36       5.750   3.745   5.572  1.00 55.34
ATOM    563  C   THR A  36       7.920   6.617   7.351  1.00 21.14
ATOM    564  O   THR A  36       8.161   7.058   6.220  1.00 51.44
ATOM    565  N   PHE A  37       8.859   6.419   8.244  1.00 74.35
ATOM    566  H   PHE A  37       8.634   6.060   9.126  1.00 44.34
ATOM    567  CA  PHE A  37      10.234   6.694   7.927  1.00  5.21
ATOM    568  HA  PHE A  37      10.267   6.942   6.878  1.00 43.14
ATOM    569  CB  PHE A  37      10.775   7.906   8.728  1.00 44.22
ATOM    570 1HB  PHE A  37      11.790   8.103   8.417  1.00 64.21
ATOM    571 2HB  PHE A  37      10.170   8.769   8.493  1.00 32.34
ATOM    572  CG  PHE A  37      10.785   7.737  10.231  1.00  4.53
ATOM    573  CD1 PHE A  37       9.666   8.049  10.987  1.00  3.03
ATOM    574  HD1 PHE A  37       8.775   8.405  10.492  1.00  5.54
ATOM    575  CE1 PHE A  37       9.678   7.902  12.362  1.00 54.32
ATOM    576  HE1 PHE A  37       8.799   8.148  12.938  1.00 12.55
ATOM    577  CZ  PHE A  37      10.816   7.442  12.996  1.00 43.02
ATOM    578  HZ  PHE A  37      10.828   7.328  14.071  1.00 64.24
ATOM    579  CE2 PHE A  37      11.939   7.129  12.256  1.00 13.21
ATOM    580  HE2 PHE A  37      12.830   6.769  12.749  1.00 32.32
ATOM    581  CD2 PHE A  37      11.923   7.279  10.885  1.00 22.13
ATOM    582  HD2 PHE A  37      12.801   7.033  10.307  1.00 61.44
ATOM    583  C   PHE A  37      11.093   5.473   8.140  1.00 40.52
ATOM    584  O   PHE A  37      10.765   4.588   8.958  1.00  4.23
ATOM    585  N   ASP A  38      12.163   5.413   7.411  1.00 23.43
ATOM    586  H   ASP A  38      12.363   6.148   6.797  1.00 73.04
ATOM    587  CA  ASP A  38      13.082   4.317   7.493  1.00  3.21
ATOM    588  HA  ASP A  38      12.584   3.494   7.984  1.00  4.24
ATOM    589  CB  ASP A  38      13.506   3.881   6.084  1.00  4.30
ATOM    590 1HB  ASP A  38      12.630   3.577   5.532  1.00  1.11
ATOM    591 2HB  ASP A  38      13.963   4.720   5.582  1.00  1.41
ATOM    592  CG  ASP A  38      14.477   2.734   6.081  1.00  5.41
ATOM    593  OD1 ASP A  38      14.410   1.887   6.999  1.00 43.31
ATOM    594  OD2 ASP A  38      15.320   2.669   5.171  1.00 10.34
ATOM    595  C   ASP A  38      14.278   4.739   8.314  1.00 42.33
ATOM    596  O   ASP A  38      14.630   5.917   8.333  1.00 14.31
ATOM    597  N   TYR A  39      14.915   3.787   8.954  1.00 63.43
ATOM    598  H   TYR A  39      14.638   2.859   8.779  1.00 31.43
ATOM    599  CA  TYR A  39      16.046   4.055   9.838  1.00 71.41
ATOM    600  HA  TYR A  39      15.777   4.896  10.454  1.00 71.00
ATOM    601  CB  TYR A  39      16.347   2.846  10.732  1.00 41.34
ATOM    602 1HB  TYR A  39      16.599   2.001  10.108  1.00 74.02
ATOM    603 2HB  TYR A  39      17.189   3.078  11.368  1.00 42.42
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ATOM    604  CG  TYR A  39      15.184   2.444  11.620  1.00 14.41
ATOM    605  CD1 TYR A  39      15.019   3.006  12.880  1.00 62.03
ATOM    606  HD1 TYR A  39      15.737   3.734  13.228  1.00 11.11
ATOM    607  CE1 TYR A  39      13.956   2.647  13.689  1.00 30.43
ATOM    608  HE1 TYR A  39      13.844   3.094  14.666  1.00  3.02
ATOM    609  CZ  TYR A  39      13.041   1.716  13.243  1.00 42.33
ATOM    610  CE2 TYR A  39      13.182   1.143  11.996  1.00  3.44
ATOM    611  HE2 TYR A  39      12.465   0.415  11.648  1.00 13.21
ATOM    612  CD2 TYR A  39      14.245   1.507  11.193  1.00 62.13
ATOM    613  HD2 TYR A  39      14.357   1.060  10.217  1.00 72.42
ATOM    614  OH  TYR A  39      11.981   1.359  14.042  1.00 24.34
ATOM    615  HH  TYR A  39      11.610   2.142  14.455  1.00 11.53
ATOM    616  C   TYR A  39      17.264   4.493   9.056  1.00 62.31
ATOM    617  O   TYR A  39      18.101   5.218   9.556  1.00 20.04
ATOM    618  N   LYS A  40      17.346   4.051   7.824  1.00 54.31
ATOM    619  H   LYS A  40      16.678   3.414   7.494  1.00 72.24
ATOM    620  CA  LYS A  40      18.406   4.490   6.946  1.00  0.01
ATOM    621  HA  LYS A  40      19.112   5.027   7.562  1.00 23.15
ATOM    622  CB  LYS A  40      19.118   3.304   6.268  1.00 73.31
ATOM    623 1HB  LYS A  40      19.783   3.683   5.506  1.00 63.44
ATOM    624 2HB  LYS A  40      19.698   2.775   7.010  1.00 51.43
ATOM    625  CG  LYS A  40      18.169   2.336   5.630  1.00 62.32
ATOM    626 1HG  LYS A  40      17.607   1.840   6.405  1.00 34.24
ATOM    627 2HG  LYS A  40      17.485   2.893   5.006  1.00 22.22
ATOM    628  CD  LYS A  40      18.852   1.285   4.794  1.00 41.41
ATOM    629 1HD  LYS A  40      19.366   1.764   3.974  1.00 64.35
ATOM    630 2HD  LYS A  40      19.558   0.744   5.405  1.00 21.50
ATOM    631  CE  LYS A  40      17.819   0.315   4.245  1.00 64.20
ATOM    632 1HE  LYS A  40      18.305  -0.359   3.553  1.00 50.50
ATOM    633 2HE  LYS A  40      17.407  -0.254   5.065  1.00 73.14
ATOM    634  NZ  LYS A  40      16.722   1.014   3.540  1.00  1.20
ATOM    635 1HZ  LYS A  40      17.072   1.603   2.760  1.00 40.43
ATOM    636 2HZ  LYS A  40      16.124   1.598   4.171  1.00 75.12
ATOM    637 3HZ  LYS A  40      16.110   0.291   3.092  1.00 21.04
ATOM    638  C   LYS A  40      17.843   5.474   5.931  1.00 65.01
ATOM    639  O   LYS A  40      18.525   5.870   4.996  1.00 35.23
ATOM    640  N   SER A  41      16.566   5.847   6.148  1.00 50.10
ATOM    641  H   SER A  41      16.085   5.428   6.890  1.00 62.04
ATOM    642  CA  SER A  41      15.884   6.871   5.370  1.00 54.01
ATOM    643  HA  SER A  41      14.861   6.871   5.715  1.00 34.33
ATOM    644  CB  SER A  41      16.484   8.231   5.718  1.00 22.12
ATOM    645 1HB  SER A  41      17.554   8.136   5.622  1.00  2.41
ATOM    646 2HB  SER A  41      16.090   9.016   5.089  1.00 24.42
ATOM    647  OG  SER A  41      16.239   8.537   7.089  1.00 62.53
ATOM    648  HG  SER A  41      16.102   7.709   7.560  1.00 61.45
ATOM    649  C   SER A  41      15.842   6.589   3.848  1.00  3.35
ATOM    650  O   SER A  41      16.084   7.482   3.034  1.00 62.23
ATOM    651  N   ASN A  42      15.497   5.350   3.483  1.00 44.11
ATOM    652  H   ASN A  42      15.265   4.685   4.166  1.00 41.35
ATOM    653  CA  ASN A  42      15.445   4.949   2.074  1.00 43.24
ATOM    654  HA  ASN A  42      16.395   5.221   1.638  1.00 62.25
ATOM    655  CB  ASN A  42      15.232   3.421   1.930  1.00 21.15
ATOM    656 1HB  ASN A  42      15.706   3.085   1.020  1.00  2.30
ATOM    657 2HB  ASN A  42      15.709   2.932   2.766  1.00 23.41
ATOM    658  CG  ASN A  42      13.769   2.966   1.879  1.00 60.13
ATOM    659  OD1 ASN A  42      13.126   2.733   2.905  1.00 14.22
ATOM    660  ND2 ASN A  42      13.270   2.753   0.683  1.00  0.53
ATOM    661 2HD2 ASN A  42      13.862   2.887  -0.093  1.00 64.15
ATOM    662 1HD2 ASN A  42      12.336   2.480   0.609  1.00 21.23
ATOM    663  C   ASN A  42      14.325   5.726   1.340  1.00 64.23
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ATOM    664  O   ASN A  42      13.321   6.089   1.955  1.00  1.10
ATOM    665  N   PRO A  43      14.535   6.045   0.035  1.00 52.34
ATOM    666  CD  PRO A  43      15.739   5.668  -0.753  1.00 10.50
ATOM    667  CA  PRO A  43      13.595   6.830  -0.788  1.00 60.12
ATOM    668  HA  PRO A  43      13.700   7.884  -0.579  1.00 12.23
ATOM    669  CB  PRO A  43      14.077   6.571  -2.213  1.00 63.20
ATOM    670 1HB  PRO A  43      13.588   5.691  -2.605  1.00 32.12
ATOM    671 2HB  PRO A  43      13.889   7.428  -2.843  1.00 22.11
ATOM    672  CG  PRO A  43      15.540   6.370  -2.071  1.00 12.41
ATOM    673 1HG  PRO A  43      15.908   5.770  -2.890  1.00  4.15
ATOM    674 2HG  PRO A  43      16.044   7.325  -2.046  1.00 34.32
ATOM    675 1HD  PRO A  43      15.785   4.599  -0.898  1.00  0.14
ATOM    676 2HD  PRO A  43      16.639   6.026  -0.275  1.00 32.30
ATOM    677  C   PRO A  43      12.105   6.452  -0.652  1.00  2.33
ATOM    678  O   PRO A  43      11.657   5.383  -1.092  1.00 22.34
ATOM    679  N   TYR A  44      11.364   7.336  -0.009  1.00 35.21
ATOM    680  H   TYR A  44      11.810   8.085   0.433  1.00 65.12
ATOM    681  CA  TYR A  44       9.921   7.208   0.115  1.00 70.34
ATOM    682  HA  TYR A  44       9.694   6.166  -0.061  1.00 50.32
ATOM    683  CB  TYR A  44       9.405   7.582   1.496  1.00 44.15
ATOM    684 1HB  TYR A  44       9.891   8.490   1.822  1.00 52.40
ATOM    685 2HB  TYR A  44       8.339   7.745   1.444  1.00 13.10
ATOM    686  CG  TYR A  44       9.666   6.527   2.515  1.00 51.41
ATOM    687  CD1 TYR A  44       8.949   5.340   2.486  1.00 34.11
ATOM    688  HD1 TYR A  44       8.205   5.196   1.715  1.00 13.31
ATOM    689  CE1 TYR A  44       9.173   4.358   3.409  1.00 52.32
ATOM    690  HE1 TYR A  44       8.607   3.438   3.371  1.00  1.35
ATOM    691  CZ  TYR A  44      10.119   4.552   4.376  1.00 30.20
ATOM    692  CE2 TYR A  44      10.840   5.721   4.428  1.00 52.33
ATOM    693  HE2 TYR A  44      11.586   5.866   5.194  1.00 71.23
ATOM    694  CD2 TYR A  44      10.610   6.701   3.501  1.00 71.43
ATOM    695  HD2 TYR A  44      11.175   7.621   3.537  1.00 14.50
ATOM    696  OH  TYR A  44      10.344   3.578   5.297  1.00 11.15
ATOM    697  HH  TYR A  44      10.474   2.754   4.820  1.00  5.23
ATOM    698  C   TYR A  44       9.207   7.998  -0.934  1.00 30.31
ATOM    699  O   TYR A  44       7.999   7.941  -1.033  1.00 54.52
ATOM    700  N   ASP A  45       9.943   8.742  -1.708  1.00 55.13
ATOM    701  H   ASP A  45      10.913   8.749  -1.620  1.00 11.33
ATOM    702  CA  ASP A  45       9.313   9.514  -2.741  1.00 73.31
ATOM    703  HA  ASP A  45       8.348   9.810  -2.354  1.00 33.53
ATOM    704  CB  ASP A  45      10.112  10.744  -3.132  1.00 21.03
ATOM    705 1HB  ASP A  45      10.302  11.341  -2.252  1.00 32.41
ATOM    706 2HB  ASP A  45      11.049  10.437  -3.573  1.00 50.10
ATOM    707  CG  ASP A  45       9.355  11.581  -4.139  1.00  3.11
ATOM    708  OD1 ASP A  45       9.941  11.931  -5.164  1.00 62.15
ATOM    709  OD2 ASP A  45       8.144  11.851  -3.897  1.00 14.42
ATOM    710  C   ASP A  45       9.063   8.607  -3.914  1.00  2.22
ATOM    711  O   ASP A  45       9.926   7.780  -4.283  1.00 61.34
ATOM    712  N   ILE A  46       7.894   8.727  -4.451  1.00 73.35
ATOM    713  H   ILE A  46       7.378   9.532  -4.223  1.00 12.24
ATOM    714  CA  ILE A  46       7.366   7.802  -5.415  1.00 14.24
ATOM    715  HA  ILE A  46       7.475   6.812  -4.997  1.00 75.10
ATOM    716  CB  ILE A  46       5.865   8.059  -5.625  1.00 21.33
ATOM    717  HB  ILE A  46       5.729   9.053  -6.022  1.00 30.13
ATOM    718  CG2 ILE A  46       5.270   7.043  -6.599  1.00 13.33
ATOM    719 1HG2 ILE A  46       5.408   6.045  -6.208  1.00 63.04
ATOM    720 2HG2 ILE A  46       5.761   7.125  -7.558  1.00 24.02
ATOM    721 3HG2 ILE A  46       4.214   7.238  -6.717  1.00  0.21
ATOM    722  CG1 ILE A  46       5.167   7.979  -4.264  1.00  1.21
ATOM    723 1HG1 ILE A  46       5.285   6.981  -3.868  1.00  4.44
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ATOM    724 2HG1 ILE A  46       5.636   8.680  -3.590  1.00  1.01
ATOM    725  CD1 ILE A  46       3.700   8.277  -4.300  1.00 30.34
ATOM    726 1HD1 ILE A  46       3.225   7.575  -4.969  1.00 32.22
ATOM    727 2HD1 ILE A  46       3.546   9.288  -4.644  1.00 13.20
ATOM    728 3HD1 ILE A  46       3.298   8.154  -3.305  1.00 23.45
ATOM    729  C   ILE A  46       8.128   7.832  -6.720  1.00 51.14
ATOM    730  O   ILE A  46       8.152   8.826  -7.423  1.00 44.22
ATOM    731  N   SER A  47       8.705   6.707  -7.058  1.00  1.23
ATOM    732  H   SER A  47       8.567   5.905  -6.509  1.00  3.43
ATOM    733  CA  SER A  47       9.518   6.623  -8.218  1.00 11.44
ATOM    734  HA  SER A  47       9.959   7.587  -8.424  1.00 61.53
ATOM    735  CB  SER A  47      10.629   5.624  -7.924  1.00 12.23
ATOM    736 1HB  SER A  47      10.231   4.622  -7.963  1.00 34.01
ATOM    737 2HB  SER A  47      11.419   5.730  -8.652  1.00  3.51
ATOM    738  OG  SER A  47      11.171   5.862  -6.619  1.00 12.30
ATOM    739  HG  SER A  47      10.869   6.739  -6.338  1.00 61.43
ATOM    740  C   SER A  47       8.668   6.149  -9.404  1.00 53.42
ATOM    741  O   SER A  47       8.923   6.521 -10.544  1.00  5.03
ATOM    742  N   VAL A  48       7.634   5.340  -9.132  1.00 34.34
ATOM    743  H   VAL A  48       7.492   5.009  -8.216  1.00 31.44
ATOM    744  CA  VAL A  48       6.691   4.951 -10.171  1.00  1.34
ATOM    745  HA  VAL A  48       6.732   5.668 -10.978  1.00 31.54
ATOM    746  CB  VAL A  48       6.982   3.513 -10.733  1.00 20.05
ATOM    747  HB  VAL A  48       6.691   2.821  -9.954  1.00 21.34
ATOM    748  CG1 VAL A  48       6.116   3.220 -11.948  1.00 23.44
ATOM    749 1HG1 VAL A  48       6.328   3.939 -12.724  1.00 51.14
ATOM    750 2HG1 VAL A  48       5.074   3.284 -11.672  1.00 21.03
ATOM    751 3HG1 VAL A  48       6.332   2.225 -12.311  1.00 61.12
ATOM    752  CG2 VAL A  48       8.457   3.292 -11.065  1.00 35.30
ATOM    753 1HG2 VAL A  48       8.593   2.290 -11.442  1.00 61.41
ATOM    754 2HG2 VAL A  48       9.050   3.426 -10.173  1.00 32.43
ATOM    755 3HG2 VAL A  48       8.766   4.005 -11.814  1.00 23.22
ATOM    756  C   VAL A  48       5.289   4.919  -9.563  1.00  3.52
ATOM    757  O   VAL A  48       5.076   4.309  -8.517  1.00 10.43
ATOM    758  N   ASN A  49       4.368   5.568 -10.200  1.00 61.33
ATOM    759  H   ASN A  49       4.610   6.099 -10.987  1.00 23.23
ATOM    760  CA  ASN A  49       2.959   5.537  -9.822  1.00 60.23
ATOM    761  HA  ASN A  49       2.874   4.892  -8.958  1.00 53.30
ATOM    762  CB  ASN A  49       2.487   6.956  -9.427  1.00  3.23
ATOM    763 1HB  ASN A  49       2.860   7.183  -8.439  1.00 42.03
ATOM    764 2HB  ASN A  49       2.889   7.683 -10.116  1.00 71.14
ATOM    765  CG  ASN A  49       0.978   7.110  -9.391  1.00 21.30
ATOM    766  OD1 ASN A  49       0.332   6.856  -8.387  1.00 35.01
ATOM    767  ND2 ASN A  49       0.422   7.551 -10.488  1.00 72.01
ATOM    768 2HD2 ASN A  49       0.993   7.756 -11.256  1.00  0.15
ATOM    769 1HD2 ASN A  49      -0.559   7.648 -10.517  1.00 33.21
ATOM    770  C   ASN A  49       2.106   4.962 -10.960  1.00 43.53
ATOM    771  O   ASN A  49       2.262   5.405 -12.099  1.00 62.32
ATOM    772  N   LYS A  50       1.256   3.973 -10.708  1.00 42.42
ATOM    773  H   LYS A  50       1.271   3.495  -9.851  1.00 42.43
ATOM    774  CA  LYS A  50       0.291   3.599 -11.740  1.00 12.42
ATOM    775  HA  LYS A  50       0.431   4.210 -12.618  1.00 41.32
ATOM    776  CB  LYS A  50       0.415   2.087 -12.107  1.00 21.43
ATOM    777 1HB  LYS A  50       0.065   1.512 -11.263  1.00 34.22
ATOM    778 2HB  LYS A  50      -0.250   1.894 -12.936  1.00 51.42
ATOM    779  CG  LYS A  50       1.812   1.542 -12.474  1.00 23.30
ATOM    780 1HG  LYS A  50       1.736   0.616 -13.025  1.00 13.45
ATOM    781 2HG  LYS A  50       2.257   2.310 -13.089  1.00 70.10
ATOM    782  CD  LYS A  50       2.722   1.345 -11.255  1.00  3.24
ATOM    783 1HD  LYS A  50       3.093   2.312 -10.952  1.00  4.51
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ATOM    784 2HD  LYS A  50       2.152   0.928 -10.442  1.00 70.52
ATOM    785  CE  LYS A  50       3.921   0.442 -11.554  1.00 45.31
ATOM    786 1HE  LYS A  50       4.443   0.836 -12.413  1.00 53.31
ATOM    787 2HE  LYS A  50       4.583   0.454 -10.701  1.00 63.01
ATOM    788  NZ  LYS A  50       3.524  -0.967 -11.844  1.00 23.12
ATOM    789 1HZ  LYS A  50       4.356  -1.557 -12.038  1.00 41.43
ATOM    790 2HZ  LYS A  50       2.831  -1.062 -12.608  1.00 44.41
ATOM    791 3HZ  LYS A  50       3.071  -1.398 -10.999  1.00 62.31
ATOM    792  C   LYS A  50      -1.103   3.801 -11.142  1.00 72.23
ATOM    793  O   LYS A  50      -1.329   3.421  -9.987  1.00 74.10
ATOM    794  N   ASN A  51      -2.049   4.343 -11.907  1.00 44.12
ATOM    795  H   ASN A  51      -1.845   4.647 -12.816  1.00 71.33
ATOM    796  CA  ASN A  51      -3.416   4.494 -11.398  1.00  4.13
ATOM    797  HA  ASN A  51      -3.384   4.157 -10.372  1.00  2.41
ATOM    798  CB  ASN A  51      -3.917   5.936 -11.374  1.00 42.00
ATOM    799 1HB  ASN A  51      -3.952   6.307 -12.387  1.00 55.13
ATOM    800 2HB  ASN A  51      -4.921   5.889 -10.978  1.00 14.30
ATOM    801  CG  ASN A  51      -3.095   6.878 -10.524  1.00 25.34
ATOM    802  OD1 ASN A  51      -2.194   7.526 -11.011  1.00 45.01
ATOM    803  ND2 ASN A  51      -3.402   6.963  -9.246  1.00 51.12
ATOM    804 2HD2 ASN A  51      -4.142   6.435  -8.888  1.00 33.33
ATOM    805 1HD2 ASN A  51      -2.843   7.558  -8.703  1.00 62.02
ATOM    806  C   ASN A  51      -4.458   3.662 -12.103  1.00 12.35
ATOM    807  O   ASN A  51      -4.568   3.745 -13.312  1.00 61.31
ATOM    808  N   ASN A  52      -5.149   2.822 -11.341  1.00 74.24
ATOM    809  H   ASN A  52      -4.735   2.335 -10.609  1.00 44.31
ATOM    810  CA  ASN A  52      -6.458   2.285 -11.620  1.00 45.41
ATOM    811  HA  ASN A  52      -6.447   1.321 -11.130  1.00 52.41
ATOM    812  CB  ASN A  52      -7.594   3.082 -10.948  1.00 20.20
ATOM    813 1HB  ASN A  52      -7.360   3.200  -9.901  1.00 60.21
ATOM    814 2HB  ASN A  52      -7.657   4.055 -11.411  1.00 31.02
ATOM    815  CG  ASN A  52      -8.965   2.397 -11.058  1.00  4.51
ATOM    816  OD1 ASN A  52      -9.311   1.558 -10.233  1.00 72.21
ATOM    817  ND2 ASN A  52      -9.738   2.751 -12.047  1.00 40.01
ATOM    818 2HD2 ASN A  52      -9.397   3.429 -12.673  1.00 24.02
ATOM    819 1HD2 ASN A  52     -10.623   2.344 -12.130  1.00 34.52
ATOM    820  C   ASN A  52      -6.743   1.974 -13.035  1.00 12.00
ATOM    821  O   ASN A  52      -7.471   2.681 -13.722  1.00 41.44
ATOM    822  N   GLY A  53      -6.085   0.971 -13.494  1.00 42.51
ATOM    823  H   GLY A  53      -5.270   0.695 -13.025  1.00  1.52
ATOM    824  CA  GLY A  53      -6.514   0.384 -14.713  1.00 54.24
ATOM    825 1HA  GLY A  53      -6.963   1.238 -15.190  1.00 70.24
ATOM    826 2HA  GLY A  53      -5.686  -0.014 -15.282  1.00 14.31
ATOM    827  C   GLY A  53      -7.533  -0.691 -14.345  1.00 50.41
ATOM    828  O   GLY A  53      -8.213  -1.276 -15.172  1.00  4.33
ATOM    829  N   THR A  54      -7.604  -0.851 -13.029  1.00 63.51
ATOM    830  H   THR A  54      -7.105  -0.185 -12.536  1.00  1.42
ATOM    831  CA  THR A  54      -8.349  -1.784 -12.245  1.00 64.21
ATOM    832  HA  THR A  54      -9.282  -1.341 -11.920  1.00 31.42
ATOM    833  CB  THR A  54      -8.601  -3.149 -12.947  1.00 62.22
ATOM    834  HB  THR A  54      -9.078  -2.888 -13.879  1.00  0.05
ATOM    835  OG1 THR A  54      -9.459  -3.974 -12.120  1.00 31.25
ATOM    836  HG1 THR A  54      -8.827  -4.426 -11.543  1.00 41.14
ATOM    837  CG2 THR A  54      -7.299  -3.909 -13.228  1.00 22.51
ATOM    838 1HG2 THR A  54      -6.671  -3.310 -13.871  1.00 71.00
ATOM    839 2HG2 THR A  54      -7.521  -4.850 -13.710  1.00 32.42
ATOM    840 3HG2 THR A  54      -6.786  -4.091 -12.295  1.00 24.32
ATOM    841  C   THR A  54      -7.541  -2.002 -10.968  1.00 23.22
ATOM    842  O   THR A  54      -8.051  -2.537 -10.000  1.00  3.21
ATOM    843  N   ASP A  55      -6.274  -1.538 -10.974  1.00 25.31
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ATOM    844  H   ASP A  55      -5.833  -1.023 -11.683  1.00 60.20
ATOM    845  CA  ASP A  55      -5.383  -1.689  -9.876  1.00 64.24
ATOM    846  HA  ASP A  55      -5.933  -1.759  -8.951  1.00 32.23
ATOM    847  CB  ASP A  55      -4.431  -2.904 -10.036  1.00 43.00
ATOM    848 1HB  ASP A  55      -3.762  -2.701 -10.858  1.00 23.52
ATOM    849 2HB  ASP A  55      -3.837  -2.977  -9.137  1.00 61.01
ATOM    850  CG  ASP A  55      -5.104  -4.243 -10.279  1.00 71.45
ATOM    851  OD1 ASP A  55      -4.655  -5.013 -11.148  1.00 43.11
ATOM    852  OD2 ASP A  55      -6.097  -4.575  -9.609  1.00 22.52
ATOM    853  C   ASP A  55      -4.540  -0.470  -9.911  1.00 13.31
ATOM    854  O   ASP A  55      -4.387   0.140 -10.982  1.00 41.30
ATOM    855  N   ALA A  56      -4.027  -0.096  -8.814  1.00 22.30
ATOM    856  H   ALA A  56      -4.206  -0.646  -8.014  1.00  2.42
ATOM    857  CA  ALA A  56      -3.158   1.036  -8.706  1.00 21.43
ATOM    858  HA  ALA A  56      -2.804   1.282  -9.698  1.00 11.24
ATOM    859  CB  ALA A  56      -3.889   2.233  -8.105  1.00 53.20
ATOM    860 1HB  ALA A  56      -4.354   1.947  -7.174  1.00 41.21
ATOM    861 2HB  ALA A  56      -4.640   2.591  -8.795  1.00  1.24
ATOM    862 3HB  ALA A  56      -3.182   3.029  -7.920  1.00 24.20
ATOM    863  C   ALA A  56      -1.996   0.607  -7.863  1.00 50.14
ATOM    864  O   ALA A  56      -2.177  -0.091  -6.885  1.00 21.55
ATOM    865  N   GLU A  57      -0.831   0.998  -8.225  1.00 43.54
ATOM    866  H   GLU A  57      -0.729   1.675  -8.931  1.00 30.23
ATOM    867  CA  GLU A  57       0.347   0.512  -7.567  1.00 11.45
ATOM    868  HA  GLU A  57       0.070   0.098  -6.610  1.00 22.12
ATOM    869  CB  GLU A  57       0.967  -0.583  -8.424  1.00  3.02
ATOM    870 1HB  GLU A  57       0.230  -1.367  -8.515  1.00 33.05
ATOM    871 2HB  GLU A  57       1.161  -0.209  -9.415  1.00 51.21
ATOM    872  CG  GLU A  57       2.228  -1.228  -7.881  1.00 45.32
ATOM    873 1HG  GLU A  57       2.870  -0.460  -7.471  1.00 15.20
ATOM    874 2HG  GLU A  57       1.964  -1.934  -7.107  1.00 64.35
ATOM    875  CD  GLU A  57       2.969  -1.954  -8.970  1.00 20.32
ATOM    876  OE1 GLU A  57       4.198  -2.021  -8.920  1.00 25.40
ATOM    877  OE2 GLU A  57       2.345  -2.342  -9.973  1.00 44.13
ATOM    878  C   GLU A  57       1.307   1.657  -7.369  1.00 43.11
ATOM    879  O   GLU A  57       1.545   2.448  -8.300  1.00 25.34
ATOM    880  N   ILE A  58       1.826   1.763  -6.181  1.00 33.31
ATOM    881  H   ILE A  58       1.618   1.075  -5.509  1.00 52.33
ATOM    882  CA  ILE A  58       2.725   2.834  -5.834  1.00 72.25
ATOM    883  HA  ILE A  58       2.786   3.532  -6.657  1.00  1.22
ATOM    884  CB  ILE A  58       2.251   3.578  -4.558  1.00 43.24
ATOM    885  HB  ILE A  58       2.463   2.942  -3.711  1.00 70.32
ATOM    886  CG2 ILE A  58       3.053   4.845  -4.389  1.00 41.22
ATOM    887 1HG2 ILE A  58       4.091   4.600  -4.223  1.00 25.51
ATOM    888 2HG2 ILE A  58       2.665   5.424  -3.564  1.00  0.02
ATOM    889 3HG2 ILE A  58       2.971   5.415  -5.305  1.00 24.31
ATOM    890  CG1 ILE A  58       0.736   3.900  -4.584  1.00 54.33
ATOM    891 1HG1 ILE A  58       0.190   2.973  -4.653  1.00 33.15
ATOM    892 2HG1 ILE A  58       0.470   4.390  -3.659  1.00 45.35
ATOM    893  CD1 ILE A  58       0.272   4.780  -5.732  1.00 64.42
ATOM    894 1HD1 ILE A  58      -0.793   4.933  -5.638  1.00  3.30
ATOM    895 2HD1 ILE A  58       0.481   4.285  -6.669  1.00  2.24
ATOM    896 3HD1 ILE A  58       0.783   5.731  -5.696  1.00 32.43
ATOM    897  C   ILE A  58       4.089   2.231  -5.544  1.00  4.10
ATOM    898  O   ILE A  58       4.189   1.311  -4.718  1.00 15.33
ATOM    899  N   VAL A  59       5.124   2.705  -6.225  1.00 23.51
ATOM    900  H   VAL A  59       5.009   3.411  -6.901  1.00  1.33
ATOM    901  CA  VAL A  59       6.460   2.174  -6.025  1.00  2.44
ATOM    902  HA  VAL A  59       6.447   1.487  -5.191  1.00 41.23
ATOM    903  CB  VAL A  59       6.967   1.401  -7.281  1.00 20.10
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ATOM    904  HB  VAL A  59       7.197   2.147  -8.028  1.00  3.32
ATOM    905  CG1 VAL A  59       8.268   0.659  -6.994  1.00 71.44
ATOM    906 1HG1 VAL A  59       8.592   0.139  -7.883  1.00 54.13
ATOM    907 2HG1 VAL A  59       8.107  -0.055  -6.199  1.00 63.43
ATOM    908 3HG1 VAL A  59       9.027   1.366  -6.692  1.00 55.44
ATOM    909  CG2 VAL A  59       5.916   0.467  -7.843  1.00 54.22
ATOM    910 1HG2 VAL A  59       5.626  -0.238  -7.081  1.00 11.33
ATOM    911 2HG2 VAL A  59       6.322  -0.065  -8.692  1.00 10.25
ATOM    912 3HG2 VAL A  59       5.054   1.039  -8.152  1.00 51.23
ATOM    913  C   VAL A  59       7.469   3.295  -5.768  1.00 11.01
ATOM    914  O   VAL A  59       7.597   4.217  -6.576  1.00 62.32
ATOM    915  N   SER A  60       8.140   3.241  -4.659  1.00 23.15
ATOM    916  H   SER A  60       7.862   2.616  -3.950  1.00  1.54
ATOM    917  CA  SER A  60       9.294   4.071  -4.432  1.00 55.12
ATOM    918  HA  SER A  60       9.454   4.680  -5.311  1.00 30.24
ATOM    919  CB  SER A  60       9.107   4.937  -3.177  1.00 11.11
ATOM    920 1HB  SER A  60       9.910   5.650  -3.084  1.00 42.53
ATOM    921 2HB  SER A  60       8.184   5.485  -3.290  1.00 11.52
ATOM    922  OG  SER A  60       9.026   4.159  -1.992  1.00 34.01
ATOM    923  HG  SER A  60       9.780   4.418  -1.449  1.00 52.31
ATOM    924  C   SER A  60      10.449   3.093  -4.275  1.00 40.22
ATOM    925  O   SER A  60      10.247   2.016  -3.708  1.00 53.41
ATOM    926  N   ALA A  61      11.620   3.400  -4.763  1.00 24.20
ATOM    927  H   ALA A  61      11.801   4.281  -5.159  1.00  1.25
ATOM    928  CA  ALA A  61      12.680   2.406  -4.717  1.00 54.12
ATOM    929  HA  ALA A  61      12.417   1.685  -3.957  1.00 13.11
ATOM    930  CB  ALA A  61      12.750   1.653  -6.042  1.00 40.45
ATOM    931 1HB  ALA A  61      13.475   0.856  -5.967  1.00 52.10
ATOM    932 2HB  ALA A  61      13.047   2.335  -6.827  1.00 34.42
ATOM    933 3HB  ALA A  61      11.781   1.240  -6.273  1.00 54.14
ATOM    934  C   ALA A  61      14.022   2.989  -4.383  1.00 65.14
ATOM    935  O   ALA A  61      14.299   4.152  -4.686  1.00 24.24
ATOM    936  N   SER A  62      14.833   2.188  -3.732  1.00 14.03
ATOM    937  H   SER A  62      14.526   1.320  -3.393  1.00 31.12
ATOM    938  CA  SER A  62      16.190   2.527  -3.465  1.00 52.43
ATOM    939  HA  SER A  62      16.284   3.603  -3.448  1.00 73.05
ATOM    940  CB  SER A  62      16.606   1.953  -2.117  1.00 21.34
ATOM    941 1HB  SER A  62      16.592   0.875  -2.170  1.00 21.44
ATOM    942 2HB  SER A  62      17.604   2.289  -1.875  1.00 11.35
ATOM    943  OG  SER A  62      15.716   2.374  -1.083  1.00 43.31
ATOM    944  HG  SER A  62      15.725   1.646  -0.436  1.00 25.34
ATOM    945  C   SER A  62      17.058   1.947  -4.586  1.00 54.42
ATOM    946  O   SER A  62      16.680   0.958  -5.231  1.00 63.40
ATOM    947  N   ASP A  63      18.180   2.559  -4.816  1.00 64.41
ATOM    948  H   ASP A  63      18.461   3.337  -4.281  1.00 54.44
ATOM    949  CA  ASP A  63      19.099   2.174  -5.886  1.00 34.43
ATOM    950  HA  ASP A  63      18.547   1.906  -6.773  1.00  1.20
ATOM    951  CB  ASP A  63      19.981   3.376  -6.210  1.00 41.42
ATOM    952 1HB  ASP A  63      20.719   3.096  -6.949  1.00 35.13
ATOM    953 2HB  ASP A  63      19.371   4.182  -6.591  1.00 25.11
ATOM    954  CG  ASP A  63      20.696   3.865  -4.953  1.00 42.34
ATOM    955  OD1 ASP A  63      21.858   3.476  -4.724  1.00  2.23
ATOM    956  OD2 ASP A  63      20.038   4.555  -4.140  1.00 40.11
ATOM    957  C   ASP A  63      19.995   1.020  -5.478  1.00 75.12
ATOM    958  O   ASP A  63      20.365   0.193  -6.310  1.00 62.23
ATOM    959  N   SER A  64      20.304   0.938  -4.206  1.00 13.01
ATOM    960  H   SER A  64      19.944   1.607  -3.589  1.00 30.12
ATOM    961  CA  SER A  64      21.226  -0.051  -3.736  1.00 74.22
ATOM    962  HA  SER A  64      22.065  -0.086  -4.415  1.00 22.43
ATOM    963  CB  SER A  64      21.727   0.372  -2.368  1.00 54.21
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ATOM    964 1HB  SER A  64      20.925   0.278  -1.652  1.00  2.11
ATOM    965 2HB  SER A  64      22.550  -0.262  -2.073  1.00  1.35
ATOM    966  OG  SER A  64      22.173   1.727  -2.385  1.00  2.53
ATOM    967  HG  SER A  64      22.089   2.151  -3.257  1.00 11.30
ATOM    968  C   SER A  64      20.561  -1.425  -3.674  1.00 62.53
ATOM    969  O   SER A  64      21.145  -2.433  -4.074  1.00 31.43
ATOM    970  N   ASP A  65      19.347  -1.459  -3.183  1.00 23.04
ATOM    971  H   ASP A  65      18.917  -0.635  -2.881  1.00 44.42
ATOM    972  CA  ASP A  65      18.593  -2.684  -3.125  1.00  3.54
ATOM    973  HA  ASP A  65      19.118  -3.386  -3.756  1.00 22.14
ATOM    974  CB  ASP A  65      18.513  -3.263  -1.706  1.00 34.45
ATOM    975 1HB  ASP A  65      19.503  -3.557  -1.387  1.00 55.04
ATOM    976 2HB  ASP A  65      18.138  -2.505  -1.035  1.00 40.23
ATOM    977  CG  ASP A  65      17.597  -4.483  -1.616  1.00 73.44
ATOM    978  OD1 ASP A  65      17.001  -4.704  -0.562  1.00 74.30
ATOM    979  OD2 ASP A  65      17.402  -5.193  -2.622  1.00 61.35
ATOM    980  C   ASP A  65      17.228  -2.488  -3.727  1.00 34.43
ATOM    981  O   ASP A  65      16.454  -1.649  -3.278  1.00 53.32
ATOM    982  N   SER A  66      16.960  -3.237  -4.756  1.00  5.21
ATOM    983  H   SER A  66      17.672  -3.837  -5.061  1.00 54.00
ATOM    984  CA  SER A  66      15.699  -3.216  -5.439  1.00 23.44
ATOM    985  HA  SER A  66      15.474  -2.186  -5.674  1.00 22.11
ATOM    986  CB  SER A  66      15.817  -4.001  -6.760  1.00 71.44
ATOM    987 1HB  SER A  66      16.660  -3.630  -7.323  1.00 32.44
ATOM    988 2HB  SER A  66      15.975  -5.048  -6.538  1.00  1.52
ATOM    989  OG  SER A  66      14.651  -3.874  -7.563  1.00 15.02
ATOM    990  HG  SER A  66      14.697  -3.029  -8.019  1.00  1.24
ATOM    991  C   SER A  66      14.560  -3.780  -4.543  1.00 74.40
ATOM    992  O   SER A  66      13.375  -3.458  -4.749  1.00 60.43
ATOM    993  N   THR A  67      14.890  -4.605  -3.543  1.00 25.02
ATOM    994  H   THR A  67      15.836  -4.831  -3.350  1.00 34.04
ATOM    995  CA  THR A  67      13.844  -5.173  -2.704  1.00 13.13
ATOM    996  HA  THR A  67      12.957  -5.253  -3.317  1.00 32.54
ATOM    997  CB  THR A  67      14.220  -6.575  -2.143  1.00 11.32
ATOM    998  HB  THR A  67      13.305  -7.089  -1.890  1.00 72.44
ATOM    999  OG1 THR A  67      15.080  -6.472  -1.003  1.00 43.31
ATOM   1000  HG1 THR A  67      15.877  -5.936  -1.181  1.00 31.22
ATOM   1001  CG2 THR A  67      14.932  -7.380  -3.208  1.00 23.42
ATOM   1002 1HG2 THR A  67      14.282  -7.526  -4.057  1.00 43.23
ATOM   1003 2HG2 THR A  67      15.250  -8.331  -2.806  1.00 12.24
ATOM   1004 3HG2 THR A  67      15.790  -6.797  -3.511  1.00  0.44
ATOM   1005  C   THR A  67      13.539  -4.202  -1.566  1.00 64.51
ATOM   1006  O   THR A  67      12.483  -4.277  -0.895  1.00 30.50
ATOM   1007  N   ASP A  68      14.457  -3.277  -1.392  1.00  1.42
ATOM   1008  H   ASP A  68      15.272  -3.361  -1.933  1.00 61.44
ATOM   1009  CA  ASP A  68      14.340  -2.182  -0.443  1.00 43.41
ATOM   1010  HA  ASP A  68      13.771  -2.530   0.406  1.00 53.41
ATOM   1011  CB  ASP A  68      15.740  -1.707   0.011  1.00 72.23
ATOM   1012 1HB  ASP A  68      16.283  -2.554   0.403  1.00 43.22
ATOM   1013 2HB  ASP A  68      16.265  -1.331  -0.855  1.00 61.35
ATOM   1014  CG  ASP A  68      15.737  -0.629   1.078  1.00 43.43
ATOM   1015  OD1 ASP A  68      15.491  -0.938   2.258  1.00 23.25
ATOM   1016  OD2 ASP A  68      16.062   0.536   0.785  1.00 53.42
ATOM   1017  C   ASP A  68      13.576  -1.068  -1.131  1.00 42.02
ATOM   1018  O   ASP A  68      14.129  -0.079  -1.607  1.00 23.20
ATOM   1019  N   SER A  69      12.324  -1.324  -1.320  1.00 44.54
ATOM   1020  H   SER A  69      11.942  -2.167  -0.995  1.00 43.21
ATOM   1021  CA  SER A  69      11.457  -0.434  -1.994  1.00 71.43
ATOM   1022  HA  SER A  69      11.831   0.572  -1.880  1.00 64.21
ATOM   1023  CB  SER A  69      11.455  -0.786  -3.495  1.00 43.01
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ATOM   1024 1HB  SER A  69      10.649  -0.263  -3.986  1.00 62.11
ATOM   1025 2HB  SER A  69      12.396  -0.485  -3.933  1.00  2.33
ATOM   1026  OG  SER A  69      11.285  -2.194  -3.711  1.00 21.43
ATOM   1027  HG  SER A  69      12.184  -2.507  -3.910  1.00 72.33
ATOM   1028  C   SER A  69      10.074  -0.536  -1.405  1.00 73.30
ATOM   1029  O   SER A  69       9.691  -1.603  -0.902  1.00 74.12
ATOM   1030  N   LEU A  70       9.337   0.537  -1.429  1.00 61.21
ATOM   1031  H   LEU A  70       9.686   1.374  -1.809  1.00 20.21
ATOM   1032  CA  LEU A  70       7.984   0.488  -0.990  1.00 10.33
ATOM   1033  HA  LEU A  70       7.867  -0.340  -0.306  1.00 11.45
ATOM   1034  CB  LEU A  70       7.581   1.833  -0.297  1.00 42.55
ATOM   1035 1HB  LEU A  70       8.323   2.041   0.458  1.00 25.50
ATOM   1036 2HB  LEU A  70       7.654   2.609  -1.045  1.00  1.30
ATOM   1037  CG  LEU A  70       6.173   1.958   0.391  1.00 32.24
ATOM   1038  HG  LEU A  70       6.108   2.943   0.830  1.00 61.23
ATOM   1039  CD1 LEU A  70       5.009   1.841  -0.585  1.00 52.22
ATOM   1040 1HD1 LEU A  70       4.074   1.943  -0.053  1.00  3.40
ATOM   1041 2HD1 LEU A  70       5.055   0.867  -1.050  1.00 23.52
ATOM   1042 3HD1 LEU A  70       5.071   2.585  -1.363  1.00 43.41
ATOM   1043  CD2 LEU A  70       6.017   0.947   1.513  1.00  1.22
ATOM   1044 1HD2 LEU A  70       6.790   1.104   2.249  1.00 22.51
ATOM   1045 2HD2 LEU A  70       6.095  -0.052   1.111  1.00 14.01
ATOM   1046 3HD2 LEU A  70       5.049   1.073   1.976  1.00 70.52
ATOM   1047  C   LEU A  70       7.180   0.249  -2.237  1.00 32.11
ATOM   1048  O   LEU A  70       7.134   1.096  -3.125  1.00  4.10
ATOM   1049  N   GLN A  71       6.620  -0.908  -2.334  1.00 51.54
ATOM   1050  H   GLN A  71       6.762  -1.579  -1.634  1.00 73.34
ATOM   1051  CA  GLN A  71       5.784  -1.232  -3.437  1.00  1.53
ATOM   1052  HA  GLN A  71       5.565  -0.317  -3.969  1.00  2.30
ATOM   1053  CB  GLN A  71       6.509  -2.204  -4.379  1.00 21.34
ATOM   1054 1HB  GLN A  71       7.397  -1.722  -4.755  1.00 62.43
ATOM   1055 2HB  GLN A  71       6.808  -3.069  -3.804  1.00 43.42
ATOM   1056  CG  GLN A  71       5.697  -2.688  -5.577  1.00 71.41
ATOM   1057 1HG  GLN A  71       4.919  -3.343  -5.214  1.00 21.13
ATOM   1058 2HG  GLN A  71       5.245  -1.845  -6.074  1.00 14.31
ATOM   1059  CD  GLN A  71       6.553  -3.458  -6.573  1.00 60.32
ATOM   1060  OE1 GLN A  71       7.551  -4.091  -6.202  1.00 63.11
ATOM   1061  NE2 GLN A  71       6.195  -3.416  -7.823  1.00 63.43
ATOM   1062 2HE2 GLN A  71       5.393  -2.891  -8.087  1.00  4.42
ATOM   1063 1HE2 GLN A  71       6.716  -3.912  -8.483  1.00 53.12
ATOM   1064  C   GLN A  71       4.507  -1.798  -2.901  1.00 61.43
ATOM   1065  O   GLN A  71       4.512  -2.842  -2.226  1.00 52.43
ATOM   1066  N   VAL A  72       3.434  -1.109  -3.150  1.00 31.52
ATOM   1067  H   VAL A  72       3.517  -0.281  -3.676  1.00 45.34
ATOM   1068  CA  VAL A  72       2.140  -1.534  -2.704  1.00 33.23
ATOM   1069  HA  VAL A  72       2.234  -2.537  -2.313  1.00 63.14
ATOM   1070  CB  VAL A  72       1.550  -0.611  -1.585  1.00 54.21
ATOM   1071  HB  VAL A  72       1.479   0.393  -1.976  1.00 70.13
ATOM   1072  CG1 VAL A  72       0.149  -1.066  -1.176  1.00 40.20
ATOM   1073 1HG1 VAL A  72       0.201  -2.077  -0.797  1.00 44.35
ATOM   1074 2HG1 VAL A  72      -0.505  -1.038  -2.035  1.00 70.41
ATOM   1075 3HG1 VAL A  72      -0.236  -0.412  -0.407  1.00 72.03
ATOM   1076  CG2 VAL A  72       2.451  -0.593  -0.368  1.00 74.51
ATOM   1077 1HG2 VAL A  72       3.427  -0.232  -0.652  1.00  0.00
ATOM   1078 2HG2 VAL A  72       2.544  -1.594   0.023  1.00 21.41
ATOM   1079 3HG2 VAL A  72       2.031   0.056   0.386  1.00 22.51
ATOM   1080  C   VAL A  72       1.208  -1.555  -3.874  1.00 15.10
ATOM   1081  O   VAL A  72       1.041  -0.541  -4.568  1.00 35.33
ATOM   1082  N   ALA A  73       0.627  -2.686  -4.097  1.00  4.24
ATOM   1083  H   ALA A  73       0.843  -3.443  -3.508  1.00 72.41
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ATOM   1084  CA  ALA A  73      -0.324  -2.857  -5.135  1.00 33.30
ATOM   1085  HA  ALA A  73      -0.254  -2.021  -5.814  1.00  1.13
ATOM   1086  CB  ALA A  73      -0.065  -4.146  -5.900  1.00 65.43
ATOM   1087 1HB  ALA A  73       0.928  -4.117  -6.324  1.00 60.24
ATOM   1088 2HB  ALA A  73      -0.790  -4.247  -6.694  1.00 21.20
ATOM   1089 3HB  ALA A  73      -0.144  -4.987  -5.229  1.00 34.51
ATOM   1090  C   ALA A  73      -1.694  -2.860  -4.524  1.00 12.23
ATOM   1091  O   ALA A  73      -1.945  -3.556  -3.531  1.00 61.43
ATOM   1092  N   MET A  74      -2.546  -2.070  -5.075  1.00 23.51
ATOM   1093  H   MET A  74      -2.281  -1.527  -5.853  1.00 33.34
ATOM   1094  CA  MET A  74      -3.893  -1.937  -4.625  1.00 32.21
ATOM   1095  HA  MET A  74      -4.042  -2.527  -3.733  1.00  0.14
ATOM   1096  CB  MET A  74      -4.205  -0.461  -4.337  1.00 22.22
ATOM   1097 1HB  MET A  74      -4.137   0.101  -5.256  1.00 22.50
ATOM   1098 2HB  MET A  74      -5.217  -0.409  -3.963  1.00 10.12
ATOM   1099  CG  MET A  74      -3.292   0.189  -3.303  1.00  1.40
ATOM   1100 1HG  MET A  74      -3.435  -0.282  -2.347  1.00 32.43
ATOM   1101 2HG  MET A  74      -2.268   0.044  -3.616  1.00 20.21
ATOM   1102  SD  MET A  74      -3.583   1.956  -3.111  1.00 21.12
ATOM   1103  CE  MET A  74      -2.869   2.585  -4.619  1.00 43.04
ATOM   1104 1HE  MET A  74      -1.824   2.318  -4.659  1.00 61.53
ATOM   1105 2HE  MET A  74      -2.969   3.661  -4.646  1.00 72.10
ATOM   1106 3HE  MET A  74      -3.383   2.153  -5.464  1.00  1.32
ATOM   1107  C   MET A  74      -4.767  -2.426  -5.743  1.00 31.40
ATOM   1108  O   MET A  74      -4.698  -1.908  -6.849  1.00  3.12
ATOM   1109  N   LYS A  75      -5.563  -3.402  -5.469  1.00  4.32
ATOM   1110  H   LYS A  75      -5.611  -3.740  -4.548  1.00 30.31
ATOM   1111  CA  LYS A  75      -6.377  -4.024  -6.472  1.00 23.52
ATOM   1112  HA  LYS A  75      -6.134  -3.590  -7.428  1.00 21.11
ATOM   1113  CB  LYS A  75      -6.048  -5.531  -6.529  1.00  2.05
ATOM   1114 1HB  LYS A  75      -5.058  -5.647  -6.943  1.00 53.33
ATOM   1115 2HB  LYS A  75      -6.043  -5.915  -5.519  1.00 65.32
ATOM   1116  CG  LYS A  75      -7.021  -6.371  -7.358  1.00 32.11
ATOM   1117 1HG  LYS A  75      -7.956  -6.451  -6.823  1.00 21.00
ATOM   1118 2HG  LYS A  75      -7.191  -5.874  -8.301  1.00 51.12
ATOM   1119  CD  LYS A  75      -6.496  -7.772  -7.620  1.00 72.44
ATOM   1120 1HD  LYS A  75      -6.198  -8.213  -6.680  1.00 51.10
ATOM   1121 2HD  LYS A  75      -7.291  -8.355  -8.058  1.00 13.40
ATOM   1122  CE  LYS A  75      -5.294  -7.758  -8.569  1.00 12.12
ATOM   1123 1HE  LYS A  75      -4.493  -7.195  -8.114  1.00 52.12
ATOM   1124 2HE  LYS A  75      -4.968  -8.776  -8.725  1.00 11.32
ATOM   1125  NZ  LYS A  75      -5.626  -7.153  -9.879  1.00 14.45
ATOM   1126 1HZ  LYS A  75      -5.977  -6.175  -9.720  1.00 52.32
ATOM   1127 2HZ  LYS A  75      -6.342  -7.646 -10.440  1.00  2.42
ATOM   1128 3HZ  LYS A  75      -4.784  -6.996 -10.474  1.00 21.22
ATOM   1129  C   LYS A  75      -7.830  -3.802  -6.175  1.00 44.25
ATOM   1130  O   LYS A  75      -8.292  -4.081  -5.061  1.00 50.34
ATOM   1131  N   LYS A  76      -8.553  -3.339  -7.173  1.00 43.42
ATOM   1132  H   LYS A  76      -8.143  -3.196  -8.056  1.00 40.14
ATOM   1133  CA  LYS A  76      -9.936  -3.034  -7.031  1.00 33.32
ATOM   1134  HA  LYS A  76     -10.124  -2.525  -6.098  1.00 34.20
ATOM   1135  CB  LYS A  76     -10.364  -2.155  -8.187  1.00 71.00
ATOM   1136 1HB  LYS A  76      -9.688  -1.328  -8.351  1.00 73.03
ATOM   1137 2HB  LYS A  76     -10.303  -2.763  -9.076  1.00 75.13
ATOM   1138  CG  LYS A  76     -11.773  -1.649  -8.099  1.00 63.44
ATOM   1139 1HG  LYS A  76     -12.387  -2.393  -7.614  1.00  4.34
ATOM   1140 2HG  LYS A  76     -11.781  -0.739  -7.517  1.00 52.03
ATOM   1141  CD  LYS A  76     -12.337  -1.356  -9.471  1.00 24.21
ATOM   1142 1HD  LYS A  76     -13.183  -0.693  -9.369  1.00  1.31
ATOM   1143 2HD  LYS A  76     -11.574  -0.881 -10.072  1.00 30.52
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ATOM   1144  CE  LYS A  76     -12.787  -2.641 -10.165  1.00 44.04
ATOM   1145 1HE  LYS A  76     -13.415  -3.105  -9.420  1.00 71.42
ATOM   1146 2HE  LYS A  76     -13.360  -2.390 -11.044  1.00 20.11
ATOM   1147  NZ  LYS A  76     -11.685  -3.612 -10.488  1.00 60.31
ATOM   1148 1HZ  LYS A  76     -10.900  -3.185 -11.024  1.00 64.30
ATOM   1149 2HZ  LYS A  76     -12.044  -4.385 -11.081  1.00 22.21
ATOM   1150 3HZ  LYS A  76     -11.292  -4.046  -9.624  1.00 34.54
ATOM   1151  C   LYS A  76     -10.708  -4.335  -7.134  1.00 41.32
ATOM   1152  O   LYS A  76     -10.760  -4.962  -8.220  1.00 24.45
ATOM   1153  N   LEU A  77     -11.331  -4.705  -6.074  1.00  3.54
ATOM   1154  H   LEU A  77     -11.362  -4.105  -5.292  1.00  1.42
ATOM   1155  CA  LEU A  77     -12.033  -5.953  -5.986  1.00 71.12
ATOM   1156  HA  LEU A  77     -11.708  -6.594  -6.791  1.00 63.43
ATOM   1157  CB  LEU A  77     -11.697  -6.617  -4.630  1.00  1.50
ATOM   1158 1HB  LEU A  77     -10.636  -6.519  -4.464  1.00 55.02
ATOM   1159 2HB  LEU A  77     -12.220  -6.047  -3.878  1.00 35.42
ATOM   1160  CG  LEU A  77     -12.060  -8.095  -4.437  1.00 30.14
ATOM   1161  HG  LEU A  77     -13.098  -8.239  -4.697  1.00 13.43
ATOM   1162  CD1 LEU A  77     -11.217  -8.986  -5.342  1.00 24.13
ATOM   1163 1HD1 LEU A  77     -10.174  -8.865  -5.089  1.00 12.25
ATOM   1164 2HD1 LEU A  77     -11.365  -8.709  -6.375  1.00  0.00
ATOM   1165 3HD1 LEU A  77     -11.500 -10.019  -5.201  1.00 22.30
ATOM   1166  CD2 LEU A  77     -11.877  -8.498  -2.982  1.00 45.12
ATOM   1167 1HD2 LEU A  77     -12.123  -9.543  -2.863  1.00 52.43
ATOM   1168 2HD2 LEU A  77     -12.525  -7.904  -2.356  1.00 73.12
ATOM   1169 3HD2 LEU A  77     -10.849  -8.338  -2.691  1.00 53.41
ATOM   1170  C   LEU A  77     -13.538  -5.671  -6.089  1.00 44.42
ATOM   1171  O   LEU A  77     -13.993  -4.572  -5.721  1.00 60.10
ATOM   1172  N   PRO A  78     -14.314  -6.594  -6.688  1.00 13.23
ATOM   1173  CD  PRO A  78     -13.830  -7.790  -7.395  1.00 33.45
ATOM   1174  CA  PRO A  78     -15.779  -6.492  -6.730  1.00 42.20
ATOM   1175  HA  PRO A  78     -16.104  -5.690  -7.375  1.00 73.35
ATOM   1176  CB  PRO A  78     -16.216  -7.844  -7.307  1.00 43.43
ATOM   1177 1HB  PRO A  78     -16.454  -8.520  -6.498  1.00 45.23
ATOM   1178 2HB  PRO A  78     -17.065  -7.721  -7.963  1.00 32.21
ATOM   1179  CG  PRO A  78     -15.049  -8.321  -8.090  1.00 10.31
ATOM   1180 1HG  PRO A  78     -15.041  -9.401  -8.107  1.00  4.43
ATOM   1181 2HG  PRO A  78     -15.088  -7.926  -9.094  1.00 60.42
ATOM   1182 1HD  PRO A  78     -13.435  -8.501  -6.684  1.00 11.21
ATOM   1183 2HD  PRO A  78     -13.076  -7.521  -8.119  1.00 72.15
ATOM   1184  C   PRO A  78     -16.382  -6.309  -5.326  1.00 54.13
ATOM   1185  O   PRO A  78     -15.729  -6.584  -4.317  1.00 11.22
ATOM   1186  N   ASN A  79     -17.623  -5.822  -5.288  1.00 23.21
ATOM   1187  H   ASN A  79     -18.073  -5.650  -6.138  1.00 13.15
ATOM   1188  CA  ASN A  79     -18.372  -5.573  -4.030  1.00 33.11
ATOM   1189  HA  ASN A  79     -19.372  -5.299  -4.337  1.00 31.43
ATOM   1190  CB  ASN A  79     -18.460  -6.832  -3.116  1.00  1.40
ATOM   1191 1HB  ASN A  79     -17.462  -7.204  -2.941  1.00 12.41
ATOM   1192 2HB  ASN A  79     -18.896  -6.545  -2.170  1.00 23.32
ATOM   1193  CG  ASN A  79     -19.289  -7.968  -3.709  1.00 41.20
ATOM   1194  OD1 ASN A  79     -19.388  -8.121  -4.922  1.00 65.54
ATOM   1195  ND2 ASN A  79     -19.879  -8.775  -2.860  1.00 72.31
ATOM   1196 2HD2 ASN A  79     -19.761  -8.611  -1.902  1.00 10.23
ATOM   1197 1HD2 ASN A  79     -20.407  -9.511  -3.229  1.00 72.50
ATOM   1198  C   ASN A  79     -17.811  -4.383  -3.264  1.00 41.34
ATOM   1199  O   ASN A  79     -18.160  -4.164  -2.112  1.00 64.41
ATOM   1200  N   ASN A  80     -16.991  -3.582  -3.955  1.00 13.13
ATOM   1201  H   ASN A  80     -16.773  -3.846  -4.870  1.00 51.22
ATOM   1202  CA  ASN A  80     -16.363  -2.371  -3.392  1.00 40.01
ATOM   1203  HA  ASN A  80     -15.787  -1.961  -4.211  1.00 71.40
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ATOM   1204  CB  ASN A  80     -17.367  -1.289  -2.930  1.00 12.44
ATOM   1205 1HB  ASN A  80     -18.134  -1.754  -2.329  1.00 71.52
ATOM   1206 2HB  ASN A  80     -16.842  -0.563  -2.325  1.00 22.41
ATOM   1207  CG  ASN A  80     -18.042  -0.565  -4.074  1.00 11.01
ATOM   1208  OD1 ASN A  80     -17.530   0.439  -4.576  1.00 55.32
ATOM   1209  ND2 ASN A  80     -19.201  -1.029  -4.473  1.00 51.43
ATOM   1210 2HD2 ASN A  80     -19.559  -1.813  -4.007  1.00 20.53
ATOM   1211 1HD2 ASN A  80     -19.650  -0.565  -5.209  1.00 61.54
ATOM   1212  C   ASN A  80     -15.358  -2.676  -2.313  1.00 52.35
ATOM   1213  O   ASN A  80     -15.423  -2.145  -1.212  1.00 42.32
ATOM   1214  N   ALA A  81     -14.464  -3.568  -2.618  1.00 43.31
ATOM   1215  H   ALA A  81     -14.498  -4.036  -3.480  1.00 41.20
ATOM   1216  CA  ALA A  81     -13.385  -3.882  -1.733  1.00 34.21
ATOM   1217  HA  ALA A  81     -13.445  -3.217  -0.884  1.00 12.42
ATOM   1218  CB  ALA A  81     -13.479  -5.319  -1.252  1.00 61.05
ATOM   1219 1HB  ALA A  81     -12.648  -5.520  -0.592  1.00  2.02
ATOM   1220 2HB  ALA A  81     -13.450  -5.988  -2.098  1.00 12.40
ATOM   1221 3HB  ALA A  81     -14.404  -5.453  -0.713  1.00 62.51
ATOM   1222  C   ALA A  81     -12.084  -3.633  -2.465  1.00 12.42
ATOM   1223  O   ALA A  81     -12.071  -3.525  -3.687  1.00 70.24
ATOM   1224  N   THR A  82     -11.017  -3.501  -1.748  1.00 23.41
ATOM   1225  H   THR A  82     -11.065  -3.572  -0.767  1.00 30.32
ATOM   1226  CA  THR A  82      -9.736  -3.268  -2.348  1.00 31.41
ATOM   1227  HA  THR A  82      -9.793  -3.482  -3.406  1.00  3.43
ATOM   1228  CB  THR A  82      -9.317  -1.794  -2.139  1.00 24.22
ATOM   1229  HB  THR A  82      -9.016  -1.653  -1.111  1.00 15.54
ATOM   1230  OG1 THR A  82     -10.424  -0.936  -2.443  1.00 64.53
ATOM   1231  HG1 THR A  82     -11.217  -1.256  -1.996  1.00 20.11
ATOM   1232  CG2 THR A  82      -8.157  -1.422  -3.055  1.00 43.43
ATOM   1233 1HG2 THR A  82      -8.458  -1.547  -4.085  1.00 73.41
ATOM   1234 2HG2 THR A  82      -7.316  -2.066  -2.849  1.00 24.33
ATOM   1235 3HG2 THR A  82      -7.875  -0.393  -2.884  1.00 62.44
ATOM   1236  C   THR A  82      -8.723  -4.191  -1.675  1.00 30.42
ATOM   1237  O   THR A  82      -8.712  -4.307  -0.454  1.00  2.12
ATOM   1238  N   ARG A  83      -7.904  -4.865  -2.435  1.00 23.31
ATOM   1239  H   ARG A  83      -7.952  -4.769  -3.413  1.00  3.34
ATOM   1240  CA  ARG A  83      -6.929  -5.733  -1.845  1.00  1.21
ATOM   1241  HA  ARG A  83      -7.189  -5.891  -0.810  1.00 22.34
ATOM   1242  CB  ARG A  83      -6.841  -7.072  -2.562  1.00 22.25
ATOM   1243 1HB  ARG A  83      -7.830  -7.371  -2.877  1.00 24.23
ATOM   1244 2HB  ARG A  83      -6.206  -6.967  -3.428  1.00 51.24
ATOM   1245  CG  ARG A  83      -6.258  -8.155  -1.675  1.00 15.41
ATOM   1246 1HG  ARG A  83      -5.401  -7.751  -1.158  1.00 33.35
ATOM   1247 2HG  ARG A  83      -7.005  -8.445  -0.950  1.00  2.32
ATOM   1248  CD  ARG A  83      -5.818  -9.373  -2.445  1.00 62.21
ATOM   1249 1HD  ARG A  83      -5.809 -10.191  -1.744  1.00 42.02
ATOM   1250 2HD  ARG A  83      -6.535  -9.571  -3.228  1.00 30.52
ATOM   1251  NE  ARG A  83      -4.467  -9.196  -3.041  1.00 12.43
ATOM   1252  HE  ARG A  83      -4.082  -8.296  -2.933  1.00 74.42
ATOM   1253  CZ  ARG A  83      -3.721 -10.179  -3.598  1.00  2.25
ATOM   1254  NH1 ARG A  83      -4.258 -11.380  -3.843  1.00 71.25
ATOM   1255 1HH1 ARG A  83      -5.215 -11.577  -3.624  1.00 23.31
ATOM   1256 2HH1 ARG A  83      -3.728 -12.129  -4.245  1.00 52.21
ATOM   1257  NH2 ARG A  83      -2.439  -9.947  -3.896  1.00 33.11
ATOM   1258 1HH2 ARG A  83      -2.021  -9.048  -3.700  1.00 25.25
ATOM   1259 2HH2 ARG A  83      -1.804 -10.614  -4.294  1.00 54.44
ATOM   1260  C   ARG A  83      -5.589  -5.055  -1.925  1.00 12.15
ATOM   1261  O   ARG A  83      -5.210  -4.565  -2.980  1.00 64.42
ATOM   1262  N   ILE A  84      -4.883  -5.039  -0.839  1.00 53.31
ATOM   1263  H   ILE A  84      -5.205  -5.502  -0.031  1.00 53.40
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ATOM   1264  CA  ILE A  84      -3.607  -4.389  -0.768  1.00 62.35
ATOM   1265  HA  ILE A  84      -3.440  -3.916  -1.725  1.00  4.43
ATOM   1266  CB  ILE A  84      -3.575  -3.275   0.356  1.00 72.10
ATOM   1267  HB  ILE A  84      -4.312  -3.556   1.092  1.00 34.52
ATOM   1268  CG2 ILE A  84      -2.237  -3.167   1.069  1.00 72.52
ATOM   1269 1HG2 ILE A  84      -2.285  -2.388   1.815  1.00 35.31
ATOM   1270 2HG2 ILE A  84      -1.466  -2.936   0.350  1.00 21.31
ATOM   1271 3HG2 ILE A  84      -2.014  -4.110   1.547  1.00 23.32
ATOM   1272  CG1 ILE A  84      -3.976  -1.916  -0.203  1.00 61.25
ATOM   1273 1HG1 ILE A  84      -3.884  -1.168   0.569  1.00 70.03
ATOM   1274 2HG1 ILE A  84      -3.284  -1.694  -1.002  1.00  3.02
ATOM   1275  CD1 ILE A  84      -5.370  -1.844  -0.754  1.00 74.43
ATOM   1276 1HD1 ILE A  84      -5.544  -0.859  -1.158  1.00  1.22
ATOM   1277 2HD1 ILE A  84      -6.083  -2.049   0.032  1.00  3.24
ATOM   1278 3HD1 ILE A  84      -5.477  -2.578  -1.540  1.00 12.42
ATOM   1279  C   ILE A  84      -2.530  -5.420  -0.569  1.00 73.42
ATOM   1280  O   ILE A  84      -2.693  -6.386   0.185  1.00 24.40
ATOM   1281  N   SER A  85      -1.512  -5.293  -1.345  1.00 50.23
ATOM   1282  H   SER A  85      -1.516  -4.569  -2.015  1.00 41.25
ATOM   1283  CA  SER A  85      -0.386  -6.149  -1.281  1.00 63.13
ATOM   1284  HA  SER A  85      -0.488  -6.777  -0.408  1.00 12.15
ATOM   1285  CB  SER A  85      -0.392  -7.029  -2.515  1.00 61.34
ATOM   1286 1HB  SER A  85      -0.239  -6.423  -3.395  1.00 53.01
ATOM   1287 2HB  SER A  85       0.384  -7.778  -2.440  1.00 41.43
ATOM   1288  OG  SER A  85      -1.658  -7.686  -2.603  1.00 54.04
ATOM   1289  HG  SER A  85      -2.040  -7.487  -1.738  1.00 50.15
ATOM   1290  C   SER A  85       0.890  -5.325  -1.161  1.00 51.41
ATOM   1291  O   SER A  85       1.185  -4.510  -2.037  1.00 13.24
ATOM   1292  N   ILE A  86       1.616  -5.514  -0.089  1.00 62.42
ATOM   1293  H   ILE A  86       1.324  -6.189   0.564  1.00 55.42
ATOM   1294  CA  ILE A  86       2.854  -4.793   0.123  1.00  4.12
ATOM   1295  HA  ILE A  86       2.897  -3.962  -0.566  1.00  4.24
ATOM   1296  CB  ILE A  86       3.049  -4.268   1.603  1.00 52.01
ATOM   1297  HB  ILE A  86       3.169  -5.137   2.234  1.00 62.50
ATOM   1298  CG2 ILE A  86       4.328  -3.453   1.722  1.00 71.43
ATOM   1299 1HG2 ILE A  86       4.458  -3.126   2.743  1.00 40.22
ATOM   1300 2HG2 ILE A  86       4.269  -2.591   1.073  1.00 73.42
ATOM   1301 3HG2 ILE A  86       5.168  -4.065   1.426  1.00  2.42
ATOM   1302  CG1 ILE A  86       1.874  -3.426   2.123  1.00 14.22
ATOM   1303 1HG1 ILE A  86       2.228  -2.772   2.905  1.00 41.04
ATOM   1304 2HG1 ILE A  86       1.492  -2.821   1.313  1.00  1.10
ATOM   1305  CD1 ILE A  86       0.717  -4.214   2.690  1.00 73.43
ATOM   1306 1HD1 ILE A  86       0.277  -4.834   1.922  1.00 41.31
ATOM   1307 2HD1 ILE A  86      -0.014  -3.518   3.079  1.00 10.45
ATOM   1308 3HD1 ILE A  86       1.074  -4.831   3.500  1.00 33.21
ATOM   1309  C   ILE A  86       3.990  -5.751  -0.165  1.00 50.43
ATOM   1310  O   ILE A  86       3.954  -6.889   0.288  1.00 75.02
ATOM   1311  N   LYS A  87       4.971  -5.318  -0.907  1.00 41.44
ATOM   1312  H   LYS A  87       4.933  -4.408  -1.279  1.00 62.04
ATOM   1313  CA  LYS A  87       6.111  -6.155  -1.185  1.00 53.41
ATOM   1314  HA  LYS A  87       5.929  -7.153  -0.818  1.00 72.43
ATOM   1315  CB  LYS A  87       6.388  -6.219  -2.688  1.00 51.12
ATOM   1316 1HB  LYS A  87       5.531  -6.661  -3.177  1.00 72.10
ATOM   1317 2HB  LYS A  87       6.519  -5.215  -3.064  1.00 31.34
ATOM   1318  CG  LYS A  87       7.634  -7.043  -3.048  1.00 60.34
ATOM   1319 1HG  LYS A  87       8.233  -7.173  -2.158  1.00 43.41
ATOM   1320 2HG  LYS A  87       7.324  -8.011  -3.414  1.00 50.13
ATOM   1321  CD  LYS A  87       8.482  -6.351  -4.114  1.00 63.10
ATOM   1322 1HD  LYS A  87       9.277  -7.023  -4.406  1.00 13.15
ATOM   1323 2HD  LYS A  87       7.861  -6.121  -4.966  1.00 64.00
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ATOM   1324  CE  LYS A  87       9.118  -5.052  -3.586  1.00 71.24
ATOM   1325 1HE  LYS A  87       8.358  -4.430  -3.137  1.00 61.21
ATOM   1326 2HE  LYS A  87       9.850  -5.309  -2.834  1.00 73.23
ATOM   1327  NZ  LYS A  87       9.790  -4.276  -4.657  1.00 30.44
ATOM   1328 1HZ  LYS A  87      10.553  -4.812  -5.110  1.00 33.30
ATOM   1329 2HZ  LYS A  87      10.192  -3.396  -4.265  1.00 43.40
ATOM   1330 3HZ  LYS A  87       9.075  -4.025  -5.376  1.00 31.43
ATOM   1331  C   LYS A  87       7.329  -5.571  -0.522  1.00 11.52
ATOM   1332  O   LYS A  87       7.711  -4.432  -0.803  1.00 31.11
ATOM   1333  N   TYR A  88       7.908  -6.314   0.360  1.00 14.31
ATOM   1334  H   TYR A  88       7.503  -7.168   0.629  1.00 65.03
ATOM   1335  CA  TYR A  88       9.137  -5.946   0.969  1.00 55.31
ATOM   1336  HA  TYR A  88       9.499  -5.091   0.424  1.00 55.43
ATOM   1337  CB  TYR A  88       8.953  -5.519   2.379  1.00 62.11
ATOM   1338 1HB  TYR A  88       8.019  -5.947   2.713  1.00 30.33
ATOM   1339 2HB  TYR A  88       9.763  -5.912   2.973  1.00 14.35
ATOM   1340  CG  TYR A  88       8.925  -4.025   2.493  1.00 54.34
ATOM   1341  CD1 TYR A  88       7.746  -3.334   2.651  1.00 41.14
ATOM   1342  HD1 TYR A  88       6.820  -3.883   2.723  1.00 33.04
ATOM   1343  CE1 TYR A  88       7.740  -1.959   2.725  1.00 71.33
ATOM   1344  HE1 TYR A  88       6.807  -1.430   2.851  1.00 64.15
ATOM   1345  CZ  TYR A  88       8.928  -1.267   2.639  1.00 30.12
ATOM   1346  CE2 TYR A  88      10.106  -1.939   2.477  1.00 30.15
ATOM   1347  HE2 TYR A  88      11.037  -1.397   2.411  1.00 24.52
ATOM   1348  CD2 TYR A  88      10.101  -3.306   2.404  1.00 52.05
ATOM   1349  HD2 TYR A  88      11.032  -3.838   2.277  1.00 65.32
ATOM   1350  OH  TYR A  88       8.934   0.102   2.729  1.00 23.52
ATOM   1351  HH  TYR A  88       9.542   0.447   2.067  1.00  3.25
ATOM   1352  C   TYR A  88      10.167  -7.004   0.868  1.00 31.14
ATOM   1353  O   TYR A  88       9.842  -8.172   0.857  1.00 52.22
ATOM   1354  N   GLY A  89      11.401  -6.592   0.775  1.00 10.14
ATOM   1355  H   GLY A  89      11.602  -5.639   0.662  1.00 52.23
ATOM   1356  CA  GLY A  89      12.480  -7.524   0.802  1.00 53.52
ATOM   1357 1HA  GLY A  89      12.089  -8.528   0.719  1.00 73.11
ATOM   1358 2HA  GLY A  89      13.148  -7.329  -0.021  1.00 21.13
ATOM   1359  C   GLY A  89      13.259  -7.397   2.080  1.00 74.00
ATOM   1360  O   GLY A  89      12.750  -7.736   3.150  1.00 24.40
ATOM   1361  N   SER A  90      14.435  -6.817   1.971  1.00 20.31
ATOM   1362  H   SER A  90      14.737  -6.495   1.089  1.00 33.11
ATOM   1363  CA  SER A  90      15.401  -6.668   3.062  1.00 21.31
ATOM   1364  HA  SER A  90      15.762  -7.658   3.297  1.00 10.44
ATOM   1365  CB  SER A  90      16.597  -5.874   2.547  1.00 25.24
ATOM   1366 1HB  SER A  90      16.288  -4.869   2.307  1.00 23.20
ATOM   1367 2HB  SER A  90      17.368  -5.847   3.304  1.00 65.30
ATOM   1368  OG  SER A  90      17.121  -6.487   1.381  1.00 20.41
ATOM   1369  HG  SER A  90      17.133  -5.834   0.658  1.00  3.03
ATOM   1370  C   SER A  90      14.853  -6.036   4.379  1.00 72.22
ATOM   1371  O   SER A  90      15.407  -6.282   5.444  1.00 62.55
ATOM   1372  N   GLN A  91      13.786  -5.228   4.324  1.00 30.45
ATOM   1373  H   GLN A  91      13.355  -5.064   3.463  1.00  3.11
ATOM   1374  CA  GLN A  91      13.302  -4.611   5.576  1.00 64.53
ATOM   1375  HA  GLN A  91      14.126  -4.550   6.272  1.00 10.04
ATOM   1376  CB  GLN A  91      12.725  -3.209   5.360  1.00 53.43
ATOM   1377 1HB  GLN A  91      11.677  -3.312   5.118  1.00 50.44
ATOM   1378 2HB  GLN A  91      12.798  -2.668   6.294  1.00 32.10
ATOM   1379  CG  GLN A  91      13.346  -2.361   4.274  1.00 34.14
ATOM   1380 1HG  GLN A  91      14.416  -2.334   4.419  1.00 32.12
ATOM   1381 2HG  GLN A  91      13.117  -2.792   3.312  1.00 65.15
ATOM   1382  CD  GLN A  91      12.802  -0.940   4.315  1.00 63.02
ATOM   1383  OE1 GLN A  91      11.699  -0.698   4.813  1.00 51.03
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ATOM   1384  NE2 GLN A  91      13.485  -0.038   3.701  1.00 23.03
ATOM   1385 2HE2 GLN A  91      14.302  -0.359   3.241  1.00 44.04
ATOM   1386 1HE2 GLN A  91      13.196   0.903   3.680  1.00 44.14
ATOM   1387  C   GLN A  91      12.173  -5.435   6.183  1.00 51.42
ATOM   1388  O   GLN A  91      11.939  -5.391   7.388  1.00 25.32
ATOM   1389  N   GLY A  92      11.498  -6.206   5.346  1.00 31.23
ATOM   1390  H   GLY A  92      11.864  -6.361   4.451  1.00 42.10
ATOM   1391  CA  GLY A  92      10.289  -6.880   5.773  1.00 41.03
ATOM   1392 1HA  GLY A  92      10.027  -7.614   5.024  1.00 63.32
ATOM   1393 2HA  GLY A  92      10.452  -7.386   6.712  1.00 45.50
ATOM   1394  C   GLY A  92       9.113  -5.895   5.927  1.00 53.20
ATOM   1395  O   GLY A  92       9.245  -4.812   6.508  1.00 30.15
ATOM   1396  N   ASN A  93       7.963  -6.251   5.380  1.00 54.33
ATOM   1397  H   ASN A  93       7.935  -7.073   4.849  1.00 63.32
ATOM   1398  CA  ASN A  93       6.763  -5.386   5.460  1.00 21.32
ATOM   1399  HA  ASN A  93       7.042  -4.412   5.089  1.00 24.30
ATOM   1400  CB  ASN A  93       5.588  -5.905   4.594  1.00  0.41
ATOM   1401 1HB  ASN A  93       4.852  -5.121   4.496  1.00 52.34
ATOM   1402 2HB  ASN A  93       5.960  -6.162   3.614  1.00 42.43
ATOM   1403  CG  ASN A  93       4.892  -7.139   5.186  1.00 35.43
ATOM   1404  OD1 ASN A  93       4.016  -7.028   6.028  1.00 64.14
ATOM   1405  ND2 ASN A  93       5.203  -8.292   4.689  1.00 73.11
ATOM   1406 2HD2 ASN A  93       5.857  -8.309   3.954  1.00 71.13
ATOM   1407 1HD2 ASN A  93       4.755  -9.081   5.055  1.00 25.11
ATOM   1408  C   ASN A  93       6.229  -5.225   6.884  1.00 35.21
ATOM   1409  O   ASN A  93       5.403  -4.371   7.101  1.00 33.22
ATOM   1410  N   SER A  94       6.735  -6.007   7.830  1.00 14.41
ATOM   1411  H   SER A  94       7.519  -6.563   7.638  1.00 11.30
ATOM   1412  CA  SER A  94       6.190  -6.124   9.185  1.00 53.13
ATOM   1413  HA  SER A  94       5.299  -6.733   9.133  1.00  4.32
ATOM   1414  CB  SER A  94       7.211  -6.871  10.027  1.00 42.20
ATOM   1415 1HB  SER A  94       8.057  -6.228  10.222  1.00 24.14
ATOM   1416 2HB  SER A  94       6.762  -7.178  10.959  1.00 24.34
ATOM   1417  OG  SER A  94       7.657  -8.031   9.325  1.00 55.41
ATOM   1418  HG  SER A  94       7.749  -8.754   9.953  1.00 35.02
ATOM   1419  C   SER A  94       5.827  -4.762   9.835  1.00  4.11
ATOM   1420  O   SER A  94       4.675  -4.533  10.201  1.00 55.32
ATOM   1421  N   ILE A  95       6.782  -3.859   9.931  1.00 54.31
ATOM   1422  H   ILE A  95       7.682  -4.076   9.615  1.00 42.02
ATOM   1423  CA  ILE A  95       6.522  -2.561  10.540  1.00 52.34
ATOM   1424  HA  ILE A  95       5.930  -2.732  11.426  1.00 13.11
ATOM   1425  CB  ILE A  95       7.841  -1.885  10.979  1.00  2.50
ATOM   1426  HB  ILE A  95       8.462  -1.775  10.102  1.00 22.03
ATOM   1427  CG2 ILE A  95       7.602  -0.492  11.557  1.00  3.22
ATOM   1428 1HG2 ILE A  95       6.962  -0.565  12.425  1.00 64.33
ATOM   1429 2HG2 ILE A  95       7.118   0.112  10.802  1.00 21.52
ATOM   1430 3HG2 ILE A  95       8.545  -0.044  11.832  1.00 43.24
ATOM   1431  CG1 ILE A  95       8.580  -2.772  11.983  1.00 30.52
ATOM   1432 1HG1 ILE A  95       9.037  -3.618  11.494  1.00 75.25
ATOM   1433 2HG1 ILE A  95       9.338  -2.142  12.412  1.00 14.12
ATOM   1434  CD1 ILE A  95       7.731  -3.282  13.136  1.00 33.03
ATOM   1435 1HD1 ILE A  95       6.954  -3.913  12.725  1.00  3.44
ATOM   1436 2HD1 ILE A  95       7.288  -2.448  13.660  1.00 20.52
ATOM   1437 3HD1 ILE A  95       8.344  -3.860  13.811  1.00 10.24
ATOM   1438  C   ILE A  95       5.751  -1.637   9.590  1.00 41.23
ATOM   1439  O   ILE A  95       4.856  -0.890  10.000  1.00 42.12
ATOM   1440  N   ARG A  96       6.071  -1.744   8.323  1.00 70.43
ATOM   1441  H   ARG A  96       6.699  -2.454   8.072  1.00 55.43
ATOM   1442  CA  ARG A  96       5.509  -0.882   7.294  1.00 74.11
ATOM   1443  HA  ARG A  96       5.674   0.145   7.581  1.00 12.35
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ATOM   1444  CB  ARG A  96       6.208  -1.133   5.965  1.00  5.24
ATOM   1445 1HB  ARG A  96       5.943  -2.119   5.615  1.00 25.24
ATOM   1446 2HB  ARG A  96       5.857  -0.405   5.247  1.00 20.13
ATOM   1447  CG  ARG A  96       7.721  -1.042   6.031  1.00 13.10
ATOM   1448 1HG  ARG A  96       8.075  -1.755   6.761  1.00 60.02
ATOM   1449 2HG  ARG A  96       8.127  -1.299   5.065  1.00 23.03
ATOM   1450  CD  ARG A  96       8.210   0.336   6.432  1.00 10.05
ATOM   1451 1HD  ARG A  96       7.846   1.062   5.721  1.00 63.51
ATOM   1452 2HD  ARG A  96       7.840   0.572   7.420  1.00 42.32
ATOM   1453  NE  ARG A  96       9.665   0.368   6.453  1.00  4.04
ATOM   1454  HE  ARG A  96      10.107  -0.285   5.859  1.00 74.03
ATOM   1455  CZ  ARG A  96      10.429   1.189   7.170  1.00  4.32
ATOM   1456 NH1  ARG A  96       9.879   2.145   7.932  1.00 52.32
ATOM   1457 1HH1 ARG A  96       8.886   2.267   7.985  1.00 71.14
ATOM   1458 2HH1 ARG A  96      10.420   2.821   8.443  1.00 44.41
ATOM   1459 NH2  ARG A  96      11.746   1.063   7.083  1.00 34.11
ATOM   1460 1HH2 ARG A  96      12.137   0.359   6.483  1.00 72.32
ATOM   1461 2HH2 ARG A  96      12.441   1.621   7.542  1.00 43.31
ATOM   1462  C   ARG A  96       4.019  -1.123   7.130  1.00 73.22
ATOM   1463  O   ARG A  96       3.241  -0.190   7.144  1.00 75.31
ATOM   1464  N   SER A  97       3.649  -2.382   7.011  1.00 11.22
ATOM   1465  H   SER A  97       4.330  -3.090   7.073  1.00 11.02
ATOM   1466  CA  SER A  97       2.280  -2.798   6.799  1.00  0.42
ATOM   1467  HA  SER A  97       1.911  -2.307   5.911  1.00 65.53
ATOM   1468  CB  SER A  97       2.238  -4.317   6.579  1.00 44.31
ATOM   1469 1HB  SER A  97       2.906  -4.576   5.771  1.00 22.41
ATOM   1470 2HB  SER A  97       2.563  -4.812   7.480  1.00  5.15
ATOM   1471  OG  SER A  97       0.949  -4.768   6.248  1.00 74.42
ATOM   1472  HG  SER A  97       1.044  -5.668   5.925  1.00 53.30
ATOM   1473  C   SER A  97       1.415  -2.396   7.988  1.00 72.11
ATOM   1474  O   SER A  97       0.321  -1.860   7.810  1.00 30.42
ATOM   1475  N   SER A  98       1.945  -2.602   9.193  1.00  1.23
ATOM   1476  H   SER A  98       2.829  -3.015   9.264  1.00 11.02
ATOM   1477  CA  SER A  98       1.253  -2.258  10.418  1.00 14.25
ATOM   1478  HA  SER A  98       0.353  -2.852  10.468  1.00  0.12
ATOM   1479  CB  SER A  98       2.144  -2.608  11.619  1.00 43.14
ATOM   1480 1HB  SER A  98       3.073  -2.056  11.557  1.00 61.32
ATOM   1481 2HB  SER A  98       1.638  -2.364  12.540  1.00 61.11
ATOM   1482  OG  SER A  98       2.456  -3.999  11.620  1.00 41.41
ATOM   1483  HG  SER A  98       3.275  -4.169  11.136  1.00 74.33
ATOM   1484  C   SER A  98       0.866  -0.768  10.424  1.00 74.41
ATOM   1485  O   SER A  98      -0.288  -0.408  10.699  1.00 41.45
ATOM   1486  N   ALA A  99       1.819   0.083  10.084  1.00 62.22
ATOM   1487  H   ALA A  99       2.713  -0.260   9.871  1.00 13.11
ATOM   1488  CA  ALA A  99       1.561   1.504  10.015  1.00 65.12
ATOM   1489  HA  ALA A  99       1.019   1.774  10.908  1.00 15.43
ATOM   1490  CB  ALA A  99       2.860   2.294   9.972  1.00 21.11
ATOM   1491 1HB  ALA A  99       3.391   2.061   9.063  1.00 43.44
ATOM   1492 2HB  ALA A  99       3.471   2.030  10.823  1.00 43.32
ATOM   1493 3HB  ALA A  99       2.642   3.352  10.000  1.00 74.44
ATOM   1494  C   ALA A  99       0.666   1.847   8.828  1.00 45.42
ATOM   1495  O   ALA A  99      -0.263   2.638   8.961  1.00 12.41
ATOM   1496  N   LEU A 100       0.931   1.209   7.687  1.00 23.10
ATOM   1497  H   LEU A 100       1.654   0.543   7.657  1.00 21.24
ATOM   1498  CA  LEU A 100       0.216   1.460   6.449  1.00 25.21
ATOM   1499  HA  LEU A 100       0.399   2.480   6.151  1.00 44.33
ATOM   1500  CB  LEU A 100       0.721   0.531   5.346  1.00 70.04
ATOM   1501 1HB  LEU A 100       1.797   0.497   5.388  1.00 42.12
ATOM   1502 2HB  LEU A 100       0.365  -0.470   5.554  1.00 62.12
ATOM   1503  CG  LEU A 100       0.275   0.879   3.933  1.00 61.13
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ATOM   1504  HG  LEU A 100      -0.802   0.952   3.922  1.00 31.01
ATOM   1505  CD1 LEU A 100       0.836   2.227   3.510  1.00 22.52
ATOM   1506 1HD1 LEU A 100       1.913   2.196   3.576  1.00 22.43
ATOM   1507 2HD1 LEU A 100       0.455   2.996   4.164  1.00 50.24
ATOM   1508 3HD1 LEU A 100       0.542   2.436   2.492  1.00 24.14
ATOM   1509  CD2 LEU A 100       0.689  -0.200   2.969  1.00 74.13
ATOM   1510 1HD2 LEU A 100       0.237  -1.134   3.265  1.00 61.11
ATOM   1511 2HD2 LEU A 100       1.764  -0.299   2.989  1.00  3.11
ATOM   1512 3HD2 LEU A 100       0.363   0.060   1.973  1.00 52.15
ATOM   1513  C   LEU A 100      -1.264   1.240   6.634  1.00 24.43
ATOM   1514  O   LEU A 100      -2.060   2.094   6.298  1.00 54.33
ATOM   1515  N   ILE A 101      -1.607   0.117   7.227  1.00 23.33
ATOM   1516  H   ILE A 101      -0.882  -0.495   7.498  1.00 10.32
ATOM   1517  CA  ILE A 101      -2.999  -0.243   7.459  1.00 55.31
ATOM   1518  HA  ILE A 101      -3.493  -0.250   6.500  1.00 52.54
ATOM   1519  CB  ILE A 101      -3.123  -1.664   8.096  1.00 50.54
ATOM   1520  HB  ILE A 101      -2.477  -1.681   8.960  1.00 44.01
ATOM   1521  CG2 ILE A 101      -4.537  -1.955   8.589  1.00  3.51
ATOM   1522 1HG2 ILE A 101      -4.792  -1.220   9.339  1.00  1.41
ATOM   1523 2HG2 ILE A 101      -4.569  -2.943   9.025  1.00 61.21
ATOM   1524 3HG2 ILE A 101      -5.231  -1.888   7.765  1.00 61.23
ATOM   1525  CG1 ILE A 101      -2.638  -2.751   7.112  1.00 12.32
ATOM   1526 1HG1 ILE A 101      -1.593  -2.585   6.892  1.00 53.50
ATOM   1527 2HG1 ILE A 101      -2.747  -3.718   7.583  1.00 50.35
ATOM   1528  CD1 ILE A 101      -3.383  -2.786   5.784  1.00 12.22
ATOM   1529 1HD1 ILE A 101      -3.287  -1.836   5.281  1.00 72.52
ATOM   1530 2HD1 ILE A 101      -4.428  -3.004   5.950  1.00 24.12
ATOM   1531 3HD1 ILE A 101      -2.952  -3.555   5.162  1.00 33.42
ATOM   1532  C   ILE A 101      -3.697   0.804   8.326  1.00  3.33
ATOM   1533  O   ILE A 101      -4.815   1.236   8.004  1.00 41.31
ATOM   1534  N   GLY A 102      -3.003   1.259   9.368  1.00 73.02
ATOM   1535  H   GLY A 102      -2.101   0.908   9.531  1.00 11.25
ATOM   1536  CA  GLY A 102      -3.555   2.267  10.253  1.00 64.23
ATOM   1537 1HA  GLY A 102      -4.475   1.908  10.675  1.00 35.34
ATOM   1538 2HA  GLY A 102      -2.851   2.456  11.050  1.00  3.21
ATOM   1539  C   GLY A 102      -3.826   3.564   9.531  1.00 11.04
ATOM   1540  O   GLY A 102      -4.880   4.171   9.688  1.00 52.25
ATOM   1541  N   ILE A 103      -2.890   3.962   8.722  1.00 24.13
ATOM   1542  H   ILE A 103      -2.084   3.406   8.631  1.00  0.55
ATOM   1543  CA  ILE A 103      -2.988   5.188   7.967  1.00 64.10
ATOM   1544  HA  ILE A 103      -3.288   5.965   8.652  1.00 34.31
ATOM   1545  CB  ILE A 103      -1.613   5.560   7.382  1.00  3.14
ATOM   1546  HB  ILE A 103      -1.269   4.750   6.757  1.00 54.04
ATOM   1547  CG2 ILE A 103      -1.710   6.831   6.539  1.00 33.32
ATOM   1548 1HG2 ILE A 103      -2.058   7.645   7.156  1.00 54.25
ATOM   1549 2HG2 ILE A 103      -2.409   6.668   5.731  1.00  4.31
ATOM   1550 3HG2 ILE A 103      -0.740   7.072   6.134  1.00  3.23
ATOM   1551  CG1 ILE A 103      -0.618   5.748   8.530  1.00  3.35
ATOM   1552 1HG1 ILE A 103      -0.833   6.678   9.035  1.00 43.43
ATOM   1553 2HG1 ILE A 103      -0.736   4.933   9.230  1.00  0.01
ATOM   1554  CD1 ILE A 103       0.818   5.789   8.099  1.00  5.23
ATOM   1555 1HD1 ILE A 103       0.969   6.598   7.400  1.00 20.34
ATOM   1556 2HD1 ILE A 103       1.047   4.840   7.639  1.00 42.35
ATOM   1557 3HD1 ILE A 103       1.439   5.924   8.973  1.00 53.42
ATOM   1558  C   ILE A 103      -4.041   5.079   6.857  1.00 15.12
ATOM   1559  O   ILE A 103      -4.804   6.029   6.621  1.00 65.10
ATOM   1560  N   ILE A 104      -4.112   3.918   6.211  1.00 23.05
ATOM   1561  H   ILE A 104      -3.518   3.182   6.483  1.00 64.32
ATOM   1562  CA  ILE A 104      -5.050   3.722   5.125  1.00 12.15
ATOM   1563  HA  ILE A 104      -4.873   4.519   4.421  1.00  0.33
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ATOM   1564  CB  ILE A 104      -4.837   2.355   4.389  1.00 40.41
ATOM   1565  HB  ILE A 104      -4.791   1.580   5.139  1.00 22.11
ATOM   1566  CG2 ILE A 104      -6.009   2.031   3.450  1.00 61.43
ATOM   1567 1HG2 ILE A 104      -6.096   2.805   2.703  1.00 73.35
ATOM   1568 2HG2 ILE A 104      -6.924   1.976   4.020  1.00 72.23
ATOM   1569 3HG2 ILE A 104      -5.830   1.081   2.966  1.00 13.04
ATOM   1570  CG1 ILE A 104      -3.515   2.361   3.605  1.00 51.42
ATOM   1571 1HG1 ILE A 104      -3.595   3.087   2.809  1.00 73.23
ATOM   1572 2HG1 ILE A 104      -2.700   2.647   4.255  1.00 42.22
ATOM   1573  CD1 ILE A 104      -3.177   1.025   2.967  1.00 14.03
ATOM   1574 1HD1 ILE A 104      -2.261   1.115   2.404  1.00  2.20
ATOM   1575 2HD1 ILE A 104      -3.979   0.732   2.305  1.00  1.32
ATOM   1576 3HD1 ILE A 104      -3.057   0.279   3.737  1.00 51.10
ATOM   1577  C   ILE A 104      -6.475   3.822   5.631  1.00 32.31
ATOM   1578  O   ILE A 104      -7.268   4.604   5.098  1.00 31.21
ATOM   1579  N   GLU A 105      -6.791   3.089   6.690  1.00 43.31
ATOM   1580  H   GLU A 105      -6.119   2.510   7.115  1.00  4.04
ATOM   1581  CA  GLU A 105      -8.124   3.153   7.229  1.00  2.53
ATOM   1582  HA  GLU A 105      -8.784   3.072   6.378  1.00 71.20
ATOM   1583  CB  GLU A 105      -8.425   2.018   8.208  1.00 73.15
ATOM   1584 1HB  GLU A 105      -9.489   2.006   8.396  1.00  4.11
ATOM   1585 2HB  GLU A 105      -8.151   1.084   7.739  1.00  2.43
ATOM   1586  CG  GLU A 105      -7.728   2.106   9.542  1.00 22.43
ATOM   1587 1HG  GLU A 105      -6.987   1.322   9.629  1.00 11.41
ATOM   1588 2HG  GLU A 105      -7.228   3.062   9.597  1.00 35.02
ATOM   1589  CD  GLU A 105      -8.746   2.038  10.650  1.00 61.11
ATOM   1590  OE1 GLU A 105      -9.151   3.104  11.150  1.00 51.21
ATOM   1591  OE2 GLU A 105      -9.255   0.942  10.942  1.00 13.43
ATOM   1592  C   GLU A 105      -8.381   4.526   7.847  1.00  2.14
ATOM   1593  O   GLU A 105      -9.468   5.076   7.721  1.00 45.04
ATOM   1594  N   GLY A 106      -7.339   5.082   8.459  1.00 34.22
ATOM   1595  H   GLY A 106      -6.502   4.566   8.485  1.00 43.14
ATOM   1596  CA  GLY A 106      -7.405   6.371   9.127  1.00 53.13
ATOM   1597 1HA  GLY A 106      -8.128   6.313   9.928  1.00 41.05
ATOM   1598 2HA  GLY A 106      -6.436   6.585   9.554  1.00 24.43
ATOM   1599  C   GLY A 106      -7.792   7.506   8.202  1.00 15.04
ATOM   1600  O   GLY A 106      -8.628   8.345   8.554  1.00 60.21
ATOM   1601  N   ASN A 107      -7.215   7.532   7.013  1.00 22.21
ATOM   1602  H   ASN A 107      -6.535   6.852   6.801  1.00 70.04
ATOM   1603  CA  ASN A 107      -7.542   8.572   6.029  1.00 15.51
ATOM   1604  HA  ASN A 107      -7.451   9.527   6.526  1.00  5.32
ATOM   1605  CB  ASN A 107      -6.585   8.519   4.829  1.00  4.30
ATOM   1606 1HB  ASN A 107      -5.565   8.541   5.183  1.00 71.40
ATOM   1607 2HB  ASN A 107      -6.750   7.589   4.305  1.00 34.14
ATOM   1608  CG  ASN A 107      -6.781   9.669   3.837  1.00 22.43
ATOM   1609  OD1 ASN A 107      -6.202  10.735   3.997  1.00 34.11
ATOM   1610  ND2 ASN A 107      -7.559   9.445   2.799  1.00 13.22
ATOM   1611 2HD2 ASN A 107      -7.983   8.571   2.697  1.00 74.12
ATOM   1612 1HD2 ASN A 107      -7.682  10.172   2.147  1.00 34.42
ATOM   1613  C   ASN A 107      -8.990   8.405   5.580  1.00 42.02
ATOM   1614  O   ASN A 107      -9.712   9.379   5.354  1.00 71.34
ATOM   1615  N   ILE A 108      -9.421   7.157   5.506  1.00 71.01
ATOM   1616  H   ILE A 108      -8.791   6.426   5.695  1.00 73.24
ATOM   1617  CA  ILE A 108     -10.792   6.827   5.170  1.00  5.45
ATOM   1618  HA  ILE A 108     -11.039   7.380   4.275  1.00 61.35
ATOM   1619  CB  ILE A 108     -10.958   5.303   4.894  1.00 25.32
ATOM   1620  HB  ILE A 108     -10.624   4.759   5.765  1.00 72.50
ATOM   1621  CG2 ILE A 108     -12.424   4.947   4.624  1.00 12.22
ATOM   1622 1HG2 ILE A 108     -12.510   3.887   4.440  1.00 62.51
ATOM   1623 2HG2 ILE A 108     -12.770   5.490   3.758  1.00 43.10
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ATOM   1624 3HG2 ILE A 108     -13.023   5.217   5.481  1.00 55.20
ATOM   1625  CG1 ILE A 108     -10.078   4.904   3.699  1.00 11.41
ATOM   1626 1HG1 ILE A 108     -10.482   5.356   2.805  1.00  0.13
ATOM   1627 2HG1 ILE A 108      -9.075   5.269   3.862  1.00  4.23
ATOM   1628  CD1 ILE A 108     -10.003   3.419   3.446  1.00 12.31
ATOM   1629 1HD1 ILE A 108     -10.993   3.033   3.251  1.00 33.33
ATOM   1630 2HD1 ILE A 108      -9.586   2.937   4.318  1.00 51.25
ATOM   1631 3HD1 ILE A 108      -9.366   3.238   2.594  1.00 74.12
ATOM   1632  C   ILE A 108     -11.729   7.301   6.295  1.00 64.01
ATOM   1633  O   ILE A 108     -12.793   7.814   6.030  1.00 15.32
ATOM   1634  N   ARG A 109     -11.288   7.147   7.555  1.00  0.32
ATOM   1635  H   ARG A 109     -10.426   6.690   7.684  1.00 53.52
ATOM   1636  CA  ARG A 109     -12.062   7.612   8.726  1.00 44.41
ATOM   1637  HA  ARG A 109     -13.016   7.106   8.723  1.00 52.44
ATOM   1638  CB  ARG A 109     -11.333   7.328  10.058  1.00 61.41
ATOM   1639 1HB  ARG A 109     -10.434   7.927  10.085  1.00 31.32
ATOM   1640 2HB  ARG A 109     -11.976   7.641  10.867  1.00 43.31
ATOM   1641  CG  ARG A 109     -10.930   5.884  10.298  1.00 11.41
ATOM   1642 1HG  ARG A 109     -10.246   5.582   9.519  1.00 51.33
ATOM   1643 2HG  ARG A 109     -10.430   5.817  11.254  1.00 14.14
ATOM   1644  CD  ARG A 109     -12.108   4.935  10.289  1.00 11.53
ATOM   1645 1HD  ARG A 109     -12.787   5.210  11.083  1.00 42.20
ATOM   1646 2HD  ARG A 109     -12.613   5.010   9.338  1.00 73.35
ATOM   1647  NE  ARG A 109     -11.669   3.555  10.486  1.00 64.12
ATOM   1648  HE  ARG A 109     -10.740   3.461  10.847  1.00 72.03
ATOM   1649  CZ  ARG A 109     -12.370   2.461  10.213  1.00 61.31
ATOM   1650  NH1 ARG A 109     -13.602   2.556   9.696  1.00 25.31
ATOM   1651 1HH1 ARG A 109     -14.024   3.444   9.512  1.00 71.33
ATOM   1652 2HH1 ARG A 109     -14.128   1.739   9.447  1.00 11.15
ATOM   1653  NH2 ARG A 109     -11.831   1.264  10.428  1.00 20.35
ATOM   1654 1HH2 ARG A 109     -10.881   1.183  10.796  1.00 74.22
ATOM   1655 2HH2 ARG A 109     -12.291   0.394  10.253  1.00  1.21
ATOM   1656  C   ARG A 109     -12.295   9.116   8.626  1.00 40.30
ATOM   1657  O   ARG A 109     -13.361   9.612   8.968  1.00 45.00
ATOM   1658  N   TYR A 110     -11.285   9.824   8.144  1.00 72.24
ATOM   1659  H   TYR A 110     -10.456   9.350   7.914  1.00 71.04
ATOM   1660  CA  TYR A 110     -11.361  11.263   7.958  1.00 22.05
ATOM   1661  HA  TYR A 110     -11.692  11.698   8.889  1.00 33.32
ATOM   1662  CB  TYR A 110      -9.970  11.821   7.608  1.00  0.02
ATOM   1663 1HB  TYR A 110      -9.281  11.561   8.398  1.00 21.15
ATOM   1664 2HB  TYR A 110      -9.634  11.362   6.690  1.00 71.13
ATOM   1665  CG  TYR A 110      -9.911  13.326   7.430  1.00 12.42
ATOM   1666  CD1 TYR A 110      -9.866  13.899   6.162  1.00 73.31
ATOM   1667  HD1 TYR A 110      -9.876  13.255   5.296  1.00 44.04
ATOM   1668  CE1 TYR A 110      -9.808  15.269   6.000  1.00 52.52
ATOM   1669  HE1 TYR A 110      -9.774  15.696   5.008  1.00 62.11
ATOM   1670  CZ  TYR A 110      -9.796  16.088   7.110  1.00 21.02
ATOM   1671  CE2 TYR A 110      -9.841  15.547   8.376  1.00 22.54
ATOM   1672  HE2 TYR A 110      -9.831  16.186   9.245  1.00 55.32
ATOM   1673  CD2 TYR A 110      -9.897  14.175   8.532  1.00 64.44
ATOM   1674  HD2 TYR A 110      -9.932  13.747   9.523  1.00 41.15
ATOM   1675  OH  TYR A 110      -9.737  17.454   6.952  1.00 22.14
ATOM   1676  HH  TYR A 110      -9.112  17.824   7.580  1.00 40.01
ATOM   1677  C   TYR A 110     -12.388  11.601   6.871  1.00 65.44
ATOM   1678  O   TYR A 110     -13.215  12.478   7.041  1.00 60.33
ATOM   1679  N   ALA A 111     -12.324  10.888   5.763  1.00 42.11
ATOM   1680  H   ALA A 111     -11.612  10.217   5.671  1.00 40.12
ATOM   1681  CA  ALA A 111     -13.275  11.071   4.661  1.00 21.33
ATOM   1682  HA  ALA A 111     -13.292  12.123   4.420  1.00 12.22
ATOM   1683  CB  ALA A 111     -12.811  10.303   3.432  1.00 64.32
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ATOM   1684 1HB  ALA A 111     -12.811   9.245   3.647  1.00 21.42
ATOM   1685 2HB  ALA A 111     -11.812  10.617   3.165  1.00 71.42
ATOM   1686 3HB  ALA A 111     -13.483  10.503   2.609  1.00  1.15
ATOM   1687  C   ALA A 111     -14.698  10.639   5.062  1.00 21.45
ATOM   1688  O   ALA A 111     -15.670  11.101   4.512  1.00 53.14
ATOM   1689  N   ASN A 112     -14.776   9.757   6.042  1.00  3.41
ATOM   1690  H   ASN A 112     -13.935   9.464   6.455  1.00 15.11
ATOM   1691  CA  ASN A 112     -16.033   9.164   6.515  1.00 22.13
ATOM   1692  HA  ASN A 112     -16.601   8.824   5.662  1.00 51.01
ATOM   1693  CB  ASN A 112     -15.690   7.936   7.409  1.00 62.02
ATOM   1694 1HB  ASN A 112     -14.889   7.388   6.936  1.00 64.43
ATOM   1695 2HB  ASN A 112     -15.324   8.306   8.355  1.00 13.25
ATOM   1696  CG  ASN A 112     -16.825   6.924   7.689  1.00 22.30
ATOM   1697  OD1 ASN A 112     -16.554   5.739   7.882  1.00  2.31
ATOM   1698  ND2 ASN A 112     -18.060   7.349   7.734  1.00 71.21
ATOM   1699 2HD2 ASN A 112     -18.238   8.310   7.592  1.00 40.34
ATOM   1700 1HD2 ASN A 112     -18.765   6.692   7.904  1.00 44.25
ATOM   1701  C   ASN A 112     -16.860  10.194   7.314  1.00 74.51
ATOM   1702  O   ASN A 112     -18.051   9.999   7.544  1.00  0.52
ATOM   1703  N   THR A 113     -16.241  11.272   7.727  1.00 52.13
ATOM   1704  H   THR A 113     -15.305  11.426   7.481  1.00 42.44
ATOM   1705  CA  THR A 113     -16.940  12.262   8.511  1.00 73.21
ATOM   1706  HA  THR A 113     -17.909  11.839   8.741  1.00  0.43
ATOM   1707  CB  THR A 113     -16.191  12.562   9.862  1.00 15.34
ATOM   1708  HB  THR A 113     -16.096  11.630  10.401  1.00 15.24
ATOM   1709  OG1 THR A 113     -16.951  13.467  10.672  1.00 63.40
ATOM   1710  HG1 THR A 113     -17.288  14.136  10.059  1.00 61.21
ATOM   1711  CG2 THR A 113     -14.804  13.145   9.633  1.00 32.13
ATOM   1712 1HG2 THR A 113     -14.331  13.337  10.586  1.00 71.03
ATOM   1713 2HG2 THR A 113     -14.890  14.069   9.081  1.00 33.20
ATOM   1714 3HG2 THR A 113     -14.206  12.444   9.069  1.00 73.41
ATOM   1715  C   THR A 113     -17.181  13.541   7.686  1.00 53.04
ATOM   1716  O   THR A 113     -17.389  14.633   8.241  1.00 23.44
ATOM   1717  N   HIS A 114     -17.216  13.383   6.384  1.00  4.34
ATOM   1718  H   HIS A 114     -17.153  12.500   5.959  1.00 33.22
ATOM   1719  CA  HIS A 114     -17.447  14.472   5.479  1.00 24.54
ATOM   1720  HA  HIS A 114     -17.648  15.362   6.057  1.00 75.11
ATOM   1721  CB  HIS A 114     -16.226  14.706   4.554  1.00 61.21
ATOM   1722 1HB  HIS A 114     -15.340  14.810   5.162  1.00 43.22
ATOM   1723 2HB  HIS A 114     -16.110  13.846   3.910  1.00 73.10
ATOM   1724  CG  HIS A 114     -16.331  15.941   3.673  1.00 74.34
ATOM   1725  ND1 HIS A 114     -17.516  16.422   3.162  1.00 43.22
ATOM   1726  CD2 HIS A 114     -15.370  16.791   3.234  1.00 51.43
ATOM   1727  HD1 HIS A 114     -18.397  16.007   3.353  1.00  3.41
ATOM   1728  CE1 HIS A 114     -17.258  17.510   2.448  1.00 42.32
ATOM   1729  NE2 HIS A 114     -15.963  17.789   2.454  1.00 53.32
ATOM   1730  HD2 HIS A 114     -14.314  16.718   3.447  1.00 54.34
ATOM   1731  HE1 HIS A 114     -18.006  18.093   1.932  1.00  0.43
ATOM   1732  C   HIS A 114     -18.673  14.115   4.657  1.00 41.30
ATOM   1733  O   HIS A 114     -18.750  12.963   4.210  1.00 22.30
TER    1734       HIS A 114
ENDMDL
MODEL        3
ATOM      1  N   MET A   1     -12.742  -6.594   9.961  1.00  2.13
ATOM      2  CA  MET A   1     -12.187  -5.958   8.769  1.00 31.35
ATOM      3  HA  MET A   1     -12.985  -5.759   8.068  1.00 61.15
ATOM      4  CB  MET A   1     -11.456  -4.654   9.153  1.00  4.42
ATOM      5 1HB  MET A   1     -12.145  -4.012   9.682  1.00 44.44
ATOM      6 2HB  MET A   1     -10.638  -4.902   9.812  1.00 25.24
ATOM      7  CG  MET A   1     -10.893  -3.869   7.968  1.00 31.32
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ATOM      8 1HG  MET A   1     -10.114  -4.456   7.504  1.00  3.53
ATOM      9 2HG  MET A   1     -11.688  -3.708   7.255  1.00 40.41
ATOM     10  SD  MET A   1     -10.205  -2.277   8.438  1.00 52.54
ATOM     11  CE  MET A   1      -8.780  -2.774   9.422  1.00 21.20
ATOM     12 1HE  MET A   1      -9.109  -3.352  10.273  1.00 55.43
ATOM     13 2HE  MET A   1      -8.255  -1.894   9.766  1.00 13.11
ATOM     14 3HE  MET A   1      -8.116  -3.373   8.816  1.00 53.14
ATOM     15  C   MET A   1     -11.239  -6.946   8.183  1.00 45.34
ATOM     16  O   MET A   1     -10.692  -7.735   8.947  1.00 61.04
ATOM     17  N   ASP A   2     -11.097  -6.940   6.854  1.00  1.02
ATOM     18  H   ASP A   2     -11.608  -6.300   6.316  1.00 41.51
ATOM     19  CA  ASP A   2     -10.202  -7.860   6.113  1.00 43.01
ATOM     20  HA  ASP A   2     -10.161  -7.490   5.100  1.00 42.44
ATOM     21  CB  ASP A   2      -8.728  -7.883   6.651  1.00 14.02
ATOM     22 1HB  ASP A   2      -8.241  -6.954   6.395  1.00  0.24
ATOM     23 2HB  ASP A   2      -8.747  -7.991   7.726  1.00 72.04
ATOM     24  CG  ASP A   2      -7.899  -9.053   6.055  1.00 20.41
ATOM     25  OD1 ASP A   2      -7.279  -8.882   4.983  1.00 54.15
ATOM     26  OD2 ASP A   2      -7.923 -10.202   6.625  1.00 63.11
ATOM     27  C   ASP A   2     -10.690  -9.276   6.053  1.00 60.11
ATOM     28  O   ASP A   2     -11.302  -9.786   6.993  1.00 64.52
ATOM     29  N   LYS A   3     -10.474  -9.876   4.906  1.00 40.23
ATOM     30  H   LYS A   3     -10.325  -9.337   4.102  1.00 21.24
ATOM     31  CA  LYS A   3     -10.435 -11.280   4.794  1.00 20.31
ATOM     32  HA  LYS A   3      -9.771 -11.548   5.603  1.00  5.20
ATOM     33  CB  LYS A   3     -11.750 -12.044   4.964  1.00 55.03
ATOM     34 1HB  LYS A   3     -12.378 -11.518   5.666  1.00 52.44
ATOM     35 2HB  LYS A   3     -12.250 -12.112   4.009  1.00  0.30
ATOM     36  CG  LYS A   3     -11.499 -13.481   5.483  1.00 61.53
ATOM     37 1HG  LYS A   3     -12.337 -14.101   5.201  1.00 33.34
ATOM     38 2HG  LYS A   3     -10.608 -13.861   5.006  1.00 44.22
ATOM     39  CD  LYS A   3     -11.315 -13.582   7.049  1.00 41.43
ATOM     40 1HD  LYS A   3     -12.277 -13.415   7.510  1.00 43.40
ATOM     41 2HD  LYS A   3     -10.998 -14.587   7.280  1.00 74.44
ATOM     42  CE  LYS A   3     -10.310 -12.573   7.688  1.00  1.22
ATOM     43 1HE  LYS A   3     -10.655 -11.569   7.490  1.00 24.11
ATOM     44 2HE  LYS A   3     -10.326 -12.730   8.758  1.00 64.03
ATOM     45  NZ  LYS A   3      -8.898 -12.692   7.203  1.00 21.42
ATOM     46 1HZ  LYS A   3      -8.366 -13.428   7.708  1.00 43.04
ATOM     47 2HZ  LYS A   3      -8.407 -11.771   7.296  1.00 24.41
ATOM     48 3HZ  LYS A   3      -8.880 -12.915   6.192  1.00 63.12
ATOM     49  C   LYS A   3      -9.663 -11.687   3.561  1.00 73.12
ATOM     50  O   LYS A   3     -10.226 -11.995   2.512  1.00 72.43
ATOM     51  N   GLY A   4      -8.364 -11.551   3.674  1.00 65.52
ATOM     52  H   GLY A   4      -7.982 -11.087   4.456  1.00 72.12
ATOM     53  CA  GLY A   4      -7.462 -11.969   2.633  1.00 22.42
ATOM     54 1HA  GLY A   4      -7.540 -13.040   2.503  1.00 43.34
ATOM     55 2HA  GLY A   4      -7.721 -11.472   1.709  1.00 32.34
ATOM     56  C   GLY A   4      -6.061 -11.610   3.005  1.00 54.43
ATOM     57  O   GLY A   4      -5.352 -10.995   2.230  1.00 20.13
ATOM     58  N   THR A   5      -5.703 -11.968   4.207  1.00 43.25
ATOM     59  H   THR A   5      -6.289 -12.468   4.806  1.00 73.02
ATOM     60  CA  THR A   5      -4.427 -11.672   4.786  1.00 53.30
ATOM     61  HA  THR A   5      -4.049 -10.746   4.382  1.00 21.04
ATOM     62  CB  THR A   5      -4.635 -11.480   6.285  1.00 71.42
ATOM     63  HB  THR A   5      -3.931 -12.109   6.812  1.00 73.40
ATOM     64  OG1 THR A   5      -5.995 -11.907   6.620  1.00 42.40
ATOM     65  HG1 THR A   5      -6.506 -11.077   6.653  1.00 14.23
ATOM     66  CG2 THR A   5      -4.432 -10.027   6.681  1.00  1.14
ATOM     67 1HG2 THR A   5      -5.142  -9.408   6.152  1.00 65.14
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ATOM     68 2HG2 THR A   5      -3.427  -9.718   6.431  1.00 75.54
ATOM     69 3HG2 THR A   5      -4.586  -9.918   7.745  1.00 52.14
ATOM     70  C   THR A   5      -3.431 -12.804   4.557  1.00 70.21
ATOM     71  O   THR A   5      -3.662 -13.940   4.984  1.00 32.25
ATOM     72  N   GLN A   6      -2.348 -12.505   3.873  1.00 45.44
ATOM     73  H   GLN A   6      -2.253 -11.589   3.524  1.00 33.44
ATOM     74  CA  GLN A   6      -1.290 -13.472   3.644  1.00  3.40
ATOM     75  HA  GLN A   6      -1.369 -14.234   4.404  1.00  2.13
ATOM     76  CB  GLN A   6      -1.391 -14.133   2.258  1.00 61.11
ATOM     77 1HB  GLN A   6      -1.319 -13.363   1.504  1.00 10.42
ATOM     78 2HB  GLN A   6      -0.553 -14.804   2.139  1.00  1.42
ATOM     79  CG  GLN A   6      -2.670 -14.919   2.004  1.00 12.13
ATOM     80 1HG  GLN A   6      -2.790 -15.647   2.791  1.00 52.12
ATOM     81 2HG  GLN A   6      -3.506 -14.234   2.020  1.00  3.43
ATOM     82  CD  GLN A   6      -2.657 -15.644   0.674  1.00 54.33
ATOM     83  OE1 GLN A   6      -2.030 -15.213  -0.284  1.00  0.13
ATOM     84  NE2 GLN A   6      -3.352 -16.750   0.602  1.00 31.32
ATOM     85 2HE2 GLN A   6      -3.836 -17.046   1.401  1.00 52.32
ATOM     86 1HE2 GLN A   6      -3.349 -17.223  -0.256  1.00  4.04
ATOM     87  C   GLN A   6       0.059 -12.793   3.766  1.00 33.05
ATOM     88  O   GLN A   6       0.231 -11.653   3.333  1.00 12.53
ATOM     89  N   TYR A   7       0.981 -13.467   4.398  1.00 31.13
ATOM     90  H   TYR A   7       0.754 -14.332   4.800  1.00  2.34
ATOM     91  CA  TYR A   7       2.346 -13.017   4.508  1.00  1.15
ATOM     92  HA  TYR A   7       2.425 -12.133   3.891  1.00 33.43
ATOM     93  CB  TYR A   7       2.716 -12.657   5.978  1.00  1.34
ATOM     94 1HB  TYR A   7       3.768 -12.412   6.023  1.00 50.01
ATOM     95 2HB  TYR A   7       2.149 -11.784   6.270  1.00 71.13
ATOM     96  CG  TYR A   7       2.464 -13.748   7.018  1.00 20.15
ATOM     97  CD1 TYR A   7       1.194 -13.944   7.556  1.00 43.32
ATOM     98  HD1 TYR A   7       0.381 -13.319   7.220  1.00  3.12
ATOM     99  CE1 TYR A   7       0.961 -14.922   8.502  1.00  4.52
ATOM    100  HE1 TYR A   7      -0.033 -15.058   8.906  1.00 44.00
ATOM    101  CZ  TYR A   7       1.999 -15.722   8.928  1.00 34.10
ATOM    102  CE2 TYR A   7       3.268 -15.549   8.416  1.00 54.54
ATOM    103  HE2 TYR A   7       4.081 -16.176   8.749  1.00 33.44
ATOM    104  CD2 TYR A   7       3.494 -14.568   7.468  1.00  4.11
ATOM    105  HD2 TYR A   7       4.488 -14.430   7.066  1.00 24.32
ATOM    106  OH  TYR A   7       1.769 -16.696   9.872  1.00 14.02
ATOM    107  HH  TYR A   7       0.972 -17.181   9.643  1.00 40.44
ATOM    108  C   TYR A   7       3.265 -14.076   3.905  1.00  3.34
ATOM    109  O   TYR A   7       3.316 -15.201   4.388  1.00 54.54
ATOM    110  N   LYS A   8       3.938 -13.745   2.837  1.00 15.34
ATOM    111  H   LYS A   8       3.867 -12.833   2.468  1.00 11.21
ATOM    112  CA  LYS A   8       4.778 -14.709   2.154  1.00 63.43
ATOM    113  HA  LYS A   8       5.150 -15.433   2.865  1.00 52.45
ATOM    114  CB  LYS A   8       3.928 -15.439   1.102  1.00 21.22
ATOM    115 1HB  LYS A   8       3.092 -15.909   1.600  1.00  4.22
ATOM    116 2HB  LYS A   8       3.548 -14.694   0.420  1.00 31.03
ATOM    117  CG  LYS A   8       4.660 -16.506   0.295  1.00 72.52
ATOM    118 1HG  LYS A   8       5.517 -16.055  -0.182  1.00 53.43
ATOM    119 2HG  LYS A   8       4.991 -17.287   0.965  1.00 73.22
ATOM    120  CD  LYS A   8       3.756 -17.116  -0.781  1.00 63.21
ATOM    121 1HD  LYS A   8       4.300 -17.896  -1.291  1.00 30.53
ATOM    122 2HD  LYS A   8       2.886 -17.543  -0.301  1.00 72.31
ATOM    123  CE  LYS A   8       3.296 -16.077  -1.816  1.00 63.33
ATOM    124 1HE  LYS A   8       2.626 -16.564  -2.507  1.00 53.23
ATOM    125 2HE  LYS A   8       2.765 -15.280  -1.318  1.00 63.33
ATOM    126  NZ  LYS A   8       4.426 -15.506  -2.590  1.00 33.23
ATOM    127 1HZ  LYS A   8       5.168 -15.117  -1.956  1.00 54.31
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ATOM    128 2HZ  LYS A   8       4.138 -14.709  -3.187  1.00 31.50
ATOM    129 3HZ  LYS A   8       4.899 -16.222  -3.174  1.00 15.04
ATOM    130  C   LYS A   8       5.930 -13.996   1.473  1.00  1.25
ATOM    131  O   LYS A   8       5.702 -13.050   0.790  1.00 32.33
ATOM    132  N   ASP A   9       7.166 -14.435   1.744  1.00 32.44
ATOM    133  H   ASP A   9       7.248 -15.157   2.400  1.00 54.20
ATOM    134  CA  ASP A   9       8.438 -13.918   1.102  1.00 15.14
ATOM    135  HA  ASP A   9       9.237 -14.275   1.736  1.00 60.11
ATOM    136  CB  ASP A   9       8.668 -14.499  -0.344  1.00  1.02
ATOM    137 1HB  ASP A   9       9.637 -14.174  -0.692  1.00 32.54
ATOM    138 2HB  ASP A   9       8.675 -15.576  -0.278  1.00 61.32
ATOM    139  CG  ASP A   9       7.642 -14.083  -1.411  1.00  1.31
ATOM    140  OD1 ASP A   9       7.865 -13.082  -2.135  1.00 40.31
ATOM    141  OD2 ASP A   9       6.619 -14.778  -1.557  1.00 43.33
ATOM    142  C   ASP A   9       8.554 -12.381   1.096  1.00 34.14
ATOM    143  O   ASP A   9       9.170 -11.788   0.211  1.00 21.22
ATOM    144  N   GLY A  10       8.083 -11.756   2.154  1.00 74.34
ATOM    145  H   GLY A  10       7.674 -12.288   2.865  1.00 71.24
ATOM    146  CA  GLY A  10       8.159 -10.307   2.245  1.00 32.31
ATOM    147 1HA  GLY A  10       8.027 -10.014   3.276  1.00 70.12
ATOM    148 2HA  GLY A  10       9.135  -9.986   1.911  1.00 75.15
ATOM    149  C   GLY A  10       7.102  -9.621   1.398  1.00 72.14
ATOM    150  O   GLY A  10       7.232  -8.466   1.060  1.00 70.44
ATOM    151  N   TYR A  11       6.103 -10.365   1.039  1.00  4.43
ATOM    152  H   TYR A  11       6.126 -11.315   1.269  1.00 73.53
ATOM    153  CA  TYR A  11       4.959  -9.900   0.288  1.00 63.34
ATOM    154  HA  TYR A  11       5.096  -8.873  -0.015  1.00 71.20
ATOM    155  CB  TYR A  11       4.788 -10.810  -0.956  1.00 63.55
ATOM    156 1HB  TYR A  11       5.746 -10.904  -1.446  1.00 13.41
ATOM    157 2HB  TYR A  11       4.489 -11.790  -0.614  1.00 64.21
ATOM    158  CG  TYR A  11       3.797 -10.360  -2.011  1.00 14.12
ATOM    159  CD1 TYR A  11       2.483 -10.792  -2.010  1.00 63.42
ATOM    160  HD1 TYR A  11       2.145 -11.446  -1.220  1.00 53.45
ATOM    161  CE1 TYR A  11       1.607 -10.397  -3.007  1.00 63.13
ATOM    162  HE1 TYR A  11       0.584 -10.739  -2.998  1.00 62.14
ATOM    163  CZ  TYR A  11       2.045  -9.561  -4.006  1.00 75.42
ATOM    164  CE2 TYR A  11       3.336  -9.123  -4.022  1.00 72.12
ATOM    165  HE2 TYR A  11       3.680  -8.467  -4.807  1.00 43.50
ATOM    166  CD2 TYR A  11       4.199  -9.528  -3.032  1.00  0.12
ATOM    167  HD2 TYR A  11       5.221  -9.186  -3.036  1.00  2.33
ATOM    168  OH  TYR A  11       1.178  -9.167  -5.003  1.00 54.01
ATOM    169  HH  TYR A  11       1.626  -9.243  -5.850  1.00 52.34
ATOM    170  C   TYR A  11       3.751 -10.012   1.219  1.00  3.12
ATOM    171  O   TYR A  11       3.502 -11.085   1.799  1.00 12.41
ATOM    172  N   TYR A  12       3.057  -8.923   1.417  1.00  1.53
ATOM    173  H   TYR A  12       3.327  -8.112   0.929  1.00 55.23
ATOM    174  CA  TYR A  12       1.920  -8.896   2.320  1.00 44.34
ATOM    175  HA  TYR A  12       1.845  -9.862   2.793  1.00 25.22
ATOM    176  CB  TYR A  12       2.107  -7.825   3.406  1.00 41.32
ATOM    177 1HB  TYR A  12       3.078  -7.917   3.865  1.00 23.43
ATOM    178 2HB  TYR A  12       2.044  -6.854   2.938  1.00 11.30
ATOM    179  CG  TYR A  12       1.075  -7.863   4.515  1.00 64.01
ATOM    180  CD1 TYR A  12       0.100  -6.880   4.628  1.00 30.23
ATOM    181  HD1 TYR A  12       0.077  -6.076   3.908  1.00 71.24
ATOM    182  CE1 TYR A  12      -0.831  -6.917   5.647  1.00 71.21
ATOM    183  HE1 TYR A  12      -1.583  -6.145   5.720  1.00 42.31
ATOM    184  CZ  TYR A  12      -0.801  -7.946   6.564  1.00  4.14
ATOM    185  CE2 TYR A  12       0.155  -8.933   6.471  1.00 72.40
ATOM    186  HE2 TYR A  12       0.179  -9.738   7.190  1.00 72.43
ATOM    187  CD2 TYR A  12       1.084  -8.888   5.453  1.00 73.30
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ATOM    188  HD2 TYR A  12       1.835  -9.660   5.376  1.00  4.00
ATOM    189  OH  TYR A  12      -1.725  -7.983   7.582  1.00  3.10
ATOM    190  HH  TYR A  12      -1.304  -8.199   8.417  1.00 24.20
ATOM    191  C   TYR A  12       0.653  -8.623   1.550  1.00  5.11
ATOM    192  O   TYR A  12       0.612  -7.727   0.705  1.00  3.52
ATOM    193  N   ILE A  13      -0.350  -9.400   1.825  1.00 54.24
ATOM    194  H   ILE A  13      -0.228 -10.123   2.481  1.00 64.34
ATOM    195  CA  ILE A  13      -1.638  -9.251   1.206  1.00 22.23
ATOM    196  HA  ILE A  13      -1.623  -8.397   0.547  1.00 52.12
ATOM    197  CB  ILE A  13      -2.012 -10.528   0.393  1.00 40.34
ATOM    198  HB  ILE A  13      -2.152 -11.344   1.085  1.00 75.24
ATOM    199  CG2 ILE A  13      -3.315 -10.314  -0.374  1.00  3.32
ATOM    200 1HG2 ILE A  13      -4.109 -10.094   0.325  1.00 70.22
ATOM    201 2HG2 ILE A  13      -3.560 -11.207  -0.927  1.00 64.14
ATOM    202 3HG2 ILE A  13      -3.199  -9.486  -1.057  1.00 75.34
ATOM    203  CG1 ILE A  13      -0.882 -10.885  -0.579  1.00 21.01
ATOM    204 1HG1 ILE A  13      -0.779 -10.087  -1.299  1.00 62.54
ATOM    205 2HG1 ILE A  13       0.041 -10.976  -0.024  1.00 14.33
ATOM    206  CD1 ILE A  13      -1.094 -12.171  -1.349  1.00 32.41
ATOM    207 1HD1 ILE A  13      -1.974 -12.085  -1.969  1.00 11.53
ATOM    208 2HD1 ILE A  13      -1.223 -12.986  -0.653  1.00 22.51
ATOM    209 3HD1 ILE A  13      -0.229 -12.363  -1.965  1.00 40.10
ATOM    210  C   ILE A  13      -2.670  -9.051   2.308  1.00 14.42
ATOM    211  O   ILE A  13      -2.595  -9.714   3.340  1.00 72.13
ATOM    212  N   THR A  14      -3.567  -8.111   2.117  1.00 61.02
ATOM    213  H   THR A  14      -3.497  -7.528   1.330  1.00 21.20
ATOM    214  CA  THR A  14      -4.658  -7.878   3.036  1.00 60.32
ATOM    215  HA  THR A  14      -4.996  -8.844   3.384  1.00 12.43
ATOM    216  CB  THR A  14      -4.225  -7.009   4.258  1.00  0.24
ATOM    217  HB  THR A  14      -3.416  -7.516   4.762  1.00 35.43
ATOM    218  OG1 THR A  14      -5.317  -6.856   5.179  1.00 74.12
ATOM    219  HG1 THR A  14      -5.818  -7.680   5.247  1.00 62.41
ATOM    220  CG2 THR A  14      -3.744  -5.629   3.813  1.00 23.24
ATOM    221 1HG2 THR A  14      -3.459  -5.049   4.678  1.00 73.11
ATOM    222 2HG2 THR A  14      -4.540  -5.124   3.287  1.00 61.22
ATOM    223 3HG2 THR A  14      -2.893  -5.741   3.157  1.00 41.42
ATOM    224  C   THR A  14      -5.813  -7.213   2.279  1.00 72.35
ATOM    225  O   THR A  14      -5.601  -6.574   1.237  1.00 24.32
ATOM    226  N   THR A  15      -7.013  -7.404   2.752  1.00 24.11
ATOM    227  H   THR A  15      -7.111  -7.942   3.574  1.00 43.02
ATOM    228  CA  THR A  15      -8.181  -6.845   2.134  1.00 15.43
ATOM    229  HA  THR A  15      -7.938  -6.488   1.146  1.00 34.12
ATOM    230  CB  THR A  15      -9.233  -7.937   2.002  1.00 71.15
ATOM    231  HB  THR A  15      -9.642  -8.146   2.978  1.00 32.42
ATOM    232  OG1 THR A  15      -8.597  -9.104   1.488  1.00 73.01
ATOM    233  HG1 THR A  15      -7.789  -9.170   2.016  1.00 32.22
ATOM    234  CG2 THR A  15     -10.351  -7.513   1.063  1.00 71.35
ATOM    235 1HG2 THR A  15     -11.081  -8.306   0.989  1.00 33.25
ATOM    236 2HG2 THR A  15      -9.941  -7.312   0.083  1.00 22.02
ATOM    237 3HG2 THR A  15     -10.824  -6.621   1.444  1.00 53.12
ATOM    238  C   THR A  15      -8.770  -5.720   2.989  1.00 24.34
ATOM    239  O   THR A  15      -9.155  -5.935   4.123  1.00 44.54
ATOM    240  N   LEU A  16      -8.883  -4.557   2.435  1.00 52.20
ATOM    241  H   LEU A  16      -8.576  -4.394   1.514  1.00 64.34
ATOM    242  CA  LEU A  16      -9.495  -3.472   3.133  1.00  5.44
ATOM    243  HA  LEU A  16      -9.613  -3.769   4.164  1.00 51.20
ATOM    244  CB  LEU A  16      -8.646  -2.208   3.070  1.00 32.53
ATOM    245 1HB  LEU A  16      -8.378  -2.049   2.036  1.00 42.54
ATOM    246 2HB  LEU A  16      -9.261  -1.384   3.393  1.00  3.53
ATOM    247  CG  LEU A  16      -7.365  -2.226   3.901  1.00 20.03
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ATOM    248  HG  LEU A  16      -6.727  -3.026   3.556  1.00 21.44
ATOM    249  CD1 LEU A  16      -6.613  -0.920   3.740  1.00 41.03
ATOM    250 1HD1 LEU A  16      -7.241  -0.104   4.067  1.00 72.11
ATOM    251 2HD1 LEU A  16      -6.352  -0.780   2.701  1.00 70.43
ATOM    252 3HD1 LEU A  16      -5.714  -0.943   4.338  1.00 71.32
ATOM    253  CD2 LEU A  16      -7.693  -2.475   5.371  1.00 54.13
ATOM    254 1HD2 LEU A  16      -8.156  -3.445   5.481  1.00 11.23
ATOM    255 2HD2 LEU A  16      -8.389  -1.723   5.709  1.00 35.02
ATOM    256 3HD2 LEU A  16      -6.792  -2.433   5.964  1.00 20.22
ATOM    257  C   LEU A  16     -10.850  -3.233   2.564  1.00 71.32
ATOM    258  O   LEU A  16     -10.998  -3.014   1.368  1.00  1.43
ATOM    259  N   ASN A  17     -11.839  -3.295   3.406  1.00 65.01
ATOM    260  H   ASN A  17     -11.643  -3.442   4.352  1.00 24.14
ATOM    261  CA  ASN A  17     -13.217  -3.146   2.981  1.00 32.10
ATOM    262  HA  ASN A  17     -13.251  -3.579   1.992  1.00 22.11
ATOM    263  CB  ASN A  17     -14.193  -3.944   3.881  1.00  3.03
ATOM    264 1HB  ASN A  17     -15.209  -3.756   3.574  1.00 41.45
ATOM    265 2HB  ASN A  17     -13.961  -4.989   3.740  1.00 61.31
ATOM    266  CG  ASN A  17     -14.086  -3.641   5.380  1.00 63.13
ATOM    267  OD1 ASN A  17     -13.339  -4.315   6.111  1.00 13.52
ATOM    268  ND2 ASN A  17     -14.793  -2.643   5.842  1.00 43.12
ATOM    269 2HD2 ASN A  17     -15.335  -2.155   5.181  1.00 63.54
ATOM    270 1HD2 ASN A  17     -14.764  -2.414   6.792  1.00  3.12
ATOM    271  C   ASN A  17     -13.627  -1.683   2.809  1.00 23.22
ATOM    272  O   ASN A  17     -14.506  -1.164   3.501  1.00 32.44
ATOM    273  N   TYR A  18     -12.930  -1.020   1.919  1.00 45.25
ATOM    274  H   TYR A  18     -12.204  -1.488   1.450  1.00 25.22
ATOM    275  CA  TYR A  18     -13.188   0.349   1.568  1.00 62.44
ATOM    276  HA  TYR A  18     -14.196   0.590   1.873  1.00 10.03
ATOM    277  CB  TYR A  18     -12.188   1.303   2.256  1.00  1.34
ATOM    278 1HB  TYR A  18     -11.191   1.078   1.908  1.00 63.21
ATOM    279 2HB  TYR A  18     -12.435   2.316   1.975  1.00 52.44
ATOM    280  CG  TYR A  18     -12.176   1.227   3.783  1.00 13.01
ATOM    281  CD1 TYR A  18     -13.214   1.762   4.538  1.00 44.24
ATOM    282  HD1 TYR A  18     -14.037   2.240   4.029  1.00 54.32
ATOM    283  CE1 TYR A  18     -13.207   1.687   5.919  1.00 20.30
ATOM    284  HE1 TYR A  18     -14.024   2.108   6.486  1.00 43.42
ATOM    285  CZ  TYR A  18     -12.154   1.073   6.568  1.00 12.13
ATOM    286  CE2 TYR A  18     -11.110   0.538   5.844  1.00 51.31
ATOM    287  HE2 TYR A  18     -10.285   0.059   6.351  1.00 52.14
ATOM    288  CD2 TYR A  18     -11.126   0.616   4.462  1.00 23.42
ATOM    289  HD2 TYR A  18     -10.309   0.203   3.891  1.00 32.22
ATOM    290  OH  TYR A  18     -12.155   0.989   7.954  1.00 35.41
ATOM    291  HH  TYR A  18     -13.045   0.722   8.206  1.00 22.30
ATOM    292  C   TYR A  18     -13.084   0.466   0.052  1.00 33.31
ATOM    293  O   TYR A  18     -12.395  -0.345  -0.585  1.00 71.03
ATOM    294  N   ASN A  19     -13.739   1.467  -0.509  1.00 63.45
ATOM    295  H   ASN A  19     -14.177   2.111   0.080  1.00 50.34
ATOM    296  CA  ASN A  19     -13.813   1.656  -1.969  1.00 71.43
ATOM    297  HA  ASN A  19     -14.146   0.726  -2.409  1.00 40.10
ATOM    298  CB  ASN A  19     -14.825   2.762  -2.322  1.00 11.12
ATOM    299 1HB  ASN A  19     -15.795   2.490  -1.933  1.00 52.31
ATOM    300 2HB  ASN A  19     -14.506   3.687  -1.863  1.00 53.10
ATOM    301  CG  ASN A  19     -14.962   2.993  -3.828  1.00 31.21
ATOM    302  OD1 ASN A  19     -14.202   3.760  -4.423  1.00 50.12
ATOM    303  ND2 ASN A  19     -15.941   2.369  -4.443  1.00 73.04
ATOM    304 2HD2 ASN A  19     -16.553   1.782  -3.938  1.00  4.23
ATOM    305 1HD2 ASN A  19     -16.046   2.523  -5.404  1.00 13.44
ATOM    306  C   ASN A  19     -12.447   2.008  -2.546  1.00 33.44
ATOM    307  O   ASN A  19     -11.735   2.839  -1.977  1.00 12.21
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ATOM    308  N   PHE A  20     -12.096   1.382  -3.675  1.00  1.43
ATOM    309  H   PHE A  20     -12.716   0.758  -4.108  1.00 72.43
ATOM    310  CA  PHE A  20     -10.786   1.557  -4.308  1.00 31.30
ATOM    311  HA  PHE A  20     -10.076   1.097  -3.638  1.00  3.13
ATOM    312  CB  PHE A  20     -10.714   0.786  -5.639  1.00 73.02
ATOM    313 1HB  PHE A  20     -10.660  -0.267  -5.402  1.00 61.01
ATOM    314 2HB  PHE A  20     -11.607   0.952  -6.221  1.00 52.23
ATOM    315  CG  PHE A  20      -9.503   1.111  -6.486  1.00 13.43
ATOM    316  CD1 PHE A  20      -9.603   2.002  -7.548  1.00  0.40
ATOM    317  HD1 PHE A  20     -10.558   2.450  -7.776  1.00 70.41
ATOM    318  CE1 PHE A  20      -8.499   2.322  -8.304  1.00 55.40
ATOM    319  HE1 PHE A  20      -8.590   3.017  -9.128  1.00 24.53
ATOM    320  CZ  PHE A  20      -7.280   1.753  -8.014  1.00 12.13
ATOM    321  HZ  PHE A  20      -6.413   2.003  -8.607  1.00 53.14
ATOM    322  CE2 PHE A  20      -7.164   0.864  -6.964  1.00 75.14
ATOM    323  HE2 PHE A  20      -6.207   0.418  -6.739  1.00 74.43
ATOM    324  CD2 PHE A  20      -8.270   0.548  -6.206  1.00 31.14
ATOM    325  HD2 PHE A  20      -8.177  -0.147  -5.386  1.00 20.22
ATOM    326  C   PHE A  20     -10.343   3.014  -4.482  1.00 52.03
ATOM    327  O   PHE A  20      -9.186   3.318  -4.234  1.00 61.43
ATOM    328  N   ASN A  21     -11.256   3.911  -4.858  1.00 44.42
ATOM    329  H   ASN A  21     -12.192   3.635  -4.954  1.00 35.25
ATOM    330  CA  ASN A  21     -10.873   5.314  -5.114  1.00 31.03
ATOM    331  HA  ASN A  21     -10.104   5.299  -5.871  1.00 63.31
ATOM    332  CB  ASN A  21     -12.060   6.147  -5.625  1.00 74.11
ATOM    333 1HB  ASN A  21     -12.448   5.695  -6.527  1.00 12.33
ATOM    334 2HB  ASN A  21     -12.835   6.153  -4.872  1.00 64.24
ATOM    335  CG  ASN A  21     -11.679   7.601  -5.939  1.00  5.02
ATOM    336  OD1 ASN A  21     -10.559   7.897  -6.338  1.00 42.54
ATOM    337  ND2 ASN A  21     -12.606   8.509  -5.755  1.00 21.22
ATOM    338 2HD2 ASN A  21     -13.487   8.231  -5.434  1.00 74.13
ATOM    339 1HD2 ASN A  21     -12.355   9.436  -5.946  1.00 61.12
ATOM    340  C   ASN A  21     -10.290   5.961  -3.863  1.00 24.45
ATOM    341  O   ASN A  21      -9.188   6.500  -3.893  1.00 54.52
ATOM    342  N   THR A  22     -10.983   5.816  -2.747  1.00 10.45
ATOM    343  H   THR A  22     -11.794   5.268  -2.757  1.00 63.34
ATOM    344  CA  THR A  22     -10.536   6.424  -1.518  1.00  4.23
ATOM    345  HA  THR A  22     -10.236   7.425  -1.799  1.00 35.40
ATOM    346  CB  THR A  22     -11.660   6.523  -0.425  1.00 50.52
ATOM    347  HB  THR A  22     -12.466   7.111  -0.840  1.00 43.03
ATOM    348  OG1 THR A  22     -11.183   7.198   0.738  1.00 45.21
ATOM    349  HG1 THR A  22     -10.578   7.898   0.474  1.00 52.24
ATOM    350  CG2 THR A  22     -12.204   5.162  -0.022  1.00 74.25
ATOM    351 1HG2 THR A  22     -12.968   5.283   0.731  1.00 10.25
ATOM    352 2HG2 THR A  22     -11.399   4.559   0.374  1.00 13.52
ATOM    353 3HG2 THR A  22     -12.624   4.670  -0.888  1.00  4.14
ATOM    354  C   THR A  22      -9.256   5.738  -1.010  1.00 13.21
ATOM    355  O   THR A  22      -8.351   6.406  -0.490  1.00 34.51
ATOM    356  N   VAL A  23      -9.169   4.418  -1.199  1.00 25.42
ATOM    357  H   VAL A  23      -9.925   3.940  -1.607  1.00 11.24
ATOM    358  CA  VAL A  23      -7.976   3.664  -0.828  1.00 20.12
ATOM    359  HA  VAL A  23      -7.770   3.873   0.211  1.00 50.32
ATOM    360  CB  VAL A  23      -8.178   2.132  -1.012  1.00  1.31
ATOM    361  HB  VAL A  23      -8.420   1.940  -2.047  1.00 12.34
ATOM    362  CG1 VAL A  23      -6.910   1.367  -0.660  1.00  0.30
ATOM    363 1HG1 VAL A  23      -6.105   1.682  -1.308  1.00 31.21
ATOM    364 2HG1 VAL A  23      -7.084   0.308  -0.785  1.00 12.33
ATOM    365 3HG1 VAL A  23      -6.646   1.567   0.367  1.00  2.55
ATOM    366  CG2 VAL A  23      -9.329   1.641  -0.152  1.00  4.50
ATOM    367 1HG2 VAL A  23      -9.461   0.579  -0.296  1.00 44.53
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ATOM    368 2HG2 VAL A  23     -10.235   2.159  -0.434  1.00 23.53
ATOM    369 3HG2 VAL A  23      -9.110   1.839   0.887  1.00 14.13
ATOM    370  C   VAL A  23      -6.781   4.143  -1.659  1.00 32.20
ATOM    371  O   VAL A  23      -5.692   4.354  -1.124  1.00 41.03
ATOM    372  N   TYR A  24      -7.010   4.342  -2.953  1.00 70.42
ATOM    373  H   TYR A  24      -7.898   4.123  -3.316  1.00 33.21
ATOM    374  CA  TYR A  24      -5.999   4.856  -3.870  1.00 45.13
ATOM    375  HA  TYR A  24      -5.175   4.157  -3.882  1.00 23.23
ATOM    376  CB  TYR A  24      -6.581   4.966  -5.309  1.00  4.55
ATOM    377 1HB  TYR A  24      -6.735   3.970  -5.693  1.00 73.10
ATOM    378 2HB  TYR A  24      -7.530   5.480  -5.264  1.00 42.42
ATOM    379  CG  TYR A  24      -5.697   5.685  -6.323  1.00 43.52
ATOM    380  CD1 TYR A  24      -5.846   7.052  -6.565  1.00 64.32
ATOM    381  HD1 TYR A  24      -6.596   7.601  -6.017  1.00 42.14
ATOM    382  CE1 TYR A  24      -5.051   7.704  -7.486  1.00 30.24
ATOM    383  HE1 TYR A  24      -5.181   8.763  -7.658  1.00 40.04
ATOM    384  CZ  TYR A  24      -4.093   6.998  -8.178  1.00 44.44
ATOM    385  CE2 TYR A  24      -3.929   5.652  -7.959  1.00 61.53
ATOM    386  HE2 TYR A  24      -3.178   5.098  -8.504  1.00  3.31
ATOM    387  CD2 TYR A  24      -4.728   5.004  -7.038  1.00 43.40
ATOM    388  HD2 TYR A  24      -4.599   3.947  -6.867  1.00 43.14
ATOM    389  OH  TYR A  24      -3.299   7.641  -9.101  1.00  2.45
ATOM    390  HH  TYR A  24      -3.295   7.130  -9.912  1.00 22.43
ATOM    391  C   TYR A  24      -5.491   6.204  -3.390  1.00  4.41
ATOM    392  O   TYR A  24      -4.279   6.439  -3.337  1.00 25.22
ATOM    393  N   ASN A  25      -6.420   7.073  -3.010  1.00 54.31
ATOM    394  H   ASN A  25      -7.370   6.825  -3.063  1.00 11.33
ATOM    395  CA  ASN A  25      -6.085   8.395  -2.537  1.00 21.32
ATOM    396  HA  ASN A  25      -5.517   8.904  -3.302  1.00 34.52
ATOM    397  CB  ASN A  25      -7.349   9.217  -2.229  1.00 33.34
ATOM    398 1HB  ASN A  25      -7.875   8.743  -1.414  1.00 21.23
ATOM    399 2HB  ASN A  25      -7.021  10.189  -1.902  1.00  4.32
ATOM    400  CG  ASN A  25      -8.340   9.394  -3.382  1.00 63.34
ATOM    401  OD1 ASN A  25      -9.532   9.530  -3.149  1.00 14.32
ATOM    402  ND2 ASN A  25      -7.874   9.396  -4.610  1.00 43.42
ATOM    403 2HD2 ASN A  25      -6.916   9.294  -4.778  1.00 32.21
ATOM    404 1HD2 ASN A  25      -8.546   9.473  -5.320  1.00 62.40
ATOM    405  C   ASN A  25      -5.261   8.299  -1.262  1.00 10.44
ATOM    406  O   ASN A  25      -4.189   8.890  -1.163  1.00 43.25
ATOM    407  N   ALA A  26      -5.749   7.511  -0.317  1.00 41.51
ATOM    408  H   ALA A  26      -6.569   7.000  -0.508  1.00 12.02
ATOM    409  CA  ALA A  26      -5.128   7.378   0.990  1.00 15.43
ATOM    410  HA  ALA A  26      -5.030   8.374   1.398  1.00 21.24
ATOM    411  CB  ALA A  26      -6.024   6.583   1.926  1.00 32.31
ATOM    412 1HB  ALA A  26      -5.596   6.582   2.918  1.00  4.42
ATOM    413 2HB  ALA A  26      -6.108   5.569   1.567  1.00 62.31
ATOM    414 3HB  ALA A  26      -7.005   7.035   1.958  1.00 51.42
ATOM    415  C   ALA A  26      -3.741   6.756   0.919  1.00 43.13
ATOM    416  O   ALA A  26      -2.805   7.286   1.503  1.00 73.42
ATOM    417  N   THR A  27      -3.611   5.675   0.175  1.00 53.14
ATOM    418  H   THR A  27      -4.390   5.315  -0.306  1.00 41.45
ATOM    419  CA  THR A  27      -2.348   4.963   0.054  1.00 54.22
ATOM    420  HA  THR A  27      -2.017   4.693   1.045  1.00 72.45
ATOM    421  CB  THR A  27      -2.527   3.673  -0.772  1.00 12.11
ATOM    422  HB  THR A  27      -2.773   3.944  -1.788  1.00 53.41
ATOM    423  OG1 THR A  27      -3.602   2.906  -0.217  1.00 31.30
ATOM    424  HG1 THR A  27      -4.418   3.198  -0.641  1.00  4.43
ATOM    425  CG2 THR A  27      -1.251   2.836  -0.766  1.00 65.32
ATOM    426 1HG2 THR A  27      -0.452   3.417  -1.201  1.00 44.32
ATOM    427 2HG2 THR A  27      -1.404   1.939  -1.347  1.00 71.00
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ATOM    428 3HG2 THR A  27      -0.994   2.573   0.249  1.00 64.43
ATOM    429  C   THR A  27      -1.283   5.842  -0.602  1.00 52.30
ATOM    430  O   THR A  27      -0.152   5.939  -0.103  1.00 72.33
ATOM    431  N   LEU A  28      -1.666   6.511  -1.689  1.00 51.20
ATOM    432  H   LEU A  28      -2.595   6.422  -1.997  1.00 65.04
ATOM    433  CA  LEU A  28      -0.754   7.360  -2.433  1.00  2.42
ATOM    434  HA  LEU A  28       0.063   6.746  -2.779  1.00 65.21
ATOM    435  CB  LEU A  28      -1.466   7.960  -3.651  1.00 75.14
ATOM    436 1HB  LEU A  28      -1.812   7.145  -4.270  1.00 64.32
ATOM    437 2HB  LEU A  28      -2.331   8.502  -3.296  1.00 73.33
ATOM    438  CG  LEU A  28      -0.643   8.907  -4.532  1.00 73.41
ATOM    439  HG  LEU A  28      -0.249   9.692  -3.905  1.00  4.13
ATOM    440  CD1 LEU A  28       0.537   8.180  -5.171  1.00 63.03
ATOM    441 1HD1 LEU A  28       1.088   8.871  -5.794  1.00 21.31
ATOM    442 2HD1 LEU A  28       0.175   7.361  -5.775  1.00  2.10
ATOM    443 3HD1 LEU A  28       1.187   7.798  -4.399  1.00 24.43
ATOM    444  CD2 LEU A  28      -1.527   9.544  -5.592  1.00 42.34
ATOM    445 1HD2 LEU A  28      -1.958   8.773  -6.215  1.00  2.33
ATOM    446 2HD2 LEU A  28      -0.935  10.211  -6.202  1.00  4.43
ATOM    447 3HD2 LEU A  28      -2.317  10.103  -5.113  1.00 62.14
ATOM    448  C   LEU A  28      -0.200   8.470  -1.549  1.00  5.43
ATOM    449  O   LEU A  28       1.003   8.631  -1.441  1.00 73.24
ATOM    450  N   GLN A  29      -1.083   9.182  -0.876  1.00 21.55
ATOM    451  H   GLN A  29      -2.032   8.956  -0.968  1.00 62.11
ATOM    452  CA  GLN A  29      -0.691  10.296  -0.015  1.00  4.22
ATOM    453  HA  GLN A  29      -0.078  10.964  -0.601  1.00 24.30
ATOM    454  CB  GLN A  29      -1.921  11.060   0.468  1.00  0.23
ATOM    455 1HB  GLN A  29      -2.517  10.402   1.085  1.00 15.32
ATOM    456 2HB  GLN A  29      -1.596  11.898   1.067  1.00 53.11
ATOM    457  CG  GLN A  29      -2.799  11.587  -0.655  1.00 41.24
ATOM    458 1HG  GLN A  29      -3.066  10.751  -1.283  1.00 14.33
ATOM    459 2HG  GLN A  29      -3.692  12.000  -0.216  1.00 65.00
ATOM    460  CD  GLN A  29      -2.133  12.636  -1.529  1.00  1.15
ATOM    461  OE1 GLN A  29      -1.307  13.404  -1.081  1.00 64.14
ATOM    462  NE2 GLN A  29      -2.488  12.658  -2.788  1.00 72.42
ATOM    463 2HE2 GLN A  29      -3.152  12.011  -3.100  1.00 42.11
ATOM    464 1HE2 GLN A  29      -2.058  13.332  -3.352  1.00 15.30
ATOM    465  C   GLN A  29       0.122   9.812   1.181  1.00 72.13
ATOM    466  O   GLN A  29       1.063  10.467   1.592  1.00 13.44
ATOM    467  N   ALA A  30      -0.231   8.642   1.708  1.00 73.31
ATOM    468  H   ALA A  30      -0.983   8.147   1.313  1.00 64.02
ATOM    469  CA  ALA A  30       0.452   8.073   2.868  1.00 41.10
ATOM    470  HA  ALA A  30       0.331   8.766   3.687  1.00 43.14
ATOM    471  CB  ALA A  30      -0.177   6.748   3.271  1.00 70.25
ATOM    472 1HB  ALA A  30      -1.231   6.889   3.453  1.00 54.00
ATOM    473 2HB  ALA A  30       0.299   6.380   4.167  1.00 11.14
ATOM    474 3HB  ALA A  30      -0.044   6.031   2.473  1.00 21.00
ATOM    475  C   ALA A  30       1.938   7.888   2.604  1.00  1.35
ATOM    476  O   ALA A  30       2.780   8.213   3.454  1.00 70.12
ATOM    477  N   ILE A  31       2.259   7.380   1.440  1.00  3.12
ATOM    478  H   ILE A  31       1.545   7.155   0.806  1.00 51.32
ATOM    479  CA  ILE A  31       3.637   7.158   1.091  1.00 15.44
ATOM    480  HA  ILE A  31       4.142   6.968   2.028  1.00 15.10
ATOM    481  CB  ILE A  31       3.819   5.897   0.177  1.00 12.01
ATOM    482  HB  ILE A  31       3.475   5.046   0.747  1.00 53.11
ATOM    483  CG2 ILE A  31       2.951   5.967  -1.078  1.00 43.24
ATOM    484 1HG2 ILE A  31       1.910   5.999  -0.795  1.00 75.22
ATOM    485 2HG2 ILE A  31       3.134   5.098  -1.694  1.00 25.00
ATOM    486 3HG2 ILE A  31       3.199   6.861  -1.631  1.00 23.12
ATOM    487  CG1 ILE A  31       5.296   5.680  -0.175  1.00 50.22
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ATOM    488 1HG1 ILE A  31       5.649   6.528  -0.743  1.00  1.42
ATOM    489 2HG1 ILE A  31       5.862   5.607   0.741  1.00 73.50
ATOM    490  CD1 ILE A  31       5.565   4.439  -0.997  1.00 22.44
ATOM    491 1HD1 ILE A  31       5.032   4.504  -1.932  1.00 52.22
ATOM    492 2HD1 ILE A  31       5.228   3.570  -0.450  1.00 33.10
ATOM    493 3HD1 ILE A  31       6.624   4.356  -1.189  1.00 44.15
ATOM    494  C   ILE A  31       4.296   8.424   0.492  1.00 22.04
ATOM    495  O   ILE A  31       5.374   8.805   0.914  1.00 52.33
ATOM    496  N   GLN A  32       3.588   9.106  -0.412  1.00 72.14
ATOM    497  H   GLN A  32       2.670   8.821  -0.613  1.00 52.24
ATOM    498  CA  GLN A  32       4.117  10.281  -1.142  1.00  2.23
ATOM    499  HA  GLN A  32       5.006  10.005  -1.688  1.00 53.10
ATOM    500  CB  GLN A  32       3.030  10.755  -2.142  1.00 15.13
ATOM    501 1HB  GLN A  32       2.544   9.879  -2.544  1.00  3.23
ATOM    502 2HB  GLN A  32       2.292  11.307  -1.576  1.00 22.52
ATOM    503  CG  GLN A  32       3.456  11.624  -3.344  1.00 64.02
ATOM    504 1HG  GLN A  32       4.019  11.005  -4.027  1.00 31.04
ATOM    505 2HG  GLN A  32       2.561  11.964  -3.848  1.00 24.34
ATOM    506  CD  GLN A  32       4.315  12.830  -3.014  1.00 63.14
ATOM    507  OE1 GLN A  32       5.527  12.765  -3.078  1.00  4.02
ATOM    508  NE2 GLN A  32       3.701  13.902  -2.597  1.00  1.12
ATOM    509 2HE2 GLN A  32       2.724  13.895  -2.502  1.00  4.14
ATOM    510 1HE2 GLN A  32       4.270  14.664  -2.366  1.00 51.45
ATOM    511  C   GLN A  32       4.415  11.421  -0.153  1.00  0.43
ATOM    512  O   GLN A  32       5.486  11.995  -0.152  1.00  3.11
ATOM    513  N   ASN A  33       3.472  11.682   0.720  1.00 13.32
ATOM    514  H   ASN A  33       2.680  11.104   0.775  1.00 62.33
ATOM    515  CA  ASN A  33       3.555  12.823   1.631  1.00 60.25
ATOM    516  HA  ASN A  33       4.084  13.608   1.113  1.00 62.41
ATOM    517  CB  ASN A  33       2.144  13.345   1.977  1.00 14.04
ATOM    518 1HB  ASN A  33       1.531  12.513   2.290  1.00 33.22
ATOM    519 2HB  ASN A  33       2.213  14.057   2.787  1.00 45.54
ATOM    520  CG  ASN A  33       1.417  14.009   0.812  1.00 62.40
ATOM    521  OD1 ASN A  33       1.663  13.718  -0.360  1.00 71.30
ATOM    522  ND2 ASN A  33       0.492  14.881   1.124  1.00 73.33
ATOM    523 2HD2 ASN A  33       0.326  15.060   2.073  1.00 72.42
ATOM    524 1HD2 ASN A  33      -0.006  15.280   0.380  1.00  1.55
ATOM    525  C   ASN A  33       4.320  12.485   2.896  1.00 60.44
ATOM    526  O   ASN A  33       4.415  13.309   3.806  1.00 31.04
ATOM    527  N   GLY A  34       4.877  11.277   2.939  1.00 60.53
ATOM    528  H   GLY A  34       4.778  10.701   2.151  1.00 61.55
ATOM    529  CA  GLY A  34       5.650  10.832   4.080  1.00  0.22
ATOM    530 1HA  GLY A  34       6.018   9.834   3.886  1.00 42.42
ATOM    531 2HA  GLY A  34       6.492  11.496   4.212  1.00 74.25
ATOM    532  C   GLY A  34       4.840  10.813   5.357  1.00 31.52
ATOM    533  O   GLY A  34       5.204  11.433   6.348  1.00 74.44
ATOM    534  N   GLN A  35       3.734  10.098   5.344  1.00 14.51
ATOM    535  H   GLN A  35       3.482   9.607   4.527  1.00  1.22
ATOM    536  CA  GLN A  35       2.880  10.028   6.521  1.00 62.32
ATOM    537  HA  GLN A  35       3.035  10.914   7.116  1.00 11.02
ATOM    538  CB  GLN A  35       1.401   9.923   6.128  1.00 74.40
ATOM    539 1HB  GLN A  35       1.231   8.933   5.730  1.00 12.11
ATOM    540 2HB  GLN A  35       0.809  10.032   7.025  1.00 43.52
ATOM    541  CG  GLN A  35       0.880  10.946   5.079  1.00 20.41
ATOM    542 1HG  GLN A  35       1.446  10.807   4.170  1.00 30.33
ATOM    543 2HG  GLN A  35      -0.153  10.709   4.872  1.00  0.42
ATOM    544  CD  GLN A  35       0.975  12.447   5.446  1.00 64.22
ATOM    545  OE1 GLN A  35       0.116  13.224   5.053  1.00 14.43
ATOM    546  NE2 GLN A  35       2.041  12.884   6.069  1.00 45.52
ATOM    547 2HE2 GLN A  35       2.777  12.279   6.292  1.00 52.30
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ATOM    548 1HE2 GLN A  35       2.067  13.840   6.278  1.00 62.11
ATOM    549  C   GLN A  35       3.298   8.844   7.386  1.00 63.54
ATOM    550  O   GLN A  35       2.724   8.577   8.434  1.00 71.24
ATOM    551  N   THR A  36       4.301   8.151   6.929  1.00 50.02
ATOM    552  H   THR A  36       4.723   8.419   6.086  1.00 50.31
ATOM    553  CA  THR A  36       4.859   7.048   7.622  1.00 34.41
ATOM    554  HA  THR A  36       4.574   7.126   8.662  1.00 61.23
ATOM    555  CB  THR A  36       4.350   5.675   7.041  1.00 52.03
ATOM    556  HB  THR A  36       3.276   5.654   7.166  1.00 42.23
ATOM    557  OG1 THR A  36       4.894   4.560   7.783  1.00  3.44
ATOM    558  HG1 THR A  36       4.281   4.420   8.513  1.00 24.54
ATOM    559  CG2 THR A  36       4.680   5.516   5.553  1.00 31.35
ATOM    560 1HG2 THR A  36       4.214   6.314   4.994  1.00 52.32
ATOM    561 2HG2 THR A  36       4.309   4.564   5.202  1.00 51.15
ATOM    562 3HG2 THR A  36       5.750   5.556   5.417  1.00 62.15
ATOM    563  C   THR A  36       6.368   7.164   7.513  1.00  2.12
ATOM    564  O   THR A  36       6.877   7.613   6.486  1.00 33.42
ATOM    565  N   PHE A  37       7.062   6.846   8.573  1.00 61.22
ATOM    566  H   PHE A  37       6.615   6.551   9.392  1.00 72.14
ATOM    567  CA  PHE A  37       8.498   6.885   8.566  1.00 53.03
ATOM    568  HA  PHE A  37       8.805   7.060   7.546  1.00 53.44
ATOM    569  CB  PHE A  37       9.048   8.022   9.465  1.00 63.43
ATOM    570 1HB  PHE A  37      10.126   8.036   9.384  1.00 52.31
ATOM    571 2HB  PHE A  37       8.663   8.964   9.105  1.00 71.52
ATOM    572  CG  PHE A  37       8.709   7.910  10.936  1.00 31.22
ATOM    573  CD1 PHE A  37       7.501   8.385  11.424  1.00 54.13
ATOM    574  HD1 PHE A  37       6.794   8.832  10.740  1.00 14.20
ATOM    575  CE1 PHE A  37       7.195   8.290  12.767  1.00 72.53
ATOM    576  HE1 PHE A  37       6.250   8.664  13.135  1.00  3.13
ATOM    577  CZ  PHE A  37       8.098   7.714  13.641  1.00  2.44
ATOM    578  HZ  PHE A  37       7.861   7.639  14.692  1.00 71.12
ATOM    579  CE2 PHE A  37       9.306   7.239  13.170  1.00 75.30
ATOM    580  HE2 PHE A  37      10.014   6.790  13.852  1.00 74.42
ATOM    581  CD2 PHE A  37       9.607   7.337  11.827  1.00 43.22
ATOM    582  HD2 PHE A  37      10.552   6.965  11.459  1.00 33.32
ATOM    583  C   PHE A  37       9.026   5.537   8.990  1.00 41.32
ATOM    584  O   PHE A  37       8.380   4.829   9.792  1.00 45.24
ATOM    585  N   ASP A  38      10.135   5.156   8.429  1.00 70.14
ATOM    586  H   ASP A  38      10.551   5.747   7.769  1.00  1.21
ATOM    587  CA  ASP A  38      10.763   3.894   8.749  1.00 63.03
ATOM    588  HA  ASP A  38      10.037   3.267   9.244  1.00 10.32
ATOM    589  CB  ASP A  38      11.250   3.193   7.475  1.00 43.33
ATOM    590 1HB  ASP A  38      10.440   3.165   6.762  1.00 24.52
ATOM    591 2HB  ASP A  38      12.074   3.753   7.057  1.00 54.12
ATOM    592  CG  ASP A  38      11.702   1.776   7.712  1.00 44.10
ATOM    593  OD1 ASP A  38      12.850   1.441   7.348  1.00 20.12
ATOM    594  OD2 ASP A  38      10.919   1.001   8.301  1.00 15.04
ATOM    595  C   ASP A  38      11.912   4.149   9.675  1.00  2.03
ATOM    596  O   ASP A  38      12.369   5.286   9.781  1.00 50.12
ATOM    597  N   TYR A  39      12.415   3.109  10.299  1.00 30.44
ATOM    598  H   TYR A  39      12.043   2.220  10.103  1.00 73.30
ATOM    599  CA  TYR A  39      13.513   3.228  11.248  1.00 15.44
ATOM    600  HA  TYR A  39      13.228   3.976  11.972  1.00  2.04
ATOM    601  CB  TYR A  39      13.746   1.906  11.982  1.00 64.25
ATOM    602 1HB  TYR A  39      13.963   1.134  11.257  1.00 62.30
ATOM    603 2HB  TYR A  39      14.593   2.015  12.644  1.00 50.32
ATOM    604  CG  TYR A  39      12.562   1.452  12.805  1.00 62.23
ATOM    605  CD1 TYR A  39      12.357   1.945  14.088  1.00 45.45
ATOM    606  HD1 TYR A  39      13.058   2.661  14.493  1.00 61.31
ATOM    607  CE1 TYR A  39      11.278   1.538  14.843  1.00 32.34
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ATOM    608  HE1 TYR A  39      11.134   1.932  15.839  1.00 41.34
ATOM    609  CZ  TYR A  39      10.387   0.625  14.321  1.00 50.32
ATOM    610  CE2 TYR A  39      10.570   0.121  13.054  1.00 32.13
ATOM    611  HE2 TYR A  39       9.869  -0.594  12.649  1.00 62.41
ATOM    612  CD2 TYR A  39      11.650   0.533  12.303  1.00 24.22
ATOM    613  HD2 TYR A  39      11.796   0.138  11.309  1.00 41.30
ATOM    614  OH  TYR A  39       9.310   0.218  15.068  1.00 43.43
ATOM    615  HH  TYR A  39       8.902   0.977  15.491  1.00 33.31
ATOM    616  C   TYR A  39      14.792   3.690  10.563  1.00 53.23
ATOM    617  O   TYR A  39      15.667   4.255  11.194  1.00 40.51
ATOM    618  N   LYS A  40      14.888   3.452   9.266  1.00  1.13
ATOM    619  H   LYS A  40      14.170   2.962   8.811  1.00 21.52
ATOM    620  CA  LYS A  40      16.055   3.884   8.527  1.00  2.20
ATOM    621  HA  LYS A  40      16.791   4.209   9.246  1.00 11.14
ATOM    622  CB  LYS A  40      16.641   2.726   7.718  1.00 32.24
ATOM    623 1HB  LYS A  40      17.547   3.061   7.238  1.00 41.45
ATOM    624 2HB  LYS A  40      16.878   1.915   8.391  1.00 43.20
ATOM    625  CG  LYS A  40      15.708   2.201   6.652  1.00 64.13
ATOM    626 1HG  LYS A  40      14.797   1.859   7.122  1.00 63.32
ATOM    627 2HG  LYS A  40      15.478   3.003   5.968  1.00 41.15
ATOM    628  CD  LYS A  40      16.317   1.058   5.890  1.00 63.13
ATOM    629 1HD  LYS A  40      17.251   1.383   5.451  1.00 34.15
ATOM    630 2HD  LYS A  40      16.502   0.237   6.567  1.00  0.52
ATOM    631  CE  LYS A  40      15.391   0.589   4.790  1.00 60.14
ATOM    632 1HE  LYS A  40      15.171   1.420   4.138  1.00 31.33
ATOM    633 2HE  LYS A  40      15.909  -0.167   4.218  1.00 54.53
ATOM    634  NZ  LYS A  40      14.112   0.010   5.297  1.00 45.40
ATOM    635 1HZ  LYS A  40      13.580   0.647   5.935  1.00 51.22
ATOM    636 2HZ  LYS A  40      14.312  -0.884   5.789  1.00 51.34
ATOM    637 3HZ  LYS A  40      13.526  -0.216   4.461  1.00 25.24
ATOM    638  C   LYS A  40      15.724   5.063   7.606  1.00 34.20
ATOM    639  O   LYS A  40      16.567   5.481   6.827  1.00 62.41
ATOM    640  N   SER A  41      14.486   5.595   7.715  1.00 75.54
ATOM    641  H   SER A  41      13.877   5.239   8.398  1.00 63.53
ATOM    642  CA  SER A  41      14.040   6.742   6.900  1.00 12.21
ATOM    643  HA  SER A  41      12.998   6.907   7.131  1.00 74.33
ATOM    644  CB  SER A  41      14.849   8.012   7.291  1.00 60.30
ATOM    645 1HB  SER A  41      14.738   8.194   8.350  1.00  3.54
ATOM    646 2HB  SER A  41      15.892   7.848   7.064  1.00  2.43
ATOM    647  OG  SER A  41      14.401   9.161   6.590  1.00 54.14
ATOM    648  HG  SER A  41      14.485   8.942   5.653  1.00 42.04
ATOM    649  C   SER A  41      14.148   6.436   5.378  1.00 21.35
ATOM    650  O   SER A  41      14.601   7.277   4.599  1.00 72.04
ATOM    651  N   ASN A  42      13.681   5.254   4.970  1.00 23.45
ATOM    652  H   ASN A  42      13.205   4.685   5.608  1.00 51.15
ATOM    653  CA  ASN A  42      13.834   4.792   3.581  1.00 40.42
ATOM    654  HA  ASN A  42      14.884   4.849   3.335  1.00 73.41
ATOM    655  CB  ASN A  42      13.369   3.316   3.442  1.00 15.44
ATOM    656 1HB  ASN A  42      13.825   2.874   2.569  1.00 55.34
ATOM    657 2HB  ASN A  42      13.704   2.784   4.319  1.00 30.32
ATOM    658  CG  ASN A  42      11.849   3.125   3.329  1.00 11.22
ATOM    659  OD1 ASN A  42      11.135   3.032   4.331  1.00 61.23
ATOM    660  ND2 ASN A  42      11.360   3.019   2.114  1.00 71.41
ATOM    661 2HD2 ASN A  42      11.986   3.064   1.359  1.00 60.40
ATOM    662 1HD2 ASN A  42      10.396   2.907   1.999  1.00 32.24
ATOM    663  C   ASN A  42      13.031   5.680   2.607  1.00 73.35
ATOM    664  O   ASN A  42      11.967   6.183   2.966  1.00 74.42
ATOM    665  N   PRO A  43      13.577   5.920   1.386  1.00 32.44
ATOM    666  CD  PRO A  43      14.926   5.490   0.948  1.00 11.20
ATOM    667  CA  PRO A  43      12.913   6.715   0.334  1.00 51.31
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ATOM    668  HA  PRO A  43      12.900   7.762   0.596  1.00 44.31
ATOM    669  CB  PRO A  43      13.809   6.507  -0.883  1.00 24.02
ATOM    670 1HB  PRO A  43      13.470   5.645  -1.439  1.00 71.54
ATOM    671 2HB  PRO A  43      13.822   7.387  -1.506  1.00 61.13
ATOM    672  CG  PRO A  43      15.151   6.290  -0.302  1.00 64.12
ATOM    673 1HG  PRO A  43      15.779   5.759  -1.002  1.00 22.42
ATOM    674 2HG  PRO A  43      15.598   7.237  -0.041  1.00  1.24
ATOM    675 1HD  PRO A  43      14.947   4.431   0.731  1.00 44.34
ATOM    676 2HD  PRO A  43      15.672   5.744   1.687  1.00 50.15
ATOM    677  C   PRO A  43      11.478   6.262   0.031  1.00 30.52
ATOM    678  O   PRO A  43      11.211   5.097  -0.322  1.00 65.20
ATOM    679  N   TYR A  44      10.577   7.182   0.223  1.00 43.21
ATOM    680  H   TYR A  44      10.896   8.066   0.508  1.00 22.33
ATOM    681  CA  TYR A  44       9.153   7.014  -0.008  1.00 20.03
ATOM    682  HA  TYR A  44       8.983   5.948  -0.050  1.00 64.51
ATOM    683  CB  TYR A  44       8.316   7.590   1.111  1.00 75.32
ATOM    684 1HB  TYR A  44       8.588   8.621   1.275  1.00  0.45
ATOM    685 2HB  TYR A  44       7.277   7.522   0.826  1.00 55.33
ATOM    686  CG  TYR A  44       8.498   6.832   2.377  1.00  1.23
ATOM    687  CD1 TYR A  44       8.119   5.505   2.445  1.00 22.25
ATOM    688  HD1 TYR A  44       7.679   5.038   1.578  1.00 25.41
ATOM    689  CE1 TYR A  44       8.301   4.780   3.580  1.00 30.24
ATOM    690  HE1 TYR A  44       7.998   3.744   3.615  1.00 62.11
ATOM    691  CZ  TYR A  44       8.861   5.371   4.674  1.00 54.24
ATOM    692  CE2 TYR A  44       9.244   6.692   4.645  1.00 44.32
ATOM    693  HE2 TYR A  44       9.688   7.155   5.513  1.00 22.43
ATOM    694  CD2 TYR A  44       9.064   7.419   3.495  1.00 73.33
ATOM    695  HD2 TYR A  44       9.359   8.456   3.456  1.00  5.32
ATOM    696  OH  TYR A  44       9.046   4.637   5.789  1.00 53.30
ATOM    697  HH  TYR A  44       9.559   3.873   5.497  1.00 73.33
ATOM    698  C   TYR A  44       8.753   7.568  -1.330  1.00 50.43
ATOM    699  O   TYR A  44       7.601   7.431  -1.769  1.00 44.14
ATOM    700  N   ASP A  45       9.712   8.119  -1.991  1.00 61.20
ATOM    701  H   ASP A  45      10.639   8.025  -1.675  1.00  2.11
ATOM    702  CA  ASP A  45       9.515   8.934  -3.138  1.00  5.11
ATOM    703  HA  ASP A  45       8.745   9.670  -2.961  1.00 72.44
ATOM    704  CB  ASP A  45      10.840   9.657  -3.451  1.00 32.12
ATOM    705 1HB  ASP A  45      11.544   8.941  -3.846  1.00 25.12
ATOM    706 2HB  ASP A  45      10.660  10.420  -4.194  1.00 73.40
ATOM    707  CG  ASP A  45      11.468  10.315  -2.225  1.00  2.42
ATOM    708  OD1 ASP A  45      11.940   9.557  -1.311  1.00 22.15
ATOM    709  OD2 ASP A  45      11.516  11.552  -2.169  1.00  1.14
ATOM    710  C   ASP A  45       9.177   8.033  -4.280  1.00 74.14
ATOM    711  O   ASP A  45       9.921   7.095  -4.630  1.00 14.33
ATOM    712  N   ILE A  46       8.020   8.319  -4.841  1.00 20.35
ATOM    713  H   ILE A  46       7.591   9.153  -4.563  1.00 32.44
ATOM    714  CA  ILE A  46       7.374   7.497  -5.834  1.00 25.44
ATOM    715  HA  ILE A  46       7.225   6.501  -5.446  1.00 73.23
ATOM    716  CB  ILE A  46       5.994   8.104  -6.229  1.00  1.23
ATOM    717  HB  ILE A  46       6.194   8.992  -6.812  1.00 64.42
ATOM    718  CG2 ILE A  46       5.216   7.144  -7.123  1.00 13.31
ATOM    719 1HG2 ILE A  46       5.055   6.214  -6.598  1.00 54.23
ATOM    720 2HG2 ILE A  46       5.773   6.957  -8.030  1.00 14.23
ATOM    721 3HG2 ILE A  46       4.263   7.590  -7.365  1.00 12.01
ATOM    722  CG1 ILE A  46       5.143   8.505  -4.989  1.00 25.42
ATOM    723 1HG1 ILE A  46       5.720   9.191  -4.386  1.00 24.31
ATOM    724 2HG1 ILE A  46       4.250   9.006  -5.329  1.00  0.42
ATOM    725  CD1 ILE A  46       4.728   7.372  -4.069  1.00 70.32
ATOM    726 1HD1 ILE A  46       5.597   6.892  -3.646  1.00 64.12
ATOM    727 2HD1 ILE A  46       4.149   6.652  -4.633  1.00  5.23
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ATOM    728 3HD1 ILE A  46       4.107   7.769  -3.279  1.00 24.12
ATOM    729  C   ILE A  46       8.241   7.470  -7.059  1.00 42.52
ATOM    730  O   ILE A  46       8.463   8.501  -7.689  1.00 31.45
ATOM    731  N   SER A  47       8.750   6.318  -7.388  1.00 65.21
ATOM    732  H   SER A  47       8.516   5.505  -6.885  1.00 41.32
ATOM    733  CA  SER A  47       9.639   6.236  -8.491  1.00 54.21
ATOM    734  HA  SER A  47      10.138   7.184  -8.621  1.00 12.15
ATOM    735  CB  SER A  47      10.681   5.173  -8.165  1.00 52.23
ATOM    736 1HB  SER A  47      10.228   4.195  -8.237  1.00 34.15
ATOM    737 2HB  SER A  47      11.504   5.246  -8.859  1.00 20.10
ATOM    738  OG  SER A  47      11.181   5.362  -6.833  1.00 44.14
ATOM    739  HG  SER A  47      10.782   6.163  -6.467  1.00  2.32
ATOM    740  C   SER A  47       8.857   5.865  -9.751  1.00 43.54
ATOM    741  O   SER A  47       9.207   6.291 -10.847  1.00 33.22
ATOM    742  N   VAL A  48       7.782   5.077  -9.594  1.00 45.20
ATOM    743  H   VAL A  48       7.586   4.679  -8.717  1.00 30.21
ATOM    744  CA  VAL A  48       6.873   4.816 -10.699  1.00 31.53
ATOM    745  HA  VAL A  48       6.949   5.619 -11.418  1.00 31.43
ATOM    746  CB  VAL A  48       7.164   3.446 -11.409  1.00 61.15
ATOM    747  HB  VAL A  48       6.778   2.681 -10.750  1.00 53.05
ATOM    748  CG1 VAL A  48       6.399   3.348 -12.718  1.00 75.32
ATOM    749 1HG1 VAL A  48       6.598   2.395 -13.185  1.00  4.00
ATOM    750 2HG1 VAL A  48       6.717   4.142 -13.378  1.00  3.21
ATOM    751 3HG1 VAL A  48       5.340   3.444 -12.528  1.00  0.21
ATOM    752  CG2 VAL A  48       8.652   3.190 -11.646  1.00  3.21
ATOM    753 1HG2 VAL A  48       8.781   2.237 -12.138  1.00 64.02
ATOM    754 2HG2 VAL A  48       9.169   3.182 -10.699  1.00 25.11
ATOM    755 3HG2 VAL A  48       9.056   3.975 -12.269  1.00  1.04
ATOM    756  C   VAL A  48       5.449   4.740 -10.143  1.00 35.35
ATOM    757  O   VAL A  48       5.206   4.021  -9.167  1.00 41.21
ATOM    758  N   ASN A  49       4.524   5.447 -10.727  1.00 24.23
ATOM    759  H   ASN A  49       4.769   6.106 -11.411  1.00 62.43
ATOM    760  CA  ASN A  49       3.119   5.299 -10.376  1.00 32.45
ATOM    761  HA  ASN A  49       3.081   4.499  -9.649  1.00 72.34
ATOM    762  CB  ASN A  49       2.529   6.586  -9.739  1.00 33.14
ATOM    763 1HB  ASN A  49       1.501   6.402  -9.466  1.00 55.12
ATOM    764 2HB  ASN A  49       3.086   6.802  -8.839  1.00 35.43
ATOM    765  CG  ASN A  49       2.569   7.818 -10.638  1.00 51.00
ATOM    766  OD1 ASN A  49       3.558   8.528 -10.682  1.00 13.33
ATOM    767  ND2 ASN A  49       1.482   8.105 -11.315  1.00  1.42
ATOM    768 2HD2 ASN A  49       0.700   7.527 -11.218  1.00 63.21
ATOM    769 1HD2 ASN A  49       1.526   8.898 -11.886  1.00 43.04
ATOM    770  C   ASN A  49       2.315   4.830 -11.583  1.00 23.42
ATOM    771  O   ASN A  49       2.348   5.474 -12.624  1.00 34.13
ATOM    772  N   LYS A  50       1.634   3.700 -11.502  1.00 61.31
ATOM    773  H   LYS A  50       1.674   3.117 -10.713  1.00  1.35
ATOM    774  CA  LYS A  50       0.795   3.320 -12.620  1.00 61.23
ATOM    775  HA  LYS A  50       0.898   4.056 -13.404  1.00 71.43
ATOM    776  CB  LYS A  50       1.155   1.922 -13.190  1.00 60.52
ATOM    777 1HB  LYS A  50       0.879   1.173 -12.465  1.00 72.31
ATOM    778 2HB  LYS A  50       0.547   1.764 -14.070  1.00 31.31
ATOM    779  CG  LYS A  50       2.614   1.700 -13.578  1.00 75.25
ATOM    780 1HG  LYS A  50       2.709   0.877 -14.270  1.00 22.43
ATOM    781 2HG  LYS A  50       2.922   2.623 -14.043  1.00 24.55
ATOM    782  CD  LYS A  50       3.523   1.464 -12.377  1.00 12.03
ATOM    783 1HD  LYS A  50       4.551   1.394 -12.696  1.00 74.54
ATOM    784 2HD  LYS A  50       3.387   2.325 -11.737  1.00 53.24
ATOM    785  CE  LYS A  50       3.157   0.221 -11.583  1.00 65.33
ATOM    786 1HE  LYS A  50       3.840   0.135 -10.751  1.00 30.11
ATOM    787 2HE  LYS A  50       2.160   0.366 -11.202  1.00 73.54
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ATOM    788  NZ  LYS A  50       3.213  -1.043 -12.373  1.00 51.13
ATOM    789 1HZ  LYS A  50       2.578  -1.039 -13.191  1.00  0.40
ATOM    790 2HZ  LYS A  50       2.894  -1.824 -11.743  1.00 40.32
ATOM    791 3HZ  LYS A  50       4.181  -1.289 -12.651  1.00 61.11
ATOM    792  C   LYS A  50      -0.627   3.249 -12.162  1.00 63.14
ATOM    793  O   LYS A  50      -0.906   2.807 -11.042  1.00  1.12
ATOM    794  N   ASN A  51      -1.517   3.688 -12.994  1.00 63.13
ATOM    795  H   ASN A  51      -1.246   4.098 -13.841  1.00 44.13
ATOM    796  CA  ASN A  51      -2.911   3.510 -12.748  1.00 21.52
ATOM    797  HA  ASN A  51      -2.943   3.038 -11.777  1.00 54.43
ATOM    798  CB  ASN A  51      -3.703   4.838 -12.719  1.00 21.04
ATOM    799 1HB  ASN A  51      -4.692   4.647 -12.330  1.00 23.15
ATOM    800 2HB  ASN A  51      -3.196   5.526 -12.057  1.00 55.13
ATOM    801  CG  ASN A  51      -3.860   5.505 -14.078  1.00 70.02
ATOM    802  OD1 ASN A  51      -4.819   5.260 -14.785  1.00  5.14
ATOM    803  ND2 ASN A  51      -2.932   6.364 -14.436  1.00 33.21
ATOM    804 2HD2 ASN A  51      -2.185   6.549 -13.832  1.00 20.14
ATOM    805 1HD2 ASN A  51      -3.052   6.780 -15.315  1.00 73.41
ATOM    806  C   ASN A  51      -3.459   2.551 -13.784  1.00 53.44
ATOM    807  O   ASN A  51      -2.969   2.534 -14.910  1.00 75.21
ATOM    808  N   ASN A  52      -4.405   1.745 -13.419  1.00 51.51
ATOM    809  H   ASN A  52      -4.652   1.637 -12.473  1.00 11.35
ATOM    810  CA  ASN A  52      -5.081   0.885 -14.386  1.00 31.23
ATOM    811  HA  ASN A  52      -4.693   1.127 -15.364  1.00 24.41
ATOM    812  CB  ASN A  52      -4.829  -0.608 -14.090  1.00 21.24
ATOM    813 1HB  ASN A  52      -5.093  -0.810 -13.063  1.00 74.41
ATOM    814 2HB  ASN A  52      -5.454  -1.204 -14.738  1.00 34.13
ATOM    815  CG  ASN A  52      -3.383  -1.027 -14.295  1.00 15.45
ATOM    816  OD1 ASN A  52      -2.557  -0.947 -13.389  1.00 22.31
ATOM    817  ND2 ASN A  52      -3.065  -1.484 -15.481  1.00 11.20
ATOM    818 2HD2 ASN A  52      -3.761  -1.534 -16.170  1.00 22.24
ATOM    819 1HD2 ASN A  52      -2.136  -1.758 -15.617  1.00 13.33
ATOM    820  C   ASN A  52      -6.564   1.180 -14.366  1.00 43.51
ATOM    821  O   ASN A  52      -7.365   0.483 -14.982  1.00 54.22
ATOM    822  N   GLY A  53      -6.929   2.214 -13.621  1.00 32.33
ATOM    823  H   GLY A  53      -6.232   2.694 -13.132  1.00 52.23
ATOM    824  CA  GLY A  53      -8.319   2.637 -13.505  1.00 31.53
ATOM    825 1HA  GLY A  53      -8.351   3.682 -13.239  1.00  4.33
ATOM    826 2HA  GLY A  53      -8.810   2.497 -14.457  1.00 71.03
ATOM    827  C   GLY A  53      -9.050   1.835 -12.456  1.00 74.03
ATOM    828  O   GLY A  53      -9.575   2.372 -11.499  1.00  1.30
ATOM    829  N   THR A  54      -9.055   0.556 -12.657  1.00 34.04
ATOM    830  H   THR A  54      -8.617   0.222 -13.467  1.00 51.31
ATOM    831  CA  THR A  54      -9.636  -0.394 -11.760  1.00 64.10
ATOM    832  HA  THR A  54     -10.484  -0.007 -11.216  1.00 74.11
ATOM    833  CB  THR A  54     -10.092  -1.692 -12.539  1.00 44.24
ATOM    834  HB  THR A  54     -11.047  -1.456 -12.991  1.00 22.32
ATOM    835  OG1 THR A  54     -10.314  -2.801 -11.660  1.00 73.55
ATOM    836  HG1 THR A  54      -9.438  -3.232 -11.551  1.00 22.32
ATOM    837  CG2 THR A  54      -9.116  -2.086 -13.654  1.00 21.44
ATOM    838 1HG2 THR A  54      -9.461  -2.998 -14.120  1.00 60.21
ATOM    839 2HG2 THR A  54      -8.134  -2.244 -13.235  1.00 51.33
ATOM    840 3HG2 THR A  54      -9.071  -1.302 -14.395  1.00 54.00
ATOM    841  C   THR A  54      -8.672  -0.706 -10.666  1.00 30.42
ATOM    842  O   THR A  54      -9.051  -0.814  -9.522  1.00 13.10
ATOM    843  N   ASP A  55      -7.428  -0.763 -10.994  1.00 54.25
ATOM    844  H   ASP A  55      -7.121  -0.483 -11.879  1.00 14.42
ATOM    845  CA  ASP A  55      -6.450  -1.185 -10.052  1.00 25.34
ATOM    846  HA  ASP A  55      -6.867  -1.080  -9.060  1.00 53.22
ATOM    847  CB  ASP A  55      -6.085  -2.665 -10.307  1.00 20.23
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ATOM    848 1HB  ASP A  55      -5.555  -2.740 -11.244  1.00 32.05
ATOM    849 2HB  ASP A  55      -5.444  -3.010  -9.511  1.00  2.22
ATOM    850  CG  ASP A  55      -7.340  -3.567 -10.351  1.00 52.10
ATOM    851  OD1 ASP A  55      -7.834  -3.866 -11.460  1.00 61.21
ATOM    852  OD2 ASP A  55      -7.893  -3.898  -9.293  1.00 53.22
ATOM    853  C   ASP A  55      -5.271  -0.265 -10.193  1.00 35.02
ATOM    854  O   ASP A  55      -5.191   0.476 -11.174  1.00 65.13
ATOM    855  N   ALA A  56      -4.424  -0.217  -9.216  1.00 23.33
ATOM    856  H   ALA A  56      -4.552  -0.828  -8.454  1.00 61.42
ATOM    857  CA  ALA A  56      -3.284   0.680  -9.252  1.00 62.41
ATOM    858  HA  ALA A  56      -3.009   0.806 -10.289  1.00 64.53
ATOM    859  CB  ALA A  56      -3.648   2.041  -8.693  1.00  1.33
ATOM    860 1HB  ALA A  56      -2.785   2.690  -8.721  1.00 30.54
ATOM    861 2HB  ALA A  56      -3.999   1.939  -7.677  1.00 75.10
ATOM    862 3HB  ALA A  56      -4.434   2.477  -9.291  1.00 53.34
ATOM    863  C   ALA A  56      -2.102   0.096  -8.517  1.00 52.31
ATOM    864  O   ALA A  56      -2.270  -0.599  -7.515  1.00 53.51
ATOM    865  N   GLU A  57      -0.927   0.378  -9.002  1.00  4.33
ATOM    866  H   GLU A  57      -0.849   0.958  -9.791  1.00 45.13
ATOM    867  CA  GLU A  57       0.291  -0.104  -8.393  1.00 13.51
ATOM    868  HA  GLU A  57       0.080  -0.468  -7.396  1.00 72.11
ATOM    869  CB  GLU A  57       0.891  -1.222  -9.240  1.00 73.31
ATOM    870 1HB  GLU A  57       0.140  -1.994  -9.339  1.00 42.32
ATOM    871 2HB  GLU A  57       1.117  -0.852 -10.226  1.00  5.11
ATOM    872  CG  GLU A  57       2.140  -1.874  -8.659  1.00 12.22
ATOM    873 1HG  GLU A  57       2.747  -1.112  -8.193  1.00 40.20
ATOM    874 2HG  GLU A  57       1.848  -2.604  -7.920  1.00 21.35
ATOM    875  CD  GLU A  57       2.955  -2.559  -9.724  1.00  2.21
ATOM    876  OE1 GLU A  57       2.387  -2.950 -10.763  1.00 10.14
ATOM    877  OE2 GLU A  57       4.178  -2.600  -9.607  1.00 54.20
ATOM    878  C   GLU A  57       1.267   1.068  -8.274  1.00 32.21
ATOM    879  O   GLU A  57       1.516   1.799  -9.260  1.00  1.12
ATOM    880  N   ILE A  58       1.791   1.259  -7.091  1.00 62.20
ATOM    881  H   ILE A  58       1.596   0.598  -6.388  1.00 24.10
ATOM    882  CA  ILE A  58       2.686   2.363  -6.792  1.00 15.13
ATOM    883  HA  ILE A  58       2.781   3.002  -7.658  1.00 11.13
ATOM    884  CB  ILE A  58       2.163   3.194  -5.574  1.00 62.25
ATOM    885  HB  ILE A  58       2.360   2.617  -4.683  1.00 24.11
ATOM    886  CG2 ILE A  58       2.936   4.499  -5.443  1.00 23.34
ATOM    887 1HG2 ILE A  58       2.563   5.051  -4.592  1.00 22.41
ATOM    888 2HG2 ILE A  58       2.802   5.086  -6.339  1.00 71.42
ATOM    889 3HG2 ILE A  58       3.986   4.286  -5.304  1.00 21.12
ATOM    890  CG1 ILE A  58       0.637   3.478  -5.661  1.00  4.12
ATOM    891 1HG1 ILE A  58       0.112   2.534  -5.680  1.00  1.51
ATOM    892 2HG1 ILE A  58       0.338   4.022  -4.777  1.00 63.11
ATOM    893  CD1 ILE A  58       0.181   4.263  -6.875  1.00 51.24
ATOM    894 1HD1 ILE A  58      -0.891   4.384  -6.815  1.00 73.13
ATOM    895 2HD1 ILE A  58       0.433   3.713  -7.770  1.00 62.01
ATOM    896 3HD1 ILE A  58       0.659   5.232  -6.886  1.00 31.33
ATOM    897  C   ILE A  58       4.043   1.767  -6.409  1.00 53.52
ATOM    898  O   ILE A  58       4.091   0.850  -5.580  1.00 65.54
ATOM    899  N   VAL A  59       5.123   2.248  -7.014  1.00 71.40
ATOM    900  H   VAL A  59       5.061   2.979  -7.672  1.00 10.31
ATOM    901  CA  VAL A  59       6.448   1.710  -6.733  1.00 54.13
ATOM    902  HA  VAL A  59       6.362   0.993  -5.931  1.00  3.50
ATOM    903  CB  VAL A  59       7.044   0.985  -7.982  1.00 60.35
ATOM    904  HB  VAL A  59       7.231   1.738  -8.736  1.00 23.55
ATOM    905  CG1 VAL A  59       8.382   0.327  -7.657  1.00 11.24
ATOM    906 1HG1 VAL A  59       8.244  -0.402  -6.872  1.00 71.21
ATOM    907 2HG1 VAL A  59       9.081   1.080  -7.327  1.00  2.31
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ATOM    908 3HG1 VAL A  59       8.767  -0.162  -8.540  1.00 11.21
ATOM    909  CG2 VAL A  59       6.073  -0.035  -8.551  1.00 73.42
ATOM    910 1HG2 VAL A  59       5.853  -0.772  -7.793  1.00 41.31
ATOM    911 2HG2 VAL A  59       6.516  -0.520  -9.409  1.00 75.22
ATOM    912 3HG2 VAL A  59       5.160   0.461  -8.845  1.00 61.11
ATOM    913  C   VAL A  59       7.421   2.825  -6.322  1.00 30.33
ATOM    914  O   VAL A  59       7.604   3.801  -7.058  1.00 45.42
ATOM    915  N   SER A  60       8.022   2.677  -5.170  1.00 33.40
ATOM    916  H   SER A  60       7.750   1.932  -4.586  1.00 63.11
ATOM    917  CA  SER A  60       9.073   3.569  -4.714  1.00 44.44
ATOM    918  HA  SER A  60       9.305   4.254  -5.516  1.00 44.03
ATOM    919  CB  SER A  60       8.612   4.346  -3.467  1.00 70.44
ATOM    920 1HB  SER A  60       8.446   3.683  -2.632  1.00 23.21
ATOM    921 2HB  SER A  60       9.372   5.066  -3.203  1.00  4.21
ATOM    922  OG  SER A  60       7.409   5.056  -3.729  1.00 74.45
ATOM    923  HG  SER A  60       7.428   5.867  -3.208  1.00 63.11
ATOM    924  C   SER A  60      10.303   2.712  -4.399  1.00  5.11
ATOM    925  O   SER A  60      10.154   1.594  -3.898  1.00 65.04
ATOM    926  N   ALA A  61      11.491   3.205  -4.686  1.00 64.12
ATOM    927  H   ALA A  61      11.582   4.119  -5.035  1.00 74.04
ATOM    928  CA  ALA A  61      12.708   2.418  -4.485  1.00 13.51
ATOM    929  HA  ALA A  61      12.418   1.475  -4.045  1.00  4.12
ATOM    930  CB  ALA A  61      13.379   2.133  -5.822  1.00 55.41
ATOM    931 1HB  ALA A  61      14.239   1.500  -5.667  1.00 31.11
ATOM    932 2HB  ALA A  61      13.694   3.064  -6.270  1.00 61.14
ATOM    933 3HB  ALA A  61      12.679   1.638  -6.479  1.00 30.30
ATOM    934  C   ALA A  61      13.671   3.120  -3.544  1.00 62.24
ATOM    935  O   ALA A  61      13.591   4.330  -3.369  1.00 31.11
ATOM    936  N   SER A  62      14.561   2.358  -2.947  1.00 64.52
ATOM    937  H   SER A  62      14.592   1.391  -3.112  1.00 54.14
ATOM    938  CA  SER A  62      15.536   2.875  -2.022  1.00 12.20
ATOM    939  HA  SER A  62      15.285   3.894  -1.775  1.00 30.35
ATOM    940  CB  SER A  62      15.497   2.032  -0.756  1.00  1.15
ATOM    941 1HB  SER A  62      14.482   1.966  -0.397  1.00 11.31
ATOM    942 2HB  SER A  62      15.844   1.041  -1.010  1.00 55.35
ATOM    943  OG  SER A  62      16.305   2.524   0.297  1.00 62.33
ATOM    944  HG  SER A  62      15.841   2.171   1.069  1.00 44.52
ATOM    945  C   SER A  62      16.920   2.796  -2.642  1.00 12.30
ATOM    946  O   SER A  62      17.208   1.891  -3.437  1.00 70.44
ATOM    947  N   ASP A  63      17.739   3.755  -2.310  1.00 51.31
ATOM    948  H   ASP A  63      17.429   4.500  -1.744  1.00 74.42
ATOM    949  CA  ASP A  63      19.126   3.809  -2.745  1.00 51.45
ATOM    950  HA  ASP A  63      19.209   3.408  -3.745  1.00 12.41
ATOM    951  CB  ASP A  63      19.612   5.261  -2.745  1.00 72.01
ATOM    952 1HB  ASP A  63      20.655   5.285  -3.024  1.00 24.44
ATOM    953 2HB  ASP A  63      19.032   5.833  -3.452  1.00 64.21
ATOM    954  CG  ASP A  63      19.463   5.895  -1.370  1.00 34.24
ATOM    955  OD1 ASP A  63      18.356   6.379  -1.077  1.00 24.00
ATOM    956  OD2 ASP A  63      20.416   5.846  -0.564  1.00 14.42
ATOM    957  C   ASP A  63      20.004   3.004  -1.810  1.00 52.12
ATOM    958  O   ASP A  63      21.023   2.446  -2.225  1.00 24.15
ATOM    959  N   SER A  64      19.588   2.912  -0.562  1.00 55.23
ATOM    960  H   SER A  64      18.713   3.292  -0.331  1.00 11.55
ATOM    961  CA  SER A  64      20.395   2.299   0.453  1.00 11.15
ATOM    962  HA  SER A  64      21.410   2.647   0.339  1.00 14.52
ATOM    963  CB  SER A  64      19.878   2.742   1.808  1.00 13.22
ATOM    964 1HB  SER A  64      18.911   2.295   1.985  1.00 14.41
ATOM    965 2HB  SER A  64      20.566   2.430   2.579  1.00 23.32
ATOM    966  OG  SER A  64      19.743   4.161   1.861  1.00 12.35
ATOM    967  HG  SER A  64      20.032   4.592   1.038  1.00 62.13
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ATOM    968  C   SER A  64      20.359   0.778   0.320  1.00  4.02
ATOM    969  O   SER A  64      21.382   0.100   0.443  1.00 11.55
ATOM    970  N   ASP A  65      19.189   0.252   0.082  1.00 54.35
ATOM    971  H   ASP A  65      18.401   0.832   0.018  1.00 12.12
ATOM    972  CA  ASP A  65      19.024  -1.158  -0.166  1.00 74.15
ATOM    973  HA  ASP A  65      20.015  -1.547  -0.349  1.00  1.11
ATOM    974  CB  ASP A  65      18.399  -1.914   1.028  1.00 64.31
ATOM    975 1HB  ASP A  65      19.124  -1.958   1.827  1.00 43.42
ATOM    976 2HB  ASP A  65      17.534  -1.368   1.372  1.00 54.12
ATOM    977  CG  ASP A  65      17.973  -3.355   0.688  1.00 15.02
ATOM    978  OD1 ASP A  65      18.575  -3.996  -0.193  1.00 53.42
ATOM    979  OD2 ASP A  65      16.998  -3.851   1.284  1.00 33.34
ATOM    980  C   ASP A  65      18.237  -1.352  -1.424  1.00 54.33
ATOM    981  O   ASP A  65      17.125  -0.861  -1.547  1.00 71.23
ATOM    982  N   SER A  66      18.820  -2.054  -2.349  1.00 44.42
ATOM    983  H   SER A  66      19.714  -2.400  -2.150  1.00 35.22
ATOM    984  CA  SER A  66      18.217  -2.332  -3.622  1.00 63.11
ATOM    985  HA  SER A  66      17.899  -1.391  -4.045  1.00  4.55
ATOM    986  CB  SER A  66      19.264  -2.951  -4.567  1.00 74.31
ATOM    987 1HB  SER A  66      20.100  -2.276  -4.662  1.00 64.45
ATOM    988 2HB  SER A  66      19.608  -3.885  -4.147  1.00  4.51
ATOM    989  OG  SER A  66      18.734  -3.200  -5.862  1.00 21.23
ATOM    990  HG  SER A  66      17.772  -3.169  -5.802  1.00 71.41
ATOM    991  C   SER A  66      16.980  -3.249  -3.487  1.00 43.15
ATOM    992  O   SER A  66      16.162  -3.316  -4.406  1.00  4.45
ATOM    993  N   THR A  67      16.846  -3.966  -2.373  1.00 71.32
ATOM    994  H   THR A  67      17.529  -3.924  -1.658  1.00 55.03
ATOM    995  CA  THR A  67      15.692  -4.834  -2.215  1.00 73.30
ATOM    996  HA  THR A  67      15.314  -5.042  -3.206  1.00 24.11
ATOM    997  CB  THR A  67      16.067  -6.180  -1.512  1.00 22.32
ATOM    998  HB  THR A  67      15.308  -6.919  -1.721  1.00 12.55
ATOM    999  OG1 THR A  67      16.238  -6.033  -0.083  1.00 71.25
ATOM   1000  HG1 THR A  67      16.727  -5.222   0.157  1.00 35.12
ATOM   1001  CG2 THR A  67      17.369  -6.685  -2.080  1.00 73.25
ATOM   1002 1HG2 THR A  67      17.671  -7.594  -1.580  1.00 45.25
ATOM   1003 2HG2 THR A  67      18.087  -5.896  -1.908  1.00 64.33
ATOM   1004 3HG2 THR A  67      17.258  -6.847  -3.142  1.00 50.55
ATOM   1005  C   THR A  67      14.604  -4.090  -1.443  1.00 31.13
ATOM   1006  O   THR A  67      13.419  -4.462  -1.443  1.00  4.22
ATOM   1007  N   ASP A  68      15.019  -3.018  -0.828  1.00 73.42
ATOM   1008  H   ASP A  68      15.976  -2.816  -0.913  1.00 22.12
ATOM   1009  CA  ASP A  68      14.141  -2.144  -0.061  1.00  3.01
ATOM   1010  HA  ASP A  68      13.437  -2.763   0.477  1.00 65.45
ATOM   1011  CB  ASP A  68      14.957  -1.304   0.937  1.00 65.14
ATOM   1012 1HB  ASP A  68      15.499  -1.979   1.582  1.00 64.43
ATOM   1013 2HB  ASP A  68      15.669  -0.715   0.380  1.00 70.44
ATOM   1014  CG  ASP A  68      14.154  -0.372   1.834  1.00 10.42
ATOM   1015  OD1 ASP A  68      13.425  -0.857   2.731  1.00 21.21
ATOM   1016  OD2 ASP A  68      14.343   0.849   1.751  1.00  2.11
ATOM   1017  C   ASP A  68      13.385  -1.266  -1.020  1.00 60.14
ATOM   1018  O   ASP A  68      13.899  -0.296  -1.544  1.00  4.40
ATOM   1019  N   SER A  69      12.225  -1.682  -1.342  1.00 35.03
ATOM   1020  H   SER A  69      11.860  -2.513  -0.973  1.00 43.20
ATOM   1021  CA  SER A  69      11.396  -0.968  -2.227  1.00  2.33
ATOM   1022  HA  SER A  69      11.636   0.083  -2.147  1.00 71.22
ATOM   1023  CB  SER A  69      11.651  -1.432  -3.667  1.00  3.24
ATOM   1024 1HB  SER A  69      10.864  -1.066  -4.307  1.00 53.35
ATOM   1025 2HB  SER A  69      12.602  -1.046  -4.005  1.00 73.22
ATOM   1026  OG  SER A  69      11.679  -2.848  -3.742  1.00 23.02
ATOM   1027  HG  SER A  69      12.288  -3.165  -3.067  1.00 73.33
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ATOM   1028  C   SER A  69       9.982  -1.181  -1.806  1.00 34.12
ATOM   1029  O   SER A  69       9.662  -2.220  -1.223  1.00 23.22
ATOM   1030  N   LEU A  70       9.155  -0.224  -2.032  1.00 51.45
ATOM   1031  H   LEU A  70       9.466   0.585  -2.497  1.00  2.03
ATOM   1032  CA  LEU A  70       7.795  -0.359  -1.679  1.00  1.35
ATOM   1033  HA  LEU A  70       7.676  -1.264  -1.100  1.00  1.33
ATOM   1034  CB  LEU A  70       7.341   0.869  -0.833  1.00 11.11
ATOM   1035 1HB  LEU A  70       8.115   1.068  -0.107  1.00 22.12
ATOM   1036 2HB  LEU A  70       7.293   1.716  -1.502  1.00 34.35
ATOM   1037  CG  LEU A  70       5.984   0.792  -0.058  1.00 21.11
ATOM   1038  HG  LEU A  70       5.868   1.717   0.488  1.00 63.43
ATOM   1039  CD1 LEU A  70       4.772   0.675  -0.976  1.00  3.12
ATOM   1040 1HD1 LEU A  70       4.857  -0.221  -1.572  1.00 32.41
ATOM   1041 2HD1 LEU A  70       4.734   1.535  -1.629  1.00 34.41
ATOM   1042 3HD1 LEU A  70       3.871   0.632  -0.382  1.00 61.41
ATOM   1043  CD2 LEU A  70       6.002  -0.341   0.959  1.00 41.01
ATOM   1044 1HD2 LEU A  70       6.792  -0.168   1.673  1.00 21.31
ATOM   1045 2HD2 LEU A  70       6.166  -1.283   0.456  1.00  1.14
ATOM   1046 3HD2 LEU A  70       5.054  -0.374   1.476  1.00 42.42
ATOM   1047  C   LEU A  70       7.029  -0.469  -2.968  1.00 34.13
ATOM   1048  O   LEU A  70       6.970   0.483  -3.748  1.00 31.30
ATOM   1049  N   GLN A  71       6.504  -1.623  -3.204  1.00 61.22
ATOM   1050  H   GLN A  71       6.686  -2.375  -2.600  1.00 12.34
ATOM   1051  CA  GLN A  71       5.674  -1.867  -4.338  1.00 63.40
ATOM   1052  HA  GLN A  71       5.590  -0.963  -4.919  1.00 43.23
ATOM   1053  CB  GLN A  71       6.274  -2.986  -5.198  1.00 44.32
ATOM   1054 1HB  GLN A  71       7.240  -2.665  -5.560  1.00  3.10
ATOM   1055 2HB  GLN A  71       6.410  -3.862  -4.580  1.00 14.23
ATOM   1056  CG  GLN A  71       5.425  -3.377  -6.400  1.00 62.41
ATOM   1057 1HG  GLN A  71       4.467  -3.724  -6.043  1.00 72.42
ATOM   1058 2HG  GLN A  71       5.274  -2.512  -7.026  1.00 62.13
ATOM   1059  CD  GLN A  71       6.051  -4.479  -7.234  1.00 33.12
ATOM   1060  OE1 GLN A  71       6.773  -5.340  -6.726  1.00  5.33
ATOM   1061  NE2 GLN A  71       5.780  -4.468  -8.508  1.00 53.45
ATOM   1062 2HE2 GLN A  71       5.190  -3.751  -8.864  1.00 51.14
ATOM   1063 1HE2 GLN A  71       6.169  -5.165  -9.068  1.00 11.03
ATOM   1064  C   GLN A  71       4.332  -2.276  -3.814  1.00 61.32
ATOM   1065  O   GLN A  71       4.220  -3.290  -3.125  1.00 13.43
ATOM   1066  N   VAL A  72       3.334  -1.501  -4.090  1.00 15.44
ATOM   1067  H   VAL A  72       3.482  -0.699  -4.642  1.00  5.02
ATOM   1068  CA  VAL A  72       2.025  -1.818  -3.616  1.00 53.24
ATOM   1069  HA  VAL A  72       2.083  -2.803  -3.178  1.00 64.10
ATOM   1070  CB  VAL A  72       1.513  -0.825  -2.525  1.00 72.01
ATOM   1071  HB  VAL A  72       2.273  -0.760  -1.763  1.00 73.25
ATOM   1072  CG1 VAL A  72       1.319   0.552  -3.092  1.00 72.50
ATOM   1073 1HG1 VAL A  72       0.616   0.417  -3.901  1.00 73.33
ATOM   1074 2HG1 VAL A  72       2.263   0.916  -3.468  1.00 11.42
ATOM   1075 3HG1 VAL A  72       0.906   1.215  -2.348  1.00 40.24
ATOM   1076  CG2 VAL A  72       0.225  -1.318  -1.878  1.00 54.32
ATOM   1077 1HG2 VAL A  72       0.384  -2.298  -1.455  1.00 43.43
ATOM   1078 2HG2 VAL A  72      -0.553  -1.374  -2.627  1.00 64.42
ATOM   1079 3HG2 VAL A  72      -0.074  -0.632  -1.100  1.00 21.14
ATOM   1080  C   VAL A  72       1.057  -1.883  -4.768  1.00 24.41
ATOM   1081  O   VAL A  72       1.051  -1.034  -5.647  1.00  4.25
ATOM   1082  N   ALA A  73       0.285  -2.889  -4.754  1.00 40.22
ATOM   1083  H   ALA A  73       0.418  -3.502  -4.001  1.00 11.13
ATOM   1084  CA  ALA A  73      -0.717  -3.113  -5.732  1.00 72.00
ATOM   1085  HA  ALA A  73      -0.693  -2.305  -6.447  1.00 13.24
ATOM   1086  CB  ALA A  73      -0.480  -4.429  -6.460  1.00 61.44
ATOM   1087 1HB  ALA A  73       0.487  -4.408  -6.941  1.00 10.24
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ATOM   1088 2HB  ALA A  73      -1.248  -4.574  -7.206  1.00 13.13
ATOM   1089 3HB  ALA A  73      -0.512  -5.243  -5.751  1.00  4.13
ATOM   1090  C   ALA A  73      -2.054  -3.111  -5.047  1.00 60.53
ATOM   1091  O   ALA A  73      -2.319  -3.946  -4.160  1.00 74.33
ATOM   1092  N   MET A  74      -2.898  -2.240  -5.479  1.00 25.13
ATOM   1093  H   MET A  74      -2.660  -1.688  -6.262  1.00  1.31
ATOM   1094  CA  MET A  74      -4.194  -2.032  -4.896  1.00  0.25
ATOM   1095  HA  MET A  74      -4.302  -2.621  -3.998  1.00  4.33
ATOM   1096  CB  MET A  74      -4.394  -0.539  -4.583  1.00 31.04
ATOM   1097 1HB  MET A  74      -4.426   0.006  -5.514  1.00 34.53
ATOM   1098 2HB  MET A  74      -5.343  -0.429  -4.076  1.00  1.02
ATOM   1099  CG  MET A  74      -3.314   0.086  -3.705  1.00 64.02
ATOM   1100 1HG  MET A  74      -3.293  -0.397  -2.743  1.00 22.42
ATOM   1101 2HG  MET A  74      -2.359  -0.054  -4.190  1.00 33.13
ATOM   1102  SD  MET A  74      -3.554   1.847  -3.430  1.00 31.41
ATOM   1103  CE  MET A  74      -3.311   2.479  -5.072  1.00 65.23
ATOM   1104 1HE  MET A  74      -2.346   2.169  -5.447  1.00 54.45
ATOM   1105 2HE  MET A  74      -3.353   3.557  -5.046  1.00 52.30
ATOM   1106 3HE  MET A  74      -4.094   2.101  -5.712  1.00  3.32
ATOM   1107  C   MET A  74      -5.181  -2.443  -5.939  1.00 42.34
ATOM   1108  O   MET A  74      -5.079  -2.010  -7.080  1.00 34.40
ATOM   1109  N   LYS A  75      -6.091  -3.297  -5.577  1.00  4.02
ATOM   1110  H   LYS A  75      -6.195  -3.548  -4.635  1.00 44.52
ATOM   1111  CA  LYS A  75      -7.011  -3.855  -6.537  1.00 20.10
ATOM   1112  HA  LYS A  75      -6.957  -3.272  -7.449  1.00 12.10
ATOM   1113  CB  LYS A  75      -6.611  -5.309  -6.862  1.00 75.20
ATOM   1114 1HB  LYS A  75      -7.325  -5.705  -7.570  1.00 62.32
ATOM   1115 2HB  LYS A  75      -5.640  -5.292  -7.329  1.00 24.00
ATOM   1116  CG  LYS A  75      -6.568  -6.253  -5.663  1.00  4.32
ATOM   1117 1HG  LYS A  75      -6.205  -5.707  -4.803  1.00 75.34
ATOM   1118 2HG  LYS A  75      -7.570  -6.607  -5.462  1.00 62.11
ATOM   1119  CD  LYS A  75      -5.655  -7.452  -5.913  1.00  2.22
ATOM   1120 1HD  LYS A  75      -5.736  -8.135  -5.080  1.00 30.02
ATOM   1121 2HD  LYS A  75      -5.968  -7.948  -6.820  1.00 24.20
ATOM   1122  CE  LYS A  75      -4.188  -7.014  -6.062  1.00  4.55
ATOM   1123 1HE  LYS A  75      -3.593  -7.894  -6.253  1.00 61.42
ATOM   1124 2HE  LYS A  75      -4.077  -6.337  -6.894  1.00 53.30
ATOM   1125  NZ  LYS A  75      -3.660  -6.362  -4.824  1.00 11.40
ATOM   1126 1HZ  LYS A  75      -3.383  -7.076  -4.113  1.00 42.42
ATOM   1127 2HZ  LYS A  75      -4.371  -5.742  -4.381  1.00 11.20
ATOM   1128 3HZ  LYS A  75      -2.826  -5.770  -5.019  1.00 20.11
ATOM   1129  C   LYS A  75      -8.430  -3.722  -6.066  1.00 31.14
ATOM   1130  O   LYS A  75      -8.756  -4.022  -4.893  1.00 44.43
ATOM   1131  N   LYS A  76      -9.248  -3.287  -6.968  1.00  5.41
ATOM   1132  H   LYS A  76      -8.888  -3.237  -7.889  1.00 75.11
ATOM   1133  CA  LYS A  76     -10.612  -2.946  -6.716  1.00 44.41
ATOM   1134  HA  LYS A  76     -10.691  -2.421  -5.778  1.00  4.11
ATOM   1135  CB  LYS A  76     -11.095  -2.024  -7.819  1.00 23.15
ATOM   1136 1HB  LYS A  76     -10.467  -1.145  -7.877  1.00 15.30
ATOM   1137 2HB  LYS A  76     -10.989  -2.523  -8.771  1.00 11.24
ATOM   1138  CG  LYS A  76     -12.530  -1.575  -7.698  1.00 12.01
ATOM   1139 1HG  LYS A  76     -13.101  -2.358  -7.222  1.00 31.43
ATOM   1140 2HG  LYS A  76     -12.579  -0.678  -7.099  1.00  2.44
ATOM   1141  CD  LYS A  76     -13.119  -1.293  -9.068  1.00 53.34
ATOM   1142 1HD  LYS A  76     -14.010  -0.692  -8.952  1.00 62.42
ATOM   1143 2HD  LYS A  76     -12.393  -0.749  -9.655  1.00 24.05
ATOM   1144  CE  LYS A  76     -13.486  -2.594  -9.811  1.00 34.10
ATOM   1145 1HE  LYS A  76     -14.155  -3.109  -9.138  1.00 13.14
ATOM   1146 2HE  LYS A  76     -14.007  -2.336 -10.721  1.00 30.05
ATOM   1147  NZ  LYS A  76     -12.329  -3.517 -10.105  1.00 10.22
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ATOM   1148 1HZ  LYS A  76     -11.923  -3.920  -9.231  1.00 12.00
ATOM   1149 2HZ  LYS A  76     -11.539  -3.026 -10.585  1.00 61.41
ATOM   1150 3HZ  LYS A  76     -12.593  -4.308 -10.720  1.00 24.11
ATOM   1151  C   LYS A  76     -11.488  -4.183  -6.715  1.00 50.14
ATOM   1152  O   LYS A  76     -11.688  -4.826  -7.763  1.00 21.03
ATOM   1153  N   LEU A  77     -12.053  -4.477  -5.597  1.00 53.42
ATOM   1154  H   LEU A  77     -11.892  -3.898  -4.815  1.00 15.53
ATOM   1155  CA  LEU A  77     -12.937  -5.600  -5.482  1.00 61.12
ATOM   1156  HA  LEU A  77     -12.668  -6.300  -6.258  1.00 72.24
ATOM   1157  CB  LEU A  77     -12.791  -6.278  -4.110  1.00 43.23
ATOM   1158 1HB  LEU A  77     -13.006  -5.529  -3.361  1.00 12.32
ATOM   1159 2HB  LEU A  77     -13.523  -7.066  -4.031  1.00 60.44
ATOM   1160  CG  LEU A  77     -11.406  -6.864  -3.789  1.00 72.41
ATOM   1161  HG  LEU A  77     -10.688  -6.058  -3.752  1.00 31.23
ATOM   1162  CD1 LEU A  77     -11.415  -7.532  -2.431  1.00 12.12
ATOM   1163 1HD1 LEU A  77     -11.651  -6.802  -1.671  1.00 14.24
ATOM   1164 2HD1 LEU A  77     -10.443  -7.959  -2.231  1.00 54.04
ATOM   1165 3HD1 LEU A  77     -12.160  -8.314  -2.420  1.00 52.43
ATOM   1166  CD2 LEU A  77     -10.963  -7.854  -4.862  1.00 45.21
ATOM   1167 1HD2 LEU A  77     -10.882  -7.347  -5.812  1.00  1.23
ATOM   1168 2HD2 LEU A  77     -11.690  -8.649  -4.940  1.00  4.10
ATOM   1169 3HD2 LEU A  77     -10.002  -8.269  -4.593  1.00 74.22
ATOM   1170  C   LEU A  77     -14.374  -5.134  -5.734  1.00 13.33
ATOM   1171  O   LEU A  77     -14.748  -4.025  -5.339  1.00 31.51
ATOM   1172  N   PRO A  78     -15.213  -5.976  -6.372  1.00 42.10
ATOM   1173  CD  PRO A  78     -14.898  -7.374  -6.748  1.00 52.21
ATOM   1174  CA  PRO A  78     -16.589  -5.597  -6.786  1.00 33.25
ATOM   1175  HA  PRO A  78     -16.593  -4.646  -7.297  1.00 42.21
ATOM   1176  CB  PRO A  78     -16.966  -6.705  -7.771  1.00  0.25
ATOM   1177 1HB  PRO A  78     -18.032  -6.883  -7.725  1.00  2.02
ATOM   1178 2HB  PRO A  78     -16.666  -6.438  -8.772  1.00 41.35
ATOM   1179  CG  PRO A  78     -16.191  -7.896  -7.321  1.00 61.22
ATOM   1180 1HG  PRO A  78     -16.753  -8.429  -6.568  1.00 62.51
ATOM   1181 2HG  PRO A  78     -15.977  -8.540  -8.160  1.00 60.02
ATOM   1182 1HD  PRO A  78     -14.619  -7.947  -5.875  1.00 41.21
ATOM   1183 2HD  PRO A  78     -14.106  -7.404  -7.480  1.00  4.43
ATOM   1184  C   PRO A  78     -17.596  -5.541  -5.625  1.00 53.33
ATOM   1185  O   PRO A  78     -18.794  -5.504  -5.836  1.00 20.21
ATOM   1186  N   ASN A  79     -17.096  -5.513  -4.426  1.00  4.33
ATOM   1187  H   ASN A  79     -16.120  -5.518  -4.327  1.00 61.51
ATOM   1188  CA  ASN A  79     -17.929  -5.442  -3.238  1.00 20.53
ATOM   1189  HA  ASN A  79     -18.948  -5.318  -3.578  1.00  4.42
ATOM   1190  CB  ASN A  79     -17.828  -6.741  -2.394  1.00 74.24
ATOM   1191 1HB  ASN A  79     -18.414  -6.618  -1.494  1.00 40.01
ATOM   1192 2HB  ASN A  79     -18.243  -7.557  -2.968  1.00  2.24
ATOM   1193  CG  ASN A  79     -16.408  -7.115  -1.979  1.00 10.22
ATOM   1194  OD1 ASN A  79     -15.914  -6.697  -0.961  1.00 32.22
ATOM   1195  ND2 ASN A  79     -15.755  -7.942  -2.770  1.00 15.21
ATOM   1196 2HD2 ASN A  79     -16.212  -8.271  -3.570  1.00 65.41
ATOM   1197 1HD2 ASN A  79     -14.852  -8.193  -2.489  1.00 41.33
ATOM   1198  C   ASN A  79     -17.558  -4.215  -2.427  1.00 23.20
ATOM   1199  O   ASN A  79     -17.922  -4.089  -1.274  1.00  0.31
ATOM   1200  N   ASN A  80     -16.885  -3.271  -3.107  1.00 62.14
ATOM   1201  H   ASN A  80     -16.701  -3.439  -4.054  1.00 11.51
ATOM   1202  CA  ASN A  80     -16.401  -2.007  -2.507  1.00 21.45
ATOM   1203  HA  ASN A  80     -15.927  -1.476  -3.319  1.00 64.42
ATOM   1204  CB  ASN A  80     -17.524  -1.114  -1.929  1.00  4.00
ATOM   1205 1HB  ASN A  80     -18.178  -1.721  -1.322  1.00 30.44
ATOM   1206 2HB  ASN A  80     -17.079  -0.346  -1.313  1.00 15.15
ATOM   1207  CG  ASN A  80     -18.356  -0.453  -3.000  1.00  4.40
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ATOM   1208  OD1 ASN A  80     -18.011   0.626  -3.489  1.00 62.13
ATOM   1209  ND2 ASN A  80     -19.459  -1.062  -3.359  1.00 22.12
ATOM   1210 2HD2 ASN A  80     -19.677  -1.908  -2.912  1.00 51.33
ATOM   1211 1HD2 ASN A  80     -20.013  -0.643  -4.050  1.00 71.32
ATOM   1212  C   ASN A  80     -15.328  -2.251  -1.490  1.00 52.44
ATOM   1213  O   ASN A  80     -15.277  -1.621  -0.443  1.00 12.43
ATOM   1214  N   ALA A  81     -14.447  -3.131  -1.841  1.00 74.31
ATOM   1215  H   ALA A  81     -14.536  -3.582  -2.705  1.00 34.24
ATOM   1216  CA  ALA A  81     -13.315  -3.446  -1.042  1.00  2.42
ATOM   1217  HA  ALA A  81     -13.253  -2.732  -0.232  1.00 21.34
ATOM   1218  CB  ALA A  81     -13.423  -4.848  -0.477  1.00 13.50
ATOM   1219 1HB  ALA A  81     -14.285  -4.911   0.169  1.00 54.01
ATOM   1220 2HB  ALA A  81     -12.529  -5.084   0.082  1.00  2.21
ATOM   1221 3HB  ALA A  81     -13.534  -5.549  -1.291  1.00 34.00
ATOM   1222  C   ALA A  81     -12.104  -3.323  -1.919  1.00 13.32
ATOM   1223  O   ALA A  81     -12.229  -3.314  -3.144  1.00 64.12
ATOM   1224  N   THR A  82     -10.973  -3.199  -1.332  1.00 55.42
ATOM   1225  H   THR A  82     -10.929  -3.174  -0.350  1.00 34.10
ATOM   1226  CA  THR A  82      -9.760  -3.084  -2.059  1.00 22.33
ATOM   1227  HA  THR A  82      -9.923  -3.387  -3.083  1.00 61.30
ATOM   1228  CB  THR A  82      -9.274  -1.627  -2.032  1.00 13.55
ATOM   1229  HB  THR A  82      -8.940  -1.396  -1.032  1.00 35.12
ATOM   1230  OG1 THR A  82     -10.355  -0.765  -2.396  1.00 71.21
ATOM   1231  HG1 THR A  82     -11.057  -0.837  -1.736  1.00 11.33
ATOM   1232  CG2 THR A  82      -8.129  -1.414  -3.007  1.00 31.01
ATOM   1233 1HG2 THR A  82      -7.296  -2.039  -2.721  1.00 43.52
ATOM   1234 2HG2 THR A  82      -7.827  -0.376  -2.998  1.00 63.34
ATOM   1235 3HG2 THR A  82      -8.454  -1.689  -3.999  1.00  0.04
ATOM   1236  C   THR A  82      -8.728  -3.980  -1.399  1.00 32.13
ATOM   1237  O   THR A  82      -8.522  -3.909  -0.189  1.00 44.31
ATOM   1238  N   ARG A  83      -8.107  -4.835  -2.152  1.00 34.23
ATOM   1239  H   ARG A  83      -8.313  -4.876  -3.111  1.00 73.14
ATOM   1240  CA  ARG A  83      -7.131  -5.703  -1.590  1.00 63.44
ATOM   1241  HA  ARG A  83      -7.225  -5.613  -0.519  1.00  4.11
ATOM   1242  CB  ARG A  83      -7.379  -7.164  -1.991  1.00 62.00
ATOM   1243 1HB  ARG A  83      -8.373  -7.446  -1.681  1.00 51.42
ATOM   1244 2HB  ARG A  83      -7.308  -7.247  -3.066  1.00 30.10
ATOM   1245  CG  ARG A  83      -6.394  -8.133  -1.371  1.00 54.34
ATOM   1246 1HG  ARG A  83      -5.416  -7.947  -1.789  1.00 73.13
ATOM   1247 2HG  ARG A  83      -6.364  -7.953  -0.306  1.00 11.23
ATOM   1248  CD  ARG A  83      -6.761  -9.578  -1.619  1.00 62.34
ATOM   1249 1HD  ARG A  83      -6.815  -9.787  -2.676  1.00 25.31
ATOM   1250 2HD  ARG A  83      -5.955 -10.126  -1.159  1.00 12.11
ATOM   1251  NE  ARG A  83      -8.010  -9.982  -0.954  1.00 20.20
ATOM   1252  HE  ARG A  83      -8.246  -9.444  -0.157  1.00 14.23
ATOM   1253  CZ  ARG A  83      -8.767 -11.045  -1.264  1.00 70.10
ATOM   1254  NH1 ARG A  83      -8.520 -11.762  -2.369  1.00 42.50
ATOM   1255 1HH1 ARG A  83      -7.770 -11.526  -2.990  1.00 25.10
ATOM   1256 2HH1 ARG A  83      -9.068 -12.562  -2.622  1.00 24.35
ATOM   1257  NH2 ARG A  83      -9.773 -11.391  -0.455  1.00 53.11
ATOM   1258 1HH2 ARG A  83      -9.970 -10.874   0.384  1.00  4.24
ATOM   1259 2HH2 ARG A  83     -10.376 -12.174  -0.616  1.00 11.13
ATOM   1260  C   ARG A  83      -5.739  -5.218  -1.956  1.00 11.31
ATOM   1261  O   ARG A  83      -5.439  -4.936  -3.129  1.00 13.13
ATOM   1262  N   ILE A  84      -4.892  -5.155  -0.979  1.00 44.14
ATOM   1263  H   ILE A  84      -5.134  -5.522  -0.096  1.00  2.11
ATOM   1264  CA  ILE A  84      -3.579  -4.592  -1.116  1.00 31.14
ATOM   1265  HA  ILE A  84      -3.511  -4.157  -2.102  1.00 43.03
ATOM   1266  CB  ILE A  84      -3.324  -3.446  -0.048  1.00 61.50
ATOM   1267  HB  ILE A  84      -3.957  -3.676   0.798  1.00 43.12
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ATOM   1268  CG2 ILE A  84      -1.889  -3.399   0.472  1.00  1.01
ATOM   1269 1HG2 ILE A  84      -1.786  -2.594   1.184  1.00 53.15
ATOM   1270 2HG2 ILE A  84      -1.215  -3.243  -0.355  1.00 44.13
ATOM   1271 3HG2 ILE A  84      -1.654  -4.339   0.953  1.00 54.21
ATOM   1272  CG1 ILE A  84      -3.739  -2.075  -0.583  1.00 70.14
ATOM   1273 1HG1 ILE A  84      -3.459  -1.312   0.126  1.00 15.51
ATOM   1274 2HG1 ILE A  84      -3.193  -1.925  -1.503  1.00 11.45
ATOM   1275  CD1 ILE A  84      -5.206  -1.919  -0.877  1.00 63.50
ATOM   1276 1HD1 ILE A  84      -5.780  -2.058   0.027  1.00 21.24
ATOM   1277 2HD1 ILE A  84      -5.492  -2.663  -1.607  1.00 65.15
ATOM   1278 3HD1 ILE A  84      -5.385  -0.934  -1.280  1.00 64.13
ATOM   1279  C   ILE A  84      -2.549  -5.676  -0.999  1.00 71.32
ATOM   1280  O   ILE A  84      -2.656  -6.574  -0.168  1.00 62.33
ATOM   1281  N   SER A  85      -1.637  -5.632  -1.914  1.00 62.21
ATOM   1282  H   SER A  85      -1.665  -4.910  -2.578  1.00 65.04
ATOM   1283  CA  SER A  85      -0.553  -6.546  -1.989  1.00 30.13
ATOM   1284  HA  SER A  85      -0.551  -7.181  -1.115  1.00 55.21
ATOM   1285  CB  SER A  85      -0.733  -7.390  -3.244  1.00 13.24
ATOM   1286 1HB  SER A  85      -0.600  -6.768  -4.115  1.00 24.24
ATOM   1287 2HB  SER A  85      -0.004  -8.187  -3.251  1.00 35.04
ATOM   1288  OG  SER A  85      -2.054  -7.972  -3.280  1.00 33.12
ATOM   1289  HG  SER A  85      -1.978  -8.756  -2.723  1.00  4.23
ATOM   1290  C   SER A  85       0.729  -5.723  -2.058  1.00 14.20
ATOM   1291  O   SER A  85       0.835  -4.834  -2.904  1.00 74.44
ATOM   1292  N   ILE A  86       1.639  -5.959  -1.163  1.00 51.55
ATOM   1293  H   ILE A  86       1.488  -6.666  -0.496  1.00 62.21
ATOM   1294  CA  ILE A  86       2.888  -5.220  -1.118  1.00 75.23
ATOM   1295  HA  ILE A  86       2.890  -4.483  -1.908  1.00 43.31
ATOM   1296  CB  ILE A  86       3.065  -4.497   0.260  1.00 75.42
ATOM   1297  HB  ILE A  86       3.128  -5.250   1.031  1.00 62.43
ATOM   1298  CG2 ILE A  86       4.358  -3.676   0.281  1.00 74.13
ATOM   1299 1HG2 ILE A  86       4.321  -2.930  -0.500  1.00 21.03
ATOM   1300 2HG2 ILE A  86       5.200  -4.329   0.115  1.00  5.53
ATOM   1301 3HG2 ILE A  86       4.461  -3.189   1.241  1.00 42.22
ATOM   1302  CG1 ILE A  86       1.860  -3.590   0.545  1.00 65.11
ATOM   1303 1HG1 ILE A  86       1.855  -2.796  -0.185  1.00 73.23
ATOM   1304 2HG1 ILE A  86       0.952  -4.167   0.454  1.00 31.24
ATOM   1305  CD1 ILE A  86       1.874  -2.935   1.911  1.00 70.34
ATOM   1306 1HD1 ILE A  86       1.875  -3.697   2.676  1.00 12.24
ATOM   1307 2HD1 ILE A  86       0.992  -2.321   2.020  1.00 23.13
ATOM   1308 3HD1 ILE A  86       2.758  -2.322   2.008  1.00 32.44
ATOM   1309  C   ILE A  86       4.034  -6.191  -1.315  1.00 63.01
ATOM   1310  O   ILE A  86       3.984  -7.292  -0.791  1.00 32.14
ATOM   1311  N   LYS A  87       5.019  -5.813  -2.099  1.00 12.55
ATOM   1312  H   LYS A  87       4.952  -4.943  -2.555  1.00 74.31
ATOM   1313  CA  LYS A  87       6.203  -6.626  -2.278  1.00  1.34
ATOM   1314  HA  LYS A  87       6.050  -7.525  -1.701  1.00 61.53
ATOM   1315  CB  LYS A  87       6.445  -7.007  -3.757  1.00 52.32
ATOM   1316 1HB  LYS A  87       5.601  -7.567  -4.129  1.00 73.41
ATOM   1317 2HB  LYS A  87       6.519  -6.095  -4.332  1.00 15.54
ATOM   1318  CG  LYS A  87       7.735  -7.823  -4.000  1.00 73.44
ATOM   1319 1HG  LYS A  87       7.778  -8.107  -5.041  1.00 44.11
ATOM   1320 2HG  LYS A  87       8.584  -7.200  -3.764  1.00 64.32
ATOM   1321  CD  LYS A  87       7.797  -9.098  -3.143  1.00 74.34
ATOM   1322 1HD  LYS A  87       7.656  -8.847  -2.102  1.00 54.11
ATOM   1323 2HD  LYS A  87       7.020  -9.774  -3.465  1.00 54.40
ATOM   1324  CE  LYS A  87       9.135  -9.807  -3.293  1.00 13.02
ATOM   1325 1HE  LYS A  87       9.218 -10.185  -4.301  1.00 62.32
ATOM   1326 2HE  LYS A  87       9.925  -9.094  -3.113  1.00 31.32
ATOM   1327  NZ  LYS A  87       9.278 -10.935  -2.345  1.00 61.23
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ATOM   1328 1HZ  LYS A  87       9.224 -10.624  -1.352  1.00  1.11
ATOM   1329 2HZ  LYS A  87      10.182 -11.430  -2.448  1.00  2.51
ATOM   1330 3HZ  LYS A  87       8.543 -11.677  -2.451  1.00  0.44
ATOM   1331  C   LYS A  87       7.405  -5.904  -1.716  1.00 33.53
ATOM   1332  O   LYS A  87       7.653  -4.746  -2.043  1.00 12.10
ATOM   1333  N   TYR A  88       8.098  -6.570  -0.833  1.00  0.43
ATOM   1334  H   TYR A  88       7.789  -7.452  -0.532  1.00 64.25
ATOM   1335  CA  TYR A  88       9.283  -6.049  -0.234  1.00 74.43
ATOM   1336  HA  TYR A  88       9.517  -5.095  -0.679  1.00 74.42
ATOM   1337  CB  TYR A  88       9.058  -5.859   1.223  1.00 20.13
ATOM   1338 1HB  TYR A  88       8.002  -5.971   1.416  1.00 11.24
ATOM   1339 2HB  TYR A  88       9.563  -6.657   1.747  1.00 24.52
ATOM   1340  CG  TYR A  88       9.567  -4.537   1.743  1.00 63.31
ATOM   1341  CD1 TYR A  88      10.790  -4.433   2.388  1.00  2.31
ATOM   1342  HD1 TYR A  88      11.398  -5.317   2.513  1.00 51.00
ATOM   1343  CE1 TYR A  88      11.229  -3.222   2.874  1.00 51.23
ATOM   1344  HE1 TYR A  88      12.182  -3.150   3.373  1.00 24.12
ATOM   1345  CZ  TYR A  88      10.446  -2.100   2.708  1.00  4.35
ATOM   1346  CE2 TYR A  88       9.238  -2.183   2.069  1.00  0.45
ATOM   1347  HE2 TYR A  88       8.627  -1.303   1.939  1.00 44.33
ATOM   1348  CD2 TYR A  88       8.804  -3.391   1.595  1.00 42.12
ATOM   1349  HD2 TYR A  88       7.852  -3.457   1.090  1.00 14.10
ATOM   1350  OH  TYR A  88      10.868  -0.894   3.198  1.00  2.02
ATOM   1351  HH  TYR A  88      11.809  -0.799   2.958  1.00 40.31
ATOM   1352  C   TYR A  88      10.420  -7.020  -0.434  1.00 43.42
ATOM   1353  O   TYR A  88      10.190  -8.216  -0.682  1.00 32.13
ATOM   1354  N   GLY A  89      11.626  -6.517  -0.364  1.00 73.34
ATOM   1355  H   GLY A  89      11.750  -5.551  -0.256  1.00 71.11
ATOM   1356  CA  GLY A  89      12.786  -7.348  -0.481  1.00 20.31
ATOM   1357 1HA  GLY A  89      12.610  -8.097  -1.239  1.00 55.13
ATOM   1358 2HA  GLY A  89      13.605  -6.719  -0.789  1.00  1.23
ATOM   1359  C   GLY A  89      13.167  -8.040   0.822  1.00 21.23
ATOM   1360  O   GLY A  89      12.298  -8.457   1.596  1.00  5.31
ATOM   1361  N   SER A  90      14.457  -8.067   1.093  1.00 22.22
ATOM   1362  H   SER A  90      15.087  -7.549   0.542  1.00 21.05
ATOM   1363  CA  SER A  90      15.050  -8.834   2.192  1.00 61.41
ATOM   1364  HA  SER A  90      14.769  -9.870   2.074  1.00 24.34
ATOM   1365  CB  SER A  90      16.566  -8.750   2.062  1.00 14.34
ATOM   1366 1HB  SER A  90      16.894  -7.758   2.335  1.00 22.33
ATOM   1367 2HB  SER A  90      17.027  -9.479   2.713  1.00 14.52
ATOM   1368  OG  SER A  90      16.962  -9.017   0.719  1.00 10.34
ATOM   1369  HG  SER A  90      17.369  -8.215   0.376  1.00 14.03
ATOM   1370  C   SER A  90      14.620  -8.345   3.586  1.00 13.24
ATOM   1371  O   SER A  90      14.689  -9.087   4.558  1.00 31.11
ATOM   1372  N   GLN A  91      14.181  -7.110   3.671  1.00  4.22
ATOM   1373  H   GLN A  91      14.115  -6.586   2.848  1.00 72.42
ATOM   1374  CA  GLN A  91      13.808  -6.527   4.948  1.00 52.20
ATOM   1375  HA  GLN A  91      14.474  -6.954   5.684  1.00 61.54
ATOM   1376  CB  GLN A  91      14.042  -5.024   4.927  1.00 33.24
ATOM   1377 1HB  GLN A  91      13.632  -4.625   4.011  1.00 43.03
ATOM   1378 2HB  GLN A  91      13.534  -4.575   5.767  1.00 12.44
ATOM   1379  CG  GLN A  91      15.514  -4.646   4.995  1.00 13.33
ATOM   1380 1HG  GLN A  91      15.903  -4.929   5.962  1.00 24.11
ATOM   1381 2HG  GLN A  91      16.043  -5.182   4.223  1.00 21.12
ATOM   1382  CD  GLN A  91      15.739  -3.171   4.805  1.00 43.54
ATOM   1383  OE1 GLN A  91      15.683  -2.389   5.755  1.00 12.41
ATOM   1384  NE2 GLN A  91      16.073  -2.777   3.611  1.00 10.34
ATOM   1385 2HE2 GLN A  91      16.185  -3.427   2.873  1.00 23.30
ATOM   1386 1HE2 GLN A  91      16.211  -1.827   3.445  1.00  3.22
ATOM   1387  C   GLN A  91      12.380  -6.869   5.374  1.00 32.53
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ATOM   1388  O   GLN A  91      12.051  -6.803   6.555  1.00 33.21
ATOM   1389  N   GLY A  92      11.547  -7.260   4.426  1.00 71.13
ATOM   1390  H   GLY A  92      11.885  -7.363   3.511  1.00 61.03
ATOM   1391  CA  GLY A  92      10.174  -7.579   4.747  1.00 22.13
ATOM   1392 1HA  GLY A  92       9.759  -8.177   3.950  1.00 73.03
ATOM   1393 2HA  GLY A  92      10.155  -8.154   5.661  1.00 22.43
ATOM   1394  C   GLY A  92       9.302  -6.339   4.934  1.00 51.32
ATOM   1395  O   GLY A  92       9.641  -5.414   5.667  1.00 50.31
ATOM   1396  N   ASN A  93       8.169  -6.322   4.273  1.00 14.11
ATOM   1397  H   ASN A  93       7.954  -7.071   3.678  1.00 60.35
ATOM   1398  CA  ASN A  93       7.241  -5.186   4.345  1.00  2.44
ATOM   1399  HA  ASN A  93       7.849  -4.299   4.229  1.00 33.14
ATOM   1400  CB  ASN A  93       6.200  -5.177   3.203  1.00 23.33
ATOM   1401 1HB  ASN A  93       5.465  -4.423   3.440  1.00 12.43
ATOM   1402 2HB  ASN A  93       6.675  -4.895   2.277  1.00 35.41
ATOM   1403  CG  ASN A  93       5.434  -6.488   2.994  1.00 73.43
ATOM   1404  OD1 ASN A  93       4.999  -6.768   1.907  1.00 15.43
ATOM   1405  ND2 ASN A  93       5.261  -7.296   4.023  1.00 32.34
ATOM   1406 2HD2 ASN A  93       5.606  -7.052   4.906  1.00  1.55
ATOM   1407 1HD2 ASN A  93       4.781  -8.130   3.835  1.00 43.01
ATOM   1408  C   ASN A  93       6.527  -5.059   5.662  1.00 71.50
ATOM   1409  O   ASN A  93       5.912  -4.066   5.891  1.00 74.32
ATOM   1410  N   SER A  94       6.643  -6.061   6.521  1.00 42.11
ATOM   1411  H   SER A  94       7.286  -6.781   6.349  1.00 44.32
ATOM   1412  CA  SER A  94       5.881  -6.161   7.771  1.00 51.24
ATOM   1413  HA  SER A  94       4.869  -6.444   7.518  1.00 42.52
ATOM   1414  CB  SER A  94       6.489  -7.284   8.588  1.00  1.12
ATOM   1415 1HB  SER A  94       7.455  -6.979   8.964  1.00 54.12
ATOM   1416 2HB  SER A  94       5.836  -7.535   9.412  1.00 52.23
ATOM   1417  OG  SER A  94       6.650  -8.437   7.761  1.00 14.12
ATOM   1418  HG  SER A  94       6.801  -9.194   8.335  1.00 74.42
ATOM   1419  C   SER A  94       5.837  -4.836   8.580  1.00  0.02
ATOM   1420  O   SER A  94       4.769  -4.417   9.035  1.00 21.20
ATOM   1421  N   ILE A  95       6.977  -4.165   8.689  1.00 34.24
ATOM   1422  H   ILE A  95       7.780  -4.528   8.262  1.00 22.22
ATOM   1423  CA  ILE A  95       7.065  -2.899   9.417  1.00 35.23
ATOM   1424  HA  ILE A  95       6.587  -3.042  10.376  1.00 42.43
ATOM   1425  CB  ILE A  95       8.563  -2.441   9.650  1.00 32.13
ATOM   1426  HB  ILE A  95       9.042  -2.428   8.682  1.00 30.24
ATOM   1427  CG2 ILE A  95       8.631  -1.021  10.200  1.00 13.25
ATOM   1428 1HG2 ILE A  95       8.169  -0.341   9.500  1.00 60.23
ATOM   1429 2HG2 ILE A  95       9.664  -0.739  10.344  1.00 21.23
ATOM   1430 3HG2 ILE A  95       8.108  -0.974  11.144  1.00  4.45
ATOM   1431  CG1 ILE A  95       9.352  -3.402  10.585  1.00 70.45
ATOM   1432 1HG1 ILE A  95      10.291  -2.939  10.845  1.00 12.42
ATOM   1433 2HG1 ILE A  95       8.781  -3.552  11.488  1.00 21.14
ATOM   1434  CD1 ILE A  95       9.679  -4.771  10.004  1.00  3.21
ATOM   1435 1HD1 ILE A  95      10.229  -5.348  10.732  1.00 33.32
ATOM   1436 2HD1 ILE A  95      10.275  -4.652   9.111  1.00 72.23
ATOM   1437 3HD1 ILE A  95       8.759  -5.282   9.761  1.00 43.54
ATOM   1438  C   ILE A  95       6.301  -1.799   8.652  1.00 64.04
ATOM   1439  O   ILE A  95       5.485  -1.063   9.222  1.00  2.11
ATOM   1440  N   ARG A  96       6.546  -1.739   7.356  1.00 53.23
ATOM   1441  H   ARG A  96       7.144  -2.400   6.952  1.00 62.34
ATOM   1442  CA  ARG A  96       5.942  -0.749   6.489  1.00 54.23
ATOM   1443  HA  ARG A  96       6.146   0.231   6.895  1.00 34.33
ATOM   1444  CB  ARG A  96       6.561  -0.831   5.095  1.00 35.15
ATOM   1445 1HB  ARG A  96       6.368  -1.817   4.700  1.00 14.22
ATOM   1446 2HB  ARG A  96       6.067  -0.108   4.462  1.00 65.22
ATOM   1447  CG  ARG A  96       8.069  -0.586   5.017  1.00 23.12
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ATOM   1448 1HG  ARG A  96       8.546  -1.240   5.731  1.00 44.10
ATOM   1449 2HG  ARG A  96       8.412  -0.842   4.028  1.00 61.23
ATOM   1450  CD  ARG A  96       8.467   0.853   5.352  1.00 62.22
ATOM   1451 1HD  ARG A  96       9.450   1.040   4.944  1.00 62.12
ATOM   1452 2HD  ARG A  96       7.760   1.523   4.887  1.00 41.31
ATOM   1453  NE  ARG A  96       8.506   1.119   6.796  1.00 23.02
ATOM   1454  HE  ARG A  96       9.195   0.600   7.283  1.00 41.14
ATOM   1455  CZ  ARG A  96       7.784   2.030   7.459  1.00 12.21
ATOM   1456  NH1 ARG A  96       6.846   2.752   6.830  1.00 13.11
ATOM   1457 1HH1 ARG A  96       6.659   2.637   5.856  1.00 64.13
ATOM   1458 2HH1 ARG A  96       6.294   3.458   7.292  1.00 52.13
ATOM   1459  NH2 ARG A  96       8.017   2.215   8.746  1.00 33.42
ATOM   1460 1HH2 ARG A  96       8.720   1.662   9.203  1.00 24.21
ATOM   1461 2HH2 ARG A  96       7.572   2.926   9.295  1.00 22.54
ATOM   1462  C   ARG A  96       4.435  -0.954   6.379  1.00  2.51
ATOM   1463  O   ARG A  96       3.669  -0.009   6.547  1.00 63.12
ATOM   1464  N   SER A  97       4.032  -2.195   6.127  1.00 14.12
ATOM   1465  H   SER A  97       4.699  -2.916   6.059  1.00  2.25
ATOM   1466  CA  SER A  97       2.646  -2.565   5.916  1.00  3.44
ATOM   1467  HA  SER A  97       2.293  -2.057   5.032  1.00 44.34
ATOM   1468  CB  SER A  97       2.549  -4.068   5.659  1.00 63.22
ATOM   1469 1HB  SER A  97       2.859  -4.603   6.543  1.00 33.05
ATOM   1470 2HB  SER A  97       1.529  -4.328   5.419  1.00 40.40
ATOM   1471  OG  SER A  97       3.384  -4.447   4.582  1.00 64.00
ATOM   1472  HG  SER A  97       2.842  -4.724   3.837  1.00 51.00
ATOM   1473  C   SER A  97       1.770  -2.195   7.097  1.00 33.34
ATOM   1474  O   SER A  97       0.712  -1.620   6.908  1.00 33.42
ATOM   1475  N   SER A  98       2.241  -2.477   8.308  1.00 52.31
ATOM   1476  H   SER A  98       3.137  -2.864   8.408  1.00 65.51
ATOM   1477  CA  SER A  98       1.463  -2.223   9.504  1.00 54.25
ATOM   1478  HA  SER A  98       0.537  -2.772   9.412  1.00 64.32
ATOM   1479  CB  SER A  98       2.220  -2.729  10.749  1.00 62.24
ATOM   1480 1HB  SER A  98       2.495  -3.764  10.606  1.00 13.31
ATOM   1481 2HB  SER A  98       3.116  -2.140  10.877  1.00  3.35
ATOM   1482  OG  SER A  98       1.432  -2.623  11.924  1.00 21.54
ATOM   1483  HG  SER A  98       0.592  -2.205  11.718  1.00 34.04
ATOM   1484  C   SER A  98       1.132  -0.731   9.622  1.00 14.13
ATOM   1485  O   SER A  98      -0.022  -0.357   9.849  1.00  1.42
ATOM   1486  N   ALA A  99       2.132   0.106   9.441  1.00 34.12
ATOM   1487  H   ALA A  99       3.022  -0.254   9.239  1.00 53.22
ATOM   1488  CA  ALA A  99       1.937   1.533   9.529  1.00 43.13
ATOM   1489  HA  ALA A  99       1.347   1.715  10.416  1.00 74.35
ATOM   1490  CB  ALA A  99       3.264   2.258   9.673  1.00 14.31
ATOM   1491 1HB  ALA A  99       3.806   1.854  10.515  1.00 74.41
ATOM   1492 2HB  ALA A  99       3.082   3.311   9.832  1.00 14.45
ATOM   1493 3HB  ALA A  99       3.844   2.126   8.772  1.00 23.11
ATOM   1494  C   ALA A  99       1.133   2.068   8.351  1.00 14.41
ATOM   1495  O   ALA A  99       0.235   2.879   8.536  1.00 63.35
ATOM   1496  N   LEU A 100       1.458   1.596   7.151  1.00 24.24
ATOM   1497  H   LEU A 100       2.171   0.926   7.061  1.00 61.12
ATOM   1498  CA  LEU A 100       0.810   2.036   5.928  1.00 40.21
ATOM   1499  HA  LEU A 100       0.995   3.091   5.799  1.00 71.33
ATOM   1500  CB  LEU A 100       1.397   1.283   4.740  1.00 54.21
ATOM   1501 1HB  LEU A 100       2.469   1.283   4.842  1.00 62.51
ATOM   1502 2HB  LEU A 100       1.066   0.257   4.823  1.00 63.22
ATOM   1503  CG  LEU A 100       1.011   1.788   3.351  1.00  0.15
ATOM   1504  HG  LEU A 100      -0.066   1.795   3.270  1.00 21.42
ATOM   1505  CD1 LEU A 100       1.506   3.212   3.144  1.00 52.11
ATOM   1506 1HD1 LEU A 100       1.257   3.541   2.146  1.00  4.13
ATOM   1507 2HD1 LEU A 100       2.576   3.238   3.287  1.00 54.12
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ATOM   1508 3HD1 LEU A 100       1.035   3.860   3.867  1.00 75.32
ATOM   1509  CD2 LEU A 100       1.567   0.868   2.284  1.00  2.44
ATOM   1510 1HD2 LEU A 100       2.643   0.836   2.372  1.00 54.12
ATOM   1511 2HD2 LEU A 100       1.291   1.236   1.307  1.00 71.21
ATOM   1512 3HD2 LEU A 100       1.167  -0.124   2.428  1.00 11.24
ATOM   1513  C   LEU A 100      -0.681   1.779   5.998  1.00 55.32
ATOM   1514  O   LEU A 100      -1.483   2.681   5.777  1.00 40.54
ATOM   1515  N   ILE A 101      -1.032   0.560   6.374  1.00 64.31
ATOM   1516  H   ILE A 101      -0.313  -0.079   6.587  1.00 35.34
ATOM   1517  CA  ILE A 101      -2.425   0.139   6.469  1.00 22.45
ATOM   1518  HA  ILE A 101      -2.870   0.295   5.499  1.00 62.43
ATOM   1519  CB  ILE A 101      -2.550  -1.380   6.836  1.00 64.11
ATOM   1520  HB  ILE A 101      -1.920  -1.545   7.698  1.00  4.13
ATOM   1521  CG2 ILE A 101      -3.969  -1.763   7.242  1.00 64.50
ATOM   1522 1HG2 ILE A 101      -4.243  -1.178   8.108  1.00 15.20
ATOM   1523 2HG2 ILE A 101      -4.002  -2.814   7.489  1.00 13.12
ATOM   1524 3HG2 ILE A 101      -4.649  -1.551   6.431  1.00  1.52
ATOM   1525  CG1 ILE A 101      -2.037  -2.279   5.688  1.00 72.25
ATOM   1526 1HG1 ILE A 101      -0.992  -2.066   5.515  1.00 13.21
ATOM   1527 2HG1 ILE A 101      -2.138  -3.314   5.985  1.00 44.23
ATOM   1528  CD1 ILE A 101      -2.760  -2.098   4.362  1.00  4.23
ATOM   1529 1HD1 ILE A 101      -3.815  -2.285   4.498  1.00 42.04
ATOM   1530 2HD1 ILE A 101      -2.365  -2.803   3.646  1.00 11.23
ATOM   1531 3HD1 ILE A 101      -2.611  -1.095   3.992  1.00 60.42
ATOM   1532  C   ILE A 101      -3.194   1.002   7.466  1.00 34.03
ATOM   1533  O   ILE A 101      -4.284   1.476   7.143  1.00 55.40
ATOM   1534  N   GLY A 102      -2.576   1.277   8.624  1.00 24.14
ATOM   1535  H   GLY A 102      -1.678   0.916   8.789  1.00 21.04
ATOM   1536  CA  GLY A 102      -3.215   2.087   9.656  1.00 13.44
ATOM   1537 1HA  GLY A 102      -4.097   1.579  10.005  1.00 52.44
ATOM   1538 2HA  GLY A 102      -2.530   2.206  10.482  1.00 10.52
ATOM   1539  C   GLY A 102      -3.623   3.458   9.155  1.00  3.31
ATOM   1540  O   GLY A 102      -4.700   3.979   9.490  1.00 60.15
ATOM   1541  N   ILE A 103      -2.774   4.027   8.343  1.00 50.03
ATOM   1542  H   ILE A 103      -1.949   3.541   8.126  1.00 13.21
ATOM   1543  CA  ILE A 103      -3.014   5.320   7.760  1.00 72.21
ATOM   1544  HA  ILE A 103      -3.309   6.000   8.546  1.00 64.22
ATOM   1545  CB  ILE A 103      -1.733   5.854   7.097  1.00 23.32
ATOM   1546  HB  ILE A 103      -1.438   5.178   6.308  1.00 34.42
ATOM   1547  CG2 ILE A 103      -1.971   7.245   6.498  1.00  2.03
ATOM   1548 1HG2 ILE A 103      -2.749   7.185   5.751  1.00  1.44
ATOM   1549 2HG2 ILE A 103      -1.059   7.601   6.040  1.00 70.34
ATOM   1550 3HG2 ILE A 103      -2.270   7.927   7.280  1.00 32.31
ATOM   1551  CG1 ILE A 103      -0.622   5.908   8.136  1.00 33.51
ATOM   1552 1HG1 ILE A 103      -0.800   6.740   8.802  1.00 31.03
ATOM   1553 2HG1 ILE A 103      -0.628   4.991   8.707  1.00 20.53
ATOM   1554  CD1 ILE A 103       0.742   6.080   7.549  1.00 22.14
ATOM   1555 1HD1 ILE A 103       0.933   5.231   6.911  1.00 21.10
ATOM   1556 2HD1 ILE A 103       1.462   6.105   8.354  1.00 34.24
ATOM   1557 3HD1 ILE A 103       0.782   6.992   6.975  1.00 50.43
ATOM   1558  C   ILE A 103      -4.132   5.229   6.729  1.00 41.25
ATOM   1559  O   ILE A 103      -5.053   6.039   6.737  1.00 50.54
ATOM   1560  N   ILE A 104      -4.065   4.209   5.878  1.00 11.52
ATOM   1561  H   ILE A 104      -3.342   3.552   5.988  1.00  1.24
ATOM   1562  CA  ILE A 104      -5.039   4.032   4.805  1.00 64.15
ATOM   1563  HA  ILE A 104      -5.022   4.914   4.182  1.00 61.21
ATOM   1564  CB  ILE A 104      -4.693   2.796   3.922  1.00 11.34
ATOM   1565  HB  ILE A 104      -4.723   1.917   4.550  1.00 41.22
ATOM   1566  CG2 ILE A 104      -5.730   2.623   2.808  1.00 74.40
ATOM   1567 1HG2 ILE A 104      -5.477   1.753   2.221  1.00 54.00
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ATOM   1568 2HG2 ILE A 104      -5.726   3.497   2.174  1.00 65.14
ATOM   1569 3HG2 ILE A 104      -6.711   2.496   3.241  1.00 22.35
ATOM   1570  CG1 ILE A 104      -3.296   2.932   3.317  1.00 24.54
ATOM   1571 1HG1 ILE A 104      -3.303   3.736   2.596  1.00 63.32
ATOM   1572 2HG1 ILE A 104      -2.591   3.166   4.102  1.00 14.44
ATOM   1573  CD1 ILE A 104      -2.813   1.680   2.611  1.00  2.21
ATOM   1574 1HD1 ILE A 104      -1.840   1.861   2.181  1.00  4.23
ATOM   1575 2HD1 ILE A 104      -3.510   1.416   1.829  1.00 14.53
ATOM   1576 3HD1 ILE A 104      -2.746   0.872   3.323  1.00 24.23
ATOM   1577  C   ILE A 104      -6.442   3.840   5.373  1.00 63.12
ATOM   1578  O   ILE A 104      -7.367   4.562   4.999  1.00 35.12
ATOM   1579  N   GLU A 105      -6.574   2.927   6.322  1.00  1.31
ATOM   1580  H   GLU A 105      -5.779   2.443   6.648  1.00 63.13
ATOM   1581  CA  GLU A 105      -7.866   2.616   6.893  1.00 34.42
ATOM   1582  HA  GLU A 105      -8.533   2.429   6.064  1.00 33.44
ATOM   1583  CB  GLU A 105      -7.803   1.343   7.769  1.00 24.52
ATOM   1584 1HB  GLU A 105      -8.794   1.125   8.136  1.00  3.53
ATOM   1585 2HB  GLU A 105      -7.470   0.518   7.158  1.00 73.41
ATOM   1586  CG  GLU A 105      -6.871   1.452   8.970  1.00 75.54
ATOM   1587 1HG  GLU A 105      -5.864   1.621   8.621  1.00 75.44
ATOM   1588 2HG  GLU A 105      -7.207   2.306   9.542  1.00 71.24
ATOM   1589  CD  GLU A 105      -6.886   0.234   9.857  1.00 41.44
ATOM   1590  OE1 GLU A 105      -6.024  -0.617   9.711  1.00 50.03
ATOM   1591  OE2 GLU A 105      -7.795   0.146  10.723  1.00  1.34
ATOM   1592  C   GLU A 105      -8.426   3.809   7.678  1.00 75.45
ATOM   1593  O   GLU A 105      -9.579   4.206   7.493  1.00 22.41
ATOM   1594  N   GLY A 106      -7.584   4.412   8.497  1.00 12.21
ATOM   1595  H   GLY A 106      -6.650   4.105   8.525  1.00 42.21
ATOM   1596  CA  GLY A 106      -8.006   5.488   9.346  1.00 32.44
ATOM   1597 1HA  GLY A 106      -8.914   5.164   9.835  1.00 41.32
ATOM   1598 2HA  GLY A 106      -7.277   5.675  10.113  1.00 40.24
ATOM   1599  C   GLY A 106      -8.317   6.765   8.610  1.00 71.54
ATOM   1600  O   GLY A 106      -9.228   7.476   9.001  1.00  3.22
ATOM   1601  N   ASN A 107      -7.581   7.050   7.543  1.00 21.20
ATOM   1602  H   ASN A 107      -6.857   6.440   7.270  1.00 53.52
ATOM   1603  CA  ASN A 107      -7.802   8.283   6.762  1.00 64.43
ATOM   1604  HA  ASN A 107      -7.752   9.121   7.440  1.00 14.33
ATOM   1605  CB  ASN A 107      -6.731   8.442   5.671  1.00 65.41
ATOM   1606 1HB  ASN A 107      -5.754   8.408   6.128  1.00 65.00
ATOM   1607 2HB  ASN A 107      -6.821   7.621   4.973  1.00  1.42
ATOM   1608  CG  ASN A 107      -6.846   9.749   4.895  1.00 23.13
ATOM   1609  OD1 ASN A 107      -7.264  10.767   5.420  1.00 74.43
ATOM   1610  ND2 ASN A 107      -6.474   9.722   3.637  1.00 41.30
ATOM   1611 2HD2 ASN A 107      -6.148   8.877   3.271  1.00 62.43
ATOM   1612 1HD2 ASN A 107      -6.546  10.563   3.142  1.00 72.25
ATOM   1613  C   ASN A 107      -9.183   8.243   6.123  1.00 41.24
ATOM   1614  O   ASN A 107      -9.909   9.236   6.107  1.00 24.34
ATOM   1615  N   ILE A 108      -9.557   7.071   5.647  1.00 55.12
ATOM   1616  H   ILE A 108      -8.931   6.318   5.692  1.00  1.02
ATOM   1617  CA  ILE A 108     -10.867   6.868   5.058  1.00  3.11
ATOM   1618  HA  ILE A 108     -11.018   7.627   4.305  1.00 23.03
ATOM   1619  CB  ILE A 108     -10.971   5.465   4.404  1.00 73.31
ATOM   1620  HB  ILE A 108     -10.783   4.717   5.161  1.00 64.35
ATOM   1621  CG2 ILE A 108     -12.373   5.238   3.831  1.00 52.44
ATOM   1622 1HG2 ILE A 108     -12.425   4.256   3.384  1.00  2.42
ATOM   1623 2HG2 ILE A 108     -12.579   5.986   3.078  1.00 41.22
ATOM   1624 3HG2 ILE A 108     -13.102   5.314   4.623  1.00 51.03
ATOM   1625  CG1 ILE A 108      -9.913   5.332   3.301  1.00 31.43
ATOM   1626 1HG1 ILE A 108     -10.205   5.956   2.470  1.00  3.21
ATOM   1627 2HG1 ILE A 108      -8.955   5.658   3.680  1.00 31.30
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ATOM   1628  CD1 ILE A 108      -9.756   3.935   2.756  1.00 54.21
ATOM   1629 1HD1 ILE A 108      -9.463   3.270   3.556  1.00 43.42
ATOM   1630 2HD1 ILE A 108      -8.995   3.934   1.990  1.00 52.52
ATOM   1631 3HD1 ILE A 108     -10.694   3.603   2.337  1.00 60.14
ATOM   1632  C   ILE A 108     -11.938   7.032   6.138  1.00 34.13
ATOM   1633  O   ILE A 108     -12.945   7.698   5.927  1.00 52.04
ATOM   1634  N   ARG A 109     -11.678   6.463   7.311  1.00 12.33
ATOM   1635  H   ARG A 109     -10.844   5.957   7.405  1.00 70.21
ATOM   1636  CA  ARG A 109     -12.606   6.554   8.432  1.00 64.34
ATOM   1637  HA  ARG A 109     -13.566   6.240   8.048  1.00  2.44
ATOM   1638  CB  ARG A 109     -12.218   5.627   9.579  1.00 43.24
ATOM   1639 1HB  ARG A 109     -11.253   5.925   9.964  1.00 71.45
ATOM   1640 2HB  ARG A 109     -12.956   5.708  10.363  1.00  4.35
ATOM   1641  CG  ARG A 109     -12.144   4.193   9.142  1.00 21.42
ATOM   1642 1HG  ARG A 109     -12.894   3.973   8.407  1.00 23.13
ATOM   1643 2HG  ARG A 109     -11.189   4.075   8.652  1.00 51.42
ATOM   1644  CD  ARG A 109     -12.186   3.218  10.296  1.00 12.50
ATOM   1645 1HD  ARG A 109     -13.007   3.484  10.944  1.00 11.44
ATOM   1646 2HD  ARG A 109     -12.353   2.226   9.902  1.00  0.33
ATOM   1647  NE  ARG A 109     -10.956   3.218  11.077  1.00 61.21
ATOM   1648  HE  ARG A 109     -10.846   3.976  11.688  1.00 23.33
ATOM   1649  CZ  ARG A 109     -10.049   2.229  11.012  1.00 23.42
ATOM   1650  NH1 ARG A 109     -10.175   1.254  10.117  1.00 44.05
ATOM   1651 1HH1 ARG A 109     -10.907   1.159   9.435  1.00 54.05
ATOM   1652 2HH1 ARG A 109      -9.452   0.542  10.108  1.00 65.31
ATOM   1653  NH2 ARG A 109      -8.994   2.226  11.808  1.00 64.12
ATOM   1654 1HH2 ARG A 109      -8.761   2.903  12.503  1.00 71.23
ATOM   1655 2HH2 ARG A 109      -8.351   1.447  11.675  1.00 33.43
ATOM   1656  C   ARG A 109     -12.765   7.981   8.917  1.00 75.53
ATOM   1657  O   ARG A 109     -13.841   8.369   9.340  1.00 64.22
ATOM   1658  N   TYR A 110     -11.687   8.741   8.857  1.00 63.04
ATOM   1659  H   TYR A 110     -10.841   8.334   8.561  1.00 51.43
ATOM   1660  CA  TYR A 110     -11.688  10.150   9.226  1.00 54.15
ATOM   1661  HA  TYR A 110     -11.986  10.238  10.259  1.00 70.24
ATOM   1662  CB  TYR A 110     -10.270  10.721   9.041  1.00 42.02
ATOM   1663 1HB  TYR A 110      -9.567  10.076   9.547  1.00 55.14
ATOM   1664 2HB  TYR A 110     -10.036  10.722   7.986  1.00  1.25
ATOM   1665  CG  TYR A 110     -10.047  12.127   9.572  1.00 74.44
ATOM   1666  CD1 TYR A 110     -10.172  13.242   8.746  1.00 53.41
ATOM   1667  HD1 TYR A 110     -10.455  13.104   7.714  1.00 62.33
ATOM   1668  CE1 TYR A 110      -9.938  14.518   9.233  1.00 10.23
ATOM   1669  HE1 TYR A 110     -10.040  15.372   8.580  1.00 44.40
ATOM   1670  CZ  TYR A 110      -9.581  14.689  10.555  1.00 71.40
ATOM   1671  CE2 TYR A 110      -9.455  13.598  11.388  1.00 42.23
ATOM   1672  HE2 TYR A 110      -9.175  13.732  12.422  1.00 32.10
ATOM   1673  CD2 TYR A 110      -9.684  12.329  10.895  1.00 12.30
ATOM   1674  HD2 TYR A 110      -9.584  11.475  11.546  1.00 24.14
ATOM   1675  OH  TYR A 110      -9.336  15.955  11.049  1.00 64.11
ATOM   1676  HH  TYR A 110      -8.530  15.942  11.567  1.00 45.42
ATOM   1677  C   TYR A 110     -12.692  10.886   8.335  1.00 32.43
ATOM   1678  O   TYR A 110     -13.575  11.578   8.826  1.00 10.00
ATOM   1679  N   ALA A 111     -12.594  10.631   7.032  1.00 54.25
ATOM   1680  H   ALA A 111     -11.883  10.031   6.721  1.00 43.02
ATOM   1681  CA  ALA A 111     -13.489  11.221   6.027  1.00 13.01
ATOM   1682  HA  ALA A 111     -13.477  12.292   6.173  1.00 24.42
ATOM   1683  CB  ALA A 111     -12.980  10.919   4.625  1.00 22.14
ATOM   1684 1HB  ALA A 111     -11.964  11.275   4.526  1.00 73.12
ATOM   1685 2HB  ALA A 111     -13.607  11.412   3.899  1.00 35.23
ATOM   1686 3HB  ALA A 111     -13.004   9.852   4.457  1.00 55.00
ATOM   1687  C   ALA A 111     -14.935  10.723   6.198  1.00 74.04
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ATOM   1688  O   ALA A 111     -15.878  11.336   5.720  1.00 13.14
ATOM   1689  N   ASN A 112     -15.089   9.565   6.824  1.00 54.01
ATOM   1690  H   ASN A 112     -14.284   9.084   7.107  1.00 10.03
ATOM   1691  CA  ASN A 112     -16.417   9.004   7.090  1.00 42.41
ATOM   1692  HA  ASN A 112     -17.011   9.150   6.201  1.00 71.24
ATOM   1693  CB  ASN A 112     -16.364   7.493   7.414  1.00 34.53
ATOM   1694 1HB  ASN A 112     -15.686   7.342   8.240  1.00 15.25
ATOM   1695 2HB  ASN A 112     -17.351   7.174   7.719  1.00 60.22
ATOM   1696  CG  ASN A 112     -15.899   6.600   6.266  1.00 32.54
ATOM   1697  OD1 ASN A 112     -15.306   5.546   6.492  1.00  4.14
ATOM   1698  ND2 ASN A 112     -16.167   6.993   5.041  1.00 75.43
ATOM   1699 2HD2 ASN A 112     -16.650   7.835   4.910  1.00 53.15
ATOM   1700 1HD2 ASN A 112     -15.853   6.416   4.316  1.00 63.23
ATOM   1701  C   ASN A 112     -17.092   9.736   8.237  1.00 24.12
ATOM   1702  O   ASN A 112     -18.311   9.679   8.384  1.00 43.03
ATOM   1703  N   THR A 113     -16.304  10.392   9.058  1.00 35.51
ATOM   1704  H   THR A 113     -15.335  10.389   8.906  1.00 32.02
ATOM   1705  CA  THR A 113     -16.833  11.118  10.180  1.00 70.14
ATOM   1706  HA  THR A 113     -17.854  10.789  10.302  1.00 32.30
ATOM   1707  CB  THR A 113     -16.066  10.781  11.489  1.00 73.43
ATOM   1708  HB  THR A 113     -16.326  11.516  12.235  1.00 24.35
ATOM   1709  OG1 THR A 113     -14.640  10.824  11.272  1.00 35.22
ATOM   1710  HG1 THR A 113     -14.425  11.453  10.574  1.00 40.44
ATOM   1711  CG2 THR A 113     -16.457   9.401  12.001  1.00 30.24
ATOM   1712 1HG2 THR A 113     -15.906   9.183  12.905  1.00 53.05
ATOM   1713 2HG2 THR A 113     -16.224   8.660  11.251  1.00 63.03
ATOM   1714 3HG2 THR A 113     -17.515   9.379  12.211  1.00 72.13
ATOM   1715  C   THR A 113     -16.870  12.631   9.929  1.00  1.23
ATOM   1716  O   THR A 113     -17.854  13.295  10.276  1.00 12.43
ATOM   1717  N   HIS A 114     -15.815  13.150   9.314  1.00 55.44
ATOM   1718  H   HIS A 114     -15.070  12.599   8.987  1.00  3.31
ATOM   1719  CA  HIS A 114     -15.659  14.566   9.025  1.00 70.01
ATOM   1720  HA  HIS A 114     -16.520  14.838   8.433  1.00 70.55
ATOM   1721  CB  HIS A 114     -15.629  15.452  10.326  1.00 61.41
ATOM   1722 1HB  HIS A 114     -15.319  16.451  10.056  1.00 61.41
ATOM   1723 2HB  HIS A 114     -16.630  15.501  10.727  1.00 42.12
ATOM   1724  CG  HIS A 114     -14.701  14.985  11.434  1.00 12.05
ATOM   1725  ND1 HIS A 114     -13.362  14.809  11.278  1.00 72.33
ATOM   1726  CD2 HIS A 114     -14.970  14.663  12.725  1.00 20.33
ATOM   1727  HD1 HIS A 114     -12.930  14.930  10.393  1.00 41.31
ATOM   1728  CE1 HIS A 114     -12.847  14.402  12.431  1.00 71.43
ATOM   1729  NE2 HIS A 114     -13.783  14.294  13.357  1.00 11.41
ATOM   1730  HD2 HIS A 114     -15.941  14.686  13.196  1.00 63.35
ATOM   1731  HE1 HIS A 114     -11.800  14.188  12.591  1.00 74.44
ATOM   1732  C   HIS A 114     -14.424  14.790   8.134  1.00 64.13
ATOM   1733  O   HIS A 114     -13.292  14.902   8.667  1.00 71.21
TER    1734      HIS A 114
ENDMDL
MODEL        4
ATOM      1  N   MET A   1      -6.729 -16.271   4.760  1.00  1.42
ATOM      2  CA  MET A   1      -8.121 -16.701   4.602  1.00 42.12
ATOM      3  HA  MET A   1      -8.701 -15.800   4.457  1.00 41.12
ATOM      4  CB  MET A   1      -8.322 -17.672   3.396  1.00 52.24
ATOM      5 1HB  MET A   1      -9.359 -17.971   3.371  1.00 52.35
ATOM      6 2HB  MET A   1      -8.106 -17.126   2.489  1.00 42.53
ATOM      7  CG  MET A   1      -7.473 -18.956   3.398  1.00 41.45
ATOM      8 1HG  MET A   1      -7.673 -19.498   4.308  1.00 13.13
ATOM      9 2HG  MET A   1      -7.762 -19.562   2.552  1.00 50.02
ATOM     10  SD  MET A   1      -5.692 -18.637   3.306  1.00 31.35
ATOM     11  CE  MET A   1      -5.057 -20.317   3.307  1.00 63.33
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ATOM     12 1HE  MET A   1      -5.355 -20.816   4.219  1.00 53.33
ATOM     13 2HE  MET A   1      -3.978 -20.298   3.242  1.00 54.41
ATOM     14 3HE  MET A   1      -5.458 -20.852   2.458  1.00  4.33
ATOM     15  C   MET A   1      -8.559 -17.290   5.906  1.00 13.10
ATOM     16  O   MET A   1      -8.455 -18.482   6.167  1.00  5.32
ATOM     17  N   ASP A   2      -9.001 -16.384   6.721  1.00  1.22
ATOM     18  H   ASP A   2      -9.217 -15.490   6.379  1.00 41.11
ATOM     19  CA  ASP A   2      -9.248 -16.556   8.143  1.00 55.32
ATOM     20  HA  ASP A   2     -10.060 -17.251   8.301  1.00 53.32
ATOM     21  CB  ASP A   2      -7.931 -17.037   8.854  1.00 13.42
ATOM     22 1HB  ASP A   2      -8.122 -17.138   9.911  1.00  3.31
ATOM     23 2HB  ASP A   2      -7.659 -18.004   8.457  1.00 14.02
ATOM     24  CG  ASP A   2      -6.724 -16.083   8.682  1.00  2.15
ATOM     25  OD1 ASP A   2      -6.381 -15.678   7.496  1.00 22.14
ATOM     26  OD2 ASP A   2      -6.097 -15.712   9.689  1.00 54.30
ATOM     27  C   ASP A   2      -9.620 -15.165   8.602  1.00 41.33
ATOM     28  O   ASP A   2     -10.492 -14.941   9.415  1.00 12.54
ATOM     29  N   LYS A   3      -8.933 -14.248   7.979  1.00 12.33
ATOM     30  H   LYS A   3      -8.178 -14.558   7.432  1.00 13.25
ATOM     31  CA  LYS A   3      -9.124 -12.847   8.052  1.00 11.55
ATOM     32  HA  LYS A   3     -10.159 -12.633   8.278  1.00 32.20
ATOM     33  CB  LYS A   3      -8.184 -12.252   9.120  1.00 45.52
ATOM     34 1HB  LYS A   3      -8.334 -11.183   9.162  1.00 43.22
ATOM     35 2HB  LYS A   3      -8.433 -12.679  10.080  1.00 54.52
ATOM     36  CG  LYS A   3      -6.715 -12.518   8.845  1.00 43.21
ATOM     37 1HG  LYS A   3      -6.601 -13.549   8.542  1.00 40.54
ATOM     38 2HG  LYS A   3      -6.385 -11.875   8.042  1.00  2.31
ATOM     39  CD  LYS A   3      -5.848 -12.277  10.063  1.00 42.45
ATOM     40 1HD  LYS A   3      -5.901 -11.232  10.334  1.00  0.14
ATOM     41 2HD  LYS A   3      -6.210 -12.883  10.880  1.00 72.24
ATOM     42  CE  LYS A   3      -4.397 -12.646   9.776  1.00 43.41
ATOM     43 1HE  LYS A   3      -3.969 -11.914   9.107  1.00 63.42
ATOM     44 2HE  LYS A   3      -3.849 -12.644  10.705  1.00  3.32
ATOM     45  NZ  LYS A   3      -4.285 -13.992   9.151  1.00  2.42
ATOM     46 1HZ  LYS A   3      -4.650 -13.975   8.177  1.00 62.55
ATOM     47 2HZ  LYS A   3      -4.934 -14.671   9.621  1.00 23.45
ATOM     48 3HZ  LYS A   3      -3.327 -14.388   9.151  1.00 33.42
ATOM     49  C   LYS A   3      -8.769 -12.363   6.657  1.00 74.20
ATOM     50  O   LYS A   3      -8.447 -13.205   5.790  1.00 32.35
ATOM     51  N   GLY A   4      -8.803 -11.078   6.416  1.00 62.24
ATOM     52  H   GLY A   4      -9.049 -10.451   7.126  1.00 10.13
ATOM     53  CA  GLY A   4      -8.492 -10.587   5.083  1.00  3.03
ATOM     54 1HA  GLY A   4      -8.953 -11.235   4.354  1.00 41.02
ATOM     55 2HA  GLY A   4      -8.898  -9.593   4.975  1.00  4.51
ATOM     56  C   GLY A   4      -6.997 -10.534   4.817  1.00 24.51
ATOM     57  O   GLY A   4      -6.560 -10.544   3.657  1.00 41.44
ATOM     58  N   THR A   5      -6.235 -10.513   5.881  1.00  2.35
ATOM     59  H   THR A   5      -6.654 -10.580   6.763  1.00 63.05
ATOM     60  CA  THR A   5      -4.801 -10.361   5.840  1.00 54.52
ATOM     61  HA  THR A   5      -4.528  -9.761   4.987  1.00  2.31
ATOM     62  CB  THR A   5      -4.376  -9.601   7.101  1.00 52.42
ATOM     63  HB  THR A   5      -4.454 -10.262   7.950  1.00 21.24
ATOM     64  OG1 THR A   5      -5.271  -8.496   7.287  1.00 24.34
ATOM     65  HG1 THR A   5      -5.325  -7.985   6.468  1.00  1.33
ATOM     66  CG2 THR A   5      -2.949  -9.086   6.982  1.00 62.44
ATOM     67 1HG2 THR A   5      -2.677  -8.562   7.886  1.00 62.24
ATOM     68 2HG2 THR A   5      -2.874  -8.413   6.141  1.00 31.13
ATOM     69 3HG2 THR A   5      -2.276  -9.920   6.835  1.00 53.45
ATOM     70  C   THR A   5      -4.054 -11.723   5.791  1.00 50.04
ATOM     71  O   THR A   5      -4.374 -12.665   6.536  1.00 54.45
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ATOM     72  N   GLN A   6      -3.072 -11.802   4.916  1.00 45.45
ATOM     73  H   GLN A   6      -2.904 -11.018   4.340  1.00 42.24
ATOM     74  CA  GLN A   6      -2.194 -12.947   4.772  1.00 13.15
ATOM     75  HA  GLN A   6      -2.395 -13.643   5.573  1.00 51.41
ATOM     76  CB  GLN A   6      -2.341 -13.665   3.395  1.00 35.13
ATOM     77 1HB  GLN A   6      -2.236 -12.925   2.616  1.00 33.31
ATOM     78 2HB  GLN A   6      -1.519 -14.359   3.301  1.00 71.32
ATOM     79  CG  GLN A   6      -3.650 -14.434   3.125  1.00  1.12
ATOM     80 1HG  GLN A   6      -3.550 -14.963   2.190  1.00  4.22
ATOM     81 2HG  GLN A   6      -3.788 -15.153   3.919  1.00 60.23
ATOM     82  CD  GLN A   6      -4.889 -13.567   3.036  1.00 14.30
ATOM     83  OE1 GLN A   6      -5.988 -14.012   3.358  1.00  3.54
ATOM     84  NE2 GLN A   6      -4.737 -12.350   2.572  1.00 35.44
ATOM     85 2HE2 GLN A   6      -3.841 -12.071   2.291  1.00 54.33
ATOM     86 1HE2 GLN A   6      -5.500 -11.731   2.614  1.00  5.21
ATOM     87  C   GLN A   6      -0.774 -12.443   4.876  1.00 24.44
ATOM     88  O   GLN A   6      -0.453 -11.376   4.340  1.00 74.12
ATOM     89  N   TYR A   7       0.044 -13.176   5.572  1.00  4.10
ATOM     90  H   TYR A   7      -0.262 -14.004   5.992  1.00 34.41
ATOM     91  CA  TYR A   7       1.441 -12.858   5.726  1.00 64.23
ATOM     92  HA  TYR A   7       1.656 -11.980   5.137  1.00 10.31
ATOM     93  CB  TYR A   7       1.767 -12.567   7.205  1.00  2.53
ATOM     94 1HB  TYR A   7       1.315 -11.626   7.485  1.00 21.50
ATOM     95 2HB  TYR A   7       1.351 -13.354   7.816  1.00 10.31
ATOM     96  CG  TYR A   7       3.253 -12.471   7.508  1.00 72.35
ATOM     97  CD1 TYR A   7       3.904 -13.491   8.199  1.00 51.21
ATOM     98  HD1 TYR A   7       3.334 -14.342   8.538  1.00 54.13
ATOM     99  CE1 TYR A   7       5.258 -13.427   8.454  1.00 75.42
ATOM    100  HE1 TYR A   7       5.744 -14.227   8.991  1.00 20.41
ATOM    101  CZ  TYR A   7       5.978 -12.339   8.025  1.00 30.21
ATOM    102  CE2 TYR A   7       5.358 -11.319   7.339  1.00 52.11
ATOM    103  HE2 TYR A   7       5.925 -10.464   7.003  1.00 42.41
ATOM    104  CD2 TYR A   7       4.004 -11.390   7.082  1.00 42.55
ATOM    105  HD2 TYR A   7       3.515 -10.590   6.545  1.00 34.42
ATOM    106  OH  TYR A   7       7.330 -12.276   8.265  1.00 53.32
ATOM    107  HH  TYR A   7       7.727 -13.145   8.164  1.00 20.14
ATOM    108  C   TYR A   7       2.277 -14.015   5.216  1.00 25.22
ATOM    109  O   TYR A   7       2.061 -15.156   5.636  1.00  3.03
ATOM    110  N   LYS A   8       3.194 -13.752   4.316  1.00  1.45
ATOM    111  H   LYS A   8       3.269 -12.849   3.928  1.00 12.24
ATOM    112  CA  LYS A   8       4.097 -14.787   3.867  1.00 55.31
ATOM    113  HA  LYS A   8       4.277 -15.450   4.699  1.00 21.01
ATOM    114  CB  LYS A   8       3.477 -15.596   2.704  1.00  3.04
ATOM    115 1HB  LYS A   8       2.500 -15.942   3.009  1.00 51.14
ATOM    116 2HB  LYS A   8       3.359 -14.937   1.857  1.00 11.30
ATOM    117  CG  LYS A   8       4.295 -16.819   2.252  1.00 34.21
ATOM    118 1HG  LYS A   8       3.805 -17.276   1.406  1.00 50.32
ATOM    119 2HG  LYS A   8       5.281 -16.489   1.962  1.00 54.50
ATOM    120  CD  LYS A   8       4.427 -17.860   3.370  1.00 75.24
ATOM    121 1HD  LYS A   8       4.986 -17.429   4.186  1.00  0.12
ATOM    122 2HD  LYS A   8       3.439 -18.131   3.714  1.00 31.20
ATOM    123  CE  LYS A   8       5.155 -19.127   2.902  1.00  2.12
ATOM    124 1HE  LYS A   8       5.150 -19.847   3.707  1.00  0.21
ATOM    125 2HE  LYS A   8       4.621 -19.538   2.058  1.00 63.44
ATOM    126  NZ  LYS A   8       6.558 -18.876   2.510  1.00 21.32
ATOM    127 1HZ  LYS A   8       6.634 -18.168   1.738  1.00 53.43
ATOM    128 2HZ  LYS A   8       7.100 -19.700   2.198  1.00 54.22
ATOM    129 3HZ  LYS A   8       7.115 -18.419   3.272  1.00 74.41
ATOM    130  C   LYS A   8       5.408 -14.165   3.434  1.00 21.30
ATOM    131  O   LYS A   8       5.432 -13.344   2.553  1.00 71.43
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ATOM    132  N   ASP A   9       6.478 -14.561   4.108  1.00  2.05
ATOM    133  H   ASP A   9       6.348 -15.178   4.856  1.00 24.14
ATOM    134  CA  ASP A   9       7.889 -14.169   3.802  1.00 54.24
ATOM    135  HA  ASP A   9       8.511 -14.517   4.611  1.00 52.22
ATOM    136  CB  ASP A   9       8.362 -14.844   2.496  1.00 65.41
ATOM    137 1HB  ASP A   9       7.873 -14.370   1.659  1.00 73.32
ATOM    138 2HB  ASP A   9       9.430 -14.710   2.401  1.00 60.14
ATOM    139  CG  ASP A   9       8.054 -16.320   2.443  1.00 52.45
ATOM    140  OD1 ASP A   9       7.554 -16.797   1.399  1.00  0.40
ATOM    141  OD2 ASP A   9       8.195 -17.035   3.477  1.00 22.41
ATOM    142  C   ASP A   9       8.060 -12.649   3.665  1.00 20.23
ATOM    143  O   ASP A   9       8.869 -12.172   2.884  1.00 50.40
ATOM    144  N   GLY A  10       7.352 -11.897   4.483  1.00 52.43
ATOM    145  H   GLY A  10       6.754 -12.322   5.127  1.00  3.45
ATOM    146  CA  GLY A  10       7.461 -10.460   4.428  1.00 11.23
ATOM    147 1HA  GLY A  10       7.291 -10.056   5.415  1.00 51.32
ATOM    148 2HA  GLY A  10       8.465 -10.204   4.121  1.00 11.22
ATOM    149  C   GLY A  10       6.479  -9.818   3.458  1.00 24.24
ATOM    150  O   GLY A  10       6.330  -8.592   3.453  1.00 23.11
ATOM    151  N   TYR A  11       5.836 -10.628   2.633  1.00 25.43
ATOM    152  H   TYR A  11       5.995 -11.599   2.667  1.00 35.23
ATOM    153  CA  TYR A  11       4.861 -10.150   1.670  1.00 40.21
ATOM    154  HA  TYR A  11       5.179  -9.186   1.299  1.00 14.03
ATOM    155  CB  TYR A  11       4.731 -11.163   0.505  1.00 25.33
ATOM    156 1HB  TYR A  11       5.711 -11.556   0.276  1.00 75.33
ATOM    157 2HB  TYR A  11       4.105 -11.980   0.834  1.00 12.12
ATOM    158  CG  TYR A  11       4.149 -10.617  -0.794  1.00 60.03
ATOM    159  CD1 TYR A  11       2.784 -10.562  -1.014  1.00  1.32
ATOM    160  HD1 TYR A  11       2.116 -10.899  -0.235  1.00 54.31
ATOM    161  CE1 TYR A  11       2.270 -10.079  -2.209  1.00 64.24
ATOM    162  HE1 TYR A  11       1.202 -10.042  -2.365  1.00 25.13
ATOM    163  CZ  TYR A  11       3.131  -9.646  -3.198  1.00 12.21
ATOM    164  CE2 TYR A  11       4.488  -9.694  -3.004  1.00  1.40
ATOM    165  HE2 TYR A  11       5.162  -9.355  -3.778  1.00 34.43
ATOM    166  CD2 TYR A  11       4.991 -10.177  -1.815  1.00 71.44
ATOM    167  HD2 TYR A  11       6.060 -10.212  -1.676  1.00 40.44
ATOM    168  OH  TYR A  11       2.630  -9.163  -4.385  1.00 40.14
ATOM    169  HH  TYR A  11       1.862  -8.616  -4.203  1.00 22.43
ATOM    170  C   TYR A  11       3.543 -10.006   2.419  1.00 30.02
ATOM    171  O   TYR A  11       3.151 -10.908   3.187  1.00 40.11
ATOM    172  N   TYR A  12       2.887  -8.898   2.227  1.00 31.22
ATOM    173  H   TYR A  12       3.183  -8.273   1.532  1.00  3.44
ATOM    174  CA  TYR A  12       1.701  -8.574   2.978  1.00 31.32
ATOM    175  HA  TYR A  12       1.502  -9.368   3.683  1.00 75.42
ATOM    176  CB  TYR A  12       1.970  -7.270   3.756  1.00 73.43
ATOM    177 1HB  TYR A  12       2.888  -7.377   4.315  1.00 71.12
ATOM    178 2HB  TYR A  12       2.100  -6.472   3.042  1.00  2.32
ATOM    179  CG  TYR A  12       0.899  -6.842   4.736  1.00 50.33
ATOM    180  CD1 TYR A  12       0.977  -7.199   6.074  1.00 22.12
ATOM    181  HD1 TYR A  12       1.803  -7.811   6.405  1.00  3.14
ATOM    182  CE1 TYR A  12       0.024  -6.787   6.981  1.00 20.13
ATOM    183  HE1 TYR A  12       0.103  -7.075   8.019  1.00 53.33
ATOM    184  CZ  TYR A  12      -1.027  -6.011   6.552  1.00 32.31
ATOM    185  CE2 TYR A  12      -1.125  -5.646   5.228  1.00 54.51
ATOM    186  HE2 TYR A  12      -1.949  -5.039   4.886  1.00 35.50
ATOM    187  CD2 TYR A  12      -0.168  -6.055   4.333  1.00 54.23
ATOM    188  HD2 TYR A  12      -0.246  -5.769   3.293  1.00 31.44
ATOM    189  OH  TYR A  12      -1.983  -5.590   7.449  1.00 51.15
ATOM    190  HH  TYR A  12      -1.566  -5.327   8.274  1.00  4.25
ATOM    191  C   TYR A  12       0.521  -8.410   2.027  1.00 51.00
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ATOM    192  O   TYR A  12       0.582  -7.617   1.084  1.00 51.34
ATOM    193  N   ILE A  13      -0.524  -9.175   2.245  1.00 22.13
ATOM    194  H   ILE A  13      -0.500  -9.813   2.995  1.00  1.11
ATOM    195  CA  ILE A  13      -1.721  -9.096   1.419  1.00 44.34
ATOM    196  HA  ILE A  13      -1.638  -8.250   0.753  1.00 42.03
ATOM    197  CB  ILE A  13      -1.937 -10.402   0.594  1.00 42.44
ATOM    198  HB  ILE A  13      -2.230 -11.191   1.269  1.00 42.11
ATOM    199  CG2 ILE A  13      -3.054 -10.193  -0.422  1.00 33.41
ATOM    200 1HG2 ILE A  13      -2.788  -9.389  -1.093  1.00 72.34
ATOM    201 2HG2 ILE A  13      -3.969  -9.940   0.095  1.00 61.51
ATOM    202 3HG2 ILE A  13      -3.202 -11.101  -0.989  1.00 64.13
ATOM    203  CG1 ILE A  13      -0.653 -10.809  -0.135  1.00 45.00
ATOM    204 1HG1 ILE A  13      -0.400 -10.045  -0.855  1.00 55.12
ATOM    205 2HG1 ILE A  13       0.142 -10.887   0.591  1.00  3.33
ATOM    206  CD1 ILE A  13      -0.747 -12.132  -0.877  1.00  0.34
ATOM    207 1HD1 ILE A  13      -1.531 -12.076  -1.616  1.00 70.14
ATOM    208 2HD1 ILE A  13      -0.968 -12.923  -0.174  1.00 53.44
ATOM    209 3HD1 ILE A  13       0.195 -12.338  -1.365  1.00 61.20
ATOM    210  C   ILE A  13      -2.916  -8.920   2.344  1.00  0.24
ATOM    211  O   ILE A  13      -3.020  -9.634   3.329  1.00 31.44
ATOM    212  N   THR A  14      -3.802  -8.004   2.046  1.00 33.12
ATOM    213  H   THR A  14      -3.697  -7.456   1.234  1.00  1.23
ATOM    214  CA  THR A  14      -4.948  -7.787   2.898  1.00 51.33
ATOM    215  HA  THR A  14      -5.237  -8.746   3.303  1.00 10.34
ATOM    216  CB  THR A  14      -4.592  -6.823   4.086  1.00 43.22
ATOM    217  HB  THR A  14      -3.676  -7.176   4.539  1.00 55.25
ATOM    218  OG1 THR A  14      -5.632  -6.831   5.083  1.00 30.42
ATOM    219  HG1 THR A  14      -5.608  -5.985   5.543  1.00  4.50
ATOM    220  CG2 THR A  14      -4.381  -5.391   3.595  1.00 42.21
ATOM    221 1HG2 THR A  14      -5.282  -5.042   3.113  1.00 43.05
ATOM    222 2HG2 THR A  14      -3.564  -5.367   2.888  1.00 54.41
ATOM    223 3HG2 THR A  14      -4.152  -4.752   4.434  1.00 50.32
ATOM    224  C   THR A  14      -6.130  -7.242   2.074  1.00 30.33
ATOM    225  O   THR A  14      -5.974  -6.908   0.890  1.00 73.21
ATOM    226  N   THR A  15      -7.289  -7.191   2.680  1.00 50.21
ATOM    227  H   THR A  15      -7.353  -7.479   3.616  1.00 73.33
ATOM    228  CA  THR A  15      -8.471  -6.658   2.059  1.00 74.43
ATOM    229  HA  THR A  15      -8.209  -6.292   1.078  1.00 73.14
ATOM    230  CB  THR A  15      -9.589  -7.729   1.926  1.00 34.51
ATOM    231  HB  THR A  15      -9.866  -8.067   2.916  1.00 11.12
ATOM    232  OG1 THR A  15      -9.115  -8.848   1.164  1.00 31.21
ATOM    233  HG1 THR A  15      -9.915  -9.276   0.838  1.00 41.20
ATOM    234  CG2 THR A  15     -10.827  -7.160   1.233  1.00 53.42
ATOM    235 1HG2 THR A  15     -11.586  -7.925   1.161  1.00 22.54
ATOM    236 2HG2 THR A  15     -10.563  -6.823   0.242  1.00 64.13
ATOM    237 3HG2 THR A  15     -11.209  -6.327   1.807  1.00 65.32
ATOM    238  C   THR A  15      -8.983  -5.510   2.907  1.00 72.54
ATOM    239  O   THR A  15      -9.153  -5.651   4.117  1.00 61.34
ATOM    240  N   LEU A  16      -9.189  -4.395   2.288  1.00 74.04
ATOM    241  H   LEU A  16      -9.028  -4.332   1.316  1.00 24.01
ATOM    242  CA  LEU A  16      -9.708  -3.247   2.942  1.00 31.31
ATOM    243  HA  LEU A  16      -9.719  -3.423   4.006  1.00 62.44
ATOM    244  CB  LEU A  16      -8.839  -2.022   2.642  1.00 23.34
ATOM    245 1HB  LEU A  16      -8.745  -1.955   1.568  1.00 43.43
ATOM    246 2HB  LEU A  16      -9.346  -1.136   2.986  1.00 34.31
ATOM    247  CG  LEU A  16      -7.428  -2.041   3.233  1.00 52.53
ATOM    248  HG  LEU A  16      -6.884  -2.881   2.827  1.00 20.02
ATOM    249  CD1 LEU A  16      -6.677  -0.772   2.857  1.00 72.12
ATOM    250 1HD1 LEU A  16      -6.604  -0.700   1.783  1.00 72.13
ATOM    251 2HD1 LEU A  16      -5.686  -0.801   3.285  1.00 32.34
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ATOM    252 3HD1 LEU A  16      -7.209   0.086   3.240  1.00 21.23
ATOM    253  CD2 LEU A  16      -7.490  -2.195   4.747  1.00 15.32
ATOM    254 1HD2 LEU A  16      -7.978  -3.124   5.000  1.00 52.14
ATOM    255 2HD2 LEU A  16      -8.048  -1.374   5.172  1.00 53.21
ATOM    256 3HD2 LEU A  16      -6.489  -2.199   5.147  1.00  2.12
ATOM    257  C   LEU A  16     -11.109  -3.026   2.467  1.00 34.41
ATOM    258  O   LEU A  16     -11.346  -2.885   1.267  1.00  2.21
ATOM    259  N   ASN A  17     -12.038  -3.001   3.382  1.00 32.22
ATOM    260  H   ASN A  17     -11.789  -3.121   4.320  1.00  5.24
ATOM    261  CA  ASN A  17     -13.438  -2.796   3.034  1.00 32.25
ATOM    262  HA  ASN A  17     -13.585  -3.234   2.058  1.00 21.11
ATOM    263  CB  ASN A  17     -14.396  -3.467   4.040  1.00 21.33
ATOM    264 1HB  ASN A  17     -14.180  -3.076   5.024  1.00 20.23
ATOM    265 2HB  ASN A  17     -15.414  -3.220   3.778  1.00 60.52
ATOM    266  CG  ASN A  17     -14.259  -4.982   4.100  1.00 34.21
ATOM    267  OD1 ASN A  17     -13.889  -5.629   3.130  1.00 23.33
ATOM    268  ND2 ASN A  17     -14.566  -5.559   5.243  1.00 41.25
ATOM    269 2HD2 ASN A  17     -14.864  -4.997   5.987  1.00  5.40
ATOM    270 1HD2 ASN A  17     -14.481  -6.534   5.285  1.00  0.21
ATOM    271  C   ASN A  17     -13.721  -1.318   2.929  1.00  2.35
ATOM    272  O   ASN A  17     -14.435  -0.741   3.742  1.00 10.40
ATOM    273  N   TYR A  18     -13.065  -0.706   1.980  1.00 42.24
ATOM    274  H   TYR A  18     -12.483  -1.244   1.396  1.00 54.33
ATOM    275  CA  TYR A  18     -13.175   0.700   1.708  1.00 62.24
ATOM    276  HA  TYR A  18     -14.139   1.044   2.053  1.00 61.23
ATOM    277  CB  TYR A  18     -12.046   1.506   2.402  1.00 14.14
ATOM    278 1HB  TYR A  18     -11.092   1.150   2.042  1.00 53.30
ATOM    279 2HB  TYR A  18     -12.157   2.543   2.122  1.00  3.41
ATOM    280  CG  TYR A  18     -12.013   1.431   3.934  1.00 45.52
ATOM    281  CD1 TYR A  18     -12.778   2.291   4.716  1.00 44.03
ATOM    282  HD1 TYR A  18     -13.413   3.016   4.231  1.00 70.12
ATOM    283  CE1 TYR A  18     -12.735   2.226   6.102  1.00 20.02
ATOM    284  HE1 TYR A  18     -13.336   2.902   6.692  1.00 30.11
ATOM    285  CZ  TYR A  18     -11.922   1.294   6.721  1.00  5.14
ATOM    286  CE2 TYR A  18     -11.157   0.435   5.967  1.00 43.34
ATOM    287  HE2 TYR A  18     -10.520  -0.294   6.447  1.00 53.23
ATOM    288  CD2 TYR A  18     -11.204   0.509   4.587  1.00 33.05
ATOM    289  HD2 TYR A  18     -10.606  -0.167   3.999  1.00 53.14
ATOM    290  OH  TYR A  18     -11.878   1.224   8.101  1.00 21.43
ATOM    291  HH  TYR A  18     -10.963   1.189   8.423  1.00 22.13
ATOM    292  C   TYR A  18     -13.077   0.873   0.204  1.00 13.23
ATOM    293  O   TYR A  18     -12.469   0.030  -0.476  1.00 31.10
ATOM    294  N   ASN A  19     -13.629   1.958  -0.295  1.00 14.40
ATOM    295  H   ASN A  19     -14.011   2.608   0.328  1.00 52.52
ATOM    296  CA  ASN A  19     -13.699   2.230  -1.737  1.00 61.21
ATOM    297  HA  ASN A  19     -14.134   1.360  -2.207  1.00 23.55
ATOM    298  CB  ASN A  19     -14.630   3.434  -2.000  1.00 44.13
ATOM    299 1HB  ASN A  19     -15.656   3.146  -1.829  1.00 24.35
ATOM    300 2HB  ASN A  19     -14.365   4.226  -1.317  1.00 65.01
ATOM    301  CG  ASN A  19     -14.533   3.985  -3.412  1.00  4.23
ATOM    302  OD1 ASN A  19     -13.722   4.862  -3.666  1.00  3.54
ATOM    303  ND2 ASN A  19     -15.355   3.516  -4.319  1.00 21.44
ATOM    304 2HD2 ASN A  19     -16.023   2.828  -4.087  1.00 73.25
ATOM    305 1HD2 ASN A  19     -15.276   3.882  -5.224  1.00 44.03
ATOM    306  C   ASN A  19     -12.320   2.468  -2.349  1.00 62.41
ATOM    307  O   ASN A  19     -11.530   3.256  -1.836  1.00  2.21
ATOM    308  N   PHE A  20     -12.070   1.795  -3.466  1.00  0.22
ATOM    309  H   PHE A  20     -12.766   1.209  -3.830  1.00 31.13
ATOM    310  CA  PHE A  20     -10.800   1.833  -4.202  1.00 60.52
ATOM    311  HA  PHE A  20     -10.060   1.313  -3.613  1.00 72.02
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ATOM    312  CB  PHE A  20     -10.993   1.046  -5.502  1.00 71.13
ATOM    313 1HB  PHE A  20     -11.097   0.001  -5.247  1.00 22.24
ATOM    314 2HB  PHE A  20     -11.912   1.369  -5.969  1.00 43.01
ATOM    315  CG  PHE A  20      -9.885   1.135  -6.520  1.00 52.22
ATOM    316  CD1 PHE A  20      -8.741   0.370  -6.398  1.00 14.15
ATOM    317  HD1 PHE A  20      -8.623  -0.277  -5.542  1.00  2.40
ATOM    318  CE1 PHE A  20      -7.753   0.427  -7.353  1.00 43.45
ATOM    319  HE1 PHE A  20      -6.862  -0.173  -7.249  1.00 21.02
ATOM    320  CZ  PHE A  20      -7.898   1.259  -8.448  1.00 35.34
ATOM    321  HZ  PHE A  20      -7.124   1.303  -9.199  1.00 73.14
ATOM    322  CE2 PHE A  20      -9.030   2.027  -8.582  1.00 71.14
ATOM    323  HE2 PHE A  20      -9.146   2.677  -9.438  1.00 64.51
ATOM    324  CD2 PHE A  20     -10.019   1.960  -7.629  1.00  1.41
ATOM    325  HD2 PHE A  20     -10.908   2.565  -7.736  1.00 24.32
ATOM    326  C   PHE A  20     -10.293   3.255  -4.485  1.00 74.41
ATOM    327  O   PHE A  20      -9.100   3.538  -4.328  1.00 51.02
ATOM    328  N   ASN A  21     -11.196   4.142  -4.853  1.00 34.01
ATOM    329  H   ASN A  21     -12.145   3.887  -4.859  1.00 21.11
ATOM    330  CA  ASN A  21     -10.831   5.501  -5.222  1.00 71.24
ATOM    331  HA  ASN A  21     -10.071   5.418  -5.982  1.00 40.52
ATOM    332  CB  ASN A  21     -12.031   6.268  -5.804  1.00 22.43
ATOM    333 1HB  ASN A  21     -12.798   6.345  -5.048  1.00 20.24
ATOM    334 2HB  ASN A  21     -11.711   7.260  -6.087  1.00 23.11
ATOM    335  CG  ASN A  21     -12.632   5.589  -7.023  1.00 32.34
ATOM    336  OD1 ASN A  21     -13.512   4.740  -6.903  1.00 11.15
ATOM    337  ND2 ASN A  21     -12.176   5.956  -8.196  1.00 41.22
ATOM    338 2HD2 ASN A  21     -11.478   6.641  -8.247  1.00 55.04
ATOM    339 1HD2 ASN A  21     -12.567   5.516  -8.979  1.00 61.04
ATOM    340  C   ASN A  21     -10.247   6.244  -4.038  1.00 13.02
ATOM    341  O   ASN A  21      -9.192   6.889  -4.151  1.00 42.41
ATOM    342  N   THR A  22     -10.909   6.155  -2.903  1.00 54.33
ATOM    343  H   THR A  22     -11.743   5.633  -2.880  1.00  2.41
ATOM    344  CA  THR A  22     -10.412   6.797  -1.716  1.00 74.11
ATOM    345  HA  THR A  22     -10.075   7.765  -2.063  1.00 30.13
ATOM    346  CB  THR A  22     -11.502   7.022  -0.605  1.00 30.00
ATOM    347  HB  THR A  22     -12.286   7.629  -1.035  1.00 31.34
ATOM    348  OG1 THR A  22     -10.951   7.736   0.509  1.00 40.10
ATOM    349  HG1 THR A  22      -9.999   7.835   0.405  1.00 61.22
ATOM    350  CG2 THR A  22     -12.101   5.719  -0.110  1.00 42.41
ATOM    351 1HG2 THR A  22     -12.543   5.194  -0.943  1.00 63.35
ATOM    352 2HG2 THR A  22     -12.859   5.925   0.631  1.00 64.22
ATOM    353 3HG2 THR A  22     -11.323   5.110   0.326  1.00 41.24
ATOM    354  C   THR A  22      -9.149   6.095  -1.187  1.00 60.24
ATOM    355  O   THR A  22      -8.232   6.765  -0.720  1.00 75.04
ATOM    356  N   VAL A  23      -9.098   4.753  -1.293  1.00  3.21
ATOM    357  H   VAL A  23      -9.863   4.269  -1.679  1.00 61.11
ATOM    358  CA  VAL A  23      -7.936   3.972  -0.834  1.00 41.22
ATOM    359  HA  VAL A  23      -7.795   4.192   0.213  1.00  4.32
ATOM    360  CB  VAL A  23      -8.152   2.427  -0.999  1.00 55.14
ATOM    361  HB  VAL A  23      -8.413   2.225  -2.028  1.00 43.32
ATOM    362  CG1 VAL A  23      -6.891   1.645  -0.657  1.00 73.10
ATOM    363 1HG1 VAL A  23      -6.611   1.849   0.366  1.00 71.12
ATOM    364 2HG1 VAL A  23      -6.089   1.940  -1.316  1.00 41.04
ATOM    365 3HG1 VAL A  23      -7.086   0.589  -0.771  1.00 72.33
ATOM    366  CG2 VAL A  23      -9.288   1.947  -0.119  1.00 24.41
ATOM    367 1HG2 VAL A  23      -9.050   2.139   0.916  1.00  3.12
ATOM    368 2HG2 VAL A  23      -9.432   0.885  -0.264  1.00 52.45
ATOM    369 3HG2 VAL A  23     -10.194   2.470  -0.382  1.00 60.11
ATOM    370  C   VAL A  23      -6.659   4.396  -1.563  1.00 73.24
ATOM    371  O   VAL A  23      -5.618   4.619  -0.921  1.00 74.11
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ATOM    372  N   TYR A  24      -6.749   4.554  -2.882  1.00 51.22
ATOM    373  H   TYR A  24      -7.607   4.368  -3.327  1.00 24.53
ATOM    374  CA  TYR A  24      -5.592   4.952  -3.678  1.00 74.40
ATOM    375  HA  TYR A  24      -4.821   4.218  -3.505  1.00  4.31
ATOM    376  CB  TYR A  24      -5.923   4.974  -5.177  1.00  4.41
ATOM    377 1HB  TYR A  24      -6.243   3.988  -5.481  1.00 51.44
ATOM    378 2HB  TYR A  24      -6.725   5.675  -5.348  1.00 41.33
ATOM    379  CG  TYR A  24      -4.748   5.377  -6.057  1.00 42.11
ATOM    380  CD1 TYR A  24      -4.751   6.576  -6.765  1.00 15.53
ATOM    381  HD1 TYR A  24      -5.609   7.228  -6.690  1.00 34.12
ATOM    382  CE1 TYR A  24      -3.680   6.937  -7.566  1.00 33.11
ATOM    383  HE1 TYR A  24      -3.700   7.871  -8.108  1.00 74.43
ATOM    384  CZ  TYR A  24      -2.587   6.100  -7.660  1.00 33.35
ATOM    385  CE2 TYR A  24      -2.560   4.912  -6.963  1.00 53.25
ATOM    386  HE2 TYR A  24      -1.708   4.255  -7.037  1.00 25.10
ATOM    387  CD2 TYR A  24      -3.634   4.558  -6.171  1.00 13.23
ATOM    388  HD2 TYR A  24      -3.612   3.626  -5.624  1.00 72.24
ATOM    389  OH  TYR A  24      -1.521   6.438  -8.469  1.00 74.44
ATOM    390  HH  TYR A  24      -1.336   5.642  -8.978  1.00 34.04
ATOM    391  C   TYR A  24      -5.068   6.303  -3.233  1.00 31.23
ATOM    392  O   TYR A  24      -3.867   6.470  -2.999  1.00 65.21
ATOM    393  N   ASN A  25      -5.981   7.239  -3.055  1.00 12.54
ATOM    394  H   ASN A  25      -6.925   7.018  -3.195  1.00 23.31
ATOM    395  CA  ASN A  25      -5.630   8.576  -2.641  1.00 61.31
ATOM    396  HA  ASN A  25      -4.867   8.924  -3.323  1.00 53.24
ATOM    397  CB  ASN A  25      -6.827   9.529  -2.731  1.00 42.34
ATOM    398 1HB  ASN A  25      -7.702   9.024  -2.351  1.00  2.13
ATOM    399 2HB  ASN A  25      -6.627  10.393  -2.119  1.00 22.14
ATOM    400  CG  ASN A  25      -7.126   9.990  -4.151  1.00 34.31
ATOM    401  OD1 ASN A  25      -6.599  10.987  -4.607  1.00 13.32
ATOM    402  ND2 ASN A  25      -7.980   9.282  -4.854  1.00 40.24
ATOM    403 2HD2 ASN A  25      -8.404   8.484  -4.467  1.00 61.34
ATOM    404 1HD2 ASN A  25      -8.153   9.605  -5.763  1.00 35.23
ATOM    405  C   ASN A  25      -5.041   8.586  -1.251  1.00  1.30
ATOM    406  O   ASN A  25      -4.005   9.186  -1.030  1.00  2.41
ATOM    407  N   ALA A  26      -5.671   7.863  -0.337  1.00 14.52
ATOM    408  H   ALA A  26      -6.468   7.349  -0.596  1.00 75.12
ATOM    409  CA  ALA A  26      -5.237   7.803   1.056  1.00 23.13
ATOM    410  HA  ALA A  26      -5.248   8.807   1.453  1.00 61.35
ATOM    411  CB  ALA A  26      -6.207   6.963   1.855  1.00  0.53
ATOM    412 1HB  ALA A  26      -5.889   6.925   2.886  1.00 21.21
ATOM    413 2HB  ALA A  26      -6.236   5.964   1.449  1.00 24.24
ATOM    414 3HB  ALA A  26      -7.193   7.401   1.801  1.00 11.53
ATOM    415  C   ALA A  26      -3.825   7.237   1.173  1.00 53.12
ATOM    416  O   ALA A  26      -2.984   7.795   1.869  1.00 73.02
ATOM    417  N   THR A  27      -3.576   6.151   0.467  1.00 71.04
ATOM    418  H   THR A  27      -4.310   5.749  -0.042  1.00 35.41
ATOM    419  CA  THR A  27      -2.271   5.514   0.445  1.00 14.14
ATOM    420  HA  THR A  27      -1.993   5.237   1.451  1.00 32.10
ATOM    421  CB  THR A  27      -2.299   4.258  -0.428  1.00 73.20
ATOM    422  HB  THR A  27      -2.441   4.562  -1.454  1.00 42.32
ATOM    423  OG1 THR A  27      -3.383   3.413  -0.024  1.00 14.14
ATOM    424  HG1 THR A  27      -4.218   3.771  -0.355  1.00 22.55
ATOM    425  CG2 THR A  27      -0.987   3.484  -0.316  1.00 75.01
ATOM    426 1HG2 THR A  27      -1.031   2.606  -0.941  1.00 64.34
ATOM    427 2HG2 THR A  27      -0.828   3.191   0.710  1.00  3.34
ATOM    428 3HG2 THR A  27      -0.177   4.120  -0.642  1.00  2.13
ATOM    429  C   THR A  27      -1.229   6.472  -0.116  1.00 63.31
ATOM    430  O   THR A  27      -0.147   6.622   0.453  1.00 11.32
ATOM    431  N   LEU A  28      -1.581   7.132  -1.217  1.00 74.13
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ATOM    432  H   LEU A  28      -2.469   6.972  -1.609  1.00  0.24
ATOM    433  CA  LEU A  28      -0.717   8.095  -1.862  1.00 44.30
ATOM    434  HA  LEU A  28       0.188   7.584  -2.154  1.00  0.41
ATOM    435  CB  LEU A  28      -1.407   8.655  -3.118  1.00 54.35
ATOM    436 1HB  LEU A  28      -1.446   7.840  -3.826  1.00 24.10
ATOM    437 2HB  LEU A  28      -2.425   8.910  -2.873  1.00 60.34
ATOM    438  CG  LEU A  28      -0.735   9.840  -3.833  1.00 52.25
ATOM    439  HG  LEU A  28      -0.513  10.614  -3.113  1.00 42.15
ATOM    440  CD1 LEU A  28       0.586   9.431  -4.450  1.00 51.35
ATOM    441 1HD1 LEU A  28       1.033  10.284  -4.943  1.00 30.31
ATOM    442 2HD1 LEU A  28       0.423   8.643  -5.171  1.00  4.30
ATOM    443 3HD1 LEU A  28       1.246   9.080  -3.673  1.00 25.43
ATOM    444  CD2 LEU A  28      -1.664  10.424  -4.884  1.00 62.44
ATOM    445 1HD2 LEU A  28      -2.571  10.772  -4.412  1.00 33.23
ATOM    446 2HD2 LEU A  28      -1.906   9.665  -5.615  1.00  2.54
ATOM    447 3HD2 LEU A  28      -1.174  11.252  -5.376  1.00 12.32
ATOM    448  C   LEU A  28      -0.356   9.202  -0.879  1.00 15.45
ATOM    449  O   LEU A  28       0.798   9.497  -0.688  1.00 33.24
ATOM    450  N   GLN A  29      -1.355   9.757  -0.223  1.00 14.43
ATOM    451  H   GLN A  29      -2.268   9.457  -0.432  1.00 34.52
ATOM    452  CA  GLN A  29      -1.160  10.801   0.787  1.00 23.14
ATOM    453  HA  GLN A  29      -0.714  11.658   0.304  1.00 64.13
ATOM    454  CB  GLN A  29      -2.497  11.213   1.390  1.00 45.21
ATOM    455 1HB  GLN A  29      -2.956  10.341   1.833  1.00 34.24
ATOM    456 2HB  GLN A  29      -2.316  11.940   2.167  1.00 44.44
ATOM    457  CG  GLN A  29      -3.474  11.805   0.399  1.00  3.41
ATOM    458 1HG  GLN A  29      -3.082  12.739   0.028  1.00 24.33
ATOM    459 2HG  GLN A  29      -3.580  11.116  -0.425  1.00 74.14
ATOM    460  CD  GLN A  29      -4.840  12.040   1.007  1.00 43.12
ATOM    461  OE1 GLN A  29      -5.266  11.324   1.910  1.00 61.14
ATOM    462  NE2 GLN A  29      -5.538  13.030   0.516  1.00  5.23
ATOM    463 2HE2 GLN A  29      -5.148  13.561  -0.210  1.00 34.05
ATOM    464 1HE2 GLN A  29      -6.421  13.190   0.905  1.00 12.21
ATOM    465  C   GLN A  29      -0.235  10.317   1.905  1.00 50.10
ATOM    466  O   GLN A  29       0.694  11.015   2.288  1.00 31.31
ATOM    467  N   ALA A  30      -0.467   9.100   2.362  1.00 61.22
ATOM    468  H   ALA A  30      -1.199   8.579   1.959  1.00 25.22
ATOM    469  CA  ALA A  30       0.283   8.507   3.461  1.00 60.53
ATOM    470  HA  ALA A  30       0.102   9.096   4.346  1.00 63.21
ATOM    471  CB  ALA A  30      -0.229   7.097   3.728  1.00 71.42
ATOM    472 1HB  ALA A  30       0.276   6.680   4.587  1.00 25.24
ATOM    473 2HB  ALA A  30      -0.035   6.474   2.867  1.00 72.41
ATOM    474 3HB  ALA A  30      -1.292   7.120   3.913  1.00  1.42
ATOM    475  C   ALA A  30       1.783   8.462   3.178  1.00 73.32
ATOM    476  O   ALA A  30       2.600   8.865   4.017  1.00 75.23
ATOM    477  N   ILE A  31       2.131   8.011   2.000  1.00 40.03
ATOM    478  H   ILE A  31       1.425   7.788   1.353  1.00 62.43
ATOM    479  CA  ILE A  31       3.520   7.834   1.627  1.00  4.10
ATOM    480  HA  ILE A  31       4.052   7.578   2.533  1.00 42.14
ATOM    481  CB  ILE A  31       3.661   6.630   0.624  1.00 71.43
ATOM    482  HB  ILE A  31       3.294   5.759   1.147  1.00 22.21
ATOM    483  CG2 ILE A  31       2.763   6.797  -0.595  1.00 30.15
ATOM    484 1HG2 ILE A  31       2.894   5.951  -1.252  1.00 72.42
ATOM    485 2HG2 ILE A  31       3.033   7.704  -1.115  1.00 62.32
ATOM    486 3HG2 ILE A  31       1.731   6.855  -0.282  1.00  3.42
ATOM    487  CG1 ILE A  31       5.109   6.369   0.196  1.00 64.12
ATOM    488 1HG1 ILE A  31       5.502   7.224  -0.334  1.00 70.14
ATOM    489 2HG1 ILE A  31       5.722   6.170   1.061  1.00 13.15
ATOM    490  CD1 ILE A  31       5.240   5.177  -0.727  1.00 63.22
ATOM    491 1HD1 ILE A  31       4.888   4.292  -0.220  1.00 25.42
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ATOM    492 2HD1 ILE A  31       6.277   5.046  -1.003  1.00 43.52
ATOM    493 3HD1 ILE A  31       4.648   5.343  -1.615  1.00 33.14
ATOM    494  C   ILE A  31       4.147   9.139   1.073  1.00 11.42
ATOM    495  O   ILE A  31       5.213   9.546   1.510  1.00  3.45
ATOM    496  N   GLN A  32       3.409   9.820   0.211  1.00 31.23
ATOM    497  H   GLN A  32       2.492   9.520   0.030  1.00 35.22
ATOM    498  CA  GLN A  32       3.885  11.006  -0.516  1.00  2.33
ATOM    499  HA  GLN A  32       4.867  10.789  -0.912  1.00  1.01
ATOM    500  CB  GLN A  32       2.915  11.237  -1.714  1.00  1.33
ATOM    501 1HB  GLN A  32       2.862  10.315  -2.271  1.00 75.51
ATOM    502 2HB  GLN A  32       1.933  11.421  -1.302  1.00 75.53
ATOM    503  CG  GLN A  32       3.224  12.342  -2.729  1.00  2.22
ATOM    504 1HG  GLN A  32       4.248  12.234  -3.043  1.00 61.34
ATOM    505 2HG  GLN A  32       2.575  12.144  -3.570  1.00 50.43
ATOM    506  CD  GLN A  32       2.983  13.781  -2.247  1.00 25.44
ATOM    507  OE1 GLN A  32       3.648  14.708  -2.676  1.00  2.45
ATOM    508  NE2 GLN A  32       2.000  13.979  -1.393  1.00 43.22
ATOM    509 2HE2 GLN A  32       1.464  13.214  -1.105  1.00 11.52
ATOM    510 1HE2 GLN A  32       1.883  14.900  -1.083  1.00 14.21
ATOM    511  C   GLN A  32       3.975  12.230   0.401  1.00  1.24
ATOM    512  O   GLN A  32       4.892  13.021   0.302  1.00 11.45
ATOM    513  N   ASN A  33       3.033  12.366   1.323  1.00  1.33
ATOM    514  H   ASN A  33       2.358  11.665   1.451  1.00 35.10
ATOM    515  CA  ASN A  33       3.005  13.560   2.180  1.00  0.42
ATOM    516  HA  ASN A  33       3.462  14.368   1.629  1.00 70.34
ATOM    517  CB  ASN A  33       1.542  13.940   2.532  1.00 23.31
ATOM    518 1HB  ASN A  33       0.939  13.855   1.641  1.00 54.13
ATOM    519 2HB  ASN A  33       1.173  13.239   3.266  1.00 22.30
ATOM    520  CG  ASN A  33       1.363  15.359   3.083  1.00  5.33
ATOM    521  OD1 ASN A  33       1.147  16.300   2.328  1.00 32.11
ATOM    522  ND2 ASN A  33       1.433  15.525   4.383  1.00 20.31
ATOM    523 2HD2 ASN A  33       1.604  14.739   4.943  1.00 25.14
ATOM    524 1HD2 ASN A  33       1.326  16.435   4.724  1.00 32.53
ATOM    525  C   ASN A  33       3.827  13.304   3.446  1.00 11.34
ATOM    526  O   ASN A  33       3.913  14.144   4.331  1.00 15.41
ATOM    527  N   GLY A  34       4.439  12.127   3.507  1.00 22.22
ATOM    528  H   GLY A  34       4.360  11.519   2.742  1.00 62.21
ATOM    529  CA  GLY A  34       5.262  11.760   4.638  1.00 33.23
ATOM    530 1HA  GLY A  34       5.721  10.804   4.436  1.00 73.41
ATOM    531 2HA  GLY A  34       6.039  12.501   4.755  1.00 42.14
ATOM    532  C   GLY A  34       4.484  11.661   5.934  1.00 54.43
ATOM    533  O   GLY A  34       4.871  12.238   6.941  1.00 45.34
ATOM    534  N   GLN A  35       3.391  10.904   5.923  1.00 54.45
ATOM    535  H   GLN A  35       3.120  10.451   5.093  1.00 11.12
ATOM    536  CA  GLN A  35       2.576  10.732   7.127  1.00 22.31
ATOM    537  HA  GLN A  35       2.594  11.670   7.661  1.00 24.42
ATOM    538  CB  GLN A  35       1.132  10.381   6.782  1.00 53.44
ATOM    539 1HB  GLN A  35       1.125   9.457   6.224  1.00 61.32
ATOM    540 2HB  GLN A  35       0.590  10.236   7.704  1.00 70.24
ATOM    541  CG  GLN A  35       0.415  11.444   5.965  1.00 53.15
ATOM    542 1HG  GLN A  35       0.512  12.392   6.472  1.00 63.03
ATOM    543 2HG  GLN A  35       0.902  11.515   5.002  1.00 74.02
ATOM    544  CD  GLN A  35      -1.061  11.135   5.743  1.00 14.53
ATOM    545  OE1 GLN A  35      -1.638  11.515   4.736  1.00  0.01
ATOM    546  NE2 GLN A  35      -1.684  10.463   6.687  1.00 34.54
ATOM    547 2HE2 GLN A  35      -1.186  10.191   7.484  1.00  3.15
ATOM    548 1HE2 GLN A  35      -2.637  10.240   6.564  1.00 11.00
ATOM    549  C   GLN A  35       3.171   9.658   8.029  1.00 61.51
ATOM    550  O   GLN A  35       2.634   9.341   9.083  1.00 31.12
ATOM    551  N   THR A  36       4.262   9.106   7.587  1.00 33.42
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ATOM    552  H   THR A  36       4.632   9.393   6.728  1.00 61.44
ATOM    553  CA  THR A  36       4.984   8.121   8.305  1.00 21.42
ATOM    554  HA  THR A  36       4.970   8.387   9.351  1.00  2.51
ATOM    555  CB  THR A  36       4.368   6.689   8.116  1.00 54.33
ATOM    556  HB  THR A  36       3.342   6.726   8.454  1.00 43.21
ATOM    557  OG1 THR A  36       5.067   5.722   8.917  1.00  5.14
ATOM    558  HG1 THR A  36       5.696   5.232   8.381  1.00 41.50
ATOM    559  CG2 THR A  36       4.388   6.248   6.647  1.00 23.21
ATOM    560 1HG2 THR A  36       3.958   5.262   6.559  1.00 23.41
ATOM    561 2HG2 THR A  36       5.409   6.229   6.293  1.00 61.03
ATOM    562 3HG2 THR A  36       3.818   6.946   6.054  1.00 34.54
ATOM    563  C   THR A  36       6.413   8.168   7.795  1.00 32.32
ATOM    564  O   THR A  36       6.660   8.684   6.693  1.00 32.21
ATOM    565  N   PHE A  37       7.327   7.684   8.579  1.00 61.40
ATOM    566  H   PHE A  37       7.061   7.296   9.440  1.00 30.31
ATOM    567  CA  PHE A  37       8.719   7.630   8.216  1.00 25.45
ATOM    568  HA  PHE A  37       8.796   7.914   7.177  1.00 52.23
ATOM    569  CB  PHE A  37       9.577   8.585   9.083  1.00 25.04
ATOM    570 1HB  PHE A  37      10.611   8.494   8.781  1.00 44.02
ATOM    571 2HB  PHE A  37       9.255   9.600   8.907  1.00 73.44
ATOM    572  CG  PHE A  37       9.524   8.329  10.575  1.00 33.05
ATOM    573  CD1 PHE A  37       8.528   8.898  11.357  1.00 74.03
ATOM    574  HD1 PHE A  37       7.781   9.522  10.887  1.00 22.53
ATOM    575  CE1 PHE A  37       8.482   8.673  12.718  1.00 52.54
ATOM    576  HE1 PHE A  37       7.701   9.124  13.313  1.00 33.52
ATOM    577  CZ  PHE A  37       9.435   7.873  13.318  1.00 53.23
ATOM    578  HZ  PHE A  37       9.399   7.696  14.383  1.00 71.30
ATOM    579  CE2 PHE A  37      10.433   7.300  12.554  1.00 55.33
ATOM    580  HE2 PHE A  37      11.179   6.676  13.020  1.00 31.42
ATOM    581  CD2 PHE A  37      10.475   7.530  11.195  1.00 64.05
ATOM    582  HD2 PHE A  37      11.256   7.082  10.598  1.00 65.12
ATOM    583  C   PHE A  37       9.175   6.201   8.353  1.00 13.10
ATOM    584  O   PHE A  37       8.512   5.413   9.037  1.00 74.14
ATOM    585  N   ASP A  38      10.251   5.846   7.706  1.00 30.31
ATOM    586  H   ASP A  38      10.760   6.505   7.192  1.00 50.23
ATOM    587  CA  ASP A  38      10.723   4.482   7.789  1.00 71.44
ATOM    588  HA  ASP A  38       9.861   3.860   7.980  1.00 31.25
ATOM    589  CB  ASP A  38      11.394   4.017   6.493  1.00 23.34
ATOM    590 1HB  ASP A  38      10.742   4.218   5.655  1.00 32.02
ATOM    591 2HB  ASP A  38      12.327   4.546   6.362  1.00 30.13
ATOM    592  CG  ASP A  38      11.683   2.536   6.545  1.00 65.55
ATOM    593  OD1 ASP A  38      12.806   2.143   6.924  1.00 52.04
ATOM    594  OD2 ASP A  38      10.765   1.755   6.308  1.00 34.01
ATOM    595  C   ASP A  38      11.679   4.328   8.958  1.00 14.34
ATOM    596  O   ASP A  38      12.287   5.304   9.398  1.00 75.24
ATOM    597  N   TYR A  39      11.831   3.108   9.420  1.00 13.52
ATOM    598  H   TYR A  39      11.385   2.386   8.932  1.00 34.53
ATOM    599  CA  TYR A  39      12.651   2.776  10.562  1.00 14.31
ATOM    600  HA  TYR A  39      12.368   3.424  11.378  1.00 14.14
ATOM    601  CB  TYR A  39      12.383   1.326  10.982  1.00 62.34
ATOM    602 1HB  TYR A  39      12.737   0.663  10.206  1.00 45.30
ATOM    603 2HB  TYR A  39      12.917   1.117  11.897  1.00 13.51
ATOM    604  CG  TYR A  39      10.913   1.028  11.215  1.00 42.13
ATOM    605  CD1 TYR A  39      10.297   1.355  12.417  1.00 24.21
ATOM    606  HD1 TYR A  39      10.882   1.822  13.196  1.00 10.45
ATOM    607  CE1 TYR A  39       8.955   1.092  12.624  1.00  4.32
ATOM    608  HE1 TYR A  39       8.494   1.353  13.565  1.00 44.32
ATOM    609  CZ  TYR A  39       8.215   0.495  11.624  1.00  1.11
ATOM    610  CE2 TYR A  39       8.804   0.161  10.425  1.00 53.01
ATOM    611  HE2 TYR A  39       8.221  -0.307   9.644  1.00  1.35
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ATOM    612  CD2 TYR A  39      10.142   0.426  10.225  1.00 53.04
ATOM    613  HD2 TYR A  39      10.605   0.164   9.285  1.00 14.00
ATOM    614  OH  TYR A  39       6.881   0.233  11.825  1.00  1.02
ATOM    615  HH  TYR A  39       6.459   1.001  12.220  1.00 72.55
ATOM    616  C   TYR A  39      14.138   2.976  10.256  1.00 33.23
ATOM    617  O   TYR A  39      14.923   3.237  11.157  1.00  4.12
ATOM    618  N   LYS A  40      14.524   2.851   8.989  1.00 14.55
ATOM    619  H   LYS A  40      13.875   2.584   8.293  1.00 75.22
ATOM    620  CA  LYS A  40      15.914   3.102   8.624  1.00 22.03
ATOM    621  HA  LYS A  40      16.458   3.258   9.545  1.00 72.44
ATOM    622  CB  LYS A  40      16.538   1.922   7.862  1.00 55.43
ATOM    623 1HB  LYS A  40      17.576   2.154   7.675  1.00 72.53
ATOM    624 2HB  LYS A  40      16.483   1.039   8.480  1.00 14.12
ATOM    625  CG  LYS A  40      15.870   1.623   6.534  1.00 71.55
ATOM    626 1HG  LYS A  40      14.870   1.259   6.722  1.00 24.54
ATOM    627 2HG  LYS A  40      15.810   2.539   5.966  1.00 52.22
ATOM    628  CD  LYS A  40      16.620   0.582   5.720  1.00 22.21
ATOM    629 1HD  LYS A  40      16.704  -0.335   6.281  1.00  4.20
ATOM    630 2HD  LYS A  40      16.050   0.413   4.816  1.00 21.44
ATOM    631  CE  LYS A  40      18.011   1.061   5.323  1.00 20.32
ATOM    632 1HE  LYS A  40      17.929   2.025   4.843  1.00 32.45
ATOM    633 2HE  LYS A  40      18.620   1.151   6.211  1.00 31.03
ATOM    634  NZ  LYS A  40      18.663   0.119   4.394  1.00 23.52
ATOM    635 1HZ  LYS A  40      18.000  -0.042   3.596  1.00 22.23
ATOM    636 2HZ  LYS A  40      18.843  -0.828   4.783  1.00 51.14
ATOM    637 3HZ  LYS A  40      19.518   0.532   3.966  1.00 22.22
ATOM    638  C   LYS A  40      16.015   4.375   7.796  1.00 60.12
ATOM    639  O   LYS A  40      17.085   4.710   7.281  1.00 74.42
ATOM    640  N   SER A  41      14.882   5.061   7.675  1.00 32.23
ATOM    641  H   SER A  41      14.086   4.692   8.110  1.00 34.00
ATOM    642  CA  SER A  41      14.761   6.338   6.980  1.00 43.25
ATOM    643  HA  SER A  41      13.717   6.613   7.021  1.00 63.04
ATOM    644  CB  SER A  41      15.572   7.424   7.737  1.00 33.24
ATOM    645 1HB  SER A  41      15.252   7.453   8.769  1.00 72.45
ATOM    646 2HB  SER A  41      16.621   7.170   7.700  1.00 50.20
ATOM    647  OG  SER A  41      15.391   8.712   7.176  1.00 72.24
ATOM    648  HG  SER A  41      15.532   8.607   6.225  1.00 55.23
ATOM    649  C   SER A  41      15.165   6.254   5.476  1.00 45.53
ATOM    650  O   SER A  41      15.562   7.263   4.876  1.00 44.25
ATOM    651  N   ASN A  42      15.005   5.084   4.861  1.00  2.30
ATOM    652  H   ASN A  42      14.644   4.323   5.359  1.00 13.04
ATOM    653  CA  ASN A  42      15.309   4.941   3.432  1.00 14.12
ATOM    654  HA  ASN A  42      16.254   5.448   3.306  1.00 52.33
ATOM    655  CB  ASN A  42      15.467   3.469   2.951  1.00 13.23
ATOM    656 1HB  ASN A  42      15.583   3.472   1.879  1.00 54.50
ATOM    657 2HB  ASN A  42      16.367   3.063   3.389  1.00  2.42
ATOM    658  CG  ASN A  42      14.307   2.531   3.279  1.00 71.32
ATOM    659  OD1 ASN A  42      13.171   2.942   3.508  1.00 42.53
ATOM    660  ND2 ASN A  42      14.580   1.260   3.214  1.00 31.11
ATOM    661 2HD2 ASN A  42      15.476   0.947   2.943  1.00 33.04
ATOM    662 1HD2 ASN A  42      13.890   0.612   3.482  1.00 32.14
ATOM    663  C   ASN A  42      14.270   5.666   2.579  1.00 41.45
ATOM    664  O   ASN A  42      13.135   5.821   3.008  1.00 12.52
ATOM    665  N   PRO A  43      14.677   6.235   1.414  1.00 73.25
ATOM    666  CD  PRO A  43      16.075   6.359   0.951  1.00 22.34
ATOM    667  CA  PRO A  43      13.744   6.862   0.468  1.00 13.20
ATOM    668  HA  PRO A  43      13.349   7.784   0.870  1.00 71.03
ATOM    669  CB  PRO A  43      14.612   7.151  -0.757  1.00 22.05
ATOM    670 1HB  PRO A  43      14.565   6.313  -1.439  1.00  4.24
ATOM    671 2HB  PRO A  43      14.298   8.061  -1.243  1.00 41.42
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ATOM    672  CG  PRO A  43      15.973   7.329  -0.195  1.00 44.24
ATOM    673 1HG  PRO A  43      16.712   7.112  -0.954  1.00 22.03
ATOM    674 2HG  PRO A  43      16.095   8.336   0.176  1.00 55.01
ATOM    675 1HD  PRO A  43      16.457   5.407   0.610  1.00 72.14
ATOM    676 2HD  PRO A  43      16.704   6.764   1.730  1.00 13.32
ATOM    677  C   PRO A  43      12.577   5.933   0.106  1.00 35.34
ATOM    678  O   PRO A  43      12.719   4.987  -0.669  1.00 51.40
ATOM    679  N   TYR A  44      11.467   6.181   0.752  1.00 44.31
ATOM    680  H   TYR A  44      11.476   6.906   1.409  1.00 74.22
ATOM    681  CA  TYR A  44      10.251   5.413   0.600  1.00 53.51
ATOM    682  HA  TYR A  44      10.550   4.470   0.167  1.00 45.35
ATOM    683  CB  TYR A  44       9.587   5.106   1.955  1.00 45.41
ATOM    684 1HB  TYR A  44       8.616   4.681   1.750  1.00 22.43
ATOM    685 2HB  TYR A  44      10.185   4.377   2.483  1.00 63.02
ATOM    686  CG  TYR A  44       9.379   6.311   2.862  1.00 20.14
ATOM    687  CD1 TYR A  44      10.314   6.623   3.838  1.00 52.54
ATOM    688  HD1 TYR A  44      11.189   5.999   3.939  1.00 42.04
ATOM    689  CE1 TYR A  44      10.149   7.702   4.669  1.00  0.14
ATOM    690  HE1 TYR A  44      10.894   7.921   5.420  1.00 13.43
ATOM    691  CZ  TYR A  44       9.040   8.496   4.539  1.00 12.22
ATOM    692  CE2 TYR A  44       8.086   8.216   3.581  1.00 44.13
ATOM    693  HE2 TYR A  44       7.212   8.842   3.480  1.00 40.54
ATOM    694  CD2 TYR A  44       8.258   7.127   2.748  1.00 50.24
ATOM    695  HD2 TYR A  44       7.517   6.902   1.995  1.00 22.32
ATOM    696  OH  TYR A  44       8.879   9.566   5.377  1.00 52.14
ATOM    697  HH  TYR A  44       7.988   9.521   5.750  1.00 72.35
ATOM    698  C   TYR A  44       9.264   6.037  -0.361  1.00 33.20
ATOM    699  O   TYR A  44       8.241   5.455  -0.628  1.00 75.52
ATOM    700  N   ASP A  45       9.572   7.206  -0.879  1.00 65.31
ATOM    701  H   ASP A  45      10.464   7.579  -0.744  1.00 54.40
ATOM    702  CA  ASP A  45       8.604   7.940  -1.702  1.00 31.24
ATOM    703  HA  ASP A  45       7.637   7.741  -1.259  1.00 64.14
ATOM    704  CB  ASP A  45       8.855   9.452  -1.679  1.00 55.12
ATOM    705 1HB  ASP A  45       8.792   9.808  -0.662  1.00  4.24
ATOM    706 2HB  ASP A  45       9.839   9.655  -2.069  1.00 45.14
ATOM    707  CG  ASP A  45       7.836  10.207  -2.520  1.00  4.04
ATOM    708  OD1 ASP A  45       8.249  11.061  -3.309  1.00 52.01
ATOM    709  OD2 ASP A  45       6.618   9.873  -2.427  1.00 25.10
ATOM    710  C   ASP A  45       8.548   7.391  -3.131  1.00  2.01
ATOM    711  O   ASP A  45       9.534   6.837  -3.646  1.00 14.33
ATOM    712  N   ILE A  46       7.389   7.525  -3.725  1.00 72.22
ATOM    713  H   ILE A  46       6.782   8.183  -3.306  1.00 23.14
ATOM    714  CA  ILE A  46       6.996   6.889  -4.972  1.00 35.51
ATOM    715  HA  ILE A  46       7.086   5.817  -4.876  1.00 22.31
ATOM    716  CB  ILE A  46       5.506   7.195  -5.239  1.00 24.52
ATOM    717  HB  ILE A  46       5.390   8.262  -5.361  1.00 10.12
ATOM    718  CG2 ILE A  46       5.021   6.505  -6.513  1.00 35.00
ATOM    719 1HG2 ILE A  46       5.138   5.435  -6.411  1.00  2.11
ATOM    720 2HG2 ILE A  46       5.602   6.849  -7.355  1.00 52.52
ATOM    721 3HG2 ILE A  46       3.978   6.737  -6.678  1.00  1.44
ATOM    722  CG1 ILE A  46       4.673   6.750  -4.043  1.00 25.11
ATOM    723 1HG1 ILE A  46       4.715   5.674  -3.965  1.00 63.22
ATOM    724 2HG1 ILE A  46       5.085   7.184  -3.144  1.00  1.21
ATOM    725  CD1 ILE A  46       3.234   7.144  -4.134  1.00 31.44
ATOM    726 1HD1 ILE A  46       2.819   6.719  -5.035  1.00 45.24
ATOM    727 2HD1 ILE A  46       3.161   8.221  -4.167  1.00 13.13
ATOM    728 3HD1 ILE A  46       2.699   6.763  -3.277  1.00 11.13
ATOM    729  C   ILE A  46       7.814   7.372  -6.159  1.00 60.03
ATOM    730  O   ILE A  46       7.891   8.552  -6.438  1.00 43.30
ATOM    731  N   SER A  47       8.393   6.435  -6.878  1.00 20.41
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ATOM    732  H   SER A  47       8.278   5.493  -6.630  1.00 42.40
ATOM    733  CA  SER A  47       9.172   6.780  -8.020  1.00 13.32
ATOM    734  HA  SER A  47       9.467   7.815  -7.921  1.00 63.32
ATOM    735  CB  SER A  47      10.437   5.906  -8.078  1.00 54.23
ATOM    736 1HB  SER A  47      10.997   6.025  -7.161  1.00 53.35
ATOM    737 2HB  SER A  47      10.146   4.871  -8.184  1.00  1.31
ATOM    738  OG  SER A  47      11.273   6.259  -9.167  1.00 52.40
ATOM    739  HG  SER A  47      10.820   6.927  -9.695  1.00 11.15
ATOM    740  C   SER A  47       8.332   6.622  -9.293  1.00 12.33
ATOM    741  O   SER A  47       8.559   7.325 -10.273  1.00 14.13
ATOM    742  N   VAL A  48       7.360   5.695  -9.281  1.00 14.33
ATOM    743  H   VAL A  48       7.232   5.120  -8.495  1.00 61.43
ATOM    744  CA  VAL A  48       6.459   5.532 -10.425  1.00 22.35
ATOM    745  HA  VAL A  48       6.462   6.439 -11.011  1.00 42.00
ATOM    746  CB  VAL A  48       6.869   4.320 -11.334  1.00 14.54
ATOM    747  HB  VAL A  48       6.621   3.429 -10.775  1.00 22.35
ATOM    748  CG1 VAL A  48       6.049   4.308 -12.616  1.00 23.24
ATOM    749 1HG1 VAL A  48       6.303   3.439 -13.204  1.00 60.34
ATOM    750 2HG1 VAL A  48       6.271   5.199 -13.184  1.00 11.51
ATOM    751 3HG1 VAL A  48       4.997   4.294 -12.372  1.00  2.15
ATOM    752  CG2 VAL A  48       8.361   4.302 -11.658  1.00 42.13
ATOM    753 1HG2 VAL A  48       8.929   4.233 -10.743  1.00 61.53
ATOM    754 2HG2 VAL A  48       8.627   5.211 -12.178  1.00 45.12
ATOM    755 3HG2 VAL A  48       8.583   3.451 -12.286  1.00 14.12
ATOM    756  C   VAL A  48       5.050   5.247  -9.903  1.00 44.41
ATOM    757  O   VAL A  48       4.869   4.378  -9.044  1.00 60.22
ATOM    758  N   ASN A  49       4.073   5.952 -10.404  1.00 53.31
ATOM    759  H   ASN A  49       4.261   6.662 -11.055  1.00 60.22
ATOM    760  CA  ASN A  49       2.682   5.710 -10.048  1.00 44.25
ATOM    761  HA  ASN A  49       2.679   4.879  -9.359  1.00 34.44
ATOM    762  CB  ASN A  49       2.049   6.952  -9.358  1.00 51.41
ATOM    763 1HB  ASN A  49       1.073   6.688  -8.981  1.00 10.30
ATOM    764 2HB  ASN A  49       2.675   7.231  -8.523  1.00 54.41
ATOM    765  CG  ASN A  49       1.889   8.169 -10.264  1.00 34.12
ATOM    766  OD1 ASN A  49       2.814   8.947 -10.441  1.00 30.10
ATOM    767  ND2 ASN A  49       0.698   8.384 -10.773  1.00 74.14
ATOM    768 2HD2 ASN A  49      -0.030   7.766 -10.549  1.00 64.24
ATOM    769 1HD2 ASN A  49       0.605   9.162 -11.360  1.00 23.34
ATOM    770  C   ASN A  49       1.903   5.290 -11.290  1.00 33.42
ATOM    771  O   ASN A  49       2.053   5.903 -12.341  1.00 33.11
ATOM    772  N   LYS A  50       1.120   4.223 -11.214  1.00 25.02
ATOM    773  H   LYS A  50       1.084   3.670 -10.398  1.00 20.31
ATOM    774  CA  LYS A  50       0.289   3.842 -12.352  1.00 23.10
ATOM    775  HA  LYS A  50       0.154   4.710 -12.979  1.00 50.14
ATOM    776  CB  LYS A  50       0.883   2.686 -13.213  1.00 21.34
ATOM    777 1HB  LYS A  50       0.730   1.759 -12.679  1.00 64.54
ATOM    778 2HB  LYS A  50       0.323   2.634 -14.135  1.00  3.42
ATOM    779  CG  LYS A  50       2.363   2.770 -13.554  1.00 74.31
ATOM    780 1HG  LYS A  50       2.533   2.346 -14.532  1.00 42.13
ATOM    781 2HG  LYS A  50       2.639   3.813 -13.552  1.00 45.24
ATOM    782  CD  LYS A  50       3.232   2.030 -12.528  1.00 11.41
ATOM    783 1HD  LYS A  50       4.246   2.391 -12.611  1.00 62.12
ATOM    784 2HD  LYS A  50       2.858   2.249 -11.540  1.00 33.15
ATOM    785  CE  LYS A  50       3.257   0.497 -12.728  1.00 31.25
ATOM    786 1HE  LYS A  50       3.662   0.286 -13.704  1.00 21.40
ATOM    787 2HE  LYS A  50       3.919   0.091 -11.976  1.00 51.33
ATOM    788  NZ  LYS A  50       1.926  -0.176 -12.612  1.00 51.32
ATOM    789 1HZ  LYS A  50       1.253  -0.025 -13.388  1.00 72.12
ATOM    790 2HZ  LYS A  50       1.479   0.120 -11.722  1.00 20.03
ATOM    791 3HZ  LYS A  50       2.059  -1.200 -12.459  1.00 33.53
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ATOM    792  C   LYS A  50      -1.050   3.362 -11.866  1.00 65.23
ATOM    793  O   LYS A  50      -1.150   2.762 -10.799  1.00 65.45
ATOM    794  N   ASN A  51      -2.065   3.639 -12.618  1.00  3.32
ATOM    795  H   ASN A  51      -1.962   4.234 -13.389  1.00 11.44
ATOM    796  CA  ASN A  51      -3.349   3.043 -12.376  1.00  2.24
ATOM    797  HA  ASN A  51      -3.275   2.504 -11.443  1.00 53.53
ATOM    798  CB  ASN A  51      -4.499   4.061 -12.320  1.00 53.53
ATOM    799 1HB  ASN A  51      -4.540   4.633 -13.234  1.00 75.14
ATOM    800 2HB  ASN A  51      -5.420   3.507 -12.198  1.00 13.54
ATOM    801  CG  ASN A  51      -4.383   5.018 -11.152  1.00 42.42
ATOM    802  OD1 ASN A  51      -3.837   4.681 -10.120  1.00  2.11
ATOM    803  ND2 ASN A  51      -4.906   6.213 -11.301  1.00 62.34
ATOM    804 2HD2 ASN A  51      -5.345   6.433 -12.150  1.00 22.33
ATOM    805 1HD2 ASN A  51      -4.833   6.827 -10.544  1.00  3.34
ATOM    806  C   ASN A  51      -3.553   2.057 -13.471  1.00 23.54
ATOM    807  O   ASN A  51      -3.471   2.409 -14.636  1.00  2.21
ATOM    808  N   ASN A  52      -3.800   0.834 -13.117  1.00 25.13
ATOM    809  H   ASN A  52      -3.986   0.630 -12.172  1.00 54.25
ATOM    810  CA  ASN A  52      -3.866  -0.247 -14.089  1.00 13.40
ATOM    811  HA  ASN A  52      -3.299   0.062 -14.955  1.00 74.50
ATOM    812  CB  ASN A  52      -3.243  -1.547 -13.515  1.00 43.21
ATOM    813 1HB  ASN A  52      -3.818  -1.833 -12.651  1.00 12.24
ATOM    814 2HB  ASN A  52      -3.311  -2.328 -14.259  1.00 41.01
ATOM    815  CG  ASN A  52      -1.767  -1.425 -13.059  1.00 53.54
ATOM    816  OD1 ASN A  52      -0.980  -0.600 -13.572  1.00 34.54
ATOM    817  ND2 ASN A  52      -1.382  -2.249 -12.105  1.00 22.04
ATOM    818 2HD2 ASN A  52      -2.037  -2.879 -11.739  1.00 23.32
ATOM    819 1HD2 ASN A  52      -0.447  -2.248 -11.774  1.00 32.43
ATOM    820  C   ASN A  52      -5.318  -0.484 -14.531  1.00 42.30
ATOM    821  O   ASN A  52      -5.653  -1.511 -15.103  1.00 11.44
ATOM    822  N   GLY A  53      -6.175   0.474 -14.232  1.00 61.24
ATOM    823  H   GLY A  53      -5.865   1.213 -13.674  1.00 33.34
ATOM    824  CA  GLY A  53      -7.548   0.434 -14.675  1.00 60.33
ATOM    825 1HA  GLY A  53      -7.828   1.410 -15.041  1.00 13.44
ATOM    826 2HA  GLY A  53      -7.638  -0.284 -15.477  1.00 14.32
ATOM    827  C   GLY A  53      -8.475   0.043 -13.566  1.00 50.31
ATOM    828  O   GLY A  53      -9.200   0.865 -13.028  1.00 31.52
ATOM    829  N   THR A  54      -8.422  -1.195 -13.205  1.00 72.22
ATOM    830  H   THR A  54      -7.781  -1.776 -13.666  1.00 61.55
ATOM    831  CA  THR A  54      -9.247  -1.714 -12.139  1.00 21.43
ATOM    832  HA  THR A  54      -9.910  -0.926 -11.809  1.00 52.22
ATOM    833  CB  THR A  54     -10.094  -2.942 -12.605  1.00 41.02
ATOM    834  HB  THR A  54     -10.761  -2.608 -13.388  1.00  2.51
ATOM    835  OG1 THR A  54     -10.893  -3.441 -11.516  1.00 24.13
ATOM    836  HG1 THR A  54     -10.217  -3.670 -10.861  1.00  4.40
ATOM    837  CG2 THR A  54      -9.209  -4.064 -13.147  1.00  0.25
ATOM    838 1HG2 THR A  54      -8.643  -3.700 -13.993  1.00 73.31
ATOM    839 2HG2 THR A  54      -9.825  -4.895 -13.454  1.00 21.42
ATOM    840 3HG2 THR A  54      -8.528  -4.385 -12.373  1.00 22.15
ATOM    841  C   THR A  54      -8.356  -2.063 -10.963  1.00 44.30
ATOM    842  O   THR A  54      -8.791  -2.658  -9.956  1.00  1.30
ATOM    843  N   ASP A  55      -7.134  -1.648 -11.093  1.00  1.21
ATOM    844  H   ASP A  55      -6.887  -1.135 -11.890  1.00 73.11
ATOM    845  CA  ASP A  55      -6.114  -1.835 -10.119  1.00  4.13
ATOM    846  HA  ASP A  55      -6.575  -2.000  -9.157  1.00 31.44
ATOM    847  CB  ASP A  55      -5.180  -3.020 -10.461  1.00 42.01
ATOM    848 1HB  ASP A  55      -4.829  -2.901 -11.470  1.00 44.44
ATOM    849 2HB  ASP A  55      -4.326  -2.976  -9.800  1.00 52.31
ATOM    850  CG  ASP A  55      -5.812  -4.398 -10.337  1.00  1.25
ATOM    851  OD1 ASP A  55      -5.524  -5.111  -9.369  1.00  4.51
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ATOM    852  OD2 ASP A  55      -6.597  -4.816 -11.211  1.00 44.13
ATOM    853  C   ASP A  55      -5.313  -0.572 -10.084  1.00 32.01
ATOM    854  O   ASP A  55      -5.389   0.239 -11.015  1.00 11.52
ATOM    855  N   ALA A  56      -4.569  -0.397  -9.064  1.00 33.54
ATOM    856  H   ALA A  56      -4.567  -1.115  -8.391  1.00 61.01
ATOM    857  CA  ALA A  56      -3.733   0.770  -8.893  1.00 50.20
ATOM    858  HA  ALA A  56      -3.529   1.178  -9.872  1.00 73.33
ATOM    859  CB  ALA A  56      -4.417   1.817  -8.042  1.00 43.12
ATOM    860 1HB  ALA A  56      -5.309   2.154  -8.551  1.00 15.12
ATOM    861 2HB  ALA A  56      -3.749   2.654  -7.902  1.00 42.11
ATOM    862 3HB  ALA A  56      -4.680   1.398  -7.083  1.00 14.41
ATOM    863  C   ALA A  56      -2.448   0.331  -8.276  1.00 31.12
ATOM    864  O   ALA A  56      -2.445  -0.601  -7.472  1.00 42.32
ATOM    865  N   GLU A  57      -1.364   0.960  -8.646  1.00 50.43
ATOM    866  H   GLU A  57      -1.402   1.756  -9.225  1.00 71.30
ATOM    867  CA  GLU A  57      -0.078   0.494  -8.230  1.00 13.22
ATOM    868  HA  GLU A  57      -0.152  -0.063  -7.310  1.00  1.22
ATOM    869  CB  GLU A  57       0.389  -0.441  -9.316  1.00 52.24
ATOM    870 1HB  GLU A  57      -0.423  -1.108  -9.564  1.00 51.31
ATOM    871 2HB  GLU A  57       0.606   0.158 -10.189  1.00 34.25
ATOM    872  CG  GLU A  57       1.592  -1.290  -9.026  1.00 63.53
ATOM    873 1HG  GLU A  57       2.384  -0.668  -8.635  1.00 32.04
ATOM    874 2HG  GLU A  57       1.335  -2.062  -8.317  1.00 23.13
ATOM    875  CD  GLU A  57       2.039  -1.931 -10.299  1.00 65.44
ATOM    876  OE1 GLU A  57       1.163  -2.384 -11.081  1.00  2.14
ATOM    877  OE2 GLU A  57       3.210  -1.845 -10.630  1.00 72.20
ATOM    878  C   GLU A  57       0.909   1.659  -8.109  1.00 25.04
ATOM    879  O   GLU A  57       1.157   2.385  -9.084  1.00 34.31
ATOM    880  N   ILE A  58       1.451   1.850  -6.938  1.00 70.20
ATOM    881  H   ILE A  58       1.186   1.318  -6.159  1.00  3.22
ATOM    882  CA  ILE A  58       2.478   2.814  -6.728  1.00 43.14
ATOM    883  HA  ILE A  58       2.638   3.284  -7.689  1.00 70.20
ATOM    884  CB  ILE A  58       2.143   3.914  -5.682  1.00 75.42
ATOM    885  HB  ILE A  58       3.116   4.313  -5.457  1.00 21.43
ATOM    886  CG2 ILE A  58       1.326   5.034  -6.303  1.00 23.25
ATOM    887 1HG2 ILE A  58       1.924   5.522  -7.057  1.00 21.14
ATOM    888 2HG2 ILE A  58       1.047   5.743  -5.539  1.00 50.22
ATOM    889 3HG2 ILE A  58       0.438   4.622  -6.759  1.00  1.42
ATOM    890  CG1 ILE A  58       1.502   3.388  -4.360  1.00 11.51
ATOM    891 1HG1 ILE A  58       1.968   2.450  -4.097  1.00 61.05
ATOM    892 2HG1 ILE A  58       1.697   4.103  -3.574  1.00 65.13
ATOM    893  CD1 ILE A  58      -0.001   3.144  -4.408  1.00 71.52
ATOM    894 1HD1 ILE A  58      -0.324   2.742  -3.460  1.00 14.24
ATOM    895 2HD1 ILE A  58      -0.247   2.458  -5.206  1.00 50.32
ATOM    896 3HD1 ILE A  58      -0.501   4.089  -4.571  1.00 52.12
ATOM    897  C   ILE A  58       3.768   2.110  -6.366  1.00 34.14
ATOM    898  O   ILE A  58       3.785   1.261  -5.460  1.00 21.20
ATOM    899  N   VAL A  59       4.829   2.430  -7.088  1.00 42.53
ATOM    900  H   VAL A  59       4.780   3.140  -7.771  1.00 11.22
ATOM    901  CA  VAL A  59       6.097   1.761  -6.918  1.00 42.44
ATOM    902  HA  VAL A  59       5.976   0.974  -6.191  1.00 13.45
ATOM    903  CB  VAL A  59       6.578   1.120  -8.256  1.00 60.33
ATOM    904  HB  VAL A  59       6.864   1.930  -8.913  1.00  2.41
ATOM    905  CG1 VAL A  59       7.816   0.254  -8.047  1.00  2.20
ATOM    906 1HG1 VAL A  59       8.125  -0.170  -8.991  1.00  4.33
ATOM    907 2HG1 VAL A  59       7.585  -0.540  -7.353  1.00 10.12
ATOM    908 3HG1 VAL A  59       8.615   0.861  -7.645  1.00 43.12
ATOM    909  CG2 VAL A  59       5.465   0.324  -8.934  1.00 13.34
ATOM    910 1HG2 VAL A  59       5.841  -0.126  -9.840  1.00 20.42
ATOM    911 2HG2 VAL A  59       4.651   0.990  -9.179  1.00 34.51
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ATOM    912 3HG2 VAL A  59       5.108  -0.444  -8.265  1.00 61.23
ATOM    913  C   VAL A  59       7.175   2.741  -6.442  1.00 31.03
ATOM    914  O   VAL A  59       7.407   3.792  -7.060  1.00 73.52
ATOM    915  N   SER A  60       7.783   2.415  -5.348  1.00 44.55
ATOM    916  H   SER A  60       7.456   1.639  -4.839  1.00 15.33
ATOM    917  CA  SER A  60       8.917   3.127  -4.836  1.00 22.21
ATOM    918  HA  SER A  60       9.137   3.939  -5.515  1.00 54.23
ATOM    919  CB  SER A  60       8.626   3.685  -3.430  1.00  2.33
ATOM    920 1HB  SER A  60       7.833   4.418  -3.463  1.00 31.14
ATOM    921 2HB  SER A  60       8.329   2.900  -2.755  1.00  3.13
ATOM    922  OG  SER A  60       9.768   4.314  -2.899  1.00  3.43
ATOM    923  HG  SER A  60       9.681   5.271  -3.035  1.00 42.33
ATOM    924  C   SER A  60      10.095   2.152  -4.790  1.00 63.45
ATOM    925  O   SER A  60       9.886   0.938  -4.857  1.00  2.43
ATOM    926  N   ALA A  61      11.295   2.668  -4.678  1.00 21.35
ATOM    927  H   ALA A  61      11.410   3.636  -4.573  1.00 55.54
ATOM    928  CA  ALA A  61      12.495   1.872  -4.615  1.00 61.44
ATOM    929  HA  ALA A  61      12.264   0.929  -4.143  1.00 73.11
ATOM    930  CB  ALA A  61      13.047   1.619  -6.016  1.00 23.54
ATOM    931 1HB  ALA A  61      12.316   1.077  -6.599  1.00 63.13
ATOM    932 2HB  ALA A  61      13.955   1.039  -5.946  1.00 72.43
ATOM    933 3HB  ALA A  61      13.261   2.563  -6.493  1.00 53.23
ATOM    934  C   ALA A  61      13.504   2.624  -3.783  1.00 70.30
ATOM    935  O   ALA A  61      13.632   3.842  -3.926  1.00 64.13
ATOM    936  N   SER A  62      14.178   1.934  -2.911  1.00 53.12
ATOM    937  H   SER A  62      14.040   0.966  -2.821  1.00 42.22
ATOM    938  CA  SER A  62      15.145   2.555  -2.057  1.00  1.03
ATOM    939  HA  SER A  62      14.937   3.615  -2.039  1.00  0.21
ATOM    940  CB  SER A  62      14.990   2.004  -0.649  1.00 22.21
ATOM    941 1HB  SER A  62      15.193   0.943  -0.658  1.00  2.23
ATOM    942 2HB  SER A  62      15.684   2.502   0.012  1.00 34.14
ATOM    943  OG  SER A  62      13.662   2.221  -0.181  1.00 25.21
ATOM    944  HG  SER A  62      13.332   3.056  -0.536  1.00 34.24
ATOM    945  C   SER A  62      16.564   2.339  -2.598  1.00 33.31
ATOM    946  O   SER A  62      16.852   1.318  -3.216  1.00 21.32
ATOM    947  N   ASP A  63      17.431   3.298  -2.357  1.00 34.15
ATOM    948  H   ASP A  63      17.192   4.087  -1.818  1.00 41.45
ATOM    949  CA  ASP A  63      18.812   3.278  -2.847  1.00 31.14
ATOM    950  HA  ASP A  63      18.836   2.844  -3.836  1.00  4.24
ATOM    951  CB  ASP A  63      19.334   4.725  -2.924  1.00 34.14
ATOM    952 1HB  ASP A  63      20.326   4.724  -3.349  1.00  5.14
ATOM    953 2HB  ASP A  63      18.676   5.307  -3.553  1.00 23.42
ATOM    954  CG  ASP A  63      19.397   5.385  -1.549  1.00 12.45
ATOM    955  OD1 ASP A  63      18.389   5.268  -0.784  1.00 62.03
ATOM    956  OD2 ASP A  63      20.413   5.991  -1.219  1.00 33.23
ATOM    957  C   ASP A  63      19.697   2.481  -1.895  1.00  0.43
ATOM    958  O   ASP A  63      20.648   1.824  -2.310  1.00 34.51
ATOM    959  N   SER A  64      19.346   2.512  -0.622  1.00 55.34
ATOM    960  H   SER A  64      18.610   3.118  -0.382  1.00 41.11
ATOM    961  CA  SER A  64      20.076   1.796   0.390  1.00 63.40
ATOM    962  HA  SER A  64      21.131   1.927   0.201  1.00 52.05
ATOM    963  CB  SER A  64      19.749   2.372   1.790  1.00 53.44
ATOM    964 1HB  SER A  64      20.031   3.416   1.819  1.00 22.45
ATOM    965 2HB  SER A  64      18.687   2.287   1.969  1.00 20.50
ATOM    966  OG  SER A  64      20.451   1.681   2.838  1.00 25.53
ATOM    967  HG  SER A  64      21.272   1.376   2.431  1.00 11.21
ATOM    968  C   SER A  64      19.742   0.313   0.329  1.00 54.32
ATOM    969  O   SER A  64      20.520  -0.534   0.774  1.00 44.11
ATOM    970  N   ASP A  65      18.595   0.005  -0.227  1.00  2.41
ATOM    971  H   ASP A  65      18.057   0.712  -0.638  1.00 13.25
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ATOM    972  CA  ASP A  65      18.137  -1.352  -0.294  1.00 54.24
ATOM    973  HA  ASP A  65      18.936  -2.003   0.025  1.00  2.00
ATOM    974  CB  ASP A  65      16.918  -1.566   0.614  1.00 33.43
ATOM    975 1HB  ASP A  65      16.099  -0.965   0.247  1.00 71.12
ATOM    976 2HB  ASP A  65      16.634  -2.608   0.577  1.00 23.13
ATOM    977  CG  ASP A  65      17.175  -1.185   2.048  1.00 35.23
ATOM    978  OD1 ASP A  65      17.647  -2.029   2.839  1.00 55.21
ATOM    979  OD2 ASP A  65      16.953   0.001   2.413  1.00 73.33
ATOM    980  C   ASP A  65      17.773  -1.662  -1.713  1.00 51.11
ATOM    981  O   ASP A  65      16.659  -1.412  -2.135  1.00 54.41
ATOM    982  N   SER A  66      18.705  -2.232  -2.438  1.00 23.22
ATOM    983  H   SER A  66      19.558  -2.451  -2.009  1.00 60.33
ATOM    984  CA  SER A  66      18.542  -2.503  -3.863  1.00 23.20
ATOM    985  HA  SER A  66      18.304  -1.561  -4.338  1.00 34.32
ATOM    986  CB  SER A  66      19.872  -3.011  -4.454  1.00 44.25
ATOM    987 1HB  SER A  66      20.640  -2.268  -4.292  1.00 65.42
ATOM    988 2HB  SER A  66      20.153  -3.925  -3.954  1.00  4.21
ATOM    989  OG  SER A  66      19.776  -3.261  -5.846  1.00 44.13
ATOM    990  HG  SER A  66      18.862  -3.136  -6.125  1.00 24.21
ATOM    991  C   SER A  66      17.394  -3.487  -4.157  1.00 15.23
ATOM    992  O   SER A  66      16.861  -3.512  -5.257  1.00  1.13
ATOM    993  N   THR A  67      17.014  -4.279  -3.186  1.00  2.45
ATOM    994  H   THR A  67      17.435  -4.194  -2.307  1.00  1.40
ATOM    995  CA  THR A  67      15.971  -5.241  -3.401  1.00 71.05
ATOM    996  HA  THR A  67      15.828  -5.308  -4.470  1.00 35.12
ATOM    997  CB  THR A  67      16.388  -6.656  -2.866  1.00 70.33
ATOM    998  HB  THR A  67      17.292  -6.950  -3.382  1.00 12.04
ATOM    999  OG1 THR A  67      15.381  -7.638  -3.145  1.00 20.43
ATOM   1000  HG1 THR A  67      15.801  -8.488  -3.304  1.00 44.03
ATOM   1001  CG2 THR A  67      16.669  -6.629  -1.370  1.00 60.31
ATOM   1002 1HG2 THR A  67      16.953  -7.616  -1.036  1.00 74.22
ATOM   1003 2HG2 THR A  67      15.779  -6.313  -0.844  1.00 65.21
ATOM   1004 3HG2 THR A  67      17.471  -5.934  -1.167  1.00 72.14
ATOM   1005  C   THR A  67      14.642  -4.760  -2.779  1.00 40.52
ATOM   1006  O   THR A  67      13.557  -5.336  -3.039  1.00 72.24
ATOM   1007  N   ASP A  68      14.686  -3.665  -2.020  1.00 64.35
ATOM   1008  H   ASP A  68      15.482  -3.091  -1.976  1.00 71.34
ATOM   1009  CA  ASP A  68      13.480  -3.239  -1.349  1.00 41.14
ATOM   1010  HA  ASP A  68      12.796  -4.071  -1.391  1.00 22.32
ATOM   1011  CB  ASP A  68      13.672  -2.830   0.105  1.00 21.23
ATOM   1012 1HB  ASP A  68      14.446  -3.431   0.556  1.00 60.44
ATOM   1013 2HB  ASP A  68      13.963  -1.790   0.142  1.00 15.34
ATOM   1014  CG  ASP A  68      12.371  -2.991   0.895  1.00  4.25
ATOM   1015  OD1 ASP A  68      11.437  -2.194   0.708  1.00 51.54
ATOM   1016  OD2 ASP A  68      12.270  -3.969   1.687  1.00 31.50
ATOM   1017  C   ASP A  68      12.806  -2.166  -2.121  1.00 13.04
ATOM   1018  O   ASP A  68      13.424  -1.207  -2.593  1.00 64.11
ATOM   1019  N   SER A  69      11.566  -2.373  -2.294  1.00 12.50
ATOM   1020  H   SER A  69      11.126  -3.120  -1.842  1.00 60.43
ATOM   1021  CA  SER A  69      10.736  -1.538  -3.037  1.00 41.44
ATOM   1022  HA  SER A  69      11.133  -0.534  -3.017  1.00 21.11
ATOM   1023  CB  SER A  69      10.725  -2.036  -4.491  1.00 14.44
ATOM   1024 1HB  SER A  69       9.735  -1.908  -4.904  1.00 61.34
ATOM   1025 2HB  SER A  69      11.439  -1.473  -5.073  1.00 33.31
ATOM   1026  OG  SER A  69      11.077  -3.431  -4.544  1.00 24.35
ATOM   1027  HG  SER A  69      12.041  -3.387  -4.519  1.00  1.22
ATOM   1028  C   SER A  69       9.368  -1.561  -2.417  1.00 54.41
ATOM   1029  O   SER A  69       8.859  -2.637  -2.060  1.00 62.12
ATOM   1030  N   LEU A  70       8.782  -0.415  -2.256  1.00 63.41
ATOM   1031  H   LEU A  70       9.256   0.405  -2.511  1.00 22.33
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ATOM   1032  CA  LEU A  70       7.458  -0.342  -1.748  1.00 33.11
ATOM   1033  HA  LEU A  70       7.268  -1.228  -1.161  1.00 20.14
ATOM   1034  CB  LEU A  70       7.275   0.944  -0.865  1.00 71.54
ATOM   1035 1HB  LEU A  70       8.000   0.898  -0.067  1.00 25.34
ATOM   1036 2HB  LEU A  70       7.527   1.794  -1.477  1.00 22.32
ATOM   1037  CG  LEU A  70       5.885   1.241  -0.199  1.00 23.52
ATOM   1038  HG  LEU A  70       6.015   2.079   0.469  1.00 23.10
ATOM   1039  CD1 LEU A  70       4.819   1.657  -1.208  1.00 63.32
ATOM   1040 1HD1 LEU A  70       4.686   0.872  -1.939  1.00 31.54
ATOM   1041 2HD1 LEU A  70       5.126   2.561  -1.711  1.00 44.04
ATOM   1042 3HD1 LEU A  70       3.882   1.831  -0.701  1.00 15.34
ATOM   1043  CD2 LEU A  70       5.401   0.059   0.628  1.00 10.50
ATOM   1044 1HD2 LEU A  70       4.440   0.296   1.061  1.00 21.23
ATOM   1045 2HD2 LEU A  70       6.109  -0.140   1.418  1.00 40.15
ATOM   1046 3HD2 LEU A  70       5.306  -0.810  -0.004  1.00 61.34
ATOM   1047  C   LEU A  70       6.578  -0.343  -2.955  1.00 52.11
ATOM   1048  O   LEU A  70       6.603   0.579  -3.756  1.00  3.42
ATOM   1049  N   GLN A  71       5.868  -1.398  -3.107  1.00 23.34
ATOM   1050  H   GLN A  71       5.909  -2.109  -2.435  1.00 53.41
ATOM   1051  CA  GLN A  71       5.009  -1.574  -4.216  1.00 43.52
ATOM   1052  HA  GLN A  71       4.955  -0.667  -4.798  1.00 42.12
ATOM   1053  CB  GLN A  71       5.539  -2.715  -5.080  1.00 44.14
ATOM   1054 1HB  GLN A  71       6.597  -2.570  -5.240  1.00 11.54
ATOM   1055 2HB  GLN A  71       5.395  -3.639  -4.541  1.00 53.23
ATOM   1056  CG  GLN A  71       4.878  -2.855  -6.435  1.00 32.22
ATOM   1057 1HG  GLN A  71       3.806  -2.895  -6.301  1.00  4.34
ATOM   1058 2HG  GLN A  71       5.136  -1.997  -7.036  1.00 21.44
ATOM   1059  CD  GLN A  71       5.330  -4.106  -7.151  1.00 44.15
ATOM   1060  OE1 GLN A  71       6.329  -4.112  -7.854  1.00  2.33
ATOM   1061  NE2 GLN A  71       4.587  -5.173  -6.993  1.00  3.11
ATOM   1062 2HE2 GLN A  71       3.793  -5.105  -6.426  1.00 20.31
ATOM   1063 1HE2 GLN A  71       4.863  -5.977  -7.479  1.00 11.34
ATOM   1064  C   GLN A  71       3.677  -1.945  -3.658  1.00 55.03
ATOM   1065  O   GLN A  71       3.557  -2.963  -2.965  1.00  5.34
ATOM   1066  N   VAL A  72       2.706  -1.121  -3.885  1.00 71.53
ATOM   1067  H   VAL A  72       2.880  -0.312  -4.416  1.00 14.33
ATOM   1068  CA  VAL A  72       1.385  -1.397  -3.411  1.00 33.24
ATOM   1069  HA  VAL A  72       1.412  -2.301  -2.820  1.00 52.20
ATOM   1070  CB  VAL A  72       0.824  -0.234  -2.538  1.00 52.20
ATOM   1071  HB  VAL A  72       0.805   0.656  -3.149  1.00 12.43
ATOM   1072  CG1 VAL A  72      -0.593  -0.533  -2.056  1.00 21.42
ATOM   1073 1HG1 VAL A  72      -0.589  -1.435  -1.463  1.00 22.45
ATOM   1074 2HG1 VAL A  72      -1.242  -0.669  -2.908  1.00 41.23
ATOM   1075 3HG1 VAL A  72      -0.953   0.290  -1.457  1.00 15.20
ATOM   1076  CG2 VAL A  72       1.720   0.031  -1.350  1.00  5.13
ATOM   1077 1HG2 VAL A  72       1.319   0.848  -0.769  1.00 10.21
ATOM   1078 2HG2 VAL A  72       2.707   0.286  -1.704  1.00 51.41
ATOM   1079 3HG2 VAL A  72       1.783  -0.852  -0.733  1.00 34.50
ATOM   1080  C   VAL A  72       0.490  -1.600  -4.599  1.00  1.11
ATOM   1081  O   VAL A  72       0.388  -0.723  -5.454  1.00 45.11
ATOM   1082  N   ALA A  73      -0.133  -2.739  -4.649  1.00 41.40
ATOM   1083  H   ALA A  73       0.043  -3.410  -3.952  1.00 30.54
ATOM   1084  CA  ALA A  73      -1.066  -3.058  -5.688  1.00 31.31
ATOM   1085  HA  ALA A  73      -1.063  -2.258  -6.412  1.00  5.02
ATOM   1086  CB  ALA A  73      -0.685  -4.362  -6.375  1.00  2.12
ATOM   1087 1HB  ALA A  73      -0.692  -5.163  -5.651  1.00 34.21
ATOM   1088 2HB  ALA A  73       0.303  -4.271  -6.800  1.00 13.52
ATOM   1089 3HB  ALA A  73      -1.396  -4.578  -7.158  1.00 10.04
ATOM   1090  C   ALA A  73      -2.434  -3.153  -5.076  1.00 62.00
ATOM   1091  O   ALA A  73      -2.623  -3.841  -4.065  1.00 23.45
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ATOM   1092  N   MET A  74      -3.354  -2.433  -5.631  1.00  4.44
ATOM   1093  H   MET A  74      -3.124  -1.904  -6.429  1.00  3.30
ATOM   1094  CA  MET A  74      -4.707  -2.386  -5.133  1.00  5.41
ATOM   1095  HA  MET A  74      -4.798  -2.972  -4.232  1.00 54.43
ATOM   1096  CB  MET A  74      -5.112  -0.951  -4.843  1.00 13.45
ATOM   1097 1HB  MET A  74      -5.237  -0.425  -5.776  1.00 71.15
ATOM   1098 2HB  MET A  74      -6.059  -0.969  -4.322  1.00 25.55
ATOM   1099  CG  MET A  74      -4.138  -0.184  -4.008  1.00 51.24
ATOM   1100 1HG  MET A  74      -4.072  -0.647  -3.036  1.00  3.31
ATOM   1101 2HG  MET A  74      -3.172  -0.209  -4.489  1.00 51.23
ATOM   1102  SD  MET A  74      -4.631   1.519  -3.797  1.00 55.32
ATOM   1103  CE  MET A  74      -3.196   2.118  -2.961  1.00 32.32
ATOM   1104 1HE  MET A  74      -3.306   3.167  -2.739  1.00  3.22
ATOM   1105 2HE  MET A  74      -2.337   1.973  -3.599  1.00 54.23
ATOM   1106 3HE  MET A  74      -3.059   1.566  -2.043  1.00 23.10
ATOM   1107  C   MET A  74      -5.615  -2.885  -6.200  1.00 55.01
ATOM   1108  O   MET A  74      -5.491  -2.469  -7.331  1.00  1.30
ATOM   1109  N   LYS A  75      -6.518  -3.743  -5.853  1.00 51.41
ATOM   1110  H   LYS A  75      -6.530  -4.081  -4.934  1.00 30.24
ATOM   1111  CA  LYS A  75      -7.476  -4.237  -6.785  1.00 25.42
ATOM   1112  HA  LYS A  75      -7.262  -3.799  -7.748  1.00 14.11
ATOM   1113  CB  LYS A  75      -7.360  -5.756  -6.890  1.00 53.43
ATOM   1114 1HB  LYS A  75      -6.378  -5.993  -7.271  1.00 41.12
ATOM   1115 2HB  LYS A  75      -7.463  -6.184  -5.907  1.00 14.33
ATOM   1116  CG  LYS A  75      -8.388  -6.390  -7.798  1.00 14.24
ATOM   1117 1HG  LYS A  75      -9.338  -6.324  -7.288  1.00 70.22
ATOM   1118 2HG  LYS A  75      -8.425  -5.862  -8.738  1.00 30.31
ATOM   1119  CD  LYS A  75      -8.114  -7.861  -8.043  1.00  3.31
ATOM   1120 1HD  LYS A  75      -8.097  -8.376  -7.094  1.00 20.34
ATOM   1121 2HD  LYS A  75      -8.921  -8.244  -8.646  1.00  2.24
ATOM   1122  CE  LYS A  75      -6.782  -8.101  -8.762  1.00  4.11
ATOM   1123 1HE  LYS A  75      -5.975  -7.805  -8.112  1.00  4.15
ATOM   1124 2HE  LYS A  75      -6.695  -9.156  -8.974  1.00 33.44
ATOM   1125  NZ  LYS A  75      -6.675  -7.342 -10.037  1.00 44.13
ATOM   1126 1HZ  LYS A  75      -5.846  -7.609 -10.599  1.00 62.21
ATOM   1127 2HZ  LYS A  75      -6.461  -6.338  -9.803  1.00 70.41
ATOM   1128 3HZ  LYS A  75      -7.521  -7.330 -10.635  1.00 30.14
ATOM   1129  C   LYS A  75      -8.860  -3.813  -6.344  1.00 14.42
ATOM   1130  O   LYS A  75      -9.223  -3.978  -5.172  1.00 72.53
ATOM   1131  N   LYS A  76      -9.613  -3.257  -7.271  1.00 21.41
ATOM   1132  H   LYS A  76      -9.286  -3.186  -8.196  1.00 74.42
ATOM   1133  CA  LYS A  76     -10.909  -2.725  -7.009  1.00 60.53
ATOM   1134  HA  LYS A  76     -10.915  -2.168  -6.085  1.00 44.12
ATOM   1135  CB  LYS A  76     -11.266  -1.778  -8.138  1.00 74.41
ATOM   1136 1HB  LYS A  76     -10.456  -1.088  -8.323  1.00 34.12
ATOM   1137 2HB  LYS A  76     -11.396  -2.373  -9.031  1.00 42.41
ATOM   1138  CG  LYS A  76     -12.543  -1.002  -7.919  1.00 42.01
ATOM   1139 1HG  LYS A  76     -13.229  -1.608  -7.346  1.00 23.43
ATOM   1140 2HG  LYS A  76     -12.312  -0.103  -7.369  1.00 55.25
ATOM   1141  CD  LYS A  76     -13.193  -0.624  -9.234  1.00 11.24
ATOM   1142 1HD  LYS A  76     -13.858   0.211  -9.072  1.00  3.25
ATOM   1143 2HD  LYS A  76     -12.424  -0.342  -9.937  1.00 14.14
ATOM   1144  CE  LYS A  76     -13.996  -1.794  -9.819  1.00  2.44
ATOM   1145 1HE  LYS A  76     -14.620  -2.112  -8.998  1.00 14.44
ATOM   1146 2HE  LYS A  76     -14.591  -1.446 -10.648  1.00 22.44
ATOM   1147  NZ  LYS A  76     -13.190  -2.993 -10.209  1.00 42.45
ATOM   1148 1HZ  LYS A  76     -12.390  -2.773 -10.844  1.00 41.00
ATOM   1149 2HZ  LYS A  76     -13.783  -3.678 -10.714  1.00 51.04
ATOM   1150 3HZ  LYS A  76     -12.808  -3.485  -9.371  1.00 53.23
ATOM   1151  C   LYS A  76     -11.955  -3.834  -7.004  1.00 72.14
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ATOM   1152  O   LYS A  76     -12.231  -4.439  -8.061  1.00 61.25
ATOM   1153  N   LEU A  77     -12.563  -4.064  -5.881  1.00 44.23
ATOM   1154  H   LEU A  77     -12.307  -3.561  -5.071  1.00 62.33
ATOM   1155  CA  LEU A  77     -13.639  -5.027  -5.782  1.00 33.52
ATOM   1156  HA  LEU A  77     -13.439  -5.766  -6.543  1.00 25.41
ATOM   1157  CB  LEU A  77     -13.702  -5.720  -4.395  1.00 34.00
ATOM   1158 1HB  LEU A  77     -13.544  -4.953  -3.651  1.00 75.51
ATOM   1159 2HB  LEU A  77     -14.697  -6.120  -4.264  1.00  1.22
ATOM   1160  CG  LEU A  77     -12.683  -6.848  -4.115  1.00  4.31
ATOM   1161  HG  LEU A  77     -12.756  -7.578  -4.908  1.00 53.23
ATOM   1162  CD1 LEU A  77     -11.256  -6.344  -4.099  1.00 42.11
ATOM   1163 1HD1 LEU A  77     -11.026  -5.886  -5.048  1.00 45.23
ATOM   1164 2HD1 LEU A  77     -10.592  -7.178  -3.934  1.00  2.14
ATOM   1165 3HD1 LEU A  77     -11.133  -5.619  -3.308  1.00 11.32
ATOM   1166  CD2 LEU A  77     -13.013  -7.554  -2.810  1.00 10.20
ATOM   1167 1HD2 LEU A  77     -12.969  -6.847  -1.993  1.00 41.43
ATOM   1168 2HD2 LEU A  77     -12.296  -8.343  -2.639  1.00 33.32
ATOM   1169 3HD2 LEU A  77     -14.005  -7.976  -2.869  1.00  2.12
ATOM   1170  C   LEU A  77     -14.964  -4.340  -6.106  1.00 33.23
ATOM   1171  O   LEU A  77     -15.128  -3.149  -5.820  1.00 71.33
ATOM   1172  N   PRO A  78     -15.931  -5.064  -6.716  1.00 52.31
ATOM   1173  CD  PRO A  78     -15.855  -6.499  -7.044  1.00 31.22
ATOM   1174  CA  PRO A  78     -17.236  -4.487  -7.117  1.00 12.01
ATOM   1175  HA  PRO A  78     -17.110  -3.627  -7.759  1.00 74.42
ATOM   1176  CB  PRO A  78     -17.924  -5.627  -7.891  1.00 53.11
ATOM   1177 1HB  PRO A  78     -18.729  -6.030  -7.293  1.00 21.12
ATOM   1178 2HB  PRO A  78     -18.304  -5.265  -8.835  1.00 42.21
ATOM   1179  CG  PRO A  78     -16.866  -6.652  -8.140  1.00 42.13
ATOM   1180 1HG  PRO A  78     -17.305  -7.640  -8.121  1.00 60.11
ATOM   1181 2HG  PRO A  78     -16.393  -6.470  -9.093  1.00 51.13
ATOM   1182 1HD  PRO A  78     -16.115  -7.093  -6.177  1.00 62.43
ATOM   1183 2HD  PRO A  78     -14.875  -6.762  -7.409  1.00 53.40
ATOM   1184  C   PRO A  78     -18.084  -4.103  -5.907  1.00 51.44
ATOM   1185  O   PRO A  78     -19.013  -3.320  -6.004  1.00 42.51
ATOM   1186  N   ASN A  79     -17.712  -4.635  -4.769  1.00 64.41
ATOM   1187  H   ASN A  79     -16.928  -5.224  -4.780  1.00 34.35
ATOM   1188  CA  ASN A  79     -18.418  -4.411  -3.514  1.00  3.02
ATOM   1189  HA  ASN A  79     -19.474  -4.332  -3.717  1.00 34.02
ATOM   1190  CB  ASN A  79     -18.186  -5.600  -2.565  1.00 54.11
ATOM   1191 1HB  ASN A  79     -17.132  -5.668  -2.340  1.00 21.32
ATOM   1192 2HB  ASN A  79     -18.731  -5.428  -1.650  1.00 23.24
ATOM   1193  CG  ASN A  79     -18.628  -6.927  -3.149  1.00 62.44
ATOM   1194  OD1 ASN A  79     -17.860  -7.594  -3.834  1.00 75.44
ATOM   1195  ND2 ASN A  79     -19.844  -7.330  -2.873  1.00 21.00
ATOM   1196 2HD2 ASN A  79     -20.414  -6.766  -2.310  1.00  4.43
ATOM   1197 1HD2 ASN A  79     -20.124  -8.191  -3.247  1.00 44.02
ATOM   1198  C   ASN A  79     -17.923  -3.141  -2.838  1.00 54.41
ATOM   1199  O   ASN A  79     -18.279  -2.873  -1.702  1.00 54.04
ATOM   1200  N   ASN A  80     -17.113  -2.355  -3.569  1.00 63.11
ATOM   1201  H   ASN A  80     -16.935  -2.617  -4.496  1.00 20.25
ATOM   1202  CA  ASN A  80     -16.482  -1.127  -3.044  1.00 14.13
ATOM   1203  HA  ASN A  80     -15.918  -0.719  -3.871  1.00 72.01
ATOM   1204  CB  ASN A  80     -17.495  -0.064  -2.562  1.00 42.30
ATOM   1205 1HB  ASN A  80     -18.290  -0.556  -2.021  1.00 73.01
ATOM   1206 2HB  ASN A  80     -16.993   0.625  -1.899  1.00 12.41
ATOM   1207  CG  ASN A  80     -18.110   0.718  -3.699  1.00 10.13
ATOM   1208  OD1 ASN A  80     -17.574   1.745  -4.114  1.00 42.23
ATOM   1209  ND2 ASN A  80     -19.228   0.259  -4.206  1.00 45.44
ATOM   1210 2HD2 ASN A  80     -19.606  -0.561  -3.828  1.00 22.54
ATOM   1211 1HD2 ASN A  80     -19.631   0.760  -4.943  1.00 41.41
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ATOM   1212  C   ASN A  80     -15.487  -1.453  -1.974  1.00  5.23
ATOM   1213  O   ASN A  80     -15.314  -0.720  -1.021  1.00 75.20
ATOM   1214  N   ALA A  81     -14.806  -2.542  -2.181  1.00 43.44
ATOM   1215  H   ALA A  81     -14.990  -3.061  -2.989  1.00 22.24
ATOM   1216  CA  ALA A  81     -13.764  -2.990  -1.309  1.00 62.25
ATOM   1217  HA  ALA A  81     -13.670  -2.288  -0.493  1.00  3.01
ATOM   1218  CB  ALA A  81     -14.087  -4.371  -0.763  1.00 34.52
ATOM   1219 1HB  ALA A  81     -14.991  -4.319  -0.175  1.00 12.42
ATOM   1220 2HB  ALA A  81     -13.270  -4.709  -0.142  1.00  1.13
ATOM   1221 3HB  ALA A  81     -14.233  -5.057  -1.587  1.00 31.21
ATOM   1222  C   ALA A  81     -12.484  -3.010  -2.114  1.00 40.53
ATOM   1223  O   ALA A  81     -12.534  -2.986  -3.351  1.00  0.21
ATOM   1224  N   THR A  82     -11.365  -3.028  -1.466  1.00 12.13
ATOM   1225  H   THR A  82     -11.357  -3.065  -0.482  1.00 64.11
ATOM   1226  CA  THR A  82     -10.117  -2.996  -2.163  1.00  3.41
ATOM   1227  HA  THR A  82     -10.309  -3.187  -3.209  1.00  5.43
ATOM   1228  CB  THR A  82      -9.485  -1.594  -2.026  1.00 51.04
ATOM   1229  HB  THR A  82      -9.099  -1.471  -1.026  1.00 60.54
ATOM   1230  OG1 THR A  82     -10.484  -0.600  -2.297  1.00 34.43
ATOM   1231  HG1 THR A  82     -11.160  -0.611  -1.606  1.00 73.22
ATOM   1232  CG2 THR A  82      -8.362  -1.416  -3.029  1.00  2.21
ATOM   1233 1HG2 THR A  82      -7.587  -2.139  -2.829  1.00 72.33
ATOM   1234 2HG2 THR A  82      -7.959  -0.417  -2.955  1.00  5.01
ATOM   1235 3HG2 THR A  82      -8.753  -1.580  -4.022  1.00 42.23
ATOM   1236  C   THR A  82      -9.162  -4.073  -1.612  1.00 40.31
ATOM   1237  O   THR A  82      -9.085  -4.294  -0.408  1.00 20.35
ATOM   1238  N   ARG A  83      -8.470  -4.743  -2.493  1.00 44.10
ATOM   1239  H   ARG A  83      -8.599  -4.522  -3.443  1.00 14.15
ATOM   1240  CA  ARG A  83      -7.519  -5.781  -2.117  1.00 53.02
ATOM   1241  HA  ARG A  83      -7.695  -6.087  -1.097  1.00 63.21
ATOM   1242  CB  ARG A  83      -7.689  -6.979  -3.067  1.00 33.42
ATOM   1243 1HB  ARG A  83      -8.718  -7.301  -3.025  1.00 75.22
ATOM   1244 2HB  ARG A  83      -7.478  -6.634  -4.066  1.00 74.40
ATOM   1245  CG  ARG A  83      -6.816  -8.205  -2.792  1.00 31.01
ATOM   1246 1HG  ARG A  83      -6.916  -8.898  -3.613  1.00 61.40
ATOM   1247 2HG  ARG A  83      -5.787  -7.886  -2.716  1.00 53.31
ATOM   1248  CD  ARG A  83      -7.209  -8.915  -1.507  1.00 74.34
ATOM   1249 1HD  ARG A  83      -6.992  -8.269  -0.670  1.00 64.10
ATOM   1250 2HD  ARG A  83      -8.272  -9.109  -1.554  1.00 14.24
ATOM   1251  NE  ARG A  83      -6.488 -10.201  -1.351  1.00 40.03
ATOM   1252  HE  ARG A  83      -5.980 -10.458  -2.153  1.00 14.15
ATOM   1253  CZ  ARG A  83      -6.507 -10.990  -0.252  1.00 45.05
ATOM   1254  NH1 ARG A  83      -7.170 -10.620   0.835  1.00 13.34
ATOM   1255 1HH1 ARG A  83      -7.686  -9.750   0.874  1.00 60.24
ATOM   1256 2HH1 ARG A  83      -7.215 -11.140   1.691  1.00 24.23
ATOM   1257  NH2 ARG A  83      -5.849 -12.157  -0.258  1.00 53.41
ATOM   1258 1HH2 ARG A  83      -5.338 -12.475  -1.059  1.00 42.33
ATOM   1259 2HH2 ARG A  83      -5.835 -12.760   0.543  1.00 54.15
ATOM   1260  C   ARG A  83      -6.125  -5.196  -2.270  1.00 73.23
ATOM   1261  O   ARG A  83      -5.804  -4.673  -3.322  1.00 23.21
ATOM   1262  N   ILE A  84      -5.324  -5.270  -1.235  1.00 62.34
ATOM   1263  H   ILE A  84      -5.599  -5.746  -0.419  1.00 21.22
ATOM   1264  CA  ILE A  84      -3.994  -4.695  -1.249  1.00 45.53
ATOM   1265  HA  ILE A  84      -3.883  -4.198  -2.203  1.00 45.51
ATOM   1266  CB  ILE A  84      -3.794  -3.610  -0.108  1.00 15.54
ATOM   1267  HB  ILE A  84      -4.465  -3.885   0.693  1.00 11.11
ATOM   1268  CG2 ILE A  84      -2.387  -3.595   0.476  1.00 74.14
ATOM   1269 1HG2 ILE A  84      -2.184  -4.566   0.903  1.00 64.51
ATOM   1270 2HG2 ILE A  84      -2.318  -2.837   1.240  1.00  2.32
ATOM   1271 3HG2 ILE A  84      -1.676  -3.392  -0.310  1.00 51.41
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ATOM   1272  CG1 ILE A  84      -4.182  -2.208  -0.583  1.00 14.05
ATOM   1273 1HG1 ILE A  84      -3.907  -1.484   0.169  1.00 33.13
ATOM   1274 2HG1 ILE A  84      -3.619  -2.018  -1.485  1.00 71.40
ATOM   1275  CD1 ILE A  84      -5.638  -2.025  -0.889  1.00 72.43
ATOM   1276 1HD1 ILE A  84      -6.227  -2.194   0.001  1.00 70.34
ATOM   1277 2HD1 ILE A  84      -5.919  -2.739  -1.651  1.00 11.22
ATOM   1278 3HD1 ILE A  84      -5.804  -1.024  -1.258  1.00 51.21
ATOM   1279  C   ILE A  84      -2.932  -5.768  -1.163  1.00 24.24
ATOM   1280  O   ILE A  84      -3.049  -6.721  -0.384  1.00 35.31
ATOM   1281  N   SER A  85      -1.953  -5.645  -2.013  1.00  1.23
ATOM   1282  H   SER A  85      -2.011  -4.929  -2.688  1.00 33.43
ATOM   1283  CA  SER A  85      -0.801  -6.500  -2.014  1.00 73.23
ATOM   1284  HA  SER A  85      -0.847  -7.115  -1.126  1.00 44.14
ATOM   1285  CB  SER A  85      -0.834  -7.391  -3.250  1.00 41.21
ATOM   1286 1HB  SER A  85      -0.749  -6.783  -4.137  1.00 43.22
ATOM   1287 2HB  SER A  85      -0.021  -8.100  -3.209  1.00 73.24
ATOM   1288  OG  SER A  85      -2.064  -8.104  -3.285  1.00 40.25
ATOM   1289  HG  SER A  85      -2.652  -7.620  -2.697  1.00 53.42
ATOM   1290  C   SER A  85       0.472  -5.640  -1.957  1.00 20.21
ATOM   1291  O   SER A  85       0.653  -4.726  -2.775  1.00 13.24
ATOM   1292  N   ILE A  86       1.299  -5.905  -0.974  1.00 11.53
ATOM   1293  H   ILE A  86       1.082  -6.639  -0.354  1.00 45.43
ATOM   1294  CA  ILE A  86       2.541  -5.182  -0.729  1.00 72.33
ATOM   1295  HA  ILE A  86       2.561  -4.275  -1.315  1.00 33.14
ATOM   1296  CB  ILE A  86       2.703  -4.836   0.779  1.00  1.22
ATOM   1297  HB  ILE A  86       2.904  -5.761   1.299  1.00 73.12
ATOM   1298  CG2 ILE A  86       3.918  -3.929   0.972  1.00 12.14
ATOM   1299 1HG2 ILE A  86       4.804  -4.435   0.620  1.00 62.41
ATOM   1300 2HG2 ILE A  86       4.030  -3.693   2.020  1.00 63.34
ATOM   1301 3HG2 ILE A  86       3.778  -3.016   0.412  1.00 25.32
ATOM   1302  CG1 ILE A  86       1.436  -4.168   1.384  1.00 34.01
ATOM   1303 1HG1 ILE A  86       0.570  -4.710   1.031  1.00 41.54
ATOM   1304 2HG1 ILE A  86       1.472  -4.252   2.458  1.00 24.01
ATOM   1305  CD1 ILE A  86       1.218  -2.711   1.022  1.00 65.24
ATOM   1306 1HD1 ILE A  86       0.327  -2.349   1.514  1.00 61.05
ATOM   1307 2HD1 ILE A  86       1.110  -2.613  -0.047  1.00 71.50
ATOM   1308 3HD1 ILE A  86       2.065  -2.134   1.369  1.00 53.34
ATOM   1309  C   ILE A  86       3.718  -6.100  -1.103  1.00 65.25
ATOM   1310  O   ILE A  86       3.625  -7.310  -0.934  1.00 71.43
ATOM   1311  N   LYS A  87       4.814  -5.529  -1.561  1.00 45.33
ATOM   1312  H   LYS A  87       4.827  -4.554  -1.652  1.00 41.40
ATOM   1313  CA  LYS A  87       5.993  -6.298  -1.928  1.00 54.20
ATOM   1314  HA  LYS A  87       5.736  -7.348  -1.918  1.00 55.01
ATOM   1315  CB  LYS A  87       6.504  -5.921  -3.321  1.00 65.41
ATOM   1316 1HB  LYS A  87       5.773  -6.208  -4.061  1.00 74.45
ATOM   1317 2HB  LYS A  87       6.650  -4.853  -3.357  1.00 42.14
ATOM   1318  CG  LYS A  87       7.839  -6.594  -3.654  1.00 51.14
ATOM   1319 1HG  LYS A  87       8.505  -6.480  -2.812  1.00 52.54
ATOM   1320 2HG  LYS A  87       7.662  -7.646  -3.825  1.00 12.01
ATOM   1321  CD  LYS A  87       8.493  -6.001  -4.869  1.00 14.04
ATOM   1322 1HD  LYS A  87       7.901  -6.236  -5.739  1.00 40.22
ATOM   1323 2HD  LYS A  87       8.533  -4.934  -4.707  1.00 60.05
ATOM   1324  CE  LYS A  87       9.918  -6.530  -5.043  1.00 13.40
ATOM   1325 1HE  LYS A  87       9.887  -7.608  -5.073  1.00 74.40
ATOM   1326 2HE  LYS A  87      10.318  -6.156  -5.974  1.00 45.40
ATOM   1327  NZ  LYS A  87      10.809  -6.103  -3.921  1.00 51.42
ATOM   1328 1HZ  LYS A  87      10.818  -5.059  -3.884  1.00 63.11
ATOM   1329 2HZ  LYS A  87      11.791  -6.412  -4.067  1.00 24.11
ATOM   1330 3HZ  LYS A  87      10.488  -6.468  -2.998  1.00  4.40
ATOM   1331  C   LYS A  87       7.118  -6.035  -0.934  1.00  4.53
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ATOM   1332  O   LYS A  87       7.378  -4.903  -0.557  1.00 53.51
ATOM   1333  N   TYR A  88       7.766  -7.097  -0.525  1.00 71.22
ATOM   1334  H   TYR A  88       7.506  -7.969  -0.886  1.00 11.45
ATOM   1335  CA  TYR A  88       8.854  -7.053   0.428  1.00 64.42
ATOM   1336  HA  TYR A  88       8.746  -6.168   1.033  1.00 12.31
ATOM   1337  CB  TYR A  88       8.811  -8.277   1.343  1.00 44.31
ATOM   1338 1HB  TYR A  88       9.537  -8.144   2.130  1.00  2.22
ATOM   1339 2HB  TYR A  88       7.817  -8.325   1.758  1.00 12.50
ATOM   1340  CG  TYR A  88       9.099  -9.605   0.649  1.00 64.24
ATOM   1341  CD1 TYR A  88       8.113 -10.259  -0.057  1.00 32.34
ATOM   1342  HD1 TYR A  88       7.133  -9.807  -0.096  1.00 72.54
ATOM   1343  CE1 TYR A  88       8.358 -11.454  -0.698  1.00 35.43
ATOM   1344  HE1 TYR A  88       7.567 -11.947  -1.243  1.00 71.40
ATOM   1345  CZ  TYR A  88       9.608 -12.017  -0.634  1.00 45.21
ATOM   1346  CE2 TYR A  88      10.619 -11.392   0.064  1.00 13.42
ATOM   1347  HE2 TYR A  88      11.602 -11.834   0.113  1.00 12.14
ATOM   1348  CD2 TYR A  88      10.363 -10.193   0.702  1.00 41.50
ATOM   1349  HD2 TYR A  88      11.150  -9.697   1.252  1.00 33.21
ATOM   1350  OH  TYR A  88       9.851 -13.202  -1.276  1.00  3.21
ATOM   1351  HH  TYR A  88      10.249 -13.811  -0.648  1.00  1.05
ATOM   1352  C   TYR A  88      10.191  -7.026  -0.282  1.00 50.53
ATOM   1353  O   TYR A  88      10.278  -7.351  -1.485  1.00 53.11
ATOM   1354  N   GLY A  89      11.197  -6.553   0.402  1.00 53.53
ATOM   1355  H   GLY A  89      11.079  -6.099   1.263  1.00 30.22
ATOM   1356  CA  GLY A  89      12.515  -6.642  -0.109  1.00  1.24
ATOM   1357 1HA  GLY A  89      12.551  -7.428  -0.848  1.00 52.44
ATOM   1358 2HA  GLY A  89      12.787  -5.713  -0.577  1.00  2.43
ATOM   1359  C   GLY A  89      13.524  -6.945   0.971  1.00 22.21
ATOM   1360  O   GLY A  89      13.545  -8.033   1.515  1.00 33.14
ATOM   1361  N   SER A  90      14.290  -5.951   1.310  1.00 14.15
ATOM   1362  H   SER A  90      14.040  -5.056   1.000  1.00 63.41
ATOM   1363  CA  SER A  90      15.432  -6.077   2.192  1.00 40.03
ATOM   1364  HA  SER A  90      15.985  -6.963   1.921  1.00 70.14
ATOM   1365  CB  SER A  90      16.344  -4.859   1.920  1.00 40.11
ATOM   1366 1HB  SER A  90      16.590  -4.831   0.869  1.00 21.54
ATOM   1367 2HB  SER A  90      15.793  -3.963   2.170  1.00 25.14
ATOM   1368  OG  SER A  90      17.552  -4.864   2.646  1.00 42.23
ATOM   1369  HG  SER A  90      17.709  -3.941   2.905  1.00 41.05
ATOM   1370  C   SER A  90      15.035  -6.147   3.678  1.00  4.25
ATOM   1371  O   SER A  90      15.530  -6.991   4.420  1.00 11.12
ATOM   1372  N   GLN A  91      14.104  -5.307   4.097  1.00 10.42
ATOM   1373  H   GLN A  91      13.620  -4.751   3.446  1.00 35.53
ATOM   1374  CA  GLN A  91      13.805  -5.202   5.528  1.00 71.45
ATOM   1375  HA  GLN A  91      14.605  -5.715   6.041  1.00 13.24
ATOM   1376  CB  GLN A  91      13.836  -3.733   5.968  1.00 22.54
ATOM   1377 1HB  GLN A  91      13.703  -3.685   7.038  1.00 22.43
ATOM   1378 2HB  GLN A  91      14.803  -3.321   5.719  1.00 42.31
ATOM   1379  CG  GLN A  91      12.775  -2.869   5.325  1.00 52.10
ATOM   1380 1HG  GLN A  91      12.757  -3.072   4.264  1.00 60.14
ATOM   1381 2HG  GLN A  91      11.819  -3.128   5.755  1.00  5.01
ATOM   1382  CD  GLN A  91      13.021  -1.394   5.531  1.00 12.21
ATOM   1383  OE1 GLN A  91      13.669  -0.772   4.731  1.00 64.22
ATOM   1384  NE2 GLN A  91      12.520  -0.831   6.604  1.00 15.12
ATOM   1385 2HE2 GLN A  91      12.018  -1.372   7.242  1.00 21.34
ATOM   1386 1HE2 GLN A  91      12.647   0.146   6.690  1.00 43.51
ATOM   1387  C   GLN A  91      12.499  -5.885   5.931  1.00 14.23
ATOM   1388  O   GLN A  91      12.066  -5.768   7.073  1.00 51.21
ATOM   1389  N   GLY A  92      11.893  -6.617   5.006  1.00  1.04
ATOM   1390  H   GLY A  92      12.365  -6.750   4.158  1.00 63.01
ATOM   1391  CA  GLY A  92      10.592  -7.225   5.282  1.00  4.42
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ATOM   1392 1HA  GLY A  92      10.341  -7.880   4.461  1.00 22.21
ATOM   1393 2HA  GLY A  92      10.612  -7.801   6.195  1.00 14.33
ATOM   1394  C   GLY A  92       9.532  -6.144   5.394  1.00 65.24
ATOM   1395  O   GLY A  92       9.220  -5.658   6.482  1.00 53.15
ATOM   1396  N   ASN A  93       8.964  -5.794   4.264  1.00 13.30
ATOM   1397  H   ASN A  93       9.144  -6.334   3.470  1.00 63.02
ATOM   1398  CA  ASN A  93       8.074  -4.636   4.150  1.00 54.34
ATOM   1399  HA  ASN A  93       8.646  -3.781   4.475  1.00 33.10
ATOM   1400  CB  ASN A  93       7.678  -4.415   2.681  1.00 24.34
ATOM   1401 1HB  ASN A  93       8.564  -4.553   2.080  1.00 51.23
ATOM   1402 2HB  ASN A  93       6.933  -5.142   2.397  1.00 10.11
ATOM   1403  CG  ASN A  93       7.150  -3.014   2.358  1.00 32.55
ATOM   1404  OD1 ASN A  93       6.586  -2.317   3.190  1.00 45.32
ATOM   1405  ND2 ASN A  93       7.329  -2.608   1.133  1.00 63.34
ATOM   1406 2HD2 ASN A  93       7.774  -3.214   0.496  1.00 60.44
ATOM   1407 1HD2 ASN A  93       7.018  -1.712   0.893  1.00 21.14
ATOM   1408  C   ASN A  93       6.827  -4.750   5.040  1.00 14.35
ATOM   1409  O   ASN A  93       6.337  -3.750   5.512  1.00  4.44
ATOM   1410  N   SER A  94       6.396  -5.977   5.333  1.00 63.13
ATOM   1411  H   SER A  94       6.918  -6.741   5.010  1.00 11.32
ATOM   1412  CA  SER A  94       5.163  -6.266   6.094  1.00 72.13
ATOM   1413  HA  SER A  94       4.335  -6.059   5.432  1.00 64.32
ATOM   1414  CB  SER A  94       5.111  -7.759   6.448  1.00 44.22
ATOM   1415 1HB  SER A  94       5.159  -8.341   5.541  1.00 64.02
ATOM   1416 2HB  SER A  94       5.961  -8.002   7.071  1.00 35.42
ATOM   1417  OG  SER A  94       3.923  -8.101   7.139  1.00 73.24
ATOM   1418  HG  SER A  94       3.457  -7.306   7.413  1.00  1.54
ATOM   1419  C   SER A  94       4.972  -5.398   7.373  1.00 45.23
ATOM   1420  O   SER A  94       3.842  -5.012   7.688  1.00  4.34
ATOM   1421  N   ILE A  95       6.052  -5.081   8.079  1.00 64.15
ATOM   1422  H   ILE A  95       6.928  -5.405   7.777  1.00  3.43
ATOM   1423  CA  ILE A  95       5.959  -4.262   9.294  1.00 50.35
ATOM   1424  HA  ILE A  95       5.165  -4.680   9.896  1.00 40.02
ATOM   1425  CB  ILE A  95       7.302  -4.254  10.133  1.00  2.21
ATOM   1426  HB  ILE A  95       8.090  -3.923   9.472  1.00 22.42
ATOM   1427  CG2 ILE A  95       7.228  -3.256  11.285  1.00 75.53
ATOM   1428 1HG2 ILE A  95       7.058  -2.265  10.892  1.00 33.45
ATOM   1429 2HG2 ILE A  95       8.157  -3.271  11.836  1.00 44.30
ATOM   1430 3HG2 ILE A  95       6.414  -3.527  11.943  1.00 25.45
ATOM   1431  CG1 ILE A  95       7.673  -5.659  10.690  1.00  1.22
ATOM   1432 1HG1 ILE A  95       8.471  -5.548  11.408  1.00  3.35
ATOM   1433 2HG1 ILE A  95       6.811  -6.065  11.198  1.00 44.12
ATOM   1434  CD1 ILE A  95       8.137  -6.681   9.663  1.00 20.13
ATOM   1435 1HD1 ILE A  95       9.013  -6.309   9.153  1.00 62.50
ATOM   1436 2HD1 ILE A  95       7.348  -6.857   8.948  1.00 33.33
ATOM   1437 3HD1 ILE A  95       8.379  -7.608  10.165  1.00 33.23
ATOM   1438  C   ILE A  95       5.558  -2.818   8.919  1.00 33.40
ATOM   1439  O   ILE A  95       4.642  -2.231   9.501  1.00  1.45
ATOM   1440  N   ARG A  96       6.185  -2.320   7.873  1.00 32.50
ATOM   1441  H   ARG A  96       6.794  -2.917   7.390  1.00  1.53
ATOM   1442  CA  ARG A  96       5.974  -0.959   7.362  1.00 34.44
ATOM   1443  HA  ARG A  96       6.090  -0.240   8.158  1.00  2.10
ATOM   1444  CB  ARG A  96       7.003  -0.691   6.249  1.00 73.40
ATOM   1445 1HB  ARG A  96       6.724  -1.266   5.378  1.00  4.43
ATOM   1446 2HB  ARG A  96       6.983   0.359   5.997  1.00 44.12
ATOM   1447  CG  ARG A  96       8.423  -1.067   6.644  1.00 22.20
ATOM   1448 1HG  ARG A  96       8.856  -0.255   7.208  1.00 11.13
ATOM   1449 2HG  ARG A  96       8.390  -1.953   7.260  1.00 63.11
ATOM   1450  CD  ARG A  96       9.297  -1.339   5.431  1.00 61.05
ATOM   1451 1HD  ARG A  96      10.108  -1.988   5.721  1.00 70.31
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ATOM   1452 2HD  ARG A  96       8.687  -1.849   4.701  1.00 63.12
ATOM   1453  NE  ARG A  96       9.870  -0.158   4.796  1.00 23.30
ATOM   1454  HE  ARG A  96       9.979   0.643   5.377  1.00 73.22
ATOM   1455  CZ  ARG A  96      10.400  -0.156   3.563  1.00  0.45
ATOM   1456  NH1 ARG A  96      10.207  -1.203   2.771  1.00 32.32
ATOM   1457 1HH1 ARG A  96       9.665  -1.989   3.056  1.00 62.21
ATOM   1458 2HH1 ARG A  96      10.643  -1.316   1.861  1.00 40.42
ATOM   1459  NH2 ARG A  96      11.119   0.879   3.139  1.00 35.32
ATOM   1460 1HH2 ARG A  96      11.297   1.680   3.720  1.00 71.53
ATOM   1461 2HH2 ARG A  96      11.541   0.909   2.231  1.00 41.15
ATOM   1462  C   ARG A  96       4.568  -0.901   6.769  1.00 71.45
ATOM   1463  O   ARG A  96       3.831   0.071   6.941  1.00 24.11
ATOM   1464  N   SER A  97       4.205  -1.986   6.100  1.00 34.22
ATOM   1465  H   SER A  97       4.853  -2.718   5.997  1.00  4.14
ATOM   1466  CA  SER A  97       2.917  -2.149   5.480  1.00 64.43
ATOM   1467  HA  SER A  97       2.785  -1.385   4.729  1.00 53.54
ATOM   1468  CB  SER A  97       2.882  -3.491   4.801  1.00 31.31
ATOM   1469 1HB  SER A  97       2.847  -4.266   5.553  1.00 24.22
ATOM   1470 2HB  SER A  97       2.000  -3.548   4.183  1.00 74.32
ATOM   1471  OG  SER A  97       4.028  -3.674   4.000  1.00 72.45
ATOM   1472  HG  SER A  97       4.528  -2.855   3.903  1.00 40.44
ATOM   1473  C   SER A  97       1.792  -2.079   6.508  1.00 20.42
ATOM   1474  O   SER A  97       0.764  -1.473   6.257  1.00 51.14
ATOM   1475  N   SER A  98       2.008  -2.683   7.672  1.00 70.04
ATOM   1476  H   SER A  98       2.867  -3.134   7.830  1.00 33.14
ATOM   1477  CA  SER A  98       1.009  -2.709   8.719  1.00 72.33
ATOM   1478  HA  SER A  98       0.111  -3.142   8.300  1.00 72.13
ATOM   1479  CB  SER A  98       1.487  -3.587   9.892  1.00 10.52
ATOM   1480 1HB  SER A  98       1.804  -4.548   9.513  1.00 12.53
ATOM   1481 2HB  SER A  98       2.324  -3.102  10.374  1.00 21.44
ATOM   1482  OG  SER A  98       0.462  -3.792  10.848  1.00 12.53
ATOM   1483  HG  SER A  98       0.106  -2.944  11.133  1.00 60.11
ATOM   1484  C   SER A  98       0.690  -1.281   9.181  1.00 40.23
ATOM   1485  O   SER A  98      -0.470  -0.938   9.426  1.00 50.23
ATOM   1486  N   ALA A  99       1.719  -0.450   9.268  1.00 45.33
ATOM   1487  H   ALA A  99       2.622  -0.783   9.072  1.00 61.04
ATOM   1488  CA  ALA A  99       1.544   0.941   9.641  1.00  1.43
ATOM   1489  HA  ALA A  99       0.913   0.971  10.518  1.00 32.11
ATOM   1490  CB  ALA A  99       2.885   1.586   9.971  1.00 52.22
ATOM   1491 1HB  ALA A  99       3.364   1.038  10.767  1.00 12.54
ATOM   1492 2HB  ALA A  99       2.726   2.609  10.280  1.00 12.12
ATOM   1493 3HB  ALA A  99       3.514   1.570   9.094  1.00 23.23
ATOM   1494  C   ALA A  99       0.838   1.695   8.523  1.00 61.14
ATOM   1495  O   ALA A  99      -0.071   2.487   8.773  1.00 33.12
ATOM   1496  N   LEU A 100       1.237   1.393   7.282  1.00 33.33
ATOM   1497  H   LEU A 100       1.962   0.742   7.158  1.00 41.40
ATOM   1498  CA  LEU A 100       0.679   2.006   6.089  1.00 62.51
ATOM   1499  HA  LEU A 100       0.902   3.061   6.103  1.00 21.23
ATOM   1500  CB  LEU A 100       1.315   1.378   4.841  1.00 63.11
ATOM   1501 1HB  LEU A 100       2.379   1.303   4.996  1.00 74.35
ATOM   1502 2HB  LEU A 100       0.947   0.365   4.741  1.00 20.21
ATOM   1503  CG  LEU A 100       1.042   2.082   3.513  1.00 11.21
ATOM   1504  HG  LEU A 100      -0.025   2.157   3.369  1.00 15.14
ATOM   1505  CD1 LEU A 100       1.611   3.492   3.525  1.00 30.02
ATOM   1506 1HD1 LEU A 100       1.440   3.961   2.568  1.00 25.23
ATOM   1507 2HD1 LEU A 100       2.670   3.444   3.731  1.00  1.31
ATOM   1508 3HD1 LEU A 100       1.124   4.066   4.299  1.00 21.51
ATOM   1509  CD2 LEU A 100       1.622   1.277   2.367  1.00 31.32
ATOM   1510 1HD2 LEU A 100       1.432   1.785   1.433  1.00 52.34
ATOM   1511 2HD2 LEU A 100       1.164   0.300   2.350  1.00 23.44
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ATOM   1512 3HD2 LEU A 100       2.688   1.173   2.512  1.00 73.23
ATOM   1513  C   LEU A 100      -0.823   1.789   6.047  1.00 54.01
ATOM   1514  O   LEU A 100      -1.579   2.726   5.857  1.00 54.32
ATOM   1515  N   ILE A 101      -1.229   0.561   6.312  1.00 34.54
ATOM   1516  H   ILE A 101      -0.527  -0.099   6.512  1.00  3.41
ATOM   1517  CA  ILE A 101      -2.641   0.162   6.274  1.00 50.21
ATOM   1518  HA  ILE A 101      -3.011   0.345   5.276  1.00 10.34
ATOM   1519  CB  ILE A 101      -2.812  -1.359   6.593  1.00 45.34
ATOM   1520  HB  ILE A 101      -2.341  -1.537   7.548  1.00 70.22
ATOM   1521  CG2 ILE A 101      -4.278  -1.751   6.730  1.00 51.34
ATOM   1522 1HG2 ILE A 101      -4.720  -1.206   7.552  1.00 61.00
ATOM   1523 2HG2 ILE A 101      -4.361  -2.813   6.904  1.00 31.45
ATOM   1524 3HG2 ILE A 101      -4.784  -1.487   5.814  1.00 44.13
ATOM   1525  CG1 ILE A 101      -2.115  -2.233   5.538  1.00  3.54
ATOM   1526 1HG1 ILE A 101      -1.057  -2.016   5.547  1.00 21.30
ATOM   1527 2HG1 ILE A 101      -2.263  -3.267   5.808  1.00 14.10
ATOM   1528  CD1 ILE A 101      -2.609  -2.040   4.114  1.00  1.41
ATOM   1529 1HD1 ILE A 101      -2.098  -2.736   3.465  1.00 45.24
ATOM   1530 2HD1 ILE A 101      -2.389  -1.034   3.791  1.00 11.00
ATOM   1531 3HD1 ILE A 101      -3.674  -2.217   4.069  1.00 44.01
ATOM   1532  C   ILE A 101      -3.481   0.988   7.250  1.00 42.54
ATOM   1533  O   ILE A 101      -4.566   1.467   6.883  1.00  2.33
ATOM   1534  N   GLY A 102      -2.952   1.199   8.452  1.00 73.41
ATOM   1535  H   GLY A 102      -2.069   0.826   8.658  1.00 42.31
ATOM   1536  CA  GLY A 102      -3.661   1.977   9.457  1.00 52.31
ATOM   1537 1HA  GLY A 102      -4.617   1.524   9.649  1.00 33.41
ATOM   1538 2HA  GLY A 102      -3.083   1.988  10.367  1.00 41.41
ATOM   1539  C   GLY A 102      -3.886   3.398   9.007  1.00 71.45
ATOM   1540  O   GLY A 102      -4.945   3.978   9.212  1.00 24.22
ATOM   1541  N   ILE A 103      -2.895   3.936   8.373  1.00 23.44
ATOM   1542  H   ILE A 103      -2.087   3.395   8.229  1.00 72.22
ATOM   1543  CA  ILE A 103      -2.935   5.282   7.876  1.00 13.54
ATOM   1544  HA  ILE A 103      -3.304   5.903   8.679  1.00 64.24
ATOM   1545  CB  ILE A 103      -1.523   5.751   7.507  1.00 21.25
ATOM   1546  HB  ILE A 103      -1.110   5.070   6.778  1.00 54.23
ATOM   1547  CG2 ILE A 103      -1.556   7.152   6.908  1.00 54.12
ATOM   1548 1HG2 ILE A 103      -2.153   7.132   6.005  1.00 21.23
ATOM   1549 2HG2 ILE A 103      -0.553   7.468   6.663  1.00 51.31
ATOM   1550 3HG2 ILE A 103      -1.996   7.842   7.612  1.00 54.54
ATOM   1551  CG1 ILE A 103      -0.647   5.710   8.759  1.00 12.44
ATOM   1552 1HG1 ILE A 103      -0.941   6.512   9.421  1.00 22.24
ATOM   1553 2HG1 ILE A 103      -0.800   4.766   9.262  1.00 41.24
ATOM   1554  CD1 ILE A 103       0.818   5.861   8.489  1.00 53.34
ATOM   1555 1HD1 ILE A 103       1.004   6.804   7.995  1.00 43.52
ATOM   1556 2HD1 ILE A 103       1.121   5.036   7.860  1.00 35.13
ATOM   1557 3HD1 ILE A 103       1.348   5.814   9.428  1.00 54.02
ATOM   1558  C   ILE A 103      -3.889   5.415   6.686  1.00 51.41
ATOM   1559  O   ILE A 103      -4.624   6.401   6.581  1.00 33.11
ATOM   1560  N   ILE A 104      -3.902   4.407   5.820  1.00 62.12
ATOM   1561  H   ILE A 104      -3.344   3.619   6.005  1.00 12.13
ATOM   1562  CA  ILE A 104      -4.732   4.444   4.623  1.00 52.04
ATOM   1563  HA  ILE A 104      -4.455   5.301   4.027  1.00 21.21
ATOM   1564  CB  ILE A 104      -4.540   3.154   3.766  1.00 63.24
ATOM   1565  HB  ILE A 104      -4.760   2.304   4.396  1.00 12.34
ATOM   1566  CG2 ILE A 104      -5.513   3.124   2.585  1.00 15.44
ATOM   1567 1HG2 ILE A 104      -5.362   2.215   2.025  1.00 22.22
ATOM   1568 2HG2 ILE A 104      -5.329   3.975   1.945  1.00  2.02
ATOM   1569 3HG2 ILE A 104      -6.529   3.159   2.951  1.00 71.01
ATOM   1570  CG1 ILE A 104      -3.099   3.036   3.265  1.00 21.04
ATOM   1571 1HG1 ILE A 104      -2.940   3.809   2.529  1.00 64.43
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ATOM   1572 2HG1 ILE A 104      -2.410   3.186   4.084  1.00 33.53
ATOM   1573  CD1 ILE A 104      -2.787   1.706   2.602  1.00 73.15
ATOM   1574 1HD1 ILE A 104      -1.756   1.689   2.283  1.00  1.21
ATOM   1575 2HD1 ILE A 104      -3.428   1.582   1.741  1.00 31.13
ATOM   1576 3HD1 ILE A 104      -2.967   0.904   3.300  1.00 43.13
ATOM   1577  C   ILE A 104      -6.192   4.537   5.017  1.00 12.40
ATOM   1578  O   ILE A 104      -6.912   5.425   4.567  1.00 52.31
ATOM   1579  N   GLU A 105      -6.603   3.658   5.897  1.00  0.23
ATOM   1580  H   GLU A 105      -5.965   3.010   6.269  1.00 10.21
ATOM   1581  CA  GLU A 105      -7.964   3.641   6.344  1.00 75.11
ATOM   1582  HA  GLU A 105      -8.561   3.714   5.446  1.00 15.24
ATOM   1583  CB  GLU A 105      -8.289   2.323   7.041  1.00 43.41
ATOM   1584 1HB  GLU A 105      -9.356   2.276   7.208  1.00 64.13
ATOM   1585 2HB  GLU A 105      -8.009   1.513   6.383  1.00 33.53
ATOM   1586  CG  GLU A 105      -7.611   2.113   8.364  1.00 63.31
ATOM   1587 1HG  GLU A 105      -7.058   1.186   8.383  1.00 44.00
ATOM   1588 2HG  GLU A 105      -6.912   2.926   8.493  1.00 51.32
ATOM   1589  CD  GLU A 105      -8.610   2.198   9.473  1.00 63.31
ATOM   1590  OE1 GLU A 105      -8.688   3.240  10.125  1.00 51.15
ATOM   1591  OE2 GLU A 105      -9.402   1.246   9.652  1.00 51.14
ATOM   1592  C   GLU A 105      -8.290   4.892   7.180  1.00 14.01
ATOM   1593  O   GLU A 105      -9.383   5.457   7.071  1.00 63.32
ATOM   1594  N   GLY A 106      -7.304   5.341   7.962  1.00 71.43
ATOM   1595  H   GLY A 106      -6.465   4.831   8.005  1.00 51.32
ATOM   1596  CA  GLY A 106      -7.440   6.518   8.793  1.00 32.14
ATOM   1597 1HA  GLY A 106      -8.230   6.370   9.514  1.00 62.23
ATOM   1598 2HA  GLY A 106      -6.506   6.670   9.314  1.00 11.00
ATOM   1599  C   GLY A 106      -7.729   7.764   7.995  1.00 72.41
ATOM   1600  O   GLY A 106      -8.608   8.559   8.362  1.00 62.51
ATOM   1601  N   ASN A 107      -7.021   7.928   6.888  1.00 70.50
ATOM   1602  H   ASN A 107      -6.312   7.284   6.658  1.00 74.21
ATOM   1603  CA  ASN A 107      -7.229   9.062   6.007  1.00 10.32
ATOM   1604  HA  ASN A 107      -7.156   9.954   6.613  1.00 74.21
ATOM   1605  CB  ASN A 107      -6.178   9.134   4.898  1.00 74.34
ATOM   1606 1HB  ASN A 107      -5.996   8.130   4.545  1.00 24.42
ATOM   1607 2HB  ASN A 107      -6.591   9.717   4.093  1.00 23.24
ATOM   1608  CG  ASN A 107      -4.837   9.726   5.312  1.00 65.33
ATOM   1609  OD1 ASN A 107      -4.386   9.593   6.452  1.00 13.50
ATOM   1610  ND2 ASN A 107      -4.204  10.415   4.392  1.00 45.13
ATOM   1611 2HD2 ASN A 107      -4.624  10.514   3.506  1.00 12.03
ATOM   1612 1HD2 ASN A 107      -3.328  10.816   4.595  1.00  3.40
ATOM   1613  C   ASN A 107      -8.609   9.015   5.396  1.00 34.53
ATOM   1614  O   ASN A 107      -9.251  10.048   5.217  1.00 21.32
ATOM   1615  N   ILE A 108      -9.081   7.811   5.105  1.00 21.44
ATOM   1616  H   ILE A 108      -8.508   7.029   5.260  1.00 62.44
ATOM   1617  CA  ILE A 108     -10.418   7.617   4.565  1.00  5.34
ATOM   1618  HA  ILE A 108     -10.511   8.244   3.690  1.00 12.34
ATOM   1619  CB  ILE A 108     -10.651   6.139   4.159  1.00 13.23
ATOM   1620  HB  ILE A 108     -10.492   5.520   5.028  1.00 34.35
ATOM   1621  CG2 ILE A 108     -12.089   5.926   3.669  1.00 61.23
ATOM   1622 1HG2 ILE A 108     -12.781   6.177   4.459  1.00 14.34
ATOM   1623 2HG2 ILE A 108     -12.221   4.891   3.388  1.00 35.13
ATOM   1624 3HG2 ILE A 108     -12.273   6.558   2.813  1.00 63.45
ATOM   1625  CG1 ILE A 108      -9.646   5.740   3.079  1.00 51.25
ATOM   1626 1HG1 ILE A 108      -9.851   6.308   2.182  1.00 25.42
ATOM   1627 2HG1 ILE A 108      -8.650   5.976   3.422  1.00 44.00
ATOM   1628  CD1 ILE A 108      -9.681   4.282   2.710  1.00 21.01
ATOM   1629 1HD1 ILE A 108      -8.925   4.082   1.967  1.00 40.52
ATOM   1630 2HD1 ILE A 108     -10.656   4.041   2.312  1.00  2.21
ATOM   1631 3HD1 ILE A 108      -9.491   3.687   3.589  1.00 23.41
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ATOM   1632  C   ILE A 108     -11.458   8.056   5.593  1.00 25.42
ATOM   1633  O   ILE A 108     -12.390   8.787   5.262  1.00 24.53
ATOM   1634  N   ARG A 109     -11.256   7.647   6.851  1.00 33.31
ATOM   1635  H   ARG A 109     -10.492   7.057   7.036  1.00 73.30
ATOM   1636  CA  ARG A 109     -12.160   8.023   7.935  1.00  0.03
ATOM   1637  HA  ARG A 109     -13.147   7.662   7.687  1.00 24.12
ATOM   1638  CB  ARG A 109     -11.729   7.425   9.281  1.00 41.32
ATOM   1639 1HB  ARG A 109     -10.794   7.880   9.572  1.00 12.44
ATOM   1640 2HB  ARG A 109     -12.476   7.674  10.020  1.00 41.50
ATOM   1641  CG  ARG A 109     -11.536   5.926   9.286  1.00 25.11
ATOM   1642 1HG  ARG A 109     -12.365   5.447   8.792  1.00 75.14
ATOM   1643 2HG  ARG A 109     -10.632   5.702   8.737  1.00 11.22
ATOM   1644  CD  ARG A 109     -11.384   5.407  10.706  1.00 40.01
ATOM   1645 1HD  ARG A 109     -10.568   5.932  11.183  1.00 11.32
ATOM   1646 2HD  ARG A 109     -12.298   5.601  11.248  1.00 42.45
ATOM   1647  NE  ARG A 109     -11.103   3.977  10.740  1.00 43.04
ATOM   1648  HE  ARG A 109     -10.197   3.727  10.398  1.00 50.51
ATOM   1649  CZ  ARG A 109     -11.909   3.013  11.184  1.00 73.44
ATOM   1650  NH1 ARG A 109     -13.124   3.308  11.670  1.00 62.04
ATOM   1651 1HH1 ARG A 109     -13.441   4.255  11.707  1.00 51.13
ATOM   1652 2HH1 ARG A 109     -13.741   2.592  11.997  1.00  2.32
ATOM   1653  NH2 ARG A 109     -11.508   1.755  11.125  1.00 30.02
ATOM   1654 1HH2 ARG A 109     -10.589   1.559  10.730  1.00 22.11
ATOM   1655 2HH2 ARG A 109     -12.024   0.952  11.410  1.00 20.44
ATOM   1656  C   ARG A 109     -12.210   9.535   8.071  1.00 63.01
ATOM   1657  O   ARG A 109     -13.278  10.115   8.203  1.00 34.34
ATOM   1658  N   TYR A 110     -11.038  10.162   8.002  1.00  0.11
ATOM   1659  H   TYR A 110     -10.223   9.623   7.891  1.00 42.35
ATOM   1660  CA  TYR A 110     -10.927  11.611   8.099  1.00 33.43
ATOM   1661  HA  TYR A 110     -11.421  11.910   9.012  1.00 33.51
ATOM   1662  CB  TYR A 110      -9.454  12.050   8.166  1.00 72.32
ATOM   1663 1HB  TYR A 110      -8.993  11.613   9.039  1.00 32.53
ATOM   1664 2HB  TYR A 110      -8.942  11.695   7.282  1.00 54.23
ATOM   1665  CG  TYR A 110      -9.269  13.555   8.243  1.00 33.31
ATOM   1666  CD1 TYR A 110      -8.950  14.298   7.110  1.00 11.11
ATOM   1667  HD1 TYR A 110      -8.815  13.787   6.168  1.00 14.22
ATOM   1668  CE1 TYR A 110      -8.804  15.668   7.174  1.00 74.44
ATOM   1669  HE1 TYR A 110      -8.557  16.226   6.282  1.00  0.33
ATOM   1670  CZ  TYR A 110      -8.976  16.317   8.376  1.00 45.12
ATOM   1671  CE2 TYR A 110      -9.290  15.605   9.515  1.00 53.12
ATOM   1672  HE2 TYR A 110      -9.424  16.115  10.458  1.00 60.03
ATOM   1673  CD2 TYR A 110      -9.437  14.234   9.444  1.00  1.13
ATOM   1674  HD2 TYR A 110      -9.683  13.672  10.334  1.00 54.32
ATOM   1675  OH  TYR A 110      -8.832  17.683   8.440  1.00 61.44
ATOM   1676  HH  TYR A 110      -9.360  18.065   7.732  1.00 23.53
ATOM   1677  C   TYR A 110     -11.639  12.288   6.929  1.00 20.23
ATOM   1678  O   TYR A 110     -12.298  13.304   7.105  1.00 63.02
ATOM   1679  N   ALA A 111     -11.516  11.705   5.747  1.00 21.45
ATOM   1680  H   ALA A 111     -10.964  10.895   5.673  1.00 42.22
ATOM   1681  CA  ALA A 111     -12.157  12.236   4.553  1.00 22.45
ATOM   1682  HA  ALA A 111     -11.842  13.261   4.444  1.00 11.35
ATOM   1683  CB  ALA A 111     -11.714  11.463   3.318  1.00 74.11
ATOM   1684 1HB  ALA A 111     -10.638  11.497   3.236  1.00 23.42
ATOM   1685 2HB  ALA A 111     -12.155  11.906   2.437  1.00 12.32
ATOM   1686 3HB  ALA A 111     -12.036  10.435   3.404  1.00 61.20
ATOM   1687  C   ALA A 111     -13.674  12.202   4.693  1.00 53.41
ATOM   1688  O   ALA A 111     -14.378  13.061   4.158  1.00 61.53
ATOM   1689  N   ASN A 112     -14.162  11.224   5.430  1.00 52.15
ATOM   1690  H   ASN A 112     -13.532  10.581   5.826  1.00 74.11
ATOM   1691  CA  ASN A 112     -15.590  11.063   5.666  1.00  2.33
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ATOM   1692  HA  ASN A 112     -16.095  11.268   4.734  1.00 32.01
ATOM   1693  CB  ASN A 112     -15.936   9.622   6.096  1.00 32.24
ATOM   1694 1HB  ASN A 112     -15.369   9.379   6.983  1.00 10.04
ATOM   1695 2HB  ASN A 112     -16.989   9.576   6.336  1.00 21.24
ATOM   1696  CG  ASN A 112     -15.633   8.555   5.044  1.00 62.43
ATOM   1697  OD1 ASN A 112     -15.333   7.415   5.375  1.00 61.04
ATOM   1698  ND2 ASN A 112     -15.719   8.905   3.778  1.00 61.23
ATOM   1699 2HD2 ASN A 112     -15.972   9.825   3.558  1.00 42.24
ATOM   1700 1HD2 ASN A 112     -15.511   8.213   3.119  1.00 55.42
ATOM   1701  C   ASN A 112     -16.102  12.044   6.708  1.00  4.34
ATOM   1702  O   ASN A 112     -17.293  12.330   6.758  1.00  5.33
ATOM   1703  N   THR A 113     -15.219  12.548   7.538  1.00 20.15
ATOM   1704  H   THR A 113     -14.269  12.312   7.469  1.00 50.11
ATOM   1705  CA  THR A 113     -15.610  13.463   8.576  1.00 42.40
ATOM   1706  HA  THR A 113     -16.674  13.344   8.714  1.00 24.15
ATOM   1707  CB  THR A 113     -14.913  13.127   9.914  1.00 12.03
ATOM   1708  HB  THR A 113     -15.103  13.930  10.612  1.00 32.13
ATOM   1709  OG1 THR A 113     -13.496  13.012   9.712  1.00 24.33
ATOM   1710  HG1 THR A 113     -13.260  13.694   9.068  1.00 22.35
ATOM   1711  CG2 THR A 113     -15.452  11.825  10.495  1.00 61.11
ATOM   1712 1HG2 THR A 113     -14.948  11.611  11.427  1.00 43.24
ATOM   1713 2HG2 THR A 113     -15.275  11.020   9.797  1.00 41.21
ATOM   1714 3HG2 THR A 113     -16.512  11.919  10.674  1.00 55.43
ATOM   1715  C   THR A 113     -15.348  14.917   8.185  1.00 23.14
ATOM   1716  O   THR A 113     -14.253  15.440   8.414  1.00 10.30
ATOM   1717  N   HIS A 114     -16.322  15.519   7.548  1.00 64.33
ATOM   1718  H   HIS A 114     -17.151  15.050   7.318  1.00 32.32
ATOM   1719  CA  HIS A 114     -16.292  16.911   7.149  1.00 74.33
ATOM   1720  HA  HIS A 114     -15.662  17.441   7.849  1.00 21.54
ATOM   1721  CB  HIS A 114     -15.752  17.105   5.709  1.00 51.25
ATOM   1722 1HB  HIS A 114     -16.234  16.392   5.055  1.00 12.32
ATOM   1723 2HB  HIS A 114     -16.000  18.103   5.377  1.00 35.43
ATOM   1724  CG  HIS A 114     -14.266  16.920   5.554  1.00 73.52
ATOM   1725  ND1 HIS A 114     -13.670  15.769   5.087  1.00 43.54
ATOM   1726  CD2 HIS A 114     -13.252  17.790   5.795  1.00 21.14
ATOM   1727  HD1 HIS A 114     -14.136  14.938   4.841  1.00 53.21
ATOM   1728  CE1 HIS A 114     -12.350  15.971   5.059  1.00 64.33
ATOM   1729  NE2 HIS A 114     -12.037  17.183   5.478  1.00 75.32
ATOM   1730  HD2 HIS A 114     -13.358  18.796   6.174  1.00  1.35
ATOM   1731  HE1 HIS A 114     -11.622  15.243   4.734  1.00 53.41
ATOM   1732  C   HIS A 114     -17.697  17.454   7.254  1.00 24.42
ATOM   1733  O   HIS A 114     -18.002  18.111   8.262  1.00 15.01
TER    1734       HIS A 114
ENDMDL
MODEL        5
ATOM      1  N   MET A   1      -7.770 -12.815   7.750  1.00 61.01
ATOM      2  CA  MET A   1      -9.088 -13.476   8.003  1.00  3.04
ATOM      3  HA  MET A   1      -9.554 -13.673   7.048  1.00 31.42
ATOM      4  CB  MET A   1      -8.895 -14.781   8.784  1.00 12.24
ATOM      5 1HB  MET A   1      -8.240 -15.428   8.221  1.00 71.03
ATOM      6 2HB  MET A   1      -8.426 -14.550   9.731  1.00 54.44
ATOM      7  CG  MET A   1     -10.187 -15.542   9.065  1.00 12.14
ATOM      8 1HG  MET A   1     -10.847 -14.913   9.645  1.00 61.15
ATOM      9 2HG  MET A   1     -10.659 -15.785   8.124  1.00 13.14
ATOM     10  SD  MET A   1      -9.894 -17.065   9.976  1.00 11.40
ATOM     11  CE  MET A   1     -11.564 -17.707  10.118  1.00  5.31
ATOM     12 1HE  MET A   1     -11.974 -17.866   9.132  1.00 63.31
ATOM     13 2HE  MET A   1     -12.179 -16.999  10.653  1.00 34.54
ATOM     14 3HE  MET A   1     -11.544 -18.644  10.654  1.00 30.31
ATOM     15  C   MET A   1      -9.967 -12.520   8.780  1.00 62.13
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ATOM     16  O   MET A   1     -11.135 -12.381   8.517  1.00 62.12
ATOM     17  N   ASP A   2      -9.319 -11.886   9.715  1.00 73.32
ATOM     18  H   ASP A   2      -8.378 -12.108   9.888  1.00 63.02
ATOM     19  CA  ASP A   2      -9.782 -10.823  10.601  1.00 23.31
ATOM     20  HA  ASP A   2     -10.334 -11.250  11.424  1.00 64.15
ATOM     21  CB  ASP A   2      -8.490 -10.212  11.185  1.00 21.34
ATOM     22 1HB  ASP A   2      -8.712  -9.246  11.617  1.00 11.12
ATOM     23 2HB  ASP A   2      -8.084 -10.868  11.942  1.00 13.24
ATOM     24  CG  ASP A   2      -7.433 -10.039  10.070  1.00 34.11
ATOM     25  OD1 ASP A   2      -6.823 -11.074   9.646  1.00 52.23
ATOM     26  OD2 ASP A   2      -7.319  -8.935   9.509  1.00 23.50
ATOM     27  C   ASP A   2     -10.629  -9.736   9.883  1.00 13.51
ATOM     28  O   ASP A   2     -11.841  -9.807   9.865  1.00 64.41
ATOM     29  N   LYS A   3      -9.969  -8.750   9.308  1.00 64.22
ATOM     30  H   LYS A   3      -8.988  -8.702   9.414  1.00 32.13
ATOM     31  CA  LYS A   3     -10.622  -7.697   8.560  1.00  2.20
ATOM     32  HA  LYS A   3     -11.688  -7.803   8.691  1.00 13.22
ATOM     33  CB  LYS A   3     -10.173  -6.309   9.081  1.00 71.21
ATOM     34 1HB  LYS A   3     -10.692  -5.547   8.519  1.00 50.21
ATOM     35 2HB  LYS A   3     -10.457  -6.226  10.120  1.00 42.22
ATOM     36  CG  LYS A   3      -8.669  -6.037   8.972  1.00 13.15
ATOM     37 1HG  LYS A   3      -8.133  -6.849   9.441  1.00 74.42
ATOM     38 2HG  LYS A   3      -8.398  -5.982   7.928  1.00 34.35
ATOM     39  CD  LYS A   3      -8.285  -4.730   9.659  1.00 45.34
ATOM     40 1HD  LYS A   3      -8.796  -3.914   9.170  1.00 15.22
ATOM     41 2HD  LYS A   3      -8.586  -4.778  10.694  1.00 11.51
ATOM     42  CE  LYS A   3      -6.776  -4.475   9.591  1.00 33.00
ATOM     43 1HE  LYS A   3      -6.538  -3.632  10.223  1.00 55.35
ATOM     44 2HE  LYS A   3      -6.263  -5.350   9.958  1.00 13.04
ATOM     45  NZ  LYS A   3      -6.310  -4.182   8.214  1.00 53.23
ATOM     46 1HZ  LYS A   3      -6.719  -3.257   7.929  1.00 23.21
ATOM     47 2HZ  LYS A   3      -6.594  -4.914   7.536  1.00 33.54
ATOM     48 3HZ  LYS A   3      -5.277  -4.081   8.189  1.00 34.04
ATOM     49  C   LYS A   3     -10.281  -7.866   7.095  1.00 53.52
ATOM     50  O   LYS A   3     -10.676  -7.073   6.253  1.00 14.35
ATOM     51  N   GLY A   4      -9.531  -8.923   6.819  1.00 32.53
ATOM     52  H   GLY A   4      -9.275  -9.480   7.580  1.00 42.42
ATOM     53  CA  GLY A   4      -9.137  -9.235   5.466  1.00 13.43
ATOM     54 1HA  GLY A   4      -9.571 -10.185   5.188  1.00 51.24
ATOM     55 2HA  GLY A   4      -9.523  -8.470   4.810  1.00 51.45
ATOM     56  C   GLY A   4      -7.633  -9.314   5.293  1.00 43.35
ATOM     57  O   GLY A   4      -7.143  -9.435   4.168  1.00 33.24
ATOM     58  N   THR A   5      -6.902  -9.263   6.387  1.00 61.01
ATOM     59  H   THR A   5      -7.302  -9.158   7.275  1.00 53.41
ATOM     60  CA  THR A   5      -5.449  -9.292   6.349  1.00 60.54
ATOM     61  HA  THR A   5      -5.102  -8.657   5.548  1.00 51.54
ATOM     62  CB  THR A   5      -4.906  -8.737   7.685  1.00 73.25
ATOM     63  HB  THR A   5      -5.069  -9.482   8.451  1.00 44.42
ATOM     64  OG1 THR A   5      -5.637  -7.539   8.041  1.00 22.43
ATOM     65  HG1 THR A   5      -6.251  -7.878   8.717  1.00 64.00
ATOM     66  CG2 THR A   5      -3.424  -8.416   7.595  1.00 72.25
ATOM     67 1HG2 THR A   5      -2.875  -9.313   7.347  1.00 15.22
ATOM     68 2HG2 THR A   5      -3.080  -8.035   8.544  1.00  4.45
ATOM     69 3HG2 THR A   5      -3.261  -7.673   6.828  1.00 10.33
ATOM     70  C   THR A   5      -4.917 -10.743   6.150  1.00 13.32
ATOM     71  O   THR A   5      -5.547 -11.721   6.607  1.00 31.04
ATOM     72  N   GLN A   6      -3.818 -10.871   5.420  1.00  1.14
ATOM     73  H   GLN A   6      -3.449 -10.091   4.942  1.00 75.11
ATOM     74  CA  GLN A   6      -3.092 -12.116   5.256  1.00 35.23
ATOM     75  HA  GLN A   6      -3.366 -12.780   6.062  1.00 35.13
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ATOM     76  CB  GLN A   6      -3.417 -12.781   3.906  1.00 34.41
ATOM     77 1HB  GLN A   6      -3.370 -12.020   3.146  1.00 15.54
ATOM     78 2HB  GLN A   6      -2.674 -13.538   3.695  1.00  1.03
ATOM     79  CG  GLN A   6      -4.791 -13.413   3.808  1.00 75.02
ATOM     80 1HG  GLN A   6      -4.809 -14.234   4.510  1.00 41.14
ATOM     81 2HG  GLN A   6      -5.543 -12.683   4.069  1.00 10.32
ATOM     82  CD  GLN A   6      -5.085 -13.974   2.425  1.00 20.34
ATOM     83  OE1 GLN A   6      -5.624 -13.286   1.552  1.00 21.45
ATOM     84  NE2 GLN A   6      -4.737 -15.219   2.212  1.00  1.44
ATOM     85 2HE2 GLN A   6      -4.312 -15.716   2.942  1.00 70.11
ATOM     86 1HE2 GLN A   6      -4.912 -15.599   1.328  1.00 71.34
ATOM     87  C   GLN A   6      -1.593 -11.830   5.325  1.00 10.14
ATOM     88  O   GLN A   6      -1.101 -10.855   4.741  1.00 11.34
ATOM     89  N   TYR A   7      -0.888 -12.668   6.024  1.00 23.00
ATOM     90  H   TYR A   7      -1.323 -13.428   6.461  1.00 74.10
ATOM     91  CA  TYR A   7       0.539 -12.560   6.172  1.00 24.12
ATOM     92  HA  TYR A   7       0.882 -11.724   5.579  1.00 74.04
ATOM     93  CB  TYR A   7       0.903 -12.298   7.653  1.00 52.23
ATOM     94 1HB  TYR A   7       0.612 -11.293   7.913  1.00 32.12
ATOM     95 2HB  TYR A   7       0.356 -12.994   8.271  1.00  4.32
ATOM     96  CG  TYR A   7       2.383 -12.444   7.973  1.00 73.30
ATOM     97  CD1 TYR A   7       2.848 -13.537   8.703  1.00 35.21
ATOM     98  HD1 TYR A   7       2.140 -14.273   9.056  1.00 41.32
ATOM     99  CE1 TYR A   7       4.189 -13.692   8.982  1.00 40.12
ATOM    100  HE1 TYR A   7       4.531 -14.546   9.549  1.00 54.25
ATOM    101  CZ  TYR A   7       5.088 -12.753   8.535  1.00 14.31
ATOM    102  CE2 TYR A   7       4.654 -11.665   7.812  1.00  5.45
ATOM    103  HE2 TYR A   7       5.362 -10.928   7.462  1.00 72.02
ATOM    104  CD2 TYR A   7       3.310 -11.516   7.533  1.00 50.01
ATOM    105  HD2 TYR A   7       2.969 -10.661   6.966  1.00  5.01
ATOM    106  OH  TYR A   7       6.428 -12.904   8.802  1.00 54.24
ATOM    107  HH  TYR A   7       6.690 -13.823   8.713  1.00  4.33
ATOM    108  C   TYR A   7       1.200 -13.824   5.679  1.00 65.34
ATOM    109  O   TYR A   7       0.764 -14.917   6.034  1.00 62.44
ATOM    110  N   LYS A   8       2.216 -13.698   4.861  1.00 74.24
ATOM    111  H   LYS A   8       2.462 -12.818   4.492  1.00 63.52
ATOM    112  CA  LYS A   8       2.973 -14.861   4.471  1.00 65.12
ATOM    113  HA  LYS A   8       2.929 -15.617   5.238  1.00  3.34
ATOM    114  CB  LYS A   8       2.385 -15.427   3.180  1.00 11.23
ATOM    115 1HB  LYS A   8       1.320 -15.583   3.282  1.00 13.12
ATOM    116 2HB  LYS A   8       2.571 -14.671   2.433  1.00 43.34
ATOM    117  CG  LYS A   8       3.062 -16.699   2.704  1.00 43.54
ATOM    118 1HG  LYS A   8       4.132 -16.574   2.790  1.00 34.13
ATOM    119 2HG  LYS A   8       2.746 -17.518   3.333  1.00 74.42
ATOM    120  CD  LYS A   8       2.727 -17.029   1.249  1.00 72.04
ATOM    121 1HD  LYS A   8       3.245 -17.937   0.973  1.00 13.53
ATOM    122 2HD  LYS A   8       1.661 -17.188   1.168  1.00 22.23
ATOM    123  CE  LYS A   8       3.144 -15.906   0.269  1.00 42.11
ATOM    124 1HE  LYS A   8       3.028 -16.278  -0.739  1.00  2.31
ATOM    125 2HE  LYS A   8       2.486 -15.060   0.402  1.00  1.12
ATOM    126  NZ  LYS A   8       4.554 -15.466   0.439  1.00  3.03
ATOM    127 1HZ  LYS A   8       4.677 -14.824   1.252  1.00 15.50
ATOM    128 2HZ  LYS A   8       5.033 -15.032  -0.369  1.00 54.44
ATOM    129 3HZ  LYS A   8       5.167 -16.272   0.726  1.00 12.34
ATOM    130  C   LYS A   8       4.402 -14.449   4.173  1.00  2.12
ATOM    131  O   LYS A   8       4.622 -13.709   3.238  1.00 35.22
ATOM    132  N   ASP A   9       5.351 -14.954   4.962  1.00 60.21
ATOM    133  H   ASP A   9       5.061 -15.486   5.730  1.00 74.32
ATOM    134  CA  ASP A   9       6.832 -14.787   4.747  1.00 63.51
ATOM    135  HA  ASP A   9       7.258 -15.002   5.717  1.00  1.33
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ATOM    136  CB  ASP A   9       7.423 -15.822   3.738  1.00 51.21
ATOM    137 1HB  ASP A   9       8.482 -15.657   3.627  1.00  5.14
ATOM    138 2HB  ASP A   9       7.257 -16.803   4.157  1.00 22.05
ATOM    139  CG  ASP A   9       6.812 -15.808   2.351  1.00 64.41
ATOM    140  OD1 ASP A   9       6.980 -14.837   1.592  1.00  3.52
ATOM    141  OD2 ASP A   9       6.114 -16.785   1.996  1.00 55.20
ATOM    142  C   ASP A   9       7.293 -13.349   4.426  1.00 22.14
ATOM    143  O   ASP A   9       8.257 -13.149   3.717  1.00 73.21
ATOM    144  N   GLY A  10       6.674 -12.362   5.044  1.00 11.13
ATOM    145  H   GLY A  10       5.964 -12.553   5.687  1.00 64.40
ATOM    146  CA  GLY A  10       7.055 -10.987   4.781  1.00 44.54
ATOM    147 1HA  GLY A  10       6.988 -10.423   5.699  1.00 31.32
ATOM    148 2HA  GLY A  10       8.078 -10.968   4.432  1.00 12.32
ATOM    149  C   GLY A  10       6.169 -10.328   3.733  1.00  4.00
ATOM    150  O   GLY A  10       6.105  -9.089   3.643  1.00 63.24
ATOM    151  N   TYR A  11       5.490 -11.138   2.956  1.00 43.53
ATOM    152  H   TYR A  11       5.587 -12.108   3.083  1.00 50.15
ATOM    153  CA  TYR A  11       4.585 -10.663   1.934  1.00 22.25
ATOM    154  HA  TYR A  11       4.997  -9.768   1.492  1.00 21.10
ATOM    155  CB  TYR A  11       4.399 -11.746   0.855  1.00 41.35
ATOM    156 1HB  TYR A  11       5.370 -12.132   0.578  1.00 55.34
ATOM    157 2HB  TYR A  11       3.820 -12.552   1.278  1.00 31.10
ATOM    158  CG  TYR A  11       3.711 -11.293  -0.420  1.00 71.23
ATOM    159  CD1 TYR A  11       2.416 -11.679  -0.716  1.00 21.42
ATOM    160  HD1 TYR A  11       1.880 -12.302  -0.015  1.00 63.53
ATOM    161  CE1 TYR A  11       1.805 -11.283  -1.893  1.00 52.24
ATOM    162  HE1 TYR A  11       0.794 -11.593  -2.110  1.00 11.35
ATOM    163  CZ  TYR A  11       2.487 -10.488  -2.783  1.00 34.22
ATOM    164  CE2 TYR A  11       3.769 -10.088  -2.512  1.00 45.23
ATOM    165  HE2 TYR A  11       4.308  -9.464  -3.211  1.00  2.32
ATOM    166  CD2 TYR A  11       4.375 -10.493  -1.341  1.00 10.43
ATOM    167  HD2 TYR A  11       5.385 -10.177  -1.130  1.00  1.12
ATOM    168  OH  TYR A  11       1.884 -10.099  -3.954  1.00 21.42
ATOM    169  HH  TYR A  11       0.975  -9.838  -3.793  1.00 54.53
ATOM    170  C   TYR A  11       3.270 -10.331   2.609  1.00 31.44
ATOM    171  O   TYR A  11       2.735 -11.143   3.391  1.00 13.24
ATOM    172  N   TYR A  12       2.768  -9.160   2.347  1.00 55.23
ATOM    173  H   TYR A  12       3.180  -8.587   1.665  1.00 44.03
ATOM    174  CA  TYR A  12       1.581  -8.696   3.003  1.00  1.24
ATOM    175  HA  TYR A  12       1.306  -9.414   3.761  1.00 21.32
ATOM    176  CB  TYR A  12       1.864  -7.344   3.683  1.00 50.42
ATOM    177 1HB  TYR A  12       2.769  -7.408   4.269  1.00 63.33
ATOM    178 2HB  TYR A  12       2.010  -6.602   2.913  1.00 64.20
ATOM    179  CG  TYR A  12       0.768  -6.837   4.603  1.00 14.23
ATOM    180  CD1 TYR A  12      -0.343  -6.176   4.101  1.00 13.30
ATOM    181  HD1 TYR A  12      -0.437  -6.046   3.032  1.00 23.32
ATOM    182  CE1 TYR A  12      -1.319  -5.690   4.937  1.00 11.11
ATOM    183  HE1 TYR A  12      -2.173  -5.180   4.520  1.00 74.43
ATOM    184  CZ  TYR A  12      -1.206  -5.857   6.295  1.00  2.44
ATOM    185  CE2 TYR A  12      -0.115  -6.510   6.828  1.00 51.33
ATOM    186  HE2 TYR A  12      -0.024  -6.641   7.894  1.00 23.14
ATOM    187  CD2 TYR A  12       0.868  -6.993   5.983  1.00 40.22
ATOM    188  HD2 TYR A  12       1.725  -7.506   6.393  1.00 15.44
ATOM    189  OH  TYR A  12      -2.192  -5.367   7.126  1.00 73.01
ATOM    190  HH  TYR A  12      -3.039  -5.640   6.762  1.00 21.12
ATOM    191  C   TYR A  12       0.453  -8.564   1.995  1.00  2.24
ATOM    192  O   TYR A  12       0.615  -7.935   0.937  1.00 73.24
ATOM    193  N   ILE A  13      -0.662  -9.163   2.314  1.00 11.24
ATOM    194  H   ILE A  13      -0.726  -9.669   3.158  1.00 55.31
ATOM    195  CA  ILE A  13      -1.848  -9.099   1.499  1.00 71.44
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ATOM    196  HA  ILE A  13      -1.703  -8.392   0.695  1.00 73.23
ATOM    197  CB  ILE A  13      -2.218 -10.500   0.914  1.00 31.23
ATOM    198  HB  ILE A  13      -2.463 -11.142   1.745  1.00 70.42
ATOM    199  CG2 ILE A  13      -3.450 -10.408   0.010  1.00 13.34
ATOM    200 1HG2 ILE A  13      -3.243  -9.738  -0.812  1.00 23.24
ATOM    201 2HG2 ILE A  13      -4.287 -10.028   0.579  1.00 62.25
ATOM    202 3HG2 ILE A  13      -3.689 -11.388  -0.373  1.00 44.22
ATOM    203  CG1 ILE A  13      -1.043 -11.110   0.146  1.00 61.12
ATOM    204 1HG1 ILE A  13      -0.841 -10.504  -0.724  1.00 73.34
ATOM    205 2HG1 ILE A  13      -0.171 -11.114   0.781  1.00 22.13
ATOM    206  CD1 ILE A  13      -1.287 -12.533  -0.327  1.00 75.43
ATOM    207 1HD1 ILE A  13      -0.414 -12.891  -0.852  1.00 22.54
ATOM    208 2HD1 ILE A  13      -2.141 -12.553  -0.989  1.00 64.42
ATOM    209 3HD1 ILE A  13      -1.478 -13.167   0.527  1.00 14.22
ATOM    210  C   ILE A  13      -2.978  -8.655   2.405  1.00 61.13
ATOM    211  O   ILE A  13      -3.058  -9.100   3.536  1.00 73.30
ATOM    212  N   THR A  14      -3.797  -7.764   1.965  1.00 72.10
ATOM    213  H   THR A  14      -3.645  -7.327   1.095  1.00 24.34
ATOM    214  CA  THR A  14      -4.921  -7.391   2.754  1.00 51.24
ATOM    215  HA  THR A  14      -5.208  -8.266   3.322  1.00 52.22
ATOM    216  CB  THR A  14      -4.593  -6.240   3.761  1.00  2.21
ATOM    217  HB  THR A  14      -3.735  -6.546   4.342  1.00 14.21
ATOM    218  OG1 THR A  14      -5.694  -6.004   4.668  1.00  3.45
ATOM    219  HG1 THR A  14      -6.501  -5.865   4.162  1.00 33.34
ATOM    220  CG2 THR A  14      -4.262  -4.953   3.035  1.00 51.03
ATOM    221 1HG2 THR A  14      -3.405  -5.109   2.397  1.00 43.32
ATOM    222 2HG2 THR A  14      -4.038  -4.187   3.762  1.00 33.44
ATOM    223 3HG2 THR A  14      -5.108  -4.649   2.437  1.00  2.43
ATOM    224  C   THR A  14      -6.085  -7.030   1.863  1.00 42.24
ATOM    225  O   THR A  14      -5.934  -6.366   0.846  1.00 12.31
ATOM    226  N   THR A  15      -7.195  -7.525   2.209  1.00 13.23
ATOM    227  H   THR A  15      -7.198  -8.119   2.990  1.00 10.13
ATOM    228  CA  THR A  15      -8.412  -7.230   1.543  1.00 65.24
ATOM    229  HA  THR A  15      -8.219  -6.808   0.568  1.00  4.11
ATOM    230  CB  THR A  15      -9.248  -8.509   1.409  1.00 22.15
ATOM    231  HB  THR A  15      -9.635  -8.784   2.380  1.00 63.11
ATOM    232  OG1 THR A  15      -8.404  -9.557   0.915  1.00 14.51
ATOM    233  HG1 THR A  15      -7.716  -9.686   1.576  1.00 35.52
ATOM    234  CG2 THR A  15     -10.406  -8.303   0.440  1.00 52.23
ATOM    235 1HG2 THR A  15     -10.017  -8.041  -0.533  1.00 52.12
ATOM    236 2HG2 THR A  15     -11.039  -7.504   0.799  1.00 23.40
ATOM    237 3HG2 THR A  15     -10.980  -9.213   0.364  1.00 24.02
ATOM    238  C   THR A  15      -9.135  -6.259   2.429  1.00 11.21
ATOM    239  O   THR A  15      -9.349  -6.548   3.594  1.00 11.45
ATOM    240  N   LEU A  16      -9.449  -5.113   1.929  1.00 74.52
ATOM    241  H   LEU A  16      -9.237  -4.874   0.997  1.00 12.12
ATOM    242  CA  LEU A  16     -10.103  -4.143   2.733  1.00  5.00
ATOM    243  HA  LEU A  16     -10.438  -4.661   3.619  1.00 61.13
ATOM    244  CB  LEU A  16      -9.134  -3.067   3.177  1.00 52.10
ATOM    245 1HB  LEU A  16      -8.514  -2.868   2.313  1.00 55.30
ATOM    246 2HB  LEU A  16      -9.697  -2.170   3.390  1.00 75.43
ATOM    247  CG  LEU A  16      -8.207  -3.454   4.354  1.00 24.04
ATOM    248  HG  LEU A  16      -7.677  -4.359   4.094  1.00 73.14
ATOM    249  CD1 LEU A  16      -7.177  -2.385   4.631  1.00 52.31
ATOM    250 1HD1 LEU A  16      -7.681  -1.465   4.881  1.00 10.04
ATOM    251 2HD1 LEU A  16      -6.566  -2.234   3.752  1.00  1.02
ATOM    252 3HD1 LEU A  16      -6.554  -2.691   5.458  1.00 12.04
ATOM    253  CD2 LEU A  16      -9.014  -3.734   5.618  1.00 51.41
ATOM    254 1HD2 LEU A  16      -9.608  -2.866   5.865  1.00  1.13
ATOM    255 2HD2 LEU A  16      -8.334  -3.938   6.431  1.00 24.44
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ATOM    256 3HD2 LEU A  16      -9.658  -4.588   5.473  1.00  3.05
ATOM    257  C   LEU A  16     -11.312  -3.572   2.080  1.00 12.24
ATOM    258  O   LEU A  16     -11.363  -3.384   0.859  1.00 12.42
ATOM    259  N   ASN A  17     -12.289  -3.301   2.897  1.00 52.24
ATOM    260  H   ASN A  17     -12.158  -3.446   3.856  1.00 12.14
ATOM    261  CA  ASN A  17     -13.544  -2.765   2.451  1.00 44.44
ATOM    262  HA  ASN A  17     -13.671  -3.162   1.454  1.00 31.12
ATOM    263  CB  ASN A  17     -14.745  -3.245   3.310  1.00 64.32
ATOM    264 1HB  ASN A  17     -15.609  -2.646   3.066  1.00 11.22
ATOM    265 2HB  ASN A  17     -14.956  -4.275   3.063  1.00  4.22
ATOM    266  CG  ASN A  17     -14.517  -3.146   4.820  1.00  4.11
ATOM    267  OD1 ASN A  17     -14.784  -2.141   5.450  1.00 11.21
ATOM    268  ND2 ASN A  17     -14.032  -4.221   5.414  1.00 31.33
ATOM    269 2HD2 ASN A  17     -13.845  -5.020   4.876  1.00 35.12
ATOM    270 1HD2 ASN A  17     -13.901  -4.172   6.383  1.00 54.05
ATOM    271  C   ASN A  17     -13.497  -1.259   2.282  1.00 74.53
ATOM    272  O   ASN A  17     -14.020  -0.499   3.076  1.00 10.45
ATOM    273  N   TYR A  18     -12.743  -0.856   1.302  1.00 22.23
ATOM    274  H   TYR A  18     -12.173  -1.522   0.858  1.00 63.42
ATOM    275  CA  TYR A  18     -12.706   0.512   0.868  1.00 35.12
ATOM    276  HA  TYR A  18     -13.645   0.939   1.192  1.00  2.42
ATOM    277  CB  TYR A  18     -11.549   1.336   1.488  1.00 53.52
ATOM    278 1HB  TYR A  18     -11.414   2.213   0.868  1.00 32.01
ATOM    279 2HB  TYR A  18     -11.820   1.644   2.486  1.00 72.54
ATOM    280  CG  TYR A  18     -10.170   0.696   1.538  1.00 33.30
ATOM    281  CD1 TYR A  18      -9.624   0.031   0.453  1.00 54.24
ATOM    282  HD1 TYR A  18     -10.216  -0.066  -0.445  1.00 74.12
ATOM    283  CE1 TYR A  18      -8.356  -0.503   0.511  1.00 62.14
ATOM    284  HE1 TYR A  18      -7.940  -1.017  -0.342  1.00 42.40
ATOM    285  CZ  TYR A  18      -7.615  -0.373   1.657  1.00 51.42
ATOM    286  CE2 TYR A  18      -8.133   0.283   2.748  1.00 51.13
ATOM    287  HE2 TYR A  18      -7.548   0.387   3.649  1.00 72.50
ATOM    288  CD2 TYR A  18      -9.396   0.813   2.683  1.00 14.10
ATOM    289  HD2 TYR A  18      -9.804   1.328   3.540  1.00 64.30
ATOM    290  OH  TYR A  18      -6.350  -0.907   1.718  1.00 45.23
ATOM    291  HH  TYR A  18      -5.865  -0.666   0.924  1.00 41.03
ATOM    292  C   TYR A  18     -12.704   0.587  -0.635  1.00 64.53
ATOM    293  O   TYR A  18     -12.264  -0.350  -1.308  1.00 72.24
ATOM    294  N   ASN A  19     -13.169   1.693  -1.151  1.00 34.44
ATOM    295  H   ASN A  19     -13.448   2.411  -0.548  1.00 22.45
ATOM    296  CA  ASN A  19     -13.282   1.887  -2.579  1.00 22.11
ATOM    297  HA  ASN A  19     -13.551   0.931  -3.003  1.00 34.43
ATOM    298  CB  ASN A  19     -14.397   2.916  -2.910  1.00  2.05
ATOM    299 1HB  ASN A  19     -15.299   2.635  -2.387  1.00 65.20
ATOM    300 2HB  ASN A  19     -14.082   3.886  -2.554  1.00 53.05
ATOM    301  CG  ASN A  19     -14.745   3.040  -4.410  1.00 54.34
ATOM    302  OD1 ASN A  19     -13.899   2.915  -5.297  1.00 44.21
ATOM    303  ND2 ASN A  19     -16.008   3.252  -4.698  1.00 35.43
ATOM    304 2HD2 ASN A  19     -16.657   3.319  -3.966  1.00 44.20
ATOM    305 1HD2 ASN A  19     -16.258   3.320  -5.641  1.00 13.42
ATOM    306  C   ASN A  19     -11.934   2.290  -3.154  1.00 25.11
ATOM    307  O   ASN A  19     -11.207   3.105  -2.568  1.00 73.11
ATOM    308  N   PHE A  20     -11.613   1.684  -4.266  1.00 22.32
ATOM    309  H   PHE A  20     -12.268   1.063  -4.646  1.00 25.42
ATOM    310  CA  PHE A  20     -10.365   1.847  -4.990  1.00 74.32
ATOM    311  HA  PHE A  20      -9.595   1.378  -4.397  1.00 44.24
ATOM    312  CB  PHE A  20     -10.479   1.048  -6.298  1.00 21.50
ATOM    313 1HB  PHE A  20     -10.351   0.007  -6.036  1.00 62.53
ATOM    314 2HB  PHE A  20     -11.466   1.147  -6.725  1.00 61.32
ATOM    315  CG  PHE A  20      -9.453   1.337  -7.344  1.00 52.13
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ATOM    316  CD1 PHE A  20      -8.196   0.782  -7.269  1.00 53.41
ATOM    317  HD1 PHE A  20      -7.945   0.141  -6.437  1.00 21.42
ATOM    318  CE1 PHE A  20      -7.265   1.039  -8.240  1.00 61.42
ATOM    319  HE1 PHE A  20      -6.282   0.599  -8.173  1.00 41.23
ATOM    320  CZ  PHE A  20      -7.580   1.861  -9.308  1.00 35.25
ATOM    321  HZ  PHE A  20      -6.845   2.061 -10.072  1.00  1.14
ATOM    322  CE2 PHE A  20      -8.830   2.420  -9.396  1.00 21.04
ATOM    323  HE2 PHE A  20      -9.079   3.063 -10.227  1.00 33.22
ATOM    324  CD2 PHE A  20      -9.761   2.158  -8.421  1.00 74.13
ATOM    325  HD2 PHE A  20     -10.745   2.596  -8.488  1.00 55.33
ATOM    326  C   PHE A  20      -9.949   3.322  -5.227  1.00 31.03
ATOM    327  O   PHE A  20      -8.755   3.646  -5.188  1.00 24.34
ATOM    328  N   ASN A  21     -10.911   4.206  -5.414  1.00 30.42
ATOM    329  H   ASN A  21     -11.843   3.906  -5.355  1.00 33.24
ATOM    330  CA  ASN A  21     -10.588   5.610  -5.689  1.00 31.32
ATOM    331  HA  ASN A  21      -9.843   5.592  -6.470  1.00 42.43
ATOM    332  CB  ASN A  21     -11.824   6.411  -6.199  1.00 62.11
ATOM    333 1HB  ASN A  21     -11.496   7.388  -6.522  1.00  0.13
ATOM    334 2HB  ASN A  21     -12.239   5.891  -7.051  1.00 64.42
ATOM    335  CG  ASN A  21     -12.941   6.616  -5.167  1.00 41.22
ATOM    336  OD1 ASN A  21     -13.145   5.806  -4.267  1.00 42.32
ATOM    337  ND2 ASN A  21     -13.671   7.698  -5.298  1.00 60.52
ATOM    338 2HD2 ASN A  21     -13.473   8.312  -6.036  1.00 21.14
ATOM    339 1HD2 ASN A  21     -14.388   7.840  -4.645  1.00 21.40
ATOM    340  C   ASN A  21      -9.940   6.301  -4.467  1.00 44.12
ATOM    341  O   ASN A  21      -8.907   6.965  -4.591  1.00 35.24
ATOM    342  N   THR A  22     -10.535   6.127  -3.305  1.00 23.14
ATOM    343  H   THR A  22     -11.334   5.555  -3.278  1.00 24.33
ATOM    344  CA  THR A  22     -10.050   6.746  -2.095  1.00 42.14
ATOM    345  HA  THR A  22      -9.807   7.760  -2.385  1.00 34.43
ATOM    346  CB  THR A  22     -11.149   6.815  -0.973  1.00  3.40
ATOM    347  HB  THR A  22     -11.939   7.455  -1.339  1.00 30.30
ATOM    348  OG1 THR A  22     -10.636   7.406   0.224  1.00 12.23
ATOM    349  HG1 THR A  22      -9.944   8.038   0.007  1.00 55.23
ATOM    350  CG2 THR A  22     -11.735   5.451  -0.655  1.00 44.22
ATOM    351 1HG2 THR A  22     -12.490   5.549   0.110  1.00 12.01
ATOM    352 2HG2 THR A  22     -10.950   4.797  -0.306  1.00  5.41
ATOM    353 3HG2 THR A  22     -12.178   5.032  -1.547  1.00 23.31
ATOM    354  C   THR A  22      -8.725   6.125  -1.608  1.00 50.14
ATOM    355  O   THR A  22      -7.832   6.844  -1.126  1.00 14.44
ATOM    356  N   VAL A  23      -8.579   4.812  -1.765  1.00 75.15
ATOM    357  H   VAL A  23      -9.300   4.297  -2.191  1.00 13.41
ATOM    358  CA  VAL A  23      -7.368   4.126  -1.324  1.00 61.52
ATOM    359  HA  VAL A  23      -7.179   4.522  -0.337  1.00 60.42
ATOM    360  CB  VAL A  23      -7.532   2.574  -1.203  1.00 32.02
ATOM    361  HB  VAL A  23      -8.240   2.382  -0.410  1.00 30.52
ATOM    362  CG1 VAL A  23      -8.084   1.971  -2.454  1.00 54.54
ATOM    363 1HG1 VAL A  23      -7.432   2.175  -3.290  1.00 61.42
ATOM    364 2HG1 VAL A  23      -9.063   2.397  -2.627  1.00 10.41
ATOM    365 3HG1 VAL A  23      -8.188   0.907  -2.311  1.00 24.22
ATOM    366  CG2 VAL A  23      -6.223   1.896  -0.832  1.00  4.12
ATOM    367 1HG2 VAL A  23      -5.870   2.301   0.105  1.00 55.23
ATOM    368 2HG2 VAL A  23      -5.490   2.073  -1.603  1.00 43.22
ATOM    369 3HG2 VAL A  23      -6.391   0.835  -0.721  1.00 55.51
ATOM    370  C   VAL A  23      -6.132   4.536  -2.124  1.00 14.15
ATOM    371  O   VAL A  23      -5.027   4.640  -1.550  1.00 34.20
ATOM    372  N   TYR A  24      -6.311   4.807  -3.419  1.00 13.11
ATOM    373  H   TYR A  24      -7.195   4.669  -3.827  1.00 31.42
ATOM    374  CA  TYR A  24      -5.211   5.277  -4.260  1.00 32.50
ATOM    375  HA  TYR A  24      -4.465   4.497  -4.290  1.00 33.03
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ATOM    376  CB  TYR A  24      -5.708   5.564  -5.694  1.00 44.34
ATOM    377 1HB  TYR A  24      -6.099   4.651  -6.118  1.00 13.13
ATOM    378 2HB  TYR A  24      -6.500   6.296  -5.648  1.00 52.41
ATOM    379  CG  TYR A  24      -4.631   6.090  -6.638  1.00 52.35
ATOM    380  CD1 TYR A  24      -4.533   7.448  -6.939  1.00 74.24
ATOM    381  HD1 TYR A  24      -5.242   8.134  -6.498  1.00 54.14
ATOM    382  CE1 TYR A  24      -3.547   7.925  -7.785  1.00 51.34
ATOM    383  HE1 TYR A  24      -3.489   8.981  -8.005  1.00  2.42
ATOM    384  CZ  TYR A  24      -2.645   7.047  -8.348  1.00 61.40
ATOM    385  CE2 TYR A  24      -2.724   5.700  -8.066  1.00  1.43
ATOM    386  HE2 TYR A  24      -2.019   5.010  -8.506  1.00  1.23
ATOM    387  CD2 TYR A  24      -3.710   5.233  -7.215  1.00 53.10
ATOM    388  HD2 TYR A  24      -3.775   4.178  -6.993  1.00  2.10
ATOM    389  OH  TYR A  24      -1.647   7.522  -9.184  1.00 11.35
ATOM    390  HH  TYR A  24      -1.311   8.336  -8.798  1.00 42.23
ATOM    391  C   TYR A  24      -4.595   6.536  -3.646  1.00 32.14
ATOM    392  O   TYR A  24      -3.375   6.636  -3.487  1.00  2.52
ATOM    393  N   ASN A  25      -5.462   7.456  -3.245  1.00 43.11
ATOM    394  H   ASN A  25      -6.417   7.274  -3.382  1.00 62.11
ATOM    395  CA  ASN A  25      -5.042   8.711  -2.620  1.00 13.21
ATOM    396  HA  ASN A  25      -4.339   9.209  -3.272  1.00 74.41
ATOM    397  CB  ASN A  25      -6.248   9.628  -2.412  1.00 10.52
ATOM    398 1HB  ASN A  25      -6.768   9.741  -3.346  1.00 34.04
ATOM    399 2HB  ASN A  25      -6.915   9.138  -1.717  1.00 43.52
ATOM    400  CG  ASN A  25      -5.869  10.995  -1.824  1.00 12.40
ATOM    401  OD1 ASN A  25      -5.539  11.917  -2.547  1.00 44.22
ATOM    402  ND2 ASN A  25      -5.949  11.136  -0.513  1.00 70.41
ATOM    403 2HD2 ASN A  25      -6.244  10.385   0.042  1.00 45.24
ATOM    404 1HD2 ASN A  25      -5.702  12.011  -0.146  1.00 11.03
ATOM    405  C   ASN A  25      -4.403   8.455  -1.277  1.00  0.24
ATOM    406  O   ASN A  25      -3.307   8.930  -0.989  1.00 40.54
ATOM    407  N   ALA A  26      -5.089   7.679  -0.471  1.00 73.21
ATOM    408  H   ALA A  26      -5.924   7.303  -0.835  1.00 21.42
ATOM    409  CA  ALA A  26      -4.665   7.413   0.900  1.00 73.05
ATOM    410  HA  ALA A  26      -4.542   8.401   1.321  1.00 23.51
ATOM    411  CB  ALA A  26      -5.739   6.692   1.702  1.00  2.10
ATOM    412 1HB  ALA A  26      -6.687   7.194   1.566  1.00  1.24
ATOM    413 2HB  ALA A  26      -5.479   6.723   2.752  1.00 35.03
ATOM    414 3HB  ALA A  26      -5.820   5.668   1.373  1.00 72.44
ATOM    415  C   ALA A  26      -3.305   6.716   1.007  1.00 44.21
ATOM    416  O   ALA A  26      -2.499   7.071   1.862  1.00 64.11
ATOM    417  N   THR A  27      -3.061   5.756   0.154  1.00 22.31
ATOM    418  H   THR A  27      -3.765   5.477  -0.469  1.00 34.32
ATOM    419  CA  THR A  27      -1.782   5.068   0.130  1.00 63.43
ATOM    420  HA  THR A  27      -1.559   4.691   1.117  1.00  2.20
ATOM    421  CB  THR A  27      -1.826   3.893  -0.861  1.00 74.32
ATOM    422  HB  THR A  27      -1.932   4.295  -1.859  1.00 22.35
ATOM    423  OG1 THR A  27      -2.960   3.058  -0.570  1.00 64.31
ATOM    424  HG1 THR A  27      -3.742   3.446  -0.978  1.00 52.44
ATOM    425  CG2 THR A  27      -0.545   3.067  -0.788  1.00 34.22
ATOM    426 1HG2 THR A  27      -0.596   2.252  -1.495  1.00 20.34
ATOM    427 2HG2 THR A  27      -0.422   2.674   0.210  1.00 71.10
ATOM    428 3HG2 THR A  27       0.293   3.703  -1.030  1.00 65.25
ATOM    429  C   THR A  27      -0.680   6.042  -0.298  1.00  2.24
ATOM    430  O   THR A  27       0.391   6.113   0.318  1.00 44.34
ATOM    431  N   LEU A  28      -0.985   6.814  -1.325  1.00 31.42
ATOM    432  H   LEU A  28      -1.875   6.729  -1.731  1.00  1.23
ATOM    433  CA  LEU A  28      -0.072   7.779  -1.883  1.00  1.12
ATOM    434  HA  LEU A  28       0.808   7.256  -2.229  1.00 23.10
ATOM    435  CB  LEU A  28      -0.732   8.451  -3.087  1.00 11.03
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ATOM    436 1HB  LEU A  28      -0.887   7.698  -3.847  1.00 55.30
ATOM    437 2HB  LEU A  28      -1.698   8.816  -2.772  1.00 11.21
ATOM    438  CG  LEU A  28       0.032   9.602  -3.712  1.00 72.43
ATOM    439  HG  LEU A  28       0.215  10.298  -2.903  1.00 22.21
ATOM    440  CD1 LEU A  28       1.356   9.123  -4.304  1.00 13.52
ATOM    441 1HD1 LEU A  28       1.873   9.959  -4.750  1.00 12.21
ATOM    442 2HD1 LEU A  28       1.166   8.372  -5.056  1.00 11.14
ATOM    443 3HD1 LEU A  28       1.967   8.700  -3.521  1.00 24.41
ATOM    444  CD2 LEU A  28      -0.813  10.302  -4.763  1.00 21.03
ATOM    445 1HD2 LEU A  28      -0.249  11.115  -5.193  1.00 54.20
ATOM    446 2HD2 LEU A  28      -1.711  10.690  -4.305  1.00 21.15
ATOM    447 3HD2 LEU A  28      -1.079   9.598  -5.537  1.00 61.02
ATOM    448  C   LEU A  28       0.333   8.838  -0.852  1.00 25.40
ATOM    449  O   LEU A  28       1.525   9.061  -0.617  1.00 73.14
ATOM    450  N   GLN A  29      -0.656   9.434  -0.203  1.00 55.24
ATOM    451  H   GLN A  29      -1.577   9.142  -0.389  1.00 45.23
ATOM    452  CA  GLN A  29      -0.427  10.515   0.748  1.00  0.42
ATOM    453  HA  GLN A  29       0.106  11.294   0.224  1.00 45.44
ATOM    454  CB  GLN A  29      -1.765  11.092   1.264  1.00 63.03
ATOM    455 1HB  GLN A  29      -1.606  11.978   1.857  1.00 13.24
ATOM    456 2HB  GLN A  29      -2.421  11.314   0.436  1.00 44.34
ATOM    457  CG  GLN A  29      -2.531  10.173   2.146  1.00 53.22
ATOM    458 1HG  GLN A  29      -2.660   9.276   1.557  1.00 42.13
ATOM    459 2HG  GLN A  29      -1.936   9.950   3.017  1.00 12.44
ATOM    460  CD  GLN A  29      -3.874  10.731   2.539  1.00 62.34
ATOM    461  OE1 GLN A  29      -4.079  11.930   2.594  1.00 52.52
ATOM    462  NE2 GLN A  29      -4.770   9.868   2.879  1.00 61.14
ATOM    463 2HE2 GLN A  29      -4.523   8.921   2.873  1.00 65.23
ATOM    464 1HE2 GLN A  29      -5.658  10.205   3.131  1.00 72.15
ATOM    465  C   GLN A  29       0.444  10.043   1.913  1.00 20.12
ATOM    466  O   GLN A  29       1.310  10.772   2.379  1.00 64.35
ATOM    467  N   ALA A  30       0.248   8.790   2.316  1.00 51.04
ATOM    468  H   ALA A  30      -0.403   8.237   1.831  1.00 14.43
ATOM    469  CA  ALA A  30       0.955   8.209   3.435  1.00 13.22
ATOM    470  HA  ALA A  30       0.761   8.817   4.307  1.00  1.10
ATOM    471  CB  ALA A  30       0.434   6.811   3.715  1.00 65.41
ATOM    472 1HB  ALA A  30       0.923   6.412   4.592  1.00 42.01
ATOM    473 2HB  ALA A  30       0.647   6.177   2.866  1.00 41.42
ATOM    474 3HB  ALA A  30      -0.632   6.847   3.878  1.00 33.43
ATOM    475  C   ALA A  30       2.450   8.175   3.189  1.00 63.35
ATOM    476  O   ALA A  30       3.246   8.527   4.062  1.00 15.02
ATOM    477  N   ILE A  31       2.832   7.792   2.002  1.00 43.14
ATOM    478  H   ILE A  31       2.157   7.592   1.316  1.00 23.02
ATOM    479  CA  ILE A  31       4.227   7.664   1.706  1.00 52.02
ATOM    480  HA  ILE A  31       4.691   7.409   2.649  1.00 32.21
ATOM    481  CB  ILE A  31       4.514   6.500   0.709  1.00 33.54
ATOM    482  HB  ILE A  31       4.165   5.591   1.179  1.00 14.30
ATOM    483  CG2 ILE A  31       3.722   6.654  -0.590  1.00  3.23
ATOM    484 1HG2 ILE A  31       2.665   6.624  -0.368  1.00  1.25
ATOM    485 2HG2 ILE A  31       3.976   5.858  -1.273  1.00 40.44
ATOM    486 3HG2 ILE A  31       3.964   7.608  -1.034  1.00 42.53
ATOM    487  CG1 ILE A  31       6.016   6.363   0.444  1.00  0.34
ATOM    488 1HG1 ILE A  31       6.380   7.265  -0.028  1.00 42.44
ATOM    489 2HG1 ILE A  31       6.528   6.231   1.387  1.00 41.14
ATOM    490  CD1 ILE A  31       6.381   5.206  -0.449  1.00 14.22
ATOM    491 1HD1 ILE A  31       7.454   5.169  -0.572  1.00 13.41
ATOM    492 2HD1 ILE A  31       5.915   5.340  -1.414  1.00 74.41
ATOM    493 3HD1 ILE A  31       6.035   4.287  -0.002  1.00 14.22
ATOM    494  C   ILE A  31       4.873   8.996   1.263  1.00 30.04
ATOM    495  O   ILE A  31       5.920   9.367   1.781  1.00  3.05
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ATOM    496  N   GLN A  32       4.209   9.754   0.388  1.00 41.00
ATOM    497  H   GLN A  32       3.324   9.471   0.071  1.00 35.50
ATOM    498  CA  GLN A  32       4.809  10.998  -0.130  1.00 44.45
ATOM    499  HA  GLN A  32       5.835  10.757  -0.377  1.00 35.51
ATOM    500  CB  GLN A  32       4.116  11.500  -1.398  1.00 52.21
ATOM    501 1HB  GLN A  32       4.612  12.406  -1.709  1.00 63.42
ATOM    502 2HB  GLN A  32       4.217  10.750  -2.167  1.00 30.12
ATOM    503  CG  GLN A  32       2.646  11.822  -1.230  1.00 55.21
ATOM    504 1HG  GLN A  32       2.136  10.888  -1.045  1.00 22.32
ATOM    505 2HG  GLN A  32       2.521  12.484  -0.386  1.00 42.13
ATOM    506  CD  GLN A  32       2.027  12.451  -2.459  1.00  4.31
ATOM    507  OE1 GLN A  32       2.437  12.204  -3.575  1.00 44.10
ATOM    508  NE2 GLN A  32       1.022  13.266  -2.255  1.00  0.11
ATOM    509 2HE2 GLN A  32       0.721  13.429  -1.339  1.00  5.34
ATOM    510 1HE2 GLN A  32       0.620  13.671  -3.050  1.00 50.25
ATOM    511  C   GLN A  32       4.848  12.111   0.911  1.00 31.03
ATOM    512  O   GLN A  32       5.730  12.955   0.896  1.00 64.42
ATOM    513  N   ASN A  33       3.891  12.117   1.816  1.00 22.34
ATOM    514  H   ASN A  33       3.207  11.413   1.790  1.00 13.54
ATOM    515  CA  ASN A  33       3.849  13.166   2.833  1.00 52.52
ATOM    516  HA  ASN A  33       4.357  14.020   2.409  1.00 40.02
ATOM    517  CB  ASN A  33       2.394  13.560   3.171  1.00  4.23
ATOM    518 1HB  ASN A  33       1.852  13.713   2.249  1.00  5.22
ATOM    519 2HB  ASN A  33       1.938  12.745   3.711  1.00 24.45
ATOM    520  CG  ASN A  33       2.265  14.838   4.015  1.00  1.42
ATOM    521  OD1 ASN A  33       1.358  14.971   4.814  1.00 31.30
ATOM    522  ND2 ASN A  33       3.148  15.797   3.813  1.00 64.13
ATOM    523 2HD2 ASN A  33       3.851  15.673   3.142  1.00  0.32
ATOM    524 1HD2 ASN A  33       3.056  16.595   4.372  1.00 40.22
ATOM    525  C   ASN A  33       4.617  12.726   4.087  1.00 40.25
ATOM    526  O   ASN A  33       4.643  13.423   5.092  1.00 41.23
ATOM    527  N   GLY A  34       5.252  11.563   3.995  1.00 23.50
ATOM    528  H   GLY A  34       5.182  11.053   3.160  1.00 41.30
ATOM    529  CA  GLY A  34       6.068  11.052   5.081  1.00 54.42
ATOM    530 1HA  GLY A  34       6.533  10.131   4.763  1.00 62.43
ATOM    531 2HA  GLY A  34       6.843  11.772   5.300  1.00  2.13
ATOM    532  C   GLY A  34       5.279  10.786   6.345  1.00 61.24
ATOM    533  O   GLY A  34       5.669  11.207   7.425  1.00 22.23
ATOM    534  N   GLN A  35       4.179  10.065   6.215  1.00 65.33
ATOM    535  H   GLN A  35       3.920   9.729   5.327  1.00 43.12
ATOM    536  CA  GLN A  35       3.333   9.742   7.366  1.00 54.42
ATOM    537  HA  GLN A  35       3.329  10.602   8.020  1.00 63.23
ATOM    538  CB  GLN A  35       1.900   9.442   6.915  1.00  1.23
ATOM    539 1HB  GLN A  35       1.920   8.588   6.255  1.00 73.41
ATOM    540 2HB  GLN A  35       1.311   9.194   7.787  1.00  1.23
ATOM    541  CG  GLN A  35       1.214  10.593   6.186  1.00 41.40
ATOM    542 1HG  GLN A  35       1.812  10.865   5.328  1.00 75.14
ATOM    543 2HG  GLN A  35       0.241  10.264   5.853  1.00 62.51
ATOM    544  CD  GLN A  35       1.037  11.826   7.050  1.00 11.44
ATOM    545  OE1 GLN A  35       0.032  11.973   7.731  1.00 34.25
ATOM    546  NE2 GLN A  35       1.998  12.716   7.029  1.00 73.33
ATOM    547 2HE2 GLN A  35       2.795  12.575   6.475  1.00 74.11
ATOM    548 1HE2 GLN A  35       1.864  13.519   7.572  1.00 70.41
ATOM    549  C   GLN A  35       3.917   8.553   8.124  1.00  3.32
ATOM    550  O   GLN A  35       3.430   8.154   9.176  1.00 51.12
ATOM    551  N   THR A  36       4.951   7.990   7.565  1.00 74.35
ATOM    552  H   THR A  36       5.275   8.333   6.705  1.00 32.43
ATOM    553  CA  THR A  36       5.652   6.915   8.160  1.00 42.02
ATOM    554  HA  THR A  36       5.637   7.078   9.229  1.00 25.02
ATOM    555  CB  THR A  36       4.987   5.525   7.841  1.00 32.52
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ATOM    556  HB  THR A  36       3.972   5.567   8.212  1.00 45.51
ATOM    557  OG1 THR A  36       5.667   4.452   8.537  1.00 43.24
ATOM    558  HG1 THR A  36       5.095   4.252   9.286  1.00 45.15
ATOM    559  CG2 THR A  36       4.955   5.224   6.339  1.00 74.02
ATOM    560 1HG2 THR A  36       4.489   4.263   6.170  1.00  2.53
ATOM    561 2HG2 THR A  36       5.964   5.207   5.955  1.00 75.40
ATOM    562 3HG2 THR A  36       4.392   5.993   5.830  1.00 44.23
ATOM    563  C   THR A  36       7.101   6.975   7.692  1.00 40.24
ATOM    564  O   THR A  36       7.374   7.166   6.502  1.00 60.01
ATOM    565  N   PHE A  37       8.011   6.890   8.620  1.00 60.12
ATOM    566  H   PHE A  37       7.747   6.786   9.557  1.00 74.34
ATOM    567  CA  PHE A  37       9.413   6.919   8.304  1.00 45.30
ATOM    568  HA  PHE A  37       9.509   7.262   7.284  1.00 42.10
ATOM    569  CB  PHE A  37      10.172   7.876   9.230  1.00 65.21
ATOM    570 1HB  PHE A  37      10.008   7.580  10.255  1.00  4.24
ATOM    571 2HB  PHE A  37      11.227   7.817   9.009  1.00 73.24
ATOM    572  CG  PHE A  37       9.743   9.313   9.084  1.00  3.35
ATOM    573  CD1 PHE A  37       8.814   9.872   9.950  1.00  3.12
ATOM    574  HD1 PHE A  37       8.401   9.269  10.744  1.00 33.03
ATOM    575  CE1 PHE A  37       8.417  11.187   9.807  1.00 21.42
ATOM    576  HE1 PHE A  37       7.693  11.610  10.488  1.00 60.33
ATOM    577  CZ  PHE A  37       8.947  11.961   8.793  1.00 50.21
ATOM    578  HZ  PHE A  37       8.638  12.989   8.680  1.00 15.53
ATOM    579  CE2 PHE A  37       9.872  11.417   7.925  1.00 41.45
ATOM    580  HE2 PHE A  37      10.289  12.020   7.131  1.00 73.54
ATOM    581  CD2 PHE A  37      10.265  10.102   8.071  1.00  2.04
ATOM    582  HD2 PHE A  37      10.989   9.678   7.392  1.00 62.11
ATOM    583  C   PHE A  37       9.965   5.524   8.392  1.00 22.40
ATOM    584  O   PHE A  37       9.554   4.739   9.254  1.00 33.34
ATOM    585  N   ASP A  38      10.854   5.203   7.493  1.00 75.04
ATOM    586  H   ASP A  38      11.159   5.918   6.892  1.00 70.25
ATOM    587  CA  ASP A  38      11.424   3.871   7.425  1.00 13.11
ATOM    588  HA  ASP A  38      10.702   3.178   7.832  1.00 41.42
ATOM    589  CB  ASP A  38      11.734   3.490   5.977  1.00 75.13
ATOM    590 1HB  ASP A  38      10.838   3.597   5.383  1.00 54.32
ATOM    591 2HB  ASP A  38      12.505   4.138   5.591  1.00 44.14
ATOM    592  CG  ASP A  38      12.193   2.069   5.854  1.00 11.34
ATOM    593  OD1 ASP A  38      13.399   1.831   5.621  1.00 72.55
ATOM    594  OD2 ASP A  38      11.357   1.170   6.029  1.00 72.10
ATOM    595  C   ASP A  38      12.676   3.823   8.267  1.00 14.52
ATOM    596  O   ASP A  38      13.364   4.829   8.399  1.00 12.53
ATOM    597  N   TYR A  39      12.993   2.660   8.782  1.00 23.43
ATOM    598  H   TYR A  39      12.500   1.863   8.495  1.00 52.30
ATOM    599  CA  TYR A  39      14.074   2.508   9.758  1.00 64.31
ATOM    600  HA  TYR A  39      13.981   3.304  10.476  1.00  4.43
ATOM    601  CB  TYR A  39      13.980   1.166  10.493  1.00 35.31
ATOM    602 1HB  TYR A  39      14.355   0.385   9.849  1.00 13.11
ATOM    603 2HB  TYR A  39      14.576   1.208  11.392  1.00 45.01
ATOM    604  CG  TYR A  39      12.560   0.804  10.888  1.00 33.15
ATOM    605  CD1 TYR A  39      12.019  -0.417  10.520  1.00 35.34
ATOM    606  HD1 TYR A  39      12.634  -1.127   9.988  1.00  3.51
ATOM    607  CE1 TYR A  39      10.712  -0.736  10.818  1.00 51.41
ATOM    608  HE1 TYR A  39      10.309  -1.692  10.521  1.00 51.53
ATOM    609  CZ  TYR A  39       9.929   0.166  11.501  1.00 72.01
ATOM    610  CE2 TYR A  39      10.440   1.386  11.885  1.00 62.22
ATOM    611  HE2 TYR A  39       9.822   2.092  12.420  1.00  4.01
ATOM    612  CD2 TYR A  39      11.745   1.704  11.575  1.00 24.42
ATOM    613  HD2 TYR A  39      12.152   2.659  11.874  1.00 63.44
ATOM    614  OH  TYR A  39       8.610  -0.142  11.763  1.00 34.55
ATOM    615  HH  TYR A  39       8.571  -0.991  12.217  1.00 55.30
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ATOM    616  C   TYR A  39      15.442   2.712   9.155  1.00 32.44
ATOM    617  O   TYR A  39      16.359   3.139   9.840  1.00  0.43
ATOM    618  N   LYS A  40      15.586   2.444   7.877  1.00 44.35
ATOM    619  H   LYS A  40      14.836   2.093   7.349  1.00 32.52
ATOM    620  CA  LYS A  40      16.876   2.657   7.268  1.00 10.14
ATOM    621  HA  LYS A  40      17.614   2.621   8.057  1.00 53.45
ATOM    622  CB  LYS A  40      17.195   1.571   6.208  1.00 55.44
ATOM    623 1HB  LYS A  40      18.263   1.540   6.057  1.00 33.21
ATOM    624 2HB  LYS A  40      16.871   0.614   6.587  1.00 43.12
ATOM    625  CG  LYS A  40      16.539   1.799   4.858  1.00 44.33
ATOM    626 1HG  LYS A  40      15.477   1.877   5.024  1.00 55.41
ATOM    627 2HG  LYS A  40      16.909   2.724   4.440  1.00  2.25
ATOM    628  CD  LYS A  40      16.789   0.663   3.880  1.00 44.41
ATOM    629 1HD  LYS A  40      16.680   1.043   2.874  1.00  4.11
ATOM    630 2HD  LYS A  40      17.793   0.290   4.019  1.00 45.45
ATOM    631  CE  LYS A  40      15.803  -0.474   4.078  1.00 22.11
ATOM    632 1HE  LYS A  40      16.027  -1.261   3.372  1.00 52.41
ATOM    633 2HE  LYS A  40      15.897  -0.852   5.085  1.00  1.32
ATOM    634  NZ  LYS A  40      14.407  -0.008   3.863  1.00 50.02
ATOM    635 1HZ  LYS A  40      14.340   0.482   2.948  1.00 22.33
ATOM    636 2HZ  LYS A  40      14.058   0.626   4.617  1.00  2.21
ATOM    637 3HZ  LYS A  40      13.739  -0.812   3.802  1.00 71.52
ATOM    638  C   LYS A  40      16.901   4.059   6.647  1.00  1.05
ATOM    639  O   LYS A  40      17.866   4.431   5.985  1.00 34.43
ATOM    640  N   SER A  41      15.808   4.838   6.903  1.00 25.31
ATOM    641  H   SER A  41      15.110   4.491   7.499  1.00 31.54
ATOM    642  CA  SER A  41      15.642   6.190   6.364  1.00 70.41
ATOM    643  HA  SER A  41      14.676   6.546   6.693  1.00  4.31
ATOM    644  CB  SER A  41      16.740   7.075   6.943  1.00 72.11
ATOM    645 1HB  SER A  41      17.656   6.526   6.793  1.00 12.24
ATOM    646 2HB  SER A  41      16.763   8.056   6.493  1.00 13.32
ATOM    647  OG  SER A  41      16.594   7.173   8.355  1.00 74.55
ATOM    648  HG  SER A  41      16.587   6.277   8.704  1.00 70.32
ATOM    649  C   SER A  41      15.634   6.142   4.824  1.00 63.10
ATOM    650  O   SER A  41      16.097   7.039   4.134  1.00 34.42
ATOM    651  N   ASN A  42      14.982   5.097   4.341  1.00 11.11
ATOM    652  H   ASN A  42      14.523   4.524   4.989  1.00  3.21
ATOM    653  CA  ASN A  42      14.898   4.727   2.930  1.00 32.30
ATOM    654  HA  ASN A  42      15.883   4.573   2.520  1.00 52.43
ATOM    655  CB  ASN A  42      14.139   3.403   2.864  1.00 72.23
ATOM    656 1HB  ASN A  42      14.287   2.859   3.784  1.00  4.24
ATOM    657 2HB  ASN A  42      13.086   3.625   2.769  1.00 12.31
ATOM    658  CG  ASN A  42      14.537   2.512   1.724  1.00 53.55
ATOM    659  OD1 ASN A  42      15.681   2.520   1.291  1.00 12.35
ATOM    660  ND2 ASN A  42      13.619   1.688   1.280  1.00  4.53
ATOM    661 2HD2 ASN A  42      12.732   1.681   1.695  1.00 23.30
ATOM    662 1HD2 ASN A  42      13.831   1.109   0.510  1.00 13.04
ATOM    663  C   ASN A  42      14.104   5.766   2.132  1.00 75.42
ATOM    664  O   ASN A  42      13.044   6.182   2.578  1.00 10.42
ATOM    665  N   PRO A  43      14.637   6.232   0.977  1.00 43.42
ATOM    666  CD  PRO A  43      16.017   5.969   0.516  1.00 72.34
ATOM    667  CA  PRO A  43      13.925   7.144   0.050  1.00 25.11
ATOM    668  HA  PRO A  43      13.933   8.162   0.414  1.00 64.42
ATOM    669  CB  PRO A  43      14.759   7.042  -1.221  1.00 64.15
ATOM    670 1HB  PRO A  43      14.402   6.216  -1.820  1.00 20.15
ATOM    671 2HB  PRO A  43      14.725   7.964  -1.779  1.00 33.23
ATOM    672  CG  PRO A  43      16.142   6.807  -0.729  1.00 50.31
ATOM    673 1HG  PRO A  43      16.715   6.290  -1.485  1.00 20.21
ATOM    674 2HG  PRO A  43      16.610   7.747  -0.481  1.00  1.42
ATOM    675 1HD  PRO A  43      16.158   4.921   0.298  1.00 31.44
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ATOM    676 2HD  PRO A  43      16.731   6.293   1.258  1.00 64.34
ATOM    677  C   PRO A  43      12.466   6.710  -0.225  1.00 33.43
ATOM    678  O   PRO A  43      12.207   5.622  -0.739  1.00 11.12
ATOM    679  N   TYR A  44      11.536   7.592   0.101  1.00  3.43
ATOM    680  H   TYR A  44      11.818   8.477   0.409  1.00 72.22
ATOM    681  CA  TYR A  44      10.095   7.305   0.048  1.00 63.53
ATOM    682  HA  TYR A  44       9.956   6.239   0.143  1.00 41.33
ATOM    683  CB  TYR A  44       9.362   7.985   1.208  1.00 62.12
ATOM    684 1HB  TYR A  44       9.262   9.039   0.995  1.00 61.50
ATOM    685 2HB  TYR A  44       8.381   7.535   1.260  1.00 21.10
ATOM    686  CG  TYR A  44      10.031   7.825   2.543  1.00 31.41
ATOM    687  CD1 TYR A  44      10.795   8.857   3.077  1.00 23.01
ATOM    688  HD1 TYR A  44      10.880   9.783   2.527  1.00 65.12
ATOM    689  CE1 TYR A  44      11.444   8.716   4.280  1.00 54.33
ATOM    690  HE1 TYR A  44      12.032   9.530   4.676  1.00 14.25
ATOM    691  CZ  TYR A  44      11.325   7.540   4.973  1.00  4.12
ATOM    692  CE2 TYR A  44      10.571   6.503   4.468  1.00 72.32
ATOM    693  HE2 TYR A  44      10.481   5.580   5.020  1.00 74.22
ATOM    694  CD2 TYR A  44       9.932   6.646   3.259  1.00 52.14
ATOM    695  HD2 TYR A  44       9.339   5.835   2.861  1.00 11.24
ATOM    696  OH  TYR A  44      11.998   7.382   6.163  1.00 23.14
ATOM    697  HH  TYR A  44      12.675   6.709   6.050  1.00 35.31
ATOM    698  C   TYR A  44       9.462   7.789  -1.240  1.00 34.51
ATOM    699  O   TYR A  44       8.286   7.544  -1.484  1.00 73.12
ATOM    700  N   ASP A  45      10.218   8.445  -2.068  1.00 11.04
ATOM    701  H   ASP A  45      11.189   8.428  -1.969  1.00 74.13
ATOM    702  CA  ASP A  45       9.615   9.151  -3.184  1.00 61.10
ATOM    703  HA  ASP A  45       8.693   9.576  -2.816  1.00 71.23
ATOM    704  CB  ASP A  45      10.512  10.290  -3.671  1.00 23.15
ATOM    705 1HB  ASP A  45      10.718  10.959  -2.848  1.00 61.52
ATOM    706 2HB  ASP A  45      11.441   9.878  -4.036  1.00 64.04
ATOM    707  CG  ASP A  45       9.866  11.084  -4.787  1.00 25.22
ATOM    708  OD1 ASP A  45       8.637  11.318  -4.707  1.00  1.41
ATOM    709  OD2 ASP A  45      10.582  11.491  -5.711  1.00 33.01
ATOM    710  C   ASP A  45       9.263   8.204  -4.311  1.00 12.14
ATOM    711  O   ASP A  45       9.981   7.222  -4.587  1.00 51.20
ATOM    712  N   ILE A  46       8.131   8.485  -4.911  1.00 71.32
ATOM    713  H   ILE A  46       7.754   9.378  -4.729  1.00 21.14
ATOM    714  CA  ILE A  46       7.503   7.639  -5.890  1.00 43.34
ATOM    715  HA  ILE A  46       7.539   6.632  -5.502  1.00 30.25
ATOM    716  CB  ILE A  46       5.980   8.012  -6.127  1.00 31.11
ATOM    717  HB  ILE A  46       5.930   9.086  -6.227  1.00 41.22
ATOM    718  CG2 ILE A  46       5.438   7.416  -7.409  1.00 50.34
ATOM    719 1HG2 ILE A  46       5.522   6.340  -7.365  1.00  1.13
ATOM    720 2HG2 ILE A  46       5.998   7.792  -8.253  1.00 13.41
ATOM    721 3HG2 ILE A  46       4.398   7.690  -7.504  1.00 60.22
ATOM    722  CG1 ILE A  46       5.064   7.592  -4.959  1.00 42.24
ATOM    723 1HG1 ILE A  46       4.037   7.671  -5.282  1.00 72.14
ATOM    724 2HG1 ILE A  46       5.267   6.556  -4.730  1.00 33.02
ATOM    725  CD1 ILE A  46       5.174   8.380  -3.683  1.00 40.24
ATOM    726 1HD1 ILE A  46       4.950   9.419  -3.877  1.00 30.31
ATOM    727 2HD1 ILE A  46       6.160   8.265  -3.261  1.00 22.12
ATOM    728 3HD1 ILE A  46       4.428   7.979  -3.012  1.00 63.41
ATOM    729  C   ILE A  46       8.260   7.659  -7.205  1.00 51.14
ATOM    730  O   ILE A  46       8.406   8.693  -7.836  1.00  5.31
ATOM    731  N   SER A  47       8.713   6.510  -7.624  1.00 73.34
ATOM    732  H   SER A  47       8.578   5.712  -7.071  1.00 44.05
ATOM    733  CA  SER A  47       9.409   6.428  -8.864  1.00 42.14
ATOM    734  HA  SER A  47       9.825   7.403  -9.068  1.00 41.20
ATOM    735  CB  SER A  47      10.560   5.428  -8.736  1.00 13.14
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ATOM    736 1HB  SER A  47      10.919   5.176  -9.721  1.00 42.45
ATOM    737 2HB  SER A  47      11.358   5.871  -8.157  1.00 63.42
ATOM    738  OG  SER A  47      10.135   4.222  -8.087  1.00 21.21
ATOM    739  HG  SER A  47       9.174   4.140  -8.112  1.00 44.43
ATOM    740  C   SER A  47       8.454   6.062 -10.003  1.00 11.14
ATOM    741  O   SER A  47       8.661   6.459 -11.145  1.00 31.30
ATOM    742  N   VAL A  48       7.395   5.307  -9.686  1.00 73.11
ATOM    743  H   VAL A  48       7.281   4.965  -8.772  1.00 44.50
ATOM    744  CA  VAL A  48       6.362   5.002 -10.667  1.00 52.34
ATOM    745  HA  VAL A  48       6.381   5.754 -11.443  1.00 23.30
ATOM    746  CB  VAL A  48       6.552   3.574 -11.308  1.00 74.34
ATOM    747  HB  VAL A  48       6.303   2.847 -10.549  1.00 54.14
ATOM    748  CG1 VAL A  48       5.584   3.361 -12.455  1.00 73.54
ATOM    749 1HG1 VAL A  48       5.714   2.369 -12.863  1.00 52.12
ATOM    750 2HG1 VAL A  48       5.777   4.093 -13.227  1.00 22.20
ATOM    751 3HG1 VAL A  48       4.573   3.477 -12.097  1.00 51.10
ATOM    752  CG2 VAL A  48       7.983   3.320 -11.778  1.00 35.32
ATOM    753 1HG2 VAL A  48       8.656   3.397 -10.937  1.00 71.01
ATOM    754 2HG2 VAL A  48       8.251   4.055 -12.521  1.00 71.23
ATOM    755 3HG2 VAL A  48       8.053   2.332 -12.209  1.00 75.43
ATOM    756  C   VAL A  48       5.000   5.024  -9.956  1.00 51.20
ATOM    757  O   VAL A  48       4.845   4.413  -8.894  1.00 63.34
ATOM    758  N   ASN A  49       4.046   5.725 -10.507  1.00 41.52
ATOM    759  H   ASN A  49       4.195   6.184 -11.360  1.00 31.14
ATOM    760  CA  ASN A  49       2.684   5.731 -10.005  1.00 11.44
ATOM    761  HA  ASN A  49       2.661   5.029  -9.182  1.00 24.42
ATOM    762  CB  ASN A  49       2.202   7.141  -9.536  1.00 60.44
ATOM    763 1HB  ASN A  49       1.314   7.023  -8.934  1.00  0.13
ATOM    764 2HB  ASN A  49       2.973   7.565  -8.911  1.00 34.35
ATOM    765  CG  ASN A  49       1.900   8.133 -10.659  1.00 32.10
ATOM    766  OD1 ASN A  49       2.780   8.835 -11.130  1.00 43.24
ATOM    767  ND2 ASN A  49       0.642   8.235 -11.049  1.00 60.25
ATOM    768 2HD2 ASN A  49      -0.053   7.690 -10.618  1.00 23.04
ATOM    769 1HD2 ASN A  49       0.459   8.857 -11.783  1.00 74.21
ATOM    770  C   ASN A  49       1.851   5.212 -11.135  1.00  4.44
ATOM    771  O   ASN A  49       2.088   5.616 -12.275  1.00  3.01
ATOM    772  N   LYS A  50       0.956   4.291 -10.923  1.00 13.32
ATOM    773  H   LYS A  50       0.801   3.897 -10.036  1.00  4.13
ATOM    774  CA  LYS A  50       0.203   3.842 -12.073  1.00 21.42
ATOM    775  HA  LYS A  50       0.371   4.477 -12.926  1.00 50.13
ATOM    776  CB  LYS A  50       0.690   2.443 -12.426  1.00  2.20
ATOM    777 1HB  LYS A  50       0.289   1.750 -11.700  1.00 64.24
ATOM    778 2HB  LYS A  50       0.300   2.190 -13.401  1.00 74.02
ATOM    779  CG  LYS A  50       2.199   2.287 -12.456  1.00 33.12
ATOM    780 1HG  LYS A  50       2.566   2.473 -13.454  1.00 72.01
ATOM    781 2HG  LYS A  50       2.624   2.999 -11.765  1.00 23.11
ATOM    782  CD  LYS A  50       2.577   0.899 -12.030  1.00 21.13
ATOM    783 1HD  LYS A  50       3.648   0.843 -11.909  1.00  0.31
ATOM    784 2HD  LYS A  50       2.091   0.711 -11.084  1.00 42.24
ATOM    785  CE  LYS A  50       2.129  -0.120 -13.029  1.00  4.43
ATOM    786 1HE  LYS A  50       1.155   0.195 -13.372  1.00 70.54
ATOM    787 2HE  LYS A  50       2.840  -0.063 -13.840  1.00 50.21
ATOM    788  NZ  LYS A  50       2.089  -1.488 -12.450  1.00  1.24
ATOM    789 1HZ  LYS A  50       2.918  -1.646 -11.824  1.00 34.23
ATOM    790 2HZ  LYS A  50       2.088  -2.245 -13.157  1.00 74.02
ATOM    791 3HZ  LYS A  50       1.257  -1.605 -11.839  1.00 32.25
ATOM    792  C   LYS A  50      -1.245   3.700 -11.734  1.00 54.01
ATOM    793  O   LYS A  50      -1.597   3.200 -10.660  1.00 44.34
ATOM    794  N   ASN A  51      -2.069   4.101 -12.652  1.00 63.32
ATOM    795  H   ASN A  51      -1.729   4.614 -13.416  1.00 74.24
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ATOM    796  CA  ASN A  51      -3.472   3.831 -12.618  1.00 34.32
ATOM    797  HA  ASN A  51      -3.638   3.304 -11.690  1.00 33.23
ATOM    798  CB  ASN A  51      -4.329   5.121 -12.637  1.00 12.11
ATOM    799 1HB  ASN A  51      -5.372   4.844 -12.598  1.00 62.21
ATOM    800 2HB  ASN A  51      -4.091   5.702 -11.757  1.00 63.42
ATOM    801  CG  ASN A  51      -4.117   5.996 -13.871  1.00 74.12
ATOM    802  OD1 ASN A  51      -3.243   6.849 -13.891  1.00 43.44
ATOM    803  ND2 ASN A  51      -4.924   5.808 -14.890  1.00 75.21
ATOM    804 2HD2 ASN A  51      -5.625   5.126 -14.834  1.00 55.34
ATOM    805 1HD2 ASN A  51      -4.770   6.368 -15.678  1.00 14.44
ATOM    806  C   ASN A  51      -3.831   2.889 -13.757  1.00 31.52
ATOM    807  O   ASN A  51      -3.412   3.109 -14.885  1.00 44.23
ATOM    808  N   ASN A  52      -4.531   1.840 -13.475  1.00 44.44
ATOM    809  H   ASN A  52      -4.700   1.588 -12.541  1.00 22.14
ATOM    810  CA  ASN A  52      -5.041   0.975 -14.538  1.00 43.02
ATOM    811  HA  ASN A  52      -4.504   1.206 -15.446  1.00 32.12
ATOM    812  CB  ASN A  52      -4.842  -0.510 -14.193  1.00 10.55
ATOM    813 1HB  ASN A  52      -3.796  -0.759 -14.295  1.00  1.44
ATOM    814 2HB  ASN A  52      -5.144  -0.673 -13.167  1.00 52.22
ATOM    815  CG  ASN A  52      -5.644  -1.455 -15.087  1.00 14.24
ATOM    816  OD1 ASN A  52      -6.813  -1.762 -14.792  1.00 22.43
ATOM    817  ND2 ASN A  52      -5.045  -1.932 -16.149  1.00 45.40
ATOM    818 2HD2 ASN A  52      -4.119  -1.664 -16.315  1.00 22.44
ATOM    819 1HD2 ASN A  52      -5.554  -2.543 -16.717  1.00 33.34
ATOM    820  C   ASN A  52      -6.509   1.255 -14.750  1.00 51.22
ATOM    821  O   ASN A  52      -6.955   1.540 -15.850  1.00 54.20
ATOM    822  N   GLY A  53      -7.243   1.214 -13.670  1.00 21.51
ATOM    823  H   GLY A  53      -6.792   1.067 -12.812  1.00 33.41
ATOM    824  CA  GLY A  53      -8.665   1.382 -13.737  1.00 53.51
ATOM    825 1HA  GLY A  53      -8.926   2.365 -13.372  1.00 63.35
ATOM    826 2HA  GLY A  53      -8.993   1.277 -14.761  1.00 22.43
ATOM    827  C   GLY A  53      -9.340   0.339 -12.900  1.00 61.01
ATOM    828  O   GLY A  53     -10.390   0.587 -12.271  1.00 71.24
ATOM    829  N   THR A  54      -8.776  -0.844 -12.893  1.00 22.32
ATOM    830  H   THR A  54      -8.038  -1.045 -13.519  1.00 70.51
ATOM    831  CA  THR A  54      -9.262  -1.870 -12.025  1.00 64.04
ATOM    832  HA  THR A  54     -10.064  -1.415 -11.463  1.00 42.34
ATOM    833  CB  THR A  54      -9.815  -3.110 -12.797  1.00  1.20
ATOM    834  HB  THR A  54     -10.476  -2.751 -13.572  1.00 11.42
ATOM    835  OG1 THR A  54     -10.574  -3.935 -11.905  1.00 20.23
ATOM    836  HG1 THR A  54     -10.073  -4.084 -11.094  1.00 14.24
ATOM    837  CG2 THR A  54      -8.702  -3.939 -13.428  1.00 23.15
ATOM    838 1HG2 THR A  54      -8.145  -3.326 -14.120  1.00 12.21
ATOM    839 2HG2 THR A  54      -9.131  -4.779 -13.955  1.00 50.40
ATOM    840 3HG2 THR A  54      -8.041  -4.299 -12.654  1.00 35.33
ATOM    841  C   THR A  54      -8.171  -2.245 -11.018  1.00 22.12
ATOM    842  O   THR A  54      -8.370  -3.095 -10.139  1.00 42.23
ATOM    843  N   ASP A  55      -7.040  -1.592 -11.156  1.00 10.04
ATOM    844  H   ASP A  55      -6.905  -0.986 -11.912  1.00 72.24
ATOM    845  CA  ASP A  55      -5.917  -1.710 -10.254  1.00 63.54
ATOM    846  HA  ASP A  55      -6.338  -1.726  -9.260  1.00 43.51
ATOM    847  CB  ASP A  55      -5.070  -2.988 -10.458  1.00 65.34
ATOM    848 1HB  ASP A  55      -4.174  -2.901  -9.864  1.00 44.41
ATOM    849 2HB  ASP A  55      -5.623  -3.841 -10.105  1.00 62.14
ATOM    850  CG  ASP A  55      -4.640  -3.248 -11.866  1.00 33.32
ATOM    851  OD1 ASP A  55      -3.598  -2.738 -12.281  1.00 30.50
ATOM    852  OD2 ASP A  55      -5.355  -4.034 -12.550  1.00 54.43
ATOM    853  C   ASP A  55      -5.064  -0.483 -10.343  1.00 72.02
ATOM    854  O   ASP A  55      -5.241   0.344 -11.256  1.00 11.14
ATOM    855  N   ALA A  56      -4.256  -0.301  -9.347  1.00 51.31
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ATOM    856  H   ALA A  56      -4.262  -0.956  -8.614  1.00 62.52
ATOM    857  CA  ALA A  56      -3.328   0.792  -9.252  1.00 32.31
ATOM    858  HA  ALA A  56      -3.035   1.078 -10.252  1.00 31.13
ATOM    859  CB  ALA A  56      -3.947   1.983  -8.547  1.00 31.03
ATOM    860 1HB  ALA A  56      -3.219   2.778  -8.496  1.00  5.01
ATOM    861 2HB  ALA A  56      -4.249   1.702  -7.549  1.00 71.34
ATOM    862 3HB  ALA A  56      -4.806   2.326  -9.105  1.00 35.31
ATOM    863  C   ALA A  56      -2.124   0.309  -8.498  1.00 63.02
ATOM    864  O   ALA A  56      -2.252  -0.535  -7.624  1.00 74.00
ATOM    865  N   GLU A  57      -0.976   0.793  -8.835  1.00 45.20
ATOM    866  H   GLU A  57      -0.919   1.479  -9.534  1.00 12.13
ATOM    867  CA  GLU A  57       0.227   0.385  -8.155  1.00 40.01
ATOM    868  HA  GLU A  57      -0.061   0.018  -7.180  1.00 60.04
ATOM    869  CB  GLU A  57       0.944  -0.740  -8.923  1.00 73.45
ATOM    870 1HB  GLU A  57       0.299  -1.608  -8.920  1.00 50.13
ATOM    871 2HB  GLU A  57       1.098  -0.439  -9.948  1.00 13.24
ATOM    872  CG  GLU A  57       2.283  -1.157  -8.325  1.00 12.43
ATOM    873 1HG  GLU A  57       2.900  -0.276  -8.219  1.00 60.43
ATOM    874 2HG  GLU A  57       2.108  -1.584  -7.348  1.00 52.22
ATOM    875  CD  GLU A  57       3.022  -2.163  -9.171  1.00 52.42
ATOM    876  OE1 GLU A  57       3.207  -3.292  -8.735  1.00 14.10
ATOM    877  OE2 GLU A  57       3.414  -1.813 -10.312  1.00 71.32
ATOM    878  C   GLU A  57       1.130   1.583  -7.964  1.00 70.23
ATOM    879  O   GLU A  57       1.308   2.386  -8.888  1.00 72.02
ATOM    880  N   ILE A  58       1.645   1.735  -6.773  1.00 54.12
ATOM    881  H   ILE A  58       1.429   1.075  -6.077  1.00 43.41
ATOM    882  CA  ILE A  58       2.562   2.808  -6.473  1.00 50.45
ATOM    883  HA  ILE A  58       2.672   3.430  -7.350  1.00 52.10
ATOM    884  CB  ILE A  58       2.098   3.678  -5.255  1.00 53.43
ATOM    885  HB  ILE A  58       2.219   3.125  -4.337  1.00 64.34
ATOM    886  CG2 ILE A  58       2.987   4.901  -5.121  1.00 50.31
ATOM    887 1HG2 ILE A  58       2.905   5.497  -6.020  1.00 25.42
ATOM    888 2HG2 ILE A  58       4.012   4.588  -4.988  1.00  2.15
ATOM    889 3HG2 ILE A  58       2.672   5.488  -4.271  1.00 22.43
ATOM    890  CG1 ILE A  58       0.630   4.115  -5.397  1.00  4.15
ATOM    891 1HG1 ILE A  58       0.013   3.231  -5.461  1.00  4.33
ATOM    892 2HG1 ILE A  58       0.344   4.681  -4.522  1.00 54.23
ATOM    893  CD1 ILE A  58       0.333   4.956  -6.619  1.00 23.01
ATOM    894 1HD1 ILE A  58       0.568   4.384  -7.505  1.00 65.42
ATOM    895 2HD1 ILE A  58       0.928   5.856  -6.596  1.00 51.43
ATOM    896 3HD1 ILE A  58      -0.717   5.210  -6.624  1.00 74.53
ATOM    897  C   ILE A  58       3.889   2.170  -6.134  1.00 51.41
ATOM    898  O   ILE A  58       3.950   1.298  -5.253  1.00 40.40
ATOM    899  N   VAL A  59       4.925   2.564  -6.831  1.00 70.31
ATOM    900  H   VAL A  59       4.826   3.267  -7.514  1.00  5.42
ATOM    901  CA  VAL A  59       6.230   1.995  -6.625  1.00 45.41
ATOM    902  HA  VAL A  59       6.182   1.317  -5.785  1.00 42.32
ATOM    903  CB  VAL A  59       6.731   1.196  -7.871  1.00 51.42
ATOM    904  HB  VAL A  59       6.883   1.907  -8.671  1.00 35.21
ATOM    905  CG1 VAL A  59       8.075   0.525  -7.596  1.00 54.31
ATOM    906 1HG1 VAL A  59       8.393  -0.018  -8.475  1.00 15.01
ATOM    907 2HG1 VAL A  59       7.974  -0.159  -6.767  1.00 72.22
ATOM    908 3HG1 VAL A  59       8.810   1.279  -7.353  1.00 61.23
ATOM    909  CG2 VAL A  59       5.713   0.170  -8.324  1.00 11.11
ATOM    910 1HG2 VAL A  59       4.799   0.675  -8.598  1.00 74.44
ATOM    911 2HG2 VAL A  59       5.517  -0.516  -7.513  1.00 12.31
ATOM    912 3HG2 VAL A  59       6.097  -0.373  -9.174  1.00 33.21
ATOM    913  C   VAL A  59       7.240   3.084  -6.336  1.00 43.21
ATOM    914  O   VAL A  59       7.489   3.967  -7.180  1.00 11.04
ATOM    915  N   SER A  60       7.806   3.037  -5.180  1.00 55.12
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ATOM    916  H   SER A  60       7.490   2.389  -4.509  1.00 21.23
ATOM    917  CA  SER A  60       8.886   3.895  -4.839  1.00 43.44
ATOM    918  HA  SER A  60       9.017   4.622  -5.627  1.00 44.25
ATOM    919  CB  SER A  60       8.608   4.604  -3.502  1.00  2.11
ATOM    920 1HB  SER A  60       8.588   3.922  -2.664  1.00 20.14
ATOM    921 2HB  SER A  60       9.387   5.331  -3.335  1.00 11.05
ATOM    922  OG  SER A  60       7.374   5.300  -3.555  1.00 23.41
ATOM    923  HG  SER A  60       7.507   6.151  -3.117  1.00 62.53
ATOM    924  C   SER A  60      10.115   3.013  -4.742  1.00 42.43
ATOM    925  O   SER A  60      10.029   1.869  -4.262  1.00 30.02
ATOM    926  N   ALA A  61      11.228   3.506  -5.183  1.00 54.20
ATOM    927  H   ALA A  61      11.276   4.435  -5.494  1.00 13.34
ATOM    928  CA  ALA A  61      12.433   2.731  -5.205  1.00 15.33
ATOM    929  HA  ALA A  61      12.254   1.810  -4.671  1.00 60.14
ATOM    930  CB  ALA A  61      12.833   2.399  -6.637  1.00 13.51
ATOM    931 1HB  ALA A  61      13.008   3.314  -7.183  1.00 52.41
ATOM    932 2HB  ALA A  61      12.038   1.842  -7.111  1.00 52.41
ATOM    933 3HB  ALA A  61      13.734   1.804  -6.631  1.00 63.02
ATOM    934  C   ALA A  61      13.505   3.499  -4.522  1.00 10.13
ATOM    935  O   ALA A  61      13.517   4.730  -4.571  1.00  1.14
ATOM    936  N   SER A  62      14.369   2.811  -3.858  1.00 31.35
ATOM    937  H   SER A  62      14.340   1.832  -3.804  1.00 34.02
ATOM    938  CA  SER A  62      15.398   3.447  -3.146  1.00  1.41
ATOM    939  HA  SER A  62      15.255   4.515  -3.200  1.00  3.42
ATOM    940  CB  SER A  62      15.277   3.033  -1.714  1.00  1.40
ATOM    941 1HB  SER A  62      15.475   1.974  -1.635  1.00 51.10
ATOM    942 2HB  SER A  62      15.986   3.584  -1.115  1.00 33.30
ATOM    943  OG  SER A  62      13.957   3.299  -1.245  1.00 44.23
ATOM    944  HG  SER A  62      13.610   4.105  -1.645  1.00 71.35
ATOM    945  C   SER A  62      16.760   3.080  -3.710  1.00 51.24
ATOM    946  O   SER A  62      16.943   1.999  -4.266  1.00 62.33
ATOM    947  N   ASP A  63      17.676   3.999  -3.592  1.00 12.41
ATOM    948  H   ASP A  63      17.457   4.888  -3.221  1.00 62.43
ATOM    949  CA  ASP A  63      19.061   3.827  -4.013  1.00 14.12
ATOM    950  HA  ASP A  63      19.098   3.252  -4.926  1.00 52.13
ATOM    951  CB  ASP A  63      19.679   5.206  -4.267  1.00 11.43
ATOM    952 1HB  ASP A  63      20.732   5.095  -4.479  1.00 73.32
ATOM    953 2HB  ASP A  63      19.186   5.674  -5.105  1.00 55.32
ATOM    954  CG  ASP A  63      19.519   6.101  -3.050  1.00 11.03
ATOM    955  OD1 ASP A  63      20.442   6.172  -2.216  1.00 71.43
ATOM    956  OD2 ASP A  63      18.413   6.654  -2.884  1.00 61.52
ATOM    957  C   ASP A  63      19.849   3.141  -2.914  1.00 43.43
ATOM    958  O   ASP A  63      20.800   2.409  -3.177  1.00 61.23
ATOM    959  N   SER A  64      19.414   3.351  -1.690  1.00 13.22
ATOM    960  H   SER A  64      18.621   3.911  -1.562  1.00 13.05
ATOM    961  CA  SER A  64      20.105   2.865  -0.534  1.00 30.31
ATOM    962  HA  SER A  64      21.159   3.071  -0.644  1.00 35.41
ATOM    963  CB  SER A  64      19.584   3.625   0.669  1.00 43.34
ATOM    964 1HB  SER A  64      18.594   3.273   0.914  1.00 22.24
ATOM    965 2HB  SER A  64      20.245   3.470   1.510  1.00 53.44
ATOM    966  OG  SER A  64      19.523   5.025   0.385  1.00 62.44
ATOM    967  HG  SER A  64      19.977   5.262  -0.442  1.00  2.44
ATOM    968  C   SER A  64      19.886   1.357  -0.367  1.00 73.22
ATOM    969  O   SER A  64      20.806   0.619  -0.009  1.00 55.04
ATOM    970  N   ASP A  65      18.677   0.906  -0.637  1.00 11.31
ATOM    971  H   ASP A  65      17.972   1.526  -0.911  1.00 12.54
ATOM    972  CA  ASP A  65      18.377  -0.504  -0.585  1.00 64.30
ATOM    973  HA  ASP A  65      19.310  -1.041  -0.481  1.00 12.51
ATOM    974  CB  ASP A  65      17.444  -0.856   0.567  1.00 23.55
ATOM    975 1HB  ASP A  65      17.812  -0.397   1.474  1.00 72.43
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ATOM    976 2HB  ASP A  65      16.456  -0.479   0.351  1.00 34.12
ATOM    977  CG  ASP A  65      17.348  -2.362   0.794  1.00 13.43
ATOM    978  OD1 ASP A  65      17.576  -2.797   1.930  1.00 23.11
ATOM    979  OD2 ASP A  65      17.045  -3.120  -0.171  1.00 53.03
ATOM    980  C   ASP A  65      17.738  -0.885  -1.887  1.00 22.32
ATOM    981  O   ASP A  65      16.673  -0.373  -2.235  1.00 31.10
ATOM    982  N   SER A  66      18.401  -1.738  -2.607  1.00 12.15
ATOM    983  H   SER A  66      19.226  -2.102  -2.230  1.00 52.33
ATOM    984  CA  SER A  66      17.967  -2.165  -3.906  1.00 73.12
ATOM    985  HA  SER A  66      17.768  -1.277  -4.486  1.00 51.31
ATOM    986  CB  SER A  66      19.105  -2.929  -4.607  1.00 10.30
ATOM    987 1HB  SER A  66      19.981  -2.297  -4.658  1.00 31.33
ATOM    988 2HB  SER A  66      19.339  -3.814  -4.035  1.00 22.44
ATOM    989  OG  SER A  66      18.758  -3.318  -5.928  1.00 51.33
ATOM    990  HG  SER A  66      17.838  -3.079  -6.087  1.00 53.40
ATOM    991  C   SER A  66      16.675  -3.009  -3.870  1.00 20.43
ATOM    992  O   SER A  66      15.857  -2.928  -4.794  1.00 30.20
ATOM    993  N   THR A  67      16.477  -3.812  -2.835  1.00 15.14
ATOM    994  H   THR A  67      17.031  -3.744  -2.023  1.00 21.45
ATOM    995  CA  THR A  67      15.349  -4.711  -2.867  1.00 12.24
ATOM    996  HA  THR A  67      14.986  -4.714  -3.884  1.00 60.41
ATOM    997  CB  THR A  67      15.784  -6.175  -2.509  1.00 21.23
ATOM    998  HB  THR A  67      16.559  -6.468  -3.203  1.00 12.25
ATOM    999  OG1 THR A  67      14.690  -7.092  -2.653  1.00  1.02
ATOM   1000  HG1 THR A  67      14.406  -7.384  -1.784  1.00  5.44
ATOM   1001  CG2 THR A  67      16.338  -6.271  -1.090  1.00 43.53
ATOM   1002 1HG2 THR A  67      17.197  -5.623  -0.996  1.00 61.30
ATOM   1003 2HG2 THR A  67      16.629  -7.290  -0.884  1.00 12.44
ATOM   1004 3HG2 THR A  67      15.576  -5.964  -0.387  1.00 43.34
ATOM   1005  C   THR A  67      14.203  -4.231  -1.967  1.00 42.43
ATOM   1006  O   THR A  67      13.030  -4.606  -2.173  1.00 32.00
ATOM   1007  N   ASP A  68      14.494  -3.339  -1.051  1.00  2.23
ATOM   1008  H   ASP A  68      15.425  -3.025  -0.942  1.00 75.42
ATOM   1009  CA  ASP A  68      13.469  -2.849  -0.158  1.00 20.13
ATOM   1010  HA  ASP A  68      12.684  -3.589  -0.111  1.00  3.24
ATOM   1011  CB  ASP A  68      14.012  -2.589   1.245  1.00 11.32
ATOM   1012 1HB  ASP A  68      14.812  -3.283   1.459  1.00 34.13
ATOM   1013 2HB  ASP A  68      14.402  -1.579   1.223  1.00 62.44
ATOM   1014  CG  ASP A  68      12.957  -2.687   2.343  1.00 21.30
ATOM   1015  OD1 ASP A  68      12.557  -3.835   2.690  1.00  1.34
ATOM   1016  OD2 ASP A  68      12.580  -1.648   2.925  1.00  5.32
ATOM   1017  C   ASP A  68      12.869  -1.609  -0.749  1.00 63.33
ATOM   1018  O   ASP A  68      13.281  -0.484  -0.469  1.00 41.15
ATOM   1019  N   SER A  69      11.986  -1.842  -1.659  1.00 14.33
ATOM   1020  H   SER A  69      11.773  -2.774  -1.872  1.00 22.04
ATOM   1021  CA  SER A  69      11.290  -0.818  -2.351  1.00 70.31
ATOM   1022  HA  SER A  69      11.690   0.138  -2.050  1.00 72.21
ATOM   1023  CB  SER A  69      11.509  -1.005  -3.860  1.00 22.32
ATOM   1024 1HB  SER A  69      10.776  -0.427  -4.404  1.00 24.23
ATOM   1025 2HB  SER A  69      12.501  -0.666  -4.123  1.00 61.42
ATOM   1026  OG  SER A  69      11.381  -2.390  -4.234  1.00 73.52
ATOM   1027  HG  SER A  69      12.256  -2.760  -4.063  1.00 23.20
ATOM   1028  C   SER A  69       9.831  -0.903  -1.978  1.00  1.33
ATOM   1029  O   SER A  69       9.307  -2.008  -1.764  1.00 74.32
ATOM   1030  N   LEU A  70       9.168   0.214  -1.907  1.00 14.32
ATOM   1031  H   LEU A  70       9.593   1.057  -2.178  1.00  4.13
ATOM   1032  CA  LEU A  70       7.803   0.206  -1.495  1.00  2.20
ATOM   1033  HA  LEU A  70       7.651  -0.683  -0.902  1.00 22.24
ATOM   1034  CB  LEU A  70       7.487   1.466  -0.633  1.00 40.23
ATOM   1035 1HB  LEU A  70       8.236   1.525   0.141  1.00  3.22
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ATOM   1036 2HB  LEU A  70       7.607   2.330  -1.269  1.00 52.22
ATOM   1037  CG  LEU A  70       6.092   1.570   0.062  1.00 73.30
ATOM   1038  HG  LEU A  70       6.128   2.387   0.767  1.00 23.21
ATOM   1039  CD1 LEU A  70       4.967   1.880  -0.920  1.00 32.42
ATOM   1040 1HD1 LEU A  70       4.925   1.103  -1.670  1.00  1.14
ATOM   1041 2HD1 LEU A  70       5.152   2.830  -1.398  1.00 20.23
ATOM   1042 3HD1 LEU A  70       4.027   1.919  -0.391  1.00 31.23
ATOM   1043  CD2 LEU A  70       5.779   0.300   0.845  1.00 74.33
ATOM   1044 1HD2 LEU A  70       6.542   0.140   1.592  1.00 21.50
ATOM   1045 2HD2 LEU A  70       5.746  -0.544   0.172  1.00 73.33
ATOM   1046 3HD2 LEU A  70       4.818   0.405   1.331  1.00 45.53
ATOM   1047  C   LEU A  70       6.954   0.111  -2.732  1.00 62.10
ATOM   1048  O   LEU A  70       6.930   1.008  -3.560  1.00 71.43
ATOM   1049  N   GLN A  71       6.325  -1.005  -2.864  1.00 61.30
ATOM   1050  H   GLN A  71       6.418  -1.684  -2.163  1.00 72.33
ATOM   1051  CA  GLN A  71       5.476  -1.305  -3.968  1.00 25.20
ATOM   1052  HA  GLN A  71       5.310  -0.398  -4.530  1.00 71.32
ATOM   1053  CB  GLN A  71       6.178  -2.330  -4.865  1.00  5.15
ATOM   1054 1HB  GLN A  71       6.990  -1.834  -5.376  1.00 54.00
ATOM   1055 2HB  GLN A  71       6.600  -3.096  -4.230  1.00 43.33
ATOM   1056  CG  GLN A  71       5.317  -3.003  -5.918  1.00 73.44
ATOM   1057 1HG  GLN A  71       4.573  -3.610  -5.423  1.00 63.04
ATOM   1058 2HG  GLN A  71       4.827  -2.249  -6.515  1.00 63.21
ATOM   1059  CD  GLN A  71       6.145  -3.889  -6.828  1.00 44.44
ATOM   1060  OE1 GLN A  71       7.215  -4.410  -6.421  1.00  3.24
ATOM   1061  NE2 GLN A  71       5.670  -4.118  -8.016  1.00 53.13
ATOM   1062 2HE2 GLN A  71       4.794  -3.715  -8.263  1.00  2.42
ATOM   1063 1HE2 GLN A  71       6.161  -4.680  -8.645  1.00 23.02
ATOM   1064  C   GLN A  71       4.160  -1.814  -3.439  1.00 42.21
ATOM   1065  O   GLN A  71       4.119  -2.837  -2.735  1.00 14.35
ATOM   1066  N   VAL A  72       3.114  -1.084  -3.723  1.00 22.43
ATOM   1067  H   VAL A  72       3.238  -0.274  -4.270  1.00 22.45
ATOM   1068  CA  VAL A  72       1.786  -1.441  -3.287  1.00 13.04
ATOM   1069  HA  VAL A  72       1.830  -2.386  -2.765  1.00 71.13
ATOM   1070  CB  VAL A  72       1.185  -0.361  -2.328  1.00 22.34
ATOM   1071  HB  VAL A  72       1.121   0.566  -2.878  1.00 62.22
ATOM   1072  CG1 VAL A  72      -0.224  -0.736  -1.879  1.00 62.42
ATOM   1073 1HG1 VAL A  72      -0.865  -0.828  -2.744  1.00 52.52
ATOM   1074 2HG1 VAL A  72      -0.612   0.026  -1.221  1.00 64.31
ATOM   1075 3HG1 VAL A  72      -0.191  -1.680  -1.355  1.00 63.44
ATOM   1076  CG2 VAL A  72       2.074  -0.140  -1.118  1.00 44.12
ATOM   1077 1HG2 VAL A  72       1.635   0.615  -0.483  1.00 14.50
ATOM   1078 2HG2 VAL A  72       3.047   0.190  -1.451  1.00 62.31
ATOM   1079 3HG2 VAL A  72       2.183  -1.059  -0.565  1.00 23.00
ATOM   1080  C   VAL A  72       0.887  -1.554  -4.494  1.00 64.21
ATOM   1081  O   VAL A  72       0.748  -0.593  -5.255  1.00 62.03
ATOM   1082  N   ALA A  73       0.286  -2.696  -4.653  1.00 65.31
ATOM   1083  H   ALA A  73       0.477  -3.431  -4.026  1.00  3.04
ATOM   1084  CA  ALA A  73      -0.651  -2.932  -5.709  1.00 32.51
ATOM   1085  HA  ALA A  73      -0.589  -2.112  -6.410  1.00  2.42
ATOM   1086  CB  ALA A  73      -0.329  -4.235  -6.429  1.00  0.23
ATOM   1087 1HB  ALA A  73      -1.047  -4.398  -7.219  1.00 65.43
ATOM   1088 2HB  ALA A  73      -0.374  -5.054  -5.726  1.00 54.31
ATOM   1089 3HB  ALA A  73       0.664  -4.178  -6.850  1.00 35.43
ATOM   1090  C   ALA A  73      -2.040  -2.980  -5.108  1.00 64.34
ATOM   1091  O   ALA A  73      -2.262  -3.649  -4.094  1.00 32.32
ATOM   1092  N   MET A  74      -2.941  -2.260  -5.694  1.00 62.21
ATOM   1093  H   MET A  74      -2.699  -1.771  -6.516  1.00 12.14
ATOM   1094  CA  MET A  74      -4.298  -2.148  -5.208  1.00 13.21
ATOM   1095  HA  MET A  74      -4.408  -2.648  -4.258  1.00 71.13
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ATOM   1096  CB  MET A  74      -4.673  -0.669  -5.064  1.00  5.40
ATOM   1097 1HB  MET A  74      -4.917  -0.277  -6.040  1.00  1.23
ATOM   1098 2HB  MET A  74      -5.547  -0.595  -4.433  1.00 63.11
ATOM   1099  CG  MET A  74      -3.586   0.199  -4.470  1.00 14.21
ATOM   1100 1HG  MET A  74      -3.350  -0.161  -3.479  1.00 64.15
ATOM   1101 2HG  MET A  74      -2.706   0.116  -5.091  1.00 44.02
ATOM   1102  SD  MET A  74      -4.059   1.928  -4.387  1.00 31.34
ATOM   1103  CE  MET A  74      -2.482   2.650  -3.994  1.00 71.13
ATOM   1104 1HE  MET A  74      -1.778   2.396  -4.773  1.00 20.45
ATOM   1105 2HE  MET A  74      -2.133   2.259  -3.049  1.00 73.13
ATOM   1106 3HE  MET A  74      -2.573   3.725  -3.929  1.00 62.21
ATOM   1107  C   MET A  74      -5.193  -2.736  -6.256  1.00 73.00
ATOM   1108  O   MET A  74      -5.101  -2.352  -7.410  1.00  0.43
ATOM   1109  N   LYS A  75      -6.034  -3.651  -5.888  1.00  5.11
ATOM   1110  H   LYS A  75      -6.057  -3.942  -4.948  1.00  1.53
ATOM   1111  CA  LYS A  75      -6.914  -4.262  -6.841  1.00 15.15
ATOM   1112  HA  LYS A  75      -6.688  -3.852  -7.812  1.00 44.42
ATOM   1113  CB  LYS A  75      -6.709  -5.776  -6.874  1.00 70.22
ATOM   1114 1HB  LYS A  75      -5.649  -5.981  -6.904  1.00 41.10
ATOM   1115 2HB  LYS A  75      -7.120  -6.200  -5.971  1.00 12.52
ATOM   1116  CG  LYS A  75      -7.361  -6.463  -8.065  1.00 41.41
ATOM   1117 1HG  LYS A  75      -7.264  -7.526  -7.918  1.00 60.41
ATOM   1118 2HG  LYS A  75      -8.408  -6.199  -8.084  1.00  0.53
ATOM   1119  CD  LYS A  75      -6.691  -5.995  -9.361  1.00 11.24
ATOM   1120 1HD  LYS A  75      -6.932  -4.949  -9.450  1.00 15.20
ATOM   1121 2HD  LYS A  75      -5.622  -6.135  -9.299  1.00 63.42
ATOM   1122  CE  LYS A  75      -7.236  -6.651 -10.614  1.00 72.42
ATOM   1123 1HE  LYS A  75      -7.179  -7.723 -10.500  1.00 30.24
ATOM   1124 2HE  LYS A  75      -8.268  -6.356 -10.746  1.00 65.14
ATOM   1125  NZ  LYS A  75      -6.455  -6.248 -11.830  1.00 23.12
ATOM   1126 1HZ  LYS A  75      -6.867  -6.604 -12.711  1.00 72.33
ATOM   1127 2HZ  LYS A  75      -5.474  -6.583 -11.776  1.00 11.15
ATOM   1128 3HZ  LYS A  75      -6.329  -5.212 -11.944  1.00  3.55
ATOM   1129  C   LYS A  75      -8.347  -3.950  -6.477  1.00 61.53
ATOM   1130  O   LYS A  75      -8.785  -4.250  -5.365  1.00  2.30
ATOM   1131  N   LYS A  76      -9.066  -3.401  -7.416  1.00 52.42
ATOM   1132  H   LYS A  76      -8.668  -3.276  -8.306  1.00 43.10
ATOM   1133  CA  LYS A  76     -10.432  -2.994  -7.210  1.00 30.44
ATOM   1134  HA  LYS A  76     -10.530  -2.547  -6.232  1.00 60.23
ATOM   1135  CB  LYS A  76     -10.832  -1.970  -8.266  1.00 51.32
ATOM   1136 1HB  LYS A  76     -10.148  -1.136  -8.212  1.00 22.44
ATOM   1137 2HB  LYS A  76     -10.731  -2.440  -9.232  1.00 23.54
ATOM   1138  CG  LYS A  76     -12.258  -1.430  -8.131  1.00 10.32
ATOM   1139 1HG  LYS A  76     -12.947  -2.260  -8.104  1.00 22.34
ATOM   1140 2HG  LYS A  76     -12.336  -0.866  -7.212  1.00 35.44
ATOM   1141  CD  LYS A  76     -12.617  -0.525  -9.303  1.00 13.02
ATOM   1142 1HD  LYS A  76     -13.561  -0.041  -9.098  1.00 64.52
ATOM   1143 2HD  LYS A  76     -11.846   0.221  -9.423  1.00  5.32
ATOM   1144  CE  LYS A  76     -12.741  -1.323 -10.596  1.00 54.41
ATOM   1145 1HE  LYS A  76     -11.869  -1.942 -10.732  1.00 40.20
ATOM   1146 2HE  LYS A  76     -13.612  -1.956 -10.510  1.00 42.21
ATOM   1147  NZ  LYS A  76     -12.904  -0.447 -11.781  1.00  1.30
ATOM   1148 1HZ  LYS A  76     -13.727   0.179 -11.673  1.00 71.52
ATOM   1149 2HZ  LYS A  76     -13.028  -1.036 -12.627  1.00 23.24
ATOM   1150 3HZ  LYS A  76     -12.044   0.129 -11.913  1.00 24.04
ATOM   1151  C   LYS A  76     -11.334  -4.194  -7.330  1.00 41.22
ATOM   1152  O   LYS A  76     -11.291  -4.920  -8.330  1.00 51.24
ATOM   1153  N   LEU A  77     -12.128  -4.389  -6.331  1.00 74.24
ATOM   1154  H   LEU A  77     -12.118  -3.748  -5.582  1.00 44.34
ATOM   1155  CA  LEU A  77     -13.052  -5.484  -6.280  1.00 54.32
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ATOM   1156  HA  LEU A  77     -12.798  -6.175  -7.069  1.00 52.05
ATOM   1157  CB  LEU A  77     -12.966  -6.201  -4.920  1.00 12.45
ATOM   1158 1HB  LEU A  77     -13.269  -5.497  -4.159  1.00 33.33
ATOM   1159 2HB  LEU A  77     -13.672  -7.018  -4.924  1.00 22.24
ATOM   1160  CG  LEU A  77     -11.586  -6.759  -4.533  1.00 33.04
ATOM   1161  HG  LEU A  77     -10.882  -5.942  -4.486  1.00 65.05
ATOM   1162  CD1 LEU A  77     -11.637  -7.398  -3.157  1.00 62.22
ATOM   1163 1HD1 LEU A  77     -12.360  -8.200  -3.160  1.00 14.44
ATOM   1164 2HD1 LEU A  77     -11.922  -6.657  -2.425  1.00  3.20
ATOM   1165 3HD1 LEU A  77     -10.663  -7.794  -2.911  1.00 13.41
ATOM   1166  CD2 LEU A  77     -11.090  -7.763  -5.568  1.00 24.04
ATOM   1167 1HD2 LEU A  77     -11.796  -8.578  -5.648  1.00 21.12
ATOM   1168 2HD2 LEU A  77     -10.130  -8.149  -5.257  1.00 62.21
ATOM   1169 3HD2 LEU A  77     -10.987  -7.276  -6.526  1.00 74.10
ATOM   1170  C   LEU A  77     -14.459  -4.943  -6.523  1.00 54.55
ATOM   1171  O   LEU A  77     -14.773  -3.816  -6.120  1.00 15.12
ATOM   1172  N   PRO A  78     -15.340  -5.732  -7.164  1.00 35.13
ATOM   1173  CD  PRO A  78     -15.090  -7.134  -7.563  1.00  3.33
ATOM   1174  CA  PRO A  78     -16.700  -5.287  -7.535  1.00 31.30
ATOM   1175  HA  PRO A  78     -16.672  -4.341  -8.053  1.00 73.23
ATOM   1176  CB  PRO A  78     -17.185  -6.387  -8.488  1.00 22.24
ATOM   1177 1HB  PRO A  78     -18.247  -6.532  -8.360  1.00 31.40
ATOM   1178 2HB  PRO A  78     -16.957  -6.127  -9.510  1.00 42.33
ATOM   1179  CG  PRO A  78     -16.415  -7.605  -8.103  1.00 73.10
ATOM   1180 1HG  PRO A  78     -16.962  -8.152  -7.347  1.00 74.34
ATOM   1181 2HG  PRO A  78     -16.250  -8.229  -8.968  1.00 40.24
ATOM   1182 1HD  PRO A  78     -14.810  -7.722  -6.702  1.00 54.41
ATOM   1183 2HD  PRO A  78     -14.310  -7.184  -8.307  1.00  1.25
ATOM   1184  C   PRO A  78     -17.637  -5.168  -6.326  1.00 74.34
ATOM   1185  O   PRO A  78     -18.807  -4.844  -6.455  1.00 50.23
ATOM   1186  N   ASN A  79     -17.094  -5.415  -5.165  1.00 25.33
ATOM   1187  H   ASN A  79     -16.148  -5.671  -5.161  1.00  1.34
ATOM   1188  CA  ASN A  79     -17.830  -5.339  -3.918  1.00 73.42
ATOM   1189  HA  ASN A  79     -18.882  -5.484  -4.117  1.00  1.44
ATOM   1190  CB  ASN A  79     -17.346  -6.437  -2.951  1.00 34.22
ATOM   1191 1HB  ASN A  79     -16.310  -6.260  -2.708  1.00 44.51
ATOM   1192 2HB  ASN A  79     -17.930  -6.384  -2.044  1.00  2.14
ATOM   1193  CG  ASN A  79     -17.461  -7.840  -3.518  1.00 41.13
ATOM   1194  OD1 ASN A  79     -16.545  -8.328  -4.174  1.00  3.55
ATOM   1195  ND2 ASN A  79     -18.564  -8.503  -3.262  1.00 24.03
ATOM   1196 2HD2 ASN A  79     -19.262  -8.077  -2.722  1.00 43.34
ATOM   1197 1HD2 ASN A  79     -18.633  -9.410  -3.626  1.00  5.33
ATOM   1198  C   ASN A  79     -17.598  -3.983  -3.273  1.00 60.31
ATOM   1199  O   ASN A  79     -17.984  -3.769  -2.134  1.00 21.42
ATOM   1200  N   ASN A  80     -16.967  -3.064  -4.042  1.00 12.52
ATOM   1201  H   ASN A  80     -16.759  -3.302  -4.968  1.00 73.04
ATOM   1202  CA  ASN A  80     -16.558  -1.716  -3.552  1.00 52.12
ATOM   1203  HA  ASN A  80     -16.116  -1.211  -4.401  1.00 13.21
ATOM   1204  CB  ASN A  80     -17.741  -0.878  -3.002  1.00 32.20
ATOM   1205 1HB  ASN A  80     -18.294  -1.475  -2.293  1.00 54.00
ATOM   1206 2HB  ASN A  80     -17.348  -0.006  -2.497  1.00 61.41
ATOM   1207  CG  ASN A  80     -18.704  -0.419  -4.081  1.00 41.22
ATOM   1208  OD1 ASN A  80     -18.535   0.645  -4.668  1.00 31.13
ATOM   1209  ND2 ASN A  80     -19.725  -1.201  -4.338  1.00 31.30
ATOM   1210 2HD2 ASN A  80     -19.808  -2.030  -3.822  1.00 22.32
ATOM   1211 1HD2 ASN A  80     -20.349  -0.917  -5.035  1.00 15.44
ATOM   1212  C   ASN A  80     -15.474  -1.870  -2.514  1.00 43.23
ATOM   1213  O   ASN A  80     -15.277  -1.029  -1.650  1.00 44.40
ATOM   1214  N   ALA A  81     -14.738  -2.933  -2.676  1.00 53.11
ATOM   1215  H   ALA A  81     -14.906  -3.484  -3.467  1.00 35.53
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ATOM   1216  CA  ALA A  81     -13.665  -3.303  -1.814  1.00 15.24
ATOM   1217  HA  ALA A  81     -13.597  -2.586  -1.009  1.00 30.54
ATOM   1218  CB  ALA A  81     -13.910  -4.684  -1.237  1.00  1.24
ATOM   1219 1HB  ALA A  81     -13.082  -4.941  -0.590  1.00 52.55
ATOM   1220 2HB  ALA A  81     -13.980  -5.397  -2.046  1.00 32.33
ATOM   1221 3HB  ALA A  81     -14.828  -4.683  -0.669  1.00 75.42
ATOM   1222  C   ALA A  81     -12.400  -3.293  -2.624  1.00 55.22
ATOM   1223  O   ALA A  81     -12.459  -3.292  -3.850  1.00 53.15
ATOM   1224  N   THR A  82     -11.284  -3.254  -1.980  1.00 14.20
ATOM   1225  H   THR A  82     -11.274  -3.251  -0.997  1.00 45.12
ATOM   1226  CA  THR A  82     -10.034  -3.229  -2.669  1.00  4.25
ATOM   1227  HA  THR A  82     -10.185  -3.585  -3.677  1.00 45.44
ATOM   1228  CB  THR A  82      -9.502  -1.778  -2.723  1.00 43.41
ATOM   1229  HB  THR A  82      -9.303  -1.452  -1.714  1.00 43.23
ATOM   1230  OG1 THR A  82     -10.496  -0.923  -3.294  1.00 44.22
ATOM   1231  HG1 THR A  82     -11.242  -0.900  -2.680  1.00 60.12
ATOM   1232  CG2 THR A  82      -8.236  -1.677  -3.542  1.00 14.12
ATOM   1233 1HG2 THR A  82      -7.489  -2.297  -3.070  1.00 75.51
ATOM   1234 2HG2 THR A  82      -7.896  -0.653  -3.566  1.00 40.40
ATOM   1235 3HG2 THR A  82      -8.420  -2.032  -4.544  1.00 23.40
ATOM   1236  C   THR A  82      -9.033  -4.142  -1.945  1.00 50.51
ATOM   1237  O   THR A  82      -8.965  -4.142  -0.708  1.00 64.14
ATOM   1238  N   ARG A  83      -8.306  -4.952  -2.688  1.00 14.14
ATOM   1239  H   ARG A  83      -8.416  -4.988  -3.667  1.00 45.33
ATOM   1240  CA  ARG A  83      -7.314  -5.785  -2.094  1.00 54.03
ATOM   1241  HA  ARG A  83      -7.471  -5.755  -1.026  1.00 52.13
ATOM   1242  CB  ARG A  83      -7.403  -7.234  -2.578  1.00 53.10
ATOM   1243 1HB  ARG A  83      -8.404  -7.605  -2.402  1.00 44.31
ATOM   1244 2HB  ARG A  83      -7.189  -7.271  -3.636  1.00 41.34
ATOM   1245  CG  ARG A  83      -6.417  -8.132  -1.858  1.00  3.34
ATOM   1246 1HG  ARG A  83      -5.420  -7.751  -2.024  1.00 42.50
ATOM   1247 2HG  ARG A  83      -6.633  -8.094  -0.800  1.00 51.14
ATOM   1248  CD  ARG A  83      -6.457  -9.568  -2.318  1.00  4.13
ATOM   1249 1HD  ARG A  83      -6.164  -9.637  -3.355  1.00 20.13
ATOM   1250 2HD  ARG A  83      -5.735 -10.063  -1.688  1.00 73.11
ATOM   1251  NE  ARG A  83      -7.767 -10.210  -2.120  1.00 11.33
ATOM   1252  HE  ARG A  83      -8.519  -9.715  -2.509  1.00 74.32
ATOM   1253  CZ  ARG A  83      -7.958 -11.391  -1.481  1.00 50.41
ATOM   1254  NH1 ARG A  83      -6.922 -12.020  -0.895  1.00  3.22
ATOM   1255 1HH1 ARG A  83      -5.993 -11.647  -0.914  1.00 10.45
ATOM   1256 2HH1 ARG A  83      -7.003 -12.876  -0.379  1.00 14.13
ATOM   1257  NH2 ARG A  83      -9.184 -11.916  -1.404  1.00 34.55
ATOM   1258 1HH2 ARG A  83      -9.984 -11.469  -1.805  1.00 13.54
ATOM   1259 2HH2 ARG A  83      -9.355 -12.785  -0.933  1.00 12.12
ATOM   1260  C   ARG A  83      -5.946  -5.207  -2.381  1.00 32.31
ATOM   1261  O   ARG A  83      -5.653  -4.846  -3.504  1.00 61.24
ATOM   1262  N   ILE A  84      -5.136  -5.121  -1.379  1.00 14.24
ATOM   1263  H   ILE A  84      -5.413  -5.471  -0.500  1.00 73.11
ATOM   1264  CA  ILE A  84      -3.825  -4.555  -1.487  1.00 24.11
ATOM   1265  HA  ILE A  84      -3.724  -4.165  -2.489  1.00 44.42
ATOM   1266  CB  ILE A  84      -3.604  -3.363  -0.460  1.00 73.32
ATOM   1267  HB  ILE A  84      -4.259  -3.556   0.377  1.00 21.31
ATOM   1268  CG2 ILE A  84      -2.191  -3.297   0.100  1.00 15.54
ATOM   1269 1HG2 ILE A  84      -1.983  -4.210   0.638  1.00 62.35
ATOM   1270 2HG2 ILE A  84      -2.100  -2.452   0.767  1.00 52.22
ATOM   1271 3HG2 ILE A  84      -1.492  -3.196  -0.716  1.00  3.10
ATOM   1272  CG1 ILE A  84      -4.001  -2.014  -1.066  1.00 32.30
ATOM   1273 1HG1 ILE A  84      -3.739  -1.221  -0.381  1.00 24.23
ATOM   1274 2HG1 ILE A  84      -3.439  -1.897  -1.981  1.00 15.32
ATOM   1275  CD1 ILE A  84      -5.459  -1.875  -1.389  1.00 40.10
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ATOM   1276 1HD1 ILE A  84      -6.039  -1.976  -0.484  1.00 13.34
ATOM   1277 2HD1 ILE A  84      -5.733  -2.659  -2.078  1.00 74.02
ATOM   1278 3HD1 ILE A  84      -5.644  -0.911  -1.839  1.00 32.12
ATOM   1279  C   ILE A  84      -2.792  -5.637  -1.294  1.00 41.32
ATOM   1280  O   ILE A  84      -2.926  -6.511  -0.425  1.00 54.12
ATOM   1281  N   SER A  85      -1.831  -5.622  -2.159  1.00 21.23
ATOM   1282  H   SER A  85      -1.852  -4.926  -2.860  1.00 25.30
ATOM   1283  CA  SER A  85      -0.729  -6.534  -2.125  1.00 74.20
ATOM   1284  HA  SER A  85      -0.810  -7.137  -1.234  1.00 22.51
ATOM   1285  CB  SER A  85      -0.774  -7.430  -3.359  1.00  1.04
ATOM   1286 1HB  SER A  85      -0.636  -6.829  -4.245  1.00 43.43
ATOM   1287 2HB  SER A  85       0.005  -8.174  -3.295  1.00 20.40
ATOM   1288  OG  SER A  85      -2.033  -8.084  -3.429  1.00 51.13
ATOM   1289  HG  SER A  85      -2.629  -7.551  -2.894  1.00 40.34
ATOM   1290  C   SER A  85       0.548  -5.720  -2.080  1.00 31.11
ATOM   1291  O   SER A  85       0.733  -4.798  -2.881  1.00 54.34
ATOM   1292  N   ILE A  86       1.383  -6.007  -1.124  1.00 74.40
ATOM   1293  H   ILE A  86       1.197  -6.755  -0.513  1.00 31.12
ATOM   1294  CA  ILE A  86       2.601  -5.266  -0.937  1.00 11.52
ATOM   1295  HA  ILE A  86       2.644  -4.544  -1.741  1.00 73.24
ATOM   1296  CB  ILE A  86       2.604  -4.494   0.427  1.00 30.34
ATOM   1297  HB  ILE A  86       2.501  -5.207   1.232  1.00  2.42
ATOM   1298  CG2 ILE A  86       3.905  -3.713   0.622  1.00 60.32
ATOM   1299 1HG2 ILE A  86       4.028  -3.005  -0.184  1.00 31.10
ATOM   1300 2HG2 ILE A  86       4.740  -4.400   0.634  1.00 62.52
ATOM   1301 3HG2 ILE A  86       3.873  -3.186   1.564  1.00 34.31
ATOM   1302  CG1 ILE A  86       1.396  -3.541   0.460  1.00 54.11
ATOM   1303 1HG1 ILE A  86       1.429  -2.903  -0.409  1.00 40.23
ATOM   1304 2HG1 ILE A  86       0.495  -4.134   0.408  1.00 11.41
ATOM   1305  CD1 ILE A  86       1.299  -2.654   1.682  1.00 75.31
ATOM   1306 1HD1 ILE A  86       2.198  -2.064   1.772  1.00 74.22
ATOM   1307 2HD1 ILE A  86       1.167  -3.262   2.563  1.00 15.10
ATOM   1308 3HD1 ILE A  86       0.449  -1.995   1.575  1.00 23.21
ATOM   1309  C   ILE A  86       3.803  -6.188  -1.087  1.00  2.22
ATOM   1310  O   ILE A  86       3.742  -7.367  -0.718  1.00 74.02
ATOM   1311  N   LYS A  87       4.886  -5.641  -1.583  1.00 11.24
ATOM   1312  H   LYS A  87       4.884  -4.669  -1.726  1.00 31.04
ATOM   1313  CA  LYS A  87       6.065  -6.386  -1.922  1.00 21.32
ATOM   1314  HA  LYS A  87       5.853  -7.444  -1.889  1.00 64.51
ATOM   1315  CB  LYS A  87       6.473  -5.980  -3.373  1.00 21.35
ATOM   1316 1HB  LYS A  87       5.605  -6.103  -4.005  1.00 33.34
ATOM   1317 2HB  LYS A  87       6.718  -4.931  -3.355  1.00 14.55
ATOM   1318  CG  LYS A  87       7.641  -6.741  -4.058  1.00 53.52
ATOM   1319 1HG  LYS A  87       7.453  -7.799  -3.977  1.00 61.14
ATOM   1320 2HG  LYS A  87       7.649  -6.467  -5.104  1.00 65.55
ATOM   1321  CD  LYS A  87       9.029  -6.459  -3.459  1.00 31.32
ATOM   1322 1HD  LYS A  87       9.033  -6.795  -2.432  1.00 31.02
ATOM   1323 2HD  LYS A  87       9.765  -7.020  -4.015  1.00 32.40
ATOM   1324  CE  LYS A  87       9.415  -4.972  -3.478  1.00  1.34
ATOM   1325 1HE  LYS A  87       8.689  -4.411  -2.909  1.00 32.20
ATOM   1326 2HE  LYS A  87      10.380  -4.867  -3.005  1.00 62.21
ATOM   1327  NZ  LYS A  87       9.488  -4.405  -4.850  1.00 34.54
ATOM   1328 1HZ  LYS A  87       8.556  -4.393  -5.322  1.00 15.14
ATOM   1329 2HZ  LYS A  87      10.138  -4.970  -5.427  1.00 63.12
ATOM   1330 3HZ  LYS A  87       9.862  -3.434  -4.791  1.00 54.55
ATOM   1331  C   LYS A  87       7.144  -6.015  -0.916  1.00 10.12
ATOM   1332  O   LYS A  87       7.382  -4.845  -0.639  1.00 33.33
ATOM   1333  N   TYR A  88       7.770  -7.031  -0.387  1.00  3.33
ATOM   1334  H   TYR A  88       7.594  -7.924  -0.746  1.00  1.04
ATOM   1335  CA  TYR A  88       8.749  -6.921   0.672  1.00 51.40
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ATOM   1336  HA  TYR A  88       8.621  -5.965   1.154  1.00 13.32
ATOM   1337  CB  TYR A  88       8.511  -8.025   1.729  1.00 65.43
ATOM   1338 1HB  TYR A  88       9.267  -7.932   2.494  1.00  1.22
ATOM   1339 2HB  TYR A  88       7.542  -7.874   2.179  1.00 52.23
ATOM   1340  CG  TYR A  88       8.573  -9.478   1.211  1.00  0.33
ATOM   1341  CD1 TYR A  88       7.641  -9.952   0.297  1.00 64.20
ATOM   1342  HD1 TYR A  88       6.881  -9.277  -0.066  1.00 50.10
ATOM   1343  CE1 TYR A  88       7.663 -11.249  -0.151  1.00 61.02
ATOM   1344  HE1 TYR A  88       6.926 -11.589  -0.864  1.00 22.04
ATOM   1345  CZ  TYR A  88       8.615 -12.112   0.298  1.00  0.22
ATOM   1346  CE2 TYR A  88       9.565 -11.687   1.211  1.00 72.41
ATOM   1347  HE2 TYR A  88      10.320 -12.371   1.569  1.00 44.11
ATOM   1348  CD2 TYR A  88       9.540 -10.372   1.667  1.00 33.33
ATOM   1349  HD2 TYR A  88      10.278 -10.035   2.380  1.00 74.31
ATOM   1350  OH  TYR A  88       8.596 -13.411  -0.144  1.00 24.44
ATOM   1351  HH  TYR A  88       8.398 -13.977   0.619  1.00  3.22
ATOM   1352  C   TYR A  88      10.151  -7.023   0.132  1.00 13.22
ATOM   1353  O   TYR A  88      10.376  -7.660  -0.887  1.00 45.35
ATOM   1354  N   GLY A  89      11.072  -6.389   0.804  1.00 25.34
ATOM   1355  H   GLY A  89      10.857  -5.837   1.585  1.00 73.40
ATOM   1356  CA  GLY A  89      12.433  -6.479   0.413  1.00 60.53
ATOM   1357 1HA  GLY A  89      12.507  -7.161  -0.423  1.00 11.05
ATOM   1358 2HA  GLY A  89      12.793  -5.511   0.104  1.00 43.22
ATOM   1359  C   GLY A  89      13.295  -6.986   1.528  1.00  1.43
ATOM   1360  O   GLY A  89      13.066  -8.072   2.048  1.00 61.40
ATOM   1361  N   SER A  90      14.216  -6.169   1.943  1.00 54.41
ATOM   1362  H   SER A  90      14.219  -5.246   1.607  1.00 72.34
ATOM   1363  CA  SER A  90      15.216  -6.531   2.917  1.00 13.43
ATOM   1364  HA  SER A  90      15.579  -7.520   2.679  1.00 11.33
ATOM   1365  CB  SER A  90      16.389  -5.540   2.784  1.00 64.21
ATOM   1366 1HB  SER A  90      16.723  -5.525   1.758  1.00 74.12
ATOM   1367 2HB  SER A  90      16.044  -4.553   3.052  1.00 70.23
ATOM   1368  OG  SER A  90      17.494  -5.871   3.595  1.00  4.23
ATOM   1369  HG  SER A  90      18.126  -5.158   3.453  1.00 60.14
ATOM   1370  C   SER A  90      14.636  -6.532   4.347  1.00  5.22
ATOM   1371  O   SER A  90      14.971  -7.387   5.163  1.00 34.40
ATOM   1372  N   GLN A  91      13.721  -5.612   4.623  1.00  2.44
ATOM   1373  H   GLN A  91      13.385  -5.026   3.904  1.00 40.13
ATOM   1374  CA  GLN A  91      13.203  -5.455   5.984  1.00 32.15
ATOM   1375  HA  GLN A  91      13.993  -5.730   6.668  1.00 51.53
ATOM   1376  CB  GLN A  91      12.843  -3.999   6.261  1.00 61.50
ATOM   1377 1HB  GLN A  91      12.226  -3.650   5.447  1.00 14.33
ATOM   1378 2HB  GLN A  91      12.265  -3.957   7.174  1.00 44.03
ATOM   1379  CG  GLN A  91      14.023  -3.052   6.397  1.00 65.13
ATOM   1380 1HG  GLN A  91      14.611  -3.345   7.253  1.00 22.43
ATOM   1381 2HG  GLN A  91      14.628  -3.115   5.504  1.00 63.02
ATOM   1382  CD  GLN A  91      13.579  -1.609   6.581  1.00 75.51
ATOM   1383  OE1 GLN A  91      14.237  -0.820   7.259  1.00 72.31
ATOM   1384  NE2 GLN A  91      12.518  -1.233   5.909  1.00 73.20
ATOM   1385 2HE2 GLN A  91      12.075  -1.880   5.317  1.00 10.23
ATOM   1386 1HE2 GLN A  91      12.191  -0.304   6.014  1.00  1.33
ATOM   1387  C   GLN A  91      11.984  -6.317   6.279  1.00 44.11
ATOM   1388  O   GLN A  91      11.554  -6.386   7.425  1.00 41.11
ATOM   1389  N   GLY A  92      11.443  -6.985   5.269  1.00 21.43
ATOM   1390  H   GLY A  92      11.938  -7.019   4.425  1.00 72.41
ATOM   1391  CA  GLY A  92      10.173  -7.679   5.467  1.00 73.22
ATOM   1392 1HA  GLY A  92       9.945  -8.264   4.588  1.00 42.33
ATOM   1393 2HA  GLY A  92      10.217  -8.329   6.328  1.00 53.23
ATOM   1394  C   GLY A  92       9.090  -6.636   5.688  1.00 55.42
ATOM   1395  O   GLY A  92       8.779  -6.258   6.823  1.00 51.12
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ATOM   1396  N   ASN A  93       8.492  -6.189   4.602  1.00  4.13
ATOM   1397  H   ASN A  93       8.621  -6.670   3.760  1.00 53.34
ATOM   1398  CA  ASN A  93       7.626  -5.011   4.615  1.00 43.44
ATOM   1399  HA  ASN A  93       8.224  -4.212   5.029  1.00 25.14
ATOM   1400  CB  ASN A  93       7.232  -4.589   3.185  1.00 53.31
ATOM   1401 1HB  ASN A  93       8.121  -4.553   2.576  1.00 70.40
ATOM   1402 2HB  ASN A  93       6.545  -5.315   2.775  1.00 42.20
ATOM   1403  CG  ASN A  93       6.573  -3.210   3.132  1.00  5.30
ATOM   1404  OD1 ASN A  93       5.370  -3.074   3.281  1.00  2.14
ATOM   1405  ND2 ASN A  93       7.362  -2.185   2.899  1.00 31.12
ATOM   1406 2HD2 ASN A  93       8.323  -2.337   2.769  1.00  2.03
ATOM   1407 1HD2 ASN A  93       6.940  -1.304   2.852  1.00 54.41
ATOM   1408  C   ASN A  93       6.387  -5.143   5.510  1.00 53.25
ATOM   1409  O   ASN A  93       5.806  -4.155   5.847  1.00 62.14
ATOM   1410  N   SER A  94       6.038  -6.354   5.942  1.00 23.43
ATOM   1411  H   SER A  94       6.598  -7.127   5.713  1.00 23.43
ATOM   1412  CA  SER A  94       4.847  -6.597   6.779  1.00 42.31
ATOM   1413  HA  SER A  94       3.978  -6.490   6.150  1.00 32.51
ATOM   1414  CB  SER A  94       4.887  -8.013   7.302  1.00 63.12
ATOM   1415 1HB  SER A  94       5.715  -8.122   7.986  1.00 24.41
ATOM   1416 2HB  SER A  94       3.962  -8.241   7.811  1.00 42.24
ATOM   1417  OG  SER A  94       5.054  -8.917   6.236  1.00 51.44
ATOM   1418  HG  SER A  94       4.730  -8.531   5.415  1.00 60.40
ATOM   1419  C   SER A  94       4.725  -5.603   7.963  1.00 33.31
ATOM   1420  O   SER A  94       3.663  -5.031   8.179  1.00 72.22
ATOM   1421  N   ILE A  95       5.826  -5.364   8.668  1.00 22.11
ATOM   1422  H   ILE A  95       6.657  -5.820   8.414  1.00 75.13
ATOM   1423  CA  ILE A  95       5.832  -4.448   9.819  1.00  1.02
ATOM   1424  HA  ILE A  95       4.975  -4.716  10.421  1.00  2.33
ATOM   1425  CB  ILE A  95       7.142  -4.601  10.700  1.00 24.54
ATOM   1426  HB  ILE A  95       7.981  -4.650  10.020  1.00 14.40
ATOM   1427  CG2 ILE A  95       7.367  -3.395  11.615  1.00 75.44
ATOM   1428 1HG2 ILE A  95       6.524  -3.289  12.282  1.00 51.23
ATOM   1429 2HG2 ILE A  95       7.463  -2.503  11.013  1.00 72.32
ATOM   1430 3HG2 ILE A  95       8.268  -3.543  12.191  1.00  2.50
ATOM   1431  CG1 ILE A  95       7.126  -5.902  11.551  1.00 52.44
ATOM   1432 1HG1 ILE A  95       8.018  -5.931  12.159  1.00 41.43
ATOM   1433 2HG1 ILE A  95       6.267  -5.870  12.206  1.00 74.44
ATOM   1434  CD1 ILE A  95       7.077  -7.201  10.774  1.00 21.41
ATOM   1435 1HD1 ILE A  95       7.077  -8.035  11.461  1.00  3.21
ATOM   1436 2HD1 ILE A  95       7.929  -7.265  10.114  1.00 44.21
ATOM   1437 3HD1 ILE A  95       6.166  -7.214  10.194  1.00 74.54
ATOM   1438  C   ILE A  95       5.629  -2.992   9.360  1.00 23.32
ATOM   1439  O   ILE A  95       4.905  -2.218   9.988  1.00 44.31
ATOM   1440  N   ARG A  96       6.228  -2.652   8.234  1.00 11.32
ATOM   1441  H   ARG A  96       6.755  -3.321   7.750  1.00 75.10
ATOM   1442  CA  ARG A  96       6.099  -1.320   7.663  1.00 13.02
ATOM   1443  HA  ARG A  96       6.322  -0.586   8.424  1.00 22.30
ATOM   1444  CB  ARG A  96       7.082  -1.169   6.497  1.00 64.54
ATOM   1445 1HB  ARG A  96       6.793  -1.848   5.709  1.00  0.22
ATOM   1446 2HB  ARG A  96       7.023  -0.157   6.125  1.00 70.34
ATOM   1447  CG  ARG A  96       8.541  -1.455   6.862  1.00 44.53
ATOM   1448 1HG  ARG A  96       8.598  -2.462   7.248  1.00 22.24
ATOM   1449 2HG  ARG A  96       9.147  -1.382   5.974  1.00 20.22
ATOM   1450  CD  ARG A  96       9.055  -0.495   7.925  1.00 24.14
ATOM   1451 1HD  ARG A  96       8.485  -0.639   8.831  1.00 41.13
ATOM   1452 2HD  ARG A  96      10.093  -0.720   8.122  1.00 61.14
ATOM   1453  NE  ARG A  96       8.944   0.901   7.503  1.00 21.33
ATOM   1454  HE  ARG A  96       9.471   1.082   6.684  1.00 32.41
ATOM   1455  CZ  ARG A  96       8.163   1.820   8.099  1.00 54.44
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ATOM   1456  NH1 ARG A  96       7.681   1.601   9.334  1.00 55.44
ATOM   1457 1HH1 ARG A  96       7.876   0.770   9.864  1.00  4.45
ATOM   1458 2HH1 ARG A  96       7.110   2.282   9.794  1.00 52.04
ATOM   1459  NH2 ARG A  96       7.928   2.983   7.499  1.00 55.31
ATOM   1460 1HH2 ARG A  96       8.321   3.209   6.607  1.00 22.15
ATOM   1461 2HH2 ARG A  96       7.330   3.682   7.912  1.00 12.40
ATOM   1462  C   ARG A  96       4.664  -1.131   7.162  1.00  4.52
ATOM   1463  O   ARG A  96       4.039  -0.084   7.361  1.00 33.32
ATOM   1464  N   SER A  97       4.170  -2.180   6.555  1.00 43.21
ATOM   1465  H   SER A  97       4.741  -2.975   6.451  1.00  1.53
ATOM   1466  CA  SER A  97       2.855  -2.262   5.988  1.00 51.11
ATOM   1467  HA  SER A  97       2.745  -1.466   5.267  1.00 70.54
ATOM   1468  CB  SER A  97       2.724  -3.592   5.249  1.00 34.20
ATOM   1469 1HB  SER A  97       3.487  -3.654   4.488  1.00 40.11
ATOM   1470 2HB  SER A  97       2.860  -4.398   5.954  1.00 61.22
ATOM   1471  OG  SER A  97       1.476  -3.730   4.638  1.00 40.03
ATOM   1472  HG  SER A  97       1.589  -4.295   3.869  1.00 22.23
ATOM   1473  C   SER A  97       1.777  -2.129   7.062  1.00 60.20
ATOM   1474  O   SER A  97       0.755  -1.508   6.827  1.00 20.21
ATOM   1475  N   SER A  98       2.036  -2.684   8.249  1.00 34.11
ATOM   1476  H   SER A  98       2.885  -3.157   8.375  1.00 61.43
ATOM   1477  CA  SER A  98       1.090  -2.619   9.359  1.00 24.40
ATOM   1478  HA  SER A  98       0.190  -3.137   9.062  1.00 31.34
ATOM   1479  CB  SER A  98       1.693  -3.314  10.589  1.00 24.43
ATOM   1480 1HB  SER A  98       2.591  -2.791  10.887  1.00 72.53
ATOM   1481 2HB  SER A  98       0.992  -3.308  11.410  1.00  5.20
ATOM   1482  OG  SER A  98       2.041  -4.666  10.303  1.00 74.32
ATOM   1483  HG  SER A  98       2.316  -4.758   9.384  1.00  2.41
ATOM   1484  C   SER A  98       0.745  -1.151   9.675  1.00 70.52
ATOM   1485  O   SER A  98      -0.427  -0.784   9.833  1.00 64.23
ATOM   1486  N   ALA A  99       1.774  -0.318   9.716  1.00 62.11
ATOM   1487  H   ALA A  99       2.671  -0.684   9.562  1.00  4.24
ATOM   1488  CA  ALA A  99       1.604   1.097   9.957  1.00 61.04
ATOM   1489  HA  ALA A  99       0.950   1.212  10.809  1.00 71.44
ATOM   1490  CB  ALA A  99       2.941   1.750  10.279  1.00 51.20
ATOM   1491 1HB  ALA A  99       3.598   1.664   9.426  1.00 21.41
ATOM   1492 2HB  ALA A  99       3.389   1.254  11.128  1.00 73.34
ATOM   1493 3HB  ALA A  99       2.786   2.793  10.511  1.00 61.22
ATOM   1494  C   ALA A  99       0.947   1.774   8.757  1.00 52.13
ATOM   1495  O   ALA A  99       0.024   2.569   8.915  1.00 44.24
ATOM   1496  N   LEU A 100       1.422   1.423   7.562  1.00 41.14
ATOM   1497  H   LEU A 100       2.129   0.746   7.502  1.00 62.32
ATOM   1498  CA  LEU A 100       0.946   1.996   6.311  1.00 40.24
ATOM   1499  HA  LEU A 100       1.166   3.052   6.304  1.00 14.23
ATOM   1500  CB  LEU A 100       1.688   1.332   5.156  1.00 31.03
ATOM   1501 1HB  LEU A 100       2.738   1.317   5.398  1.00 33.50
ATOM   1502 2HB  LEU A 100       1.349   0.307   5.116  1.00 62.55
ATOM   1503  CG  LEU A 100       1.495   1.944   3.772  1.00 53.13
ATOM   1504  HG  LEU A 100       0.439   1.974   3.545  1.00  2.12
ATOM   1505  CD1 LEU A 100       2.024   3.367   3.739  1.00 54.11
ATOM   1506 1HD1 LEU A 100       1.907   3.776   2.746  1.00 40.21
ATOM   1507 2HD1 LEU A 100       3.068   3.363   4.017  1.00 31.11
ATOM   1508 3HD1 LEU A 100       1.470   3.968   4.446  1.00 74.14
ATOM   1509  CD2 LEU A 100       2.184   1.091   2.726  1.00 71.44
ATOM   1510 1HD2 LEU A 100       1.750   0.102   2.730  1.00 63.23
ATOM   1511 2HD2 LEU A 100       3.234   1.022   2.966  1.00 12.01
ATOM   1512 3HD2 LEU A 100       2.062   1.539   1.751  1.00 14.30
ATOM   1513  C   LEU A 100      -0.555   1.768   6.150  1.00 24.14
ATOM   1514  O   LEU A 100      -1.313   2.708   5.916  1.00 74.32
ATOM   1515  N   ILE A 101      -0.964   0.528   6.342  1.00 11.22
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ATOM   1516  H   ILE A 101      -0.280  -0.153   6.548  1.00 71.31
ATOM   1517  CA  ILE A 101      -2.361   0.124   6.245  1.00 33.22
ATOM   1518  HA  ILE A 101      -2.697   0.397   5.256  1.00 52.24
ATOM   1519  CB  ILE A 101      -2.520  -1.428   6.412  1.00 75.31
ATOM   1520  HB  ILE A 101      -1.899  -1.725   7.244  1.00 22.41
ATOM   1521  CG2 ILE A 101      -3.953  -1.845   6.748  1.00 62.14
ATOM   1522 1HG2 ILE A 101      -4.255  -1.385   7.677  1.00 61.21
ATOM   1523 2HG2 ILE A 101      -4.005  -2.919   6.843  1.00 61.54
ATOM   1524 3HG2 ILE A 101      -4.613  -1.522   5.957  1.00 33.50
ATOM   1525  CG1 ILE A 101      -2.022  -2.170   5.158  1.00 63.51
ATOM   1526 1HG1 ILE A 101      -1.015  -1.848   4.940  1.00 63.12
ATOM   1527 2HG1 ILE A 101      -2.016  -3.230   5.361  1.00 32.30
ATOM   1528  CD1 ILE A 101      -2.863  -1.930   3.903  1.00 61.21
ATOM   1529 1HD1 ILE A 101      -2.835  -0.893   3.608  1.00 55.42
ATOM   1530 2HD1 ILE A 101      -3.886  -2.218   4.103  1.00 32.11
ATOM   1531 3HD1 ILE A 101      -2.501  -2.553   3.097  1.00 60.12
ATOM   1532  C   ILE A 101      -3.219   0.878   7.254  1.00 51.35
ATOM   1533  O   ILE A 101      -4.311   1.330   6.911  1.00 23.33
ATOM   1534  N   GLY A 102      -2.687   1.070   8.468  1.00 14.40
ATOM   1535  H   GLY A 102      -1.796   0.708   8.665  1.00 41.53
ATOM   1536  CA  GLY A 102      -3.405   1.805   9.504  1.00 73.41
ATOM   1537 1HA  GLY A 102      -4.312   1.276   9.743  1.00 31.31
ATOM   1538 2HA  GLY A 102      -2.788   1.868  10.389  1.00 43.42
ATOM   1539  C   GLY A 102      -3.772   3.204   9.059  1.00 41.01
ATOM   1540  O   GLY A 102      -4.882   3.692   9.308  1.00 13.35
ATOM   1541  N   ILE A 103      -2.850   3.820   8.371  1.00 73.12
ATOM   1542  H   ILE A 103      -2.003   3.349   8.216  1.00 51.23
ATOM   1543  CA  ILE A 103      -3.027   5.145   7.836  1.00 20.01
ATOM   1544  HA  ILE A 103      -3.374   5.797   8.624  1.00 52.32
ATOM   1545  CB  ILE A 103      -1.674   5.676   7.317  1.00 31.11
ATOM   1546  HB  ILE A 103      -1.305   4.987   6.573  1.00 63.04
ATOM   1547  CG2 ILE A 103      -1.832   7.055   6.662  1.00 23.12
ATOM   1548 1HG2 ILE A 103      -0.868   7.406   6.327  1.00  2.42
ATOM   1549 2HG2 ILE A 103      -2.248   7.754   7.372  1.00 23.34
ATOM   1550 3HG2 ILE A 103      -2.494   6.967   5.811  1.00  3.33
ATOM   1551  CG1 ILE A 103      -0.674   5.724   8.474  1.00 45.21
ATOM   1552 1HG1 ILE A 103      -0.920   6.555   9.119  1.00 63.33
ATOM   1553 2HG1 ILE A 103      -0.746   4.807   9.038  1.00 33.25
ATOM   1554  CD1 ILE A 103       0.755   5.893   8.040  1.00 32.33
ATOM   1555 1HD1 ILE A 103       0.865   6.808   7.479  1.00  5.24
ATOM   1556 2HD1 ILE A 103       1.010   5.040   7.428  1.00 54.33
ATOM   1557 3HD1 ILE A 103       1.385   5.907   8.917  1.00 13.24
ATOM   1558  C   ILE A 103      -4.039   5.120   6.697  1.00 12.20
ATOM   1559  O   ILE A 103      -4.969   5.936   6.659  1.00 74.23
ATOM   1560  N   ILE A 104      -3.881   4.156   5.801  1.00 43.43
ATOM   1561  H   ILE A 104      -3.176   3.487   5.949  1.00 73.02
ATOM   1562  CA  ILE A 104      -4.716   4.069   4.617  1.00 20.11
ATOM   1563  HA  ILE A 104      -4.637   4.997   4.070  1.00 20.14
ATOM   1564  CB  ILE A 104      -4.224   2.921   3.690  1.00 41.42
ATOM   1565  HB  ILE A 104      -4.251   2.001   4.253  1.00 25.24
ATOM   1566  CG2 ILE A 104      -5.139   2.765   2.481  1.00 11.11
ATOM   1567 1HG2 ILE A 104      -5.131   3.677   1.902  1.00 42.20
ATOM   1568 2HG2 ILE A 104      -6.145   2.559   2.813  1.00 21.45
ATOM   1569 3HG2 ILE A 104      -4.781   1.947   1.873  1.00 74.34
ATOM   1570  CG1 ILE A 104      -2.788   3.177   3.237  1.00 44.24
ATOM   1571 1HG1 ILE A 104      -2.787   4.035   2.582  1.00 72.31
ATOM   1572 2HG1 ILE A 104      -2.175   3.388   4.102  1.00 13.53
ATOM   1573  CD1 ILE A 104      -2.166   2.017   2.485  1.00  2.44
ATOM   1574 1HD1 ILE A 104      -2.760   1.798   1.610  1.00 63.23
ATOM   1575 2HD1 ILE A 104      -2.128   1.149   3.126  1.00  4.41
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ATOM   1576 3HD1 ILE A 104      -1.165   2.285   2.181  1.00 71.12
ATOM   1577  C   ILE A 104      -6.178   3.812   4.979  1.00 14.01
ATOM   1578  O   ILE A 104      -7.050   4.589   4.590  1.00 22.30
ATOM   1579  N   GLU A 105      -6.437   2.789   5.787  1.00 75.12
ATOM   1580  H   GLU A 105      -5.696   2.241   6.136  1.00 54.24
ATOM   1581  CA  GLU A 105      -7.803   2.482   6.156  1.00 51.24
ATOM   1582  HA  GLU A 105      -8.347   2.552   5.223  1.00 24.32
ATOM   1583  CB  GLU A 105      -7.995   1.054   6.723  1.00 31.33
ATOM   1584 1HB  GLU A 105      -9.031   0.933   7.004  1.00 63.55
ATOM   1585 2HB  GLU A 105      -7.774   0.349   5.936  1.00 31.41
ATOM   1586  CG  GLU A 105      -7.152   0.691   7.936  1.00 31.15
ATOM   1587 1HG  GLU A 105      -6.108   0.716   7.659  1.00 44.11
ATOM   1588 2HG  GLU A 105      -7.340   1.424   8.705  1.00 14.41
ATOM   1589  CD  GLU A 105      -7.486  -0.689   8.479  1.00 72.24
ATOM   1590  OE1 GLU A 105      -8.234  -0.773   9.480  1.00 43.54
ATOM   1591  OE2 GLU A 105      -7.050  -1.702   7.903  1.00  2.30
ATOM   1592  C   GLU A 105      -8.407   3.560   7.038  1.00 15.34
ATOM   1593  O   GLU A 105      -9.564   3.939   6.872  1.00 35.41
ATOM   1594  N   GLY A 106      -7.599   4.093   7.938  1.00 73.54
ATOM   1595  H   GLY A 106      -6.662   3.801   7.972  1.00 41.14
ATOM   1596  CA  GLY A 106      -8.071   5.089   8.861  1.00 72.23
ATOM   1597 1HA  GLY A 106      -8.967   4.706   9.327  1.00 65.51
ATOM   1598 2HA  GLY A 106      -7.339   5.252   9.635  1.00 60.20
ATOM   1599  C   GLY A 106      -8.414   6.410   8.207  1.00 11.11
ATOM   1600  O   GLY A 106      -9.445   7.000   8.537  1.00 43.03
ATOM   1601  N   ASN A 107      -7.596   6.858   7.244  1.00 71.22
ATOM   1602  H   ASN A 107      -6.813   6.320   6.981  1.00 35.42
ATOM   1603  CA  ASN A 107      -7.838   8.157   6.579  1.00 34.42
ATOM   1604  HA  ASN A 107      -7.919   8.910   7.349  1.00 64.04
ATOM   1605  CB  ASN A 107      -6.699   8.542   5.595  1.00 13.24
ATOM   1606 1HB  ASN A 107      -5.696   8.520   6.001  1.00 53.34
ATOM   1607 2HB  ASN A 107      -6.737   7.845   4.772  1.00  1.20
ATOM   1608  CG  ASN A 107      -6.900   9.920   4.990  1.00 70.11
ATOM   1609  OD1 ASN A 107      -7.490  10.066   3.928  1.00 51.22
ATOM   1610  ND2 ASN A 107      -6.374  10.935   5.634  1.00 54.33
ATOM   1611 2HD2 ASN A 107      -5.882  10.765   6.464  1.00  3.31
ATOM   1612 1HD2 ASN A 107      -6.495  11.829   5.251  1.00 14.20
ATOM   1613  C   ASN A 107      -9.149   8.100   5.818  1.00  2.02
ATOM   1614  O   ASN A 107      -9.960   9.027   5.877  1.00 21.33
ATOM   1615  N   ILE A 108      -9.371   6.971   5.175  1.00 51.11
ATOM   1616  H   ILE A 108      -8.691   6.265   5.227  1.00  2.51
ATOM   1617  CA  ILE A 108     -10.564   6.731   4.389  1.00 53.40
ATOM   1618  HA  ILE A 108     -10.636   7.520   3.653  1.00  4.34
ATOM   1619  CB  ILE A 108     -10.454   5.376   3.645  1.00 52.50
ATOM   1620  HB  ILE A 108     -10.225   4.612   4.372  1.00  5.13
ATOM   1621  CG2 ILE A 108     -11.766   4.997   2.955  1.00 44.10
ATOM   1622 1HG2 ILE A 108     -11.644   4.055   2.439  1.00 40.01
ATOM   1623 2HG2 ILE A 108     -12.033   5.767   2.248  1.00 52.21
ATOM   1624 3HG2 ILE A 108     -12.546   4.904   3.696  1.00 52.05
ATOM   1625  CG1 ILE A 108      -9.302   5.443   2.639  1.00 12.14
ATOM   1626 1HG1 ILE A 108      -9.546   6.162   1.871  1.00 12.10
ATOM   1627 2HG1 ILE A 108      -8.409   5.766   3.154  1.00 41.23
ATOM   1628  CD1 ILE A 108      -9.001   4.139   1.957  1.00 55.02
ATOM   1629 1HD1 ILE A 108      -9.856   3.819   1.382  1.00 32.20
ATOM   1630 2HD1 ILE A 108      -8.778   3.396   2.709  1.00 22.52
ATOM   1631 3HD1 ILE A 108      -8.148   4.256   1.311  1.00 43.14
ATOM   1632  C   ILE A 108     -11.815   6.773   5.263  1.00 60.44
ATOM   1633  O   ILE A 108     -12.846   7.315   4.856  1.00 62.33
ATOM   1634  N   ARG A 109     -11.720   6.214   6.465  1.00 12.40
ATOM   1635  H   ARG A 109     -10.886   5.768   6.721  1.00 32.52
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ATOM   1636  CA  ARG A 109     -12.836   6.223   7.390  1.00  2.14
ATOM   1637  HA  ARG A 109     -13.664   5.740   6.894  1.00  1.43
ATOM   1638  CB  ARG A 109     -12.511   5.441   8.661  1.00 23.21
ATOM   1639 1HB  ARG A 109     -11.675   5.912   9.158  1.00 62.50
ATOM   1640 2HB  ARG A 109     -13.370   5.454   9.314  1.00 42.03
ATOM   1641  CG  ARG A 109     -12.155   4.013   8.368  1.00 73.35
ATOM   1642 1HG  ARG A 109     -12.840   3.592   7.654  1.00 51.50
ATOM   1643 2HG  ARG A 109     -11.187   4.032   7.889  1.00 54.24
ATOM   1644  CD  ARG A 109     -12.039   3.160   9.611  1.00 72.32
ATOM   1645 1HD  ARG A 109     -11.173   3.473  10.173  1.00  1.53
ATOM   1646 2HD  ARG A 109     -12.928   3.284  10.210  1.00 10.23
ATOM   1647  NE  ARG A 109     -11.905   1.741   9.245  1.00  1.55
ATOM   1648  HE  ARG A 109     -12.692   1.366   8.795  1.00 42.34
ATOM   1649  CZ  ARG A 109     -10.822   0.979   9.457  1.00 61.53
ATOM   1650 NH1  ARG A 109      -9.753   1.460  10.078  1.00  1.11
ATOM   1651 1HH1 ARG A 109      -9.666   2.390  10.434  1.00 44.40
ATOM   1652 2HH1 ARG A 109      -8.960   0.842  10.186  1.00  3.21
ATOM   1653 NH2  ARG A 109     -10.802  -0.279   9.043  1.00 24.11
ATOM   1654 1HH2 ARG A 109     -11.554  -0.741   8.572  1.00 64.14
ATOM   1655 2HH2 ARG A 109      -9.944  -0.798   9.199  1.00 74.44
ATOM   1656  C   ARG A 109     -13.257   7.637   7.731  1.00 73.02
ATOM   1657  O   ARG A 109     -14.419   7.973   7.574  1.00 62.42
ATOM   1658  N   TYR A 110     -12.292   8.470   8.104  1.00 70.52
ATOM   1659  H   TYR A 110     -11.364   8.151   8.104  1.00 33.02
ATOM   1660  CA  TYR A 110     -12.574   9.855   8.498  1.00 23.00
ATOM   1661  HA  TYR A 110     -13.364   9.809   9.234  1.00 71.24
ATOM   1662  CB  TYR A 110     -11.354  10.532   9.135  1.00 32.12
ATOM   1663 1HB  TYR A 110     -10.539  10.523   8.426  1.00 62.15
ATOM   1664 2HB  TYR A 110     -11.604  11.556   9.372  1.00 72.23
ATOM   1665  CG  TYR A 110     -10.870   9.861  10.403  1.00 42.32
ATOM   1666  CD1 TYR A 110      -9.578   9.369  10.500  1.00  2.44
ATOM   1667  HD1 TYR A 110      -8.910   9.478   9.658  1.00  0.34
ATOM   1668  CE1 TYR A 110      -9.135   8.746  11.647  1.00 34.15
ATOM   1669  HE1 TYR A 110      -8.124   8.369  11.702  1.00  2.05
ATOM   1670  CZ  TYR A 110      -9.988   8.608  12.720  1.00  0.10
ATOM   1671  CE2 TYR A 110     -11.277   9.089  12.652  1.00 72.01
ATOM   1672  HE2 TYR A 110     -11.946   8.981  13.493  1.00 40.12
ATOM   1673  CD2 TYR A 110     -11.713   9.710  11.499  1.00 14.32
ATOM   1674  HD2 TYR A 110     -12.724  10.087  11.440  1.00  2.02
ATOM   1675  OH  TYR A 110      -9.547   7.980  13.863  1.00 14.41
ATOM   1676  HH  TYR A 110      -8.689   8.333  14.110  1.00 60.45
ATOM   1677  C   TYR A 110     -13.089  10.679   7.330  1.00 12.01
ATOM   1678  O   TYR A 110     -13.940  11.538   7.502  1.00 31.50
ATOM   1679  N   ALA A 111     -12.541  10.428   6.149  1.00 54.42
ATOM   1680  H   ALA A 111     -11.826   9.759   6.083  1.00 30.20
ATOM   1681  CA  ALA A 111     -12.960  11.136   4.946  1.00 54.12
ATOM   1682  HA  ALA A 111     -12.857  12.195   5.134  1.00 71.22
ATOM   1683  CB  ALA A 111     -12.057  10.769   3.775  1.00  3.31
ATOM   1684 1HB  ALA A 111     -11.030  10.983   4.030  1.00 14.42
ATOM   1685 2HB  ALA A 111     -12.342  11.344   2.907  1.00 64.13
ATOM   1686 3HB  ALA A 111     -12.161   9.716   3.560  1.00 61.41
ATOM   1687  C   ALA A 111     -14.424  10.839   4.605  1.00 34.41
ATOM   1688  O   ALA A 111     -15.147  11.709   4.132  1.00 52.30
ATOM   1689  N   ASN A 112     -14.839   9.605   4.836  1.00 45.35
ATOM   1690  H   ASN A 112     -14.201   8.966   5.218  1.00 30.22
ATOM   1691  CA  ASN A 112     -16.215   9.193   4.559  1.00 32.25
ATOM   1692  HA  ASN A 112     -16.497   9.699   3.649  1.00 14.04
ATOM   1693  CB  ASN A 112     -16.336   7.678   4.318  1.00 53.11
ATOM   1694 1HB  ASN A 112     -15.733   7.157   5.048  1.00 54.44
ATOM   1695 2HB  ASN A 112     -17.368   7.384   4.443  1.00 75.41
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ATOM   1696  CG  ASN A 112     -15.874   7.251   2.931  1.00 60.44
ATOM   1697  OD1 ASN A 112     -16.662   7.171   1.998  1.00  3.40
ATOM   1698  ND2 ASN A 112     -14.605   6.979   2.777  1.00 15.45
ATOM   1699 2HD2 ASN A 112     -14.011   7.064   3.558  1.00 64.24
ATOM   1700 1HD2 ASN A 112     -14.305   6.718   1.886  1.00 60.15
ATOM   1701  C   ASN A 112     -17.189   9.649   5.627  1.00 43.30
ATOM   1702  O   ASN A 112     -18.311  10.047   5.319  1.00 22.13
ATOM   1703  N   THR A 113     -16.775   9.591   6.874  1.00 35.50
ATOM   1704  H   THR A 113     -15.867   9.291   7.096  1.00  0.53
ATOM   1705  CA  THR A 113     -17.635   9.973   7.965  1.00 62.41
ATOM   1706  HA  THR A 113     -18.107  10.906   7.695  1.00 21.24
ATOM   1707  CB  THR A 113     -18.761   8.898   8.209  1.00 31.12
ATOM   1708  HB  THR A 113     -19.322   8.805   7.293  1.00 72.14
ATOM   1709  OG1 THR A 113     -19.672   9.315   9.245  1.00 51.23
ATOM   1710  HG1 THR A 113     -19.196   9.462  10.074  1.00 54.42
ATOM   1711  CG2 THR A 113     -18.174   7.529   8.566  1.00  4.23
ATOM   1712 1HG2 THR A 113     -17.590   7.614   9.471  1.00 21.31
ATOM   1713 2HG2 THR A 113     -17.539   7.191   7.760  1.00 53.00
ATOM   1714 3HG2 THR A 113     -18.975   6.821   8.718  1.00 43.12
ATOM   1715  C   THR A 113     -16.815  10.193   9.234  1.00 51.15
ATOM   1716  O   THR A 113     -15.761   9.579   9.423  1.00 32.45
ATOM   1717  N   HIS A 114     -17.288  11.070  10.069  1.00 53.35
ATOM   1718  H   HIS A 114     -18.113  11.562   9.882  1.00 32.53
ATOM   1719  CA  HIS A 114     -16.671  11.357  11.325  1.00 33.35
ATOM   1720  HA  HIS A 114     -16.151  10.472  11.659  1.00 21.44
ATOM   1721  CB  HIS A 114     -15.675  12.540  11.182  1.00 14.11
ATOM   1722 1HB  HIS A 114     -14.944  12.293  10.428  1.00 72.41
ATOM   1723 2HB  HIS A 114     -16.223  13.415  10.865  1.00 24.25
ATOM   1724  CG  HIS A 114     -14.926  12.888  12.445  1.00 75.54
ATOM   1725  ND1 HIS A 114     -15.526  13.438  13.545  1.00 60.44
ATOM   1726  CD2 HIS A 114     -13.617  12.754  12.761  1.00  4.12
ATOM   1727  HD1 HIS A 114     -16.501  13.586  13.584  1.00 54.51
ATOM   1728  CE1 HIS A 114     -14.601  13.630  14.479  1.00 32.32
ATOM   1729  NE2 HIS A 114     -13.411  13.231  14.059  1.00 64.43
ATOM   1730  HD2 HIS A 114     -12.847  12.348  12.120  1.00 11.31
ATOM   1731  HE1 HIS A 114     -14.796  14.054  15.453  1.00 31.12
ATOM   1732  C   HIS A 114     -17.796  11.685  12.304  1.00 52.42
ATOM   1733  O   HIS A 114     -18.054  12.889  12.554  1.00 22.20
TER    1734       HIS A 114
ENDMDL
MODEL        6
ATOM      1  N   MET A   1     -10.609 -20.603   0.228  1.00 61.24
ATOM      2  CA  MET A   1      -9.293 -20.602   0.892  1.00 50.11
ATOM      3  HA  MET A   1      -9.444 -20.452   1.950  1.00 20.55
ATOM      4  CB  MET A   1      -8.532 -21.907   0.618  1.00  3.44
ATOM      5 1HB  MET A   1      -9.136 -22.738   0.949  1.00 10.03
ATOM      6 2HB  MET A   1      -8.376 -21.990  -0.447  1.00 32.43
ATOM      7  CG  MET A   1      -7.176 -21.992   1.311  1.00 41.52
ATOM      8 1HG  MET A   1      -6.549 -21.192   0.942  1.00 50.31
ATOM      9 2HG  MET A   1      -7.321 -21.866   2.373  1.00 50.04
ATOM     10  SD  MET A   1      -6.337 -23.559   1.021  1.00 22.21
ATOM     11  CE  MET A   1      -6.073 -23.510  -0.754  1.00 32.50
ATOM     12 1HE  MET A   1      -5.484 -22.642  -1.006  1.00 31.20
ATOM     13 2HE  MET A   1      -7.025 -23.464  -1.264  1.00 64.31
ATOM     14 3HE  MET A   1      -5.546 -24.402  -1.062  1.00  3.21
ATOM     15  C   MET A   1      -8.562 -19.434   0.336  1.00 74.41
ATOM     16  O   MET A   1      -8.033 -19.494  -0.763  1.00 11.34
ATOM     17  N   ASP A   2      -8.598 -18.364   1.081  1.00 21.02
ATOM     18  H   ASP A   2      -8.881 -18.398   2.016  1.00  3.35
ATOM     19  CA  ASP A   2      -8.246 -17.060   0.578  1.00 44.41
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ATOM     20  HA  ASP A   2      -7.386 -17.149  -0.067  1.00 61.23
ATOM     21  CB  ASP A   2      -9.449 -16.558  -0.279  1.00 23.33
ATOM     22 1HB  ASP A   2      -9.417 -15.480  -0.344  1.00 20.11
ATOM     23 2HB  ASP A   2      -9.385 -16.982  -1.269  1.00 63.33
ATOM     24  CG  ASP A   2     -10.801 -16.974   0.343  1.00 11.34
ATOM     25  OD1 ASP A   2     -11.316 -18.096  -0.009  1.00 14.20
ATOM     26  OD2 ASP A   2     -11.270 -16.293   1.257  1.00 72.34
ATOM     27  C   ASP A   2      -7.941 -16.100   1.731  1.00 13.33
ATOM     28  O   ASP A   2      -6.784 -15.739   1.945  1.00 21.05
ATOM     29  N   LYS A   3      -8.989 -15.737   2.484  1.00 14.53
ATOM     30  H   LYS A   3      -9.887 -16.031   2.187  1.00 42.01
ATOM     31  CA  LYS A   3      -8.942 -14.830   3.640  1.00 45.35
ATOM     32  HA  LYS A   3      -9.885 -14.955   4.150  1.00 40.30
ATOM     33  CB  LYS A   3      -7.799 -15.134   4.637  1.00 42.12
ATOM     34 1HB  LYS A   3      -6.862 -15.107   4.100  1.00 74.55
ATOM     35 2HB  LYS A   3      -7.784 -14.355   5.386  1.00 51.32
ATOM     36  CG  LYS A   3      -7.889 -16.469   5.338  1.00  0.42
ATOM     37 1HG  LYS A   3      -8.802 -16.505   5.915  1.00 52.11
ATOM     38 2HG  LYS A   3      -7.894 -17.242   4.587  1.00 64.11
ATOM     39  CD  LYS A   3      -6.696 -16.664   6.263  1.00 52.01
ATOM     40 1HD  LYS A   3      -5.790 -16.654   5.674  1.00  0.22
ATOM     41 2HD  LYS A   3      -6.670 -15.855   6.977  1.00  3.33
ATOM     42  CE  LYS A   3      -6.776 -17.981   7.010  1.00 12.21
ATOM     43 1HE  LYS A   3      -7.679 -17.980   7.600  1.00 54.12
ATOM     44 2HE  LYS A   3      -6.811 -18.784   6.290  1.00 44.51
ATOM     45  NZ  LYS A   3      -5.606 -18.177   7.910  1.00 30.14
ATOM     46 1HZ  LYS A   3      -5.689 -19.083   8.413  1.00 61.23
ATOM     47 2HZ  LYS A   3      -5.558 -17.408   8.610  1.00 74.44
ATOM     48 3HZ  LYS A   3      -4.724 -18.178   7.359  1.00  5.53
ATOM     49  C   LYS A   3      -8.869 -13.381   3.205  1.00  4.22
ATOM     50  O   LYS A   3      -8.705 -13.066   2.021  1.00 65.30
ATOM     51  N   GLY A   4      -9.030 -12.501   4.161  1.00 32.32
ATOM     52  H   GLY A   4      -9.247 -12.814   5.061  1.00 20.52
ATOM     53  CA  GLY A   4      -8.911 -11.106   3.893  1.00 43.11
ATOM     54 1HA  GLY A   4      -9.219 -10.924   2.873  1.00 24.40
ATOM     55 2HA  GLY A   4      -9.547 -10.560   4.571  1.00 12.55
ATOM     56  C   GLY A   4      -7.490 -10.654   4.077  1.00 72.50
ATOM     57  O   GLY A   4      -6.960  -9.890   3.274  1.00 54.24
ATOM     58  N   THR A   5      -6.888 -11.131   5.137  1.00  2.14
ATOM     59  H   THR A   5      -7.357 -11.740   5.740  1.00 62.41
ATOM     60  CA  THR A   5      -5.536 -10.813   5.481  1.00 10.12
ATOM     61  HA  THR A   5      -5.199  -9.982   4.879  1.00 23.45
ATOM     62  CB  THR A   5      -5.475 -10.408   6.965  1.00 33.05
ATOM     63  HB  THR A   5      -5.666 -11.282   7.574  1.00 70.24
ATOM     64  OG1 THR A   5      -6.496  -9.422   7.220  1.00 33.12
ATOM     65  HG1 THR A   5      -6.324  -8.636   6.685  1.00 45.14
ATOM     66  CG2 THR A   5      -4.114  -9.822   7.325  1.00 53.23
ATOM     67 1HG2 THR A   5      -3.344 -10.554   7.133  1.00  1.51
ATOM     68 2HG2 THR A   5      -4.100  -9.551   8.371  1.00 72.20
ATOM     69 3HG2 THR A   5      -3.933  -8.943   6.726  1.00  3.31
ATOM     70  C   THR A   5      -4.630 -12.034   5.227  1.00 15.33
ATOM     71  O   THR A   5      -4.946 -13.155   5.668  1.00  4.04
ATOM     72  N   GLN A   6      -3.546 -11.825   4.509  1.00 64.15
ATOM     73  H   GLN A   6      -3.371 -10.917   4.171  1.00  3.23
ATOM     74  CA  GLN A   6      -2.581 -12.872   4.235  1.00 64.51
ATOM     75  HA  GLN A   6      -2.788 -13.741   4.841  1.00 12.32
ATOM     76  CB  GLN A   6      -2.586 -13.257   2.743  1.00 60.31
ATOM     77 1HB  GLN A   6      -2.085 -12.483   2.183  1.00  3.21
ATOM     78 2HB  GLN A   6      -2.010 -14.166   2.640  1.00 14.30
ATOM     79  CG  GLN A   6      -3.953 -13.489   2.106  1.00  3.23
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ATOM     80 1HG  GLN A   6      -4.436 -14.315   2.608  1.00 52.44
ATOM     81 2HG  GLN A   6      -4.550 -12.597   2.226  1.00  3.22
ATOM     82  CD  GLN A   6      -3.849 -13.813   0.616  1.00 22.11
ATOM     83  OE1 GLN A   6      -4.720 -13.465  -0.172  1.00 71.02
ATOM     84  NE2 GLN A   6      -2.803 -14.499   0.221  1.00 73.02
ATOM     85 2HE2 GLN A   6      -2.143 -14.768   0.890  1.00 34.32
ATOM     86 1HE2 GLN A   6      -2.746 -14.718  -0.731  1.00 42.01
ATOM     87  C   GLN A   6      -1.198 -12.310   4.533  1.00 15.33
ATOM     88  O   GLN A   6      -0.919 -11.151   4.202  1.00 52.33
ATOM     89  N   TYR A   7      -0.360 -13.083   5.167  1.00 61.24
ATOM     90  H   TYR A   7      -0.639 -13.961   5.498  1.00 34.13
ATOM     91  CA  TYR A   7       1.014 -12.692   5.368  1.00 20.11
ATOM     92  HA  TYR A   7       1.178 -11.761   4.846  1.00 24.30
ATOM     93  CB  TYR A   7       1.338 -12.527   6.861  1.00 61.54
ATOM     94 1HB  TYR A   7       0.417 -12.412   7.413  1.00 23.22
ATOM     95 2HB  TYR A   7       1.857 -13.407   7.210  1.00 44.00
ATOM     96  CG  TYR A   7       2.212 -11.322   7.143  1.00  3.21
ATOM     97  CD1 TYR A   7       1.806 -10.352   8.045  1.00 42.32
ATOM     98  HD1 TYR A   7       0.876 -10.485   8.578  1.00  3.13
ATOM     99  CE1 TYR A   7       2.568  -9.223   8.270  1.00 70.43
ATOM    100  HE1 TYR A   7       2.234  -8.478   8.977  1.00 22.10
ATOM    101  CZ  TYR A   7       3.753  -9.058   7.596  1.00 52.15
ATOM    102  CE2 TYR A   7       4.182 -10.006   6.697  1.00 10.24
ATOM    103  HE2 TYR A   7       5.114  -9.874   6.167  1.00 31.32
ATOM    104  CD2 TYR A   7       3.412 -11.126   6.471  1.00 63.23
ATOM    105  HD2 TYR A   7       3.744 -11.874   5.766  1.00 60.24
ATOM    106  OH  TYR A   7       4.495  -7.923   7.795  1.00  1.54
ATOM    107  HH  TYR A   7       4.593  -7.490   6.934  1.00 12.31
ATOM    108  C   TYR A   7       1.889 -13.771   4.750  1.00 22.12
ATOM    109  O   TYR A   7       1.743 -14.943   5.105  1.00 25.14
ATOM    110  N   LYS A   8       2.757 -13.422   3.829  1.00 53.52
ATOM    111  H   LYS A   8       2.847 -12.479   3.554  1.00 34.13
ATOM    112  CA  LYS A   8       3.601 -14.426   3.209  1.00 24.20
ATOM    113  HA  LYS A   8       3.814 -15.179   3.954  1.00 70.43
ATOM    114  CB  LYS A   8       2.863 -15.101   2.028  1.00 63.25
ATOM    115 1HB  LYS A   8       1.905 -15.454   2.378  1.00 24.45
ATOM    116 2HB  LYS A   8       2.694 -14.355   1.264  1.00  1.12
ATOM    117  CG  LYS A   8       3.596 -16.288   1.381  1.00  4.21
ATOM    118 1HG  LYS A   8       3.011 -16.654   0.551  1.00 34.15
ATOM    119 2HG  LYS A   8       4.556 -15.947   1.019  1.00  4.42
ATOM    120  CD  LYS A   8       3.817 -17.436   2.372  1.00 11.33
ATOM    121 1HD  LYS A   8       4.487 -17.099   3.151  1.00 55.52
ATOM    122 2HD  LYS A   8       2.868 -17.708   2.808  1.00 71.51
ATOM    123  CE  LYS A   8       4.436 -18.672   1.702  1.00 41.30
ATOM    124 1HE  LYS A   8       4.511 -19.462   2.434  1.00 33.02
ATOM    125 2HE  LYS A   8       3.778 -18.993   0.906  1.00 31.33
ATOM    126  NZ  LYS A   8       5.784 -18.420   1.142  1.00 44.51
ATOM    127 1HZ  LYS A   8       6.221 -19.225   0.657  1.00 13.24
ATOM    128 2HZ  LYS A   8       6.464 -18.050   1.850  1.00 75.45
ATOM    129 3HZ  LYS A   8       5.811 -17.610   0.476  1.00 33.21
ATOM    130  C   LYS A   8       4.912 -13.819   2.739  1.00  1.35
ATOM    131  O   LYS A   8       4.912 -12.892   1.956  1.00 44.22
ATOM    132  N   ASP A   9       6.012 -14.339   3.281  1.00 61.14
ATOM    133  H   ASP A   9       5.907 -15.016   3.979  1.00 51.42
ATOM    134  CA  ASP A   9       7.409 -13.987   2.883  1.00 71.24
ATOM    135  HA  ASP A   9       8.078 -14.502   3.558  1.00 43.10
ATOM    136  CB  ASP A   9       7.704 -14.461   1.442  1.00 61.33
ATOM    137 1HB  ASP A   9       7.136 -13.854   0.753  1.00 35.23
ATOM    138 2HB  ASP A   9       8.756 -14.337   1.235  1.00 71.55
ATOM    139  CG  ASP A   9       7.332 -15.903   1.208  1.00 14.55
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ATOM    140  OD1 ASP A   9       7.633 -16.781   2.066  1.00 64.32
ATOM    141  OD2 ASP A   9       6.668 -16.208   0.190  1.00 53.05
ATOM    142  C   ASP A   9       7.669 -12.490   2.987  1.00 41.14
ATOM    143  O   ASP A   9       8.404 -11.909   2.196  1.00 75.54
ATOM    144  N   GLY A  10       7.110 -11.872   4.001  1.00 73.52
ATOM    145  H   GLY A  10       6.572 -12.368   4.648  1.00 75.34
ATOM    146  CA  GLY A  10       7.286 -10.467   4.173  1.00 20.13
ATOM    147 1HA  GLY A  10       7.364 -10.248   5.227  1.00 14.51
ATOM    148 2HA  GLY A  10       8.200 -10.169   3.683  1.00 42.53
ATOM    149  C   GLY A  10       6.142  -9.674   3.587  1.00 34.20
ATOM    150  O   GLY A  10       5.857  -8.605   4.060  1.00 61.11
ATOM    151  N   TYR A  11       5.501 -10.213   2.565  1.00  3.13
ATOM    152  H   TYR A  11       5.800 -11.096   2.260  1.00 73.34
ATOM    153  CA  TYR A  11       4.363  -9.564   1.897  1.00 15.50
ATOM    154  HA  TYR A  11       4.641  -8.539   1.698  1.00  5.23
ATOM    155  CB  TYR A  11       4.001 -10.241   0.563  1.00 63.30
ATOM    156 1HB  TYR A  11       3.918 -11.304   0.730  1.00 33.44
ATOM    157 2HB  TYR A  11       3.040  -9.868   0.241  1.00 64.04
ATOM    158  CG  TYR A  11       4.981 -10.045  -0.566  1.00 52.22
ATOM    159  CD1 TYR A  11       4.896  -8.927  -1.381  1.00 32.23
ATOM    160  HD1 TYR A  11       4.132  -8.190  -1.176  1.00 63.44
ATOM    161  CE1 TYR A  11       5.760  -8.740  -2.433  1.00 32.31
ATOM    162  HE1 TYR A  11       5.674  -7.860  -3.054  1.00 33.15
ATOM    163  CZ  TYR A  11       6.731  -9.675  -2.691  1.00  1.11
ATOM    164  CE2 TYR A  11       6.844 -10.802  -1.897  1.00 45.42
ATOM    165  HE2 TYR A  11       7.607 -11.538  -2.101  1.00 30.34
ATOM    166  CD2 TYR A  11       5.967 -10.983  -0.842  1.00 25.13
ATOM    167  HD2 TYR A  11       6.050 -11.861  -0.217  1.00 55.03
ATOM    168  OH  TYR A  11       7.603  -9.476  -3.738  1.00  1.40
ATOM    169  HH  TYR A  11       7.733  -8.537  -3.885  1.00 14.31
ATOM    170  C   TYR A  11       3.132  -9.568   2.780  1.00 33.34
ATOM    171  O   TYR A  11       2.825 -10.568   3.438  1.00  3.22
ATOM    172  N   TYR A  12       2.435  -8.463   2.780  1.00 63.00
ATOM    173  H   TYR A  12       2.685  -7.743   2.162  1.00  2.30
ATOM    174  CA  TYR A  12       1.242  -8.302   3.572  1.00 62.23
ATOM    175  HA  TYR A  12       1.051  -9.230   4.087  1.00 71.50
ATOM    176  CB  TYR A  12       1.412  -7.174   4.604  1.00 53.12
ATOM    177 1HB  TYR A  12       2.255  -7.375   5.247  1.00 53.44
ATOM    178 2HB  TYR A  12       1.605  -6.255   4.070  1.00 23.33
ATOM    179  CG  TYR A  12       0.200  -6.939   5.486  1.00 24.03
ATOM    180  CD1 TYR A  12      -0.058  -7.750   6.578  1.00 60.54
ATOM    181  HD1 TYR A  12       0.613  -8.569   6.792  1.00 22.41
ATOM    182  CE1 TYR A  12      -1.153  -7.531   7.388  1.00 10.41
ATOM    183  HE1 TYR A  12      -1.338  -8.175   8.237  1.00 42.43
ATOM    184  CZ  TYR A  12      -2.004  -6.486   7.111  1.00 43.10
ATOM    185  CE2 TYR A  12      -1.766  -5.668   6.032  1.00 75.22
ATOM    186  HE2 TYR A  12      -2.434  -4.849   5.813  1.00  4.33
ATOM    187  CD2 TYR A  12      -0.675  -5.894   5.230  1.00 64.33
ATOM    188  HD2 TYR A  12      -0.491  -5.253   4.381  1.00 21.34
ATOM    189  OH  TYR A  12      -3.105  -6.260   7.912  1.00 45.22
ATOM    190  HH  TYR A  12      -2.835  -6.313   8.834  1.00 50.23
ATOM    191  C   TYR A  12       0.093  -7.993   2.655  1.00 30.11
ATOM    192  O   TYR A  12       0.199  -7.110   1.798  1.00 64.41
ATOM    193  N   ILE A  13      -0.962  -8.719   2.799  1.00 33.52
ATOM    194  H   ILE A  13      -0.963  -9.457   3.453  1.00  0.33
ATOM    195  CA  ILE A  13      -2.156  -8.504   2.038  1.00 20.14
ATOM    196  HA  ILE A  13      -2.058  -7.585   1.479  1.00  0.10
ATOM    197  CB  ILE A  13      -2.415  -9.693   1.053  1.00 42.01
ATOM    198  HB  ILE A  13      -2.523 -10.590   1.643  1.00 33.44
ATOM    199  CG2 ILE A  13      -3.711  -9.489   0.272  1.00 12.41
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ATOM    200 1HG2 ILE A  13      -3.867 -10.322  -0.396  1.00 62.14
ATOM    201 2HG2 ILE A  13      -3.646  -8.575  -0.301  1.00 61.44
ATOM    202 3HG2 ILE A  13      -4.540  -9.420   0.962  1.00 42.51
ATOM    203  CG1 ILE A  13      -1.225  -9.872   0.088  1.00 24.51
ATOM    204 1HG1 ILE A  13      -1.128  -8.984  -0.520  1.00  2.41
ATOM    205 2HG1 ILE A  13      -0.321 -10.001   0.667  1.00 50.24
ATOM    206  CD1 ILE A  13      -1.353 -11.055  -0.852  1.00 52.54
ATOM    207 1HD1 ILE A  13      -1.434 -11.964  -0.276  1.00 75.44
ATOM    208 2HD1 ILE A  13      -0.481 -11.108  -1.488  1.00 74.34
ATOM    209 3HD1 ILE A  13      -2.237 -10.936  -1.462  1.00 32.12
ATOM    210  C   ILE A  13      -3.309  -8.397   3.020  1.00  1.31
ATOM    211  O   ILE A  13      -3.364  -9.163   3.969  1.00 53.43
ATOM    212  N   THR A  14      -4.172  -7.439   2.839  1.00  1.04
ATOM    213  H   THR A  14      -4.047  -6.795   2.109  1.00 34.53
ATOM    214  CA  THR A  14      -5.341  -7.322   3.669  1.00 20.35
ATOM    215  HA  THR A  14      -5.681  -8.333   3.839  1.00 73.02
ATOM    216  CB  THR A  14      -5.073  -6.616   5.057  1.00 64.24
ATOM    217  HB  THR A  14      -4.146  -7.002   5.458  1.00 53.43
ATOM    218  OG1 THR A  14      -6.131  -6.923   5.977  1.00 61.20
ATOM    219  HG1 THR A  14      -5.920  -6.464   6.799  1.00 75.41
ATOM    220  CG2 THR A  14      -4.975  -5.095   4.934  1.00 51.23
ATOM    221 1HG2 THR A  14      -5.893  -4.702   4.522  1.00 32.32
ATOM    222 2HG2 THR A  14      -4.147  -4.835   4.292  1.00 14.52
ATOM    223 3HG2 THR A  14      -4.807  -4.662   5.910  1.00 43.23
ATOM    224  C   THR A  14      -6.439  -6.639   2.860  1.00 21.05
ATOM    225  O   THR A  14      -6.185  -6.179   1.731  1.00 60.12
ATOM    226  N   THR A  15      -7.633  -6.614   3.376  1.00 63.23
ATOM    227  H   THR A  15      -7.777  -6.933   4.293  1.00 62.53
ATOM    228  CA  THR A  15      -8.737  -6.059   2.656  1.00 50.22
ATOM    229  HA  THR A  15      -8.375  -5.684   1.710  1.00 70.40
ATOM    230  CB  THR A  15      -9.781  -7.152   2.377  1.00 64.53
ATOM    231  HB  THR A  15     -10.250  -7.444   3.305  1.00 21.25
ATOM    232  OG1 THR A  15      -9.102  -8.280   1.807  1.00 64.14
ATOM    233  HG1 THR A  15      -8.270  -8.356   2.293  1.00 70.40
ATOM    234  CG2 THR A  15     -10.843  -6.667   1.392  1.00 35.15
ATOM    235 1HG2 THR A  15     -11.342  -5.800   1.801  1.00 20.54
ATOM    236 2HG2 THR A  15     -11.565  -7.452   1.225  1.00 12.44
ATOM    237 3HG2 THR A  15     -10.373  -6.404   0.456  1.00 33.11
ATOM    238  C   THR A  15      -9.369  -4.924   3.443  1.00 70.10
ATOM    239  O   THR A  15      -9.629  -5.052   4.634  1.00 51.34
ATOM    240  N   LEU A  16      -9.571  -3.820   2.784  1.00 31.41
ATOM    241  H   LEU A  16      -9.287  -3.754   1.844  1.00 30.11
ATOM    242  CA  LEU A  16     -10.246  -2.708   3.369  1.00 54.34
ATOM    243  HA  LEU A  16     -10.337  -2.873   4.432  1.00 33.50
ATOM    244  CB  LEU A  16      -9.505  -1.365   3.111  1.00 33.31
ATOM    245 1HB  LEU A  16      -9.331  -1.295   2.048  1.00 20.53
ATOM    246 2HB  LEU A  16     -10.175  -0.564   3.385  1.00 63.11
ATOM    247  CG  LEU A  16      -8.147  -1.128   3.816  1.00  2.02
ATOM    248  HG  LEU A  16      -7.890  -0.088   3.665  1.00 63.00
ATOM    249  CD1 LEU A  16      -8.263  -1.313   5.321  1.00 71.25
ATOM    250 1HD1 LEU A  16      -7.306  -1.117   5.784  1.00 54.51
ATOM    251 2HD1 LEU A  16      -8.562  -2.328   5.536  1.00 33.41
ATOM    252 3HD1 LEU A  16      -9.002  -0.631   5.713  1.00 55.14
ATOM    253  CD2 LEU A  16      -7.031  -1.986   3.229  1.00 22.41
ATOM    254 1HD2 LEU A  16      -6.903  -1.746   2.184  1.00 22.11
ATOM    255 2HD2 LEU A  16      -7.296  -3.029   3.326  1.00  0.12
ATOM    256 3HD2 LEU A  16      -6.109  -1.796   3.762  1.00 54.44
ATOM    257  C   LEU A  16     -11.609  -2.646   2.750  1.00  3.53
ATOM    258  O   LEU A  16     -11.730  -2.557   1.527  1.00 73.01
ATOM    259  N   ASN A  17     -12.623  -2.706   3.558  1.00 14.50
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ATOM    260  H   ASN A  17     -12.465  -2.815   4.517  1.00 40.12
ATOM    261  CA  ASN A  17     -13.991  -2.644   3.061  1.00 20.01
ATOM    262  HA  ASN A  17     -13.992  -3.120   2.092  1.00 43.11
ATOM    263  CB  ASN A  17     -14.983  -3.384   3.979  1.00 22.35
ATOM    264 1HB  ASN A  17     -14.809  -3.052   4.992  1.00  3.42
ATOM    265 2HB  ASN A  17     -15.990  -3.124   3.689  1.00 30.30
ATOM    266  CG  ASN A  17     -14.838  -4.900   3.960  1.00 44.43
ATOM    267  OD1 ASN A  17     -13.761  -5.441   3.751  1.00 22.44
ATOM    268  ND2 ASN A  17     -15.929  -5.594   4.182  1.00 52.03
ATOM    269 2HD2 ASN A  17     -16.764  -5.108   4.344  1.00 74.11
ATOM    270 1HD2 ASN A  17     -15.846  -6.569   4.171  1.00 62.10
ATOM    271  C   ASN A  17     -14.413  -1.211   2.872  1.00  1.31
ATOM    272  O   ASN A  17     -15.265  -0.696   3.593  1.00 74.24
ATOM    273  N   TYR A  18     -13.741  -0.555   1.956  1.00 24.11
ATOM    274  H   TYR A  18     -13.059  -1.046   1.443  1.00  1.52
ATOM    275  CA  TYR A  18     -13.975   0.825   1.623  1.00 31.55
ATOM    276  HA  TYR A  18     -15.012   1.039   1.836  1.00 10.22
ATOM    277  CB  TYR A  18     -13.074   1.781   2.448  1.00 44.03
ATOM    278 1HB  TYR A  18     -12.039   1.502   2.304  1.00 74.14
ATOM    279 2HB  TYR A  18     -13.218   2.793   2.095  1.00 61.12
ATOM    280  CG  TYR A  18     -13.358   1.757   3.941  1.00 23.33
ATOM    281  CD1 TYR A  18     -14.464   2.419   4.464  1.00 63.10
ATOM    282  HD1 TYR A  18     -15.108   2.971   3.796  1.00 50.11
ATOM    283  CE1 TYR A  18     -14.750   2.377   5.813  1.00 13.34
ATOM    284  HE1 TYR A  18     -15.616   2.897   6.198  1.00  5.40
ATOM    285  CZ  TYR A  18     -13.927   1.674   6.664  1.00 33.43
ATOM    286  CE2 TYR A  18     -12.820   1.011   6.175  1.00 41.33
ATOM    287  HE2 TYR A  18     -12.176   0.460   6.843  1.00 44.02
ATOM    288  CD2 TYR A  18     -12.542   1.052   4.821  1.00 33.42
ATOM    289  HD2 TYR A  18     -11.675   0.534   4.436  1.00 11.54
ATOM    290  OH  TYR A  18     -14.226   1.615   8.017  1.00 50.41
ATOM    291  HH  TYR A  18     -15.184   1.522   8.071  1.00 62.13
ATOM    292  C   TYR A  18     -13.739   1.006   0.144  1.00 73.12
ATOM    293  O   TYR A  18     -13.032   0.196  -0.480  1.00 34.30
ATOM    294  N   ASN A  19     -14.290   2.066  -0.402  1.00 62.33
ATOM    295  H   ASN A  19     -14.729   2.708   0.190  1.00 31.45
ATOM    296  CA  ASN A  19     -14.248   2.318  -1.839  1.00 54.44
ATOM    297  HA  ASN A  19     -14.598   1.429  -2.339  1.00 75.51
ATOM    298  CB  ASN A  19     -15.167   3.491  -2.222  1.00 53.31
ATOM    299 1HB  ASN A  19     -16.172   3.280  -1.888  1.00 40.41
ATOM    300 2HB  ASN A  19     -14.815   4.389  -1.735  1.00 41.11
ATOM    301  CG  ASN A  19     -15.206   3.744  -3.730  1.00 25.41
ATOM    302  OD1 ASN A  19     -14.367   4.457  -4.271  1.00 61.13
ATOM    303  ND2 ASN A  19     -16.178   3.184  -4.409  1.00 14.54
ATOM    304 2HD2 ASN A  19     -16.851   2.626  -3.949  1.00 25.54
ATOM    305 1HD2 ASN A  19     -16.223   3.360  -5.370  1.00 34.10
ATOM    306  C   ASN A  19     -12.828   2.606  -2.300  1.00 23.42
ATOM    307  O   ASN A  19     -12.097   3.361  -1.648  1.00 52.12
ATOM    308  N   PHE A  20     -12.458   2.002  -3.420  1.00 73.30
ATOM    309  H   PHE A  20     -13.104   1.420  -3.871  1.00 45.21
ATOM    310  CA  PHE A  20     -11.126   2.113  -4.009  1.00 14.04
ATOM    311  HA  PHE A  20     -10.446   1.559  -3.379  1.00 14.22
ATOM    312  CB  PHE A  20     -11.122   1.450  -5.397  1.00 74.24
ATOM    313 1HB  PHE A  20     -11.328   0.396  -5.282  1.00 40.43
ATOM    314 2HB  PHE A  20     -11.905   1.895  -5.996  1.00 23.34
ATOM    315  CG  PHE A  20      -9.824   1.582  -6.151  1.00 33.41
ATOM    316  CD1 PHE A  20      -8.754   0.763  -5.859  1.00 15.21
ATOM    317  HD1 PHE A  20      -8.854   0.021  -5.081  1.00  5.22
ATOM    318  CE1 PHE A  20      -7.570   0.884  -6.546  1.00 43.43
ATOM    319  HE1 PHE A  20      -6.738   0.238  -6.307  1.00 61.15
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ATOM    320  CZ  PHE A  20      -7.441   1.831  -7.540  1.00 73.41
ATOM    321  HZ  PHE A  20      -6.511   1.923  -8.078  1.00 45.21
ATOM    322  CE2 PHE A  20      -8.499   2.656  -7.845  1.00 62.35
ATOM    323  HE2 PHE A  20      -8.399   3.398  -8.624  1.00 22.34
ATOM    324  CD2 PHE A  20      -9.682   2.531  -7.156  1.00 23.33
ATOM    325  HD2 PHE A  20     -10.513   3.178  -7.395  1.00 15.23
ATOM    326  C   PHE A  20     -10.628   3.560  -4.107  1.00  3.22
ATOM    327  O   PHE A  20      -9.468   3.820  -3.835  1.00 10.32
ATOM    328  N   ASN A  21     -11.508   4.492  -4.464  1.00 64.12
ATOM    329  H   ASN A  21     -12.444   4.228  -4.614  1.00 45.43
ATOM    330  CA  ASN A  21     -11.106   5.902  -4.621  1.00 70.32
ATOM    331  HA  ASN A  21     -10.307   5.916  -5.349  1.00 32.03
ATOM    332  CB  ASN A  21     -12.261   6.778  -5.138  1.00 73.25
ATOM    333 1HB  ASN A  21     -12.601   6.386  -6.086  1.00 20.41
ATOM    334 2HB  ASN A  21     -13.075   6.733  -4.431  1.00 20.23
ATOM    335  CG  ASN A  21     -11.878   8.260  -5.343  1.00 74.12
ATOM    336  OD1 ASN A  21     -12.696   9.142  -5.160  1.00 63.12
ATOM    337  ND2 ASN A  21     -10.646   8.537  -5.739  1.00 11.02
ATOM    338 2HD2 ASN A  21     -10.004   7.814  -5.888  1.00 64.23
ATOM    339 1HD2 ASN A  21     -10.420   9.480  -5.875  1.00 42.13
ATOM    340  C   ASN A  21     -10.555   6.480  -3.316  1.00 42.24
ATOM    341  O   ASN A  21      -9.476   7.066  -3.306  1.00 13.15
ATOM    342  N   THR A  22     -11.259   6.268  -2.214  1.00  1.30
ATOM    343  H   THR A  22     -12.070   5.718  -2.260  1.00 65.51
ATOM    344  CA  THR A  22     -10.816   6.817  -0.951  1.00 31.02
ATOM    345  HA  THR A  22     -10.521   7.831  -1.185  1.00 64.54
ATOM    346  CB  THR A  22     -11.931   6.865   0.158  1.00 22.31
ATOM    347  HB  THR A  22     -12.746   7.460  -0.226  1.00 12.53
ATOM    348  OG1 THR A  22     -11.437   7.502   1.340  1.00  0.54
ATOM    349  HG1 THR A  22     -10.475   7.560   1.327  1.00 52.21
ATOM    350  CG2 THR A  22     -12.452   5.485   0.523  1.00 31.43
ATOM    351 1HG2 THR A  22     -12.875   5.016  -0.355  1.00 24.41
ATOM    352 2HG2 THR A  22     -13.213   5.574   1.285  1.00 41.33
ATOM    353 3HG2 THR A  22     -11.640   4.879   0.895  1.00 65.32
ATOM    354  C   THR A  22      -9.538   6.122  -0.470  1.00 31.53
ATOM    355  O   THR A  22      -8.653   6.773   0.092  1.00 35.21
ATOM    356  N   VAL A  23      -9.438   4.816  -0.716  1.00 53.20
ATOM    357  H   VAL A  23     -10.177   4.349  -1.163  1.00 41.15
ATOM    358  CA  VAL A  23      -8.252   4.056  -0.345  1.00 23.14
ATOM    359  HA  VAL A  23      -8.045   4.260   0.696  1.00 41.22
ATOM    360  CB  VAL A  23      -8.456   2.526  -0.537  1.00 74.51
ATOM    361  HB  VAL A  23      -8.627   2.338  -1.586  1.00 41.22
ATOM    362  CG1 VAL A  23      -7.215   1.746  -0.104  1.00 21.03
ATOM    363 1HG1 VAL A  23      -6.373   2.047  -0.709  1.00 44.33
ATOM    364 2HG1 VAL A  23      -7.389   0.688  -0.223  1.00 11.45
ATOM    365 3HG1 VAL A  23      -7.005   1.958   0.934  1.00 50.20
ATOM    366  CG2 VAL A  23      -9.674   2.046   0.242  1.00 51.15
ATOM    367 1HG2 VAL A  23     -10.549   2.587  -0.088  1.00 62.35
ATOM    368 2HG2 VAL A  23      -9.521   2.214   1.298  1.00  2.10
ATOM    369 3HG2 VAL A  23      -9.819   0.991   0.066  1.00 52.42
ATOM    370  C   VAL A  23      -7.055   4.534  -1.172  1.00 11.44
ATOM    371  O   VAL A  23      -5.956   4.705  -0.642  1.00 63.51
ATOM    372  N   TYR A  24      -7.297   4.780  -2.462  1.00 35.33
ATOM    373  H   TYR A  24      -8.190   4.581  -2.822  1.00 51.24
ATOM    374  CA  TYR A  24      -6.279   5.297  -3.375  1.00 11.43
ATOM    375  HA  TYR A  24      -5.484   4.569  -3.438  1.00 11.43
ATOM    376  CB  TYR A  24      -6.880   5.499  -4.794  1.00 54.41
ATOM    377 1HB  TYR A  24      -7.062   4.529  -5.234  1.00 11.04
ATOM    378 2HB  TYR A  24      -7.820   6.025  -4.704  1.00 51.14
ATOM    379  CG  TYR A  24      -5.997   6.269  -5.774  1.00 53.41
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ATOM    380  CD1 TYR A  24      -5.021   5.629  -6.514  1.00 31.12
ATOM    381  HD1 TYR A  24      -4.887   4.565  -6.392  1.00  2.43
ATOM    382  CE1 TYR A  24      -4.219   6.325  -7.400  1.00 12.22
ATOM    383  HE1 TYR A  24      -3.463   5.802  -7.968  1.00  5.42
ATOM    384  CZ  TYR A  24      -4.390   7.682  -7.555  1.00 11.33
ATOM    385  CE2 TYR A  24      -5.356   8.347  -6.833  1.00  2.31
ATOM    386  HE2 TYR A  24      -5.490   9.412  -6.954  1.00 71.12
ATOM    387  CD2 TYR A  24      -6.152   7.645  -5.951  1.00 63.54
ATOM    388  HD2 TYR A  24      -6.908   8.163  -5.382  1.00 13.50
ATOM    389  OH  TYR A  24      -3.589   8.376  -8.436  1.00 52.04
ATOM    390  HH  TYR A  24      -3.592   7.926  -9.282  1.00 71.34
ATOM    391  C   TYR A  24      -5.714   6.606  -2.858  1.00 23.35
ATOM    392  O   TYR A  24      -4.499   6.771  -2.782  1.00 41.53
ATOM    393  N   ASN A  25      -6.602   7.500  -2.452  1.00 51.11
ATOM    394  H   ASN A  25      -7.559   7.290  -2.495  1.00  3.03
ATOM    395  CA  ASN A  25      -6.212   8.805  -1.966  1.00 12.10
ATOM    396  HA  ASN A  25      -5.624   9.291  -2.730  1.00 61.44
ATOM    397  CB  ASN A  25      -7.445   9.676  -1.668  1.00 62.11
ATOM    398 1HB  ASN A  25      -8.059   9.166  -0.940  1.00 44.42
ATOM    399 2HB  ASN A  25      -7.103  10.605  -1.244  1.00 70.42
ATOM    400  CG  ASN A  25      -8.313   9.981  -2.880  1.00 74.23
ATOM    401  OD1 ASN A  25      -7.847  10.036  -4.008  1.00 21.12
ATOM    402  ND2 ASN A  25      -9.589  10.196  -2.646  1.00  3.21
ATOM    403 2HD2 ASN A  25      -9.911  10.155  -1.722  1.00 33.13
ATOM    404 1HD2 ASN A  25     -10.167  10.382  -3.415  1.00 53.10
ATOM    405  C   ASN A  25      -5.385   8.673  -0.708  1.00 34.00
ATOM    406  O   ASN A  25      -4.289   9.222  -0.612  1.00 63.33
ATOM    407  N   ALA A  26      -5.897   7.891   0.225  1.00 43.14
ATOM    408  H   ALA A  26      -6.731   7.411   0.035  1.00 72.44
ATOM    409  CA  ALA A  26      -5.278   7.709   1.521  1.00 21.32
ATOM    410  HA  ALA A  26      -5.190   8.680   1.986  1.00 23.11
ATOM    411  CB  ALA A  26      -6.173   6.856   2.397  1.00 64.42
ATOM    412 1HB  ALA A  26      -6.236   5.858   1.989  1.00 70.12
ATOM    413 2HB  ALA A  26      -7.160   7.293   2.430  1.00 62.51
ATOM    414 3HB  ALA A  26      -5.764   6.816   3.395  1.00 15.03
ATOM    415  C   ALA A  26      -3.891   7.086   1.415  1.00 74.21
ATOM    416  O   ALA A  26      -2.932   7.582   2.014  1.00 15.24
ATOM    417  N   THR A  27      -3.785   6.044   0.622  1.00  1.03
ATOM    418  H   THR A  27      -4.575   5.722   0.133  1.00  2.44
ATOM    419  CA  THR A  27      -2.543   5.328   0.457  1.00 61.00
ATOM    420  HA  THR A  27      -2.160   5.075   1.434  1.00 24.01
ATOM    421  CB  THR A  27      -2.778   4.033  -0.321  1.00 52.13
ATOM    422  HB  THR A  27      -3.077   4.283  -1.328  1.00 21.13
ATOM    423  OG1 THR A  27      -3.827   3.282   0.304  1.00 44.32
ATOM    424  HG1 THR A  27      -4.647   3.525  -0.141  1.00 60.33
ATOM    425  CG2 THR A  27      -1.516   3.195  -0.369  1.00 51.45
ATOM    426 1HG2 THR A  27      -1.207   2.935   0.631  1.00 33.10
ATOM    427 2HG2 THR A  27      -0.738   3.773  -0.849  1.00 75.12
ATOM    428 3HG2 THR A  27      -1.707   2.299  -0.941  1.00  1.10
ATOM    429  C   THR A  27      -1.509   6.180  -0.278  1.00 62.14
ATOM    430  O   THR A  27      -0.336   6.245   0.130  1.00 62.21
ATOM    431  N   LEU A  28      -1.949   6.853  -1.344  1.00  2.34
ATOM    432  H   LEU A  28      -2.897   6.795  -1.599  1.00 24.32
ATOM    433  CA  LEU A  28      -1.066   7.677  -2.136  1.00  1.55
ATOM    434  HA  LEU A  28      -0.262   7.049  -2.491  1.00 21.11
ATOM    435  CB  LEU A  28      -1.807   8.268  -3.342  1.00 21.03
ATOM    436 1HB  LEU A  28      -2.164   7.443  -3.941  1.00 63.13
ATOM    437 2HB  LEU A  28      -2.666   8.807  -2.973  1.00 23.24
ATOM    438  CG  LEU A  28      -1.002   9.202  -4.253  1.00 10.02
ATOM    439  HG  LEU A  28      -0.574   9.984  -3.640  1.00 63.51
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ATOM    440  CD1 LEU A  28       0.145   8.461  -4.926  1.00 23.54
ATOM    441 1HD1 LEU A  28      -0.250   7.646  -5.516  1.00 23.42
ATOM    442 2HD1 LEU A  28       0.815   8.071  -4.175  1.00 20.35
ATOM    443 3HD1 LEU A  28       0.684   9.140  -5.568  1.00 55.40
ATOM    444  CD2 LEU A  28      -1.906   9.853  -5.286  1.00 61.44
ATOM    445 1HD2 LEU A  28      -2.372   9.087  -5.890  1.00 53.21
ATOM    446 2HD2 LEU A  28      -1.320  10.502  -5.919  1.00 70.13
ATOM    447 3HD2 LEU A  28      -2.670  10.430  -4.787  1.00 61.23
ATOM    448  C   LEU A  28      -0.482   8.782  -1.279  1.00 71.45
ATOM    449  O   LEU A  28       0.721   8.928  -1.208  1.00 13.12
ATOM    450  N   GLN A  29      -1.341   9.496  -0.575  1.00 51.51
ATOM    451  H   GLN A  29      -2.296   9.287  -0.660  1.00 20.21
ATOM    452  CA  GLN A  29      -0.924  10.590   0.291  1.00 64.31
ATOM    453  HA  GLN A  29      -0.372  11.285  -0.325  1.00 62.34
ATOM    454  CB  GLN A  29      -2.127  11.323   0.874  1.00 34.10
ATOM    455 1HB  GLN A  29      -2.742  10.614   1.410  1.00  2.51
ATOM    456 2HB  GLN A  29      -1.774  12.073   1.566  1.00 23.34
ATOM    457  CG  GLN A  29      -2.989  12.008  -0.170  1.00  2.53
ATOM    458 1HG  GLN A  29      -2.382  12.731  -0.692  1.00 44.21
ATOM    459 2HG  GLN A  29      -3.330  11.262  -0.871  1.00 73.12
ATOM    460  CD  GLN A  29      -4.197  12.704   0.429  1.00 71.14
ATOM    461  OE1 GLN A  29      -4.732  12.288   1.452  1.00  2.30
ATOM    462  NE2 GLN A  29      -4.636  13.765  -0.201  1.00 20.22
ATOM    463 2HE2 GLN A  29      -4.170  14.048  -1.013  1.00  0.45
ATOM    464 1HE2 GLN A  29      -5.416  14.220   0.179  1.00 75.52
ATOM    465  C   GLN A  29       0.002  10.121   1.410  1.00 72.23
ATOM    466  O   GLN A  29       0.932  10.839   1.774  1.00 45.20
ATOM    467  N   ALA A  30      -0.239   8.917   1.922  1.00 71.44
ATOM    468  H   ALA A  30      -0.995   8.395   1.570  1.00 61.32
ATOM    469  CA  ALA A  30       0.566   8.345   3.001  1.00 64.12
ATOM    470  HA  ALA A  30       0.482   9.001   3.855  1.00 43.43
ATOM    471  CB  ALA A  30       0.031   6.978   3.396  1.00 74.53
ATOM    472 1HB  ALA A  30       0.131   6.302   2.560  1.00 42.44
ATOM    473 2HB  ALA A  30      -1.011   7.063   3.667  1.00 71.34
ATOM    474 3HB  ALA A  30       0.594   6.597   4.235  1.00 13.13
ATOM    475  C   ALA A  30       2.036   8.237   2.607  1.00 24.01
ATOM    476  O   ALA A  30       2.925   8.646   3.361  1.00 31.44
ATOM    477  N   ILE A  31       2.290   7.721   1.427  1.00  4.11
ATOM    478  H   ILE A  31       1.543   7.427   0.861  1.00 20.24
ATOM    479  CA  ILE A  31       3.655   7.582   0.961  1.00 75.31
ATOM    480  HA  ILE A  31       4.251   7.396   1.843  1.00 40.32
ATOM    481  CB  ILE A  31       3.836   6.373  -0.023  1.00 33.51
ATOM    482  HB  ILE A  31       3.677   5.474   0.556  1.00 64.52
ATOM    483  CG2 ILE A  31       2.790   6.367  -1.137  1.00  3.14
ATOM    484 1HG2 ILE A  31       1.804   6.266  -0.706  1.00 64.32
ATOM    485 2HG2 ILE A  31       2.985   5.538  -1.800  1.00 53.32
ATOM    486 3HG2 ILE A  31       2.851   7.296  -1.683  1.00 61.44
ATOM    487  CG1 ILE A  31       5.266   6.336  -0.588  1.00 23.40
ATOM    488 1HG1 ILE A  31       5.473   7.269  -1.090  1.00 64.23
ATOM    489 2HG1 ILE A  31       5.964   6.221   0.228  1.00 45.05
ATOM    490  CD1 ILE A  31       5.521   5.223  -1.579  1.00 21.44
ATOM    491 1HD1 ILE A  31       5.336   4.280  -1.090  1.00 43.00
ATOM    492 2HD1 ILE A  31       6.545   5.269  -1.921  1.00 60.02
ATOM    493 3HD1 ILE A  31       4.850   5.333  -2.418  1.00 64.03
ATOM    494  C   ILE A  31       4.170   8.891   0.343  1.00 41.13
ATOM    495  O   ILE A  31       5.268   9.331   0.651  1.00 22.55
ATOM    496  N   GLN A  32       3.326   9.533  -0.450  1.00 73.31
ATOM    497  H   GLN A  32       2.421   9.166  -0.570  1.00 15.12
ATOM    498  CA  GLN A  32       3.660  10.761  -1.179  1.00 72.21
ATOM    499  HA  GLN A  32       4.484  10.542  -1.842  1.00 20.50
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ATOM    500  CB  GLN A  32       2.454  11.164  -2.033  1.00 70.04
ATOM    501 1HB  GLN A  32       2.242  10.363  -2.727  1.00 21.12
ATOM    502 2HB  GLN A  32       1.603  11.274  -1.378  1.00  2.53
ATOM    503  CG  GLN A  32       2.599  12.426  -2.834  1.00 34.41
ATOM    504 1HG  GLN A  32       2.775  13.240  -2.147  1.00 53.43
ATOM    505 2HG  GLN A  32       3.434  12.298  -3.505  1.00 74.24
ATOM    506  CD  GLN A  32       1.353  12.721  -3.640  1.00 22.24
ATOM    507  OE1 GLN A  32       0.437  13.379  -3.168  1.00 42.23
ATOM    508  NE2 GLN A  32       1.310  12.238  -4.858  1.00  1.10
ATOM    509 2HE2 GLN A  32       2.073  11.719  -5.184  1.00 62.23
ATOM    510 1HE2 GLN A  32       0.505  12.428  -5.382  1.00 31.54
ATOM    511  C   GLN A  32       4.069  11.902  -0.240  1.00 42.40
ATOM    512  O   GLN A  32       4.950  12.682  -0.556  1.00 70.34
ATOM    513  N   ASN A  33       3.444  11.972   0.916  1.00 11.51
ATOM    514  H   ASN A  33       2.766  11.297   1.143  1.00 44.40
ATOM    515  CA  ASN A  33       3.737  13.041   1.871  1.00 15.12
ATOM    516  HA  ASN A  33       4.238  13.828   1.326  1.00 34.15
ATOM    517  CB  ASN A  33       2.449  13.613   2.482  1.00 63.33
ATOM    518 1HB  ASN A  33       1.868  12.786   2.861  1.00 41.33
ATOM    519 2HB  ASN A  33       2.705  14.275   3.295  1.00  1.11
ATOM    520  CG  ASN A  33       1.591  14.366   1.479  1.00 24.04
ATOM    521  OD1 ASN A  33       1.734  15.563   1.296  1.00 61.33
ATOM    522  ND2 ASN A  33       0.686  13.668   0.840  1.00 40.12
ATOM    523 2HD2 ASN A  33       0.622  12.714   1.055  1.00  2.44
ATOM    524 1HD2 ASN A  33       0.142  14.142   0.178  1.00 21.12
ATOM    525  C   ASN A  33       4.659  12.558   2.968  1.00  2.31
ATOM    526  O   ASN A  33       4.863  13.254   3.960  1.00 11.44
ATOM    527  N   GLY A  34       5.205  11.358   2.785  1.00 15.32
ATOM    528  H   GLY A  34       4.980  10.874   1.962  1.00 10.51
ATOM    529  CA  GLY A  34       6.142  10.772   3.739  1.00 63.14
ATOM    530 1HA  GLY A  34       6.392   9.774   3.413  1.00 64.34
ATOM    531 2HA  GLY A  34       7.041  11.369   3.753  1.00 12.42
ATOM    532  C   GLY A  34       5.583  10.694   5.144  1.00  4.04
ATOM    533  O   GLY A  34       6.197  11.162   6.087  1.00 33.03
ATOM    534  N   GLN A  35       4.424  10.089   5.280  1.00  0.22
ATOM    535  H   GLN A  35       3.994   9.679   4.495  1.00  1.43
ATOM    536  CA  GLN A  35       3.753  10.008   6.574  1.00 62.31
ATOM    537  HA  GLN A  35       4.007  10.903   7.125  1.00 63.34
ATOM    538  CB  GLN A  35       2.237   9.969   6.375  1.00 44.21
ATOM    539 1HB  GLN A  35       1.990   9.095   5.789  1.00  0.34
ATOM    540 2HB  GLN A  35       1.761   9.892   7.341  1.00 13.54
ATOM    541  CG  GLN A  35       1.675  11.196   5.658  1.00 41.12
ATOM    542 1HG  GLN A  35       2.176  11.295   4.706  1.00 74.01
ATOM    543 2HG  GLN A  35       0.618  11.052   5.492  1.00 21.43
ATOM    544  CD  GLN A  35       1.879  12.488   6.437  1.00 44.33
ATOM    545  OE1 GLN A  35       1.045  12.870   7.238  1.00 35.02
ATOM    546  NE2 GLN A  35       2.972  13.175   6.195  1.00 23.03
ATOM    547 2HE2 GLN A  35       3.631  12.864   5.534  1.00 31.22
ATOM    548 1HE2 GLN A  35       3.094  14.001   6.702  1.00 12.13
ATOM    549  C   GLN A  35       4.238   8.797   7.376  1.00 70.55
ATOM    550  O   GLN A  35       3.796   8.550   8.491  1.00 75.43
ATOM    551  N   THR A  36       5.145   8.062   6.796  1.00 35.21
ATOM    552  H   THR A  36       5.476   8.318   5.911  1.00 13.20
ATOM    553  CA  THR A  36       5.729   6.919   7.415  1.00 22.31
ATOM    554  HA  THR A  36       5.615   7.033   8.483  1.00 32.44
ATOM    555  CB  THR A  36       5.039   5.584   6.954  1.00 14.12
ATOM    556  HB  THR A  36       4.011   5.620   7.289  1.00 43.42
ATOM    557  OG1 THR A  36       5.658   4.441   7.570  1.00 43.42
ATOM    558  HG1 THR A  36       6.587   4.404   7.317  1.00 70.31
ATOM    559  CG2 THR A  36       5.057   5.420   5.433  1.00 41.33
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ATOM    560 1HG2 THR A  36       4.575   4.493   5.163  1.00 64.33
ATOM    561 2HG2 THR A  36       6.080   5.411   5.085  1.00 53.03
ATOM    562 3HG2 THR A  36       4.532   6.247   4.975  1.00 35.53
ATOM    563  C   THR A  36       7.213   6.921   7.086  1.00 74.54
ATOM    564  O   THR A  36       7.605   7.304   5.975  1.00 32.20
ATOM    565  N   PHE A  37       8.032   6.556   8.043  1.00 13.11
ATOM    566  H   PHE A  37       7.680   6.257   8.908  1.00 14.13
ATOM    567  CA  PHE A  37       9.460   6.540   7.848  1.00 65.44
ATOM    568  HA  PHE A  37       9.637   6.747   6.802  1.00  3.42
ATOM    569  CB  PHE A  37      10.160   7.621   8.687  1.00 45.44
ATOM    570 1HB  PHE A  37       9.903   7.483   9.725  1.00 62.24
ATOM    571 2HB  PHE A  37      11.229   7.511   8.572  1.00 42.11
ATOM    572  CG  PHE A  37       9.793   9.033   8.304  1.00 61.23
ATOM    573  CD1 PHE A  37      10.384   9.639   7.206  1.00 44.43
ATOM    574  HD1 PHE A  37      11.108   9.090   6.623  1.00 21.54
ATOM    575  CE1 PHE A  37      10.058  10.934   6.852  1.00 72.44
ATOM    576  HE1 PHE A  37      10.527  11.395   5.995  1.00 53.03
ATOM    577  CZ  PHE A  37       9.131  11.637   7.595  1.00 50.21
ATOM    578  HZ  PHE A  37       8.874  12.650   7.318  1.00  2.41
ATOM    579  CE2 PHE A  37       8.533  11.046   8.691  1.00 32.44
ATOM    580  HE2 PHE A  37       7.807  11.595   9.273  1.00 41.43
ATOM    581  CD2 PHE A  37       8.864   9.751   9.042  1.00 44.04
ATOM    582  HD2 PHE A  37       8.397   9.289   9.898  1.00 54.54
ATOM    583  C   PHE A  37      10.023   5.177   8.166  1.00 44.43
ATOM    584  O   PHE A  37       9.469   4.441   8.983  1.00 14.22
ATOM    585  N   ASP A  38      11.102   4.850   7.508  1.00 50.25
ATOM    586  H   ASP A  38      11.479   5.497   6.879  1.00 13.41
ATOM    587  CA  ASP A  38      11.781   3.581   7.680  1.00  2.03
ATOM    588  HA  ASP A  38      11.106   2.890   8.160  1.00 11.45
ATOM    589  CB  ASP A  38      12.185   3.026   6.305  1.00 14.45
ATOM    590 1HB  ASP A  38      11.297   2.880   5.710  1.00 53.14
ATOM    591 2HB  ASP A  38      12.822   3.745   5.814  1.00  3.51
ATOM    592  CG  ASP A  38      12.915   1.717   6.390  1.00  3.32
ATOM    593  OD1 ASP A  38      14.143   1.726   6.333  1.00 54.15
ATOM    594  OD2 ASP A  38      12.263   0.671   6.536  1.00 61.22
ATOM    595  C   ASP A  38      13.013   3.787   8.557  1.00 23.25
ATOM    596  O   ASP A  38      13.480   4.919   8.694  1.00 34.13
ATOM    597  N   TYR A  39      13.562   2.703   9.101  1.00 34.25
ATOM    598  H   TYR A  39      13.188   1.826   8.876  1.00  5.43
ATOM    599  CA  TYR A  39      14.722   2.766   9.993  1.00 74.35
ATOM    600  HA  TYR A  39      14.482   3.447  10.796  1.00 14.24
ATOM    601  CB  TYR A  39      15.020   1.395  10.603  1.00 51.24
ATOM    602 1HB  TYR A  39      15.150   0.681   9.803  1.00 74.24
ATOM    603 2HB  TYR A  39      15.938   1.458  11.166  1.00 11.20
ATOM    604  CG  TYR A  39      13.944   0.863  11.515  1.00 64.22
ATOM    605  CD1 TYR A  39      13.025  -0.078  11.071  1.00 31.23
ATOM    606  HD1 TYR A  39      13.080  -0.426  10.050  1.00 31.50
ATOM    607  CE1 TYR A  39      12.051  -0.569  11.913  1.00 70.35
ATOM    608  HE1 TYR A  39      11.343  -1.302  11.552  1.00 61.14
ATOM    609  CZ  TYR A  39      11.985  -0.121  13.215  1.00  3.32
ATOM    610  CE2 TYR A  39      12.883   0.813  13.676  1.00 65.11
ATOM    611  HE2 TYR A  39      12.830   1.163  14.696  1.00  5.11
ATOM    612  CD2 TYR A  39      13.855   1.297  12.829  1.00  4.52
ATOM    613  HD2 TYR A  39      14.561   2.030  13.187  1.00  3.12
ATOM    614  OH  TYR A  39      11.019  -0.609  14.059  1.00  4.53
ATOM    615  HH  TYR A  39      11.011  -1.567  13.992  1.00 12.42
ATOM    616  C   TYR A  39      15.971   3.271   9.280  1.00 62.44
ATOM    617  O   TYR A  39      16.840   3.861   9.903  1.00 63.04
ATOM    618  N   LYS A  40      16.060   3.047   7.982  1.00  1.13
ATOM    619  H   LYS A  40      15.351   2.547   7.510  1.00 32.32
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ATOM    620  CA  LYS A  40      17.213   3.525   7.237  1.00 62.11
ATOM    621  HA  LYS A  40      17.898   3.953   7.955  1.00 45.14
ATOM    622  CB  LYS A  40      17.917   2.375   6.490  1.00  3.14
ATOM    623 1HB  LYS A  40      18.776   2.772   5.970  1.00 34.13
ATOM    624 2HB  LYS A  40      18.255   1.650   7.217  1.00 44.52
ATOM    625  CG  LYS A  40      17.044   1.663   5.480  1.00 12.52
ATOM    626 1HG  LYS A  40      16.153   1.308   5.978  1.00  1.21
ATOM    627 2HG  LYS A  40      16.764   2.367   4.711  1.00 24.05
ATOM    628  CD  LYS A  40      17.747   0.487   4.844  1.00 33.04
ATOM    629 1HD  LYS A  40      18.590   0.843   4.270  1.00 12.23
ATOM    630 2HD  LYS A  40      18.086  -0.187   5.618  1.00 62.52
ATOM    631  CE  LYS A  40      16.799  -0.251   3.927  1.00 22.25
ATOM    632 1HE  LYS A  40      15.934  -0.562   4.492  1.00 14.13
ATOM    633 2HE  LYS A  40      16.490   0.422   3.141  1.00 71.13
ATOM    634  NZ  LYS A  40      17.415  -1.435   3.323  1.00 65.51
ATOM    635 1HZ  LYS A  40      16.695  -1.962   2.791  1.00 61.04
ATOM    636 2HZ  LYS A  40      17.846  -2.093   3.999  1.00 11.21
ATOM    637 3HZ  LYS A  40      18.135  -1.163   2.608  1.00 14.41
ATOM    638  C   LYS A  40      16.791   4.625   6.284  1.00 14.32
ATOM    639  O   LYS A  40      17.575   5.069   5.451  1.00 40.35
ATOM    640  N   SER A  41      15.533   5.064   6.444  1.00 40.03
ATOM    641  H   SER A  41      15.009   4.677   7.175  1.00 71.41
ATOM    642  CA  SER A  41      14.934   6.110   5.629  1.00 45.31
ATOM    643  HA  SER A  41      13.895   6.188   5.914  1.00 64.44
ATOM    644  CB  SER A  41      15.639   7.465   5.913  1.00 65.12
ATOM    645 1HB  SER A  41      15.601   7.673   6.972  1.00 31.24
ATOM    646 2HB  SER A  41      16.672   7.399   5.601  1.00 41.41
ATOM    647  OG  SER A  41      15.020   8.538   5.222  1.00 72.12
ATOM    648  HG  SER A  41      15.061   8.306   4.286  1.00 51.43
ATOM    649  C   SER A  41      14.999   5.730   4.137  1.00 61.12
ATOM    650  O   SER A  41      15.290   6.570   3.277  1.00 23.15
ATOM    651  N   ASN A  42      14.672   4.472   3.844  1.00 71.05
ATOM    652  H   ASN A  42      14.383   3.876   4.566  1.00 52.24
ATOM    653  CA  ASN A  42      14.730   3.961   2.473  1.00 45.52
ATOM    654  HA  ASN A  42      15.717   4.160   2.082  1.00 22.44
ATOM    655  CB  ASN A  42      14.461   2.445   2.449  1.00 73.04
ATOM    656 1HB  ASN A  42      15.043   1.969   3.222  1.00  5.44
ATOM    657 2HB  ASN A  42      13.413   2.275   2.646  1.00 52.03
ATOM    658  CG  ASN A  42      14.810   1.801   1.107  1.00 10.35
ATOM    659  OD1 ASN A  42      15.748   2.211   0.437  1.00 22.22
ATOM    660  ND2 ASN A  42      14.080   0.794   0.719  1.00  0.33
ATOM    661 2HD2 ASN A  42      13.343   0.468   1.279  1.00 45.13
ATOM    662 1HD2 ASN A  42      14.288   0.369  -0.143  1.00 54.01
ATOM    663  C   ASN A  42      13.674   4.677   1.622  1.00 75.13
ATOM    664  O   ASN A  42      12.523   4.779   2.059  1.00 52.12
ATOM    665  N   PRO A  43      14.095   5.230   0.437  1.00 41.32
ATOM    666  CD  PRO A  43      15.486   5.196  -0.069  1.00 33.31
ATOM    667  CA  PRO A  43      13.257   5.978  -0.514  1.00 63.34
ATOM    668  HA  PRO A  43      13.369   7.042  -0.369  1.00 40.12
ATOM    669  CB  PRO A  43      13.898   5.624  -1.845  1.00 22.22
ATOM    670 1HB  PRO A  43      13.512   4.675  -2.191  1.00 32.05
ATOM    671 2HB  PRO A  43      13.720   6.399  -2.575  1.00  5.14
ATOM    672  CG  PRO A  43      15.357   5.552  -1.540  1.00 43.21
ATOM    673 1HG  PRO A  43      15.817   4.794  -2.159  1.00 24.53
ATOM    674 2HG  PRO A  43      15.819   6.512  -1.719  1.00 14.11
ATOM    675 1HD  PRO A  43      15.904   4.206   0.033  1.00 32.41
ATOM    676 2HD  PRO A  43      16.103   5.919   0.445  1.00 55.22
ATOM    677  C   PRO A  43      11.763   5.641  -0.534  1.00  3.20
ATOM    678  O   PRO A  43      11.351   4.497  -0.772  1.00 52.02
ATOM    679  N   TYR A  44      10.991   6.643  -0.192  1.00 32.33
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ATOM    680  H   TYR A  44      11.434   7.461   0.120  1.00 20.20
ATOM    681  CA  TYR A  44       9.544   6.641  -0.280  1.00 42.32
ATOM    682  HA  TYR A  44       9.260   5.605  -0.396  1.00 20.12
ATOM    683  CB  TYR A  44       8.868   7.206   0.958  1.00  3.42
ATOM    684 1HB  TYR A  44       9.330   8.145   1.223  1.00 61.21
ATOM    685 2HB  TYR A  44       7.828   7.363   0.715  1.00 14.31
ATOM    686  CG  TYR A  44       8.939   6.277   2.140  1.00 74.31
ATOM    687  CD1 TYR A  44       8.101   5.173   2.209  1.00 65.13
ATOM    688  HD1 TYR A  44       7.400   4.997   1.406  1.00 63.40
ATOM    689  CE1 TYR A  44       8.148   4.307   3.272  1.00 24.42
ATOM    690  HE1 TYR A  44       7.486   3.453   3.305  1.00 45.33
ATOM    691  CZ  TYR A  44       9.040   4.532   4.289  1.00 31.20
ATOM    692  CE2 TYR A  44       9.885   5.623   4.251  1.00 43.14
ATOM    693  HE2 TYR A  44      10.587   5.796   5.054  1.00 45.54
ATOM    694  CD2 TYR A  44       9.833   6.489   3.179  1.00 34.21
ATOM    695  HD2 TYR A  44      10.490   7.345   3.142  1.00 34.21
ATOM    696  OH  TYR A  44       9.082   3.666   5.352  1.00 33.54
ATOM    697  HH  TYR A  44       9.205   2.776   5.011  1.00 52.42
ATOM    698  C   TYR A  44       9.096   7.353  -1.533  1.00 71.05
ATOM    699  O   TYR A  44       7.910   7.438  -1.846  1.00 60.24
ATOM    700  N   ASP A  45      10.056   7.857  -2.242  1.00  4.54
ATOM    701  H   ASP A  45      10.986   7.687  -1.979  1.00 54.03
ATOM    702  CA  ASP A  45       9.844   8.705  -3.379  1.00 33.23
ATOM    703  HA  ASP A  45       9.091   9.450  -3.168  1.00  1.12
ATOM    704  CB  ASP A  45      11.169   9.396  -3.739  1.00 31.33
ATOM    705 1HB  ASP A  45      11.828   8.673  -4.197  1.00 42.21
ATOM    706 2HB  ASP A  45      10.969  10.188  -4.444  1.00 52.22
ATOM    707  CG  ASP A  45      11.879   9.989  -2.536  1.00  1.43
ATOM    708  OD1 ASP A  45      11.858  11.218  -2.372  1.00 25.13
ATOM    709  OD2 ASP A  45      12.453   9.191  -1.729  1.00 63.54
ATOM    710  C   ASP A  45       9.446   7.817  -4.522  1.00 33.32
ATOM    711  O   ASP A  45      10.235   6.995  -5.011  1.00 10.24
ATOM    712  N   ILE A  46       8.210   7.968  -4.932  1.00 30.14
ATOM    713  H   ILE A  46       7.700   8.713  -4.553  1.00 23.44
ATOM    714  CA  ILE A  46       7.583   7.096  -5.897  1.00 33.35
ATOM    715  HA  ILE A  46       7.665   6.078  -5.541  1.00 51.53
ATOM    716  CB  ILE A  46       6.077   7.444  -6.035  1.00 21.31
ATOM    717  HB  ILE A  46       5.988   8.460  -6.387  1.00 52.22
ATOM    718  CG2 ILE A  46       5.396   6.515  -7.038  1.00 41.42
ATOM    719 1HG2 ILE A  46       5.869   6.619  -8.004  1.00 51.31
ATOM    720 2HG2 ILE A  46       4.351   6.774  -7.122  1.00 40.25
ATOM    721 3HG2 ILE A  46       5.487   5.494  -6.702  1.00 34.45
ATOM    722  CG1 ILE A  46       5.403   7.340  -4.655  1.00 45.41
ATOM    723 1HG1 ILE A  46       5.464   6.318  -4.316  1.00 30.00
ATOM    724 2HG1 ILE A  46       5.933   7.970  -3.957  1.00 63.23
ATOM    725  CD1 ILE A  46       3.945   7.739  -4.631  1.00 62.03
ATOM    726 1HD1 ILE A  46       3.842   8.773  -4.927  1.00 51.42
ATOM    727 2HD1 ILE A  46       3.557   7.605  -3.632  1.00 54.12
ATOM    728 3HD1 ILE A  46       3.401   7.108  -5.317  1.00 61.32
ATOM    729  C   ILE A  46       8.279   7.206  -7.233  1.00 45.44
ATOM    730  O   ILE A  46       8.327   8.268  -7.838  1.00 22.31
ATOM    731  N   SER A  47       8.826   6.099  -7.665  1.00 70.40
ATOM    732  H   SER A  47       8.696   5.261  -7.170  1.00 74.54
ATOM    733  CA  SER A  47       9.610   6.054  -8.854  1.00 61.35
ATOM    734  HA  SER A  47      10.072   7.013  -9.025  1.00 42.22
ATOM    735  CB  SER A  47      10.703   5.016  -8.638  1.00 30.03
ATOM    736 1HB  SER A  47      10.279   4.025  -8.714  1.00  3.24
ATOM    737 2HB  SER A  47      11.477   5.140  -9.380  1.00 72.40
ATOM    738  OG  SER A  47      11.284   5.175  -7.337  1.00 13.42
ATOM    739  HG  SER A  47      11.021   6.033  -6.978  1.00 61.10
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ATOM    740  C   SER A  47       8.730   5.659 -10.044  1.00 52.14
ATOM    741  O   SER A  47       8.989   6.052 -11.173  1.00 64.23
ATOM    742  N   VAL A  48       7.679   4.879  -9.777  1.00 71.12
ATOM    743  H   VAL A  48       7.529   4.550  -8.864  1.00 12.34
ATOM    744  CA  VAL A  48       6.722   4.511 -10.808  1.00 52.43
ATOM    745  HA  VAL A  48       6.782   5.227 -11.616  1.00  2.10
ATOM    746  CB  VAL A  48       6.976   3.061 -11.369  1.00 35.34
ATOM    747  HB  VAL A  48       6.755   2.365 -10.572  1.00  4.44
ATOM    748  CG1 VAL A  48       6.029   2.742 -12.517  1.00 51.41
ATOM    749 1HG1 VAL A  48       5.009   2.813 -12.172  1.00 73.42
ATOM    750 2HG1 VAL A  48       6.220   1.741 -12.874  1.00 14.01
ATOM    751 3HG1 VAL A  48       6.186   3.446 -13.322  1.00 43.51
ATOM    752  CG2 VAL A  48       8.421   2.853 -11.811  1.00 51.45
ATOM    753 1HG2 VAL A  48       8.545   1.847 -12.186  1.00 52.02
ATOM    754 2HG2 VAL A  48       9.079   3.009 -10.970  1.00  2.34
ATOM    755 3HG2 VAL A  48       8.662   3.561 -12.592  1.00 72.01
ATOM    756  C   VAL A  48       5.328   4.544 -10.191  1.00 42.50
ATOM    757  O   VAL A  48       5.106   3.977  -9.112  1.00 25.43
ATOM    758  N   ASN A  49       4.415   5.193 -10.852  1.00 63.31
ATOM    759  H   ASN A  49       4.628   5.558 -11.736  1.00 20.54
ATOM    760  CA  ASN A  49       3.041   5.269 -10.418  1.00  3.31
ATOM    761  HA  ASN A  49       2.970   4.643  -9.540  1.00 21.03
ATOM    762  CB  ASN A  49       2.584   6.717 -10.079  1.00 33.22
ATOM    763 1HB  ASN A  49       1.596   6.672  -9.642  1.00 40.13
ATOM    764 2HB  ASN A  49       3.258   7.109  -9.331  1.00 42.41
ATOM    765  CG  ASN A  49       2.565   7.681 -11.264  1.00 73.15
ATOM    766  OD1 ASN A  49       3.562   8.302 -11.582  1.00 74.43
ATOM    767  ND2 ASN A  49       1.419   7.848 -11.891  1.00  2.12
ATOM    768 2HD2 ASN A  49       0.632   7.361 -11.582  1.00 23.55
ATOM    769 1HD2 ASN A  49       1.434   8.469 -12.648  1.00 41.01
ATOM    770  C   ASN A  49       2.214   4.632 -11.483  1.00 23.02
ATOM    771  O   ASN A  49       2.358   4.963 -12.658  1.00  3.52
ATOM    772  N   LYS A  50       1.396   3.701 -11.139  1.00 60.13
ATOM    773  H   LYS A  50       1.272   3.441 -10.198  1.00 32.21
ATOM    774  CA  LYS A  50       0.691   2.994 -12.161  1.00 13.11
ATOM    775  HA  LYS A  50       0.909   3.386 -13.141  1.00 25.21
ATOM    776  CB  LYS A  50       1.158   1.554 -12.129  1.00 55.00
ATOM    777 1HB  LYS A  50       0.705   1.073 -11.275  1.00 54.12
ATOM    778 2HB  LYS A  50       0.815   1.060 -13.027  1.00 23.23
ATOM    779  CG  LYS A  50       2.655   1.390 -12.033  1.00  0.24
ATOM    780 1HG  LYS A  50       3.094   1.629 -12.990  1.00 25.45
ATOM    781 2HG  LYS A  50       3.024   2.082 -11.290  1.00 24.12
ATOM    782  CD  LYS A  50       3.061  -0.017 -11.644  1.00 63.03
ATOM    783 1HD  LYS A  50       4.131  -0.055 -11.496  1.00 55.21
ATOM    784 2HD  LYS A  50       2.558  -0.249 -10.718  1.00 55.53
ATOM    785  CE  LYS A  50       2.663  -1.032 -12.680  1.00 55.53
ATOM    786 1HE  LYS A  50       2.731  -0.465 -13.596  1.00  1.44
ATOM    787 2HE  LYS A  50       3.385  -1.828 -12.647  1.00 62.14
ATOM    788  NZ  LYS A  50       1.270  -1.548 -12.522  1.00 62.41
ATOM    789 1HZ  LYS A  50       1.014  -2.219 -13.274  1.00  1.44
ATOM    790 2HZ  LYS A  50       0.531  -0.819 -12.516  1.00 43.44
ATOM    791 3HZ  LYS A  50       1.205  -2.088 -11.623  1.00 41.41
ATOM    792  C   LYS A  50      -0.766   2.954 -11.872  1.00 32.42
ATOM    793  O   LYS A  50      -1.180   2.858 -10.712  1.00 24.32
ATOM    794  N   ASN A  51      -1.535   3.060 -12.896  1.00  5.04
ATOM    795  H   ASN A  51      -1.168   3.322 -13.766  1.00  4.45
ATOM    796  CA  ASN A  51      -2.914   2.722 -12.833  1.00 30.43
ATOM    797  HA  ASN A  51      -3.100   2.446 -11.805  1.00  0.22
ATOM    798  CB  ASN A  51      -3.850   3.869 -13.285  1.00 22.43
ATOM    799 1HB  ASN A  51      -4.864   3.616 -13.010  1.00 23.34
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ATOM    800 2HB  ASN A  51      -3.567   4.769 -12.758  1.00 52.31
ATOM    801  CG  ASN A  51      -3.825   4.152 -14.781  1.00 31.41
ATOM    802  OD1 ASN A  51      -4.602   3.594 -15.532  1.00 64.35
ATOM    803  ND2 ASN A  51      -2.949   5.032 -15.212  1.00 45.55
ATOM    804 2HD2 ASN A  51      -2.353   5.474 -14.577  1.00  4.52
ATOM    805 1HD2 ASN A  51      -2.945   5.193 -16.180  1.00 15.13
ATOM    806  C   ASN A  51      -3.064   1.486 -13.692  1.00 14.43
ATOM    807  O   ASN A  51      -2.366   1.371 -14.698  1.00 52.41
ATOM    808  N   ASN A  52      -3.875   0.565 -13.302  1.00 15.32
ATOM    809  H   ASN A  52      -4.346   0.612 -12.434  1.00 25.31
ATOM    810  CA  ASN A  52      -4.107  -0.617 -14.102  1.00 23.04
ATOM    811  HA  ASN A  52      -3.521  -0.531 -15.004  1.00 12.43
ATOM    812  CB  ASN A  52      -3.707  -1.900 -13.326  1.00 41.05
ATOM    813 1HB  ASN A  52      -4.314  -1.967 -12.436  1.00 71.24
ATOM    814 2HB  ASN A  52      -3.919  -2.755 -13.950  1.00 74.31
ATOM    815  CG  ASN A  52      -2.225  -1.972 -12.888  1.00 32.32
ATOM    816  OD1 ASN A  52      -1.313  -1.432 -13.536  1.00 23.24
ATOM    817  ND2 ASN A  52      -1.975  -2.631 -11.776  1.00 60.41
ATOM    818 2HD2 ASN A  52      -2.752  -3.024 -11.300  1.00 54.51
ATOM    819 1HD2 ASN A  52      -1.072  -2.755 -11.418  1.00 33.31
ATOM    820  C   ASN A  52      -5.589  -0.645 -14.464  1.00 54.45
ATOM    821  O   ASN A  52      -6.141  -1.654 -14.892  1.00 64.34
ATOM    822  N   GLY A  53      -6.242   0.497 -14.244  1.00 43.24
ATOM    823  H   GLY A  53      -5.734   1.226 -13.838  1.00  2.44
ATOM    824  CA  GLY A  53      -7.648   0.665 -14.563  1.00 40.44
ATOM    825 1HA  GLY A  53      -7.869   1.661 -14.910  1.00 45.33
ATOM    826 2HA  GLY A  53      -7.906  -0.064 -15.318  1.00 73.20
ATOM    827  C   GLY A  53      -8.493   0.342 -13.387  1.00 11.51
ATOM    828  O   GLY A  53      -9.262   1.173 -12.848  1.00 73.03
ATOM    829  N   THR A  54      -8.369  -0.851 -13.003  1.00 35.32
ATOM    830  H   THR A  54      -7.788  -1.458 -13.514  1.00 35.23
ATOM    831  CA  THR A  54      -9.028  -1.379 -11.908  1.00 33.32
ATOM    832  HA  THR A  54     -10.036  -1.015 -11.784  1.00  4.24
ATOM    833  CB  THR A  54      -9.079  -2.881 -12.099  1.00  2.40
ATOM    834  HB  THR A  54      -8.080  -3.278 -12.017  1.00  4.32
ATOM    835  OG1 THR A  54      -9.619  -3.158 -13.398  1.00 53.42
ATOM    836  HG1 THR A  54      -9.124  -3.889 -13.779  1.00 75.45
ATOM    837  CG2 THR A  54      -9.944  -3.491 -11.073  1.00 21.21
ATOM    838 1HG2 THR A  54     -10.920  -3.048 -11.194  1.00 31.43
ATOM    839 2HG2 THR A  54      -9.504  -3.221 -10.125  1.00 61.33
ATOM    840 3HG2 THR A  54      -9.971  -4.558 -11.219  1.00 64.34
ATOM    841  C   THR A  54      -8.261  -1.035 -10.663  1.00 74.44
ATOM    842  O   THR A  54      -8.818  -0.544  -9.696  1.00 24.35
ATOM    843  N   ASP A  55      -7.008  -1.189 -10.731  1.00 22.21
ATOM    844  H   ASP A  55      -6.560  -1.395 -11.579  1.00 71.35
ATOM    845  CA  ASP A  55      -6.192  -1.057  -9.591  1.00 32.30
ATOM    846  HA  ASP A  55      -6.829  -0.702  -8.796  1.00 10.23
ATOM    847  CB  ASP A  55      -5.651  -2.423  -9.176  1.00 31.24
ATOM    848 1HB  ASP A  55      -5.022  -2.308  -8.306  1.00  5.23
ATOM    849 2HB  ASP A  55      -6.514  -3.019  -8.914  1.00  3.43
ATOM    850  CG  ASP A  55      -4.871  -3.167 -10.222  1.00 42.43
ATOM    851  OD1 ASP A  55      -5.434  -3.474 -11.268  1.00 72.14
ATOM    852  OD2 ASP A  55      -3.699  -3.518  -9.964  1.00 44.13
ATOM    853  C   ASP A  55      -5.125  -0.037  -9.799  1.00 61.40
ATOM    854  O   ASP A  55      -4.914   0.419 -10.906  1.00 74.21
ATOM    855  N   ALA A  56      -4.525   0.384  -8.737  1.00 31.41
ATOM    856  H   ALA A  56      -4.754  -0.015  -7.867  1.00 22.31
ATOM    857  CA  ALA A  56      -3.486   1.368  -8.786  1.00 10.22
ATOM    858  HA  ALA A  56      -3.192   1.483  -9.819  1.00 60.31
ATOM    859  CB  ALA A  56      -3.970   2.697  -8.252  1.00 71.14
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ATOM    860 1HB  ALA A  56      -4.748   3.071  -8.902  1.00  2.13
ATOM    861 2HB  ALA A  56      -3.152   3.401  -8.215  1.00 54.43
ATOM    862 3HB  ALA A  56      -4.379   2.554  -7.264  1.00  5.30
ATOM    863  C   ALA A  56      -2.316   0.846  -8.011  1.00 55.04
ATOM    864  O   ALA A  56      -2.492   0.160  -6.993  1.00 43.25
ATOM    865  N   GLU A  57      -1.145   1.155  -8.461  1.00 40.11
ATOM    866  H   GLU A  57      -1.050   1.829  -9.172  1.00 64.52
ATOM    867  CA  GLU A  57       0.022   0.525  -7.937  1.00 53.35
ATOM    868  HA  GLU A  57      -0.171   0.137  -6.950  1.00 52.13
ATOM    869  CB  GLU A  57       0.275  -0.647  -8.890  1.00  5.41
ATOM    870 1HB  GLU A  57      -0.678  -1.025  -9.227  1.00 63.33
ATOM    871 2HB  GLU A  57       0.805  -0.296  -9.767  1.00 41.24
ATOM    872  CG  GLU A  57       1.032  -1.817  -8.355  1.00 35.22
ATOM    873 1HG  GLU A  57       2.092  -1.613  -8.401  1.00 72.51
ATOM    874 2HG  GLU A  57       0.727  -2.011  -7.337  1.00 62.30
ATOM    875  CD  GLU A  57       0.704  -3.026  -9.197  1.00 51.43
ATOM    876  OE1 GLU A  57      -0.022  -3.926  -8.703  1.00 61.41
ATOM    877  OE2 GLU A  57       1.080  -3.035 -10.394  1.00 43.12
ATOM    878  C   GLU A  57       1.174   1.531  -7.924  1.00 13.41
ATOM    879  O   GLU A  57       1.508   2.100  -8.950  1.00 64.10
ATOM    880  N   ILE A  58       1.729   1.792  -6.766  1.00 13.33
ATOM    881  H   ILE A  58       1.438   1.357  -5.937  1.00 15.21
ATOM    882  CA  ILE A  58       2.819   2.710  -6.638  1.00 41.13
ATOM    883  HA  ILE A  58       3.031   3.059  -7.637  1.00 11.11
ATOM    884  CB  ILE A  58       2.528   3.953  -5.748  1.00 11.32
ATOM    885  HB  ILE A  58       3.519   4.301  -5.509  1.00 53.35
ATOM    886  CG2 ILE A  58       1.830   5.050  -6.541  1.00  2.44
ATOM    887 1HG2 ILE A  58       2.471   5.375  -7.348  1.00  4.34
ATOM    888 2HG2 ILE A  58       1.613   5.885  -5.891  1.00  1.20
ATOM    889 3HG2 ILE A  58       0.907   4.664  -6.949  1.00 44.41
ATOM    890  CG1 ILE A  58       1.778   3.638  -4.417  1.00 31.24
ATOM    891 1HG1 ILE A  58       2.191   2.738  -3.988  1.00 74.31
ATOM    892 2HG1 ILE A  58       1.936   4.456  -3.728  1.00 20.14
ATOM    893  CD1 ILE A  58       0.275   3.423  -4.553  1.00 71.11
ATOM    894 1HD1 ILE A  58      -0.161   3.225  -3.586  1.00 15.54
ATOM    895 2HD1 ILE A  58       0.089   2.593  -5.219  1.00 23.25
ATOM    896 3HD1 ILE A  58      -0.166   4.318  -4.973  1.00 21.13
ATOM    897  C   ILE A  58       4.076   2.012  -6.188  1.00 13.24
ATOM    898  O   ILE A  58       4.058   1.227  -5.229  1.00 20.24
ATOM    899  N   VAL A  59       5.155   2.284  -6.894  1.00 12.12
ATOM    900  H   VAL A  59       5.112   2.952  -7.616  1.00 23.40
ATOM    901  CA  VAL A  59       6.422   1.643  -6.646  1.00 55.15
ATOM    902  HA  VAL A  59       6.328   0.986  -5.796  1.00 74.41
ATOM    903  CB  VAL A  59       6.875   0.788  -7.877  1.00 45.23
ATOM    904  HB  VAL A  59       7.147   1.483  -8.658  1.00 43.53
ATOM    905  CG1 VAL A  59       8.126  -0.024  -7.554  1.00 53.14
ATOM    906 1HG1 VAL A  59       7.915  -0.695  -6.735  1.00 63.22
ATOM    907 2HG1 VAL A  59       8.926   0.644  -7.272  1.00 13.44
ATOM    908 3HG1 VAL A  59       8.422  -0.595  -8.423  1.00 14.21
ATOM    909  CG2 VAL A  59       5.763  -0.114  -8.397  1.00 15.41
ATOM    910 1HG2 VAL A  59       5.494  -0.822  -7.632  1.00 31.33
ATOM    911 2HG2 VAL A  59       6.104  -0.642  -9.274  1.00 52.52
ATOM    912 3HG2 VAL A  59       4.902   0.489  -8.648  1.00 33.14
ATOM    913  C   VAL A  59       7.508   2.685  -6.390  1.00 42.43
ATOM    914  O   VAL A  59       7.702   3.606  -7.191  1.00 12.30
ATOM    915  N   SER A  60       8.160   2.563  -5.286  1.00 31.41
ATOM    916  H   SER A  60       7.849   1.913  -4.614  1.00 24.42
ATOM    917  CA  SER A  60       9.335   3.318  -4.985  1.00 21.14
ATOM    918  HA  SER A  60       9.538   3.964  -5.827  1.00 12.30
ATOM    919  CB  SER A  60       9.162   4.142  -3.703  1.00 21.12
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ATOM    920 1HB  SER A  60       8.346   4.837  -3.838  1.00 54.22
ATOM    921 2HB  SER A  60       8.952   3.513  -2.851  1.00 43.40
ATOM    922  OG  SER A  60      10.324   4.884  -3.434  1.00 33.43
ATOM    923  HG  SER A  60      10.321   5.708  -3.942  1.00 22.54
ATOM    924  C   SER A  60      10.464   2.307  -4.841  1.00 35.13
ATOM    925  O   SER A  60      10.228   1.181  -4.383  1.00  1.43
ATOM    926  N   ALA A  61      11.648   2.663  -5.237  1.00 23.41
ATOM    927  H   ALA A  61      11.812   3.594  -5.500  1.00 51.41
ATOM    928  CA  ALA A  61      12.746   1.721  -5.230  1.00 53.41
ATOM    929  HA  ALA A  61      12.478   0.908  -4.571  1.00 44.34
ATOM    930  CB  ALA A  61      12.962   1.146  -6.624  1.00  3.54
ATOM    931 1HB  ALA A  61      12.047   0.691  -6.973  1.00 11.21
ATOM    932 2HB  ALA A  61      13.744   0.401  -6.586  1.00  3.00
ATOM    933 3HB  ALA A  61      13.252   1.938  -7.298  1.00 72.01
ATOM    934  C   ALA A  61      14.012   2.361  -4.721  1.00  3.35
ATOM    935  O   ALA A  61      14.150   3.581  -4.743  1.00 21.23
ATOM    936  N   SER A  62      14.917   1.536  -4.263  1.00 51.13
ATOM    937  H   SER A  62      14.762   0.570  -4.274  1.00 62.11
ATOM    938  CA  SER A  62      16.179   1.976  -3.769  1.00 14.00
ATOM    939  HA  SER A  62      16.153   3.043  -3.608  1.00 60.34
ATOM    940  CB  SER A  62      16.474   1.267  -2.444  1.00 75.54
ATOM    941 1HB  SER A  62      15.655   1.413  -1.756  1.00 64.40
ATOM    942 2HB  SER A  62      16.588   0.214  -2.654  1.00  1.13
ATOM    943  OG  SER A  62      17.671   1.726  -1.829  1.00 41.24
ATOM    944  HG  SER A  62      17.419   2.024  -0.945  1.00  3.21
ATOM    945  C   SER A  62      17.237   1.618  -4.796  1.00 72.42
ATOM    946  O   SER A  62      17.086   0.636  -5.540  1.00 52.14
ATOM    947  N   ASP A  63      18.267   2.412  -4.855  1.00 71.42
ATOM    948  H   ASP A  63      18.317   3.215  -4.285  1.00 41.54
ATOM    949  CA  ASP A  63      19.389   2.189  -5.746  1.00 65.33
ATOM    950  HA  ASP A  63      19.041   1.768  -6.677  1.00 63.14
ATOM    951  CB  ASP A  63      20.087   3.523  -6.021  1.00 32.01
ATOM    952 1HB  ASP A  63      20.958   3.352  -6.636  1.00 24.41
ATOM    953 2HB  ASP A  63      19.406   4.187  -6.533  1.00  3.24
ATOM    954  CG  ASP A  63      20.526   4.186  -4.723  1.00 54.14
ATOM    955  OD1 ASP A  63      19.659   4.796  -4.059  1.00 53.24
ATOM    956  OD2 ASP A  63      21.697   4.034  -4.330  1.00 34.02
ATOM    957  C   ASP A  63      20.373   1.238  -5.096  1.00 73.13
ATOM    958  O   ASP A  63      21.032   0.445  -5.770  1.00 33.15
ATOM    959  N   SER A  64      20.427   1.282  -3.790  1.00 54.41
ATOM    960  H   SER A  64      19.830   1.900  -3.315  1.00  3.54
ATOM    961  CA  SER A  64      21.332   0.463  -3.059  1.00 41.54
ATOM    962  HA  SER A  64      22.181   0.256  -3.693  1.00 31.42
ATOM    963  CB  SER A  64      21.809   1.210  -1.812  1.00 44.35
ATOM    964 1HB  SER A  64      20.961   1.434  -1.183  1.00 72.15
ATOM    965 2HB  SER A  64      22.506   0.588  -1.269  1.00 34.21
ATOM    966  OG  SER A  64      22.463   2.438  -2.158  1.00 44.52
ATOM    967  HG  SER A  64      22.086   2.865  -2.948  1.00 73.12
ATOM    968  C   SER A  64      20.646  -0.847  -2.706  1.00 65.12
ATOM    969  O   SER A  64      21.218  -1.940  -2.849  1.00 34.54
ATOM    970  N   ASP A  65      19.406  -0.751  -2.295  1.00 61.53
ATOM    971  H   ASP A  65      18.986   0.132  -2.209  1.00 12.34
ATOM    972  CA  ASP A  65      18.648  -1.926  -1.984  1.00 41.42
ATOM    973  HA  ASP A  65      19.348  -2.716  -1.756  1.00 62.55
ATOM    974  CB  ASP A  65      17.729  -1.741  -0.800  1.00 52.51
ATOM    975 1HB  ASP A  65      17.218  -0.793  -0.887  1.00 41.41
ATOM    976 2HB  ASP A  65      17.003  -2.539  -0.855  1.00 11.53
ATOM    977  CG  ASP A  65      18.381  -1.786   0.549  1.00 65.33
ATOM    978  OD1 ASP A  65      18.460  -2.880   1.131  1.00 30.53
ATOM    979  OD2 ASP A  65      18.700  -0.727   1.117  1.00 43.33
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ATOM    980  C   ASP A  65      17.821  -2.343  -3.160  1.00 44.52
ATOM    981  O   ASP A  65      16.719  -1.846  -3.369  1.00 61.01
ATOM    982  N   SER A  66      18.349  -3.247  -3.929  1.00  4.03
ATOM    983  H   SER A  66      19.277  -3.509  -3.746  1.00 34.51
ATOM    984  CA  SER A  66      17.652  -3.786  -5.075  1.00  5.21
ATOM    985  HA  SER A  66      17.329  -2.952  -5.681  1.00 12.31
ATOM    986  CB  SER A  66      18.615  -4.651  -5.908  1.00 40.12
ATOM    987 1HB  SER A  66      19.455  -4.050  -6.222  1.00 53.22
ATOM    988 2HB  SER A  66      18.972  -5.467  -5.297  1.00 53.21
ATOM    989  OG  SER A  66      17.990  -5.185  -7.063  1.00  3.05
ATOM    990  HG  SER A  66      17.080  -4.874  -7.103  1.00 33.34
ATOM    991  C   SER A  66      16.405  -4.596  -4.647  1.00 43.01
ATOM    992  O   SER A  66      15.445  -4.709  -5.405  1.00 34.32
ATOM    993  N   THR A  67      16.415  -5.142  -3.440  1.00 44.31
ATOM    994  H   THR A  67      17.182  -4.985  -2.852  1.00 75.12
ATOM    995  CA  THR A  67      15.294  -5.943  -2.997  1.00 21.54
ATOM    996  HA  THR A  67      14.706  -6.160  -3.876  1.00 61.42
ATOM    997  CB  THR A  67      15.762  -7.303  -2.372  1.00 63.14
ATOM    998  HB  THR A  67      16.384  -7.808  -3.096  1.00 11.01
ATOM    999  OG1 THR A  67      14.631  -8.148  -2.081  1.00 45.20
ATOM   1000  HG1 THR A  67      14.935  -9.057  -1.986  1.00 23.41
ATOM   1001  CG2 THR A  67      16.569  -7.082  -1.093  1.00 12.13
ATOM   1002 1HG2 THR A  67      16.872  -8.036  -0.687  1.00 35.24
ATOM   1003 2HG2 THR A  67      15.957  -6.561  -0.371  1.00 63.23
ATOM   1004 3HG2 THR A  67      17.444  -6.490  -1.318  1.00 12.50
ATOM   1005  C   THR A  67      14.393  -5.166  -2.018  1.00 43.13
ATOM   1006  O   THR A  67      13.231  -5.547  -1.788  1.00 45.11
ATOM   1007  N   ASP A  68      14.889  -4.063  -1.485  1.00 21.41
ATOM   1008  H   ASP A  68      15.758  -3.713  -1.768  1.00 53.20
ATOM   1009  CA  ASP A  68      14.111  -3.300  -0.528  1.00 54.43
ATOM   1010  HA  ASP A  68      13.321  -3.941  -0.167  1.00 32.33
ATOM   1011  CB  ASP A  68      14.960  -2.804   0.653  1.00 73.25
ATOM   1012 1HB  ASP A  68      15.584  -3.607   1.015  1.00 22.14
ATOM   1013 2HB  ASP A  68      15.590  -1.999   0.306  1.00 22.43
ATOM   1014  CG  ASP A  68      14.158  -2.275   1.826  1.00 12.45
ATOM   1015  OD1 ASP A  68      13.090  -1.695   1.644  1.00  5.22
ATOM   1016  OD2 ASP A  68      14.606  -2.453   2.988  1.00 21.21
ATOM   1017  C   ASP A  68      13.488  -2.142  -1.250  1.00  0.24
ATOM   1018  O   ASP A  68      14.110  -1.092  -1.451  1.00 43.22
ATOM   1019  N   SER A  69      12.314  -2.365  -1.704  1.00 31.24
ATOM   1020  H   SER A  69      11.878  -3.229  -1.561  1.00 11.14
ATOM   1021  CA  SER A  69      11.577  -1.399  -2.413  1.00 31.23
ATOM   1022  HA  SER A  69      12.082  -0.450  -2.319  1.00 10.42
ATOM   1023  CB  SER A  69      11.532  -1.794  -3.894  1.00  2.24
ATOM   1024 1HB  SER A  69      10.774  -1.213  -4.396  1.00 10.54
ATOM   1025 2HB  SER A  69      12.494  -1.598  -4.344  1.00 40.35
ATOM   1026  OG  SER A  69      11.225  -3.185  -4.050  1.00 13.24
ATOM   1027  HG  SER A  69      11.535  -3.438  -4.924  1.00 35.22
ATOM   1028  C   SER A  69      10.196  -1.297  -1.804  1.00 51.31
ATOM   1029  O   SER A  69       9.715  -2.251  -1.160  1.00 50.14
ATOM   1030  N   LEU A  70       9.578  -0.173  -1.964  1.00 55.54
ATOM   1031  H   LEU A  70       9.988   0.535  -2.508  1.00 61.21
ATOM   1032  CA  LEU A  70       8.280   0.039  -1.425  1.00 25.12
ATOM   1033  HA  LEU A  70       8.076  -0.735  -0.702  1.00 62.11
ATOM   1034  CB  LEU A  70       8.222   1.434  -0.729  1.00 11.43
ATOM   1035 1HB  LEU A  70       9.102   1.529  -0.111  1.00  0.55
ATOM   1036 2HB  LEU A  70       8.287   2.178  -1.508  1.00 31.44
ATOM   1037  CG  LEU A  70       6.988   1.784   0.162  1.00 61.54
ATOM   1038  HG  LEU A  70       7.116   2.785   0.548  1.00 31.03
ATOM   1039  CD1 LEU A  70       5.685   1.797  -0.619  1.00 55.32
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ATOM   1040 1HD1 LEU A  70       4.870   2.129   0.007  1.00 34.23
ATOM   1041 2HD1 LEU A  70       5.486   0.792  -0.961  1.00 12.23
ATOM   1042 3HD1 LEU A  70       5.770   2.433  -1.489  1.00 13.21
ATOM   1043  CD2 LEU A  70       6.892   0.835   1.351  1.00 61.31
ATOM   1044 1HD2 LEU A  70       6.775  -0.179   1.000  1.00 45.15
ATOM   1045 2HD2 LEU A  70       6.042   1.106   1.960  1.00 62.32
ATOM   1046 3HD2 LEU A  70       7.794   0.909   1.942  1.00 14.22
ATOM   1047  C   LEU A  70       7.298  -0.052  -2.573  1.00 62.42
ATOM   1048  O   LEU A  70       7.292   0.789  -3.462  1.00 51.42
ATOM   1049  N   GLN A  71       6.502  -1.062  -2.563  1.00 32.11
ATOM   1050  H   GLN A  71       6.577  -1.734  -1.855  1.00 25.12
ATOM   1051  CA  GLN A  71       5.487  -1.223  -3.554  1.00 61.04
ATOM   1052  HA  GLN A  71       5.410  -0.293  -4.101  1.00 30.42
ATOM   1053  CB  GLN A  71       5.836  -2.352  -4.529  1.00 34.42
ATOM   1054 1HB  GLN A  71       6.762  -2.103  -5.025  1.00 54.41
ATOM   1055 2HB  GLN A  71       5.983  -3.270  -3.981  1.00 72.41
ATOM   1056  CG  GLN A  71       4.788  -2.607  -5.600  1.00 71.22
ATOM   1057 1HG  GLN A  71       3.872  -2.892  -5.106  1.00 32.32
ATOM   1058 2HG  GLN A  71       4.616  -1.703  -6.163  1.00 71.32
ATOM   1059  CD  GLN A  71       5.186  -3.723  -6.542  1.00 31.12
ATOM   1060  OE1 GLN A  71       6.365  -3.968  -6.774  1.00 10.44
ATOM   1061  NE2 GLN A  71       4.213  -4.396  -7.100  1.00 61.54
ATOM   1062 2HE2 GLN A  71       3.285  -4.160  -6.895  1.00 25.15
ATOM   1063 1HE2 GLN A  71       4.471  -5.115  -7.714  1.00 63.10
ATOM   1064  C   GLN A  71       4.178  -1.485  -2.866  1.00 44.33
ATOM   1065  O   GLN A  71       4.079  -2.383  -2.019  1.00 21.34
ATOM   1066  N   VAL A  72       3.212  -0.677  -3.166  1.00 13.35
ATOM   1067  H   VAL A  72       3.372   0.049  -3.811  1.00 22.03
ATOM   1068  CA  VAL A  72       1.903  -0.836  -2.615  1.00  2.33
ATOM   1069  HA  VAL A  72       1.886  -1.766  -2.065  1.00 23.31
ATOM   1070  CB  VAL A  72       1.510   0.329  -1.663  1.00 44.21
ATOM   1071  HB  VAL A  72       1.545   1.255  -2.218  1.00 44.32
ATOM   1072  CG1 VAL A  72       0.112   0.130  -1.127  1.00 31.35
ATOM   1073 1HG1 VAL A  72      -0.131   0.939  -0.452  1.00 61.40
ATOM   1074 2HG1 VAL A  72       0.064  -0.810  -0.596  1.00 22.45
ATOM   1075 3HG1 VAL A  72      -0.590   0.117  -1.946  1.00 50.43
ATOM   1076  CG2 VAL A  72       2.479   0.427  -0.508  1.00 15.25
ATOM   1077 1HG2 VAL A  72       3.475   0.575  -0.894  1.00 51.35
ATOM   1078 2HG2 VAL A  72       2.445  -0.480   0.076  1.00 21.41
ATOM   1079 3HG2 VAL A  72       2.211   1.269   0.114  1.00 11.05
ATOM   1080  C   VAL A  72       0.924  -0.926  -3.751  1.00 53.11
ATOM   1081  O   VAL A  72       0.877  -0.044  -4.622  1.00 64.21
ATOM   1082  N   ALA A  73       0.181  -1.982  -3.765  1.00 25.21
ATOM   1083  H   ALA A  73       0.280  -2.649  -3.048  1.00  0.42
ATOM   1084  CA  ALA A  73      -0.776  -2.217  -4.788  1.00 40.42
ATOM   1085  HA  ALA A  73      -0.716  -1.412  -5.506  1.00 43.02
ATOM   1086  CB  ALA A  73      -0.467  -3.516  -5.493  1.00 24.41
ATOM   1087 1HB  ALA A  73      -0.648  -4.344  -4.825  1.00 71.44
ATOM   1088 2HB  ALA A  73       0.576  -3.519  -5.778  1.00 31.52
ATOM   1089 3HB  ALA A  73      -1.079  -3.612  -6.377  1.00 63.02
ATOM   1090  C   ALA A  73      -2.165  -2.227  -4.203  1.00 73.43
ATOM   1091  O   ALA A  73      -2.440  -2.957  -3.248  1.00  4.03
ATOM   1092  N   MET A  74      -3.024  -1.432  -4.768  1.00 11.25
ATOM   1093  H   MET A  74      -2.757  -0.905  -5.557  1.00 50.14
ATOM   1094  CA  MET A  74      -4.386  -1.294  -4.303  1.00 52.42
ATOM   1095  HA  MET A  74      -4.550  -1.850  -3.395  1.00 64.45
ATOM   1096  CB  MET A  74      -4.693   0.186  -4.066  1.00  3.25
ATOM   1097 1HB  MET A  74      -4.608   0.704  -5.010  1.00  1.45
ATOM   1098 2HB  MET A  74      -5.710   0.275  -3.715  1.00 40.02
ATOM   1099  CG  MET A  74      -3.783   0.869  -3.073  1.00 70.12
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ATOM   1100 1HG  MET A  74      -3.943   0.429  -2.102  1.00 61.11
ATOM   1101 2HG  MET A  74      -2.758   0.687  -3.362  1.00 75.03
ATOM   1102  SD  MET A  74      -4.056   2.643  -2.975  1.00 72.34
ATOM   1103  CE  MET A  74      -3.453   3.160  -4.568  1.00 71.04
ATOM   1104 1HE  MET A  74      -4.053   2.700  -5.337  1.00 64.31
ATOM   1105 2HE  MET A  74      -2.424   2.851  -4.680  1.00 23.41
ATOM   1106 3HE  MET A  74      -3.517   4.234  -4.650  1.00 51.41
ATOM   1107  C   MET A  74      -5.282  -1.774  -5.391  1.00  1.32
ATOM   1108  O   MET A  74      -5.234  -1.239  -6.482  1.00 52.35
ATOM   1109  N   LYS A  75      -6.082  -2.766  -5.119  1.00 71.20
ATOM   1110  H   LYS A  75      -6.079  -3.176  -4.226  1.00 13.02
ATOM   1111  CA  LYS A  75      -6.965  -3.284  -6.116  1.00  2.12
ATOM   1112  HA  LYS A  75      -6.889  -2.515  -6.874  1.00  0.14
ATOM   1113  CB  LYS A  75      -6.461  -4.583  -6.766  1.00 14.51
ATOM   1114 1HB  LYS A  75      -7.294  -5.171  -7.120  1.00 75.43
ATOM   1115 2HB  LYS A  75      -5.874  -4.265  -7.610  1.00 64.53
ATOM   1116  CG  LYS A  75      -5.564  -5.484  -5.925  1.00 34.31
ATOM   1117 1HG  LYS A  75      -5.206  -4.931  -5.070  1.00 40.42
ATOM   1118 2HG  LYS A  75      -6.119  -6.353  -5.602  1.00  2.11
ATOM   1119  CD  LYS A  75      -4.366  -5.945  -6.792  1.00 43.33
ATOM   1120 1HD  LYS A  75      -3.842  -6.736  -6.278  1.00 10.13
ATOM   1121 2HD  LYS A  75      -4.736  -6.314  -7.736  1.00 74.22
ATOM   1122  CE  LYS A  75      -3.377  -4.779  -7.060  1.00 55.34
ATOM   1123 1HE  LYS A  75      -3.930  -3.873  -7.255  1.00 54.31
ATOM   1124 2HE  LYS A  75      -2.794  -4.638  -6.161  1.00 73.44
ATOM   1125  NZ  LYS A  75      -2.444  -5.024  -8.213  1.00 32.40
ATOM   1126 1HZ  LYS A  75      -1.589  -4.418  -8.219  1.00 33.20
ATOM   1127 2HZ  LYS A  75      -2.936  -4.675  -9.069  1.00 12.02
ATOM   1128 3HZ  LYS A  75      -2.170  -6.012  -8.355  1.00 35.13
ATOM   1129  C   LYS A  75      -8.444  -3.215  -5.786  1.00 62.42
ATOM   1130  O   LYS A  75      -8.863  -3.454  -4.654  1.00 65.12
ATOM   1131  N   LYS A  76      -9.198  -2.878  -6.814  1.00 43.44
ATOM   1132  H   LYS A  76      -8.781  -2.878  -7.699  1.00 51.22
ATOM   1133  CA  LYS A  76     -10.608  -2.522  -6.751  1.00 30.21
ATOM   1134  HA  LYS A  76     -10.782  -1.881  -5.900  1.00 71.53
ATOM   1135  CB  LYS A  76     -10.955  -1.729  -7.990  1.00 51.23
ATOM   1136 1HB  LYS A  76     -10.179  -1.011  -8.203  1.00 24.11
ATOM   1137 2HB  LYS A  76     -10.946  -2.434  -8.808  1.00 50.23
ATOM   1138  CG  LYS A  76     -12.325  -1.048  -8.004  1.00 20.10
ATOM   1139 1HG  LYS A  76     -13.102  -1.757  -7.765  1.00 21.41
ATOM   1140 2HG  LYS A  76     -12.325  -0.258  -7.263  1.00 71.42
ATOM   1141  CD  LYS A  76     -12.571  -0.421  -9.375  1.00 24.12
ATOM   1142 1HD  LYS A  76     -12.424  -1.182 -10.128  1.00 51.14
ATOM   1143 2HD  LYS A  76     -13.576  -0.031  -9.426  1.00 75.43
ATOM   1144  CE  LYS A  76     -11.580   0.694  -9.635  1.00  2.44
ATOM   1145 1HE  LYS A  76     -11.794   1.479  -8.925  1.00 74.04
ATOM   1146 2HE  LYS A  76     -10.596   0.308  -9.422  1.00 41.52
ATOM   1147  NZ  LYS A  76     -11.631   1.209 -11.036  1.00 75.25
ATOM   1148 1HZ  LYS A  76     -10.883   1.918 -11.184  1.00 13.23
ATOM   1149 2HZ  LYS A  76     -12.549   1.642 -11.258  1.00 21.43
ATOM   1150 3HZ  LYS A  76     -11.454   0.435 -11.711  1.00 55.41
ATOM   1151  C   LYS A  76     -11.523  -3.720  -6.713  1.00 31.43
ATOM   1152  O   LYS A  76     -11.438  -4.612  -7.553  1.00 22.55
ATOM   1153  N   LEU A  77     -12.380  -3.721  -5.752  1.00 73.55
ATOM   1154  H   LEU A  77     -12.324  -2.992  -5.096  1.00 11.40
ATOM   1155  CA  LEU A  77     -13.433  -4.708  -5.666  1.00 51.35
ATOM   1156  HA  LEU A  77     -13.246  -5.428  -6.449  1.00 23.11
ATOM   1157  CB  LEU A  77     -13.499  -5.427  -4.294  1.00 51.55
ATOM   1158 1HB  LEU A  77     -13.426  -4.661  -3.536  1.00 64.03
ATOM   1159 2HB  LEU A  77     -14.473  -5.888  -4.211  1.00  4.33
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ATOM   1160  CG  LEU A  77     -12.425  -6.493  -3.979  1.00 52.23
ATOM   1161  HG  LEU A  77     -12.710  -6.974  -3.054  1.00 55.01
ATOM   1162  CD1 LEU A  77     -12.400  -7.588  -5.036  1.00 11.41
ATOM   1163 1HD1 LEU A  77     -12.146  -7.163  -5.996  1.00 35.41
ATOM   1164 2HD1 LEU A  77     -13.373  -8.053  -5.095  1.00 40.12
ATOM   1165 3HD1 LEU A  77     -11.663  -8.330  -4.765  1.00 55.04
ATOM   1166  CD2 LEU A  77     -11.051  -5.886  -3.794  1.00 62.42
ATOM   1167 1HD2 LEU A  77     -11.060  -5.209  -2.954  1.00 14.43
ATOM   1168 2HD2 LEU A  77     -10.776  -5.347  -4.688  1.00 63.33
ATOM   1169 3HD2 LEU A  77     -10.341  -6.678  -3.616  1.00 43.44
ATOM   1170  C   LEU A  77     -14.757  -4.024  -5.969  1.00  5.23
ATOM   1171  O   LEU A  77     -14.997  -2.902  -5.501  1.00 24.25
ATOM   1172  N   PRO A  78     -15.650  -4.685  -6.726  1.00  5.44
ATOM   1173  CD  PRO A  78     -15.477  -6.060  -7.249  1.00 30.23
ATOM   1174  CA  PRO A  78     -16.940  -4.098  -7.133  1.00 64.24
ATOM   1175  HA  PRO A  78     -16.802  -3.122  -7.575  1.00 74.24
ATOM   1176  CB  PRO A  78     -17.467  -5.082  -8.185  1.00 40.14
ATOM   1177 1HB  PRO A  78     -18.542  -5.151  -8.108  1.00 31.43
ATOM   1178 2HB  PRO A  78     -17.177  -4.765  -9.175  1.00 15.12
ATOM   1179  CG  PRO A  78     -16.811  -6.384  -7.870  1.00  4.13
ATOM   1180 1HG  PRO A  78     -17.428  -6.941  -7.179  1.00 50.30
ATOM   1181 2HG  PRO A  78     -16.656  -6.950  -8.776  1.00 50.03
ATOM   1182 1HD  PRO A  78     -15.266  -6.744  -6.441  1.00 12.22
ATOM   1183 2HD  PRO A  78     -14.680  -6.093  -7.975  1.00 75.02
ATOM   1184  C   PRO A  78     -17.917  -3.980  -5.963  1.00 20.13
ATOM   1185  O   PRO A  78     -18.936  -3.311  -6.047  1.00 64.13
ATOM   1186  N   ASN A  79     -17.556  -4.599  -4.860  1.00 53.45
ATOM   1187  H   ASN A  79     -16.708  -5.085  -4.880  1.00 23.52
ATOM   1188  CA  ASN A  79     -18.374  -4.600  -3.652  1.00 11.14
ATOM   1189  HA  ASN A  79     -19.412  -4.542  -3.942  1.00 75.44
ATOM   1190  CB  ASN A  79     -18.156  -5.895  -2.824  1.00 33.14
ATOM   1191 1HB  ASN A  79     -17.117  -5.951  -2.538  1.00  2.01
ATOM   1192 2HB  ASN A  79     -18.756  -5.834  -1.927  1.00 61.32
ATOM   1193  CG  ASN A  79     -18.507  -7.194  -3.553  1.00 44.04
ATOM   1194  OD1 ASN A  79     -18.357  -7.315  -4.761  1.00  3.10
ATOM   1195  ND2 ASN A  79     -18.973  -8.172  -2.815  1.00 34.40
ATOM   1196 2HD2 ASN A  79     -19.076  -8.029  -1.851  1.00 64.44
ATOM   1197 1HD2 ASN A  79     -19.204  -9.006  -3.274  1.00 41.42
ATOM   1198  C   ASN A  79     -18.024  -3.402  -2.784  1.00  0.43
ATOM   1199  O   ASN A  79     -18.442  -3.327  -1.637  1.00 51.03
ATOM   1200  N   ASN A  80     -17.269  -2.459  -3.363  1.00 73.13
ATOM   1201  H   ASN A  80     -17.037  -2.586  -4.308  1.00 34.42
ATOM   1202  CA  ASN A  80     -16.773  -1.259  -2.665  1.00 30.35
ATOM   1203  HA  ASN A  80     -16.217  -0.706  -3.407  1.00 63.52
ATOM   1204  CB  ASN A  80     -17.892  -0.353  -2.100  1.00 13.43
ATOM   1205 1HB  ASN A  80     -18.602  -0.963  -1.562  1.00 12.23
ATOM   1206 2HB  ASN A  80     -17.455   0.363  -1.419  1.00  3.40
ATOM   1207  CG  ASN A  80     -18.640   0.401  -3.176  1.00 62.42
ATOM   1208  OD1 ASN A  80     -18.246   1.503  -3.563  1.00 62.21
ATOM   1209  ND2 ASN A  80     -19.715  -0.168  -3.663  1.00 53.43
ATOM   1210 2HD2 ASN A  80     -19.973  -1.042  -3.303  1.00 74.34
ATOM   1211 1HD2 ASN A  80     -20.211   0.305  -4.363  1.00 75.41
ATOM   1212  C   ASN A  80     -15.785  -1.636  -1.600  1.00 10.14
ATOM   1213  O   ASN A  80     -15.855  -1.187  -0.464  1.00 24.43
ATOM   1214  N   ALA A  81     -14.863  -2.464  -1.990  1.00 64.00
ATOM   1215  H   ALA A  81     -14.855  -2.772  -2.919  1.00 50.03
ATOM   1216  CA  ALA A  81     -13.811  -2.910  -1.134  1.00 31.01
ATOM   1217  HA  ALA A  81     -13.798  -2.281  -0.256  1.00 23.43
ATOM   1218  CB  ALA A  81     -14.036  -4.354  -0.716  1.00 23.13
ATOM   1219 1HB  ALA A  81     -13.220  -4.663  -0.079  1.00 73.53
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ATOM   1220 2HB  ALA A  81     -14.079  -4.983  -1.592  1.00 71.44
ATOM   1221 3HB  ALA A  81     -14.965  -4.427  -0.171  1.00 75.23
ATOM   1222  C   ALA A  81     -12.510  -2.762  -1.881  1.00  0.33
ATOM   1223  O   ALA A  81     -12.515  -2.623  -3.111  1.00 51.53
ATOM   1224  N   THR A  82     -11.430  -2.758  -1.174  1.00  1.02
ATOM   1225  H   THR A  82     -11.483  -2.830  -0.193  1.00  3.31
ATOM   1226  CA  THR A  82     -10.141  -2.642  -1.771  1.00 62.15
ATOM   1227  HA  THR A  82     -10.240  -2.820  -2.832  1.00 51.12
ATOM   1228  CB  THR A  82      -9.576  -1.224  -1.552  1.00 12.41
ATOM   1229  HB  THR A  82      -9.363  -1.093  -0.500  1.00 51.42
ATOM   1230  OG1 THR A  82     -10.555  -0.257  -1.970  1.00 62.12
ATOM   1231  HG1 THR A  82     -11.382  -0.419  -1.500  1.00  3.52
ATOM   1232  CG2 THR A  82      -8.296  -1.014  -2.357  1.00 43.15
ATOM   1233 1HG2 THR A  82      -7.541  -1.705  -2.014  1.00 11.02
ATOM   1234 2HG2 THR A  82      -7.947   0.000  -2.236  1.00  3.52
ATOM   1235 3HG2 THR A  82      -8.499  -1.200  -3.400  1.00 73.43
ATOM   1236  C   THR A  82      -9.200  -3.689  -1.163  1.00 73.42
ATOM   1237  O   THR A  82      -9.189  -3.903   0.052  1.00 74.33
ATOM   1238  N   ARG A  83      -8.437  -4.331  -1.999  1.00 74.40
ATOM   1239  H   ARG A  83      -8.505  -4.101  -2.955  1.00 72.24
ATOM   1240  CA  ARG A  83      -7.495  -5.341  -1.573  1.00 33.14
ATOM   1241  HA  ARG A  83      -7.731  -5.673  -0.573  1.00 11.21
ATOM   1242  CB  ARG A  83      -7.546  -6.522  -2.561  1.00  0.20
ATOM   1243 1HB  ARG A  83      -8.578  -6.797  -2.698  1.00 13.41
ATOM   1244 2HB  ARG A  83      -7.154  -6.182  -3.508  1.00 51.13
ATOM   1245  CG  ARG A  83      -6.789  -7.795  -2.157  1.00 11.13
ATOM   1246 1HG  ARG A  83      -6.756  -8.465  -3.001  1.00 73.23
ATOM   1247 2HG  ARG A  83      -5.783  -7.524  -1.874  1.00 44.34
ATOM   1248  CD  ARG A  83      -7.461  -8.509  -0.986  1.00 35.12
ATOM   1249 1HD  ARG A  83      -7.319  -7.921  -0.090  1.00 24.13
ATOM   1250 2HD  ARG A  83      -8.518  -8.595  -1.189  1.00 54.34
ATOM   1251  NE  ARG A  83      -6.907  -9.868  -0.754  1.00 41.35
ATOM   1252  HE  ARG A  83      -6.022 -10.029  -1.149  1.00 73.52
ATOM   1253  CZ  ARG A  83      -7.543 -10.865  -0.084  1.00  4.42
ATOM   1254  NH1 ARG A  83      -8.694 -10.637   0.521  1.00  2.32
ATOM   1255 1HH1 ARG A  83      -9.147  -9.739   0.534  1.00 43.12
ATOM   1256 2HH1 ARG A  83      -9.154 -11.388   1.008  1.00  5.45
ATOM   1257  NH2 ARG A  83      -7.001 -12.070   0.022  1.00 62.13
ATOM   1258 1HH2 ARG A  83      -6.115 -12.368  -0.356  1.00 73.03
ATOM   1259 2HH2 ARG A  83      -7.479 -12.791   0.538  1.00 21.33
ATOM   1260  C   ARG A  83      -6.134  -4.689  -1.630  1.00 11.15
ATOM   1261  O   ARG A  83      -5.788  -4.078  -2.648  1.00 13.30
ATOM   1262  N   ILE A  84      -5.376  -4.790  -0.575  1.00 53.32
ATOM   1263  H   ILE A  84      -5.661  -5.318   0.204  1.00 31.34
ATOM   1264  CA  ILE A  84      -4.100  -4.131  -0.538  1.00  3.11
ATOM   1265  HA  ILE A  84      -4.002  -3.548  -1.440  1.00 53.00
ATOM   1266  CB  ILE A  84      -3.966  -3.175   0.712  1.00 33.41
ATOM   1267  HB  ILE A  84      -4.889  -2.622   0.809  1.00 60.22
ATOM   1268  CG2 ILE A  84      -3.753  -3.945   1.982  1.00 23.22
ATOM   1269 1HG2 ILE A  84      -3.641  -3.262   2.811  1.00 31.23
ATOM   1270 2HG2 ILE A  84      -2.852  -4.528   1.851  1.00 64.35
ATOM   1271 3HG2 ILE A  84      -4.591  -4.605   2.146  1.00 61.34
ATOM   1272  CG1 ILE A  84      -2.827  -2.183   0.550  1.00 71.21
ATOM   1273 1HG1 ILE A  84      -2.634  -1.700   1.495  1.00 42.20
ATOM   1274 2HG1 ILE A  84      -1.940  -2.713   0.234  1.00 52.32
ATOM   1275  CD1 ILE A  84      -3.108  -1.125  -0.460  1.00  2.12
ATOM   1276 1HD1 ILE A  84      -2.273  -0.440  -0.501  1.00 22.20
ATOM   1277 2HD1 ILE A  84      -4.001  -0.588  -0.177  1.00 31.15
ATOM   1278 3HD1 ILE A  84      -3.245  -1.576  -1.432  1.00 14.13
ATOM   1279  C   ILE A  84      -3.003  -5.190  -0.510  1.00 54.30
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ATOM   1280  O   ILE A  84      -3.143  -6.241   0.126  1.00 23.52
ATOM   1281  N   SER A  85      -2.004  -4.963  -1.275  1.00 24.30
ATOM   1282  H   SER A  85      -2.022  -4.161  -1.842  1.00 31.34
ATOM   1283  CA  SER A  85      -0.859  -5.817  -1.329  1.00 15.30
ATOM   1284  HA  SER A  85      -0.942  -6.532  -0.524  1.00 21.43
ATOM   1285  CB  SER A  85      -0.839  -6.550  -2.665  1.00 41.24
ATOM   1286 1HB  SER A  85      -0.680  -5.843  -3.465  1.00 23.25
ATOM   1287 2HB  SER A  85      -0.048  -7.285  -2.665  1.00 32.44
ATOM   1288  OG  SER A  85      -2.085  -7.217  -2.864  1.00 55.41
ATOM   1289  HG  SER A  85      -2.536  -7.193  -2.013  1.00 53.11
ATOM   1290  C   SER A  85       0.390  -4.967  -1.114  1.00 11.13
ATOM   1291  O   SER A  85       0.655  -4.030  -1.880  1.00 71.53
ATOM   1292  N   ILE A  86       1.104  -5.247  -0.059  1.00 14.10
ATOM   1293  H   ILE A  86       0.834  -6.002   0.512  1.00 23.14
ATOM   1294  CA  ILE A  86       2.274  -4.487   0.309  1.00 15.21
ATOM   1295  HA  ILE A  86       2.321  -3.624  -0.339  1.00 11.02
ATOM   1296  CB  ILE A  86       2.166  -3.996   1.796  1.00 34.21
ATOM   1297  HB  ILE A  86       2.138  -4.865   2.438  1.00 44.32
ATOM   1298  CG2 ILE A  86       3.375  -3.137   2.197  1.00 74.34
ATOM   1299 1HG2 ILE A  86       4.277  -3.728   2.115  1.00 73.22
ATOM   1300 2HG2 ILE A  86       3.261  -2.811   3.221  1.00 63.43
ATOM   1301 3HG2 ILE A  86       3.444  -2.278   1.546  1.00 11.24
ATOM   1302  CG1 ILE A  86       0.859  -3.201   1.989  1.00 74.04
ATOM   1303 1HG1 ILE A  86       0.876  -2.336   1.343  1.00 11.30
ATOM   1304 2HG1 ILE A  86       0.025  -3.829   1.710  1.00 52.43
ATOM   1305  CD1 ILE A  86       0.623  -2.709   3.402  1.00 41.41
ATOM   1306 1HD1 ILE A  86       0.598  -3.547   4.080  1.00  3.02
ATOM   1307 2HD1 ILE A  86      -0.317  -2.179   3.448  1.00 42.40
ATOM   1308 3HD1 ILE A  86       1.425  -2.043   3.686  1.00 71.20
ATOM   1309  C   ILE A  86       3.542  -5.333   0.093  1.00 13.11
ATOM   1310  O   ILE A  86       3.539  -6.547   0.328  1.00 31.31
ATOM   1311  N   LYS A  87       4.614  -4.672  -0.266  1.00 34.11
ATOM   1312  H   LYS A  87       4.547  -3.695  -0.336  1.00 52.04
ATOM   1313  CA  LYS A  87       5.889  -5.274  -0.604  1.00 55.40
ATOM   1314  HA  LYS A  87       5.748  -6.345  -0.641  1.00 13.42
ATOM   1315  CB  LYS A  87       6.328  -4.766  -2.008  1.00 70.24
ATOM   1316 1HB  LYS A  87       5.851  -5.379  -2.759  1.00 22.42
ATOM   1317 2HB  LYS A  87       5.935  -3.764  -2.095  1.00 14.10
ATOM   1318  CG  LYS A  87       7.838  -4.719  -2.349  1.00 71.43
ATOM   1319 1HG  LYS A  87       7.949  -4.362  -3.361  1.00 40.25
ATOM   1320 2HG  LYS A  87       8.305  -4.007  -1.684  1.00 11.02
ATOM   1321  CD  LYS A  87       8.576  -6.049  -2.248  1.00 21.24
ATOM   1322 1HD  LYS A  87       8.491  -6.427  -1.240  1.00 50.43
ATOM   1323 2HD  LYS A  87       8.148  -6.755  -2.944  1.00 52.41
ATOM   1324  CE  LYS A  87      10.053  -5.842  -2.588  1.00  0.42
ATOM   1325 1HE  LYS A  87      10.157  -5.766  -3.659  1.00 54.14
ATOM   1326 2HE  LYS A  87      10.383  -4.916  -2.137  1.00 22.54
ATOM   1327  NZ  LYS A  87      10.918  -6.950  -2.105  1.00 65.31
ATOM   1328 1HZ  LYS A  87      10.717  -7.872  -2.537  1.00 51.32
ATOM   1329 2HZ  LYS A  87      10.813  -6.997  -1.069  1.00 52.22
ATOM   1330 3HZ  LYS A  87      11.918  -6.688  -2.259  1.00  1.11
ATOM   1331  C   LYS A  87       6.892  -4.951   0.485  1.00 43.21
ATOM   1332  O   LYS A  87       6.955  -3.839   0.999  1.00 44.35
ATOM   1333  N   TYR A  88       7.621  -5.968   0.853  1.00 44.21
ATOM   1334  H   TYR A  88       7.570  -6.789   0.327  1.00 63.03
ATOM   1335  CA  TYR A  88       8.498  -5.955   1.989  1.00 64.10
ATOM   1336  HA  TYR A  88       8.142  -5.274   2.744  1.00 43.05
ATOM   1337  CB  TYR A  88       8.504  -7.368   2.599  1.00  4.53
ATOM   1338 1HB  TYR A  88       8.935  -7.312   3.583  1.00 25.21
ATOM   1339 2HB  TYR A  88       7.483  -7.708   2.690  1.00 25.31
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ATOM   1340  CG  TYR A  88       9.280  -8.413   1.792  1.00  4.31
ATOM   1341  CD1 TYR A  88       8.816  -8.873   0.567  1.00  4.31
ATOM   1342  HD1 TYR A  88       7.877  -8.505   0.183  1.00 13.34
ATOM   1343  CE1 TYR A  88       9.536  -9.787  -0.168  1.00 52.20
ATOM   1344  HE1 TYR A  88       9.156 -10.131  -1.118  1.00 44.33
ATOM   1345  CZ  TYR A  88      10.728 -10.263   0.311  1.00 62.02
ATOM   1346  CE2 TYR A  88      11.213  -9.833   1.525  1.00 62.23
ATOM   1347  HE2 TYR A  88      12.153 -10.210   1.902  1.00  0.32
ATOM   1348  CD2 TYR A  88      10.494  -8.911   2.256  1.00 31.42
ATOM   1349  HD2 TYR A  88      10.870  -8.572   3.210  1.00 62.22
ATOM   1350  OH  TYR A  88      11.441 -11.162  -0.434  1.00 12.23
ATOM   1351  HH  TYR A  88      11.627 -11.928   0.119  1.00 71.22
ATOM   1352  C   TYR A  88       9.917  -5.594   1.599  1.00 42.35
ATOM   1353  O   TYR A  88      10.351  -5.842   0.462  1.00 20.32
ATOM   1354  N   GLY A  89      10.628  -5.035   2.533  1.00  2.25
ATOM   1355  H   GLY A  89      10.231  -4.847   3.411  1.00 52.34
ATOM   1356  CA  GLY A  89      11.992  -4.714   2.315  1.00  5.41
ATOM   1357 1HA  GLY A  89      12.222  -4.885   1.274  1.00 70.21
ATOM   1358 2HA  GLY A  89      12.166  -3.676   2.560  1.00 22.31
ATOM   1359  C   GLY A  89      12.886  -5.574   3.165  1.00 74.54
ATOM   1360  O   GLY A  89      12.521  -6.699   3.497  1.00 45.43
ATOM   1361  N   SER A  90      14.005  -5.037   3.574  1.00 64.31
ATOM   1362  H   SER A  90      14.196  -4.100   3.331  1.00 54.02
ATOM   1363  CA  SER A  90      14.979  -5.772   4.372  1.00 42.31
ATOM   1364  HA  SER A  90      15.099  -6.745   3.916  1.00 52.20
ATOM   1365  CB  SER A  90      16.334  -5.044   4.332  1.00 14.25
ATOM   1366 1HB  SER A  90      17.011  -5.510   5.032  1.00 32.30
ATOM   1367 2HB  SER A  90      16.746  -5.108   3.336  1.00 51.44
ATOM   1368  OG  SER A  90      16.191  -3.664   4.684  1.00  3.11
ATOM   1369  HG  SER A  90      15.536  -3.249   4.098  1.00 73.12
ATOM   1370  C   SER A  90      14.488  -5.971   5.814  1.00 31.44
ATOM   1371  O   SER A  90      14.995  -6.802   6.551  1.00 42.11
ATOM   1372  N   GLN A  91      13.514  -5.177   6.196  1.00 44.23
ATOM   1373  H   GLN A  91      13.188  -4.507   5.562  1.00  2.45
ATOM   1374  CA  GLN A  91      12.892  -5.250   7.513  1.00 42.34
ATOM   1375  HA  GLN A  91      13.530  -5.825   8.168  1.00 35.05
ATOM   1376  CB  GLN A  91      12.722  -3.831   8.084  1.00  0.22
ATOM   1377 1HB  GLN A  91      12.094  -3.263   7.414  1.00 11.20
ATOM   1378 2HB  GLN A  91      12.232  -3.903   9.043  1.00 35.00
ATOM   1379  CG  GLN A  91      14.029  -3.068   8.271  1.00 64.12
ATOM   1380 1HG  GLN A  91      14.546  -3.029   7.322  1.00 25.43
ATOM   1381 2HG  GLN A  91      13.803  -2.063   8.596  1.00 63.24
ATOM   1382  CD  GLN A  91      14.949  -3.715   9.290  1.00 34.13
ATOM   1383  OE1 GLN A  91      14.898  -3.406  10.473  1.00 63.34
ATOM   1384  NE2 GLN A  91      15.781  -4.625   8.846  1.00 75.40
ATOM   1385 2HE2 GLN A  91      15.770  -4.847   7.892  1.00  1.00
ATOM   1386 1HE2 GLN A  91      16.369  -5.050   9.502  1.00 12.32
ATOM   1387  C   GLN A  91      11.529  -5.924   7.393  1.00 41.13
ATOM   1388  O   GLN A  91      10.734  -5.926   8.334  1.00 63.10
ATOM   1389  N   GLY A  92      11.254  -6.476   6.215  1.00 13.31
ATOM   1390  H   GLY A  92      11.964  -6.558   5.543  1.00 31.34
ATOM   1391  CA  GLY A  92       9.926  -6.953   5.923  1.00 20.04
ATOM   1392 1HA  GLY A  92       9.944  -7.635   5.084  1.00 14.25
ATOM   1393 2HA  GLY A  92       9.500  -7.487   6.761  1.00  0.32
ATOM   1394  C   GLY A  92       9.075  -5.732   5.635  1.00 14.42
ATOM   1395  O   GLY A  92       9.622  -4.636   5.402  1.00 33.53
ATOM   1396  N   ASN A  93       7.794  -5.874   5.543  1.00 63.23
ATOM   1397  H   ASN A  93       7.373  -6.760   5.541  1.00 32.33
ATOM   1398  CA  ASN A  93       6.967  -4.693   5.429  1.00 24.20
ATOM   1399  HA  ASN A  93       7.656  -3.894   5.190  1.00 52.12
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ATOM   1400  CB  ASN A  93       5.889  -4.752   4.325  1.00  5.23
ATOM   1401 1HB  ASN A  93       5.356  -3.813   4.324  1.00 60.50
ATOM   1402 2HB  ASN A  93       6.361  -4.870   3.361  1.00 11.42
ATOM   1403  CG  ASN A  93       4.857  -5.842   4.486  1.00 73.32
ATOM   1404  OD1 ASN A  93       4.529  -6.281   5.585  1.00 24.23
ATOM   1405  ND2 ASN A  93       4.323  -6.282   3.392  1.00  4.43
ATOM   1406 2HD2 ASN A  93       4.597  -5.901   2.532  1.00 72.23
ATOM   1407 1HD2 ASN A  93       3.675  -7.008   3.500  1.00 72.24
ATOM   1408  C   ASN A  93       6.356  -4.331   6.748  1.00 33.42
ATOM   1409  O   ASN A  93       5.843  -3.261   6.883  1.00 74.24
ATOM   1410  N   SER A  94       6.502  -5.213   7.727  1.00  1.34
ATOM   1411  H   SER A  94       7.145  -5.948   7.637  1.00  5.12
ATOM   1412  CA  SER A  94       5.753  -5.198   8.988  1.00 25.13
ATOM   1413  HA  SER A  94       4.766  -5.587   8.791  1.00 54.33
ATOM   1414  CB  SER A  94       6.439  -6.171   9.929  1.00 61.11
ATOM   1415 1HB  SER A  94       7.372  -5.747  10.271  1.00  5.41
ATOM   1416 2HB  SER A  94       5.799  -6.382  10.772  1.00 31.45
ATOM   1417  OG  SER A  94       6.702  -7.382   9.237  1.00 72.11
ATOM   1418  HG  SER A  94       5.858  -7.711   8.888  1.00 22.53
ATOM   1419  C   SER A  94       5.618  -3.805   9.640  1.00 13.30
ATOM   1420  O   SER A  94       4.498  -3.328   9.832  1.00 72.20
ATOM   1421  N   ILE A  95       6.722  -3.139   9.914  1.00 52.55
ATOM   1422  H   ILE A  95       7.587  -3.541   9.688  1.00 12.45
ATOM   1423  CA  ILE A  95       6.674  -1.816  10.562  1.00 73.42
ATOM   1424  HA  ILE A  95       6.008  -1.927  11.406  1.00 21.14
ATOM   1425  CB  ILE A  95       8.090  -1.347  11.091  1.00 51.44
ATOM   1426  HB  ILE A  95       8.810  -1.560  10.314  1.00 43.32
ATOM   1427  CG2 ILE A  95       8.135   0.161  11.352  1.00 21.34
ATOM   1428 1HG2 ILE A  95       7.394   0.417  12.095  1.00 14.20
ATOM   1429 2HG2 ILE A  95       7.923   0.691  10.437  1.00 24.42
ATOM   1430 3HG2 ILE A  95       9.115   0.436  11.712  1.00 22.32
ATOM   1431  CG1 ILE A  95       8.508  -2.116  12.372  1.00  3.14
ATOM   1432 1HG1 ILE A  95       9.448  -1.717  12.728  1.00 63.51
ATOM   1433 2HG1 ILE A  95       7.759  -1.949  13.132  1.00 70.35
ATOM   1434  CD1 ILE A  95       8.691  -3.614  12.219  1.00  2.33
ATOM   1435 1HD1 ILE A  95       7.751  -4.039  11.899  1.00 24.32
ATOM   1436 2HD1 ILE A  95       8.975  -4.042  13.170  1.00 12.24
ATOM   1437 3HD1 ILE A  95       9.452  -3.819  11.482  1.00 51.23
ATOM   1438  C   ILE A  95       6.036  -0.766   9.633  1.00 43.55
ATOM   1439  O   ILE A  95       5.163   0.003  10.047  1.00 10.10
ATOM   1440  N   ARG A  96       6.416  -0.819   8.369  1.00 13.32
ATOM   1441  H   ARG A  96       7.031  -1.532   8.107  1.00 64.21
ATOM   1442  CA  ARG A  96       5.925   0.114   7.356  1.00 22.53
ATOM   1443  HA  ARG A  96       6.102   1.123   7.697  1.00 31.21
ATOM   1444  CB  ARG A  96       6.675  -0.115   6.031  1.00 33.33
ATOM   1445 1HB  ARG A  96       6.434  -1.106   5.671  1.00 44.33
ATOM   1446 2HB  ARG A  96       6.332   0.609   5.309  1.00 75.31
ATOM   1447  CG  ARG A  96       8.195  -0.009   6.137  1.00 13.52
ATOM   1448 1HG  ARG A  96       8.456   1.003   6.410  1.00 13.31
ATOM   1449 2HG  ARG A  96       8.542  -0.689   6.901  1.00  3.12
ATOM   1450  CD  ARG A  96       8.870  -0.355   4.814  1.00 65.11
ATOM   1451 1HD  ARG A  96       8.555  -1.341   4.508  1.00 62.33
ATOM   1452 2HD  ARG A  96       8.567   0.366   4.070  1.00 33.24
ATOM   1453  NE  ARG A  96      10.335  -0.340   4.920  1.00 71.34
ATOM   1454  HE  ARG A  96      10.733   0.042   5.744  1.00 12.04
ATOM   1455  CZ  ARG A  96      11.198  -0.801   4.002  1.00 64.31
ATOM   1456  NH1 ARG A  96      10.777  -1.290   2.844  1.00 20.04
ATOM   1457 1HH1 ARG A  96       9.820  -1.362   2.565  1.00 14.31
ATOM   1458 2HH1 ARG A  96      11.486  -1.581   2.179  1.00 11.24
ATOM   1459  NH2 ARG A  96      12.494  -0.749   4.249  1.00 64.01
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ATOM   1460 1HH2 ARG A  96      12.814  -0.348   5.121  1.00 75.11
ATOM   1461 2HH2 ARG A  96      13.171  -1.108   3.591  1.00 34.22
ATOM   1462  C   ARG A  96       4.420  -0.103   7.144  1.00 55.24
ATOM   1463  O   ARG A  96       3.652   0.838   7.089  1.00 61.24
ATOM   1464  N   SER A  97       4.039  -1.367   7.073  1.00 42.53
ATOM   1465  H   SER A  97       4.729  -2.062   7.163  1.00 44.34
ATOM   1466  CA  SER A  97       2.675  -1.804   6.860  1.00  2.33
ATOM   1467  HA  SER A  97       2.316  -1.385   5.933  1.00 60.13
ATOM   1468  CB  SER A  97       2.662  -3.341   6.735  1.00  3.21
ATOM   1469 1HB  SER A  97       3.324  -3.640   5.936  1.00 15.34
ATOM   1470 2HB  SER A  97       3.014  -3.768   7.662  1.00 24.43
ATOM   1471  OG  SER A  97       1.379  -3.845   6.459  1.00 61.34
ATOM   1472  HG  SER A  97       1.375  -4.789   6.638  1.00 21.54
ATOM   1473  C   SER A  97       1.778  -1.353   8.013  1.00  2.51
ATOM   1474  O   SER A  97       0.696  -0.818   7.784  1.00 15.22
ATOM   1475  N   SER A  98       2.272  -1.520   9.243  1.00 43.41
ATOM   1476  H   SER A  98       3.167  -1.904   9.350  1.00  1.31
ATOM   1477  CA  SER A  98       1.528  -1.157  10.440  1.00 31.11
ATOM   1478  HA  SER A  98       0.636  -1.763  10.469  1.00 35.15
ATOM   1479  CB  SER A  98       2.375  -1.465  11.685  1.00 31.13
ATOM   1480 1HB  SER A  98       3.296  -0.904  11.630  1.00 15.21
ATOM   1481 2HB  SER A  98       1.848  -1.191  12.586  1.00 54.21
ATOM   1482  OG  SER A  98       2.700  -2.849  11.749  1.00 64.20
ATOM   1483  HG  SER A  98       3.307  -3.072  11.033  1.00 34.32
ATOM   1484  C   SER A  98       1.123   0.321  10.403  1.00  5.21
ATOM   1485  O   SER A  98      -0.050   0.666  10.616  1.00  3.43
ATOM   1486  N   ALA A  99       2.082   1.178  10.101  1.00 55.34
ATOM   1487  H   ALA A  99       2.987   0.848   9.919  1.00 21.14
ATOM   1488  CA  ALA A  99       1.819   2.593  10.021  1.00 25.34
ATOM   1489  HA  ALA A  99       1.247   2.859  10.897  1.00 54.33
ATOM   1490  CB  ALA A  99       3.114   3.391  10.024  1.00 15.01
ATOM   1491 1HB  ALA A  99       3.696   3.133  10.897  1.00 73.31
ATOM   1492 2HB  ALA A  99       2.887   4.447  10.040  1.00 35.04
ATOM   1493 3HB  ALA A  99       3.679   3.159   9.133  1.00 51.33
ATOM   1494  C   ALA A  99       0.969   2.927   8.805  1.00 41.30
ATOM   1495  O   ALA A  99      -0.007   3.666   8.918  1.00 23.00
ATOM   1496  N   LEU A 100       1.315   2.338   7.661  1.00 20.50
ATOM   1497  H   LEU A 100       2.071   1.708   7.644  1.00 13.11
ATOM   1498  CA  LEU A 100       0.645   2.599   6.398  1.00 41.51
ATOM   1499  HA  LEU A 100       0.805   3.631   6.127  1.00  4.12
ATOM   1500  CB  LEU A 100       1.239   1.715   5.316  1.00 41.04
ATOM   1501 1HB  LEU A 100       2.313   1.748   5.404  1.00 51.44
ATOM   1502 2HB  LEU A 100       0.932   0.702   5.531  1.00 71.11
ATOM   1503  CG  LEU A 100       0.831   2.029   3.882  1.00 32.32
ATOM   1504  HG  LEU A 100      -0.247   2.027   3.820  1.00 73.44
ATOM   1505  CD1 LEU A 100       1.322   3.408   3.475  1.00 32.55
ATOM   1506 1HD1 LEU A 100       2.396   3.444   3.581  1.00  2.42
ATOM   1507 2HD1 LEU A 100       0.871   4.151   4.116  1.00 62.14
ATOM   1508 3HD1 LEU A 100       1.052   3.599   2.447  1.00  1.15
ATOM   1509  CD2 LEU A 100       1.364   0.971   2.946  1.00 10.51
ATOM   1510 1HD2 LEU A 100       2.441   0.944   3.015  1.00 13.02
ATOM   1511 2HD2 LEU A 100       1.066   1.206   1.934  1.00 63.20
ATOM   1512 3HD2 LEU A 100       0.960   0.011   3.226  1.00 31.24
ATOM   1513  C   LEU A 100      -0.836   2.315   6.506  1.00 61.14
ATOM   1514  O   LEU A 100      -1.652   3.169   6.186  1.00  1.11
ATOM   1515  N   ILE A 101      -1.170   1.143   7.025  1.00 42.20
ATOM   1516  H   ILE A 101      -0.449   0.521   7.280  1.00 52.12
ATOM   1517  CA  ILE A 101      -2.558   0.734   7.194  1.00 23.42
ATOM   1518  HA  ILE A 101      -3.024   0.760   6.220  1.00 74.31
ATOM   1519  CB  ILE A 101      -2.658  -0.723   7.758  1.00 31.12
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ATOM   1520  HB  ILE A 101      -2.009  -0.769   8.621  1.00 34.02
ATOM   1521  CG2 ILE A 101      -4.065  -1.063   8.246  1.00 25.25
ATOM   1522 1HG2 ILE A 101      -4.084  -2.075   8.619  1.00 24.14
ATOM   1523 2HG2 ILE A 101      -4.767  -0.953   7.433  1.00 22.43
ATOM   1524 3HG2 ILE A 101      -4.319  -0.379   9.045  1.00 74.12
ATOM   1525  CG1 ILE A 101      -2.160  -1.761   6.726  1.00 61.25
ATOM   1526 1HG1 ILE A 101      -1.127  -1.550   6.488  1.00 30.44
ATOM   1527 2HG1 ILE A 101      -2.222  -2.746   7.164  1.00 71.23
ATOM   1528  CD1 ILE A 101      -2.935  -1.783   5.414  1.00  3.43
ATOM   1529 1HD1 ILE A 101      -2.850  -0.827   4.921  1.00 43.42
ATOM   1530 2HD1 ILE A 101      -3.976  -1.988   5.616  1.00 61.33
ATOM   1531 3HD1 ILE A 101      -2.536  -2.554   4.773  1.00 53.24
ATOM   1532  C   ILE A 101      -3.306   1.716   8.098  1.00 42.54
ATOM   1533  O   ILE A 101      -4.429   2.115   7.779  1.00  3.52
ATOM   1534  N   GLY A 102      -2.644   2.159   9.169  1.00 31.11
ATOM   1535  H   GLY A 102      -1.732   1.836   9.338  1.00 40.13
ATOM   1536  CA  GLY A 102      -3.246   3.112  10.092  1.00 43.13
ATOM   1537 1HA  GLY A 102      -4.156   2.693  10.483  1.00 23.33
ATOM   1538 2HA  GLY A 102      -2.562   3.297  10.906  1.00 63.44
ATOM   1539  C   GLY A 102      -3.576   4.427   9.420  1.00 52.45
ATOM   1540  O   GLY A 102      -4.639   5.013   9.638  1.00  0.24
ATOM   1541  N   ILE A 103      -2.677   4.876   8.586  1.00 63.54
ATOM   1542  H   ILE A 103      -1.856   4.347   8.465  1.00 45.11
ATOM   1543  CA  ILE A 103      -2.850   6.111   7.859  1.00 63.31
ATOM   1544  HA  ILE A 103      -3.152   6.874   8.559  1.00 12.22
ATOM   1545  CB  ILE A 103      -1.523   6.538   7.200  1.00  5.32
ATOM   1546  HB  ILE A 103      -1.215   5.779   6.498  1.00 61.44
ATOM   1547  CG2 ILE A 103      -1.694   7.867   6.458  1.00 23.45
ATOM   1548 1HG2 ILE A 103      -2.445   7.751   5.690  1.00 71.32
ATOM   1549 2HG2 ILE A 103      -0.754   8.148   6.005  1.00 73.01
ATOM   1550 3HG2 ILE A 103      -2.003   8.632   7.155  1.00 71.35
ATOM   1551  CG1 ILE A 103      -0.451   6.673   8.279  1.00  3.12
ATOM   1552 1HG1 ILE A 103      -0.624   7.583   8.836  1.00 64.11
ATOM   1553 2HG1 ILE A 103      -0.521   5.832   8.951  1.00 74.41
ATOM   1554  CD1 ILE A 103       0.947   6.727   7.744  1.00 51.31
ATOM   1555 1HD1 ILE A 103       1.633   6.848   8.568  1.00  4.42
ATOM   1556 2HD1 ILE A 103       1.040   7.543   7.043  1.00 50.13
ATOM   1557 3HD1 ILE A 103       1.141   5.785   7.254  1.00 64.24
ATOM   1558  C   ILE A 103      -3.941   5.950   6.800  1.00 71.42
ATOM   1559  O   ILE A 103      -4.789   6.836   6.633  1.00 43.15
ATOM   1560  N   ILE A 104      -3.933   4.803   6.114  1.00 52.23
ATOM   1561  H   ILE A 104      -3.239   4.136   6.316  1.00 62.33
ATOM   1562  CA  ILE A 104      -4.915   4.526   5.076  1.00 64.35
ATOM   1563  HA  ILE A 104      -4.841   5.309   4.338  1.00 50.45
ATOM   1564  CB  ILE A 104      -4.649   3.150   4.371  1.00 23.05
ATOM   1565  HB  ILE A 104      -4.634   2.387   5.135  1.00 24.14
ATOM   1566  CG2 ILE A 104      -5.773   2.808   3.384  1.00 25.45
ATOM   1567 1HG2 ILE A 104      -5.829   3.574   2.625  1.00  3.55
ATOM   1568 2HG2 ILE A 104      -6.715   2.752   3.909  1.00  2.11
ATOM   1569 3HG2 ILE A 104      -5.562   1.856   2.918  1.00 15.03
ATOM   1570  CG1 ILE A 104      -3.298   3.157   3.650  1.00 61.53
ATOM   1571 1HG1 ILE A 104      -3.340   3.866   2.836  1.00 54.44
ATOM   1572 2HG1 ILE A 104      -2.528   3.462   4.343  1.00 21.44
ATOM   1573  CD1 ILE A 104      -2.901   1.809   3.067  1.00 10.21
ATOM   1574 1HD1 ILE A 104      -1.958   1.901   2.551  1.00 23.35
ATOM   1575 2HD1 ILE A 104      -3.660   1.480   2.374  1.00 52.03
ATOM   1576 3HD1 ILE A 104      -2.806   1.087   3.864  1.00 13.51
ATOM   1577  C   ILE A 104      -6.318   4.517   5.664  1.00  1.20
ATOM   1578  O   ILE A 104      -7.198   5.231   5.178  1.00 43.34
ATOM   1579  N   GLU A 105      -6.513   3.768   6.743  1.00  3.51
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ATOM   1580  H   GLU A 105      -5.769   3.254   7.131  1.00 61.22
ATOM   1581  CA  GLU A 105      -7.817   3.711   7.350  1.00 64.43
ATOM   1582  HA  GLU A 105      -8.500   3.547   6.528  1.00 34.41
ATOM   1583  CB  GLU A 105      -7.987   2.565   8.348  1.00 53.44
ATOM   1584 1HB  GLU A 105      -8.996   2.596   8.734  1.00 25.12
ATOM   1585 2HB  GLU A 105      -7.853   1.632   7.820  1.00 10.33
ATOM   1586  CG  GLU A 105      -7.045   2.579   9.534  1.00 32.20
ATOM   1587 1HG  GLU A 105      -6.170   1.990   9.301  1.00 52.30
ATOM   1588 2HG  GLU A 105      -6.755   3.598   9.743  1.00 41.05
ATOM   1589  CD  GLU A 105      -7.714   2.011  10.742  1.00 54.33
ATOM   1590  OE1 GLU A 105      -7.991   0.800  10.771  1.00 53.44
ATOM   1591  OE2 GLU A 105      -8.085   2.793  11.631  1.00 53.31
ATOM   1592  C   GLU A 105      -8.217   5.037   7.970  1.00 13.11
ATOM   1593  O   GLU A 105      -9.321   5.508   7.743  1.00 34.03
ATOM   1594  N   GLY A 106      -7.294   5.658   8.702  1.00 51.41
ATOM   1595  H   GLY A 106      -6.398   5.261   8.783  1.00 22.02
ATOM   1596  CA  GLY A 106      -7.578   6.888   9.417  1.00 31.41
ATOM   1597 1HA  GLY A 106      -8.369   6.694  10.127  1.00 43.11
ATOM   1598 2HA  GLY A 106      -6.696   7.188   9.962  1.00 53.24
ATOM   1599  C   GLY A 106      -8.013   8.017   8.515  1.00 74.51
ATOM   1600  O   GLY A 106      -8.919   8.776   8.863  1.00 24.34
ATOM   1601  N   ASN A 107      -7.400   8.106   7.346  1.00  1.10
ATOM   1602  H   ASN A 107      -6.689   7.461   7.132  1.00 43.21
ATOM   1603  CA  ASN A 107      -7.741   9.143   6.364  1.00 13.21
ATOM   1604  HA  ASN A 107      -7.675  10.106   6.847  1.00  5.23
ATOM   1605  CB  ASN A 107      -6.743   9.076   5.184  1.00 15.44
ATOM   1606 1HB  ASN A 107      -5.740   9.072   5.580  1.00  3.34
ATOM   1607 2HB  ASN A 107      -6.909   8.144   4.665  1.00 54.24
ATOM   1608  CG  ASN A 107      -6.836  10.224   4.164  1.00 35.24
ATOM   1609  OD1 ASN A 107      -7.886  10.795   3.919  1.00 44.00
ATOM   1610  ND2 ASN A 107      -5.708  10.551   3.563  1.00 50.32
ATOM   1611 2HD2 ASN A 107      -4.895  10.059   3.797  1.00 12.22
ATOM   1612 1HD2 ASN A 107      -5.715  11.280   2.902  1.00 13.03
ATOM   1613  C   ASN A 107      -9.183   8.914   5.888  1.00 71.04
ATOM   1614  O   ASN A 107     -10.000   9.838   5.851  1.00  0.41
ATOM   1615  N   ILE A 108      -9.508   7.648   5.625  1.00 21.42
ATOM   1616  H   ILE A 108      -8.822   6.953   5.729  1.00 21.41
ATOM   1617  CA  ILE A 108     -10.849   7.258   5.197  1.00  5.14
ATOM   1618  HA  ILE A 108     -11.107   7.849   4.331  1.00 22.23
ATOM   1619  CB  ILE A 108     -10.909   5.751   4.817  1.00 65.22
ATOM   1620  HB  ILE A 108     -10.614   5.175   5.681  1.00 31.24
ATOM   1621  CG2 ILE A 108     -12.332   5.348   4.432  1.00 70.52
ATOM   1622 1HG2 ILE A 108     -12.354   4.298   4.176  1.00 44.24
ATOM   1623 2HG2 ILE A 108     -12.653   5.932   3.582  1.00  4.12
ATOM   1624 3HG2 ILE A 108     -12.996   5.530   5.264  1.00 24.15
ATOM   1625  CG1 ILE A 108      -9.946   5.447   3.666  1.00 64.22
ATOM   1626 1HG1 ILE A 108     -10.327   5.912   2.768  1.00 51.31
ATOM   1627 2HG1 ILE A 108      -8.968   5.846   3.897  1.00 13.54
ATOM   1628  CD1 ILE A 108      -9.800   3.974   3.365  1.00 21.13
ATOM   1629 1HD1 ILE A 108      -9.443   3.465   4.248  1.00 14.23
ATOM   1630 2HD1 ILE A 108      -9.086   3.846   2.566  1.00  4.21
ATOM   1631 3HD1 ILE A 108     -10.756   3.568   3.071  1.00 30.24
ATOM   1632  C   ILE A 108     -11.863   7.533   6.315  1.00 60.41
ATOM   1633  O   ILE A 108     -12.934   8.060   6.065  1.00 53.43
ATOM   1634  N   ARG A 109     -11.499   7.185   7.551  1.00 51.33
ATOM   1635  H   ARG A 109     -10.616   6.769   7.672  1.00  3.45
ATOM   1636  CA  ARG A 109     -12.388   7.381   8.695  1.00 25.23
ATOM   1637  HA  ARG A 109     -13.315   6.878   8.461  1.00 13.22
ATOM   1638  CB  ARG A 109     -11.813   6.779   9.990  1.00 53.03
ATOM   1639 1HB  ARG A 109     -10.939   7.345  10.276  1.00 70.44
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ATOM   1640 2HB  ARG A 109     -12.555   6.861  10.770  1.00  5.12
ATOM   1641  CG  ARG A 109     -11.414   5.325   9.860  1.00 65.31
ATOM   1642 1HG  ARG A 109     -12.189   4.789   9.337  1.00 11.33
ATOM   1643 2HG  ARG A 109     -10.511   5.281   9.269  1.00 64.52
ATOM   1644  CD  ARG A 109     -11.144   4.668  11.210  1.00 63.33
ATOM   1645 1HD  ARG A 109     -10.422   5.264  11.749  1.00 11.12
ATOM   1646 2HD  ARG A 109     -12.067   4.627  11.769  1.00 64.15
ATOM   1647  NE  ARG A 109     -10.616   3.299  11.059  1.00 71.11
ATOM   1648  HE  ARG A 109      -9.668   3.182  11.357  1.00 32.42
ATOM   1649  CZ  ARG A 109     -11.271   2.229  10.563  1.00 74.00
ATOM   1650  NH1 ARG A 109     -12.541   2.342  10.148  1.00 72.22
ATOM   1651 1HH1 ARG A 109     -13.027   3.212  10.211  1.00 12.14
ATOM   1652 2HH1 ARG A 109     -13.054   1.596   9.710  1.00 24.12
ATOM   1653  NH2 ARG A 109     -10.644   1.057  10.471  1.00 44.15
ATOM   1654 1HH2 ARG A 109      -9.672   0.970  10.769  1.00 65.33
ATOM   1655 2HH2 ARG A 109     -11.042   0.212  10.122  1.00 73.52
ATOM   1656  C   ARG A 109     -12.695   8.851   8.900  1.00 65.23
ATOM   1657  O   ARG A 109     -13.817   9.206   9.215  1.00 15.43
ATOM   1658  N   TYR A 110     -11.697   9.691   8.685  1.00 52.04
ATOM   1659  H   TYR A 110     -10.818   9.338   8.424  1.00 73.15
ATOM   1660  CA  TYR A 110     -11.858  11.127   8.828  1.00 33.33
ATOM   1661  HA  TYR A 110     -12.315  11.311   9.789  1.00 52.30
ATOM   1662  CB  TYR A 110     -10.489  11.823   8.784  1.00 41.01
ATOM   1663 1HB  TYR A 110      -9.859  11.405   9.554  1.00 62.03
ATOM   1664 2HB  TYR A 110     -10.035  11.634   7.821  1.00  0.35
ATOM   1665  CG  TYR A 110     -10.539  13.322   8.993  1.00 22.45
ATOM   1666  CD1 TYR A 110     -10.394  14.202   7.927  1.00  5.33
ATOM   1667  HD1 TYR A 110     -10.241  13.802   6.935  1.00 34.44
ATOM   1668  CE1 TYR A 110     -10.440  15.569   8.119  1.00 21.12
ATOM   1669  HE1 TYR A 110     -10.325  16.237   7.278  1.00 11.13
ATOM   1670  CZ  TYR A 110     -10.636  16.072   9.388  1.00 64.33
ATOM   1671  CE2 TYR A 110     -10.784  15.221  10.460  1.00 22.33
ATOM   1672  HE2 TYR A 110     -10.938  15.617  11.455  1.00 71.43
ATOM   1673  CD2 TYR A 110     -10.736  13.855  10.260  1.00 13.44
ATOM   1674  HD2 TYR A 110     -10.851  13.185  11.100  1.00 11.14
ATOM   1675  OH  TYR A 110     -10.680  17.435   9.584  1.00 70.31
ATOM   1676  HH  TYR A 110     -10.179  17.654  10.371  1.00 13.43
ATOM   1677  C   TYR A 110     -12.786  11.667   7.738  1.00  2.35
ATOM   1678  O   TYR A 110     -13.664  12.478   8.005  1.00 50.53
ATOM   1679  N   ALA A 111     -12.590  11.196   6.517  1.00 23.45
ATOM   1680  H   ALA A 111     -11.845  10.573   6.358  1.00 14.12
ATOM   1681  CA  ALA A 111     -13.430  11.589   5.388  1.00 74.44
ATOM   1682  HA  ALA A 111     -13.456  12.668   5.359  1.00 13.33
ATOM   1683  CB  ALA A 111     -12.828  11.086   4.083  1.00 21.43
ATOM   1684 1HB  ALA A 111     -13.423  11.433   3.253  1.00 74.01
ATOM   1685 2HB  ALA A 111     -12.812  10.006   4.089  1.00  5.13
ATOM   1686 3HB  ALA A 111     -11.819  11.460   3.984  1.00 24.15
ATOM   1687  C   ALA A 111     -14.867  11.068   5.554  1.00 21.24
ATOM   1688  O   ALA A 111     -15.813  11.625   5.008  1.00 65.31
ATOM   1689  N   ASN A 112     -15.000   9.989   6.299  1.00 14.04
ATOM   1690  H   ASN A 112     -14.185   9.592   6.671  1.00 24.13
ATOM   1691  CA  ASN A 112     -16.286   9.351   6.555  1.00 13.22
ATOM   1692  HA  ASN A 112     -16.849   9.328   5.634  1.00 13.35
ATOM   1693  CB  ASN A 112     -16.052   7.897   7.042  1.00 52.43
ATOM   1694 1HB  ASN A 112     -15.305   7.442   6.409  1.00 41.45
ATOM   1695 2HB  ASN A 112     -15.661   7.940   8.049  1.00 23.00
ATOM   1696  CG  ASN A 112     -17.284   6.960   7.037  1.00 60.00
ATOM   1697  OD1 ASN A 112     -17.136   5.755   6.876  1.00 32.24
ATOM   1698  ND2 ASN A 112     -18.477   7.475   7.214  1.00 34.13
ATOM   1699 2HD2 ASN A 112     -18.570   8.447   7.348  1.00 50.55
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ATOM   1700 1HD2 ASN A 112     -19.234   6.856   7.197  1.00 20.00
ATOM   1701  C   ASN A 112     -17.064  10.148   7.610  1.00 14.54
ATOM   1702  O   ASN A 112     -18.301  10.146   7.617  1.00  2.52
ATOM   1703  N   THR A 113     -16.357  10.803   8.498  1.00 21.30
ATOM   1704  H   THR A 113     -15.377  10.791   8.461  1.00 51.14
ATOM   1705  CA  THR A 113     -16.988  11.565   9.538  1.00 41.43
ATOM   1706  HA  THR A 113     -17.915  11.064   9.772  1.00 35.44
ATOM   1707  CB  THR A 113     -16.124  11.599  10.820  1.00 35.34
ATOM   1708  HB  THR A 113     -16.530  12.345  11.489  1.00  4.22
ATOM   1709  OG1 THR A 113     -14.772  11.953  10.499  1.00 51.54
ATOM   1710  HG1 THR A 113     -14.791  12.546   9.732  1.00 32.21
ATOM   1711  CG2 THR A 113     -16.143  10.245  11.522  1.00 42.44
ATOM   1712 1HG2 THR A 113     -15.756   9.491  10.853  1.00  2.12
ATOM   1713 2HG2 THR A 113     -17.158   9.995  11.798  1.00 63.44
ATOM   1714 3HG2 THR A 113     -15.530  10.289  12.408  1.00 10.14
ATOM   1715  C   THR A 113     -17.332  12.976   9.074  1.00 63.10
ATOM   1716  O   THR A 113     -16.449  13.825   8.924  1.00 24.54
ATOM   1717  N   HIS A 114     -18.592  13.187   8.811  1.00 22.12
ATOM   1718  H   HIS A 114     -19.258  12.473   8.893  1.00  2.41
ATOM   1719  CA  HIS A 114     -19.112  14.459   8.409  1.00  3.42
ATOM   1720  HA  HIS A 114     -18.470  15.231   8.808  1.00 53.21
ATOM   1721  CB  HIS A 114     -19.161  14.556   6.858  1.00 31.33
ATOM   1722 1HB  HIS A 114     -18.164  14.427   6.468  1.00 74.51
ATOM   1723 2HB  HIS A 114     -19.789  13.761   6.483  1.00 20.30
ATOM   1724  CG  HIS A 114     -19.693  15.864   6.321  1.00 72.14
ATOM   1725  ND1 HIS A 114     -20.999  16.248   6.450  1.00 44.22
ATOM   1726  CD2 HIS A 114     -19.074  16.865   5.648  1.00 35.23
ATOM   1727  HD1 HIS A 114     -21.650  15.705   6.958  1.00 55.20
ATOM   1728  CE1 HIS A 114     -21.154  17.432   5.869  1.00  4.42
ATOM   1729  NE2 HIS A 114     -20.010  17.863   5.359  1.00 12.14
ATOM   1730  HD2 HIS A 114     -18.030  16.897   5.374  1.00 21.24
ATOM   1731  HE1 HIS A 114     -22.087  17.971   5.820  1.00  4.33
ATOM   1732  C   HIS A 114     -20.511  14.590   9.022  1.00 24.52
ATOM   1733  O   HIS A 114     -21.510  14.264   8.329  1.00  2.20
TER    1734      HIS A 114
ENDMDL
MODEL        7
ATOM      1  N   MET A   1     -16.858  -8.106  10.735  1.00 42.32
ATOM      2  CA  MET A   1     -15.857  -7.044  10.541  1.00 73.34
ATOM      3  HA  MET A   1     -16.065  -6.551   9.600  1.00 33.13
ATOM      4  CB  MET A   1     -15.850  -6.041  11.707  1.00 23.45
ATOM      5 1HB  MET A   1     -16.831  -5.600  11.784  1.00 34.42
ATOM      6 2HB  MET A   1     -15.632  -6.573  12.622  1.00 63.12
ATOM      7  CG  MET A   1     -14.827  -4.917  11.547  1.00 13.41
ATOM      8 1HG  MET A   1     -13.842  -5.352  11.487  1.00 32.45
ATOM      9 2HG  MET A   1     -15.039  -4.389  10.629  1.00 11.01
ATOM     10  SD  MET A   1     -14.849  -3.736  12.913  1.00 20.53
ATOM     11  CE  MET A   1     -16.493  -3.033  12.772  1.00 12.14
ATOM     12 1HE  MET A   1     -16.629  -2.280  13.534  1.00  2.23
ATOM     13 2HE  MET A   1     -17.234  -3.809  12.906  1.00  4.21
ATOM     14 3HE  MET A   1     -16.613  -2.584  11.798  1.00 20.41
ATOM     15  C   MET A   1     -14.565  -7.750  10.426  1.00 45.22
ATOM     16  O   MET A   1     -13.967  -8.133  11.416  1.00 21.45
ATOM     17  N   ASP A   2     -14.172  -7.960   9.214  1.00 13.51
ATOM     18  H   ASP A   2     -14.523  -7.459   8.449  1.00 31.23
ATOM     19  CA  ASP A   2     -13.178  -8.931   8.907  1.00 60.22
ATOM     20  HA  ASP A   2     -12.715  -9.295   9.811  1.00 51.31
ATOM     21  CB  ASP A   2     -13.895 -10.114   8.206  1.00 53.00
ATOM     22 1HB  ASP A   2     -14.159  -9.821   7.200  1.00 13.45
ATOM     23 2HB  ASP A   2     -13.231 -10.966   8.167  1.00 12.45
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ATOM     24  CG  ASP A   2     -15.183 -10.533   8.946  1.00 65.12
ATOM     25  OD1 ASP A   2     -15.148 -11.481   9.710  1.00  1.44
ATOM     26  OD2 ASP A   2     -16.242  -9.804   8.808  1.00 74.11
ATOM     27  C   ASP A   2     -12.174  -8.308   7.986  1.00 65.02
ATOM     28  O   ASP A   2     -12.436  -7.231   7.425  1.00 42.33
ATOM     29  N   LYS A   3     -11.043  -8.951   7.827  1.00 51.31
ATOM     30  H   LYS A   3     -10.910  -9.819   8.265  1.00 43.53
ATOM     31  CA  LYS A   3      -9.977  -8.437   7.005  1.00 23.31
ATOM     32  HA  LYS A   3     -10.406  -7.918   6.162  1.00 45.11
ATOM     33  CB  LYS A   3      -9.135  -7.460   7.840  1.00 42.21
ATOM     34 1HB  LYS A   3      -9.822  -6.767   8.299  1.00 14.33
ATOM     35 2HB  LYS A   3      -8.638  -8.017   8.621  1.00 24.32
ATOM     36  CG  LYS A   3      -8.090  -6.662   7.068  1.00 63.40
ATOM     37 1HG  LYS A   3      -7.353  -7.345   6.669  1.00 14.33
ATOM     38 2HG  LYS A   3      -8.575  -6.140   6.256  1.00 62.43
ATOM     39  CD  LYS A   3      -7.384  -5.640   7.970  1.00 54.50
ATOM     40 1HD  LYS A   3      -6.890  -6.164   8.775  1.00 51.34
ATOM     41 2HD  LYS A   3      -6.651  -5.102   7.386  1.00 33.52
ATOM     42  CE  LYS A   3      -8.380  -4.641   8.565  1.00 23.50
ATOM     43 1HE  LYS A   3      -8.887  -4.133   7.759  1.00 31.31
ATOM     44 2HE  LYS A   3      -9.101  -5.196   9.146  1.00  3.45
ATOM     45  NZ  LYS A   3      -7.733  -3.639   9.443  1.00  4.31
ATOM     46 1HZ  LYS A   3      -8.420  -2.985   9.869  1.00 20.21
ATOM     47 2HZ  LYS A   3      -7.143  -2.969   8.887  1.00 54.22
ATOM     48 3HZ  LYS A   3      -7.149  -4.047  10.195  1.00  1.13
ATOM     49  C   LYS A   3      -9.143  -9.613   6.516  1.00 61.34
ATOM     50  O   LYS A   3      -8.582 -10.359   7.317  1.00  1.33
ATOM     51  N   GLY A   4      -9.089  -9.791   5.212  1.00 34.43
ATOM     52  H   GLY A   4      -9.525  -9.134   4.632  1.00 10.00
ATOM     53  CA  GLY A   4      -8.394 -10.931   4.634  1.00 73.30
ATOM     54 1HA  GLY A   4      -8.557 -11.793   5.264  1.00 74.44
ATOM     55 2HA  GLY A   4      -8.814 -11.133   3.658  1.00 23.12
ATOM     56  C   GLY A   4      -6.902 -10.718   4.489  1.00 51.23
ATOM     57  O   GLY A   4      -6.404 -10.576   3.369  1.00 64.34
ATOM     58  N   THR A   5      -6.219 -10.666   5.610  1.00 55.51
ATOM     59  H   THR A   5      -6.715 -10.712   6.457  1.00 34.24
ATOM     60  CA  THR A   5      -4.780 -10.509   5.662  1.00 50.24
ATOM     61  HA  THR A   5      -4.506  -9.803   4.891  1.00 63.34
ATOM     62  CB  THR A   5      -4.358  -9.900   7.031  1.00 42.04
ATOM     63  HB  THR A   5      -4.860 -10.461   7.805  1.00 51.23
ATOM     64  OG1 THR A   5      -4.804  -8.524   7.117  1.00 33.24
ATOM     65  HG1 THR A   5      -4.040  -7.987   7.372  1.00 73.44
ATOM     66  CG2 THR A   5      -2.849  -9.970   7.251  1.00 53.14
ATOM     67 1HG2 THR A   5      -2.605  -9.544   8.212  1.00  1.22
ATOM     68 2HG2 THR A   5      -2.348  -9.410   6.474  1.00 21.15
ATOM     69 3HG2 THR A   5      -2.527 -10.999   7.218  1.00 71.43
ATOM     70  C   THR A   5      -4.019 -11.833   5.400  1.00 74.11
ATOM     71  O   THR A   5      -4.276 -12.855   6.030  1.00 10.14
ATOM     72  N   GLN A   6      -3.107 -11.780   4.446  1.00 31.32
ATOM     73  H   GLN A   6      -3.038 -10.961   3.905  1.00 55.33
ATOM     74  CA  GLN A   6      -2.207 -12.862   4.122  1.00 55.10
ATOM     75  HA  GLN A   6      -2.345 -13.689   4.800  1.00 34.30
ATOM     76  CB  GLN A   6      -2.396 -13.323   2.674  1.00 52.44
ATOM     77 1HB  GLN A   6      -1.974 -12.565   2.033  1.00 44.54
ATOM     78 2HB  GLN A   6      -1.839 -14.237   2.530  1.00 53.51
ATOM     79  CG  GLN A   6      -3.826 -13.558   2.237  1.00 30.32
ATOM     80 1HG  GLN A   6      -4.213 -14.366   2.838  1.00 31.13
ATOM     81 2HG  GLN A   6      -4.396 -12.657   2.404  1.00 62.04
ATOM     82  CD  GLN A   6      -3.935 -13.960   0.772  1.00 61.40
ATOM     83  OE1 GLN A   6      -4.871 -14.637   0.363  1.00 34.12
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ATOM     84  NE2 GLN A   6      -2.975 -13.559  -0.036  1.00 73.52
ATOM     85 2HE2 GLN A   6      -2.251 -13.022   0.345  1.00 52.44
ATOM     86 1HE2 GLN A   6      -3.004 -13.842  -0.971  1.00 12.33
ATOM     87  C   GLN A   6      -0.798 -12.298   4.207  1.00 14.43
ATOM     88  O   GLN A   6      -0.557 -11.158   3.769  1.00 41.24
ATOM     89  N   TYR A   7       0.108 -13.049   4.745  1.00 50.00
ATOM     90  H   TYR A   7      -0.128 -13.926   5.113  1.00 53.22
ATOM     91  CA  TYR A   7       1.489 -12.642   4.795  1.00 60.14
ATOM     92  HA  TYR A   7       1.586 -11.685   4.303  1.00  0.22
ATOM     93  CB  TYR A   7       1.984 -12.538   6.253  1.00 33.22
ATOM     94 1HB  TYR A   7       1.329 -11.877   6.801  1.00 13.24
ATOM     95 2HB  TYR A   7       1.952 -13.519   6.704  1.00 22.35
ATOM     96  CG  TYR A   7       3.402 -12.006   6.383  1.00 30.13
ATOM     97  CD1 TYR A   7       3.631 -10.667   6.641  1.00 43.33
ATOM     98  HD1 TYR A   7       2.788 -10.004   6.764  1.00 24.34
ATOM     99  CE1 TYR A   7       4.914 -10.173   6.736  1.00 13.23
ATOM    100  HE1 TYR A   7       5.072  -9.124   6.936  1.00 35.03
ATOM    101  CZ  TYR A   7       5.987 -11.015   6.578  1.00 33.31
ATOM    102  CE2 TYR A   7       5.791 -12.352   6.328  1.00  1.20
ATOM    103  HE2 TYR A   7       6.635 -13.013   6.202  1.00 20.24
ATOM    104  CD2 TYR A   7       4.509 -12.841   6.228  1.00 11.34
ATOM    105  HD2 TYR A   7       4.348 -13.890   6.031  1.00 31.43
ATOM    106  OH  TYR A   7       7.260 -10.517   6.657  1.00 13.32
ATOM    107  HH  TYR A   7       7.300  -9.958   7.447  1.00 53.42
ATOM    108  C   TYR A   7       2.288 -13.681   4.046  1.00 51.15
ATOM    109  O   TYR A   7       2.223 -14.860   4.389  1.00  1.45
ATOM    110  N   LYS A   8       3.007 -13.283   3.020  1.00 14.40
ATOM    111  H   LYS A   8       3.048 -12.335   2.752  1.00 41.32
ATOM    112  CA  LYS A   8       3.782 -14.241   2.276  1.00 74.32
ATOM    113  HA  LYS A   8       4.130 -14.970   2.992  1.00 72.40
ATOM    114  CB  LYS A   8       2.922 -14.992   1.227  1.00 64.04
ATOM    115 1HB  LYS A   8       2.128 -15.540   1.714  1.00 31.41
ATOM    116 2HB  LYS A   8       2.474 -14.258   0.574  1.00 52.34
ATOM    117  CG  LYS A   8       3.778 -15.915   0.377  1.00 55.42
ATOM    118 1HG  LYS A   8       4.439 -15.310  -0.224  1.00  4.43
ATOM    119 2HG  LYS A   8       4.379 -16.517   1.041  1.00 62.23
ATOM    120  CD  LYS A   8       3.015 -16.822  -0.553  1.00 54.22
ATOM    121 1HD  LYS A   8       2.491 -17.567   0.029  1.00 62.53
ATOM    122 2HD  LYS A   8       2.311 -16.238  -1.129  1.00  4.54
ATOM    123  CE  LYS A   8       3.995 -17.510  -1.511  1.00 24.31
ATOM    124 1HE  LYS A   8       3.463 -18.272  -2.061  1.00 24.30
ATOM    125 2HE  LYS A   8       4.377 -16.775  -2.203  1.00 51.12
ATOM    126  NZ  LYS A   8       5.147 -18.153  -0.799  1.00 54.34
ATOM    127 1HZ  LYS A   8       5.627 -17.466  -0.167  1.00 22.30
ATOM    128 2HZ  LYS A   8       5.924 -18.314  -1.474  1.00 34.33
ATOM    129 3HZ  LYS A   8       4.925 -19.006  -0.256  1.00 53.12
ATOM    130  C   LYS A   8       5.010 -13.627   1.613  1.00 42.12
ATOM    131  O   LYS A   8       4.896 -12.672   0.884  1.00  2.41
ATOM    132  N   ASP A   9       6.170 -14.200   1.919  1.00  1.52
ATOM    133  H   ASP A   9       6.175 -14.897   2.607  1.00 62.12
ATOM    134  CA  ASP A   9       7.483 -13.920   1.255  1.00 61.44
ATOM    135  HA  ASP A   9       8.248 -14.439   1.812  1.00 22.13
ATOM    136  CB  ASP A   9       7.479 -14.491  -0.199  1.00 55.30
ATOM    137 1HB  ASP A   9       6.724 -13.971  -0.770  1.00 60.24
ATOM    138 2HB  ASP A   9       8.443 -14.295  -0.647  1.00 32.35
ATOM    139  CG  ASP A   9       7.188 -15.995  -0.309  1.00 41.31
ATOM    140  OD1 ASP A   9       6.783 -16.639   0.697  1.00 31.32
ATOM    141  OD2 ASP A   9       7.244 -16.552  -1.422  1.00 74.03
ATOM    142  C   ASP A   9       7.836 -12.425   1.211  1.00  4.11
ATOM    143  O   ASP A   9       8.439 -11.949   0.264  1.00 62.00
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ATOM    144  N   GLY A  10       7.511 -11.698   2.267  1.00  3.33
ATOM    145  H   GLY A  10       7.049 -12.135   3.009  1.00 74.10
ATOM    146  CA  GLY A  10       7.839 -10.275   2.310  1.00 42.20
ATOM    147 1HA  GLY A  10       8.070  -9.998   3.328  1.00 11.14
ATOM    148 2HA  GLY A  10       8.708 -10.098   1.692  1.00 51.30
ATOM    149  C   GLY A  10       6.696  -9.405   1.811  1.00 24.14
ATOM    150  O   GLY A  10       6.678  -8.196   2.031  1.00 14.53
ATOM    151  N   TYR A  11       5.747 -10.033   1.193  1.00 11.13
ATOM    152  H   TYR A  11       5.861 -10.997   1.099  1.00  4.24
ATOM    153  CA  TYR A  11       4.551  -9.411   0.647  1.00  3.25
ATOM    154  HA  TYR A  11       4.775  -8.385   0.398  1.00 24.20
ATOM    155  CB  TYR A  11       4.061 -10.141  -0.625  1.00 61.01
ATOM    156 1HB  TYR A  11       3.875 -11.176  -0.376  1.00 41.21
ATOM    157 2HB  TYR A  11       3.127  -9.694  -0.932  1.00 21.00
ATOM    158  CG  TYR A  11       4.997 -10.139  -1.817  1.00 44.13
ATOM    159  CD1 TYR A  11       6.145 -10.922  -1.837  1.00 43.44
ATOM    160  HD1 TYR A  11       6.387 -11.518  -0.969  1.00 71.02
ATOM    161  CE1 TYR A  11       6.979 -10.941  -2.935  1.00 51.31
ATOM    162  HE1 TYR A  11       7.866 -11.555  -2.930  1.00 30.23
ATOM    163  CZ  TYR A  11       6.670 -10.174  -4.035  1.00 15.43
ATOM    164  CE2 TYR A  11       5.534  -9.393  -4.043  1.00 73.42
ATOM    165  HE2 TYR A  11       5.292  -8.792  -4.906  1.00 50.14
ATOM    166  CD2 TYR A  11       4.705  -9.381  -2.941  1.00 70.22
ATOM    167  HD2 TYR A  11       3.816  -8.770  -2.945  1.00 12.44
ATOM    168  OH  TYR A  11       7.499 -10.186  -5.133  1.00  1.33
ATOM    169  HH  TYR A  11       7.747 -11.100  -5.294  1.00 65.03
ATOM    170  C   TYR A  11       3.422  -9.460   1.673  1.00 41.01
ATOM    171  O   TYR A  11       3.312 -10.423   2.459  1.00 12.32
ATOM    172  N   TYR A  12       2.627  -8.430   1.685  1.00 64.44
ATOM    173  H   TYR A  12       2.821  -7.698   1.056  1.00 23.53
ATOM    174  CA  TYR A  12       1.471  -8.337   2.545  1.00 52.13
ATOM    175  HA  TYR A  12       1.388  -9.238   3.134  1.00 42.21
ATOM    176  CB  TYR A  12       1.585  -7.121   3.459  1.00 34.11
ATOM    177 1HB  TYR A  12       2.552  -7.141   3.935  1.00 41.42
ATOM    178 2HB  TYR A  12       1.511  -6.227   2.859  1.00 54.00
ATOM    179  CG  TYR A  12       0.532  -7.033   4.552  1.00 22.44
ATOM    180  CD1 TYR A  12       0.718  -7.676   5.769  1.00 22.45
ATOM    181  HD1 TYR A  12       1.617  -8.254   5.924  1.00 53.41
ATOM    182  CE1 TYR A  12      -0.222  -7.587   6.775  1.00 62.30
ATOM    183  HE1 TYR A  12      -0.058  -8.094   7.714  1.00 63.51
ATOM    184  CZ  TYR A  12      -1.367  -6.852   6.572  1.00 72.13
ATOM    185  CE2 TYR A  12      -1.571  -6.210   5.376  1.00 51.30
ATOM    186  HE2 TYR A  12      -2.470  -5.635   5.219  1.00 54.54
ATOM    187  CD2 TYR A  12      -0.628  -6.298   4.376  1.00 53.35
ATOM    188  HD2 TYR A  12      -0.792  -5.792   3.436  1.00 53.43
ATOM    189  OH  TYR A  12      -2.320  -6.762   7.576  1.00 71.03
ATOM    190  HH  TYR A  12      -1.852  -6.554   8.391  1.00  5.11
ATOM    191  C   TYR A  12       0.269  -8.182   1.658  1.00 63.14
ATOM    192  O   TYR A  12       0.205  -7.241   0.867  1.00 54.11
ATOM    193  N   ILE A  13      -0.652  -9.079   1.749  1.00 21.22
ATOM    194  H   ILE A  13      -0.573  -9.805   2.410  1.00 22.40
ATOM    195  CA  ILE A  13      -1.818  -9.011   0.917  1.00 42.41
ATOM    196  HA  ILE A  13      -1.786  -8.085   0.361  1.00 34.13
ATOM    197  CB  ILE A  13      -1.929 -10.218  -0.094  1.00  1.13
ATOM    198  HB  ILE A  13      -2.114 -11.106   0.491  1.00 14.44
ATOM    199  CG2 ILE A  13      -3.121 -10.037  -1.019  1.00  1.32
ATOM    200 1HG2 ILE A  13      -4.027  -9.979  -0.434  1.00 22.21
ATOM    201 2HG2 ILE A  13      -3.183 -10.876  -1.696  1.00  1.01
ATOM    202 3HG2 ILE A  13      -3.001  -9.125  -1.586  1.00 10.42
ATOM    203  CG1 ILE A  13      -0.645 -10.429  -0.936  1.00 71.50
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ATOM    204 1HG1 ILE A  13      -0.893 -10.958  -1.844  1.00 43.31
ATOM    205 2HG1 ILE A  13      -0.248  -9.457  -1.191  1.00 21.40
ATOM    206  CD1 ILE A  13       0.461 -11.207  -0.237  1.00 62.01
ATOM    207 1HD1 ILE A  13       1.306 -11.309  -0.901  1.00 10.42
ATOM    208 2HD1 ILE A  13       0.098 -12.188   0.033  1.00  3.04
ATOM    209 3HD1 ILE A  13       0.763 -10.678   0.655  1.00 24.11
ATOM    210  C   ILE A  13      -3.031  -9.016   1.812  1.00 20.53
ATOM    211  O   ILE A  13      -3.228  -9.952   2.545  1.00 53.22
ATOM    212  N   THR A  14      -3.817  -7.989   1.779  1.00  0.44
ATOM    213  H   THR A  14      -3.627  -7.243   1.171  1.00 61.44
ATOM    214  CA  THR A  14      -4.998  -7.959   2.595  1.00 10.24
ATOM    215  HA  THR A  14      -5.256  -8.996   2.763  1.00 40.43
ATOM    216  CB  THR A  14      -4.794  -7.260   3.987  1.00 64.03
ATOM    217  HB  THR A  14      -3.914  -7.680   4.452  1.00 23.42
ATOM    218  OG1 THR A  14      -5.925  -7.509   4.832  1.00 54.11
ATOM    219  HG1 THR A  14      -5.598  -7.894   5.659  1.00 23.21
ATOM    220  CG2 THR A  14      -4.621  -5.762   3.851  1.00 21.41
ATOM    221 1HG2 THR A  14      -3.732  -5.552   3.275  1.00  3.34
ATOM    222 2HG2 THR A  14      -4.543  -5.314   4.830  1.00 53.40
ATOM    223 3HG2 THR A  14      -5.480  -5.356   3.339  1.00 50.35
ATOM    224  C   THR A  14      -6.153  -7.353   1.814  1.00 24.43
ATOM    225  O   THR A  14      -5.968  -6.865   0.690  1.00 73.12
ATOM    226  N   THR A  15      -7.326  -7.436   2.361  1.00  4.31
ATOM    227  H   THR A  15      -7.383  -7.778   3.281  1.00 44.50
ATOM    228  CA  THR A  15      -8.498  -6.953   1.708  1.00 34.33
ATOM    229  HA  THR A  15      -8.213  -6.512   0.766  1.00 51.54
ATOM    230  CB  THR A  15      -9.444  -8.127   1.445  1.00 44.21
ATOM    231  HB  THR A  15      -9.909  -8.428   2.372  1.00 71.44
ATOM    232  OG1 THR A  15      -8.642  -9.205   0.927  1.00 64.22
ATOM    233  HG1 THR A  15      -7.807  -9.070   1.392  1.00 25.41
ATOM    234  CG2 THR A  15     -10.506  -7.749   0.418  1.00 52.54
ATOM    235 1HG2 THR A  15     -10.028  -7.471  -0.511  1.00 63.02
ATOM    236 2HG2 THR A  15     -11.081  -6.912   0.788  1.00 21.10
ATOM    237 3HG2 THR A  15     -11.161  -8.590   0.248  1.00 31.33
ATOM    238  C   THR A  15      -9.168  -5.906   2.588  1.00 12.22
ATOM    239  O   THR A  15      -9.492  -6.173   3.749  1.00 65.20
ATOM    240  N   LEU A  16      -9.338  -4.733   2.044  1.00  1.42
ATOM    241  H   LEU A  16      -9.082  -4.595   1.103  1.00 13.31
ATOM    242  CA  LEU A  16      -9.944  -3.638   2.743  1.00 64.02
ATOM    243  HA  LEU A  16     -10.030  -3.901   3.786  1.00 12.24
ATOM    244  CB  LEU A  16      -9.116  -2.332   2.622  1.00 35.02
ATOM    245 1HB  LEU A  16      -8.944  -2.165   1.569  1.00  4.43
ATOM    246 2HB  LEU A  16      -9.729  -1.522   2.984  1.00 41.34
ATOM    247  CG  LEU A  16      -7.746  -2.263   3.325  1.00 32.22
ATOM    248  HG  LEU A  16      -7.444  -1.226   3.330  1.00 42.22
ATOM    249  CD1 LEU A  16      -7.844  -2.675   4.788  1.00 12.50
ATOM    250 1HD1 LEU A  16      -8.180  -3.699   4.852  1.00 52.30
ATOM    251 2HD1 LEU A  16      -8.554  -2.036   5.292  1.00  4.35
ATOM    252 3HD1 LEU A  16      -6.876  -2.582   5.258  1.00 33.10
ATOM    253  CD2 LEU A  16      -6.688  -3.061   2.581  1.00  3.43
ATOM    254 1HD2 LEU A  16      -5.753  -3.012   3.121  1.00 64.02
ATOM    255 2HD2 LEU A  16      -6.555  -2.643   1.594  1.00 21.11
ATOM    256 3HD2 LEU A  16      -7.007  -4.088   2.498  1.00 71.11
ATOM    257  C   LEU A  16     -11.309  -3.397   2.181  1.00  4.34
ATOM    258  O   LEU A  16     -11.459  -3.181   0.974  1.00  0.33
ATOM    259  N   ASN A  17     -12.299  -3.428   3.025  1.00 63.03
ATOM    260  H   ASN A  17     -12.121  -3.629   3.964  1.00 20.14
ATOM    261  CA  ASN A  17     -13.657  -3.171   2.590  1.00 15.24
ATOM    262  HA  ASN A  17     -13.720  -3.523   1.572  1.00 73.25
ATOM    263  CB  ASN A  17     -14.701  -3.915   3.443  1.00 45.14
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ATOM    264 1HB  ASN A  17     -14.527  -3.671   4.480  1.00 24.44
ATOM    265 2HB  ASN A  17     -15.690  -3.587   3.161  1.00 63.35
ATOM    266  CG  ASN A  17     -14.624  -5.427   3.298  1.00 73.53
ATOM    267  OD1 ASN A  17     -14.237  -5.950   2.261  1.00 45.53
ATOM    268  ND2 ASN A  17     -15.000  -6.142   4.334  1.00  1.42
ATOM    269 2HD2 ASN A  17     -15.308  -5.674   5.136  1.00 62.41
ATOM    270 1HD2 ASN A  17     -14.949  -7.115   4.241  1.00 35.31
ATOM    271  C   ASN A  17     -13.920  -1.683   2.567  1.00 34.24
ATOM    272  O   ASN A  17     -14.623  -1.138   3.416  1.00 72.22
ATOM    273  N   TYR A  18     -13.248  -1.033   1.648  1.00 33.13
ATOM    274  H   TYR A  18     -12.660  -1.542   1.047  1.00 20.01
ATOM    275  CA  TYR A  18     -13.336   0.379   1.403  1.00 62.40
ATOM    276  HA  TYR A  18     -14.330   0.716   1.660  1.00 44.40
ATOM    277  CB  TYR A  18     -12.267   1.180   2.197  1.00 24.22
ATOM    278 1HB  TYR A  18     -11.288   0.814   1.927  1.00 34.11
ATOM    279 2HB  TYR A  18     -12.337   2.219   1.909  1.00 33.33
ATOM    280  CG  TYR A  18     -12.379   1.103   3.718  1.00 11.44
ATOM    281  CD1 TYR A  18     -13.348   1.827   4.406  1.00 65.32
ATOM    282  HD1 TYR A  18     -14.031   2.448   3.846  1.00 52.24
ATOM    283  CE1 TYR A  18     -13.448   1.759   5.785  1.00  4.12
ATOM    284  HE1 TYR A  18     -14.207   2.328   6.301  1.00 44.22
ATOM    285  CZ  TYR A  18     -12.572   0.960   6.496  1.00 40.44
ATOM    286  CE2 TYR A  18     -11.604   0.238   5.838  1.00 23.52
ATOM    287  HE2 TYR A  18     -10.920  -0.387   6.392  1.00 22.05
ATOM    288  CD2 TYR A  18     -11.511   0.311   4.462  1.00  2.25
ATOM    289  HD2 TYR A  18     -10.750  -0.254   3.949  1.00 42.12
ATOM    290  OH  TYR A  18     -12.671   0.884   7.878  1.00 32.12
ATOM    291  HH  TYR A  18     -13.608   0.767   8.076  1.00 23.53
ATOM    292  C   TYR A  18     -13.104   0.552  -0.077  1.00 45.31
ATOM    293  O   TYR A  18     -12.446  -0.305  -0.693  1.00 74.12
ATOM    294  N   ASN A  19     -13.599   1.628  -0.635  1.00 51.31
ATOM    295  H   ASN A  19     -14.022   2.303  -0.068  1.00 44.21
ATOM    296  CA  ASN A  19     -13.532   1.843  -2.077  1.00 54.10
ATOM    297  HA  ASN A  19     -13.809   0.901  -2.528  1.00 34.25
ATOM    298  CB  ASN A  19     -14.538   2.906  -2.537  1.00 71.03
ATOM    299 1HB  ASN A  19     -15.522   2.617  -2.201  1.00 73.12
ATOM    300 2HB  ASN A  19     -14.275   3.856  -2.093  1.00 42.25
ATOM    301  CG  ASN A  19     -14.594   3.077  -4.056  1.00 64.13
ATOM    302  OD1 ASN A  19     -14.331   2.152  -4.822  1.00 11.43
ATOM    303  ND2 ASN A  19     -14.948   4.249  -4.499  1.00 52.33
ATOM    304 2HD2 ASN A  19     -15.153   4.953  -3.847  1.00 62.14
ATOM    305 1HD2 ASN A  19     -15.001   4.366  -5.470  1.00 22.40
ATOM    306  C   ASN A  19     -12.121   2.162  -2.550  1.00 75.14
ATOM    307  O   ASN A  19     -11.421   2.980  -1.960  1.00  2.03
ATOM    308  N   PHE A  20     -11.754   1.529  -3.633  1.00 51.25
ATOM    309  H   PHE A  20     -12.431   0.955  -4.051  1.00 20.41
ATOM    310  CA  PHE A  20     -10.433   1.596  -4.252  1.00 34.05
ATOM    311  HA  PHE A  20      -9.754   1.072  -3.598  1.00 31.01
ATOM    312  CB  PHE A  20     -10.490   0.812  -5.576  1.00 34.22
ATOM    313 1HB  PHE A  20     -10.484  -0.236  -5.317  1.00 63.41
ATOM    314 2HB  PHE A  20     -11.419   1.008  -6.091  1.00 20.53
ATOM    315  CG  PHE A  20      -9.348   1.000  -6.540  1.00 33.22
ATOM    316  CD1 PHE A  20      -9.423   1.962  -7.539  1.00 61.23
ATOM    317  HD1 PHE A  20     -10.299   2.592  -7.602  1.00  3.44
ATOM    318  CE1 PHE A  20      -8.399   2.125  -8.440  1.00 52.24
ATOM    319  HE1 PHE A  20      -8.470   2.877  -9.212  1.00 70.43
ATOM    320  CZ  PHE A  20      -7.284   1.325  -8.357  1.00 54.24
ATOM    321  HZ  PHE A  20      -6.478   1.448  -9.064  1.00 55.10
ATOM    322  CE2 PHE A  20      -7.196   0.366  -7.371  1.00 72.14
ATOM    323  HE2 PHE A  20      -6.322  -0.263  -7.309  1.00 54.32
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ATOM    324  CD2 PHE A  20      -8.225   0.205  -6.470  1.00 61.45
ATOM    325  HD2 PHE A  20      -8.153  -0.549  -5.699  1.00 50.15
ATOM    326  C   PHE A  20      -9.895   3.026  -4.438  1.00 64.21
ATOM    327  O   PHE A  20      -8.721   3.280  -4.172  1.00 34.51
ATOM    328  N   ASN A  21     -10.744   3.963  -4.844  1.00 44.13
ATOM    329  H   ASN A  21     -11.683   3.719  -4.970  1.00 30.24
ATOM    330  CA  ASN A  21     -10.257   5.325  -5.086  1.00  1.21
ATOM    331  HA  ASN A  21      -9.348   5.174  -5.651  1.00 61.13
ATOM    332  CB  ASN A  21     -11.213   6.208  -5.941  1.00 21.12
ATOM    333 1HB  ASN A  21     -10.769   7.186  -6.039  1.00  4.20
ATOM    334 2HB  ASN A  21     -11.293   5.767  -6.922  1.00 14.01
ATOM    335  CG  ASN A  21     -12.622   6.413  -5.383  1.00 42.44
ATOM    336  OD1 ASN A  21     -12.863   6.368  -4.185  1.00  0.51
ATOM    337  ND2 ASN A  21     -13.564   6.661  -6.267  1.00 71.40
ATOM    338 2HD2 ASN A  21     -13.318   6.692  -7.217  1.00 15.41
ATOM    339 1HD2 ASN A  21     -14.471   6.829  -5.940  1.00 41.20
ATOM    340  C   ASN A  21      -9.800   6.037  -3.807  1.00 61.53
ATOM    341  O   ASN A  21      -8.773   6.723  -3.812  1.00 35.44
ATOM    342  N   THR A  22     -10.533   5.876  -2.724  1.00 13.10
ATOM    343  H   THR A  22     -11.358   5.349  -2.780  1.00 60.44
ATOM    344  CA  THR A  22     -10.131   6.472  -1.475  1.00  5.23
ATOM    345  HA  THR A  22      -9.789   7.461  -1.748  1.00 44.20
ATOM    346  CB  THR A  22     -11.302   6.609  -0.428  1.00 32.43
ATOM    347  HB  THR A  22     -12.058   7.240  -0.874  1.00 32.13
ATOM    348  OG1 THR A  22     -10.850   7.252   0.766  1.00 71.43
ATOM    349  HG1 THR A  22     -10.821   8.201   0.621  1.00 14.41
ATOM    350  CG2 THR A  22     -11.924   5.274  -0.070  1.00 34.44
ATOM    351 1HG2 THR A  22     -12.723   5.424   0.641  1.00 22.21
ATOM    352 2HG2 THR A  22     -11.171   4.633   0.363  1.00  2.14
ATOM    353 3HG2 THR A  22     -12.319   4.808  -0.962  1.00 45.03
ATOM    354  C   THR A  22      -8.888   5.753  -0.916  1.00  4.14
ATOM    355  O   THR A  22      -7.974   6.401  -0.388  1.00 63.31
ATOM    356  N   VAL A  23      -8.831   4.423  -1.101  1.00 75.01
ATOM    357  H   VAL A  23      -9.584   3.963  -1.533  1.00 45.52
ATOM    358  CA  VAL A  23      -7.678   3.628  -0.671  1.00 41.23
ATOM    359  HA  VAL A  23      -7.534   3.812   0.384  1.00 22.02
ATOM    360  CB  VAL A  23      -7.898   2.100  -0.898  1.00 42.24
ATOM    361  HB  VAL A  23      -8.062   1.932  -1.952  1.00 41.50
ATOM    362  CG1 VAL A  23      -6.672   1.296  -0.467  1.00 12.22
ATOM    363 1HG1 VAL A  23      -5.819   1.594  -1.059  1.00 72.22
ATOM    364 2HG1 VAL A  23      -6.861   0.242  -0.600  1.00 24.41
ATOM    365 3HG1 VAL A  23      -6.469   1.493   0.575  1.00 65.41
ATOM    366  CG2 VAL A  23      -9.119   1.615  -0.139  1.00 42.20
ATOM    367 1HG2 VAL A  23      -9.263   0.562  -0.324  1.00 72.45
ATOM    368 2HG2 VAL A  23      -9.992   2.162  -0.468  1.00 63.31
ATOM    369 3HG2 VAL A  23      -8.973   1.773   0.919  1.00 21.00
ATOM    370  C   VAL A  23      -6.419   4.088  -1.407  1.00  2.41
ATOM    371  O   VAL A  23      -5.353   4.249  -0.789  1.00 73.11
ATOM    372  N   TYR A  24      -6.555   4.330  -2.715  1.00 32.21
ATOM    373  H   TYR A  24      -7.422   4.144  -3.141  1.00 20.34
ATOM    374  CA  TYR A  24      -5.449   4.810  -3.544  1.00  4.13
ATOM    375  HA  TYR A  24      -4.682   4.050  -3.532  1.00 32.03
ATOM    376  CB  TYR A  24      -5.911   5.021  -5.005  1.00 15.01
ATOM    377 1HB  TYR A  24      -6.182   4.064  -5.427  1.00  3.21
ATOM    378 2HB  TYR A  24      -6.781   5.662  -5.006  1.00 64.40
ATOM    379  CG  TYR A  24      -4.860   5.647  -5.923  1.00 51.11
ATOM    380  CD1 TYR A  24      -4.938   6.989  -6.291  1.00 71.21
ATOM    381  HD1 TYR A  24      -5.759   7.586  -5.924  1.00 74.14
ATOM    382  CE1 TYR A  24      -3.987   7.562  -7.117  1.00 75.42
ATOM    383  HE1 TYR A  24      -4.068   8.603  -7.392  1.00 23.35
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ATOM    384  CZ  TYR A  24      -2.940   6.797  -7.585  1.00  5.43
ATOM    385  CE2 TYR A  24      -2.838   5.468  -7.235  1.00 42.31
ATOM    386  HE2 TYR A  24      -2.018   4.869  -7.602  1.00  5.32
ATOM    387  CD2 TYR A  24      -3.793   4.903  -6.409  1.00 74.52
ATOM    388  HD2 TYR A  24      -3.716   3.860  -6.134  1.00 12.40
ATOM    389  OH  TYR A  24      -1.988   7.366  -8.412  1.00  1.12
ATOM    390  HH  TYR A  24      -1.717   8.205  -8.028  1.00 55.31
ATOM    391  C   TYR A  24      -4.876   6.099  -2.987  1.00 44.12
ATOM    392  O   TYR A  24      -3.658   6.226  -2.813  1.00 51.34
ATOM    393  N   ASN A  25      -5.758   7.019  -2.653  1.00 20.22
ATOM    394  H   ASN A  25      -6.712   6.828  -2.758  1.00 71.14
ATOM    395  CA  ASN A  25      -5.361   8.301  -2.119  1.00 12.11
ATOM    396  HA  ASN A  25      -4.619   8.700  -2.795  1.00 61.42
ATOM    397  CB  ASN A  25      -6.539   9.280  -2.067  1.00 41.30
ATOM    398 1HB  ASN A  25      -7.410   8.754  -1.709  1.00 14.21
ATOM    399 2HB  ASN A  25      -6.298  10.072  -1.377  1.00 54.34
ATOM    400  CG  ASN A  25      -6.877   9.890  -3.423  1.00 62.45
ATOM    401  OD1 ASN A  25      -6.349  10.924  -3.793  1.00 20.45
ATOM    402  ND2 ASN A  25      -7.750   9.263  -4.173  1.00 32.51
ATOM    403 2HD2 ASN A  25      -8.161   8.424  -3.859  1.00 54.44
ATOM    404 1HD2 ASN A  25      -7.952   9.680  -5.035  1.00 34.12
ATOM    405  C   ASN A  25      -4.712   8.157  -0.765  1.00 20.13
ATOM    406  O   ASN A  25      -3.617   8.651  -0.555  1.00 51.12
ATOM    407  N   ALA A  26      -5.357   7.409   0.121  1.00 50.21
ATOM    408  H   ALA A  26      -6.193   6.970  -0.154  1.00 11.34
ATOM    409  CA  ALA A  26      -4.881   7.221   1.489  1.00 25.22
ATOM    410  HA  ALA A  26      -4.820   8.195   1.954  1.00 71.21
ATOM    411  CB  ALA A  26      -5.873   6.382   2.274  1.00 52.52
ATOM    412 1HB  ALA A  26      -5.942   5.402   1.829  1.00 74.21
ATOM    413 2HB  ALA A  26      -6.844   6.857   2.250  1.00 21.13
ATOM    414 3HB  ALA A  26      -5.541   6.292   3.297  1.00 53.23
ATOM    415  C   ALA A  26      -3.493   6.578   1.525  1.00 13.32
ATOM    416  O   ALA A  26      -2.611   7.032   2.257  1.00 44.14
ATOM    417  N   THR A  27      -3.309   5.544   0.719  1.00  4.35
ATOM    418  H   THR A  27      -4.065   5.224   0.184  1.00 14.30
ATOM    419  CA  THR A  27      -2.031   4.857   0.619  1.00 54.11
ATOM    420  HA  THR A  27      -1.742   4.495   1.592  1.00 13.13
ATOM    421  CB  THR A  27      -2.125   3.666  -0.355  1.00 42.32
ATOM    422  HB  THR A  27      -2.297   4.052  -1.349  1.00 30.44
ATOM    423  OG1 THR A  27      -3.220   2.815   0.015  1.00 23.03
ATOM    424  HG1 THR A  27      -4.048   3.227  -0.264  1.00  3.11
ATOM    425  CG2 THR A  27      -0.833   2.856  -0.354  1.00 63.43
ATOM    426 1HG2 THR A  27      -0.647   2.464   0.635  1.00 53.13
ATOM    427 2HG2 THR A  27      -0.013   3.495  -0.648  1.00 74.20
ATOM    428 3HG2 THR A  27      -0.924   2.042  -1.058  1.00 23.02
ATOM    429  C   THR A  27      -0.962   5.819   0.114  1.00 51.55
ATOM    430  O   THR A  27       0.132   5.905   0.681  1.00 42.04
ATOM    431  N   LEU A  28      -1.311   6.568  -0.928  1.00 62.42
ATOM    432  H   LEU A  28      -2.217   6.487  -1.299  1.00 14.50
ATOM    433  CA  LEU A  28      -0.413   7.517  -1.533  1.00 62.10
ATOM    434  HA  LEU A  28       0.477   6.973  -1.819  1.00 34.12
ATOM    435  CB  LEU A  28      -1.051   8.121  -2.793  1.00 23.52
ATOM    436 1HB  LEU A  28      -1.202   7.302  -3.483  1.00 12.34
ATOM    437 2HB  LEU A  28      -2.022   8.509  -2.539  1.00 12.23
ATOM    438  CG  LEU A  28      -0.252   9.194  -3.531  1.00 54.14
ATOM    439  HG  LEU A  28       0.010   9.967  -2.823  1.00  4.33
ATOM    440  CD1 LEU A  28       1.035   8.617  -4.101  1.00 21.43
ATOM    441 1HD1 LEU A  28       1.643   8.230  -3.297  1.00 11.22
ATOM    442 2HD1 LEU A  28       1.578   9.393  -4.620  1.00 41.24
ATOM    443 3HD1 LEU A  28       0.800   7.820  -4.790  1.00 75.31
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ATOM    444  CD2 LEU A  28      -1.095   9.821  -4.630  1.00 65.32
ATOM    445 1HD2 LEU A  28      -1.395   9.059  -5.334  1.00 25.35
ATOM    446 2HD2 LEU A  28      -0.514  10.575  -5.142  1.00 42.30
ATOM    447 3HD2 LEU A  28      -1.974  10.276  -4.197  1.00 63.15
ATOM    448  C   LEU A  28      -0.010   8.591  -0.519  1.00 41.43
ATOM    449  O   LEU A  28       1.150   8.836  -0.338  1.00 35.15
ATOM    450  N   GLN A  29      -0.983   9.157   0.173  1.00 21.24
ATOM    451  H   GLN A  29      -1.899   8.909  -0.068  1.00 61.31
ATOM    452  CA  GLN A  29      -0.744  10.170   1.224  1.00 43.42
ATOM    453  HA  GLN A  29      -0.354  11.067   0.768  1.00 41.45
ATOM    454  CB  GLN A  29      -2.038  10.512   1.969  1.00 54.54
ATOM    455 1HB  GLN A  29      -2.426   9.605   2.409  1.00  4.22
ATOM    456 2HB  GLN A  29      -1.788  11.194   2.768  1.00 13.14
ATOM    457  CG  GLN A  29      -3.156  11.132   1.148  1.00 54.14
ATOM    458 1HG  GLN A  29      -2.834  12.095   0.779  1.00 62.32
ATOM    459 2HG  GLN A  29      -3.375  10.481   0.314  1.00 71.14
ATOM    460  CD  GLN A  29      -4.431  11.309   1.975  1.00 44.42
ATOM    461  OE1 GLN A  29      -5.543  11.248   1.458  1.00 63.32
ATOM    462  NE2 GLN A  29      -4.275  11.528   3.263  1.00 73.35
ATOM    463 2HE2 GLN A  29      -3.368  11.577   3.626  1.00 74.32
ATOM    464 1HE2 GLN A  29      -5.071  11.607   3.831  1.00 35.33
ATOM    465  C   GLN A  29       0.234   9.646   2.270  1.00 32.52
ATOM    466  O   GLN A  29       1.177  10.331   2.645  1.00 33.30
ATOM    467  N   ALA A  30       0.012   8.418   2.706  1.00 62.30
ATOM    468  H   ALA A  30      -0.737   7.912   2.318  1.00 64.22
ATOM    469  CA  ALA A  30       0.822   7.796   3.742  1.00 13.24
ATOM    470  HA  ALA A  30       0.713   8.389   4.638  1.00 54.31
ATOM    471  CB  ALA A  30       0.306   6.401   4.041  1.00 13.04
ATOM    472 1HB  ALA A  30      -0.740   6.448   4.307  1.00 51.11
ATOM    473 2HB  ALA A  30       0.872   5.972   4.855  1.00 20.24
ATOM    474 3HB  ALA A  30       0.425   5.790   3.157  1.00 43.14
ATOM    475  C   ALA A  30       2.298   7.739   3.360  1.00  3.15
ATOM    476  O   ALA A  30       3.180   8.083   4.164  1.00 71.04
ATOM    477  N   ILE A  31       2.565   7.330   2.146  1.00 61.31
ATOM    478  H   ILE A  31       1.821   7.117   1.541  1.00 22.42
ATOM    479  CA  ILE A  31       3.928   7.193   1.695  1.00 60.02
ATOM    480  HA  ILE A  31       4.502   6.917   2.568  1.00 64.32
ATOM    481  CB  ILE A  31       4.058   6.035   0.644  1.00 52.43
ATOM    482  HB  ILE A  31       3.797   5.119   1.153  1.00 20.23
ATOM    483  CG2 ILE A  31       3.072   6.191  -0.516  1.00 51.44
ATOM    484 1HG2 ILE A  31       3.239   7.142  -1.001  1.00 73.31
ATOM    485 2HG2 ILE A  31       2.059   6.150  -0.144  1.00 72.02
ATOM    486 3HG2 ILE A  31       3.225   5.394  -1.229  1.00 25.01
ATOM    487  CG1 ILE A  31       5.485   5.917   0.138  1.00 70.43
ATOM    488 1HG1 ILE A  31       5.776   6.854  -0.315  1.00 34.10
ATOM    489 2HG1 ILE A  31       6.131   5.712   0.979  1.00 33.43
ATOM    490  CD1 ILE A  31       5.693   4.832  -0.887  1.00 11.25
ATOM    491 1HD1 ILE A  31       5.436   3.883  -0.444  1.00 74.44
ATOM    492 2HD1 ILE A  31       6.727   4.826  -1.202  1.00 53.41
ATOM    493 3HD1 ILE A  31       5.055   5.020  -1.738  1.00 24.05
ATOM    494  C   ILE A  31       4.505   8.530   1.145  1.00 55.12
ATOM    495  O   ILE A  31       5.580   8.956   1.545  1.00 50.23
ATOM    496  N   GLN A  32       3.719   9.214   0.337  1.00 44.05
ATOM    497  H   GLN A  32       2.802   8.893   0.187  1.00 12.32
ATOM    498  CA  GLN A  32       4.125  10.434  -0.366  1.00 44.33
ATOM    499  HA  GLN A  32       5.073  10.242  -0.848  1.00  1.25
ATOM    500  CB  GLN A  32       3.092  10.737  -1.461  1.00 43.54
ATOM    501 1HB  GLN A  32       3.172   9.981  -2.226  1.00 51.44
ATOM    502 2HB  GLN A  32       2.108  10.671  -1.021  1.00 35.03
ATOM    503  CG  GLN A  32       3.218  12.078  -2.133  1.00 21.02
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ATOM    504 1HG  GLN A  32       3.106  12.826  -1.362  1.00  2.20
ATOM    505 2HG  GLN A  32       4.186  12.149  -2.605  1.00 40.03
ATOM    506  CD  GLN A  32       2.136  12.300  -3.159  1.00  1.45
ATOM    507  OE1 GLN A  32       2.292  11.982  -4.325  1.00  1.13
ATOM    508  NE2 GLN A  32       1.014  12.823  -2.723  1.00 53.32
ATOM    509 2HE2 GLN A  32       0.938  13.037  -1.769  1.00 14.14
ATOM    510 1HE2 GLN A  32       0.307  12.974  -3.383  1.00 52.21
ATOM    511  C   GLN A  32       4.283  11.621   0.572  1.00  2.32
ATOM    512  O   GLN A  32       5.166  12.444   0.403  1.00  2.32
ATOM    513  N   ASN A  33       3.441  11.702   1.568  1.00 73.14
ATOM    514  H   ASN A  33       2.759  11.006   1.697  1.00 34.23
ATOM    515  CA  ASN A  33       3.496  12.819   2.494  1.00 13.13
ATOM    516  HA  ASN A  33       3.957  13.641   1.969  1.00 60.12
ATOM    517  CB  ASN A  33       2.092  13.250   2.936  1.00 33.13
ATOM    518 1HB  ASN A  33       1.572  12.373   3.289  1.00 31.32
ATOM    519 2HB  ASN A  33       2.182  13.960   3.745  1.00 44.15
ATOM    520  CG  ASN A  33       1.279  13.876   1.813  1.00 54.14
ATOM    521  OD1 ASN A  33       0.589  13.193   1.057  1.00  5.41
ATOM    522  ND2 ASN A  33       1.338  15.182   1.700  1.00 51.33
ATOM    523 2HD2 ASN A  33       1.896  15.675   2.337  1.00 70.40
ATOM    524 1HD2 ASN A  33       0.820  15.602   0.984  1.00 71.12
ATOM    525  C   ASN A  33       4.357  12.488   3.689  1.00 31.14
ATOM    526  O   ASN A  33       4.375  13.230   4.668  1.00 20.15
ATOM    527  N   GLY A  34       5.065  11.366   3.591  1.00 54.34
ATOM    528  H   GLY A  34       4.965  10.837   2.771  1.00 32.13
ATOM    529  CA  GLY A  34       5.983  10.932   4.624  1.00 12.43
ATOM    530 1HA  GLY A  34       6.416   9.988   4.330  1.00 22.42
ATOM    531 2HA  GLY A  34       6.775  11.664   4.714  1.00 35.34
ATOM    532  C   GLY A  34       5.318  10.766   5.965  1.00 74.24
ATOM    533  O   GLY A  34       5.798  11.266   6.969  1.00 34.11
ATOM    534  N   GLN A  35       4.216  10.049   5.984  1.00 44.15
ATOM    535  H   GLN A  35       3.899   9.624   5.155  1.00 10.32
ATOM    536  CA  GLN A  35       3.464   9.861   7.214  1.00 43.13
ATOM    537  HA  GLN A  35       3.559  10.769   7.792  1.00 63.32
ATOM    538  CB  GLN A  35       1.987   9.623   6.905  1.00 55.55
ATOM    539 1HB  GLN A  35       1.902   8.718   6.323  1.00 73.33
ATOM    540 2HB  GLN A  35       1.455   9.491   7.835  1.00  2.20
ATOM    541  CG  GLN A  35       1.326  10.766   6.131  1.00 22.30
ATOM    542 1HG  GLN A  35       1.870  10.921   5.212  1.00 42.13
ATOM    543 2HG  GLN A  35       0.309  10.485   5.899  1.00 33.02
ATOM    544  CD  GLN A  35       1.307  12.076   6.903  1.00 74.33
ATOM    545  OE1 GLN A  35       0.372  12.359   7.630  1.00 13.52
ATOM    546  NE2 GLN A  35       2.326  12.887   6.740  1.00  4.41
ATOM    547 2HE2 GLN A  35       3.065  12.647   6.139  1.00 45.14
ATOM    548 1HE2 GLN A  35       2.312  13.721   7.251  1.00 13.42
ATOM    549  C   GLN A  35       4.044   8.712   8.021  1.00 22.42
ATOM    550  O   GLN A  35       3.677   8.484   9.168  1.00 54.23
ATOM    551  N   THR A  36       4.944   7.976   7.409  1.00 33.45
ATOM    552  H   THR A  36       5.173   8.171   6.476  1.00 20.34
ATOM    553  CA  THR A  36       5.602   6.905   8.075  1.00 63.23
ATOM    554  HA  THR A  36       5.818   7.243   9.078  1.00 72.44
ATOM    555  CB  THR A  36       4.677   5.635   8.159  1.00 75.41
ATOM    556  HB  THR A  36       3.779   5.929   8.681  1.00 15.25
ATOM    557  OG1 THR A  36       5.303   4.590   8.930  1.00 41.53
ATOM    558  HG1 THR A  36       4.990   4.728   9.832  1.00 14.23
ATOM    559  CG2 THR A  36       4.291   5.098   6.772  1.00  2.43
ATOM    560 1HG2 THR A  36       3.770   5.865   6.217  1.00 12.50
ATOM    561 2HG2 THR A  36       3.650   4.237   6.879  1.00 33.31
ATOM    562 3HG2 THR A  36       5.185   4.818   6.233  1.00 32.43
ATOM    563  C   THR A  36       6.939   6.603   7.374  1.00 44.31
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ATOM    564  O   THR A  36       6.996   6.434   6.151  1.00 51.43
ATOM    565  N   PHE A  37       8.000   6.547   8.141  1.00 13.00
ATOM    566  H   PHE A  37       7.917   6.675   9.108  1.00 51.03
ATOM    567  CA  PHE A  37       9.321   6.266   7.606  1.00 15.04
ATOM    568  HA  PHE A  37       9.205   6.152   6.540  1.00 40.01
ATOM    569  CB  PHE A  37      10.309   7.410   7.882  1.00 63.41
ATOM    570 1HB  PHE A  37      10.281   7.652   8.934  1.00 75.21
ATOM    571 2HB  PHE A  37      11.304   7.077   7.628  1.00 70.12
ATOM    572  CG  PHE A  37      10.029   8.673   7.120  1.00 21.11
ATOM    573  CD1 PHE A  37      10.476   8.816   5.816  1.00 73.32
ATOM    574  HD1 PHE A  37      11.017   8.005   5.351  1.00 61.14
ATOM    575  CE1 PHE A  37      10.233   9.975   5.108  1.00 22.31
ATOM    576  HE1 PHE A  37      10.587  10.072   4.092  1.00 14.13
ATOM    577  CZ  PHE A  37       9.540  11.011   5.701  1.00 23.21
ATOM    578  HZ  PHE A  37       9.349  11.920   5.150  1.00  3.14
ATOM    579  CE2 PHE A  37       9.091  10.882   7.002  1.00 11.00
ATOM    580  HE2 PHE A  37       8.549  11.693   7.468  1.00 24.22
ATOM    581  CD2 PHE A  37       9.336   9.720   7.706  1.00 65.11
ATOM    582  HD2 PHE A  37       8.985   9.621   8.721  1.00 41.51
ATOM    583  C   PHE A  37       9.847   4.980   8.184  1.00 51.21
ATOM    584  O   PHE A  37       9.357   4.517   9.221  1.00 12.41
ATOM    585  N   ASP A  38      10.802   4.387   7.512  1.00 40.20
ATOM    586  H   ASP A  38      11.155   4.784   6.688  1.00 73.44
ATOM    587  CA  ASP A  38      11.406   3.162   7.974  1.00  0.43
ATOM    588  HA  ASP A  38      10.740   2.730   8.706  1.00 15.41
ATOM    589  CB  ASP A  38      11.640   2.150   6.829  1.00 52.11
ATOM    590 1HB  ASP A  38      11.799   1.170   7.254  1.00  4.04
ATOM    591 2HB  ASP A  38      10.754   2.117   6.211  1.00 53.10
ATOM    592  CG  ASP A  38      12.829   2.465   5.945  1.00 42.22
ATOM    593  OD1 ASP A  38      13.761   1.647   5.893  1.00 20.30
ATOM    594  OD2 ASP A  38      12.851   3.524   5.308  1.00 60.52
ATOM    595  C   ASP A  38      12.713   3.498   8.657  1.00 54.23
ATOM    596  O   ASP A  38      13.124   4.655   8.671  1.00 50.43
ATOM    597  N   TYR A  39      13.359   2.484   9.185  1.00 54.35
ATOM    598  H   TYR A  39      12.983   1.591   9.049  1.00 45.22
ATOM    599  CA  TYR A  39      14.605   2.594   9.957  1.00 21.42
ATOM    600  HA  TYR A  39      14.379   3.105  10.880  1.00 12.44
ATOM    601  CB  TYR A  39      15.109   1.171  10.321  1.00 64.43
ATOM    602 1HB  TYR A  39      16.022   1.252  10.893  1.00 63.31
ATOM    603 2HB  TYR A  39      14.361   0.671  10.917  1.00 31.23
ATOM    604  CG  TYR A  39      15.396   0.303   9.102  1.00 63.00
ATOM    605  CD1 TYR A  39      14.367  -0.336   8.428  1.00 70.51
ATOM    606  HD1 TYR A  39      13.357  -0.239   8.799  1.00  2.11
ATOM    607  CE1 TYR A  39      14.607  -1.075   7.300  1.00 13.55
ATOM    608  HE1 TYR A  39      13.788  -1.563   6.791  1.00 25.02
ATOM    609  CZ  TYR A  39      15.890  -1.203   6.827  1.00 24.42
ATOM    610  CE2 TYR A  39      16.939  -0.593   7.476  1.00 33.44
ATOM    611  HE2 TYR A  39      17.947  -0.696   7.102  1.00 14.12
ATOM    612  CD2 TYR A  39      16.690   0.161   8.604  1.00 20.33
ATOM    613  HD2 TYR A  39      17.508   0.642   9.120  1.00 50.34
ATOM    614  OH  TYR A  39      16.112  -1.921   5.676  1.00 41.33
ATOM    615  HH  TYR A  39      16.904  -2.467   5.768  1.00 11.45
ATOM    616  C   TYR A  39      15.723   3.368   9.220  1.00 11.34
ATOM    617  O   TYR A  39      16.586   3.949   9.857  1.00 25.40
ATOM    618  N   LYS A  40      15.710   3.366   7.891  1.00 72.12
ATOM    619  H   LYS A  40      14.991   2.913   7.398  1.00 42.42
ATOM    620  CA  LYS A  40      16.764   4.044   7.150  1.00 25.31
ATOM    621  HA  LYS A  40      17.498   4.375   7.871  1.00 62.33
ATOM    622  CB  LYS A  40      17.452   3.062   6.178  1.00 60.23
ATOM    623 1HB  LYS A  40      18.248   3.581   5.663  1.00 75.33
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ATOM    624 2HB  LYS A  40      17.877   2.249   6.748  1.00 53.21
ATOM    625  CG  LYS A  40      16.518   2.474   5.134  1.00  0.41
ATOM    626 1HG  LYS A  40      15.659   2.047   5.632  1.00  3.42
ATOM    627 2HG  LYS A  40      16.196   3.277   4.488  1.00 43.51
ATOM    628  CD  LYS A  40      17.185   1.400   4.298  1.00 21.45
ATOM    629 1HD  LYS A  40      18.005   1.838   3.750  1.00 73.14
ATOM    630 2HD  LYS A  40      17.563   0.632   4.957  1.00  4.53
ATOM    631  CE  LYS A  40      16.205   0.761   3.305  1.00 50.01
ATOM    632 1HE  LYS A  40      15.827   1.523   2.641  1.00 12.12
ATOM    633 2HE  LYS A  40      16.744   0.028   2.723  1.00 20.54
ATOM    634  NZ  LYS A  40      15.060   0.094   3.973  1.00 41.40
ATOM    635 1HZ  LYS A  40      14.405  -0.310   3.260  1.00 50.35
ATOM    636 2HZ  LYS A  40      14.530   0.739   4.602  1.00 20.43
ATOM    637 3HZ  LYS A  40      15.417  -0.704   4.540  1.00 12.04
ATOM    638  C   LYS A  40      16.237   5.269   6.405  1.00 24.04
ATOM    639  O   LYS A  40      16.988   5.905   5.669  1.00 74.43
ATOM    640  N   SER A  41      14.950   5.603   6.630  1.00 14.12
ATOM    641  H   SER A  41      14.424   5.068   7.263  1.00 52.22
ATOM    642  CA  SER A  41      14.296   6.758   5.994  1.00 41.32
ATOM    643  HA  SER A  41      13.241   6.703   6.224  1.00 64.25
ATOM    644  CB  SER A  41      14.878   8.072   6.578  1.00 20.24
ATOM    645 1HB  SER A  41      14.762   8.067   7.653  1.00 72.41
ATOM    646 2HB  SER A  41      15.927   8.133   6.334  1.00  3.14
ATOM    647  OG  SER A  41      14.218   9.218   6.060  1.00 30.10
ATOM    648  HG  SER A  41      14.270   9.120   5.101  1.00 55.03
ATOM    649  C   SER A  41      14.463   6.692   4.457  1.00 51.31
ATOM    650  O   SER A  41      14.727   7.707   3.792  1.00 72.52
ATOM    651  N   ASN A  42      14.254   5.502   3.911  1.00 50.42
ATOM    652  H   ASN A  42      13.887   4.792   4.488  1.00  0.22
ATOM    653  CA  ASN A  42      14.492   5.234   2.493  1.00 51.02
ATOM    654  HA  ASN A  42      15.483   5.595   2.267  1.00 60.20
ATOM    655  CB  ASN A  42      14.436   3.720   2.206  1.00 64.42
ATOM    656 1HB  ASN A  42      15.131   3.482   1.415  1.00 33.53
ATOM    657 2HB  ASN A  42      14.740   3.201   3.102  1.00  1.41
ATOM    658  CG  ASN A  42      13.067   3.183   1.797  1.00 12.23
ATOM    659  OD1 ASN A  42      12.768   3.054   0.613  1.00 73.12
ATOM    660  ND2 ASN A  42      12.236   2.889   2.744  1.00 63.01
ATOM    661 2HD2 ASN A  42      12.515   3.032   3.684  1.00 32.41
ATOM    662 1HD2 ASN A  42      11.370   2.538   2.466  1.00 55.11
ATOM    663  C   ASN A  42      13.490   5.990   1.620  1.00 22.41
ATOM    664  O   ASN A  42      12.370   6.232   2.060  1.00 61.51
ATOM    665  N   PRO A  43      13.927   6.437   0.406  1.00 61.21
ATOM    666  CD  PRO A  43      15.306   6.301  -0.110  1.00 15.03
ATOM    667  CA  PRO A  43      13.075   7.158  -0.556  1.00 31.44
ATOM    668  HA  PRO A  43      12.998   8.200  -0.286  1.00 51.14
ATOM    669  CB  PRO A  43      13.840   7.035  -1.865  1.00  3.44
ATOM    670 1HB  PRO A  43      13.541   6.132  -2.377  1.00 13.35
ATOM    671 2HB  PRO A  43      13.674   7.901  -2.489  1.00  0.42
ATOM    672  CG  PRO A  43      15.268   6.988  -1.454  1.00 35.41
ATOM    673 1HG  PRO A  43      15.837   6.431  -2.185  1.00 73.21
ATOM    674 2HG  PRO A  43      15.659   7.989  -1.355  1.00 43.22
ATOM    675 1HD  PRO A  43      15.576   5.262  -0.220  1.00 54.45
ATOM    676 2HD  PRO A  43      16.007   6.801   0.540  1.00  3.00
ATOM    677  C   PRO A  43      11.658   6.584  -0.698  1.00 40.41
ATOM    678  O   PRO A  43      11.436   5.493  -1.246  1.00 44.53
ATOM    679  N   TYR A  44      10.738   7.325  -0.161  1.00 44.32
ATOM    680  H   TYR A  44      11.028   8.148   0.286  1.00 44.45
ATOM    681  CA  TYR A  44       9.330   7.037  -0.194  1.00 30.33
ATOM    682  HA  TYR A  44       9.279   5.994  -0.473  1.00  3.52
ATOM    683  CB  TYR A  44       8.643   7.213   1.153  1.00  3.34
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ATOM    684 1HB  TYR A  44       9.028   8.096   1.641  1.00 71.20
ATOM    685 2HB  TYR A  44       7.581   7.319   0.987  1.00 21.20
ATOM    686  CG  TYR A  44       8.858   6.024   2.069  1.00 73.43
ATOM    687  CD1 TYR A  44       9.459   6.149   3.310  1.00 71.11
ATOM    688  HD1 TYR A  44       9.783   7.123   3.645  1.00 55.25
ATOM    689  CE1 TYR A  44       9.643   5.041   4.121  1.00 75.43
ATOM    690  HE1 TYR A  44      10.116   5.144   5.085  1.00 42.10
ATOM    691  CZ  TYR A  44       9.222   3.797   3.684  1.00  1.03
ATOM    692  CE2 TYR A  44       8.633   3.656   2.462  1.00 62.11
ATOM    693  HE2 TYR A  44       8.306   2.683   2.124  1.00 33.41
ATOM    694  CD2 TYR A  44       8.453   4.755   1.665  1.00  0.44
ATOM    695  HD2 TYR A  44       7.987   4.638   0.698  1.00 65.14
ATOM    696  OH  TYR A  44       9.391   2.682   4.493  1.00 72.23
ATOM    697  HH  TYR A  44       9.856   2.011   3.980  1.00 22.54
ATOM    698  C   TYR A  44       8.660   7.779  -1.309  1.00 31.33
ATOM    699  O   TYR A  44       7.452   7.679  -1.530  1.00 22.34
ATOM    700  N   ASP A  45       9.452   8.535  -1.993  1.00  3.04
ATOM    701  H   ASP A  45      10.401   8.597  -1.747  1.00 52.11
ATOM    702  CA  ASP A  45       9.013   9.331  -3.079  1.00 24.24
ATOM    703  HA  ASP A  45       8.096   9.848  -2.842  1.00 52.05
ATOM    704  CB  ASP A  45      10.120  10.338  -3.450  1.00 53.11
ATOM    705 1HB  ASP A  45      10.924   9.808  -3.941  1.00 11.24
ATOM    706 2HB  ASP A  45       9.712  11.066  -4.135  1.00 63.25
ATOM    707  CG  ASP A  45      10.703  11.075  -2.255  1.00 60.21
ATOM    708  OD1 ASP A  45      11.479  10.429  -1.477  1.00  3.42
ATOM    709  OD2 ASP A  45      10.429  12.276  -2.097  1.00  5.10
ATOM    710  C   ASP A  45       8.853   8.368  -4.226  1.00 21.51
ATOM    711  O   ASP A  45       9.800   7.661  -4.612  1.00 70.11
ATOM    712  N   ILE A  46       7.644   8.304  -4.735  1.00 15.24
ATOM    713  H   ILE A  46       6.981   8.945  -4.409  1.00 10.14
ATOM    714  CA  ILE A  46       7.280   7.346  -5.747  1.00 31.44
ATOM    715  HA  ILE A  46       7.566   6.368  -5.383  1.00 50.23
ATOM    716  CB  ILE A  46       5.722   7.333  -6.036  1.00 72.43
ATOM    717  HB  ILE A  46       5.434   8.352  -6.245  1.00 52.32
ATOM    718  CG2 ILE A  46       5.388   6.520  -7.264  1.00 33.34
ATOM    719 1HG2 ILE A  46       5.721   5.502  -7.125  1.00 64.30
ATOM    720 2HG2 ILE A  46       5.881   6.945  -8.126  1.00 40.10
ATOM    721 3HG2 ILE A  46       4.319   6.528  -7.417  1.00 12.32
ATOM    722  CG1 ILE A  46       4.881   6.823  -4.839  1.00  1.24
ATOM    723 1HG1 ILE A  46       3.903   6.542  -5.197  1.00 55.50
ATOM    724 2HG1 ILE A  46       5.363   5.946  -4.430  1.00 51.03
ATOM    725  CD1 ILE A  46       4.673   7.810  -3.714  1.00  1.22
ATOM    726 1HD1 ILE A  46       4.054   7.352  -2.954  1.00 15.52
ATOM    727 2HD1 ILE A  46       4.156   8.673  -4.107  1.00 73.32
ATOM    728 3HD1 ILE A  46       5.621   8.100  -3.290  1.00 22.04
ATOM    729  C   ILE A  46       8.050   7.619  -7.027  1.00 61.15
ATOM    730  O   ILE A  46       7.999   8.719  -7.571  1.00 23.22
ATOM    731  N   SER A  47       8.762   6.616  -7.501  1.00 55.52
ATOM    732  H   SER A  47       8.768   5.744  -7.048  1.00 42.31
ATOM    733  CA  SER A  47       9.552   6.773  -8.675  1.00 44.34
ATOM    734  HA  SER A  47       9.803   7.820  -8.767  1.00  4.30
ATOM    735  CB  SER A  47      10.848   5.977  -8.518  1.00 74.14
ATOM    736 1HB  SER A  47      11.353   5.924  -9.471  1.00 63.11
ATOM    737 2HB  SER A  47      11.486   6.466  -7.798  1.00 15.21
ATOM    738  OG  SER A  47      10.581   4.646  -8.068  1.00  1.43
ATOM    739  HG  SER A  47      11.229   4.059  -8.466  1.00 55.43
ATOM    740  C   SER A  47       8.768   6.352  -9.906  1.00 20.41
ATOM    741  O   SER A  47       8.992   6.867 -10.998  1.00 42.32
ATOM    742  N   VAL A  48       7.834   5.412  -9.738  1.00 72.31
ATOM    743  H   VAL A  48       7.775   4.961  -8.865  1.00  3.24
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ATOM    744  CA  VAL A  48       6.925   5.079 -10.838  1.00  5.44
ATOM    745  HA  VAL A  48       6.912   5.895 -11.545  1.00 64.33
ATOM    746  CB  VAL A  48       7.350   3.758 -11.579  1.00 22.33
ATOM    747  HB  VAL A  48       7.186   2.950 -10.879  1.00 25.21
ATOM    748  CG1 VAL A  48       6.463   3.498 -12.792  1.00 24.44
ATOM    749 1HG1 VAL A  48       5.436   3.400 -12.473  1.00 43.41
ATOM    750 2HG1 VAL A  48       6.778   2.587 -13.280  1.00  3.20
ATOM    751 3HG1 VAL A  48       6.549   4.323 -13.483  1.00 32.14
ATOM    752  CG2 VAL A  48       8.820   3.759 -11.993  1.00  2.22
ATOM    753 1HG2 VAL A  48       9.003   4.584 -12.666  1.00 71.51
ATOM    754 2HG2 VAL A  48       9.057   2.830 -12.489  1.00 22.22
ATOM    755 3HG2 VAL A  48       9.440   3.869 -11.114  1.00 62.10
ATOM    756  C   VAL A  48       5.526   4.850 -10.273  1.00 43.01
ATOM    757  O   VAL A  48       5.349   4.052  -9.346  1.00 31.42
ATOM    758  N   ASN A  49       4.550   5.509 -10.844  1.00 51.11
ATOM    759  H   ASN A  49       4.751   6.164 -11.547  1.00 65.11
ATOM    760  CA  ASN A  49       3.153   5.325 -10.483  1.00 73.44
ATOM    761  HA  ASN A  49       3.138   4.591  -9.687  1.00 75.30
ATOM    762  CB  ASN A  49       2.528   6.651  -9.959  1.00 61.53
ATOM    763 1HB  ASN A  49       1.530   6.449  -9.600  1.00 62.21
ATOM    764 2HB  ASN A  49       3.124   7.004  -9.130  1.00 74.43
ATOM    765  CG  ASN A  49       2.445   7.767 -11.001  1.00 25.04
ATOM    766  OD1 ASN A  49       3.393   8.504 -11.205  1.00 14.22
ATOM    767  ND2 ASN A  49       1.295   7.934 -11.615  1.00 35.23
ATOM    768 2HD2 ASN A  49       0.545   7.348 -11.384  1.00 52.42
ATOM    769 1HD2 ASN A  49       1.264   8.651 -12.281  1.00 74.25
ATOM    770  C   ASN A  49       2.387   4.798 -11.697  1.00  4.14
ATOM    771  O   ASN A  49       2.588   5.297 -12.803  1.00 20.34
ATOM    772  N   LYS A  50       1.571   3.776 -11.547  1.00 72.40
ATOM    773  H   LYS A  50       1.511   3.290 -10.692  1.00 71.21
ATOM    774  CA  LYS A  50       0.755   3.358 -12.677  1.00 35.42
ATOM    775  HA  LYS A  50       0.906   4.030 -13.507  1.00 71.50
ATOM    776  CB  LYS A  50       1.068   1.901 -13.132  1.00 31.53
ATOM    777 1HB  LYS A  50       0.622   1.227 -12.415  1.00 34.32
ATOM    778 2HB  LYS A  50       0.574   1.742 -14.080  1.00  5.40
ATOM    779  CG  LYS A  50       2.534   1.484 -13.280  1.00 53.14
ATOM    780 1HG  LYS A  50       2.614   0.602 -13.899  1.00 55.23
ATOM    781 2HG  LYS A  50       3.045   2.314 -13.745  1.00 32.40
ATOM    782  CD  LYS A  50       3.192   1.219 -11.930  1.00 31.21
ATOM    783 1HD  LYS A  50       3.391   2.165 -11.446  1.00 73.25
ATOM    784 2HD  LYS A  50       2.512   0.646 -11.320  1.00 13.04
ATOM    785  CE  LYS A  50       4.492   0.462 -12.065  1.00 23.03
ATOM    786 1HE  LYS A  50       5.148   0.982 -12.746  1.00 61.21
ATOM    787 2HE  LYS A  50       4.937   0.417 -11.082  1.00 71.21
ATOM    788  NZ  LYS A  50       4.277  -0.923 -12.546  1.00  5.10
ATOM    789 1HZ  LYS A  50       5.174  -1.413 -12.726  1.00 71.33
ATOM    790 2HZ  LYS A  50       3.629  -0.994 -13.351  1.00 73.44
ATOM    791 3HZ  LYS A  50       3.831  -1.442 -11.746  1.00 44.54
ATOM    792  C   LYS A  50      -0.697   3.349 -12.251  1.00  1.22
ATOM    793  O   LYS A  50      -1.011   2.968 -11.115  1.00 55.40
ATOM    794  N   ASN A  51      -1.564   3.777 -13.130  1.00 41.23
ATOM    795  H   ASN A  51      -1.257   4.173 -13.972  1.00 65.54
ATOM    796  CA  ASN A  51      -2.985   3.609 -12.954  1.00 31.10
ATOM    797  HA  ASN A  51      -3.108   3.113 -12.001  1.00 62.22
ATOM    798  CB  ASN A  51      -3.770   4.943 -12.952  1.00  3.45
ATOM    799 1HB  ASN A  51      -4.785   4.736 -12.647  1.00 24.11
ATOM    800 2HB  ASN A  51      -3.323   5.595 -12.215  1.00 12.41
ATOM    801  CG  ASN A  51      -3.807   5.664 -14.293  1.00 42.02
ATOM    802  OD1 ASN A  51      -4.706   5.464 -15.089  1.00 54.42
ATOM    803  ND2 ASN A  51      -2.841   6.521 -14.539  1.00 23.44
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ATOM    804 2HD2 ASN A  51      -2.149   6.663 -13.863  1.00  2.02
ATOM    805 1HD2 ASN A  51      -2.877   6.971 -15.408  1.00 15.53
ATOM    806  C   ASN A  51      -3.487   2.651 -14.015  1.00 41.03
ATOM    807  O   ASN A  51      -3.078   2.755 -15.166  1.00 53.23
ATOM    808  N   ASN A  52      -4.306   1.716 -13.649  1.00 23.21
ATOM    809  H   ASN A  52      -4.514   1.572 -12.697  1.00 24.02
ATOM    810  CA  ASN A  52      -4.889   0.791 -14.629  1.00  4.42
ATOM    811  HA  ASN A  52      -4.506   1.029 -15.610  1.00 13.33
ATOM    812  CB  ASN A  52      -4.570  -0.673 -14.288  1.00  2.52
ATOM    813 1HB  ASN A  52      -4.979  -0.846 -13.306  1.00 31.31
ATOM    814 2HB  ASN A  52      -5.097  -1.306 -14.987  1.00  2.22
ATOM    815  CG  ASN A  52      -3.085  -1.064 -14.280  1.00  2.41
ATOM    816  OD1 ASN A  52      -2.192  -0.263 -14.013  1.00  4.01
ATOM    817  ND2 ASN A  52      -2.823  -2.322 -14.540  1.00  5.52
ATOM    818 2HD2 ASN A  52      -3.576  -2.923 -14.719  1.00 65.24
ATOM    819 1HD2 ASN A  52      -1.886  -2.603 -14.528  1.00 21.04
ATOM    820  C   ASN A  52      -6.394   0.953 -14.607  1.00 32.01
ATOM    821  O   ASN A  52      -7.138   0.163 -15.188  1.00 13.13
ATOM    822  N   GLY A  53      -6.844   1.952 -13.882  1.00 11.51
ATOM    823  H   GLY A  53      -6.191   2.519 -13.428  1.00 63.42
ATOM    824  CA  GLY A  53      -8.256   2.215 -13.752  1.00  5.52
ATOM    825 1HA  GLY A  53      -8.402   3.270 -13.573  1.00 31.25
ATOM    826 2HA  GLY A  53      -8.753   1.939 -14.669  1.00 74.24
ATOM    827  C   GLY A  53      -8.857   1.429 -12.613  1.00 33.52
ATOM    828  O   GLY A  53      -9.341   1.996 -11.643  1.00 64.22
ATOM    829  N   THR A  54      -8.798   0.127 -12.720  1.00 31.45
ATOM    830  H   THR A  54      -8.373  -0.252 -13.518  1.00 51.11
ATOM    831  CA  THR A  54      -9.340  -0.742 -11.702  1.00 75.40
ATOM    832  HA  THR A  54      -9.872  -0.103 -11.011  1.00 21.34
ATOM    833  CB  THR A  54     -10.348  -1.783 -12.305  1.00 54.11
ATOM    834  HB  THR A  54     -11.162  -1.223 -12.747  1.00 61.32
ATOM    835  OG1 THR A  54     -10.903  -2.624 -11.280  1.00 40.25
ATOM    836  HG1 THR A  54     -10.187  -2.788 -10.656  1.00 63.30
ATOM    837  CG2 THR A  54      -9.701  -2.642 -13.384  1.00 24.40
ATOM    838 1HG2 THR A  54      -8.866  -3.182 -12.960  1.00 74.34
ATOM    839 2HG2 THR A  54      -9.350  -2.012 -14.187  1.00 11.40
ATOM    840 3HG2 THR A  54     -10.426  -3.346 -13.768  1.00 60.32
ATOM    841  C   THR A  54      -8.202  -1.419 -10.915  1.00 53.34
ATOM    842  O   THR A  54      -8.443  -2.249 -10.015  1.00 62.30
ATOM    843  N   ASP A  55      -6.982  -1.038 -11.249  1.00 23.22
ATOM    844  H   ASP A  55      -6.861  -0.386 -11.968  1.00 23.51
ATOM    845  CA  ASP A  55      -5.774  -1.503 -10.573  1.00 22.31
ATOM    846  HA  ASP A  55      -6.032  -1.850  -9.584  1.00  4.54
ATOM    847  CB  ASP A  55      -4.976  -2.596 -11.364  1.00 53.22
ATOM    848 1HB  ASP A  55      -4.405  -2.170 -12.171  1.00 11.24
ATOM    849 2HB  ASP A  55      -4.252  -2.977 -10.658  1.00 63.10
ATOM    850  CG  ASP A  55      -5.767  -3.800 -11.865  1.00 74.44
ATOM    851  OD1 ASP A  55      -6.792  -3.635 -12.567  1.00 20.23
ATOM    852  OD2 ASP A  55      -5.370  -4.952 -11.599  1.00 41.42
ATOM    853  C   ASP A  55      -4.889  -0.284 -10.485  1.00 22.43
ATOM    854  O   ASP A  55      -5.035   0.635 -11.298  1.00 63.32
ATOM    855  N   ALA A  56      -4.058  -0.218  -9.502  1.00 44.31
ATOM    856  H   ALA A  56      -4.047  -0.957  -8.856  1.00 10.12
ATOM    857  CA  ALA A  56      -3.110   0.885  -9.354  1.00 12.13
ATOM    858  HA  ALA A  56      -2.845   1.219 -10.347  1.00 12.24
ATOM    859  CB  ALA A  56      -3.719   2.047  -8.582  1.00 65.32
ATOM    860 1HB  ALA A  56      -2.984   2.834  -8.492  1.00 43.12
ATOM    861 2HB  ALA A  56      -4.027   1.724  -7.599  1.00 71.42
ATOM    862 3HB  ALA A  56      -4.568   2.426  -9.129  1.00 74.21
ATOM    863  C   ALA A  56      -1.860   0.383  -8.676  1.00 33.24
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ATOM    864  O   ALA A  56      -1.949  -0.503  -7.845  1.00 32.34
ATOM    865  N   GLU A  57      -0.713   0.906  -9.025  1.00 41.31
ATOM    866  H   GLU A  57      -0.677   1.608  -9.714  1.00 61.31
ATOM    867  CA  GLU A  57       0.520   0.476  -8.386  1.00 35.53
ATOM    868  HA  GLU A  57       0.266   0.152  -7.386  1.00 23.54
ATOM    869  CB  GLU A  57       1.153  -0.710  -9.140  1.00  2.11
ATOM    870 1HB  GLU A  57       0.444  -1.525  -9.180  1.00 44.35
ATOM    871 2HB  GLU A  57       1.386  -0.402 -10.149  1.00 13.04
ATOM    872  CG  GLU A  57       2.439  -1.235  -8.508  1.00 52.01
ATOM    873 1HG  GLU A  57       3.153  -0.427  -8.454  1.00 61.11
ATOM    874 2HG  GLU A  57       2.216  -1.582  -7.508  1.00 74.14
ATOM    875  CD  GLU A  57       3.056  -2.364  -9.288  1.00 14.23
ATOM    876  OE1 GLU A  57       3.107  -3.488  -8.782  1.00 73.30
ATOM    877  OE2 GLU A  57       3.513  -2.117 -10.429  1.00 42.50
ATOM    878  C   GLU A  57       1.512   1.626  -8.279  1.00 52.54
ATOM    879  O   GLU A  57       1.732   2.355  -9.246  1.00 54.20
ATOM    880  N   ILE A  58       2.075   1.811  -7.109  1.00 32.23
ATOM    881  H   ILE A  58       1.820   1.271  -6.330  1.00 54.45
ATOM    882  CA  ILE A  58       3.099   2.772  -6.896  1.00 55.32
ATOM    883  HA  ILE A  58       3.302   3.218  -7.858  1.00 55.11
ATOM    884  CB  ILE A  58       2.739   3.904  -5.891  1.00 63.25
ATOM    885  HB  ILE A  58       3.708   4.323  -5.686  1.00  1.33
ATOM    886  CG2 ILE A  58       1.882   4.984  -6.541  1.00 40.45
ATOM    887 1HG2 ILE A  58       0.961   4.548  -6.894  1.00 71.43
ATOM    888 2HG2 ILE A  58       2.418   5.416  -7.374  1.00 43.23
ATOM    889 3HG2 ILE A  58       1.662   5.753  -5.816  1.00 52.31
ATOM    890  CG1 ILE A  58       2.124   3.410  -4.550  1.00 44.03
ATOM    891 1HG1 ILE A  58       2.643   2.516  -4.239  1.00 51.24
ATOM    892 2HG1 ILE A  58       2.271   4.173  -3.801  1.00 15.22
ATOM    893  CD1 ILE A  58       0.646   3.076  -4.599  1.00  4.53
ATOM    894 1HD1 ILE A  58       0.095   3.976  -4.842  1.00  3.41
ATOM    895 2HD1 ILE A  58       0.326   2.719  -3.632  1.00  3.14
ATOM    896 3HD1 ILE A  58       0.464   2.328  -5.356  1.00 14.32
ATOM    897  C   ILE A  58       4.375   2.080  -6.463  1.00 43.23
ATOM    898  O   ILE A  58       4.354   1.219  -5.570  1.00 62.11
ATOM    899  N   VAL A  59       5.463   2.419  -7.119  1.00 40.14
ATOM    900  H   VAL A  59       5.416   3.096  -7.833  1.00 51.43
ATOM    901  CA  VAL A  59       6.749   1.829  -6.840  1.00 31.31
ATOM    902  HA  VAL A  59       6.626   1.047  -6.104  1.00 11.20
ATOM    903  CB  VAL A  59       7.383   1.214  -8.124  1.00 42.23
ATOM    904  HB  VAL A  59       7.655   2.037  -8.770  1.00 60.41
ATOM    905  CG1 VAL A  59       8.666   0.453  -7.800  1.00 40.42
ATOM    906 1HG1 VAL A  59       9.378   1.126  -7.346  1.00 13.40
ATOM    907 2HG1 VAL A  59       9.084   0.046  -8.709  1.00  2.33
ATOM    908 3HG1 VAL A  59       8.444  -0.352  -7.114  1.00 12.53
ATOM    909  CG2 VAL A  59       6.398   0.324  -8.866  1.00 31.51
ATOM    910 1HG2 VAL A  59       5.521   0.900  -9.121  1.00  3.25
ATOM    911 2HG2 VAL A  59       6.117  -0.508  -8.240  1.00 71.23
ATOM    912 3HG2 VAL A  59       6.859  -0.048  -9.769  1.00 40.33
ATOM    913  C   VAL A  59       7.697   2.898  -6.314  1.00 11.23
ATOM    914  O   VAL A  59       7.841   3.960  -6.923  1.00 73.40
ATOM    915  N   SER A  60       8.265   2.651  -5.170  1.00 50.12
ATOM    916  H   SER A  60       7.991   1.864  -4.645  1.00 71.21
ATOM    917  CA  SER A  60       9.298   3.483  -4.601  1.00 32.00
ATOM    918  HA  SER A  60       9.619   4.198  -5.343  1.00 61.23
ATOM    919  CB  SER A  60       8.741   4.194  -3.370  1.00 52.52
ATOM    920 1HB  SER A  60       8.602   3.500  -2.556  1.00 50.21
ATOM    921 2HB  SER A  60       9.418   4.980  -3.068  1.00 55.31
ATOM    922  OG  SER A  60       7.494   4.780  -3.698  1.00 52.02
ATOM    923  HG  SER A  60       7.304   4.512  -4.602  1.00 73.31
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ATOM    924  C   SER A  60      10.459   2.550  -4.239  1.00 13.11
ATOM    925  O   SER A  60      10.222   1.369  -3.963  1.00 63.25
ATOM    926  N   ALA A  61      11.677   3.019  -4.273  1.00 11.25
ATOM    927  H   ALA A  61      11.832   3.970  -4.462  1.00 64.04
ATOM    928  CA  ALA A  61      12.813   2.136  -3.998  1.00 43.12
ATOM    929  HA  ALA A  61      12.429   1.257  -3.505  1.00 21.41
ATOM    930  CB  ALA A  61      13.464   1.692  -5.304  1.00 13.24
ATOM    931 1HB  ALA A  61      14.254   0.986  -5.091  1.00 54.13
ATOM    932 2HB  ALA A  61      13.876   2.552  -5.811  1.00 44.35
ATOM    933 3HB  ALA A  61      12.722   1.224  -5.934  1.00 63.43
ATOM    934  C   ALA A  61      13.841   2.789  -3.095  1.00 51.02
ATOM    935  O   ALA A  61      13.979   4.008  -3.090  1.00 35.13
ATOM    936  N   SER A  62      14.558   1.972  -2.336  1.00 35.55
ATOM    937  H   SER A  62      14.395   1.001  -2.348  1.00 33.32
ATOM    938  CA  SER A  62      15.610   2.455  -1.478  1.00 35.30
ATOM    939  HA  SER A  62      15.272   3.359  -0.996  1.00 51.24
ATOM    940  CB  SER A  62      15.927   1.415  -0.417  1.00 32.01
ATOM    941 1HB  SER A  62      16.281   0.518  -0.903  1.00 54.40
ATOM    942 2HB  SER A  62      16.695   1.796   0.240  1.00 20.11
ATOM    943  OG  SER A  62      14.789   1.092   0.345  1.00 20.22
ATOM    944  HG  SER A  62      14.011   1.536  -0.014  1.00 22.43
ATOM    945  C   SER A  62      16.868   2.737  -2.300  1.00 34.41
ATOM    946  O   SER A  62      17.112   2.083  -3.309  1.00 51.44
ATOM    947  N   ASP A  63      17.645   3.707  -1.859  1.00  4.33
ATOM    948  H   ASP A  63      17.384   4.219  -1.070  1.00  2.21
ATOM    949  CA  ASP A  63      18.895   4.076  -2.539  1.00 42.42
ATOM    950  HA  ASP A  63      18.767   3.952  -3.604  1.00 54.41
ATOM    951  CB  ASP A  63      19.193   5.554  -2.234  1.00 41.43
ATOM    952 1HB  ASP A  63      18.439   6.167  -2.705  1.00 11.40
ATOM    953 2HB  ASP A  63      19.138   5.702  -1.165  1.00 24.13
ATOM    954  CG  ASP A  63      20.550   6.036  -2.717  1.00 53.22
ATOM    955  OD1 ASP A  63      20.651   6.450  -3.885  1.00  4.13
ATOM    956  OD2 ASP A  63      21.491   6.048  -1.896  1.00 11.13
ATOM    957  C   ASP A  63      20.048   3.184  -2.069  1.00  1.21
ATOM    958  O   ASP A  63      20.910   2.798  -2.843  1.00 25.14
ATOM    959  N   SER A  64      19.980   2.768  -0.822  1.00 43.40
ATOM    960  H   SER A  64      19.257   3.062  -0.237  1.00  0.53
ATOM    961  CA  SER A  64      20.995   1.914  -0.258  1.00 15.14
ATOM    962  HA  SER A  64      21.958   2.183  -0.660  1.00 43.22
ATOM    963  CB  SER A  64      21.011   2.143   1.255  1.00 41.22
ATOM    964 1HB  SER A  64      21.644   1.403   1.725  1.00 71.52
ATOM    965 2HB  SER A  64      21.386   3.133   1.468  1.00 25.51
ATOM    966  OG  SER A  64      19.677   2.030   1.793  1.00 43.20
ATOM    967  HG  SER A  64      19.548   1.111   2.101  1.00  3.24
ATOM    968  C   SER A  64      20.676   0.462  -0.567  1.00 11.13
ATOM    969  O   SER A  64      21.535  -0.336  -0.970  1.00  2.41
ATOM    970  N   ASP A  65      19.427   0.144  -0.417  1.00 75.15
ATOM    971  H   ASP A  65      18.802   0.853  -0.167  1.00 61.41
ATOM    972  CA  ASP A  65      18.955  -1.185  -0.588  1.00 53.42
ATOM    973  HA  ASP A  65      19.793  -1.860  -0.524  1.00 24.03
ATOM    974  CB  ASP A  65      17.948  -1.562   0.501  1.00 24.10
ATOM    975 1HB  ASP A  65      17.153  -0.832   0.502  1.00  4.34
ATOM    976 2HB  ASP A  65      17.531  -2.530   0.269  1.00 52.42
ATOM    977  CG  ASP A  65      18.520  -1.605   1.892  1.00 65.42
ATOM    978  OD1 ASP A  65      18.511  -2.697   2.495  1.00 71.33
ATOM    979  OD2 ASP A  65      18.964  -0.536   2.395  1.00 50.13
ATOM    980  C   ASP A  65      18.303  -1.320  -1.915  1.00 72.02
ATOM    981  O   ASP A  65      17.142  -0.993  -2.077  1.00 32.22
ATOM    982  N   SER A  66      19.050  -1.782  -2.875  1.00 41.13
ATOM    983  H   SER A  66      20.010  -1.881  -2.698  1.00 13.11
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ATOM    984  CA  SER A  66      18.518  -2.058  -4.198  1.00 13.35
ATOM    985  HA  SER A  66      18.029  -1.164  -4.553  1.00 50.43
ATOM    986  CB  SER A  66      19.667  -2.425  -5.160  1.00 14.32
ATOM    987 1HB  SER A  66      20.370  -1.606  -5.202  1.00 35.25
ATOM    988 2HB  SER A  66      20.168  -3.307  -4.789  1.00 13.53
ATOM    989  OG  SER A  66      19.201  -2.683  -6.473  1.00 31.53
ATOM    990  HG  SER A  66      18.240  -2.772  -6.455  1.00 43.51
ATOM    991  C   SER A  66      17.475  -3.197  -4.121  1.00  4.32
ATOM    992  O   SER A  66      16.657  -3.370  -5.019  1.00 72.12
ATOM    993  N   THR A  67      17.519  -3.951  -3.038  1.00 23.34
ATOM    994  H   THR A  67      18.180  -3.743  -2.346  1.00 13.40
ATOM    995  CA  THR A  67      16.626  -5.051  -2.839  1.00 15.13
ATOM    996  HA  THR A  67      16.314  -5.390  -3.815  1.00 51.02
ATOM    997  CB  THR A  67      17.344  -6.236  -2.116  1.00 53.03
ATOM    998  HB  THR A  67      18.177  -6.542  -2.733  1.00 43.23
ATOM    999  OG1 THR A  67      16.466  -7.354  -1.970  1.00 30.44
ATOM   1000  HG1 THR A  67      15.562  -7.033  -1.863  1.00 71.20
ATOM   1001  CG2 THR A  67      17.877  -5.820  -0.746  1.00 74.52
ATOM   1002 1HG2 THR A  67      17.055  -5.487  -0.129  1.00 41.32
ATOM   1003 2HG2 THR A  67      18.588  -5.017  -0.862  1.00 64.24
ATOM   1004 3HG2 THR A  67      18.360  -6.664  -0.276  1.00 41.23
ATOM   1005  C   THR A  67      15.365  -4.615  -2.061  1.00 32.30
ATOM   1006  O   THR A  67      14.370  -5.348  -2.030  1.00 22.13
ATOM   1007  N   ASP A  68      15.384  -3.425  -1.468  1.00 72.21
ATOM   1008  H   ASP A  68      16.133  -2.802  -1.577  1.00 51.11
ATOM   1009  CA  ASP A  68      14.232  -2.978  -0.702  1.00 74.14
ATOM   1010  HA  ASP A  68      13.570  -3.826  -0.620  1.00 20.14
ATOM   1011  CB  ASP A  68      14.595  -2.476   0.708  1.00 50.50
ATOM   1012 1HB  ASP A  68      15.237  -3.197   1.190  1.00 24.11
ATOM   1013 2HB  ASP A  68      15.123  -1.536   0.619  1.00 71.34
ATOM   1014  CG  ASP A  68      13.368  -2.253   1.595  1.00 34.44
ATOM   1015  OD1 ASP A  68      13.401  -1.348   2.488  1.00  4.25
ATOM   1016  OD2 ASP A  68      12.371  -3.004   1.433  1.00 64.23
ATOM   1017  C   ASP A  68      13.499  -1.935  -1.479  1.00 42.21
ATOM   1018  O   ASP A  68      14.045  -0.890  -1.842  1.00 12.23
ATOM   1019  N   SER A  69      12.298  -2.238  -1.802  1.00 31.43
ATOM   1020  H   SER A  69      11.897  -3.067  -1.465  1.00 31.20
ATOM   1021  CA  SER A  69      11.494  -1.368  -2.566  1.00 14.35
ATOM   1022  HA  SER A  69      11.819  -0.359  -2.362  1.00 63.44
ATOM   1023  CB  SER A  69      11.674  -1.650  -4.071  1.00 33.34
ATOM   1024 1HB  SER A  69      10.889  -1.156  -4.623  1.00 24.44
ATOM   1025 2HB  SER A  69      12.634  -1.276  -4.395  1.00 13.11
ATOM   1026  OG  SER A  69      11.613  -3.053  -4.343  1.00 31.45
ATOM   1027  HG  SER A  69      12.301  -3.412  -3.765  1.00 55.42
ATOM   1028  C   SER A  69      10.072  -1.507  -2.132  1.00 74.14
ATOM   1029  O   SER A  69       9.572  -2.626  -1.961  1.00 62.21
ATOM   1030  N   LEU A  70       9.427  -0.405  -1.976  1.00 14.31
ATOM   1031  H   LEU A  70       9.867   0.442  -2.206  1.00 73.43
ATOM   1032  CA  LEU A  70       8.081  -0.373  -1.541  1.00 20.25
ATOM   1033  HA  LEU A  70       7.880  -1.266  -0.969  1.00 30.00
ATOM   1034  CB  LEU A  70       7.861   0.888  -0.653  1.00 13.14
ATOM   1035 1HB  LEU A  70       8.645   0.902   0.090  1.00 51.32
ATOM   1036 2HB  LEU A  70       7.995   1.754  -1.283  1.00 51.24
ATOM   1037  CG  LEU A  70       6.512   1.051   0.103  1.00 61.51
ATOM   1038  HG  LEU A  70       6.581   1.923   0.735  1.00 51.14
ATOM   1039  CD1 LEU A  70       5.346   1.282  -0.843  1.00 40.41
ATOM   1040 1HD1 LEU A  70       5.250   0.425  -1.492  1.00 71.41
ATOM   1041 2HD1 LEU A  70       5.539   2.151  -1.456  1.00 34.44
ATOM   1042 3HD1 LEU A  70       4.431   1.420  -0.286  1.00 23.53
ATOM   1043  CD2 LEU A  70       6.247  -0.153   1.000  1.00 31.11
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ATOM   1044 1HD2 LEU A  70       6.187  -1.049   0.399  1.00 32.31
ATOM   1045 2HD2 LEU A  70       5.315  -0.011   1.529  1.00 63.43
ATOM   1046 3HD2 LEU A  70       7.052  -0.254   1.712  1.00 10.50
ATOM   1047  C   LEU A  70       7.236  -0.355  -2.794  1.00 65.02
ATOM   1048  O   LEU A  70       7.292   0.587  -3.583  1.00 72.12
ATOM   1049  N   GLN A  71       6.529  -1.412  -3.005  1.00 74.42
ATOM   1050  H   GLN A  71       6.544  -2.139  -2.344  1.00 33.42
ATOM   1051  CA  GLN A  71       5.700  -1.548  -4.164  1.00  1.22
ATOM   1052  HA  GLN A  71       5.657  -0.604  -4.685  1.00 42.54
ATOM   1053  CB  GLN A  71       6.294  -2.613  -5.081  1.00 43.44
ATOM   1054 1HB  GLN A  71       7.334  -2.381  -5.259  1.00 64.33
ATOM   1055 2HB  GLN A  71       6.237  -3.563  -4.575  1.00 13.24
ATOM   1056  CG  GLN A  71       5.618  -2.764  -6.425  1.00 71.31
ATOM   1057 1HG  GLN A  71       4.584  -3.031  -6.263  1.00 44.14
ATOM   1058 2HG  GLN A  71       5.668  -1.823  -6.950  1.00 62.41
ATOM   1059  CD  GLN A  71       6.276  -3.840  -7.268  1.00 63.21
ATOM   1060  OE1 GLN A  71       7.493  -4.114  -7.130  1.00 43.42
ATOM   1061  NE2 GLN A  71       5.533  -4.423  -8.160  1.00 54.23
ATOM   1062 2HE2 GLN A  71       4.584  -4.136  -8.256  1.00 42.51
ATOM   1063 1HE2 GLN A  71       5.902  -5.130  -8.722  1.00 12.52
ATOM   1064  C   GLN A  71       4.330  -1.949  -3.703  1.00 15.14
ATOM   1065  O   GLN A  71       4.177  -2.980  -3.039  1.00 73.40
ATOM   1066  N   VAL A  72       3.358  -1.130  -3.978  1.00 22.24
ATOM   1067  H   VAL A  72       3.546  -0.318  -4.498  1.00 41.44
ATOM   1068  CA  VAL A  72       2.010  -1.418  -3.565  1.00 72.14
ATOM   1069  HA  VAL A  72       2.010  -2.370  -3.056  1.00 61.53
ATOM   1070  CB  VAL A  72       1.460  -0.335  -2.586  1.00 63.53
ATOM   1071  HB  VAL A  72       1.516   0.624  -3.081  1.00 64.14
ATOM   1072  CG1 VAL A  72       0.016  -0.617  -2.216  1.00  4.31
ATOM   1073 1HG1 VAL A  72      -0.333   0.131  -1.519  1.00 61.02
ATOM   1074 2HG1 VAL A  72      -0.054  -1.594  -1.761  1.00 53.32
ATOM   1075 3HG1 VAL A  72      -0.594  -0.592  -3.106  1.00 41.44
ATOM   1076  CG2 VAL A  72       2.297  -0.272  -1.330  1.00 51.42
ATOM   1077 1HG2 VAL A  72       3.302   0.014  -1.597  1.00 54.54
ATOM   1078 2HG2 VAL A  72       2.321  -1.246  -0.864  1.00 11.31
ATOM   1079 3HG2 VAL A  72       1.882   0.454  -0.648  1.00  1.13
ATOM   1080  C   VAL A  72       1.109  -1.502  -4.771  1.00 21.04
ATOM   1081  O   VAL A  72       1.002  -0.542  -5.536  1.00 65.31
ATOM   1082  N   ALA A  73       0.458  -2.625  -4.906  1.00 63.44
ATOM   1083  H   ALA A  73       0.612  -3.344  -4.251  1.00 13.11
ATOM   1084  CA  ALA A  73      -0.481  -2.867  -5.958  1.00 43.15
ATOM   1085  HA  ALA A  73      -0.415  -2.051  -6.664  1.00 42.21
ATOM   1086  CB  ALA A  73      -0.161  -4.172  -6.674  1.00  0.13
ATOM   1087 1HB  ALA A  73       0.835  -4.118  -7.089  1.00 32.12
ATOM   1088 2HB  ALA A  73      -0.875  -4.333  -7.467  1.00 75.03
ATOM   1089 3HB  ALA A  73      -0.213  -4.990  -5.971  1.00 22.15
ATOM   1090  C   ALA A  73      -1.875  -2.902  -5.362  1.00  4.23
ATOM   1091  O   ALA A  73      -2.110  -3.540  -4.324  1.00 60.30
ATOM   1092  N   MET A  74      -2.767  -2.200  -5.979  1.00 51.42
ATOM   1093  H   MET A  74      -2.501  -1.733  -6.806  1.00 12.01
ATOM   1094  CA  MET A  74      -4.130  -2.067  -5.531  1.00 41.10
ATOM   1095  HA  MET A  74      -4.264  -2.541  -4.571  1.00 41.10
ATOM   1096  CB  MET A  74      -4.488  -0.592  -5.414  1.00 54.14
ATOM   1097 1HB  MET A  74      -4.467  -0.161  -6.404  1.00 75.10
ATOM   1098 2HB  MET A  74      -5.489  -0.507  -5.017  1.00 11.04
ATOM   1099  CG  MET A  74      -3.565   0.216  -4.556  1.00 23.33
ATOM   1100 1HG  MET A  74      -3.654  -0.140  -3.540  1.00  5.42
ATOM   1101 2HG  MET A  74      -2.548   0.081  -4.895  1.00 73.40
ATOM   1102  SD  MET A  74      -3.968   1.952  -4.577  1.00 33.31
ATOM   1103  CE  MET A  74      -2.646   2.575  -3.576  1.00 53.41
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ATOM   1104 1HE  MET A  74      -2.720   2.158  -2.583  1.00 33.33
ATOM   1105 2HE  MET A  74      -2.688   3.654  -3.533  1.00 45.33
ATOM   1106 3HE  MET A  74      -1.709   2.273  -4.018  1.00 34.10
ATOM   1107  C   MET A  74      -5.032  -2.663  -6.562  1.00 74.23
ATOM   1108  O   MET A  74      -4.845  -2.424  -7.755  1.00 11.02
ATOM   1109  N   LYS A  75      -5.983  -3.421  -6.133  1.00 33.04
ATOM   1110  H   LYS A  75      -6.056  -3.631  -5.174  1.00 65.23
ATOM   1111  CA  LYS A  75      -6.933  -3.997  -7.030  1.00 21.12
ATOM   1112  HA  LYS A  75      -6.770  -3.586  -8.014  1.00 12.42
ATOM   1113  CB  LYS A  75      -6.754  -5.512  -7.091  1.00  1.23
ATOM   1114 1HB  LYS A  75      -5.739  -5.725  -7.391  1.00 31.32
ATOM   1115 2HB  LYS A  75      -6.918  -5.919  -6.107  1.00 24.32
ATOM   1116  CG  LYS A  75      -7.691  -6.199  -8.062  1.00 21.12
ATOM   1117 1HG  LYS A  75      -7.605  -7.268  -7.938  1.00  0.51
ATOM   1118 2HG  LYS A  75      -8.698  -5.890  -7.825  1.00 10.51
ATOM   1119  CD  LYS A  75      -7.368  -5.768  -9.472  1.00 43.53
ATOM   1120 1HD  LYS A  75      -7.510  -4.700  -9.552  1.00 73.22
ATOM   1121 2HD  LYS A  75      -6.333  -6.001  -9.676  1.00 44.42
ATOM   1122  CE  LYS A  75      -8.233  -6.423 -10.522  1.00 64.22
ATOM   1123 1HE  LYS A  75      -8.138  -7.495 -10.440  1.00 31.30
ATOM   1124 2HE  LYS A  75      -9.262  -6.133 -10.367  1.00  4.11
ATOM   1125  NZ  LYS A  75      -7.809  -5.995 -11.877  1.00 34.13
ATOM   1126 1HZ  LYS A  75      -8.288  -6.467 -12.665  1.00 44.24
ATOM   1127 2HZ  LYS A  75      -6.768  -6.072 -11.950  1.00 30.23
ATOM   1128 3HZ  LYS A  75      -7.888  -4.961 -12.006  1.00 12.32
ATOM   1129  C   LYS A  75      -8.330  -3.681  -6.556  1.00 14.12
ATOM   1130  O   LYS A  75      -8.649  -3.892  -5.376  1.00 13.03
ATOM   1131  N   LYS A  76      -9.158  -3.170  -7.441  1.00 60.00
ATOM   1132  H   LYS A  76      -8.830  -2.956  -8.343  1.00  3.35
ATOM   1133  CA  LYS A  76     -10.523  -2.921  -7.087  1.00  0.32
ATOM   1134  HA  LYS A  76     -10.549  -2.591  -6.059  1.00  4.10
ATOM   1135  CB  LYS A  76     -11.187  -1.868  -7.973  1.00 72.32
ATOM   1136 1HB  LYS A  76     -10.513  -1.032  -8.090  1.00 53.14
ATOM   1137 2HB  LYS A  76     -11.388  -2.302  -8.942  1.00 52.40
ATOM   1138  CG  LYS A  76     -12.510  -1.359  -7.389  1.00 54.51
ATOM   1139 1HG  LYS A  76     -13.114  -2.215  -7.127  1.00  2.12
ATOM   1140 2HG  LYS A  76     -12.305  -0.788  -6.495  1.00 72.43
ATOM   1141  CD  LYS A  76     -13.293  -0.501  -8.366  1.00 64.21
ATOM   1142 1HD  LYS A  76     -13.937   0.170  -7.816  1.00  4.24
ATOM   1143 2HD  LYS A  76     -12.597   0.071  -8.963  1.00 21.22
ATOM   1144  CE  LYS A  76     -14.146  -1.359  -9.290  1.00 43.03
ATOM   1145 1HE  LYS A  76     -14.624  -0.723 -10.020  1.00 43.30
ATOM   1146 2HE  LYS A  76     -13.509  -2.071  -9.793  1.00 44.44
ATOM   1147  NZ  LYS A  76     -15.195  -2.103  -8.524  1.00 65.43
ATOM   1148 1HZ  LYS A  76     -15.812  -2.647  -9.157  1.00 60.41
ATOM   1149 2HZ  LYS A  76     -15.791  -1.434  -7.989  1.00 60.40
ATOM   1150 3HZ  LYS A  76     -14.763  -2.755  -7.837  1.00 60.22
ATOM   1151  C   LYS A  76     -11.298  -4.210  -7.213  1.00  4.43
ATOM   1152  O   LYS A  76     -11.298  -4.854  -8.265  1.00  2.23
ATOM   1153  N   LEU A  77     -11.939  -4.566  -6.168  1.00  1.21
ATOM   1154  H   LEU A  77     -11.868  -3.990  -5.367  1.00 52.33
ATOM   1155  CA  LEU A  77     -12.768  -5.733  -6.123  1.00  1.14
ATOM   1156  HA  LEU A  77     -12.340  -6.475  -6.779  1.00 71.33
ATOM   1157  CB  LEU A  77     -12.792  -6.255  -4.643  1.00 63.32
ATOM   1158 1HB  LEU A  77     -11.767  -6.319  -4.311  1.00 22.13
ATOM   1159 2HB  LEU A  77     -13.274  -5.486  -4.060  1.00  3.10
ATOM   1160  CG  LEU A  77     -13.463  -7.612  -4.302  1.00 33.33
ATOM   1161  HG  LEU A  77     -13.225  -8.347  -5.057  1.00  1.31
ATOM   1162  CD1 LEU A  77     -12.937  -8.117  -2.967  1.00 32.44
ATOM   1163 1HD1 LEU A  77     -13.409  -9.060  -2.728  1.00  2.40
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ATOM   1164 2HD1 LEU A  77     -13.158  -7.401  -2.189  1.00 45.24
ATOM   1165 3HD1 LEU A  77     -11.868  -8.262  -3.030  1.00 33.54
ATOM   1166  CD2 LEU A  77     -14.975  -7.472  -4.199  1.00 31.54
ATOM   1167 1HD2 LEU A  77     -15.224  -6.766  -3.423  1.00 54.23
ATOM   1168 2HD2 LEU A  77     -15.411  -8.433  -3.966  1.00 55.23
ATOM   1169 3HD2 LEU A  77     -15.359  -7.122  -5.143  1.00 54.25
ATOM   1170  C   LEU A  77     -14.146  -5.296  -6.664  1.00 71.35
ATOM   1171  O   LEU A  77     -14.494  -4.101  -6.555  1.00 61.51
ATOM   1172  N   PRO A  78     -14.885  -6.200  -7.359  1.00 51.14
ATOM   1173  CD  PRO A  78     -14.466  -7.588  -7.665  1.00 52.03
ATOM   1174  CA  PRO A  78     -16.214  -5.913  -7.945  1.00 70.12
ATOM   1175  HA  PRO A  78     -16.123  -5.450  -8.915  1.00 22.14
ATOM   1176  CB  PRO A  78     -16.811  -7.305  -8.104  1.00  5.03
ATOM   1177 1HB  PRO A  78     -17.285  -7.604  -7.179  1.00 41.55
ATOM   1178 2HB  PRO A  78     -17.515  -7.331  -8.923  1.00  3.51
ATOM   1179  CG  PRO A  78     -15.637  -8.162  -8.428  1.00 31.41
ATOM   1180 1HG  PRO A  78     -15.834  -9.180  -8.117  1.00 75.25
ATOM   1181 2HG  PRO A  78     -15.428  -8.122  -9.487  1.00 73.24
ATOM   1182 1HD  PRO A  78     -14.312  -8.132  -6.746  1.00 65.42
ATOM   1183 2HD  PRO A  78     -13.567  -7.593  -8.260  1.00 42.43
ATOM   1184  C   PRO A  78     -17.108  -5.034  -7.060  1.00 44.12
ATOM   1185  O   PRO A  78     -17.539  -3.964  -7.486  1.00 32.15
ATOM   1186  N   ASN A  79     -17.265  -5.442  -5.812  1.00 34.42
ATOM   1187  H   ASN A  79     -16.809  -6.267  -5.550  1.00 40.25
ATOM   1188  CA  ASN A  79     -18.135  -4.769  -4.810  1.00  1.54
ATOM   1189  HA  ASN A  79     -19.065  -4.520  -5.298  1.00 73.35
ATOM   1190  CB  ASN A  79     -18.449  -5.715  -3.623  1.00 43.41
ATOM   1191 1HB  ASN A  79     -17.521  -5.997  -3.149  1.00  1.02
ATOM   1192 2HB  ASN A  79     -19.052  -5.178  -2.906  1.00 14.22
ATOM   1193  CG  ASN A  79     -19.182  -6.998  -4.006  1.00  5.53
ATOM   1194  OD1 ASN A  79     -18.999  -7.542  -5.086  1.00 52.42
ATOM   1195  ND2 ASN A  79     -20.007  -7.490  -3.115  1.00 13.41
ATOM   1196 2HD2 ASN A  79     -20.113  -7.021  -2.261  1.00 70.25
ATOM   1197 1HD2 ASN A  79     -20.482  -8.312  -3.356  1.00 33.14
ATOM   1198  C   ASN A  79     -17.509  -3.480  -4.253  1.00 41.41
ATOM   1199  O   ASN A  79     -17.937  -2.983  -3.225  1.00 55.42
ATOM   1200  N   ASN A  80     -16.510  -2.953  -4.956  1.00 31.15
ATOM   1201  H   ASN A  80     -16.233  -3.437  -5.761  1.00 71.32
ATOM   1202  CA  ASN A  80     -15.801  -1.703  -4.600  1.00 54.44
ATOM   1203  HA  ASN A  80     -15.082  -1.539  -5.390  1.00 52.31
ATOM   1204  CB  ASN A  80     -16.739  -0.484  -4.551  1.00 32.00
ATOM   1205 1HB  ASN A  80     -17.555  -0.701  -3.877  1.00 71.43
ATOM   1206 2HB  ASN A  80     -16.186   0.364  -4.175  1.00 13.34
ATOM   1207  CG  ASN A  80     -17.310  -0.137  -5.915  1.00 64.23
ATOM   1208  OD1 ASN A  80     -16.678  -0.391  -6.964  1.00 65.11
ATOM   1209  ND2 ASN A  80     -18.486   0.435  -5.933  1.00 75.12
ATOM   1210 2HD2 ASN A  80     -18.923   0.600  -5.070  1.00  5.43
ATOM   1211 1HD2 ASN A  80     -18.883   0.671  -6.796  1.00 32.13
ATOM   1212  C   ASN A  80     -14.997  -1.830  -3.334  1.00 24.54
ATOM   1213  O   ASN A  80     -14.750  -0.866  -2.643  1.00 63.54
ATOM   1214  N   ALA A  81     -14.539  -3.023  -3.090  1.00 72.25
ATOM   1215  H   ALA A  81     -14.804  -3.748  -3.687  1.00 12.30
ATOM   1216  CA  ALA A  81     -13.644  -3.305  -1.998  1.00 30.00
ATOM   1217  HA  ALA A  81     -13.744  -2.527  -1.254  1.00 62.31
ATOM   1218  CB  ALA A  81     -13.965  -4.663  -1.389  1.00  4.02
ATOM   1219 1HB  ALA A  81     -14.956  -4.640  -0.962  1.00  3.43
ATOM   1220 2HB  ALA A  81     -13.240  -4.898  -0.623  1.00 20.32
ATOM   1221 3HB  ALA A  81     -13.929  -5.415  -2.164  1.00 64.05
ATOM   1222  C   ALA A  81     -12.240  -3.287  -2.577  1.00 42.10
ATOM   1223  O   ALA A  81     -12.088  -3.342  -3.796  1.00 51.04
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ATOM   1224  N   THR A  82     -11.241  -3.173  -1.773  1.00 24.42
ATOM   1225  H   THR A  82     -11.371  -3.148  -0.797  1.00 60.14
ATOM   1226  CA  THR A  82      -9.910  -3.102  -2.299  1.00 73.25
ATOM   1227  HA  THR A  82      -9.979  -3.131  -3.378  1.00 11.54
ATOM   1228  CB  THR A  82      -9.248  -1.775  -1.899  1.00 51.23
ATOM   1229  HB  THR A  82      -9.053  -1.779  -0.837  1.00 23.12
ATOM   1230  OG1 THR A  82     -10.137  -0.705  -2.225  1.00 61.10
ATOM   1231  HG1 THR A  82     -10.966  -0.810  -1.740  1.00 33.43
ATOM   1232  CG2 THR A  82      -7.936  -1.571  -2.655  1.00 22.12
ATOM   1233 1HG2 THR A  82      -7.247  -2.363  -2.401  1.00 62.21
ATOM   1234 2HG2 THR A  82      -7.507  -0.615  -2.393  1.00 33.11
ATOM   1235 3HG2 THR A  82      -8.129  -1.595  -3.718  1.00 13.22
ATOM   1236  C   THR A  82      -9.053  -4.281  -1.827  1.00 54.52
ATOM   1237  O   THR A  82      -9.012  -4.603  -0.642  1.00 15.44
ATOM   1238  N   ARG A  83      -8.389  -4.911  -2.751  1.00  1.42
ATOM   1239  H   ARG A  83      -8.497  -4.648  -3.696  1.00 12.22
ATOM   1240  CA  ARG A  83      -7.471  -5.971  -2.452  1.00 51.21
ATOM   1241  HA  ARG A  83      -7.631  -6.325  -1.445  1.00  4.01
ATOM   1242  CB  ARG A  83      -7.683  -7.100  -3.473  1.00  3.03
ATOM   1243 1HB  ARG A  83      -8.710  -7.425  -3.403  1.00 22.01
ATOM   1244 2HB  ARG A  83      -7.527  -6.696  -4.460  1.00 21.52
ATOM   1245  CG  ARG A  83      -6.808  -8.340  -3.317  1.00 22.20
ATOM   1246 1HG  ARG A  83      -6.942  -8.972  -4.182  1.00 72.11
ATOM   1247 2HG  ARG A  83      -5.774  -8.025  -3.265  1.00 73.32
ATOM   1248  CD  ARG A  83      -7.141  -9.154  -2.070  1.00 64.31
ATOM   1249 1HD  ARG A  83      -6.856  -8.591  -1.193  1.00 43.42
ATOM   1250 2HD  ARG A  83      -8.202  -9.352  -2.049  1.00  3.03
ATOM   1251  NE  ARG A  83      -6.413 -10.441  -2.081  1.00 45.35
ATOM   1252  HE  ARG A  83      -5.778 -10.514  -2.827  1.00  3.13
ATOM   1253  CZ  ARG A  83      -6.571 -11.459  -1.204  1.00 45.11
ATOM   1254  NH1 ARG A  83      -7.421 -11.360  -0.183  1.00 50.13
ATOM   1255 1HH1 ARG A  83      -7.981 -10.536  -0.017  1.00 40.43
ATOM   1256 2HH1 ARG A  83      -7.548 -12.096   0.484  1.00 73.42
ATOM   1257  NH2 ARG A  83      -5.870 -12.584  -1.371  1.00 51.41
ATOM   1258 1HH2 ARG A  83      -5.233 -12.706  -2.132  1.00 62.15
ATOM   1259 2HH2 ARG A  83      -5.922 -13.364  -0.735  1.00 13.25
ATOM   1260  C   ARG A  83      -6.093  -5.350  -2.600  1.00 50.11
ATOM   1261  O   ARG A  83      -5.776  -4.805  -3.655  1.00 51.12
ATOM   1262  N   ILE A  84      -5.304  -5.381  -1.563  1.00 32.35
ATOM   1263  H   ILE A  84      -5.552  -5.887  -0.757  1.00 34.34
ATOM   1264  CA  ILE A  84      -4.040  -4.688  -1.589  1.00 23.21
ATOM   1265  HA  ILE A  84      -3.978  -4.140  -2.518  1.00 21.53
ATOM   1266  CB  ILE A  84      -3.928  -3.666  -0.387  1.00 54.03
ATOM   1267  HB  ILE A  84      -4.894  -3.197  -0.267  1.00 64.34
ATOM   1268  CG2 ILE A  84      -3.588  -4.354   0.910  1.00 34.14
ATOM   1269 1HG2 ILE A  84      -3.510  -3.625   1.704  1.00 71.12
ATOM   1270 2HG2 ILE A  84      -2.644  -4.861   0.777  1.00  3.12
ATOM   1271 3HG2 ILE A  84      -4.356  -5.077   1.143  1.00 35.53
ATOM   1272  CG1 ILE A  84      -2.899  -2.583  -0.653  1.00 10.22
ATOM   1273 1HG1 ILE A  84      -2.701  -2.041   0.260  1.00 24.32
ATOM   1274 2HG1 ILE A  84      -1.985  -3.038  -1.006  1.00 42.12
ATOM   1275  CD1 ILE A  84      -3.342  -1.594  -1.684  1.00 24.21
ATOM   1276 1HD1 ILE A  84      -2.576  -0.841  -1.801  1.00 61.13
ATOM   1277 2HD1 ILE A  84      -4.262  -1.128  -1.368  1.00 54.30
ATOM   1278 3HD1 ILE A  84      -3.492  -2.098  -2.626  1.00 22.33
ATOM   1279  C   ILE A  84      -2.897  -5.704  -1.528  1.00 55.45
ATOM   1280  O   ILE A  84      -3.001  -6.732  -0.853  1.00 23.10
ATOM   1281  N   SER A  85      -1.891  -5.473  -2.304  1.00 65.31
ATOM   1282  H   SER A  85      -1.922  -4.710  -2.924  1.00 11.44
ATOM   1283  CA  SER A  85      -0.707  -6.282  -2.297  1.00 43.44
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ATOM   1284  HA  SER A  85      -0.773  -6.948  -1.449  1.00  2.51
ATOM   1285  CB  SER A  85      -0.639  -7.104  -3.580  1.00 54.43
ATOM   1286 1HB  SER A  85      -0.548  -6.445  -4.429  1.00 13.34
ATOM   1287 2HB  SER A  85       0.206  -7.772  -3.540  1.00 22.44
ATOM   1288  OG  SER A  85      -1.829  -7.874  -3.709  1.00 71.20
ATOM   1289  HG  SER A  85      -2.444  -7.492  -3.075  1.00  1.21
ATOM   1290  C   SER A  85       0.520  -5.386  -2.121  1.00 64.31
ATOM   1291  O   SER A  85       0.784  -4.511  -2.940  1.00 70.52
ATOM   1292  N   ILE A  86       1.220  -5.573  -1.044  1.00  3.25
ATOM   1293  H   ILE A  86       0.939  -6.274  -0.412  1.00 23.41
ATOM   1294  CA  ILE A  86       2.396  -4.793  -0.731  1.00 71.33
ATOM   1295  HA  ILE A  86       2.479  -3.972  -1.426  1.00 64.03
ATOM   1296  CB  ILE A  86       2.304  -4.225   0.718  1.00 54.23
ATOM   1297  HB  ILE A  86       2.207  -5.069   1.383  1.00 62.44
ATOM   1298  CG2 ILE A  86       3.591  -3.476   1.116  1.00 60.23
ATOM   1299 1HG2 ILE A  86       3.802  -2.700   0.395  1.00 15.22
ATOM   1300 2HG2 ILE A  86       4.417  -4.172   1.164  1.00  2.11
ATOM   1301 3HG2 ILE A  86       3.462  -3.033   2.092  1.00 55.12
ATOM   1302  CG1 ILE A  86       1.057  -3.330   0.867  1.00  0.23
ATOM   1303 1HG1 ILE A  86       1.149  -2.474   0.218  1.00 11.11
ATOM   1304 2HG1 ILE A  86       0.186  -3.896   0.572  1.00  4.05
ATOM   1305  CD1 ILE A  86       0.821  -2.814   2.272  1.00 42.45
ATOM   1306 1HD1 ILE A  86      -0.045  -2.170   2.277  1.00 12.05
ATOM   1307 2HD1 ILE A  86       1.689  -2.265   2.605  1.00 43.14
ATOM   1308 3HD1 ILE A  86       0.651  -3.649   2.935  1.00 32.15
ATOM   1309  C   ILE A  86       3.613  -5.687  -0.825  1.00 64.30
ATOM   1310  O   ILE A  86       3.585  -6.800  -0.336  1.00  1.25
ATOM   1311  N   LYS A  87       4.648  -5.211  -1.446  1.00 40.43
ATOM   1312  H   LYS A  87       4.581  -4.325  -1.871  1.00  2.21
ATOM   1313  CA  LYS A  87       5.887  -5.940  -1.539  1.00 12.32
ATOM   1314  HA  LYS A  87       5.758  -6.943  -1.164  1.00  1.31
ATOM   1315  CB  LYS A  87       6.375  -5.987  -2.974  1.00 21.04
ATOM   1316 1HB  LYS A  87       5.603  -6.415  -3.595  1.00 63.40
ATOM   1317 2HB  LYS A  87       6.565  -4.974  -3.288  1.00 75.22
ATOM   1318  CG  LYS A  87       7.656  -6.797  -3.154  1.00 61.52
ATOM   1319 1HG  LYS A  87       8.310  -6.606  -2.315  1.00 71.54
ATOM   1320 2HG  LYS A  87       7.404  -7.848  -3.179  1.00 25.33
ATOM   1321  CD  LYS A  87       8.380  -6.427  -4.429  1.00 63.03
ATOM   1322 1HD  LYS A  87       9.155  -7.158  -4.609  1.00 21.04
ATOM   1323 2HD  LYS A  87       7.674  -6.422  -5.245  1.00 40.51
ATOM   1324  CE  LYS A  87       9.018  -5.049  -4.306  1.00 41.20
ATOM   1325 1HE  LYS A  87       8.267  -4.319  -4.048  1.00  3.42
ATOM   1326 2HE  LYS A  87       9.761  -5.082  -3.521  1.00 54.14
ATOM   1327  NZ  LYS A  87       9.671  -4.616  -5.557  1.00  5.32
ATOM   1328 1HZ  LYS A  87      10.221  -3.750  -5.351  1.00 30.01
ATOM   1329 2HZ  LYS A  87       8.942  -4.393  -6.270  1.00 12.53
ATOM   1330 3HZ  LYS A  87      10.310  -5.346  -5.923  1.00 64.24
ATOM   1331  C   LYS A  87       6.922  -5.190  -0.747  1.00 70.40
ATOM   1332  O   LYS A  87       7.034  -3.966  -0.885  1.00  1.33
ATOM   1333  N   TYR A  88       7.641  -5.889   0.083  1.00 41.20
ATOM   1334  H   TYR A  88       7.491  -6.852   0.199  1.00  4.32
ATOM   1335  CA  TYR A  88       8.692  -5.292   0.838  1.00 64.24
ATOM   1336  HA  TYR A  88       8.824  -4.278   0.499  1.00 53.43
ATOM   1337  CB  TYR A  88       8.336  -5.287   2.292  1.00  4.12
ATOM   1338 1HB  TYR A  88       7.263  -5.168   2.344  1.00 31.03
ATOM   1339 2HB  TYR A  88       8.577  -6.263   2.695  1.00 50.53
ATOM   1340  CG  TYR A  88       9.068  -4.184   3.048  1.00 65.32
ATOM   1341  CD1 TYR A  88      10.287  -4.408   3.677  1.00 32.14
ATOM   1342  HD1 TYR A  88      10.708  -5.403   3.668  1.00 42.41
ATOM   1343  CE1 TYR A  88      10.962  -3.381   4.307  1.00 24.30
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ATOM   1344  HE1 TYR A  88      11.908  -3.575   4.791  1.00 42.44
ATOM   1345  CZ  TYR A  88      10.419  -2.116   4.319  1.00 64.42
ATOM   1346  CE2 TYR A  88       9.212  -1.870   3.709  1.00 24.33
ATOM   1347  HE2 TYR A  88       8.788  -0.877   3.719  1.00 50.23
ATOM   1348  CD2 TYR A  88       8.549  -2.896   3.074  1.00 30.22
ATOM   1349  HD2 TYR A  88       7.600  -2.706   2.595  1.00 41.15
ATOM   1350  OH  TYR A  88      11.095  -1.088   4.936  1.00 14.33
ATOM   1351  HH  TYR A  88      11.962  -1.095   4.507  1.00 14.22
ATOM   1352  C   TYR A  88       9.971  -6.077   0.601  1.00 34.54
ATOM   1353  O   TYR A  88       9.891  -7.244   0.215  1.00 33.30
ATOM   1354  N   GLY A  89      11.128  -5.463   0.801  1.00  2.44
ATOM   1355  H   GLY A  89      11.190  -4.523   1.099  1.00 71.14
ATOM   1356  CA  GLY A  89      12.362  -6.166   0.588  1.00 34.53
ATOM   1357 1HA  GLY A  89      12.139  -7.066   0.034  1.00 33.41
ATOM   1358 2HA  GLY A  89      13.024  -5.562  -0.009  1.00 64.42
ATOM   1359  C   GLY A  89      13.086  -6.571   1.871  1.00  1.13
ATOM   1360  O   GLY A  89      12.602  -7.426   2.614  1.00 64.34
ATOM   1361  N   SER A  90      14.182  -5.868   2.160  1.00 45.43
ATOM   1362  H   SER A  90      14.360  -5.036   1.669  1.00 22.53
ATOM   1363  CA  SER A  90      15.192  -6.236   3.178  1.00 44.11
ATOM   1364  HA  SER A  90      15.776  -7.049   2.776  1.00  4.24
ATOM   1365  CB  SER A  90      16.154  -5.054   3.354  1.00 40.24
ATOM   1366 1HB  SER A  90      15.633  -4.234   3.827  1.00  3.14
ATOM   1367 2HB  SER A  90      16.987  -5.355   3.971  1.00 43.34
ATOM   1368  OG  SER A  90      16.650  -4.611   2.096  1.00 74.43
ATOM   1369  HG  SER A  90      17.356  -3.961   2.276  1.00 54.52
ATOM   1370  C   SER A  90      14.646  -6.662   4.568  1.00 72.13
ATOM   1371  O   SER A  90      15.129  -7.632   5.148  1.00 52.34
ATOM   1372  N   GLN A  91      13.659  -5.969   5.091  1.00 74.23
ATOM   1373  H   GLN A  91      13.253  -5.251   4.564  1.00 61.13
ATOM   1374  CA  GLN A  91      13.186  -6.295   6.441  1.00 72.32
ATOM   1375  HA  GLN A  91      13.935  -6.936   6.883  1.00 40.33
ATOM   1376  CB  GLN A  91      13.076  -5.052   7.317  1.00 30.42
ATOM   1377 1HB  GLN A  91      12.423  -4.343   6.830  1.00 53.12
ATOM   1378 2HB  GLN A  91      12.637  -5.334   8.263  1.00 52.35
ATOM   1379  CG  GLN A  91      14.397  -4.363   7.592  1.00 11.23
ATOM   1380 1HG  GLN A  91      14.824  -4.046   6.651  1.00 60.40
ATOM   1381 2HG  GLN A  91      14.207  -3.492   8.201  1.00  4.12
ATOM   1382  CD  GLN A  91      15.423  -5.236   8.303  1.00 55.04
ATOM   1383  OE1 GLN A  91      16.615  -5.064   8.119  1.00 32.14
ATOM   1384  NE2 GLN A  91      14.973  -6.157   9.125  1.00 34.23
ATOM   1385 2HE2 GLN A  91      14.007  -6.258   9.256  1.00 53.50
ATOM   1386 1HE2 GLN A  91      15.645  -6.715   9.565  1.00 60.50
ATOM   1387  C   GLN A  91      11.877  -7.045   6.466  1.00 22.33
ATOM   1388  O   GLN A  91      11.452  -7.518   7.527  1.00  2.12
ATOM   1389  N   GLY A  92      11.240  -7.169   5.331  1.00 51.22
ATOM   1390  H   GLY A  92      11.692  -6.922   4.495  1.00 52.14
ATOM   1391  CA  GLY A  92       9.914  -7.727   5.319  1.00 62.33
ATOM   1392 1HA  GLY A  92       9.680  -8.064   4.320  1.00 25.01
ATOM   1393 2HA  GLY A  92       9.877  -8.566   5.999  1.00 42.12
ATOM   1394  C   GLY A  92       8.881  -6.688   5.763  1.00 73.55
ATOM   1395  O   GLY A  92       9.132  -5.875   6.662  1.00 23.34
ATOM   1396  N   ASN A  93       7.742  -6.692   5.121  1.00 24.15
ATOM   1397  H   ASN A  93       7.613  -7.308   4.369  1.00 32.34
ATOM   1398  CA  ASN A  93       6.650  -5.741   5.393  1.00  4.33
ATOM   1399  HA  ASN A  93       7.019  -4.750   5.181  1.00 50.10
ATOM   1400  CB  ASN A  93       5.465  -5.989   4.459  1.00 53.30
ATOM   1401 1HB  ASN A  93       4.797  -5.143   4.501  1.00 35.04
ATOM   1402 2HB  ASN A  93       5.824  -6.103   3.449  1.00 64.24
ATOM   1403  CG  ASN A  93       4.673  -7.233   4.822  1.00 24.02
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ATOM   1404  OD1 ASN A  93       3.796  -7.202   5.666  1.00 55.42
ATOM   1405  ND2 ASN A  93       4.926  -8.302   4.153  1.00 71.13
ATOM   1406 2HD2 ASN A  93       5.607  -8.259   3.443  1.00 14.15
ATOM   1407 1HD2 ASN A  93       4.405  -9.104   4.366  1.00 25.53
ATOM   1408  C   ASN A  93       6.105  -5.775   6.832  1.00 32.22
ATOM   1409  O   ASN A  93       5.365  -4.874   7.194  1.00 24.43
ATOM   1410  N   SER A  94       6.524  -6.755   7.640  1.00 70.10
ATOM   1411  H   SER A  94       7.308  -7.281   7.383  1.00 62.31
ATOM   1412  CA  SER A  94       5.878  -7.112   8.911  1.00 40.11
ATOM   1413  HA  SER A  94       5.004  -7.711   8.703  1.00 10.45
ATOM   1414  CB  SER A  94       6.858  -7.985   9.694  1.00 12.34
ATOM   1415 1HB  SER A  94       7.634  -7.360  10.112  1.00 73.51
ATOM   1416 2HB  SER A  94       6.335  -8.491  10.493  1.00 73.11
ATOM   1417  OG  SER A  94       7.459  -8.962   8.843  1.00 54.42
ATOM   1418  HG  SER A  94       8.298  -9.227   9.239  1.00  5.13
ATOM   1419  C   SER A  94       5.477  -5.891   9.774  1.00 24.45
ATOM   1420  O   SER A  94       4.311  -5.720  10.093  1.00 33.25
ATOM   1421  N   ILE A  95       6.416  -5.049  10.131  1.00 63.53
ATOM   1422  H   ILE A  95       7.344  -5.233   9.885  1.00 50.12
ATOM   1423  CA  ILE A  95       6.080  -3.868  10.910  1.00 31.43
ATOM   1424  HA  ILE A  95       5.311  -4.171  11.606  1.00 10.32
ATOM   1425  CB  ILE A  95       7.283  -3.363  11.734  1.00 23.23
ATOM   1426  HB  ILE A  95       8.079  -3.116  11.048  1.00 13.13
ATOM   1427  CG2 ILE A  95       6.935  -2.103  12.530  1.00  4.12
ATOM   1428 1HG2 ILE A  95       6.127  -2.320  13.212  1.00 22.23
ATOM   1429 2HG2 ILE A  95       6.629  -1.326  11.843  1.00 62.40
ATOM   1430 3HG2 ILE A  95       7.803  -1.775  13.085  1.00 55.22
ATOM   1431  CG1 ILE A  95       7.781  -4.469  12.670  1.00 24.42
ATOM   1432 1HG1 ILE A  95       8.352  -5.212  12.136  1.00 74.30
ATOM   1433 2HG1 ILE A  95       8.408  -3.962  13.384  1.00 74.21
ATOM   1434  CD1 ILE A  95       6.694  -5.168  13.471  1.00 23.20
ATOM   1435 1HD1 ILE A  95       6.042  -5.672  12.772  1.00 25.13
ATOM   1436 2HD1 ILE A  95       6.134  -4.441  14.039  1.00 52.21
ATOM   1437 3HD1 ILE A  95       7.141  -5.893  14.136  1.00 74.32
ATOM   1438  C   ILE A  95       5.509  -2.741  10.043  1.00  2.04
ATOM   1439  O   ILE A  95       4.514  -2.096  10.396  1.00 44.33
ATOM   1440  N   ARG A  96       6.123  -2.551   8.894  1.00 61.30
ATOM   1441  H   ARG A  96       6.783  -3.215   8.606  1.00  1.42
ATOM   1442  CA  ARG A  96       5.832  -1.432   8.013  1.00 41.21
ATOM   1443  HA  ARG A  96       5.965  -0.526   8.583  1.00 24.35
ATOM   1444  CB  ARG A  96       6.837  -1.409   6.865  1.00 71.20
ATOM   1445 1HB  ARG A  96       6.745  -2.327   6.303  1.00  3.41
ATOM   1446 2HB  ARG A  96       6.607  -0.574   6.220  1.00 63.32
ATOM   1447  CG  ARG A  96       8.283  -1.267   7.332  1.00 64.15
ATOM   1448 1HG  ARG A  96       8.491  -2.059   8.035  1.00 32.03
ATOM   1449 2HG  ARG A  96       8.937  -1.366   6.480  1.00 22.03
ATOM   1450  CD  ARG A  96       8.523   0.074   8.017  1.00 63.24
ATOM   1451 1HD  ARG A  96       7.858   0.173   8.860  1.00 33.44
ATOM   1452 2HD  ARG A  96       9.545   0.095   8.372  1.00 55.43
ATOM   1453  NE  ARG A  96       8.323   1.204   7.100  1.00 72.52
ATOM   1454  HE  ARG A  96       8.826   1.135   6.256  1.00  3.24
ATOM   1455  CZ  ARG A  96       7.573   2.295   7.340  1.00 15.45
ATOM   1456  NH1 ARG A  96       6.866   2.407   8.465  1.00 62.33
ATOM   1457 1HH1 ARG A  96       6.859   1.702   9.173  1.00 45.41
ATOM   1458 2HH1 ARG A  96       6.308   3.229   8.646  1.00 53.12
ATOM   1459  NH2 ARG A  96       7.549   3.271   6.448  1.00 71.02
ATOM   1460 1HH2 ARG A  96       8.096   3.181   5.603  1.00  4.54
ATOM   1461 2HH2 ARG A  96       7.029   4.120   6.555  1.00 43.21
ATOM   1462  C   ARG A  96       4.407  -1.442   7.485  1.00  3.20
ATOM   1463  O   ARG A  96       3.698  -0.449   7.618  1.00 51.33
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ATOM   1464  N   SER A  97       3.985  -2.554   6.938  1.00 64.14
ATOM   1465  H   SER A  97       4.562  -3.350   6.900  1.00 65.51
ATOM   1466  CA  SER A  97       2.667  -2.667   6.373  1.00 32.14
ATOM   1467  HA  SER A  97       2.533  -1.793   5.752  1.00 24.13
ATOM   1468  CB  SER A  97       2.562  -3.885   5.493  1.00 33.44
ATOM   1469 1HB  SER A  97       2.818  -4.764   6.065  1.00 20.52
ATOM   1470 2HB  SER A  97       1.556  -3.976   5.110  1.00 64.40
ATOM   1471  OG  SER A  97       3.458  -3.759   4.411  1.00 61.52
ATOM   1472  HG  SER A  97       2.965  -3.911   3.601  1.00 64.54
ATOM   1473  C   SER A  97       1.589  -2.636   7.429  1.00 53.14
ATOM   1474  O   SER A  97       0.534  -2.076   7.193  1.00 21.44
ATOM   1475  N   SER A  98       1.865  -3.209   8.589  1.00 41.11
ATOM   1476  H   SER A  98       2.721  -3.669   8.717  1.00 72.51
ATOM   1477  CA  SER A  98       0.923  -3.192   9.690  1.00 63.44
ATOM   1478  HA  SER A  98       0.032  -3.702   9.356  1.00 23.11
ATOM   1479  CB  SER A  98       1.515  -3.951  10.885  1.00 43.11
ATOM   1480 1HB  SER A  98       2.472  -3.521  11.158  1.00 25.42
ATOM   1481 2HB  SER A  98       0.845  -3.908  11.730  1.00 35.13
ATOM   1482  OG  SER A  98       1.730  -5.311  10.538  1.00 53.02
ATOM   1483  HG  SER A  98       2.677  -5.484  10.444  1.00 74.14
ATOM   1484  C   SER A  98       0.547  -1.746  10.051  1.00  5.32
ATOM   1485  O   SER A  98      -0.635  -1.408  10.179  1.00 64.31
ATOM   1486  N   ALA A  99       1.553  -0.897  10.165  1.00 52.33
ATOM   1487  H   ALA A  99       2.469  -1.230  10.056  1.00 52.02
ATOM   1488  CA  ALA A  99       1.329   0.507  10.444  1.00 41.42
ATOM   1489  HA  ALA A  99       0.614   0.562  11.250  1.00 32.23
ATOM   1490  CB  ALA A  99       2.617   1.185  10.881  1.00 72.50
ATOM   1491 1HB  ALA A  99       3.030   0.660  11.731  1.00 44.34
ATOM   1492 2HB  ALA A  99       2.413   2.210  11.155  1.00 44.44
ATOM   1493 3HB  ALA A  99       3.327   1.165  10.068  1.00 44.12
ATOM   1494  C   ALA A  99       0.712   1.220   9.237  1.00 24.22
ATOM   1495  O   ALA A  99      -0.217   2.009   9.388  1.00 73.24
ATOM   1496  N   LEU A 100       1.231   0.914   8.047  1.00 53.13
ATOM   1497  H   LEU A 100       1.954   0.252   7.990  1.00 51.05
ATOM   1498  CA  LEU A 100       0.795   1.528   6.800  1.00 55.35
ATOM   1499  HA  LEU A 100       1.019   2.582   6.838  1.00 54.41
ATOM   1500  CB  LEU A 100       1.560   0.907   5.635  1.00  3.24
ATOM   1501 1HB  LEU A 100       2.602   0.852   5.907  1.00 15.43
ATOM   1502 2HB  LEU A 100       1.197  -0.105   5.531  1.00 73.50
ATOM   1503  CG  LEU A 100       1.421   1.593   4.276  1.00 32.13
ATOM   1504  HG  LEU A 100       0.375   1.647   4.017  1.00 20.13
ATOM   1505  CD1 LEU A 100       1.965   3.008   4.338  1.00 10.54
ATOM   1506 1HD1 LEU A 100       1.891   3.471   3.366  1.00 62.14
ATOM   1507 2HD1 LEU A 100       2.998   2.977   4.655  1.00 55.44
ATOM   1508 3HD1 LEU A 100       1.391   3.577   5.053  1.00  4.13
ATOM   1509  CD2 LEU A 100       2.139   0.790   3.208  1.00  4.43
ATOM   1510 1HD2 LEU A 100       3.184   0.707   3.470  1.00 50.53
ATOM   1511 2HD2 LEU A 100       2.042   1.286   2.255  1.00 11.21
ATOM   1512 3HD2 LEU A 100       1.704  -0.195   3.153  1.00 70.33
ATOM   1513  C   LEU A 100      -0.695   1.320   6.589  1.00 40.25
ATOM   1514  O   LEU A 100      -1.431   2.269   6.343  1.00 60.34
ATOM   1515  N   ILE A 101      -1.123   0.081   6.737  1.00 22.44
ATOM   1516  H   ILE A 101      -0.457  -0.606   6.972  1.00 42.24
ATOM   1517  CA  ILE A 101      -2.523  -0.303   6.561  1.00 61.24
ATOM   1518  HA  ILE A 101      -2.812  -0.020   5.560  1.00 12.33
ATOM   1519  CB  ILE A 101      -2.711  -1.850   6.718  1.00 25.44
ATOM   1520  HB  ILE A 101      -2.228  -2.135   7.641  1.00 52.30
ATOM   1521  CG2 ILE A 101      -4.176  -2.250   6.842  1.00 72.54
ATOM   1522 1HG2 ILE A 101      -4.589  -1.771   7.717  1.00  0.21
ATOM   1523 2HG2 ILE A 101      -4.249  -3.324   6.948  1.00  2.34
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ATOM   1524 3HG2 ILE A 101      -4.714  -1.928   5.963  1.00 33.33
ATOM   1525  CG1 ILE A 101      -2.029  -2.617   5.566  1.00 24.13
ATOM   1526 1HG1 ILE A 101      -0.976  -2.370   5.558  1.00 60.23
ATOM   1527 2HG1 ILE A 101      -2.135  -3.676   5.746  1.00 60.23
ATOM   1528  CD1 ILE A 101      -2.574  -2.314   4.181  1.00 53.34
ATOM   1529 1HD1 ILE A 101      -2.417  -1.274   3.943  1.00  3.34
ATOM   1530 2HD1 ILE A 101      -3.633  -2.530   4.161  1.00 22.04
ATOM   1531 3HD1 ILE A 101      -2.069  -2.931   3.454  1.00 75.42
ATOM   1532  C   ILE A 101      -3.418   0.453   7.543  1.00 55.55
ATOM   1533  O   ILE A 101      -4.480   0.954   7.152  1.00 71.52
ATOM   1534  N   GLY A 102      -2.942   0.601   8.784  1.00 13.15
ATOM   1535  H   GLY A 102      -2.070   0.213   9.010  1.00 12.10
ATOM   1536  CA  GLY A 102      -3.687   1.320   9.809  1.00 75.02
ATOM   1537 1HA  GLY A 102      -4.628   0.822   9.974  1.00 44.14
ATOM   1538 2HA  GLY A 102      -3.118   1.319  10.725  1.00 12.44
ATOM   1539  C   GLY A 102      -3.970   2.749   9.409  1.00 72.24
ATOM   1540  O   GLY A 102      -5.067   3.283   9.646  1.00 61.43
ATOM   1541  N   ILE A 103      -2.997   3.347   8.779  1.00 30.51
ATOM   1542  H   ILE A 103      -2.170   2.839   8.631  1.00 21.15
ATOM   1543  CA  ILE A 103      -3.091   4.698   8.293  1.00 34.53
ATOM   1544  HA  ILE A 103      -3.447   5.327   9.095  1.00 60.13
ATOM   1545  CB  ILE A 103      -1.694   5.196   7.860  1.00 63.03
ATOM   1546  HB  ILE A 103      -1.308   4.517   7.114  1.00 14.43
ATOM   1547  CG2 ILE A 103      -1.770   6.600   7.243  1.00 60.13
ATOM   1548 1HG2 ILE A 103      -0.779   6.922   6.962  1.00 22.14
ATOM   1549 2HG2 ILE A 103      -2.187   7.293   7.958  1.00 51.14
ATOM   1550 3HG2 ILE A 103      -2.397   6.567   6.363  1.00  2.34
ATOM   1551  CG1 ILE A 103      -0.756   5.174   9.068  1.00 73.20
ATOM   1552 1HG1 ILE A 103      -1.016   5.985   9.733  1.00 32.21
ATOM   1553 2HG1 ILE A 103      -0.882   4.237   9.591  1.00  5.10
ATOM   1554  CD1 ILE A 103       0.694   5.321   8.718  1.00 45.41
ATOM   1555 1HD1 ILE A 103       0.956   4.488   8.083  1.00 21.22
ATOM   1556 2HD1 ILE A 103       1.276   5.285   9.626  1.00 20.45
ATOM   1557 3HD1 ILE A 103       0.856   6.251   8.194  1.00 13.03
ATOM   1558  C   ILE A 103      -4.058   4.768   7.121  1.00 11.32
ATOM   1559  O   ILE A 103      -4.928   5.633   7.084  1.00 54.34
ATOM   1560  N   ILE A 104      -3.931   3.825   6.198  1.00 62.32
ATOM   1561  H   ILE A 104      -3.264   3.116   6.340  1.00 33.14
ATOM   1562  CA  ILE A 104      -4.747   3.816   4.991  1.00 72.43
ATOM   1563  HA  ILE A 104      -4.580   4.740   4.459  1.00  4.14
ATOM   1564  CB  ILE A 104      -4.332   2.638   4.061  1.00 41.01
ATOM   1565  HB  ILE A 104      -4.460   1.714   4.606  1.00 61.43
ATOM   1566  CG2 ILE A 104      -5.226   2.582   2.818  1.00 70.55
ATOM   1567 1HG2 ILE A 104      -4.935   1.741   2.206  1.00 13.21
ATOM   1568 2HG2 ILE A 104      -5.106   3.494   2.253  1.00 73.44
ATOM   1569 3HG2 ILE A 104      -6.259   2.477   3.117  1.00 45.01
ATOM   1570  CG1 ILE A 104      -2.864   2.776   3.659  1.00 71.34
ATOM   1571 1HG1 ILE A 104      -2.766   3.645   3.028  1.00 21.15
ATOM   1572 2HG1 ILE A 104      -2.265   2.914   4.547  1.00 34.42
ATOM   1573  CD1 ILE A 104      -2.316   1.583   2.900  1.00 13.43
ATOM   1574 1HD1 ILE A 104      -2.387   0.704   3.522  1.00 51.03
ATOM   1575 2HD1 ILE A 104      -1.284   1.763   2.642  1.00 73.42
ATOM   1576 3HD1 ILE A 104      -2.893   1.434   1.999  1.00 45.22
ATOM   1577  C   ILE A 104      -6.229   3.675   5.327  1.00 35.15
ATOM   1578  O   ILE A 104      -7.043   4.506   4.915  1.00 14.02
ATOM   1579  N   GLU A 105      -6.562   2.680   6.132  1.00 43.03
ATOM   1580  H   GLU A 105      -5.855   2.091   6.487  1.00 11.42
ATOM   1581  CA  GLU A 105      -7.944   2.444   6.496  1.00 52.52
ATOM   1582  HA  GLU A 105      -8.502   2.469   5.570  1.00 31.13
ATOM   1583  CB  GLU A 105      -8.135   1.065   7.142  1.00 32.23
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ATOM   1584 1HB  GLU A 105      -9.182   0.934   7.369  1.00  0.24
ATOM   1585 2HB  GLU A 105      -7.837   0.308   6.432  1.00 75.03
ATOM   1586  CG  GLU A 105      -7.354   0.847   8.422  1.00 51.14
ATOM   1587 1HG  GLU A 105      -6.302   0.995   8.223  1.00 14.14
ATOM   1588 2HG  GLU A 105      -7.694   1.571   9.147  1.00  5.31
ATOM   1589  CD  GLU A 105      -7.556  -0.528   8.980  1.00 43.05
ATOM   1590  OE1 GLU A 105      -6.773  -1.424   8.670  1.00 33.00
ATOM   1591  OE2 GLU A 105      -8.534  -0.744   9.743  1.00 12.51
ATOM   1592  C   GLU A 105      -8.492   3.569   7.368  1.00 25.53
ATOM   1593  O   GLU A 105      -9.630   4.018   7.192  1.00 44.13
ATOM   1594  N   GLY A 106      -7.659   4.052   8.274  1.00  5.15
ATOM   1595  H   GLY A 106      -6.745   3.693   8.323  1.00  5.20
ATOM   1596  CA  GLY A 106      -8.063   5.082   9.184  1.00 53.31
ATOM   1597 1HA  GLY A 106      -9.004   4.778   9.623  1.00 65.40
ATOM   1598 2HA  GLY A 106      -7.346   5.187   9.978  1.00 10.44
ATOM   1599  C   GLY A 106      -8.273   6.409   8.509  1.00 63.31
ATOM   1600  O   GLY A 106      -9.184   7.131   8.867  1.00 34.12
ATOM   1601  N   ASN A 107      -7.460   6.711   7.502  1.00  2.05
ATOM   1602  H   ASN A 107      -6.744   6.081   7.253  1.00 12.13
ATOM   1603  CA  ASN A 107      -7.566   7.984   6.763  1.00  2.22
ATOM   1604  HA  ASN A 107      -7.518   8.789   7.480  1.00 14.12
ATOM   1605  CB  ASN A 107      -6.410   8.131   5.752  1.00  1.53
ATOM   1606 1HB  ASN A 107      -5.469   8.111   6.282  1.00 35.10
ATOM   1607 2HB  ASN A 107      -6.441   7.288   5.078  1.00 41.15
ATOM   1608  CG  ASN A 107      -6.472   9.416   4.921  1.00 12.14
ATOM   1609  OD1 ASN A 107      -5.987  10.462   5.337  1.00 14.22
ATOM   1610  ND2 ASN A 107      -7.019   9.335   3.724  1.00 41.33
ATOM   1611 2HD2 ASN A 107      -7.367   8.473   3.416  1.00 13.54
ATOM   1612 1HD2 ASN A 107      -7.038  10.146   3.171  1.00 21.00
ATOM   1613  C   ASN A 107      -8.895   8.049   6.049  1.00 52.03
ATOM   1614  O   ASN A 107      -9.550   9.092   6.012  1.00 41.44
ATOM   1615  N   ILE A 108      -9.314   6.912   5.532  1.00 53.23
ATOM   1616  H   ILE A 108      -8.729   6.126   5.594  1.00 10.43
ATOM   1617  CA  ILE A 108     -10.597   6.791   4.877  1.00 74.20
ATOM   1618  HA  ILE A 108     -10.650   7.530   4.091  1.00 63.01
ATOM   1619  CB  ILE A 108     -10.768   5.381   4.270  1.00 75.24
ATOM   1620  HB  ILE A 108     -10.693   4.657   5.066  1.00 25.34
ATOM   1621  CG2 ILE A 108     -12.141   5.235   3.609  1.00 75.52
ATOM   1622 1HG2 ILE A 108     -12.914   5.389   4.348  1.00 10.15
ATOM   1623 2HG2 ILE A 108     -12.236   4.244   3.190  1.00  3.31
ATOM   1624 3HG2 ILE A 108     -12.242   5.968   2.824  1.00 61.10
ATOM   1625  CG1 ILE A 108      -9.649   5.120   3.260  1.00 45.14
ATOM   1626 1HG1 ILE A 108      -9.789   5.766   2.406  1.00 75.54
ATOM   1627 2HG1 ILE A 108      -8.699   5.349   3.722  1.00 70.52
ATOM   1628  CD1 ILE A 108      -9.593   3.705   2.754  1.00 13.11
ATOM   1629 1HD1 ILE A 108     -10.513   3.466   2.242  1.00 21.22
ATOM   1630 2HD1 ILE A 108      -9.456   3.034   3.588  1.00  3.44
ATOM   1631 3HD1 ILE A 108      -8.762   3.605   2.073  1.00 42.31
ATOM   1632  C   ILE A 108     -11.702   7.056   5.893  1.00  4.55
ATOM   1633  O   ILE A 108     -12.646   7.785   5.621  1.00 52.11
ATOM   1634  N   ARG A 109     -11.543   6.490   7.076  1.00 10.13
ATOM   1635  H   ARG A 109     -10.771   5.902   7.221  1.00 53.00
ATOM   1636  CA  ARG A 109     -12.492   6.678   8.150  1.00 54.20
ATOM   1637  HA  ARG A 109     -13.463   6.439   7.742  1.00 31.32
ATOM   1638  CB  ARG A 109     -12.219   5.733   9.311  1.00 42.10
ATOM   1639 1HB  ARG A 109     -11.253   5.968   9.734  1.00 62.23
ATOM   1640 2HB  ARG A 109     -12.984   5.889  10.059  1.00 63.30
ATOM   1641  CG  ARG A 109     -12.248   4.290   8.872  1.00 52.33
ATOM   1642 1HG  ARG A 109     -13.062   4.123   8.193  1.00 52.24
ATOM   1643 2HG  ARG A 109     -11.340   4.131   8.306  1.00 13.04
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ATOM   1644  CD  ARG A 109     -12.259   3.305  10.022  1.00 25.25
ATOM   1645 1HD  ARG A 109     -12.968   3.646  10.761  1.00 44.13
ATOM   1646 2HD  ARG A 109     -12.572   2.341   9.650  1.00 23.10
ATOM   1647  NE  ARG A 109     -10.946   3.167  10.662  1.00 34.24
ATOM   1648  HE  ARG A 109     -10.675   3.936  11.208  1.00 34.53
ATOM   1649  CZ  ARG A 109     -10.177   2.060  10.556  1.00 72.13
ATOM   1650  NH1 ARG A 109     -10.535   1.062   9.744  1.00 44.43
ATOM   1651 1HH1 ARG A 109     -11.365   1.059   9.173  1.00 74.05
ATOM   1652 2HH1 ARG A 109      -9.940   0.246   9.667  1.00 51.40
ATOM   1653  NH2 ARG A 109      -9.033   1.964  11.227  1.00 73.14
ATOM   1654 1HH2 ARG A 109      -8.676   2.673  11.835  1.00 43.32
ATOM   1655 2HH2 ARG A 109      -8.481   1.131  11.120  1.00 23.44
ATOM   1656  C   ARG A 109     -12.545   8.121   8.620  1.00 32.31
ATOM   1657  O   ARG A 109     -13.593   8.598   8.972  1.00 54.10
ATOM   1658  N   TYR A 110     -11.419   8.808   8.619  1.00 62.43
ATOM   1659  H   TYR A 110     -10.583   8.357   8.367  1.00  4.34
ATOM   1660  CA  TYR A 110     -11.409  10.211   9.018  1.00 61.22
ATOM   1661  HA  TYR A 110     -11.984  10.285   9.927  1.00 10.44
ATOM   1662  CB  TYR A 110      -9.983  10.738   9.278  1.00 23.14
ATOM   1663 1HB  TYR A 110      -9.415  10.674   8.361  1.00 13.24
ATOM   1664 2HB  TYR A 110     -10.042  11.774   9.579  1.00 21.25
ATOM   1665  CG  TYR A 110      -9.213   9.981  10.345  1.00 23.15
ATOM   1666  CD1 TYR A 110      -7.873   9.659  10.161  1.00 53.25
ATOM   1667  HD1 TYR A 110      -7.377   9.975   9.255  1.00 44.01
ATOM   1668  CE1 TYR A 110      -7.172   8.945  11.111  1.00 22.32
ATOM   1669  HE1 TYR A 110      -6.131   8.705  10.948  1.00 53.25
ATOM   1670  CZ  TYR A 110      -7.804   8.545  12.267  1.00 15.21
ATOM   1671  CE2 TYR A 110      -9.131   8.853  12.480  1.00 41.22
ATOM   1672  HE2 TYR A 110      -9.624   8.539  13.387  1.00 43.45
ATOM   1673  CD2 TYR A 110      -9.828   9.563  11.522  1.00 31.44
ATOM   1674  HD2 TYR A 110     -10.868   9.803  11.689  1.00  2.10
ATOM   1675  OH  TYR A 110      -7.112   7.827  13.211  1.00 23.45
ATOM   1676  HH  TYR A 110      -6.258   8.240  13.364  1.00 70.51
ATOM   1677  C   TYR A 110     -12.103  11.067   7.965  1.00 32.21
ATOM   1678  O   TYR A 110     -12.836  11.979   8.296  1.00 14.13
ATOM   1679  N   ALA A 111     -11.840  10.772   6.699  1.00 72.43
ATOM   1680  H   ALA A 111     -11.200  10.054   6.493  1.00 34.40
ATOM   1681  CA  ALA A 111     -12.466  11.496   5.599  1.00 61.34
ATOM   1682  HA  ALA A 111     -12.315  12.550   5.775  1.00 12.13
ATOM   1683  CB  ALA A 111     -11.788  11.138   4.281  1.00 63.50
ATOM   1684 1HB  ALA A 111     -10.728  11.332   4.356  1.00 74.34
ATOM   1685 2HB  ALA A 111     -12.209  11.734   3.485  1.00 72.40
ATOM   1686 3HB  ALA A 111     -11.947  10.091   4.070  1.00 71.42
ATOM   1687  C   ALA A 111     -13.978  11.230   5.513  1.00 73.42
ATOM   1688  O   ALA A 111     -14.775  12.146   5.380  1.00 23.11
ATOM   1689  N   ASN A 112     -14.346   9.961   5.570  1.00  4.43
ATOM   1690  H   ASN A 112     -13.651   9.278   5.709  1.00 41.45
ATOM   1691  CA  ASN A 112     -15.742   9.533   5.424  1.00 10.04
ATOM   1692  HA  ASN A 112     -16.183  10.120   4.632  1.00 43.22
ATOM   1693  CB  ASN A 112     -15.792   8.049   5.009  1.00 75.31
ATOM   1694 1HB  ASN A 112     -15.202   7.915   4.116  1.00 51.32
ATOM   1695 2HB  ASN A 112     -15.364   7.454   5.802  1.00 21.52
ATOM   1696  CG  ASN A 112     -17.198   7.532   4.725  1.00 42.21
ATOM   1697  OD1 ASN A 112     -17.680   7.606   3.608  1.00 32.54
ATOM   1698  ND2 ASN A 112     -17.847   6.984   5.718  1.00  4.24
ATOM   1699 2HD2 ASN A 112     -17.425   6.921   6.600  1.00 12.52
ATOM   1700 1HD2 ASN A 112     -18.753   6.664   5.531  1.00 22.15
ATOM   1701  C   ASN A 112     -16.552   9.757   6.703  1.00 31.10
ATOM   1702  O   ASN A 112     -17.744  10.056   6.650  1.00 73.52
ATOM   1703  N   THR A 113     -15.893   9.602   7.837  1.00 54.44
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ATOM   1704  H   THR A 113     -14.932   9.414   7.807  1.00  1.22
ATOM   1705  CA  THR A 113     -16.466   9.698   9.196  1.00 24.24
ATOM   1706  HA  THR A 113     -15.604   9.425   9.791  1.00 14.50
ATOM   1707  CB  THR A 113     -16.894  11.129   9.654  1.00 13.23
ATOM   1708  HB  THR A 113     -17.491  11.028  10.549  1.00 72.42
ATOM   1709  OG1 THR A 113     -17.682  11.809   8.659  1.00 52.32
ATOM   1710  HG1 THR A 113     -17.756  11.240   7.882  1.00 22.41
ATOM   1711  CG2 THR A 113     -15.667  11.953   9.995  1.00 44.11
ATOM   1712 1HG2 THR A 113     -15.958  12.940  10.320  1.00 70.02
ATOM   1713 2HG2 THR A 113     -15.035  12.025   9.120  1.00 34.12
ATOM   1714 3HG2 THR A 113     -15.115  11.455  10.780  1.00 14.53
ATOM   1715  C   THR A 113     -17.469   8.601   9.587  1.00 22.52
ATOM   1716  O   THR A 113     -17.275   7.968  10.609  1.00 32.52
ATOM   1717  N   HIS A 114     -18.475   8.363   8.728  1.00 52.24
ATOM   1718  H   HIS A 114     -18.524   8.941   7.936  1.00  4.32
ATOM   1719  CA  HIS A 114     -19.543   7.346   8.920  1.00 44.04
ATOM   1720  HA  HIS A 114     -20.329   7.700   8.267  1.00 54.35
ATOM   1721  CB  HIS A 114     -19.147   5.895   8.447  1.00 74.53
ATOM   1722 1HB  HIS A 114     -19.962   5.225   8.681  1.00  5.30
ATOM   1723 2HB  HIS A 114     -19.023   5.911   7.373  1.00 32.33
ATOM   1724  CG  HIS A 114     -17.899   5.288   9.054  1.00 12.23
ATOM   1725  ND1 HIS A 114     -17.744   5.073  10.388  1.00 44.13
ATOM   1726  CD2 HIS A 114     -16.749   4.859   8.469  1.00 21.14
ATOM   1727  HD1 HIS A 114     -18.423   5.388  11.039  1.00 13.14
ATOM   1728  CE1 HIS A 114     -16.552   4.531  10.600  1.00 71.12
ATOM   1729  NE2 HIS A 114     -15.889   4.374   9.456  1.00 71.54
ATOM   1730  HD2 HIS A 114     -16.527   4.885   7.414  1.00 52.14
ATOM   1731  HE1 HIS A 114     -16.172   4.254  11.572  1.00 23.35
ATOM   1732  C   HIS A 114     -20.194   7.366  10.317  1.00 45.34
ATOM   1733  O   HIS A 114     -19.868   6.494  11.162  1.00  4.22
TER    1734      HIS A 114
ENDMDL
MODEL        8
ATOM      1  N   MET A   1     -10.791 -11.220  10.740  1.00 72.34
ATOM      2  CA  MET A   1     -11.046 -12.195   9.622  1.00 40.52
ATOM      3  HA  MET A   1     -10.151 -12.782   9.472  1.00 54.01
ATOM      4  CB  MET A   1     -12.244 -13.102   9.948  1.00 40.33
ATOM      5 1HB  MET A   1     -13.110 -12.482  10.122  1.00 14.10
ATOM      6 2HB  MET A   1     -12.434 -13.735   9.094  1.00 44.04
ATOM      7  CG  MET A   1     -12.044 -13.988  11.167  1.00 22.52
ATOM      8 1HG  MET A   1     -11.232 -14.673  10.968  1.00 54.20
ATOM      9 2HG  MET A   1     -11.783 -13.364  12.008  1.00 41.30
ATOM     10  SD  MET A   1     -13.507 -14.950  11.591  1.00 63.35
ATOM     11  CE  MET A   1     -13.710 -15.986  10.136  1.00 14.00
ATOM     12 1HE  MET A   1     -13.866 -15.367   9.266  1.00 31.00
ATOM     13 2HE  MET A   1     -14.566 -16.631  10.274  1.00 33.42
ATOM     14 3HE  MET A   1     -12.826 -16.589   9.996  1.00 21.50
ATOM     15  C   MET A   1     -11.325 -11.400   8.375  1.00 42.40
ATOM     16  O   MET A   1     -10.665 -11.548   7.368  1.00  3.43
ATOM     17  N   ASP A   2     -12.287 -10.538   8.541  1.00 50.42
ATOM     18  H   ASP A   2     -12.801 -10.561   9.378  1.00 63.34
ATOM     19  CA  ASP A   2     -12.749  -9.459   7.659  1.00 74.25
ATOM     20  HA  ASP A   2     -13.633  -9.769   7.122  1.00 10.51
ATOM     21  CB  ASP A   2     -13.190  -8.349   8.632  1.00  3.50
ATOM     22 1HB  ASP A   2     -13.163  -7.392   8.130  1.00  5.05
ATOM     23 2HB  ASP A   2     -14.188  -8.548   8.993  1.00 54.23
ATOM     24  CG  ASP A   2     -12.232  -8.315   9.846  1.00 41.13
ATOM     25  OD1 ASP A   2     -11.205  -7.643   9.773  1.00  3.22
ATOM     26  OD2 ASP A   2     -12.431  -9.137  10.804  1.00 64.42
ATOM     27  C   ASP A   2     -11.675  -8.913   6.683  1.00 42.45
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ATOM     28  O   ASP A   2     -11.815  -9.047   5.475  1.00 64.42
ATOM     29  N   LYS A   3     -10.635  -8.290   7.228  1.00 60.02
ATOM     30  H   LYS A   3     -10.653  -8.144   8.206  1.00 52.22
ATOM     31  CA  LYS A   3      -9.523  -7.712   6.466  1.00 14.15
ATOM     32  HA  LYS A   3      -9.921  -6.896   5.882  1.00 33.41
ATOM     33  CB  LYS A   3      -8.496  -7.120   7.418  1.00 75.23
ATOM     34 1HB  LYS A   3      -8.301  -7.833   8.204  1.00 30.31
ATOM     35 2HB  LYS A   3      -7.582  -6.943   6.870  1.00 14.42
ATOM     36  CG  LYS A   3      -8.935  -5.824   8.049  1.00 24.32
ATOM     37 1HG  LYS A   3      -8.956  -5.092   7.258  1.00 51.24
ATOM     38 2HG  LYS A   3      -9.930  -5.971   8.440  1.00 75.43
ATOM     39  CD  LYS A   3      -7.987  -5.364   9.173  1.00 35.34
ATOM     40 1HD  LYS A   3      -8.317  -4.399   9.528  1.00 64.00
ATOM     41 2HD  LYS A   3      -8.049  -6.076   9.983  1.00 64.41
ATOM     42  CE  LYS A   3      -6.526  -5.243   8.723  1.00  0.44
ATOM     43 1HE  LYS A   3      -5.932  -4.921   9.566  1.00 34.13
ATOM     44 2HE  LYS A   3      -6.181  -6.215   8.402  1.00 15.42
ATOM     45  NZ  LYS A   3      -6.337  -4.274   7.624  1.00 34.03
ATOM     46 1HZ  LYS A   3      -5.339  -4.234   7.347  1.00 32.34
ATOM     47 2HZ  LYS A   3      -6.596  -3.304   7.936  1.00 24.44
ATOM     48 3HZ  LYS A   3      -6.912  -4.509   6.794  1.00 20.34
ATOM     49  C   LYS A   3      -8.834  -8.680   5.521  1.00 61.42
ATOM     50  O   LYS A   3      -8.281  -8.260   4.511  1.00 64.32
ATOM     51  N   GLY A   4      -8.862  -9.953   5.833  1.00 32.00
ATOM     52  H   GLY A   4      -9.406 -10.251   6.594  1.00 61.44
ATOM     53  CA  GLY A   4      -8.177 -10.920   5.010  1.00 14.13
ATOM     54 1HA  GLY A   4      -8.346 -11.904   5.417  1.00 73.12
ATOM     55 2HA  GLY A   4      -8.602 -10.842   4.021  1.00 10.21
ATOM     56  C   GLY A   4      -6.691 -10.635   4.932  1.00  4.02
ATOM     57  O   GLY A   4      -6.094 -10.654   3.854  1.00 11.14
ATOM     58  N   THR A   5      -6.127 -10.309   6.061  1.00 25.14
ATOM     59  H   THR A   5      -6.658 -10.295   6.881  1.00 72.04
ATOM     60  CA  THR A   5      -4.748  -9.976   6.162  1.00 72.13
ATOM     61  HA  THR A   5      -4.450  -9.452   5.266  1.00 14.54
ATOM     62  CB  THR A   5      -4.530  -9.049   7.367  1.00  0.30
ATOM     63  HB  THR A   5      -4.783  -9.589   8.268  1.00  3.14
ATOM     64  OG1 THR A   5      -5.401  -7.907   7.241  1.00 10.54
ATOM     65  HG1 THR A   5      -5.278  -7.527   6.361  1.00 74.31
ATOM     66  CG2 THR A   5      -3.086  -8.579   7.444  1.00 32.30
ATOM     67 1HG2 THR A   5      -2.833  -8.040   6.543  1.00 75.14
ATOM     68 2HG2 THR A   5      -2.434  -9.433   7.546  1.00 32.42
ATOM     69 3HG2 THR A   5      -2.964  -7.929   8.298  1.00 42.44
ATOM     70  C   THR A   5      -3.916 -11.241   6.316  1.00 22.41
ATOM     71  O   THR A   5      -4.103 -12.006   7.261  1.00  4.12
ATOM     72  N   GLN A   6      -3.034 -11.459   5.378  1.00 64.32
ATOM     73  H   GLN A   6      -2.952 -10.808   4.644  1.00  4.40
ATOM     74  CA  GLN A   6      -2.159 -12.596   5.397  1.00 13.05
ATOM     75  HA  GLN A   6      -2.230 -13.085   6.357  1.00 63.33
ATOM     76  CB  GLN A   6      -2.540 -13.588   4.292  1.00 72.21
ATOM     77 1HB  GLN A   6      -2.441 -13.088   3.340  1.00 11.42
ATOM     78 2HB  GLN A   6      -1.846 -14.416   4.320  1.00 63.32
ATOM     79  CG  GLN A   6      -3.955 -14.145   4.387  1.00 31.40
ATOM     80 1HG  GLN A   6      -4.053 -14.688   5.316  1.00 74.21
ATOM     81 2HG  GLN A   6      -4.653 -13.321   4.382  1.00 71.20
ATOM     82  CD  GLN A   6      -4.303 -15.088   3.241  1.00 44.41
ATOM     83  OE1 GLN A   6      -5.083 -16.006   3.400  1.00 24.32
ATOM     84  NE2 GLN A   6      -3.733 -14.858   2.076  1.00 32.32
ATOM     85 2HE2 GLN A   6      -3.116 -14.103   1.990  1.00 15.40
ATOM     86 1HE2 GLN A   6      -3.969 -15.471   1.350  1.00 62.21
ATOM     87  C   GLN A   6      -0.749 -12.118   5.155  1.00 55.44
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ATOM     88  O   GLN A   6      -0.520 -11.240   4.317  1.00 60.21
ATOM     89  N   TYR A   7       0.173 -12.654   5.881  1.00  0.03
ATOM     90  H   TYR A   7      -0.063 -13.304   6.576  1.00 72.24
ATOM     91  CA  TYR A   7       1.557 -12.352   5.687  1.00 42.42
ATOM     92  HA  TYR A   7       1.609 -11.733   4.802  1.00 11.15
ATOM     93  CB  TYR A   7       2.161 -11.572   6.887  1.00 51.04
ATOM     94 1HB  TYR A   7       3.218 -11.433   6.713  1.00 70.24
ATOM     95 2HB  TYR A   7       1.693 -10.601   6.932  1.00 54.41
ATOM     96  CG  TYR A   7       2.013 -12.229   8.255  1.00 13.21
ATOM     97  CD1 TYR A   7       3.031 -13.009   8.791  1.00 34.42
ATOM     98  HD1 TYR A   7       3.937 -13.156   8.221  1.00 32.02
ATOM     99  CE1 TYR A   7       2.900 -13.598  10.036  1.00 54.23
ATOM    100  HE1 TYR A   7       3.702 -14.200  10.436  1.00 11.10
ATOM    101  CZ  TYR A   7       1.741 -13.409  10.761  1.00 64.41
ATOM    102  CE2 TYR A   7       0.718 -12.640  10.253  1.00 40.43
ATOM    103  HE2 TYR A   7      -0.189 -12.494  10.821  1.00 72.03
ATOM    104  CD2 TYR A   7       0.856 -12.054   9.008  1.00 20.24
ATOM    105  HD2 TYR A   7       0.055 -11.452   8.607  1.00 33.01
ATOM    106  OH  TYR A   7       1.609 -13.991  12.000  1.00  4.33
ATOM    107  HH  TYR A   7       2.424 -13.868  12.494  1.00 35.31
ATOM    108  C   TYR A   7       2.304 -13.630   5.379  1.00 21.12
ATOM    109  O   TYR A   7       2.202 -14.607   6.122  1.00 14.03
ATOM    110  N   LYS A   8       3.001 -13.655   4.284  1.00 61.32
ATOM    111  H   LYS A   8       3.051 -12.857   3.712  1.00 62.05
ATOM    112  CA  LYS A   8       3.729 -14.837   3.907  1.00 33.42
ATOM    113  HA  LYS A   8       3.902 -15.415   4.801  1.00 35.14
ATOM    114  CB  LYS A   8       2.911 -15.690   2.911  1.00 10.31
ATOM    115 1HB  LYS A   8       1.950 -15.901   3.353  1.00 74.23
ATOM    116 2HB  LYS A   8       2.755 -15.108   2.013  1.00  2.23
ATOM    117  CG  LYS A   8       3.552 -17.029   2.510  1.00  4.45
ATOM    118 1HG  LYS A   8       2.908 -17.529   1.801  1.00  3.14
ATOM    119 2HG  LYS A   8       4.508 -16.831   2.048  1.00 64.22
ATOM    120  CD  LYS A   8       3.762 -17.949   3.717  1.00 21.34
ATOM    121 1HD  LYS A   8       4.473 -17.488   4.386  1.00  4.21
ATOM    122 2HD  LYS A   8       2.819 -18.076   4.227  1.00 65.40
ATOM    123  CE  LYS A   8       4.305 -19.328   3.312  1.00 70.13
ATOM    124 1HE  LYS A   8       4.385 -19.941   4.197  1.00 43.40
ATOM    125 2HE  LYS A   8       3.602 -19.786   2.630  1.00 11.32
ATOM    126  NZ  LYS A   8       5.637 -19.267   2.663  1.00  4.42
ATOM    127 1HZ  LYS A   8       6.381 -18.848   3.271  1.00 64.11
ATOM    128 2HZ  LYS A   8       5.675 -18.569   1.882  1.00  0.51
ATOM    129 3HZ  LYS A   8       5.999 -20.173   2.315  1.00 51.40
ATOM    130  C   LYS A   8       5.051 -14.440   3.318  1.00 51.33
ATOM    131  O   LYS A   8       5.099 -13.688   2.361  1.00 61.54
ATOM    132  N   ASP A   9       6.112 -14.905   3.958  1.00 32.42
ATOM    133  H   ASP A   9       5.963 -15.439   4.765  1.00 61.21
ATOM    134  CA  ASP A   9       7.520 -14.702   3.539  1.00 71.04
ATOM    135  HA  ASP A   9       8.157 -15.099   4.315  1.00 20.53
ATOM    136  CB  ASP A   9       7.811 -15.453   2.219  1.00 51.22
ATOM    137 1HB  ASP A   9       7.297 -14.952   1.412  1.00 34.54
ATOM    138 2HB  ASP A   9       8.873 -15.431   2.029  1.00 63.15
ATOM    139  CG  ASP A   9       7.352 -16.891   2.246  1.00  3.41
ATOM    140  OD1 ASP A   9       6.617 -17.314   1.323  1.00 43.35
ATOM    141  OD2 ASP A   9       7.612 -17.619   3.244  1.00  1.00
ATOM    142  C   ASP A   9       7.825 -13.222   3.362  1.00 75.44
ATOM    143  O   ASP A   9       8.601 -12.832   2.515  1.00 44.52
ATOM    144  N   GLY A  10       7.248 -12.407   4.218  1.00 63.44
ATOM    145  H   GLY A  10       6.641 -12.793   4.879  1.00 15.12
ATOM    146  CA  GLY A  10       7.492 -10.990   4.161  1.00 53.34
ATOM    147 1HA  GLY A  10       7.465 -10.592   5.163  1.00 31.42
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ATOM    148 2HA  GLY A  10       8.478 -10.827   3.750  1.00 51.32
ATOM    149  C   GLY A  10       6.479 -10.239   3.311  1.00 42.34
ATOM    150  O   GLY A  10       6.362  -9.016   3.438  1.00 40.14
ATOM    151  N   TYR A  11       5.758 -10.953   2.454  1.00 62.30
ATOM    152  H   TYR A  11       5.881 -11.928   2.401  1.00 54.31
ATOM    153  CA  TYR A  11       4.755 -10.346   1.583  1.00 23.40
ATOM    154  HA  TYR A  11       5.141  -9.416   1.195  1.00 63.33
ATOM    155  CB  TYR A  11       4.414 -11.307   0.414  1.00 15.41
ATOM    156 1HB  TYR A  11       5.330 -11.738   0.040  1.00 72.11
ATOM    157 2HB  TYR A  11       3.791 -12.103   0.798  1.00  4.34
ATOM    158  CG  TYR A  11       3.687 -10.675  -0.774  1.00 33.11
ATOM    159  CD1 TYR A  11       4.367 -10.396  -1.955  1.00 40.14
ATOM    160  HD1 TYR A  11       5.419 -10.628  -2.025  1.00 12.44
ATOM    161  CE1 TYR A  11       3.723  -9.828  -3.038  1.00 64.21
ATOM    162  HE1 TYR A  11       4.270  -9.621  -3.945  1.00 41.42
ATOM    163  CZ  TYR A  11       2.383  -9.531  -2.951  1.00 15.22
ATOM    164  CE2 TYR A  11       1.687  -9.796  -1.795  1.00 34.22
ATOM    165  HE2 TYR A  11       0.635  -9.561  -1.730  1.00 11.44
ATOM    166  CD2 TYR A  11       2.338 -10.365  -0.718  1.00  4.02
ATOM    167  HD2 TYR A  11       1.796 -10.574   0.191  1.00 14.53
ATOM    168  OH  TYR A  11       1.735  -8.962  -4.019  1.00  5.13
ATOM    169  HH  TYR A  11       1.966  -9.427  -4.827  1.00 74.52
ATOM    170  C   TYR A  11       3.517 -10.063   2.425  1.00 73.01
ATOM    171  O   TYR A  11       3.164 -10.864   3.309  1.00 35.24
ATOM    172  N   TYR A  12       2.881  -8.946   2.181  1.00 54.44
ATOM    173  H   TYR A  12       3.157  -8.373   1.435  1.00 74.34
ATOM    174  CA  TYR A  12       1.739  -8.546   2.964  1.00  4.31
ATOM    175  HA  TYR A  12       1.567  -9.288   3.729  1.00 24.03
ATOM    176  CB  TYR A  12       2.026  -7.191   3.628  1.00 42.34
ATOM    177 1HB  TYR A  12       3.026  -7.204   4.034  1.00 24.22
ATOM    178 2HB  TYR A  12       1.970  -6.419   2.874  1.00 34.20
ATOM    179  CG  TYR A  12       1.081  -6.812   4.754  1.00 65.34
ATOM    180  CD1 TYR A  12      -0.109  -6.143   4.513  1.00 31.53
ATOM    181  HD1 TYR A  12      -0.378  -5.900   3.497  1.00 74.33
ATOM    182  CE1 TYR A  12      -0.945  -5.786   5.554  1.00 43.31
ATOM    183  HE1 TYR A  12      -1.873  -5.271   5.352  1.00 22.53
ATOM    184  CZ  TYR A  12      -0.600  -6.098   6.848  1.00 50.24
ATOM    185  CE2 TYR A  12       0.572  -6.765   7.110  1.00 41.34
ATOM    186  HE2 TYR A  12       0.845  -7.010   8.125  1.00  4.13
ATOM    187  CD2 TYR A  12       1.405  -7.113   6.068  1.00 74.52
ATOM    188  HD2 TYR A  12       2.327  -7.638   6.274  1.00 14.24
ATOM    189  OH  TYR A  12      -1.433  -5.730   7.887  1.00 23.03
ATOM    190  HH  TYR A  12      -0.901  -5.391   8.621  1.00 42.44
ATOM    191  C   TYR A  12       0.519  -8.455   2.056  1.00 54.21
ATOM    192  O   TYR A  12       0.528  -7.723   1.057  1.00 31.20
ATOM    193  N   ILE A  13      -0.495  -9.220   2.379  1.00 35.53
ATOM    194  H   ILE A  13      -0.437  -9.804   3.170  1.00 53.31
ATOM    195  CA  ILE A  13      -1.731  -9.248   1.624  1.00  3.14
ATOM    196  HA  ILE A  13      -1.655  -8.594   0.768  1.00  0.15
ATOM    197  CB  ILE A  13      -2.054 -10.698   1.144  1.00 62.23
ATOM    198  HB  ILE A  13      -2.244 -11.303   2.018  1.00 74.12
ATOM    199  CG2 ILE A  13      -3.317 -10.712   0.274  1.00 25.52
ATOM    200 1HG2 ILE A  13      -3.162 -10.085  -0.592  1.00 13.11
ATOM    201 2HG2 ILE A  13      -4.152 -10.338   0.846  1.00 63.24
ATOM    202 3HG2 ILE A  13      -3.522 -11.724  -0.044  1.00 41.12
ATOM    203  CG1 ILE A  13      -0.866 -11.290   0.375  1.00 12.43
ATOM    204 1HG1 ILE A  13      -0.703 -10.713  -0.522  1.00 61.13
ATOM    205 2HG1 ILE A  13       0.010 -11.224   1.003  1.00 44.12
ATOM    206  CD1 ILE A  13      -1.037 -12.737  -0.037  1.00 21.40
ATOM    207 1HD1 ILE A  13      -1.899 -12.830  -0.681  1.00 61.01
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ATOM    208 2HD1 ILE A  13      -1.172 -13.350   0.842  1.00 15.34
ATOM    209 3HD1 ILE A  13      -0.153 -13.060  -0.568  1.00 10.14
ATOM    210  C   ILE A  13      -2.848  -8.805   2.545  1.00 34.12
ATOM    211  O   ILE A  13      -2.928  -9.280   3.676  1.00  2.43
ATOM    212  N   THR A  14      -3.676  -7.894   2.106  1.00 74.33
ATOM    213  H   THR A  14      -3.528  -7.463   1.235  1.00 55.25
ATOM    214  CA  THR A  14      -4.803  -7.497   2.898  1.00 62.35
ATOM    215  HA  THR A  14      -5.213  -8.395   3.337  1.00 33.31
ATOM    216  CB  THR A  14      -4.407  -6.516   4.057  1.00 40.45
ATOM    217  HB  THR A  14      -3.618  -6.979   4.631  1.00 43.01
ATOM    218  OG1 THR A  14      -5.539  -6.271   4.941  1.00 32.20
ATOM    219  HG1 THR A  14      -6.334  -6.135   4.410  1.00  3.43
ATOM    220  CG2 THR A  14      -3.911  -5.187   3.505  1.00 64.55
ATOM    221 1HG2 THR A  14      -3.029  -5.353   2.902  1.00 35.51
ATOM    222 2HG2 THR A  14      -3.673  -4.521   4.320  1.00 74.04
ATOM    223 3HG2 THR A  14      -4.684  -4.745   2.894  1.00 61.23
ATOM    224  C   THR A  14      -5.874  -6.876   2.018  1.00 44.11
ATOM    225  O   THR A  14      -5.585  -6.270   0.981  1.00 74.21
ATOM    226  N   THR A  15      -7.081  -7.074   2.407  1.00 50.21
ATOM    227  H   THR A  15      -7.259  -7.653   3.179  1.00 24.12
ATOM    228  CA  THR A  15      -8.209  -6.492   1.776  1.00 11.43
ATOM    229  HA  THR A  15      -7.958  -6.178   0.775  1.00 12.01
ATOM    230  CB  THR A  15      -9.369  -7.511   1.725  1.00 43.54
ATOM    231  HB  THR A  15      -9.797  -7.602   2.713  1.00 52.32
ATOM    232  OG1 THR A  15      -8.855  -8.794   1.309  1.00 55.42
ATOM    233  HG1 THR A  15      -8.566  -9.213   2.132  1.00 53.32
ATOM    234  CG2 THR A  15     -10.448  -7.063   0.743  1.00 42.22
ATOM    235 1HG2 THR A  15     -11.246  -7.790   0.728  1.00 44.53
ATOM    236 2HG2 THR A  15     -10.021  -6.978  -0.245  1.00 52.34
ATOM    237 3HG2 THR A  15     -10.839  -6.104   1.050  1.00 22.30
ATOM    238  C   THR A  15      -8.644  -5.312   2.635  1.00 74.54
ATOM    239  O   THR A  15      -8.550  -5.368   3.868  1.00  4.13
ATOM    240  N   LEU A  16      -9.017  -4.251   2.012  1.00 15.14
ATOM    241  H   LEU A  16      -8.927  -4.170   1.034  1.00 72.52
ATOM    242  CA  LEU A  16      -9.577  -3.140   2.689  1.00 12.22
ATOM    243  HA  LEU A  16      -9.615  -3.358   3.745  1.00 70.33
ATOM    244  CB  LEU A  16      -8.748  -1.875   2.457  1.00 34.11
ATOM    245 1HB  LEU A  16      -8.653  -1.747   1.388  1.00 34.22
ATOM    246 2HB  LEU A  16      -9.301  -1.034   2.847  1.00 14.53
ATOM    247  CG  LEU A  16      -7.343  -1.875   3.062  1.00 65.22
ATOM    248  HG  LEU A  16      -6.764  -2.663   2.603  1.00 54.12
ATOM    249  CD1 LEU A  16      -6.640  -0.561   2.780  1.00 50.24
ATOM    250 1HD1 LEU A  16      -7.205   0.249   3.215  1.00 62.13
ATOM    251 2HD1 LEU A  16      -6.564  -0.413   1.713  1.00 33.02
ATOM    252 3HD1 LEU A  16      -5.650  -0.581   3.212  1.00 33.21
ATOM    253  CD2 LEU A  16      -7.407  -2.140   4.560  1.00  1.52
ATOM    254 1HD2 LEU A  16      -8.067  -1.420   5.020  1.00 75.54
ATOM    255 2HD2 LEU A  16      -6.421  -2.047   4.988  1.00 70.01
ATOM    256 3HD2 LEU A  16      -7.783  -3.136   4.737  1.00  4.30
ATOM    257  C   LEU A  16     -10.959  -2.957   2.173  1.00 25.00
ATOM    258  O   LEU A  16     -11.159  -2.779   0.974  1.00 32.22
ATOM    259  N   ASN A  17     -11.908  -2.998   3.048  1.00 31.11
ATOM    260  H   ASN A  17     -11.688  -3.108   3.994  1.00 73.11
ATOM    261  CA  ASN A  17     -13.291  -2.878   2.649  1.00  4.23
ATOM    262  HA  ASN A  17     -13.355  -3.258   1.641  1.00 43.24
ATOM    263  CB  ASN A  17     -14.223  -3.707   3.553  1.00 51.40
ATOM    264 1HB  ASN A  17     -14.053  -3.407   4.576  1.00  4.45
ATOM    265 2HB  ASN A  17     -15.250  -3.511   3.285  1.00 50.42
ATOM    266  CG  ASN A  17     -13.962  -5.207   3.451  1.00 71.13
ATOM    267  OD1 ASN A  17     -13.544  -5.711   2.412  1.00 35.35
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ATOM    268  ND2 ASN A  17     -14.198  -5.930   4.526  1.00 72.25
ATOM    269 2HD2 ASN A  17     -14.529  -5.491   5.335  1.00 72.50
ATOM    270 1HD2 ASN A  17     -14.022  -6.892   4.460  1.00 64.15
ATOM    271  C   ASN A  17     -13.689  -1.428   2.611  1.00 60.23
ATOM    272  O   ASN A  17     -14.445  -0.946   3.448  1.00 11.14
ATOM    273  N   TYR A  18     -13.056  -0.721   1.700  1.00 53.11
ATOM    274  H   TYR A  18     -12.392  -1.175   1.135  1.00 24.51
ATOM    275  CA  TYR A  18     -13.285   0.675   1.455  1.00 24.14
ATOM    276  HA  TYR A  18     -14.285   0.918   1.783  1.00 53.43
ATOM    277  CB  TYR A  18     -12.260   1.556   2.204  1.00 65.40
ATOM    278 1HB  TYR A  18     -11.265   1.289   1.879  1.00 43.03
ATOM    279 2HB  TYR A  18     -12.444   2.588   1.946  1.00 35.33
ATOM    280  CG  TYR A  18     -12.294   1.436   3.727  1.00 23.42
ATOM    281  CD1 TYR A  18     -13.253   2.107   4.477  1.00 35.23
ATOM    282  HD1 TYR A  18     -13.980   2.722   3.968  1.00 74.04
ATOM    283  CE1 TYR A  18     -13.289   1.997   5.856  1.00 15.05
ATOM    284  HE1 TYR A  18     -14.043   2.526   6.420  1.00 62.11
ATOM    285  CZ  TYR A  18     -12.361   1.209   6.504  1.00 51.23
ATOM    286  CE2 TYR A  18     -11.399   0.535   5.785  1.00 50.23
ATOM    287  HE2 TYR A  18     -10.671  -0.082   6.290  1.00 20.04
ATOM    288  CD2 TYR A  18     -11.368   0.651   4.406  1.00 31.14
ATOM    289  HD2 TYR A  18     -10.615   0.124   3.841  1.00 42.11
ATOM    290  OH  TYR A  18     -12.400   1.092   7.888  1.00 52.42
ATOM    291  HH  TYR A  18     -13.322   0.932   8.118  1.00 53.00
ATOM    292  C   TYR A  18     -13.177   0.902  -0.044  1.00 21.32
ATOM    293  O   TYR A  18     -12.507   0.113  -0.742  1.00 14.42
ATOM    294  N   ASN A  19     -13.774   1.979  -0.521  1.00 54.20
ATOM    295  H   ASN A  19     -14.168   2.606   0.118  1.00 51.40
ATOM    296  CA  ASN A  19     -13.863   2.268  -1.959  1.00 24.41
ATOM    297  HA  ASN A  19     -14.257   1.383  -2.437  1.00 64.32
ATOM    298  CB  ASN A  19     -14.823   3.441  -2.232  1.00  4.22
ATOM    299 1HB  ASN A  19     -15.806   3.185  -1.864  1.00 50.04
ATOM    300 2HB  ASN A  19     -14.466   4.316  -1.709  1.00 44.02
ATOM    301  CG  ASN A  19     -14.940   3.782  -3.720  1.00 12.14
ATOM    302  OD1 ASN A  19     -14.162   4.576  -4.250  1.00 63.34
ATOM    303  ND2 ASN A  19     -15.912   3.203  -4.396  1.00 14.34
ATOM    304 2HD2 ASN A  19     -16.532   2.579  -3.954  1.00 72.41
ATOM    305 1HD2 ASN A  19     -16.003   3.423  -5.345  1.00 40.40
ATOM    306  C   ASN A  19     -12.493   2.557  -2.554  1.00 33.32
ATOM    307  O   ASN A  19     -11.695   3.292  -1.972  1.00 33.54
ATOM    308  N   PHE A  20     -12.249   1.981  -3.720  1.00 12.34
ATOM    309  H   PHE A  20     -12.958   1.458  -4.149  1.00 14.11
ATOM    310  CA  PHE A  20     -10.965   2.032  -4.411  1.00 42.22
ATOM    311  HA  PHE A  20     -10.278   1.413  -3.855  1.00 61.13
ATOM    312  CB  PHE A  20     -11.119   1.406  -5.800  1.00 14.33
ATOM    313 1HB  PHE A  20     -10.176   1.140  -6.250  1.00 62.42
ATOM    314 2HB  PHE A  20     -11.666   0.508  -5.573  1.00 71.02
ATOM    315  CG  PHE A  20     -11.983   2.168  -6.801  1.00 64.34
ATOM    316  CD1 PHE A  20     -13.369   2.113  -6.736  1.00 70.43
ATOM    317  HD1 PHE A  20     -13.840   1.532  -5.957  1.00 23.14
ATOM    318  CE1 PHE A  20     -14.148   2.792  -7.652  1.00 14.14
ATOM    319  HE1 PHE A  20     -15.225   2.741  -7.590  1.00 23.45
ATOM    320  CZ  PHE A  20     -13.549   3.541  -8.645  1.00 72.34
ATOM    321  HZ  PHE A  20     -14.156   4.074  -9.363  1.00 62.20
ATOM    322  CE2 PHE A  20     -12.173   3.604  -8.725  1.00 24.32
ATOM    323  HE2 PHE A  20     -11.701   4.186  -9.500  1.00 40.45
ATOM    324  CD2 PHE A  20     -11.398   2.920  -7.809  1.00 12.15
ATOM    325  HD2 PHE A  20     -10.322   2.970  -7.870  1.00 21.34
ATOM    326  C   PHE A  20     -10.368   3.429  -4.506  1.00 72.32
ATOM    327  O   PHE A  20      -9.210   3.623  -4.181  1.00 42.11
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ATOM    328  N   ASN A  21     -11.177   4.384  -4.896  1.00 63.15
ATOM    329  H   ASN A  21     -12.104   4.099  -5.051  1.00 12.41
ATOM    330  CA  ASN A  21     -10.710   5.769  -5.104  1.00 64.34
ATOM    331  HA  ASN A  21      -9.928   5.729  -5.851  1.00 13.12
ATOM    332  CB  ASN A  21     -11.840   6.676  -5.621  1.00 20.43
ATOM    333 1HB  ASN A  21     -12.231   6.264  -6.540  1.00 10.35
ATOM    334 2HB  ASN A  21     -12.628   6.707  -4.883  1.00 40.14
ATOM    335  CG  ASN A  21     -11.372   8.109  -5.894  1.00  2.02
ATOM    336  OD1 ASN A  21     -10.230   8.347  -6.264  1.00 51.55
ATOM    337  ND2 ASN A  21     -12.249   9.065  -5.709  1.00 32.25
ATOM    338 2HD2 ASN A  21     -13.152   8.832  -5.409  1.00 72.15
ATOM    339 1HD2 ASN A  21     -11.945   9.980  -5.878  1.00 10.55
ATOM    340  C   ASN A  21     -10.112   6.359  -3.829  1.00 20.33
ATOM    341  O   ASN A  21      -8.983   6.856  -3.831  1.00  2.01
ATOM    342  N   THR A  22     -10.830   6.232  -2.731  1.00 22.31
ATOM    343  H   THR A  22     -11.675   5.737  -2.766  1.00 51.53
ATOM    344  CA  THR A  22     -10.367   6.779  -1.481  1.00 53.40
ATOM    345  HA  THR A  22     -10.012   7.768  -1.741  1.00 64.03
ATOM    346  CB  THR A  22     -11.496   6.924  -0.400  1.00 31.11
ATOM    347  HB  THR A  22     -12.238   7.601  -0.799  1.00 70.42
ATOM    348  OG1 THR A  22     -10.988   7.504   0.805  1.00 62.22
ATOM    349  HG1 THR A  22     -10.036   7.636   0.744  1.00 13.35
ATOM    350  CG2 THR A  22     -12.164   5.603  -0.078  1.00 14.12
ATOM    351 1HG2 THR A  22     -11.428   4.916   0.312  1.00 11.34
ATOM    352 2HG2 THR A  22     -12.590   5.192  -0.980  1.00 62.45
ATOM    353 3HG2 THR A  22     -12.942   5.757   0.655  1.00 33.31
ATOM    354  C   THR A  22      -9.127   6.026  -0.977  1.00 41.40
ATOM    355  O   THR A  22      -8.220   6.639  -0.410  1.00  5.03
ATOM    356  N   VAL A  23      -9.085   4.708  -1.207  1.00 44.42
ATOM    357  H   VAL A  23      -9.848   4.266  -1.637  1.00 75.32
ATOM    358  CA  VAL A  23      -7.922   3.902  -0.842  1.00  3.03
ATOM    359  HA  VAL A  23      -7.718   4.067   0.205  1.00  5.43
ATOM    360  CB  VAL A  23      -8.159   2.383  -1.083  1.00 64.41
ATOM    361  HB  VAL A  23      -8.366   2.233  -2.132  1.00 41.22
ATOM    362  CG1 VAL A  23      -6.924   1.572  -0.717  1.00 24.20
ATOM    363 1HG1 VAL A  23      -6.091   1.884  -1.331  1.00 52.41
ATOM    364 2HG1 VAL A  23      -7.121   0.524  -0.880  1.00 12.31
ATOM    365 3HG1 VAL A  23      -6.683   1.735   0.323  1.00 73.51
ATOM    366  CG2 VAL A  23      -9.350   1.893  -0.284  1.00 43.11
ATOM    367 1HG2 VAL A  23     -10.230   2.446  -0.577  1.00 11.22
ATOM    368 2HG2 VAL A  23      -9.164   2.043   0.770  1.00 44.44
ATOM    369 3HG2 VAL A  23      -9.509   0.843  -0.472  1.00 63.32
ATOM    370  C   VAL A  23      -6.692   4.367  -1.625  1.00 23.13
ATOM    371  O   VAL A  23      -5.610   4.538  -1.048  1.00 42.12
ATOM    372  N   TYR A  24      -6.875   4.606  -2.928  1.00 45.35
ATOM    373  H   TYR A  24      -7.748   4.444  -3.346  1.00 70.23
ATOM    374  CA  TYR A  24      -5.804   5.084  -3.785  1.00 70.51
ATOM    375  HA  TYR A  24      -5.012   4.352  -3.776  1.00 42.15
ATOM    376  CB  TYR A  24      -6.289   5.282  -5.235  1.00 73.45
ATOM    377 1HB  TYR A  24      -7.121   5.969  -5.228  1.00 35.22
ATOM    378 2HB  TYR A  24      -5.482   5.728  -5.793  1.00 13.32
ATOM    379  CG  TYR A  24      -6.750   4.031  -5.986  1.00 71.44
ATOM    380  CD1 TYR A  24      -6.479   2.747  -5.521  1.00 44.34
ATOM    381  HD1 TYR A  24      -5.930   2.626  -4.598  1.00 71.12
ATOM    382  CE1 TYR A  24      -6.900   1.630  -6.212  1.00 42.02
ATOM    383  HE1 TYR A  24      -6.678   0.644  -5.834  1.00 20.11
ATOM    384  CZ  TYR A  24      -7.596   1.778  -7.384  1.00 30.11
ATOM    385  CE2 TYR A  24      -7.880   3.033  -7.873  1.00 63.11
ATOM    386  HE2 TYR A  24      -8.426   3.146  -8.797  1.00 51.32
ATOM    387  CD2 TYR A  24      -7.458   4.148  -7.176  1.00 44.33
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ATOM    388  HD2 TYR A  24      -7.678   5.134  -7.559  1.00 13.45
ATOM    389  OH  TYR A  24      -8.024   0.663  -8.064  1.00 25.42
ATOM    390  HH  TYR A  24      -8.319   0.020  -7.416  1.00 23.41
ATOM    391  C   TYR A  24      -5.261   6.403  -3.256  1.00 22.03
ATOM    392  O   TYR A  24      -4.048   6.608  -3.192  1.00  4.45
ATOM    393  N   ASN A  25      -6.171   7.277  -2.842  1.00 23.23
ATOM    394  H   ASN A  25      -7.122   7.033  -2.870  1.00 33.32
ATOM    395  CA  ASN A  25      -5.804   8.580  -2.322  1.00 72.32
ATOM    396  HA  ASN A  25      -5.171   9.055  -3.056  1.00 24.03
ATOM    397  CB  ASN A  25      -7.039   9.474  -2.101  1.00 31.34
ATOM    398 1HB  ASN A  25      -7.796   8.885  -1.604  1.00 55.14
ATOM    399 2HB  ASN A  25      -6.753  10.279  -1.445  1.00 75.33
ATOM    400  CG  ASN A  25      -7.676  10.066  -3.365  1.00 61.44
ATOM    401  OD1 ASN A  25      -8.214  11.159  -3.327  1.00 51.42
ATOM    402  ND2 ASN A  25      -7.649   9.356  -4.465  1.00 72.33
ATOM    403 2HD2 ASN A  25      -7.230   8.471  -4.464  1.00 43.22
ATOM    404 1HD2 ASN A  25      -8.084   9.735  -5.258  1.00 63.23
ATOM    405  C   ASN A  25      -5.031   8.463  -1.017  1.00 13.21
ATOM    406  O   ASN A  25      -3.950   9.027  -0.888  1.00 64.15
ATOM    407  N   ALA A  26      -5.566   7.689  -0.081  1.00 20.15
ATOM    408  H   ALA A  26      -6.388   7.190  -0.284  1.00 74.14
ATOM    409  CA  ALA A  26      -4.983   7.551   1.260  1.00 43.03
ATOM    410  HA  ALA A  26      -4.902   8.544   1.676  1.00 14.03
ATOM    411  CB  ALA A  26      -5.905   6.738   2.154  1.00 12.24
ATOM    412 1HB  ALA A  26      -6.005   5.740   1.756  1.00  1.24
ATOM    413 2HB  ALA A  26      -6.877   7.208   2.192  1.00 13.41
ATOM    414 3HB  ALA A  26      -5.490   6.690   3.150  1.00 10.13
ATOM    415  C   ALA A  26      -3.583   6.937   1.221  1.00 13.43
ATOM    416  O   ALA A  26      -2.665   7.436   1.880  1.00 60.45
ATOM    417  N   THR A  27      -3.424   5.892   0.430  1.00  3.32
ATOM    418  H   THR A  27      -4.202   5.531  -0.044  1.00 52.35
ATOM    419  CA  THR A  27      -2.145   5.213   0.272  1.00 50.05
ATOM    420  HA  THR A  27      -1.815   4.844   1.231  1.00 34.01
ATOM    421  CB  THR A  27      -2.304   4.020  -0.692  1.00 55.40
ATOM    422  HB  THR A  27      -2.543   4.401  -1.675  1.00  3.13
ATOM    423  OG1 THR A  27      -3.383   3.190  -0.242  1.00 21.12
ATOM    424  HG1 THR A  27      -4.167   3.412  -0.760  1.00 33.53
ATOM    425  CG2 THR A  27      -1.022   3.192  -0.769  1.00 34.41
ATOM    426 1HG2 THR A  27      -0.216   3.819  -1.119  1.00 44.42
ATOM    427 2HG2 THR A  27      -1.165   2.371  -1.456  1.00 31.41
ATOM    428 3HG2 THR A  27      -0.781   2.806   0.209  1.00 70.12
ATOM    429  C   THR A  27      -1.097   6.176  -0.291  1.00 72.32
ATOM    430  O   THR A  27       0.031   6.263   0.220  1.00 71.21
ATOM    431  N   LEU A  28      -1.497   6.929  -1.306  1.00 61.14
ATOM    432  H   LEU A  28      -2.419   6.837  -1.630  1.00 11.53
ATOM    433  CA  LEU A  28      -0.631   7.889  -1.941  1.00 75.42
ATOM    434  HA  LEU A  28       0.251   7.366  -2.281  1.00 12.13
ATOM    435  CB  LEU A  28      -1.343   8.508  -3.151  1.00  2.12
ATOM    436 1HB  LEU A  28      -1.538   7.706  -3.847  1.00 75.31
ATOM    437 2HB  LEU A  28      -2.295   8.894  -2.824  1.00 44.11
ATOM    438  CG  LEU A  28      -0.594   9.605  -3.911  1.00  3.31
ATOM    439  HG  LEU A  28      -0.286  10.355  -3.196  1.00 20.22
ATOM    440  CD1 LEU A  28       0.653   9.052  -4.582  1.00 63.11
ATOM    441 1HD1 LEU A  28       1.161   9.846  -5.111  1.00 53.31
ATOM    442 2HD1 LEU A  28       0.374   8.278  -5.282  1.00 25.35
ATOM    443 3HD1 LEU A  28       1.314   8.640  -3.834  1.00  2.41
ATOM    444  CD2 LEU A  28      -1.507  10.267  -4.930  1.00 43.22
ATOM    445 1HD2 LEU A  28      -0.959  11.034  -5.456  1.00 72.11
ATOM    446 2HD2 LEU A  28      -2.350  10.712  -4.423  1.00 70.04
ATOM    447 3HD2 LEU A  28      -1.857   9.527  -5.634  1.00 42.43
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ATOM    448  C   LEU A  28      -0.215   8.962  -0.935  1.00 61.42
ATOM    449  O   LEU A  28       0.964   9.237  -0.773  1.00 44.31
ATOM    450  N   GLN A  29      -1.191   9.518  -0.235  1.00  4.41
ATOM    451  H   GLN A  29      -2.114   9.227  -0.410  1.00 65.21
ATOM    452  CA  GLN A  29      -0.948  10.552   0.775  1.00 21.04
ATOM    453  HA  GLN A  29      -0.529  11.408   0.267  1.00 24.32
ATOM    454  CB  GLN A  29      -2.252  10.984   1.451  1.00 71.10
ATOM    455 1HB  GLN A  29      -2.729  10.108   1.866  1.00 51.10
ATOM    456 2HB  GLN A  29      -2.012  11.662   2.257  1.00  2.30
ATOM    457  CG  GLN A  29      -3.244  11.670   0.531  1.00 75.42
ATOM    458 1HG  GLN A  29      -2.800  12.573   0.145  1.00 53.31
ATOM    459 2HG  GLN A  29      -3.466  11.003  -0.291  1.00  5.31
ATOM    460  CD  GLN A  29      -4.546  12.015   1.236  1.00 64.31
ATOM    461  OE1 GLN A  29      -4.575  12.267   2.435  1.00  4.13
ATOM    462  NE2 GLN A  29      -5.629  12.022   0.500  1.00 34.33
ATOM    463 2HE2 GLN A  29      -5.549  11.810  -0.451  1.00 53.20
ATOM    464 1HE2 GLN A  29      -6.472  12.240   0.951  1.00  4.24
ATOM    465  C   GLN A  29       0.044  10.091   1.840  1.00 24.04
ATOM    466  O   GLN A  29       1.008  10.797   2.132  1.00 22.44
ATOM    467  N   ALA A  30      -0.160   8.889   2.366  1.00 14.13
ATOM    468  H   ALA A  30      -0.902   8.341   2.021  1.00 12.04
ATOM    469  CA  ALA A  30       0.662   8.374   3.456  1.00 72.22
ATOM    470  HA  ALA A  30       0.524   9.031   4.299  1.00  3.34
ATOM    471  CB  ALA A  30       0.178   6.984   3.869  1.00  0.03
ATOM    472 1HB  ALA A  30      -0.870   7.020   4.128  1.00 74.34
ATOM    473 2HB  ALA A  30       0.744   6.633   4.720  1.00  0.31
ATOM    474 3HB  ALA A  30       0.316   6.294   3.049  1.00 63.31
ATOM    475  C   ALA A  30       2.153   8.321   3.099  1.00 14.25
ATOM    476  O   ALA A  30       2.994   8.842   3.843  1.00 52.32
ATOM    477  N   ILE A  31       2.475   7.771   1.947  1.00 22.43
ATOM    478  H   ILE A  31       1.768   7.469   1.337  1.00 42.42
ATOM    479  CA  ILE A  31       3.873   7.625   1.585  1.00 11.24
ATOM    480  HA  ILE A  31       4.407   7.504   2.518  1.00 22.33
ATOM    481  CB  ILE A  31       4.117   6.336   0.720  1.00  2.44
ATOM    482  HB  ILE A  31       3.870   5.488   1.343  1.00 63.35
ATOM    483  CG2 ILE A  31       3.198   6.271  -0.502  1.00 51.12
ATOM    484 1HG2 ILE A  31       2.168   6.244  -0.183  1.00 53.31
ATOM    485 2HG2 ILE A  31       3.429   5.379  -1.067  1.00 62.14
ATOM    486 3HG2 ILE A  31       3.367   7.141  -1.118  1.00 45.21
ATOM    487  CG1 ILE A  31       5.592   6.223   0.313  1.00 13.41
ATOM    488 1HG1 ILE A  31       5.882   7.118  -0.216  1.00 62.03
ATOM    489 2HG1 ILE A  31       6.190   6.136   1.209  1.00 15.32
ATOM    490  CD1 ILE A  31       5.913   5.041  -0.577  1.00 13.23
ATOM    491 1HD1 ILE A  31       5.333   5.123  -1.485  1.00 43.44
ATOM    492 2HD1 ILE A  31       5.670   4.120  -0.069  1.00 60.12
ATOM    493 3HD1 ILE A  31       6.965   5.056  -0.828  1.00 74.52
ATOM    494  C   ILE A  31       4.438   8.882   0.881  1.00  3.13
ATOM    495  O   ILE A  31       5.480   9.404   1.265  1.00 34.10
ATOM    496  N   GLN A  32       3.685   9.407  -0.066  1.00 31.33
ATOM    497  H   GLN A  32       2.777   9.057  -0.207  1.00 52.43
ATOM    498  CA  GLN A  32       4.140  10.491  -0.929  1.00 63.24
ATOM    499  HA  GLN A  32       5.141  10.253  -1.256  1.00 11.33
ATOM    500  CB  GLN A  32       3.246  10.555  -2.170  1.00 63.41
ATOM    501 1HB  GLN A  32       3.269   9.590  -2.655  1.00  3.13
ATOM    502 2HB  GLN A  32       2.234  10.744  -1.842  1.00  1.12
ATOM    503  CG  GLN A  32       3.615  11.598  -3.202  1.00 12.14
ATOM    504 1HG  GLN A  32       2.860  11.575  -3.973  1.00 21.43
ATOM    505 2HG  GLN A  32       3.611  12.560  -2.709  1.00 33.23
ATOM    506  CD  GLN A  32       4.971  11.362  -3.834  1.00 64.11
ATOM    507  OE1 GLN A  32       5.072  10.671  -4.830  1.00 54.24
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ATOM    508  NE2 GLN A  32       5.998  11.938  -3.267  1.00 21.51
ATOM    509 2HE2 GLN A  32       5.871  12.488  -2.465  1.00 65.14
ATOM    510 1HE2 GLN A  32       6.899  11.823  -3.671  1.00 64.21
ATOM    511  C   GLN A  32       4.167  11.841  -0.219  1.00 20.03
ATOM    512  O   GLN A  32       4.970  12.704  -0.545  1.00 63.13
ATOM    513  N   ASN A  33       3.287  12.033   0.744  1.00 74.03
ATOM    514  H   ASN A  33       2.696  11.300   1.029  1.00 22.44
ATOM    515  CA  ASN A  33       3.206  13.333   1.421  1.00  4.13
ATOM    516  HA  ASN A  33       3.598  14.062   0.726  1.00 30.50
ATOM    517  CB  ASN A  33       1.756  13.732   1.775  1.00 73.04
ATOM    518 1HB  ASN A  33       1.288  12.898   2.277  1.00 63.23
ATOM    519 2HB  ASN A  33       1.785  14.572   2.453  1.00 24.01
ATOM    520  CG  ASN A  33       0.871  14.103   0.576  1.00  2.15
ATOM    521  OD1 ASN A  33      -0.032  14.906   0.699  1.00 45.40
ATOM    522  ND2 ASN A  33       1.118  13.525  -0.575  1.00 70.12
ATOM    523 2HD2 ASN A  33       1.856  12.882  -0.624  1.00 73.33
ATOM    524 1HD2 ASN A  33       0.545  13.779  -1.327  1.00 15.03
ATOM    525  C   ASN A  33       4.074  13.375   2.654  1.00 73.01
ATOM    526  O   ASN A  33       4.069  14.365   3.377  1.00 61.13
ATOM    527  N   GLY A  34       4.813  12.297   2.897  1.00  5.42
ATOM    528  H   GLY A  34       4.765  11.523   2.298  1.00 24.31
ATOM    529  CA  GLY A  34       5.712  12.259   4.031  1.00 54.01
ATOM    530 1HA  GLY A  34       6.360  11.401   3.934  1.00 22.20
ATOM    531 2HA  GLY A  34       6.313  13.155   4.033  1.00 42.13
ATOM    532  C   GLY A  34       4.974  12.166   5.340  1.00 12.12
ATOM    533  O   GLY A  34       5.420  12.687   6.351  1.00 51.33
ATOM    534  N   GLN A  35       3.854  11.467   5.324  1.00 72.33
ATOM    535  H   GLN A  35       3.574  11.018   4.499  1.00 70.24
ATOM    536  CA  GLN A  35       3.038  11.300   6.522  1.00 41.44
ATOM    537  HA  GLN A  35       3.197  12.144   7.175  1.00 44.41
ATOM    538  CB  GLN A  35       1.560  11.202   6.137  1.00 41.12
ATOM    539 1HB  GLN A  35       1.422  10.319   5.534  1.00 30.41
ATOM    540 2HB  GLN A  35       0.972  11.108   7.037  1.00 15.13
ATOM    541  CG  GLN A  35       1.051  12.406   5.355  1.00 64.42
ATOM    542 1HG  GLN A  35       1.666  12.522   4.476  1.00 63.13
ATOM    543 2HG  GLN A  35       0.030  12.222   5.056  1.00 63.53
ATOM    544  CD  GLN A  35       1.110  13.698   6.153  1.00 34.55
ATOM    545  OE1 GLN A  35       0.964  13.703   7.365  1.00 23.05
ATOM    546  NE2 GLN A  35       1.351  14.791   5.482  1.00 75.11
ATOM    547 2HE2 GLN A  35       1.485  14.735   4.514  1.00 72.20
ATOM    548 1HE2 GLN A  35       1.397  15.623   5.996  1.00 40.23
ATOM    549  C   GLN A  35       3.485  10.029   7.199  1.00 33.25
ATOM    550  O   GLN A  35       3.023   9.649   8.271  1.00 33.24
ATOM    551  N   THR A  36       4.348   9.353   6.517  1.00 11.23
ATOM    552  H   THR A  36       4.619   9.653   5.629  1.00 64.45
ATOM    553  CA  THR A  36       4.920   8.177   6.935  1.00 14.14
ATOM    554  HA  THR A  36       4.896   8.125   8.013  1.00 32.25
ATOM    555  CB  THR A  36       4.072   7.031   6.375  1.00 35.03
ATOM    556  HB  THR A  36       3.783   7.267   5.362  1.00  2.13
ATOM    557  OG1 THR A  36       2.855   6.979   7.080  1.00 32.34
ATOM    558  HG1 THR A  36       2.747   7.822   7.539  1.00 44.44
ATOM    559  CG2 THR A  36       4.784   5.713   6.399  1.00 23.02
ATOM    560 1HG2 THR A  36       5.641   5.864   5.758  1.00 73.45
ATOM    561 2HG2 THR A  36       4.136   4.951   5.994  1.00 54.34
ATOM    562 3HG2 THR A  36       5.105   5.482   7.403  1.00 52.11
ATOM    563  C   THR A  36       6.361   8.127   6.429  1.00 52.31
ATOM    564  O   THR A  36       6.626   8.367   5.255  1.00  2.13
ATOM    565  N   PHE A  37       7.266   7.870   7.334  1.00 71.31
ATOM    566  H   PHE A  37       6.992   7.743   8.265  1.00 60.53
ATOM    567  CA  PHE A  37       8.669   7.738   7.034  1.00 21.30
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ATOM    568  HA  PHE A  37       8.773   7.740   5.958  1.00 23.31
ATOM    569  CB  PHE A  37       9.496   8.900   7.640  1.00 60.13
ATOM    570 1HB  PHE A  37      10.536   8.750   7.392  1.00 41.22
ATOM    571 2HB  PHE A  37       9.165   9.828   7.199  1.00 30.22
ATOM    572  CG  PHE A  37       9.410   9.038   9.146  1.00  0.54
ATOM    573  CD1 PHE A  37      10.357   8.442   9.969  1.00 31.20
ATOM    574  HD1 PHE A  37      11.157   7.869   9.524  1.00 71.11
ATOM    575  CE1 PHE A  37      10.284   8.570  11.341  1.00 30.31
ATOM    576  HE1 PHE A  37      11.027   8.099  11.967  1.00  1.25
ATOM    577  CZ  PHE A  37       9.260   9.300  11.911  1.00 12.34
ATOM    578  HZ  PHE A  37       9.202   9.402  12.985  1.00 72.32
ATOM    579  CE2 PHE A  37       8.310   9.901  11.107  1.00 45.13
ATOM    580  HE2 PHE A  37       7.509  10.472  11.551  1.00 65.12
ATOM    581  CD2 PHE A  37       8.388   9.770   9.735  1.00 44.23
ATOM    582  HD2 PHE A  37       7.645  10.241   9.105  1.00 23.34
ATOM    583  C   PHE A  37       9.132   6.401   7.558  1.00 52.34
ATOM    584  O   PHE A  37       8.441   5.798   8.403  1.00 53.25
ATOM    585  N   ASP A  38      10.233   5.913   7.057  1.00 64.32
ATOM    586  H   ASP A  38      10.743   6.421   6.394  1.00  1.44
ATOM    587  CA  ASP A  38      10.749   4.630   7.504  1.00  3.43
ATOM    588  HA  ASP A  38       9.932   4.058   7.913  1.00 33.21
ATOM    589  CB  ASP A  38      11.384   3.863   6.342  1.00  0.33
ATOM    590 1HB  ASP A  38      10.753   3.956   5.471  1.00 14.34
ATOM    591 2HB  ASP A  38      12.352   4.288   6.125  1.00 54.12
ATOM    592  CG  ASP A  38      11.564   2.385   6.643  1.00 13.32
ATOM    593  OD1 ASP A  38      10.733   1.575   6.164  1.00 61.23
ATOM    594  OD2 ASP A  38      12.481   2.027   7.396  1.00 41.01
ATOM    595  C   ASP A  38      11.784   4.871   8.585  1.00 64.14
ATOM    596  O   ASP A  38      12.322   5.973   8.687  1.00 71.11
ATOM    597  N   TYR A  39      12.084   3.850   9.354  1.00 72.51
ATOM    598  H   TYR A  39      11.696   2.975   9.134  1.00 50.02
ATOM    599  CA  TYR A  39      13.040   3.933  10.442  1.00 11.43
ATOM    600  HA  TYR A  39      12.788   4.794  11.046  1.00 21.42
ATOM    601  CB  TYR A  39      12.948   2.663  11.311  1.00  1.31
ATOM    602 1HB  TYR A  39      11.934   2.553  11.663  1.00 32.20
ATOM    603 2HB  TYR A  39      13.199   1.809  10.700  1.00 21.01
ATOM    604  CG  TYR A  39      13.857   2.654  12.529  1.00 41.51
ATOM    605  CD1 TYR A  39      13.498   3.329  13.690  1.00 63.14
ATOM    606  HD1 TYR A  39      12.564   3.866  13.715  1.00 51.32
ATOM    607  CE1 TYR A  39      14.320   3.320  14.802  1.00 33.24
ATOM    608  HE1 TYR A  39      14.023   3.849  15.695  1.00  1.22
ATOM    609  CZ  TYR A  39      15.514   2.632  14.765  1.00 54.41
ATOM    610  CE2 TYR A  39      15.892   1.955  13.626  1.00 50.34
ATOM    611  HE2 TYR A  39      16.828   1.418  13.598  1.00 64.15
ATOM    612  CD2 TYR A  39      15.068   1.967  12.518  1.00 45.42
ATOM    613  HD2 TYR A  39      15.362   1.438  11.623  1.00 61.11
ATOM    614  OH  TYR A  39      16.333   2.622  15.869  1.00 42.24
ATOM    615  HH  TYR A  39      17.235   2.792  15.588  1.00 43.21
ATOM    616  C   TYR A  39      14.455   4.114   9.883  1.00 44.10
ATOM    617  O   TYR A  39      15.316   4.710  10.519  1.00 23.33
ATOM    618  N   LYS A  40      14.675   3.615   8.675  1.00 13.32
ATOM    619  H   LYS A  40      13.948   3.131   8.219  1.00 32.33
ATOM    620  CA  LYS A  40      15.978   3.756   8.033  1.00 63.44
ATOM    621  HA  LYS A  40      16.711   3.901   8.813  1.00 32.15
ATOM    622  CB  LYS A  40      16.330   2.476   7.251  1.00 13.10
ATOM    623 1HB  LYS A  40      17.264   2.631   6.731  1.00  3.11
ATOM    624 2HB  LYS A  40      16.450   1.662   7.951  1.00 31.12
ATOM    625  CG  LYS A  40      15.275   2.086   6.237  1.00 24.21
ATOM    626 1HG  LYS A  40      14.332   1.968   6.749  1.00 73.23
ATOM    627 2HG  LYS A  40      15.186   2.882   5.514  1.00 51.23
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ATOM    628  CD  LYS A  40      15.595   0.793   5.519  1.00 75.51
ATOM    629 1HD  LYS A  40      16.459   0.944   4.888  1.00 14.24
ATOM    630 2HD  LYS A  40      15.795   0.018   6.243  1.00 52.13
ATOM    631  CE  LYS A  40      14.414   0.381   4.657  1.00 30.03
ATOM    632 1HE  LYS A  40      13.568   0.184   5.301  1.00 51.55
ATOM    633 2HE  LYS A  40      14.170   1.197   3.993  1.00 11.44
ATOM    634  NZ  LYS A  40      14.682  -0.822   3.861  1.00 20.25
ATOM    635 1HZ  LYS A  40      15.531  -0.692   3.260  1.00 73.43
ATOM    636 2HZ  LYS A  40      13.907  -0.980   3.192  1.00 61.33
ATOM    637 3HZ  LYS A  40      14.817  -1.687   4.427  1.00 34.02
ATOM    638  C   LYS A  40      16.002   4.978   7.110  1.00 33.24
ATOM    639  O   LYS A  40      16.987   5.219   6.423  1.00  4.21
ATOM    640  N   SER A  41      14.900   5.749   7.138  1.00 63.24
ATOM    641  H   SER A  41      14.169   5.483   7.734  1.00 50.03
ATOM    642  CA  SER A  41      14.741   6.993   6.368  1.00  1.43
ATOM    643  HA  SER A  41      13.714   7.307   6.482  1.00 54.55
ATOM    644  CB  SER A  41      15.657   8.089   6.973  1.00 15.32
ATOM    645 1HB  SER A  41      15.451   8.185   8.028  1.00  0.44
ATOM    646 2HB  SER A  41      16.687   7.800   6.835  1.00 44.11
ATOM    647  OG  SER A  41      15.448   9.351   6.360  1.00 54.33
ATOM    648  HG  SER A  41      15.558   9.200   5.413  1.00 42.03
ATOM    649  C   SER A  41      15.016   6.792   4.850  1.00 11.31
ATOM    650  O   SER A  41      15.400   7.736   4.147  1.00 71.34
ATOM    651  N   ASN A  42      14.740   5.596   4.350  1.00  1.31
ATOM    652  H   ASN A  42      14.322   4.926   4.926  1.00 33.14
ATOM    653  CA  ASN A  42      15.001   5.262   2.952  1.00 23.23
ATOM    654  HA  ASN A  42      15.990   5.638   2.740  1.00 62.25
ATOM    655  CB  ASN A  42      14.974   3.739   2.687  1.00 41.03
ATOM    656 1HB  ASN A  42      15.369   3.552   1.699  1.00 31.13
ATOM    657 2HB  ASN A  42      15.609   3.248   3.409  1.00 42.23
ATOM    658  CG  ASN A  42      13.590   3.114   2.755  1.00 64.11
ATOM    659  OD1 ASN A  42      12.736   3.538   3.508  1.00 73.03
ATOM    660  ND2 ASN A  42      13.388   2.072   2.004  1.00 50.14
ATOM    661 2HD2 ASN A  42      14.150   1.745   1.458  1.00  2.44
ATOM    662 1HD2 ASN A  42      12.495   1.679   1.980  1.00 74.54
ATOM    663  C   ASN A  42      14.013   5.981   2.028  1.00 33.41
ATOM    664  O   ASN A  42      12.887   6.292   2.443  1.00 25.53
ATOM    665  N   PRO A  43      14.459   6.351   0.809  1.00 61.42
ATOM    666  CD  PRO A  43      15.845   6.183   0.314  1.00 40.43
ATOM    667  CA  PRO A  43      13.620   7.016  -0.193  1.00 13.22
ATOM    668  HA  PRO A  43      13.465   8.052   0.068  1.00  1.43
ATOM    669  CB  PRO A  43      14.459   6.942  -1.459  1.00 10.31
ATOM    670 1HB  PRO A  43      14.236   6.028  -1.991  1.00 55.52
ATOM    671 2HB  PRO A  43      14.284   7.804  -2.086  1.00 13.45
ATOM    672  CG  PRO A  43      15.849   6.968  -0.960  1.00 30.53
ATOM    673 1HG  PRO A  43      16.506   6.515  -1.689  1.00 23.03
ATOM    674 2HG  PRO A  43      16.152   7.983  -0.754  1.00 51.21
ATOM    675 1HD  PRO A  43      16.066   5.144   0.117  1.00  2.11
ATOM    676 2HD  PRO A  43      16.556   6.600   1.010  1.00 41.13
ATOM    677  C   PRO A  43      12.253   6.354  -0.410  1.00 72.31
ATOM    678  O   PRO A  43      12.146   5.239  -0.929  1.00 32.12
ATOM    679  N   TYR A  44      11.247   7.048   0.074  1.00 52.02
ATOM    680  H   TYR A  44      11.467   7.844   0.599  1.00 64.23
ATOM    681  CA  TYR A  44       9.838   6.708  -0.069  1.00 65.41
ATOM    682  HA  TYR A  44       9.784   5.661  -0.320  1.00 31.31
ATOM    683  CB  TYR A  44       9.047   6.942   1.214  1.00  5.02
ATOM    684 1HB  TYR A  44       9.452   7.798   1.733  1.00 52.31
ATOM    685 2HB  TYR A  44       8.034   7.156   0.909  1.00 22.02
ATOM    686  CG  TYR A  44       9.002   5.778   2.197  1.00 62.04
ATOM    687  CD1 TYR A  44       8.210   5.866   3.332  1.00 72.44
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ATOM    688  HD1 TYR A  44       7.662   6.777   3.517  1.00 52.15
ATOM    689  CE1 TYR A  44       8.112   4.819   4.218  1.00 33.42
ATOM    690  HE1 TYR A  44       7.488   4.910   5.096  1.00 40.21
ATOM    691  CZ  TYR A  44       8.809   3.659   3.988  1.00 52.01
ATOM    692  CE2 TYR A  44       9.608   3.536   2.873  1.00 21.42
ATOM    693  HE2 TYR A  44      10.156   2.622   2.693  1.00 11.13
ATOM    694  CD2 TYR A  44       9.701   4.586   1.980  1.00 63.55
ATOM    695  HD2 TYR A  44      10.334   4.480   1.111  1.00 11.01
ATOM    696  OH  TYR A  44       8.696   2.611   4.884  1.00 25.01
ATOM    697  HH  TYR A  44       9.576   2.223   5.040  1.00 45.10
ATOM    698  C   TYR A  44       9.196   7.458  -1.215  1.00 13.02
ATOM    699  O   TYR A  44       8.027   7.261  -1.514  1.00 73.32
ATOM    700  N   ASP A  45       9.950   8.309  -1.861  1.00 22.25
ATOM    701  H   ASP A  45      10.910   8.333  -1.685  1.00 64.30
ATOM    702  CA  ASP A  45       9.376   9.176  -2.871  1.00 64.43
ATOM    703  HA  ASP A  45       8.414   9.508  -2.513  1.00 23.44
ATOM    704  CB  ASP A  45      10.271  10.386  -3.112  1.00 31.34
ATOM    705 1HB  ASP A  45      10.376  10.941  -2.191  1.00 34.40
ATOM    706 2HB  ASP A  45      11.243  10.047  -3.440  1.00 64.01
ATOM    707  CG  ASP A  45       9.705  11.306  -4.162  1.00 54.35
ATOM    708  OD1 ASP A  45      10.405  11.584  -5.141  1.00 64.25
ATOM    709  OD2 ASP A  45       8.543  11.730  -4.004  1.00 21.42
ATOM    710  C   ASP A  45       9.173   8.389  -4.147  1.00 74.11
ATOM    711  O   ASP A  45      10.051   7.623  -4.590  1.00 62.34
ATOM    712  N   ILE A  46       7.989   8.516  -4.673  1.00 40.25
ATOM    713  H   ILE A  46       7.415   9.245  -4.351  1.00 45.21
ATOM    714  CA  ILE A  46       7.508   7.708  -5.756  1.00 51.23
ATOM    715  HA  ILE A  46       7.798   6.687  -5.564  1.00 63.43
ATOM    716  CB  ILE A  46       5.963   7.753  -5.794  1.00 50.23
ATOM    717  HB  ILE A  46       5.653   8.781  -5.905  1.00 13.13
ATOM    718  CG2 ILE A  46       5.407   6.946  -6.972  1.00  0.12
ATOM    719 1HG2 ILE A  46       5.696   5.910  -6.873  1.00 14.01
ATOM    720 2HG2 ILE A  46       5.801   7.339  -7.897  1.00 54.43
ATOM    721 3HG2 ILE A  46       4.330   7.023  -6.992  1.00 55.15
ATOM    722  CG1 ILE A  46       5.420   7.226  -4.453  1.00 42.03
ATOM    723 1HG1 ILE A  46       5.657   6.176  -4.365  1.00 41.45
ATOM    724 2HG1 ILE A  46       5.901   7.761  -3.646  1.00 53.41
ATOM    725  CD1 ILE A  46       3.934   7.366  -4.285  1.00 72.44
ATOM    726 1HD1 ILE A  46       3.438   6.803  -5.061  1.00 12.32
ATOM    727 2HD1 ILE A  46       3.671   8.409  -4.374  1.00 11.01
ATOM    728 3HD1 ILE A  46       3.638   6.992  -3.316  1.00  1.51
ATOM    729  C   ILE A  46       8.101   8.137  -7.075  1.00 21.04
ATOM    730  O   ILE A  46       7.873   9.233  -7.548  1.00 24.44
ATOM    731  N   SER A  47       8.814   7.232  -7.689  1.00 13.50
ATOM    732  H   SER A  47       8.882   6.338  -7.298  1.00  4.14
ATOM    733  CA  SER A  47       9.477   7.538  -8.905  1.00 54.30
ATOM    734  HA  SER A  47       9.662   8.602  -8.928  1.00 62.24
ATOM    735  CB  SER A  47      10.828   6.802  -8.961  1.00  4.22
ATOM    736 1HB  SER A  47      11.425   7.086  -8.107  1.00 20.24
ATOM    737 2HB  SER A  47      10.652   5.737  -8.932  1.00 73.21
ATOM    738  OG  SER A  47      11.554   7.113 -10.137  1.00 64.24
ATOM    739  HG  SER A  47      11.043   7.750 -10.649  1.00 64.24
ATOM    740  C   SER A  47       8.592   7.162 -10.083  1.00 71.42
ATOM    741  O   SER A  47       8.681   7.775 -11.146  1.00 34.53
ATOM    742  N   VAL A  48       7.722   6.158  -9.908  1.00 42.34
ATOM    743  H   VAL A  48       7.678   5.672  -9.056  1.00 21.54
ATOM    744  CA  VAL A  48       6.813   5.798 -10.979  1.00 70.12
ATOM    745  HA  VAL A  48       6.736   6.620 -11.674  1.00 14.55
ATOM    746  CB  VAL A  48       7.310   4.525 -11.762  1.00 24.44
ATOM    747  HB  VAL A  48       7.192   3.688 -11.087  1.00  2.34
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ATOM    748  CG1 VAL A  48       6.438   4.251 -12.978  1.00 73.30
ATOM    749 1HG1 VAL A  48       6.794   3.367 -13.486  1.00 34.15
ATOM    750 2HG1 VAL A  48       6.483   5.094 -13.651  1.00 13.53
ATOM    751 3HG1 VAL A  48       5.418   4.098 -12.660  1.00 54.01
ATOM    752  CG2 VAL A  48       8.778   4.618 -12.176  1.00 63.52
ATOM    753 1HG2 VAL A  48       9.062   3.716 -12.700  1.00 73.02
ATOM    754 2HG2 VAL A  48       9.395   4.733 -11.298  1.00 12.53
ATOM    755 3HG2 VAL A  48       8.916   5.470 -12.825  1.00 13.23
ATOM    756  C   VAL A  48       5.438   5.464 -10.398  1.00 64.42
ATOM    757  O   VAL A  48       5.323   4.676  -9.457  1.00 72.24
ATOM    758  N   ASN A  49       4.425   6.053 -10.956  1.00 54.23
ATOM    759  H   ASN A  49       4.580   6.747 -11.633  1.00 20.24
ATOM    760  CA  ASN A  49       3.041   5.724 -10.661  1.00  4.35
ATOM    761  HA  ASN A  49       3.061   4.922  -9.937  1.00 11.43
ATOM    762  CB  ASN A  49       2.256   6.931 -10.067  1.00 53.14
ATOM    763 1HB  ASN A  49       2.443   6.960  -9.005  1.00 53.51
ATOM    764 2HB  ASN A  49       2.609   7.859 -10.480  1.00 62.25
ATOM    765  CG  ASN A  49       0.729   6.829 -10.265  1.00 55.42
ATOM    766  OD1 ASN A  49       0.188   7.316 -11.246  1.00 63.42
ATOM    767  ND2 ASN A  49       0.035   6.208  -9.344  1.00 71.43
ATOM    768 2HD2 ASN A  49       0.491   5.837  -8.564  1.00 33.41
ATOM    769 1HD2 ASN A  49      -0.930   6.134  -9.511  1.00 30.33
ATOM    770  C   ASN A  49       2.384   5.203 -11.907  1.00 15.01
ATOM    771  O   ASN A  49       2.589   5.761 -12.979  1.00 31.15
ATOM    772  N   LYS A  50       1.678   4.107 -11.810  1.00 23.31
ATOM    773  H   LYS A  50       1.653   3.581 -10.983  1.00 22.05
ATOM    774  CA  LYS A  50       0.908   3.665 -12.928  1.00 51.22
ATOM    775  HA  LYS A  50       0.936   4.412 -13.706  1.00  1.23
ATOM    776  CB  LYS A  50       1.390   2.310 -13.503  1.00 64.14
ATOM    777 1HB  LYS A  50       1.107   1.521 -12.825  1.00 53.34
ATOM    778 2HB  LYS A  50       0.851   2.145 -14.426  1.00  3.41
ATOM    779  CG  LYS A  50       2.880   2.178 -13.803  1.00 74.43
ATOM    780 1HG  LYS A  50       3.064   1.362 -14.485  1.00 52.40
ATOM    781 2HG  LYS A  50       3.154   3.128 -14.236  1.00 64.43
ATOM    782  CD  LYS A  50       3.729   1.981 -12.556  1.00 15.51
ATOM    783 1HD  LYS A  50       4.769   1.884 -12.823  1.00 73.40
ATOM    784 2HD  LYS A  50       3.581   2.864 -11.950  1.00 25.43
ATOM    785  CE  LYS A  50       3.302   0.775 -11.746  1.00  4.31
ATOM    786 1HE  LYS A  50       3.958   0.692 -10.892  1.00 41.45
ATOM    787 2HE  LYS A  50       2.298   0.956 -11.399  1.00 72.13
ATOM    788  NZ  LYS A  50       3.342  -0.514 -12.493  1.00 60.54
ATOM    789 1HZ  LYS A  50       2.735  -0.513 -13.334  1.00 73.12
ATOM    790 2HZ  LYS A  50       2.964  -1.249 -11.843  1.00 25.12
ATOM    791 3HZ  LYS A  50       4.310  -0.807 -12.723  1.00 51.31
ATOM    792  C   LYS A  50      -0.485   3.450 -12.456  1.00 53.23
ATOM    793  O   LYS A  50      -0.704   2.969 -11.330  1.00 45.54
ATOM    794  N   ASN A  51      -1.410   3.782 -13.277  1.00 41.00
ATOM    795  H   ASN A  51      -1.181   4.247 -14.108  1.00 11.44
ATOM    796  CA  ASN A  51      -2.766   3.457 -13.023  1.00 13.23
ATOM    797  HA  ASN A  51      -2.778   3.038 -12.028  1.00 11.55
ATOM    798  CB  ASN A  51      -3.687   4.686 -13.102  1.00 11.21
ATOM    799 1HB  ASN A  51      -3.565   5.161 -14.064  1.00 35.00
ATOM    800 2HB  ASN A  51      -4.711   4.356 -12.993  1.00 50.32
ATOM    801  CG  ASN A  51      -3.400   5.724 -12.017  1.00 31.53
ATOM    802  OD1 ASN A  51      -2.991   5.395 -10.903  1.00 72.05
ATOM    803  ND2 ASN A  51      -3.605   6.977 -12.333  1.00  4.20
ATOM    804 2HD2 ASN A  51      -3.929   7.196 -13.230  1.00 34.43
ATOM    805 1HD2 ASN A  51      -3.399   7.645 -11.647  1.00 25.33
ATOM    806  C   ASN A  51      -3.145   2.407 -14.021  1.00 31.50
ATOM    807  O   ASN A  51      -3.027   2.632 -15.220  1.00 31.02
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ATOM    808  N   ASN A  52      -3.601   1.291 -13.558  1.00 53.22
ATOM    809  H   ASN A  52      -3.772   1.178 -12.594  1.00 40.12
ATOM    810  CA  ASN A  52      -3.892   0.162 -14.431  1.00 73.00
ATOM    811  HA  ASN A  52      -3.385   0.332 -15.370  1.00  5.12
ATOM    812  CB  ASN A  52      -3.372  -1.146 -13.803  1.00 72.33
ATOM    813 1HB  ASN A  52      -3.888  -1.313 -12.870  1.00  1.52
ATOM    814 2HB  ASN A  52      -3.592  -1.964 -14.475  1.00 53.11
ATOM    815  CG  ASN A  52      -1.860  -1.145 -13.516  1.00 72.22
ATOM    816  OD1 ASN A  52      -1.060  -0.512 -14.218  1.00 24.42
ATOM    817  ND2 ASN A  52      -1.468  -1.828 -12.469  1.00 21.35
ATOM    818 2HD2 ASN A  52      -2.174  -2.286 -11.941  1.00 31.31
ATOM    819 1HD2 ASN A  52      -0.521  -1.875 -12.231  1.00 25.11
ATOM    820  C   ASN A  52      -5.393   0.079 -14.691  1.00 52.14
ATOM    821  O   ASN A  52      -5.909  -0.907 -15.213  1.00 33.00
ATOM    822  N   GLY A  53      -6.099   1.121 -14.289  1.00 32.53
ATOM    823  H   GLY A  53      -5.628   1.816 -13.790  1.00 11.24
ATOM    824  CA  GLY A  53      -7.522   1.222 -14.548  1.00 44.32
ATOM    825 1HA  GLY A  53      -7.785   2.265 -14.639  1.00 34.33
ATOM    826 2HA  GLY A  53      -7.742   0.722 -15.480  1.00  4.42
ATOM    827  C   GLY A  53      -8.352   0.603 -13.454  1.00 52.44
ATOM    828  O   GLY A  53      -9.129   1.276 -12.796  1.00 62.42
ATOM    829  N   THR A  54      -8.176  -0.670 -13.255  1.00 21.14
ATOM    830  H   THR A  54      -7.516  -1.137 -13.813  1.00 53.35
ATOM    831  CA  THR A  54      -8.908  -1.385 -12.237  1.00 41.30
ATOM    832  HA  THR A  54      -9.743  -0.780 -11.910  1.00  4.21
ATOM    833  CB  THR A  54      -9.451  -2.747 -12.778  1.00 75.22
ATOM    834  HB  THR A  54     -10.139  -2.536 -13.584  1.00 34.30
ATOM    835  OG1 THR A  54     -10.166  -3.445 -11.743  1.00 50.53
ATOM    836  HG1 THR A  54      -9.482  -3.556 -11.066  1.00 71.12
ATOM    837  CG2 THR A  54      -8.323  -3.634 -13.304  1.00 41.23
ATOM    838 1HG2 THR A  54      -8.733  -4.565 -13.668  1.00 30.23
ATOM    839 2HG2 THR A  54      -7.625  -3.837 -12.504  1.00 40.43
ATOM    840 3HG2 THR A  54      -7.810  -3.127 -14.109  1.00  0.13
ATOM    841  C   THR A  54      -8.024  -1.585 -11.016  1.00 14.32
ATOM    842  O   THR A  54      -8.373  -2.332 -10.069  1.00 74.44
ATOM    843  N   ASP A  55      -6.901  -0.934 -11.046  1.00  1.50
ATOM    844  H   ASP A  55      -6.674  -0.378 -11.821  1.00 51.20
ATOM    845  CA  ASP A  55      -5.946  -0.949  -9.988  1.00 52.22
ATOM    846  HA  ASP A  55      -6.495  -0.690  -9.093  1.00 24.54
ATOM    847  CB  ASP A  55      -5.293  -2.325  -9.786  1.00 60.42
ATOM    848 1HB  ASP A  55      -4.563  -2.269  -8.994  1.00  0.02
ATOM    849 2HB  ASP A  55      -6.083  -2.992  -9.482  1.00 74.33
ATOM    850  CG  ASP A  55      -4.627  -2.925 -10.975  1.00 70.44
ATOM    851  OD1 ASP A  55      -5.337  -3.577 -11.774  1.00 41.31
ATOM    852  OD2 ASP A  55      -3.414  -2.925 -11.045  1.00 51.31
ATOM    853  C   ASP A  55      -4.943   0.131 -10.203  1.00 52.44
ATOM    854  O   ASP A  55      -4.885   0.710 -11.286  1.00 63.04
ATOM    855  N   ALA A  56      -4.211   0.450  -9.189  1.00 74.03
ATOM    856  H   ALA A  56      -4.331  -0.040  -8.346  1.00 72.42
ATOM    857  CA  ALA A  56      -3.199   1.467  -9.260  1.00 11.00
ATOM    858  HA  ALA A  56      -2.917   1.586 -10.297  1.00 23.35
ATOM    859  CB  ALA A  56      -3.726   2.792  -8.728  1.00 33.43
ATOM    860 1HB  ALA A  56      -2.936   3.527  -8.742  1.00  1.22
ATOM    861 2HB  ALA A  56      -4.094   2.662  -7.721  1.00  1.10
ATOM    862 3HB  ALA A  56      -4.535   3.128  -9.361  1.00 31.52
ATOM    863  C   ALA A  56      -2.003   0.999  -8.476  1.00 54.24
ATOM    864  O   ALA A  56      -2.157   0.359  -7.426  1.00 64.42
ATOM    865  N   GLU A  57      -0.837   1.302  -8.962  1.00  3.21
ATOM    866  H   GLU A  57      -0.772   1.884  -9.754  1.00  2.53
ATOM    867  CA  GLU A  57       0.378   0.812  -8.367  1.00 25.51
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ATOM    868  HA  GLU A  57       0.176   0.456  -7.368  1.00 50.33
ATOM    869  CB  GLU A  57       0.883  -0.349  -9.215  1.00  4.04
ATOM    870 1HB  GLU A  57       0.089  -1.075  -9.292  1.00 10.03
ATOM    871 2HB  GLU A  57       1.101   0.014 -10.206  1.00 14.41
ATOM    872  CG  GLU A  57       2.110  -1.072  -8.686  1.00 51.11
ATOM    873 1HG  GLU A  57       2.778  -0.349  -8.242  1.00  1.12
ATOM    874 2HG  GLU A  57       1.808  -1.795  -7.943  1.00 23.41
ATOM    875  CD  GLU A  57       2.833  -1.787  -9.797  1.00 61.14
ATOM    876  OE1 GLU A  57       4.068  -1.766  -9.810  1.00 14.13
ATOM    877  OE2 GLU A  57       2.192  -2.213 -10.776  1.00  4.32
ATOM    878  C   GLU A  57       1.426   1.923  -8.337  1.00 53.42
ATOM    879  O   GLU A  57       1.654   2.613  -9.350  1.00 33.20
ATOM    880  N   ILE A  58       2.045   2.111  -7.200  1.00 32.20
ATOM    881  H   ILE A  58       1.837   1.563  -6.413  1.00 13.35
ATOM    882  CA  ILE A  58       3.077   3.081  -7.041  1.00  4.32
ATOM    883  HA  ILE A  58       3.207   3.542  -8.009  1.00  3.14
ATOM    884  CB  ILE A  58       2.761   4.201  -6.011  1.00 12.34
ATOM    885  HB  ILE A  58       3.738   4.559  -5.734  1.00 71.04
ATOM    886  CG2 ILE A  58       2.016   5.347  -6.668  1.00 33.45
ATOM    887 1HG2 ILE A  58       1.760   6.093  -5.931  1.00 72.40
ATOM    888 2HG2 ILE A  58       1.115   4.967  -7.126  1.00 31.41
ATOM    889 3HG2 ILE A  58       2.653   5.784  -7.420  1.00 20.23
ATOM    890  CG1 ILE A  58       2.031   3.708  -4.729  1.00 50.30
ATOM    891 1HG1 ILE A  58       2.432   2.748  -4.445  1.00 12.11
ATOM    892 2HG1 ILE A  58       2.212   4.414  -3.930  1.00 42.25
ATOM    893  CD1 ILE A  58       0.525   3.548  -4.882  1.00 63.11
ATOM    894 1HD1 ILE A  58       0.088   3.187  -3.963  1.00 14.32
ATOM    895 2HD1 ILE A  58       0.322   2.870  -5.698  1.00 63.23
ATOM    896 3HD1 ILE A  58       0.109   4.517  -5.127  1.00 15.24
ATOM    897  C   ILE A  58       4.389   2.423  -6.707  1.00 32.12
ATOM    898  O   ILE A  58       4.452   1.540  -5.837  1.00 52.25
ATOM    899  N   VAL A  59       5.422   2.826  -7.418  1.00 33.41
ATOM    900  H   VAL A  59       5.316   3.528  -8.101  1.00 41.11
ATOM    901  CA  VAL A  59       6.737   2.282  -7.240  1.00 54.54
ATOM    902  HA  VAL A  59       6.691   1.518  -6.478  1.00 50.22
ATOM    903  CB  VAL A  59       7.280   1.641  -8.553  1.00 74.22
ATOM    904  HB  VAL A  59       7.401   2.431  -9.280  1.00 23.22
ATOM    905  CG1 VAL A  59       8.647   0.997  -8.331  1.00  5.30
ATOM    906 1HG1 VAL A  59       8.996   0.564  -9.258  1.00 50.11
ATOM    907 2HG1 VAL A  59       8.563   0.225  -7.582  1.00 21.44
ATOM    908 3HG1 VAL A  59       9.347   1.748  -7.997  1.00 71.11
ATOM    909  CG2 VAL A  59       6.300   0.623  -9.110  1.00 24.40
ATOM    910 1HG2 VAL A  59       6.685   0.212 -10.032  1.00 73.34
ATOM    911 2HG2 VAL A  59       5.350   1.103  -9.292  1.00 22.31
ATOM    912 3HG2 VAL A  59       6.169  -0.171  -8.391  1.00 11.45
ATOM    913  C   VAL A  59       7.697   3.379  -6.801  1.00 32.15
ATOM    914  O   VAL A  59       7.867   4.409  -7.488  1.00 74.43
ATOM    915  N   SER A  60       8.281   3.180  -5.676  1.00 64.10
ATOM    916  H   SER A  60       8.052   2.382  -5.145  1.00 22.22
ATOM    917  CA  SER A  60       9.290   4.032  -5.176  1.00 23.03
ATOM    918  HA  SER A  60       9.398   4.868  -5.852  1.00 15.21
ATOM    919  CB  SER A  60       8.945   4.538  -3.768  1.00 24.13
ATOM    920 1HB  SER A  60       8.064   5.155  -3.826  1.00  3.32
ATOM    921 2HB  SER A  60       8.752   3.726  -3.087  1.00 31.14
ATOM    922  OG  SER A  60       9.992   5.318  -3.248  1.00 45.42
ATOM    923  HG  SER A  60       9.954   6.207  -3.634  1.00 13.01
ATOM    924  C   SER A  60      10.566   3.232  -5.168  1.00 23.42
ATOM    925  O   SER A  60      10.547   2.025  -4.921  1.00 31.32
ATOM    926  N   ALA A  61      11.650   3.856  -5.451  1.00 13.02
ATOM    927  H   ALA A  61      11.634   4.830  -5.550  1.00 53.43
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ATOM    928  CA  ALA A  61      12.882   3.150  -5.496  1.00 70.04
ATOM    929  HA  ALA A  61      12.655   2.104  -5.351  1.00 25.21
ATOM    930  CB  ALA A  61      13.577   3.309  -6.834  1.00 11.40
ATOM    931 1HB  ALA A  61      13.848   4.343  -6.992  1.00 72.14
ATOM    932 2HB  ALA A  61      12.909   2.974  -7.613  1.00 70.44
ATOM    933 3HB  ALA A  61      14.462   2.690  -6.834  1.00 23.32
ATOM    934  C   ALA A  61      13.743   3.596  -4.373  1.00 43.31
ATOM    935  O   ALA A  61      13.837   4.784  -4.082  1.00 72.32
ATOM    936  N   SER A  62      14.342   2.663  -3.741  1.00 21.44
ATOM    937  H   SER A  62      14.256   1.727  -4.017  1.00  2.44
ATOM    938  CA  SER A  62      15.158   2.918  -2.628  1.00 43.53
ATOM    939  HA  SER A  62      14.990   3.926  -2.280  1.00 51.03
ATOM    940  CB  SER A  62      14.734   1.944  -1.532  1.00 73.14
ATOM    941 1HB  SER A  62      14.826   0.950  -1.947  1.00 44.42
ATOM    942 2HB  SER A  62      15.343   2.000  -0.645  1.00 35.23
ATOM    943  OG  SER A  62      13.355   2.137  -1.198  1.00 42.33
ATOM    944  HG  SER A  62      13.116   3.064  -1.327  1.00 23.34
ATOM    945  C   SER A  62      16.618   2.728  -3.026  1.00  2.44
ATOM    946  O   SER A  62      17.071   1.619  -3.200  1.00 15.24
ATOM    947  N   ASP A  63      17.326   3.828  -3.208  1.00 42.35
ATOM    948  H   ASP A  63      16.907   4.713  -3.117  1.00 14.44
ATOM    949  CA  ASP A  63      18.759   3.797  -3.580  1.00 43.22
ATOM    950  HA  ASP A  63      18.884   3.102  -4.397  1.00 25.30
ATOM    951  CB  ASP A  63      19.244   5.185  -4.018  1.00 35.12
ATOM    952 1HB  ASP A  63      20.312   5.154  -4.181  1.00 32.24
ATOM    953 2HB  ASP A  63      18.752   5.461  -4.940  1.00 32.25
ATOM    954  CG  ASP A  63      18.949   6.246  -2.978  1.00  2.23
ATOM    955  OD1 ASP A  63      19.671   6.329  -1.956  1.00 32.34
ATOM    956  OD2 ASP A  63      17.953   6.949  -3.150  1.00 11.02
ATOM    957  C   ASP A  63      19.591   3.326  -2.416  1.00  3.43
ATOM    958  O   ASP A  63      20.636   2.698  -2.586  1.00 13.10
ATOM    959  N   SER A  64      19.101   3.607  -1.235  1.00 23.21
ATOM    960  H   SER A  64      18.265   4.114  -1.183  1.00 53.24
ATOM    961  CA  SER A  64      19.765   3.251  -0.027  1.00 24.12
ATOM    962  HA  SER A  64      20.816   3.475  -0.124  1.00 40.14
ATOM    963  CB  SER A  64      19.178   4.091   1.090  1.00 41.21
ATOM    964 1HB  SER A  64      18.176   3.751   1.306  1.00 11.02
ATOM    965 2HB  SER A  64      19.791   4.001   1.973  1.00  3.14
ATOM    966  OG  SER A  64      19.128   5.470   0.702  1.00 22.34
ATOM    967  HG  SER A  64      19.483   5.626  -0.192  1.00 21.23
ATOM    968  C   SER A  64      19.571   1.755   0.239  1.00 70.32
ATOM    969  O   SER A  64      20.290   1.137   1.030  1.00 34.14
ATOM    970  N   ASP A  65      18.624   1.171  -0.467  1.00 25.14
ATOM    971  H   ASP A  65      18.138   1.691  -1.139  1.00 40.34
ATOM    972  CA  ASP A  65      18.344  -0.223  -0.336  1.00 42.35
ATOM    973  HA  ASP A  65      18.890  -0.572   0.526  1.00 51.51
ATOM    974  CB  ASP A  65      16.867  -0.548  -0.130  1.00 11.11
ATOM    975 1HB  ASP A  65      16.283   0.019  -0.837  1.00 52.52
ATOM    976 2HB  ASP A  65      16.715  -1.599  -0.322  1.00 30.22
ATOM    977  CG  ASP A  65      16.368  -0.237   1.240  1.00 44.54
ATOM    978  OD1 ASP A  65      15.688   0.777   1.420  1.00 34.10
ATOM    979  OD2 ASP A  65      16.619  -1.029   2.163  1.00 64.43
ATOM    980  C   ASP A  65      18.836  -0.961  -1.515  1.00 30.12
ATOM    981  O   ASP A  65      18.173  -1.054  -2.531  1.00 23.25
ATOM    982  N   SER A  66      20.004  -1.491  -1.382  1.00 12.22
ATOM    983  H   SER A  66      20.517  -1.255  -0.581  1.00 70.13
ATOM    984  CA  SER A  66      20.578  -2.354  -2.383  1.00 14.54
ATOM    985  HA  SER A  66      20.536  -1.841  -3.332  1.00 74.05
ATOM    986  CB  SER A  66      22.046  -2.664  -2.035  1.00 31.51
ATOM    987 1HB  SER A  66      22.600  -1.739  -1.966  1.00 73.43
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ATOM    988 2HB  SER A  66      22.082  -3.169  -1.080  1.00 53.01
ATOM    989  OG  SER A  66      22.659  -3.488  -3.011  1.00 11.30
ATOM    990  HG  SER A  66      21.968  -3.899  -3.544  1.00 61.45
ATOM    991  C   SER A  66      19.749  -3.648  -2.474  1.00 43.14
ATOM    992  O   SER A  66      19.872  -4.413  -3.426  1.00 21.21
ATOM    993  N   THR A  67      18.942  -3.882  -1.451  1.00 61.10
ATOM    994  H   THR A  67      18.851  -3.188  -0.769  1.00 31.04
ATOM    995  CA  THR A  67      18.185  -5.077  -1.332  1.00  3.33
ATOM    996  HA  THR A  67      18.773  -5.878  -1.753  1.00 74.24
ATOM    997  CB  THR A  67      17.973  -5.423   0.183  1.00 62.22
ATOM    998  HB  THR A  67      18.946  -5.543   0.636  1.00  3.34
ATOM    999  OG1 THR A  67      17.249  -6.640   0.346  1.00 75.41
ATOM   1000  HG1 THR A  67      17.140  -7.067  -0.517  1.00 64.05
ATOM   1001  CG2 THR A  67      17.236  -4.303   0.915  1.00 21.35
ATOM   1002 1HG2 THR A  67      16.273  -4.147   0.453  1.00 51.21
ATOM   1003 2HG2 THR A  67      17.815  -3.393   0.862  1.00 52.33
ATOM   1004 3HG2 THR A  67      17.097  -4.579   1.950  1.00  2.21
ATOM   1005  C   THR A  67      16.820  -5.029  -2.061  1.00 32.02
ATOM   1006  O   THR A  67      16.277  -6.105  -2.315  1.00 44.04
ATOM   1007  N   ASP A  68      16.283  -3.814  -2.445  1.00 41.54
ATOM   1008  H   ASP A  68      16.760  -2.963  -2.331  1.00 55.12
ATOM   1009  CA  ASP A  68      14.934  -3.763  -3.109  1.00 62.32
ATOM   1010  HA  ASP A  68      14.999  -4.272  -4.058  1.00 52.03
ATOM   1011  CB  ASP A  68      13.888  -4.469  -2.249  1.00 35.32
ATOM   1012 1HB  ASP A  68      14.386  -5.148  -1.570  1.00  1.52
ATOM   1013 2HB  ASP A  68      13.386  -3.687  -1.694  1.00 23.40
ATOM   1014  CG  ASP A  68      12.878  -5.239  -3.090  1.00 35.34
ATOM   1015  OD1 ASP A  68      11.939  -4.632  -3.657  1.00 71.21
ATOM   1016  OD2 ASP A  68      12.992  -6.478  -3.188  1.00  2.05
ATOM   1017  C   ASP A  68      14.424  -2.317  -3.327  1.00 53.33
ATOM   1018  O   ASP A  68      15.176  -1.353  -3.246  1.00 40.15
ATOM   1019  N   SER A  69      13.117  -2.211  -3.582  1.00 42.13
ATOM   1020  H   SER A  69      12.569  -3.033  -3.588  1.00 41.53
ATOM   1021  CA  SER A  69      12.397  -0.989  -3.830  1.00 63.10
ATOM   1022  HA  SER A  69      12.944  -0.171  -3.387  1.00 34.21
ATOM   1023  CB  SER A  69      12.293  -0.781  -5.346  1.00 35.31
ATOM   1024 1HB  SER A  69      11.602   0.023  -5.551  1.00 21.13
ATOM   1025 2HB  SER A  69      13.267  -0.531  -5.742  1.00 74.44
ATOM   1026  OG  SER A  69      11.825  -1.961  -5.992  1.00 52.23
ATOM   1027  HG  SER A  69      11.934  -2.702  -5.386  1.00  4.42
ATOM   1028  C   SER A  69      10.989  -1.091  -3.176  1.00 21.30
ATOM   1029  O   SER A  69      10.557  -2.184  -2.799  1.00 13.22
ATOM   1030  N   LEU A  70      10.302   0.017  -3.010  1.00 52.02
ATOM   1031  H   LEU A  70      10.646   0.873  -3.349  1.00 43.11
ATOM   1032  CA  LEU A  70       8.986  -0.004  -2.403  1.00 10.45
ATOM   1033  HA  LEU A  70       8.908  -0.914  -1.828  1.00 73.13
ATOM   1034  CB  LEU A  70       8.814   1.227  -1.451  1.00  2.34
ATOM   1035 1HB  LEU A  70       9.659   1.235  -0.779  1.00 64.15
ATOM   1036 2HB  LEU A  70       8.880   2.114  -2.062  1.00 35.50
ATOM   1037  CG  LEU A  70       7.523   1.342  -0.567  1.00 41.40
ATOM   1038  HG  LEU A  70       7.633   2.195   0.086  1.00 23.11
ATOM   1039  CD1 LEU A  70       6.259   1.602  -1.382  1.00 52.50
ATOM   1040 1HD1 LEU A  70       5.406   1.658  -0.721  1.00 43.03
ATOM   1041 2HD1 LEU A  70       6.115   0.803  -2.094  1.00 45.42
ATOM   1042 3HD1 LEU A  70       6.357   2.536  -1.917  1.00 10.41
ATOM   1043  CD2 LEU A  70       7.353   0.106   0.310  1.00 72.31
ATOM   1044 1HD2 LEU A  70       6.467   0.218   0.918  1.00 71.34
ATOM   1045 2HD2 LEU A  70       8.217  -0.008   0.948  1.00 14.31
ATOM   1046 3HD2 LEU A  70       7.250  -0.769  -0.316  1.00  1.41
ATOM   1047  C   LEU A  70       7.929  -0.033  -3.510  1.00 72.44
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ATOM   1048  O   LEU A  70       7.774   0.927  -4.260  1.00 45.32
ATOM   1049  N   GLN A  71       7.223  -1.127  -3.607  1.00 11.25
ATOM   1050  H   GLN A  71       7.397  -1.872  -2.995  1.00 35.15
ATOM   1051  CA  GLN A  71       6.181  -1.291  -4.598  1.00 43.14
ATOM   1052  HA  GLN A  71       6.029  -0.338  -5.085  1.00  1.21
ATOM   1053  CB  GLN A  71       6.628  -2.328  -5.640  1.00 45.11
ATOM   1054 1HB  GLN A  71       7.510  -1.944  -6.133  1.00 74.35
ATOM   1055 2HB  GLN A  71       6.901  -3.244  -5.142  1.00 41.00
ATOM   1056  CG  GLN A  71       5.613  -2.650  -6.724  1.00 22.35
ATOM   1057 1HG  GLN A  71       4.702  -2.988  -6.251  1.00 62.31
ATOM   1058 2HG  GLN A  71       5.409  -1.760  -7.299  1.00 34.10
ATOM   1059  CD  GLN A  71       6.107  -3.740  -7.663  1.00 34.41
ATOM   1060  OE1 GLN A  71       6.868  -4.630  -7.272  1.00 55.00
ATOM   1061  NE2 GLN A  71       5.697  -3.680  -8.898  1.00 33.52
ATOM   1062 2HE2 GLN A  71       5.091  -2.942  -9.168  1.00 43.04
ATOM   1063 1HE2 GLN A  71       6.000  -4.374  -9.512  1.00 64.45
ATOM   1064  C   GLN A  71       4.878  -1.712  -3.907  1.00 51.12
ATOM   1065  O   GLN A  71       4.858  -2.684  -3.131  1.00 53.14
ATOM   1066  N   VAL A  72       3.820  -0.951  -4.136  1.00 44.11
ATOM   1067  H   VAL A  72       3.912  -0.179  -4.739  1.00 64.42
ATOM   1068  CA  VAL A  72       2.509  -1.226  -3.548  1.00  1.40
ATOM   1069  HA  VAL A  72       2.533  -2.222  -3.131  1.00 61.10
ATOM   1070  CB  VAL A  72       2.142  -0.205  -2.411  1.00 71.43
ATOM   1071  HB  VAL A  72       2.177   0.790  -2.832  1.00 30.31
ATOM   1072  CG1 VAL A  72       0.729  -0.448  -1.881  1.00 33.24
ATOM   1073 1HG1 VAL A  72       0.653  -1.454  -1.492  1.00  4.31
ATOM   1074 2HG1 VAL A  72       0.015  -0.322  -2.682  1.00 24.55
ATOM   1075 3HG1 VAL A  72       0.511   0.259  -1.093  1.00 50.30
ATOM   1076  CG2 VAL A  72       3.138  -0.281  -1.264  1.00 41.22
ATOM   1077 1HG2 VAL A  72       3.128  -1.277  -0.846  1.00 41.30
ATOM   1078 2HG2 VAL A  72       2.870   0.434  -0.500  1.00 11.12
ATOM   1079 3HG2 VAL A  72       4.128  -0.060  -1.633  1.00 52.42
ATOM   1080  C   VAL A  72       1.437  -1.171  -4.630  1.00 34.44
ATOM   1081  O   VAL A  72       1.312  -0.160  -5.337  1.00 31.20
ATOM   1082  N   ALA A  73       0.684  -2.244  -4.760  1.00 23.41
ATOM   1083  H   ALA A  73       0.838  -3.029  -4.185  1.00 41.02
ATOM   1084  CA  ALA A  73      -0.392  -2.320  -5.723  1.00  3.40
ATOM   1085  HA  ALA A  73      -0.388  -1.418  -6.316  1.00 10.32
ATOM   1086  CB  ALA A  73      -0.212  -3.518  -6.645  1.00 21.22
ATOM   1087 1HB  ALA A  73      -0.271  -4.428  -6.067  1.00 53.52
ATOM   1088 2HB  ALA A  73       0.752  -3.466  -7.128  1.00 13.24
ATOM   1089 3HB  ALA A  73      -0.990  -3.518  -7.394  1.00 14.35
ATOM   1090  C   ALA A  73      -1.729  -2.383  -5.011  1.00 44.35
ATOM   1091  O   ALA A  73      -1.900  -3.125  -4.043  1.00 51.12
ATOM   1092  N   MET A  74      -2.652  -1.598  -5.478  1.00 41.15
ATOM   1093  H   MET A  74      -2.447  -1.034  -6.261  1.00 71.51
ATOM   1094  CA  MET A  74      -3.983  -1.512  -4.917  1.00  3.13
ATOM   1095  HA  MET A  74      -4.053  -2.122  -4.030  1.00 14.41
ATOM   1096  CB  MET A  74      -4.281  -0.052  -4.573  1.00 63.40
ATOM   1097 1HB  MET A  74      -4.260   0.525  -5.487  1.00 31.22
ATOM   1098 2HB  MET A  74      -5.273   0.005  -4.152  1.00 21.35
ATOM   1099  CG  MET A  74      -3.307   0.577  -3.589  1.00 42.12
ATOM   1100 1HG  MET A  74      -3.417   0.097  -2.629  1.00 13.41
ATOM   1101 2HG  MET A  74      -2.303   0.410  -3.952  1.00  0.42
ATOM   1102  SD  MET A  74      -3.559   2.350  -3.387  1.00 53.22
ATOM   1103  CE  MET A  74      -3.039   2.951  -4.988  1.00 73.21
ATOM   1104 1HE  MET A  74      -2.015   2.658  -5.170  1.00 15.34
ATOM   1105 2HE  MET A  74      -3.113   4.028  -5.008  1.00 41.14
ATOM   1106 3HE  MET A  74      -3.676   2.531  -5.751  1.00 42.34
ATOM   1107  C   MET A  74      -4.953  -1.982  -5.978  1.00 52.33
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ATOM   1108  O   MET A  74      -5.000  -1.392  -7.034  1.00 15.12
ATOM   1109  N   LYS A  75      -5.749  -2.990  -5.683  1.00  5.22
ATOM   1110  H   LYS A  75      -5.757  -3.362  -4.773  1.00  2.12
ATOM   1111  CA  LYS A  75      -6.618  -3.623  -6.669  1.00 73.43
ATOM   1112  HA  LYS A  75      -6.406  -3.217  -7.642  1.00  1.11
ATOM   1113  CB  LYS A  75      -6.311  -5.142  -6.677  1.00 53.04
ATOM   1114 1HB  LYS A  75      -5.258  -5.278  -6.874  1.00 74.30
ATOM   1115 2HB  LYS A  75      -6.513  -5.523  -5.687  1.00 34.34
ATOM   1116  CG  LYS A  75      -7.096  -5.998  -7.685  1.00 23.02
ATOM   1117 1HG  LYS A  75      -6.936  -7.040  -7.456  1.00 31.54
ATOM   1118 2HG  LYS A  75      -8.146  -5.770  -7.575  1.00 34.15
ATOM   1119  CD  LYS A  75      -6.686  -5.757  -9.142  1.00 40.42
ATOM   1120 1HD  LYS A  75      -7.302  -6.389  -9.763  1.00 21.11
ATOM   1121 2HD  LYS A  75      -6.870  -4.726  -9.400  1.00 21.42
ATOM   1122  CE  LYS A  75      -5.210  -6.105  -9.399  1.00 42.23
ATOM   1123 1HE  LYS A  75      -4.587  -5.445  -8.814  1.00 33.44
ATOM   1124 2HE  LYS A  75      -5.035  -7.126  -9.095  1.00 10.31
ATOM   1125  NZ  LYS A  75      -4.828  -5.950 -10.834  1.00 22.41
ATOM   1126 1HZ  LYS A  75      -3.810  -6.098 -10.978  1.00 51.23
ATOM   1127 2HZ  LYS A  75      -5.023  -4.973 -11.163  1.00 43.25
ATOM   1128 3HZ  LYS A  75      -5.358  -6.588 -11.459  1.00 24.24
ATOM   1129  C   LYS A  75      -8.083  -3.393  -6.297  1.00 70.53
ATOM   1130  O   LYS A  75      -8.494  -3.668  -5.169  1.00 12.32
ATOM   1131  N   LYS A  76      -8.865  -2.923  -7.261  1.00 24.24
ATOM   1132  H   LYS A  76      -8.537  -2.801  -8.180  1.00 41.51
ATOM   1133  CA  LYS A  76     -10.237  -2.571  -7.043  1.00 62.43
ATOM   1134  HA  LYS A  76     -10.352  -2.030  -6.117  1.00 72.25
ATOM   1135  CB  LYS A  76     -10.693  -1.678  -8.185  1.00 21.35
ATOM   1136 1HB  LYS A  76      -9.993  -0.874  -8.360  1.00 75.51
ATOM   1137 2HB  LYS A  76     -10.706  -2.286  -9.078  1.00 23.42
ATOM   1138  CG  LYS A  76     -12.076  -1.108  -8.015  1.00  1.14
ATOM   1139 1HG  LYS A  76     -12.682  -1.812  -7.462  1.00 45.13
ATOM   1140 2HG  LYS A  76     -12.005  -0.182  -7.463  1.00 30.23
ATOM   1141  CD  LYS A  76     -12.732  -0.829  -9.351  1.00 54.42
ATOM   1142 1HD  LYS A  76     -13.505  -0.085  -9.216  1.00 61.24
ATOM   1143 2HD  LYS A  76     -11.987  -0.456 -10.037  1.00 20.15
ATOM   1144  CE  LYS A  76     -13.359  -2.097  -9.939  1.00 22.03
ATOM   1145 1HE  LYS A  76     -13.957  -2.489  -9.131  1.00  2.41
ATOM   1146 2HE  LYS A  76     -13.971  -1.838 -10.787  1.00 51.31
ATOM   1147  NZ  LYS A  76     -12.392  -3.178 -10.294  1.00 74.04
ATOM   1148 1HZ  LYS A  76     -11.634  -2.867 -10.941  1.00 73.31
ATOM   1149 2HZ  LYS A  76     -12.880  -3.955 -10.778  1.00 52.24
ATOM   1150 3HZ  LYS A  76     -11.944  -3.587  -9.446  1.00  1.31
ATOM   1151  C   LYS A  76     -11.110  -3.818  -7.081  1.00 42.13
ATOM   1152  O   LYS A  76     -11.241  -4.458  -8.143  1.00 44.22
ATOM   1153  N   LEU A  77     -11.727  -4.127  -5.989  1.00 62.03
ATOM   1154  H   LEU A  77     -11.612  -3.565  -5.186  1.00 45.34
ATOM   1155  CA  LEU A  77     -12.633  -5.249  -5.914  1.00 33.23
ATOM   1156  HA  LEU A  77     -12.358  -5.966  -6.674  1.00 32.11
ATOM   1157  CB  LEU A  77     -12.556  -5.885  -4.500  1.00 43.12
ATOM   1158 1HB  LEU A  77     -11.514  -5.965  -4.230  1.00 42.23
ATOM   1159 2HB  LEU A  77     -13.025  -5.195  -3.816  1.00 40.02
ATOM   1160  CG  LEU A  77     -13.202  -7.270  -4.306  1.00 64.24
ATOM   1161  HG  LEU A  77     -14.223  -7.228  -4.652  1.00 15.43
ATOM   1162  CD1 LEU A  77     -12.464  -8.330  -5.117  1.00 53.44
ATOM   1163 1HD1 LEU A  77     -11.441  -8.392  -4.780  1.00 70.30
ATOM   1164 2HD1 LEU A  77     -12.477  -8.068  -6.165  1.00 61.44
ATOM   1165 3HD1 LEU A  77     -12.945  -9.287  -4.979  1.00 54.12
ATOM   1166  CD2 LEU A  77     -13.213  -7.660  -2.834  1.00 73.32
ATOM   1167 1HD2 LEU A  77     -12.208  -7.633  -2.443  1.00 10.24
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ATOM   1168 2HD2 LEU A  77     -13.601  -8.664  -2.744  1.00 30.14
ATOM   1169 3HD2 LEU A  77     -13.846  -6.986  -2.277  1.00 23.52
ATOM   1170  C   LEU A  77     -14.043  -4.683  -6.206  1.00 61.54
ATOM   1171  O   LEU A  77     -14.352  -3.564  -5.787  1.00 42.32
ATOM   1172  N   PRO A  78     -14.911  -5.416  -6.943  1.00 45.33
ATOM   1173  CD  PRO A  78     -14.679  -6.788  -7.438  1.00  2.40
ATOM   1174  CA  PRO A  78     -16.241  -4.906  -7.354  1.00  0.00
ATOM   1175  HA  PRO A  78     -16.143  -3.967  -7.877  1.00 11.01
ATOM   1176  CB  PRO A  78     -16.759  -5.977  -8.323  1.00 54.42
ATOM   1177 1HB  PRO A  78     -17.826  -6.097  -8.192  1.00  4.35
ATOM   1178 2HB  PRO A  78     -16.531  -5.704  -9.342  1.00 23.32
ATOM   1179  CG  PRO A  78     -16.021  -7.219  -7.964  1.00  2.40
ATOM   1180 1HG  PRO A  78     -16.571  -7.757  -7.206  1.00 74.03
ATOM   1181 2HG  PRO A  78     -15.883  -7.835  -8.840  1.00 21.21
ATOM   1182 1HD  PRO A  78     -14.384  -7.433  -6.626  1.00  5.33
ATOM   1183 2HD  PRO A  78     -13.921  -6.792  -8.205  1.00 73.51
ATOM   1184  C   PRO A  78     -17.214  -4.715  -6.188  1.00 10.45
ATOM   1185  O   PRO A  78     -18.267  -4.118  -6.340  1.00 61.24
ATOM   1186  N   ASN A  79     -16.819  -5.171  -5.024  1.00 32.00
ATOM   1187  H   ASN A  79     -15.945  -5.610  -4.975  1.00 13.50
ATOM   1188  CA  ASN A  79     -17.645  -5.074  -3.821  1.00 32.33
ATOM   1189  HA  ASN A  79     -18.681  -5.174  -4.107  1.00 32.55
ATOM   1190  CB  ASN A  79     -17.294  -6.197  -2.806  1.00 14.14
ATOM   1191 1HB  ASN A  79     -16.261  -6.090  -2.515  1.00  4.31
ATOM   1192 2HB  ASN A  79     -17.912  -6.069  -1.929  1.00 33.20
ATOM   1193  CG  ASN A  79     -17.481  -7.623  -3.322  1.00 61.34
ATOM   1194  OD1 ASN A  79     -17.293  -7.913  -4.496  1.00 31.20
ATOM   1195  ND2 ASN A  79     -17.847  -8.521  -2.441  1.00 12.43
ATOM   1196 2HD2 ASN A  79     -17.981  -8.239  -1.512  1.00 15.40
ATOM   1197 1HD2 ASN A  79     -17.977  -9.437  -2.762  1.00 34.51
ATOM   1198  C   ASN A  79     -17.430  -3.730  -3.137  1.00  2.32
ATOM   1199  O   ASN A  79     -17.855  -3.542  -2.007  1.00 62.10
ATOM   1200  N   ASN A  80     -16.788  -2.789  -3.857  1.00 34.35
ATOM   1201  H   ASN A  80     -16.575  -3.007  -4.787  1.00  4.42
ATOM   1202  CA  ASN A  80     -16.398  -1.468  -3.314  1.00 25.04
ATOM   1203  HA  ASN A  80     -15.929  -0.940  -4.133  1.00 55.40
ATOM   1204  CB  ASN A  80     -17.588  -0.634  -2.786  1.00  3.04
ATOM   1205 1HB  ASN A  80     -18.251  -1.281  -2.230  1.00 20.41
ATOM   1206 2HB  ASN A  80     -17.213   0.136  -2.126  1.00 61.20
ATOM   1207  CG  ASN A  80     -18.386   0.021  -3.888  1.00 43.42
ATOM   1208  OD1 ASN A  80     -18.081   1.143  -4.302  1.00 62.24
ATOM   1209  ND2 ASN A  80     -19.407  -0.649  -4.366  1.00  3.32
ATOM   1210 2HD2 ASN A  80     -19.596  -1.533  -3.985  1.00 62.23
ATOM   1211 1HD2 ASN A  80     -19.932  -0.236  -5.080  1.00 13.10
ATOM   1212  C   ASN A  80     -15.350  -1.639  -2.258  1.00 15.42
ATOM   1213  O   ASN A  80     -15.275  -0.886  -1.305  1.00 12.31
ATOM   1214  N   ALA A  81     -14.509  -2.603  -2.494  1.00  2.11
ATOM   1215  H   ALA A  81     -14.594  -3.102  -3.331  1.00 61.24
ATOM   1216  CA  ALA A  81     -13.430  -2.939  -1.622  1.00 33.24
ATOM   1217  HA  ALA A  81     -13.414  -2.246  -0.793  1.00  3.43
ATOM   1218  CB  ALA A  81     -13.616  -4.350  -1.096  1.00 52.02
ATOM   1219 1HB  ALA A  81     -13.687  -5.021  -1.940  1.00 23.25
ATOM   1220 2HB  ALA A  81     -14.524  -4.407  -0.514  1.00 71.32
ATOM   1221 3HB  ALA A  81     -12.769  -4.629  -0.488  1.00 13.34
ATOM   1222  C   ALA A  81     -12.148  -2.833  -2.414  1.00 10.14
ATOM   1223  O   ALA A  81     -12.182  -2.818  -3.646  1.00  5.12
ATOM   1224  N   THR A  82     -11.046  -2.741  -1.749  1.00 74.21
ATOM   1225  H   THR A  82     -11.061  -2.751  -0.765  1.00 54.12
ATOM   1226  CA  THR A  82      -9.784  -2.630  -2.414  1.00 31.35
ATOM   1227  HA  THR A  82      -9.904  -2.905  -3.451  1.00 65.00
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ATOM   1228  CB  THR A  82      -9.274  -1.182  -2.328  1.00 10.43
ATOM   1229  HB  THR A  82      -8.917  -0.993  -1.325  1.00 60.14
ATOM   1230  OG1 THR A  82     -10.350  -0.293  -2.647  1.00 24.24
ATOM   1231  HG1 THR A  82     -11.056  -0.405  -1.998  1.00 15.52
ATOM   1232  CG2 THR A  82      -8.143  -0.944  -3.320  1.00 14.42
ATOM   1233 1HG2 THR A  82      -7.328  -1.621  -3.108  1.00 13.31
ATOM   1234 2HG2 THR A  82      -7.795   0.075  -3.233  1.00 62.23
ATOM   1235 3HG2 THR A  82      -8.501  -1.116  -4.323  1.00 64.12
ATOM   1236  C   THR A  82      -8.785  -3.566  -1.733  1.00 32.40
ATOM   1237  O   THR A  82      -8.598  -3.507  -0.530  1.00 24.33
ATOM   1238  N   ARG A  83      -8.178  -4.432  -2.482  1.00 21.50
ATOM   1239  H   ARG A  83      -8.345  -4.451  -3.450  1.00 31.21
ATOM   1240  CA  ARG A  83      -7.224  -5.346  -1.938  1.00 12.34
ATOM   1241  HA  ARG A  83      -7.307  -5.265  -0.865  1.00 21.54
ATOM   1242  CB  ARG A  83      -7.511  -6.781  -2.358  1.00 22.45
ATOM   1243 1HB  ARG A  83      -8.504  -7.052  -2.032  1.00 51.13
ATOM   1244 2HB  ARG A  83      -7.465  -6.845  -3.435  1.00 50.15
ATOM   1245  CG  ARG A  83      -6.531  -7.785  -1.783  1.00 61.21
ATOM   1246 1HG  ARG A  83      -5.575  -7.663  -2.271  1.00 43.13
ATOM   1247 2HG  ARG A  83      -6.419  -7.594  -0.725  1.00 72.53
ATOM   1248  CD  ARG A  83      -7.002  -9.200  -1.981  1.00 63.22
ATOM   1249 1HD  ARG A  83      -7.136  -9.410  -3.031  1.00 74.14
ATOM   1250 2HD  ARG A  83      -6.226  -9.819  -1.562  1.00 43.44
ATOM   1251  NE  ARG A  83      -8.247  -9.472  -1.243  1.00 14.54
ATOM   1252  HE  ARG A  83      -8.326  -8.996  -0.377  1.00 22.44
ATOM   1253  CZ  ARG A  83      -9.227 -10.306  -1.605  1.00 55.33
ATOM   1254  NH1 ARG A  83      -9.167 -10.968  -2.769  1.00  2.42
ATOM   1255 1HH1 ARG A  83      -8.387 -10.852  -3.387  1.00 63.50
ATOM   1256 2HH1 ARG A  83      -9.881 -11.603  -3.070  1.00 21.24
ATOM   1257  NH2 ARG A  83     -10.270 -10.476  -0.788  1.00  3.14
ATOM   1258 1HH2 ARG A  83     -10.298  -9.980   0.088  1.00 25.34
ATOM   1259 2HH2 ARG A  83     -11.046 -11.078  -0.980  1.00 25.41
ATOM   1260  C   ARG A  83      -5.833  -4.898  -2.308  1.00 32.13
ATOM   1261  O   ARG A  83      -5.580  -4.540  -3.447  1.00 64.22
ATOM   1262  N   ILE A  84      -4.955  -4.894  -1.353  1.00 14.42
ATOM   1263  H   ILE A  84      -5.167  -5.278  -0.472  1.00 50.43
ATOM   1264  CA  ILE A  84      -3.638  -4.368  -1.534  1.00 54.30
ATOM   1265  HA  ILE A  84      -3.605  -3.922  -2.517  1.00 11.21
ATOM   1266  CB  ILE A  84      -3.317  -3.238  -0.472  1.00 64.25
ATOM   1267  HB  ILE A  84      -3.856  -3.491   0.430  1.00 41.30
ATOM   1268  CG2 ILE A  84      -1.852  -3.172  -0.107  1.00 20.02
ATOM   1269 1HG2 ILE A  84      -1.572  -4.111   0.349  1.00 72.34
ATOM   1270 2HG2 ILE A  84      -1.685  -2.359   0.584  1.00 53.21
ATOM   1271 3HG2 ILE A  84      -1.267  -3.018  -1.000  1.00 31.03
ATOM   1272  CG1 ILE A  84      -3.794  -1.864  -0.938  1.00  1.44
ATOM   1273 1HG1 ILE A  84      -3.466  -1.111  -0.237  1.00 22.00
ATOM   1274 2HG1 ILE A  84      -3.321  -1.692  -1.894  1.00 43.11
ATOM   1275  CD1 ILE A  84      -5.278  -1.715  -1.116  1.00  4.13
ATOM   1276 1HD1 ILE A  84      -5.486  -0.715  -1.465  1.00 32.42
ATOM   1277 2HD1 ILE A  84      -5.781  -1.895  -0.177  1.00 13.11
ATOM   1278 3HD1 ILE A  84      -5.608  -2.427  -1.858  1.00 10.34
ATOM   1279  C   ILE A  84      -2.614  -5.479  -1.484  1.00 41.01
ATOM   1280  O   ILE A  84      -2.707  -6.416  -0.670  1.00 73.30
ATOM   1281  N   SER A  85      -1.701  -5.391  -2.405  1.00 63.43
ATOM   1282  H   SER A  85      -1.739  -4.625  -3.026  1.00 72.14
ATOM   1283  CA  SER A  85      -0.623  -6.311  -2.562  1.00 71.43
ATOM   1284  HA  SER A  85      -0.681  -7.068  -1.793  1.00 50.34
ATOM   1285  CB  SER A  85      -0.751  -6.960  -3.938  1.00 61.01
ATOM   1286 1HB  SER A  85      -0.567  -6.221  -4.704  1.00 42.40
ATOM   1287 2HB  SER A  85      -0.040  -7.767  -4.031  1.00  2.31
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ATOM   1288  OG  SER A  85      -2.068  -7.485  -4.103  1.00 11.10
ATOM   1289  HG  SER A  85      -2.495  -7.371  -3.249  1.00 14.31
ATOM   1290  C   SER A  85       0.683  -5.522  -2.442  1.00 51.10
ATOM   1291  O   SER A  85       0.923  -4.573  -3.207  1.00 21.02
ATOM   1292  N   ILE A  86       1.474  -5.853  -1.457  1.00 52.03
ATOM   1293  H   ILE A  86       1.241  -6.616  -0.885  1.00 43.23
ATOM   1294  CA  ILE A  86       2.702  -5.136  -1.190  1.00 62.34
ATOM   1295  HA  ILE A  86       2.723  -4.285  -1.855  1.00 11.34
ATOM   1296  CB  ILE A  86       2.728  -4.613   0.286  1.00 53.01
ATOM   1297  HB  ILE A  86       2.602  -5.453   0.953  1.00 73.44
ATOM   1298  CG2 ILE A  86       4.056  -3.918   0.624  1.00 34.11
ATOM   1299 1HG2 ILE A  86       4.870  -4.620   0.513  1.00  2.01
ATOM   1300 2HG2 ILE A  86       4.032  -3.564   1.644  1.00 53.30
ATOM   1301 3HG2 ILE A  86       4.209  -3.083  -0.044  1.00 74.40
ATOM   1302  CG1 ILE A  86       1.549  -3.652   0.486  1.00 13.43
ATOM   1303 1HG1 ILE A  86       1.677  -2.802  -0.166  1.00 63.14
ATOM   1304 2HG1 ILE A  86       0.638  -4.164   0.212  1.00 11.35
ATOM   1305  CD1 ILE A  86       1.380  -3.114   1.886  1.00 32.31
ATOM   1306 1HD1 ILE A  86       1.213  -3.935   2.568  1.00 63.02
ATOM   1307 2HD1 ILE A  86       0.531  -2.446   1.909  1.00 24.25
ATOM   1308 3HD1 ILE A  86       2.271  -2.574   2.169  1.00 21.43
ATOM   1309  C   ILE A  86       3.913  -6.007  -1.505  1.00 31.04
ATOM   1310  O   ILE A  86       3.896  -7.213  -1.278  1.00 11.04
ATOM   1311  N   LYS A  87       4.970  -5.379  -1.949  1.00 51.33
ATOM   1312  H   LYS A  87       4.954  -4.397  -2.010  1.00 30.11
ATOM   1313  CA  LYS A  87       6.162  -6.045  -2.383  1.00 75.21
ATOM   1314  HA  LYS A  87       5.969  -7.104  -2.470  1.00 23.31
ATOM   1315  CB  LYS A  87       6.542  -5.488  -3.764  1.00 11.51
ATOM   1316 1HB  LYS A  87       5.831  -5.851  -4.490  1.00 61.41
ATOM   1317 2HB  LYS A  87       6.441  -4.416  -3.694  1.00  3.12
ATOM   1318  CG  LYS A  87       7.946  -5.812  -4.278  1.00 14.32
ATOM   1319 1HG  LYS A  87       8.091  -5.322  -5.229  1.00 51.33
ATOM   1320 2HG  LYS A  87       8.664  -5.423  -3.569  1.00 54.15
ATOM   1321  CD  LYS A  87       8.193  -7.296  -4.465  1.00 44.24
ATOM   1322 1HD  LYS A  87       8.066  -7.797  -3.515  1.00 42.34
ATOM   1323 2HD  LYS A  87       7.487  -7.688  -5.181  1.00 55.44
ATOM   1324  CE  LYS A  87       9.608  -7.537  -4.973  1.00 42.25
ATOM   1325 1HE  LYS A  87       9.782  -8.601  -5.045  1.00 12.20
ATOM   1326 2HE  LYS A  87       9.708  -7.091  -5.952  1.00 24.32
ATOM   1327  NZ  LYS A  87      10.611  -6.950  -4.071  1.00  3.42
ATOM   1328 1HZ  LYS A  87      11.607  -7.171  -4.297  1.00 55.43
ATOM   1329 2HZ  LYS A  87      10.517  -7.238  -3.076  1.00 44.11
ATOM   1330 3HZ  LYS A  87      10.602  -5.905  -4.048  1.00 30.55
ATOM   1331  C   LYS A  87       7.260  -5.786  -1.374  1.00  0.55
ATOM   1332  O   LYS A  87       7.583  -4.645  -1.043  1.00 61.02
ATOM   1333  N   TYR A  88       7.778  -6.874  -0.867  1.00 50.50
ATOM   1334  H   TYR A  88       7.482  -7.735  -1.222  1.00 41.02
ATOM   1335  CA  TYR A  88       8.762  -6.883   0.179  1.00 11.34
ATOM   1336  HA  TYR A  88       8.683  -5.976   0.760  1.00 22.10
ATOM   1337  CB  TYR A  88       8.492  -8.076   1.122  1.00 53.21
ATOM   1338 1HB  TYR A  88       9.177  -8.022   1.954  1.00 13.42
ATOM   1339 2HB  TYR A  88       7.480  -8.011   1.493  1.00 75.21
ATOM   1340  CG  TYR A  88       8.670  -9.456   0.468  1.00 10.00
ATOM   1341  CD1 TYR A  88       9.805 -10.218   0.712  1.00 63.34
ATOM   1342  HD1 TYR A  88      10.558  -9.834   1.385  1.00 62.33
ATOM   1343  CE1 TYR A  88       9.988 -11.447   0.111  1.00 21.10
ATOM   1344  HE1 TYR A  88      10.879 -12.022   0.315  1.00 14.41
ATOM   1345  CZ  TYR A  88       9.027 -11.935  -0.742  1.00 41.22
ATOM   1346  CE2 TYR A  88       7.894 -11.207  -1.001  1.00  4.54
ATOM   1347  HE2 TYR A  88       7.148 -11.600  -1.672  1.00 74.45
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ATOM   1348  CD2 TYR A  88       7.719  -9.975  -0.401  1.00 14.41
ATOM   1349  HD2 TYR A  88       6.826  -9.401  -0.606  1.00 61.10
ATOM   1350  OH  TYR A  88       9.203 -13.148  -1.348  1.00 51.30
ATOM   1351  HH  TYR A  88       9.404 -13.799  -0.669  1.00 22.31
ATOM   1352  C   TYR A  88      10.156  -7.022  -0.387  1.00 21.23
ATOM   1353  O   TYR A  88      10.331  -7.568  -1.481  1.00 43.21
ATOM   1354  N   GLY A  89      11.119  -6.536   0.353  1.00 73.24
ATOM   1355  H   GLY A  89      10.893  -6.018   1.156  1.00  3.40
ATOM   1356  CA  GLY A  89      12.496  -6.739   0.025  1.00 42.45
ATOM   1357 1HA  GLY A  89      12.594  -6.888  -1.042  1.00  4.43
ATOM   1358 2HA  GLY A  89      13.072  -5.877   0.328  1.00 23.10
ATOM   1359  C   GLY A  89      13.003  -7.947   0.763  1.00 71.45
ATOM   1360  O   GLY A  89      12.238  -8.568   1.505  1.00 43.32
ATOM   1361  N   SER A  90      14.276  -8.252   0.639  1.00 54.53
ATOM   1362  H   SER A  90      14.871  -7.673   0.112  1.00 72.41
ATOM   1363  CA  SER A  90      14.866  -9.451   1.241  1.00 24.45
ATOM   1364  HA  SER A  90      14.341 -10.306   0.843  1.00  4.01
ATOM   1365  CB  SER A  90      16.320  -9.548   0.813  1.00 42.35
ATOM   1366 1HB  SER A  90      16.898  -8.792   1.325  1.00 74.13
ATOM   1367 2HB  SER A  90      16.707 -10.527   1.049  1.00 23.25
ATOM   1368  OG  SER A  90      16.428  -9.339  -0.595  1.00 21.55
ATOM   1369  HG  SER A  90      15.704  -9.786  -1.041  1.00 14.14
ATOM   1370  C   SER A  90      14.751  -9.483   2.793  1.00 12.14
ATOM   1371  O   SER A  90      14.905 -10.531   3.406  1.00 71.34
ATOM   1372  N   GLN A  91      14.482  -8.335   3.405  1.00 44.35
ATOM   1373  H   GLN A  91      14.369  -7.535   2.855  1.00 51.44
ATOM   1374  CA  GLN A  91      14.357  -8.257   4.858  1.00 41.23
ATOM   1375  HA  GLN A  91      14.922  -9.076   5.277  1.00 53.12
ATOM   1376  CB  GLN A  91      14.940  -6.942   5.390  1.00 63.00
ATOM   1377 1HB  GLN A  91      14.857  -6.948   6.466  1.00  1.24
ATOM   1378 2HB  GLN A  91      15.986  -6.892   5.122  1.00  1.22
ATOM   1379  CG  GLN A  91      14.246  -5.684   4.861  1.00 43.44
ATOM   1380 1HG  GLN A  91      14.409  -5.622   3.796  1.00 72.13
ATOM   1381 2HG  GLN A  91      13.186  -5.771   5.054  1.00 24.33
ATOM   1382  CD  GLN A  91      14.756  -4.401   5.501  1.00  3.25
ATOM   1383  OE1 GLN A  91      14.760  -3.341   4.879  1.00 64.12
ATOM   1384  NE2 GLN A  91      15.160  -4.471   6.748  1.00  1.43
ATOM   1385 2HE2 GLN A  91      15.112  -5.337   7.205  1.00 41.41
ATOM   1386 1HE2 GLN A  91      15.489  -3.652   7.170  1.00 12.44
ATOM   1387  C   GLN A  91      12.894  -8.387   5.316  1.00 65.44
ATOM   1388  O   GLN A  91      12.628  -8.523   6.504  1.00 71.24
ATOM   1389  N   GLY A  92      11.964  -8.349   4.374  1.00 20.32
ATOM   1390  H   GLY A  92      12.232  -8.321   3.430  1.00 60.21
ATOM   1391  CA  GLY A  92      10.566  -8.392   4.734  1.00 11.11
ATOM   1392 1HA  GLY A  92      10.007  -8.826   3.920  1.00 73.04
ATOM   1393 2HA  GLY A  92      10.447  -9.010   5.612  1.00 64.10
ATOM   1394  C   GLY A  92      10.012  -7.003   5.036  1.00  3.24
ATOM   1395  O   GLY A  92      10.446  -6.331   5.966  1.00 71.11
ATOM   1396  N   ASN A  93       9.045  -6.575   4.256  1.00 31.02
ATOM   1397  H   ASN A  93       8.709  -7.152   3.540  1.00 53.25
ATOM   1398  CA  ASN A  93       8.460  -5.239   4.419  1.00 12.11
ATOM   1399  HA  ASN A  93       9.189  -4.622   4.922  1.00 34.13
ATOM   1400  CB  ASN A  93       8.126  -4.592   3.056  1.00 71.12
ATOM   1401 1HB  ASN A  93       7.537  -5.285   2.477  1.00 35.21
ATOM   1402 2HB  ASN A  93       7.537  -3.703   3.231  1.00 43.01
ATOM   1403  CG  ASN A  93       9.348  -4.207   2.231  1.00 35.50
ATOM   1404  OD1 ASN A  93      10.417  -4.797   2.360  1.00 11.12
ATOM   1405  ND2 ASN A  93       9.184  -3.266   1.337  1.00 14.31
ATOM   1406 2HD2 ASN A  93       8.298  -2.859   1.238  1.00  1.51
ATOM   1407 1HD2 ASN A  93       9.951  -3.015   0.782  1.00 62.31
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ATOM   1408  C   ASN A  93       7.209  -5.296   5.260  1.00 41.35
ATOM   1409  O   ASN A  93       6.721  -4.268   5.702  1.00 24.32
ATOM   1410  N   SER A  94       6.751  -6.512   5.529  1.00 62.13
ATOM   1411  H   SER A  94       7.317  -7.267   5.266  1.00 14.13
ATOM   1412  CA  SER A  94       5.464  -6.808   6.173  1.00 32.35
ATOM   1413  HA  SER A  94       4.694  -6.636   5.436  1.00 13.31
ATOM   1414  CB  SER A  94       5.430  -8.305   6.546  1.00 41.43
ATOM   1415 1HB  SER A  94       5.630  -8.895   5.664  1.00 11.21
ATOM   1416 2HB  SER A  94       6.197  -8.499   7.281  1.00 24.22
ATOM   1417  OG  SER A  94       4.185  -8.703   7.069  1.00 63.10
ATOM   1418  HG  SER A  94       3.601  -8.950   6.346  1.00 44.10
ATOM   1419  C   SER A  94       5.158  -5.912   7.406  1.00 34.02
ATOM   1420  O   SER A  94       4.089  -5.302   7.471  1.00 53.50
ATOM   1421  N   ILE A  95       6.105  -5.787   8.333  1.00 30.11
ATOM   1422  H   ILE A  95       6.952  -6.260   8.210  1.00 50.24
ATOM   1423  CA  ILE A  95       5.896  -4.979   9.538  1.00 21.25
ATOM   1424  HA  ILE A  95       5.020  -5.376  10.031  1.00 41.20
ATOM   1425  CB  ILE A  95       7.087  -5.115  10.512  1.00 33.02
ATOM   1426  HB  ILE A  95       7.979  -4.789   9.999  1.00 32.44
ATOM   1427  CG2 ILE A  95       6.904  -4.240  11.757  1.00 44.32
ATOM   1428 1HG2 ILE A  95       6.821  -3.205  11.459  1.00  4.04
ATOM   1429 2HG2 ILE A  95       7.756  -4.359  12.411  1.00 70.12
ATOM   1430 3HG2 ILE A  95       6.006  -4.537  12.277  1.00 30.33
ATOM   1431  CG1 ILE A  95       7.266  -6.584  10.907  1.00 23.51
ATOM   1432 1HG1 ILE A  95       7.626  -7.165  10.072  1.00 20.10
ATOM   1433 2HG1 ILE A  95       7.997  -6.584  11.695  1.00 72.13
ATOM   1434  CD1 ILE A  95       6.017  -7.262  11.462  1.00 42.23
ATOM   1435 1HD1 ILE A  95       6.260  -8.270  11.760  1.00 61.24
ATOM   1436 2HD1 ILE A  95       5.264  -7.298  10.689  1.00 74.32
ATOM   1437 3HD1 ILE A  95       5.646  -6.707  12.312  1.00 63.23
ATOM   1438  C   ILE A  95       5.654  -3.500   9.193  1.00 23.01
ATOM   1439  O   ILE A  95       4.737  -2.860   9.712  1.00  0.23
ATOM   1440  N   ARG A  96       6.451  -2.991   8.276  1.00 31.41
ATOM   1441  H   ARG A  96       7.131  -3.562   7.857  1.00 22.13
ATOM   1442  CA  ARG A  96       6.350  -1.618   7.820  1.00  5.35
ATOM   1443  HA  ARG A  96       6.348  -0.967   8.681  1.00 13.02
ATOM   1444  CB  ARG A  96       7.563  -1.293   6.956  1.00 75.32
ATOM   1445 1HB  ARG A  96       7.624  -2.019   6.159  1.00 75.22
ATOM   1446 2HB  ARG A  96       7.430  -0.311   6.527  1.00 52.35
ATOM   1447  CG  ARG A  96       8.879  -1.304   7.719  1.00 71.24
ATOM   1448 1HG  ARG A  96       8.940  -2.230   8.276  1.00  2.30
ATOM   1449 2HG  ARG A  96       9.695  -1.252   7.017  1.00 64.35
ATOM   1450  CD  ARG A  96       8.948  -0.134   8.689  1.00 23.33
ATOM   1451 1HD  ARG A  96       8.162  -0.230   9.423  1.00  4.23
ATOM   1452 2HD  ARG A  96       9.909  -0.143   9.183  1.00 14.30
ATOM   1453  NE  ARG A  96       8.798   1.130   7.970  1.00 33.40
ATOM   1454  HE  ARG A  96       9.322   1.154   7.124  1.00 13.35
ATOM   1455  CZ  ARG A  96       8.024   2.156   8.321  1.00  0.13
ATOM   1456  NH1 ARG A  96       7.448   2.199   9.530  1.00 24.05
ATOM   1457 1HH1 ARG A  96       7.586   1.465  10.196  1.00 73.34
ATOM   1458 2HH1 ARG A  96       6.867   2.966   9.808  1.00 35.34
ATOM   1459  NH2 ARG A  96       7.841   3.146   7.466  1.00 72.02
ATOM   1460 1HH2 ARG A  96       8.269   3.099   6.549  1.00 31.54
ATOM   1461 2HH2 ARG A  96       7.329   3.984   7.666  1.00 61.11
ATOM   1462  C   ARG A  96       5.064  -1.414   7.030  1.00  1.43
ATOM   1463  O   ARG A  96       4.386  -0.396   7.165  1.00 64.53
ATOM   1464  N   SER A  97       4.729  -2.407   6.247  1.00 50.32
ATOM   1465  H   SER A  97       5.313  -3.199   6.210  1.00 34.11
ATOM   1466  CA  SER A  97       3.553  -2.399   5.420  1.00  1.01
ATOM   1467  HA  SER A  97       3.577  -1.515   4.802  1.00 75.12
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ATOM   1468  CB  SER A  97       3.605  -3.612   4.514  1.00 14.44
ATOM   1469 1HB  SER A  97       3.582  -4.507   5.121  1.00 54.52
ATOM   1470 2HB  SER A  97       2.763  -3.608   3.842  1.00 24.23
ATOM   1471  OG  SER A  97       4.806  -3.599   3.761  1.00 12.31
ATOM   1472  HG  SER A  97       5.266  -2.777   3.958  1.00 14.22
ATOM   1473  C   SER A  97       2.269  -2.398   6.259  1.00 31.14
ATOM   1474  O   SER A  97       1.300  -1.729   5.912  1.00 12.00
ATOM   1475  N   SER A  98       2.291  -3.117   7.372  1.00 10.20
ATOM   1476  H   SER A  98       3.097  -3.631   7.600  1.00 44.11
ATOM   1477  CA  SER A  98       1.148  -3.212   8.254  1.00 33.51
ATOM   1478  HA  SER A  98       0.313  -3.574   7.672  1.00 15.41
ATOM   1479  CB  SER A  98       1.445  -4.219   9.386  1.00 12.14
ATOM   1480 1HB  SER A  98       1.910  -5.100   8.970  1.00 33.44
ATOM   1481 2HB  SER A  98       2.124  -3.769  10.095  1.00 23.45
ATOM   1482  OG  SER A  98       0.255  -4.603  10.066  1.00 65.12
ATOM   1483  HG  SER A  98       0.377  -4.467  11.010  1.00  2.11
ATOM   1484  C   SER A  98       0.798  -1.823   8.819  1.00 22.20
ATOM   1485  O   SER A  98      -0.378  -1.453   8.923  1.00 65.43
ATOM   1486  N   ALA A  99       1.833  -1.044   9.126  1.00  1.13
ATOM   1487  H   ALA A  99       2.738  -1.395   8.986  1.00 24.24
ATOM   1488  CA  ALA A  99       1.657   0.300   9.654  1.00 31.54
ATOM   1489  HA  ALA A  99       1.002   0.233  10.511  1.00 20.22
ATOM   1490  CB  ALA A  99       2.993   0.873  10.103  1.00 44.15
ATOM   1491 1HB  ALA A  99       3.436   0.221  10.840  1.00 25.21
ATOM   1492 2HB  ALA A  99       2.839   1.852  10.533  1.00 45.20
ATOM   1493 3HB  ALA A  99       3.654   0.955   9.252  1.00 70.13
ATOM   1494  C   ALA A  99       1.008   1.199   8.607  1.00 54.52
ATOM   1495  O   ALA A  99       0.078   1.943   8.911  1.00  3.50
ATOM   1496  N   LEU A 100       1.491   1.089   7.368  1.00 65.31
ATOM   1497  H   LEU A 100       2.236   0.478   7.192  1.00 72.12
ATOM   1498  CA  LEU A 100       0.987   1.845   6.237  1.00  3.43
ATOM   1499  HA  LEU A 100       1.160   2.897   6.407  1.00 72.24
ATOM   1500  CB  LEU A 100       1.740   1.414   4.983  1.00 23.21
ATOM   1501 1HB  LEU A 100       2.793   1.396   5.216  1.00 74.21
ATOM   1502 2HB  LEU A 100       1.443   0.398   4.772  1.00 55.13
ATOM   1503  CG  LEU A 100       1.508   2.243   3.722  1.00 14.02
ATOM   1504  HG  LEU A 100       0.447   2.282   3.520  1.00  5.11
ATOM   1505  CD1 LEU A 100       1.996   3.667   3.922  1.00 43.23
ATOM   1506 1HD1 LEU A 100       1.439   4.127   4.726  1.00 42.00
ATOM   1507 2HD1 LEU A 100       1.858   4.235   3.012  1.00 12.14
ATOM   1508 3HD1 LEU A 100       3.044   3.644   4.183  1.00 11.34
ATOM   1509  CD2 LEU A 100       2.198   1.597   2.535  1.00 52.22
ATOM   1510 1HD2 LEU A 100       3.257   1.536   2.734  1.00 42.10
ATOM   1511 2HD2 LEU A 100       2.028   2.192   1.650  1.00 74.04
ATOM   1512 3HD2 LEU A 100       1.802   0.604   2.389  1.00  3.11
ATOM   1513  C   LEU A 100      -0.498   1.573   6.050  1.00  4.13
ATOM   1514  O   LEU A 100      -1.295   2.492   5.903  1.00 33.35
ATOM   1515  N   ILE A 101      -0.849   0.302   6.116  1.00 15.41
ATOM   1516  H   ILE A 101      -0.125  -0.348   6.260  1.00 50.22
ATOM   1517  CA  ILE A 101      -2.231  -0.150   5.956  1.00 15.14
ATOM   1518  HA  ILE A 101      -2.575   0.179   4.988  1.00 64.03
ATOM   1519  CB  ILE A 101      -2.320  -1.706   6.011  1.00 64.44
ATOM   1520  HB  ILE A 101      -1.814  -2.028   6.910  1.00 60.31
ATOM   1521  CG2 ILE A 101      -3.767  -2.201   6.094  1.00 42.03
ATOM   1522 1HG2 ILE A 101      -4.298  -1.883   5.209  1.00 63.21
ATOM   1523 2HG2 ILE A 101      -4.240  -1.780   6.968  1.00 31.11
ATOM   1524 3HG2 ILE A 101      -3.781  -3.278   6.159  1.00 12.21
ATOM   1525  CG1 ILE A 101      -1.600  -2.331   4.803  1.00 71.13
ATOM   1526 1HG1 ILE A 101      -0.588  -1.955   4.768  1.00 12.15
ATOM   1527 2HG1 ILE A 101      -1.565  -3.402   4.922  1.00 22.22
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ATOM   1528  CD1 ILE A 101      -2.237  -2.029   3.456  1.00  4.35
ATOM   1529 1HD1 ILE A 101      -3.256  -2.389   3.459  1.00 20.15
ATOM   1530 2HD1 ILE A 101      -1.688  -2.551   2.687  1.00 22.44
ATOM   1531 3HD1 ILE A 101      -2.223  -0.968   3.258  1.00 11.41
ATOM   1532  C   ILE A 101      -3.141   0.473   7.014  1.00 43.41
ATOM   1533  O   ILE A 101      -4.232   0.955   6.685  1.00 63.42
ATOM   1534  N   GLY A 102      -2.657   0.521   8.258  1.00 41.21
ATOM   1535  H   GLY A 102      -1.768   0.141   8.434  1.00 54.51
ATOM   1536  CA  GLY A 102      -3.422   1.111   9.353  1.00 64.21
ATOM   1537 1HA  GLY A 102      -4.338   0.559   9.474  1.00 20.12
ATOM   1538 2HA  GLY A 102      -2.845   1.045  10.265  1.00 34.44
ATOM   1539  C   GLY A 102      -3.766   2.563   9.095  1.00 32.34
ATOM   1540  O   GLY A 102      -4.862   3.035   9.431  1.00  0.44
ATOM   1541  N   ILE A 103      -2.844   3.247   8.476  1.00 22.04
ATOM   1542  H   ILE A 103      -2.005   2.789   8.251  1.00 64.34
ATOM   1543  CA  ILE A 103      -3.000   4.631   8.110  1.00 32.34
ATOM   1544  HA  ILE A 103      -3.311   5.189   8.981  1.00 65.12
ATOM   1545  CB  ILE A 103      -1.648   5.189   7.626  1.00 43.32
ATOM   1546  HB  ILE A 103      -1.284   4.550   6.834  1.00 34.01
ATOM   1547  CG2 ILE A 103      -1.792   6.611   7.064  1.00 51.11
ATOM   1548 1HG2 ILE A 103      -2.199   7.264   7.820  1.00 24.15
ATOM   1549 2HG2 ILE A 103      -2.454   6.590   6.208  1.00 61.01
ATOM   1550 3HG2 ILE A 103      -0.825   6.975   6.748  1.00 42.44
ATOM   1551  CG1 ILE A 103      -0.650   5.143   8.780  1.00 61.13
ATOM   1552 1HG1 ILE A 103      -0.869   5.948   9.467  1.00 71.12
ATOM   1553 2HG1 ILE A 103      -0.760   4.201   9.296  1.00 24.24
ATOM   1554  CD1 ILE A 103       0.782   5.280   8.360  1.00 12.51
ATOM   1555 1HD1 ILE A 103       0.960   6.202   7.822  1.00  2.11
ATOM   1556 2HD1 ILE A 103       1.026   4.449   7.718  1.00 63.12
ATOM   1557 3HD1 ILE A 103       1.412   5.244   9.237  1.00 54.53
ATOM   1558  C   ILE A 103      -4.044   4.769   7.013  1.00 51.10
ATOM   1559  O   ILE A 103      -4.955   5.589   7.116  1.00  4.12
ATOM   1560  N   ILE A 104      -3.930   3.926   6.001  1.00 53.53
ATOM   1561  H   ILE A 104      -3.224   3.244   6.041  1.00 12.52
ATOM   1562  CA  ILE A 104      -4.807   3.978   4.838  1.00 21.24
ATOM   1563  HA  ILE A 104      -4.713   4.951   4.380  1.00  3.23
ATOM   1564  CB  ILE A 104      -4.384   2.905   3.799  1.00 34.43
ATOM   1565  HB  ILE A 104      -4.464   1.932   4.264  1.00 43.52
ATOM   1566  CG2 ILE A 104      -5.308   2.933   2.579  1.00  5.31
ATOM   1567 1HG2 ILE A 104      -5.016   2.154   1.892  1.00 75.15
ATOM   1568 2HG2 ILE A 104      -5.215   3.889   2.086  1.00 45.40
ATOM   1569 3HG2 ILE A 104      -6.330   2.782   2.892  1.00 64.50
ATOM   1570  CG1 ILE A 104      -2.933   3.130   3.372  1.00 53.34
ATOM   1571 1HG1 ILE A 104      -2.889   4.029   2.775  1.00 55.53
ATOM   1572 2HG1 ILE A 104      -2.314   3.264   4.247  1.00  1.20
ATOM   1573  CD1 ILE A 104      -2.351   2.003   2.545  1.00 31.44
ATOM   1574 1HD1 ILE A 104      -1.329   2.237   2.286  1.00 20.41
ATOM   1575 2HD1 ILE A 104      -2.933   1.881   1.645  1.00 71.23
ATOM   1576 3HD1 ILE A 104      -2.376   1.088   3.119  1.00 53.52
ATOM   1577  C   ILE A 104      -6.262   3.739   5.239  1.00 33.01
ATOM   1578  O   ILE A 104      -7.135   4.549   4.926  1.00 13.11
ATOM   1579  N   GLU A 105      -6.506   2.674   5.982  1.00 31.04
ATOM   1580  H   GLU A 105      -5.756   2.094   6.249  1.00 21.44
ATOM   1581  CA  GLU A 105      -7.854   2.360   6.407  1.00 53.11
ATOM   1582  HA  GLU A 105      -8.458   2.436   5.515  1.00 51.23
ATOM   1583  CB  GLU A 105      -7.971   0.931   6.949  1.00 75.01
ATOM   1584 1HB  GLU A 105      -8.975   0.787   7.320  1.00 21.32
ATOM   1585 2HB  GLU A 105      -7.801   0.248   6.131  1.00 34.11
ATOM   1586  CG  GLU A 105      -7.015   0.579   8.068  1.00 54.04
ATOM   1587 1HG  GLU A 105      -6.004   0.628   7.693  1.00 51.41
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ATOM   1588 2HG  GLU A 105      -7.140   1.292   8.869  1.00 14.42
ATOM   1589  CD  GLU A 105      -7.265  -0.800   8.602  1.00 22.24
ATOM   1590  OE1 GLU A 105      -6.740  -1.774   8.040  1.00  1.02
ATOM   1591  OE2 GLU A 105      -8.016  -0.921   9.591  1.00 32.04
ATOM   1592  C   GLU A 105      -8.401   3.398   7.386  1.00 32.14
ATOM   1593  O   GLU A 105      -9.560   3.824   7.273  1.00 25.30
ATOM   1594  N   GLY A 106      -7.547   3.825   8.315  1.00 53.15
ATOM   1595  H   GLY A 106      -6.639   3.457   8.334  1.00 74.31
ATOM   1596  CA  GLY A 106      -7.911   4.801   9.304  1.00 21.45
ATOM   1597 1HA  GLY A 106      -8.755   4.429   9.868  1.00 64.44
ATOM   1598 2HA  GLY A 106      -7.079   4.942   9.978  1.00 41.14
ATOM   1599  C   GLY A 106      -8.278   6.131   8.699  1.00  4.31
ATOM   1600  O   GLY A 106      -9.275   6.731   9.091  1.00 43.24
ATOM   1601  N   ASN A 107      -7.531   6.539   7.689  1.00 31.04
ATOM   1602  H   ASN A 107      -6.804   5.957   7.369  1.00 42.22
ATOM   1603  CA  ASN A 107      -7.726   7.836   7.036  1.00 34.20
ATOM   1604  HA  ASN A 107      -7.649   8.613   7.782  1.00 63.41
ATOM   1605  CB  ASN A 107      -6.629   8.052   5.970  1.00 10.13
ATOM   1606 1HB  ASN A 107      -5.667   8.075   6.459  1.00 61.21
ATOM   1607 2HB  ASN A 107      -6.648   7.218   5.285  1.00  3.21
ATOM   1608  CG  ASN A 107      -6.777   9.344   5.166  1.00 61.41
ATOM   1609  OD1 ASN A 107      -7.433   9.373   4.134  1.00 52.53
ATOM   1610  ND2 ASN A 107      -6.139  10.401   5.614  1.00 43.42
ATOM   1611 2HD2 ASN A 107      -5.605  10.326   6.430  1.00 12.24
ATOM   1612 1HD2 ASN A 107      -6.219  11.219   5.080  1.00 64.25
ATOM   1613  C   ASN A 107      -9.092   7.888   6.387  1.00 63.01
ATOM   1614  O   ASN A 107      -9.831   8.860   6.558  1.00 21.22
ATOM   1615  N   ILE A 108      -9.452   6.809   5.729  1.00  0.43
ATOM   1616  H   ILE A 108      -8.829   6.052   5.694  1.00  3.33
ATOM   1617  CA  ILE A 108     -10.724   6.719   5.043  1.00 12.10
ATOM   1618  HA  ILE A 108     -10.816   7.566   4.380  1.00 35.33
ATOM   1619  CB  ILE A 108     -10.819   5.426   4.216  1.00 22.35
ATOM   1620  HB  ILE A 108     -10.751   4.585   4.891  1.00 62.14
ATOM   1621  CG2 ILE A 108     -12.163   5.356   3.491  1.00 33.44
ATOM   1622 1HG2 ILE A 108     -12.260   6.207   2.834  1.00 42.24
ATOM   1623 2HG2 ILE A 108     -12.963   5.370   4.218  1.00 60.14
ATOM   1624 3HG2 ILE A 108     -12.214   4.446   2.914  1.00 62.01
ATOM   1625  CG1 ILE A 108      -9.669   5.354   3.217  1.00 35.24
ATOM   1626 1HG1 ILE A 108      -9.843   6.080   2.437  1.00 11.15
ATOM   1627 2HG1 ILE A 108      -8.741   5.581   3.721  1.00 14.22
ATOM   1628  CD1 ILE A 108      -9.532   4.014   2.553  1.00 13.24
ATOM   1629 1HD1 ILE A 108      -9.398   3.251   3.307  1.00 43.44
ATOM   1630 2HD1 ILE A 108      -8.665   4.028   1.911  1.00 63.13
ATOM   1631 3HD1 ILE A 108     -10.417   3.799   1.974  1.00 63.35
ATOM   1632  C   ILE A 108     -11.876   6.759   6.030  1.00 30.12
ATOM   1633  O   ILE A 108     -12.801   7.543   5.869  1.00 13.42
ATOM   1634  N   ARG A 109     -11.800   5.946   7.077  1.00  4.25
ATOM   1635  H   ARG A 109     -10.996   5.388   7.180  1.00 10.45
ATOM   1636  CA  ARG A 109     -12.885   5.901   8.039  1.00 51.55
ATOM   1637  HA  ARG A 109     -13.751   5.775   7.409  1.00 72.24
ATOM   1638  CB  ARG A 109     -12.838   4.711   8.995  1.00  4.02
ATOM   1639 1HB  ARG A 109     -13.471   4.967   9.831  1.00 43.42
ATOM   1640 2HB  ARG A 109     -13.234   3.837   8.500  1.00 72.03
ATOM   1641  CG  ARG A 109     -11.491   4.380   9.574  1.00 14.33
ATOM   1642 1HG  ARG A 109     -10.866   4.159   8.722  1.00 32.13
ATOM   1643 2HG  ARG A 109     -11.050   5.202  10.119  1.00 14.00
ATOM   1644  CD  ARG A 109     -11.588   3.149  10.453  1.00 42.31
ATOM   1645 1HD  ARG A 109     -12.231   3.375  11.290  1.00 24.55
ATOM   1646 2HD  ARG A 109     -12.024   2.345   9.878  1.00 13.51
ATOM   1647  NE  ARG A 109     -10.286   2.715  10.966  1.00 73.25
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ATOM   1648  HE  ARG A 109      -9.883   3.314  11.630  1.00 71.24
ATOM   1649  CZ  ARG A 109      -9.679   1.562  10.612  1.00 35.12
ATOM   1650  NH1 ARG A 109     -10.186   0.788   9.655  1.00 44.44
ATOM   1651 1HH1 ARG A 109     -11.022   0.978   9.128  1.00 64.43
ATOM   1652 2HH1 ARG A 109      -9.682  -0.060   9.429  1.00 13.33
ATOM   1653  NH2 ARG A 109      -8.544   1.193  11.188  1.00 41.42
ATOM   1654 1HH2 ARG A 109      -8.061   1.704  11.898  1.00 10.31
ATOM   1655 2HH2 ARG A 109      -8.129   0.327  10.866  1.00 53.14
ATOM   1656  C   ARG A 109     -13.102   7.205   8.757  1.00 73.30
ATOM   1657  O   ARG A 109     -14.237   7.593   8.972  1.00  3.55
ATOM   1658  N   TYR A 110     -12.032   7.902   9.069  1.00  2.34
ATOM   1659  H   TYR A 110     -11.139   7.560   8.845  1.00  3.43
ATOM   1660  CA  TYR A 110     -12.161   9.182   9.738  1.00 64.10
ATOM   1661  HA  TYR A 110     -12.900   9.046  10.515  1.00 11.03
ATOM   1662  CB  TYR A 110     -10.845   9.644  10.373  1.00 14.33
ATOM   1663 1HB  TYR A 110     -10.111   9.713   9.585  1.00 11.12
ATOM   1664 2HB  TYR A 110     -10.993  10.613  10.826  1.00 63.40
ATOM   1665  CG  TYR A 110     -10.288   8.697  11.424  1.00 22.41
ATOM   1666  CD1 TYR A 110      -8.920   8.471  11.522  1.00  2.50
ATOM   1667  HD1 TYR A 110      -8.254   9.001  10.857  1.00 11.40
ATOM   1668  CE1 TYR A 110      -8.406   7.587  12.446  1.00 61.35
ATOM   1669  HE1 TYR A 110      -7.340   7.428  12.505  1.00 24.13
ATOM   1670  CZ  TYR A 110      -9.258   6.916  13.294  1.00  5.31
ATOM   1671  CE2 TYR A 110     -10.617   7.122  13.223  1.00 31.45
ATOM   1672  HE2 TYR A 110     -11.285   6.596  13.889  1.00 22.34
ATOM   1673  CD2 TYR A 110     -11.128   8.002  12.292  1.00  3.41
ATOM   1674  HD2 TYR A 110     -12.194   8.161  12.239  1.00 12.33
ATOM   1675  OH  TYR A 110      -8.747   6.022  14.206  1.00 53.54
ATOM   1676  HH  TYR A 110      -8.010   6.431  14.667  1.00  1.11
ATOM   1677  C   TYR A 110     -12.717  10.230   8.782  1.00 52.13
ATOM   1678  O   TYR A 110     -13.515  11.067   9.173  1.00 32.34
ATOM   1679  N   ALA A 111     -12.291  10.175   7.519  1.00 33.22
ATOM   1680  H   ALA A 111     -11.621   9.510   7.243  1.00 73.23
ATOM   1681  CA  ALA A 111     -12.804  11.094   6.509  1.00 55.04
ATOM   1682  HA  ALA A 111     -12.701  12.097   6.898  1.00 44.13
ATOM   1683  CB  ALA A 111     -11.995  10.987   5.225  1.00 65.30
ATOM   1684 1HB  ALA A 111     -10.954  11.177   5.438  1.00 24.54
ATOM   1685 2HB  ALA A 111     -12.355  11.713   4.510  1.00 63.11
ATOM   1686 3HB  ALA A 111     -12.104   9.994   4.815  1.00 70.53
ATOM   1687  C   ALA A 111     -14.290  10.832   6.227  1.00 14.25
ATOM   1688  O   ALA A 111     -15.028  11.725   5.851  1.00  3.01
ATOM   1689  N   ASN A 112     -14.696   9.582   6.372  1.00 72.50
ATOM   1690  H   ASN A 112     -14.035   8.912   6.649  1.00 24.55
ATOM   1691  CA  ASN A 112     -16.086   9.181   6.137  1.00 60.32
ATOM   1692  HA  ASN A 112     -16.417   9.758   5.287  1.00  1.41
ATOM   1693  CB  ASN A 112     -16.213   7.684   5.772  1.00 72.43
ATOM   1694 1HB  ASN A 112     -15.608   7.107   6.457  1.00 44.34
ATOM   1695 2HB  ASN A 112     -17.246   7.386   5.886  1.00 24.41
ATOM   1696  CG  ASN A 112     -15.764   7.342   4.342  1.00 12.53
ATOM   1697  OD1 ASN A 112     -16.264   6.407   3.733  1.00 62.02
ATOM   1698  ND2 ASN A 112     -14.827   8.086   3.803  1.00 11.32
ATOM   1699 2HD2 ASN A 112     -14.464   8.817   4.347  1.00 53.43
ATOM   1700 1HD2 ASN A 112     -14.533   7.876   2.895  1.00 62.23
ATOM   1701  C   ASN A 112     -17.009   9.536   7.292  1.00 12.45
ATOM   1702  O   ASN A 112     -18.201   9.780   7.082  1.00  2.44
ATOM   1703  N   THR A 113     -16.479   9.558   8.502  1.00 53.44
ATOM   1704  H   THR A 113     -15.526   9.371   8.640  1.00  4.01
ATOM   1705  CA  THR A 113     -17.278   9.874   9.664  1.00 13.13
ATOM   1706  HA  THR A 113     -18.204   9.328   9.559  1.00 24.13
ATOM   1707  CB  THR A 113     -16.597   9.411  10.969  1.00 35.14
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ATOM   1708  HB  THR A 113     -17.081   9.905  11.799  1.00 14.41
ATOM   1709  OG1 THR A 113     -15.212   9.779  10.962  1.00 40.34
ATOM   1710  HG1 THR A 113     -15.114  10.615  10.483  1.00 33.42
ATOM   1711  CG2 THR A 113     -16.731   7.905  11.147  1.00 22.34
ATOM   1712 1HG2 THR A 113     -17.776   7.636  11.188  1.00  2.23
ATOM   1713 2HG2 THR A 113     -16.245   7.606  12.065  1.00 22.31
ATOM   1714 3HG2 THR A 113     -16.262   7.403  10.313  1.00 22.03
ATOM   1715  C   THR A 113     -17.627  11.356   9.738  1.00 75.34
ATOM   1716  O   THR A 113     -16.746  12.214   9.698  1.00 64.21
ATOM   1717  N   HIS A 114     -18.904  11.621   9.816  1.00 62.44
ATOM   1718  H   HIS A 114     -19.582  10.916   9.862  1.00 11.21
ATOM   1719  CA  HIS A 114     -19.452  12.946   9.908  1.00 32.43
ATOM   1720  HA  HIS A 114     -18.661  13.640  10.151  1.00 33.55
ATOM   1721  CB  HIS A 114     -20.138  13.363   8.586  1.00 33.33
ATOM   1722 1HB  HIS A 114     -20.836  12.590   8.301  1.00 45.34
ATOM   1723 2HB  HIS A 114     -20.688  14.277   8.757  1.00  1.12
ATOM   1724  CG  HIS A 114     -19.215  13.585   7.419  1.00 63.04
ATOM   1725  ND1 HIS A 114     -18.646  12.574   6.676  1.00 73.45
ATOM   1726  CD2 HIS A 114     -18.787  14.742   6.857  1.00 63.50
ATOM   1727  HD1 HIS A 114     -18.722  11.609   6.855  1.00 73.11
ATOM   1728  CE1 HIS A 114     -17.914  13.129   5.711  1.00 52.42
ATOM   1729  NE2 HIS A 114     -17.964  14.446   5.772  1.00 44.43
ATOM   1730  HD2 HIS A 114     -19.038  15.737   7.189  1.00  4.32
ATOM   1731  HE1 HIS A 114     -17.352  12.574   4.974  1.00  2.01
ATOM   1732  C   HIS A 114     -20.470  12.909  11.013  1.00 40.21
ATOM   1733  O   HIS A 114     -21.518  12.263  10.805  1.00 52.33
TER    1734      HIS A 114
ENDMDL
MODEL        9
ATOM      1  N   MET A   1     -15.999 -10.333   5.607  1.00 74.31
ATOM      2  CA  MET A   1     -14.602 -10.506   5.160  1.00 23.31
ATOM      3  HA  MET A   1     -14.014 -10.851   6.001  1.00 63.24
ATOM      4  CB  MET A   1     -14.495 -11.477   3.971  1.00 63.00
ATOM      5 1HB  MET A   1     -14.906 -12.431   4.266  1.00 13.11
ATOM      6 2HB  MET A   1     -15.077 -11.085   3.150  1.00 41.20
ATOM      7  CG  MET A   1     -13.064 -11.698   3.485  1.00 14.23
ATOM      8 1HG  MET A   1     -12.637 -10.740   3.226  1.00 35.14
ATOM      9 2HG  MET A   1     -12.491 -12.134   4.291  1.00 71.53
ATOM     10  SD  MET A   1     -12.954 -12.779   2.045  1.00 54.24
ATOM     11  CE  MET A   1     -13.609 -14.323   2.682  1.00 62.53
ATOM     12 1HE  MET A   1     -13.579 -15.072   1.904  1.00 64.34
ATOM     13 2HE  MET A   1     -14.632 -14.179   2.997  1.00 22.54
ATOM     14 3HE  MET A   1     -13.013 -14.651   3.520  1.00 32.20
ATOM     15  C   MET A   1     -14.141  -9.153   4.774  1.00 71.44
ATOM     16  O   MET A   1     -14.391  -8.695   3.674  1.00 55.12
ATOM     17  N   ASP A   2     -13.524  -8.500   5.705  1.00 74.23
ATOM     18  H   ASP A   2     -13.192  -8.960   6.501  1.00 74.02
ATOM     19  CA  ASP A   2     -13.339  -7.075   5.601  1.00 24.32
ATOM     20  HA  ASP A   2     -13.672  -6.764   4.625  1.00  3.10
ATOM     21  CB  ASP A   2     -14.242  -6.418   6.655  1.00 12.04
ATOM     22 1HB  ASP A   2     -13.869  -6.650   7.641  1.00 21.32
ATOM     23 2HB  ASP A   2     -14.249  -5.348   6.510  1.00 15.35
ATOM     24  CG  ASP A   2     -15.681  -6.937   6.531  1.00 10.53
ATOM     25  OD1 ASP A   2     -15.965  -8.091   7.037  1.00 75.11
ATOM     26  OD2 ASP A   2     -16.487  -6.301   5.865  1.00 43.22
ATOM     27  C   ASP A   2     -11.897  -6.721   5.792  1.00 13.25
ATOM     28  O   ASP A   2     -11.370  -5.831   5.138  1.00 71.21
ATOM     29  N   LYS A   3     -11.269  -7.403   6.714  1.00 45.11
ATOM     30  H   LYS A   3     -11.766  -7.987   7.319  1.00 34.40
ATOM     31  CA  LYS A   3      -9.850  -7.317   6.887  1.00 34.22
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ATOM     32  HA  LYS A   3      -9.463  -6.657   6.126  1.00  2.05
ATOM     33  CB  LYS A   3      -9.438  -6.798   8.261  1.00 35.41
ATOM     34 1HB  LYS A   3     -10.030  -7.315   9.003  1.00 61.11
ATOM     35 2HB  LYS A   3      -8.399  -7.044   8.426  1.00 55.21
ATOM     36  CG  LYS A   3      -9.626  -5.313   8.479  1.00  2.02
ATOM     37 1HG  LYS A   3     -10.678  -5.078   8.417  1.00 12.53
ATOM     38 2HG  LYS A   3      -9.246  -5.124   9.470  1.00 74.13
ATOM     39  CD  LYS A   3      -8.838  -4.466   7.463  1.00 12.20
ATOM     40 1HD  LYS A   3      -9.192  -4.683   6.467  1.00 30.33
ATOM     41 2HD  LYS A   3      -9.024  -3.423   7.677  1.00 53.51
ATOM     42  CE  LYS A   3      -7.318  -4.718   7.518  1.00 13.32
ATOM     43 1HE  LYS A   3      -7.128  -5.774   7.403  1.00 54.44
ATOM     44 2HE  LYS A   3      -6.856  -4.191   6.696  1.00  0.33
ATOM     45  NZ  LYS A   3      -6.700  -4.262   8.784  1.00 74.11
ATOM     46 1HZ  LYS A   3      -6.782  -3.217   8.843  1.00 11.33
ATOM     47 2HZ  LYS A   3      -5.687  -4.479   8.794  1.00 23.00
ATOM     48 3HZ  LYS A   3      -7.163  -4.664   9.620  1.00  5.23
ATOM     49  C   LYS A   3      -9.267  -8.659   6.684  1.00 31.22
ATOM     50  O   LYS A   3      -9.481  -9.558   7.488  1.00 73.33
ATOM     51  N   GLY A   4      -8.596  -8.820   5.609  1.00 24.52
ATOM     52  H   GLY A   4      -8.539  -8.083   4.961  1.00 14.45
ATOM     53  CA  GLY A   4      -7.939 -10.050   5.371  1.00 72.41
ATOM     54 1HA  GLY A   4      -8.156 -10.660   6.235  1.00 53.34
ATOM     55 2HA  GLY A   4      -8.314 -10.501   4.465  1.00 74.22
ATOM     56  C   GLY A   4      -6.476  -9.817   5.280  1.00 72.20
ATOM     57  O   GLY A   4      -5.939  -9.686   4.193  1.00 23.32
ATOM     58  N   THR A   5      -5.852  -9.716   6.413  1.00 21.33
ATOM     59  H   THR A   5      -6.332  -9.888   7.248  1.00 22.34
ATOM     60  CA  THR A   5      -4.463  -9.389   6.495  1.00 35.41
ATOM     61  HA  THR A   5      -4.147  -9.023   5.529  1.00 63.40
ATOM     62  CB  THR A   5      -4.254  -8.252   7.522  1.00 74.22
ATOM     63  HB  THR A   5      -4.579  -8.590   8.495  1.00 21.25
ATOM     64  OG1 THR A   5      -5.042  -7.106   7.118  1.00 23.52
ATOM     65  HG1 THR A   5      -4.606  -6.813   6.303  1.00 64.12
ATOM     66  CG2 THR A   5      -2.791  -7.846   7.581  1.00 53.03
ATOM     67 1HG2 THR A   5      -2.179  -8.695   7.843  1.00 72.11
ATOM     68 2HG2 THR A   5      -2.661  -7.058   8.308  1.00 65.53
ATOM     69 3HG2 THR A   5      -2.507  -7.482   6.599  1.00 13.11
ATOM     70  C   THR A   5      -3.616 -10.604   6.871  1.00 74.35
ATOM     71  O   THR A   5      -3.784 -11.183   7.941  1.00 52.23
ATOM     72  N   GLN A   6      -2.728 -10.986   5.975  1.00 42.33
ATOM     73  H   GLN A   6      -2.665 -10.506   5.116  1.00 11.43
ATOM     74  CA  GLN A   6      -1.800 -12.064   6.206  1.00 54.24
ATOM     75  HA  GLN A   6      -1.733 -12.250   7.266  1.00 12.52
ATOM     76  CB  GLN A   6      -2.251 -13.348   5.488  1.00 11.01
ATOM     77 1HB  GLN A   6      -2.376 -13.120   4.440  1.00 33.31
ATOM     78 2HB  GLN A   6      -1.472 -14.090   5.589  1.00  2.34
ATOM     79  CG  GLN A   6      -3.553 -13.944   6.000  1.00 24.42
ATOM     80 1HG  GLN A   6      -3.406 -14.224   7.032  1.00 10.12
ATOM     81 2HG  GLN A   6      -4.329 -13.197   5.933  1.00 75.11
ATOM     82  CD  GLN A   6      -3.989 -15.184   5.233  1.00 15.14
ATOM     83  OE1 GLN A   6      -4.624 -16.066   5.779  1.00 33.13
ATOM     84  NE2 GLN A   6      -3.665 -15.254   3.962  1.00 51.11
ATOM     85 2HE2 GLN A   6      -3.161 -14.519   3.560  1.00 13.50
ATOM     86 1HE2 GLN A   6      -3.953 -16.059   3.489  1.00 73.42
ATOM     87  C   GLN A   6      -0.450 -11.655   5.667  1.00 45.24
ATOM     88  O   GLN A   6      -0.358 -11.049   4.601  1.00 54.30
ATOM     89  N   TYR A   7       0.574 -11.945   6.393  1.00 61.11
ATOM     90  H   TYR A   7       0.454 -12.371   7.268  1.00 60.22
ATOM     91  CA  TYR A   7       1.909 -11.692   5.943  1.00 71.33
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ATOM     92  HA  TYR A   7       1.815 -11.368   4.916  1.00 43.30
ATOM     93  CB  TYR A   7       2.608 -10.572   6.764  1.00 14.31
ATOM     94 1HB  TYR A   7       3.639 -10.508   6.454  1.00 62.42
ATOM     95 2HB  TYR A   7       2.122  -9.634   6.539  1.00 61.44
ATOM     96  CG  TYR A   7       2.606 -10.747   8.279  1.00 52.14
ATOM     97  CD1 TYR A   7       3.680 -11.336   8.938  1.00 33.15
ATOM     98  HD1 TYR A   7       4.524 -11.684   8.361  1.00 72.34
ATOM     99  CE1 TYR A   7       3.680 -11.483  10.314  1.00 64.14
ATOM    100  HE1 TYR A   7       4.524 -11.942  10.807  1.00 31.24
ATOM    101  CZ  TYR A   7       2.599 -11.041  11.048  1.00 51.32
ATOM    102  CE2 TYR A   7       1.524 -10.453  10.419  1.00 75.11
ATOM    103  HE2 TYR A   7       0.677 -10.107  10.995  1.00 45.12
ATOM    104  CD2 TYR A   7       1.530 -10.308   9.046  1.00 51.12
ATOM    105  HD2 TYR A   7       0.687  -9.848   8.551  1.00  3.21
ATOM    106  OH  TYR A   7       2.597 -11.185  12.416  1.00 54.21
ATOM    107  HH  TYR A   7       1.741 -11.511  12.706  1.00 12.22
ATOM    108  C   TYR A   7       2.682 -12.985   5.925  1.00  5.10
ATOM    109  O   TYR A   7       2.780 -13.667   6.943  1.00 13.34
ATOM    110  N   LYS A   8       3.188 -13.352   4.786  1.00  2.51
ATOM    111  H   LYS A   8       3.099 -12.782   3.987  1.00  1.33
ATOM    112  CA  LYS A   8       3.929 -14.570   4.676  1.00 74.01
ATOM    113  HA  LYS A   8       4.200 -14.837   5.686  1.00 63.23
ATOM    114  CB  LYS A   8       3.101 -15.730   4.084  1.00 23.32
ATOM    115 1HB  LYS A   8       2.329 -16.013   4.785  1.00 34.23
ATOM    116 2HB  LYS A   8       2.638 -15.396   3.167  1.00 52.23
ATOM    117  CG  LYS A   8       3.972 -16.942   3.767  1.00 54.21
ATOM    118 1HG  LYS A   8       4.592 -16.706   2.915  1.00 35.10
ATOM    119 2HG  LYS A   8       4.611 -17.129   4.617  1.00 22.41
ATOM    120  CD  LYS A   8       3.198 -18.197   3.447  1.00 24.42
ATOM    121 1HD  LYS A   8       2.705 -18.548   4.342  1.00  3.15
ATOM    122 2HD  LYS A   8       2.465 -17.980   2.685  1.00 11.52
ATOM    123  CE  LYS A   8       4.145 -19.290   2.930  1.00  2.15
ATOM    124 1HE  LYS A   8       3.621 -20.234   2.935  1.00 53.03
ATOM    125 2HE  LYS A   8       4.427 -19.047   1.916  1.00 23.34
ATOM    126  NZ  LYS A   8       5.381 -19.427   3.760  1.00 22.40
ATOM    127 1HZ  LYS A   8       5.927 -20.274   3.510  1.00 12.31
ATOM    128 2HZ  LYS A   8       5.261 -19.338   4.784  1.00 21.43
ATOM    129 3HZ  LYS A   8       6.018 -18.635   3.488  1.00 12.44
ATOM    130  C   LYS A   8       5.209 -14.367   3.922  1.00 71.35
ATOM    131  O   LYS A   8       5.202 -13.923   2.782  1.00 35.35
ATOM    132  N   ASP A   9       6.301 -14.676   4.606  1.00 14.21
ATOM    133  H   ASP A   9       6.189 -14.997   5.525  1.00 74.23
ATOM    134  CA  ASP A   9       7.684 -14.625   4.093  1.00 14.12
ATOM    135  HA  ASP A   9       8.354 -14.826   4.916  1.00 32.31
ATOM    136  CB  ASP A   9       7.902 -15.698   2.985  1.00 35.31
ATOM    137 1HB  ASP A   9       7.381 -15.384   2.092  1.00 40.30
ATOM    138 2HB  ASP A   9       8.956 -15.761   2.766  1.00 64.33
ATOM    139  CG  ASP A   9       7.395 -17.094   3.350  1.00 21.44
ATOM    140  OD1 ASP A   9       7.328 -17.455   4.546  1.00 31.23
ATOM    141  OD2 ASP A   9       6.990 -17.849   2.447  1.00 42.12
ATOM    142  C   ASP A   9       7.985 -13.239   3.534  1.00 50.42
ATOM    143  O   ASP A   9       8.747 -13.076   2.597  1.00 33.11
ATOM    144  N   GLY A  10       7.435 -12.232   4.189  1.00 60.13
ATOM    145  H   GLY A  10       6.864 -12.442   4.953  1.00 51.10
ATOM    146  CA  GLY A  10       7.645 -10.869   3.774  1.00 13.23
ATOM    147 1HA  GLY A  10       7.663 -10.237   4.651  1.00 55.34
ATOM    148 2HA  GLY A  10       8.600 -10.801   3.276  1.00 40.52
ATOM    149  C   GLY A  10       6.564 -10.362   2.828  1.00 32.53
ATOM    150  O   GLY A  10       6.335  -9.156   2.739  1.00 32.03
ATOM    151  N   TYR A  11       5.908 -11.270   2.124  1.00 40.41
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ATOM    152  H   TYR A  11       6.105 -12.225   2.257  1.00 21.02
ATOM    153  CA  TYR A  11       4.860 -10.906   1.188  1.00 30.53
ATOM    154  HA  TYR A  11       5.188 -10.026   0.657  1.00 75.42
ATOM    155  CB  TYR A  11       4.594 -12.044   0.177  1.00 54.44
ATOM    156 1HB  TYR A  11       5.498 -12.233  -0.382  1.00 62.34
ATOM    157 2HB  TYR A  11       4.327 -12.937   0.722  1.00 22.32
ATOM    158  CG  TYR A  11       3.486 -11.755  -0.828  1.00  1.30
ATOM    159  CD1 TYR A  11       2.361 -12.561  -0.896  1.00 34.24
ATOM    160  HD1 TYR A  11       2.282 -13.408  -0.230  1.00 24.32
ATOM    161  CE1 TYR A  11       1.344 -12.300  -1.797  1.00  2.05
ATOM    162  HE1 TYR A  11       0.477 -12.942  -1.830  1.00 52.44
ATOM    163  CZ  TYR A  11       1.439 -11.222  -2.643  1.00 42.21
ATOM    164  CE2 TYR A  11       2.549 -10.402  -2.600  1.00 32.01
ATOM    165  HE2 TYR A  11       2.625  -9.554  -3.265  1.00 11.13
ATOM    166  CD2 TYR A  11       3.562 -10.670  -1.696  1.00 23.21
ATOM    167  HD2 TYR A  11       4.432 -10.030  -1.660  1.00 53.40
ATOM    168  OH  TYR A  11       0.416 -10.960  -3.541  1.00 53.21
ATOM    169  HH  TYR A  11       0.826 -10.739  -4.384  1.00 33.31
ATOM    170  C   TYR A  11       3.615 -10.532   1.959  1.00 63.02
ATOM    171  O   TYR A  11       3.158 -11.279   2.842  1.00 73.13
ATOM    172  N   TYR A  12       3.089  -9.380   1.662  1.00 24.50
ATOM    173  H   TYR A  12       3.447  -8.861   0.909  1.00 51.24
ATOM    174  CA  TYR A  12       1.985  -8.866   2.401  1.00 64.51
ATOM    175  HA  TYR A  12       1.888  -9.423   3.323  1.00 43.52
ATOM    176  CB  TYR A  12       2.239  -7.413   2.741  1.00 20.31
ATOM    177 1HB  TYR A  12       3.276  -7.258   2.995  1.00 64.41
ATOM    178 2HB  TYR A  12       1.987  -6.834   1.866  1.00 52.13
ATOM    179  CG  TYR A  12       1.397  -6.897   3.861  1.00  4.10
ATOM    180  CD1 TYR A  12       1.701  -7.223   5.168  1.00 31.51
ATOM    181  HD1 TYR A  12       2.547  -7.866   5.361  1.00 12.41
ATOM    182  CE1 TYR A  12       0.955  -6.746   6.210  1.00 62.11
ATOM    183  HE1 TYR A  12       1.210  -7.013   7.225  1.00 12.53
ATOM    184  CZ  TYR A  12      -0.115  -5.934   5.956  1.00 33.32
ATOM    185  CE2 TYR A  12      -0.440  -5.595   4.659  1.00 73.03
ATOM    186  HE2 TYR A  12      -1.284  -4.957   4.440  1.00 63.22
ATOM    187  CD2 TYR A  12       0.315  -6.074   3.622  1.00 23.21
ATOM    188  HD2 TYR A  12       0.065  -5.812   2.606  1.00 52.43
ATOM    189  OH  TYR A  12      -0.852  -5.445   7.004  1.00 13.30
ATOM    190  HH  TYR A  12      -0.257  -5.276   7.740  1.00  4.40
ATOM    191  C   TYR A  12       0.706  -9.003   1.605  1.00 34.52
ATOM    192  O   TYR A  12       0.632  -8.582   0.439  1.00 21.24
ATOM    193  N   ILE A  13      -0.277  -9.598   2.226  1.00 15.11
ATOM    194  H   ILE A  13      -0.149  -9.936   3.142  1.00 61.34
ATOM    195  CA  ILE A  13      -1.577  -9.796   1.640  1.00 51.41
ATOM    196  HA  ILE A  13      -1.647  -9.350   0.661  1.00 41.31
ATOM    197  CB  ILE A  13      -1.928 -11.307   1.557  1.00 34.40
ATOM    198  HB  ILE A  13      -2.000 -11.686   2.567  1.00 54.30
ATOM    199  CG2 ILE A  13      -3.284 -11.516   0.878  1.00 34.51
ATOM    200 1HG2 ILE A  13      -4.052 -11.007   1.442  1.00  4.21
ATOM    201 2HG2 ILE A  13      -3.508 -12.572   0.838  1.00  2.13
ATOM    202 3HG2 ILE A  13      -3.249 -11.118  -0.126  1.00  2.23
ATOM    203  CG1 ILE A  13      -0.829 -12.073   0.818  1.00 10.43
ATOM    204 1HG1 ILE A  13      -0.809 -11.747  -0.211  1.00  4.42
ATOM    205 2HG1 ILE A  13       0.123 -11.844   1.277  1.00 53.32
ATOM    206  CD1 ILE A  13      -1.000 -13.577   0.819  1.00  3.50
ATOM    207 1HD1 ILE A  13      -1.928 -13.839   0.335  1.00 33.23
ATOM    208 2HD1 ILE A  13      -1.004 -13.933   1.839  1.00 73.33
ATOM    209 3HD1 ILE A  13      -0.172 -14.023   0.287  1.00 12.51
ATOM    210  C   ILE A  13      -2.584  -9.126   2.520  1.00 15.43
ATOM    211  O   ILE A  13      -2.607  -9.352   3.735  1.00 22.21
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ATOM    212  N   THR A  14      -3.368  -8.280   1.950  1.00 20.15
ATOM    213  H   THR A  14      -3.245  -8.022   1.010  1.00 54.12
ATOM    214  CA  THR A  14      -4.395  -7.653   2.670  1.00 11.31
ATOM    215  HA  THR A  14      -4.756  -8.380   3.384  1.00 24.01
ATOM    216  CB  THR A  14      -3.811  -6.462   3.488  1.00 41.53
ATOM    217  HB  THR A  14      -2.846  -6.210   3.078  1.00  2.20
ATOM    218  OG1 THR A  14      -3.480  -6.891   4.782  1.00 50.25
ATOM    219  HG1 THR A  14      -2.955  -7.689   4.639  1.00 70.03
ATOM    220  CG2 THR A  14      -4.682  -5.239   3.517  1.00 52.21
ATOM    221 1HG2 THR A  14      -5.647  -5.487   3.930  1.00 74.54
ATOM    222 2HG2 THR A  14      -4.771  -4.912   2.490  1.00 21.12
ATOM    223 3HG2 THR A  14      -4.190  -4.480   4.102  1.00 44.33
ATOM    224  C   THR A  14      -5.572  -7.262   1.784  1.00  5.41
ATOM    225  O   THR A  14      -5.406  -6.722   0.708  1.00 22.25
ATOM    226  N   THR A  15      -6.737  -7.595   2.237  1.00 44.11
ATOM    227  H   THR A  15      -6.768  -8.203   3.003  1.00 13.34
ATOM    228  CA  THR A  15      -7.955  -7.186   1.623  1.00 35.11
ATOM    229  HA  THR A  15      -7.724  -6.693   0.691  1.00 21.41
ATOM    230  CB  THR A  15      -8.867  -8.408   1.354  1.00 13.10
ATOM    231  HB  THR A  15      -9.178  -8.828   2.299  1.00 64.11
ATOM    232  OG1 THR A  15      -8.130  -9.403   0.608  1.00 52.22
ATOM    233  HG1 THR A  15      -8.606 -10.233   0.692  1.00 12.22
ATOM    234  CG2 THR A  15     -10.101  -8.002   0.550  1.00 12.10
ATOM    235 1HG2 THR A  15     -10.664  -7.264   1.103  1.00 30.11
ATOM    236 2HG2 THR A  15     -10.721  -8.869   0.375  1.00 63.32
ATOM    237 3HG2 THR A  15      -9.793  -7.583  -0.396  1.00  1.11
ATOM    238  C   THR A  15      -8.651  -6.197   2.564  1.00 14.11
ATOM    239  O   THR A  15      -8.753  -6.456   3.779  1.00 20.11
ATOM    240  N   LEU A  16      -9.054  -5.071   2.020  1.00 20.05
ATOM    241  H   LEU A  16      -8.908  -4.920   1.059  1.00 42.45
ATOM    242  CA  LEU A  16      -9.720  -4.011   2.747  1.00 51.01
ATOM    243  HA  LEU A  16      -9.742  -4.237   3.803  1.00 51.43
ATOM    244  CB  LEU A  16      -8.963  -2.687   2.532  1.00 14.33
ATOM    245 1HB  LEU A  16      -8.947  -2.498   1.469  1.00 64.31
ATOM    246 2HB  LEU A  16      -9.535  -1.898   2.997  1.00 60.23
ATOM    247  CG  LEU A  16      -7.520  -2.606   3.036  1.00 31.12
ATOM    248  HG  LEU A  16      -6.944  -3.415   2.610  1.00 23.12
ATOM    249  CD1 LEU A  16      -6.887  -1.291   2.613  1.00 71.22
ATOM    250 1HD1 LEU A  16      -5.869  -1.249   2.970  1.00 61.43
ATOM    251 2HD1 LEU A  16      -7.449  -0.470   3.032  1.00 64.12
ATOM    252 3HD1 LEU A  16      -6.894  -1.217   1.535  1.00 23.55
ATOM    253  CD2 LEU A  16      -7.479  -2.728   4.543  1.00 41.54
ATOM    254 1HD2 LEU A  16      -6.455  -2.667   4.881  1.00  2.24
ATOM    255 2HD2 LEU A  16      -7.899  -3.678   4.837  1.00 55.34
ATOM    256 3HD2 LEU A  16      -8.051  -1.927   4.987  1.00 74.32
ATOM    257  C   LEU A  16     -11.123  -3.831   2.199  1.00 32.23
ATOM    258  O   LEU A  16     -11.300  -3.734   0.979  1.00 12.12
ATOM    259  N   ASN A  17     -12.113  -3.788   3.066  1.00 33.30
ATOM    260  H   ASN A  17     -11.937  -3.978   4.011  1.00 33.23
ATOM    261  CA  ASN A  17     -13.487  -3.498   2.629  1.00 33.45
ATOM    262  HA  ASN A  17     -13.628  -3.932   1.651  1.00 62.33
ATOM    263  CB  ASN A  17     -14.543  -4.052   3.618  1.00 62.41
ATOM    264 1HB  ASN A  17     -14.295  -5.076   3.852  1.00 42.52
ATOM    265 2HB  ASN A  17     -14.517  -3.467   4.525  1.00 54.21
ATOM    266  CG  ASN A  17     -15.981  -4.032   3.065  1.00 74.52
ATOM    267  OD1 ASN A  17     -16.312  -3.280   2.152  1.00 62.11
ATOM    268  ND2 ASN A  17     -16.856  -4.814   3.655  1.00 71.13
ATOM    269 2HD2 ASN A  17     -16.588  -5.379   4.425  1.00  3.42
ATOM    270 1HD2 ASN A  17     -17.771  -4.798   3.317  1.00 62.54
ATOM    271  C   ASN A  17     -13.644  -1.978   2.526  1.00 43.54
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ATOM    272  O   ASN A  17     -14.268  -1.341   3.378  1.00 22.11
ATOM    273  N   TYR A  18     -12.958  -1.399   1.557  1.00 12.13
ATOM    274  H   TYR A  18     -12.411  -1.965   0.972  1.00 75.43
ATOM    275  CA  TYR A  18     -12.992   0.025   1.296  1.00 11.44
ATOM    276  HA  TYR A  18     -13.974   0.378   1.579  1.00 20.11
ATOM    277  CB  TYR A  18     -11.916   0.806   2.107  1.00 71.42
ATOM    278 1HB  TYR A  18     -10.947   0.366   1.922  1.00  2.11
ATOM    279 2HB  TYR A  18     -11.907   1.832   1.768  1.00 65.43
ATOM    280  CG  TYR A  18     -12.147   0.808   3.614  1.00 65.44
ATOM    281  CD1 TYR A  18     -13.171   1.565   4.172  1.00 60.05
ATOM    282  HD1 TYR A  18     -13.786   2.170   3.521  1.00 32.14
ATOM    283  CE1 TYR A  18     -13.417   1.550   5.529  1.00 21.33
ATOM    284  HE1 TYR A  18     -14.219   2.147   5.939  1.00 63.34
ATOM    285  CZ  TYR A  18     -12.633   0.779   6.357  1.00 22.42
ATOM    286  CE2 TYR A  18     -11.602   0.022   5.835  1.00 21.14
ATOM    287  HE2 TYR A  18     -10.987  -0.583   6.486  1.00 44.05
ATOM    288  CD2 TYR A  18     -11.367   0.036   4.471  1.00 21.25
ATOM    289  HD2 TYR A  18     -10.559  -0.553   4.063  1.00 12.01
ATOM    290  OH  TYR A  18     -12.894   0.753   7.722  1.00 45.22
ATOM    291  HH  TYR A  18     -13.840   0.585   7.798  1.00 75.53
ATOM    292  C   TYR A  18     -12.818   0.263  -0.188  1.00 60.43
ATOM    293  O   TYR A  18     -12.222  -0.571  -0.884  1.00 31.53
ATOM    294  N   ASN A  19     -13.289   1.413  -0.651  1.00 53.02
ATOM    295  H   ASN A  19     -13.647   2.048  -0.001  1.00 14.43
ATOM    296  CA  ASN A  19     -13.309   1.758  -2.077  1.00 74.03
ATOM    297  HA  ASN A  19     -13.811   0.965  -2.605  1.00 12.42
ATOM    298  CB  ASN A  19     -14.100   3.054  -2.298  1.00  5.11
ATOM    299 1HB  ASN A  19     -15.109   2.922  -1.939  1.00 74.13
ATOM    300 2HB  ASN A  19     -13.625   3.846  -1.737  1.00 32.52
ATOM    301  CG  ASN A  19     -14.169   3.490  -3.762  1.00 21.52
ATOM    302  OD1 ASN A  19     -14.196   2.675  -4.677  1.00 34.31
ATOM    303  ND2 ASN A  19     -14.140   4.778  -3.988  1.00 25.41
ATOM    304 2HD2 ASN A  19     -14.061   5.376  -3.207  1.00 64.43
ATOM    305 1HD2 ASN A  19     -14.222   5.092  -4.910  1.00 74.24
ATOM    306  C   ASN A  19     -11.913   1.931  -2.637  1.00 33.45
ATOM    307  O   ASN A  19     -11.103   2.645  -2.070  1.00 54.04
ATOM    308  N   PHE A  20     -11.682   1.314  -3.777  1.00 54.23
ATOM    309  H   PHE A  20     -12.411   0.807  -4.197  1.00  2.41
ATOM    310  CA  PHE A  20     -10.397   1.292  -4.465  1.00 33.22
ATOM    311  HA  PHE A  20      -9.725   0.721  -3.840  1.00 74.32
ATOM    312  CB  PHE A  20     -10.563   0.509  -5.779  1.00 65.25
ATOM    313 1HB  PHE A  20     -10.551  -0.540  -5.523  1.00 14.12
ATOM    314 2HB  PHE A  20     -11.521   0.719  -6.231  1.00  5.13
ATOM    315  CG  PHE A  20      -9.484   0.695  -6.805  1.00 21.32
ATOM    316  CD1 PHE A  20      -9.677   1.566  -7.869  1.00 74.01
ATOM    317  HD1 PHE A  20     -10.605   2.115  -7.941  1.00 71.02
ATOM    318  CE1 PHE A  20      -8.708   1.739  -8.821  1.00 25.41
ATOM    319  HE1 PHE A  20      -8.870   2.419  -9.644  1.00 64.42
ATOM    320  CZ  PHE A  20      -7.530   1.043  -8.724  1.00 50.12
ATOM    321  HZ  PHE A  20      -6.765   1.177  -9.475  1.00 55.15
ATOM    322  CE2 PHE A  20      -7.321   0.172  -7.671  1.00 34.04
ATOM    323  HE2 PHE A  20      -6.393  -0.375  -7.600  1.00 23.04
ATOM    324  CD2 PHE A  20      -8.295   0.000  -6.721  1.00 12.31
ATOM    325  HD2 PHE A  20      -8.132  -0.680  -5.899  1.00 11.24
ATOM    326  C   PHE A  20      -9.759   2.673  -4.678  1.00 22.41
ATOM    327  O   PHE A  20      -8.582   2.859  -4.367  1.00 40.15
ATOM    328  N   ASN A  21     -10.538   3.644  -5.144  1.00 75.43
ATOM    329  H   ASN A  21     -11.503   3.486  -5.172  1.00 11.22
ATOM    330  CA  ASN A  21      -9.967   4.968  -5.471  1.00 31.43
ATOM    331  HA  ASN A  21      -9.089   4.805  -6.075  1.00 75.35
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ATOM    332  CB  ASN A  21     -10.970   5.856  -6.226  1.00 42.14
ATOM    333 1HB  ASN A  21     -11.314   5.331  -7.105  1.00 40.30
ATOM    334 2HB  ASN A  21     -11.814   6.061  -5.583  1.00  0.24
ATOM    335  CG  ASN A  21     -10.358   7.191  -6.668  1.00 50.44
ATOM    336  OD1 ASN A  21      -9.176   7.280  -6.978  1.00 21.23
ATOM    337  ND2 ASN A  21     -11.157   8.233  -6.690  1.00 23.12
ATOM    338 2HD2 ASN A  21     -12.094   8.127  -6.431  1.00 23.25
ATOM    339 1HD2 ASN A  21     -10.764   9.088  -6.963  1.00 34.31
ATOM    340  C   ASN A  21      -9.561   5.633  -4.190  1.00  1.01
ATOM    341  O   ASN A  21      -8.491   6.198  -4.054  1.00 14.11
ATOM    342  N   THR A  22     -10.414   5.444  -3.245  1.00 72.31
ATOM    343  H   THR A  22     -11.196   4.889  -3.437  1.00 30.22
ATOM    344  CA  THR A  22     -10.315   5.949  -1.935  1.00 12.11
ATOM    345  HA  THR A  22     -10.279   7.029  -1.955  1.00 75.12
ATOM    346  CB  THR A  22     -11.616   5.532  -1.261  1.00 21.10
ATOM    347  HB  THR A  22     -11.698   4.462  -1.399  1.00  5.15
ATOM    348  OG1 THR A  22     -12.726   6.147  -1.945  1.00  0.12
ATOM    349  HG1 THR A  22     -12.582   7.099  -1.891  1.00  4.12
ATOM    350  CG2 THR A  22     -11.663   5.858   0.176  1.00 30.04
ATOM    351 1HG2 THR A  22     -11.587   6.924   0.316  1.00 74.31
ATOM    352 2HG2 THR A  22     -10.841   5.328   0.633  1.00 74.23
ATOM    353 3HG2 THR A  22     -12.606   5.476   0.537  1.00  3.11
ATOM    354  C   THR A  22      -9.069   5.368  -1.212  1.00 53.34
ATOM    355  O   THR A  22      -8.333   6.098  -0.540  1.00 33.44
ATOM    356  N   VAL A  23      -8.829   4.076  -1.391  1.00 64.53
ATOM    357  H   VAL A  23      -9.461   3.531  -1.913  1.00  3.41
ATOM    358  CA  VAL A  23      -7.660   3.431  -0.819  1.00 52.12
ATOM    359  HA  VAL A  23      -7.627   3.694   0.228  1.00 32.41
ATOM    360  CB  VAL A  23      -7.721   1.879  -0.954  1.00 62.42
ATOM    361  HB  VAL A  23      -7.794   1.627  -2.002  1.00 40.23
ATOM    362  CG1 VAL A  23      -6.469   1.237  -0.393  1.00 32.30
ATOM    363 1HG1 VAL A  23      -5.607   1.569  -0.952  1.00 44.33
ATOM    364 2HG1 VAL A  23      -6.561   0.163  -0.451  1.00 20.34
ATOM    365 3HG1 VAL A  23      -6.359   1.527   0.642  1.00 24.32
ATOM    366  CG2 VAL A  23      -8.938   1.318  -0.240  1.00 70.43
ATOM    367 1HG2 VAL A  23      -8.960   0.243  -0.352  1.00  1.32
ATOM    368 2HG2 VAL A  23      -9.834   1.741  -0.671  1.00 42.53
ATOM    369 3HG2 VAL A  23      -8.891   1.568   0.808  1.00  2.44
ATOM    370  C   VAL A  23      -6.394   3.970  -1.489  1.00 71.42
ATOM    371  O   VAL A  23      -5.396   4.249  -0.816  1.00  4.34
ATOM    372  N   TYR A  24      -6.464   4.153  -2.802  1.00 25.02
ATOM    373  H   TYR A  24      -7.295   3.914  -3.270  1.00 62.54
ATOM    374  CA  TYR A  24      -5.346   4.670  -3.587  1.00 33.02
ATOM    375  HA  TYR A  24      -4.505   4.013  -3.435  1.00  4.24
ATOM    376  CB  TYR A  24      -5.709   4.674  -5.083  1.00 34.24
ATOM    377 1HB  TYR A  24      -6.058   3.690  -5.360  1.00 62.43
ATOM    378 2HB  TYR A  24      -6.513   5.379  -5.237  1.00 11.32
ATOM    379  CG  TYR A  24      -4.575   5.038  -6.035  1.00 75.23
ATOM    380  CD1 TYR A  24      -4.674   6.133  -6.890  1.00 63.10
ATOM    381  HD1 TYR A  24      -5.562   6.747  -6.857  1.00 54.13
ATOM    382  CE1 TYR A  24      -3.655   6.439  -7.782  1.00  4.42
ATOM    383  HE1 TYR A  24      -3.749   7.293  -8.436  1.00 42.13
ATOM    384  CZ  TYR A  24      -2.520   5.652  -7.820  1.00 12.15
ATOM    385  CE2 TYR A  24      -2.399   4.569  -6.978  1.00  0.44
ATOM    386  HE2 TYR A  24      -1.513   3.951  -7.006  1.00 53.23
ATOM    387  CD2 TYR A  24      -3.423   4.266  -6.097  1.00 70.30
ATOM    388  HD2 TYR A  24      -3.326   3.415  -5.439  1.00  0.15
ATOM    389  OH  TYR A  24      -1.506   5.939  -8.718  1.00 45.41
ATOM    390  HH  TYR A  24      -1.236   5.091  -9.089  1.00 72.12
ATOM    391  C   TYR A  24      -4.962   6.067  -3.108  1.00 25.32
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ATOM    392  O   TYR A  24      -3.775   6.371  -2.937  1.00 30.43
ATOM    393  N   ASN A  25      -5.971   6.891  -2.848  1.00  1.44
ATOM    394  H   ASN A  25      -6.895   6.592  -3.003  1.00  3.23
ATOM    395  CA  ASN A  25      -5.768   8.243  -2.365  1.00 13.42
ATOM    396  HA  ASN A  25      -5.146   8.772  -3.070  1.00 43.23
ATOM    397  CB  ASN A  25      -7.115   8.986  -2.235  1.00 12.44
ATOM    398 1HB  ASN A  25      -7.738   8.450  -1.534  1.00 24.40
ATOM    399 2HB  ASN A  25      -6.915   9.965  -1.833  1.00 44.11
ATOM    400  CG  ASN A  25      -7.915   9.145  -3.534  1.00 25.20
ATOM    401  OD1 ASN A  25      -9.143   9.185  -3.513  1.00 71.40
ATOM    402  ND2 ASN A  25      -7.243   9.244  -4.660  1.00 63.13
ATOM    403 2HD2 ASN A  25      -6.265   9.221  -4.646  1.00 51.43
ATOM    404 1HD2 ASN A  25      -7.776   9.313  -5.480  1.00 51.14
ATOM    405  C   ASN A  25      -5.087   8.221  -0.999  1.00  1.41
ATOM    406  O   ASN A  25      -4.047   8.865  -0.803  1.00 61.25
ATOM    407  N   ALA A  26      -5.639   7.420  -0.088  1.00 22.22
ATOM    408  H   ALA A  26      -6.415   6.874  -0.346  1.00  2.15
ATOM    409  CA  ALA A  26      -5.150   7.335   1.288  1.00 73.11
ATOM    410  HA  ALA A  26      -5.155   8.332   1.703  1.00 32.42
ATOM    411  CB  ALA A  26      -6.088   6.473   2.122  1.00  1.20
ATOM    412 1HB  ALA A  26      -5.746   6.457   3.148  1.00 63.24
ATOM    413 2HB  ALA A  26      -6.097   5.467   1.730  1.00 70.43
ATOM    414 3HB  ALA A  26      -7.086   6.882   2.083  1.00 52.23
ATOM    415  C   ALA A  26      -3.730   6.783   1.353  1.00 12.15
ATOM    416  O   ALA A  26      -2.868   7.357   2.014  1.00 23.23
ATOM    417  N   THR A  27      -3.490   5.705   0.632  1.00 41.22
ATOM    418  H   THR A  27      -4.232   5.315   0.126  1.00 55.15
ATOM    419  CA  THR A  27      -2.190   5.057   0.599  1.00 74.53
ATOM    420  HA  THR A  27      -1.924   4.756   1.601  1.00 41.12
ATOM    421  CB  THR A  27      -2.223   3.803  -0.291  1.00 30.22
ATOM    422  HB  THR A  27      -2.414   4.118  -1.306  1.00 24.41
ATOM    423  OG1 THR A  27      -3.273   2.931   0.138  1.00 45.44
ATOM    424  HG1 THR A  27      -4.117   3.307  -0.140  1.00 45.40
ATOM    425  CG2 THR A  27      -0.888   3.055  -0.247  1.00 64.21
ATOM    426 1HG2 THR A  27      -0.104   3.702  -0.608  1.00  5.54
ATOM    427 2HG2 THR A  27      -0.945   2.178  -0.876  1.00  0.12
ATOM    428 3HG2 THR A  27      -0.670   2.759   0.768  1.00 34.52
ATOM    429  C   THR A  27      -1.127   5.994   0.066  1.00 62.23
ATOM    430  O   THR A  27      -0.073   6.137   0.681  1.00 65.21
ATOM    431  N   LEU A  28      -1.426   6.662  -1.053  1.00 13.13
ATOM    432  H   LEU A  28      -2.315   6.557  -1.459  1.00 13.32
ATOM    433  CA  LEU A  28      -0.479   7.562  -1.677  1.00 65.20
ATOM    434  HA  LEU A  28       0.401   6.984  -1.916  1.00 64.34
ATOM    435  CB  LEU A  28      -1.052   8.153  -2.972  1.00  1.15
ATOM    436 1HB  LEU A  28      -1.184   7.323  -3.652  1.00 55.10
ATOM    437 2HB  LEU A  28      -2.026   8.565  -2.770  1.00 62.35
ATOM    438  CG  LEU A  28      -0.188   9.205  -3.691  1.00 61.21
ATOM    439  HG  LEU A  28       0.132   9.953  -2.977  1.00 10.12
ATOM    440  CD1 LEU A  28       1.078   8.580  -4.253  1.00 51.51
ATOM    441 1HD1 LEU A  28       0.813   7.816  -4.969  1.00 44.34
ATOM    442 2HD1 LEU A  28       1.650   8.142  -3.451  1.00 24.23
ATOM    443 3HD1 LEU A  28       1.667   9.343  -4.742  1.00 44.51
ATOM    444  CD2 LEU A  28      -0.982   9.896  -4.784  1.00 54.22
ATOM    445 1HD2 LEU A  28      -1.842  10.386  -4.350  1.00 54.24
ATOM    446 2HD2 LEU A  28      -1.312   9.165  -5.507  1.00 25.31
ATOM    447 3HD2 LEU A  28      -0.359  10.630  -5.274  1.00 73.13
ATOM    448  C   LEU A  28      -0.079   8.659  -0.711  1.00  4.11
ATOM    449  O   LEU A  28       1.083   8.877  -0.487  1.00 51.21
ATOM    450  N   GLN A  29      -1.050   9.300  -0.107  1.00 13.13
ATOM    451  H   GLN A  29      -1.986   9.084  -0.311  1.00 71.01
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ATOM    452  CA  GLN A  29      -0.784  10.351   0.853  1.00 34.40
ATOM    453  HA  GLN A  29      -0.143  11.066   0.357  1.00 22.44
ATOM    454  CB  GLN A  29      -2.073  11.053   1.231  1.00 51.14
ATOM    455 1HB  GLN A  29      -2.764  10.326   1.630  1.00 71.24
ATOM    456 2HB  GLN A  29      -1.862  11.796   1.985  1.00 22.44
ATOM    457  CG  GLN A  29      -2.726  11.748   0.047  1.00 53.24
ATOM    458 1HG  GLN A  29      -2.865  11.013  -0.733  1.00 74.22
ATOM    459 2HG  GLN A  29      -3.690  12.126   0.346  1.00 10.33
ATOM    460  CD  GLN A  29      -1.878  12.884  -0.513  1.00 65.33
ATOM    461  OE1 GLN A  29      -1.993  14.017  -0.087  1.00 44.35
ATOM    462  NE2 GLN A  29      -1.021  12.583  -1.468  1.00 22.23
ATOM    463 2HE2 GLN A  29      -0.956  11.660  -1.785  1.00 22.31
ATOM    464 1HE2 GLN A  29      -0.470  13.309  -1.834  1.00 34.43
ATOM    465  C   GLN A  29      -0.036   9.838   2.087  1.00  2.22
ATOM    466  O   GLN A  29       0.866  10.498   2.561  1.00 13.34
ATOM    467  N   ALA A  30      -0.376   8.647   2.552  1.00 21.14
ATOM    468  H   ALA A  30      -1.108   8.152   2.123  1.00 74.14
ATOM    469  CA  ALA A  30       0.281   8.051   3.722  1.00 25.32
ATOM    470  HA  ALA A  30       0.100   8.694   4.571  1.00  4.34
ATOM    471  CB  ALA A  30      -0.308   6.679   4.022  1.00 55.00
ATOM    472 1HB  ALA A  30      -1.373   6.766   4.187  1.00 51.22
ATOM    473 2HB  ALA A  30       0.161   6.260   4.901  1.00 44.24
ATOM    474 3HB  ALA A  30      -0.130   6.021   3.185  1.00 53.50
ATOM    475  C   ALA A  30       1.787   7.922   3.504  1.00 71.04
ATOM    476  O   ALA A  30       2.596   8.309   4.358  1.00 44.10
ATOM    477  N   ILE A  31       2.152   7.416   2.350  1.00 13.23
ATOM    478  H   ILE A  31       1.453   7.183   1.700  1.00 50.14
ATOM    479  CA  ILE A  31       3.541   7.191   2.034  1.00 34.21
ATOM    480  HA  ILE A  31       4.026   6.923   2.960  1.00 34.11
ATOM    481  CB  ILE A  31       3.698   5.980   1.034  1.00 53.52
ATOM    482  HB  ILE A  31       3.343   5.099   1.547  1.00 65.41
ATOM    483  CG2 ILE A  31       2.839   6.142  -0.213  1.00 54.35
ATOM    484 1HG2 ILE A  31       3.097   7.069  -0.705  1.00 34.55
ATOM    485 2HG2 ILE A  31       1.795   6.153   0.062  1.00 51.33
ATOM    486 3HG2 ILE A  31       3.029   5.314  -0.882  1.00 51.21
ATOM    487  CG1 ILE A  31       5.147   5.765   0.653  1.00  4.54
ATOM    488 1HG1 ILE A  31       5.493   6.663   0.164  1.00 51.50
ATOM    489 2HG1 ILE A  31       5.728   5.581   1.545  1.00 42.23
ATOM    490  CD1 ILE A  31       5.379   4.629  -0.312  1.00  5.23
ATOM    491 1HD1 ILE A  31       5.022   3.707   0.121  1.00 42.22
ATOM    492 2HD1 ILE A  31       6.437   4.553  -0.523  1.00 14.32
ATOM    493 3HD1 ILE A  31       4.844   4.833  -1.228  1.00 14.14
ATOM    494  C   ILE A  31       4.235   8.477   1.502  1.00 72.50
ATOM    495  O   ILE A  31       5.311   8.846   1.964  1.00 74.04
ATOM    496  N   GLN A  32       3.566   9.178   0.611  1.00 41.23
ATOM    497  H   GLN A  32       2.651   8.907   0.375  1.00 10.03
ATOM    498  CA  GLN A  32       4.117  10.355  -0.065  1.00 53.02
ATOM    499  HA  GLN A  32       5.127  10.099  -0.348  1.00 14.23
ATOM    500  CB  GLN A  32       3.328  10.617  -1.358  1.00 21.23
ATOM    501 1HB  GLN A  32       3.576   9.848  -2.074  1.00 51.33
ATOM    502 2HB  GLN A  32       2.274  10.543  -1.132  1.00 30.13
ATOM    503  CG  GLN A  32       3.579  11.943  -2.013  1.00 62.21
ATOM    504 1HG  GLN A  32       3.173  12.712  -1.375  1.00 35.00
ATOM    505 2HG  GLN A  32       4.646  12.046  -2.121  1.00 50.54
ATOM    506  CD  GLN A  32       2.936  12.043  -3.366  1.00 70.34
ATOM    507  OE1 GLN A  32       1.769  12.434  -3.491  1.00 62.00
ATOM    508  NE2 GLN A  32       3.692  11.743  -4.385  1.00 74.23
ATOM    509 2HE2 GLN A  32       4.633  11.478  -4.195  1.00 34.23
ATOM    510 1HE2 GLN A  32       3.338  11.797  -5.292  1.00 32.45
ATOM    511  C   GLN A  32       4.195  11.603   0.825  1.00 24.21
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ATOM    512  O   GLN A  32       5.154  12.361   0.753  1.00 70.12
ATOM    513  N   ASN A  33       3.217  11.798   1.691  1.00 22.10
ATOM    514  H   ASN A  33       2.494  11.137   1.783  1.00 64.04
ATOM    515  CA  ASN A  33       3.195  12.998   2.547  1.00  4.14
ATOM    516  HA  ASN A  33       3.588  13.818   1.963  1.00 61.23
ATOM    517  CB  ASN A  33       1.734  13.322   2.968  1.00 11.53
ATOM    518 1HB  ASN A  33       1.149  13.468   2.072  1.00 30.44
ATOM    519 2HB  ASN A  33       1.332  12.471   3.494  1.00 32.23
ATOM    520  CG  ASN A  33       1.536  14.571   3.841  1.00 12.24
ATOM    521  OD1 ASN A  33       0.638  14.602   4.688  1.00 63.23
ATOM    522  ND2 ASN A  33       2.315  15.608   3.624  1.00 74.22
ATOM    523 2HD2 ASN A  33       2.991  15.552   2.920  1.00 64.53
ATOM    524 1HD2 ASN A  33       2.186  16.389   4.200  1.00 73.10
ATOM    525  C   ASN A  33       4.107  12.796   3.767  1.00 32.00
ATOM    526  O   ASN A  33       4.296  13.695   4.575  1.00 61.25
ATOM    527  N   GLY A  34       4.716  11.619   3.842  1.00 15.24
ATOM    528  H   GLY A  34       4.564  10.964   3.130  1.00 32.53
ATOM    529  CA  GLY A  34       5.610  11.312   4.929  1.00 21.10
ATOM    530 1HA  GLY A  34       6.115  10.382   4.714  1.00 51.35
ATOM    531 2HA  GLY A  34       6.344  12.101   5.015  1.00 74.50
ATOM    532  C   GLY A  34       4.878  11.182   6.235  1.00 63.11
ATOM    533  O   GLY A  34       5.346  11.648   7.267  1.00  4.32
ATOM    534  N   GLN A  35       3.737  10.509   6.198  1.00 35.43
ATOM    535  H   GLN A  35       3.430  10.113   5.355  1.00 42.04
ATOM    536  CA  GLN A  35       2.915  10.336   7.392  1.00  1.23
ATOM    537  HA  GLN A  35       3.035  11.225   7.996  1.00 73.11
ATOM    538  CB  GLN A  35       1.442  10.170   7.005  1.00 31.42
ATOM    539 1HB  GLN A  35       1.314   9.215   6.514  1.00  1.24
ATOM    540 2HB  GLN A  35       0.835  10.195   7.898  1.00 71.31
ATOM    541  CG  GLN A  35       0.959  11.271   6.067  1.00 74.54
ATOM    542 1HG  GLN A  35       1.186  12.229   6.507  1.00 41.32
ATOM    543 2HG  GLN A  35       1.502  11.172   5.138  1.00 74.52
ATOM    544  CD  GLN A  35      -0.525  11.227   5.767  1.00 65.13
ATOM    545  OE1 GLN A  35      -1.155  10.177   5.789  1.00 71.24
ATOM    546  NE2 GLN A  35      -1.083  12.367   5.441  1.00 43.35
ATOM    547 2HE2 GLN A  35      -0.512  13.170   5.407  1.00 62.02
ATOM    548 1HE2 GLN A  35      -2.038  12.369   5.234  1.00 20.21
ATOM    549  C   GLN A  35       3.431   9.141   8.190  1.00 45.04
ATOM    550  O   GLN A  35       2.906   8.778   9.238  1.00 64.24
ATOM    551  N   THR A  36       4.464   8.547   7.660  1.00 41.32
ATOM    552  H   THR A  36       4.788   8.870   6.792  1.00 23.33
ATOM    553  CA  THR A  36       5.163   7.480   8.263  1.00 13.41
ATOM    554  HA  THR A  36       5.173   7.658   9.329  1.00 22.32
ATOM    555  CB  THR A  36       4.484   6.088   7.965  1.00 60.03
ATOM    556  HB  THR A  36       3.476   6.142   8.349  1.00 51.21
ATOM    557  OG1 THR A  36       5.157   5.010   8.659  1.00 65.32
ATOM    558  HG1 THR A  36       4.476   4.612   9.212  1.00 64.22
ATOM    559  CG2 THR A  36       4.427   5.774   6.464  1.00 72.14
ATOM    560 1HG2 THR A  36       3.957   4.814   6.313  1.00 70.12
ATOM    561 2HG2 THR A  36       5.429   5.752   6.062  1.00 55.41
ATOM    562 3HG2 THR A  36       3.855   6.540   5.957  1.00 21.30
ATOM    563  C   THR A  36       6.599   7.537   7.743  1.00 53.30
ATOM    564  O   THR A  36       6.823   7.738   6.547  1.00 43.35
ATOM    565  N   PHE A  37       7.552   7.467   8.630  1.00 23.34
ATOM    566  H   PHE A  37       7.332   7.388   9.581  1.00 32.43
ATOM    567  CA  PHE A  37       8.937   7.462   8.234  1.00 13.23
ATOM    568  HA  PHE A  37       8.980   7.696   7.181  1.00 45.32
ATOM    569  CB  PHE A  37       9.773   8.486   9.023  1.00 51.21
ATOM    570 1HB  PHE A  37       9.731   8.246  10.075  1.00 43.14
ATOM    571 2HB  PHE A  37      10.801   8.423   8.691  1.00  5.12
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ATOM    572  CG  PHE A  37       9.313   9.911   8.850  1.00 75.23
ATOM    573  CD1 PHE A  37       9.729  10.659   7.759  1.00  2.31
ATOM    574  HD1 PHE A  37      10.389  10.211   7.031  1.00 54.23
ATOM    575  CE1 PHE A  37       9.308  11.965   7.595  1.00 62.20
ATOM    576  HE1 PHE A  37       9.641  12.539   6.741  1.00 30.35
ATOM    577  CZ  PHE A  37       8.464  12.539   8.526  1.00 21.30
ATOM    578  HZ  PHE A  37       8.135  13.560   8.400  1.00 75.41
ATOM    579  CE2 PHE A  37       8.042  11.805   9.617  1.00  1.13
ATOM    580  HE2 PHE A  37       7.381  12.252  10.345  1.00 52.13
ATOM    581  CD2 PHE A  37       8.464  10.501   9.774  1.00 22.45
ATOM    582  HD2 PHE A  37       8.132   9.929  10.629  1.00 64.20
ATOM    583  C   PHE A  37       9.470   6.087   8.444  1.00 34.41
ATOM    584  O   PHE A  37       9.031   5.383   9.365  1.00 45.43
ATOM    585  N   ASP A  38      10.365   5.681   7.601  1.00 71.14
ATOM    586  H   ASP A  38      10.690   6.291   6.909  1.00 65.34
ATOM    587  CA  ASP A  38      10.910   4.353   7.689  1.00 65.01
ATOM    588  HA  ASP A  38      10.147   3.690   8.066  1.00 75.10
ATOM    589  CB  ASP A  38      11.371   3.868   6.318  1.00 41.32
ATOM    590 1HB  ASP A  38      10.621   4.115   5.583  1.00 14.22
ATOM    591 2HB  ASP A  38      12.300   4.356   6.064  1.00 50.45
ATOM    592  CG  ASP A  38      11.590   2.380   6.300  1.00 14.22
ATOM    593  OD1 ASP A  38      12.672   1.938   6.687  1.00 24.43
ATOM    594  OD2 ASP A  38      10.647   1.651   5.930  1.00 30.43
ATOM    595  C   ASP A  38      12.079   4.372   8.644  1.00 63.35
ATOM    596  O   ASP A  38      12.684   5.421   8.852  1.00  5.32
ATOM    597  N   TYR A  39      12.411   3.228   9.197  1.00 22.53
ATOM    598  H   TYR A  39      11.928   2.420   8.926  1.00 31.33
ATOM    599  CA  TYR A  39      13.518   3.112  10.139  1.00 70.23
ATOM    600  HA  TYR A  39      13.410   3.888  10.881  1.00 33.42
ATOM    601  CB  TYR A  39      13.506   1.737  10.823  1.00 14.23
ATOM    602 1HB  TYR A  39      13.850   0.991  10.122  1.00 73.21
ATOM    603 2HB  TYR A  39      14.176   1.760  11.671  1.00 13.23
ATOM    604  CG  TYR A  39      12.135   1.318  11.318  1.00 14.11
ATOM    605  CD1 TYR A  39      11.588   0.103  10.933  1.00  5.44
ATOM    606  HD1 TYR A  39      12.167  -0.558  10.305  1.00 32.15
ATOM    607  CE1 TYR A  39      10.325  -0.270  11.336  1.00 11.42
ATOM    608  HE1 TYR A  39       9.918  -1.220  11.025  1.00 23.42
ATOM    609  CZ  TYR A  39       9.589   0.570  12.139  1.00 22.04
ATOM    610  CE2 TYR A  39      10.106   1.782  12.542  1.00 40.33
ATOM    611  HE2 TYR A  39       9.528   2.441  13.173  1.00 73.13
ATOM    612  CD2 TYR A  39      11.370   2.155  12.128  1.00 52.21
ATOM    613  HD2 TYR A  39      11.780   3.104  12.439  1.00  5.10
ATOM    614  OH  TYR A  39       8.316   0.206  12.514  1.00 52.41
ATOM    615  HH  TYR A  39       8.341  -0.652  12.949  1.00  3.44
ATOM    616  C   TYR A  39      14.830   3.316   9.392  1.00 42.23
ATOM    617  O   TYR A  39      15.831   3.725   9.961  1.00 74.43
ATOM    618  N   LYS A  40      14.794   3.031   8.097  1.00 44.44
ATOM    619  H   LYS A  40      13.985   2.670   7.660  1.00 61.21
ATOM    620  CA  LYS A  40      15.904   3.187   7.220  1.00 25.12
ATOM    621  HA  LYS A  40      16.827   3.010   7.750  1.00 34.15
ATOM    622  CB  LYS A  40      15.717   2.072   6.169  1.00 23.15
ATOM    623 1HB  LYS A  40      15.965   1.127   6.629  1.00 23.24
ATOM    624 2HB  LYS A  40      14.666   2.052   5.920  1.00 61.22
ATOM    625  CG  LYS A  40      16.505   2.171   4.903  1.00 63.42
ATOM    626 1HG  LYS A  40      16.139   3.065   4.425  1.00 75.13
ATOM    627 2HG  LYS A  40      17.551   2.272   5.152  1.00 32.54
ATOM    628  CD  LYS A  40      16.271   0.955   4.003  1.00 51.53
ATOM    629 1HD  LYS A  40      16.883   1.080   3.124  1.00 34.32
ATOM    630 2HD  LYS A  40      16.564   0.059   4.529  1.00 50.22
ATOM    631  CE  LYS A  40      14.816   0.812   3.521  1.00 74.05
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ATOM    632 1HE  LYS A  40      14.146   0.903   4.362  1.00  0.24
ATOM    633 2HE  LYS A  40      14.603   1.588   2.801  1.00 10.32
ATOM    634  NZ  LYS A  40      14.584  -0.514   2.879  1.00 52.31
ATOM    635 1HZ  LYS A  40      13.734  -0.566   2.284  1.00 64.14
ATOM    636 2HZ  LYS A  40      14.472  -1.203   3.653  1.00 33.02
ATOM    637 3HZ  LYS A  40      15.428  -0.845   2.354  1.00 72.22
ATOM    638  C   LYS A  40      15.881   4.607   6.593  1.00 21.45
ATOM    639  O   LYS A  40      16.747   4.968   5.821  1.00 42.52
ATOM    640  N   SER A  41      14.901   5.417   7.026  1.00  4.24
ATOM    641  H   SER A  41      14.284   5.070   7.706  1.00 44.34
ATOM    642  CA  SER A  41      14.718   6.810   6.587  1.00 53.14
ATOM    643  HA  SER A  41      13.757   7.123   6.971  1.00  1.32
ATOM    644  CB  SER A  41      15.812   7.709   7.206  1.00 41.23
ATOM    645 1HB  SER A  41      15.801   7.597   8.279  1.00 35.02
ATOM    646 2HB  SER A  41      16.771   7.397   6.826  1.00 34.11
ATOM    647  OG  SER A  41      15.613   9.078   6.893  1.00  0.31
ATOM    648  HG  SER A  41      15.546   9.111   5.928  1.00 14.34
ATOM    649  C   SER A  41      14.657   6.935   5.038  1.00 40.52
ATOM    650  O   SER A  41      14.879   8.019   4.478  1.00 13.01
ATOM    651  N   ASN A  42      14.257   5.851   4.388  1.00 42.35
ATOM    652  H   ASN A  42      14.005   5.076   4.924  1.00 64.12
ATOM    653  CA  ASN A  42      14.191   5.770   2.932  1.00 25.23
ATOM    654  HA  ASN A  42      15.166   6.015   2.535  1.00 75.22
ATOM    655  CB  ASN A  42      13.851   4.317   2.519  1.00 71.12
ATOM    656 1HB  ASN A  42      14.691   3.688   2.772  1.00 55.45
ATOM    657 2HB  ASN A  42      12.989   3.991   3.081  1.00  0.30
ATOM    658  CG  ASN A  42      13.559   4.123   1.018  1.00 41.05
ATOM    659  OD1 ASN A  42      12.738   3.281   0.653  1.00 72.11
ATOM    660  ND2 ASN A  42      14.294   4.776   0.154  1.00  5.11
ATOM    661 2HD2 ASN A  42      15.033   5.342   0.495  1.00 12.00
ATOM    662 1HD2 ASN A  42      14.047   4.729  -0.796  1.00 44.52
ATOM    663  C   ASN A  42      13.129   6.719   2.385  1.00 64.10
ATOM    664  O   ASN A  42      11.985   6.701   2.865  1.00  2.50
ATOM    665  N   PRO A  43      13.519   7.629   1.448  1.00 24.10
ATOM    666  CD  PRO A  43      14.923   7.914   1.061  1.00 34.05
ATOM    667  CA  PRO A  43      12.588   8.500   0.746  1.00 63.44
ATOM    668  HA  PRO A  43      12.180   9.251   1.406  1.00 54.11
ATOM    669  CB  PRO A  43      13.449   9.164  -0.332  1.00 54.51
ATOM    670 1HB  PRO A  43      13.398   8.584  -1.243  1.00  2.34
ATOM    671 2HB  PRO A  43      13.128  10.180  -0.505  1.00 72.10
ATOM    672  CG  PRO A  43      14.818   9.166   0.240  1.00 54.44
ATOM    673 1HG  PRO A  43      15.548   9.168  -0.558  1.00 14.05
ATOM    674 2HG  PRO A  43      14.951  10.026   0.879  1.00 62.23
ATOM    675 1HD  PRO A  43      15.334   7.111   0.467  1.00 43.41
ATOM    676 2HD  PRO A  43      15.533   8.089   1.936  1.00 42.24
ATOM    677  C   PRO A  43      11.447   7.709   0.111  1.00 12.44
ATOM    678  O   PRO A  43      11.613   7.036  -0.890  1.00 12.54
ATOM    679  N   TYR A  44      10.318   7.808   0.744  1.00 10.42
ATOM    680  H   TYR A  44      10.300   8.377   1.539  1.00 63.42
ATOM    681  CA  TYR A  44       9.092   7.118   0.392  1.00 42.15
ATOM    682  HA  TYR A  44       9.344   6.083   0.203  1.00 72.44
ATOM    683  CB  TYR A  44       8.117   7.127   1.548  1.00 54.11
ATOM    684 1HB  TYR A  44       8.224   8.062   2.078  1.00 62.44
ATOM    685 2HB  TYR A  44       7.119   7.079   1.142  1.00  3.14
ATOM    686  CG  TYR A  44       8.271   6.019   2.557  1.00 51.33
ATOM    687  CD1 TYR A  44       8.356   4.689   2.152  1.00 53.31
ATOM    688  HD1 TYR A  44       8.369   4.456   1.097  1.00 62.41
ATOM    689  CE1 TYR A  44       8.421   3.668   3.073  1.00  4.52
ATOM    690  HE1 TYR A  44       8.488   2.642   2.742  1.00 12.23
ATOM    691  CZ  TYR A  44       8.412   3.969   4.411  1.00 23.05
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ATOM    692  CE2 TYR A  44       8.331   5.276   4.835  1.00 53.24
ATOM    693  HE2 TYR A  44       8.323   5.508   5.890  1.00 42.03
ATOM    694  CD2 TYR A  44       8.253   6.291   3.909  1.00 21.22
ATOM    695  HD2 TYR A  44       8.189   7.316   4.241  1.00 13.11
ATOM    696  OH  TYR A  44       8.458   2.959   5.344  1.00 34.13
ATOM    697  HH  TYR A  44       9.256   2.424   5.184  1.00  4.22
ATOM    698  C   TYR A  44       8.387   7.638  -0.850  1.00 55.40
ATOM    699  O   TYR A  44       7.379   7.063  -1.252  1.00  2.01
ATOM    700  N   ASP A  45       8.873   8.686  -1.472  1.00 60.43
ATOM    701  H   ASP A  45       9.766   9.020  -1.262  1.00 62.10
ATOM    702  CA  ASP A  45       8.071   9.284  -2.525  1.00 51.33
ATOM    703  HA  ASP A  45       7.047   9.197  -2.189  1.00  3.55
ATOM    704  CB  ASP A  45       8.390  10.764  -2.768  1.00 14.15
ATOM    705 1HB  ASP A  45       8.286  11.308  -1.841  1.00  5.41
ATOM    706 2HB  ASP A  45       9.404  10.854  -3.126  1.00 44.54
ATOM    707  CG  ASP A  45       7.453  11.380  -3.806  1.00 12.32
ATOM    708  OD1 ASP A  45       7.922  12.150  -4.647  1.00  3.23
ATOM    709  OD2 ASP A  45       6.226  11.037  -3.793  1.00 24.11
ATOM    710  C   ASP A  45       8.170   8.469  -3.796  1.00 12.44
ATOM    711  O   ASP A  45       9.199   7.852  -4.104  1.00 54.42
ATOM    712  N   ILE A  46       7.078   8.444  -4.473  1.00 30.22
ATOM    713  H   ILE A  46       6.437   9.163  -4.259  1.00 34.43
ATOM    714  CA  ILE A  46       6.794   7.541  -5.540  1.00 34.42
ATOM    715  HA  ILE A  46       7.122   6.563  -5.219  1.00 44.42
ATOM    716  CB  ILE A  46       5.238   7.447  -5.769  1.00 44.41
ATOM    717  HB  ILE A  46       4.861   8.460  -5.792  1.00 25.42
ATOM    718  CG2 ILE A  46       4.892   6.818  -7.080  1.00 71.25
ATOM    719 1HG2 ILE A  46       3.818   6.745  -7.167  1.00  4.42
ATOM    720 2HG2 ILE A  46       5.327   5.831  -7.133  1.00 65.22
ATOM    721 3HG2 ILE A  46       5.275   7.425  -7.888  1.00  3.33
ATOM    722  CG1 ILE A  46       4.513   6.698  -4.623  1.00 51.22
ATOM    723 1HG1 ILE A  46       3.489   6.525  -4.917  1.00 55.15
ATOM    724 2HG1 ILE A  46       4.994   5.743  -4.476  1.00 32.24
ATOM    725  CD1 ILE A  46       4.471   7.415  -3.292  1.00  1.12
ATOM    726 1HD1 ILE A  46       3.936   6.805  -2.580  1.00  1.21
ATOM    727 2HD1 ILE A  46       3.969   8.362  -3.418  1.00  0.35
ATOM    728 3HD1 ILE A  46       5.479   7.584  -2.942  1.00 33.44
ATOM    729  C   ILE A  46       7.542   7.883  -6.828  1.00 52.31
ATOM    730  O   ILE A  46       7.496   8.999  -7.306  1.00 45.42
ATOM    731  N   SER A  47       8.202   6.887  -7.391  1.00 42.35
ATOM    732  H   SER A  47       8.172   5.999  -6.976  1.00 74.24
ATOM    733  CA  SER A  47       8.937   7.075  -8.603  1.00 64.40
ATOM    734  HA  SER A  47       9.205   8.119  -8.673  1.00 73.44
ATOM    735  CB  SER A  47      10.222   6.228  -8.572  1.00  1.43
ATOM    736 1HB  SER A  47      10.804   6.492  -7.700  1.00 71.02
ATOM    737 2HB  SER A  47       9.954   5.183  -8.517  1.00 41.24
ATOM    738  OG  SER A  47      11.023   6.434  -9.724  1.00 21.15
ATOM    739  HG  SER A  47      10.519   6.957 -10.358  1.00  4.30
ATOM    740  C   SER A  47       8.058   6.703  -9.801  1.00 33.53
ATOM    741  O   SER A  47       8.227   7.251 -10.885  1.00 64.14
ATOM    742  N   VAL A  48       7.120   5.763  -9.607  1.00  1.42
ATOM    743  H   VAL A  48       7.113   5.277  -8.751  1.00 14.35
ATOM    744  CA  VAL A  48       6.119   5.470 -10.658  1.00 75.34
ATOM    745  HA  VAL A  48       6.060   6.310 -11.335  1.00 70.12
ATOM    746  CB  VAL A  48       6.485   4.166 -11.471  1.00 50.22
ATOM    747  HB  VAL A  48       6.480   3.344 -10.770  1.00 12.14
ATOM    748  CG1 VAL A  48       5.435   3.859 -12.538  1.00 51.34
ATOM    749 1HG1 VAL A  48       5.722   2.969 -13.080  1.00 34.13
ATOM    750 2HG1 VAL A  48       5.360   4.688 -13.225  1.00 73.03
ATOM    751 3HG1 VAL A  48       4.477   3.695 -12.068  1.00 20.44
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ATOM    752  CG2 VAL A  48       7.867   4.252 -12.111  1.00  1.54
ATOM    753 1HG2 VAL A  48       8.613   4.393 -11.341  1.00 50.10
ATOM    754 2HG2 VAL A  48       7.897   5.087 -12.795  1.00 52.30
ATOM    755 3HG2 VAL A  48       8.072   3.338 -12.648  1.00  2.41
ATOM    756  C   VAL A  48       4.762   5.230  -9.999  1.00  3.24
ATOM    757  O   VAL A  48       4.656   4.420  -9.069  1.00  4.04
ATOM    758  N   ASN A  49       3.746   5.926 -10.464  1.00  3.30
ATOM    759  H   ASN A  49       3.891   6.600 -11.162  1.00 14.34
ATOM    760  CA  ASN A  49       2.378   5.733 -10.002  1.00 61.11
ATOM    761  HA  ASN A  49       2.394   4.904  -9.310  1.00 42.10
ATOM    762  CB  ASN A  49       1.806   6.991  -9.286  1.00 30.13
ATOM    763 1HB  ASN A  49       0.915   6.708  -8.743  1.00 55.54
ATOM    764 2HB  ASN A  49       2.539   7.352  -8.582  1.00 42.42
ATOM    765  CG  ASN A  49       1.433   8.139 -10.216  1.00 54.33
ATOM    766  OD1 ASN A  49       2.266   8.952 -10.581  1.00 63.02
ATOM    767  ND2 ASN A  49       0.161   8.250 -10.541  1.00 33.30
ATOM    768 2HD2 ASN A  49      -0.474   7.601 -10.168  1.00 55.21
ATOM    769 1HD2 ASN A  49      -0.077   8.981 -11.146  1.00 43.01
ATOM    770  C   ASN A  49       1.500   5.314 -11.162  1.00 53.42
ATOM    771  O   ASN A  49       1.616   5.877 -12.250  1.00 21.41
ATOM    772  N   LYS A  50       0.680   4.313 -10.992  1.00 11.33
ATOM    773  H   LYS A  50       0.715   3.769 -10.171  1.00 21.30
ATOM    774  CA  LYS A  50      -0.273   3.997 -12.034  1.00 74.22
ATOM    775  HA  LYS A  50      -0.296   4.756 -12.800  1.00 41.44
ATOM    776  CB  LYS A  50       0.112   2.657 -12.668  1.00 42.03
ATOM    777 1HB  LYS A  50      -0.058   1.881 -11.938  1.00 35.22
ATOM    778 2HB  LYS A  50      -0.546   2.481 -13.507  1.00 41.31
ATOM    779  CG  LYS A  50       1.543   2.528 -13.149  1.00 45.31
ATOM    780 1HG  LYS A  50       1.646   3.010 -14.110  1.00 33.10
ATOM    781 2HG  LYS A  50       2.204   2.988 -12.430  1.00 24.41
ATOM    782  CD  LYS A  50       1.887   1.062 -13.274  1.00 41.31
ATOM    783 1HD  LYS A  50       1.741   0.620 -12.301  1.00 71.05
ATOM    784 2HD  LYS A  50       1.232   0.599 -13.997  1.00 43.12
ATOM    785  CE  LYS A  50       3.323   0.830 -13.661  1.00 22.14
ATOM    786 1HE  LYS A  50       3.490   1.173 -14.670  1.00 10.24
ATOM    787 2HE  LYS A  50       3.929   1.393 -12.967  1.00 23.25
ATOM    788  NZ  LYS A  50       3.681  -0.606 -13.546  1.00 14.43
ATOM    789 1HZ  LYS A  50       4.645  -0.810 -13.867  1.00 11.14
ATOM    790 2HZ  LYS A  50       2.980  -1.251 -13.956  1.00 51.31
ATOM    791 3HZ  LYS A  50       3.668  -0.833 -12.519  1.00 21.42
ATOM    792  C   LYS A  50      -1.626   3.765 -11.400  1.00 14.05
ATOM    793  O   LYS A  50      -1.710   3.210 -10.297  1.00 71.44
ATOM    794  N   ASN A  51      -2.657   4.250 -12.025  1.00 64.44
ATOM    795  H   ASN A  51      -2.528   4.902 -12.744  1.00 25.00
ATOM    796  CA  ASN A  51      -4.009   3.811 -11.763  1.00 63.11
ATOM    797  HA  ASN A  51      -3.953   3.054 -10.993  1.00 73.14
ATOM    798  CB  ASN A  51      -4.924   4.963 -11.339  1.00 34.23
ATOM    799 1HB  ASN A  51      -4.425   5.489 -10.542  1.00 30.23
ATOM    800 2HB  ASN A  51      -5.079   5.593 -12.199  1.00 61.53
ATOM    801  CG  ASN A  51      -6.293   4.517 -10.794  1.00 64.55
ATOM    802  OD1 ASN A  51      -6.834   3.493 -11.171  1.00  2.14
ATOM    803  ND2 ASN A  51      -6.848   5.293  -9.895  1.00 13.13
ATOM    804 2HD2 ASN A  51      -6.383   6.107  -9.609  1.00 74.30
ATOM    805 1HD2 ASN A  51      -7.718   5.024  -9.536  1.00 73.33
ATOM    806  C   ASN A  51      -4.472   3.152 -13.039  1.00 12.31
ATOM    807  O   ASN A  51      -4.226   3.703 -14.108  1.00 62.55
ATOM    808  N   ASN A  52      -5.097   2.043 -12.964  1.00 53.01
ATOM    809  H   ASN A  52      -5.248   1.643 -12.078  1.00 51.41
ATOM    810  CA  ASN A  52      -5.558   1.357 -14.180  1.00 51.35
ATOM    811  HA  ASN A  52      -5.334   1.997 -15.021  1.00 41.05
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ATOM    812  CB  ASN A  52      -4.818   0.020 -14.339  1.00 45.12
ATOM    813 1HB  ASN A  52      -3.757   0.196 -14.232  1.00 74.54
ATOM    814 2HB  ASN A  52      -5.138  -0.647 -13.553  1.00 73.43
ATOM    815  CG  ASN A  52      -5.045  -0.670 -15.683  1.00 72.50
ATOM    816  OD1 ASN A  52      -5.233  -0.024 -16.716  1.00 45.23
ATOM    817  ND2 ASN A  52      -5.040  -1.974 -15.672  1.00 52.42
ATOM    818 2HD2 ASN A  52      -4.895  -2.420 -14.794  1.00 62.21
ATOM    819 1HD2 ASN A  52      -5.172  -2.457 -16.508  1.00 43.51
ATOM    820  C   ASN A  52      -7.078   1.150 -14.114  1.00 32.42
ATOM    821  O   ASN A  52      -7.684   0.428 -14.902  1.00  3.52
ATOM    822  N   GLY A  53      -7.700   1.765 -13.129  1.00 21.22
ATOM    823  H   GLY A  53      -7.171   2.285 -12.481  1.00 52.54
ATOM    824  CA  GLY A  53      -9.140   1.698 -12.994  1.00 20.23
ATOM    825 1HA  GLY A  53      -9.478   2.565 -12.449  1.00 13.22
ATOM    826 2HA  GLY A  53      -9.579   1.714 -13.981  1.00 22.33
ATOM    827  C   GLY A  53      -9.613   0.451 -12.271  1.00  2.13
ATOM    828  O   GLY A  53     -10.635   0.477 -11.555  1.00 53.33
ATOM    829  N   THR A  54      -8.927  -0.637 -12.477  1.00 43.34
ATOM    830  H   THR A  54      -8.191  -0.601 -13.130  1.00 24.11
ATOM    831  CA  THR A  54      -9.241  -1.876 -11.822  1.00 44.01
ATOM    832  HA  THR A  54     -10.109  -1.689 -11.207  1.00 40.25
ATOM    833  CB  THR A  54      -9.593  -2.993 -12.854  1.00 71.23
ATOM    834  HB  THR A  54     -10.457  -2.652 -13.405  1.00 34.22
ATOM    835  OG1 THR A  54      -9.941  -4.214 -12.187  1.00  4.03
ATOM    836  HG1 THR A  54      -9.110  -4.690 -12.087  1.00 42.40
ATOM    837  CG2 THR A  54      -8.448  -3.246 -13.832  1.00 21.41
ATOM    838 1HG2 THR A  54      -8.730  -4.024 -14.527  1.00 55.43
ATOM    839 2HG2 THR A  54      -7.571  -3.556 -13.283  1.00 33.14
ATOM    840 3HG2 THR A  54      -8.230  -2.339 -14.373  1.00 42.34
ATOM    841  C   THR A  54      -8.096  -2.299 -10.892  1.00 72.22
ATOM    842  O   THR A  54      -8.289  -3.100  -9.967  1.00 32.23
ATOM    843  N   ASP A  55      -6.942  -1.741 -11.122  1.00 31.10
ATOM    844  H   ASP A  55      -6.802  -1.113 -11.859  1.00 53.31
ATOM    845  CA  ASP A  55      -5.772  -1.997 -10.322  1.00 32.41
ATOM    846  HA  ASP A  55      -6.108  -2.286  -9.336  1.00 41.51
ATOM    847  CB  ASP A  55      -4.891  -3.116 -10.919  1.00 63.43
ATOM    848 1HB  ASP A  55      -4.047  -3.285 -10.268  1.00 65.43
ATOM    849 2HB  ASP A  55      -5.474  -4.023 -10.981  1.00  0.55
ATOM    850  CG  ASP A  55      -4.360  -2.794 -12.296  1.00 22.43
ATOM    851  OD1 ASP A  55      -3.293  -2.176 -12.399  1.00 21.44
ATOM    852  OD2 ASP A  55      -5.035  -3.154 -13.288  1.00 42.55
ATOM    853  C   ASP A  55      -4.996  -0.710 -10.203  1.00 24.43
ATOM    854  O   ASP A  55      -5.275   0.252 -10.937  1.00 40.44
ATOM    855  N   ALA A  56      -4.122  -0.643  -9.243  1.00 40.32
ATOM    856  H   ALA A  56      -3.993  -1.435  -8.676  1.00  2.21
ATOM    857  CA  ALA A  56      -3.309   0.528  -9.017  1.00 25.51
ATOM    858  HA  ALA A  56      -3.155   1.011  -9.970  1.00 15.30
ATOM    859  CB  ALA A  56      -3.994   1.508  -8.079  1.00 32.04
ATOM    860 1HB  ALA A  56      -4.962   1.771  -8.474  1.00 31.23
ATOM    861 2HB  ALA A  56      -3.401   2.408  -8.012  1.00 42.42
ATOM    862 3HB  ALA A  56      -4.106   1.072  -7.097  1.00  3.45
ATOM    863  C   ALA A  56      -1.966   0.115  -8.474  1.00 45.42
ATOM    864  O   ALA A  56      -1.875  -0.857  -7.718  1.00 74.12
ATOM    865  N   GLU A  57      -0.943   0.834  -8.846  1.00 63.11
ATOM    866  H   GLU A  57      -1.084   1.627  -9.407  1.00 70.25
ATOM    867  CA  GLU A  57       0.404   0.511  -8.446  1.00 34.15
ATOM    868  HA  GLU A  57       0.390  -0.177  -7.614  1.00 14.43
ATOM    869  CB  GLU A  57       1.130  -0.147  -9.626  1.00 41.33
ATOM    870 1HB  GLU A  57       0.528  -0.952 -10.016  1.00 45.42
ATOM    871 2HB  GLU A  57       1.251   0.599 -10.401  1.00 70.22
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ATOM    872  CG  GLU A  57       2.511  -0.700  -9.308  1.00 64.13
ATOM    873 1HG  GLU A  57       3.052   0.033  -8.727  1.00 74.15
ATOM    874 2HG  GLU A  57       2.404  -1.608  -8.733  1.00 72.12
ATOM    875  CD  GLU A  57       3.292  -1.005 -10.566  1.00 14.41
ATOM    876  OE1 GLU A  57       4.203  -0.237 -10.914  1.00 60.10
ATOM    877  OE2 GLU A  57       2.967  -1.948 -11.290  1.00 30.12
ATOM    878  C   GLU A  57       1.141   1.794  -8.086  1.00 14.32
ATOM    879  O   GLU A  57       1.037   2.790  -8.804  1.00 44.03
ATOM    880  N   ILE A  58       1.811   1.802  -6.967  1.00 21.14
ATOM    881  H   ILE A  58       1.734   1.083  -6.306  1.00 63.23
ATOM    882  CA  ILE A  58       2.706   2.852  -6.632  1.00 45.25
ATOM    883  HA  ILE A  58       2.867   3.408  -7.547  1.00 65.33
ATOM    884  CB  ILE A  58       2.226   3.831  -5.520  1.00 44.21
ATOM    885  HB  ILE A  58       3.165   4.260  -5.216  1.00 62.33
ATOM    886  CG2 ILE A  58       1.370   4.959  -6.077  1.00 13.44
ATOM    887 1HG2 ILE A  58       1.949   5.536  -6.779  1.00 43.44
ATOM    888 2HG2 ILE A  58       1.045   5.596  -5.266  1.00 63.45
ATOM    889 3HG2 ILE A  58       0.507   4.543  -6.575  1.00 74.14
ATOM    890  CG1 ILE A  58       1.574   3.153  -4.282  1.00 30.31
ATOM    891 1HG1 ILE A  58       2.119   2.247  -4.064  1.00 71.40
ATOM    892 2HG1 ILE A  58       1.661   3.819  -3.435  1.00 75.10
ATOM    893  CD1 ILE A  58       0.109   2.774  -4.438  1.00 53.22
ATOM    894 1HD1 ILE A  58      -0.466   3.678  -4.594  1.00 30.55
ATOM    895 2HD1 ILE A  58      -0.229   2.291  -3.534  1.00 23.01
ATOM    896 3HD1 ILE A  58      -0.014   2.113  -5.283  1.00  0.42
ATOM    897  C   ILE A  58       4.032   2.251  -6.247  1.00 32.53
ATOM    898  O   ILE A  58       4.091   1.370  -5.369  1.00 42.03
ATOM    899  N   VAL A  59       5.078   2.679  -6.915  1.00 61.55
ATOM    900  H   VAL A  59       4.958   3.365  -7.613  1.00 40.12
ATOM    901  CA  VAL A  59       6.404   2.158  -6.678  1.00 31.03
ATOM    902  HA  VAL A  59       6.343   1.465  -5.852  1.00  1.44
ATOM    903  CB  VAL A  59       6.966   1.388  -7.918  1.00 15.14
ATOM    904  HB  VAL A  59       7.027   2.082  -8.744  1.00 23.32
ATOM    905  CG1 VAL A  59       8.366   0.840  -7.648  1.00 45.54
ATOM    906 1HG1 VAL A  59       9.033   1.659  -7.417  1.00 21.42
ATOM    907 2HG1 VAL A  59       8.724   0.318  -8.523  1.00 45.25
ATOM    908 3HG1 VAL A  59       8.329   0.159  -6.812  1.00 63.50
ATOM    909  CG2 VAL A  59       6.045   0.258  -8.311  1.00 53.51
ATOM    910 1HG2 VAL A  59       6.447  -0.259  -9.170  1.00  4.45
ATOM    911 2HG2 VAL A  59       5.073   0.659  -8.553  1.00 14.30
ATOM    912 3HG2 VAL A  59       5.957  -0.431  -7.484  1.00 52.34
ATOM    913  C   VAL A  59       7.371   3.269  -6.310  1.00 55.23
ATOM    914  O   VAL A  59       7.487   4.276  -7.020  1.00 20.43
ATOM    915  N   SER A  60       8.024   3.091  -5.210  1.00  1.10
ATOM    916  H   SER A  60       7.793   2.312  -4.654  1.00 41.44
ATOM    917  CA  SER A  60       9.077   3.949  -4.773  1.00 61.10
ATOM    918  HA  SER A  60       9.221   4.717  -5.518  1.00  1.41
ATOM    919  CB  SER A  60       8.733   4.575  -3.410  1.00 33.10
ATOM    920 1HB  SER A  60       7.805   5.122  -3.490  1.00 61.20
ATOM    921 2HB  SER A  60       8.624   3.802  -2.664  1.00 13.34
ATOM    922  OG  SER A  60       9.741   5.466  -2.998  1.00 63.51
ATOM    923  HG  SER A  60       9.497   6.372  -3.236  1.00 72.45
ATOM    924  C   SER A  60      10.333   3.079  -4.692  1.00 25.21
ATOM    925  O   SER A  60      10.224   1.848  -4.704  1.00 24.03
ATOM    926  N   ALA A  61      11.488   3.674  -4.635  1.00 74.41
ATOM    927  H   ALA A  61      11.501   4.653  -4.571  1.00 42.04
ATOM    928  CA  ALA A  61      12.734   2.909  -4.610  1.00 74.54
ATOM    929  HA  ALA A  61      12.472   1.862  -4.646  1.00 11.30
ATOM    930  CB  ALA A  61      13.575   3.229  -5.840  1.00 64.11
ATOM    931 1HB  ALA A  61      13.870   4.268  -5.814  1.00 24.30
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ATOM    932 2HB  ALA A  61      12.995   3.043  -6.732  1.00  3.14
ATOM    933 3HB  ALA A  61      14.457   2.605  -5.847  1.00 31.12
ATOM    934  C   ALA A  61      13.533   3.169  -3.335  1.00 75.15
ATOM    935  O   ALA A  61      13.541   4.286  -2.813  1.00  4.34
ATOM    936  N   SER A  62      14.187   2.145  -2.829  1.00 73.23
ATOM    937  H   SER A  62      14.143   1.252  -3.242  1.00  4.24
ATOM    938  CA  SER A  62      15.011   2.292  -1.668  1.00 14.24
ATOM    939  HA  SER A  62      14.576   3.090  -1.083  1.00 41.13
ATOM    940  CB  SER A  62      15.006   1.020  -0.826  1.00 72.21
ATOM    941 1HB  SER A  62      15.305   0.186  -1.444  1.00 65.40
ATOM    942 2HB  SER A  62      15.695   1.129  -0.003  1.00 35.10
ATOM    943  OG  SER A  62      13.703   0.765  -0.310  1.00 60.54
ATOM    944  HG  SER A  62      13.225   1.603  -0.242  1.00 63.24
ATOM    945  C   SER A  62      16.426   2.719  -2.048  1.00 32.32
ATOM    946  O   SER A  62      17.008   2.208  -2.999  1.00 12.14
ATOM    947  N   ASP A  63      16.944   3.676  -1.313  1.00 41.31
ATOM    948  H   ASP A  63      16.432   4.068  -0.569  1.00 33.43
ATOM    949  CA  ASP A  63      18.271   4.242  -1.553  1.00 62.14
ATOM    950  HA  ASP A  63      18.438   4.342  -2.614  1.00 51.43
ATOM    951  CB  ASP A  63      18.323   5.636  -0.919  1.00 73.34
ATOM    952 1HB  ASP A  63      19.314   6.048  -1.037  1.00 22.23
ATOM    953 2HB  ASP A  63      17.601   6.279  -1.401  1.00 22.44
ATOM    954  CG  ASP A  63      17.992   5.564   0.562  1.00 41.31
ATOM    955  OD1 ASP A  63      18.912   5.505   1.382  1.00 55.13
ATOM    956  OD2 ASP A  63      16.783   5.464   0.889  1.00 60.50
ATOM    957  C   ASP A  63      19.358   3.383  -0.924  1.00  2.42
ATOM    958  O   ASP A  63      20.461   3.280  -1.454  1.00 14.21
ATOM    959  N   SER A  64      19.037   2.744   0.178  1.00 42.02
ATOM    960  H   SER A  64      18.161   2.906   0.578  1.00 55.25
ATOM    961  CA  SER A  64      19.991   1.907   0.844  1.00  1.30
ATOM    962  HA  SER A  64      20.978   2.324   0.710  1.00 53.14
ATOM    963  CB  SER A  64      19.660   1.858   2.329  1.00 70.00
ATOM    964 1HB  SER A  64      18.763   1.276   2.471  1.00 52.11
ATOM    965 2HB  SER A  64      20.475   1.390   2.861  1.00 22.34
ATOM    966  OG  SER A  64      19.456   3.168   2.865  1.00 14.22
ATOM    967  HG  SER A  64      19.436   3.881   2.203  1.00 45.34
ATOM    968  C   SER A  64      19.934   0.510   0.234  1.00 23.30
ATOM    969  O   SER A  64      20.959  -0.122  -0.045  1.00 40.15
ATOM    970  N   ASP A  65      18.728   0.048  -0.009  1.00 42.43
ATOM    971  H   ASP A  65      17.954   0.598   0.217  1.00 41.50
ATOM    972  CA  ASP A  65      18.526  -1.237  -0.620  1.00 21.20
ATOM    973  HA  ASP A  65      19.387  -1.855  -0.413  1.00 42.10
ATOM    974  CB  ASP A  65      17.270  -1.945  -0.111  1.00 11.22
ATOM    975 1HB  ASP A  65      16.435  -1.271  -0.231  1.00 63.40
ATOM    976 2HB  ASP A  65      17.099  -2.824  -0.715  1.00 42.52
ATOM    977  CG  ASP A  65      17.304  -2.347   1.324  1.00 21.32
ATOM    978  OD1 ASP A  65      17.709  -3.483   1.613  1.00 73.50
ATOM    979  OD2 ASP A  65      16.880  -1.539   2.173  1.00 44.34
ATOM    980  C   ASP A  65      18.380  -1.053  -2.087  1.00 11.52
ATOM    981  O   ASP A  65      17.295  -0.769  -2.571  1.00 32.30
ATOM    982  N   SER A  66      19.465  -1.206  -2.797  1.00 30.44
ATOM    983  H   SER A  66      20.306  -1.361  -2.319  1.00  4.31
ATOM    984  CA  SER A  66      19.467  -1.089  -4.248  1.00 61.44
ATOM    985  HA  SER A  66      19.052  -0.123  -4.496  1.00 44.01
ATOM    986  CB  SER A  66      20.915  -1.161  -4.779  1.00 31.43
ATOM    987 1HB  SER A  66      21.496  -0.368  -4.334  1.00 71.30
ATOM    988 2HB  SER A  66      21.344  -2.113  -4.505  1.00 31.20
ATOM    989  OG  SER A  66      20.973  -1.021  -6.188  1.00 11.31
ATOM    990  HG  SER A  66      20.075  -1.056  -6.540  1.00 55.01
ATOM    991  C   SER A  66      18.585  -2.181  -4.890  1.00 21.52
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ATOM    992  O   SER A  66      18.184  -2.072  -6.041  1.00 52.15
ATOM    993  N   THR A  67      18.296  -3.217  -4.132  1.00  4.23
ATOM    994  H   THR A  67      18.617  -3.227  -3.208  1.00  1.04
ATOM    995  CA  THR A  67      17.512  -4.313  -4.610  1.00  2.44
ATOM    996  HA  THR A  67      17.496  -4.259  -5.688  1.00 20.13
ATOM    997  CB  THR A  67      18.170  -5.674  -4.200  1.00 72.01
ATOM    998  HB  THR A  67      19.170  -5.696  -4.606  1.00 14.32
ATOM    999  OG1 THR A  67      17.441  -6.779  -4.742  1.00 53.40
ATOM   1000  HG1 THR A  67      16.502  -6.556  -4.728  1.00 55.20
ATOM   1001  CG2 THR A  67      18.255  -5.816  -2.679  1.00 22.33
ATOM   1002 1HG2 THR A  67      18.850  -5.010  -2.274  1.00 34.40
ATOM   1003 2HG2 THR A  67      18.715  -6.762  -2.430  1.00  5.25
ATOM   1004 3HG2 THR A  67      17.262  -5.776  -2.257  1.00 72.31
ATOM   1005  C   THR A  67      16.057  -4.229  -4.088  1.00  2.15
ATOM   1006  O   THR A  67      15.237  -5.117  -4.376  1.00 12.15
ATOM   1007  N   ASP A  68      15.716  -3.167  -3.361  1.00 61.11
ATOM   1008  H   ASP A  68      16.324  -2.407  -3.226  1.00 24.53
ATOM   1009  CA  ASP A  68      14.371  -3.080  -2.810  1.00 53.35
ATOM   1010  HA  ASP A  68      13.831  -3.896  -3.269  1.00 64.12
ATOM   1011  CB  ASP A  68      14.324  -3.274  -1.280  1.00 41.44
ATOM   1012 1HB  ASP A  68      14.821  -4.197  -1.021  1.00 33.20
ATOM   1013 2HB  ASP A  68      14.838  -2.450  -0.808  1.00 60.51
ATOM   1014  CG  ASP A  68      12.898  -3.319  -0.744  1.00 74.12
ATOM   1015  OD1 ASP A  68      12.623  -2.723   0.303  1.00 15.22
ATOM   1016  OD2 ASP A  68      12.018  -3.942  -1.420  1.00 23.44
ATOM   1017  C   ASP A  68      13.652  -1.817  -3.243  1.00  5.14
ATOM   1018  O   ASP A  68      14.263  -0.790  -3.558  1.00 31.14
ATOM   1019  N   SER A  69      12.375  -1.932  -3.295  1.00 62.14
ATOM   1020  H   SER A  69      11.981  -2.738  -2.894  1.00 20.21
ATOM   1021  CA  SER A  69      11.492  -0.931  -3.752  1.00 32.13
ATOM   1022  HA  SER A  69      11.929   0.041  -3.590  1.00  2.44
ATOM   1023  CB  SER A  69      11.283  -1.145  -5.252  1.00 64.24
ATOM   1024 1HB  SER A  69      10.399  -0.615  -5.571  1.00 12.54
ATOM   1025 2HB  SER A  69      12.143  -0.776  -5.793  1.00 60.43
ATOM   1026  OG  SER A  69      11.121  -2.551  -5.547  1.00  1.21
ATOM   1027  HG  SER A  69      11.821  -2.754  -6.177  1.00 11.32
ATOM   1028  C   SER A  69      10.185  -1.065  -2.988  1.00 32.14
ATOM   1029  O   SER A  69       9.788  -2.188  -2.651  1.00 62.31
ATOM   1030  N   LEU A  70       9.515   0.021  -2.714  1.00 32.14
ATOM   1031  H   LEU A  70       9.868   0.909  -2.944  1.00 12.53
ATOM   1032  CA  LEU A  70       8.238  -0.086  -2.081  1.00 63.23
ATOM   1033  HA  LEU A  70       8.207  -1.020  -1.541  1.00 32.13
ATOM   1034  CB  LEU A  70       8.002   1.107  -1.109  1.00 52.00
ATOM   1035 1HB  LEU A  70       8.880   1.202  -0.488  1.00 11.41
ATOM   1036 2HB  LEU A  70       7.924   2.000  -1.711  1.00 21.22
ATOM   1037  CG  LEU A  70       6.757   1.059  -0.160  1.00 64.30
ATOM   1038  HG  LEU A  70       6.813   1.909   0.504  1.00 32.20
ATOM   1039  CD1 LEU A  70       5.425   1.171  -0.907  1.00 14.33
ATOM   1040 1HD1 LEU A  70       5.377   2.110  -1.440  1.00 31.44
ATOM   1041 2HD1 LEU A  70       4.600   1.129  -0.211  1.00 51.35
ATOM   1042 3HD1 LEU A  70       5.323   0.362  -1.616  1.00 21.40
ATOM   1043  CD2 LEU A  70       6.782  -0.201   0.702  1.00 51.23
ATOM   1044 1HD2 LEU A  70       6.750  -1.074   0.067  1.00 34.13
ATOM   1045 2HD2 LEU A  70       5.926  -0.205   1.360  1.00 50.10
ATOM   1046 3HD2 LEU A  70       7.688  -0.215   1.289  1.00 72.43
ATOM   1047  C   LEU A  70       7.214  -0.114  -3.195  1.00 20.13
ATOM   1048  O   LEU A  70       7.051   0.859  -3.921  1.00  4.33
ATOM   1049  N   GLN A  71       6.579  -1.239  -3.352  1.00 13.32
ATOM   1050  H   GLN A  71       6.779  -1.993  -2.760  1.00 53.00
ATOM   1051  CA  GLN A  71       5.562  -1.421  -4.355  1.00 40.00
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ATOM   1052  HA  GLN A  71       5.399  -0.480  -4.857  1.00 13.33
ATOM   1053  CB  GLN A  71       5.985  -2.475  -5.386  1.00 65.13
ATOM   1054 1HB  GLN A  71       6.890  -2.195  -5.904  1.00 74.14
ATOM   1055 2HB  GLN A  71       6.217  -3.370  -4.835  1.00 61.32
ATOM   1056  CG  GLN A  71       4.898  -2.840  -6.398  1.00 72.02
ATOM   1057 1HG  GLN A  71       4.035  -3.206  -5.860  1.00 42.05
ATOM   1058 2HG  GLN A  71       4.618  -1.958  -6.955  1.00  5.11
ATOM   1059  CD  GLN A  71       5.342  -3.909  -7.370  1.00 53.00
ATOM   1060  OE1 GLN A  71       5.210  -5.098  -7.105  1.00 15.43
ATOM   1061  NE2 GLN A  71       5.835  -3.503  -8.509  1.00  2.40
ATOM   1062 2HE2 GLN A  71       5.890  -2.538  -8.679  1.00 34.44
ATOM   1063 1HE2 GLN A  71       6.102  -4.191  -9.150  1.00 42.33
ATOM   1064  C   GLN A  71       4.292  -1.866  -3.687  1.00 50.34
ATOM   1065  O   GLN A  71       4.269  -2.899  -3.005  1.00 65.53
ATOM   1066  N   VAL A  72       3.272  -1.082  -3.838  1.00  5.51
ATOM   1067  H   VAL A  72       3.395  -0.235  -4.321  1.00 30.10
ATOM   1068  CA  VAL A  72       1.970  -1.437  -3.356  1.00 24.32
ATOM   1069  HA  VAL A  72       2.044  -2.364  -2.806  1.00 14.23
ATOM   1070  CB  VAL A  72       1.367  -0.325  -2.441  1.00 64.40
ATOM   1071  HB  VAL A  72       1.379   0.597  -3.003  1.00 24.22
ATOM   1072  CG1 VAL A  72      -0.059  -0.659  -2.025  1.00 53.42
ATOM   1073 1HG1 VAL A  72      -0.067  -1.596  -1.487  1.00 43.12
ATOM   1074 2HG1 VAL A  72      -0.682  -0.745  -2.905  1.00 23.13
ATOM   1075 3HG1 VAL A  72      -0.444   0.123  -1.388  1.00 12.11
ATOM   1076  CG2 VAL A  72       2.217  -0.121  -1.205  1.00 20.54
ATOM   1077 1HG2 VAL A  72       2.255  -1.029  -0.622  1.00 64.32
ATOM   1078 2HG2 VAL A  72       1.796   0.672  -0.605  1.00 64.00
ATOM   1079 3HG2 VAL A  72       3.216   0.151  -1.509  1.00 42.31
ATOM   1080  C   VAL A  72       1.082  -1.636  -4.569  1.00  2.31
ATOM   1081  O   VAL A  72       0.953  -0.727  -5.399  1.00  5.03
ATOM   1082  N   ALA A  73       0.500  -2.805  -4.680  1.00  1.53
ATOM   1083  H   ALA A  73       0.669  -3.502  -4.006  1.00 72.41
ATOM   1084  CA  ALA A  73      -0.384  -3.119  -5.770  1.00 75.33
ATOM   1085  HA  ALA A  73      -0.377  -2.291  -6.465  1.00 35.01
ATOM   1086  CB  ALA A  73       0.081  -4.378  -6.489  1.00 53.52
ATOM   1087 1HB  ALA A  73       0.081  -5.207  -5.795  1.00 53.44
ATOM   1088 2HB  ALA A  73       1.080  -4.227  -6.870  1.00 45.21
ATOM   1089 3HB  ALA A  73      -0.589  -4.594  -7.309  1.00 21.23
ATOM   1090  C   ALA A  73      -1.779  -3.298  -5.226  1.00 32.11
ATOM   1091  O   ALA A  73      -1.969  -3.958  -4.195  1.00 42.31
ATOM   1092  N   MET A  74      -2.734  -2.705  -5.876  1.00 73.21
ATOM   1093  H   MET A  74      -2.516  -2.216  -6.703  1.00 72.52
ATOM   1094  CA  MET A  74      -4.110  -2.747  -5.431  1.00 55.12
ATOM   1095  HA  MET A  74      -4.187  -3.326  -4.524  1.00  1.32
ATOM   1096  CB  MET A  74      -4.630  -1.341  -5.162  1.00 51.31
ATOM   1097 1HB  MET A  74      -4.702  -0.810  -6.099  1.00 73.42
ATOM   1098 2HB  MET A  74      -5.618  -1.420  -4.730  1.00 11.51
ATOM   1099  CG  MET A  74      -3.777  -0.536  -4.236  1.00 53.44
ATOM   1100 1HG  MET A  74      -3.701  -1.061  -3.297  1.00 52.13
ATOM   1101 2HG  MET A  74      -2.794  -0.432  -4.671  1.00  3.11
ATOM   1102  SD  MET A  74      -4.442   1.092  -3.921  1.00 53.22
ATOM   1103  CE  MET A  74      -3.144   1.714  -2.894  1.00 71.24
ATOM   1104 1HE  MET A  74      -3.008   1.057  -2.049  1.00 22.42
ATOM   1105 2HE  MET A  74      -3.394   2.700  -2.538  1.00 30.42
ATOM   1106 3HE  MET A  74      -2.233   1.751  -3.472  1.00 40.13
ATOM   1107  C   MET A  74      -4.963  -3.329  -6.505  1.00  3.12
ATOM   1108  O   MET A  74      -4.721  -3.083  -7.670  1.00 35.14
ATOM   1109  N   LYS A  75      -5.932  -4.107  -6.126  1.00 73.24
ATOM   1110  H   LYS A  75      -6.016  -4.391  -5.192  1.00 13.32
ATOM   1111  CA  LYS A  75      -6.884  -4.595  -7.040  1.00 21.13
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ATOM   1112  HA  LYS A  75      -6.722  -4.117  -7.995  1.00 23.15
ATOM   1113  CB  LYS A  75      -6.775  -6.094  -7.210  1.00 10.52
ATOM   1114 1HB  LYS A  75      -5.782  -6.344  -7.553  1.00 14.53
ATOM   1115 2HB  LYS A  75      -6.963  -6.574  -6.261  1.00 71.13
ATOM   1116  CG  LYS A  75      -7.781  -6.595  -8.201  1.00 12.52
ATOM   1117 1HG  LYS A  75      -8.748  -6.189  -7.945  1.00 22.15
ATOM   1118 2HG  LYS A  75      -7.502  -6.240  -9.182  1.00 40.43
ATOM   1119  CD  LYS A  75      -7.885  -8.077  -8.227  1.00 62.53
ATOM   1120 1HD  LYS A  75      -6.935  -8.502  -8.520  1.00 13.24
ATOM   1121 2HD  LYS A  75      -8.168  -8.436  -7.249  1.00  1.42
ATOM   1122  CE  LYS A  75      -8.943  -8.468  -9.215  1.00 54.55
ATOM   1123 1HE  LYS A  75      -8.638  -8.011 -10.145  1.00 30.31
ATOM   1124 2HE  LYS A  75      -8.967  -9.542  -9.292  1.00 62.30
ATOM   1125  NZ  LYS A  75     -10.295  -7.936  -8.847  1.00 14.54
ATOM   1126 1HZ  LYS A  75     -11.001  -8.205  -9.560  1.00 14.40
ATOM   1127 2HZ  LYS A  75     -10.303  -6.892  -8.777  1.00 72.51
ATOM   1128 3HZ  LYS A  75     -10.601  -8.309  -7.927  1.00 53.13
ATOM   1129  C   LYS A  75      -8.270  -4.259  -6.530  1.00  0.02
ATOM   1130  O   LYS A  75      -8.579  -4.499  -5.358  1.00 74.12
ATOM   1131  N   LYS A  76      -9.082  -3.744  -7.401  1.00 31.12
ATOM   1132  H   LYS A  76      -8.741  -3.570  -8.309  1.00 51.11
ATOM   1133  CA  LYS A  76     -10.442  -3.394  -7.104  1.00 32.32
ATOM   1134  HA  LYS A  76     -10.485  -2.973  -6.112  1.00  2.03
ATOM   1135  CB  LYS A  76     -10.931  -2.355  -8.102  1.00 33.23
ATOM   1136 1HB  LYS A  76     -10.230  -1.534  -8.113  1.00 11.43
ATOM   1137 2HB  LYS A  76     -10.939  -2.819  -9.077  1.00 72.41
ATOM   1138  CG  LYS A  76     -12.321  -1.793  -7.818  1.00 22.11
ATOM   1139 1HG  LYS A  76     -13.034  -2.604  -7.806  1.00 52.02
ATOM   1140 2HG  LYS A  76     -12.313  -1.306  -6.855  1.00 32.12
ATOM   1141  CD  LYS A  76     -12.724  -0.786  -8.881  1.00 72.11
ATOM   1142 1HD  LYS A  76     -13.625  -0.276  -8.575  1.00 43.42
ATOM   1143 2HD  LYS A  76     -11.923  -0.073  -9.004  1.00 50.02
ATOM   1144  CE  LYS A  76     -12.971  -1.462 -10.212  1.00 54.04
ATOM   1145 1HE  LYS A  76     -12.125  -2.085 -10.455  1.00 15.23
ATOM   1146 2HE  LYS A  76     -13.857  -2.069 -10.108  1.00 25.10
ATOM   1147  NZ  LYS A  76     -13.177  -0.480 -11.298  1.00 61.23
ATOM   1148 1HZ  LYS A  76     -12.300   0.080 -11.398  1.00 62.23
ATOM   1149 2HZ  LYS A  76     -13.963   0.162 -11.078  1.00 62.44
ATOM   1150 3HZ  LYS A  76     -13.357  -0.969 -12.197  1.00 14.10
ATOM   1151  C   LYS A  76     -11.331  -4.634  -7.177  1.00 65.03
ATOM   1152  O   LYS A  76     -11.254  -5.428  -8.148  1.00 75.52
ATOM   1153  N   LEU A  77     -12.078  -4.850  -6.147  1.00 25.04
ATOM   1154  H   LEU A  77     -12.013  -4.242  -5.369  1.00 63.33
ATOM   1155  CA  LEU A  77     -13.050  -5.916  -6.102  1.00 12.14
ATOM   1156  HA  LEU A  77     -12.766  -6.629  -6.861  1.00 60.23
ATOM   1157  CB  LEU A  77     -13.098  -6.617  -4.717  1.00 51.11
ATOM   1158 1HB  LEU A  77     -13.072  -5.837  -3.971  1.00 35.35
ATOM   1159 2HB  LEU A  77     -14.041  -7.136  -4.631  1.00 22.44
ATOM   1160  CG  LEU A  77     -11.958  -7.611  -4.378  1.00 60.10
ATOM   1161  HG  LEU A  77     -11.883  -8.328  -5.183  1.00 30.42
ATOM   1162  CD1 LEU A  77     -10.606  -6.930  -4.259  1.00 65.33
ATOM   1163 1HD1 LEU A  77     -10.642  -6.192  -3.473  1.00 44.52
ATOM   1164 2HD1 LEU A  77     -10.365  -6.446  -5.195  1.00 63.51
ATOM   1165 3HD1 LEU A  77      -9.850  -7.667  -4.028  1.00 53.14
ATOM   1166  CD2 LEU A  77     -12.279  -8.380  -3.108  1.00 22.33
ATOM   1167 1HD2 LEU A  77     -13.204  -8.922  -3.238  1.00 21.32
ATOM   1168 2HD2 LEU A  77     -12.374  -7.693  -2.280  1.00 35.22
ATOM   1169 3HD2 LEU A  77     -11.482  -9.079  -2.902  1.00 20.33
ATOM   1170  C   LEU A  77     -14.417  -5.345  -6.482  1.00 20.04
ATOM   1171  O   LEU A  77     -14.706  -4.189  -6.182  1.00  3.32
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ATOM   1172  N   PRO A  78     -15.282  -6.140  -7.149  1.00  3.04
ATOM   1173  CD  PRO A  78     -15.083  -7.578  -7.437  1.00 73.12
ATOM   1174  CA  PRO A  78     -16.586  -5.655  -7.663  1.00  3.44
ATOM   1175  HA  PRO A  78     -16.463  -4.754  -8.245  1.00 62.44
ATOM   1176  CB  PRO A  78     -17.051  -6.797  -8.570  1.00 65.51
ATOM   1177 1HB  PRO A  78     -18.129  -6.869  -8.545  1.00  2.55
ATOM   1178 2HB  PRO A  78     -16.705  -6.642  -9.582  1.00 43.41
ATOM   1179  CG  PRO A  78     -16.405  -8.018  -8.012  1.00 31.14
ATOM   1180 1HG  PRO A  78     -17.034  -8.438  -7.240  1.00 21.14
ATOM   1181 2HG  PRO A  78     -16.233  -8.742  -8.793  1.00 33.11
ATOM   1182 1HD  PRO A  78     -14.871  -8.121  -6.527  1.00 14.11
ATOM   1183 2HD  PRO A  78     -14.281  -7.718  -8.144  1.00 43.24
ATOM   1184  C   PRO A  78     -17.610  -5.395  -6.554  1.00 61.12
ATOM   1185  O   PRO A  78     -18.703  -4.925  -6.807  1.00 13.02
ATOM   1186  N   ASN A  79     -17.228  -5.701  -5.343  1.00 73.43
ATOM   1187  H   ASN A  79     -16.333  -6.078  -5.226  1.00 21.41
ATOM   1188  CA  ASN A  79     -18.076  -5.510  -4.181  1.00 42.43
ATOM   1189  HA  ASN A  79     -19.073  -5.294  -4.531  1.00 55.22
ATOM   1190  CB  ASN A  79     -18.100  -6.797  -3.335  1.00 35.40
ATOM   1191 1HB  ASN A  79     -18.773  -6.657  -2.502  1.00 20.32
ATOM   1192 2HB  ASN A  79     -18.467  -7.608  -3.947  1.00 65.32
ATOM   1193  CG  ASN A  79     -16.740  -7.188  -2.782  1.00 70.13
ATOM   1194  OD1 ASN A  79     -15.956  -7.856  -3.452  1.00 41.20
ATOM   1195  ND2 ASN A  79     -16.455  -6.788  -1.572  1.00 32.11
ATOM   1196 2HD2 ASN A  79     -17.126  -6.251  -1.095  1.00  2.42
ATOM   1197 1HD2 ASN A  79     -15.594  -7.045  -1.185  1.00 33.35
ATOM   1198  C   ASN A  79     -17.569  -4.323  -3.367  1.00 24.03
ATOM   1199  O   ASN A  79     -17.815  -4.228  -2.166  1.00 74.34
ATOM   1200  N   ASN A  80     -16.858  -3.421  -4.061  1.00 21.23
ATOM   1201  H   ASN A  80     -16.695  -3.613  -5.007  1.00 22.30
ATOM   1202  CA  ASN A  80     -16.313  -2.161  -3.500  1.00 34.14
ATOM   1203  HA  ASN A  80     -15.862  -1.640  -4.331  1.00  2.44
ATOM   1204  CB  ASN A  80     -17.423  -1.253  -2.917  1.00 34.21
ATOM   1205 1HB  ASN A  80     -18.004  -1.820  -2.203  1.00 73.02
ATOM   1206 2HB  ASN A  80     -16.960  -0.419  -2.408  1.00 52.35
ATOM   1207  CG  ASN A  80     -18.372  -0.710  -3.972  1.00 54.44
ATOM   1208  OD1 ASN A  80     -19.383  -1.315  -4.293  1.00 13.11
ATOM   1209  ND2 ASN A  80     -18.054   0.444  -4.517  1.00 53.25
ATOM   1210 2HD2 ASN A  80     -17.237   0.892  -4.223  1.00  2.12
ATOM   1211 1HD2 ASN A  80     -18.674   0.788  -5.194  1.00 63.44
ATOM   1212  C   ASN A  80     -15.214  -2.387  -2.475  1.00 15.01
ATOM   1213  O   ASN A  80     -14.902  -1.507  -1.689  1.00 54.13
ATOM   1214  N   ALA A  81     -14.589  -3.535  -2.543  1.00 33.23
ATOM   1215  H   ALA A  81     -14.873  -4.170  -3.228  1.00 21.30
ATOM   1216  CA  ALA A  81     -13.479  -3.866  -1.673  1.00  1.15
ATOM   1217  HA  ALA A  81     -13.462  -3.152  -0.861  1.00 42.33
ATOM   1218  CB  ALA A  81     -13.631  -5.265  -1.108  1.00 31.03
ATOM   1219 1HB  ALA A  81     -14.539  -5.322  -0.526  1.00 22.24
ATOM   1220 2HB  ALA A  81     -12.782  -5.500  -0.483  1.00 31.32
ATOM   1221 3HB  ALA A  81     -13.686  -5.972  -1.924  1.00 32.13
ATOM   1222  C   ALA A  81     -12.191  -3.750  -2.462  1.00 12.43
ATOM   1223  O   ALA A  81     -12.222  -3.733  -3.692  1.00 33.43
ATOM   1224  N   THR A  82     -11.082  -3.657  -1.790  1.00 43.31
ATOM   1225  H   THR A  82     -11.094  -3.687  -0.808  1.00 23.14
ATOM   1226  CA  THR A  82      -9.817  -3.512  -2.457  1.00 34.30
ATOM   1227  HA  THR A  82      -9.935  -3.779  -3.498  1.00 35.55
ATOM   1228  CB  THR A  82      -9.355  -2.046  -2.379  1.00 31.22
ATOM   1229  HB  THR A  82      -9.100  -1.819  -1.355  1.00 20.44
ATOM   1230  OG1 THR A  82     -10.420  -1.203  -2.808  1.00  3.32
ATOM   1231  HG1 THR A  82     -11.082  -1.138  -2.105  1.00 63.15
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ATOM   1232  CG2 THR A  82      -8.146  -1.798  -3.268  1.00  3.21
ATOM   1233 1HG2 THR A  82      -8.403  -2.036  -4.289  1.00  3.41
ATOM   1234 2HG2 THR A  82      -7.329  -2.428  -2.946  1.00 51.24
ATOM   1235 3HG2 THR A  82      -7.851  -0.760  -3.201  1.00 33.52
ATOM   1236  C   THR A  82      -8.765  -4.409  -1.803  1.00 70.14
ATOM   1237  O   THR A  82      -8.693  -4.502  -0.584  1.00 12.41
ATOM   1238  N   ARG A  83      -7.989  -5.089  -2.605  1.00 43.21
ATOM   1239  H   ARG A  83      -8.147  -5.014  -3.574  1.00  1.23
ATOM   1240  CA  ARG A  83      -6.895  -5.890  -2.101  1.00 50.22
ATOM   1241  HA  ARG A  83      -7.024  -5.913  -1.030  1.00 35.43
ATOM   1242  CB  ARG A  83      -6.866  -7.347  -2.628  1.00 42.52
ATOM   1243 1HB  ARG A  83      -7.657  -7.910  -2.156  1.00 12.12
ATOM   1244 2HB  ARG A  83      -7.019  -7.341  -3.697  1.00 11.32
ATOM   1245  CG  ARG A  83      -5.517  -8.035  -2.335  1.00 13.11
ATOM   1246 1HG  ARG A  83      -4.751  -7.545  -2.917  1.00  4.42
ATOM   1247 2HG  ARG A  83      -5.291  -7.899  -1.287  1.00 64.41
ATOM   1248  CD  ARG A  83      -5.479  -9.502  -2.665  1.00  3.14
ATOM   1249 1HD  ARG A  83      -5.981 -10.009  -1.851  1.00 13.25
ATOM   1250 2HD  ARG A  83      -5.986  -9.686  -3.599  1.00 52.21
ATOM   1251  NE  ARG A  83      -4.073  -9.987  -2.745  1.00 41.02
ATOM   1252  HE  ARG A  83      -3.388  -9.275  -2.791  1.00 21.20
ATOM   1253  CZ  ARG A  83      -3.683 -11.267  -2.812  1.00 30.22
ATOM   1254  NH1 ARG A  83      -4.582 -12.252  -2.704  1.00 13.32
ATOM   1255 1HH1 ARG A  83      -5.552 -12.044  -2.569  1.00 40.10
ATOM   1256 2HH1 ARG A  83      -4.332 -13.219  -2.754  1.00 33.54
ATOM   1257  NH2 ARG A  83      -2.384 -11.562  -2.975  1.00 50.55
ATOM   1258 1HH2 ARG A  83      -1.673 -10.850  -3.054  1.00 15.41
ATOM   1259 2HH2 ARG A  83      -2.025 -12.493  -3.034  1.00 65.11
ATOM   1260  C   ARG A  83      -5.576  -5.211  -2.353  1.00 51.51
ATOM   1261  O   ARG A  83      -5.319  -4.740  -3.452  1.00 44.55
ATOM   1262  N   ILE A  84      -4.763  -5.177  -1.339  1.00 65.31
ATOM   1263  H   ILE A  84      -5.043  -5.594  -0.492  1.00 35.12
ATOM   1264  CA  ILE A  84      -3.456  -4.613  -1.392  1.00 11.24
ATOM   1265  HA  ILE A  84      -3.330  -4.155  -2.361  1.00 13.22
ATOM   1266  CB  ILE A  84      -3.255  -3.514  -0.272  1.00 44.44
ATOM   1267  HB  ILE A  84      -3.926  -3.769   0.533  1.00 55.01
ATOM   1268  CG2 ILE A  84      -1.847  -3.485   0.314  1.00 55.35
ATOM   1269 1HG2 ILE A  84      -1.779  -2.688   1.039  1.00 21.55
ATOM   1270 2HG2 ILE A  84      -1.125  -3.329  -0.473  1.00 22.03
ATOM   1271 3HG2 ILE A  84      -1.655  -4.430   0.804  1.00 41.43
ATOM   1272  CG1 ILE A  84      -3.645  -2.135  -0.784  1.00 50.01
ATOM   1273 1HG1 ILE A  84      -3.381  -1.387  -0.051  1.00 15.44
ATOM   1274 2HG1 ILE A  84      -3.063  -1.987  -1.681  1.00 44.34
ATOM   1275  CD1 ILE A  84      -5.104  -1.975  -1.126  1.00 42.43
ATOM   1276 1HD1 ILE A  84      -5.268  -0.986  -1.528  1.00 24.05
ATOM   1277 2HD1 ILE A  84      -5.701  -2.111  -0.237  1.00 73.44
ATOM   1278 3HD1 ILE A  84      -5.380  -2.712  -1.865  1.00 75.31
ATOM   1279  C   ILE A  84      -2.449  -5.731  -1.239  1.00 23.30
ATOM   1280  O   ILE A  84      -2.601  -6.631  -0.404  1.00 13.34
ATOM   1281  N   SER A  85      -1.493  -5.711  -2.101  1.00 50.20
ATOM   1282  H   SER A  85      -1.493  -4.990  -2.774  1.00 71.44
ATOM   1283  CA  SER A  85      -0.425  -6.658  -2.103  1.00  2.03
ATOM   1284  HA  SER A  85      -0.494  -7.259  -1.208  1.00  4.21
ATOM   1285  CB  SER A  85      -0.560  -7.548  -3.333  1.00 30.24
ATOM   1286 1HB  SER A  85      -0.375  -6.951  -4.215  1.00 14.24
ATOM   1287 2HB  SER A  85       0.148  -8.362  -3.281  1.00 65.14
ATOM   1288  OG  SER A  85      -1.891  -8.086  -3.391  1.00 14.32
ATOM   1289  HG  SER A  85      -2.432  -7.296  -3.278  1.00 63.20
ATOM   1290  C   SER A  85       0.883  -5.886  -2.104  1.00  5.41
ATOM   1291  O   SER A  85       1.039  -4.933  -2.883  1.00 21.41
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ATOM   1292  N   ILE A  86       1.781  -6.242  -1.224  1.00  2.44
ATOM   1293  H   ILE A  86       1.611  -7.014  -0.642  1.00 54.31
ATOM   1294  CA  ILE A  86       3.045  -5.540  -1.090  1.00 71.45
ATOM   1295  HA  ILE A  86       3.124  -4.881  -1.943  1.00 12.21
ATOM   1296  CB  ILE A  86       3.095  -4.678   0.225  1.00  4.25
ATOM   1297  HB  ILE A  86       2.934  -5.322   1.074  1.00 22.25
ATOM   1298  CG2 ILE A  86       4.465  -3.989   0.411  1.00 13.23
ATOM   1299 1HG2 ILE A  86       5.243  -4.735   0.488  1.00 44.13
ATOM   1300 2HG2 ILE A  86       4.457  -3.403   1.318  1.00 50.12
ATOM   1301 3HG2 ILE A  86       4.667  -3.345  -0.432  1.00 52.51
ATOM   1302  CG1 ILE A  86       1.963  -3.634   0.180  1.00 51.41
ATOM   1303 1HG1 ILE A  86       2.121  -2.993  -0.674  1.00 62.31
ATOM   1304 2HG1 ILE A  86       1.027  -4.156   0.040  1.00 14.05
ATOM   1305  CD1 ILE A  86       1.832  -2.756   1.403  1.00 43.11
ATOM   1306 1HD1 ILE A  86       2.768  -2.253   1.596  1.00 43.14
ATOM   1307 2HD1 ILE A  86       1.555  -3.366   2.249  1.00 45.32
ATOM   1308 3HD1 ILE A  86       1.059  -2.021   1.234  1.00 42.12
ATOM   1309  C   ILE A  86       4.198  -6.531  -1.168  1.00 42.14
ATOM   1310  O   ILE A  86       4.076  -7.683  -0.718  1.00 54.24
ATOM   1311  N   LYS A  87       5.300  -6.078  -1.714  1.00 22.13
ATOM   1312  H   LYS A  87       5.338  -5.129  -1.955  1.00 71.23
ATOM   1313  CA  LYS A  87       6.456  -6.892  -1.954  1.00  1.52
ATOM   1314  HA  LYS A  87       6.173  -7.893  -1.662  1.00 54.12
ATOM   1315  CB  LYS A  87       6.858  -6.917  -3.466  1.00 22.13
ATOM   1316 1HB  LYS A  87       7.786  -7.452  -3.585  1.00  4.41
ATOM   1317 2HB  LYS A  87       6.089  -7.441  -4.010  1.00 30.33
ATOM   1318  CG  LYS A  87       7.051  -5.565  -4.162  1.00 43.23
ATOM   1319 1HG  LYS A  87       7.104  -5.720  -5.230  1.00  4.23
ATOM   1320 2HG  LYS A  87       6.166  -4.998  -3.924  1.00 14.11
ATOM   1321  CD  LYS A  87       8.293  -4.777  -3.715  1.00 34.04
ATOM   1322 1HD  LYS A  87       8.334  -3.845  -4.259  1.00 62.00
ATOM   1323 2HD  LYS A  87       8.202  -4.566  -2.659  1.00 55.05
ATOM   1324  CE  LYS A  87       9.596  -5.533  -3.958  1.00 64.43
ATOM   1325 1HE  LYS A  87       9.598  -6.434  -3.364  1.00  5.25
ATOM   1326 2HE  LYS A  87       9.661  -5.791  -5.005  1.00 44.12
ATOM   1327  NZ  LYS A  87      10.779  -4.725  -3.585  1.00  4.23
ATOM   1328 1HZ  LYS A  87      11.670  -5.224  -3.768  1.00 12.11
ATOM   1329 2HZ  LYS A  87      10.799  -4.487  -2.563  1.00 43.23
ATOM   1330 3HZ  LYS A  87      10.789  -3.826  -4.113  1.00 64.22
ATOM   1331  C   LYS A  87       7.596  -6.485  -1.049  1.00 14.13
ATOM   1332  O   LYS A  87       7.814  -5.305  -0.778  1.00 70.55
ATOM   1333  N   TYR A  88       8.249  -7.462  -0.528  1.00 45.22
ATOM   1334  H   TYR A  88       8.035  -8.374  -0.802  1.00 35.13
ATOM   1335  CA  TYR A  88       9.303  -7.272   0.421  1.00 72.45
ATOM   1336  HA  TYR A  88       9.149  -6.346   0.951  1.00 35.44
ATOM   1337  CB  TYR A  88       9.284  -8.422   1.446  1.00 14.32
ATOM   1338 1HB  TYR A  88      10.035  -8.230   2.198  1.00 33.22
ATOM   1339 2HB  TYR A  88       8.312  -8.454   1.919  1.00 10.40
ATOM   1340  CG  TYR A  88       9.565  -9.812   0.853  1.00 34.12
ATOM   1341  CD1 TYR A  88      10.781 -10.449   1.074  1.00 60.23
ATOM   1342  HD1 TYR A  88      11.530  -9.958   1.677  1.00 41.42
ATOM   1343  CE1 TYR A  88      11.043 -11.694   0.532  1.00 62.34
ATOM   1344  HE1 TYR A  88      11.993 -12.173   0.714  1.00 32.31
ATOM   1345  CZ  TYR A  88      10.083 -12.320  -0.238  1.00 64.50
ATOM   1346  CE2 TYR A  88       8.872 -11.712  -0.471  1.00 73.42
ATOM   1347  HE2 TYR A  88       8.123 -12.204  -1.074  1.00 73.03
ATOM   1348  CD2 TYR A  88       8.617 -10.472   0.069  1.00 33.22
ATOM   1349  HD2 TYR A  88       7.665  -9.997  -0.115  1.00 62.23
ATOM   1350  OH  TYR A  88      10.339 -13.555  -0.779  1.00 43.44
ATOM   1351  HH  TYR A  88      10.626 -14.136  -0.070  1.00 40.45
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ATOM   1352  C   TYR A  88      10.647  -7.258  -0.268  1.00  1.45
ATOM   1353  O   TYR A  88      10.790  -7.751  -1.396  1.00 42.33
ATOM   1354  N   GLY A  89      11.582  -6.636   0.376  1.00 51.43
ATOM   1355  H   GLY A  89      11.361  -6.089   1.163  1.00 53.35
ATOM   1356  CA  GLY A  89      12.933  -6.670  -0.042  1.00 23.15
ATOM   1357 1HA  GLY A  89      13.008  -7.219  -0.970  1.00 15.05
ATOM   1358 2HA  GLY A  89      13.296  -5.663  -0.180  1.00 24.10
ATOM   1359  C   GLY A  89      13.754  -7.342   1.019  1.00 71.43
ATOM   1360  O   GLY A  89      13.265  -8.260   1.686  1.00 30.02
ATOM   1361  N   SER A  90      14.942  -6.850   1.236  1.00 13.24
ATOM   1362  H   SER A  90      15.275  -6.068   0.744  1.00 32.12
ATOM   1363  CA  SER A  90      15.887  -7.427   2.173  1.00 22.02
ATOM   1364  HA  SER A  90      16.128  -8.438   1.881  1.00 72.22
ATOM   1365  CB  SER A  90      17.162  -6.600   2.094  1.00 75.42
ATOM   1366 1HB  SER A  90      17.128  -5.819   2.838  1.00 21.14
ATOM   1367 2HB  SER A  90      18.016  -7.235   2.272  1.00 44.41
ATOM   1368  OG  SER A  90      17.290  -6.007   0.804  1.00 43.41
ATOM   1369  HG  SER A  90      17.516  -5.077   0.994  1.00 21.14
ATOM   1370  C   SER A  90      15.373  -7.381   3.630  1.00  5.52
ATOM   1371  O   SER A  90      15.735  -8.213   4.453  1.00 32.45
ATOM   1372  N   GLN A  91      14.518  -6.418   3.924  1.00 73.11
ATOM   1373  H   GLN A  91      14.142  -5.883   3.194  1.00 22.33
ATOM   1374  CA  GLN A  91      14.135  -6.148   5.299  1.00 54.20
ATOM   1375  HA  GLN A  91      14.864  -6.627   5.934  1.00  4.52
ATOM   1376  CB  GLN A  91      14.235  -4.648   5.558  1.00  4.13
ATOM   1377 1HB  GLN A  91      13.542  -4.137   4.906  1.00  1.31
ATOM   1378 2HB  GLN A  91      13.970  -4.446   6.585  1.00 51.21
ATOM   1379  CG  GLN A  91      15.630  -4.090   5.306  1.00 31.21
ATOM   1380 1HG  GLN A  91      16.322  -4.559   5.990  1.00 52.03
ATOM   1381 2HG  GLN A  91      15.918  -4.328   4.292  1.00  0.43
ATOM   1382  CD  GLN A  91      15.713  -2.597   5.495  1.00 11.52
ATOM   1383  OE1 GLN A  91      14.745  -1.872   5.281  1.00 34.23
ATOM   1384  NE2 GLN A  91      16.870  -2.118   5.866  1.00 52.54
ATOM   1385 2HE2 GLN A  91      17.604  -2.753   5.991  1.00 45.21
ATOM   1386 1HE2 GLN A  91      16.951  -1.152   5.994  1.00 13.14
ATOM   1387  C   GLN A  91      12.746  -6.670   5.690  1.00 42.42
ATOM   1388  O   GLN A  91      12.305  -6.429   6.806  1.00 25.03
ATOM   1389  N   GLY A  92      12.073  -7.395   4.796  1.00 44.52
ATOM   1390  H   GLY A  92      12.503  -7.604   3.940  1.00 54.02
ATOM   1391  CA  GLY A  92      10.724  -7.880   5.122  1.00 63.43
ATOM   1392 1HA  GLY A  92      10.367  -8.524   4.331  1.00 24.34
ATOM   1393 2HA  GLY A  92      10.764  -8.443   6.043  1.00 44.43
ATOM   1394  C   GLY A  92       9.756  -6.715   5.303  1.00 11.31
ATOM   1395  O   GLY A  92       9.326  -6.393   6.420  1.00 45.23
ATOM   1396  N   ASN A  93       9.377  -6.124   4.192  1.00 51.04
ATOM   1397  H   ASN A  93       9.629  -6.516   3.330  1.00 30.23
ATOM   1398  CA  ASN A  93       8.611  -4.877   4.147  1.00 22.00
ATOM   1399  HA  ASN A  93       9.141  -4.168   4.763  1.00  5.31
ATOM   1400  CB  ASN A  93       8.560  -4.306   2.704  1.00 53.14
ATOM   1401 1HB  ASN A  93       7.995  -4.981   2.077  1.00 71.13
ATOM   1402 2HB  ASN A  93       8.053  -3.352   2.727  1.00 42.22
ATOM   1403  CG  ASN A  93       9.951  -4.101   2.071  1.00 62.41
ATOM   1404  OD1 ASN A  93      10.899  -4.845   2.358  1.00 71.22
ATOM   1405  ND2 ASN A  93      10.079  -3.139   1.205  1.00 10.23
ATOM   1406 2HD2 ASN A  93       9.315  -2.576   0.970  1.00  4.55
ATOM   1407 1HD2 ASN A  93      10.980  -3.007   0.805  1.00 25.31
ATOM   1408  C   ASN A  93       7.204  -5.024   4.719  1.00 44.32
ATOM   1409  O   ASN A  93       6.521  -4.026   4.955  1.00 72.53
ATOM   1410  N   SER A  94       6.793  -6.255   4.978  1.00 21.25
ATOM   1411  H   SER A  94       7.403  -7.009   4.826  1.00  4.23
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ATOM   1412  CA  SER A  94       5.488  -6.580   5.520  1.00 25.20
ATOM   1413  HA  SER A  94       4.745  -6.265   4.801  1.00 43.14
ATOM   1414  CB  SER A  94       5.393  -8.096   5.665  1.00 10.31
ATOM   1415 1HB  SER A  94       4.564  -8.342   6.312  1.00 63.41
ATOM   1416 2HB  SER A  94       5.248  -8.548   4.695  1.00 52.45
ATOM   1417  OG  SER A  94       6.594  -8.611   6.238  1.00 73.51
ATOM   1418  HG  SER A  94       6.429  -8.883   7.147  1.00 12.01
ATOM   1419  C   SER A  94       5.213  -5.869   6.861  1.00 34.10
ATOM   1420  O   SER A  94       4.075  -5.482   7.149  1.00 51.31
ATOM   1421  N   ILE A  95       6.251  -5.672   7.660  1.00  0.03
ATOM   1422  H   ILE A  95       7.132  -6.011   7.384  1.00 75.51
ATOM   1423  CA  ILE A  95       6.099  -4.991   8.939  1.00 72.15
ATOM   1424  HA  ILE A  95       5.272  -5.465   9.447  1.00 11.32
ATOM   1425  CB  ILE A  95       7.355  -5.141   9.819  1.00 43.54
ATOM   1426  HB  ILE A  95       8.194  -4.727   9.280  1.00 71.12
ATOM   1427  CG2 ILE A  95       7.211  -4.380  11.142  1.00 53.11
ATOM   1428 1HG2 ILE A  95       8.108  -4.507  11.730  1.00 11.42
ATOM   1429 2HG2 ILE A  95       6.364  -4.768  11.687  1.00 25.42
ATOM   1430 3HG2 ILE A  95       7.057  -3.331  10.938  1.00 33.51
ATOM   1431  CG1 ILE A  95       7.633  -6.624  10.078  1.00 55.21
ATOM   1432 1HG1 ILE A  95       8.019  -7.110   9.195  1.00 51.42
ATOM   1433 2HG1 ILE A  95       8.370  -6.632  10.860  1.00 24.33
ATOM   1434  CD1 ILE A  95       6.441  -7.421  10.594  1.00  2.02
ATOM   1435 1HD1 ILE A  95       6.750  -8.434  10.802  1.00 64.11
ATOM   1436 2HD1 ILE A  95       5.680  -7.438   9.826  1.00 53.12
ATOM   1437 3HD1 ILE A  95       6.050  -6.961  11.490  1.00 61.24
ATOM   1438  C   ILE A  95       5.762  -3.516   8.723  1.00 20.55
ATOM   1439  O   ILE A  95       4.843  -2.975   9.339  1.00 63.22
ATOM   1440  N   ARG A  96       6.474  -2.890   7.802  1.00 52.30
ATOM   1441  H   ARG A  96       7.191  -3.369   7.333  1.00 60.11
ATOM   1442  CA  ARG A  96       6.233  -1.501   7.448  1.00 11.14
ATOM   1443  HA  ARG A  96       6.256  -0.911   8.353  1.00 22.34
ATOM   1444  CB  ARG A  96       7.327  -1.019   6.502  1.00 42.54
ATOM   1445 1HB  ARG A  96       7.334  -1.653   5.627  1.00 65.13
ATOM   1446 2HB  ARG A  96       7.103  -0.006   6.198  1.00  5.21
ATOM   1447  CG  ARG A  96       8.722  -1.034   7.121  1.00 72.50
ATOM   1448 1HG  ARG A  96       8.912  -2.029   7.498  1.00 41.13
ATOM   1449 2HG  ARG A  96       9.448  -0.798   6.360  1.00 64.43
ATOM   1450  CD  ARG A  96       8.825  -0.040   8.272  1.00 40.10
ATOM   1451 1HD  ARG A  96       8.143  -0.326   9.057  1.00  1.25
ATOM   1452 2HD  ARG A  96       9.836  -0.056   8.656  1.00 40.15
ATOM   1453  NE  ARG A  96       8.512   1.316   7.831  1.00 41.23
ATOM   1454  HE  ARG A  96       8.882   1.519   6.934  1.00 43.15
ATOM   1455  CZ  ARG A  96       7.756   2.211   8.485  1.00 44.40
ATOM   1456  NH1 ARG A  96       7.406   2.011   9.769  1.00 45.05
ATOM   1457 1HH1 ARG A  96       7.688   1.199  10.286  1.00 11.43
ATOM   1458 2HH1 ARG A  96       6.861   2.686  10.267  1.00 52.53
ATOM   1459  NH2 ARG A  96       7.391   3.322   7.862  1.00  3.01
ATOM   1460 1HH2 ARG A  96       7.696   3.458   6.910  1.00 73.23
ATOM   1461 2HH2 ARG A  96       6.820   4.052   8.259  1.00 30.42
ATOM   1462  C   ARG A  96       4.857  -1.362   6.803  1.00 41.22
ATOM   1463  O   ARG A  96       4.140  -0.385   7.028  1.00 21.44
ATOM   1464  N   SER A  97       4.489  -2.380   6.048  1.00  5.31
ATOM   1465  H   SER A  97       5.127  -3.113   5.923  1.00 31.31
ATOM   1466  CA  SER A  97       3.205  -2.452   5.381  1.00 65.15
ATOM   1467  HA  SER A  97       3.107  -1.603   4.722  1.00  4.50
ATOM   1468  CB  SER A  97       3.156  -3.719   4.550  1.00 63.41
ATOM   1469 1HB  SER A  97       3.247  -4.568   5.212  1.00 22.13
ATOM   1470 2HB  SER A  97       2.216  -3.779   4.026  1.00 10.24
ATOM   1471  OG  SER A  97       4.221  -3.756   3.619  1.00  2.43
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ATOM   1472  HG  SER A  97       5.072  -3.678   4.064  1.00 22.12
ATOM   1473  C   SER A  97       2.063  -2.454   6.396  1.00 61.45
ATOM   1474  O   SER A  97       1.047  -1.810   6.193  1.00 43.11
ATOM   1475  N   SER A  98       2.269  -3.154   7.499  1.00 44.22
ATOM   1476  H   SER A  98       3.123  -3.620   7.615  1.00 53.23
ATOM   1477  CA  SER A  98       1.277  -3.259   8.547  1.00 12.44
ATOM   1478  HA  SER A  98       0.371  -3.634   8.095  1.00 20.45
ATOM   1479  CB  SER A  98       1.758  -4.265   9.598  1.00 64.12
ATOM   1480 1HB  SER A  98       2.704  -3.939  10.010  1.00 72.00
ATOM   1481 2HB  SER A  98       1.027  -4.367  10.385  1.00 14.02
ATOM   1482  OG  SER A  98       1.965  -5.540   8.992  1.00 21.22
ATOM   1483  HG  SER A  98       2.734  -5.514   8.411  1.00  4.13
ATOM   1484  C   SER A  98       0.966  -1.881   9.158  1.00 12.41
ATOM   1485  O   SER A  98      -0.191  -1.554   9.431  1.00 55.15
ATOM   1486  N   ALA A  99       1.999  -1.067   9.316  1.00 12.13
ATOM   1487  H   ALA A  99       2.892  -1.386   9.074  1.00 43.31
ATOM   1488  CA  ALA A  99       1.832   0.279   9.835  1.00 71.14
ATOM   1489  HA  ALA A  99       1.213   0.219  10.718  1.00 31.32
ATOM   1490  CB  ALA A  99       3.179   0.879  10.213  1.00 22.13
ATOM   1491 1HB  ALA A  99       3.031   1.863  10.634  1.00 63.35
ATOM   1492 2HB  ALA A  99       3.795   0.955   9.329  1.00 11.15
ATOM   1493 3HB  ALA A  99       3.668   0.245  10.937  1.00 51.40
ATOM   1494  C   ALA A  99       1.118   1.154   8.806  1.00 34.24
ATOM   1495  O   ALA A  99       0.256   1.959   9.152  1.00 24.21
ATOM   1496  N   LEU A 100       1.478   0.962   7.541  1.00 35.41
ATOM   1497  H   LEU A 100       2.178   0.310   7.326  1.00 55.01
ATOM   1498  CA  LEU A 100       0.906   1.691   6.430  1.00 55.32
ATOM   1499  HA  LEU A 100       1.094   2.743   6.570  1.00 15.42
ATOM   1500  CB  LEU A 100       1.571   1.235   5.137  1.00 24.05
ATOM   1501 1HB  LEU A 100       2.632   1.167   5.317  1.00 15.34
ATOM   1502 2HB  LEU A 100       1.221   0.233   4.938  1.00 22.20
ATOM   1503  CG  LEU A 100       1.304   2.079   3.892  1.00  2.34
ATOM   1504  HG  LEU A 100       0.237   2.164   3.750  1.00  1.41
ATOM   1505  CD1 LEU A 100       1.861   3.484   4.068  1.00 64.42
ATOM   1506 1HD1 LEU A 100       1.690   4.056   3.169  1.00 53.43
ATOM   1507 2HD1 LEU A 100       2.921   3.422   4.269  1.00 40.24
ATOM   1508 3HD1 LEU A 100       1.368   3.963   4.900  1.00 12.53
ATOM   1509  CD2 LEU A 100       1.899   1.413   2.668  1.00 44.43
ATOM   1510 1HD2 LEU A 100       1.446   0.442   2.534  1.00 34.13
ATOM   1511 2HD2 LEU A 100       2.963   1.294   2.812  1.00  1.33
ATOM   1512 3HD2 LEU A 100       1.716   2.023   1.796  1.00 55.31
ATOM   1513  C   LEU A 100      -0.594   1.433   6.347  1.00 13.15
ATOM   1514  O   LEU A 100      -1.379   2.361   6.217  1.00 51.43
ATOM   1515  N   ILE A 101      -0.971   0.168   6.486  1.00 31.31
ATOM   1516  H   ILE A 101      -0.255  -0.497   6.600  1.00 24.15
ATOM   1517  CA  ILE A 101      -2.382  -0.254   6.421  1.00 23.52
ATOM   1518  HA  ILE A 101      -2.768   0.041   5.457  1.00 22.14
ATOM   1519  CB  ILE A 101      -2.534  -1.803   6.565  1.00 65.22
ATOM   1520  HB  ILE A 101      -2.014  -2.091   7.467  1.00 43.35
ATOM   1521  CG2 ILE A 101      -3.996  -2.231   6.730  1.00 25.43
ATOM   1522 1HG2 ILE A 101      -4.400  -1.774   7.620  1.00 14.05
ATOM   1523 2HG2 ILE A 101      -4.050  -3.306   6.818  1.00 14.33
ATOM   1524 3HG2 ILE A 101      -4.562  -1.909   5.869  1.00 23.44
ATOM   1525  CG1 ILE A 101      -1.893  -2.538   5.386  1.00 55.33
ATOM   1526 1HG1 ILE A 101      -0.840  -2.302   5.348  1.00 75.35
ATOM   1527 2HG1 ILE A 101      -2.016  -3.594   5.568  1.00 31.14
ATOM   1528  CD1 ILE A 101      -2.493  -2.220   4.024  1.00 11.13
ATOM   1529 1HD1 ILE A 101      -2.023  -2.838   3.273  1.00 21.22
ATOM   1530 2HD1 ILE A 101      -2.312  -1.184   3.782  1.00 71.03
ATOM   1531 3HD1 ILE A 101      -3.556  -2.409   4.035  1.00 43.23
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ATOM   1532  C   ILE A 101      -3.211   0.442   7.491  1.00 74.41
ATOM   1533  O   ILE A 101      -4.321   0.905   7.205  1.00 12.02
ATOM   1534  N   GLY A 102      -2.647   0.563   8.695  1.00  4.21
ATOM   1535  H   GLY A 102      -1.754   0.182   8.843  1.00 65.54
ATOM   1536  CA  GLY A 102      -3.333   1.239   9.790  1.00 32.43
ATOM   1537 1HA  GLY A 102      -4.236   0.703  10.024  1.00 62.24
ATOM   1538 2HA  GLY A 102      -2.691   1.251  10.658  1.00 11.30
ATOM   1539  C   GLY A 102      -3.700   2.659   9.430  1.00 23.35
ATOM   1540  O   GLY A 102      -4.798   3.144   9.735  1.00 43.13
ATOM   1541  N   ILE A 103      -2.792   3.301   8.751  1.00 63.32
ATOM   1542  H   ILE A 103      -1.957   2.831   8.542  1.00  4.24
ATOM   1543  CA  ILE A 103      -2.971   4.649   8.293  1.00 52.43
ATOM   1544  HA  ILE A 103      -3.310   5.250   9.123  1.00 12.50
ATOM   1545  CB  ILE A 103      -1.632   5.216   7.794  1.00 72.25
ATOM   1546  HB  ILE A 103      -1.259   4.571   7.012  1.00 10.03
ATOM   1547  CG2 ILE A 103      -1.813   6.625   7.213  1.00 71.24
ATOM   1548 1HG2 ILE A 103      -2.236   7.280   7.960  1.00 51.11
ATOM   1549 2HG2 ILE A 103      -2.472   6.574   6.355  1.00 24.11
ATOM   1550 3HG2 ILE A 103      -0.855   7.009   6.891  1.00 31.51
ATOM   1551  CG1 ILE A 103      -0.628   5.216   8.947  1.00 60.31
ATOM   1552 1HG1 ILE A 103      -0.887   6.003   9.640  1.00 22.30
ATOM   1553 2HG1 ILE A 103      -0.682   4.265   9.457  1.00  3.04
ATOM   1554  CD1 ILE A 103       0.792   5.438   8.524  1.00 21.34
ATOM   1555 1HD1 ILE A 103       1.061   4.631   7.859  1.00 51.23
ATOM   1556 2HD1 ILE A 103       1.421   5.414   9.401  1.00 12.24
ATOM   1557 3HD1 ILE A 103       0.880   6.385   8.013  1.00 11.05
ATOM   1558  C   ILE A 103      -4.006   4.694   7.179  1.00  0.33
ATOM   1559  O   ILE A 103      -4.905   5.515   7.211  1.00  1.42
ATOM   1560  N   ILE A 104      -3.896   3.776   6.234  1.00 63.14
ATOM   1561  H   ILE A 104      -3.185   3.102   6.320  1.00 63.40
ATOM   1562  CA  ILE A 104      -4.781   3.740   5.073  1.00 11.34
ATOM   1563  HA  ILE A 104      -4.689   4.676   4.542  1.00 63.53
ATOM   1564  CB  ILE A 104      -4.376   2.590   4.110  1.00 24.31
ATOM   1565  HB  ILE A 104      -4.423   1.660   4.659  1.00 33.45
ATOM   1566  CG2 ILE A 104      -5.344   2.499   2.930  1.00  5.14
ATOM   1567 1HG2 ILE A 104      -5.325   3.424   2.375  1.00 44.53
ATOM   1568 2HG2 ILE A 104      -6.343   2.314   3.293  1.00 54.12
ATOM   1569 3HG2 ILE A 104      -5.036   1.687   2.287  1.00 21.24
ATOM   1570  CG1 ILE A 104      -2.949   2.792   3.608  1.00 61.30
ATOM   1571 1HG1 ILE A 104      -2.944   3.631   2.927  1.00 14.11
ATOM   1572 2HG1 ILE A 104      -2.301   3.006   4.445  1.00  4.22
ATOM   1573  CD1 ILE A 104      -2.388   1.599   2.867  1.00 42.24
ATOM   1574 1HD1 ILE A 104      -1.397   1.828   2.506  1.00 41.14
ATOM   1575 2HD1 ILE A 104      -3.029   1.355   2.033  1.00 64.11
ATOM   1576 3HD1 ILE A 104      -2.336   0.761   3.542  1.00 33.13
ATOM   1577  C   ILE A 104      -6.237   3.537   5.494  1.00 25.41
ATOM   1578  O   ILE A 104      -7.109   4.325   5.116  1.00 63.22
ATOM   1579  N   GLU A 105      -6.486   2.531   6.322  1.00  1.05
ATOM   1580  H   GLU A 105      -5.742   1.973   6.646  1.00 63.51
ATOM   1581  CA  GLU A 105      -7.838   2.254   6.753  1.00 61.43
ATOM   1582  HA  GLU A 105      -8.431   2.271   5.849  1.00 11.43
ATOM   1583  CB  GLU A 105      -7.981   0.863   7.410  1.00 64.15
ATOM   1584 1HB  GLU A 105      -9.018   0.712   7.671  1.00 64.21
ATOM   1585 2HB  GLU A 105      -7.700   0.114   6.684  1.00 31.12
ATOM   1586  CG  GLU A 105      -7.156   0.638   8.667  1.00 13.41
ATOM   1587 1HG  GLU A 105      -6.109   0.771   8.440  1.00 13.22
ATOM   1588 2HG  GLU A 105      -7.475   1.374   9.393  1.00 25.40
ATOM   1589  CD  GLU A 105      -7.370  -0.743   9.252  1.00 51.33
ATOM   1590  OE1 GLU A 105      -6.707  -1.692   8.822  1.00 43.12
ATOM   1591  OE2 GLU A 105      -8.239  -0.894  10.135  1.00 73.23
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ATOM   1592  C   GLU A 105      -8.374   3.378   7.633  1.00  4.43
ATOM   1593  O   GLU A 105      -9.521   3.802   7.487  1.00 63.14
ATOM   1594  N   GLY A 106      -7.514   3.897   8.503  1.00 71.22
ATOM   1595  H   GLY A 106      -6.598   3.543   8.533  1.00  2.12
ATOM   1596  CA  GLY A 106      -7.900   4.954   9.404  1.00 43.04
ATOM   1597 1HA  GLY A 106      -8.800   4.653   9.918  1.00 53.00
ATOM   1598 2HA  GLY A 106      -7.118   5.103  10.134  1.00 74.24
ATOM   1599  C   GLY A 106      -8.166   6.268   8.694  1.00 63.44
ATOM   1600  O   GLY A 106      -9.101   6.980   9.047  1.00 12.04
ATOM   1601  N   ASN A 107      -7.390   6.549   7.656  1.00  0.15
ATOM   1602  H   ASN A 107      -6.694   5.903   7.392  1.00 33.22
ATOM   1603  CA  ASN A 107      -7.493   7.807   6.895  1.00 50.34
ATOM   1604  HA  ASN A 107      -7.383   8.631   7.583  1.00 74.12
ATOM   1605  CB  ASN A 107      -6.376   7.885   5.833  1.00 25.53
ATOM   1606 1HB  ASN A 107      -5.419   7.834   6.330  1.00 25.15
ATOM   1607 2HB  ASN A 107      -6.471   7.039   5.171  1.00 70.44
ATOM   1608  CG  ASN A 107      -6.406   9.162   4.998  1.00  1.33
ATOM   1609  OD1 ASN A 107      -7.063   9.231   3.971  1.00 13.22
ATOM   1610  ND2 ASN A 107      -5.662  10.160   5.414  1.00 43.52
ATOM   1611 2HD2 ASN A 107      -5.126  10.044   6.224  1.00 11.25
ATOM   1612 1HD2 ASN A 107      -5.679  10.975   4.872  1.00 43.21
ATOM   1613  C   ASN A 107      -8.841   7.896   6.220  1.00 33.50
ATOM   1614  O   ASN A 107      -9.494   8.941   6.247  1.00 62.33
ATOM   1615  N   ILE A 108      -9.283   6.775   5.686  1.00 51.04
ATOM   1616  H   ILE A 108      -8.703   5.983   5.724  1.00 41.35
ATOM   1617  CA  ILE A 108     -10.571   6.679   5.030  1.00 22.33
ATOM   1618  HA  ILE A 108     -10.602   7.421   4.245  1.00 23.11
ATOM   1619  CB  ILE A 108     -10.755   5.270   4.398  1.00 10.15
ATOM   1620  HB  ILE A 108     -10.663   4.533   5.181  1.00 12.15
ATOM   1621  CG2 ILE A 108     -12.138   5.128   3.759  1.00 10.03
ATOM   1622 1HG2 ILE A 108     -12.236   4.142   3.328  1.00 11.04
ATOM   1623 2HG2 ILE A 108     -12.254   5.872   2.984  1.00 71.42
ATOM   1624 3HG2 ILE A 108     -12.899   5.272   4.511  1.00 14.21
ATOM   1625  CG1 ILE A 108      -9.645   5.025   3.363  1.00 12.42
ATOM   1626 1HG1 ILE A 108      -9.757   5.733   2.554  1.00 30.32
ATOM   1627 2HG1 ILE A 108      -8.687   5.185   3.834  1.00 72.53
ATOM   1628  CD1 ILE A 108      -9.643   3.640   2.760  1.00 53.11
ATOM   1629 1HD1 ILE A 108     -10.578   3.469   2.248  1.00 74.02
ATOM   1630 2HD1 ILE A 108      -9.524   2.910   3.546  1.00 24.32
ATOM   1631 3HD1 ILE A 108      -8.826   3.555   2.059  1.00 22.22
ATOM   1632  C   ILE A 108     -11.694   6.969   6.034  1.00 71.32
ATOM   1633  O   ILE A 108     -12.666   7.655   5.720  1.00 31.43
ATOM   1634  N   ARG A 109     -11.533   6.471   7.244  1.00 64.21
ATOM   1635  H   ARG A 109     -10.736   5.930   7.429  1.00 63.41
ATOM   1636  CA  ARG A 109     -12.502   6.683   8.305  1.00 70.33
ATOM   1637  HA  ARG A 109     -13.467   6.379   7.930  1.00 74.30
ATOM   1638  CB  ARG A 109     -12.151   5.822   9.515  1.00 21.33
ATOM   1639 1HB  ARG A 109     -11.228   6.180   9.950  1.00 75.43
ATOM   1640 2HB  ARG A 109     -12.943   5.894  10.246  1.00 75.14
ATOM   1641  CG  ARG A 109     -11.980   4.378   9.135  1.00 20.24
ATOM   1642 1HG  ARG A 109     -12.838   4.024   8.590  1.00 62.31
ATOM   1643 2HG  ARG A 109     -11.139   4.333   8.458  1.00 43.35
ATOM   1644  CD  ARG A 109     -11.682   3.470  10.302  1.00 52.03
ATOM   1645 1HD  ARG A 109     -10.751   3.772  10.759  1.00  0.40
ATOM   1646 2HD  ARG A 109     -12.485   3.533  11.020  1.00 74.20
ATOM   1647  NE  ARG A 109     -11.573   2.093   9.828  1.00 73.40
ATOM   1648  HE  ARG A 109     -12.267   1.808   9.185  1.00 31.30
ATOM   1649  CZ  ARG A 109     -10.615   1.219  10.133  1.00 53.23
ATOM   1650  NH1 ARG A 109      -9.640   1.524  10.983  1.00 61.33
ATOM   1651 1HH1 ARG A 109      -9.552   2.402  11.451  1.00 72.12
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ATOM   1652 2HH1 ARG A 109      -8.928   0.831  11.149  1.00  3.44
ATOM   1653  NH2 ARG A 109     -10.627   0.035   9.571  1.00 52.24
ATOM   1654 1HH2 ARG A 109     -11.336  -0.245   8.919  1.00 21.14
ATOM   1655 2HH2 ARG A 109      -9.867  -0.605   9.773  1.00  4.54
ATOM   1656  C   ARG A 109     -12.569   8.156   8.688  1.00 64.21
ATOM   1657  O   ARG A 109     -13.646   8.696   8.865  1.00 42.03
ATOM   1658  N   TYR A 110     -11.412   8.799   8.768  1.00  2.11
ATOM   1659  H   TYR A 110     -10.581   8.308   8.589  1.00 64.21
ATOM   1660  CA  TYR A 110     -11.344  10.217   9.124  1.00 63.40
ATOM   1661  HA  TYR A 110     -11.958  10.346  10.003  1.00  3.52
ATOM   1662  CB  TYR A 110      -9.909  10.667   9.451  1.00 75.31
ATOM   1663 1HB  TYR A 110      -9.293  10.520   8.577  1.00 73.11
ATOM   1664 2HB  TYR A 110      -9.921  11.718   9.698  1.00 11.03
ATOM   1665  CG  TYR A 110      -9.261   9.918  10.601  1.00 43.14
ATOM   1666  CD1 TYR A 110      -7.954   9.460  10.502  1.00 32.31
ATOM   1667  HD1 TYR A 110      -7.395   9.656   9.599  1.00 43.51
ATOM   1668  CE1 TYR A 110      -7.364   8.759  11.535  1.00  3.33
ATOM   1669  HE1 TYR A 110      -6.347   8.410  11.439  1.00 24.01
ATOM   1670  CZ  TYR A 110      -8.080   8.512  12.686  1.00 62.51
ATOM   1671  CE2 TYR A 110      -9.376   8.957  12.812  1.00 54.44
ATOM   1672  HE2 TYR A 110      -9.935   8.763  13.715  1.00 61.32
ATOM   1673  CD2 TYR A 110      -9.962   9.654  11.774  1.00 62.14
ATOM   1674  HD2 TYR A 110     -10.979  10.003  11.873  1.00 41.22
ATOM   1675  OH  TYR A 110      -7.498   7.810  13.714  1.00 72.12
ATOM   1676  HH  TYR A 110      -6.615   8.151  13.881  1.00 55.52
ATOM   1677  C   TYR A 110     -11.932  11.089   8.025  1.00 42.23
ATOM   1678  O   TYR A 110     -12.568  12.082   8.299  1.00 21.14
ATOM   1679  N   ALA A 111     -11.695  10.717   6.784  1.00 64.32
ATOM   1680  H   ALA A 111     -11.133   9.928   6.621  1.00 25.14
ATOM   1681  CA  ALA A 111     -12.218  11.469   5.650  1.00  3.20
ATOM   1682  HA  ALA A 111     -11.918  12.500   5.774  1.00  0.33
ATOM   1683  CB  ALA A 111     -11.614  10.951   4.352  1.00 54.45
ATOM   1684 1HB  ALA A 111     -10.538  10.997   4.409  1.00  1.52
ATOM   1685 2HB  ALA A 111     -11.959  11.559   3.526  1.00 20.44
ATOM   1686 3HB  ALA A 111     -11.924   9.928   4.197  1.00 62.30
ATOM   1687  C   ALA A 111     -13.751  11.410   5.587  1.00 70.54
ATOM   1688  O   ALA A 111     -14.401  12.360   5.170  1.00 61.15
ATOM   1689  N   ASN A 112     -14.309  10.286   6.001  1.00 42.13
ATOM   1690  H   ASN A 112     -13.727   9.589   6.366  1.00 75.35
ATOM   1691  CA  ASN A 112     -15.763  10.072   5.953  1.00 51.35
ATOM   1692  HA  ASN A 112     -16.084  10.542   5.034  1.00 34.35
ATOM   1693  CB  ASN A 112     -16.134   8.582   5.853  1.00 24.20
ATOM   1694 1HB  ASN A 112     -15.483   8.015   6.503  1.00 32.33
ATOM   1695 2HB  ASN A 112     -17.155   8.455   6.178  1.00 31.13
ATOM   1696  CG  ASN A 112     -16.001   8.023   4.441  1.00 61.21
ATOM   1697  OD1 ASN A 112     -16.947   8.030   3.669  1.00  0.14
ATOM   1698  ND2 ASN A 112     -14.837   7.542   4.089  1.00 53.24
ATOM   1699 2HD2 ASN A 112     -14.101   7.564   4.742  1.00 52.04
ATOM   1700 1HD2 ASN A 112     -14.767   7.193   3.179  1.00 75.50
ATOM   1701  C   ASN A 112     -16.547  10.749   7.073  1.00 31.02
ATOM   1702  O   ASN A 112     -17.772  10.826   7.002  1.00 71.33
ATOM   1703  N   THR A 113     -15.881  11.229   8.101  1.00 12.43
ATOM   1704  H   THR A 113     -14.901  11.207   8.139  1.00  0.24
ATOM   1705  CA  THR A 113     -16.597  11.841   9.194  1.00 54.12
ATOM   1706  HA  THR A 113     -17.491  12.272   8.766  1.00 54.13
ATOM   1707  CB  THR A 113     -17.034  10.783  10.276  1.00 15.00
ATOM   1708  HB  THR A 113     -17.658  10.052   9.778  1.00 50.31
ATOM   1709  OG1 THR A 113     -17.819  11.391  11.317  1.00 61.44
ATOM   1710  HG1 THR A 113     -17.428  12.237  11.563  1.00 51.23
ATOM   1711  CG2 THR A 113     -15.837  10.064  10.897  1.00 33.25
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ATOM   1712 1HG2 THR A 113     -15.195  10.786  11.378  1.00 73.40
ATOM   1713 2HG2 THR A 113     -15.284   9.550  10.125  1.00 21.13
ATOM   1714 3HG2 THR A 113     -16.184   9.347  11.628  1.00 72.04
ATOM   1715  C   THR A 113     -15.797  12.983   9.814  1.00 13.24
ATOM   1716  O   THR A 113     -14.614  12.839  10.123  1.00 34.32
ATOM   1717  N   HIS A 114     -16.441  14.105   9.972  1.00 13.33
ATOM   1718  H   HIS A 114     -17.382  14.216   9.721  1.00 72.54
ATOM   1719  CA  HIS A 114     -15.844  15.267  10.550  1.00 21.45
ATOM   1720  HA  HIS A 114     -15.099  14.950  11.265  1.00 43.40
ATOM   1721  CB  HIS A 114     -15.192  16.136   9.455  1.00 63.00
ATOM   1722 1HB  HIS A 114     -14.562  15.510   8.839  1.00 32.34
ATOM   1723 2HB  HIS A 114     -15.972  16.561   8.840  1.00 63.14
ATOM   1724  CG  HIS A 114     -14.340  17.263   9.971  1.00 24.25
ATOM   1725  ND1 HIS A 114     -13.031  17.102  10.366  1.00  3.04
ATOM   1726  CD2 HIS A 114     -14.615  18.584  10.130  1.00 23.44
ATOM   1727  HD1 HIS A 114     -12.558  16.245  10.381  1.00 62.25
ATOM   1728  CE1 HIS A 114     -12.558  18.293  10.740  1.00  1.13
ATOM   1729  NE2 HIS A 114     -13.473  19.232  10.616  1.00 30.24
ATOM   1730  HD2 HIS A 114     -15.558  19.065   9.918  1.00 41.41
ATOM   1731  HE1 HIS A 114     -11.553  18.465  11.095  1.00 35.43
ATOM   1732  C   HIS A 114     -16.948  16.016  11.262  1.00  5.44
ATOM   1733  O   HIS A 114     -17.696  16.738  10.583  1.00 42.13
TER    1734      HIS A 114
ENDMDL
MODEL       10
ATOM      1  N   MET A   1     -14.410 -17.421   3.476  1.00 42.04
ATOM      2  CA  MET A   1     -13.316 -18.190   2.863  1.00 64.13
ATOM      3  HA  MET A   1     -13.358 -19.211   3.212  1.00 23.13
ATOM      4  CB  MET A   1     -13.404 -18.138   1.312  1.00 55.52
ATOM      5 1HB  MET A   1     -12.691 -18.838   0.903  1.00 54.14
ATOM      6 2HB  MET A   1     -14.397 -18.447   1.017  1.00 34.00
ATOM      7  CG  MET A   1     -13.125 -16.755   0.685  1.00 32.43
ATOM      8 1HG  MET A   1     -12.118 -16.461   0.941  1.00 14.10
ATOM      9 2HG  MET A   1     -13.209 -16.838  -0.388  1.00 14.41
ATOM     10  SD  MET A   1     -14.259 -15.474   1.264  1.00 74.22
ATOM     11  CE  MET A   1     -13.612 -14.035   0.397  1.00  0.31
ATOM     12 1HE  MET A   1     -14.202 -13.168   0.653  1.00  3.24
ATOM     13 2HE  MET A   1     -13.663 -14.203  -0.669  1.00 11.41
ATOM     14 3HE  MET A   1     -12.585 -13.873   0.687  1.00 30.43
ATOM     15  C   MET A   1     -12.042 -17.549   3.314  1.00 32.12
ATOM     16  O   MET A   1     -12.104 -16.565   4.042  1.00 23.01
ATOM     17  N   ASP A   2     -10.916 -18.084   2.920  1.00 72.04
ATOM     18  H   ASP A   2     -10.884 -18.897   2.373  1.00  1.03
ATOM     19  CA  ASP A   2      -9.654 -17.468   3.253  1.00 13.04
ATOM     20  HA  ASP A   2      -9.792 -16.937   4.184  1.00  0.24
ATOM     21  CB  ASP A   2      -8.519 -18.506   3.434  1.00 12.32
ATOM     22 1HB  ASP A   2      -8.715 -19.099   4.314  1.00 30.40
ATOM     23 2HB  ASP A   2      -8.488 -19.150   2.568  1.00 50.11
ATOM     24  CG  ASP A   2      -7.145 -17.840   3.595  1.00 15.30
ATOM     25  OD1 ASP A   2      -7.035 -16.878   4.369  1.00 22.15
ATOM     26  OD2 ASP A   2      -6.157 -18.260   2.903  1.00 74.02
ATOM     27  C   ASP A   2      -9.278 -16.472   2.189  1.00  2.34
ATOM     28  O   ASP A   2      -9.401 -16.774   1.008  1.00 40.12
ATOM     29  N   LYS A   3      -8.947 -15.274   2.650  1.00 24.25
ATOM     30  H   LYS A   3      -9.098 -15.138   3.611  1.00 63.13
ATOM     31  CA  LYS A   3      -8.358 -14.121   1.930  1.00 45.43
ATOM     32  HA  LYS A   3      -7.292 -14.270   2.040  1.00 43.13
ATOM     33  CB  LYS A   3      -8.675 -13.886   0.433  1.00 11.32
ATOM     34 1HB  LYS A   3      -9.727 -14.074   0.278  1.00 11.44
ATOM     35 2HB  LYS A   3      -8.483 -12.846   0.209  1.00  3.15
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ATOM     36  CG  LYS A   3      -7.895 -14.750  -0.580  1.00 52.42
ATOM     37 1HG  LYS A   3      -8.408 -15.696  -0.616  1.00 74.23
ATOM     38 2HG  LYS A   3      -7.929 -14.276  -1.549  1.00 40.52
ATOM     39  CD  LYS A   3      -6.420 -15.024  -0.179  1.00 22.22
ATOM     40 1HD  LYS A   3      -5.797 -15.142  -1.052  1.00 73.34
ATOM     41 2HD  LYS A   3      -6.071 -14.193   0.423  1.00 73.53
ATOM     42  CE  LYS A   3      -6.356 -16.284   0.679  1.00 60.42
ATOM     43 1HE  LYS A   3      -6.844 -16.077   1.621  1.00  1.11
ATOM     44 2HE  LYS A   3      -6.898 -17.072   0.179  1.00 44.24
ATOM     45  NZ  LYS A   3      -5.013 -16.765   1.016  1.00  3.53
ATOM     46 1HZ  LYS A   3      -5.205 -17.552   1.683  1.00  3.44
ATOM     47 2HZ  LYS A   3      -4.437 -16.072   1.544  1.00 42.13
ATOM     48 3HZ  LYS A   3      -4.492 -17.156   0.211  1.00 70.22
ATOM     49  C   LYS A   3      -8.567 -12.880   2.680  1.00  5.02
ATOM     50  O   LYS A   3      -9.517 -12.126   2.446  1.00 35.00
ATOM     51  N   GLY A   4      -7.722 -12.688   3.611  1.00 74.32
ATOM     52  H   GLY A   4      -7.031 -13.357   3.798  1.00 50.30
ATOM     53  CA  GLY A   4      -7.774 -11.527   4.362  1.00  1.05
ATOM     54 1HA  GLY A   4      -8.342 -10.808   3.791  1.00 42.14
ATOM     55 2HA  GLY A   4      -8.267 -11.731   5.300  1.00 64.01
ATOM     56  C   GLY A   4      -6.410 -11.008   4.610  1.00 35.02
ATOM     57  O   GLY A   4      -5.776 -10.483   3.719  1.00 13.44
ATOM     58  N   THR A   5      -5.944 -11.254   5.773  1.00 73.44
ATOM     59  H   THR A   5      -6.432 -11.901   6.317  1.00 23.12
ATOM     60  CA  THR A   5      -4.701 -10.706   6.249  1.00 23.42
ATOM     61  HA  THR A   5      -4.380  -9.935   5.567  1.00 43.15
ATOM     62  CB  THR A   5      -4.913 -10.078   7.637  1.00 40.12
ATOM     63  HB  THR A   5      -5.087 -10.866   8.355  1.00 13.22
ATOM     64  OG1 THR A   5      -6.065  -9.216   7.582  1.00 61.53
ATOM     65  HG1 THR A   5      -5.885  -8.488   6.969  1.00 32.22
ATOM     66  CG2 THR A   5      -3.695  -9.260   8.059  1.00 72.02
ATOM     67 1HG2 THR A   5      -2.826  -9.900   8.097  1.00 62.24
ATOM     68 2HG2 THR A   5      -3.869  -8.833   9.036  1.00 45.21
ATOM     69 3HG2 THR A   5      -3.525  -8.465   7.347  1.00 71.53
ATOM     70  C   THR A   5      -3.638 -11.794   6.327  1.00 43.30
ATOM     71  O   THR A   5      -3.714 -12.677   7.181  1.00 23.43
ATOM     72  N   GLN A   6      -2.679 -11.757   5.429  1.00 35.33
ATOM     73  H   GLN A   6      -2.674 -11.029   4.764  1.00 34.44
ATOM     74  CA  GLN A   6      -1.614 -12.737   5.417  1.00 61.21
ATOM     75  HA  GLN A   6      -1.558 -13.174   6.402  1.00 30.43
ATOM     76  CB  GLN A   6      -1.901 -13.849   4.401  1.00 42.12
ATOM     77 1HB  GLN A   6      -2.028 -13.401   3.426  1.00 53.40
ATOM     78 2HB  GLN A   6      -1.057 -14.522   4.370  1.00 32.13
ATOM     79  CG  GLN A   6      -3.152 -14.642   4.732  1.00 35.14
ATOM     80 1HG  GLN A   6      -3.033 -15.083   5.711  1.00 13.01
ATOM     81 2HG  GLN A   6      -3.981 -13.949   4.756  1.00 61.53
ATOM     82  CD  GLN A   6      -3.471 -15.740   3.764  1.00 43.02
ATOM     83  OE1 GLN A   6      -3.152 -15.666   2.572  1.00 62.21
ATOM     84  NE2 GLN A   6      -4.149 -16.740   4.248  1.00 42.34
ATOM     85 2HE2 GLN A   6      -4.392 -16.703   5.197  1.00 20.25
ATOM     86 1HE2 GLN A   6      -4.478 -17.491   3.706  1.00 15.14
ATOM     87  C   GLN A   6      -0.295 -12.073   5.110  1.00 64.35
ATOM     88  O   GLN A   6      -0.218 -11.178   4.266  1.00 31.42
ATOM     89  N   TYR A   7       0.721 -12.481   5.816  1.00 70.12
ATOM     90  H   TYR A   7       0.597 -13.178   6.493  1.00  1.41
ATOM     91  CA  TYR A   7       2.049 -11.970   5.624  1.00 73.30
ATOM     92  HA  TYR A   7       2.026 -11.279   4.795  1.00 65.15
ATOM     93  CB  TYR A   7       2.518 -11.226   6.886  1.00 44.32
ATOM     94 1HB  TYR A   7       1.842 -10.407   7.085  1.00 44.25
ATOM     95 2HB  TYR A   7       2.498 -11.908   7.722  1.00 22.24
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ATOM     96  CG  TYR A   7       3.911 -10.660   6.775  1.00 41.51
ATOM     97  CD1 TYR A   7       4.147  -9.502   6.059  1.00 34.54
ATOM     98  HD1 TYR A   7       3.317  -9.003   5.582  1.00 62.11
ATOM     99  CE1 TYR A   7       5.411  -8.989   5.939  1.00 50.43
ATOM    100  HE1 TYR A   7       5.575  -8.082   5.374  1.00 53.41
ATOM    101  CZ  TYR A   7       6.462  -9.630   6.541  1.00 15.14
ATOM    102  CE2 TYR A   7       6.258 -10.779   7.266  1.00 74.14
ATOM    103  HE2 TYR A   7       7.089 -11.281   7.739  1.00  2.24
ATOM    104  CD2 TYR A   7       4.990 -11.290   7.379  1.00 54.32
ATOM    105  HD2 TYR A   7       4.821 -12.194   7.945  1.00 32.52
ATOM    106  OH  TYR A   7       7.713  -9.121   6.422  1.00 52.04
ATOM    107  HH  TYR A   7       8.350  -9.839   6.359  1.00 40.32
ATOM    108  C   TYR A   7       2.991 -13.121   5.286  1.00 40.20
ATOM    109  O   TYR A   7       3.156 -14.036   6.090  1.00 13.43
ATOM    110  N   LYS A   8       3.587 -13.090   4.117  1.00  4.23
ATOM    111  H   LYS A   8       3.422 -12.345   3.495  1.00  2.51
ATOM    112  CA  LYS A   8       4.521 -14.123   3.725  1.00 74.12
ATOM    113  HA  LYS A   8       5.061 -14.412   4.615  1.00 14.03
ATOM    114  CB  LYS A   8       3.814 -15.366   3.133  1.00 23.01
ATOM    115 1HB  LYS A   8       2.937 -15.584   3.724  1.00 62.11
ATOM    116 2HB  LYS A   8       3.513 -15.147   2.120  1.00 54.21
ATOM    117  CG  LYS A   8       4.714 -16.613   3.112  1.00 65.22
ATOM    118 1HG  LYS A   8       5.570 -16.410   2.486  1.00  2.32
ATOM    119 2HG  LYS A   8       5.051 -16.810   4.119  1.00  4.13
ATOM    120  CD  LYS A   8       4.005 -17.858   2.570  1.00 32.14
ATOM    121 1HD  LYS A   8       4.586 -18.730   2.835  1.00 14.34
ATOM    122 2HD  LYS A   8       3.030 -17.929   3.030  1.00 10.41
ATOM    123  CE  LYS A   8       3.842 -17.838   1.053  1.00 75.44
ATOM    124 1HE  LYS A   8       3.253 -18.693   0.753  1.00 31.02
ATOM    125 2HE  LYS A   8       3.324 -16.933   0.769  1.00 35.51
ATOM    126  NZ  LYS A   8       5.151 -17.888   0.350  1.00 54.21
ATOM    127 1HZ  LYS A   8       5.785 -18.649   0.655  1.00 50.15
ATOM    128 2HZ  LYS A   8       5.662 -16.980   0.490  1.00  1.14
ATOM    129 3HZ  LYS A   8       5.037 -17.928  -0.680  1.00 21.44
ATOM    130  C   LYS A   8       5.521 -13.552   2.739  1.00 43.11
ATOM    131  O   LYS A   8       5.163 -12.728   1.928  1.00 62.33
ATOM    132  N   ASP A   9       6.786 -13.939   2.903  1.00 10.13
ATOM    133  H   ASP A   9       6.983 -14.536   3.651  1.00 53.21
ATOM    134  CA  ASP A   9       7.939 -13.568   2.012  1.00 24.21
ATOM    135  HA  ASP A   9       8.843 -13.994   2.423  1.00 14.32
ATOM    136  CB  ASP A   9       7.735 -14.113   0.562  1.00 13.44
ATOM    137 1HB  ASP A   9       7.145 -13.401   0.005  1.00 22.13
ATOM    138 2HB  ASP A   9       8.701 -14.200   0.087  1.00 21.41
ATOM    139  CG  ASP A   9       7.031 -15.446   0.472  1.00 52.41
ATOM    140  OD1 ASP A   9       7.561 -16.484   0.906  1.00 35.13
ATOM    141  OD2 ASP A   9       5.891 -15.482  -0.023  1.00 54.14
ATOM    142  C   ASP A   9       8.089 -12.048   1.913  1.00 34.40
ATOM    143  O   ASP A   9       8.503 -11.518   0.900  1.00 61.31
ATOM    144  N   GLY A  10       7.822 -11.365   3.014  1.00 62.51
ATOM    145  H   GLY A  10       7.530 -11.867   3.799  1.00 62.35
ATOM    146  CA  GLY A  10       7.938  -9.911   3.039  1.00 51.45
ATOM    147 1HA  GLY A  10       7.988  -9.608   4.075  1.00 73.02
ATOM    148 2HA  GLY A  10       8.848  -9.593   2.553  1.00 73.51
ATOM    149  C   GLY A  10       6.738  -9.210   2.397  1.00 53.13
ATOM    150  O   GLY A  10       6.680  -7.993   2.345  1.00 60.03
ATOM    151  N   TYR A  11       5.802  -9.978   1.916  1.00 33.34
ATOM    152  H   TYR A  11       5.954 -10.946   1.940  1.00 54.23
ATOM    153  CA  TYR A  11       4.558  -9.479   1.342  1.00  3.12
ATOM    154  HA  TYR A  11       4.730  -8.490   0.946  1.00 51.45
ATOM    155  CB  TYR A  11       4.036 -10.391   0.214  1.00 43.04
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ATOM    156 1HB  TYR A  11       4.032 -11.409   0.574  1.00 52.03
ATOM    157 2HB  TYR A  11       3.016 -10.107  -0.004  1.00 12.34
ATOM    158  CG  TYR A  11       4.810 -10.392  -1.087  1.00 61.44
ATOM    159  CD1 TYR A  11       6.061 -10.987  -1.192  1.00 42.54
ATOM    160  HD1 TYR A  11       6.506 -11.424  -0.313  1.00 24.25
ATOM    161  CE1 TYR A  11       6.740 -11.015  -2.399  1.00 13.54
ATOM    162  HE1 TYR A  11       7.712 -11.480  -2.463  1.00 60.12
ATOM    163  CZ  TYR A  11       6.163 -10.444  -3.516  1.00 72.14
ATOM    164  CE2 TYR A  11       4.923  -9.853  -3.434  1.00 33.24
ATOM    165  HE2 TYR A  11       4.472  -9.407  -4.309  1.00  3.14
ATOM    166  CD2 TYR A  11       4.254  -9.833  -2.228  1.00 63.32
ATOM    167  HD2 TYR A  11       3.282  -9.368  -2.165  1.00 10.24
ATOM    168  OH  TYR A  11       6.829 -10.459  -4.724  1.00 62.23
ATOM    169  HH  TYR A  11       6.752  -9.599  -5.139  1.00 11.52
ATOM    170  C   TYR A  11       3.494  -9.424   2.415  1.00 65.20
ATOM    171  O   TYR A  11       3.346 -10.362   3.197  1.00 71.50
ATOM    172  N   TYR A  12       2.773  -8.346   2.457  1.00 44.23
ATOM    173  H   TYR A  12       2.965  -7.631   1.806  1.00 60.51
ATOM    174  CA  TYR A  12       1.684  -8.181   3.388  1.00  5.23
ATOM    175  HA  TYR A  12       1.604  -9.070   3.995  1.00 71.45
ATOM    176  CB  TYR A  12       1.922  -6.964   4.282  1.00 45.22
ATOM    177 1HB  TYR A  12       2.892  -7.019   4.754  1.00 20.42
ATOM    178 2HB  TYR A  12       1.905  -6.085   3.656  1.00 31.20
ATOM    179  CG  TYR A  12       0.895  -6.754   5.376  1.00 71.31
ATOM    180  CD1 TYR A  12       1.004  -7.412   6.594  1.00 22.24
ATOM    181  HD1 TYR A  12       1.823  -8.096   6.754  1.00 61.41
ATOM    182  CE1 TYR A  12       0.085  -7.203   7.603  1.00 73.21
ATOM    183  HE1 TYR A  12       0.185  -7.723   8.544  1.00 60.35
ATOM    184  CZ  TYR A  12      -0.962  -6.330   7.399  1.00 54.44
ATOM    185  CE2 TYR A  12      -1.094  -5.668   6.201  1.00 44.43
ATOM    186  HE2 TYR A  12      -1.914  -4.983   6.042  1.00 24.31
ATOM    187  CD2 TYR A  12      -0.169  -5.878   5.200  1.00 55.15
ATOM    188  HD2 TYR A  12      -0.272  -5.360   4.257  1.00  3.11
ATOM    189  OH  TYR A  12      -1.879  -6.115   8.402  1.00 63.13
ATOM    190  HH  TYR A  12      -1.406  -6.001   9.230  1.00 21.23
ATOM    191  C   TYR A  12       0.422  -7.991   2.588  1.00 41.41
ATOM    192  O   TYR A  12       0.308  -7.032   1.820  1.00 54.13
ATOM    193  N   ILE A  13      -0.486  -8.891   2.724  1.00 43.21
ATOM    194  H   ILE A  13      -0.349  -9.654   3.335  1.00 61.35
ATOM    195  CA  ILE A  13      -1.722  -8.828   2.010  1.00 54.41
ATOM    196  HA  ILE A  13      -1.712  -7.976   1.347  1.00 51.21
ATOM    197  CB  ILE A  13      -1.930 -10.123   1.168  1.00 54.30
ATOM    198  HB  ILE A  13      -1.981 -10.957   1.851  1.00 62.45
ATOM    199  CG2 ILE A  13      -3.248 -10.063   0.396  1.00 24.42
ATOM    200 1HG2 ILE A  13      -3.233  -9.217  -0.275  1.00 62.50
ATOM    201 2HG2 ILE A  13      -4.069  -9.956   1.091  1.00 60.43
ATOM    202 3HG2 ILE A  13      -3.373 -10.973  -0.174  1.00 21.22
ATOM    203  CG1 ILE A  13      -0.750 -10.340   0.205  1.00 63.24
ATOM    204 1HG1 ILE A  13      -0.723  -9.528  -0.508  1.00 42.40
ATOM    205 2HG1 ILE A  13       0.170 -10.339   0.771  1.00 62.04
ATOM    206  CD1 ILE A  13      -0.819 -11.636  -0.578  1.00 72.44
ATOM    207 1HD1 ILE A  13      -0.843 -12.468   0.112  1.00 21.31
ATOM    208 2HD1 ILE A  13       0.047 -11.722  -1.218  1.00 14.34
ATOM    209 3HD1 ILE A  13      -1.716 -11.645  -1.180  1.00 34.12
ATOM    210  C   ILE A  13      -2.851  -8.702   3.011  1.00 14.20
ATOM    211  O   ILE A  13      -2.869  -9.427   3.997  1.00 33.50
ATOM    212  N   THR A  14      -3.741  -7.765   2.799  1.00 52.35
ATOM    213  H   THR A  14      -3.629  -7.125   2.063  1.00 34.31
ATOM    214  CA  THR A  14      -4.904  -7.663   3.628  1.00 72.35
ATOM    215  HA  THR A  14      -5.191  -8.683   3.843  1.00 54.12
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ATOM    216  CB  THR A  14      -4.647  -6.917   4.987  1.00 53.11
ATOM    217  HB  THR A  14      -3.781  -7.363   5.454  1.00 64.03
ATOM    218  OG1 THR A  14      -5.776  -7.084   5.863  1.00 70.23
ATOM    219  HG1 THR A  14      -6.142  -6.217   6.065  1.00 51.40
ATOM    220  CG2 THR A  14      -4.403  -5.434   4.785  1.00 11.42
ATOM    221 1HG2 THR A  14      -3.529  -5.292   4.167  1.00 54.33
ATOM    222 2HG2 THR A  14      -4.246  -4.960   5.742  1.00 74.11
ATOM    223 3HG2 THR A  14      -5.260  -4.989   4.301  1.00 61.30
ATOM    224  C   THR A  14      -6.059  -7.052   2.838  1.00 51.12
ATOM    225  O   THR A  14      -5.848  -6.270   1.892  1.00 12.24
ATOM    226  N   THR A  15      -7.240  -7.443   3.184  1.00 34.45
ATOM    227  H   THR A  15      -7.311  -8.063   3.937  1.00 71.01
ATOM    228  CA  THR A  15      -8.440  -7.000   2.537  1.00 11.44
ATOM    229  HA  THR A  15      -8.194  -6.714   1.525  1.00 44.31
ATOM    230  CB  THR A  15      -9.467  -8.157   2.498  1.00 44.34
ATOM    231  HB  THR A  15      -9.758  -8.397   3.510  1.00 34.44
ATOM    232  OG1 THR A  15      -8.844  -9.319   1.893  1.00 33.13
ATOM    233  HG1 THR A  15      -9.336 -10.111   2.143  1.00 73.25
ATOM    234  CG2 THR A  15     -10.697  -7.771   1.685  1.00 54.21
ATOM    235 1HG2 THR A  15     -11.396  -8.592   1.673  1.00 75.42
ATOM    236 2HG2 THR A  15     -10.398  -7.536   0.675  1.00  3.10
ATOM    237 3HG2 THR A  15     -11.165  -6.904   2.129  1.00  3.00
ATOM    238  C   THR A  15      -9.008  -5.786   3.288  1.00 73.30
ATOM    239  O   THR A  15      -9.202  -5.830   4.503  1.00 53.42
ATOM    240  N   LEU A  16      -9.232  -4.712   2.570  1.00  2.15
ATOM    241  H   LEU A  16      -9.088  -4.709   1.596  1.00 42.31
ATOM    242  CA  LEU A  16      -9.723  -3.490   3.141  1.00 43.34
ATOM    243  HA  LEU A  16      -9.793  -3.615   4.210  1.00 15.15
ATOM    244  CB  LEU A  16      -8.749  -2.357   2.844  1.00 23.44
ATOM    245 1HB  LEU A  16      -8.602  -2.351   1.774  1.00 52.20
ATOM    246 2HB  LEU A  16      -9.228  -1.430   3.125  1.00 43.31
ATOM    247  CG  LEU A  16      -7.365  -2.468   3.520  1.00 42.33
ATOM    248  HG  LEU A  16      -6.916  -3.413   3.251  1.00 72.33
ATOM    249  CD1 LEU A  16      -6.436  -1.361   3.045  1.00 74.51
ATOM    250 1HD1 LEU A  16      -6.350  -1.389   1.969  1.00  4.41
ATOM    251 2HD1 LEU A  16      -5.461  -1.501   3.488  1.00 70.41
ATOM    252 3HD1 LEU A  16      -6.828  -0.404   3.357  1.00 61.43
ATOM    253  CD2 LEU A  16      -7.501  -2.423   5.042  1.00 13.42
ATOM    254 1HD2 LEU A  16      -8.116  -3.242   5.384  1.00 44.40
ATOM    255 2HD2 LEU A  16      -7.958  -1.486   5.333  1.00 42.21
ATOM    256 3HD2 LEU A  16      -6.525  -2.490   5.497  1.00  1.00
ATOM    257  C   LEU A  16     -11.094  -3.166   2.591  1.00 15.32
ATOM    258  O   LEU A  16     -11.285  -3.040   1.375  1.00 33.23
ATOM    259  N   ASN A  17     -12.042  -3.008   3.469  1.00 63.02
ATOM    260  H   ASN A  17     -11.822  -3.059   4.422  1.00 52.51
ATOM    261  CA  ASN A  17     -13.410  -2.760   3.059  1.00 24.41
ATOM    262  HA  ASN A  17     -13.531  -3.266   2.112  1.00 25.04
ATOM    263  CB  ASN A  17     -14.437  -3.346   4.046  1.00 12.42
ATOM    264 1HB  ASN A  17     -14.224  -2.952   5.029  1.00 52.24
ATOM    265 2HB  ASN A  17     -15.429  -3.039   3.748  1.00 71.33
ATOM    266  CG  ASN A  17     -14.399  -4.864   4.134  1.00 63.42
ATOM    267  OD1 ASN A  17     -14.051  -5.546   3.185  1.00 72.15
ATOM    268  ND2 ASN A  17     -14.765  -5.401   5.277  1.00 71.53
ATOM    269 2HD2 ASN A  17     -15.044  -4.811   6.007  1.00 20.31
ATOM    270 1HD2 ASN A  17     -14.743  -6.379   5.331  1.00  3.01
ATOM    271  C   ASN A  17     -13.679  -1.288   2.812  1.00  2.24
ATOM    272  O   ASN A  17     -14.370  -0.631   3.589  1.00  4.33
ATOM    273  N   TYR A  18     -13.030  -0.754   1.801  1.00 72.52
ATOM    274  H   TYR A  18     -12.342  -1.300   1.356  1.00 52.34
ATOM    275  CA  TYR A  18     -13.291   0.592   1.326  1.00 72.42
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ATOM    276  HA  TYR A  18     -14.364   0.683   1.420  1.00 12.25
ATOM    277  CB  TYR A  18     -12.649   1.731   2.144  1.00 21.33
ATOM    278 1HB  TYR A  18     -12.375   2.493   1.426  1.00 34.52
ATOM    279 2HB  TYR A  18     -13.362   2.134   2.847  1.00 11.11
ATOM    280  CG  TYR A  18     -11.365   1.438   2.863  1.00 72.24
ATOM    281  CD1 TYR A  18     -10.181   1.261   2.181  1.00 23.21
ATOM    282  HD1 TYR A  18     -10.188   1.280   1.101  1.00  0.52
ATOM    283  CE1 TYR A  18      -9.002   1.061   2.864  1.00 61.20
ATOM    284  HE1 TYR A  18      -8.082   0.925   2.314  1.00 42.21
ATOM    285  CZ  TYR A  18      -9.005   1.030   4.245  1.00 14.33
ATOM    286  CE2 TYR A  18     -10.173   1.197   4.937  1.00 53.23
ATOM    287  HE2 TYR A  18     -10.177   1.174   6.016  1.00 20.55
ATOM    288  CD2 TYR A  18     -11.340   1.408   4.250  1.00 20.03
ATOM    289  HD2 TYR A  18     -12.265   1.539   4.794  1.00 63.14
ATOM    290  OH  TYR A  18      -7.836   0.841   4.931  1.00 62.42
ATOM    291  HH  TYR A  18      -7.157   1.423   4.580  1.00 43.54
ATOM    292  C   TYR A  18     -13.034   0.751  -0.142  1.00 51.03
ATOM    293  O   TYR A  18     -12.341  -0.069  -0.762  1.00 23.13
ATOM    294  N   ASN A  19     -13.572   1.832  -0.680  1.00 13.31
ATOM    295  H   ASN A  19     -13.980   2.483  -0.074  1.00 41.34
ATOM    296  CA  ASN A  19     -13.563   2.109  -2.104  1.00 30.30
ATOM    297  HA  ASN A  19     -13.960   1.247  -2.619  1.00 74.51
ATOM    298  CB  ASN A  19     -14.460   3.319  -2.417  1.00  4.22
ATOM    299 1HB  ASN A  19     -15.443   3.143  -2.006  1.00 43.22
ATOM    300 2HB  ASN A  19     -14.039   4.200  -1.957  1.00 23.12
ATOM    301  CG  ASN A  19     -14.610   3.578  -3.911  1.00 12.41
ATOM    302  OD1 ASN A  19     -13.771   4.227  -4.529  1.00 31.11
ATOM    303  ND2 ASN A  19     -15.700   3.129  -4.488  1.00 24.21
ATOM    304 2HD2 ASN A  19     -16.375   2.649  -3.948  1.00  2.42
ATOM    305 1HD2 ASN A  19     -15.824   3.307  -5.441  1.00 64.13
ATOM    306  C   ASN A  19     -12.153   2.380  -2.592  1.00 34.42
ATOM    307  O   ASN A  19     -11.417   3.164  -1.989  1.00 13.43
ATOM    308  N   PHE A  20     -11.816   1.750  -3.695  1.00 31.23
ATOM    309  H   PHE A  20     -12.471   1.166  -4.132  1.00 63.32
ATOM    310  CA  PHE A  20     -10.506   1.814  -4.325  1.00 41.23
ATOM    311  HA  PHE A  20      -9.813   1.340  -3.645  1.00 12.45
ATOM    312  CB  PHE A  20     -10.567   0.944  -5.587  1.00  5.14
ATOM    313 1HB  PHE A  20     -10.487  -0.075  -5.237  1.00 15.24
ATOM    314 2HB  PHE A  20     -11.525   1.038  -6.075  1.00 55.25
ATOM    315  CG  PHE A  20      -9.473   1.095  -6.594  1.00 43.12
ATOM    316  CD1 PHE A  20      -8.307   0.365  -6.488  1.00 43.43
ATOM    317  HD1 PHE A  20      -8.167  -0.295  -5.644  1.00 71.24
ATOM    318  CE1 PHE A  20      -7.328   0.472  -7.445  1.00 11.25
ATOM    319  HE1 PHE A  20      -6.418  -0.102  -7.355  1.00 74.42
ATOM    320  CZ  PHE A  20      -7.506   1.323  -8.523  1.00  2.23
ATOM    321  HZ  PHE A  20      -6.739   1.408  -9.278  1.00 44.03
ATOM    322  CE2 PHE A  20      -8.659   2.057  -8.638  1.00 74.15
ATOM    323  HE2 PHE A  20      -8.797   2.722  -9.479  1.00 31.13
ATOM    324  CD2 PHE A  20      -9.638   1.939  -7.684  1.00 62.21
ATOM    325  HD2 PHE A  20     -10.547   2.517  -7.773  1.00 24.43
ATOM    326  C   PHE A  20      -9.989   3.247  -4.586  1.00 15.53
ATOM    327  O   PHE A  20      -8.796   3.505  -4.447  1.00 41.04
ATOM    328  N   ASN A  21     -10.883   4.173  -4.893  1.00  1.02
ATOM    329  H   ASN A  21     -11.835   3.935  -4.905  1.00 52.32
ATOM    330  CA  ASN A  21     -10.473   5.550  -5.201  1.00 11.22
ATOM    331  HA  ASN A  21      -9.698   5.499  -5.951  1.00 75.24
ATOM    332  CB  ASN A  21     -11.675   6.353  -5.768  1.00 33.15
ATOM    333 1HB  ASN A  21     -12.119   5.792  -6.576  1.00 23.22
ATOM    334 2HB  ASN A  21     -12.411   6.465  -4.985  1.00 63.21
ATOM    335  CG  ASN A  21     -11.327   7.753  -6.308  1.00 60.21
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ATOM    336  OD1 ASN A  21     -10.408   8.413  -5.857  1.00 31.21
ATOM    337  ND2 ASN A  21     -12.081   8.208  -7.284  1.00 31.13
ATOM    338 2HD2 ASN A  21     -12.815   7.651  -7.619  1.00  3.21
ATOM    339 1HD2 ASN A  21     -11.865   9.096  -7.634  1.00 12.31
ATOM    340  C   ASN A  21      -9.898   6.235  -3.946  1.00 63.22
ATOM    341  O   ASN A  21      -8.796   6.798  -3.976  1.00 10.02
ATOM    342  N   THR A  22     -10.608   6.137  -2.835  1.00 72.44
ATOM    343  H   THR A  22     -11.412   5.577  -2.835  1.00 33.45
ATOM    344  CA  THR A  22     -10.186   6.811  -1.623  1.00 60.11
ATOM    345  HA  THR A  22      -9.891   7.799  -1.948  1.00 44.35
ATOM    346  CB  THR A  22     -11.352   6.963  -0.579  1.00 11.10
ATOM    347  HB  THR A  22     -12.130   7.550  -1.046  1.00 34.02
ATOM    348  OG1 THR A  22     -10.912   7.669   0.583  1.00 43.53
ATOM    349  HG1 THR A  22     -11.159   8.595   0.512  1.00 73.00
ATOM    350  CG2 THR A  22     -11.931   5.621  -0.164  1.00 32.13
ATOM    351 1HG2 THR A  22     -12.297   5.101  -1.037  1.00  2.41
ATOM    352 2HG2 THR A  22     -12.747   5.778   0.526  1.00 24.40
ATOM    353 3HG2 THR A  22     -11.163   5.029   0.312  1.00 33.12
ATOM    354  C   THR A  22      -8.911   6.170  -1.018  1.00 33.20
ATOM    355  O   THR A  22      -8.001   6.883  -0.569  1.00 24.15
ATOM    356  N   VAL A  23      -8.813   4.840  -1.070  1.00 72.14
ATOM    357  H   VAL A  23      -9.542   4.317  -1.469  1.00 60.02
ATOM    358  CA  VAL A  23      -7.630   4.153  -0.553  1.00 73.35
ATOM    359  HA  VAL A  23      -7.426   4.639   0.388  1.00 21.20
ATOM    360  CB  VAL A  23      -7.863   2.617  -0.284  1.00 33.04
ATOM    361  HB  VAL A  23      -8.498   2.539   0.586  1.00 23.32
ATOM    362  CG1 VAL A  23      -8.576   1.947  -1.420  1.00 54.24
ATOM    363 1HG1 VAL A  23      -9.575   2.362  -1.483  1.00 24.33
ATOM    364 2HG1 VAL A  23      -8.646   0.888  -1.224  1.00 72.52
ATOM    365 3HG1 VAL A  23      -8.051   2.126  -2.346  1.00 11.43
ATOM    366  CG2 VAL A  23      -6.566   1.879   0.016  1.00 31.24
ATOM    367 1HG2 VAL A  23      -6.779   0.838   0.215  1.00 13.41
ATOM    368 2HG2 VAL A  23      -6.092   2.325   0.876  1.00 54.52
ATOM    369 3HG2 VAL A  23      -5.905   1.955  -0.836  1.00 35.22
ATOM    370  C   VAL A  23      -6.387   4.446  -1.396  1.00 64.14
ATOM    371  O   VAL A  23      -5.276   4.596  -0.849  1.00 14.14
ATOM    372  N   TYR A  24      -6.575   4.583  -2.706  1.00 11.11
ATOM    373  H   TYR A  24      -7.462   4.419  -3.093  1.00 14.11
ATOM    374  CA  TYR A  24      -5.486   4.949  -3.604  1.00 14.14
ATOM    375  HA  TYR A  24      -4.730   4.182  -3.538  1.00 42.12
ATOM    376  CB  TYR A  24      -6.002   5.017  -5.055  1.00 74.42
ATOM    377 1HB  TYR A  24      -6.224   4.017  -5.397  1.00 41.13
ATOM    378 2HB  TYR A  24      -6.913   5.598  -5.070  1.00 24.32
ATOM    379  CG  TYR A  24      -5.035   5.635  -6.047  1.00 43.45
ATOM    380  CD1 TYR A  24      -3.860   4.994  -6.405  1.00 22.41
ATOM    381  HD1 TYR A  24      -3.630   4.036  -5.962  1.00 12.45
ATOM    382  CE1 TYR A  24      -2.987   5.561  -7.310  1.00 20.12
ATOM    383  HE1 TYR A  24      -2.076   5.046  -7.576  1.00 32.14
ATOM    384  CZ  TYR A  24      -3.284   6.786  -7.869  1.00 24.11
ATOM    385  CE2 TYR A  24      -4.444   7.441  -7.534  1.00 45.43
ATOM    386  HE2 TYR A  24      -4.675   8.401  -7.973  1.00 53.10
ATOM    387  CD2 TYR A  24      -5.311   6.869  -6.631  1.00 33.04
ATOM    388  HD2 TYR A  24      -6.223   7.384  -6.365  1.00 31.11
ATOM    389  OH  TYR A  24      -2.417   7.345  -8.772  1.00 42.33
ATOM    390  HH  TYR A  24      -2.360   8.299  -8.649  1.00 32.55
ATOM    391  C   TYR A  24      -4.879   6.289  -3.190  1.00 75.43
ATOM    392  O   TYR A  24      -3.653   6.413  -3.048  1.00 73.11
ATOM    393  N   ASN A  25      -5.744   7.254  -2.939  1.00  2.53
ATOM    394  H   ASN A  25      -6.704   7.077  -3.025  1.00 20.41
ATOM    395  CA  ASN A  25      -5.324   8.578  -2.540  1.00 13.44
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ATOM    396  HA  ASN A  25      -4.582   8.892  -3.259  1.00 61.00
ATOM    397  CB  ASN A  25      -6.484   9.579  -2.585  1.00 35.50
ATOM    398 1HB  ASN A  25      -7.353   9.125  -2.132  1.00 10.40
ATOM    399 2HB  ASN A  25      -6.206  10.451  -2.017  1.00 43.01
ATOM    400  CG  ASN A  25      -6.856  10.010  -4.001  1.00 43.41
ATOM    401  OD1 ASN A  25      -6.310  10.969  -4.527  1.00 63.42
ATOM    402  ND2 ASN A  25      -7.781   9.319  -4.623  1.00 44.15
ATOM    403 2HD2 ASN A  25      -8.215   8.547  -4.197  1.00 21.14
ATOM    404 1HD2 ASN A  25      -8.030   9.611  -5.524  1.00  2.12
ATOM    405  C   ASN A  25      -4.662   8.576  -1.177  1.00 54.44
ATOM    406  O   ASN A  25      -3.581   9.128  -1.016  1.00 34.24
ATOM    407  N   ALA A  26      -5.282   7.898  -0.217  1.00 41.22
ATOM    408  H   ALA A  26      -6.113   7.424  -0.441  1.00 11.15
ATOM    409  CA  ALA A  26      -4.784   7.854   1.162  1.00 63.42
ATOM    410  HA  ALA A  26      -4.737   8.871   1.521  1.00 33.21
ATOM    411  CB  ALA A  26      -5.751   7.082   2.045  1.00 44.02
ATOM    412 1HB  ALA A  26      -5.414   7.125   3.070  1.00  3.33
ATOM    413 2HB  ALA A  26      -5.787   6.052   1.721  1.00  4.34
ATOM    414 3HB  ALA A  26      -6.735   7.517   1.969  1.00 13.30
ATOM    415  C   ALA A  26      -3.379   7.246   1.245  1.00 10.33
ATOM    416  O   ALA A  26      -2.506   7.778   1.938  1.00 64.23
ATOM    417  N   THR A  27      -3.167   6.158   0.527  1.00 73.21
ATOM    418  H   THR A  27      -3.908   5.783   0.007  1.00 52.41
ATOM    419  CA  THR A  27      -1.873   5.491   0.497  1.00 72.24
ATOM    420  HA  THR A  27      -1.589   5.241   1.509  1.00 53.30
ATOM    421  CB  THR A  27      -1.964   4.200  -0.335  1.00 75.32
ATOM    422  HB  THR A  27      -2.147   4.470  -1.365  1.00 64.40
ATOM    423  OG1 THR A  27      -3.054   3.392   0.141  1.00  4.12
ATOM    424  HG1 THR A  27      -3.882   3.729  -0.223  1.00 74.12
ATOM    425  CG2 THR A  27      -0.669   3.404  -0.249  1.00 31.22
ATOM    426 1HG2 THR A  27       0.136   4.023  -0.618  1.00 13.11
ATOM    427 2HG2 THR A  27      -0.752   2.516  -0.858  1.00 43.14
ATOM    428 3HG2 THR A  27      -0.475   3.131   0.777  1.00 42.42
ATOM    429  C   THR A  27      -0.812   6.422  -0.121  1.00 72.24
ATOM    430  O   THR A  27       0.317   6.536   0.380  1.00 44.04
ATOM    431  N   LEU A  28      -1.207   7.097  -1.194  1.00  5.40
ATOM    432  H   LEU A  28      -2.116   6.948  -1.531  1.00 52.43
ATOM    433  CA  LEU A  28      -0.357   8.044  -1.892  1.00 12.42
ATOM    434  HA  LEU A  28       0.518   7.521  -2.250  1.00 11.00
ATOM    435  CB  LEU A  28      -1.124   8.623  -3.089  1.00 23.23
ATOM    436 1HB  LEU A  28      -1.427   7.800  -3.718  1.00 41.41
ATOM    437 2HB  LEU A  28      -2.016   9.099  -2.708  1.00  4.25
ATOM    438  CG  LEU A  28      -0.383   9.632  -3.961  1.00 22.41
ATOM    439  HG  LEU A  28      -0.014  10.411  -3.310  1.00 12.00
ATOM    440  CD1 LEU A  28       0.799   8.978  -4.661  1.00  0.41
ATOM    441 1HD1 LEU A  28       0.446   8.164  -5.278  1.00 42.24
ATOM    442 2HD1 LEU A  28       1.495   8.601  -3.926  1.00 52.53
ATOM    443 3HD1 LEU A  28       1.296   9.709  -5.283  1.00 34.21
ATOM    444  CD2 LEU A  28      -1.326  10.261  -4.971  1.00 14.11
ATOM    445 1HD2 LEU A  28      -2.122  10.775  -4.452  1.00 43.52
ATOM    446 2HD2 LEU A  28      -1.747   9.490  -5.600  1.00 20.11
ATOM    447 3HD2 LEU A  28      -0.782  10.964  -5.582  1.00 11.40
ATOM    448  C   LEU A  28       0.071   9.162  -0.934  1.00 54.33
ATOM    449  O   LEU A  28       1.255   9.470  -0.814  1.00 12.45
ATOM    450  N   GLN A  29      -0.908   9.727  -0.240  1.00 33.50
ATOM    451  H   GLN A  29      -1.824   9.425  -0.434  1.00 42.24
ATOM    452  CA  GLN A  29      -0.692  10.788   0.752  1.00 70.43
ATOM    453  HA  GLN A  29      -0.324  11.665   0.244  1.00 44.13
ATOM    454  CB  GLN A  29      -1.996  11.147   1.457  1.00 63.34
ATOM    455 1HB  GLN A  29      -2.395  10.253   1.915  1.00  2.25
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ATOM    456 2HB  GLN A  29      -1.766  11.857   2.237  1.00 61.32
ATOM    457  CG  GLN A  29      -3.085  11.737   0.581  1.00 15.55
ATOM    458 1HG  GLN A  29      -2.736  12.672   0.169  1.00 22.14
ATOM    459 2HG  GLN A  29      -3.301  11.047  -0.219  1.00 74.52
ATOM    460  CD  GLN A  29      -4.364  11.988   1.369  1.00 54.42
ATOM    461  OE1 GLN A  29      -5.465  11.918   0.835  1.00 44.04
ATOM    462  NE2 GLN A  29      -4.224  12.290   2.642  1.00 74.21
ATOM    463 2HE2 GLN A  29      -3.326  12.349   3.025  1.00 74.11
ATOM    464 1HE2 GLN A  29      -5.042  12.415   3.178  1.00 64.03
ATOM    465  C   GLN A  29       0.308  10.360   1.824  1.00 12.44
ATOM    466  O   GLN A  29       1.206  11.121   2.178  1.00 54.11
ATOM    467  N   ALA A  30       0.160   9.131   2.305  1.00 54.42
ATOM    468  H   ALA A  30      -0.541   8.564   1.917  1.00 55.42
ATOM    469  CA  ALA A  30       0.974   8.606   3.393  1.00 51.31
ATOM    470  HA  ALA A  30       0.775   9.220   4.256  1.00 11.04
ATOM    471  CB  ALA A  30       0.560   7.169   3.730  1.00 61.31
ATOM    472 1HB  ALA A  30       0.766   6.532   2.883  1.00 35.51
ATOM    473 2HB  ALA A  30      -0.495   7.121   3.957  1.00 33.02
ATOM    474 3HB  ALA A  30       1.118   6.808   4.583  1.00 22.22
ATOM    475  C   ALA A  30       2.461   8.663   3.067  1.00  3.31
ATOM    476  O   ALA A  30       3.268   9.117   3.890  1.00 31.51
ATOM    477  N   ILE A  31       2.815   8.239   1.879  1.00 75.03
ATOM    478  H   ILE A  31       2.120   7.940   1.252  1.00 41.33
ATOM    479  CA  ILE A  31       4.205   8.211   1.483  1.00 64.54
ATOM    480  HA  ILE A  31       4.753   8.075   2.404  1.00 22.43
ATOM    481  CB  ILE A  31       4.511   6.984   0.554  1.00 14.21
ATOM    482  HB  ILE A  31       4.214   6.104   1.107  1.00 42.20
ATOM    483  CG2 ILE A  31       3.655   6.999  -0.711  1.00 31.02
ATOM    484 1HG2 ILE A  31       3.913   6.144  -1.319  1.00 25.32
ATOM    485 2HG2 ILE A  31       3.843   7.909  -1.259  1.00 32.43
ATOM    486 3HG2 ILE A  31       2.611   6.948  -0.440  1.00 74.54
ATOM    487  CG1 ILE A  31       6.008   6.865   0.211  1.00 34.34
ATOM    488 1HG1 ILE A  31       6.321   7.676  -0.429  1.00 64.53
ATOM    489 2HG1 ILE A  31       6.592   6.894   1.119  1.00  3.11
ATOM    490  CD1 ILE A  31       6.353   5.571  -0.504  1.00 44.43
ATOM    491 1HD1 ILE A  31       7.412   5.552  -0.725  1.00 12.53
ATOM    492 2HD1 ILE A  31       5.794   5.511  -1.427  1.00 14.21
ATOM    493 3HD1 ILE A  31       6.102   4.732   0.126  1.00  3.31
ATOM    494  C   ILE A  31       4.687   9.567   0.894  1.00  3.53
ATOM    495  O   ILE A  31       5.754  10.052   1.260  1.00  1.04
ATOM    496  N   GLN A  32       3.857  10.205   0.060  1.00 73.42
ATOM    497  H   GLN A  32       2.972   9.817  -0.124  1.00 61.15
ATOM    498  CA  GLN A  32       4.221  11.476  -0.610  1.00 34.10
ATOM    499  HA  GLN A  32       5.194  11.326  -1.055  1.00 31.25
ATOM    500  CB  GLN A  32       3.245  11.818  -1.736  1.00 53.24
ATOM    501 1HB  GLN A  32       2.237  11.654  -1.382  1.00 62.44
ATOM    502 2HB  GLN A  32       3.359  12.864  -1.983  1.00 61.35
ATOM    503  CG  GLN A  32       3.434  11.009  -2.995  1.00 70.22
ATOM    504 1HG  GLN A  32       3.407   9.960  -2.740  1.00  4.13
ATOM    505 2HG  GLN A  32       2.634  11.234  -3.685  1.00 52.41
ATOM    506  CD  GLN A  32       4.758  11.311  -3.673  1.00 62.32
ATOM    507  OE1 GLN A  32       5.767  10.686  -3.405  1.00 60.32
ATOM    508  NE2 GLN A  32       4.758  12.275  -4.556  1.00 61.13
ATOM    509 2HE2 GLN A  32       3.920  12.748  -4.738  1.00 22.23
ATOM    510 1HE2 GLN A  32       5.616  12.473  -4.988  1.00 71.21
ATOM    511  C   GLN A  32       4.317  12.655   0.332  1.00 44.50
ATOM    512  O   GLN A  32       5.215  13.477   0.204  1.00  2.14
ATOM    513  N   ASN A  33       3.411  12.741   1.280  1.00 23.22
ATOM    514  H   ASN A  33       2.744  12.028   1.387  1.00 22.25
ATOM    515  CA  ASN A  33       3.384  13.895   2.182  1.00 50.23
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ATOM    516  HA  ASN A  33       3.710  14.757   1.618  1.00 40.01
ATOM    517  CB  ASN A  33       1.969  14.166   2.726  1.00 20.23
ATOM    518 1HB  ASN A  33       1.623  13.281   3.233  1.00 13.11
ATOM    519 2HB  ASN A  33       2.014  14.984   3.432  1.00 65.23
ATOM    520  CG  ASN A  33       0.930  14.495   1.670  1.00 50.03
ATOM    521  OD1 ASN A  33       1.224  15.059   0.627  1.00 15.33
ATOM    522  ND2 ASN A  33      -0.303  14.127   1.936  1.00  2.50
ATOM    523 2HD2 ASN A  33      -0.474  13.663   2.787  1.00 61.51
ATOM    524 1HD2 ASN A  33      -0.989  14.345   1.274  1.00 31.14
ATOM    525  C   ASN A  33       4.334  13.692   3.342  1.00 15.02
ATOM    526  O   ASN A  33       4.453  14.551   4.210  1.00 64.50
ATOM    527  N   GLY A  34       5.006  12.546   3.350  1.00 14.23
ATOM    528  H   GLY A  34       4.896  11.933   2.594  1.00  4.21
ATOM    529  CA  GLY A  34       5.919  12.227   4.419  1.00 11.32
ATOM    530 1HA  GLY A  34       6.471  11.336   4.158  1.00 60.34
ATOM    531 2HA  GLY A  34       6.612  13.046   4.547  1.00 53.51
ATOM    532  C   GLY A  34       5.195  11.996   5.722  1.00 63.31
ATOM    533  O   GLY A  34       5.700  12.323   6.788  1.00 60.50
ATOM    534  N   GLN A  35       4.011  11.394   5.634  1.00 40.43
ATOM    535  H   GLN A  35       3.697  11.111   4.748  1.00 31.12
ATOM    536  CA  GLN A  35       3.192  11.139   6.814  1.00 41.34
ATOM    537  HA  GLN A  35       3.250  12.014   7.444  1.00 13.14
ATOM    538  CB  GLN A  35       1.727  10.890   6.431  1.00  3.23
ATOM    539 1HB  GLN A  35       1.679   9.995   5.832  1.00  4.52
ATOM    540 2HB  GLN A  35       1.160  10.734   7.337  1.00 12.22
ATOM    541  CG  GLN A  35       1.098  12.041   5.660  1.00  5.30
ATOM    542 1HG  GLN A  35       1.200  12.958   6.219  1.00  3.22
ATOM    543 2HG  GLN A  35       1.653  12.112   4.736  1.00 43.10
ATOM    544  CD  GLN A  35      -0.372  11.836   5.309  1.00 21.43
ATOM    545  OE1 GLN A  35      -0.858  12.348   4.298  1.00 34.53
ATOM    546  NE2 GLN A  35      -1.090  11.104   6.125  1.00 23.45
ATOM    547 2HE2 GLN A  35      -0.664  10.722   6.921  1.00 20.24
ATOM    548 1HE2 GLN A  35      -2.034  10.969   5.898  1.00 65.21
ATOM    549  C   GLN A  35       3.746   9.958   7.581  1.00 21.45
ATOM    550  O   GLN A  35       3.388   9.717   8.732  1.00 31.21
ATOM    551  N   THR A  36       4.592   9.208   6.927  1.00 50.42
ATOM    552  H   THR A  36       4.777   9.398   5.983  1.00 73.44
ATOM    553  CA  THR A  36       5.258   8.130   7.540  1.00 72.34
ATOM    554  HA  THR A  36       5.542   8.454   8.530  1.00 32.13
ATOM    555  CB  THR A  36       4.319   6.869   7.666  1.00 22.33
ATOM    556  HB  THR A  36       3.424   7.187   8.181  1.00 30.31
ATOM    557  OG1 THR A  36       4.938   5.849   8.468  1.00  0.32
ATOM    558  HG1 THR A  36       4.878   6.174   9.373  1.00 34.24
ATOM    559  CG2 THR A  36       3.930   6.285   6.303  1.00 35.25
ATOM    560 1HG2 THR A  36       3.406   7.035   5.727  1.00 32.45
ATOM    561 2HG2 THR A  36       3.289   5.428   6.447  1.00 75.44
ATOM    562 3HG2 THR A  36       4.822   5.984   5.776  1.00 63.41
ATOM    563  C   THR A  36       6.540   7.830   6.752  1.00 30.53
ATOM    564  O   THR A  36       6.526   7.748   5.521  1.00  1.53
ATOM    565  N   PHE A  37       7.640   7.747   7.455  1.00 42.01
ATOM    566  H   PHE A  37       7.611   7.895   8.422  1.00 71.24
ATOM    567  CA  PHE A  37       8.908   7.402   6.856  1.00 51.55
ATOM    568  HA  PHE A  37       8.809   7.510   5.786  1.00 75.44
ATOM    569  CB  PHE A  37      10.031   8.308   7.373  1.00 53.41
ATOM    570 1HB  PHE A  37      10.076   8.235   8.449  1.00 54.11
ATOM    571 2HB  PHE A  37      10.971   7.979   6.954  1.00 73.01
ATOM    572  CG  PHE A  37       9.838   9.755   7.011  1.00 40.34
ATOM    573  CD1 PHE A  37       9.278  10.646   7.915  1.00 43.42
ATOM    574  HD1 PHE A  37       8.988  10.296   8.894  1.00 74.25
ATOM    575  CE1 PHE A  37       9.092  11.973   7.575  1.00 22.11
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ATOM    576  HE1 PHE A  37       8.653  12.658   8.286  1.00 25.35
ATOM    577  CZ  PHE A  37       9.464  12.424   6.322  1.00 20.55
ATOM    578  HZ  PHE A  37       9.320  13.459   6.053  1.00 21.33
ATOM    579  CE2 PHE A  37      10.024  11.545   5.413  1.00 71.10
ATOM    580  HE2 PHE A  37      10.316  11.894   4.433  1.00 14.44
ATOM    581  CD2 PHE A  37      10.206  10.222   5.758  1.00 32.02
ATOM    582  HD2 PHE A  37      10.643   9.536   5.047  1.00 45.21
ATOM    583  C   PHE A  37       9.176   5.964   7.176  1.00 35.52
ATOM    584  O   PHE A  37       8.638   5.451   8.169  1.00 52.43
ATOM    585  N   ASP A  38       9.974   5.301   6.377  1.00 55.13
ATOM    586  H   ASP A  38      10.472   5.754   5.669  1.00 24.52
ATOM    587  CA  ASP A  38      10.132   3.877   6.561  1.00 43.50
ATOM    588  HA  ASP A  38       9.193   3.537   6.973  1.00 20.11
ATOM    589  CB  ASP A  38      10.366   3.146   5.243  1.00 31.52
ATOM    590 1HB  ASP A  38       9.937   3.716   4.431  1.00 21.31
ATOM    591 2HB  ASP A  38      11.425   3.015   5.079  1.00 23.24
ATOM    592  CG  ASP A  38       9.715   1.788   5.292  1.00 13.44
ATOM    593  OD1 ASP A  38       8.557   1.675   4.811  1.00  2.12
ATOM    594  OD2 ASP A  38      10.240   0.893   5.959  1.00 60.04
ATOM    595  C   ASP A  38      11.199   3.544   7.599  1.00  3.42
ATOM    596  O   ASP A  38      11.988   4.409   7.993  1.00 73.55
ATOM    597  N   TYR A  39      11.253   2.280   7.981  1.00 40.42
ATOM    598  H   TYR A  39      10.753   1.626   7.429  1.00 42.52
ATOM    599  CA  TYR A  39      12.065   1.793   9.091  1.00 22.32
ATOM    600  HA  TYR A  39      11.847   2.402   9.956  1.00 20.53
ATOM    601  CB  TYR A  39      11.653   0.337   9.415  1.00 20.31
ATOM    602 1HB  TYR A  39      10.605   0.319   9.673  1.00 41.12
ATOM    603 2HB  TYR A  39      11.802  -0.266   8.532  1.00 11.00
ATOM    604  CG  TYR A  39      12.407  -0.314  10.561  1.00 23.33
ATOM    605  CD1 TYR A  39      13.459  -1.192  10.318  1.00 40.24
ATOM    606  HD1 TYR A  39      13.737  -1.409   9.297  1.00 24.31
ATOM    607  CE1 TYR A  39      14.149  -1.783  11.356  1.00 32.33
ATOM    608  HE1 TYR A  39      14.963  -2.461  11.147  1.00 73.53
ATOM    609  CZ  TYR A  39      13.793  -1.504  12.658  1.00 61.33
ATOM    610  CE2 TYR A  39      12.754  -0.639  12.925  1.00 23.45
ATOM    611  HE2 TYR A  39      12.475  -0.421  13.946  1.00 51.11
ATOM    612  CD2 TYR A  39      12.068  -0.050  11.881  1.00 12.51
ATOM    613  HD2 TYR A  39      11.252   0.628  12.088  1.00 40.44
ATOM    614  OH  TYR A  39      14.481  -2.093  13.694  1.00 30.00
ATOM    615  HH  TYR A  39      15.424  -2.002  13.541  1.00 54.44
ATOM    616  C   TYR A  39      13.557   1.873   8.790  1.00  2.34
ATOM    617  O   TYR A  39      14.376   2.023   9.692  1.00 72.11
ATOM    618  N   LYS A  40      13.904   1.795   7.539  1.00 53.44
ATOM    619  H   LYS A  40      13.197   1.697   6.865  1.00 65.04
ATOM    620  CA  LYS A  40      15.302   1.827   7.158  1.00 74.21
ATOM    621  HA  LYS A  40      15.887   1.762   8.063  1.00 32.51
ATOM    622  CB  LYS A  40      15.626   0.621   6.282  1.00 63.24
ATOM    623 1HB  LYS A  40      16.671   0.665   6.011  1.00 53.21
ATOM    624 2HB  LYS A  40      15.447  -0.282   6.847  1.00 35.02
ATOM    625  CG  LYS A  40      14.804   0.564   5.014  1.00 21.04
ATOM    626 1HG  LYS A  40      13.763   0.687   5.274  1.00  4.44
ATOM    627 2HG  LYS A  40      15.109   1.378   4.376  1.00 52.10
ATOM    628  CD  LYS A  40      14.963  -0.746   4.269  1.00 62.54
ATOM    629 1HD  LYS A  40      14.681  -1.563   4.914  1.00  2.14
ATOM    630 2HD  LYS A  40      14.300  -0.706   3.418  1.00 45.14
ATOM    631  CE  LYS A  40      16.369  -1.006   3.766  1.00 41.23
ATOM    632 1HE  LYS A  40      16.631  -0.253   3.038  1.00 62.01
ATOM    633 2HE  LYS A  40      17.057  -0.966   4.598  1.00 43.13
ATOM    634  NZ  LYS A  40      16.452  -2.337   3.139  1.00 33.43
ATOM    635 1HZ  LYS A  40      17.288  -2.418   2.511  1.00 10.42
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ATOM    636 2HZ  LYS A  40      15.583  -2.544   2.593  1.00 10.43
ATOM    637 3HZ  LYS A  40      16.507  -3.095   3.845  1.00 20.42
ATOM    638  C   LYS A  40      15.645   3.125   6.451  1.00  0.53
ATOM    639  O   LYS A  40      16.754   3.287   5.954  1.00 23.25
ATOM    640  N   SER A  41      14.675   4.046   6.421  1.00 72.22
ATOM    641  H   SER A  41      13.832   3.848   6.881  1.00 33.34
ATOM    642  CA  SER A  41      14.821   5.356   5.782  1.00 11.32
ATOM    643  HA  SER A  41      13.864   5.852   5.857  1.00 70.04
ATOM    644  CB  SER A  41      15.883   6.202   6.537  1.00 20.33
ATOM    645 1HB  SER A  41      15.613   6.263   7.581  1.00 23.21
ATOM    646 2HB  SER A  41      16.846   5.721   6.447  1.00 74.54
ATOM    647  OG  SER A  41      15.974   7.518   6.015  1.00 14.03
ATOM    648  HG  SER A  41      16.081   7.413   5.060  1.00 23.40
ATOM    649  C   SER A  41      15.167   5.215   4.277  1.00 23.43
ATOM    650  O   SER A  41      15.791   6.097   3.681  1.00  1.40
ATOM    651  N   ASN A  42      14.700   4.137   3.669  1.00 22.10
ATOM    652  H   ASN A  42      14.132   3.509   4.162  1.00 40.03
ATOM    653  CA  ASN A  42      14.935   3.880   2.257  1.00 32.10
ATOM    654  HA  ASN A  42      15.975   4.103   2.079  1.00 40.53
ATOM    655  CB  ASN A  42      14.667   2.400   1.874  1.00 74.23
ATOM    656 1HB  ASN A  42      14.831   2.289   0.812  1.00 62.31
ATOM    657 2HB  ASN A  42      15.369   1.767   2.394  1.00 45.11
ATOM    658  CG  ASN A  42      13.251   1.908   2.167  1.00 10.41
ATOM    659  OD1 ASN A  42      12.612   2.355   3.105  1.00 72.55
ATOM    660  ND2 ASN A  42      12.774   0.977   1.381  1.00 63.53
ATOM    661 2HD2 ASN A  42      13.332   0.641   0.643  1.00 74.13
ATOM    662 1HD2 ASN A  42      11.878   0.638   1.584  1.00 33.03
ATOM    663  C   ASN A  42      14.080   4.813   1.416  1.00 60.13
ATOM    664  O   ASN A  42      12.997   5.210   1.863  1.00  2.53
ATOM    665  N   PRO A  43      14.600   5.245   0.231  1.00  0.32
ATOM    666  CD  PRO A  43      15.957   4.926  -0.282  1.00 73.40
ATOM    667  CA  PRO A  43      13.896   6.141  -0.699  1.00 53.20
ATOM    668  HA  PRO A  43      14.035   7.175  -0.419  1.00 33.45
ATOM    669  CB  PRO A  43      14.602   5.882  -2.018  1.00 75.44
ATOM    670 1HB  PRO A  43      14.157   5.027  -2.508  1.00 71.13
ATOM    671 2HB  PRO A  43      14.559   6.752  -2.655  1.00  4.15
ATOM    672  CG  PRO A  43      16.011   5.624  -1.623  1.00  1.52
ATOM    673 1HG  PRO A  43      16.494   5.005  -2.365  1.00 31.01
ATOM    674 2HG  PRO A  43      16.539   6.560  -1.514  1.00 11.45
ATOM    675 1HD  PRO A  43      16.080   3.860  -0.408  1.00 70.52
ATOM    676 2HD  PRO A  43      16.718   5.317   0.376  1.00 22.10
ATOM    677  C   PRO A  43      12.395   5.861  -0.816  1.00 52.53
ATOM    678  O   PRO A  43      11.955   4.779  -1.245  1.00 25.13
ATOM    679  N   TYR A  44      11.640   6.850  -0.428  1.00 42.20
ATOM    680  H   TYR A  44      12.094   7.681  -0.165  1.00  4.03
ATOM    681  CA  TYR A  44      10.190   6.830  -0.406  1.00 73.21
ATOM    682  HA  TYR A  44       9.891   5.793  -0.349  1.00 11.34
ATOM    683  CB  TYR A  44       9.635   7.586   0.821  1.00 72.31
ATOM    684 1HB  TYR A  44       8.559   7.633   0.740  1.00 42.42
ATOM    685 2HB  TYR A  44       9.889   7.032   1.712  1.00 52.44
ATOM    686  CG  TYR A  44      10.131   9.015   0.996  1.00 62.43
ATOM    687  CD1 TYR A  44      11.194   9.296   1.846  1.00 72.21
ATOM    688  HD1 TYR A  44      11.675   8.484   2.371  1.00 61.51
ATOM    689  CE1 TYR A  44      11.639  10.589   2.031  1.00  3.00
ATOM    690  HE1 TYR A  44      12.467  10.786   2.696  1.00 54.03
ATOM    691  CZ  TYR A  44      11.027  11.624   1.360  1.00 64.32
ATOM    692  CE2 TYR A  44       9.972  11.374   0.506  1.00 51.34
ATOM    693  HE2 TYR A  44       9.493  12.185  -0.021  1.00 54.31
ATOM    694  CD2 TYR A  44       9.527  10.078   0.331  1.00 51.11
ATOM    695  HD2 TYR A  44       8.701   9.879  -0.337  1.00 72.34
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ATOM    696  OH  TYR A  44      11.465  12.918   1.548  1.00 13.34
ATOM    697  HH  TYR A  44      10.696  13.493   1.529  1.00 71.00
ATOM    698  C   TYR A  44       9.656   7.393  -1.701  1.00 41.53
ATOM    699  O   TYR A  44       8.460   7.380  -1.980  1.00 53.01
ATOM    700  N   ASP A  45      10.570   7.815  -2.497  1.00 74.01
ATOM    701  H   ASP A  45      11.501   7.655  -2.242  1.00 53.13
ATOM    702  CA  ASP A  45      10.325   8.558  -3.687  1.00 45.22
ATOM    703  HA  ASP A  45       9.604   9.338  -3.505  1.00  4.23
ATOM    704  CB  ASP A  45      11.648   9.188  -4.145  1.00 31.21
ATOM    705 1HB  ASP A  45      12.295   8.413  -4.527  1.00 61.35
ATOM    706 2HB  ASP A  45      11.446   9.901  -4.933  1.00  4.34
ATOM    707  CG  ASP A  45      12.375   9.906  -3.019  1.00 62.33
ATOM    708  OD1 ASP A  45      12.369  11.143  -2.998  1.00  0.15
ATOM    709  OD2 ASP A  45      12.941   9.193  -2.121  1.00 50.51
ATOM    710  C   ASP A  45       9.844   7.600  -4.741  1.00  3.41
ATOM    711  O   ASP A  45      10.551   6.667  -5.174  1.00 53.42
ATOM    712  N   ILE A  46       8.611   7.815  -5.096  1.00  3.42
ATOM    713  H   ILE A  46       8.174   8.609  -4.725  1.00 52.54
ATOM    714  CA  ILE A  46       7.864   6.972  -5.980  1.00 44.13
ATOM    715  HA  ILE A  46       7.907   5.965  -5.593  1.00 34.11
ATOM    716  CB  ILE A  46       6.379   7.417  -5.993  1.00 22.42
ATOM    717  HB  ILE A  46       6.326   8.433  -6.354  1.00 53.44
ATOM    718  CG2 ILE A  46       5.556   6.528  -6.911  1.00 61.44
ATOM    719 1HG2 ILE A  46       5.622   5.504  -6.574  1.00 13.44
ATOM    720 2HG2 ILE A  46       5.936   6.598  -7.921  1.00 34.30
ATOM    721 3HG2 ILE A  46       4.526   6.848  -6.889  1.00 43.11
ATOM    722  CG1 ILE A  46       5.820   7.377  -4.560  1.00 13.11
ATOM    723 1HG1 ILE A  46       5.848   6.359  -4.199  1.00 42.23
ATOM    724 2HG1 ILE A  46       6.443   7.989  -3.925  1.00  1.24
ATOM    725  CD1 ILE A  46       4.396   7.862  -4.427  1.00 13.42
ATOM    726 1HD1 ILE A  46       4.081   7.764  -3.397  1.00 44.22
ATOM    727 2HD1 ILE A  46       3.749   7.273  -5.058  1.00 30.15
ATOM    728 3HD1 ILE A  46       4.338   8.901  -4.717  1.00 52.55
ATOM    729  C   ILE A  46       8.449   6.991  -7.382  1.00 35.34
ATOM    730  O   ILE A  46       8.548   8.035  -8.017  1.00 13.23
ATOM    731  N   SER A  47       8.826   5.828  -7.841  1.00 71.33
ATOM    732  H   SER A  47       8.672   5.023  -7.298  1.00 53.14
ATOM    733  CA  SER A  47       9.438   5.672  -9.121  1.00 63.41
ATOM    734  HA  SER A  47       9.938   6.591  -9.387  1.00 35.22
ATOM    735  CB  SER A  47      10.470   4.563  -9.004  1.00 54.14
ATOM    736 1HB  SER A  47       9.967   3.612  -8.916  1.00 13.02
ATOM    737 2HB  SER A  47      11.107   4.562  -9.876  1.00 64.21
ATOM    738  OG  SER A  47      11.275   4.779  -7.843  1.00 12.14
ATOM    739  HG  SER A  47      11.053   5.652  -7.493  1.00 61.53
ATOM    740  C   SER A  47       8.368   5.330 -10.171  1.00  3.21
ATOM    741  O   SER A  47       8.501   5.683 -11.336  1.00 63.02
ATOM    742  N   VAL A  48       7.286   4.661  -9.744  1.00 52.24
ATOM    743  H   VAL A  48       7.251   4.321  -8.822  1.00 51.12
ATOM    744  CA  VAL A  48       6.146   4.443 -10.629  1.00 24.03
ATOM    745  HA  VAL A  48       6.190   5.152 -11.443  1.00 24.23
ATOM    746  CB  VAL A  48       6.118   2.977 -11.222  1.00 10.04
ATOM    747  HB  VAL A  48       6.091   2.292 -10.387  1.00 51.31
ATOM    748  CG1 VAL A  48       4.851   2.722 -12.057  1.00  4.41
ATOM    749 1HG1 VAL A  48       4.793   3.436 -12.864  1.00 70.01
ATOM    750 2HG1 VAL A  48       3.968   2.811 -11.438  1.00 25.21
ATOM    751 3HG1 VAL A  48       4.878   1.724 -12.467  1.00 43.21
ATOM    752  CG2 VAL A  48       7.358   2.677 -12.056  1.00 43.12
ATOM    753 1HG2 VAL A  48       7.412   3.371 -12.882  1.00 71.33
ATOM    754 2HG2 VAL A  48       7.302   1.669 -12.436  1.00 33.10
ATOM    755 3HG2 VAL A  48       8.240   2.783 -11.439  1.00 62.11
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ATOM    756  C   VAL A  48       4.873   4.637  -9.837  1.00 54.04
ATOM    757  O   VAL A  48       4.687   4.043  -8.772  1.00 22.12
ATOM    758  N   ASN A  49       4.027   5.463 -10.351  1.00  2.44
ATOM    759  H   ASN A  49       4.273   5.949 -11.163  1.00  5.31
ATOM    760  CA  ASN A  49       2.697   5.671  -9.860  1.00 41.21
ATOM    761  HA  ASN A  49       2.537   4.988  -9.037  1.00  4.41
ATOM    762  CB  ASN A  49       2.511   7.126  -9.363  1.00 12.54
ATOM    763 1HB  ASN A  49       3.084   7.254  -8.457  1.00 40.23
ATOM    764 2HB  ASN A  49       2.892   7.806 -10.110  1.00  2.04
ATOM    765  CG  ASN A  49       1.056   7.514  -9.044  1.00 34.00
ATOM    766  OD1 ASN A  49       0.679   8.668  -9.176  1.00 55.40
ATOM    767  ND2 ASN A  49       0.249   6.579  -8.592  1.00 15.41
ATOM    768 2HD2 ASN A  49       0.567   5.667  -8.449  1.00 12.22
ATOM    769 1HD2 ASN A  49      -0.690   6.852  -8.463  1.00  2.41
ATOM    770  C   ASN A  49       1.742   5.346 -10.971  1.00 71.35
ATOM    771  O   ASN A  49       1.796   6.010 -12.000  1.00 21.21
ATOM    772  N   LYS A  50       0.930   4.329 -10.848  1.00 65.43
ATOM    773  H   LYS A  50       0.965   3.675 -10.119  1.00 21.43
ATOM    774  CA  LYS A  50      -0.058   4.142 -11.847  1.00  3.15
ATOM    775  HA  LYS A  50      -0.221   5.132 -12.242  1.00  4.42
ATOM    776  CB  LYS A  50       0.434   3.281 -13.017  1.00  1.54
ATOM    777 1HB  LYS A  50      -0.497   2.886 -13.378  1.00 73.23
ATOM    778 2HB  LYS A  50       0.924   3.881 -13.767  1.00  2.34
ATOM    779  CG  LYS A  50       1.237   2.030 -12.693  1.00 22.11
ATOM    780 1HG  LYS A  50       1.718   1.660 -13.587  1.00 52.40
ATOM    781 2HG  LYS A  50       1.980   2.346 -11.976  1.00 24.23
ATOM    782  CD  LYS A  50       0.392   0.929 -12.080  1.00 34.41
ATOM    783 1HD  LYS A  50       0.132   1.269 -11.088  1.00 31.10
ATOM    784 2HD  LYS A  50      -0.492   0.766 -12.677  1.00 70.51
ATOM    785  CE  LYS A  50       1.174  -0.357 -11.940  1.00  4.42
ATOM    786 1HE  LYS A  50       1.547  -0.630 -12.916  1.00 41.11
ATOM    787 2HE  LYS A  50       2.014  -0.147 -11.291  1.00 23.11
ATOM    788  NZ  LYS A  50       0.353  -1.477 -11.374  1.00 50.31
ATOM    789 1HZ  LYS A  50      -0.393  -1.873 -11.983  1.00 22.04
ATOM    790 2HZ  LYS A  50      -0.168  -1.137 -10.540  1.00 63.42
ATOM    791 3HZ  LYS A  50       0.986  -2.234 -11.028  1.00  5.53
ATOM    792  C   LYS A  50      -1.375   3.664 -11.318  1.00 50.35
ATOM    793  O   LYS A  50      -1.442   2.893 -10.347  1.00 70.12
ATOM    794  N   ASN A  51      -2.405   4.164 -11.929  1.00 55.21
ATOM    795  H   ASN A  51      -2.259   4.863 -12.602  1.00  2.35
ATOM    796  CA  ASN A  51      -3.754   3.732 -11.702  1.00 13.41
ATOM    797  HA  ASN A  51      -3.743   3.043 -10.870  1.00 52.42
ATOM    798  CB  ASN A  51      -4.698   4.919 -11.380  1.00 10.43
ATOM    799 1HB  ASN A  51      -5.681   4.534 -11.157  1.00 54.53
ATOM    800 2HB  ASN A  51      -4.319   5.434 -10.508  1.00 73.44
ATOM    801  CG  ASN A  51      -4.838   5.934 -12.517  1.00  2.30
ATOM    802  OD1 ASN A  51      -4.068   6.872 -12.615  1.00 12.50
ATOM    803  ND2 ASN A  51      -5.833   5.763 -13.363  1.00 51.21
ATOM    804 2HD2 ASN A  51      -6.448   5.009 -13.252  1.00 51.33
ATOM    805 1HD2 ASN A  51      -5.899   6.415 -14.091  1.00 42.30
ATOM    806  C   ASN A  51      -4.227   2.996 -12.935  1.00 73.45
ATOM    807  O   ASN A  51      -3.858   3.359 -14.047  1.00 15.04
ATOM    808  N   ASN A  52      -4.975   1.965 -12.751  1.00 34.33
ATOM    809  H   ASN A  52      -5.118   1.619 -11.843  1.00 43.10
ATOM    810  CA  ASN A  52      -5.577   1.248 -13.867  1.00 71.25
ATOM    811  HA  ASN A  52      -5.226   1.660 -14.801  1.00 43.23
ATOM    812  CB  ASN A  52      -5.207  -0.241 -13.774  1.00 65.34
ATOM    813 1HB  ASN A  52      -4.131  -0.325 -13.736  1.00 23.52
ATOM    814 2HB  ASN A  52      -5.609  -0.633 -12.851  1.00 44.31
ATOM    815  CG  ASN A  52      -5.692  -1.131 -14.926  1.00  4.53
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ATOM    816  OD1 ASN A  52      -6.679  -0.853 -15.594  1.00 52.45
ATOM    817  ND2 ASN A  52      -5.058  -2.256 -15.074  1.00 54.04
ATOM    818 2HD2 ASN A  52      -4.337  -2.447 -14.418  1.00  0.22
ATOM    819 1HD2 ASN A  52      -5.301  -2.850 -15.811  1.00  2.04
ATOM    820  C   ASN A  52      -7.076   1.403 -13.744  1.00 11.52
ATOM    821  O   ASN A  52      -7.746   1.943 -14.610  1.00 44.03
ATOM    822  N   GLY A  53      -7.569   0.998 -12.603  1.00 72.20
ATOM    823  H   GLY A  53      -6.949   0.692 -11.907  1.00 51.34
ATOM    824  CA  GLY A  53      -8.981   1.001 -12.345  1.00 44.32
ATOM    825 1HA  GLY A  53      -9.229   1.835 -11.705  1.00 65.33
ATOM    826 2HA  GLY A  53      -9.524   1.077 -13.276  1.00  3.13
ATOM    827  C   GLY A  53      -9.343  -0.281 -11.675  1.00 65.03
ATOM    828  O   GLY A  53     -10.170  -0.329 -10.772  1.00 42.13
ATOM    829  N   THR A  54      -8.707  -1.334 -12.115  1.00 33.31
ATOM    830  H   THR A  54      -8.131  -1.231 -12.902  1.00 41.34
ATOM    831  CA  THR A  54      -8.871  -2.609 -11.493  1.00 22.32
ATOM    832  HA  THR A  54      -9.768  -2.545 -10.893  1.00 63.11
ATOM    833  CB  THR A  54      -9.037  -3.750 -12.551  1.00 65.55
ATOM    834  HB  THR A  54      -9.865  -3.450 -13.176  1.00 12.11
ATOM    835  OG1 THR A  54      -9.375  -5.020 -11.933  1.00 51.11
ATOM    836  HG1 THR A  54      -9.707  -5.559 -12.661  1.00 12.21
ATOM    837  CG2 THR A  54      -7.792  -3.916 -13.419  1.00 14.05
ATOM    838 1HG2 THR A  54      -7.951  -4.711 -14.132  1.00  2.45
ATOM    839 2HG2 THR A  54      -6.949  -4.159 -12.789  1.00 53.33
ATOM    840 3HG2 THR A  54      -7.596  -2.993 -13.943  1.00 44.12
ATOM    841  C   THR A  54      -7.688  -2.847 -10.535  1.00 65.02
ATOM    842  O   THR A  54      -7.796  -3.630  -9.565  1.00 14.42
ATOM    843  N   ASP A  55      -6.585  -2.148 -10.796  1.00 22.32
ATOM    844  H   ASP A  55      -6.518  -1.589 -11.596  1.00  4.33
ATOM    845  CA  ASP A  55      -5.415  -2.151  -9.931  1.00 74.10
ATOM    846  HA  ASP A  55      -5.736  -2.444  -8.942  1.00 62.44
ATOM    847  CB  ASP A  55      -4.274  -3.109 -10.422  1.00 43.20
ATOM    848 1HB  ASP A  55      -3.601  -3.296  -9.598  1.00 51.21
ATOM    849 2HB  ASP A  55      -4.718  -4.047 -10.721  1.00 42.24
ATOM    850  CG  ASP A  55      -3.424  -2.574 -11.600  1.00 72.25
ATOM    851  OD1 ASP A  55      -3.795  -2.818 -12.758  1.00 50.23
ATOM    852  OD2 ASP A  55      -2.356  -1.919 -11.355  1.00 44.12
ATOM    853  C   ASP A  55      -4.877  -0.739  -9.870  1.00 44.33
ATOM    854  O   ASP A  55      -5.266   0.122 -10.684  1.00 22.14
ATOM    855  N   ALA A  56      -4.105  -0.485  -8.872  1.00 11.11
ATOM    856  H   ALA A  56      -3.994  -1.168  -8.173  1.00 22.11
ATOM    857  CA  ALA A  56      -3.355   0.729  -8.714  1.00  4.41
ATOM    858  HA  ALA A  56      -3.097   1.106  -9.695  1.00 20.13
ATOM    859  CB  ALA A  56      -4.105   1.783  -7.922  1.00 12.05
ATOM    860 1HB  ALA A  56      -4.990   2.088  -8.460  1.00 42.24
ATOM    861 2HB  ALA A  56      -3.461   2.637  -7.776  1.00 54.15
ATOM    862 3HB  ALA A  56      -4.387   1.386  -6.959  1.00 22.42
ATOM    863  C   ALA A  56      -2.119   0.334  -7.999  1.00 33.44
ATOM    864  O   ALA A  56      -2.166  -0.584  -7.187  1.00 11.52
ATOM    865  N   GLU A  57      -1.028   0.941  -8.287  1.00  2.13
ATOM    866  H   GLU A  57      -1.023   1.690  -8.925  1.00 71.35
ATOM    867  CA  GLU A  57       0.180   0.529  -7.652  1.00 43.15
ATOM    868  HA  GLU A  57      -0.074   0.169  -6.666  1.00 44.21
ATOM    869  CB  GLU A  57       0.785  -0.622  -8.430  1.00  5.42
ATOM    870 1HB  GLU A  57       0.052  -1.409  -8.502  1.00 70.13
ATOM    871 2HB  GLU A  57       0.988  -0.256  -9.427  1.00 51.22
ATOM    872  CG  GLU A  57       2.058  -1.217  -7.874  1.00 22.34
ATOM    873 1HG  GLU A  57       2.847  -0.482  -7.940  1.00 65.02
ATOM    874 2HG  GLU A  57       1.900  -1.488  -6.841  1.00 32.05
ATOM    875  CD  GLU A  57       2.465  -2.447  -8.642  1.00 42.42
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ATOM    876  OE1 GLU A  57       2.836  -3.445  -8.011  1.00 25.10
ATOM    877  OE2 GLU A  57       2.356  -2.427  -9.900  1.00 11.20
ATOM    878  C   GLU A  57       1.130   1.673  -7.511  1.00 41.44
ATOM    879  O   GLU A  57       1.249   2.531  -8.416  1.00 73.14
ATOM    880  N   ILE A  58       1.760   1.712  -6.380  1.00 45.41
ATOM    881  H   ILE A  58       1.586   1.002  -5.720  1.00  4.01
ATOM    882  CA  ILE A  58       2.727   2.704  -6.071  1.00 23.32
ATOM    883  HA  ILE A  58       2.799   3.419  -6.877  1.00 50.42
ATOM    884  CB  ILE A  58       2.377   3.429  -4.747  1.00  3.33
ATOM    885  HB  ILE A  58       2.553   2.740  -3.934  1.00  5.55
ATOM    886  CG2 ILE A  58       3.296   4.606  -4.567  1.00 62.50
ATOM    887 1HG2 ILE A  58       3.177   5.242  -5.435  1.00 32.44
ATOM    888 2HG2 ILE A  58       4.318   4.262  -4.505  1.00  1.42
ATOM    889 3HG2 ILE A  58       3.025   5.154  -3.677  1.00 61.41
ATOM    890  CG1 ILE A  58       0.902   3.898  -4.704  1.00  4.41
ATOM    891 1HG1 ILE A  58       0.266   3.039  -4.846  1.00 74.40
ATOM    892 2HG1 ILE A  58       0.700   4.328  -3.734  1.00 64.14
ATOM    893  CD1 ILE A  58       0.520   4.915  -5.761  1.00 53.31
ATOM    894 1HD1 ILE A  58       1.132   5.798  -5.652  1.00 31.05
ATOM    895 2HD1 ILE A  58      -0.520   5.180  -5.642  1.00 53.21
ATOM    896 3HD1 ILE A  58       0.673   4.488  -6.740  1.00 61.11
ATOM    897  C   ILE A  58       4.040   1.969  -5.871  1.00 62.50
ATOM    898  O   ILE A  58       4.110   1.055  -5.043  1.00 53.11
ATOM    899  N   VAL A  59       5.051   2.340  -6.607  1.00 23.21
ATOM    900  H   VAL A  59       4.953   3.082  -7.245  1.00 11.51
ATOM    901  CA  VAL A  59       6.328   1.666  -6.518  1.00 31.24
ATOM    902  HA  VAL A  59       6.297   0.951  -5.709  1.00 42.34
ATOM    903  CB  VAL A  59       6.679   0.910  -7.839  1.00 10.53
ATOM    904  HB  VAL A  59       6.957   1.668  -8.556  1.00 54.32
ATOM    905  CG1 VAL A  59       7.903   0.018  -7.662  1.00 54.04
ATOM    906 1HG1 VAL A  59       8.115  -0.492  -8.591  1.00 42.31
ATOM    907 2HG1 VAL A  59       7.709  -0.710  -6.889  1.00  4.04
ATOM    908 3HG1 VAL A  59       8.751   0.625  -7.382  1.00 74.52
ATOM    909  CG2 VAL A  59       5.495   0.127  -8.397  1.00 43.04
ATOM    910 1HG2 VAL A  59       4.706   0.815  -8.664  1.00  3.54
ATOM    911 2HG2 VAL A  59       5.122  -0.553  -7.648  1.00 32.31
ATOM    912 3HG2 VAL A  59       5.802  -0.426  -9.272  1.00 53.51
ATOM    913  C   VAL A  59       7.424   2.681  -6.279  1.00 41.22
ATOM    914  O   VAL A  59       7.663   3.530  -7.131  1.00 44.04
ATOM    915  N   SER A  60       8.051   2.617  -5.145  1.00 12.03
ATOM    916  H   SER A  60       7.748   1.992  -4.449  1.00 35.32
ATOM    917  CA  SER A  60       9.199   3.439  -4.855  1.00 74.42
ATOM    918  HA  SER A  60       9.329   4.164  -5.645  1.00 15.13
ATOM    919  CB  SER A  60       8.991   4.142  -3.508  1.00 52.41
ATOM    920 1HB  SER A  60       8.968   3.413  -2.713  1.00 72.51
ATOM    921 2HB  SER A  60       9.796   4.842  -3.338  1.00  3.31
ATOM    922  OG  SER A  60       7.762   4.861  -3.499  1.00 65.50
ATOM    923  HG  SER A  60       7.910   5.714  -3.070  1.00 74.02
ATOM    924  C   SER A  60      10.405   2.501  -4.796  1.00 12.21
ATOM    925  O   SER A  60      10.286   1.383  -4.291  1.00 40.22
ATOM    926  N   ALA A  61      11.542   2.927  -5.282  1.00 23.02
ATOM    927  H   ALA A  61      11.640   3.849  -5.602  1.00 34.53
ATOM    928  CA  ALA A  61      12.690   2.048  -5.342  1.00 33.12
ATOM    929  HA  ALA A  61      12.381   1.082  -4.970  1.00 40.20
ATOM    930  CB  ALA A  61      13.150   1.869  -6.781  1.00 64.43
ATOM    931 1HB  ALA A  61      13.485   2.819  -7.172  1.00  0.35
ATOM    932 2HB  ALA A  61      12.328   1.505  -7.380  1.00 11.43
ATOM    933 3HB  ALA A  61      13.963   1.160  -6.817  1.00 25.32
ATOM    934  C   ALA A  61      13.818   2.558  -4.483  1.00 52.05
ATOM    935  O   ALA A  61      14.038   3.755  -4.397  1.00 21.23
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ATOM    936  N   SER A  62      14.510   1.654  -3.834  1.00 21.13
ATOM    937  H   SER A  62      14.297   0.699  -3.897  1.00 74.42
ATOM    938  CA  SER A  62      15.628   2.007  -3.021  1.00 61.43
ATOM    939  HA  SER A  62      15.557   3.058  -2.790  1.00  1.24
ATOM    940  CB  SER A  62      15.568   1.205  -1.737  1.00 31.42
ATOM    941 1HB  SER A  62      15.691   0.154  -1.959  1.00 65.01
ATOM    942 2HB  SER A  62      16.346   1.532  -1.062  1.00 50.24
ATOM    943  OG  SER A  62      14.305   1.410  -1.117  1.00 51.42
ATOM    944  HG  SER A  62      13.870   2.142  -1.567  1.00 74.35
ATOM    945  C   SER A  62      16.921   1.749  -3.798  1.00 74.33
ATOM    946  O   SER A  62      16.975   0.844  -4.637  1.00 72.02
ATOM    947  N   ASP A  63      17.928   2.546  -3.528  1.00  3.31
ATOM    948  H   ASP A  63      17.877   3.230  -2.819  1.00 61.25
ATOM    949  CA  ASP A  63      19.205   2.500  -4.247  1.00 10.35
ATOM    950  HA  ASP A  63      19.024   2.423  -5.308  1.00  1.33
ATOM    951  CB  ASP A  63      19.937   3.818  -3.985  1.00 42.42
ATOM    952 1HB  ASP A  63      20.907   3.791  -4.460  1.00 62.14
ATOM    953 2HB  ASP A  63      19.359   4.638  -4.383  1.00 12.53
ATOM    954  CG  ASP A  63      20.124   4.036  -2.492  1.00 45.52
ATOM    955  OD1 ASP A  63      19.116   4.384  -1.824  1.00 12.03
ATOM    956  OD2 ASP A  63      21.215   3.773  -1.973  1.00 60.30
ATOM    957  C   ASP A  63      20.094   1.357  -3.767  1.00 35.03
ATOM    958  O   ASP A  63      20.823   0.761  -4.555  1.00 14.00
ATOM    959  N   SER A  64      19.991   1.021  -2.503  1.00 52.11
ATOM    960  H   SER A  64      19.401   1.544  -1.924  1.00 71.33
ATOM    961  CA  SER A  64      20.806  -0.028  -1.953  1.00 14.32
ATOM    962  HA  SER A  64      21.743  -0.049  -2.486  1.00 63.04
ATOM    963  CB  SER A  64      21.077   0.276  -0.480  1.00 25.14
ATOM    964 1HB  SER A  64      20.143   0.262   0.063  1.00 75.02
ATOM    965 2HB  SER A  64      21.737  -0.476  -0.071  1.00 41.31
ATOM    966  OG  SER A  64      21.684   1.563  -0.312  1.00 10.54
ATOM    967  HG  SER A  64      21.474   2.202  -1.018  1.00 21.34
ATOM    968  C   SER A  64      20.096  -1.369  -2.114  1.00 51.11
ATOM    969  O   SER A  64      20.686  -2.371  -2.534  1.00 11.11
ATOM    970  N   ASP A  65      18.820  -1.367  -1.842  1.00 10.12
ATOM    971  H   ASP A  65      18.402  -0.538  -1.542  1.00 14.35
ATOM    972  CA  ASP A  65      18.024  -2.551  -1.976  1.00  2.42
ATOM    973  HA  ASP A  65      18.682  -3.396  -2.108  1.00 42.03
ATOM    974  CB  ASP A  65      17.132  -2.806  -0.776  1.00 42.22
ATOM    975 1HB  ASP A  65      16.531  -1.930  -0.589  1.00 14.32
ATOM    976 2HB  ASP A  65      16.487  -3.616  -1.082  1.00 13.32
ATOM    977  CG  ASP A  65      17.807  -3.194   0.518  1.00 43.51
ATOM    978  OD1 ASP A  65      18.291  -2.295   1.236  1.00 42.24
ATOM    979  OD2 ASP A  65      17.736  -4.380   0.899  1.00 75.31
ATOM    980  C   ASP A  65      17.126  -2.418  -3.164  1.00 43.40
ATOM    981  O   ASP A  65      16.088  -1.766  -3.091  1.00 74.30
ATOM    982  N   SER A  66      17.518  -2.992  -4.259  1.00 21.31
ATOM    983  H   SER A  66      18.411  -3.394  -4.282  1.00 61.44
ATOM    984  CA  SER A  66      16.681  -2.986  -5.436  1.00  4.34
ATOM    985  HA  SER A  66      16.378  -1.965  -5.619  1.00 64.01
ATOM    986  CB  SER A  66      17.474  -3.511  -6.647  1.00 14.34
ATOM    987 1HB  SER A  66      18.369  -2.922  -6.769  1.00  3.31
ATOM    988 2HB  SER A  66      17.746  -4.541  -6.469  1.00 11.14
ATOM    989  OG  SER A  66      16.721  -3.436  -7.839  1.00 64.32
ATOM    990  HG  SER A  66      16.562  -2.512  -8.054  1.00 35.24
ATOM    991  C   SER A  66      15.418  -3.837  -5.169  1.00 50.42
ATOM    992  O   SER A  66      14.290  -3.456  -5.525  1.00  3.22
ATOM    993  N   THR A  67      15.604  -4.947  -4.462  1.00 21.22
ATOM    994  H   THR A  67      16.499  -5.150  -4.122  1.00  4.21
ATOM    995  CA  THR A  67      14.514  -5.850  -4.191  1.00 50.12
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ATOM    996  HA  THR A  67      13.862  -5.835  -5.052  1.00 71.51
ATOM    997  CB  THR A  67      15.032  -7.313  -3.992  1.00 74.12
ATOM    998  HB  THR A  67      15.568  -7.601  -4.886  1.00 32.21
ATOM    999  OG1 THR A  67      13.940  -8.219  -3.813  1.00 33.11
ATOM   1000  HG1 THR A  67      13.288  -7.855  -3.204  1.00 21.32
ATOM   1001  CG2 THR A  67      15.980  -7.417  -2.795  1.00 60.25
ATOM   1002 1HG2 THR A  67      16.312  -8.439  -2.684  1.00 23.11
ATOM   1003 2HG2 THR A  67      15.462  -7.107  -1.900  1.00 54.11
ATOM   1004 3HG2 THR A  67      16.834  -6.776  -2.956  1.00 41.22
ATOM   1005  C   THR A  67      13.707  -5.390  -2.966  1.00 43.22
ATOM   1006  O   THR A  67      12.533  -5.782  -2.795  1.00 62.02
ATOM   1007  N   ASP A  68      14.279  -4.507  -2.171  1.00 71.43
ATOM   1008  H   ASP A  68      15.165  -4.145  -2.372  1.00 23.42
ATOM   1009  CA  ASP A  68      13.583  -4.006  -1.011  1.00  2.52
ATOM   1010  HA  ASP A  68      12.656  -4.563  -0.972  1.00  2.33
ATOM   1011  CB  ASP A  68      14.333  -4.187   0.293  1.00 32.31
ATOM   1012 1HB  ASP A  68      14.621  -5.219   0.425  1.00 62.22
ATOM   1013 2HB  ASP A  68      15.213  -3.564   0.266  1.00 11.52
ATOM   1014  CG  ASP A  68      13.520  -3.750   1.470  1.00 75.22
ATOM   1015  OD1 ASP A  68      12.357  -4.157   1.547  1.00 12.22
ATOM   1016  OD2 ASP A  68      14.055  -3.055   2.344  1.00  4.33
ATOM   1017  C   ASP A  68      13.207  -2.589  -1.245  1.00 15.02
ATOM   1018  O   ASP A  68      13.842  -1.645  -0.808  1.00 64.23
ATOM   1019  N   SER A  69      12.264  -2.489  -2.073  1.00  2.14
ATOM   1020  H   SER A  69      11.926  -3.305  -2.481  1.00 33.11
ATOM   1021  CA  SER A  69      11.677  -1.292  -2.476  1.00 42.43
ATOM   1022  HA  SER A  69      12.234  -0.448  -2.099  1.00 22.22
ATOM   1023  CB  SER A  69      11.734  -1.295  -4.002  1.00 14.23
ATOM   1024 1HB  SER A  69      10.973  -0.637  -4.393  1.00 75.04
ATOM   1025 2HB  SER A  69      12.710  -0.962  -4.326  1.00 31.32
ATOM   1026  OG  SER A  69      11.509  -2.631  -4.511  1.00 44.22
ATOM   1027  HG  SER A  69      12.241  -2.790  -5.126  1.00 64.11
ATOM   1028  C   SER A  69      10.256  -1.298  -1.953  1.00 54.44
ATOM   1029  O   SER A  69       9.698  -2.391  -1.710  1.00 42.11
ATOM   1030  N   LEU A  70       9.661  -0.150  -1.810  1.00 54.42
ATOM   1031  H   LEU A  70      10.093   0.675  -2.114  1.00 10.22
ATOM   1032  CA  LEU A  70       8.340  -0.075  -1.257  1.00 23.05
ATOM   1033  HA  LEU A  70       8.186  -0.937  -0.624  1.00 43.03
ATOM   1034  CB  LEU A  70       8.191   1.238  -0.416  1.00 31.10
ATOM   1035 1HB  LEU A  70       9.017   1.272   0.280  1.00 15.31
ATOM   1036 2HB  LEU A  70       8.307   2.068  -1.097  1.00 23.20
ATOM   1037  CG  LEU A  70       6.882   1.478   0.411  1.00 22.24
ATOM   1038  HG  LEU A  70       7.023   2.363   1.015  1.00 61.12
ATOM   1039  CD1 LEU A  70       5.670   1.763  -0.470  1.00  0.42
ATOM   1040 1HD1 LEU A  70       5.843   2.664  -1.040  1.00 20.24
ATOM   1041 2HD1 LEU A  70       4.790   1.888   0.144  1.00 42.34
ATOM   1042 3HD1 LEU A  70       5.521   0.937  -1.150  1.00 63.20
ATOM   1043  CD2 LEU A  70       6.601   0.306   1.359  1.00 60.13
ATOM   1044 1HD2 LEU A  70       5.702   0.504   1.925  1.00 40.44
ATOM   1045 2HD2 LEU A  70       7.427   0.178   2.042  1.00 41.10
ATOM   1046 3HD2 LEU A  70       6.465  -0.601   0.788  1.00 73.02
ATOM   1047  C   LEU A  70       7.388  -0.127  -2.421  1.00  2.54
ATOM   1048  O   LEU A  70       7.353   0.768  -3.254  1.00 41.31
ATOM   1049  N   GLN A  71       6.670  -1.199  -2.497  1.00  3.22
ATOM   1050  H   GLN A  71       6.736  -1.883  -1.796  1.00  5.11
ATOM   1051  CA  GLN A  71       5.760  -1.422  -3.571  1.00 71.12
ATOM   1052  HA  GLN A  71       5.676  -0.530  -4.172  1.00 41.02
ATOM   1053  CB  GLN A  71       6.271  -2.569  -4.429  1.00 13.12
ATOM   1054 1HB  GLN A  71       7.321  -2.416  -4.631  1.00 24.04
ATOM   1055 2HB  GLN A  71       6.159  -3.478  -3.859  1.00 71.32
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ATOM   1056  CG  GLN A  71       5.556  -2.751  -5.752  1.00 12.13
ATOM   1057 1HG  GLN A  71       4.494  -2.824  -5.575  1.00 11.24
ATOM   1058 2HG  GLN A  71       5.765  -1.891  -6.368  1.00 62.30
ATOM   1059  CD  GLN A  71       6.017  -3.994  -6.484  1.00 42.52
ATOM   1060  OE1 GLN A  71       7.161  -4.450  -6.313  1.00 71.33
ATOM   1061  NE2 GLN A  71       5.177  -4.524  -7.326  1.00 72.01
ATOM   1062 2HE2 GLN A  71       4.286  -4.102  -7.461  1.00 11.34
ATOM   1063 1HE2 GLN A  71       5.439  -5.317  -7.828  1.00 62.45
ATOM   1064  C   GLN A  71       4.432  -1.787  -2.973  1.00 72.45
ATOM   1065  O   GLN A  71       4.333  -2.778  -2.234  1.00 75.22
ATOM   1066  N   VAL A  72       3.448  -0.992  -3.226  1.00 64.13
ATOM   1067  H   VAL A  72       3.602  -0.210  -3.805  1.00 64.22
ATOM   1068  CA  VAL A  72       2.135  -1.257  -2.728  1.00  3.24
ATOM   1069  HA  VAL A  72       2.164  -2.185  -2.180  1.00 33.42
ATOM   1070  CB  VAL A  72       1.636  -0.120  -1.779  1.00  4.11
ATOM   1071  HB  VAL A  72       1.666   0.812  -2.322  1.00 51.24
ATOM   1072  CG1 VAL A  72       0.214  -0.377  -1.319  1.00 50.53
ATOM   1073 1HG1 VAL A  72      -0.439  -0.406  -2.179  1.00 20.21
ATOM   1074 2HG1 VAL A  72      -0.100   0.410  -0.650  1.00 31.44
ATOM   1075 3HG1 VAL A  72       0.171  -1.325  -0.805  1.00 50.31
ATOM   1076  CG2 VAL A  72       2.545   0.007  -0.569  1.00 40.52
ATOM   1077 1HG2 VAL A  72       2.549  -0.923  -0.022  1.00 64.33
ATOM   1078 2HG2 VAL A  72       2.185   0.801   0.071  1.00 21.35
ATOM   1079 3HG2 VAL A  72       3.547   0.234  -0.897  1.00 61.05
ATOM   1080  C   VAL A  72       1.195  -1.399  -3.900  1.00 41.52
ATOM   1081  O   VAL A  72       1.058  -0.475  -4.712  1.00 73.41
ATOM   1082  N   ALA A  73       0.551  -2.522  -3.970  1.00 22.43
ATOM   1083  H   ALA A  73       0.700  -3.203  -3.273  1.00 54.13
ATOM   1084  CA  ALA A  73      -0.379  -2.821  -5.009  1.00 54.43
ATOM   1085  HA  ALA A  73      -0.312  -2.043  -5.756  1.00  2.42
ATOM   1086  CB  ALA A  73      -0.046  -4.156  -5.662  1.00 14.20
ATOM   1087 1HB  ALA A  73      -0.105  -4.943  -4.923  1.00 45.42
ATOM   1088 2HB  ALA A  73       0.952  -4.119  -6.070  1.00 23.22
ATOM   1089 3HB  ALA A  73      -0.752  -4.354  -6.455  1.00  4.43
ATOM   1090  C   ALA A  73      -1.772  -2.837  -4.432  1.00 35.13
ATOM   1091  O   ALA A  73      -2.008  -3.381  -3.340  1.00 73.43
ATOM   1092  N   MET A  74      -2.670  -2.240  -5.131  1.00 52.35
ATOM   1093  H   MET A  74      -2.416  -1.842  -5.996  1.00 30.42
ATOM   1094  CA  MET A  74      -4.039  -2.115  -4.721  1.00 32.31
ATOM   1095  HA  MET A  74      -4.178  -2.496  -3.720  1.00 45.30
ATOM   1096  CB  MET A  74      -4.453  -0.643  -4.775  1.00 74.41
ATOM   1097 1HB  MET A  74      -4.493  -0.342  -5.810  1.00 53.15
ATOM   1098 2HB  MET A  74      -5.439  -0.540  -4.345  1.00 62.15
ATOM   1099  CG  MET A  74      -3.512   0.290  -4.048  1.00 24.35
ATOM   1100 1HG  MET A  74      -3.595   0.092  -2.989  1.00 75.11
ATOM   1101 2HG  MET A  74      -2.499   0.091  -4.365  1.00  1.24
ATOM   1102  SD  MET A  74      -3.888   2.018  -4.318  1.00 12.10
ATOM   1103  CE  MET A  74      -2.518   2.771  -3.467  1.00 23.13
ATOM   1104 1HE  MET A  74      -2.576   3.845  -3.560  1.00 22.13
ATOM   1105 2HE  MET A  74      -1.590   2.419  -3.894  1.00 52.51
ATOM   1106 3HE  MET A  74      -2.555   2.498  -2.422  1.00 15.42
ATOM   1107  C   MET A  74      -4.870  -2.867  -5.712  1.00 44.11
ATOM   1108  O   MET A  74      -4.741  -2.649  -6.918  1.00 50.14
ATOM   1109  N   LYS A  75      -5.693  -3.739  -5.248  1.00  4.11
ATOM   1110  H   LYS A  75      -5.756  -3.917  -4.284  1.00 72.11
ATOM   1111  CA  LYS A  75      -6.525  -4.468  -6.122  1.00  4.42
ATOM   1112  HA  LYS A  75      -6.280  -4.185  -7.133  1.00 51.30
ATOM   1113  CB  LYS A  75      -6.313  -5.976  -5.956  1.00 15.53
ATOM   1114 1HB  LYS A  75      -5.266  -6.202  -6.086  1.00 72.42
ATOM   1115 2HB  LYS A  75      -6.616  -6.263  -4.959  1.00 13.02
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ATOM   1116  CG  LYS A  75      -7.113  -6.791  -6.950  1.00 55.21
ATOM   1117 1HG  LYS A  75      -7.044  -7.837  -6.693  1.00 70.24
ATOM   1118 2HG  LYS A  75      -8.146  -6.475  -6.910  1.00 40.55
ATOM   1119  CD  LYS A  75      -6.589  -6.587  -8.362  1.00 21.31
ATOM   1120 1HD  LYS A  75      -6.395  -5.539  -8.536  1.00 62.40
ATOM   1121 2HD  LYS A  75      -5.672  -7.145  -8.477  1.00 62.41
ATOM   1122  CE  LYS A  75      -7.578  -7.057  -9.390  1.00 32.21
ATOM   1123 1HE  LYS A  75      -7.099  -7.045 -10.357  1.00 32.12
ATOM   1124 2HE  LYS A  75      -7.869  -8.062  -9.123  1.00 42.40
ATOM   1125  NZ  LYS A  75      -8.786  -6.192  -9.423  1.00 13.41
ATOM   1126 1HZ  LYS A  75      -9.358  -6.231  -8.552  1.00 42.52
ATOM   1127 2HZ  LYS A  75      -9.380  -6.391 -10.251  1.00 42.05
ATOM   1128 3HZ  LYS A  75      -8.461  -5.207  -9.541  1.00 74.43
ATOM   1129  C   LYS A  75      -7.954  -4.119  -5.823  1.00 64.41
ATOM   1130  O   LYS A  75      -8.421  -4.312  -4.700  1.00  1.34
ATOM   1131  N   LYS A  76      -8.656  -3.644  -6.822  1.00 43.55
ATOM   1132  H   LYS A  76      -8.223  -3.526  -7.698  1.00 15.34
ATOM   1133  CA  LYS A  76     -10.022  -3.256  -6.635  1.00 63.25
ATOM   1134  HA  LYS A  76     -10.115  -2.760  -5.681  1.00 13.12
ATOM   1135  CB  LYS A  76     -10.520  -2.323  -7.735  1.00 32.11
ATOM   1136 1HB  LYS A  76      -9.788  -1.545  -7.892  1.00 51.30
ATOM   1137 2HB  LYS A  76     -10.637  -2.891  -8.647  1.00 55.40
ATOM   1138  CG  LYS A  76     -11.864  -1.676  -7.392  1.00 43.20
ATOM   1139 1HG  LYS A  76     -12.529  -2.438  -7.014  1.00 50.11
ATOM   1140 2HG  LYS A  76     -11.709  -0.936  -6.621  1.00 43.43
ATOM   1141  CD  LYS A  76     -12.519  -1.018  -8.587  1.00  4.33
ATOM   1142 1HD  LYS A  76     -13.189  -0.236  -8.264  1.00 51.42
ATOM   1143 2HD  LYS A  76     -11.739  -0.602  -9.211  1.00 71.01
ATOM   1144  CE  LYS A  76     -13.289  -2.028  -9.412  1.00 54.11
ATOM   1145 1HE  LYS A  76     -13.678  -1.518 -10.279  1.00 34.54
ATOM   1146 2HE  LYS A  76     -12.606  -2.808  -9.708  1.00 71.30
ATOM   1147  NZ  LYS A  76     -14.429  -2.631  -8.648  1.00  2.42
ATOM   1148 1HZ  LYS A  76     -15.102  -1.898  -8.351  1.00 21.33
ATOM   1149 2HZ  LYS A  76     -14.114  -3.122  -7.782  1.00  1.03
ATOM   1150 3HZ  LYS A  76     -14.948  -3.313  -9.233  1.00 40.00
ATOM   1151  C   LYS A  76     -10.880  -4.483  -6.657  1.00 55.14
ATOM   1152  O   LYS A  76     -10.789  -5.317  -7.591  1.00 52.13
ATOM   1153  N   LEU A  77     -11.664  -4.611  -5.651  1.00 11.33
ATOM   1154  H   LEU A  77     -11.653  -3.914  -4.950  1.00  1.22
ATOM   1155  CA  LEU A  77     -12.595  -5.685  -5.516  1.00 41.03
ATOM   1156  HA  LEU A  77     -12.224  -6.505  -6.114  1.00  1.04
ATOM   1157  CB  LEU A  77     -12.733  -6.124  -4.052  1.00 34.23
ATOM   1158 1HB  LEU A  77     -13.076  -5.269  -3.488  1.00 30.41
ATOM   1159 2HB  LEU A  77     -13.484  -6.897  -3.993  1.00 31.44
ATOM   1160  CG  LEU A  77     -11.446  -6.649  -3.389  1.00 41.14
ATOM   1161  HG  LEU A  77     -10.716  -5.854  -3.375  1.00 63.22
ATOM   1162  CD1 LEU A  77     -11.707  -7.055  -1.953  1.00 54.20
ATOM   1163 1HD1 LEU A  77     -10.795  -7.431  -1.517  1.00 44.33
ATOM   1164 2HD1 LEU A  77     -12.462  -7.825  -1.929  1.00 35.54
ATOM   1165 3HD1 LEU A  77     -12.046  -6.196  -1.393  1.00 62.44
ATOM   1166  CD2 LEU A  77     -10.862  -7.819  -4.174  1.00 33.43
ATOM   1167 1HD2 LEU A  77     -10.602  -7.497  -5.171  1.00 43.21
ATOM   1168 2HD2 LEU A  77     -11.595  -8.611  -4.236  1.00 13.13
ATOM   1169 3HD2 LEU A  77      -9.980  -8.186  -3.671  1.00 23.51
ATOM   1170  C   LEU A  77     -13.921  -5.230  -6.115  1.00 70.21
ATOM   1171  O   LEU A  77     -14.164  -4.010  -6.198  1.00 45.53
ATOM   1172  N   PRO A  78     -14.715  -6.178  -6.685  1.00 41.44
ATOM   1173  CD  PRO A  78     -14.402  -7.632  -6.738  1.00 61.13
ATOM   1174  CA  PRO A  78     -16.005  -5.913  -7.339  1.00 35.23
ATOM   1175  HA  PRO A  78     -15.874  -5.741  -8.393  1.00 64.23
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ATOM   1176  CB  PRO A  78     -16.751  -7.228  -7.151  1.00 74.32
ATOM   1177 1HB  PRO A  78     -17.243  -7.233  -6.189  1.00 12.23
ATOM   1178 2HB  PRO A  78     -17.466  -7.377  -7.946  1.00 62.13
ATOM   1179  CG  PRO A  78     -15.687  -8.270  -7.236  1.00 11.30
ATOM   1180 1HG  PRO A  78     -15.960  -9.113  -6.618  1.00 63.12
ATOM   1181 2HG  PRO A  78     -15.557  -8.581  -8.262  1.00 32.30
ATOM   1182 1HD  PRO A  78     -14.153  -8.007  -5.756  1.00 70.31
ATOM   1183 2HD  PRO A  78     -13.595  -7.825  -7.429  1.00 32.22
ATOM   1184  C   PRO A  78     -16.808  -4.732  -6.769  1.00 35.31
ATOM   1185  O   PRO A  78     -16.890  -3.669  -7.409  1.00 74.32
ATOM   1186  N   ASN A  79     -17.310  -4.878  -5.568  1.00 44.42
ATOM   1187  H   ASN A  79     -17.080  -5.677  -5.050  1.00 53.42
ATOM   1188  CA  ASN A  79     -18.181  -3.863  -4.989  1.00 13.42
ATOM   1189  HA  ASN A  79     -18.348  -3.123  -5.757  1.00 62.14
ATOM   1190  CB  ASN A  79     -19.552  -4.452  -4.602  1.00 23.22
ATOM   1191 1HB  ASN A  79     -20.023  -4.857  -5.485  1.00 75.15
ATOM   1192 2HB  ASN A  79     -19.401  -5.245  -3.886  1.00 24.31
ATOM   1193  CG  ASN A  79     -20.499  -3.415  -3.986  1.00 33.40
ATOM   1194  OD1 ASN A  79     -20.445  -2.229  -4.303  1.00 75.34
ATOM   1195  ND2 ASN A  79     -21.366  -3.858  -3.104  1.00 64.43
ATOM   1196 2HD2 ASN A  79     -21.365  -4.812  -2.886  1.00 61.32
ATOM   1197 1HD2 ASN A  79     -21.976  -3.205  -2.702  1.00 11.13
ATOM   1198  C   ASN A  79     -17.560  -3.154  -3.793  1.00 13.32
ATOM   1199  O   ASN A  79     -17.523  -3.696  -2.703  1.00 22.00
ATOM   1200  N   ASN A  80     -17.006  -1.975  -4.064  1.00 11.20
ATOM   1201  H   ASN A  80     -16.923  -1.733  -5.006  1.00 62.21
ATOM   1202  CA  ASN A  80     -16.529  -1.002  -3.040  1.00 44.02
ATOM   1203  HA  ASN A  80     -16.003  -0.248  -3.609  1.00 24.11
ATOM   1204  CB  ASN A  80     -17.697  -0.281  -2.344  1.00 45.24
ATOM   1205 1HB  ASN A  80     -18.438  -1.009  -2.052  1.00 32.41
ATOM   1206 2HB  ASN A  80     -17.326   0.222  -1.463  1.00 52.33
ATOM   1207  CG  ASN A  80     -18.363   0.745  -3.242  1.00  0.04
ATOM   1208  OD1 ASN A  80     -17.931   1.897  -3.303  1.00 34.15
ATOM   1209  ND2 ASN A  80     -19.406   0.356  -3.937  1.00 71.12
ATOM   1210 2HD2 ASN A  80     -19.722  -0.576  -3.864  1.00 52.40
ATOM   1211 1HD2 ASN A  80     -19.850   1.018  -4.505  1.00  3.13
ATOM   1212  C   ASN A  80     -15.524  -1.515  -2.017  1.00 31.52
ATOM   1213  O   ASN A  80     -15.414  -0.955  -0.937  1.00 65.23
ATOM   1214  N   ALA A  81     -14.762  -2.512  -2.364  1.00 33.13
ATOM   1215  H   ALA A  81     -14.869  -2.941  -3.235  1.00 52.20
ATOM   1216  CA  ALA A  81     -13.736  -2.999  -1.474  1.00  2.11
ATOM   1217  HA  ALA A  81     -13.643  -2.282  -0.671  1.00 13.54
ATOM   1218  CB  ALA A  81     -14.104  -4.355  -0.890  1.00 74.23
ATOM   1219 1HB  ALA A  81     -14.187  -5.089  -1.678  1.00 75.14
ATOM   1220 2HB  ALA A  81     -15.047  -4.272  -0.371  1.00 43.02
ATOM   1221 3HB  ALA A  81     -13.336  -4.653  -0.192  1.00 33.34
ATOM   1222  C   ALA A  81     -12.419  -3.046  -2.217  1.00 20.34
ATOM   1223  O   ALA A  81     -12.407  -3.018  -3.464  1.00 64.45
ATOM   1224  N   THR A  82     -11.331  -3.097  -1.492  1.00 21.44
ATOM   1225  H   THR A  82     -11.381  -3.148  -0.510  1.00 20.01
ATOM   1226  CA  THR A  82     -10.017  -3.093  -2.085  1.00 32.52
ATOM   1227  HA  THR A  82     -10.086  -3.418  -3.113  1.00 33.33
ATOM   1228  CB  THR A  82      -9.437  -1.657  -2.050  1.00 34.53
ATOM   1229  HB  THR A  82      -9.228  -1.395  -1.024  1.00 23.10
ATOM   1230  OG1 THR A  82     -10.401  -0.747  -2.582  1.00 14.30
ATOM   1231  HG1 THR A  82     -11.114  -0.662  -1.934  1.00 35.35
ATOM   1232  CG2 THR A  82      -8.152  -1.555  -2.869  1.00 43.14
ATOM   1233 1HG2 THR A  82      -7.412  -2.229  -2.462  1.00 73.10
ATOM   1234 2HG2 THR A  82      -7.777  -0.543  -2.833  1.00 70.03
ATOM   1235 3HG2 THR A  82      -8.357  -1.826  -3.894  1.00 34.20
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ATOM   1236  C   THR A  82      -9.094  -4.021  -1.290  1.00 72.11
ATOM   1237  O   THR A  82      -9.125  -4.041  -0.074  1.00 72.11
ATOM   1238  N   ARG A  83      -8.313  -4.797  -1.959  1.00 43.11
ATOM   1239  H   ARG A  83      -8.340  -4.797  -2.941  1.00 54.45
ATOM   1240  CA  ARG A  83      -7.373  -5.637  -1.290  1.00 53.33
ATOM   1241  HA  ARG A  83      -7.621  -5.661  -0.239  1.00 21.31
ATOM   1242  CB  ARG A  83      -7.354  -7.034  -1.860  1.00 11.13
ATOM   1243 1HB  ARG A  83      -8.366  -7.335  -2.091  1.00 10.01
ATOM   1244 2HB  ARG A  83      -6.764  -7.038  -2.763  1.00 62.55
ATOM   1245  CG  ARG A  83      -6.756  -8.034  -0.896  1.00  1.02
ATOM   1246 1HG  ARG A  83      -5.900  -7.580  -0.418  1.00 33.43
ATOM   1247 2HG  ARG A  83      -7.496  -8.283  -0.149  1.00 21.55
ATOM   1248  CD  ARG A  83      -6.313  -9.283  -1.593  1.00 71.23
ATOM   1249 1HD  ARG A  83      -6.125 -10.015  -0.823  1.00 43.55
ATOM   1250 2HD  ARG A  83      -7.099  -9.627  -2.248  1.00 50.02
ATOM   1251  NE  ARG A  83      -5.080  -9.040  -2.376  1.00 61.23
ATOM   1252  HE  ARG A  83      -4.555  -8.272  -2.059  1.00 63.30
ATOM   1253  CZ  ARG A  83      -4.616  -9.790  -3.385  1.00 32.12
ATOM   1254  NH1 ARG A  83      -5.356 -10.790  -3.885  1.00  1.41
ATOM   1255 1HH1 ARG A  83      -6.264 -10.990  -3.512  1.00 31.45
ATOM   1256 2HH1 ARG A  83      -5.042 -11.369  -4.639  1.00 20.12
ATOM   1257  NH2 ARG A  83      -3.410  -9.521  -3.903  1.00 33.40
ATOM   1258 1HH2 ARG A  83      -2.852  -8.764  -3.532  1.00 24.12
ATOM   1259 2HH2 ARG A  83      -2.995 -10.033  -4.656  1.00 24.40
ATOM   1260  C   ARG A  83      -6.016  -5.006  -1.474  1.00 25.53
ATOM   1261  O   ARG A  83      -5.669  -4.619  -2.592  1.00 44.33
ATOM   1262  N   ILE A  84      -5.251  -4.905  -0.434  1.00 71.30
ATOM   1263  H   ILE A  84      -5.512  -5.307   0.427  1.00 11.14
ATOM   1264  CA  ILE A  84      -3.995  -4.225  -0.530  1.00 22.14
ATOM   1265  HA  ILE A  84      -3.930  -3.778  -1.510  1.00 63.34
ATOM   1266  CB  ILE A  84      -3.875  -3.101   0.569  1.00 61.00
ATOM   1267  HB  ILE A  84      -4.839  -2.622   0.651  1.00 51.33
ATOM   1268  CG2 ILE A  84      -3.535  -3.667   1.927  1.00 73.42
ATOM   1269 1HG2 ILE A  84      -4.312  -4.349   2.239  1.00 11.21
ATOM   1270 2HG2 ILE A  84      -3.430  -2.865   2.642  1.00 51.45
ATOM   1271 3HG2 ILE A  84      -2.603  -4.204   1.831  1.00 32.43
ATOM   1272  CG1 ILE A  84      -2.846  -2.047   0.194  1.00 63.13
ATOM   1273 1HG1 ILE A  84      -2.639  -1.422   1.049  1.00 50.02
ATOM   1274 2HG1 ILE A  84      -1.937  -2.536  -0.125  1.00 64.21
ATOM   1275  CD1 ILE A  84      -3.299  -1.160  -0.927  1.00 60.32
ATOM   1276 1HD1 ILE A  84      -2.540  -0.415  -1.119  1.00 30.52
ATOM   1277 2HD1 ILE A  84      -4.225  -0.678  -0.653  1.00 10.42
ATOM   1278 3HD1 ILE A  84      -3.450  -1.752  -1.816  1.00 52.43
ATOM   1279  C   ILE A  84      -2.875  -5.262  -0.372  1.00 23.13
ATOM   1280  O   ILE A  84      -2.997  -6.238   0.389  1.00 10.31
ATOM   1281  N   SER A  85      -1.890  -5.147  -1.196  1.00 12.13
ATOM   1282  H   SER A  85      -1.908  -4.427  -1.869  1.00  2.12
ATOM   1283  CA  SER A  85      -0.751  -6.007  -1.165  1.00 51.14
ATOM   1284  HA  SER A  85      -0.810  -6.596  -0.263  1.00 22.25
ATOM   1285  CB  SER A  85      -0.803  -6.942  -2.369  1.00 70.54
ATOM   1286 1HB  SER A  85      -0.738  -6.364  -3.279  1.00  1.10
ATOM   1287 2HB  SER A  85       0.010  -7.651  -2.322  1.00 62.13
ATOM   1288  OG  SER A  85      -2.046  -7.660  -2.345  1.00 21.11
ATOM   1289  HG  SER A  85      -2.388  -7.420  -1.473  1.00 64.54
ATOM   1290  C   SER A  85       0.529  -5.177  -1.122  1.00 41.11
ATOM   1291  O   SER A  85       0.805  -4.407  -2.031  1.00 65.20
ATOM   1292  N   ILE A  86       1.265  -5.310  -0.070  1.00 41.32
ATOM   1293  H   ILE A  86       0.986  -5.940   0.634  1.00 25.24
ATOM   1294  CA  ILE A  86       2.491  -4.574   0.111  1.00 64.40
ATOM   1295  HA  ILE A  86       2.546  -3.794  -0.634  1.00 71.33
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ATOM   1296  CB  ILE A  86       2.532  -3.936   1.528  1.00 40.15
ATOM   1297  HB  ILE A  86       2.525  -4.732   2.256  1.00  4.35
ATOM   1298  CG2 ILE A  86       3.815  -3.118   1.726  1.00 22.42
ATOM   1299 1HG2 ILE A  86       3.810  -2.674   2.712  1.00 25.15
ATOM   1300 2HG2 ILE A  86       3.877  -2.342   0.979  1.00 52.54
ATOM   1301 3HG2 ILE A  86       4.671  -3.772   1.636  1.00 65.50
ATOM   1302  CG1 ILE A  86       1.282  -3.058   1.742  1.00 64.41
ATOM   1303 1HG1 ILE A  86       1.301  -2.234   1.045  1.00 65.21
ATOM   1304 2HG1 ILE A  86       0.404  -3.656   1.549  1.00 63.00
ATOM   1305  CD1 ILE A  86       1.152  -2.476   3.130  1.00 64.10
ATOM   1306 1HD1 ILE A  86       2.015  -1.865   3.349  1.00 42.30
ATOM   1307 2HD1 ILE A  86       1.086  -3.279   3.850  1.00 42.12
ATOM   1308 3HD1 ILE A  86       0.259  -1.872   3.184  1.00 11.13
ATOM   1309  C   ILE A  86       3.654  -5.536  -0.055  1.00  1.53
ATOM   1310  O   ILE A  86       3.638  -6.621   0.514  1.00 43.11
ATOM   1311  N   LYS A  87       4.634  -5.155  -0.826  1.00 52.32
ATOM   1312  H   LYS A  87       4.585  -4.272  -1.265  1.00 34.33
ATOM   1313  CA  LYS A  87       5.785  -5.993  -1.058  1.00 51.12
ATOM   1314  HA  LYS A  87       5.614  -6.946  -0.582  1.00 15.13
ATOM   1315  CB  LYS A  87       5.976  -6.217  -2.596  1.00 61.43
ATOM   1316 1HB  LYS A  87       5.064  -6.650  -2.979  1.00 71.45
ATOM   1317 2HB  LYS A  87       6.108  -5.255  -3.063  1.00 31.35
ATOM   1318  CG  LYS A  87       7.148  -7.149  -3.044  1.00 54.33
ATOM   1319 1HG  LYS A  87       7.084  -8.069  -2.483  1.00  3.05
ATOM   1320 2HG  LYS A  87       7.017  -7.375  -4.094  1.00 60.31
ATOM   1321  CD  LYS A  87       8.548  -6.557  -2.828  1.00 43.45
ATOM   1322 1HD  LYS A  87       8.652  -6.275  -1.791  1.00  1.15
ATOM   1323 2HD  LYS A  87       9.286  -7.308  -3.069  1.00 71.34
ATOM   1324  CE  LYS A  87       8.793  -5.325  -3.690  1.00  1.21
ATOM   1325 1HE  LYS A  87       8.885  -5.628  -4.722  1.00  2.14
ATOM   1326 2HE  LYS A  87       7.960  -4.646  -3.588  1.00 21.41
ATOM   1327  NZ  LYS A  87      10.025  -4.625  -3.290  1.00  5.44
ATOM   1328 1HZ  LYS A  87      10.285  -3.890  -3.986  1.00 42.25
ATOM   1329 2HZ  LYS A  87      10.833  -5.268  -3.151  1.00  2.32
ATOM   1330 3HZ  LYS A  87       9.835  -4.123  -2.394  1.00 75.32
ATOM   1331  C   LYS A  87       6.996  -5.336  -0.439  1.00 64.02
ATOM   1332  O   LYS A  87       7.365  -4.213  -0.802  1.00 11.40
ATOM   1333  N   TYR A  88       7.598  -6.030   0.479  1.00 62.11
ATOM   1334  H   TYR A  88       7.253  -6.913   0.741  1.00 21.41
ATOM   1335  CA  TYR A  88       8.789  -5.594   1.141  1.00 32.05
ATOM   1336  HA  TYR A  88       9.144  -4.685   0.682  1.00 72.40
ATOM   1337  CB  TYR A  88       8.480  -5.351   2.588  1.00 54.34
ATOM   1338 1HB  TYR A  88       7.492  -4.920   2.614  1.00 62.22
ATOM   1339 2HB  TYR A  88       8.453  -6.308   3.091  1.00  1.14
ATOM   1340  CG  TYR A  88       9.461  -4.434   3.288  1.00 32.34
ATOM   1341  CD1 TYR A  88       9.245  -3.058   3.346  1.00 41.33
ATOM   1342  HD1 TYR A  88       8.363  -2.644   2.878  1.00 14.25
ATOM   1343  CE1 TYR A  88      10.141  -2.225   3.988  1.00 43.33
ATOM   1344  HE1 TYR A  88       9.964  -1.160   4.026  1.00 40.41
ATOM   1345  CZ  TYR A  88      11.256  -2.769   4.578  1.00 40.15
ATOM   1346  CE2 TYR A  88      11.478  -4.111   4.527  1.00  3.31
ATOM   1347  HE2 TYR A  88      12.355  -4.536   4.992  1.00 11.22
ATOM   1348  CD2 TYR A  88      10.586  -4.931   3.888  1.00 32.31
ATOM   1349  HD2 TYR A  88      10.767  -5.996   3.849  1.00 41.50
ATOM   1350  OH  TYR A  88      12.166  -1.974   5.205  1.00 41.42
ATOM   1351  HH  TYR A  88      12.988  -2.128   4.731  1.00 14.44
ATOM   1352  C   TYR A  88       9.816  -6.699   0.980  1.00 72.51
ATOM   1353  O   TYR A  88       9.432  -7.840   0.736  1.00  3.10
ATOM   1354  N   GLY A  89      11.077  -6.385   1.077  1.00  1.34
ATOM   1355  H   GLY A  89      11.371  -5.467   1.311  1.00 21.55
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ATOM   1356  CA  GLY A  89      12.084  -7.378   0.870  1.00 33.24
ATOM   1357 1HA  GLY A  89      11.612  -8.265   0.472  1.00 10.21
ATOM   1358 2HA  GLY A  89      12.779  -7.003   0.135  1.00 45.14
ATOM   1359  C   GLY A  89      12.864  -7.773   2.120  1.00 71.41
ATOM   1360  O   GLY A  89      12.419  -8.613   2.894  1.00 31.12
ATOM   1361  N   SER A  90      13.983  -7.107   2.342  1.00 34.43
ATOM   1362  H   SER A  90      14.162  -6.264   1.876  1.00  0.12
ATOM   1363  CA  SER A  90      14.983  -7.542   3.309  1.00 22.22
ATOM   1364  HA  SER A  90      15.148  -8.585   3.085  1.00 11.11
ATOM   1365  CB  SER A  90      16.323  -6.830   3.031  1.00 31.02
ATOM   1366 1HB  SER A  90      16.989  -6.982   3.868  1.00 12.54
ATOM   1367 2HB  SER A  90      16.771  -7.244   2.140  1.00 34.51
ATOM   1368  OG  SER A  90      16.142  -5.426   2.844  1.00 44.21
ATOM   1369  HG  SER A  90      16.744  -5.138   2.131  1.00 45.25
ATOM   1370  C   SER A  90      14.588  -7.494   4.804  1.00 13.12
ATOM   1371  O   SER A  90      14.917  -8.412   5.550  1.00  2.41
ATOM   1372  N   GLN A  91      13.904  -6.456   5.247  1.00 24.42
ATOM   1373  H   GLN A  91      13.612  -5.771   4.610  1.00 30.00
ATOM   1374  CA  GLN A  91      13.624  -6.337   6.689  1.00 20.11
ATOM   1375  HA  GLN A  91      14.259  -7.077   7.156  1.00 51.25
ATOM   1376  CB  GLN A  91      14.054  -4.974   7.223  1.00 41.55
ATOM   1377 1HB  GLN A  91      13.601  -4.194   6.628  1.00 62.53
ATOM   1378 2HB  GLN A  91      13.721  -4.876   8.244  1.00  2.55
ATOM   1379  CG  GLN A  91      15.562  -4.786   7.195  1.00  0.24
ATOM   1380 1HG  GLN A  91      16.014  -5.520   7.846  1.00 62.00
ATOM   1381 2HG  GLN A  91      15.909  -4.946   6.184  1.00 32.04
ATOM   1382  CD  GLN A  91      15.997  -3.419   7.647  1.00 31.43
ATOM   1383  OE1 GLN A  91      16.140  -2.513   6.847  1.00 24.11
ATOM   1384  NE2 GLN A  91      16.206  -3.259   8.928  1.00 43.13
ATOM   1385 2HE2 GLN A  91      16.070  -4.027   9.521  1.00 34.31
ATOM   1386 1HE2 GLN A  91      16.479  -2.370   9.230  1.00  2.01
ATOM   1387  C   GLN A  91      12.198  -6.696   7.105  1.00  1.45
ATOM   1388  O   GLN A  91      11.909  -6.807   8.291  1.00 73.35
ATOM   1389  N   GLY A  92      11.336  -6.910   6.140  1.00 13.11
ATOM   1390  H   GLY A  92      11.659  -6.862   5.219  1.00 63.14
ATOM   1391  CA  GLY A  92       9.947  -7.237   6.432  1.00  4.33
ATOM   1392 1HA  GLY A  92       9.515  -7.675   5.543  1.00 61.32
ATOM   1393 2HA  GLY A  92       9.906  -7.980   7.214  1.00 40.03
ATOM   1394  C   GLY A  92       9.083  -6.021   6.834  1.00 71.52
ATOM   1395  O   GLY A  92       9.350  -5.337   7.813  1.00 14.45
ATOM   1396  N   ASN A  93       8.027  -5.778   6.069  1.00 72.42
ATOM   1397  H   ASN A  93       7.864  -6.371   5.306  1.00 33.10
ATOM   1398  CA  ASN A  93       7.130  -4.620   6.294  1.00 33.24
ATOM   1399  HA  ASN A  93       7.767  -3.795   6.575  1.00 43.31
ATOM   1400  CB  ASN A  93       6.342  -4.188   5.043  1.00 44.11
ATOM   1401 1HB  ASN A  93       5.907  -3.220   5.242  1.00 71.21
ATOM   1402 2HB  ASN A  93       7.024  -4.095   4.213  1.00 11.41
ATOM   1403  CG  ASN A  93       5.211  -5.136   4.671  1.00 30.43
ATOM   1404  OD1 ASN A  93       4.118  -5.005   5.156  1.00 32.45
ATOM   1405  ND2 ASN A  93       5.445  -6.061   3.800  1.00 40.45
ATOM   1406 2HD2 ASN A  93       6.325  -6.162   3.377  1.00 71.21
ATOM   1407 1HD2 ASN A  93       4.705  -6.661   3.571  1.00 13.20
ATOM   1408  C   ASN A  93       6.126  -4.817   7.418  1.00 12.45
ATOM   1409  O   ASN A  93       5.414  -3.893   7.718  1.00 74.23
ATOM   1410  N   SER A  94       6.035  -6.004   7.993  1.00 61.01
ATOM   1411  H   SER A  94       6.729  -6.679   7.828  1.00 52.23
ATOM   1412  CA  SER A  94       4.957  -6.369   8.945  1.00 11.43
ATOM   1413  HA  SER A  94       4.063  -6.502   8.353  1.00 71.04
ATOM   1414  CB  SER A  94       5.294  -7.717   9.566  1.00 44.10
ATOM   1415 1HB  SER A  94       4.720  -7.852  10.471  1.00 13.14
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ATOM   1416 2HB  SER A  94       5.066  -8.507   8.867  1.00 22.24
ATOM   1417  OG  SER A  94       6.679  -7.773   9.885  1.00 44.23
ATOM   1418  HG  SER A  94       6.798  -8.149  10.762  1.00 10.53
ATOM   1419  C   SER A  94       4.627  -5.296  10.035  1.00 10.21
ATOM   1420  O   SER A  94       3.461  -5.072  10.352  1.00 60.34
ATOM   1421  N   ILE A  95       5.634  -4.632  10.574  1.00 11.05
ATOM   1422  H   ILE A  95       6.545  -4.878  10.308  1.00 44.33
ATOM   1423  CA  ILE A  95       5.394  -3.570  11.562  1.00 52.51
ATOM   1424  HA  ILE A  95       4.577  -3.901  12.188  1.00 12.40
ATOM   1425  CB  ILE A  95       6.661  -3.272  12.466  1.00  0.23
ATOM   1426  HB  ILE A  95       7.487  -3.066  11.801  1.00 74.32
ATOM   1427  CG2 ILE A  95       6.455  -2.027  13.330  1.00 12.21
ATOM   1428 1HG2 ILE A  95       6.282  -1.173  12.692  1.00 52.35
ATOM   1429 2HG2 ILE A  95       7.334  -1.855  13.934  1.00 21.04
ATOM   1430 3HG2 ILE A  95       5.600  -2.173  13.973  1.00 30.31
ATOM   1431  CG1 ILE A  95       7.045  -4.475  13.375  1.00 35.53
ATOM   1432 1HG1 ILE A  95       7.770  -4.144  14.103  1.00 21.52
ATOM   1433 2HG1 ILE A  95       6.158  -4.804  13.897  1.00 22.04
ATOM   1434  CD1 ILE A  95       7.643  -5.679  12.664  1.00 11.24
ATOM   1435 1HD1 ILE A  95       6.934  -6.056  11.941  1.00 44.51
ATOM   1436 2HD1 ILE A  95       7.863  -6.449  13.388  1.00 13.12
ATOM   1437 3HD1 ILE A  95       8.552  -5.386  12.160  1.00 13.40
ATOM   1438  C   ILE A  95       4.943  -2.277  10.836  1.00 64.01
ATOM   1439  O   ILE A  95       4.027  -1.569  11.266  1.00  0.40
ATOM   1440  N   ARG A  96       5.568  -2.032   9.710  1.00 13.43
ATOM   1441  H   ARG A  96       6.205  -2.698   9.378  1.00 60.23
ATOM   1442  CA  ARG A  96       5.340  -0.857   8.888  1.00 25.30
ATOM   1443  HA  ARG A  96       5.483   0.015   9.506  1.00 52.21
ATOM   1444  CB  ARG A  96       6.386  -0.825   7.789  1.00 61.25
ATOM   1445 1HB  ARG A  96       6.434  -1.802   7.329  1.00 62.31
ATOM   1446 2HB  ARG A  96       6.089  -0.099   7.045  1.00 24.34
ATOM   1447  CG  ARG A  96       7.763  -0.462   8.289  1.00 53.31
ATOM   1448 1HG  ARG A  96       7.960  -1.019   9.193  1.00  0.45
ATOM   1449 2HG  ARG A  96       8.493  -0.712   7.537  1.00 24.23
ATOM   1450  CD  ARG A  96       7.817   1.021   8.589  1.00 74.14
ATOM   1451 1HD  ARG A  96       7.082   1.271   9.339  1.00 10.30
ATOM   1452 2HD  ARG A  96       8.803   1.276   8.949  1.00 72.31
ATOM   1453  NE  ARG A  96       7.556   1.777   7.371  1.00 13.42
ATOM   1454  HE  ARG A  96       7.989   1.403   6.557  1.00 75.12
ATOM   1455  CZ  ARG A  96       6.846   2.893   7.244  1.00 62.04
ATOM   1456  NH1 ARG A  96       6.242   3.446   8.294  1.00 44.04
ATOM   1457 1HH1 ARG A  96       6.303   3.040   9.205  1.00 55.54
ATOM   1458 2HH1 ARG A  96       5.722   4.307   8.217  1.00 41.54
ATOM   1459  NH2 ARG A  96       6.755   3.447   6.040  1.00 32.14
ATOM   1460 1HH2 ARG A  96       7.238   2.983   5.280  1.00 53.43
ATOM   1461 2HH2 ARG A  96       6.260   4.291   5.837  1.00 65.43
ATOM   1462  C   ARG A  96       3.938  -0.812   8.297  1.00 40.12
ATOM   1463  O   ARG A  96       3.280   0.236   8.330  1.00 35.55
ATOM   1464  N   SER A  97       3.482  -1.931   7.778  1.00 40.13
ATOM   1465  H   SER A  97       4.036  -2.744   7.791  1.00 20.41
ATOM   1466  CA  SER A  97       2.179  -2.022   7.173  1.00 71.52
ATOM   1467  HA  SER A  97       2.138  -1.270   6.400  1.00 72.33
ATOM   1468  CB  SER A  97       2.013  -3.364   6.516  1.00 73.33
ATOM   1469 1HB  SER A  97       0.964  -3.547   6.327  1.00 22.53
ATOM   1470 2HB  SER A  97       2.556  -3.381   5.582  1.00 44.02
ATOM   1471  OG  SER A  97       2.508  -4.391   7.345  1.00 62.13
ATOM   1472  HG  SER A  97       3.122  -4.880   6.783  1.00 42.23
ATOM   1473  C   SER A  97       1.064  -1.755   8.158  1.00 10.53
ATOM   1474  O   SER A  97       0.093  -1.100   7.816  1.00 45.04
ATOM   1475  N   SER A  98       1.228  -2.222   9.389  1.00 32.23
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ATOM   1476  H   SER A  98       2.033  -2.744   9.590  1.00 30.43
ATOM   1477  CA  SER A  98       0.238  -2.015  10.425  1.00 51.50
ATOM   1478  HA  SER A  98      -0.688  -2.454  10.087  1.00 13.00
ATOM   1479  CB  SER A  98       0.681  -2.707  11.729  1.00 52.11
ATOM   1480 1HB  SER A  98       0.879  -3.749  11.527  1.00 25.44
ATOM   1481 2HB  SER A  98       1.583  -2.236  12.090  1.00 72.03
ATOM   1482  OG  SER A  98      -0.317  -2.625  12.736  1.00 51.24
ATOM   1483  HG  SER A  98      -0.986  -1.986  12.472  1.00 62.21
ATOM   1484  C   SER A  98       0.010  -0.505  10.640  1.00 23.34
ATOM   1485  O   SER A  98      -1.131  -0.050  10.776  1.00 55.24
ATOM   1486  N   ALA A  99       1.096   0.254  10.635  1.00 11.45
ATOM   1487  H   ALA A  99       1.968  -0.180  10.531  1.00 72.12
ATOM   1488  CA  ALA A  99       1.022   1.697  10.779  1.00 10.12
ATOM   1489  HA  ALA A  99       0.374   1.911  11.617  1.00 54.02
ATOM   1490  CB  ALA A  99       2.399   2.277  11.065  1.00 44.14
ATOM   1491 1HB  ALA A  99       2.317   3.342  11.218  1.00 70.10
ATOM   1492 2HB  ALA A  99       3.050   2.082  10.224  1.00 32.12
ATOM   1493 3HB  ALA A  99       2.810   1.814  11.952  1.00 63.04
ATOM   1494  C   ALA A  99       0.414   2.333   9.529  1.00 72.53
ATOM   1495  O   ALA A  99      -0.458   3.194   9.622  1.00 22.04
ATOM   1496  N   LEU A 100       0.877   1.879   8.363  1.00  2.44
ATOM   1497  H   LEU A 100       1.579   1.195   8.354  1.00 51.15
ATOM   1498  CA  LEU A 100       0.421   2.368   7.075  1.00 13.34
ATOM   1499  HA  LEU A 100       0.680   3.411   6.989  1.00 13.13
ATOM   1500  CB  LEU A 100       1.123   1.596   5.970  1.00 62.43
ATOM   1501 1HB  LEU A 100       2.165   1.510   6.232  1.00 33.11
ATOM   1502 2HB  LEU A 100       0.711   0.597   5.981  1.00 63.42
ATOM   1503  CG  LEU A 100       0.977   2.146   4.550  1.00 72.20
ATOM   1504  HG  LEU A 100      -0.073   2.208   4.306  1.00 54.34
ATOM   1505  CD1 LEU A 100       1.565   3.542   4.452  1.00 50.24
ATOM   1506 1HD1 LEU A 100       1.025   4.208   5.107  1.00 51.22
ATOM   1507 2HD1 LEU A 100       1.495   3.898   3.434  1.00 20.25
ATOM   1508 3HD1 LEU A 100       2.601   3.509   4.754  1.00 63.31
ATOM   1509  CD2 LEU A 100       1.645   1.218   3.555  1.00 50.41
ATOM   1510 1HD2 LEU A 100       1.540   1.617   2.557  1.00 51.21
ATOM   1511 2HD2 LEU A 100       1.176   0.246   3.608  1.00 31.30
ATOM   1512 3HD2 LEU A 100       2.692   1.125   3.802  1.00  1.13
ATOM   1513  C   LEU A 100      -1.084   2.193   6.935  1.00 24.14
ATOM   1514  O   LEU A 100      -1.783   3.117   6.544  1.00 41.01
ATOM   1515  N   ILE A 101      -1.567   1.016   7.319  1.00  0.43
ATOM   1516  H   ILE A 101      -0.915   0.349   7.636  1.00  4.04
ATOM   1517  CA  ILE A 101      -2.997   0.689   7.244  1.00 34.34
ATOM   1518  HA  ILE A 101      -3.300   0.787   6.212  1.00  3.52
ATOM   1519  CB  ILE A 101      -3.298  -0.782   7.726  1.00 64.50
ATOM   1520  HB  ILE A 101      -2.836  -0.894   8.697  1.00 73.45
ATOM   1521  CG2 ILE A 101      -4.798  -1.031   7.915  1.00 63.34
ATOM   1522 1HG2 ILE A 101      -5.308  -0.871   6.976  1.00  2.11
ATOM   1523 2HG2 ILE A 101      -5.184  -0.347   8.656  1.00 44.55
ATOM   1524 3HG2 ILE A 101      -4.958  -2.047   8.244  1.00 20.41
ATOM   1525  CG1 ILE A 101      -2.692  -1.840   6.770  1.00  3.42
ATOM   1526 1HG1 ILE A 101      -1.629  -1.663   6.683  1.00 34.13
ATOM   1527 2HG1 ILE A 101      -2.846  -2.820   7.197  1.00  4.30
ATOM   1528  CD1 ILE A 101      -3.269  -1.844   5.363  1.00 34.13
ATOM   1529 1HD1 ILE A 101      -4.332  -2.034   5.414  1.00 20.24
ATOM   1530 2HD1 ILE A 101      -2.809  -2.639   4.794  1.00 63.11
ATOM   1531 3HD1 ILE A 101      -3.091  -0.896   4.877  1.00 65.15
ATOM   1532  C   ILE A 101      -3.810   1.678   8.077  1.00 44.04
ATOM   1533  O   ILE A 101      -4.815   2.193   7.597  1.00 11.24
ATOM   1534  N   GLY A 102      -3.315   1.995   9.278  1.00  0.41
ATOM   1535  H   GLY A 102      -2.471   1.589   9.575  1.00 43.42
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ATOM   1536  CA  GLY A 102      -4.003   2.937  10.161  1.00 31.42
ATOM   1537 1HA  GLY A 102      -4.985   2.561  10.382  1.00 75.43
ATOM   1538 2HA  GLY A 102      -3.445   3.030  11.081  1.00 34.34
ATOM   1539  C   GLY A 102      -4.146   4.308   9.538  1.00 34.02
ATOM   1540  O   GLY A 102      -5.174   4.972   9.657  1.00 73.13
ATOM   1541  N   ILE A 103      -3.125   4.716   8.854  1.00 22.35
ATOM   1542  H   ILE A 103      -2.343   4.125   8.795  1.00 73.04
ATOM   1543  CA  ILE A 103      -3.111   5.995   8.194  1.00 63.22
ATOM   1544  HA  ILE A 103      -3.450   6.718   8.918  1.00 50.10
ATOM   1545  CB  ILE A 103      -1.674   6.345   7.758  1.00 42.34
ATOM   1546  HB  ILE A 103      -1.308   5.550   7.126  1.00 34.04
ATOM   1547  CG2 ILE A 103      -1.630   7.656   6.959  1.00 35.33
ATOM   1548 1HG2 ILE A 103      -2.236   7.551   6.069  1.00 24.33
ATOM   1549 2HG2 ILE A 103      -0.612   7.871   6.674  1.00 33.52
ATOM   1550 3HG2 ILE A 103      -2.017   8.462   7.564  1.00  2.42
ATOM   1551  CG1 ILE A 103      -0.783   6.427   8.998  1.00 34.43
ATOM   1552 1HG1 ILE A 103      -1.008   7.337   9.532  1.00 62.31
ATOM   1553 2HG1 ILE A 103      -0.995   5.580   9.636  1.00  2.33
ATOM   1554  CD1 ILE A 103       0.684   6.430   8.698  1.00 30.12
ATOM   1555 1HD1 ILE A 103       0.913   5.504   8.193  1.00 61.54
ATOM   1556 2HD1 ILE A 103       1.227   6.482   9.629  1.00 64.22
ATOM   1557 3HD1 ILE A 103       0.927   7.268   8.063  1.00  3.55
ATOM   1558  C   ILE A 103      -4.064   5.994   6.999  1.00 23.45
ATOM   1559  O   ILE A 103      -4.786   6.973   6.755  1.00 31.23
ATOM   1560  N   ILE A 104      -4.084   4.885   6.294  1.00  3.24
ATOM   1561  H   ILE A 104      -3.533   4.127   6.593  1.00 51.53
ATOM   1562  CA  ILE A 104      -4.907   4.743   5.123  1.00 21.44
ATOM   1563  HA  ILE A 104      -4.710   5.585   4.479  1.00 12.20
ATOM   1564  CB  ILE A 104      -4.551   3.436   4.351  1.00 34.42
ATOM   1565  HB  ILE A 104      -4.600   2.609   5.045  1.00 13.11
ATOM   1566  CG2 ILE A 104      -5.549   3.166   3.230  1.00  5.31
ATOM   1567 1HG2 ILE A 104      -5.514   3.972   2.513  1.00 15.45
ATOM   1568 2HG2 ILE A 104      -6.544   3.096   3.645  1.00 53.35
ATOM   1569 3HG2 ILE A 104      -5.290   2.237   2.747  1.00 13.23
ATOM   1570  CG1 ILE A 104      -3.123   3.517   3.787  1.00 73.22
ATOM   1571 1HG1 ILE A 104      -3.111   4.258   3.001  1.00 22.43
ATOM   1572 2HG1 ILE A 104      -2.433   3.821   4.561  1.00 43.30
ATOM   1573  CD1 ILE A 104      -2.624   2.215   3.184  1.00 75.22
ATOM   1574 1HD1 ILE A 104      -3.289   1.914   2.387  1.00  0.13
ATOM   1575 2HD1 ILE A 104      -2.598   1.448   3.944  1.00 43.24
ATOM   1576 3HD1 ILE A 104      -1.632   2.362   2.785  1.00 62.24
ATOM   1577  C   ILE A 104      -6.385   4.748   5.509  1.00 73.23
ATOM   1578  O   ILE A 104      -7.161   5.532   4.966  1.00 40.03
ATOM   1579  N   GLU A 105      -6.743   3.935   6.492  1.00 41.34
ATOM   1580  H   GLU A 105      -6.061   3.393   6.952  1.00  3.14
ATOM   1581  CA  GLU A 105      -8.127   3.821   6.923  1.00 63.44
ATOM   1582  HA  GLU A 105      -8.715   3.645   6.034  1.00  5.35
ATOM   1583  CB  GLU A 105      -8.302   2.614   7.880  1.00 30.44
ATOM   1584 1HB  GLU A 105      -9.348   2.531   8.138  1.00 64.32
ATOM   1585 2HB  GLU A 105      -8.004   1.717   7.358  1.00 72.31
ATOM   1586  CG  GLU A 105      -7.511   2.697   9.184  1.00 44.13
ATOM   1587 1HG  GLU A 105      -6.981   1.789   9.420  1.00 54.43
ATOM   1588 2HG  GLU A 105      -6.754   3.434   8.958  1.00 11.54
ATOM   1589  CD  GLU A 105      -8.301   3.255  10.361  1.00 25.13
ATOM   1590  OE1 GLU A 105      -9.542   3.371  10.268  1.00 71.34
ATOM   1591  OE2 GLU A 105      -7.691   3.609  11.386  1.00 21.14
ATOM   1592  C   GLU A 105      -8.603   5.123   7.540  1.00 71.13
ATOM   1593  O   GLU A 105      -9.670   5.628   7.187  1.00 24.25
ATOM   1594  N   GLY A 106      -7.756   5.699   8.380  1.00 22.44
ATOM   1595  H   GLY A 106      -6.898   5.244   8.534  1.00 63.13
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ATOM   1596  CA  GLY A 106      -8.087   6.909   9.095  1.00 51.30
ATOM   1597 1HA  GLY A 106      -8.951   6.724   9.717  1.00 22.44
ATOM   1598 2HA  GLY A 106      -7.254   7.176   9.729  1.00 62.42
ATOM   1599  C   GLY A 106      -8.390   8.067   8.180  1.00 11.22
ATOM   1600  O   GLY A 106      -9.391   8.754   8.360  1.00 41.40
ATOM   1601  N   ASN A 107      -7.580   8.236   7.149  1.00 65.35
ATOM   1602  H   ASN A 107      -6.841   7.600   7.020  1.00 64.22
ATOM   1603  CA  ASN A 107      -7.759   9.344   6.204  1.00  3.53
ATOM   1604  HA  ASN A 107      -7.791  10.261   6.773  1.00  5.23
ATOM   1605  CB  ASN A 107      -6.579   9.399   5.217  1.00 12.04
ATOM   1606 1HB  ASN A 107      -5.659   9.494   5.776  1.00 74.10
ATOM   1607 2HB  ASN A 107      -6.555   8.476   4.658  1.00 42.23
ATOM   1608  CG  ASN A 107      -6.650  10.561   4.230  1.00 64.34
ATOM   1609  OD1 ASN A 107      -6.196  11.665   4.525  1.00 52.13
ATOM   1610  ND2 ASN A 107      -7.158  10.315   3.042  1.00 12.14
ATOM   1611 2HD2 ASN A 107      -7.478   9.413   2.836  1.00 65.32
ATOM   1612 1HD2 ASN A 107      -7.175  11.052   2.393  1.00 61.42
ATOM   1613  C   ASN A 107      -9.080   9.186   5.461  1.00 31.44
ATOM   1614  O   ASN A 107      -9.789  10.154   5.205  1.00 61.51
ATOM   1615  N   ILE A 108      -9.411   7.950   5.165  1.00 24.52
ATOM   1616  H   ILE A 108      -8.799   7.226   5.425  1.00 53.13
ATOM   1617  CA  ILE A 108     -10.652   7.608   4.499  1.00 64.51
ATOM   1618  HA  ILE A 108     -10.754   8.238   3.631  1.00 42.54
ATOM   1619  CB  ILE A 108     -10.642   6.131   4.047  1.00 74.43
ATOM   1620  HB  ILE A 108     -10.415   5.520   4.909  1.00 42.22
ATOM   1621  CG2 ILE A 108     -12.007   5.697   3.505  1.00 63.43
ATOM   1622 1HG2 ILE A 108     -11.959   4.662   3.196  1.00 53.33
ATOM   1623 2HG2 ILE A 108     -12.268   6.315   2.657  1.00 30.54
ATOM   1624 3HG2 ILE A 108     -12.754   5.810   4.276  1.00  4.44
ATOM   1625  CG1 ILE A 108      -9.554   5.920   3.006  1.00 52.41
ATOM   1626 1HG1 ILE A 108      -9.887   6.359   2.076  1.00 41.12
ATOM   1627 2HG1 ILE A 108      -8.638   6.393   3.330  1.00 75.41
ATOM   1628  CD1 ILE A 108      -9.273   4.484   2.720  1.00 24.43
ATOM   1629 1HD1 ILE A 108      -8.981   3.990   3.637  1.00 50.21
ATOM   1630 2HD1 ILE A 108      -8.463   4.406   2.011  1.00  4.22
ATOM   1631 3HD1 ILE A 108     -10.156   4.006   2.325  1.00 41.22
ATOM   1632  C   ILE A 108     -11.849   7.874   5.398  1.00 24.23
ATOM   1633  O   ILE A 108     -12.822   8.507   4.961  1.00 63.30
ATOM   1634  N   ARG A 109     -11.775   7.404   6.651  1.00  0.34
ATOM   1635  H   ARG A 109     -10.959   6.935   6.941  1.00 11.21
ATOM   1636  CA  ARG A 109     -12.891   7.567   7.569  1.00 33.20
ATOM   1637  HA  ARG A 109     -13.761   7.091   7.141  1.00 51.22
ATOM   1638  CB  ARG A 109     -12.635   6.996   8.944  1.00 55.15
ATOM   1639 1HB  ARG A 109     -11.939   7.649   9.448  1.00 13.34
ATOM   1640 2HB  ARG A 109     -13.566   7.023   9.491  1.00 22.11
ATOM   1641  CG  ARG A 109     -12.072   5.603   9.045  1.00 44.41
ATOM   1642 1HG  ARG A 109     -12.607   4.902   8.423  1.00 50.24
ATOM   1643 2HG  ARG A 109     -11.040   5.630   8.729  1.00 11.21
ATOM   1644  CD  ARG A 109     -12.107   5.175  10.497  1.00 14.01
ATOM   1645 1HD  ARG A 109     -13.108   4.851  10.742  1.00 72.42
ATOM   1646 2HD  ARG A 109     -11.415   4.359  10.646  1.00 55.10
ATOM   1647  NE  ARG A 109     -11.729   6.295  11.375  1.00 71.13
ATOM   1648  HE  ARG A 109     -12.379   7.042  11.399  1.00 64.11
ATOM   1649  CZ  ARG A 109     -10.625   6.377  12.096  1.00  5.21
ATOM   1650  NH1 ARG A 109      -9.707   5.416  12.039  1.00 71.23
ATOM   1651 1HH1 ARG A 109      -9.799   4.593  11.447  1.00  1.33
ATOM   1652 2HH1 ARG A 109      -8.833   5.379  12.526  1.00 74.21
ATOM   1653  NH2 ARG A 109     -10.422   7.467  12.821  1.00 51.54
ATOM   1654 1HH2 ARG A 109     -11.128   8.195  12.774  1.00 53.24
ATOM   1655 2HH2 ARG A 109      -9.622   7.622  13.399  1.00 63.42
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ATOM   1656  C   ARG A 109     -13.169   9.025   7.769  1.00 10.21
ATOM   1657  O   ARG A 109     -14.261   9.448   7.595  1.00 33.50
ATOM   1658  N   TYR A 110     -12.127   9.793   8.078  1.00  0.52
ATOM   1659  H   TYR A 110     -11.239   9.378   8.152  1.00 14.15
ATOM   1660  CA  TYR A 110     -12.257  11.242   8.319  1.00 35.04
ATOM   1661  HA  TYR A 110     -12.994  11.325   9.108  1.00 40.33
ATOM   1662  CB  TYR A 110     -10.949  11.921   8.776  1.00 75.33
ATOM   1663 1HB  TYR A 110     -10.138  11.558   8.161  1.00 54.41
ATOM   1664 2HB  TYR A 110     -11.046  12.985   8.625  1.00 61.24
ATOM   1665  CG  TYR A 110     -10.551  11.688  10.223  1.00 24.04
ATOM   1666  CD1 TYR A 110     -11.015  12.528  11.224  1.00 74.52
ATOM   1667  HD1 TYR A 110     -11.677  13.340  10.962  1.00 11.10
ATOM   1668  CE1 TYR A 110     -10.650  12.337  12.542  1.00 42.01
ATOM   1669  HE1 TYR A 110     -11.025  13.004  13.306  1.00  3.03
ATOM   1670  CZ  TYR A 110      -9.812  11.300  12.873  1.00 40.32
ATOM   1671  CE2 TYR A 110      -9.336  10.457  11.898  1.00 13.34
ATOM   1672  HE2 TYR A 110      -8.678   9.641  12.157  1.00  5.43
ATOM   1673  CD2 TYR A 110      -9.704  10.655  10.585  1.00 12.44
ATOM   1674  HD2 TYR A 110      -9.330   9.993   9.819  1.00 12.35
ATOM   1675  OH  TYR A 110      -9.453  11.102  14.188  1.00 32.54
ATOM   1676  HH  TYR A 110     -10.239  11.242  14.723  1.00 34.32
ATOM   1677  C   TYR A 110     -12.859  11.984   7.151  1.00 41.21
ATOM   1678  O   TYR A 110     -13.574  12.955   7.349  1.00 63.33
ATOM   1679  N   ALA A 111     -12.530  11.556   5.940  1.00 64.52
ATOM   1680  H   ALA A 111     -11.988  10.742   5.849  1.00 42.51
ATOM   1681  CA  ALA A 111     -13.025  12.218   4.755  1.00 21.21
ATOM   1682  HA  ALA A 111     -12.720  13.253   4.799  1.00 43.53
ATOM   1683  CB  ALA A 111     -12.438  11.584   3.500  1.00 33.32
ATOM   1684 1HB  ALA A 111     -11.360  11.641   3.540  1.00 52.33
ATOM   1685 2HB  ALA A 111     -12.794  12.111   2.628  1.00 71.34
ATOM   1686 3HB  ALA A 111     -12.740  10.550   3.445  1.00 61.24
ATOM   1687  C   ALA A 111     -14.544  12.154   4.730  1.00 50.41
ATOM   1688  O   ALA A 111     -15.214  13.131   4.414  1.00 51.40
ATOM   1689  N   ASN A 112     -15.072  10.985   5.013  1.00 62.35
ATOM   1690  H   ASN A 112     -14.476  10.227   5.201  1.00 11.03
ATOM   1691  CA  ASN A 112     -16.503  10.817   5.096  1.00 73.35
ATOM   1692  HA  ASN A 112     -16.937  11.435   4.326  1.00 54.44
ATOM   1693  CB  ASN A 112     -16.899   9.352   4.817  1.00  4.34
ATOM   1694 1HB  ASN A 112     -16.505   9.061   3.855  1.00 54.31
ATOM   1695 2HB  ASN A 112     -16.457   8.727   5.578  1.00 31.42
ATOM   1696  CG  ASN A 112     -18.417   9.096   4.802  1.00 73.14
ATOM   1697  OD1 ASN A 112     -18.872   8.012   5.133  1.00 23.43
ATOM   1698  ND2 ASN A 112     -19.204  10.072   4.400  1.00 55.23
ATOM   1699 2HD2 ASN A 112     -18.805  10.926   4.131  1.00 61.30
ATOM   1700 1HD2 ASN A 112     -20.166   9.892   4.402  1.00  3.22
ATOM   1701  C   ASN A 112     -17.064  11.291   6.447  1.00 24.33
ATOM   1702  O   ASN A 112     -18.107  11.944   6.501  1.00 74.03
ATOM   1703  N   THR A 113     -16.349  10.979   7.524  1.00  1.52
ATOM   1704  H   THR A 113     -15.466  10.561   7.414  1.00 22.45
ATOM   1705  CA  THR A 113     -16.827  11.201   8.883  1.00 31.12
ATOM   1706  HA  THR A 113     -17.604  11.949   8.841  1.00 42.21
ATOM   1707  CB  THR A 113     -17.493   9.886   9.446  1.00 72.54
ATOM   1708  HB  THR A 113     -17.803  10.046  10.467  1.00 34.24
ATOM   1709  OG1 THR A 113     -16.571   8.759   9.383  1.00 23.20
ATOM   1710  HG1 THR A 113     -16.212   8.536  10.251  1.00 33.03
ATOM   1711  CG2 THR A 113     -18.674   9.525   8.623  1.00 22.31
ATOM   1712 1HG2 THR A 113     -19.118   8.611   8.986  1.00 15.43
ATOM   1713 2HG2 THR A 113     -18.243   9.388   7.640  1.00 53.43
ATOM   1714 3HG2 THR A 113     -19.367  10.351   8.613  1.00 32.40
ATOM   1715  C   THR A 113     -15.733  11.670   9.878  1.00 71.50
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ATOM   1716  O   THR A 113     -15.577  12.871  10.138  1.00 20.23
ATOM   1717  N   HIS A 114     -14.991  10.693  10.394  1.00 33.35
ATOM   1718  H   HIS A 114     -15.074   9.786  10.019  1.00  4.43
ATOM   1719  CA  HIS A 114     -14.023  10.789  11.470  1.00 13.52
ATOM   1720  HA  HIS A 114     -13.217  11.446  11.179  1.00 73.20
ATOM   1721  CB  HIS A 114     -14.683  11.279  12.778  1.00 43.04
ATOM   1722 1HB  HIS A 114     -15.755  11.283  12.648  1.00 61.33
ATOM   1723 2HB  HIS A 114     -14.429  10.594  13.574  1.00 63.41
ATOM   1724  CG  HIS A 114     -14.273  12.660  13.198  1.00 55.34
ATOM   1725  ND1 HIS A 114     -14.517  13.786  12.458  1.00 73.31
ATOM   1726  CD2 HIS A 114     -13.613  13.078  14.303  1.00 22.31
ATOM   1727  HD1 HIS A 114     -14.962  13.780  11.576  1.00 31.04
ATOM   1728  CE1 HIS A 114     -14.015  14.834  13.109  1.00 21.51
ATOM   1729  NE2 HIS A 114     -13.452  14.461  14.242  1.00 23.45
ATOM   1730  HD2 HIS A 114     -13.260  12.451  15.109  1.00 35.43
ATOM   1731  HE1 HIS A 114     -14.066  15.853  12.756  1.00  2.23
ATOM   1732  C   HIS A 114     -13.506   9.384  11.674  1.00 12.14
ATOM   1733  O   HIS A 114     -12.350   9.195  12.098  1.00 75.05
TER    1734      HIS A 114
ENDMDL
MODEL       11
ATOM      1  N   MET A   1     -12.814 -16.889  -2.978  1.00 53.13
ATOM      2  CA  MET A   1     -12.940 -16.221  -1.679  1.00 52.43
ATOM      3  HA  MET A   1     -13.869 -15.669  -1.653  1.00 20.03
ATOM      4  CB  MET A   1     -12.904 -17.268  -0.552  1.00 73.41
ATOM      5 1HB  MET A   1     -13.725 -17.956  -0.695  1.00 34.22
ATOM      6 2HB  MET A   1     -11.979 -17.820  -0.629  1.00  1.31
ATOM      7  CG  MET A   1     -13.007 -16.705   0.863  1.00 32.53
ATOM      8 1HG  MET A   1     -12.165 -16.053   1.042  1.00 51.11
ATOM      9 2HG  MET A   1     -13.923 -16.139   0.949  1.00 21.32
ATOM     10  SD  MET A   1     -13.008 -18.002   2.103  1.00 30.25
ATOM     11  CE  MET A   1     -13.081 -17.034   3.614  1.00 52.21
ATOM     12 1HE  MET A   1     -13.080 -17.697   4.466  1.00 74.23
ATOM     13 2HE  MET A   1     -13.984 -16.442   3.619  1.00 72.31
ATOM     14 3HE  MET A   1     -12.222 -16.380   3.664  1.00 34.33
ATOM     15  C   MET A   1     -11.786 -15.268  -1.558  1.00 62.03
ATOM     16  O   MET A   1     -10.727 -15.553  -2.098  1.00 53.31
ATOM     17  N   ASP A   2     -11.997 -14.148  -0.916  1.00 41.24
ATOM     18  H   ASP A   2     -12.854 -13.941  -0.491  1.00 43.05
ATOM     19  CA  ASP A   2     -10.949 -13.161  -0.733  1.00 62.03
ATOM     20  HA  ASP A   2     -10.023 -13.590  -1.086  1.00 24.22
ATOM     21  CB  ASP A   2     -11.291 -11.867  -1.519  1.00  1.21
ATOM     22 1HB  ASP A   2     -11.641 -12.136  -2.505  1.00 11.31
ATOM     23 2HB  ASP A   2     -12.074 -11.336  -0.998  1.00 63.03
ATOM     24  CG  ASP A   2     -10.092 -10.933  -1.674  1.00  5.23
ATOM     25  OD1 ASP A   2      -9.326 -11.086  -2.651  1.00 74.34
ATOM     26  OD2 ASP A   2      -9.877 -10.081  -0.793  1.00  3.15
ATOM     27  C   ASP A   2     -10.844 -12.920   0.780  1.00 51.02
ATOM     28  O   ASP A   2     -11.222 -13.814   1.544  1.00 42.31
ATOM     29  N   LYS A   3     -10.356 -11.754   1.202  1.00 61.04
ATOM     30  H   LYS A   3     -10.146 -11.068   0.520  1.00 32.15
ATOM     31  CA  LYS A   3     -10.130 -11.408   2.612  1.00 14.53
ATOM     32  HA  LYS A   3      -9.816 -10.373   2.583  1.00 33.41
ATOM     33  CB  LYS A   3     -11.441 -11.540   3.470  1.00 62.21
ATOM     34 1HB  LYS A   3     -12.190 -10.881   3.058  1.00 34.00
ATOM     35 2HB  LYS A   3     -11.798 -12.557   3.389  1.00  3.00
ATOM     36  CG  LYS A   3     -11.281 -11.202   4.949  1.00 51.35
ATOM     37 1HG  LYS A   3     -12.249 -11.245   5.426  1.00 21.24
ATOM     38 2HG  LYS A   3     -10.626 -11.933   5.398  1.00  0.45
ATOM     39  CD  LYS A   3     -10.691  -9.810   5.153  1.00 54.44
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ATOM     40 1HD  LYS A   3      -9.852  -9.681   4.485  1.00 15.52
ATOM     41 2HD  LYS A   3     -11.445  -9.064   4.948  1.00 70.01
ATOM     42  CE  LYS A   3     -10.194  -9.640   6.570  1.00 33.32
ATOM     43 1HE  LYS A   3      -9.822  -8.633   6.681  1.00 23.21
ATOM     44 2HE  LYS A   3     -11.015  -9.813   7.250  1.00 22.42
ATOM     45  NZ  LYS A   3      -9.090 -10.598   6.879  1.00 61.03
ATOM     46 1HZ  LYS A   3      -8.839 -10.579   7.886  1.00 53.34
ATOM     47 2HZ  LYS A   3      -8.225 -10.331   6.355  1.00 41.41
ATOM     48 3HZ  LYS A   3      -9.328 -11.569   6.595  1.00  2.25
ATOM     49  C   LYS A   3      -8.921 -12.203   3.158  1.00 14.10
ATOM     50  O   LYS A   3      -8.718 -12.397   4.384  1.00 15.35
ATOM     51  N   GLY A   4      -8.061 -12.546   2.234  1.00 51.33
ATOM     52  H   GLY A   4      -8.248 -12.220   1.330  1.00 52.43
ATOM     53  CA  GLY A   4      -6.894 -13.322   2.525  1.00 71.33
ATOM     54 1HA  GLY A   4      -7.154 -14.093   3.235  1.00  1.14
ATOM     55 2HA  GLY A   4      -6.548 -13.786   1.613  1.00 52.41
ATOM     56  C   GLY A   4      -5.777 -12.485   3.097  1.00 62.51
ATOM     57  O   GLY A   4      -4.871 -12.055   2.367  1.00 25.12
ATOM     58  N   THR A   5      -5.866 -12.226   4.375  1.00 33.32
ATOM     59  H   THR A   5      -6.668 -12.529   4.849  1.00 32.54
ATOM     60  CA  THR A   5      -4.850 -11.520   5.098  1.00 71.21
ATOM     61  HA  THR A   5      -4.472 -10.717   4.484  1.00 40.32
ATOM     62  CB  THR A   5      -5.425 -10.941   6.412  1.00 20.21
ATOM     63  HB  THR A   5      -5.774 -11.763   7.022  1.00 42.30
ATOM     64  OG1 THR A   5      -6.553 -10.076   6.110  1.00 11.41
ATOM     65  HG1 THR A   5      -6.160  -9.213   5.889  1.00 50.00
ATOM     66  CG2 THR A   5      -4.367 -10.150   7.182  1.00  4.23
ATOM     67 1HG2 THR A   5      -3.538 -10.799   7.425  1.00 21.32
ATOM     68 2HG2 THR A   5      -4.797  -9.760   8.092  1.00 34.03
ATOM     69 3HG2 THR A   5      -4.014  -9.331   6.573  1.00 62.32
ATOM     70  C   THR A   5      -3.726 -12.499   5.408  1.00 13.51
ATOM     71  O   THR A   5      -3.895 -13.409   6.222  1.00 54.24
ATOM     72  N   GLN A   6      -2.627 -12.342   4.727  1.00  4.33
ATOM     73  H   GLN A   6      -2.549 -11.568   4.123  1.00 12.21
ATOM     74  CA  GLN A   6      -1.501 -13.227   4.853  1.00 22.33
ATOM     75  HA  GLN A   6      -1.626 -13.805   5.756  1.00 20.53
ATOM     76  CB  GLN A   6      -1.436 -14.203   3.665  1.00 22.22
ATOM     77 1HB  GLN A   6      -1.523 -13.636   2.750  1.00 53.10
ATOM     78 2HB  GLN A   6      -0.473 -14.694   3.678  1.00 74.33
ATOM     79  CG  GLN A   6      -2.519 -15.272   3.662  1.00 20.51
ATOM     80 1HG  GLN A   6      -3.481 -14.791   3.761  1.00 64.33
ATOM     81 2HG  GLN A   6      -2.480 -15.810   2.725  1.00 22.14
ATOM     82  CD  GLN A   6      -2.356 -16.265   4.802  1.00 30.42
ATOM     83  OE1 GLN A   6      -1.698 -17.277   4.658  1.00  0.40
ATOM     84  NE2 GLN A   6      -2.928 -15.973   5.941  1.00 74.11
ATOM     85 2HE2 GLN A   6      -3.431 -15.129   6.016  1.00 30.23
ATOM     86 1HE2 GLN A   6      -2.830 -16.621   6.667  1.00 71.33
ATOM     87  C   GLN A   6      -0.218 -12.453   4.939  1.00 72.00
ATOM     88  O   GLN A   6      -0.051 -11.428   4.271  1.00 43.25
ATOM     89  N   TYR A   7       0.639 -12.907   5.797  1.00 55.54
ATOM     90  H   TYR A   7       0.397 -13.666   6.365  1.00 24.33
ATOM     91  CA  TYR A   7       1.961 -12.388   5.936  1.00 63.52
ATOM     92  HA  TYR A   7       2.097 -11.662   5.146  1.00 32.44
ATOM     93  CB  TYR A   7       2.175 -11.709   7.321  1.00 61.11
ATOM     94 1HB  TYR A   7       3.214 -11.428   7.412  1.00 31.13
ATOM     95 2HB  TYR A   7       1.574 -10.813   7.357  1.00 22.31
ATOM     96  CG  TYR A   7       1.827 -12.553   8.544  1.00 13.41
ATOM     97  CD1 TYR A   7       2.812 -13.228   9.258  1.00 34.44
ATOM     98  HD1 TYR A   7       3.839 -13.157   8.932  1.00 50.13
ATOM     99  CE1 TYR A   7       2.494 -13.987  10.368  1.00  4.44
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ATOM    100  HE1 TYR A   7       3.273 -14.503  10.910  1.00 62.53
ATOM    101  CZ  TYR A   7       1.181 -14.078  10.781  1.00 41.13
ATOM    102  CE2 TYR A   7       0.187 -13.418  10.093  1.00 60.34
ATOM    103  HE2 TYR A   7      -0.841 -13.490  10.416  1.00 33.12
ATOM    104  CD2 TYR A   7       0.510 -12.662   8.985  1.00 43.12
ATOM    105  HD2 TYR A   7      -0.267 -12.144   8.441  1.00 25.14
ATOM    106  OH  TYR A   7       0.861 -14.831  11.886  1.00 32.44
ATOM    107  HH  TYR A   7       0.095 -15.377  11.693  1.00 43.31
ATOM    108  C   TYR A   7       2.921 -13.531   5.683  1.00 12.21
ATOM    109  O   TYR A   7       2.908 -14.528   6.401  1.00 63.22
ATOM    110  N   LYS A   8       3.694 -13.430   4.647  1.00 51.23
ATOM    111  H   LYS A   8       3.707 -12.603   4.109  1.00 54.30
ATOM    112  CA  LYS A   8       4.567 -14.506   4.274  1.00 50.03
ATOM    113  HA  LYS A   8       4.822 -15.088   5.146  1.00 23.13
ATOM    114  CB  LYS A   8       3.873 -15.411   3.261  1.00 34.43
ATOM    115 1HB  LYS A   8       2.885 -15.662   3.624  1.00 64.23
ATOM    116 2HB  LYS A   8       3.795 -14.831   2.350  1.00 12.42
ATOM    117  CG  LYS A   8       4.647 -16.689   2.971  1.00 75.52
ATOM    118 1HG  LYS A   8       5.652 -16.426   2.676  1.00 73.40
ATOM    119 2HG  LYS A   8       4.686 -17.283   3.872  1.00 34.53
ATOM    120  CD  LYS A   8       4.019 -17.510   1.864  1.00 41.41
ATOM    121 1HD  LYS A   8       3.011 -17.773   2.148  1.00 41.43
ATOM    122 2HD  LYS A   8       4.000 -16.922   0.958  1.00  1.31
ATOM    123  CE  LYS A   8       4.814 -18.790   1.610  1.00 54.20
ATOM    124 1HE  LYS A   8       4.768 -19.408   2.494  1.00 23.30
ATOM    125 2HE  LYS A   8       4.363 -19.318   0.782  1.00 62.20
ATOM    126  NZ  LYS A   8       6.239 -18.519   1.292  1.00 20.54
ATOM    127 1HZ  LYS A   8       6.330 -17.834   0.508  1.00  0.24
ATOM    128 2HZ  LYS A   8       6.804 -19.349   1.037  1.00 12.43
ATOM    129 3HZ  LYS A   8       6.750 -18.042   2.074  1.00 52.21
ATOM    130  C   LYS A   8       5.795 -13.941   3.636  1.00 61.11
ATOM    131  O   LYS A   8       5.690 -13.025   2.874  1.00  4.24
ATOM    132  N   ASP A   9       6.951 -14.485   3.989  1.00 51.40
ATOM    133  H   ASP A   9       6.940 -15.197   4.660  1.00 53.43
ATOM    134  CA  ASP A   9       8.280 -14.119   3.412  1.00 22.44
ATOM    135  HA  ASP A   9       9.051 -14.582   4.009  1.00 65.32
ATOM    136  CB  ASP A   9       8.405 -14.615   1.939  1.00 32.13
ATOM    137 1HB  ASP A   9       7.850 -13.941   1.303  1.00 30.55
ATOM    138 2HB  ASP A   9       9.445 -14.574   1.651  1.00  2.41
ATOM    139  CG  ASP A   9       7.884 -16.023   1.676  1.00  1.51
ATOM    140  OD1 ASP A   9       7.253 -16.247   0.603  1.00 43.44
ATOM    141  OD2 ASP A   9       7.997 -16.927   2.549  1.00 22.43
ATOM    142  C   ASP A   9       8.467 -12.596   3.421  1.00 44.03
ATOM    143  O   ASP A   9       9.089 -12.023   2.535  1.00 14.41
ATOM    144  N   GLY A  10       7.969 -11.958   4.457  1.00 63.11
ATOM    145  H   GLY A  10       7.504 -12.476   5.143  1.00 10.21
ATOM    146  CA  GLY A  10       8.076 -10.531   4.562  1.00 13.03
ATOM    147 1HA  GLY A  10       8.201 -10.273   5.602  1.00 23.32
ATOM    148 2HA  GLY A  10       8.944 -10.203   4.009  1.00  2.50
ATOM    149  C   GLY A  10       6.849  -9.796   4.032  1.00 44.22
ATOM    150  O   GLY A  10       6.429  -8.798   4.635  1.00 54.34
ATOM    151  N   TYR A  11       6.255 -10.305   2.949  1.00 40.13
ATOM    152  H   TYR A  11       6.553 -11.180   2.618  1.00 64.50
ATOM    153  CA  TYR A  11       5.126  -9.637   2.295  1.00  4.31
ATOM    154  HA  TYR A  11       5.386  -8.589   2.356  1.00  0.33
ATOM    155  CB  TYR A  11       4.949  -9.984   0.785  1.00 42.22
ATOM    156 1HB  TYR A  11       3.966  -9.650   0.491  1.00 71.13
ATOM    157 2HB  TYR A  11       5.699  -9.473   0.201  1.00  3.34
ATOM    158  CG  TYR A  11       4.961 -11.442   0.396  1.00 30.25
ATOM    159  CD1 TYR A  11       6.118 -12.023  -0.088  1.00 62.21
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ATOM    160  HD1 TYR A  11       7.009 -11.419  -0.170  1.00 24.21
ATOM    161  CE1 TYR A  11       6.156 -13.343  -0.455  1.00 73.30
ATOM    162  HE1 TYR A  11       7.073 -13.773  -0.831  1.00 22.33
ATOM    163  CZ  TYR A  11       5.027 -14.115  -0.347  1.00 75.32
ATOM    164  CE2 TYR A  11       3.850 -13.569   0.129  1.00 70.24
ATOM    165  HE2 TYR A  11       2.960 -14.175   0.214  1.00 73.04
ATOM    166  CD2 TYR A  11       3.819 -12.235   0.497  1.00 43.14
ATOM    167  HD2 TYR A  11       2.905 -11.798   0.869  1.00 73.22
ATOM    168  OH  TYR A  11       5.087 -15.446  -0.695  1.00 51.41
ATOM    169  HH  TYR A  11       5.949 -15.736  -0.348  1.00 11.03
ATOM    170  C   TYR A  11       3.826  -9.748   3.056  1.00 32.30
ATOM    171  O   TYR A  11       3.520 -10.776   3.670  1.00 61.44
ATOM    172  N   TYR A  12       3.083  -8.667   3.029  1.00 11.44
ATOM    173  H   TYR A  12       3.355  -7.927   2.447  1.00 74.44
ATOM    174  CA  TYR A  12       1.833  -8.561   3.730  1.00 30.30
ATOM    175  HA  TYR A  12       1.633  -9.510   4.206  1.00 51.21
ATOM    176  CB  TYR A  12       1.920  -7.466   4.810  1.00 14.21
ATOM    177 1HB  TYR A  12       2.724  -7.702   5.490  1.00 64.53
ATOM    178 2HB  TYR A  12       2.140  -6.523   4.330  1.00 32.40
ATOM    179  CG  TYR A  12       0.661  -7.287   5.640  1.00 71.04
ATOM    180  CD1 TYR A  12      -0.230  -6.256   5.377  1.00 53.21
ATOM    181  HD1 TYR A  12      -0.023  -5.575   4.565  1.00 42.42
ATOM    182  CE1 TYR A  12      -1.371  -6.092   6.132  1.00 42.10
ATOM    183  HE1 TYR A  12      -2.051  -5.283   5.911  1.00 71.34
ATOM    184  CZ  TYR A  12      -1.639  -6.961   7.165  1.00 73.34
ATOM    185  CE2 TYR A  12      -0.770  -7.992   7.447  1.00 35.40
ATOM    186  HE2 TYR A  12      -0.979  -8.676   8.257  1.00  1.23
ATOM    187  CD2 TYR A  12       0.372  -8.149   6.686  1.00 10.35
ATOM    188  HD2 TYR A  12       1.059  -8.952   6.902  1.00  3.44
ATOM    189  OH  TYR A  12      -2.785  -6.799   7.919  1.00 42.53
ATOM    190  HH  TYR A  12      -2.547  -6.859   8.848  1.00 20.30
ATOM    191  C   TYR A  12       0.727  -8.261   2.737  1.00 42.43
ATOM    192  O   TYR A  12       0.841  -7.318   1.938  1.00 14.01
ATOM    193  N   ILE A  13      -0.296  -9.062   2.754  1.00 52.21
ATOM    194  H   ILE A  13      -0.297  -9.829   3.373  1.00 41.44
ATOM    195  CA  ILE A  13      -1.442  -8.876   1.897  1.00 71.12
ATOM    196  HA  ILE A  13      -1.357  -7.926   1.390  1.00 24.41
ATOM    197  CB  ILE A  13      -1.539 -10.028   0.844  1.00 52.13
ATOM    198  HB  ILE A  13      -1.684 -10.958   1.374  1.00 13.41
ATOM    199  CG2 ILE A  13      -2.738  -9.816  -0.079  1.00 45.43
ATOM    200 1HG2 ILE A  13      -2.789 -10.622  -0.796  1.00 72.11
ATOM    201 2HG2 ILE A  13      -2.626  -8.878  -0.602  1.00  3.33
ATOM    202 3HG2 ILE A  13      -3.643  -9.795   0.509  1.00  3.01
ATOM    203  CG1 ILE A  13      -0.240 -10.120   0.020  1.00 22.45
ATOM    204 1HG1 ILE A  13      -0.123  -9.213  -0.554  1.00 22.32
ATOM    205 2HG1 ILE A  13       0.596 -10.218   0.697  1.00 30.43
ATOM    206  CD1 ILE A  13      -0.200 -11.284  -0.951  1.00 22.34
ATOM    207 1HD1 ILE A  13      -0.297 -12.209  -0.401  1.00 12.12
ATOM    208 2HD1 ILE A  13       0.738 -11.278  -1.484  1.00 63.32
ATOM    209 3HD1 ILE A  13      -1.016 -11.196  -1.652  1.00 51.25
ATOM    210  C   ILE A  13      -2.688  -8.894   2.776  1.00 65.00
ATOM    211  O   ILE A  13      -2.796  -9.748   3.650  1.00 12.23
ATOM    212  N   THR A  14      -3.595  -7.964   2.581  1.00 60.44
ATOM    213  H   THR A  14      -3.461  -7.275   1.891  1.00 32.12
ATOM    214  CA  THR A  14      -4.813  -7.943   3.356  1.00 23.41
ATOM    215  HA  THR A  14      -5.117  -8.970   3.504  1.00 14.42
ATOM    216  CB  THR A  14      -4.608  -7.267   4.758  1.00  0.24
ATOM    217  HB  THR A  14      -3.715  -7.678   5.205  1.00  5.23
ATOM    218  OG1 THR A  14      -5.731  -7.536   5.623  1.00 55.14
ATOM    219  HG1 THR A  14      -5.661  -6.879   6.327  1.00 74.54
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ATOM    220  CG2 THR A  14      -4.449  -5.756   4.633  1.00 42.42
ATOM    221 1HG2 THR A  14      -4.331  -5.323   5.616  1.00 51.34
ATOM    222 2HG2 THR A  14      -5.324  -5.340   4.157  1.00 40.53
ATOM    223 3HG2 THR A  14      -3.575  -5.537   4.037  1.00 12.55
ATOM    224  C   THR A  14      -5.915  -7.239   2.567  1.00 51.42
ATOM    225  O   THR A  14      -5.632  -6.510   1.613  1.00 54.41
ATOM    226  N   THR A  15      -7.137  -7.475   2.942  1.00 43.21
ATOM    227  H   THR A  15      -7.304  -8.067   3.699  1.00 62.20
ATOM    228  CA  THR A  15      -8.263  -6.892   2.290  1.00 51.44
ATOM    229  HA  THR A  15      -7.937  -6.434   1.369  1.00 22.32
ATOM    230  CB  THR A  15      -9.288  -7.980   1.961  1.00 42.02
ATOM    231  HB  THR A  15      -9.708  -8.335   2.889  1.00  3.34
ATOM    232  OG1 THR A  15      -8.620  -9.062   1.283  1.00 23.45
ATOM    233  HG1 THR A  15      -9.103  -9.268   0.461  1.00 10.14
ATOM    234  CG2 THR A  15     -10.400  -7.431   1.080  1.00 43.55
ATOM    235 1HG2 THR A  15     -11.103  -8.218   0.856  1.00 52.15
ATOM    236 2HG2 THR A  15      -9.977  -7.051   0.161  1.00 13.12
ATOM    237 3HG2 THR A  15     -10.907  -6.631   1.599  1.00 35.34
ATOM    238  C   THR A  15      -8.906  -5.840   3.192  1.00 23.42
ATOM    239  O   THR A  15      -9.290  -6.134   4.331  1.00 32.14
ATOM    240  N   LEU A  16      -9.003  -4.639   2.688  1.00 60.44
ATOM    241  H   LEU A  16      -8.690  -4.463   1.771  1.00 44.24
ATOM    242  CA  LEU A  16      -9.613  -3.545   3.386  1.00 45.31
ATOM    243  HA  LEU A  16      -9.743  -3.803   4.425  1.00 73.12
ATOM    244  CB  LEU A  16      -8.743  -2.295   3.277  1.00 65.15
ATOM    245 1HB  LEU A  16      -8.593  -2.108   2.223  1.00  4.30
ATOM    246 2HB  LEU A  16      -9.317  -1.478   3.682  1.00 71.12
ATOM    247  CG  LEU A  16      -7.366  -2.341   3.949  1.00 14.21
ATOM    248  HG  LEU A  16      -6.793  -3.148   3.521  1.00 24.51
ATOM    249  CD1 LEU A  16      -6.613  -1.045   3.693  1.00 32.53
ATOM    250 1HD1 LEU A  16      -7.177  -0.215   4.091  1.00 41.12
ATOM    251 2HD1 LEU A  16      -6.477  -0.911   2.630  1.00 33.15
ATOM    252 3HD1 LEU A  16      -5.648  -1.087   4.174  1.00  3.13
ATOM    253  CD2 LEU A  16      -7.503  -2.586   5.448  1.00 33.53
ATOM    254 1HD2 LEU A  16      -7.988  -3.536   5.617  1.00 34.54
ATOM    255 2HD2 LEU A  16      -8.094  -1.798   5.892  1.00 61.04
ATOM    256 3HD2 LEU A  16      -6.523  -2.600   5.901  1.00  2.34
ATOM    257  C   LEU A  16     -10.941  -3.265   2.745  1.00 64.30
ATOM    258  O   LEU A  16     -11.010  -3.050   1.536  1.00 70.31
ATOM    259  N   ASN A  17     -11.992  -3.250   3.511  1.00 10.21
ATOM    260  H   ASN A  17     -11.904  -3.388   4.475  1.00 25.22
ATOM    261  CA  ASN A  17     -13.293  -3.014   2.922  1.00 71.40
ATOM    262  HA  ASN A  17     -13.240  -3.404   1.915  1.00 12.54
ATOM    263  CB  ASN A  17     -14.424  -3.733   3.676  1.00 54.14
ATOM    264 1HB  ASN A  17     -14.127  -4.751   3.878  1.00 41.32
ATOM    265 2HB  ASN A  17     -14.602  -3.223   4.610  1.00 33.45
ATOM    266  CG  ASN A  17     -15.734  -3.762   2.883  1.00 21.31
ATOM    267  OD1 ASN A  17     -15.986  -4.696   2.133  1.00 73.42
ATOM    268  ND2 ASN A  17     -16.553  -2.752   3.031  1.00 11.01
ATOM    269 2HD2 ASN A  17     -16.288  -2.027   3.637  1.00 43.15
ATOM    270 1HD2 ASN A  17     -17.385  -2.769   2.516  1.00 33.32
ATOM    271  C   ASN A  17     -13.565  -1.519   2.810  1.00 20.25
ATOM    272  O   ASN A  17     -14.322  -0.942   3.598  1.00 60.42
ATOM    273  N   TYR A  18     -12.826  -0.885   1.925  1.00 23.01
ATOM    274  H   TYR A  18     -12.114  -1.388   1.471  1.00 52.14
ATOM    275  CA  TYR A  18     -13.008   0.507   1.598  1.00 52.32
ATOM    276  HA  TYR A  18     -13.985   0.810   1.944  1.00 75.11
ATOM    277  CB  TYR A  18     -11.933   1.398   2.244  1.00 43.14
ATOM    278 1HB  TYR A  18     -10.963   1.096   1.876  1.00 32.24
ATOM    279 2HB  TYR A  18     -12.114   2.420   1.945  1.00 71.54
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ATOM    280  CG  TYR A  18     -11.883   1.354   3.760  1.00 62.22
ATOM    281  CD1 TYR A  18     -10.841   0.720   4.414  1.00 43.54
ATOM    282  HD1 TYR A  18     -10.062   0.268   3.821  1.00 31.41
ATOM    283  CE1 TYR A  18     -10.782   0.671   5.790  1.00 41.01
ATOM    284  HE1 TYR A  18      -9.959   0.171   6.278  1.00 23.14
ATOM    285  CZ  TYR A  18     -11.778   1.260   6.535  1.00 44.52
ATOM    286  CE2 TYR A  18     -12.828   1.899   5.913  1.00 52.04
ATOM    287  HE2 TYR A  18     -13.610   2.362   6.496  1.00  1.23
ATOM    288  CD2 TYR A  18     -12.878   1.943   4.531  1.00 41.22
ATOM    289  HD2 TYR A  18     -13.699   2.441   4.037  1.00 30.05
ATOM    290  OH  TYR A  18     -11.715   1.217   7.910  1.00 61.03
ATOM    291  HH  TYR A  18     -10.788   1.333   8.147  1.00 65.40
ATOM    292  C   TYR A  18     -12.944   0.653   0.093  1.00 42.31
ATOM    293  O   TYR A  18     -12.307  -0.167  -0.584  1.00 44.31
ATOM    294  N   ASN A  19     -13.562   1.698  -0.419  1.00  2.14
ATOM    295  H   ASN A  19     -13.978   2.331   0.200  1.00 54.41
ATOM    296  CA  ASN A  19     -13.647   1.940  -1.861  1.00 24.15
ATOM    297  HA  ASN A  19     -14.017   1.038  -2.324  1.00 52.31
ATOM    298  CB  ASN A  19     -14.632   3.090  -2.159  1.00 70.53
ATOM    299 1HB  ASN A  19     -15.613   2.813  -1.802  1.00  2.31
ATOM    300 2HB  ASN A  19     -14.307   3.977  -1.637  1.00 60.21
ATOM    301  CG  ASN A  19     -14.745   3.420  -3.647  1.00 64.22
ATOM    302  OD1 ASN A  19     -13.968   4.211  -4.176  1.00 13.15
ATOM    303  ND2 ASN A  19     -15.721   2.857  -4.321  1.00  4.33
ATOM    304 2HD2 ASN A  19     -16.354   2.245  -3.875  1.00 14.54
ATOM    305 1HD2 ASN A  19     -15.808   3.077  -5.271  1.00 15.04
ATOM    306  C   ASN A  19     -12.271   2.258  -2.443  1.00 55.20
ATOM    307  O   ASN A  19     -11.514   3.048  -1.865  1.00 44.35
ATOM    308  N   PHE A  20     -11.977   1.644  -3.585  1.00 74.11
ATOM    309  H   PHE A  20     -12.630   1.043  -4.005  1.00 11.44
ATOM    310  CA  PHE A  20     -10.699   1.759  -4.282  1.00 63.14
ATOM    311  HA  PHE A  20      -9.967   1.252  -3.670  1.00 50.54
ATOM    312  CB  PHE A  20     -10.809   0.980  -5.596  1.00 30.13
ATOM    313 1HB  PHE A  20     -10.858  -0.064  -5.322  1.00 50.33
ATOM    314 2HB  PHE A  20     -11.728   1.223  -6.106  1.00 12.41
ATOM    315  CG  PHE A  20      -9.664   1.095  -6.557  1.00 20.34
ATOM    316  CD1 PHE A  20      -8.524   0.334  -6.390  1.00 64.44
ATOM    317  HD1 PHE A  20      -8.445  -0.326  -5.539  1.00  2.33
ATOM    318  CE1 PHE A  20      -7.494   0.411  -7.297  1.00 63.31
ATOM    319  HE1 PHE A  20      -6.606  -0.189  -7.159  1.00 54.44
ATOM    320  CZ  PHE A  20      -7.594   1.258  -8.384  1.00 72.14
ATOM    321  HZ  PHE A  20      -6.787   1.317  -9.098  1.00 64.03
ATOM    322  CE2 PHE A  20      -8.722   2.022  -8.561  1.00 15.43
ATOM    323  HE2 PHE A  20      -8.801   2.685  -9.411  1.00 33.14
ATOM    324  CD2 PHE A  20      -9.752   1.937  -7.656  1.00 12.25
ATOM    325  HD2 PHE A  20     -10.640   2.538  -7.792  1.00 65.43
ATOM    326  C   PHE A  20     -10.211   3.215  -4.489  1.00 24.44
ATOM    327  O   PHE A  20      -9.025   3.487  -4.369  1.00 70.44
ATOM    328  N   ASN A  21     -11.119   4.134  -4.744  1.00 72.23
ATOM    329  H   ASN A  21     -12.065   3.877  -4.769  1.00 12.11
ATOM    330  CA  ASN A  21     -10.729   5.536  -4.975  1.00  0.20
ATOM    331  HA  ASN A  21      -9.940   5.530  -5.714  1.00 71.14
ATOM    332  CB  ASN A  21     -11.914   6.355  -5.522  1.00 73.10
ATOM    333 1HB  ASN A  21     -12.270   5.894  -6.431  1.00  4.01
ATOM    334 2HB  ASN A  21     -12.708   6.348  -4.790  1.00 21.53
ATOM    335  CG  ASN A  21     -11.557   7.810  -5.833  1.00 42.13
ATOM    336  OD1 ASN A  21     -10.440   8.128  -6.194  1.00  3.12
ATOM    337  ND2 ASN A  21     -12.517   8.696  -5.701  1.00 60.12
ATOM    338 2HD2 ASN A  21     -13.403   8.398  -5.415  1.00 74.31
ATOM    339 1HD2 ASN A  21     -12.280   9.624  -5.903  1.00 71.03
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ATOM    340  C   ASN A  21     -10.175   6.191  -3.692  1.00 74.34
ATOM    341  O   ASN A  21      -9.097   6.791  -3.695  1.00 51.22
ATOM    342  N   THR A  22     -10.890   6.029  -2.587  1.00  5.43
ATOM    343  H   THR A  22     -11.674   5.443  -2.615  1.00 24.21
ATOM    344  CA  THR A  22     -10.492   6.675  -1.345  1.00 33.22
ATOM    345  HA  THR A  22     -10.228   7.684  -1.629  1.00  4.53
ATOM    346  CB  THR A  22     -11.663   6.745  -0.292  1.00 33.15
ATOM    347  HB  THR A  22     -12.481   7.285  -0.748  1.00 25.42
ATOM    348  OG1 THR A  22     -11.258   7.466   0.879  1.00 52.33
ATOM    349  HG1 THR A  22     -12.033   7.835   1.311  1.00 15.30
ATOM    350  CG2 THR A  22     -12.153   5.365   0.119  1.00 52.34
ATOM    351 1HG2 THR A  22     -12.964   5.461   0.825  1.00  0.11
ATOM    352 2HG2 THR A  22     -11.340   4.821   0.576  1.00 21.32
ATOM    353 3HG2 THR A  22     -12.493   4.829  -0.754  1.00 41.14
ATOM    354  C   THR A  22      -9.204   6.048  -0.763  1.00 72.42
ATOM    355  O   THR A  22      -8.319   6.766  -0.260  1.00 33.22
ATOM    356  N   VAL A  23      -9.069   4.725  -0.891  1.00  1.41
ATOM    357  H   VAL A  23      -9.775   4.208  -1.337  1.00 55.43
ATOM    358  CA  VAL A  23      -7.891   4.029  -0.389  1.00 22.40
ATOM    359  HA  VAL A  23      -7.728   4.395   0.613  1.00 13.43
ATOM    360  CB  VAL A  23      -8.095   2.474  -0.335  1.00 54.41
ATOM    361  HB  VAL A  23      -8.960   2.283   0.284  1.00  2.34
ATOM    362  CG1 VAL A  23      -8.380   1.904  -1.690  1.00 73.51
ATOM    363 1HG1 VAL A  23      -7.531   2.060  -2.338  1.00 40.34
ATOM    364 2HG1 VAL A  23      -9.242   2.410  -2.101  1.00 64.24
ATOM    365 3HG1 VAL A  23      -8.589   0.848  -1.602  1.00  3.23
ATOM    366  CG2 VAL A  23      -6.907   1.767   0.288  1.00 23.31
ATOM    367 1HG2 VAL A  23      -6.015   1.985  -0.281  1.00 34.02
ATOM    368 2HG2 VAL A  23      -7.081   0.700   0.291  1.00 41.54
ATOM    369 3HG2 VAL A  23      -6.782   2.115   1.302  1.00 31.33
ATOM    370  C   VAL A  23      -6.648   4.416  -1.203  1.00 43.31
ATOM    371  O   VAL A  23      -5.544   4.553  -0.646  1.00 22.11
ATOM    372  N   TYR A  24      -6.840   4.638  -2.504  1.00 31.14
ATOM    373  H   TYR A  24      -7.730   4.508  -2.897  1.00 12.42
ATOM    374  CA  TYR A  24      -5.765   5.048  -3.383  1.00 25.42
ATOM    375  HA  TYR A  24      -4.999   4.290  -3.316  1.00 61.05
ATOM    376  CB  TYR A  24      -6.259   5.120  -4.840  1.00 43.11
ATOM    377 1HB  TYR A  24      -6.510   4.124  -5.174  1.00  5.42
ATOM    378 2HB  TYR A  24      -7.150   5.730  -4.871  1.00 45.14
ATOM    379  CG  TYR A  24      -5.260   5.694  -5.832  1.00 31.12
ATOM    380  CD1 TYR A  24      -5.606   6.771  -6.638  1.00 23.04
ATOM    381  HD1 TYR A  24      -6.597   7.191  -6.556  1.00 52.41
ATOM    382  CE1 TYR A  24      -4.709   7.304  -7.538  1.00 63.14
ATOM    383  HE1 TYR A  24      -4.996   8.142  -8.156  1.00 72.15
ATOM    384  CZ  TYR A  24      -3.447   6.763  -7.643  1.00 50.34
ATOM    385  CE2 TYR A  24      -3.075   5.699  -6.852  1.00 54.52
ATOM    386  HE2 TYR A  24      -2.085   5.277  -6.936  1.00 21.14
ATOM    387  CD2 TYR A  24      -3.978   5.170  -5.955  1.00 14.23
ATOM    388  HD2 TYR A  24      -3.692   4.334  -5.334  1.00 10.41
ATOM    389  OH  TYR A  24      -2.545   7.293  -8.543  1.00 10.31
ATOM    390  HH  TYR A  24      -1.948   6.568  -8.785  1.00 61.12
ATOM    391  C   TYR A  24      -5.178   6.375  -2.933  1.00 50.44
ATOM    392  O   TYR A  24      -3.954   6.504  -2.784  1.00 63.31
ATOM    393  N   ASN A  25      -6.050   7.326  -2.641  1.00 52.34
ATOM    394  H   ASN A  25      -7.006   7.128  -2.751  1.00  0.53
ATOM    395  CA  ASN A  25      -5.618   8.652  -2.199  1.00 44.50
ATOM    396  HA  ASN A  25      -4.947   9.063  -2.939  1.00 20.34
ATOM    397  CB  ASN A  25      -6.802   9.592  -2.024  1.00 12.40
ATOM    398 1HB  ASN A  25      -7.417   9.556  -2.906  1.00 52.14
ATOM    399 2HB  ASN A  25      -7.388   9.241  -1.187  1.00 61.32
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ATOM    400  CG  ASN A  25      -6.348  11.022  -1.722  1.00 73.12
ATOM    401  OD1 ASN A  25      -5.319  11.468  -2.198  1.00 25.44
ATOM    402  ND2 ASN A  25      -7.099  11.730  -0.917  1.00 55.44
ATOM    403 2HD2 ASN A  25      -7.914  11.336  -0.551  1.00 64.20
ATOM    404 1HD2 ASN A  25      -6.774  12.632  -0.702  1.00 43.21
ATOM    405  C   ASN A  25      -4.907   8.548  -0.870  1.00 13.53
ATOM    406  O   ASN A  25      -3.807   9.057  -0.695  1.00  1.01
ATOM    407  N   ALA A  26      -5.525   7.815   0.036  1.00 53.23
ATOM    408  H   ALA A  26      -6.365   7.390  -0.249  1.00 34.52
ATOM    409  CA  ALA A  26      -5.024   7.661   1.402  1.00 63.12
ATOM    410  HA  ALA A  26      -4.984   8.643   1.850  1.00 52.12
ATOM    411  CB  ALA A  26      -5.982   6.807   2.218  1.00  2.10
ATOM    412 1HB  ALA A  26      -6.007   5.808   1.810  1.00 64.04
ATOM    413 2HB  ALA A  26      -6.971   7.237   2.175  1.00 41.35
ATOM    414 3HB  ALA A  26      -5.649   6.772   3.244  1.00 24.21
ATOM    415  C   ALA A  26      -3.623   7.053   1.429  1.00 23.31
ATOM    416  O   ALA A  26      -2.752   7.522   2.162  1.00 31.11
ATOM    417  N   THR A  27      -3.403   6.048   0.611  1.00 10.04
ATOM    418  H   THR A  27      -4.138   5.722   0.046  1.00  0.53
ATOM    419  CA  THR A  27      -2.109   5.402   0.535  1.00 72.43
ATOM    420  HA  THR A  27      -1.797   5.132   1.533  1.00 51.34
ATOM    421  CB  THR A  27      -2.200   4.135  -0.317  1.00 52.34
ATOM    422  HB  THR A  27      -2.401   4.425  -1.338  1.00 52.52
ATOM    423  OG1 THR A  27      -3.268   3.302   0.158  1.00 72.02
ATOM    424  HG1 THR A  27      -4.117   3.658  -0.138  1.00 42.50
ATOM    425  CG2 THR A  27      -0.894   3.360  -0.272  1.00 60.41
ATOM    426 1HG2 THR A  27      -0.100   4.004  -0.620  1.00 21.00
ATOM    427 2HG2 THR A  27      -0.974   2.505  -0.926  1.00  3.24
ATOM    428 3HG2 THR A  27      -0.690   3.039   0.739  1.00 33.30
ATOM    429  C   THR A  27      -1.074   6.353  -0.092  1.00 20.30
ATOM    430  O   THR A  27       0.061   6.469   0.389  1.00 43.01
ATOM    431  N   LEU A  28      -1.491   7.033  -1.152  1.00 14.15
ATOM    432  H   LEU A  28      -2.412   6.897  -1.467  1.00 74.24
ATOM    433  CA  LEU A  28      -0.653   7.975  -1.874  1.00  2.54
ATOM    434  HA  LEU A  28       0.195   7.431  -2.260  1.00  5.40
ATOM    435  CB  LEU A  28      -1.444   8.562  -3.051  1.00 33.21
ATOM    436 1HB  LEU A  28      -1.709   7.738  -3.697  1.00 43.42
ATOM    437 2HB  LEU A  28      -2.361   8.981  -2.665  1.00 42.55
ATOM    438  CG  LEU A  28      -0.745   9.613  -3.909  1.00 63.53
ATOM    439  HG  LEU A  28      -0.380  10.388  -3.251  1.00  3.00
ATOM    440  CD1 LEU A  28       0.442   9.010  -4.646  1.00  1.45
ATOM    441 1HD1 LEU A  28       0.100   8.208  -5.283  1.00 64.44
ATOM    442 2HD1 LEU A  28       1.155   8.626  -3.931  1.00 73.44
ATOM    443 3HD1 LEU A  28       0.914   9.772  -5.249  1.00 72.22
ATOM    444  CD2 LEU A  28      -1.724  10.239  -4.888  1.00 34.14
ATOM    445 1HD2 LEU A  28      -1.213  10.977  -5.487  1.00 45.20
ATOM    446 2HD2 LEU A  28      -2.526  10.714  -4.340  1.00 42.21
ATOM    447 3HD2 LEU A  28      -2.132   9.473  -5.530  1.00 43.01
ATOM    448  C   LEU A  28      -0.146   9.086  -0.937  1.00 55.31
ATOM    449  O   LEU A  28       1.049   9.378  -0.906  1.00 60.15
ATOM    450  N   GLN A  29      -1.056   9.665  -0.164  1.00 74.11
ATOM    451  H   GLN A  29      -1.994   9.393  -0.280  1.00 20.43
ATOM    452  CA  GLN A  29      -0.715  10.713   0.814  1.00 43.22
ATOM    453  HA  GLN A  29      -0.288  11.552   0.282  1.00 31.50
ATOM    454  CB  GLN A  29      -1.956  11.182   1.574  1.00  2.01
ATOM    455 1HB  GLN A  29      -2.349  10.334   2.112  1.00 33.41
ATOM    456 2HB  GLN A  29      -1.658  11.935   2.288  1.00 33.43
ATOM    457  CG  GLN A  29      -3.072  11.751   0.710  1.00 32.24
ATOM    458 1HG  GLN A  29      -2.699  12.640   0.224  1.00 31.23
ATOM    459 2HG  GLN A  29      -3.348  11.017  -0.033  1.00  3.41
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ATOM    460  CD  GLN A  29      -4.310  12.122   1.524  1.00  4.21
ATOM    461  OE1 GLN A  29      -5.073  13.015   1.160  1.00 53.40
ATOM    462  NE2 GLN A  29      -4.505  11.453   2.639  1.00 13.43
ATOM    463 2HE2 GLN A  29      -3.854  10.763   2.881  1.00 40.24
ATOM    464 1HE2 GLN A  29      -5.276  11.675   3.207  1.00 71.12
ATOM    465  C   GLN A  29       0.296  10.191   1.833  1.00 20.41
ATOM    466  O   GLN A  29       1.287  10.849   2.130  1.00 75.12
ATOM    467  N   ALA A  30       0.063   8.970   2.306  1.00 30.44
ATOM    468  H   ALA A  30      -0.708   8.476   1.955  1.00 72.34
ATOM    469  CA  ALA A  30       0.884   8.347   3.341  1.00 11.23
ATOM    470  HA  ALA A  30       0.803   8.951   4.234  1.00 43.15
ATOM    471  CB  ALA A  30       0.353   6.960   3.665  1.00 23.32
ATOM    472 1HB  ALA A  30       0.919   6.534   4.481  1.00 41.14
ATOM    473 2HB  ALA A  30       0.460   6.334   2.791  1.00  0.30
ATOM    474 3HB  ALA A  30      -0.691   7.018   3.936  1.00 53.10
ATOM    475  C   ALA A  30       2.348   8.261   2.934  1.00 12.41
ATOM    476  O   ALA A  30       3.249   8.530   3.738  1.00 25.35
ATOM    477  N   ILE A  31       2.587   7.908   1.701  1.00 42.41
ATOM    478  H   ILE A  31       1.827   7.725   1.107  1.00 75.31
ATOM    479  CA  ILE A  31       3.937   7.787   1.224  1.00 25.15
ATOM    480  HA  ILE A  31       4.519   7.521   2.097  1.00 42.25
ATOM    481  CB  ILE A  31       4.072   6.610   0.165  1.00 31.25
ATOM    482  HB  ILE A  31       3.775   5.716   0.697  1.00  2.21
ATOM    483  CG2 ILE A  31       3.068   6.745  -0.976  1.00 35.43
ATOM    484 1HG2 ILE A  31       2.063   6.719  -0.580  1.00 34.41
ATOM    485 2HG2 ILE A  31       3.200   5.930  -1.673  1.00 52.02
ATOM    486 3HG2 ILE A  31       3.228   7.684  -1.484  1.00  2.25
ATOM    487  CG1 ILE A  31       5.516   6.402  -0.383  1.00 44.15
ATOM    488 1HG1 ILE A  31       6.220   6.486   0.432  1.00 73.14
ATOM    489 2HG1 ILE A  31       5.604   5.415  -0.812  1.00 53.13
ATOM    490  CD1 ILE A  31       5.975   7.399  -1.422  1.00  2.12
ATOM    491 1HD1 ILE A  31       5.224   7.455  -2.195  1.00  3.24
ATOM    492 2HD1 ILE A  31       6.896   7.033  -1.857  1.00 45.02
ATOM    493 3HD1 ILE A  31       6.132   8.370  -0.976  1.00 71.33
ATOM    494  C   ILE A  31       4.494   9.147   0.742  1.00 74.05
ATOM    495  O   ILE A  31       5.595   9.530   1.123  1.00  2.41
ATOM    496  N   GLN A  32       3.698   9.902  -0.014  1.00 21.31
ATOM    497  H   GLN A  32       2.780   9.603  -0.201  1.00 12.44
ATOM    498  CA  GLN A  32       4.159  11.176  -0.589  1.00 53.42
ATOM    499  HA  GLN A  32       5.124  10.979  -1.033  1.00 74.34
ATOM    500  CB  GLN A  32       3.225  11.668  -1.699  1.00 54.45
ATOM    501 1HB  GLN A  32       2.212  11.658  -1.324  1.00 33.11
ATOM    502 2HB  GLN A  32       3.492  12.685  -1.949  1.00 32.33
ATOM    503  CG  GLN A  32       3.263  10.838  -2.975  1.00 13.22
ATOM    504 1HG  GLN A  32       3.031   9.813  -2.725  1.00 54.44
ATOM    505 2HG  GLN A  32       2.520  11.216  -3.661  1.00 32.43
ATOM    506  CD  GLN A  32       4.621  10.870  -3.658  1.00  4.12
ATOM    507  OE1 GLN A  32       5.480  10.045  -3.406  1.00 15.23
ATOM    508  NE2 GLN A  32       4.822  11.832  -4.523  1.00  3.13
ATOM    509 2HE2 GLN A  32       4.105  12.477  -4.692  1.00 72.54
ATOM    510 1HE2 GLN A  32       5.703  11.854  -4.954  1.00 72.21
ATOM    511  C   GLN A  32       4.352  12.271   0.449  1.00 11.33
ATOM    512  O   GLN A  32       5.135  13.191   0.245  1.00 70.24
ATOM    513  N   ASN A  33       3.632  12.198   1.540  1.00 54.05
ATOM    514  H   ASN A  33       2.975  11.474   1.656  1.00 53.45
ATOM    515  CA  ASN A  33       3.765  13.206   2.585  1.00 50.34
ATOM    516  HA  ASN A  33       4.236  14.060   2.123  1.00 44.45
ATOM    517  CB  ASN A  33       2.399  13.648   3.145  1.00 72.44
ATOM    518 1HB  ASN A  33       1.848  12.768   3.445  1.00 51.50
ATOM    519 2HB  ASN A  33       2.554  14.281   4.004  1.00 42.51
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ATOM    520  CG  ASN A  33       1.536  14.402   2.132  1.00 14.55
ATOM    521  OD1 ASN A  33       0.320  14.348   2.181  1.00 15.04
ATOM    522  ND2 ASN A  33       2.153  15.110   1.207  1.00 42.21
ATOM    523 2HD2 ASN A  33       3.133  15.126   1.196  1.00  3.15
ATOM    524 1HD2 ASN A  33       1.585  15.592   0.573  1.00 42.21
ATOM    525  C   ASN A  33       4.685  12.741   3.690  1.00 73.23
ATOM    526  O   ASN A  33       4.874  13.442   4.676  1.00 64.32
ATOM    527  N   GLY A  34       5.269  11.564   3.502  1.00 32.14
ATOM    528  H   GLY A  34       5.067  11.066   2.682  1.00 72.53
ATOM    529  CA  GLY A  34       6.214  11.025   4.460  1.00 65.32
ATOM    530 1HA  GLY A  34       6.645  10.123   4.051  1.00 43.23
ATOM    531 2HA  GLY A  34       7.003  11.747   4.613  1.00 71.14
ATOM    532  C   GLY A  34       5.589  10.695   5.796  1.00 51.12
ATOM    533  O   GLY A  34       6.166  10.969   6.842  1.00 62.51
ATOM    534  N   GLN A  35       4.414  10.092   5.765  1.00 20.23
ATOM    535  H   GLN A  35       4.001   9.884   4.898  1.00 23.13
ATOM    536  CA  GLN A  35       3.734   9.722   6.995  1.00  3.51
ATOM    537  HA  GLN A  35       3.961  10.483   7.728  1.00 45.53
ATOM    538  CB  GLN A  35       2.219   9.645   6.792  1.00 52.32
ATOM    539 1HB  GLN A  35       2.006   8.858   6.084  1.00 12.34
ATOM    540 2HB  GLN A  35       1.751   9.405   7.735  1.00  0.34
ATOM    541  CG  GLN A  35       1.608  10.939   6.269  1.00  3.12
ATOM    542 1HG  GLN A  35       1.911  11.756   6.906  1.00 12.35
ATOM    543 2HG  GLN A  35       1.977  11.108   5.267  1.00 11.22
ATOM    544  CD  GLN A  35       0.098  10.897   6.222  1.00 62.51
ATOM    545  OE1 GLN A  35      -0.493  10.500   5.237  1.00 71.02
ATOM    546  NE2 GLN A  35      -0.533  11.312   7.290  1.00 50.24
ATOM    547 2HE2 GLN A  35      -0.002  11.623   8.050  1.00 15.24
ATOM    548 1HE2 GLN A  35      -1.512  11.296   7.257  1.00 44.12
ATOM    549  C   GLN A  35       4.286   8.398   7.499  1.00 14.41
ATOM    550  O   GLN A  35       4.139   8.042   8.663  1.00 33.33
ATOM    551  N   THR A  36       4.907   7.678   6.603  1.00  1.30
ATOM    552  H   THR A  36       4.939   8.005   5.681  1.00  3.10
ATOM    553  CA  THR A  36       5.570   6.462   6.934  1.00  1.42
ATOM    554  HA  THR A  36       5.249   6.184   7.928  1.00 42.02
ATOM    555  CB  THR A  36       5.212   5.305   5.925  1.00 44.31
ATOM    556  HB  THR A  36       4.159   5.097   6.047  1.00 73.03
ATOM    557  OG1 THR A  36       5.928   4.093   6.232  1.00 14.45
ATOM    558  HG1 THR A  36       6.877   4.242   6.173  1.00 63.41
ATOM    559  CG2 THR A  36       5.467   5.703   4.469  1.00 15.24
ATOM    560 1HG2 THR A  36       4.861   6.562   4.220  1.00 32.14
ATOM    561 2HG2 THR A  36       5.209   4.881   3.819  1.00 22.31
ATOM    562 3HG2 THR A  36       6.511   5.949   4.342  1.00 53.12
ATOM    563  C   THR A  36       7.076   6.742   6.978  1.00 14.41
ATOM    564  O   THR A  36       7.635   7.355   6.061  1.00 74.44
ATOM    565  N   PHE A  37       7.712   6.339   8.046  1.00 12.45
ATOM    566  H   PHE A  37       7.224   5.847   8.739  1.00 40.05
ATOM    567  CA  PHE A  37       9.125   6.579   8.222  1.00 22.44
ATOM    568  HA  PHE A  37       9.430   7.303   7.481  1.00 62.53
ATOM    569  CB  PHE A  37       9.410   7.144   9.620  1.00 74.40
ATOM    570 1HB  PHE A  37       9.079   6.432  10.362  1.00  5.54
ATOM    571 2HB  PHE A  37      10.473   7.300   9.729  1.00 61.22
ATOM    572  CG  PHE A  37       8.714   8.455   9.887  1.00  5.20
ATOM    573  CD1 PHE A  37       7.502   8.492  10.562  1.00 31.11
ATOM    574  HD1 PHE A  37       7.060   7.569  10.908  1.00 20.44
ATOM    575  CE1 PHE A  37       6.859   9.691  10.796  1.00 52.50
ATOM    576  HE1 PHE A  37       5.916   9.706  11.322  1.00 34.01
ATOM    577  CZ  PHE A  37       7.423  10.872  10.355  1.00  1.34
ATOM    578  HZ  PHE A  37       6.922  11.811  10.537  1.00 14.32
ATOM    579  CE2 PHE A  37       8.629  10.851   9.682  1.00 24.31
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ATOM    580  HE2 PHE A  37       9.072  11.773   9.337  1.00 43.10
ATOM    581  CD2 PHE A  37       9.268   9.647   9.449  1.00 15.15
ATOM    582  HD2 PHE A  37      10.211   9.631   8.924  1.00 72.45
ATOM    583  C   PHE A  37       9.886   5.297   7.992  1.00 25.22
ATOM    584  O   PHE A  37       9.406   4.217   8.347  1.00 12.13
ATOM    585  N   ASP A  38      11.049   5.404   7.393  1.00 11.31
ATOM    586  H   ASP A  38      11.407   6.289   7.181  1.00 54.22
ATOM    587  CA  ASP A  38      11.822   4.225   7.060  1.00 10.42
ATOM    588  HA  ASP A  38      11.130   3.397   7.017  1.00 53.31
ATOM    589  CB  ASP A  38      12.500   4.357   5.691  1.00 20.24
ATOM    590 1HB  ASP A  38      11.759   4.609   4.946  1.00 32.45
ATOM    591 2HB  ASP A  38      13.249   5.132   5.731  1.00  1.34
ATOM    592  CG  ASP A  38      13.165   3.067   5.291  1.00 54.11
ATOM    593  OD1 ASP A  38      14.386   2.994   5.367  1.00 51.53
ATOM    594  OD2 ASP A  38      12.443   2.080   5.014  1.00 12.02
ATOM    595  C   ASP A  38      12.851   3.918   8.125  1.00 31.12
ATOM    596  O   ASP A  38      13.302   4.812   8.844  1.00  3.41
ATOM    597  N   TYR A  39      13.230   2.662   8.199  1.00 53.05
ATOM    598  H   TYR A  39      12.850   2.040   7.540  1.00 65.21
ATOM    599  CA  TYR A  39      14.188   2.151   9.171  1.00 12.21
ATOM    600  HA  TYR A  39      13.918   2.496  10.155  1.00 72.42
ATOM    601  CB  TYR A  39      14.192   0.618   9.137  1.00 21.52
ATOM    602 1HB  TYR A  39      14.785   0.286   8.297  1.00  1.34
ATOM    603 2HB  TYR A  39      14.637   0.246  10.049  1.00 32.52
ATOM    604  CG  TYR A  39      12.812  -0.003   9.002  1.00 71.32
ATOM    605  CD1 TYR A  39      12.043  -0.326  10.110  1.00 41.34
ATOM    606  HD1 TYR A  39      12.436  -0.136  11.098  1.00 64.20
ATOM    607  CE1 TYR A  39      10.785  -0.882   9.960  1.00  0.31
ATOM    608  HE1 TYR A  39      10.195  -1.128  10.831  1.00  2.31
ATOM    609  CZ  TYR A  39      10.289  -1.121   8.691  1.00 21.31
ATOM    610  CE2 TYR A  39      11.032  -0.812   7.586  1.00 60.11
ATOM    611  HE2 TYR A  39      10.645  -1.000   6.595  1.00 13.44
ATOM    612  CD2 TYR A  39      12.279  -0.258   7.740  1.00 10.14
ATOM    613  HD2 TYR A  39      12.866  -0.014   6.867  1.00 31.14
ATOM    614  OH  TYR A  39       9.036  -1.667   8.537  1.00 50.52
ATOM    615  HH  TYR A  39       8.467  -1.146   9.111  1.00 14.13
ATOM    616  C   TYR A  39      15.587   2.675   8.866  1.00 63.23
ATOM    617  O   TYR A  39      16.408   2.819   9.754  1.00 33.32
ATOM    618  N   LYS A  40      15.844   2.956   7.601  1.00 14.42
ATOM    619  H   LYS A  40      15.192   2.788   6.876  1.00 25.24
ATOM    620  CA  LYS A  40      17.099   3.548   7.196  1.00 63.24
ATOM    621  HA  LYS A  40      17.894   3.375   7.904  1.00 12.33
ATOM    622  CB  LYS A  40      17.485   2.973   5.842  1.00 14.32
ATOM    623 1HB  LYS A  40      16.677   3.189   5.160  1.00 22.32
ATOM    624 2HB  LYS A  40      18.359   3.504   5.499  1.00 64.22
ATOM    625  CG  LYS A  40      17.752   1.494   5.754  1.00 51.51
ATOM    626 1HG  LYS A  40      18.761   1.290   6.083  1.00 52.00
ATOM    627 2HG  LYS A  40      17.043   0.962   6.370  1.00 54.25
ATOM    628  CD  LYS A  40      17.579   1.058   4.304  1.00 23.44
ATOM    629 1HD  LYS A  40      17.823   1.922   3.695  1.00 64.31
ATOM    630 2HD  LYS A  40      18.226   0.225   4.072  1.00 52.23
ATOM    631  CE  LYS A  40      16.120   0.698   4.008  1.00 22.43
ATOM    632 1HE  LYS A  40      15.868  -0.203   4.549  1.00 15.21
ATOM    633 2HE  LYS A  40      15.487   1.503   4.349  1.00 14.04
ATOM    634  NZ  LYS A  40      15.872   0.463   2.575  1.00 43.41
ATOM    635 1HZ  LYS A  40      14.983  -0.058   2.408  1.00  1.40
ATOM    636 2HZ  LYS A  40      16.654  -0.040   2.093  1.00 23.45
ATOM    637 3HZ  LYS A  40      15.750   1.397   2.131  1.00 62.23
ATOM    638  C   LYS A  40      16.831   4.995   6.920  1.00 23.12
ATOM    639  O   LYS A  40      17.730   5.740   6.549  1.00  2.34
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ATOM    640  N   SER A  41      15.573   5.385   7.150  1.00 43.34
ATOM    641  H   SER A  41      14.971   4.736   7.569  1.00 64.13
ATOM    642  CA  SER A  41      15.080   6.701   6.836  1.00 53.15
ATOM    643  HA  SER A  41      14.006   6.664   6.958  1.00  4.15
ATOM    644  CB  SER A  41      15.657   7.689   7.840  1.00 30.53
ATOM    645 1HB  SER A  41      16.708   7.451   7.911  1.00 72.33
ATOM    646 2HB  SER A  41      15.481   8.715   7.559  1.00 43.31
ATOM    647  OG  SER A  41      15.129   7.427   9.139  1.00 72.34
ATOM    648  HG  SER A  41      14.804   6.520   9.148  1.00  1.33
ATOM    649  C   SER A  41      15.368   7.068   5.347  1.00 73.04
ATOM    650  O   SER A  41      15.443   8.244   4.982  1.00 71.43
ATOM    651  N   ASN A  42      15.432   6.025   4.488  1.00  4.14
ATOM    652  H   ASN A  42      15.214   5.123   4.809  1.00 14.02
ATOM    653  CA  ASN A  42      15.785   6.191   3.085  1.00 23.44
ATOM    654  HA  ASN A  42      16.520   6.979   3.078  1.00 12.51
ATOM    655  CB  ASN A  42      16.438   4.906   2.472  1.00 54.12
ATOM    656 1HB  ASN A  42      17.202   5.202   1.771  1.00  5.20
ATOM    657 2HB  ASN A  42      16.903   4.343   3.269  1.00 53.43
ATOM    658  CG  ASN A  42      15.471   3.990   1.735  1.00 13.11
ATOM    659  OD1 ASN A  42      14.899   3.076   2.305  1.00 13.44
ATOM    660  ND2 ASN A  42      15.337   4.195   0.456  1.00 43.03
ATOM    661 2HD2 ASN A  42      15.885   4.912   0.043  1.00 41.42
ATOM    662 1HD2 ASN A  42      14.659   3.680  -0.029  1.00 21.35
ATOM    663  C   ASN A  42      14.552   6.622   2.270  1.00 23.12
ATOM    664  O   ASN A  42      13.417   6.303   2.661  1.00 73.24
ATOM    665  N   PRO A  43      14.763   7.443   1.207  1.00 10.22
ATOM    666  CD  PRO A  43      16.076   8.025   0.833  1.00 24.42
ATOM    667  CA  PRO A  43      13.708   7.902   0.273  1.00  1.32
ATOM    668  HA  PRO A  43      13.217   8.788   0.647  1.00 11.45
ATOM    669  CB  PRO A  43      14.511   8.271  -0.967  1.00 31.41
ATOM    670 1HB  PRO A  43      14.673   7.387  -1.569  1.00 10.33
ATOM    671 2HB  PRO A  43      14.007   9.036  -1.537  1.00 31.05
ATOM    672  CG  PRO A  43      15.784   8.811  -0.424  1.00 21.41
ATOM    673 1HG  PRO A  43      16.572   8.679  -1.152  1.00 73.22
ATOM    674 2HG  PRO A  43      15.668   9.855  -0.175  1.00 42.12
ATOM    675 1HD  PRO A  43      16.795   7.244   0.629  1.00 51.52
ATOM    676 2HD  PRO A  43      16.442   8.679   1.610  1.00 54.54
ATOM    677  C   PRO A  43      12.636   6.842  -0.076  1.00 62.24
ATOM    678  O   PRO A  43      12.934   5.746  -0.562  1.00 50.34
ATOM    679  N   TYR A  44      11.405   7.197   0.210  1.00 30.31
ATOM    680  H   TYR A  44      11.277   8.083   0.601  1.00 53.04
ATOM    681  CA  TYR A  44      10.232   6.374  -0.048  1.00 44.20
ATOM    682  HA  TYR A  44      10.583   5.358  -0.142  1.00 52.31
ATOM    683  CB  TYR A  44       9.205   6.412   1.084  1.00 72.01
ATOM    684 1HB  TYR A  44       9.238   7.385   1.550  1.00  3.45
ATOM    685 2HB  TYR A  44       8.225   6.270   0.652  1.00  4.32
ATOM    686  CG  TYR A  44       9.386   5.390   2.170  1.00 11.31
ATOM    687  CD1 TYR A  44       9.127   5.711   3.487  1.00 51.13
ATOM    688  HD1 TYR A  44       8.811   6.715   3.733  1.00 73.54
ATOM    689  CE1 TYR A  44       9.266   4.777   4.481  1.00 51.33
ATOM    690  HE1 TYR A  44       9.058   5.046   5.507  1.00 45.41
ATOM    691  CZ  TYR A  44       9.669   3.502   4.165  1.00 41.23
ATOM    692  CE2 TYR A  44       9.935   3.157   2.865  1.00 23.41
ATOM    693  HE2 TYR A  44      10.252   2.153   2.622  1.00  4.53
ATOM    694  CD2 TYR A  44       9.793   4.092   1.876  1.00 22.20
ATOM    695  HD2 TYR A  44      10.003   3.810   0.855  1.00 52.03
ATOM    696  OH  TYR A  44       9.842   2.573   5.166  1.00 51.42
ATOM    697  HH  TYR A  44      10.791   2.359   5.112  1.00 40.03
ATOM    698  C   TYR A  44       9.530   6.740  -1.320  1.00 44.22
ATOM    699  O   TYR A  44       8.593   6.059  -1.710  1.00 24.33
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ATOM    700  N   ASP A  45       9.987   7.754  -1.992  1.00  1.12
ATOM    701  H   ASP A  45      10.892   8.107  -1.846  1.00 41.44
ATOM    702  CA  ASP A  45       9.203   8.402  -3.013  1.00 54.20
ATOM    703  HA  ASP A  45       8.197   8.457  -2.625  1.00 74.21
ATOM    704  CB  ASP A  45       9.685   9.843  -3.225  1.00 40.32
ATOM    705 1HB  ASP A  45       9.198  10.243  -4.100  1.00 24.43
ATOM    706 2HB  ASP A  45       9.415  10.438  -2.365  1.00 51.31
ATOM    707  CG  ASP A  45      11.182   9.949  -3.435  1.00 45.04
ATOM    708  OD1 ASP A  45      11.608  10.237  -4.562  1.00 10.24
ATOM    709  OD2 ASP A  45      11.937   9.738  -2.436  1.00 13.24
ATOM    710  C   ASP A  45       9.133   7.622  -4.313  1.00 22.24
ATOM    711  O   ASP A  45      10.053   6.921  -4.735  1.00 63.45
ATOM    712  N   ILE A  46       7.947   7.709  -4.864  1.00 52.12
ATOM    713  H   ILE A  46       7.366   8.410  -4.504  1.00 14.43
ATOM    714  CA  ILE A  46       7.435   6.894  -5.952  1.00 21.12
ATOM    715  HA  ILE A  46       7.516   5.857  -5.664  1.00 52.31
ATOM    716  CB  ILE A  46       5.921   7.190  -6.106  1.00 44.43
ATOM    717  HB  ILE A  46       5.795   8.236  -6.339  1.00 52.52
ATOM    718  CG2 ILE A  46       5.305   6.366  -7.217  1.00  0.12
ATOM    719 1HG2 ILE A  46       5.425   5.316  -6.994  1.00 12.23
ATOM    720 2HG2 ILE A  46       5.798   6.593  -8.151  1.00 51.10
ATOM    721 3HG2 ILE A  46       4.253   6.599  -7.297  1.00  4.31
ATOM    722  CG1 ILE A  46       5.223   6.908  -4.780  1.00  1.12
ATOM    723 1HG1 ILE A  46       5.256   5.847  -4.578  1.00 43.42
ATOM    724 2HG1 ILE A  46       5.775   7.433  -4.016  1.00 45.33
ATOM    725  CD1 ILE A  46       3.781   7.349  -4.711  1.00 44.42
ATOM    726 1HD1 ILE A  46       3.367   7.081  -3.750  1.00 12.32
ATOM    727 2HD1 ILE A  46       3.224   6.860  -5.494  1.00 72.24
ATOM    728 3HD1 ILE A  46       3.723   8.419  -4.840  1.00  1.14
ATOM    729  C   ILE A  46       8.148   7.092  -7.285  1.00 33.31
ATOM    730  O   ILE A  46       8.258   8.199  -7.788  1.00 13.42
ATOM    731  N   SER A  47       8.575   5.982  -7.866  1.00 71.14
ATOM    732  H   SER A  47       8.456   5.117  -7.417  1.00 31.24
ATOM    733  CA  SER A  47       9.215   5.985  -9.149  1.00 73.22
ATOM    734  HA  SER A  47       9.656   6.955  -9.324  1.00 74.23
ATOM    735  CB  SER A  47      10.311   4.930  -9.131  1.00  4.44
ATOM    736 1HB  SER A  47       9.865   3.947  -9.159  1.00 43.40
ATOM    737 2HB  SER A  47      10.957   5.063  -9.987  1.00 13.05
ATOM    738  OG  SER A  47      11.092   5.052  -7.944  1.00 62.41
ATOM    739  HG  SER A  47      10.941   5.920  -7.550  1.00 21.24
ATOM    740  C   SER A  47       8.174   5.659 -10.258  1.00 52.11
ATOM    741  O   SER A  47       8.291   6.132 -11.379  1.00 64.11
ATOM    742  N   VAL A  48       7.134   4.864  -9.920  1.00  0.23
ATOM    743  H   VAL A  48       7.133   4.452  -9.024  1.00 65.31
ATOM    744  CA  VAL A  48       6.019   4.603 -10.877  1.00 22.20
ATOM    745  HA  VAL A  48       6.031   5.364 -11.644  1.00 32.14
ATOM    746  CB  VAL A  48       6.145   3.182 -11.567  1.00 44.02
ATOM    747  HB  VAL A  48       6.217   2.446 -10.781  1.00 61.42
ATOM    748  CG1 VAL A  48       4.895   2.829 -12.412  1.00 64.34
ATOM    749 1HG1 VAL A  48       5.039   1.873 -12.894  1.00 30.32
ATOM    750 2HG1 VAL A  48       4.723   3.580 -13.167  1.00  0.12
ATOM    751 3HG1 VAL A  48       4.012   2.762 -11.787  1.00 41.12
ATOM    752  CG2 VAL A  48       7.396   3.091 -12.433  1.00 63.33
ATOM    753 1HG2 VAL A  48       8.272   3.252 -11.821  1.00 41.21
ATOM    754 2HG2 VAL A  48       7.353   3.842 -13.207  1.00 42.40
ATOM    755 3HG2 VAL A  48       7.449   2.111 -12.885  1.00 72.52
ATOM    756  C   VAL A  48       4.688   4.624 -10.148  1.00 61.22
ATOM    757  O   VAL A  48       4.526   3.966  -9.137  1.00 33.14
ATOM    758  N   ASN A  49       3.770   5.388 -10.660  1.00 62.44
ATOM    759  H   ASN A  49       3.990   5.934 -11.440  1.00 43.05
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ATOM    760  CA  ASN A  49       2.394   5.416 -10.211  1.00 33.53
ATOM    761  HA  ASN A  49       2.284   4.665  -9.441  1.00 52.32
ATOM    762  CB  ASN A  49       2.013   6.797  -9.638  1.00 55.04
ATOM    763 1HB  ASN A  49       2.568   6.973  -8.730  1.00 22.21
ATOM    764 2HB  ASN A  49       2.277   7.562 -10.347  1.00 24.14
ATOM    765  CG  ASN A  49       0.524   6.946  -9.313  1.00 72.44
ATOM    766  OD1 ASN A  49      -0.173   5.983  -9.002  1.00 11.00
ATOM    767  ND2 ASN A  49       0.027   8.157  -9.376  1.00 45.42
ATOM    768 2HD2 ASN A  49       0.617   8.897  -9.628  1.00 12.34
ATOM    769 1HD2 ASN A  49      -0.924   8.264  -9.149  1.00 13.22
ATOM    770  C   ASN A  49       1.503   5.051 -11.365  1.00 30.53
ATOM    771  O   ASN A  49       1.479   5.791 -12.349  1.00 12.11
ATOM    772  N   LYS A  50       0.809   3.952 -11.318  1.00 54.21
ATOM    773  H   LYS A  50       0.877   3.291 -10.597  1.00  1.22
ATOM    774  CA  LYS A  50      -0.104   3.695 -12.364  1.00 51.11
ATOM    775  HA  LYS A  50      -0.313   4.661 -12.793  1.00  1.51
ATOM    776  CB  LYS A  50       0.533   2.845 -13.472  1.00 41.40
ATOM    777 1HB  LYS A  50      -0.333   2.393 -13.921  1.00 54.14
ATOM    778 2HB  LYS A  50       1.046   3.473 -14.183  1.00  2.23
ATOM    779  CG  LYS A  50       1.400   1.665 -13.027  1.00 61.23
ATOM    780 1HG  LYS A  50       1.978   1.295 -13.861  1.00 74.44
ATOM    781 2HG  LYS A  50       2.053   2.057 -12.263  1.00  4.04
ATOM    782  CD  LYS A  50       0.566   0.550 -12.443  1.00 31.11
ATOM    783 1HD  LYS A  50       0.122   0.985 -11.561  1.00 71.45
ATOM    784 2HD  LYS A  50      -0.184   0.248 -13.156  1.00 54.34
ATOM    785  CE  LYS A  50       1.385  -0.637 -11.989  1.00 51.23
ATOM    786 1HE  LYS A  50       2.009  -0.943 -12.816  1.00 43.45
ATOM    787 2HE  LYS A  50       2.014  -0.305 -11.176  1.00 44.55
ATOM    788  NZ  LYS A  50       0.506  -1.780 -11.542  1.00 31.41
ATOM    789 1HZ  LYS A  50       0.995  -2.397 -10.848  1.00 21.41
ATOM    790 2HZ  LYS A  50       0.239  -2.401 -12.326  1.00 63.34
ATOM    791 3HZ  LYS A  50      -0.404  -1.496 -11.110  1.00 52.43
ATOM    792  C   LYS A  50      -1.407   3.116 -11.885  1.00 20.53
ATOM    793  O   LYS A  50      -1.458   2.354 -10.918  1.00 72.41
ATOM    794  N   ASN A  51      -2.447   3.550 -12.525  1.00 13.30
ATOM    795  H   ASN A  51      -2.298   4.229 -13.215  1.00 74.34
ATOM    796  CA  ASN A  51      -3.783   3.030 -12.334  1.00 53.32
ATOM    797  HA  ASN A  51      -3.766   2.324 -11.518  1.00 54.41
ATOM    798  CB  ASN A  51      -4.804   4.150 -12.035  1.00 11.23
ATOM    799 1HB  ASN A  51      -4.855   4.828 -12.873  1.00 73.13
ATOM    800 2HB  ASN A  51      -5.771   3.687 -11.896  1.00 72.40
ATOM    801  CG  ASN A  51      -4.494   4.962 -10.791  1.00 73.12
ATOM    802  OD1 ASN A  51      -4.900   4.616  -9.708  1.00 34.34
ATOM    803  ND2 ASN A  51      -3.808   6.074 -10.954  1.00 63.43
ATOM    804 2HD2 ASN A  51      -3.527   6.334 -11.854  1.00  3.31
ATOM    805 1HD2 ASN A  51      -3.608   6.596 -10.145  1.00 41.14
ATOM    806  C   ASN A  51      -4.184   2.327 -13.601  1.00 34.10
ATOM    807  O   ASN A  51      -4.139   2.953 -14.655  1.00 41.01
ATOM    808  N   ASN A  52      -4.559   1.076 -13.554  1.00 34.33
ATOM    809  H   ASN A  52      -4.477   0.565 -12.715  1.00 23.12
ATOM    810  CA  ASN A  52      -5.066   0.448 -14.797  1.00 61.34
ATOM    811  HA  ASN A  52      -4.885   1.172 -15.580  1.00 35.11
ATOM    812  CB  ASN A  52      -4.384  -0.887 -15.161  1.00 72.22
ATOM    813 1HB  ASN A  52      -4.570  -1.599 -14.372  1.00  1.15
ATOM    814 2HB  ASN A  52      -4.817  -1.260 -16.078  1.00 23.45
ATOM    815  CG  ASN A  52      -2.878  -0.776 -15.348  1.00 11.44
ATOM    816  OD1 ASN A  52      -2.384  -0.458 -16.422  1.00  3.41
ATOM    817  ND2 ASN A  52      -2.142  -1.090 -14.320  1.00 43.04
ATOM    818 2HD2 ASN A  52      -2.630  -1.382 -13.506  1.00 11.23
ATOM    819 1HD2 ASN A  52      -1.175  -1.029 -14.416  1.00 71.44
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ATOM    820  C   ASN A  52      -6.566   0.274 -14.711  1.00 22.35
ATOM    821  O   ASN A  52      -7.194  -0.367 -15.544  1.00 15.11
ATOM    822  N   GLY A  53      -7.145   0.836 -13.669  1.00 21.41
ATOM    823  H   GLY A  53      -6.565   1.260 -13.002  1.00 22.31
ATOM    824  CA  GLY A  53      -8.581   0.822 -13.524  1.00  2.22
ATOM    825 1HA  GLY A  53      -8.907   1.797 -13.191  1.00 22.23
ATOM    826 2HA  GLY A  53      -9.025   0.617 -14.487  1.00 33.13
ATOM    827  C   GLY A  53      -9.055  -0.211 -12.537  1.00 54.12
ATOM    828  O   GLY A  53     -10.104  -0.037 -11.881  1.00  2.11
ATOM    829  N   THR A  54      -8.341  -1.293 -12.443  1.00 34.13
ATOM    830  H   THR A  54      -7.576  -1.412 -13.047  1.00 24.11
ATOM    831  CA  THR A  54      -8.672  -2.318 -11.492  1.00  4.22
ATOM    832  HA  THR A  54      -9.559  -1.977 -10.977  1.00 25.42
ATOM    833  CB  THR A  54      -8.985  -3.684 -12.171  1.00 54.23
ATOM    834  HB  THR A  54      -9.836  -3.528 -12.816  1.00 75.54
ATOM    835  OG1 THR A  54      -9.340  -4.660 -11.177  1.00 41.42
ATOM    836  HG1 THR A  54      -8.657  -4.599 -10.500  1.00 65.31
ATOM    837  CG2 THR A  54      -7.804  -4.189 -12.997  1.00 21.31
ATOM    838 1HG2 THR A  54      -7.573  -3.472 -13.771  1.00 54.13
ATOM    839 2HG2 THR A  54      -8.056  -5.138 -13.449  1.00 41.44
ATOM    840 3HG2 THR A  54      -6.944  -4.314 -12.355  1.00 12.41
ATOM    841  C   THR A  54      -7.571  -2.452 -10.451  1.00  1.44
ATOM    842  O   THR A  54      -7.759  -3.114  -9.410  1.00  3.30
ATOM    843  N   ASP A  55      -6.450  -1.829 -10.724  1.00 74.31
ATOM    844  H   ASP A  55      -6.307  -1.342 -11.562  1.00 23.40
ATOM    845  CA  ASP A  55      -5.343  -1.800  -9.814  1.00 65.11
ATOM    846  HA  ASP A  55      -5.687  -2.086  -8.832  1.00 51.33
ATOM    847  CB  ASP A  55      -4.178  -2.733 -10.249  1.00 23.44
ATOM    848 1HB  ASP A  55      -3.524  -2.898  -9.405  1.00 51.10
ATOM    849 2HB  ASP A  55      -4.588  -3.680 -10.568  1.00 65.11
ATOM    850  CG  ASP A  55      -3.342  -2.156 -11.389  1.00 53.32
ATOM    851  OD1 ASP A  55      -2.143  -1.806 -11.187  1.00 61.33
ATOM    852  OD2 ASP A  55      -3.876  -2.007 -12.478  1.00 14.53
ATOM    853  C   ASP A  55      -4.823  -0.400  -9.789  1.00 64.10
ATOM    854  O   ASP A  55      -5.060   0.390 -10.735  1.00 11.42
ATOM    855  N   ALA A  56      -4.188  -0.091  -8.731  1.00  1.12
ATOM    856  H   ALA A  56      -4.163  -0.736  -7.992  1.00 61.22
ATOM    857  CA  ALA A  56      -3.485   1.127  -8.555  1.00 52.24
ATOM    858  HA  ALA A  56      -3.255   1.526  -9.534  1.00 73.30
ATOM    859  CB  ALA A  56      -4.290   2.122  -7.746  1.00 43.13
ATOM    860 1HB  ALA A  56      -3.676   2.985  -7.532  1.00 72.31
ATOM    861 2HB  ALA A  56      -4.621   1.670  -6.823  1.00 71.13
ATOM    862 3HB  ALA A  56      -5.144   2.435  -8.328  1.00  0.42
ATOM    863  C   ALA A  56      -2.247   0.738  -7.835  1.00  5.15
ATOM    864  O   ALA A  56      -2.318   0.074  -6.795  1.00 52.51
ATOM    865  N   GLU A  57      -1.136   1.059  -8.374  1.00 31.12
ATOM    866  H   GLU A  57      -1.125   1.616  -9.185  1.00  2.24
ATOM    867  CA  GLU A  57       0.086   0.611  -7.806  1.00 44.33
ATOM    868  HA  GLU A  57      -0.078   0.328  -6.778  1.00 22.40
ATOM    869  CB  GLU A  57       0.553  -0.611  -8.568  1.00 73.54
ATOM    870 1HB  GLU A  57      -0.253  -1.331  -8.577  1.00 64.32
ATOM    871 2HB  GLU A  57       0.745  -0.310  -9.587  1.00 15.44
ATOM    872  CG  GLU A  57       1.791  -1.310  -8.030  1.00 43.24
ATOM    873 1HG  GLU A  57       2.568  -0.576  -7.877  1.00 15.33
ATOM    874 2HG  GLU A  57       1.554  -1.791  -7.093  1.00  2.30
ATOM    875  CD  GLU A  57       2.285  -2.351  -9.004  1.00 34.20
ATOM    876  OE1 GLU A  57       3.455  -2.306  -9.373  1.00 10.22
ATOM    877  OE2 GLU A  57       1.463  -3.141  -9.506  1.00 52.43
ATOM    878  C   GLU A  57       1.119   1.690  -7.889  1.00 33.42
ATOM    879  O   GLU A  57       1.324   2.300  -8.957  1.00 75.25
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ATOM    880  N   ILE A  58       1.731   1.947  -6.779  1.00  5.21
ATOM    881  H   ILE A  58       1.481   1.488  -5.950  1.00  4.34
ATOM    882  CA  ILE A  58       2.793   2.850  -6.699  1.00  2.43
ATOM    883  HA  ILE A  58       2.943   3.227  -7.700  1.00 14.11
ATOM    884  CB  ILE A  58       2.532   4.052  -5.751  1.00 32.44
ATOM    885  HB  ILE A  58       3.513   4.454  -5.567  1.00 34.23
ATOM    886  CG2 ILE A  58       1.707   5.110  -6.459  1.00  1.24
ATOM    887 1HG2 ILE A  58       2.265   5.503  -7.295  1.00 23.33
ATOM    888 2HG2 ILE A  58       1.453   5.904  -5.772  1.00 43.23
ATOM    889 3HG2 ILE A  58       0.797   4.658  -6.824  1.00 45.44
ATOM    890  CG1 ILE A  58       1.881   3.666  -4.392  1.00 13.12
ATOM    891 1HG1 ILE A  58       2.289   2.720  -4.066  1.00 33.00
ATOM    892 2HG1 ILE A  58       2.120   4.422  -3.660  1.00 10.23
ATOM    893  CD1 ILE A  58       0.366   3.516  -4.441  1.00 63.03
ATOM    894 1HD1 ILE A  58       0.106   2.731  -5.136  1.00  0.34
ATOM    895 2HD1 ILE A  58      -0.040   4.450  -4.807  1.00 41.14
ATOM    896 3HD1 ILE A  58      -0.026   3.305  -3.459  1.00 34.03
ATOM    897  C   ILE A  58       4.044   2.105  -6.312  1.00  5.15
ATOM    898  O   ILE A  58       4.076   1.382  -5.302  1.00 41.54
ATOM    899  N   VAL A  59       5.046   2.252  -7.127  1.00 61.44
ATOM    900  H   VAL A  59       4.941   2.870  -7.885  1.00 52.32
ATOM    901  CA  VAL A  59       6.289   1.560  -6.969  1.00 34.42
ATOM    902  HA  VAL A  59       6.210   0.874  -6.139  1.00 10.45
ATOM    903  CB  VAL A  59       6.654   0.746  -8.242  1.00  4.13
ATOM    904  HB  VAL A  59       6.870   1.457  -9.027  1.00 21.52
ATOM    905  CG1 VAL A  59       7.911  -0.093  -8.029  1.00 64.20
ATOM    906 1HG1 VAL A  59       8.738   0.555  -7.779  1.00 54.41
ATOM    907 2HG1 VAL A  59       8.140  -0.634  -8.936  1.00  3.02
ATOM    908 3HG1 VAL A  59       7.746  -0.792  -7.224  1.00 63.40
ATOM    909  CG2 VAL A  59       5.504  -0.121  -8.686  1.00 11.12
ATOM    910 1HG2 VAL A  59       5.790  -0.680  -9.564  1.00 53.13
ATOM    911 2HG2 VAL A  59       4.651   0.502  -8.915  1.00  4.20
ATOM    912 3HG2 VAL A  59       5.245  -0.806  -7.892  1.00 73.21
ATOM    913  C   VAL A  59       7.390   2.550  -6.723  1.00 31.30
ATOM    914  O   VAL A  59       7.568   3.497  -7.482  1.00 13.21
ATOM    915  N   SER A  60       8.065   2.355  -5.671  1.00 62.43
ATOM    916  H   SER A  60       7.779   1.662  -5.032  1.00 21.41
ATOM    917  CA  SER A  60       9.220   3.083  -5.326  1.00 61.03
ATOM    918  HA  SER A  60       9.433   3.796  -6.110  1.00 33.54
ATOM    919  CB  SER A  60       8.998   3.817  -4.004  1.00 72.14
ATOM    920 1HB  SER A  60       8.197   4.534  -4.112  1.00 64.24
ATOM    921 2HB  SER A  60       8.730   3.091  -3.253  1.00 52.21
ATOM    922  OG  SER A  60      10.165   4.489  -3.592  1.00 13.20
ATOM    923  HG  SER A  60      10.111   5.433  -3.807  1.00 44.34
ATOM    924  C   SER A  60      10.360   2.082  -5.205  1.00 34.03
ATOM    925  O   SER A  60      10.130   0.861  -5.217  1.00 11.52
ATOM    926  N   ALA A  61      11.536   2.575  -5.073  1.00 12.42
ATOM    927  H   ALA A  61      11.577   3.553  -4.972  1.00 51.05
ATOM    928  CA  ALA A  61      12.728   1.762  -4.975  1.00 72.23
ATOM    929  HA  ALA A  61      12.445   0.788  -4.604  1.00 45.41
ATOM    930  CB  ALA A  61      13.378   1.597  -6.346  1.00 23.11
ATOM    931 1HB  ALA A  61      13.661   2.568  -6.727  1.00 31.41
ATOM    932 2HB  ALA A  61      12.678   1.133  -7.025  1.00 11.13
ATOM    933 3HB  ALA A  61      14.257   0.976  -6.256  1.00 14.02
ATOM    934  C   ALA A  61      13.693   2.406  -4.009  1.00 72.11
ATOM    935  O   ALA A  61      13.876   3.614  -4.041  1.00  3.41
ATOM    936  N   SER A  62      14.288   1.615  -3.150  1.00 75.15
ATOM    937  H   SER A  62      14.122   0.648  -3.132  1.00 53.21
ATOM    938  CA  SER A  62      15.216   2.126  -2.190  1.00 74.41
ATOM    939  HA  SER A  62      14.837   3.086  -1.873  1.00  1.32
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ATOM    940  CB  SER A  62      15.269   1.202  -0.981  1.00 54.45
ATOM    941 1HB  SER A  62      15.621   0.227  -1.285  1.00 41.31
ATOM    942 2HB  SER A  62      15.926   1.617  -0.231  1.00 72.44
ATOM    943  OG  SER A  62      13.959   1.081  -0.429  1.00 11.44
ATOM    944  HG  SER A  62      13.929   0.427   0.287  1.00 63.41
ATOM    945  C   SER A  62      16.587   2.351  -2.821  1.00 13.00
ATOM    946  O   SER A  62      17.139   1.475  -3.496  1.00 73.20
ATOM    947  N   ASP A  63      17.103   3.533  -2.592  1.00 42.35
ATOM    948  H   ASP A  63      16.636   4.164  -1.998  1.00 10.14
ATOM    949  CA  ASP A  63      18.353   4.025  -3.167  1.00 73.14
ATOM    950  HA  ASP A  63      18.335   3.906  -4.240  1.00 24.31
ATOM    951  CB  ASP A  63      18.445   5.526  -2.870  1.00 44.10
ATOM    952 1HB  ASP A  63      19.379   5.912  -3.252  1.00 52.22
ATOM    953 2HB  ASP A  63      17.621   6.041  -3.340  1.00 33.34
ATOM    954  CG  ASP A  63      18.383   5.785  -1.369  1.00 10.13
ATOM    955  OD1 ASP A  63      17.268   5.676  -0.800  1.00 30.02
ATOM    956  OD2 ASP A  63      19.428   6.007  -0.745  1.00 73.14
ATOM    957  C   ASP A  63      19.580   3.351  -2.569  1.00 61.12
ATOM    958  O   ASP A  63      20.577   3.154  -3.258  1.00 22.24
ATOM    959  N   SER A  64      19.499   2.969  -1.317  1.00 25.51
ATOM    960  H   SER A  64      18.669   3.127  -0.827  1.00 14.32
ATOM    961  CA  SER A  64      20.639   2.397  -0.657  1.00 54.12
ATOM    962  HA  SER A  64      21.528   2.896  -1.014  1.00 60.31
ATOM    963  CB  SER A  64      20.507   2.644   0.842  1.00 24.11
ATOM    964 1HB  SER A  64      19.677   2.069   1.225  1.00 32.15
ATOM    965 2HB  SER A  64      21.417   2.335   1.338  1.00 53.02
ATOM    966  OG  SER A  64      20.277   4.027   1.125  1.00 10.35
ATOM    967  HG  SER A  64      20.100   4.566   0.335  1.00  2.54
ATOM    968  C   SER A  64      20.732   0.900  -0.957  1.00 52.33
ATOM    969  O   SER A  64      21.804   0.369  -1.255  1.00 71.11
ATOM    970  N   ASP A  65      19.610   0.237  -0.897  1.00 53.25
ATOM    971  H   ASP A  65      18.781   0.685  -0.626  1.00 64.21
ATOM    972  CA  ASP A  65      19.529  -1.160  -1.197  1.00 44.23
ATOM    973  HA  ASP A  65      20.461  -1.408  -1.685  1.00 73.33
ATOM    974  CB  ASP A  65      19.388  -2.027   0.086  1.00 74.13
ATOM    975 1HB  ASP A  65      19.347  -3.067  -0.202  1.00 12.33
ATOM    976 2HB  ASP A  65      20.265  -1.876   0.698  1.00 55.33
ATOM    977  CG  ASP A  65      18.154  -1.740   0.931  1.00 40.54
ATOM    978  OD1 ASP A  65      17.487  -2.700   1.342  1.00 71.44
ATOM    979  OD2 ASP A  65      17.845  -0.546   1.191  1.00 72.43
ATOM    980  C   ASP A  65      18.430  -1.403  -2.212  1.00 21.12
ATOM    981  O   ASP A  65      17.252  -1.398  -1.896  1.00 33.31
ATOM    982  N   SER A  66      18.843  -1.599  -3.449  1.00 42.41
ATOM    983  H   SER A  66      19.809  -1.604  -3.609  1.00 14.14
ATOM    984  CA  SER A  66      17.944  -1.758  -4.597  1.00 44.24
ATOM    985  HA  SER A  66      17.341  -0.864  -4.651  1.00 54.44
ATOM    986  CB  SER A  66      18.772  -1.850  -5.894  1.00 12.54
ATOM    987 1HB  SER A  66      19.398  -0.974  -5.981  1.00 40.20
ATOM    988 2HB  SER A  66      19.398  -2.729  -5.848  1.00 45.13
ATOM    989  OG  SER A  66      17.953  -1.934  -7.045  1.00 51.42
ATOM    990  HG  SER A  66      17.040  -2.083  -6.772  1.00 44.34
ATOM    991  C   SER A  66      16.989  -2.964  -4.460  1.00 64.32
ATOM    992  O   SER A  66      15.970  -3.040  -5.156  1.00 44.30
ATOM    993  N   THR A  67      17.315  -3.895  -3.580  1.00 52.12
ATOM    994  H   THR A  67      18.122  -3.775  -3.042  1.00 42.11
ATOM    995  CA  THR A  67      16.486  -5.062  -3.376  1.00  4.30
ATOM    996  HA  THR A  67      16.132  -5.367  -4.350  1.00 54.14
ATOM    997  CB  THR A  67      17.312  -6.233  -2.745  1.00 32.21
ATOM    998  HB  THR A  67      18.084  -6.501  -3.452  1.00 62.14
ATOM    999  OG1 THR A  67      16.499  -7.387  -2.527  1.00 50.24
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ATOM   1000  HG1 THR A  67      16.379  -7.511  -1.580  1.00 65.44
ATOM   1001  CG2 THR A  67      17.974  -5.816  -1.441  1.00 73.35
ATOM   1002 1HG2 THR A  67      17.217  -5.508  -0.735  1.00 33.23
ATOM   1003 2HG2 THR A  67      18.652  -4.996  -1.624  1.00 50.04
ATOM   1004 3HG2 THR A  67      18.523  -6.653  -1.034  1.00 70.24
ATOM   1005  C   THR A  67      15.253  -4.694  -2.517  1.00  5.21
ATOM   1006  O   THR A  67      14.235  -5.412  -2.496  1.00 33.44
ATOM   1007  N   ASP A  68      15.319  -3.548  -1.872  1.00 20.51
ATOM   1008  H   ASP A  68      16.116  -2.976  -1.935  1.00 25.44
ATOM   1009  CA  ASP A  68      14.217  -3.048  -1.098  1.00  2.41
ATOM   1010  HA  ASP A  68      13.546  -3.872  -0.913  1.00 10.34
ATOM   1011  CB  ASP A  68      14.688  -2.456   0.226  1.00 22.42
ATOM   1012 1HB  ASP A  68      15.176  -3.226   0.804  1.00 63.40
ATOM   1013 2HB  ASP A  68      15.404  -1.673   0.020  1.00 24.35
ATOM   1014  CG  ASP A  68      13.577  -1.875   1.070  1.00 24.34
ATOM   1015  OD1 ASP A  68      13.691  -0.710   1.497  1.00 24.20
ATOM   1016  OD2 ASP A  68      12.572  -2.573   1.333  1.00 41.00
ATOM   1017  C   ASP A  68      13.503  -2.030  -1.924  1.00 33.34
ATOM   1018  O   ASP A  68      14.126  -1.226  -2.616  1.00 31.14
ATOM   1019  N   SER A  69      12.222  -2.131  -1.971  1.00 54.15
ATOM   1020  H   SER A  69      11.744  -2.777  -1.412  1.00 72.34
ATOM   1021  CA  SER A  69      11.445  -1.232  -2.757  1.00 43.23
ATOM   1022  HA  SER A  69      11.960  -0.290  -2.863  1.00 53.23
ATOM   1023  CB  SER A  69      11.189  -1.844  -4.140  1.00 24.40
ATOM   1024 1HB  SER A  69      10.208  -2.290  -4.154  1.00 60.33
ATOM   1025 2HB  SER A  69      11.204  -1.051  -4.873  1.00  1.31
ATOM   1026  OG  SER A  69      12.209  -2.802  -4.485  1.00 23.14
ATOM   1027  HG  SER A  69      13.046  -2.316  -4.499  1.00 65.23
ATOM   1028  C   SER A  69      10.136  -1.063  -2.052  1.00 43.22
ATOM   1029  O   SER A  69       9.661  -2.018  -1.424  1.00 63.03
ATOM   1030  N   LEU A  70       9.557   0.089  -2.115  1.00 32.23
ATOM   1031  H   LEU A  70       9.997   0.844  -2.557  1.00 25.41
ATOM   1032  CA  LEU A  70       8.255   0.241  -1.562  1.00 21.43
ATOM   1033  HA  LEU A  70       8.086  -0.587  -0.889  1.00 14.33
ATOM   1034  CB  LEU A  70       8.144   1.597  -0.784  1.00 73.12
ATOM   1035 1HB  LEU A  70       8.958   1.626  -0.076  1.00  2.21
ATOM   1036 2HB  LEU A  70       8.301   2.399  -1.489  1.00 20.44
ATOM   1037  CG  LEU A  70       6.835   1.913   0.013  1.00  4.04
ATOM   1038  HG  LEU A  70       7.013   2.798   0.608  1.00 65.51
ATOM   1039  CD1 LEU A  70       5.645   2.228  -0.893  1.00 23.11
ATOM   1040 1HD1 LEU A  70       5.867   3.097  -1.493  1.00  2.40
ATOM   1041 2HD1 LEU A  70       4.766   2.418  -0.294  1.00  4.25
ATOM   1042 3HD1 LEU A  70       5.454   1.386  -1.542  1.00  2.31
ATOM   1043  CD2 LEU A  70       6.496   0.774   0.971  1.00 52.34
ATOM   1044 1HD2 LEU A  70       7.318   0.624   1.653  1.00  3.30
ATOM   1045 2HD2 LEU A  70       6.319  -0.133   0.411  1.00 54.32
ATOM   1046 3HD2 LEU A  70       5.607   1.031   1.530  1.00 65.42
ATOM   1047  C   LEU A  70       7.284   0.141  -2.720  1.00 75.13
ATOM   1048  O   LEU A  70       7.237   0.995  -3.573  1.00 11.12
ATOM   1049  N   GLN A  71       6.555  -0.915  -2.753  1.00 55.45
ATOM   1050  H   GLN A  71       6.661  -1.597  -2.058  1.00 73.12
ATOM   1051  CA  GLN A  71       5.555  -1.137  -3.760  1.00 52.11
ATOM   1052  HA  GLN A  71       5.401  -0.198  -4.272  1.00 44.03
ATOM   1053  CB  GLN A  71       5.992  -2.216  -4.789  1.00 24.31
ATOM   1054 1HB  GLN A  71       6.589  -1.734  -5.550  1.00 22.42
ATOM   1055 2HB  GLN A  71       6.606  -2.955  -4.298  1.00  1.21
ATOM   1056  CG  GLN A  71       4.836  -2.943  -5.501  1.00 43.41
ATOM   1057 1HG  GLN A  71       4.208  -3.407  -4.754  1.00  3.21
ATOM   1058 2HG  GLN A  71       4.255  -2.216  -6.050  1.00  5.11
ATOM   1059  CD  GLN A  71       5.314  -4.018  -6.463  1.00 71.53
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ATOM   1060  OE1 GLN A  71       5.574  -5.149  -6.056  1.00 35.11
ATOM   1061  NE2 GLN A  71       5.309  -3.733  -7.734  1.00  2.12
ATOM   1062 2HE2 GLN A  71       4.993  -2.856  -8.055  1.00 63.42
ATOM   1063 1HE2 GLN A  71       5.600  -4.427  -8.356  1.00 32.43
ATOM   1064  C   GLN A  71       4.288  -1.501  -3.077  1.00 40.55
ATOM   1065  O   GLN A  71       4.271  -2.391  -2.213  1.00 40.12
ATOM   1066  N   VAL A  72       3.270  -0.774  -3.380  1.00 10.22
ATOM   1067  H   VAL A  72       3.380  -0.042  -4.029  1.00 15.24
ATOM   1068  CA  VAL A  72       1.984  -1.021  -2.836  1.00 43.54
ATOM   1069  HA  VAL A  72       2.020  -1.938  -2.266  1.00 55.23
ATOM   1070  CB  VAL A  72       1.537   0.147  -1.907  1.00 73.45
ATOM   1071  HB  VAL A  72       1.547   1.060  -2.485  1.00 34.03
ATOM   1072  CG1 VAL A  72       0.141  -0.084  -1.379  1.00 10.32
ATOM   1073 1HG1 VAL A  72      -0.121   0.706  -0.692  1.00 42.24
ATOM   1074 2HG1 VAL A  72       0.102  -1.033  -0.868  1.00 24.45
ATOM   1075 3HG1 VAL A  72      -0.555  -0.090  -2.204  1.00 53.15
ATOM   1076  CG2 VAL A  72       2.503   0.317  -0.744  1.00 62.21
ATOM   1077 1HG2 VAL A  72       3.492   0.518  -1.128  1.00 24.01
ATOM   1078 2HG2 VAL A  72       2.523  -0.589  -0.158  1.00 20.51
ATOM   1079 3HG2 VAL A  72       2.183   1.142  -0.125  1.00 52.02
ATOM   1080  C   VAL A  72       1.022  -1.174  -3.991  1.00  5.01
ATOM   1081  O   VAL A  72       0.898  -0.269  -4.822  1.00 72.12
ATOM   1082  N   ALA A  73       0.362  -2.297  -4.035  1.00 54.53
ATOM   1083  H   ALA A  73       0.501  -2.959  -3.322  1.00 22.11
ATOM   1084  CA  ALA A  73      -0.571  -2.600  -5.084  1.00 73.22
ATOM   1085  HA  ALA A  73      -0.562  -1.786  -5.794  1.00 12.14
ATOM   1086  CB  ALA A  73      -0.169  -3.880  -5.803  1.00  2.11
ATOM   1087 1HB  ALA A  73      -0.180  -4.703  -5.104  1.00 23.10
ATOM   1088 2HB  ALA A  73       0.826  -3.768  -6.208  1.00 70.52
ATOM   1089 3HB  ALA A  73      -0.864  -4.080  -6.605  1.00 45.13
ATOM   1090  C   ALA A  73      -1.952  -2.731  -4.497  1.00 53.25
ATOM   1091  O   ALA A  73      -2.131  -3.346  -3.438  1.00 70.30
ATOM   1092  N   MET A  74      -2.903  -2.136  -5.146  1.00 41.12
ATOM   1093  H   MET A  74      -2.686  -1.652  -5.975  1.00 33.32
ATOM   1094  CA  MET A  74      -4.277  -2.135  -4.700  1.00 70.33
ATOM   1095  HA  MET A  74      -4.366  -2.588  -3.725  1.00 20.32
ATOM   1096  CB  MET A  74      -4.790  -0.699  -4.639  1.00 73.04
ATOM   1097 1HB  MET A  74      -4.886  -0.328  -5.649  1.00 23.33
ATOM   1098 2HB  MET A  74      -5.766  -0.695  -4.174  1.00 64.51
ATOM   1099  CG  MET A  74      -3.897   0.241  -3.881  1.00 70.44
ATOM   1100 1HG  MET A  74      -3.929  -0.041  -2.839  1.00 74.24
ATOM   1101 2HG  MET A  74      -2.883   0.141  -4.239  1.00  3.21
ATOM   1102  SD  MET A  74      -4.406   1.945  -4.002  1.00  1.54
ATOM   1103  CE  MET A  74      -2.988   2.712  -3.263  1.00  3.54
ATOM   1104 1HE  MET A  74      -2.896   2.380  -2.239  1.00 71.12
ATOM   1105 2HE  MET A  74      -3.076   3.788  -3.295  1.00 34.14
ATOM   1106 3HE  MET A  74      -2.103   2.415  -3.807  1.00 10.11
ATOM   1107  C   MET A  74      -5.099  -2.854  -5.722  1.00 51.33
ATOM   1108  O   MET A  74      -4.950  -2.597  -6.909  1.00 54.12
ATOM   1109  N   LYS A  75      -5.945  -3.742  -5.295  1.00 44.41
ATOM   1110  H   LYS A  75      -5.974  -4.016  -4.352  1.00  1.42
ATOM   1111  CA  LYS A  75      -6.822  -4.383  -6.189  1.00 64.10
ATOM   1112  HA  LYS A  75      -6.602  -4.041  -7.190  1.00 24.53
ATOM   1113  CB  LYS A  75      -6.671  -5.888  -6.134  1.00 21.23
ATOM   1114 1HB  LYS A  75      -5.650  -6.153  -6.366  1.00  3.34
ATOM   1115 2HB  LYS A  75      -6.919  -6.235  -5.142  1.00 43.11
ATOM   1116  CG  LYS A  75      -7.588  -6.561  -7.112  1.00 53.52
ATOM   1117 1HG  LYS A  75      -8.583  -6.165  -6.974  1.00 32.12
ATOM   1118 2HG  LYS A  75      -7.253  -6.330  -8.113  1.00 44.41
ATOM   1119  CD  LYS A  75      -7.637  -8.042  -6.940  1.00 54.31
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ATOM   1120 1HD  LYS A  75      -6.652  -8.454  -7.101  1.00 10.15
ATOM   1121 2HD  LYS A  75      -7.983  -8.278  -5.944  1.00 20.21
ATOM   1122  CE  LYS A  75      -8.596  -8.620  -7.942  1.00 61.11
ATOM   1123 1HE  LYS A  75      -8.223  -8.323  -8.909  1.00 43.03
ATOM   1124 2HE  LYS A  75      -8.593  -9.694  -7.839  1.00 53.53
ATOM   1125  NZ  LYS A  75      -9.985  -8.087  -7.774  1.00 54.43
ATOM   1126 1HZ  LYS A  75     -10.617  -8.487  -8.495  1.00 31.41
ATOM   1127 2HZ  LYS A  75     -10.020  -7.047  -7.852  1.00  2.10
ATOM   1128 3HZ  LYS A  75     -10.349  -8.353  -6.838  1.00 43.23
ATOM   1129  C   LYS A  75      -8.242  -4.017  -5.829  1.00 30.42
ATOM   1130  O   LYS A  75      -8.668  -4.185  -4.682  1.00 44.24
ATOM   1131  N   LYS A  76      -8.964  -3.580  -6.812  1.00 21.34
ATOM   1132  H   LYS A  76      -8.545  -3.522  -7.699  1.00 71.44
ATOM   1133  CA  LYS A  76     -10.321  -3.143  -6.650  1.00 63.13
ATOM   1134  HA  LYS A  76     -10.401  -2.583  -5.731  1.00 31.32
ATOM   1135  CB  LYS A  76     -10.691  -2.233  -7.814  1.00 72.13
ATOM   1136 1HB  LYS A  76      -9.923  -1.481  -7.917  1.00  1.23
ATOM   1137 2HB  LYS A  76     -10.705  -2.838  -8.707  1.00 25.43
ATOM   1138  CG  LYS A  76     -12.037  -1.522  -7.684  1.00 23.21
ATOM   1139 1HG  LYS A  76     -12.819  -2.259  -7.584  1.00 12.22
ATOM   1140 2HG  LYS A  76     -12.025  -0.887  -6.811  1.00 24.33
ATOM   1141  CD  LYS A  76     -12.310  -0.667  -8.909  1.00 24.44
ATOM   1142 1HD  LYS A  76     -13.149  -0.015  -8.722  1.00  1.43
ATOM   1143 2HD  LYS A  76     -11.428  -0.081  -9.126  1.00 33.54
ATOM   1144  CE  LYS A  76     -12.612  -1.526 -10.107  1.00 52.14
ATOM   1145 1HE  LYS A  76     -11.838  -2.269 -10.203  1.00 63.34
ATOM   1146 2HE  LYS A  76     -13.560  -1.999  -9.903  1.00 20.44
ATOM   1147  NZ  LYS A  76     -12.707  -0.732 -11.356  1.00 42.43
ATOM   1148 1HZ  LYS A  76     -12.966  -1.346 -12.152  1.00 73.22
ATOM   1149 2HZ  LYS A  76     -11.769  -0.321 -11.566  1.00  0.33
ATOM   1150 3HZ  LYS A  76     -13.401   0.037 -11.262  1.00 64.20
ATOM   1151  C   LYS A  76     -11.261  -4.345  -6.611  1.00  5.44
ATOM   1152  O   LYS A  76     -11.162  -5.277  -7.452  1.00 43.44
ATOM   1153  N   LEU A  77     -12.080  -4.383  -5.597  1.00 14.25
ATOM   1154  H   LEU A  77     -12.033  -3.680  -4.905  1.00 42.54
ATOM   1155  CA  LEU A  77     -13.086  -5.406  -5.451  1.00 12.15
ATOM   1156  HA  LEU A  77     -12.906  -6.157  -6.206  1.00 51.12
ATOM   1157  CB  LEU A  77     -13.019  -6.047  -4.054  1.00 21.42
ATOM   1158 1HB  LEU A  77     -13.189  -5.264  -3.329  1.00 70.54
ATOM   1159 2HB  LEU A  77     -13.819  -6.767  -3.970  1.00 74.42
ATOM   1160  CG  LEU A  77     -11.700  -6.749  -3.691  1.00 21.41
ATOM   1161  HG  LEU A  77     -10.891  -6.036  -3.755  1.00  5.12
ATOM   1162  CD1 LEU A  77     -11.751  -7.274  -2.273  1.00 44.33
ATOM   1163 1HD1 LEU A  77     -11.895  -6.452  -1.588  1.00 22.15
ATOM   1164 2HD1 LEU A  77     -10.823  -7.776  -2.043  1.00 21.32
ATOM   1165 3HD1 LEU A  77     -12.570  -7.971  -2.176  1.00  4.24
ATOM   1166  CD2 LEU A  77     -11.410  -7.887  -4.654  1.00 73.23
ATOM   1167 1HD2 LEU A  77     -10.481  -8.364  -4.381  1.00  4.54
ATOM   1168 2HD2 LEU A  77     -11.331  -7.491  -5.656  1.00 31.41
ATOM   1169 3HD2 LEU A  77     -12.213  -8.608  -4.614  1.00 32.43
ATOM   1170  C   LEU A  77     -14.461  -4.777  -5.699  1.00 24.55
ATOM   1171  O   LEU A  77     -14.681  -3.616  -5.351  1.00  5.24
ATOM   1172  N   PRO A  78     -15.408  -5.533  -6.290  1.00 62.13
ATOM   1173  CD  PRO A  78     -15.269  -6.962  -6.653  1.00  2.21
ATOM   1174  CA  PRO A  78     -16.743  -5.005  -6.667  1.00 10.22
ATOM   1175  HA  PRO A  78     -16.653  -4.117  -7.274  1.00 53.41
ATOM   1176  CB  PRO A  78     -17.348  -6.140  -7.503  1.00 14.33
ATOM   1177 1HB  PRO A  78     -18.415  -6.183  -7.336  1.00 71.40
ATOM   1178 2HB  PRO A  78     -17.132  -5.995  -8.551  1.00 62.11
ATOM   1179  CG  PRO A  78     -16.666  -7.373  -7.024  1.00 11.54
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ATOM   1180 1HG  PRO A  78     -17.190  -7.763  -6.162  1.00 44.30
ATOM   1181 2HG  PRO A  78     -16.629  -8.112  -7.810  1.00 42.32
ATOM   1182 1HD  PRO A  78     -14.922  -7.538  -5.808  1.00 12.45
ATOM   1183 2HD  PRO A  78     -14.593  -7.080  -7.486  1.00 50.20
ATOM   1184  C   PRO A  78     -17.637  -4.696  -5.463  1.00 25.14
ATOM   1185  O   PRO A  78     -18.641  -4.015  -5.584  1.00 33.11
ATOM   1186  N   ASN A  79     -17.225  -5.154  -4.300  1.00 62.41
ATOM   1187  H   ASN A  79     -16.372  -5.629  -4.273  1.00 41.13
ATOM   1188  CA  ASN A  79     -18.007  -4.970  -3.073  1.00 43.12
ATOM   1189  HA  ASN A  79     -19.054  -4.954  -3.337  1.00  3.32
ATOM   1190  CB  ASN A  79     -17.763  -6.126  -2.078  1.00 54.25
ATOM   1191 1HB  ASN A  79     -16.719  -6.134  -1.804  1.00 64.24
ATOM   1192 2HB  ASN A  79     -18.353  -5.948  -1.191  1.00 63.43
ATOM   1193  CG  ASN A  79     -18.112  -7.498  -2.625  1.00 21.55
ATOM   1194  OD1 ASN A  79     -18.960  -7.645  -3.485  1.00 44.22
ATOM   1195  ND2 ASN A  79     -17.463  -8.519  -2.112  1.00 52.24
ATOM   1196 2HD2 ASN A  79     -16.798  -8.349  -1.413  1.00 42.25
ATOM   1197 1HD2 ASN A  79     -17.700  -9.406  -2.453  1.00 24.52
ATOM   1198  C   ASN A  79     -17.637  -3.663  -2.399  1.00  1.43
ATOM   1199  O   ASN A  79     -18.021  -3.422  -1.265  1.00 33.25
ATOM   1200  N   ASN A  80     -16.910  -2.806  -3.133  1.00 41.01
ATOM   1201  H   ASN A  80     -16.729  -3.048  -4.064  1.00 71.44
ATOM   1202  CA  ASN A  80     -16.383  -1.534  -2.604  1.00 63.32
ATOM   1203  HA  ASN A  80     -15.863  -1.069  -3.430  1.00 63.31
ATOM   1204  CB  ASN A  80     -17.477  -0.574  -2.086  1.00 40.14
ATOM   1205 1HB  ASN A  80     -18.169  -1.130  -1.471  1.00  2.12
ATOM   1206 2HB  ASN A  80     -17.014   0.198  -1.490  1.00 12.44
ATOM   1207  CG  ASN A  80     -18.256   0.078  -3.202  1.00 53.31
ATOM   1208  OD1 ASN A  80     -17.876   1.143  -3.693  1.00 23.41
ATOM   1209  ND2 ASN A  80     -19.339  -0.535  -3.613  1.00  0.43
ATOM   1210 2HD2 ASN A  80     -19.584  -1.378  -3.176  1.00 72.33
ATOM   1211 1HD2 ASN A  80     -19.854  -0.125  -4.339  1.00  3.20
ATOM   1212  C   ASN A  80     -15.354  -1.809  -1.554  1.00 11.23
ATOM   1213  O   ASN A  80     -15.287  -1.153  -0.523  1.00 33.52
ATOM   1214  N   ALA A  81     -14.529  -2.765  -1.862  1.00 43.40
ATOM   1215  H   ALA A  81     -14.617  -3.202  -2.733  1.00  2.23
ATOM   1216  CA  ALA A  81     -13.459  -3.177  -1.020  1.00 73.24
ATOM   1217  HA  ALA A  81     -13.374  -2.486  -0.194  1.00 73.54
ATOM   1218  CB  ALA A  81     -13.719  -4.577  -0.487  1.00 54.43
ATOM   1219 1HB  ALA A  81     -12.879  -4.894   0.113  1.00 14.24
ATOM   1220 2HB  ALA A  81     -13.856  -5.259  -1.314  1.00  5.04
ATOM   1221 3HB  ALA A  81     -14.614  -4.571   0.119  1.00  4.53
ATOM   1222  C   ALA A  81     -12.201  -3.147  -1.847  1.00 63.22
ATOM   1223  O   ALA A  81     -12.272  -3.143  -3.085  1.00  4.11
ATOM   1224  N   THR A  82     -11.080  -3.113  -1.209  1.00 53.31
ATOM   1225  H   THR A  82     -11.059  -3.124  -0.224  1.00 60.32
ATOM   1226  CA  THR A  82      -9.832  -3.069  -1.891  1.00 22.24
ATOM   1227  HA  THR A  82      -9.978  -3.403  -2.907  1.00 44.31
ATOM   1228  CB  THR A  82      -9.277  -1.630  -1.910  1.00 41.11
ATOM   1229  HB  THR A  82      -9.007  -1.346  -0.903  1.00 52.42
ATOM   1230  OG1 THR A  82     -10.288  -0.740  -2.404  1.00  1.32
ATOM   1231  HG1 THR A  82     -11.019  -0.725  -1.770  1.00 64.44
ATOM   1232  CG2 THR A  82      -8.044  -1.535  -2.807  1.00 74.31
ATOM   1233 1HG2 THR A  82      -7.667  -0.524  -2.818  1.00 12.03
ATOM   1234 2HG2 THR A  82      -8.310  -1.831  -3.812  1.00 21.40
ATOM   1235 3HG2 THR A  82      -7.281  -2.201  -2.433  1.00 32.14
ATOM   1236  C   THR A  82      -8.849  -3.984  -1.181  1.00 33.11
ATOM   1237  O   THR A  82      -8.733  -3.960   0.044  1.00  4.44
ATOM   1238  N   ARG A  83      -8.161  -4.780  -1.921  1.00 44.00
ATOM   1239  H   ARG A  83      -8.290  -4.754  -2.894  1.00 73.15
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ATOM   1240  CA  ARG A  83      -7.199  -5.658  -1.341  1.00 21.54
ATOM   1241  HA  ARG A  83      -7.359  -5.639  -0.274  1.00 51.54
ATOM   1242  CB  ARG A  83      -7.354  -7.083  -1.864  1.00 41.01
ATOM   1243 1HB  ARG A  83      -8.382  -7.389  -1.736  1.00 12.21
ATOM   1244 2HB  ARG A  83      -7.117  -7.093  -2.917  1.00  0.10
ATOM   1245  CG  ARG A  83      -6.464  -8.092  -1.163  1.00 22.01
ATOM   1246 1HG  ARG A  83      -5.437  -7.911  -1.441  1.00 43.34
ATOM   1247 2HG  ARG A  83      -6.575  -7.979  -0.095  1.00 15.03
ATOM   1248  CD  ARG A  83      -6.838  -9.497  -1.554  1.00  1.25
ATOM   1249 1HD  ARG A  83      -7.869  -9.648  -1.266  1.00 64.52
ATOM   1250 2HD  ARG A  83      -6.730  -9.616  -2.621  1.00 51.12
ATOM   1251  NE  ARG A  83      -6.030 -10.510  -0.866  1.00 44.01
ATOM   1252  HE  ARG A  83      -5.389 -10.134  -0.226  1.00 34.12
ATOM   1253  CZ  ARG A  83      -6.121 -11.826  -1.087  1.00 31.12
ATOM   1254 NH1  ARG A  83      -7.097 -12.310  -1.861  1.00 40.24
ATOM   1255 1HH1 ARG A  83      -7.791 -11.694  -2.279  1.00 62.43
ATOM   1256 2HH1 ARG A  83      -7.217 -13.273  -2.094  1.00 64.23
ATOM   1257 NH2  ARG A  83      -5.290 -12.665  -0.459  1.00 44.20
ATOM   1258 1HH2 ARG A  83      -4.599 -12.329   0.189  1.00 40.21
ATOM   1259 2HH2 ARG A  83      -5.316 -13.653  -0.611  1.00 21.14
ATOM   1260  C   ARG A  83      -5.834  -5.090  -1.609  1.00  4.43
ATOM   1261  O   ARG A  83      -5.539  -4.686  -2.731  1.00 41.42
ATOM   1262  N   ILE A  84      -5.025  -5.030  -0.595  1.00  4.21
ATOM   1263  H   ILE A  84      -5.259  -5.488   0.246  1.00 42.24
ATOM   1264  CA  ILE A  84      -3.773  -4.346  -0.678  1.00 54.35
ATOM   1265  HA  ILE A  84      -3.721  -3.840  -1.630  1.00 65.33
ATOM   1266  CB  ILE A  84      -3.667  -3.272   0.476  1.00 55.43
ATOM   1267  HB  ILE A  84      -4.644  -2.820   0.579  1.00 23.32
ATOM   1268  CG2 ILE A  84      -3.326  -3.897   1.811  1.00 45.31
ATOM   1269 1HG2 ILE A  84      -4.097  -4.599   2.087  1.00 22.12
ATOM   1270 2HG2 ILE A  84      -3.232  -3.128   2.563  1.00 23.11
ATOM   1271 3HG2 ILE A  84      -2.387  -4.421   1.697  1.00 30.42
ATOM   1272  CG1 ILE A  84      -2.664  -2.176   0.153  1.00 74.31
ATOM   1273 1HG1 ILE A  84      -2.475  -1.586   1.038  1.00 63.12
ATOM   1274 2HG1 ILE A  84      -1.743  -2.622  -0.193  1.00 31.05
ATOM   1275  CD1 ILE A  84      -3.141  -1.247  -0.920  1.00 13.12
ATOM   1276 1HD1 ILE A  84      -4.077  -0.798  -0.620  1.00 51.30
ATOM   1277 2HD1 ILE A  84      -3.276  -1.795  -1.840  1.00 52.22
ATOM   1278 3HD1 ILE A  84      -2.407  -0.470  -1.070  1.00  2.53
ATOM   1279  C   ILE A  84      -2.632  -5.368  -0.571  1.00 54.24
ATOM   1280  O   ILE A  84      -2.734  -6.374   0.155  1.00 41.22
ATOM   1281  N   SER A  85      -1.633  -5.172  -1.362  1.00 22.32
ATOM   1282  H   SER A  85      -1.673  -4.423  -1.999  1.00 24.52
ATOM   1283  CA  SER A  85      -0.455  -5.992  -1.353  1.00 55.42
ATOM   1284  HA  SER A  85      -0.519  -6.657  -0.505  1.00 64.11
ATOM   1285  CB  SER A  85      -0.399  -6.812  -2.640  1.00 74.40
ATOM   1286 1HB  SER A  85      -0.288  -6.149  -3.485  1.00 53.03
ATOM   1287 2HB  SER A  85       0.434  -7.497  -2.600  1.00 44.21
ATOM   1288  OG  SER A  85      -1.602  -7.558  -2.786  1.00  3.11
ATOM   1289  HG  SER A  85      -2.194  -7.247  -2.094  1.00 54.41
ATOM   1290  C   SER A  85       0.771  -5.096  -1.204  1.00 25.10
ATOM   1291  O   SER A  85       0.862  -4.046  -1.857  1.00 44.23
ATOM   1292  N   ILE A  86       1.670  -5.474  -0.326  1.00 71.32
ATOM   1293  H   ILE A  86       1.545  -6.311   0.175  1.00 52.35
ATOM   1294  CA  ILE A  86       2.868  -4.705  -0.064  1.00 22.32
ATOM   1295  HA  ILE A  86       2.842  -3.815  -0.675  1.00 51.10
ATOM   1296  CB  ILE A  86       2.990  -4.309   1.444  1.00 13.11
ATOM   1297  HB  ILE A  86       3.339  -5.171   1.993  1.00 64.34
ATOM   1298  CG2 ILE A  86       4.028  -3.191   1.601  1.00  2.24
ATOM   1299 1HG2 ILE A  86       4.984  -3.537   1.238  1.00 22.12
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ATOM   1300 2HG2 ILE A  86       4.114  -2.917   2.642  1.00 15.45
ATOM   1301 3HG2 ILE A  86       3.716  -2.330   1.028  1.00 13.25
ATOM   1302  CG1 ILE A  86       1.630  -3.837   2.038  1.00 14.00
ATOM   1303 1HG1 ILE A  86       0.881  -4.588   1.831  1.00 44.32
ATOM   1304 2HG1 ILE A  86       1.735  -3.742   3.109  1.00 43.25
ATOM   1305  CD1 ILE A  86       1.101  -2.522   1.499  1.00 70.20
ATOM   1306 1HD1 ILE A  86       0.966  -2.591   0.430  1.00 11.41
ATOM   1307 2HD1 ILE A  86       1.805  -1.739   1.739  1.00  3.43
ATOM   1308 3HD1 ILE A  86       0.158  -2.295   1.974  1.00  2.24
ATOM   1309  C   ILE A  86       4.087  -5.563  -0.462  1.00 44.11
ATOM   1310  O   ILE A  86       4.042  -6.791  -0.338  1.00  1.24
ATOM   1311  N   LYS A  87       5.149  -4.925  -0.911  1.00 30.30
ATOM   1312  H   LYS A  87       5.131  -3.945  -0.927  1.00 14.01
ATOM   1313  CA  LYS A  87       6.338  -5.605  -1.409  1.00 32.11
ATOM   1314  HA  LYS A  87       6.122  -6.663  -1.462  1.00  3.13
ATOM   1315  CB  LYS A  87       6.656  -5.073  -2.830  1.00 75.42
ATOM   1316 1HB  LYS A  87       5.772  -5.172  -3.442  1.00 52.22
ATOM   1317 2HB  LYS A  87       6.873  -4.023  -2.711  1.00  4.34
ATOM   1318  CG  LYS A  87       7.831  -5.719  -3.598  1.00 24.14
ATOM   1319 1HG  LYS A  87       7.825  -6.782  -3.409  1.00 72.44
ATOM   1320 2HG  LYS A  87       7.691  -5.547  -4.655  1.00 74.10
ATOM   1321  CD  LYS A  87       9.186  -5.166  -3.178  1.00 11.03
ATOM   1322 1HD  LYS A  87       9.207  -4.104  -3.369  1.00 14.34
ATOM   1323 2HD  LYS A  87       9.320  -5.341  -2.120  1.00 72.11
ATOM   1324  CE  LYS A  87      10.332  -5.825  -3.939  1.00 11.45
ATOM   1325 1HE  LYS A  87      10.286  -6.893  -3.787  1.00 32.14
ATOM   1326 2HE  LYS A  87      10.223  -5.606  -4.991  1.00  3.30
ATOM   1327  NZ  LYS A  87      11.648  -5.327  -3.472  1.00 54.21
ATOM   1328 1HZ  LYS A  87      11.720  -5.460  -2.440  1.00 42.55
ATOM   1329 2HZ  LYS A  87      11.794  -4.320  -3.708  1.00 72.23
ATOM   1330 3HZ  LYS A  87      12.439  -5.847  -3.902  1.00 42.31
ATOM   1331  C   LYS A  87       7.496  -5.381  -0.432  1.00 50.22
ATOM   1332  O   LYS A  87       7.709  -4.269   0.063  1.00 60.41
ATOM   1333  N   TYR A  88       8.220  -6.451  -0.155  1.00 25.40
ATOM   1334  H   TYR A  88       8.048  -7.274  -0.657  1.00  2.23
ATOM   1335  CA  TYR A  88       9.244  -6.472   0.875  1.00 55.32
ATOM   1336  HA  TYR A  88       8.998  -5.722   1.611  1.00 73.14
ATOM   1337  CB  TYR A  88       9.253  -7.843   1.597  1.00 34.52
ATOM   1338 1HB  TYR A  88       9.927  -7.782   2.437  1.00 72.44
ATOM   1339 2HB  TYR A  88       8.259  -8.055   1.964  1.00 73.03
ATOM   1340  CG  TYR A  88       9.708  -9.028   0.750  1.00 43.51
ATOM   1341  CD1 TYR A  88       8.857  -9.635  -0.165  1.00 62.23
ATOM   1342  HD1 TYR A  88       7.855  -9.253  -0.282  1.00 12.43
ATOM   1343  CE1 TYR A  88       9.278 -10.713  -0.925  1.00  2.04
ATOM   1344  HE1 TYR A  88       8.605 -11.173  -1.633  1.00 42.45
ATOM   1345  CZ  TYR A  88      10.561 -11.197  -0.775  1.00 13.52
ATOM   1346  CE2 TYR A  88      11.423 -10.612   0.126  1.00  4.21
ATOM   1347  HE2 TYR A  88      12.428 -10.991   0.244  1.00 33.34
ATOM   1348  CD2 TYR A  88      10.997  -9.538   0.882  1.00 65.42
ATOM   1349  HD2 TYR A  88      11.673  -9.079   1.589  1.00 54.14
ATOM   1350  OH  TYR A  88      10.985 -12.263  -1.535  1.00 34.31
ATOM   1351  HH  TYR A  88      10.648 -12.189  -2.429  1.00 21.35
ATOM   1352  C   TYR A  88      10.636  -6.191   0.334  1.00 33.24
ATOM   1353  O   TYR A  88      10.921  -6.355  -0.864  1.00 12.51
ATOM   1354  N   GLY A  89      11.472  -5.740   1.214  1.00 53.14
ATOM   1355  H   GLY A  89      11.164  -5.557   2.123  1.00 10.15
ATOM   1356  CA  GLY A  89      12.845  -5.518   0.910  1.00 74.40
ATOM   1357 1HA  GLY A  89      13.057  -5.871  -0.088  1.00 51.41
ATOM   1358 2HA  GLY A  89      13.056  -4.462   0.985  1.00 71.01
ATOM   1359  C   GLY A  89      13.699  -6.246   1.898  1.00 73.10
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ATOM   1360  O   GLY A  89      13.224  -7.197   2.518  1.00 53.05
ATOM   1361  N   SER A  90      14.904  -5.766   2.109  1.00  0.54
ATOM   1362  H   SER A  90      15.212  -4.952   1.654  1.00 31.40
ATOM   1363  CA  SER A  90      15.880  -6.403   2.989  1.00 22.22
ATOM   1364  HA  SER A  90      16.107  -7.380   2.604  1.00 71.12
ATOM   1365  CB  SER A  90      17.153  -5.577   2.975  1.00 64.32
ATOM   1366 1HB  SER A  90      16.992  -4.654   3.511  1.00 14.44
ATOM   1367 2HB  SER A  90      17.955  -6.133   3.439  1.00 52.30
ATOM   1368  OG  SER A  90      17.516  -5.280   1.639  1.00 24.35
ATOM   1369  HG  SER A  90      17.561  -4.308   1.551  1.00 61.52
ATOM   1370  C   SER A  90      15.371  -6.566   4.422  1.00 51.21
ATOM   1371  O   SER A  90      15.642  -7.559   5.083  1.00 21.32
ATOM   1372  N   GLN A  91      14.624  -5.603   4.872  1.00 35.53
ATOM   1373  H   GLN A  91      14.399  -4.862   4.271  1.00  3.42
ATOM   1374  CA  GLN A  91      14.128  -5.603   6.227  1.00 33.00
ATOM   1375  HA  GLN A  91      14.695  -6.340   6.777  1.00 13.14
ATOM   1376  CB  GLN A  91      14.361  -4.231   6.875  1.00 71.52
ATOM   1377 1HB  GLN A  91      14.150  -4.312   7.931  1.00 63.23
ATOM   1378 2HB  GLN A  91      15.404  -3.981   6.755  1.00 71.11
ATOM   1379  CG  GLN A  91      13.526  -3.066   6.324  1.00 34.23
ATOM   1380 1HG  GLN A  91      12.493  -3.351   6.451  1.00 71.11
ATOM   1381 2HG  GLN A  91      13.747  -2.180   6.897  1.00 11.32
ATOM   1382  CD  GLN A  91      13.693  -2.766   4.847  1.00 64.43
ATOM   1383  OE1 GLN A  91      14.575  -2.032   4.453  1.00 12.13
ATOM   1384  NE2 GLN A  91      12.791  -3.272   4.042  1.00 63.33
ATOM   1385 2HE2 GLN A  91      12.067  -3.807   4.437  1.00 51.13
ATOM   1386 1HE2 GLN A  91      12.851  -3.044   3.081  1.00 24.32
ATOM   1387  C   GLN A  91      12.651  -5.998   6.283  1.00 14.42
ATOM   1388  O   GLN A  91      12.014  -5.917   7.328  1.00 14.42
ATOM   1389  N   GLY A  92      12.117  -6.428   5.155  1.00 54.10
ATOM   1390  H   GLY A  92      12.698  -6.556   4.374  1.00 32.44
ATOM   1391  CA  GLY A  92      10.715  -6.768   5.095  1.00 42.31
ATOM   1392 1HA  GLY A  92      10.549  -7.409   4.244  1.00 32.21
ATOM   1393 2HA  GLY A  92      10.448  -7.308   5.990  1.00 35.31
ATOM   1394  C   GLY A  92       9.829  -5.532   4.985  1.00 40.33
ATOM   1395  O   GLY A  92      10.289  -4.402   5.181  1.00 13.31
ATOM   1396  N   ASN A  93       8.598  -5.728   4.571  1.00 41.34
ATOM   1397  H   ASN A  93       8.316  -6.625   4.287  1.00  1.14
ATOM   1398  CA  ASN A  93       7.619  -4.640   4.512  1.00  5.40
ATOM   1399  HA  ASN A  93       8.171  -3.710   4.529  1.00 75.11
ATOM   1400  CB  ASN A  93       6.772  -4.682   3.234  1.00 74.23
ATOM   1401 1HB  ASN A  93       6.066  -3.865   3.261  1.00 11.30
ATOM   1402 2HB  ASN A  93       7.412  -4.562   2.374  1.00 42.05
ATOM   1403  CG  ASN A  93       5.985  -5.974   3.079  1.00 73.14
ATOM   1404  OD1 ASN A  93       6.450  -6.898   2.470  1.00 55.20
ATOM   1405  ND2 ASN A  93       4.798  -6.044   3.634  1.00 63.15
ATOM   1406 2HD2 ASN A  93       4.424  -5.276   4.127  1.00  4.05
ATOM   1407 1HD2 ASN A  93       4.325  -6.896   3.556  1.00 51.21
ATOM   1408  C   ASN A  93       6.693  -4.668   5.709  1.00  1.34
ATOM   1409  O   ASN A  93       5.934  -3.741   5.915  1.00  4.45
ATOM   1410  N   SER A  94       6.773  -5.735   6.477  1.00 60.43
ATOM   1411  H   SER A  94       7.501  -6.377   6.339  1.00 35.15
ATOM   1412  CA  SER A  94       5.836  -6.067   7.550  1.00 52.33
ATOM   1413  HA  SER A  94       4.929  -6.426   7.087  1.00 70.21
ATOM   1414  CB  SER A  94       6.438  -7.222   8.323  1.00 40.22
ATOM   1415 1HB  SER A  94       7.246  -6.861   8.942  1.00 33.25
ATOM   1416 2HB  SER A  94       5.681  -7.690   8.935  1.00 51.20
ATOM   1417  OG  SER A  94       6.949  -8.190   7.401  1.00 14.02
ATOM   1418  HG  SER A  94       6.322  -8.346   6.683  1.00 41.23
ATOM   1419  C   SER A  94       5.468  -4.874   8.491  1.00 73.51
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ATOM   1420  O   SER A  94       4.277  -4.547   8.649  1.00 45.54
ATOM   1421  N   ILE A  95       6.460  -4.209   9.067  1.00 44.42
ATOM   1422  H   ILE A  95       7.390  -4.460   8.881  1.00 52.02
ATOM   1423  CA  ILE A  95       6.186  -3.100   9.987  1.00 12.25
ATOM   1424  HA  ILE A  95       5.370  -3.444  10.608  1.00 53.42
ATOM   1425  CB  ILE A  95       7.418  -2.731  10.917  1.00 25.55
ATOM   1426  HB  ILE A  95       8.279  -2.619  10.275  1.00 63.34
ATOM   1427  CG2 ILE A  95       7.212  -1.400  11.639  1.00  2.32
ATOM   1428 1HG2 ILE A  95       6.330  -1.460  12.260  1.00 52.31
ATOM   1429 2HG2 ILE A  95       7.086  -0.613  10.912  1.00 51.41
ATOM   1430 3HG2 ILE A  95       8.073  -1.188  12.257  1.00 41.14
ATOM   1431  CG1 ILE A  95       7.725  -3.844  11.959  1.00 15.00
ATOM   1432 1HG1 ILE A  95       8.478  -3.484  12.643  1.00 24.33
ATOM   1433 2HG1 ILE A  95       6.822  -4.045  12.519  1.00 60.14
ATOM   1434  CD1 ILE A  95       8.228  -5.159  11.395  1.00 74.03
ATOM   1435 1HD1 ILE A  95       9.142  -4.993  10.846  1.00 64.01
ATOM   1436 2HD1 ILE A  95       7.476  -5.565  10.734  1.00 61.00
ATOM   1437 3HD1 ILE A  95       8.406  -5.853  12.203  1.00 24.22
ATOM   1438  C   ILE A  95       5.650  -1.872   9.217  1.00 25.30
ATOM   1439  O   ILE A  95       4.760  -1.165   9.703  1.00 24.11
ATOM   1440  N   ARG A  96       6.153  -1.678   7.989  1.00 13.25
ATOM   1441  H   ARG A  96       6.865  -2.271   7.670  1.00 52.00
ATOM   1442  CA  ARG A  96       5.681  -0.600   7.106  1.00 61.14
ATOM   1443  HA  ARG A  96       5.880   0.352   7.577  1.00 32.11
ATOM   1444  CB  ARG A  96       6.380  -0.649   5.735  1.00 32.02
ATOM   1445 1HB  ARG A  96       6.245  -1.637   5.322  1.00 11.14
ATOM   1446 2HB  ARG A  96       5.892   0.059   5.082  1.00 53.33
ATOM   1447  CG  ARG A  96       7.862  -0.354   5.734  1.00 53.35
ATOM   1448 1HG  ARG A  96       8.024   0.654   6.086  1.00  2.21
ATOM   1449 2HG  ARG A  96       8.355  -1.050   6.396  1.00 34.22
ATOM   1450  CD  ARG A  96       8.434  -0.514   4.328  1.00 34.24
ATOM   1451 1HD  ARG A  96       8.408  -1.559   4.058  1.00 73.33
ATOM   1452 2HD  ARG A  96       7.817   0.048   3.643  1.00 60.53
ATOM   1453  NE  ARG A  96       9.809  -0.037   4.230  1.00 40.04
ATOM   1454  HE  ARG A  96      10.013   0.712   4.837  1.00 10.54
ATOM   1455  CZ  ARG A  96      10.743  -0.483   3.374  1.00  0.00
ATOM   1456  NH1 ARG A  96      10.478  -1.493   2.548  1.00 72.02
ATOM   1457 1HH1 ARG A  96       9.598  -1.961   2.505  1.00 41.35
ATOM   1458 2HH1 ARG A  96      11.212  -1.828   1.933  1.00 51.20
ATOM   1459  NH2 ARG A  96      11.933   0.088   3.341  1.00 62.20
ATOM   1460 1HH2 ARG A  96      12.191   0.861   3.945  1.00 72.22
ATOM   1461 2HH2 ARG A  96      12.642  -0.217   2.686  1.00 24.25
ATOM   1462  C   ARG A  96       4.194  -0.760   6.871  1.00 62.53
ATOM   1463  O   ARG A  96       3.434   0.172   7.027  1.00  2.02
ATOM   1464  N   SER A  97       3.802  -1.977   6.524  1.00 12.31
ATOM   1465  H   SER A  97       4.476  -2.688   6.435  1.00 13.24
ATOM   1466  CA  SER A  97       2.426  -2.319   6.251  1.00 42.20
ATOM   1467  HA  SER A  97       2.083  -1.730   5.414  1.00 63.32
ATOM   1468  CB  SER A  97       2.367  -3.779   5.863  1.00 60.22
ATOM   1469 1HB  SER A  97       2.621  -4.390   6.716  1.00  0.24
ATOM   1470 2HB  SER A  97       1.374  -4.026   5.518  1.00 50.01
ATOM   1471  OG  SER A  97       3.292  -4.029   4.820  1.00 35.43
ATOM   1472  HG  SER A  97       3.260  -3.262   4.239  1.00 33.41
ATOM   1473  C   SER A  97       1.538  -2.058   7.462  1.00 43.33
ATOM   1474  O   SER A  97       0.449  -1.523   7.322  1.00 50.41
ATOM   1475  N   SER A  98       2.044  -2.396   8.635  1.00 42.42
ATOM   1476  H   SER A  98       2.953  -2.757   8.676  1.00  2.12
ATOM   1477  CA  SER A  98       1.309  -2.231   9.872  1.00 44.32
ATOM   1478  HA  SER A  98       0.402  -2.811   9.798  1.00 31.33
ATOM   1479  CB  SER A  98       2.154  -2.770  11.032  1.00 35.44
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ATOM   1480 1HB  SER A  98       3.051  -2.175  11.126  1.00 74.42
ATOM   1481 2HB  SER A  98       1.591  -2.720  11.952  1.00 14.43
ATOM   1482  OG  SER A  98       2.529  -4.131  10.797  1.00 71.24
ATOM   1483  HG  SER A  98       3.085  -4.217  10.014  1.00 35.15
ATOM   1484  C   SER A  98       0.937  -0.748  10.088  1.00 45.12
ATOM   1485  O   SER A  98      -0.224  -0.416  10.339  1.00 40.32
ATOM   1486  N   ALA A  99       1.919   0.129   9.943  1.00 25.41
ATOM   1487  H   ALA A  99       2.821  -0.194   9.725  1.00 43.22
ATOM   1488  CA  ALA A  99       1.692   1.557  10.094  1.00 42.51
ATOM   1489  HA  ALA A  99       1.118   1.702  10.997  1.00 41.13
ATOM   1490  CB  ALA A  99       3.012   2.303  10.229  1.00 34.24
ATOM   1491 1HB  ALA A  99       3.576   1.894  11.055  1.00 40.05
ATOM   1492 2HB  ALA A  99       2.818   3.350  10.409  1.00 54.24
ATOM   1493 3HB  ALA A  99       3.579   2.195   9.317  1.00 62.52
ATOM   1494  C   ALA A  99       0.869   2.113   8.935  1.00 31.35
ATOM   1495  O   ALA A  99      -0.049   2.909   9.144  1.00 41.41
ATOM   1496  N   LEU A 100       1.183   1.650   7.724  1.00 34.04
ATOM   1497  H   LEU A 100       1.898   0.982   7.636  1.00 31.41
ATOM   1498  CA  LEU A 100       0.545   2.106   6.499  1.00 73.53
ATOM   1499  HA  LEU A 100       0.768   3.153   6.363  1.00 71.41
ATOM   1500  CB  LEU A 100       1.098   1.328   5.305  1.00 31.50
ATOM   1501 1HB  LEU A 100       2.165   1.239   5.421  1.00 70.41
ATOM   1502 2HB  LEU A 100       0.697   0.324   5.347  1.00 43.21
ATOM   1503  CG  LEU A 100       0.777   1.885   3.924  1.00 54.41
ATOM   1504  HG  LEU A 100      -0.294   1.983   3.827  1.00 22.34
ATOM   1505  CD1 LEU A 100       1.391   3.265   3.746  1.00 25.32
ATOM   1506 1HD1 LEU A 100       2.459   3.198   3.897  1.00 53.45
ATOM   1507 2HD1 LEU A 100       0.966   3.946   4.467  1.00 32.44
ATOM   1508 3HD1 LEU A 100       1.190   3.625   2.747  1.00 21.33
ATOM   1509  CD2 LEU A 100       1.268   0.939   2.852  1.00 32.00
ATOM   1510 1HD2 LEU A 100       1.038   1.343   1.878  1.00 44.55
ATOM   1511 2HD2 LEU A 100       0.781  -0.018   2.973  1.00  3.44
ATOM   1512 3HD2 LEU A 100       2.337   0.812   2.950  1.00 74.43
ATOM   1513  C   LEU A 100      -0.951   1.903   6.571  1.00 45.44
ATOM   1514  O   LEU A 100      -1.716   2.814   6.282  1.00  5.24
ATOM   1515  N   ILE A 101      -1.351   0.724   7.020  1.00 21.54
ATOM   1516  H   ILE A 101      -0.653   0.074   7.265  1.00 13.44
ATOM   1517  CA  ILE A 101      -2.768   0.374   7.132  1.00 14.13
ATOM   1518  HA  ILE A 101      -3.202   0.471   6.148  1.00 11.24
ATOM   1519  CB  ILE A 101      -2.974  -1.100   7.631  1.00 70.44
ATOM   1520  HB  ILE A 101      -2.399  -1.207   8.539  1.00 32.10
ATOM   1521  CG2 ILE A 101      -4.434  -1.388   7.987  1.00 23.40
ATOM   1522 1HG2 ILE A 101      -5.054  -1.231   7.117  1.00 22.34
ATOM   1523 2HG2 ILE A 101      -4.739  -0.718   8.777  1.00 50.21
ATOM   1524 3HG2 ILE A 101      -4.528  -2.411   8.324  1.00  2.24
ATOM   1525  CG1 ILE A 101      -2.450  -2.124   6.600  1.00 52.51
ATOM   1526 1HG1 ILE A 101      -1.395  -1.955   6.444  1.00 15.20
ATOM   1527 2HG1 ILE A 101      -2.590  -3.119   6.996  1.00 64.22
ATOM   1528  CD1 ILE A 101      -3.121  -2.063   5.239  1.00 35.43
ATOM   1529 1HD1 ILE A 101      -4.181  -2.238   5.357  1.00  4.04
ATOM   1530 2HD1 ILE A 101      -2.702  -2.832   4.609  1.00 43.04
ATOM   1531 3HD1 ILE A 101      -2.957  -1.098   4.786  1.00 41.33
ATOM   1532  C   ILE A 101      -3.493   1.347   8.061  1.00 72.35
ATOM   1533  O   ILE A 101      -4.553   1.857   7.701  1.00 13.13
ATOM   1534  N   GLY A 102      -2.870   1.661   9.201  1.00 64.15
ATOM   1535  H   GLY A 102      -1.987   1.274   9.386  1.00 71.42
ATOM   1536  CA  GLY A 102      -3.470   2.570  10.172  1.00  1.33
ATOM   1537 1HA  GLY A 102      -4.402   2.153  10.510  1.00 73.14
ATOM   1538 2HA  GLY A 102      -2.803   2.676  11.015  1.00 34.43
ATOM   1539  C   GLY A 102      -3.746   3.941   9.594  1.00 61.24
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ATOM   1540  O   GLY A 102      -4.807   4.540   9.825  1.00 30.25
ATOM   1541  N   ILE A 103      -2.812   4.414   8.816  1.00 44.10
ATOM   1542  H   ILE A 103      -2.016   3.859   8.666  1.00 32.34
ATOM   1543  CA  ILE A 103      -2.914   5.705   8.176  1.00  5.44
ATOM   1544  HA  ILE A 103      -3.161   6.443   8.925  1.00 33.10
ATOM   1545  CB  ILE A 103      -1.561   6.079   7.533  1.00 14.13
ATOM   1546  HB  ILE A 103      -1.320   5.344   6.779  1.00  4.24
ATOM   1547  CG2 ILE A 103      -1.637   7.458   6.873  1.00 54.54
ATOM   1548 1HG2 ILE A 103      -2.396   7.449   6.104  1.00 34.45
ATOM   1549 2HG2 ILE A 103      -0.681   7.698   6.431  1.00 10.13
ATOM   1550 3HG2 ILE A 103      -1.884   8.202   7.616  1.00 72.42
ATOM   1551  CG1 ILE A 103      -0.472   6.058   8.606  1.00 21.12
ATOM   1552 1HG1 ILE A 103      -0.588   6.920   9.246  1.00 31.44
ATOM   1553 2HG1 ILE A 103      -0.582   5.162   9.200  1.00 53.42
ATOM   1554  CD1 ILE A 103       0.927   6.083   8.060  1.00 41.34
ATOM   1555 1HD1 ILE A 103       1.074   6.971   7.462  1.00 13.01
ATOM   1556 2HD1 ILE A 103       1.057   5.195   7.460  1.00 62.33
ATOM   1557 3HD1 ILE A 103       1.621   6.066   8.887  1.00 73.41
ATOM   1558  C   ILE A 103      -4.006   5.668   7.110  1.00 73.13
ATOM   1559  O   ILE A 103      -4.867   6.558   7.051  1.00  1.24
ATOM   1560  N   ILE A 104      -3.994   4.608   6.311  1.00 30.42
ATOM   1561  H   ILE A 104      -3.316   3.912   6.462  1.00  5.20
ATOM   1562  CA  ILE A 104      -4.946   4.444   5.229  1.00 63.42
ATOM   1563  HA  ILE A 104      -4.849   5.293   4.569  1.00 23.12
ATOM   1564  CB  ILE A 104      -4.638   3.152   4.410  1.00  3.33
ATOM   1565  HB  ILE A 104      -4.594   2.318   5.095  1.00 72.32
ATOM   1566  CG2 ILE A 104      -5.742   2.862   3.406  1.00 15.51
ATOM   1567 1HG2 ILE A 104      -5.824   3.682   2.708  1.00  4.51
ATOM   1568 2HG2 ILE A 104      -6.680   2.738   3.928  1.00  4.44
ATOM   1569 3HG2 ILE A 104      -5.500   1.954   2.873  1.00  0.34
ATOM   1570  CG1 ILE A 104      -3.286   3.266   3.694  1.00 22.10
ATOM   1571 1HG1 ILE A 104      -3.366   4.014   2.919  1.00  2.01
ATOM   1572 2HG1 ILE A 104      -2.524   3.569   4.398  1.00 73.14
ATOM   1573  CD1 ILE A 104      -2.837   1.973   3.034  1.00  2.10
ATOM   1574 1HD1 ILE A 104      -2.699   1.211   3.787  1.00 53.12
ATOM   1575 2HD1 ILE A 104      -1.910   2.138   2.506  1.00 72.34
ATOM   1576 3HD1 ILE A 104      -3.592   1.651   2.333  1.00 50.30
ATOM   1577  C   ILE A 104      -6.382   4.377   5.758  1.00 41.21
ATOM   1578  O   ILE A 104      -7.244   5.147   5.315  1.00 23.12
ATOM   1579  N   GLU A 105      -6.623   3.523   6.745  1.00 71.23
ATOM   1580  H   GLU A 105      -5.885   2.990   7.123  1.00  1.31
ATOM   1581  CA  GLU A 105      -7.964   3.365   7.266  1.00 62.12
ATOM   1582  HA  GLU A 105      -8.593   3.239   6.396  1.00 43.13
ATOM   1583  CB  GLU A 105      -8.130   2.128   8.155  1.00  0.43
ATOM   1584 1HB  GLU A 105      -9.133   2.128   8.552  1.00 33.53
ATOM   1585 2HB  GLU A 105      -8.002   1.247   7.544  1.00 62.12
ATOM   1586  CG  GLU A 105      -7.177   2.034   9.332  1.00 63.41
ATOM   1587 1HG  GLU A 105      -6.194   1.761   8.977  1.00 62.52
ATOM   1588 2HG  GLU A 105      -7.138   3.003   9.808  1.00 74.21
ATOM   1589  CD  GLU A 105      -7.639   1.021  10.340  1.00  1.32
ATOM   1590  OE1 GLU A 105      -8.121  -0.049   9.940  1.00 42.25
ATOM   1591  OE2 GLU A 105      -7.641   1.340  11.547  1.00 34.43
ATOM   1592  C   GLU A 105      -8.461   4.615   7.970  1.00  3.23
ATOM   1593  O   GLU A 105      -9.586   5.060   7.727  1.00 34.12
ATOM   1594  N   GLY A 106      -7.615   5.201   8.802  1.00 51.53
ATOM   1595  H   GLY A 106      -6.708   4.835   8.906  1.00 62.34
ATOM   1596  CA  GLY A 106      -8.004   6.364   9.563  1.00 14.23
ATOM   1597 1HA  GLY A 106      -8.904   6.113  10.106  1.00 21.25
ATOM   1598 2HA  GLY A 106      -7.239   6.614  10.278  1.00 73.12
ATOM   1599  C   GLY A 106      -8.302   7.563   8.695  1.00 30.30
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ATOM   1600  O   GLY A 106      -9.225   8.319   8.986  1.00 53.35
ATOM   1601  N   ASN A 107      -7.555   7.712   7.609  1.00 61.13
ATOM   1602  H   ASN A 107      -6.828   7.073   7.430  1.00  1.11
ATOM   1603  CA  ASN A 107      -7.767   8.825   6.677  1.00 74.33
ATOM   1604  HA  ASN A 107      -7.729   9.744   7.242  1.00 54.24
ATOM   1605  CB  ASN A 107      -6.673   8.852   5.595  1.00 35.32
ATOM   1606 1HB  ASN A 107      -5.713   8.990   6.068  1.00 45.11
ATOM   1607 2HB  ASN A 107      -6.676   7.905   5.075  1.00 64.11
ATOM   1608  CG  ASN A 107      -6.865   9.966   4.568  1.00 23.12
ATOM   1609  OD1 ASN A 107      -6.402  11.081   4.754  1.00 43.03
ATOM   1610  ND2 ASN A 107      -7.514   9.664   3.463  1.00 21.00
ATOM   1611 2HD2 ASN A 107      -7.847   8.751   3.340  1.00 62.23
ATOM   1612 1HD2 ASN A 107      -7.634  10.381   2.808  1.00 11.30
ATOM   1613  C   ASN A 107      -9.134   8.705   6.026  1.00 34.34
ATOM   1614  O   ASN A 107      -9.870   9.685   5.904  1.00  5.20
ATOM   1615  N   ILE A 108      -9.486   7.486   5.654  1.00 54.15
ATOM   1616  H   ILE A 108      -8.860   6.746   5.805  1.00 73.21
ATOM   1617  CA  ILE A 108     -10.772   7.213   5.036  1.00 44.14
ATOM   1618  HA  ILE A 108     -10.884   7.892   4.203  1.00  2.41
ATOM   1619  CB  ILE A 108     -10.840   5.753   4.510  1.00 60.40
ATOM   1620  HB  ILE A 108     -10.673   5.081   5.339  1.00 63.22
ATOM   1621  CG2 ILE A 108     -12.217   5.455   3.911  1.00 60.33
ATOM   1622 1HG2 ILE A 108     -12.976   5.589   4.667  1.00 20.03
ATOM   1623 2HG2 ILE A 108     -12.242   4.436   3.552  1.00 51.22
ATOM   1624 3HG2 ILE A 108     -12.403   6.130   3.088  1.00 33.34
ATOM   1625  CG1 ILE A 108      -9.739   5.530   3.463  1.00 62.51
ATOM   1626 1HG1 ILE A 108      -9.970   6.116   2.585  1.00 31.44
ATOM   1627 2HG1 ILE A 108      -8.792   5.853   3.869  1.00 43.33
ATOM   1628  CD1 ILE A 108      -9.592   4.098   3.012  1.00 25.54
ATOM   1629 1HD1 ILE A 108      -8.785   4.020   2.300  1.00  1.45
ATOM   1630 2HD1 ILE A 108     -10.512   3.770   2.552  1.00  2.11
ATOM   1631 3HD1 ILE A 108      -9.376   3.475   3.868  1.00 34.54
ATOM   1632  C   ILE A 108     -11.901   7.480   6.036  1.00 22.50
ATOM   1633  O   ILE A 108     -12.927   8.058   5.684  1.00 10.13
ATOM   1634  N   ARG A 109     -11.684   7.087   7.290  1.00 13.42
ATOM   1635  H   ARG A 109     -10.851   6.613   7.499  1.00 22.02
ATOM   1636  CA  ARG A 109     -12.673   7.318   8.336  1.00 25.03
ATOM   1637  HA  ARG A 109     -13.612   6.923   7.979  1.00 72.40
ATOM   1638  CB  ARG A 109     -12.301   6.605   9.638  1.00 22.43
ATOM   1639 1HB  ARG A 109     -11.395   7.042  10.032  1.00 13.32
ATOM   1640 2HB  ARG A 109     -13.098   6.744  10.354  1.00 54.31
ATOM   1641  CG  ARG A 109     -12.077   5.126   9.459  1.00 14.41
ATOM   1642 1HG  ARG A 109     -12.825   4.704   8.814  1.00 62.54
ATOM   1643 2HG  ARG A 109     -11.129   5.018   8.952  1.00 50.11
ATOM   1644  CD  ARG A 109     -11.988   4.382  10.776  1.00 15.24
ATOM   1645 1HD  ARG A 109     -11.143   4.756  11.334  1.00 72.25
ATOM   1646 2HD  ARG A 109     -12.896   4.548  11.336  1.00 14.00
ATOM   1647  NE  ARG A 109     -11.828   2.942  10.545  1.00  0.43
ATOM   1648  HE  ARG A 109     -12.541   2.523  10.013  1.00  0.44
ATOM   1649  CZ  ARG A 109     -10.772   2.215  10.934  1.00 30.44
ATOM   1650  NH1 ARG A 109      -9.834   2.748  11.707  1.00 61.22
ATOM   1651 1HH1 ARG A 109      -9.836   3.679  12.063  1.00 54.43
ATOM   1652 2HH1 ARG A 109      -9.008   2.190  11.922  1.00 52.52
ATOM   1653  NH2 ARG A 109     -10.671   0.939  10.561  1.00 11.11
ATOM   1654 1HH2 ARG A 109     -11.356   0.464  10.005  1.00 41.54
ATOM   1655 2HH2 ARG A 109      -9.839   0.401  10.778  1.00 42.12
ATOM   1656  C   ARG A 109     -12.858   8.804   8.591  1.00 50.22
ATOM   1657  O   ARG A 109     -13.974   9.263   8.787  1.00 43.30
ATOM   1658  N   TYR A 110     -11.762   9.555   8.558  1.00  4.12
ATOM   1659  H   TYR A 110     -10.888   9.136   8.394  1.00 50.03
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ATOM   1660  CA  TYR A 110     -11.828  10.985   8.783  1.00 22.34
ATOM   1661  HA  TYR A 110     -12.406  11.127   9.685  1.00  2.23
ATOM   1662  CB  TYR A 110     -10.438  11.618   8.973  1.00 35.32
ATOM   1663 1HB  TYR A 110      -9.871  11.031   9.679  1.00 22.31
ATOM   1664 2HB  TYR A 110      -9.923  11.638   8.024  1.00 13.43
ATOM   1665  CG  TYR A 110     -10.523  13.044   9.495  1.00 24.22
ATOM   1666  CD1 TYR A 110     -10.617  14.132   8.631  1.00 45.11
ATOM   1667  HD1 TYR A 110     -10.597  13.960   7.565  1.00 70.22
ATOM   1668  CE1 TYR A 110     -10.741  15.418   9.117  1.00 70.45
ATOM   1669  HE1 TYR A 110     -10.813  16.251   8.433  1.00 65.23
ATOM   1670  CZ  TYR A 110     -10.765  15.633  10.478  1.00 20.33
ATOM   1671  CE2 TYR A 110     -10.665  14.574  11.352  1.00  4.25
ATOM   1672  HE2 TYR A 110     -10.683  14.744  12.420  1.00 71.32
ATOM   1673  CD2 TYR A 110     -10.550  13.291  10.861  1.00 51.25
ATOM   1674  HD2 TYR A 110     -10.471  12.459  11.545  1.00  4.24
ATOM   1675  OH  TYR A 110     -10.896  16.904  10.965  1.00 53.12
ATOM   1676  HH  TYR A 110     -11.769  17.207  10.648  1.00 61.55
ATOM   1677  C   TYR A 110     -12.581  11.664   7.644  1.00 72.40
ATOM   1678  O   TYR A 110     -13.344  12.583   7.872  1.00 51.24
ATOM   1679  N   ALA A 111     -12.369  11.182   6.425  1.00 71.22
ATOM   1680  H   ALA A 111     -11.731  10.445   6.315  1.00 24.44
ATOM   1681  CA  ALA A 111     -13.041  11.724   5.236  1.00 22.14
ATOM   1682  HA  ALA A 111     -12.820  12.780   5.193  1.00 20.32
ATOM   1683  CB  ALA A 111     -12.494  11.067   3.975  1.00 55.14
ATOM   1684 1HB  ALA A 111     -12.731  10.014   3.986  1.00 20.23
ATOM   1685 2HB  ALA A 111     -11.423  11.195   3.936  1.00 23.43
ATOM   1686 3HB  ALA A 111     -12.942  11.527   3.105  1.00 11.52
ATOM   1687  C   ALA A 111     -14.569  11.552   5.315  1.00 64.14
ATOM   1688  O   ALA A 111     -15.317  12.272   4.664  1.00 60.23
ATOM   1689  N   ASN A 112     -15.008  10.573   6.092  1.00 12.02
ATOM   1690  H   ASN A 112     -14.350  10.001   6.540  1.00 14.55
ATOM   1691  CA  ASN A 112     -16.436  10.321   6.298  1.00 34.41
ATOM   1692  HA  ASN A 112     -16.943  10.426   5.350  1.00 43.34
ATOM   1693  CB  ASN A 112     -16.635   8.879   6.840  1.00 31.52
ATOM   1694 1HB  ASN A 112     -16.015   8.208   6.262  1.00 34.14
ATOM   1695 2HB  ASN A 112     -16.293   8.857   7.864  1.00 10.34
ATOM   1696  CG  ASN A 112     -18.083   8.321   6.797  1.00 35.34
ATOM   1697  OD1 ASN A 112     -18.272   7.120   6.662  1.00 21.22
ATOM   1698  ND2 ASN A 112     -19.094   9.152   6.918  1.00 64.22
ATOM   1699 2HD2 ASN A 112     -18.910  10.113   7.033  1.00 14.54
ATOM   1700 1HD2 ASN A 112     -19.991   8.767   6.882  1.00 24.42
ATOM   1701  C   ASN A 112     -16.992  11.361   7.296  1.00 71.11
ATOM   1702  O   ASN A 112     -18.191  11.656   7.315  1.00  0.55
ATOM   1703  N   THR A 113     -16.117  11.901   8.105  1.00 35.10
ATOM   1704  H   THR A 113     -15.169  11.669   8.019  1.00  3.11
ATOM   1705  CA  THR A 113     -16.478  12.878   9.102  1.00 31.33
ATOM   1706  HA  THR A 113     -17.554  12.873   9.193  1.00 54.33
ATOM   1707  CB  THR A 113     -15.862  12.492  10.473  1.00 31.30
ATOM   1708  HB  THR A 113     -15.978  13.322  11.154  1.00 54.35
ATOM   1709  OG1 THR A 113     -14.467  12.205  10.327  1.00 23.43
ATOM   1710  HG1 THR A 113     -14.118  12.704   9.576  1.00 72.34
ATOM   1711  CG2 THR A 113     -16.567  11.273  11.058  1.00 43.32
ATOM   1712 1HG2 THR A 113     -16.468  10.442  10.375  1.00 14.30
ATOM   1713 2HG2 THR A 113     -17.613  11.495  11.206  1.00 12.32
ATOM   1714 3HG2 THR A 113     -16.115  11.015  12.005  1.00 52.34
ATOM   1715  C   THR A 113     -16.025  14.284   8.668  1.00 53.03
ATOM   1716  O   THR A 113     -15.737  14.512   7.483  1.00 72.22
ATOM   1717  N   HIS A 114     -15.999  15.215   9.594  1.00 73.15
ATOM   1718  H   HIS A 114     -16.199  15.046  10.537  1.00 71.23
ATOM   1719  CA  HIS A 114     -15.592  16.575   9.329  1.00 20.11
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ATOM   1720  HA  HIS A 114     -15.098  16.604   8.369  1.00 22.53
ATOM   1721  CB  HIS A 114     -16.793  17.559   9.336  1.00 20.53
ATOM   1722 1HB  HIS A 114     -17.285  17.497  10.296  1.00 63.25
ATOM   1723 2HB  HIS A 114     -16.415  18.562   9.208  1.00 52.21
ATOM   1724  CG  HIS A 114     -17.846  17.317   8.281  1.00 22.12
ATOM   1725  ND1 HIS A 114     -17.656  16.550   7.155  1.00 63.22
ATOM   1726  CD2 HIS A 114     -19.123  17.763   8.210  1.00  2.24
ATOM   1727  HD1 HIS A 114     -16.834  16.045   6.947  1.00 73.42
ATOM   1728  CE1 HIS A 114     -18.784  16.554   6.449  1.00 43.34
ATOM   1729  NE2 HIS A 114     -19.714  17.277   7.046  1.00 15.23
ATOM   1730  HD2 HIS A 114     -19.614  18.396   8.935  1.00  2.22
ATOM   1731  HE1 HIS A 114     -18.923  16.032   5.513  1.00  2.42
ATOM   1732  C   HIS A 114     -14.620  16.962  10.408  1.00 64.44
ATOM   1733  O   HIS A 114     -15.049  16.983  11.572  1.00 12.12
TER    1734      HIS A 114
ENDMDL
MODEL       12
ATOM      1  N   MET A   1     -15.043 -11.155   6.909  1.00 24.04
ATOM      2  CA  MET A   1     -14.043 -10.309   7.587  1.00 52.24
ATOM      3  HA  MET A   1     -13.863  -9.449   6.955  1.00 20.33
ATOM      4  CB  MET A   1     -14.499  -9.863   9.002  1.00 22.32
ATOM      5 1HB  MET A   1     -14.722 -10.742   9.589  1.00 53.53
ATOM      6 2HB  MET A   1     -13.685  -9.333   9.472  1.00  4.14
ATOM      7  CG  MET A   1     -15.733  -8.959   9.025  1.00 64.33
ATOM      8 1HG  MET A   1     -15.912  -8.646  10.042  1.00 13.04
ATOM      9 2HG  MET A   1     -15.532  -8.090   8.416  1.00 72.43
ATOM     10  SD  MET A   1     -17.234  -9.768   8.406  1.00  1.33
ATOM     11  CE  MET A   1     -17.512 -11.030   9.663  1.00 33.32
ATOM     12 1HE  MET A   1     -16.667 -11.702   9.697  1.00 14.34
ATOM     13 2HE  MET A   1     -18.404 -11.587   9.421  1.00 50.00
ATOM     14 3HE  MET A   1     -17.634 -10.557  10.626  1.00  3.44
ATOM     15  C   MET A   1     -12.794 -11.103   7.647  1.00 70.54
ATOM     16  O   MET A   1     -11.931 -10.953   6.790  1.00 25.02
ATOM     17  N   ASP A   2     -12.738 -11.992   8.652  1.00 14.01
ATOM     18  H   ASP A   2     -13.374 -11.946   9.393  1.00  1.51
ATOM     19  CA  ASP A   2     -11.761 -13.069   8.733  1.00  3.20
ATOM     20  HA  ASP A   2     -11.935 -13.609   9.652  1.00 62.10
ATOM     21  CB  ASP A   2     -12.021 -14.036   7.555  1.00  4.45
ATOM     22 1HB  ASP A   2     -11.786 -13.535   6.627  1.00  4.15
ATOM     23 2HB  ASP A   2     -11.397 -14.911   7.662  1.00 52.04
ATOM     24  CG  ASP A   2     -13.485 -14.483   7.514  1.00 13.44
ATOM     25  OD1 ASP A   2     -14.363 -13.671   7.024  1.00 62.22
ATOM     26  OD2 ASP A   2     -13.783 -15.562   7.997  1.00 71.13
ATOM     27  C   ASP A   2     -10.338 -12.539   8.737  1.00 71.13
ATOM     28  O   ASP A   2     -10.098 -11.373   9.075  1.00 63.23
ATOM     29  N   LYS A   3      -9.392 -13.374   8.410  1.00 33.44
ATOM     30  H   LYS A   3      -9.628 -14.290   8.152  1.00 73.22
ATOM     31  CA  LYS A   3      -8.031 -12.943   8.388  1.00 13.04
ATOM     32  HA  LYS A   3      -7.998 -11.982   8.882  1.00 11.22
ATOM     33  CB  LYS A   3      -7.113 -13.916   9.127  1.00 63.25
ATOM     34 1HB  LYS A   3      -7.550 -14.147  10.087  1.00 52.12
ATOM     35 2HB  LYS A   3      -7.037 -14.826   8.550  1.00  3.30
ATOM     36  CG  LYS A   3      -5.710 -13.379   9.358  1.00 41.05
ATOM     37 1HG  LYS A   3      -5.235 -13.211   8.403  1.00 44.45
ATOM     38 2HG  LYS A   3      -5.775 -12.446   9.898  1.00 10.02
ATOM     39  CD  LYS A   3      -4.876 -14.358  10.156  1.00 54.50
ATOM     40 1HD  LYS A   3      -5.421 -14.645  11.043  1.00 25.31
ATOM     41 2HD  LYS A   3      -4.688 -15.232   9.550  1.00 41.23
ATOM     42  CE  LYS A   3      -3.547 -13.749  10.570  1.00 30.54
ATOM     43 1HE  LYS A   3      -3.778 -12.822  11.074  1.00 41.45
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ATOM     44 2HE  LYS A   3      -3.040 -14.421  11.246  1.00 73.12
ATOM     45  NZ  LYS A   3      -2.667 -13.426   9.424  1.00 73.41
ATOM     46 1HZ  LYS A   3      -1.740 -13.124   9.789  1.00 42.34
ATOM     47 2HZ  LYS A   3      -3.061 -12.654   8.841  1.00 43.32
ATOM     48 3HZ  LYS A   3      -2.529 -14.230   8.776  1.00 24.24
ATOM     49  C   LYS A   3      -7.593 -12.743   6.954  1.00 51.12
ATOM     50  O   LYS A   3      -7.059 -13.651   6.314  1.00  3.01
ATOM     51  N   GLY A   4      -7.870 -11.564   6.453  1.00 64.12
ATOM     52  H   GLY A   4      -8.317 -10.915   7.036  1.00 41.23
ATOM     53  CA  GLY A   4      -7.546 -11.231   5.076  1.00  4.31
ATOM     54 1HA  GLY A   4      -7.624 -12.124   4.473  1.00 11.43
ATOM     55 2HA  GLY A   4      -8.249 -10.496   4.715  1.00 12.23
ATOM     56  C   GLY A   4      -6.154 -10.678   4.954  1.00 30.43
ATOM     57  O   GLY A   4      -5.634 -10.496   3.853  1.00 61.30
ATOM     58  N   THR A   5      -5.572 -10.382   6.083  1.00 62.24
ATOM     59  H   THR A   5      -6.078 -10.478   6.914  1.00 50.21
ATOM     60  CA  THR A   5      -4.238  -9.898   6.154  1.00  2.44
ATOM     61  HA  THR A   5      -3.998  -9.382   5.237  1.00 74.21
ATOM     62  CB  THR A   5      -4.115  -8.920   7.329  1.00 51.24
ATOM     63  HB  THR A   5      -4.225  -9.470   8.252  1.00 31.03
ATOM     64  OG1 THR A   5      -5.172  -7.949   7.233  1.00 43.10
ATOM     65  HG1 THR A   5      -5.107  -7.471   6.393  1.00 35.33
ATOM     66  CG2 THR A   5      -2.770  -8.211   7.315  1.00  2.31
ATOM     67 1HG2 THR A   5      -2.710  -7.534   8.154  1.00 61.22
ATOM     68 2HG2 THR A   5      -2.665  -7.651   6.397  1.00 71.31
ATOM     69 3HG2 THR A   5      -1.977  -8.940   7.383  1.00 31.32
ATOM     70  C   THR A   5      -3.287 -11.087   6.347  1.00 52.42
ATOM     71  O   THR A   5      -3.240 -11.701   7.434  1.00  3.13
ATOM     72  N   GLN A   6      -2.577 -11.426   5.301  1.00 43.12
ATOM     73  H   GLN A   6      -2.647 -10.868   4.493  1.00 41.44
ATOM     74  CA  GLN A   6      -1.658 -12.543   5.294  1.00 14.33
ATOM     75  HA  GLN A   6      -1.587 -12.912   6.307  1.00 72.01
ATOM     76  CB  GLN A   6      -2.157 -13.674   4.383  1.00 60.53
ATOM     77 1HB  GLN A   6      -2.275 -13.283   3.383  1.00 31.24
ATOM     78 2HB  GLN A   6      -1.406 -14.449   4.362  1.00  3.13
ATOM     79  CG  GLN A   6      -3.486 -14.310   4.800  1.00 53.00
ATOM     80 1HG  GLN A   6      -4.230 -13.531   4.887  1.00 61.34
ATOM     81 2HG  GLN A   6      -3.781 -14.996   4.020  1.00 71.13
ATOM     82  CD  GLN A   6      -3.438 -15.077   6.129  1.00  4.01
ATOM     83  OE1 GLN A   6      -2.666 -14.764   7.055  1.00 44.32
ATOM     84  NE2 GLN A   6      -4.269 -16.082   6.241  1.00 54.54
ATOM     85 2HE2 GLN A   6      -4.857 -16.259   5.475  1.00 21.42
ATOM     86 1HE2 GLN A   6      -4.271 -16.621   7.056  1.00 22.44
ATOM     87  C   GLN A   6      -0.289 -12.079   4.846  1.00 34.44
ATOM     88  O   GLN A   6      -0.161 -11.219   3.991  1.00 75.21
ATOM     89  N   TYR A   7       0.706 -12.615   5.463  1.00 14.24
ATOM     90  H   TYR A   7       0.542 -13.315   6.127  1.00 72.32
ATOM     91  CA  TYR A   7       2.085 -12.284   5.203  1.00 23.54
ATOM     92  HA  TYR A   7       2.102 -11.580   4.384  1.00 23.35
ATOM     93  CB  TYR A   7       2.710 -11.611   6.455  1.00 75.43
ATOM     94 1HB  TYR A   7       3.735 -11.935   6.561  1.00 73.42
ATOM     95 2HB  TYR A   7       2.680 -10.538   6.335  1.00 71.21
ATOM     96  CG  TYR A   7       1.968 -11.962   7.737  1.00 73.25
ATOM     97  CD1 TYR A   7       2.218 -13.143   8.425  1.00 32.40
ATOM     98  HD1 TYR A   7       2.996 -13.805   8.071  1.00 72.23
ATOM     99  CE1 TYR A   7       1.481 -13.480   9.541  1.00  4.11
ATOM    100  HE1 TYR A   7       1.686 -14.401  10.069  1.00 71.15
ATOM    101  CZ  TYR A   7       0.495 -12.625   9.988  1.00 21.43
ATOM    102  CE2 TYR A   7       0.238 -11.449   9.330  1.00 41.22
ATOM    103  HE2 TYR A   7      -0.536 -10.784   9.685  1.00  0.12
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ATOM    104  CD2 TYR A   7       0.961 -11.127   8.212  1.00 53.41
ATOM    105  HD2 TYR A   7       0.759 -10.201   7.691  1.00 31.04
ATOM    106  OH  TYR A   7      -0.274 -12.971  11.077  1.00 52.34
ATOM    107  HH  TYR A   7       0.321 -13.214  11.797  1.00 25.41
ATOM    108  C   TYR A   7       2.841 -13.529   4.785  1.00 74.43
ATOM    109  O   TYR A   7       3.002 -14.455   5.575  1.00  1.42
ATOM    110  N   LYS A   8       3.262 -13.571   3.552  1.00 34.22
ATOM    111  H   LYS A   8       3.092 -12.804   2.956  1.00 32.01
ATOM    112  CA  LYS A   8       3.986 -14.708   3.043  1.00  2.31
ATOM    113  HA  LYS A   8       4.398 -15.218   3.900  1.00 42.21
ATOM    114  CB  LYS A   8       3.059 -15.695   2.294  1.00 55.51
ATOM    115 1HB  LYS A   8       2.404 -16.183   3.002  1.00  5.43
ATOM    116 2HB  LYS A   8       2.455 -15.136   1.592  1.00  3.34
ATOM    117  CG  LYS A   8       3.837 -16.749   1.518  1.00 10.13
ATOM    118 1HG  LYS A   8       4.359 -16.265   0.706  1.00 15.33
ATOM    119 2HG  LYS A   8       4.566 -17.188   2.184  1.00 54.45
ATOM    120  CD  LYS A   8       2.981 -17.847   0.932  1.00 35.12
ATOM    121 1HD  LYS A   8       2.641 -18.494   1.728  1.00  2.32
ATOM    122 2HD  LYS A   8       2.131 -17.407   0.432  1.00 21.20
ATOM    123  CE  LYS A   8       3.786 -18.672  -0.083  1.00 34.24
ATOM    124 1HE  LYS A   8       3.240 -19.577  -0.304  1.00 71.44
ATOM    125 2HE  LYS A   8       3.892 -18.093  -0.989  1.00 34.12
ATOM    126  NZ  LYS A   8       5.146 -19.047   0.416  1.00  4.13
ATOM    127 1HZ  LYS A   8       5.155 -19.530   1.334  1.00 54.31
ATOM    128 2HZ  LYS A   8       5.740 -18.183   0.487  1.00 31.14
ATOM    129 3HZ  LYS A   8       5.652 -19.622  -0.284  1.00 54.13
ATOM    130  C   LYS A   8       5.146 -14.279   2.163  1.00 44.12
ATOM    131  O   LYS A   8       4.964 -13.549   1.211  1.00  3.24
ATOM    132  N   ASP A   9       6.339 -14.735   2.521  1.00  1.34
ATOM    133  H   ASP A   9       6.393 -15.289   3.327  1.00 63.32
ATOM    134  CA  ASP A   9       7.609 -14.502   1.772  1.00 31.44
ATOM    135  HA  ASP A   9       8.425 -14.928   2.337  1.00 51.42
ATOM    136  CB  ASP A   9       7.573 -15.155   0.355  1.00 25.15
ATOM    137 1HB  ASP A   9       6.969 -14.537  -0.292  1.00  5.42
ATOM    138 2HB  ASP A   9       8.581 -15.173  -0.035  1.00 52.43
ATOM    139  CG  ASP A   9       7.006 -16.561   0.293  1.00 41.32
ATOM    140  OD1 ASP A   9       7.182 -17.361   1.226  1.00 11.22
ATOM    141  OD2 ASP A   9       6.326 -16.880  -0.691  1.00 22.45
ATOM    142  C   ASP A   9       7.847 -13.006   1.580  1.00 63.30
ATOM    143  O   ASP A   9       8.348 -12.577   0.536  1.00 14.54
ATOM    144  N   GLY A  10       7.502 -12.218   2.585  1.00 75.45
ATOM    145  H   GLY A  10       7.116 -12.628   3.385  1.00 63.22
ATOM    146  CA  GLY A  10       7.687 -10.771   2.512  1.00 74.53
ATOM    147 1HA  GLY A  10       7.710 -10.379   3.517  1.00 41.12
ATOM    148 2HA  GLY A  10       8.631 -10.564   2.030  1.00  4.01
ATOM    149  C   GLY A  10       6.571 -10.067   1.738  1.00 22.04
ATOM    150  O   GLY A  10       6.571  -8.843   1.604  1.00 53.15
ATOM    151  N   TYR A  11       5.651 -10.841   1.227  1.00 61.21
ATOM    152  H   TYR A  11       5.716 -11.811   1.372  1.00  3.51
ATOM    153  CA  TYR A  11       4.510 -10.348   0.492  1.00 73.53
ATOM    154  HA  TYR A  11       4.767  -9.401   0.040  1.00 25.23
ATOM    155  CB  TYR A  11       4.145 -11.368  -0.610  1.00 31.21
ATOM    156 1HB  TYR A  11       4.995 -11.488  -1.264  1.00 13.42
ATOM    157 2HB  TYR A  11       3.966 -12.317  -0.128  1.00  1.04
ATOM    158  CG  TYR A  11       2.946 -11.060  -1.486  1.00 22.33
ATOM    159  CD1 TYR A  11       2.844  -9.874  -2.197  1.00 71.13
ATOM    160  HD1 TYR A  11       3.621  -9.132  -2.094  1.00 24.40
ATOM    161  CE1 TYR A  11       1.763  -9.628  -3.023  1.00 35.20
ATOM    162  HE1 TYR A  11       1.707  -8.698  -3.570  1.00 14.13
ATOM    163  CZ  TYR A  11       0.766 -10.579  -3.143  1.00 73.02
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ATOM    164  CE2 TYR A  11       0.852 -11.758  -2.452  1.00 74.44
ATOM    165  HE2 TYR A  11       0.074 -12.501  -2.546  1.00 12.42
ATOM    166  CD2 TYR A  11       1.935 -11.995  -1.634  1.00 41.42
ATOM    167  HD2 TYR A  11       2.000 -12.927  -1.090  1.00 41.01
ATOM    168  OH  TYR A  11      -0.327 -10.347  -3.964  1.00 24.05
ATOM    169  HH  TYR A  11      -0.004  -9.971  -4.791  1.00 70.54
ATOM    170  C   TYR A  11       3.380 -10.141   1.473  1.00 21.33
ATOM    171  O   TYR A  11       3.011 -11.057   2.217  1.00 72.22
ATOM    172  N   TYR A  12       2.878  -8.951   1.500  1.00 43.42
ATOM    173  H   TYR A  12       3.200  -8.291   0.844  1.00 73.52
ATOM    174  CA  TYR A  12       1.861  -8.566   2.429  1.00 71.12
ATOM    175  HA  TYR A  12       1.799  -9.307   3.213  1.00 54.52
ATOM    176  CB  TYR A  12       2.239  -7.215   3.042  1.00  1.14
ATOM    177 1HB  TYR A  12       3.272  -7.252   3.358  1.00 53.43
ATOM    178 2HB  TYR A  12       2.139  -6.458   2.280  1.00 43.30
ATOM    179  CG  TYR A  12       1.418  -6.782   4.238  1.00 10.15
ATOM    180  CD1 TYR A  12       1.733  -7.238   5.511  1.00 12.51
ATOM    181  HD1 TYR A  12       2.550  -7.933   5.628  1.00 63.45
ATOM    182  CE1 TYR A  12       1.029  -6.817   6.619  1.00 70.13
ATOM    183  HE1 TYR A  12       1.292  -7.184   7.599  1.00 64.32
ATOM    184  CZ  TYR A  12      -0.013  -5.932   6.467  1.00 14.24
ATOM    185  CE2 TYR A  12      -0.355  -5.465   5.213  1.00 11.34
ATOM    186  HE2 TYR A  12      -1.173  -4.771   5.094  1.00 54.10
ATOM    187  CD2 TYR A  12       0.362  -5.885   4.107  1.00 13.22
ATOM    188  HD2 TYR A  12       0.099  -5.523   3.124  1.00  4.23
ATOM    189  OH  TYR A  12      -0.706  -5.501   7.573  1.00 74.31
ATOM    190  HH  TYR A  12      -0.090  -5.337   8.300  1.00 53.11
ATOM    191  C   TYR A  12       0.540  -8.473   1.697  1.00 25.22
ATOM    192  O   TYR A  12       0.389  -7.676   0.763  1.00 52.23
ATOM    193  N   ILE A  13      -0.371  -9.302   2.087  1.00 25.41
ATOM    194  H   ILE A  13      -0.170  -9.929   2.821  1.00 63.41
ATOM    195  CA  ILE A  13      -1.687  -9.365   1.519  1.00 11.12
ATOM    196  HA  ILE A  13      -1.729  -8.814   0.591  1.00 10.02
ATOM    197  CB  ILE A  13      -2.092 -10.843   1.252  1.00 32.12
ATOM    198  HB  ILE A  13      -2.134 -11.343   2.209  1.00 51.30
ATOM    199  CG2 ILE A  13      -3.485 -10.928   0.624  1.00 54.54
ATOM    200 1HG2 ILE A  13      -3.745 -11.962   0.458  1.00 22.30
ATOM    201 2HG2 ILE A  13      -3.487 -10.401  -0.320  1.00 14.21
ATOM    202 3HG2 ILE A  13      -4.207 -10.475   1.288  1.00 23.43
ATOM    203  CG1 ILE A  13      -1.057 -11.543   0.374  1.00 64.32
ATOM    204 1HG1 ILE A  13      -1.050 -11.082  -0.603  1.00 74.14
ATOM    205 2HG1 ILE A  13      -0.080 -11.430   0.821  1.00 21.23
ATOM    206  CD1 ILE A  13      -1.311 -13.026   0.175  1.00 21.14
ATOM    207 1HD1 ILE A  13      -0.530 -13.441  -0.446  1.00 24.31
ATOM    208 2HD1 ILE A  13      -2.268 -13.166  -0.303  1.00 70.42
ATOM    209 3HD1 ILE A  13      -1.309 -13.523   1.136  1.00 41.05
ATOM    210  C   ILE A  13      -2.660  -8.823   2.534  1.00 41.55
ATOM    211  O   ILE A  13      -2.588  -9.191   3.697  1.00  2.44
ATOM    212  N   THR A  14      -3.510  -7.936   2.132  1.00 64.45
ATOM    213  H   THR A  14      -3.426  -7.517   1.246  1.00  2.12
ATOM    214  CA  THR A  14      -4.558  -7.501   2.983  1.00 72.00
ATOM    215  HA  THR A  14      -4.903  -8.372   3.521  1.00 72.31
ATOM    216  CB  THR A  14      -4.074  -6.421   4.008  1.00 63.22
ATOM    217  HB  THR A  14      -3.202  -6.817   4.509  1.00 40.44
ATOM    218  OG1 THR A  14      -5.084  -6.167   4.995  1.00 11.13
ATOM    219  HG1 THR A  14      -4.849  -5.358   5.464  1.00 25.32
ATOM    220  CG2 THR A  14      -3.696  -5.118   3.319  1.00 32.04
ATOM    221 1HG2 THR A  14      -2.892  -5.299   2.622  1.00 70.23
ATOM    222 2HG2 THR A  14      -3.378  -4.401   4.062  1.00 25.40
ATOM    223 3HG2 THR A  14      -4.554  -4.732   2.789  1.00  2.24
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ATOM    224  C   THR A  14      -5.718  -7.009   2.117  1.00 51.21
ATOM    225  O   THR A  14      -5.509  -6.365   1.090  1.00  1.01
ATOM    226  N   THR A  15      -6.903  -7.382   2.474  1.00 53.22
ATOM    227  H   THR A  15      -7.016  -7.918   3.282  1.00  4.45
ATOM    228  CA  THR A  15      -8.071  -6.996   1.746  1.00 73.33
ATOM    229  HA  THR A  15      -7.764  -6.405   0.898  1.00 14.30
ATOM    230  CB  THR A  15      -8.824  -8.249   1.248  1.00 73.14
ATOM    231  HB  THR A  15      -9.226  -8.779   2.099  1.00 54.20
ATOM    232  OG1 THR A  15      -7.884  -9.101   0.553  1.00 24.13
ATOM    233  HG1 THR A  15      -7.199  -9.313   1.194  1.00 23.22
ATOM    234  CG2 THR A  15      -9.954  -7.868   0.294  1.00 54.24
ATOM    235 1HG2 THR A  15      -9.549  -7.341  -0.557  1.00 13.04
ATOM    236 2HG2 THR A  15     -10.658  -7.230   0.807  1.00 74.41
ATOM    237 3HG2 THR A  15     -10.457  -8.762  -0.042  1.00 54.14
ATOM    238  C   THR A  15      -8.952  -6.151   2.655  1.00 71.32
ATOM    239  O   THR A  15      -9.334  -6.587   3.736  1.00 45.32
ATOM    240  N   LEU A  16      -9.246  -4.953   2.227  1.00 34.34
ATOM    241  H   LEU A  16      -8.979  -4.661   1.324  1.00 20.24
ATOM    242  CA  LEU A  16      -9.996  -4.032   3.021  1.00 14.12
ATOM    243  HA  LEU A  16     -10.221  -4.481   3.976  1.00 32.12
ATOM    244  CB  LEU A  16      -9.168  -2.771   3.231  1.00  3.21
ATOM    245 1HB  LEU A  16      -8.147  -3.050   3.445  1.00  1.31
ATOM    246 2HB  LEU A  16      -9.194  -2.236   2.291  1.00 21.24
ATOM    247  CG  LEU A  16      -9.648  -1.812   4.313  1.00  1.20
ATOM    248  HG  LEU A  16     -10.674  -1.551   4.107  1.00 43.43
ATOM    249  CD1 LEU A  16      -9.596  -2.483   5.684  1.00 52.32
ATOM    250 1HD1 LEU A  16      -9.905  -1.779   6.442  1.00 33.02
ATOM    251 2HD1 LEU A  16      -8.589  -2.816   5.880  1.00 40.31
ATOM    252 3HD1 LEU A  16     -10.258  -3.335   5.695  1.00 62.41
ATOM    253  CD2 LEU A  16      -8.811  -0.542   4.301  1.00 23.14
ATOM    254 1HD2 LEU A  16      -9.146   0.121   5.084  1.00 50.32
ATOM    255 2HD2 LEU A  16      -8.914  -0.055   3.342  1.00  3.42
ATOM    256 3HD2 LEU A  16      -7.774  -0.798   4.463  1.00 65.21
ATOM    257  C   LEU A  16     -11.268  -3.694   2.277  1.00 52.43
ATOM    258  O   LEU A  16     -11.227  -3.381   1.085  1.00 33.44
ATOM    259  N   ASN A  17     -12.389  -3.740   2.941  1.00 41.30
ATOM    260  H   ASN A  17     -12.381  -3.940   3.898  1.00 35.33
ATOM    261  CA  ASN A  17     -13.638  -3.481   2.252  1.00 13.40
ATOM    262  HA  ASN A  17     -13.481  -3.770   1.223  1.00  4.34
ATOM    263  CB  ASN A  17     -14.809  -4.305   2.823  1.00  2.21
ATOM    264 1HB  ASN A  17     -14.489  -5.330   2.950  1.00 41.43
ATOM    265 2HB  ASN A  17     -15.088  -3.898   3.783  1.00 51.52
ATOM    266  CG  ASN A  17     -16.046  -4.298   1.914  1.00 23.31
ATOM    267  OD1 ASN A  17     -16.205  -5.174   1.066  1.00 12.03
ATOM    268  ND2 ASN A  17     -16.904  -3.321   2.070  1.00  1.34
ATOM    269 2HD2 ASN A  17     -16.716  -2.643   2.754  1.00  3.32
ATOM    270 1HD2 ASN A  17     -17.687  -3.308   1.482  1.00 44.45
ATOM    271  C   ASN A  17     -13.965  -1.991   2.255  1.00 61.24
ATOM    272  O   ASN A  17     -14.804  -1.523   3.030  1.00 52.54
ATOM    273  N   TYR A  18     -13.207  -1.254   1.474  1.00 52.11
ATOM    274  H   TYR A  18     -12.451  -1.684   1.015  1.00 53.33
ATOM    275  CA  TYR A  18     -13.426   0.159   1.233  1.00 12.33
ATOM    276  HA  TYR A  18     -14.480   0.341   1.389  1.00 11.33
ATOM    277  CB  TYR A  18     -12.599   1.072   2.164  1.00 44.32
ATOM    278 1HB  TYR A  18     -11.582   0.708   2.194  1.00 12.54
ATOM    279 2HB  TYR A  18     -12.599   2.073   1.756  1.00 53.11
ATOM    280  CG  TYR A  18     -13.105   1.143   3.596  1.00  0.52
ATOM    281  CD1 TYR A  18     -14.342   1.715   3.882  1.00 45.53
ATOM    282  HD1 TYR A  18     -14.944   2.094   3.069  1.00 71.25
ATOM    283  CE1 TYR A  18     -14.809   1.801   5.179  1.00 74.24
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ATOM    284  HE1 TYR A  18     -15.772   2.247   5.377  1.00  1.44
ATOM    285  CZ  TYR A  18     -14.042   1.313   6.212  1.00  4.11
ATOM    286  CE2 TYR A  18     -12.810   0.744   5.957  1.00 11.53
ATOM    287  HE2 TYR A  18     -12.208   0.363   6.768  1.00 74.03
ATOM    288  CD2 TYR A  18     -12.350   0.665   4.655  1.00 71.21
ATOM    289  HD2 TYR A  18     -11.386   0.226   4.454  1.00 43.22
ATOM    290  OH  TYR A  18     -14.509   1.392   7.509  1.00 14.43
ATOM    291  HH  TYR A  18     -15.442   1.157   7.497  1.00 50.52
ATOM    292  C   TYR A  18     -13.116   0.453  -0.212  1.00 52.22
ATOM    293  O   TYR A  18     -12.339  -0.278  -0.836  1.00  1.52
ATOM    294  N   ASN A  19     -13.708   1.512  -0.735  1.00 13.44
ATOM    295  H   ASN A  19     -14.241   2.080  -0.143  1.00 23.22
ATOM    296  CA  ASN A  19     -13.605   1.861  -2.155  1.00 32.32
ATOM    297  HA  ASN A  19     -13.834   0.962  -2.710  1.00 73.15
ATOM    298  CB  ASN A  19     -14.663   2.942  -2.524  1.00 71.42
ATOM    299 1HB  ASN A  19     -15.642   2.572  -2.258  1.00 51.25
ATOM    300 2HB  ASN A  19     -14.462   3.826  -1.938  1.00  2.41
ATOM    301  CG  ASN A  19     -14.706   3.347  -4.016  1.00 64.53
ATOM    302  OD1 ASN A  19     -13.700   3.386  -4.713  1.00 43.54
ATOM    303  ND2 ASN A  19     -15.886   3.623  -4.511  1.00 62.23
ATOM    304 2HD2 ASN A  19     -16.677   3.559  -3.937  1.00  0.11
ATOM    305 1HD2 ASN A  19     -15.931   3.874  -5.456  1.00 75.53
ATOM    306  C   ASN A  19     -12.193   2.288  -2.535  1.00 62.24
ATOM    307  O   ASN A  19     -11.603   3.169  -1.909  1.00 65.12
ATOM    308  N   PHE A  20     -11.702   1.669  -3.588  1.00 21.20
ATOM    309  H   PHE A  20     -12.274   1.005  -4.022  1.00 51.34
ATOM    310  CA  PHE A  20     -10.367   1.862  -4.152  1.00 63.25
ATOM    311  HA  PHE A  20      -9.662   1.420  -3.463  1.00 22.11
ATOM    312  CB  PHE A  20     -10.275   1.063  -5.466  1.00 33.41
ATOM    313 1HB  PHE A  20     -10.135   0.022  -5.210  1.00  3.54
ATOM    314 2HB  PHE A  20     -11.209   1.144  -6.003  1.00 41.12
ATOM    315  CG  PHE A  20      -9.149   1.428  -6.401  1.00 13.35
ATOM    316  CD1 PHE A  20      -7.861   0.980  -6.183  1.00 42.12
ATOM    317  HD1 PHE A  20      -7.648   0.366  -5.320  1.00 44.43
ATOM    318  CE1 PHE A  20      -6.847   1.314  -7.059  1.00 74.11
ATOM    319  HE1 PHE A  20      -5.841   0.966  -6.889  1.00 71.33
ATOM    320  CZ  PHE A  20      -7.118   2.102  -8.160  1.00 73.35
ATOM    321  HZ  PHE A  20      -6.327   2.365  -8.847  1.00 14.45
ATOM    322  CE2 PHE A  20      -8.395   2.553  -8.389  1.00 34.44
ATOM    323  HE2 PHE A  20      -8.609   3.168  -9.251  1.00  2.35
ATOM    324  CD2 PHE A  20      -9.403   2.217  -7.516  1.00 63.44
ATOM    325  HD2 PHE A  20     -10.406   2.571  -7.696  1.00 42.53
ATOM    326  C   PHE A  20      -9.983   3.321  -4.357  1.00 52.22
ATOM    327  O   PHE A  20      -8.842   3.693  -4.102  1.00 61.35
ATOM    328  N   ASN A  21     -10.927   4.141  -4.776  1.00 53.14
ATOM    329  H   ASN A  21     -11.837   3.791  -4.909  1.00 20.32
ATOM    330  CA  ASN A  21     -10.642   5.547  -5.038  1.00 51.41
ATOM    331  HA  ASN A  21      -9.834   5.557  -5.754  1.00 33.44
ATOM    332  CB  ASN A  21     -11.847   6.271  -5.658  1.00 71.12
ATOM    333 1HB  ASN A  21     -12.723   6.073  -5.059  1.00 71.14
ATOM    334 2HB  ASN A  21     -11.653   7.334  -5.666  1.00 33.45
ATOM    335  CG  ASN A  21     -12.130   5.820  -7.087  1.00 55.44
ATOM    336  OD1 ASN A  21     -12.875   4.874  -7.326  1.00 51.52
ATOM    337  ND2 ASN A  21     -11.540   6.493  -8.047  1.00 62.21
ATOM    338 2HD2 ASN A  21     -10.952   7.236  -7.804  1.00 53.52
ATOM    339 1HD2 ASN A  21     -11.718   6.221  -8.970  1.00 52.01
ATOM    340  C   ASN A  21     -10.139   6.266  -3.793  1.00 55.53
ATOM    341  O   ASN A  21      -9.128   6.957  -3.841  1.00  1.23
ATOM    342  N   THR A  22     -10.819   6.085  -2.674  1.00 14.14
ATOM    343  H   THR A  22     -11.612   5.510  -2.680  1.00 63.01
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ATOM    344  CA  THR A  22     -10.368   6.692  -1.438  1.00 63.13
ATOM    345  HA  THR A  22     -10.061   7.690  -1.726  1.00 72.31
ATOM    346  CB  THR A  22     -11.484   6.807  -0.335  1.00 20.03
ATOM    347  HB  THR A  22     -12.267   7.438  -0.732  1.00 62.13
ATOM    348  OG1 THR A  22     -10.978   7.438   0.848  1.00  2.13
ATOM    349  HG1 THR A  22     -10.035   7.621   0.772  1.00 34.14
ATOM    350  CG2 THR A  22     -12.080   5.461   0.038  1.00 71.34
ATOM    351 1HG2 THR A  22     -12.851   5.600   0.780  1.00 12.54
ATOM    352 2HG2 THR A  22     -11.306   4.823   0.438  1.00 33.23
ATOM    353 3HG2 THR A  22     -12.506   4.998  -0.840  1.00 52.40
ATOM    354  C   THR A  22      -9.088   6.008  -0.926  1.00  4.34
ATOM    355  O   THR A  22      -8.193   6.675  -0.402  1.00 33.41
ATOM    356  N   VAL A  23      -9.003   4.684  -1.111  1.00  4.14
ATOM    357  H   VAL A  23      -9.739   4.221  -1.567  1.00 73.52
ATOM    358  CA  VAL A  23      -7.846   3.899  -0.666  1.00  3.54
ATOM    359  HA  VAL A  23      -7.725   4.067   0.394  1.00 74.25
ATOM    360  CB  VAL A  23      -8.033   2.371  -0.918  1.00 34.04
ATOM    361  HB  VAL A  23      -8.112   2.217  -1.984  1.00 23.11
ATOM    362  CG1 VAL A  23      -6.834   1.586  -0.417  1.00 34.40
ATOM    363 1HG1 VAL A  23      -5.948   1.906  -0.944  1.00 42.31
ATOM    364 2HG1 VAL A  23      -6.999   0.532  -0.587  1.00 73.14
ATOM    365 3HG1 VAL A  23      -6.707   1.764   0.641  1.00 72.11
ATOM    366  CG2 VAL A  23      -9.298   1.848  -0.262  1.00 25.11
ATOM    367 1HG2 VAL A  23      -9.409   0.798  -0.486  1.00  4.43
ATOM    368 2HG2 VAL A  23     -10.153   2.390  -0.639  1.00 23.31
ATOM    369 3HG2 VAL A  23      -9.232   1.980   0.808  1.00 31.10
ATOM    370  C   VAL A  23      -6.566   4.366  -1.365  1.00 72.42
ATOM    371  O   VAL A  23      -5.519   4.536  -0.713  1.00 14.54
ATOM    372  N   TYR A  24      -6.653   4.585  -2.676  1.00  0.32
ATOM    373  H   TYR A  24      -7.512   4.432  -3.134  1.00 45.33
ATOM    374  CA  TYR A  24      -5.508   5.017  -3.462  1.00 11.44
ATOM    375  HA  TYR A  24      -4.743   4.266  -3.337  1.00 51.13
ATOM    376  CB  TYR A  24      -5.862   5.119  -4.959  1.00 42.33
ATOM    377 1HB  TYR A  24      -6.187   4.151  -5.310  1.00 21.14
ATOM    378 2HB  TYR A  24      -6.664   5.830  -5.084  1.00 12.11
ATOM    379  CG  TYR A  24      -4.700   5.560  -5.844  1.00 64.01
ATOM    380  CD1 TYR A  24      -4.692   6.807  -6.464  1.00  1.14
ATOM    381  HD1 TYR A  24      -5.530   7.472  -6.319  1.00  2.22
ATOM    382  CE1 TYR A  24      -3.630   7.199  -7.264  1.00 41.34
ATOM    383  HE1 TYR A  24      -3.639   8.170  -7.738  1.00 61.12
ATOM    384  CZ  TYR A  24      -2.562   6.342  -7.447  1.00 64.51
ATOM    385  CE2 TYR A  24      -2.551   5.110  -6.840  1.00 11.03
ATOM    386  HE2 TYR A  24      -1.716   4.439  -6.982  1.00 52.13
ATOM    387  CD2 TYR A  24      -3.613   4.726  -6.048  1.00 41.43
ATOM    388  HD2 TYR A  24      -3.602   3.756  -5.572  1.00 40.04
ATOM    389  OH  TYR A  24      -1.499   6.712  -8.249  1.00 32.41
ATOM    390  HH  TYR A  24      -1.285   5.948  -8.791  1.00 64.14
ATOM    391  C   TYR A  24      -4.978   6.336  -2.946  1.00 61.03
ATOM    392  O   TYR A  24      -3.776   6.474  -2.703  1.00 35.55
ATOM    393  N   ASN A  25      -5.885   7.268  -2.713  1.00 60.54
ATOM    394  H   ASN A  25      -6.829   7.088  -2.910  1.00 71.21
ATOM    395  CA  ASN A  25      -5.543   8.578  -2.204  1.00 44.23
ATOM    396  HA  ASN A  25      -4.843   9.026  -2.895  1.00 75.42
ATOM    397  CB  ASN A  25      -6.781   9.485  -2.116  1.00  4.20
ATOM    398 1HB  ASN A  25      -7.574   8.941  -1.625  1.00 74.21
ATOM    399 2HB  ASN A  25      -6.528  10.345  -1.518  1.00 13.24
ATOM    400  CG  ASN A  25      -7.305   9.962  -3.464  1.00 54.30
ATOM    401  OD1 ASN A  25      -7.170   9.299  -4.476  1.00 14.22
ATOM    402  ND2 ASN A  25      -7.916  11.124  -3.476  1.00 25.40
ATOM    403 2HD2 ASN A  25      -8.002  11.614  -2.633  1.00 10.24
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ATOM    404 1HD2 ASN A  25      -8.255  11.434  -4.340  1.00 11.21
ATOM    405  C   ASN A  25      -4.885   8.481  -0.845  1.00 60.15
ATOM    406  O   ASN A  25      -3.814   9.047  -0.633  1.00 73.44
ATOM    407  N   ALA A  26      -5.503   7.719   0.046  1.00 20.24
ATOM    408  H   ALA A  26      -6.321   7.239  -0.217  1.00 11.20
ATOM    409  CA  ALA A  26      -5.027   7.567   1.415  1.00 10.45
ATOM    410  HA  ALA A  26      -5.012   8.544   1.875  1.00 61.32
ATOM    411  CB  ALA A  26      -5.991   6.694   2.198  1.00  2.14
ATOM    412 1HB  ALA A  26      -6.982   7.121   2.155  1.00 63.33
ATOM    413 2HB  ALA A  26      -5.668   6.638   3.227  1.00 22.51
ATOM    414 3HB  ALA A  26      -6.006   5.703   1.768  1.00 43.22
ATOM    415  C   ALA A  26      -3.622   6.973   1.464  1.00 74.55
ATOM    416  O   ALA A  26      -2.744   7.489   2.155  1.00 54.30
ATOM    417  N   THR A  27      -3.412   5.920   0.698  1.00 23.21
ATOM    418  H   THR A  27      -4.158   5.589   0.154  1.00 55.03
ATOM    419  CA  THR A  27      -2.133   5.237   0.654  1.00 64.32
ATOM    420  HA  THR A  27      -1.847   4.954   1.656  1.00 72.03
ATOM    421  CB  THR A  27      -2.229   3.971  -0.208  1.00 75.35
ATOM    422  HB  THR A  27      -2.362   4.273  -1.235  1.00 53.41
ATOM    423  OG1 THR A  27      -3.356   3.181   0.201  1.00 20.52
ATOM    424  HG1 THR A  27      -4.171   3.587  -0.123  1.00  2.21
ATOM    425  CG2 THR A  27      -0.953   3.138  -0.099  1.00 34.24
ATOM    426 1HG2 THR A  27      -0.783   2.871   0.933  1.00 73.14
ATOM    427 2HG2 THR A  27      -0.121   3.724  -0.460  1.00 24.12
ATOM    428 3HG2 THR A  27      -1.049   2.242  -0.695  1.00 31.12
ATOM    429  C   THR A  27      -1.059   6.150   0.060  1.00 22.52
ATOM    430  O   THR A  27       0.039   6.285   0.615  1.00 51.40
ATOM    431  N   LEU A  28      -1.403   6.783  -1.056  1.00  1.44
ATOM    432  H   LEU A  28      -2.308   6.664  -1.419  1.00 52.31
ATOM    433  CA  LEU A  28      -0.510   7.674  -1.755  1.00 33.34
ATOM    434  HA  LEU A  28       0.369   7.101  -2.015  1.00 62.14
ATOM    435  CB  LEU A  28      -1.180   8.165  -3.056  1.00 40.03
ATOM    436 1HB  LEU A  28      -1.119   7.329  -3.741  1.00 55.20
ATOM    437 2HB  LEU A  28      -2.227   8.335  -2.876  1.00 55.25
ATOM    438  CG  LEU A  28      -0.565   9.368  -3.788  1.00 13.32
ATOM    439  HG  LEU A  28      -0.456  10.185  -3.088  1.00 41.12
ATOM    440  CD1 LEU A  28       0.815   9.050  -4.320  1.00 32.24
ATOM    441 1HD1 LEU A  28       1.213   9.912  -4.832  1.00 41.12
ATOM    442 2HD1 LEU A  28       0.760   8.212  -4.999  1.00 60.32
ATOM    443 3HD1 LEU A  28       1.457   8.801  -3.486  1.00 53.21
ATOM    444  CD2 LEU A  28      -1.480   9.831  -4.910  1.00 62.43
ATOM    445 1HD2 LEU A  28      -1.625   9.023  -5.613  1.00 14.24
ATOM    446 2HD2 LEU A  28      -1.031  10.672  -5.417  1.00 73.22
ATOM    447 3HD2 LEU A  28      -2.435  10.125  -4.499  1.00 12.22
ATOM    448  C   LEU A  28      -0.071   8.820  -0.852  1.00  3.23
ATOM    449  O   LEU A  28       1.114   9.043  -0.691  1.00 22.34
ATOM    450  N   GLN A  29      -1.022   9.483  -0.211  1.00  5.31
ATOM    451  H   GLN A  29      -1.961   9.217  -0.332  1.00 41.04
ATOM    452  CA  GLN A  29      -0.707  10.601   0.675  1.00 50.21
ATOM    453  HA  GLN A  29      -0.120  11.299   0.095  1.00 63.45
ATOM    454  CB  GLN A  29      -1.971  11.313   1.157  1.00 15.41
ATOM    455 1HB  GLN A  29      -2.603  10.597   1.661  1.00 61.43
ATOM    456 2HB  GLN A  29      -1.691  12.087   1.857  1.00 72.53
ATOM    457  CG  GLN A  29      -2.776  11.953   0.037  1.00 22.41
ATOM    458 1HG  GLN A  29      -2.136  12.620  -0.518  1.00 22.00
ATOM    459 2HG  GLN A  29      -3.112  11.166  -0.622  1.00 32.43
ATOM    460  CD  GLN A  29      -3.989  12.717   0.536  1.00 44.33
ATOM    461  OE1 GLN A  29      -4.586  12.386   1.550  1.00 35.12
ATOM    462  NE2 GLN A  29      -4.353  13.759  -0.175  1.00 62.32
ATOM    463 2HE2 GLN A  29      -3.831  13.978  -0.973  1.00  4.32
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ATOM    464 1HE2 GLN A  29      -5.130  14.264   0.139  1.00  0.54
ATOM    465  C   GLN A  29       0.143  10.160   1.862  1.00 11.03
ATOM    466  O   GLN A  29       1.094  10.827   2.219  1.00 40.13
ATOM    467  N   ALA A  30      -0.171   9.006   2.417  1.00 72.43
ATOM    468  H   ALA A  30      -0.929   8.500   2.056  1.00  4.35
ATOM    469  CA  ALA A  30       0.538   8.474   3.568  1.00 23.34
ATOM    470  HA  ALA A  30       0.393   9.169   4.380  1.00 54.10
ATOM    471  CB  ALA A  30      -0.055   7.136   3.983  1.00 15.54
ATOM    472 1HB  ALA A  30      -1.113   7.251   4.175  1.00 65.05
ATOM    473 2HB  ALA A  30       0.435   6.781   4.878  1.00 51.53
ATOM    474 3HB  ALA A  30       0.088   6.420   3.188  1.00 70.32
ATOM    475  C   ALA A  30       2.035   8.315   3.295  1.00 41.34
ATOM    476  O   ALA A  30       2.868   8.724   4.100  1.00 71.23
ATOM    477  N   ILE A  31       2.370   7.761   2.167  1.00 35.34
ATOM    478  H   ILE A  31       1.667   7.494   1.535  1.00 13.53
ATOM    479  CA  ILE A  31       3.761   7.537   1.853  1.00 73.11
ATOM    480  HA  ILE A  31       4.251   7.381   2.805  1.00 70.21
ATOM    481  CB  ILE A  31       3.952   6.240   0.998  1.00  3.31
ATOM    482  HB  ILE A  31       3.558   5.419   1.579  1.00 10.40
ATOM    483  CG2 ILE A  31       3.149   6.290  -0.298  1.00 42.45
ATOM    484 1HG2 ILE A  31       3.469   7.141  -0.883  1.00 41.14
ATOM    485 2HG2 ILE A  31       2.097   6.384  -0.070  1.00 62.31
ATOM    486 3HG2 ILE A  31       3.319   5.383  -0.861  1.00 33.12
ATOM    487  CG1 ILE A  31       5.433   5.970   0.720  1.00 40.41
ATOM    488 1HG1 ILE A  31       5.831   6.776   0.121  1.00 42.42
ATOM    489 2HG1 ILE A  31       5.969   5.929   1.656  1.00  1.41
ATOM    490  CD1 ILE A  31       5.688   4.675  -0.022  1.00 73.05
ATOM    491 1HD1 ILE A  31       6.748   4.562  -0.199  1.00  3.35
ATOM    492 2HD1 ILE A  31       5.173   4.700  -0.972  1.00 64.42
ATOM    493 3HD1 ILE A  31       5.329   3.842   0.562  1.00 35.22
ATOM    494  C   ILE A  31       4.436   8.779   1.201  1.00 61.22
ATOM    495  O   ILE A  31       5.517   9.174   1.606  1.00 71.44
ATOM    496  N   GLN A  32       3.741   9.417   0.263  1.00 53.21
ATOM    497  H   GLN A  32       2.815   9.141   0.080  1.00 15.33
ATOM    498  CA  GLN A  32       4.288  10.537  -0.539  1.00 50.11
ATOM    499  HA  GLN A  32       5.229  10.235  -0.975  1.00  2.11
ATOM    500  CB  GLN A  32       3.277  10.844  -1.677  1.00  3.22
ATOM    501 1HB  GLN A  32       2.822   9.912  -1.975  1.00 53.53
ATOM    502 2HB  GLN A  32       2.502  11.469  -1.258  1.00 53.05
ATOM    503  CG  GLN A  32       3.795  11.519  -2.959  1.00 11.23
ATOM    504 1HG  GLN A  32       4.498  10.852  -3.436  1.00 21.44
ATOM    505 2HG  GLN A  32       2.950  11.654  -3.619  1.00 13.24
ATOM    506  CD  GLN A  32       4.472  12.855  -2.754  1.00 15.13
ATOM    507  OE1 GLN A  32       3.817  13.899  -2.741  1.00 24.14
ATOM    508  NE2 GLN A  32       5.765  12.840  -2.674  1.00 30.12
ATOM    509 2HE2 GLN A  32       6.227  11.965  -2.759  1.00 12.34
ATOM    510 1HE2 GLN A  32       6.251  13.673  -2.528  1.00 23.32
ATOM    511  C   GLN A  32       4.486  11.787   0.347  1.00 23.45
ATOM    512  O   GLN A  32       5.520  12.434   0.307  1.00 64.11
ATOM    513  N   ASN A  33       3.505  12.067   1.194  1.00 44.55
ATOM    514  H   ASN A  33       2.758  11.439   1.290  1.00 24.13
ATOM    515  CA  ASN A  33       3.502  13.294   2.018  1.00  1.21
ATOM    516  HA  ASN A  33       3.910  14.094   1.420  1.00 43.44
ATOM    517  CB  ASN A  33       2.038  13.641   2.393  1.00 12.04
ATOM    518 1HB  ASN A  33       1.457  13.685   1.484  1.00 32.35
ATOM    519 2HB  ASN A  33       1.646  12.841   3.004  1.00 22.34
ATOM    520  CG  ASN A  33       1.826  14.959   3.128  1.00 21.32
ATOM    521  OD1 ASN A  33       2.532  15.938   2.924  1.00  2.04
ATOM    522  ND2 ASN A  33       0.823  14.988   3.982  1.00 13.43
ATOM    523 2HD2 ASN A  33       0.283  14.173   4.092  1.00  3.01
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ATOM    524 1HD2 ASN A  33       0.677  15.825   4.466  1.00 41.43
ATOM    525  C   ASN A  33       4.382  13.120   3.278  1.00  4.21
ATOM    526  O   ASN A  33       4.460  14.000   4.129  1.00 73.12
ATOM    527  N   GLY A  34       5.052  11.976   3.384  1.00  1.25
ATOM    528  H   GLY A  34       4.965  11.294   2.684  1.00 34.13
ATOM    529  CA  GLY A  34       5.941  11.748   4.499  1.00  2.41
ATOM    530 1HA  GLY A  34       6.558  10.889   4.287  1.00 63.13
ATOM    531 2HA  GLY A  34       6.576  12.613   4.622  1.00 40.23
ATOM    532  C   GLY A  34       5.201  11.502   5.786  1.00 14.01
ATOM    533  O   GLY A  34       5.636  11.912   6.859  1.00 71.32
ATOM    534  N   GLN A  35       4.089  10.795   5.692  1.00  0.25
ATOM    535  H   GLN A  35       3.810  10.441   4.819  1.00 42.31
ATOM    536  CA  GLN A  35       3.288  10.491   6.865  1.00 42.41
ATOM    537  HA  GLN A  35       3.470  11.255   7.607  1.00 41.25
ATOM    538  CB  GLN A  35       1.799  10.452   6.510  1.00 31.33
ATOM    539 1HB  GLN A  35       1.631   9.605   5.865  1.00 30.42
ATOM    540 2HB  GLN A  35       1.231  10.321   7.419  1.00 25.12
ATOM    541  CG  GLN A  35       1.309  11.714   5.808  1.00 72.04
ATOM    542 1HG  GLN A  35       1.568  12.593   6.377  1.00 31.22
ATOM    543 2HG  GLN A  35       1.812  11.733   4.850  1.00 54.45
ATOM    544  CD  GLN A  35      -0.181  11.730   5.522  1.00 23.44
ATOM    545  OE1 GLN A  35      -0.625  12.354   4.568  1.00 72.21
ATOM    546  NE2 GLN A  35      -0.959  11.051   6.331  1.00 53.44
ATOM    547 2HE2 GLN A  35      -0.558  10.566   7.082  1.00 51.13
ATOM    548 1HE2 GLN A  35      -1.916  11.060   6.125  1.00 51.25
ATOM    549  C   GLN A  35       3.743   9.152   7.408  1.00 71.03
ATOM    550  O   GLN A  35       3.210   8.621   8.382  1.00 55.22
ATOM    551  N   THR A  36       4.704   8.604   6.730  1.00 42.52
ATOM    552  H   THR A  36       5.032   9.039   5.915  1.00 25.24
ATOM    553  CA  THR A  36       5.329   7.406   7.072  1.00 73.04
ATOM    554  HA  THR A  36       5.309   7.289   8.145  1.00 31.43
ATOM    555  CB  THR A  36       4.534   6.245   6.425  1.00 23.35
ATOM    556  HB  THR A  36       4.117   6.610   5.499  1.00 11.22
ATOM    557  OG1 THR A  36       3.403   5.933   7.220  1.00  2.31
ATOM    558  HG1 THR A  36       3.203   6.721   7.741  1.00 40.31
ATOM    559  CG2 THR A  36       5.374   5.025   6.154  1.00 62.03
ATOM    560 1HG2 THR A  36       6.131   5.358   5.459  1.00 23.12
ATOM    561 2HG2 THR A  36       4.762   4.258   5.704  1.00 41.13
ATOM    562 3HG2 THR A  36       5.837   4.681   7.067  1.00 53.54
ATOM    563  C   THR A  36       6.774   7.458   6.574  1.00 71.53
ATOM    564  O   THR A  36       7.030   7.769   5.415  1.00 52.31
ATOM    565  N   PHE A  37       7.690   7.207   7.471  1.00 72.31
ATOM    566  H   PHE A  37       7.421   7.012   8.393  1.00 22.43
ATOM    567  CA  PHE A  37       9.096   7.153   7.173  1.00 52.11
ATOM    568  HA  PHE A  37       9.199   7.170   6.097  1.00 44.31
ATOM    569  CB  PHE A  37       9.851   8.368   7.776  1.00 32.21
ATOM    570 1HB  PHE A  37      10.902   8.273   7.547  1.00 51.52
ATOM    571 2HB  PHE A  37       9.478   9.271   7.314  1.00 63.32
ATOM    572  CG  PHE A  37       9.728   8.524   9.279  1.00 30.20
ATOM    573  CD1 PHE A  37      10.658   7.944  10.134  1.00 35.22
ATOM    574  HD1 PHE A  37      11.473   7.371   9.719  1.00 62.31
ATOM    575  CE1 PHE A  37      10.548   8.092  11.503  1.00 64.42
ATOM    576  HE1 PHE A  37      11.277   7.635  12.156  1.00 53.32
ATOM    577  CZ  PHE A  37       9.505   8.823  12.036  1.00 40.31
ATOM    578  HZ  PHE A  37       9.418   8.940  13.106  1.00 14.12
ATOM    579  CE2 PHE A  37       8.574   9.407  11.200  1.00 52.25
ATOM    580  HE2 PHE A  37       7.758   9.979  11.614  1.00 42.21
ATOM    581  CD2 PHE A  37       8.687   9.257   9.830  1.00  0.42
ATOM    582  HD2 PHE A  37       7.959   9.715   9.178  1.00 34.22
ATOM    583  C   PHE A  37       9.657   5.848   7.685  1.00 61.32
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ATOM    584  O   PHE A  37       9.051   5.221   8.558  1.00 73.03
ATOM    585  N   ASP A  38      10.777   5.437   7.164  1.00  1.03
ATOM    586  H   ASP A  38      11.197   5.939   6.436  1.00 24.11
ATOM    587  CA  ASP A  38      11.452   4.257   7.674  1.00 15.32
ATOM    588  HA  ASP A  38      10.736   3.684   8.244  1.00 35.33
ATOM    589  CB  ASP A  38      12.024   3.408   6.531  1.00 22.22
ATOM    590 1HB  ASP A  38      11.228   3.149   5.848  1.00 20.15
ATOM    591 2HB  ASP A  38      12.766   3.988   6.001  1.00 72.42
ATOM    592  CG  ASP A  38      12.677   2.115   7.009  1.00 55.04
ATOM    593  OD1 ASP A  38      12.003   1.069   7.022  1.00 11.04
ATOM    594  OD2 ASP A  38      13.862   2.138   7.373  1.00 34.04
ATOM    595  C   ASP A  38      12.560   4.728   8.606  1.00 22.33
ATOM    596  O   ASP A  38      12.973   5.892   8.531  1.00 51.33
ATOM    597  N   TYR A  39      13.055   3.844   9.444  1.00 53.34
ATOM    598  H   TYR A  39      12.769   2.911   9.349  1.00 23.34
ATOM    599  CA  TYR A  39      14.054   4.176  10.445  1.00  0.45
ATOM    600  HA  TYR A  39      13.670   5.007  11.019  1.00 42.31
ATOM    601  CB  TYR A  39      14.269   3.001  11.406  1.00 73.41
ATOM    602 1HB  TYR A  39      14.574   2.136  10.836  1.00 31.33
ATOM    603 2HB  TYR A  39      15.055   3.258  12.101  1.00 15.04
ATOM    604  CG  TYR A  39      13.041   2.621  12.203  1.00 34.04
ATOM    605  CD1 TYR A  39      12.198   1.599  11.780  1.00 23.24
ATOM    606  HD1 TYR A  39      12.431   1.071  10.867  1.00 71.02
ATOM    607  CE1 TYR A  39      11.078   1.251  12.509  1.00  1.40
ATOM    608  HE1 TYR A  39      10.436   0.454  12.167  1.00 52.24
ATOM    609  CZ  TYR A  39      10.788   1.929  13.675  1.00 35.30
ATOM    610  CE2 TYR A  39      11.606   2.946  14.113  1.00  3.34
ATOM    611  HE2 TYR A  39      11.378   3.477  15.026  1.00 53.10
ATOM    612  CD2 TYR A  39      12.724   3.287  13.378  1.00 12.30
ATOM    613  HD2 TYR A  39      13.367   4.085  13.719  1.00  2.54
ATOM    614  OH  TYR A  39       9.675   1.585  14.406  1.00 62.53
ATOM    615  HH  TYR A  39       9.203   2.378  14.667  1.00 15.43
ATOM    616  C   TYR A  39      15.386   4.594   9.827  1.00 14.11
ATOM    617  O   TYR A  39      16.135   5.352  10.429  1.00 53.14
ATOM    618  N   LYS A  40      15.677   4.115   8.629  1.00 62.52
ATOM    619  H   LYS A  40      15.039   3.505   8.185  1.00 64.35
ATOM    620  CA  LYS A  40      16.942   4.472   7.986  1.00 44.01
ATOM    621  HA  LYS A  40      17.636   4.728   8.771  1.00  1.44
ATOM    622  CB  LYS A  40      17.509   3.280   7.205  1.00  1.35
ATOM    623 1HB  LYS A  40      18.417   3.587   6.707  1.00 71.42
ATOM    624 2HB  LYS A  40      17.739   2.485   7.898  1.00 30.51
ATOM    625  CG  LYS A  40      16.555   2.747   6.168  1.00 61.04
ATOM    626 1HG  LYS A  40      15.640   2.446   6.658  1.00 45.13
ATOM    627 2HG  LYS A  40      16.336   3.539   5.466  1.00 14.54
ATOM    628  CD  LYS A  40      17.106   1.563   5.419  1.00 35.42
ATOM    629 1HD  LYS A  40      17.936   1.881   4.805  1.00  1.31
ATOM    630 2HD  LYS A  40      17.433   0.811   6.122  1.00 35.32
ATOM    631  CE  LYS A  40      16.026   0.983   4.537  1.00 31.24
ATOM    632 1HE  LYS A  40      15.245   0.581   5.165  1.00  2.32
ATOM    633 2HE  LYS A  40      15.616   1.774   3.927  1.00 42.02
ATOM    634  NZ  LYS A  40      16.517  -0.085   3.669  1.00 14.03
ATOM    635 1HZ  LYS A  40      15.729  -0.446   3.083  1.00 73.32
ATOM    636 2HZ  LYS A  40      16.982  -0.862   4.173  1.00 72.51
ATOM    637 3HZ  LYS A  40      17.222   0.317   3.009  1.00 64.02
ATOM    638  C   LYS A  40      16.790   5.691   7.069  1.00 74.33
ATOM    639  O   LYS A  40      17.735   6.071   6.388  1.00 74.05
ATOM    640  N   SER A  41      15.594   6.295   7.081  1.00 51.44
ATOM    641  H   SER A  41      14.891   5.919   7.652  1.00 52.32
ATOM    642  CA  SER A  41      15.285   7.514   6.314  1.00 11.11
ATOM    643  HA  SER A  41      14.228   7.701   6.439  1.00 50.53
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ATOM    644  CB  SER A  41      16.064   8.715   6.909  1.00 64.32
ATOM    645 1HB  SER A  41      15.851   8.795   7.964  1.00 10.13
ATOM    646 2HB  SER A  41      17.123   8.547   6.772  1.00 24.23
ATOM    647  OG  SER A  41      15.709   9.937   6.283  1.00 45.53
ATOM    648  HG  SER A  41      15.787   9.770   5.335  1.00 45.23
ATOM    649  C   SER A  41      15.558   7.353   4.786  1.00 72.14
ATOM    650  O   SER A  41      15.791   8.342   4.073  1.00 52.51
ATOM    651  N   ASN A  42      15.453   6.129   4.295  1.00 74.43
ATOM    652  H   ASN A  42      15.189   5.403   4.897  1.00 61.33
ATOM    653  CA  ASN A  42      15.664   5.824   2.873  1.00 60.50
ATOM    654  HA  ASN A  42      16.609   6.261   2.590  1.00 75.22
ATOM    655  CB  ASN A  42      15.707   4.303   2.592  1.00 64.24
ATOM    656 1HB  ASN A  42      15.866   4.149   1.535  1.00 70.44
ATOM    657 2HB  ASN A  42      16.536   3.874   3.134  1.00 61.34
ATOM    658  CG  ASN A  42      14.431   3.557   2.985  1.00 73.21
ATOM    659  OD1 ASN A  42      13.803   3.860   3.986  1.00 43.15
ATOM    660  ND2 ASN A  42      14.021   2.618   2.178  1.00 34.45
ATOM    661 2HD2 ASN A  42      14.541   2.449   1.359  1.00 35.42
ATOM    662 1HD2 ASN A  42      13.209   2.120   2.407  1.00 11.50
ATOM    663  C   ASN A  42      14.564   6.448   2.025  1.00 65.41
ATOM    664  O   ASN A  42      13.449   6.632   2.515  1.00 21.52
ATOM    665  N   PRO A  43      14.881   6.880   0.775  1.00 14.04
ATOM    666  CD  PRO A  43      16.242   6.932   0.190  1.00 13.33
ATOM    667  CA  PRO A  43      13.880   7.397  -0.153  1.00 55.55
ATOM    668  HA  PRO A  43      13.512   8.360   0.174  1.00 41.10
ATOM    669  CB  PRO A  43      14.636   7.543  -1.471  1.00 72.52
ATOM    670 1HB  PRO A  43      14.506   6.648  -2.065  1.00 11.43
ATOM    671 2HB  PRO A  43      14.290   8.410  -2.014  1.00 75.10
ATOM    672  CG  PRO A  43      16.048   7.744  -1.064  1.00 33.12
ATOM    673 1HG  PRO A  43      16.706   7.404  -1.850  1.00 43.22
ATOM    674 2HG  PRO A  43      16.226   8.786  -0.846  1.00 62.03
ATOM    675 1HD  PRO A  43      16.601   5.943  -0.051  1.00 34.40
ATOM    676 2HD  PRO A  43      16.928   7.434   0.856  1.00 54.13
ATOM    677  C   PRO A  43      12.694   6.440  -0.303  1.00 33.41
ATOM    678  O   PRO A  43      12.776   5.398  -0.958  1.00 44.32
ATOM    679  N   TYR A  44      11.641   6.780   0.382  1.00 63.15
ATOM    680  H   TYR A  44      11.703   7.577   0.949  1.00 34.21
ATOM    681  CA  TYR A  44      10.417   6.024   0.408  1.00 44.25
ATOM    682  HA  TYR A  44      10.665   5.019   0.097  1.00 72.40
ATOM    683  CB  TYR A  44       9.832   5.954   1.840  1.00 41.11
ATOM    684 1HB  TYR A  44       8.851   5.505   1.791  1.00 41.53
ATOM    685 2HB  TYR A  44      10.472   5.328   2.446  1.00 53.13
ATOM    686  CG  TYR A  44       9.682   7.300   2.543  1.00  0.15
ATOM    687  CD1 TYR A  44       8.616   8.148   2.270  1.00 44.30
ATOM    688  HD1 TYR A  44       7.883   7.847   1.536  1.00 34.33
ATOM    689  CE1 TYR A  44       8.485   9.362   2.914  1.00 24.44
ATOM    690  HE1 TYR A  44       7.649  10.005   2.684  1.00 74.35
ATOM    691  CZ  TYR A  44       9.424   9.744   3.848  1.00 62.43
ATOM    692  CE2 TYR A  44      10.488   8.922   4.140  1.00 52.31
ATOM    693  HE2 TYR A  44      11.223   9.224   4.871  1.00 74.34
ATOM    694  CD2 TYR A  44      10.613   7.712   3.492  1.00 31.22
ATOM    695  HD2 TYR A  44      11.449   7.066   3.720  1.00 13.51
ATOM    696  OH  TYR A  44       9.298  10.950   4.497  1.00 41.24
ATOM    697  HH  TYR A  44      10.144  11.401   4.526  1.00 73.01
ATOM    698  C   TYR A  44       9.412   6.574  -0.575  1.00 54.01
ATOM    699  O   TYR A  44       8.353   6.008  -0.761  1.00 20.34
ATOM    700  N   ASP A  45       9.753   7.665  -1.217  1.00 32.43
ATOM    701  H   ASP A  45      10.666   8.002  -1.151  1.00 31.14
ATOM    702  CA  ASP A  45       8.799   8.351  -2.064  1.00 23.24
ATOM    703  HA  ASP A  45       7.839   8.275  -1.574  1.00 21.43
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ATOM    704  CB  ASP A  45       9.160   9.828  -2.210  1.00 35.31
ATOM    705 1HB  ASP A  45       9.205  10.281  -1.232  1.00  1.40
ATOM    706 2HB  ASP A  45      10.124   9.911  -2.687  1.00 22.40
ATOM    707  CG  ASP A  45       8.146  10.583  -3.041  1.00 64.12
ATOM    708  OD1 ASP A  45       8.550  11.377  -3.885  1.00  1.41
ATOM    709  OD2 ASP A  45       6.924  10.350  -2.851  1.00 73.44
ATOM    710  C   ASP A  45       8.680   7.664  -3.417  1.00 21.12
ATOM    711  O   ASP A  45       9.648   7.065  -3.933  1.00 12.12
ATOM    712  N   ILE A  46       7.490   7.741  -3.954  1.00 24.22
ATOM    713  H   ILE A  46       6.885   8.410  -3.560  1.00 21.03
ATOM    714  CA  ILE A  46       7.066   7.004  -5.122  1.00  5.41
ATOM    715  HA  ILE A  46       7.306   5.963  -4.961  1.00 44.12
ATOM    716  CB  ILE A  46       5.537   7.107  -5.277  1.00 61.22
ATOM    717  HB  ILE A  46       5.263   8.147  -5.371  1.00 31.21
ATOM    718  CG2 ILE A  46       5.058   6.352  -6.523  1.00 21.15
ATOM    719 1HG2 ILE A  46       3.985   6.436  -6.610  1.00 70.10
ATOM    720 2HG2 ILE A  46       5.331   5.310  -6.441  1.00 13.31
ATOM    721 3HG2 ILE A  46       5.524   6.774  -7.400  1.00 12.23
ATOM    722  CG1 ILE A  46       4.885   6.544  -4.007  1.00 41.43
ATOM    723 1HG1 ILE A  46       5.119   5.493  -3.927  1.00 11.35
ATOM    724 2HG1 ILE A  46       5.293   7.058  -3.149  1.00 20.42
ATOM    725  CD1 ILE A  46       3.397   6.674  -3.961  1.00 44.02
ATOM    726 1HD1 ILE A  46       3.137   7.720  -4.010  1.00 14.44
ATOM    727 2HD1 ILE A  46       3.032   6.242  -3.041  1.00  5.20
ATOM    728 3HD1 ILE A  46       2.974   6.154  -4.806  1.00  1.31
ATOM    729  C   ILE A  46       7.779   7.466  -6.373  1.00  5.41
ATOM    730  O   ILE A  46       7.620   8.589  -6.820  1.00 41.31
ATOM    731  N   SER A  47       8.523   6.568  -6.956  1.00 31.13
ATOM    732  H   SER A  47       8.527   5.647  -6.615  1.00 14.13
ATOM    733  CA  SER A  47       9.322   6.888  -8.089  1.00 22.41
ATOM    734  HA  SER A  47       9.590   7.932  -8.054  1.00 11.33
ATOM    735  CB  SER A  47      10.592   6.055  -7.997  1.00 70.43
ATOM    736 1HB  SER A  47      10.366   5.027  -8.240  1.00 61.31
ATOM    737 2HB  SER A  47      11.334   6.440  -8.682  1.00 32.13
ATOM    738  OG  SER A  47      11.115   6.118  -6.667  1.00 11.32
ATOM    739  HG  SER A  47      10.633   6.812  -6.198  1.00 72.34
ATOM    740  C   SER A  47       8.554   6.576  -9.385  1.00 72.22
ATOM    741  O   SER A  47       8.744   7.236 -10.400  1.00 63.14
ATOM    742  N   VAL A  48       7.658   5.581  -9.339  1.00 41.25
ATOM    743  H   VAL A  48       7.554   5.052  -8.517  1.00  2.32
ATOM    744  CA  VAL A  48       6.815   5.268 -10.491  1.00 53.21
ATOM    745  HA  VAL A  48       6.778   6.126 -11.147  1.00 33.41
ATOM    746  CB  VAL A  48       7.353   4.023 -11.294  1.00 51.01
ATOM    747  HB  VAL A  48       7.277   3.167 -10.637  1.00 52.14
ATOM    748  CG1 VAL A  48       6.489   3.735 -12.519  1.00 14.32
ATOM    749 1HG1 VAL A  48       6.499   4.593 -13.175  1.00 14.30
ATOM    750 2HG1 VAL A  48       5.475   3.538 -12.203  1.00 62.13
ATOM    751 3HG1 VAL A  48       6.878   2.875 -13.042  1.00 21.24
ATOM    752  CG2 VAL A  48       8.813   4.188 -11.711  1.00 34.23
ATOM    753 1HG2 VAL A  48       9.425   4.314 -10.830  1.00 10.41
ATOM    754 2HG2 VAL A  48       8.910   5.058 -12.344  1.00 53.04
ATOM    755 3HG2 VAL A  48       9.135   3.311 -12.250  1.00 71.51
ATOM    756  C   VAL A  48       5.415   4.926  -9.994  1.00 21.11
ATOM    757  O   VAL A  48       5.263   4.125  -9.075  1.00 21.41
ATOM    758  N   ASN A  49       4.414   5.531 -10.575  1.00 52.03
ATOM    759  H   ASN A  49       4.583   6.200 -11.273  1.00 43.01
ATOM    760  CA  ASN A  49       3.030   5.211 -10.267  1.00  3.01
ATOM    761  HA  ASN A  49       3.051   4.408  -9.544  1.00 61.31
ATOM    762  CB  ASN A  49       2.253   6.421  -9.671  1.00 35.01
ATOM    763 1HB  ASN A  49       1.325   6.073  -9.243  1.00 73.01
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ATOM    764 2HB  ASN A  49       2.849   6.842  -8.874  1.00 21.24
ATOM    765  CG  ASN A  49       1.931   7.537 -10.666  1.00 71.54
ATOM    766  OD1 ASN A  49       0.889   7.523 -11.316  1.00 55.02
ATOM    767  ND2 ASN A  49       2.802   8.517 -10.766  1.00 54.14
ATOM    768 2HD2 ASN A  49       3.604   8.499 -10.207  1.00 23.14
ATOM    769 1HD2 ASN A  49       2.590   9.228 -11.407  1.00 62.53
ATOM    770  C   ASN A  49       2.346   4.689 -11.517  1.00 54.33
ATOM    771  O   ASN A  49       2.571   5.234 -12.597  1.00 21.30
ATOM    772  N   LYS A  50       1.609   3.605 -11.434  1.00 22.42
ATOM    773  H   LYS A  50       1.595   3.048 -10.622  1.00  1.43
ATOM    774  CA  LYS A  50       0.800   3.236 -12.571  1.00 22.24
ATOM    775  HA  LYS A  50       0.942   3.944 -13.372  1.00 54.54
ATOM    776  CB  LYS A  50       1.112   1.791 -13.076  1.00  1.35
ATOM    777 1HB  LYS A  50       0.695   1.097 -12.364  1.00 64.51
ATOM    778 2HB  LYS A  50       0.590   1.652 -14.013  1.00 11.32
ATOM    779  CG  LYS A  50       2.582   1.390 -13.283  1.00 15.52
ATOM    780 1HG  LYS A  50       2.652   0.515 -13.910  1.00 74.52
ATOM    781 2HG  LYS A  50       3.062   2.231 -13.760  1.00 61.55
ATOM    782  CD  LYS A  50       3.296   1.127 -11.959  1.00 51.13
ATOM    783 1HD  LYS A  50       3.540   2.076 -11.506  1.00 12.33
ATOM    784 2HD  LYS A  50       2.632   0.588 -11.308  1.00 14.21
ATOM    785  CE  LYS A  50       4.578   0.332 -12.127  1.00 50.15
ATOM    786 1HE  LYS A  50       5.235   0.839 -12.818  1.00  1.04
ATOM    787 2HE  LYS A  50       5.033   0.276 -11.150  1.00 72.23
ATOM    788  NZ  LYS A  50       4.322  -1.060 -12.610  1.00 30.23
ATOM    789 1HZ  LYS A  50       3.886  -1.125 -13.545  1.00 54.14
ATOM    790 2HZ  LYS A  50       3.673  -1.529 -11.925  1.00 25.20
ATOM    791 3HZ  LYS A  50       5.175  -1.647 -12.557  1.00 71.52
ATOM    792  C   LYS A  50      -0.642   3.219 -12.104  1.00 65.22
ATOM    793  O   LYS A  50      -0.930   2.754 -10.992  1.00 54.15
ATOM    794  N   ASN A  51      -1.530   3.714 -12.918  1.00 11.31
ATOM    795  H   ASN A  51      -1.238   4.158 -13.741  1.00 23.20
ATOM    796  CA  ASN A  51      -2.952   3.588 -12.681  1.00 72.40
ATOM    797  HA  ASN A  51      -3.040   3.048 -11.748  1.00 43.11
ATOM    798  CB  ASN A  51      -3.667   4.937 -12.542  1.00 75.13
ATOM    799 1HB  ASN A  51      -3.414   5.583 -13.369  1.00 72.23
ATOM    800 2HB  ASN A  51      -4.730   4.734 -12.548  1.00 21.53
ATOM    801  CG  ASN A  51      -3.344   5.653 -11.237  1.00 40.45
ATOM    802  OD1 ASN A  51      -4.012   5.445 -10.242  1.00 52.12
ATOM    803  ND2 ASN A  51      -2.332   6.500 -11.233  1.00 64.30
ATOM    804 2HD2 ASN A  51      -1.811   6.650 -12.047  1.00 42.44
ATOM    805 1HD2 ASN A  51      -2.141   6.967 -10.390  1.00  4.11
ATOM    806  C   ASN A  51      -3.581   2.719 -13.737  1.00 11.51
ATOM    807  O   ASN A  51      -3.467   3.031 -14.914  1.00  3.54
ATOM    808  N   ASN A  52      -4.250   1.668 -13.351  1.00 53.21
ATOM    809  H   ASN A  52      -4.312   1.416 -12.401  1.00  1.33
ATOM    810  CA  ASN A  52      -4.897   0.789 -14.330  1.00 24.52
ATOM    811  HA  ASN A  52      -4.579   1.109 -15.312  1.00 21.45
ATOM    812  CB  ASN A  52      -4.489  -0.682 -14.122  1.00 45.30
ATOM    813 1HB  ASN A  52      -4.782  -0.986 -13.128  1.00 41.12
ATOM    814 2HB  ASN A  52      -5.013  -1.293 -14.842  1.00 22.02
ATOM    815  CG  ASN A  52      -2.989  -0.937 -14.268  1.00 75.00
ATOM    816  OD1 ASN A  52      -2.286  -0.253 -15.012  1.00 53.20
ATOM    817  ND2 ASN A  52      -2.497  -1.912 -13.558  1.00 12.42
ATOM    818 2HD2 ASN A  52      -3.128  -2.413 -12.976  1.00 63.31
ATOM    819 1HD2 ASN A  52      -1.546  -2.123 -13.620  1.00 31.52
ATOM    820  C   ASN A  52      -6.414   0.926 -14.246  1.00 43.51
ATOM    821  O   ASN A  52      -7.164   0.178 -14.864  1.00 75.30
ATOM    822  N   GLY A  53      -6.872   1.865 -13.426  1.00  3.32
ATOM    823  H   GLY A  53      -6.210   2.352 -12.892  1.00 30.53
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ATOM    824  CA  GLY A  53      -8.300   2.161 -13.322  1.00 62.43
ATOM    825 1HA  GLY A  53      -8.418   3.169 -12.955  1.00 72.32
ATOM    826 2HA  GLY A  53      -8.737   2.100 -14.308  1.00 65.53
ATOM    827  C   GLY A  53      -9.053   1.216 -12.391  1.00 54.25
ATOM    828  O   GLY A  53      -9.937   1.639 -11.614  1.00 12.41
ATOM    829  N   THR A  54      -8.765  -0.048 -12.483  1.00 54.41
ATOM    830  H   THR A  54      -8.134  -0.340 -13.179  1.00 64.35
ATOM    831  CA  THR A  54      -9.382  -1.002 -11.610  1.00 43.11
ATOM    832  HA  THR A  54     -10.105  -0.443 -11.038  1.00 35.13
ATOM    833  CB  THR A  54     -10.116  -2.132 -12.395  1.00  2.11
ATOM    834  HB  THR A  54     -10.824  -1.655 -13.056  1.00 52.42
ATOM    835  OG1 THR A  54     -10.850  -2.966 -11.491  1.00 32.14
ATOM    836  HG1 THR A  54     -10.274  -3.213 -10.756  1.00 30.44
ATOM    837  CG2 THR A  54      -9.150  -2.977 -13.220  1.00  2.31
ATOM    838 1HG2 THR A  54      -8.428  -3.437 -12.562  1.00  4.21
ATOM    839 2HG2 THR A  54      -8.638  -2.346 -13.931  1.00  0.40
ATOM    840 3HG2 THR A  54      -9.698  -3.743 -13.746  1.00 33.32
ATOM    841  C   THR A  54      -8.348  -1.548 -10.629  1.00 20.43
ATOM    842  O   THR A  54      -8.637  -2.423  -9.802  1.00 63.22
ATOM    843  N   ASP A  55      -7.168  -1.004 -10.731  1.00 71.24
ATOM    844  H   ASP A  55      -6.983  -0.343 -11.431  1.00 74.13
ATOM    845  CA  ASP A  55      -6.052  -1.297  -9.878  1.00 61.32
ATOM    846  HA  ASP A  55      -6.416  -1.161  -8.870  1.00 23.24
ATOM    847  CB  ASP A  55      -5.504  -2.741 -10.030  1.00 42.35
ATOM    848 1HB  ASP A  55      -4.545  -2.795  -9.538  1.00 11.13
ATOM    849 2HB  ASP A  55      -6.180  -3.404  -9.520  1.00 14.31
ATOM    850  CG  ASP A  55      -5.312  -3.227 -11.431  1.00 72.33
ATOM    851  OD1 ASP A  55      -6.278  -3.826 -11.983  1.00  2.33
ATOM    852  OD2 ASP A  55      -4.227  -3.099 -11.960  1.00 74.24
ATOM    853  C   ASP A  55      -5.001  -0.260 -10.091  1.00 31.52
ATOM    854  O   ASP A  55      -5.055   0.470 -11.080  1.00 23.42
ATOM    855  N   ALA A  56      -4.133  -0.109  -9.140  1.00 53.11
ATOM    856  H   ALA A  56      -4.182  -0.691  -8.350  1.00 52.30
ATOM    857  CA  ALA A  56      -3.063   0.859  -9.213  1.00 71.35
ATOM    858  HA  ALA A  56      -2.802   0.978 -10.255  1.00 32.12
ATOM    859  CB  ALA A  56      -3.489   2.208  -8.652  1.00  4.11
ATOM    860 1HB  ALA A  56      -4.301   2.605  -9.244  1.00 12.11
ATOM    861 2HB  ALA A  56      -2.656   2.894  -8.701  1.00 51.33
ATOM    862 3HB  ALA A  56      -3.804   2.103  -7.624  1.00 73.51
ATOM    863  C   ALA A  56      -1.862   0.324  -8.480  1.00 60.32
ATOM    864  O   ALA A  56      -2.011  -0.384  -7.477  1.00 53.54
ATOM    865  N   GLU A  57      -0.701   0.642  -8.969  1.00 14.14
ATOM    866  H   GLU A  57      -0.649   1.260  -9.732  1.00 40.22
ATOM    867  CA  GLU A  57       0.531   0.145  -8.409  1.00 41.33
ATOM    868  HA  GLU A  57       0.344  -0.330  -7.459  1.00 11.32
ATOM    869  CB  GLU A  57       1.132  -0.868  -9.373  1.00 62.53
ATOM    870 1HB  GLU A  57       0.388  -1.617  -9.600  1.00 41.44
ATOM    871 2HB  GLU A  57       1.392  -0.360 -10.290  1.00 12.23
ATOM    872  CG  GLU A  57       2.372  -1.586  -8.878  1.00 64.54
ATOM    873 1HG  GLU A  57       2.968  -0.899  -8.295  1.00 42.50
ATOM    874 2HG  GLU A  57       2.081  -2.428  -8.268  1.00  5.51
ATOM    875  CD  GLU A  57       3.193  -2.087 -10.037  1.00 44.22
ATOM    876  OE1 GLU A  57       2.622  -2.434 -11.092  1.00 24.44
ATOM    877  OE2 GLU A  57       4.422  -2.025  -9.982  1.00 44.12
ATOM    878  C   GLU A  57       1.500   1.309  -8.254  1.00 63.40
ATOM    879  O   GLU A  57       1.714   2.064  -9.204  1.00  1.32
ATOM    880  N   ILE A  58       2.048   1.483  -7.088  1.00 62.01
ATOM    881  H   ILE A  58       1.820   0.922  -6.316  1.00 64.23
ATOM    882  CA  ILE A  58       3.032   2.479  -6.871  1.00 50.34
ATOM    883  HA  ILE A  58       3.217   2.926  -7.838  1.00  1.43
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ATOM    884  CB  ILE A  58       2.615   3.601  -5.886  1.00 75.30
ATOM    885  HB  ILE A  58       3.558   4.074  -5.684  1.00 51.11
ATOM    886  CG2 ILE A  58       1.712   4.625  -6.558  1.00 12.41
ATOM    887 1HG2 ILE A  58       2.266   5.112  -7.348  1.00 14.11
ATOM    888 2HG2 ILE A  58       1.387   5.357  -5.834  1.00 55.24
ATOM    889 3HG2 ILE A  58       0.851   4.125  -6.980  1.00 65.30
ATOM    890  CG1 ILE A  58       2.018   3.093  -4.543  1.00 22.34
ATOM    891 1HG1 ILE A  58       2.545   2.201  -4.244  1.00  2.22
ATOM    892 2HG1 ILE A  58       2.169   3.853  -3.789  1.00 33.42
ATOM    893  CD1 ILE A  58       0.539   2.752  -4.576  1.00 54.02
ATOM    894 1HD1 ILE A  58      -0.021   3.658  -4.770  1.00 13.13
ATOM    895 2HD1 ILE A  58       0.238   2.353  -3.620  1.00 70.22
ATOM    896 3HD1 ILE A  58       0.345   2.035  -5.359  1.00 44.25
ATOM    897  C   ILE A  58       4.329   1.849  -6.421  1.00  3.03
ATOM    898  O   ILE A  58       4.331   0.956  -5.559  1.00 72.02
ATOM    899  N   VAL A  59       5.416   2.283  -7.028  1.00 61.24
ATOM    900  H   VAL A  59       5.342   2.986  -7.713  1.00 44.12
ATOM    901  CA  VAL A  59       6.731   1.770  -6.728  1.00 33.11
ATOM    902  HA  VAL A  59       6.636   1.061  -5.918  1.00 41.24
ATOM    903  CB  VAL A  59       7.367   1.041  -7.953  1.00 64.55
ATOM    904  HB  VAL A  59       7.494   1.766  -8.744  1.00 21.45
ATOM    905  CG1 VAL A  59       8.744   0.477  -7.607  1.00 63.53
ATOM    906 1HG1 VAL A  59       9.397   1.280  -7.304  1.00 11.11
ATOM    907 2HG1 VAL A  59       9.161  -0.019  -8.474  1.00 51.50
ATOM    908 3HG1 VAL A  59       8.648  -0.233  -6.799  1.00 33.21
ATOM    909  CG2 VAL A  59       6.460  -0.067  -8.458  1.00  2.52
ATOM    910 1HG2 VAL A  59       5.510   0.354  -8.752  1.00 61.32
ATOM    911 2HG2 VAL A  59       6.305  -0.791  -7.673  1.00 34.22
ATOM    912 3HG2 VAL A  59       6.919  -0.549  -9.309  1.00 21.24
ATOM    913  C   VAL A  59       7.652   2.902  -6.292  1.00 72.23
ATOM    914  O   VAL A  59       7.830   3.889  -7.020  1.00 24.12
ATOM    915  N   SER A  60       8.201   2.767  -5.128  1.00 34.21
ATOM    916  H   SER A  60       7.948   1.985  -4.588  1.00 22.01
ATOM    917  CA  SER A  60       9.156   3.700  -4.594  1.00 25.34
ATOM    918  HA  SER A  60       9.209   4.573  -5.227  1.00  5.41
ATOM    919  CB  SER A  60       8.741   4.094  -3.187  1.00 40.32
ATOM    920 1HB  SER A  60       8.952   3.305  -2.485  1.00 75.35
ATOM    921 2HB  SER A  60       9.304   4.968  -2.896  1.00 52.12
ATOM    922  OG  SER A  60       7.364   4.436  -3.132  1.00 52.12
ATOM    923  HG  SER A  60       7.278   5.102  -2.438  1.00 73.33
ATOM    924  C   SER A  60      10.504   2.991  -4.549  1.00 70.32
ATOM    925  O   SER A  60      10.544   1.766  -4.374  1.00  1.12
ATOM    926  N   ALA A  61      11.583   3.708  -4.712  1.00 21.04
ATOM    927  H   ALA A  61      11.530   4.683  -4.821  1.00 15.24
ATOM    928  CA  ALA A  61      12.890   3.082  -4.721  1.00  1.04
ATOM    929  HA  ALA A  61      12.794   2.109  -4.262  1.00 55.34
ATOM    930  CB  ALA A  61      13.374   2.886  -6.152  1.00  3.40
ATOM    931 1HB  ALA A  61      12.648   2.305  -6.701  1.00 14.41
ATOM    932 2HB  ALA A  61      14.322   2.366  -6.144  1.00 52.45
ATOM    933 3HB  ALA A  61      13.496   3.849  -6.623  1.00 25.11
ATOM    934  C   ALA A  61      13.891   3.895  -3.931  1.00 21.44
ATOM    935  O   ALA A  61      13.830   5.124  -3.917  1.00 24.14
ATOM    936  N   SER A  62      14.779   3.209  -3.256  1.00 44.23
ATOM    937  H   SER A  62      14.742   2.227  -3.248  1.00 64.13
ATOM    938  CA  SER A  62      15.830   3.837  -2.511  1.00 11.11
ATOM    939  HA  SER A  62      15.570   4.872  -2.351  1.00 41.45
ATOM    940  CB  SER A  62      15.960   3.144  -1.173  1.00 62.25
ATOM    941 1HB  SER A  62      16.216   2.111  -1.350  1.00 65.32
ATOM    942 2HB  SER A  62      16.727   3.620  -0.580  1.00 40.32
ATOM    943  OG  SER A  62      14.727   3.191  -0.474  1.00 73.15
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ATOM    944  HG  SER A  62      14.104   3.739  -0.972  1.00 13.22
ATOM    945  C   SER A  62      17.139   3.756  -3.300  1.00 20.21
ATOM    946  O   SER A  62      17.369   2.792  -4.027  1.00  1.23
ATOM    947  N   ASP A  63      17.972   4.760  -3.160  1.00  2.31
ATOM    948  H   ASP A  63      17.802   5.505  -2.538  1.00  2.52
ATOM    949  CA  ASP A  63      19.232   4.859  -3.900  1.00 32.21
ATOM    950  HA  ASP A  63      19.092   4.463  -4.894  1.00 12.11
ATOM    951  CB  ASP A  63      19.625   6.342  -4.013  1.00 72.32
ATOM    952 1HB  ASP A  63      20.529   6.426  -4.598  1.00 21.43
ATOM    953 2HB  ASP A  63      18.830   6.882  -4.504  1.00 74.12
ATOM    954  CG  ASP A  63      19.868   6.974  -2.645  1.00 44.02
ATOM    955  OD1 ASP A  63      20.923   7.569  -2.441  1.00 51.21
ATOM    956  OD2 ASP A  63      18.988   6.803  -1.744  1.00 53.43
ATOM    957  C   ASP A  63      20.349   4.099  -3.191  1.00  2.20
ATOM    958  O   ASP A  63      21.224   3.523  -3.833  1.00 52.15
ATOM    959  N   SER A  64      20.288   4.054  -1.877  1.00 20.23
ATOM    960  H   SER A  64      19.594   4.583  -1.428  1.00 50.21
ATOM    961  CA  SER A  64      21.287   3.351  -1.109  1.00  5.55
ATOM    962  HA  SER A  64      22.225   3.438  -1.639  1.00 11.51
ATOM    963  CB  SER A  64      21.442   3.990   0.288  1.00 31.12
ATOM    964 1HB  SER A  64      21.669   5.040   0.178  1.00  4.25
ATOM    965 2HB  SER A  64      20.514   3.881   0.832  1.00 64.30
ATOM    966  OG  SER A  64      22.488   3.376   1.037  1.00 53.42
ATOM    967  HG  SER A  64      22.555   2.457   0.760  1.00 55.01
ATOM    968  C   SER A  64      20.925   1.876  -1.010  1.00 12.35
ATOM    969  O   SER A  64      21.791   1.011  -0.843  1.00 43.33
ATOM    970  N   ASP A  65      19.655   1.587  -1.139  1.00 51.14
ATOM    971  H   ASP A  65      19.024   2.310  -1.327  1.00 14.23
ATOM    972  CA  ASP A  65      19.187   0.231  -1.055  1.00 32.13
ATOM    973  HA  ASP A  65      20.004  -0.393  -0.722  1.00 52.33
ATOM    974  CB  ASP A  65      18.029   0.065  -0.092  1.00 13.34
ATOM    975 1HB  ASP A  65      17.276   0.798  -0.333  1.00 10.33
ATOM    976 2HB  ASP A  65      17.608  -0.919  -0.243  1.00 51.02
ATOM    977  CG  ASP A  65      18.338   0.231   1.355  1.00 70.31
ATOM    978  OD1 ASP A  65      18.701  -0.754   2.002  1.00 45.40
ATOM    979  OD2 ASP A  65      18.078   1.307   1.907  1.00 21.31
ATOM    980  C   ASP A  65      18.716  -0.236  -2.389  1.00 43.24
ATOM    981  O   ASP A  65      17.571  -0.009  -2.762  1.00 33.24
ATOM    982  N   SER A  66      19.578  -0.896  -3.107  1.00 13.34
ATOM    983  H   SER A  66      20.492  -0.981  -2.767  1.00 41.11
ATOM    984  CA  SER A  66      19.230  -1.448  -4.402  1.00  3.11
ATOM    985  HA  SER A  66      18.788  -0.654  -4.986  1.00 15.13
ATOM    986  CB  SER A  66      20.498  -1.948  -5.121  1.00 74.04
ATOM    987 1HB  SER A  66      21.196  -1.130  -5.225  1.00 32.22
ATOM    988 2HB  SER A  66      20.953  -2.731  -4.533  1.00 10.43
ATOM    989  OG  SER A  66      20.207  -2.457  -6.411  1.00 23.12
ATOM    990  HG  SER A  66      19.251  -2.537  -6.510  1.00 63.35
ATOM    991  C   SER A  66      18.192  -2.582  -4.253  1.00 42.34
ATOM    992  O   SER A  66      17.516  -2.944  -5.207  1.00 11.14
ATOM    993  N   THR A  67      18.075  -3.117  -3.054  1.00 55.13
ATOM    994  H   THR A  67      18.595  -2.745  -2.315  1.00 71.04
ATOM    995  CA  THR A  67      17.185  -4.218  -2.806  1.00 54.10
ATOM    996  HA  THR A  67      16.927  -4.650  -3.762  1.00 52.53
ATOM    997  CB  THR A  67      17.897  -5.324  -1.954  1.00  2.33
ATOM    998  HB  THR A  67      18.771  -5.654  -2.498  1.00 14.24
ATOM    999  OG1 THR A  67      17.037  -6.450  -1.757  1.00 45.23
ATOM   1000  HG1 THR A  67      16.126  -6.153  -1.854  1.00 55.22
ATOM   1001  CG2 THR A  67      18.342  -4.780  -0.594  1.00 73.24
ATOM   1002 1HG2 THR A  67      19.036  -3.966  -0.740  1.00 24.42
ATOM   1003 2HG2 THR A  67      18.821  -5.567  -0.031  1.00  0.43
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ATOM   1004 3HG2 THR A  67      17.479  -4.426  -0.051  1.00 50.12
ATOM   1005  C   THR A  67      15.887  -3.756  -2.113  1.00 32.52
ATOM   1006  O   THR A  67      14.978  -4.563  -1.897  1.00 44.11
ATOM   1007  N   ASP A  68      15.778  -2.481  -1.797  1.00 61.40
ATOM   1008  H   ASP A  68      16.441  -1.821  -2.092  1.00 23.35
ATOM   1009  CA  ASP A  68      14.610  -2.005  -1.067  1.00 31.41
ATOM   1010  HA  ASP A  68      14.022  -2.868  -0.785  1.00 63.23
ATOM   1011  CB  ASP A  68      15.021  -1.232   0.197  1.00 11.52
ATOM   1012 1HB  ASP A  68      15.796  -1.785   0.707  1.00 33.11
ATOM   1013 2HB  ASP A  68      15.424  -0.277  -0.111  1.00 71.43
ATOM   1014  CG  ASP A  68      13.902  -0.974   1.210  1.00 54.42
ATOM   1015  OD1 ASP A  68      12.703  -0.985   0.853  1.00 61.41
ATOM   1016  OD2 ASP A  68      14.230  -0.757   2.415  1.00 23.41
ATOM   1017  C   ASP A  68      13.782  -1.135  -1.978  1.00 72.23
ATOM   1018  O   ASP A  68      14.124   0.023  -2.250  1.00 43.03
ATOM   1019  N   SER A  69      12.766  -1.721  -2.521  1.00 52.00
ATOM   1020  H   SER A  69      12.572  -2.664  -2.346  1.00 64.50
ATOM   1021  CA  SER A  69      11.852  -1.034  -3.354  1.00 31.54
ATOM   1022  HA  SER A  69      12.038   0.023  -3.242  1.00 33.33
ATOM   1023  CB  SER A  69      12.059  -1.435  -4.821  1.00 44.11
ATOM   1024 1HB  SER A  69      11.229  -1.073  -5.408  1.00 62.00
ATOM   1025 2HB  SER A  69      12.977  -0.995  -5.184  1.00 55.14
ATOM   1026  OG  SER A  69      12.138  -2.847  -4.966  1.00 64.51
ATOM   1027  HG  SER A  69      13.018  -3.116  -4.694  1.00 51.43
ATOM   1028  C   SER A  69      10.457  -1.332  -2.863  1.00 72.04
ATOM   1029  O   SER A  69      10.125  -2.483  -2.558  1.00 41.52
ATOM   1030  N   LEU A  70       9.675  -0.318  -2.759  1.00 51.32
ATOM   1031  H   LEU A  70       9.993   0.552  -3.089  1.00 12.14
ATOM   1032  CA  LEU A  70       8.353  -0.423  -2.229  1.00 65.14
ATOM   1033  HA  LEU A  70       8.309  -1.316  -1.625  1.00 33.01
ATOM   1034  CB  LEU A  70       8.088   0.819  -1.323  1.00 30.15
ATOM   1035 1HB  LEU A  70       8.848   0.843  -0.557  1.00 30.01
ATOM   1036 2HB  LEU A  70       8.237   1.676  -1.959  1.00 24.22
ATOM   1037  CG  LEU A  70       6.718   0.994  -0.617  1.00 62.53
ATOM   1038  HG  LEU A  70       6.826   1.767   0.130  1.00 33.44
ATOM   1039  CD1 LEU A  70       5.643   1.469  -1.580  1.00 11.32
ATOM   1040 1HD1 LEU A  70       5.522   0.745  -2.372  1.00 41.03
ATOM   1041 2HD1 LEU A  70       5.938   2.416  -2.004  1.00 12.42
ATOM   1042 3HD1 LEU A  70       4.710   1.590  -1.049  1.00 62.30
ATOM   1043  CD2 LEU A  70       6.291  -0.286   0.088  1.00 32.43
ATOM   1044 1HD2 LEU A  70       7.033  -0.557   0.824  1.00 24.42
ATOM   1045 2HD2 LEU A  70       6.191  -1.079  -0.636  1.00 72.31
ATOM   1046 3HD2 LEU A  70       5.341  -0.127   0.578  1.00 71.24
ATOM   1047  C   LEU A  70       7.384  -0.549  -3.379  1.00 60.52
ATOM   1048  O   LEU A  70       7.278   0.349  -4.191  1.00 34.55
ATOM   1049  N   GLN A  71       6.734  -1.674  -3.468  1.00 61.20
ATOM   1050  H   GLN A  71       6.907  -2.385  -2.816  1.00 41.44
ATOM   1051  CA  GLN A  71       5.759  -1.917  -4.500  1.00 65.23
ATOM   1052  HA  GLN A  71       5.669  -1.036  -5.119  1.00 52.10
ATOM   1053  CB  GLN A  71       6.223  -3.097  -5.365  1.00 72.41
ATOM   1054 1HB  GLN A  71       7.125  -2.803  -5.880  1.00 44.14
ATOM   1055 2HB  GLN A  71       6.453  -3.928  -4.716  1.00 33.32
ATOM   1056  CG  GLN A  71       5.216  -3.569  -6.412  1.00  1.22
ATOM   1057 1HG  GLN A  71       4.292  -3.819  -5.911  1.00 63.23
ATOM   1058 2HG  GLN A  71       5.036  -2.768  -7.113  1.00  4.31
ATOM   1059  CD  GLN A  71       5.696  -4.793  -7.180  1.00 32.23
ATOM   1060  OE1 GLN A  71       4.905  -5.626  -7.599  1.00 35.22
ATOM   1061  NE2 GLN A  71       6.993  -4.913  -7.369  1.00 60.22
ATOM   1062 2HE2 GLN A  71       7.584  -4.221  -7.014  1.00 35.24
ATOM   1063 1HE2 GLN A  71       7.291  -5.696  -7.874  1.00 33.02
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ATOM   1064  C   GLN A  71       4.428  -2.234  -3.853  1.00 24.44
ATOM   1065  O   GLN A  71       4.302  -3.244  -3.150  1.00 41.03
ATOM   1066  N   VAL A  72       3.451  -1.392  -4.076  1.00  2.43
ATOM   1067  H   VAL A  72       3.627  -0.600  -4.634  1.00  0.31
ATOM   1068  CA  VAL A  72       2.126  -1.611  -3.540  1.00  4.13
ATOM   1069  HA  VAL A  72       2.120  -2.542  -2.994  1.00 63.11
ATOM   1070  CB  VAL A  72       1.665  -0.458  -2.585  1.00 65.53
ATOM   1071  HB  VAL A  72       1.603   0.445  -3.175  1.00 65.30
ATOM   1072  CG1 VAL A  72       0.275  -0.730  -2.015  1.00 63.10
ATOM   1073 1HG1 VAL A  72       0.289  -1.656  -1.459  1.00 53.50
ATOM   1074 2HG1 VAL A  72      -0.436  -0.808  -2.824  1.00 14.45
ATOM   1075 3HG1 VAL A  72      -0.010   0.080  -1.360  1.00  1.10
ATOM   1076  CG2 VAL A  72       2.655  -0.235  -1.464  1.00 64.04
ATOM   1077 1HG2 VAL A  72       3.613   0.019  -1.892  1.00 13.32
ATOM   1078 2HG2 VAL A  72       2.760  -1.127  -0.869  1.00 21.32
ATOM   1079 3HG2 VAL A  72       2.318   0.579  -0.839  1.00 41.04
ATOM   1080  C   VAL A  72       1.150  -1.683  -4.679  1.00 53.23
ATOM   1081  O   VAL A  72       1.045  -0.744  -5.468  1.00 51.35
ATOM   1082  N   ALA A  73       0.443  -2.768  -4.753  1.00 14.51
ATOM   1083  H   ALA A  73       0.608  -3.497  -4.113  1.00  3.42
ATOM   1084  CA  ALA A  73      -0.573  -2.949  -5.737  1.00 44.25
ATOM   1085  HA  ALA A  73      -0.544  -2.119  -6.427  1.00 30.23
ATOM   1086  CB  ALA A  73      -0.352  -4.246  -6.504  1.00 51.20
ATOM   1087 1HB  ALA A  73      -0.379  -5.077  -5.816  1.00 24.44
ATOM   1088 2HB  ALA A  73       0.610  -4.215  -6.995  1.00 11.32
ATOM   1089 3HB  ALA A  73      -1.131  -4.366  -7.243  1.00  5.02
ATOM   1090  C   ALA A  73      -1.909  -2.961  -5.040  1.00 72.33
ATOM   1091  O   ALA A  73      -2.077  -3.631  -4.013  1.00  0.42
ATOM   1092  N   MET A  74      -2.829  -2.210  -5.556  1.00  0.34
ATOM   1093  H   MET A  74      -2.619  -1.688  -6.364  1.00 54.42
ATOM   1094  CA  MET A  74      -4.157  -2.117  -4.993  1.00 65.42
ATOM   1095  HA  MET A  74      -4.219  -2.660  -4.063  1.00 41.33
ATOM   1096  CB  MET A  74      -4.557  -0.669  -4.778  1.00  2.10
ATOM   1097 1HB  MET A  74      -4.720  -0.225  -5.747  1.00 43.22
ATOM   1098 2HB  MET A  74      -5.487  -0.646  -4.228  1.00  4.35
ATOM   1099  CG  MET A  74      -3.559   0.183  -4.062  1.00 42.11
ATOM   1100 1HG  MET A  74      -3.387  -0.223  -3.077  1.00 60.13
ATOM   1101 2HG  MET A  74      -2.634   0.189  -4.621  1.00 52.41
ATOM   1102  SD  MET A  74      -4.143   1.863  -3.902  1.00 61.42
ATOM   1103  CE  MET A  74      -2.677   2.633  -3.293  1.00 44.04
ATOM   1104 1HE  MET A  74      -2.842   3.689  -3.151  1.00 31.24
ATOM   1105 2HE  MET A  74      -1.895   2.493  -4.025  1.00 21.02
ATOM   1106 3HE  MET A  74      -2.392   2.174  -2.358  1.00 72.13
ATOM   1107  C   MET A  74      -5.093  -2.658  -6.010  1.00 51.52
ATOM   1108  O   MET A  74      -5.019  -2.260  -7.152  1.00 72.42
ATOM   1109  N   LYS A  75      -5.956  -3.533  -5.620  1.00 73.13
ATOM   1110  H   LYS A  75      -5.964  -3.798  -4.672  1.00 65.45
ATOM   1111  CA  LYS A  75      -6.892  -4.107  -6.541  1.00  4.35
ATOM   1112  HA  LYS A  75      -6.681  -3.711  -7.521  1.00 52.15
ATOM   1113  CB  LYS A  75      -6.753  -5.631  -6.576  1.00 25.31
ATOM   1114 1HB  LYS A  75      -5.718  -5.884  -6.756  1.00 43.33
ATOM   1115 2HB  LYS A  75      -7.044  -6.024  -5.613  1.00 35.00
ATOM   1116  CG  LYS A  75      -7.607  -6.304  -7.645  1.00 11.11
ATOM   1117 1HG  LYS A  75      -7.530  -7.371  -7.510  1.00 11.33
ATOM   1118 2HG  LYS A  75      -8.634  -6.000  -7.503  1.00 35.13
ATOM   1119  CD  LYS A  75      -7.141  -5.878  -9.037  1.00 61.11
ATOM   1120 1HD  LYS A  75      -7.283  -4.812  -9.096  1.00 44.43
ATOM   1121 2HD  LYS A  75      -6.100  -6.129  -9.173  1.00 64.42
ATOM   1122  CE  LYS A  75      -7.965  -6.468 -10.163  1.00  1.11
ATOM   1123 1HE  LYS A  75      -7.953  -7.544 -10.078  1.00 20.13
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ATOM   1124 2HE  LYS A  75      -8.980  -6.109 -10.081  1.00 40.21
ATOM   1125  NZ  LYS A  75      -7.415  -6.074 -11.495  1.00 32.24
ATOM   1126 1HZ  LYS A  75      -8.033  -6.342 -12.284  1.00 15.31
ATOM   1127 2HZ  LYS A  75      -6.480  -6.500 -11.643  1.00 42.32
ATOM   1128 3HZ  LYS A  75      -7.218  -5.046 -11.568  1.00 45.43
ATOM   1129  C   LYS A  75      -8.292  -3.737  -6.131  1.00 33.30
ATOM   1130  O   LYS A  75      -8.674  -3.952  -4.985  1.00 74.32
ATOM   1131  N   LYS A  76      -9.040  -3.187  -7.049  1.00 11.35
ATOM   1132  H   LYS A  76      -8.673  -3.026  -7.945  1.00 22.01
ATOM   1133  CA  LYS A  76     -10.402  -2.816  -6.793  1.00 24.10
ATOM   1134  HA  LYS A  76     -10.485  -2.500  -5.764  1.00 43.10
ATOM   1135  CB  LYS A  76     -10.811  -1.664  -7.705  1.00 43.21
ATOM   1136 1HB  LYS A  76     -10.116  -0.850  -7.561  1.00 22.21
ATOM   1137 2HB  LYS A  76     -10.729  -2.013  -8.721  1.00 65.55
ATOM   1138  CG  LYS A  76     -12.226  -1.124  -7.485  1.00 64.44
ATOM   1139 1HG  LYS A  76     -12.936  -1.916  -7.677  1.00 72.52
ATOM   1140 2HG  LYS A  76     -12.323  -0.790  -6.464  1.00  2.22
ATOM   1141  CD  LYS A  76     -12.511   0.043  -8.426  1.00  1.31
ATOM   1142 1HD  LYS A  76     -13.455   0.493  -8.157  1.00  2.55
ATOM   1143 2HD  LYS A  76     -11.722   0.773  -8.326  1.00 32.14
ATOM   1144  CE  LYS A  76     -12.581  -0.406  -9.876  1.00 35.33
ATOM   1145 1HE  LYS A  76     -11.738  -1.042 -10.098  1.00 14.12
ATOM   1146 2HE  LYS A  76     -13.489  -0.980 -10.004  1.00  2.35
ATOM   1147  NZ  LYS A  76     -12.603   0.745 -10.817  1.00 53.03
ATOM   1148 1HZ  LYS A  76     -11.700   1.264 -10.776  1.00 52.22
ATOM   1149 2HZ  LYS A  76     -13.372   1.400 -10.568  1.00 64.14
ATOM   1150 3HZ  LYS A  76     -12.744   0.402 -11.789  1.00  1.43
ATOM   1151  C   LYS A  76     -11.299  -4.010  -7.032  1.00 54.55
ATOM   1152  O   LYS A  76     -11.251  -4.639  -8.097  1.00 32.30
ATOM   1153  N   LEU A  77     -12.076  -4.314  -6.053  1.00 23.15
ATOM   1154  H   LEU A  77     -12.026  -3.761  -5.238  1.00 51.04
ATOM   1155  CA  LEU A  77     -13.024  -5.388  -6.098  1.00 51.21
ATOM   1156  HA  LEU A  77     -12.716  -6.065  -6.882  1.00  5.42
ATOM   1157  CB  LEU A  77     -13.084  -6.156  -4.751  1.00 31.53
ATOM   1158 1HB  LEU A  77     -13.060  -5.403  -3.977  1.00 33.40
ATOM   1159 2HB  LEU A  77     -14.029  -6.678  -4.694  1.00  4.40
ATOM   1160  CG  LEU A  77     -11.946  -7.156  -4.429  1.00 43.54
ATOM   1161  HG  LEU A  77     -11.849  -7.844  -5.256  1.00 63.30
ATOM   1162  CD1 LEU A  77     -10.603  -6.470  -4.252  1.00 25.44
ATOM   1163 1HD1 LEU A  77     -10.346  -5.945  -5.159  1.00 25.41
ATOM   1164 2HD1 LEU A  77      -9.846  -7.209  -4.036  1.00 42.51
ATOM   1165 3HD1 LEU A  77     -10.662  -5.767  -3.434  1.00 54.54
ATOM   1166  CD2 LEU A  77     -12.289  -7.969  -3.192  1.00 35.40
ATOM   1167 1HD2 LEU A  77     -12.423  -7.305  -2.350  1.00 63.44
ATOM   1168 2HD2 LEU A  77     -11.487  -8.661  -2.982  1.00 73.11
ATOM   1169 3HD2 LEU A  77     -13.203  -8.520  -3.364  1.00 63.02
ATOM   1170  C   LEU A  77     -14.392  -4.819  -6.446  1.00 50.21
ATOM   1171  O   LEU A  77     -14.720  -3.700  -6.038  1.00  3.54
ATOM   1172  N   PRO A  78     -15.227  -5.582  -7.179  1.00 23.25
ATOM   1173  CD  PRO A  78     -14.939  -6.961  -7.635  1.00 54.34
ATOM   1174  CA  PRO A  78     -16.557  -5.120  -7.644  1.00 61.44
ATOM   1175  HA  PRO A  78     -16.468  -4.210  -8.220  1.00 74.42
ATOM   1176  CB  PRO A  78     -17.030  -6.260  -8.559  1.00 13.12
ATOM   1177 1HB  PRO A  78     -18.098  -6.396  -8.451  1.00 44.14
ATOM   1178 2HB  PRO A  78     -16.777  -6.049  -9.588  1.00 33.13
ATOM   1179  CG  PRO A  78     -16.277  -7.459  -8.102  1.00 64.23
ATOM   1180 1HG  PRO A  78     -16.812  -7.935  -7.293  1.00 52.32
ATOM   1181 2HG  PRO A  78     -16.137  -8.149  -8.921  1.00 62.04
ATOM   1182 1HD  PRO A  78     -14.579  -7.563  -6.815  1.00 63.31
ATOM   1183 2HD  PRO A  78     -14.219  -6.953  -8.437  1.00 44.30
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ATOM   1184  C   PRO A  78     -17.565  -4.891  -6.504  1.00 51.14
ATOM   1185  O   PRO A  78     -18.668  -4.431  -6.731  1.00 14.41
ATOM   1186  N   ASN A  79     -17.159  -5.197  -5.290  1.00  4.23
ATOM   1187  H   ASN A  79     -16.251  -5.547  -5.186  1.00 40.35
ATOM   1188  CA  ASN A  79     -18.012  -5.013  -4.114  1.00 52.41
ATOM   1189  HA  ASN A  79     -19.044  -4.989  -4.432  1.00 34.12
ATOM   1190  CB  ASN A  79     -17.799  -6.170  -3.117  1.00 10.55
ATOM   1191 1HB  ASN A  79     -17.839  -7.108  -3.651  1.00 12.33
ATOM   1192 2HB  ASN A  79     -16.824  -6.064  -2.663  1.00 35.22
ATOM   1193  CG  ASN A  79     -18.849  -6.206  -2.004  1.00 72.35
ATOM   1194  OD1 ASN A  79     -20.010  -5.897  -2.224  1.00 13.41
ATOM   1195  ND2 ASN A  79     -18.436  -6.534  -0.804  1.00  2.24
ATOM   1196 2HD2 ASN A  79     -17.488  -6.734  -0.650  1.00 12.51
ATOM   1197 1HD2 ASN A  79     -19.110  -6.548  -0.095  1.00 52.52
ATOM   1198  C   ASN A  79     -17.640  -3.685  -3.438  1.00  3.55
ATOM   1199  O   ASN A  79     -18.073  -3.390  -2.335  1.00 13.34
ATOM   1200  N   ASN A  80     -16.833  -2.878  -4.147  1.00 25.04
ATOM   1201  H   ASN A  80     -16.580  -3.156  -5.053  1.00 51.03
ATOM   1202  CA  ASN A  80     -16.299  -1.598  -3.628  1.00 62.34
ATOM   1203  HA  ASN A  80     -15.727  -1.157  -4.434  1.00 22.14
ATOM   1204  CB  ASN A  80     -17.413  -0.611  -3.184  1.00 12.51
ATOM   1205 1HB  ASN A  80     -18.067  -1.110  -2.484  1.00  3.00
ATOM   1206 2HB  ASN A  80     -16.951   0.233  -2.692  1.00  2.43
ATOM   1207  CG  ASN A  80     -18.258  -0.096  -4.332  1.00 24.35
ATOM   1208  OD1 ASN A  80     -17.946   0.922  -4.938  1.00  4.53
ATOM   1209  ND2 ASN A  80     -19.334  -0.782  -4.631  1.00 74.43
ATOM   1210 2HD2 ASN A  80     -19.533  -1.582  -4.098  1.00 13.24
ATOM   1211 1HD2 ASN A  80     -19.885  -0.467  -5.377  1.00 33.24
ATOM   1212  C   ASN A  80     -15.340  -1.873  -2.494  1.00 64.30
ATOM   1213  O   ASN A  80     -15.265  -1.137  -1.525  1.00 71.24
ATOM   1214  N   ALA A  81     -14.582  -2.927  -2.667  1.00 63.33
ATOM   1215  H   ALA A  81     -14.675  -3.424  -3.503  1.00 15.14
ATOM   1216  CA  ALA A  81     -13.579  -3.352  -1.720  1.00  3.32
ATOM   1217  HA  ALA A  81     -13.604  -2.693  -0.865  1.00 52.52
ATOM   1218  CB  ALA A  81     -13.848  -4.780  -1.275  1.00 62.01
ATOM   1219 1HB  ALA A  81     -13.883  -5.429  -2.138  1.00 72.43
ATOM   1220 2HB  ALA A  81     -14.792  -4.823  -0.754  1.00 64.51
ATOM   1221 3HB  ALA A  81     -13.055  -5.100  -0.615  1.00 42.13
ATOM   1222  C   ALA A  81     -12.238  -3.253  -2.407  1.00  2.51
ATOM   1223  O   ALA A  81     -12.191  -3.187  -3.629  1.00 51.04
ATOM   1224  N   THR A  82     -11.167  -3.232  -1.663  1.00 62.23
ATOM   1225  H   THR A  82     -11.218  -3.318  -0.684  1.00 61.43
ATOM   1226  CA  THR A  82      -9.864  -3.086  -2.256  1.00  1.02
ATOM   1227  HA  THR A  82      -9.924  -3.358  -3.299  1.00 11.21
ATOM   1228  CB  THR A  82      -9.411  -1.616  -2.163  1.00 63.40
ATOM   1229  HB  THR A  82      -9.223  -1.384  -1.127  1.00 24.24
ATOM   1230  OG1 THR A  82     -10.446  -0.780  -2.661  1.00 55.43
ATOM   1231  HG1 THR A  82     -11.153  -0.742  -2.002  1.00 31.04
ATOM   1232  CG2 THR A  82      -8.150  -1.365  -2.977  1.00 61.33
ATOM   1233 1HG2 THR A  82      -7.855  -0.331  -2.878  1.00 32.15
ATOM   1234 2HG2 THR A  82      -8.345  -1.586  -4.016  1.00 12.35
ATOM   1235 3HG2 THR A  82      -7.358  -2.005  -2.618  1.00  4.10
ATOM   1236  C   THR A  82      -8.838  -3.976  -1.548  1.00 35.11
ATOM   1237  O   THR A  82      -8.786  -4.037  -0.318  1.00 55.11
ATOM   1238  N   ARG A  83      -8.054  -4.673  -2.314  1.00 61.41
ATOM   1239  H   ARG A  83      -8.189  -4.639  -3.291  1.00 52.21
ATOM   1240  CA  ARG A  83      -6.990  -5.475  -1.773  1.00 51.23
ATOM   1241  HA  ARG A  83      -7.145  -5.515  -0.707  1.00 20.30
ATOM   1242  CB  ARG A  83      -6.987  -6.909  -2.333  1.00 24.24
ATOM   1243 1HB  ARG A  83      -7.781  -7.472  -1.865  1.00 54.30
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ATOM   1244 2HB  ARG A  83      -7.163  -6.870  -3.398  1.00 60.34
ATOM   1245  CG  ARG A  83      -5.667  -7.649  -2.092  1.00 74.24
ATOM   1246 1HG  ARG A  83      -4.892  -7.181  -2.680  1.00 50.25
ATOM   1247 2HG  ARG A  83      -5.414  -7.569  -1.047  1.00 11.24
ATOM   1248  CD  ARG A  83      -5.741  -9.103  -2.475  1.00 63.32
ATOM   1249 1HD  ARG A  83      -6.198  -9.608  -1.634  1.00 22.21
ATOM   1250 2HD  ARG A  83      -6.347  -9.222  -3.360  1.00 50.02
ATOM   1251  NE  ARG A  83      -4.389  -9.674  -2.703  1.00 11.14
ATOM   1252  HE  ARG A  83      -3.658  -9.007  -2.755  1.00 32.44
ATOM   1253  CZ  ARG A  83      -4.109 -10.973  -2.890  1.00 52.50
ATOM   1254  NH1 ARG A  83      -5.079 -11.893  -2.773  1.00 45.43
ATOM   1255 1HH1 ARG A  83      -6.016 -11.624  -2.546  1.00 51.42
ATOM   1256 2HH1 ARG A  83      -4.917 -12.872  -2.904  1.00  3.22
ATOM   1257  NH2 ARG A  83      -2.859 -11.352  -3.187  1.00 53.32
ATOM   1258 1HH2 ARG A  83      -2.100 -10.692  -3.281  1.00  2.31
ATOM   1259 2HH2 ARG A  83      -2.595 -12.305  -3.336  1.00 71.33
ATOM   1260  C   ARG A  83      -5.665  -4.799  -2.006  1.00 42.44
ATOM   1261  O   ARG A  83      -5.397  -4.329  -3.096  1.00 63.10
ATOM   1262  N   ILE A  84      -4.854  -4.740  -0.984  1.00 50.42
ATOM   1263  H   ILE A  84      -5.122  -5.130  -0.121  1.00  4.34
ATOM   1264  CA  ILE A  84      -3.549  -4.172  -1.097  1.00 11.04
ATOM   1265  HA  ILE A  84      -3.452  -3.760  -2.091  1.00 75.53
ATOM   1266  CB  ILE A  84      -3.302  -3.020  -0.031  1.00 73.44
ATOM   1267  HB  ILE A  84      -3.960  -3.217   0.804  1.00 32.14
ATOM   1268  CG2 ILE A  84      -1.875  -2.988   0.519  1.00 65.32
ATOM   1269 1HG2 ILE A  84      -1.661  -3.935   0.994  1.00 42.14
ATOM   1270 2HG2 ILE A  84      -1.786  -2.194   1.244  1.00 44.53
ATOM   1271 3HG2 ILE A  84      -1.180  -2.824  -0.291  1.00 40.12
ATOM   1272  CG1 ILE A  84      -3.672  -1.658  -0.607  1.00 71.34
ATOM   1273 1HG1 ILE A  84      -3.395  -0.880   0.089  1.00 62.42
ATOM   1274 2HG1 ILE A  84      -3.098  -1.553  -1.517  1.00 33.51
ATOM   1275  CD1 ILE A  84      -5.126  -1.490  -0.947  1.00 12.44
ATOM   1276 1HD1 ILE A  84      -5.725  -1.600  -0.055  1.00 13.42
ATOM   1277 2HD1 ILE A  84      -5.403  -2.246  -1.667  1.00  0.41
ATOM   1278 3HD1 ILE A  84      -5.281  -0.512  -1.376  1.00  1.12
ATOM   1279  C   ILE A  84      -2.556  -5.283  -0.935  1.00 44.24
ATOM   1280  O   ILE A  84      -2.694  -6.161  -0.073  1.00 54.25
ATOM   1281  N   SER A  85      -1.655  -5.317  -1.838  1.00 24.20
ATOM   1282  H   SER A  85      -1.684  -4.638  -2.554  1.00 42.12
ATOM   1283  CA  SER A  85      -0.619  -6.275  -1.854  1.00 14.31
ATOM   1284  HA  SER A  85      -0.639  -6.786  -0.903  1.00 21.32
ATOM   1285  CB  SER A  85      -0.911  -7.280  -2.948  1.00 24.15
ATOM   1286 1HB  SER A  85      -0.928  -6.772  -3.901  1.00 20.03
ATOM   1287 2HB  SER A  85      -0.159  -8.053  -2.948  1.00  0.50
ATOM   1288  OG  SER A  85      -2.190  -7.878  -2.693  1.00  1.55
ATOM   1289  HG  SER A  85      -2.471  -7.406  -1.897  1.00 64.02
ATOM   1290  C   SER A  85       0.728  -5.590  -2.003  1.00 70.24
ATOM   1291  O   SER A  85       0.934  -4.818  -2.940  1.00 41.12
ATOM   1292  N   ILE A  86       1.607  -5.829  -1.078  1.00 33.11
ATOM   1293  H   ILE A  86       1.372  -6.440  -0.345  1.00 61.31
ATOM   1294  CA  ILE A  86       2.925  -5.238  -1.115  1.00 13.21
ATOM   1295  HA  ILE A  86       2.997  -4.590  -1.976  1.00 41.04
ATOM   1296  CB  ILE A  86       3.211  -4.424   0.175  1.00 62.40
ATOM   1297  HB  ILE A  86       3.288  -5.115   1.002  1.00 52.24
ATOM   1298  CG2 ILE A  86       4.540  -3.693   0.043  1.00 62.24
ATOM   1299 1HG2 ILE A  86       4.510  -3.027  -0.808  1.00 71.32
ATOM   1300 2HG2 ILE A  86       5.336  -4.413  -0.085  1.00 24.10
ATOM   1301 3HG2 ILE A  86       4.728  -3.122   0.940  1.00 72.22
ATOM   1302  CG1 ILE A  86       2.062  -3.431   0.452  1.00 64.03
ATOM   1303 1HG1 ILE A  86       1.919  -2.799  -0.411  1.00 31.34
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ATOM   1304 2HG1 ILE A  86       1.157  -4.001   0.602  1.00 35.22
ATOM   1305  CD1 ILE A  86       2.263  -2.549   1.675  1.00  0.12
ATOM   1306 1HD1 ILE A  86       1.412  -1.897   1.807  1.00 12.31
ATOM   1307 2HD1 ILE A  86       3.152  -1.949   1.546  1.00 53.13
ATOM   1308 3HD1 ILE A  86       2.379  -3.169   2.551  1.00 71.40
ATOM   1309  C   ILE A  86       3.932  -6.362  -1.227  1.00 72.41
ATOM   1310  O   ILE A  86       3.865  -7.318  -0.449  1.00 41.51
ATOM   1311  N   LYS A  87       4.846  -6.289  -2.165  1.00 63.23
ATOM   1312  H   LYS A  87       4.911  -5.489  -2.734  1.00 23.44
ATOM   1313  CA  LYS A  87       5.775  -7.380  -2.319  1.00  2.12
ATOM   1314  HA  LYS A  87       5.473  -8.135  -1.610  1.00 34.34
ATOM   1315  CB  LYS A  87       5.695  -8.010  -3.732  1.00 63.14
ATOM   1316 1HB  LYS A  87       4.696  -8.386  -3.892  1.00 31.12
ATOM   1317 2HB  LYS A  87       5.893  -7.231  -4.453  1.00 51.34
ATOM   1318  CG  LYS A  87       6.693  -9.164  -3.982  1.00 25.43
ATOM   1319 1HG  LYS A  87       6.522  -9.571  -4.967  1.00 63.22
ATOM   1320 2HG  LYS A  87       7.698  -8.770  -3.927  1.00 62.31
ATOM   1321  CD  LYS A  87       6.540 -10.286  -2.953  1.00 72.04
ATOM   1322 1HD  LYS A  87       6.665  -9.879  -1.961  1.00 14.54
ATOM   1323 2HD  LYS A  87       5.548 -10.697  -3.057  1.00 20.32
ATOM   1324  CE  LYS A  87       7.564 -11.402  -3.155  1.00 13.34
ATOM   1325 1HE  LYS A  87       7.349 -11.907  -4.084  1.00  2.51
ATOM   1326 2HE  LYS A  87       8.550 -10.964  -3.203  1.00  3.41
ATOM   1327  NZ  LYS A  87       7.530 -12.400  -2.045  1.00  4.51
ATOM   1328 1HZ  LYS A  87       7.817 -11.962  -1.139  1.00 12.11
ATOM   1329 2HZ  LYS A  87       8.194 -13.182  -2.210  1.00 73.12
ATOM   1330 3HZ  LYS A  87       6.583 -12.806  -1.910  1.00 45.15
ATOM   1331  C   LYS A  87       7.198  -6.993  -1.984  1.00 12.41
ATOM   1332  O   LYS A  87       7.795  -6.126  -2.603  1.00 12.30
ATOM   1333  N   TYR A  88       7.701  -7.663  -0.987  1.00 55.01
ATOM   1334  H   TYR A  88       7.105  -8.238  -0.459  1.00  0.11
ATOM   1335  CA  TYR A  88       9.067  -7.622  -0.568  1.00 15.13
ATOM   1336  HA  TYR A  88       9.621  -7.063  -1.304  1.00 43.50
ATOM   1337  CB  TYR A  88       9.225  -6.958   0.785  1.00 41.52
ATOM   1338 1HB  TYR A  88       8.337  -7.158   1.365  1.00 12.53
ATOM   1339 2HB  TYR A  88      10.076  -7.389   1.290  1.00 62.13
ATOM   1340  CG  TYR A  88       9.422  -5.465   0.701  1.00 12.13
ATOM   1341  CD1 TYR A  88       8.428  -4.627   0.220  1.00  5.44
ATOM   1342  HD1 TYR A  88       7.499  -5.059  -0.118  1.00 61.32
ATOM   1343  CE1 TYR A  88       8.611  -3.264   0.172  1.00 10.35
ATOM   1344  HE1 TYR A  88       7.820  -2.634  -0.204  1.00 45.14
ATOM   1345  CZ  TYR A  88       9.801  -2.722   0.604  1.00 14.11
ATOM   1346  CE2 TYR A  88      10.800  -3.534   1.082  1.00 33.20
ATOM   1347  HE2 TYR A  88      11.733  -3.108   1.420  1.00  1.50
ATOM   1348  CD2 TYR A  88      10.606  -4.891   1.130  1.00 21.22
ATOM   1349  HD2 TYR A  88      11.392  -5.531   1.503  1.00 31.34
ATOM   1350  OH  TYR A  88       9.986  -1.364   0.578  1.00 45.14
ATOM   1351  HH  TYR A  88      10.903  -1.186   0.311  1.00 45.53
ATOM   1352  C   TYR A  88       9.590  -9.019  -0.530  1.00  4.53
ATOM   1353  O   TYR A  88       8.802  -9.969  -0.522  1.00 64.33
ATOM   1354  N   GLY A  89      10.877  -9.167  -0.604  1.00 22.30
ATOM   1355  H   GLY A  89      11.461  -8.390  -0.723  1.00 55.24
ATOM   1356  CA  GLY A  89      11.454 -10.470  -0.488  1.00 71.33
ATOM   1357 1HA  GLY A  89      10.751 -11.201  -0.861  1.00 54.21
ATOM   1358 2HA  GLY A  89      12.360 -10.514  -1.074  1.00  2.43
ATOM   1359  C   GLY A  89      11.788 -10.785   0.954  1.00 71.44
ATOM   1360  O   GLY A  89      10.950 -10.628   1.849  1.00 63.34
ATOM   1361  N   SER A  90      13.022 -11.136   1.175  1.00 73.15
ATOM   1362  H   SER A  90      13.665 -11.154   0.433  1.00 33.45
ATOM   1363  CA  SER A  90      13.563 -11.529   2.464  1.00  1.41
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ATOM   1364  HA  SER A  90      12.996 -12.372   2.825  1.00 74.44
ATOM   1365  CB  SER A  90      14.992 -11.994   2.244  1.00 11.34
ATOM   1366 1HB  SER A  90      15.612 -11.145   1.992  1.00 73.14
ATOM   1367 2HB  SER A  90      15.365 -12.463   3.142  1.00 32.40
ATOM   1368  OG  SER A  90      15.034 -12.937   1.178  1.00 20.04
ATOM   1369  HG  SER A  90      14.982 -13.822   1.549  1.00 61.21
ATOM   1370  C   SER A  90      13.516 -10.399   3.520  1.00  4.30
ATOM   1371  O   SER A  90      13.664 -10.655   4.704  1.00  1.53
ATOM   1372  N   GLN A  91      13.300  -9.162   3.080  1.00 60.15
ATOM   1373  H   GLN A  91      13.122  -9.046   2.123  1.00 13.02
ATOM   1374  CA  GLN A  91      13.380  -8.013   3.979  1.00 44.22
ATOM   1375  HA  GLN A  91      14.199  -8.185   4.661  1.00 64.14
ATOM   1376  CB  GLN A  91      13.651  -6.696   3.209  1.00 64.01
ATOM   1377 1HB  GLN A  91      12.725  -6.370   2.765  1.00 12.35
ATOM   1378 2HB  GLN A  91      13.972  -5.947   3.918  1.00 53.10
ATOM   1379  CG  GLN A  91      14.695  -6.781   2.094  1.00  5.43
ATOM   1380 1HG  GLN A  91      15.148  -5.809   1.963  1.00 21.32
ATOM   1381 2HG  GLN A  91      15.451  -7.495   2.382  1.00 64.22
ATOM   1382  CD  GLN A  91      14.093  -7.219   0.765  1.00 43.23
ATOM   1383  OE1 GLN A  91      13.991  -8.395   0.460  1.00 30.20
ATOM   1384  NE2 GLN A  91      13.692  -6.270  -0.031  1.00 64.13
ATOM   1385 2HE2 GLN A  91      13.794  -5.341   0.262  1.00 50.40
ATOM   1386 1HE2 GLN A  91      13.344  -6.501  -0.916  1.00 70.41
ATOM   1387  C   GLN A  91      12.091  -7.842   4.790  1.00  2.02
ATOM   1388  O   GLN A  91      12.081  -7.094   5.749  1.00 12.52
ATOM   1389  N   GLY A  92      11.016  -8.532   4.365  1.00 33.05
ATOM   1390  H   GLY A  92      11.126  -9.093   3.568  1.00 33.14
ATOM   1391  CA  GLY A  92       9.727  -8.526   5.086  1.00 41.25
ATOM   1392 1HA  GLY A  92       8.971  -8.941   4.436  1.00 42.34
ATOM   1393 2HA  GLY A  92       9.819  -9.167   5.951  1.00 34.14
ATOM   1394  C   GLY A  92       9.249  -7.146   5.542  1.00 73.03
ATOM   1395  O   GLY A  92       9.201  -6.864   6.735  1.00 45.42
ATOM   1396  N   ASN A  93       8.838  -6.307   4.595  1.00 14.22
ATOM   1397  H   ASN A  93       8.844  -6.613   3.664  1.00 22.43
ATOM   1398  CA  ASN A  93       8.413  -4.912   4.896  1.00  3.33
ATOM   1399  HA  ASN A  93       9.238  -4.461   5.428  1.00 73.33
ATOM   1400  CB  ASN A  93       8.141  -4.062   3.662  1.00 70.23
ATOM   1401 1HB  ASN A  93       8.213  -3.021   3.936  1.00 44.24
ATOM   1402 2HB  ASN A  93       8.893  -4.279   2.918  1.00 63.32
ATOM   1403  CG  ASN A  93       6.761  -4.277   3.026  1.00 41.04
ATOM   1404  OD1 ASN A  93       6.131  -3.318   2.626  1.00 43.42
ATOM   1405  ND2 ASN A  93       6.320  -5.516   2.858  1.00 12.43
ATOM   1406 2HD2 ASN A  93       6.854  -6.287   3.130  1.00 71.23
ATOM   1407 1HD2 ASN A  93       5.436  -5.607   2.445  1.00 13.30
ATOM   1408  C   ASN A  93       7.185  -4.799   5.800  1.00 52.33
ATOM   1409  O   ASN A  93       6.821  -3.699   6.158  1.00 62.41
ATOM   1410  N   SER A  94       6.551  -5.919   6.115  1.00 40.11
ATOM   1411  H   SER A  94       6.987  -6.774   5.919  1.00 24.20
ATOM   1412  CA  SER A  94       5.246  -6.000   6.777  1.00 12.34
ATOM   1413  HA  SER A  94       4.497  -5.770   6.035  1.00 20.22
ATOM   1414  CB  SER A  94       5.034  -7.445   7.194  1.00 51.43
ATOM   1415 1HB  SER A  94       5.721  -7.692   7.989  1.00 62.53
ATOM   1416 2HB  SER A  94       4.017  -7.583   7.528  1.00 30.14
ATOM   1417  OG  SER A  94       5.276  -8.300   6.078  1.00 74.45
ATOM   1418  HG  SER A  94       4.442  -8.465   5.625  1.00 10.24
ATOM   1419  C   SER A  94       5.050  -5.036   7.987  1.00  3.32
ATOM   1420  O   SER A  94       3.922  -4.634   8.270  1.00 74.55
ATOM   1421  N   ILE A  95       6.122  -4.647   8.665  1.00 12.14
ATOM   1422  H   ILE A  95       6.993  -5.033   8.427  1.00 54.45
ATOM   1423  CA  ILE A  95       6.027  -3.658   9.747  1.00  4.44
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ATOM   1424  HA  ILE A  95       5.223  -3.991  10.389  1.00  1.42
ATOM   1425  CB  ILE A  95       7.362  -3.556  10.592  1.00 51.44
ATOM   1426  HB  ILE A  95       8.186  -3.591   9.895  1.00 72.32
ATOM   1427  CG2 ILE A  95       7.461  -2.230  11.351  1.00 64.50
ATOM   1428 1HG2 ILE A  95       8.387  -2.204  11.908  1.00 74.01
ATOM   1429 2HG2 ILE A  95       6.629  -2.143  12.033  1.00 42.50
ATOM   1430 3HG2 ILE A  95       7.440  -1.410  10.648  1.00 34.24
ATOM   1431  CG1 ILE A  95       7.507  -4.741  11.584  1.00 14.21
ATOM   1432 1HG1 ILE A  95       8.430  -4.626  12.132  1.00 52.32
ATOM   1433 2HG1 ILE A  95       6.684  -4.701  12.285  1.00 45.12
ATOM   1434  CD1 ILE A  95       7.527  -6.124  10.964  1.00 44.31
ATOM   1435 1HD1 ILE A  95       8.352  -6.202  10.270  1.00 31.41
ATOM   1436 2HD1 ILE A  95       6.593  -6.278  10.443  1.00 51.23
ATOM   1437 3HD1 ILE A  95       7.628  -6.866  11.743  1.00 64.23
ATOM   1438  C   ILE A  95       5.607  -2.285   9.171  1.00 24.22
ATOM   1439  O   ILE A  95       4.690  -1.637   9.688  1.00 50.44
ATOM   1440  N   ARG A  96       6.225  -1.910   8.046  1.00  4.41
ATOM   1441  H   ARG A  96       6.889  -2.517   7.653  1.00 13.21
ATOM   1442  CA  ARG A  96       5.906  -0.663   7.342  1.00 33.01
ATOM   1443  HA  ARG A  96       6.029   0.171   8.017  1.00 32.23
ATOM   1444  CB  ARG A  96       6.805  -0.464   6.097  1.00 52.51
ATOM   1445 1HB  ARG A  96       6.657  -1.308   5.441  1.00  2.24
ATOM   1446 2HB  ARG A  96       6.468   0.424   5.580  1.00  3.35
ATOM   1447  CG  ARG A  96       8.303  -0.337   6.337  1.00 73.05
ATOM   1448 1HG  ARG A  96       8.493   0.521   6.963  1.00 40.52
ATOM   1449 2HG  ARG A  96       8.661  -1.232   6.823  1.00 43.00
ATOM   1450  CD  ARG A  96       9.034  -0.169   4.998  1.00 63.32
ATOM   1451 1HD  ARG A  96       8.848  -1.039   4.386  1.00 34.12
ATOM   1452 2HD  ARG A  96       8.639   0.703   4.498  1.00  4.51
ATOM   1453  NE  ARG A  96      10.482  -0.014   5.151  1.00 14.42
ATOM   1454  HE  ARG A  96      10.815   0.279   6.042  1.00 71.25
ATOM   1455  CZ  ARG A  96      11.406  -0.215   4.197  1.00 30.42
ATOM   1456  NH1 ARG A  96      11.063  -0.538   2.964  1.00 31.24
ATOM   1457 1HH1 ARG A  96      10.125  -0.659   2.634  1.00 64.22
ATOM   1458 2HH1 ARG A  96      11.766  -0.682   2.246  1.00  1.34
ATOM   1459  NH2 ARG A  96      12.672  -0.053   4.487  1.00  4.32
ATOM   1460 1HH2 ARG A  96      12.933   0.232   5.419  1.00 64.45
ATOM   1461 2HH2 ARG A  96      13.376  -0.225   3.780  1.00 52.34
ATOM   1462  C   ARG A  96       4.473  -0.740   6.852  1.00 73.51
ATOM   1463  O   ARG A  96       3.697   0.194   7.009  1.00  2.32
ATOM   1464  N   SER A  97       4.139  -1.893   6.283  1.00 52.44
ATOM   1465  H   SER A  97       4.801  -2.615   6.233  1.00 43.34
ATOM   1466  CA  SER A  97       2.840  -2.147   5.697  1.00 11.03
ATOM   1467  HA  SER A  97       2.681  -1.485   4.860  1.00 20.22
ATOM   1468  CB  SER A  97       2.832  -3.570   5.188  1.00 24.02
ATOM   1469 1HB  SER A  97       2.738  -4.242   6.029  1.00 61.20
ATOM   1470 2HB  SER A  97       1.996  -3.715   4.521  1.00 51.33
ATOM   1471  OG  SER A  97       4.032  -3.865   4.503  1.00 63.33
ATOM   1472  HG  SER A  97       4.188  -3.239   3.784  1.00  1.54
ATOM   1473  C   SER A  97       1.719  -1.989   6.730  1.00 64.34
ATOM   1474  O   SER A  97       0.716  -1.348   6.465  1.00 73.10
ATOM   1475  N   SER A  98       1.932  -2.540   7.907  1.00 51.00
ATOM   1476  H   SER A  98       2.786  -2.989   8.082  1.00 35.22
ATOM   1477  CA  SER A  98       0.941  -2.518   8.959  1.00 11.32
ATOM   1478  HA  SER A  98       0.022  -2.894   8.534  1.00 33.22
ATOM   1479  CB  SER A  98       1.380  -3.462  10.075  1.00 51.42
ATOM   1480 1HB  SER A  98       2.326  -3.120  10.470  1.00 33.24
ATOM   1481 2HB  SER A  98       0.655  -3.502  10.871  1.00 52.12
ATOM   1482  OG  SER A  98       1.558  -4.777   9.545  1.00 14.01
ATOM   1483  HG  SER A  98       2.458  -4.836   9.201  1.00 51.14
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ATOM   1484  C   SER A  98       0.680  -1.089   9.458  1.00 45.23
ATOM   1485  O   SER A  98      -0.468  -0.710   9.715  1.00 31.13
ATOM   1486  N   ALA A  99       1.737  -0.290   9.544  1.00 12.00
ATOM   1487  H   ALA A  99       2.628  -0.638   9.328  1.00 22.31
ATOM   1488  CA  ALA A  99       1.601   1.099   9.949  1.00 42.14
ATOM   1489  HA  ALA A  99       1.004   1.127  10.848  1.00 33.40
ATOM   1490  CB  ALA A  99       2.969   1.705  10.239  1.00 32.32
ATOM   1491 1HB  ALA A  99       2.848   2.726  10.571  1.00 45.15
ATOM   1492 2HB  ALA A  99       3.565   1.685   9.339  1.00  3.24
ATOM   1493 3HB  ALA A  99       3.461   1.131  11.010  1.00 72.43
ATOM   1494  C   ALA A  99       0.883   1.884   8.857  1.00 53.03
ATOM   1495  O   ALA A  99      -0.007   2.696   9.138  1.00 52.00
ATOM   1496  N   LEU A 100       1.250   1.590   7.609  1.00  2.42
ATOM   1497  H   LEU A 100       1.968   0.936   7.464  1.00 71.32
ATOM   1498  CA  LEU A 100       0.673   2.212   6.434  1.00 42.22
ATOM   1499  HA  LEU A 100       0.894   3.269   6.453  1.00 62.52
ATOM   1500  CB  LEU A 100       1.297   1.595   5.181  1.00 61.55
ATOM   1501 1HB  LEU A 100       2.360   1.515   5.339  1.00 73.24
ATOM   1502 2HB  LEU A 100       0.921   0.586   5.093  1.00 75.23
ATOM   1503  CG  LEU A 100       1.024   2.306   3.856  1.00 30.42
ATOM   1504  HG  LEU A 100      -0.043   2.404   3.725  1.00 22.52
ATOM   1505  CD1 LEU A 100       1.620   3.705   3.866  1.00  2.11
ATOM   1506 1HD1 LEU A 100       1.445   4.180   2.912  1.00 23.21
ATOM   1507 2HD1 LEU A 100       2.682   3.637   4.056  1.00 74.23
ATOM   1508 3HD1 LEU A 100       1.154   4.285   4.649  1.00 62.50
ATOM   1509  CD2 LEU A 100       1.578   1.493   2.700  1.00 55.22
ATOM   1510 1HD2 LEU A 100       1.386   2.006   1.769  1.00 22.14
ATOM   1511 2HD2 LEU A 100       1.102   0.524   2.684  1.00 71.32
ATOM   1512 3HD2 LEU A 100       2.642   1.367   2.832  1.00 13.20
ATOM   1513  C   LEU A 100      -0.832   1.987   6.412  1.00 64.10
ATOM   1514  O   LEU A 100      -1.603   2.924   6.231  1.00 64.43
ATOM   1515  N   ILE A 101      -1.234   0.744   6.683  1.00 63.40
ATOM   1516  H   ILE A 101      -0.525   0.086   6.867  1.00 53.51
ATOM   1517  CA  ILE A 101      -2.648   0.346   6.670  1.00 31.24
ATOM   1518  HA  ILE A 101      -3.030   0.537   5.678  1.00 15.53
ATOM   1519  CB  ILE A 101      -2.832  -1.186   6.989  1.00 52.54
ATOM   1520  HB  ILE A 101      -2.329  -1.375   7.927  1.00 61.13
ATOM   1521  CG2 ILE A 101      -4.305  -1.559   7.183  1.00 31.32
ATOM   1522 1HG2 ILE A 101      -4.384  -2.614   7.402  1.00 71.35
ATOM   1523 2HG2 ILE A 101      -4.857  -1.335   6.282  1.00 52.41
ATOM   1524 3HG2 ILE A 101      -4.712  -0.990   8.007  1.00 74.13
ATOM   1525  CG1 ILE A 101      -2.192  -2.069   5.902  1.00 61.43
ATOM   1526 1HG1 ILE A 101      -1.134  -1.855   5.852  1.00  2.34
ATOM   1527 2HG1 ILE A 101      -2.324  -3.106   6.178  1.00 32.34
ATOM   1528  CD1 ILE A 101      -2.760  -1.880   4.505  1.00 45.44
ATOM   1529 1HD1 ILE A 101      -2.261  -2.553   3.822  1.00 14.15
ATOM   1530 2HD1 ILE A 101      -2.600  -0.866   4.177  1.00 50.32
ATOM   1531 3HD1 ILE A 101      -3.817  -2.100   4.511  1.00 31.31
ATOM   1532  C   ILE A 101      -3.456   1.176   7.665  1.00 64.11
ATOM   1533  O   ILE A 101      -4.553   1.626   7.339  1.00 72.41
ATOM   1534  N   GLY A 102      -2.873   1.430   8.837  1.00 12.12
ATOM   1535  H   GLY A 102      -1.974   1.074   9.007  1.00 42.34
ATOM   1536  CA  GLY A 102      -3.538   2.226   9.863  1.00 31.44
ATOM   1537 1HA  GLY A 102      -4.456   1.743  10.150  1.00 60.14
ATOM   1538 2HA  GLY A 102      -2.892   2.298  10.726  1.00 72.20
ATOM   1539  C   GLY A 102      -3.866   3.621   9.385  1.00  3.04
ATOM   1540  O   GLY A 102      -4.946   4.150   9.629  1.00 11.23
ATOM   1541  N   ILE A 103      -2.940   4.199   8.685  1.00 12.42
ATOM   1542  H   ILE A 103      -2.109   3.703   8.518  1.00 12.43
ATOM   1543  CA  ILE A 103      -3.101   5.526   8.148  1.00  3.23
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ATOM   1544  HA  ILE A 103      -3.464   6.159   8.943  1.00 21.32
ATOM   1545  CB  ILE A 103      -1.748   6.064   7.666  1.00 23.23
ATOM   1546  HB  ILE A 103      -1.360   5.404   6.906  1.00 51.25
ATOM   1547  CG2 ILE A 103      -1.897   7.470   7.076  1.00 45.42
ATOM   1548 1HG2 ILE A 103      -2.567   7.424   6.229  1.00 34.42
ATOM   1549 2HG2 ILE A 103      -0.931   7.830   6.750  1.00 73.20
ATOM   1550 3HG2 ILE A 103      -2.302   8.139   7.821  1.00 63.05
ATOM   1551  CG1 ILE A 103      -0.781   6.067   8.846  1.00 53.42
ATOM   1552 1HG1 ILE A 103      -1.074   6.840   9.541  1.00 13.44
ATOM   1553 2HG1 ILE A 103      -0.831   5.108   9.342  1.00 13.21
ATOM   1554  CD1 ILE A 103       0.639   6.320   8.469  1.00 74.43
ATOM   1555 1HD1 ILE A 103       0.954   5.540   7.790  1.00 22.23
ATOM   1556 2HD1 ILE A 103       1.246   6.280   9.360  1.00  2.53
ATOM   1557 3HD1 ILE A 103       0.737   7.280   7.986  1.00  2.21
ATOM   1558  C   ILE A 103      -4.117   5.524   7.013  1.00 24.00
ATOM   1559  O   ILE A 103      -4.941   6.443   6.896  1.00 45.02
ATOM   1560  N   ILE A 104      -4.070   4.477   6.204  1.00 64.24
ATOM   1561  H   ILE A 104      -3.411   3.774   6.390  1.00 45.01
ATOM   1562  CA  ILE A 104      -4.963   4.341   5.070  1.00 54.21
ATOM   1563  HA  ILE A 104      -4.842   5.209   4.438  1.00 33.12
ATOM   1564  CB  ILE A 104      -4.624   3.067   4.235  1.00 22.33
ATOM   1565  HB  ILE A 104      -4.674   2.214   4.897  1.00 51.42
ATOM   1566  CG2 ILE A 104      -5.640   2.854   3.110  1.00 62.30
ATOM   1567 1HG2 ILE A 104      -5.622   3.703   2.444  1.00 13.34
ATOM   1568 2HG2 ILE A 104      -6.627   2.748   3.533  1.00 33.13
ATOM   1569 3HG2 ILE A 104      -5.384   1.960   2.561  1.00  1.00
ATOM   1570  CG1 ILE A 104      -3.211   3.159   3.659  1.00  4.12
ATOM   1571 1HG1 ILE A 104      -3.201   3.929   2.901  1.00 43.10
ATOM   1572 2HG1 ILE A 104      -2.516   3.426   4.442  1.00  0.41
ATOM   1573  CD1 ILE A 104      -2.730   1.874   3.014  1.00 32.53
ATOM   1574 1HD1 ILE A 104      -2.697   1.091   3.755  1.00 52.34
ATOM   1575 2HD1 ILE A 104      -1.745   2.019   2.597  1.00 35.41
ATOM   1576 3HD1 ILE A 104      -3.415   1.593   2.228  1.00 14.23
ATOM   1577  C   ILE A 104      -6.403   4.247   5.549  1.00 73.20
ATOM   1578  O   ILE A 104      -7.256   5.020   5.117  1.00 12.31
ATOM   1579  N   GLU A 105      -6.644   3.363   6.501  1.00 72.42
ATOM   1580  H   GLU A 105      -5.900   2.844   6.883  1.00 64.41
ATOM   1581  CA  GLU A 105      -7.980   3.140   6.999  1.00 43.44
ATOM   1582  HA  GLU A 105      -8.601   3.014   6.122  1.00 32.14
ATOM   1583  CB  GLU A 105      -8.053   1.850   7.844  1.00 15.03
ATOM   1584 1HB  GLU A 105      -9.081   1.685   8.132  1.00 54.23
ATOM   1585 2HB  GLU A 105      -7.730   1.022   7.229  1.00 13.34
ATOM   1586  CG  GLU A 105      -7.217   1.862   9.107  1.00 32.20
ATOM   1587 1HG  GLU A 105      -6.566   1.003   9.150  1.00 22.12
ATOM   1588 2HG  GLU A 105      -6.612   2.755   9.063  1.00 52.31
ATOM   1589  CD  GLU A 105      -8.064   1.951  10.342  1.00 33.14
ATOM   1590  OE1 GLU A 105      -8.481   3.060  10.706  1.00 33.23
ATOM   1591  OE2 GLU A 105      -8.374   0.908  10.941  1.00 63.22
ATOM   1592  C   GLU A 105      -8.508   4.375   7.730  1.00 13.43
ATOM   1593  O   GLU A 105      -9.646   4.787   7.500  1.00 44.01
ATOM   1594  N   GLY A 106      -7.648   5.000   8.541  1.00 31.23
ATOM   1595  H   GLY A 106      -6.751   4.620   8.668  1.00 61.23
ATOM   1596  CA  GLY A 106      -8.022   6.183   9.292  1.00 74.32
ATOM   1597 1HA  GLY A 106      -8.843   5.933   9.949  1.00  4.21
ATOM   1598 2HA  GLY A 106      -7.179   6.499   9.889  1.00 12.33
ATOM   1599  C   GLY A 106      -8.445   7.325   8.395  1.00 61.52
ATOM   1600  O   GLY A 106      -9.422   8.034   8.687  1.00 64.31
ATOM   1601  N   ASN A 107      -7.731   7.489   7.290  1.00 13.10
ATOM   1602  H   ASN A 107      -6.974   6.884   7.127  1.00 43.24
ATOM   1603  CA  ASN A 107      -8.037   8.533   6.313  1.00 74.44
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ATOM   1604  HA  ASN A 107      -8.068   9.483   6.826  1.00 63.23
ATOM   1605  CB  ASN A 107      -6.952   8.579   5.224  1.00 12.03
ATOM   1606 1HB  ASN A 107      -5.997   8.779   5.686  1.00 74.40
ATOM   1607 2HB  ASN A 107      -6.912   7.613   4.743  1.00 23.54
ATOM   1608  CG  ASN A 107      -7.192   9.643   4.150  1.00 33.20
ATOM   1609  OD1 ASN A 107      -7.858   9.397   3.152  1.00 62.33
ATOM   1610  ND2 ASN A 107      -6.619  10.809   4.328  1.00 31.24
ATOM   1611 2HD2 ASN A 107      -6.074  10.952   5.128  1.00 33.40
ATOM   1612 1HD2 ASN A 107      -6.750  11.480   3.629  1.00  2.50
ATOM   1613  C   ASN A 107      -9.394   8.262   5.681  1.00 44.30
ATOM   1614  O   ASN A 107     -10.231   9.158   5.578  1.00 24.25
ATOM   1615  N   ILE A 108      -9.624   6.999   5.338  1.00 53.22
ATOM   1616  H   ILE A 108      -8.923   6.331   5.502  1.00 60.10
ATOM   1617  CA  ILE A 108     -10.872   6.570   4.718  1.00 33.35
ATOM   1618  HA  ILE A 108     -11.023   7.170   3.833  1.00  4.34
ATOM   1619  CB  ILE A 108     -10.814   5.078   4.302  1.00 22.10
ATOM   1620  HB  ILE A 108     -10.612   4.488   5.184  1.00 24.04
ATOM   1621  CG2 ILE A 108     -12.151   4.624   3.719  1.00 62.12
ATOM   1622 1HG2 ILE A 108     -12.087   3.583   3.438  1.00 41.14
ATOM   1623 2HG2 ILE A 108     -12.381   5.218   2.848  1.00 35.03
ATOM   1624 3HG2 ILE A 108     -12.928   4.752   4.458  1.00 45.40
ATOM   1625  CG1 ILE A 108      -9.692   4.851   3.291  1.00  0.21
ATOM   1626 1HG1 ILE A 108      -9.936   5.360   2.370  1.00 24.41
ATOM   1627 2HG1 ILE A 108      -8.772   5.259   3.686  1.00 52.34
ATOM   1628  CD1 ILE A 108      -9.454   3.397   2.965  1.00 10.22
ATOM   1629 1HD1 ILE A 108      -8.630   3.318   2.274  1.00 64.35
ATOM   1630 2HD1 ILE A 108     -10.346   2.978   2.522  1.00  0.11
ATOM   1631 3HD1 ILE A 108      -9.215   2.862   3.872  1.00 15.03
ATOM   1632  C   ILE A 108     -12.051   6.785   5.667  1.00 61.31
ATOM   1633  O   ILE A 108     -13.120   7.217   5.239  1.00 62.14
ATOM   1634  N   ARG A 109     -11.840   6.504   6.962  1.00 64.13
ATOM   1635  H   ARG A 109     -10.965   6.147   7.231  1.00 24.55
ATOM   1636  CA  ARG A 109     -12.895   6.675   7.952  1.00 42.54
ATOM   1637  HA  ARG A 109     -13.723   6.046   7.662  1.00 43.41
ATOM   1638  CB  ARG A 109     -12.442   6.291   9.370  1.00 61.21
ATOM   1639 1HB  ARG A 109     -11.685   6.993   9.689  1.00 52.43
ATOM   1640 2HB  ARG A 109     -13.290   6.376  10.035  1.00 65.35
ATOM   1641  CG  ARG A 109     -11.864   4.896   9.506  1.00 74.31
ATOM   1642 1HG  ARG A 109     -12.477   4.178   8.983  1.00  2.45
ATOM   1643 2HG  ARG A 109     -10.887   4.899   9.048  1.00 31.51
ATOM   1644  CD  ARG A 109     -11.705   4.508  10.968  1.00 11.03
ATOM   1645 1HD  ARG A 109     -11.109   5.261  11.461  1.00 33.34
ATOM   1646 2HD  ARG A 109     -12.682   4.468  11.427  1.00 41.11
ATOM   1647  NE  ARG A 109     -11.050   3.210  11.127  1.00  1.15
ATOM   1648  HE  ARG A 109     -10.072   3.210  10.912  1.00 22.52
ATOM   1649  CZ  ARG A 109     -11.611   2.079  11.558  1.00 53.41
ATOM   1650  NH1 ARG A 109     -12.925   2.030  11.821  1.00 55.52
ATOM   1651 1HH1 ARG A 109     -13.501   2.838  11.699  1.00 73.44
ATOM   1652 2HH1 ARG A 109     -13.364   1.188  12.139  1.00 45.52
ATOM   1653  NH2 ARG A 109     -10.866   0.992  11.700  1.00  3.23
ATOM   1654 1HH2 ARG A 109      -9.871   1.035  11.475  1.00 40.45
ATOM   1655 2HH2 ARG A 109     -11.175   0.097  12.010  1.00 25.42
ATOM   1656  C   ARG A 109     -13.360   8.115   7.962  1.00 41.24
ATOM   1657  O   ARG A 109     -14.548   8.377   7.881  1.00 51.13
ATOM   1658  N   TYR A 110     -12.411   9.035   8.003  1.00 30.44
ATOM   1659  H   TYR A 110     -11.472   8.748   8.013  1.00 72.23
ATOM   1660  CA  TYR A 110     -12.719  10.449   8.018  1.00 22.22
ATOM   1661  HA  TYR A 110     -13.590  10.482   8.659  1.00  2.24
ATOM   1662  CB  TYR A 110     -11.653  11.307   8.674  1.00 22.10
ATOM   1663 1HB  TYR A 110     -10.718  10.767   8.691  1.00 13.10
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ATOM   1664 2HB  TYR A 110     -11.539  12.228   8.123  1.00 53.43
ATOM   1665  CG  TYR A 110     -12.066  11.641  10.082  1.00 34.43
ATOM   1666  CD1 TYR A 110     -11.921  10.728  11.120  1.00 35.11
ATOM   1667  HD1 TYR A 110     -11.443   9.779  10.925  1.00  3.12
ATOM   1668  CE1 TYR A 110     -12.386  11.019  12.390  1.00  3.24
ATOM   1669  HE1 TYR A 110     -12.267  10.301  13.189  1.00 63.02
ATOM   1670  CZ  TYR A 110     -12.989  12.239  12.630  1.00 34.34
ATOM   1671  CE2 TYR A 110     -13.130  13.154  11.619  1.00 72.33
ATOM   1672  HE2 TYR A 110     -13.603  14.107  11.809  1.00 41.34
ATOM   1673  CD2 TYR A 110     -12.682  12.850  10.356  1.00 30.54
ATOM   1674  HD2 TYR A 110     -12.795  13.571   9.560  1.00 32.12
ATOM   1675  OH  TYR A 110     -13.489  12.526  13.876  1.00 43.34
ATOM   1676  HH  TYR A 110     -14.429  12.729  13.721  1.00 13.10
ATOM   1677  C   TYR A 110     -13.243  10.996   6.714  1.00 52.01
ATOM   1678  O   TYR A 110     -14.078  11.899   6.706  1.00  4.13
ATOM   1679  N   ALA A 111     -12.728  10.500   5.619  1.00 23.54
ATOM   1680  H   ALA A 111     -11.969   9.877   5.681  1.00  4.32
ATOM   1681  CA  ALA A 111     -13.243  10.875   4.314  1.00 34.35
ATOM   1682  HA  ALA A 111     -13.175  11.949   4.227  1.00 31.21
ATOM   1683  CB  ALA A 111     -12.413  10.235   3.210  1.00 71.14
ATOM   1684 1HB  ALA A 111     -12.783  10.555   2.247  1.00 55.30
ATOM   1685 2HB  ALA A 111     -12.487   9.160   3.283  1.00 41.02
ATOM   1686 3HB  ALA A 111     -11.380  10.533   3.316  1.00 64.22
ATOM   1687  C   ALA A 111     -14.721  10.457   4.186  1.00  5.54
ATOM   1688  O   ALA A 111     -15.526  11.160   3.575  1.00 32.02
ATOM   1689  N   ASN A 112     -15.056   9.311   4.769  1.00 42.13
ATOM   1690  H   ASN A 112     -14.354   8.793   5.219  1.00 24.34
ATOM   1691  CA  ASN A 112     -16.421   8.795   4.733  1.00 35.34
ATOM   1692  HA  ASN A 112     -16.816   8.971   3.747  1.00 42.44
ATOM   1693  CB  ASN A 112     -16.426   7.270   5.009  1.00 71.25
ATOM   1694 1HB  ASN A 112     -15.637   6.815   4.430  1.00 23.24
ATOM   1695 2HB  ASN A 112     -16.211   7.116   6.056  1.00 33.51
ATOM   1696  CG  ASN A 112     -17.743   6.525   4.667  1.00  3.31
ATOM   1697  OD1 ASN A 112     -17.713   5.347   4.336  1.00 30.51
ATOM   1698  ND2 ASN A 112     -18.886   7.179   4.730  1.00 41.14
ATOM   1699 2HD2 ASN A 112     -18.887   8.131   4.989  1.00 24.42
ATOM   1700 1HD2 ASN A 112     -19.696   6.681   4.505  1.00 30.55
ATOM   1701  C   ASN A 112     -17.316   9.526   5.752  1.00 73.44
ATOM   1702  O   ASN A 112     -18.483   9.808   5.468  1.00  2.11
ATOM   1703  N   THR A 113     -16.788   9.808   6.917  1.00 71.33
ATOM   1704  H   THR A 113     -15.849   9.581   7.105  1.00 33.54
ATOM   1705  CA  THR A 113     -17.554  10.459   7.961  1.00 34.51
ATOM   1706  HA  THR A 113     -18.188  11.192   7.486  1.00 71.03
ATOM   1707  CB  THR A 113     -18.466   9.429   8.728  1.00 12.02
ATOM   1708  HB  THR A 113     -19.097   8.947   7.996  1.00 71.24
ATOM   1709  OG1 THR A 113     -19.320  10.094   9.678  1.00 44.13
ATOM   1710  HG1 THR A 113     -18.791  10.502  10.376  1.00 14.31
ATOM   1711  CG2 THR A 113     -17.640   8.360   9.446  1.00 15.45
ATOM   1712 1HG2 THR A 113     -16.986   8.834  10.162  1.00  2.22
ATOM   1713 2HG2 THR A 113     -17.051   7.816   8.725  1.00 21.34
ATOM   1714 3HG2 THR A 113     -18.303   7.679   9.960  1.00 22.24
ATOM   1715  C   THR A 113     -16.619  11.186   8.932  1.00 32.31
ATOM   1716  O   THR A 113     -15.474  10.799   9.105  1.00 53.45
ATOM   1717  N   HIS A 114     -17.119  12.212   9.555  1.00 62.45
ATOM   1718  H   HIS A 114     -18.067  12.451   9.491  1.00 31.41
ATOM   1719  CA  HIS A 114     -16.347  13.026  10.452  1.00 44.14
ATOM   1720  HA  HIS A 114     -15.368  12.571  10.509  1.00 22.12
ATOM   1721  CB  HIS A 114     -16.192  14.479   9.919  1.00 60.33
ATOM   1722 1HB  HIS A 114     -15.735  15.084  10.688  1.00 14.44
ATOM   1723 2HB  HIS A 114     -15.535  14.461   9.062  1.00 40.11
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ATOM   1724  CG  HIS A 114     -17.474  15.171   9.510  1.00 43.23
ATOM   1725  ND1 HIS A 114     -18.001  15.101   8.236  1.00  5.15
ATOM   1726  CD2 HIS A 114     -18.313  15.974  10.213  1.00 62.11
ATOM   1727  HD1 HIS A 114     -17.620  14.584   7.497  1.00 61.42
ATOM   1728  CE1 HIS A 114     -19.109  15.844   8.204  1.00 42.02
ATOM   1729  NE2 HIS A 114     -19.348  16.399   9.373  1.00  5.04
ATOM   1730  HD2 HIS A 114     -18.208  16.246  11.253  1.00 45.25
ATOM   1731  HE1 HIS A 114     -19.729  15.974   7.329  1.00 74.14
ATOM   1732  C   HIS A 114     -16.945  12.975  11.834  1.00 15.55
ATOM   1733  O   HIS A 114     -18.174  13.134  11.930  1.00 11.14
TER    1734      HIS A 114
ENDMDL
MODEL       13
ATOM      1  N   MET A   1     -12.272 -13.208  13.177  1.00 11.21
ATOM      2  CA  MET A   1     -12.504 -12.817  11.784  1.00 34.25
ATOM      3  HA  MET A   1     -12.631 -13.706  11.183  1.00 43.32
ATOM      4  CB  MET A   1     -13.735 -11.898  11.662  1.00 61.51
ATOM      5 1HB  MET A   1     -13.515 -10.961  12.152  1.00 64.33
ATOM      6 2HB  MET A   1     -13.920 -11.707  10.616  1.00 43.53
ATOM      7  CG  MET A   1     -15.006 -12.465  12.278  1.00 74.24
ATOM      8 1HG  MET A   1     -14.900 -12.465  13.352  1.00 70.15
ATOM      9 2HG  MET A   1     -15.842 -11.841  11.997  1.00 11.04
ATOM     10  SD  MET A   1     -15.330 -14.147  11.738  1.00 31.21
ATOM     11  CE  MET A   1     -16.904 -14.475  12.548  1.00  1.31
ATOM     12 1HE  MET A   1     -17.638 -13.758  12.212  1.00 70.12
ATOM     13 2HE  MET A   1     -16.783 -14.391  13.618  1.00  3.33
ATOM     14 3HE  MET A   1     -17.235 -15.472  12.302  1.00 73.52
ATOM     15  C   MET A   1     -11.286 -12.084  11.348  1.00 52.52
ATOM     16  O   MET A   1     -10.543 -11.635  12.208  1.00 12.31
ATOM     17  N   ASP A   2     -11.074 -11.970  10.062  1.00 21.31
ATOM     18  H   ASP A   2     -11.692 -12.319   9.381  1.00  3.33
ATOM     19  CA  ASP A   2      -9.917 -11.283   9.516  1.00  3.41
ATOM     20  HA  ASP A   2      -9.736 -10.418  10.138  1.00 72.32
ATOM     21  CB  ASP A   2      -8.660 -12.201   9.523  1.00 24.25
ATOM     22 1HB  ASP A   2      -8.375 -12.401  10.546  1.00 71.32
ATOM     23 2HB  ASP A   2      -8.905 -13.134   9.038  1.00 60.12
ATOM     24  CG  ASP A   2      -7.465 -11.584   8.811  1.00 63.24
ATOM     25  OD1 ASP A   2      -7.090 -10.434   9.124  1.00 11.21
ATOM     26  OD2 ASP A   2      -6.956 -12.196   7.884  1.00 52.54
ATOM     27  C   ASP A   2     -10.255 -10.798   8.116  1.00 71.32
ATOM     28  O   ASP A   2     -11.259 -11.230   7.547  1.00 12.22
ATOM     29  N   LYS A   3      -9.440  -9.919   7.595  1.00 33.34
ATOM     30  H   LYS A   3      -8.633  -9.707   8.119  1.00 44.21
ATOM     31  CA  LYS A   3      -9.623  -9.301   6.296  1.00  3.11
ATOM     32  HA  LYS A   3     -10.670  -9.344   6.037  1.00 45.31
ATOM     33  CB  LYS A   3      -9.204  -7.826   6.395  1.00  2.22
ATOM     34 1HB  LYS A   3      -9.203  -7.398   5.403  1.00 53.34
ATOM     35 2HB  LYS A   3      -9.921  -7.298   7.006  1.00 71.23
ATOM     36  CG  LYS A   3      -7.816  -7.625   7.003  1.00 24.01
ATOM     37 1HG  LYS A   3      -7.826  -7.973   8.025  1.00 14.33
ATOM     38 2HG  LYS A   3      -7.102  -8.206   6.437  1.00 31.03
ATOM     39  CD  LYS A   3      -7.384  -6.167   6.994  1.00 54.42
ATOM     40 1HD  LYS A   3      -7.324  -5.828   5.970  1.00 24.43
ATOM     41 2HD  LYS A   3      -8.120  -5.581   7.526  1.00 42.12
ATOM     42  CE  LYS A   3      -6.019  -5.980   7.662  1.00 11.32
ATOM     43 1HE  LYS A   3      -5.707  -4.955   7.536  1.00  1.02
ATOM     44 2HE  LYS A   3      -6.118  -6.196   8.716  1.00 60.22
ATOM     45  NZ  LYS A   3      -4.984  -6.870   7.079  1.00 54.32
ATOM     46 1HZ  LYS A   3      -5.059  -6.889   6.040  1.00 11.42
ATOM     47 2HZ  LYS A   3      -5.105  -7.857   7.400  1.00 35.33
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ATOM     48 3HZ  LYS A   3      -4.011  -6.582   7.315  1.00 10.43
ATOM     49  C   LYS A   3      -8.792 -10.020   5.214  1.00 71.13
ATOM     50  O   LYS A   3      -8.665  -9.537   4.067  1.00 32.21
ATOM     51  N   GLY A   4      -8.219 -11.146   5.575  1.00 71.12
ATOM     52  H   GLY A   4      -8.289 -11.476   6.500  1.00 42.41
ATOM     53  CA  GLY A   4      -7.410 -11.892   4.660  1.00  0.22
ATOM     54 1HA  GLY A   4      -7.415 -12.935   4.941  1.00 11.01
ATOM     55 2HA  GLY A   4      -7.798 -11.781   3.659  1.00 41.51
ATOM     56  C   GLY A   4      -6.015 -11.363   4.700  1.00 13.13
ATOM     57  O   GLY A   4      -5.536 -10.785   3.733  1.00 31.44
ATOM     58  N   THR A   5      -5.409 -11.481   5.834  1.00 74.25
ATOM     59  H   THR A   5      -5.875 -11.927   6.587  1.00 41.22
ATOM     60  CA  THR A   5      -4.096 -10.981   6.066  1.00 50.14
ATOM     61  HA  THR A   5      -3.908 -10.156   5.393  1.00 13.23
ATOM     62  CB  THR A   5      -4.021 -10.438   7.511  1.00 20.30
ATOM     63  HB  THR A   5      -4.163 -11.266   8.194  1.00 51.42
ATOM     64  OG1 THR A   5      -5.079  -9.472   7.721  1.00 34.33
ATOM     65  HG1 THR A   5      -5.771  -9.958   8.218  1.00 52.41
ATOM     66  CG2 THR A   5      -2.678  -9.778   7.789  1.00 43.42
ATOM     67 1HG2 THR A   5      -2.540  -8.948   7.112  1.00 62.12
ATOM     68 2HG2 THR A   5      -1.885 -10.496   7.642  1.00 74.53
ATOM     69 3HG2 THR A   5      -2.655  -9.420   8.807  1.00 42.50
ATOM     70  C   THR A   5      -3.033 -12.076   5.871  1.00 11.23
ATOM     71  O   THR A   5      -2.886 -12.962   6.701  1.00 52.50
ATOM     72  N   GLN A   6      -2.301 -12.013   4.775  1.00 61.34
ATOM     73  H   GLN A   6      -2.495 -11.334   4.089  1.00 31.15
ATOM     74  CA  GLN A   6      -1.206 -12.943   4.570  1.00 53.51
ATOM     75  HA  GLN A   6      -1.051 -13.500   5.480  1.00 32.13
ATOM     76  CB  GLN A   6      -1.514 -13.929   3.425  1.00 74.13
ATOM     77 1HB  GLN A   6      -1.760 -13.358   2.541  1.00 33.34
ATOM     78 2HB  GLN A   6      -0.623 -14.503   3.220  1.00 51.54
ATOM     79  CG  GLN A   6      -2.663 -14.903   3.682  1.00 41.12
ATOM     80 1HG  GLN A   6      -3.552 -14.338   3.914  1.00 31.12
ATOM     81 2HG  GLN A   6      -2.826 -15.471   2.777  1.00 31.33
ATOM     82  CD  GLN A   6      -2.397 -15.880   4.827  1.00 75.33
ATOM     83  OE1 GLN A   6      -3.309 -16.309   5.505  1.00 64.12
ATOM     84  NE2 GLN A   6      -1.153 -16.270   5.022  1.00 30.13
ATOM     85 2HE2 GLN A   6      -0.447 -15.932   4.437  1.00 24.22
ATOM     86 1HE2 GLN A   6      -1.012 -16.889   5.768  1.00 53.11
ATOM     87  C   GLN A   6       0.048 -12.180   4.219  1.00  4.11
ATOM     88  O   GLN A   6       0.005 -11.221   3.449  1.00 62.24
ATOM     89  N   TYR A   7       1.142 -12.571   4.812  1.00  3.11
ATOM     90  H   TYR A   7       1.104 -13.262   5.506  1.00 10.12
ATOM     91  CA  TYR A   7       2.438 -12.042   4.473  1.00 72.51
ATOM     92  HA  TYR A   7       2.291 -11.439   3.589  1.00  3.52
ATOM     93  CB  TYR A   7       3.028 -11.156   5.600  1.00 11.53
ATOM     94 1HB  TYR A   7       4.004 -10.809   5.302  1.00 55.13
ATOM     95 2HB  TYR A   7       2.384 -10.297   5.729  1.00 24.21
ATOM     96  CG  TYR A   7       3.185 -11.820   6.960  1.00 40.15
ATOM     97  CD1 TYR A   7       2.126 -11.865   7.860  1.00 71.44
ATOM     98  HD1 TYR A   7       1.178 -11.433   7.576  1.00 72.33
ATOM     99  CE1 TYR A   7       2.268 -12.453   9.101  1.00 23.32
ATOM    100  HE1 TYR A   7       1.433 -12.480   9.786  1.00 42.31
ATOM    101  CZ  TYR A   7       3.478 -13.007   9.458  1.00  4.41
ATOM    102  CE2 TYR A   7       4.545 -12.975   8.585  1.00 15.24
ATOM    103  HE2 TYR A   7       5.494 -13.409   8.867  1.00 13.14
ATOM    104  CD2 TYR A   7       4.397 -12.383   7.348  1.00 40.24
ATOM    105  HD2 TYR A   7       5.232 -12.354   6.662  1.00 62.41
ATOM    106  OH  TYR A   7       3.622 -13.595  10.693  1.00 40.43
ATOM    107  HH  TYR A   7       4.457 -13.333  11.085  1.00 23.13
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ATOM    108  C   TYR A   7       3.368 -13.179   4.083  1.00 45.11
ATOM    109  O   TYR A   7       3.418 -14.197   4.777  1.00 14.24
ATOM    110  N   LYS A   8       4.048 -13.049   2.980  1.00 65.13
ATOM    111  H   LYS A   8       3.891 -12.265   2.402  1.00 13.32
ATOM    112  CA  LYS A   8       5.023 -14.037   2.575  1.00 72.11
ATOM    113  HA  LYS A   8       5.481 -14.436   3.468  1.00 12.55
ATOM    114  CB  LYS A   8       4.384 -15.188   1.779  1.00 62.01
ATOM    115 1HB  LYS A   8       3.545 -15.582   2.335  1.00 62.23
ATOM    116 2HB  LYS A   8       4.030 -14.802   0.835  1.00 73.22
ATOM    117  CG  LYS A   8       5.371 -16.317   1.494  1.00 74.53
ATOM    118 1HG  LYS A   8       6.263 -15.895   1.055  1.00 22.13
ATOM    119 2HG  LYS A   8       5.629 -16.795   2.427  1.00 13.41
ATOM    120  CD  LYS A   8       4.815 -17.356   0.543  1.00 71.24
ATOM    121 1HD  LYS A   8       3.930 -17.794   0.979  1.00  2.34
ATOM    122 2HD  LYS A   8       4.559 -16.878  -0.393  1.00 31.12
ATOM    123  CE  LYS A   8       5.839 -18.462   0.272  1.00  0.22
ATOM    124 1HE  LYS A   8       6.038 -18.983   1.197  1.00 10.43
ATOM    125 2HE  LYS A   8       5.419 -19.155  -0.442  1.00 33.35
ATOM    126  NZ  LYS A   8       7.125 -17.935  -0.262  1.00 33.05
ATOM    127 1HZ  LYS A   8       7.664 -17.362   0.430  1.00 51.24
ATOM    128 2HZ  LYS A   8       6.976 -17.183  -0.976  1.00 40.33
ATOM    129 3HZ  LYS A   8       7.772 -18.645  -0.645  1.00 44.04
ATOM    130  C   LYS A   8       6.092 -13.377   1.727  1.00  2.14
ATOM    131  O   LYS A   8       5.777 -12.645   0.819  1.00 44.14
ATOM    132  N   ASP A   9       7.351 -13.626   2.072  1.00 41.35
ATOM    133  H   ASP A   9       7.506 -14.192   2.854  1.00 61.21
ATOM    134  CA  ASP A   9       8.557 -13.136   1.334  1.00 73.12
ATOM    135  HA  ASP A   9       9.441 -13.445   1.869  1.00 31.11
ATOM    136  CB  ASP A   9       8.615 -13.711  -0.112  1.00 55.11
ATOM    137 1HB  ASP A   9       7.901 -13.177  -0.722  1.00 75.44
ATOM    138 2HB  ASP A   9       9.602 -13.534  -0.512  1.00 10.20
ATOM    139  CG  ASP A   9       8.300 -15.181  -0.233  1.00 64.20
ATOM    140  OD1 ASP A   9       7.562 -15.559  -1.172  1.00 64.22
ATOM    141  OD2 ASP A   9       8.707 -15.992   0.632  1.00 40.42
ATOM    142  C   ASP A   9       8.534 -11.615   1.208  1.00 12.53
ATOM    143  O   ASP A   9       9.001 -11.053   0.208  1.00 31.43
ATOM    144  N   GLY A  10       8.059 -10.944   2.227  1.00 70.25
ATOM    145  H   GLY A  10       7.752 -11.434   3.016  1.00  2.44
ATOM    146  CA  GLY A  10       7.977  -9.500   2.176  1.00  1.03
ATOM    147 1HA  GLY A  10       7.821  -9.124   3.177  1.00 54.43
ATOM    148 2HA  GLY A  10       8.909  -9.108   1.795  1.00 74.14
ATOM    149  C   GLY A  10       6.836  -9.016   1.280  1.00  4.23
ATOM    150  O   GLY A  10       6.826  -7.893   0.845  1.00 41.33
ATOM    151  N   TYR A  11       5.913  -9.878   0.997  1.00 70.15
ATOM    152  H   TYR A  11       5.984 -10.791   1.343  1.00 72.00
ATOM    153  CA  TYR A  11       4.761  -9.553   0.192  1.00  2.45
ATOM    154  HA  TYR A  11       4.837  -8.524  -0.126  1.00 44.40
ATOM    155  CB  TYR A  11       4.731 -10.477  -1.042  1.00 45.20
ATOM    156 1HB  TYR A  11       5.679 -10.395  -1.552  1.00 14.11
ATOM    157 2HB  TYR A  11       4.615 -11.494  -0.697  1.00 25.10
ATOM    158  CG  TYR A  11       3.655 -10.202  -2.066  1.00 62.02
ATOM    159  CD1 TYR A  11       3.672  -9.045  -2.832  1.00  5.34
ATOM    160  HD1 TYR A  11       4.450  -8.317  -2.659  1.00  3.24
ATOM    161  CE1 TYR A  11       2.715  -8.814  -3.799  1.00 62.23
ATOM    162  HE1 TYR A  11       2.745  -7.908  -4.386  1.00 32.53
ATOM    163  CZ  TYR A  11       1.725  -9.748  -4.006  1.00 53.21
ATOM    164  CE2 TYR A  11       1.688 -10.899  -3.261  1.00 61.24
ATOM    165  HE2 TYR A  11       0.908 -11.627  -3.428  1.00 61.15
ATOM    166  CD2 TYR A  11       2.651 -11.124  -2.302  1.00 13.04
ATOM    167  HD2 TYR A  11       2.620 -12.031  -1.713  1.00 50.42
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ATOM    168  OH  TYR A  11       0.770  -9.535  -4.967  1.00 30.25
ATOM    169  HH  TYR A  11       1.184  -9.224  -5.775  1.00 40.05
ATOM    170  C   TYR A  11       3.516  -9.698   1.064  1.00  0.01
ATOM    171  O   TYR A  11       3.289 -10.746   1.663  1.00 13.23
ATOM    172  N   TYR A  12       2.754  -8.646   1.150  1.00 23.24
ATOM    173  H   TYR A  12       2.985  -7.870   0.592  1.00  1.22
ATOM    174  CA  TYR A  12       1.583  -8.586   2.001  1.00 25.45
ATOM    175  HA  TYR A  12       1.562  -9.454   2.644  1.00 64.34
ATOM    176  CB  TYR A  12       1.665  -7.326   2.869  1.00 44.24
ATOM    177 1HB  TYR A  12       2.626  -7.287   3.359  1.00 32.03
ATOM    178 2HB  TYR A  12       1.585  -6.480   2.206  1.00 71.34
ATOM    179  CG  TYR A  12       0.603  -7.154   3.946  1.00 45.34
ATOM    180  CD1 TYR A  12       0.670  -7.861   5.135  1.00 15.34
ATOM    181  HD1 TYR A  12       1.465  -8.578   5.271  1.00 40.44
ATOM    182  CE1 TYR A  12      -0.257  -7.664   6.141  1.00  1.23
ATOM    183  HE1 TYR A  12      -0.185  -8.227   7.060  1.00 12.41
ATOM    184  CZ  TYR A  12      -1.276  -6.753   5.962  1.00  5.44
ATOM    185  CE2 TYR A  12      -1.364  -6.040   4.788  1.00 71.22
ATOM    186  HE2 TYR A  12      -2.160  -5.324   4.646  1.00 73.44
ATOM    187  CD2 TYR A  12      -0.429  -6.236   3.792  1.00 21.02
ATOM    188  HD2 TYR A  12      -0.501  -5.676   2.870  1.00 24.34
ATOM    189  OH  TYR A  12      -2.206  -6.540   6.982  1.00 73.51
ATOM    190  HH  TYR A  12      -1.688  -6.463   7.792  1.00 22.54
ATOM    191  C   TYR A  12       0.345  -8.542   1.143  1.00 41.03
ATOM    192  O   TYR A  12       0.238  -7.707   0.241  1.00 40.41
ATOM    193  N   ILE A  13      -0.559  -9.430   1.408  1.00  2.32
ATOM    194  H   ILE A  13      -0.395 -10.073   2.136  1.00 64.00
ATOM    195  CA  ILE A  13      -1.802  -9.511   0.696  1.00 23.21
ATOM    196  HA  ILE A  13      -1.836  -8.760  -0.079  1.00 54.31
ATOM    197  CB  ILE A  13      -1.986 -10.922   0.065  1.00 13.31
ATOM    198  HB  ILE A  13      -2.100 -11.636   0.868  1.00 13.42
ATOM    199  CG2 ILE A  13      -3.251 -10.963  -0.795  1.00 73.13
ATOM    200 1HG2 ILE A  13      -3.172 -10.236  -1.590  1.00  4.23
ATOM    201 2HG2 ILE A  13      -4.111 -10.730  -0.183  1.00 71.21
ATOM    202 3HG2 ILE A  13      -3.368 -11.949  -1.219  1.00 60.22
ATOM    203  CG1 ILE A  13      -0.759 -11.303  -0.772  1.00 15.24
ATOM    204 1HG1 ILE A  13      -0.696 -10.638  -1.620  1.00 24.14
ATOM    205 2HG1 ILE A  13       0.127 -11.188  -0.166  1.00 51.22
ATOM    206  CD1 ILE A  13      -0.785 -12.721  -1.304  1.00 32.25
ATOM    207 1HD1 ILE A  13       0.123 -12.905  -1.858  1.00  2.31
ATOM    208 2HD1 ILE A  13      -1.638 -12.851  -1.952  1.00 33.13
ATOM    209 3HD1 ILE A  13      -0.848 -13.414  -0.477  1.00 64.21
ATOM    210  C   ILE A  13      -2.908  -9.304   1.704  1.00 13.22
ATOM    211  O   ILE A  13      -2.872  -9.915   2.781  1.00 61.13
ATOM    212  N   THR A  14      -3.847  -8.429   1.411  1.00  4.23
ATOM    213  H   THR A  14      -3.775  -7.875   0.602  1.00  3.31
ATOM    214  CA  THR A  14      -4.965  -8.252   2.287  1.00 32.13
ATOM    215  HA  THR A  14      -5.293  -9.238   2.580  1.00 35.43
ATOM    216  CB  THR A  14      -4.566  -7.461   3.567  1.00 22.53
ATOM    217  HB  THR A  14      -3.583  -7.787   3.876  1.00 64.52
ATOM    218  OG1 THR A  14      -5.494  -7.752   4.610  1.00 33.10
ATOM    219  HG1 THR A  14      -5.648  -8.708   4.551  1.00 52.22
ATOM    220  CG2 THR A  14      -4.543  -5.950   3.320  1.00  0.13
ATOM    221 1HG2 THR A  14      -4.287  -5.438   4.237  1.00 65.24
ATOM    222 2HG2 THR A  14      -5.519  -5.626   2.989  1.00 25.30
ATOM    223 3HG2 THR A  14      -3.812  -5.720   2.559  1.00  1.34
ATOM    224  C   THR A  14      -6.121  -7.571   1.544  1.00 11.31
ATOM    225  O   THR A  14      -5.919  -6.988   0.465  1.00 25.44
ATOM    226  N   THR A  15      -7.312  -7.649   2.092  1.00  5.03
ATOM    227  H   THR A  15      -7.452  -8.081   2.964  1.00 54.34
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ATOM    228  CA  THR A  15      -8.458  -7.055   1.478  1.00 51.13
ATOM    229  HA  THR A  15      -8.170  -6.606   0.539  1.00 61.43
ATOM    230  CB  THR A  15      -9.543  -8.120   1.224  1.00 72.42
ATOM    231  HB  THR A  15     -10.058  -8.332   2.150  1.00 32.13
ATOM    232  OG1 THR A  15      -8.916  -9.320   0.731  1.00 10.32
ATOM    233  HG1 THR A  15      -8.577  -9.721   1.543  1.00 65.30
ATOM    234  CG2 THR A  15     -10.544  -7.628   0.185  1.00 72.41
ATOM    235 1HG2 THR A  15     -11.302  -8.381   0.027  1.00 63.41
ATOM    236 2HG2 THR A  15     -10.027  -7.442  -0.744  1.00 54.22
ATOM    237 3HG2 THR A  15     -11.005  -6.715   0.531  1.00 50.43
ATOM    238  C   THR A  15      -9.010  -6.002   2.419  1.00 55.11
ATOM    239  O   THR A  15      -9.163  -6.251   3.607  1.00  2.04
ATOM    240  N   LEU A  16      -9.270  -4.844   1.918  1.00  3.50
ATOM    241  H   LEU A  16      -9.115  -4.662   0.962  1.00 72.23
ATOM    242  CA  LEU A  16      -9.821  -3.803   2.720  1.00  2.55
ATOM    243  HA  LEU A  16      -9.960  -4.162   3.729  1.00 74.32
ATOM    244  CB  LEU A  16      -8.890  -2.596   2.713  1.00 35.33
ATOM    245 1HB  LEU A  16      -7.864  -2.933   2.734  1.00 13.32
ATOM    246 2HB  LEU A  16      -9.079  -2.094   1.774  1.00 51.23
ATOM    247  CG  LEU A  16      -9.102  -1.575   3.827  1.00 53.22
ATOM    248  HG  LEU A  16     -10.134  -1.260   3.808  1.00 22.31
ATOM    249  CD1 LEU A  16      -8.835  -2.201   5.192  1.00 60.01
ATOM    250 1HD1 LEU A  16      -9.530  -3.009   5.367  1.00 53.22
ATOM    251 2HD1 LEU A  16      -8.950  -1.453   5.963  1.00 32.21
ATOM    252 3HD1 LEU A  16      -7.827  -2.588   5.215  1.00 73.31
ATOM    253  CD2 LEU A  16      -8.218  -0.357   3.608  1.00 73.21
ATOM    254 1HD2 LEU A  16      -7.183  -0.663   3.600  1.00 61.04
ATOM    255 2HD2 LEU A  16      -8.378   0.352   4.406  1.00  3.53
ATOM    256 3HD2 LEU A  16      -8.464   0.103   2.662  1.00 31.31
ATOM    257  C   LEU A  16     -11.141  -3.438   2.097  1.00 70.13
ATOM    258  O   LEU A  16     -11.185  -3.094   0.914  1.00 72.23
ATOM    259  N   ASN A  17     -12.214  -3.522   2.841  1.00 44.42
ATOM    260  H   ASN A  17     -12.143  -3.756   3.788  1.00 71.01
ATOM    261  CA  ASN A  17     -13.511  -3.254   2.247  1.00  5.01
ATOM    262  HA  ASN A  17     -13.418  -3.541   1.210  1.00 32.35
ATOM    263  CB  ASN A  17     -14.652  -4.076   2.883  1.00 44.45
ATOM    264 1HB  ASN A  17     -14.349  -5.109   2.952  1.00 61.32
ATOM    265 2HB  ASN A  17     -14.849  -3.696   3.875  1.00 42.04
ATOM    266  CG  ASN A  17     -15.956  -4.006   2.069  1.00 12.13
ATOM    267  OD1 ASN A  17     -16.203  -4.842   1.201  1.00 22.10
ATOM    268  ND2 ASN A  17     -16.778  -3.019   2.331  1.00 60.23
ATOM    269 2HD2 ASN A  17     -16.521  -2.373   3.024  1.00 54.41
ATOM    270 1HD2 ASN A  17     -17.600  -2.963   1.803  1.00 54.31
ATOM    271  C   ASN A  17     -13.829  -1.772   2.266  1.00 14.20
ATOM    272  O   ASN A  17     -14.565  -1.287   3.127  1.00 41.54
ATOM    273  N   TYR A  18     -13.168  -1.059   1.392  1.00  0.50
ATOM    274  H   TYR A  18     -12.468  -1.506   0.865  1.00 43.11
ATOM    275  CA  TYR A  18     -13.425   0.339   1.150  1.00 53.41
ATOM    276  HA  TYR A  18     -14.443   0.537   1.455  1.00  1.35
ATOM    277  CB  TYR A  18     -12.467   1.282   1.902  1.00 41.02
ATOM    278 1HB  TYR A  18     -11.451   0.981   1.691  1.00 51.43
ATOM    279 2HB  TYR A  18     -12.611   2.286   1.532  1.00 53.22
ATOM    280  CG  TYR A  18     -12.622   1.311   3.408  1.00  0.45
ATOM    281  CD1 TYR A  18     -13.798   1.762   4.001  1.00 64.33
ATOM    282  HD1 TYR A  18     -14.619   2.071   3.370  1.00 22.22
ATOM    283  CE1 TYR A  18     -13.926   1.815   5.376  1.00 73.03
ATOM    284  HE1 TYR A  18     -14.846   2.168   5.819  1.00  1.02
ATOM    285  CZ  TYR A  18     -12.875   1.414   6.171  1.00 41.23
ATOM    286  CE2 TYR A  18     -11.705   0.967   5.604  1.00 11.43
ATOM    287  HE2 TYR A  18     -10.882   0.654   6.228  1.00 43.11
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ATOM    288  CD2 TYR A  18     -11.586   0.923   4.234  1.00 54.22
ATOM    289  HD2 TYR A  18     -10.668   0.580   3.782  1.00  5.12
ATOM    290  OH  TYR A  18     -12.989   1.467   7.539  1.00 14.32
ATOM    291  HH  TYR A  18     -12.158   1.795   7.895  1.00 45.33
ATOM    292  C   TYR A  18     -13.320   0.587  -0.331  1.00 61.22
ATOM    293  O   TYR A  18     -12.685  -0.202  -1.052  1.00 13.34
ATOM    294  N   ASN A  19     -13.906   1.673  -0.775  1.00 64.32
ATOM    295  H   ASN A  19     -14.304   2.279  -0.117  1.00  4.41
ATOM    296  CA  ASN A  19     -13.962   2.009  -2.192  1.00  5.44
ATOM    297  HA  ASN A  19     -14.341   1.147  -2.720  1.00 10.15
ATOM    298  CB  ASN A  19     -14.910   3.194  -2.432  1.00 40.23
ATOM    299 1HB  ASN A  19     -15.894   2.941  -2.066  1.00 70.42
ATOM    300 2HB  ASN A  19     -14.543   4.054  -1.892  1.00 21.23
ATOM    301  CG  ASN A  19     -15.029   3.566  -3.906  1.00 61.42
ATOM    302  OD1 ASN A  19     -14.229   4.334  -4.423  1.00 71.34
ATOM    303  ND2 ASN A  19     -16.028   3.051  -4.580  1.00 74.54
ATOM    304 2HD2 ASN A  19     -16.674   2.446  -4.140  1.00 14.13
ATOM    305 1HD2 ASN A  19     -16.118   3.306  -5.521  1.00 41.24
ATOM    306  C   ASN A  19     -12.569   2.335  -2.725  1.00 55.21
ATOM    307  O   ASN A  19     -11.800   3.053  -2.074  1.00 23.01
ATOM    308  N   PHE A  20     -12.263   1.802  -3.901  1.00  3.14
ATOM    309  H   PHE A  20     -12.927   1.249  -4.366  1.00  1.23
ATOM    310  CA  PHE A  20     -10.965   1.959  -4.554  1.00 13.13
ATOM    311  HA  PHE A  20     -10.259   1.420  -3.940  1.00 35.44
ATOM    312  CB  PHE A  20     -11.002   1.271  -5.924  1.00  2.12
ATOM    313 1HB  PHE A  20     -11.118   0.212  -5.743  1.00 50.53
ATOM    314 2HB  PHE A  20     -11.859   1.604  -6.487  1.00 20.53
ATOM    315  CG  PHE A  20      -9.764   1.427  -6.769  1.00 34.11
ATOM    316  CD1 PHE A  20      -8.618   0.711  -6.479  1.00  3.23
ATOM    317  HD1 PHE A  20      -8.606   0.050  -5.625  1.00 63.14
ATOM    318  CE1 PHE A  20      -7.493   0.836  -7.266  1.00 34.32
ATOM    319  HE1 PHE A  20      -6.603   0.272  -7.030  1.00  2.42
ATOM    320  CZ  PHE A  20      -7.507   1.684  -8.354  1.00 25.30
ATOM    321  HZ  PHE A  20      -6.626   1.781  -8.971  1.00 61.42
ATOM    322  CE2 PHE A  20      -8.641   2.403  -8.655  1.00  1.12
ATOM    323  HE2 PHE A  20      -8.651   3.067  -9.508  1.00 41.41
ATOM    324  CD2 PHE A  20      -9.764   2.273  -7.869  1.00 32.44
ATOM    325  HD2 PHE A  20     -10.654   2.837  -8.105  1.00 22.14
ATOM    326  C   PHE A  20     -10.477   3.432  -4.649  1.00 33.25
ATOM    327  O   PHE A  20      -9.281   3.694  -4.563  1.00 33.02
ATOM    328  N   ASN A  21     -11.391   4.377  -4.784  1.00 20.24
ATOM    329  H   ASN A  21     -12.345   4.139  -4.807  1.00 44.50
ATOM    330  CA  ASN A  21     -11.004   5.787  -4.878  1.00  4.43
ATOM    331  HA  ASN A  21     -10.244   5.858  -5.641  1.00 44.34
ATOM    332  CB  ASN A  21     -12.200   6.668  -5.285  1.00 34.12
ATOM    333 1HB  ASN A  21     -12.558   6.341  -6.250  1.00  1.41
ATOM    334 2HB  ASN A  21     -12.989   6.536  -4.558  1.00 64.31
ATOM    335  CG  ASN A  21     -11.881   8.172  -5.387  1.00 60.04
ATOM    336  OD1 ASN A  21     -12.731   9.002  -5.125  1.00 30.14
ATOM    337  ND2 ASN A  21     -10.674   8.526  -5.789  1.00  1.21
ATOM    338 2HD2 ASN A  21     -10.008   7.843  -6.011  1.00 11.45
ATOM    339 1HD2 ASN A  21     -10.505   9.490  -5.840  1.00 45.24
ATOM    340  C   ASN A  21     -10.400   6.287  -3.557  1.00 63.21
ATOM    341  O   ASN A  21      -9.307   6.868  -3.548  1.00 63.23
ATOM    342  N   THR A  22     -11.076   6.013  -2.450  1.00  1.03
ATOM    343  H   THR A  22     -11.881   5.458  -2.505  1.00 30.10
ATOM    344  CA  THR A  22     -10.617   6.497  -1.164  1.00 11.25
ATOM    345  HA  THR A  22     -10.331   7.524  -1.342  1.00 52.43
ATOM    346  CB  THR A  22     -11.744   6.477  -0.057  1.00  4.22
ATOM    347  HB  THR A  22     -12.575   7.062  -0.426  1.00 42.13
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ATOM    348  OG1 THR A  22     -11.280   7.084   1.154  1.00 55.32
ATOM    349  HG1 THR A  22     -11.930   7.726   1.455  1.00 51.15
ATOM    350  CG2 THR A  22     -12.229   5.068   0.252  1.00  2.43
ATOM    351 1HG2 THR A  22     -11.402   4.477   0.617  1.00 45.52
ATOM    352 2HG2 THR A  22     -12.621   4.616  -0.646  1.00 54.10
ATOM    353 3HG2 THR A  22     -13.003   5.107   1.006  1.00  5.51
ATOM    354  C   THR A  22      -9.327   5.776  -0.714  1.00 33.53
ATOM    355  O   THR A  22      -8.404   6.415  -0.182  1.00 14.34
ATOM    356  N   VAL A  23      -9.225   4.467  -0.996  1.00 21.50
ATOM    357  H   VAL A  23      -9.942   3.977  -1.455  1.00  2.13
ATOM    358  CA  VAL A  23      -8.054   3.711  -0.618  1.00 72.24
ATOM    359  HA  VAL A  23      -7.854   3.943   0.417  1.00 23.32
ATOM    360  CB  VAL A  23      -8.255   2.179  -0.757  1.00 12.41
ATOM    361  HB  VAL A  23      -7.363   1.720  -0.370  1.00 55.23
ATOM    362  CG1 VAL A  23      -9.422   1.683   0.068  1.00 24.32
ATOM    363 1HG1 VAL A  23      -9.542   0.620  -0.087  1.00 13.45
ATOM    364 2HG1 VAL A  23     -10.323   2.196  -0.232  1.00 45.25
ATOM    365 3HG1 VAL A  23      -9.232   1.870   1.115  1.00 22.21
ATOM    366  CG2 VAL A  23      -8.414   1.764  -2.187  1.00 23.32
ATOM    367 1HG2 VAL A  23      -7.481   1.879  -2.718  1.00  3.44
ATOM    368 2HG2 VAL A  23      -9.150   2.416  -2.633  1.00 61.34
ATOM    369 3HG2 VAL A  23      -8.758   0.742  -2.231  1.00 63.20
ATOM    370  C   VAL A  23      -6.839   4.162  -1.426  1.00 44.33
ATOM    371  O   VAL A  23      -5.732   4.209  -0.900  1.00 51.41
ATOM    372  N   TYR A  24      -7.064   4.521  -2.699  1.00 41.53
ATOM    373  H   TYR A  24      -7.967   4.429  -3.070  1.00 75.14
ATOM    374  CA  TYR A  24      -6.005   5.017  -3.555  1.00 24.43
ATOM    375  HA  TYR A  24      -5.232   4.263  -3.594  1.00  0.51
ATOM    376  CB  TYR A  24      -6.529   5.275  -4.988  1.00  1.04
ATOM    377 1HB  TYR A  24      -6.777   4.330  -5.446  1.00 72.42
ATOM    378 2HB  TYR A  24      -7.423   5.879  -4.926  1.00 74.51
ATOM    379  CG  TYR A  24      -5.542   5.987  -5.905  1.00 61.05
ATOM    380  CD1 TYR A  24      -5.682   7.342  -6.187  1.00 53.44
ATOM    381  HD1 TYR A  24      -6.510   7.886  -5.757  1.00  1.53
ATOM    382  CE1 TYR A  24      -4.783   7.997  -7.004  1.00 40.51
ATOM    383  HE1 TYR A  24      -4.909   9.050  -7.211  1.00 71.21
ATOM    384  CZ  TYR A  24      -3.730   7.302  -7.554  1.00 23.24
ATOM    385  CE2 TYR A  24      -3.569   5.961  -7.291  1.00 64.13
ATOM    386  HE2 TYR A  24      -2.742   5.417  -7.724  1.00 21.20
ATOM    387  CD2 TYR A  24      -4.472   5.313  -6.471  1.00 20.12
ATOM    388  HD2 TYR A  24      -4.349   4.260  -6.268  1.00 23.42
ATOM    389  OH  TYR A  24      -2.829   7.955  -8.361  1.00 63.02
ATOM    390  HH  TYR A  24      -2.613   7.422  -9.130  1.00 42.33
ATOM    391  C   TYR A  24      -5.430   6.280  -2.966  1.00 44.24
ATOM    392  O   TYR A  24      -4.223   6.412  -2.837  1.00 30.15
ATOM    393  N   ASN A  25      -6.315   7.169  -2.557  1.00 62.55
ATOM    394  H   ASN A  25      -7.268   6.949  -2.656  1.00 40.12
ATOM    395  CA  ASN A  25      -5.927   8.448  -1.980  1.00 55.53
ATOM    396  HA  ASN A  25      -5.329   8.991  -2.696  1.00 14.52
ATOM    397  CB  ASN A  25      -7.179   9.270  -1.669  1.00 33.51
ATOM    398 1HB  ASN A  25      -7.770   9.361  -2.562  1.00 61.02
ATOM    399 2HB  ASN A  25      -7.762   8.715  -0.947  1.00  3.52
ATOM    400  CG  ASN A  25      -6.873  10.646  -1.076  1.00  2.44
ATOM    401  OD1 ASN A  25      -6.641  11.602  -1.791  1.00 64.44
ATOM    402  ND2 ASN A  25      -6.923  10.761   0.237  1.00 50.21
ATOM    403 2HD2 ASN A  25      -7.149   9.975   0.774  1.00 33.54
ATOM    404 1HD2 ASN A  25      -6.743  11.652   0.602  1.00 33.11
ATOM    405  C   ASN A  25      -5.150   8.241  -0.709  1.00 64.33
ATOM    406  O   ASN A  25      -4.058   8.768  -0.540  1.00 31.14
ATOM    407  N   ALA A  26      -5.702   7.428   0.153  1.00 54.35
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ATOM    408  H   ALA A  26      -6.552   7.011  -0.120  1.00 64.42
ATOM    409  CA  ALA A  26      -5.120   7.168   1.458  1.00 31.42
ATOM    410  HA  ALA A  26      -4.986   8.126   1.934  1.00 53.30
ATOM    411  CB  ALA A  26      -6.078   6.359   2.306  1.00  3.53
ATOM    412 1HB  ALA A  26      -7.031   6.867   2.353  1.00  4.23
ATOM    413 2HB  ALA A  26      -5.679   6.250   3.303  1.00 44.01
ATOM    414 3HB  ALA A  26      -6.215   5.387   1.859  1.00 55.24
ATOM    415  C   ALA A  26      -3.750   6.491   1.375  1.00 72.24
ATOM    416  O   ALA A  26      -2.808   6.931   2.020  1.00 34.01
ATOM    417  N   THR A  27      -3.647   5.465   0.561  1.00 42.40
ATOM    418  H   THR A  27      -4.442   5.142   0.087  1.00  0.54
ATOM    419  CA  THR A  27      -2.401   4.745   0.370  1.00  1.10
ATOM    420  HA  THR A  27      -2.040   4.414   1.332  1.00 65.54
ATOM    421  CB  THR A  27      -2.631   3.508  -0.521  1.00 40.51
ATOM    422  HB  THR A  27      -2.924   3.843  -1.506  1.00  4.25
ATOM    423  OG1 THR A  27      -3.685   2.717   0.035  1.00 53.04
ATOM    424  HG1 THR A  27      -4.491   2.935  -0.450  1.00  2.11
ATOM    425  CG2 THR A  27      -1.368   2.665  -0.631  1.00  4.24
ATOM    426 1HG2 THR A  27      -0.583   3.273  -1.058  1.00 60.40
ATOM    427 2HG2 THR A  27      -1.559   1.817  -1.273  1.00 34.31
ATOM    428 3HG2 THR A  27      -1.070   2.322   0.348  1.00  1.31
ATOM    429  C   THR A  27      -1.346   5.645  -0.271  1.00 51.42
ATOM    430  O   THR A  27      -0.192   5.680   0.172  1.00 71.14
ATOM    431  N   LEU A  28      -1.761   6.398  -1.287  1.00 34.25
ATOM    432  H   LEU A  28      -2.706   6.365  -1.557  1.00 23.03
ATOM    433  CA  LEU A  28      -0.868   7.276  -2.005  1.00 14.34
ATOM    434  HA  LEU A  28      -0.054   6.683  -2.390  1.00 23.01
ATOM    435  CB  LEU A  28      -1.611   7.925  -3.181  1.00  2.23
ATOM    436 1HB  LEU A  28      -1.943   7.125  -3.827  1.00 71.11
ATOM    437 2HB  LEU A  28      -2.489   8.415  -2.793  1.00 15.11
ATOM    438  CG  LEU A  28      -0.836   8.917  -4.046  1.00 73.32
ATOM    439  HG  LEU A  28      -0.390   9.662  -3.401  1.00 53.15
ATOM    440  CD1 LEU A  28       0.283   8.228  -4.799  1.00 24.42
ATOM    441 1HD1 LEU A  28      -0.130   7.464  -5.439  1.00 41.12
ATOM    442 2HD1 LEU A  28       0.968   7.777  -4.095  1.00 21.34
ATOM    443 3HD1 LEU A  28       0.812   8.953  -5.399  1.00 23.10
ATOM    444  CD2 LEU A  28      -1.774   9.628  -5.007  1.00 40.32
ATOM    445 1HD2 LEU A  28      -2.526  10.165  -4.448  1.00  4.50
ATOM    446 2HD2 LEU A  28      -2.252   8.902  -5.647  1.00 40.21
ATOM    447 3HD2 LEU A  28      -1.208  10.323  -5.610  1.00 12.13
ATOM    448  C   LEU A  28      -0.312   8.336  -1.065  1.00 32.13
ATOM    449  O   LEU A  28       0.881   8.482  -0.953  1.00 42.45
ATOM    450  N   GLN A  29      -1.183   9.013  -0.346  1.00 43.42
ATOM    451  H   GLN A  29      -2.143   8.865  -0.474  1.00 74.31
ATOM    452  CA  GLN A  29      -0.787  10.039   0.600  1.00  0.51
ATOM    453  HA  GLN A  29      -0.192  10.754   0.050  1.00 23.22
ATOM    454  CB  GLN A  29      -2.003  10.770   1.133  1.00 15.30
ATOM    455 1HB  GLN A  29      -2.687  10.049   1.558  1.00 20.12
ATOM    456 2HB  GLN A  29      -1.693  11.463   1.902  1.00 21.53
ATOM    457  CG  GLN A  29      -2.725  11.546   0.058  1.00 40.42
ATOM    458 1HG  GLN A  29      -2.973  10.853  -0.733  1.00  2.45
ATOM    459 2HG  GLN A  29      -3.634  11.961   0.461  1.00 62.23
ATOM    460  CD  GLN A  29      -1.862  12.645  -0.522  1.00 45.22
ATOM    461  OE1 GLN A  29      -1.139  12.435  -1.484  1.00 63.42
ATOM    462  NE2 GLN A  29      -1.913  13.812   0.066  1.00 63.01
ATOM    463 2HE2 GLN A  29      -2.497  13.924   0.843  1.00 35.25
ATOM    464 1HE2 GLN A  29      -1.358  14.525  -0.309  1.00 41.22
ATOM    465  C   GLN A  29       0.069   9.512   1.739  1.00 15.10
ATOM    466  O   GLN A  29       0.969  10.208   2.188  1.00 75.15
ATOM    467  N   ALA A  30      -0.178   8.284   2.171  1.00  0.11
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ATOM    468  H   ALA A  30      -0.906   7.762   1.765  1.00 42.54
ATOM    469  CA  ALA A  30       0.582   7.693   3.270  1.00 63.01
ATOM    470  HA  ALA A  30       0.424   8.311   4.141  1.00 72.43
ATOM    471  CB  ALA A  30       0.086   6.285   3.577  1.00 41.33
ATOM    472 1HB  ALA A  30       0.250   5.650   2.719  1.00 20.23
ATOM    473 2HB  ALA A  30      -0.969   6.312   3.806  1.00 14.44
ATOM    474 3HB  ALA A  30       0.625   5.885   4.425  1.00 74.53
ATOM    475  C   ALA A  30       2.069   7.671   2.946  1.00 20.15
ATOM    476  O   ALA A  30       2.907   8.083   3.760  1.00  2.33
ATOM    477  N   ILE A  31       2.380   7.231   1.756  1.00 70.42
ATOM    478  H   ILE A  31       1.649   6.963   1.154  1.00  3.34
ATOM    479  CA  ILE A  31       3.745   7.142   1.302  1.00 22.34
ATOM    480  HA  ILE A  31       4.343   6.956   2.183  1.00 24.03
ATOM    481  CB  ILE A  31       3.937   5.935   0.319  1.00 15.20
ATOM    482  HB  ILE A  31       3.770   5.042   0.903  1.00 70.41
ATOM    483  CG2 ILE A  31       2.883   5.925  -0.782  1.00 64.44
ATOM    484 1HG2 ILE A  31       1.903   5.810  -0.344  1.00 42.01
ATOM    485 2HG2 ILE A  31       3.075   5.105  -1.460  1.00 42.41
ATOM    486 3HG2 ILE A  31       2.928   6.861  -1.319  1.00 33.13
ATOM    487  CG1 ILE A  31       5.358   5.878  -0.265  1.00 61.01
ATOM    488 1HG1 ILE A  31       5.558   6.780  -0.823  1.00 71.40
ATOM    489 2HG1 ILE A  31       6.075   5.792   0.538  1.00 54.20
ATOM    490  CD1 ILE A  31       5.578   4.709  -1.200  1.00 62.11
ATOM    491 1HD1 ILE A  31       4.888   4.772  -2.028  1.00 43.11
ATOM    492 2HD1 ILE A  31       5.406   3.794  -0.655  1.00 73.21
ATOM    493 3HD1 ILE A  31       6.593   4.722  -1.572  1.00  5.12
ATOM    494  C   ILE A  31       4.234   8.477   0.690  1.00  3.23
ATOM    495  O   ILE A  31       5.334   8.924   0.969  1.00 33.14
ATOM    496  N   GLN A  32       3.375   9.124  -0.085  1.00 64.32
ATOM    497  H   GLN A  32       2.461   8.774  -0.185  1.00 22.12
ATOM    498  CA  GLN A  32       3.729  10.340  -0.822  1.00 24.51
ATOM    499  HA  GLN A  32       4.677  10.159  -1.307  1.00 74.30
ATOM    500  CB  GLN A  32       2.683  10.616  -1.915  1.00 43.12
ATOM    501 1HB  GLN A  32       2.614   9.750  -2.555  1.00 64.43
ATOM    502 2HB  GLN A  32       1.725  10.769  -1.440  1.00 21.20
ATOM    503  CG  GLN A  32       2.982  11.815  -2.777  1.00 61.34
ATOM    504 1HG  GLN A  32       2.963  12.664  -2.114  1.00  0.23
ATOM    505 2HG  GLN A  32       3.961  11.681  -3.212  1.00 41.32
ATOM    506  CD  GLN A  32       1.959  12.061  -3.874  1.00 31.05
ATOM    507  OE1 GLN A  32       2.294  12.541  -4.940  1.00  3.35
ATOM    508  NE2 GLN A  32       0.708  11.804  -3.602  1.00 14.32
ATOM    509 2HE2 GLN A  32       0.442  11.473  -2.717  1.00 21.11
ATOM    510 1HE2 GLN A  32       0.061  11.969  -4.319  1.00 21.32
ATOM    511  C   GLN A  32       3.884  11.563   0.089  1.00 13.10
ATOM    512  O   GLN A  32       4.770  12.379  -0.108  1.00 52.00
ATOM    513  N   ASN A  33       3.038  11.678   1.088  1.00 52.35
ATOM    514  H   ASN A  33       2.373  10.977   1.273  1.00 41.41
ATOM    515  CA  ASN A  33       3.076  12.847   1.967  1.00 54.44
ATOM    516  HA  ASN A  33       3.524  13.658   1.413  1.00 73.03
ATOM    517  CB  ASN A  33       1.631  13.246   2.373  1.00  3.30
ATOM    518 1HB  ASN A  33       1.047  13.387   1.476  1.00 22.32
ATOM    519 2HB  ASN A  33       1.200  12.430   2.935  1.00 70.35
ATOM    520  CG  ASN A  33       1.506  14.529   3.208  1.00  3.23
ATOM    521  OD1 ASN A  33       0.600  14.653   4.024  1.00 43.33
ATOM    522  ND2 ASN A  33       2.373  15.492   2.991  1.00 43.05
ATOM    523 2HD2 ASN A  33       3.066  15.363   2.312  1.00 71.44
ATOM    524 1HD2 ASN A  33       2.293  16.292   3.549  1.00 61.40
ATOM    525  C   ASN A  33       3.943  12.552   3.189  1.00 44.14
ATOM    526  O   ASN A  33       4.184  13.417   4.017  1.00 25.23
ATOM    527  N   GLY A  34       4.466  11.336   3.239  1.00  4.33
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ATOM    528  H   GLY A  34       4.283  10.715   2.505  1.00  3.50
ATOM    529  CA  GLY A  34       5.315  10.933   4.333  1.00  3.42
ATOM    530 1HA  GLY A  34       5.709   9.949   4.126  1.00  1.04
ATOM    531 2HA  GLY A  34       6.138  11.629   4.414  1.00 33.30
ATOM    532  C   GLY A  34       4.578  10.896   5.651  1.00  3.05
ATOM    533  O   GLY A  34       5.027  11.469   6.639  1.00 41.21
ATOM    534  N   GLN A  35       3.458  10.184   5.681  1.00 61.23
ATOM    535  H   GLN A  35       3.172   9.710   4.870  1.00 34.20
ATOM    536  CA  GLN A  35       2.645  10.084   6.892  1.00 31.44
ATOM    537  HA  GLN A  35       2.674  11.052   7.369  1.00 53.22
ATOM    538  CB  GLN A  35       1.183   9.727   6.569  1.00 44.34
ATOM    539 1HB  GLN A  35       1.166   8.773   6.063  1.00 14.34
ATOM    540 2HB  GLN A  35       0.636   9.637   7.495  1.00 23.14
ATOM    541  CG  GLN A  35       0.472  10.754   5.690  1.00 12.23
ATOM    542 1HG  GLN A  35       0.595  11.731   6.131  1.00 12.54
ATOM    543 2HG  GLN A  35       0.932  10.748   4.713  1.00 34.41
ATOM    544  CD  GLN A  35      -1.018  10.469   5.531  1.00 53.53
ATOM    545  OE1 GLN A  35      -1.446   9.773   4.623  1.00 44.33
ATOM    546  NE2 GLN A  35      -1.817  11.014   6.413  1.00 30.45
ATOM    547 2HE2 GLN A  35      -1.414  11.566   7.116  1.00 54.24
ATOM    548 1HE2 GLN A  35      -2.775  10.838   6.322  1.00 11.40
ATOM    549  C   GLN A  35       3.247   9.068   7.867  1.00  5.03
ATOM    550  O   GLN A  35       2.710   8.813   8.942  1.00 65.42
ATOM    551  N   THR A  36       4.351   8.493   7.472  1.00 51.13
ATOM    552  H   THR A  36       4.727   8.738   6.600  1.00 24.25
ATOM    553  CA  THR A  36       5.059   7.555   8.265  1.00 51.13
ATOM    554  HA  THR A  36       4.898   7.813   9.302  1.00 44.04
ATOM    555  CB  THR A  36       4.546   6.089   8.013  1.00 32.34
ATOM    556  HB  THR A  36       3.501   6.067   8.292  1.00  3.42
ATOM    557  OG1 THR A  36       5.241   5.143   8.847  1.00  5.41
ATOM    558  HG1 THR A  36       4.701   5.015   9.632  1.00 35.15
ATOM    559  CG2 THR A  36       4.673   5.671   6.543  1.00 14.04
ATOM    560 1HG2 THR A  36       4.311   4.660   6.423  1.00  1.35
ATOM    561 2HG2 THR A  36       5.710   5.719   6.247  1.00 52.10
ATOM    562 3HG2 THR A  36       4.091   6.339   5.926  1.00 10.44
ATOM    563  C   THR A  36       6.552   7.689   7.954  1.00  5.22
ATOM    564  O   THR A  36       6.942   7.842   6.790  1.00 64.44
ATOM    565  N   PHE A  37       7.373   7.693   8.980  1.00 32.44
ATOM    566  H   PHE A  37       7.011   7.617   9.887  1.00 54.43
ATOM    567  CA  PHE A  37       8.804   7.768   8.791  1.00 61.11
ATOM    568  HA  PHE A  37       8.975   8.208   7.818  1.00 22.14
ATOM    569  CB  PHE A  37       9.515   8.607   9.867  1.00 44.12
ATOM    570 1HB  PHE A  37       9.399   8.137  10.830  1.00 24.55
ATOM    571 2HB  PHE A  37      10.573   8.635   9.621  1.00 31.23
ATOM    572  CG  PHE A  37       9.024  10.028   9.962  1.00 35.23
ATOM    573  CD1 PHE A  37       9.490  10.998   9.090  1.00 71.25
ATOM    574  HD1 PHE A  37      10.215  10.727   8.335  1.00 52.04
ATOM    575  CE1 PHE A  37       9.040  12.302   9.174  1.00 64.11
ATOM    576  HE1 PHE A  37       9.413  13.048   8.491  1.00 50.35
ATOM    577  CZ  PHE A  37       8.113  12.649  10.139  1.00 44.34
ATOM    578  HZ  PHE A  37       7.760  13.667  10.207  1.00  2.31
ATOM    579  CE2 PHE A  37       7.639  11.692  11.014  1.00 41.41
ATOM    580  HE2 PHE A  37       6.914  11.963  11.769  1.00 42.11
ATOM    581  CD2 PHE A  37       8.093  10.391  10.925  1.00 53.14
ATOM    582  HD2 PHE A  37       7.721   9.644  11.610  1.00 21.20
ATOM    583  C   PHE A  37       9.352   6.378   8.780  1.00 74.01
ATOM    584  O   PHE A  37       8.688   5.429   9.232  1.00 65.21
ATOM    585  N   ASP A  38      10.503   6.234   8.240  1.00 70.34
ATOM    586  H   ASP A  38      10.999   7.015   7.920  1.00 55.13
ATOM    587  CA  ASP A  38      11.115   4.951   8.132  1.00 64.21
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ATOM    588  HA  ASP A  38      10.343   4.214   8.292  1.00 21.54
ATOM    589  CB  ASP A  38      11.673   4.762   6.740  1.00 32.42
ATOM    590 1HB  ASP A  38      10.860   4.752   6.030  1.00 74.55
ATOM    591 2HB  ASP A  38      12.347   5.571   6.503  1.00 61.34
ATOM    592  CG  ASP A  38      12.404   3.485   6.633  1.00 24.22
ATOM    593  OD1 ASP A  38      11.778   2.437   6.766  1.00 75.24
ATOM    594  OD2 ASP A  38      13.606   3.525   6.475  1.00  3.51
ATOM    595  C   ASP A  38      12.190   4.755   9.201  1.00 71.31
ATOM    596  O   ASP A  38      12.780   5.721   9.668  1.00 43.42
ATOM    597  N   TYR A  39      12.442   3.500   9.550  1.00 41.31
ATOM    598  H   TYR A  39      11.982   2.796   9.042  1.00 21.02
ATOM    599  CA  TYR A  39      13.400   3.120  10.587  1.00 60.32
ATOM    600  HA  TYR A  39      13.173   3.704  11.466  1.00 60.01
ATOM    601  CB  TYR A  39      13.216   1.615  10.946  1.00 54.13
ATOM    602 1HB  TYR A  39      14.020   1.305  11.597  1.00 42.43
ATOM    603 2HB  TYR A  39      12.276   1.487  11.460  1.00 10.25
ATOM    604  CG  TYR A  39      13.220   0.692   9.730  1.00 24.13
ATOM    605  CD1 TYR A  39      12.038   0.384   9.071  1.00 30.44
ATOM    606  HD1 TYR A  39      11.110   0.782   9.455  1.00 74.11
ATOM    607  CE1 TYR A  39      12.033  -0.403   7.938  1.00 62.32
ATOM    608  HE1 TYR A  39      11.103  -0.631   7.440  1.00 75.53
ATOM    609  CZ  TYR A  39      13.213  -0.901   7.456  1.00 31.14
ATOM    610  CE2 TYR A  39      14.400  -0.625   8.096  1.00 73.10
ATOM    611  HE2 TYR A  39      15.329  -1.021   7.712  1.00 21.44
ATOM    612  CD2 TYR A  39      14.402   0.172   9.221  1.00 32.33
ATOM    613  HD2 TYR A  39      15.331   0.390   9.726  1.00 62.04
ATOM    614  OH  TYR A  39      13.216  -1.658   6.318  1.00 74.14
ATOM    615  HH  TYR A  39      12.703  -1.208   5.635  1.00 63.32
ATOM    616  C   TYR A  39      14.855   3.413  10.174  1.00 61.31
ATOM    617  O   TYR A  39      15.705   3.650  11.023  1.00 52.45
ATOM    618  N   LYS A  40      15.135   3.389   8.878  1.00 13.22
ATOM    619  H   LYS A  40      14.446   3.172   8.207  1.00 34.43
ATOM    620  CA  LYS A  40      16.468   3.713   8.385  1.00 44.11
ATOM    621  HA  LYS A  40      17.097   3.884   9.247  1.00 61.14
ATOM    622  CB  LYS A  40      17.048   2.528   7.547  1.00 15.34
ATOM    623 1HB  LYS A  40      17.991   2.831   7.119  1.00 12.43
ATOM    624 2HB  LYS A  40      17.213   1.686   8.203  1.00 63.00
ATOM    625  CG  LYS A  40      16.135   2.083   6.417  1.00 51.14
ATOM    626 1HG  LYS A  40      15.160   1.870   6.831  1.00 13.14
ATOM    627 2HG  LYS A  40      16.043   2.905   5.723  1.00 42.34
ATOM    628  CD  LYS A  40      16.612   0.844   5.672  1.00 74.53
ATOM    629 1HD  LYS A  40      17.523   1.077   5.142  1.00 54.45
ATOM    630 2HD  LYS A  40      16.789   0.046   6.376  1.00 23.20
ATOM    631  CE  LYS A  40      15.539   0.398   4.670  1.00 51.51
ATOM    632 1HE  LYS A  40      14.614   0.239   5.201  1.00 75.34
ATOM    633 2HE  LYS A  40      15.387   1.177   3.938  1.00 60.43
ATOM    634  NZ  LYS A  40      15.882  -0.843   3.974  1.00 60.31
ATOM    635 1HZ  LYS A  40      16.003  -1.615   4.660  1.00  4.21
ATOM    636 2HZ  LYS A  40      16.769  -0.738   3.426  1.00 65.51
ATOM    637 3HZ  LYS A  40      15.115  -1.102   3.310  1.00 23.23
ATOM    638  C   LYS A  40      16.404   5.007   7.578  1.00 20.50
ATOM    639  O   LYS A  40      17.400   5.451   7.012  1.00 12.34
ATOM    640  N   SER A  41      15.204   5.614   7.583  1.00 61.21
ATOM    641  H   SER A  41      14.505   5.199   8.128  1.00  3.23
ATOM    642  CA  SER A  41      14.883   6.827   6.845  1.00 13.31
ATOM    643  HA  SER A  41      13.806   6.920   6.896  1.00  3.12
ATOM    644  CB  SER A  41      15.526   8.063   7.519  1.00 52.50
ATOM    645 1HB  SER A  41      15.117   8.146   8.517  1.00 70.14
ATOM    646 2HB  SER A  41      16.591   7.945   7.601  1.00 71.40
ATOM    647  OG  SER A  41      15.224   9.264   6.829  1.00 31.50
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ATOM    648  HG  SER A  41      15.440   9.091   5.904  1.00 74.33
ATOM    649  C   SER A  41      15.236   6.670   5.340  1.00 12.35
ATOM    650  O   SER A  41      15.652   7.621   4.665  1.00 51.45
ATOM    651  N   ASN A  42      14.984   5.466   4.839  1.00 12.25
ATOM    652  H   ASN A  42      14.586   4.794   5.441  1.00 64.10
ATOM    653  CA  ASN A  42      15.235   5.069   3.445  1.00 25.52
ATOM    654  HA  ASN A  42      16.272   5.261   3.213  1.00 72.43
ATOM    655  CB  ASN A  42      14.987   3.552   3.332  1.00 72.20
ATOM    656 1HB  ASN A  42      15.858   3.058   3.733  1.00 13.04
ATOM    657 2HB  ASN A  42      14.122   3.289   3.923  1.00 13.40
ATOM    658  CG  ASN A  42      14.800   3.021   1.913  1.00 51.52
ATOM    659  OD1 ASN A  42      13.714   3.066   1.382  1.00 44.20
ATOM    660  ND2 ASN A  42      15.798   2.437   1.337  1.00 32.10
ATOM    661 2HD2 ASN A  42      16.680   2.303   1.767  1.00 52.53
ATOM    662 1HD2 ASN A  42      15.587   2.112   0.434  1.00 45.05
ATOM    663  C   ASN A  42      14.327   5.821   2.461  1.00 31.55
ATOM    664  O   ASN A  42      13.186   6.170   2.813  1.00  0.11
ATOM    665  N   PRO A  43      14.843   6.137   1.235  1.00  1.04
ATOM    666  CD  PRO A  43      16.257   5.996   0.829  1.00  4.43
ATOM    667  CA  PRO A  43      14.031   6.712   0.158  1.00 20.12
ATOM    668  HA  PRO A  43      13.570   7.635   0.479  1.00 41.42
ATOM    669  CB  PRO A  43      15.032   6.976  -0.978  1.00 23.40
ATOM    670 1HB  PRO A  43      14.584   6.713  -1.926  1.00 13.12
ATOM    671 2HB  PRO A  43      15.342   8.010  -0.977  1.00 53.10
ATOM    672  CG  PRO A  43      16.203   6.108  -0.667  1.00 22.12
ATOM    673 1HG  PRO A  43      16.062   5.137  -1.118  1.00 35.33
ATOM    674 2HG  PRO A  43      17.114   6.563  -1.028  1.00 53.31
ATOM    675 1HD  PRO A  43      16.646   5.031   1.116  1.00 11.04
ATOM    676 2HD  PRO A  43      16.859   6.787   1.250  1.00 11.31
ATOM    677  C   PRO A  43      12.926   5.734  -0.291  1.00 33.23
ATOM    678  O   PRO A  43      13.140   4.829  -1.118  1.00 15.34
ATOM    679  N   TYR A  44      11.807   5.870   0.370  1.00 55.52
ATOM    680  H   TYR A  44      11.813   6.543   1.084  1.00 65.51
ATOM    681  CA  TYR A  44      10.599   5.107   0.151  1.00 74.52
ATOM    682  HA  TYR A  44      10.921   4.241  -0.410  1.00 65.21
ATOM    683  CB  TYR A  44       9.930   4.610   1.429  1.00 63.02
ATOM    684 1HB  TYR A  44       9.992   5.384   2.180  1.00 11.11
ATOM    685 2HB  TYR A  44       8.890   4.401   1.224  1.00 25.22
ATOM    686  CG  TYR A  44      10.556   3.362   2.001  1.00 33.55
ATOM    687  CD1 TYR A  44      11.140   3.366   3.241  1.00 21.04
ATOM    688  HD1 TYR A  44      11.159   4.282   3.811  1.00 34.12
ATOM    689  CE1 TYR A  44      11.696   2.221   3.765  1.00 12.54
ATOM    690  HE1 TYR A  44      12.150   2.251   4.746  1.00 54.43
ATOM    691  CZ  TYR A  44      11.686   1.056   3.058  1.00 33.53
ATOM    692  CE2 TYR A  44      11.112   1.010   1.810  1.00 22.13
ATOM    693  HE2 TYR A  44      11.100   0.090   1.244  1.00 74.14
ATOM    694  CD2 TYR A  44      10.546   2.161   1.286  1.00 45.41
ATOM    695  HD2 TYR A  44      10.094   2.142   0.305  1.00 32.54
ATOM    696  OH  TYR A  44      12.228  -0.086   3.632  1.00 71.22
ATOM    697  HH  TYR A  44      12.757  -0.574   2.971  1.00 50.01
ATOM    698  C   TYR A  44       9.621   5.817  -0.726  1.00 63.43
ATOM    699  O   TYR A  44       8.550   5.299  -0.998  1.00 21.34
ATOM    700  N   ASP A  45       9.962   6.991  -1.153  1.00 22.13
ATOM    701  H   ASP A  45      10.871   7.348  -1.024  1.00 55.13
ATOM    702  CA  ASP A  45       9.053   7.816  -1.887  1.00 44.43
ATOM    703  HA  ASP A  45       8.083   7.737  -1.421  1.00 54.12
ATOM    704  CB  ASP A  45       9.510   9.277  -1.832  1.00 34.52
ATOM    705 1HB  ASP A  45       8.878   9.863  -2.481  1.00 63.22
ATOM    706 2HB  ASP A  45       9.419   9.642  -0.819  1.00 53.52
ATOM    707  CG  ASP A  45      10.944   9.452  -2.283  1.00 11.13
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ATOM    708  OD1 ASP A  45      11.860   9.087  -1.491  1.00 54.45
ATOM    709  OD2 ASP A  45      11.164   9.949  -3.397  1.00 31.34
ATOM    710  C   ASP A  45       8.953   7.330  -3.326  1.00 54.03
ATOM    711  O   ASP A  45       9.873   6.719  -3.886  1.00 53.42
ATOM    712  N   ILE A  46       7.782   7.547  -3.873  1.00 52.33
ATOM    713  H   ILE A  46       7.189   8.164  -3.400  1.00 74.04
ATOM    714  CA  ILE A  46       7.346   6.975  -5.134  1.00 14.25
ATOM    715  HA  ILE A  46       7.451   5.902  -5.073  1.00  1.11
ATOM    716  CB  ILE A  46       5.849   7.272  -5.346  1.00 32.14
ATOM    717  HB  ILE A  46       5.704   8.341  -5.381  1.00 64.24
ATOM    718  CG2 ILE A  46       5.347   6.660  -6.657  1.00 72.34
ATOM    719 1HG2 ILE A  46       4.297   6.879  -6.782  1.00 71.14
ATOM    720 2HG2 ILE A  46       5.488   5.589  -6.632  1.00 25.33
ATOM    721 3HG2 ILE A  46       5.903   7.074  -7.484  1.00 63.54
ATOM    722  CG1 ILE A  46       5.069   6.716  -4.163  1.00 71.04
ATOM    723 1HG1 ILE A  46       5.175   5.641  -4.147  1.00 12.23
ATOM    724 2HG1 ILE A  46       5.474   7.123  -3.249  1.00 53.40
ATOM    725  CD1 ILE A  46       3.610   7.017  -4.199  1.00 74.23
ATOM    726 1HD1 ILE A  46       3.220   6.632  -5.129  1.00 15.15
ATOM    727 2HD1 ILE A  46       3.450   8.081  -4.127  1.00 52.34
ATOM    728 3HD1 ILE A  46       3.132   6.503  -3.378  1.00 54.34
ATOM    729  C   ILE A  46       8.144   7.476  -6.309  1.00 51.14
ATOM    730  O   ILE A  46       8.105   8.651  -6.649  1.00 31.14
ATOM    731  N   SER A  47       8.813   6.560  -6.956  1.00  2.32
ATOM    732  H   SER A  47       8.766   5.625  -6.670  1.00 33.42
ATOM    733  CA  SER A  47       9.641   6.889  -8.063  1.00 71.13
ATOM    734  HA  SER A  47      10.013   7.897  -7.959  1.00 51.30
ATOM    735  CB  SER A  47      10.817   5.922  -8.051  1.00 24.02
ATOM    736 1HB  SER A  47      10.499   4.965  -8.437  1.00 53.13
ATOM    737 2HB  SER A  47      11.619   6.315  -8.660  1.00 21.23
ATOM    738  OG  SER A  47      11.297   5.745  -6.715  1.00 64.45
ATOM    739  HG  SER A  47      11.138   6.550  -6.205  1.00 13.24
ATOM    740  C   SER A  47       8.838   6.729  -9.369  1.00  2.31
ATOM    741  O   SER A  47       9.071   7.441 -10.342  1.00 75.14
ATOM    742  N   VAL A  48       7.865   5.807  -9.372  1.00 44.41
ATOM    743  H   VAL A  48       7.719   5.245  -8.577  1.00 71.32
ATOM    744  CA  VAL A  48       6.998   5.613 -10.531  1.00 53.42
ATOM    745  HA  VAL A  48       7.025   6.501 -11.147  1.00 62.33
ATOM    746  CB  VAL A  48       7.445   4.371 -11.390  1.00 50.50
ATOM    747  HB  VAL A  48       7.282   3.497 -10.775  1.00 54.33
ATOM    748  CG1 VAL A  48       6.581   4.224 -12.637  1.00  4.34
ATOM    749 1HG1 VAL A  48       6.671   5.111 -13.246  1.00 13.12
ATOM    750 2HG1 VAL A  48       5.551   4.091 -12.341  1.00 14.13
ATOM    751 3HG1 VAL A  48       6.905   3.362 -13.200  1.00 24.45
ATOM    752  CG2 VAL A  48       8.920   4.430 -11.778  1.00 24.40
ATOM    753 1HG2 VAL A  48       9.176   3.554 -12.357  1.00 13.21
ATOM    754 2HG2 VAL A  48       9.526   4.460 -10.884  1.00 11.00
ATOM    755 3HG2 VAL A  48       9.103   5.317 -12.364  1.00 70.03
ATOM    756  C   VAL A  48       5.573   5.347 -10.044  1.00 14.24
ATOM    757  O   VAL A  48       5.360   4.502  -9.174  1.00  4.13
ATOM    758  N   ASN A  49       4.616   6.045 -10.596  1.00 30.32
ATOM    759  H   ASN A  49       4.826   6.722 -11.272  1.00 73.53
ATOM    760  CA  ASN A  49       3.214   5.811 -10.280  1.00 65.10
ATOM    761  HA  ASN A  49       3.186   4.994  -9.573  1.00 33.11
ATOM    762  CB  ASN A  49       2.526   7.060  -9.656  1.00 35.40
ATOM    763 1HB  ASN A  49       1.546   6.779  -9.298  1.00 75.24
ATOM    764 2HB  ASN A  49       3.115   7.384  -8.811  1.00 11.53
ATOM    765  CG  ASN A  49       2.359   8.244 -10.607  1.00 33.14
ATOM    766  OD1 ASN A  49       1.363   8.358 -11.304  1.00 31.52
ATOM    767  ND2 ASN A  49       3.314   9.151 -10.609  1.00 35.13
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ATOM    768 2HD2 ASN A  49       4.080   9.039 -10.011  1.00 23.22
ATOM    769 1HD2 ASN A  49       3.195   9.907 -11.221  1.00 13.44
ATOM    770  C   ASN A  49       2.495   5.356 -11.535  1.00 12.32
ATOM    771  O   ASN A  49       2.748   5.895 -12.607  1.00 51.32
ATOM    772  N   LYS A  50       1.696   4.310 -11.451  1.00  4.13
ATOM    773  H   LYS A  50       1.632   3.766 -10.637  1.00 25.05
ATOM    774  CA  LYS A  50       0.894   3.922 -12.589  1.00 34.10
ATOM    775  HA  LYS A  50       0.934   4.703 -13.333  1.00 42.23
ATOM    776  CB  LYS A  50       1.350   2.589 -13.235  1.00 64.21
ATOM    777 1HB  LYS A  50       1.061   1.776 -12.587  1.00 44.21
ATOM    778 2HB  LYS A  50       0.799   2.475 -14.157  1.00 61.52
ATOM    779  CG  LYS A  50       2.833   2.443 -13.553  1.00 30.21
ATOM    780 1HG  LYS A  50       2.994   1.686 -14.304  1.00 74.15
ATOM    781 2HG  LYS A  50       3.136   3.419 -13.900  1.00 32.45
ATOM    782  CD  LYS A  50       3.675   2.109 -12.330  1.00 64.21
ATOM    783 1HD  LYS A  50       4.715   2.026 -12.605  1.00 11.24
ATOM    784 2HD  LYS A  50       3.533   2.927 -11.639  1.00 22.22
ATOM    785  CE  LYS A  50       3.230   0.828 -11.645  1.00 65.03
ATOM    786 1HE  LYS A  50       3.903   0.649 -10.821  1.00 74.23
ATOM    787 2HE  LYS A  50       2.237   0.988 -11.263  1.00 62.34
ATOM    788  NZ  LYS A  50       3.241  -0.379 -12.521  1.00 43.53
ATOM    789 1HZ  LYS A  50       2.855  -1.172 -11.951  1.00 31.43
ATOM    790 2HZ  LYS A  50       4.203  -0.664 -12.785  1.00 72.43
ATOM    791 3HZ  LYS A  50       2.629  -0.271 -13.351  1.00 51.04
ATOM    792  C   LYS A  50      -0.520   3.702 -12.143  1.00  1.03
ATOM    793  O   LYS A  50      -0.770   3.197 -11.037  1.00 22.53
ATOM    794  N   ASN A  51      -1.431   4.067 -12.973  1.00 15.11
ATOM    795  H   ASN A  51      -1.187   4.568 -13.777  1.00 31.11
ATOM    796  CA  ASN A  51      -2.799   3.717 -12.774  1.00 12.45
ATOM    797  HA  ASN A  51      -2.825   3.250 -11.799  1.00 45.21
ATOM    798  CB  ASN A  51      -3.730   4.927 -12.807  1.00 30.02
ATOM    799 1HB  ASN A  51      -3.477   5.546 -11.960  1.00 75.23
ATOM    800 2HB  ASN A  51      -3.585   5.459 -13.733  1.00 64.24
ATOM    801  CG  ASN A  51      -5.205   4.561 -12.666  1.00 11.34
ATOM    802  OD1 ASN A  51      -5.558   3.580 -12.036  1.00 61.03
ATOM    803  ND2 ASN A  51      -6.070   5.349 -13.255  1.00 42.52
ATOM    804 2HD2 ASN A  51      -5.738   6.124 -13.753  1.00 62.22
ATOM    805 1HD2 ASN A  51      -7.020   5.126 -13.162  1.00 30.23
ATOM    806  C   ASN A  51      -3.159   2.707 -13.820  1.00 23.30
ATOM    807  O   ASN A  51      -2.871   2.910 -14.992  1.00 32.14
ATOM    808  N   ASN A  52      -3.774   1.655 -13.415  1.00 11.40
ATOM    809  H   ASN A  52      -4.066   1.614 -12.476  1.00 30.01
ATOM    810  CA  ASN A  52      -4.095   0.560 -14.321  1.00  4.31
ATOM    811  HA  ASN A  52      -3.569   0.733 -15.248  1.00 61.15
ATOM    812  CB  ASN A  52      -3.654  -0.797 -13.730  1.00 63.44
ATOM    813 1HB  ASN A  52      -4.203  -0.932 -12.812  1.00 41.11
ATOM    814 2HB  ASN A  52      -3.918  -1.587 -14.419  1.00  4.12
ATOM    815  CG  ASN A  52      -2.156  -0.901 -13.399  1.00 32.40
ATOM    816  OD1 ASN A  52      -1.307  -0.262 -14.020  1.00 32.11
ATOM    817  ND2 ASN A  52      -1.824  -1.716 -12.413  1.00 74.54
ATOM    818 2HD2 ASN A  52      -2.536  -2.207 -11.952  1.00 72.14
ATOM    819 1HD2 ASN A  52      -0.877  -1.813 -12.179  1.00 70.23
ATOM    820  C   ASN A  52      -5.597   0.545 -14.597  1.00  1.12
ATOM    821  O   ASN A  52      -6.124  -0.366 -15.234  1.00 15.54
ATOM    822  N   GLY A  53      -6.293   1.529 -14.056  1.00 73.42
ATOM    823  H   GLY A  53      -5.845   2.147 -13.440  1.00 35.43
ATOM    824  CA  GLY A  53      -7.709   1.680 -14.305  1.00 11.12
ATOM    825 1HA  GLY A  53      -7.955   2.731 -14.299  1.00 40.44
ATOM    826 2HA  GLY A  53      -7.941   1.268 -15.276  1.00 10.43
ATOM    827  C   GLY A  53      -8.538   0.976 -13.264  1.00 22.40
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ATOM    828  O   GLY A  53      -9.275   1.598 -12.513  1.00 43.44
ATOM    829  N   THR A  54      -8.411  -0.318 -13.216  1.00  5.05
ATOM    830  H   THR A  54      -7.800  -0.748 -13.851  1.00 23.13
ATOM    831  CA  THR A  54      -9.123  -1.108 -12.252  1.00 14.40
ATOM    832  HA  THR A  54      -9.908  -0.482 -11.850  1.00 75.32
ATOM    833  CB  THR A  54      -9.767  -2.375 -12.900  1.00 64.44
ATOM    834  HB  THR A  54     -10.474  -2.042 -13.646  1.00  1.13
ATOM    835  OG1 THR A  54     -10.483  -3.141 -11.912  1.00 50.33
ATOM    836  HG1 THR A  54      -9.771  -3.533 -11.388  1.00 72.41
ATOM    837  CG2 THR A  54      -8.715  -3.260 -13.570  1.00 51.23
ATOM    838 1HG2 THR A  54      -7.993  -3.580 -12.833  1.00 14.42
ATOM    839 2HG2 THR A  54      -8.212  -2.698 -14.345  1.00 50.21
ATOM    840 3HG2 THR A  54      -9.195  -4.124 -14.005  1.00 44.13
ATOM    841  C   THR A  54      -8.186  -1.476 -11.109  1.00  3.42
ATOM    842  O   THR A  54      -8.598  -2.061 -10.095  1.00 14.03
ATOM    843  N   ASP A  55      -6.948  -1.102 -11.282  1.00 23.45
ATOM    844  H   ASP A  55      -6.703  -0.611 -12.090  1.00 53.34
ATOM    845  CA  ASP A  55      -5.902  -1.304 -10.317  1.00 40.34
ATOM    846  HA  ASP A  55      -6.338  -1.436  -9.340  1.00 21.44
ATOM    847  CB  ASP A  55      -4.953  -2.494 -10.652  1.00 55.40
ATOM    848 1HB  ASP A  55      -4.457  -2.376 -11.600  1.00  4.03
ATOM    849 2HB  ASP A  55      -4.208  -2.466  -9.870  1.00 14.13
ATOM    850  CG  ASP A  55      -5.527  -3.889 -10.596  1.00 63.10
ATOM    851  OD1 ASP A  55      -6.563  -4.197 -11.218  1.00 72.14
ATOM    852  OD2 ASP A  55      -4.902  -4.741  -9.944  1.00 24.40
ATOM    853  C   ASP A  55      -5.072  -0.056 -10.337  1.00 40.23
ATOM    854  O   ASP A  55      -5.177   0.737 -11.265  1.00 44.24
ATOM    855  N   ALA A  56      -4.282   0.128  -9.351  1.00 10.33
ATOM    856  H   ALA A  56      -4.318  -0.516  -8.607  1.00 75.02
ATOM    857  CA  ALA A  56      -3.352   1.225  -9.288  1.00 63.52
ATOM    858  HA  ALA A  56      -3.072   1.480 -10.300  1.00  2.03
ATOM    859  CB  ALA A  56      -3.956   2.436  -8.600  1.00  1.41
ATOM    860 1HB  ALA A  56      -4.791   2.798  -9.180  1.00 13.45
ATOM    861 2HB  ALA A  56      -3.213   3.217  -8.529  1.00  5.22
ATOM    862 3HB  ALA A  56      -4.294   2.163  -7.612  1.00 53.10
ATOM    863  C   ALA A  56      -2.145   0.734  -8.557  1.00 61.51
ATOM    864  O   ALA A  56      -2.277  -0.059  -7.619  1.00 63.43
ATOM    865  N   GLU A  57      -0.989   1.163  -8.965  1.00 51.13
ATOM    866  H   GLU A  57      -0.922   1.865  -9.654  1.00  1.04
ATOM    867  CA  GLU A  57       0.224   0.639  -8.412  1.00 30.44
ATOM    868  HA  GLU A  57       0.031   0.235  -7.430  1.00 71.13
ATOM    869  CB  GLU A  57       0.711  -0.485  -9.315  1.00 34.31
ATOM    870 1HB  GLU A  57      -0.093  -1.198  -9.419  1.00 33.11
ATOM    871 2HB  GLU A  57       0.925  -0.080 -10.292  1.00 14.24
ATOM    872  CG  GLU A  57       1.929  -1.241  -8.826  1.00 11.12
ATOM    873 1HG  GLU A  57       2.622  -0.539  -8.384  1.00 30.41
ATOM    874 2HG  GLU A  57       1.627  -1.968  -8.086  1.00 73.15
ATOM    875  CD  GLU A  57       2.615  -1.954  -9.961  1.00  1.41
ATOM    876  OE1 GLU A  57       3.827  -2.154  -9.886  1.00 52.21
ATOM    877  OE2 GLU A  57       1.981  -2.168 -11.018  1.00 62.13
ATOM    878  C   GLU A  57       1.281   1.734  -8.335  1.00 71.12
ATOM    879  O   GLU A  57       1.548   2.432  -9.325  1.00 73.24
ATOM    880  N   ILE A  58       1.859   1.893  -7.185  1.00  4.13
ATOM    881  H   ILE A  58       1.611   1.346  -6.410  1.00 74.02
ATOM    882  CA  ILE A  58       2.900   2.831  -6.977  1.00 51.44
ATOM    883  HA  ILE A  58       3.064   3.311  -7.932  1.00 32.33
ATOM    884  CB  ILE A  58       2.565   3.923  -5.927  1.00 15.02
ATOM    885  HB  ILE A  58       3.531   4.336  -5.699  1.00 42.14
ATOM    886 CG2  ILE A  58       1.727   5.032  -6.547  1.00 64.42
ATOM    887 1HG2 ILE A  58       0.834   4.610  -6.981  1.00 62.03
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ATOM    888 2HG2 ILE A  58       2.309   5.535  -7.305  1.00  5.14
ATOM    889 3HG2 ILE A  58       1.454   5.740  -5.778  1.00 72.34
ATOM    890  CG1 ILE A  58       1.924   3.383  -4.603  1.00 64.14
ATOM    891 1HG1 ILE A  58       2.433   2.472  -4.320  1.00 55.43
ATOM    892 2HG1 ILE A  58       2.072   4.116  -3.824  1.00 31.33
ATOM    893  CD1 ILE A  58       0.431   3.059  -4.670  1.00 41.54
ATOM    894 1HD1 ILE A  58      -0.116   3.969  -4.880  1.00 13.34
ATOM    895 2HD1 ILE A  58       0.100   2.651  -3.727  1.00 41.44
ATOM    896 3HD1 ILE A  58       0.254   2.348  -5.463  1.00 62.23
ATOM    897  C   ILE A  58       4.182   2.111  -6.616  1.00 35.51
ATOM    898  O   ILE A  58       4.183   1.218  -5.757  1.00  4.44
ATOM    899  N   VAL A  59       5.254   2.470  -7.294  1.00  2.01
ATOM    900  H   VAL A  59       5.215   3.216  -7.935  1.00 43.52
ATOM    901  CA  VAL A  59       6.531   1.817  -7.123  1.00 23.44
ATOM    902  HA  VAL A  59       6.426   1.040  -6.380  1.00 72.34
ATOM    903  CB  VAL A  59       7.015   1.163  -8.457  1.00 22.30
ATOM    904  HB  VAL A  59       7.199   1.959  -9.163  1.00 52.40
ATOM    905  CG1 VAL A  59       8.323   0.399  -8.267  1.00 52.31
ATOM    906 1HG1 VAL A  59       8.627  -0.034  -9.209  1.00 40.50
ATOM    907 2HG1 VAL A  59       8.178  -0.388  -7.542  1.00 33.50
ATOM    908 3HG1 VAL A  59       9.088   1.075  -7.917  1.00 34.23
ATOM    909  CG2 VAL A  59       5.952   0.251  -9.033  1.00 24.55
ATOM    910 1HG2 VAL A  59       6.285  -0.143  -9.982  1.00 42.41
ATOM    911 2HG2 VAL A  59       5.037   0.807  -9.158  1.00 63.51
ATOM    912 3HG2 VAL A  59       5.781  -0.567  -8.348  1.00  3.42
ATOM    913  C   VAL A  59       7.583   2.819  -6.668  1.00 14.22
ATOM    914  O   VAL A  59       7.706   3.920  -7.229  1.00  0.50
ATOM    915  N   SER A  60       8.285   2.462  -5.656  1.00 44.42
ATOM    916  H   SER A  60       8.082   1.629  -5.167  1.00 63.23
ATOM    917  CA  SER A  60       9.392   3.200  -5.176  1.00 32.12
ATOM    918  HA  SER A  60       9.509   4.097  -5.765  1.00 75.23
ATOM    919  CB  SER A  60       9.170   3.569  -3.708  1.00 54.42
ATOM    920 1HB  SER A  60       8.370   4.293  -3.652  1.00 62.04
ATOM    921 2HB  SER A  60       8.892   2.702  -3.129  1.00 64.31
ATOM    922  OG  SER A  60      10.323   4.151  -3.154  1.00 45.51
ATOM    923  HG  SER A  60      10.294   5.110  -3.293  1.00 25.13
ATOM    924  C   SER A  60      10.611   2.318  -5.325  1.00 41.43
ATOM    925  O   SER A  60      10.475   1.091  -5.340  1.00 53.20
ATOM    926  N   ALA A  61      11.761   2.916  -5.478  1.00 22.41
ATOM    927  H   ALA A  61      11.805   3.898  -5.498  1.00 13.14
ATOM    928  CA  ALA A  61      12.996   2.184  -5.564  1.00 33.10
ATOM    929  HA  ALA A  61      12.882   1.249  -5.041  1.00 12.11
ATOM    930  CB  ALA A  61      13.371   1.896  -7.008  1.00 71.50
ATOM    931 1HB  ALA A  61      12.568   1.340  -7.470  1.00 75.35
ATOM    932 2HB  ALA A  61      14.267   1.295  -7.016  1.00 72.25
ATOM    933 3HB  ALA A  61      13.536   2.820  -7.541  1.00 61.23
ATOM    934  C   ALA A  61      14.069   2.964  -4.872  1.00 72.32
ATOM    935  O   ALA A  61      14.170   4.174  -5.050  1.00 42.54
ATOM    936  N   SER A  62      14.854   2.294  -4.094  1.00 25.14
ATOM    937  H   SER A  62      14.754   1.321  -4.007  1.00 31.22
ATOM    938  CA  SER A  62      15.873   2.944  -3.343  1.00 33.14
ATOM    939  HA  SER A  62      15.623   3.989  -3.252  1.00 41.43
ATOM    940  CB  SER A  62      15.916   2.343  -1.959  1.00 25.21
ATOM    941 1HB  SER A  62      16.256   1.320  -2.029  1.00 33.23
ATOM    942 2HB  SER A  62      16.600   2.907  -1.341  1.00 70.32
ATOM    943  OG  SER A  62      14.634   2.358  -1.357  1.00  1.02
ATOM    944  HG  SER A  62      14.180   3.205  -1.475  1.00 43.31
ATOM    945  C   SER A  62      17.225   2.790  -4.020  1.00 24.04
ATOM    946  O   SER A  62      17.543   1.733  -4.574  1.00  5.41
ATOM    947  N   ASP A  63      18.008   3.841  -3.979  1.00 51.11
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ATOM    948  H   ASP A  63      17.705   4.691  -3.580  1.00 40.34
ATOM    949  CA  ASP A  63      19.353   3.840  -4.533  1.00 70.04
ATOM    950  HA  ASP A  63      19.371   3.298  -5.466  1.00 31.33
ATOM    951  CB  ASP A  63      19.785   5.294  -4.783  1.00 14.02
ATOM    952 1HB  ASP A  63      20.781   5.306  -5.197  1.00 63.21
ATOM    953 2HB  ASP A  63      19.098   5.761  -5.473  1.00 53.23
ATOM    954  CG  ASP A  63      19.782   6.088  -3.485  1.00 43.34
ATOM    955  OD1 ASP A  63      18.672   6.357  -2.973  1.00 32.14
ATOM    956  OD2 ASP A  63      20.858   6.349  -2.931  1.00 54.02
ATOM    957  C   ASP A  63      20.309   3.223  -3.522  1.00 72.01
ATOM    958  O   ASP A  63      21.262   2.542  -3.885  1.00 23.21
ATOM    959  N   SER A  64      19.996   3.414  -2.255  1.00  5.41
ATOM    960  H   SER A  64      19.212   3.965  -2.051  1.00 61.11
ATOM    961  CA  SER A  64      20.812   2.928  -1.186  1.00 15.41
ATOM    962  HA  SER A  64      21.847   3.045  -1.467  1.00 72.33
ATOM    963  CB  SER A  64      20.541   3.769   0.056  1.00  1.24
ATOM    964 1HB  SER A  64      19.534   3.581   0.403  1.00 42.51
ATOM    965 2HB  SER A  64      21.243   3.505   0.832  1.00 41.14
ATOM    966  OG  SER A  64      20.677   5.166  -0.231  1.00 44.24
ATOM    967  HG  SER A  64      20.806   5.362  -1.176  1.00 34.13
ATOM    968  C   SER A  64      20.515   1.453  -0.932  1.00 14.30
ATOM    969  O   SER A  64      21.420   0.637  -0.749  1.00 12.11
ATOM    970  N   ASP A  65      19.252   1.101  -0.977  1.00 54.24
ATOM    971  H   ASP A  65      18.568   1.761  -1.194  1.00 43.03
ATOM    972  CA  ASP A  65      18.871  -0.259  -0.773  1.00  1.12
ATOM    973  HA  ASP A  65      19.722  -0.798  -0.382  1.00 50.33
ATOM    974  CB  ASP A  65      17.694  -0.403   0.198  1.00 31.41
ATOM    975 1HB  ASP A  65      16.877   0.216  -0.140  1.00 70.25
ATOM    976 2HB  ASP A  65      17.382  -1.437   0.171  1.00 23.30
ATOM    977  CG  ASP A  65      17.995  -0.032   1.630  1.00  1.20
ATOM    978  OD1 ASP A  65      18.095   1.174   1.935  1.00 22.21
ATOM    979  OD2 ASP A  65      18.043  -0.942   2.483  1.00 61.40
ATOM    980  C   ASP A  65      18.484  -0.836  -2.086  1.00 64.14
ATOM    981  O   ASP A  65      17.354  -0.718  -2.527  1.00 14.33
ATOM    982  N   SER A  66      19.428  -1.435  -2.722  1.00 21.02
ATOM    983  H   SER A  66      20.339  -1.397  -2.357  1.00  4.43
ATOM    984  CA  SER A  66      19.220  -2.098  -3.981  1.00  1.04
ATOM    985  HA  SER A  66      18.748  -1.411  -4.667  1.00 31.55
ATOM    986  CB  SER A  66      20.578  -2.462  -4.519  1.00 72.03
ATOM    987 1HB  SER A  66      21.010  -3.145  -3.804  1.00  2.34
ATOM    988 2HB  SER A  66      20.504  -2.916  -5.496  1.00 32.13
ATOM    989  OG  SER A  66      21.411  -1.314  -4.567  1.00 11.53
ATOM    990  HG  SER A  66      20.881  -0.520  -4.707  1.00  4.14
ATOM    991  C   SER A  66      18.341  -3.353  -3.804  1.00 61.20
ATOM    992  O   SER A  66      17.717  -3.837  -4.733  1.00 61.12
ATOM    993  N   THR A  67      18.308  -3.850  -2.592  1.00 61.13
ATOM    994  H   THR A  67      18.763  -3.354  -1.882  1.00  1.13
ATOM    995  CA  THR A  67      17.615  -5.065  -2.270  1.00 50.14
ATOM    996  HA  THR A  67      17.418  -5.590  -3.194  1.00 34.24
ATOM    997  CB  THR A  67      18.538  -5.972  -1.388  1.00 75.42
ATOM    998  HB  THR A  67      19.420  -6.207  -1.967  1.00 23.04
ATOM    999  OG1 THR A  67      17.894  -7.200  -1.043  1.00 34.34
ATOM   1000  HG1 THR A  67      16.946  -7.089  -1.202  1.00 11.41
ATOM   1001  CG2 THR A  67      18.975  -5.246  -0.116  1.00 73.21
ATOM   1002 1HG2 THR A  67      19.529  -4.360  -0.393  1.00 13.34
ATOM   1003 2HG2 THR A  67      19.602  -5.895   0.476  1.00 23.31
ATOM   1004 3HG2 THR A  67      18.104  -4.963   0.453  1.00 54.10
ATOM   1005  C   THR A  67      16.275  -4.782  -1.557  1.00  2.41
ATOM   1006  O   THR A  67      15.606  -5.717  -1.080  1.00 64.42
ATOM   1007  N   ASP A  68      15.869  -3.526  -1.498  1.00 61.24
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ATOM   1008  H   ASP A  68      16.350  -2.802  -1.955  1.00 55.50
ATOM   1009  CA  ASP A  68      14.655  -3.180  -0.772  1.00  5.31
ATOM   1010  HA  ASP A  68      13.964  -4.001  -0.880  1.00 10.52
ATOM   1011  CB  ASP A  68      14.959  -2.997   0.712  1.00 74.51
ATOM   1012 1HB  ASP A  68      15.375  -3.906   1.116  1.00 31.41
ATOM   1013 2HB  ASP A  68      15.682  -2.201   0.799  1.00 34.22
ATOM   1014  CG  ASP A  68      13.750  -2.619   1.529  1.00  4.22
ATOM   1015  OD1 ASP A  68      13.847  -1.635   2.304  1.00 50.43
ATOM   1016  OD2 ASP A  68      12.714  -3.315   1.434  1.00 62.53
ATOM   1017  C   ASP A  68      14.010  -1.940  -1.334  1.00 53.00
ATOM   1018  O   ASP A  68      14.623  -0.888  -1.393  1.00  3.21
ATOM   1019  N   SER A  69      12.816  -2.096  -1.829  1.00 44.14
ATOM   1020  H   SER A  69      12.389  -2.975  -1.862  1.00 41.22
ATOM   1021  CA  SER A  69      12.033  -1.013  -2.335  1.00 24.24
ATOM   1022  HA  SER A  69      12.317  -0.121  -1.796  1.00 52.11
ATOM   1023  CB  SER A  69      12.292  -0.817  -3.817  1.00 74.12
ATOM   1024 1HB  SER A  69      11.895  -1.643  -4.389  1.00 53.11
ATOM   1025 2HB  SER A  69      11.749   0.066  -4.113  1.00 13.51
ATOM   1026  OG  SER A  69      13.688  -0.606  -4.055  1.00 25.23
ATOM   1027  HG  SER A  69      14.108  -0.642  -3.182  1.00 20.54
ATOM   1028  C   SER A  69      10.568  -1.311  -2.061  1.00 33.00
ATOM   1029  O   SER A  69      10.212  -2.462  -1.786  1.00 33.35
ATOM   1030  N   LEU A  70       9.737  -0.306  -2.140  1.00 72.03
ATOM   1031  H   LEU A  70      10.065   0.564  -2.450  1.00 14.04
ATOM   1032  CA  LEU A  70       8.341  -0.445  -1.809  1.00 14.43
ATOM   1033  HA  LEU A  70       8.209  -1.398  -1.321  1.00 14.20
ATOM   1034  CB  LEU A  70       7.971   0.685  -0.795  1.00 34.12
ATOM   1035 1HB  LEU A  70       8.657   0.600   0.033  1.00 23.44
ATOM   1036 2HB  LEU A  70       8.165   1.630  -1.281  1.00 75.55
ATOM   1037  CG  LEU A  70       6.546   0.744  -0.183  1.00  1.42
ATOM   1038  HG  LEU A  70       6.548   1.480   0.608  1.00 22.43
ATOM   1039  CD1 LEU A  70       5.505   1.185  -1.189  1.00 53.22
ATOM   1040 1HD1 LEU A  70       4.554   1.310  -0.695  1.00 53.14
ATOM   1041 2HD1 LEU A  70       5.423   0.429  -1.956  1.00 54.04
ATOM   1042 3HD1 LEU A  70       5.810   2.114  -1.648  1.00 54.32
ATOM   1043  CD2 LEU A  70       6.163  -0.594   0.432  1.00 50.13
ATOM   1044 1HD2 LEU A  70       5.175  -0.523   0.865  1.00  4.51
ATOM   1045 2HD2 LEU A  70       6.875  -0.854   1.200  1.00 22.21
ATOM   1046 3HD2 LEU A  70       6.164  -1.356  -0.333  1.00 11.31
ATOM   1047  C   LEU A  70       7.476  -0.411  -3.080  1.00 22.10
ATOM   1048  O   LEU A  70       7.564   0.520  -3.877  1.00 13.10
ATOM   1049  N   GLN A  71       6.675  -1.431  -3.255  1.00  1.14
ATOM   1050  H   GLN A  71       6.715  -2.184  -2.622  1.00 43.52
ATOM   1051  CA  GLN A  71       5.732  -1.522  -4.358  1.00 75.44
ATOM   1052  HA  GLN A  71       5.695  -0.569  -4.864  1.00 70.14
ATOM   1053  CB  GLN A  71       6.188  -2.611  -5.338  1.00 72.12
ATOM   1054 1HB  GLN A  71       7.137  -2.317  -5.763  1.00 31.10
ATOM   1055 2HB  GLN A  71       6.330  -3.528  -4.788  1.00 43.23
ATOM   1056  CG  GLN A  71       5.226  -2.887  -6.489  1.00 22.20
ATOM   1057 1HG  GLN A  71       4.259  -3.129  -6.075  1.00 73.35
ATOM   1058 2HG  GLN A  71       5.139  -2.002  -7.100  1.00  3.13
ATOM   1059  CD  GLN A  71       5.680  -4.045  -7.361  1.00 25.42
ATOM   1060  OE1 GLN A  71       6.336  -4.979  -6.891  1.00 34.43
ATOM   1061  NE2 GLN A  71       5.335  -4.008  -8.619  1.00 20.12
ATOM   1062 2HE2 GLN A  71       4.801  -3.248  -8.969  1.00 32.34
ATOM   1063 1HE2 GLN A  71       5.618  -4.751  -9.186  1.00 20.53
ATOM   1064  C   GLN A  71       4.348  -1.865  -3.798  1.00 45.04
ATOM   1065  O   GLN A  71       4.208  -2.832  -3.057  1.00  4.45
ATOM   1066  N   VAL A  72       3.346  -1.069  -4.107  1.00 40.32
ATOM   1067  H   VAL A  72       3.510  -0.290  -4.688  1.00 35.15
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ATOM   1068  CA  VAL A  72       1.990  -1.343  -3.628  1.00 41.34
ATOM   1069  HA  VAL A  72       2.001  -2.333  -3.198  1.00 13.23
ATOM   1070  CB  VAL A  72       1.502  -0.329  -2.537  1.00 73.14
ATOM   1071  HB  VAL A  72       1.518   0.663  -2.965  1.00 61.13
ATOM   1072 CG1 VAL A  72       0.072  -0.637  -2.096  1.00 53.15
ATOM   1073 1HG1 VAL A  72      -0.230   0.066  -1.334  1.00 43.45
ATOM   1074 2HG1 VAL A  72       0.023  -1.641  -1.700  1.00 62.14
ATOM   1075 3HG1 VAL A  72      -0.591  -0.555  -2.945  1.00 34.22
ATOM   1076 CG2 VAL A  72       2.414  -0.348  -1.333  1.00  3.00
ATOM   1077 1HG2 VAL A  72       3.408  -0.068  -1.648  1.00 51.31
ATOM   1078 2HG2 VAL A  72       2.446  -1.347  -0.922  1.00 45.45
ATOM   1079 3HG2 VAL A  72       2.060   0.349  -0.588  1.00 23.55
ATOM   1080  C   VAL A  72       1.008  -1.341  -4.781  1.00 33.52
ATOM   1081  O   VAL A  72       0.918  -0.362  -5.527  1.00 31.10
ATOM   1082  N   ALA A  73       0.292  -2.430  -4.917  1.00 11.53
ATOM   1083  H   ALA A  73       0.446  -3.181  -4.301  1.00 33.32
ATOM   1084  CA  ALA A  73      -0.730  -2.572  -5.920  1.00 53.02
ATOM   1085  HA  ALA A  73      -0.757  -1.676  -6.520  1.00 73.02
ATOM   1086  CB  ALA A  73      -0.457  -3.772  -6.814  1.00 43.11
ATOM   1087 1HB  ALA A  73      -1.218  -3.832  -7.580  1.00 65.24
ATOM   1088 2HB  ALA A  73      -0.477  -4.675  -6.219  1.00 44.45
ATOM   1089 3HB  ALA A  73       0.512  -3.669  -7.277  1.00  1.44
ATOM   1090  C   ALA A  73      -2.077  -2.696  -5.243  1.00 72.11
ATOM   1091  O   ALA A  73      -2.211  -3.371  -4.213  1.00 40.31
ATOM   1092  N   MET A  74      -3.047  -2.019  -5.784  1.00 73.44
ATOM   1093  H   MET A  74      -2.864  -1.500  -6.601  1.00 25.35
ATOM   1094  CA  MET A  74      -4.391  -1.990  -5.247  1.00 44.44
ATOM   1095  HA  MET A  74      -4.495  -2.715  -4.457  1.00 13.31
ATOM   1096  CB  MET A  74      -4.685  -0.588  -4.697  1.00 62.23
ATOM   1097 1HB  MET A  74      -4.641   0.121  -5.509  1.00 43.15
ATOM   1098 2HB  MET A  74      -5.688  -0.592  -4.294  1.00 70.13
ATOM   1099  CG  MET A  74      -3.743  -0.123  -3.605  1.00  1.22
ATOM   1100 1HG  MET A  74      -3.905  -0.735  -2.733  1.00 32.33
ATOM   1101 2HG  MET A  74      -2.728  -0.251  -3.949  1.00 24.25
ATOM   1102  SD  MET A  74      -3.988   1.604  -3.150  1.00 35.11
ATOM   1103  CE  MET A  74      -3.445   2.416  -4.646  1.00 42.43
ATOM   1104 1HE  MET A  74      -4.097   2.148  -5.463  1.00 43.54
ATOM   1105 2HE  MET A  74      -2.438   2.101  -4.875  1.00 24.35
ATOM   1106 3HE  MET A  74      -3.459   3.486  -4.502  1.00 22.31
ATOM   1107  C   MET A  74      -5.356  -2.262  -6.372  1.00 70.24
ATOM   1108  O   MET A  74      -5.229  -1.659  -7.423  1.00 12.14
ATOM   1109  N   LYS A  75      -6.289  -3.163  -6.178  1.00  2.24
ATOM   1110  H   LYS A  75      -6.307  -3.648  -5.323  1.00  5.33
ATOM   1111  CA  LYS A  75      -7.288  -3.426  -7.204  1.00 13.34
ATOM   1112  HA  LYS A  75      -7.136  -2.660  -7.949  1.00 63.42
ATOM   1113  CB  LYS A  75      -7.134  -4.786  -7.882  1.00  2.32
ATOM   1114 1HB  LYS A  75      -7.975  -4.942  -8.541  1.00 42.13
ATOM   1115 2HB  LYS A  75      -6.232  -4.758  -8.477  1.00 54.44
ATOM   1116  CG  LYS A  75      -7.052  -5.958  -6.958  1.00 51.40
ATOM   1117 1HG  LYS A  75      -6.088  -5.946  -6.469  1.00  2.12
ATOM   1118 2HG  LYS A  75      -7.830  -5.788  -6.236  1.00 42.13
ATOM   1119  CD  LYS A  75      -7.265  -7.321  -7.664  1.00  0.13
ATOM   1120 1HD  LYS A  75      -7.253  -8.096  -6.913  1.00  3.42
ATOM   1121 2HD  LYS A  75      -8.241  -7.308  -8.127  1.00 21.14
ATOM   1122  CE  LYS A  75      -6.206  -7.686  -8.736  1.00 43.10
ATOM   1123 1HE  LYS A  75      -5.224  -7.541  -8.311  1.00 74.22
ATOM   1124 2HE  LYS A  75      -6.325  -8.730  -8.986  1.00 53.50
ATOM   1125  NZ  LYS A  75      -6.292  -6.876  -9.984  1.00 12.50
ATOM   1126 1HZ  LYS A  75      -7.239  -6.805 -10.399  1.00 31.32
ATOM   1127 2HZ  LYS A  75      -5.638  -7.232 -10.705  1.00 31.21
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ATOM   1128 3HZ  LYS A  75      -5.942  -5.898  -9.830  1.00 20.21
ATOM   1129  C   LYS A  75      -8.698  -3.237  -6.699  1.00 53.21
ATOM   1130  O   LYS A  75      -9.025  -3.594  -5.563  1.00 30.15
ATOM   1131  N   LYS A  76      -9.519  -2.724  -7.576  1.00 32.04
ATOM   1132  H   LYS A  76      -9.187  -2.569  -8.490  1.00 11.41
ATOM   1133  CA  LYS A  76     -10.875  -2.358  -7.305  1.00 15.20
ATOM   1134  HA  LYS A  76     -10.954  -1.835  -6.364  1.00 42.13
ATOM   1135  CB  LYS A  76     -11.306  -1.405  -8.403  1.00 23.44
ATOM   1136 1HB  LYS A  76     -10.593  -0.598  -8.492  1.00 10.50
ATOM   1137 2HB  LYS A  76     -11.286  -1.956  -9.331  1.00  1.43
ATOM   1138  CG  LYS A  76     -12.694  -0.832  -8.238  1.00 60.31
ATOM   1139 1HG  LYS A  76     -13.322  -1.568  -7.759  1.00 32.41
ATOM   1140 2HG  LYS A  76     -12.643   0.054  -7.623  1.00 12.02
ATOM   1141  CD  LYS A  76     -13.294  -0.468  -9.582  1.00 12.02
ATOM   1142 1HD  LYS A  76     -14.091   0.246  -9.431  1.00 23.12
ATOM   1143 2HD  LYS A  76     -12.526  -0.025 -10.199  1.00 20.05
ATOM   1144  CE  LYS A  76     -13.863  -1.703 -10.306  1.00 63.54
ATOM   1145 1HE  LYS A  76     -14.544  -2.147  -9.595  1.00  1.11
ATOM   1146 2HE  LYS A  76     -14.395  -1.384 -11.188  1.00 62.31
ATOM   1147  NZ  LYS A  76     -12.859  -2.766 -10.654  1.00 43.01
ATOM   1148 1HZ  LYS A  76     -13.300  -3.515 -11.222  1.00 32.35
ATOM   1149 2HZ  LYS A  76     -12.497  -3.236  -9.796  1.00 32.14
ATOM   1150 3HZ  LYS A  76     -12.026  -2.419 -11.180  1.00 70.33
ATOM   1151  C   LYS A  76     -11.811  -3.567  -7.365  1.00 43.10
ATOM   1152  O   LYS A  76     -11.975  -4.183  -8.438  1.00 11.40
ATOM   1153  N   LEU A  77     -12.455  -3.860  -6.271  1.00 63.23
ATOM   1154  H   LEU A  77     -12.282  -3.333  -5.455  1.00 20.11
ATOM   1155  CA  LEU A  77     -13.446  -4.926  -6.222  1.00 73.31
ATOM   1156  HA  LEU A  77     -13.247  -5.551  -7.080  1.00 73.04
ATOM   1157  CB  LEU A  77     -13.358  -5.779  -4.926  1.00 43.04
ATOM   1158 1HB  LEU A  77     -13.233  -5.095  -4.101  1.00 30.43
ATOM   1159 2HB  LEU A  77     -14.303  -6.286  -4.800  1.00 32.34
ATOM   1160  CG  LEU A  77     -12.229  -6.833  -4.829  1.00 64.30
ATOM   1161  HG  LEU A  77     -12.301  -7.498  -5.676  1.00 53.43
ATOM   1162  CD1 LEU A  77     -10.850  -6.208  -4.861  1.00 22.31
ATOM   1163 1HD1 LEU A  77     -10.725  -5.657  -5.781  1.00 65.23
ATOM   1164 2HD1 LEU A  77     -10.103  -6.986  -4.802  1.00 45.14
ATOM   1165 3HD1 LEU A  77     -10.738  -5.538  -4.021  1.00 62.44
ATOM   1166  CD2 LEU A  77     -12.397  -7.672  -3.574  1.00 23.44
ATOM   1167 1HD2 LEU A  77     -12.357  -7.033  -2.704  1.00 21.51
ATOM   1168 2HD2 LEU A  77     -11.602  -8.402  -3.518  1.00 61.43
ATOM   1169 3HD2 LEU A  77     -13.349  -8.181  -3.603  1.00 54.11
ATOM   1170  C   LEU A  77     -14.850  -4.322  -6.371  1.00 25.44
ATOM   1171  O   LEU A  77     -15.091  -3.206  -5.908  1.00 13.22
ATOM   1172  N   PRO A  78     -15.799  -5.047  -7.015  1.00 44.43
ATOM   1173  CD  PRO A  78     -15.632  -6.417  -7.535  1.00 32.41
ATOM   1174  CA  PRO A  78     -17.168  -4.535  -7.286  1.00  2.35
ATOM   1175  HA  PRO A  78     -17.135  -3.607  -7.837  1.00 50.40
ATOM   1176  CB  PRO A  78     -17.802  -5.630  -8.164  1.00 53.22
ATOM   1177 1HB  PRO A  78     -18.520  -6.187  -7.577  1.00 45.44
ATOM   1178 2HB  PRO A  78     -18.282  -5.191  -9.026  1.00 10.20
ATOM   1179  CG  PRO A  78     -16.673  -6.496  -8.610  1.00  4.31
ATOM   1180 1HG  PRO A  78     -17.021  -7.512  -8.734  1.00 50.44
ATOM   1181 2HG  PRO A  78     -16.261  -6.122  -9.536  1.00 34.11
ATOM   1182 1HD  PRO A  78     -15.818  -7.144  -6.757  1.00 35.11
ATOM   1183 2HD  PRO A  78     -14.652  -6.556  -7.964  1.00 13.35
ATOM   1184  C   PRO A  78     -18.008  -4.337  -6.018  1.00 14.12
ATOM   1185  O   PRO A  78     -18.993  -3.623  -6.028  1.00  1.42
ATOM   1186  N   ASN A  79     -17.577  -4.938  -4.928  1.00 71.32
ATOM   1187  H   ASN A  79     -16.738  -5.438  -4.978  1.00 31.21
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ATOM   1188  CA  ASN A  79     -18.315  -4.878  -3.652  1.00 70.23
ATOM   1189  HA  ASN A  79     -19.371  -4.821  -3.870  1.00 73.42
ATOM   1190  CB  ASN A  79     -18.025  -6.170  -2.838  1.00 63.53
ATOM   1191 1HB  ASN A  79     -18.146  -7.024  -3.488  1.00 52.34
ATOM   1192 2HB  ASN A  79     -17.001  -6.139  -2.499  1.00 24.44
ATOM   1193  CG  ASN A  79     -18.935  -6.383  -1.615  1.00 52.30
ATOM   1194  OD1 ASN A  79     -20.010  -6.951  -1.737  1.00 25.44
ATOM   1195  ND2 ASN A  79     -18.498  -5.980  -0.441  1.00 44.14
ATOM   1196 2HD2 ASN A  79     -17.618  -5.550  -0.350  1.00 44.00
ATOM   1197 1HD2 ASN A  79     -19.091  -6.126   0.323  1.00 70.24
ATOM   1198  C   ASN A  79     -17.889  -3.626  -2.865  1.00 55.34
ATOM   1199  O   ASN A  79     -18.241  -3.450  -1.712  1.00 54.52
ATOM   1200  N   ASN A  80     -17.165  -2.731  -3.548  1.00 25.21
ATOM   1201  H   ASN A  80     -17.022  -2.896  -4.504  1.00  2.23
ATOM   1202  CA  ASN A  80     -16.586  -1.526  -2.936  1.00 22.34
ATOM   1203  HA  ASN A  80     -16.058  -1.023  -3.733  1.00  5.12
ATOM   1204  CB  ASN A  80     -17.632  -0.561  -2.328  1.00  3.13
ATOM   1205 1HB  ASN A  80     -18.317  -1.127  -1.716  1.00  2.43
ATOM   1206 2HB  ASN A  80     -17.122   0.165  -1.711  1.00 20.52
ATOM   1207  CG  ASN A  80     -18.433   0.174  -3.376  1.00 14.31
ATOM   1208  OD1 ASN A  80     -18.041   1.253  -3.825  1.00 75.23
ATOM   1209  ND2 ASN A  80     -19.554  -0.383  -3.769  1.00 51.22
ATOM   1210 2HD2 ASN A  80     -19.808  -1.239  -3.364  1.00 22.14
ATOM   1211 1HD2 ASN A  80     -20.083   0.078  -4.452  1.00 13.13
ATOM   1212  C   ASN A  80     -15.555  -1.922  -1.931  1.00 61.02
ATOM   1213  O   ASN A  80     -15.546  -1.473  -0.793  1.00 30.13
ATOM   1214  N   ALA A  81     -14.696  -2.787  -2.376  1.00 54.43
ATOM   1215  H   ALA A  81     -14.763  -3.086  -3.306  1.00 23.13
ATOM   1216  CA  ALA A  81     -13.618  -3.282  -1.600  1.00 52.11
ATOM   1217  HA  ALA A  81     -13.518  -2.670  -0.716  1.00 61.32
ATOM   1218  CB  ALA A  81     -13.868  -4.723  -1.192  1.00 64.31
ATOM   1219 1HB  ALA A  81     -14.002  -5.335  -2.072  1.00 40.41
ATOM   1220 2HB  ALA A  81     -14.753  -4.768  -0.576  1.00 23.22
ATOM   1221 3HB  ALA A  81     -13.017  -5.077  -0.628  1.00 43.42
ATOM   1222  C   ALA A  81     -12.380  -3.175  -2.434  1.00 75.05
ATOM   1223  O   ALA A  81     -12.470  -3.026  -3.656  1.00 70.31
ATOM   1224  N   THR A  82     -11.258  -3.220  -1.817  1.00 44.14
ATOM   1225  H   THR A  82     -11.227  -3.311  -0.839  1.00 30.44
ATOM   1226  CA  THR A  82     -10.027  -3.130  -2.516  1.00 14.03
ATOM   1227  HA  THR A  82     -10.221  -3.326  -3.560  1.00 13.05
ATOM   1228  CB  THR A  82      -9.424  -1.715  -2.383  1.00 21.01
ATOM   1229  HB  THR A  82      -9.093  -1.562  -1.365  1.00 54.52
ATOM   1230  OG1 THR A  82     -10.429  -0.739  -2.726  1.00 61.24
ATOM   1231  HG1 THR A  82     -11.206  -0.862  -2.167  1.00  2.14
ATOM   1232  CG2 THR A  82      -8.239  -1.556  -3.331  1.00 33.33
ATOM   1233 1HG2 THR A  82      -7.790  -0.579  -3.237  1.00 12.44
ATOM   1234 2HG2 THR A  82      -8.579  -1.695  -4.346  1.00  3.41
ATOM   1235 3HG2 THR A  82      -7.503  -2.313  -3.105  1.00 30.42
ATOM   1236  C   THR A  82      -9.053  -4.183  -1.982  1.00  0.11
ATOM   1237  O   THR A  82      -8.999  -4.449  -0.778  1.00  2.53
ATOM   1238  N   ARG A  83      -8.335  -4.796  -2.869  1.00 63.42
ATOM   1239  H   ARG A  83      -8.466  -4.558  -3.813  1.00 53.53
ATOM   1240  CA  ARG A  83      -7.342  -5.775  -2.515  1.00 51.01
ATOM   1241  HA  ARG A  83      -7.508  -6.079  -1.492  1.00 63.33
ATOM   1242  CB  ARG A  83      -7.458  -7.003  -3.453  1.00 24.33
ATOM   1243 1HB  ARG A  83      -8.347  -7.554  -3.185  1.00 21.15
ATOM   1244 2HB  ARG A  83      -7.579  -6.643  -4.462  1.00 71.33
ATOM   1245  CG  ARG A  83      -6.285  -8.000  -3.444  1.00 32.21
ATOM   1246 1HG  ARG A  83      -6.484  -8.777  -4.166  1.00 41.35
ATOM   1247 2HG  ARG A  83      -5.389  -7.473  -3.739  1.00 13.24
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ATOM   1248  CD  ARG A  83      -6.047  -8.663  -2.096  1.00 64.42
ATOM   1249 1HD  ARG A  83      -5.201  -9.327  -2.182  1.00 42.24
ATOM   1250 2HD  ARG A  83      -5.815  -7.885  -1.383  1.00 23.34
ATOM   1251  NE  ARG A  83      -7.202  -9.432  -1.602  1.00 41.10
ATOM   1252  HE  ARG A  83      -7.852  -8.910  -1.073  1.00 44.15
ATOM   1253  CZ  ARG A  83      -7.384 -10.757  -1.743  1.00 31.51
ATOM   1254  NH1 ARG A  83      -6.537 -11.489  -2.481  1.00 74.15
ATOM   1255 1HH1 ARG A  83      -5.750 -11.071  -2.942  1.00 72.11
ATOM   1256 2HH1 ARG A  83      -6.643 -12.478  -2.606  1.00 34.02
ATOM   1257  NH2 ARG A  83      -8.417 -11.342  -1.138  1.00 33.45
ATOM   1258 1HH2 ARG A  83      -9.037 -10.776  -0.578  1.00 23.24
ATOM   1259 2HH2 ARG A  83      -8.633 -12.319  -1.196  1.00 54.54
ATOM   1260  C   ARG A  83      -5.994  -5.110  -2.633  1.00 14.15
ATOM   1261  O   ARG A  83      -5.693  -4.486  -3.648  1.00 14.44
ATOM   1262  N   ILE A  84      -5.215  -5.232  -1.592  1.00  4.12
ATOM   1263  H   ILE A  84      -5.499  -5.783  -0.827  1.00 51.14
ATOM   1264  CA  ILE A  84      -3.926  -4.599  -1.503  1.00 23.55
ATOM   1265  HA  ILE A  84      -3.804  -3.971  -2.371  1.00 53.52
ATOM   1266  CB  ILE A  84      -3.820  -3.685  -0.202  1.00 71.05
ATOM   1267  HB  ILE A  84      -4.559  -4.057   0.492  1.00 32.11
ATOM   1268  CG2 ILE A  84      -2.466  -3.767   0.499  1.00 10.44
ATOM   1269 1HG2 ILE A  84      -2.274  -4.784   0.805  1.00 24.11
ATOM   1270 2HG2 ILE A  84      -2.471  -3.123   1.367  1.00 71.44
ATOM   1271 3HG2 ILE A  84      -1.695  -3.442  -0.185  1.00  4.35
ATOM   1272  CG1 ILE A  84      -4.156  -2.225  -0.505  1.00 31.20
ATOM   1273 1HG1 ILE A  84      -4.027  -1.637   0.391  1.00 14.32
ATOM   1274 2HG1 ILE A  84      -3.447  -1.897  -1.250  1.00  3.41
ATOM   1275  CD1 ILE A  84      -5.547  -1.979  -1.024  1.00 44.32
ATOM   1276 1HD1 ILE A  84      -6.277  -2.329  -0.310  1.00 12.44
ATOM   1277 2HD1 ILE A  84      -5.659  -2.507  -1.960  1.00  5.03
ATOM   1278 3HD1 ILE A  84      -5.679  -0.921  -1.199  1.00  3.15
ATOM   1279  C   ILE A  84      -2.848  -5.652  -1.509  1.00 13.21
ATOM   1280  O   ILE A  84      -2.973  -6.707  -0.864  1.00 50.23
ATOM   1281  N   SER A  85      -1.871  -5.411  -2.318  1.00 65.32
ATOM   1282  H   SER A  85      -1.921  -4.619  -2.903  1.00 42.04
ATOM   1283  CA  SER A  85      -0.716  -6.233  -2.420  1.00 13.45
ATOM   1284  HA  SER A  85      -0.746  -6.958  -1.619  1.00 32.24
ATOM   1285  CB  SER A  85      -0.758  -6.952  -3.757  1.00 71.04
ATOM   1286 1HB  SER A  85      -0.680  -6.232  -4.559  1.00 12.23
ATOM   1287 2HB  SER A  85       0.051  -7.665  -3.818  1.00 15.20
ATOM   1288  OG  SER A  85      -1.997  -7.649  -3.870  1.00 62.32
ATOM   1289  HG  SER A  85      -2.406  -7.559  -3.005  1.00 14.32
ATOM   1290  C   SER A  85       0.526  -5.350  -2.262  1.00 45.32
ATOM   1291  O   SER A  85       0.752  -4.435  -3.056  1.00 12.43
ATOM   1292  N   ILE A  86       1.286  -5.595  -1.230  1.00 54.34
ATOM   1293  H   ILE A  86       1.052  -6.357  -0.651  1.00 42.35
ATOM   1294  CA  ILE A  86       2.465  -4.803  -0.922  1.00 32.24
ATOM   1295  HA  ILE A  86       2.512  -3.958  -1.594  1.00 13.14
ATOM   1296  CB  ILE A  86       2.409  -4.270   0.547  1.00 60.11
ATOM   1297  HB  ILE A  86       2.332  -5.131   1.189  1.00 10.41
ATOM   1298  CG2 ILE A  86       3.708  -3.546   0.954  1.00 33.34
ATOM   1299 1HG2 ILE A  86       3.905  -2.730   0.276  1.00 74.35
ATOM   1300 2HG2 ILE A  86       4.535  -4.245   0.939  1.00  0.42
ATOM   1301 3HG2 ILE A  86       3.604  -3.164   1.959  1.00 22.33
ATOM   1302  CG1 ILE A  86       1.171  -3.384   0.758  1.00 52.43
ATOM   1303 1HG1 ILE A  86       1.226  -2.518   0.117  1.00 51.13
ATOM   1304 2HG1 ILE A  86       0.295  -3.958   0.491  1.00 21.04
ATOM   1305  CD1 ILE A  86       0.984  -2.892   2.176  1.00 62.13
ATOM   1306 1HD1 ILE A  86       0.863  -3.741   2.833  1.00 33.04
ATOM   1307 2HD1 ILE A  86       0.107  -2.265   2.231  1.00  0.14
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ATOM   1308 3HD1 ILE A  86       1.855  -2.329   2.477  1.00 33.20
ATOM   1309  C   ILE A  86       3.696  -5.656  -1.073  1.00 44.11
ATOM   1310  O   ILE A  86       3.753  -6.751  -0.532  1.00 53.14
ATOM   1311  N   LYS A  87       4.655  -5.178  -1.799  1.00 75.04
ATOM   1312  H   LYS A  87       4.534  -4.317  -2.265  1.00 31.43
ATOM   1313  CA  LYS A  87       5.896  -5.860  -1.926  1.00 33.40
ATOM   1314  HA  LYS A  87       5.802  -6.781  -1.371  1.00 51.15
ATOM   1315  CB  LYS A  87       6.230  -6.186  -3.392  1.00  2.32
ATOM   1316 1HB  LYS A  87       5.427  -6.766  -3.819  1.00 35.02
ATOM   1317 2HB  LYS A  87       6.312  -5.259  -3.938  1.00 12.13
ATOM   1318  CG  LYS A  87       7.538  -6.963  -3.581  1.00 14.50
ATOM   1319 1HG  LYS A  87       7.689  -7.144  -4.635  1.00 43.43
ATOM   1320 2HG  LYS A  87       8.354  -6.366  -3.200  1.00 11.03
ATOM   1321  CD  LYS A  87       7.517  -8.305  -2.849  1.00 71.30
ATOM   1322 1HD  LYS A  87       7.366  -8.131  -1.793  1.00 21.24
ATOM   1323 2HD  LYS A  87       6.707  -8.906  -3.236  1.00 52.10
ATOM   1324  CE  LYS A  87       8.824  -9.057  -3.031  1.00  3.14
ATOM   1325 1HE  LYS A  87       8.981  -9.233  -4.085  1.00 20.02
ATOM   1326 2HE  LYS A  87       9.630  -8.451  -2.645  1.00 25.32
ATOM   1327  NZ  LYS A  87       8.819 -10.364  -2.325  1.00 33.23
ATOM   1328 1HZ  LYS A  87       8.023 -10.964  -2.616  1.00 53.42
ATOM   1329 2HZ  LYS A  87       8.766 -10.241  -1.288  1.00 62.25
ATOM   1330 3HZ  LYS A  87       9.700 -10.886  -2.502  1.00 34.21
ATOM   1331  C   LYS A  87       6.985  -5.027  -1.280  1.00 73.45
ATOM   1332  O   LYS A  87       7.170  -3.847  -1.602  1.00 23.33
ATOM   1333  N   TYR A  88       7.627  -5.636  -0.339  1.00 54.32
ATOM   1334  H   TYR A  88       7.366  -6.553  -0.099  1.00 74.31
ATOM   1335  CA  TYR A  88       8.704  -5.080   0.403  1.00 24.30
ATOM   1336  HA  TYR A  88       8.893  -4.063   0.109  1.00 12.12
ATOM   1337  CB  TYR A  88       8.346  -5.134   1.875  1.00 14.34
ATOM   1338 1HB  TYR A  88       7.272  -5.214   1.949  1.00  1.41
ATOM   1339 2HB  TYR A  88       8.784  -6.019   2.314  1.00 30.40
ATOM   1340  CG  TYR A  88       8.778  -3.926   2.675  1.00 24.02
ATOM   1341  CD1 TYR A  88       7.933  -2.834   2.786  1.00 22.23
ATOM   1342  HD1 TYR A  88       6.976  -2.862   2.287  1.00 61.15
ATOM   1343  CE1 TYR A  88       8.287  -1.724   3.516  1.00 43.20
ATOM   1344  HE1 TYR A  88       7.611  -0.885   3.587  1.00 65.00
ATOM   1345  CZ  TYR A  88       9.502  -1.689   4.151  1.00 64.22
ATOM   1346  CE2 TYR A  88      10.367  -2.762   4.060  1.00  1.11
ATOM   1347  HE2 TYR A  88      11.322  -2.728   4.563  1.00 41.13
ATOM   1348  CD2 TYR A  88      10.002  -3.875   3.324  1.00 21.21
ATOM   1349  HD2 TYR A  88      10.676  -4.717   3.248  1.00 21.11
ATOM   1350  OH  TYR A  88       9.858  -0.572   4.883  1.00  5.24
ATOM   1351  HH  TYR A  88      10.759  -0.361   4.581  1.00  1.44
ATOM   1352  C   TYR A  88       9.897  -5.967   0.132  1.00 64.32
ATOM   1353  O   TYR A  88       9.713  -7.139  -0.281  1.00 11.35
ATOM   1354  N   GLY A  89      11.090  -5.459   0.301  1.00 52.11
ATOM   1355  H   GLY A  89      11.228  -4.541   0.631  1.00 32.43
ATOM   1356  CA  GLY A  89      12.241  -6.262   0.032  1.00  4.51
ATOM   1357 1HA  GLY A  89      12.032  -6.899  -0.815  1.00 12.32
ATOM   1358 2HA  GLY A  89      13.073  -5.619  -0.213  1.00 53.12
ATOM   1359  C   GLY A  89      12.637  -7.129   1.208  1.00 52.55
ATOM   1360  O   GLY A  89      11.797  -7.514   2.038  1.00  3.13
ATOM   1361  N   SER A  90      13.919  -7.390   1.286  1.00 31.34
ATOM   1362  H   SER A  90      14.515  -7.014   0.602  1.00 13.22
ATOM   1363  CA  SER A  90      14.564  -8.237   2.293  1.00 11.32
ATOM   1364  HA  SER A  90      14.184  -9.240   2.170  1.00 74.45
ATOM   1365  CB  SER A  90      16.055  -8.266   1.993  1.00 71.50
ATOM   1366 1HB  SER A  90      16.486  -7.300   2.203  1.00 63.12
ATOM   1367 2HB  SER A  90      16.536  -9.023   2.594  1.00 23.22
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ATOM   1368  OG  SER A  90      16.255  -8.577   0.620  1.00 74.42
ATOM   1369  HG  SER A  90      17.146  -8.338   0.335  1.00 11.11
ATOM   1370  C   SER A  90      14.302  -7.786   3.753  1.00 34.04
ATOM   1371  O   SER A  90      14.577  -8.520   4.694  1.00 24.30
ATOM   1372  N   GLN A  91      13.815  -6.574   3.917  1.00 31.40
ATOM   1373  H   GLN A  91      13.562  -6.063   3.120  1.00 32.44
ATOM   1374  CA  GLN A  91      13.601  -5.985   5.230  1.00 63.23
ATOM   1375  HA  GLN A  91      14.418  -6.269   5.876  1.00 63.13
ATOM   1376  CB  GLN A  91      13.604  -4.483   5.070  1.00 23.33
ATOM   1377 1HB  GLN A  91      12.774  -4.207   4.437  1.00 30.11
ATOM   1378 2HB  GLN A  91      13.485  -4.022   6.040  1.00 54.44
ATOM   1379  CG  GLN A  91      14.883  -3.955   4.442  1.00 11.24
ATOM   1380 1HG  GLN A  91      15.124  -4.572   3.590  1.00 12.22
ATOM   1381 2HG  GLN A  91      14.705  -2.945   4.103  1.00 15.12
ATOM   1382  CD  GLN A  91      16.073  -3.955   5.370  1.00  5.21
ATOM   1383  OE1 GLN A  91      16.346  -2.964   6.034  1.00 53.31
ATOM   1384  NE2 GLN A  91      16.785  -5.051   5.432  1.00 61.10
ATOM   1385 2HE2 GLN A  91      16.517  -5.818   4.886  1.00 10.42
ATOM   1386 1HE2 GLN A  91      17.555  -5.045   6.036  1.00 34.13
ATOM   1387  C   GLN A  91      12.271  -6.459   5.837  1.00 12.53
ATOM   1388  O   GLN A  91      12.099  -6.443   7.051  1.00 32.14
ATOM   1389  N   GLY A  92      11.348  -6.889   4.991  1.00  4.31
ATOM   1390  H   GLY A  92      11.522  -6.838   4.026  1.00  2.42
ATOM   1391  CA  GLY A  92      10.113  -7.446   5.485  1.00 71.43
ATOM   1392 1HA  GLY A  92       9.768  -8.186   4.778  1.00 31.51
ATOM   1393 2HA  GLY A  92      10.318  -7.941   6.423  1.00 74.13
ATOM   1394  C   GLY A  92       8.989  -6.438   5.700  1.00 14.24
ATOM   1395  O   GLY A  92       9.051  -5.573   6.579  1.00 50.15
ATOM   1396  N   ASN A  93       7.952  -6.562   4.882  1.00 13.53
ATOM   1397  H   ASN A  93       8.023  -7.144   4.096  1.00 33.23
ATOM   1398  CA  ASN A  93       6.712  -5.780   4.984  1.00  1.54
ATOM   1399  HA  ASN A  93       6.913  -4.755   4.708  1.00 40.10
ATOM   1400  CB  ASN A  93       5.669  -6.332   3.977  1.00 13.11
ATOM   1401 1HB  ASN A  93       4.842  -5.640   3.902  1.00  1.14
ATOM   1402 2HB  ASN A  93       6.130  -6.437   3.007  1.00 35.45
ATOM   1403  CG  ASN A  93       5.108  -7.709   4.388  1.00 15.45
ATOM   1404  OD1 ASN A  93       5.682  -8.737   4.088  1.00 40.21
ATOM   1405  ND2 ASN A  93       3.981  -7.728   5.059  1.00 53.31
ATOM   1406 2HD2 ASN A  93       3.520  -6.887   5.285  1.00 41.53
ATOM   1407 1HD2 ASN A  93       3.630  -8.607   5.305  1.00 72.43
ATOM   1408  C   ASN A  93       6.058  -5.843   6.376  1.00 54.53
ATOM   1409  O   ASN A  93       5.344  -4.926   6.730  1.00 65.44
ATOM   1410  N   SER A  94       6.359  -6.872   7.159  1.00 30.23
ATOM   1411  H   SER A  94       7.124  -7.442   6.934  1.00 11.12
ATOM   1412  CA  SER A  94       5.602  -7.252   8.360  1.00 71.13
ATOM   1413  HA  SER A  94       4.702  -7.750   8.031  1.00 72.25
ATOM   1414  CB  SER A  94       6.429  -8.279   9.121  1.00 43.43
ATOM   1415 1HB  SER A  94       7.289  -7.792   9.558  1.00 51.42
ATOM   1416 2HB  SER A  94       5.830  -8.733   9.895  1.00 41.31
ATOM   1417  OG  SER A  94       6.881  -9.295   8.229  1.00 64.02
ATOM   1418  HG  SER A  94       7.154 -10.059   8.746  1.00 22.25
ATOM   1419  C   SER A  94       5.197  -6.073   9.286  1.00 41.42
ATOM   1420  O   SER A  94       4.009  -5.843   9.499  1.00 54.54
ATOM   1421  N   ILE A  95       6.148  -5.300   9.761  1.00 51.22
ATOM   1422  H   ILE A  95       7.079  -5.476   9.508  1.00 32.22
ATOM   1423  CA  ILE A  95       5.821  -4.190  10.665  1.00 22.33
ATOM   1424  HA  ILE A  95       5.036  -4.541  11.320  1.00  4.52
ATOM   1425  CB  ILE A  95       7.057  -3.726  11.545  1.00 70.32
ATOM   1426  HB  ILE A  95       7.864  -3.502  10.862  1.00 14.44
ATOM   1427  CG2 ILE A  95       6.749  -2.440  12.313  1.00 10.23
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ATOM   1428 1HG2 ILE A  95       6.511  -1.652  11.613  1.00 21.53
ATOM   1429 2HG2 ILE A  95       7.609  -2.154  12.898  1.00  4.25
ATOM   1430 3HG2 ILE A  95       5.907  -2.607  12.969  1.00 53.52
ATOM   1431  CG1 ILE A  95       7.536  -4.821  12.540  1.00 43.40
ATOM   1432 1HG1 ILE A  95       8.236  -4.380  13.232  1.00 45.30
ATOM   1433 2HG1 ILE A  95       6.681  -5.176  13.097  1.00 55.44
ATOM   1434  CD1 ILE A  95       8.222  -6.024  11.919  1.00 25.22
ATOM   1435 1HD1 ILE A  95       7.537  -6.513  11.241  1.00  5.04
ATOM   1436 2HD1 ILE A  95       8.516  -6.714  12.697  1.00 53.13
ATOM   1437 3HD1 ILE A  95       9.097  -5.699  11.374  1.00 74.24
ATOM   1438  C   ILE A  95       5.272  -2.994   9.869  1.00 44.44
ATOM   1439  O   ILE A  95       4.256  -2.385  10.220  1.00 33.14
ATOM   1440  N   ARG A  96       5.914  -2.738   8.757  1.00 13.44
ATOM   1441  H   ARG A  96       6.582  -3.392   8.466  1.00 31.44
ATOM   1442  CA  ARG A  96       5.661  -1.566   7.930  1.00 12.13
ATOM   1443  HA  ARG A  96       5.741  -0.693   8.560  1.00 41.43
ATOM   1444  CB  ARG A  96       6.752  -1.483   6.867  1.00 44.14
ATOM   1445 1HB  ARG A  96       6.706  -2.367   6.249  1.00 33.34
ATOM   1446 2HB  ARG A  96       6.582  -0.611   6.251  1.00 14.04
ATOM   1447  CG  ARG A  96       8.152  -1.377   7.468  1.00 21.31
ATOM   1448 1HG  ARG A  96       8.248  -2.111   8.254  1.00 33.21
ATOM   1449 2HG  ARG A  96       8.879  -1.581   6.696  1.00 21.33
ATOM   1450  CD  ARG A  96       8.418   0.004   8.051  1.00 20.21
ATOM   1451 1HD  ARG A  96       7.562   0.315   8.631  1.00 11.23
ATOM   1452 2HD  ARG A  96       9.285  -0.051   8.693  1.00 11.53
ATOM   1453  NE  ARG A  96       8.667   0.992   6.997  1.00  1.12
ATOM   1454  HE  ARG A  96       9.104   0.601   6.200  1.00 42.21
ATOM   1455  CZ  ARG A  96       8.425   2.315   7.078  1.00 40.42
ATOM   1456  NH1 ARG A  96       7.800   2.833   8.148  1.00 63.34
ATOM   1457 1HH1 ARG A  96       7.492   2.261   8.907  1.00 73.15
ATOM   1458 2HH1 ARG A  96       7.634   3.821   8.256  1.00 33.23
ATOM   1459  NH2 ARG A  96       8.813   3.113   6.087  1.00 53.40
ATOM   1460 1HH2 ARG A  96       9.291   2.737   5.289  1.00 51.12
ATOM   1461 2HH2 ARG A  96       8.658   4.102   6.095  1.00 22.11
ATOM   1462  C   ARG A  96       4.267  -1.579   7.298  1.00 52.05
ATOM   1463  O   ARG A  96       3.555  -0.583   7.344  1.00 30.21
ATOM   1464  N   SER A  97       3.879  -2.709   6.752  1.00 33.52
ATOM   1465  H   SER A  97       4.479  -3.486   6.804  1.00  2.11
ATOM   1466  CA  SER A  97       2.600  -2.835   6.076  1.00 62.23
ATOM   1467  HA  SER A  97       2.529  -1.995   5.401  1.00  1.11
ATOM   1468  CB  SER A  97       2.540  -4.126   5.240  1.00 41.53
ATOM   1469 1HB  SER A  97       1.544  -4.236   4.836  1.00 44.21
ATOM   1470 2HB  SER A  97       3.250  -4.061   4.430  1.00  4.25
ATOM   1471  OG  SER A  97       2.832  -5.283   6.022  1.00 65.22
ATOM   1472  HG  SER A  97       3.613  -5.115   6.563  1.00 23.21
ATOM   1473  C   SER A  97       1.424  -2.741   7.041  1.00  1.32
ATOM   1474  O   SER A  97       0.401  -2.166   6.706  1.00 53.32
ATOM   1475  N   SER A  98       1.595  -3.266   8.247  1.00 62.43
ATOM   1476  H   SER A  98       2.449  -3.683   8.485  1.00 32.35
ATOM   1477  CA  SER A  98       0.541  -3.245   9.237  1.00 12.40
ATOM   1478  HA  SER A  98      -0.347  -3.661   8.782  1.00 42.40
ATOM   1479  CB  SER A  98       0.944  -4.104  10.452  1.00 60.14
ATOM   1480 1HB  SER A  98       1.284  -5.071  10.112  1.00 41.12
ATOM   1481 2HB  SER A  98       1.747  -3.609  10.978  1.00 71.51
ATOM   1482  OG  SER A  98      -0.140  -4.293  11.343  1.00 50.51
ATOM   1483  HG  SER A  98       0.082  -3.916  12.198  1.00 23.40
ATOM   1484  C   SER A  98       0.252  -1.791   9.643  1.00 75.35
ATOM   1485  O   SER A  98      -0.911  -1.366   9.725  1.00 33.32
ATOM   1486  N   ALA A  99       1.320  -1.019   9.825  1.00 55.30
ATOM   1487  H   ALA A  99       2.213  -1.413   9.723  1.00  0.35
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ATOM   1488  CA  ALA A  99       1.200   0.382  10.178  1.00 14.55
ATOM   1489  HA  ALA A  99       0.530   0.454  11.024  1.00 23.00
ATOM   1490  CB  ALA A  99       2.554   0.947  10.576  1.00 63.30
ATOM   1491 1HB  ALA A  99       2.957   0.375  11.397  1.00 22.32
ATOM   1492 2HB  ALA A  99       2.441   1.979  10.876  1.00 61.01
ATOM   1493 3HB  ALA A  99       3.228   0.889   9.732  1.00 13.23
ATOM   1494  C   ALA A  99       0.605   1.171   9.016  1.00 40.30
ATOM   1495  O   ALA A  99      -0.243   2.039   9.214  1.00  3.42
ATOM   1496  N   LEU A 100       1.044   0.833   7.803  1.00 74.42
ATOM   1497  H   LEU A 100       1.733   0.143   7.710  1.00  3.41
ATOM   1498  CA  LEU A 100       0.577   1.463   6.584  1.00 34.45
ATOM   1499  HA  LEU A 100       0.831   2.511   6.619  1.00 40.15
ATOM   1500  CB  LEU A 100       1.261   0.824   5.385  1.00 24.13
ATOM   1501 1HB  LEU A 100       2.304   0.700   5.624  1.00 45.52
ATOM   1502 2HB  LEU A 100       0.841  -0.164   5.272  1.00 32.22
ATOM   1503  CG  LEU A 100       1.114   1.552   4.049  1.00 61.45
ATOM   1504  HG  LEU A 100       0.064   1.677   3.829  1.00 44.42
ATOM   1505  CD1 LEU A 100       1.744   2.934   4.122  1.00 42.55
ATOM   1506 1HD1 LEU A 100       1.230   3.524   4.866  1.00 43.35
ATOM   1507 2HD1 LEU A 100       1.676   3.420   3.159  1.00 62.41
ATOM   1508 3HD1 LEU A 100       2.782   2.831   4.405  1.00 70.34
ATOM   1509  CD2 LEU A 100       1.743   0.739   2.934  1.00 32.41
ATOM   1510 1HD2 LEU A 100       1.241  -0.214   2.864  1.00 62.30
ATOM   1511 2HD2 LEU A 100       2.787   0.578   3.159  1.00 20.11
ATOM   1512 3HD2 LEU A 100       1.648   1.269   1.998  1.00  4.30
ATOM   1513  C   LEU A 100      -0.927   1.297   6.456  1.00 45.42
ATOM   1514  O   LEU A 100      -1.635   2.261   6.208  1.00 54.12
ATOM   1515  N   ILE A 101      -1.401   0.079   6.692  1.00 61.45
ATOM   1516  H   ILE A 101      -0.746  -0.624   6.905  1.00 21.11
ATOM   1517  CA  ILE A 101      -2.835  -0.232   6.609  1.00  5.51
ATOM   1518  HA  ILE A 101      -3.160   0.015   5.609  1.00 54.22
ATOM   1519  CB  ILE A 101      -3.128  -1.748   6.882  1.00 74.43
ATOM   1520  HB  ILE A 101      -2.682  -1.991   7.835  1.00 41.13
ATOM   1521  CG2 ILE A 101      -4.630  -2.030   7.000  1.00 71.21
ATOM   1522 1HG2 ILE A 101      -4.782  -3.080   7.187  1.00 34.42
ATOM   1523 2HG2 ILE A 101      -5.123  -1.751   6.080  1.00 53.21
ATOM   1524 3HG2 ILE A 101      -5.037  -1.452   7.817  1.00 33.24
ATOM   1525  CG1 ILE A 101      -2.496  -2.652   5.802  1.00 74.03
ATOM   1526 1HG1 ILE A 101      -1.427  -2.496   5.796  1.00 74.11
ATOM   1527 2HG1 ILE A 101      -2.697  -3.684   6.054  1.00  3.13
ATOM   1528  CD1 ILE A 101      -2.998  -2.410   4.387  1.00 53.43
ATOM   1529 1HD1 ILE A 101      -2.761  -1.402   4.080  1.00 45.34
ATOM   1530 2HD1 ILE A 101      -4.068  -2.553   4.358  1.00 12.13
ATOM   1531 3HD1 ILE A 101      -2.526  -3.112   3.715  1.00 24.01
ATOM   1532  C   ILE A 101      -3.620   0.635   7.595  1.00 61.02
ATOM   1533  O   ILE A 101      -4.675   1.166   7.247  1.00 13.11
ATOM   1534  N   GLY A 102      -3.063   0.817   8.792  1.00  3.13
ATOM   1535  H   GLY A 102      -2.212   0.368   8.991  1.00 31.44
ATOM   1536  CA  GLY A 102      -3.689   1.653   9.811  1.00 33.34
ATOM   1537 1HA  GLY A 102      -4.658   1.255  10.049  1.00 55.20
ATOM   1538 2HA  GLY A 102      -3.074   1.647  10.699  1.00 21.03
ATOM   1539  C   GLY A 102      -3.860   3.083   9.348  1.00 35.14
ATOM   1540  O   GLY A 102      -4.881   3.718   9.589  1.00 75.04
ATOM   1541  N   ILE A 103      -2.871   3.570   8.662  1.00  4.00
ATOM   1542  H   ILE A 103      -2.089   2.996   8.509  1.00 41.25
ATOM   1543  CA  ILE A 103      -2.884   4.912   8.128  1.00 31.21
ATOM   1544  HA  ILE A 103      -3.171   5.580   8.924  1.00  1.51
ATOM   1545  CB  ILE A 103      -1.476   5.294   7.637  1.00  1.14
ATOM   1546  HB  ILE A 103      -1.150   4.541   6.936  1.00 42.51
ATOM   1547  CG2 ILE A 103      -1.477   6.651   6.919  1.00 45.34
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ATOM   1548 1HG2 ILE A 103      -2.121   6.593   6.052  1.00 72.42
ATOM   1549 2HG2 ILE A 103      -0.475   6.893   6.597  1.00 10.42
ATOM   1550 3HG2 ILE A 103      -1.841   7.419   7.587  1.00 65.23
ATOM   1551  CG1 ILE A 103      -0.518   5.293   8.827  1.00 23.30
ATOM   1552 1HG1 ILE A 103      -0.707   6.166   9.433  1.00 21.10
ATOM   1553 2HG1 ILE A 103      -0.700   4.407   9.420  1.00  5.43
ATOM   1554  CD1 ILE A 103       0.928   5.309   8.446  1.00 41.22
ATOM   1555 1HD1 ILE A 103       1.119   4.414   7.871  1.00  1.41
ATOM   1556 2HD1 ILE A 103       1.523   5.300   9.346  1.00 21.20
ATOM   1557 3HD1 ILE A 103       1.142   6.184   7.850  1.00 51.24
ATOM   1558  C   ILE A 103      -3.889   5.020   6.991  1.00 51.45
ATOM   1559  O   ILE A 103      -4.636   6.006   6.895  1.00  4.51
ATOM   1560  N   ILE A 104      -3.935   3.989   6.166  1.00  5.13
ATOM   1561  H   ILE A 104      -3.355   3.215   6.349  1.00 71.34
ATOM   1562  CA  ILE A 104      -4.819   3.970   5.029  1.00 35.43
ATOM   1563  HA  ILE A 104      -4.630   4.854   4.439  1.00 22.13
ATOM   1564  CB  ILE A 104      -4.563   2.709   4.140  1.00 65.12
ATOM   1565  HB  ILE A 104      -4.682   1.832   4.760  1.00 50.41
ATOM   1566  CG2 ILE A 104      -5.574   2.623   2.993  1.00 42.33
ATOM   1567 1HG2 ILE A 104      -5.470   3.493   2.360  1.00 21.32
ATOM   1568 2HG2 ILE A 104      -6.575   2.589   3.396  1.00 12.41
ATOM   1569 3HG2 ILE A 104      -5.387   1.732   2.414  1.00 64.51
ATOM   1570  CG1 ILE A 104      -3.134   2.730   3.588  1.00 53.13
ATOM   1571 1HG1 ILE A 104      -3.050   3.547   2.886  1.00 23.33
ATOM   1572 2HG1 ILE A 104      -2.442   2.891   4.402  1.00 72.34
ATOM   1573  CD1 ILE A 104      -2.727   1.459   2.865  1.00  4.42
ATOM   1574 1HD1 ILE A 104      -2.782   0.625   3.548  1.00 43.33
ATOM   1575 2HD1 ILE A 104      -1.718   1.561   2.497  1.00 23.30
ATOM   1576 3HD1 ILE A 104      -3.396   1.289   2.035  1.00 13.42
ATOM   1577  C   ILE A 104      -6.259   3.970   5.507  1.00 52.54
ATOM   1578  O   ILE A 104      -7.037   4.839   5.128  1.00 62.23
ATOM   1579  N   GLU A 105      -6.573   3.068   6.415  1.00 31.32
ATOM   1580  H   GLU A 105      -5.876   2.466   6.767  1.00 65.32
ATOM   1581  CA  GLU A 105      -7.920   2.939   6.915  1.00 15.12
ATOM   1582  HA  GLU A 105      -8.561   2.905   6.047  1.00  1.32
ATOM   1583  CB  GLU A 105      -8.090   1.627   7.705  1.00  2.41
ATOM   1584 1HB  GLU A 105      -9.143   1.474   7.888  1.00 33.25
ATOM   1585 2HB  GLU A 105      -7.725   0.814   7.096  1.00 70.43
ATOM   1586  CG  GLU A 105      -7.378   1.580   9.043  1.00 43.12
ATOM   1587 1HG  GLU A 105      -6.742   0.712   9.113  1.00 24.41
ATOM   1588 2HG  GLU A 105      -6.746   2.455   9.098  1.00 32.41
ATOM   1589  CD  GLU A 105      -8.364   1.650  10.181  1.00 54.34
ATOM   1590  OE1 GLU A 105      -8.729   0.598  10.729  1.00 72.14
ATOM   1591  OE2 GLU A 105      -8.865   2.748  10.480  1.00 72.15
ATOM   1592  C   GLU A 105      -8.327   4.178   7.726  1.00 12.03
ATOM   1593  O   GLU A 105      -9.453   4.666   7.595  1.00 22.31
ATOM   1594  N   GLY A 106      -7.379   4.703   8.511  1.00 51.11
ATOM   1595  H   GLY A 106      -6.505   4.260   8.564  1.00 41.44
ATOM   1596  CA  GLY A 106      -7.613   5.863   9.343  1.00 71.24
ATOM   1597 1HA  GLY A 106      -8.425   5.652  10.024  1.00 45.24
ATOM   1598 2HA  GLY A 106      -6.721   6.060   9.918  1.00 50.40
ATOM   1599  C   GLY A 106      -7.953   7.089   8.540  1.00 73.40
ATOM   1600  O   GLY A 106      -8.888   7.818   8.872  1.00 53.24
ATOM   1601  N   ASN A 107      -7.226   7.299   7.461  1.00 14.41
ATOM   1602  H   ASN A 107      -6.501   6.670   7.248  1.00 53.24
ATOM   1603  CA  ASN A 107      -7.459   8.449   6.587  1.00 41.31
ATOM   1604  HA  ASN A 107      -7.491   9.333   7.208  1.00 53.43
ATOM   1605  CB  ASN A 107      -6.311   8.572   5.574  1.00  4.54
ATOM   1606 1HB  ASN A 107      -5.367   8.522   6.095  1.00 62.21
ATOM   1607 2HB  ASN A 107      -6.369   7.731   4.899  1.00 12.42
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ATOM   1608  CG  ASN A 107      -6.345   9.850   4.748  1.00 55.44
ATOM   1609  OD1 ASN A 107      -6.874  10.868   5.163  1.00 64.21
ATOM   1610  ND2 ASN A 107      -5.711   9.821   3.604  1.00 25.02
ATOM   1611 2HD2 ASN A 107      -5.257   8.989   3.361  1.00 33.31
ATOM   1612 1HD2 ASN A 107      -5.706  10.641   3.069  1.00 32.43
ATOM   1613  C   ASN A 107      -8.814   8.291   5.890  1.00 30.04
ATOM   1614  O   ASN A 107      -9.560   9.257   5.689  1.00 34.42
ATOM   1615  N   ILE A 108      -9.144   7.047   5.581  1.00 54.24
ATOM   1616  H   ILE A 108      -8.488   6.334   5.742  1.00 21.14
ATOM   1617  CA  ILE A 108     -10.432   6.689   5.007  1.00  0.02
ATOM   1618  HA  ILE A 108     -10.567   7.321   4.141  1.00  1.14
ATOM   1619  CB  ILE A 108     -10.489   5.206   4.553  1.00 24.03
ATOM   1620  HB  ILE A 108     -10.196   4.579   5.383  1.00 45.01
ATOM   1621  CG2 ILE A 108     -11.903   4.816   4.120  1.00 21.24
ATOM   1622 1HG2 ILE A 108     -11.914   3.782   3.810  1.00 54.44
ATOM   1623 2HG2 ILE A 108     -12.211   5.443   3.297  1.00 33.13
ATOM   1624 3HG2 ILE A 108     -12.581   4.952   4.950  1.00 52.12
ATOM   1625  CG1 ILE A 108      -9.514   4.984   3.405  1.00 21.42
ATOM   1626 1HG1 ILE A 108      -9.915   5.458   2.520  1.00 24.34
ATOM   1627 2HG1 ILE A 108      -8.558   5.419   3.653  1.00  3.10
ATOM   1628  CD1 ILE A 108      -9.303   3.540   3.062  1.00 24.12
ATOM   1629 1HD1 ILE A 108      -8.577   3.474   2.265  1.00 23.43
ATOM   1630 2HD1 ILE A 108     -10.238   3.100   2.748  1.00  3.31
ATOM   1631 3HD1 ILE A 108      -8.926   3.022   3.931  1.00 62.21
ATOM   1632  C   ILE A 108     -11.566   7.000   5.982  1.00 43.31
ATOM   1633  O   ILE A 108     -12.611   7.455   5.569  1.00 44.45
ATOM   1634  N   ARG A 109     -11.331   6.781   7.284  1.00 11.51
ATOM   1635  H   ARG A 109     -10.442   6.451   7.539  1.00 73.52
ATOM   1636  CA  ARG A 109     -12.365   7.004   8.312  1.00 31.43
ATOM   1637  HA  ARG A 109     -13.189   6.328   8.136  1.00 14.00
ATOM   1638  CB  ARG A 109     -11.808   6.779   9.739  1.00 74.13
ATOM   1639 1HB  ARG A 109     -11.057   7.532   9.926  1.00 42.25
ATOM   1640 2HB  ARG A 109     -12.615   6.928  10.441  1.00 64.52
ATOM   1641  CG  ARG A 109     -11.168   5.422  10.024  1.00  2.32
ATOM   1642 1HG  ARG A 109     -10.401   5.250   9.285  1.00  4.42
ATOM   1643 2HG  ARG A 109     -10.711   5.447  11.004  1.00 51.13
ATOM   1644  CD  ARG A 109     -12.143   4.263   9.956  1.00 14.42
ATOM   1645 1HD  ARG A 109     -12.959   4.446  10.642  1.00 61.15
ATOM   1646 2HD  ARG A 109     -12.525   4.182   8.949  1.00 63.51
ATOM   1647  NE  ARG A 109     -11.482   3.000  10.318  1.00 25.31
ATOM   1648  HE  ARG A 109     -10.482   3.036  10.357  1.00 61.22
ATOM   1649  CZ  ARG A 109     -12.078   1.840  10.604  1.00 31.42
ATOM   1650  NH1 ARG A 109     -13.411   1.734  10.552  1.00  0.10
ATOM   1651 1HH1 ARG A 109     -13.977   2.517  10.301  1.00 12.50
ATOM   1652 2HH1 ARG A 109     -13.878   0.870  10.742  1.00 71.41
ATOM   1653  NH2 ARG A 109     -11.342   0.785  10.920  1.00 31.34
ATOM   1654 1HH2 ARG A 109     -10.323   0.850  10.944  1.00  3.43
ATOM   1655 2HH2 ARG A 109     -11.685  -0.123  11.151  1.00 63.32
ATOM   1656  C   ARG A 109     -12.851   8.449   8.236  1.00 35.14
ATOM   1657  O   ARG A 109     -14.045   8.702   8.267  1.00 40.45
ATOM   1658  N   TYR A 110     -11.912   9.372   8.087  1.00 61.05
ATOM   1659  H   TYR A 110     -10.974   9.086   8.033  1.00 40.31
ATOM   1660  CA  TYR A 110     -12.231  10.793   7.987  1.00  4.53
ATOM   1661  HA  TYR A 110     -12.930  11.023   8.778  1.00 41.44
ATOM   1662  CB  TYR A 110     -10.977  11.651   8.182  1.00 32.33
ATOM   1663 1HB  TYR A 110     -10.226  11.331   7.476  1.00 52.51
ATOM   1664 2HB  TYR A 110     -11.219  12.684   7.987  1.00 41.21
ATOM   1665  CG  TYR A 110     -10.375  11.559   9.563  1.00 21.02
ATOM   1666  CD1 TYR A 110      -9.243  10.795   9.800  1.00 62.44
ATOM   1667  HD1 TYR A 110      -8.788  10.260   8.979  1.00 51.20
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ATOM   1668  CE1 TYR A 110      -8.694  10.708  11.063  1.00 62.32
ATOM   1669  HE1 TYR A 110      -7.811  10.107  11.228  1.00 54.50
ATOM   1670  CZ  TYR A 110      -9.277  11.390  12.107  1.00 15.34
ATOM   1671  CE2 TYR A 110     -10.402  12.157  11.896  1.00 33.12
ATOM   1672  HE2 TYR A 110     -10.858  12.692  12.716  1.00 40.31
ATOM   1673  CD2 TYR A 110     -10.943  12.237  10.631  1.00 33.25
ATOM   1674  HD2 TYR A 110     -11.827  12.836  10.461  1.00 24.12
ATOM   1675  OH  TYR A 110      -8.733  11.308  13.365  1.00 13.33
ATOM   1676  HH  TYR A 110      -9.434  11.192  14.012  1.00  1.35
ATOM   1677  C   TYR A 110     -12.885  11.128   6.651  1.00 14.32
ATOM   1678  O   TYR A 110     -13.826  11.910   6.591  1.00 63.53
ATOM   1679  N   ALA A 111     -12.366  10.558   5.590  1.00 54.00
ATOM   1680  H   ALA A 111     -11.597   9.959   5.703  1.00 53.04
ATOM   1681  CA  ALA A 111     -12.891  10.801   4.252  1.00 22.33
ATOM   1682  HA  ALA A 111     -12.931  11.871   4.109  1.00 43.23
ATOM   1683  CB  ALA A 111     -11.949  10.223   3.204  1.00 10.14
ATOM   1684 1HB  ALA A 111     -10.959  10.628   3.346  1.00 63.34
ATOM   1685 2HB  ALA A 111     -12.307  10.478   2.218  1.00 52.31
ATOM   1686 3HB  ALA A 111     -11.917   9.148   3.308  1.00 42.13
ATOM   1687  C   ALA A 111     -14.306  10.236   4.070  1.00 13.10
ATOM   1688  O   ALA A 111     -15.135  10.823   3.386  1.00 24.54
ATOM   1689  N   ASN A 112     -14.553   9.094   4.677  1.00 44.50
ATOM   1690  H   ASN A 112     -13.850   8.708   5.245  1.00 51.42
ATOM   1691  CA  ASN A 112     -15.813   8.371   4.521  1.00 71.22
ATOM   1692  HA  ASN A 112     -16.091   8.424   3.481  1.00 72.42
ATOM   1693  CB  ASN A 112     -15.623   6.884   4.892  1.00  5.22
ATOM   1694 1HB  ASN A 112     -14.748   6.507   4.385  1.00 72.34
ATOM   1695 2HB  ASN A 112     -15.460   6.814   5.958  1.00 74.21
ATOM   1696  CG  ASN A 112     -16.805   5.991   4.522  1.00 63.12
ATOM   1697  OD1 ASN A 112     -16.857   5.443   3.427  1.00 22.13
ATOM   1698  ND2 ASN A 112     -17.740   5.811   5.430  1.00 51.44
ATOM   1699 2HD2 ASN A 112     -17.654   6.250   6.300  1.00 62.04
ATOM   1700 1HD2 ASN A 112     -18.497   5.248   5.169  1.00 42.11
ATOM   1701  C   ASN A 112     -16.940   8.985   5.348  1.00 22.04
ATOM   1702  O   ASN A 112     -18.102   8.923   4.962  1.00 43.43
ATOM   1703  N   THR A 113     -16.609   9.565   6.483  1.00  5.11
ATOM   1704  H   THR A 113     -15.671   9.664   6.756  1.00  2.12
ATOM   1705  CA  THR A 113     -17.628  10.119   7.343  1.00 64.21
ATOM   1706  HA  THR A 113     -18.388  10.544   6.705  1.00 44.43
ATOM   1707  CB  THR A 113     -18.300   9.000   8.222  1.00 35.33
ATOM   1708  HB  THR A 113     -18.697   8.253   7.549  1.00 25.52
ATOM   1709  OG1 THR A 113     -19.397   9.521   8.996  1.00 31.21
ATOM   1710  HG1 THR A 113     -19.102  10.258   9.548  1.00 14.21
ATOM   1711  CG2 THR A 113     -17.295   8.327   9.159  1.00 43.21
ATOM   1712 1HG2 THR A 113     -16.508   7.873   8.576  1.00 44.44
ATOM   1713 2HG2 THR A 113     -17.796   7.569   9.741  1.00 33.54
ATOM   1714 3HG2 THR A 113     -16.872   9.069   9.822  1.00 53.01
ATOM   1715  C   THR A 113     -17.064  11.233   8.220  1.00 21.51
ATOM   1716  O   THR A 113     -15.875  11.236   8.553  1.00  3.24
ATOM   1717  N   HIS A 114     -17.918  12.168   8.544  1.00 10.43
ATOM   1718  H   HIS A 114     -18.843  12.158   8.219  1.00 34.44
ATOM   1719  CA  HIS A 114     -17.627  13.280   9.407  1.00 11.21
ATOM   1720  HA  HIS A 114     -16.909  12.961  10.147  1.00 14.45
ATOM   1721  CB  HIS A 114     -17.072  14.475   8.612  1.00 73.51
ATOM   1722 1HB  HIS A 114     -17.203  14.284   7.558  1.00 62.21
ATOM   1723 2HB  HIS A 114     -17.627  15.360   8.879  1.00  1.01
ATOM   1724  CG  HIS A 114     -15.615  14.750   8.846  1.00 63.53
ATOM   1725  ND1 HIS A 114     -14.589  14.068   8.233  1.00 14.20
ATOM   1726  CD2 HIS A 114     -15.021  15.678   9.635  1.00 23.34
ATOM   1727  HD1 HIS A 114     -14.687  13.297   7.627  1.00 44.44
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ATOM   1728  CE1 HIS A 114     -13.438  14.588   8.650  1.00 43.42
ATOM   1729  NE2 HIS A 114     -13.637  15.571   9.505  1.00  3.21
ATOM   1730  HD2 HIS A 114     -15.528  16.392  10.266  1.00 70.12
ATOM   1731  HE1 HIS A 114     -12.465  14.256   8.326  1.00 63.42
ATOM   1732  C   HIS A 114     -18.918  13.659  10.089  1.00 71.43
ATOM   1733  O   HIS A 114     -19.681  14.444   9.505  1.00  1.04
TER    1734      HIS A 114
ENDMDL
MODEL       14
ATOM      1  N   MET A   1      -7.416  -8.825  14.417  1.00 62.32
ATOM      2  CA  MET A   1      -8.416  -9.683  13.748  1.00  2.34
ATOM      3  HA  MET A   1      -7.923 -10.563  13.361  1.00  1.50
ATOM      4  CB  MET A   1      -9.552 -10.054  14.713  1.00 13.23
ATOM      5 1HB  MET A   1      -9.134 -10.605  15.545  1.00 62.55
ATOM      6 2HB  MET A   1      -9.993  -9.143  15.090  1.00 20.21
ATOM      7  CG  MET A   1     -10.658 -10.901  14.093  1.00 72.43
ATOM      8 1HG  MET A   1     -11.113 -10.342  13.289  1.00 72.24
ATOM      9 2HG  MET A   1     -10.224 -11.809  13.700  1.00 72.32
ATOM     10  SD  MET A   1     -11.929 -11.334  15.288  1.00 11.14
ATOM     11  CE  MET A   1     -13.070 -12.262  14.260  1.00 12.55
ATOM     12 1HE  MET A   1     -13.434 -11.626  13.466  1.00 74.13
ATOM     13 2HE  MET A   1     -13.903 -12.598  14.860  1.00  3.24
ATOM     14 3HE  MET A   1     -12.564 -13.114  13.836  1.00 64.01
ATOM     15  C   MET A   1      -8.917  -8.867  12.634  1.00  0.42
ATOM     16  O   MET A   1      -9.705  -7.958  12.836  1.00 14.53
ATOM     17  N   ASP A   2      -8.425  -9.144  11.465  1.00 54.33
ATOM     18  H   ASP A   2      -8.002 -10.000  11.253  1.00 62.14
ATOM     19  CA  ASP A   2      -8.539  -8.183  10.427  1.00 30.11
ATOM     20  HA  ASP A   2      -9.221  -7.425  10.782  1.00 13.02
ATOM     21  CB  ASP A   2      -7.182  -7.482  10.241  1.00 25.52
ATOM     22 1HB  ASP A   2      -6.413  -8.236  10.138  1.00 51.43
ATOM     23 2HB  ASP A   2      -7.174  -6.856   9.363  1.00 50.34
ATOM     24  CG  ASP A   2      -6.824  -6.624  11.433  1.00 44.25
ATOM     25  OD1 ASP A   2      -7.010  -5.393  11.335  1.00 74.54
ATOM     26  OD2 ASP A   2      -6.410  -7.204  12.509  1.00  1.43
ATOM     27  C   ASP A   2      -9.091  -8.719   9.140  1.00 53.33
ATOM     28  O   ASP A   2      -9.444  -9.891   9.017  1.00 34.30
ATOM     29  N   LYS A   3      -9.104  -7.848   8.191  1.00 65.21
ATOM     30  H   LYS A   3      -8.587  -7.031   8.323  1.00 73.43
ATOM     31  CA  LYS A   3      -9.738  -7.994   6.931  1.00 35.21
ATOM     32  HA  LYS A   3     -10.587  -8.645   7.078  1.00 51.52
ATOM     33  CB  LYS A   3     -10.286  -6.607   6.457  1.00 32.41
ATOM     34 1HB  LYS A   3     -10.570  -6.691   5.419  1.00 53.11
ATOM     35 2HB  LYS A   3     -11.168  -6.370   7.037  1.00 45.12
ATOM     36  CG  LYS A   3      -9.287  -5.416   6.584  1.00 40.53
ATOM     37 1HG  LYS A   3      -8.310  -5.757   6.277  1.00  2.40
ATOM     38 2HG  LYS A   3      -9.612  -4.629   5.918  1.00 43.43
ATOM     39  CD  LYS A   3      -9.178  -4.847   8.023  1.00  3.01
ATOM     40 1HD  LYS A   3     -10.033  -4.206   8.186  1.00 13.31
ATOM     41 2HD  LYS A   3      -9.192  -5.625   8.769  1.00 24.45
ATOM     42  CE  LYS A   3      -7.925  -3.998   8.192  1.00 31.44
ATOM     43 1HE  LYS A   3      -7.083  -4.634   7.959  1.00 72.01
ATOM     44 2HE  LYS A   3      -7.962  -3.178   7.490  1.00 31.12
ATOM     45  NZ  LYS A   3      -7.767  -3.474   9.575  1.00 42.15
ATOM     46 1HZ  LYS A   3      -6.998  -2.763   9.558  1.00 24.02
ATOM     47 2HZ  LYS A   3      -7.512  -4.186  10.299  1.00 52.33
ATOM     48 3HZ  LYS A   3      -8.609  -2.936   9.862  1.00 63.21
ATOM     49  C   LYS A   3      -8.818  -8.647   5.892  1.00 12.22
ATOM     50  O   LYS A   3      -8.010  -7.983   5.233  1.00  3.43
ATOM     51  N   GLY A   4      -8.897  -9.963   5.831  1.00 74.33
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ATOM     52  H   GLY A   4      -9.472 -10.400   6.493  1.00 61.34
ATOM     53  CA  GLY A   4      -8.140 -10.751   4.854  1.00 12.34
ATOM     54 1HA  GLY A   4      -8.402 -11.793   4.965  1.00 41.30
ATOM     55 2HA  GLY A   4      -8.407 -10.425   3.858  1.00 34.35
ATOM     56  C   GLY A   4      -6.649 -10.599   5.036  1.00 55.11
ATOM     57  O   GLY A   4      -5.887 -10.644   4.074  1.00  1.11
ATOM     58  N   THR A   5      -6.263 -10.390   6.261  1.00 41.43
ATOM     59  H   THR A   5      -6.933 -10.369   6.972  1.00 44.43
ATOM     60  CA  THR A   5      -4.907 -10.174   6.623  1.00 23.35
ATOM     61  HA  THR A   5      -4.437  -9.607   5.834  1.00 42.20
ATOM     62  CB  THR A   5      -4.849  -9.333   7.908  1.00  3.35
ATOM     63  HB  THR A   5      -5.427  -9.844   8.665  1.00 40.12
ATOM     64  OG1 THR A   5      -5.461  -8.051   7.654  1.00  5.43
ATOM     65  HG1 THR A   5      -4.762  -7.385   7.629  1.00 52.15
ATOM     66  CG2 THR A   5      -3.424  -9.139   8.397  1.00  2.11
ATOM     67 1HG2 THR A   5      -3.429  -8.547   9.300  1.00 54.04
ATOM     68 2HG2 THR A   5      -2.850  -8.628   7.637  1.00 54.24
ATOM     69 3HG2 THR A   5      -2.977 -10.101   8.600  1.00 72.13
ATOM     70  C   THR A   5      -4.161 -11.493   6.798  1.00 73.11
ATOM     71  O   THR A   5      -4.467 -12.287   7.690  1.00 10.40
ATOM     72  N   GLN A   6      -3.215 -11.722   5.924  1.00 33.31
ATOM     73  H   GLN A   6      -3.063 -11.050   5.222  1.00 72.05
ATOM     74  CA  GLN A   6      -2.379 -12.897   5.970  1.00 15.53
ATOM     75  HA  GLN A   6      -2.545 -13.410   6.906  1.00 72.23
ATOM     76  CB  GLN A   6      -2.699 -13.839   4.800  1.00  2.14
ATOM     77 1HB  GLN A   6      -2.499 -13.324   3.873  1.00 72.13
ATOM     78 2HB  GLN A   6      -2.043 -14.696   4.867  1.00 45.41
ATOM     79  CG  GLN A   6      -4.135 -14.341   4.763  1.00 51.22
ATOM     80 1HG  GLN A   6      -4.298 -14.940   5.646  1.00 63.51
ATOM     81 2HG  GLN A   6      -4.800 -13.490   4.773  1.00  2.53
ATOM     82  CD  GLN A   6      -4.446 -15.198   3.544  1.00 34.14
ATOM     83  OE1 GLN A   6      -5.561 -15.216   3.058  1.00 13.22
ATOM     84  NE2 GLN A   6      -3.470 -15.925   3.051  1.00 15.12
ATOM     85 2HE2 GLN A   6      -2.592 -15.884   3.479  1.00 25.34
ATOM     86 1HE2 GLN A   6      -3.686 -16.481   2.276  1.00 74.32
ATOM     87  C   GLN A   6      -0.940 -12.451   5.870  1.00 25.30
ATOM     88  O   GLN A   6      -0.627 -11.531   5.117  1.00 55.05
ATOM     89  N   TYR A   7      -0.084 -13.050   6.643  1.00 61.15
ATOM     90  H   TYR A   7      -0.382 -13.741   7.273  1.00 44.23
ATOM     91  CA  TYR A   7       1.319 -12.749   6.577  1.00 35.24
ATOM     92  HA  TYR A   7       1.465 -12.044   5.772  1.00 54.11
ATOM     93  CB  TYR A   7       1.811 -12.124   7.893  1.00 62.01
ATOM     94 1HB  TYR A   7       1.232 -11.236   8.099  1.00 13.24
ATOM     95 2HB  TYR A   7       1.669 -12.833   8.694  1.00 62.35
ATOM     96  CG  TYR A   7       3.272 -11.731   7.863  1.00 32.41
ATOM     97  CD1 TYR A   7       4.229 -12.475   8.543  1.00 23.04
ATOM     98  HD1 TYR A   7       3.919 -13.338   9.114  1.00 52.03
ATOM     99  CE1 TYR A   7       5.563 -12.126   8.500  1.00 42.31
ATOM    100  HE1 TYR A   7       6.294 -12.714   9.034  1.00 64.22
ATOM    101  CZ  TYR A   7       5.953 -11.023   7.774  1.00 13.23
ATOM    102  CE2 TYR A   7       5.019 -10.272   7.092  1.00 22.24
ATOM    103  HE2 TYR A   7       5.325  -9.407   6.522  1.00 73.31
ATOM    104  CD2 TYR A   7       3.692 -10.628   7.138  1.00 22.51
ATOM    105  HD2 TYR A   7       2.958 -10.041   6.606  1.00 10.12
ATOM    106  OH  TYR A   7       7.285 -10.676   7.721  1.00 52.31
ATOM    107  HH  TYR A   7       7.393  -9.724   7.839  1.00 21.12
ATOM    108  C   TYR A   7       2.083 -14.016   6.253  1.00 44.21
ATOM    109  O   TYR A   7       1.896 -15.034   6.920  1.00 41.23
ATOM    110  N   LYS A   8       2.906 -13.977   5.236  1.00  0.25
ATOM    111  H   LYS A   8       2.996 -13.148   4.709  1.00 73.04
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ATOM    112  CA  LYS A   8       3.677 -15.134   4.857  1.00 71.41
ATOM    113  HA  LYS A   8       3.906 -15.690   5.754  1.00 41.24
ATOM    114  CB  LYS A   8       2.845 -16.035   3.914  1.00 22.35
ATOM    115 1HB  LYS A   8       1.890 -16.237   4.379  1.00 23.24
ATOM    116 2HB  LYS A   8       2.664 -15.485   3.003  1.00 64.22
ATOM    117  CG  LYS A   8       3.497 -17.377   3.539  1.00  1.13
ATOM    118 1HG  LYS A   8       2.845 -17.903   2.856  1.00 43.40
ATOM    119 2HG  LYS A   8       4.442 -17.180   3.053  1.00 35.43
ATOM    120  CD  LYS A   8       3.739 -18.263   4.766  1.00 41.21
ATOM    121 1HD  LYS A   8       4.459 -17.776   5.407  1.00 32.03
ATOM    122 2HD  LYS A   8       2.808 -18.386   5.297  1.00 71.53
ATOM    123  CE  LYS A   8       4.286 -19.645   4.382  1.00 42.35
ATOM    124 1HE  LYS A   8       4.379 -20.240   5.277  1.00 24.14
ATOM    125 2HE  LYS A   8       3.580 -20.119   3.717  1.00  0.11
ATOM    126  NZ  LYS A   8       5.607 -19.586   3.720  1.00  1.43
ATOM    127 1HZ  LYS A   8       5.588 -18.990   2.857  1.00 43.51
ATOM    128 2HZ  LYS A   8       6.019 -20.491   3.441  1.00 31.30
ATOM    129 3HZ  LYS A   8       6.327 -19.092   4.302  1.00 51.04
ATOM    130  C   LYS A   8       4.974 -14.708   4.181  1.00 11.41
ATOM    131  O   LYS A   8       4.948 -13.988   3.207  1.00 42.30
ATOM    132  N   ASP A   9       6.096 -15.114   4.773  1.00 50.12
ATOM    133  H   ASP A   9       6.027 -15.575   5.632  1.00 72.01
ATOM    134  CA  ASP A   9       7.473 -14.935   4.208  1.00 11.13
ATOM    135  HA  ASP A   9       8.173 -15.299   4.945  1.00 21.32
ATOM    136  CB  ASP A   9       7.649 -15.766   2.916  1.00 41.44
ATOM    137 1HB  ASP A   9       7.053 -15.324   2.132  1.00 33.02
ATOM    138 2HB  ASP A   9       8.688 -15.743   2.622  1.00 71.31
ATOM    139  CG  ASP A   9       7.222 -17.202   3.072  1.00 53.21
ATOM    140  OD1 ASP A   9       7.543 -17.848   4.109  1.00 22.42
ATOM    141  OD2 ASP A   9       6.500 -17.726   2.189  1.00 33.41
ATOM    142  C   ASP A   9       7.801 -13.470   3.912  1.00 70.44
ATOM    143  O   ASP A   9       8.482 -13.155   2.942  1.00 75.50
ATOM    144  N   GLY A  10       7.359 -12.582   4.773  1.00 60.31
ATOM    145  H   GLY A  10       6.859 -12.871   5.560  1.00  0.23
ATOM    146  CA  GLY A  10       7.631 -11.187   4.582  1.00  1.35
ATOM    147 1HA  GLY A  10       7.754 -10.720   5.549  1.00 44.50
ATOM    148 2HA  GLY A  10       8.549 -11.084   4.023  1.00 51.32
ATOM    149  C   GLY A  10       6.527 -10.478   3.838  1.00 32.41
ATOM    150  O   GLY A  10       6.463  -9.254   3.857  1.00 52.23
ATOM    151  N   TYR A  11       5.664 -11.249   3.203  1.00 61.24
ATOM    152  H   TYR A  11       5.759 -12.226   3.273  1.00 43.03
ATOM    153  CA  TYR A  11       4.565 -10.743   2.396  1.00 21.12
ATOM    154  HA  TYR A  11       4.851  -9.785   1.997  1.00 43.24
ATOM    155  CB  TYR A  11       4.331 -11.719   1.217  1.00 41.44
ATOM    156 1HB  TYR A  11       5.254 -11.811   0.664  1.00 52.52
ATOM    157 2HB  TYR A  11       4.089 -12.688   1.630  1.00 14.33
ATOM    158  CG  TYR A  11       3.251 -11.358   0.202  1.00  1.34
ATOM    159  CD1 TYR A  11       2.317 -12.305  -0.196  1.00 10.21
ATOM    160  HD1 TYR A  11       2.353 -13.291   0.242  1.00 21.45
ATOM    161  CE1 TYR A  11       1.349 -12.010  -1.143  1.00 13.44
ATOM    162  HE1 TYR A  11       0.634 -12.765  -1.435  1.00 54.45
ATOM    163  CZ  TYR A  11       1.298 -10.754  -1.698  1.00 32.34
ATOM    164  CE2 TYR A  11       2.210  -9.793  -1.318  1.00  2.50
ATOM    165  HE2 TYR A  11       2.173  -8.804  -1.751  1.00 40.14
ATOM    166  CD2 TYR A  11       3.185 -10.099  -0.375  1.00 15.11
ATOM    167  HD2 TYR A  11       3.899  -9.346  -0.079  1.00 54.20
ATOM    168  OH  TYR A  11       0.332 -10.458  -2.657  1.00 72.32
ATOM    169  HH  TYR A  11       0.799 -10.042  -3.389  1.00 13.42
ATOM    170  C   TYR A  11       3.308 -10.574   3.246  1.00 35.42
ATOM    171  O   TYR A  11       2.867 -11.511   3.920  1.00 60.35
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ATOM    172  N   TYR A  12       2.777  -9.373   3.244  1.00 31.33
ATOM    173  H   TYR A  12       3.197  -8.637   2.753  1.00 41.24
ATOM    174  CA  TYR A  12       1.571  -9.052   3.956  1.00 31.22
ATOM    175  HA  TYR A  12       1.342  -9.864   4.630  1.00 24.11
ATOM    176  CB  TYR A  12       1.781  -7.758   4.768  1.00 51.11
ATOM    177 1HB  TYR A  12       2.611  -7.903   5.442  1.00 42.41
ATOM    178 2HB  TYR A  12       2.036  -6.963   4.082  1.00 73.32
ATOM    179  CG  TYR A  12       0.605  -7.293   5.605  1.00 64.44
ATOM    180  CD1 TYR A  12      -0.367  -6.457   5.069  1.00  1.13
ATOM    181  HD1 TYR A  12      -0.286  -6.154   4.036  1.00 33.24
ATOM    182  CE1 TYR A  12      -1.426  -6.018   5.831  1.00 42.14
ATOM    183  HE1 TYR A  12      -2.169  -5.369   5.391  1.00 21.55
ATOM    184  CZ  TYR A  12      -1.529  -6.405   7.143  1.00 62.02
ATOM    185  CE2 TYR A  12      -0.577  -7.234   7.702  1.00 61.14
ATOM    186  HE2 TYR A  12      -0.658  -7.540   8.734  1.00  5.35
ATOM    187  CD2 TYR A  12       0.483  -7.671   6.933  1.00 22.22
ATOM    188  HD2 TYR A  12       1.231  -8.319   7.367  1.00  3.35
ATOM    189  OH  TYR A  12      -2.597  -5.968   7.903  1.00  3.00
ATOM    190  HH  TYR A  12      -2.288  -5.665   8.763  1.00 12.13
ATOM    191  C   TYR A  12       0.438  -8.890   2.952  1.00 71.11
ATOM    192  O   TYR A  12       0.574  -8.172   1.946  1.00 52.10
ATOM    193  N   ILE A  13      -0.632  -9.577   3.205  1.00 21.41
ATOM    194  H   ILE A  13      -0.651 -10.149   4.006  1.00  1.44
ATOM    195  CA  ILE A  13      -1.807  -9.557   2.377  1.00 52.21
ATOM    196  HA  ILE A  13      -1.631  -8.970   1.487  1.00 35.34
ATOM    197  CB  ILE A  13      -2.209 -11.003   1.969  1.00 62.23
ATOM    198  HB  ILE A  13      -2.497 -11.528   2.867  1.00 42.41
ATOM    199  CG2 ILE A  13      -3.416 -10.990   1.026  1.00 51.10
ATOM    200 1HG2 ILE A  13      -3.679 -12.002   0.759  1.00 65.41
ATOM    201 2HG2 ILE A  13      -3.168 -10.434   0.132  1.00 32.54
ATOM    202 3HG2 ILE A  13      -4.253 -10.518   1.520  1.00 61.22
ATOM    203  CG1 ILE A  13      -1.029 -11.732   1.322  1.00 21.04
ATOM    204 1HG1 ILE A  13      -0.774 -11.236   0.396  1.00 34.21
ATOM    205 2HG1 ILE A  13      -0.181 -11.685   1.989  1.00 45.21
ATOM    206  CD1 ILE A  13      -1.293 -13.191   1.002  1.00 12.30
ATOM    207 1HD1 ILE A  13      -0.407 -13.615   0.553  1.00 12.52
ATOM    208 2HD1 ILE A  13      -2.121 -13.265   0.312  1.00 31.44
ATOM    209 3HD1 ILE A  13      -1.525 -13.725   1.911  1.00 14.25
ATOM    210  C   ILE A  13      -2.944  -8.986   3.195  1.00 14.42
ATOM    211  O   ILE A  13      -3.060  -9.312   4.378  1.00 62.31
ATOM    212  N   THR A  14      -3.729  -8.115   2.610  1.00 63.12
ATOM    213  H   THR A  14      -3.523  -7.759   1.719  1.00  2.44
ATOM    214  CA  THR A  14      -4.910  -7.632   3.257  1.00 65.31
ATOM    215  HA  THR A  14      -5.325  -8.464   3.809  1.00 42.44
ATOM    216  CB  THR A  14      -4.612  -6.460   4.249  1.00 60.51
ATOM    217  HB  THR A  14      -3.853  -6.793   4.942  1.00  1.22
ATOM    218  OG1 THR A  14      -5.795  -6.110   4.997  1.00 43.34
ATOM    219  HG1 THR A  14      -6.211  -6.909   5.342  1.00 60.14
ATOM    220  CG2 THR A  14      -4.104  -5.231   3.512  1.00 54.20
ATOM    221 1HG2 THR A  14      -3.188  -5.473   2.993  1.00 12.01
ATOM    222 2HG2 THR A  14      -3.921  -4.437   4.221  1.00 13.41
ATOM    223 3HG2 THR A  14      -4.848  -4.910   2.798  1.00 10.12
ATOM    224  C   THR A  14      -5.932  -7.218   2.198  1.00 63.32
ATOM    225  O   THR A  14      -5.573  -6.733   1.106  1.00 41.33
ATOM    226  N   THR A  15      -7.167  -7.474   2.477  1.00 11.13
ATOM    227  H   THR A  15      -7.388  -7.903   3.330  1.00 73.21
ATOM    228  CA  THR A  15      -8.237  -7.104   1.621  1.00 11.23
ATOM    229  HA  THR A  15      -7.838  -6.709   0.701  1.00 44.13
ATOM    230  CB  THR A  15      -9.105  -8.341   1.326  1.00 51.00
ATOM    231  HB  THR A  15      -9.592  -8.651   2.240  1.00 35.01
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ATOM    232  OG1 THR A  15      -8.247  -9.403   0.857  1.00 34.42
ATOM    233  HG1 THR A  15      -7.572  -9.532   1.530  1.00 71.11
ATOM    234  CG2 THR A  15     -10.152  -8.031   0.264  1.00 11.04
ATOM    235 1HG2 THR A  15     -10.795  -7.237   0.614  1.00 53.04
ATOM    236 2HG2 THR A  15     -10.744  -8.914   0.070  1.00 31.05
ATOM    237 3HG2 THR A  15      -9.662  -7.722  -0.646  1.00  2.14
ATOM    238  C   THR A  15      -9.048  -6.041   2.351  1.00 23.30
ATOM    239  O   THR A  15      -9.563  -6.287   3.428  1.00 33.14
ATOM    240  N   LEU A  16      -9.184  -4.892   1.767  1.00 11.45
ATOM    241  H   LEU A  16      -8.884  -4.742   0.842  1.00 54.21
ATOM    242  CA  LEU A  16      -9.810  -3.799   2.445  1.00 23.02
ATOM    243  HA  LEU A  16      -9.872  -4.037   3.495  1.00 23.41
ATOM    244  CB  LEU A  16      -8.957  -2.520   2.291  1.00 12.22
ATOM    245 1HB  LEU A  16      -8.851  -2.337   1.232  1.00 10.42
ATOM    246 2HB  LEU A  16      -9.485  -1.679   2.712  1.00 63.34
ATOM    247  CG  LEU A  16      -7.541  -2.543   2.893  1.00 54.21
ATOM    248  HG  LEU A  16      -6.954  -3.291   2.378  1.00 71.02
ATOM    249  CD1 LEU A  16      -6.862  -1.197   2.692  1.00 31.43
ATOM    250 1HD1 LEU A  16      -7.421  -0.433   3.214  1.00 45.03
ATOM    251 2HD1 LEU A  16      -6.834  -0.957   1.642  1.00 71.13
ATOM    252 3HD1 LEU A  16      -5.855  -1.237   3.083  1.00 14.44
ATOM    253  CD2 LEU A  16      -7.580  -2.894   4.374  1.00 44.43
ATOM    254 1HD2 LEU A  16      -7.994  -3.882   4.500  1.00 24.34
ATOM    255 2HD2 LEU A  16      -8.194  -2.176   4.897  1.00 70.10
ATOM    256 3HD2 LEU A  16      -6.577  -2.870   4.775  1.00 51.45
ATOM    257  C   LEU A  16     -11.201  -3.559   1.909  1.00 42.33
ATOM    258  O   LEU A  16     -11.399  -3.316   0.706  1.00 61.54
ATOM    259  N   ASN A  17     -12.170  -3.620   2.795  1.00 61.33
ATOM    260  H   ASN A  17     -11.953  -3.876   3.714  1.00 33.22
ATOM    261  CA  ASN A  17     -13.544  -3.314   2.450  1.00 23.22
ATOM    262  HA  ASN A  17     -13.678  -3.572   1.409  1.00  3.24
ATOM    263  CB  ASN A  17     -14.549  -4.097   3.321  1.00 72.22
ATOM    264 1HB  ASN A  17     -14.367  -5.154   3.198  1.00 13.21
ATOM    265 2HB  ASN A  17     -14.387  -3.835   4.356  1.00 10.31
ATOM    266  CG  ASN A  17     -16.026  -3.826   2.977  1.00 20.11
ATOM    267  OD1 ASN A  17     -16.878  -3.853   3.847  1.00 43.04
ATOM    268  ND2 ASN A  17     -16.338  -3.608   1.712  1.00 20.13
ATOM    269 2HD2 ASN A  17     -15.647  -3.627   1.023  1.00 44.44
ATOM    270 1HD2 ASN A  17     -17.285  -3.428   1.533  1.00 42.34
ATOM    271  C   ASN A  17     -13.739  -1.817   2.598  1.00 52.00
ATOM    272  O   ASN A  17     -14.357  -1.323   3.541  1.00 64.32
ATOM    273  N   TYR A  18     -13.084  -1.113   1.728  1.00  2.03
ATOM    274  H   TYR A  18     -12.561  -1.563   1.027  1.00 51.11
ATOM    275  CA  TYR A  18     -13.097   0.306   1.680  1.00 44.40
ATOM    276  HA  TYR A  18     -13.974   0.684   2.184  1.00 45.31
ATOM    277  CB  TYR A  18     -11.806   0.881   2.340  1.00 72.45
ATOM    278 1HB  TYR A  18     -10.949   0.435   1.857  1.00 44.14
ATOM    279 2HB  TYR A  18     -11.782   1.945   2.165  1.00 54.41
ATOM    280  CG  TYR A  18     -11.648   0.640   3.859  1.00 71.41
ATOM    281  CD1 TYR A  18     -11.237  -0.592   4.374  1.00 33.43
ATOM    282  HD1 TYR A  18     -11.048  -1.408   3.694  1.00 61.02
ATOM    283  CE1 TYR A  18     -11.091  -0.795   5.738  1.00 53.54
ATOM    284  HE1 TYR A  18     -10.771  -1.756   6.113  1.00 61.31
ATOM    285  CZ  TYR A  18     -11.348   0.241   6.605  1.00 74.24
ATOM    286  CE2 TYR A  18     -11.748   1.460   6.119  1.00 43.44
ATOM    287  HE2 TYR A  18     -11.950   2.274   6.800  1.00 52.00
ATOM    288  CD2 TYR A  18     -11.894   1.655   4.761  1.00 21.45
ATOM    289  HD2 TYR A  18     -12.212   2.619   4.397  1.00 34.42
ATOM    290  OH  TYR A  18     -11.230   0.056   7.971  1.00 74.20
ATOM    291  HH  TYR A  18     -10.363  -0.314   8.219  1.00 62.30
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ATOM    292  C   TYR A  18     -13.129   0.654   0.214  1.00 43.41
ATOM    293  O   TYR A  18     -12.645  -0.137  -0.599  1.00  3.35
ATOM    294  N   ASN A  19     -13.660   1.808  -0.112  1.00 51.22
ATOM    295  H   ASN A  19     -14.015   2.393   0.583  1.00 63.02
ATOM    296  CA  ASN A  19     -13.829   2.238  -1.488  1.00 50.14
ATOM    297  HA  ASN A  19     -14.316   1.436  -2.024  1.00 45.31
ATOM    298  CB  ASN A  19     -14.726   3.476  -1.561  1.00 74.20
ATOM    299 1HB  ASN A  19     -14.204   4.341  -1.184  1.00 41.50
ATOM    300 2HB  ASN A  19     -14.946   3.607  -2.610  1.00 54.12
ATOM    301  CG  ASN A  19     -16.053   3.324  -0.815  1.00 42.41
ATOM    302  OD1 ASN A  19     -17.035   2.844  -1.370  1.00 12.24
ATOM    303  ND2 ASN A  19     -16.092   3.773   0.424  1.00 63.13
ATOM    304 2HD2 ASN A  19     -15.305   4.187   0.832  1.00 44.22
ATOM    305 1HD2 ASN A  19     -16.925   3.705   0.952  1.00  1.33
ATOM    306  C   ASN A  19     -12.491   2.532  -2.158  1.00 11.01
ATOM    307  O   ASN A  19     -11.723   3.356  -1.668  1.00 63.13
ATOM    308  N   PHE A  20     -12.248   1.893  -3.302  1.00 41.30
ATOM    309  H   PHE A  20     -12.917   1.252  -3.637  1.00 53.53
ATOM    310  CA  PHE A  20     -10.988   2.023  -4.066  1.00 11.32
ATOM    311  HA  PHE A  20     -10.222   1.531  -3.484  1.00 61.22
ATOM    312  CB  PHE A  20     -11.114   1.263  -5.404  1.00 32.33
ATOM    313 1HB  PHE A  20     -11.136   0.206  -5.181  1.00 70.12
ATOM    314 2HB  PHE A  20     -12.040   1.522  -5.893  1.00 12.03
ATOM    315  CG  PHE A  20      -9.978   1.480  -6.374  1.00 24.34
ATOM    316  CD1 PHE A  20      -8.769   0.832  -6.207  1.00 33.03
ATOM    317  HD1 PHE A  20      -8.641   0.174  -5.361  1.00 31.41
ATOM    318  CE1 PHE A  20      -7.738   1.020  -7.099  1.00 11.50
ATOM    319  HE1 PHE A  20      -6.798   0.507  -6.957  1.00 14.32
ATOM    320  CZ  PHE A  20      -7.907   1.865  -8.178  1.00 41.33
ATOM    321  HZ  PHE A  20      -7.099   2.014  -8.880  1.00 74.51
ATOM    322  CE2 PHE A  20      -9.104   2.519  -8.360  1.00 61.32
ATOM    323  HE2 PHE A  20      -9.238   3.181  -9.203  1.00 51.22
ATOM    324  CD2 PHE A  20     -10.133   2.324  -7.465  1.00 11.33
ATOM    325  HD2 PHE A  20     -11.074   2.838  -7.606  1.00 21.51
ATOM    326  C   PHE A  20     -10.528   3.479  -4.297  1.00 13.11
ATOM    327  O   PHE A  20      -9.342   3.789  -4.139  1.00 53.43
ATOM    328  N   ASN A  21     -11.467   4.359  -4.620  1.00 63.23
ATOM    329  H   ASN A  21     -12.391   4.038  -4.649  1.00 12.13
ATOM    330  CA  ASN A  21     -11.150   5.767  -4.945  1.00 71.32
ATOM    331  HA  ASN A  21     -10.505   5.758  -5.812  1.00 74.40
ATOM    332  CB  ASN A  21     -12.435   6.543  -5.298  1.00 61.32
ATOM    333 1HB  ASN A  21     -12.932   6.047  -6.119  1.00 51.43
ATOM    334 2HB  ASN A  21     -13.088   6.541  -4.437  1.00 65.33
ATOM    335  CG  ASN A  21     -12.173   7.995  -5.703  1.00 42.01
ATOM    336  OD1 ASN A  21     -11.929   8.283  -6.857  1.00  1.35
ATOM    337  ND2 ASN A  21     -12.273   8.915  -4.766  1.00 32.32
ATOM    338 2HD2 ASN A  21     -12.509   8.664  -3.850  1.00 24.20
ATOM    339 1HD2 ASN A  21     -12.096   9.835  -5.052  1.00 11.33
ATOM    340  C   ASN A  21     -10.403   6.466  -3.800  1.00 52.53
ATOM    341  O   ASN A  21      -9.367   7.092  -4.006  1.00 33.41
ATOM    342  N   THR A  22     -10.920   6.334  -2.599  1.00 52.21
ATOM    343  H   THR A  22     -11.715   5.772  -2.481  1.00 53.32
ATOM    344  CA  THR A  22     -10.314   6.950  -1.440  1.00 55.23
ATOM    345  HA  THR A  22     -10.050   7.946  -1.768  1.00 24.00
ATOM    346  CB  THR A  22     -11.299   7.080  -0.237  1.00 63.12
ATOM    347  HB  THR A  22     -12.083   7.764  -0.530  1.00  4.22
ATOM    348  OG1 THR A  22     -10.645   7.632   0.916  1.00 61.12
ATOM    349  HG1 THR A  22      -9.688   7.630   0.798  1.00 35.31
ATOM    350  CG2 THR A  22     -11.922   5.754   0.115  1.00 20.42
ATOM    351 1HG2 THR A  22     -12.384   5.333  -0.766  1.00 10.14
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ATOM    352 2HG2 THR A  22     -12.683   5.906   0.865  1.00 45.41
ATOM    353 3HG2 THR A  22     -11.164   5.078   0.485  1.00 24.22
ATOM    354  C   THR A  22      -8.987   6.274  -1.057  1.00 73.24
ATOM    355  O   THR A  22      -8.057   6.955  -0.598  1.00 12.11
ATOM    356  N   VAL A  23      -8.915   4.943  -1.237  1.00 32.02
ATOM    357  H   VAL A  23      -9.684   4.462  -1.612  1.00 41.41
ATOM    358  CA  VAL A  23      -7.711   4.163  -0.906  1.00 41.52
ATOM    359  HA  VAL A  23      -7.518   4.277   0.150  1.00 51.44
ATOM    360  CB  VAL A  23      -7.878   2.644  -1.238  1.00 21.45
ATOM    361  HB  VAL A  23      -7.996   2.549  -2.307  1.00 55.43
ATOM    362  CG1 VAL A  23      -6.647   1.853  -0.835  1.00 70.52
ATOM    363 1HG1 VAL A  23      -5.788   2.214  -1.379  1.00 64.11
ATOM    364 2HG1 VAL A  23      -6.813   0.811  -1.063  1.00 32.21
ATOM    365 3HG1 VAL A  23      -6.477   1.967   0.226  1.00 33.52
ATOM    366  CG2 VAL A  23      -9.103   2.055  -0.567  1.00 63.41
ATOM    367 1HG2 VAL A  23      -9.984   2.593  -0.885  1.00 10.43
ATOM    368 2HG2 VAL A  23      -9.000   2.125   0.505  1.00 72.21
ATOM    369 3HG2 VAL A  23      -9.200   1.017  -0.850  1.00 22.25
ATOM    370  C   VAL A  23      -6.498   4.707  -1.658  1.00 64.20
ATOM    371  O   VAL A  23      -5.422   4.857  -1.079  1.00 45.42
ATOM    372  N   TYR A  24      -6.699   5.046  -2.931  1.00 75.31
ATOM    373  H   TYR A  24      -7.594   4.912  -3.313  1.00 13.13
ATOM    374  CA  TYR A  24      -5.631   5.580  -3.769  1.00 15.45
ATOM    375  HA  TYR A  24      -4.881   4.809  -3.846  1.00 25.30
ATOM    376  CB  TYR A  24      -6.153   5.897  -5.186  1.00 44.43
ATOM    377 1HB  TYR A  24      -6.413   4.973  -5.682  1.00 42.42
ATOM    378 2HB  TYR A  24      -7.038   6.510  -5.102  1.00 43.13
ATOM    379  CG  TYR A  24      -5.154   6.632  -6.074  1.00 42.10
ATOM    380  CD1 TYR A  24      -3.898   6.101  -6.333  1.00 34.14
ATOM    381  HD1 TYR A  24      -3.633   5.150  -5.894  1.00 13.54
ATOM    382  CE1 TYR A  24      -2.993   6.760  -7.129  1.00 13.43
ATOM    383  HE1 TYR A  24      -2.022   6.327  -7.317  1.00 34.34
ATOM    384  CZ  TYR A  24      -3.327   7.971  -7.682  1.00 74.32
ATOM    385  CE2 TYR A  24      -4.567   8.524  -7.450  1.00 13.33
ATOM    386  HE2 TYR A  24      -4.831   9.477  -7.887  1.00 34.22
ATOM    387  CD2 TYR A  24      -5.473   7.857  -6.648  1.00 35.14
ATOM    388  HD2 TYR A  24      -6.447   8.288  -6.461  1.00 34.44
ATOM    389  OH  TYR A  24      -2.420   8.621  -8.483  1.00 12.10
ATOM    390  HH  TYR A  24      -1.917   7.930  -8.934  1.00 12.11
ATOM    391  C   TYR A  24      -4.989   6.817  -3.141  1.00 41.14
ATOM    392  O   TYR A  24      -3.760   6.913  -3.057  1.00 34.12
ATOM    393  N   ASN A  25      -5.819   7.724  -2.669  1.00 45.51
ATOM    394  H   ASN A  25      -6.781   7.544  -2.721  1.00  4.31
ATOM    395  CA  ASN A  25      -5.334   8.960  -2.065  1.00 24.30
ATOM    396  HA  ASN A  25      -4.676   9.456  -2.762  1.00 54.15
ATOM    397  CB  ASN A  25      -6.492   9.892  -1.730  1.00 44.44
ATOM    398 1HB  ASN A  25      -7.130   9.981  -2.593  1.00 13.33
ATOM    399 2HB  ASN A  25      -7.065   9.442  -0.933  1.00 42.02
ATOM    400  CG  ASN A  25      -6.015  11.271  -1.260  1.00 52.03
ATOM    401  OD1 ASN A  25      -4.979  11.771  -1.697  1.00 21.44
ATOM    402  ND2 ASN A  25      -6.748  11.878  -0.357  1.00 22.10
ATOM    403 2HD2 ASN A  25      -7.553  11.431  -0.024  1.00 51.34
ATOM    404 1HD2 ASN A  25      -6.452  12.762  -0.058  1.00  1.03
ATOM    405  C   ASN A  25      -4.591   8.660  -0.787  1.00 63.03
ATOM    406  O   ASN A  25      -3.451   9.088  -0.601  1.00 33.21
ATOM    407  N   ALA A  26      -5.230   7.865   0.052  1.00  5.35
ATOM    408  H   ALA A  26      -6.081   7.477  -0.252  1.00 43.23
ATOM    409  CA  ALA A  26      -4.723   7.555   1.385  1.00 62.32
ATOM    410  HA  ALA A  26      -4.619   8.488   1.919  1.00 54.45
ATOM    411  CB  ALA A  26      -5.725   6.694   2.137  1.00 41.31
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ATOM    412 1HB  ALA A  26      -5.378   6.534   3.147  1.00 11.21
ATOM    413 2HB  ALA A  26      -5.830   5.745   1.634  1.00  1.15
ATOM    414 3HB  ALA A  26      -6.683   7.195   2.161  1.00 62.23
ATOM    415  C   ALA A  26      -3.359   6.874   1.335  1.00 32.33
ATOM    416  O   ALA A  26      -2.432   7.279   2.049  1.00 21.13
ATOM    417  N   THR A  27      -3.227   5.887   0.474  1.00 53.50
ATOM    418  H   THR A  27      -3.997   5.597  -0.065  1.00 70.32
ATOM    419  CA  THR A  27      -1.985   5.167   0.312  1.00 44.21
ATOM    420  HA  THR A  27      -1.684   4.780   1.274  1.00 42.23
ATOM    421  CB  THR A  27      -2.177   3.990  -0.651  1.00 23.01
ATOM    422  HB  THR A  27      -2.417   4.382  -1.629  1.00 33.34
ATOM    423  OG1 THR A  27      -3.263   3.180  -0.192  1.00 73.25
ATOM    424  HG1 THR A  27      -3.826   3.001  -0.954  1.00 22.40
ATOM    425  CG2 THR A  27      -0.913   3.142  -0.746  1.00 13.00
ATOM    426 1HG2 THR A  27      -0.668   2.743   0.226  1.00 44.21
ATOM    427 2HG2 THR A  27      -0.102   3.763  -1.096  1.00  3.31
ATOM    428 3HG2 THR A  27      -1.074   2.334  -1.442  1.00 44.14
ATOM    429  C   THR A  27      -0.886   6.088  -0.223  1.00 64.15
ATOM    430  O   THR A  27       0.247   6.087   0.294  1.00 13.34
ATOM    431  N   LEU A  28      -1.231   6.898  -1.226  1.00 41.25
ATOM    432  H   LEU A  28      -2.158   6.889  -1.551  1.00 61.31
ATOM    433  CA  LEU A  28      -0.271   7.790  -1.847  1.00 13.20
ATOM    434  HA  LEU A  28       0.540   7.186  -2.226  1.00 24.34
ATOM    435  CB  LEU A  28      -0.917   8.541  -3.022  1.00 13.14
ATOM    436 1HB  LEU A  28      -1.292   7.809  -3.721  1.00  3.14
ATOM    437 2HB  LEU A  28      -1.758   9.098  -2.635  1.00 31.25
ATOM    438  CG  LEU A  28      -0.016   9.516  -3.793  1.00  2.11
ATOM    439  HG  LEU A  28       0.395  10.229  -3.093  1.00 15.11
ATOM    440  CD1 LEU A  28       1.149   8.785  -4.451  1.00 43.14
ATOM    441 1HD1 LEU A  28       0.768   8.040  -5.135  1.00 53.43
ATOM    442 2HD1 LEU A  28       1.753   8.307  -3.695  1.00 62.02
ATOM    443 3HD1 LEU A  28       1.755   9.495  -4.996  1.00 75.51
ATOM    444  CD2 LEU A  28      -0.824  10.280  -4.830  1.00 25.32
ATOM    445 1HD2 LEU A  28      -0.173  10.957  -5.361  1.00  4.40
ATOM    446 2HD2 LEU A  28      -1.603  10.843  -4.336  1.00 34.53
ATOM    447 3HD2 LEU A  28      -1.266   9.584  -5.526  1.00 20.22
ATOM    448  C   LEU A  28       0.285   8.774  -0.824  1.00 72.34
ATOM    449  O   LEU A  28       1.471   8.862  -0.653  1.00 53.24
ATOM    450  N   GLN A  29      -0.590   9.443  -0.105  1.00 74.11
ATOM    451  H   GLN A  29      -1.539   9.322  -0.311  1.00 24.21
ATOM    452  CA  GLN A  29      -0.202  10.406   0.926  1.00 75.53
ATOM    453  HA  GLN A  29       0.395  11.170   0.454  1.00 43.41
ATOM    454  CB  GLN A  29      -1.426  11.064   1.551  1.00 60.14
ATOM    455 1HB  GLN A  29      -1.969  10.317   2.110  1.00 34.21
ATOM    456 2HB  GLN A  29      -1.090  11.829   2.234  1.00 33.41
ATOM    457  CG  GLN A  29      -2.389  11.698   0.561  1.00  5.43
ATOM    458 1HG  GLN A  29      -2.805  10.905  -0.042  1.00 43.33
ATOM    459 2HG  GLN A  29      -3.185  12.169   1.110  1.00 54.31
ATOM    460  CD  GLN A  29      -1.750  12.702  -0.377  1.00  1.13
ATOM    461  OE1 GLN A  29      -0.755  13.339  -0.054  1.00 72.31
ATOM    462  NE2 GLN A  29      -2.343  12.872  -1.530  1.00 11.31
ATOM    463 2HE2 GLN A  29      -3.157  12.344  -1.706  1.00 64.30
ATOM    464 1HE2 GLN A  29      -1.971  13.524  -2.155  1.00 14.11
ATOM    465  C   GLN A  29       0.619   9.747   2.034  1.00 52.41
ATOM    466  O   GLN A  29       1.555  10.343   2.554  1.00 33.12
ATOM    467  N   ALA A  30       0.255   8.525   2.399  1.00  3.32
ATOM    468  H   ALA A  30      -0.526   8.113   1.975  1.00 25.22
ATOM    469  CA  ALA A  30       0.953   7.777   3.431  1.00 61.43
ATOM    470  HA  ALA A  30       0.882   8.346   4.346  1.00 23.25
ATOM    471  CB  ALA A  30       0.299   6.426   3.656  1.00 63.20
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ATOM    472 1HB  ALA A  30       0.789   5.920   4.474  1.00 70.14
ATOM    473 2HB  ALA A  30       0.393   5.834   2.757  1.00 33.11
ATOM    474 3HB  ALA A  30      -0.746   6.564   3.889  1.00 15.33
ATOM    475  C   ALA A  30       2.422   7.608   3.085  1.00 20.10
ATOM    476  O   ALA A  30       3.284   7.764   3.929  1.00 70.33
ATOM    477  N   ILE A  31       2.708   7.306   1.857  1.00 73.40
ATOM    478  H   ILE A  31       1.983   7.155   1.208  1.00 60.31
ATOM    479  CA  ILE A  31       4.083   7.177   1.459  1.00 74.23
ATOM    480  HA  ILE A  31       4.609   6.874   2.352  1.00 12.40
ATOM    481  CB  ILE A  31       4.292   6.083   0.382  1.00 53.31
ATOM    482  HB  ILE A  31       4.024   5.140   0.836  1.00 45.15
ATOM    483  CG2 ILE A  31       3.370   6.273  -0.823  1.00 15.50
ATOM    484 1HG2 ILE A  31       3.565   5.499  -1.550  1.00 72.02
ATOM    485 2HG2 ILE A  31       3.551   7.241  -1.265  1.00 35.02
ATOM    486 3HG2 ILE A  31       2.340   6.215  -0.501  1.00 62.34
ATOM    487  CG1 ILE A  31       5.753   6.011  -0.044  1.00  2.01
ATOM    488 1HG1 ILE A  31       6.036   6.901  -0.589  1.00 42.53
ATOM    489 2HG1 ILE A  31       6.381   5.926   0.831  1.00 14.41
ATOM    490  CD1 ILE A  31       6.040   4.852  -0.922  1.00 14.51
ATOM    491 1HD1 ILE A  31       5.804   3.944  -0.388  1.00 73.23
ATOM    492 2HD1 ILE A  31       7.083   4.857  -1.197  1.00 40.11
ATOM    493 3HD1 ILE A  31       5.428   4.916  -1.811  1.00 64.12
ATOM    494  C   ILE A  31       4.700   8.525   1.058  1.00 52.23
ATOM    495  O   ILE A  31       5.779   8.870   1.512  1.00 41.33
ATOM    496  N   GLN A  32       3.957   9.300   0.295  1.00 51.21
ATOM    497  H   GLN A  32       3.049   9.001   0.063  1.00 22.53
ATOM    498  CA  GLN A  32       4.401  10.579  -0.266  1.00 41.41
ATOM    499  HA  GLN A  32       5.249  10.395  -0.910  1.00 34.35
ATOM    500  CB  GLN A  32       3.268  11.155  -1.117  1.00 71.45
ATOM    501 1HB  GLN A  32       2.889  10.374  -1.760  1.00 24.35
ATOM    502 2HB  GLN A  32       2.475  11.463  -0.450  1.00 72.25
ATOM    503  CG  GLN A  32       3.637  12.325  -1.985  1.00 30.31
ATOM    504 1HG  GLN A  32       3.980  13.117  -1.340  1.00 23.33
ATOM    505 2HG  GLN A  32       4.419  11.997  -2.653  1.00 20.53
ATOM    506  CD  GLN A  32       2.468  12.847  -2.810  1.00  3.42
ATOM    507  OE1 GLN A  32       2.644  13.333  -3.914  1.00 62.35
ATOM    508  NE2 GLN A  32       1.276  12.798  -2.263  1.00 54.15
ATOM    509 2HE2 GLN A  32       1.163  12.441  -1.358  1.00 65.12
ATOM    510 1HE2 GLN A  32       0.534  13.140  -2.802  1.00 14.54
ATOM    511  C   GLN A  32       4.802  11.581   0.827  1.00 12.32
ATOM    512  O   GLN A  32       5.769  12.308   0.685  1.00 23.33
ATOM    513  N   ASN A  33       4.062  11.586   1.924  1.00 33.13
ATOM    514  H   ASN A  33       3.312  10.956   2.007  1.00  2.35
ATOM    515  CA  ASN A  33       4.321  12.528   3.017  1.00 24.31
ATOM    516  HA  ASN A  33       4.815  13.393   2.596  1.00 21.43
ATOM    517  CB  ASN A  33       2.977  12.967   3.661  1.00 54.40
ATOM    518 1HB  ASN A  33       2.287  13.240   2.875  1.00 24.21
ATOM    519 2HB  ASN A  33       2.561  12.128   4.198  1.00 73.22
ATOM    520  CG  ASN A  33       3.080  14.156   4.626  1.00 74.32
ATOM    521  OD1 ASN A  33       2.977  15.304   4.219  1.00 31.20
ATOM    522  ND2 ASN A  33       3.248  13.893   5.901  1.00 64.23
ATOM    523 2HD2 ASN A  33       3.309  12.960   6.193  1.00  3.44
ATOM    524 1HD2 ASN A  33       3.319  14.661   6.502  1.00 34.11
ATOM    525  C   ASN A  33       5.259  11.881   4.058  1.00 11.22
ATOM    526  O   ASN A  33       5.584  12.471   5.075  1.00  3.41
ATOM    527  N   GLY A  34       5.704  10.660   3.766  1.00 42.23
ATOM    528  H   GLY A  34       5.460  10.256   2.906  1.00 52.13
ATOM    529  CA  GLY A  34       6.596   9.940   4.666  1.00 25.14
ATOM    530 1HA  GLY A  34       6.946   9.048   4.168  1.00 25.05
ATOM    531 2HA  GLY A  34       7.444  10.569   4.890  1.00 21.42
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ATOM    532  C   GLY A  34       5.925   9.542   5.967  1.00 73.51
ATOM    533  O   GLY A  34       6.463   9.758   7.041  1.00 21.23
ATOM    534  N   GLN A  35       4.751   8.953   5.866  1.00 13.30
ATOM    535  H   GLN A  35       4.372   8.771   4.978  1.00 34.30
ATOM    536  CA  GLN A  35       4.002   8.554   7.045  1.00  2.50
ATOM    537  HA  GLN A  35       4.357   9.149   7.875  1.00  1.04
ATOM    538  CB  GLN A  35       2.494   8.813   6.854  1.00 24.40
ATOM    539 1HB  GLN A  35       2.125   8.142   6.092  1.00 42.41
ATOM    540 2HB  GLN A  35       1.990   8.592   7.783  1.00 33.11
ATOM    541  CG  GLN A  35       2.141  10.237   6.446  1.00 65.20
ATOM    542 1HG  GLN A  35       2.633  10.958   7.080  1.00 21.54
ATOM    543 2HG  GLN A  35       2.476  10.345   5.422  1.00 61.41
ATOM    544  CD  GLN A  35       0.648  10.496   6.447  1.00 21.33
ATOM    545  OE1 GLN A  35       0.074  10.870   7.452  1.00 34.43
ATOM    546  NE2 GLN A  35       0.026  10.363   5.310  1.00 52.24
ATOM    547 2HE2 GLN A  35       0.546  10.112   4.516  1.00  2.52
ATOM    548 1HE2 GLN A  35      -0.938  10.524   5.310  1.00 55.10
ATOM    549  C   GLN A  35       4.250   7.073   7.361  1.00 11.41
ATOM    550  O   GLN A  35       3.984   6.610   8.461  1.00 40.04
ATOM    551  N   THR A  36       4.761   6.344   6.393  1.00 52.21
ATOM    552  H   THR A  36       4.991   6.776   5.546  1.00 32.45
ATOM    553  CA  THR A  36       5.036   4.938   6.577  1.00 30.41
ATOM    554  HA  THR A  36       4.508   4.628   7.467  1.00  0.14
ATOM    555  CB  THR A  36       4.554   4.076   5.361  1.00 15.44
ATOM    556  HB  THR A  36       3.483   4.190   5.284  1.00 72.24
ATOM    557  OG1 THR A  36       4.844   2.686   5.576  1.00  1.45
ATOM    558  HG1 THR A  36       4.037   2.171   5.662  1.00 34.13
ATOM    559  CG2 THR A  36       5.196   4.534   4.055  1.00 24.32
ATOM    560 1HG2 THR A  36       6.269   4.432   4.134  1.00 41.33
ATOM    561 2HG2 THR A  36       4.947   5.570   3.886  1.00 61.51
ATOM    562 3HG2 THR A  36       4.830   3.931   3.237  1.00 43.43
ATOM    563  C   THR A  36       6.528   4.759   6.835  1.00 24.22
ATOM    564  O   THR A  36       7.362   5.464   6.245  1.00 55.30
ATOM    565  N   PHE A  37       6.868   3.838   7.708  1.00 22.12
ATOM    566  H   PHE A  37       6.198   3.208   8.043  1.00 50.30
ATOM    567  CA  PHE A  37       8.223   3.715   8.149  1.00 61.32
ATOM    568  HA  PHE A  37       8.784   4.498   7.662  1.00 41.32
ATOM    569  CB  PHE A  37       8.325   3.960   9.662  1.00 21.34
ATOM    570 1HB  PHE A  37       7.734   3.219  10.181  1.00 64.30
ATOM    571 2HB  PHE A  37       9.357   3.859   9.965  1.00 25.33
ATOM    572  CG  PHE A  37       7.843   5.323  10.093  1.00  1.44
ATOM    573  CD1 PHE A  37       8.645   6.437   9.927  1.00 51.43
ATOM    574  HD1 PHE A  37       9.622   6.321   9.485  1.00 74.35
ATOM    575  CE1 PHE A  37       8.210   7.690  10.316  1.00 52.32
ATOM    576  HE1 PHE A  37       8.849   8.550  10.179  1.00 61.20
ATOM    577  CZ  PHE A  37       6.959   7.838  10.881  1.00 13.42
ATOM    578  HZ  PHE A  37       6.617   8.818  11.186  1.00 24.44
ATOM    579  CE2 PHE A  37       6.147   6.736  11.055  1.00 33.55
ATOM    580  HE2 PHE A  37       5.168   6.850  11.498  1.00 40.23
ATOM    581  CD2 PHE A  37       6.588   5.486  10.663  1.00 31.45
ATOM    582  HD2 PHE A  37       5.953   4.624  10.800  1.00 14.14
ATOM    583  C   PHE A  37       8.857   2.384   7.786  1.00 12.30
ATOM    584  O   PHE A  37       8.282   1.313   7.985  1.00 23.03
ATOM    585  N   ASP A  38      10.016   2.498   7.199  1.00 61.23
ATOM    586  H   ASP A  38      10.269   3.405   6.938  1.00 72.15
ATOM    587  CA  ASP A  38      10.925   1.386   6.915  1.00 42.10
ATOM    588  HA  ASP A  38      10.352   0.474   6.834  1.00 41.30
ATOM    589  CB  ASP A  38      11.693   1.680   5.598  1.00  4.23
ATOM    590 1HB  ASP A  38      10.978   1.812   4.800  1.00 45.42
ATOM    591 2HB  ASP A  38      12.249   2.598   5.720  1.00 72.21
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ATOM    592  CG  ASP A  38      12.659   0.585   5.175  1.00 22.33
ATOM    593  OD1 ASP A  38      12.227  -0.392   4.560  1.00  3.31
ATOM    594  OD2 ASP A  38      13.871   0.702   5.462  1.00 31.53
ATOM    595  C   ASP A  38      11.894   1.302   8.117  1.00 65.14
ATOM    596  O   ASP A  38      11.802   2.136   9.019  1.00 72.13
ATOM    597  N   TYR A  39      12.806   0.348   8.152  1.00 44.51
ATOM    598  H   TYR A  39      12.885  -0.278   7.400  1.00 61.55
ATOM    599  CA  TYR A  39      13.738   0.225   9.291  1.00 51.04
ATOM    600  HA  TYR A  39      13.147   0.292  10.190  1.00 35.23
ATOM    601  CB  TYR A  39      14.458  -1.130   9.239  1.00 34.21
ATOM    602 1HB  TYR A  39      13.718  -1.917   9.227  1.00  1.45
ATOM    603 2HB  TYR A  39      15.031  -1.181   8.326  1.00 62.23
ATOM    604  CG  TYR A  39      15.397  -1.412  10.398  1.00 32.21
ATOM    605  CD1 TYR A  39      14.904  -1.831  11.627  1.00 24.14
ATOM    606  HD1 TYR A  39      13.838  -1.941  11.756  1.00 12.32
ATOM    607  CE1 TYR A  39      15.756  -2.104  12.681  1.00 35.25
ATOM    608  HE1 TYR A  39      15.353  -2.429  13.630  1.00 45.45
ATOM    609  CZ  TYR A  39      17.116  -1.959  12.515  1.00 71.45
ATOM    610  CE2 TYR A  39      17.630  -1.546  11.305  1.00 71.22
ATOM    611  HE2 TYR A  39      18.697  -1.433  11.174  1.00 54.41
ATOM    612  CD2 TYR A  39      16.775  -1.277  10.256  1.00 53.13
ATOM    613  HD2 TYR A  39      17.175  -0.952   9.307  1.00 52.44
ATOM    614  OH  TYR A  39      17.966  -2.236  13.564  1.00 41.43
ATOM    615  HH  TYR A  39      17.696  -3.058  13.977  1.00 55.31
ATOM    616  C   TYR A  39      14.731   1.413   9.329  1.00 12.11
ATOM    617  O   TYR A  39      15.192   1.814  10.382  1.00 15.14
ATOM    618  N   LYS A  40      15.011   1.981   8.170  1.00 53.32
ATOM    619  H   LYS A  40      14.684   1.549   7.351  1.00 55.12
ATOM    620  CA  LYS A  40      15.812   3.231   8.077  1.00 21.24
ATOM    621  HA  LYS A  40      16.344   3.389   9.003  1.00 44.22
ATOM    622  CB  LYS A  40      16.779   3.144   6.905  1.00 33.32
ATOM    623 1HB  LYS A  40      17.221   4.114   6.735  1.00 34.44
ATOM    624 2HB  LYS A  40      17.554   2.427   7.130  1.00 11.12
ATOM    625  CG  LYS A  40      16.071   2.704   5.658  1.00 74.12
ATOM    626 1HG  LYS A  40      15.815   1.661   5.766  1.00 70.14
ATOM    627 2HG  LYS A  40      15.160   3.269   5.557  1.00 21.02
ATOM    628  CD  LYS A  40      16.873   2.846   4.420  1.00 64.41
ATOM    629 1HD  LYS A  40      16.902   3.903   4.190  1.00 43.25
ATOM    630 2HD  LYS A  40      17.866   2.440   4.553  1.00 42.20
ATOM    631  CE  LYS A  40      16.171   2.147   3.280  1.00 63.11
ATOM    632 1HE  LYS A  40      15.246   2.664   3.074  1.00 71.21
ATOM    633 2HE  LYS A  40      16.799   2.174   2.403  1.00 22.40
ATOM    634  NZ  LYS A  40      15.863   0.726   3.619  1.00  5.32
ATOM    635 1HZ  LYS A  40      15.076   0.652   4.307  1.00 62.21
ATOM    636 2HZ  LYS A  40      16.700   0.274   4.032  1.00 11.43
ATOM    637 3HZ  LYS A  40      15.636   0.161   2.768  1.00 50.33
ATOM    638  C   LYS A  40      14.839   4.371   7.818  1.00 23.12
ATOM    639  O   LYS A  40      15.209   5.503   7.586  1.00 63.52
ATOM    640  N   SER A  41      13.597   3.986   7.857  1.00 15.40
ATOM    641  H   SER A  41      13.454   3.051   8.109  1.00 41.21
ATOM    642  CA  SER A  41      12.423   4.784   7.628  1.00 63.02
ATOM    643  HA  SER A  41      11.599   4.089   7.655  1.00 50.33
ATOM    644  CB  SER A  41      12.236   5.728   8.808  1.00 43.50
ATOM    645 1HB  SER A  41      13.177   6.235   8.957  1.00 24.40
ATOM    646 2HB  SER A  41      11.437   6.431   8.628  1.00 63.03
ATOM    647  OG  SER A  41      11.980   4.979   9.995  1.00 31.33
ATOM    648  HG  SER A  41      12.105   4.042   9.804  1.00 30.22
ATOM    649  C   SER A  41      12.370   5.509   6.262  1.00 41.11
ATOM    650  O   SER A  41      11.554   6.400   6.072  1.00 42.54
ATOM    651  N   ASN A  42      13.142   5.047   5.277  1.00 23.44
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ATOM    652  H   ASN A  42      13.836   4.391   5.468  1.00 40.33
ATOM    653  CA  ASN A  42      12.957   5.553   3.928  1.00 12.14
ATOM    654  HA  ASN A  42      12.291   6.398   3.972  1.00 44.00
ATOM    655  CB  ASN A  42      14.279   5.999   3.294  1.00 71.34
ATOM    656 1HB  ASN A  42      14.931   5.141   3.222  1.00 52.20
ATOM    657 2HB  ASN A  42      14.073   6.353   2.294  1.00 12.03
ATOM    658  CG  ASN A  42      15.028   7.074   4.036  1.00 64.30
ATOM    659  OD1 ASN A  42      14.450   7.907   4.724  1.00 52.43
ATOM    660  ND2 ASN A  42      16.324   7.076   3.867  1.00 51.44
ATOM    661 2HD2 ASN A  42      16.708   6.390   3.264  1.00 12.43
ATOM    662 1HD2 ASN A  42      16.859   7.748   4.333  1.00 73.22
ATOM    663  C   ASN A  42      12.395   4.461   3.037  1.00 42.21
ATOM    664  O   ASN A  42      13.056   3.442   2.829  1.00 72.15
ATOM    665  N   PRO A  43      11.173   4.604   2.541  1.00  4.35
ATOM    666  CD  PRO A  43      10.042   5.173   3.258  1.00 42.51
ATOM    667  CA  PRO A  43      10.680   3.801   1.415  1.00 22.15
ATOM    668  HA  PRO A  43      11.400   3.135   0.967  1.00 22.12
ATOM    669  CB  PRO A  43       9.647   2.982   2.196  1.00  5.02
ATOM    670 1HB  PRO A  43       8.883   2.627   1.519  1.00 24.54
ATOM    671 2HB  PRO A  43      10.120   2.161   2.713  1.00 41.13
ATOM    672  CG  PRO A  43       9.084   3.975   3.231  1.00 21.42
ATOM    673 1HG  PRO A  43       8.097   4.288   2.926  1.00 34.40
ATOM    674 2HG  PRO A  43       9.050   3.518   4.208  1.00 73.20
ATOM    675 1HD  PRO A  43       9.614   6.008   2.724  1.00 50.10
ATOM    676 2HD  PRO A  43      10.308   5.443   4.270  1.00 32.40
ATOM    677  C   PRO A  43       9.902   4.666   0.375  1.00 14.41
ATOM    678  O   PRO A  43       9.174   4.147  -0.449  1.00 24.02
ATOM    679  N   TYR A  44      10.111   5.965   0.413  1.00  3.45
ATOM    680  H   TYR A  44      10.938   6.299   0.821  1.00 65.41
ATOM    681  CA  TYR A  44       9.138   6.893  -0.138  1.00 22.43
ATOM    682  HA  TYR A  44       8.260   6.271  -0.207  1.00 54.12
ATOM    683  CB  TYR A  44       8.767   7.978   0.857  1.00 14.52
ATOM    684 1HB  TYR A  44       7.961   8.540   0.406  1.00 72.45
ATOM    685 2HB  TYR A  44       8.401   7.494   1.749  1.00 33.01
ATOM    686  CG  TYR A  44       9.894   8.938   1.225  1.00 43.01
ATOM    687  CD1 TYR A  44      10.046  10.144   0.551  1.00 73.03
ATOM    688  HD1 TYR A  44       9.354  10.391  -0.240  1.00 15.33
ATOM    689  CE1 TYR A  44      11.061  11.021   0.871  1.00 63.50
ATOM    690  HE1 TYR A  44      11.160  11.952   0.335  1.00  2.22
ATOM    691  CZ  TYR A  44      11.945  10.702   1.880  1.00 44.55
ATOM    692  CE2 TYR A  44      11.820   9.515   2.567  1.00 72.22
ATOM    693  HE2 TYR A  44      12.512   9.264   3.356  1.00 11.43
ATOM    694  CD2 TYR A  44      10.800   8.640   2.241  1.00 42.15
ATOM    695  HD2 TYR A  44      10.704   7.711   2.779  1.00 23.42
ATOM    696  OH  TYR A  44      12.957  11.576   2.197  1.00 41.03
ATOM    697  HH  TYR A  44      12.591  12.461   2.272  1.00 22.33
ATOM    698  C   TYR A  44       9.313   7.468  -1.530  1.00 54.32
ATOM    699  O   TYR A  44       8.421   8.199  -1.964  1.00 24.21
ATOM    700  N   ASP A  45      10.380   7.209  -2.231  1.00  3.50
ATOM    701  H   ASP A  45      11.039   6.537  -1.961  1.00 34.30
ATOM    702  CA  ASP A  45      10.531   7.936  -3.506  1.00  3.41
ATOM    703  HA  ASP A  45      10.165   8.935  -3.322  1.00  3.24
ATOM    704  CB  ASP A  45      11.992   7.991  -3.958  1.00 62.42
ATOM    705 1HB  ASP A  45      12.560   8.586  -3.259  1.00 33.41
ATOM    706 2HB  ASP A  45      12.392   6.988  -3.981  1.00  2.02
ATOM    707  CG  ASP A  45      12.142   8.600  -5.347  1.00 15.31
ATOM    708  OD1 ASP A  45      12.269   7.829  -6.331  1.00 33.34
ATOM    709  OD2 ASP A  45      12.119   9.840  -5.449  1.00 31.51
ATOM    710  C   ASP A  45       9.683   7.296  -4.575  1.00 11.11
ATOM    711  O   ASP A  45       9.976   6.205  -5.026  1.00 21.01
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ATOM    712  N   ILE A  46       8.633   8.009  -4.975  1.00 41.22
ATOM    713  H   ILE A  46       8.562   8.926  -4.645  1.00 23.15
ATOM    714  CA  ILE A  46       7.634   7.495  -5.897  1.00 73.25
ATOM    715  HA  ILE A  46       7.309   6.521  -5.563  1.00 53.24
ATOM    716  CB  ILE A  46       6.386   8.452  -5.986  1.00 52.13
ATOM    717  HB  ILE A  46       6.708   9.334  -6.520  1.00 34.22
ATOM    718  CG2 ILE A  46       5.276   7.810  -6.825  1.00 51.32
ATOM    719 1HG2 ILE A  46       4.966   6.882  -6.365  1.00  5.24
ATOM    720 2HG2 ILE A  46       5.644   7.612  -7.820  1.00 21.34
ATOM    721 3HG2 ILE A  46       4.431   8.482  -6.880  1.00  5.34
ATOM    722  CG1 ILE A  46       5.827   8.879  -4.585  1.00 33.11
ATOM    723 1HG1 ILE A  46       6.648   9.234  -3.982  1.00 21.10
ATOM    724 2HG1 ILE A  46       5.132   9.694  -4.726  1.00 51.23
ATOM    725  CD1 ILE A  46       5.122   7.796  -3.771  1.00 25.33
ATOM    726 1HD1 ILE A  46       4.756   8.228  -2.849  1.00 34.01
ATOM    727 2HD1 ILE A  46       5.802   6.988  -3.541  1.00 14.14
ATOM    728 3HD1 ILE A  46       4.278   7.415  -4.325  1.00 61.45
ATOM    729  C   ILE A  46       8.248   7.399  -7.293  1.00 54.34
ATOM    730  O   ILE A  46       8.411   8.409  -7.969  1.00 41.15
ATOM    731  N   SER A  47       8.546   6.201  -7.730  1.00 55.42
ATOM    732  H   SER A  47       8.375   5.416  -7.171  1.00  2.33
ATOM    733  CA  SER A  47       9.159   6.029  -9.014  1.00  3.15
ATOM    734  HA  SER A  47       9.706   6.926  -9.263  1.00 13.41
ATOM    735  CB  SER A  47      10.136   4.865  -8.926  1.00 23.32
ATOM    736 1HB  SER A  47       9.583   3.940  -8.859  1.00 64.21
ATOM    737 2HB  SER A  47      10.760   4.848  -9.808  1.00  3.31
ATOM    738  OG  SER A  47      10.968   4.985  -7.777  1.00  4.51
ATOM    739  HG  SER A  47      11.080   5.917  -7.524  1.00 62.30
ATOM    740  C   SER A  47       8.088   5.757 -10.082  1.00 74.21
ATOM    741  O   SER A  47       8.247   6.130 -11.241  1.00 14.02
ATOM    742  N   VAL A  48       6.975   5.121  -9.685  1.00  1.54
ATOM    743  H   VAL A  48       6.920   4.772  -8.767  1.00 73.54
ATOM    744  CA  VAL A  48       5.839   4.963 -10.583  1.00 22.44
ATOM    745  HA  VAL A  48       5.902   5.701 -11.367  1.00 52.23
ATOM    746  CB  VAL A  48       5.775   3.520 -11.233  1.00  2.55
ATOM    747  HB  VAL A  48       5.659   2.810 -10.429  1.00 42.24
ATOM    748  CG1 VAL A  48       4.543   3.356 -12.139  1.00 44.42
ATOM    749 1HG1 VAL A  48       3.633   3.489 -11.570  1.00 23.40
ATOM    750 2HG1 VAL A  48       4.525   2.365 -12.568  1.00 61.31
ATOM    751 3HG1 VAL A  48       4.572   4.087 -12.933  1.00 63.14
ATOM    752  CG2 VAL A  48       7.045   3.181 -12.008  1.00  4.22
ATOM    753 1HG2 VAL A  48       7.893   3.209 -11.340  1.00 12.51
ATOM    754 2HG2 VAL A  48       7.185   3.900 -12.801  1.00 23.33
ATOM    755 3HG2 VAL A  48       6.952   2.192 -12.430  1.00 70.42
ATOM    756  C   VAL A  48       4.566   5.148  -9.789  1.00 53.23
ATOM    757  O   VAL A  48       4.379   4.532  -8.734  1.00 72.13
ATOM    758  N   ASN A  49       3.733   6.005 -10.274  1.00 64.33
ATOM    759  H   ASN A  49       3.996   6.518 -11.064  1.00  3.23
ATOM    760  CA  ASN A  49       2.391   6.182  -9.805  1.00 61.13
ATOM    761  HA  ASN A  49       2.197   5.438  -9.047  1.00 71.30
ATOM    762  CB  ASN A  49       2.193   7.592  -9.226  1.00 23.43
ATOM    763 1HB  ASN A  49       2.799   7.686  -8.336  1.00  4.34
ATOM    764 2HB  ASN A  49       2.527   8.313  -9.955  1.00 10.41
ATOM    765  CG  ASN A  49       0.746   7.896  -8.849  1.00 73.03
ATOM    766  OD1 ASN A  49      -0.029   7.004  -8.518  1.00 53.33
ATOM    767  ND2 ASN A  49       0.376   9.156  -8.885  1.00 52.52
ATOM    768 2HD2 ASN A  49       1.027   9.837  -9.149  1.00 54.43
ATOM    769 1HD2 ASN A  49      -0.555   9.358  -8.636  1.00 13.41
ATOM    770  C   ASN A  49       1.487   5.942 -10.979  1.00 65.43
ATOM    771  O   ASN A  49       1.551   6.715 -11.938  1.00 25.23
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ATOM    772  N   LYS A  50       0.691   4.918 -10.984  1.00 51.23
ATOM    773  H   LYS A  50       0.653   4.235 -10.285  1.00 71.12
ATOM    774  CA  LYS A  50      -0.174   4.754 -12.082  1.00 52.40
ATOM    775  HA  LYS A  50      -0.313   5.753 -12.464  1.00 14.05
ATOM    776  CB  LYS A  50       0.470   3.947 -13.207  1.00 52.12
ATOM    777 1HB  LYS A  50      -0.403   3.613 -13.736  1.00 51.55
ATOM    778 2HB  LYS A  50       1.100   4.561 -13.831  1.00 74.15
ATOM    779  CG  LYS A  50       1.154   2.652 -12.823  1.00 42.54
ATOM    780 1HG  LYS A  50       1.839   2.347 -13.600  1.00  3.15
ATOM    781 2HG  LYS A  50       1.689   2.866 -11.910  1.00 73.40
ATOM    782  CD  LYS A  50       0.157   1.560 -12.563  1.00 15.32
ATOM    783 1HD  LYS A  50      -0.430   1.885 -11.717  1.00 41.01
ATOM    784 2HD  LYS A  50      -0.461   1.433 -13.438  1.00 62.14
ATOM    785  CE  LYS A  50       0.819   0.266 -12.204  1.00 44.24
ATOM    786 1HE  LYS A  50       1.515   0.036 -12.999  1.00 32.52
ATOM    787 2HE  LYS A  50       1.378   0.429 -11.295  1.00  1.34
ATOM    788  NZ  LYS A  50      -0.179  -0.841 -12.036  1.00 15.24
ATOM    789 1HZ  LYS A  50       0.284  -1.656 -11.563  1.00 50.44
ATOM    790 2HZ  LYS A  50      -0.546  -1.191 -12.940  1.00 11.30
ATOM    791 3HZ  LYS A  50      -1.025  -0.596 -11.469  1.00 44.43
ATOM    792  C   LYS A  50      -1.527   4.239 -11.716  1.00 12.44
ATOM    793  O   LYS A  50      -1.686   3.460 -10.767  1.00 10.02
ATOM    794  N   ASN A  51      -2.487   4.719 -12.440  1.00  2.13
ATOM    795  H   ASN A  51      -2.262   5.402 -13.106  1.00 53.11
ATOM    796  CA  ASN A  51      -3.842   4.264 -12.356  1.00 34.44
ATOM    797  HA  ASN A  51      -3.919   3.598 -11.508  1.00 13.24
ATOM    798  CB  ASN A  51      -4.813   5.430 -12.184  1.00 54.11
ATOM    799 1HB  ASN A  51      -4.589   5.907 -11.244  1.00 24.21
ATOM    800 2HB  ASN A  51      -4.664   6.115 -13.003  1.00 50.11
ATOM    801  CG  ASN A  51      -6.288   5.019 -12.148  1.00 72.42
ATOM    802  OD1 ASN A  51      -6.643   3.932 -11.714  1.00 70.13
ATOM    803  ND2 ASN A  51      -7.152   5.891 -12.606  1.00 60.31
ATOM    804 2HD2 ASN A  51      -6.816   6.747 -12.944  1.00  1.23
ATOM    805 1HD2 ASN A  51      -8.101   5.651 -12.581  1.00 45.05
ATOM    806  C   ASN A  51      -4.151   3.495 -13.610  1.00 31.43
ATOM    807  O   ASN A  51      -3.867   3.953 -14.710  1.00 13.02
ATOM    808  N   ASN A  52      -4.682   2.352 -13.436  1.00 70.23
ATOM    809  H   ASN A  52      -4.850   2.078 -12.502  1.00  2.23
ATOM    810  CA  ASN A  52      -5.059   1.466 -14.521  1.00 41.14
ATOM    811  HA  ASN A  52      -4.478   1.713 -15.395  1.00 72.05
ATOM    812  CB  ASN A  52      -4.742   0.010 -14.102  1.00 52.24
ATOM    813 1HB  ASN A  52      -3.692  -0.178 -14.267  1.00 22.03
ATOM    814 2HB  ASN A  52      -4.948  -0.097 -13.048  1.00 33.02
ATOM    815  CG  ASN A  52      -5.526  -1.057 -14.860  1.00 34.14
ATOM    816  OD1 ASN A  52      -6.620  -1.452 -14.428  1.00  4.35
ATOM    817  ND2 ASN A  52      -4.993  -1.535 -15.958  1.00 50.24
ATOM    818 2HD2 ASN A  52      -4.123  -1.194 -16.247  1.00 25.44
ATOM    819 1HD2 ASN A  52      -5.506  -2.215 -16.443  1.00  4.41
ATOM    820  C   ASN A  52      -6.536   1.631 -14.819  1.00  4.20
ATOM    821  O   ASN A  52      -7.019   1.320 -15.903  1.00 62.45
ATOM    822  N   GLY A  53      -7.234   2.155 -13.856  1.00 54.23
ATOM    823  H   GLY A  53      -6.779   2.504 -13.057  1.00 43.12
ATOM    824  CA  GLY A  53      -8.645   2.251 -13.944  1.00 40.42
ATOM    825 1HA  GLY A  53      -9.007   3.263 -13.850  1.00 53.41
ATOM    826 2HA  GLY A  53      -8.954   1.805 -14.878  1.00 20.23
ATOM    827  C   GLY A  53      -9.218   1.394 -12.907  1.00 25.31
ATOM    828  O   GLY A  53     -10.140   1.772 -12.171  1.00  1.23
ATOM    829  N   THR A  54      -8.679   0.227 -12.852  1.00 61.45
ATOM    830  H   THR A  54      -7.988  -0.028 -13.501  1.00 73.35
ATOM    831  CA  THR A  54      -9.053  -0.735 -11.938  1.00 50.43
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ATOM    832  HA  THR A  54      -9.962  -0.393 -11.470  1.00 73.42
ATOM    833  CB  THR A  54      -9.362  -2.013 -12.684  1.00 52.42
ATOM    834  HB  THR A  54      -8.489  -2.311 -13.241  1.00 13.41
ATOM    835  OG1 THR A  54     -10.448  -1.759 -13.596  1.00 51.34
ATOM    836  HG1 THR A  54     -10.183  -2.103 -14.455  1.00 15.32
ATOM    837  CG2 THR A  54      -9.745  -3.072 -11.745  1.00 63.33
ATOM    838 1HG2 THR A  54      -9.925  -3.987 -12.284  1.00 31.11
ATOM    839 2HG2 THR A  54     -10.618  -2.707 -11.228  1.00 20.10
ATOM    840 3HG2 THR A  54      -8.893  -3.151 -11.087  1.00 71.22
ATOM    841  C   THR A  54      -7.975  -0.908 -10.853  1.00 35.11
ATOM    842  O   THR A  54      -8.279  -1.249  -9.722  1.00 10.25
ATOM    843  N   ASP A  55      -6.743  -0.644 -11.174  1.00 32.34
ATOM    844  H   ASP A  55      -6.497  -0.437 -12.096  1.00 63.43
ATOM    845  CA  ASP A  55      -5.747  -0.660 -10.129  1.00 10.51
ATOM    846  HA  ASP A  55      -6.315  -0.756  -9.213  1.00 44.55
ATOM    847  CB  ASP A  55      -4.705  -1.823 -10.172  1.00 55.50
ATOM    848 1HB  ASP A  55      -4.224  -1.863  -9.207  1.00 22.44
ATOM    849 2HB  ASP A  55      -5.247  -2.747 -10.314  1.00 54.42
ATOM    850  CG  ASP A  55      -3.566  -1.760 -11.214  1.00 34.01
ATOM    851  OD1 ASP A  55      -2.771  -0.785 -11.246  1.00 31.41
ATOM    852  OD2 ASP A  55      -3.372  -2.773 -11.905  1.00 43.14
ATOM    853  C   ASP A  55      -5.056   0.639 -10.033  1.00 73.33
ATOM    854  O   ASP A  55      -5.044   1.425 -10.971  1.00  2.31
ATOM    855  N   ALA A  56      -4.558   0.876  -8.890  1.00 52.30
ATOM    856  H   ALA A  56      -4.706   0.224  -8.167  1.00  2.53
ATOM    857  CA  ALA A  56      -3.758   1.994  -8.597  1.00 12.43
ATOM    858  HA  ALA A  56      -3.428   2.443  -9.523  1.00  4.24
ATOM    859  CB  ALA A  56      -4.519   2.994  -7.755  1.00  1.23
ATOM    860 1HB  ALA A  56      -3.843   3.772  -7.435  1.00 32.30
ATOM    861 2HB  ALA A  56      -4.954   2.496  -6.901  1.00 31.12
ATOM    862 3HB  ALA A  56      -5.306   3.432  -8.353  1.00  2.44
ATOM    863  C   ALA A  56      -2.600   1.415  -7.871  1.00 24.22
ATOM    864  O   ALA A  56      -2.759   0.796  -6.822  1.00 54.33
ATOM    865  N   GLU A  57      -1.469   1.540  -8.422  1.00 21.01
ATOM    866  H   GLU A  57      -1.363   2.151  -9.184  1.00 44.12
ATOM    867  CA  GLU A  57      -0.355   0.810  -7.932  1.00 23.40
ATOM    868  HA  GLU A  57      -0.597   0.414  -6.957  1.00 72.24
ATOM    869  CB  GLU A  57      -0.179  -0.342  -8.901  1.00 44.32
ATOM    870 1HB  GLU A  57      -1.147  -0.793  -9.048  1.00  2.21
ATOM    871 2HB  GLU A  57       0.121   0.085  -9.847  1.00 63.33
ATOM    872  CG  GLU A  57       0.774  -1.454  -8.546  1.00  3.11
ATOM    873 1HG  GLU A  57       1.787  -1.115  -8.704  1.00 43.23
ATOM    874 2HG  GLU A  57       0.642  -1.757  -7.519  1.00 52.41
ATOM    875  CD  GLU A  57       0.493  -2.644  -9.448  1.00 40.11
ATOM    876  OE1 GLU A  57      -0.336  -3.508  -9.068  1.00 10.33
ATOM    877  OE2 GLU A  57       0.992  -2.662 -10.591  1.00 30.54
ATOM    878  C   GLU A  57       0.833   1.733  -7.828  1.00 61.14
ATOM    879  O   GLU A  57       1.203   2.414  -8.804  1.00 65.22
ATOM    880  N   ILE A  58       1.386   1.795  -6.642  1.00  5.53
ATOM    881  H   ILE A  58       1.107   1.146  -5.956  1.00 34.11
ATOM    882  CA  ILE A  58       2.432   2.738  -6.325  1.00 62.02
ATOM    883  HA  ILE A  58       2.493   3.488  -7.099  1.00 74.21
ATOM    884  CB  ILE A  58       2.166   3.444  -4.955  1.00 14.23
ATOM    885  HB  ILE A  58       2.396   2.730  -4.177  1.00  1.41
ATOM    886  CG2 ILE A  58       3.111   4.632  -4.766  1.00 54.20
ATOM    887 1HG2 ILE A  58       2.913   5.102  -3.814  1.00  2.13
ATOM    888 2HG2 ILE A  58       2.949   5.348  -5.559  1.00 24.35
ATOM    889 3HG2 ILE A  58       4.133   4.288  -4.794  1.00 25.33
ATOM    890  CG1 ILE A  58       0.690   3.897  -4.803  1.00  2.12
ATOM    891 1HG1 ILE A  58       0.056   3.026  -4.856  1.00 35.13
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ATOM    892 2HG1 ILE A  58       0.567   4.355  -3.831  1.00  4.42
ATOM    893  CD1 ILE A  58       0.194   4.874  -5.849  1.00 33.40
ATOM    894 1HD1 ILE A  58       0.280   4.421  -6.826  1.00 14.22
ATOM    895 2HD1 ILE A  58       0.774   5.783  -5.808  1.00 34.32
ATOM    896 3HD1 ILE A  58      -0.846   5.089  -5.646  1.00 65.40
ATOM    897  C   ILE A  58       3.745   1.993  -6.202  1.00 44.43
ATOM    898  O   ILE A  58       3.847   1.034  -5.431  1.00 41.41
ATOM    899  N   VAL A  59       4.730   2.411  -6.949  1.00 33.20
ATOM    900  H   VAL A  59       4.577   3.166  -7.566  1.00 61.31
ATOM    901  CA  VAL A  59       6.042   1.808  -6.876  1.00 12.20
ATOM    902  HA  VAL A  59       6.029   1.047  -6.110  1.00 15.21
ATOM    903  CB  VAL A  59       6.484   1.177  -8.230  1.00  0.44
ATOM    904  HB  VAL A  59       6.637   1.983  -8.932  1.00 21.32
ATOM    905  CG1 VAL A  59       7.817   0.448  -8.084  1.00 12.34
ATOM    906 1HG1 VAL A  59       7.716  -0.339  -7.353  1.00 22.53
ATOM    907 2HG1 VAL A  59       8.575   1.145  -7.757  1.00 24.12
ATOM    908 3HG1 VAL A  59       8.102   0.023  -9.034  1.00 43.41
ATOM    909  CG2 VAL A  59       5.417   0.242  -8.783  1.00 11.23
ATOM    910 1HG2 VAL A  59       5.749  -0.172  -9.723  1.00 21.45
ATOM    911 2HG2 VAL A  59       4.497   0.789  -8.930  1.00 43.32
ATOM    912 3HG2 VAL A  59       5.252  -0.556  -8.075  1.00 13.02
ATOM    913  C   VAL A  59       7.029   2.887  -6.495  1.00 42.13
ATOM    914  O   VAL A  59       7.174   3.864  -7.209  1.00 44.21
ATOM    915  N   SER A  60       7.639   2.751  -5.364  1.00 52.45
ATOM    916  H   SER A  60       7.446   1.981  -4.781  1.00 31.23
ATOM    917  CA  SER A  60       8.605   3.700  -4.896  1.00 35.04
ATOM    918  HA  SER A  60       8.760   4.428  -5.678  1.00 62.43
ATOM    919  CB  SER A  60       8.041   4.405  -3.667  1.00 14.32
ATOM    920 1HB  SER A  60       8.055   3.820  -2.759  1.00 15.23
ATOM    921 2HB  SER A  60       8.630   5.294  -3.497  1.00 61.11
ATOM    922  OG  SER A  60       6.724   4.838  -3.967  1.00 11.43
ATOM    923  HG  SER A  60       6.468   4.368  -4.763  1.00 23.54
ATOM    924  C   SER A  60       9.936   2.997  -4.612  1.00 73.51
ATOM    925  O   SER A  60       9.950   1.801  -4.402  1.00 42.52
ATOM    926  N   ALA A  61      11.026   3.718  -4.633  1.00 11.44
ATOM    927  H   ALA A  61      10.948   4.692  -4.770  1.00 61.23
ATOM    928  CA  ALA A  61      12.349   3.133  -4.473  1.00 24.54
ATOM    929  HA  ALA A  61      12.240   2.062  -4.582  1.00 11.24
ATOM    930  CB  ALA A  61      13.276   3.613  -5.580  1.00 35.22
ATOM    931 1HB  ALA A  61      13.437   4.675  -5.478  1.00  1.13
ATOM    932 2HB  ALA A  61      12.826   3.406  -6.540  1.00 31.23
ATOM    933 3HB  ALA A  61      14.221   3.095  -5.506  1.00 55.35
ATOM    934  C   ALA A  61      12.966   3.412  -3.102  1.00 22.32
ATOM    935  O   ALA A  61      12.535   4.324  -2.373  1.00 13.32
ATOM    936  N   SER A  62      13.932   2.581  -2.739  1.00 32.22
ATOM    937  H   SER A  62      14.183   1.834  -3.323  1.00 44.15
ATOM    938  CA  SER A  62      14.685   2.730  -1.521  1.00 34.01
ATOM    939  HA  SER A  62      14.137   3.362  -0.837  1.00 21.44
ATOM    940  CB  SER A  62      14.914   1.359  -0.886  1.00 41.32
ATOM    941 1HB  SER A  62      13.978   0.852  -0.712  1.00 31.50
ATOM    942 2HB  SER A  62      15.524   0.791  -1.572  1.00 34.34
ATOM    943  OG  SER A  62      15.626   1.443   0.338  1.00 32.52
ATOM    944  HG  SER A  62      15.631   0.543   0.712  1.00 21.23
ATOM    945  C   SER A  62      16.027   3.361  -1.868  1.00  2.42
ATOM    946  O   SER A  62      16.547   3.153  -2.966  1.00 63.32
ATOM    947  N   ASP A  63      16.570   4.120  -0.947  1.00 63.21
ATOM    948  H   ASP A  63      16.122   4.255  -0.083  1.00 34.20
ATOM    949  CA  ASP A  63      17.851   4.796  -1.142  1.00 50.10
ATOM    950  HA  ASP A  63      17.959   5.097  -2.170  1.00 65.13
ATOM    951  CB  ASP A  63      17.926   6.029  -0.237  1.00  1.34
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ATOM    952 1HB  ASP A  63      18.847   6.561  -0.430  1.00 33.34
ATOM    953 2HB  ASP A  63      17.084   6.676  -0.439  1.00  5.35
ATOM    954  CG  ASP A  63      17.889   5.636   1.237  1.00  1.30
ATOM    955  OD1 ASP A  63      16.809   5.240   1.720  1.00 32.34
ATOM    956  OD2 ASP A  63      18.929   5.650   1.896  1.00 53.41
ATOM    957  C   ASP A  63      18.993   3.868  -0.789  1.00 12.03
ATOM    958  O   ASP A  63      20.065   3.932  -1.383  1.00  4.43
ATOM    959  N   SER A  64      18.747   2.983   0.137  1.00  5.14
ATOM    960  H   SER A  64      17.835   2.924   0.490  1.00 14.03
ATOM    961  CA  SER A  64      19.786   2.120   0.596  1.00 43.15
ATOM    962  HA  SER A  64      20.737   2.576   0.362  1.00 72.34
ATOM    963  CB  SER A  64      19.689   1.913   2.104  1.00 34.13
ATOM    964 1HB  SER A  64      18.783   1.371   2.333  1.00 43.22
ATOM    965 2HB  SER A  64      20.538   1.335   2.436  1.00 14.41
ATOM    966  OG  SER A  64      19.672   3.151   2.818  1.00 43.22
ATOM    967  HG  SER A  64      19.477   3.930   2.266  1.00  5.55
ATOM    968  C   SER A  64      19.673   0.809  -0.118  1.00 74.20
ATOM    969  O   SER A  64      20.670   0.181  -0.494  1.00  2.33
ATOM    970  N   ASP A  65      18.452   0.403  -0.362  1.00 62.34
ATOM    971  H   ASP A  65      17.685   0.968  -0.134  1.00 44.32
ATOM    972  CA  ASP A  65      18.254  -0.837  -1.010  1.00 21.30
ATOM    973  HA  ASP A  65      19.136  -1.449  -0.885  1.00  2.10
ATOM    974  CB  ASP A  65      17.027  -1.593  -0.465  1.00 52.23
ATOM    975 1HB  ASP A  65      16.137  -1.134  -0.869  1.00  2.25
ATOM    976 2HB  ASP A  65      17.073  -2.616  -0.809  1.00 51.23
ATOM    977  CG  ASP A  65      16.896  -1.596   1.038  1.00 61.12
ATOM    978  OD1 ASP A  65      16.029  -0.844   1.557  1.00 54.24
ATOM    979  OD2 ASP A  65      17.631  -2.322   1.712  1.00 14.15
ATOM    980  C   ASP A  65      18.023  -0.552  -2.456  1.00 14.24
ATOM    981  O   ASP A  65      16.912  -0.283  -2.868  1.00 61.03
ATOM    982  N   SER A  66      19.072  -0.586  -3.221  1.00 44.11
ATOM    983  H   SER A  66      19.947  -0.622  -2.782  1.00 22.15
ATOM    984  CA  SER A  66      18.982  -0.434  -4.665  1.00 71.44
ATOM    985  HA  SER A  66      18.412   0.460  -4.869  1.00 63.30
ATOM    986  CB  SER A  66      20.393  -0.286  -5.270  1.00 33.24
ATOM    987 1HB  SER A  66      20.883   0.567  -4.823  1.00 32.21
ATOM    988 2HB  SER A  66      20.964  -1.177  -5.051  1.00  0.00
ATOM    989  OG  SER A  66      20.353  -0.099  -6.673  1.00  4.14
ATOM    990  HG  SER A  66      19.459  -0.276  -6.988  1.00 64.23
ATOM    991  C   SER A  66      18.244  -1.639  -5.275  1.00  0.31
ATOM    992  O   SER A  66      17.750  -1.582  -6.392  1.00  3.21
ATOM    993  N   THR A  67      18.176  -2.709  -4.514  1.00 10.12
ATOM    994  H   THR A  67      18.560  -2.664  -3.616  1.00 72.10
ATOM    995  CA  THR A  67      17.546  -3.922  -4.942  1.00 54.31
ATOM    996  HA  THR A  67      17.510  -3.916  -6.021  1.00 42.03
ATOM    997  CB  THR A  67      18.392  -5.161  -4.489  1.00 53.12
ATOM    998  HB  THR A  67      19.373  -5.072  -4.929  1.00 62.54
ATOM    999  OG1 THR A  67      17.802  -6.381  -4.943  1.00 32.14
ATOM   1000  HG1 THR A  67      16.842  -6.268  -4.955  1.00 72.52
ATOM   1001  CG2 THR A  67      18.544  -5.205  -2.966  1.00 14.21
ATOM   1002 1HG2 THR A  67      19.123  -6.073  -2.688  1.00 32.44
ATOM   1003 2HG2 THR A  67      17.568  -5.260  -2.509  1.00 53.13
ATOM   1004 3HG2 THR A  67      19.048  -4.311  -2.629  1.00 12.12
ATOM   1005  C   THR A  67      16.107  -4.022  -4.394  1.00 51.04
ATOM   1006  O   THR A  67      15.420  -5.022  -4.628  1.00 13.11
ATOM   1007  N   ASP A  68      15.635  -2.998  -3.692  1.00 51.04
ATOM   1008  H   ASP A  68      16.133  -2.157  -3.592  1.00 53.24
ATOM   1009  CA  ASP A  68      14.306  -3.084  -3.119  1.00 12.21
ATOM   1010  HA  ASP A  68      13.788  -3.838  -3.695  1.00 60.31
ATOM   1011  CB  ASP A  68      14.334  -3.533  -1.643  1.00 12.31
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ATOM   1012 1HB  ASP A  68      14.945  -4.418  -1.554  1.00 34.03
ATOM   1013 2HB  ASP A  68      14.767  -2.746  -1.045  1.00  0.30
ATOM   1014  CG  ASP A  68      12.954  -3.852  -1.088  1.00  0.12
ATOM   1015  OD1 ASP A  68      12.034  -4.177  -1.885  1.00 43.23
ATOM   1016  OD2 ASP A  68      12.778  -3.836   0.150  1.00 23.40
ATOM   1017  C   ASP A  68      13.534  -1.790  -3.310  1.00 73.43
ATOM   1018  O   ASP A  68      14.104  -0.718  -3.468  1.00 23.24
ATOM   1019  N   SER A  69      12.255  -1.918  -3.308  1.00 65.52
ATOM   1020  H   SER A  69      11.891  -2.781  -3.012  1.00 41.20
ATOM   1021  CA  SER A  69      11.352  -0.874  -3.598  1.00 64.12
ATOM   1022  HA  SER A  69      11.811   0.074  -3.361  1.00 65.11
ATOM   1023  CB  SER A  69      11.069  -0.915  -5.107  1.00 42.14
ATOM   1024 1HB  SER A  69      10.200  -0.312  -5.325  1.00 31.20
ATOM   1025 2HB  SER A  69      11.922  -0.524  -5.643  1.00 24.30
ATOM   1026  OG  SER A  69      10.823  -2.266  -5.550  1.00  2.14
ATOM   1027  HG  SER A  69      11.477  -2.410  -6.243  1.00 53.45
ATOM   1028  C   SER A  69      10.070  -1.060  -2.785  1.00 33.13
ATOM   1029  O   SER A  69       9.678  -2.209  -2.485  1.00 64.54
ATOM   1030  N   LEU A  70       9.405   0.019  -2.466  1.00 11.33
ATOM   1031  H   LEU A  70       9.730   0.913  -2.722  1.00 45.52
ATOM   1032  CA  LEU A  70       8.160  -0.046  -1.779  1.00 34.21
ATOM   1033  HA  LEU A  70       8.116  -0.949  -1.187  1.00 13.33
ATOM   1034  CB  LEU A  70       7.997   1.208  -0.871  1.00 74.15
ATOM   1035 1HB  LEU A  70       8.888   1.283  -0.268  1.00 22.03
ATOM   1036 2HB  LEU A  70       7.974   2.069  -1.522  1.00 53.22
ATOM   1037  CG  LEU A  70       6.772   1.307   0.100  1.00 52.05
ATOM   1038  HG  LEU A  70       6.857   2.242   0.636  1.00 61.21
ATOM   1039  CD1 LEU A  70       5.429   1.350  -0.612  1.00 62.13
ATOM   1040 1HD1 LEU A  70       5.302   0.439  -1.179  1.00  4.51
ATOM   1041 2HD1 LEU A  70       5.396   2.185  -1.295  1.00 32.54
ATOM   1042 3HD1 LEU A  70       4.626   1.435   0.106  1.00 42.00
ATOM   1043  CD2 LEU A  70       6.799   0.197   1.122  1.00 12.04
ATOM   1044 1HD2 LEU A  70       5.922   0.263   1.751  1.00 54.45
ATOM   1045 2HD2 LEU A  70       7.679   0.334   1.730  1.00 43.13
ATOM   1046 3HD2 LEU A  70       6.832  -0.763   0.629  1.00 53.12
ATOM   1047  C   LEU A  70       7.115  -0.064  -2.864  1.00  2.21
ATOM   1048  O   LEU A  70       6.969   0.887  -3.602  1.00 32.22
ATOM   1049  N   GLN A  71       6.451  -1.149  -2.997  1.00 41.33
ATOM   1050  H   GLN A  71       6.614  -1.905  -2.397  1.00 10.10
ATOM   1051  CA  GLN A  71       5.432  -1.268  -3.982  1.00 32.22
ATOM   1052  HA  GLN A  71       5.262  -0.282  -4.394  1.00 22.24
ATOM   1053  CB  GLN A  71       5.860  -2.209  -5.116  1.00 50.24
ATOM   1054 1HB  GLN A  71       6.678  -1.746  -5.645  1.00 60.11
ATOM   1055 2HB  GLN A  71       6.208  -3.138  -4.690  1.00 43.53
ATOM   1056  CG  GLN A  71       4.757  -2.521  -6.124  1.00  2.13
ATOM   1057 1HG  GLN A  71       3.968  -3.053  -5.610  1.00 45.11
ATOM   1058 2HG  GLN A  71       4.360  -1.593  -6.508  1.00 20.32
ATOM   1059  CD  GLN A  71       5.228  -3.377  -7.287  1.00 51.03
ATOM   1060  OE1 GLN A  71       4.483  -4.163  -7.820  1.00 43.32
ATOM   1061  NE2 GLN A  71       6.463  -3.203  -7.708  1.00 61.22
ATOM   1062 2HE2 GLN A  71       7.028  -2.538  -7.266  1.00 65.24
ATOM   1063 1HE2 GLN A  71       6.723  -3.752  -8.475  1.00 21.43
ATOM   1064  C   GLN A  71       4.170  -1.720  -3.325  1.00 22.43
ATOM   1065  O   GLN A  71       4.170  -2.706  -2.574  1.00  3.20
ATOM   1066  N   VAL A  72       3.134  -0.970  -3.542  1.00 52.34
ATOM   1067  H   VAL A  72       3.234  -0.183  -4.125  1.00 74.03
ATOM   1068  CA  VAL A  72       1.845  -1.269  -3.016  1.00 33.50
ATOM   1069  HA  VAL A  72       1.887  -2.221  -2.505  1.00 44.52
ATOM   1070  CB  VAL A  72       1.366  -0.180  -2.019  1.00 40.43
ATOM   1071  HB  VAL A  72       1.378   0.773  -2.530  1.00 63.50
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ATOM   1072  CG1 VAL A  72      -0.049  -0.463  -1.518  1.00  3.15
ATOM   1073 1HG1 VAL A  72      -0.072  -1.426  -1.030  1.00 24.42
ATOM   1074 2HG1 VAL A  72      -0.734  -0.468  -2.352  1.00 21.41
ATOM   1075 3HG1 VAL A  72      -0.343   0.302  -0.814  1.00 44.20
ATOM   1076  CG2 VAL A  72       2.312  -0.091  -0.850  1.00 72.45
ATOM   1077 1HG2 VAL A  72       1.996   0.698  -0.187  1.00 33.21
ATOM   1078 2HG2 VAL A  72       3.304   0.117  -1.220  1.00 10.42
ATOM   1079 3HG2 VAL A  72       2.318  -1.031  -0.320  1.00 21.14
ATOM   1080  C   VAL A  72       0.882  -1.350  -4.160  1.00 64.22
ATOM   1081  O   VAL A  72       0.733  -0.391  -4.932  1.00 73.23
ATOM   1082  N   ALA A  73       0.249  -2.459  -4.268  1.00 51.45
ATOM   1083  H   ALA A  73       0.448  -3.176  -3.625  1.00 51.02
ATOM   1084  CA  ALA A  73      -0.711  -2.673  -5.288  1.00  3.20
ATOM   1085  HA  ALA A  73      -0.621  -1.900  -6.033  1.00 22.42
ATOM   1086  CB  ALA A  73      -0.499  -4.020  -5.949  1.00 34.14
ATOM   1087 1HB  ALA A  73       0.504  -4.081  -6.341  1.00 43.23
ATOM   1088 2HB  ALA A  73      -1.207  -4.135  -6.756  1.00 71.21
ATOM   1089 3HB  ALA A  73      -0.657  -4.804  -5.223  1.00  0.02
ATOM   1090  C   ALA A  73      -2.072  -2.586  -4.697  1.00 73.35
ATOM   1091  O   ALA A  73      -2.388  -3.305  -3.738  1.00 34.50
ATOM   1092  N   MET A  74      -2.869  -1.718  -5.235  1.00 44.21
ATOM   1093  H   MET A  74      -2.562  -1.141  -5.970  1.00 23.21
ATOM   1094  CA  MET A  74      -4.212  -1.563  -4.793  1.00 33.13
ATOM   1095  HA  MET A  74      -4.419  -2.229  -3.967  1.00 41.01
ATOM   1096  CB  MET A  74      -4.490  -0.107  -4.393  1.00  3.04
ATOM   1097 1HB  MET A  74      -4.457   0.527  -5.267  1.00 33.12
ATOM   1098 2HB  MET A  74      -5.483  -0.083  -3.966  1.00 11.41
ATOM   1099  CG  MET A  74      -3.532   0.445  -3.348  1.00 22.12
ATOM   1100 1HG  MET A  74      -3.631  -0.107  -2.430  1.00 71.14
ATOM   1101 2HG  MET A  74      -2.526   0.320  -3.719  1.00 74.42
ATOM   1102  SD  MET A  74      -3.785   2.191  -2.988  1.00  5.30
ATOM   1103  CE  MET A  74      -3.073   2.945  -4.436  1.00 30.12
ATOM   1104 1HE  MET A  74      -3.646   2.677  -5.311  1.00 13.52
ATOM   1105 2HE  MET A  74      -2.062   2.583  -4.554  1.00 74.44
ATOM   1106 3HE  MET A  74      -3.053   4.017  -4.318  1.00  2.44
ATOM   1107  C   MET A  74      -5.068  -1.965  -5.943  1.00 33.05
ATOM   1108  O   MET A  74      -4.991  -1.394  -7.025  1.00 21.33
ATOM   1109  N   LYS A  75      -5.852  -2.947  -5.707  1.00 45.40
ATOM   1110  H   LYS A  75      -5.913  -3.292  -4.789  1.00 41.40
ATOM   1111  CA  LYS A  75      -6.636  -3.575  -6.719  1.00 10.20
ATOM   1112  HA  LYS A  75      -6.398  -3.167  -7.688  1.00  4.11
ATOM   1113  CB  LYS A  75      -6.269  -5.043  -6.713  1.00 14.10
ATOM   1114 1HB  LYS A  75      -5.603  -5.203  -5.877  1.00 32.42
ATOM   1115 2HB  LYS A  75      -7.167  -5.613  -6.536  1.00  3.42
ATOM   1116  CG  LYS A  75      -5.573  -5.571  -7.954  1.00 13.53
ATOM   1117 1HG  LYS A  75      -5.345  -6.586  -7.677  1.00 71.22
ATOM   1118 2HG  LYS A  75      -6.264  -5.562  -8.785  1.00 45.04
ATOM   1119  CD  LYS A  75      -4.272  -4.805  -8.308  1.00 64.21
ATOM   1120 1HD  LYS A  75      -4.514  -3.775  -8.518  1.00 71.21
ATOM   1121 2HD  LYS A  75      -3.601  -4.849  -7.463  1.00 43.51
ATOM   1122  CE  LYS A  75      -3.572  -5.417  -9.540  1.00 43.41
ATOM   1123 1HE  LYS A  75      -3.156  -6.372  -9.258  1.00 65.21
ATOM   1124 2HE  LYS A  75      -4.314  -5.572 -10.309  1.00 11.15
ATOM   1125  NZ  LYS A  75      -2.466  -4.567 -10.092  1.00 33.31
ATOM   1126 1HZ  LYS A  75      -1.760  -4.213  -9.400  1.00 64.51
ATOM   1127 2HZ  LYS A  75      -2.823  -3.744 -10.628  1.00 45.22
ATOM   1128 3HZ  LYS A  75      -1.920  -5.099 -10.796  1.00 65.32
ATOM   1129  C   LYS A  75      -8.100  -3.414  -6.410  1.00 53.21
ATOM   1130  O   LYS A  75      -8.542  -3.793  -5.333  1.00  2.44
ATOM   1131  N   LYS A  76      -8.839  -2.895  -7.349  1.00 23.32
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ATOM   1132  H   LYS A  76      -8.430  -2.665  -8.212  1.00 32.32
ATOM   1133  CA  LYS A  76     -10.250  -2.644  -7.165  1.00  4.33
ATOM   1134  HA  LYS A  76     -10.407  -2.263  -6.168  1.00  1.02
ATOM   1135  CB  LYS A  76     -10.750  -1.625  -8.151  1.00 33.13
ATOM   1136 1HB  LYS A  76     -10.146  -0.735  -8.047  1.00  4.23
ATOM   1137 2HB  LYS A  76     -10.612  -2.022  -9.146  1.00 11.24
ATOM   1138  CG  LYS A  76     -12.212  -1.226  -7.990  1.00  2.15
ATOM   1139 1HG  LYS A  76     -12.800  -2.010  -7.537  1.00 72.21
ATOM   1140 2HG  LYS A  76     -12.240  -0.375  -7.325  1.00  0.44
ATOM   1141  CD  LYS A  76     -12.763  -0.786  -9.331  1.00 65.42
ATOM   1142 1HD  LYS A  76     -12.584  -1.576 -10.049  1.00 54.35
ATOM   1143 2HD  LYS A  76     -13.816  -0.564  -9.257  1.00 12.03
ATOM   1144  CE  LYS A  76     -12.029   0.419  -9.829  1.00 54.02
ATOM   1145 1HE  LYS A  76     -12.251   1.234  -9.158  1.00 43.43
ATOM   1146 2HE  LYS A  76     -10.975   0.193  -9.777  1.00 11.14
ATOM   1147  NZ  LYS A  76     -12.414   0.767 -11.215  1.00 31.30
ATOM   1148 1HZ  LYS A  76     -12.315  -0.065 -11.833  1.00  1.31
ATOM   1149 2HZ  LYS A  76     -11.725   1.466 -11.572  1.00 25.23
ATOM   1150 3HZ  LYS A  76     -13.377   1.148 -11.276  1.00 13.51
ATOM   1151  C   LYS A  76     -11.047  -3.904  -7.362  1.00 54.01
ATOM   1152  O   LYS A  76     -10.928  -4.597  -8.369  1.00 42.05
ATOM   1153  N   LEU A  77     -11.834  -4.161  -6.409  1.00 24.23
ATOM   1154  H   LEU A  77     -11.844  -3.507  -5.671  1.00 11.55
ATOM   1155  CA  LEU A  77     -12.721  -5.273  -6.373  1.00  0.23
ATOM   1156  HA  LEU A  77     -12.391  -6.003  -7.095  1.00 62.22
ATOM   1157  CB  LEU A  77     -12.725  -5.887  -4.966  1.00 64.21
ATOM   1158 1HB  LEU A  77     -13.005  -5.098  -4.285  1.00 10.42
ATOM   1159 2HB  LEU A  77     -13.462  -6.673  -4.919  1.00 33.44
ATOM   1160  CG  LEU A  77     -11.380  -6.443  -4.470  1.00 65.32
ATOM   1161  HG  LEU A  77     -10.661  -5.639  -4.444  1.00 53.43
ATOM   1162  CD1 LEU A  77     -11.516  -6.983  -3.061  1.00 13.44
ATOM   1163 1HD1 LEU A  77     -11.825  -6.186  -2.399  1.00 73.40
ATOM   1164 2HD1 LEU A  77     -10.564  -7.373  -2.734  1.00 32.14
ATOM   1165 3HD1 LEU A  77     -12.254  -7.771  -3.046  1.00 53.52
ATOM   1166  CD2 LEU A  77     -10.855  -7.527  -5.404  1.00 51.01
ATOM   1167 1HD2 LEU A  77     -11.577  -8.328  -5.470  1.00 64.51
ATOM   1168 2HD2 LEU A  77      -9.926  -7.915  -5.015  1.00 32.35
ATOM   1169 3HD2 LEU A  77     -10.685  -7.110  -6.385  1.00 75.35
ATOM   1170  C   LEU A  77     -14.104  -4.758  -6.758  1.00 71.54
ATOM   1171  O   LEU A  77     -14.424  -3.604  -6.471  1.00 52.43
ATOM   1172  N   PRO A  78     -14.940  -5.585  -7.419  1.00 52.24
ATOM   1173  CD  PRO A  78     -14.670  -7.006  -7.716  1.00 42.12
ATOM   1174  CA  PRO A  78     -16.278  -5.168  -7.947  1.00 64.24
ATOM   1175  HA  PRO A  78     -16.166  -4.375  -8.673  1.00 70.42
ATOM   1176  CB  PRO A  78     -16.788  -6.430  -8.658  1.00 55.45
ATOM   1177 1HB  PRO A  78     -17.853  -6.532  -8.496  1.00 23.53
ATOM   1178 2HB  PRO A  78     -16.569  -6.383  -9.715  1.00 33.44
ATOM   1179  CG  PRO A  78     -16.029  -7.554  -8.044  1.00  4.45
ATOM   1180 1HG  PRO A  78     -16.534  -7.886  -7.149  1.00 64.03
ATOM   1181 2HG  PRO A  78     -15.929  -8.367  -8.747  1.00  3.42
ATOM   1182 1HD  PRO A  78     -14.261  -7.508  -6.851  1.00 51.12
ATOM   1183 2HD  PRO A  78     -13.998  -7.099  -8.556  1.00 24.42
ATOM   1184  C   PRO A  78     -17.294  -4.706  -6.872  1.00  5.05
ATOM   1185  O   PRO A  78     -18.419  -4.355  -7.183  1.00 61.21
ATOM   1186  N   ASN A  79     -16.878  -4.710  -5.628  1.00 72.40
ATOM   1187  H   ASN A  79     -15.966  -5.027  -5.461  1.00 71.02
ATOM   1188  CA  ASN A  79     -17.719  -4.267  -4.515  1.00 61.44
ATOM   1189  HA  ASN A  79     -18.742  -4.196  -4.853  1.00 24.15
ATOM   1190  CB  ASN A  79     -17.628  -5.269  -3.349  1.00 43.55
ATOM   1191 1HB  ASN A  79     -16.610  -5.288  -2.985  1.00 74.25
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ATOM   1192 2HB  ASN A  79     -18.279  -4.938  -2.554  1.00 51.21
ATOM   1193  CG  ASN A  79     -18.015  -6.681  -3.739  1.00 44.51
ATOM   1194  OD1 ASN A  79     -17.176  -7.464  -4.166  1.00 20.02
ATOM   1195  ND2 ASN A  79     -19.273  -7.020  -3.589  1.00 44.34
ATOM   1196 2HD2 ASN A  79     -19.904  -6.359  -3.239  1.00 43.34
ATOM   1197 1HD2 ASN A  79     -19.517  -7.933  -3.843  1.00 53.01
ATOM   1198  C   ASN A  79     -17.224  -2.911  -4.043  1.00 14.34
ATOM   1199  O   ASN A  79     -17.570  -2.452  -2.960  1.00 34.32
ATOM   1200  N   ASN A  80     -16.381  -2.301  -4.888  1.00 34.22
ATOM   1201  H   ASN A  80     -16.196  -2.755  -5.737  1.00 21.14
ATOM   1202  CA  ASN A  80     -15.686  -1.009  -4.651  1.00 34.20
ATOM   1203  HA  ASN A  80     -15.104  -0.756  -5.525  1.00 63.41
ATOM   1204  CB  ASN A  80     -16.657   0.143  -4.336  1.00 51.12
ATOM   1205 1HB  ASN A  80     -17.611  -0.008  -4.815  1.00 31.44
ATOM   1206 2HB  ASN A  80     -16.778   0.165  -3.260  1.00  2.45
ATOM   1207  CG  ASN A  80     -16.085   1.500  -4.747  1.00 42.32
ATOM   1208  OD1 ASN A  80     -15.263   1.602  -5.668  1.00 11.22
ATOM   1209  ND2 ASN A  80     -16.509   2.544  -4.096  1.00  2.43
ATOM   1210 2HD2 ASN A  80     -17.160   2.410  -3.368  1.00 62.32
ATOM   1211 1HD2 ASN A  80     -16.179   3.422  -4.364  1.00 10.32
ATOM   1212  C   ASN A  80     -14.698  -1.180  -3.527  1.00 44.03
ATOM   1213  O   ASN A  80     -14.221  -0.236  -2.962  1.00  2.44
ATOM   1214  N   ALA A  81     -14.324  -2.414  -3.315  1.00 10.03
ATOM   1215  H   ALA A  81     -14.672  -3.086  -3.932  1.00 60.33
ATOM   1216  CA  ALA A  81     -13.410  -2.807  -2.275  1.00 64.40
ATOM   1217  HA  ALA A  81     -13.414  -2.051  -1.504  1.00 23.03
ATOM   1218  CB  ALA A  81     -13.829  -4.148  -1.683  1.00 73.03
ATOM   1219 1HB  ALA A  81     -13.875  -4.892  -2.465  1.00 11.42
ATOM   1220 2HB  ALA A  81     -14.802  -4.052  -1.224  1.00 33.03
ATOM   1221 3HB  ALA A  81     -13.108  -4.453  -0.939  1.00 73.32
ATOM   1222  C   ALA A  81     -12.042  -2.893  -2.893  1.00 55.44
ATOM   1223  O   ALA A  81     -11.931  -2.886  -4.101  1.00 34.41
ATOM   1224  N   THR A  82     -11.012  -2.905  -2.112  1.00 72.02
ATOM   1225  H   THR A  82     -11.108  -2.937  -1.134  1.00 41.30
ATOM   1226  CA  THR A  82      -9.687  -2.897  -2.677  1.00 72.12
ATOM   1227  HA  THR A  82      -9.745  -3.081  -3.739  1.00 62.11
ATOM   1228  CB  THR A  82      -9.080  -1.504  -2.457  1.00 61.40
ATOM   1229  HB  THR A  82      -8.791  -1.421  -1.422  1.00  3.13
ATOM   1230  OG1 THR A  82     -10.059  -0.519  -2.771  1.00 45.53
ATOM   1231  HG1 THR A  82     -10.926  -0.907  -2.618  1.00 54.42
ATOM   1232  CG2 THR A  82      -7.872  -1.289  -3.340  1.00  1.35
ATOM   1233 1HG2 THR A  82      -8.147  -1.452  -4.370  1.00 32.11
ATOM   1234 2HG2 THR A  82      -7.094  -1.984  -3.065  1.00 23.32
ATOM   1235 3HG2 THR A  82      -7.518  -0.276  -3.219  1.00 24.13
ATOM   1236  C   THR A  82      -8.802  -3.947  -1.992  1.00 44.33
ATOM   1237  O   THR A  82      -8.846  -4.083  -0.779  1.00  3.30
ATOM   1238  N   ARG A  83      -8.019  -4.709  -2.745  1.00  3.45
ATOM   1239  H   ARG A  83      -8.029  -4.681  -3.733  1.00 21.14
ATOM   1240  CA  ARG A  83      -7.111  -5.607  -2.112  1.00 72.22
ATOM   1241  HA  ARG A  83      -7.381  -5.655  -1.068  1.00 52.40
ATOM   1242  CB  ARG A  83      -7.088  -7.001  -2.707  1.00 72.34
ATOM   1243 1HB  ARG A  83      -8.078  -7.263  -3.053  1.00 63.23
ATOM   1244 2HB  ARG A  83      -6.390  -7.032  -3.531  1.00 33.52
ATOM   1245  CG  ARG A  83      -6.637  -8.001  -1.662  1.00  4.33
ATOM   1246 1HG  ARG A  83      -5.836  -7.554  -1.091  1.00 24.30
ATOM   1247 2HG  ARG A  83      -7.465  -8.194  -0.997  1.00 54.35
ATOM   1248  CD  ARG A  83      -6.137  -9.299  -2.218  1.00 13.13
ATOM   1249 1HD  ARG A  83      -6.163  -9.973  -1.377  1.00 31.55
ATOM   1250 2HD  ARG A  83      -6.805  -9.643  -2.993  1.00 35.41
ATOM   1251  NE  ARG A  83      -4.752  -9.177  -2.739  1.00 32.12
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ATOM   1252  HE  ARG A  83      -4.516  -8.287  -3.078  1.00 51.40
ATOM   1253  CZ  ARG A  83      -3.811 -10.152  -2.693  1.00 34.35
ATOM   1254  NH1 ARG A  83      -4.146 -11.394  -2.325  1.00 61.33
ATOM   1255 1HH1 ARG A  83      -5.089 -11.631  -2.081  1.00  3.45
ATOM   1256 2HH1 ARG A  83      -3.475 -12.136  -2.273  1.00 35.42
ATOM   1257  NH2 ARG A  83      -2.550  -9.877  -3.032  1.00  2.20
ATOM   1258 1HH2 ARG A  83      -2.280  -8.949  -3.326  1.00 64.42
ATOM   1259 2HH2 ARG A  83      -1.785 -10.528  -2.991  1.00 72.15
ATOM   1260  C   ARG A  83      -5.742  -5.010  -2.218  1.00 32.11
ATOM   1261  O   ARG A  83      -5.359  -4.533  -3.289  1.00 61.14
ATOM   1262  N   ILE A  84      -5.014  -5.016  -1.145  1.00 44.24
ATOM   1263  H   ILE A  84      -5.314  -5.474  -0.327  1.00 11.22
ATOM   1264  CA  ILE A  84      -3.726  -4.395  -1.116  1.00 72.00
ATOM   1265  HA  ILE A  84      -3.595  -3.897  -2.067  1.00 13.33
ATOM   1266  CB  ILE A  84      -3.624  -3.312   0.032  1.00 63.10
ATOM   1267  HB  ILE A  84      -4.316  -3.622   0.799  1.00 33.11
ATOM   1268  CG2 ILE A  84      -2.251  -3.227   0.662  1.00 55.52
ATOM   1269 1HG2 ILE A  84      -2.249  -2.460   1.424  1.00 74.31
ATOM   1270 2HG2 ILE A  84      -1.524  -2.984  -0.098  1.00 61.44
ATOM   1271 3HG2 ILE A  84      -2.006  -4.179   1.105  1.00 15.14
ATOM   1272  CG1 ILE A  84      -4.065  -1.936  -0.453  1.00 31.42
ATOM   1273 1HG1 ILE A  84      -3.862  -1.201   0.312  1.00 70.22
ATOM   1274 2HG1 ILE A  84      -3.477  -1.714  -1.329  1.00 53.33
ATOM   1275  CD1 ILE A  84      -5.513  -1.836  -0.820  1.00 14.23
ATOM   1276 1HD1 ILE A  84      -5.723  -0.843  -1.182  1.00 40.24
ATOM   1277 2HD1 ILE A  84      -6.125  -2.054   0.043  1.00  1.23
ATOM   1278 3HD1 ILE A  84      -5.725  -2.553  -1.599  1.00 32.42
ATOM   1279  C   ILE A  84      -2.652  -5.449  -0.989  1.00  0.44
ATOM   1280  O   ILE A  84      -2.773  -6.409  -0.222  1.00 12.43
ATOM   1281  N   SER A  85      -1.653  -5.300  -1.814  1.00 11.22
ATOM   1282  H   SER A  85      -1.656  -4.522  -2.417  1.00 41.44
ATOM   1283  CA  SER A  85      -0.543  -6.197  -1.855  1.00  3.32
ATOM   1284  HA  SER A  85      -0.632  -6.920  -1.058  1.00 24.10
ATOM   1285  CB  SER A  85      -0.547  -6.909  -3.200  1.00 64.44
ATOM   1286 1HB  SER A  85      -0.162  -6.252  -3.965  1.00 72.43
ATOM   1287 2HB  SER A  85       0.070  -7.794  -3.141  1.00 72.41
ATOM   1288  OG  SER A  85      -1.882  -7.306  -3.524  1.00 55.02
ATOM   1289  HG  SER A  85      -2.391  -6.528  -3.265  1.00 41.22
ATOM   1290  C   SER A  85       0.724  -5.374  -1.690  1.00 20.12
ATOM   1291  O   SER A  85       0.922  -4.392  -2.408  1.00 23.13
ATOM   1292  N   ILE A  86       1.523  -5.732  -0.735  1.00 61.31
ATOM   1293  H   ILE A  86       1.311  -6.520  -0.188  1.00 50.34
ATOM   1294  CA  ILE A  86       2.748  -5.026  -0.436  1.00 22.15
ATOM   1295  HA  ILE A  86       2.742  -4.108  -1.008  1.00 32.30
ATOM   1296  CB  ILE A  86       2.907  -4.707   1.075  1.00 63.22
ATOM   1297  HB  ILE A  86       3.248  -5.596   1.584  1.00 30.31
ATOM   1298  CG2 ILE A  86       3.967  -3.606   1.246  1.00 13.54
ATOM   1299 1HG2 ILE A  86       3.664  -2.727   0.696  1.00 33.20
ATOM   1300 2HG2 ILE A  86       4.918  -3.957   0.876  1.00  1.24
ATOM   1301 3HG2 ILE A  86       4.057  -3.359   2.295  1.00 55.34
ATOM   1302  CG1 ILE A  86       1.578  -4.227   1.701  1.00 12.21
ATOM   1303 1HG1 ILE A  86       0.798  -4.931   1.452  1.00 12.00
ATOM   1304 2HG1 ILE A  86       1.690  -4.198   2.776  1.00  3.41
ATOM   1305  CD1 ILE A  86       1.116  -2.863   1.243  1.00 11.32
ATOM   1306 1HD1 ILE A  86       1.852  -2.124   1.522  1.00 43.02
ATOM   1307 2HD1 ILE A  86       0.175  -2.622   1.721  1.00 64.34
ATOM   1308 3HD1 ILE A  86       0.993  -2.867   0.172  1.00 43.15
ATOM   1309  C   ILE A  86       3.923  -5.886  -0.915  1.00 40.32
ATOM   1310  O   ILE A  86       3.824  -7.106  -0.934  1.00 71.30
ATOM   1311  N   LYS A  87       5.017  -5.277  -1.281  1.00 51.35
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ATOM   1312  H   LYS A  87       5.074  -4.304  -1.159  1.00 22.14
ATOM   1313  CA  LYS A  87       6.120  -5.992  -1.888  1.00  1.35
ATOM   1314  HA  LYS A  87       5.817  -6.973  -2.213  1.00 73.40
ATOM   1315  CB  LYS A  87       6.604  -5.155  -3.110  1.00 41.32
ATOM   1316 1HB  LYS A  87       5.721  -4.731  -3.566  1.00  5.33
ATOM   1317 2HB  LYS A  87       7.206  -4.340  -2.736  1.00 33.13
ATOM   1318  CG  LYS A  87       7.396  -5.867  -4.247  1.00 64.25
ATOM   1319 1HG  LYS A  87       6.739  -6.581  -4.722  1.00 54.21
ATOM   1320 2HG  LYS A  87       7.674  -5.121  -4.977  1.00 60.51
ATOM   1321  CD  LYS A  87       8.656  -6.624  -3.803  1.00 64.52
ATOM   1322 1HD  LYS A  87       8.357  -7.434  -3.153  1.00  3.23
ATOM   1323 2HD  LYS A  87       9.130  -7.040  -4.680  1.00 45.23
ATOM   1324  CE  LYS A  87       9.677  -5.763  -3.046  1.00 72.34
ATOM   1325 1HE  LYS A  87       9.182  -5.323  -2.194  1.00 62.43
ATOM   1326 2HE  LYS A  87      10.459  -6.415  -2.683  1.00 63.15
ATOM   1327  NZ  LYS A  87      10.281  -4.674  -3.823  1.00 22.33
ATOM   1328 1HZ  LYS A  87      10.732  -4.988  -4.703  1.00 43.22
ATOM   1329 2HZ  LYS A  87      11.040  -4.348  -3.179  1.00 71.54
ATOM   1330 3HZ  LYS A  87       9.652  -3.859  -3.966  1.00 25.11
ATOM   1331  C   LYS A  87       7.242  -6.048  -0.849  1.00 24.15
ATOM   1332  O   LYS A  87       7.690  -5.025  -0.330  1.00  1.40
ATOM   1333  N   TYR A  88       7.673  -7.263  -0.547  1.00 63.32
ATOM   1334  H   TYR A  88       7.309  -8.034  -1.033  1.00 71.11
ATOM   1335  CA  TYR A  88       8.708  -7.517   0.448  1.00 54.40
ATOM   1336  HA  TYR A  88       8.732  -6.678   1.128  1.00 22.01
ATOM   1337  CB  TYR A  88       8.403  -8.804   1.253  1.00 72.01
ATOM   1338 1HB  TYR A  88       9.187  -8.952   1.980  1.00  1.41
ATOM   1339 2HB  TYR A  88       7.468  -8.676   1.777  1.00 55.33
ATOM   1340  CG  TYR A  88       8.311 -10.090   0.433  1.00 20.52
ATOM   1341  CD1 TYR A  88       7.195 -10.367  -0.347  1.00 32.01
ATOM   1342  HD1 TYR A  88       6.387  -9.651  -0.378  1.00 10.44
ATOM   1343  CE1 TYR A  88       7.105 -11.532  -1.081  1.00  4.21
ATOM   1344  HE1 TYR A  88       6.229 -11.727  -1.681  1.00 52.31
ATOM   1345  CZ  TYR A  88       8.136 -12.443  -1.043  1.00 63.12
ATOM   1346  CE2 TYR A  88       9.256 -12.197  -0.277  1.00 53.24
ATOM   1347  HE2 TYR A  88      10.065 -12.911  -0.249  1.00 33.32
ATOM   1348  CD2 TYR A  88       9.338 -11.027   0.456  1.00 22.14
ATOM   1349  HD2 TYR A  88      10.213 -10.832   1.058  1.00 33.15
ATOM   1350  OH  TYR A  88       8.045 -13.602  -1.773  1.00 52.23
ATOM   1351  HH  TYR A  88       8.300 -14.338  -1.210  1.00  4.23
ATOM   1352  C   TYR A  88      10.043  -7.643  -0.226  1.00 52.12
ATOM   1353  O   TYR A  88      10.143  -8.237  -1.295  1.00 75.10
ATOM   1354  N   GLY A  89      11.037  -7.060   0.357  1.00 35.15
ATOM   1355  H   GLY A  89      10.916  -6.564   1.192  1.00 43.43
ATOM   1356  CA  GLY A  89      12.335  -7.140  -0.209  1.00 73.23
ATOM   1357 1HA  GLY A  89      12.377  -7.993  -0.871  1.00 33.51
ATOM   1358 2HA  GLY A  89      12.527  -6.242  -0.777  1.00 21.34
ATOM   1359  C   GLY A  89      13.384  -7.283   0.840  1.00 71.41
ATOM   1360  O   GLY A  89      13.430  -8.284   1.536  1.00 40.11
ATOM   1361  N   SER A  90      14.140  -6.244   1.022  1.00 40.41
ATOM   1362  H   SER A  90      13.902  -5.401   0.572  1.00 62.34
ATOM   1363  CA  SER A  90      15.293  -6.267   1.891  1.00 74.32
ATOM   1364  HA  SER A  90      15.878  -7.146   1.669  1.00  4.22
ATOM   1365  CB  SER A  90      16.147  -5.033   1.561  1.00 55.54
ATOM   1366 1HB  SER A  90      16.515  -5.118   0.549  1.00 70.51
ATOM   1367 2HB  SER A  90      15.523  -4.153   1.627  1.00 33.13
ATOM   1368  OG  SER A  90      17.257  -4.867   2.417  1.00 63.51
ATOM   1369  HG  SER A  90      17.575  -3.961   2.252  1.00 41.50
ATOM   1370  C   SER A  90      14.891  -6.278   3.366  1.00 64.21
ATOM   1371  O   SER A  90      15.436  -7.029   4.165  1.00 35.54
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ATOM   1372  N   GLN A  91      13.914  -5.478   3.709  1.00 63.45
ATOM   1373  H   GLN A  91      13.460  -4.953   3.018  1.00  1.12
ATOM   1374  CA  GLN A  91      13.504  -5.352   5.096  1.00 54.03
ATOM   1375  HA  GLN A  91      14.281  -5.767   5.720  1.00 40.40
ATOM   1376  CB  GLN A  91      13.335  -3.863   5.445  1.00  2.22
ATOM   1377 1HB  GLN A  91      12.505  -3.470   4.876  1.00 32.03
ATOM   1378 2HB  GLN A  91      13.104  -3.780   6.498  1.00 40.05
ATOM   1379  CG  GLN A  91      14.568  -2.989   5.152  1.00 34.34
ATOM   1380 1HG  GLN A  91      14.808  -3.081   4.103  1.00 32.04
ATOM   1381 2HG  GLN A  91      14.318  -1.960   5.367  1.00  0.14
ATOM   1382  CD  GLN A  91      15.806  -3.373   5.955  1.00 73.41
ATOM   1383  OE1 GLN A  91      16.022  -2.876   7.050  1.00 54.43
ATOM   1384  NE2 GLN A  91      16.641  -4.217   5.404  1.00 32.44
ATOM   1385 2HE2 GLN A  91      16.462  -4.576   4.507  1.00 61.23
ATOM   1386 1HE2 GLN A  91      17.431  -4.475   5.920  1.00 62.22
ATOM   1387  C   GLN A  91      12.192  -6.102   5.346  1.00 70.35
ATOM   1388  O   GLN A  91      11.605  -6.006   6.429  1.00 41.12
ATOM   1389  N   GLY A  92      11.737  -6.867   4.343  1.00 64.34
ATOM   1390  H   GLY A  92      12.336  -7.039   3.588  1.00 20.21
ATOM   1391  CA  GLY A  92      10.400  -7.463   4.422  1.00 51.02
ATOM   1392 1HA  GLY A  92      10.249  -8.229   3.674  1.00 55.13
ATOM   1393 2HA  GLY A  92      10.271  -7.917   5.395  1.00 55.24
ATOM   1394  C   GLY A  92       9.352  -6.359   4.280  1.00 51.41
ATOM   1395  O   GLY A  92       9.702  -5.175   4.237  1.00 23.22
ATOM   1396  N   ASN A  93       8.098  -6.676   4.116  1.00 30.01
ATOM   1397  H   ASN A  93       7.790  -7.605   4.017  1.00 63.25
ATOM   1398  CA  ASN A  93       7.153  -5.582   4.102  1.00 34.24
ATOM   1399  HA  ASN A  93       7.810  -4.726   4.061  1.00  1.21
ATOM   1400  CB  ASN A  93       6.212  -5.498   2.892  1.00 25.23
ATOM   1401 1HB  ASN A  93       5.600  -4.618   3.006  1.00 12.23
ATOM   1402 2HB  ASN A  93       6.813  -5.378   2.002  1.00 14.31
ATOM   1403  CG  ASN A  93       5.272  -6.661   2.682  1.00 11.42
ATOM   1404  OD1 ASN A  93       4.247  -6.765   3.320  1.00 75.11
ATOM   1405  ND2 ASN A  93       5.548  -7.459   1.701  1.00 60.11
ATOM   1406 2HD2 ASN A  93       6.345  -7.265   1.167  1.00  3.41
ATOM   1407 1HD2 ASN A  93       4.940  -8.200   1.515  1.00 72.02
ATOM   1408  C   ASN A  93       6.429  -5.384   5.410  1.00 23.42
ATOM   1409  O   ASN A  93       5.828  -4.362   5.606  1.00 60.44
ATOM   1410  N   SER A  94       6.572  -6.328   6.329  1.00 62.41
ATOM   1411  H   SER A  94       7.206  -7.062   6.189  1.00 24.25
ATOM   1412  CA  SER A  94       5.844  -6.342   7.608  1.00 73.23
ATOM   1413  HA  SER A  94       4.823  -6.608   7.376  1.00  0.14
ATOM   1414  CB  SER A  94       6.411  -7.454   8.475  1.00 73.21
ATOM   1415 1HB  SER A  94       6.442  -7.126   9.503  1.00 11.24
ATOM   1416 2HB  SER A  94       5.797  -8.338   8.393  1.00 74.15
ATOM   1417  OG  SER A  94       7.742  -7.777   8.049  1.00 42.45
ATOM   1418  HG  SER A  94       8.356  -7.650   8.780  1.00 23.00
ATOM   1419  C   SER A  94       5.807  -4.991   8.364  1.00 54.04
ATOM   1420  O   SER A  94       4.728  -4.526   8.740  1.00 50.51
ATOM   1421  N   ILE A  95       6.960  -4.361   8.537  1.00 22.33
ATOM   1422  H   ILE A  95       7.771  -4.755   8.153  1.00 12.14
ATOM   1423  CA  ILE A  95       7.045  -3.091   9.272  1.00 14.51
ATOM   1424  HA  ILE A  95       6.528  -3.224  10.211  1.00 34.12
ATOM   1425  CB  ILE A  95       8.541  -2.650   9.558  1.00  2.31
ATOM   1426  HB  ILE A  95       9.041  -2.588   8.604  1.00 25.51
ATOM   1427  CG2 ILE A  95       8.599  -1.258  10.186  1.00 55.01
ATOM   1428 1HG2 ILE A  95       8.057  -1.263  11.120  1.00 14.40
ATOM   1429 2HG2 ILE A  95       8.151  -0.542   9.514  1.00 71.20
ATOM   1430 3HG2 ILE A  95       9.628  -0.988  10.368  1.00 21.34
ATOM   1431  CG1 ILE A  95       9.309  -3.658  10.462  1.00  5.00
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ATOM   1432 1HG1 ILE A  95      10.229  -3.197  10.790  1.00 62.33
ATOM   1433 2HG1 ILE A  95       8.704  -3.870  11.331  1.00 51.10
ATOM   1434  CD1 ILE A  95       9.682  -4.983   9.813  1.00 34.01
ATOM   1435 1HD1 ILE A  95       8.784  -5.500   9.509  1.00 25.20
ATOM   1436 2HD1 ILE A  95      10.224  -5.592  10.522  1.00 64.12
ATOM   1437 3HD1 ILE A  95      10.302  -4.799   8.950  1.00 41.00
ATOM   1438  C   ILE A  95       6.328  -1.988   8.477  1.00 21.13
ATOM   1439  O   ILE A  95       5.473  -1.259   9.007  1.00 45.43
ATOM   1440  N   ARG A  96       6.634  -1.956   7.194  1.00 33.40
ATOM   1441  H   ARG A  96       7.227  -2.658   6.857  1.00 34.21
ATOM   1442  CA  ARG A  96       6.119  -0.969   6.253  1.00  1.13
ATOM   1443  HA  ARG A  96       6.407   0.024   6.570  1.00 34.43
ATOM   1444  CB  ARG A  96       6.724  -1.251   4.857  1.00 60.50
ATOM   1445 1HB  ARG A  96       6.388  -2.225   4.534  1.00 74.14
ATOM   1446 2HB  ARG A  96       6.349  -0.511   4.167  1.00 52.01
ATOM   1447  CG  ARG A  96       8.262  -1.240   4.788  1.00 14.31
ATOM   1448 1HG  ARG A  96       8.613  -0.226   4.911  1.00 71.02
ATOM   1449 2HG  ARG A  96       8.653  -1.856   5.584  1.00 32.01
ATOM   1450  CD  ARG A  96       8.761  -1.784   3.440  1.00 72.41
ATOM   1451 1HD  ARG A  96       8.472  -2.821   3.365  1.00 74.12
ATOM   1452 2HD  ARG A  96       8.292  -1.237   2.637  1.00 72.22
ATOM   1453  NE  ARG A  96      10.225  -1.701   3.288  1.00 31.22
ATOM   1454  HE  ARG A  96      10.720  -1.175   3.968  1.00 53.35
ATOM   1455  CZ  ARG A  96      10.961  -2.267   2.310  1.00 10.41
ATOM   1456  NH1 ARG A  96      10.402  -2.990   1.331  1.00 31.13
ATOM   1457 1HH1 ARG A  96       9.419  -3.157   1.260  1.00 42.32
ATOM   1458 2HH1 ARG A  96      11.014  -3.381   0.628  1.00 33.14
ATOM   1459  NH2 ARG A  96      12.266  -2.093   2.313  1.00 61.44
ATOM   1460 1HH2 ARG A  96      12.682  -1.539   3.045  1.00 51.21
ATOM   1461 2HH2 ARG A  96      12.848  -2.502   1.600  1.00 40.55
ATOM   1462  C   ARG A  96       4.589  -1.066   6.171  1.00 44.40
ATOM   1463  O   ARG A  96       3.876  -0.069   6.344  1.00 74.13
ATOM   1464  N   SER A  97       4.110  -2.274   5.956  1.00 60.24
ATOM   1465  H   SER A  97       4.731  -3.034   5.871  1.00  1.14
ATOM   1466  CA  SER A  97       2.703  -2.565   5.789  1.00  1.44
ATOM   1467  HA  SER A  97       2.328  -1.971   4.970  1.00  4.32
ATOM   1468  CB  SER A  97       2.539  -4.024   5.418  1.00 72.31
ATOM   1469 1HB  SER A  97       2.828  -4.645   6.253  1.00  2.10
ATOM   1470 2HB  SER A  97       1.511  -4.222   5.155  1.00 12.41
ATOM   1471  OG  SER A  97       3.356  -4.327   4.318  1.00 22.01
ATOM   1472  HG  SER A  97       3.315  -5.267   4.101  1.00 73.52
ATOM   1473  C   SER A  97       1.898  -2.263   7.038  1.00 11.05
ATOM   1474  O   SER A  97       0.823  -1.679   6.944  1.00  3.23
ATOM   1475  N   SER A  98       2.426  -2.634   8.200  1.00 30.03
ATOM   1476  H   SER A  98       3.323  -3.035   8.224  1.00 11.44
ATOM   1477  CA  SER A  98       1.719  -2.454   9.452  1.00 71.33
ATOM   1478  HA  SER A  98       0.790  -3.004   9.383  1.00 43.12
ATOM   1479  CB  SER A  98       2.547  -3.018  10.623  1.00 31.22
ATOM   1480 1HB  SER A  98       2.827  -4.038  10.405  1.00 54.34
ATOM   1481 2HB  SER A  98       3.440  -2.424  10.743  1.00 45.35
ATOM   1482  OG  SER A  98       1.819  -3.002  11.843  1.00 24.24
ATOM   1483  HG  SER A  98       1.138  -2.325  11.812  1.00 54.30
ATOM   1484  C   SER A  98       1.390  -0.977   9.668  1.00 10.23
ATOM   1485  O   SER A  98       0.259  -0.624  10.011  1.00 60.11
ATOM   1486  N   ALA A  99       2.371  -0.127   9.451  1.00 11.22
ATOM   1487  H   ALA A  99       3.254  -0.465   9.188  1.00 63.03
ATOM   1488  CA  ALA A  99       2.174   1.296   9.595  1.00  4.34
ATOM   1489  HA  ALA A  99       1.626   1.459  10.510  1.00 12.30
ATOM   1490  CB  ALA A  99       3.508   2.024   9.673  1.00 51.14
ATOM   1491 1HB  ALA A  99       4.051   1.871   8.749  1.00 73.24
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ATOM   1492 2HB  ALA A  99       4.088   1.631  10.495  1.00 44.33
ATOM   1493 3HB  ALA A  99       3.341   3.080   9.819  1.00 54.14
ATOM   1494  C   ALA A  99       1.298   1.847   8.484  1.00  3.44
ATOM   1495  O   ALA A  99       0.369   2.604   8.745  1.00 72.43
ATOM   1496  N   LEU A 100       1.575   1.419   7.262  1.00 51.14
ATOM   1497  H   LEU A 100       2.287   0.756   7.132  1.00 32.53
ATOM   1498  CA  LEU A 100       0.877   1.895   6.082  1.00 21.15
ATOM   1499  HA  LEU A 100       1.086   2.945   5.944  1.00 43.33
ATOM   1500  CB  LEU A 100       1.391   1.136   4.873  1.00 73.12
ATOM   1501 1HB  LEU A 100       2.467   1.129   4.905  1.00 63.44
ATOM   1502 2HB  LEU A 100       1.061   0.111   4.968  1.00 63.52
ATOM   1503  CG  LEU A 100       0.934   1.636   3.523  1.00 42.23
ATOM   1504  HG  LEU A 100      -0.141   1.728   3.541  1.00 34.53
ATOM   1505  CD1 LEU A 100       1.515   3.006   3.230  1.00 62.24
ATOM   1506 1HD1 LEU A 100       1.174   3.707   3.976  1.00 74.45
ATOM   1507 2HD1 LEU A 100       1.202   3.333   2.249  1.00 52.42
ATOM   1508 3HD1 LEU A 100       2.593   2.945   3.266  1.00 33.45
ATOM   1509  CD2 LEU A 100       1.305   0.651   2.454  1.00 61.02
ATOM   1510 1HD2 LEU A 100       2.380   0.547   2.418  1.00  0.34
ATOM   1511 2HD2 LEU A 100       0.931   1.003   1.503  1.00  0.24
ATOM   1512 3HD2 LEU A 100       0.860  -0.305   2.686  1.00  0.33
ATOM   1513  C   LEU A 100      -0.619   1.663   6.206  1.00 14.15
ATOM   1514  O   LEU A 100      -1.412   2.583   6.043  1.00  1.01
ATOM   1515  N   ILE A 101      -0.976   0.448   6.559  1.00 63.22
ATOM   1516  H   ILE A 101      -0.261  -0.206   6.736  1.00  4.34
ATOM   1517  CA  ILE A 101      -2.366   0.036   6.682  1.00 11.14
ATOM   1518  HA  ILE A 101      -2.832   0.230   5.727  1.00 10.23
ATOM   1519  CB  ILE A 101      -2.479  -1.493   6.974  1.00 60.54
ATOM   1520  HB  ILE A 101      -1.793  -1.711   7.778  1.00 11.43
ATOM   1521  CG2 ILE A 101      -3.867  -1.899   7.453  1.00 32.22
ATOM   1522 1HG2 ILE A 101      -4.599  -1.649   6.699  1.00 71.10
ATOM   1523 2HG2 ILE A 101      -4.076  -1.356   8.364  1.00 61.12
ATOM   1524 3HG2 ILE A 101      -3.885  -2.960   7.652  1.00 65.51
ATOM   1525  CG1 ILE A 101      -2.045  -2.319   5.745  1.00 50.13
ATOM   1526 1HG1 ILE A 101      -1.011  -2.101   5.523  1.00 23.11
ATOM   1527 2HG1 ILE A 101      -2.137  -3.367   5.986  1.00 72.33
ATOM   1528  CD1 ILE A 101      -2.852  -2.053   4.482  1.00 52.15
ATOM   1529 1HD1 ILE A 101      -3.898  -2.240   4.673  1.00 21.23
ATOM   1530 2HD1 ILE A 101      -2.518  -2.723   3.705  1.00 61.31
ATOM   1531 3HD1 ILE A 101      -2.715  -1.033   4.152  1.00 73.21
ATOM   1532  C   ILE A 101      -3.125   0.860   7.723  1.00 25.30
ATOM   1533  O   ILE A 101      -4.251   1.306   7.451  1.00 43.35
ATOM   1534  N   GLY A 102      -2.479   1.129   8.868  1.00 14.54
ATOM   1535  H   GLY A 102      -1.553   0.827   9.002  1.00  3.12
ATOM   1536  CA  GLY A 102      -3.135   1.893   9.920  1.00 10.32
ATOM   1537 1HA  GLY A 102      -4.030   1.373  10.223  1.00  3.25
ATOM   1538 2HA  GLY A 102      -2.469   1.977  10.767  1.00 51.14
ATOM   1539  C   GLY A 102      -3.514   3.279   9.452  1.00  2.34
ATOM   1540  O   GLY A 102      -4.591   3.800   9.767  1.00 72.43
ATOM   1541  N   ILE A 103      -2.635   3.854   8.679  1.00 51.24
ATOM   1542  H   ILE A 103      -1.815   3.360   8.469  1.00 43.11
ATOM   1543  CA  ILE A 103      -2.827   5.167   8.127  1.00 72.42
ATOM   1544  HA  ILE A 103      -3.109   5.840   8.920  1.00  3.44
ATOM   1545  CB  ILE A 103      -1.511   5.668   7.508  1.00 73.42
ATOM   1546  HB  ILE A 103      -1.218   4.989   6.721  1.00 61.15
ATOM   1547  CG2 ILE A 103      -1.686   7.071   6.909  1.00 64.05
ATOM   1548 1HG2 ILE A 103      -0.748   7.399   6.484  1.00 74.32
ATOM   1549 2HG2 ILE A 103      -1.992   7.759   7.682  1.00  3.43
ATOM   1550 3HG2 ILE A 103      -2.439   7.039   6.135  1.00 21.45
ATOM   1551  CG1 ILE A 103      -0.430   5.673   8.576  1.00 64.22
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ATOM   1552 1HG1 ILE A 103      -0.589   6.509   9.239  1.00  3.05
ATOM   1553 2HG1 ILE A 103      -0.489   4.754   9.141  1.00 20.30
ATOM   1554  CD1 ILE A 103       0.950   5.786   8.021  1.00 62.13
ATOM   1555 1HD1 ILE A 103       1.138   4.922   7.399  1.00 14.51
ATOM   1556 2HD1 ILE A 103       1.661   5.812   8.833  1.00 12.01
ATOM   1557 3HD1 ILE A 103       1.027   6.683   7.425  1.00  2.32
ATOM   1558  C   ILE A 103      -3.911   5.144   7.060  1.00  0.41
ATOM   1559  O   ILE A 103      -4.832   5.960   7.096  1.00 12.24
ATOM   1560  N   ILE A 104      -3.822   4.180   6.144  1.00 10.15
ATOM   1561  H   ILE A 104      -3.127   3.491   6.244  1.00 15.04
ATOM   1562  CA  ILE A 104      -4.729   4.127   5.006  1.00 74.52
ATOM   1563  HA  ILE A 104      -4.625   5.047   4.451  1.00 32.24
ATOM   1564  CB  ILE A 104      -4.369   2.945   4.045  1.00 54.34
ATOM   1565  HB  ILE A 104      -4.396   2.034   4.621  1.00 30.43
ATOM   1566  CG2 ILE A 104      -5.398   2.815   2.914  1.00 21.11
ATOM   1567 1HG2 ILE A 104      -5.127   1.987   2.274  1.00 13.14
ATOM   1568 2HG2 ILE A 104      -5.412   3.725   2.333  1.00 72.44
ATOM   1569 3HG2 ILE A 104      -6.378   2.642   3.335  1.00 51.11
ATOM   1570  CG1 ILE A 104      -2.971   3.118   3.459  1.00 70.13
ATOM   1571 1HG1 ILE A 104      -2.963   3.985   2.816  1.00 12.45
ATOM   1572 2HG1 ILE A 104      -2.263   3.263   4.263  1.00 73.13
ATOM   1573  CD1 ILE A 104      -2.511   1.928   2.641  1.00 62.43
ATOM   1574 1HD1 ILE A 104      -1.550   2.143   2.196  1.00 72.13
ATOM   1575 2HD1 ILE A 104      -3.230   1.731   1.860  1.00 41.04
ATOM   1576 3HD1 ILE A 104      -2.427   1.060   3.279  1.00 45.03
ATOM   1577  C   ILE A 104      -6.176   3.961   5.440  1.00 61.05
ATOM   1578  O   ILE A 104      -7.021   4.782   5.081  1.00 24.00
ATOM   1579  N   GLU A 105      -6.452   2.971   6.275  1.00 14.21
ATOM   1580  H   GLU A 105      -5.727   2.420   6.649  1.00 32.40
ATOM   1581  CA  GLU A 105      -7.825   2.714   6.641  1.00  4.31
ATOM   1582  HA  GLU A 105      -8.355   2.777   5.700  1.00 23.34
ATOM   1583  CB  GLU A 105      -8.049   1.317   7.221  1.00 50.54
ATOM   1584 1HB  GLU A 105      -9.111   1.159   7.328  1.00 12.55
ATOM   1585 2HB  GLU A 105      -7.674   0.596   6.508  1.00 50.32
ATOM   1586  CG  GLU A 105      -7.415   1.029   8.558  1.00 73.11
ATOM   1587 1HG  GLU A 105      -6.351   1.194   8.488  1.00 21.40
ATOM   1588 2HG  GLU A 105      -7.842   1.687   9.301  1.00 21.31
ATOM   1589  CD  GLU A 105      -7.667  -0.397   8.971  1.00 24.25
ATOM   1590  OE1 GLU A 105      -6.700  -1.122   9.251  1.00 15.23
ATOM   1591  OE2 GLU A 105      -8.850  -0.844   8.963  1.00 55.44
ATOM   1592  C   GLU A 105      -8.421   3.828   7.489  1.00 54.20
ATOM   1593  O   GLU A 105      -9.554   4.256   7.254  1.00 73.42
ATOM   1594  N   GLY A 106      -7.632   4.342   8.425  1.00 34.13
ATOM   1595  H   GLY A 106      -6.724   3.984   8.533  1.00 51.02
ATOM   1596  CA  GLY A 106      -8.097   5.403   9.290  1.00 55.13
ATOM   1597 1HA  GLY A 106      -9.034   5.089   9.726  1.00 21.42
ATOM   1598 2HA  GLY A 106      -7.388   5.570  10.084  1.00 24.13
ATOM   1599  C   GLY A 106      -8.330   6.696   8.533  1.00  3.45
ATOM   1600  O   GLY A 106      -9.286   7.426   8.820  1.00 43.21
ATOM   1601  N   ASN A 107      -7.482   6.962   7.542  1.00 23.01
ATOM   1602  H   ASN A 107      -6.739   6.341   7.364  1.00  1.45
ATOM   1603  CA  ASN A 107      -7.611   8.162   6.709  1.00 73.34
ATOM   1604  HA  ASN A 107      -7.643   9.021   7.361  1.00 32.22
ATOM   1605  CB  ASN A 107      -6.418   8.292   5.746  1.00 22.25
ATOM   1606 1HB  ASN A 107      -5.502   8.296   6.317  1.00  5.21
ATOM   1607 2HB  ASN A 107      -6.413   7.437   5.087  1.00 22.42
ATOM   1608  CG  ASN A 107      -6.458   9.556   4.893  1.00 11.24
ATOM   1609  OD1 ASN A 107      -7.009   9.573   3.801  1.00 33.41
ATOM   1610  ND2 ASN A 107      -5.848  10.616   5.378  1.00  3.13
ATOM   1611 2HD2 ASN A 107      -5.407  10.543   6.250  1.00 53.35
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ATOM   1612 1HD2 ASN A 107      -5.867  11.427   4.833  1.00 43.43
ATOM   1613  C   ASN A 107      -8.904   8.088   5.922  1.00  5.10
ATOM   1614  O   ASN A 107      -9.648   9.065   5.835  1.00 14.54
ATOM   1615  N   ILE A 108      -9.186   6.902   5.399  1.00 50.52
ATOM   1616  H   ILE A 108      -8.535   6.176   5.516  1.00 62.33
ATOM   1617  CA  ILE A 108     -10.406   6.644   4.646  1.00  3.43
ATOM   1618  HA  ILE A 108     -10.457   7.354   3.835  1.00 24.50
ATOM   1619  CB  ILE A 108     -10.414   5.213   4.065  1.00 20.32
ATOM   1620  HB  ILE A 108     -10.256   4.526   4.884  1.00 33.31
ATOM   1621  CG2 ILE A 108     -11.765   4.883   3.438  1.00 51.13
ATOM   1622 1HG2 ILE A 108     -11.714   3.924   2.945  1.00 12.24
ATOM   1623 2HG2 ILE A 108     -12.014   5.651   2.720  1.00  3.05
ATOM   1624 3HG2 ILE A 108     -12.523   4.858   4.206  1.00 41.20
ATOM   1625  CG1 ILE A 108      -9.284   5.037   3.056  1.00 74.21
ATOM   1626 1HG1 ILE A 108      -9.486   5.643   2.184  1.00 70.32
ATOM   1627 2HG1 ILE A 108      -8.358   5.361   3.505  1.00 21.24
ATOM   1628  CD1 ILE A 108      -9.106   3.615   2.595  1.00  1.43
ATOM   1629 1HD1 ILE A 108      -8.921   2.983   3.452  1.00 41.24
ATOM   1630 2HD1 ILE A 108      -8.258   3.561   1.929  1.00  0.33
ATOM   1631 3HD1 ILE A 108      -9.998   3.284   2.087  1.00 52.25
ATOM   1632  C   ILE A 108     -11.624   6.832   5.530  1.00 61.23
ATOM   1633  O   ILE A 108     -12.586   7.475   5.132  1.00  2.04
ATOM   1634  N   ARG A 109     -11.561   6.299   6.737  1.00 63.41
ATOM   1635  H   ARG A 109     -10.740   5.820   6.992  1.00 32.41
ATOM   1636  CA  ARG A 109     -12.667   6.409   7.676  1.00 41.11
ATOM   1637  HA  ARG A 109     -13.536   5.941   7.238  1.00  5.24
ATOM   1638  CB  ARG A 109     -12.340   5.720   8.999  1.00  1.13
ATOM   1639 1HB  ARG A 109     -11.442   6.167   9.398  1.00 45.12
ATOM   1640 2HB  ARG A 109     -13.149   5.919   9.686  1.00 32.41
ATOM   1641  CG  ARG A 109     -12.120   4.208   8.940  1.00 20.33
ATOM   1642 1HG  ARG A 109     -11.528   3.990   8.065  1.00 50.44
ATOM   1643 2HG  ARG A 109     -11.562   3.911   9.816  1.00 35.02
ATOM   1644  CD  ARG A 109     -13.413   3.382   8.864  1.00 74.11
ATOM   1645 1HD  ARG A 109     -13.131   2.348   8.996  1.00 54.33
ATOM   1646 2HD  ARG A 109     -14.037   3.678   9.694  1.00  5.34
ATOM   1647  NE  ARG A 109     -14.187   3.501   7.596  1.00 34.22
ATOM   1648  HE  ARG A 109     -14.256   4.396   7.193  1.00 31.01
ATOM   1649  CZ  ARG A 109     -14.830   2.465   6.999  1.00 24.32
ATOM   1650  NH1 ARG A 109     -14.715   1.221   7.502  1.00  4.41
ATOM   1651 1HH1 ARG A 109     -14.157   1.029   8.313  1.00 41.51
ATOM   1652 2HH1 ARG A 109     -15.175   0.437   7.085  1.00 73.03
ATOM   1653  NH2 ARG A 109     -15.538   2.654   5.888  1.00 65.35
ATOM   1654 1HH2 ARG A 109     -15.650   3.542   5.410  1.00 42.54
ATOM   1655 2HH2 ARG A 109     -16.029   1.922   5.415  1.00 13.24
ATOM   1656  C   ARG A 109     -12.978   7.866   7.945  1.00 22.43
ATOM   1657  O   ARG A 109     -14.124   8.239   8.062  1.00 34.10
ATOM   1658  N   TYR A 110     -11.952   8.672   8.090  1.00 22.30
ATOM   1659  H   TYR A 110     -11.039   8.313   8.045  1.00 64.14
ATOM   1660  CA  TYR A 110     -12.176  10.072   8.316  1.00  2.52
ATOM   1661  HA  TYR A 110     -12.997  10.125   9.009  1.00 52.13
ATOM   1662  CB  TYR A 110     -10.947  10.725   8.975  1.00 35.30
ATOM   1663 1HB  TYR A 110     -10.756  10.237   9.920  1.00 53.34
ATOM   1664 2HB  TYR A 110     -10.093  10.582   8.330  1.00 41.01
ATOM   1665  CG  TYR A 110     -11.087  12.212   9.247  1.00 14.40
ATOM   1666  CD1 TYR A 110     -11.780  12.672  10.361  1.00 10.41
ATOM   1667  HD1 TYR A 110     -12.225  11.957  11.035  1.00 23.40
ATOM   1668  CE1 TYR A 110     -11.908  14.025  10.612  1.00 35.41
ATOM   1669  HE1 TYR A 110     -12.449  14.364  11.482  1.00 34.23
ATOM   1670  CZ  TYR A 110     -11.341  14.937   9.746  1.00 72.34
ATOM   1671  CE2 TYR A 110     -10.648  14.507   8.636  1.00 63.21
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ATOM   1672  HE2 TYR A 110     -10.204  15.223   7.959  1.00 70.40
ATOM   1673  CD2 TYR A 110     -10.523  13.154   8.391  1.00 74.31
ATOM   1674  HD2 TYR A 110      -9.982  12.813   7.521  1.00 55.54
ATOM   1675  OH  TYR A 110     -11.468  16.284   9.994  1.00 64.14
ATOM   1676  HH  TYR A 110     -11.719  16.731   9.182  1.00 74.13
ATOM   1677  C   TYR A 110     -12.625  10.842   7.056  1.00 71.31
ATOM   1678  O   TYR A 110     -13.640  11.521   7.084  1.00 12.31
ATOM   1679  N   ALA A 111     -11.859  10.739   5.970  1.00 12.31
ATOM   1680  H   ALA A 111     -11.098  10.114   5.959  1.00 24.01
ATOM   1681  CA  ALA A 111     -12.165  11.521   4.768  1.00 24.44
ATOM   1682  HA  ALA A 111     -12.325  12.541   5.086  1.00 12.13
ATOM   1683  CB  ALA A 111     -10.967  11.525   3.827  1.00 54.11
ATOM   1684 1HB  ALA A 111     -10.090  11.859   4.359  1.00 24.23
ATOM   1685 2HB  ALA A 111     -11.161  12.191   2.998  1.00 61.13
ATOM   1686 3HB  ALA A 111     -10.802  10.526   3.454  1.00 62.44
ATOM   1687  C   ALA A 111     -13.418  11.055   4.037  1.00  3.04
ATOM   1688  O   ALA A 111     -14.304  11.837   3.723  1.00 72.11
ATOM   1689  N   ASN A 112     -13.453   9.776   3.770  1.00 40.51
ATOM   1690  H   ASN A 112     -12.736   9.203   4.116  1.00 12.30
ATOM   1691  CA  ASN A 112     -14.524   9.143   3.012  1.00 54.34
ATOM   1692  HA  ASN A 112     -14.809   9.808   2.209  1.00 74.53
ATOM   1693  CB  ASN A 112     -14.001   7.854   2.401  1.00 70.02
ATOM   1694 1HB  ASN A 112     -13.044   8.054   1.945  1.00 12.10
ATOM   1695 2HB  ASN A 112     -13.860   7.173   3.229  1.00  5.23
ATOM   1696  CG  ASN A 112     -14.945   7.231   1.382  1.00 74.43
ATOM   1697  OD1 ASN A 112     -14.884   7.537   0.188  1.00  3.14
ATOM   1698  ND2 ASN A 112     -15.761   6.319   1.809  1.00 33.23
ATOM   1699 2HD2 ASN A 112     -15.756   6.038   2.752  1.00 12.43
ATOM   1700 1HD2 ASN A 112     -16.415   5.927   1.192  1.00 35.53
ATOM   1701  C   ASN A 112     -15.735   8.858   3.880  1.00 11.34
ATOM   1702  O   ASN A 112     -16.866   8.838   3.410  1.00 73.10
ATOM   1703  N   THR A 113     -15.452   8.614   5.146  1.00 11.31
ATOM   1704  H   THR A 113     -14.519   8.739   5.421  1.00 73.24
ATOM   1705  CA  THR A 113     -16.385   8.172   6.182  1.00 21.44
ATOM   1706  HA  THR A 113     -15.742   8.124   7.053  1.00 74.20
ATOM   1707  CB  THR A 113     -17.588   9.145   6.512  1.00  1.23
ATOM   1708  HB  THR A 113     -18.196   8.671   7.269  1.00 32.03
ATOM   1709  OG1 THR A 113     -18.420   9.410   5.372  1.00 73.43
ATOM   1710  HG1 THR A 113     -17.853   9.415   4.586  1.00 12.12
ATOM   1711  CG2 THR A 113     -17.067  10.460   7.079  1.00 72.35
ATOM   1712 1HG2 THR A 113     -16.424  10.932   6.351  1.00 14.42
ATOM   1713 2HG2 THR A 113     -16.503  10.262   7.979  1.00 52.55
ATOM   1714 3HG2 THR A 113     -17.897  11.112   7.307  1.00 50.22
ATOM   1715  C   THR A 113     -16.817   6.708   6.000  1.00 22.40
ATOM   1716  O   THR A 113     -16.296   5.807   6.694  1.00  4.20
ATOM   1717  N   HIS A 114     -17.696   6.451   5.055  1.00 62.21
ATOM   1718  H   HIS A 114     -18.019   7.187   4.492  1.00 74.20
ATOM   1719  CA  HIS A 114     -18.162   5.104   4.807  1.00 75.45
ATOM   1720  HA  HIS A 114     -17.995   4.523   5.703  1.00 53.25
ATOM   1721  CB  HIS A 114     -19.671   5.115   4.463  1.00 32.33
ATOM   1722 1HB  HIS A 114     -20.203   5.652   5.235  1.00 53.02
ATOM   1723 2HB  HIS A 114     -19.807   5.625   3.522  1.00 15.23
ATOM   1724  CG  HIS A 114     -20.300   3.747   4.347  1.00 15.12
ATOM   1725  ND1 HIS A 114     -20.121   2.921   3.271  1.00 75.34
ATOM   1726  CD2 HIS A 114     -21.117   3.079   5.198  1.00 24.32
ATOM   1727  HD1 HIS A 114     -19.532   3.145   2.513  1.00 20.21
ATOM   1728  CE1 HIS A 114     -20.817   1.802   3.477  1.00 10.55
ATOM   1729  NE2 HIS A 114     -21.442   1.843   4.641  1.00 14.41
ATOM   1730  HD2 HIS A 114     -21.465   3.436   6.156  1.00 71.32
ATOM   1731  HE1 HIS A 114     -20.861   0.972   2.789  1.00 75.32
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ATOM   1732  C   HIS A 114     -17.329   4.504   3.665  1.00 52.01
ATOM   1733  O   HIS A 114     -17.832   4.355   2.526  1.00 55.43
TER    1734      HIS A 114
ENDMDL
MODEL       15
ATOM      1  N   MET A   1     -15.882  -7.549   5.343  1.00 13.12
ATOM      2  CA  MET A   1     -15.626  -8.939   4.949  1.00 22.22
ATOM      3  HA  MET A   1     -15.739  -9.575   5.816  1.00 45.54
ATOM      4  CB  MET A   1     -16.593  -9.384   3.841  1.00  0.51
ATOM      5 1HB  MET A   1     -16.487  -8.708   3.005  1.00 54.55
ATOM      6 2HB  MET A   1     -16.315 -10.377   3.519  1.00 40.54
ATOM      7  CG  MET A   1     -18.059  -9.403   4.244  1.00 74.00
ATOM      8 1HG  MET A   1     -18.189 -10.102   5.057  1.00 62.35
ATOM      9 2HG  MET A   1     -18.343  -8.415   4.572  1.00 54.24
ATOM     10  SD  MET A   1     -19.130  -9.892   2.885  1.00 23.20
ATOM     11  CE  MET A   1     -20.744  -9.834   3.671  1.00 20.22
ATOM     12 1HE  MET A   1     -20.938  -8.832   4.022  1.00 52.01
ATOM     13 2HE  MET A   1     -20.764 -10.519   4.506  1.00 44.41
ATOM     14 3HE  MET A   1     -21.502 -10.118   2.955  1.00 41.41
ATOM     15  C   MET A   1     -14.217  -9.027   4.445  1.00  1.13
ATOM     16  O   MET A   1     -13.691  -8.032   3.968  1.00 53.00
ATOM     17  N   ASP A   2     -13.609 -10.184   4.590  1.00 51.23
ATOM     18  H   ASP A   2     -14.042 -10.959   5.008  1.00  4.32
ATOM     19  CA  ASP A   2     -12.245 -10.438   4.136  1.00 10.02
ATOM     20  HA  ASP A   2     -12.105 -10.001   3.159  1.00  1.31
ATOM     21  CB  ASP A   2     -11.157  -9.843   5.102  1.00 33.22
ATOM     22 1HB  ASP A   2     -11.058  -8.784   4.918  1.00  0.45
ATOM     23 2HB  ASP A   2     -11.468 -10.000   6.124  1.00 30.23
ATOM     24  CG  ASP A   2      -9.755 -10.523   4.903  1.00 54.25
ATOM     25  OD1 ASP A   2      -9.454 -11.549   5.608  1.00 22.34
ATOM     26  OD2 ASP A   2      -9.017 -10.150   3.960  1.00 43.33
ATOM     27  C   ASP A   2     -11.994 -11.896   4.090  1.00 25.11
ATOM     28  O   ASP A   2     -12.561 -12.647   4.890  1.00 50.32
ATOM     29  N   LYS A   3     -11.217 -12.293   3.124  1.00 63.43
ATOM     30  H   LYS A   3     -11.099 -11.728   2.330  1.00 23.30
ATOM     31  CA  LYS A   3     -10.508 -13.509   3.196  1.00 75.52
ATOM     32  HA  LYS A   3     -10.068 -13.462   4.182  1.00 34.42
ATOM     33  CB  LYS A   3     -11.311 -14.809   3.062  1.00 41.31
ATOM     34 1HB  LYS A   3     -12.285 -14.670   3.509  1.00 72.34
ATOM     35 2HB  LYS A   3     -11.422 -15.054   2.017  1.00 30.24
ATOM     36  CG  LYS A   3     -10.595 -15.992   3.765  1.00  3.13
ATOM     37 1HG  LYS A   3     -10.966 -16.915   3.345  1.00 43.11
ATOM     38 2HG  LYS A   3      -9.538 -15.916   3.558  1.00  2.25
ATOM     39  CD  LYS A   3     -10.804 -16.043   5.328  1.00  4.15
ATOM     40 1HD  LYS A   3     -11.822 -16.342   5.523  1.00 20.02
ATOM     41 2HD  LYS A   3     -10.146 -16.802   5.725  1.00 62.32
ATOM     42  CE  LYS A   3     -10.553 -14.707   6.095  1.00 52.11
ATOM     43 1HE  LYS A   3     -11.257 -13.969   5.743  1.00 34.13
ATOM     44 2HE  LYS A   3     -10.749 -14.886   7.142  1.00 32.01
ATOM     45  NZ  LYS A   3      -9.166 -14.153   5.952  1.00 45.11
ATOM     46 1HZ  LYS A   3      -9.221 -13.110   6.085  1.00 21.33
ATOM     47 2HZ  LYS A   3      -8.757 -14.324   5.014  1.00 74.32
ATOM     48 3HZ  LYS A   3      -8.527 -14.519   6.683  1.00 34.31
ATOM     49  C   LYS A   3      -9.322 -13.436   2.284  1.00  2.51
ATOM     50  O   LYS A   3      -9.147 -14.236   1.379  1.00 24.30
ATOM     51  N   GLY A   4      -8.532 -12.409   2.508  1.00  1.13
ATOM     52  H   GLY A   4      -8.745 -11.747   3.212  1.00  1.40
ATOM     53  CA  GLY A   4      -7.383 -12.195   1.707  1.00  2.22
ATOM     54 1HA  GLY A   4      -7.153 -13.110   1.184  1.00 61.10
ATOM     55 2HA  GLY A   4      -7.604 -11.428   0.980  1.00  2.04
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ATOM     56  C   GLY A   4      -6.169 -11.775   2.497  1.00 10.10
ATOM     57  O   GLY A   4      -5.157 -11.396   1.895  1.00 51.25
ATOM     58  N   THR A   5      -6.252 -11.836   3.813  1.00 21.14
ATOM     59  H   THR A   5      -7.101 -12.016   4.265  1.00 71.24
ATOM     60  CA  THR A   5      -5.118 -11.526   4.657  1.00 21.25
ATOM     61  HA  THR A   5      -4.597 -10.659   4.285  1.00 65.01
ATOM     62  CB  THR A   5      -5.576 -11.261   6.104  1.00 20.10
ATOM     63  HB  THR A   5      -5.907 -12.193   6.542  1.00 50.55
ATOM     64  OG1 THR A   5      -6.656 -10.338   6.093  1.00 35.03
ATOM     65  HG1 THR A   5      -6.339  -9.449   5.879  1.00 14.02
ATOM     66  CG2 THR A   5      -4.436 -10.693   6.946  1.00 53.13
ATOM     67 1HG2 THR A   5      -3.617 -11.396   6.967  1.00 73.31
ATOM     68 2HG2 THR A   5      -4.783 -10.516   7.954  1.00 30.11
ATOM     69 3HG2 THR A   5      -4.099  -9.762   6.515  1.00 33.13
ATOM     70  C   THR A   5      -4.168 -12.711   4.657  1.00 50.22
ATOM     71  O   THR A   5      -4.518 -13.812   5.110  1.00  4.40
ATOM     72  N   GLN A   6      -3.000 -12.492   4.114  1.00 60.30
ATOM     73  H   GLN A   6      -2.785 -11.587   3.788  1.00  1.30
ATOM     74  CA  GLN A   6      -2.009 -13.508   4.000  1.00 43.33
ATOM     75  HA  GLN A   6      -2.159 -14.274   4.744  1.00  2.54
ATOM     76  CB  GLN A   6      -2.103 -14.114   2.623  1.00 71.04
ATOM     77 1HB  GLN A   6      -3.120 -14.149   2.270  1.00 74.32
ATOM     78 2HB  GLN A   6      -1.533 -13.415   2.032  1.00 54.41
ATOM     79  CG  GLN A   6      -1.436 -15.463   2.449  1.00 53.10
ATOM     80 1HG  GLN A   6      -0.384 -15.365   2.673  1.00 62.44
ATOM     81 2HG  GLN A   6      -1.888 -16.171   3.127  1.00 23.22
ATOM     82  CD  GLN A   6      -1.590 -15.982   1.030  1.00 71.12
ATOM     83  OE1 GLN A   6      -2.568 -15.684   0.341  1.00 43.45
ATOM     84  NE2 GLN A   6      -0.634 -16.754   0.581  1.00 35.51
ATOM     85 2HE2 GLN A   6       0.118 -16.951   1.174  1.00 22.22
ATOM     86 1HE2 GLN A   6      -0.724 -17.096  -0.332  1.00 60.21
ATOM     87  C   GLN A   6      -0.653 -12.850   4.135  1.00 10.14
ATOM     88  O   GLN A   6      -0.424 -11.760   3.610  1.00 42.54
ATOM     89  N   TYR A   7       0.197 -13.477   4.851  1.00 75.12
ATOM     90  H   TYR A   7      -0.093 -14.327   5.235  1.00 22.44
ATOM     91  CA  TYR A   7       1.553 -13.028   5.032  1.00 63.35
ATOM     92  HA  TYR A   7       1.691 -12.195   4.357  1.00  0.32
ATOM     93  CB  TYR A   7       1.815 -12.550   6.486  1.00 52.33
ATOM     94 1HB  TYR A   7       2.856 -12.279   6.580  1.00 12.40
ATOM     95 2HB  TYR A   7       1.213 -11.673   6.673  1.00 14.24
ATOM     96  CG  TYR A   7       1.515 -13.569   7.581  1.00 62.10
ATOM     97  CD1 TYR A   7       0.229 -13.711   8.094  1.00 54.42
ATOM     98  HD1 TYR A   7      -0.564 -13.094   7.696  1.00 64.02
ATOM     99  CE1 TYR A   7      -0.048 -14.623   9.092  1.00 60.05
ATOM    100  HE1 TYR A   7      -1.053 -14.717   9.475  1.00 74.11
ATOM    101  CZ  TYR A   7       0.965 -15.411   9.595  1.00 11.14
ATOM    102  CE2 TYR A   7       2.250 -15.292   9.108  1.00 62.12
ATOM    103  HE2 TYR A   7       3.043 -15.909   9.502  1.00 44.12
ATOM    104  CD2 TYR A   7       2.520 -14.375   8.109  1.00 52.23
ATOM    105  HD2 TYR A   7       3.525 -14.279   7.725  1.00  2.32
ATOM    106  OH  TYR A   7       0.691 -16.319  10.591  1.00 64.51
ATOM    107  HH  TYR A   7      -0.108 -16.803  10.370  1.00 32.24
ATOM    108  C   TYR A   7       2.515 -14.120   4.601  1.00 70.25
ATOM    109  O   TYR A   7       2.324 -15.288   4.966  1.00 31.14
ATOM    110  N   LYS A   8       3.501 -13.792   3.810  1.00  3.12
ATOM    111  H   LYS A   8       3.576 -12.873   3.463  1.00 14.04
ATOM    112  CA  LYS A   8       4.481 -14.783   3.425  1.00 32.41
ATOM    113  HA  LYS A   8       4.593 -15.490   4.234  1.00 44.50
ATOM    114  CB  LYS A   8       3.983 -15.534   2.164  1.00 41.45
ATOM    115 1HB  LYS A   8       2.954 -15.818   2.326  1.00 30.34
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ATOM    116 2HB  LYS A   8       4.009 -14.837   1.337  1.00 14.32
ATOM    117  CG  LYS A   8       4.751 -16.810   1.738  1.00 42.14
ATOM    118 1HG  LYS A   8       4.388 -17.126   0.771  1.00 42.52
ATOM    119 2HG  LYS A   8       5.801 -16.567   1.658  1.00 15.12
ATOM    120  CD  LYS A   8       4.582 -17.980   2.731  1.00 70.24
ATOM    121 1HD  LYS A   8       3.650 -17.854   3.260  1.00 10.43
ATOM    122 2HD  LYS A   8       4.546 -18.903   2.174  1.00 61.43
ATOM    123  CE  LYS A   8       5.710 -18.066   3.762  1.00 64.15
ATOM    124 1HE  LYS A   8       5.843 -17.102   4.228  1.00 42.10
ATOM    125 2HE  LYS A   8       5.439 -18.794   4.513  1.00 24.13
ATOM    126  NZ  LYS A   8       6.998 -18.472   3.145  1.00  4.31
ATOM    127 1HZ  LYS A   8       7.039 -19.438   2.772  1.00 11.42
ATOM    128 2HZ  LYS A   8       7.821 -18.250   3.749  1.00 61.50
ATOM    129 3HZ  LYS A   8       7.226 -17.828   2.346  1.00 34.22
ATOM    130  C   LYS A   8       5.802 -14.091   3.139  1.00 20.42
ATOM    131  O   LYS A   8       5.874 -13.259   2.269  1.00  3.22
ATOM    132  N   ASP A   9       6.818 -14.440   3.918  1.00 72.44
ATOM    133  H   ASP A   9       6.644 -15.051   4.660  1.00 22.01
ATOM    134  CA  ASP A   9       8.230 -13.975   3.761  1.00 24.34
ATOM    135  HA  ASP A   9       8.766 -14.274   4.650  1.00  4.05
ATOM    136  CB  ASP A   9       8.886 -14.659   2.548  1.00 64.44
ATOM    137 1HB  ASP A   9       8.440 -14.276   1.642  1.00 52.32
ATOM    138 2HB  ASP A   9       9.945 -14.442   2.544  1.00 41.43
ATOM    139  CG  ASP A   9       8.701 -16.151   2.573  1.00 43.41
ATOM    140  OD1 ASP A   9       8.085 -16.701   1.628  1.00  5.33
ATOM    141  OD2 ASP A   9       9.024 -16.806   3.594  1.00 22.31
ATOM    142  C   ASP A   9       8.343 -12.452   3.621  1.00 54.13
ATOM    143  O   ASP A   9       9.212 -11.941   2.930  1.00 14.20
ATOM    144  N   GLY A  10       7.509 -11.733   4.343  1.00 54.34
ATOM    145  H   GLY A  10       6.843 -12.192   4.894  1.00 51.41
ATOM    146  CA  GLY A  10       7.564 -10.290   4.302  1.00 73.02
ATOM    147 1HA  GLY A  10       7.377  -9.905   5.294  1.00 73.34
ATOM    148 2HA  GLY A  10       8.553  -9.988   3.989  1.00  1.15
ATOM    149  C   GLY A  10       6.547  -9.688   3.349  1.00 40.31
ATOM    150  O   GLY A  10       6.275  -8.478   3.408  1.00 72.22
ATOM    151  N   TYR A  11       6.001 -10.507   2.476  1.00 10.40
ATOM    152  H   TYR A  11       6.263 -11.455   2.464  1.00 75.44
ATOM    153  CA  TYR A  11       4.994 -10.075   1.528  1.00 32.32
ATOM    154  HA  TYR A  11       5.242  -9.087   1.169  1.00 23.52
ATOM    155  CB  TYR A  11       4.930 -11.080   0.359  1.00 34.45
ATOM    156 1HB  TYR A  11       5.934 -11.394   0.116  1.00 12.45
ATOM    157 2HB  TYR A  11       4.372 -11.946   0.687  1.00 54.24
ATOM    158  CG  TYR A  11       4.296 -10.570  -0.918  1.00 23.30
ATOM    159  CD1 TYR A  11       2.921 -10.507  -1.077  1.00 73.34
ATOM    160  HD1 TYR A  11       2.285 -10.814  -0.261  1.00 63.34
ATOM    161  CE1 TYR A  11       2.361 -10.054  -2.262  1.00 55.32
ATOM    162  HE1 TYR A  11       1.288 -10.009  -2.370  1.00 55.03
ATOM    163  CZ  TYR A  11       3.178  -9.660  -3.296  1.00  0.53
ATOM    164  CE2 TYR A  11       4.543  -9.717  -3.160  1.00 12.34
ATOM    165  HE2 TYR A  11       5.184  -9.409  -3.972  1.00  3.43
ATOM    166  CD2 TYR A  11       5.094 -10.171  -1.980  1.00  0.51
ATOM    167  HD2 TYR A  11       6.169 -10.215  -1.875  1.00 21.42
ATOM    168  OH  TYR A  11       2.633  -9.212  -4.476  1.00 52.30
ATOM    169  HH  TYR A  11       1.922  -8.591  -4.306  1.00  0.22
ATOM    170  C   TYR A  11       3.677 -10.042   2.294  1.00 34.30
ATOM    171  O   TYR A  11       3.309 -11.032   2.952  1.00 74.34
ATOM    172  N   TYR A  12       3.000  -8.927   2.247  1.00 31.24
ATOM    173  H   TYR A  12       3.276  -8.218   1.628  1.00 72.32
ATOM    174  CA  TYR A  12       1.812  -8.738   3.048  1.00 12.52
ATOM    175  HA  TYR A  12       1.641  -9.633   3.623  1.00 32.33
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ATOM    176  CB  TYR A  12       2.039  -7.564   4.014  1.00 21.32
ATOM    177 1HB  TYR A  12       2.975  -7.707   4.533  1.00 74.42
ATOM    178 2HB  TYR A  12       2.100  -6.653   3.438  1.00 22.34
ATOM    179  CG  TYR A  12       0.964  -7.374   5.067  1.00  0.12
ATOM    180  CD1 TYR A  12       1.028  -8.056   6.274  1.00 64.21
ATOM    181  HD1 TYR A  12       1.847  -8.740   6.446  1.00  2.43
ATOM    182  CE1 TYR A  12       0.069  -7.875   7.250  1.00 31.12
ATOM    183  HE1 TYR A  12       0.139  -8.413   8.183  1.00 31.41
ATOM    184  CZ  TYR A  12      -0.973  -7.003   7.025  1.00 20.41
ATOM    185  CE2 TYR A  12      -1.061  -6.315   5.835  1.00 75.21
ATOM    186  HE2 TYR A  12      -1.879  -5.632   5.660  1.00 53.15
ATOM    187  CD2 TYR A  12      -0.098  -6.499   4.865  1.00 51.02
ATOM    188  HD2 TYR A  12      -0.166  -5.961   3.932  1.00 50.41
ATOM    189  OH  TYR A  12      -1.927  -6.815   7.996  1.00 14.30
ATOM    190  HH  TYR A  12      -1.493  -6.706   8.848  1.00 30.50
ATOM    191  C   TYR A  12       0.614  -8.472   2.153  1.00 72.24
ATOM    192  O   TYR A  12       0.647  -7.574   1.304  1.00 61.32
ATOM    193  N   ILE A  13      -0.412  -9.269   2.310  1.00  4.11
ATOM    194  H   ILE A  13      -0.372 -10.008   2.961  1.00 61.11
ATOM    195  CA  ILE A  13      -1.631  -9.127   1.552  1.00 72.40
ATOM    196  HA  ILE A  13      -1.592  -8.216   0.973  1.00 70.50
ATOM    197  CB  ILE A  13      -1.848 -10.341   0.599  1.00 24.12
ATOM    198  HB  ILE A  13      -2.105 -11.204   1.197  1.00 62.31
ATOM    199  CG2 ILE A  13      -2.997 -10.050  -0.347  1.00 72.55
ATOM    200 1HG2 ILE A  13      -3.895  -9.870   0.225  1.00 54.43
ATOM    201 2HG2 ILE A  13      -3.151 -10.897  -0.999  1.00 72.15
ATOM    202 3HG2 ILE A  13      -2.766  -9.177  -0.938  1.00 11.30
ATOM    203  CG1 ILE A  13      -0.585 -10.646  -0.211  1.00 42.40
ATOM    204 1HG1 ILE A  13      -0.368  -9.804  -0.853  1.00 53.51
ATOM    205 2HG1 ILE A  13       0.238 -10.790   0.473  1.00  3.30
ATOM    206  CD1 ILE A  13      -0.693 -11.883  -1.086  1.00 20.54
ATOM    207 1HD1 ILE A  13      -0.890 -12.745  -0.466  1.00 53.24
ATOM    208 2HD1 ILE A  13       0.235 -12.029  -1.620  1.00 60.43
ATOM    209 3HD1 ILE A  13      -1.500 -11.755  -1.793  1.00  1.33
ATOM    210  C   ILE A  13      -2.802  -9.086   2.534  1.00 51.42
ATOM    211  O   ILE A  13      -2.795  -9.828   3.506  1.00 61.01
ATOM    212  N   THR A  14      -3.755  -8.202   2.324  1.00 71.41
ATOM    213  H   THR A  14      -3.665  -7.542   1.601  1.00 34.52
ATOM    214  CA  THR A  14      -4.958  -8.183   3.141  1.00 23.14
ATOM    215  HA  THR A  14      -5.288  -9.207   3.237  1.00 32.53
ATOM    216  CB  THR A  14      -4.719  -7.578   4.571  1.00 43.43
ATOM    217  HB  THR A  14      -3.867  -8.077   5.007  1.00 25.12
ATOM    218  OG1 THR A  14      -5.865  -7.814   5.404  1.00 11.11
ATOM    219  HG1 THR A  14      -6.284  -6.978   5.634  1.00  2.55
ATOM    220  CG2 THR A  14      -4.448  -6.079   4.513  1.00 72.43
ATOM    221 1HG2 THR A  14      -4.298  -5.699   5.513  1.00 73.25
ATOM    222 2HG2 THR A  14      -5.290  -5.578   4.059  1.00 12.32
ATOM    223 3HG2 THR A  14      -3.562  -5.898   3.923  1.00 41.45
ATOM    224  C   THR A  14      -6.068  -7.447   2.398  1.00 23.42
ATOM    225  O   THR A  14      -5.790  -6.690   1.456  1.00 71.34
ATOM    226  N   THR A  15      -7.294  -7.691   2.766  1.00 54.24
ATOM    227  H   THR A  15      -7.489  -8.318   3.495  1.00 70.13
ATOM    228  CA  THR A  15      -8.402  -7.051   2.131  1.00  4.45
ATOM    229  HA  THR A  15      -8.075  -6.664   1.180  1.00 42.34
ATOM    230  CB  THR A  15      -9.544  -8.047   1.900  1.00 34.50
ATOM    231  HB  THR A  15     -10.064  -8.210   2.832  1.00 54.44
ATOM    232  OG1 THR A  15      -8.988  -9.290   1.442  1.00 40.24
ATOM    233  HG1 THR A  15      -8.872  -9.746   2.292  1.00 31.45
ATOM    234  CG2 THR A  15     -10.525  -7.523   0.855  1.00 24.24
ATOM    235 1HG2 THR A  15     -10.939  -6.585   1.193  1.00 62.13
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ATOM    236 2HG2 THR A  15     -11.321  -8.239   0.716  1.00 14.02
ATOM    237 3HG2 THR A  15     -10.010  -7.373  -0.082  1.00 25.44
ATOM    238  C   THR A  15      -8.902  -5.906   3.008  1.00  3.21
ATOM    239  O   THR A  15      -9.119  -6.066   4.204  1.00 21.13
ATOM    240  N   LEU A  16      -9.047  -4.767   2.417  1.00 41.43
ATOM    241  H   LEU A  16      -8.830  -4.679   1.460  1.00 61.15
ATOM    242  CA  LEU A  16      -9.562  -3.617   3.075  1.00 72.24
ATOM    243  HA  LEU A  16      -9.574  -3.779   4.141  1.00 13.24
ATOM    244  CB  LEU A  16      -8.692  -2.399   2.740  1.00 52.34
ATOM    245 1HB  LEU A  16      -8.672  -2.308   1.663  1.00 12.35
ATOM    246 2HB  LEU A  16      -9.159  -1.512   3.135  1.00 31.42
ATOM    247  CG  LEU A  16      -7.241  -2.446   3.228  1.00 12.33
ATOM    248  HG  LEU A  16      -6.752  -3.304   2.791  1.00 20.23
ATOM    249  CD1 LEU A  16      -6.488  -1.200   2.787  1.00 73.42
ATOM    250 1HD1 LEU A  16      -6.968  -0.324   3.196  1.00 73.42
ATOM    251 2HD1 LEU A  16      -6.488  -1.140   1.708  1.00 34.51
ATOM    252 3HD1 LEU A  16      -5.470  -1.251   3.144  1.00 13.00
ATOM    253  CD2 LEU A  16      -7.194  -2.587   4.743  1.00 21.21
ATOM    254 1HD2 LEU A  16      -7.687  -3.500   5.039  1.00 22.52
ATOM    255 2HD2 LEU A  16      -7.692  -1.745   5.202  1.00 54.41
ATOM    256 3HD2 LEU A  16      -6.166  -2.616   5.068  1.00 24.43
ATOM    257  C   LEU A  16     -10.959  -3.413   2.559  1.00 25.51
ATOM    258  O   LEU A  16     -11.159  -3.263   1.360  1.00 34.10
ATOM    259  N   ASN A  17     -11.923  -3.400   3.429  1.00 64.21
ATOM    260  H   ASN A  17     -11.706  -3.456   4.383  1.00 75.21
ATOM    261  CA  ASN A  17     -13.308  -3.291   2.994  1.00 62.54
ATOM    262  HA  ASN A  17     -13.368  -3.729   2.008  1.00 60.34
ATOM    263  CB  ASN A  17     -14.240  -4.062   3.957  1.00 63.53
ATOM    264 1HB  ASN A  17     -13.764  -4.996   4.221  1.00 73.55
ATOM    265 2HB  ASN A  17     -14.363  -3.475   4.854  1.00 15.53
ATOM    266  CG  ASN A  17     -15.641  -4.396   3.394  1.00 11.11
ATOM    267  OD1 ASN A  17     -16.197  -5.456   3.728  1.00 24.34
ATOM    268  ND2 ASN A  17     -16.234  -3.526   2.610  1.00 54.21
ATOM    269 2HD2 ASN A  17     -15.783  -2.677   2.403  1.00 55.20
ATOM    270 1HD2 ASN A  17     -17.116  -3.739   2.238  1.00  0.35
ATOM    271  C   ASN A  17     -13.684  -1.822   2.882  1.00 70.11
ATOM    272  O   ASN A  17     -14.561  -1.326   3.580  1.00 74.40
ATOM    273  N   TYR A  18     -12.968  -1.136   2.029  1.00 52.14
ATOM    274  H   TYR A  18     -12.285  -1.614   1.508  1.00 12.33
ATOM    275  CA  TYR A  18     -13.162   0.266   1.782  1.00 65.23
ATOM    276  HA  TYR A  18     -14.157   0.533   2.106  1.00 15.12
ATOM    277  CB  TYR A  18     -12.116   1.118   2.545  1.00 54.54
ATOM    278 1HB  TYR A  18     -11.134   0.892   2.160  1.00 42.13
ATOM    279 2HB  TYR A  18     -12.327   2.164   2.371  1.00 32.52
ATOM    280  CG  TYR A  18     -12.085   0.888   4.054  1.00 33.30
ATOM    281  CD1 TYR A  18     -12.962   1.543   4.905  1.00 35.41
ATOM    282  HD1 TYR A  18     -13.674   2.242   4.490  1.00 13.23
ATOM    283  CE1 TYR A  18     -12.938   1.308   6.270  1.00 12.44
ATOM    284  HE1 TYR A  18     -13.627   1.827   6.920  1.00 51.03
ATOM    285  CZ  TYR A  18     -12.025   0.413   6.796  1.00 22.31
ATOM    286  CE2 TYR A  18     -11.147  -0.244   5.972  1.00  2.21
ATOM    287  HE2 TYR A  18     -10.433  -0.943   6.381  1.00 50.42
ATOM    288  CD2 TYR A  18     -11.182  -0.005   4.615  1.00 72.15
ATOM    289  HD2 TYR A  18     -10.495  -0.518   3.963  1.00 52.22
ATOM    290  OH  TYR A  18     -12.013   0.165   8.150  1.00 65.10
ATOM    291  HH  TYR A  18     -11.091   0.090   8.480  1.00 53.13
ATOM    292  C   TYR A  18     -13.044   0.490   0.283  1.00 63.41
ATOM    293  O   TYR A  18     -12.412  -0.320  -0.419  1.00 11.01
ATOM    294  N   ASN A  19     -13.620   1.571  -0.198  1.00 20.12
ATOM    295  H   ASN A  19     -14.020   2.200   0.434  1.00 34.11
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ATOM    296  CA  ASN A  19     -13.682   1.863  -1.633  1.00 65.45
ATOM    297  HA  ASN A  19     -14.083   0.990  -2.126  1.00  2.01
ATOM    298  CB  ASN A  19     -14.623   3.053  -1.901  1.00 52.24
ATOM    299 1HB  ASN A  19     -15.607   2.814  -1.524  1.00 60.52
ATOM    300 2HB  ASN A  19     -14.252   3.924  -1.383  1.00 51.21
ATOM    301  CG  ASN A  19     -14.757   3.394  -3.384  1.00 73.23
ATOM    302  OD1 ASN A  19     -13.957   4.147  -3.932  1.00 22.11
ATOM    303  ND2 ASN A  19     -15.779   2.885  -4.029  1.00 34.32
ATOM    304 2HD2 ASN A  19     -16.427   2.309  -3.553  1.00 62.33
ATOM    305 1HD2 ASN A  19     -15.887   3.106  -4.977  1.00 31.05
ATOM    306  C   ASN A  19     -12.291   2.149  -2.212  1.00 70.41
ATOM    307  O   ASN A  19     -11.502   2.892  -1.623  1.00 22.13
ATOM    308  N   PHE A  20     -12.029   1.555  -3.369  1.00 32.34
ATOM    309  H   PHE A  20     -12.724   0.987  -3.760  1.00 65.31
ATOM    310  CA  PHE A  20     -10.749   1.646  -4.088  1.00 50.42
ATOM    311  HA  PHE A  20     -10.019   1.108  -3.501  1.00 52.05
ATOM    312  CB  PHE A  20     -10.877   0.926  -5.446  1.00  1.14
ATOM    313 1HB  PHE A  20     -11.093  -0.113  -5.247  1.00 33.32
ATOM    314 2HB  PHE A  20     -11.702   1.337  -6.007  1.00 73.03
ATOM    315  CG  PHE A  20      -9.649   0.950  -6.323  1.00 63.32
ATOM    316  CD1 PHE A  20      -9.510   1.898  -7.328  1.00  0.21
ATOM    317  HD1 PHE A  20     -10.284   2.640  -7.468  1.00  1.30
ATOM    318  CE1 PHE A  20      -8.399   1.904  -8.145  1.00 13.25
ATOM    319  HE1 PHE A  20      -8.302   2.646  -8.924  1.00  0.45
ATOM    320  CZ  PHE A  20      -7.412   0.960  -7.965  1.00 52.32
ATOM    321  HZ  PHE A  20      -6.542   0.959  -8.604  1.00 40.31
ATOM    322  CE2 PHE A  20      -7.536   0.014  -6.971  1.00 42.15
ATOM    323  HE2 PHE A  20      -6.763  -0.727  -6.830  1.00 41.15
ATOM    324  CD2 PHE A  20      -8.648   0.011  -6.160  1.00 74.21
ATOM    325  HD2 PHE A  20      -8.748  -0.730  -5.381  1.00 62.31
ATOM    326  C   PHE A  20     -10.250   3.090  -4.272  1.00  3.33
ATOM    327  O   PHE A  20      -9.062   3.358  -4.131  1.00 51.40
ATOM    328  N   ASN A  21     -11.150   4.013  -4.549  1.00 70.14
ATOM    329  H   ASN A  21     -12.101   3.766  -4.571  1.00 45.31
ATOM    330  CA  ASN A  21     -10.748   5.401  -4.791  1.00 33.01
ATOM    331  HA  ASN A  21      -9.951   5.377  -5.520  1.00 54.53
ATOM    332  CB  ASN A  21     -11.917   6.233  -5.360  1.00 45.03
ATOM    333 1HB  ASN A  21     -12.264   5.774  -6.273  1.00 74.15
ATOM    334 2HB  ASN A  21     -12.722   6.239  -4.640  1.00 54.01
ATOM    335  CG  ASN A  21     -11.531   7.683  -5.670  1.00 72.33
ATOM    336  OD1 ASN A  21     -10.398   7.983  -6.008  1.00 64.03
ATOM    337  ND2 ASN A  21     -12.482   8.582  -5.563  1.00  3.44
ATOM    338 2HD2 ASN A  21     -13.380   8.301  -5.296  1.00 24.33
ATOM    339 1HD2 ASN A  21     -12.232   9.508  -5.764  1.00 44.41
ATOM    340  C   ASN A  21     -10.202   6.048  -3.515  1.00 60.44
ATOM    341  O   ASN A  21      -9.136   6.678  -3.528  1.00 32.52
ATOM    342  N   THR A  22     -10.900   5.857  -2.407  1.00  5.35
ATOM    343  H   THR A  22     -11.682   5.269  -2.427  1.00 61.21
ATOM    344  CA  THR A  22     -10.479   6.476  -1.171  1.00  1.23
ATOM    345  HA  THR A  22     -10.206   7.484  -1.452  1.00 41.05
ATOM    346  CB  THR A  22     -11.623   6.552  -0.084  1.00 44.43
ATOM    347  HB  THR A  22     -12.462   7.069  -0.529  1.00 24.45
ATOM    348  OG1 THR A  22     -11.192   7.309   1.053  1.00  2.43
ATOM    349  HG1 THR A  22     -11.875   7.940   1.297  1.00 11.13
ATOM    350  CG2 THR A  22     -12.076   5.179   0.384  1.00 11.33
ATOM    351 1HG2 THR A  22     -12.438   4.612  -0.459  1.00 63.32
ATOM    352 2HG2 THR A  22     -12.865   5.289   1.113  1.00 23.13
ATOM    353 3HG2 THR A  22     -11.241   4.661   0.834  1.00 51.54
ATOM    354  C   THR A  22      -9.182   5.833  -0.634  1.00 41.31
ATOM    355  O   THR A  22      -8.277   6.546  -0.179  1.00 43.24
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ATOM    356  N   VAL A  23      -9.053   4.501  -0.758  1.00 35.42
ATOM    357  H   VAL A  23      -9.751   3.939  -1.160  1.00  3.14
ATOM    358  CA  VAL A  23      -7.872   3.832  -0.286  1.00 30.32
ATOM    359  HA  VAL A  23      -7.692   4.216   0.708  1.00 51.41
ATOM    360  CB  VAL A  23      -8.029   2.290  -0.188  1.00  1.24
ATOM    361  HB  VAL A  23      -7.098   1.919   0.203  1.00 51.13
ATOM    362  CG1 VAL A  23      -9.121   1.902   0.779  1.00  1.42
ATOM    363 1HG1 VAL A  23      -9.218   0.827   0.796  1.00 41.05
ATOM    364 2HG1 VAL A  23     -10.056   2.346   0.466  1.00 32.52
ATOM    365 3HG1 VAL A  23      -8.867   2.253   1.768  1.00 20.44
ATOM    366  CG2 VAL A  23      -8.266   1.657  -1.531  1.00 43.04
ATOM    367 1HG2 VAL A  23      -9.146   2.101  -1.972  1.00 40.42
ATOM    368 2HG2 VAL A  23      -8.425   0.597  -1.401  1.00 64.12
ATOM    369 3HG2 VAL A  23      -7.414   1.826  -2.174  1.00 40.13
ATOM    370  C   VAL A  23      -6.653   4.192  -1.126  1.00 72.40
ATOM    371  O   VAL A  23      -5.561   4.345  -0.583  1.00 32.24
ATOM    372  N   TYR A  24      -6.843   4.371  -2.444  1.00 30.23
ATOM    373  H   TYR A  24      -7.734   4.227  -2.834  1.00 13.01
ATOM    374  CA  TYR A  24      -5.742   4.740  -3.323  1.00 42.14
ATOM    375  HA  TYR A  24      -4.982   3.980  -3.226  1.00 24.24
ATOM    376  CB  TYR A  24      -6.198   4.802  -4.800  1.00 63.43
ATOM    377 1HB  TYR A  24      -6.450   3.806  -5.134  1.00 24.31
ATOM    378 2HB  TYR A  24      -7.074   5.429  -4.871  1.00 75.51
ATOM    379  CG  TYR A  24      -5.144   5.354  -5.755  1.00 54.40
ATOM    380  CD1 TYR A  24      -5.243   6.649  -6.257  1.00 41.30
ATOM    381  HD1 TYR A  24      -6.088   7.260  -5.973  1.00 64.42
ATOM    382  CE1 TYR A  24      -4.282   7.163  -7.105  1.00 64.13
ATOM    383  HE1 TYR A  24      -4.376   8.170  -7.482  1.00 61.11
ATOM    384  CZ  TYR A  24      -3.205   6.383  -7.466  1.00 23.35
ATOM    385  CE2 TYR A  24      -3.082   5.098  -6.984  1.00 30.31
ATOM    386  HE2 TYR A  24      -2.238   4.487  -7.267  1.00 33.53
ATOM    387  CD2 TYR A  24      -4.048   4.592  -6.133  1.00 53.31
ATOM    388  HD2 TYR A  24      -3.955   3.584  -5.754  1.00 51.43
ATOM    389  OH  TYR A  24      -2.241   6.892  -8.307  1.00 35.34
ATOM    390  HH  TYR A  24      -2.010   6.239  -8.973  1.00  2.44
ATOM    391  C   TYR A  24      -5.162   6.071  -2.904  1.00  3.04
ATOM    392  O   TYR A  24      -3.949   6.195  -2.712  1.00 41.41
ATOM    393  N   ASN A  25      -6.036   7.026  -2.675  1.00 31.10
ATOM    394  H   ASN A  25      -6.992   6.832  -2.780  1.00  2.13
ATOM    395  CA  ASN A  25      -5.637   8.355  -2.281  1.00  3.05
ATOM    396  HA  ASN A  25      -4.896   8.683  -2.995  1.00 10.03
ATOM    397  CB  ASN A  25      -6.818   9.333  -2.332  1.00 42.30
ATOM    398 1HB  ASN A  25      -7.686   8.848  -1.909  1.00 45.41
ATOM    399 2HB  ASN A  25      -6.575  10.199  -1.737  1.00 73.34
ATOM    400  CG  ASN A  25      -7.170   9.785  -3.745  1.00 51.44
ATOM    401  OD1 ASN A  25      -6.649  10.777  -4.231  1.00 35.14
ATOM    402  ND2 ASN A  25      -8.054   9.074  -4.407  1.00 64.32
ATOM    403 2HD2 ASN A  25      -8.468   8.279  -4.001  1.00 10.04
ATOM    404 1HD2 ASN A  25      -8.281   9.364  -5.314  1.00 55.55
ATOM    405  C   ASN A  25      -4.990   8.356  -0.915  1.00  2.25
ATOM    406  O   ASN A  25      -3.946   8.960  -0.721  1.00 63.14
ATOM    407  N   ALA A  26      -5.580   7.626   0.015  1.00 13.51
ATOM    408  H   ALA A  26      -6.387   7.114  -0.217  1.00  2.20
ATOM    409  CA  ALA A  26      -5.083   7.577   1.383  1.00 45.15
ATOM    410  HA  ALA A  26      -4.942   8.605   1.692  1.00 13.25
ATOM    411  CB  ALA A  26      -6.097   6.934   2.302  1.00  2.32
ATOM    412 1HB  ALA A  26      -7.034   7.467   2.236  1.00 42.41
ATOM    413 2HB  ALA A  26      -5.733   6.961   3.318  1.00  1.11
ATOM    414 3HB  ALA A  26      -6.250   5.908   2.002  1.00 31.31
ATOM    415  C   ALA A  26      -3.727   6.869   1.482  1.00 12.24
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ATOM    416  O   ALA A  26      -2.873   7.287   2.255  1.00 13.45
ATOM    417  N   THR A  27      -3.546   5.805   0.723  1.00 22.43
ATOM    418  H   THR A  27      -4.295   5.468   0.190  1.00 34.31
ATOM    419  CA  THR A  27      -2.268   5.102   0.688  1.00 34.10
ATOM    420  HA  THR A  27      -1.979   4.844   1.695  1.00 12.12
ATOM    421  CB  THR A  27      -2.349   3.821  -0.171  1.00 62.40
ATOM    422  HB  THR A  27      -2.504   4.108  -1.200  1.00 23.13
ATOM    423  OG1 THR A  27      -3.442   3.005   0.259  1.00 15.33
ATOM    424  HG1 THR A  27      -4.272   3.413  -0.020  1.00 32.11
ATOM    425  CG2 THR A  27      -1.054   3.014  -0.074  1.00 63.45
ATOM    426 1HG2 THR A  27      -0.880   2.731   0.953  1.00  2.20
ATOM    427 2HG2 THR A  27      -0.229   3.617  -0.425  1.00 32.42
ATOM    428 3HG2 THR A  27      -1.136   2.127  -0.684  1.00 31.12
ATOM    429  C   THR A  27      -1.214   6.019   0.085  1.00 40.52
ATOM    430  O   THR A  27      -0.126   6.184   0.639  1.00 50.24
ATOM    431  N   LEU A  28      -1.581   6.644  -1.029  1.00 53.43
ATOM    432  H   LEU A  28      -2.481   6.487  -1.395  1.00 22.12
ATOM    433  CA  LEU A  28      -0.720   7.554  -1.745  1.00 30.32
ATOM    434  HA  LEU A  28       0.150   7.004  -2.073  1.00  2.23
ATOM    435  CB  LEU A  28      -1.463   8.070  -2.988  1.00 64.14
ATOM    436 1HB  LEU A  28      -1.490   7.249  -3.691  1.00 10.32
ATOM    437 2HB  LEU A  28      -2.481   8.288  -2.714  1.00 73.44
ATOM    438  CG  LEU A  28      -0.870   9.271  -3.727  1.00 54.33
ATOM    439  HG  LEU A  28      -0.714  10.051  -2.994  1.00 12.14
ATOM    440  CD1 LEU A  28       0.466   8.925  -4.359  1.00 71.34
ATOM    441 1HD1 LEU A  28       0.857   9.790  -4.874  1.00 64.11
ATOM    442 2HD1 LEU A  28       0.335   8.114  -5.060  1.00 65.52
ATOM    443 3HD1 LEU A  28       1.154   8.627  -3.582  1.00 72.33
ATOM    444  CD2 LEU A  28      -1.846   9.790  -4.770  1.00 25.35
ATOM    445 1HD2 LEU A  28      -2.762  10.097  -4.287  1.00 43.02
ATOM    446 2HD2 LEU A  28      -2.061   9.007  -5.482  1.00 42.14
ATOM    447 3HD2 LEU A  28      -1.409  10.634  -5.284  1.00 31.33
ATOM    448  C   LEU A  28      -0.275   8.707  -0.850  1.00 72.41
ATOM    449  O   LEU A  28       0.905   8.938  -0.707  1.00 23.35
ATOM    450  N   GLN A  29      -1.217   9.359  -0.201  1.00  2.23
ATOM    451  H   GLN A  29      -2.156   9.108  -0.340  1.00 54.43
ATOM    452  CA  GLN A  29      -0.913  10.490   0.669  1.00 41.10
ATOM    453  HA  GLN A  29      -0.337  11.182   0.071  1.00 51.13
ATOM    454  CB  GLN A  29      -2.225  11.201   1.130  1.00  2.11
ATOM    455 1HB  GLN A  29      -1.995  12.155   1.576  1.00 61.12
ATOM    456 2HB  GLN A  29      -2.827  11.358   0.248  1.00 52.21
ATOM    457  CG  GLN A  29      -3.111  10.449   2.118  1.00 42.34
ATOM    458 1HG  GLN A  29      -4.127  10.800   2.018  1.00 31.31
ATOM    459 2HG  GLN A  29      -3.059   9.410   1.825  1.00 52.43
ATOM    460  CD  GLN A  29      -2.670  10.573   3.573  1.00 73.13
ATOM    461  OE1 GLN A  29      -2.106  11.568   3.978  1.00 61.41
ATOM    462  NE2 GLN A  29      -2.899   9.545   4.350  1.00 74.35
ATOM    463 2HE2 GLN A  29      -3.329   8.755   3.962  1.00 73.33
ATOM    464 1HE2 GLN A  29      -2.635   9.639   5.287  1.00 23.20
ATOM    465  C   GLN A  29      -0.017  10.061   1.842  1.00 25.11
ATOM    466  O   GLN A  29       0.918  10.765   2.207  1.00 24.04
ATOM    467  N   ALA A  30      -0.259   8.858   2.357  1.00 61.24
ATOM    468  H   ALA A  30      -0.974   8.322   1.950  1.00 10.13
ATOM    469  CA  ALA A  30       0.476   8.337   3.497  1.00  5.22
ATOM    470  HA  ALA A  30       0.304   8.997   4.334  1.00 44.24
ATOM    471  CB  ALA A  30      -0.051   6.953   3.874  1.00 73.43
ATOM    472 1HB  ALA A  30       0.465   6.589   4.750  1.00 53.10
ATOM    473 2HB  ALA A  30       0.116   6.263   3.060  1.00 75.32
ATOM    474 3HB  ALA A  30      -1.111   6.997   4.078  1.00 21.52
ATOM    475  C   ALA A  30       1.965   8.249   3.206  1.00 13.43
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ATOM    476  O   ALA A  30       2.799   8.711   3.992  1.00 55.41
ATOM    477  N   ILE A  31       2.292   7.691   2.078  1.00 24.24
ATOM    478  H   ILE A  31       1.584   7.414   1.457  1.00 13.33
ATOM    479  CA  ILE A  31       3.673   7.505   1.724  1.00 72.14
ATOM    480  HA  ILE A  31       4.214   7.377   2.649  1.00 50.21
ATOM    481  CB  ILE A  31       3.853   6.194   0.884  1.00 22.22
ATOM    482  HB  ILE A  31       3.632   5.370   1.547  1.00 34.13
ATOM    483  CG2 ILE A  31       2.853   6.108  -0.262  1.00  2.01
ATOM    484 1HG2 ILE A  31       1.848   6.081   0.132  1.00 31.41
ATOM    485 2HG2 ILE A  31       3.040   5.216  -0.841  1.00 14.13
ATOM    486 3HG2 ILE A  31       2.967   6.979  -0.889  1.00 54.22
ATOM    487  CG1 ILE A  31       5.283   6.037   0.377  1.00 31.21
ATOM    488 1HG1 ILE A  31       5.522   6.872  -0.263  1.00 63.24
ATOM    489 2HG1 ILE A  31       5.957   6.031   1.220  1.00 21.40
ATOM    490  CD1 ILE A  31       5.513   4.767  -0.417  1.00 20.00
ATOM    491 1HD1 ILE A  31       5.297   3.912   0.208  1.00 73.02
ATOM    492 2HD1 ILE A  31       6.544   4.726  -0.741  1.00 74.20
ATOM    493 3HD1 ILE A  31       4.864   4.757  -1.280  1.00 30.02
ATOM    494  C   ILE A  31       4.268   8.734   1.004  1.00 11.23
ATOM    495  O   ILE A  31       5.321   9.235   1.379  1.00  3.21
ATOM    496  N   GLN A  32       3.526   9.260   0.052  1.00 61.43
ATOM    497  H   GLN A  32       2.604   8.941  -0.075  1.00 42.43
ATOM    498  CA  GLN A  32       4.001  10.310  -0.834  1.00  1.55
ATOM    499  HA  GLN A  32       5.001  10.044  -1.143  1.00 71.11
ATOM    500  CB  GLN A  32       3.122  10.357  -2.086  1.00 23.03
ATOM    501 1HB  GLN A  32       2.983   9.345  -2.437  1.00 25.25
ATOM    502 2HB  GLN A  32       2.157  10.753  -1.805  1.00  1.13
ATOM    503  CG  GLN A  32       3.661  11.180  -3.235  1.00 31.41
ATOM    504 1HG  GLN A  32       2.885  11.180  -3.987  1.00 70.21
ATOM    505 2HG  GLN A  32       3.821  12.181  -2.871  1.00 54.43
ATOM    506  CD  GLN A  32       4.960  10.608  -3.825  1.00  2.14
ATOM    507  OE1 GLN A  32       5.748   9.977  -3.139  1.00 50.54
ATOM    508  NE2 GLN A  32       5.182  10.819  -5.096  1.00  1.54
ATOM    509 2HE2 GLN A  32       4.527  11.323  -5.619  1.00 33.12
ATOM    510 1HE2 GLN A  32       6.020  10.458  -5.462  1.00  1.34
ATOM    511  C   GLN A  32       4.060  11.680  -0.154  1.00 62.55
ATOM    512  O   GLN A  32       4.832  12.547  -0.548  1.00 73.21
ATOM    513  N   ASN A  33       3.237  11.887   0.843  1.00 54.35
ATOM    514  H   ASN A  33       2.616  11.182   1.134  1.00 43.43
ATOM    515  CA  ASN A  33       3.221  13.172   1.532  1.00  4.04
ATOM    516  HA  ASN A  33       3.729  13.874   0.886  1.00 75.30
ATOM    517  CB  ASN A  33       1.795  13.671   1.782  1.00 14.13
ATOM    518 1HB  ASN A  33       1.264  12.892   2.308  1.00  3.14
ATOM    519 2HB  ASN A  33       1.837  14.555   2.400  1.00 10.44
ATOM    520  CG  ASN A  33       1.029  13.997   0.495  1.00 31.15
ATOM    521  OD1 ASN A  33      -0.179  13.863   0.432  1.00 41.13
ATOM    522  ND2 ASN A  33       1.727  14.430  -0.538  1.00 55.50
ATOM    523 2HD2 ASN A  33       2.697  14.526  -0.455  1.00 61.11
ATOM    524 1HD2 ASN A  33       1.221  14.641  -1.349  1.00 54.02
ATOM    525  C   ASN A  33       4.010  13.100   2.813  1.00 12.22
ATOM    526  O   ASN A  33       3.944  13.997   3.651  1.00  4.31
ATOM    527  N   GLY A  34       4.757  12.021   2.948  1.00 51.44
ATOM    528  H   GLY A  34       4.690  11.331   2.255  1.00 33.41
ATOM    529  CA  GLY A  34       5.659  11.846   4.059  1.00  4.45
ATOM    530 1HA  GLY A  34       6.237  10.950   3.896  1.00 64.24
ATOM    531 2HA  GLY A  34       6.333  12.690   4.093  1.00 44.21
ATOM    532  C   GLY A  34       4.963  11.728   5.387  1.00 43.51
ATOM    533  O   GLY A  34       5.427  12.272   6.380  1.00 73.53
ATOM    534  N   GLN A  35       3.849  11.024   5.412  1.00 42.33
ATOM    535  H   GLN A  35       3.504  10.621   4.587  1.00 72.21
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ATOM    536  CA  GLN A  35       3.132  10.816   6.660  1.00 45.24
ATOM    537  HA  GLN A  35       3.248  11.713   7.254  1.00 40.04
ATOM    538  CB  GLN A  35       1.648  10.546   6.410  1.00 13.45
ATOM    539 1HB  GLN A  35       1.560   9.634   5.841  1.00 71.35
ATOM    540 2HB  GLN A  35       1.160  10.405   7.364  1.00 14.42
ATOM    541  CG  GLN A  35       0.920  11.661   5.658  1.00 72.15
ATOM    542 1HG  GLN A  35       1.366  11.768   4.680  1.00 20.22
ATOM    543 2HG  GLN A  35      -0.119  11.385   5.545  1.00 31.15
ATOM    544  CD  GLN A  35       0.994  13.007   6.366  1.00 54.51
ATOM    545  OE1 GLN A  35       0.158  13.329   7.197  1.00 74.33
ATOM    546  NE2 GLN A  35       1.977  13.811   6.024  1.00 35.34
ATOM    547 2HE2 GLN A  35       2.623  13.536   5.339  1.00 64.30
ATOM    548 1HE2 GLN A  35       2.018  14.672   6.487  1.00 61.15
ATOM    549  C   GLN A  35       3.780   9.659   7.401  1.00  4.21
ATOM    550  O   GLN A  35       3.607   9.480   8.603  1.00 41.13
ATOM    551  N   THR A  36       4.513   8.869   6.656  1.00  4.11
ATOM    552  H   THR A  36       4.543   9.004   5.686  1.00 74.30
ATOM    553  CA  THR A  36       5.284   7.815   7.195  1.00 42.41
ATOM    554  HA  THR A  36       5.523   8.083   8.214  1.00 14.13
ATOM    555  CB  THR A  36       4.492   6.458   7.187  1.00 34.44
ATOM    556  HB  THR A  36       3.615   6.595   7.804  1.00 30.41
ATOM    557  OG1 THR A  36       5.267   5.407   7.767  1.00 22.01
ATOM    558  HG1 THR A  36       5.137   5.414   8.719  1.00 24.00
ATOM    559  CG2 THR A  36       4.044   6.052   5.782  1.00 50.20
ATOM    560 1HG2 THR A  36       3.384   6.808   5.383  1.00 42.43
ATOM    561 2HG2 THR A  36       3.527   5.106   5.822  1.00 21.42
ATOM    562 3HG2 THR A  36       4.913   5.963   5.147  1.00 51.34
ATOM    563  C   THR A  36       6.595   7.730   6.403  1.00 65.03
ATOM    564  O   THR A  36       6.598   7.771   5.167  1.00 74.41
ATOM    565  N   PHE A  37       7.692   7.722   7.114  1.00 73.41
ATOM    566  H   PHE A  37       7.634   7.745   8.092  1.00 72.24
ATOM    567  CA  PHE A  37       9.006   7.616   6.529  1.00 22.01
ATOM    568  HA  PHE A  37       8.877   7.384   5.482  1.00 41.53
ATOM    569  CB  PHE A  37       9.802   8.941   6.670  1.00 74.44
ATOM    570 1HB  PHE A  37      10.777   8.811   6.224  1.00 50.25
ATOM    571 2HB  PHE A  37       9.279   9.718   6.133  1.00  0.41
ATOM    572  CG  PHE A  37      10.016   9.418   8.091  1.00 23.34
ATOM    573  CD1 PHE A  37      11.174   9.086   8.785  1.00 71.21
ATOM    574  HD1 PHE A  37      11.923   8.477   8.302  1.00 62.50
ATOM    575  CE1 PHE A  37      11.374   9.523  10.080  1.00 55.35
ATOM    576  HE1 PHE A  37      12.278   9.258  10.606  1.00 34.43
ATOM    577  CZ  PHE A  37      10.415  10.300  10.698  1.00 15.52
ATOM    578  HZ  PHE A  37      10.566  10.644  11.711  1.00 42.31
ATOM    579  CE2 PHE A  37       9.258  10.639  10.022  1.00 11.34
ATOM    580  HE2 PHE A  37       8.507  11.248  10.504  1.00 35.44
ATOM    581  CD2 PHE A  37       9.064  10.201   8.727  1.00 62.21
ATOM    582  HD2 PHE A  37       8.160  10.465   8.199  1.00  2.51
ATOM    583  C   PHE A  37       9.731   6.467   7.185  1.00 51.33
ATOM    584  O   PHE A  37       9.357   6.061   8.290  1.00 32.54
ATOM    585  N   ASP A  38      10.747   5.946   6.543  1.00 13.10
ATOM    586  H   ASP A  38      11.028   6.307   5.678  1.00 33.43
ATOM    587  CA  ASP A  38      11.486   4.844   7.129  1.00 21.22
ATOM    588  HA  ASP A  38      10.828   4.314   7.801  1.00  2.25
ATOM    589  CB  ASP A  38      11.976   3.888   6.045  1.00 24.45
ATOM    590 1HB  ASP A  38      11.140   3.590   5.429  1.00 34.44
ATOM    591 2HB  ASP A  38      12.708   4.393   5.433  1.00 13.11
ATOM    592  CG  ASP A  38      12.612   2.643   6.621  1.00 24.12
ATOM    593  OD1 ASP A  38      13.815   2.641   6.914  1.00  1.53
ATOM    594  OD2 ASP A  38      11.916   1.648   6.777  1.00 65.23
ATOM    595  C   ASP A  38      12.675   5.385   7.914  1.00 62.24
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ATOM    596  O   ASP A  38      13.225   6.439   7.574  1.00 72.24
ATOM    597  N   TYR A  39      13.083   4.654   8.930  1.00 10.53
ATOM    598  H   TYR A  39      12.643   3.791   9.076  1.00 15.30
ATOM    599  CA  TYR A  39      14.180   5.048   9.806  1.00 50.32
ATOM    600  HA  TYR A  39      14.012   6.091  10.034  1.00 11.14
ATOM    601  CB  TYR A  39      14.160   4.267  11.132  1.00  1.42
ATOM    602 1HB  TYR A  39      15.020   4.553  11.719  1.00 61.30
ATOM    603 2HB  TYR A  39      13.265   4.532  11.677  1.00 63.10
ATOM    604  CG  TYR A  39      14.191   2.759  10.988  1.00 63.32
ATOM    605  CD1 TYR A  39      13.012   2.029  10.911  1.00 11.33
ATOM    606  HD1 TYR A  39      12.068   2.553  10.948  1.00 70.24
ATOM    607  CE1 TYR A  39      13.030   0.659  10.790  1.00 43.13
ATOM    608  HE1 TYR A  39      12.102   0.109  10.731  1.00 43.11
ATOM    609  CZ  TYR A  39      14.236  -0.004  10.741  1.00 71.11
ATOM    610  CE2 TYR A  39      15.419   0.693  10.815  1.00  2.11
ATOM    611  HE2 TYR A  39      16.363   0.170  10.777  1.00 42.52
ATOM    612  CD2 TYR A  39      15.395   2.066  10.940  1.00 71.55
ATOM    613  HD2 TYR A  39      16.320   2.617  10.998  1.00 11.52
ATOM    614  OH  TYR A  39      14.254  -1.367  10.615  1.00 44.42
ATOM    615  HH  TYR A  39      13.622  -1.587   9.916  1.00 24.33
ATOM    616  C   TYR A  39      15.554   4.996   9.132  1.00 64.25
ATOM    617  O   TYR A  39      16.506   5.591   9.624  1.00 50.42
ATOM    618  N   LYS A  40      15.661   4.312   8.000  1.00 33.35
ATOM    619  H   LYS A  40      14.916   3.809   7.588  1.00 33.22
ATOM    620  CA  LYS A  40      16.901   4.228   7.299  1.00 43.23
ATOM    621  HA  LYS A  40      17.709   4.231   8.015  1.00  5.00
ATOM    622  CB  LYS A  40      16.906   2.867   6.540  1.00 72.23
ATOM    623 1HB  LYS A  40      17.087   2.073   7.249  1.00 10.15
ATOM    624 2HB  LYS A  40      15.922   2.727   6.117  1.00 71.54
ATOM    625  CG  LYS A  40      17.922   2.738   5.437  1.00 45.00
ATOM    626 1HG  LYS A  40      17.611   3.489   4.727  1.00  2.04
ATOM    627 2HG  LYS A  40      18.888   2.987   5.846  1.00 32.33
ATOM    628  CD  LYS A  40      17.938   1.361   4.763  1.00 63.01
ATOM    629 1HD  LYS A  40      18.596   1.468   3.912  1.00 35.24
ATOM    630 2HD  LYS A  40      18.308   0.613   5.447  1.00 52.42
ATOM    631  CE  LYS A  40      16.576   0.954   4.211  1.00 73.25
ATOM    632 1HE  LYS A  40      15.854   0.974   5.013  1.00 62.12
ATOM    633 2HE  LYS A  40      16.284   1.662   3.450  1.00 13.12
ATOM    634  NZ  LYS A  40      16.576  -0.411   3.628  1.00 72.41
ATOM    635 1HZ  LYS A  40      17.270  -0.572   2.861  1.00 54.33
ATOM    636 2HZ  LYS A  40      15.639  -0.569   3.189  1.00 51.40
ATOM    637 3HZ  LYS A  40      16.697  -1.165   4.329  1.00 21.31
ATOM    638  C   LYS A  40      17.038   5.441   6.348  1.00 22.13
ATOM    639  O   LYS A  40      18.045   5.606   5.659  1.00 43.12
ATOM    640  N   SER A  41      16.044   6.340   6.414  1.00 60.44
ATOM    641  H   SER A  41      15.288   6.159   7.014  1.00 74.12
ATOM    642  CA  SER A  41      16.011   7.584   5.638  1.00 34.04
ATOM    643  HA  SER A  41      15.035   8.022   5.789  1.00 55.40
ATOM    644  CB  SER A  41      17.066   8.545   6.190  1.00 72.25
ATOM    645 1HB  SER A  41      18.046   8.116   6.040  1.00 11.45
ATOM    646 2HB  SER A  41      16.986   9.497   5.689  1.00 43.24
ATOM    647  OG  SER A  41      16.867   8.739   7.589  1.00 71.52
ATOM    648  HG  SER A  41      16.855   7.869   7.999  1.00 62.34
ATOM    649  C   SER A  41      16.191   7.335   4.119  1.00 63.13
ATOM    650  O   SER A  41      16.586   8.224   3.366  1.00 72.35
ATOM    651  N   ASN A  42      15.841   6.130   3.690  1.00 14.01
ATOM    652  H   ASN A  42      15.500   5.497   4.352  1.00 35.33
ATOM    653  CA  ASN A  42      15.916   5.739   2.298  1.00 31.32
ATOM    654  HA  ASN A  42      16.876   6.072   1.931  1.00 52.10
ATOM    655  CB  ASN A  42      15.832   4.202   2.138  1.00 21.44
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ATOM    656 1HB  ASN A  42      15.935   3.957   1.093  1.00 50.45
ATOM    657 2HB  ASN A  42      16.651   3.753   2.682  1.00 35.21
ATOM    658  CG  ASN A  42      14.524   3.591   2.636  1.00 64.35
ATOM    659  OD1 ASN A  42      14.415   3.241   3.796  1.00  0.05
ATOM    660  ND2 ASN A  42      13.544   3.440   1.768  1.00  0.33
ATOM    661 2HD2 ASN A  42      13.662   3.723   0.835  1.00 24.33
ATOM    662 1HD2 ASN A  42      12.711   3.045   2.099  1.00 62.52
ATOM    663  C   ASN A  42      14.769   6.379   1.548  1.00 53.04
ATOM    664  O   ASN A  42      13.721   6.625   2.163  1.00 23.33
ATOM    665  N   PRO A  43      14.959   6.749   0.256  1.00 21.31
ATOM    666  CD  PRO A  43      16.251   6.759  -0.461  1.00 40.32
ATOM    667  CA  PRO A  43      13.866   7.245  -0.599  1.00  4.23
ATOM    668  HA  PRO A  43      13.572   8.249  -0.327  1.00 32.40
ATOM    669  CB  PRO A  43      14.473   7.216  -1.999  1.00 53.33
ATOM    670 1HB  PRO A  43      14.269   6.260  -2.463  1.00 11.52
ATOM    671 2HB  PRO A  43      14.083   8.023  -2.600  1.00 53.33
ATOM    672  CG  PRO A  43      15.925   7.423  -1.776  1.00 65.32
ATOM    673 1HG  PRO A  43      16.485   6.972  -2.582  1.00 51.44
ATOM    674 2HG  PRO A  43      16.145   8.478  -1.707  1.00 53.13
ATOM    675 1HD  PRO A  43      16.602   5.750  -0.624  1.00 53.40
ATOM    676 2HD  PRO A  43      16.987   7.333   0.082  1.00 42.14
ATOM    677  C   PRO A  43      12.657   6.311  -0.519  1.00 22.25
ATOM    678  O   PRO A  43      12.695   5.167  -0.990  1.00 70.53
ATOM    679  N   TYR A  44      11.690   6.742   0.254  1.00 20.44
ATOM    680  H   TYR A  44      11.831   7.607   0.691  1.00 52.10
ATOM    681  CA  TYR A  44      10.450   6.031   0.474  1.00 63.12
ATOM    682  HA  TYR A  44      10.602   5.001   0.186  1.00 11.03
ATOM    683  CB  TYR A  44      10.056   6.100   1.929  1.00 14.01
ATOM    684 1HB  TYR A  44      10.936   6.016   2.539  1.00 25.03
ATOM    685 2HB  TYR A  44       9.588   7.068   2.021  1.00 24.41
ATOM    686  CG  TYR A  44       9.048   5.058   2.384  1.00 41.40
ATOM    687  CD1 TYR A  44       9.345   3.704   2.312  1.00 61.12
ATOM    688  HD1 TYR A  44      10.298   3.398   1.905  1.00 53.32
ATOM    689  CE1 TYR A  44       8.447   2.751   2.743  1.00 61.21
ATOM    690  HE1 TYR A  44       8.701   1.704   2.676  1.00 12.14
ATOM    691  CZ  TYR A  44       7.230   3.143   3.258  1.00 71.15
ATOM    692  CE2 TYR A  44       6.911   4.481   3.344  1.00 13.23
ATOM    693  HE2 TYR A  44       5.957   4.789   3.746  1.00 22.53
ATOM    694  CD2 TYR A  44       7.818   5.431   2.910  1.00 12.15
ATOM    695  HD2 TYR A  44       7.570   6.480   2.977  1.00 60.21
ATOM    696  OH  TYR A  44       6.326   2.190   3.693  1.00 52.04
ATOM    697  HH  TYR A  44       5.451   2.485   3.429  1.00 53.42
ATOM    698  C   TYR A  44       9.379   6.629  -0.405  1.00 50.21
ATOM    699  O   TYR A  44       8.268   6.148  -0.462  1.00 41.00
ATOM    700  N   ASP A  45       9.739   7.672  -1.092  1.00 24.24
ATOM    701  H   ASP A  45      10.675   7.979  -1.105  1.00 63.41
ATOM    702  CA  ASP A  45       8.836   8.425  -1.910  1.00 70.12
ATOM    703  HA  ASP A  45       7.894   8.511  -1.390  1.00 51.05
ATOM    704  CB  ASP A  45       9.407   9.832  -2.137  1.00 54.33
ATOM    705 1HB  ASP A  45       8.785  10.355  -2.850  1.00 73.35
ATOM    706 2HB  ASP A  45       9.404  10.372  -1.202  1.00 64.31
ATOM    707  CG  ASP A  45      10.832   9.805  -2.676  1.00 71.22
ATOM    708  OD1 ASP A  45      11.753   9.390  -1.898  1.00 74.12
ATOM    709  OD2 ASP A  45      11.045  10.196  -3.835  1.00  4.35
ATOM    710  C   ASP A  45       8.624   7.709  -3.226  1.00 52.04
ATOM    711  O   ASP A  45       9.510   7.012  -3.740  1.00 21.43
ATOM    712  N   ILE A  46       7.425   7.823  -3.725  1.00 21.14
ATOM    713  H   ILE A  46       6.814   8.465  -3.295  1.00 43.03
ATOM    714  CA  ILE A  46       6.988   7.114  -4.896  1.00 13.32
ATOM    715  HA  ILE A  46       7.259   6.072  -4.799  1.00 42.11
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ATOM    716  CB  ILE A  46       5.452   7.196  -5.034  1.00 70.15
ATOM    717  HB  ILE A  46       5.174   8.238  -5.104  1.00 63.51
ATOM    718  CG2 ILE A  46       4.971   6.482  -6.303  1.00  4.31
ATOM    719 1HG2 ILE A  46       5.251   5.439  -6.258  1.00 43.42
ATOM    720 2HG2 ILE A  46       5.431   6.936  -7.168  1.00 53.41
ATOM    721 3HG2 ILE A  46       3.897   6.563  -6.390  1.00  3.22
ATOM    722  CG1 ILE A  46       4.797   6.599  -3.791  1.00 23.12
ATOM    723 1HG1 ILE A  46       5.016   5.543  -3.746  1.00 41.10
ATOM    724 2HG1 ILE A  46       5.202   7.081  -2.914  1.00 24.05
ATOM    725  CD1 ILE A  46       3.308   6.756  -3.761  1.00  4.21
ATOM    726 1HD1 ILE A  46       2.907   6.304  -2.867  1.00 51.43
ATOM    727 2HD1 ILE A  46       2.894   6.274  -4.633  1.00 42.43
ATOM    728 3HD1 ILE A  46       3.068   7.808  -3.782  1.00  3.33
ATOM    729  C   ILE A  46       7.640   7.677  -6.127  1.00 22.14
ATOM    730  O   ILE A  46       7.355   8.811  -6.535  1.00 15.14
ATOM    731  N   SER A  47       8.467   6.878  -6.736  1.00 61.52
ATOM    732  H   SER A  47       8.618   5.983  -6.359  1.00 33.52
ATOM    733  CA  SER A  47       9.174   7.303  -7.900  1.00 53.33
ATOM    734  HA  SER A  47       9.262   8.378  -7.863  1.00  3.44
ATOM    735  CB  SER A  47      10.586   6.686  -7.907  1.00 22.21
ATOM    736 1HB  SER A  47      11.111   6.984  -7.011  1.00 53.20
ATOM    737 2HB  SER A  47      10.501   5.609  -7.929  1.00  5.45
ATOM    738  OG  SER A  47      11.342   7.107  -9.029  1.00 64.54
ATOM    739  HG  SER A  47      11.008   7.963  -9.313  1.00 60.11
ATOM    740  C   SER A  47       8.386   6.911  -9.151  1.00 12.01
ATOM    741  O   SER A  47       8.438   7.605 -10.164  1.00 51.01
ATOM    742  N   VAL A  48       7.609   5.829  -9.073  1.00  3.04
ATOM    743  H   VAL A  48       7.579   5.297  -8.248  1.00 42.30
ATOM    744  CA  VAL A  48       6.785   5.440 -10.206  1.00 64.15
ATOM    745  HA  VAL A  48       6.728   6.262 -10.905  1.00 23.12
ATOM    746  CB  VAL A  48       7.374   4.186 -10.940  1.00 41.25
ATOM    747  HB  VAL A  48       7.316   3.363 -10.241  1.00 62.30
ATOM    748  CG1 VAL A  48       6.538   3.814 -12.162  1.00 60.44
ATOM    749 1HG1 VAL A  48       6.520   4.642 -12.856  1.00 32.33
ATOM    750 2HG1 VAL A  48       5.530   3.587 -11.847  1.00 72.22
ATOM    751 3HG1 VAL A  48       6.965   2.947 -12.644  1.00 14.05
ATOM    752  CG2 VAL A  48       8.833   4.386 -11.340  1.00 11.22
ATOM    753 1HG2 VAL A  48       8.910   5.231 -12.007  1.00 54.32
ATOM    754 2HG2 VAL A  48       9.197   3.498 -11.836  1.00 74.03
ATOM    755 3HG2 VAL A  48       9.422   4.572 -10.455  1.00 22.35
ATOM    756  C   VAL A  48       5.398   5.077  -9.707  1.00 24.31
ATOM    757  O   VAL A  48       5.258   4.296  -8.762  1.00 54.31
ATOM    758  N   ASN A  49       4.396   5.635 -10.322  1.00 32.51
ATOM    759  H   ASN A  49       4.559   6.278 -11.044  1.00 44.31
ATOM    760  CA  ASN A  49       3.019   5.301 -10.026  1.00 65.30
ATOM    761  HA  ASN A  49       3.041   4.527  -9.272  1.00 63.15
ATOM    762  CB  ASN A  49       2.215   6.521  -9.492  1.00 63.33
ATOM    763 1HB  ASN A  49       1.275   6.180  -9.088  1.00 41.15
ATOM    764 2HB  ASN A  49       2.783   6.962  -8.686  1.00 30.44
ATOM    765  CG  ASN A  49       1.942   7.610 -10.530  1.00 34.03
ATOM    766  OD1 ASN A  49       0.936   7.579 -11.228  1.00 62.41
ATOM    767  ND2 ASN A  49       2.817   8.589 -10.615  1.00 10.21
ATOM    768 2HD2 ASN A  49       3.594   8.587 -10.021  1.00 22.33
ATOM    769 1HD2 ASN A  49       2.630   9.280 -11.284  1.00 62.23
ATOM    770  C   ASN A  49       2.384   4.716 -11.272  1.00 60.04
ATOM    771  O   ASN A  49       2.620   5.224 -12.365  1.00 63.05
ATOM    772  N   LYS A  50       1.680   3.614 -11.160  1.00 41.54
ATOM    773  H   LYS A  50       1.631   3.112 -10.318  1.00 70.24
ATOM    774  CA  LYS A  50       0.964   3.114 -12.308  1.00  1.23
ATOM    775  HA  LYS A  50       1.057   3.815 -13.124  1.00 14.44
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ATOM    776  CB  LYS A  50       1.483   1.727 -12.774  1.00  2.41
ATOM    777 1HB  LYS A  50       1.203   0.993 -12.035  1.00 23.22
ATOM    778 2HB  LYS A  50       0.970   1.480 -13.691  1.00 60.13
ATOM    779  CG  LYS A  50       2.982   1.608 -13.021  1.00 70.20
ATOM    780 1HG  LYS A  50       3.203   0.771 -13.666  1.00  0.44
ATOM    781 2HG  LYS A  50       3.256   2.541 -13.486  1.00 63.01
ATOM    782  CD  LYS A  50       3.796   1.482 -11.736  1.00 42.02
ATOM    783 1HD  LYS A  50       4.850   1.471 -11.965  1.00 21.15
ATOM    784 2HD  LYS A  50       3.551   2.354 -11.146  1.00 32.32
ATOM    785  CE  LYS A  50       3.445   0.243 -10.923  1.00 63.23
ATOM    786 1HE  LYS A  50       4.077   0.230 -10.048  1.00 42.44
ATOM    787 2HE  LYS A  50       2.417   0.327 -10.608  1.00 50.54
ATOM    788  NZ  LYS A  50       3.638  -1.033 -11.653  1.00 51.43
ATOM    789 1HZ  LYS A  50       3.428  -1.798 -10.963  1.00 62.01
ATOM    790 2HZ  LYS A  50       4.616  -1.179 -11.960  1.00 40.23
ATOM    791 3HZ  LYS A  50       2.965  -1.141 -12.436  1.00 71.41
ATOM    792  C   LYS A  50      -0.473   2.930 -11.936  1.00 34.30
ATOM    793  O   LYS A  50      -0.788   2.513 -10.809  1.00 63.22
ATOM    794  N   ASN A  51      -1.338   3.232 -12.847  1.00 13.41
ATOM    795  H   ASN A  51      -1.045   3.651 -13.684  1.00 13.44
ATOM    796  CA  ASN A  51      -2.718   2.909 -12.698  1.00 34.11
ATOM    797  HA  ASN A  51      -2.784   2.485 -11.707  1.00  4.21
ATOM    798  CB  ASN A  51      -3.654   4.133 -12.820  1.00 52.13
ATOM    799 1HB  ASN A  51      -4.653   3.833 -12.542  1.00 53.23
ATOM    800 2HB  ASN A  51      -3.317   4.892 -12.130  1.00 42.02
ATOM    801  CG  ASN A  51      -3.714   4.735 -14.216  1.00 52.41
ATOM    802  OD1 ASN A  51      -4.541   4.353 -15.028  1.00  3.11
ATOM    803  ND2 ASN A  51      -2.859   5.697 -14.490  1.00 34.22
ATOM    804 2HD2 ASN A  51      -2.227   5.988 -13.799  1.00 12.20
ATOM    805 1HD2 ASN A  51      -2.900   6.079 -15.390  1.00 71.53
ATOM    806  C   ASN A  51      -3.047   1.837 -13.712  1.00 60.40
ATOM    807  O   ASN A  51      -2.459   1.819 -14.790  1.00 33.41
ATOM    808  N   ASN A  52      -3.919   0.941 -13.378  1.00 31.52
ATOM    809  H   ASN A  52      -4.302   0.917 -12.471  1.00 64.14
ATOM    810  CA  ASN A  52      -4.314  -0.113 -14.304  1.00 54.04
ATOM    811  HA  ASN A  52      -3.897   0.134 -15.269  1.00 61.22
ATOM    812  CB  ASN A  52      -3.758  -1.466 -13.854  1.00 24.12
ATOM    813 1HB  ASN A  52      -3.923  -1.524 -12.792  1.00 34.34
ATOM    814 2HB  ASN A  52      -4.281  -2.267 -14.355  1.00  3.31
ATOM    815  CG  ASN A  52      -2.260  -1.613 -14.090  1.00 71.25
ATOM    816  OD1 ASN A  52      -1.435  -1.251 -13.250  1.00 21.44
ATOM    817  ND2 ASN A  52      -1.896  -2.156 -15.229  1.00 32.42
ATOM    818 2HD2 ASN A  52      -2.598  -2.435 -15.854  1.00 21.12
ATOM    819 1HD2 ASN A  52      -0.939  -2.258 -15.393  1.00 71.01
ATOM    820  C   ASN A  52      -5.822  -0.161 -14.436  1.00 65.30
ATOM    821  O   ASN A  52      -6.403  -1.172 -14.826  1.00 31.25
ATOM    822  N   GLY A  53      -6.455   0.942 -14.094  1.00 74.01
ATOM    823  H   GLY A  53      -5.919   1.681 -13.744  1.00 33.41
ATOM    824  CA  GLY A  53      -7.894   1.077 -14.235  1.00  1.31
ATOM    825 1HA  GLY A  53      -8.142   2.128 -14.273  1.00  1.53
ATOM    826 2HA  GLY A  53      -8.197   0.615 -15.163  1.00 44.25
ATOM    827  C   GLY A  53      -8.663   0.439 -13.099  1.00 61.11
ATOM    828  O   GLY A  53      -9.484   1.093 -12.419  1.00 23.22
ATOM    829  N   THR A  54      -8.437  -0.818 -12.884  1.00 20.25
ATOM    830  H   THR A  54      -7.796  -1.291 -13.466  1.00 35.24
ATOM    831  CA  THR A  54      -9.105  -1.502 -11.830  1.00 34.23
ATOM    832  HA  THR A  54      -9.672  -0.740 -11.315  1.00 44.43
ATOM    833  CB  THR A  54     -10.098  -2.580 -12.368  1.00 41.32
ATOM    834  HB  THR A  54     -10.712  -2.105 -13.121  1.00 24.41
ATOM    835  OG1 THR A  54     -10.959  -3.023 -11.319  1.00  3.04
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ATOM    836  HG1 THR A  54     -10.441  -3.589 -10.733  1.00 41.21
ATOM    837  CG2 THR A  54      -9.378  -3.772 -12.988  1.00 50.22
ATOM    838 1HG2 THR A  54      -8.772  -3.433 -13.816  1.00 74.42
ATOM    839 2HG2 THR A  54     -10.103  -4.490 -13.342  1.00 71.01
ATOM    840 3HG2 THR A  54      -8.746  -4.234 -12.246  1.00 52.31
ATOM    841  C   THR A  54      -8.088  -2.056 -10.825  1.00 40.24
ATOM    842  O   THR A  54      -8.445  -2.706  -9.832  1.00  2.20
ATOM    843  N   ASP A  55      -6.841  -1.736 -11.075  1.00 71.24
ATOM    844  H   ASP A  55      -6.611  -1.213 -11.870  1.00 12.40
ATOM    845  CA  ASP A  55      -5.734  -2.082 -10.209  1.00 40.04
ATOM    846  HA  ASP A  55      -6.114  -2.323  -9.227  1.00 44.05
ATOM    847  CB  ASP A  55      -4.841  -3.240 -10.767  1.00 35.34
ATOM    848 1HB  ASP A  55      -4.267  -2.929 -11.620  1.00 63.15
ATOM    849 2HB  ASP A  55      -4.150  -3.464  -9.966  1.00 64.13
ATOM    850  CG  ASP A  55      -5.536  -4.553 -11.102  1.00 73.52
ATOM    851  OD1 ASP A  55      -5.036  -5.627 -10.703  1.00 14.43
ATOM    852  OD2 ASP A  55      -6.604  -4.562 -11.764  1.00 40.32
ATOM    853  C   ASP A  55      -4.889  -0.833 -10.151  1.00 11.24
ATOM    854  O   ASP A  55      -5.018   0.038 -11.036  1.00 64.43
ATOM    855  N   ALA A  56      -4.105  -0.687  -9.137  1.00 21.24
ATOM    856  H   ALA A  56      -4.099  -1.387  -8.447  1.00 74.21
ATOM    857  CA  ALA A  56      -3.203   0.449  -9.008  1.00 41.34
ATOM    858  HA  ALA A  56      -2.921   0.766 -10.002  1.00 40.11
ATOM    859  CB  ALA A  56      -3.874   1.610  -8.285  1.00 62.42
ATOM    860 1HB  ALA A  56      -3.169   2.423  -8.184  1.00 34.21
ATOM    861 2HB  ALA A  56      -4.206   1.298  -7.305  1.00 44.23
ATOM    862 3HB  ALA A  56      -4.719   1.949  -8.866  1.00 12.45
ATOM    863  C   ALA A  56      -1.972   0.011  -8.270  1.00 11.43
ATOM    864  O   ALA A  56      -2.069  -0.827  -7.391  1.00 14.34
ATOM    865  N   GLU A  57      -0.825   0.547  -8.615  1.00 22.40
ATOM    866  H   GLU A  57      -0.777   1.216  -9.334  1.00 72.15
ATOM    867  CA  GLU A  57       0.396   0.171  -7.934  1.00 33.23
ATOM    868  HA  GLU A  57       0.131  -0.046  -6.910  1.00 72.31
ATOM    869  CB  GLU A  57       1.004  -1.097  -8.562  1.00 25.54
ATOM    870 1HB  GLU A  57       0.291  -1.902  -8.458  1.00 65.02
ATOM    871 2HB  GLU A  57       1.177  -0.927  -9.613  1.00  5.54
ATOM    872  CG  GLU A  57       2.312  -1.546  -7.922  1.00  1.21
ATOM    873 1HG  GLU A  57       3.037  -0.751  -8.018  1.00  1.13
ATOM    874 2HG  GLU A  57       2.135  -1.741  -6.874  1.00  1.13
ATOM    875  CD  GLU A  57       2.877  -2.784  -8.556  1.00 20.23
ATOM    876  OE1 GLU A  57       2.976  -3.812  -7.876  1.00 52.45
ATOM    877  OE2 GLU A  57       3.246  -2.718  -9.761  1.00 20.11
ATOM    878  C   GLU A  57       1.400   1.322  -7.925  1.00 33.23
ATOM    879  O   GLU A  57       1.641   1.961  -8.954  1.00 52.25
ATOM    880  N   ILE A  58       1.959   1.598  -6.769  1.00 21.40
ATOM    881  H   ILE A  58       1.722   1.091  -5.963  1.00 62.43
ATOM    882  CA  ILE A  58       2.953   2.608  -6.605  1.00 45.55
ATOM    883  HA  ILE A  58       3.118   3.040  -7.583  1.00 74.40
ATOM    884  CB  ILE A  58       2.541   3.736  -5.627  1.00 55.22
ATOM    885  HB  ILE A  58       3.479   4.226  -5.436  1.00 23.00
ATOM    886  CG2 ILE A  58       1.621   4.743  -6.302  1.00 14.30
ATOM    887 1HG2 ILE A  58       2.165   5.231  -7.096  1.00 64.11
ATOM    888 2HG2 ILE A  58       1.291   5.476  -5.581  1.00 33.12
ATOM    889 3HG2 ILE A  58       0.765   4.229  -6.716  1.00 34.34
ATOM    890  CG1 ILE A  58       1.958   3.234  -4.268  1.00  1.22
ATOM    891 1HG1 ILE A  58       2.520   2.369  -3.949  1.00 22.12
ATOM    892 2HG1 ILE A  58       2.080   4.014  -3.530  1.00 42.34
ATOM    893  CD1 ILE A  58       0.492   2.831  -4.291  1.00 22.15
ATOM    894 1HD1 ILE A  58       0.211   2.442  -3.323  1.00 63.31
ATOM    895 2HD1 ILE A  58       0.321   2.090  -5.057  1.00 64.53
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ATOM    896 3HD1 ILE A  58      -0.104   3.709  -4.499  1.00 42.13
ATOM    897  C   ILE A  58       4.264   1.984  -6.155  1.00  2.11
ATOM    898  O   ILE A  58       4.262   1.057  -5.334  1.00 61.44
ATOM    899  N   VAL A  59       5.371   2.473  -6.703  1.00 60.23
ATOM    900  H   VAL A  59       5.330   3.236  -7.325  1.00 61.52
ATOM    901  CA  VAL A  59       6.679   1.903  -6.429  1.00  3.33
ATOM    902  HA  VAL A  59       6.577   1.092  -5.723  1.00 44.23
ATOM    903  CB  VAL A  59       7.326   1.336  -7.734  1.00 24.52
ATOM    904  HB  VAL A  59       7.686   2.194  -8.282  1.00 62.04
ATOM    905  CG1 VAL A  59       8.555   0.483  -7.436  1.00 52.12
ATOM    906 1HG1 VAL A  59       8.967   0.112  -8.362  1.00  4.12
ATOM    907 2HG1 VAL A  59       8.277  -0.348  -6.806  1.00 65.42
ATOM    908 3HG1 VAL A  59       9.295   1.086  -6.930  1.00 23.00
ATOM    909  CG2 VAL A  59       6.324   0.593  -8.613  1.00 74.23
ATOM    910 1HG2 VAL A  59       5.576   1.294  -8.952  1.00 42.33
ATOM    911 2HG2 VAL A  59       5.835  -0.187  -8.050  1.00 31.42
ATOM    912 3HG2 VAL A  59       6.830   0.169  -9.467  1.00 44.14
ATOM    913  C   VAL A  59       7.645   2.969  -5.887  1.00 32.02
ATOM    914  O   VAL A  59       7.777   4.060  -6.474  1.00 45.45
ATOM    915  N   SER A  60       8.285   2.662  -4.787  1.00 60.12
ATOM    916  H   SER A  60       8.026   1.852  -4.288  1.00 72.43
ATOM    917  CA  SER A  60       9.378   3.447  -4.275  1.00  0.33
ATOM    918  HA  SER A  60       9.561   4.247  -4.979  1.00 11.11
ATOM    919  CB  SER A  60       9.110   4.019  -2.869  1.00  1.13
ATOM    920 1HB  SER A  60       8.277   4.706  -2.810  1.00 64.30
ATOM    921 2HB  SER A  60       8.974   3.245  -2.132  1.00 60.14
ATOM    922  OG  SER A  60      10.223   4.749  -2.463  1.00 72.23
ATOM    923  HG  SER A  60      10.109   5.660  -2.777  1.00 53.11
ATOM    924  C   SER A  60      10.593   2.528  -4.222  1.00 42.00
ATOM    925  O   SER A  60      10.437   1.317  -4.016  1.00 23.42
ATOM    926  N   ALA A  61      11.771   3.071  -4.406  1.00 62.41
ATOM    927  H   ALA A  61      11.850   4.046  -4.495  1.00 65.05
ATOM    928  CA  ALA A  61      12.989   2.289  -4.403  1.00 21.13
ATOM    929  HA  ALA A  61      12.858   1.457  -3.725  1.00 44.54
ATOM    930  CB  ALA A  61      13.282   1.746  -5.798  1.00 20.40
ATOM    931 1HB  ALA A  61      14.181   1.148  -5.772  1.00  2.44
ATOM    932 2HB  ALA A  61      13.415   2.569  -6.483  1.00 32.42
ATOM    933 3HB  ALA A  61      12.453   1.134  -6.126  1.00 40.22
ATOM    934  C   ALA A  61      14.137   3.145  -3.925  1.00 55.45
ATOM    935  O   ALA A  61      14.161   4.342  -4.190  1.00 51.20
ATOM    936  N   SER A  62      15.067   2.551  -3.225  1.00 43.21
ATOM    937  H   SER A  62      15.010   1.593  -3.024  1.00 61.43
ATOM    938  CA  SER A  62      16.205   3.272  -2.750  1.00  4.50
ATOM    939  HA  SER A  62      15.930   4.315  -2.687  1.00 54.04
ATOM    940  CB  SER A  62      16.612   2.787  -1.347  1.00 73.45
ATOM    941 1HB  SER A  62      15.783   2.921  -0.670  1.00 75.31
ATOM    942 2HB  SER A  62      16.851   1.734  -1.408  1.00  4.32
ATOM    943  OG  SER A  62      17.758   3.487  -0.833  1.00 64.11
ATOM    944  HG  SER A  62      17.726   4.419  -1.080  1.00 51.43
ATOM    945  C   SER A  62      17.362   3.134  -3.731  1.00 20.41
ATOM    946  O   SER A  62      17.492   2.125  -4.434  1.00 41.23
ATOM    947  N   ASP A  63      18.165   4.155  -3.769  1.00 21.43
ATOM    948  H   ASP A  63      18.000   4.954  -3.216  1.00 33.01
ATOM    949  CA  ASP A  63      19.354   4.244  -4.593  1.00 41.11
ATOM    950  HA  ASP A  63      19.151   3.912  -5.600  1.00 24.22
ATOM    951  CB  ASP A  63      19.760   5.723  -4.635  1.00 24.31
ATOM    952 1HB  ASP A  63      20.683   5.827  -5.189  1.00  2.12
ATOM    953 2HB  ASP A  63      18.982   6.300  -5.111  1.00 13.11
ATOM    954  CG  ASP A  63      19.969   6.261  -3.219  1.00 63.53
ATOM    955  OD1 ASP A  63      21.114   6.478  -2.823  1.00 33.00
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ATOM    956  OD2 ASP A  63      18.955   6.340  -2.459  1.00  3.45
ATOM    957  C   ASP A  63      20.494   3.454  -3.953  1.00 32.11
ATOM    958  O   ASP A  63      21.317   2.863  -4.642  1.00 71.45
ATOM    959  N   SER A  64      20.490   3.402  -2.637  1.00 50.44
ATOM    960  H   SER A  64      19.781   3.871  -2.153  1.00  3.42
ATOM    961  CA  SER A  64      21.521   2.732  -1.907  1.00 43.32
ATOM    962  HA  SER A  64      22.408   2.710  -2.523  1.00  3.51
ATOM    963  CB  SER A  64      21.832   3.512  -0.628  1.00 10.14
ATOM    964 1HB  SER A  64      20.940   3.568  -0.022  1.00  2.52
ATOM    965 2HB  SER A  64      22.606   2.999  -0.077  1.00 22.31
ATOM    966  OG  SER A  64      22.276   4.839  -0.915  1.00 31.44
ATOM    967  HG  SER A  64      21.785   5.281  -1.631  1.00 12.44
ATOM    968  C   SER A  64      21.098   1.308  -1.593  1.00 10.01
ATOM    969  O   SER A  64      21.914   0.385  -1.577  1.00 44.13
ATOM    970  N   ASP A  65      19.818   1.125  -1.361  1.00 75.23
ATOM    971  H   ASP A  65      19.199   1.884  -1.404  1.00 31.52
ATOM    972  CA  ASP A  65      19.300  -0.186  -1.089  1.00 32.23
ATOM    973  HA  ASP A  65      20.125  -0.883  -1.100  1.00 21.32
ATOM    974  CB  ASP A  65      18.604  -0.227   0.273  1.00 74.22
ATOM    975 1HB  ASP A  65      19.265   0.191   1.016  1.00 13.13
ATOM    976 2HB  ASP A  65      17.709   0.376   0.223  1.00 34.21
ATOM    977  CG  ASP A  65      18.217  -1.625   0.720  1.00  3.41
ATOM    978  OD1 ASP A  65      18.020  -2.518  -0.129  1.00 72.40
ATOM    979  OD2 ASP A  65      18.045  -1.816   1.956  1.00 13.15
ATOM    980  C   ASP A  65      18.337  -0.538  -2.196  1.00 32.44
ATOM    981  O   ASP A  65      17.171  -0.146  -2.185  1.00 52.33
ATOM    982  N   SER A  66      18.855  -1.218  -3.165  1.00 71.43
ATOM    983  H   SER A  66      19.802  -1.467  -3.105  1.00 12.52
ATOM    984  CA  SER A  66      18.126  -1.605  -4.340  1.00  4.14
ATOM    985  HA  SER A  66      17.687  -0.721  -4.776  1.00 23.12
ATOM    986  CB  SER A  66      19.118  -2.155  -5.330  1.00 61.34
ATOM    987 1HB  SER A  66      19.578  -3.022  -4.880  1.00 21.41
ATOM    988 2HB  SER A  66      18.622  -2.434  -6.246  1.00 52.11
ATOM    989  OG  SER A  66      20.133  -1.198  -5.588  1.00 13.54
ATOM    990  HG  SER A  66      19.812  -0.320  -5.349  1.00  1.14
ATOM    991  C   SER A  66      17.021  -2.634  -4.057  1.00 64.24
ATOM    992  O   SER A  66      15.980  -2.656  -4.735  1.00 32.35
ATOM    993  N   THR A  67      17.218  -3.464  -3.059  1.00 41.12
ATOM    994  H   THR A  67      17.968  -3.328  -2.439  1.00 44.25
ATOM    995  CA  THR A  67      16.281  -4.522  -2.823  1.00 63.22
ATOM    996  HA  THR A  67      15.811  -4.726  -3.775  1.00  5.43
ATOM    997  CB  THR A  67      16.990  -5.827  -2.338  1.00 11.11
ATOM    998  HB  THR A  67      17.633  -6.159  -3.141  1.00 34.15
ATOM    999  OG1 THR A  67      16.043  -6.871  -2.080  1.00  0.13
ATOM   1000  HG1 THR A  67      15.322  -6.517  -1.550  1.00 54.41
ATOM   1001  CG2 THR A  67      17.843  -5.575  -1.106  1.00 54.05
ATOM   1002 1HG2 THR A  67      17.219  -5.204  -0.308  1.00  1.13
ATOM   1003 2HG2 THR A  67      18.587  -4.831  -1.361  1.00 33.53
ATOM   1004 3HG2 THR A  67      18.331  -6.490  -0.805  1.00 73.05
ATOM   1005  C   THR A  67      15.184  -4.071  -1.869  1.00 73.51
ATOM   1006  O   THR A  67      14.095  -4.690  -1.806  1.00 15.35
ATOM   1007  N   ASP A  68      15.418  -2.983  -1.171  1.00 71.40
ATOM   1008  H   ASP A  68      16.302  -2.548  -1.205  1.00 24.23
ATOM   1009  CA  ASP A  68      14.409  -2.441  -0.317  1.00 64.01
ATOM   1010  HA  ASP A  68      13.754  -3.266  -0.078  1.00 42.30
ATOM   1011  CB  ASP A  68      14.962  -1.861   0.957  1.00 54.42
ATOM   1012 1HB  ASP A  68      15.635  -2.575   1.406  1.00 21.20
ATOM   1013 2HB  ASP A  68      15.507  -0.959   0.724  1.00 71.22
ATOM   1014  CG  ASP A  68      13.895  -1.527   1.959  1.00  3.43
ATOM   1015  OD1 ASP A  68      14.102  -0.600   2.767  1.00 42.13
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ATOM   1016  OD2 ASP A  68      12.857  -2.211   1.992  1.00 42.33
ATOM   1017  C   ASP A  68      13.610  -1.433  -1.069  1.00 61.41
ATOM   1018  O   ASP A  68      13.961  -0.255  -1.175  1.00 21.42
ATOM   1019  N   SER A  69      12.602  -1.930  -1.664  1.00 54.11
ATOM   1020  H   SER A  69      12.436  -2.889  -1.572  1.00 43.03
ATOM   1021  CA  SER A  69      11.719  -1.169  -2.439  1.00 11.41
ATOM   1022  HA  SER A  69      11.941  -0.127  -2.262  1.00 43.42
ATOM   1023  CB  SER A  69      11.967  -1.477  -3.922  1.00 22.01
ATOM   1024 1HB  SER A  69      11.051  -1.326  -4.476  1.00  0.22
ATOM   1025 2HB  SER A  69      12.733  -0.820  -4.307  1.00  1.54
ATOM   1026  OG  SER A  69      12.396  -2.839  -4.096  1.00 30.23
ATOM   1027  HG  SER A  69      13.345  -2.766  -4.274  1.00 74.42
ATOM   1028  C   SER A  69      10.294  -1.440  -1.996  1.00 75.55
ATOM   1029  O   SER A  69       9.908  -2.601  -1.744  1.00  4.33
ATOM   1030  N   LEU A  70       9.546  -0.393  -1.856  1.00 22.42
ATOM   1031  H   LEU A  70       9.912   0.480  -2.113  1.00 14.22
ATOM   1032  CA  LEU A  70       8.192  -0.461  -1.402  1.00 42.25
ATOM   1033  HA  LEU A  70       8.054  -1.390  -0.869  1.00 44.24
ATOM   1034  CB  LEU A  70       7.927   0.737  -0.436  1.00 15.13
ATOM   1035 1HB  LEU A  70       8.681   0.703   0.334  1.00 22.22
ATOM   1036 2HB  LEU A  70       8.084   1.643  -1.002  1.00 54.34
ATOM   1037  CG  LEU A  70       6.550   0.856   0.282  1.00 30.11
ATOM   1038  HG  LEU A  70       6.623   1.645   1.016  1.00 61.14
ATOM   1039  CD1 LEU A  70       5.437   1.249  -0.667  1.00 13.44
ATOM   1040 1HD1 LEU A  70       4.503   1.316  -0.127  1.00  4.52
ATOM   1041 2HD1 LEU A  70       5.356   0.504  -1.445  1.00 40.04
ATOM   1042 3HD1 LEU A  70       5.664   2.205  -1.116  1.00 71.42
ATOM   1043  CD2 LEU A  70       6.199  -0.430   1.015  1.00 14.44
ATOM   1044 1HD2 LEU A  70       6.965  -0.651   1.743  1.00 21.40
ATOM   1045 2HD2 LEU A  70       6.125  -1.242   0.307  1.00 22.42
ATOM   1046 3HD2 LEU A  70       5.251  -0.306   1.518  1.00 32.31
ATOM   1047  C   LEU A  70       7.295  -0.439  -2.624  1.00 42.45
ATOM   1048  O   LEU A  70       7.304   0.523  -3.385  1.00 11.14
ATOM   1049  N   GLN A  71       6.576  -1.504  -2.834  1.00  0.20
ATOM   1050  H   GLN A  71       6.616  -2.261  -2.215  1.00 40.34
ATOM   1051  CA  GLN A  71       5.682  -1.595  -3.955  1.00 11.40
ATOM   1052  HA  GLN A  71       5.595  -0.629  -4.429  1.00  3.33
ATOM   1053  CB  GLN A  71       6.212  -2.617  -4.946  1.00 22.22
ATOM   1054 1HB  GLN A  71       7.286  -2.677  -4.846  1.00 23.40
ATOM   1055 2HB  GLN A  71       5.788  -3.578  -4.699  1.00 33.32
ATOM   1056  CG  GLN A  71       5.893  -2.324  -6.389  1.00 13.04
ATOM   1057 1HG  GLN A  71       4.819  -2.283  -6.508  1.00 12.25
ATOM   1058 2HG  GLN A  71       6.332  -1.370  -6.632  1.00 43.32
ATOM   1059  CD  GLN A  71       6.462  -3.379  -7.318  1.00 55.44
ATOM   1060  OE1 GLN A  71       7.624  -3.300  -7.720  1.00  0.02
ATOM   1061  NE2 GLN A  71       5.644  -4.291  -7.755  1.00 74.10
ATOM   1062 2HE2 GLN A  71       4.689  -4.259  -7.485  1.00 25.01
ATOM   1063 1HE2 GLN A  71       5.982  -4.980  -8.356  1.00 73.42
ATOM   1064  C   GLN A  71       4.343  -2.037  -3.417  1.00 23.02
ATOM   1065  O   GLN A  71       4.265  -3.071  -2.721  1.00 11.14
ATOM   1066  N   VAL A  72       3.327  -1.254  -3.658  1.00 63.41
ATOM   1067  H   VAL A  72       3.467  -0.456  -4.215  1.00 51.24
ATOM   1068  CA  VAL A  72       1.998  -1.557  -3.167  1.00 64.12
ATOM   1069  HA  VAL A  72       2.033  -2.492  -2.629  1.00 54.55
ATOM   1070  CB  VAL A  72       1.485  -0.442  -2.201  1.00 55.31
ATOM   1071  HB  VAL A  72       1.503   0.497  -2.736  1.00 24.34
ATOM   1072  CG1 VAL A  72       0.060  -0.709  -1.748  1.00 21.11
ATOM   1073 1HG1 VAL A  72      -0.258   0.073  -1.074  1.00 53.13
ATOM   1074 2HG1 VAL A  72       0.013  -1.662  -1.242  1.00  4.11
ATOM   1075 3HG1 VAL A  72      -0.591  -0.728  -2.609  1.00 40.03
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ATOM   1076  CG2 VAL A  72       2.384  -0.313  -0.993  1.00 21.41
ATOM   1077 1HG2 VAL A  72       3.380  -0.066  -1.327  1.00 45.54
ATOM   1078 2HG2 VAL A  72       2.413  -1.248  -0.452  1.00 42.43
ATOM   1079 3HG2 VAL A  72       2.018   0.470  -0.346  1.00 31.42
ATOM   1080  C   VAL A  72       1.041  -1.672  -4.330  1.00 54.05
ATOM   1081  O   VAL A  72       0.882  -0.721  -5.095  1.00 63.04
ATOM   1082  N   ALA A  73       0.395  -2.808  -4.431  1.00  3.34
ATOM   1083  H   ALA A  73       0.589  -3.528  -3.790  1.00  2.14
ATOM   1084  CA  ALA A  73      -0.586  -3.070  -5.450  1.00 71.21
ATOM   1085  HA  ALA A  73      -0.547  -2.268  -6.172  1.00 11.23
ATOM   1086  CB  ALA A  73      -0.284  -4.386  -6.154  1.00 41.42
ATOM   1087 1HB  ALA A  73      -1.019  -4.559  -6.926  1.00 51.21
ATOM   1088 2HB  ALA A  73      -0.317  -5.191  -5.436  1.00 62.24
ATOM   1089 3HB  ALA A  73       0.700  -4.338  -6.595  1.00 51.54
ATOM   1090  C   ALA A  73      -1.971  -3.105  -4.818  1.00 34.05
ATOM   1091  O   ALA A  73      -2.157  -3.654  -3.719  1.00  2.02
ATOM   1092  N   MET A  74      -2.912  -2.504  -5.484  1.00 74.03
ATOM   1093  H   MET A  74      -2.677  -2.099  -6.352  1.00 33.43
ATOM   1094  CA  MET A  74      -4.281  -2.393  -5.023  1.00 41.34
ATOM   1095  HA  MET A  74      -4.382  -2.824  -4.039  1.00 51.33
ATOM   1096  CB  MET A  74      -4.686  -0.921  -4.971  1.00 54.32
ATOM   1097 1HB  MET A  74      -4.698  -0.536  -5.980  1.00 12.32
ATOM   1098 2HB  MET A  74      -5.684  -0.852  -4.562  1.00 64.22
ATOM   1099  CG  MET A  74      -3.776  -0.046  -4.156  1.00 43.14
ATOM   1100 1HG  MET A  74      -3.842  -0.359  -3.124  1.00 61.32
ATOM   1101 2HG  MET A  74      -2.759  -0.166  -4.498  1.00 12.15
ATOM   1102  SD  MET A  74      -4.226   1.683  -4.239  1.00 75.42
ATOM   1103  CE  MET A  74      -2.910   2.386  -3.276  1.00 74.30
ATOM   1104 1HE  MET A  74      -3.000   3.461  -3.260  1.00  3.22
ATOM   1105 2HE  MET A  74      -1.963   2.112  -3.719  1.00 15.32
ATOM   1106 3HE  MET A  74      -2.960   2.004  -2.268  1.00 64.21
ATOM   1107  C   MET A  74      -5.186  -3.073  -6.013  1.00 63.45
ATOM   1108  O   MET A  74      -5.062  -2.842  -7.218  1.00 73.22
ATOM   1109  N   LYS A  75      -6.077  -3.894  -5.534  1.00 42.22
ATOM   1110  H   LYS A  75      -6.096  -4.079  -4.568  1.00 52.33
ATOM   1111  CA  LYS A  75      -7.021  -4.550  -6.395  1.00  4.43
ATOM   1112  HA  LYS A  75      -6.805  -4.251  -7.409  1.00  5.30
ATOM   1113  CB  LYS A  75      -6.902  -6.072  -6.275  1.00 44.22
ATOM   1114 1HB  LYS A  75      -5.862  -6.348  -6.366  1.00 24.13
ATOM   1115 2HB  LYS A  75      -7.258  -6.371  -5.301  1.00 73.41
ATOM   1116  CG  LYS A  75      -7.693  -6.832  -7.328  1.00 71.34
ATOM   1117 1HG  LYS A  75      -7.672  -7.895  -7.132  1.00  5.44
ATOM   1118 2HG  LYS A  75      -8.704  -6.460  -7.304  1.00 33.42
ATOM   1119  CD  LYS A  75      -7.135  -6.553  -8.702  1.00 72.24
ATOM   1120 1HD  LYS A  75      -7.246  -5.502  -8.922  1.00 44.14
ATOM   1121 2HD  LYS A  75      -6.086  -6.810  -8.712  1.00 23.34
ATOM   1122  CE  LYS A  75      -7.837  -7.329  -9.797  1.00 73.21
ATOM   1123 1HE  LYS A  75      -7.739  -8.387  -9.600  1.00  3.41
ATOM   1124 2HE  LYS A  75      -8.883  -7.058  -9.807  1.00 24.14
ATOM   1125  NZ  LYS A  75      -7.247  -7.020 -11.120  1.00 63.53
ATOM   1126 1HZ  LYS A  75      -6.211  -7.148 -11.085  1.00 73.03
ATOM   1127 2HZ  LYS A  75      -7.283  -5.990 -11.316  1.00 34.24
ATOM   1128 3HZ  LYS A  75      -7.627  -7.551 -11.923  1.00  4.12
ATOM   1129  C   LYS A  75      -8.425  -4.106  -6.022  1.00 35.35
ATOM   1130  O   LYS A  75      -8.818  -4.206  -4.858  1.00 12.42
ATOM   1131  N   LYS A  76      -9.159  -3.626  -6.995  1.00 33.13
ATOM   1132  H   LYS A  76      -8.782  -3.582  -7.899  1.00 61.33
ATOM   1133  CA  LYS A  76     -10.508  -3.129  -6.797  1.00 43.11
ATOM   1134  HA  LYS A  76     -10.547  -2.572  -5.873  1.00 43.12
ATOM   1135  CB  LYS A  76     -10.880  -2.199  -7.925  1.00 70.31
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ATOM   1136 1HB  LYS A  76     -10.137  -1.416  -7.939  1.00 62.20
ATOM   1137 2HB  LYS A  76     -10.831  -2.745  -8.856  1.00  1.34
ATOM   1138  CG  LYS A  76     -12.260  -1.544  -7.810  1.00 73.21
ATOM   1139 1HG  LYS A  76     -12.991  -2.291  -7.535  1.00  5.43
ATOM   1140 2HG  LYS A  76     -12.224  -0.774  -7.054  1.00 14.21
ATOM   1141  CD  LYS A  76     -12.656  -0.914  -9.136  1.00 21.20
ATOM   1142 1HD  LYS A  76     -12.790  -1.693  -9.872  1.00 61.25
ATOM   1143 2HD  LYS A  76     -13.579  -0.371  -9.009  1.00 55.05
ATOM   1144  CE  LYS A  76     -11.585   0.035  -9.615  1.00 34.14
ATOM   1145 1HE  LYS A  76     -11.554   0.861  -8.920  1.00 41.14
ATOM   1146 2HE  LYS A  76     -10.651  -0.503  -9.562  1.00 12.00
ATOM   1147  NZ  LYS A  76     -11.832   0.509 -11.003  1.00 61.02
ATOM   1148 1HZ  LYS A  76     -11.975  -0.316 -11.619  1.00 51.22
ATOM   1149 2HZ  LYS A  76     -10.989   1.007 -11.370  1.00 25.11
ATOM   1150 3HZ  LYS A  76     -12.661   1.132 -11.061  1.00 42.34
ATOM   1151  C   LYS A  76     -11.519  -4.252  -6.765  1.00  0.34
ATOM   1152  O   LYS A  76     -11.561  -5.097  -7.663  1.00 61.51
ATOM   1153  N   LEU A  77     -12.303  -4.256  -5.737  1.00 53.33
ATOM   1154  H   LEU A  77     -12.163  -3.565  -5.052  1.00 51.52
ATOM   1155  CA  LEU A  77     -13.404  -5.183  -5.608  1.00  1.15
ATOM   1156  HA  LEU A  77     -13.320  -5.879  -6.430  1.00 11.13
ATOM   1157  CB  LEU A  77     -13.399  -5.960  -4.261  1.00 41.21
ATOM   1158 1HB  LEU A  77     -13.239  -5.234  -3.479  1.00 13.54
ATOM   1159 2HB  LEU A  77     -14.381  -6.388  -4.123  1.00 72.25
ATOM   1160  CG  LEU A  77     -12.349  -7.083  -4.072  1.00 14.30
ATOM   1161  HG  LEU A  77     -12.400  -7.746  -4.923  1.00 52.20
ATOM   1162  CD1 LEU A  77     -10.932  -6.547  -4.005  1.00 15.25
ATOM   1163 1HD1 LEU A  77     -10.704  -6.019  -4.919  1.00 64.44
ATOM   1164 2HD1 LEU A  77     -10.242  -7.369  -3.882  1.00  4.30
ATOM   1165 3HD1 LEU A  77     -10.841  -5.872  -3.167  1.00 15.52
ATOM   1166  CD2 LEU A  77     -12.667  -7.902  -2.832  1.00 63.21
ATOM   1167 1HD2 LEU A  77     -11.926  -8.679  -2.717  1.00  4.55
ATOM   1168 2HD2 LEU A  77     -13.644  -8.350  -2.935  1.00 31.23
ATOM   1169 3HD2 LEU A  77     -12.654  -7.262  -1.963  1.00 70.11
ATOM   1170  C   LEU A  77     -14.708  -4.410  -5.772  1.00 64.44
ATOM   1171  O   LEU A  77     -14.846  -3.299  -5.240  1.00  1.33
ATOM   1172  N   PRO A  78     -15.695  -4.984  -6.481  1.00 74.14
ATOM   1173  CD  PRO A  78     -15.653  -6.349  -7.054  1.00 13.13
ATOM   1174  CA  PRO A  78     -16.970  -4.301  -6.780  1.00 12.34
ATOM   1175  HA  PRO A  78     -16.797  -3.329  -7.216  1.00 10.35
ATOM   1176  CB  PRO A  78     -17.636  -5.221  -7.809  1.00 53.44
ATOM   1177 1HB  PRO A  78     -18.706  -5.217  -7.661  1.00 15.40
ATOM   1178 2HB  PRO A  78     -17.393  -4.902  -8.813  1.00 72.25
ATOM   1179  CG  PRO A  78     -17.053  -6.570  -7.564  1.00 62.51
ATOM   1180 1HG  PRO A  78     -17.648  -7.091  -6.828  1.00 12.03
ATOM   1181 2HG  PRO A  78     -17.015  -7.133  -8.485  1.00 22.33
ATOM   1182 1HD  PRO A  78     -15.415  -7.071  -6.287  1.00 55.42
ATOM   1183 2HD  PRO A  78     -14.929  -6.404  -7.851  1.00 40.32
ATOM   1184  C   PRO A  78     -17.860  -4.141  -5.545  1.00 62.53
ATOM   1185  O   PRO A  78     -18.825  -3.392  -5.550  1.00 42.31
ATOM   1186  N   ASN A  79     -17.483  -4.808  -4.478  1.00 52.01
ATOM   1187  H   ASN A  79     -16.671  -5.348  -4.555  1.00 30.25
ATOM   1188  CA  ASN A  79     -18.238  -4.785  -3.224  1.00 34.25
ATOM   1189  HA  ASN A  79     -19.285  -4.673  -3.458  1.00 72.11
ATOM   1190  CB  ASN A  79     -18.039  -6.100  -2.423  1.00 54.03
ATOM   1191 1HB  ASN A  79     -16.989  -6.218  -2.203  1.00 55.15
ATOM   1192 2HB  ASN A  79     -18.579  -6.018  -1.491  1.00  2.44
ATOM   1193  CG  ASN A  79     -18.506  -7.367  -3.141  1.00 41.40
ATOM   1194  OD1 ASN A  79     -18.446  -7.475  -4.359  1.00 33.44
ATOM   1195  ND2 ASN A  79     -18.969  -8.334  -2.384  1.00 63.12
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ATOM   1196 2HD2 ASN A  79     -18.993  -8.205  -1.414  1.00 32.32
ATOM   1197 1HD2 ASN A  79     -19.273  -9.149  -2.833  1.00 12.32
ATOM   1198  C   ASN A  79     -17.787  -3.614  -2.362  1.00 33.12
ATOM   1199  O   ASN A  79     -18.098  -3.556  -1.178  1.00 22.44
ATOM   1200  N   ASN A  80     -17.075  -2.670  -2.987  1.00 43.42
ATOM   1201  H   ASN A  80     -16.944  -2.772  -3.953  1.00 71.51
ATOM   1202  CA  ASN A  80     -16.486  -1.506  -2.306  1.00 71.42
ATOM   1203  HA  ASN A  80     -15.967  -0.958  -3.080  1.00 13.53
ATOM   1204  CB  ASN A  80     -17.526  -0.574  -1.642  1.00 71.31
ATOM   1205 1HB  ASN A  80     -18.226  -1.172  -1.079  1.00 12.42
ATOM   1206 2HB  ASN A  80     -17.016   0.098  -0.969  1.00 43.12
ATOM   1207  CG  ASN A  80     -18.303   0.245  -2.648  1.00 63.24
ATOM   1208  OD1 ASN A  80     -17.881   1.337  -3.028  1.00  3.25
ATOM   1209  ND2 ASN A  80     -19.433  -0.256  -3.086  1.00 25.21
ATOM   1210 2HD2 ASN A  80     -19.718  -1.130  -2.741  1.00 43.42
ATOM   1211 1HD2 ASN A  80     -19.944   0.264  -3.739  1.00 41.00
ATOM   1212  C   ASN A  80     -15.436  -1.947  -1.335  1.00 51.45
ATOM   1213  O   ASN A  80     -15.387  -1.517  -0.185  1.00 33.31
ATOM   1214  N   ALA A  81     -14.604  -2.819  -1.817  1.00 75.50
ATOM   1215  H   ALA A  81     -14.698  -3.113  -2.748  1.00 23.12
ATOM   1216  CA  ALA A  81     -13.511  -3.334  -1.073  1.00 41.25
ATOM   1217  HA  ALA A  81     -13.369  -2.718  -0.197  1.00 53.32
ATOM   1218  CB  ALA A  81     -13.780  -4.764  -0.641  1.00 72.44
ATOM   1219 1HB  ALA A  81     -12.923  -5.131  -0.097  1.00 24.23
ATOM   1220 2HB  ALA A  81     -13.958  -5.379  -1.512  1.00 63.10
ATOM   1221 3HB  ALA A  81     -14.648  -4.783   0.000  1.00 35.35
ATOM   1222  C   ALA A  81     -12.285  -3.254  -1.943  1.00 45.21
ATOM   1223  O   ALA A  81     -12.399  -3.111  -3.162  1.00 52.31
ATOM   1224  N   THR A  82     -11.151  -3.317  -1.347  1.00 25.31
ATOM   1225  H   THR A  82     -11.109  -3.402  -0.367  1.00 23.53
ATOM   1226  CA  THR A  82      -9.914  -3.268  -2.051  1.00  4.34
ATOM   1227  HA  THR A  82     -10.075  -3.524  -3.087  1.00  1.50
ATOM   1228  CB  THR A  82      -9.312  -1.851  -1.962  1.00 45.05
ATOM   1229  HB  THR A  82      -9.044  -1.657  -0.933  1.00 54.10
ATOM   1230  OG1 THR A  82     -10.290  -0.888  -2.379  1.00 64.40
ATOM   1231  HG1 THR A  82     -11.035  -0.933  -1.769  1.00 23.42
ATOM   1232  CG2 THR A  82      -8.065  -1.730  -2.837  1.00 71.20
ATOM   1233 1HG2 THR A  82      -7.305  -2.403  -2.465  1.00 62.14
ATOM   1234 2HG2 THR A  82      -7.690  -0.719  -2.828  1.00 14.52
ATOM   1235 3HG2 THR A  82      -8.316  -2.015  -3.849  1.00  4.54
ATOM   1236  C   THR A  82      -8.963  -4.247  -1.396  1.00 55.20
ATOM   1237  O   THR A  82      -8.848  -4.276  -0.186  1.00 34.21
ATOM   1238  N   ARG A  83      -8.300  -5.041  -2.161  1.00 54.24
ATOM   1239  H   ARG A  83      -8.435  -4.988  -3.135  1.00 33.04
ATOM   1240  CA  ARG A  83      -7.352  -5.947  -1.590  1.00 34.22
ATOM   1241  HA  ARG A  83      -7.507  -5.911  -0.522  1.00 60.15
ATOM   1242  CB  ARG A  83      -7.516  -7.392  -2.100  1.00 31.25
ATOM   1243 1HB  ARG A  83      -8.547  -7.689  -1.981  1.00 61.31
ATOM   1244 2HB  ARG A  83      -7.260  -7.422  -3.148  1.00 44.34
ATOM   1245  CG  ARG A  83      -6.630  -8.401  -1.361  1.00  3.21
ATOM   1246 1HG  ARG A  83      -5.597  -8.207  -1.608  1.00 52.41
ATOM   1247 2HG  ARG A  83      -6.771  -8.273  -0.297  1.00 50.22
ATOM   1248  CD  ARG A  83      -6.958  -9.840  -1.738  1.00 35.40
ATOM   1249 1HD  ARG A  83      -7.983 -10.020  -1.449  1.00 74.54
ATOM   1250 2HD  ARG A  83      -6.838  -9.974  -2.803  1.00 32.45
ATOM   1251  NE  ARG A  83      -6.107 -10.811  -1.018  1.00  1.24
ATOM   1252  HE  ARG A  83      -5.734 -10.470  -0.171  1.00 61.42
ATOM   1253  CZ  ARG A  83      -5.824 -12.075  -1.412  1.00 10.00
ATOM   1254  NH1 ARG A  83      -6.341 -12.564  -2.543  1.00 52.02
ATOM   1255 1HH1 ARG A  83      -6.945 -12.008  -3.118  1.00 30.32
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ATOM   1256 2HH1 ARG A  83      -6.152 -13.496  -2.857  1.00 31.25
ATOM   1257  NH2 ARG A  83      -5.032 -12.845  -0.650  1.00 52.25
ATOM   1258 1HH2 ARG A  83      -4.649 -12.493   0.211  1.00 13.44
ATOM   1259 2HH2 ARG A  83      -4.772 -13.788  -0.875  1.00  1.54
ATOM   1260  C   ARG A  83      -5.990  -5.386  -1.855  1.00 23.45
ATOM   1261  O   ARG A  83      -5.702  -4.953  -2.968  1.00 55.34
ATOM   1262  N   ILE A  84      -5.177  -5.354  -0.848  1.00 62.43
ATOM   1263  H   ILE A  84      -5.411  -5.807  -0.006  1.00 62.54
ATOM   1264  CA  ILE A  84      -3.922  -4.690  -0.934  1.00 52.11
ATOM   1265  HA  ILE A  84      -3.866  -4.160  -1.874  1.00 32.35
ATOM   1266  CB  ILE A  84      -3.784  -3.653   0.266  1.00 72.43
ATOM   1267  HB  ILE A  84      -4.769  -3.246   0.442  1.00 44.42
ATOM   1268  CG2 ILE A  84      -3.347  -4.320   1.552  1.00 54.43
ATOM   1269 1HG2 ILE A  84      -2.404  -4.810   1.353  1.00 11.55
ATOM   1270 2HG2 ILE A  84      -4.085  -5.052   1.846  1.00 22.04
ATOM   1271 3HG2 ILE A  84      -3.220  -3.579   2.324  1.00  2.22
ATOM   1272  CG1 ILE A  84      -2.834  -2.505  -0.050  1.00 64.20
ATOM   1273 1HG1 ILE A  84      -2.708  -1.906   0.842  1.00 32.30
ATOM   1274 2HG1 ILE A  84      -1.881  -2.894  -0.377  1.00  1.34
ATOM   1275  CD1 ILE A  84      -3.352  -1.586  -1.117  1.00 15.14
ATOM   1276 1HD1 ILE A  84      -3.492  -2.138  -2.033  1.00 45.02
ATOM   1277 2HD1 ILE A  84      -2.639  -0.790  -1.279  1.00 30.44
ATOM   1278 3HD1 ILE A  84      -4.295  -1.165  -0.803  1.00 20.14
ATOM   1279  C   ILE A  84      -2.829  -5.763  -0.873  1.00 45.54
ATOM   1280  O   ILE A  84      -2.933  -6.744  -0.123  1.00 33.40
ATOM   1281  N   SER A  85      -1.896  -5.654  -1.753  1.00 31.12
ATOM   1282  H   SER A  85      -1.928  -4.908  -2.396  1.00 21.42
ATOM   1283  CA  SER A  85      -0.788  -6.560  -1.823  1.00 21.42
ATOM   1284  HA  SER A  85      -0.821  -7.191  -0.947  1.00 23.50
ATOM   1285  CB  SER A  85      -0.917  -7.426  -3.072  1.00 70.24
ATOM   1286 1HB  SER A  85      -0.848  -6.803  -3.953  1.00 32.54
ATOM   1287 2HB  SER A  85      -0.132  -8.167  -3.086  1.00 22.34
ATOM   1288  OG  SER A  85      -2.174  -8.087  -3.067  1.00 41.00
ATOM   1289  HG  SER A  85      -2.656  -7.715  -2.321  1.00 60.12
ATOM   1290  C   SER A  85       0.505  -5.768  -1.821  1.00 23.12
ATOM   1291  O   SER A  85       0.702  -4.894  -2.661  1.00 24.31
ATOM   1292  N   ILE A  86       1.351  -6.026  -0.874  1.00 51.23
ATOM   1293  H   ILE A  86       1.154  -6.721  -0.205  1.00 34.23
ATOM   1294  CA  ILE A  86       2.585  -5.304  -0.763  1.00 10.21
ATOM   1295  HA  ILE A  86       2.626  -4.601  -1.581  1.00 45.44
ATOM   1296  CB  ILE A  86       2.633  -4.509   0.586  1.00 41.41
ATOM   1297  HB  ILE A  86       2.602  -5.213   1.405  1.00 54.25
ATOM   1298  CG2 ILE A  86       3.919  -3.681   0.698  1.00  5.42
ATOM   1299 1HG2 ILE A  86       3.967  -2.976  -0.119  1.00 70.33
ATOM   1300 2HG2 ILE A  86       4.776  -4.337   0.657  1.00 21.22
ATOM   1301 3HG2 ILE A  86       3.921  -3.145   1.637  1.00 42.04
ATOM   1302  CG1 ILE A  86       1.385  -3.597   0.674  1.00 52.14
ATOM   1303 1HG1 ILE A  86       1.369  -2.942  -0.183  1.00  5.41
ATOM   1304 2HG1 ILE A  86       0.504  -4.223   0.635  1.00 24.11
ATOM   1305  CD1 ILE A  86       1.291  -2.739   1.915  1.00 50.22
ATOM   1306 1HD1 ILE A  86       0.392  -2.143   1.875  1.00 72.35
ATOM   1307 2HD1 ILE A  86       2.152  -2.090   1.969  1.00 43.21
ATOM   1308 3HD1 ILE A  86       1.263  -3.373   2.787  1.00 62.21
ATOM   1309  C   ILE A  86       3.763  -6.272  -0.893  1.00 55.52
ATOM   1310  O   ILE A  86       3.712  -7.393  -0.384  1.00 64.45
ATOM   1311  N   LYS A  87       4.815  -5.817  -1.532  1.00 71.44
ATOM   1312  H   LYS A  87       4.791  -4.885  -1.842  1.00 31.24
ATOM   1313  CA  LYS A  87       5.988  -6.619  -1.807  1.00 21.44
ATOM   1314  HA  LYS A  87       5.768  -7.612  -1.438  1.00 45.11
ATOM   1315  CB  LYS A  87       6.343  -6.677  -3.345  1.00  5.31
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ATOM   1316 1HB  LYS A  87       6.788  -7.638  -3.552  1.00 34.24
ATOM   1317 2HB  LYS A  87       5.416  -6.615  -3.897  1.00 41.44
ATOM   1318  CG  LYS A  87       7.304  -5.614  -3.900  1.00 72.24
ATOM   1319 1HG  LYS A  87       7.178  -5.539  -4.971  1.00 33.52
ATOM   1320 2HG  LYS A  87       7.065  -4.667  -3.440  1.00 74.21
ATOM   1321  CD  LYS A  87       8.762  -5.956  -3.595  1.00 25.25
ATOM   1322 1HD  LYS A  87       8.863  -6.129  -2.533  1.00 64.52
ATOM   1323 2HD  LYS A  87       9.028  -6.855  -4.129  1.00 65.13
ATOM   1324  CE  LYS A  87       9.706  -4.847  -3.990  1.00 73.24
ATOM   1325 1HE  LYS A  87       9.706  -4.751  -5.067  1.00 33.21
ATOM   1326 2HE  LYS A  87       9.368  -3.923  -3.546  1.00 15.34
ATOM   1327  NZ  LYS A  87      11.086  -5.129  -3.525  1.00 42.40
ATOM   1328 1HZ  LYS A  87      11.087  -5.315  -2.500  1.00 24.41
ATOM   1329 2HZ  LYS A  87      11.675  -4.283  -3.700  1.00 31.44
ATOM   1330 3HZ  LYS A  87      11.505  -5.936  -4.025  1.00 61.03
ATOM   1331  C   LYS A  87       7.104  -6.062  -0.953  1.00 13.44
ATOM   1332  O   LYS A  87       7.208  -4.849  -0.792  1.00 14.12
ATOM   1333  N   TYR A  88       7.899  -6.924  -0.395  1.00 31.25
ATOM   1334  H   TYR A  88       7.886  -7.853  -0.706  1.00 11.43
ATOM   1335  CA  TYR A  88       8.818  -6.574   0.670  1.00 22.00
ATOM   1336  HA  TYR A  88       8.404  -5.758   1.237  1.00 73.10
ATOM   1337  CB  TYR A  88       8.951  -7.767   1.629  1.00 62.14
ATOM   1338 1HB  TYR A  88       9.652  -7.505   2.408  1.00 74.34
ATOM   1339 2HB  TYR A  88       7.987  -7.975   2.072  1.00 20.34
ATOM   1340  CG  TYR A  88       9.456  -9.053   0.974  1.00 42.43
ATOM   1341  CD1 TYR A  88       8.598  -9.877   0.250  1.00 52.22
ATOM   1342  HD1 TYR A  88       7.558  -9.595   0.158  1.00 43.03
ATOM   1343  CE1 TYR A  88       9.048 -11.032  -0.347  1.00 54.22
ATOM   1344  HE1 TYR A  88       8.361 -11.655  -0.903  1.00  5.50
ATOM   1345  CZ  TYR A  88      10.370 -11.387  -0.231  1.00 32.30
ATOM   1346  CE2 TYR A  88      11.246 -10.596   0.484  1.00 41.32
ATOM   1347  HE2 TYR A  88      12.286 -10.877   0.574  1.00 53.42
ATOM   1348  CD2 TYR A  88      10.788  -9.437   1.080  1.00 43.35
ATOM   1349  HD2 TYR A  88      11.471  -8.814   1.639  1.00  4.23
ATOM   1350  OH  TYR A  88      10.818 -12.536  -0.826  1.00 74.33
ATOM   1351  HH  TYR A  88      11.270 -13.066  -0.165  1.00 52.12
ATOM   1352  C   TYR A  88      10.206  -6.173   0.187  1.00 42.15
ATOM   1353  O   TYR A  88      10.612  -6.446  -0.958  1.00 32.24
ATOM   1354  N   GLY A  89      10.867  -5.421   1.043  1.00 63.32
ATOM   1355  H   GLY A  89      10.435  -5.140   1.875  1.00 62.31
ATOM   1356  CA  GLY A  89      12.214  -5.000   0.828  1.00 22.13
ATOM   1357 1HA  GLY A  89      12.499  -5.200  -0.195  1.00 50.44
ATOM   1358 2HA  GLY A  89      12.271  -3.941   1.029  1.00 64.41
ATOM   1359  C   GLY A  89      13.146  -5.723   1.777  1.00 54.53
ATOM   1360  O   GLY A  89      12.821  -6.821   2.223  1.00  0.20
ATOM   1361  N   SER A  90      14.234  -5.085   2.157  1.00 62.23
ATOM   1362  H   SER A  90      14.376  -4.149   1.899  1.00 52.23
ATOM   1363  CA  SER A  90      15.251  -5.720   2.987  1.00 12.11
ATOM   1364  HA  SER A  90      15.398  -6.713   2.591  1.00 24.45
ATOM   1365  CB  SER A  90      16.584  -4.956   2.872  1.00 71.03
ATOM   1366 1HB  SER A  90      17.286  -5.351   3.592  1.00 70.21
ATOM   1367 2HB  SER A  90      16.985  -5.084   1.876  1.00 34.32
ATOM   1368  OG  SER A  90      16.414  -3.559   3.124  1.00 75.41
ATOM   1369  HG  SER A  90      17.069  -3.093   2.570  1.00  3.31
ATOM   1370  C   SER A  90      14.810  -5.867   4.451  1.00 15.52
ATOM   1371  O   SER A  90      15.317  -6.712   5.176  1.00 24.44
ATOM   1372  N   GLN A  91      13.857  -5.050   4.873  1.00 42.54
ATOM   1373  H   GLN A  91      13.493  -4.393   4.244  1.00 61.33
ATOM   1374  CA  GLN A  91      13.377  -5.102   6.253  1.00 31.25
ATOM   1375  HA  GLN A  91      14.169  -5.490   6.876  1.00 52.31
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ATOM   1376  CB  GLN A  91      12.998  -3.714   6.756  1.00 44.12
ATOM   1377 1HB  GLN A  91      12.211  -3.326   6.128  1.00 14.34
ATOM   1378 2HB  GLN A  91      12.615  -3.811   7.761  1.00  0.52
ATOM   1379  CG  GLN A  91      14.113  -2.689   6.773  1.00 21.13
ATOM   1380 1HG  GLN A  91      14.930  -3.066   7.371  1.00  2.13
ATOM   1381 2HG  GLN A  91      14.450  -2.514   5.762  1.00 12.54
ATOM   1382  CD  GLN A  91      13.634  -1.381   7.362  1.00 33.11
ATOM   1383  OE1 GLN A  91      12.759  -1.363   8.216  1.00 12.14
ATOM   1384  NE2 GLN A  91      14.196  -0.287   6.921  1.00 62.30
ATOM   1385 2HE2 GLN A  91      14.899  -0.351   6.251  1.00 54.50
ATOM   1386 1HE2 GLN A  91      13.851   0.575   7.261  1.00 72.42
ATOM   1387  C   GLN A  91      12.148  -5.990   6.379  1.00 24.11
ATOM   1388  O   GLN A  91      11.719  -6.309   7.481  1.00 54.22
ATOM   1389  N   GLY A  92      11.600  -6.405   5.253  1.00 45.42
ATOM   1390  H   GLY A  92      12.086  -6.264   4.414  1.00 13.41
ATOM   1391  CA  GLY A  92      10.337  -7.097   5.293  1.00 43.42
ATOM   1392 1HA  GLY A  92      10.208  -7.665   4.383  1.00 21.42
ATOM   1393 2HA  GLY A  92      10.320  -7.763   6.143  1.00 74.24
ATOM   1394  C   GLY A  92       9.218  -6.082   5.443  1.00 13.12
ATOM   1395  O   GLY A  92       8.992  -5.539   6.525  1.00 63.24
ATOM   1396  N   ASN A  93       8.487  -5.839   4.376  1.00 10.12
ATOM   1397  H   ASN A  93       8.586  -6.415   3.593  1.00 52.20
ATOM   1398  CA  ASN A  93       7.504  -4.752   4.375  1.00 51.53
ATOM   1399  HA  ASN A  93       8.039  -3.933   4.834  1.00 63.10
ATOM   1400  CB  ASN A  93       7.092  -4.268   2.971  1.00 15.33
ATOM   1401 1HB  ASN A  93       6.935  -5.116   2.321  1.00 34.23
ATOM   1402 2HB  ASN A  93       6.162  -3.723   3.054  1.00 43.24
ATOM   1403  CG  ASN A  93       8.134  -3.344   2.376  1.00 51.34
ATOM   1404  OD1 ASN A  93       8.812  -2.664   3.089  1.00 51.35
ATOM   1405  ND2 ASN A  93       8.261  -3.301   1.085  1.00 65.34
ATOM   1406 2HD2 ASN A  93       7.687  -3.861   0.512  1.00 34.14
ATOM   1407 1HD2 ASN A  93       8.936  -2.699   0.704  1.00 22.31
ATOM   1408  C   ASN A  93       6.313  -4.953   5.257  1.00 61.21
ATOM   1409  O   ASN A  93       5.610  -4.008   5.496  1.00 34.24
ATOM   1410  N   SER A  94       6.131  -6.156   5.795  1.00 75.21
ATOM   1411  H   SER A  94       6.775  -6.870   5.607  1.00  2.00
ATOM   1412  CA  SER A  94       4.997  -6.473   6.663  1.00 54.14
ATOM   1413  HA  SER A  94       4.103  -6.450   6.058  1.00 15.44
ATOM   1414  CB  SER A  94       5.172  -7.879   7.215  1.00  4.40
ATOM   1415 1HB  SER A  94       6.016  -7.896   7.888  1.00 71.24
ATOM   1416 2HB  SER A  94       4.278  -8.175   7.743  1.00  3.21
ATOM   1417  OG  SER A  94       5.404  -8.791   6.158  1.00 54.40
ATOM   1418  HG  SER A  94       5.016  -8.446   5.345  1.00 61.42
ATOM   1419  C   SER A  94       4.843  -5.453   7.816  1.00 71.02
ATOM   1420  O   SER A  94       3.731  -5.035   8.135  1.00 64.44
ATOM   1421  N   ILE A  95       5.962  -5.023   8.391  1.00  4.11
ATOM   1422  H   ILE A  95       6.823  -5.375   8.076  1.00 61.41
ATOM   1423  CA  ILE A  95       5.949  -4.039   9.479  1.00  2.23
ATOM   1424  HA  ILE A  95       5.223  -4.391  10.199  1.00 44.42
ATOM   1425  CB  ILE A  95       7.357  -3.903  10.192  1.00 12.24
ATOM   1426  HB  ILE A  95       8.108  -3.882   9.416  1.00  2.52
ATOM   1427  CG2 ILE A  95       7.476  -2.595  10.980  1.00 31.33
ATOM   1428 1HG2 ILE A  95       8.449  -2.542  11.447  1.00 43.01
ATOM   1429 2HG2 ILE A  95       6.711  -2.561  11.740  1.00 32.35
ATOM   1430 3HG2 ILE A  95       7.353  -1.758  10.309  1.00 54.23
ATOM   1431  CG1 ILE A  95       7.653  -5.105  11.131  1.00 70.52
ATOM   1432 1HG1 ILE A  95       8.614  -4.952  11.599  1.00 14.21
ATOM   1433 2HG1 ILE A  95       6.898  -5.133  11.902  1.00 14.02
ATOM   1434  CD1 ILE A  95       7.696  -6.467  10.468  1.00 12.01
ATOM   1435 1HD1 ILE A  95       6.729  -6.655  10.024  1.00 72.44
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ATOM   1436 2HD1 ILE A  95       7.907  -7.223  11.209  1.00 33.03
ATOM   1437 3HD1 ILE A  95       8.454  -6.477   9.700  1.00 60.43
ATOM   1438  C   ILE A  95       5.453  -2.683   8.960  1.00 50.51
ATOM   1439  O   ILE A  95       4.553  -2.069   9.549  1.00 72.24
ATOM   1440  N   ARG A  96       5.993  -2.262   7.823  1.00 44.23
ATOM   1441  H   ARG A  96       6.671  -2.822   7.392  1.00 64.13
ATOM   1442  CA  ARG A  96       5.597  -1.008   7.195  1.00 12.43
ATOM   1443  HA  ARG A  96       5.706  -0.223   7.928  1.00 11.33
ATOM   1444  CB  ARG A  96       6.480  -0.692   5.979  1.00 35.22
ATOM   1445 1HB  ARG A  96       6.416  -1.518   5.287  1.00 70.22
ATOM   1446 2HB  ARG A  96       6.092   0.193   5.495  1.00 32.03
ATOM   1447  CG  ARG A  96       7.957  -0.459   6.292  1.00 33.13
ATOM   1448 1HG  ARG A  96       8.047   0.379   6.968  1.00 24.13
ATOM   1449 2HG  ARG A  96       8.364  -1.345   6.755  1.00 34.54
ATOM   1450  CD  ARG A  96       8.723  -0.168   5.013  1.00 11.34
ATOM   1451 1HD  ARG A  96       8.623  -1.016   4.354  1.00 50.11
ATOM   1452 2HD  ARG A  96       8.276   0.696   4.543  1.00 10.32
ATOM   1453  NE  ARG A  96      10.157   0.094   5.227  1.00 51.35
ATOM   1454  HE  ARG A  96      10.407   0.627   6.024  1.00 72.21
ATOM   1455  CZ  ARG A  96      11.135  -0.247   4.377  1.00 71.41
ATOM   1456  NH1 ARG A  96      10.911  -1.082   3.387  1.00 33.43
ATOM   1457 1HH1 ARG A  96      10.010  -1.496   3.220  1.00 10.14
ATOM   1458 2HH1 ARG A  96      11.660  -1.369   2.768  1.00 20.44
ATOM   1459  NH2 ARG A  96      12.339   0.194   4.568  1.00 54.42
ATOM   1460 1HH2 ARG A  96      12.509   0.785   5.371  1.00 34.45
ATOM   1461 2HH2 ARG A  96      13.090  -0.025   3.926  1.00  3.43
ATOM   1462  C   ARG A  96       4.130  -1.078   6.770  1.00 60.43
ATOM   1463  O   ARG A  96       3.381  -0.131   6.956  1.00 70.14
ATOM   1464  N   SER A  97       3.733  -2.232   6.232  1.00 43.31
ATOM   1465  H   SER A  97       4.393  -2.952   6.098  1.00 15.35
ATOM   1466  CA  SER A  97       2.375  -2.482   5.798  1.00 21.55
ATOM   1467  HA  SER A  97       2.123  -1.776   5.023  1.00 63.24
ATOM   1468  CB  SER A  97       2.280  -3.889   5.221  1.00 21.23
ATOM   1469 1HB  SER A  97       2.499  -4.605   6.000  1.00 32.24
ATOM   1470 2HB  SER A  97       1.281  -4.062   4.850  1.00 54.32
ATOM   1471  OG  SER A  97       3.206  -4.068   4.166  1.00 62.35
ATOM   1472  HG  SER A  97       3.270  -3.246   3.673  1.00  4.05
ATOM   1473  C   SER A  97       1.398  -2.344   6.958  1.00  0.11
ATOM   1474  O   SER A  97       0.374  -1.702   6.817  1.00 32.23
ATOM   1475  N   SER A  98       1.758  -2.906   8.104  1.00 62.01
ATOM   1476  H   SER A  98       2.621  -3.369   8.159  1.00 74.50
ATOM   1477  CA  SER A  98       0.920  -2.871   9.292  1.00 54.50
ATOM   1478  HA  SER A  98      -0.009  -3.365   9.050  1.00 42.10
ATOM   1479  CB  SER A  98       1.613  -3.642  10.424  1.00  4.33
ATOM   1480 1HB  SER A  98       2.567  -3.180  10.632  1.00 30.21
ATOM   1481 2HB  SER A  98       1.017  -3.640  11.323  1.00 61.13
ATOM   1482  OG  SER A  98       1.846  -4.995  10.036  1.00 30.52
ATOM   1483  HG  SER A  98       2.546  -5.031   9.373  1.00 63.33
ATOM   1484  C   SER A  98       0.605  -1.417   9.701  1.00 21.23
ATOM   1485  O   SER A  98      -0.550  -1.069   9.969  1.00 31.33
ATOM   1486  N   ALA A  99       1.626  -0.573   9.697  1.00 25.44
ATOM   1487  H   ALA A  99       2.519  -0.908   9.467  1.00 45.33
ATOM   1488  CA  ALA A  99       1.451   0.831  10.022  1.00 35.13
ATOM   1489  HA  ALA A  99       0.862   0.888  10.926  1.00 63.11
ATOM   1490  CB  ALA A  99       2.797   1.496  10.270  1.00 63.43
ATOM   1491 1HB  ALA A  99       2.643   2.524  10.565  1.00 33.13
ATOM   1492 2HB  ALA A  99       3.385   1.467   9.364  1.00 73.53
ATOM   1493 3HB  ALA A  99       3.320   0.970  11.055  1.00 14.24
ATOM   1494  C   ALA A  99       0.682   1.550   8.914  1.00 24.42
ATOM   1495  O   ALA A  99      -0.218   2.345   9.186  1.00 63.41
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ATOM   1496  N   LEU A 100       1.032   1.232   7.670  1.00 53.22
ATOM   1497  H   LEU A 100       1.751   0.579   7.523  1.00  2.53
ATOM   1498  CA  LEU A 100       0.432   1.824   6.486  1.00 11.25
ATOM   1499  HA  LEU A 100       0.649   2.881   6.484  1.00 33.11
ATOM   1500  CB  LEU A 100       1.037   1.197   5.240  1.00 24.43
ATOM   1501 1HB  LEU A 100       2.097   1.098   5.402  1.00 32.41
ATOM   1502 2HB  LEU A 100       0.634   0.197   5.168  1.00 23.31
ATOM   1503  CG  LEU A 100       0.763   1.907   3.912  1.00  0.22
ATOM   1504  HG  LEU A 100      -0.305   1.999   3.778  1.00 63.43
ATOM   1505  CD1 LEU A 100       1.354   3.310   3.922  1.00 73.22
ATOM   1506 1HD1 LEU A 100       0.884   3.895   4.699  1.00 71.53
ATOM   1507 2HD1 LEU A 100       1.192   3.782   2.965  1.00 53.14
ATOM   1508 3HD1 LEU A 100       2.413   3.241   4.119  1.00 30.32
ATOM   1509  CD2 LEU A 100       1.325   1.099   2.756  1.00  3.12
ATOM   1510 1HD2 LEU A 100       2.391   0.985   2.890  1.00 70.31
ATOM   1511 2HD2 LEU A 100       1.131   1.613   1.827  1.00 42.04
ATOM   1512 3HD2 LEU A 100       0.860   0.125   2.738  1.00 11.32
ATOM   1513  C   LEU A 100      -1.068   1.608   6.478  1.00 43.12
ATOM   1514  O   LEU A 100      -1.817   2.531   6.220  1.00 12.23
ATOM   1515  N   ILE A 101      -1.487   0.398   6.823  1.00 63.30
ATOM   1516  H   ILE A 101      -0.788  -0.268   7.028  1.00 51.35
ATOM   1517  CA  ILE A 101      -2.916   0.034   6.855  1.00 40.34
ATOM   1518  HA  ILE A 101      -3.320   0.175   5.864  1.00 44.14
ATOM   1519  CB  ILE A 101      -3.131  -1.464   7.287  1.00 55.45
ATOM   1520  HB  ILE A 101      -2.632  -1.588   8.236  1.00  5.23
ATOM   1521  CG2 ILE A 101      -4.608  -1.785   7.522  1.00 73.32
ATOM   1522 1HG2 ILE A 101      -4.987  -1.163   8.319  1.00 11.35
ATOM   1523 2HG2 ILE A 101      -4.717  -2.825   7.791  1.00 73.35
ATOM   1524 3HG2 ILE A 101      -5.164  -1.584   6.618  1.00 74.43
ATOM   1525  CG1 ILE A 101      -2.512  -2.454   6.275  1.00 41.43
ATOM   1526 1HG1 ILE A 101      -1.453  -2.261   6.200  1.00 63.50
ATOM   1527 2HG1 ILE A 101      -2.659  -3.458   6.642  1.00 25.44
ATOM   1528  CD1 ILE A 101      -3.081  -2.384   4.868  1.00 73.15
ATOM   1529 1HD1 ILE A 101      -2.568  -3.108   4.252  1.00 12.35
ATOM   1530 2HD1 ILE A 101      -2.943  -1.397   4.456  1.00 53.44
ATOM   1531 3HD1 ILE A 101      -4.133  -2.629   4.893  1.00 52.21
ATOM   1532  C   ILE A 101      -3.670   0.950   7.820  1.00 14.12
ATOM   1533  O   ILE A 101      -4.752   1.464   7.485  1.00 34.33
ATOM   1534  N   GLY A 102      -3.059   1.208   8.975  1.00 31.22
ATOM   1535  H   GLY A 102      -2.180   0.807   9.152  1.00 24.24
ATOM   1536  CA  GLY A 102      -3.662   2.076   9.967  1.00 41.55
ATOM   1537 1HA  GLY A 102      -4.626   1.688  10.242  1.00 12.34
ATOM   1538 2HA  GLY A 102      -3.029   2.111  10.840  1.00 41.10
ATOM   1539  C   GLY A 102      -3.842   3.479   9.444  1.00 21.33
ATOM   1540  O   GLY A 102      -4.860   4.122   9.674  1.00 71.31
ATOM   1541  N   ILE A 103      -2.861   3.935   8.726  1.00 22.13
ATOM   1542  H   ILE A 103      -2.087   3.347   8.577  1.00 72.11
ATOM   1543  CA  ILE A 103      -2.872   5.255   8.150  1.00 64.34
ATOM   1544  HA  ILE A 103      -3.163   5.942   8.930  1.00 52.24
ATOM   1545  CB  ILE A 103      -1.464   5.636   7.665  1.00 24.33
ATOM   1546  HB  ILE A 103      -1.147   4.921   6.919  1.00 35.21
ATOM   1547  CG2 ILE A 103      -1.468   7.033   7.041  1.00 41.04
ATOM   1548 1HG2 ILE A 103      -2.131   7.030   6.185  1.00 21.53
ATOM   1549 2HG2 ILE A 103      -0.471   7.289   6.718  1.00 45.53
ATOM   1550 3HG2 ILE A 103      -1.817   7.755   7.764  1.00 22.22
ATOM   1551  CG1 ILE A 103      -0.496   5.569   8.846  1.00 14.12
ATOM   1552 1HG1 ILE A 103      -0.687   6.402   9.506  1.00  4.21
ATOM   1553 2HG1 ILE A 103      -0.665   4.649   9.387  1.00 72.54
ATOM   1554  CD1 ILE A 103       0.952   5.622   8.458  1.00 30.55
ATOM   1555 1HD1 ILE A 103       1.553   5.579   9.354  1.00 54.33
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ATOM   1556 2HD1 ILE A 103       1.149   6.525   7.905  1.00 11.31
ATOM   1557 3HD1 ILE A 103       1.156   4.753   7.850  1.00 14.05
ATOM   1558  C   ILE A 103      -3.885   5.357   7.004  1.00 51.34
ATOM   1559  O   ILE A 103      -4.597   6.369   6.883  1.00 35.50
ATOM   1560  N   ILE A 104      -3.966   4.306   6.185  1.00 52.44
ATOM   1561  H   ILE A 104      -3.405   3.519   6.363  1.00 22.14
ATOM   1562  CA  ILE A 104      -4.868   4.312   5.042  1.00 60.45
ATOM   1563  HA  ILE A 104      -4.627   5.166   4.427  1.00  3.01
ATOM   1564  CB  ILE A 104      -4.720   3.017   4.179  1.00 54.50
ATOM   1565  HB  ILE A 104      -4.900   2.142   4.788  1.00 23.40
ATOM   1566  CG2 ILE A 104      -5.767   3.004   3.055  1.00 53.13
ATOM   1567 1HG2 ILE A 104      -5.598   3.842   2.395  1.00  3.45
ATOM   1568 2HG2 ILE A 104      -6.753   3.105   3.486  1.00 24.22
ATOM   1569 3HG2 ILE A 104      -5.703   2.082   2.497  1.00 72.44
ATOM   1570  CG1 ILE A 104      -3.313   2.927   3.585  1.00  3.11
ATOM   1571 1HG1 ILE A 104      -3.261   3.628   2.765  1.00 52.12
ATOM   1572 2HG1 ILE A 104      -2.569   3.197   4.320  1.00 40.41
ATOM   1573  CD1 ILE A 104      -2.978   1.555   3.020  1.00 22.25
ATOM   1574 1HD1 ILE A 104      -3.021   0.820   3.810  1.00 51.05
ATOM   1575 2HD1 ILE A 104      -1.989   1.569   2.589  1.00 12.30
ATOM   1576 3HD1 ILE A 104      -3.696   1.301   2.256  1.00 73.21
ATOM   1577  C   ILE A 104      -6.301   4.427   5.516  1.00 64.13
ATOM   1578  O   ILE A 104      -7.032   5.329   5.077  1.00 24.53
ATOM   1579  N   GLU A 105      -6.699   3.567   6.444  1.00 54.33
ATOM   1580  H   GLU A 105      -6.092   2.869   6.781  1.00  0.14
ATOM   1581  CA  GLU A 105      -8.029   3.676   6.959  1.00 14.41
ATOM   1582  HA  GLU A 105      -8.600   3.894   6.067  1.00 65.01
ATOM   1583  CB  GLU A 105      -8.622   2.443   7.603  1.00 41.05
ATOM   1584 1HB  GLU A 105      -9.693   2.576   7.667  1.00 31.11
ATOM   1585 2HB  GLU A 105      -8.428   1.602   6.953  1.00 42.50
ATOM   1586  CG  GLU A 105      -8.140   2.097   8.974  1.00 21.43
ATOM   1587 1HG  GLU A 105      -7.238   1.504   8.907  1.00  1.53
ATOM   1588 2HG  GLU A 105      -7.935   3.010   9.513  1.00  1.21
ATOM   1589  CD  GLU A 105      -9.243   1.359   9.685  1.00 63.00
ATOM   1590  OE1 GLU A 105      -9.573   0.230   9.274  1.00 54.04
ATOM   1591  OE2 GLU A 105      -9.876   1.957  10.593  1.00  5.00
ATOM   1592  C   GLU A 105      -8.227   4.912   7.797  1.00  1.32
ATOM   1593  O   GLU A 105      -9.296   5.452   7.821  1.00 63.44
ATOM   1594  N   GLY A 106      -7.175   5.350   8.491  1.00 73.22
ATOM   1595  H   GLY A 106      -6.329   4.855   8.439  1.00 32.13
ATOM   1596  CA  GLY A 106      -7.260   6.515   9.364  1.00 53.24
ATOM   1597 1HA  GLY A 106      -7.973   6.312  10.150  1.00 53.04
ATOM   1598 2HA  GLY A 106      -6.291   6.688   9.807  1.00 74.50
ATOM   1599  C   GLY A 106      -7.691   7.766   8.621  1.00 40.51
ATOM   1600  O   GLY A 106      -8.467   8.569   9.146  1.00 52.34
ATOM   1601  N   ASN A 107      -7.229   7.914   7.391  1.00  4.22
ATOM   1602  H   ASN A 107      -6.572   7.264   7.057  1.00 64.11
ATOM   1603  CA  ASN A 107      -7.661   9.031   6.538  1.00 23.44
ATOM   1604  HA  ASN A 107      -7.519   9.948   7.090  1.00  3.24
ATOM   1605  CB  ASN A 107      -6.832   9.072   5.242  1.00 30.40
ATOM   1606 1HB  ASN A 107      -5.795   9.234   5.489  1.00 24.52
ATOM   1607 2HB  ASN A 107      -6.930   8.119   4.742  1.00 35.42
ATOM   1608  CG  ASN A 107      -7.270  10.172   4.272  1.00 72.12
ATOM   1609  OD1 ASN A 107      -6.816  11.295   4.354  1.00  1.30
ATOM   1610  ND2 ASN A 107      -8.122   9.838   3.325  1.00 35.31
ATOM   1611 2HD2 ASN A 107      -8.446   8.914   3.268  1.00 54.54
ATOM   1612 1HD2 ASN A 107      -8.391  10.553   2.712  1.00 64.41
ATOM   1613  C   ASN A 107      -9.146   8.867   6.215  1.00 44.14
ATOM   1614  O   ASN A 107      -9.923   9.823   6.236  1.00 72.14
ATOM   1615  N   ILE A 108      -9.529   7.631   5.975  1.00 41.14
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ATOM   1616  H   ILE A 108      -8.856   6.917   6.014  1.00 11.13
ATOM   1617  CA  ILE A 108     -10.899   7.266   5.675  1.00 15.23
ATOM   1618  HA  ILE A 108     -11.222   7.912   4.874  1.00 53.31
ATOM   1619  CB  ILE A 108     -10.988   5.792   5.198  1.00 65.42
ATOM   1620  HB  ILE A 108     -10.619   5.155   5.989  1.00 24.20
ATOM   1621  CG2 ILE A 108     -12.435   5.399   4.893  1.00 31.33
ATOM   1622 1HG2 ILE A 108     -12.825   6.036   4.114  1.00 51.11
ATOM   1623 2HG2 ILE A 108     -13.030   5.519   5.786  1.00 11.25
ATOM   1624 3HG2 ILE A 108     -12.469   4.369   4.572  1.00 33.42
ATOM   1625  CG1 ILE A 108     -10.102   5.601   3.960  1.00  1.10
ATOM   1626 1HG1 ILE A 108     -10.496   6.195   3.151  1.00 42.02
ATOM   1627 2HG1 ILE A 108      -9.101   5.940   4.190  1.00 41.53
ATOM   1628  CD1 ILE A 108     -10.011   4.177   3.475  1.00 22.33
ATOM   1629 1HD1 ILE A 108     -10.997   3.821   3.218  1.00 63.23
ATOM   1630 2HD1 ILE A 108      -9.592   3.557   4.252  1.00 23.01
ATOM   1631 3HD1 ILE A 108      -9.377   4.144   2.603  1.00 43.21
ATOM   1632  C   ILE A 108     -11.792   7.491   6.910  1.00 20.42
ATOM   1633  O   ILE A 108     -12.913   7.952   6.791  1.00 42.50
ATOM   1634  N   ARG A 109     -11.248   7.180   8.090  1.00 34.03
ATOM   1635  H   ARG A 109     -10.340   6.799   8.072  1.00 32.24
ATOM   1636  CA  ARG A 109     -11.937   7.326   9.379  1.00 15.50
ATOM   1637  HA  ARG A 109     -12.797   6.675   9.391  1.00 33.21
ATOM   1638  CB  ARG A 109     -11.012   6.946  10.555  1.00 50.32
ATOM   1639 1HB  ARG A 109     -10.105   7.524  10.465  1.00 63.31
ATOM   1640 2HB  ARG A 109     -11.504   7.239  11.471  1.00 63.01
ATOM   1641  CG  ARG A 109     -10.605   5.477  10.679  1.00 61.41
ATOM   1642 1HG  ARG A 109     -10.369   5.103   9.693  1.00 61.11
ATOM   1643 2HG  ARG A 109      -9.721   5.418  11.297  1.00 71.12
ATOM   1644  CD  ARG A 109     -11.693   4.585  11.280  1.00 12.05
ATOM   1645 1HD  ARG A 109     -11.277   3.603  11.450  1.00 12.32
ATOM   1646 2HD  ARG A 109     -11.981   5.007  12.233  1.00 42.15
ATOM   1647  NE  ARG A 109     -12.897   4.445  10.444  1.00 22.00
ATOM   1648  HE  ARG A 109     -13.502   5.217  10.445  1.00 62.10
ATOM   1649  CZ  ARG A 109     -13.213   3.319   9.781  1.00 34.13
ATOM   1650  NH1 ARG A 109     -12.359   2.303   9.747  1.00 42.10
ATOM   1651 1HH1 ARG A 109     -11.447   2.300  10.201  1.00 35.10
ATOM   1652 2HH1 ARG A 109     -12.500   1.434   9.253  1.00 31.45
ATOM   1653  NH2 ARG A 109     -14.387   3.221   9.156  1.00 23.21
ATOM   1654 1HH2 ARG A 109     -15.063   3.969   9.165  1.00 42.33
ATOM   1655 2HH2 ARG A 109     -14.634   2.387   8.658  1.00 42.41
ATOM   1656  C   ARG A 109     -12.368   8.755   9.584  1.00 14.44
ATOM   1657  O   ARG A 109     -13.456   8.992  10.073  1.00 22.51
ATOM   1658  N   TYR A 110     -11.516   9.697   9.186  1.00 44.35
ATOM   1659  H   TYR A 110     -10.658   9.430   8.792  1.00 71.22
ATOM   1660  CA  TYR A 110     -11.828  11.110   9.333  1.00 70.14
ATOM   1661  HA  TYR A 110     -12.049  11.292  10.374  1.00 50.02
ATOM   1662  CB  TYR A 110     -10.621  11.971   8.918  1.00 73.32
ATOM   1663 1HB  TYR A 110      -9.778  11.721   9.544  1.00 11.44
ATOM   1664 2HB  TYR A 110     -10.371  11.744   7.891  1.00  4.12
ATOM   1665  CG  TYR A 110     -10.843  13.471   9.025  1.00 52.00
ATOM   1666  CD1 TYR A 110     -10.928  14.268   7.885  1.00 21.02
ATOM   1667  HD1 TYR A 110     -10.832  13.807   6.914  1.00 52.44
ATOM   1668  CE1 TYR A 110     -11.125  15.634   7.981  1.00 50.45
ATOM   1669  HE1 TYR A 110     -11.188  16.236   7.085  1.00 31.24
ATOM   1670  CZ  TYR A 110     -11.247  16.221   9.225  1.00 44.43
ATOM   1671  CE2 TYR A 110     -11.170  15.452  10.367  1.00 21.40
ATOM   1672  HE2 TYR A 110     -11.265  15.911  11.341  1.00 44.33
ATOM   1673  CD2 TYR A 110     -10.968  14.088  10.264  1.00 63.24
ATOM   1674  HD2 TYR A 110     -10.907  13.484  11.158  1.00 45.32
ATOM   1675  OH  TYR A 110     -11.437  17.587   9.331  1.00  2.41
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ATOM   1676  HH  TYR A 110     -10.893  17.918  10.046  1.00  3.42
ATOM   1677  C   TYR A 110     -13.058  11.459   8.505  1.00 14.05
ATOM   1678  O   TYR A 110     -14.042  11.919   9.049  1.00  3.04
ATOM   1679  N   ALA A 111     -13.032  11.087   7.227  1.00 30.23
ATOM   1680  H   ALA A 111     -12.242  10.614   6.893  1.00 45.32
ATOM   1681  CA  ALA A 111     -14.142  11.364   6.293  1.00 63.13
ATOM   1682  HA  ALA A 111     -14.358  12.421   6.345  1.00 74.21
ATOM   1683  CB  ALA A 111     -13.727  11.019   4.871  1.00 51.10
ATOM   1684 1HB  ALA A 111     -13.523   9.961   4.804  1.00 73.43
ATOM   1685 2HB  ALA A 111     -12.839  11.575   4.609  1.00 54.53
ATOM   1686 3HB  ALA A 111     -14.527  11.275   4.191  1.00 21.53
ATOM   1687  C   ALA A 111     -15.404  10.586   6.686  1.00 51.23
ATOM   1688  O   ALA A 111     -16.512  10.912   6.300  1.00 11.03
ATOM   1689  N   ASN A 112     -15.191   9.515   7.402  1.00  3.52
ATOM   1690  H   ASN A 112     -14.258   9.296   7.614  1.00  0.34
ATOM   1691  CA  ASN A 112     -16.251   8.652   7.882  1.00 21.44
ATOM   1692  HA  ASN A 112     -16.969   8.534   7.084  1.00 62.03
ATOM   1693  CB  ASN A 112     -15.641   7.267   8.209  1.00 73.21
ATOM   1694 1HB  ASN A 112     -15.120   6.907   7.335  1.00 51.24
ATOM   1695 2HB  ASN A 112     -14.916   7.403   8.999  1.00 73.13
ATOM   1696  CG  ASN A 112     -16.618   6.173   8.636  1.00 63.52
ATOM   1697  OD1 ASN A 112     -16.238   5.264   9.383  1.00 11.12
ATOM   1698  ND2 ASN A 112     -17.838   6.212   8.160  1.00 23.43
ATOM   1699 2HD2 ASN A 112     -18.085   6.940   7.552  1.00 61.44
ATOM   1700 1HD2 ASN A 112     -18.466   5.521   8.454  1.00 60.13
ATOM   1701  C   ASN A 112     -16.956   9.276   9.103  1.00 52.20
ATOM   1702  O   ASN A 112     -18.018   8.819   9.518  1.00 41.41
ATOM   1703  N   THR A 113     -16.367  10.320   9.660  1.00 20.20
ATOM   1704  H   THR A 113     -15.530  10.659   9.277  1.00 61.35
ATOM   1705  CA  THR A 113     -16.940  10.984  10.817  1.00 24.25
ATOM   1706  HA  THR A 113     -17.888  10.503  11.013  1.00  5.22
ATOM   1707  CB  THR A 113     -16.047  10.805  12.079  1.00 53.54
ATOM   1708  HB  THR A 113     -16.420  11.463  12.850  1.00 21.35
ATOM   1709  OG1 THR A 113     -14.679  11.169  11.793  1.00 30.12
ATOM   1710  HG1 THR A 113     -14.620  11.572  10.920  1.00 22.25
ATOM   1711  CG2 THR A 113     -16.093   9.369  12.588  1.00 53.22
ATOM   1712 1HG2 THR A 113     -17.109   9.112  12.853  1.00 72.25
ATOM   1713 2HG2 THR A 113     -15.460   9.270  13.456  1.00  4.33
ATOM   1714 3HG2 THR A 113     -15.746   8.704  11.812  1.00 23.22
ATOM   1715  C   THR A 113     -17.217  12.479  10.568  1.00 63.30
ATOM   1716  O   THR A 113     -18.211  13.023  11.064  1.00 13.34
ATOM   1717  N   HIS A 114     -16.352  13.110   9.798  1.00 63.31
ATOM   1718  H   HIS A 114     -15.604  12.659   9.347  1.00 52.33
ATOM   1719  CA  HIS A 114     -16.410  14.519   9.499  1.00 45.24
ATOM   1720  HA  HIS A 114     -17.419  14.779   9.214  1.00 65.24
ATOM   1721  CB  HIS A 114     -15.979  15.344  10.747  1.00 55.12
ATOM   1722 1HB  HIS A 114     -16.661  15.130  11.558  1.00 44.14
ATOM   1723 2HB  HIS A 114     -14.987  15.034  11.038  1.00 24.23
ATOM   1724  CG  HIS A 114     -15.964  16.841  10.556  1.00 41.14
ATOM   1725  ND1 HIS A 114     -15.001  17.495   9.832  1.00 13.32
ATOM   1726  CD2 HIS A 114     -16.798  17.802  11.023  1.00 12.35
ATOM   1727  HD1 HIS A 114     -14.295  17.020   9.330  1.00 54.41
ATOM   1728  CE1 HIS A 114     -15.253  18.798   9.877  1.00 12.23
ATOM   1729  NE2 HIS A 114     -16.341  19.049  10.592  1.00 54.14
ATOM   1730  HD2 HIS A 114     -17.676  17.640  11.632  1.00 64.52
ATOM   1731  HE1 HIS A 114     -14.651  19.555   9.394  1.00 52.20
ATOM   1732  C   HIS A 114     -15.452  14.773   8.330  1.00 33.24
ATOM   1733  O   HIS A 114     -14.257  15.055   8.588  1.00 64.14
TER    1734      HIS A 114
ENDMDL
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MODEL       16
ATOM      1  N   MET A   1     -15.169 -12.184   1.936  1.00 52.25
ATOM      2  CA  MET A   1     -13.701 -12.296   2.084  1.00 10.11
ATOM      3  HA  MET A   1     -13.498 -12.826   3.004  1.00 55.20
ATOM      4  CB  MET A   1     -13.032 -12.994   0.885  1.00 34.10
ATOM      5 1HB  MET A   1     -13.423 -13.998   0.806  1.00 23.33
ATOM      6 2HB  MET A   1     -13.274 -12.448  -0.014  1.00 55.11
ATOM      7  CG  MET A   1     -11.507 -13.075   1.009  1.00  3.53
ATOM      8 1HG  MET A   1     -11.114 -12.072   1.090  1.00 35.32
ATOM      9 2HG  MET A   1     -11.267 -13.618   1.912  1.00  2.43
ATOM     10  SD  MET A   1     -10.700 -13.883  -0.385  1.00 33.15
ATOM     11  CE  MET A   1     -11.155 -12.807  -1.752  1.00  5.35
ATOM     12 1HE  MET A   1     -10.700 -13.172  -2.661  1.00 14.24
ATOM     13 2HE  MET A   1     -10.809 -11.802  -1.553  1.00 30.42
ATOM     14 3HE  MET A   1     -12.228 -12.801  -1.867  1.00 31.51
ATOM     15  C   MET A   1     -13.204 -10.914   2.221  1.00 22.44
ATOM     16  O   MET A   1     -12.992 -10.218   1.247  1.00 12.12
ATOM     17  N   ASP A   2     -13.067 -10.516   3.436  1.00 41.21
ATOM     18  H   ASP A   2     -13.120 -11.140   4.186  1.00 33.24
ATOM     19  CA  ASP A   2     -12.946  -9.126   3.743  1.00  2.33
ATOM     20  HA  ASP A   2     -13.076  -8.557   2.835  1.00  3.54
ATOM     21  CB  ASP A   2     -14.113  -8.782   4.662  1.00 13.50
ATOM     22 1HB  ASP A   2     -14.020  -9.340   5.583  1.00 42.51
ATOM     23 2HB  ASP A   2     -14.101  -7.723   4.877  1.00 74.40
ATOM     24  CG  ASP A   2     -15.453  -9.131   4.003  1.00 44.33
ATOM     25  OD1 ASP A   2     -15.771 -10.386   3.850  1.00 24.23
ATOM     26  OD2 ASP A   2     -16.147  -8.215   3.589  1.00 21.25
ATOM     27  C   ASP A   2     -11.629  -8.794   4.365  1.00 24.24
ATOM     28  O   ASP A   2     -11.320  -7.637   4.606  1.00 35.15
ATOM     29  N   LYS A   3     -10.839  -9.806   4.625  1.00 65.44
ATOM     30  H   LYS A   3     -11.147 -10.707   4.407  1.00 62.12
ATOM     31  CA  LYS A   3      -9.518  -9.616   5.173  1.00 34.33
ATOM     32  HA  LYS A   3      -9.229  -8.627   4.851  1.00 43.42
ATOM     33  CB  LYS A   3      -9.488  -9.652   6.720  1.00  5.24
ATOM     34 1HB  LYS A   3     -10.084 -10.485   7.061  1.00 51.42
ATOM     35 2HB  LYS A   3      -8.468  -9.795   7.045  1.00 24.31
ATOM     36  CG  LYS A   3     -10.023  -8.378   7.364  1.00 52.43
ATOM     37 1HG  LYS A   3     -10.973  -8.136   6.913  1.00 74.32
ATOM     38 2HG  LYS A   3     -10.152  -8.540   8.423  1.00 23.32
ATOM     39  CD  LYS A   3      -9.056  -7.212   7.147  1.00 51.11
ATOM     40 1HD  LYS A   3      -8.228  -7.316   7.832  1.00 63.15
ATOM     41 2HD  LYS A   3      -8.680  -7.233   6.136  1.00 53.14
ATOM     42  CE  LYS A   3      -9.720  -5.871   7.397  1.00 62.12
ATOM     43 1HE  LYS A   3     -10.233  -5.922   8.345  1.00 30.42
ATOM     44 2HE  LYS A   3      -8.955  -5.110   7.431  1.00 62.22
ATOM     45  NZ  LYS A   3     -10.703  -5.537   6.325  1.00 24.22
ATOM     46 1HZ  LYS A   3     -11.448  -6.255   6.215  1.00 62.52
ATOM     47 2HZ  LYS A   3     -10.210  -5.509   5.406  1.00 60.42
ATOM     48 3HZ  LYS A   3     -11.146  -4.615   6.498  1.00 44.51
ATOM     49  C   LYS A   3      -8.524 -10.555   4.552  1.00 63.44
ATOM     50  O   LYS A   3      -8.008 -10.267   3.477  1.00 60.31
ATOM     51  N   GLY A   4      -8.318 -11.706   5.169  1.00 41.12
ATOM     52  H   GLY A   4      -8.818 -11.922   5.981  1.00  4.24
ATOM     53  CA  GLY A   4      -7.313 -12.628   4.667  1.00 11.21
ATOM     54 1HA  GLY A   4      -7.331 -13.531   5.259  1.00 72.15
ATOM     55 2HA  GLY A   4      -7.519 -12.863   3.634  1.00 35.21
ATOM     56  C   GLY A   4      -5.954 -11.982   4.763  1.00 12.11
ATOM     57  O   GLY A   4      -5.131 -12.084   3.853  1.00 75.41
ATOM     58  N   THR A   5      -5.760 -11.295   5.863  1.00 72.24
ATOM     59  H   THR A   5      -6.444 -11.271   6.561  1.00 22.44
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ATOM     60  CA  THR A   5      -4.586 -10.550   6.128  1.00 64.55
ATOM     61  HA  THR A   5      -4.285 -10.015   5.239  1.00 23.34
ATOM     62  CB  THR A   5      -4.899  -9.533   7.230  1.00 34.50
ATOM     63  HB  THR A   5      -5.116 -10.072   8.142  1.00 22.12
ATOM     64  OG1 THR A   5      -6.075  -8.786   6.839  1.00 70.34
ATOM     65  HG1 THR A   5      -5.785  -8.084   6.239  1.00 13.22
ATOM     66  CG2 THR A   5      -3.735  -8.576   7.458  1.00 73.42
ATOM     67 1HG2 THR A   5      -3.995  -7.873   8.235  1.00 21.32
ATOM     68 2HG2 THR A   5      -3.519  -8.042   6.547  1.00 41.33
ATOM     69 3HG2 THR A   5      -2.863  -9.137   7.759  1.00 50.43
ATOM     70  C   THR A   5      -3.492 -11.493   6.573  1.00 42.23
ATOM     71  O   THR A   5      -3.531 -12.043   7.671  1.00  5.34
ATOM     72  N   GLN A   6      -2.560 -11.714   5.696  1.00  4.52
ATOM     73  H   GLN A   6      -2.583 -11.211   4.851  1.00 22.01
ATOM     74  CA  GLN A   6      -1.493 -12.630   5.940  1.00 13.41
ATOM     75  HA  GLN A   6      -1.501 -12.904   6.983  1.00 32.55
ATOM     76  CB  GLN A   6      -1.676 -13.900   5.100  1.00 52.42
ATOM     77 1HB  GLN A   6      -1.694 -13.610   4.060  1.00 54.34
ATOM     78 2HB  GLN A   6      -0.829 -14.546   5.264  1.00 65.44
ATOM     79  CG  GLN A   6      -2.957 -14.677   5.395  1.00 20.22
ATOM     80 1HG  GLN A   6      -2.944 -14.983   6.432  1.00 64.14
ATOM     81 2HG  GLN A   6      -3.802 -14.026   5.228  1.00 25.43
ATOM     82  CD  GLN A   6      -3.120 -15.920   4.536  1.00 75.52
ATOM     83  OE1 GLN A   6      -3.716 -16.894   4.951  1.00 55.12
ATOM     84  NE2 GLN A   6      -2.599 -15.893   3.330  1.00 51.20
ATOM     85 2HE2 GLN A   6      -2.135 -15.083   3.040  1.00 62.31
ATOM     86 1HE2 GLN A   6      -2.707 -16.704   2.793  1.00 30.01
ATOM     87  C   GLN A   6      -0.183 -11.988   5.589  1.00 41.01
ATOM     88  O   GLN A   6      -0.081 -11.261   4.593  1.00 60.05
ATOM     89  N   TYR A   7       0.789 -12.215   6.412  1.00 25.43
ATOM     90  H   TYR A   7       0.625 -12.731   7.229  1.00  3.32
ATOM     91  CA  TYR A   7       2.121 -11.769   6.164  1.00 12.12
ATOM     92  HA  TYR A   7       2.119 -11.349   5.168  1.00 63.10
ATOM     93  CB  TYR A   7       2.570 -10.680   7.179  1.00 20.32
ATOM     94 1HB  TYR A   7       3.598 -10.418   6.981  1.00 25.44
ATOM     95 2HB  TYR A   7       1.957  -9.804   7.024  1.00 52.04
ATOM     96  CG  TYR A   7       2.477 -11.057   8.655  1.00 62.44
ATOM     97  CD1 TYR A   7       1.274 -10.941   9.348  1.00 64.45
ATOM     98  HD1 TYR A   7       0.399 -10.591   8.821  1.00 32.44
ATOM     99  CE1 TYR A   7       1.188 -11.268  10.686  1.00 33.01
ATOM    100  HE1 TYR A   7       0.245 -11.171  11.205  1.00  1.14
ATOM    101  CZ  TYR A   7       2.307 -11.717  11.353  1.00 63.11
ATOM    102  CE2 TYR A   7       3.510 -11.841  10.691  1.00  3.51
ATOM    103  HE2 TYR A   7       4.387 -12.192  11.214  1.00 10.43
ATOM    104  CD2 TYR A   7       3.592 -11.509   9.353  1.00  0.13
ATOM    105  HD2 TYR A   7       4.533 -11.603   8.833  1.00 73.11
ATOM    106  OH  TYR A   7       2.224 -12.045  12.687  1.00 54.25
ATOM    107  HH  TYR A   7       2.982 -11.679  13.149  1.00 63.12
ATOM    108  C   TYR A   7       3.040 -12.975   6.142  1.00 71.11
ATOM    109  O   TYR A   7       3.122 -13.719   7.116  1.00 74.21
ATOM    110  N   LYS A   8       3.669 -13.204   5.032  1.00 15.43
ATOM    111  H   LYS A   8       3.565 -12.582   4.275  1.00  0.41
ATOM    112  CA  LYS A   8       4.554 -14.322   4.893  1.00 62.05
ATOM    113  HA  LYS A   8       4.879 -14.580   5.889  1.00 25.23
ATOM    114  CB  LYS A   8       3.860 -15.562   4.276  1.00 51.43
ATOM    115 1HB  LYS A   8       3.174 -15.976   5.000  1.00 75.44
ATOM    116 2HB  LYS A   8       3.313 -15.262   3.393  1.00 12.30
ATOM    117  CG  LYS A   8       4.865 -16.637   3.879  1.00 55.42
ATOM    118 1HG  LYS A   8       5.484 -16.249   3.083  1.00 74.31
ATOM    119 2HG  LYS A   8       5.494 -16.839   4.734  1.00 41.03
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ATOM    120  CD  LYS A   8       4.255 -17.930   3.400  1.00  1.41
ATOM    121 1HD  LYS A   8       3.800 -18.442   4.236  1.00  4.12
ATOM    122 2HD  LYS A   8       3.509 -17.717   2.648  1.00 20.54
ATOM    123  CE  LYS A   8       5.344 -18.819   2.783  1.00 75.43
ATOM    124 1HE  LYS A   8       4.925 -19.797   2.595  1.00 53.33
ATOM    125 2HE  LYS A   8       5.656 -18.382   1.847  1.00 73.15
ATOM    126  NZ  LYS A   8       6.540 -18.979   3.670  1.00 24.31
ATOM    127 1HZ  LYS A   8       6.362 -19.439   4.581  1.00 51.13
ATOM    128 2HZ  LYS A   8       6.974 -18.039   3.855  1.00 24.11
ATOM    129 3HZ  LYS A   8       7.310 -19.465   3.171  1.00 63.42
ATOM    130  C   LYS A   8       5.776 -13.950   4.101  1.00  4.30
ATOM    131  O   LYS A   8       5.670 -13.411   3.007  1.00 11.11
ATOM    132  N   ASP A   9       6.928 -14.226   4.698  1.00 22.03
ATOM    133  H   ASP A   9       6.900 -14.625   5.591  1.00  1.34
ATOM    134  CA  ASP A   9       8.265 -14.034   4.103  1.00 42.11
ATOM    135  HA  ASP A   9       8.999 -14.232   4.871  1.00 12.31
ATOM    136  CB  ASP A   9       8.488 -15.031   2.922  1.00 72.51
ATOM    137 1HB  ASP A   9       7.789 -14.794   2.134  1.00 54.02
ATOM    138 2HB  ASP A   9       9.491 -14.904   2.545  1.00 53.11
ATOM    139  CG  ASP A   9       8.287 -16.512   3.291  1.00 70.25
ATOM    140  OD1 ASP A   9       7.970 -16.840   4.468  1.00 70.13
ATOM    141  OD2 ASP A   9       8.346 -17.380   2.403  1.00  5.45
ATOM    142  C   ASP A   9       8.433 -12.596   3.624  1.00 34.22
ATOM    143  O   ASP A   9       9.103 -12.318   2.641  1.00 23.24
ATOM    144  N   GLY A  10       7.867 -11.676   4.385  1.00 11.14
ATOM    145  H   GLY A  10       7.357 -11.971   5.167  1.00 30.32
ATOM    146  CA  GLY A  10       7.969 -10.277   4.067  1.00 74.40
ATOM    147 1HA  GLY A  10       8.005  -9.710   4.985  1.00 60.32
ATOM    148 2HA  GLY A  10       8.887 -10.119   3.521  1.00 23.04
ATOM    149  C   GLY A  10       6.807  -9.769   3.223  1.00  1.40
ATOM    150  O   GLY A  10       6.531  -8.558   3.213  1.00 11.03
ATOM    151  N   TYR A  11       6.121 -10.667   2.546  1.00 25.21
ATOM    152  H   TYR A  11       6.321 -11.625   2.661  1.00 13.04
ATOM    153  CA  TYR A  11       5.039 -10.309   1.646  1.00 74.32
ATOM    154  HA  TYR A  11       5.280  -9.370   1.171  1.00 51.40
ATOM    155  CB  TYR A  11       4.881 -11.404   0.581  1.00 74.43
ATOM    156 1HB  TYR A  11       5.861 -11.765   0.305  1.00 20.02
ATOM    157 2HB  TYR A  11       4.317 -12.222   1.007  1.00 40.53
ATOM    158  CG  TYR A  11       4.185 -10.969  -0.689  1.00 43.32
ATOM    159  CD1 TYR A  11       4.924 -10.474  -1.755  1.00 65.14
ATOM    160  HD1 TYR A  11       5.998 -10.398  -1.661  1.00  4.34
ATOM    161  CE1 TYR A  11       4.322 -10.084  -2.927  1.00 40.52
ATOM    162  HE1 TYR A  11       4.919  -9.703  -3.743  1.00 15.44
ATOM    163  CZ  TYR A  11       2.960 -10.178  -3.051  1.00 53.15
ATOM    164  CE2 TYR A  11       2.196 -10.664  -2.009  1.00  1.10
ATOM    165  HE2 TYR A  11       1.123 -10.738  -2.107  1.00 22.42
ATOM    166  CD2 TYR A  11       2.812 -11.058  -0.836  1.00 35.52
ATOM    167  HD2 TYR A  11       2.220 -11.439  -0.016  1.00 71.43
ATOM    168  OH  TYR A  11       2.358  -9.793  -4.225  1.00 63.31
ATOM    169  HH  TYR A  11       1.565  -9.276  -4.033  1.00 54.12
ATOM    170  C   TYR A  11       3.759 -10.150   2.465  1.00 33.22
ATOM    171  O   TYR A  11       3.452 -10.987   3.320  1.00 63.12
ATOM    172  N   TYR A  12       3.040  -9.084   2.228  1.00 60.53
ATOM    173  H   TYR A  12       3.264  -8.503   1.468  1.00 53.01
ATOM    174  CA  TYR A  12       1.868  -8.765   3.019  1.00 54.43
ATOM    175  HA  TYR A  12       1.733  -9.539   3.757  1.00 33.41
ATOM    176  CB  TYR A  12       2.118  -7.423   3.737  1.00  2.23
ATOM    177 1HB  TYR A  12       3.063  -7.482   4.257  1.00 44.23
ATOM    178 2HB  TYR A  12       2.187  -6.641   2.998  1.00 20.12
ATOM    179  CG  TYR A  12       1.079  -7.007   4.759  1.00 62.53
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ATOM    180  CD1 TYR A  12       1.271  -7.265   6.111  1.00 61.44
ATOM    181  HD1 TYR A  12       2.165  -7.783   6.423  1.00 20.42
ATOM    182  CE1 TYR A  12       0.341  -6.867   7.051  1.00 60.41
ATOM    183  HE1 TYR A  12       0.506  -7.077   8.098  1.00 10.10
ATOM    184  CZ  TYR A  12      -0.795  -6.210   6.643  1.00 50.50
ATOM    185  CE2 TYR A  12      -1.004  -5.946   5.310  1.00 74.34
ATOM    186  HE2 TYR A  12      -1.897  -5.434   4.986  1.00 10.51
ATOM    187  CD2 TYR A  12      -0.075  -6.339   4.378  1.00 25.12
ATOM    188  HD2 TYR A  12      -0.238  -6.134   3.331  1.00 14.42
ATOM    189  OH  TYR A  12      -1.726  -5.805   7.571  1.00  2.21
ATOM    190  HH  TYR A  12      -1.291  -5.423   8.341  1.00 54.14
ATOM    191  C   TYR A  12       0.627  -8.697   2.116  1.00 62.10
ATOM    192  O   TYR A  12       0.645  -8.033   1.079  1.00 62.03
ATOM    193  N   ILE A  13      -0.423  -9.397   2.489  1.00 15.13
ATOM    194  H   ILE A  13      -0.378  -9.944   3.310  1.00 44.22
ATOM    195  CA  ILE A  13      -1.671  -9.398   1.726  1.00 41.12
ATOM    196  HA  ILE A  13      -1.605  -8.649   0.950  1.00 12.12
ATOM    197  CB  ILE A  13      -1.940 -10.794   1.080  1.00 72.42
ATOM    198  HB  ILE A  13      -2.125 -11.504   1.872  1.00 74.21
ATOM    199  CG2 ILE A  13      -3.184 -10.735   0.186  1.00  3.32
ATOM    200 1HG2 ILE A  13      -3.358 -11.704  -0.256  1.00 65.33
ATOM    201 2HG2 ILE A  13      -3.035 -10.005  -0.596  1.00 42.31
ATOM    202 3HG2 ILE A  13      -4.041 -10.450   0.778  1.00 33.01
ATOM    203  CG1 ILE A  13      -0.727 -11.257   0.260  1.00  3.34
ATOM    204 1HG1 ILE A  13      -0.592 -10.588  -0.576  1.00 54.21
ATOM    205 2HG1 ILE A  13       0.152 -11.218   0.888  1.00 53.25
ATOM    206  CD1 ILE A  13      -0.848 -12.664  -0.292  1.00 31.31
ATOM    207 1HD1 ILE A  13      -0.963 -13.358   0.529  1.00 70.55
ATOM    208 2HD1 ILE A  13       0.044 -12.909  -0.849  1.00 34.23
ATOM    209 3HD1 ILE A  13      -1.709 -12.726  -0.940  1.00 51.52
ATOM    210  C   ILE A  13      -2.829  -9.066   2.670  1.00 60.20
ATOM    211  O   ILE A  13      -2.851  -9.563   3.794  1.00 14.40
ATOM    212  N   THR A  14      -3.755  -8.215   2.239  1.00 22.34
ATOM    213  H   THR A  14      -3.680  -7.792   1.354  1.00 21.50
ATOM    214  CA  THR A  14      -4.907  -7.878   3.054  1.00 61.04
ATOM    215  HA  THR A  14      -5.253  -8.790   3.514  1.00 20.24
ATOM    216  CB  THR A  14      -4.526  -6.848   4.172  1.00  1.31
ATOM    217  HB  THR A  14      -3.673  -7.243   4.704  1.00 54.34
ATOM    218  OG1 THR A  14      -5.613  -6.662   5.110  1.00 64.14
ATOM    219  HG1 THR A  14      -5.418  -5.859   5.607  1.00 43.53
ATOM    220  CG2 THR A  14      -4.147  -5.499   3.573  1.00 54.10
ATOM    221 1HG2 THR A  14      -4.977  -5.121   2.993  1.00  2.23
ATOM    222 2HG2 THR A  14      -3.285  -5.616   2.934  1.00 20.40
ATOM    223 3HG2 THR A  14      -3.918  -4.803   4.366  1.00 53.11
ATOM    224  C   THR A  14      -6.045  -7.333   2.159  1.00 33.15
ATOM    225  O   THR A  14      -5.828  -7.017   0.980  1.00 32.43
ATOM    226  N   THR A  15      -7.242  -7.264   2.700  1.00 14.04
ATOM    227  H   THR A  15      -7.352  -7.529   3.638  1.00  1.11
ATOM    228  CA  THR A  15      -8.380  -6.747   1.977  1.00 42.11
ATOM    229  HA  THR A  15      -8.031  -6.397   1.016  1.00  1.03
ATOM    230  CB  THR A  15      -9.449  -7.842   1.763  1.00 40.41
ATOM    231  HB  THR A  15      -9.922  -8.064   2.709  1.00  2.03
ATOM    232  OG1 THR A  15      -8.810  -9.022   1.261  1.00 23.13
ATOM    233  HG1 THR A  15      -8.261  -9.322   2.003  1.00 54.30
ATOM    234  CG2 THR A  15     -10.508  -7.391   0.761  1.00  3.43
ATOM    235 1HG2 THR A  15     -10.992  -6.498   1.129  1.00 71.43
ATOM    236 2HG2 THR A  15     -11.241  -8.173   0.635  1.00 34.24
ATOM    237 3HG2 THR A  15     -10.040  -7.182  -0.189  1.00 23.30
ATOM    238  C   THR A  15      -8.981  -5.566   2.748  1.00 33.45
ATOM    239  O   THR A  15      -9.195  -5.642   3.974  1.00 21.24
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ATOM    240  N   LEU A  16      -9.226  -4.492   2.060  1.00 73.33
ATOM    241  H   LEU A  16      -9.054  -4.479   1.089  1.00  4.11
ATOM    242  CA  LEU A  16      -9.804  -3.318   2.644  1.00 75.21
ATOM    243  HA  LEU A  16      -9.816  -3.460   3.714  1.00 52.43
ATOM    244  CB  LEU A  16      -8.987  -2.043   2.313  1.00  0.25
ATOM    245 1HB  LEU A  16      -8.743  -2.084   1.261  1.00 12.25
ATOM    246 2HB  LEU A  16      -9.627  -1.189   2.468  1.00 54.21
ATOM    247  CG  LEU A  16      -7.663  -1.807   3.088  1.00 52.45
ATOM    248  HG  LEU A  16      -7.301  -0.824   2.819  1.00 43.21
ATOM    249  CD1 LEU A  16      -7.903  -1.779   4.583  1.00 33.41
ATOM    250 1HD1 LEU A  16      -8.636  -1.021   4.812  1.00 34.21
ATOM    251 2HD1 LEU A  16      -6.977  -1.547   5.088  1.00 53.33
ATOM    252 3HD1 LEU A  16      -8.259  -2.743   4.918  1.00 54.15
ATOM    253  CD2 LEU A  16      -6.591  -2.826   2.734  1.00  4.42
ATOM    254 1HD2 LEU A  16      -5.707  -2.636   3.323  1.00 65.43
ATOM    255 2HD2 LEU A  16      -6.341  -2.742   1.688  1.00 32.51
ATOM    256 3HD2 LEU A  16      -6.955  -3.822   2.940  1.00  4.51
ATOM    257  C   LEU A  16     -11.229  -3.171   2.171  1.00 71.04
ATOM    258  O   LEU A  16     -11.496  -3.192   0.976  1.00 31.42
ATOM    259  N   ASN A  17     -12.135  -3.022   3.105  1.00 75.20
ATOM    260  H   ASN A  17     -11.852  -2.999   4.040  1.00 53.44
ATOM    261  CA  ASN A  17     -13.567  -2.869   2.807  1.00 12.25
ATOM    262  HA  ASN A  17     -13.807  -3.452   1.932  1.00 24.42
ATOM    263  CB  ASN A  17     -14.420  -3.351   3.999  1.00 74.21
ATOM    264 1HB  ASN A  17     -14.115  -2.814   4.885  1.00 71.45
ATOM    265 2HB  ASN A  17     -15.457  -3.124   3.796  1.00 14.53
ATOM    266  CG  ASN A  17     -14.298  -4.832   4.288  1.00 13.00
ATOM    267  OD1 ASN A  17     -13.398  -5.261   5.048  1.00  0.33
ATOM    268  ND2 ASN A  17     -15.198  -5.607   3.723  1.00 42.11
ATOM    269 2HD2 ASN A  17     -15.879  -5.196   3.153  1.00 34.31
ATOM    270 1HD2 ASN A  17     -15.234  -6.585   3.862  1.00 11.51
ATOM    271  C   ASN A  17     -13.858  -1.407   2.548  1.00 50.23
ATOM    272  O   ASN A  17     -14.697  -0.799   3.208  1.00  1.22
ATOM    273  N   TYR A  18     -13.134  -0.843   1.611  1.00 40.21
ATOM    274  H   TYR A  18     -12.558  -1.412   1.056  1.00 63.34
ATOM    275  CA  TYR A  18     -13.223   0.564   1.303  1.00 65.41
ATOM    276  HA  TYR A  18     -14.208   0.901   1.591  1.00 52.53
ATOM    277  CB  TYR A  18     -12.156   1.379   2.083  1.00 31.33
ATOM    278 1HB  TYR A  18     -11.172   1.039   1.797  1.00 35.14
ATOM    279 2HB  TYR A  18     -12.259   2.422   1.822  1.00 70.14
ATOM    280  CG  TYR A  18     -12.269   1.260   3.603  1.00 35.55
ATOM    281  CD1 TYR A  18     -11.393   0.459   4.328  1.00  3.00
ATOM    282  HD1 TYR A  18     -10.601  -0.058   3.809  1.00 73.41
ATOM    283  CE1 TYR A  18     -11.518   0.315   5.697  1.00 15.03
ATOM    284  HE1 TYR A  18     -10.826  -0.312   6.239  1.00 22.13
ATOM    285  CZ  TYR A  18     -12.523   0.979   6.364  1.00 63.11
ATOM    286  CE2 TYR A  18     -13.404   1.782   5.671  1.00 32.12
ATOM    287  HE2 TYR A  18     -14.193   2.303   6.193  1.00  3.44
ATOM    288  CD2 TYR A  18     -13.278   1.915   4.300  1.00 34.11
ATOM    289  HD2 TYR A  18     -13.968   2.543   3.755  1.00 30.01
ATOM    290  OH  TYR A  18     -12.663   0.826   7.736  1.00 25.10
ATOM    291  HH  TYR A  18     -13.594   0.639   7.894  1.00 51.33
ATOM    292  C   TYR A  18     -13.058   0.753  -0.191  1.00 41.44
ATOM    293  O   TYR A  18     -12.467  -0.103  -0.867  1.00 72.31
ATOM    294  N   ASN A  19     -13.551   1.871  -0.689  1.00 25.33
ATOM    295  H   ASN A  19     -13.920   2.527  -0.065  1.00 65.31
ATOM    296  CA  ASN A  19     -13.567   2.166  -2.122  1.00 45.41
ATOM    297  HA  ASN A  19     -14.002   1.306  -2.601  1.00 22.23
ATOM    298  CB  ASN A  19     -14.447   3.388  -2.434  1.00 62.53
ATOM    299 1HB  ASN A  19     -15.452   3.198  -2.086  1.00 41.43
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ATOM    300 2HB  ASN A  19     -14.050   4.248  -1.915  1.00 24.24
ATOM    301  CG  ASN A  19     -14.506   3.709  -3.928  1.00 65.03
ATOM    302  OD1 ASN A  19     -13.662   4.435  -4.456  1.00 73.31
ATOM    303  ND2 ASN A  19     -15.496   3.190  -4.617  1.00 64.33
ATOM    304 2HD2 ASN A  19     -16.165   2.617  -4.173  1.00 71.22
ATOM    305 1HD2 ASN A  19     -15.546   3.407  -5.570  1.00  2.22
ATOM    306  C   ASN A  19     -12.164   2.365  -2.686  1.00 53.12
ATOM    307  O   ASN A  19     -11.320   3.001  -2.057  1.00 11.12
ATOM    308  N   PHE A  20     -11.927   1.783  -3.853  1.00 62.14
ATOM    309  H   PHE A  20     -12.637   1.253  -4.279  1.00 30.15
ATOM    310  CA  PHE A  20     -10.643   1.842  -4.546  1.00 14.13
ATOM    311  HA  PHE A  20      -9.952   1.280  -3.937  1.00 13.31
ATOM    312  CB  PHE A  20     -10.750   1.119  -5.891  1.00 15.14
ATOM    313 1HB  PHE A  20     -10.868   0.065  -5.687  1.00 33.51
ATOM    314 2HB  PHE A  20     -11.624   1.460  -6.423  1.00  1.15
ATOM    315  CG  PHE A  20      -9.548   1.259  -6.786  1.00 55.53
ATOM    316  CD1 PHE A  20      -9.593   2.089  -7.896  1.00 51.11
ATOM    317  HD1 PHE A  20     -10.499   2.635  -8.114  1.00 73.25
ATOM    318  CE1 PHE A  20      -8.497   2.225  -8.718  1.00 62.33
ATOM    319  HE1 PHE A  20      -8.544   2.874  -9.580  1.00 21.13
ATOM    320  CZ  PHE A  20      -7.342   1.530  -8.438  1.00 43.53
ATOM    321  HZ  PHE A  20      -6.481   1.633  -9.081  1.00 64.13
ATOM    322  CE2 PHE A  20      -7.283   0.701  -7.336  1.00 61.32
ATOM    323  HE2 PHE A  20      -6.377   0.156  -7.118  1.00 23.01
ATOM    324  CD2 PHE A  20      -8.381   0.568  -6.518  1.00 51.02
ATOM    325  HD2 PHE A  20      -8.335  -0.082  -5.655  1.00 30.12
ATOM    326  C   PHE A  20     -10.065   3.269  -4.715  1.00 40.14
ATOM    327  O   PHE A  20      -8.877   3.471  -4.499  1.00 71.12
ATOM    328  N   ASN A  21     -10.892   4.251  -5.068  1.00 21.40
ATOM    329  H   ASN A  21     -11.864   4.104  -5.060  1.00 50.21
ATOM    330  CA  ASN A  21     -10.377   5.620  -5.306  1.00 42.22
ATOM    331  HA  ASN A  21      -9.511   5.538  -5.949  1.00 34.34
ATOM    332  CB  ASN A  21     -11.438   6.522  -5.967  1.00 34.41
ATOM    333 1HB  ASN A  21     -11.703   6.109  -6.929  1.00 11.40
ATOM    334 2HB  ASN A  21     -12.315   6.546  -5.338  1.00 34.24
ATOM    335  CG  ASN A  21     -10.952   7.960  -6.179  1.00 31.30
ATOM    336  OD1 ASN A  21     -10.355   8.280  -7.192  1.00 62.03
ATOM    337  ND2 ASN A  21     -11.229   8.834  -5.236  1.00 61.31
ATOM    338 2HD2 ASN A  21     -11.727   8.544  -4.445  1.00 50.51
ATOM    339 1HD2 ASN A  21     -10.905   9.748  -5.360  1.00 43.13
ATOM    340  C   ASN A  21      -9.945   6.200  -3.991  1.00 44.11
ATOM    341  O   ASN A  21      -8.899   6.829  -3.851  1.00 42.41
ATOM    342  N   THR A  22     -10.745   5.893  -3.034  1.00  3.52
ATOM    343  H   THR A  22     -11.515   5.321  -3.241  1.00 41.44
ATOM    344  CA  THR A  22     -10.627   6.306  -1.695  1.00 42.40
ATOM    345  HA  THR A  22     -10.670   7.383  -1.630  1.00 34.32
ATOM    346  CB  THR A  22     -11.864   5.741  -1.017  1.00 61.13
ATOM    347  HB  THR A  22     -11.826   4.664  -1.114  1.00 25.03
ATOM    348  OG1 THR A  22     -13.028   6.206  -1.715  1.00 42.45
ATOM    349  HG1 THR A  22     -13.066   7.165  -1.641  1.00 34.21
ATOM    350  CG2 THR A  22     -11.967   6.115   0.401  1.00 22.10
ATOM    351 1HG2 THR A  22     -12.042   7.186   0.491  1.00 70.44
ATOM    352 2HG2 THR A  22     -11.091   5.723   0.896  1.00 54.21
ATOM    353 3HG2 THR A  22     -12.861   5.628   0.761  1.00  4.12
ATOM    354  C   THR A  22      -9.319   5.754  -1.059  1.00 32.01
ATOM    355  O   THR A  22      -8.533   6.512  -0.473  1.00 52.02
ATOM    356  N   VAL A  23      -9.081   4.458  -1.210  1.00 11.34
ATOM    357  H   VAL A  23      -9.741   3.900  -1.681  1.00 72.41
ATOM    358  CA  VAL A  23      -7.868   3.839  -0.689  1.00 22.44
ATOM    359  HA  VAL A  23      -7.755   4.214   0.319  1.00 51.44
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ATOM    360  CB  VAL A  23      -7.966   2.274  -0.644  1.00 42.01
ATOM    361  HB  VAL A  23      -8.842   2.025  -0.064  1.00 12.31
ATOM    362  CG1 VAL A  23      -8.153   1.682  -2.004  1.00 61.42
ATOM    363 1HG1 VAL A  23      -7.279   1.862  -2.612  1.00 63.23
ATOM    364 2HG1 VAL A  23      -9.010   2.156  -2.458  1.00 54.13
ATOM    365 3HG1 VAL A  23      -8.328   0.621  -1.903  1.00 12.02
ATOM    366  CG2 VAL A  23      -6.767   1.645   0.038  1.00 52.32
ATOM    367 1HG2 VAL A  23      -6.718   1.998   1.057  1.00 42.21
ATOM    368 2HG2 VAL A  23      -5.866   1.930  -0.487  1.00 13.05
ATOM    369 3HG2 VAL A  23      -6.867   0.570   0.031  1.00 30.22
ATOM    370  C   VAL A  23      -6.634   4.330  -1.471  1.00 51.20
ATOM    371  O   VAL A  23      -5.559   4.521  -0.894  1.00 43.51
ATOM    372  N   TYR A  24      -6.816   4.562  -2.775  1.00 70.01
ATOM    373  H   TYR A  24      -7.688   4.350  -3.177  1.00 15.21
ATOM    374  CA  TYR A  24      -5.767   5.096  -3.643  1.00 35.33
ATOM    375  HA  TYR A  24      -4.953   4.387  -3.640  1.00 21.24
ATOM    376  CB  TYR A  24      -6.298   5.245  -5.093  1.00  0.25
ATOM    377 1HB  TYR A  24      -6.508   4.261  -5.488  1.00  1.54
ATOM    378 2HB  TYR A  24      -7.222   5.805  -5.058  1.00 71.55
ATOM    379  CG  TYR A  24      -5.361   5.939  -6.078  1.00 20.43
ATOM    380  CD1 TYR A  24      -5.561   7.270  -6.431  1.00 53.10
ATOM    381  HD1 TYR A  24      -6.387   7.811  -5.994  1.00 61.11
ATOM    382  CE1 TYR A  24      -4.722   7.907  -7.324  1.00 74.05
ATOM    383  HE1 TYR A  24      -4.895   8.940  -7.586  1.00 14.14
ATOM    384  CZ  TYR A  24      -3.666   7.217  -7.881  1.00 42.23
ATOM    385  CE2 TYR A  24      -3.445   5.899  -7.548  1.00  0.53
ATOM    386  HE2 TYR A  24      -2.617   5.359  -7.986  1.00 34.44
ATOM    387  CD2 TYR A  24      -4.291   5.269  -6.654  1.00 21.54
ATOM    388  HD2 TYR A  24      -4.119   4.234  -6.395  1.00 41.45
ATOM    389  OH  TYR A  24      -2.824   7.856  -8.771  1.00  1.24
ATOM    390  HH  TYR A  24      -2.712   8.762  -8.471  1.00  3.15
ATOM    391  C   TYR A  24      -5.257   6.431  -3.109  1.00 54.50
ATOM    392  O   TYR A  24      -4.047   6.666  -3.045  1.00 30.51
ATOM    393  N   ASN A  25      -6.185   7.288  -2.705  1.00 62.33
ATOM    394  H   ASN A  25      -7.136   7.050  -2.773  1.00 60.13
ATOM    395  CA  ASN A  25      -5.847   8.588  -2.175  1.00 44.10
ATOM    396  HA  ASN A  25      -5.221   9.094  -2.895  1.00 24.10
ATOM    397  CB  ASN A  25      -7.110   9.438  -1.940  1.00 71.31
ATOM    398 1HB  ASN A  25      -7.762   8.907  -1.263  1.00 51.14
ATOM    399 2HB  ASN A  25      -6.807  10.359  -1.473  1.00 22.13
ATOM    400  CG  ASN A  25      -7.919   9.770  -3.199  1.00  5.42
ATOM    401  OD1 ASN A  25      -9.132   9.933  -3.136  1.00 64.32
ATOM    402  ND2 ASN A  25      -7.267   9.890  -4.336  1.00 40.52
ATOM    403 2HD2 ASN A  25      -6.297   9.771  -4.351  1.00 71.43
ATOM    404 1HD2 ASN A  25      -7.807  10.085  -5.131  1.00  1.12
ATOM    405  C   ASN A  25      -5.085   8.452  -0.865  1.00 42.41
ATOM    406  O   ASN A  25      -3.995   9.015  -0.716  1.00 31.12
ATOM    407  N   ALA A  26      -5.628   7.650   0.042  1.00  3.13
ATOM    408  H   ALA A  26      -6.442   7.154  -0.191  1.00 35.52
ATOM    409  CA  ALA A  26      -5.067   7.481   1.383  1.00 24.42
ATOM    410  HA  ALA A  26      -5.008   8.461   1.832  1.00 40.13
ATOM    411  CB  ALA A  26      -5.996   6.632   2.234  1.00 31.33
ATOM    412 1HB  ALA A  26      -5.602   6.559   3.238  1.00 34.23
ATOM    413 2HB  ALA A  26      -6.082   5.647   1.800  1.00 11.42
ATOM    414 3HB  ALA A  26      -6.973   7.092   2.266  1.00 70.10
ATOM    415  C   ALA A  26      -3.657   6.881   1.354  1.00 14.12
ATOM    416  O   ALA A  26      -2.754   7.399   1.998  1.00 12.41
ATOM    417  N   THR A  27      -3.474   5.831   0.574  1.00 30.24
ATOM    418  H   THR A  27      -4.248   5.457   0.102  1.00 74.11
ATOM    419  CA  THR A  27      -2.184   5.157   0.435  1.00 51.10
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ATOM    420  HA  THR A  27      -1.865   4.805   1.405  1.00 10.44
ATOM    421  CB  THR A  27      -2.322   3.942  -0.516  1.00 55.24
ATOM    422  HB  THR A  27      -2.566   4.305  -1.503  1.00 72.32
ATOM    423  OG1 THR A  27      -3.385   3.102  -0.054  1.00 20.03
ATOM    424  HG1 THR A  27      -4.185   3.326  -0.544  1.00 32.22
ATOM    425  CG2 THR A  27      -1.029   3.131  -0.578  1.00 71.12
ATOM    426 1HG2 THR A  27      -0.782   2.766   0.409  1.00 54.33
ATOM    427 2HG2 THR A  27      -0.228   3.760  -0.937  1.00 63.41
ATOM    428 3HG2 THR A  27      -1.160   2.295  -1.249  1.00 42.22
ATOM    429  C   THR A  27      -1.129   6.123  -0.125  1.00 65.42
ATOM    430  O   THR A  27      -0.015   6.234   0.413  1.00 11.21
ATOM    431  N   LEU A  28      -1.509   6.849  -1.166  1.00 23.01
ATOM    432  H   LEU A  28      -2.424   6.740  -1.507  1.00  2.34
ATOM    433  CA  LEU A  28      -0.633   7.801  -1.811  1.00 72.42
ATOM    434  HA  LEU A  28       0.251   7.267  -2.130  1.00 34.02
ATOM    435  CB  LEU A  28      -1.333   8.379  -3.052  1.00 35.22
ATOM    436 1HB  LEU A  28      -1.433   7.563  -3.753  1.00 75.44
ATOM    437 2HB  LEU A  28      -2.330   8.681  -2.775  1.00  2.44
ATOM    438  CG  LEU A  28      -0.640   9.527  -3.789  1.00 12.51
ATOM    439  HG  LEU A  28      -0.423  10.310  -3.076  1.00 14.11
ATOM    440  CD1 LEU A  28       0.676   9.077  -4.398  1.00 43.21
ATOM    441 1HD1 LEU A  28       0.494   8.275  -5.099  1.00 22.11
ATOM    442 2HD1 LEU A  28       1.333   8.731  -3.615  1.00 32.50
ATOM    443 3HD1 LEU A  28       1.137   9.907  -4.912  1.00 32.43
ATOM    444  CD2 LEU A  28      -1.557  10.102  -4.855  1.00 64.44
ATOM    445 1HD2 LEU A  28      -1.812   9.329  -5.567  1.00 25.05
ATOM    446 2HD2 LEU A  28      -1.050  10.908  -5.368  1.00 11.04
ATOM    447 3HD2 LEU A  28      -2.457  10.479  -4.393  1.00 74.23
ATOM    448  C   LEU A  28      -0.210   8.906  -0.833  1.00 51.41
ATOM    449  O   LEU A  28       0.972   9.226  -0.723  1.00 40.32
ATOM    450  N   GLN A  29      -1.169   9.458  -0.106  1.00 55.44
ATOM    451  H   GLN A  29      -2.108   9.177  -0.215  1.00 64.13
ATOM    452  CA  GLN A  29      -0.883  10.508   0.856  1.00 20.35
ATOM    453  HA  GLN A  29      -0.293  11.258   0.350  1.00 14.43
ATOM    454  CB  GLN A  29      -2.172  11.153   1.328  1.00 64.44
ATOM    455 1HB  GLN A  29      -2.801  10.393   1.768  1.00 24.40
ATOM    456 2HB  GLN A  29      -1.936  11.892   2.078  1.00 65.11
ATOM    457  CG  GLN A  29      -2.944  11.833   0.218  1.00 52.15
ATOM    458 1HG  GLN A  29      -3.104  11.106  -0.564  1.00 55.33
ATOM    459 2HG  GLN A  29      -3.891  12.149   0.623  1.00 45.23
ATOM    460  CD  GLN A  29      -2.218  13.023  -0.378  1.00 13.44
ATOM    461  OE1 GLN A  29      -2.374  14.144   0.078  1.00 32.24
ATOM    462  NE2 GLN A  29      -1.414  12.794  -1.385  1.00 11.10
ATOM    463 2HE2 GLN A  29      -1.316  11.877  -1.709  1.00  3.10
ATOM    464 1HE2 GLN A  29      -0.945  13.569  -1.756  1.00 42.13
ATOM    465  C   GLN A  29      -0.085   9.990   2.044  1.00 24.32
ATOM    466  O   GLN A  29       0.793  10.681   2.545  1.00 14.43
ATOM    467  N   ALA A  30      -0.362   8.760   2.459  1.00 20.35
ATOM    468  H   ALA A  30      -1.055   8.243   1.989  1.00 32.15
ATOM    469  CA  ALA A  30       0.297   8.158   3.612  1.00 24.25
ATOM    470  HA  ALA A  30       0.062   8.764   4.474  1.00 10.42
ATOM    471  CB  ALA A  30      -0.232   6.751   3.870  1.00 31.50
ATOM    472 1HB  ALA A  30       0.014   6.117   3.029  1.00 11.30
ATOM    473 2HB  ALA A  30      -1.303   6.778   3.995  1.00 14.25
ATOM    474 3HB  ALA A  30       0.224   6.346   4.763  1.00 71.45
ATOM    475  C   ALA A  30       1.799   8.121   3.444  1.00 32.03
ATOM    476  O   ALA A  30       2.541   8.524   4.344  1.00 62.33
ATOM    477  N   ILE A  31       2.240   7.684   2.295  1.00 13.41
ATOM    478  H   ILE A  31       1.597   7.439   1.594  1.00 24.53
ATOM    479  CA  ILE A  31       3.649   7.556   2.065  1.00 13.34
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ATOM    480  HA  ILE A  31       4.082   7.343   3.032  1.00 74.31
ATOM    481  CB  ILE A  31       3.970   6.350   1.118  1.00 43.23
ATOM    482  HB  ILE A  31       3.559   5.467   1.587  1.00 11.05
ATOM    483  CG2 ILE A  31       3.273   6.490  -0.237  1.00 14.22
ATOM    484 1HG2 ILE A  31       2.203   6.525  -0.089  1.00 13.35
ATOM    485 2HG2 ILE A  31       3.523   5.645  -0.862  1.00 31.13
ATOM    486 3HG2 ILE A  31       3.600   7.402  -0.714  1.00 41.11
ATOM    487  CG1 ILE A  31       5.484   6.153   0.945  1.00 42.23
ATOM    488 1HG1 ILE A  31       5.902   6.991   0.406  1.00 43.11
ATOM    489 2HG1 ILE A  31       5.950   6.095   1.917  1.00 34.21
ATOM    490  CD1 ILE A  31       5.852   4.896   0.180  1.00 34.51
ATOM    491 1HD1 ILE A  31       5.484   4.029   0.708  1.00 72.54
ATOM    492 2HD1 ILE A  31       6.925   4.832   0.082  1.00  3.34
ATOM    493 3HD1 ILE A  31       5.408   4.932  -0.804  1.00 65.34
ATOM    494  C   ILE A  31       4.283   8.880   1.582  1.00 74.42
ATOM    495  O   ILE A  31       5.279   9.315   2.139  1.00  0.44
ATOM    496  N   GLN A  32       3.633   9.569   0.639  1.00  2.45
ATOM    497  H   GLN A  32       2.759   9.260   0.323  1.00 50.25
ATOM    498  CA  GLN A  32       4.215  10.784   0.048  1.00 72.44
ATOM    499  HA  GLN A  32       5.250  10.548  -0.149  1.00 22.51
ATOM    500  CB  GLN A  32       3.561  11.143  -1.288  1.00  2.10
ATOM    501 1HB  GLN A  32       2.492  11.191  -1.148  1.00 14.11
ATOM    502 2HB  GLN A  32       3.916  12.118  -1.593  1.00 14.23
ATOM    503  CG  GLN A  32       3.848  10.162  -2.414  1.00 34.33
ATOM    504 1HG  GLN A  32       3.468   9.190  -2.131  1.00 13.13
ATOM    505 2HG  GLN A  32       3.340  10.497  -3.306  1.00 73.52
ATOM    506  CD  GLN A  32       5.332  10.033  -2.717  1.00  3.33
ATOM    507  OE1 GLN A  32       6.020   9.193  -2.155  1.00 30.51
ATOM    508  NE2 GLN A  32       5.822  10.860  -3.602  1.00 34.12
ATOM    509 2HE2 GLN A  32       5.240  11.513  -4.035  1.00  3.24
ATOM    510 1HE2 GLN A  32       6.794  10.831  -3.818  1.00 10.44
ATOM    511  C   GLN A  32       4.206  11.987   0.977  1.00 73.13
ATOM    512  O   GLN A  32       5.125  12.795   0.942  1.00 22.24
ATOM    513  N   ASN A  33       3.194  12.104   1.825  1.00 24.02
ATOM    514  H   ASN A  33       2.492  11.421   1.867  1.00 35.43
ATOM    515  CA  ASN A  33       3.121  13.267   2.724  1.00 61.45
ATOM    516  HA  ASN A  33       3.549  14.096   2.181  1.00  3.41
ATOM    517  CB  ASN A  33       1.671  13.637   3.136  1.00 43.11
ATOM    518 1HB  ASN A  33       1.184  12.761   3.539  1.00 64.42
ATOM    519 2HB  ASN A  33       1.693  14.411   3.889  1.00 42.15
ATOM    520  CG  ASN A  33       0.786  14.100   1.998  1.00 32.11
ATOM    521  OD1 ASN A  33       1.253  14.596   0.979  1.00 72.15
ATOM    522  ND2 ASN A  33      -0.504  13.986   2.192  1.00  1.51
ATOM    523 2HD2 ASN A  33      -0.818  13.619   3.045  1.00 72.42
ATOM    524 1HD2 ASN A  33      -1.106  14.281   1.470  1.00  3.32
ATOM    525  C   ASN A  33       3.966  13.054   3.963  1.00 73.42
ATOM    526  O   ASN A  33       4.031  13.916   4.831  1.00 73.11
ATOM    527  N   GLY A  34       4.622  11.899   4.032  1.00 25.34
ATOM    528  H   GLY A  34       4.549  11.269   3.285  1.00 62.31
ATOM    529  CA  GLY A  34       5.461  11.587   5.162  1.00 31.33
ATOM    530 1HA  GLY A  34       6.032  10.696   4.942  1.00 51.41
ATOM    531 2HA  GLY A  34       6.141  12.408   5.334  1.00  4.03
ATOM    532  C   GLY A  34       4.654  11.352   6.412  1.00 12.52
ATOM    533  O   GLY A  34       5.029  11.782   7.494  1.00 72.04
ATOM    534  N   GLN A  35       3.546  10.637   6.267  1.00 23.03
ATOM    535  H   GLN A  35       3.321  10.276   5.382  1.00 13.33
ATOM    536  CA  GLN A  35       2.665  10.363   7.398  1.00  1.42
ATOM    537  HA  GLN A  35       2.744  11.202   8.076  1.00 54.21
ATOM    538  CB  GLN A  35       1.208  10.208   6.936  1.00 72.33
ATOM    539 1HB  GLN A  35       1.116   9.282   6.386  1.00  5.33
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ATOM    540 2HB  GLN A  35       0.568  10.166   7.805  1.00 64.32
ATOM    541  CG  GLN A  35       0.731  11.356   6.045  1.00 23.20
ATOM    542 1HG  GLN A  35       0.918  12.289   6.556  1.00 74.45
ATOM    543 2HG  GLN A  35       1.311  11.332   5.134  1.00 71.13
ATOM    544  CD  GLN A  35      -0.751  11.302   5.682  1.00 35.11
ATOM    545  OE1 GLN A  35      -1.372  12.325   5.438  1.00 61.43
ATOM    546  NE2 GLN A  35      -1.334  10.128   5.681  1.00 73.30
ATOM    547 2HE2 GLN A  35      -0.807   9.338   5.915  1.00 71.30
ATOM    548 1HE2 GLN A  35      -2.282  10.106   5.436  1.00 22.21
ATOM    549  C   GLN A  35       3.152   9.111   8.124  1.00 53.31
ATOM    550  O   GLN A  35       2.554   8.649   9.092  1.00 52.12
ATOM    551  N   THR A  36       4.222   8.569   7.614  1.00 50.43
ATOM    552  H   THR A  36       4.634   8.972   6.820  1.00 71.53
ATOM    553  CA  THR A  36       4.878   7.439   8.152  1.00 13.11
ATOM    554  HA  THR A  36       4.800   7.485   9.228  1.00 64.21
ATOM    555  CB  THR A  36       4.240   6.105   7.623  1.00 15.24
ATOM    556  HB  THR A  36       3.193   6.119   7.891  1.00 70.43
ATOM    557  OG1 THR A  36       4.840   4.968   8.252  1.00 42.54
ATOM    558  HG1 THR A  36       4.175   4.517   8.777  1.00 54.15
ATOM    559  CG2 THR A  36       4.357   5.970   6.101  1.00 45.41
ATOM    560 1HG2 THR A  36       3.847   6.794   5.625  1.00 71.04
ATOM    561 2HG2 THR A  36       3.912   5.040   5.784  1.00 34.34
ATOM    562 3HG2 THR A  36       5.400   5.984   5.821  1.00 23.20
ATOM    563  C   THR A  36       6.348   7.564   7.748  1.00 24.11
ATOM    564  O   THR A  36       6.652   8.128   6.683  1.00 23.14
ATOM    565  N   PHE A  37       7.244   7.131   8.597  1.00 34.24
ATOM    566  H   PHE A  37       6.960   6.682   9.420  1.00  1.54
ATOM    567  CA  PHE A  37       8.653   7.221   8.313  1.00 64.33
ATOM    568  HA  PHE A  37       8.748   7.541   7.285  1.00 51.04
ATOM    569  CB  PHE A  37       9.377   8.246   9.225  1.00 23.23
ATOM    570 1HB  PHE A  37      10.421   8.274   8.941  1.00  2.21
ATOM    571 2HB  PHE A  37       8.951   9.224   9.065  1.00  0.42
ATOM    572  CG  PHE A  37       9.325   7.939  10.708  1.00 21.03
ATOM    573  CD1 PHE A  37      10.368   7.260  11.328  1.00 63.25
ATOM    574  HD1 PHE A  37      11.220   6.947  10.741  1.00 52.30
ATOM    575  CE1 PHE A  37      10.326   6.981  12.679  1.00 21.43
ATOM    576  HE1 PHE A  37      11.144   6.453  13.146  1.00  4.33
ATOM    577  CZ  PHE A  37       9.239   7.378  13.432  1.00 64.22
ATOM    578  HZ  PHE A  37       9.204   7.160  14.488  1.00  1.25
ATOM    579  CE2 PHE A  37       8.195   8.054  12.831  1.00 51.34
ATOM    580  HE2 PHE A  37       7.343   8.365  13.417  1.00 23.12
ATOM    581  CD2 PHE A  37       8.240   8.333  11.478  1.00 21.50
ATOM    582  HD2 PHE A  37       7.424   8.861  11.010  1.00 72.20
ATOM    583  C   PHE A  37       9.280   5.861   8.435  1.00 24.34
ATOM    584  O   PHE A  37       8.733   4.975   9.095  1.00 35.11
ATOM    585  N   ASP A  38      10.405   5.699   7.820  1.00  4.15
ATOM    586  H   ASP A  38      10.807   6.449   7.338  1.00 64.11
ATOM    587  CA  ASP A  38      11.116   4.451   7.854  1.00 22.41
ATOM    588  HA  ASP A  38      10.424   3.694   8.191  1.00 74.41
ATOM    589  CB  ASP A  38      11.609   4.080   6.458  1.00 72.42
ATOM    590 1HB  ASP A  38      10.761   3.856   5.828  1.00 73.42
ATOM    591 2HB  ASP A  38      12.159   4.909   6.039  1.00 21.23
ATOM    592  CG  ASP A  38      12.498   2.886   6.498  1.00 44.44
ATOM    593  OD1 ASP A  38      12.007   1.779   6.745  1.00 53.05
ATOM    594  OD2 ASP A  38      13.696   3.053   6.364  1.00 74.24
ATOM    595  C   ASP A  38      12.278   4.514   8.849  1.00 62.44
ATOM    596  O   ASP A  38      12.790   5.595   9.135  1.00 65.21
ATOM    597  N   TYR A  39      12.690   3.355   9.349  1.00 52.22
ATOM    598  H   TYR A  39      12.271   2.541   8.995  1.00 74.03
ATOM    599  CA  TYR A  39      13.749   3.237  10.344  1.00  0.12
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ATOM    600  HA  TYR A  39      13.516   3.935  11.133  1.00  1.43
ATOM    601  CB  TYR A  39      13.764   1.829  10.947  1.00 54.03
ATOM    602 1HB  TYR A  39      13.943   1.109  10.162  1.00 65.32
ATOM    603 2HB  TYR A  39      14.559   1.766  11.674  1.00 70.42
ATOM    604  CG  TYR A  39      12.468   1.454  11.637  1.00 32.35
ATOM    605  CD1 TYR A  39      12.210   1.870  12.936  1.00 14.33
ATOM    606  HD1 TYR A  39      12.947   2.468  13.452  1.00 75.01
ATOM    607  CE1 TYR A  39      11.031   1.535  13.572  1.00 10.11
ATOM    608  HE1 TYR A  39      10.849   1.870  14.583  1.00 34.52
ATOM    609  CZ  TYR A  39      10.090   0.775  12.910  1.00 53.43
ATOM    610  CE2 TYR A  39      10.322   0.347  11.619  1.00 32.15
ATOM    611  HE2 TYR A  39       9.586  -0.249  11.100  1.00 51.21
ATOM    612  CD2 TYR A  39      11.504   0.686  10.990  1.00 42.23
ATOM    613  HD2 TYR A  39      11.691   0.353   9.980  1.00 74.23
ATOM    614  OH  TYR A  39       8.915   0.439  13.542  1.00 42.24
ATOM    615  HH  TYR A  39       8.732  -0.493  13.419  1.00 31.54
ATOM    616  C   TYR A  39      15.134   3.599   9.784  1.00 72.02
ATOM    617  O   TYR A  39      16.006   4.028  10.529  1.00 52.13
ATOM    618  N   LYS A  40      15.337   3.423   8.481  1.00 13.32
ATOM    619  H   LYS A  40      14.637   3.052   7.890  1.00  1.33
ATOM    620  CA  LYS A  40      16.596   3.821   7.862  1.00 32.11
ATOM    621  HA  LYS A  40      17.235   4.160   8.665  1.00 35.32
ATOM    622  CB  LYS A  40      17.293   2.644   7.115  1.00 72.03
ATOM    623 1HB  LYS A  40      18.165   3.034   6.612  1.00 40.12
ATOM    624 2HB  LYS A  40      17.621   1.925   7.852  1.00 70.10
ATOM    625  CG  LYS A  40      16.452   1.908   6.065  1.00 15.31
ATOM    626 1HG  LYS A  40      15.570   1.503   6.542  1.00 31.41
ATOM    627 2HG  LYS A  40      16.153   2.608   5.297  1.00 61.21
ATOM    628  CD  LYS A  40      17.246   0.773   5.430  1.00 32.43
ATOM    629 1HD  LYS A  40      17.951   1.215   4.742  1.00  3.14
ATOM    630 2HD  LYS A  40      17.777   0.235   6.201  1.00 50.51
ATOM    631  CE  LYS A  40      16.363  -0.203   4.642  1.00 31.41
ATOM    632 1HE  LYS A  40      16.931  -1.100   4.442  1.00 75.42
ATOM    633 2HE  LYS A  40      15.522  -0.455   5.272  1.00 24.13
ATOM    634  NZ  LYS A  40      15.859   0.318   3.354  1.00 11.22
ATOM    635 1HZ  LYS A  40      16.656   0.491   2.696  1.00  2.44
ATOM    636 2HZ  LYS A  40      15.300   1.186   3.476  1.00 22.22
ATOM    637 3HZ  LYS A  40      15.230  -0.374   2.886  1.00 61.51
ATOM    638  C   LYS A  40      16.358   5.003   6.950  1.00 32.14
ATOM    639  O   LYS A  40      17.260   5.466   6.255  1.00 64.42
ATOM    640  N   SER A  41      15.114   5.490   7.001  1.00  3.14
ATOM    641  H   SER A  41      14.483   5.019   7.583  1.00 24.25
ATOM    642  CA  SER A  41      14.644   6.646   6.271  1.00 40.12
ATOM    643  HA  SER A  41      13.572   6.684   6.402  1.00 34.10
ATOM    644  CB  SER A  41      15.253   7.934   6.885  1.00 63.43
ATOM    645 1HB  SER A  41      14.994   7.982   7.931  1.00 13.42
ATOM    646 2HB  SER A  41      16.326   7.903   6.791  1.00 11.54
ATOM    647  OG  SER A  41      14.765   9.106   6.251  1.00 13.45
ATOM    648  HG  SER A  41      14.897   8.953   5.307  1.00 42.20
ATOM    649  C   SER A  41      14.929   6.521   4.761  1.00 33.21
ATOM    650  O   SER A  41      15.146   7.533   4.070  1.00 30.43
ATOM    651  N   ASN A  42      14.855   5.292   4.235  1.00 64.23
ATOM    652  H   ASN A  42      14.597   4.544   4.819  1.00 61.04
ATOM    653  CA  ASN A  42      15.124   5.081   2.815  1.00  1.03
ATOM    654  HA  ASN A  42      16.060   5.584   2.620  1.00 70.11
ATOM    655  CB  ASN A  42      15.266   3.582   2.433  1.00 60.11
ATOM    656 1HB  ASN A  42      15.542   3.514   1.391  1.00 14.22
ATOM    657 2HB  ASN A  42      16.062   3.152   3.024  1.00 62.12
ATOM    658  CG  ASN A  42      14.010   2.733   2.626  1.00 12.51
ATOM    659  OD1 ASN A  42      13.817   2.159   3.673  1.00 43.34
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ATOM    660  ND2 ASN A  42      13.223   2.570   1.607  1.00 13.52
ATOM    661 2HD2 ASN A  42      13.480   2.993   0.755  1.00 11.31
ATOM    662 1HD2 ASN A  42      12.412   2.035   1.723  1.00 12.31
ATOM    663  C   ASN A  42      14.039   5.746   1.975  1.00  2.02
ATOM    664  O   ASN A  42      12.880   5.787   2.400  1.00 12.15
ATOM    665  N   PRO A  43      14.428   6.351   0.811  1.00 44.33
ATOM    666  CD  PRO A  43      15.828   6.463   0.334  1.00 33.33
ATOM    667  CA  PRO A  43      13.519   7.024  -0.117  1.00 74.04
ATOM    668  HA  PRO A  43      13.368   8.053   0.173  1.00 13.33
ATOM    669  CB  PRO A  43      14.279   6.988  -1.426  1.00 45.04
ATOM    670 1HB  PRO A  43      14.099   6.044  -1.922  1.00 11.54
ATOM    671 2HB  PRO A  43      13.999   7.816  -2.060  1.00 14.15
ATOM    672  CG  PRO A  43      15.696   7.139  -1.012  1.00 31.22
ATOM    673 1HG  PRO A  43      16.340   6.669  -1.741  1.00 41.34
ATOM    674 2HG  PRO A  43      15.944   8.185  -0.910  1.00 55.22
ATOM    675 1HD  PRO A  43      16.278   5.486   0.226  1.00 43.23
ATOM    676 2HD  PRO A  43      16.414   7.073   1.004  1.00 20.01
ATOM    677  C   PRO A  43      12.155   6.353  -0.258  1.00 52.21
ATOM    678  O   PRO A  43      12.014   5.266  -0.825  1.00  1.43
ATOM    679  N   TYR A  44      11.179   7.018   0.303  1.00  1.21
ATOM    680  H   TYR A  44      11.401   7.846   0.774  1.00 15.33
ATOM    681  CA  TYR A  44       9.794   6.598   0.310  1.00  3.13
ATOM    682  HA  TYR A  44       9.772   5.518   0.328  1.00 40.24
ATOM    683  CB  TYR A  44       9.074   7.127   1.570  1.00 14.33
ATOM    684 1HB  TYR A  44       8.045   6.798   1.548  1.00  5.32
ATOM    685 2HB  TYR A  44       9.553   6.714   2.445  1.00  1.15
ATOM    686  CG  TYR A  44       9.061   8.650   1.716  1.00  2.21
ATOM    687  CD1 TYR A  44       9.972   9.299   2.540  1.00 70.11
ATOM    688  HD1 TYR A  44      10.700   8.714   3.083  1.00 74.11
ATOM    689  CE1 TYR A  44       9.955  10.676   2.674  1.00 21.43
ATOM    690  HE1 TYR A  44      10.671  11.164   3.319  1.00 23.44
ATOM    691  CZ  TYR A  44       9.025  11.420   1.978  1.00 53.55
ATOM    692  CE2 TYR A  44       8.116  10.803   1.154  1.00 30.22
ATOM    693  HE2 TYR A  44       7.389  11.388   0.611  1.00 23.11
ATOM    694  CD2 TYR A  44       8.135   9.432   1.027  1.00 54.33
ATOM    695  HD2 TYR A  44       7.421   8.947   0.380  1.00 55.24
ATOM    696  OH  TYR A  44       9.006  12.785   2.106  1.00  1.01
ATOM    697  HH  TYR A  44       8.088  13.067   2.163  1.00 31.24
ATOM    698  C   TYR A  44       9.091   7.084  -0.940  1.00  5.24
ATOM    699  O   TYR A  44       7.951   6.739  -1.197  1.00 71.41
ATOM    700  N   ASP A  45       9.800   7.840  -1.728  1.00 73.12
ATOM    701  H   ASP A  45      10.762   7.901  -1.589  1.00 34.13
ATOM    702  CA  ASP A  45       9.202   8.549  -2.827  1.00 31.12
ATOM    703  HA  ASP A  45       8.251   8.931  -2.486  1.00 31.21
ATOM    704  CB  ASP A  45      10.075   9.731  -3.242  1.00 75.32
ATOM    705 1HB  ASP A  45      10.172  10.412  -2.410  1.00 53.30
ATOM    706 2HB  ASP A  45      11.054   9.366  -3.517  1.00 11.14
ATOM    707  CG  ASP A  45       9.499  10.490  -4.417  1.00 44.41
ATOM    708  OD1 ASP A  45       8.367  11.007  -4.291  1.00 41.11
ATOM    709  OD2 ASP A  45      10.181  10.595  -5.440  1.00 23.45
ATOM    710  C   ASP A  45       8.959   7.625  -3.987  1.00 73.00
ATOM    711  O   ASP A  45       9.834   6.835  -4.407  1.00 44.52
ATOM    712  N   ILE A  46       7.734   7.677  -4.423  1.00 15.11
ATOM    713  H   ILE A  46       7.166   8.372  -4.026  1.00 33.32
ATOM    714  CA  ILE A  46       7.190   6.831  -5.441  1.00 12.44
ATOM    715  HA  ILE A  46       7.383   5.808  -5.157  1.00 62.21
ATOM    716  CB  ILE A  46       5.653   7.020  -5.512  1.00 73.21
ATOM    717  HB  ILE A  46       5.444   8.067  -5.680  1.00 74.43
ATOM    718  CG2 ILE A  46       5.045   6.216  -6.659  1.00 70.31
ATOM    719 1HG2 ILE A  46       5.488   6.521  -7.595  1.00  4.23
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ATOM    720 2HG2 ILE A  46       3.981   6.399  -6.702  1.00 43.34
ATOM    721 3HG2 ILE A  46       5.225   5.163  -6.500  1.00 63.35
ATOM    722  CG1 ILE A  46       5.036   6.614  -4.166  1.00 32.45
ATOM    723 1HG1 ILE A  46       5.195   5.557  -4.010  1.00 63.53
ATOM    724 2HG1 ILE A  46       5.533   7.160  -3.379  1.00 25.15
ATOM    725  CD1 ILE A  46       3.559   6.871  -4.051  1.00 22.52
ATOM    726 1HD1 ILE A  46       3.210   6.538  -3.085  1.00 62.34
ATOM    727 2HD1 ILE A  46       3.043   6.333  -4.832  1.00 44.34
ATOM    728 3HD1 ILE A  46       3.372   7.928  -4.158  1.00 14.53
ATOM    729  C   ILE A  46       7.836   7.096  -6.782  1.00 31.21
ATOM    730  O   ILE A  46       7.689   8.156  -7.367  1.00 75.00
ATOM    731  N   SER A  47       8.483   6.087  -7.286  1.00 51.34
ATOM    732  H   SER A  47       8.457   5.226  -6.814  1.00 25.20
ATOM    733  CA  SER A  47       9.218   6.187  -8.497  1.00  2.25
ATOM    734  HA  SER A  47       9.565   7.202  -8.625  1.00 63.51
ATOM    735  CB  SER A  47      10.421   5.265  -8.378  1.00 54.04
ATOM    736 1HB  SER A  47      10.095   4.238  -8.462  1.00 64.22
ATOM    737 2HB  SER A  47      11.132   5.489  -9.160  1.00 74.31
ATOM    738  OG  SER A  47      11.054   5.453  -7.109  1.00 53.34
ATOM    739  HG  SER A  47      10.695   6.266  -6.727  1.00 20.04
ATOM    740  C   SER A  47       8.324   5.774  -9.673  1.00 43.14
ATOM    741  O   SER A  47       8.498   6.254 -10.791  1.00 34.13
ATOM    742  N   VAL A  48       7.349   4.892  -9.420  1.00 52.10
ATOM    743  H   VAL A  48       7.273   4.485  -8.528  1.00 13.41
ATOM    744  CA  VAL A  48       6.373   4.549 -10.448  1.00 63.30
ATOM    745  HA  VAL A  48       6.374   5.315 -11.208  1.00 74.24
ATOM    746  CB  VAL A  48       6.700   3.157 -11.127  1.00 50.51
ATOM    747  HB  VAL A  48       6.724   2.414 -10.344  1.00 21.24
ATOM    748  CG1 VAL A  48       5.607   2.739 -12.121  1.00 13.55
ATOM    749 1HG1 VAL A  48       4.661   2.632 -11.608  1.00 13.55
ATOM    750 2HG1 VAL A  48       5.857   1.790 -12.571  1.00 42.44
ATOM    751 3HG1 VAL A  48       5.507   3.488 -12.891  1.00  3.30
ATOM    752  CG2 VAL A  48       8.055   3.170 -11.827  1.00 33.41
ATOM    753 1HG2 VAL A  48       8.050   3.923 -12.601  1.00 64.52
ATOM    754 2HG2 VAL A  48       8.242   2.202 -12.267  1.00 31.31
ATOM    755 3HG2 VAL A  48       8.831   3.396 -11.110  1.00 13.05
ATOM    756  C   VAL A  48       4.997   4.434  -9.817  1.00  4.21
ATOM    757  O   VAL A  48       4.822   3.751  -8.816  1.00 42.20
ATOM    758  N   ASN A  49       4.055   5.122 -10.391  1.00  2.41
ATOM    759  H   ASN A  49       4.292   5.740 -11.112  1.00 31.50
ATOM    760  CA  ASN A  49       2.651   4.983 -10.083  1.00 71.11
ATOM    761  HA  ASN A  49       2.552   4.189  -9.358  1.00 24.15
ATOM    762  CB  ASN A  49       2.037   6.279  -9.527  1.00 42.41
ATOM    763 1HB  ASN A  49       2.475   6.483  -8.562  1.00 63.21
ATOM    764 2HB  ASN A  49       2.268   7.105 -10.179  1.00 71.11
ATOM    765  CG  ASN A  49       0.509   6.199  -9.353  1.00 52.33
ATOM    766  OD1 ASN A  49      -0.060   5.138  -9.108  1.00 70.31
ATOM    767  ND2 ASN A  49      -0.153   7.319  -9.489  1.00 73.05
ATOM    768 2HD2 ASN A  49       0.346   8.134  -9.694  1.00  0.12
ATOM    769 1HD2 ASN A  49      -1.131   7.295  -9.371  1.00 33.31
ATOM    770  C   ASN A  49       1.953   4.569 -11.339  1.00 71.44
ATOM    771  O   ASN A  49       1.956   5.333 -12.305  1.00  0.02
ATOM    772  N   LYS A  50       1.394   3.406 -11.392  1.00 62.42
ATOM    773  H   LYS A  50       1.416   2.771 -10.644  1.00 10.33
ATOM    774  CA  LYS A  50       0.692   3.045 -12.557  1.00  0.14
ATOM    775  HA  LYS A  50       0.444   3.987 -13.021  1.00 10.31
ATOM    776  CB  LYS A  50       1.567   2.271 -13.547  1.00 51.03
ATOM    777 1HB  LYS A  50       0.831   1.727 -14.111  1.00 10.52
ATOM    778 2HB  LYS A  50       2.109   2.948 -14.188  1.00 52.23
ATOM    779  CG  LYS A  50       2.491   1.205 -12.969  1.00 33.12
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ATOM    780 1HG  LYS A  50       3.231   0.921 -13.702  1.00 14.54
ATOM    781 2HG  LYS A  50       2.970   1.666 -12.119  1.00  1.33
ATOM    782  CD  LYS A  50       1.745  -0.020 -12.504  1.00  0.14
ATOM    783 1HD  LYS A  50       1.105   0.307 -11.700  1.00 64.02
ATOM    784 2HD  LYS A  50       1.169  -0.419 -13.324  1.00 52.11
ATOM    785  CE  LYS A  50       2.684  -1.074 -11.963  1.00 53.30
ATOM    786 1HE  LYS A  50       3.432  -1.286 -12.712  1.00 32.41
ATOM    787 2HE  LYS A  50       3.164  -0.663 -11.087  1.00  5.21
ATOM    788  NZ  LYS A  50       1.963  -2.330 -11.597  1.00 23.33
ATOM    789 1HZ  LYS A  50       1.138  -2.133 -10.996  1.00 74.44
ATOM    790 2HZ  LYS A  50       2.557  -2.894 -10.942  1.00 62.41
ATOM    791 3HZ  LYS A  50       1.674  -2.925 -12.396  1.00  1.51
ATOM    792  C   LYS A  50      -0.598   2.360 -12.255  1.00 71.41
ATOM    793  O   LYS A  50      -0.722   1.635 -11.275  1.00 44.33
ATOM    794  N   ASN A  51      -1.566   2.640 -13.072  1.00 42.13
ATOM    795  H   ASN A  51      -1.389   3.246 -13.824  1.00 33.34
ATOM    796  CA  ASN A  51      -2.884   2.048 -12.963  1.00 45.03
ATOM    797  HA  ASN A  51      -2.931   1.502 -12.034  1.00 32.00
ATOM    798  CB  ASN A  51      -4.009   3.117 -12.986  1.00 54.13
ATOM    799 1HB  ASN A  51      -3.866   3.748 -13.851  1.00 33.51
ATOM    800 2HB  ASN A  51      -4.956   2.608 -13.087  1.00 73.32
ATOM    801  CG  ASN A  51      -4.084   4.038 -11.753  1.00 70.24
ATOM    802  OD1 ASN A  51      -5.155   4.475 -11.375  1.00 50.24
ATOM    803  ND2 ASN A  51      -2.964   4.353 -11.139  1.00 23.13
ATOM    804 2HD2 ASN A  51      -2.118   3.994 -11.474  1.00 61.14
ATOM    805 1HD2 ASN A  51      -3.023   4.943 -10.359  1.00 12.24
ATOM    806  C   ASN A  51      -3.082   1.085 -14.101  1.00 31.42
ATOM    807  O   ASN A  51      -2.714   1.393 -15.228  1.00 52.53
ATOM    808  N   ASN A  52      -3.624  -0.074 -13.820  1.00 65.21
ATOM    809  H   ASN A  52      -3.805  -0.310 -12.882  1.00 31.34
ATOM    810  CA  ASN A  52      -3.938  -1.037 -14.883  1.00 61.42
ATOM    811  HA  ASN A  52      -3.293  -0.830 -15.726  1.00 54.13
ATOM    812  CB  ASN A  52      -3.718  -2.490 -14.375  1.00 41.02
ATOM    813 1HB  ASN A  52      -2.784  -2.526 -13.835  1.00 52.44
ATOM    814 2HB  ASN A  52      -4.515  -2.726 -13.683  1.00 62.52
ATOM    815  CG  ASN A  52      -3.665  -3.607 -15.457  1.00 14.01
ATOM    816  OD1 ASN A  52      -2.967  -4.597 -15.285  1.00 53.03
ATOM    817  ND2 ASN A  52      -4.391  -3.482 -16.542  1.00 34.03
ATOM    818 2HD2 ASN A  52      -4.959  -2.685 -16.650  1.00  4.33
ATOM    819 1HD2 ASN A  52      -4.326  -4.204 -17.197  1.00 64.12
ATOM    820  C   ASN A  52      -5.397  -0.802 -15.297  1.00 30.21
ATOM    821  O   ASN A  52      -5.865  -1.266 -16.332  1.00 30.02
ATOM    822  N   GLY A  53      -6.105  -0.049 -14.475  1.00 21.00
ATOM    823  H   GLY A  53      -5.664   0.298 -13.672  1.00 13.53
ATOM    824  CA  GLY A  53      -7.487   0.274 -14.755  1.00 74.25
ATOM    825 1HA  GLY A  53      -7.596   1.347 -14.804  1.00 34.13
ATOM    826 2HA  GLY A  53      -7.764  -0.155 -15.707  1.00 73.25
ATOM    827  C   GLY A  53      -8.399  -0.268 -13.693  1.00 75.14
ATOM    828  O   GLY A  53      -9.361   0.366 -13.294  1.00 73.14
ATOM    829  N   THR A  54      -8.091  -1.441 -13.227  1.00 70.34
ATOM    830  H   THR A  54      -7.320  -1.914 -13.608  1.00 20.21
ATOM    831  CA  THR A  54      -8.860  -2.050 -12.181  1.00 25.32
ATOM    832  HA  THR A  54      -9.658  -1.374 -11.909  1.00 34.42
ATOM    833  CB  THR A  54      -9.472  -3.413 -12.636  1.00 54.24
ATOM    834  HB  THR A  54     -10.087  -3.228 -13.507  1.00  4.34
ATOM    835  OG1 THR A  54     -10.312  -3.956 -11.597  1.00 21.14
ATOM    836  HG1 THR A  54      -9.692  -4.260 -10.921  1.00 40.22
ATOM    837  CG2 THR A  54      -8.383  -4.425 -12.999  1.00 64.04
ATOM    838 1HG2 THR A  54      -7.756  -4.603 -12.137  1.00 73.31
ATOM    839 2HG2 THR A  54      -7.780  -4.033 -13.806  1.00 13.12
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ATOM    840 3HG2 THR A  54      -8.842  -5.353 -13.310  1.00 43.43
ATOM    841  C   THR A  54      -7.978  -2.212 -10.954  1.00 23.44
ATOM    842  O   THR A  54      -8.331  -2.909  -9.985  1.00 31.23
ATOM    843  N   ASP A  55      -6.854  -1.549 -10.996  1.00 63.45
ATOM    844  H   ASP A  55      -6.629  -0.996 -11.774  1.00 25.33
ATOM    845  CA  ASP A  55      -5.891  -1.550  -9.934  1.00 73.44
ATOM    846  HA  ASP A  55      -6.429  -1.338  -9.022  1.00 32.45
ATOM    847  CB  ASP A  55      -5.161  -2.897  -9.781  1.00 11.35
ATOM    848 1HB  ASP A  55      -4.464  -2.829  -8.958  1.00 53.51
ATOM    849 2HB  ASP A  55      -5.895  -3.654  -9.547  1.00 13.43
ATOM    850  CG  ASP A  55      -4.397  -3.341 -10.988  1.00  3.20
ATOM    851  OD1 ASP A  55      -4.876  -4.297 -11.647  1.00  4.21
ATOM    852  OD2 ASP A  55      -3.327  -2.811 -11.249  1.00 14.13
ATOM    853  C   ASP A  55      -4.902  -0.448 -10.153  1.00 10.34
ATOM    854  O   ASP A  55      -4.822   0.112 -11.261  1.00 51.14
ATOM    855  N   ALA A  56      -4.196  -0.124  -9.109  1.00 61.45
ATOM    856  H   ALA A  56      -4.352  -0.608  -8.265  1.00 22.21
ATOM    857  CA  ALA A  56      -3.181   0.882  -9.111  1.00 45.21
ATOM    858  HA  ALA A  56      -2.815   1.015 -10.118  1.00 51.35
ATOM    859  CB  ALA A  56      -3.733   2.197  -8.598  1.00 53.10
ATOM    860 1HB  ALA A  56      -2.939   2.928  -8.560  1.00 14.12
ATOM    861 2HB  ALA A  56      -4.146   2.055  -7.611  1.00 32.44
ATOM    862 3HB  ALA A  56      -4.506   2.546  -9.266  1.00 25.32
ATOM    863  C   ALA A  56      -2.059   0.409  -8.230  1.00  1.12
ATOM    864  O   ALA A  56      -2.304  -0.190  -7.176  1.00 65.00
ATOM    865  N   GLU A  57      -0.859   0.643  -8.648  1.00 53.21
ATOM    866  H   GLU A  57      -0.725   1.141  -9.486  1.00 44.15
ATOM    867  CA  GLU A  57       0.293   0.205  -7.919  1.00 12.33
ATOM    868  HA  GLU A  57      -0.007  -0.088  -6.924  1.00  0.10
ATOM    869  CB  GLU A  57       0.911  -0.988  -8.621  1.00 13.13
ATOM    870 1HB  GLU A  57       0.152  -1.747  -8.741  1.00 32.44
ATOM    871 2HB  GLU A  57       1.238  -0.673  -9.600  1.00 62.32
ATOM    872  CG  GLU A  57       2.097  -1.620  -7.906  1.00 34.01
ATOM    873 1HG  GLU A  57       2.784  -0.841  -7.609  1.00 23.40
ATOM    874 2HG  GLU A  57       1.746  -2.151  -7.033  1.00 40.40
ATOM    875  CD  GLU A  57       2.807  -2.576  -8.806  1.00 53.31
ATOM    876  OE1 GLU A  57       3.919  -2.258  -9.244  1.00 74.01
ATOM    877  OE2 GLU A  57       2.207  -3.569  -9.230  1.00 44.42
ATOM    878  C   GLU A  57       1.301   1.325  -7.851  1.00  3.34
ATOM    879  O   GLU A  57       1.624   1.950  -8.880  1.00 23.10
ATOM    880  N   ILE A  58       1.772   1.584  -6.668  1.00 23.22
ATOM    881  H   ILE A  58       1.461   1.086  -5.885  1.00 32.34
ATOM    882  CA  ILE A  58       2.772   2.556  -6.431  1.00 61.21
ATOM    883  HA  ILE A  58       3.002   2.995  -7.392  1.00 72.42
ATOM    884  CB  ILE A  58       2.333   3.693  -5.461  1.00  1.22
ATOM    885  HB  ILE A  58       3.265   4.104  -5.111  1.00 43.14
ATOM    886  CG2 ILE A  58       1.584   4.780  -6.211  1.00  3.53
ATOM    887 1HG2 ILE A  58       0.722   4.346  -6.695  1.00 42.21
ATOM    888 2HG2 ILE A  58       2.231   5.216  -6.958  1.00 21.22
ATOM    889 3HG2 ILE A  58       1.258   5.544  -5.521  1.00 74.21
ATOM    890  CG1 ILE A  58       1.515   3.196  -4.237  1.00 41.44
ATOM    891 1HG1 ILE A  58       1.911   2.247  -3.911  1.00 65.25
ATOM    892 2HG1 ILE A  58       1.614   3.912  -3.436  1.00  0.42
ATOM    893  CD1 ILE A  58       0.030   3.001  -4.515  1.00 14.03
ATOM    894 1HD1 ILE A  58      -0.084   2.334  -5.360  1.00 13.25
ATOM    895 2HD1 ILE A  58      -0.397   3.963  -4.763  1.00 65.05
ATOM    896 3HD1 ILE A  58      -0.466   2.595  -3.646  1.00 11.25
ATOM    897  C   ILE A  58       4.033   1.885  -5.930  1.00 20.20
ATOM    898  O   ILE A  58       3.994   1.075  -4.989  1.00 35.04
ATOM    899  N   VAL A  59       5.124   2.176  -6.593  1.00 43.31
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ATOM    900  H   VAL A  59       5.064   2.818  -7.338  1.00 25.34
ATOM    901  CA  VAL A  59       6.410   1.597  -6.283  1.00 75.11
ATOM    902  HA  VAL A  59       6.303   0.921  -5.449  1.00 23.11
ATOM    903  CB  VAL A  59       6.981   0.805  -7.494  1.00 15.32
ATOM    904  HB  VAL A  59       7.207   1.525  -8.268  1.00 23.40
ATOM    905  CG1 VAL A  59       8.285   0.098  -7.134  1.00 71.20
ATOM    906 1HG1 VAL A  59       8.646  -0.450  -7.992  1.00  1.51
ATOM    907 2HG1 VAL A  59       8.113  -0.585  -6.315  1.00 50.52
ATOM    908 3HG1 VAL A  59       9.022   0.830  -6.839  1.00 53.51
ATOM    909  CG2 VAL A  59       5.970  -0.177  -8.036  1.00 31.33
ATOM    910 1HG2 VAL A  59       5.706  -0.883  -7.263  1.00  1.44
ATOM    911 2HG2 VAL A  59       6.395  -0.705  -8.876  1.00 73.24
ATOM    912 3HG2 VAL A  59       5.085   0.355  -8.352  1.00 70.43
ATOM    913  C   VAL A  59       7.395   2.694  -5.949  1.00 72.30
ATOM    914  O   VAL A  59       7.616   3.597  -6.758  1.00  1.32
ATOM    915  N   SER A  60       7.967   2.616  -4.796  1.00 21.23
ATOM    916  H   SER A  60       7.684   1.905  -4.175  1.00 31.40
ATOM    917  CA  SER A  60       8.991   3.523  -4.371  1.00 53.31
ATOM    918  HA  SER A  60       9.070   4.346  -5.066  1.00 24.23
ATOM    919  CB  SER A  60       8.646   4.041  -2.980  1.00 40.41
ATOM    920 1HB  SER A  60       8.742   3.241  -2.262  1.00 32.31
ATOM    921 2HB  SER A  60       9.323   4.841  -2.718  1.00 15.42
ATOM    922  OG  SER A  60       7.319   4.538  -2.939  1.00 52.33
ATOM    923  HG  SER A  60       7.332   5.380  -2.462  1.00 50.23
ATOM    924  C   SER A  60      10.293   2.735  -4.314  1.00 43.21
ATOM    925  O   SER A  60      10.284   1.552  -3.929  1.00 55.04
ATOM    926  N   ALA A  61      11.385   3.348  -4.680  1.00 11.21
ATOM    927  H   ALA A  61      11.362   4.298  -4.937  1.00 61.40
ATOM    928  CA  ALA A  61      12.660   2.669  -4.696  1.00 30.34
ATOM    929  HA  ALA A  61      12.542   1.730  -4.174  1.00 34.01
ATOM    930  CB  ALA A  61      13.098   2.380  -6.125  1.00  1.04
ATOM    931 1HB  ALA A  61      12.343   1.787  -6.618  1.00 34.33
ATOM    932 2HB  ALA A  61      14.029   1.831  -6.107  1.00 20.33
ATOM    933 3HB  ALA A  61      13.237   3.309  -6.658  1.00 32.43
ATOM    934  C   ALA A  61      13.690   3.499  -3.974  1.00 72.33
ATOM    935  O   ALA A  61      13.564   4.716  -3.897  1.00 15.14
ATOM    936  N   SER A  62      14.667   2.850  -3.409  1.00 41.43
ATOM    937  H   SER A  62      14.724   1.873  -3.468  1.00 43.30
ATOM    938  CA  SER A  62      15.696   3.529  -2.688  1.00 41.43
ATOM    939  HA  SER A  62      15.457   4.583  -2.700  1.00 63.02
ATOM    940  CB  SER A  62      15.673   3.057  -1.262  1.00 14.55
ATOM    941 1HB  SER A  62      15.865   1.995  -1.231  1.00  0.25
ATOM    942 2HB  SER A  62      16.418   3.584  -0.683  1.00 43.35
ATOM    943  OG  SER A  62      14.388   3.323  -0.716  1.00 60.43
ATOM    944  HG  SER A  62      13.861   3.750  -1.404  1.00  1.32
ATOM    945  C   SER A  62      17.058   3.338  -3.337  1.00 41.41
ATOM    946  O   SER A  62      17.345   2.279  -3.894  1.00 43.52
ATOM    947  N   ASP A  63      17.869   4.373  -3.271  1.00 52.11
ATOM    948  H   ASP A  63      17.600   5.208  -2.820  1.00  5.15
ATOM    949  CA  ASP A  63      19.201   4.398  -3.874  1.00 22.04
ATOM    950  HA  ASP A  63      19.175   3.891  -4.826  1.00 45.33
ATOM    951  CB  ASP A  63      19.602   5.855  -4.122  1.00 43.30
ATOM    952 1HB  ASP A  63      20.606   5.889  -4.522  1.00 51.43
ATOM    953 2HB  ASP A  63      18.916   6.304  -4.824  1.00 14.43
ATOM    954  CG  ASP A  63      19.561   6.653  -2.830  1.00 45.11
ATOM    955  OD1 ASP A  63      18.445   7.040  -2.431  1.00 61.22
ATOM    956  OD2 ASP A  63      20.605   6.810  -2.169  1.00 70.12
ATOM    957  C   ASP A  63      20.249   3.771  -2.966  1.00 44.21
ATOM    958  O   ASP A  63      21.201   3.160  -3.451  1.00 22.42
ATOM    959  N   SER A  64      20.053   3.872  -1.661  1.00 34.10
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ATOM    960  H   SER A  64      19.249   4.317  -1.324  1.00 34.02
ATOM    961  CA  SER A  64      21.052   3.413  -0.730  1.00 10.53
ATOM    962  HA  SER A  64      22.020   3.747  -1.073  1.00 73.33
ATOM    963  CB  SER A  64      20.761   4.043   0.622  1.00 60.05
ATOM    964 1HB  SER A  64      19.880   3.585   1.046  1.00 13.44
ATOM    965 2HB  SER A  64      21.601   3.891   1.282  1.00  1.43
ATOM    966  OG  SER A  64      20.533   5.448   0.481  1.00 15.33
ATOM    967  HG  SER A  64      20.708   5.771  -0.419  1.00  0.11
ATOM    968  C   SER A  64      21.033   1.888  -0.654  1.00 62.41
ATOM    969  O   SER A  64      22.080   1.234  -0.685  1.00  4.54
ATOM    970  N   ASP A  65      19.855   1.320  -0.583  1.00 63.03
ATOM    971  H   ASP A  65      19.048   1.849  -0.414  1.00 21.02
ATOM    972  CA  ASP A  65      19.715  -0.091  -0.726  1.00 23.13
ATOM    973  HA  ASP A  65      20.651  -0.404  -1.172  1.00 54.12
ATOM    974  CB  ASP A  65      19.507  -0.857   0.626  1.00  1.31
ATOM    975 1HB  ASP A  65      19.476  -1.916   0.416  1.00 41.23
ATOM    976 2HB  ASP A  65      20.368  -0.667   1.251  1.00  3.20
ATOM    977  CG  ASP A  65      18.246  -0.527   1.429  1.00 43.32
ATOM    978  OD1 ASP A  65      17.913   0.675   1.621  1.00 24.50
ATOM    979  OD2 ASP A  65      17.615  -1.469   1.962  1.00 65.05
ATOM    980  C   ASP A  65      18.662  -0.366  -1.773  1.00  1.02
ATOM    981  O   ASP A  65      17.473  -0.389  -1.511  1.00 53.02
ATOM    982  N   SER A  66      19.140  -0.546  -2.993  1.00  1.31
ATOM    983  H   SER A  66      20.112  -0.507  -3.110  1.00 21.42
ATOM    984  CA  SER A  66      18.303  -0.736  -4.176  1.00 10.25
ATOM    985  HA  SER A  66      17.582   0.069  -4.186  1.00 45.12
ATOM    986  CB  SER A  66      19.156  -0.635  -5.452  1.00 11.01
ATOM    987 1HB  SER A  66      19.653   0.323  -5.474  1.00 33.51
ATOM    988 2HB  SER A  66      19.896  -1.422  -5.444  1.00 44.21
ATOM    989  OG  SER A  66      18.370  -0.758  -6.626  1.00  4.24
ATOM    990  HG  SER A  66      17.489  -1.069  -6.385  1.00 41.35
ATOM    991  C   SER A  66      17.535  -2.050  -4.125  1.00 61.34
ATOM    992  O   SER A  66      16.564  -2.243  -4.852  1.00 22.11
ATOM    993  N   THR A  67      17.981  -2.944  -3.283  1.00 63.21
ATOM    994  H   THR A  67      18.746  -2.710  -2.721  1.00 51.33
ATOM    995  CA  THR A  67      17.360  -4.227  -3.133  1.00 41.41
ATOM    996  HA  THR A  67      17.041  -4.536  -4.117  1.00 74.33
ATOM    997  CB  THR A  67      18.380  -5.282  -2.589  1.00 34.34
ATOM    998  HB  THR A  67      19.142  -5.412  -3.344  1.00 32.03
ATOM    999  OG1 THR A  67      17.754  -6.550  -2.385  1.00  2.31
ATOM   1000  HG1 THR A  67      16.817  -6.392  -2.211  1.00 15.13
ATOM   1001  CG2 THR A  67      19.049  -4.812  -1.299  1.00 33.41
ATOM   1002 1HG2 THR A  67      19.586  -3.895  -1.480  1.00 43.23
ATOM   1003 2HG2 THR A  67      19.736  -5.570  -0.952  1.00 23.12
ATOM   1004 3HG2 THR A  67      18.293  -4.644  -0.546  1.00 54.34
ATOM   1005  C   THR A  67      16.107  -4.123  -2.241  1.00 34.10
ATOM   1006  O   THR A  67      15.379  -5.110  -2.050  1.00 11.21
ATOM   1007  N   ASP A  68      15.846  -2.941  -1.723  1.00  1.34
ATOM   1008  H   ASP A  68      16.427  -2.166  -1.894  1.00 52.13
ATOM   1009  CA  ASP A  68      14.686  -2.715  -0.906  1.00 22.45
ATOM   1010  HA  ASP A  68      14.140  -3.645  -0.877  1.00 42.13
ATOM   1011  CB  ASP A  68      15.075  -2.318   0.513  1.00 44.31
ATOM   1012 1HB  ASP A  68      15.724  -3.077   0.924  1.00 24.33
ATOM   1013 2HB  ASP A  68      15.614  -1.381   0.477  1.00 35.43
ATOM   1014  CG  ASP A  68      13.894  -2.156   1.440  1.00 60.43
ATOM   1015  OD1 ASP A  68      13.072  -3.101   1.541  1.00 43.12
ATOM   1016  OD2 ASP A  68      13.799  -1.109   2.146  1.00 64.45
ATOM   1017  C   ASP A  68      13.816  -1.666  -1.552  1.00 61.55
ATOM   1018  O   ASP A  68      14.288  -0.590  -1.941  1.00 43.34
ATOM   1019  N   SER A  69      12.573  -1.993  -1.718  1.00 23.43
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ATOM   1020  H   SER A  69      12.229  -2.834  -1.356  1.00 63.42
ATOM   1021  CA  SER A  69      11.640  -1.137  -2.360  1.00  4.54
ATOM   1022  HA  SER A  69      11.963  -0.117  -2.213  1.00 21.13
ATOM   1023  CB  SER A  69      11.618  -1.434  -3.869  1.00 63.43
ATOM   1024 1HB  SER A  69      10.778  -0.931  -4.320  1.00 53.15
ATOM   1025 2HB  SER A  69      12.534  -1.079  -4.319  1.00 24.25
ATOM   1026  OG  SER A  69      11.498  -2.833  -4.114  1.00 33.34
ATOM   1027  HG  SER A  69      12.299  -3.224  -3.752  1.00 62.54
ATOM   1028  C   SER A  69      10.272  -1.316  -1.734  1.00 73.11
ATOM   1029  O   SER A  69      10.013  -2.321  -1.039  1.00 43.14
ATOM   1030  N   LEU A  70       9.417  -0.365  -1.950  1.00 33.23
ATOM   1031  H   LEU A  70       9.682   0.400  -2.508  1.00  3.12
ATOM   1032  CA  LEU A  70       8.084  -0.411  -1.438  1.00  4.21
ATOM   1033  HA  LEU A  70       7.980  -1.320  -0.863  1.00 53.54
ATOM   1034  CB  LEU A  70       7.839   0.828  -0.517  1.00 24.00
ATOM   1035 1HB  LEU A  70       8.634   0.853   0.213  1.00 65.44
ATOM   1036 2HB  LEU A  70       7.937   1.709  -1.133  1.00 61.11
ATOM   1037  CG  LEU A  70       6.496   0.941   0.266  1.00 45.42
ATOM   1038  HG  LEU A  70       6.591   1.749   0.978  1.00 63.25
ATOM   1039  CD1 LEU A  70       5.323   1.290  -0.637  1.00 54.05
ATOM   1040 1HD1 LEU A  70       4.418   1.335  -0.050  1.00 55.53
ATOM   1041 2HD1 LEU A  70       5.225   0.538  -1.405  1.00 60.43
ATOM   1042 3HD1 LEU A  70       5.501   2.250  -1.099  1.00 74.01
ATOM   1043  CD2 LEU A  70       6.210  -0.336   1.049  1.00 55.11
ATOM   1044 1HD2 LEU A  70       6.131  -1.170   0.366  1.00  1.31
ATOM   1045 2HD2 LEU A  70       5.279  -0.226   1.586  1.00 25.43
ATOM   1046 3HD2 LEU A  70       7.013  -0.518   1.748  1.00 13.24
ATOM   1047  C   LEU A  70       7.149  -0.461  -2.631  1.00 62.24
ATOM   1048  O   LEU A  70       7.085   0.472  -3.405  1.00 65.44
ATOM   1049  N   GLN A  71       6.486  -1.567  -2.794  1.00 30.43
ATOM   1050  H   GLN A  71       6.589  -2.294  -2.146  1.00 22.43
ATOM   1051  CA  GLN A  71       5.572  -1.775  -3.892  1.00 12.02
ATOM   1052  HA  GLN A  71       5.406  -0.815  -4.358  1.00 12.44
ATOM   1053  CB  GLN A  71       6.232  -2.733  -4.925  1.00 61.12
ATOM   1054 1HB  GLN A  71       6.917  -2.159  -5.530  1.00 23.10
ATOM   1055 2HB  GLN A  71       6.809  -3.461  -4.372  1.00 73.21
ATOM   1056  CG  GLN A  71       5.313  -3.489  -5.890  1.00 71.43
ATOM   1057 1HG  GLN A  71       4.773  -4.251  -5.348  1.00 25.43
ATOM   1058 2HG  GLN A  71       4.612  -2.792  -6.326  1.00 35.42
ATOM   1059  CD  GLN A  71       6.112  -4.147  -7.022  1.00 71.10
ATOM   1060  OE1 GLN A  71       6.668  -5.249  -6.868  1.00 15.33
ATOM   1061  NE2 GLN A  71       6.081  -3.564  -8.181  1.00 31.41
ATOM   1062 2HE2 GLN A  71       5.536  -2.746  -8.284  1.00 15.02
ATOM   1063 1HE2 GLN A  71       6.562  -3.944  -8.940  1.00 55.31
ATOM   1064  C   GLN A  71       4.242  -2.269  -3.353  1.00 32.13
ATOM   1065  O   GLN A  71       4.173  -3.320  -2.703  1.00 34.53
ATOM   1066  N   VAL A  72       3.215  -1.475  -3.562  1.00 71.44
ATOM   1067  H   VAL A  72       3.352  -0.647  -4.076  1.00  3.53
ATOM   1068  CA  VAL A  72       1.877  -1.780  -3.087  1.00 50.30
ATOM   1069  HA  VAL A  72       1.883  -2.755  -2.623  1.00 30.42
ATOM   1070  CB  VAL A  72       1.385  -0.723  -2.040  1.00 63.05
ATOM   1071  HB  VAL A  72       1.392   0.241  -2.528  1.00 52.22
ATOM   1072  CG1 VAL A  72      -0.046  -1.005  -1.582  1.00 13.23
ATOM   1073 1HG1 VAL A  72      -0.104  -1.989  -1.143  1.00  3.02
ATOM   1074 2HG1 VAL A  72      -0.713  -0.953  -2.431  1.00 23.44
ATOM   1075 3HG1 VAL A  72      -0.340  -0.267  -0.850  1.00  0.32
ATOM   1076  CG2 VAL A  72       2.315  -0.661  -0.841  1.00 43.43
ATOM   1077 1HG2 VAL A  72       2.342  -1.621  -0.350  1.00 13.32
ATOM   1078 2HG2 VAL A  72       1.964   0.090  -0.148  1.00 75.20
ATOM   1079 3HG2 VAL A  72       3.310  -0.404  -1.177  1.00 30.22
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ATOM   1080  C   VAL A  72       0.921  -1.772  -4.256  1.00 41.31
ATOM   1081  O   VAL A  72       0.815  -0.764  -4.963  1.00 54.34
ATOM   1082  N   ALA A  73       0.233  -2.864  -4.447  1.00 65.42
ATOM   1083  H   ALA A  73       0.377  -3.644  -3.861  1.00 43.43
ATOM   1084  CA  ALA A  73      -0.741  -2.981  -5.487  1.00 72.14
ATOM   1085  HA  ALA A  73      -0.675  -2.108  -6.117  1.00 71.42
ATOM   1086  CB  ALA A  73      -0.485  -4.221  -6.331  1.00 60.40
ATOM   1087 1HB  ALA A  73       0.506  -4.169  -6.756  1.00  1.31
ATOM   1088 2HB  ALA A  73      -1.216  -4.275  -7.125  1.00 25.15
ATOM   1089 3HB  ALA A  73      -0.562  -5.100  -5.708  1.00 61.24
ATOM   1090  C   ALA A  73      -2.121  -3.025  -4.873  1.00  1.23
ATOM   1091  O   ALA A  73      -2.398  -3.845  -3.984  1.00 32.03
ATOM   1092  N   MET A  74      -2.967  -2.157  -5.328  1.00 32.33
ATOM   1093  H   MET A  74      -2.687  -1.545  -6.049  1.00 34.13
ATOM   1094  CA  MET A  74      -4.316  -2.045  -4.830  1.00 74.21
ATOM   1095  HA  MET A  74      -4.463  -2.700  -3.984  1.00 40.02
ATOM   1096  CB  MET A  74      -4.592  -0.595  -4.420  1.00 41.20
ATOM   1097 1HB  MET A  74      -4.533   0.018  -5.305  1.00 53.13
ATOM   1098 2HB  MET A  74      -5.595  -0.533  -4.023  1.00 24.05
ATOM   1099  CG  MET A  74      -3.628  -0.034  -3.387  1.00 61.33
ATOM   1100 1HG  MET A  74      -3.752  -0.571  -2.460  1.00 24.51
ATOM   1101 2HG  MET A  74      -2.620  -0.177  -3.747  1.00 61.42
ATOM   1102  SD  MET A  74      -3.883   1.719  -3.077  1.00 44.33
ATOM   1103  CE  MET A  74      -3.501   2.385  -4.690  1.00 51.43
ATOM   1104 1HE  MET A  74      -4.250   2.079  -5.406  1.00  1.05
ATOM   1105 2HE  MET A  74      -2.539   2.006  -5.004  1.00 23.01
ATOM   1106 3HE  MET A  74      -3.455   3.462  -4.636  1.00 34.41
ATOM   1107  C   MET A  74      -5.234  -2.397  -5.962  1.00 35.53
ATOM   1108  O   MET A  74      -5.189  -1.760  -6.992  1.00 24.22
ATOM   1109  N   LYS A  75      -6.059  -3.392  -5.781  1.00 10.43
ATOM   1110  H   LYS A  75      -6.084  -3.846  -4.908  1.00  4.44
ATOM   1111  CA  LYS A  75      -6.939  -3.847  -6.826  1.00 61.24
ATOM   1112  HA  LYS A  75      -6.744  -3.225  -7.688  1.00  1.43
ATOM   1113  CB  LYS A  75      -6.603  -5.310  -7.194  1.00 14.31
ATOM   1114 1HB  LYS A  75      -5.626  -5.341  -7.650  1.00 14.44
ATOM   1115 2HB  LYS A  75      -6.560  -5.877  -6.275  1.00 42.20
ATOM   1116  CG  LYS A  75      -7.600  -5.989  -8.123  1.00 64.42
ATOM   1117 1HG  LYS A  75      -8.454  -6.269  -7.521  1.00 14.32
ATOM   1118 2HG  LYS A  75      -7.902  -5.297  -8.893  1.00 40.13
ATOM   1119  CD  LYS A  75      -7.040  -7.268  -8.767  1.00  1.41
ATOM   1120 1HD  LYS A  75      -6.373  -7.744  -8.061  1.00 53.32
ATOM   1121 2HD  LYS A  75      -7.866  -7.929  -8.975  1.00 41.22
ATOM   1122  CE  LYS A  75      -6.259  -6.992 -10.076  1.00 65.52
ATOM   1123 1HE  LYS A  75      -5.994  -7.938 -10.524  1.00 31.52
ATOM   1124 2HE  LYS A  75      -6.912  -6.463 -10.754  1.00  1.15
ATOM   1125  NZ  LYS A  75      -5.012  -6.206  -9.893  1.00 60.13
ATOM   1126 1HZ  LYS A  75      -4.727  -5.817 -10.825  1.00 42.22
ATOM   1127 2HZ  LYS A  75      -4.208  -6.756  -9.538  1.00 70.52
ATOM   1128 3HZ  LYS A  75      -5.164  -5.375  -9.289  1.00 22.11
ATOM   1129  C   LYS A  75      -8.393  -3.647  -6.438  1.00 62.20
ATOM   1130  O   LYS A  75      -8.798  -3.998  -5.341  1.00  1.34
ATOM   1131  N   LYS A  76      -9.161  -3.121  -7.371  1.00 72.41
ATOM   1132  H   LYS A  76      -8.824  -3.009  -8.288  1.00  2.23
ATOM   1133  CA  LYS A  76     -10.512  -2.695  -7.150  1.00 65.45
ATOM   1134  HA  LYS A  76     -10.596  -2.135  -6.232  1.00 71.53
ATOM   1135  CB  LYS A  76     -10.895  -1.776  -8.295  1.00  4.21
ATOM   1136 1HB  LYS A  76     -10.145  -1.010  -8.424  1.00 41.04
ATOM   1137 2HB  LYS A  76     -10.913  -2.371  -9.196  1.00 14.52
ATOM   1138  CG  LYS A  76     -12.248  -1.121  -8.150  1.00 23.15
ATOM   1139 1HG  LYS A  76     -12.900  -1.783  -7.598  1.00 75.04
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ATOM   1140 2HG  LYS A  76     -12.134  -0.196  -7.607  1.00 11.24
ATOM   1141  CD  LYS A  76     -12.866  -0.829  -9.502  1.00  3.10
ATOM   1142 1HD  LYS A  76     -13.597  -0.042  -9.394  1.00 10.25
ATOM   1143 2HD  LYS A  76     -12.088  -0.506 -10.179  1.00 33.10
ATOM   1144  CE  LYS A  76     -13.553  -2.072 -10.091  1.00  3.15
ATOM   1145 1HE  LYS A  76     -14.213  -2.408  -9.307  1.00  4.45
ATOM   1146 2HE  LYS A  76     -14.110  -1.788 -10.969  1.00 41.12
ATOM   1147  NZ  LYS A  76     -12.649  -3.225 -10.393  1.00 72.33
ATOM   1148 1HZ  LYS A  76     -12.239  -3.632  -9.524  1.00  4.22
ATOM   1149 2HZ  LYS A  76     -11.850  -2.978 -11.015  1.00 41.54
ATOM   1150 3HZ  LYS A  76     -13.170  -3.990 -10.868  1.00  3.03
ATOM   1151  C   LYS A  76     -11.472  -3.868  -7.187  1.00 43.35
ATOM   1152  O   LYS A  76     -11.590  -4.554  -8.223  1.00 71.01
ATOM   1153  N   LEU A  77     -12.179  -4.047  -6.125  1.00 74.23
ATOM   1154  H   LEU A  77     -12.069  -3.447  -5.348  1.00 43.34
ATOM   1155  CA  LEU A  77     -13.190  -5.073  -6.004  1.00 55.31
ATOM   1156  HA  LEU A  77     -13.095  -5.699  -6.879  1.00  2.22
ATOM   1157  CB  LEU A  77     -13.003  -5.940  -4.732  1.00 65.23
ATOM   1158 1HB  LEU A  77     -12.667  -5.290  -3.939  1.00 13.00
ATOM   1159 2HB  LEU A  77     -13.973  -6.330  -4.457  1.00  5.43
ATOM   1160  CG  LEU A  77     -12.014  -7.126  -4.814  1.00 70.43
ATOM   1161  HG  LEU A  77     -12.353  -7.804  -5.585  1.00 62.22
ATOM   1162  CD1 LEU A  77     -10.614  -6.685  -5.178  1.00 10.12
ATOM   1163 1HD1 LEU A  77      -9.967  -7.547  -5.234  1.00 22.12
ATOM   1164 2HD1 LEU A  77     -10.246  -6.005  -4.424  1.00 61.43
ATOM   1165 3HD1 LEU A  77     -10.632  -6.183  -6.135  1.00 24.42
ATOM   1166  CD2 LEU A  77     -12.002  -7.895  -3.501  1.00 73.44
ATOM   1167 1HD2 LEU A  77     -11.702  -7.236  -2.701  1.00 72.11
ATOM   1168 2HD2 LEU A  77     -11.305  -8.716  -3.573  1.00  2.20
ATOM   1169 3HD2 LEU A  77     -12.992  -8.280  -3.299  1.00 64.24
ATOM   1170  C   LEU A  77     -14.568  -4.427  -6.012  1.00 41.23
ATOM   1171  O   LEU A  77     -14.707  -3.254  -5.634  1.00 11.11
ATOM   1172  N   PRO A  78     -15.591  -5.117  -6.546  1.00 34.31
ATOM   1173  CD  PRO A  78     -15.506  -6.431  -7.209  1.00 53.41
ATOM   1174  CA  PRO A  78     -16.967  -4.618  -6.505  1.00 43.43
ATOM   1175  HA  PRO A  78     -17.063  -3.668  -7.011  1.00 43.12
ATOM   1176  CB  PRO A  78     -17.775  -5.702  -7.239  1.00 24.54
ATOM   1177 1HB  PRO A  78     -18.289  -6.320  -6.516  1.00 75.00
ATOM   1178 2HB  PRO A  78     -18.481  -5.252  -7.922  1.00 23.03
ATOM   1179  CG  PRO A  78     -16.770  -6.484  -8.009  1.00 62.20
ATOM   1180 1HG  PRO A  78     -17.109  -7.503  -8.125  1.00 72.14
ATOM   1181 2HG  PRO A  78     -16.603  -6.029  -8.975  1.00 10.31
ATOM   1182 1HD  PRO A  78     -15.479  -7.233  -6.485  1.00 63.43
ATOM   1183 2HD  PRO A  78     -14.652  -6.478  -7.866  1.00 64.44
ATOM   1184  C   PRO A  78     -17.459  -4.485  -5.056  1.00 10.44
ATOM   1185  O   PRO A  78     -16.815  -4.988  -4.128  1.00  4.32
ATOM   1186  N   ASN A  79     -18.583  -3.792  -4.877  1.00  1.14
ATOM   1187  H   ASN A  79     -19.044  -3.431  -5.660  1.00 53.04
ATOM   1188  CA  ASN A  79     -19.205  -3.575  -3.547  1.00 24.34
ATOM   1189  HA  ASN A  79     -20.141  -3.073  -3.737  1.00 34.22
ATOM   1190  CB  ASN A  79     -19.504  -4.905  -2.803  1.00 25.32
ATOM   1191 1HB  ASN A  79     -18.603  -5.500  -2.778  1.00  3.42
ATOM   1192 2HB  ASN A  79     -19.798  -4.677  -1.788  1.00 62.15
ATOM   1193  CG  ASN A  79     -20.597  -5.740  -3.450  1.00 70.04
ATOM   1194  OD1 ASN A  79     -20.810  -5.699  -4.659  1.00  1.43
ATOM   1195  ND2 ASN A  79     -21.292  -6.514  -2.652  1.00 54.52
ATOM   1196 2HD2 ASN A  79     -21.071  -6.512  -1.698  1.00  3.44
ATOM   1197 1HD2 ASN A  79     -21.998  -7.057  -3.058  1.00 31.11
ATOM   1198  C   ASN A  79     -18.377  -2.646  -2.672  1.00  3.22
ATOM   1199  O   ASN A  79     -18.570  -2.597  -1.463  1.00 11.13
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ATOM   1200  N   ASN A  80     -17.503  -1.860  -3.316  1.00 61.20
ATOM   1201  H   ASN A  80     -17.422  -1.979  -4.281  1.00 50.14
ATOM   1202  CA  ASN A  80     -16.644  -0.867  -2.636  1.00 35.22
ATOM   1203  HA  ASN A  80     -16.104  -0.363  -3.423  1.00  1.22
ATOM   1204  CB  ASN A  80     -17.456   0.199  -1.854  1.00 51.11
ATOM   1205 1HB  ASN A  80     -18.199  -0.303  -1.252  1.00 74.00
ATOM   1206 2HB  ASN A  80     -16.784   0.737  -1.202  1.00 12.21
ATOM   1207  CG  ASN A  80     -18.169   1.192  -2.744  1.00 74.24
ATOM   1208  OD1 ASN A  80     -17.689   1.541  -3.824  1.00 64.30
ATOM   1209  ND2 ASN A  80     -19.320   1.656  -2.310  1.00  2.13
ATOM   1210 2HD2 ASN A  80     -19.645   1.331  -1.443  1.00 25.50
ATOM   1211 1HD2 ASN A  80     -19.799   2.302  -2.868  1.00 51.31
ATOM   1212  C   ASN A  80     -15.606  -1.506  -1.740  1.00 61.34
ATOM   1213  O   ASN A  80     -15.464  -1.140  -0.579  1.00 42.32
ATOM   1214  N   ALA A  81     -14.888  -2.462  -2.274  1.00 74.22
ATOM   1215  H   ALA A  81     -15.058  -2.766  -3.191  1.00 74.40
ATOM   1216  CA  ALA A  81     -13.813  -3.084  -1.550  1.00 62.43
ATOM   1217  HA  ALA A  81     -13.638  -2.493  -0.663  1.00  3.34
ATOM   1218  CB  ALA A  81     -14.170  -4.503  -1.138  1.00 42.44
ATOM   1219 1HB  ALA A  81     -14.321  -5.117  -2.013  1.00 72.01
ATOM   1220 2HB  ALA A  81     -15.072  -4.475  -0.546  1.00 20.02
ATOM   1221 3HB  ALA A  81     -13.362  -4.900  -0.542  1.00 22.51
ATOM   1222  C   ALA A  81     -12.554  -3.057  -2.399  1.00 23.14
ATOM   1223  O   ALA A  81     -12.621  -2.859  -3.615  1.00 44.54
ATOM   1224  N   THR A  82     -11.423  -3.220  -1.776  1.00  4.12
ATOM   1225  H   THR A  82     -11.418  -3.362  -0.803  1.00 31.13
ATOM   1226  CA  THR A  82     -10.168  -3.194  -2.470  1.00 51.22
ATOM   1227  HA  THR A  82     -10.351  -3.413  -3.511  1.00 33.31
ATOM   1228  CB  THR A  82      -9.509  -1.790  -2.358  1.00 52.55
ATOM   1229  HB  THR A  82      -9.154  -1.638  -1.350  1.00 70.45
ATOM   1230  OG1 THR A  82     -10.473  -0.780  -2.695  1.00  4.02
ATOM   1231  HG1 THR A  82     -11.208  -0.808  -2.070  1.00 53.42
ATOM   1232  CG2 THR A  82      -8.342  -1.670  -3.325  1.00  5.53
ATOM   1233 1HG2 THR A  82      -7.886  -0.695  -3.263  1.00  3.51
ATOM   1234 2HG2 THR A  82      -8.697  -1.834  -4.333  1.00  3.45
ATOM   1235 3HG2 THR A  82      -7.606  -2.424  -3.088  1.00 34.25
ATOM   1236  C   THR A  82      -9.230  -4.265  -1.879  1.00 44.33
ATOM   1237  O   THR A  82      -9.177  -4.455  -0.662  1.00 63.30
ATOM   1238  N   ARG A  83      -8.516  -4.953  -2.728  1.00 71.43
ATOM   1239  H   ARG A  83      -8.606  -4.737  -3.686  1.00 32.12
ATOM   1240  CA  ARG A  83      -7.588  -5.988  -2.311  1.00 64.53
ATOM   1241  HA  ARG A  83      -7.803  -6.292  -1.298  1.00 62.24
ATOM   1242  CB  ARG A  83      -7.703  -7.192  -3.256  1.00 72.24
ATOM   1243 1HB  ARG A  83      -8.725  -7.541  -3.238  1.00 12.51
ATOM   1244 2HB  ARG A  83      -7.479  -6.856  -4.259  1.00 33.33
ATOM   1245  CG  ARG A  83      -6.802  -8.390  -2.941  1.00 70.31
ATOM   1246 1HG  ARG A  83      -6.806  -9.078  -3.773  1.00 12.31
ATOM   1247 2HG  ARG A  83      -5.795  -8.036  -2.780  1.00 12.31
ATOM   1248  CD  ARG A  83      -7.245  -9.140  -1.699  1.00 62.22
ATOM   1249 1HD  ARG A  83      -7.103  -8.505  -0.836  1.00 72.01
ATOM   1250 2HD  ARG A  83      -8.290  -9.382  -1.813  1.00 41.03
ATOM   1251  NE  ARG A  83      -6.471 -10.394  -1.535  1.00 20.31
ATOM   1252  HE  ARG A  83      -5.718 -10.470  -2.161  1.00 41.32
ATOM   1253  CZ  ARG A  83      -6.761 -11.387  -0.667  1.00 54.11
ATOM   1254  NH1 ARG A  83      -7.719 -11.233   0.229  1.00 40.20
ATOM   1255 1HH1 ARG A  83      -8.248 -10.374   0.291  1.00 72.32
ATOM   1256 2HH1 ARG A  83      -7.968 -11.940   0.890  1.00 32.24
ATOM   1257  NH2 ARG A  83      -6.053 -12.522  -0.685  1.00 24.33
ATOM   1258 1HH2 ARG A  83      -5.299 -12.676  -1.325  1.00 71.05
ATOM   1259 2HH2 ARG A  83      -6.250 -13.276  -0.053  1.00 70.22
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ATOM   1260  C   ARG A  83      -6.195  -5.413  -2.418  1.00 61.23
ATOM   1261  O   ARG A  83      -5.827  -4.871  -3.462  1.00 54.21
ATOM   1262  N   ILE A  84      -5.433  -5.523  -1.366  1.00 11.21
ATOM   1263  H   ILE A  84      -5.727  -6.008  -0.562  1.00 31.54
ATOM   1264  CA  ILE A  84      -4.108  -4.972  -1.336  1.00 35.10
ATOM   1265  HA  ILE A  84      -3.965  -4.458  -2.275  1.00 75.15
ATOM   1266  CB  ILE A  84      -3.934  -3.913  -0.164  1.00 21.12
ATOM   1267  HB  ILE A  84      -4.629  -4.189   0.615  1.00  2.13
ATOM   1268  CG2 ILE A  84      -2.544  -3.925   0.457  1.00 11.43
ATOM   1269 1HG2 ILE A  84      -2.496  -3.178   1.237  1.00 22.00
ATOM   1270 2HG2 ILE A  84      -1.810  -3.707  -0.303  1.00 25.42
ATOM   1271 3HG2 ILE A  84      -2.353  -4.901   0.880  1.00 50.31
ATOM   1272  CG1 ILE A  84      -4.283  -2.493  -0.626  1.00 40.13
ATOM   1273 1HG1 ILE A  84      -4.053  -1.790   0.160  1.00 43.04
ATOM   1274 2HG1 ILE A  84      -3.648  -2.294  -1.478  1.00 52.44
ATOM   1275  CD1 ILE A  84      -5.714  -2.274  -1.044  1.00 50.30
ATOM   1276 1HD1 ILE A  84      -5.939  -2.940  -1.863  1.00 64.24
ATOM   1277 2HD1 ILE A  84      -5.839  -1.252  -1.372  1.00 13.31
ATOM   1278 3HD1 ILE A  84      -6.388  -2.473  -0.226  1.00  0.32
ATOM   1279  C   ILE A  84      -3.076  -6.076  -1.249  1.00 71.15
ATOM   1280  O   ILE A  84      -3.212  -7.034  -0.467  1.00 24.13
ATOM   1281  N   SER A  85      -2.093  -5.961  -2.078  1.00  4.11
ATOM   1282  H   SER A  85      -2.084  -5.205  -2.711  1.00 33.42
ATOM   1283  CA  SER A  85      -1.000  -6.860  -2.098  1.00 11.22
ATOM   1284  HA  SER A  85      -1.075  -7.520  -1.247  1.00 62.30
ATOM   1285  CB  SER A  85      -1.010  -7.677  -3.398  1.00 11.24
ATOM   1286 1HB  SER A  85      -1.996  -8.088  -3.554  1.00 61.32
ATOM   1287 2HB  SER A  85      -0.758  -7.023  -4.220  1.00 71.50
ATOM   1288  OG  SER A  85      -0.072  -8.741  -3.352  1.00 41.30
ATOM   1289  HG  SER A  85      -0.304  -9.312  -2.614  1.00 11.43
ATOM   1290  C   SER A  85       0.253  -6.022  -1.990  1.00  1.33
ATOM   1291  O   SER A  85       0.443  -5.077  -2.764  1.00  4.50
ATOM   1292  N   ILE A  86       1.056  -6.297  -1.014  1.00 50.44
ATOM   1293  H   ILE A  86       0.864  -7.034  -0.390  1.00 53.51
ATOM   1294  CA  ILE A  86       2.255  -5.555  -0.823  1.00 24.22
ATOM   1295  HA  ILE A  86       2.282  -4.787  -1.582  1.00 13.13
ATOM   1296  CB  ILE A  86       2.296  -4.875   0.575  1.00 23.33
ATOM   1297  HB  ILE A  86       2.268  -5.645   1.331  1.00  1.51
ATOM   1298  CG2 ILE A  86       3.584  -4.060   0.743  1.00 62.14
ATOM   1299 1HG2 ILE A  86       4.437  -4.718   0.663  1.00 74.44
ATOM   1300 2HG2 ILE A  86       3.585  -3.580   1.710  1.00 34.22
ATOM   1301 3HG2 ILE A  86       3.636  -3.310  -0.031  1.00 71.13
ATOM   1302  CG1 ILE A  86       1.061  -3.973   0.736  1.00 65.02
ATOM   1303 1HG1 ILE A  86       1.094  -3.205  -0.022  1.00 13.21
ATOM   1304 2HG1 ILE A  86       0.177  -4.572   0.581  1.00 20.30
ATOM   1305  CD1 ILE A  86       0.933  -3.284   2.075  1.00 72.52
ATOM   1306 1HD1 ILE A  86       0.801  -4.032   2.843  1.00 42.33
ATOM   1307 2HD1 ILE A  86       0.081  -2.622   2.061  1.00 54.14
ATOM   1308 3HD1 ILE A  86       1.829  -2.716   2.275  1.00 22.34
ATOM   1309  C   ILE A  86       3.445  -6.462  -1.032  1.00 64.44
ATOM   1310  O   ILE A  86       3.481  -7.602  -0.546  1.00 42.44
ATOM   1311  N   LYS A  87       4.411  -5.943  -1.709  1.00 25.34
ATOM   1312  H   LYS A  87       4.346  -4.994  -1.966  1.00 14.14
ATOM   1313  CA  LYS A  87       5.572  -6.651  -2.103  1.00  4.15
ATOM   1314  HA  LYS A  87       5.441  -7.691  -1.840  1.00 62.44
ATOM   1315  CB  LYS A  87       5.713  -6.526  -3.637  1.00 41.12
ATOM   1316 1HB  LYS A  87       4.825  -6.942  -4.090  1.00  3.44
ATOM   1317 2HB  LYS A  87       5.739  -5.472  -3.872  1.00 54.00
ATOM   1318  CG  LYS A  87       6.915  -7.194  -4.309  1.00 45.50
ATOM   1319 1HG  LYS A  87       7.076  -8.160  -3.856  1.00 72.13
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ATOM   1320 2HG  LYS A  87       6.697  -7.322  -5.359  1.00 63.23
ATOM   1321  CD  LYS A  87       8.191  -6.372  -4.164  1.00 52.22
ATOM   1322 1HD  LYS A  87       7.980  -5.345  -4.423  1.00 51.31
ATOM   1323 2HD  LYS A  87       8.526  -6.424  -3.140  1.00 21.51
ATOM   1324  CE  LYS A  87       9.285  -6.886  -5.071  1.00 44.15
ATOM   1325 1HE  LYS A  87      10.167  -6.273  -4.946  1.00 35.20
ATOM   1326 2HE  LYS A  87       9.511  -7.907  -4.805  1.00 42.13
ATOM   1327  NZ  LYS A  87       8.856  -6.841  -6.494  1.00  5.30
ATOM   1328 1HZ  LYS A  87       8.132  -7.566  -6.665  1.00 33.13
ATOM   1329 2HZ  LYS A  87       9.647  -6.954  -7.156  1.00  4.33
ATOM   1330 3HZ  LYS A  87       8.391  -5.923  -6.672  1.00 13.42
ATOM   1331  C   LYS A  87       6.745  -6.086  -1.334  1.00 54.11
ATOM   1332  O   LYS A  87       6.874  -4.869  -1.172  1.00 75.53
ATOM   1333  N   TYR A  88       7.556  -6.969  -0.835  1.00 11.44
ATOM   1334  H   TYR A  88       7.450  -7.907  -1.089  1.00 54.40
ATOM   1335  CA  TYR A  88       8.622  -6.629   0.068  1.00 64.34
ATOM   1336  HA  TYR A  88       8.357  -5.728   0.598  1.00  1.20
ATOM   1337  CB  TYR A  88       8.782  -7.743   1.119  1.00 10.12
ATOM   1338 1HB  TYR A  88       9.561  -7.458   1.810  1.00 65.04
ATOM   1339 2HB  TYR A  88       7.854  -7.853   1.661  1.00 62.43
ATOM   1340  CG  TYR A  88       9.160  -9.115   0.547  1.00 21.10
ATOM   1341  CD1 TYR A  88       8.223  -9.901  -0.110  1.00 12.22
ATOM   1342  HD1 TYR A  88       7.214  -9.528  -0.211  1.00 61.14
ATOM   1343  CE1 TYR A  88       8.555 -11.132  -0.631  1.00 24.13
ATOM   1344  HE1 TYR A  88       7.809 -11.726  -1.137  1.00 43.45
ATOM   1345  CZ  TYR A  88       9.840 -11.600  -0.501  1.00 13.21
ATOM   1346  CE2 TYR A  88      10.793 -10.848   0.149  1.00 63.31
ATOM   1347  HE2 TYR A  88      11.803 -11.218   0.251  1.00 11.14
ATOM   1348  CD2 TYR A  88      10.453  -9.614   0.668  1.00 74.15
ATOM   1349  HD2 TYR A  88      11.197  -9.021   1.179  1.00 33.43
ATOM   1350  OH  TYR A  88      10.168 -12.824  -1.020  1.00 23.10
ATOM   1351  HH  TYR A  88      10.593 -13.338  -0.329  1.00 42.23
ATOM   1352  C   TYR A  88       9.943  -6.434  -0.633  1.00 72.24
ATOM   1353  O   TYR A  88      10.171  -6.961  -1.728  1.00 25.12
ATOM   1354  N   GLY A  89      10.772  -5.642  -0.009  1.00 71.32
ATOM   1355  H   GLY A  89      10.469  -5.124   0.765  1.00 74.55
ATOM   1356  CA  GLY A  89      12.125  -5.503  -0.410  1.00 43.32
ATOM   1357 1HA  GLY A  89      12.234  -5.791  -1.446  1.00  2.42
ATOM   1358 2HA  GLY A  89      12.430  -4.477  -0.269  1.00 21.42
ATOM   1359  C   GLY A  89      12.962  -6.386   0.477  1.00 35.20
ATOM   1360  O   GLY A  89      12.401  -7.214   1.213  1.00 13.34
ATOM   1361  N   SER A  90      14.247  -6.191   0.488  1.00 62.14
ATOM   1362  H   SER A  90      14.650  -5.463  -0.035  1.00  2.14
ATOM   1363  CA  SER A  90      15.152  -7.024   1.255  1.00  1.34
ATOM   1364  HA  SER A  90      14.996  -8.049   0.952  1.00  2.35
ATOM   1365  CB  SER A  90      16.580  -6.652   0.898  1.00 62.11
ATOM   1366 1HB  SER A  90      17.260  -7.111   1.602  1.00 72.24
ATOM   1367 2HB  SER A  90      16.804  -6.990  -0.102  1.00 63.21
ATOM   1368  OG  SER A  90      16.746  -5.239   0.949  1.00 43.41
ATOM   1369  HG  SER A  90      16.935  -4.969   1.853  1.00 54.32
ATOM   1370  C   SER A  90      14.934  -6.925   2.774  1.00 23.12
ATOM   1371  O   SER A  90      15.363  -7.798   3.517  1.00 53.14
ATOM   1372  N   GLN A  91      14.257  -5.879   3.222  1.00 14.33
ATOM   1373  H   GLN A  91      13.877  -5.235   2.585  1.00  2.13
ATOM   1374  CA  GLN A  91      14.089  -5.671   4.651  1.00 13.42
ATOM   1375  HA  GLN A  91      14.943  -6.102   5.150  1.00 21.23
ATOM   1376  CB  GLN A  91      14.043  -4.181   4.976  1.00 62.41
ATOM   1377 1HB  GLN A  91      13.107  -3.781   4.619  1.00 35.34
ATOM   1378 2HB  GLN A  91      14.080  -4.067   6.050  1.00 12.41
ATOM   1379  CG  GLN A  91      15.171  -3.354   4.370  1.00 41.21
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ATOM   1380 1HG  GLN A  91      15.048  -3.350   3.297  1.00  2.35
ATOM   1381 2HG  GLN A  91      15.073  -2.343   4.734  1.00 34.02
ATOM   1382  CD  GLN A  91      16.573  -3.853   4.678  1.00 22.01
ATOM   1383  OE1 GLN A  91      16.824  -4.470   5.701  1.00 55.03
ATOM   1384  NE2 GLN A  91      17.519  -3.518   3.822  1.00 71.33
ATOM   1385 2HE2 GLN A  91      17.309  -2.955   3.033  1.00 22.01
ATOM   1386 1HE2 GLN A  91      18.424  -3.837   4.009  1.00 44.41
ATOM   1387  C   GLN A  91      12.816  -6.340   5.182  1.00 42.12
ATOM   1388  O   GLN A  91      12.614  -6.422   6.386  1.00 21.02
ATOM   1389  N   GLY A  92      11.966  -6.820   4.284  1.00 11.23
ATOM   1390  H   GLY A  92      12.225  -6.794   3.339  1.00 41.25
ATOM   1391  CA  GLY A  92      10.707  -7.399   4.717  1.00 54.24
ATOM   1392 1HA  GLY A  92      10.315  -8.026   3.929  1.00 41.04
ATOM   1393 2HA  GLY A  92      10.876  -7.998   5.598  1.00 62.40
ATOM   1394  C   GLY A  92       9.692  -6.313   5.048  1.00 24.01
ATOM   1395  O   GLY A  92       9.639  -5.806   6.168  1.00 22.40
ATOM   1396  N   ASN A  93       8.853  -5.988   4.091  1.00 50.10
ATOM   1397  H   ASN A  93       8.842  -6.527   3.275  1.00  1.03
ATOM   1398  CA  ASN A  93       7.933  -4.856   4.229  1.00 43.53
ATOM   1399  HA  ASN A  93       8.545  -4.056   4.622  1.00 73.25
ATOM   1400  CB  ASN A  93       7.375  -4.357   2.878  1.00 72.12
ATOM   1401 1HB  ASN A  93       7.070  -5.205   2.283  1.00  3.30
ATOM   1402 2HB  ASN A  93       6.516  -3.728   3.064  1.00 10.12
ATOM   1403  CG  ASN A  93       8.396  -3.562   2.099  1.00 52.22
ATOM   1404  OD1 ASN A  93       9.264  -2.955   2.680  1.00  2.33
ATOM   1405  ND2 ASN A  93       8.288  -3.533   0.797  1.00  2.12
ATOM   1406 2HD2 ASN A  93       7.561  -4.014   0.340  1.00 74.52
ATOM   1407 1HD2 ASN A  93       8.954  -3.019   0.283  1.00 24.32
ATOM   1408  C   ASN A  93       6.818  -5.041   5.229  1.00 11.24
ATOM   1409  O   ASN A  93       6.257  -4.055   5.654  1.00 11.33
ATOM   1410  N   SER A  94       6.565  -6.278   5.669  1.00 30.34
ATOM   1411  H   SER A  94       7.162  -7.005   5.397  1.00 51.44
ATOM   1412  CA  SER A  94       5.425  -6.614   6.552  1.00 14.12
ATOM   1413  HA  SER A  94       4.529  -6.586   5.950  1.00 24.34
ATOM   1414  CB  SER A  94       5.593  -8.034   7.075  1.00 22.24
ATOM   1415 1HB  SER A  94       6.456  -8.080   7.723  1.00 63.02
ATOM   1416 2HB  SER A  94       4.712  -8.323   7.628  1.00 35.43
ATOM   1417  OG  SER A  94       5.777  -8.937   6.005  1.00 40.22
ATOM   1418  HG  SER A  94       5.383  -8.579   5.201  1.00 61.13
ATOM   1419  C   SER A  94       5.242  -5.635   7.741  1.00 32.15
ATOM   1420  O   SER A  94       4.120  -5.207   8.022  1.00  1.44
ATOM   1421  N   ILE A  95       6.341  -5.255   8.386  1.00 43.55
ATOM   1422  H   ILE A  95       7.206  -5.593   8.070  1.00 74.11
ATOM   1423  CA  ILE A  95       6.293  -4.346   9.535  1.00 34.32
ATOM   1424  HA  ILE A  95       5.575  -4.752  10.233  1.00 11.41
ATOM   1425  CB  ILE A  95       7.694  -4.201  10.263  1.00 53.23
ATOM   1426  HB  ILE A  95       8.408  -3.890   9.514  1.00 32.44
ATOM   1427  CG2 ILE A  95       7.657  -3.103  11.328  1.00 34.02
ATOM   1428 1HG2 ILE A  95       7.407  -2.161  10.866  1.00 55.22
ATOM   1429 2HG2 ILE A  95       8.624  -3.026  11.803  1.00 54.24
ATOM   1430 3HG2 ILE A  95       6.910  -3.349  12.071  1.00 45.55
ATOM   1431  CG1 ILE A  95       8.183  -5.529  10.905  1.00 64.41
ATOM   1432 1HG1 ILE A  95       9.030  -5.317  11.539  1.00 23.51
ATOM   1433 2HG1 ILE A  95       7.388  -5.930  11.515  1.00 74.51
ATOM   1434  CD1 ILE A  95       8.619  -6.615   9.932  1.00 44.14
ATOM   1435 1HD1 ILE A  95       8.957  -7.478  10.486  1.00 62.34
ATOM   1436 2HD1 ILE A  95       9.423  -6.245   9.312  1.00  4.04
ATOM   1437 3HD1 ILE A  95       7.783  -6.893   9.308  1.00 43.32
ATOM   1438  C   ILE A  95       5.796  -2.960   9.090  1.00 42.01
ATOM   1439  O   ILE A  95       4.845  -2.409   9.655  1.00 53.02
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ATOM   1440  N   ARG A  96       6.403  -2.452   8.031  1.00 22.54
ATOM   1441  H   ARG A  96       7.067  -3.007   7.574  1.00 42.01
ATOM   1442  CA  ARG A  96       6.081  -1.129   7.504  1.00 31.43
ATOM   1443  HA  ARG A  96       6.077  -0.447   8.340  1.00 10.11
ATOM   1444  CB  ARG A  96       7.149  -0.668   6.483  1.00  2.54
ATOM   1445 1HB  ARG A  96       7.205  -1.392   5.685  1.00 63.33
ATOM   1446 2HB  ARG A  96       6.850   0.285   6.074  1.00 72.33
ATOM   1447  CG  ARG A  96       8.542  -0.512   7.093  1.00 30.25
ATOM   1448 1HG  ARG A  96       8.473   0.137   7.954  1.00 35.33
ATOM   1449 2HG  ARG A  96       8.884  -1.486   7.415  1.00 44.15
ATOM   1450  CD  ARG A  96       9.569   0.081   6.122  1.00 32.43
ATOM   1451 1HD  ARG A  96       9.158   0.987   5.703  1.00 52.42
ATOM   1452 2HD  ARG A  96      10.457   0.332   6.683  1.00 45.33
ATOM   1453  NE  ARG A  96       9.952  -0.811   4.999  1.00 10.41
ATOM   1454  HE  ARG A  96       9.307  -1.504   4.744  1.00 61.44
ATOM   1455  CZ  ARG A  96      11.119  -0.689   4.305  1.00 43.41
ATOM   1456  NH1 ARG A  96      12.019   0.197   4.663  1.00 45.51
ATOM   1457 1HH1 ARG A  96      11.921   0.815   5.462  1.00 55.14
ATOM   1458 2HH1 ARG A  96      12.861   0.348   4.138  1.00 53.13
ATOM   1459  NH2 ARG A  96      11.374  -1.472   3.281  1.00 71.22
ATOM   1460 1HH2 ARG A  96      10.737  -2.180   2.958  1.00 73.23
ATOM   1461 2HH2 ARG A  96      12.247  -1.422   2.765  1.00 21.42
ATOM   1462  C   ARG A  96       4.685  -1.126   6.885  1.00 10.12
ATOM   1463  O   ARG A  96       3.930  -0.166   7.025  1.00 74.30
ATOM   1464  N   SER A  97       4.346  -2.222   6.246  1.00 30.41
ATOM   1465  H   SER A  97       4.996  -2.959   6.172  1.00 43.11
ATOM   1466  CA  SER A  97       3.068  -2.406   5.612  1.00 32.03
ATOM   1467  HA  SER A  97       2.920  -1.599   4.912  1.00 54.03
ATOM   1468  CB  SER A  97       3.084  -3.708   4.837  1.00 25.52
ATOM   1469 1HB  SER A  97       3.248  -4.527   5.523  1.00  1.34
ATOM   1470 2HB  SER A  97       2.140  -3.844   4.331  1.00 23.23
ATOM   1471  OG  SER A  97       4.126  -3.692   3.880  1.00 62.51
ATOM   1472  HG  SER A  97       4.049  -2.884   3.368  1.00 14.10
ATOM   1473  C   SER A  97       1.924  -2.406   6.625  1.00 72.11
ATOM   1474  O   SER A  97       0.885  -1.810   6.372  1.00 23.25
ATOM   1475  N   SER A  98       2.132  -3.048   7.765  1.00  4.11
ATOM   1476  H   SER A  98       2.992  -3.494   7.929  1.00 14.35
ATOM   1477  CA  SER A  98       1.107  -3.133   8.790  1.00  3.40
ATOM   1478  HA  SER A  98       0.228  -3.562   8.335  1.00 35.41
ATOM   1479  CB  SER A  98       1.584  -4.048   9.935  1.00 64.05
ATOM   1480 1HB  SER A  98       1.958  -4.974   9.521  1.00 30.21
ATOM   1481 2HB  SER A  98       2.381  -3.553  10.472  1.00  1.24
ATOM   1482  OG  SER A  98       0.537  -4.349  10.842  1.00 44.11
ATOM   1483  HG  SER A  98       0.646  -3.837  11.648  1.00 14.14
ATOM   1484  C   SER A  98       0.754  -1.723   9.301  1.00  5.51
ATOM   1485  O   SER A  98      -0.422  -1.381   9.470  1.00 35.13
ATOM   1486  N   ALA A  99       1.777  -0.895   9.484  1.00 71.50
ATOM   1487  H   ALA A  99       2.686  -1.215   9.304  1.00 30.51
ATOM   1488  CA  ALA A  99       1.575   0.467   9.940  1.00 25.14
ATOM   1489  HA  ALA A  99       0.926   0.431  10.802  1.00 22.33
ATOM   1490  CB  ALA A  99       2.900   1.095  10.347  1.00  1.41
ATOM   1491 1HB  ALA A  99       3.364   0.492  11.113  1.00  5.14
ATOM   1492 2HB  ALA A  99       2.728   2.092  10.727  1.00 42.30
ATOM   1493 3HB  ALA A  99       3.551   1.146   9.487  1.00 23.41
ATOM   1494  C   ALA A  99       0.893   1.294   8.858  1.00 40.12
ATOM   1495  O   ALA A  99      -0.026   2.064   9.140  1.00 33.02
ATOM   1496  N   LEU A 100       1.332   1.095   7.617  1.00 34.12
ATOM   1497  H   LEU A 100       2.075   0.475   7.457  1.00 72.11
ATOM   1498  CA  LEU A 100       0.796   1.777   6.458  1.00 63.24
ATOM   1499  HA  LEU A 100       0.994   2.833   6.545  1.00 62.11
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ATOM   1500  CB  LEU A 100       1.494   1.244   5.209  1.00 33.22
ATOM   1501 1HB  LEU A 100       2.553   1.222   5.403  1.00 35.05
ATOM   1502 2HB  LEU A 100       1.172   0.221   5.084  1.00 34.13
ATOM   1503  CG  LEU A 100       1.227   1.981   3.901  1.00 51.52
ATOM   1504  HG  LEU A 100       0.160   2.016   3.733  1.00 24.21
ATOM   1505  CD1 LEU A 100       1.736   3.412   3.974  1.00 35.25
ATOM   1506 1HD1 LEU A 100       2.793   3.397   4.191  1.00 52.44
ATOM   1507 2HD1 LEU A 100       1.214   3.940   4.760  1.00 70.41
ATOM   1508 3HD1 LEU A 100       1.567   3.906   3.029  1.00 14.30
ATOM   1509  CD2 LEU A 100       1.867   1.240   2.740  1.00 73.01
ATOM   1510 1HD2 LEU A 100       1.676   1.771   1.820  1.00 21.23
ATOM   1511 2HD2 LEU A 100       1.449   0.246   2.680  1.00 11.13
ATOM   1512 3HD2 LEU A 100       2.932   1.172   2.907  1.00 22.42
ATOM   1513  C   LEU A 100      -0.702   1.526   6.345  1.00 10.50
ATOM   1514  O   LEU A 100      -1.479   2.459   6.212  1.00 61.04
ATOM   1515  N   ILE A 101      -1.085   0.264   6.467  1.00 25.13
ATOM   1516  H   ILE A 101      -0.377  -0.404   6.611  1.00 34.52
ATOM   1517  CA  ILE A 101      -2.492  -0.149   6.367  1.00 62.12
ATOM   1518  HA  ILE A 101      -2.847   0.155   5.392  1.00  4.55
ATOM   1519  CB  ILE A 101      -2.644  -1.700   6.487  1.00 64.42
ATOM   1520  HB  ILE A 101      -2.148  -1.999   7.399  1.00 13.13
ATOM   1521  CG2 ILE A 101      -4.108  -2.129   6.607  1.00 30.54
ATOM   1522 1HG2 ILE A 101      -4.164  -3.204   6.689  1.00 62.32
ATOM   1523 2HG2 ILE A 101      -4.654  -1.798   5.737  1.00 34.31
ATOM   1524 3HG2 ILE A 101      -4.532  -1.677   7.493  1.00 43.25
ATOM   1525  CG1 ILE A 101      -1.959  -2.413   5.309  1.00 35.24
ATOM   1526 1HG1 ILE A 101      -0.906  -2.180   5.322  1.00 61.32
ATOM   1527 2HG1 ILE A 101      -2.084  -3.478   5.435  1.00 34.21
ATOM   1528  CD1 ILE A 101      -2.492  -2.036   3.936  1.00 32.24
ATOM   1529 1HD1 ILE A 101      -3.549  -2.252   3.889  1.00 41.35
ATOM   1530 2HD1 ILE A 101      -1.974  -2.621   3.191  1.00 75.21
ATOM   1531 3HD1 ILE A 101      -2.322  -0.988   3.747  1.00 23.20
ATOM   1532  C   ILE A 101      -3.344   0.544   7.430  1.00 52.34
ATOM   1533  O   ILE A 101      -4.423   1.062   7.117  1.00 72.04
ATOM   1534  N   GLY A 102      -2.823   0.607   8.659  1.00 20.32
ATOM   1535  H   GLY A 102      -1.949   0.191   8.821  1.00 23.14
ATOM   1536  CA  GLY A 102      -3.527   1.262   9.758  1.00 32.11
ATOM   1537 1HA  GLY A 102      -4.451   0.743   9.942  1.00 22.21
ATOM   1538 2HA  GLY A 102      -2.915   1.223  10.647  1.00 42.24
ATOM   1539  C   GLY A 102      -3.849   2.706   9.448  1.00 62.01
ATOM   1540  O   GLY A 102      -4.944   3.206   9.752  1.00 12.02
ATOM   1541  N   ILE A 103      -2.905   3.352   8.824  1.00 52.01
ATOM   1542  H   ILE A 103      -2.072   2.870   8.632  1.00 24.32
ATOM   1543  CA  ILE A 103      -3.034   4.720   8.403  1.00 50.34
ATOM   1544  HA  ILE A 103      -3.342   5.317   9.248  1.00 71.52
ATOM   1545  CB  ILE A 103      -1.670   5.242   7.908  1.00 51.42
ATOM   1546  HB  ILE A 103      -1.299   4.547   7.169  1.00 53.21
ATOM   1547  CG2 ILE A 103      -1.795   6.622   7.235  1.00 10.12
ATOM   1548 1HG2 ILE A 103      -2.221   7.331   7.929  1.00 42.35
ATOM   1549 2HG2 ILE A 103      -2.430   6.537   6.363  1.00 44.05
ATOM   1550 3HG2 ILE A 103      -0.819   6.959   6.921  1.00 71.22
ATOM   1551  CG1 ILE A 103      -0.688   5.271   9.077  1.00 52.42
ATOM   1552 1HG1 ILE A 103      -0.930   6.104   9.721  1.00 10.01
ATOM   1553 2HG1 ILE A 103      -0.785   4.353   9.638  1.00 44.44
ATOM   1554  CD1 ILE A 103       0.743   5.418   8.664  1.00 35.05
ATOM   1555 1HD1 ILE A 103       0.870   6.330   8.100  1.00 30.15
ATOM   1556 2HD1 ILE A 103       0.988   4.558   8.061  1.00 44.13
ATOM   1557 3HD1 ILE A 103       1.361   5.428   9.550  1.00 11.22
ATOM   1558  C   ILE A 103      -4.062   4.833   7.293  1.00 44.41
ATOM   1559  O   ILE A 103      -4.956   5.661   7.365  1.00 51.52
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ATOM   1560  N   ILE A 104      -3.950   3.964   6.306  1.00  3.31
ATOM   1561  H   ILE A 104      -3.266   3.260   6.372  1.00  3.41
ATOM   1562  CA  ILE A 104      -4.801   4.020   5.133  1.00 44.44
ATOM   1563  HA  ILE A 104      -4.666   4.982   4.662  1.00 54.11
ATOM   1564  CB  ILE A 104      -4.382   2.928   4.115  1.00  5.10
ATOM   1565  HB  ILE A 104      -4.426   1.970   4.612  1.00 53.02
ATOM   1566  CG2 ILE A 104      -5.331   2.895   2.931  1.00 70.12
ATOM   1567 1HG2 ILE A 104      -5.021   2.115   2.252  1.00 25.31
ATOM   1568 2HG2 ILE A 104      -5.299   3.846   2.421  1.00 61.31
ATOM   1569 3HG2 ILE A 104      -6.336   2.699   3.275  1.00 20.30
ATOM   1570  CG1 ILE A 104      -2.950   3.164   3.637  1.00 34.50
ATOM   1571 1HG1 ILE A 104      -2.930   4.059   3.036  1.00 71.42
ATOM   1572 2HG1 ILE A 104      -2.309   3.296   4.496  1.00  4.30
ATOM   1573  CD1 ILE A 104      -2.390   2.030   2.802  1.00 75.24
ATOM   1574 1HD1 ILE A 104      -2.346   1.131   3.397  1.00 23.34
ATOM   1575 2HD1 ILE A 104      -1.404   2.292   2.452  1.00 65.12
ATOM   1576 3HD1 ILE A 104      -3.035   1.863   1.952  1.00 14.22
ATOM   1577  C   ILE A 104      -6.277   3.834   5.488  1.00 61.34
ATOM   1578  O   ILE A 104      -7.102   4.685   5.150  1.00  1.44
ATOM   1579  N   GLU A 105      -6.601   2.781   6.226  1.00 73.44
ATOM   1580  H   GLU A 105      -5.902   2.156   6.531  1.00 50.14
ATOM   1581  CA  GLU A 105      -7.986   2.552   6.584  1.00 44.05
ATOM   1582  HA  GLU A 105      -8.524   2.719   5.660  1.00 15.34
ATOM   1583  CB  GLU A 105      -8.277   1.126   7.055  1.00  0.01
ATOM   1584 1HB  GLU A 105      -9.310   1.073   7.364  1.00 54.11
ATOM   1585 2HB  GLU A 105      -8.138   0.461   6.216  1.00 20.32
ATOM   1586  CG  GLU A 105      -7.437   0.621   8.203  1.00 44.35
ATOM   1587 1HG  GLU A 105      -6.409   0.518   7.886  1.00  3.04
ATOM   1588 2HG  GLU A 105      -7.513   1.347   8.999  1.00 63.02
ATOM   1589  CD  GLU A 105      -7.948  -0.705   8.713  1.00 31.31
ATOM   1590  OE1 GLU A 105      -8.375  -0.751   9.895  1.00 22.25
ATOM   1591  OE2 GLU A 105      -8.034  -1.664   7.936  1.00 11.14
ATOM   1592  C   GLU A 105      -8.516   3.607   7.539  1.00 32.01
ATOM   1593  O   GLU A 105      -9.641   4.090   7.388  1.00 61.42
ATOM   1594  N   GLY A 106      -7.685   4.000   8.489  1.00 61.22
ATOM   1595  H   GLY A 106      -6.785   3.606   8.526  1.00 22.22
ATOM   1596  CA  GLY A 106      -8.076   4.993   9.460  1.00 43.21
ATOM   1597 1HA  GLY A 106      -9.013   4.672   9.890  1.00 74.30
ATOM   1598 2HA  GLY A 106      -7.348   5.056  10.250  1.00 31.11
ATOM   1599  C   GLY A 106      -8.280   6.359   8.842  1.00 61.23
ATOM   1600  O   GLY A 106      -9.165   7.098   9.259  1.00 54.24
ATOM   1601  N   ASN A 107      -7.476   6.680   7.837  1.00 22.42
ATOM   1602  H   ASN A 107      -6.768   6.050   7.568  1.00 31.43
ATOM   1603  CA  ASN A 107      -7.578   7.958   7.124  1.00 24.51
ATOM   1604  HA  ASN A 107      -7.522   8.756   7.849  1.00 11.10
ATOM   1605  CB  ASN A 107      -6.426   8.102   6.108  1.00 62.40
ATOM   1606 1HB  ASN A 107      -5.484   7.996   6.625  1.00 14.52
ATOM   1607 2HB  ASN A 107      -6.508   7.300   5.388  1.00 14.14
ATOM   1608  CG  ASN A 107      -6.399   9.431   5.344  1.00 75.21
ATOM   1609  OD1 ASN A 107      -5.966   9.481   4.203  1.00 43.44
ATOM   1610  ND2 ASN A 107      -6.825  10.512   5.967  1.00 33.23
ATOM   1611 2HD2 ASN A 107      -7.150  10.451   6.888  1.00  2.22
ATOM   1612 1HD2 ASN A 107      -6.795  11.344   5.451  1.00 42.55
ATOM   1613  C   ASN A 107      -8.916   8.024   6.412  1.00 15.41
ATOM   1614  O   ASN A 107      -9.597   9.049   6.447  1.00 15.24
ATOM   1615  N   ILE A 108      -9.307   6.904   5.825  1.00 23.23
ATOM   1616  H   ILE A 108      -8.698   6.133   5.832  1.00 71.33
ATOM   1617  CA  ILE A 108     -10.591   6.780   5.158  1.00 31.42
ATOM   1618  HA  ILE A 108     -10.663   7.560   4.414  1.00 72.12
ATOM   1619  CB  ILE A 108     -10.719   5.401   4.458  1.00 11.32
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ATOM   1620  HB  ILE A 108     -10.595   4.632   5.206  1.00 51.15
ATOM   1621  CG2 ILE A 108     -12.104   5.237   3.832  1.00 25.45
ATOM   1622 1HG2 ILE A 108     -12.261   6.012   3.097  1.00  1.02
ATOM   1623 2HG2 ILE A 108     -12.859   5.316   4.602  1.00 61.34
ATOM   1624 3HG2 ILE A 108     -12.173   4.270   3.356  1.00 25.44
ATOM   1625  CG1 ILE A 108      -9.618   5.244   3.399  1.00  3.44
ATOM   1626 1HG1 ILE A 108      -9.783   5.962   2.610  1.00 23.20
ATOM   1627 2HG1 ILE A 108      -8.660   5.443   3.858  1.00  4.44
ATOM   1628  CD1 ILE A 108      -9.556   3.874   2.765  1.00 72.43
ATOM   1629 1HD1 ILE A 108      -8.734   3.835   2.067  1.00  5.04
ATOM   1630 2HD1 ILE A 108     -10.481   3.679   2.243  1.00 22.44
ATOM   1631 3HD1 ILE A 108      -9.413   3.129   3.535  1.00 23.11
ATOM   1632  C   ILE A 108     -11.724   6.946   6.176  1.00 24.40
ATOM   1633  O   ILE A 108     -12.693   7.655   5.931  1.00 25.22
ATOM   1634  N   ARG A 109     -11.572   6.302   7.327  1.00 73.11
ATOM   1635  H   ARG A 109     -10.781   5.731   7.445  1.00 43.20
ATOM   1636  CA  ARG A 109     -12.560   6.382   8.393  1.00 43.12
ATOM   1637  HA  ARG A 109     -13.504   6.094   7.954  1.00 71.53
ATOM   1638  CB  ARG A 109     -12.243   5.407   9.524  1.00 52.24
ATOM   1639 1HB  ARG A 109     -11.277   5.655   9.942  1.00 52.42
ATOM   1640 2HB  ARG A 109     -12.998   5.497  10.292  1.00 45.24
ATOM   1641  CG  ARG A 109     -12.215   3.984   9.044  1.00 12.11
ATOM   1642 1HG  ARG A 109     -12.983   3.805   8.316  1.00 20.41
ATOM   1643 2HG  ARG A 109     -11.274   3.866   8.524  1.00 35.01
ATOM   1644  CD  ARG A 109     -12.243   2.970  10.167  1.00 75.44
ATOM   1645 1HD  ARG A 109     -12.938   3.307  10.921  1.00 10.54
ATOM   1646 2HD  ARG A 109     -12.584   2.026   9.769  1.00 74.42
ATOM   1647  NE  ARG A 109     -10.937   2.780  10.788  1.00 73.00
ATOM   1648  HE  ARG A 109     -10.640   3.499  11.385  1.00 24.50
ATOM   1649  CZ  ARG A 109     -10.196   1.671  10.596  1.00 54.34
ATOM   1650  NH1 ARG A 109     -10.583   0.751   9.723  1.00 33.41
ATOM   1651 1HH1 ARG A 109     -11.409   0.782   9.149  1.00 72.31
ATOM   1652 2HH1 ARG A 109      -9.982  -0.060   9.613  1.00 50.30
ATOM   1653  NH2 ARG A 109      -9.052   1.496  11.235  1.00 62.20
ATOM   1654 1HH2 ARG A 109      -8.633   2.119  11.894  1.00 73.34
ATOM   1655 2HH2 ARG A 109      -8.552   0.639  11.011  1.00  3.33
ATOM   1656  C   ARG A 109     -12.724   7.796   8.921  1.00 22.22
ATOM   1657  O   ARG A 109     -13.824   8.199   9.262  1.00  1.51
ATOM   1658  N   TYR A 110     -11.633   8.535   8.969  1.00 11.42
ATOM   1659  H   TYR A 110     -10.775   8.134   8.710  1.00 60.14
ATOM   1660  CA  TYR A 110     -11.668   9.917   9.422  1.00 34.12
ATOM   1661  HA  TYR A 110     -12.233   9.949  10.342  1.00 51.02
ATOM   1662  CB  TYR A 110     -10.236  10.431   9.684  1.00 11.05
ATOM   1663 1HB  TYR A 110      -9.735   9.753  10.360  1.00 55.10
ATOM   1664 2HB  TYR A 110      -9.698  10.460   8.749  1.00 31.42
ATOM   1665  CG  TYR A 110     -10.189  11.813  10.297  1.00 31.45
ATOM   1666  CD1 TYR A 110     -10.124  12.950   9.502  1.00 43.32
ATOM   1667  HD1 TYR A 110     -10.085  12.839   8.428  1.00 33.53
ATOM   1668  CE1 TYR A 110     -10.118  14.207  10.060  1.00 32.31
ATOM   1669  HE1 TYR A 110     -10.068  15.079   9.426  1.00 50.30
ATOM   1670  CZ  TYR A 110     -10.170  14.343  11.430  1.00 24.10
ATOM   1671  CE2 TYR A 110     -10.224  13.234  12.243  1.00 35.44
ATOM   1672  HE2 TYR A 110     -10.265  13.342  13.316  1.00 42.30
ATOM   1673  CD2 TYR A 110     -10.239  11.977  11.675  1.00 63.11
ATOM   1674  HD2 TYR A 110     -10.280  11.102  12.306  1.00  2.33
ATOM   1675  OH  TYR A 110     -10.188  15.595  11.983  1.00 41.32
ATOM   1676  HH  TYR A 110     -11.007  15.971  11.622  1.00 54.45
ATOM   1677  C   TYR A 110     -12.376  10.788   8.372  1.00 23.32
ATOM   1678  O   TYR A 110     -13.180  11.639   8.699  1.00 72.42
ATOM   1679  N   ALA A 111     -12.090  10.514   7.105  1.00 34.23
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ATOM   1680  H   ALA A 111     -11.460   9.785   6.915  1.00 14.14
ATOM   1681  CA  ALA A 111     -12.677  11.252   5.980  1.00 44.35
ATOM   1682  HA  ALA A 111     -12.480  12.302   6.142  1.00 74.21
ATOM   1683  CB  ALA A 111     -12.018  10.836   4.671  1.00 10.20
ATOM   1684 1HB  ALA A 111     -12.223   9.791   4.484  1.00  3.23
ATOM   1685 2HB  ALA A 111     -10.951  10.986   4.740  1.00  4.13
ATOM   1686 3HB  ALA A 111     -12.414  11.430   3.862  1.00 33.25
ATOM   1687  C   ALA A 111     -14.191  11.049   5.908  1.00 60.33
ATOM   1688  O   ALA A 111     -14.912  11.848   5.322  1.00 70.11
ATOM   1689  N   ASN A 112     -14.639   9.953   6.480  1.00 54.34
ATOM   1690  H   ASN A 112     -13.982   9.357   6.895  1.00 22.11
ATOM   1691  CA  ASN A 112     -16.047   9.592   6.523  1.00 31.12
ATOM   1692  HA  ASN A 112     -16.468   9.741   5.540  1.00 15.22
ATOM   1693  CB  ASN A 112     -16.173   8.096   6.893  1.00 41.31
ATOM   1694 1HB  ASN A 112     -15.644   7.511   6.155  1.00 53.43
ATOM   1695 2HB  ASN A 112     -15.706   7.941   7.855  1.00 20.31
ATOM   1696  CG  ASN A 112     -17.608   7.577   6.963  1.00 41.32
ATOM   1697  OD1 ASN A 112     -18.162   7.113   5.977  1.00 51.31
ATOM   1698  ND2 ASN A 112     -18.201   7.614   8.137  1.00 44.02
ATOM   1699 2HD2 ASN A 112     -17.698   7.973   8.896  1.00 21.23
ATOM   1700 1HD2 ASN A 112     -19.123   7.295   8.175  1.00 51.30
ATOM   1701  C   ASN A 112     -16.811  10.468   7.537  1.00 63.43
ATOM   1702  O   ASN A 112     -18.030  10.611   7.451  1.00 13.24
ATOM   1703  N   THR A 113     -16.101  11.041   8.489  1.00  1.32
ATOM   1704  H   THR A 113     -15.123  10.953   8.529  1.00 54.52
ATOM   1705  CA  THR A 113     -16.737  11.849   9.494  1.00 72.11
ATOM   1706  HA  THR A 113     -17.800  11.715   9.359  1.00 31.24
ATOM   1707  CB  THR A 113     -16.383  11.353  10.927  1.00 63.20
ATOM   1708  HB  THR A 113     -16.642  12.128  11.633  1.00 42.50
ATOM   1709  OG1 THR A 113     -14.963  11.075  11.035  1.00 33.24
ATOM   1710  HG1 THR A 113     -14.449  11.877  11.207  1.00 63.12
ATOM   1711  CG2 THR A 113     -17.165  10.093  11.265  1.00 74.41
ATOM   1712 1HG2 THR A 113     -18.224  10.301  11.222  1.00 11.23
ATOM   1713 2HG2 THR A 113     -16.904   9.757  12.258  1.00 41.23
ATOM   1714 3HG2 THR A 113     -16.922   9.323  10.548  1.00 30.44
ATOM   1715  C   THR A 113     -16.445  13.346   9.335  1.00 33.32
ATOM   1716  O   THR A 113     -17.261  14.096   8.784  1.00 11.51
ATOM   1717  N   HIS A 114     -15.282  13.738   9.788  1.00 73.15
ATOM   1718  H   HIS A 114     -14.596  13.120  10.132  1.00 10.11
ATOM   1719  CA  HIS A 114     -14.780  15.078   9.840  1.00 70.23
ATOM   1720  HA  HIS A 114     -14.530  15.405   8.840  1.00 32.21
ATOM   1721  CB  HIS A 114     -15.767  16.075  10.546  1.00 42.54
ATOM   1722 1HB  HIS A 114     -15.333  17.064  10.528  1.00 71.04
ATOM   1723 2HB  HIS A 114     -16.692  16.093   9.988  1.00 20.23
ATOM   1724  CG  HIS A 114     -16.097  15.761  11.995  1.00 32.42
ATOM   1725  ND1 HIS A 114     -15.194  15.880  13.024  1.00 72.13
ATOM   1726  CD2 HIS A 114     -17.252  15.331  12.561  1.00  1.23
ATOM   1727  HD1 HIS A 114     -14.249  16.121  12.890  1.00 33.14
ATOM   1728  CE1 HIS A 114     -15.800  15.536  14.156  1.00 33.23
ATOM   1729  NE2 HIS A 114     -17.059  15.191  13.938  1.00 22.20
ATOM   1730  HD2 HIS A 114     -18.177  15.125  12.043  1.00  4.22
ATOM   1731  HE1 HIS A 114     -15.327  15.535  15.127  1.00 41.32
ATOM   1732  C   HIS A 114     -13.535  14.926  10.660  1.00 24.21
ATOM   1733  O   HIS A 114     -12.871  15.934  11.004  1.00 14.32
TER    1734       HIS A 114
ENDMDL
MODEL       17
ATOM      1  N   MET A   1      -9.164 -14.141  11.357  1.00 63.04
ATOM      2  CA  MET A   1      -8.605 -14.751  10.140  1.00 64.00
ATOM      3  HA  MET A   1      -7.753 -14.162   9.831  1.00 21.34
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ATOM      4  CB  MET A   1      -8.207 -16.235  10.343  1.00 12.23
ATOM      5 1HB  MET A   1      -9.081 -16.787  10.654  1.00 61.33
ATOM      6 2HB  MET A   1      -7.871 -16.628   9.396  1.00 71.32
ATOM      7  CG  MET A   1      -7.105 -16.466  11.378  1.00 63.32
ATOM      8 1HG  MET A   1      -6.820 -17.508  11.353  1.00 21.10
ATOM      9 2HG  MET A   1      -6.252 -15.859  11.114  1.00 64.13
ATOM     10  SD  MET A   1      -7.606 -16.055  13.069  1.00 30.32
ATOM     11  CE  MET A   1      -8.824 -17.340  13.404  1.00 53.23
ATOM     12 1HE  MET A   1      -9.206 -17.222  14.407  1.00 24.31
ATOM     13 2HE  MET A   1      -8.361 -18.312  13.306  1.00 14.14
ATOM     14 3HE  MET A   1      -9.639 -17.257  12.699  1.00 31.30
ATOM     15  C   MET A   1      -9.658 -14.628   9.112  1.00  3.41
ATOM     16  O   MET A   1     -10.571 -15.437   9.046  1.00 25.15
ATOM     17  N   ASP A   2      -9.553 -13.573   8.361  1.00 64.44
ATOM     18  H   ASP A   2      -8.730 -13.039   8.329  1.00 10.01
ATOM     19  CA  ASP A   2     -10.607 -13.102   7.518  1.00 61.31
ATOM     20  HA  ASP A   2     -10.987 -13.929   6.939  1.00 72.01
ATOM     21  CB  ASP A   2     -11.743 -12.537   8.415  1.00 10.41
ATOM     22 1HB  ASP A   2     -12.465 -12.031   7.791  1.00 35.55
ATOM     23 2HB  ASP A   2     -12.228 -13.359   8.921  1.00 20.44
ATOM     24  CG  ASP A   2     -11.246 -11.540   9.471  1.00  2.24
ATOM     25  OD1 ASP A   2     -10.457 -11.943  10.402  1.00 10.44
ATOM     26  OD2 ASP A   2     -11.615 -10.373   9.399  1.00 14.13
ATOM     27  C   ASP A   2     -10.035 -12.044   6.594  1.00 23.23
ATOM     28  O   ASP A   2      -8.835 -11.743   6.691  1.00 65.32
ATOM     29  N   LYS A   3     -10.869 -11.498   5.698  1.00 14.05
ATOM     30  H   LYS A   3     -11.816 -11.741   5.760  1.00 53.40
ATOM     31  CA  LYS A   3     -10.462 -10.551   4.608  1.00 12.00
ATOM     32  HA  LYS A   3     -11.386 -10.296   4.109  1.00 15.34
ATOM     33  CB  LYS A   3      -9.776  -9.238   5.076  1.00 64.21
ATOM     34 1HB  LYS A   3      -9.082  -9.485   5.864  1.00 62.43
ATOM     35 2HB  LYS A   3      -9.209  -8.841   4.247  1.00 34.31
ATOM     36  CG  LYS A   3     -10.705  -8.142   5.594  1.00 30.33
ATOM     37 1HG  LYS A   3     -10.185  -7.204   5.485  1.00 52.11
ATOM     38 2HG  LYS A   3     -11.590  -8.125   4.975  1.00 14.52
ATOM     39  CD  LYS A   3     -11.109  -8.312   7.049  1.00 20.24
ATOM     40 1HD  LYS A   3     -11.882  -7.597   7.287  1.00 45.03
ATOM     41 2HD  LYS A   3     -11.489  -9.313   7.191  1.00 32.14
ATOM     42  CE  LYS A   3      -9.922  -8.092   7.991  1.00 33.14
ATOM     43 1HE  LYS A   3      -9.178  -8.853   7.811  1.00 71.34
ATOM     44 2HE  LYS A   3      -9.497  -7.118   7.799  1.00 72.11
ATOM     45  NZ  LYS A   3     -10.328  -8.168   9.412  1.00 25.11
ATOM     46 1HZ  LYS A   3     -11.003  -7.419   9.657  1.00 32.11
ATOM     47 2HZ  LYS A   3      -9.519  -8.169  10.060  1.00 53.54
ATOM     48 3HZ  LYS A   3     -10.830  -9.082   9.534  1.00 22.14
ATOM     49  C   LYS A   3      -9.595 -11.216   3.545  1.00 70.25
ATOM     50  O   LYS A   3      -9.861 -11.106   2.348  1.00 61.23
ATOM     51  N   GLY A   4      -8.566 -11.868   3.978  1.00 74.40
ATOM     52  H   GLY A   4      -8.434 -11.895   4.952  1.00 24.44
ATOM     53  CA  GLY A   4      -7.659 -12.511   3.090  1.00 40.35
ATOM     54 1HA  GLY A   4      -7.713 -13.578   3.233  1.00 72.24
ATOM     55 2HA  GLY A   4      -7.944 -12.256   2.079  1.00 23.22
ATOM     56  C   GLY A   4      -6.264 -12.028   3.336  1.00 61.54
ATOM     57  O   GLY A   4      -5.513 -11.772   2.397  1.00 63.32
ATOM     58  N   THR A   5      -5.939 -11.865   4.590  1.00 13.53
ATOM     59  H   THR A   5      -6.577 -12.056   5.305  1.00 55.00
ATOM     60  CA  THR A   5      -4.651 -11.407   5.000  1.00 21.13
ATOM     61  HA  THR A   5      -4.328 -10.623   4.332  1.00 62.22
ATOM     62  CB  THR A   5      -4.754 -10.840   6.423  1.00 61.14
ATOM     63  HB  THR A   5      -4.969 -11.649   7.105  1.00 35.02
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ATOM     64  OG1 THR A   5      -5.840  -9.882   6.460  1.00 60.21
ATOM     65  HG1 THR A   5      -5.639  -9.150   5.863  1.00 60.34
ATOM     66  CG2 THR A   5      -3.461 -10.152   6.832  1.00 44.42
ATOM     67 1HG2 THR A   5      -2.649 -10.863   6.802  1.00 12.11
ATOM     68 2HG2 THR A   5      -3.562  -9.762   7.834  1.00 63.33
ATOM     69 3HG2 THR A   5      -3.253  -9.340   6.152  1.00 51.42
ATOM     70  C   THR A   5      -3.655 -12.572   4.949  1.00 60.24
ATOM     71  O   THR A   5      -3.826 -13.583   5.631  1.00 72.50
ATOM     72  N   GLN A   6      -2.655 -12.431   4.113  1.00 41.33
ATOM     73  H   GLN A   6      -2.563 -11.574   3.635  1.00 73.12
ATOM     74  CA  GLN A   6      -1.664 -13.453   3.881  1.00 55.05
ATOM     75  HA  GLN A   6      -1.768 -14.226   4.626  1.00 33.23
ATOM     76  CB  GLN A   6      -1.878 -14.066   2.490  1.00 71.44
ATOM     77 1HB  GLN A   6      -1.773 -13.290   1.746  1.00 73.23
ATOM     78 2HB  GLN A   6      -1.116 -14.812   2.321  1.00 74.30
ATOM     79  CG  GLN A   6      -3.237 -14.723   2.297  1.00 22.10
ATOM     80 1HG  GLN A   6      -3.276 -15.611   2.910  1.00 22.32
ATOM     81 2HG  GLN A   6      -4.004 -14.031   2.615  1.00 24.15
ATOM     82  CD  GLN A   6      -3.499 -15.119   0.864  1.00 51.35
ATOM     83  OE1 GLN A   6      -4.041 -14.336   0.081  1.00 12.31
ATOM     84  NE2 GLN A   6      -3.129 -16.323   0.503  1.00  3.43
ATOM     85 2HE2 GLN A   6      -2.707 -16.898   1.175  1.00 44.33
ATOM     86 1HE2 GLN A   6      -3.293 -16.593  -0.422  1.00 54.00
ATOM     87  C   GLN A   6      -0.281 -12.836   3.947  1.00  0.22
ATOM     88  O   GLN A   6      -0.076 -11.714   3.487  1.00 50.03
ATOM     89  N   TYR A   7       0.640 -13.536   4.549  1.00 12.33
ATOM     90  H   TYR A   7       0.414 -14.400   4.952  1.00 30.31
ATOM     91  CA  TYR A   7       2.015 -13.101   4.618  1.00 34.51
ATOM     92  HA  TYR A   7       2.101 -12.179   4.064  1.00 75.53
ATOM     93  CB  TYR A   7       2.447 -12.861   6.079  1.00 45.14
ATOM     94 1HB  TYR A   7       1.881 -12.037   6.484  1.00 11.34
ATOM     95 2HB  TYR A   7       2.243 -13.748   6.657  1.00 33.52
ATOM     96  CG  TYR A   7       3.923 -12.529   6.232  1.00 73.30
ATOM     97  CD1 TYR A   7       4.407 -11.268   5.930  1.00 61.23
ATOM     98  HD1 TYR A   7       3.718 -10.505   5.595  1.00 63.11
ATOM     99  CE1 TYR A   7       5.751 -10.976   6.048  1.00 25.23
ATOM    100  HE1 TYR A   7       6.110  -9.987   5.810  1.00 44.44
ATOM    101  CZ  TYR A   7       6.625 -11.947   6.478  1.00 61.13
ATOM    102  CE2 TYR A   7       6.169 -13.206   6.786  1.00 25.10
ATOM    103  HE2 TYR A   7       6.856 -13.969   7.123  1.00 63.12
ATOM    104  CD2 TYR A   7       4.828 -13.494   6.660  1.00 24.35
ATOM    105  HD2 TYR A   7       4.466 -14.483   6.901  1.00 44.10
ATOM    106  OH  TYR A   7       7.963 -11.665   6.581  1.00  0.43
ATOM    107  HH  TYR A   7       8.103 -10.861   7.091  1.00 72.14
ATOM    108  C   TYR A   7       2.899 -14.147   3.964  1.00 15.10
ATOM    109  O   TYR A   7       2.799 -15.331   4.292  1.00 54.23
ATOM    110  N   LYS A   8       3.733 -13.734   3.038  1.00 32.50
ATOM    111  H   LYS A   8       3.756 -12.781   2.789  1.00 12.45
ATOM    112  CA  LYS A   8       4.627 -14.657   2.376  1.00 24.11
ATOM    113  HA  LYS A   8       4.905 -15.421   3.086  1.00 22.35
ATOM    114  CB  LYS A   8       3.906 -15.328   1.182  1.00 65.44
ATOM    115 1HB  LYS A   8       2.983 -15.764   1.536  1.00 24.12
ATOM    116 2HB  LYS A   8       3.663 -14.557   0.464  1.00 10.43
ATOM    117  CG  LYS A   8       4.703 -16.423   0.455  1.00 50.13
ATOM    118 1HG  LYS A   8       4.114 -16.797  -0.369  1.00 54.14
ATOM    119 2HG  LYS A   8       5.616 -15.991   0.074  1.00 60.11
ATOM    120  CD  LYS A   8       5.051 -17.592   1.378  1.00 21.42
ATOM    121 1HD  LYS A   8       5.719 -17.240   2.151  1.00 15.41
ATOM    122 2HD  LYS A   8       4.143 -17.964   1.829  1.00 15.22
ATOM    123  CE  LYS A   8       5.742 -18.739   0.626  1.00 64.30
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ATOM    124 1HE  LYS A   8       5.927 -19.547   1.320  1.00 14.42
ATOM    125 2HE  LYS A   8       5.077 -19.086  -0.151  1.00 62.20
ATOM    126  NZ  LYS A   8       7.034 -18.341   0.017  1.00 74.12
ATOM    127 1HZ  LYS A   8       7.741 -18.000   0.708  1.00 62.44
ATOM    128 2HZ  LYS A   8       6.951 -17.464  -0.554  1.00 12.13
ATOM    129 3HZ  LYS A   8       7.491 -19.065  -0.565  1.00 43.20
ATOM    130  C   LYS A   8       5.880 -13.931   1.905  1.00  3.22
ATOM    131  O   LYS A   8       5.786 -12.989   1.164  1.00 64.41
ATOM    132  N   ASP A   9       7.033 -14.365   2.404  1.00 22.20
ATOM    133  H   ASP A   9       7.008 -15.061   3.091  1.00 11.21
ATOM    134  CA  ASP A   9       8.389 -13.878   1.978  1.00 15.05
ATOM    135  HA  ASP A   9       9.124 -14.353   2.611  1.00 53.24
ATOM    136  CB  ASP A   9       8.678 -14.274   0.509  1.00 61.34
ATOM    137 1HB  ASP A   9       8.072 -13.663  -0.143  1.00 42.32
ATOM    138 2HB  ASP A   9       9.720 -14.084   0.294  1.00 11.53
ATOM    139  CG  ASP A   9       8.378 -15.715   0.201  1.00 21.44
ATOM    140  OD1 ASP A   9       8.798 -16.630   0.962  1.00 54.34
ATOM    141  OD2 ASP A   9       7.664 -15.991  -0.793  1.00 54.43
ATOM    142  C   ASP A   9       8.532 -12.358   2.111  1.00 65.15
ATOM    143  O   ASP A   9       9.197 -11.716   1.310  1.00 15.51
ATOM    144  N   GLY A  10       7.957 -11.796   3.147  1.00 63.30
ATOM    145  H   GLY A  10       7.475 -12.358   3.787  1.00 71.35
ATOM    146  CA  GLY A  10       8.053 -10.364   3.352  1.00  0.23
ATOM    147 1HA  GLY A  10       8.123 -10.183   4.414  1.00 20.32
ATOM    148 2HA  GLY A  10       8.947  -9.996   2.870  1.00 71.42
ATOM    149  C   GLY A  10       6.849  -9.617   2.805  1.00 41.45
ATOM    150  O   GLY A  10       6.561  -8.487   3.224  1.00 61.13
ATOM    151  N   TYR A  11       6.155 -10.250   1.888  1.00 23.42
ATOM    152  H   TYR A  11       6.464 -11.140   1.616  1.00 43.22
ATOM    153  CA  TYR A  11       4.960  -9.708   1.256  1.00 60.42
ATOM    154  HA  TYR A  11       5.141  -8.681   0.978  1.00 65.21
ATOM    155  CB  TYR A  11       4.566 -10.516  -0.011  1.00 53.23
ATOM    156 1HB  TYR A  11       4.410 -11.545   0.279  1.00 52.33
ATOM    157 2HB  TYR A  11       3.629 -10.124  -0.379  1.00 53.10
ATOM    158  CG  TYR A  11       5.558 -10.537  -1.176  1.00 41.34
ATOM    159  CD1 TYR A  11       6.924 -10.738  -0.985  1.00 10.42
ATOM    160  HD1 TYR A  11       7.300 -10.851   0.021  1.00  5.32
ATOM    161  CE1 TYR A  11       7.799 -10.786  -2.046  1.00 61.44
ATOM    162  HE1 TYR A  11       8.852 -10.944  -1.869  1.00 65.35
ATOM    163  CZ  TYR A  11       7.323 -10.637  -3.326  1.00 24.31
ATOM    164  CE2 TYR A  11       5.978 -10.441  -3.553  1.00 11.34
ATOM    165  HE2 TYR A  11       5.606 -10.324  -4.560  1.00 15.34
ATOM    166  CD2 TYR A  11       5.104 -10.395  -2.482  1.00  4.42
ATOM    167  HD2 TYR A  11       4.050 -10.240  -2.658  1.00  0.33
ATOM    168  OH  TYR A  11       8.199 -10.679  -4.387  1.00 34.13
ATOM    169  HH  TYR A  11       8.759 -11.451  -4.259  1.00  4.32
ATOM    170  C   TYR A  11       3.798  -9.780   2.229  1.00 33.32
ATOM    171  O   TYR A  11       3.601 -10.803   2.901  1.00 52.21
ATOM    172  N   TYR A  12       3.049  -8.721   2.305  1.00 13.43
ATOM    173  H   TYR A  12       3.271  -7.952   1.731  1.00 11.05
ATOM    174  CA  TYR A  12       1.881  -8.663   3.139  1.00 63.32
ATOM    175  HA  TYR A  12       1.756  -9.616   3.630  1.00 72.34
ATOM    176  CB  TYR A  12       2.027  -7.550   4.186  1.00 30.13
ATOM    177 1HB  TYR A  12       2.966  -7.654   4.708  1.00 31.53
ATOM    178 2HB  TYR A  12       2.024  -6.599   3.672  1.00 23.35
ATOM    179  CG  TYR A  12       0.923  -7.509   5.231  1.00  3.21
ATOM    180  CD1 TYR A  12      -0.285  -6.856   4.983  1.00 63.30
ATOM    181  HD1 TYR A  12      -0.441  -6.391   4.022  1.00  4.54
ATOM    182  CE1 TYR A  12      -1.273  -6.800   5.942  1.00 41.53
ATOM    183  HE1 TYR A  12      -2.201  -6.289   5.730  1.00 23.24
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ATOM    184  CZ  TYR A  12      -1.073  -7.398   7.164  1.00 43.41
ATOM    185  CE2 TYR A  12       0.111  -8.051   7.437  1.00 24.13
ATOM    186  HE2 TYR A  12       0.267  -8.519   8.398  1.00 43.11
ATOM    187  CD2 TYR A  12       1.101  -8.101   6.474  1.00 33.03
ATOM    188  HD2 TYR A  12       2.030  -8.611   6.685  1.00 75.44
ATOM    189  OH  TYR A  12      -2.055  -7.333   8.122  1.00 42.14
ATOM    190  HH  TYR A  12      -2.900  -7.584   7.742  1.00 74.22
ATOM    191  C   TYR A  12       0.693  -8.387   2.239  1.00 54.35
ATOM    192  O   TYR A  12       0.622  -7.336   1.597  1.00  1.14
ATOM    193  N   ILE A  13      -0.212  -9.305   2.180  1.00 61.00
ATOM    194  H   ILE A  13      -0.126 -10.115   2.733  1.00 12.22
ATOM    195  CA  ILE A  13      -1.365  -9.195   1.320  1.00 63.31
ATOM    196  HA  ILE A  13      -1.288  -8.286   0.743  1.00 60.04
ATOM    197  CB  ILE A  13      -1.442 -10.415   0.358  1.00 51.11
ATOM    198  HB  ILE A  13      -1.731 -11.288   0.923  1.00 53.43
ATOM    199  CG2 ILE A  13      -2.486 -10.158  -0.718  1.00 62.12
ATOM    200 1HG2 ILE A  13      -2.533 -11.005  -1.387  1.00 35.44
ATOM    201 2HG2 ILE A  13      -2.217  -9.274  -1.277  1.00 62.12
ATOM    202 3HG2 ILE A  13      -3.450 -10.011  -0.257  1.00 52.54
ATOM    203  CG1 ILE A  13      -0.071 -10.673  -0.299  1.00 71.24
ATOM    204 1HG1 ILE A  13       0.186  -9.826  -0.918  1.00 22.24
ATOM    205 2HG1 ILE A  13       0.674 -10.781   0.475  1.00 13.05
ATOM    206  CD1 ILE A  13      -0.021 -11.910  -1.177  1.00 22.53
ATOM    207 1HD1 ILE A  13      -0.743 -11.817  -1.974  1.00 43.43
ATOM    208 2HD1 ILE A  13      -0.249 -12.783  -0.584  1.00 31.55
ATOM    209 3HD1 ILE A  13       0.969 -12.012  -1.597  1.00 42.31
ATOM    210  C   ILE A  13      -2.618  -9.152   2.191  1.00 63.33
ATOM    211  O   ILE A  13      -2.699  -9.877   3.171  1.00 24.50
ATOM    212  N   THR A  14      -3.553  -8.285   1.878  1.00 72.24
ATOM    213  H   THR A  14      -3.437  -7.695   1.096  1.00 65.44
ATOM    214  CA  THR A  14      -4.772  -8.181   2.641  1.00 22.14
ATOM    215  HA  THR A  14      -5.091  -9.185   2.872  1.00 34.21
ATOM    216  CB  THR A  14      -4.544  -7.398   3.985  1.00 63.20
ATOM    217  HB  THR A  14      -3.703  -7.849   4.492  1.00 14.12
ATOM    218  OG1 THR A  14      -5.704  -7.501   4.844  1.00 24.24
ATOM    219  HG1 THR A  14      -6.105  -6.627   4.905  1.00 14.34
ATOM    220  CG2 THR A  14      -4.235  -5.923   3.725  1.00 14.25
ATOM    221 1HG2 THR A  14      -3.335  -5.840   3.135  1.00 73.30
ATOM    222 2HG2 THR A  14      -4.098  -5.408   4.666  1.00 15.42
ATOM    223 3HG2 THR A  14      -5.059  -5.476   3.189  1.00 25.21
ATOM    224  C   THR A  14      -5.873  -7.521   1.787  1.00 20.03
ATOM    225  O   THR A  14      -5.614  -7.035   0.685  1.00 21.01
ATOM    226  N   THR A  15      -7.074  -7.537   2.274  1.00 50.44
ATOM    227  H   THR A  15      -7.241  -7.915   3.160  1.00 32.44
ATOM    228  CA  THR A  15      -8.180  -6.944   1.585  1.00 41.11
ATOM    229  HA  THR A  15      -7.840  -6.540   0.644  1.00 54.22
ATOM    230  CB  THR A  15      -9.285  -7.995   1.340  1.00 44.22
ATOM    231  HB  THR A  15      -9.753  -8.241   2.282  1.00 22.24
ATOM    232  OG1 THR A  15      -8.692  -9.181   0.776  1.00 10.24
ATOM    233  HG1 THR A  15      -9.234  -9.918   1.098  1.00 15.42
ATOM    234  CG2 THR A  15     -10.342  -7.467   0.373  1.00 42.01
ATOM    235 1HG2 THR A  15     -11.104  -8.219   0.227  1.00 51.10
ATOM    236 2HG2 THR A  15      -9.879  -7.237  -0.574  1.00 45.23
ATOM    237 3HG2 THR A  15     -10.790  -6.573   0.782  1.00 72.21
ATOM    238  C   THR A  15      -8.712  -5.834   2.472  1.00 74.13
ATOM    239  O   THR A  15      -8.713  -5.980   3.703  1.00 12.44
ATOM    240  N   LEU A  16      -9.098  -4.738   1.889  1.00 52.22
ATOM    241  H   LEU A  16      -9.060  -4.642   0.908  1.00 54.24
ATOM    242  CA  LEU A  16      -9.610  -3.643   2.642  1.00 55.32
ATOM    243  HA  LEU A  16      -9.688  -3.940   3.676  1.00 11.25
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ATOM    244  CB  LEU A  16      -8.680  -2.444   2.522  1.00 31.44
ATOM    245 1HB  LEU A  16      -7.656  -2.780   2.562  1.00 20.11
ATOM    246 2HB  LEU A  16      -8.876  -2.014   1.550  1.00  3.25
ATOM    247  CG  LEU A  16      -8.886  -1.346   3.555  1.00 71.14
ATOM    248  HG  LEU A  16      -9.927  -1.062   3.524  1.00 22.21
ATOM    249  CD1 LEU A  16      -8.579  -1.863   4.961  1.00 63.35
ATOM    250 1HD1 LEU A  16      -7.560  -2.223   4.995  1.00 75.12
ATOM    251 2HD1 LEU A  16      -9.251  -2.671   5.211  1.00 63.04
ATOM    252 3HD1 LEU A  16      -8.699  -1.063   5.675  1.00 52.40
ATOM    253  CD2 LEU A  16      -8.040  -0.133   3.225  1.00  5.32
ATOM    254 1HD2 LEU A  16      -8.325   0.255   2.258  1.00  5.42
ATOM    255 2HD2 LEU A  16      -6.998  -0.416   3.205  1.00 62.53
ATOM    256 3HD2 LEU A  16      -8.190   0.629   3.976  1.00 45.41
ATOM    257  C   LEU A  16     -10.975  -3.295   2.096  1.00 40.03
ATOM    258  O   LEU A  16     -11.121  -3.005   0.897  1.00 11.52
ATOM    259  N   ASN A  17     -11.968  -3.318   2.944  1.00 71.02
ATOM    260  H   ASN A  17     -11.786  -3.517   3.884  1.00 15.51
ATOM    261  CA  ASN A  17     -13.335  -3.066   2.515  1.00 25.31
ATOM    262  HA  ASN A  17     -13.401  -3.430   1.501  1.00 60.32
ATOM    263  CB  ASN A  17     -14.382  -3.820   3.371  1.00 74.35
ATOM    264 1HB  ASN A  17     -14.235  -3.562   4.408  1.00 71.03
ATOM    265 2HB  ASN A  17     -15.369  -3.498   3.069  1.00 12.13
ATOM    266  CG  ASN A  17     -14.313  -5.343   3.256  1.00 41.51
ATOM    267  OD1 ASN A  17     -13.254  -5.927   3.054  1.00 11.23
ATOM    268  ND2 ASN A  17     -15.446  -5.993   3.386  1.00 30.14
ATOM    269 2HD2 ASN A  17     -16.262  -5.476   3.549  1.00 73.42
ATOM    270 1HD2 ASN A  17     -15.419  -6.968   3.309  1.00 12.52
ATOM    271  C   ASN A  17     -13.645  -1.583   2.477  1.00 33.34
ATOM    272  O   ASN A  17     -14.418  -1.077   3.285  1.00 61.42
ATOM    273  N   TYR A  18     -12.981  -0.892   1.583  1.00 15.22
ATOM    274  H   TYR A  18     -12.323  -1.360   1.020  1.00 14.33
ATOM    275  CA  TYR A  18     -13.192   0.519   1.338  1.00 73.54
ATOM    276  HA  TYR A  18     -14.220   0.740   1.589  1.00 12.11
ATOM    277  CB  TYR A  18     -12.238   1.435   2.150  1.00 34.32
ATOM    278 1HB  TYR A  18     -11.218   1.143   1.950  1.00 63.21
ATOM    279 2HB  TYR A  18     -12.379   2.450   1.811  1.00  1.20
ATOM    280  CG  TYR A  18     -12.431   1.412   3.667  1.00 71.05
ATOM    281  CD1 TYR A  18     -13.625   1.832   4.249  1.00 35.11
ATOM    282  HD1 TYR A  18     -14.427   2.173   3.611  1.00 21.11
ATOM    283  CE1 TYR A  18     -13.799   1.810   5.625  1.00 44.30
ATOM    284  HE1 TYR A  18     -14.732   2.140   6.057  1.00 72.24
ATOM    285  CZ  TYR A  18     -12.772   1.368   6.436  1.00 51.25
ATOM    286  CE2 TYR A  18     -11.584   0.957   5.882  1.00  2.35
ATOM    287  HE2 TYR A  18     -10.780   0.610   6.516  1.00 52.22
ATOM    288  CD2 TYR A  18     -11.420   0.980   4.510  1.00  2.12
ATOM    289  HD2 TYR A  18     -10.482   0.665   4.080  1.00 33.32
ATOM    290  OH  TYR A  18     -12.943   1.338   7.814  1.00 74.42
ATOM    291  HH  TYR A  18     -13.795   0.918   7.974  1.00 23.13
ATOM    292  C   TYR A  18     -13.009   0.751  -0.142  1.00 74.33
ATOM    293  O   TYR A  18     -12.368  -0.071  -0.815  1.00 32.13
ATOM    294  N   ASN A  19     -13.532   1.862  -0.637  1.00 23.30
ATOM    295  H   ASN A  19     -13.913   2.530  -0.034  1.00 74.32
ATOM    296  CA  ASN A  19     -13.541   2.159  -2.068  1.00  4.54
ATOM    297  HA  ASN A  19     -13.938   1.282  -2.547  1.00 50.23
ATOM    298  CB  ASN A  19     -14.471   3.330  -2.391  1.00 42.40
ATOM    299 1HB  ASN A  19     -14.298   4.123  -1.679  1.00 21.42
ATOM    300 2HB  ASN A  19     -14.218   3.686  -3.377  1.00  3.31
ATOM    301  CG  ASN A  19     -15.965   2.986  -2.367  1.00 70.14
ATOM    302  OD1 ASN A  19     -16.755   3.628  -3.032  1.00 14.15
ATOM    303  ND2 ASN A  19     -16.351   1.951  -1.659  1.00 25.44
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ATOM    304 2HD2 ASN A  19     -15.681   1.421  -1.178  1.00 64.24
ATOM    305 1HD2 ASN A  19     -17.308   1.745  -1.652  1.00 12.21
ATOM    306  C   ASN A  19     -12.162   2.399  -2.625  1.00 21.12
ATOM    307  O   ASN A  19     -11.369   3.113  -2.044  1.00 23.32
ATOM    308  N   PHE A  20     -11.910   1.805  -3.764  1.00 10.01
ATOM    309  H   PHE A  20     -12.617   1.283  -4.202  1.00 71.10
ATOM    310  CA  PHE A  20     -10.620   1.829  -4.438  1.00 75.33
ATOM    311  HA  PHE A  20      -9.932   1.295  -3.802  1.00  3.10
ATOM    312  CB  PHE A  20     -10.754   1.018  -5.724  1.00 41.41
ATOM    313 1HB  PHE A  20     -10.697  -0.025  -5.452  1.00 61.13
ATOM    314 2HB  PHE A  20     -11.722   1.185  -6.170  1.00 64.43
ATOM    315  CG  PHE A  20      -9.704   1.234  -6.761  1.00 23.20
ATOM    316  CD1 PHE A  20      -9.961   2.056  -7.846  1.00 44.00
ATOM    317  HD1 PHE A  20     -10.918   2.551  -7.918  1.00  1.33
ATOM    318  CE1 PHE A  20      -9.025   2.247  -8.818  1.00 51.14
ATOM    319  HE1 PHE A  20      -9.240   2.889  -9.659  1.00 52.53
ATOM    320  CZ  PHE A  20      -7.817   1.622  -8.721  1.00 51.54
ATOM    321  HZ  PHE A  20      -7.073   1.769  -9.490  1.00 62.55
ATOM    322  CE2 PHE A  20      -7.539   0.798  -7.645  1.00 62.24
ATOM    323  HE2 PHE A  20      -6.580   0.307  -7.575  1.00 34.52
ATOM    324  CD2 PHE A  20      -8.481   0.608  -6.675  1.00 72.33
ATOM    325  HD2 PHE A  20      -8.266  -0.035  -5.834  1.00 51.35
ATOM    326  C   PHE A  20     -10.026   3.235  -4.680  1.00 41.42
ATOM    327  O   PHE A  20      -8.850   3.465  -4.385  1.00  2.32
ATOM    328  N   ASN A  21     -10.839   4.173  -5.158  1.00 43.32
ATOM    329  H   ASN A  21     -11.795   3.980  -5.220  1.00  4.51
ATOM    330  CA  ASN A  21     -10.335   5.525  -5.522  1.00  5.21
ATOM    331  HA  ASN A  21      -9.472   5.407  -6.162  1.00 31.00
ATOM    332  CB  ASN A  21     -11.416   6.371  -6.241  1.00 73.15
ATOM    333 1HB  ASN A  21     -12.270   6.466  -5.588  1.00 53.53
ATOM    334 2HB  ASN A  21     -11.013   7.356  -6.426  1.00 45.22
ATOM    335  CG  ASN A  21     -11.910   5.794  -7.567  1.00  3.04
ATOM    336  OD1 ASN A  21     -11.962   4.588  -7.767  1.00 21.40
ATOM    337  ND2 ASN A  21     -12.286   6.659  -8.479  1.00 33.25
ATOM    338 2HD2 ASN A  21     -12.235   7.615  -8.275  1.00 51.25
ATOM    339 1HD2 ASN A  21     -12.607   6.296  -9.329  1.00 35.34
ATOM    340  C   ASN A  21      -9.929   6.227  -4.263  1.00 13.23
ATOM    341  O   ASN A  21      -8.924   6.934  -4.180  1.00 34.22
ATOM    342  N   THR A  22     -10.726   5.975  -3.294  1.00  3.33
ATOM    343  H   THR A  22     -11.496   5.395  -3.465  1.00 25.41
ATOM    344  CA  THR A  22     -10.624   6.456  -1.984  1.00 14.43
ATOM    345  HA  THR A  22     -10.681   7.532  -1.959  1.00 42.12
ATOM    346  CB  THR A  22     -11.864   5.900  -1.307  1.00  3.21
ATOM    347  HB  THR A  22     -11.782   4.822  -1.314  1.00 60.13
ATOM    348  OG1 THR A  22     -13.017   6.257  -2.088  1.00 62.24
ATOM    349  HG1 THR A  22     -13.445   7.024  -1.695  1.00 70.12
ATOM    350  CG2 THR A  22     -12.031   6.383   0.071  1.00 73.13
ATOM    351 1HG2 THR A  22     -12.919   5.892   0.443  1.00 72.44
ATOM    352 2HG2 THR A  22     -12.131   7.457   0.059  1.00 34.45
ATOM    353 3HG2 THR A  22     -11.167   6.055   0.625  1.00 74.24
ATOM    354  C   THR A  22      -9.324   5.925  -1.314  1.00 14.15
ATOM    355  O   THR A  22      -8.540   6.697  -0.746  1.00 25.51
ATOM    356  N   VAL A  23      -9.100   4.619  -1.432  1.00  0.24
ATOM    357  H   VAL A  23      -9.755   4.064  -1.911  1.00  5.44
ATOM    358  CA  VAL A  23      -7.924   3.966  -0.866  1.00 74.22
ATOM    359  HA  VAL A  23      -7.871   4.244   0.177  1.00 73.24
ATOM    360  CB  VAL A  23      -8.026   2.400  -0.963  1.00  1.00
ATOM    361  HB  VAL A  23      -8.160   2.127  -1.999  1.00 73.31
ATOM    362  CG1 VAL A  23      -6.773   1.723  -0.439  1.00 23.12
ATOM    363 1HG1 VAL A  23      -5.915   2.092  -0.981  1.00  4.32
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ATOM    364 2HG1 VAL A  23      -6.855   0.654  -0.573  1.00 70.01
ATOM    365 3HG1 VAL A  23      -6.660   1.948   0.611  1.00 30.23
ATOM    366  CG2 VAL A  23      -9.222   1.894  -0.181  1.00 51.31
ATOM    367 1HG2 VAL A  23      -9.282   0.819  -0.269  1.00 73.12
ATOM    368 2HG2 VAL A  23     -10.124   2.338  -0.575  1.00 41.23
ATOM    369 3HG2 VAL A  23      -9.113   2.163   0.859  1.00 20.13
ATOM    370  C   VAL A  23      -6.639   4.465  -1.539  1.00 73.12
ATOM    371  O   VAL A  23      -5.611   4.638  -0.867  1.00 53.42
ATOM    372  N   TYR A  24      -6.709   4.732  -2.848  1.00 52.10
ATOM    373  H   TYR A  24      -7.567   4.595  -3.308  1.00 53.24
ATOM    374  CA  TYR A  24      -5.538   5.200  -3.601  1.00 32.14
ATOM    375  HA  TYR A  24      -4.772   4.449  -3.508  1.00 43.14
ATOM    376  CB  TYR A  24      -5.852   5.385  -5.098  1.00 71.23
ATOM    377 1HB  TYR A  24      -6.116   4.430  -5.525  1.00 62.30
ATOM    378 2HB  TYR A  24      -6.684   6.063  -5.203  1.00 14.55
ATOM    379  CG  TYR A  24      -4.679   5.950  -5.900  1.00 61.11
ATOM    380  CD1 TYR A  24      -3.523   5.201  -6.107  1.00 74.13
ATOM    381  HD1 TYR A  24      -3.465   4.204  -5.694  1.00  2.32
ATOM    382  CE1 TYR A  24      -2.457   5.709  -6.826  1.00 43.42
ATOM    383  HE1 TYR A  24      -1.571   5.110  -6.974  1.00 72.20
ATOM    384  CZ  TYR A  24      -2.533   6.981  -7.354  1.00 42.31
ATOM    385  CE2 TYR A  24      -3.667   7.747  -7.164  1.00 24.43
ATOM    386  HE2 TYR A  24      -3.727   8.742  -7.575  1.00 52.32
ATOM    387  CD2 TYR A  24      -4.729   7.231  -6.441  1.00 55.23
ATOM    388  HD2 TYR A  24      -5.616   7.829  -6.292  1.00 30.15
ATOM    389  OH  TYR A  24      -1.465   7.495  -8.071  1.00 72.22
ATOM    390  HH  TYR A  24      -1.288   8.383  -7.749  1.00 23.34
ATOM    391  C   TYR A  24      -4.976   6.481  -3.022  1.00 52.13
ATOM    392  O   TYR A  24      -3.771   6.575  -2.773  1.00 43.11
ATOM    393  N   ASN A  25      -5.849   7.423  -2.745  1.00  3.33
ATOM    394  H   ASN A  25      -6.802   7.271  -2.908  1.00 15.11
ATOM    395  CA  ASN A  25      -5.442   8.706  -2.216  1.00  2.54
ATOM    396  HA  ASN A  25      -4.701   9.115  -2.888  1.00  5.03
ATOM    397  CB  ASN A  25      -6.625   9.674  -2.153  1.00 60.23
ATOM    398 1HB  ASN A  25      -7.427   9.208  -1.600  1.00  1.42
ATOM    399 2HB  ASN A  25      -6.311  10.566  -1.638  1.00 60.43
ATOM    400  CG  ASN A  25      -7.157  10.063  -3.522  1.00 14.25
ATOM    401  OD1 ASN A  25      -6.428  10.099  -4.500  1.00 14.04
ATOM    402  ND2 ASN A  25      -8.431  10.361  -3.599  1.00 34.33
ATOM    403 2HD2 ASN A  25      -8.970  10.320  -2.782  1.00 40.43
ATOM    404 1HD2 ASN A  25      -8.769  10.610  -4.482  1.00 32.12
ATOM    405  C   ASN A  25      -4.815   8.554  -0.848  1.00 35.30
ATOM    406  O   ASN A  25      -3.723   9.059  -0.598  1.00 63.54
ATOM    407  N   ALA A  26      -5.478   7.792   0.007  1.00 70.12
ATOM    408  H   ALA A  26      -6.304   7.352  -0.293  1.00 14.13
ATOM    409  CA  ALA A  26      -5.029   7.584   1.373  1.00 20.14
ATOM    410  HA  ALA A  26      -4.936   8.556   1.834  1.00 63.01
ATOM    411  CB  ALA A  26      -6.070   6.794   2.145  1.00 23.12
ATOM    412 1HB  ALA A  26      -7.027   7.289   2.068  1.00 43.05
ATOM    413 2HB  ALA A  26      -5.780   6.745   3.184  1.00 53.44
ATOM    414 3HB  ALA A  26      -6.145   5.797   1.737  1.00 30.43
ATOM    415  C   ALA A  26      -3.663   6.888   1.426  1.00 73.10
ATOM    416  O   ALA A  26      -2.783   7.284   2.199  1.00 64.33
ATOM    417  N   THR A  27      -3.486   5.884   0.584  1.00 54.44
ATOM    418  H   THR A  27      -4.221   5.639  -0.019  1.00 72.24
ATOM    419  CA  THR A  27      -2.244   5.130   0.525  1.00  3.12
ATOM    420  HA  THR A  27      -1.996   4.793   1.521  1.00 43.10
ATOM    421  CB  THR A  27      -2.403   3.903  -0.389  1.00 10.53
ATOM    422  HB  THR A  27      -2.564   4.248  -1.400  1.00 74.53
ATOM    423  OG1 THR A  27      -3.543   3.145   0.039  1.00 52.13
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ATOM    424  HG1 THR A  27      -4.342   3.615  -0.231  1.00 63.22
ATOM    425  CG2 THR A  27      -1.162   3.020  -0.346  1.00 63.44
ATOM    426 1HG2 THR A  27      -1.301   2.168  -0.996  1.00 51.32
ATOM    427 2HG2 THR A  27      -0.989   2.683   0.664  1.00 33.54
ATOM    428 3HG2 THR A  27      -0.313   3.596  -0.686  1.00  2.33
ATOM    429  C   THR A  27      -1.110   6.008   0.001  1.00 14.23
ATOM    430  O   THR A  27      -0.001   6.018   0.561  1.00 14.41
ATOM    431  N   LEU A  28      -1.412   6.767  -1.049  1.00 61.22
ATOM    432  H   LEU A  28      -2.319   6.720  -1.426  1.00 20.04
ATOM    433  CA  LEU A  28      -0.458   7.657  -1.676  1.00  4.23
ATOM    434  HA  LEU A  28       0.358   7.077  -2.080  1.00 50.12
ATOM    435  CB  LEU A  28      -1.147   8.406  -2.812  1.00 71.42
ATOM    436 1HB  LEU A  28      -1.547   7.667  -3.490  1.00 73.41
ATOM    437 2HB  LEU A  28      -1.977   8.954  -2.393  1.00 54.31
ATOM    438  CG  LEU A  28      -0.292   9.370  -3.627  1.00 53.04
ATOM    439  HG  LEU A  28       0.278  10.001  -2.958  1.00 60.11
ATOM    440  CD1 LEU A  28       0.692   8.607  -4.488  1.00 13.24
ATOM    441 1HD1 LEU A  28       1.289   9.305  -5.056  1.00 52.23
ATOM    442 2HD1 LEU A  28       0.154   7.961  -5.166  1.00 73.11
ATOM    443 3HD1 LEU A  28       1.337   8.013  -3.859  1.00 34.41
ATOM    444  CD2 LEU A  28      -1.181  10.249  -4.481  1.00  4.22
ATOM    445 1HD2 LEU A  28      -1.834  10.826  -3.844  1.00 71.44
ATOM    446 2HD2 LEU A  28      -1.777   9.614  -5.121  1.00 31.51
ATOM    447 3HD2 LEU A  28      -0.574  10.908  -5.084  1.00 33.02
ATOM    448  C   LEU A  28       0.064   8.657  -0.652  1.00 31.24
ATOM    449  O   LEU A  28       1.262   8.786  -0.464  1.00 71.30
ATOM    450  N   GLN A  29      -0.854   9.306   0.041  1.00 42.41
ATOM    451  H   GLN A  29      -1.794   9.150  -0.194  1.00 22.43
ATOM    452  CA  GLN A  29      -0.513  10.274   1.080  1.00 10.31
ATOM    453  HA  GLN A  29       0.046  11.070   0.611  1.00 64.13
ATOM    454  CB  GLN A  29      -1.766  10.879   1.719  1.00 71.40
ATOM    455 1HB  GLN A  29      -2.362  10.077   2.129  1.00 13.11
ATOM    456 2HB  GLN A  29      -1.460  11.528   2.525  1.00 13.45
ATOM    457  CG  GLN A  29      -2.642  11.673   0.771  1.00 41.41
ATOM    458 1HG  GLN A  29      -2.044  12.444   0.307  1.00 43.01
ATOM    459 2HG  GLN A  29      -3.033  11.011   0.014  1.00 63.34
ATOM    460  CD  GLN A  29      -3.802  12.329   1.488  1.00 62.02
ATOM    461  OE1 GLN A  29      -4.873  11.753   1.630  1.00 31.41
ATOM    462  NE2 GLN A  29      -3.595  13.537   1.953  1.00 62.24
ATOM    463 2HE2 GLN A  29      -2.711  13.936   1.808  1.00 31.11
ATOM    464 1HE2 GLN A  29      -4.336  13.980   2.412  1.00 41.41
ATOM    465  C   GLN A  29       0.353   9.656   2.175  1.00 74.31
ATOM    466  O   GLN A  29       1.334  10.256   2.599  1.00 52.11
ATOM    467  N   ALA A  30       0.007   8.450   2.595  1.00 51.12
ATOM    468  H   ALA A  30      -0.744   7.993   2.157  1.00 50.23
ATOM    469  CA  ALA A  30       0.701   7.788   3.691  1.00  3.34
ATOM    470  HA  ALA A  30       0.594   8.409   4.567  1.00 51.52
ATOM    471  CB  ALA A  30       0.046   6.450   3.990  1.00 74.14
ATOM    472 1HB  ALA A  30       0.167   5.794   3.141  1.00 72.40
ATOM    473 2HB  ALA A  30      -1.007   6.599   4.182  1.00 72.54
ATOM    474 3HB  ALA A  30       0.510   6.006   4.857  1.00  5.44
ATOM    475  C   ALA A  30       2.193   7.590   3.407  1.00 11.41
ATOM    476  O   ALA A  30       3.040   7.936   4.233  1.00  3.24
ATOM    477  N   ILE A  31       2.513   7.080   2.243  1.00 41.42
ATOM    478  H   ILE A  31       1.804   6.864   1.600  1.00 41.33
ATOM    479  CA  ILE A  31       3.905   6.842   1.923  1.00 71.30
ATOM    480  HA  ILE A  31       4.403   6.607   2.855  1.00 40.41
ATOM    481  CB  ILE A  31       4.061   5.600   0.970  1.00 43.31
ATOM    482  HB  ILE A  31       3.718   4.737   1.521  1.00 14.42
ATOM    483  CG2 ILE A  31       3.173   5.710  -0.277  1.00 51.43
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ATOM    484 1HG2 ILE A  31       2.135   5.763   0.020  1.00 74.53
ATOM    485 2HG2 ILE A  31       3.324   4.846  -0.907  1.00 51.43
ATOM    486 3HG2 ILE A  31       3.435   6.604  -0.824  1.00 25.22
ATOM    487  CG1 ILE A  31       5.534   5.381   0.592  1.00 54.25
ATOM    488 1HG1 ILE A  31       5.915   6.261   0.093  1.00 23.32
ATOM    489 2HG1 ILE A  31       6.100   5.212   1.495  1.00 60.42
ATOM    490  CD1 ILE A  31       5.770   4.207  -0.330  1.00 30.53
ATOM    491 1HD1 ILE A  31       6.823   4.129  -0.557  1.00 65.32
ATOM    492 2HD1 ILE A  31       5.220   4.353  -1.248  1.00  0.54
ATOM    493 3HD1 ILE A  31       5.438   3.298   0.150  1.00 11.15
ATOM    494  C   ILE A  31       4.585   8.093   1.316  1.00  4.33
ATOM    495  O   ILE A  31       5.648   8.514   1.765  1.00 40.12
ATOM    496  N   GLN A  32       3.910   8.724   0.372  1.00 40.23
ATOM    497  H   GLN A  32       2.986   8.456   0.168  1.00 44.33
ATOM    498  CA  GLN A  32       4.468   9.828  -0.397  1.00 22.32
ATOM    499  HA  GLN A  32       5.495   9.537  -0.568  1.00 32.22
ATOM    500  CB  GLN A  32       3.786   9.924  -1.783  1.00  4.13
ATOM    501 1HB  GLN A  32       4.077   9.062  -2.364  1.00 54.12
ATOM    502 2HB  GLN A  32       2.716   9.893  -1.637  1.00 53.13
ATOM    503  CG  GLN A  32       4.125  11.154  -2.586  1.00 42.53
ATOM    504 1HG  GLN A  32       3.499  11.957  -2.228  1.00 44.21
ATOM    505 2HG  GLN A  32       5.160  11.386  -2.421  1.00  3.54
ATOM    506  CD  GLN A  32       3.881  10.991  -4.065  1.00 45.41
ATOM    507  OE1 GLN A  32       2.785  11.247  -4.558  1.00 32.35
ATOM    508  NE2 GLN A  32       4.908  10.615  -4.789  1.00  4.30
ATOM    509 2HE2 GLN A  32       5.790  10.458  -4.356  1.00 54.15
ATOM    510 1HE2 GLN A  32       4.794  10.514  -5.753  1.00 72.52
ATOM    511  C   GLN A  32       4.549  11.160   0.363  1.00 11.41
ATOM    512  O   GLN A  32       5.424  11.977   0.101  1.00 74.34
ATOM    513  N   ASN A  33       3.670  11.385   1.319  1.00 35.33
ATOM    514  H   ASN A  33       2.986  10.715   1.542  1.00  0.21
ATOM    515  CA  ASN A  33       3.724  12.653   2.058  1.00 32.34
ATOM    516  HA  ASN A  33       4.173  13.367   1.383  1.00 30.32
ATOM    517  CB  ASN A  33       2.336  13.181   2.477  1.00  0.04
ATOM    518 1HB  ASN A  33       1.826  12.406   3.030  1.00  4.01
ATOM    519 2HB  ASN A  33       2.472  14.036   3.122  1.00 53.21
ATOM    520  CG  ASN A  33       1.439  13.588   1.308  1.00 55.04
ATOM    521  OD1 ASN A  33       0.215  13.524   1.402  1.00 33.01
ATOM    522  ND2 ASN A  33       2.025  14.011   0.206  1.00 34.53
ATOM    523 2HD2 ASN A  33       3.004  14.048   0.170  1.00 31.33
ATOM    524 1HD2 ASN A  33       1.447  14.262  -0.544  1.00  4.40
ATOM    525  C   ASN A  33       4.640  12.565   3.256  1.00 62.21
ATOM    526  O   ASN A  33       4.785  13.526   3.998  1.00  4.32
ATOM    527  N   GLY A  34       5.270  11.413   3.428  1.00 42.13
ATOM    528  H   GLY A  34       5.114  10.681   2.797  1.00 23.42
ATOM    529  CA  GLY A  34       6.199  11.243   4.513  1.00 13.14
ATOM    530 1HA  GLY A  34       6.833  10.395   4.302  1.00 13.43
ATOM    531 2HA  GLY A  34       6.813  12.128   4.590  1.00 42.52
ATOM    532  C   GLY A  34       5.509  11.018   5.831  1.00 32.20
ATOM    533  O   GLY A  34       5.964  11.481   6.861  1.00 23.52
ATOM    534  N   GLN A  35       4.426  10.267   5.804  1.00 55.43
ATOM    535  H   GLN A  35       4.112   9.887   4.956  1.00 43.45
ATOM    536  CA  GLN A  35       3.677   9.969   7.020  1.00 63.25
ATOM    537  HA  GLN A  35       3.829  10.780   7.717  1.00 33.32
ATOM    538  CB  GLN A  35       2.181   9.829   6.705  1.00 30.25
ATOM    539 1HB  GLN A  35       2.050   8.989   6.039  1.00 62.14
ATOM    540 2HB  GLN A  35       1.653   9.626   7.626  1.00 32.01
ATOM    541  CG  GLN A  35       1.556  11.064   6.052  1.00 22.13
ATOM    542 1HG  GLN A  35       2.139  11.319   5.180  1.00 13.20
ATOM    543 2HG  GLN A  35       0.551  10.818   5.742  1.00 32.31
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ATOM    544  CD  GLN A  35       1.501  12.291   6.961  1.00 54.32
ATOM    545  OE1 GLN A  35       2.314  12.480   7.842  1.00  3.12
ATOM    546  NE2 GLN A  35       0.535  13.140   6.731  1.00 13.42
ATOM    547 2HE2 GLN A  35      -0.092  12.952   6.004  1.00  1.13
ATOM    548 1HE2 GLN A  35       0.510  13.929   7.311  1.00 54.03
ATOM    549  C   GLN A  35       4.221   8.684   7.618  1.00 10.12
ATOM    550  O   GLN A  35       3.737   8.172   8.630  1.00  2.14
ATOM    551  N   THR A  36       5.206   8.153   6.951  1.00  1.12
ATOM    552  H   THR A  36       5.525   8.586   6.134  1.00 71.35
ATOM    553  CA  THR A  36       5.852   6.970   7.326  1.00 40.40
ATOM    554  HA  THR A  36       5.860   6.906   8.403  1.00 34.50
ATOM    555  CB  THR A  36       5.014   5.786   6.766  1.00 44.24
ATOM    556  HB  THR A  36       4.526   6.147   5.871  1.00 63.22
ATOM    557  OG1 THR A  36       3.927   5.487   7.648  1.00 70.43
ATOM    558  HG1 THR A  36       3.708   6.311   8.105  1.00 34.12
ATOM    559  CG2 THR A  36       5.832   4.562   6.440  1.00 52.44
ATOM    560 1HG2 THR A  36       5.180   3.773   6.095  1.00  1.00
ATOM    561 2HG2 THR A  36       6.413   4.256   7.297  1.00 14.11
ATOM    562 3HG2 THR A  36       6.475   4.868   5.627  1.00 41.50
ATOM    563  C   THR A  36       7.307   6.988   6.793  1.00 41.15
ATOM    564  O   THR A  36       7.546   7.275   5.619  1.00 23.33
ATOM    565  N   PHE A  37       8.258   6.753   7.692  1.00 32.41
ATOM    566  H   PHE A  37       8.008   6.597   8.626  1.00 65.00
ATOM    567  CA  PHE A  37       9.675   6.664   7.358  1.00 13.40
ATOM    568  HA  PHE A  37       9.756   6.662   6.281  1.00 70.22
ATOM    569  CB  PHE A  37      10.505   7.837   7.928  1.00 71.15
ATOM    570 1HB  PHE A  37      10.424   7.842   9.004  1.00 53.54
ATOM    571 2HB  PHE A  37      11.543   7.678   7.666  1.00 24.13
ATOM    572  CG  PHE A  37      10.110   9.197   7.428  1.00 13.32
ATOM    573  CD1 PHE A  37       9.384  10.061   8.230  1.00 75.01
ATOM    574  HD1 PHE A  37       9.094   9.746   9.222  1.00 44.41
ATOM    575  CE1 PHE A  37       9.029  11.315   7.777  1.00 62.30
ATOM    576  HE1 PHE A  37       8.462  11.979   8.413  1.00 60.24
ATOM    577  CZ  PHE A  37       9.397  11.718   6.509  1.00 54.44
ATOM    578  HZ  PHE A  37       9.120  12.699   6.152  1.00 14.02
ATOM    579  CE2 PHE A  37      10.119  10.867   5.697  1.00 21.53
ATOM    580  HE2 PHE A  37      10.408  11.179   4.704  1.00  3.04
ATOM    581  CD2 PHE A  37      10.473   9.615   6.158  1.00  2.02
ATOM    582  HD2 PHE A  37      11.039   8.947   5.526  1.00 42.14
ATOM    583  C   PHE A  37      10.234   5.367   7.886  1.00 41.24
ATOM    584  O   PHE A  37       9.647   4.751   8.780  1.00 34.53
ATOM    585  N   ASP A  38      11.341   4.957   7.344  1.00 11.14
ATOM    586  H   ASP A  38      11.728   5.472   6.607  1.00 52.14
ATOM    587  CA  ASP A  38      12.037   3.778   7.817  1.00 10.51
ATOM    588  HA  ASP A  38      11.339   3.153   8.354  1.00 23.13
ATOM    589  CB  ASP A  38      12.620   3.013   6.631  1.00 44.31
ATOM    590 1HB  ASP A  38      11.827   2.774   5.939  1.00 21.02
ATOM    591 2HB  ASP A  38      13.336   3.652   6.135  1.00 55.20
ATOM    592  CG  ASP A  38      13.309   1.716   6.990  1.00 35.33
ATOM    593  OD1 ASP A  38      13.964   1.147   6.128  1.00 31.55
ATOM    594  OD2 ASP A  38      13.179   1.234   8.151  1.00 43.15
ATOM    595  C   ASP A  38      13.148   4.236   8.752  1.00 73.11
ATOM    596  O   ASP A  38      13.630   5.358   8.627  1.00 73.03
ATOM    597  N   TYR A  39      13.569   3.372   9.650  1.00 51.44
ATOM    598  H   TYR A  39      13.209   2.458   9.593  1.00 32.42
ATOM    599  CA  TYR A  39      14.592   3.698  10.633  1.00 63.24
ATOM    600  HA  TYR A  39      14.312   4.658  11.042  1.00 62.21
ATOM    601  CB  TYR A  39      14.632   2.666  11.783  1.00 72.34
ATOM    602 1HB  TYR A  39      15.445   2.915  12.446  1.00 62.04
ATOM    603 2HB  TYR A  39      13.706   2.729  12.335  1.00 54.21
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ATOM    604  CG  TYR A  39      14.827   1.217  11.359  1.00 53.31
ATOM    605  CD1 TYR A  39      16.097   0.689  11.168  1.00 45.44
ATOM    606  HD1 TYR A  39      16.957   1.329  11.309  1.00 33.32
ATOM    607  CE1 TYR A  39      16.274  -0.626  10.799  1.00 53.04
ATOM    608  HE1 TYR A  39      17.270  -1.018  10.656  1.00 52.20
ATOM    609  CZ  TYR A  39      15.175  -1.437  10.616  1.00 43.34
ATOM    610  CE2 TYR A  39      13.904  -0.941  10.798  1.00 71.10
ATOM    611  HE2 TYR A  39      13.044  -1.577  10.653  1.00 32.53
ATOM    612  CD2 TYR A  39      13.735   0.377  11.170  1.00 15.31
ATOM    613  HD2 TYR A  39      12.738   0.770  11.314  1.00 44.23
ATOM    614  OH  TYR A  39      15.354  -2.750  10.257  1.00 42.33
ATOM    615  HH  TYR A  39      16.049  -3.099  10.823  1.00 44.43
ATOM    616  C   TYR A  39      15.958   3.878   9.976  1.00 73.22
ATOM    617  O   TYR A  39      16.819   4.561  10.498  1.00  1.35
ATOM    618  N   LYS A  40      16.139   3.260   8.815  1.00 43.52
ATOM    619  H   LYS A  40      15.432   2.672   8.473  1.00 22.41
ATOM    620  CA  LYS A  40      17.368   3.438   8.053  1.00 53.54
ATOM    621  HA  LYS A  40      18.100   3.804   8.759  1.00 32.34
ATOM    622  CB  LYS A  40      17.880   2.107   7.434  1.00 70.11
ATOM    623 1HB  LYS A  40      18.704   2.332   6.774  1.00  2.44
ATOM    624 2HB  LYS A  40      18.245   1.480   8.235  1.00 33.51
ATOM    625  CG  LYS A  40      16.853   1.317   6.638  1.00 33.32
ATOM    626 1HG  LYS A  40      16.060   1.008   7.303  1.00 40.22
ATOM    627 2HG  LYS A  40      16.443   1.953   5.867  1.00 52.40
ATOM    628  CD  LYS A  40      17.463   0.073   5.988  1.00 34.33
ATOM    629 1HD  LYS A  40      18.143   0.390   5.211  1.00 74.22
ATOM    630 2HD  LYS A  40      18.012  -0.476   6.740  1.00 73.32
ATOM    631  CE  LYS A  40      16.400  -0.859   5.361  1.00  3.42
ATOM    632 1HE  LYS A  40      16.905  -1.673   4.864  1.00 45.44
ATOM    633 2HE  LYS A  40      15.786  -1.261   6.154  1.00  3.43
ATOM    634  NZ  LYS A  40      15.528  -0.179   4.372  1.00 34.32
ATOM    635 1HZ  LYS A  40      14.910   0.503   4.866  1.00  0.11
ATOM    636 2HZ  LYS A  40      14.932  -0.865   3.851  1.00  3.10
ATOM    637 3HZ  LYS A  40      16.118   0.337   3.679  1.00 11.34
ATOM    638  C   LYS A  40      17.188   4.536   6.999  1.00 75.40
ATOM    639  O   LYS A  40      18.028   4.712   6.132  1.00 72.25
ATOM    640  N   SER A  41      16.074   5.284   7.130  1.00 60.23
ATOM    641  H   SER A  41      15.461   5.088   7.869  1.00 51.15
ATOM    642  CA  SER A  41      15.738   6.411   6.263  1.00  5.13
ATOM    643  HA  SER A  41      14.745   6.727   6.551  1.00 65.11
ATOM    644  CB  SER A  41      16.716   7.580   6.496  1.00 10.32
ATOM    645 1HB  SER A  41      16.715   7.845   7.544  1.00 32.34
ATOM    646 2HB  SER A  41      17.702   7.259   6.207  1.00  0.55
ATOM    647  OG  SER A  41      16.358   8.721   5.738  1.00 42.44
ATOM    648  HG  SER A  41      16.406   8.438   4.816  1.00  5.20
ATOM    649  C   SER A  41      15.666   5.987   4.788  1.00 11.21
ATOM    650  O   SER A  41      16.131   6.692   3.888  1.00 51.34
ATOM    651  N   ASN A  42      15.016   4.867   4.565  1.00 24.13
ATOM    652  H   ASN A  42      14.643   4.391   5.330  1.00 35.33
ATOM    653  CA  ASN A  42      14.836   4.301   3.238  1.00  4.51
ATOM    654  HA  ASN A  42      15.808   4.173   2.788  1.00 44.31
ATOM    655  CB  ASN A  42      14.164   2.924   3.367  1.00 43.22
ATOM    656 1HB  ASN A  42      14.865   2.232   3.808  1.00 62.21
ATOM    657 2HB  ASN A  42      13.310   3.017   4.022  1.00 22.11
ATOM    658  CG  ASN A  42      13.692   2.332   2.049  1.00 34.41
ATOM    659  OD1 ASN A  42      12.565   2.551   1.635  1.00 73.41
ATOM    660  ND2 ASN A  42      14.529   1.582   1.404  1.00 61.10
ATOM    661 2HD2 ASN A  42      15.433   1.424   1.777  1.00 14.53
ATOM    662 1HD2 ASN A  42      14.212   1.187   0.559  1.00 34.11
ATOM    663  C   ASN A  42      13.969   5.222   2.382  1.00 24.51
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ATOM    664  O   ASN A  42      12.915   5.688   2.833  1.00  4.34
ATOM    665  N   PRO A  43      14.454   5.572   1.173  1.00 23.33
ATOM    666  CD  PRO A  43      15.798   5.234   0.666  1.00 61.32
ATOM    667  CA  PRO A  43      13.702   6.384   0.238  1.00  1.44
ATOM    668  HA  PRO A  43      13.430   7.325   0.697  1.00 40.13
ATOM    669  CB  PRO A  43      14.653   6.629  -0.939  1.00 12.44
ATOM    670 1HB  PRO A  43      14.128   6.455  -1.867  1.00 62.33
ATOM    671 2HB  PRO A  43      15.031   7.639  -0.909  1.00  2.32
ATOM    672  CG  PRO A  43      15.782   5.673  -0.768  1.00 52.50
ATOM    673 1HG  PRO A  43      15.639   4.829  -1.425  1.00 74.12
ATOM    674 2HG  PRO A  43      16.714   6.164  -1.003  1.00  3.30
ATOM    675 1HD  PRO A  43      15.969   4.169   0.723  1.00 45.25
ATOM    676 2HD  PRO A  43      16.562   5.766   1.214  1.00 50.41
ATOM    677  C   PRO A  43      12.419   5.686  -0.216  1.00 54.32
ATOM    678  O   PRO A  43      12.447   4.706  -0.963  1.00 74.30
ATOM    679  N   TYR A  44      11.323   6.200   0.286  1.00 52.01
ATOM    680  H   TYR A  44      11.418   6.962   0.891  1.00 74.00
ATOM    681  CA  TYR A  44       9.981   5.695   0.050  1.00 63.23
ATOM    682  HA  TYR A  44      10.116   4.655  -0.214  1.00 43.53
ATOM    683  CB  TYR A  44       9.110   5.724   1.301  1.00 14.23
ATOM    684 1HB  TYR A  44       9.267   6.660   1.819  1.00 74.13
ATOM    685 2HB  TYR A  44       8.074   5.656   1.001  1.00 64.42
ATOM    686  CG  TYR A  44       9.394   4.608   2.269  1.00 62.45
ATOM    687  CD1 TYR A  44       9.243   3.280   1.876  1.00 21.12
ATOM    688  HD1 TYR A  44       8.939   3.063   0.862  1.00 11.24
ATOM    689  CE1 TYR A  44       9.483   2.246   2.751  1.00 54.44
ATOM    690  HE1 TYR A  44       9.362   1.223   2.428  1.00 53.21
ATOM    691  CZ  TYR A  44       9.874   2.527   4.035  1.00 44.11
ATOM    692  CE2 TYR A  44      10.027   3.835   4.448  1.00 13.50
ATOM    693  HE2 TYR A  44      10.332   4.063   5.458  1.00  1.14
ATOM    694  CD2 TYR A  44       9.784   4.865   3.568  1.00 64.24
ATOM    695  HD2 TYR A  44       9.902   5.889   3.890  1.00  3.01
ATOM    696  OH  TYR A  44      10.115   1.496   4.915  1.00 33.23
ATOM    697  HH  TYR A  44      10.715   0.882   4.478  1.00 22.55
ATOM    698  C   TYR A  44       9.257   6.333  -1.111  1.00 44.54
ATOM    699  O   TYR A  44       8.133   5.954  -1.407  1.00 12.35
ATOM    700  N   ASP A  45       9.854   7.293  -1.778  1.00 42.23
ATOM    701  H   ASP A  45      10.802   7.483  -1.640  1.00 21.34
ATOM    702  CA  ASP A  45       9.076   8.016  -2.768  1.00 52.11
ATOM    703  HA  ASP A  45       8.083   8.091  -2.347  1.00 12.40
ATOM    704  CB  ASP A  45       9.605   9.429  -3.041  1.00 14.11
ATOM    705 1HB  ASP A  45       9.653   9.978  -2.113  1.00  1.32
ATOM    706 2HB  ASP A  45      10.592   9.362  -3.473  1.00 21.54
ATOM    707  CG  ASP A  45       8.702  10.186  -4.013  1.00 15.22
ATOM    708  OD1 ASP A  45       7.439  10.070  -3.878  1.00 31.31
ATOM    709  OD2 ASP A  45       9.223  10.873  -4.890  1.00 74.25
ATOM    710  C   ASP A  45       8.927   7.206  -4.048  1.00  2.14
ATOM    711  O   ASP A  45       9.798   6.410  -4.439  1.00 54.05
ATOM    712  N   ILE A  46       7.800   7.393  -4.633  1.00 11.31
ATOM    713  H   ILE A  46       7.324   8.213  -4.361  1.00 15.44
ATOM    714  CA  ILE A  46       7.249   6.583  -5.673  1.00 15.42
ATOM    715  HA  ILE A  46       7.360   5.547  -5.392  1.00 62.00
ATOM    716  CB  ILE A  46       5.737   6.870  -5.723  1.00 23.12
ATOM    717  HB  ILE A  46       5.583   7.921  -5.916  1.00 22.44
ATOM    718  CG2 ILE A  46       5.053   6.063  -6.811  1.00 53.01
ATOM    719 1HG2 ILE A  46       5.171   5.008  -6.610  1.00 24.25
ATOM    720 2HG2 ILE A  46       5.500   6.294  -7.767  1.00  3.11
ATOM    721 3HG2 ILE A  46       4.002   6.310  -6.840  1.00 11.13
ATOM    722  CG1 ILE A  46       5.146   6.547  -4.341  1.00 15.31
ATOM    723 1HG1 ILE A  46       5.174   5.479  -4.188  1.00 60.35
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ATOM    724 2HG1 ILE A  46       5.750   7.024  -3.584  1.00 31.12
ATOM    725  CD1 ILE A  46       3.728   6.986  -4.151  1.00 65.32
ATOM    726 1HD1 ILE A  46       3.111   6.521  -4.905  1.00 40.22
ATOM    727 2HD1 ILE A  46       3.673   8.062  -4.238  1.00 24.42
ATOM    728 3HD1 ILE A  46       3.389   6.685  -3.171  1.00 32.03
ATOM    729  C   ILE A  46       7.914   6.803  -7.025  1.00 72.32
ATOM    730  O   ILE A  46       8.029   7.911  -7.504  1.00  3.31
ATOM    731  N   SER A  47       8.326   5.713  -7.632  1.00 43.11
ATOM    732  H   SER A  47       8.173   4.838  -7.215  1.00 71.32
ATOM    733  CA  SER A  47       8.988   5.751  -8.899  1.00 54.33
ATOM    734  HA  SER A  47       9.474   6.707  -9.008  1.00 24.14
ATOM    735  CB  SER A  47      10.043   4.658  -8.906  1.00 41.52
ATOM    736 1HB  SER A  47       9.561   3.694  -8.963  1.00 13.24
ATOM    737 2HB  SER A  47      10.698   4.790  -9.753  1.00 43.23
ATOM    738  OG  SER A  47      10.816   4.727  -7.710  1.00  0.23
ATOM    739  HG  SER A  47      10.719   5.615  -7.345  1.00 34.22
ATOM    740  C   SER A  47       7.970   5.544 -10.044  1.00 41.35
ATOM    741  O   SER A  47       8.163   6.050 -11.140  1.00 32.10
ATOM    742  N   VAL A  48       6.880   4.801  -9.779  1.00  3.21
ATOM    743  H   VAL A  48       6.798   4.348  -8.911  1.00 53.32
ATOM    744  CA  VAL A  48       5.792   4.675 -10.760  1.00 54.34
ATOM    745  HA  VAL A  48       5.852   5.486 -11.471  1.00 62.12
ATOM    746  CB  VAL A  48       5.849   3.299 -11.544  1.00 52.15
ATOM    747  HB  VAL A  48       5.852   2.510 -10.806  1.00  2.10
ATOM    748  CG1 VAL A  48       4.603   3.086 -12.437  1.00 21.10
ATOM    749 1HG1 VAL A  48       4.509   3.897 -13.144  1.00  5.42
ATOM    750 2HG1 VAL A  48       3.700   3.029 -11.841  1.00 71.35
ATOM    751 3HG1 VAL A  48       4.697   2.158 -12.982  1.00  5.12
ATOM    752  CG2 VAL A  48       7.116   3.183 -12.384  1.00 43.11
ATOM    753 1HG2 VAL A  48       7.981   3.246 -11.743  1.00  0.24
ATOM    754 2HG2 VAL A  48       7.141   3.986 -13.106  1.00  3.50
ATOM    755 3HG2 VAL A  48       7.117   2.236 -12.902  1.00 25.41
ATOM    756  C   VAL A  48       4.471   4.710 -10.035  1.00 62.52
ATOM    757  O   VAL A  48       4.260   3.957  -9.080  1.00 41.00
ATOM    758  N   ASN A  49       3.612   5.567 -10.478  1.00 72.32
ATOM    759  H   ASN A  49       3.873   6.190 -11.185  1.00 13.54
ATOM    760  CA  ASN A  49       2.250   5.625 -10.051  1.00 21.12
ATOM    761  HA  ASN A  49       2.088   4.789  -9.386  1.00 42.12
ATOM    762  CB  ASN A  49       1.924   6.964  -9.316  1.00 75.40
ATOM    763 1HB  ASN A  49       0.942   6.895  -8.871  1.00 61.44
ATOM    764 2HB  ASN A  49       2.641   7.089  -8.520  1.00 63.12
ATOM    765  CG  ASN A  49       1.963   8.215 -10.191  1.00 60.01
ATOM    766  OD1 ASN A  49       3.010   8.815 -10.383  1.00 64.23
ATOM    767  ND2 ASN A  49       0.819   8.647 -10.674  1.00 75.15
ATOM    768 2HD2 ASN A  49      -0.001   8.157 -10.453  1.00 54.12
ATOM    769 1HD2 ASN A  49       0.850   9.440 -11.246  1.00 14.54
ATOM    770  C   ASN A  49       1.403   5.418 -11.279  1.00 50.34
ATOM    771  O   ASN A  49       1.601   6.122 -12.267  1.00 62.34
ATOM    772  N   LYS A  50       0.540   4.453 -11.309  1.00 23.34
ATOM    773  H   LYS A  50       0.451   3.772 -10.608  1.00 24.05
ATOM    774  CA  LYS A  50      -0.308   4.353 -12.443  1.00 13.41
ATOM    775  HA  LYS A  50      -0.355   5.362 -12.824  1.00 40.13
ATOM    776  CB  LYS A  50       0.309   3.487 -13.552  1.00 71.32
ATOM    777 1HB  LYS A  50      -0.567   3.117 -14.053  1.00 54.23
ATOM    778 2HB  LYS A  50       0.915   4.079 -14.219  1.00  4.20
ATOM    779  CG  LYS A  50       1.046   2.226 -13.121  1.00 43.41
ATOM    780 1HG  LYS A  50       1.614   1.833 -13.951  1.00 60.23
ATOM    781 2HG  LYS A  50       1.712   2.524 -12.325  1.00 74.13
ATOM    782  CD  LYS A  50       0.106   1.173 -12.610  1.00 21.25
ATOM    783 1HD  LYS A  50      -0.289   1.584 -11.693  1.00 22.40
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ATOM    784 2HD  LYS A  50      -0.673   0.991 -13.333  1.00  2.43
ATOM    785  CE  LYS A  50       0.822  -0.108 -12.263  1.00 32.34
ATOM    786 1HE  LYS A  50       1.442  -0.380 -13.103  1.00 63.41
ATOM    787 2HE  LYS A  50       1.453   0.099 -11.411  1.00 55.30
ATOM    788  NZ  LYS A  50      -0.136  -1.210 -11.942  1.00 72.54
ATOM    789 1HZ  LYS A  50      -0.887  -0.908 -11.285  1.00 65.13
ATOM    790 2HZ  LYS A  50       0.355  -1.984 -11.436  1.00 13.34
ATOM    791 3HZ  LYS A  50      -0.610  -1.596 -12.782  1.00 21.54
ATOM    792  C   LYS A  50      -1.718   3.960 -12.104  1.00 21.52
ATOM    793  O   LYS A  50      -1.959   3.195 -11.162  1.00 64.34
ATOM    794  N   ASN A  51      -2.634   4.539 -12.839  1.00 21.33
ATOM    795  H   ASN A  51      -2.349   5.186 -13.519  1.00 41.30
ATOM    796  CA  ASN A  51      -4.046   4.268 -12.722  1.00 55.24
ATOM    797  HA  ASN A  51      -4.171   3.628 -11.863  1.00 14.11
ATOM    798  CB  ASN A  51      -4.859   5.565 -12.484  1.00 12.02
ATOM    799 1HB  ASN A  51      -5.908   5.314 -12.431  1.00 61.40
ATOM    800 2HB  ASN A  51      -4.555   5.996 -11.542  1.00 14.43
ATOM    801  CG  ASN A  51      -4.686   6.621 -13.578  1.00 44.02
ATOM    802  OD1 ASN A  51      -3.787   7.445 -13.514  1.00 23.44
ATOM    803  ND2 ASN A  51      -5.547   6.614 -14.572  1.00 33.30
ATOM    804 2HD2 ASN A  51      -6.262   5.945 -14.589  1.00 14.13
ATOM    805 1HD2 ASN A  51      -5.417   7.294 -15.265  1.00 62.44
ATOM    806  C   ASN A  51      -4.567   3.517 -13.938  1.00 43.23
ATOM    807  O   ASN A  51      -4.256   3.862 -15.071  1.00 21.23
ATOM    808  N   ASN A  52      -5.319   2.492 -13.696  1.00 12.42
ATOM    809  H   ASN A  52      -5.401   2.169 -12.766  1.00 62.35
ATOM    810  CA  ASN A  52      -5.993   1.738 -14.733  1.00 45.34
ATOM    811  HA  ASN A  52      -5.611   2.051 -15.693  1.00 24.54
ATOM    812  CB  ASN A  52      -5.702   0.235 -14.543  1.00 22.45
ATOM    813 1HB  ASN A  52      -4.710   0.020 -14.913  1.00 12.01
ATOM    814 2HB  ASN A  52      -5.734   0.011 -13.488  1.00  1.14
ATOM    815  CG  ASN A  52      -6.682  -0.687 -15.262  1.00 34.22
ATOM    816  OD1 ASN A  52      -7.714  -1.073 -14.687  1.00  0.20
ATOM    817  ND2 ASN A  52      -6.381  -1.056 -16.483  1.00 35.11
ATOM    818 2HD2 ASN A  52      -5.545  -0.725 -16.874  1.00 74.33
ATOM    819 1HD2 ASN A  52      -7.009  -1.644 -16.952  1.00  5.33
ATOM    820  C   ASN A  52      -7.494   1.998 -14.672  1.00 32.40
ATOM    821  O   ASN A  52      -8.186   1.967 -15.674  1.00 44.13
ATOM    822  N   GLY A  53      -7.985   2.277 -13.478  1.00 55.32
ATOM    823  H   GLY A  53      -7.373   2.382 -12.720  1.00 34.31
ATOM    824  CA  GLY A  53      -9.413   2.441 -13.288  1.00 75.44
ATOM    825 1HA  GLY A  53      -9.699   3.430 -12.966  1.00 71.35
ATOM    826 2HA  GLY A  53      -9.882   2.180 -14.227  1.00  1.20
ATOM    827  C   GLY A  53      -9.895   1.418 -12.341  1.00 74.05
ATOM    828  O   GLY A  53     -10.845   1.607 -11.572  1.00 43.11
ATOM    829  N   THR A  54      -9.284   0.317 -12.454  1.00 32.45
ATOM    830  H   THR A  54      -8.641   0.205 -13.188  1.00 13.15
ATOM    831  CA  THR A  54      -9.524  -0.785 -11.644  1.00  2.05
ATOM    832  HA  THR A  54     -10.301  -0.536 -10.937  1.00 13.24
ATOM    833  CB  THR A  54     -10.020  -1.892 -12.551  1.00 13.32
ATOM    834  HB  THR A  54      -9.306  -1.932 -13.353  1.00 14.24
ATOM    835  OG1 THR A  54     -11.310  -1.534 -13.118  1.00 62.13
ATOM    836  HG1 THR A  54     -11.274  -1.834 -14.035  1.00 22.12
ATOM    837  CG2 THR A  54     -10.085  -3.190 -11.866  1.00 55.53
ATOM    838 1HG2 THR A  54      -9.072  -3.344 -11.528  1.00 15.31
ATOM    839 2HG2 THR A  54     -10.397  -3.932 -12.584  1.00 30.33
ATOM    840 3HG2 THR A  54     -10.758  -3.100 -11.031  1.00 35.44
ATOM    841  C   THR A  54      -8.221  -1.151 -10.894  1.00 34.41
ATOM    842  O   THR A  54      -8.235  -1.789  -9.866  1.00 22.21
ATOM    843  N   ASP A  55      -7.128  -0.693 -11.407  1.00  1.02
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ATOM    844  H   ASP A  55      -7.152  -0.217 -12.259  1.00 61.04
ATOM    845  CA  ASP A  55      -5.838  -0.855 -10.767  1.00  5.01
ATOM    846  HA  ASP A  55      -6.031  -1.291  -9.797  1.00 12.20
ATOM    847  CB  ASP A  55      -4.923  -1.810 -11.578  1.00 52.11
ATOM    848 1HB  ASP A  55      -5.044  -2.767 -11.090  1.00 24.01
ATOM    849 2HB  ASP A  55      -5.243  -1.919 -12.600  1.00 43.32
ATOM    850  CG  ASP A  55      -3.424  -1.515 -11.495  1.00 13.23
ATOM    851  OD1 ASP A  55      -2.900  -0.741 -12.308  1.00 54.12
ATOM    852  OD2 ASP A  55      -2.759  -2.091 -10.639  1.00 13.35
ATOM    853  C   ASP A  55      -5.215   0.497 -10.535  1.00 63.11
ATOM    854  O   ASP A  55      -5.438   1.421 -11.311  1.00 73.30
ATOM    855  N   ALA A  56      -4.576   0.637  -9.420  1.00 34.45
ATOM    856  H   ALA A  56      -4.532  -0.119  -8.792  1.00 25.43
ATOM    857  CA  ALA A  56      -3.862   1.835  -9.042  1.00  3.03
ATOM    858  HA  ALA A  56      -3.506   2.328  -9.935  1.00 62.21
ATOM    859  CB  ALA A  56      -4.720   2.776  -8.224  1.00 33.12
ATOM    860 1HB  ALA A  56      -5.557   3.120  -8.813  1.00 63.42
ATOM    861 2HB  ALA A  56      -4.124   3.621  -7.911  1.00 53.44
ATOM    862 3HB  ALA A  56      -5.082   2.253  -7.350  1.00  4.54
ATOM    863  C   ALA A  56      -2.720   1.367  -8.239  1.00  1.23
ATOM    864  O   ALA A  56      -2.904   0.803  -7.181  1.00 14.21
ATOM    865  N   GLU A  57      -1.568   1.558  -8.715  1.00  3.40
ATOM    866  H   GLU A  57      -1.447   2.139  -9.498  1.00  0.25
ATOM    867  CA  GLU A  57      -0.464   0.925  -8.105  1.00 62.00
ATOM    868  HA  GLU A  57      -0.729   0.640  -7.098  1.00 75.21
ATOM    869  CB  GLU A  57      -0.238  -0.334  -8.899  1.00 23.34
ATOM    870 1HB  GLU A  57      -1.174  -0.870  -8.947  1.00 13.14
ATOM    871 2HB  GLU A  57       0.014  -0.030  -9.904  1.00 11.03
ATOM    872  CG  GLU A  57       0.797  -1.301  -8.423  1.00 22.31
ATOM    873 1HG  GLU A  57       1.775  -0.905  -8.654  1.00  3.42
ATOM    874 2HG  GLU A  57       0.703  -1.460  -7.361  1.00 30.24
ATOM    875  CD  GLU A  57       0.603  -2.604  -9.146  1.00 61.13
ATOM    876  OE1 GLU A  57       1.179  -2.768 -10.242  1.00 10.24
ATOM    877  OE2 GLU A  57      -0.217  -3.434  -8.681  1.00  5.31
ATOM    878  C   GLU A  57       0.725   1.836  -8.084  1.00 63.32
ATOM    879  O   GLU A  57       1.065   2.469  -9.104  1.00 54.23
ATOM    880  N   ILE A  58       1.316   1.941  -6.919  1.00 44.31
ATOM    881  H   ILE A  58       1.003   1.440  -6.137  1.00 12.41
ATOM    882  CA  ILE A  58       2.445   2.745  -6.703  1.00 25.14
ATOM    883  HA  ILE A  58       2.686   3.204  -7.649  1.00 43.44
ATOM    884  CB  ILE A  58       2.217   3.884  -5.663  1.00 23.44
ATOM    885  HB  ILE A  58       3.214   4.211  -5.424  1.00 12.42
ATOM    886  CG2 ILE A  58       1.480   5.051  -6.302  1.00 34.32
ATOM    887 1HG2 ILE A  58       0.539   4.699  -6.700  1.00  4.11
ATOM    888 2HG2 ILE A  58       2.078   5.464  -7.100  1.00 32.41
ATOM    889 3HG2 ILE A  58       1.290   5.812  -5.559  1.00 31.33
ATOM    890  CG1 ILE A  58       1.506   3.424  -4.350  1.00 13.13
ATOM    891 1HG1 ILE A  58       1.888   2.455  -4.067  1.00 13.52
ATOM    892 2HG1 ILE A  58       1.735   4.132  -3.564  1.00 64.42
ATOM    893  CD1 ILE A  58      -0.014   3.302  -4.445  1.00 31.20
ATOM    894 1HD1 ILE A  58      -0.274   2.594  -5.219  1.00 33.24
ATOM    895 2HD1 ILE A  58      -0.442   4.263  -4.691  1.00 64.14
ATOM    896 3HD1 ILE A  58      -0.435   2.971  -3.506  1.00 14.03
ATOM    897  C   ILE A  58       3.641   1.899  -6.337  1.00 42.50
ATOM    898  O   ILE A  58       3.609   1.092  -5.396  1.00 34.30
ATOM    899  N   VAL A  59       4.682   2.070  -7.099  1.00 55.44
ATOM    900  H   VAL A  59       4.629   2.744  -7.817  1.00 12.22
ATOM    901  CA  VAL A  59       5.898   1.328  -6.931  1.00  4.12
ATOM    902  HA  VAL A  59       5.766   0.605  -6.141  1.00 31.52
ATOM    903  CB  VAL A  59       6.296   0.585  -8.237  1.00 64.42
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ATOM    904  HB  VAL A  59       6.615   1.340  -8.941  1.00 52.30
ATOM    905  CG1 VAL A  59       7.492  -0.341  -8.010  1.00 44.31
ATOM    906 1HG1 VAL A  59       7.739  -0.853  -8.928  1.00 11.11
ATOM    907 2HG1 VAL A  59       7.255  -1.061  -7.241  1.00 73.53
ATOM    908 3HG1 VAL A  59       8.342   0.245  -7.686  1.00 23.12
ATOM    909  CG2 VAL A  59       5.111  -0.166  -8.841  1.00 73.23
ATOM    910 1HG2 VAL A  59       4.369   0.546  -9.169  1.00 44.45
ATOM    911 2HG2 VAL A  59       4.662  -0.792  -8.085  1.00 74.31
ATOM    912 3HG2 VAL A  59       5.436  -0.768  -9.677  1.00 13.11
ATOM    913  C   VAL A  59       7.004   2.291  -6.581  1.00 33.44
ATOM    914  O   VAL A  59       7.178   3.304  -7.256  1.00 13.11
ATOM    915  N   SER A  60       7.713   2.003  -5.544  1.00 73.15
ATOM    916  H   SER A  60       7.520   1.204  -4.999  1.00 45.15
ATOM    917  CA  SER A  60       8.818   2.789  -5.121  1.00 35.20
ATOM    918  HA  SER A  60       8.908   3.638  -5.782  1.00  3.12
ATOM    919  CB  SER A  60       8.583   3.291  -3.685  1.00 33.14
ATOM    920 1HB  SER A  60       7.730   3.951  -3.679  1.00 10.51
ATOM    921 2HB  SER A  60       8.386   2.454  -3.033  1.00 62.24
ATOM    922  OG  SER A  60       9.698   4.003  -3.195  1.00 53.01
ATOM    923  HG  SER A  60       9.689   4.908  -3.539  1.00 62.33
ATOM    924  C   SER A  60      10.082   1.945  -5.204  1.00 70.54
ATOM    925  O   SER A  60      10.040   0.709  -5.047  1.00 13.40
ATOM    926  N   ALA A  61      11.170   2.581  -5.485  1.00 51.14
ATOM    927  H   ALA A  61      11.145   3.552  -5.629  1.00 72.12
ATOM    928  CA  ALA A  61      12.437   1.934  -5.541  1.00 70.15
ATOM    929  HA  ALA A  61      12.345   0.972  -5.057  1.00 53.50
ATOM    930  CB  ALA A  61      12.890   1.730  -6.980  1.00 20.14
ATOM    931 1HB  ALA A  61      12.979   2.686  -7.474  1.00 53.00
ATOM    932 2HB  ALA A  61      12.166   1.118  -7.495  1.00 53.14
ATOM    933 3HB  ALA A  61      13.847   1.228  -6.981  1.00  2.12
ATOM    934  C   ALA A  61      13.412   2.775  -4.781  1.00 13.15
ATOM    935  O   ALA A  61      13.416   3.999  -4.915  1.00 40.20
ATOM    936  N   SER A  62      14.205   2.147  -3.987  1.00  1.53
ATOM    937  H   SER A  62      14.190   1.173  -3.908  1.00 72.33
ATOM    938  CA  SER A  62      15.122   2.838  -3.165  1.00 12.03
ATOM    939  HA  SER A  62      14.825   3.874  -3.100  1.00 55.32
ATOM    940  CB  SER A  62      15.041   2.229  -1.785  1.00 33.32
ATOM    941 1HB  SER A  62      15.459   1.233  -1.815  1.00 11.10
ATOM    942 2HB  SER A  62      15.591   2.826  -1.073  1.00 42.11
ATOM    943  OG  SER A  62      13.684   2.144  -1.368  1.00 50.43
ATOM    944  HG  SER A  62      13.281   3.019  -1.265  1.00 55.43
ATOM    945  C   SER A  62      16.530   2.721  -3.733  1.00 71.34
ATOM    946  O   SER A  62      16.959   1.633  -4.132  1.00 42.34
ATOM    947  N   ASP A  63      17.225   3.831  -3.794  1.00  4.02
ATOM    948  H   ASP A  63      16.836   4.698  -3.527  1.00 35.42
ATOM    949  CA  ASP A  63      18.601   3.866  -4.285  1.00 31.31
ATOM    950  HA  ASP A  63      18.689   3.244  -5.163  1.00 63.51
ATOM    951  CB  ASP A  63      18.964   5.310  -4.660  1.00 73.14
ATOM    952 1HB  ASP A  63      19.998   5.350  -4.971  1.00 12.32
ATOM    953 2HB  ASP A  63      18.329   5.643  -5.467  1.00 11.21
ATOM    954  CG  ASP A  63      18.773   6.241  -3.476  1.00  2.34
ATOM    955  OD1 ASP A  63      19.748   6.509  -2.747  1.00  2.12
ATOM    956  OD2 ASP A  63      17.614   6.613  -3.215  1.00 63.14
ATOM    957  C   ASP A  63      19.553   3.398  -3.199  1.00 45.50
ATOM    958  O   ASP A  63      20.560   2.754  -3.479  1.00 21.33
ATOM    959  N   SER A  64      19.185   3.668  -1.962  1.00 54.11
ATOM    960  H   SER A  64      18.360   4.175  -1.818  1.00 10.23
ATOM    961  CA  SER A  64      20.001   3.330  -0.834  1.00 11.01
ATOM    962  HA  SER A  64      21.027   3.571  -1.069  1.00 13.35
ATOM    963  CB  SER A  64      19.554   4.170   0.349  1.00 31.51
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ATOM    964 1HB  SER A  64      18.596   3.811   0.700  1.00 62.14
ATOM    965 2HB  SER A  64      20.282   4.094   1.142  1.00  1.52
ATOM    966  OG  SER A  64      19.425   5.545  -0.031  1.00 63.22
ATOM    967  HG  SER A  64      19.688   5.722  -0.951  1.00 62.13
ATOM    968  C   SER A  64      19.880   1.838  -0.538  1.00 62.15
ATOM    969  O   SER A  64      20.871   1.150  -0.304  1.00 35.04
ATOM    970  N   ASP A  65      18.667   1.334  -0.606  1.00 63.14
ATOM    971  H   ASP A  65      17.912   1.908  -0.831  1.00 44.02
ATOM    972  CA  ASP A  65      18.443  -0.063  -0.412  1.00 71.25
ATOM    973  HA  ASP A  65      19.369  -0.526  -0.108  1.00 21.32
ATOM    974  CB  ASP A  65      17.350  -0.366   0.613  1.00 52.23
ATOM    975 1HB  ASP A  65      16.417   0.060   0.277  1.00 13.20
ATOM    976 2HB  ASP A  65      17.253  -1.442   0.640  1.00 21.14
ATOM    977  CG  ASP A  65      17.608   0.122   2.011  1.00 72.42
ATOM    978  OD1 ASP A  65      18.368  -0.517   2.729  1.00 41.43
ATOM    979  OD2 ASP A  65      16.953   1.109   2.441  1.00 53.15
ATOM    980  C   ASP A  65      18.011  -0.621  -1.720  1.00 10.32
ATOM    981  O   ASP A  65      16.839  -0.577  -2.068  1.00 32.25
ATOM    982  N   SER A  66      18.942  -1.122  -2.452  1.00 53.40
ATOM    983  H   SER A  66      19.870  -1.086  -2.134  1.00  1.15
ATOM    984  CA  SER A  66      18.682  -1.668  -3.757  1.00 11.20
ATOM    985  HA  SER A  66      18.176  -0.922  -4.351  1.00 43.45
ATOM    986  CB  SER A  66      20.014  -1.963  -4.391  1.00 32.14
ATOM    987 1HB  SER A  66      20.481  -2.722  -3.781  1.00 53.31
ATOM    988 2HB  SER A  66      19.893  -2.305  -5.407  1.00  4.12
ATOM    989  OG  SER A  66      20.842  -0.810  -4.351  1.00 53.12
ATOM    990  HG  SER A  66      20.316  -0.003  -4.369  1.00 13.42
ATOM    991  C   SER A  66      17.818  -2.943  -3.671  1.00 54.44
ATOM    992  O   SER A  66      17.017  -3.233  -4.554  1.00 13.52
ATOM    993  N   THR A  67      17.956  -3.656  -2.580  1.00 14.03
ATOM    994  H   THR A  67      18.537  -3.323  -1.867  1.00  2.24
ATOM    995  CA  THR A  67      17.252  -4.899  -2.395  1.00 34.02
ATOM    996  HA  THR A  67      16.989  -5.271  -3.374  1.00 14.14
ATOM    997  CB  THR A  67      18.170  -5.957  -1.698  1.00 55.13
ATOM    998  HB  THR A  67      19.013  -6.141  -2.349  1.00 21.42
ATOM    999  OG1 THR A  67      17.477  -7.195  -1.506  1.00 44.21
ATOM   1000  HG1 THR A  67      16.539  -7.004  -1.380  1.00 43.12
ATOM   1001  CG2 THR A  67      18.692  -5.442  -0.359  1.00  1.21
ATOM   1002 1HG2 THR A  67      19.266  -4.543  -0.533  1.00  4.11
ATOM   1003 2HG2 THR A  67      19.319  -6.191   0.099  1.00 22.32
ATOM   1004 3HG2 THR A  67      17.858  -5.217   0.289  1.00 72.34
ATOM   1005  C   THR A  67      15.959  -4.690  -1.595  1.00 30.25
ATOM   1006  O   THR A  67      15.171  -5.627  -1.412  1.00  1.25
ATOM   1007  N   ASP A  68      15.719  -3.474  -1.158  1.00 33.35
ATOM   1008  H   ASP A  68      16.297  -2.720  -1.402  1.00 42.04
ATOM   1009  CA  ASP A  68      14.554  -3.197  -0.346  1.00 12.44
ATOM   1010  HA  ASP A  68      13.940  -4.085  -0.357  1.00 11.43
ATOM   1011  CB  ASP A  68      14.949  -2.872   1.103  1.00 64.24
ATOM   1012 1HB  ASP A  68      15.617  -3.630   1.486  1.00 44.55
ATOM   1013 2HB  ASP A  68      15.453  -1.917   1.097  1.00 22.21
ATOM   1014  CG  ASP A  68      13.769  -2.759   2.038  1.00 62.31
ATOM   1015  OD1 ASP A  68      13.881  -2.021   3.082  1.00 32.30
ATOM   1016  OD2 ASP A  68      12.731  -3.422   1.773  1.00 54.01
ATOM   1017  C   ASP A  68      13.764  -2.072  -0.969  1.00 44.23
ATOM   1018  O   ASP A  68      14.029  -0.906  -0.740  1.00 75.41
ATOM   1019  N   SER A  69      12.882  -2.449  -1.857  1.00  3.51
ATOM   1020  H   SER A  69      12.785  -3.401  -2.042  1.00 23.11
ATOM   1021  CA  SER A  69      12.040  -1.522  -2.557  1.00 22.21
ATOM   1022  HA  SER A  69      12.277  -0.530  -2.205  1.00 12.44
ATOM   1023  CB  SER A  69      12.343  -1.604  -4.057  1.00 50.53
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ATOM   1024 1HB  SER A  69      11.545  -1.127  -4.607  1.00  5.52
ATOM   1025 2HB  SER A  69      13.275  -1.099  -4.263  1.00  4.33
ATOM   1026  OG  SER A  69      12.452  -2.974  -4.496  1.00 73.11
ATOM   1027  HG  SER A  69      13.373  -3.064  -4.769  1.00 52.14
ATOM   1028  C   SER A  69      10.573  -1.816  -2.248  1.00 11.14
ATOM   1029  O   SER A  69      10.164  -2.998  -2.189  1.00 44.35
ATOM   1030  N   LEU A  70       9.798  -0.775  -2.093  1.00 33.32
ATOM   1031  H   LEU A  70      10.150   0.119  -2.285  1.00 65.04
ATOM   1032  CA  LEU A  70       8.417  -0.871  -1.676  1.00 30.51
ATOM   1033  HA  LEU A  70       8.290  -1.788  -1.121  1.00 61.33
ATOM   1034  CB  LEU A  70       8.117   0.330  -0.720  1.00 22.30
ATOM   1035 1HB  LEU A  70       8.834   0.283   0.085  1.00 41.13
ATOM   1036 2HB  LEU A  70       8.315   1.235  -1.274  1.00 41.24
ATOM   1037  CG  LEU A  70       6.712   0.468  -0.064  1.00 11.02
ATOM   1038  HG  LEU A  70       6.765   1.263   0.665  1.00 50.43
ATOM   1039  CD1 LEU A  70       5.627   0.863  -1.063  1.00 75.23
ATOM   1040 1HD1 LEU A  70       4.692   1.009  -0.542  1.00 51.32
ATOM   1041 2HD1 LEU A  70       5.506   0.085  -1.804  1.00 51.30
ATOM   1042 3HD1 LEU A  70       5.901   1.780  -1.568  1.00 74.41
ATOM   1043  CD2 LEU A  70       6.330  -0.806   0.669  1.00 14.45
ATOM   1044 1HD2 LEU A  70       7.059  -1.010   1.440  1.00  3.51
ATOM   1045 2HD2 LEU A  70       6.300  -1.629  -0.027  1.00 62.10
ATOM   1046 3HD2 LEU A  70       5.358  -0.681   1.121  1.00 74.42
ATOM   1047  C   LEU A  70       7.491  -0.880  -2.891  1.00 71.14
ATOM   1048  O   LEU A  70       7.514   0.026  -3.705  1.00 52.21
ATOM   1049  N   GLN A  71       6.702  -1.907  -3.022  1.00 10.42
ATOM   1050  H   GLN A  71       6.748  -2.642  -2.373  1.00  1.24
ATOM   1051  CA  GLN A  71       5.722  -1.962  -4.085  1.00 13.24
ATOM   1052  HA  GLN A  71       5.651  -0.990  -4.551  1.00  2.12
ATOM   1053  CB  GLN A  71       6.116  -2.998  -5.124  1.00 23.13
ATOM   1054 1HB  GLN A  71       7.150  -2.872  -5.407  1.00 53.31
ATOM   1055 2HB  GLN A  71       6.006  -3.974  -4.682  1.00 13.15
ATOM   1056  CG  GLN A  71       5.275  -2.992  -6.376  1.00 72.55
ATOM   1057 1HG  GLN A  71       4.237  -3.122  -6.108  1.00 61.51
ATOM   1058 2HG  GLN A  71       5.412  -2.041  -6.864  1.00 22.42
ATOM   1059  CD  GLN A  71       5.679  -4.091  -7.334  1.00 20.12
ATOM   1060  OE1 GLN A  71       6.839  -4.514  -7.362  1.00 14.21
ATOM   1061  NE2 GLN A  71       4.748  -4.544  -8.133  1.00  1.34
ATOM   1062 2HE2 GLN A  71       3.847  -4.158  -8.080  1.00 73.41
ATOM   1063 1HE2 GLN A  71       4.990  -5.256  -8.759  1.00 55.13
ATOM   1064  C   GLN A  71       4.383  -2.326  -3.482  1.00 51.15
ATOM   1065  O   GLN A  71       4.260  -3.386  -2.847  1.00 23.04
ATOM   1066  N   VAL A  72       3.404  -1.465  -3.635  1.00 31.12
ATOM   1067  H   VAL A  72       3.540  -0.622  -4.122  1.00 70.14
ATOM   1068  CA  VAL A  72       2.081  -1.758  -3.142  1.00 34.03
ATOM   1069  HA  VAL A  72       2.124  -2.671  -2.567  1.00  1.15
ATOM   1070  CB  VAL A  72       1.517  -0.607  -2.243  1.00 52.35
ATOM   1071  HB  VAL A  72       1.494   0.301  -2.830  1.00 33.33
ATOM   1072  CG1 VAL A  72       0.107  -0.920  -1.765  1.00 51.30
ATOM   1073 1HG1 VAL A  72      -0.536  -1.045  -2.621  1.00 35.40
ATOM   1074 2HG1 VAL A  72      -0.260  -0.107  -1.156  1.00 24.53
ATOM   1075 3HG1 VAL A  72       0.108  -1.830  -1.186  1.00 21.34
ATOM   1076  CG2 VAL A  72       2.400  -0.376  -1.046  1.00 63.33
ATOM   1077 1HG2 VAL A  72       2.060   0.497  -0.506  1.00 73.52
ATOM   1078 2HG2 VAL A  72       3.418  -0.244  -1.379  1.00 35.44
ATOM   1079 3HG2 VAL A  72       2.343  -1.236  -0.398  1.00 31.12
ATOM   1080  C   VAL A  72       1.167  -1.959  -4.328  1.00 53.11
ATOM   1081  O   VAL A  72       1.030  -1.075  -5.173  1.00 53.12
ATOM   1082  N   ALA A  73       0.556  -3.102  -4.385  1.00 53.33
ATOM   1083  H   ALA A  73       0.728  -3.777  -3.691  1.00 44.12
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ATOM   1084  CA  ALA A  73      -0.363  -3.413  -5.428  1.00 11.41
ATOM   1085  HA  ALA A  73      -0.225  -2.730  -6.251  1.00 75.33
ATOM   1086  CB  ALA A  73      -0.159  -4.834  -5.916  1.00 65.32
ATOM   1087 1HB  ALA A  73      -0.336  -5.516  -5.100  1.00 41.34
ATOM   1088 2HB  ALA A  73       0.853  -4.951  -6.274  1.00 71.51
ATOM   1089 3HB  ALA A  73      -0.853  -5.043  -6.717  1.00 54.12
ATOM   1090  C   ALA A  73      -1.745  -3.223  -4.910  1.00 21.13
ATOM   1091  O   ALA A  73      -2.150  -3.860  -3.932  1.00 43.11
ATOM   1092  N   MET A  74      -2.461  -2.349  -5.543  1.00 23.11
ATOM   1093  H   MET A  74      -2.082  -1.874  -6.315  1.00 24.34
ATOM   1094  CA  MET A  74      -3.793  -2.010  -5.138  1.00 55.32
ATOM   1095  HA  MET A  74      -4.112  -2.651  -4.331  1.00 45.33
ATOM   1096  CB  MET A  74      -3.824  -0.561  -4.681  1.00 44.11
ATOM   1097 1HB  MET A  74      -3.676   0.082  -5.535  1.00  1.32
ATOM   1098 2HB  MET A  74      -4.790  -0.357  -4.243  1.00 61.13
ATOM   1099  CG  MET A  74      -2.769  -0.252  -3.657  1.00 61.32
ATOM   1100 1HG  MET A  74      -3.034  -0.709  -2.715  1.00 44.24
ATOM   1101 2HG  MET A  74      -1.855  -0.685  -4.034  1.00  1.21
ATOM   1102  SD  MET A  74      -2.500   1.487  -3.391  1.00 34.33
ATOM   1103  CE  MET A  74      -4.113   2.019  -2.963  1.00  3.44
ATOM   1104 1HE  MET A  74      -4.745   1.981  -3.837  1.00 50.11
ATOM   1105 2HE  MET A  74      -4.019   3.022  -2.576  1.00 74.12
ATOM   1106 3HE  MET A  74      -4.490   1.358  -2.197  1.00 52.23
ATOM   1107  C   MET A  74      -4.675  -2.165  -6.325  1.00 12.31
ATOM   1108  O   MET A  74      -4.386  -1.623  -7.397  1.00 11.21
ATOM   1109  N   LYS A  75      -5.661  -2.974  -6.206  1.00 73.52
ATOM   1110  H   LYS A  75      -5.790  -3.487  -5.377  1.00 44.43
ATOM   1111  CA  LYS A  75      -6.589  -3.130  -7.263  1.00 50.25
ATOM   1112  HA  LYS A  75      -6.667  -2.109  -7.614  1.00 40.14
ATOM   1113  CB  LYS A  75      -6.047  -3.981  -8.437  1.00 74.44
ATOM   1114 1HB  LYS A  75      -6.815  -4.064  -9.193  1.00  3.05
ATOM   1115 2HB  LYS A  75      -5.216  -3.434  -8.856  1.00 65.44
ATOM   1116  CG  LYS A  75      -5.574  -5.369  -8.106  1.00 64.02
ATOM   1117 1HG  LYS A  75      -5.195  -5.418  -7.096  1.00 51.14
ATOM   1118 2HG  LYS A  75      -6.443  -5.995  -8.226  1.00 23.54
ATOM   1119  CD  LYS A  75      -4.503  -5.860  -9.108  1.00 12.13
ATOM   1120 1HD  LYS A  75      -4.504  -6.941  -9.107  1.00 42.42
ATOM   1121 2HD  LYS A  75      -4.774  -5.513 -10.094  1.00  4.53
ATOM   1122  CE  LYS A  75      -3.049  -5.377  -8.784  1.00 71.22
ATOM   1123 1HE  LYS A  75      -2.798  -5.714  -7.790  1.00 70.34
ATOM   1124 2HE  LYS A  75      -2.380  -5.858  -9.484  1.00 43.13
ATOM   1125  NZ  LYS A  75      -2.822  -3.901  -8.829  1.00 13.13
ATOM   1126 1HZ  LYS A  75      -1.806  -3.716  -8.637  1.00 54.01
ATOM   1127 2HZ  LYS A  75      -3.374  -3.331  -8.162  1.00 40.01
ATOM   1128 3HZ  LYS A  75      -2.971  -3.467  -9.770  1.00 11.52
ATOM   1129  C   LYS A  75      -8.002  -3.391  -6.776  1.00 31.51
ATOM   1130  O   LYS A  75      -8.210  -3.983  -5.707  1.00 52.11
ATOM   1131  N   LYS A  76      -8.922  -2.895  -7.533  1.00 75.12
ATOM   1132  H   LYS A  76      -8.651  -2.590  -8.428  1.00 72.14
ATOM   1133  CA  LYS A  76     -10.321  -2.752  -7.194  1.00 54.33
ATOM   1134  HA  LYS A  76     -10.425  -2.356  -6.197  1.00 13.52
ATOM   1135  CB  LYS A  76     -10.884  -1.717  -8.151  1.00  1.54
ATOM   1136 1HB  LYS A  76     -10.238  -0.851  -8.118  1.00 42.13
ATOM   1137 2HB  LYS A  76     -10.828  -2.135  -9.142  1.00 74.32
ATOM   1138  CG  LYS A  76     -12.300  -1.231  -7.906  1.00 60.24
ATOM   1139 1HG  LYS A  76     -12.979  -2.071  -7.913  1.00 10.32
ATOM   1140 2HG  LYS A  76     -12.350  -0.730  -6.951  1.00 42.45
ATOM   1141  CD  LYS A  76     -12.677  -0.250  -9.004  1.00  0.33
ATOM   1142 1HD  LYS A  76     -13.518   0.366  -8.732  1.00 12.04
ATOM   1143 2HD  LYS A  76     -11.808   0.365  -9.203  1.00 74.34
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ATOM   1144  CE  LYS A  76     -12.981  -0.962 -10.292  1.00 31.24
ATOM   1145 1HE  LYS A  76     -12.197  -1.672 -10.498  1.00 23.44
ATOM   1146 2HE  LYS A  76     -13.918  -1.479 -10.154  1.00 61.41
ATOM   1147  NZ  LYS A  76     -13.109  -0.014 -11.419  1.00 62.01
ATOM   1148 1HZ  LYS A  76     -13.956   0.578 -11.322  1.00 33.34
ATOM   1149 2HZ  LYS A  76     -13.098  -0.534 -12.321  1.00 12.52
ATOM   1150 3HZ  LYS A  76     -12.270   0.609 -11.429  1.00  3.11
ATOM   1151  C   LYS A  76     -11.101  -4.035  -7.356  1.00 61.55
ATOM   1152  O   LYS A  76     -11.088  -4.665  -8.414  1.00 25.45
ATOM   1153  N   LEU A  77     -11.784  -4.388  -6.309  1.00 64.35
ATOM   1154  H   LEU A  77     -11.723  -3.823  -5.505  1.00 33.44
ATOM   1155  CA  LEU A  77     -12.658  -5.523  -6.297  1.00 64.52
ATOM   1156  HA  LEU A  77     -12.278  -6.269  -6.976  1.00 71.24
ATOM   1157  CB  LEU A  77     -12.741  -6.081  -4.851  1.00 72.51
ATOM   1158 1HB  LEU A  77     -11.740  -6.128  -4.451  1.00 33.32
ATOM   1159 2HB  LEU A  77     -13.302  -5.358  -4.280  1.00 44.34
ATOM   1160  CG  LEU A  77     -13.396  -7.459  -4.638  1.00  4.14
ATOM   1161  HG  LEU A  77     -14.380  -7.444  -5.081  1.00 40.42
ATOM   1162  CD1 LEU A  77     -12.584  -8.561  -5.304  1.00 65.45
ATOM   1163 1HD1 LEU A  77     -13.068  -9.513  -5.141  1.00 75.02
ATOM   1164 2HD1 LEU A  77     -11.593  -8.587  -4.877  1.00 64.33
ATOM   1165 3HD1 LEU A  77     -12.512  -8.373  -6.366  1.00 32.33
ATOM   1166  CD2 LEU A  77     -13.555  -7.756  -3.154  1.00 61.05
ATOM   1167 1HD2 LEU A  77     -13.961  -8.748  -3.031  1.00 34.53
ATOM   1168 2HD2 LEU A  77     -14.237  -7.044  -2.716  1.00 73.32
ATOM   1169 3HD2 LEU A  77     -12.595  -7.693  -2.662  1.00 73.55
ATOM   1170  C   LEU A  77     -14.032  -4.989  -6.760  1.00 43.31
ATOM   1171  O   LEU A  77     -14.358  -3.832  -6.471  1.00 35.54
ATOM   1172  N   PRO A  78     -14.841  -5.795  -7.484  1.00 24.43
ATOM   1173  CD  PRO A  78     -14.525  -7.173  -7.857  1.00 53.31
ATOM   1174  CA  PRO A  78     -16.170  -5.372  -8.023  1.00 51.41
ATOM   1175  HA  PRO A  78     -16.060  -4.632  -8.802  1.00 10.45
ATOM   1176  CB  PRO A  78     -16.740  -6.661  -8.624  1.00 52.54
ATOM   1177 1HB  PRO A  78     -17.420  -7.117  -7.919  1.00 61.22
ATOM   1178 2HB  PRO A  78     -17.246  -6.451  -9.555  1.00 35.23
ATOM   1179  CG  PRO A  78     -15.563  -7.531  -8.885  1.00 10.54
ATOM   1180 1HG  PRO A  78     -15.849  -8.568  -8.792  1.00 13.44
ATOM   1181 2HG  PRO A  78     -15.171  -7.334  -9.871  1.00 74.34
ATOM   1182 1HD  PRO A  78     -14.583  -7.782  -6.966  1.00 13.00
ATOM   1183 2HD  PRO A  78     -13.540  -7.222  -8.292  1.00 63.34
ATOM   1184  C   PRO A  78     -17.139  -4.843  -6.953  1.00 11.22
ATOM   1185  O   PRO A  78     -18.099  -4.155  -7.258  1.00 24.44
ATOM   1186  N   ASN A  79     -16.862  -5.160  -5.711  1.00 64.43
ATOM   1187  H   ASN A  79     -16.059  -5.699  -5.553  1.00  0.00
ATOM   1188  CA  ASN A  79     -17.701  -4.755  -4.586  1.00 30.34
ATOM   1189  HA  ASN A  79     -18.726  -4.704  -4.919  1.00  4.01
ATOM   1190  CB  ASN A  79     -17.603  -5.791  -3.457  1.00 63.42
ATOM   1191 1HB  ASN A  79     -16.581  -5.839  -3.113  1.00 65.32
ATOM   1192 2HB  ASN A  79     -18.236  -5.482  -2.640  1.00 12.04
ATOM   1193  CG  ASN A  79     -18.019  -7.180  -3.890  1.00 24.21
ATOM   1194  OD1 ASN A  79     -17.202  -7.955  -4.374  1.00 24.33
ATOM   1195  ND2 ASN A  79     -19.273  -7.510  -3.711  1.00 63.42
ATOM   1196 2HD2 ASN A  79     -19.883  -6.856  -3.313  1.00 64.42
ATOM   1197 1HD2 ASN A  79     -19.540  -8.411  -3.990  1.00 20.33
ATOM   1198  C   ASN A  79     -17.268  -3.399  -4.048  1.00 53.10
ATOM   1199  O   ASN A  79     -17.717  -2.984  -2.982  1.00 11.35
ATOM   1200  N   ASN A  80     -16.385  -2.724  -4.796  1.00 30.51
ATOM   1201  H   ASN A  80     -16.101  -3.120  -5.648  1.00 43.53
ATOM   1202  CA  ASN A  80     -15.811  -1.420  -4.414  1.00 72.23
ATOM   1203  HA  ASN A  80     -15.156  -1.133  -5.225  1.00 20.13
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ATOM   1204  CB  ASN A  80     -16.875  -0.326  -4.228  1.00 22.14
ATOM   1205 1HB  ASN A  80     -17.668  -0.715  -3.606  1.00 70.22
ATOM   1206 2HB  ASN A  80     -16.416   0.516  -3.728  1.00 72.52
ATOM   1207  CG  ASN A  80     -17.464   0.139  -5.547  1.00  1.45
ATOM   1208  OD1 ASN A  80     -16.795   0.123  -6.582  1.00 41.43
ATOM   1209  ND2 ASN A  80     -18.704   0.558  -5.528  1.00 13.15
ATOM   1210 2HD2 ASN A  80     -19.185   0.552  -4.675  1.00 31.21
ATOM   1211 1HD2 ASN A  80     -19.085   0.857  -6.377  1.00 33.31
ATOM   1212  C   ASN A  80     -14.939  -1.557  -3.205  1.00 14.52
ATOM   1213  O   ASN A  80     -14.777  -0.637  -2.417  1.00 51.53
ATOM   1214  N   ALA A  81     -14.351  -2.709  -3.102  1.00 21.43
ATOM   1215  H   ALA A  81     -14.542  -3.372  -3.796  1.00 40.11
ATOM   1216  CA  ALA A  81     -13.417  -3.033  -2.070  1.00 23.35
ATOM   1217  HA  ALA A  81     -13.477  -2.291  -1.288  1.00  1.44
ATOM   1218  CB  ALA A  81     -13.724  -4.406  -1.503  1.00 63.21
ATOM   1219 1HB  ALA A  81     -14.701  -4.397  -1.046  1.00 13.20
ATOM   1220 2HB  ALA A  81     -12.978  -4.666  -0.767  1.00 22.41
ATOM   1221 3HB  ALA A  81     -13.712  -5.127  -2.311  1.00 14.43
ATOM   1222  C   ALA A  81     -12.047  -3.015  -2.703  1.00 43.45
ATOM   1223  O   ALA A  81     -11.942  -3.074  -3.929  1.00 42.50
ATOM   1224  N   THR A  82     -11.015  -2.923  -1.933  1.00 42.23
ATOM   1225  H   THR A  82     -11.098  -2.914  -0.954  1.00 12.54
ATOM   1226  CA  THR A  82      -9.713  -2.861  -2.516  1.00 43.04
ATOM   1227  HA  THR A  82      -9.827  -2.962  -3.586  1.00 32.52
ATOM   1228  CB  THR A  82      -9.059  -1.501  -2.218  1.00 14.14
ATOM   1229  HB  THR A  82      -8.683  -1.483  -1.206  1.00 43.32
ATOM   1230  OG1 THR A  82     -10.039  -0.468  -2.409  1.00 72.30
ATOM   1231  HG1 THR A  82     -10.824  -0.641  -1.874  1.00 34.20
ATOM   1232  CG2 THR A  82      -7.919  -1.242  -3.189  1.00 44.44
ATOM   1233 1HG2 THR A  82      -8.303  -1.250  -4.198  1.00 14.35
ATOM   1234 2HG2 THR A  82      -7.176  -2.018  -3.083  1.00 43.13
ATOM   1235 3HG2 THR A  82      -7.471  -0.282  -2.979  1.00 13.11
ATOM   1236  C   THR A  82      -8.840  -4.014  -2.001  1.00 11.15
ATOM   1237  O   THR A  82      -8.868  -4.351  -0.813  1.00 42.03
ATOM   1238  N   ARG A  83      -8.107  -4.625  -2.889  1.00 23.41
ATOM   1239  H   ARG A  83      -8.157  -4.338  -3.830  1.00 41.51
ATOM   1240  CA  ARG A  83      -7.216  -5.710  -2.550  1.00  1.50
ATOM   1241  HA  ARG A  83      -7.466  -6.085  -1.568  1.00 42.34
ATOM   1242  CB  ARG A  83      -7.374  -6.831  -3.598  1.00  3.33
ATOM   1243 1HB  ARG A  83      -8.404  -7.154  -3.592  1.00  2.13
ATOM   1244 2HB  ARG A  83      -7.157  -6.412  -4.569  1.00 70.01
ATOM   1245  CG  ARG A  83      -6.501  -8.075  -3.404  1.00 43.21
ATOM   1246 1HG  ARG A  83      -6.620  -8.723  -4.259  1.00 74.24
ATOM   1247 2HG  ARG A  83      -5.468  -7.761  -3.343  1.00 33.34
ATOM   1248  CD  ARG A  83      -6.851  -8.869  -2.146  1.00 61.25
ATOM   1249 1HD  ARG A  83      -6.604  -8.279  -1.277  1.00 41.01
ATOM   1250 2HD  ARG A  83      -7.909  -9.088  -2.148  1.00 74.52
ATOM   1251  NE  ARG A  83      -6.098 -10.145  -2.101  1.00 14.13
ATOM   1252  HE  ARG A  83      -5.727 -10.417  -2.967  1.00 10.20
ATOM   1253  CZ  ARG A  83      -5.891 -10.901  -1.005  1.00  3.51
ATOM   1254  NH1 ARG A  83      -6.433 -10.569   0.148  1.00 52.10
ATOM   1255 1HH1 ARG A  83      -7.036  -9.770   0.267  1.00 43.52
ATOM   1256 2HH1 ARG A  83      -6.233 -11.095   0.982  1.00 25.42
ATOM   1257  NH2 ARG A  83      -5.163 -12.022  -1.095  1.00 13.33
ATOM   1258 1HH2 ARG A  83      -4.756 -12.339  -1.950  1.00 25.31
ATOM   1259 2HH2 ARG A  83      -4.967 -12.621  -0.308  1.00 50.21
ATOM   1260  C   ARG A  83      -5.798  -5.158  -2.561  1.00 24.23
ATOM   1261  O   ARG A  83      -5.357  -4.596  -3.577  1.00 75.14
ATOM   1262  N   ILE A  84      -5.104  -5.285  -1.444  1.00 12.13
ATOM   1263  H   ILE A  84      -5.467  -5.782  -0.677  1.00 33.04
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ATOM   1264  CA  ILE A  84      -3.764  -4.753  -1.309  1.00 23.24
ATOM   1265  HA  ILE A  84      -3.533  -4.220  -2.220  1.00 70.53
ATOM   1266  CB  ILE A  84      -3.683  -3.714  -0.092  1.00  1.12
ATOM   1267  HB  ILE A  84      -4.508  -3.955   0.561  1.00  0.42
ATOM   1268  CG2 ILE A  84      -2.417  -3.812   0.756  1.00  5.42
ATOM   1269 1HG2 ILE A  84      -2.328  -4.802   1.176  1.00 72.14
ATOM   1270 2HG2 ILE A  84      -2.479  -3.090   1.564  1.00 41.12
ATOM   1271 3HG2 ILE A  84      -1.553  -3.591   0.146  1.00 12.54
ATOM   1272  CG1 ILE A  84      -3.880  -2.276  -0.564  1.00 62.41
ATOM   1273 1HG1 ILE A  84      -3.688  -1.598   0.253  1.00 55.30
ATOM   1274 2HG1 ILE A  84      -3.150  -2.116  -1.344  1.00 51.32
ATOM   1275  CD1 ILE A  84      -5.238  -1.970  -1.117  1.00 12.05
ATOM   1276 1HD1 ILE A  84      -5.275  -0.936  -1.426  1.00 44.13
ATOM   1277 2HD1 ILE A  84      -5.989  -2.154  -0.362  1.00 41.55
ATOM   1278 3HD1 ILE A  84      -5.417  -2.604  -1.973  1.00 21.13
ATOM   1279  C   ILE A  84      -2.755  -5.880  -1.142  1.00 12.22
ATOM   1280  O   ILE A  84      -2.946  -6.794  -0.345  1.00 44.05
ATOM   1281  N   SER A  85      -1.727  -5.815  -1.921  1.00  3.50
ATOM   1282  H   SER A  85      -1.703  -5.092  -2.590  1.00 70.30
ATOM   1283  CA  SER A  85      -0.624  -6.723  -1.839  1.00 70.42
ATOM   1284  HA  SER A  85      -0.725  -7.303  -0.934  1.00 25.02
ATOM   1285  CB  SER A  85      -0.604  -7.655  -3.059  1.00 33.22
ATOM   1286 1HB  SER A  85      -1.560  -8.146  -3.150  1.00 71.22
ATOM   1287 2HB  SER A  85      -0.418  -7.065  -3.942  1.00 64.22
ATOM   1288  OG  SER A  85       0.406  -8.649  -2.957  1.00 22.03
ATOM   1289  HG  SER A  85       1.236  -8.287  -3.279  1.00 53.23
ATOM   1290  C   SER A  85       0.632  -5.893  -1.761  1.00 34.11
ATOM   1291  O   SER A  85       0.927  -5.140  -2.680  1.00  4.33
ATOM   1292  N   ILE A  86       1.341  -5.985  -0.702  1.00  3.25
ATOM   1293  H   ILE A  86       1.087  -6.604   0.022  1.00 33.00
ATOM   1294  CA  ILE A  86       2.525  -5.193  -0.553  1.00  0.34
ATOM   1295  HA  ILE A  86       2.595  -4.497  -1.375  1.00 74.11
ATOM   1296  CB  ILE A  86       2.501  -4.402   0.769  1.00 72.51
ATOM   1297  HB  ILE A  86       2.609  -5.112   1.575  1.00 51.42
ATOM   1298  CG2 ILE A  86       3.663  -3.427   0.791  1.00  1.54
ATOM   1299 1HG2 ILE A  86       4.589  -3.983   0.756  1.00 63.41
ATOM   1300 2HG2 ILE A  86       3.632  -2.856   1.710  1.00 71.33
ATOM   1301 3HG2 ILE A  86       3.609  -2.765  -0.060  1.00 34.32
ATOM   1302  CG1 ILE A  86       1.179  -3.648   0.932  1.00 31.22
ATOM   1303 1HG1 ILE A  86       1.106  -2.904   0.156  1.00 73.25
ATOM   1304 2HG1 ILE A  86       0.365  -4.350   0.830  1.00 71.43
ATOM   1305  CD1 ILE A  86       1.027  -2.941   2.264  1.00 71.04
ATOM   1306 1HD1 ILE A  86       1.070  -3.665   3.065  1.00  1.05
ATOM   1307 2HD1 ILE A  86       0.080  -2.424   2.294  1.00 73.33
ATOM   1308 3HD1 ILE A  86       1.832  -2.230   2.382  1.00 63.35
ATOM   1309  C   ILE A  86       3.723  -6.102  -0.535  1.00 63.32
ATOM   1310  O   ILE A  86       3.715  -7.110   0.162  1.00 15.24
ATOM   1311  N   LYS A  87       4.737  -5.772  -1.280  1.00 43.40
ATOM   1312  H   LYS A  87       4.686  -4.959  -1.834  1.00 53.00
ATOM   1313  CA  LYS A  87       5.927  -6.565  -1.255  1.00 14.30
ATOM   1314  HA  LYS A  87       5.730  -7.383  -0.578  1.00 42.13
ATOM   1315  CB  LYS A  87       6.286  -7.137  -2.668  1.00 44.40
ATOM   1316 1HB  LYS A  87       6.992  -7.943  -2.543  1.00 64.13
ATOM   1317 2HB  LYS A  87       5.382  -7.546  -3.096  1.00 22.43
ATOM   1318  CG  LYS A  87       6.891  -6.181  -3.685  1.00 10.01
ATOM   1319 1HG  LYS A  87       6.660  -6.492  -4.694  1.00  3.15
ATOM   1320 2HG  LYS A  87       6.437  -5.229  -3.463  1.00 41.44
ATOM   1321  CD  LYS A  87       8.401  -6.041  -3.507  1.00 14.24
ATOM   1322 1HD  LYS A  87       8.603  -5.679  -2.510  1.00 31.11
ATOM   1323 2HD  LYS A  87       8.856  -7.013  -3.631  1.00 54.22
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ATOM   1324  CE  LYS A  87       9.006  -5.079  -4.503  1.00 23.54
ATOM   1325 1HE  LYS A  87       8.921  -5.493  -5.497  1.00 51.30
ATOM   1326 2HE  LYS A  87       8.472  -4.144  -4.449  1.00 11.51
ATOM   1327  NZ  LYS A  87      10.426  -4.836  -4.195  1.00 62.32
ATOM   1328 1HZ  LYS A  87      10.878  -4.196  -4.881  1.00 15.33
ATOM   1329 2HZ  LYS A  87      10.969  -5.718  -4.137  1.00 64.43
ATOM   1330 3HZ  LYS A  87      10.460  -4.355  -3.268  1.00 64.23
ATOM   1331  C   LYS A  87       7.034  -5.736  -0.651  1.00 14.53
ATOM   1332  O   LYS A  87       7.217  -4.555  -1.010  1.00 73.10
ATOM   1333  N   TYR A  88       7.713  -6.308   0.285  1.00  5.30
ATOM   1334  H   TYR A  88       7.532  -7.236   0.541  1.00  2.45
ATOM   1335  CA  TYR A  88       8.776  -5.646   0.960  1.00  0.15
ATOM   1336  HA  TYR A  88       8.941  -4.700   0.470  1.00 35.14
ATOM   1337  CB  TYR A  88       8.406  -5.390   2.406  1.00 31.11
ATOM   1338 1HB  TYR A  88       7.419  -4.957   2.406  1.00 74.25
ATOM   1339 2HB  TYR A  88       8.404  -6.327   2.947  1.00 14.03
ATOM   1340  CG  TYR A  88       9.318  -4.409   3.096  1.00 52.14
ATOM   1341  CD1 TYR A  88       9.080  -3.047   3.002  1.00 72.21
ATOM   1342  HD1 TYR A  88       8.215  -2.702   2.455  1.00 13.14
ATOM   1343  CE1 TYR A  88       9.927  -2.143   3.583  1.00 13.44
ATOM   1344  HE1 TYR A  88       9.730  -1.083   3.504  1.00 42.32
ATOM   1345  CZ  TYR A  88      11.018  -2.597   4.274  1.00 70.12
ATOM   1346  CE2 TYR A  88      11.267  -3.936   4.381  1.00 25.32
ATOM   1347  HE2 TYR A  88      12.135  -4.284   4.919  1.00 71.01
ATOM   1348  CD2 TYR A  88      10.426  -4.829   3.795  1.00 32.25
ATOM   1349  HD2 TYR A  88      10.622  -5.888   3.880  1.00  2.20
ATOM   1350  OH  TYR A  88      11.890  -1.712   4.823  1.00 40.41
ATOM   1351  HH  TYR A  88      12.685  -1.835   4.266  1.00  1.35
ATOM   1352  C   TYR A  88      10.012  -6.496   0.861  1.00  1.31
ATOM   1353  O   TYR A  88       9.900  -7.690   0.571  1.00 44.12
ATOM   1354  N   GLY A  89      11.176  -5.889   1.017  1.00 71.42
ATOM   1355  H   GLY A  89      11.237  -4.920   1.175  1.00 51.43
ATOM   1356  CA  GLY A  89      12.394  -6.636   1.015  1.00  4.43
ATOM   1357 1HA  GLY A  89      12.384  -7.316   0.176  1.00  0.14
ATOM   1358 2HA  GLY A  89      13.222  -5.951   0.898  1.00 71.13
ATOM   1359  C   GLY A  89      12.604  -7.440   2.308  1.00 22.42
ATOM   1360  O   GLY A  89      11.644  -7.848   2.983  1.00 54.23
ATOM   1361  N   SER A  90      13.851  -7.577   2.677  1.00  2.52
ATOM   1362  H   SER A  90      14.550  -7.083   2.198  1.00 62.13
ATOM   1363  CA  SER A  90      14.324  -8.439   3.756  1.00  4.01
ATOM   1364  HA  SER A  90      14.172  -9.462   3.448  1.00  0.52
ATOM   1365  CB  SER A  90      15.823  -8.242   3.860  1.00 62.31
ATOM   1366 1HB  SER A  90      16.031  -7.274   4.294  1.00 15.40
ATOM   1367 2HB  SER A  90      16.254  -9.019   4.473  1.00 51.44
ATOM   1368  OG  SER A  90      16.401  -8.309   2.558  1.00  5.01
ATOM   1369  HG  SER A  90      16.318  -9.209   2.235  1.00 61.34
ATOM   1370  C   SER A  90      13.659  -8.236   5.147  1.00 41.31
ATOM   1371  O   SER A  90      13.618  -9.172   5.937  1.00 51.21
ATOM   1372  N   GLN A  91      13.122  -7.054   5.435  1.00 23.53
ATOM   1373  H   GLN A  91      13.066  -6.370   4.738  1.00 12.14
ATOM   1374  CA  GLN A  91      12.610  -6.808   6.794  1.00 64.04
ATOM   1375  HA  GLN A  91      13.195  -7.423   7.462  1.00 74.03
ATOM   1376  CB  GLN A  91      12.778  -5.335   7.210  1.00 41.54
ATOM   1377 1HB  GLN A  91      12.020  -4.729   6.739  1.00 10.13
ATOM   1378 2HB  GLN A  91      12.610  -5.283   8.277  1.00 43.23
ATOM   1379  CG  GLN A  91      14.163  -4.742   6.934  1.00 70.22
ATOM   1380 1HG  GLN A  91      14.336  -4.748   5.868  1.00 11.23
ATOM   1381 2HG  GLN A  91      14.181  -3.722   7.291  1.00 64.34
ATOM   1382  CD  GLN A  91      15.289  -5.511   7.599  1.00  2.14
ATOM   1383  OE1 GLN A  91      15.849  -6.433   7.027  1.00 10.25
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ATOM   1384  NE2 GLN A  91      15.643  -5.126   8.793  1.00 31.05
ATOM   1385 2HE2 GLN A  91      15.177  -4.361   9.202  1.00 21.33
ATOM   1386 1HE2 GLN A  91      16.357  -5.636   9.226  1.00 52.24
ATOM   1387  C   GLN A  91      11.142  -7.226   6.935  1.00 43.51
ATOM   1388  O   GLN A  91      10.621  -7.310   8.048  1.00  0.30
ATOM   1389  N   GLY A  92      10.485  -7.491   5.815  1.00 71.30
ATOM   1390  H   GLY A  92      10.973  -7.468   4.963  1.00 33.00
ATOM   1391  CA  GLY A  92       9.080  -7.849   5.849  1.00 43.25
ATOM   1392 1HA  GLY A  92       8.832  -8.335   4.918  1.00 30.14
ATOM   1393 2HA  GLY A  92       8.908  -8.533   6.666  1.00 72.23
ATOM   1394  C   GLY A  92       8.172  -6.633   6.018  1.00 10.01
ATOM   1395  O   GLY A  92       8.395  -5.778   6.886  1.00 31.53
ATOM   1396  N   ASN A  93       7.147  -6.536   5.197  1.00 73.55
ATOM   1397  H   ASN A  93       7.013  -7.197   4.477  1.00 34.12
ATOM   1398  CA  ASN A  93       6.253  -5.386   5.259  1.00 64.52
ATOM   1399  HA  ASN A  93       6.886  -4.515   5.343  1.00  5.04
ATOM   1400  CB  ASN A  93       5.419  -5.229   3.996  1.00 72.10
ATOM   1401 1HB  ASN A  93       5.889  -5.708   3.153  1.00 54.32
ATOM   1402 2HB  ASN A  93       4.468  -5.713   4.166  1.00 72.11
ATOM   1403  CG  ASN A  93       5.140  -3.758   3.704  1.00 71.04
ATOM   1404  OD1 ASN A  93       5.934  -3.094   3.080  1.00 42.12
ATOM   1405  ND2 ASN A  93       4.026  -3.246   4.133  1.00 51.31
ATOM   1406 2HD2 ASN A  93       3.392  -3.809   4.638  1.00 13.43
ATOM   1407 1HD2 ASN A  93       3.852  -2.308   3.914  1.00  5.23
ATOM   1408  C   ASN A  93       5.334  -5.402   6.465  1.00 23.51
ATOM   1409  O   ASN A  93       4.687  -4.427   6.716  1.00 22.23
ATOM   1410  N   SER A  94       5.293  -6.502   7.207  1.00 74.34
ATOM   1411  H   SER A  94       5.878  -7.257   6.988  1.00 21.14
ATOM   1412  CA  SER A  94       4.389  -6.668   8.363  1.00 70.33
ATOM   1413  HA  SER A  94       3.390  -6.837   7.985  1.00 45.20
ATOM   1414  CB  SER A  94       4.820  -7.900   9.137  1.00 32.33
ATOM   1415 1HB  SER A  94       5.770  -7.712   9.616  1.00 65.14
ATOM   1416 2HB  SER A  94       4.077  -8.140   9.883  1.00 63.23
ATOM   1417  OG  SER A  94       4.959  -8.998   8.259  1.00 52.13
ATOM   1418  HG  SER A  94       4.391  -9.707   8.579  1.00 44.35
ATOM   1419  C   SER A  94       4.373  -5.434   9.298  1.00 24.15
ATOM   1420  O   SER A  94       3.306  -4.939   9.671  1.00 14.11
ATOM   1421  N   ILE A  95       5.557  -4.919   9.609  1.00 12.43
ATOM   1422  H   ILE A  95       6.362  -5.334   9.233  1.00 52.44
ATOM   1423  CA  ILE A  95       5.693  -3.759  10.488  1.00 63.24
ATOM   1424  HA  ILE A  95       5.100  -3.952  11.369  1.00 34.03
ATOM   1425  CB  ILE A  95       7.198  -3.508  10.924  1.00  2.02
ATOM   1426  HB  ILE A  95       7.782  -3.443  10.018  1.00 44.04
ATOM   1427  CG2 ILE A  95       7.357  -2.177  11.658  1.00 10.52
ATOM   1428 1HG2 ILE A  95       7.051  -1.370  11.008  1.00 31.14
ATOM   1429 2HG2 ILE A  95       8.390  -2.041  11.940  1.00  1.53
ATOM   1430 3HG2 ILE A  95       6.739  -2.179  12.543  1.00 32.14
ATOM   1431  CG1 ILE A  95       7.770  -4.656  11.804  1.00 43.14
ATOM   1432 1HG1 ILE A  95       8.717  -4.341  12.217  1.00 11.13
ATOM   1433 2HG1 ILE A  95       7.082  -4.838  12.617  1.00  3.32
ATOM   1434  CD1 ILE A  95       8.013  -5.976  11.093  1.00 60.40
ATOM   1435 1HD1 ILE A  95       8.714  -5.830  10.285  1.00 13.52
ATOM   1436 2HD1 ILE A  95       7.077  -6.339  10.698  1.00 14.14
ATOM   1437 3HD1 ILE A  95       8.411  -6.695  11.794  1.00  4.54
ATOM   1438  C   ILE A  95       5.135  -2.508   9.792  1.00  3.24
ATOM   1439  O   ILE A  95       4.429  -1.702  10.396  1.00 72.24
ATOM   1440  N   ARG A  96       5.414  -2.396   8.504  1.00 44.44
ATOM   1441  H   ARG A  96       5.877  -3.137   8.058  1.00 52.42
ATOM   1442  CA  ARG A  96       5.004  -1.244   7.713  1.00 71.35
ATOM   1443  HA  ARG A  96       5.310  -0.338   8.214  1.00 55.13
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ATOM   1444  CB  ARG A  96       5.632  -1.290   6.323  1.00 72.32
ATOM   1445 1HB  ARG A  96       5.121  -2.044   5.743  1.00 34.42
ATOM   1446 2HB  ARG A  96       5.476  -0.332   5.847  1.00 65.42
ATOM   1447  CG  ARG A  96       7.110  -1.605   6.286  1.00  3.34
ATOM   1448 1HG  ARG A  96       7.263  -2.571   6.741  1.00 64.34
ATOM   1449 2HG  ARG A  96       7.434  -1.647   5.258  1.00 13.31
ATOM   1450  CD  ARG A  96       7.943  -0.593   7.034  1.00 70.12
ATOM   1451 1HD  ARG A  96       7.747   0.392   6.638  1.00 34.34
ATOM   1452 2HD  ARG A  96       7.687  -0.626   8.082  1.00 14.34
ATOM   1453  NE  ARG A  96       9.354  -0.903   6.885  1.00 71.15
ATOM   1454  HE  ARG A  96       9.568  -1.505   6.138  1.00 64.22
ATOM   1455  CZ  ARG A  96      10.349  -0.394   7.602  1.00 43.43
ATOM   1456 NH1  ARG A  96      10.114   0.409   8.637  1.00 21.21
ATOM   1457 1HH1 ARG A  96       9.191   0.663   8.922  1.00 41.14
ATOM   1458 2HH1 ARG A  96      10.886   0.796   9.146  1.00 61.05
ATOM   1459 NH2  ARG A  96      11.581  -0.681   7.273  1.00  1.14
ATOM   1460 1HH2 ARG A  96      11.803  -1.280   6.491  1.00 70.32
ATOM   1461 2HH2 ARG A  96      12.373  -0.251   7.729  1.00  3.40
ATOM   1462  C   ARG A  96       3.497  -1.257   7.545  1.00 63.11
ATOM   1463  O   ARG A  96       2.844  -0.252   7.741  1.00 45.43
ATOM   1464  N   SER A  97       2.967  -2.430   7.205  1.00 23.04
ATOM   1465  H   SER A  97       3.557  -3.211   7.095  1.00 25.14
ATOM   1466  CA  SER A  97       1.560  -2.631   6.947  1.00 13.50
ATOM   1467  HA  SER A  97       1.294  -2.036   6.087  1.00 42.42
ATOM   1468  CB  SER A  97       1.297  -4.084   6.597  1.00 64.32
ATOM   1469 1HB  SER A  97       1.593  -4.710   7.424  1.00 21.42
ATOM   1470 2HB  SER A  97       0.245  -4.223   6.398  1.00 31.32
ATOM   1471  OG  SER A  97       2.032  -4.466   5.449  1.00 13.41
ATOM   1472  HG  SER A  97       1.490  -5.082   4.947  1.00 51.23
ATOM   1473  C   SER A  97       0.698  -2.234   8.116  1.00  5.22
ATOM   1474  O   SER A  97      -0.350  -1.660   7.914  1.00 15.40
ATOM   1475  N   SER A  98       1.155  -2.517   9.329  1.00 64.35
ATOM   1476  H   SER A  98       2.020  -2.967   9.434  1.00  4.11
ATOM   1477  CA  SER A  98       0.400  -2.184  10.512  1.00  5.41
ATOM   1478  HA  SER A  98      -0.538  -2.716  10.465  1.00 72.22
ATOM   1479  CB  SER A  98       1.176  -2.637  11.769  1.00 63.11
ATOM   1480 1HB  SER A  98       1.378  -3.696  11.692  1.00 31.34
ATOM   1481 2HB  SER A  98       2.117  -2.106  11.826  1.00 35.23
ATOM   1482  OG  SER A  98       0.443  -2.412  12.962  1.00 33.30
ATOM   1483  HG  SER A  98      -0.494  -2.341  12.753  1.00 64.13
ATOM   1484  C   SER A  98       0.106  -0.669  10.538  1.00 23.41
ATOM   1485  O   SER A  98      -1.049  -0.254  10.670  1.00 74.23
ATOM   1486  N   ALA A  99       1.140   0.133  10.375  1.00 21.44
ATOM   1487  H   ALA A  99       2.034  -0.253  10.271  1.00 74.44
ATOM   1488  CA  ALA A  99       0.976   1.571  10.340  1.00  1.00
ATOM   1489  HA  ALA A  99       0.305   1.833  11.143  1.00 40.12
ATOM   1490  CB  ALA A  99       2.304   2.277  10.564  1.00 73.03
ATOM   1491 1HB  ALA A  99       2.745   1.932  11.488  1.00 33.42
ATOM   1492 2HB  ALA A  99       2.143   3.343  10.615  1.00  1.25
ATOM   1493 3HB  ALA A  99       2.969   2.050   9.744  1.00 14.44
ATOM   1494  C   ALA A  99       0.308   2.044   9.050  1.00 72.23
ATOM   1495  O   ALA A  99      -0.644   2.815   9.093  1.00 51.22
ATOM   1496  N   LEU A 100       0.786   1.530   7.915  1.00 50.13
ATOM   1497  H   LEU A 100       1.495   0.850   7.955  1.00 33.31
ATOM   1498  CA  LEU A 100       0.334   1.948   6.593  1.00 72.23
ATOM   1499  HA  LEU A 100       0.580   2.991   6.461  1.00 74.31
ATOM   1500  CB  LEU A 100       1.060   1.140   5.526  1.00 55.03
ATOM   1501 1HB  LEU A 100       2.103   1.093   5.791  1.00 12.34
ATOM   1502 2HB  LEU A 100       0.671   0.132   5.577  1.00 71.05
ATOM   1503  CG  LEU A 100       0.918   1.624   4.084  1.00 14.23
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ATOM   1504  HG  LEU A 100      -0.131   1.677   3.831  1.00 11.32
ATOM   1505  CD1 LEU A 100       1.514   3.013   3.927  1.00 32.22
ATOM   1506 1HD1 LEU A 100       2.553   2.983   4.220  1.00  0.03
ATOM   1507 2HD1 LEU A 100       0.981   3.707   4.559  1.00 31.52
ATOM   1508 3HD1 LEU A 100       1.437   3.327   2.897  1.00 62.31
ATOM   1509  CD2 LEU A 100       1.586   0.650   3.137  1.00 70.30
ATOM   1510 1HD2 LEU A 100       1.115  -0.316   3.233  1.00 33.42
ATOM   1511 2HD2 LEU A 100       2.631   0.566   3.400  1.00 22.11
ATOM   1512 3HD2 LEU A 100       1.491   1.003   2.123  1.00 51.34
ATOM   1513  C   LEU A 100      -1.154   1.750   6.443  1.00 11.42
ATOM   1514  O   LEU A 100      -1.870   2.678   6.092  1.00 42.24
ATOM   1515  N   ILE A 101      -1.613   0.554   6.781  1.00 23.53
ATOM   1516  H   ILE A 101      -0.969  -0.113   7.113  1.00 34.41
ATOM   1517  CA  ILE A 101      -3.025   0.212   6.699  1.00 43.11
ATOM   1518  HA  ILE A 101      -3.316   0.350   5.665  1.00 21.23
ATOM   1519  CB  ILE A 101      -3.285  -1.285   7.094  1.00 14.02
ATOM   1520  HB  ILE A 101      -2.735  -1.461   8.008  1.00 34.11
ATOM   1521  CG2 ILE A 101      -4.754  -1.560   7.411  1.00 62.32
ATOM   1522 1HG2 ILE A 101      -5.041  -0.932   8.243  1.00 44.21
ATOM   1523 2HG2 ILE A 101      -4.877  -2.598   7.678  1.00 21.14
ATOM   1524 3HG2 ILE A 101      -5.362  -1.324   6.551  1.00 62.13
ATOM   1525  CG1 ILE A 101      -2.750  -2.262   6.015  1.00 61.44
ATOM   1526 1HG1 ILE A 101      -1.691  -2.093   5.885  1.00 54.31
ATOM   1527 2HG1 ILE A 101      -2.899  -3.275   6.357  1.00 22.44
ATOM   1528  CD1 ILE A 101      -3.402  -2.129   4.646  1.00 52.54
ATOM   1529 1HD1 ILE A 101      -3.217  -1.146   4.238  1.00  1.11
ATOM   1530 2HD1 ILE A 101      -4.466  -2.283   4.741  1.00 33.35
ATOM   1531 3HD1 ILE A 101      -2.997  -2.878   3.980  1.00 13.15
ATOM   1532  C   ILE A 101      -3.835   1.145   7.601  1.00 24.41
ATOM   1533  O   ILE A 101      -4.864   1.665   7.179  1.00 11.12
ATOM   1534  N   GLY A 102      -3.298   1.414   8.804  1.00 35.23
ATOM   1535  H   GLY A 102      -2.429   1.027   9.048  1.00 23.01
ATOM   1536  CA  GLY A 102      -3.966   2.275   9.771  1.00 70.13
ATOM   1537 1HA  GLY A 102      -4.917   1.844  10.022  1.00 71.32
ATOM   1538 2HA  GLY A 102      -3.360   2.343  10.662  1.00 33.12
ATOM   1539  C   GLY A 102      -4.212   3.667   9.241  1.00 22.41
ATOM   1540  O   GLY A 102      -5.296   4.245   9.426  1.00 50.41
ATOM   1541  N   ILE A 103      -3.223   4.191   8.566  1.00 61.14
ATOM   1542  H   ILE A 103      -2.398   3.663   8.472  1.00 33.50
ATOM   1543  CA  ILE A 103      -3.305   5.504   7.972  1.00 73.40
ATOM   1544  HA  ILE A 103      -3.607   6.209   8.734  1.00 70.23
ATOM   1545  CB  ILE A 103      -1.931   5.933   7.405  1.00 24.20
ATOM   1546  HB  ILE A 103      -1.651   5.250   6.617  1.00 63.14
ATOM   1547  CG2 ILE A 103      -2.010   7.349   6.827  1.00 53.10
ATOM   1548 1HG2 ILE A 103      -2.743   7.367   6.033  1.00 44.14
ATOM   1549 2HG2 ILE A 103      -1.045   7.632   6.434  1.00 12.23
ATOM   1550 3HG2 ILE A 103      -2.302   8.040   7.603  1.00 64.33
ATOM   1551  CG1 ILE A 103      -0.875   5.877   8.510  1.00 52.03
ATOM   1552 1HG1 ILE A 103      -1.008   6.721   9.170  1.00 34.01
ATOM   1553 2HG1 ILE A 103      -1.003   4.965   9.073  1.00 35.41
ATOM   1554  CD1 ILE A 103       0.542   5.914   8.001  1.00 31.11
ATOM   1555 1HD1 ILE A 103       0.680   5.050   7.368  1.00 70.24
ATOM   1556 2HD1 ILE A 103       1.218   5.852   8.840  1.00 63.42
ATOM   1557 3HD1 ILE A 103       0.722   6.815   7.434  1.00 23.01
ATOM   1558  C   ILE A 103      -4.337   5.493   6.845  1.00  1.55
ATOM   1559  O   ILE A 103      -5.163   6.400   6.743  1.00 45.34
ATOM   1560  N   ILE A 104      -4.306   4.439   6.039  1.00 22.22
ATOM   1561  H   ILE A 104      -3.657   3.725   6.226  1.00 60.24
ATOM   1562  CA  ILE A 104      -5.199   4.317   4.899  1.00 72.50
ATOM   1563  HA  ILE A 104      -5.068   5.183   4.268  1.00 35.42
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ATOM   1564  CB  ILE A 104      -4.859   3.047   4.062  1.00 13.32
ATOM   1565  HB  ILE A 104      -4.961   2.186   4.706  1.00 45.50
ATOM   1566  CG2 ILE A 104      -5.831   2.886   2.899  1.00 30.52
ATOM   1567 1HG2 ILE A 104      -5.582   1.984   2.360  1.00 44.15
ATOM   1568 2HG2 ILE A 104      -5.746   3.736   2.236  1.00 31.31
ATOM   1569 3HG2 ILE A 104      -6.842   2.815   3.274  1.00 43.13
ATOM   1570  CG1 ILE A 104      -3.424   3.109   3.542  1.00 24.44
ATOM   1571 1HG1 ILE A 104      -3.359   3.891   2.801  1.00 41.22
ATOM   1572 2HG1 ILE A 104      -2.758   3.339   4.362  1.00 75.05
ATOM   1573  CD1 ILE A 104      -2.947   1.819   2.896  1.00 52.31
ATOM   1574 1HD1 ILE A 104      -1.932   1.944   2.553  1.00 65.32
ATOM   1575 2HD1 ILE A 104      -3.583   1.584   2.055  1.00 15.01
ATOM   1576 3HD1 ILE A 104      -2.990   1.016   3.615  1.00 31.21
ATOM   1577  C   ILE A 104      -6.659   4.221   5.351  1.00 74.11
ATOM   1578  O   ILE A 104      -7.499   5.005   4.908  1.00 10.02
ATOM   1579  N   GLU A 105      -6.941   3.317   6.277  1.00 61.35
ATOM   1580  H   GLU A 105      -6.217   2.765   6.653  1.00 21.05
ATOM   1581  CA  GLU A 105      -8.301   3.124   6.742  1.00 62.03
ATOM   1582  HA  GLU A 105      -8.905   3.041   5.849  1.00 65.12
ATOM   1583  CB  GLU A 105      -8.471   1.837   7.556  1.00 51.12
ATOM   1584 1HB  GLU A 105      -9.482   1.801   7.933  1.00 22.11
ATOM   1585 2HB  GLU A 105      -8.316   0.993   6.901  1.00 11.33
ATOM   1586  CG  GLU A 105      -7.535   1.697   8.742  1.00 74.31
ATOM   1587 1HG  GLU A 105      -6.543   1.455   8.396  1.00 62.14
ATOM   1588 2HG  GLU A 105      -7.528   2.650   9.252  1.00 72.22
ATOM   1589  CD  GLU A 105      -7.994   0.642   9.712  1.00 73.31
ATOM   1590  OE1 GLU A 105      -7.686   0.775  10.913  1.00 63.20
ATOM   1591  OE2 GLU A 105      -8.812  -0.213   9.330  1.00 22.21
ATOM   1592  C   GLU A 105      -8.823   4.333   7.506  1.00 32.44
ATOM   1593  O   GLU A 105      -9.938   4.800   7.263  1.00 20.33
ATOM   1594  N   GLY A 106      -7.999   4.857   8.397  1.00 63.24
ATOM   1595  H   GLY A 106      -7.100   4.469   8.500  1.00 34.03
ATOM   1596  CA  GLY A 106      -8.386   5.971   9.225  1.00 62.11
ATOM   1597 1HA  GLY A 106      -9.311   5.695   9.712  1.00 25.11
ATOM   1598 2HA  GLY A 106      -7.654   6.147   9.991  1.00  3.15
ATOM   1599  C   GLY A 106      -8.638   7.237   8.445  1.00 32.11
ATOM   1600  O   GLY A 106      -9.528   8.007   8.800  1.00 33.21
ATOM   1601  N   ASN A 107      -7.877   7.442   7.373  1.00  1.42
ATOM   1602  H   ASN A 107      -7.175   6.791   7.149  1.00 43.00
ATOM   1603  CA  ASN A 107      -8.037   8.631   6.517  1.00 45.35
ATOM   1604  HA  ASN A 107      -7.929   9.524   7.117  1.00 40.14
ATOM   1605  CB  ASN A 107      -6.953   8.609   5.402  1.00 30.31
ATOM   1606 1HB  ASN A 107      -5.981   8.550   5.869  1.00 42.32
ATOM   1607 2HB  ASN A 107      -7.099   7.715   4.813  1.00 40.54
ATOM   1608  CG  ASN A 107      -6.934   9.822   4.449  1.00  4.55
ATOM   1609  OD1 ASN A 107      -7.931  10.469   4.198  1.00 74.23
ATOM   1610  ND2 ASN A 107      -5.771  10.103   3.892  1.00 20.14
ATOM   1611 2HD2 ASN A 107      -4.999   9.544   4.115  1.00 20.33
ATOM   1612 1HD2 ASN A 107      -5.730  10.852   3.257  1.00  5.31
ATOM   1613  C   ASN A 107      -9.423   8.578   5.893  1.00 13.24
ATOM   1614  O   ASN A 107     -10.176   9.550   5.937  1.00 34.13
ATOM   1615  N   ILE A 108      -9.788   7.398   5.431  1.00 14.34
ATOM   1616  H   ILE A 108      -9.152   6.655   5.503  1.00 12.32
ATOM   1617  CA  ILE A 108     -11.083   7.163   4.823  1.00 13.11
ATOM   1618  HA  ILE A 108     -11.219   7.884   4.030  1.00 61.23
ATOM   1619  CB  ILE A 108     -11.146   5.738   4.221  1.00 25.24
ATOM   1620  HB  ILE A 108     -10.977   5.026   5.018  1.00 40.13
ATOM   1621  CG2 ILE A 108     -12.518   5.457   3.606  1.00 74.34
ATOM   1622 1HG2 ILE A 108     -12.712   6.170   2.817  1.00 32.22
ATOM   1623 2HG2 ILE A 108     -13.279   5.548   4.366  1.00 75.42
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ATOM   1624 3HG2 ILE A 108     -12.535   4.456   3.199  1.00  2.22
ATOM   1625  CG1 ILE A 108     -10.028   5.579   3.180  1.00 13.51
ATOM   1626 1HG1 ILE A 108     -10.192   6.277   2.373  1.00 25.24
ATOM   1627 2HG1 ILE A 108      -9.086   5.815   3.651  1.00 13.54
ATOM   1628  CD1 ILE A 108      -9.917   4.196   2.591  1.00 63.33
ATOM   1629 1HD1 ILE A 108     -10.834   3.947   2.081  1.00 53.32
ATOM   1630 2HD1 ILE A 108      -9.739   3.484   3.383  1.00 30.14
ATOM   1631 3HD1 ILE A 108      -9.094   4.171   1.893  1.00 62.22
ATOM   1632  C   ILE A 108     -12.193   7.343   5.862  1.00 53.31
ATOM   1633  O   ILE A 108     -13.226   7.969   5.590  1.00 14.25
ATOM   1634  N   ARG A 109     -11.958   6.823   7.058  1.00 42.22
ATOM   1635  H   ARG A 109     -11.113   6.339   7.193  1.00 70.32
ATOM   1636  CA  ARG A 109     -12.917   6.936   8.138  1.00 55.11
ATOM   1637  HA  ARG A 109     -13.858   6.610   7.718  1.00 62.21
ATOM   1638  CB  ARG A 109     -12.585   6.034   9.329  1.00 41.22
ATOM   1639 1HB  ARG A 109     -11.633   6.335   9.740  1.00 13.11
ATOM   1640 2HB  ARG A 109     -13.355   6.160  10.074  1.00 33.44
ATOM   1641  CG  ARG A 109     -12.525   4.577   8.932  1.00 12.32
ATOM   1642 1HG  ARG A 109     -13.200   4.369   8.124  1.00 43.41
ATOM   1643 2HG  ARG A 109     -11.530   4.418   8.542  1.00  4.11
ATOM   1644  CD  ARG A 109     -12.718   3.620  10.098  1.00 32.15
ATOM   1645 1HD  ARG A 109     -13.530   3.983  10.711  1.00 43.10
ATOM   1646 2HD  ARG A 109     -12.977   2.646   9.710  1.00 54.14
ATOM   1647  NE  ARG A 109     -11.530   3.498  10.931  1.00 13.12
ATOM   1648  HE  ARG A 109     -11.388   4.220  11.579  1.00 52.24
ATOM   1649  CZ  ARG A 109     -10.674   2.462  10.847  1.00 62.54
ATOM   1650  NH1 ARG A 109     -10.876   1.490   9.934  1.00 14.31
ATOM   1651 1HH1 ARG A 109     -11.638   1.458   9.280  1.00 54.34
ATOM   1652 2HH1 ARG A 109     -10.216   0.723   9.836  1.00  4.44
ATOM   1653  NH2 ARG A 109      -9.621   2.399  11.656  1.00 21.50
ATOM   1654 1HH2 ARG A 109      -9.389   3.062  12.364  1.00 53.30
ATOM   1655 2HH2 ARG A 109      -8.949   1.639  11.544  1.00  4.15
ATOM   1656  C   ARG A 109     -13.121   8.372   8.566  1.00 63.33
ATOM   1657  O   ARG A 109     -14.202   8.747   8.974  1.00 53.10
ATOM   1658  N   TYR A 110     -12.085   9.161   8.521  1.00 75.23
ATOM   1659  H   TYR A 110     -11.199   8.800   8.293  1.00 70.44
ATOM   1660  CA  TYR A 110     -12.243  10.557   8.821  1.00 63.25
ATOM   1661  HA  TYR A 110     -12.868  10.622   9.698  1.00 54.00
ATOM   1662  CB  TYR A 110     -10.891  11.232   9.113  1.00 21.03
ATOM   1663 1HB  TYR A 110     -10.403  10.715   9.926  1.00 11.54
ATOM   1664 2HB  TYR A 110     -10.270  11.179   8.232  1.00 31.42
ATOM   1665  CG  TYR A 110     -11.041  12.683   9.498  1.00 73.24
ATOM   1666  CD1 TYR A 110     -11.341  13.041  10.804  1.00 24.42
ATOM   1667  HD1 TYR A 110     -11.433  12.267  11.552  1.00 45.45
ATOM   1668  CE1 TYR A 110     -11.528  14.358  11.153  1.00 50.33
ATOM   1669  HE1 TYR A 110     -11.760  14.620  12.175  1.00 74.11
ATOM   1670  CZ  TYR A 110     -11.404  15.338  10.196  1.00 11.32
ATOM   1671  CE2 TYR A 110     -11.100  15.010   8.894  1.00 61.33
ATOM   1672  HE2 TYR A 110     -11.004  15.782   8.146  1.00 60.24
ATOM   1673  CD2 TYR A 110     -10.927  13.692   8.549  1.00 44.13
ATOM   1674  HD2 TYR A 110     -10.689  13.430   7.529  1.00 73.43
ATOM   1675  OH  TYR A 110     -11.631  16.641  10.527  1.00 60.44
ATOM   1676  HH  TYR A 110     -12.391  16.864   9.959  1.00 24.44
ATOM   1677  C   TYR A 110     -12.978  11.269   7.672  1.00 21.05
ATOM   1678  O   TYR A 110     -14.012  11.903   7.888  1.00 31.44
ATOM   1679  N   ALA A 111     -12.485  11.063   6.455  1.00 15.52
ATOM   1680  H   ALA A 111     -11.737  10.435   6.343  1.00 24.31
ATOM   1681  CA  ALA A 111     -12.977  11.755   5.253  1.00 34.33
ATOM   1682  HA  ALA A 111     -12.864  12.814   5.430  1.00 22.13
ATOM   1683  CB  ALA A 111     -12.113  11.403   4.051  1.00 62.23
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ATOM   1684 1HB  ALA A 111     -12.240  10.358   3.813  1.00 70.43
ATOM   1685 2HB  ALA A 111     -11.075  11.595   4.283  1.00 54.11
ATOM   1686 3HB  ALA A 111     -12.411  12.004   3.203  1.00  2.30
ATOM   1687  C   ALA A 111     -14.449  11.485   4.943  1.00 73.42
ATOM   1688  O   ALA A 111     -15.091  12.273   4.266  1.00 23.34
ATOM   1689  N   ASN A 112     -14.979  10.358   5.398  1.00 53.22
ATOM   1690  H   ASN A 112     -14.399   9.719   5.864  1.00 12.23
ATOM   1691  CA  ASN A 112     -16.393  10.070   5.143  1.00 33.22
ATOM   1692  HA  ASN A 112     -16.575  10.470   4.156  1.00 74.21
ATOM   1693  CB  ASN A 112     -16.733   8.543   5.131  1.00 52.01
ATOM   1694 1HB  ASN A 112     -17.590   8.383   4.494  1.00 34.11
ATOM   1695 2HB  ASN A 112     -15.886   8.033   4.694  1.00 31.31
ATOM   1696  CG  ASN A 112     -17.046   7.874   6.485  1.00 63.12
ATOM   1697  OD1 ASN A 112     -17.823   6.933   6.541  1.00 23.11
ATOM   1698  ND2 ASN A 112     -16.445   8.301   7.550  1.00 44.11
ATOM   1699 2HD2 ASN A 112     -15.798   9.034   7.511  1.00 52.24
ATOM   1700 1HD2 ASN A 112     -16.671   7.856   8.391  1.00 73.04
ATOM   1701  C   ASN A 112     -17.316  10.860   6.081  1.00 72.00
ATOM   1702  O   ASN A 112     -18.529  10.870   5.903  1.00 31.50
ATOM   1703  N   THR A 113     -16.737  11.502   7.093  1.00 73.43
ATOM   1704  H   THR A 113     -15.760  11.498   7.177  1.00 21.02
ATOM   1705  CA  THR A 113     -17.531  12.271   8.023  1.00 21.03
ATOM   1706  HA  THR A 113     -18.554  12.033   7.771  1.00 24.12
ATOM   1707  CB  THR A 113     -17.298  11.858   9.505  1.00 71.23
ATOM   1708  HB  THR A 113     -17.747  12.613  10.135  1.00 43.21
ATOM   1709  OG1 THR A 113     -15.890  11.782   9.815  1.00 75.12
ATOM   1710  HG1 THR A 113     -15.345  11.864   9.022  1.00  3.02
ATOM   1711  CG2 THR A 113     -17.958  10.518   9.806  1.00 41.51
ATOM   1712 1HG2 THR A 113     -19.022  10.593   9.633  1.00 23.45
ATOM   1713 2HG2 THR A 113     -17.778  10.251  10.836  1.00 50.14
ATOM   1714 3HG2 THR A 113     -17.542   9.762   9.158  1.00 63.35
ATOM   1715  C   THR A 113     -17.391  13.791   7.819  1.00 43.23
ATOM   1716  O   THR A 113     -18.221  14.402   7.132  1.00 34.31
ATOM   1717  N   HIS A 114     -16.354  14.392   8.388  1.00 12.41
ATOM   1718  H   HIS A 114     -15.667  13.897   8.878  1.00 65.21
ATOM   1719  CA  HIS A 114     -16.141  15.829   8.277  1.00  1.44
ATOM   1720  HA  HIS A 114     -16.669  16.180   7.401  1.00 22.24
ATOM   1721  CB  HIS A 114     -16.662  16.594   9.529  1.00 21.42
ATOM   1722 1HB  HIS A 114     -16.123  16.243  10.397  1.00 63.23
ATOM   1723 2HB  HIS A 114     -16.455  17.646   9.401  1.00 72.24
ATOM   1724  CG  HIS A 114     -18.129  16.438   9.827  1.00 72.43
ATOM   1725  ND1 HIS A 114     -19.125  16.589   8.890  1.00  2.03
ATOM   1726  CD2 HIS A 114     -18.758  16.124  10.987  1.00 52.44
ATOM   1727  HD1 HIS A 114     -18.970  16.748   7.936  1.00 43.45
ATOM   1728  CE1 HIS A 114     -20.297  16.379   9.489  1.00 42.04
ATOM   1729  NE2 HIS A 114     -20.135  16.090  10.765  1.00 43.23
ATOM   1730  HD2 HIS A 114     -18.281  15.932  11.935  1.00 23.13
ATOM   1731  HE1 HIS A 114     -21.254  16.434   8.991  1.00 41.34
ATOM   1732  C   HIS A 114     -14.659  16.101   8.109  1.00 73.23
ATOM   1733  O   HIS A 114     -13.996  16.422   9.115  1.00 72.32
TER    1734       HIS A 114
ENDMDL
MODEL       18
ATOM      1  N   MET A   1      -8.986  -8.845   8.466  1.00 20.05
ATOM      2  CA  MET A   1      -9.317  -9.803   9.559  1.00  2.10
ATOM      3  HA  MET A   1      -8.399 -10.078  10.059  1.00 20.43
ATOM      4  CB  MET A   1     -10.294  -9.155  10.556  1.00 54.31
ATOM      5 1HB  MET A   1      -9.869  -8.224  10.903  1.00 32.52
ATOM      6 2HB  MET A   1     -11.218  -8.941  10.039  1.00 74.40
ATOM      7  CG  MET A   1     -10.621 -10.006  11.785  1.00 15.42
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ATOM      8 1HG  MET A   1     -11.072 -10.931  11.460  1.00 30.51
ATOM      9 2HG  MET A   1      -9.705 -10.219  12.313  1.00  3.10
ATOM     10  SD  MET A   1     -11.757  -9.172  12.906  1.00 52.20
ATOM     11  CE  MET A   1     -11.916 -10.395  14.212  1.00 52.24
ATOM     12 1HE  MET A   1     -10.948 -10.574  14.656  1.00 63.42
ATOM     13 2HE  MET A   1     -12.298 -11.318  13.799  1.00  3.34
ATOM     14 3HE  MET A   1     -12.598 -10.030  14.966  1.00 44.40
ATOM     15  C   MET A   1      -9.928 -11.050   8.943  1.00 33.31
ATOM     16  O   MET A   1     -10.046 -12.093   9.565  1.00 41.34
ATOM     17  N   ASP A   2     -10.270 -10.908   7.700  1.00 51.43
ATOM     18  H   ASP A   2     -10.120 -10.075   7.192  1.00 32.43
ATOM     19  CA  ASP A   2     -10.854 -11.915   6.865  1.00  2.44
ATOM     20  HA  ASP A   2     -11.616 -12.457   7.404  1.00 25.40
ATOM     21  CB  ASP A   2     -11.505 -11.192   5.681  1.00  5.22
ATOM     22 1HB  ASP A   2     -11.810 -11.921   4.947  1.00 73.33
ATOM     23 2HB  ASP A   2     -12.366 -10.638   6.023  1.00 14.34
ATOM     24  CG  ASP A   2     -10.526 -10.220   5.028  1.00 55.24
ATOM     25  OD1 ASP A   2     -10.097 -10.480   3.901  1.00 45.54
ATOM     26  OD2 ASP A   2     -10.122  -9.217   5.709  1.00  4.13
ATOM     27  C   ASP A   2      -9.762 -12.847   6.364  1.00 61.34
ATOM     28  O   ASP A   2      -8.591 -12.747   6.777  1.00 44.35
ATOM     29  N   LYS A   3     -10.095 -13.736   5.459  1.00 50.35
ATOM     30  H   LYS A   3     -11.012 -13.756   5.110  1.00 25.20
ATOM     31  CA  LYS A   3      -9.098 -14.649   4.983  1.00 52.05
ATOM     32  HA  LYS A   3      -8.441 -14.811   5.825  1.00 11.34
ATOM     33  CB  LYS A   3      -9.679 -15.998   4.545  1.00 11.30
ATOM     34 1HB  LYS A   3     -10.399 -16.319   5.283  1.00 15.30
ATOM     35 2HB  LYS A   3     -10.187 -15.862   3.603  1.00 63.13
ATOM     36  CG  LYS A   3      -8.633 -17.132   4.370  1.00 73.42
ATOM     37 1HG  LYS A   3      -9.127 -18.002   3.963  1.00 43.14
ATOM     38 2HG  LYS A   3      -7.880 -16.795   3.673  1.00 35.34
ATOM     39  CD  LYS A   3      -7.941 -17.536   5.703  1.00  2.32
ATOM     40 1HD  LYS A   3      -8.502 -17.115   6.523  1.00 11.11
ATOM     41 2HD  LYS A   3      -7.962 -18.614   5.784  1.00 43.44
ATOM     42  CE  LYS A   3      -6.465 -17.054   5.835  1.00 63.31
ATOM     43 1HE  LYS A   3      -6.045 -17.479   6.734  1.00 25.42
ATOM     44 2HE  LYS A   3      -5.908 -17.426   4.986  1.00 15.22
ATOM     45  NZ  LYS A   3      -6.308 -15.573   5.907  1.00  1.15
ATOM     46 1HZ  LYS A   3      -6.859 -15.158   6.688  1.00 65.30
ATOM     47 2HZ  LYS A   3      -6.594 -15.119   5.015  1.00 54.24
ATOM     48 3HZ  LYS A   3      -5.315 -15.292   6.051  1.00 33.32
ATOM     49  C   LYS A   3      -8.243 -14.003   3.889  1.00 60.12
ATOM     50  O   LYS A   3      -7.221 -14.574   3.475  1.00 41.42
ATOM     51  N   GLY A   4      -8.617 -12.804   3.482  1.00 52.31
ATOM     52  H   GLY A   4      -9.434 -12.357   3.802  1.00 53.34
ATOM     53  CA  GLY A   4      -7.826 -12.053   2.546  1.00 62.52
ATOM     54 1HA  GLY A   4      -7.512 -12.701   1.741  1.00 24.34
ATOM     55 2HA  GLY A   4      -8.412 -11.238   2.148  1.00 10.15
ATOM     56  C   GLY A   4      -6.617 -11.487   3.246  1.00 61.03
ATOM     57  O   GLY A   4      -5.638 -11.137   2.615  1.00 20.20
ATOM     58  N   THR A   5      -6.693 -11.426   4.575  1.00 40.15
ATOM     59  H   THR A   5      -7.539 -11.650   5.014  1.00  5.53
ATOM     60  CA  THR A   5      -5.586 -11.008   5.379  1.00 12.44
ATOM     61  HA  THR A   5      -5.098 -10.168   4.908  1.00  4.12
ATOM     62  CB  THR A   5      -6.056 -10.603   6.796  1.00 43.30
ATOM     63  HB  THR A   5      -6.395 -11.488   7.314  1.00 73.25
ATOM     64  OG1 THR A   5      -7.141  -9.662   6.704  1.00 44.44
ATOM     65  HG1 THR A   5      -6.880  -8.978   6.065  1.00 65.22
ATOM     66  CG2 THR A   5      -4.915  -9.969   7.587  1.00 51.31
ATOM     67 1HG2 THR A   5      -5.265  -9.701   8.573  1.00 62.15
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ATOM     68 2HG2 THR A   5      -4.572  -9.081   7.077  1.00  4.33
ATOM     69 3HG2 THR A   5      -4.099 -10.671   7.672  1.00 72.42
ATOM     70  C   THR A   5      -4.614 -12.180   5.497  1.00  3.52
ATOM     71  O   THR A   5      -4.908 -13.202   6.163  1.00 61.11
ATOM     72  N   GLN A   6      -3.518 -12.077   4.805  1.00  4.14
ATOM     73  H   GLN A   6      -3.371 -11.266   4.264  1.00 35.14
ATOM     74  CA  GLN A   6      -2.497 -13.086   4.815  1.00 23.42
ATOM     75  HA  GLN A   6      -2.614 -13.692   5.701  1.00 50.30
ATOM     76  CB  GLN A   6      -2.594 -13.990   3.573  1.00 62.21
ATOM     77 1HB  GLN A   6      -2.449 -13.382   2.693  1.00 74.25
ATOM     78 2HB  GLN A   6      -1.801 -14.723   3.618  1.00 22.24
ATOM     79  CG  GLN A   6      -3.916 -14.721   3.430  1.00 22.32
ATOM     80 1HG  GLN A   6      -4.064 -15.319   4.316  1.00 50.22
ATOM     81 2HG  GLN A   6      -4.706 -13.990   3.351  1.00 51.22
ATOM     82  CD  GLN A   6      -3.973 -15.639   2.233  1.00 72.02
ATOM     83  OE1 GLN A   6      -2.982 -16.196   1.816  1.00  3.12
ATOM     84  NE2 GLN A   6      -5.146 -15.794   1.673  1.00 23.24
ATOM     85 2HE2 GLN A   6      -5.916 -15.315   2.048  1.00 51.52
ATOM     86 1HE2 GLN A   6      -5.182 -16.387   0.894  1.00  1.32
ATOM     87  C   GLN A   6      -1.153 -12.418   4.829  1.00 74.35
ATOM     88  O   GLN A   6      -0.949 -11.400   4.164  1.00 34.24
ATOM     89  N   TYR A   7      -0.272 -12.942   5.612  1.00 60.32
ATOM     90  H   TYR A   7      -0.505 -13.695   6.191  1.00 55.10
ATOM     91  CA  TYR A   7       1.072 -12.483   5.639  1.00 12.22
ATOM     92  HA  TYR A   7       1.161 -11.768   4.835  1.00  1.42
ATOM     93  CB  TYR A   7       1.427 -11.784   6.985  1.00 74.14
ATOM     94 1HB  TYR A   7       2.466 -11.492   6.965  1.00 70.41
ATOM     95 2HB  TYR A   7       0.822 -10.892   7.070  1.00 71.33
ATOM     96  CG  TYR A   7       1.216 -12.606   8.254  1.00 25.12
ATOM     97  CD1 TYR A   7      -0.045 -12.730   8.830  1.00 43.31
ATOM     98  HD1 TYR A   7      -0.886 -12.247   8.355  1.00  2.23
ATOM     99  CE1 TYR A   7      -0.232 -13.458   9.988  1.00 70.11
ATOM    100  HE1 TYR A   7      -1.220 -13.542  10.419  1.00 60.22
ATOM    101  CZ  TYR A   7       0.843 -14.078  10.587  1.00  1.33
ATOM    102  CE2 TYR A   7       2.103 -13.969  10.039  1.00 63.23
ATOM    103  HE2 TYR A   7       2.946 -14.456  10.509  1.00 44.54
ATOM    104  CD2 TYR A   7       2.285 -13.236   8.883  1.00 33.53
ATOM    105  HD2 TYR A   7       3.273 -13.150   8.451  1.00 33.53
ATOM    106  OH  TYR A   7       0.661 -14.802  11.741  1.00 31.52
ATOM    107  HH  TYR A   7      -0.101 -15.379  11.644  1.00  0.24
ATOM    108  C   TYR A   7       1.988 -13.641   5.309  1.00 62.33
ATOM    109  O   TYR A   7       2.083 -14.605   6.061  1.00 12.20
ATOM    110  N   LYS A   8       2.619 -13.588   4.177  1.00  2.21
ATOM    111  H   LYS A   8       2.498 -12.796   3.604  1.00 24.31
ATOM    112  CA  LYS A   8       3.514 -14.647   3.816  1.00 52.41
ATOM    113  HA  LYS A   8       3.475 -15.448   4.538  1.00 61.31
ATOM    114  CB  LYS A   8       3.148 -15.224   2.429  1.00 11.44
ATOM    115 1HB  LYS A   8       2.169 -15.676   2.490  1.00 53.52
ATOM    116 2HB  LYS A   8       3.119 -14.415   1.716  1.00 54.55
ATOM    117  CG  LYS A   8       4.169 -16.276   1.934  1.00 74.32
ATOM    118 1HG  LYS A   8       5.117 -16.079   2.406  1.00 70.34
ATOM    119 2HG  LYS A   8       3.824 -17.252   2.245  1.00  2.32
ATOM    120  CD  LYS A   8       4.368 -16.280   0.400  1.00 74.32
ATOM    121 1HD  LYS A   8       5.004 -17.113   0.140  1.00 74.35
ATOM    122 2HD  LYS A   8       3.403 -16.418  -0.066  1.00 34.24
ATOM    123  CE  LYS A   8       5.022 -14.973  -0.168  1.00 41.51
ATOM    124 1HE  LYS A   8       5.129 -15.085  -1.237  1.00 24.11
ATOM    125 2HE  LYS A   8       4.357 -14.144   0.023  1.00 55.34
ATOM    126  NZ  LYS A   8       6.384 -14.648   0.400  1.00 72.32
ATOM    127 1HZ  LYS A   8       7.050 -15.452   0.440  1.00 41.51
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ATOM    128 2HZ  LYS A   8       6.346 -14.234   1.352  1.00 72.01
ATOM    129 3HZ  LYS A   8       6.879 -13.927  -0.170  1.00 35.10
ATOM    130  C   LYS A   8       4.878 -14.098   3.667  1.00 74.03
ATOM    131  O   LYS A   8       5.105 -13.323   2.728  1.00 44.12
ATOM    132  N   ASP A   9       5.805 -14.539   4.516  1.00 33.31
ATOM    133  H   ASP A   9       5.527 -15.052   5.304  1.00 73.12
ATOM    134  CA  ASP A   9       7.232 -14.269   4.306  1.00 12.41
ATOM    135  HA  ASP A   9       7.728 -14.491   5.239  1.00  5.34
ATOM    136  CB  ASP A   9       7.709 -15.285   3.230  1.00 73.24
ATOM    137 1HB  ASP A   9       7.786 -16.258   3.692  1.00 63.15
ATOM    138 2HB  ASP A   9       6.948 -15.349   2.467  1.00  0.41
ATOM    139  CG  ASP A   9       9.022 -15.030   2.562  1.00 22.22
ATOM    140  OD1 ASP A   9       8.988 -14.848   1.309  1.00 73.31
ATOM    141  OD2 ASP A   9      10.039 -15.036   3.227  1.00  3.24
ATOM    142  C   ASP A   9       7.488 -12.756   3.987  1.00 11.23
ATOM    143  O   ASP A   9       8.066 -12.388   2.997  1.00 12.14
ATOM    144  N   GLY A  10       6.877 -11.899   4.790  1.00 51.42
ATOM    145  H   GLY A  10       6.307 -12.245   5.506  1.00 65.35
ATOM    146  CA  GLY A  10       7.055 -10.469   4.622  1.00 74.21
ATOM    147 1HA  GLY A  10       7.049 -10.005   5.596  1.00 24.10
ATOM    148 2HA  GLY A  10       8.017 -10.299   4.163  1.00 23.22
ATOM    149  C   GLY A  10       5.975  -9.802   3.758  1.00 24.22
ATOM    150  O   GLY A  10       5.716  -8.598   3.901  1.00 55.42
ATOM    151  N   TYR A  11       5.350 -10.569   2.884  1.00 74.33
ATOM    152  H   TYR A  11       5.560 -11.530   2.872  1.00 53.50
ATOM    153  CA  TYR A  11       4.338 -10.049   1.959  1.00 40.12
ATOM    154  HA  TYR A  11       4.645  -9.075   1.607  1.00 63.43
ATOM    155  CB  TYR A  11       4.180 -11.010   0.764  1.00 44.14
ATOM    156 1HB  TYR A  11       5.145 -11.425   0.519  1.00 72.43
ATOM    157 2HB  TYR A  11       3.527 -11.817   1.065  1.00 63.33
ATOM    158  CG  TYR A  11       3.600 -10.389  -0.496  1.00 52.31
ATOM    159  CD1 TYR A  11       2.233 -10.275  -0.688  1.00  1.43
ATOM    160  HD1 TYR A  11       1.565 -10.633   0.082  1.00  1.21
ATOM    161  CE1 TYR A  11       1.719  -9.707  -1.843  1.00 10.21
ATOM    162  HE1 TYR A  11       0.650  -9.626  -1.976  1.00 43.41
ATOM    163  CZ  TYR A  11       2.577  -9.248  -2.820  1.00 30.22
ATOM    164  CE2 TYR A  11       3.936  -9.354  -2.653  1.00 45.20
ATOM    165  HE2 TYR A  11       4.609  -8.995  -3.418  1.00 23.43
ATOM    166  CD2 TYR A  11       4.441  -9.920  -1.501  1.00 53.42
ATOM    167  HD2 TYR A  11       5.510 -10.001  -1.374  1.00 35.21
ATOM    168  OH  TYR A  11       2.076  -8.684  -3.968  1.00 74.35
ATOM    169  HH  TYR A  11       1.418  -8.024  -3.739  1.00 71.43
ATOM    170  C   TYR A  11       3.029  -9.945   2.705  1.00 72.43
ATOM    171  O   TYR A  11       2.617 -10.905   3.359  1.00 64.54
ATOM    172  N   TYR A  12       2.379  -8.817   2.613  1.00 31.34
ATOM    173  H   TYR A  12       2.696  -8.121   2.000  1.00 52.42
ATOM    174  CA  TYR A  12       1.165  -8.609   3.361  1.00 44.13
ATOM    175  HA  TYR A  12       0.957  -9.522   3.899  1.00 53.42
ATOM    176  CB  TYR A  12       1.348  -7.474   4.381  1.00  1.53
ATOM    177 1HB  TYR A  12       2.209  -7.685   4.997  1.00 20.12
ATOM    178 2HB  TYR A  12       1.516  -6.549   3.850  1.00 71.34
ATOM    179  CG  TYR A  12       0.160  -7.279   5.297  1.00 53.15
ATOM    180  CD1 TYR A  12      -0.728  -6.235   5.105  1.00 14.24
ATOM    181  HD1 TYR A  12      -0.560  -5.543   4.294  1.00 74.34
ATOM    182  CE1 TYR A  12      -1.815  -6.067   5.933  1.00 24.23
ATOM    183  HE1 TYR A  12      -2.498  -5.248   5.764  1.00  3.34
ATOM    184  CZ  TYR A  12      -2.031  -6.946   6.971  1.00 12.22
ATOM    185  CE2 TYR A  12      -1.165  -7.993   7.183  1.00  4.22
ATOM    186  HE2 TYR A  12      -1.330  -8.684   7.996  1.00 24.30
ATOM    187  CD2 TYR A  12      -0.076  -8.154   6.348  1.00 51.01
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ATOM    188  HD2 TYR A  12       0.611  -8.970   6.507  1.00 63.34
ATOM    189  OH  TYR A  12      -3.125  -6.776   7.793  1.00 72.42
ATOM    190  HH  TYR A  12      -3.888  -6.540   7.260  1.00 32.43
ATOM    191  C   TYR A  12      -0.004  -8.327   2.431  1.00 72.42
ATOM    192  O   TYR A  12       0.076  -7.454   1.558  1.00 34.31
ATOM    193  N   ILE A  13      -1.060  -9.073   2.608  1.00 13.32
ATOM    194  H   ILE A  13      -1.044  -9.784   3.291  1.00 61.43
ATOM    195  CA  ILE A  13      -2.278  -8.930   1.843  1.00 41.51
ATOM    196  HA  ILE A  13      -2.209  -8.045   1.226  1.00 54.12
ATOM    197  CB  ILE A  13      -2.531 -10.180   0.936  1.00 31.24
ATOM    198  HB  ILE A  13      -2.678 -11.035   1.579  1.00 45.11
ATOM    199  CG2 ILE A  13      -3.796  -9.994   0.097  1.00 50.02
ATOM    200 1HG2 ILE A  13      -3.950 -10.868  -0.520  1.00  2.50
ATOM    201 2HG2 ILE A  13      -3.684  -9.125  -0.534  1.00 55.53
ATOM    202 3HG2 ILE A  13      -4.646  -9.858   0.749  1.00 31.32
ATOM    203  CG1 ILE A  13      -1.332 -10.442   0.021  1.00 33.43
ATOM    204 1HG1 ILE A  13      -1.217  -9.605  -0.651  1.00 23.04
ATOM    205 2HG1 ILE A  13      -0.447 -10.532   0.633  1.00 53.52
ATOM    206  CD1 ILE A  13      -1.454 -11.700  -0.822  1.00 21.11
ATOM    207 1HD1 ILE A  13      -2.329 -11.630  -1.450  1.00 32.42
ATOM    208 2HD1 ILE A  13      -1.543 -12.561  -0.174  1.00  4.12
ATOM    209 3HD1 ILE A  13      -0.574 -11.806  -1.439  1.00  1.13
ATOM    210  C   ILE A  13      -3.437  -8.802   2.825  1.00 75.13
ATOM    211  O   ILE A  13      -3.431  -9.463   3.858  1.00 34.33
ATOM    212  N   THR A  14      -4.359  -7.902   2.562  1.00 43.30
ATOM    213  H   THR A  14      -4.244  -7.280   1.809  1.00  2.34
ATOM    214  CA  THR A  14      -5.567  -7.810   3.346  1.00 61.21
ATOM    215  HA  THR A  14      -5.919  -8.823   3.477  1.00 34.33
ATOM    216  CB  THR A  14      -5.352  -7.153   4.759  1.00 64.03
ATOM    217  HB  THR A  14      -4.547  -7.678   5.254  1.00 50.43
ATOM    218  OG1 THR A  14      -6.547  -7.279   5.562  1.00 63.15
ATOM    219  HG1 THR A  14      -7.178  -6.606   5.276  1.00 40.21
ATOM    220  CG2 THR A  14      -4.998  -5.680   4.652  1.00 10.33
ATOM    221 1HG2 THR A  14      -4.865  -5.265   5.642  1.00 62.42
ATOM    222 2HG2 THR A  14      -5.791  -5.154   4.145  1.00 33.34
ATOM    223 3HG2 THR A  14      -4.081  -5.568   4.093  1.00 43.13
ATOM    224  C   THR A  14      -6.630  -7.071   2.547  1.00  3.35
ATOM    225  O   THR A  14      -6.308  -6.318   1.611  1.00 74.10
ATOM    226  N   THR A  15      -7.853  -7.308   2.879  1.00 35.15
ATOM    227  H   THR A  15      -8.054  -7.948   3.592  1.00 40.34
ATOM    228  CA  THR A  15      -8.963  -6.697   2.222  1.00 45.32
ATOM    229  HA  THR A  15      -8.667  -6.370   1.237  1.00 20.04
ATOM    230  CB  THR A  15     -10.098  -7.729   2.082  1.00 32.45
ATOM    231  HB  THR A  15     -10.622  -7.805   3.024  1.00 24.43
ATOM    232  OG1 THR A  15      -9.532  -9.008   1.729  1.00 54.53
ATOM    233  HG1 THR A  15      -9.757  -9.596   2.472  1.00 74.13
ATOM    234  CG2 THR A  15     -11.077  -7.302   0.992  1.00 15.04
ATOM    235 1HG2 THR A  15     -11.509  -6.345   1.249  1.00 72.42
ATOM    236 2HG2 THR A  15     -11.860  -8.040   0.899  1.00 55.01
ATOM    237 3HG2 THR A  15     -10.551  -7.217   0.053  1.00  1.10
ATOM    238  C   THR A  15      -9.468  -5.515   3.063  1.00 11.31
ATOM    239  O   THR A  15      -9.591  -5.623   4.290  1.00 73.01
ATOM    240  N   LEU A  16      -9.681  -4.380   2.429  1.00 11.05
ATOM    241  H   LEU A  16      -9.433  -4.277   1.480  1.00 21.23
ATOM    242  CA  LEU A  16     -10.289  -3.243   3.081  1.00  2.14
ATOM    243  HA  LEU A  16     -10.420  -3.511   4.120  1.00  1.11
ATOM    244  CB  LEU A  16      -9.457  -1.952   3.002  1.00 51.04
ATOM    245 1HB  LEU A  16      -9.131  -1.841   1.977  1.00 11.41
ATOM    246 2HB  LEU A  16     -10.116  -1.127   3.231  1.00 44.41
ATOM    247  CG  LEU A  16      -8.219  -1.850   3.893  1.00 10.01
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ATOM    248  HG  LEU A  16      -8.491  -2.175   4.888  1.00 43.41
ATOM    249  CD1 LEU A  16      -7.104  -2.753   3.416  1.00 61.53
ATOM    250 1HD1 LEU A  16      -7.472  -3.769   3.413  1.00 44.24
ATOM    251 2HD1 LEU A  16      -6.258  -2.671   4.082  1.00 23.13
ATOM    252 3HD1 LEU A  16      -6.816  -2.471   2.414  1.00 11.12
ATOM    253  CD2 LEU A  16      -7.767  -0.408   3.988  1.00 25.04
ATOM    254 1HD2 LEU A  16      -6.896  -0.338   4.623  1.00  1.32
ATOM    255 2HD2 LEU A  16      -8.576   0.171   4.412  1.00 25.50
ATOM    256 3HD2 LEU A  16      -7.537  -0.037   3.000  1.00  2.34
ATOM    257  C   LEU A  16     -11.641  -2.980   2.493  1.00 33.13
ATOM    258  O   LEU A  16     -11.830  -3.026   1.270  1.00 12.45
ATOM    259  N   ASN A  17     -12.571  -2.700   3.338  1.00 21.12
ATOM    260  H   ASN A  17     -12.358  -2.665   4.293  1.00 74.44
ATOM    261  CA  ASN A  17     -13.913  -2.416   2.914  1.00 13.22
ATOM    262  HA  ASN A  17     -14.057  -2.882   1.950  1.00 34.23
ATOM    263  CB  ASN A  17     -14.913  -3.006   3.917  1.00 73.21
ATOM    264 1HB  ASN A  17     -14.699  -4.061   4.012  1.00 22.13
ATOM    265 2HB  ASN A  17     -14.716  -2.526   4.864  1.00 65.41
ATOM    266  CG  ASN A  17     -16.388  -2.809   3.536  1.00 40.54
ATOM    267  OD1 ASN A  17     -17.023  -1.851   3.934  1.00 22.33
ATOM    268  ND2 ASN A  17     -16.936  -3.727   2.776  1.00 50.11
ATOM    269 2HD2 ASN A  17     -16.404  -4.492   2.482  1.00 63.44
ATOM    270 1HD2 ASN A  17     -17.876  -3.579   2.543  1.00 22.11
ATOM    271  C   ASN A  17     -14.081  -0.916   2.756  1.00 33.25
ATOM    272  O   ASN A  17     -14.634  -0.250   3.615  1.00 33.20
ATOM    273  N   TYR A  18     -13.449  -0.393   1.716  1.00 14.13
ATOM    274  H   TYR A  18     -12.930  -0.986   1.132  1.00 75.24
ATOM    275  CA  TYR A  18     -13.494   1.014   1.352  1.00 11.41
ATOM    276  HA  TYR A  18     -14.498   1.357   1.562  1.00  4.23
ATOM    277  CB  TYR A  18     -12.478   1.885   2.142  1.00 44.25
ATOM    278 1HB  TYR A  18     -11.511   1.404   2.121  1.00 22.42
ATOM    279 2HB  TYR A  18     -12.402   2.849   1.659  1.00 20.43
ATOM    280  CG  TYR A  18     -12.855   2.111   3.597  1.00 55.01
ATOM    281  CD1 TYR A  18     -12.115   1.560   4.640  1.00 14.20
ATOM    282  HD1 TYR A  18     -11.232   0.982   4.413  1.00 24.24
ATOM    283  CE1 TYR A  18     -12.500   1.745   5.960  1.00 53.42
ATOM    284  HE1 TYR A  18     -11.917   1.314   6.760  1.00 70.34
ATOM    285  CZ  TYR A  18     -13.631   2.492   6.247  1.00 53.24
ATOM    286  CE2 TYR A  18     -14.373   3.045   5.230  1.00 21.14
ATOM    287  HE2 TYR A  18     -15.256   3.626   5.454  1.00 44.12
ATOM    288  CD2 TYR A  18     -13.990   2.852   3.920  1.00 34.52
ATOM    289  HD2 TYR A  18     -14.574   3.287   3.122  1.00  4.31
ATOM    290  OH  TYR A  18     -14.035   2.674   7.563  1.00 32.43
ATOM    291  HH  TYR A  18     -14.989   2.544   7.572  1.00 52.31
ATOM    292  C   TYR A  18     -13.268   1.148  -0.133  1.00 63.42
ATOM    293  O   TYR A  18     -12.635   0.271  -0.749  1.00 52.14
ATOM    294  N   ASN A  19     -13.756   2.239  -0.688  1.00  4.10
ATOM    295  H   ASN A  19     -14.158   2.928  -0.120  1.00  4.41
ATOM    296  CA  ASN A  19     -13.748   2.494  -2.121  1.00 53.22
ATOM    297  HA  ASN A  19     -14.200   1.653  -2.624  1.00 21.11
ATOM    298  CB  ASN A  19     -14.572   3.749  -2.433  1.00 35.44
ATOM    299 1HB  ASN A  19     -14.049   4.616  -2.059  1.00 34.13
ATOM    300 2HB  ASN A  19     -14.666   3.836  -3.504  1.00 33.23
ATOM    301  CG  ASN A  19     -15.961   3.741  -1.826  1.00 35.04
ATOM    302  OD1 ASN A  19     -16.139   4.165  -0.694  1.00 72.25
ATOM    303  ND2 ASN A  19     -16.952   3.298  -2.561  1.00 74.52
ATOM    304 2HD2 ASN A  19     -16.806   2.976  -3.478  1.00  3.23
ATOM    305 1HD2 ASN A  19     -17.835   3.305  -2.140  1.00  3.21
ATOM    306  C   ASN A  19     -12.331   2.695  -2.633  1.00 55.43
ATOM    307  O   ASN A  19     -11.544   3.422  -2.030  1.00 63.44
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ATOM    308  N   PHE A  20     -12.029   2.071  -3.754  1.00  1.55
ATOM    309  H   PHE A  20     -12.714   1.513  -4.174  1.00 13.01
ATOM    310  CA  PHE A  20     -10.699   2.124  -4.372  1.00 24.11
ATOM    311  HA  PHE A  20     -10.023   1.648  -3.676  1.00 51.34
ATOM    312  CB  PHE A  20     -10.682   1.300  -5.671  1.00 13.31
ATOM    313 1HB  PHE A  20     -10.758   0.257  -5.399  1.00 65.44
ATOM    314 2HB  PHE A  20     -11.536   1.552  -6.281  1.00 53.15
ATOM    315  CG  PHE A  20      -9.430   1.444  -6.506  1.00 31.41
ATOM    316  CD1 PHE A  20      -9.408   2.297  -7.602  1.00 50.20
ATOM    317  HD1 PHE A  20     -10.298   2.854  -7.857  1.00 40.33
ATOM    318  CE1 PHE A  20      -8.269   2.443  -8.361  1.00 74.03
ATOM    319  HE1 PHE A  20      -8.266   3.109  -9.211  1.00 13.15
ATOM    320  CZ  PHE A  20      -7.137   1.734  -8.036  1.00 64.10
ATOM    321  HZ  PHE A  20      -6.242   1.845  -8.630  1.00 65.11
ATOM    322  CE2 PHE A  20      -7.142   0.881  -6.951  1.00 14.23
ATOM    323  HE2 PHE A  20      -6.252   0.325  -6.698  1.00 74.15
ATOM    324  CD2 PHE A  20      -8.284   0.739  -6.192  1.00  1.42
ATOM    325  HD2 PHE A  20      -8.286   0.071  -5.343  1.00 50.24
ATOM    326  C   PHE A  20     -10.181   3.548  -4.611  1.00 13.21
ATOM    327  O   PHE A  20      -8.993   3.800  -4.451  1.00 63.33
ATOM    328  N   ASN A  21     -11.068   4.474  -4.955  1.00 30.00
ATOM    329  H   ASN A  21     -12.017   4.237  -4.983  1.00 21.44
ATOM    330  CA  ASN A  21     -10.649   5.849  -5.245  1.00  1.14
ATOM    331  HA  ASN A  21      -9.859   5.765  -5.976  1.00 61.50
ATOM    332  CB  ASN A  21     -11.792   6.723  -5.843  1.00  3.43
ATOM    333 1HB  ASN A  21     -11.397   7.701  -6.073  1.00  1.20
ATOM    334 2HB  ASN A  21     -12.133   6.264  -6.760  1.00 23.42
ATOM    335  CG  ASN A  21     -12.997   6.917  -4.924  1.00 33.33
ATOM    336  OD1 ASN A  21     -13.322   6.054  -4.119  1.00 15.42
ATOM    337  ND2 ASN A  21     -13.657   8.043  -5.038  1.00 42.41
ATOM    338 2HD2 ASN A  21     -13.352   8.703  -5.696  1.00 42.25
ATOM    339 1HD2 ASN A  21     -14.432   8.176  -4.452  1.00 55.43
ATOM    340  C   ASN A  21     -10.031   6.508  -4.015  1.00 15.55
ATOM    341  O   ASN A  21      -8.944   7.075  -4.094  1.00 41.42
ATOM    342  N   THR A  22     -10.691   6.380  -2.875  1.00 44.10
ATOM    343  H   THR A  22     -11.542   5.892  -2.868  1.00 35.14
ATOM    344  CA  THR A  22     -10.178   6.943  -1.657  1.00 53.21
ATOM    345  HA  THR A  22      -9.821   7.924  -1.943  1.00 13.14
ATOM    346  CB  THR A  22     -11.265   7.114  -0.533  1.00  2.04
ATOM    347  HB  THR A  22     -12.026   7.777  -0.918  1.00 72.34
ATOM    348  OG1 THR A  22     -10.703   7.728   0.634  1.00 11.24
ATOM    349  HG1 THR A  22     -10.112   8.434   0.358  1.00 31.24
ATOM    350  CG2 THR A  22     -11.909   5.796  -0.145  1.00 43.03
ATOM    351 1HG2 THR A  22     -11.154   5.132   0.247  1.00 14.04
ATOM    352 2HG2 THR A  22     -12.358   5.347  -1.018  1.00 54.33
ATOM    353 3HG2 THR A  22     -12.668   5.967   0.605  1.00 41.45
ATOM    354  C   THR A  22      -8.930   6.179  -1.185  1.00 40.43
ATOM    355  O   THR A  22      -7.993   6.788  -0.677  1.00 51.53
ATOM    356  N   VAL A  23      -8.912   4.850  -1.383  1.00 32.12
ATOM    357  H   VAL A  23      -9.703   4.409  -1.764  1.00  5.54
ATOM    358  CA  VAL A  23      -7.740   4.039  -1.029  1.00 64.43
ATOM    359  HA  VAL A  23      -7.517   4.227   0.009  1.00 11.44
ATOM    360  CB  VAL A  23      -7.988   2.511  -1.232  1.00  2.32
ATOM    361  HB  VAL A  23      -8.217   2.340  -2.273  1.00  1.41
ATOM    362  CG1 VAL A  23      -6.745   1.701  -0.869  1.00 34.30
ATOM    363 1HG1 VAL A  23      -5.924   1.990  -1.509  1.00 61.14
ATOM    364 2HG1 VAL A  23      -6.947   0.647  -0.991  1.00 54.34
ATOM    365 3HG1 VAL A  23      -6.481   1.896   0.160  1.00 35.20
ATOM    366  CG2 VAL A  23      -9.168   2.044  -0.396  1.00 12.10
ATOM    367 1HG2 VAL A  23     -10.054   2.592  -0.685  1.00 23.34
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ATOM    368 2HG2 VAL A  23      -8.960   2.218   0.650  1.00 72.25
ATOM    369 3HG2 VAL A  23      -9.330   0.990  -0.558  1.00 34.23
ATOM    370  C   VAL A  23      -6.520   4.484  -1.847  1.00 31.13
ATOM    371  O   VAL A  23      -5.428   4.658  -1.296  1.00 70.32
ATOM    372  N   TYR A  24      -6.727   4.700  -3.147  1.00  2.10
ATOM    373  H   TYR A  24      -7.616   4.505  -3.522  1.00 52.45
ATOM    374  CA  TYR A  24      -5.679   5.186  -4.047  1.00  3.31
ATOM    375  HA  TYR A  24      -4.884   4.455  -4.052  1.00 24.44
ATOM    376  CB  TYR A  24      -6.229   5.343  -5.487  1.00 50.50
ATOM    377 1HB  TYR A  24      -6.510   4.367  -5.855  1.00 61.22
ATOM    378 2HB  TYR A  24      -7.103   5.978  -5.465  1.00 10.22
ATOM    379  CG  TYR A  24      -5.249   5.922  -6.507  1.00 40.13
ATOM    380  CD1 TYR A  24      -5.317   7.255  -6.907  1.00  1.23
ATOM    381  HD1 TYR A  24      -6.073   7.895  -6.476  1.00 54.05
ATOM    382  CE1 TYR A  24      -4.430   7.766  -7.845  1.00 13.03
ATOM    383  HE1 TYR A  24      -4.497   8.802  -8.145  1.00  2.45
ATOM    384  CZ  TYR A  24      -3.463   6.941  -8.389  1.00 21.12
ATOM    385  CE2 TYR A  24      -3.381   5.630  -8.005  1.00 11.42
ATOM    386  HE2 TYR A  24      -2.625   4.987  -8.432  1.00 23.22
ATOM    387  CD2 TYR A  24      -4.269   5.129  -7.075  1.00 12.15
ATOM    388  HD2 TYR A  24      -4.204   4.095  -6.777  1.00 24.41
ATOM    389  OH  TYR A  24      -2.582   7.432  -9.333  1.00  3.45
ATOM    390  HH  TYR A  24      -2.465   6.750 -10.013  1.00 32.30
ATOM    391  C   TYR A  24      -5.122   6.507  -3.535  1.00 31.14
ATOM    392  O   TYR A  24      -3.910   6.695  -3.469  1.00 71.22
ATOM    393  N   ASN A  25      -6.019   7.398  -3.143  1.00 44.43
ATOM    394  H   ASN A  25      -6.975   7.185  -3.207  1.00 31.31
ATOM    395  CA  ASN A  25      -5.644   8.694  -2.623  1.00  1.31
ATOM    396  HA  ASN A  25      -5.004   9.170  -3.351  1.00 20.35
ATOM    397  CB  ASN A  25      -6.883   9.581  -2.411  1.00 42.15
ATOM    398 1HB  ASN A  25      -7.593   9.042  -1.803  1.00 21.11
ATOM    399 2HB  ASN A  25      -6.577  10.466  -1.880  1.00 22.53
ATOM    400  CG  ASN A  25      -7.596  10.002  -3.695  1.00 70.53
ATOM    401  OD1 ASN A  25      -8.807  10.179  -3.708  1.00  1.40
ATOM    402  ND2 ASN A  25      -6.862  10.194  -4.771  1.00 23.33
ATOM    403 2HD2 ASN A  25      -5.894  10.063  -4.719  1.00 45.22
ATOM    404 1HD2 ASN A  25      -7.340  10.465  -5.579  1.00  3.40
ATOM    405  C   ASN A  25      -4.885   8.559  -1.315  1.00 11.24
ATOM    406  O   ASN A  25      -3.792   9.096  -1.181  1.00 42.24
ATOM    407  N   ALA A  26      -5.436   7.783  -0.393  1.00 22.51
ATOM    408  H   ALA A  26      -6.258   7.293  -0.621  1.00 64.34
ATOM    409  CA  ALA A  26      -4.874   7.621   0.947  1.00 73.25
ATOM    410  HA  ALA A  26      -4.807   8.605   1.389  1.00 30.42
ATOM    411  CB  ALA A  26      -5.801   6.780   1.811  1.00 24.13
ATOM    412 1HB  ALA A  26      -5.417   6.738   2.820  1.00 72.43
ATOM    413 2HB  ALA A  26      -5.858   5.781   1.404  1.00 50.41
ATOM    414 3HB  ALA A  26      -6.785   7.223   1.818  1.00 31.11
ATOM    415  C   ALA A  26      -3.484   7.012   0.911  1.00 51.44
ATOM    416  O   ALA A  26      -2.570   7.515   1.557  1.00 21.31
ATOM    417  N   THR A  27      -3.329   5.959   0.129  1.00  3.43
ATOM    418  H   THR A  27      -4.107   5.596  -0.345  1.00 51.22
ATOM    419  CA  THR A  27      -2.054   5.285  -0.028  1.00  4.24
ATOM    420  HA  THR A  27      -1.717   4.946   0.940  1.00  2.41
ATOM    421  CB  THR A  27      -2.216   4.060  -0.958  1.00 44.42
ATOM    422  HB  THR A  27      -2.483   4.412  -1.945  1.00 44.05
ATOM    423  OG1 THR A  27      -3.265   3.223  -0.460  1.00 61.40
ATOM    424  HG1 THR A  27      -4.069   3.437  -0.950  1.00 35.34
ATOM    425  CG2 THR A  27      -0.924   3.258  -1.042  1.00 73.32
ATOM    426 1HG2 THR A  27      -0.656   2.904  -0.058  1.00 32.13
ATOM    427 2HG2 THR A  27      -0.144   3.900  -1.420  1.00 65.32
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ATOM    428 3HG2 THR A  27      -1.061   2.420  -1.709  1.00 51.24
ATOM    429  C   THR A  27      -1.018   6.248  -0.621  1.00 71.02
ATOM    430  O   THR A  27       0.119   6.335  -0.141  1.00  4.22
ATOM    431  N   LEU A  28      -1.448   7.001  -1.628  1.00 23.33
ATOM    432  H   LEU A  28      -2.379   6.912  -1.922  1.00 51.24
ATOM    433  CA  LEU A  28      -0.601   7.957  -2.306  1.00  4.42
ATOM    434  HA  LEU A  28       0.256   7.440  -2.714  1.00 33.11
ATOM    435  CB  LEU A  28      -1.392   8.601  -3.452  1.00 11.51
ATOM    436 1HB  LEU A  28      -1.744   7.810  -4.098  1.00 13.43
ATOM    437 2HB  LEU A  28      -2.255   9.088  -3.022  1.00 24.43
ATOM    438  CG  LEU A  28      -0.658   9.615  -4.316  1.00  4.11
ATOM    439  HG  LEU A  28      -0.220  10.346  -3.651  1.00 53.11
ATOM    440  CD1 LEU A  28       0.450   8.945  -5.112  1.00 62.31
ATOM    441 1HD1 LEU A  28       0.948   9.684  -5.722  1.00 63.13
ATOM    442 2HD1 LEU A  28       0.028   8.180  -5.747  1.00 44.31
ATOM    443 3HD1 LEU A  28       1.164   8.499  -4.436  1.00 71.31
ATOM    444  CD2 LEU A  28      -1.626  10.333  -5.241  1.00 72.12
ATOM    445 1HD2 LEU A  28      -1.085  11.046  -5.846  1.00  1.34
ATOM    446 2HD2 LEU A  28      -2.371  10.850  -4.654  1.00 52.25
ATOM    447 3HD2 LEU A  28      -2.111   9.613  -5.884  1.00 23.23
ATOM    448  C   LEU A  28      -0.137   9.034  -1.318  1.00 74.25
ATOM    449  O   LEU A  28       1.063   9.285  -1.174  1.00 24.24
ATOM    450  N   GLN A  29      -1.096   9.611  -0.605  1.00  2.01
ATOM    451  H   GLN A  29      -2.023   9.326  -0.773  1.00 62.10
ATOM    452  CA  GLN A  29      -0.833  10.651   0.390  1.00  2.22
ATOM    453  HA  GLN A  29      -0.353  11.475  -0.116  1.00 61.41
ATOM    454  CB  GLN A  29      -2.134  11.156   1.019  1.00 54.30
ATOM    455 1HB  GLN A  29      -2.648  10.323   1.473  1.00 14.01
ATOM    456 2HB  GLN A  29      -1.872  11.866   1.791  1.00 20.52
ATOM    457  CG  GLN A  29      -3.087  11.838   0.052  1.00 21.45
ATOM    458 1HG  GLN A  29      -2.615  12.722  -0.348  1.00 62.10
ATOM    459 2HG  GLN A  29      -3.292  11.151  -0.756  1.00 41.24
ATOM    460  CD  GLN A  29      -4.403  12.218   0.710  1.00 32.21
ATOM    461  OE1 GLN A  29      -5.354  11.448   0.711  1.00 71.12
ATOM    462  NE2 GLN A  29      -4.465  13.395   1.280  1.00 61.43
ATOM    463 2HE2 GLN A  29      -3.677  13.975   1.259  1.00 34.24
ATOM    464 1HE2 GLN A  29      -5.311  13.630   1.714  1.00 22.14
ATOM    465  C   GLN A  29       0.090  10.145   1.487  1.00 44.52
ATOM    466  O   GLN A  29       1.024  10.830   1.871  1.00 52.01
ATOM    467  N   ALA A  30      -0.161   8.939   1.954  1.00 12.00
ATOM    468  H   ALA A  30      -0.916   8.432   1.581  1.00 54.04
ATOM    469  CA  ALA A  30       0.611   8.339   3.028  1.00  0.54
ATOM    470  HA  ALA A  30       0.476   8.945   3.912  1.00 62.04
ATOM    471  CB  ALA A  30       0.090   6.942   3.336  1.00 51.34
ATOM    472 1HB  ALA A  30       0.633   6.529   4.173  1.00 12.53
ATOM    473 2HB  ALA A  30       0.230   6.310   2.471  1.00 33.15
ATOM    474 3HB  ALA A  30      -0.962   6.993   3.577  1.00 64.30
ATOM    475  C   ALA A  30       2.089   8.261   2.687  1.00  2.51
ATOM    476  O   ALA A  30       2.944   8.649   3.488  1.00  2.12
ATOM    477  N   ILE A  31       2.394   7.801   1.508  1.00 61.31
ATOM    478  H   ILE A  31       1.682   7.581   0.867  1.00 50.20
ATOM    479  CA  ILE A  31       3.766   7.602   1.173  1.00 21.43
ATOM    480  HA  ILE A  31       4.258   7.369   2.107  1.00 24.44
ATOM    481  CB  ILE A  31       3.948   6.370   0.242  1.00 62.40
ATOM    482  HB  ILE A  31       3.536   5.515   0.758  1.00 63.01
ATOM    483  CG2 ILE A  31       3.174   6.525  -1.067  1.00 52.21
ATOM    484 1HG2 ILE A  31       2.120   6.617  -0.854  1.00 31.22
ATOM    485 2HG2 ILE A  31       3.344   5.659  -1.690  1.00 65.50
ATOM    486 3HG2 ILE A  31       3.518   7.413  -1.578  1.00  3.13
ATOM    487  CG1 ILE A  31       5.417   6.113  -0.022  1.00 62.24
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ATOM    488 1HG1 ILE A  31       5.825   6.945  -0.576  1.00 23.22
ATOM    489 2HG1 ILE A  31       5.930   6.030   0.923  1.00  1.53
ATOM    490  CD1 ILE A  31       5.680   4.865  -0.813  1.00 31.34
ATOM    491 1HD1 ILE A  31       5.190   4.938  -1.772  1.00 41.42
ATOM    492 2HD1 ILE A  31       5.292   4.012  -0.274  1.00 54.03
ATOM    493 3HD1 ILE A  31       6.744   4.745  -0.960  1.00 53.45
ATOM    494  C   ILE A  31       4.474   8.867   0.619  1.00 62.24
ATOM    495  O   ILE A  31       5.556   9.216   1.088  1.00 75.50
ATOM    496  N   GLN A  32       3.850   9.591  -0.311  1.00 41.15
ATOM    497  H   GLN A  32       2.938   9.353  -0.591  1.00 74.30
ATOM    498  CA  GLN A  32       4.535  10.742  -0.921  1.00 34.44
ATOM    499  HA  GLN A  32       5.559  10.419  -1.049  1.00 12.24
ATOM    500  CB  GLN A  32       3.985  11.117  -2.295  1.00 43.12
ATOM    501 1HB  GLN A  32       4.632  11.873  -2.708  1.00 74.41
ATOM    502 2HB  GLN A  32       4.017  10.232  -2.914  1.00  3.54
ATOM    503  CG  GLN A  32       2.574  11.671  -2.321  1.00 20.51
ATOM    504 1HG  GLN A  32       1.895  10.911  -1.962  1.00 12.15
ATOM    505 2HG  GLN A  32       2.525  12.535  -1.675  1.00 51.53
ATOM    506  CD  GLN A  32       2.154  12.076  -3.714  1.00 50.32
ATOM    507  OE1 GLN A  32       2.595  11.509  -4.702  1.00  2.35
ATOM    508  NE2 GLN A  32       1.306  13.066  -3.807  1.00 44.14
ATOM    509 2HE2 GLN A  32       0.990  13.491  -2.984  1.00 22.31
ATOM    510 1HE2 GLN A  32       1.039  13.333  -4.710  1.00 44.55
ATOM    511  C   GLN A  32       4.594  11.956  -0.014  1.00 53.44
ATOM    512  O   GLN A  32       5.523  12.743  -0.081  1.00  5.11
ATOM    513  N   ASN A  33       3.605  12.092   0.838  1.00 43.02
ATOM    514  H   ASN A  33       2.926  11.386   0.855  1.00 13.34
ATOM    515  CA  ASN A  33       3.503  13.261   1.728  1.00 25.22
ATOM    516  HA  ASN A  33       3.997  14.078   1.227  1.00 41.24
ATOM    517  CB  ASN A  33       2.012  13.615   1.942  1.00 70.11
ATOM    518 1HB  ASN A  33       1.514  13.608   0.984  1.00 21.40
ATOM    519 2HB  ASN A  33       1.591  12.834   2.558  1.00 72.24
ATOM    520  CG  ASN A  33       1.745  14.967   2.609  1.00 35.42
ATOM    521  OD1 ASN A  33       1.718  15.991   1.949  1.00 15.21
ATOM    522  ND2 ASN A  33       1.429  14.963   3.882  1.00 51.02
ATOM    523 2HD2 ASN A  33       1.371  14.108   4.355  1.00 62.24
ATOM    524 1HD2 ASN A  33       1.278  15.837   4.299  1.00 12.41
ATOM    525  C   ASN A  33       4.252  12.988   3.052  1.00 35.32
ATOM    526  O   ASN A  33       4.075  13.686   4.050  1.00 34.22
ATOM    527  N   GLY A  34       5.073  11.938   3.021  1.00 42.52
ATOM    528  H   GLY A  34       5.051  11.389   2.211  1.00 72.43
ATOM    529  CA  GLY A  34       5.986  11.595   4.114  1.00 54.35
ATOM    530 1HA  GLY A  34       6.580  10.746   3.812  1.00  0.45
ATOM    531 2HA  GLY A  34       6.648  12.432   4.278  1.00 65.22
ATOM    532  C   GLY A  34       5.301  11.253   5.412  1.00 13.43
ATOM    533  O   GLY A  34       5.708  11.710   6.469  1.00 13.43
ATOM    534  N   GLN A  35       4.279  10.438   5.340  1.00 41.03
ATOM    535  H   GLN A  35       4.007  10.061   4.473  1.00  1.21
ATOM    536  CA  GLN A  35       3.521  10.067   6.525  1.00 71.11
ATOM    537  HA  GLN A  35       3.724  10.821   7.272  1.00 51.04
ATOM    538  CB  GLN A  35       2.031  10.086   6.199  1.00 14.43
ATOM    539 1HB  GLN A  35       1.825   9.341   5.446  1.00 71.12
ATOM    540 2HB  GLN A  35       1.463   9.870   7.091  1.00 34.32
ATOM    541  CG  GLN A  35       1.623  11.454   5.689  1.00 33.24
ATOM    542 1HG  GLN A  35       2.271  11.716   4.866  1.00 44.41
ATOM    543 2HG  GLN A  35       0.600  11.409   5.343  1.00 55.25
ATOM    544  CD  GLN A  35       1.747  12.523   6.767  1.00 74.42
ATOM    545  OE1 GLN A  35       1.471  12.276   7.927  1.00  2.24
ATOM    546  NE2 GLN A  35       2.318  13.650   6.425  1.00 54.31
ATOM    547 2HE2 GLN A  35       2.664  13.779   5.514  1.00 53.31
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ATOM    548 1HE2 GLN A  35       2.397  14.322   7.132  1.00 24.41
ATOM    549  C   GLN A  35       3.993   8.731   7.074  1.00 73.31
ATOM    550  O   GLN A  35       3.479   8.224   8.062  1.00  4.50
ATOM    551  N   THR A  36       4.970   8.168   6.416  1.00 62.12
ATOM    552  H   THR A  36       5.331   8.606   5.617  1.00 14.51
ATOM    553  CA  THR A  36       5.564   6.944   6.835  1.00 53.53
ATOM    554  HA  THR A  36       5.440   6.888   7.907  1.00  2.33
ATOM    555  CB  THR A  36       4.866   5.703   6.171  1.00 64.04
ATOM    556  HB  THR A  36       3.831   5.715   6.481  1.00 24.23
ATOM    557  OG1 THR A  36       5.446   4.480   6.636  1.00 11.23
ATOM    558  HG1 THR A  36       4.805   4.036   7.196  1.00  3.13
ATOM    559  CG2 THR A  36       4.923   5.753   4.642  1.00 55.32
ATOM    560 1HG2 THR A  36       4.413   6.640   4.293  1.00 61.40
ATOM    561 2HG2 THR A  36       4.441   4.877   4.234  1.00 30.53
ATOM    562 3HG2 THR A  36       5.954   5.779   4.320  1.00 33.13
ATOM    563  C   THR A  36       7.066   7.002   6.534  1.00  5.13
ATOM    564  O   THR A  36       7.477   7.413   5.444  1.00 45.43
ATOM    565  N   PHE A  37       7.874   6.688   7.527  1.00 74.45
ATOM    566  H   PHE A  37       7.498   6.380   8.377  1.00 44.53
ATOM    567  CA  PHE A  37       9.309   6.728   7.385  1.00  5.34
ATOM    568  HA  PHE A  37       9.515   6.891   6.338  1.00 42.42
ATOM    569  CB  PHE A  37       9.930   7.892   8.198  1.00 13.30
ATOM    570 1HB  PHE A  37      10.997   7.901   8.031  1.00 61.11
ATOM    571 2HB  PHE A  37       9.519   8.824   7.838  1.00 53.21
ATOM    572  CG  PHE A  37       9.709   7.829   9.696  1.00 13.14
ATOM    573  CD1 PHE A  37      10.664   7.263  10.527  1.00  1.43
ATOM    574  HD1 PHE A  37      11.568   6.858  10.096  1.00 53.30
ATOM    575  CE1 PHE A  37      10.473   7.210  11.893  1.00 23.12
ATOM    576  HE1 PHE A  37      11.226   6.766  12.528  1.00 71.13
ATOM    577  CZ  PHE A  37       9.319   7.725  12.448  1.00 73.10
ATOM    578  HZ  PHE A  37       9.168   7.684  13.516  1.00 54.11
ATOM    579  CE2 PHE A  37       8.357   8.294  11.633  1.00 60.12
ATOM    580  HE2 PHE A  37       7.453   8.697  12.065  1.00  4.12
ATOM    581  CD2 PHE A  37       8.554   8.345  10.267  1.00 12.22
ATOM    582  HD2 PHE A  37       7.802   8.789   9.632  1.00 42.13
ATOM    583  C   PHE A  37       9.926   5.392   7.778  1.00 53.12
ATOM    584  O   PHE A  37       9.289   4.587   8.454  1.00 14.02
ATOM    585  N   ASP A  38      11.129   5.150   7.316  1.00 43.24
ATOM    586  H   ASP A  38      11.553   5.806   6.727  1.00 34.21
ATOM    587  CA  ASP A  38      11.882   3.953   7.680  1.00 73.33
ATOM    588  HA  ASP A  38      11.198   3.215   8.074  1.00 22.05
ATOM    589  CB  ASP A  38      12.653   3.381   6.460  1.00 50.34
ATOM    590 1HB  ASP A  38      11.953   3.198   5.657  1.00 42.02
ATOM    591 2HB  ASP A  38      13.376   4.114   6.131  1.00 31.31
ATOM    592  CG  ASP A  38      13.391   2.066   6.755  1.00 71.24
ATOM    593  OD1 ASP A  38      12.827   0.995   6.508  1.00 51.11
ATOM    594  OD2 ASP A  38      14.549   2.100   7.253  1.00 33.33
ATOM    595  C   ASP A  38      12.859   4.372   8.750  1.00 52.44
ATOM    596  O   ASP A  38      13.105   5.570   8.907  1.00 73.53
ATOM    597  N   TYR A  39      13.447   3.432   9.443  1.00 55.52
ATOM    598  H   TYR A  39      13.291   2.496   9.200  1.00 61.55
ATOM    599  CA  TYR A  39      14.367   3.742  10.513  1.00 52.35
ATOM    600  HA  TYR A  39      13.878   4.497  11.110  1.00 13.32
ATOM    601  CB  TYR A  39      14.631   2.510  11.412  1.00 74.00
ATOM    602 1HB  TYR A  39      15.326   2.791  12.188  1.00 63.34
ATOM    603 2HB  TYR A  39      13.699   2.220  11.874  1.00 52.02
ATOM    604  CG  TYR A  39      15.208   1.285  10.712  1.00 61.04
ATOM    605  CD1 TYR A  39      16.578   1.065  10.673  1.00  2.12
ATOM    606  HD1 TYR A  39      17.239   1.786  11.136  1.00 73.44
ATOM    607  CE1 TYR A  39      17.106  -0.049  10.054  1.00 13.50
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ATOM    608  HE1 TYR A  39      18.175  -0.200  10.036  1.00 51.21
ATOM    609  CZ  TYR A  39      16.265  -0.964   9.461  1.00 70.22
ATOM    610  CE2 TYR A  39      14.900  -0.775   9.483  1.00  5.44
ATOM    611  HE2 TYR A  39      14.243  -1.492   9.018  1.00 61.51
ATOM    612  CD2 TYR A  39      14.378   0.342  10.107  1.00 11.25
ATOM    613  HD2 TYR A  39      13.309   0.497  10.127  1.00 32.54
ATOM    614  OH  TYR A  39      16.796  -2.075   8.845  1.00 15.55
ATOM    615  HH  TYR A  39      16.362  -2.234   7.996  1.00 35.11
ATOM    616  C   TYR A  39      15.672   4.370   9.989  1.00 74.15
ATOM    617  O   TYR A  39      16.406   4.984  10.743  1.00 42.02
ATOM    618  N   LYS A  40      15.957   4.207   8.692  1.00 15.22
ATOM    619  H   LYS A  40      15.418   3.623   8.111  1.00  0.31
ATOM    620  CA  LYS A  40      17.133   4.832   8.114  1.00 44.33
ATOM    621  HA  LYS A  40      17.853   5.059   8.886  1.00 71.13
ATOM    622  CB  LYS A  40      17.762   3.908   7.105  1.00 61.32
ATOM    623 1HB  LYS A  40      17.201   3.973   6.185  1.00 43.15
ATOM    624 2HB  LYS A  40      18.762   4.260   6.926  1.00 44.34
ATOM    625  CG  LYS A  40      17.829   2.471   7.504  1.00 44.23
ATOM    626 1HG  LYS A  40      18.444   2.375   8.387  1.00 23.32
ATOM    627 2HG  LYS A  40      16.831   2.117   7.714  1.00 24.12
ATOM    628  CD  LYS A  40      18.419   1.653   6.387  1.00  2.31
ATOM    629 1HD  LYS A  40      18.264   2.172   5.452  1.00  3.11
ATOM    630 2HD  LYS A  40      19.476   1.517   6.564  1.00 15.41
ATOM    631  CE  LYS A  40      17.753   0.312   6.318  1.00 15.33
ATOM    632 1HE  LYS A  40      18.273  -0.298   5.595  1.00 70.15
ATOM    633 2HE  LYS A  40      17.801  -0.156   7.290  1.00 52.13
ATOM    634  NZ  LYS A  40      16.326   0.431   5.911  1.00 45.54
ATOM    635 1HZ  LYS A  40      15.764   1.128   6.450  1.00 41.11
ATOM    636 2HZ  LYS A  40      15.880  -0.502   6.006  1.00 33.54
ATOM    637 3HZ  LYS A  40      16.271   0.662   4.891  1.00 22.21
ATOM    638  C   LYS A  40      16.728   6.085   7.346  1.00 22.14
ATOM    639  O   LYS A  40      17.567   6.707   6.702  1.00  2.33
ATOM    640  N   SER A  41      15.439   6.440   7.425  1.00 73.13
ATOM    641  H   SER A  41      14.850   5.928   8.019  1.00 73.43
ATOM    642  CA  SER A  41      14.880   7.582   6.699  1.00 12.34
ATOM    643  HA  SER A  41      13.818   7.601   6.901  1.00 44.02
ATOM    644  CB  SER A  41      15.522   8.903   7.213  1.00 24.34
ATOM    645 1HB  SER A  41      15.374   8.979   8.280  1.00 43.20
ATOM    646 2HB  SER A  41      16.582   8.884   7.002  1.00 40.30
ATOM    647  OG  SER A  41      14.951  10.044   6.596  1.00  1.23
ATOM    648  HG  SER A  41      15.063   9.902   5.648  1.00 11.01
ATOM    649  C   SER A  41      15.074   7.402   5.162  1.00 64.30
ATOM    650  O   SER A  41      15.317   8.369   4.434  1.00 14.00
ATOM    651  N   ASN A  42      14.894   6.163   4.685  1.00 24.23
ATOM    652  H   ASN A  42      14.647   5.443   5.302  1.00 51.40
ATOM    653  CA  ASN A  42      15.079   5.830   3.261  1.00 53.11
ATOM    654  HA  ASN A  42      16.071   6.143   2.974  1.00  3.01
ATOM    655  CB  ASN A  42      14.955   4.325   3.009  1.00  2.02
ATOM    656 1HB  ASN A  42      13.971   4.001   3.313  1.00 10.00
ATOM    657 2HB  ASN A  42      15.063   4.145   1.950  1.00 25.13
ATOM    658  CG  ASN A  42      15.956   3.480   3.741  1.00 53.23
ATOM    659  OD1 ASN A  42      15.697   3.026   4.833  1.00 34.14
ATOM    660  ND2 ASN A  42      17.110   3.306   3.179  1.00 20.24
ATOM    661 2HD2 ASN A  42      17.308   3.748   2.323  1.00 33.41
ATOM    662 1HD2 ASN A  42      17.737   2.664   3.583  1.00 15.00
ATOM    663  C   ASN A  42      14.036   6.515   2.383  1.00 43.13
ATOM    664  O   ASN A  42      12.905   6.735   2.823  1.00 52.42
ATOM    665  N   PRO A  43      14.432   6.910   1.148  1.00 41.45
ATOM    666  CD  PRO A  43      15.826   6.899   0.649  1.00 22.44
ATOM    667  CA  PRO A  43      13.525   7.487   0.139  1.00 12.24
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ATOM    668  HA  PRO A  43      13.256   8.504   0.388  1.00 51.15
ATOM    669  CB  PRO A  43      14.374   7.481  -1.127  1.00 43.00
ATOM    670 1HB  PRO A  43      14.262   6.533  -1.632  1.00 42.14
ATOM    671 2HB  PRO A  43      14.101   8.298  -1.778  1.00 53.21
ATOM    672  CG  PRO A  43      15.746   7.681  -0.630  1.00 64.41
ATOM    673 1HG  PRO A  43      16.455   7.311  -1.357  1.00 21.35
ATOM    674 2HG  PRO A  43      15.920   8.725  -0.422  1.00 63.23
ATOM    675 1HD  PRO A  43      16.165   5.891   0.460  1.00  1.11
ATOM    676 2HD  PRO A  43      16.486   7.393   1.347  1.00 41.33
ATOM    677  C   PRO A  43      12.248   6.661  -0.079  1.00 10.32
ATOM    678  O   PRO A  43      12.288   5.490  -0.493  1.00  4.21
ATOM    679  N   TYR A  44      11.147   7.280   0.253  1.00 52.11
ATOM    680  H   TYR A  44      11.248   8.178   0.631  1.00  3.13
ATOM    681  CA  TYR A  44       9.805   6.752   0.087  1.00 23.51
ATOM    682  HA  TYR A  44       9.915   5.681  -0.015  1.00 14.21
ATOM    683  CB  TYR A  44       8.902   7.032   1.284  1.00 62.15
ATOM    684 1HB  TYR A  44       9.186   7.978   1.724  1.00 34.42
ATOM    685 2HB  TYR A  44       7.881   7.100   0.942  1.00 73.14
ATOM    686  CG  TYR A  44       8.968   5.981   2.363  1.00 15.35
ATOM    687  CD1 TYR A  44       8.108   4.886   2.334  1.00 21.04
ATOM    688  HD1 TYR A  44       7.404   4.789   1.523  1.00 13.52
ATOM    689  CE1 TYR A  44       8.139   3.926   3.322  1.00 73.11
ATOM    690  HE1 TYR A  44       7.465   3.083   3.281  1.00 31.53
ATOM    691  CZ  TYR A  44       9.037   4.047   4.347  1.00 62.43
ATOM    692  CE2 TYR A  44       9.900   5.120   4.389  1.00 33.25
ATOM    693  HE2 TYR A  44      10.607   5.211   5.200  1.00 10.11
ATOM    694  CD2 TYR A  44       9.858   6.077   3.406  1.00 50.40
ATOM    695  HD2 TYR A  44      10.536   6.918   3.444  1.00 53.52
ATOM    696  OH  TYR A  44       9.065   3.100   5.350  1.00 32.22
ATOM    697  HH  TYR A  44       9.036   3.546   6.204  1.00 74.11
ATOM    698  C   TYR A  44       9.173   7.259  -1.176  1.00 71.53
ATOM    699  O   TYR A  44       8.053   6.875  -1.525  1.00  1.43
ATOM    700  N   ASP A  45       9.873   8.088  -1.876  1.00 42.33
ATOM    701  H   ASP A  45      10.830   8.252  -1.706  1.00  2.42
ATOM    702  CA  ASP A  45       9.310   8.783  -2.980  1.00 42.45
ATOM    703  HA  ASP A  45       8.313   9.081  -2.691  1.00 31.53
ATOM    704  CB  ASP A  45      10.117  10.046  -3.292  1.00 41.24
ATOM    705 1HB  ASP A  45       9.766  10.463  -4.224  1.00  5.20
ATOM    706 2HB  ASP A  45       9.972  10.767  -2.501  1.00 22.20
ATOM    707  CG  ASP A  45      11.598   9.773  -3.430  1.00 40.11
ATOM    708  OD1 ASP A  45      12.113   9.832  -4.550  1.00 51.53
ATOM    709  OD2 ASP A  45      12.241   9.484  -2.378  1.00  5.33
ATOM    710  C   ASP A  45       9.196   7.873  -4.175  1.00 11.45
ATOM    711  O   ASP A  45      10.058   7.042  -4.485  1.00 21.24
ATOM    712  N   ILE A  46       8.036   7.981  -4.750  1.00 23.54
ATOM    713  H   ILE A  46       7.480   8.737  -4.478  1.00 62.03
ATOM    714  CA  ILE A  46       7.534   7.108  -5.765  1.00 71.25
ATOM    715  HA  ILE A  46       7.610   6.092  -5.408  1.00 13.41
ATOM    716  CB  ILE A  46       6.036   7.410  -5.992  1.00 54.43
ATOM    717  HB  ILE A  46       5.937   8.416  -6.375  1.00 21.43
ATOM    718  CG2 ILE A  46       5.429   6.440  -6.999  1.00 65.32
ATOM    719 1HG2 ILE A  46       4.384   6.672  -7.141  1.00 12.22
ATOM    720 2HG2 ILE A  46       5.524   5.429  -6.629  1.00 61.35
ATOM    721 3HG2 ILE A  46       5.948   6.527  -7.942  1.00 22.21
ATOM    722  CG1 ILE A  46       5.300   7.327  -4.645  1.00 41.10
ATOM    723 1HG1 ILE A  46       5.360   6.315  -4.273  1.00 13.11
ATOM    724 2HG1 ILE A  46       5.784   7.986  -3.938  1.00 32.40
ATOM    725  CD1 ILE A  46       3.848   7.697  -4.705  1.00 71.53
ATOM    726 1HD1 ILE A  46       3.742   8.715  -5.047  1.00 31.13
ATOM    727 2HD1 ILE A  46       3.423   7.584  -3.719  1.00 14.12
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ATOM    728 3HD1 ILE A  46       3.353   7.024  -5.391  1.00 25.25
ATOM    729  C   ILE A  46       8.305   7.245  -7.049  1.00 24.12
ATOM    730  O   ILE A  46       8.362   8.316  -7.640  1.00 41.25
ATOM    731  N   SER A  47       8.862   6.151  -7.491  1.00 53.23
ATOM    732  H   SER A  47       8.746   5.310  -7.000  1.00 11.04
ATOM    733  CA  SER A  47       9.643   6.160  -8.677  1.00 32.31
ATOM    734  HA  SER A  47      10.082   7.135  -8.817  1.00 34.21
ATOM    735  CB  SER A  47      10.757   5.134  -8.504  1.00 11.43
ATOM    736 1HB  SER A  47      10.349   4.139  -8.603  1.00 52.23
ATOM    737 2HB  SER A  47      11.515   5.292  -9.255  1.00 64.12
ATOM    738  OG  SER A  47      11.358   5.261  -7.211  1.00 54.14
ATOM    739  HG  SER A  47      11.199   6.155  -6.877  1.00 32.20
ATOM    740  C   SER A  47       8.753   5.784  -9.872  1.00 34.13
ATOM    741  O   SER A  47       8.972   6.246 -10.989  1.00 23.43
ATOM    742  N   VAL A  48       7.725   4.953  -9.627  1.00 52.44
ATOM    743  H   VAL A  48       7.610   4.560  -8.732  1.00 14.32
ATOM    744  CA  VAL A  48       6.749   4.627 -10.665  1.00  4.31
ATOM    745  HA  VAL A  48       6.768   5.399 -11.419  1.00 41.12
ATOM    746  CB  VAL A  48       7.040   3.236 -11.342  1.00  1.11
ATOM    747  HB  VAL A  48       6.836   2.482 -10.595  1.00 31.35
ATOM    748  CG1 VAL A  48       6.088   2.980 -12.503  1.00 61.34
ATOM    749 1HG1 VAL A  48       6.210   3.755 -13.246  1.00 33.41
ATOM    750 2HG1 VAL A  48       5.069   2.987 -12.143  1.00 30.41
ATOM    751 3HG1 VAL A  48       6.307   2.018 -12.945  1.00 55.51
ATOM    752  CG2 VAL A  48       8.487   3.094 -11.804  1.00  2.14
ATOM    753 1HG2 VAL A  48       8.712   3.867 -12.522  1.00 23.02
ATOM    754 2HG2 VAL A  48       8.627   2.125 -12.261  1.00 72.23
ATOM    755 3HG2 VAL A  48       9.147   3.188 -10.954  1.00 53.50
ATOM    756  C   VAL A  48       5.357   4.540 -10.033  1.00 51.33
ATOM    757  O   VAL A  48       5.178   3.875  -9.022  1.00 43.41
ATOM    758  N   ASN A  49       4.408   5.206 -10.615  1.00 74.15
ATOM    759  H   ASN A  49       4.614   5.784 -11.378  1.00 73.41
ATOM    760  CA  ASN A  49       3.002   5.087 -10.238  1.00 72.05
ATOM    761  HA  ASN A  49       2.929   4.347  -9.452  1.00 62.04
ATOM    762  CB  ASN A  49       2.431   6.441  -9.762  1.00  3.21
ATOM    763 1HB  ASN A  49       2.936   6.723  -8.850  1.00 20.23
ATOM    764 2HB  ASN A  49       2.623   7.193 -10.511  1.00 64.33
ATOM    765  CG  ASN A  49       0.927   6.408  -9.472  1.00 64.12
ATOM    766  OD1 ASN A  49       0.374   5.385  -9.114  1.00 53.34
ATOM    767  ND2 ASN A  49       0.274   7.537  -9.607  1.00 24.03
ATOM    768 2HD2 ASN A  49       0.764   8.338  -9.883  1.00 33.45
ATOM    769 1HD2 ASN A  49      -0.691   7.533  -9.416  1.00 14.41
ATOM    770  C   ASN A  49       2.261   4.571 -11.446  1.00 63.12
ATOM    771  O   ASN A  49       2.508   5.066 -12.551  1.00 73.21
ATOM    772  N   LYS A  50       1.421   3.583 -11.301  1.00 71.22
ATOM    773  H   LYS A  50       1.257   3.191 -10.413  1.00 32.53
ATOM    774  CA  LYS A  50       0.701   3.102 -12.459  1.00 23.21
ATOM    775  HA  LYS A  50       0.904   3.710 -13.327  1.00 44.11
ATOM    776  CB  LYS A  50       1.140   1.668 -12.744  1.00 35.42
ATOM    777 1HB  LYS A  50       0.717   1.033 -11.980  1.00 71.42
ATOM    778 2HB  LYS A  50       0.728   1.371 -13.697  1.00 63.52
ATOM    779  CG  LYS A  50       2.641   1.418 -12.771  1.00 74.14
ATOM    780 1HG  LYS A  50       3.052   1.801 -13.693  1.00 44.15
ATOM    781 2HG  LYS A  50       3.102   1.905 -11.924  1.00 71.40
ATOM    782  CD  LYS A  50       2.884  -0.068 -12.685  1.00 55.24
ATOM    783 1HD  LYS A  50       2.376  -0.395 -11.793  1.00 72.43
ATOM    784 2HD  LYS A  50       2.464  -0.544 -13.558  1.00 21.32
ATOM    785  CE  LYS A  50       4.343  -0.444 -12.534  1.00 54.02
ATOM    786 1HE  LYS A  50       4.879  -0.135 -13.419  1.00 53.44
ATOM    787 2HE  LYS A  50       4.747   0.059 -11.668  1.00 72.41
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ATOM    788  NZ  LYS A  50       4.494  -1.916 -12.356  1.00 12.52
ATOM    789 1HZ  LYS A  50       3.871  -2.224 -11.566  1.00 33.34
ATOM    790 2HZ  LYS A  50       5.444  -2.184 -12.036  1.00 13.21
ATOM    791 3HZ  LYS A  50       4.206  -2.461 -13.188  1.00 52.05
ATOM    792  C   LYS A  50      -0.778   3.032 -12.134  1.00 53.31
ATOM    793  O   LYS A  50      -1.156   2.591 -11.046  1.00 30.13
ATOM    794  N   ASN A  51      -1.607   3.404 -13.081  1.00 30.23
ATOM    795  H   ASN A  51      -1.247   3.815 -13.894  1.00  0.34
ATOM    796  CA  ASN A  51      -3.039   3.212 -12.969  1.00 10.42
ATOM    797  HA  ASN A  51      -3.214   2.804 -11.984  1.00 44.31
ATOM    798  CB  ASN A  51      -3.862   4.512 -13.139  1.00 31.00
ATOM    799 1HB  ASN A  51      -3.669   4.959 -14.101  1.00 50.41
ATOM    800 2HB  ASN A  51      -4.898   4.208 -13.083  1.00 65.33
ATOM    801  CG  ASN A  51      -3.644   5.574 -12.051  1.00 44.02
ATOM    802  OD1 ASN A  51      -2.589   5.684 -11.459  1.00 30.43
ATOM    803  ND2 ASN A  51      -4.659   6.372 -11.795  1.00 24.32
ATOM    804 2HD2 ASN A  51      -5.491   6.255 -12.296  1.00 72.32
ATOM    805 1HD2 ASN A  51      -4.524   7.065 -11.113  1.00 63.12
ATOM    806  C   ASN A  51      -3.485   2.170 -13.975  1.00 41.33
ATOM    807  O   ASN A  51      -3.235   2.322 -15.159  1.00 35.54
ATOM    808  N   ASN A  52      -4.132   1.139 -13.519  1.00 40.15
ATOM    809  H   ASN A  52      -4.279   1.036 -12.550  1.00 45.02
ATOM    810  CA  ASN A  52      -4.655   0.068 -14.391  1.00 65.30
ATOM    811  HA  ASN A  52      -4.169   0.135 -15.354  1.00 42.10
ATOM    812  CB  ASN A  52      -4.353  -1.316 -13.736  1.00 13.43
ATOM    813 1HB  ASN A  52      -3.297  -1.379 -13.523  1.00  1.32
ATOM    814 2HB  ASN A  52      -4.895  -1.376 -12.803  1.00 51.44
ATOM    815  CG  ASN A  52      -4.726  -2.526 -14.591  1.00 64.32
ATOM    816  OD1 ASN A  52      -4.667  -2.484 -15.807  1.00 53.35
ATOM    817  ND2 ASN A  52      -5.111  -3.615 -13.951  1.00 20.45
ATOM    818 2HD2 ASN A  52      -5.151  -3.634 -12.971  1.00 64.42
ATOM    819 1HD2 ASN A  52      -5.348  -4.388 -14.504  1.00 43.11
ATOM    820  C   ASN A  52      -6.179   0.274 -14.559  1.00 65.13
ATOM    821  O   ASN A  52      -6.903  -0.570 -15.066  1.00 53.52
ATOM    822  N   GLY A  53      -6.665   1.404 -14.056  1.00 12.12
ATOM    823  H   GLY A  53      -6.034   1.995 -13.601  1.00 22.53
ATOM    824  CA  GLY A  53      -8.089   1.747 -14.162  1.00 31.53
ATOM    825 1HA  GLY A  53      -8.201   2.819 -14.078  1.00 21.41
ATOM    826 2HA  GLY A  53      -8.461   1.425 -15.124  1.00 23.34
ATOM    827  C   GLY A  53      -8.898   1.073 -13.071  1.00 41.11
ATOM    828  O   GLY A  53      -9.728   1.698 -12.378  1.00 65.54
ATOM    829  N   THR A  54      -8.705  -0.194 -12.951  1.00 33.23
ATOM    830  H   THR A  54      -8.151  -0.636 -13.634  1.00 34.01
ATOM    831  CA  THR A  54      -9.261  -0.942 -11.890  1.00 13.31
ATOM    832  HA  THR A  54     -10.118  -0.443 -11.470  1.00 72.44
ATOM    833  CB  THR A  54      -9.687  -2.394 -12.314  1.00  1.12
ATOM    834  HB  THR A  54     -10.590  -2.296 -12.899  1.00 74.32
ATOM    835  OG1 THR A  54     -10.015  -3.185 -11.161  1.00 62.01
ATOM    836  HG1 THR A  54      -9.224  -3.199 -10.597  1.00  1.20
ATOM    837  CG2 THR A  54      -8.621  -3.096 -13.154  1.00 20.44
ATOM    838 1HG2 THR A  54      -8.960  -4.090 -13.407  1.00 63.44
ATOM    839 2HG2 THR A  54      -7.704  -3.162 -12.588  1.00 53.43
ATOM    840 3HG2 THR A  54      -8.446  -2.534 -14.059  1.00 73.12
ATOM    841  C   THR A  54      -8.317  -0.950 -10.748  1.00 65.35
ATOM    842  O   THR A  54      -8.703  -0.706  -9.638  1.00 15.14
ATOM    843  N   ASP A  55      -7.085  -1.111 -11.037  1.00 23.25
ATOM    844  H   ASP A  55      -6.766  -1.035 -11.957  1.00 62.33
ATOM    845  CA  ASP A  55      -6.127  -1.335 -10.013  1.00 22.23
ATOM    846  HA  ASP A  55      -6.607  -1.207  -9.054  1.00 35.53
ATOM    847  CB  ASP A  55      -5.592  -2.772 -10.119  1.00 74.30
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ATOM    848 1HB  ASP A  55      -4.992  -2.862 -11.013  1.00 71.42
ATOM    849 2HB  ASP A  55      -4.978  -2.989  -9.257  1.00 11.40
ATOM    850  CG  ASP A  55      -6.718  -3.804 -10.185  1.00 44.00
ATOM    851  OD1 ASP A  55      -6.638  -4.723 -10.997  1.00 12.25
ATOM    852  OD2 ASP A  55      -7.768  -3.658  -9.470  1.00 61.51
ATOM    853  C   ASP A  55      -5.043  -0.327 -10.172  1.00 54.45
ATOM    854  O   ASP A  55      -5.004   0.354 -11.182  1.00  5.25
ATOM    855  N   ALA A  56      -4.237  -0.152  -9.190  1.00 63.44
ATOM    856  H   ALA A  56      -4.351  -0.683  -8.370  1.00 62.32
ATOM    857  CA  ALA A  56      -3.143   0.786  -9.278  1.00 24.12
ATOM    858  HA  ALA A  56      -2.839   0.816 -10.315  1.00 34.21
ATOM    859  CB  ALA A  56      -3.575   2.182  -8.850  1.00  1.14
ATOM    860 1HB  ALA A  56      -4.019   2.154  -7.866  1.00  0.24
ATOM    861 2HB  ALA A  56      -4.275   2.582  -9.571  1.00 43.42
ATOM    862 3HB  ALA A  56      -2.706   2.823  -8.831  1.00  3.24
ATOM    863  C   ALA A  56      -1.977   0.275  -8.471  1.00 12.12
ATOM    864  O   ALA A  56      -2.173  -0.380  -7.442  1.00 21.14
ATOM    865  N   GLU A  57      -0.789   0.541  -8.936  1.00 22.11
ATOM    866  H   GLU A  57      -0.690   1.150  -9.702  1.00 41.30
ATOM    867  CA  GLU A  57       0.411   0.026  -8.318  1.00 34.45
ATOM    868  HA  GLU A  57       0.156  -0.477  -7.397  1.00 30.22
ATOM    869  CB  GLU A  57       1.079  -0.961  -9.265  1.00 45.20
ATOM    870 1HB  GLU A  57       0.340  -1.666  -9.615  1.00 32.13
ATOM    871 2HB  GLU A  57       1.447  -0.395 -10.107  1.00 20.11
ATOM    872  CG  GLU A  57       2.243  -1.746  -8.670  1.00 14.40
ATOM    873 1HG  GLU A  57       2.879  -1.066  -8.123  1.00 22.52
ATOM    874 2HG  GLU A  57       1.852  -2.495  -7.998  1.00 20.32
ATOM    875  CD  GLU A  57       3.064  -2.429  -9.737  1.00 13.34
ATOM    876  OE1 GLU A  57       4.297  -2.485  -9.616  1.00 24.10
ATOM    877  OE2 GLU A  57       2.523  -2.818 -10.779  1.00 41.11
ATOM    878  C   GLU A  57       1.359   1.179  -8.048  1.00 63.12
ATOM    879  O   GLU A  57       1.599   2.014  -8.931  1.00 65.11
ATOM    880  N   ILE A  58       1.881   1.234  -6.855  1.00 23.55
ATOM    881  H   ILE A  58       1.646   0.533  -6.206  1.00 14.11
ATOM    882  CA  ILE A  58       2.805   2.273  -6.469  1.00 53.52
ATOM    883  HA  ILE A  58       2.857   3.018  -7.249  1.00 43.50
ATOM    884  CB  ILE A  58       2.379   2.944  -5.133  1.00 53.32
ATOM    885  HB  ILE A  58       2.587   2.246  -4.336  1.00 20.35
ATOM    886  CG2 ILE A  58       3.227   4.179  -4.901  1.00 22.12
ATOM    887 1HG2 ILE A  58       2.903   4.690  -4.006  1.00 73.14
ATOM    888 2HG2 ILE A  58       3.125   4.825  -5.763  1.00 30.13
ATOM    889 3HG2 ILE A  58       4.263   3.890  -4.803  1.00 44.43
ATOM    890  CG1 ILE A  58       0.875   3.317  -5.109  1.00 13.25
ATOM    891 1HG1 ILE A  58       0.294   2.428  -5.303  1.00 42.24
ATOM    892 2HG1 ILE A  58       0.625   3.685  -4.124  1.00 53.32
ATOM    893  CD1 ILE A  58       0.445   4.360  -6.121  1.00  5.31
ATOM    894 1HD1 ILE A  58      -0.614   4.543  -6.019  1.00  3.44
ATOM    895 2HD1 ILE A  58       0.657   4.003  -7.118  1.00  1.42
ATOM    896 3HD1 ILE A  58       0.988   5.277  -5.943  1.00  1.32
ATOM    897  C   ILE A  58       4.172   1.631  -6.242  1.00 44.35
ATOM    898  O   ILE A  58       4.277   0.678  -5.464  1.00 13.44
ATOM    899  N   VAL A  59       5.201   2.120  -6.916  1.00 52.24
ATOM    900  H   VAL A  59       5.081   2.859  -7.556  1.00 21.23
ATOM    901  CA  VAL A  59       6.540   1.580  -6.754  1.00 24.54
ATOM    902  HA  VAL A  59       6.514   0.816  -5.990  1.00 73.40
ATOM    903  CB  VAL A  59       7.078   0.945  -8.070  1.00 41.21
ATOM    904  HB  VAL A  59       7.250   1.755  -8.764  1.00  5.40
ATOM    905  CG1 VAL A  59       8.417   0.252  -7.845  1.00 65.42
ATOM    906 1HG1 VAL A  59       9.137   0.970  -7.483  1.00  2.42
ATOM    907 2HG1 VAL A  59       8.767  -0.170  -8.777  1.00  1.54
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ATOM    908 3HG1 VAL A  59       8.297  -0.536  -7.117  1.00 31.42
ATOM    909  CG2 VAL A  59       6.075  -0.010  -8.685  1.00 13.33
ATOM    910 1HG2 VAL A  59       6.480  -0.426  -9.595  1.00 40.23
ATOM    911 2HG2 VAL A  59       5.161   0.521  -8.907  1.00  3.35
ATOM    912 3HG2 VAL A  59       5.866  -0.807  -7.986  1.00 45.45
ATOM    913  C   VAL A  59       7.516   2.680  -6.340  1.00 12.34
ATOM    914  O   VAL A  59       7.757   3.626  -7.100  1.00 41.31
ATOM    915  N   SER A  60       8.045   2.568  -5.163  1.00 31.02
ATOM    916  H   SER A  60       7.743   1.846  -4.566  1.00 73.41
ATOM    917  CA  SER A  60       9.064   3.462  -4.685  1.00 33.42
ATOM    918  HA  SER A  60       9.271   4.198  -5.449  1.00 32.41
ATOM    919  CB  SER A  60       8.580   4.153  -3.411  1.00 24.45
ATOM    920 1HB  SER A  60       8.450   3.428  -2.623  1.00  2.33
ATOM    921 2HB  SER A  60       9.301   4.896  -3.104  1.00 50.41
ATOM    922  OG  SER A  60       7.339   4.801  -3.621  1.00 74.52
ATOM    923  HG  SER A  60       7.365   5.601  -3.082  1.00 22.32
ATOM    924  C   SER A  60      10.321   2.635  -4.401  1.00 25.02
ATOM    925  O   SER A  60      10.225   1.486  -3.940  1.00 14.23
ATOM    926  N   ALA A  61      11.473   3.183  -4.675  1.00 52.24
ATOM    927  H   ALA A  61      11.528   4.103  -5.018  1.00 24.05
ATOM    928  CA  ALA A  61      12.718   2.484  -4.460  1.00 43.40
ATOM    929  HA  ALA A  61      12.517   1.610  -3.859  1.00 42.14
ATOM    930  CB  ALA A  61      13.316   2.045  -5.792  1.00 62.14
ATOM    931 1HB  ALA A  61      14.240   1.512  -5.618  1.00 55.24
ATOM    932 2HB  ALA A  61      13.510   2.915  -6.403  1.00 23.31
ATOM    933 3HB  ALA A  61      12.617   1.399  -6.304  1.00 55.10
ATOM    934  C   ALA A  61      13.666   3.390  -3.723  1.00 13.54
ATOM    935  O   ALA A  61      13.573   4.603  -3.844  1.00 72.21
ATOM    936  N   SER A  62      14.551   2.824  -2.957  1.00 75.13
ATOM    937  H   SER A  62      14.618   1.847  -2.895  1.00 74.34
ATOM    938  CA  SER A  62      15.470   3.606  -2.197  1.00 44.04
ATOM    939  HA  SER A  62      15.177   4.642  -2.280  1.00 61.00
ATOM    940  CB  SER A  62      15.394   3.191  -0.734  1.00  4.40
ATOM    941 1HB  SER A  62      15.720   2.165  -0.640  1.00 53.55
ATOM    942 2HB  SER A  62      16.037   3.826  -0.142  1.00 40.44
ATOM    943  OG  SER A  62      14.060   3.299  -0.247  1.00 11.24
ATOM    944  HG  SER A  62      13.591   4.038  -0.658  1.00 41.42
ATOM    945  C   SER A  62      16.890   3.445  -2.745  1.00 71.54
ATOM    946  O   SER A  62      17.210   2.443  -3.376  1.00  4.02
ATOM    947  N   ASP A  63      17.710   4.444  -2.524  1.00 13.43
ATOM    948  H   ASP A  63      17.413   5.246  -2.037  1.00  3.50
ATOM    949  CA  ASP A  63      19.109   4.453  -2.965  1.00 62.41
ATOM    950  HA  ASP A  63      19.198   3.974  -3.929  1.00 31.05
ATOM    951  CB  ASP A  63      19.582   5.922  -3.077  1.00 11.31
ATOM    952 1HB  ASP A  63      20.581   5.944  -3.490  1.00 52.20
ATOM    953 2HB  ASP A  63      18.912   6.459  -3.734  1.00 21.25
ATOM    954  CG  ASP A  63      19.607   6.640  -1.716  1.00 73.03
ATOM    955  OD1 ASP A  63      18.613   6.484  -0.928  1.00 43.34
ATOM    956  OD2 ASP A  63      20.581   7.317  -1.413  1.00 73.31
ATOM    957  C   ASP A  63      19.969   3.742  -1.923  1.00 43.11
ATOM    958  O   ASP A  63      20.955   3.078  -2.234  1.00 32.33
ATOM    959  N   SER A  64      19.529   3.857  -0.707  1.00 12.14
ATOM    960  H   SER A  64      18.716   4.384  -0.556  1.00 44.11
ATOM    961  CA  SER A  64      20.181   3.347   0.447  1.00 35.32
ATOM    962  HA  SER A  64      21.246   3.442   0.308  1.00 65.41
ATOM    963  CB  SER A  64      19.771   4.247   1.594  1.00  3.35
ATOM    964 1HB  SER A  64      19.701   3.668   2.504  1.00  1.53
ATOM    965 2HB  SER A  64      20.492   5.043   1.716  1.00 41.03
ATOM    966  OG  SER A  64      18.481   4.834   1.298  1.00 12.20
ATOM    967  HG  SER A  64      18.655   5.607   0.728  1.00 14.12
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ATOM    968  C   SER A  64      19.836   1.882   0.672  1.00 34.25
ATOM    969  O   SER A  64      20.654   1.104   1.166  1.00 71.10
ATOM    970  N   ASP A  65      18.653   1.493   0.241  1.00  5.30
ATOM    971  H   ASP A  65      18.075   2.119  -0.235  1.00 21.53
ATOM    972  CA  ASP A  65      18.259   0.122   0.303  1.00  4.32
ATOM    973  HA  ASP A  65      19.075  -0.470   0.692  1.00 75.40
ATOM    974  CB  ASP A  65      16.949  -0.111   1.122  1.00 62.04
ATOM    975 1HB  ASP A  65      16.161   0.494   0.702  1.00 30.23
ATOM    976 2HB  ASP A  65      16.679  -1.150   0.999  1.00 55.43
ATOM    977  CG  ASP A  65      17.002   0.191   2.623  1.00 35.20
ATOM    978  OD1 ASP A  65      18.037   0.637   3.139  1.00 42.43
ATOM    979  OD2 ASP A  65      15.966  -0.021   3.321  1.00 74.31
ATOM    980  C   ASP A  65      18.005  -0.212  -1.115  1.00 23.34
ATOM    981  O   ASP A  65      16.928   0.011  -1.639  1.00 74.43
ATOM    982  N   SER A  66      19.021  -0.677  -1.744  1.00 53.30
ATOM    983  H   SER A  66      19.855  -0.839  -1.259  1.00 14.34
ATOM    984  CA  SER A  66      19.009  -0.955  -3.143  1.00 72.21
ATOM    985  HA  SER A  66      18.594  -0.086  -3.629  1.00 71.42
ATOM    986  CB  SER A  66      20.436  -1.088  -3.602  1.00 21.43
ATOM    987 1HB  SER A  66      20.427  -1.485  -4.600  1.00 54.32
ATOM    988 2HB  SER A  66      20.898  -0.112  -3.610  1.00 21.50
ATOM    989  OG  SER A  66      21.169  -1.939  -2.717  1.00 20.24
ATOM    990  HG  SER A  66      22.075  -1.617  -2.686  1.00 30.21
ATOM    991  C   SER A  66      18.138  -2.153  -3.524  1.00 43.30
ATOM    992  O   SER A  66      17.409  -2.129  -4.504  1.00 34.22
ATOM    993  N   THR A  67      18.223  -3.175  -2.726  1.00  5.15
ATOM    994  H   THR A  67      18.786  -3.083  -1.930  1.00 10.31
ATOM    995  CA  THR A  67      17.539  -4.415  -2.973  1.00 42.03
ATOM    996  HA  THR A  67      17.340  -4.465  -4.034  1.00 14.44
ATOM    997  CB  THR A  67      18.468  -5.618  -2.591  1.00 42.14
ATOM    998  HB  THR A  67      19.321  -5.589  -3.256  1.00 33.14
ATOM    999  OG1 THR A  67      17.811  -6.871  -2.782  1.00  4.34
ATOM   1000  HG1 THR A  67      16.919  -6.771  -2.427  1.00 72.33
ATOM   1001  CG2 THR A  67      18.974  -5.499  -1.154  1.00 35.30
ATOM   1002 1HG2 THR A  67      19.547  -4.590  -1.052  1.00 14.30
ATOM   1003 2HG2 THR A  67      19.596  -6.350  -0.918  1.00  4.51
ATOM   1004 3HG2 THR A  67      18.129  -5.472  -0.481  1.00  3.43
ATOM   1005  C   THR A  67      16.188  -4.462  -2.228  1.00 43.24
ATOM   1006  O   THR A  67      15.525  -5.508  -2.154  1.00 11.11
ATOM   1007  N   ASP A  68      15.766  -3.333  -1.719  1.00  5.14
ATOM   1008  H   ASP A  68      16.256  -2.498  -1.876  1.00  2.34
ATOM   1009  CA  ASP A  68      14.526  -3.265  -0.994  1.00 11.22
ATOM   1010  HA  ASP A  68      14.059  -4.238  -1.009  1.00 25.31
ATOM   1011  CB  ASP A  68      14.780  -2.817   0.445  1.00 64.40
ATOM   1012 1HB  ASP A  68      15.732  -3.205   0.776  1.00 60.35
ATOM   1013 2HB  ASP A  68      14.807  -1.739   0.465  1.00 41.42
ATOM   1014  CG  ASP A  68      13.718  -3.281   1.412  1.00 23.32
ATOM   1015  OD1 ASP A  68      12.599  -2.764   1.388  1.00 43.31
ATOM   1016  OD2 ASP A  68      14.024  -4.192   2.233  1.00 31.51
ATOM   1017  C   ASP A  68      13.652  -2.264  -1.721  1.00 43.41
ATOM   1018  O   ASP A  68      14.148  -1.239  -2.183  1.00 43.15
ATOM   1019  N   SER A  69      12.394  -2.559  -1.876  1.00 55.10
ATOM   1020  H   SER A  69      11.993  -3.329  -1.422  1.00 61.12
ATOM   1021  CA  SER A  69      11.526  -1.698  -2.634  1.00 40.52
ATOM   1022  HA  SER A  69      11.920  -0.695  -2.559  1.00 51.35
ATOM   1023  CB  SER A  69      11.539  -2.109  -4.122  1.00 73.45
ATOM   1024 1HB  SER A  69      10.726  -1.620  -4.636  1.00 74.01
ATOM   1025 2HB  SER A  69      12.476  -1.809  -4.569  1.00 23.51
ATOM   1026  OG  SER A  69      11.389  -3.529  -4.266  1.00 11.24
ATOM   1027  HG  SER A  69      12.095  -3.873  -3.706  1.00 54.44
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ATOM   1028  C   SER A  69      10.123  -1.707  -2.075  1.00 30.15
ATOM   1029  O   SER A  69       9.614  -2.761  -1.661  1.00 63.15
ATOM   1030  N   LEU A  70       9.509  -0.556  -2.054  1.00 42.04
ATOM   1031  H   LEU A  70       9.966   0.246  -2.394  1.00 70.12
ATOM   1032  CA  LEU A  70       8.161  -0.433  -1.605  1.00 11.54
ATOM   1033  HA  LEU A  70       7.942  -1.262  -0.948  1.00 72.23
ATOM   1034  CB  LEU A  70       7.979   0.916  -0.837  1.00 43.11
ATOM   1035 1HB  LEU A  70       8.736   0.954  -0.067  1.00  1.12
ATOM   1036 2HB  LEU A  70       8.187   1.711  -1.537  1.00 64.12
ATOM   1037  CG  LEU A  70       6.611   1.228  -0.150  1.00 34.35
ATOM   1038  HG  LEU A  70       6.723   2.144   0.409  1.00 13.32
ATOM   1039  CD1 LEU A  70       5.487   1.463  -1.147  1.00 63.03
ATOM   1040 1HD1 LEU A  70       5.723   2.322  -1.756  1.00 62.32
ATOM   1041 2HD1 LEU A  70       4.561   1.638  -0.620  1.00 31.14
ATOM   1042 3HD1 LEU A  70       5.388   0.594  -1.779  1.00 70.14
ATOM   1043  CD2 LEU A  70       6.226   0.136   0.830  1.00 32.23
ATOM   1044 1HD2 LEU A  70       6.986   0.051   1.593  1.00 34.25
ATOM   1045 2HD2 LEU A  70       6.132  -0.804   0.307  1.00 43.13
ATOM   1046 3HD2 LEU A  70       5.282   0.386   1.291  1.00 34.40
ATOM   1047  C   LEU A  70       7.283  -0.513  -2.838  1.00 51.55
ATOM   1048  O   LEU A  70       7.319   0.362  -3.699  1.00 65.51
ATOM   1049  N   GLN A  71       6.548  -1.565  -2.936  1.00 61.04
ATOM   1050  H   GLN A  71       6.591  -2.244  -2.232  1.00 11.23
ATOM   1051  CA  GLN A  71       5.653  -1.776  -4.031  1.00 11.02
ATOM   1052  HA  GLN A  71       5.564  -0.846  -4.574  1.00 51.31
ATOM   1053  CB  GLN A  71       6.228  -2.862  -4.952  1.00 34.31
ATOM   1054 1HB  GLN A  71       7.188  -2.533  -5.319  1.00 24.23
ATOM   1055 2HB  GLN A  71       6.380  -3.751  -4.361  1.00 53.33
ATOM   1056  CG  GLN A  71       5.387  -3.241  -6.157  1.00 34.15
ATOM   1057 1HG  GLN A  71       4.446  -3.644  -5.810  1.00 24.40
ATOM   1058 2HG  GLN A  71       5.203  -2.361  -6.754  1.00 65.41
ATOM   1059  CD  GLN A  71       6.081  -4.290  -7.025  1.00  2.32
ATOM   1060  OE1 GLN A  71       6.879  -5.128  -6.532  1.00 71.23
ATOM   1061  NE2 GLN A  71       5.819  -4.264  -8.299  1.00 41.23
ATOM   1062 2HE2 GLN A  71       5.195  -3.571  -8.642  1.00 54.45
ATOM   1063 1HE2 GLN A  71       6.219  -4.932  -8.886  1.00 21.30
ATOM   1064  C   GLN A  71       4.300  -2.144  -3.453  1.00 45.33
ATOM   1065  O   GLN A  71       4.182  -3.104  -2.692  1.00 52.04
ATOM   1066  N   VAL A  72       3.316  -1.354  -3.736  1.00 71.43
ATOM   1067  H   VAL A  72       3.483  -0.595  -4.341  1.00 41.14
ATOM   1068  CA  VAL A  72       1.990  -1.577  -3.209  1.00  2.02
ATOM   1069  HA  VAL A  72       1.999  -2.520  -2.683  1.00 61.43
ATOM   1070  CB  VAL A  72       1.571  -0.454  -2.208  1.00 73.02
ATOM   1071  HB  VAL A  72       1.656   0.501  -2.706  1.00 35.14
ATOM   1072  CG1 VAL A  72       0.136  -0.634  -1.744  1.00 64.11
ATOM   1073 1HG1 VAL A  72      -0.125   0.160  -1.061  1.00 74.05
ATOM   1074 2HG1 VAL A  72       0.037  -1.588  -1.246  1.00 14.40
ATOM   1075 3HG1 VAL A  72      -0.525  -0.607  -2.599  1.00 41.44
ATOM   1076  CG2 VAL A  72       2.489  -0.444  -1.002  1.00 75.35
ATOM   1077 1HG2 VAL A  72       3.509  -0.309  -1.329  1.00 75.40
ATOM   1078 2HG2 VAL A  72       2.401  -1.381  -0.471  1.00 45.33
ATOM   1079 3HG2 VAL A  72       2.212   0.370  -0.349  1.00 12.23
ATOM   1080  C   VAL A  72       0.995  -1.659  -4.340  1.00 11.53
ATOM   1081  O   VAL A  72       0.909  -0.749  -5.159  1.00 64.21
ATOM   1082  N   ALA A  73       0.269  -2.738  -4.388  1.00 44.23
ATOM   1083  H   ALA A  73       0.396  -3.434  -3.706  1.00 22.42
ATOM   1084  CA  ALA A  73      -0.731  -2.932  -5.395  1.00 14.41
ATOM   1085  HA  ALA A  73      -0.648  -2.127  -6.109  1.00 43.42
ATOM   1086  CB  ALA A  73      -0.532  -4.255  -6.116  1.00 31.34
ATOM   1087 1HB  ALA A  73       0.460  -4.285  -6.542  1.00 71.42
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ATOM   1088 2HB  ALA A  73      -1.265  -4.349  -6.903  1.00 61.44
ATOM   1089 3HB  ALA A  73      -0.648  -5.068  -5.414  1.00 63.54
ATOM   1090  C   ALA A  73      -2.103  -2.849  -4.771  1.00 75.20
ATOM   1091  O   ALA A  73      -2.368  -3.456  -3.718  1.00  4.34
ATOM   1092  N   MET A  74      -2.954  -2.097  -5.398  1.00 25.24
ATOM   1093  H   MET A  74      -2.675  -1.650  -6.232  1.00 12.13
ATOM   1094  CA  MET A  74      -4.301  -1.873  -4.943  1.00 34.10
ATOM   1095  HA  MET A  74      -4.440  -2.367  -3.991  1.00 54.25
ATOM   1096  CB  MET A  74      -4.540  -0.364  -4.776  1.00 31.42
ATOM   1097 1HB  MET A  74      -4.336   0.122  -5.718  1.00 45.25
ATOM   1098 2HB  MET A  74      -5.572  -0.200  -4.508  1.00 73.22
ATOM   1099  CG  MET A  74      -3.660   0.272  -3.714  1.00 75.14
ATOM   1100 1HG  MET A  74      -3.878  -0.187  -2.764  1.00  4.30
ATOM   1101 2HG  MET A  74      -2.632   0.061  -3.967  1.00 22.23
ATOM   1102  SD  MET A  74      -3.862   2.055  -3.562  1.00 41.34
ATOM   1103  CE  MET A  74      -3.047   2.604  -5.048  1.00 43.00
ATOM   1104 1HE  MET A  74      -3.557   2.195  -5.907  1.00  2.00
ATOM   1105 2HE  MET A  74      -2.023   2.263  -5.038  1.00 41.43
ATOM   1106 3HE  MET A  74      -3.070   3.682  -5.087  1.00 63.02
ATOM   1107  C   MET A  74      -5.250  -2.447  -5.967  1.00 53.32
ATOM   1108  O   MET A  74      -5.142  -2.128  -7.142  1.00 40.43
ATOM   1109  N   LYS A  75      -6.155  -3.286  -5.521  1.00 64.12
ATOM   1110  H   LYS A  75      -6.219  -3.481  -4.563  1.00 31.53
ATOM   1111  CA  LYS A  75      -7.088  -3.981  -6.381  1.00 11.31
ATOM   1112  HA  LYS A  75      -6.918  -3.791  -7.434  1.00 44.02
ATOM   1113  CB  LYS A  75      -6.979  -5.493  -6.106  1.00 70.41
ATOM   1114 1HB  LYS A  75      -5.963  -5.810  -6.288  1.00 25.42
ATOM   1115 2HB  LYS A  75      -7.214  -5.659  -5.065  1.00 23.21
ATOM   1116  CG  LYS A  75      -7.902  -6.352  -6.946  1.00 31.33
ATOM   1117 1HG  LYS A  75      -8.048  -7.304  -6.458  1.00 23.33
ATOM   1118 2HG  LYS A  75      -8.852  -5.849  -7.043  1.00 21.41
ATOM   1119  CD  LYS A  75      -7.327  -6.586  -8.317  1.00 72.34
ATOM   1120 1HD  LYS A  75      -6.839  -5.683  -8.653  1.00  1.32
ATOM   1121 2HD  LYS A  75      -6.605  -7.388  -8.263  1.00 71.13
ATOM   1122  CE  LYS A  75      -8.402  -6.956  -9.311  1.00  3.23
ATOM   1123 1HE  LYS A  75      -7.936  -7.296 -10.222  1.00 34.34
ATOM   1124 2HE  LYS A  75      -8.989  -7.743  -8.865  1.00 54.43
ATOM   1125  NZ  LYS A  75      -9.282  -5.799  -9.600  1.00 42.41
ATOM   1126 1HZ  LYS A  75      -9.882  -5.951 -10.433  1.00 51.43
ATOM   1127 2HZ  LYS A  75      -8.655  -4.978  -9.778  1.00 40.34
ATOM   1128 3HZ  LYS A  75      -9.879  -5.531  -8.788  1.00  1.11
ATOM   1129  C   LYS A  75      -8.494  -3.543  -6.044  1.00 51.12
ATOM   1130  O   LYS A  75      -8.930  -3.652  -4.890  1.00 21.14
ATOM   1131  N   LYS A  76      -9.190  -3.084  -7.040  1.00 35.14
ATOM   1132  H   LYS A  76      -8.747  -3.031  -7.919  1.00 40.32
ATOM   1133  CA  LYS A  76     -10.553  -2.651  -6.893  1.00 75.12
ATOM   1134  HA  LYS A  76     -10.665  -2.207  -5.915  1.00 14.23
ATOM   1135  CB  LYS A  76     -10.902  -1.617  -7.943  1.00 50.25
ATOM   1136 1HB  LYS A  76     -10.153  -0.840  -7.969  1.00 25.43
ATOM   1137 2HB  LYS A  76     -10.872  -2.136  -8.890  1.00 43.21
ATOM   1138  CG  LYS A  76     -12.282  -0.971  -7.809  1.00 14.53
ATOM   1139 1HG  LYS A  76     -13.045  -1.715  -7.986  1.00 22.04
ATOM   1140 2HG  LYS A  76     -12.391  -0.573  -6.811  1.00 21.13
ATOM   1141  CD  LYS A  76     -12.439   0.165  -8.814  1.00 53.14
ATOM   1142 1HD  LYS A  76     -13.391   0.648  -8.657  1.00 50.14
ATOM   1143 2HD  LYS A  76     -11.644   0.880  -8.665  1.00 31.32
ATOM   1144  CE  LYS A  76     -12.383  -0.345 -10.241  1.00 14.24
ATOM   1145 1HE  LYS A  76     -11.557  -1.032 -10.330  1.00 73.21
ATOM   1146 2HE  LYS A  76     -13.300  -0.882 -10.431  1.00 53.45
ATOM   1147  NZ  LYS A  76     -12.248   0.766 -11.228  1.00 11.33
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ATOM   1148 1HZ  LYS A  76     -13.007   1.465 -11.109  1.00  5.04
ATOM   1149 2HZ  LYS A  76     -12.295   0.387 -12.194  1.00 41.30
ATOM   1150 3HZ  LYS A  76     -11.326   1.243 -11.132  1.00 23.14
ATOM   1151  C   LYS A  76     -11.485  -3.828  -7.017  1.00 40.51
ATOM   1152  O   LYS A  76     -11.373  -4.640  -7.963  1.00 70.50
ATOM   1153  N   LEU A  77     -12.333  -3.958  -6.053  1.00 35.33
ATOM   1154  H   LEU A  77     -12.288  -3.326  -5.298  1.00 43.22
ATOM   1155  CA  LEU A  77     -13.369  -4.952  -6.050  1.00 71.54
ATOM   1156  HA  LEU A  77     -13.107  -5.693  -6.792  1.00 43.40
ATOM   1157  CB  LEU A  77     -13.525  -5.636  -4.663  1.00 72.24
ATOM   1158 1HB  LEU A  77     -13.464  -4.851  -3.922  1.00 34.54
ATOM   1159 2HB  LEU A  77     -14.509  -6.077  -4.607  1.00 31.22
ATOM   1160  CG  LEU A  77     -12.483  -6.709  -4.269  1.00 12.24
ATOM   1161  HG  LEU A  77     -12.438  -7.446  -5.055  1.00 22.42
ATOM   1162  CD1 LEU A  77     -11.087  -6.133  -4.112  1.00 73.22
ATOM   1163 1HD1 LEU A  77     -10.783  -5.674  -5.040  1.00 24.32
ATOM   1164 2HD1 LEU A  77     -10.399  -6.927  -3.864  1.00 32.12
ATOM   1165 3HD1 LEU A  77     -11.086  -5.394  -3.324  1.00 44.22
ATOM   1166  CD2 LEU A  77     -12.910  -7.421  -2.993  1.00 62.41
ATOM   1167 1HD2 LEU A  77     -12.180  -8.175  -2.741  1.00  2.02
ATOM   1168 2HD2 LEU A  77     -13.873  -7.888  -3.143  1.00  2.22
ATOM   1169 3HD2 LEU A  77     -12.979  -6.706  -2.187  1.00 11.23
ATOM   1170  C   LEU A  77     -14.670  -4.281  -6.468  1.00  1.45
ATOM   1171  O   LEU A  77     -14.894  -3.109  -6.142  1.00 65.04
ATOM   1172  N   PRO A  78     -15.561  -4.999  -7.173  1.00 73.43
ATOM   1173  CD  PRO A  78     -15.438  -6.438  -7.506  1.00 53.32
ATOM   1174  CA  PRO A  78     -16.819  -4.421  -7.693  1.00 73.30
ATOM   1175  HA  PRO A  78     -16.635  -3.500  -8.226  1.00 45.33
ATOM   1176  CB  PRO A  78     -17.328  -5.498  -8.658  1.00 41.12
ATOM   1177 1HB  PRO A  78     -18.409  -5.506  -8.657  1.00 22.02
ATOM   1178 2HB  PRO A  78     -16.950  -5.316  -9.654  1.00  3.43
ATOM   1179  CG  PRO A  78     -16.763  -6.777  -8.143  1.00  1.24
ATOM   1180 1HG  PRO A  78     -17.439  -7.199  -7.413  1.00 44.14
ATOM   1181 2HG  PRO A  78     -16.605  -7.469  -8.956  1.00 22.21
ATOM   1182 1HD  PRO A  78     -15.297  -7.020  -6.608  1.00 12.10
ATOM   1183 2HD  PRO A  78     -14.614  -6.601  -8.182  1.00 75.41
ATOM   1184  C   PRO A  78     -17.835  -4.163  -6.579  1.00 13.25
ATOM   1185  O   PRO A  78     -18.887  -3.578  -6.789  1.00 24.11
ATOM   1186  N   ASN A  79     -17.477  -4.585  -5.391  1.00 13.32
ATOM   1187  H   ASN A  79     -16.617  -5.048  -5.327  1.00 61.53
ATOM   1188  CA  ASN A  79     -18.297  -4.415  -4.205  1.00  0.42
ATOM   1189  HA  ASN A  79     -19.336  -4.391  -4.492  1.00 22.33
ATOM   1190  CB  ASN A  79     -18.069  -5.587  -3.235  1.00 52.22
ATOM   1191 1HB  ASN A  79     -17.034  -5.586  -2.923  1.00 73.11
ATOM   1192 2HB  ASN A  79     -18.697  -5.454  -2.367  1.00  1.43
ATOM   1193  CG  ASN A  79     -18.371  -6.941  -3.847  1.00 73.43
ATOM   1194  OD1 ASN A  79     -17.504  -7.560  -4.452  1.00 54.45
ATOM   1195  ND2 ASN A  79     -19.582  -7.417  -3.684  1.00 55.14
ATOM   1196 2HD2 ASN A  79     -20.238  -6.889  -3.183  1.00 33.01
ATOM   1197 1HD2 ASN A  79     -19.772  -8.293  -4.079  1.00 51.42
ATOM   1198  C   ASN A  79     -17.917  -3.120  -3.508  1.00 32.14
ATOM   1199  O   ASN A  79     -18.353  -2.867  -2.396  1.00 61.33
ATOM   1200  N   ASN A  80     -17.094  -2.304  -4.194  1.00 54.32
ATOM   1201  H   ASN A  80     -16.829  -2.574  -5.098  1.00 64.20
ATOM   1202  CA  ASN A  80     -16.561  -1.032  -3.661  1.00 25.12
ATOM   1203  HA  ASN A  80     -15.971  -0.611  -4.463  1.00 14.02
ATOM   1204  CB  ASN A  80     -17.661  -0.023  -3.268  1.00 12.20
ATOM   1205 1HB  ASN A  80     -18.443  -0.544  -2.737  1.00 51.54
ATOM   1206 2HB  ASN A  80     -17.232   0.727  -2.619  1.00 10.42
ATOM   1207  CG  ASN A  80     -18.280   0.671  -4.463  1.00 53.35
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ATOM   1208  OD1 ASN A  80     -17.798   1.716  -4.901  1.00 53.25
ATOM   1209  ND2 ASN A  80     -19.347   0.122  -4.989  1.00 74.43
ATOM   1210 2HD2 ASN A  80     -19.691  -0.704  -4.588  1.00 70.05
ATOM   1211 1HD2 ASN A  80     -19.749   0.564  -5.764  1.00 42.22
ATOM   1212  C   ASN A  80     -15.613  -1.280  -2.519  1.00 42.52
ATOM   1213  O   ASN A  80     -15.435  -0.452  -1.651  1.00  5.22
ATOM   1214  N   ALA A  81     -14.964  -2.408  -2.584  1.00 55.24
ATOM   1215  H   ALA A  81     -15.132  -2.992  -3.350  1.00  2.33
ATOM   1216  CA  ALA A  81     -13.980  -2.798  -1.620  1.00 75.22
ATOM   1217  HA  ALA A  81     -13.988  -2.090  -0.805  1.00 52.31
ATOM   1218  CB  ALA A  81     -14.287  -4.188  -1.089  1.00 31.13
ATOM   1219 1HB  ALA A  81     -13.521  -4.474  -0.384  1.00 50.01
ATOM   1220 2HB  ALA A  81     -14.313  -4.886  -1.911  1.00 60.22
ATOM   1221 3HB  ALA A  81     -15.248  -4.177  -0.595  1.00 20.20
ATOM   1222  C   ALA A  81     -12.632  -2.777  -2.305  1.00 75.12
ATOM   1223  O   ALA A  81     -12.571  -2.787  -3.539  1.00 12.13
ATOM   1224  N   THR A  82     -11.577  -2.741  -1.551  1.00 32.21
ATOM   1225  H   THR A  82     -11.652  -2.762  -0.570  1.00 61.11
ATOM   1226  CA  THR A  82     -10.263  -2.695  -2.121  1.00 51.20
ATOM   1227  HA  THR A  82     -10.325  -2.957  -3.167  1.00 52.33
ATOM   1228  CB  THR A  82      -9.675  -1.278  -1.994  1.00 62.31
ATOM   1229  HB  THR A  82      -9.481  -1.090  -0.950  1.00 34.30
ATOM   1230  OG1 THR A  82     -10.618  -0.327  -2.495  1.00 24.25
ATOM   1231  HG1 THR A  82     -11.353  -0.259  -1.871  1.00 43.22
ATOM   1232  CG2 THR A  82      -8.374  -1.152  -2.779  1.00 10.31
ATOM   1233 1HG2 THR A  82      -7.638  -1.828  -2.369  1.00 15.04
ATOM   1234 2HG2 THR A  82      -8.009  -0.137  -2.724  1.00 14.53
ATOM   1235 3HG2 THR A  82      -8.556  -1.412  -3.811  1.00 35.44
ATOM   1236  C   THR A  82      -9.361  -3.681  -1.393  1.00 51.33
ATOM   1237  O   THR A  82      -9.331  -3.716  -0.169  1.00 33.13
ATOM   1238  N   ARG A  83      -8.651  -4.479  -2.124  1.00 31.21
ATOM   1239  H   ARG A  83      -8.714  -4.430  -3.103  1.00 62.44
ATOM   1240  CA  ARG A  83      -7.753  -5.412  -1.534  1.00 43.34
ATOM   1241  HA  ARG A  83      -7.972  -5.469  -0.479  1.00  0.43
ATOM   1242  CB  ARG A  83      -7.838  -6.787  -2.156  1.00 10.12
ATOM   1243 1HB  ARG A  83      -8.874  -7.024  -2.347  1.00 15.43
ATOM   1244 2HB  ARG A  83      -7.287  -6.797  -3.084  1.00 10.12
ATOM   1245  CG  ARG A  83      -7.255  -7.845  -1.246  1.00 21.54
ATOM   1246 1HG  ARG A  83      -6.340  -7.464  -0.817  1.00 31.11
ATOM   1247 2HG  ARG A  83      -7.963  -8.048  -0.454  1.00 15.43
ATOM   1248  CD  ARG A  83      -6.945  -9.119  -1.971  1.00 33.32
ATOM   1249 1HD  ARG A  83      -6.788  -9.862  -1.205  1.00 53.11
ATOM   1250 2HD  ARG A  83      -7.789  -9.395  -2.583  1.00 75.32
ATOM   1251  NE  ARG A  83      -5.729  -8.980  -2.814  1.00 41.43
ATOM   1252  HE  ARG A  83      -5.274  -8.113  -2.725  1.00  2.25
ATOM   1253  CZ  ARG A  83      -5.197  -9.941  -3.591  1.00 31.12
ATOM   1254  NH1 ARG A  83      -5.847 -11.095  -3.781  1.00 55.30
ATOM   1255 1HH1 ARG A  83      -6.735 -11.261  -3.349  1.00 54.43
ATOM   1256 2HH1 ARG A  83      -5.483 -11.835  -4.349  1.00 63.21
ATOM   1257  NH2 ARG A  83      -4.006  -9.742  -4.168  1.00 50.54
ATOM   1258 1HH2 ARG A  83      -3.494  -8.882  -4.021  1.00 33.12
ATOM   1259 2HH2 ARG A  83      -3.557 -10.412  -4.762  1.00  1.11
ATOM   1260  C   ARG A  83      -6.363  -4.875  -1.715  1.00 64.23
ATOM   1261  O   ARG A  83      -6.009  -4.425  -2.812  1.00 14.42
ATOM   1262  N   ILE A  84      -5.580  -4.917  -0.687  1.00 53.40
ATOM   1263  H   ILE A  84      -5.868  -5.363   0.142  1.00 65.02
ATOM   1264  CA  ILE A  84      -4.284  -4.327  -0.739  1.00 64.22
ATOM   1265  HA  ILE A  84      -4.192  -3.774  -1.662  1.00 22.02
ATOM   1266  CB  ILE A  84      -4.074  -3.350   0.476  1.00 70.10
ATOM   1267  HB  ILE A  84      -4.975  -2.767   0.589  1.00 73.34
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ATOM   1268  CG2 ILE A  84      -3.852  -4.104   1.754  1.00 14.22
ATOM   1269 1HG2 ILE A  84      -2.967  -4.707   1.617  1.00 71.04
ATOM   1270 2HG2 ILE A  84      -4.703  -4.741   1.946  1.00 70.31
ATOM   1271 3HG2 ILE A  84      -3.705  -3.414   2.573  1.00 65.33
ATOM   1272  CG1 ILE A  84      -2.911  -2.401   0.253  1.00 63.31
ATOM   1273 1HG1 ILE A  84      -2.709  -1.867   1.170  1.00 42.41
ATOM   1274 2HG1 ILE A  84      -2.035  -2.968  -0.031  1.00 14.41
ATOM   1275  CD1 ILE A  84      -3.180  -1.394  -0.815  1.00  5.51
ATOM   1276 1HD1 ILE A  84      -3.317  -1.902  -1.758  1.00 11.33
ATOM   1277 2HD1 ILE A  84      -2.349  -0.708  -0.884  1.00 53.42
ATOM   1278 3HD1 ILE A  84      -4.083  -0.854  -0.567  1.00 22.12
ATOM   1279  C   ILE A  84      -3.244  -5.454  -0.698  1.00 73.35
ATOM   1280  O   ILE A  84      -3.430  -6.491  -0.033  1.00  2.24
ATOM   1281  N   SER A  85      -2.266  -5.326  -1.524  1.00 22.02
ATOM   1282  H   SER A  85      -2.251  -4.546  -2.123  1.00 52.03
ATOM   1283  CA  SER A  85      -1.182  -6.254  -1.594  1.00 10.41
ATOM   1284  HA  SER A  85      -1.267  -6.915  -0.744  1.00 30.55
ATOM   1285  CB  SER A  85      -1.307  -7.064  -2.878  1.00 21.45
ATOM   1286 1HB  SER A  85      -1.224  -6.406  -3.730  1.00  0.43
ATOM   1287 2HB  SER A  85      -0.535  -7.820  -2.919  1.00 64.20
ATOM   1288  OG  SER A  85      -2.587  -7.707  -2.901  1.00 53.15
ATOM   1289  HG  SER A  85      -2.923  -7.516  -2.015  1.00 63.03
ATOM   1290  C   SER A  85       0.140  -5.496  -1.497  1.00 53.32
ATOM   1291  O   SER A  85       0.445  -4.655  -2.345  1.00 63.01
ATOM   1292  N   ILE A  86       0.888  -5.767  -0.466  1.00 41.21
ATOM   1293  H   ILE A  86       0.612  -6.465   0.171  1.00 13.15
ATOM   1294  CA  ILE A  86       2.133  -5.079  -0.220  1.00 72.45
ATOM   1295  HA  ILE A  86       2.197  -4.260  -0.921  1.00 54.22
ATOM   1296  CB  ILE A  86       2.165  -4.502   1.229  1.00 62.04
ATOM   1297  HB  ILE A  86       2.106  -5.321   1.928  1.00  5.24
ATOM   1298  CG2 ILE A  86       3.468  -3.727   1.482  1.00 30.41
ATOM   1299 1HG2 ILE A  86       3.570  -2.931   0.759  1.00 74.42
ATOM   1300 2HG2 ILE A  86       4.314  -4.397   1.407  1.00 62.32
ATOM   1301 3HG2 ILE A  86       3.450  -3.307   2.476  1.00  2.43
ATOM   1302  CG1 ILE A  86       0.940  -3.583   1.437  1.00 42.21
ATOM   1303 1HG1 ILE A  86       1.019  -2.737   0.770  1.00 71.13
ATOM   1304 2HG1 ILE A  86       0.046  -4.137   1.193  1.00 60.04
ATOM   1305  CD1 ILE A  86       0.785  -3.036   2.838  1.00 13.14
ATOM   1306 1HD1 ILE A  86       1.669  -2.475   3.105  1.00 14.31
ATOM   1307 2HD1 ILE A  86       0.649  -3.854   3.529  1.00 62.34
ATOM   1308 3HD1 ILE A  86      -0.079  -2.387   2.876  1.00 72.32
ATOM   1309  C   ILE A  86       3.311  -6.022  -0.468  1.00 60.31
ATOM   1310  O   ILE A  86       3.235  -7.210  -0.173  1.00 52.43
ATOM   1311  N   LYS A  87       4.390  -5.462  -0.937  1.00 12.14
ATOM   1312  H   LYS A  87       4.407  -4.484  -1.023  1.00  3.31
ATOM   1313  CA  LYS A  87       5.576  -6.159  -1.368  1.00 62.43
ATOM   1314  HA  LYS A  87       5.386  -7.216  -1.474  1.00 52.02
ATOM   1315  CB  LYS A  87       5.956  -5.593  -2.727  1.00 71.04
ATOM   1316 1HB  LYS A  87       5.251  -5.958  -3.460  1.00 41.30
ATOM   1317 2HB  LYS A  87       5.843  -4.521  -2.653  1.00  2.54
ATOM   1318  CG  LYS A  87       7.357  -5.896  -3.240  1.00 41.15
ATOM   1319 1HG  LYS A  87       7.626  -5.192  -4.013  1.00 75.30
ATOM   1320 2HG  LYS A  87       8.047  -5.785  -2.417  1.00 35.14
ATOM   1321  CD  LYS A  87       7.510  -7.278  -3.814  1.00 13.05
ATOM   1322 1HD  LYS A  87       7.421  -8.008  -3.022  1.00 62.25
ATOM   1323 2HD  LYS A  87       6.749  -7.444  -4.563  1.00  2.34
ATOM   1324  CE  LYS A  87       8.878  -7.394  -4.464  1.00 65.31
ATOM   1325 1HE  LYS A  87       9.635  -7.407  -3.693  1.00 70.41
ATOM   1326 2HE  LYS A  87       8.923  -8.312  -5.032  1.00 14.33
ATOM   1327  NZ  LYS A  87       9.136  -6.239  -5.387  1.00 14.22
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ATOM   1328 1HZ  LYS A  87       8.310  -6.077  -6.007  1.00 54.45
ATOM   1329 2HZ  LYS A  87       9.969  -6.401  -5.983  1.00 72.14
ATOM   1330 3HZ  LYS A  87       9.294  -5.367  -4.840  1.00 32.30
ATOM   1331  C   LYS A  87       6.703  -5.886  -0.403  1.00 51.41
ATOM   1332  O   LYS A  87       6.896  -4.760   0.041  1.00 52.22
ATOM   1333  N   TYR A  88       7.401  -6.926  -0.062  1.00 12.14
ATOM   1334  H   TYR A  88       7.180  -7.794  -0.452  1.00 62.55
ATOM   1335  CA  TYR A  88       8.503  -6.850   0.843  1.00 32.42
ATOM   1336  HA  TYR A  88       8.365  -5.969   1.449  1.00 51.23
ATOM   1337  CB  TYR A  88       8.527  -8.071   1.783  1.00 31.42
ATOM   1338 1HB  TYR A  88       9.382  -7.985   2.438  1.00 64.14
ATOM   1339 2HB  TYR A  88       7.629  -8.066   2.384  1.00 74.51
ATOM   1340  CG  TYR A  88       8.622  -9.435   1.092  1.00 24.34
ATOM   1341  CD1 TYR A  88       7.532  -9.973   0.438  1.00 44.42
ATOM   1342  HD1 TYR A  88       6.619  -9.398   0.397  1.00 22.44
ATOM   1343  CE1 TYR A  88       7.582 -11.212  -0.152  1.00 11.44
ATOM   1344  HE1 TYR A  88       6.718 -11.612  -0.662  1.00 63.32
ATOM   1345  CZ  TYR A  88       8.725 -11.942  -0.108  1.00 62.15
ATOM   1346  CE2 TYR A  88       9.849 -11.444   0.529  1.00 73.15
ATOM   1347  HE2 TYR A  88      10.760 -12.024   0.564  1.00 12.53
ATOM   1348  CD2 TYR A  88       9.791 -10.195   1.134  1.00  1.31
ATOM   1349  HD2 TYR A  88      10.661  -9.798   1.635  1.00 12.10
ATOM   1350  OH  TYR A  88       8.731 -13.192  -0.683  1.00 21.01
ATOM   1351  HH  TYR A  88       9.158 -13.774  -0.022  1.00  4.22
ATOM   1352  C   TYR A  88       9.812  -6.747   0.104  1.00  0.24
ATOM   1353  O   TYR A  88       9.932  -7.207  -1.044  1.00 62.43
ATOM   1354  N   GLY A  89      10.756  -6.100   0.735  1.00  3.01
ATOM   1355  H   GLY A  89      10.555  -5.604   1.554  1.00 41.33
ATOM   1356  CA  GLY A  89      12.092  -6.081   0.256  1.00 52.24
ATOM   1357 1HA  GLY A  89      12.102  -6.332  -0.795  1.00 41.10
ATOM   1358 2HA  GLY A  89      12.520  -5.101   0.405  1.00 55.32
ATOM   1359  C   GLY A  89      12.897  -7.087   1.039  1.00 21.21
ATOM   1360  O   GLY A  89      12.338  -8.056   1.546  1.00  5.13
ATOM   1361  N   SER A  90      14.152  -6.834   1.218  1.00 23.10
ATOM   1362  H   SER A  90      14.523  -5.976   0.920  1.00 55.23
ATOM   1363  CA  SER A  90      15.029  -7.761   1.902  1.00 73.31
ATOM   1364  HA  SER A  90      14.816  -8.758   1.547  1.00 41.05
ATOM   1365  CB  SER A  90      16.461  -7.419   1.545  1.00 12.04
ATOM   1366 1HB  SER A  90      16.728  -6.476   2.000  1.00 11.10
ATOM   1367 2HB  SER A  90      17.121  -8.197   1.899  1.00 11.54
ATOM   1368  OG  SER A  90      16.589  -7.310   0.140  1.00 12.51
ATOM   1369  HG  SER A  90      15.904  -7.846  -0.271  1.00 32.22
ATOM   1370  C   SER A  90      14.832  -7.707   3.425  1.00 22.04
ATOM   1371  O   SER A  90      15.158  -8.649   4.136  1.00 44.34
ATOM   1372  N   GLN A  91      14.293  -6.608   3.910  1.00  1.20
ATOM   1373  H   GLN A  91      14.027  -5.886   3.292  1.00  5.21
ATOM   1374  CA  GLN A  91      14.119  -6.408   5.349  1.00  1.32
ATOM   1375  HA  GLN A  91      14.883  -6.967   5.868  1.00 43.41
ATOM   1376  CB  GLN A  91      14.315  -4.947   5.663  1.00 63.33
ATOM   1377 1HB  GLN A  91      13.611  -4.368   5.083  1.00 71.34
ATOM   1378 2HB  GLN A  91      14.129  -4.783   6.713  1.00 13.32
ATOM   1379  CG  GLN A  91      15.696  -4.465   5.343  1.00  1.52
ATOM   1380 1HG  GLN A  91      16.370  -4.791   6.122  1.00  5.21
ATOM   1381 2HG  GLN A  91      16.004  -4.892   4.400  1.00 33.44
ATOM   1382  CD  GLN A  91      15.764  -2.982   5.245  1.00 74.15
ATOM   1383  OE1 GLN A  91      16.008  -2.280   6.225  1.00 63.55
ATOM   1384  NE2 GLN A  91      15.498  -2.491   4.076  1.00 71.13
ATOM   1385 2HE2 GLN A  91      15.248  -3.130   3.368  1.00 51.12
ATOM   1386 1HE2 GLN A  91      15.591  -1.523   3.889  1.00 23.13
ATOM   1387  C   GLN A  91      12.755  -6.843   5.833  1.00 20.01
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ATOM   1388  O   GLN A  91      12.504  -6.873   7.030  1.00 44.13
ATOM   1389  N   GLY A  92      11.886  -7.198   4.915  1.00 44.50
ATOM   1390  H   GLY A  92      12.186  -7.263   3.985  1.00 31.20
ATOM   1391  CA  GLY A  92      10.537  -7.510   5.304  1.00  4.31
ATOM   1392 1HA  GLY A  92      10.065  -8.091   4.526  1.00 22.35
ATOM   1393 2HA  GLY A  92      10.550  -8.076   6.223  1.00 64.03
ATOM   1394  C   GLY A  92       9.761  -6.229   5.531  1.00 23.02
ATOM   1395  O   GLY A  92       9.815  -5.626   6.601  1.00 75.22
ATOM   1396  N   ASN A  93       8.999  -5.830   4.536  1.00 44.33
ATOM   1397  H   ASN A  93       8.870  -6.410   3.759  1.00 64.52
ATOM   1398  CA  ASN A  93       8.308  -4.544   4.551  1.00 60.44
ATOM   1399  HA  ASN A  93       9.027  -3.798   4.857  1.00 53.52
ATOM   1400  CB  ASN A  93       7.810  -4.192   3.141  1.00 50.15
ATOM   1401 1HB  ASN A  93       8.624  -4.357   2.452  1.00 61.45
ATOM   1402 2HB  ASN A  93       6.975  -4.828   2.885  1.00  0.22
ATOM   1403  CG  ASN A  93       7.393  -2.740   2.971  1.00 10.33
ATOM   1404  OD1 ASN A  93       8.213  -1.901   2.623  1.00  0.00
ATOM   1405  ND2 ASN A  93       6.142  -2.422   3.220  1.00 11.45
ATOM   1406 2HD2 ASN A  93       5.512  -3.116   3.517  1.00 53.41
ATOM   1407 1HD2 ASN A  93       5.886  -1.487   3.086  1.00 42.32
ATOM   1408  C   ASN A  93       7.160  -4.540   5.558  1.00 51.25
ATOM   1409  O   ASN A  93       6.598  -3.511   5.834  1.00 35.12
ATOM   1410  N   SER A  94       6.855  -5.708   6.114  1.00 23.33
ATOM   1411  H   SER A  94       7.424  -6.484   5.922  1.00 42.53
ATOM   1412  CA  SER A  94       5.739  -5.942   7.028  1.00 42.03
ATOM   1413  HA  SER A  94       4.831  -5.979   6.445  1.00 43.51
ATOM   1414  CB  SER A  94       5.941  -7.303   7.655  1.00 25.55
ATOM   1415 1HB  SER A  94       6.745  -7.253   8.377  1.00 73.24
ATOM   1416 2HB  SER A  94       5.032  -7.624   8.141  1.00 25.41
ATOM   1417  OG  SER A  94       6.279  -8.243   6.648  1.00 73.20
ATOM   1418  HG  SER A  94       5.679  -8.156   5.898  1.00 53.42
ATOM   1419  C   SER A  94       5.602  -4.858   8.128  1.00 33.50
ATOM   1420  O   SER A  94       4.494  -4.432   8.433  1.00  3.14
ATOM   1421  N   ILE A  95       6.719  -4.396   8.679  1.00  1.52
ATOM   1422  H   ILE A  95       7.580  -4.769   8.395  1.00  3.12
ATOM   1423  CA  ILE A  95       6.692  -3.345   9.712  1.00 44.01
ATOM   1424  HA  ILE A  95       5.975  -3.671  10.451  1.00 12.13
ATOM   1425  CB  ILE A  95       8.100  -3.144  10.409  1.00 22.10
ATOM   1426  HB  ILE A  95       8.850  -3.163   9.631  1.00 51.31
ATOM   1427  CG2 ILE A  95       8.203  -1.789  11.110  1.00  3.34
ATOM   1428 1HG2 ILE A  95       8.067  -0.997  10.389  1.00 73.43
ATOM   1429 2HG2 ILE A  95       9.176  -1.691  11.570  1.00 44.43
ATOM   1430 3HG2 ILE A  95       7.438  -1.718  11.870  1.00  3.24
ATOM   1431  CG1 ILE A  95       8.413  -4.279  11.422  1.00 70.32
ATOM   1432 1HG1 ILE A  95       9.378  -4.092  11.865  1.00 13.24
ATOM   1433 2HG1 ILE A  95       7.666  -4.259  12.203  1.00 43.52
ATOM   1434  CD1 ILE A  95       8.452  -5.683  10.850  1.00 30.30
ATOM   1435 1HD1 ILE A  95       7.479  -5.907  10.437  1.00 53.42
ATOM   1436 2HD1 ILE A  95       8.682  -6.388  11.636  1.00 64.45
ATOM   1437 3HD1 ILE A  95       9.197  -5.740  10.070  1.00 73.14
ATOM   1438  C   ILE A  95       6.161  -2.026   9.119  1.00 60.32
ATOM   1439  O   ILE A  95       5.294  -1.369   9.704  1.00 35.51
ATOM   1440  N   ARG A  96       6.622  -1.707   7.922  1.00 61.34
ATOM   1441  H   ARG A  96       7.250  -2.317   7.483  1.00 65.24
ATOM   1442  CA  ARG A  96       6.190  -0.509   7.215  1.00 42.22
ATOM   1443  HA  ARG A  96       6.285   0.338   7.878  1.00 63.54
ATOM   1444  CB  ARG A  96       7.042  -0.283   5.948  1.00 74.42
ATOM   1445 1HB  ARG A  96       6.857  -1.100   5.267  1.00 34.51
ATOM   1446 2HB  ARG A  96       6.715   0.633   5.478  1.00 14.40
ATOM   1447  CG  ARG A  96       8.555  -0.198   6.169  1.00 52.30
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ATOM   1448 1HG  ARG A  96       8.775   0.659   6.789  1.00  2.33
ATOM   1449 2HG  ARG A  96       8.897  -1.099   6.657  1.00 52.51
ATOM   1450  CD  ARG A  96       9.273  -0.050   4.830  1.00 73.13
ATOM   1451 1HD  ARG A  96       8.972  -0.864   4.190  1.00 72.24
ATOM   1452 2HD  ARG A  96       8.961   0.882   4.381  1.00 33.12
ATOM   1453  NE  ARG A  96      10.738  -0.058   4.938  1.00 20.44
ATOM   1454  HE  ARG A  96      11.141   0.415   5.708  1.00 14.23
ATOM   1455  CZ  ARG A  96      11.575  -0.608   4.039  1.00 50.41
ATOM   1456  NH1 ARG A  96      11.098  -1.297   2.992  1.00 11.32
ATOM   1457 1HH1 ARG A  96      10.118  -1.425   2.822  1.00 72.23
ATOM   1458 2HH1 ARG A  96      11.712  -1.749   2.320  1.00 23.50
ATOM   1459  NH2 ARG A  96      12.878  -0.460   4.204  1.00 31.13
ATOM   1460 1HH2 ARG A  96      13.186   0.060   5.012  1.00 33.12
ATOM   1461 2HH2 ARG A  96      13.575  -0.800   3.568  1.00 64.23
ATOM   1462  C   ARG A  96       4.721  -0.691   6.811  1.00 65.00
ATOM   1463  O   ARG A  96       3.919   0.228   6.921  1.00 32.13
ATOM   1464  N   SER A  97       4.394  -1.911   6.375  1.00 30.02
ATOM   1465  H   SER A  97       5.102  -2.589   6.301  1.00 71.23
ATOM   1466  CA  SER A  97       3.051  -2.298   5.966  1.00  3.55
ATOM   1467  HA  SER A  97       2.764  -1.705   5.111  1.00 65.32
ATOM   1468  CB  SER A  97       3.053  -3.771   5.557  1.00 60.25
ATOM   1469 1HB  SER A  97       3.279  -4.375   6.423  1.00 63.11
ATOM   1470 2HB  SER A  97       2.078  -4.040   5.179  1.00 52.04
ATOM   1471  OG  SER A  97       4.027  -4.027   4.551  1.00 13.32
ATOM   1472  HG  SER A  97       3.594  -4.580   3.893  1.00 53.13
ATOM   1473  C   SER A  97       2.044  -2.091   7.099  1.00 74.10
ATOM   1474  O   SER A  97       0.944  -1.596   6.867  1.00  4.01
ATOM   1475  N   SER A  98       2.446  -2.456   8.310  1.00 74.44
ATOM   1476  H   SER A  98       3.348  -2.824   8.419  1.00  5.31
ATOM   1477  CA  SER A  98       1.606  -2.343   9.489  1.00 34.32
ATOM   1478  HA  SER A  98       0.726  -2.949   9.331  1.00  2.01
ATOM   1479  CB  SER A  98       2.373  -2.886  10.708  1.00 61.32
ATOM   1480 1HB  SER A  98       3.258  -2.290  10.867  1.00 42.23
ATOM   1481 2HB  SER A  98       1.762  -2.852  11.595  1.00 74.52
ATOM   1482  OG  SER A  98       2.777  -4.238  10.490  1.00 10.54
ATOM   1483  HG  SER A  98       3.372  -4.299   9.735  1.00  0.54
ATOM   1484  C   SER A  98       1.172  -0.882   9.707  1.00  5.01
ATOM   1485  O   SER A  98      -0.011  -0.590   9.907  1.00 32.24
ATOM   1486  N   ALA A  99       2.130   0.029   9.616  1.00 31.31
ATOM   1487  H   ALA A  99       3.049  -0.266   9.438  1.00 72.41
ATOM   1488  CA  ALA A  99       1.850   1.441   9.767  1.00  0.13
ATOM   1489  HA  ALA A  99       1.247   1.568  10.655  1.00 72.12
ATOM   1490  CB  ALA A  99       3.142   2.227   9.939  1.00 52.15
ATOM   1491 1HB  ALA A  99       2.912   3.270  10.105  1.00  4.24
ATOM   1492 2HB  ALA A  99       3.739   2.129   9.045  1.00 51.12
ATOM   1493 3HB  ALA A  99       3.691   1.839  10.783  1.00 62.34
ATOM   1494  C   ALA A  99       1.053   1.964   8.578  1.00 63.23
ATOM   1495  O   ALA A  99       0.097   2.714   8.745  1.00  1.43
ATOM   1496  N   LEU A 100       1.437   1.513   7.384  1.00 31.13
ATOM   1497  H   LEU A 100       2.182   0.876   7.330  1.00 44.33
ATOM   1498  CA  LEU A 100       0.831   1.933   6.133  1.00 60.13
ATOM   1499  HA  LEU A 100       1.014   2.989   6.002  1.00 75.31
ATOM   1500  CB  LEU A 100       1.477   1.180   4.984  1.00  1.44
ATOM   1501 1HB  LEU A 100       2.541   1.167   5.151  1.00 72.13
ATOM   1502 2HB  LEU A 100       1.134   0.158   5.052  1.00 13.44
ATOM   1503  CG  LEU A 100       1.164   1.683   3.577  1.00 31.41
ATOM   1504  HG  LEU A 100       0.095   1.668   3.431  1.00 61.42
ATOM   1505  CD1 LEU A 100       1.645   3.115   3.398  1.00 41.11
ATOM   1506 1HD1 LEU A 100       2.705   3.158   3.597  1.00  4.22
ATOM   1507 2HD1 LEU A 100       1.119   3.762   4.084  1.00 43.11
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ATOM   1508 3HD1 LEU A 100       1.456   3.434   2.383  1.00 32.44
ATOM   1509  CD2 LEU A 100       1.800   0.776   2.546  1.00 14.30
ATOM   1510 1HD2 LEU A 100       1.579   1.151   1.558  1.00 61.40
ATOM   1511 2HD2 LEU A 100       1.404  -0.223   2.656  1.00 72.25
ATOM   1512 3HD2 LEU A 100       2.868   0.759   2.698  1.00 65.43
ATOM   1513  C   LEU A 100      -0.661   1.664   6.136  1.00 44.12
ATOM   1514  O   LEU A 100      -1.445   2.544   5.808  1.00  2.11
ATOM   1515  N   ILE A 101      -1.037   0.466   6.566  1.00 52.32
ATOM   1516  H   ILE A 101      -0.328  -0.170   6.816  1.00 13.52
ATOM   1517  CA  ILE A 101      -2.452   0.077   6.636  1.00 33.02
ATOM   1518  HA  ILE A 101      -2.865   0.155   5.641  1.00 52.13
ATOM   1519  CB  ILE A 101      -2.626  -1.396   7.145  1.00 35.33
ATOM   1520  HB  ILE A 101      -2.050  -1.487   8.055  1.00 50.13
ATOM   1521  CG2 ILE A 101      -4.087  -1.716   7.500  1.00 40.03
ATOM   1522 1HG2 ILE A 101      -4.705  -1.587   6.625  1.00 52.42
ATOM   1523 2HG2 ILE A 101      -4.422  -1.045   8.279  1.00 70.40
ATOM   1524 3HG2 ILE A 101      -4.157  -2.736   7.847  1.00 72.23
ATOM   1525  CG1 ILE A 101      -2.085  -2.413   6.122  1.00  2.23
ATOM   1526 1HG1 ILE A 101      -1.069  -2.147   5.871  1.00 31.04
ATOM   1527 2HG1 ILE A 101      -2.090  -3.392   6.575  1.00 32.20
ATOM   1528  CD1 ILE A 101      -2.872  -2.491   4.817  1.00 71.41
ATOM   1529 1HD1 ILE A 101      -2.889  -1.531   4.324  1.00 33.30
ATOM   1530 2HD1 ILE A 101      -3.885  -2.817   5.014  1.00 71.20
ATOM   1531 3HD1 ILE A 101      -2.405  -3.219   4.171  1.00 73.14
ATOM   1532  C   ILE A 101      -3.213   1.030   7.549  1.00 14.32
ATOM   1533  O   ILE A 101      -4.261   1.543   7.159  1.00 63.24
ATOM   1534  N   GLY A 102      -2.629   1.326   8.715  1.00 63.14
ATOM   1535  H   GLY A 102      -1.756   0.932   8.926  1.00 63.52
ATOM   1536  CA  GLY A 102      -3.257   2.221   9.678  1.00 52.15
ATOM   1537 1HA  GLY A 102      -4.200   1.801   9.981  1.00 22.31
ATOM   1538 2HA  GLY A 102      -2.618   2.315  10.543  1.00 51.13
ATOM   1539  C   GLY A 102      -3.518   3.596   9.109  1.00 55.42
ATOM   1540  O   GLY A 102      -4.571   4.195   9.336  1.00 41.44
ATOM   1541  N   ILE A 103      -2.573   4.079   8.353  1.00 64.55
ATOM   1542  H   ILE A 103      -1.771   3.530   8.213  1.00 21.44
ATOM   1543  CA  ILE A 103      -2.675   5.376   7.730  1.00 24.54
ATOM   1544  HA  ILE A 103      -2.975   6.086   8.487  1.00 31.34
ATOM   1545  CB  ILE A 103      -1.310   5.807   7.164  1.00 62.15
ATOM   1546  HB  ILE A 103      -1.000   5.090   6.417  1.00  4.22
ATOM   1547  CG2 ILE A 103      -1.409   7.191   6.517  1.00 11.41
ATOM   1548 1HG2 ILE A 103      -1.740   7.914   7.249  1.00 62.44
ATOM   1549 2HG2 ILE A 103      -2.114   7.153   5.698  1.00 42.53
ATOM   1550 3HG2 ILE A 103      -0.440   7.478   6.137  1.00 11.24
ATOM   1551  CG1 ILE A 103      -0.281   5.817   8.293  1.00 12.31
ATOM   1552 1HG1 ILE A 103      -0.456   6.675   8.925  1.00 73.43
ATOM   1553 2HG1 ILE A 103      -0.394   4.918   8.881  1.00 24.34
ATOM   1554  CD1 ILE A 103       1.140   5.884   7.821  1.00 64.20
ATOM   1555 1HD1 ILE A 103       1.326   5.006   7.221  1.00  3.41
ATOM   1556 2HD1 ILE A 103       1.792   5.882   8.682  1.00 22.03
ATOM   1557 3HD1 ILE A 103       1.291   6.774   7.230  1.00 14.21
ATOM   1558  C   ILE A 103      -3.726   5.355   6.621  1.00  2.21
ATOM   1559  O   ILE A 103      -4.585   6.240   6.561  1.00  3.43
ATOM   1560  N   ILE A 104      -3.679   4.321   5.775  1.00  4.51
ATOM   1561  H   ILE A 104      -3.002   3.620   5.914  1.00  1.33
ATOM   1562  CA  ILE A 104      -4.606   4.208   4.655  1.00 61.21
ATOM   1563  HA  ILE A 104      -4.504   5.098   4.052  1.00 35.42
ATOM   1564  CB  ILE A 104      -4.295   2.961   3.761  1.00  1.03
ATOM   1565  HB  ILE A 104      -4.343   2.082   4.386  1.00 15.44
ATOM   1566  CG2 ILE A 104      -5.343   2.813   2.648  1.00 33.03
ATOM   1567 1HG2 ILE A 104      -5.327   3.690   2.020  1.00 44.23
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ATOM   1568 2HG2 ILE A 104      -6.323   2.707   3.089  1.00 41.31
ATOM   1569 3HG2 ILE A 104      -5.116   1.939   2.055  1.00 34.00
ATOM   1570  CG1 ILE A 104      -2.891   3.064   3.153  1.00 54.42
ATOM   1571 1HG1 ILE A 104      -2.870   3.892   2.458  1.00 64.53
ATOM   1572 2HG1 ILE A 104      -2.177   3.247   3.943  1.00 54.42
ATOM   1573  CD1 ILE A 104      -2.452   1.820   2.401  1.00 53.31
ATOM   1574 1HD1 ILE A 104      -3.150   1.623   1.600  1.00 15.11
ATOM   1575 2HD1 ILE A 104      -2.429   0.977   3.075  1.00 51.41
ATOM   1576 3HD1 ILE A 104      -1.468   1.979   1.986  1.00 61.14
ATOM   1577  C   ILE A 104      -6.040   4.116   5.156  1.00 62.42
ATOM   1578  O   ILE A 104      -6.895   4.894   4.727  1.00 74.03
ATOM   1579  N   GLU A 105      -6.294   3.216   6.101  1.00  1.32
ATOM   1580  H   GLU A 105      -5.569   2.651   6.459  1.00 34.12
ATOM   1581  CA  GLU A 105      -7.633   3.070   6.617  1.00 54.42
ATOM   1582  HA  GLU A 105      -8.269   3.017   5.745  1.00 73.12
ATOM   1583  CB  GLU A 105      -7.846   1.800   7.449  1.00 34.15
ATOM   1584 1HB  GLU A 105      -8.869   1.787   7.796  1.00 23.13
ATOM   1585 2HB  GLU A 105      -7.691   0.941   6.813  1.00 73.24
ATOM   1586  CG  GLU A 105      -6.952   1.658   8.664  1.00 44.44
ATOM   1587 1HG  GLU A 105      -6.049   1.133   8.385  1.00 33.04
ATOM   1588 2HG  GLU A 105      -6.699   2.645   9.028  1.00 74.44
ATOM   1589  CD  GLU A 105      -7.637   0.907   9.752  1.00 13.43
ATOM   1590  OE1 GLU A 105      -7.825  -0.313   9.634  1.00  4.31
ATOM   1591  OE2 GLU A 105      -8.100   1.552  10.703  1.00 22.45
ATOM   1592  C   GLU A 105      -8.072   4.301   7.390  1.00 73.02
ATOM   1593  O   GLU A 105      -9.151   4.830   7.144  1.00 72.32
ATOM   1594  N   GLY A 106      -7.199   4.789   8.272  1.00 15.22
ATOM   1595  H   GLY A 106      -6.311   4.376   8.351  1.00 71.14
ATOM   1596  CA  GLY A 106      -7.523   5.899   9.143  1.00 14.33
ATOM   1597 1HA  GLY A 106      -8.359   5.617   9.766  1.00 54.31
ATOM   1598 2HA  GLY A 106      -6.674   6.103   9.777  1.00 35.41
ATOM   1599  C   GLY A 106      -7.885   7.150   8.391  1.00 20.11
ATOM   1600  O   GLY A 106      -8.847   7.832   8.748  1.00  0.00
ATOM   1601  N   ASN A 107      -7.167   7.414   7.311  1.00  3.31
ATOM   1602  H   ASN A 107      -6.435   6.807   7.060  1.00 52.05
ATOM   1603  CA  ASN A 107      -7.418   8.601   6.494  1.00 14.14
ATOM   1604  HA  ASN A 107      -7.382   9.465   7.143  1.00 65.02
ATOM   1605  CB  ASN A 107      -6.337   8.734   5.401  1.00  1.50
ATOM   1606 1HB  ASN A 107      -5.369   8.800   5.873  1.00 61.43
ATOM   1607 2HB  ASN A 107      -6.363   7.849   4.783  1.00 41.45
ATOM   1608  CG  ASN A 107      -6.506   9.958   4.499  1.00  2.11
ATOM   1609  OD1 ASN A 107      -6.033  11.043   4.813  1.00  1.11
ATOM   1610  ND2 ASN A 107      -7.133   9.781   3.355  1.00 20.54
ATOM   1611 2HD2 ASN A 107      -7.469   8.889   3.128  1.00 22.34
ATOM   1612 1HD2 ASN A 107      -7.213  10.560   2.768  1.00 22.10
ATOM   1613  C   ASN A 107      -8.804   8.509   5.879  1.00 32.21
ATOM   1614  O   ASN A 107      -9.574   9.471   5.898  1.00 42.42
ATOM   1615  N   ILE A 108      -9.144   7.325   5.398  1.00  1.04
ATOM   1616  H   ILE A 108      -8.499   6.587   5.455  1.00 33.24
ATOM   1617  CA  ILE A 108     -10.447   7.089   4.813  1.00  1.21
ATOM   1618  HA  ILE A 108     -10.624   7.864   4.081  1.00 62.12
ATOM   1619  CB  ILE A 108     -10.530   5.714   4.115  1.00 44.54
ATOM   1620  HB  ILE A 108     -10.392   4.943   4.856  1.00 61.41
ATOM   1621  CG2 ILE A 108     -11.906   5.546   3.483  1.00 60.41
ATOM   1622 1HG2 ILE A 108     -11.962   4.582   2.997  1.00 42.52
ATOM   1623 2HG2 ILE A 108     -12.066   6.328   2.756  1.00  3.24
ATOM   1624 3HG2 ILE A 108     -12.664   5.607   4.251  1.00 74.23
ATOM   1625  CG1 ILE A 108      -9.450   5.586   3.044  1.00 32.20
ATOM   1626 1HG1 ILE A 108      -9.704   6.241   2.223  1.00 72.24
ATOM   1627 2HG1 ILE A 108      -8.492   5.866   3.454  1.00 54.42
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ATOM   1628  CD1 ILE A 108      -9.333   4.195   2.471  1.00 62.31
ATOM   1629 1HD1 ILE A 108      -8.547   4.179   1.733  1.00 21.04
ATOM   1630 2HD1 ILE A 108     -10.268   3.912   2.012  1.00 64.14
ATOM   1631 3HD1 ILE A 108      -9.096   3.499   3.263  1.00 73.01
ATOM   1632  C   ILE A 108     -11.544   7.172   5.880  1.00 74.04
ATOM   1633  O   ILE A 108     -12.573   7.798   5.660  1.00 75.53
ATOM   1634  N   ARG A 109     -11.304   6.553   7.047  1.00  0.21
ATOM   1635  H   ARG A 109     -10.442   6.093   7.169  1.00 63.44
ATOM   1636  CA  ARG A 109     -12.302   6.517   8.117  1.00 14.21
ATOM   1637  HA  ARG A 109     -13.179   6.034   7.713  1.00 54.35
ATOM   1638  CB  ARG A 109     -11.825   5.720   9.349  1.00  3.23
ATOM   1639 1HB  ARG A 109     -10.998   6.249   9.800  1.00 64.13
ATOM   1640 2HB  ARG A 109     -12.634   5.678  10.063  1.00 24.35
ATOM   1641  CG  ARG A 109     -11.366   4.299   9.063  1.00 51.42
ATOM   1642 1HG  ARG A 109     -12.065   3.827   8.392  1.00 20.33
ATOM   1643 2HG  ARG A 109     -10.404   4.352   8.573  1.00 63.24
ATOM   1644  CD  ARG A 109     -11.216   3.495  10.350  1.00  0.13
ATOM   1645 1HD  ARG A 109     -10.600   4.055  11.038  1.00 53.40
ATOM   1646 2HD  ARG A 109     -12.195   3.356  10.784  1.00 33.23
ATOM   1647  NE  ARG A 109     -10.596   2.174  10.141  1.00 34.30
ATOM   1648  HE  ARG A 109      -9.618   2.124  10.334  1.00 13.33
ATOM   1649  CZ  ARG A 109     -11.221   1.033   9.816  1.00 35.20
ATOM   1650  NH1 ARG A 109     -12.494   1.044   9.411  1.00 32.11
ATOM   1651 1HH1 ARG A 109     -13.009   1.901   9.324  1.00 30.10
ATOM   1652 2HH1 ARG A 109     -12.983   0.205   9.175  1.00 25.43
ATOM   1653  NH2 ARG A 109     -10.537  -0.108   9.810  1.00 63.24
ATOM   1654 1HH2 ARG A 109      -9.544  -0.108  10.040  1.00 71.22
ATOM   1655 2HH2 ARG A 109     -10.901  -1.011   9.593  1.00 40.42
ATOM   1656  C   ARG A 109     -12.692   7.919   8.551  1.00 63.33
ATOM   1657  O   ARG A 109     -13.872   8.212   8.696  1.00 50.32
ATOM   1658  N   TYR A 110     -11.704   8.782   8.725  1.00 11.34
ATOM   1659  H   TYR A 110     -10.776   8.494   8.566  1.00 54.41
ATOM   1660  CA  TYR A 110     -11.971  10.150   9.138  1.00 63.12
ATOM   1661  HA  TYR A 110     -12.701  10.068   9.929  1.00 72.34
ATOM   1662  CB  TYR A 110     -10.728  10.836   9.718  1.00 12.34
ATOM   1663 1HB  TYR A 110      -9.886  10.643   9.070  1.00 23.11
ATOM   1664 2HB  TYR A 110     -10.905  11.900   9.769  1.00 64.35
ATOM   1665  CG  TYR A 110     -10.362  10.352  11.109  1.00 32.54
ATOM   1666  CD1 TYR A 110      -9.459   9.319  11.304  1.00  2.40
ATOM   1667  HD1 TYR A 110      -9.003   8.855  10.442  1.00  3.20
ATOM   1668  CE1 TYR A 110      -9.137   8.877  12.572  1.00 51.12
ATOM   1669  HE1 TYR A 110      -8.430   8.071  12.699  1.00 23.01
ATOM   1670  CZ  TYR A 110      -9.719   9.472  13.667  1.00 60.44
ATOM   1671  CE2 TYR A 110     -10.619  10.502  13.504  1.00 30.02
ATOM   1672  HE2 TYR A 110     -11.077  10.968  14.364  1.00 10.01
ATOM   1673  CD2 TYR A 110     -10.938  10.935  12.232  1.00 21.22
ATOM   1674  HD2 TYR A 110     -11.644  11.742  12.100  1.00 72.41
ATOM   1675  OH  TYR A 110      -9.401   9.035  14.930  1.00 40.12
ATOM   1676  HH  TYR A 110     -10.197   8.970  15.462  1.00 15.33
ATOM   1677  C   TYR A 110     -12.609  10.987   8.039  1.00 74.20
ATOM   1678  O   TYR A 110     -13.473  11.793   8.316  1.00 75.03
ATOM   1679  N   ALA A 111     -12.175  10.795   6.802  1.00 53.32
ATOM   1680  H   ALA A 111     -11.456  10.149   6.629  1.00 35.10
ATOM   1681  CA  ALA A 111     -12.745  11.532   5.671  1.00 22.25
ATOM   1682  HA  ALA A 111     -12.721  12.582   5.925  1.00 42.30
ATOM   1683  CB  ALA A 111     -11.903  11.325   4.421  1.00  4.44
ATOM   1684 1HB  ALA A 111     -12.292  11.935   3.620  1.00 52.24
ATOM   1685 2HB  ALA A 111     -11.940  10.285   4.133  1.00 63.32
ATOM   1686 3HB  ALA A 111     -10.880  11.607   4.626  1.00 74.42
ATOM   1687  C   ALA A 111     -14.205  11.137   5.403  1.00  2.44
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ATOM   1688  O   ALA A 111     -15.018  11.958   4.997  1.00  2.42
ATOM   1689  N   ASN A 112     -14.500   9.869   5.615  1.00 74.34
ATOM   1690  H   ASN A 112     -13.793   9.280   5.954  1.00 51.42
ATOM   1691  CA  ASN A 112     -15.825   9.312   5.338  1.00 72.41
ATOM   1692  HA  ASN A 112     -16.165   9.722   4.399  1.00 21.21
ATOM   1693  CB  ASN A 112     -15.721   7.780   5.188  1.00 75.32
ATOM   1694 1HB  ASN A 112     -14.981   7.554   4.437  1.00 64.54
ATOM   1695 2HB  ASN A 112     -15.396   7.366   6.131  1.00 50.24
ATOM   1696  CG  ASN A 112     -17.023   7.090   4.782  1.00 42.32
ATOM   1697  OD1 ASN A 112     -17.854   7.643   4.087  1.00 54.43
ATOM   1698  ND2 ASN A 112     -17.187   5.855   5.203  1.00 51.23
ATOM   1699 2HD2 ASN A 112     -16.481   5.451   5.744  1.00 25.12
ATOM   1700 1HD2 ASN A 112     -18.016   5.407   4.937  1.00 71.01
ATOM   1701  C   ASN A 112     -16.841   9.675   6.428  1.00 71.32
ATOM   1702  O   ASN A 112     -18.020   9.899   6.142  1.00 41.33
ATOM   1703  N   THR A 113     -16.386   9.749   7.662  1.00 75.02
ATOM   1704  H   THR A 113     -15.427   9.662   7.836  1.00 21.45
ATOM   1705  CA  THR A 113     -17.288  10.025   8.756  1.00  4.03
ATOM   1706  HA  THR A 113     -18.204   9.499   8.532  1.00 75.14
ATOM   1707  CB  THR A 113     -16.738   9.511  10.137  1.00 21.40
ATOM   1708  HB  THR A 113     -16.461   8.473  10.018  1.00 73.41
ATOM   1709  OG1 THR A 113     -17.751   9.593  11.153  1.00 52.40
ATOM   1710  HG1 THR A 113     -18.204  10.441  11.084  1.00 43.01
ATOM   1711  CG2 THR A 113     -15.515  10.298  10.598  1.00 53.24
ATOM   1712 1HG2 THR A 113     -14.748  10.225   9.844  1.00 65.41
ATOM   1713 2HG2 THR A 113     -15.149   9.888  11.527  1.00 74.31
ATOM   1714 3HG2 THR A 113     -15.785  11.334  10.740  1.00 35.41
ATOM   1715  C   THR A 113     -17.622  11.519   8.804  1.00 32.33
ATOM   1716  O   THR A 113     -16.766  12.372   8.558  1.00 21.20
ATOM   1717  N   HIS A 114     -18.859  11.804   9.080  1.00  4.22
ATOM   1718  H   HIS A 114     -19.560  11.142   9.270  1.00 63.53
ATOM   1719  CA  HIS A 114     -19.369  13.128   9.152  1.00 31.21
ATOM   1720  HA  HIS A 114     -18.617  13.743   9.623  1.00 53.21
ATOM   1721  CB  HIS A 114     -19.706  13.687   7.735  1.00  3.22
ATOM   1722 1HB  HIS A 114     -20.163  14.658   7.848  1.00 41.24
ATOM   1723 2HB  HIS A 114     -18.784  13.802   7.185  1.00 75.44
ATOM   1724  CG  HIS A 114     -20.651  12.847   6.894  1.00 73.22
ATOM   1725  ND1 HIS A 114     -20.258  11.736   6.168  1.00 54.25
ATOM   1726  CD2 HIS A 114     -21.978  12.995   6.652  1.00 11.34
ATOM   1727  HD1 HIS A 114     -19.359  11.337   6.150  1.00 64.21
ATOM   1728  CE1 HIS A 114     -21.325  11.264   5.525  1.00 51.33
ATOM   1729  NE2 HIS A 114     -22.401  11.989   5.779  1.00  1.31
ATOM   1730  HD2 HIS A 114     -22.616  13.763   7.065  1.00 40.13
ATOM   1731  HE1 HIS A 114     -21.314  10.398   4.879  1.00 40.35
ATOM   1732  C   HIS A 114     -20.570  13.063  10.044  1.00 45.44
ATOM   1733  O   HIS A 114     -20.725  13.933  10.904  1.00 33.44
TER    1734      HIS A 114
ENDMDL
MODEL       19
ATOM      1  N   MET A   1     -16.055  -7.459   1.498  1.00 55.34
ATOM      2  CA  MET A   1     -16.745  -7.924   2.740  1.00  0.00
ATOM      3  HA  MET A   1     -16.852  -7.070   3.393  1.00 65.01
ATOM      4  CB  MET A   1     -18.135  -8.512   2.414  1.00 63.50
ATOM      5 1HB  MET A   1     -18.616  -8.799   3.338  1.00 71.13
ATOM      6 2HB  MET A   1     -18.726  -7.743   1.940  1.00 50.11
ATOM      7  CG  MET A   1     -18.114  -9.735   1.495  1.00  3.51
ATOM      8 1HG  MET A   1     -17.671  -9.449   0.553  1.00 61.44
ATOM      9 2HG  MET A   1     -17.507 -10.500   1.955  1.00 32.44
ATOM     10  SD  MET A   1     -19.758 -10.411   1.173  1.00  1.31
ATOM     11  CE  MET A   1     -20.570  -9.039   0.347  1.00 22.11
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ATOM     12 1HE  MET A   1     -21.576  -9.326   0.081  1.00 73.03
ATOM     13 2HE  MET A   1     -20.022  -8.777  -0.545  1.00 75.13
ATOM     14 3HE  MET A   1     -20.606  -8.187   1.010  1.00 74.55
ATOM     15  C   MET A   1     -15.881  -8.953   3.442  1.00 72.11
ATOM     16  O   MET A   1     -16.035  -9.238   4.614  1.00 75.14
ATOM     17  N   ASP A   2     -14.983  -9.467   2.685  1.00 63.24
ATOM     18  H   ASP A   2     -14.862  -9.201   1.746  1.00  3.21
ATOM     19  CA  ASP A   2     -14.039 -10.485   3.023  1.00  3.24
ATOM     20  HA  ASP A   2     -14.360 -11.089   3.855  1.00 31.25
ATOM     21  CB  ASP A   2     -13.941 -11.371   1.782  1.00 44.50
ATOM     22 1HB  ASP A   2     -13.146 -12.091   1.914  1.00 12.52
ATOM     23 2HB  ASP A   2     -14.878 -11.882   1.626  1.00 71.23
ATOM     24  CG  ASP A   2     -13.641 -10.512   0.532  1.00 23.34
ATOM     25  OD1 ASP A   2     -12.524 -10.572   0.017  1.00 43.34
ATOM     26  OD2 ASP A   2     -14.570  -9.690   0.115  1.00 13.43
ATOM     27  C   ASP A   2     -12.690  -9.838   3.233  1.00 22.43
ATOM     28  O   ASP A   2     -12.532  -8.633   2.960  1.00 13.14
ATOM     29  N   LYS A   3     -11.727 -10.607   3.730  1.00 22.42
ATOM     30  H   LYS A   3     -11.937 -11.512   4.039  1.00 22.15
ATOM     31  CA  LYS A   3     -10.370 -10.134   3.799  1.00 63.44
ATOM     32  HA  LYS A   3     -10.222  -9.708   2.822  1.00 50.14
ATOM     33  CB  LYS A   3     -10.103  -9.024   4.867  1.00 74.50
ATOM     34 1HB  LYS A   3      -9.126  -8.612   4.668  1.00 41.24
ATOM     35 2HB  LYS A   3     -10.834  -8.241   4.721  1.00 43.23
ATOM     36  CG  LYS A   3     -10.127  -9.440   6.342  1.00 53.43
ATOM     37 1HG  LYS A   3     -11.075  -9.911   6.558  1.00 70.10
ATOM     38 2HG  LYS A   3      -9.327 -10.142   6.517  1.00 11.23
ATOM     39  CD  LYS A   3      -9.945  -8.225   7.277  1.00 33.21
ATOM     40 1HD  LYS A   3     -10.816  -7.592   7.195  1.00 51.33
ATOM     41 2HD  LYS A   3      -9.867  -8.586   8.292  1.00 20.05
ATOM     42  CE  LYS A   3      -8.694  -7.378   6.947  1.00 74.22
ATOM     43 1HE  LYS A   3      -8.760  -7.034   5.925  1.00 33.44
ATOM     44 2HE  LYS A   3      -8.696  -6.515   7.598  1.00 70.45
ATOM     45  NZ  LYS A   3      -7.406  -8.106   7.119  1.00 54.44
ATOM     46 1HZ  LYS A   3      -7.182  -8.254   8.122  1.00 62.11
ATOM     47 2HZ  LYS A   3      -6.623  -7.601   6.649  1.00 13.14
ATOM     48 3HZ  LYS A   3      -7.427  -9.046   6.664  1.00 73.45
ATOM     49  C   LYS A   3      -9.351 -11.262   3.832  1.00 54.51
ATOM     50  O   LYS A   3      -9.068 -11.856   4.883  1.00 32.45
ATOM     51  N   GLY A   4      -8.816 -11.558   2.668  1.00 10.33
ATOM     52  H   GLY A   4      -9.118 -11.073   1.872  1.00 73.42
ATOM     53  CA  GLY A   4      -7.774 -12.545   2.548  1.00 73.14
ATOM     54 1HA  GLY A   4      -8.054 -13.431   3.101  1.00 43.21
ATOM     55 2HA  GLY A   4      -7.626 -12.794   1.507  1.00 14.31
ATOM     56  C   GLY A   4      -6.504 -11.976   3.102  1.00 21.00
ATOM     57  O   GLY A   4      -5.824 -11.204   2.439  1.00 20.33
ATOM     58  N   THR A   5      -6.232 -12.294   4.330  1.00 65.10
ATOM     59  H   THR A   5      -6.781 -12.965   4.786  1.00 31.25
ATOM     60  CA  THR A   5      -5.118 -11.733   5.020  1.00 42.34
ATOM     61  HA  THR A   5      -4.739 -10.889   4.461  1.00 75.51
ATOM     62  CB  THR A   5      -5.583 -11.244   6.394  1.00 51.15
ATOM     63  HB  THR A   5      -5.723 -12.096   7.044  1.00 60.33
ATOM     64  OG1 THR A   5      -6.851 -10.549   6.221  1.00 34.24
ATOM     65  HG1 THR A   5      -7.386 -11.146   5.677  1.00 32.44
ATOM     66  CG2 THR A   5      -4.562 -10.287   7.002  1.00 13.01
ATOM     67 1HG2 THR A   5      -4.910  -9.960   7.970  1.00 13.23
ATOM     68 2HG2 THR A   5      -4.444  -9.430   6.355  1.00  5.13
ATOM     69 3HG2 THR A   5      -3.613 -10.791   7.109  1.00 15.12
ATOM     70  C   THR A   5      -4.030 -12.783   5.172  1.00 14.25
ATOM     71  O   THR A   5      -4.172 -13.716   5.959  1.00 75.12
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ATOM     72  N   GLN A   6      -2.976 -12.650   4.405  1.00 40.12
ATOM     73  H   GLN A   6      -2.906 -11.865   3.817  1.00 51.52
ATOM     74  CA  GLN A   6      -1.891 -13.601   4.435  1.00 40.33
ATOM     75  HA  GLN A   6      -1.940 -14.163   5.355  1.00 41.21
ATOM     76  CB  GLN A   6      -2.003 -14.581   3.251  1.00 73.24
ATOM     77 1HB  GLN A   6      -1.963 -14.014   2.332  1.00 64.20
ATOM     78 2HB  GLN A   6      -1.157 -15.250   3.280  1.00 62.22
ATOM     79  CG  GLN A   6      -3.280 -15.417   3.232  1.00 75.14
ATOM     80 1HG  GLN A   6      -3.296 -16.040   4.114  1.00 74.02
ATOM     81 2HG  GLN A   6      -4.127 -14.747   3.258  1.00 12.04
ATOM     82  CD  GLN A   6      -3.404 -16.314   2.011  1.00 23.10
ATOM     83  OE1 GLN A   6      -4.493 -16.599   1.553  1.00 54.14
ATOM     84  NE2 GLN A   6      -2.293 -16.775   1.484  1.00 22.43
ATOM     85 2HE2 GLN A   6      -1.438 -16.529   1.891  1.00 14.12
ATOM     86 1HE2 GLN A   6      -2.392 -17.353   0.700  1.00  1.15
ATOM     87  C   GLN A   6      -0.569 -12.872   4.341  1.00 75.54
ATOM     88  O   GLN A   6      -0.432 -11.917   3.588  1.00 35.04
ATOM     89  N   TYR A   7       0.372 -13.298   5.123  1.00  2.52
ATOM     90  H   TYR A   7       0.181 -14.005   5.772  1.00 45.33
ATOM     91  CA  TYR A   7       1.719 -12.795   5.062  1.00  3.32
ATOM     92  HA  TYR A   7       1.760 -12.145   4.200  1.00 43.55
ATOM     93  CB  TYR A   7       2.095 -11.988   6.336  1.00 63.14
ATOM     94 1HB  TYR A   7       3.149 -11.754   6.305  1.00 52.23
ATOM     95 2HB  TYR A   7       1.537 -11.063   6.327  1.00 54.13
ATOM     96  CG  TYR A   7       1.826 -12.679   7.670  1.00 64.45
ATOM     97  CD1 TYR A   7       0.578 -12.587   8.278  1.00 12.25
ATOM     98  HD1 TYR A   7      -0.205 -12.029   7.784  1.00 11.43
ATOM     99  CE1 TYR A   7       0.325 -13.194   9.491  1.00 32.34
ATOM    100  HE1 TYR A   7      -0.650 -13.109   9.946  1.00 14.32
ATOM    101  CZ  TYR A   7       1.324 -13.909  10.116  1.00  2.31
ATOM    102  CE2 TYR A   7       2.571 -14.016   9.537  1.00 65.22
ATOM    103  HE2 TYR A   7       3.353 -14.577  10.028  1.00 74.50
ATOM    104  CD2 TYR A   7       2.817 -13.404   8.322  1.00  4.25
ATOM    105  HD2 TYR A   7       3.794 -13.486   7.867  1.00 54.54
ATOM    106  OH  TYR A   7       1.076 -14.512  11.326  1.00 22.20
ATOM    107  HH  TYR A   7       0.237 -14.979  11.288  1.00 14.52
ATOM    108  C   TYR A   7       2.657 -13.954   4.794  1.00 43.13
ATOM    109  O   TYR A   7       2.633 -14.946   5.523  1.00 65.23
ATOM    110  N   LYS A   8       3.432 -13.876   3.743  1.00 23.00
ATOM    111  H   LYS A   8       3.433 -13.067   3.181  1.00 42.13
ATOM    112  CA  LYS A   8       4.308 -14.971   3.398  1.00 74.23
ATOM    113  HA  LYS A   8       4.622 -15.445   4.315  1.00  2.42
ATOM    114  CB  LYS A   8       3.543 -16.015   2.545  1.00 45.04
ATOM    115 1HB  LYS A   8       2.638 -16.284   3.065  1.00 13.24
ATOM    116 2HB  LYS A   8       3.273 -15.552   1.606  1.00  5.44
ATOM    117  CG  LYS A   8       4.309 -17.312   2.236  1.00 72.03
ATOM    118 1HG  LYS A   8       3.695 -17.938   1.603  1.00 23.11
ATOM    119 2HG  LYS A   8       5.221 -17.060   1.716  1.00 71.13
ATOM    120  CD  LYS A   8       4.657 -18.089   3.508  1.00 61.42
ATOM    121 1HD  LYS A   8       5.352 -17.508   4.094  1.00 44.42
ATOM    122 2HD  LYS A   8       3.754 -18.249   4.078  1.00 63.25
ATOM    123  CE  LYS A   8       5.300 -19.450   3.197  1.00 54.23
ATOM    124 1HE  LYS A   8       5.481 -19.968   4.127  1.00 32.21
ATOM    125 2HE  LYS A   8       4.605 -20.026   2.604  1.00 44.14
ATOM    126  NZ  LYS A   8       6.585 -19.335   2.466  1.00 73.34
ATOM    127 1HZ  LYS A   8       7.035 -20.235   2.221  1.00 21.30
ATOM    128 2HZ  LYS A   8       7.283 -18.731   2.958  1.00 65.03
ATOM    129 3HZ  LYS A   8       6.508 -18.781   1.580  1.00 20.21
ATOM    130  C   LYS A   8       5.526 -14.463   2.655  1.00  4.02
ATOM    131  O   LYS A   8       5.399 -13.739   1.683  1.00 21.00
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ATOM    132  N   ASP A   9       6.693 -14.803   3.193  1.00 24.21
ATOM    133  H   ASP A   9       6.686 -15.280   4.046  1.00 63.01
ATOM    134  CA  ASP A   9       8.033 -14.543   2.594  1.00 61.53
ATOM    135  HA  ASP A   9       8.772 -14.827   3.327  1.00 70.04
ATOM    136  CB  ASP A   9       8.241 -15.415   1.338  1.00  2.30
ATOM    137 1HB  ASP A   9       7.570 -15.077   0.562  1.00  2.53
ATOM    138 2HB  ASP A   9       9.260 -15.304   0.997  1.00 64.12
ATOM    139  CG  ASP A   9       7.969 -16.875   1.591  1.00 31.31
ATOM    140  OD1 ASP A   9       7.256 -17.516   0.779  1.00 63.22
ATOM    141  OD2 ASP A   9       8.360 -17.415   2.667  1.00 74.31
ATOM    142  C   ASP A   9       8.244 -13.077   2.247  1.00 42.41
ATOM    143  O   ASP A   9       8.912 -12.742   1.282  1.00 35.23
ATOM    144  N   GLY A  10       7.732 -12.206   3.089  1.00 43.21
ATOM    145  H   GLY A  10       7.215 -12.540   3.846  1.00 22.55
ATOM    146  CA  GLY A  10       7.920 -10.792   2.879  1.00 74.22
ATOM    147 1HA  GLY A  10       7.995 -10.306   3.841  1.00 71.42
ATOM    148 2HA  GLY A  10       8.842 -10.640   2.337  1.00 50.02
ATOM    149  C   GLY A  10       6.787 -10.155   2.102  1.00 33.21
ATOM    150  O   GLY A  10       6.715  -8.940   1.996  1.00 14.52
ATOM    151  N   TYR A  11       5.906 -10.954   1.570  1.00 44.45
ATOM    152  H   TYR A  11       5.998 -11.928   1.667  1.00 61.04
ATOM    153  CA  TYR A  11       4.789 -10.444   0.817  1.00  4.50
ATOM    154  HA  TYR A  11       5.024  -9.445   0.478  1.00 63.34
ATOM    155  CB  TYR A  11       4.531 -11.353  -0.392  1.00  1.51
ATOM    156 1HB  TYR A  11       5.479 -11.633  -0.828  1.00 33.22
ATOM    157 2HB  TYR A  11       4.027 -12.246  -0.050  1.00 61.51
ATOM    158  CG  TYR A  11       3.693 -10.731  -1.484  1.00 60.31
ATOM    159  CD1 TYR A  11       2.327 -10.929  -1.549  1.00 74.13
ATOM    160  HD1 TYR A  11       1.848 -11.537  -0.796  1.00 72.45
ATOM    161  CE1 TYR A  11       1.574 -10.362  -2.560  1.00 31.24
ATOM    162  HE1 TYR A  11       0.508 -10.526  -2.598  1.00 24.33
ATOM    163  CZ  TYR A  11       2.189  -9.588  -3.515  1.00 53.11
ATOM    164  CE2 TYR A  11       3.543  -9.376  -3.473  1.00 23.33
ATOM    165  HE2 TYR A  11       4.024  -8.769  -4.223  1.00 40.25
ATOM    166  CD2 TYR A  11       4.288  -9.946  -2.462  1.00 60.35
ATOM    167  HD2 TYR A  11       5.355  -9.783  -2.425  1.00 74.23
ATOM    168  OH  TYR A  11       1.440  -9.022  -4.521  1.00 51.23
ATOM    169  HH  TYR A  11       1.913  -9.113  -5.354  1.00 33.23
ATOM    170  C   TYR A  11       3.572 -10.380   1.744  1.00 70.10
ATOM    171  O   TYR A  11       3.318 -11.319   2.509  1.00 24.22
ATOM    172  N   TYR A  12       2.847  -9.280   1.708  1.00 44.21
ATOM    173  H   TYR A  12       3.068  -8.591   1.039  1.00 52.13
ATOM    174  CA  TYR A  12       1.701  -9.093   2.590  1.00 55.34
ATOM    175  HA  TYR A  12       1.593  -9.976   3.203  1.00 50.04
ATOM    176  CB  TYR A  12       1.911  -7.866   3.500  1.00 12.22
ATOM    177 1HB  TYR A  12       2.900  -7.869   3.931  1.00 25.14
ATOM    178 2HB  TYR A  12       1.810  -6.979   2.892  1.00 61.22
ATOM    179  CG  TYR A  12       0.922  -7.741   4.643  1.00 51.12
ATOM    180  CD1 TYR A  12       1.142  -8.405   5.840  1.00 65.42
ATOM    181  HD1 TYR A  12       2.024  -9.021   5.938  1.00 74.02
ATOM    182  CE1 TYR A  12       0.258  -8.295   6.894  1.00 13.01
ATOM    183  HE1 TYR A  12       0.448  -8.821   7.818  1.00 61.50
ATOM    184  CZ  TYR A  12      -0.863  -7.508   6.762  1.00 51.15
ATOM    185  CE2 TYR A  12      -1.103  -6.838   5.585  1.00 52.11
ATOM    186  HE2 TYR A  12      -1.983  -6.221   5.482  1.00 73.51
ATOM    187  CD2 TYR A  12      -0.215  -6.953   4.533  1.00 74.21
ATOM    188  HD2 TYR A  12      -0.406  -6.428   3.609  1.00  2.30
ATOM    189  OH  TYR A  12      -1.753  -7.394   7.812  1.00 41.34
ATOM    190  HH  TYR A  12      -1.257  -7.205   8.614  1.00 45.45
ATOM    191  C   TYR A  12       0.448  -8.902   1.757  1.00  2.53
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ATOM    192  O   TYR A  12       0.436  -8.087   0.826  1.00  5.22
ATOM    193  N   ILE A  13      -0.574  -9.651   2.070  1.00 52.13
ATOM    194  H   ILE A  13      -0.495 -10.315   2.794  1.00 31.24
ATOM    195  CA  ILE A  13      -1.845  -9.574   1.388  1.00 73.44
ATOM    196  HA  ILE A  13      -1.817  -8.774   0.663  1.00  1.00
ATOM    197  CB  ILE A  13      -2.166 -10.916   0.656  1.00 10.42
ATOM    198  HB  ILE A  13      -2.272 -11.689   1.403  1.00 14.51
ATOM    199  CG2 ILE A  13      -3.486 -10.810  -0.113  1.00 60.32
ATOM    200 1HG2 ILE A  13      -3.412 -10.024  -0.849  1.00 71.52
ATOM    201 2HG2 ILE A  13      -4.287 -10.582   0.575  1.00 24.30
ATOM    202 3HG2 ILE A  13      -3.692 -11.749  -0.607  1.00 51.12
ATOM    203  CG1 ILE A  13      -1.027 -11.294  -0.294  1.00 51.45
ATOM    204 1HG1 ILE A  13      -0.972 -10.553  -1.078  1.00 74.12
ATOM    205 2HG1 ILE A  13      -0.100 -11.291   0.258  1.00 20.44
ATOM    206  CD1 ILE A  13      -1.181 -12.649  -0.955  1.00 21.03
ATOM    207 1HD1 ILE A  13      -2.090 -12.668  -1.537  1.00 31.14
ATOM    208 2HD1 ILE A  13      -1.217 -13.415  -0.195  1.00 23.24
ATOM    209 3HD1 ILE A  13      -0.333 -12.825  -1.601  1.00 12.51
ATOM    210  C   ILE A  13      -2.935  -9.321   2.418  1.00 14.50
ATOM    211  O   ILE A  13      -2.986  -9.996   3.446  1.00 53.44
ATOM    212  N   THR A  14      -3.757  -8.336   2.176  1.00  3.01
ATOM    213  H   THR A  14      -3.598  -7.744   1.406  1.00 34.12
ATOM    214  CA  THR A  14      -4.891  -8.072   3.017  1.00 32.21
ATOM    215  HA  THR A  14      -5.295  -9.023   3.332  1.00 25.32
ATOM    216  CB  THR A  14      -4.521  -7.227   4.292  1.00 40.41
ATOM    217  HB  THR A  14      -3.772  -7.766   4.853  1.00 43.23
ATOM    218  OG1 THR A  14      -5.694  -7.028   5.141  1.00 74.34
ATOM    219  HG1 THR A  14      -6.048  -6.174   4.868  1.00 13.54
ATOM    220  CG2 THR A  14      -3.968  -5.857   3.899  1.00 20.40
ATOM    221 1HG2 THR A  14      -4.702  -5.336   3.304  1.00 32.22
ATOM    222 2HG2 THR A  14      -3.063  -5.982   3.323  1.00 24.02
ATOM    223 3HG2 THR A  14      -3.757  -5.286   4.789  1.00 42.25
ATOM    224  C   THR A  14      -5.948  -7.349   2.209  1.00 50.03
ATOM    225  O   THR A  14      -5.631  -6.572   1.304  1.00 75.31
ATOM    226  N   THR A  15      -7.169  -7.629   2.486  1.00  2.11
ATOM    227  H   THR A  15      -7.361  -8.343   3.123  1.00 51.42
ATOM    228  CA  THR A  15      -8.234  -6.925   1.875  1.00 33.34
ATOM    229  HA  THR A  15      -7.874  -6.429   0.990  1.00 23.32
ATOM    230  CB  THR A  15      -9.403  -7.851   1.517  1.00 62.42
ATOM    231  HB  THR A  15      -9.973  -7.983   2.423  1.00 62.12
ATOM    232  OG1 THR A  15      -8.917  -9.093   0.968  1.00 42.33
ATOM    233  HG1 THR A  15      -9.620  -9.409   0.388  1.00 73.25
ATOM    234  CG2 THR A  15     -10.291  -7.194   0.484  1.00  2.32
ATOM    235 1HG2 THR A  15     -11.131  -7.834   0.260  1.00 74.32
ATOM    236 2HG2 THR A  15      -9.720  -7.017  -0.414  1.00 42.44
ATOM    237 3HG2 THR A  15     -10.643  -6.253   0.880  1.00 21.14
ATOM    238  C   THR A  15      -8.727  -5.900   2.879  1.00 54.20
ATOM    239  O   THR A  15      -8.778  -6.169   4.083  1.00  4.33
ATOM    240  N   LEU A  16      -9.009  -4.749   2.415  1.00 51.21
ATOM    241  H   LEU A  16      -8.856  -4.555   1.461  1.00 55.52
ATOM    242  CA  LEU A  16      -9.564  -3.717   3.210  1.00 71.53
ATOM    243  HA  LEU A  16      -9.543  -4.002   4.250  1.00 23.30
ATOM    244  CB  LEU A  16      -8.785  -2.428   3.016  1.00 65.52
ATOM    245 1HB  LEU A  16      -8.777  -2.225   1.955  1.00  0.12
ATOM    246 2HB  LEU A  16      -9.350  -1.654   3.503  1.00 74.40
ATOM    247  CG  LEU A  16      -7.334  -2.414   3.515  1.00 13.31
ATOM    248  HG  LEU A  16      -6.774  -3.174   2.992  1.00 30.23
ATOM    249  CD1 LEU A  16      -6.686  -1.076   3.215  1.00 24.15
ATOM    250 1HD1 LEU A  16      -6.698  -0.899   2.150  1.00 34.15
ATOM    251 2HD1 LEU A  16      -5.665  -1.083   3.565  1.00 11.04
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ATOM    252 3HD1 LEU A  16      -7.232  -0.290   3.717  1.00 60.14
ATOM    253  CD2 LEU A  16      -7.267  -2.709   5.011  1.00 21.22
ATOM    254 1HD2 LEU A  16      -7.846  -1.976   5.553  1.00 71.33
ATOM    255 2HD2 LEU A  16      -6.239  -2.665   5.339  1.00 10.33
ATOM    256 3HD2 LEU A  16      -7.661  -3.697   5.206  1.00 51.23
ATOM    257  C   LEU A  16     -10.971  -3.522   2.753  1.00 12.44
ATOM    258  O   LEU A  16     -11.203  -3.344   1.561  1.00 45.44
ATOM    259  N   ASN A  17     -11.915  -3.569   3.654  1.00 22.33
ATOM    260  H   ASN A  17     -11.694  -3.691   4.600  1.00 24.04
ATOM    261  CA  ASN A  17     -13.298  -3.408   3.257  1.00 54.22
ATOM    262  HA  ASN A  17     -13.372  -3.806   2.254  1.00 24.15
ATOM    263  CB  ASN A  17     -14.276  -4.167   4.171  1.00 22.31
ATOM    264 1HB  ASN A  17     -13.955  -5.194   4.257  1.00 62.00
ATOM    265 2HB  ASN A  17     -14.268  -3.711   5.150  1.00 73.12
ATOM    266  CG  ASN A  17     -15.716  -4.155   3.643  1.00 41.00
ATOM    267  OD1 ASN A  17     -16.108  -5.033   2.879  1.00 22.35
ATOM    268  ND2 ASN A  17     -16.498  -3.183   4.038  1.00 62.20
ATOM    269 2HD2 ASN A  17     -16.115  -2.512   4.645  1.00 23.30
ATOM    270 1HD2 ASN A  17     -17.419  -3.148   3.711  1.00 12.40
ATOM    271  C   ASN A  17     -13.643  -1.939   3.182  1.00 51.34
ATOM    272  O   ASN A  17     -14.308  -1.387   4.060  1.00  3.45
ATOM    273  N   TYR A  18     -13.059  -1.298   2.207  1.00 54.15
ATOM    274  H   TYR A  18     -12.419  -1.800   1.649  1.00 33.05
ATOM    275  CA  TYR A  18     -13.306   0.089   1.904  1.00  1.23
ATOM    276  HA  TYR A  18     -14.293   0.351   2.257  1.00 74.10
ATOM    277  CB  TYR A  18     -12.247   1.022   2.536  1.00 71.35
ATOM    278 1HB  TYR A  18     -11.294   0.825   2.068  1.00 45.04
ATOM    279 2HB  TYR A  18     -12.530   2.042   2.322  1.00 54.24
ATOM    280  CG  TYR A  18     -12.051   0.886   4.045  1.00  0.22
ATOM    281  CD1 TYR A  18     -12.986   1.371   4.958  1.00 30.41
ATOM    282  HD1 TYR A  18     -13.881   1.850   4.590  1.00 71.52
ATOM    283  CE1 TYR A  18     -12.781   1.238   6.326  1.00 71.13
ATOM    284  HE1 TYR A  18     -13.515   1.619   7.022  1.00 63.55
ATOM    285  CZ  TYR A  18     -11.634   0.620   6.786  1.00 71.03
ATOM    286  CE2 TYR A  18     -10.704   0.141   5.897  1.00 44.45
ATOM    287  HE2 TYR A  18      -9.806  -0.343   6.253  1.00 13.11
ATOM    288  CD2 TYR A  18     -10.918   0.280   4.544  1.00 70.45
ATOM    289  HD2 TYR A  18     -10.193  -0.081   3.835  1.00 45.32
ATOM    290  OH  TYR A  18     -11.419   0.470   8.142  1.00 24.02
ATOM    291  HH  TYR A  18     -10.463   0.450   8.274  1.00 25.51
ATOM    292  C   TYR A  18     -13.248   0.223   0.398  1.00 40.51
ATOM    293  O   TYR A  18     -12.631  -0.619  -0.274  1.00 11.23
ATOM    294  N   ASN A  19     -13.859   1.258  -0.135  1.00 32.33
ATOM    295  H   ASN A  19     -14.290   1.903   0.461  1.00  2.43
ATOM    296  CA  ASN A  19     -13.893   1.463  -1.580  1.00 21.24
ATOM    297  HA  ASN A  19     -14.114   0.515  -2.047  1.00 35.14
ATOM    298  CB  ASN A  19     -14.972   2.479  -1.965  1.00 40.12
ATOM    299 1HB  ASN A  19     -15.912   2.188  -1.518  1.00 62.24
ATOM    300 2HB  ASN A  19     -14.688   3.453  -1.592  1.00 30.50
ATOM    301  CG  ASN A  19     -15.164   2.579  -3.472  1.00 75.35
ATOM    302  OD1 ASN A  19     -14.462   3.324  -4.160  1.00 24.22
ATOM    303  ND2 ASN A  19     -16.127   1.852  -3.993  1.00 54.45
ATOM    304 2HD2 ASN A  19     -16.666   1.291  -3.392  1.00 11.12
ATOM    305 1HD2 ASN A  19     -16.295   1.904  -4.955  1.00 10.41
ATOM    306  C   ASN A  19     -12.536   1.954  -2.072  1.00 42.13
ATOM    307  O   ASN A  19     -11.956   2.858  -1.481  1.00 41.30
ATOM    308  N   PHE A  20     -12.063   1.376  -3.166  1.00 55.25
ATOM    309  H   PHE A  20     -12.598   0.676  -3.593  1.00 43.44
ATOM    310  CA  PHE A  20     -10.740   1.673  -3.751  1.00  2.34
ATOM    311  HA  PHE A  20     -10.000   1.258  -3.084  1.00 11.13
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ATOM    312  CB  PHE A  20     -10.593   0.951  -5.095  1.00 62.43
ATOM    313 1HB  PHE A  20     -10.579  -0.114  -4.916  1.00 70.23
ATOM    314 2HB  PHE A  20     -11.453   1.188  -5.703  1.00 33.31
ATOM    315  CG  PHE A  20      -9.345   1.298  -5.888  1.00 41.32
ATOM    316  CD1 PHE A  20      -8.175   0.595  -5.715  1.00 25.23
ATOM    317  HD1 PHE A  20      -8.139  -0.213  -5.000  1.00  5.25
ATOM    318  CE1 PHE A  20      -7.054   0.912  -6.441  1.00 74.30
ATOM    319  HE1 PHE A  20      -6.143   0.353  -6.298  1.00 13.45
ATOM    320  CZ  PHE A  20      -7.093   1.942  -7.353  1.00 23.11
ATOM    321  HZ  PHE A  20      -6.210   2.187  -7.924  1.00 55.33
ATOM    322  CE2 PHE A  20      -8.246   2.652  -7.542  1.00 41.12
ATOM    323  HE2 PHE A  20      -8.276   3.460  -8.257  1.00 61.23
ATOM    324  CD2 PHE A  20      -9.361   2.334  -6.818  1.00  1.22
ATOM    325  HD2 PHE A  20     -10.273   2.895  -6.965  1.00 40.44
ATOM    326  C   PHE A  20     -10.449   3.156  -3.927  1.00 55.21
ATOM    327  O   PHE A  20      -9.316   3.581  -3.728  1.00 72.04
ATOM    328  N   ASN A  21     -11.458   3.935  -4.285  1.00 65.42
ATOM    329  H   ASN A  21     -12.361   3.556  -4.324  1.00  1.22
ATOM    330  CA  ASN A  21     -11.239   5.347  -4.598  1.00 31.13
ATOM    331  HA  ASN A  21     -10.493   5.373  -5.378  1.00 25.42
ATOM    332  CB  ASN A  21     -12.522   6.032  -5.113  1.00 53.21
ATOM    333 1HB  ASN A  21     -13.259   6.020  -4.324  1.00 73.04
ATOM    334 2HB  ASN A  21     -12.293   7.058  -5.358  1.00 21.14
ATOM    335  CG  ASN A  21     -13.145   5.364  -6.353  1.00 23.51
ATOM    336  OD1 ASN A  21     -12.467   4.701  -7.169  1.00 72.13
ATOM    337  ND2 ASN A  21     -14.437   5.541  -6.514  1.00 33.21
ATOM    338 2HD2 ASN A  21     -14.912   6.075  -5.844  1.00 13.45
ATOM    339 1HD2 ASN A  21     -14.878   5.153  -7.295  1.00 53.31
ATOM    340  C   ASN A  21     -10.666   6.096  -3.390  1.00 64.50
ATOM    341  O   ASN A  21      -9.693   6.837  -3.512  1.00 40.30
ATOM    342  N   THR A  22     -11.253   5.875  -2.224  1.00 12.41
ATOM    343  H   THR A  22     -12.021   5.268  -2.181  1.00  2.42
ATOM    344  CA  THR A  22     -10.754   6.479  -1.005  1.00 72.12
ATOM    345  HA  THR A  22     -10.512   7.496  -1.284  1.00 61.41
ATOM    346  CB  THR A  22     -11.826   6.512   0.151  1.00 23.22
ATOM    347  HB  THR A  22     -12.632   7.150  -0.181  1.00 74.23
ATOM    348  OG1 THR A  22     -11.287   7.086   1.341  1.00 75.13
ATOM    349  HG1 THR A  22     -11.859   7.795   1.647  1.00 34.20
ATOM    350  CG2 THR A  22     -12.386   5.138   0.463  1.00  1.20
ATOM    351 1HG2 THR A  22     -12.841   4.723  -0.425  1.00 12.44
ATOM    352 2HG2 THR A  22     -13.134   5.221   1.238  1.00 55.41
ATOM    353 3HG2 THR A  22     -11.589   4.489   0.795  1.00 41.03
ATOM    354  C   THR A  22      -9.406   5.833  -0.578  1.00 50.50
ATOM    355  O   THR A  22      -8.487   6.528  -0.117  1.00 32.32
ATOM    356  N   VAL A  23      -9.284   4.509  -0.794  1.00 53.23
ATOM    357  H   VAL A  23     -10.036   4.025  -1.197  1.00 12.50
ATOM    358  CA  VAL A  23      -8.064   3.757  -0.456  1.00 33.12
ATOM    359  HA  VAL A  23      -7.883   3.887   0.601  1.00 31.11
ATOM    360  CB  VAL A  23      -8.208   2.233  -0.761  1.00 50.11
ATOM    361  HB  VAL A  23      -8.352   2.118  -1.826  1.00 13.42
ATOM    362  CG1 VAL A  23      -6.949   1.472  -0.369  1.00 61.44
ATOM    363 1HG1 VAL A  23      -7.090   0.423  -0.581  1.00 24.14
ATOM    364 2HG1 VAL A  23      -6.763   1.606   0.685  1.00 23.34
ATOM    365 3HG1 VAL A  23      -6.108   1.847  -0.936  1.00 33.54
ATOM    366  CG2 VAL A  23      -9.408   1.644  -0.048  1.00 44.01
ATOM    367 1HG2 VAL A  23      -9.501   0.600  -0.309  1.00 15.34
ATOM    368 2HG2 VAL A  23     -10.303   2.172  -0.341  1.00 71.22
ATOM    369 3HG2 VAL A  23      -9.269   1.731   1.018  1.00 22.45
ATOM    370  C   VAL A  23      -6.858   4.310  -1.216  1.00 40.23
ATOM    371  O   VAL A  23      -5.772   4.455  -0.652  1.00 22.05
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ATOM    372  N   TYR A  24      -7.068   4.641  -2.491  1.00 64.35
ATOM    373  H   TYR A  24      -7.958   4.474  -2.874  1.00 70.51
ATOM    374  CA  TYR A  24      -6.024   5.208  -3.333  1.00 70.00
ATOM    375  HA  TYR A  24      -5.240   4.471  -3.412  1.00 30.34
ATOM    376  CB  TYR A  24      -6.563   5.518  -4.749  1.00 65.14
ATOM    377 1HB  TYR A  24      -6.803   4.588  -5.244  1.00 22.35
ATOM    378 2HB  TYR A  24      -7.458   6.115  -4.664  1.00 10.42
ATOM    379  CG  TYR A  24      -5.579   6.265  -5.642  1.00 54.31
ATOM    380  CD1 TYR A  24      -4.545   5.601  -6.284  1.00 33.02
ATOM    381  HD1 TYR A  24      -4.447   4.533  -6.154  1.00 34.20
ATOM    382  CE1 TYR A  24      -3.643   6.280  -7.079  1.00 62.45
ATOM    383  HE1 TYR A  24      -2.844   5.743  -7.570  1.00 33.12
ATOM    384  CZ  TYR A  24      -3.769   7.640  -7.247  1.00 55.00
ATOM    385  CE2 TYR A  24      -4.790   8.325  -6.624  1.00 24.11
ATOM    386  HE2 TYR A  24      -4.888   9.393  -6.756  1.00 34.03
ATOM    387  CD2 TYR A  24      -5.685   7.641  -5.828  1.00  1.51
ATOM    388  HD2 TYR A  24      -6.484   8.177  -5.338  1.00 14.25
ATOM    389  OH  TYR A  24      -2.869   8.321  -8.033  1.00 32.12
ATOM    390  HH  TYR A  24      -2.713   7.842  -8.850  1.00 65.01
ATOM    391  C   TYR A  24      -5.444   6.461  -2.696  1.00  4.21
ATOM    392  O   TYR A  24      -4.225   6.610  -2.602  1.00 41.30
ATOM    393  N   ASN A  25      -6.327   7.319  -2.223  1.00  1.04
ATOM    394  H   ASN A  25      -7.278   7.090  -2.299  1.00 14.41
ATOM    395  CA  ASN A  25      -5.943   8.572  -1.586  1.00 24.33
ATOM    396  HA  ASN A  25      -5.355   9.155  -2.278  1.00 45.42
ATOM    397  CB  ASN A  25      -7.200   9.364  -1.220  1.00  3.42
ATOM    398 1HB  ASN A  25      -7.768   9.554  -2.113  1.00 34.12
ATOM    399 2HB  ASN A  25      -7.802   8.742  -0.574  1.00 70.31
ATOM    400  CG  ASN A  25      -6.903  10.668  -0.480  1.00 34.55
ATOM    401  OD1 ASN A  25      -6.649  11.699  -1.089  1.00 23.30
ATOM    402  ND2 ASN A  25      -6.988  10.636   0.836  1.00 35.52
ATOM    403 2HD2 ASN A  25      -7.241   9.802   1.286  1.00  3.40
ATOM    404 1HD2 ASN A  25      -6.774  11.452   1.331  1.00  0.20
ATOM    405  C   ASN A  25      -5.153   8.300  -0.333  1.00 15.14
ATOM    406  O   ASN A  25      -4.049   8.808  -0.151  1.00 34.23
ATOM    407  N   ALA A  26      -5.706   7.443   0.482  1.00 22.52
ATOM    408  H   ALA A  26      -6.555   7.047   0.180  1.00 34.02
ATOM    409  CA  ALA A  26      -5.136   7.104   1.779  1.00 13.52
ATOM    410  HA  ALA A  26      -5.068   8.018   2.350  1.00 33.54
ATOM    411  CB  ALA A  26      -6.070   6.167   2.515  1.00 24.21
ATOM    412 1HB  ALA A  26      -7.050   6.615   2.583  1.00 61.14
ATOM    413 2HB  ALA A  26      -5.690   5.984   3.508  1.00 71.21
ATOM    414 3HB  ALA A  26      -6.141   5.234   1.976  1.00 61.14
ATOM    415  C   ALA A  26      -3.730   6.496   1.670  1.00 61.52
ATOM    416  O   ALA A  26      -2.812   6.921   2.378  1.00 30.05
ATOM    417  N   THR A  27      -3.561   5.544   0.772  1.00 45.23
ATOM    418  H   THR A  27      -4.329   5.234   0.242  1.00 52.51
ATOM    419  CA  THR A  27      -2.278   4.889   0.566  1.00 13.22
ATOM    420  HA  THR A  27      -1.920   4.525   1.518  1.00 15.15
ATOM    421  CB  THR A  27      -2.441   3.695  -0.387  1.00 33.54
ATOM    422  HB  THR A  27      -2.714   4.067  -1.363  1.00 42.34
ATOM    423  OG1 THR A  27      -3.487   2.842   0.099  1.00 12.34
ATOM    424  HG1 THR A  27      -4.088   2.678  -0.637  1.00 34.24
ATOM    425  CG2 THR A  27      -1.148   2.898  -0.495  1.00 54.33
ATOM    426 1HG2 THR A  27      -0.866   2.530   0.481  1.00 60.35
ATOM    427 2HG2 THR A  27      -0.373   3.548  -0.874  1.00 62.41
ATOM    428 3HG2 THR A  27      -1.290   2.069  -1.172  1.00 61.04
ATOM    429  C   THR A  27      -1.246   5.867  -0.010  1.00 20.11
ATOM    430  O   THR A  27      -0.092   5.927   0.453  1.00 30.14
ATOM    431  N   LEU A  28      -1.678   6.647  -0.994  1.00 32.15
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ATOM    432  H   LEU A  28      -2.612   6.574  -1.287  1.00 12.44
ATOM    433  CA  LEU A  28      -0.827   7.620  -1.646  1.00 52.24
ATOM    434  HA  LEU A  28       0.019   7.092  -2.061  1.00 14.30
ATOM    435  CB  LEU A  28      -1.599   8.301  -2.790  1.00 34.25
ATOM    436 1HB  LEU A  28      -1.797   7.534  -3.525  1.00 40.22
ATOM    437 2HB  LEU A  28      -2.550   8.630  -2.408  1.00  2.34
ATOM    438  CG  LEU A  28      -0.913   9.461  -3.518  1.00 44.40
ATOM    439  HG  LEU A  28      -0.591  10.187  -2.786  1.00 51.12
ATOM    440  CD1 LEU A  28       0.320   8.988  -4.266  1.00 21.21
ATOM    441 1HD1 LEU A  28       1.022   8.558  -3.567  1.00 44.12
ATOM    442 2HD1 LEU A  28       0.779   9.826  -4.769  1.00 24.34
ATOM    443 3HD1 LEU A  28       0.037   8.242  -4.994  1.00 71.11
ATOM    444  CD2 LEU A  28      -1.886  10.145  -4.465  1.00 61.23
ATOM    445 1HD2 LEU A  28      -2.241   9.431  -5.194  1.00 64.42
ATOM    446 2HD2 LEU A  28      -1.385  10.956  -4.971  1.00 40.22
ATOM    447 3HD2 LEU A  28      -2.724  10.533  -3.904  1.00 40.31
ATOM    448  C   LEU A  28      -0.316   8.640  -0.635  1.00  0.44
ATOM    449  O   LEU A  28       0.890   8.866  -0.529  1.00 20.22
ATOM    450  N   GLN A  29      -1.227   9.201   0.147  1.00 41.32
ATOM    451  H   GLN A  29      -2.172   8.951   0.033  1.00 12.44
ATOM    452  CA  GLN A  29      -0.871  10.187   1.159  1.00 70.43
ATOM    453  HA  GLN A  29      -0.326  10.973   0.660  1.00 42.13
ATOM    454  CB  GLN A  29      -2.112  10.797   1.812  1.00 34.51
ATOM    455 1HB  GLN A  29      -2.710  10.001   2.230  1.00 21.12
ATOM    456 2HB  GLN A  29      -1.797  11.451   2.611  1.00 61.45
ATOM    457  CG  GLN A  29      -2.985  11.595   0.860  1.00 63.45
ATOM    458 1HG  GLN A  29      -2.382  12.354   0.384  1.00 54.12
ATOM    459 2HG  GLN A  29      -3.362  10.922   0.103  1.00 43.05
ATOM    460  CD  GLN A  29      -4.164  12.249   1.554  1.00 43.34
ATOM    461  OE1 GLN A  29      -4.690  11.742   2.544  1.00 53.32
ATOM    462  NE2 GLN A  29      -4.591  13.374   1.045  1.00 31.04
ATOM    463 2HE2 GLN A  29      -4.128  13.714   0.253  1.00 14.33
ATOM    464 1HE2 GLN A  29      -5.349  13.819   1.475  1.00 44.00
ATOM    465  C   GLN A  29       0.035   9.592   2.227  1.00 21.23
ATOM    466  O   GLN A  29       0.964  10.248   2.687  1.00 14.02
ATOM    467  N   ALA A  30      -0.202   8.337   2.576  1.00 31.34
ATOM    468  H   ALA A  30      -0.927   7.849   2.126  1.00 21.34
ATOM    469  CA  ALA A  30       0.565   7.671   3.618  1.00 51.22
ATOM    470  HA  ALA A  30       0.404   8.233   4.526  1.00 73.41
ATOM    471  CB  ALA A  30       0.052   6.258   3.843  1.00  1.20
ATOM    472 1HB  ALA A  30       0.572   5.813   4.679  1.00 51.44
ATOM    473 2HB  ALA A  30       0.224   5.668   2.955  1.00 24.33
ATOM    474 3HB  ALA A  30      -1.007   6.289   4.053  1.00 71.21
ATOM    475  C   ALA A  30       2.062   7.651   3.309  1.00 61.34
ATOM    476  O   ALA A  30       2.886   7.997   4.163  1.00 75.15
ATOM    477  N   ILE A  31       2.417   7.275   2.100  1.00 12.42
ATOM    478  H   ILE A  31       1.724   7.041   1.444  1.00 43.30
ATOM    479  CA  ILE A  31       3.818   7.225   1.749  1.00 25.42
ATOM    480  HA  ILE A  31       4.347   7.006   2.665  1.00  3.34
ATOM    481  CB  ILE A  31       4.137   6.080   0.723  1.00 22.14
ATOM    482  HB  ILE A  31       3.932   5.142   1.218  1.00  0.33
ATOM    483  CG2 ILE A  31       3.229   6.144  -0.511  1.00 74.12
ATOM    484 1HG2 ILE A  31       2.197   6.025  -0.211  1.00 44.40
ATOM    485 2HG2 ILE A  31       3.500   5.357  -1.200  1.00 73.42
ATOM    486 3HG2 ILE A  31       3.354   7.102  -0.993  1.00 61.55
ATOM    487  CG1 ILE A  31       5.627   6.108   0.330  1.00  2.12
ATOM    488 1HG1 ILE A  31       5.858   7.073  -0.096  1.00 65.11
ATOM    489 2HG1 ILE A  31       6.225   5.968   1.220  1.00 41.21
ATOM    490  CD1 ILE A  31       6.034   5.060  -0.677  1.00 72.14
ATOM    491 1HD1 ILE A  31       7.084   5.169  -0.906  1.00 13.52
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ATOM    492 2HD1 ILE A  31       5.451   5.188  -1.578  1.00 63.33
ATOM    493 3HD1 ILE A  31       5.854   4.082  -0.260  1.00 31.25
ATOM    494  C   ILE A  31       4.343   8.580   1.241  1.00 20.11
ATOM    495  O   ILE A  31       5.364   9.071   1.703  1.00 33.22
ATOM    496  N   GLN A  32       3.581   9.211   0.371  1.00  3.03
ATOM    497  H   GLN A  32       2.679   8.867   0.180  1.00 24.13
ATOM    498  CA  GLN A  32       4.013  10.414  -0.322  1.00 45.41
ATOM    499  HA  GLN A  32       5.037  10.239  -0.621  1.00 63.53
ATOM    500  CB  GLN A  32       3.178  10.591  -1.604  1.00 33.05
ATOM    501 1HB  GLN A  32       3.317   9.716  -2.221  1.00 11.01
ATOM    502 2HB  GLN A  32       2.137  10.635  -1.318  1.00 33.12
ATOM    503  CG  GLN A  32       3.489  11.808  -2.463  1.00 71.31
ATOM    504 1HG  GLN A  32       2.881  11.740  -3.352  1.00 50.42
ATOM    505 2HG  GLN A  32       3.206  12.684  -1.900  1.00 13.01
ATOM    506  CD  GLN A  32       4.958  11.934  -2.888  1.00 13.54
ATOM    507  OE1 GLN A  32       5.440  13.024  -3.100  1.00 43.12
ATOM    508  NE2 GLN A  32       5.670  10.832  -2.994  1.00  1.41
ATOM    509 2HE2 GLN A  32       5.260   9.964  -2.809  1.00 52.22
ATOM    510 1HE2 GLN A  32       6.611  10.977  -3.232  1.00 34.41
ATOM    511  C   GLN A  32       4.014  11.657   0.568  1.00 33.24
ATOM    512  O   GLN A  32       4.768  12.586   0.347  1.00 73.13
ATOM    513  N   ASN A  33       3.186  11.674   1.576  1.00 13.44
ATOM    514  H   ASN A  33       2.579  10.920   1.746  1.00 44.14
ATOM    515  CA  ASN A  33       3.148  12.827   2.470  1.00 55.04
ATOM    516  HA  ASN A  33       3.644  13.635   1.953  1.00 53.03
ATOM    517  CB  ASN A  33       1.715  13.251   2.794  1.00 63.42
ATOM    518 1HB  ASN A  33       1.208  12.381   3.185  1.00 71.44
ATOM    519 2HB  ASN A  33       1.740  14.019   3.550  1.00 64.12
ATOM    520  CG  ASN A  33       0.939  13.762   1.577  1.00 51.11
ATOM    521  OD1 ASN A  33      -0.274  13.631   1.502  1.00 24.14
ATOM    522  ND2 ASN A  33       1.627  14.344   0.612  1.00 15.12
ATOM    523 2HD2 ASN A  33       2.601  14.428   0.696  1.00 14.35
ATOM    524 1HD2 ASN A  33       1.124  14.672  -0.160  1.00 73.55
ATOM    525  C   ASN A  33       3.933  12.553   3.728  1.00 73.44
ATOM    526  O   ASN A  33       3.821  13.277   4.715  1.00 52.13
ATOM    527  N   GLY A  34       4.721  11.493   3.675  1.00  3.04
ATOM    528  H   GLY A  34       4.695  10.950   2.860  1.00 61.32
ATOM    529  CA  GLY A  34       5.615  11.135   4.759  1.00 75.32
ATOM    530 1HA  GLY A  34       6.190  10.270   4.462  1.00  3.15
ATOM    531 2HA  GLY A  34       6.293  11.958   4.931  1.00 74.52
ATOM    532  C   GLY A  34       4.899  10.816   6.044  1.00 24.32
ATOM    533  O   GLY A  34       5.325  11.232   7.111  1.00 20.03
ATOM    534  N   GLN A  35       3.810  10.081   5.947  1.00 10.42
ATOM    535  H   GLN A  35       3.513   9.770   5.065  1.00 34.30
ATOM    536  CA  GLN A  35       3.059   9.704   7.131  1.00 71.20
ATOM    537  HA  GLN A  35       3.122  10.518   7.836  1.00 61.20
ATOM    538  CB  GLN A  35       1.596   9.429   6.784  1.00 14.44
ATOM    539 1HB  GLN A  35       1.561   8.582   6.117  1.00  3.43
ATOM    540 2HB  GLN A  35       1.071   9.174   7.694  1.00 31.51
ATOM    541  CG  GLN A  35       0.873  10.606   6.127  1.00 62.01
ATOM    542 1HG  GLN A  35       1.390  10.864   5.215  1.00 31.41
ATOM    543 2HG  GLN A  35      -0.137  10.303   5.890  1.00  3.11
ATOM    544  CD  GLN A  35       0.817  11.842   7.011  1.00 54.05
ATOM    545  OE1 GLN A  35      -0.109  12.012   7.789  1.00  3.14
ATOM    546  NE2 GLN A  35       1.787  12.717   6.884  1.00 32.34
ATOM    547 2HE2 GLN A  35       2.513  12.568   6.240  1.00 50.13
ATOM    548 1HE2 GLN A  35       1.747  13.506   7.462  1.00 21.11
ATOM    549  C   GLN A  35       3.708   8.476   7.740  1.00 63.01
ATOM    550  O   GLN A  35       3.619   8.226   8.937  1.00 51.14
ATOM    551  N   THR A  36       4.352   7.710   6.899  1.00 62.23
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ATOM    552  H   THR A  36       4.328   7.910   5.939  1.00 72.43
ATOM    553  CA  THR A  36       5.111   6.599   7.333  1.00 10.43
ATOM    554  HA  THR A  36       5.226   6.695   8.404  1.00 35.31
ATOM    555  CB  THR A  36       4.399   5.234   7.007  1.00 24.51
ATOM    556  HB  THR A  36       3.448   5.239   7.521  1.00 35.14
ATOM    557  OG1 THR A  36       5.157   4.125   7.510  1.00 73.34
ATOM    558  HG1 THR A  36       4.911   4.004   8.430  1.00 63.51
ATOM    559  CG2 THR A  36       4.149   5.049   5.509  1.00  1.24
ATOM    560 1HG2 THR A  36       3.665   4.100   5.340  1.00 35.02
ATOM    561 2HG2 THR A  36       5.093   5.071   4.983  1.00 53.32
ATOM    562 3HG2 THR A  36       3.518   5.846   5.148  1.00 50.55
ATOM    563  C   THR A  36       6.497   6.698   6.698  1.00 45.40
ATOM    564  O   THR A  36       6.631   6.935   5.487  1.00 75.54
ATOM    565  N   PHE A  37       7.508   6.599   7.515  1.00 42.33
ATOM    566  H   PHE A  37       7.351   6.433   8.468  1.00 61.14
ATOM    567  CA  PHE A  37       8.868   6.683   7.062  1.00 63.15
ATOM    568  HA  PHE A  37       8.842   6.672   5.981  1.00 24.24
ATOM    569  CB  PHE A  37       9.549   7.994   7.529  1.00  1.53
ATOM    570 1HB  PHE A  37      10.557   8.020   7.142  1.00 12.11
ATOM    571 2HB  PHE A  37       9.002   8.833   7.124  1.00 60.44
ATOM    572  CG  PHE A  37       9.640   8.179   9.031  1.00 42.14
ATOM    573  CD1 PHE A  37      10.777   7.785   9.725  1.00  1.21
ATOM    574  HD1 PHE A  37      11.598   7.336   9.185  1.00 50.12
ATOM    575  CE1 PHE A  37      10.867   7.960  11.092  1.00 62.44
ATOM    576  HE1 PHE A  37      11.758   7.648  11.619  1.00 72.14
ATOM    577  CZ  PHE A  37       9.818   8.532  11.785  1.00 72.55
ATOM    578  HZ  PHE A  37       9.887   8.668  12.853  1.00 73.02
ATOM    579  CE2 PHE A  37       8.682   8.930  11.106  1.00 75.11
ATOM    580  HE2 PHE A  37       7.859   9.378  11.646  1.00 13.01
ATOM    581  CD2 PHE A  37       8.596   8.755   9.739  1.00 65.35
ATOM    582  HD2 PHE A  37       7.707   9.065   9.211  1.00 51.34
ATOM    583  C   PHE A  37       9.639   5.469   7.521  1.00 35.53
ATOM    584  O   PHE A  37       9.216   4.776   8.453  1.00 72.03
ATOM    585  N   ASP A  38      10.732   5.201   6.869  1.00 43.32
ATOM    586  H   ASP A  38      11.010   5.780   6.130  1.00 43.51
ATOM    587  CA  ASP A  38      11.598   4.097   7.230  1.00  4.03
ATOM    588  HA  ASP A  38      11.048   3.406   7.851  1.00 51.24
ATOM    589  CB  ASP A  38      12.101   3.391   5.963  1.00 33.15
ATOM    590 1HB  ASP A  38      11.250   3.109   5.362  1.00 71.12
ATOM    591 2HB  ASP A  38      12.707   4.084   5.400  1.00 21.03
ATOM    592  CG  ASP A  38      12.925   2.132   6.223  1.00 71.21
ATOM    593  OD1 ASP A  38      14.018   2.219   6.796  1.00 20.00
ATOM    594  OD2 ASP A  38      12.521   1.054   5.797  1.00 11.11
ATOM    595  C   ASP A  38      12.770   4.676   8.010  1.00 60.05
ATOM    596  O   ASP A  38      13.130   5.839   7.807  1.00 60.24
ATOM    597  N   TYR A  39      13.372   3.880   8.860  1.00 23.02
ATOM    598  H   TYR A  39      13.098   2.940   8.877  1.00 32.23
ATOM    599  CA  TYR A  39      14.465   4.323   9.711  1.00  0.10
ATOM    600  HA  TYR A  39      14.169   5.250  10.176  1.00 52.40
ATOM    601  CB  TYR A  39      14.741   3.281  10.815  1.00 73.35
ATOM    602 1HB  TYR A  39      13.840   3.135  11.391  1.00 55.23
ATOM    603 2HB  TYR A  39      15.012   2.346  10.347  1.00 22.24
ATOM    604  CG  TYR A  39      15.848   3.659  11.786  1.00 23.33
ATOM    605  CD1 TYR A  39      17.118   3.098  11.680  1.00 14.31
ATOM    606  HD1 TYR A  39      17.310   2.379  10.898  1.00 43.13
ATOM    607  CE1 TYR A  39      18.126   3.445  12.558  1.00 73.12
ATOM    608  HE1 TYR A  39      19.105   2.999  12.459  1.00 34.42
ATOM    609  CZ  TYR A  39      17.876   4.360  13.556  1.00 51.53
ATOM    610  CE2 TYR A  39      16.627   4.931  13.683  1.00 51.01
ATOM    611  HE2 TYR A  39      16.433   5.649  14.465  1.00  3.23
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ATOM    612  CD2 TYR A  39      15.623   4.580  12.801  1.00  1.44
ATOM    613  HD2 TYR A  39      14.643   5.025  12.898  1.00 22.41
ATOM    614  OH  TYR A  39      18.879   4.709  14.431  1.00 31.23
ATOM    615  HH  TYR A  39      19.687   4.867  13.938  1.00 62.23
ATOM    616  C   TYR A  39      15.727   4.626   8.896  1.00  2.22
ATOM    617  O   TYR A  39      16.530   5.470   9.287  1.00 25.33
ATOM    618  N   LYS A  40      15.887   3.985   7.746  1.00 52.32
ATOM    619  H   LYS A  40      15.203   3.336   7.442  1.00 61.51
ATOM    620  CA  LYS A  40      17.069   4.250   6.932  1.00 74.13
ATOM    621  HA  LYS A  40      17.860   4.525   7.614  1.00 31.15
ATOM    622  CB  LYS A  40      17.509   3.009   6.131  1.00 13.14
ATOM    623 1HB  LYS A  40      18.395   3.260   5.566  1.00 73.21
ATOM    624 2HB  LYS A  40      17.754   2.221   6.826  1.00 32.42
ATOM    625  CG  LYS A  40      16.469   2.483   5.159  1.00 40.23
ATOM    626 1HG  LYS A  40      15.577   2.221   5.709  1.00 74.34
ATOM    627 2HG  LYS A  40      16.234   3.261   4.446  1.00 45.25
ATOM    628  CD  LYS A  40      16.964   1.263   4.419  1.00 75.32
ATOM    629 1HD  LYS A  40      17.755   1.580   3.756  1.00 62.03
ATOM    630 2HD  LYS A  40      17.339   0.538   5.126  1.00 42.10
ATOM    631  CE  LYS A  40      15.861   0.633   3.577  1.00 62.41
ATOM    632 1HE  LYS A  40      15.502   1.367   2.872  1.00 63.52
ATOM    633 2HE  LYS A  40      16.277  -0.204   3.034  1.00 23.40
ATOM    634  NZ  LYS A  40      14.706   0.155   4.395  1.00 43.43
ATOM    635 1HZ  LYS A  40      14.021  -0.321   3.764  1.00 51.21
ATOM    636 2HZ  LYS A  40      14.168   0.909   4.875  1.00 30.32
ATOM    637 3HZ  LYS A  40      14.987  -0.541   5.107  1.00 43.33
ATOM    638  C   LYS A  40      16.826   5.432   6.004  1.00 73.12
ATOM    639  O   LYS A  40      17.677   5.766   5.191  1.00 21.41
ATOM    640  N   SER A  41      15.650   6.069   6.171  1.00 13.31
ATOM    641  H   SER A  41      15.011   5.713   6.825  1.00 40.42
ATOM    642  CA  SER A  41      15.269   7.282   5.448  1.00 30.33
ATOM    643  HA  SER A  41      14.237   7.488   5.689  1.00 12.20
ATOM    644  CB  SER A  41      16.122   8.436   5.974  1.00 74.43
ATOM    645 1HB  SER A  41      17.159   8.186   5.808  1.00 62.02
ATOM    646 2HB  SER A  41      15.865   9.361   5.481  1.00 72.34
ATOM    647  OG  SER A  41      15.941   8.577   7.381  1.00 44.52
ATOM    648  HG  SER A  41      16.114   7.720   7.780  1.00 12.25
ATOM    649  C   SER A  41      15.385   7.122   3.910  1.00 22.53
ATOM    650  O   SER A  41      15.643   8.083   3.188  1.00 15.44
ATOM    651  N   ASN A  42      15.120   5.913   3.436  1.00 12.43
ATOM    652  H   ASN A  42      14.830   5.214   4.055  1.00 15.24
ATOM    653  CA  ASN A  42      15.195   5.600   2.016  1.00 35.15
ATOM    654  HA  ASN A  42      16.100   6.065   1.657  1.00  2.14
ATOM    655  CB  ASN A  42      15.277   4.086   1.745  1.00 70.54
ATOM    656 1HB  ASN A  42      15.391   3.928   0.682  1.00 75.40
ATOM    657 2HB  ASN A  42      16.148   3.689   2.245  1.00 12.44
ATOM    658  CG  ASN A  42      14.061   3.298   2.196  1.00 65.15
ATOM    659  OD1 ASN A  42      13.442   3.595   3.199  1.00  2.42
ATOM    660  ND2 ASN A  42      13.713   2.316   1.442  1.00 63.41
ATOM    661 2HD2 ASN A  42      14.248   2.156   0.625  1.00 21.14
ATOM    662 1HD2 ASN A  42      12.965   1.718   1.659  1.00 21.32
ATOM    663  C   ASN A  42      14.005   6.198   1.269  1.00 33.11
ATOM    664  O   ASN A  42      12.925   6.348   1.858  1.00 35.13
ATOM    665  N   PRO A  43      14.223   6.612  -0.010  1.00 52.03
ATOM    666  CD  PRO A  43      15.529   6.541  -0.723  1.00 21.51
ATOM    667  CA  PRO A  43      13.207   7.219  -0.884  1.00  4.45
ATOM    668  HA  PRO A  43      13.209   8.294  -0.771  1.00 74.33
ATOM    669  CB  PRO A  43      13.719   6.885  -2.272  1.00 41.14
ATOM    670 1HB  PRO A  43      13.388   5.894  -2.552  1.00 14.41
ATOM    671 2HB  PRO A  43      13.386   7.618  -2.992  1.00 35.01
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ATOM    672  CG  PRO A  43      15.200   6.956  -2.141  1.00 13.40
ATOM    673 1HG  PRO A  43      15.661   6.289  -2.854  1.00 20.24
ATOM    674 2HG  PRO A  43      15.535   7.970  -2.303  1.00 13.23
ATOM    675 1HD  PRO A  43      15.920   5.534  -0.708  1.00 42.34
ATOM    676 2HD  PRO A  43      16.241   7.225  -0.287  1.00 24.04
ATOM    677  C   PRO A  43      11.761   6.714  -0.697  1.00 72.44
ATOM    678  O   PRO A  43      11.418   5.535  -0.946  1.00 22.31
ATOM    679  N   TYR A  44      10.939   7.630  -0.261  1.00 41.21
ATOM    680  H   TYR A  44      11.327   8.516  -0.077  1.00 54.15
ATOM    681  CA  TYR A  44       9.503   7.450  -0.072  1.00 62.11
ATOM    682  HA  TYR A  44       9.294   6.395   0.024  1.00 63.22
ATOM    683  CB  TYR A  44       9.019   8.210   1.179  1.00 22.10
ATOM    684 1HB  TYR A  44       7.960   8.027   1.281  1.00 42.21
ATOM    685 2HB  TYR A  44       9.536   7.822   2.043  1.00  3.24
ATOM    686  CG  TYR A  44       9.238   9.720   1.116  1.00 33.21
ATOM    687  CD1 TYR A  44      10.489  10.274   1.364  1.00 35.24
ATOM    688  HD1 TYR A  44      11.310   9.619   1.617  1.00 63.12
ATOM    689  CE1 TYR A  44      10.696  11.633   1.289  1.00 62.10
ATOM    690  HE1 TYR A  44      11.676  12.040   1.484  1.00 32.32
ATOM    691  CZ  TYR A  44       9.647  12.464   0.965  1.00  4.01
ATOM    692  CE2 TYR A  44       8.395  11.946   0.721  1.00 12.23
ATOM    693  HE2 TYR A  44       7.573  12.601   0.468  1.00 61.00
ATOM    694  CD2 TYR A  44       8.194  10.584   0.794  1.00  3.10
ATOM    695  HD2 TYR A  44       7.213  10.174   0.605  1.00 55.51
ATOM    696  OH  TYR A  44       9.857  13.817   0.887  1.00 42.11
ATOM    697  HH  TYR A  44      10.561  13.931   0.242  1.00 44.33
ATOM    698  C   TYR A  44       8.824   7.997  -1.310  1.00 55.43
ATOM    699  O   TYR A  44       7.603   7.924  -1.500  1.00 63.43
ATOM    700  N   ASP A  45       9.652   8.540  -2.137  1.00 42.34
ATOM    701  H   ASP A  45      10.612   8.508  -1.928  1.00 31.11
ATOM    702  CA  ASP A  45       9.291   9.236  -3.308  1.00  4.34
ATOM    703  HA  ASP A  45       8.452   9.889  -3.124  1.00 31.42
ATOM    704  CB  ASP A  45      10.496  10.071  -3.766  1.00 22.55
ATOM    705 1HB  ASP A  45      11.224   9.415  -4.221  1.00 22.22
ATOM    706 2HB  ASP A  45      10.169  10.799  -4.493  1.00 12.22
ATOM    707  CG  ASP A  45      11.164  10.804  -2.611  1.00 61.24
ATOM    708  OD1 ASP A  45      10.958  12.012  -2.465  1.00 31.25
ATOM    709  OD2 ASP A  45      11.882  10.122  -1.812  1.00  2.14
ATOM    710  C   ASP A  45       8.980   8.205  -4.340  1.00 31.02
ATOM    711  O   ASP A  45       9.841   7.413  -4.754  1.00 53.10
ATOM    712  N   ILE A  46       7.734   8.187  -4.717  1.00 24.44
ATOM    713  H   ILE A  46       7.147   8.886  -4.365  1.00 53.02
ATOM    714  CA  ILE A  46       7.200   7.214  -5.619  1.00 10.34
ATOM    715  HA  ILE A  46       7.424   6.228  -5.241  1.00 43.00
ATOM    716  CB  ILE A  46       5.667   7.373  -5.708  1.00 22.12
ATOM    717  HB  ILE A  46       5.440   8.363  -6.072  1.00 35.44
ATOM    718  CG2 ILE A  46       5.068   6.344  -6.666  1.00 50.11
ATOM    719 1HG2 ILE A  46       5.504   6.467  -7.647  1.00 34.54
ATOM    720 2HG2 ILE A  46       4.002   6.494  -6.729  1.00 50.32
ATOM    721 3HG2 ILE A  46       5.273   5.347  -6.302  1.00 13.05
ATOM    722  CG1 ILE A  46       5.072   7.220  -4.298  1.00 43.11
ATOM    723 1HG1 ILE A  46       5.233   6.210  -3.955  1.00 52.30
ATOM    724 2HG1 ILE A  46       5.579   7.901  -3.630  1.00 20.32
ATOM    725  CD1 ILE A  46       3.597   7.496  -4.211  1.00 73.44
ATOM    726 1HD1 ILE A  46       3.400   8.513  -4.516  1.00  4.24
ATOM    727 2HD1 ILE A  46       3.264   7.346  -3.196  1.00 11.42
ATOM    728 3HD1 ILE A  46       3.073   6.817  -4.867  1.00 52.22
ATOM    729  C   ILE A  46       7.842   7.390  -6.969  1.00 42.31
ATOM    730  O   ILE A  46       7.703   8.426  -7.606  1.00 42.21
ATOM    731  N   SER A  47       8.526   6.372  -7.391  1.00 65.34
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ATOM    732  H   SER A  47       8.498   5.522  -6.898  1.00 53.32
ATOM    733  CA  SER A  47       9.310   6.434  -8.570  1.00 64.25
ATOM    734  HA  SER A  47       9.658   7.443  -8.731  1.00 35.12
ATOM    735  CB  SER A  47      10.520   5.529  -8.357  1.00 12.35
ATOM    736 1HB  SER A  47      10.214   4.496  -8.446  1.00  3.43
ATOM    737 2HB  SER A  47      11.276   5.751  -9.094  1.00 12.02
ATOM    738  OG  SER A  47      11.072   5.742  -7.048  1.00 35.02
ATOM    739  HG  SER A  47      10.680   6.539  -6.668  1.00 45.10
ATOM    740  C   SER A  47       8.482   5.951  -9.754  1.00 23.34
ATOM    741  O   SER A  47       8.674   6.401 -10.877  1.00  4.43
ATOM    742  N   VAL A  48       7.531   5.050  -9.498  1.00 11.20
ATOM    743  H   VAL A  48       7.429   4.671  -8.597  1.00 31.32
ATOM    744  CA  VAL A  48       6.626   4.625 -10.545  1.00 11.03
ATOM    745  HA  VAL A  48       6.624   5.349 -11.345  1.00 62.11
ATOM    746  CB  VAL A  48       7.017   3.220 -11.117  1.00 25.14
ATOM    747  HB  VAL A  48       6.777   2.509 -10.337  1.00 22.12
ATOM    748  CG1 VAL A  48       6.176   2.880 -12.336  1.00 43.34
ATOM    749 1HG1 VAL A  48       6.377   3.596 -13.119  1.00 75.42
ATOM    750 2HG1 VAL A  48       5.133   2.940 -12.067  1.00 63.43
ATOM    751 3HG1 VAL A  48       6.414   1.886 -12.681  1.00 24.51
ATOM    752  CG2 VAL A  48       8.504   3.107 -11.448  1.00 51.35
ATOM    753 1HG2 VAL A  48       8.715   2.120 -11.835  1.00 13.41
ATOM    754 2HG2 VAL A  48       9.086   3.277 -10.555  1.00 12.51
ATOM    755 3HG2 VAL A  48       8.764   3.847 -12.192  1.00 11.21
ATOM    756  C   VAL A  48       5.236   4.480  -9.943  1.00 31.43
ATOM    757  O   VAL A  48       5.073   3.850  -8.896  1.00 53.22
ATOM    758  N   ASN A  49       4.263   5.075 -10.567  1.00 52.34
ATOM    759  H   ASN A  49       4.456   5.635 -11.348  1.00 50.34
ATOM    760  CA  ASN A  49       2.874   4.889 -10.204  1.00 25.40
ATOM    761  HA  ASN A  49       2.855   4.147  -9.418  1.00 72.24
ATOM    762  CB  ASN A  49       2.192   6.197  -9.705  1.00  1.54
ATOM    763 1HB  ASN A  49       1.259   5.946  -9.223  1.00 72.31
ATOM    764 2HB  ASN A  49       2.839   6.658  -8.972  1.00 33.11
ATOM    765  CG  ASN A  49       1.892   7.227 -10.797  1.00 64.11
ATOM    766  OD1 ASN A  49       0.820   7.215 -11.399  1.00  4.23
ATOM    767  ND2 ASN A  49       2.812   8.134 -11.036  1.00  2.44
ATOM    768 2HD2 ASN A  49       3.639   8.121 -10.512  1.00 62.33
ATOM    769 1HD2 ASN A  49       2.616   8.790 -11.736  1.00 72.53
ATOM    770  C   ASN A  49       2.144   4.313 -11.398  1.00 64.25
ATOM    771  O   ASN A  49       2.394   4.757 -12.517  1.00 74.22
ATOM    772  N   LYS A  50       1.335   3.295 -11.237  1.00  2.34
ATOM    773  H   LYS A  50       1.281   2.832 -10.368  1.00 55.23
ATOM    774  CA  LYS A  50       0.498   2.929 -12.367  1.00 52.12
ATOM    775  HA  LYS A  50       0.569   3.702 -13.117  1.00  2.31
ATOM    776  CB  LYS A  50       0.902   1.562 -13.001  1.00 71.13
ATOM    777 1HB  LYS A  50       0.629   0.775 -12.315  1.00 70.44
ATOM    778 2HB  LYS A  50       0.333   1.431 -13.910  1.00 55.41
ATOM    779  CG  LYS A  50       2.380   1.394 -13.334  1.00 44.03
ATOM    780 1HG  LYS A  50       2.505   0.730 -14.175  1.00 41.42
ATOM    781 2HG  LYS A  50       2.741   2.382 -13.583  1.00 13.04
ATOM    782  CD  LYS A  50       3.208   0.875 -12.145  1.00 54.51
ATOM    783 1HD  LYS A  50       4.243   1.135 -12.306  1.00 43.55
ATOM    784 2HD  LYS A  50       2.851   1.367 -11.250  1.00 70.24
ATOM    785  CE  LYS A  50       3.135  -0.650 -11.941  1.00 74.44
ATOM    786 1HE  LYS A  50       3.527  -1.130 -12.826  1.00 12.32
ATOM    787 2HE  LYS A  50       3.769  -0.900 -11.103  1.00 13.22
ATOM    788  NZ  LYS A  50       1.765  -1.181 -11.692  1.00 22.44
ATOM    789 1HZ  LYS A  50       1.879  -2.087 -11.169  1.00 70.13
ATOM    790 2HZ  LYS A  50       1.234  -1.390 -12.557  1.00  4.44
ATOM    791 3HZ  LYS A  50       1.212  -0.560 -11.073  1.00 74.23
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ATOM    792  C   LYS A  50      -0.913   2.810 -11.893  1.00 11.42
ATOM    793  O   LYS A  50      -1.155   2.312 -10.796  1.00 22.31
ATOM    794  N   ASN A  51      -1.826   3.288 -12.680  1.00 23.22
ATOM    795  H   ASN A  51      -1.569   3.782 -13.487  1.00 63.00
ATOM    796  CA  ASN A  51      -3.232   3.074 -12.464  1.00 15.20
ATOM    797  HA  ASN A  51      -3.312   2.496 -11.556  1.00  2.12
ATOM    798  CB  ASN A  51      -4.020   4.400 -12.298  1.00 15.32
ATOM    799 1HB  ASN A  51      -5.036   4.168 -12.014  1.00 12.41
ATOM    800 2HB  ASN A  51      -3.563   4.976 -11.506  1.00 73.43
ATOM    801  CG  ASN A  51      -4.077   5.267 -13.551  1.00 63.11
ATOM    802  OD1 ASN A  51      -4.984   5.147 -14.353  1.00 44.33
ATOM    803  ND2 ASN A  51      -3.124   6.159 -13.706  1.00 53.23
ATOM    804 2HD2 ASN A  51      -2.422   6.245 -13.028  1.00 54.22
ATOM    805 1HD2 ASN A  51      -3.170   6.709 -14.517  1.00 34.31
ATOM    806  C   ASN A  51      -3.780   2.232 -13.594  1.00 63.14
ATOM    807  O   ASN A  51      -3.323   2.379 -14.722  1.00  4.15
ATOM    808  N   ASN A  52      -4.689   1.341 -13.316  1.00 43.13
ATOM    809  H   ASN A  52      -4.858   1.079 -12.382  1.00 24.30
ATOM    810  CA  ASN A  52      -5.417   0.662 -14.398  1.00 31.43
ATOM    811  HA  ASN A  52      -5.129   1.157 -15.315  1.00 41.04
ATOM    812  CB  ASN A  52      -5.127  -0.853 -14.505  1.00 41.41
ATOM    813 1HB  ASN A  52      -5.334  -1.315 -13.552  1.00 34.21
ATOM    814 2HB  ASN A  52      -5.786  -1.278 -15.248  1.00 40.44
ATOM    815  CG  ASN A  52      -3.689  -1.192 -14.881  1.00 72.04
ATOM    816  OD1 ASN A  52      -3.321  -1.192 -16.055  1.00 33.42
ATOM    817  ND2 ASN A  52      -2.894  -1.567 -13.918  1.00 12.34
ATOM    818 2HD2 ASN A  52      -3.269  -1.618 -12.998  1.00 30.34
ATOM    819 1HD2 ASN A  52      -1.983  -1.813 -14.148  1.00 65.14
ATOM    820  C   ASN A  52      -6.898   0.895 -14.203  1.00 51.14
ATOM    821  O   ASN A  52      -7.747   0.279 -14.845  1.00 44.34
ATOM    822  N   GLY A  53      -7.217   1.782 -13.263  1.00 12.20
ATOM    823  H   GLY A  53      -6.472   2.192 -12.777  1.00 24.05
ATOM    824  CA  GLY A  53      -8.602   2.140 -12.973  1.00 54.33
ATOM    825 1HA  GLY A  53      -8.622   3.114 -12.506  1.00 75.24
ATOM    826 2HA  GLY A  53      -9.153   2.186 -13.901  1.00 63.45
ATOM    827  C   GLY A  53      -9.273   1.137 -12.051  1.00 71.43
ATOM    828  O   GLY A  53     -10.054   1.501 -11.136  1.00 21.23
ATOM    829  N   THR A  54      -8.988  -0.114 -12.289  1.00 33.50
ATOM    830  H   THR A  54      -8.412  -0.316 -13.062  1.00  4.20
ATOM    831  CA  THR A  54      -9.492  -1.190 -11.498  1.00 21.32
ATOM    832  HA  THR A  54     -10.378  -0.844 -10.987  1.00 52.41
ATOM    833  CB  THR A  54      -9.867  -2.415 -12.417  1.00 11.41
ATOM    834  HB  THR A  54     -10.518  -2.043 -13.195  1.00 63.14
ATOM    835  OG1 THR A  54     -10.591  -3.431 -11.686  1.00  3.33
ATOM    836  HG1 THR A  54     -11.416  -3.560 -12.166  1.00 21.45
ATOM    837  CG2 THR A  54      -8.632  -3.035 -13.067  1.00 44.51
ATOM    838 1HG2 THR A  54      -7.954  -3.378 -12.298  1.00 53.11
ATOM    839 2HG2 THR A  54      -8.136  -2.295 -13.678  1.00 72.34
ATOM    840 3HG2 THR A  54      -8.930  -3.870 -13.683  1.00 73.41
ATOM    841  C   THR A  54      -8.429  -1.563 -10.441  1.00 42.54
ATOM    842  O   THR A  54      -8.647  -2.439  -9.586  1.00 34.42
ATOM    843  N   ASP A  55      -7.306  -0.866 -10.497  1.00 65.54
ATOM    844  H   ASP A  55      -7.165  -0.193 -11.196  1.00 32.12
ATOM    845  CA  ASP A  55      -6.191  -1.048  -9.578  1.00 52.13
ATOM    846  HA  ASP A  55      -6.584  -1.072  -8.573  1.00 32.43
ATOM    847  CB  ASP A  55      -5.422  -2.348  -9.856  1.00 54.40
ATOM    848 1HB  ASP A  55      -4.640  -2.476  -9.125  1.00 75.30
ATOM    849 2HB  ASP A  55      -6.113  -3.172  -9.788  1.00 73.40
ATOM    850  CG  ASP A  55      -4.803  -2.386 -11.224  1.00  2.11
ATOM    851  OD1 ASP A  55      -5.444  -2.933 -12.130  1.00 53.03
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ATOM    852  OD2 ASP A  55      -3.684  -1.849 -11.401  1.00 51.30
ATOM    853  C   ASP A  55      -5.241   0.118  -9.714  1.00 14.41
ATOM    854  O   ASP A  55      -5.357   0.920 -10.667  1.00 15.42
ATOM    855  N   ALA A  56      -4.393   0.272  -8.729  1.00 61.11
ATOM    856  H   ALA A  56      -4.455  -0.334  -7.957  1.00 20.04
ATOM    857  CA  ALA A  56      -3.331   1.244  -8.734  1.00  0.12
ATOM    858  HA  ALA A  56      -3.013   1.371  -9.758  1.00 24.30
ATOM    859  CB  ALA A  56      -3.778   2.583  -8.175  1.00 30.44
ATOM    860 1HB  ALA A  56      -4.142   2.452  -7.166  1.00 71.43
ATOM    861 2HB  ALA A  56      -4.553   3.001  -8.797  1.00 63.14
ATOM    862 3HB  ALA A  56      -2.934   3.257  -8.161  1.00  1.24
ATOM    863  C   ALA A  56      -2.167   0.688  -7.943  1.00  1.44
ATOM    864  O   ALA A  56      -2.371  -0.014  -6.950  1.00 44.12
ATOM    865  N   GLU A  57      -0.980   0.994  -8.362  1.00  2.32
ATOM    866  H   GLU A  57      -0.891   1.583  -9.144  1.00 52.41
ATOM    867  CA  GLU A  57       0.205   0.502  -7.709  1.00 32.44
ATOM    868  HA  GLU A  57      -0.042   0.130  -6.726  1.00 30.43
ATOM    869  CB  GLU A  57       0.796  -0.617  -8.539  1.00 63.54
ATOM    870 1HB  GLU A  57       0.019  -1.326  -8.785  1.00  5.21
ATOM    871 2HB  GLU A  57       1.164  -0.173  -9.451  1.00 64.44
ATOM    872  CG  GLU A  57       1.945  -1.373  -7.896  1.00 22.40
ATOM    873 1HG  GLU A  57       2.632  -0.664  -7.460  1.00 61.41
ATOM    874 2HG  GLU A  57       1.556  -2.023  -7.126  1.00 32.54
ATOM    875  CD  GLU A  57       2.678  -2.203  -8.910  1.00 52.30
ATOM    876  OE1 GLU A  57       3.901  -2.081  -8.993  1.00 74.41
ATOM    877  OE2 GLU A  57       2.018  -2.871  -9.738  1.00 61.22
ATOM    878  C   GLU A  57       1.213   1.628  -7.620  1.00 71.52
ATOM    879  O   GLU A  57       1.433   2.345  -8.610  1.00  3.21
ATOM    880  N   ILE A  58       1.797   1.795  -6.469  1.00 73.43
ATOM    881  H   ILE A  58       1.584   1.219  -5.705  1.00 62.41
ATOM    882  CA  ILE A  58       2.788   2.789  -6.242  1.00 45.42
ATOM    883  HA  ILE A  58       2.981   3.255  -7.199  1.00 30.43
ATOM    884  CB  ILE A  58       2.343   3.895  -5.238  1.00 32.14
ATOM    885  HB  ILE A  58       3.281   4.300  -4.902  1.00 53.41
ATOM    886  CG2 ILE A  58       1.560   4.994  -5.946  1.00 12.35
ATOM    887 1HG2 ILE A  58       2.184   5.458  -6.694  1.00  3.42
ATOM    888 2HG2 ILE A  58       1.245   5.736  -5.226  1.00 30.13
ATOM    889 3HG2 ILE A  58       0.690   4.565  -6.420  1.00 23.22
ATOM    890  CG1 ILE A  58       1.566   3.352  -3.993  1.00 53.01
ATOM    891 1HG1 ILE A  58       2.017   2.421  -3.681  1.00  4.41
ATOM    892 2HG1 ILE A  58       1.655   4.067  -3.189  1.00 12.24
ATOM    893  CD1 ILE A  58       0.080   3.078  -4.219  1.00 30.21
ATOM    894 1HD1 ILE A  58      -0.418   4.017  -4.426  1.00 60.43
ATOM    895 2HD1 ILE A  58      -0.355   2.627  -3.341  1.00 53.21
ATOM    896 3HD1 ILE A  58      -0.033   2.424  -5.072  1.00 53.43
ATOM    897  C   ILE A  58       4.085   2.144  -5.782  1.00 50.30
ATOM    898  O   ILE A  58       4.080   1.324  -4.852  1.00 51.20
ATOM    899  N   VAL A  59       5.179   2.463  -6.472  1.00  3.11
ATOM    900  H   VAL A  59       5.127   3.075  -7.242  1.00 41.10
ATOM    901  CA  VAL A  59       6.480   1.899  -6.160  1.00  2.51
ATOM    902  HA  VAL A  59       6.396   1.283  -5.276  1.00 41.34
ATOM    903  CB  VAL A  59       6.998   1.008  -7.328  1.00 41.22
ATOM    904  HB  VAL A  59       7.202   1.665  -8.162  1.00 25.53
ATOM    905  CG1 VAL A  59       8.312   0.315  -6.970  1.00 54.40
ATOM    906 1HG1 VAL A  59       8.631  -0.305  -7.795  1.00  3.05
ATOM    907 2HG1 VAL A  59       8.176  -0.293  -6.090  1.00  4.21
ATOM    908 3HG1 VAL A  59       9.066   1.064  -6.773  1.00 34.55
ATOM    909  CG2 VAL A  59       5.957  -0.001  -7.761  1.00 72.40
ATOM    910 1HG2 VAL A  59       5.072   0.518  -8.100  1.00 23.24
ATOM    911 2HG2 VAL A  59       5.699  -0.636  -6.926  1.00 11.45
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ATOM    912 3HG2 VAL A  59       6.348  -0.607  -8.566  1.00 13.34
ATOM    913  C   VAL A  59       7.516   3.000  -5.934  1.00  0.11
ATOM    914  O   VAL A  59       7.683   3.879  -6.786  1.00 15.23
ATOM    915  N   SER A  60       8.181   2.968  -4.807  1.00 21.43
ATOM    916  H   SER A  60       7.913   2.332  -4.104  1.00 50.14
ATOM    917  CA  SER A  60       9.314   3.824  -4.560  1.00 62.43
ATOM    918  HA  SER A  60       9.411   4.498  -5.401  1.00 24.33
ATOM    919  CB  SER A  60       9.131   4.620  -3.240  1.00 62.22
ATOM    920 1HB  SER A  60       9.961   5.294  -3.090  1.00 54.33
ATOM    921 2HB  SER A  60       8.226   5.208  -3.285  1.00 35.04
ATOM    922  OG  SER A  60       9.044   3.772  -2.112  1.00 34.23
ATOM    923  HG  SER A  60       9.759   4.053  -1.527  1.00 33.42
ATOM    924  C   SER A  60      10.546   2.908  -4.509  1.00  1.44
ATOM    925  O   SER A  60      10.440   1.762  -4.041  1.00 15.42
ATOM    926  N   ALA A  61      11.674   3.352  -5.009  1.00 42.23
ATOM    927  H   ALA A  61      11.748   4.265  -5.366  1.00 20.31
ATOM    928  CA  ALA A  61      12.856   2.505  -5.029  1.00 43.34
ATOM    929  HA  ALA A  61      12.607   1.586  -4.519  1.00 64.51
ATOM    930  CB  ALA A  61      13.248   2.167  -6.460  1.00 12.23
ATOM    931 1HB  ALA A  61      12.413   1.698  -6.959  1.00 15.32
ATOM    932 2HB  ALA A  61      14.087   1.486  -6.448  1.00 51.42
ATOM    933 3HB  ALA A  61      13.521   3.071  -6.983  1.00 22.12
ATOM    934  C   ALA A  61      14.004   3.163  -4.301  1.00 24.03
ATOM    935  O   ALA A  61      14.143   4.380  -4.341  1.00 40.11
ATOM    936  N   SER A  62      14.805   2.366  -3.634  1.00 25.41
ATOM    937  H   SER A  62      14.655   1.397  -3.623  1.00 53.32
ATOM    938  CA  SER A  62      15.930   2.864  -2.888  1.00  3.34
ATOM    939  HA  SER A  62      15.739   3.892  -2.618  1.00  1.15
ATOM    940  CB  SER A  62      16.088   2.046  -1.621  1.00  4.20
ATOM    941 1HB  SER A  62      16.451   1.059  -1.872  1.00 44.31
ATOM    942 2HB  SER A  62      16.789   2.533  -0.958  1.00 71.12
ATOM    943  OG  SER A  62      14.845   1.927  -0.964  1.00 31.51
ATOM    944  HG  SER A  62      14.471   1.079  -1.252  1.00 32.23
ATOM    945  C   SER A  62      17.200   2.778  -3.727  1.00  4.34
ATOM    946  O   SER A  62      17.423   1.795  -4.441  1.00 73.02
ATOM    947  N   ASP A  63      17.993   3.816  -3.667  1.00 53.04
ATOM    948  H   ASP A  63      17.751   4.615  -3.143  1.00 53.44
ATOM    949  CA  ASP A  63      19.261   3.888  -4.384  1.00 63.23
ATOM    950  HA  ASP A  63      19.178   3.390  -5.337  1.00  0.20
ATOM    951  CB  ASP A  63      19.616   5.360  -4.616  1.00 70.31
ATOM    952 1HB  ASP A  63      20.571   5.424  -5.116  1.00  2.00
ATOM    953 2HB  ASP A  63      18.854   5.824  -5.224  1.00 61.23
ATOM    954  CG  ASP A  63      19.700   6.107  -3.291  1.00 71.25
ATOM    955  OD1 ASP A  63      18.621   6.395  -2.719  1.00  4.35
ATOM    956  OD2 ASP A  63      20.813   6.321  -2.779  1.00 11.11
ATOM    957  C   ASP A  63      20.373   3.245  -3.577  1.00 33.43
ATOM    958  O   ASP A  63      21.301   2.665  -4.139  1.00  5.52
ATOM    959  N   SER A  64      20.255   3.312  -2.269  1.00 31.25
ATOM    960  H   SER A  64      19.473   3.755  -1.882  1.00 63.34
ATOM    961  CA  SER A  64      21.281   2.820  -1.405  1.00  2.45
ATOM    962  HA  SER A  64      22.235   3.133  -1.805  1.00 33.32
ATOM    963  CB  SER A  64      21.104   3.450  -0.032  1.00  3.51
ATOM    964 1HB  SER A  64      20.197   3.077   0.418  1.00 60.23
ATOM    965 2HB  SER A  64      21.949   3.200   0.593  1.00 72.31
ATOM    966  OG  SER A  64      21.017   4.875  -0.136  1.00 42.21
ATOM    967  HG  SER A  64      21.031   5.191  -1.054  1.00 13.43
ATOM    968  C   SER A  64      21.247   1.294  -1.331  1.00 51.21
ATOM    969  O   SER A  64      22.289   0.632  -1.385  1.00 60.41
ATOM    970  N   ASP A  65      20.063   0.736  -1.218  1.00 12.35
ATOM    971  H   ASP A  65      19.234   1.251  -1.176  1.00 52.25
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ATOM    972  CA  ASP A  65      19.915  -0.669  -1.219  1.00 54.32
ATOM    973  HA  ASP A  65      20.849  -1.071  -1.585  1.00 21.04
ATOM    974  CB  ASP A  65      19.620  -1.257   0.177  1.00  5.04
ATOM    975 1HB  ASP A  65      19.810  -2.320   0.157  1.00 63.22
ATOM    976 2HB  ASP A  65      20.287  -0.799   0.893  1.00 55.24
ATOM    977  CG  ASP A  65      18.210  -1.056   0.640  1.00 52.14
ATOM    978  OD1 ASP A  65      17.401  -1.964   0.409  1.00 25.40
ATOM    979  OD2 ASP A  65      17.910   0.003   1.228  1.00 55.24
ATOM    980  C   ASP A  65      18.858  -1.035  -2.229  1.00 74.33
ATOM    981  O   ASP A  65      17.769  -0.486  -2.253  1.00 42.40
ATOM    982  N   SER A  66      19.230  -1.877  -3.104  1.00 54.23
ATOM    983  H   SER A  66      20.165  -2.161  -3.100  1.00  3.21
ATOM    984  CA  SER A  66      18.392  -2.380  -4.156  1.00 21.13
ATOM    985  HA  SER A  66      18.020  -1.557  -4.745  1.00 42.24
ATOM    986  CB  SER A  66      19.283  -3.193  -5.039  1.00 31.41
ATOM    987 1HB  SER A  66      19.712  -3.922  -4.370  1.00 24.55
ATOM    988 2HB  SER A  66      18.732  -3.668  -5.835  1.00 52.42
ATOM    989  OG  SER A  66      20.352  -2.407  -5.534  1.00 23.21
ATOM    990  HG  SER A  66      20.030  -1.516  -5.703  1.00 15.22
ATOM    991  C   SER A  66      17.215  -3.260  -3.657  1.00 64.34
ATOM    992  O   SER A  66      16.252  -3.487  -4.393  1.00 22.44
ATOM    993  N   THR A  67      17.294  -3.750  -2.440  1.00 22.51
ATOM    994  H   THR A  67      17.966  -3.409  -1.814  1.00 43.22
ATOM    995  CA  THR A  67      16.327  -4.719  -1.977  1.00 30.31
ATOM    996  HA  THR A  67      15.984  -5.234  -2.862  1.00 74.13
ATOM    997  CB  THR A  67      16.994  -5.786  -1.043  1.00 73.14
ATOM    998  HB  THR A  67      17.629  -6.396  -1.670  1.00 63.15
ATOM    999  OG1 THR A  67      16.020  -6.665  -0.441  1.00 10.42
ATOM   1000  HG1 THR A  67      15.171  -6.201  -0.469  1.00 43.22
ATOM   1001  CG2 THR A  67      17.856  -5.134   0.025  1.00 50.32
ATOM   1002 1HG2 THR A  67      17.245  -4.477   0.628  1.00 60.14
ATOM   1003 2HG2 THR A  67      18.626  -4.559  -0.469  1.00 63.04
ATOM   1004 3HG2 THR A  67      18.307  -5.893   0.646  1.00 61.22
ATOM   1005  C   THR A  67      15.093  -4.079  -1.328  1.00 61.44
ATOM   1006  O   THR A  67      14.048  -4.749  -1.183  1.00 14.53
ATOM   1007  N   ASP A  68      15.175  -2.823  -0.970  1.00 51.02
ATOM   1008  H   ASP A  68      16.026  -2.329  -1.016  1.00 53.32
ATOM   1009  CA  ASP A  68      14.030  -2.154  -0.405  1.00 42.41
ATOM   1010  HA  ASP A  68      13.341  -2.907  -0.056  1.00 23.55
ATOM   1011  CB  ASP A  68      14.409  -1.252   0.762  1.00 74.04
ATOM   1012 1HB  ASP A  68      15.090  -1.784   1.407  1.00 70.23
ATOM   1013 2HB  ASP A  68      14.906  -0.373   0.376  1.00 13.12
ATOM   1014  CG  ASP A  68      13.217  -0.804   1.597  1.00 34.34
ATOM   1015  OD1 ASP A  68      13.144  -1.213   2.775  1.00 54.25
ATOM   1016  OD2 ASP A  68      12.353  -0.014   1.128  1.00 73.52
ATOM   1017  C   ASP A  68      13.357  -1.326  -1.458  1.00  4.33
ATOM   1018  O   ASP A  68      13.945  -0.394  -2.030  1.00 65.14
ATOM   1019  N   SER A  69      12.169  -1.682  -1.748  1.00 53.13
ATOM   1020  H   SER A  69      11.778  -2.466  -1.312  1.00 73.12
ATOM   1021  CA  SER A  69      11.355  -0.937  -2.618  1.00 13.45
ATOM   1022  HA  SER A  69      11.695   0.088  -2.613  1.00 62.34
ATOM   1023  CB  SER A  69      11.428  -1.509  -4.055  1.00 33.04
ATOM   1024 1HB  SER A  69      10.650  -1.064  -4.657  1.00 61.04
ATOM   1025 2HB  SER A  69      12.391  -1.274  -4.483  1.00  3.42
ATOM   1026  OG  SER A  69      11.255  -2.938  -4.063  1.00  1.22
ATOM   1027  HG  SER A  69      11.911  -3.224  -3.415  1.00 32.14
ATOM   1028  C   SER A  69       9.976  -1.012  -2.055  1.00 62.30
ATOM   1029  O   SER A  69       9.516  -2.106  -1.688  1.00 15.43
ATOM   1030  N   LEU A  70       9.317   0.091  -1.958  1.00 11.43
ATOM   1031  H   LEU A  70       9.702   0.933  -2.289  1.00 53.40
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ATOM   1032  CA  LEU A  70       8.013   0.070  -1.420  1.00 11.13
ATOM   1033  HA  LEU A  70       7.916  -0.814  -0.805  1.00  3.25
ATOM   1034  CB  LEU A  70       7.772   1.345  -0.562  1.00 61.25
ATOM   1035 1HB  LEU A  70       8.633   1.471   0.076  1.00  1.34
ATOM   1036 2HB  LEU A  70       7.743   2.185  -1.241  1.00 32.03
ATOM   1037  CG  LEU A  70       6.513   1.415   0.344  1.00 30.34
ATOM   1038  HG  LEU A  70       6.569   2.329   0.918  1.00 31.43
ATOM   1039  CD1 LEU A  70       5.225   1.470  -0.452  1.00 55.55
ATOM   1040 1HD1 LEU A  70       5.165   0.587  -1.072  1.00 31.23
ATOM   1041 2HD1 LEU A  70       5.216   2.345  -1.086  1.00 34.25
ATOM   1042 3HD1 LEU A  70       4.378   1.495   0.219  1.00 62.25
ATOM   1043  CD2 LEU A  70       6.486   0.252   1.329  1.00 63.00
ATOM   1044 1HD2 LEU A  70       5.613   0.336   1.958  1.00 14.21
ATOM   1045 2HD2 LEU A  70       7.376   0.276   1.941  1.00 32.23
ATOM   1046 3HD2 LEU A  70       6.448  -0.680   0.786  1.00 21.42
ATOM   1047  C   LEU A  70       7.088  -0.034  -2.594  1.00 63.12
ATOM   1048  O   LEU A  70       6.995   0.873  -3.398  1.00 42.15
ATOM   1049  N   GLN A  71       6.475  -1.161  -2.710  1.00 50.23
ATOM   1050  H   GLN A  71       6.624  -1.851  -2.031  1.00 45.43
ATOM   1051  CA  GLN A  71       5.570  -1.449  -3.771  1.00 74.43
ATOM   1052  HA  GLN A  71       5.344  -0.515  -4.264  1.00 54.30
ATOM   1053  CB  GLN A  71       6.265  -2.390  -4.785  1.00  3.51
ATOM   1054 1HB  GLN A  71       6.840  -1.788  -5.470  1.00 51.24
ATOM   1055 2HB  GLN A  71       6.956  -3.009  -4.231  1.00 62.13
ATOM   1056  CG  GLN A  71       5.384  -3.306  -5.627  1.00 55.13
ATOM   1057 1HG  GLN A  71       4.985  -4.090  -5.000  1.00 53.22
ATOM   1058 2HG  GLN A  71       4.573  -2.728  -6.051  1.00 32.54
ATOM   1059  CD  GLN A  71       6.183  -3.930  -6.761  1.00 33.42
ATOM   1060  OE1 GLN A  71       6.894  -4.924  -6.563  1.00 10.41
ATOM   1061  NE2 GLN A  71       6.001  -3.452  -7.956  1.00 33.20
ATOM   1062 2HE2 GLN A  71       5.350  -2.716  -8.099  1.00  2.03
ATOM   1063 1HE2 GLN A  71       6.481  -3.839  -8.713  1.00 14.11
ATOM   1064  C   GLN A  71       4.297  -1.995  -3.198  1.00 31.24
ATOM   1065  O   GLN A  71       4.295  -3.043  -2.521  1.00 63.21
ATOM   1066  N   VAL A  72       3.240  -1.259  -3.410  1.00 33.10
ATOM   1067  H   VAL A  72       3.342  -0.433  -3.935  1.00 14.42
ATOM   1068  CA  VAL A  72       1.936  -1.610  -2.926  1.00 42.35
ATOM   1069  HA  VAL A  72       1.977  -2.590  -2.477  1.00 12.41
ATOM   1070  CB  VAL A  72       1.427  -0.588  -1.859  1.00 32.10
ATOM   1071  HB  VAL A  72       1.408   0.390  -2.322  1.00 75.30
ATOM   1072  CG1 VAL A  72       0.017  -0.937  -1.383  1.00  3.12
ATOM   1073 1HG1 VAL A  72       0.025  -1.923  -0.940  1.00  2.43
ATOM   1074 2HG1 VAL A  72      -0.660  -0.930  -2.224  1.00 50.30
ATOM   1075 3HG1 VAL A  72      -0.307  -0.214  -0.650  1.00 74.04
ATOM   1076  CG2 VAL A  72       2.364  -0.538  -0.676  1.00 63.41
ATOM   1077 1HG2 VAL A  72       2.005   0.185   0.038  1.00 11.25
ATOM   1078 2HG2 VAL A  72       3.346  -0.252  -1.020  1.00 22.32
ATOM   1079 3HG2 VAL A  72       2.421  -1.511  -0.212  1.00 74.45
ATOM   1080  C   VAL A  72       0.978  -1.607  -4.078  1.00  0.53
ATOM   1081  O   VAL A  72       0.842  -0.594  -4.778  1.00 32.02
ATOM   1082  N   ALA A  73       0.335  -2.712  -4.273  1.00 52.23
ATOM   1083  H   ALA A  73       0.545  -3.490  -3.711  1.00 24.02
ATOM   1084  CA  ALA A  73      -0.667  -2.836  -5.279  1.00  2.15
ATOM   1085  HA  ALA A  73      -0.615  -1.979  -5.933  1.00 20.44
ATOM   1086  CB  ALA A  73      -0.463  -4.105  -6.093  1.00 10.33
ATOM   1087 1HB  ALA A  73       0.509  -4.080  -6.562  1.00  3.22
ATOM   1088 2HB  ALA A  73      -1.228  -4.172  -6.852  1.00  3.11
ATOM   1089 3HB  ALA A  73      -0.526  -4.962  -5.440  1.00 21.52
ATOM   1090  C   ALA A  73      -2.010  -2.841  -4.604  1.00  1.42
ATOM   1091  O   ALA A  73      -2.223  -3.573  -3.627  1.00  2.45
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ATOM   1092  N   MET A  74      -2.886  -2.011  -5.078  1.00 65.12
ATOM   1093  H   MET A  74      -2.648  -1.439  -5.845  1.00  1.33
ATOM   1094  CA  MET A  74      -4.213  -1.901  -4.541  1.00 10.33
ATOM   1095  HA  MET A  74      -4.309  -2.541  -3.677  1.00 13.25
ATOM   1096  CB  MET A  74      -4.516  -0.456  -4.152  1.00  4.04
ATOM   1097 1HB  MET A  74      -4.508   0.152  -5.042  1.00 52.45
ATOM   1098 2HB  MET A  74      -5.501  -0.435  -3.710  1.00 33.04
ATOM   1099  CG  MET A  74      -3.548   0.155  -3.162  1.00  1.43
ATOM   1100 1HG  MET A  74      -3.605  -0.391  -2.233  1.00 53.52
ATOM   1101 2HG  MET A  74      -2.548   0.074  -3.562  1.00 41.20
ATOM   1102  SD  MET A  74      -3.901   1.891  -2.839  1.00 22.12
ATOM   1103  CE  MET A  74      -3.618   2.589  -4.457  1.00 53.50
ATOM   1104 1HE  MET A  74      -3.677   3.667  -4.401  1.00 70.52
ATOM   1105 2HE  MET A  74      -4.381   2.233  -5.132  1.00 51.21
ATOM   1106 3HE  MET A  74      -2.644   2.297  -4.820  1.00  0.12
ATOM   1107  C   MET A  74      -5.168  -2.318  -5.619  1.00 24.02
ATOM   1108  O   MET A  74      -5.141  -1.764  -6.710  1.00 71.04
ATOM   1109  N   LYS A  75      -6.006  -3.263  -5.327  1.00 62.01
ATOM   1110  H   LYS A  75      -6.009  -3.654  -4.426  1.00 45.24
ATOM   1111  CA  LYS A  75      -6.905  -3.782  -6.300  1.00 65.41
ATOM   1112  HA  LYS A  75      -6.678  -3.332  -7.252  1.00 62.44
ATOM   1113  CB  LYS A  75      -6.717  -5.306  -6.419  1.00 41.13
ATOM   1114 1HB  LYS A  75      -5.680  -5.511  -6.646  1.00  0.20
ATOM   1115 2HB  LYS A  75      -6.963  -5.759  -5.472  1.00 75.43
ATOM   1116  CG  LYS A  75      -7.573  -5.946  -7.494  1.00 13.51
ATOM   1117 1HG  LYS A  75      -7.480  -7.020  -7.433  1.00 21.40
ATOM   1118 2HG  LYS A  75      -8.603  -5.657  -7.342  1.00 72.33
ATOM   1119  CD  LYS A  75      -7.129  -5.483  -8.860  1.00 73.55
ATOM   1120 1HD  LYS A  75      -7.094  -4.409  -8.833  1.00 14.24
ATOM   1121 2HD  LYS A  75      -6.154  -5.888  -9.088  1.00  4.31
ATOM   1122  CE  LYS A  75      -8.104  -5.868  -9.936  1.00 64.02
ATOM   1123 1HE  LYS A  75      -7.645  -5.687 -10.895  1.00 74.44
ATOM   1124 2HE  LYS A  75      -8.320  -6.917  -9.810  1.00 32.13
ATOM   1125  NZ  LYS A  75      -9.365  -5.091  -9.830  1.00 70.41
ATOM   1126 1HZ  LYS A  75     -10.005  -5.281 -10.627  1.00 45.11
ATOM   1127 2HZ  LYS A  75      -9.140  -4.073  -9.883  1.00 73.42
ATOM   1128 3HZ  LYS A  75      -9.883  -5.240  -8.939  1.00 54.25
ATOM   1129  C   LYS A  75      -8.335  -3.488  -5.899  1.00  2.11
ATOM   1130  O   LYS A  75      -8.743  -3.788  -4.780  1.00  1.41
ATOM   1131  N   LYS A  76      -9.091  -2.946  -6.828  1.00 43.02
ATOM   1132  H   LYS A  76      -8.691  -2.741  -7.702  1.00 63.14
ATOM   1133  CA  LYS A  76     -10.482  -2.625  -6.613  1.00 43.13
ATOM   1134  HA  LYS A  76     -10.601  -2.227  -5.618  1.00 55.51
ATOM   1135  CB  LYS A  76     -10.929  -1.572  -7.641  1.00 12.32
ATOM   1136 1HB  LYS A  76     -10.341  -0.681  -7.481  1.00 52.02
ATOM   1137 2HB  LYS A  76     -10.699  -1.952  -8.625  1.00 41.34
ATOM   1138  CG  LYS A  76     -12.416  -1.190  -7.608  1.00 63.34
ATOM   1139 1HG  LYS A  76     -13.020  -2.067  -7.785  1.00  4.02
ATOM   1140 2HG  LYS A  76     -12.645  -0.796  -6.629  1.00 52.53
ATOM   1141  CD  LYS A  76     -12.727  -0.117  -8.660  1.00 31.53
ATOM   1142 1HD  LYS A  76     -12.315  -0.423  -9.610  1.00 41.24
ATOM   1143 2HD  LYS A  76     -13.799  -0.009  -8.747  1.00 62.44
ATOM   1144  CE  LYS A  76     -12.122   1.219  -8.263  1.00 14.15
ATOM   1145 1HE  LYS A  76     -12.660   1.573  -7.395  1.00 61.15
ATOM   1146 2HE  LYS A  76     -11.093   1.050  -7.981  1.00 75.43
ATOM   1147  NZ  LYS A  76     -12.185   2.251  -9.334  1.00 65.31
ATOM   1148 1HZ  LYS A  76     -11.530   1.999 -10.108  1.00 22.34
ATOM   1149 2HZ  LYS A  76     -11.906   3.177  -8.946  1.00 61.52
ATOM   1150 3HZ  LYS A  76     -13.146   2.330  -9.719  1.00  4.44
ATOM   1151  C   LYS A  76     -11.299  -3.883  -6.768  1.00  2.03
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ATOM   1152  O   LYS A  76     -11.212  -4.582  -7.802  1.00 45.23
ATOM   1153  N   LEU A  77     -12.005  -4.204  -5.730  1.00 61.33
ATOM   1154  H   LEU A  77     -11.987  -3.615  -4.941  1.00 32.14
ATOM   1155  CA  LEU A  77     -12.857  -5.361  -5.684  1.00 71.21
ATOM   1156  HA  LEU A  77     -12.666  -5.932  -6.580  1.00 40.32
ATOM   1157  CB  LEU A  77     -12.548  -6.236  -4.454  1.00 71.11
ATOM   1158 1HB  LEU A  77     -12.713  -5.635  -3.573  1.00  5.34
ATOM   1159 2HB  LEU A  77     -13.252  -7.055  -4.439  1.00 30.13
ATOM   1160  CG  LEU A  77     -11.130  -6.822  -4.365  1.00 72.21
ATOM   1161  HG  LEU A  77     -10.421  -6.011  -4.294  1.00 42.30
ATOM   1162  CD1 LEU A  77     -10.993  -7.668  -3.117  1.00 32.52
ATOM   1163 1HD1 LEU A  77     -11.728  -8.461  -3.139  1.00 41.51
ATOM   1164 2HD1 LEU A  77     -11.152  -7.053  -2.243  1.00 23.23
ATOM   1165 3HD1 LEU A  77     -10.004  -8.100  -3.081  1.00 33.34
ATOM   1166  CD2 LEU A  77     -10.797  -7.649  -5.603  1.00 32.42
ATOM   1167 1HD2 LEU A  77     -11.515  -8.449  -5.707  1.00 71.35
ATOM   1168 2HD2 LEU A  77      -9.808  -8.071  -5.493  1.00 20.51
ATOM   1169 3HD2 LEU A  77     -10.821  -7.022  -6.481  1.00 34.10
ATOM   1170  C   LEU A  77     -14.320  -4.928  -5.684  1.00 41.32
ATOM   1171  O   LEU A  77     -14.660  -3.884  -5.121  1.00 34.35
ATOM   1172  N   PRO A  78     -15.217  -5.728  -6.285  1.00 42.11
ATOM   1173  CD  PRO A  78     -14.919  -7.040  -6.895  1.00 73.15
ATOM   1174  CA  PRO A  78     -16.649  -5.403  -6.361  1.00 11.25
ATOM   1175  HA  PRO A  78     -16.811  -4.360  -6.589  1.00 15.42
ATOM   1176  CB  PRO A  78     -17.147  -6.293  -7.503  1.00 52.42
ATOM   1177 1HB  PRO A  78     -18.169  -6.588  -7.309  1.00 62.21
ATOM   1178 2HB  PRO A  78     -17.077  -5.768  -8.445  1.00 31.14
ATOM   1179  CG  PRO A  78     -16.227  -7.474  -7.522  1.00  2.40
ATOM   1180 1HG  PRO A  78     -16.668  -8.281  -6.955  1.00 11.40
ATOM   1181 2HG  PRO A  78     -16.051  -7.786  -8.540  1.00 52.24
ATOM   1182 1HD  PRO A  78     -14.625  -7.729  -6.116  1.00 62.44
ATOM   1183 2HD  PRO A  78     -14.132  -6.951  -7.628  1.00 41.21
ATOM   1184  C   PRO A  78     -17.352  -5.759  -5.047  1.00 71.54
ATOM   1185  O   PRO A  78     -18.542  -5.555  -4.864  1.00 32.10
ATOM   1186  N   ASN A  79     -16.553  -6.243  -4.127  1.00 51.14
ATOM   1187  H   ASN A  79     -15.612  -6.327  -4.389  1.00  1.22
ATOM   1188  CA  ASN A  79     -16.967  -6.676  -2.803  1.00 42.04
ATOM   1189  HA  ASN A  79     -17.938  -7.144  -2.855  1.00 32.21
ATOM   1190  CB  ASN A  79     -15.941  -7.708  -2.261  1.00 64.31
ATOM   1191 1HB  ASN A  79     -14.963  -7.251  -2.253  1.00 52.40
ATOM   1192 2HB  ASN A  79     -16.210  -7.962  -1.247  1.00 74.51
ATOM   1193  CG  ASN A  79     -15.835  -9.003  -3.073  1.00 54.24
ATOM   1194  OD1 ASN A  79     -16.118  -9.034  -4.264  1.00 41.32
ATOM   1195  ND2 ASN A  79     -15.356 -10.045  -2.454  1.00 62.11
ATOM   1196 2HD2 ASN A  79     -15.074  -9.963  -1.506  1.00 75.44
ATOM   1197 1HD2 ASN A  79     -15.276 -10.883  -2.951  1.00 23.50
ATOM   1198  C   ASN A  79     -16.988  -5.482  -1.856  1.00 42.14
ATOM   1199  O   ASN A  79     -17.084  -5.661  -0.623  1.00 73.44
ATOM   1200  N   ASN A  80     -16.895  -4.262  -2.452  1.00 50.04
ATOM   1201  H   ASN A  80     -16.917  -4.239  -3.432  1.00 23.03
ATOM   1202  CA  ASN A  80     -16.777  -2.975  -1.720  1.00 54.53
ATOM   1203  HA  ASN A  80     -16.651  -2.210  -2.473  1.00 63.54
ATOM   1204  CB  ASN A  80     -18.018  -2.658  -0.857  1.00 54.25
ATOM   1205 1HB  ASN A  80     -18.282  -3.532  -0.282  1.00 74.32
ATOM   1206 2HB  ASN A  80     -17.774  -1.849  -0.184  1.00 14.35
ATOM   1207  CG  ASN A  80     -19.223  -2.249  -1.690  1.00 42.51
ATOM   1208  OD1 ASN A  80     -19.408  -1.076  -1.990  1.00 32.42
ATOM   1209  ND2 ASN A  80     -20.041  -3.202  -2.070  1.00 72.03
ATOM   1210 2HD2 ASN A  80     -19.848  -4.124  -1.808  1.00 22.21
ATOM   1211 1HD2 ASN A  80     -20.815  -2.932  -2.606  1.00 41.53
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ATOM   1212  C   ASN A  80     -15.525  -2.996  -0.899  1.00 71.04
ATOM   1213  O   ASN A  80     -15.430  -2.405   0.171  1.00 10.41
ATOM   1214  N   ALA A  81     -14.551  -3.658  -1.452  1.00 61.04
ATOM   1215  H   ALA A  81     -14.649  -3.971  -2.375  1.00 53.44
ATOM   1216  CA  ALA A  81     -13.319  -3.885  -0.813  1.00 60.13
ATOM   1217  HA  ALA A  81     -13.263  -3.264   0.067  1.00  3.30
ATOM   1218  CB  ALA A  81     -13.243  -5.323  -0.375  1.00 33.24
ATOM   1219 1HB  ALA A  81     -12.320  -5.456   0.164  1.00 14.43
ATOM   1220 2HB  ALA A  81     -13.269  -5.960  -1.250  1.00 15.13
ATOM   1221 3HB  ALA A  81     -14.081  -5.543   0.271  1.00 45.11
ATOM   1222  C   ALA A  81     -12.181  -3.557  -1.744  1.00 10.31
ATOM   1223  O   ALA A  81     -12.367  -3.447  -2.959  1.00 44.31
ATOM   1224  N   THR A  82     -11.041  -3.377  -1.182  1.00 74.13
ATOM   1225  H   THR A  82     -10.979  -3.412  -0.201  1.00 25.23
ATOM   1226  CA  THR A  82      -9.849  -3.131  -1.913  1.00 62.14
ATOM   1227  HA  THR A  82     -10.019  -3.329  -2.961  1.00 41.34
ATOM   1228  CB  THR A  82      -9.416  -1.677  -1.726  1.00 12.45
ATOM   1229  HB  THR A  82      -9.115  -1.532  -0.699  1.00  3.53
ATOM   1230  OG1 THR A  82     -10.518  -0.828  -2.029  1.00 42.32
ATOM   1231  HG1 THR A  82     -11.240  -1.015  -1.414  1.00 21.54
ATOM   1232  CG2 THR A  82      -8.256  -1.335  -2.642  1.00 62.31
ATOM   1233 1HG2 THR A  82      -8.017  -0.285  -2.559  1.00 15.20
ATOM   1234 2HG2 THR A  82      -8.528  -1.582  -3.655  1.00 63.53
ATOM   1235 3HG2 THR A  82      -7.396  -1.923  -2.356  1.00 60.14
ATOM   1236  C   THR A  82      -8.786  -4.052  -1.360  1.00 20.25
ATOM   1237  O   THR A  82      -8.632  -4.148  -0.149  1.00  4.15
ATOM   1238  N   ARG A  83      -8.075  -4.736  -2.199  1.00 63.14
ATOM   1239  H   ARG A  83      -8.207  -4.624  -3.165  1.00 53.54
ATOM   1240  CA  ARG A  83      -7.091  -5.642  -1.713  1.00 22.11
ATOM   1241  HA  ARG A  83      -7.265  -5.797  -0.662  1.00 32.14
ATOM   1242  CB  ARG A  83      -7.132  -6.975  -2.428  1.00  1.43
ATOM   1243 1HB  ARG A  83      -8.158  -7.219  -2.658  1.00 61.51
ATOM   1244 2HB  ARG A  83      -6.568  -6.899  -3.347  1.00 25.54
ATOM   1245  CG  ARG A  83      -6.533  -8.085  -1.592  1.00 73.51
ATOM   1246 1HG  ARG A  83      -5.613  -7.731  -1.151  1.00 23.31
ATOM   1247 2HG  ARG A  83      -7.229  -8.338  -0.805  1.00 63.23
ATOM   1248  CD  ARG A  83      -6.234  -9.312  -2.403  1.00 34.31
ATOM   1249 1HD  ARG A  83      -6.109 -10.123  -1.704  1.00  0.12
ATOM   1250 2HD  ARG A  83      -7.072  -9.519  -3.053  1.00 44.22
ATOM   1251  NE  ARG A  83      -5.006  -9.145  -3.212  1.00 43.33
ATOM   1252  HE  ARG A  83      -4.501  -8.319  -3.032  1.00 40.20
ATOM   1253  CZ  ARG A  83      -4.508 -10.040  -4.081  1.00  1.24
ATOM   1254  NH1 ARG A  83      -5.216 -11.133  -4.409  1.00 64.42
ATOM   1255 1HH1 ARG A  83      -6.122 -11.301  -4.014  1.00 43.04
ATOM   1256 2HH1 ARG A  83      -4.873 -11.823  -5.050  1.00 73.43
ATOM   1257  NH2 ARG A  83      -3.301  -9.833  -4.617  1.00 35.12
ATOM   1258 1HH2 ARG A  83      -2.765  -9.015  -4.359  1.00 51.34
ATOM   1259 2HH2 ARG A  83      -2.860 -10.445  -5.275  1.00 13.11
ATOM   1260  C   ARG A  83      -5.737  -5.031  -1.886  1.00 34.41
ATOM   1261  O   ARG A  83      -5.424  -4.515  -2.949  1.00 63.10
ATOM   1262  N   ILE A  84      -4.952  -5.092  -0.861  1.00 43.32
ATOM   1263  H   ILE A  84      -5.242  -5.551  -0.039  1.00 43.20
ATOM   1264  CA  ILE A  84      -3.642  -4.532  -0.869  1.00 63.51
ATOM   1265  HA  ILE A  84      -3.516  -4.014  -1.808  1.00 44.21
ATOM   1266  CB  ILE A  84      -3.438  -3.497   0.311  1.00 73.51
ATOM   1267  HB  ILE A  84      -4.115  -3.795   1.098  1.00 42.12
ATOM   1268  CG2 ILE A  84      -2.028  -3.509   0.896  1.00 34.14
ATOM   1269 1HG2 ILE A  84      -1.318  -3.274   0.120  1.00 41.34
ATOM   1270 2HG2 ILE A  84      -1.817  -4.491   1.294  1.00 44.14
ATOM   1271 3HG2 ILE A  84      -1.957  -2.776   1.688  1.00 54.33
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ATOM   1272  CG1 ILE A  84      -3.816  -2.081  -0.116  1.00 41.53
ATOM   1273 1HG1 ILE A  84      -3.561  -1.385   0.669  1.00 20.03
ATOM   1274 2HG1 ILE A  84      -3.223  -1.867  -0.994  1.00 30.21
ATOM   1275  CD1 ILE A  84      -5.269  -1.879  -0.464  1.00 33.32
ATOM   1276 1HD1 ILE A  84      -5.528  -2.540  -1.278  1.00 13.02
ATOM   1277 2HD1 ILE A  84      -5.420  -0.856  -0.772  1.00 63.01
ATOM   1278 3HD1 ILE A  84      -5.887  -2.100   0.394  1.00 44.15
ATOM   1279  C   ILE A  84      -2.634  -5.648  -0.800  1.00 74.45
ATOM   1280  O   ILE A  84      -2.798  -6.629  -0.058  1.00  2.31
ATOM   1281  N   SER A  85      -1.680  -5.549  -1.653  1.00 43.41
ATOM   1282  H   SER A  85      -1.697  -4.789  -2.281  1.00 25.31
ATOM   1283  CA  SER A  85      -0.607  -6.472  -1.734  1.00 10.15
ATOM   1284  HA  SER A  85      -0.668  -7.137  -0.886  1.00 15.03
ATOM   1285  CB  SER A  85      -0.761  -7.279  -3.018  1.00 43.23
ATOM   1286 1HB  SER A  85      -0.675  -6.623  -3.872  1.00 61.52
ATOM   1287 2HB  SER A  85      -0.002  -8.046  -3.064  1.00 62.42
ATOM   1288  OG  SER A  85      -2.053  -7.906  -3.025  1.00 70.34
ATOM   1289  HG  SER A  85      -2.321  -7.805  -2.103  1.00 43.30
ATOM   1290  C   SER A  85       0.711  -5.703  -1.671  1.00 55.42
ATOM   1291  O   SER A  85       0.969  -4.833  -2.507  1.00 31.24
ATOM   1292  N   ILE A  86       1.490  -5.973  -0.662  1.00 14.24
ATOM   1293  H   ILE A  86       1.215  -6.680  -0.035  1.00 23.32
ATOM   1294  CA  ILE A  86       2.748  -5.289  -0.458  1.00 71.31
ATOM   1295  HA  ILE A  86       2.830  -4.480  -1.169  1.00 32.42
ATOM   1296  CB  ILE A  86       2.853  -4.718   0.990  1.00 73.23
ATOM   1297  HB  ILE A  86       2.945  -5.546   1.676  1.00 53.12
ATOM   1298  CG2 ILE A  86       4.105  -3.841   1.133  1.00 54.13
ATOM   1299 1HG2 ILE A  86       4.159  -3.452   2.138  1.00 52.10
ATOM   1300 2HG2 ILE A  86       4.054  -3.021   0.431  1.00 61.12
ATOM   1301 3HG2 ILE A  86       4.982  -4.435   0.928  1.00 64.35
ATOM   1302  CG1 ILE A  86       1.594  -3.911   1.340  1.00 73.00
ATOM   1303 1HG1 ILE A  86       1.505  -3.070   0.669  1.00  2.35
ATOM   1304 2HG1 ILE A  86       0.731  -4.548   1.210  1.00 22.41
ATOM   1305  CD1 ILE A  86       1.566  -3.378   2.758  1.00 12.54
ATOM   1306 1HD1 ILE A  86       0.653  -2.824   2.916  1.00 13.34
ATOM   1307 2HD1 ILE A  86       2.415  -2.727   2.915  1.00 74.44
ATOM   1308 3HD1 ILE A  86       1.613  -4.203   3.453  1.00 14.35
ATOM   1309  C   ILE A  86       3.872  -6.286  -0.670  1.00 13.32
ATOM   1310  O   ILE A  86       3.792  -7.419  -0.181  1.00 24.41
ATOM   1311  N   LYS A  87       4.901  -5.877  -1.362  1.00 62.15
ATOM   1312  H   LYS A  87       4.912  -4.954  -1.699  1.00  4.03
ATOM   1313  CA  LYS A  87       6.018  -6.752  -1.644  1.00 61.30
ATOM   1314  HA  LYS A  87       5.775  -7.758  -1.336  1.00 10.24
ATOM   1315  CB  LYS A  87       6.317  -6.762  -3.140  1.00 33.32
ATOM   1316 1HB  LYS A  87       5.463  -7.186  -3.648  1.00 53.11
ATOM   1317 2HB  LYS A  87       6.449  -5.749  -3.483  1.00 23.11
ATOM   1318  CG  LYS A  87       7.556  -7.584  -3.514  1.00  4.30
ATOM   1319 1HG  LYS A  87       8.191  -7.673  -2.645  1.00 52.25
ATOM   1320 2HG  LYS A  87       7.245  -8.567  -3.835  1.00 54.34
ATOM   1321  CD  LYS A  87       8.342  -6.919  -4.633  1.00 14.31
ATOM   1322 1HD  LYS A  87       9.141  -7.583  -4.926  1.00 54.01
ATOM   1323 2HD  LYS A  87       7.682  -6.736  -5.467  1.00 52.34
ATOM   1324  CE  LYS A  87       8.957  -5.585  -4.169  1.00 60.43
ATOM   1325 1HE  LYS A  87       8.210  -4.976  -3.684  1.00  2.13
ATOM   1326 2HE  LYS A  87       9.743  -5.803  -3.463  1.00 22.01
ATOM   1327  NZ  LYS A  87       9.532  -4.811  -5.291  1.00 21.32
ATOM   1328 1HZ  LYS A  87       9.968  -3.937  -4.920  1.00 21.24
ATOM   1329 2HZ  LYS A  87       8.762  -4.565  -5.949  1.00 24.51
ATOM   1330 3HZ  LYS A  87      10.250  -5.366  -5.795  1.00 62.01
ATOM   1331  C   LYS A  87       7.264  -6.272  -0.932  1.00 10.44
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ATOM   1332  O   LYS A  87       7.713  -5.145  -1.145  1.00 51.43
ATOM   1333  N   TYR A  88       7.792  -7.099  -0.089  1.00 70.32
ATOM   1334  H   TYR A  88       7.360  -7.958   0.116  1.00 61.14
ATOM   1335  CA  TYR A  88       9.036  -6.850   0.564  1.00 65.10
ATOM   1336  HA  TYR A  88       9.478  -5.965   0.137  1.00  4.41
ATOM   1337  CB  TYR A  88       8.843  -6.648   2.019  1.00 41.44
ATOM   1338 1HB  TYR A  88       7.781  -6.655   2.211  1.00 50.32
ATOM   1339 2HB  TYR A  88       9.301  -7.476   2.538  1.00 14.02
ATOM   1340  CG  TYR A  88       9.450  -5.369   2.529  1.00 14.31
ATOM   1341  CD1 TYR A  88      10.634  -5.373   3.246  1.00 74.43
ATOM   1342  HD1 TYR A  88      11.136  -6.312   3.423  1.00 22.32
ATOM   1343  CE1 TYR A  88      11.164  -4.203   3.736  1.00 54.22
ATOM   1344  HE1 TYR A  88      12.088  -4.212   4.294  1.00 32.40
ATOM   1345  CZ  TYR A  88      10.513  -3.017   3.502  1.00 44.32
ATOM   1346  CE2 TYR A  88       9.345  -2.986   2.788  1.00 32.55
ATOM   1347  HE2 TYR A  88       8.838  -2.050   2.609  1.00  3.21
ATOM   1348  CD2 TYR A  88       8.818  -4.155   2.309  1.00 14.44
ATOM   1349  HD2 TYR A  88       7.897  -4.134   1.746  1.00 62.11
ATOM   1350  OH  TYR A  88      11.016  -1.861   4.001  1.00 64.22
ATOM   1351  HH  TYR A  88      11.930  -1.767   3.665  1.00 33.30
ATOM   1352  C   TYR A  88       9.933  -8.020   0.339  1.00 32.41
ATOM   1353  O   TYR A  88       9.447  -9.099   0.011  1.00 52.14
ATOM   1354  N   GLY A  89      11.216  -7.815   0.458  1.00 31.12
ATOM   1355  H   GLY A  89      11.564  -6.919   0.653  1.00 70.54
ATOM   1356  CA  GLY A  89      12.125  -8.912   0.338  1.00 73.11
ATOM   1357 1HA  GLY A  89      11.734  -9.614  -0.384  1.00 55.33
ATOM   1358 2HA  GLY A  89      13.082  -8.544  -0.002  1.00 71.34
ATOM   1359  C   GLY A  89      12.316  -9.619   1.672  1.00  3.11
ATOM   1360  O   GLY A  89      11.395  -9.681   2.501  1.00 63.01
ATOM   1361  N   SER A  90      13.529 -10.047   1.908  1.00 62.00
ATOM   1362  H   SER A  90      14.253  -9.846   1.279  1.00 43.21
ATOM   1363  CA  SER A  90      13.927 -10.808   3.079  1.00 22.44
ATOM   1364  HA  SER A  90      13.294 -11.683   3.110  1.00  0.44
ATOM   1365  CB  SER A  90      15.359 -11.291   2.883  1.00 71.24
ATOM   1366 1HB  SER A  90      15.766 -11.604   3.833  1.00 71.51
ATOM   1367 2HB  SER A  90      15.370 -12.121   2.192  1.00 72.33
ATOM   1368  OG  SER A  90      16.172 -10.244   2.353  1.00 11.32
ATOM   1369  HG  SER A  90      17.070 -10.378   2.668  1.00 25.25
ATOM   1370  C   SER A  90      13.748 -10.057   4.415  1.00 13.43
ATOM   1371  O   SER A  90      13.786 -10.664   5.477  1.00 11.32
ATOM   1372  N   GLN A  91      13.559  -8.749   4.347  1.00  0.55
ATOM   1373  H   GLN A  91      13.463  -8.336   3.462  1.00 50.01
ATOM   1374  CA  GLN A  91      13.498  -7.918   5.541  1.00 70.03
ATOM   1375  HA  GLN A  91      14.232  -8.275   6.246  1.00 12.23
ATOM   1376  CB  GLN A  91      13.810  -6.438   5.209  1.00 55.34
ATOM   1377 1HB  GLN A  91      12.999  -6.059   4.604  1.00 62.53
ATOM   1378 2HB  GLN A  91      13.826  -5.881   6.135  1.00 62.33
ATOM   1379  CG  GLN A  91      15.114  -6.149   4.445  1.00 11.12
ATOM   1380 1HG  GLN A  91      15.292  -5.083   4.453  1.00 25.44
ATOM   1381 2HG  GLN A  91      15.925  -6.646   4.957  1.00 44.24
ATOM   1382  CD  GLN A  91      15.092  -6.617   2.992  1.00  3.42
ATOM   1383  OE1 GLN A  91      14.036  -6.679   2.354  1.00 51.42
ATOM   1384  NE2 GLN A  91      16.236  -6.944   2.464  1.00 34.21
ATOM   1385 2HE2 GLN A  91      17.043  -6.882   3.014  1.00 34.22
ATOM   1386 1HE2 GLN A  91      16.243  -7.213   1.517  1.00 51.24
ATOM   1387  C   GLN A  91      12.104  -7.978   6.173  1.00 32.34
ATOM   1388  O   GLN A  91      11.955  -7.742   7.363  1.00 22.15
ATOM   1389  N   GLY A  92      11.098  -8.320   5.377  1.00 40.34
ATOM   1390  H   GLY A  92      11.292  -8.539   4.441  1.00 22.32
ATOM   1391  CA  GLY A  92       9.744  -8.396   5.894  1.00 55.34
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ATOM   1392 1HA  GLY A  92       9.152  -9.008   5.229  1.00 44.41
ATOM   1393 2HA  GLY A  92       9.771  -8.864   6.865  1.00 72.30
ATOM   1394  C   GLY A  92       9.072  -7.028   6.028  1.00 44.44
ATOM   1395  O   GLY A  92       9.492  -6.183   6.811  1.00 34.00
ATOM   1396  N   ASN A  93       8.013  -6.815   5.267  1.00 63.14
ATOM   1397  H   ASN A  93       7.731  -7.514   4.639  1.00 63.02
ATOM   1398  CA  ASN A  93       7.269  -5.538   5.292  1.00  1.45
ATOM   1399  HA  ASN A  93       8.008  -4.756   5.190  1.00 35.31
ATOM   1400  CB  ASN A  93       6.285  -5.398   4.102  1.00 21.24
ATOM   1401 1HB  ASN A  93       5.735  -4.478   4.236  1.00 34.30
ATOM   1402 2HB  ASN A  93       6.839  -5.319   3.181  1.00 24.42
ATOM   1403  CG  ASN A  93       5.262  -6.519   3.977  1.00 53.25
ATOM   1404  OD1 ASN A  93       4.811  -7.098   4.953  1.00 32.11
ATOM   1405  ND2 ASN A  93       4.914  -6.848   2.768  1.00 43.04
ATOM   1406 2HD2 ASN A  93       5.312  -6.372   2.008  1.00 33.42
ATOM   1407 1HD2 ASN A  93       4.282  -7.588   2.658  1.00 24.45
ATOM   1408  C   ASN A  93       6.521  -5.284   6.579  1.00 11.43
ATOM   1409  O   ASN A  93       6.089  -4.173   6.791  1.00 22.33
ATOM   1410  N   SER A  94       6.437  -6.282   7.440  1.00 15.14
ATOM   1411  H   SER A  94       6.959  -7.097   7.280  1.00 34.22
ATOM   1412  CA  SER A  94       5.596  -6.287   8.636  1.00 21.41
ATOM   1413  HA  SER A  94       4.578  -6.452   8.319  1.00 63.42
ATOM   1414  CB  SER A  94       6.005  -7.479   9.483  1.00 70.41
ATOM   1415 1HB  SER A  94       6.978  -7.299   9.916  1.00 41.32
ATOM   1416 2HB  SER A  94       5.279  -7.637  10.267  1.00 12.34
ATOM   1417  OG  SER A  94       6.064  -8.648   8.669  1.00 52.32
ATOM   1418  HG  SER A  94       5.461  -9.308   9.023  1.00 40.34
ATOM   1419  C   SER A  94       5.648  -4.980   9.465  1.00 24.33
ATOM   1420  O   SER A  94       4.605  -4.485   9.895  1.00 71.50
ATOM   1421  N   ILE A  95       6.829  -4.398   9.632  1.00 44.20
ATOM   1422  H   ILE A  95       7.616  -4.798   9.204  1.00 30.13
ATOM   1423  CA  ILE A  95       6.956  -3.179  10.430  1.00 50.40
ATOM   1424  HA  ILE A  95       6.419  -3.347  11.352  1.00 23.20
ATOM   1425  CB  ILE A  95       8.461  -2.826  10.771  1.00 11.44
ATOM   1426  HB  ILE A  95       8.994  -2.761   9.834  1.00 12.22
ATOM   1427  CG2 ILE A  95       8.571  -1.459  11.448  1.00 21.33
ATOM   1428 1HG2 ILE A  95       9.607  -1.246  11.667  1.00  0.31
ATOM   1429 2HG2 ILE A  95       8.002  -1.466  12.367  1.00 65.54
ATOM   1430 3HG2 ILE A  95       8.178  -0.700  10.789  1.00 72.24
ATOM   1431  CG1 ILE A  95       9.146  -3.904  11.662  1.00 52.24
ATOM   1432 1HG1 ILE A  95      10.079  -3.507  12.032  1.00 20.14
ATOM   1433 2HG1 ILE A  95       8.501  -4.109  12.505  1.00 64.43
ATOM   1434  CD1 ILE A  95       9.460  -5.226  10.979  1.00 50.52
ATOM   1435 1HD1 ILE A  95       9.943  -5.887  11.684  1.00 75.22
ATOM   1436 2HD1 ILE A  95      10.117  -5.053  10.139  1.00 11.42
ATOM   1437 3HD1 ILE A  95       8.541  -5.677  10.634  1.00 22.05
ATOM   1438  C   ILE A  95       6.294  -1.987   9.703  1.00 14.31
ATOM   1439  O   ILE A  95       5.411  -1.319  10.250  1.00 65.23
ATOM   1440  N   ARG A  96       6.684  -1.771   8.457  1.00 71.21
ATOM   1441  H   ARG A  96       7.349  -2.369   8.058  1.00 14.12
ATOM   1442  CA  ARG A  96       6.145  -0.677   7.655  1.00 10.12
ATOM   1443  HA  ARG A  96       6.163   0.199   8.288  1.00 64.52
ATOM   1444  CB  ARG A  96       7.030  -0.412   6.419  1.00  2.05
ATOM   1445 1HB  ARG A  96       7.073  -1.311   5.821  1.00 75.00
ATOM   1446 2HB  ARG A  96       6.595   0.383   5.835  1.00 53.35
ATOM   1447  CG  ARG A  96       8.458  -0.008   6.794  1.00 25.03
ATOM   1448 1HG  ARG A  96       8.422   0.917   7.346  1.00 54.41
ATOM   1449 2HG  ARG A  96       8.863  -0.776   7.437  1.00 43.44
ATOM   1450  CD  ARG A  96       9.379   0.163   5.583  1.00 41.50
ATOM   1451 1HD  ARG A  96      10.387   0.311   5.940  1.00 64.22
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ATOM   1452 2HD  ARG A  96       9.347  -0.750   5.007  1.00 62.15
ATOM   1453  NE  ARG A  96       9.038   1.300   4.692  1.00 62.03
ATOM   1454  HE  ARG A  96       8.376   1.924   5.053  1.00 13.34
ATOM   1455  CZ  ARG A  96       9.651   1.521   3.496  1.00  4.40
ATOM   1456  NH1 ARG A  96      10.510   0.618   3.014  1.00 72.21
ATOM   1457 1HH1 ARG A  96      10.713  -0.229   3.523  1.00 53.31
ATOM   1458 2HH1 ARG A  96      11.041   0.652   2.153  1.00 53.51
ATOM   1459  NH2 ARG A  96       9.388   2.633   2.797  1.00 62.35
ATOM   1460 1HH2 ARG A  96       8.745   3.330   3.112  1.00 63.32
ATOM   1461 2HH2 ARG A  96       9.857   2.809   1.929  1.00 54.12
ATOM   1462  C   ARG A  96       4.682  -0.932   7.273  1.00 50.31
ATOM   1463  O   ARG A  96       3.885  -0.011   7.228  1.00 30.11
ATOM   1464  N   SER A  97       4.350  -2.197   7.049  1.00 54.52
ATOM   1465  H   SER A  97       5.041  -2.890   7.145  1.00 41.22
ATOM   1466  CA  SER A  97       3.015  -2.625   6.655  1.00 62.52
ATOM   1467  HA  SER A  97       2.746  -2.111   5.744  1.00 53.02
ATOM   1468  CB  SER A  97       3.027  -4.145   6.368  1.00 41.34
ATOM   1469 1HB  SER A  97       3.779  -4.360   5.625  1.00 45.31
ATOM   1470 2HB  SER A  97       3.270  -4.671   7.279  1.00 52.34
ATOM   1471  OG  SER A  97       1.786  -4.612   5.887  1.00 23.30
ATOM   1472  HG  SER A  97       1.906  -5.504   5.548  1.00  2.01
ATOM   1473  C   SER A  97       1.997  -2.298   7.745  1.00 15.01
ATOM   1474  O   SER A  97       0.939  -1.747   7.458  1.00 44.13
ATOM   1475  N   SER A  98       2.357  -2.577   8.999  1.00 34.44
ATOM   1476  H   SER A  98       3.239  -2.969   9.177  1.00 51.20
ATOM   1477  CA  SER A  98       1.474  -2.340  10.128  1.00 51.00
ATOM   1478  HA  SER A  98       0.565  -2.899   9.959  1.00 13.40
ATOM   1479  CB  SER A  98       2.144  -2.842  11.425  1.00 35.33
ATOM   1480 1HB  SER A  98       2.436  -3.874  11.299  1.00 51.34
ATOM   1481 2HB  SER A  98       3.025  -2.247  11.620  1.00 34.13
ATOM   1482  OG  SER A  98       1.276  -2.757  12.543  1.00 70.10
ATOM   1483  HG  SER A  98       1.610  -2.104  13.161  1.00 41.33
ATOM   1484  C   SER A  98       1.127  -0.845  10.220  1.00 64.41
ATOM   1485  O   SER A  98      -0.040  -0.464  10.388  1.00 22.01
ATOM   1486  N   ALA A  99       2.137  -0.006  10.055  1.00 40.50
ATOM   1487  H   ALA A  99       3.030  -0.368   9.878  1.00 31.33
ATOM   1488  CA  ALA A  99       1.941   1.424  10.116  1.00 64.55
ATOM   1489  HA  ALA A  99       1.359   1.635  11.001  1.00  2.11
ATOM   1490  CB  ALA A  99       3.274   2.150  10.221  1.00 71.31
ATOM   1491 1HB  ALA A  99       3.100   3.211  10.324  1.00 45.40
ATOM   1492 2HB  ALA A  99       3.852   1.966   9.328  1.00 33.21
ATOM   1493 3HB  ALA A  99       3.817   1.787  11.082  1.00 54.41
ATOM   1494  C   ALA A  99       1.151   1.908   8.912  1.00  2.24
ATOM   1495  O   ALA A  99       0.215   2.687   9.059  1.00 10.43
ATOM   1496  N   LEU A 100       1.518   1.415   7.736  1.00 55.33
ATOM   1497  H   LEU A 100       2.264   0.778   7.681  1.00 41.35
ATOM   1498  CA  LEU A 100       0.878   1.783   6.490  1.00  5.02
ATOM   1499  HA  LEU A 100       1.040   2.834   6.309  1.00 21.04
ATOM   1500  CB  LEU A 100       1.506   0.986   5.357  1.00 51.24
ATOM   1501 1HB  LEU A 100       2.577   1.050   5.457  1.00 60.33
ATOM   1502 2HB  LEU A 100       1.232  -0.048   5.511  1.00  4.23
ATOM   1503  CG  LEU A 100       1.100   1.370   3.941  1.00 30.31
ATOM   1504  HG  LEU A 100       0.024   1.310   3.859  1.00 64.22
ATOM   1505  CD1 LEU A 100       1.519   2.796   3.629  1.00 22.33
ATOM   1506 1HD1 LEU A 100       1.240   3.045   2.617  1.00 32.10
ATOM   1507 2HD1 LEU A 100       2.589   2.882   3.747  1.00 74.14
ATOM   1508 3HD1 LEU A 100       1.030   3.469   4.316  1.00 23.31
ATOM   1509  CD2 LEU A 100       1.708   0.408   2.949  1.00 73.25
ATOM   1510 1HD2 LEU A 100       2.784   0.448   3.030  1.00 73.34
ATOM   1511 2HD2 LEU A 100       1.403   0.687   1.952  1.00 44.24
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ATOM   1512 3HD2 LEU A 100       1.365  -0.592   3.169  1.00 42.14
ATOM   1513  C   LEU A 100      -0.609   1.481   6.551  1.00 64.24
ATOM   1514  O   LEU A 100      -1.431   2.356   6.308  1.00 43.22
ATOM   1515  N   ILE A 101      -0.933   0.261   6.960  1.00 43.54
ATOM   1516  H   ILE A 101      -0.198  -0.355   7.182  1.00 71.14
ATOM   1517  CA  ILE A 101      -2.321  -0.187   7.071  1.00 61.13
ATOM   1518  HA  ILE A 101      -2.771  -0.071   6.095  1.00 45.31
ATOM   1519  CB  ILE A 101      -2.418  -1.699   7.493  1.00 65.04
ATOM   1520  HB  ILE A 101      -1.769  -1.826   8.347  1.00 71.42
ATOM   1521  CG2 ILE A 101      -3.831  -2.084   7.944  1.00  1.11
ATOM   1522 1HG2 ILE A 101      -4.105  -1.472   8.792  1.00 42.21
ATOM   1523 2HG2 ILE A 101      -3.847  -3.125   8.230  1.00 63.23
ATOM   1524 3HG2 ILE A 101      -4.526  -1.917   7.137  1.00 10.54
ATOM   1525  CG1 ILE A 101      -1.926  -2.638   6.363  1.00 65.34
ATOM   1526 1HG1 ILE A 101      -0.919  -2.357   6.088  1.00 60.23
ATOM   1527 2HG1 ILE A 101      -1.915  -3.653   6.733  1.00 44.22
ATOM   1528  CD1 ILE A 101      -2.768  -2.612   5.089  1.00 44.33
ATOM   1529 1HD1 ILE A 101      -2.777  -1.620   4.661  1.00 21.44
ATOM   1530 2HD1 ILE A 101      -3.780  -2.918   5.318  1.00  2.34
ATOM   1531 3HD1 ILE A 101      -2.360  -3.309   4.372  1.00 24.42
ATOM   1532  C   ILE A 101      -3.098   0.694   8.047  1.00 62.02
ATOM   1533  O   ILE A 101      -4.195   1.154   7.717  1.00 33.40
ATOM   1534  N   GLY A 102      -2.488   0.983   9.204  1.00 74.13
ATOM   1535  H   GLY A 102      -1.596   0.613   9.382  1.00 64.24
ATOM   1536  CA  GLY A 102      -3.125   1.820  10.217  1.00 32.04
ATOM   1537 1HA  GLY A 102      -4.019   1.337  10.568  1.00 34.44
ATOM   1538 2HA  GLY A 102      -2.442   1.943  11.045  1.00 50.42
ATOM   1539  C   GLY A 102      -3.499   3.190   9.691  1.00 41.10
ATOM   1540  O   GLY A 102      -4.599   3.705   9.950  1.00 54.44
ATOM   1541  N   ILE A 103      -2.602   3.761   8.935  1.00 12.03
ATOM   1542  H   ILE A 103      -1.763   3.277   8.770  1.00 32.42
ATOM   1543  CA  ILE A 103      -2.805   5.061   8.348  1.00 32.10
ATOM   1544  HA  ILE A 103      -3.146   5.729   9.125  1.00  2.12
ATOM   1545  CB  ILE A 103      -1.478   5.605   7.780  1.00 64.14
ATOM   1546  HB  ILE A 103      -1.092   4.901   7.059  1.00 74.42
ATOM   1547  CG2 ILE A 103      -1.688   6.956   7.083  1.00 14.51
ATOM   1548 1HG2 ILE A 103      -2.085   7.670   7.790  1.00  5.03
ATOM   1549 2HG2 ILE A 103      -2.386   6.833   6.267  1.00  2.24
ATOM   1550 3HG2 ILE A 103      -0.745   7.313   6.696  1.00 50.21
ATOM   1551  CG1 ILE A 103      -0.468   5.739   8.918  1.00 42.33
ATOM   1552 1HG1 ILE A 103      -0.725   6.597   9.519  1.00 15.42
ATOM   1553 2HG1 ILE A 103      -0.513   4.852   9.531  1.00 13.21
ATOM   1554  CD1 ILE A 103       0.945   5.916   8.458  1.00 33.41
ATOM   1555 1HD1 ILE A 103       1.585   6.018   9.321  1.00 35.45
ATOM   1556 2HD1 ILE A 103       1.019   6.781   7.818  1.00  1.21
ATOM   1557 3HD1 ILE A 103       1.216   5.021   7.917  1.00 32.03
ATOM   1558  C   ILE A 103      -3.865   4.994   7.257  1.00 13.53
ATOM   1559  O   ILE A 103      -4.771   5.829   7.222  1.00 41.34
ATOM   1560  N   ILE A 104      -3.778   3.976   6.404  1.00  5.41
ATOM   1561  H   ILE A 104      -3.068   3.307   6.531  1.00 70.44
ATOM   1562  CA  ILE A 104      -4.704   3.835   5.291  1.00  3.50
ATOM   1563  HA  ILE A 104      -4.635   4.737   4.704  1.00 70.04
ATOM   1564  CB  ILE A 104      -4.340   2.621   4.374  1.00 22.20
ATOM   1565  HB  ILE A 104      -4.325   1.731   4.985  1.00 71.32
ATOM   1566  CG2 ILE A 104      -5.392   2.429   3.276  1.00 13.12
ATOM   1567 1HG2 ILE A 104      -5.126   1.580   2.667  1.00 63.24
ATOM   1568 2HG2 ILE A 104      -5.430   3.315   2.659  1.00 22.52
ATOM   1569 3HG2 ILE A 104      -6.359   2.264   3.728  1.00 63.43
ATOM   1570  CG1 ILE A 104      -2.959   2.816   3.744  1.00 52.01
ATOM   1571 1HG1 ILE A 104      -3.003   3.656   3.069  1.00  3.14
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ATOM   1572 2HG1 ILE A 104      -2.243   3.025   4.525  1.00 42.43
ATOM   1573  CD1 ILE A 104      -2.466   1.614   2.959  1.00 32.22
ATOM   1574 1HD1 ILE A 104      -1.503   1.839   2.527  1.00 14.14
ATOM   1575 2HD1 ILE A 104      -3.169   1.387   2.170  1.00 12.44
ATOM   1576 3HD1 ILE A 104      -2.376   0.763   3.619  1.00 12.11
ATOM   1577  C   ILE A 104      -6.137   3.677   5.786  1.00 12.15
ATOM   1578  O   ILE A 104      -7.014   4.438   5.383  1.00 40.22
ATOM   1579  N   GLU A 105      -6.358   2.763   6.721  1.00 43.15
ATOM   1580  H   GLU A 105      -5.603   2.253   7.097  1.00 33.01
ATOM   1581  CA  GLU A 105      -7.704   2.516   7.191  1.00 11.32
ATOM   1582  HA  GLU A 105      -8.302   2.389   6.301  1.00 41.03
ATOM   1583  CB  GLU A 105      -7.823   1.246   8.031  1.00 42.32
ATOM   1584 1HB  GLU A 105      -8.844   1.162   8.374  1.00 25.30
ATOM   1585 2HB  GLU A 105      -7.597   0.396   7.405  1.00 22.44
ATOM   1586  CG  GLU A 105      -6.929   1.191   9.252  1.00 71.42
ATOM   1587 1HG  GLU A 105      -5.923   0.929   8.958  1.00 42.44
ATOM   1588 2HG  GLU A 105      -6.940   2.174   9.702  1.00 60.54
ATOM   1589  CD  GLU A 105      -7.428   0.200  10.265  1.00  1.50
ATOM   1590  OE1 GLU A 105      -7.198   0.425  11.470  1.00 14.24
ATOM   1591  OE2 GLU A 105      -8.210  -0.695   9.894  1.00  5.14
ATOM   1592  C   GLU A 105      -8.285   3.711   7.934  1.00 12.32
ATOM   1593  O   GLU A 105      -9.432   4.088   7.704  1.00 71.23
ATOM   1594  N   GLY A 106      -7.488   4.326   8.786  1.00  2.33
ATOM   1595  H   GLY A 106      -6.561   4.012   8.890  1.00 64.12
ATOM   1596  CA  GLY A 106      -7.964   5.442   9.569  1.00 72.43
ATOM   1597 1HA  GLY A 106      -8.897   5.132  10.018  1.00 23.54
ATOM   1598 2HA  GLY A 106      -7.279   5.672  10.365  1.00 74.00
ATOM   1599  C   GLY A 106      -8.237   6.674   8.737  1.00 30.23
ATOM   1600  O   GLY A 106      -9.192   7.406   9.015  1.00 60.43
ATOM   1601  N   ASN A 107      -7.424   6.889   7.705  1.00  1.21
ATOM   1602  H   ASN A 107      -6.675   6.272   7.542  1.00  4.11
ATOM   1603  CA  ASN A 107      -7.597   8.037   6.795  1.00 45.10
ATOM   1604  HA  ASN A 107      -7.604   8.945   7.379  1.00 43.22
ATOM   1605  CB  ASN A 107      -6.424   8.071   5.770  1.00 10.22
ATOM   1606 1HB  ASN A 107      -5.492   8.078   6.315  1.00  2.20
ATOM   1607 2HB  ASN A 107      -6.468   7.166   5.183  1.00  1.02
ATOM   1608  CG  ASN A 107      -6.402   9.277   4.803  1.00 75.51
ATOM   1609  OD1 ASN A 107      -7.421   9.829   4.426  1.00 22.12
ATOM   1610  ND2 ASN A 107      -5.215   9.665   4.388  1.00 70.34
ATOM   1611 2HD2 ASN A 107      -4.423   9.185   4.703  1.00 61.12
ATOM   1612 1HD2 ASN A 107      -5.165  10.437   3.778  1.00 74.23
ATOM   1613  C   ASN A 107      -8.930   7.874   6.082  1.00 45.14
ATOM   1614  O   ASN A 107      -9.731   8.808   6.011  1.00 32.52
ATOM   1615  N   ILE A 108      -9.197   6.651   5.645  1.00 14.31
ATOM   1616  H   ILE A 108      -8.513   5.954   5.752  1.00  0.30
ATOM   1617  CA  ILE A 108     -10.455   6.322   5.000  1.00 44.13
ATOM   1618  HA  ILE A 108     -10.585   6.981   4.155  1.00 31.11
ATOM   1619  CB  ILE A 108     -10.472   4.861   4.505  1.00  4.54
ATOM   1620  HB  ILE A 108     -10.279   4.216   5.349  1.00 73.12
ATOM   1621  CG2 ILE A 108     -11.840   4.510   3.936  1.00 41.24
ATOM   1622 1HG2 ILE A 108     -11.832   3.485   3.602  1.00 64.45
ATOM   1623 2HG2 ILE A 108     -12.057   5.164   3.102  1.00 23.24
ATOM   1624 3HG2 ILE A 108     -12.593   4.639   4.699  1.00 71.23
ATOM   1625  CG1 ILE A 108      -9.390   4.641   3.457  1.00 62.25
ATOM   1626 1HG1 ILE A 108      -9.675   5.151   2.549  1.00 13.13
ATOM   1627 2HG1 ILE A 108      -8.453   5.040   3.818  1.00 14.23
ATOM   1628  CD1 ILE A 108      -9.179   3.192   3.107  1.00 61.13
ATOM   1629 1HD1 ILE A 108     -10.087   2.792   2.682  1.00 70.54
ATOM   1630 2HD1 ILE A 108      -8.936   2.642   4.006  1.00 45.44
ATOM   1631 3HD1 ILE A 108      -8.371   3.097   2.400  1.00 45.44
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ATOM   1632  C   ILE A 108     -11.613   6.526   5.971  1.00 45.44
ATOM   1633  O   ILE A 108     -12.609   7.146   5.626  1.00 42.52
ATOM   1634  N   ARG A 109     -11.465   6.016   7.195  1.00 35.32
ATOM   1635  H   ARG A 109     -10.636   5.533   7.406  1.00 32.42
ATOM   1636  CA  ARG A 109     -12.517   6.136   8.191  1.00 73.24
ATOM   1637  HA  ARG A 109     -13.395   5.700   7.735  1.00 31.24
ATOM   1638  CB  ARG A 109     -12.218   5.361   9.481  1.00 55.25
ATOM   1639 1HB  ARG A 109     -11.323   5.761   9.931  1.00  1.35
ATOM   1640 2HB  ARG A 109     -13.050   5.505  10.156  1.00 12.13
ATOM   1641  CG  ARG A 109     -12.041   3.881   9.233  1.00 31.44
ATOM   1642 1HG  ARG A 109     -12.679   3.539   8.441  1.00  2.13
ATOM   1643 2HG  ARG A 109     -11.030   3.768   8.868  1.00 32.05
ATOM   1644  CD  ARG A 109     -12.167   3.031  10.490  1.00 33.23
ATOM   1645 1HD  ARG A 109     -13.011   3.387  11.063  1.00 71.34
ATOM   1646 2HD  ARG A 109     -12.342   2.007  10.199  1.00 20.53
ATOM   1647  NE  ARG A 109     -10.972   3.096  11.330  1.00 51.14
ATOM   1648  HE  ARG A 109     -10.849   3.931  11.829  1.00 51.31
ATOM   1649  CZ  ARG A 109     -10.068   2.099  11.405  1.00 72.44
ATOM   1650  NH1 ARG A 109     -10.282   0.949  10.751  1.00 31.52
ATOM   1651 1HH1 ARG A 109     -11.090   0.747  10.192  1.00 13.15
ATOM   1652 2HH1 ARG A 109      -9.584   0.210  10.758  1.00 62.10
ATOM   1653  NH2 ARG A 109      -8.969   2.242  12.135  1.00 73.12
ATOM   1654 1HH2 ARG A 109      -8.721   3.043  12.676  1.00 15.00
ATOM   1655 2HH2 ARG A 109      -8.279   1.490  12.118  1.00 53.32
ATOM   1656  C   ARG A 109     -12.863   7.572   8.491  1.00 40.30
ATOM   1657  O   ARG A 109     -14.008   7.877   8.751  1.00 65.43
ATOM   1658  N   TYR A 110     -11.881   8.441   8.476  1.00 21.45
ATOM   1659  H   TYR A 110     -10.958   8.137   8.326  1.00  3.42
ATOM   1660  CA  TYR A 110     -12.147   9.847   8.681  1.00 70.24
ATOM   1661  HA  TYR A 110     -12.809   9.938   9.529  1.00 12.40
ATOM   1662  CB  TYR A 110     -10.834  10.591   8.994  1.00 31.41
ATOM   1663 1HB  TYR A 110     -10.389  10.162   9.880  1.00 44.45
ATOM   1664 2HB  TYR A 110     -10.155  10.458   8.163  1.00 75.05
ATOM   1665  CG  TYR A 110     -10.998  12.079   9.233  1.00 14.12
ATOM   1666  CD1 TYR A 110     -10.794  12.996   8.209  1.00 52.34
ATOM   1667  HD1 TYR A 110     -10.507  12.637   7.230  1.00 34.44
ATOM   1668  CE1 TYR A 110     -10.954  14.348   8.419  1.00 33.30
ATOM   1669  HE1 TYR A 110     -10.792  15.044   7.610  1.00 12.21
ATOM   1670  CZ  TYR A 110     -11.322  14.802   9.665  1.00 13.32
ATOM   1671  CE2 TYR A 110     -11.527  13.917  10.701  1.00 74.54
ATOM   1672  HE2 TYR A 110     -11.816  14.276  11.678  1.00 52.12
ATOM   1673  CD2 TYR A 110     -11.367  12.563  10.481  1.00 31.22
ATOM   1674  HD2 TYR A 110     -11.526  11.864  11.290  1.00 11.43
ATOM   1675  OH  TYR A 110     -11.490  16.149   9.872  1.00 53.44
ATOM   1676  HH  TYR A 110     -12.123  16.402   9.191  1.00 24.21
ATOM   1677  C   TYR A 110     -12.834  10.455   7.442  1.00 41.21
ATOM   1678  O   TYR A 110     -13.926  10.985   7.538  1.00 54.31
ATOM   1679  N   ALA A 111     -12.227  10.249   6.279  1.00 12.43
ATOM   1680  H   ALA A 111     -11.442   9.658   6.256  1.00 11.42
ATOM   1681  CA  ALA A 111     -12.668  10.870   5.014  1.00  4.33
ATOM   1682  HA  ALA A 111     -12.745  11.932   5.197  1.00 23.24
ATOM   1683  CB  ALA A 111     -11.610  10.673   3.937  1.00 43.01
ATOM   1684 1HB  ALA A 111     -11.885  11.233   3.055  1.00 24.40
ATOM   1685 2HB  ALA A 111     -11.537   9.625   3.692  1.00  3.01
ATOM   1686 3HB  ALA A 111     -10.655  11.024   4.304  1.00 74.01
ATOM   1687  C   ALA A 111     -14.031  10.380   4.517  1.00 63.31
ATOM   1688  O   ALA A 111     -14.715  11.073   3.780  1.00 14.55
ATOM   1689  N   ASN A 112     -14.394   9.168   4.886  1.00 52.12
ATOM   1690  H   ASN A 112     -13.830   8.676   5.520  1.00 54.41
ATOM   1691  CA  ASN A 112     -15.661   8.561   4.445  1.00 52.41
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ATOM   1692  HA  ASN A 112     -15.827   8.818   3.410  1.00 72.23
ATOM   1693  CB  ASN A 112     -15.584   7.025   4.595  1.00  2.21
ATOM   1694 1HB  ASN A 112     -14.669   6.678   4.138  1.00  4.11
ATOM   1695 2HB  ASN A 112     -15.554   6.783   5.648  1.00 54.00
ATOM   1696  CG  ASN A 112     -16.744   6.265   3.954  1.00 23.42
ATOM   1697  OD1 ASN A 112     -16.674   5.875   2.791  1.00 22.24
ATOM   1698  ND2 ASN A 112     -17.800   6.034   4.698  1.00 62.44
ATOM   1699 2HD2 ASN A 112     -17.804   6.361   5.623  1.00 42.41
ATOM   1700 1HD2 ASN A 112     -18.546   5.558   4.282  1.00 64.53
ATOM   1701  C   ASN A 112     -16.792   9.113   5.296  1.00 33.10
ATOM   1702  O   ASN A 112     -17.972   8.957   4.999  1.00 62.30
ATOM   1703  N   THR A 113     -16.397   9.753   6.345  1.00 44.11
ATOM   1704  H   THR A 113     -15.450   9.970   6.467  1.00 41.34
ATOM   1705  CA  THR A 113     -17.254  10.210   7.350  1.00 50.45
ATOM   1706  HA  THR A 113     -18.220   9.742   7.239  1.00 32.00
ATOM   1707  CB  THR A 113     -16.650   9.721   8.665  1.00 30.41
ATOM   1708  HB  THR A 113     -15.632  10.083   8.705  1.00 54.14
ATOM   1709  OG1 THR A 113     -16.603   8.282   8.669  1.00 44.32
ATOM   1710  HG1 THR A 113     -15.664   8.056   8.704  1.00 24.41
ATOM   1711  CG2 THR A 113     -17.393  10.193   9.849  1.00 73.14
ATOM   1712 1HG2 THR A 113     -18.409   9.839   9.789  1.00 63.32
ATOM   1713 2HG2 THR A 113     -17.330  11.270   9.830  1.00 55.31
ATOM   1714 3HG2 THR A 113     -16.880   9.781  10.704  1.00 65.21
ATOM   1715  C   THR A 113     -17.390  11.752   7.314  1.00 62.10
ATOM   1716  O   THR A 113     -18.497  12.271   7.118  1.00 72.41
ATOM   1717  N   HIS A 114     -16.271  12.452   7.472  1.00 40.11
ATOM   1718  H   HIS A 114     -15.390  12.020   7.558  1.00 51.21
ATOM   1719  CA  HIS A 114     -16.221  13.904   7.499  1.00 53.43
ATOM   1720  HA  HIS A 114     -16.601  14.277   6.559  1.00 65.43
ATOM   1721  CB  HIS A 114     -17.074  14.466   8.677  1.00 71.44
ATOM   1722 1HB  HIS A 114     -18.090  14.115   8.571  1.00 63.44
ATOM   1723 2HB  HIS A 114     -16.672  14.087   9.605  1.00  5.33
ATOM   1724  CG  HIS A 114     -17.122  15.970   8.766  1.00 23.55
ATOM   1725  ND1 HIS A 114     -16.065  16.724   9.189  1.00 33.23
ATOM   1726  CD2 HIS A 114     -18.120  16.842   8.492  1.00 12.41
ATOM   1727  HD1 HIS A 114     -15.188  16.322   9.398  1.00 35.51
ATOM   1728  CE1 HIS A 114     -16.425  18.003   9.172  1.00 25.31
ATOM   1729  NE2 HIS A 114     -17.672  18.139   8.753  1.00 31.14
ATOM   1730  HD2 HIS A 114     -19.105  16.587   8.129  1.00 54.22
ATOM   1731  HE1 HIS A 114     -15.783  18.822   9.462  1.00 42.44
ATOM   1732  C   HIS A 114     -14.751  14.323   7.657  1.00 61.23
ATOM   1733  O   HIS A 114     -14.314  14.573   8.810  1.00  2.44
TER    1734       HIS A 114
ENDMDL
MODEL       20
ATOM      1  N   MET A   1     -15.746  -6.447   6.796  1.00  2.52
ATOM      2  CA  MET A   1     -16.111  -7.866   6.914  1.00 25.11
ATOM      3  HA  MET A   1     -16.624  -7.991   7.858  1.00 13.10
ATOM      4  CB  MET A   1     -17.027  -8.323   5.759  1.00 40.20
ATOM      5 1HB  MET A   1     -16.554  -8.056   4.825  1.00 54.35
ATOM      6 2HB  MET A   1     -17.124  -9.397   5.802  1.00 51.00
ATOM      7  CG  MET A   1     -18.431  -7.709   5.767  1.00 23.21
ATOM      8 1HG  MET A   1     -18.980  -8.087   4.918  1.00 34.43
ATOM      9 2HG  MET A   1     -18.931  -8.012   6.676  1.00 43.43
ATOM     10  SD  MET A   1     -18.421  -5.903   5.683  1.00 54.11
ATOM     11  CE  MET A   1     -20.185  -5.550   5.689  1.00 72.05
ATOM     12 1HE  MET A   1     -20.628  -5.941   6.593  1.00 63.13
ATOM     13 2HE  MET A   1     -20.649  -6.016   4.831  1.00 73.20
ATOM     14 3HE  MET A   1     -20.339  -4.482   5.644  1.00 31.54
ATOM     15  C   MET A   1     -14.859  -8.688   6.955  1.00  5.44
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ATOM     16  O   MET A   1     -14.587  -9.337   7.944  1.00 43.13
ATOM     17  N   ASP A   2     -14.084  -8.616   5.895  1.00 14.11
ATOM     18  H   ASP A   2     -14.320  -8.075   5.110  1.00 13.55
ATOM     19  CA  ASP A   2     -12.808  -9.295   5.837  1.00 21.14
ATOM     20  HA  ASP A   2     -12.859 -10.183   6.452  1.00  2.53
ATOM     21  CB  ASP A   2     -12.443  -9.683   4.391  1.00 33.21
ATOM     22 1HB  ASP A   2     -13.197 -10.349   4.001  1.00 74.54
ATOM     23 2HB  ASP A   2     -12.406  -8.791   3.785  1.00 43.03
ATOM     24  CG  ASP A   2     -11.088 -10.383   4.306  1.00 74.12
ATOM     25  OD1 ASP A   2     -10.063  -9.694   4.108  1.00  4.41
ATOM     26  OD2 ASP A   2     -11.040 -11.591   4.487  1.00 72.12
ATOM     27  C   ASP A   2     -11.762  -8.360   6.388  1.00 43.03
ATOM     28  O   ASP A   2     -11.958  -7.124   6.371  1.00  2.34
ATOM     29  N   LYS A   3     -10.710  -8.916   6.902  1.00 54.43
ATOM     30  H   LYS A   3     -10.646  -9.895   6.899  1.00  1.43
ATOM     31  CA  LYS A   3      -9.611  -8.169   7.422  1.00 74.02
ATOM     32  HA  LYS A   3      -9.462  -7.283   6.822  1.00  3.44
ATOM     33  CB  LYS A   3      -9.871  -7.788   8.879  1.00 41.21
ATOM     34 1HB  LYS A   3     -10.924  -7.906   9.085  1.00 74.51
ATOM     35 2HB  LYS A   3      -9.312  -8.459   9.515  1.00 62.53
ATOM     36  CG  LYS A   3      -9.472  -6.360   9.225  1.00 44.41
ATOM     37 1HG  LYS A   3     -10.110  -5.680   8.683  1.00 13.30
ATOM     38 2HG  LYS A   3      -9.618  -6.255  10.287  1.00 11.43
ATOM     39  CD  LYS A   3      -8.017  -6.037   8.893  1.00 73.42
ATOM     40 1HD  LYS A   3      -7.372  -6.622   9.532  1.00 45.44
ATOM     41 2HD  LYS A   3      -7.821  -6.283   7.860  1.00 24.41
ATOM     42  CE  LYS A   3      -7.729  -4.565   9.114  1.00 72.21
ATOM     43 1HE  LYS A   3      -8.404  -3.988   8.500  1.00 74.24
ATOM     44 2HE  LYS A   3      -7.905  -4.331  10.153  1.00 23.54
ATOM     45  NZ  LYS A   3      -6.340  -4.201   8.760  1.00 24.21
ATOM     46 1HZ  LYS A   3      -6.106  -4.495   7.792  1.00 52.35
ATOM     47 2HZ  LYS A   3      -5.647  -4.596   9.423  1.00 15.54
ATOM     48 3HZ  LYS A   3      -6.287  -3.152   8.794  1.00 63.33
ATOM     49  C   LYS A   3      -8.409  -9.077   7.343  1.00 52.11
ATOM     50  O   LYS A   3      -7.576  -9.125   8.264  1.00  5.33
ATOM     51  N   GLY A   4      -8.318  -9.792   6.249  1.00 14.41
ATOM     52  H   GLY A   4      -8.974  -9.682   5.515  1.00 71.33
ATOM     53  CA  GLY A   4      -7.270 -10.741   6.082  1.00 11.23
ATOM     54 1HA  GLY A   4      -7.198 -11.248   7.032  1.00 32.21
ATOM     55 2HA  GLY A   4      -7.530 -11.438   5.300  1.00  4.25
ATOM     56  C   GLY A   4      -5.937 -10.095   5.792  1.00 23.52
ATOM     57  O   GLY A   4      -5.552  -9.924   4.641  1.00 73.32
ATOM     58  N   THR A   5      -5.277  -9.690   6.837  1.00 34.42
ATOM     59  H   THR A   5      -5.718  -9.766   7.710  1.00 64.13
ATOM     60  CA  THR A   5      -3.974  -9.119   6.777  1.00 35.24
ATOM     61  HA  THR A   5      -3.791  -8.768   5.773  1.00 64.43
ATOM     62  CB  THR A   5      -3.889  -7.923   7.767  1.00 64.13
ATOM     63  HB  THR A   5      -4.025  -8.299   8.770  1.00  3.42
ATOM     64  OG1 THR A   5      -4.943  -6.966   7.471  1.00 40.21
ATOM     65  HG1 THR A   5      -4.949  -6.862   6.507  1.00 65.24
ATOM     66  CG2 THR A   5      -2.550  -7.225   7.664  1.00 50.13
ATOM     67 1HG2 THR A   5      -1.760  -7.925   7.892  1.00 51.24
ATOM     68 2HG2 THR A   5      -2.517  -6.407   8.367  1.00 51.22
ATOM     69 3HG2 THR A   5      -2.414  -6.841   6.663  1.00 72.40
ATOM     70  C   THR A   5      -2.946 -10.207   7.152  1.00 75.31
ATOM     71  O   THR A   5      -2.897 -10.656   8.297  1.00 61.42
ATOM     72  N   GLN A   6      -2.183 -10.660   6.177  1.00 32.13
ATOM     73  H   GLN A   6      -2.262 -10.263   5.279  1.00 14.40
ATOM     74  CA  GLN A   6      -1.202 -11.712   6.386  1.00 52.44
ATOM     75  HA  GLN A   6      -1.071 -11.847   7.449  1.00 71.42
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ATOM     76  CB  GLN A   6      -1.673 -13.040   5.776  1.00 20.32
ATOM     77 1HB  GLN A   6      -1.851 -12.892   4.722  1.00 43.55
ATOM     78 2HB  GLN A   6      -0.883 -13.768   5.889  1.00 65.12
ATOM     79  CG  GLN A   6      -2.939 -13.619   6.382  1.00  2.25
ATOM     80 1HG  GLN A   6      -2.767 -13.792   7.435  1.00 54.24
ATOM     81 2HG  GLN A   6      -3.743 -12.911   6.257  1.00 14.31
ATOM     82  CD  GLN A   6      -3.332 -14.927   5.735  1.00 71.45
ATOM     83  OE1 GLN A   6      -4.063 -14.956   4.766  1.00 75.25
ATOM     84  NE2 GLN A   6      -2.849 -16.022   6.268  1.00 51.13
ATOM     85 2HE2 GLN A   6      -2.266 -15.946   7.050  1.00 44.22
ATOM     86 1HE2 GLN A   6      -3.105 -16.864   5.842  1.00 73.02
ATOM     87  C   GLN A   6       0.127 -11.339   5.756  1.00 72.20
ATOM     88  O   GLN A   6       0.175 -10.659   4.734  1.00 61.32
ATOM     89  N   TYR A   7       1.191 -11.755   6.381  1.00 54.41
ATOM     90  H   TYR A   7       1.104 -12.232   7.231  1.00 11.20
ATOM     91  CA  TYR A   7       2.514 -11.572   5.846  1.00 64.11
ATOM     92  HA  TYR A   7       2.395 -11.144   4.861  1.00 55.22
ATOM     93  CB  TYR A   7       3.364 -10.610   6.722  1.00 51.12
ATOM     94 1HB  TYR A   7       4.366 -10.569   6.323  1.00  1.54
ATOM     95 2HB  TYR A   7       2.930  -9.621   6.663  1.00 64.23
ATOM     96  CG  TYR A   7       3.481 -10.983   8.196  1.00 55.12
ATOM     97  CD1 TYR A   7       4.556 -11.730   8.667  1.00 21.11
ATOM     98  HD1 TYR A   7       5.313 -12.057   7.969  1.00  2.04
ATOM     99  CE1 TYR A   7       4.664 -12.063  10.004  1.00 51.33
ATOM    100  HE1 TYR A   7       5.506 -12.644  10.349  1.00 32.21
ATOM    101  CZ  TYR A   7       3.693 -11.647  10.892  1.00 54.30
ATOM    102  CE2 TYR A   7       2.619 -10.904  10.452  1.00 45.41
ATOM    103  HE2 TYR A   7       1.860 -10.578  11.149  1.00  4.25
ATOM    104  CD2 TYR A   7       2.518 -10.574   9.114  1.00 13.24
ATOM    105  HD2 TYR A   7       1.677  -9.992   8.767  1.00 32.41
ATOM    106  OH  TYR A   7       3.798 -11.974  12.224  1.00 24.55
ATOM    107  HH  TYR A   7       4.706 -11.848  12.514  1.00 34.10
ATOM    108  C   TYR A   7       3.176 -12.930   5.675  1.00 53.15
ATOM    109  O   TYR A   7       3.142 -13.759   6.586  1.00 61.33
ATOM    110  N   LYS A   8       3.724 -13.180   4.517  1.00 53.24
ATOM    111  H   LYS A   8       3.702 -12.504   3.799  1.00 73.10
ATOM    112  CA  LYS A   8       4.385 -14.432   4.253  1.00 43.14
ATOM    113  HA  LYS A   8       4.690 -14.856   5.197  1.00 22.21
ATOM    114  CB  LYS A   8       3.422 -15.414   3.545  1.00  2.24
ATOM    115 1HB  LYS A   8       2.546 -15.542   4.164  1.00 22.43
ATOM    116 2HB  LYS A   8       3.118 -14.972   2.609  1.00 34.15
ATOM    117  CG  LYS A   8       4.004 -16.808   3.250  1.00 43.20
ATOM    118 1HG  LYS A   8       3.268 -17.391   2.717  1.00 64.13
ATOM    119 2HG  LYS A   8       4.882 -16.693   2.629  1.00 32.25
ATOM    120  CD  LYS A   8       4.391 -17.558   4.527  1.00 41.12
ATOM    121 1HD  LYS A   8       5.182 -17.017   5.025  1.00 30.03
ATOM    122 2HD  LYS A   8       3.529 -17.612   5.175  1.00 23.31
ATOM    123  CE  LYS A   8       4.885 -18.981   4.232  1.00 71.22
ATOM    124 1HE  LYS A   8       5.080 -19.483   5.169  1.00 40.25
ATOM    125 2HE  LYS A   8       4.103 -19.512   3.704  1.00  4.52
ATOM    126  NZ  LYS A   8       6.121 -19.010   3.420  1.00 61.14
ATOM    127 1HZ  LYS A   8       6.013 -18.494   2.513  1.00 51.53
ATOM    128 2HZ  LYS A   8       6.485 -19.946   3.173  1.00 74.45
ATOM    129 3HZ  LYS A   8       6.915 -18.490   3.866  1.00 52.42
ATOM    130  C   LYS A   8       5.607 -14.178   3.402  1.00 13.11
ATOM    131  O   LYS A   8       5.500 -13.642   2.313  1.00 44.14
ATOM    132  N   ASP A   9       6.763 -14.540   3.947  1.00 41.11
ATOM    133  H   ASP A   9       6.745 -14.929   4.845  1.00 50.04
ATOM    134  CA  ASP A   9       8.094 -14.423   3.290  1.00 73.34
ATOM    135  HA  ASP A   9       8.846 -14.698   4.013  1.00 22.45
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ATOM    136  CB  ASP A   9       8.191 -15.370   2.071  1.00 73.14
ATOM    137 1HB  ASP A   9       7.556 -14.993   1.282  1.00  1.51
ATOM    138 2HB  ASP A   9       9.211 -15.390   1.719  1.00 24.11
ATOM    139  CG  ASP A   9       7.759 -16.779   2.386  1.00 52.53
ATOM    140  OD1 ASP A   9       6.917 -17.342   1.641  1.00  4.13
ATOM    141  OD2 ASP A   9       8.152 -17.338   3.449  1.00 54.32
ATOM    142  C   ASP A   9       8.343 -12.989   2.845  1.00 12.02
ATOM    143  O   ASP A   9       8.988 -12.727   1.836  1.00 35.32
ATOM    144  N   GLY A  10       7.884 -12.057   3.652  1.00 31.15
ATOM    145  H   GLY A  10       7.402 -12.342   4.454  1.00 10.20
ATOM    146  CA  GLY A  10       8.059 -10.662   3.352  1.00 34.13
ATOM    147 1HA  GLY A  10       8.134 -10.112   4.279  1.00 25.42
ATOM    148 2HA  GLY A  10       8.974 -10.537   2.794  1.00 43.04
ATOM    149  C   GLY A  10       6.909 -10.094   2.536  1.00  2.34
ATOM    150  O   GLY A  10       6.646  -8.902   2.595  1.00 64.44
ATOM    151  N   TYR A  11       6.249 -10.941   1.777  1.00 11.24
ATOM    152  H   TYR A  11       6.507 -11.888   1.788  1.00 24.41
ATOM    153  CA  TYR A  11       5.119 -10.551   0.953  1.00 35.23
ATOM    154  HA  TYR A  11       5.368  -9.622   0.461  1.00 25.43
ATOM    155  CB  TYR A  11       4.840 -11.638  -0.116  1.00 24.25
ATOM    156 1HB  TYR A  11       5.675 -11.668  -0.801  1.00  3.55
ATOM    157 2HB  TYR A  11       4.772 -12.595   0.382  1.00 62.14
ATOM    158  CG  TYR A  11       3.584 -11.446  -0.951  1.00 34.41
ATOM    159  CD1 TYR A  11       2.647 -12.461  -1.044  1.00 74.12
ATOM    160  HD1 TYR A  11       2.827 -13.391  -0.527  1.00  3.15
ATOM    161  CE1 TYR A  11       1.493 -12.303  -1.781  1.00 63.11
ATOM    162  HE1 TYR A  11       0.777 -13.111  -1.838  1.00  0.10
ATOM    163  CZ  TYR A  11       1.256 -11.121  -2.441  1.00 62.24
ATOM    164  CE2 TYR A  11       2.171 -10.092  -2.373  1.00 43.40
ATOM    165  HE2 TYR A  11       1.990  -9.162  -2.890  1.00 14.13
ATOM    166  CD2 TYR A  11       3.329 -10.257  -1.629  1.00 34.42
ATOM    167  HD2 TYR A  11       4.049  -9.455  -1.571  1.00 21.43
ATOM    168  OH  TYR A  11       0.084 -10.967  -3.159  1.00 35.13
ATOM    169  HH  TYR A  11      -0.607 -11.275  -2.568  1.00  2.41
ATOM    170  C   TYR A  11       3.918 -10.279   1.846  1.00 31.24
ATOM    171  O   TYR A  11       3.607 -11.063   2.747  1.00 61.25
ATOM    172  N   TYR A  12       3.275  -9.167   1.618  1.00 31.10
ATOM    173  H   TYR A  12       3.498  -8.628   0.832  1.00 44.32
ATOM    174  CA  TYR A  12       2.206  -8.738   2.475  1.00 70.45
ATOM    175  HA  TYR A  12       2.157  -9.393   3.331  1.00 50.41
ATOM    176  CB  TYR A  12       2.489  -7.312   2.943  1.00 64.23
ATOM    177 1HB  TYR A  12       3.557  -7.159   2.997  1.00 14.44
ATOM    178 2HB  TYR A  12       2.073  -6.634   2.213  1.00 24.13
ATOM    179  CG  TYR A  12       1.906  -6.952   4.290  1.00 32.33
ATOM    180  CD1 TYR A  12       0.692  -6.290   4.409  1.00 43.10
ATOM    181  HD1 TYR A  12       0.137  -6.043   3.517  1.00 52.14
ATOM    182  CE1 TYR A  12       0.191  -5.947   5.652  1.00 53.41
ATOM    183  HE1 TYR A  12      -0.756  -5.433   5.729  1.00 64.21
ATOM    184  CZ  TYR A  12       0.905  -6.268   6.793  1.00 24.12
ATOM    185  CE2 TYR A  12       2.106  -6.924   6.697  1.00 62.30
ATOM    186  HE2 TYR A  12       2.665  -7.175   7.587  1.00 71.25
ATOM    187  CD2 TYR A  12       2.601  -7.260   5.455  1.00 55.23
ATOM    188  HD2 TYR A  12       3.547  -7.775   5.376  1.00 71.22
ATOM    189  OH  TYR A  12       0.411  -5.928   8.033  1.00 10.43
ATOM    190  HH  TYR A  12       1.117  -5.603   8.610  1.00 32.22
ATOM    191  C   TYR A  12       0.904  -8.797   1.699  1.00 24.43
ATOM    192  O   TYR A  12       0.819  -8.280   0.568  1.00 53.13
ATOM    193  N   ILE A  13      -0.075  -9.441   2.278  1.00 22.12
ATOM    194  H   ILE A  13       0.055  -9.819   3.180  1.00 32.12
ATOM    195  CA  ILE A  13      -1.372  -9.623   1.671  1.00 11.31
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ATOM    196  HA  ILE A  13      -1.411  -9.145   0.704  1.00 43.22
ATOM    197  CB  ILE A  13      -1.701 -11.133   1.514  1.00 22.41
ATOM    198  HB  ILE A  13      -1.892 -11.540   2.496  1.00 44.11
ATOM    199  CG2 ILE A  13      -2.965 -11.317   0.666  1.00 72.32
ATOM    200 1HG2 ILE A  13      -3.182 -12.372   0.568  1.00 35.22
ATOM    201 2HG2 ILE A  13      -2.810 -10.890  -0.315  1.00  0.45
ATOM    202 3HG2 ILE A  13      -3.798 -10.820   1.142  1.00  4.12
ATOM    203  CG1 ILE A  13      -0.526 -11.880   0.883  1.00  4.21
ATOM    204 1HG1 ILE A  13      -0.403 -11.543  -0.137  1.00 31.13
ATOM    205 2HG1 ILE A  13       0.371 -11.652   1.437  1.00  5.01
ATOM    206  CD1 ILE A  13      -0.687 -13.386   0.851  1.00 13.11
ATOM    207 1HD1 ILE A  13      -1.563 -13.648   0.275  1.00 41.35
ATOM    208 2HD1 ILE A  13      -0.789 -13.756   1.860  1.00 23.34
ATOM    209 3HD1 ILE A  13       0.191 -13.818   0.394  1.00 11.52
ATOM    210  C   ILE A  13      -2.406  -9.052   2.613  1.00  1.11
ATOM    211  O   ILE A  13      -2.347  -9.319   3.808  1.00 74.32
ATOM    212  N   THR A  14      -3.305  -8.248   2.116  1.00 52.43
ATOM    213  H   THR A  14      -3.245  -7.929   1.188  1.00 74.22
ATOM    214  CA  THR A  14      -4.377  -7.775   2.938  1.00 15.20
ATOM    215  HA  THR A  14      -4.741  -8.635   3.480  1.00 64.35
ATOM    216  CB  THR A  14      -3.908  -6.711   3.980  1.00 30.42
ATOM    217  HB  THR A  14      -3.166  -7.184   4.608  1.00 61.35
ATOM    218  OG1 THR A  14      -5.004  -6.278   4.827  1.00 41.31
ATOM    219  HG1 THR A  14      -5.809  -6.220   4.298  1.00 32.22
ATOM    220  CG2 THR A  14      -3.278  -5.516   3.300  1.00 75.21
ATOM    221 1HG2 THR A  14      -2.423  -5.838   2.726  1.00 74.33
ATOM    222 2HG2 THR A  14      -2.967  -4.803   4.048  1.00 44.44
ATOM    223 3HG2 THR A  14      -4.003  -5.057   2.642  1.00  5.43
ATOM    224  C   THR A  14      -5.532  -7.258   2.100  1.00 30.12
ATOM    225  O   THR A  14      -5.340  -6.583   1.081  1.00 65.32
ATOM    226  N   THR A  15      -6.704  -7.620   2.493  1.00 35.33
ATOM    227  H   THR A  15      -6.792  -8.271   3.222  1.00 45.34
ATOM    228  CA  THR A  15      -7.896  -7.145   1.877  1.00 72.02
ATOM    229  HA  THR A  15      -7.663  -6.807   0.879  1.00 51.14
ATOM    230  CB  THR A  15      -8.937  -8.275   1.803  1.00 64.13
ATOM    231  HB  THR A  15      -9.238  -8.529   2.808  1.00 12.11
ATOM    232  OG1 THR A  15      -8.344  -9.429   1.183  1.00 12.14
ATOM    233  HG1 THR A  15      -8.589 -10.149   1.779  1.00 12.24
ATOM    234  CG2 THR A  15     -10.163  -7.850   1.003  1.00 24.44
ATOM    235 1HG2 THR A  15     -10.625  -6.998   1.480  1.00 14.03
ATOM    236 2HG2 THR A  15     -10.869  -8.667   0.961  1.00 50.40
ATOM    237 3HG2 THR A  15      -9.863  -7.582   0.002  1.00 45.43
ATOM    238  C   THR A  15      -8.445  -5.979   2.706  1.00 51.20
ATOM    239  O   THR A  15      -8.364  -5.988   3.939  1.00 55.40
ATOM    240  N   LEU A  16      -8.903  -4.953   2.032  1.00 22.20
ATOM    241  H   LEU A  16      -8.849  -4.936   1.049  1.00  4.43
ATOM    242  CA  LEU A  16      -9.497  -3.809   2.663  1.00 73.24
ATOM    243  HA  LEU A  16      -9.545  -3.996   3.725  1.00 41.24
ATOM    244  CB  LEU A  16      -8.656  -2.520   2.411  1.00 55.55
ATOM    245 1HB  LEU A  16      -8.392  -2.526   1.364  1.00 41.04
ATOM    246 2HB  LEU A  16      -9.275  -1.653   2.574  1.00 72.20
ATOM    247  CG  LEU A  16      -7.338  -2.333   3.204  1.00  2.41
ATOM    248  HG  LEU A  16      -6.991  -1.327   3.013  1.00 51.42
ATOM    249  CD1 LEU A  16      -7.574  -2.416   4.705  1.00  1.02
ATOM    250 1HD1 LEU A  16      -7.949  -3.396   4.961  1.00 22.11
ATOM    251 2HD1 LEU A  16      -8.301  -1.671   4.991  1.00 33.50
ATOM    252 3HD1 LEU A  16      -6.648  -2.234   5.228  1.00 62.20
ATOM    253  CD2 LEU A  16      -6.252  -3.304   2.763  1.00 52.34
ATOM    254 1HD2 LEU A  16      -6.599  -4.316   2.909  1.00 44.10
ATOM    255 2HD2 LEU A  16      -5.363  -3.141   3.353  1.00 72.31
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ATOM    256 3HD2 LEU A  16      -6.025  -3.149   1.719  1.00 51.03
ATOM    257  C   LEU A  16     -10.909  -3.621   2.129  1.00 54.24
ATOM    258  O   LEU A  16     -11.122  -3.487   0.915  1.00  1.03
ATOM    259  N   ASN A  17     -11.881  -3.621   3.006  1.00 32.31
ATOM    260  H   ASN A  17     -11.674  -3.761   3.953  1.00 31.12
ATOM    261  CA  ASN A  17     -13.257  -3.396   2.580  1.00 21.22
ATOM    262  HA  ASN A  17     -13.321  -3.716   1.551  1.00 75.11
ATOM    263  CB  ASN A  17     -14.298  -4.167   3.422  1.00 51.01
ATOM    264 1HB  ASN A  17     -14.195  -3.857   4.450  1.00 31.15
ATOM    265 2HB  ASN A  17     -15.286  -3.898   3.075  1.00 44.44
ATOM    266  CG  ASN A  17     -14.166  -5.687   3.387  1.00 71.44
ATOM    267  OD1 ASN A  17     -14.557  -6.367   4.343  1.00 30.02
ATOM    268  ND2 ASN A  17     -13.623  -6.238   2.322  1.00 72.31
ATOM    269 2HD2 ASN A  17     -13.324  -5.662   1.589  1.00 41.53
ATOM    270 1HD2 ASN A  17     -13.522  -7.214   2.300  1.00 13.14
ATOM    271  C   ASN A  17     -13.552  -1.919   2.617  1.00 62.14
ATOM    272  O   ASN A  17     -14.259  -1.432   3.485  1.00 54.54
ATOM    273  N   TYR A  18     -12.919  -1.213   1.719  1.00  1.44
ATOM    274  H   TYR A  18     -12.359  -1.670   1.055  1.00 12.11
ATOM    275  CA  TYR A  18     -13.019   0.219   1.609  1.00 61.14
ATOM    276  HA  TYR A  18     -13.965   0.542   2.019  1.00 71.55
ATOM    277  CB  TYR A  18     -11.853   0.921   2.342  1.00 62.33
ATOM    278 1HB  TYR A  18     -10.920   0.582   1.918  1.00 42.41
ATOM    279 2HB  TYR A  18     -11.946   1.983   2.169  1.00 33.42
ATOM    280  CG  TYR A  18     -11.770   0.698   3.856  1.00 32.12
ATOM    281  CD1 TYR A  18     -12.325   1.605   4.750  1.00 44.53
ATOM    282  HD1 TYR A  18     -12.838   2.475   4.365  1.00 31.23
ATOM    283  CE1 TYR A  18     -12.230   1.412   6.117  1.00 53.34
ATOM    284  HE1 TYR A  18     -12.668   2.129   6.795  1.00 53.45
ATOM    285  CZ  TYR A  18     -11.579   0.299   6.603  1.00  5.14
ATOM    286  CE2 TYR A  18     -11.027  -0.614   5.740  1.00 43.20
ATOM    287  HE2 TYR A  18     -10.517  -1.485   6.121  1.00 30.33
ATOM    288  CD2 TYR A  18     -11.120  -0.409   4.382  1.00 64.42
ATOM    289  HD2 TYR A  18     -10.691  -1.132   3.707  1.00 45.42
ATOM    290  OH  TYR A  18     -11.471   0.095   7.966  1.00 42.21
ATOM    291  HH  TYR A  18     -10.592  -0.278   8.103  1.00 74.41
ATOM    292  C   TYR A  18     -12.954   0.542   0.137  1.00 31.34
ATOM    293  O   TYR A  18     -12.385  -0.248  -0.629  1.00 20.15
ATOM    294  N   ASN A  19     -13.502   1.685  -0.257  1.00  1.15
ATOM    295  H   ASN A  19     -13.840   2.319   0.408  1.00 52.31
ATOM    296  CA  ASN A  19     -13.581   2.063  -1.667  1.00 31.44
ATOM    297  HA  ASN A  19     -13.975   1.195  -2.174  1.00 63.13
ATOM    298  CB  ASN A  19     -14.548   3.221  -1.907  1.00 72.22
ATOM    299 1HB  ASN A  19     -14.444   3.930  -1.100  1.00  2.44
ATOM    300 2HB  ASN A  19     -14.281   3.705  -2.833  1.00 62.20
ATOM    301  CG  ASN A  19     -16.015   2.794  -1.976  1.00 50.11
ATOM    302  OD1 ASN A  19     -16.811   3.410  -2.666  1.00 45.13
ATOM    303  ND2 ASN A  19     -16.376   1.728  -1.303  1.00 63.24
ATOM    304 2HD2 ASN A  19     -15.701   1.236  -0.788  1.00 54.33
ATOM    305 1HD2 ASN A  19     -17.318   1.462  -1.349  1.00 60.42
ATOM    306  C   ASN A  19     -12.237   2.344  -2.277  1.00 31.14
ATOM    307  O   ASN A  19     -11.464   3.152  -1.770  1.00 64.40
ATOM    308  N   PHE A  20     -12.000   1.692  -3.386  1.00 64.34
ATOM    309  H   PHE A  20     -12.702   1.103  -3.739  1.00 63.15
ATOM    310  CA  PHE A  20     -10.741   1.716  -4.120  1.00 42.43
ATOM    311  HA  PHE A  20     -10.016   1.196  -3.512  1.00 61.41
ATOM    312  CB  PHE A  20     -10.917   0.909  -5.408  1.00 31.35
ATOM    313 1HB  PHE A  20     -10.009   0.496  -5.820  1.00 74.02
ATOM    314 2HB  PHE A  20     -11.491   0.083  -5.024  1.00 74.32
ATOM    315  CG  PHE A  20     -11.799   1.511  -6.496  1.00  3.41
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ATOM    316  CD1 PHE A  20     -11.239   2.031  -7.647  1.00 44.55
ATOM    317  HD1 PHE A  20     -10.164   2.024  -7.756  1.00 11.12
ATOM    318  CE1 PHE A  20     -12.027   2.552  -8.652  1.00 61.44
ATOM    319  HE1 PHE A  20     -11.569   2.953  -9.544  1.00 40.55
ATOM    320  CZ  PHE A  20     -13.400   2.561  -8.516  1.00 34.14
ATOM    321  HZ  PHE A  20     -14.019   2.968  -9.300  1.00 61.04
ATOM    322  CE2 PHE A  20     -13.979   2.048  -7.373  1.00 15.14
ATOM    323  HE2 PHE A  20     -15.054   2.055  -7.261  1.00 70.53
ATOM    324  CD2 PHE A  20     -13.184   1.525  -6.371  1.00 60.04
ATOM    325  HD2 PHE A  20     -13.639   1.125  -5.477  1.00 50.33
ATOM    326  C   PHE A  20     -10.199   3.122  -4.386  1.00 20.04
ATOM    327  O   PHE A  20      -9.013   3.373  -4.205  1.00 73.03
ATOM    328  N   ASN A  21     -11.082   4.024  -4.753  1.00 31.02
ATOM    329  H   ASN A  21     -12.001   3.687  -4.824  1.00 62.33
ATOM    330  CA  ASN A  21     -10.703   5.421  -5.097  1.00 52.20
ATOM    331  HA  ASN A  21     -10.058   5.398  -5.963  1.00 53.40
ATOM    332  CB  ASN A  21     -11.937   6.274  -5.425  1.00 32.02
ATOM    333 1HB  ASN A  21     -12.539   6.371  -4.534  1.00 64.45
ATOM    334 2HB  ASN A  21     -11.608   7.256  -5.731  1.00 31.41
ATOM    335  CG  ASN A  21     -12.801   5.699  -6.508  1.00 11.43
ATOM    336  OD1 ASN A  21     -13.709   4.938  -6.230  1.00 62.03
ATOM    337  ND2 ASN A  21     -12.538   6.055  -7.739  1.00 21.44
ATOM    338 2HD2 ASN A  21     -11.799   6.673  -7.913  1.00  1.13
ATOM    339 1HD2 ASN A  21     -13.105   5.678  -8.443  1.00 31.41
ATOM    340  C   ASN A  21      -9.974   6.103  -3.951  1.00 62.10
ATOM    341  O   ASN A  21      -8.899   6.674  -4.137  1.00 30.14
ATOM    342  N   THR A  22     -10.548   6.024  -2.770  1.00  5.54
ATOM    343  H   THR A  22     -11.374   5.509  -2.675  1.00 74.33
ATOM    344  CA  THR A  22      -9.966   6.646  -1.616  1.00  3.42
ATOM    345  HA  THR A  22      -9.624   7.606  -1.984  1.00 65.21
ATOM    346  CB  THR A  22     -10.983   6.903  -0.452  1.00 14.14
ATOM    347  HB  THR A  22     -11.706   7.620  -0.816  1.00 54.33
ATOM    348  OG1 THR A  22     -10.334   7.489   0.682  1.00 51.22
ATOM    349  HG1 THR A  22      -9.406   7.236   0.704  1.00 12.10
ATOM    350  CG2 THR A  22     -11.713   5.644  -0.032  1.00 60.44
ATOM    351 1HG2 THR A  22     -12.252   5.239  -0.877  1.00 70.23
ATOM    352 2HG2 THR A  22     -12.412   5.879   0.754  1.00 43.10
ATOM    353 3HG2 THR A  22     -10.999   4.915   0.320  1.00 33.24
ATOM    354  C   THR A  22      -8.693   5.926  -1.171  1.00 72.33
ATOM    355  O   THR A  22      -7.751   6.570  -0.707  1.00 71.35
ATOM    356  N   VAL A  23      -8.679   4.593  -1.308  1.00 61.32
ATOM    357  H   VAL A  23      -9.476   4.137  -1.657  1.00 23.41
ATOM    358  CA  VAL A  23      -7.507   3.777  -0.960  1.00 35.11
ATOM    359  HA  VAL A  23      -7.304   3.920   0.090  1.00 35.12
ATOM    360  CB  VAL A  23      -7.754   2.257  -1.230  1.00 31.42
ATOM    361  HB  VAL A  23      -7.975   2.135  -2.281  1.00  4.11
ATOM    362  CG1 VAL A  23      -6.520   1.433  -0.906  1.00 22.22
ATOM    363 1HG1 VAL A  23      -5.701   1.738  -1.540  1.00 72.54
ATOM    364 2HG1 VAL A  23      -6.743   0.390  -1.070  1.00  1.02
ATOM    365 3HG1 VAL A  23      -6.251   1.582   0.129  1.00 44.12
ATOM    366  CG2 VAL A  23      -8.933   1.740  -0.430  1.00 12.32
ATOM    367 1HG2 VAL A  23      -8.730   1.851   0.624  1.00 15.31
ATOM    368 2HG2 VAL A  23      -9.093   0.696  -0.656  1.00 64.32
ATOM    369 3HG2 VAL A  23      -9.819   2.304  -0.687  1.00 22.22
ATOM    370  C   VAL A  23      -6.276   4.235  -1.749  1.00 60.22
ATOM    371  O   VAL A  23      -5.198   4.405  -1.179  1.00 64.33
ATOM    372  N   TYR A  24      -6.460   4.475  -3.049  1.00 53.24
ATOM    373  H   TYR A  24      -7.347   4.353  -3.452  1.00 22.44
ATOM    374  CA  TYR A  24      -5.376   4.896  -3.922  1.00 41.15
ATOM    375  HA  TYR A  24      -4.625   4.121  -3.922  1.00 15.42
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ATOM    376  CB  TYR A  24      -5.876   5.099  -5.360  1.00 30.23
ATOM    377 1HB  TYR A  24      -6.629   5.875  -5.356  1.00 65.54
ATOM    378 2HB  TYR A  24      -5.048   5.430  -5.963  1.00 21.43
ATOM    379  CG  TYR A  24      -6.493   3.883  -6.033  1.00 74.45
ATOM    380  CD1 TYR A  24      -6.218   2.585  -5.610  1.00 34.35
ATOM    381  HD1 TYR A  24      -5.553   2.435  -4.773  1.00 11.32
ATOM    382  CE1 TYR A  24      -6.785   1.496  -6.231  1.00 54.42
ATOM    383  HE1 TYR A  24      -6.560   0.497  -5.886  1.00  4.42
ATOM    384  CZ  TYR A  24      -7.633   1.687  -7.291  1.00 45.45
ATOM    385  CE2 TYR A  24      -7.919   2.958  -7.737  1.00 53.41
ATOM    386  HE2 TYR A  24      -8.584   3.110  -8.575  1.00 24.22
ATOM    387  CD2 TYR A  24      -7.352   4.045  -7.109  1.00 74.14
ATOM    388  HD2 TYR A  24      -7.575   5.042  -7.458  1.00 31.13
ATOM    389  OH  TYR A  24      -8.203   0.606  -7.904  1.00 41.14
ATOM    390  HH  TYR A  24      -8.484  -0.019  -7.233  1.00 14.24
ATOM    391  C   TYR A  24      -4.750   6.191  -3.420  1.00 45.25
ATOM    392  O   TYR A  24      -3.520   6.322  -3.349  1.00 40.52
ATOM    393  N   ASN A  25      -5.609   7.124  -3.053  1.00 51.45
ATOM    394  H   ASN A  25      -6.565   6.915  -3.118  1.00 44.41
ATOM    395  CA  ASN A  25      -5.183   8.430  -2.561  1.00 20.13
ATOM    396  HA  ASN A  25      -4.531   8.886  -3.290  1.00 53.03
ATOM    397  CB  ASN A  25      -6.390   9.333  -2.342  1.00 14.23
ATOM    398 1HB  ASN A  25      -7.016   9.301  -3.218  1.00 22.50
ATOM    399 2HB  ASN A  25      -6.956   8.933  -1.513  1.00 60.14
ATOM    400  CG  ASN A  25      -5.994  10.769  -2.004  1.00 51.10
ATOM    401  OD1 ASN A  25      -4.975  11.269  -2.453  1.00 51.03
ATOM    402  ND2 ASN A  25      -6.792  11.433  -1.200  1.00 21.24
ATOM    403 2HD2 ASN A  25      -7.594  10.992  -0.853  1.00 41.14
ATOM    404 1HD2 ASN A  25      -6.531  12.352  -0.987  1.00 23.34
ATOM    405  C   ASN A  25      -4.459   8.280  -1.241  1.00 53.23
ATOM    406  O   ASN A  25      -3.362   8.806  -1.055  1.00 12.20
ATOM    407  N   ALA A  26      -5.066   7.512  -0.354  1.00 13.11
ATOM    408  H   ALA A  26      -5.896   7.067  -0.641  1.00 21.33
ATOM    409  CA  ALA A  26      -4.564   7.320   1.005  1.00 25.51
ATOM    410  HA  ALA A  26      -4.518   8.293   1.472  1.00 50.25
ATOM    411  CB  ALA A  26      -5.521   6.455   1.812  1.00 13.11
ATOM    412 1HB  ALA A  26      -6.507   6.894   1.793  1.00 73.11
ATOM    413 2HB  ALA A  26      -5.175   6.389   2.833  1.00 61.11
ATOM    414 3HB  ALA A  26      -5.558   5.467   1.376  1.00 11.42
ATOM    415  C   ALA A  26      -3.165   6.722   1.012  1.00  3.24
ATOM    416  O   ALA A  26      -2.297   7.201   1.732  1.00 73.44
ATOM    417  N   THR A  27      -2.942   5.712   0.190  1.00 34.33
ATOM    418  H   THR A  27      -3.680   5.340  -0.341  1.00 71.52
ATOM    419  CA  THR A  27      -1.637   5.084   0.079  1.00 61.10
ATOM    420  HA  THR A  27      -1.352   4.715   1.054  1.00 73.23
ATOM    421  CB  THR A  27      -1.707   3.895  -0.902  1.00 53.51
ATOM    422  HB  THR A  27      -1.926   4.273  -1.890  1.00 42.04
ATOM    423  OG1 THR A  27      -2.756   3.015  -0.494  1.00 60.52
ATOM    424  HG1 THR A  27      -3.299   2.812  -1.265  1.00 73.41
ATOM    425  CG2 THR A  27      -0.391   3.128  -0.936  1.00 21.13
ATOM    426 1HG2 THR A  27      -0.469   2.307  -1.631  1.00 20.31
ATOM    427 2HG2 THR A  27      -0.167   2.748   0.051  1.00 52.42
ATOM    428 3HG2 THR A  27       0.396   3.796  -1.253  1.00  3.12
ATOM    429  C   THR A  27      -0.584   6.101  -0.412  1.00 61.03
ATOM    430  O   THR A  27       0.518   6.199   0.150  1.00 53.31
ATOM    431  N   LEU A  28      -0.954   6.878  -1.424  1.00 43.21
ATOM    432  H   LEU A  28      -1.863   6.772  -1.781  1.00 42.13
ATOM    433  CA  LEU A  28      -0.075   7.882  -2.007  1.00 52.34
ATOM    434  HA  LEU A  28       0.825   7.385  -2.340  1.00 52.31
ATOM    435  CB  LEU A  28      -0.762   8.528  -3.218  1.00 41.11
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ATOM    436 1HB  LEU A  28      -1.010   7.743  -3.918  1.00 40.33
ATOM    437 2HB  LEU A  28      -1.683   8.975  -2.874  1.00 22.34
ATOM    438  CG  LEU A  28       0.035   9.599  -3.965  1.00 73.11
ATOM    439  HG  LEU A  28       0.352  10.327  -3.233  1.00 14.33
ATOM    440  CD1 LEU A  28       1.277   9.004  -4.628  1.00 74.41
ATOM    441 1HD1 LEU A  28       1.919   8.565  -3.879  1.00 12.10
ATOM    442 2HD1 LEU A  28       1.815   9.782  -5.151  1.00 55.13
ATOM    443 3HD1 LEU A  28       0.982   8.245  -5.338  1.00 50.42
ATOM    444  CD2 LEU A  28      -0.843  10.301  -4.989  1.00 11.42
ATOM    445 1HD2 LEU A  28      -1.215   9.580  -5.701  1.00  3.13
ATOM    446 2HD2 LEU A  28      -0.260  11.049  -5.505  1.00 55.20
ATOM    447 3HD2 LEU A  28      -1.674  10.775  -4.487  1.00  4.53
ATOM    448  C   LEU A  28       0.293   8.954  -0.969  1.00 61.00
ATOM    449  O   LEU A  28       1.460   9.299  -0.796  1.00  4.45
ATOM    450  N   GLN A  29      -0.705   9.469  -0.296  1.00 63.00
ATOM    451  H   GLN A  29      -1.615   9.177  -0.526  1.00 21.05
ATOM    452  CA  GLN A  29      -0.515  10.471   0.742  1.00 64.23
ATOM    453  HA  GLN A  29       0.022  11.299   0.301  1.00 10.43
ATOM    454  CB  GLN A  29      -1.853  10.980   1.245  1.00 34.43
ATOM    455 1HB  GLN A  29      -2.409  10.147   1.648  1.00 21.53
ATOM    456 2HB  GLN A  29      -1.679  11.695   2.035  1.00 64.44
ATOM    457  CG  GLN A  29      -2.698  11.645   0.179  1.00 32.24
ATOM    458 1HG  GLN A  29      -2.845  10.928  -0.614  1.00 42.41
ATOM    459 2HG  GLN A  29      -3.652  11.897   0.610  1.00 60.31
ATOM    460  CD  GLN A  29      -2.053  12.883  -0.412  1.00 61.34
ATOM    461  OE1 GLN A  29      -2.222  13.984   0.085  1.00 63.54
ATOM    462  NE2 GLN A  29      -1.328  12.714  -1.492  1.00  1.50
ATOM    463 2HE2 GLN A  29      -1.247  11.809  -1.854  1.00 24.11
ATOM    464 1HE2 GLN A  29      -0.922  13.513  -1.884  1.00 23.22
ATOM    465  C   GLN A  29       0.305   9.929   1.905  1.00 15.50
ATOM    466  O   GLN A  29       1.194  10.604   2.398  1.00 60.22
ATOM    467  N   ALA A  30       0.025   8.695   2.302  1.00 41.33
ATOM    468  H   ALA A  30      -0.698   8.202   1.856  1.00 73.44
ATOM    469  CA  ALA A  30       0.708   8.052   3.419  1.00 10.11
ATOM    470  HA  ALA A  30       0.490   8.618   4.312  1.00  0.23
ATOM    471  CB  ALA A  30       0.184   6.646   3.615  1.00 51.22
ATOM    472 1HB  ALA A  30       0.423   6.073   2.730  1.00 32.23
ATOM    473 2HB  ALA A  30      -0.888   6.666   3.754  1.00 43.52
ATOM    474 3HB  ALA A  30       0.660   6.196   4.473  1.00 14.22
ATOM    475  C   ALA A  30       2.210   8.004   3.209  1.00  3.43
ATOM    476  O   ALA A  30       2.983   8.224   4.139  1.00 45.44
ATOM    477  N   ILE A  31       2.631   7.731   2.006  1.00 70.12
ATOM    478  H   ILE A  31       1.986   7.544   1.289  1.00 71.31
ATOM    479  CA  ILE A  31       4.043   7.691   1.744  1.00 63.54
ATOM    480  HA  ILE A  31       4.490   7.331   2.660  1.00  2.20
ATOM    481  CB  ILE A  31       4.412   6.697   0.600  1.00 31.34
ATOM    482  HB  ILE A  31       4.145   5.712   0.956  1.00 12.02
ATOM    483  CG2 ILE A  31       3.580   6.936  -0.652  1.00  1.32
ATOM    484 1HG2 ILE A  31       2.535   6.797  -0.414  1.00 64.31
ATOM    485 2HG2 ILE A  31       3.875   6.237  -1.420  1.00 13.32
ATOM    486 3HG2 ILE A  31       3.738   7.947  -0.997  1.00  2.50
ATOM    487  CG1 ILE A  31       5.920   6.700   0.272  1.00 13.35
ATOM    488 1HG1 ILE A  31       6.214   7.604  -0.245  1.00 30.43
ATOM    489 2HG1 ILE A  31       6.519   6.599   1.164  1.00 24.54
ATOM    490  CD1 ILE A  31       6.288   5.579  -0.634  1.00 41.34
ATOM    491 1HD1 ILE A  31       5.704   5.652  -1.539  1.00 55.12
ATOM    492 2HD1 ILE A  31       6.080   4.640  -0.145  1.00 75.41
ATOM    493 3HD1 ILE A  31       7.337   5.629  -0.884  1.00 24.22
ATOM    494  C   ILE A  31       4.612   9.087   1.520  1.00 24.12
ATOM    495  O   ILE A  31       5.585   9.450   2.156  1.00 71.23
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ATOM    496  N   GLN A  32       3.923   9.909   0.735  1.00 14.44
ATOM    497  H   GLN A  32       3.067   9.612   0.353  1.00 23.03
ATOM    498  CA  GLN A  32       4.424  11.244   0.403  1.00 51.12
ATOM    499  HA  GLN A  32       5.452  11.081   0.113  1.00 30.21
ATOM    500  CB  GLN A  32       3.704  11.852  -0.798  1.00 10.23
ATOM    501 1HB  GLN A  32       2.638  11.832  -0.617  1.00 25.35
ATOM    502 2HB  GLN A  32       4.021  12.878  -0.912  1.00 42.42
ATOM    503  CG  GLN A  32       3.984  11.119  -2.096  1.00  2.44
ATOM    504 1HG  GLN A  32       3.552  10.132  -2.043  1.00 23.41
ATOM    505 2HG  GLN A  32       3.539  11.665  -2.915  1.00 11.35
ATOM    506  CD  GLN A  32       5.475  10.987  -2.357  1.00  1.05
ATOM    507  OE1 GLN A  32       6.095  10.023  -1.959  1.00 71.22
ATOM    508  NE2 GLN A  32       6.057  11.962  -3.002  1.00 73.35
ATOM    509 2HE2 GLN A  32       5.526  12.729  -3.294  1.00 33.13
ATOM    510 1HE2 GLN A  32       7.023  11.875  -3.145  1.00 21.45
ATOM    511  C   GLN A  32       4.443  12.208   1.580  1.00 35.03
ATOM    512  O   GLN A  32       5.238  13.144   1.610  1.00 41.30
ATOM    513  N   ASN A  33       3.577  11.988   2.540  1.00 52.22
ATOM    514  H   ASN A  33       2.944  11.240   2.461  1.00 45.05
ATOM    515  CA  ASN A  33       3.515  12.853   3.711  1.00 62.33
ATOM    516  HA  ASN A  33       3.950  13.801   3.428  1.00 33.30
ATOM    517  CB  ASN A  33       2.034  13.073   4.127  1.00 42.31
ATOM    518 1HB  ASN A  33       1.452  13.320   3.250  1.00 63.01
ATOM    519 2HB  ASN A  33       1.651  12.150   4.534  1.00 21.24
ATOM    520  CG  ASN A  33       1.828  14.181   5.159  1.00 23.42
ATOM    521  OD1 ASN A  33       1.811  13.946   6.348  1.00 10.03
ATOM    522  ND2 ASN A  33       1.654  15.398   4.696  1.00 55.14
ATOM    523 2HD2 ASN A  33       1.662  15.538   3.726  1.00 61.02
ATOM    524 1HD2 ASN A  33       1.523  16.103   5.361  1.00 23.05
ATOM    525  C   ASN A  33       4.365  12.255   4.853  1.00 23.42
ATOM    526  O   ASN A  33       4.437  12.792   5.945  1.00 14.44
ATOM    527  N   GLY A  34       5.034  11.134   4.559  1.00  1.11
ATOM    528  H   GLY A  34       4.950  10.751   3.658  1.00 61.21
ATOM    529  CA  GLY A  34       5.916  10.487   5.529  1.00 12.45
ATOM    530 1HA  GLY A  34       6.451   9.691   5.037  1.00 35.50
ATOM    531 2HA  GLY A  34       6.632  11.217   5.881  1.00 21.35
ATOM    532  C   GLY A  34       5.175   9.912   6.719  1.00 41.50
ATOM    533  O   GLY A  34       5.594  10.072   7.857  1.00 13.41
ATOM    534  N   GLN A  35       4.081   9.244   6.453  1.00 11.52
ATOM    535  H   GLN A  35       3.799   9.127   5.518  1.00  4.45
ATOM    536  CA  GLN A  35       3.264   8.670   7.507  1.00 44.13
ATOM    537  HA  GLN A  35       3.396   9.267   8.397  1.00 51.52
ATOM    538  CB  GLN A  35       1.787   8.707   7.105  1.00 42.00
ATOM    539 1HB  GLN A  35       1.661   8.131   6.200  1.00  4.54
ATOM    540 2HB  GLN A  35       1.208   8.249   7.893  1.00  1.34
ATOM    541  CG  GLN A  35       1.229  10.102   6.861  1.00 40.13
ATOM    542 1HG  GLN A  35       1.858  10.586   6.128  1.00 40.51
ATOM    543 2HG  GLN A  35       0.226  10.017   6.466  1.00 62.43
ATOM    544  CD  GLN A  35       1.215  10.957   8.118  1.00 34.01
ATOM    545  OE1 GLN A  35       0.251  10.949   8.873  1.00 60.41
ATOM    546  NE2 GLN A  35       2.262  11.712   8.340  1.00 74.34
ATOM    547 2HE2 GLN A  35       3.008  11.710   7.704  1.00 44.43
ATOM    548 1HE2 GLN A  35       2.246  12.271   9.140  1.00 62.11
ATOM    549  C   GLN A  35       3.690   7.232   7.798  1.00 75.32
ATOM    550  O   GLN A  35       3.482   6.719   8.892  1.00 71.51
ATOM    551  N   THR A  36       4.299   6.593   6.826  1.00 74.20
ATOM    552  H   THR A  36       4.515   7.068   6.000  1.00 12.01
ATOM    553  CA  THR A  36       4.700   5.219   6.980  1.00 42.42
ATOM    554  HA  THR A  36       4.169   4.833   7.838  1.00 73.23
ATOM    555  CB  THR A  36       4.328   4.349   5.724  1.00 13.32
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ATOM    556  HB  THR A  36       3.250   4.339   5.644  1.00 63.23
ATOM    557  OG1 THR A  36       4.768   2.991   5.888  1.00 52.14
ATOM    558  HG1 THR A  36       4.023   2.412   6.083  1.00 42.05
ATOM    559  CG2 THR A  36       4.912   4.926   4.433  1.00 53.53
ATOM    560 1HG2 THR A  36       5.988   4.963   4.512  1.00 65.15
ATOM    561 2HG2 THR A  36       4.528   5.924   4.283  1.00 41.24
ATOM    562 3HG2 THR A  36       4.631   4.303   3.597  1.00 65.44
ATOM    563  C   THR A  36       6.192   5.147   7.290  1.00 73.53
ATOM    564  O   THR A  36       7.018   5.784   6.622  1.00 21.11
ATOM    565  N   PHE A  37       6.522   4.413   8.324  1.00 72.14
ATOM    566  H   PHE A  37       5.834   3.919   8.813  1.00 71.30
ATOM    567  CA  PHE A  37       7.878   4.294   8.751  1.00 14.43
ATOM    568  HA  PHE A  37       8.451   4.994   8.163  1.00 43.10
ATOM    569  CB  PHE A  37       8.029   4.674  10.228  1.00 71.14
ATOM    570 1HB  PHE A  37       7.395   4.035  10.825  1.00 23.20
ATOM    571 2HB  PHE A  37       9.057   4.532  10.526  1.00 42.42
ATOM    572  CG  PHE A  37       7.652   6.106  10.510  1.00  1.02
ATOM    573  CD1 PHE A  37       8.543   7.133  10.241  1.00 45.41
ATOM    574  HD1 PHE A  37       9.513   6.896   9.829  1.00  4.55
ATOM    575  CE1 PHE A  37       8.203   8.449  10.487  1.00 32.53
ATOM    576  HE1 PHE A  37       8.907   9.238  10.271  1.00  2.22
ATOM    577  CZ  PHE A  37       6.962   8.752  11.011  1.00  2.24
ATOM    578  HZ  PHE A  37       6.694   9.781  11.205  1.00 74.34
ATOM    579  CE2 PHE A  37       6.064   7.739  11.286  1.00 23.22
ATOM    580  HE2 PHE A  37       5.093   7.975  11.698  1.00 64.34
ATOM    581  CD2 PHE A  37       6.409   6.426  11.037  1.00 60.31
ATOM    582  HD2 PHE A  37       5.708   5.634  11.252  1.00 13.11
ATOM    583  C   PHE A  37       8.414   2.911   8.477  1.00 31.35
ATOM    584  O   PHE A  37       7.835   1.900   8.882  1.00 21.12
ATOM    585  N   ASP A  38       9.483   2.890   7.743  1.00 51.30
ATOM    586  H   ASP A  38       9.806   3.759   7.429  1.00 22.54
ATOM    587  CA  ASP A  38      10.195   1.675   7.377  1.00 11.13
ATOM    588  HA  ASP A  38       9.497   0.857   7.317  1.00 20.41
ATOM    589  CB  ASP A  38      10.858   1.895   5.993  1.00 32.24
ATOM    590 1HB  ASP A  38      10.084   2.063   5.261  1.00 64.03
ATOM    591 2HB  ASP A  38      11.491   2.769   6.034  1.00 54.14
ATOM    592  CG  ASP A  38      11.680   0.736   5.518  1.00 21.30
ATOM    593  OD1 ASP A  38      12.901   0.726   5.759  1.00 63.03
ATOM    594  OD2 ASP A  38      11.125  -0.185   4.963  1.00 50.44
ATOM    595  C   ASP A  38      11.239   1.346   8.465  1.00 63.11
ATOM    596  O   ASP A  38      11.424   2.125   9.393  1.00 60.31
ATOM    597  N   TYR A  39      11.929   0.230   8.330  1.00 21.13
ATOM    598  H   TYR A  39      11.769  -0.324   7.537  1.00 41.35
ATOM    599  CA  TYR A  39      12.951  -0.188   9.276  1.00 43.55
ATOM    600  HA  TYR A  39      12.511  -0.033  10.248  1.00 24.54
ATOM    601  CB  TYR A  39      13.297  -1.682   9.118  1.00 73.43
ATOM    602 1HB  TYR A  39      14.181  -1.900   9.696  1.00  2.43
ATOM    603 2HB  TYR A  39      12.477  -2.273   9.498  1.00 11.22
ATOM    604  CG  TYR A  39      13.567  -2.123   7.689  1.00  2.44
ATOM    605  CD1 TYR A  39      12.523  -2.529   6.864  1.00 23.30
ATOM    606  HD1 TYR A  39      11.516  -2.529   7.255  1.00  2.13
ATOM    607  CE1 TYR A  39      12.750  -2.926   5.566  1.00 75.34
ATOM    608  HE1 TYR A  39      11.923  -3.239   4.945  1.00  3.04
ATOM    609  CZ  TYR A  39      14.022  -2.925   5.069  1.00 63.32
ATOM    610  CE2 TYR A  39      15.082  -2.531   5.864  1.00 42.02
ATOM    611  HE2 TYR A  39      16.087  -2.531   5.470  1.00 23.45
ATOM    612  CD2 TYR A  39      14.851  -2.132   7.166  1.00 11.11
ATOM    613  HD2 TYR A  39      15.676  -1.824   7.790  1.00 20.23
ATOM    614  OH  TYR A  39      14.254  -3.330   3.773  1.00 74.23
ATOM    615  HH  TYR A  39      13.706  -2.795   3.171  1.00 63.44
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ATOM    616  C   TYR A  39      14.190   0.728   9.252  1.00 51.24
ATOM    617  O   TYR A  39      14.889   0.831  10.240  1.00 32.40
ATOM    618  N   LYS A  40      14.475   1.376   8.120  1.00 31.41
ATOM    619  H   LYS A  40      14.011   1.140   7.281  1.00 62.01
ATOM    620  CA  LYS A  40      15.497   2.445   8.154  1.00 11.11
ATOM    621  HA  LYS A  40      15.862   2.469   9.173  1.00 11.52
ATOM    622  CB  LYS A  40      16.673   2.231   7.140  1.00 51.41
ATOM    623 1HB  LYS A  40      17.552   2.713   7.544  1.00 13.11
ATOM    624 2HB  LYS A  40      16.873   1.172   7.085  1.00 70.41
ATOM    625  CG  LYS A  40      16.492   2.766   5.703  1.00 30.34
ATOM    626 1HG  LYS A  40      16.178   3.796   5.774  1.00 22.13
ATOM    627 2HG  LYS A  40      17.449   2.723   5.203  1.00 52.32
ATOM    628  CD  LYS A  40      15.454   2.040   4.869  1.00 30.20
ATOM    629 1HD  LYS A  40      14.502   2.095   5.375  1.00 13.54
ATOM    630 2HD  LYS A  40      15.373   2.528   3.908  1.00 31.34
ATOM    631  CE  LYS A  40      15.794   0.580   4.652  1.00 12.32
ATOM    632 1HE  LYS A  40      16.804   0.506   4.280  1.00 65.52
ATOM    633 2HE  LYS A  40      15.716   0.059   5.595  1.00 62.33
ATOM    634  NZ  LYS A  40      14.872  -0.046   3.678  1.00 34.12
ATOM    635 1HZ  LYS A  40      15.020  -1.071   3.586  1.00 74.20
ATOM    636 2HZ  LYS A  40      15.156   0.303   2.734  1.00 21.11
ATOM    637 3HZ  LYS A  40      13.871   0.166   3.874  1.00 35.43
ATOM    638  C   LYS A  40      14.756   3.760   7.916  1.00 14.43
ATOM    639  O   LYS A  40      15.313   4.832   7.801  1.00 71.13
ATOM    640  N   SER A  41      13.462   3.575   7.887  1.00 55.42
ATOM    641  H   SER A  41      13.181   2.658   8.077  1.00  5.25
ATOM    642  CA  SER A  41      12.415   4.539   7.660  1.00 23.30
ATOM    643  HA  SER A  41      11.498   3.971   7.654  1.00 21.03
ATOM    644  CB  SER A  41      12.330   5.492   8.850  1.00 12.12
ATOM    645 1HB  SER A  41      13.326   5.857   9.044  1.00 31.40
ATOM    646 2HB  SER A  41      11.644   6.302   8.650  1.00 23.52
ATOM    647  OG  SER A  41      11.918   4.792  10.025  1.00 41.51
ATOM    648  HG  SER A  41      11.903   3.842   9.850  1.00 50.02
ATOM    649  C   SER A  41      12.496   5.281   6.321  1.00 74.50
ATOM    650  O   SER A  41      11.817   6.284   6.132  1.00 34.54
ATOM    651  N   ASN A  42      13.232   4.744   5.356  1.00 52.22
ATOM    652  H   ASN A  42      13.859   4.021   5.560  1.00 12.42
ATOM    653  CA  ASN A  42      13.109   5.246   4.005  1.00 53.24
ATOM    654  HA  ASN A  42      12.444   6.096   4.039  1.00 15.12
ATOM    655  CB  ASN A  42      14.456   5.711   3.456  1.00  3.22
ATOM    656 1HB  ASN A  42      15.199   4.954   3.658  1.00  3.43
ATOM    657 2HB  ASN A  42      14.364   5.841   2.388  1.00 25.11
ATOM    658  CG  ASN A  42      14.926   7.014   4.065  1.00 33.11
ATOM    659  OD1 ASN A  42      15.624   7.030   5.062  1.00 53.44
ATOM    660  ND2 ASN A  42      14.552   8.114   3.456  1.00  5.45
ATOM    661 2HD2 ASN A  42      13.999   8.036   2.647  1.00 13.32
ATOM    662 1HD2 ASN A  42      14.844   8.964   3.840  1.00  5.30
ATOM    663  C   ASN A  42      12.505   4.199   3.082  1.00 52.32
ATOM    664  O   ASN A  42      13.104   3.145   2.884  1.00  4.44
ATOM    665  N   PRO A  43      11.310   4.441   2.557  1.00 62.30
ATOM    666  CD  PRO A  43      10.242   5.168   3.219  1.00 31.30
ATOM    667  CA  PRO A  43      10.736   3.684   1.430  1.00 64.43
ATOM    668  HA  PRO A  43      11.371   2.943   0.968  1.00 11.23
ATOM    669  CB  PRO A  43       9.634   2.991   2.237  1.00 51.41
ATOM    670 1HB  PRO A  43       8.840   2.680   1.575  1.00 32.55
ATOM    671 2HB  PRO A  43      10.026   2.158   2.798  1.00  1.44
ATOM    672  CG  PRO A  43       9.156   4.082   3.217  1.00 55.22
ATOM    673 1HG  PRO A  43       8.214   4.488   2.875  1.00  2.03
ATOM    674 2HG  PRO A  43       9.051   3.675   4.211  1.00 55.32
ATOM    675 1HD  PRO A  43       9.927   6.026   2.647  1.00 43.52
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ATOM    676 2HD  PRO A  43      10.513   5.438   4.228  1.00 45.53
ATOM    677  C   PRO A  43      10.022   4.642   0.426  1.00 43.02
ATOM    678  O   PRO A  43       9.061   4.253  -0.222  1.00 12.02
ATOM    679  N   TYR A  44      10.549   5.832   0.263  1.00 64.45
ATOM    680  H   TYR A  44      11.513   5.991   0.417  1.00 41.05
ATOM    681  CA  TYR A  44       9.724   6.956  -0.152  1.00 15.11
ATOM    682  HA  TYR A  44       8.731   6.668   0.154  1.00 43.42
ATOM    683  CB  TYR A  44      10.078   8.111   0.752  1.00 12.01
ATOM    684 1HB  TYR A  44       9.668   7.798   1.698  1.00 22.12
ATOM    685 2HB  TYR A  44      11.154   8.129   0.790  1.00  1.43
ATOM    686  CG  TYR A  44       9.515   9.495   0.426  1.00 71.11
ATOM    687  CD1 TYR A  44       8.369   9.948   1.035  1.00 43.32
ATOM    688  HD1 TYR A  44       7.859   9.304   1.735  1.00  4.14
ATOM    689  CE1 TYR A  44       7.861  11.199   0.761  1.00 32.22
ATOM    690  HE1 TYR A  44       6.963  11.533   1.260  1.00 21.11
ATOM    691  CZ  TYR A  44       8.497  12.022  -0.134  1.00 35.52
ATOM    692  CE2 TYR A  44       9.650  11.605  -0.757  1.00 74.04
ATOM    693  HE2 TYR A  44      10.154  12.248  -1.464  1.00 74.21
ATOM    694  CD2 TYR A  44      10.158  10.350  -0.478  1.00 21.43
ATOM    695  HD2 TYR A  44      11.061  10.013  -0.963  1.00 64.14
ATOM    696  OH  TYR A  44       7.975  13.273  -0.401  1.00 32.14
ATOM    697  HH  TYR A  44       7.594  13.614   0.415  1.00 33.40
ATOM    698  C   TYR A  44       9.642   7.379  -1.611  1.00 42.42
ATOM    699  O   TYR A  44       8.573   7.839  -2.028  1.00 62.02
ATOM    700  N   ASP A  45      10.644   7.203  -2.393  1.00 65.05
ATOM    701  H   ASP A  45      11.384   6.625  -2.115  1.00 11.12
ATOM    702  CA  ASP A  45      10.620   7.893  -3.705  1.00 25.32
ATOM    703  HA  ASP A  45      10.202   8.871  -3.525  1.00 64.11
ATOM    704  CB  ASP A  45      12.030   8.055  -4.293  1.00 42.13
ATOM    705 1HB  ASP A  45      12.587   8.761  -3.691  1.00 70.55
ATOM    706 2HB  ASP A  45      12.532   7.100  -4.275  1.00 51.24
ATOM    707  CG  ASP A  45      12.008   8.565  -5.742  1.00 43.32
ATOM    708  OD1 ASP A  45      11.900   9.790  -5.940  1.00 51.32
ATOM    709  OD2 ASP A  45      12.102   7.721  -6.688  1.00 11.43
ATOM    710  C   ASP A  45       9.759   7.178  -4.691  1.00 70.42
ATOM    711  O   ASP A  45      10.092   6.088  -5.115  1.00 72.14
ATOM    712  N   ILE A  46       8.620   7.804  -5.036  1.00 54.20
ATOM    713  H   ILE A  46       8.444   8.675  -4.626  1.00 21.55
ATOM    714  CA  ILE A  46       7.689   7.240  -5.999  1.00  4.02
ATOM    715  HA  ILE A  46       7.422   6.232  -5.717  1.00 53.45
ATOM    716  CB  ILE A  46       6.388   8.121  -6.158  1.00 14.22
ATOM    717  HB  ILE A  46       6.702   9.037  -6.638  1.00 13.02
ATOM    718  CG2 ILE A  46       5.390   7.450  -7.116  1.00  2.34
ATOM    719 1HG2 ILE A  46       4.510   8.068  -7.214  1.00  3.04
ATOM    720 2HG2 ILE A  46       5.108   6.485  -6.725  1.00 14.14
ATOM    721 3HG2 ILE A  46       5.851   7.322  -8.085  1.00 23.14
ATOM    722  CG1 ILE A  46       5.689   8.466  -4.806  1.00  3.23
ATOM    723 1HG1 ILE A  46       6.444   8.766  -4.094  1.00 55.20
ATOM    724 2HG1 ILE A  46       5.026   9.303  -4.969  1.00  2.12
ATOM    725  CD1 ILE A  46       4.884   7.353  -4.145  1.00 31.11
ATOM    726 1HD1 ILE A  46       4.091   7.039  -4.807  1.00 72.02
ATOM    727 2HD1 ILE A  46       4.423   7.719  -3.237  1.00 32.12
ATOM    728 3HD1 ILE A  46       5.516   6.509  -3.918  1.00 74.34
ATOM    729  C   ILE A  46       8.392   7.270  -7.341  1.00 25.31
ATOM    730  O   ILE A  46       8.487   8.325  -7.967  1.00  1.11
ATOM    731  N   SER A  47       8.843   6.148  -7.789  1.00 71.54
ATOM    732  H   SER A  47       8.731   5.330  -7.260  1.00  1.42
ATOM    733  CA  SER A  47       9.552   6.112  -9.018  1.00 11.22
ATOM    734  HA  SER A  47       9.989   7.084  -9.192  1.00 21.01
ATOM    735  CB  SER A  47      10.670   5.076  -8.920  1.00  2.55
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ATOM    736 1HB  SER A  47      10.236   4.088  -8.902  1.00 22.20
ATOM    737 2HB  SER A  47      11.320   5.168  -9.777  1.00 52.02
ATOM    738  OG  SER A  47      11.448   5.253  -7.732  1.00  3.11
ATOM    739  HG  SER A  47      11.530   6.195  -7.481  1.00 11.21
ATOM    740  C   SER A  47       8.587   5.769 -10.151  1.00 32.11
ATOM    741  O   SER A  47       8.768   6.203 -11.290  1.00 13.22
ATOM    742  N   VAL A  48       7.531   5.000  -9.838  1.00  3.40
ATOM    743  H   VAL A  48       7.434   4.655  -8.922  1.00 75.33
ATOM    744  CA  VAL A  48       6.517   4.695 -10.835  1.00 51.32
ATOM    745  HA  VAL A  48       6.564   5.444 -11.612  1.00  5.41
ATOM    746  CB  VAL A  48       6.725   3.273 -11.488  1.00 42.35
ATOM    747  HB  VAL A  48       6.531   2.536 -10.723  1.00 15.03
ATOM    748  CG1 VAL A  48       5.719   3.030 -12.602  1.00 70.51
ATOM    749 1HG1 VAL A  48       5.883   2.051 -13.031  1.00 52.42
ATOM    750 2HG1 VAL A  48       5.844   3.780 -13.367  1.00  2.01
ATOM    751 3HG1 VAL A  48       4.717   3.086 -12.202  1.00 41.20
ATOM    752  CG2 VAL A  48       8.144   3.068 -12.015  1.00  4.44
ATOM    753 1HG2 VAL A  48       8.849   3.168 -11.203  1.00 74.51
ATOM    754 2HG2 VAL A  48       8.360   3.812 -12.769  1.00 34.50
ATOM    755 3HG2 VAL A  48       8.228   2.083 -12.448  1.00  4.05
ATOM    756  C   VAL A  48       5.128   4.714 -10.187  1.00 11.04
ATOM    757  O   VAL A  48       4.917   4.121  -9.126  1.00 22.24
ATOM    758  N   ASN A  49       4.220   5.418 -10.803  1.00 21.02
ATOM    759  H   ASN A  49       4.481   5.978 -11.563  1.00 15.04
ATOM    760  CA  ASN A  49       2.804   5.397 -10.451  1.00 43.52
ATOM    761  HA  ASN A  49       2.666   4.674  -9.658  1.00 54.43
ATOM    762  CB  ASN A  49       2.306   6.791  -9.997  1.00 64.35
ATOM    763 1HB  ASN A  49       2.734   6.995  -9.026  1.00 72.33
ATOM    764 2HB  ASN A  49       2.641   7.555 -10.680  1.00 65.24
ATOM    765  CG  ASN A  49       0.784   6.884  -9.856  1.00 55.24
ATOM    766  OD1 ASN A  49       0.073   7.206 -10.802  1.00 62.25
ATOM    767  ND2 ASN A  49       0.279   6.626  -8.684  1.00 11.31
ATOM    768 2HD2 ASN A  49       0.883   6.386  -7.954  1.00  1.55
ATOM    769 1HD2 ASN A  49      -0.695   6.690  -8.597  1.00 64.25
ATOM    770  C   ASN A  49       2.020   4.894 -11.640  1.00  0.41
ATOM    771  O   ASN A  49       2.285   5.324 -12.763  1.00 14.44
ATOM    772  N   LYS A  50       1.115   3.973 -11.443  1.00 35.14
ATOM    773  H   LYS A  50       0.992   3.562 -10.557  1.00 22.20
ATOM    774  CA  LYS A  50       0.280   3.549 -12.543  1.00 70.25
ATOM    775  HA  LYS A  50       0.439   4.180 -13.405  1.00 32.34
ATOM    776  CB  LYS A  50       0.614   2.116 -12.919  1.00 51.22
ATOM    777 1HB  LYS A  50       0.383   1.487 -12.073  1.00  4.11
ATOM    778 2HB  LYS A  50      -0.027   1.825 -13.739  1.00 41.44
ATOM    779  CG  LYS A  50       2.044   1.850 -13.315  1.00 34.25
ATOM    780 1HG  LYS A  50       2.224   2.240 -14.306  1.00 61.32
ATOM    781 2HG  LYS A  50       2.702   2.322 -12.600  1.00 40.54
ATOM    782  CD  LYS A  50       2.275   0.368 -13.297  1.00 43.33
ATOM    783 1HD  LYS A  50       2.101   0.061 -12.277  1.00 51.35
ATOM    784 2HD  LYS A  50       1.578  -0.119 -13.961  1.00 60.20
ATOM    785  CE  LYS A  50       3.689  -0.015 -13.642  1.00 71.31
ATOM    786 1HE  LYS A  50       3.918   0.278 -14.654  1.00 55.33
ATOM    787 2HE  LYS A  50       4.319   0.508 -12.940  1.00  3.41
ATOM    788  NZ  LYS A  50       3.902  -1.474 -13.468  1.00 22.32
ATOM    789 1HZ  LYS A  50       3.816  -1.654 -12.434  1.00  1.41
ATOM    790 2HZ  LYS A  50       4.841  -1.815 -13.734  1.00 65.53
ATOM    791 3HZ  LYS A  50       3.144  -2.041 -13.893  1.00 23.41
ATOM    792  C   LYS A  50      -1.159   3.550 -12.117  1.00 33.41
ATOM    793  O   LYS A  50      -1.477   3.197 -10.974  1.00 75.24
ATOM    794  N   ASN A  51      -2.015   3.947 -13.007  1.00 71.24
ATOM    795  H   ASN A  51      -1.696   4.329 -13.852  1.00 42.24
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ATOM    796  CA  ASN A  51      -3.431   3.790 -12.847  1.00  3.45
ATOM    797  HA  ASN A  51      -3.572   3.353 -11.868  1.00  5.13
ATOM    798  CB  ASN A  51      -4.198   5.139 -12.941  1.00 33.33
ATOM    799 1HB  ASN A  51      -5.250   4.950 -12.781  1.00 63.20
ATOM    800 2HB  ASN A  51      -3.844   5.788 -12.152  1.00 44.45
ATOM    801  CG  ASN A  51      -4.057   5.868 -14.270  1.00  1.30
ATOM    802  OD1 ASN A  51      -4.856   5.696 -15.173  1.00 40.31
ATOM    803  ND2 ASN A  51      -3.047   6.705 -14.385  1.00 30.34
ATOM    804 2HD2 ASN A  51      -2.438   6.824 -13.625  1.00 72.00
ATOM    805 1HD2 ASN A  51      -2.957   7.170 -15.242  1.00 62.33
ATOM    806  C   ASN A  51      -3.892   2.768 -13.863  1.00 61.14
ATOM    807  O   ASN A  51      -3.619   2.919 -15.043  1.00 53.41
ATOM    808  N   ASN A  52      -4.529   1.726 -13.423  1.00 63.53
ATOM    809  H   ASN A  52      -4.710   1.597 -12.465  1.00 75.20
ATOM    810  CA  ASN A  52      -4.962   0.668 -14.338  1.00 15.34
ATOM    811  HA  ASN A  52      -4.580   0.907 -15.321  1.00 21.34
ATOM    812  CB  ASN A  52      -4.408  -0.703 -13.896  1.00  3.21
ATOM    813 1HB  ASN A  52      -4.782  -0.929 -12.909  1.00  4.00
ATOM    814 2HB  ASN A  52      -4.761  -1.458 -14.583  1.00 60.05
ATOM    815  CG  ASN A  52      -2.874  -0.770 -13.847  1.00 71.22
ATOM    816  OD1 ASN A  52      -2.170  -0.095 -14.600  1.00 23.22
ATOM    817  ND2 ASN A  52      -2.353  -1.578 -12.961  1.00 13.41
ATOM    818 2HD2 ASN A  52      -2.981  -2.088 -12.386  1.00  2.05
ATOM    819 1HD2 ASN A  52      -1.382  -1.655 -12.892  1.00 32.31
ATOM    820  C   ASN A  52      -6.481   0.634 -14.401  1.00 60.44
ATOM    821  O   ASN A  52      -7.091  -0.312 -14.902  1.00  2.25
ATOM    822  N   GLY A  53      -7.092   1.666 -13.859  1.00 33.24
ATOM    823  H   GLY A  53      -6.540   2.333 -13.408  1.00 42.20
ATOM    824  CA  GLY A  53      -8.529   1.813 -13.909  1.00 30.22
ATOM    825 1HA  GLY A  53      -8.773   2.863 -13.891  1.00  0.53
ATOM    826 2HA  GLY A  53      -8.886   1.387 -14.835  1.00 34.33
ATOM    827  C   GLY A  53      -9.225   1.129 -12.758  1.00 22.05
ATOM    828  O   GLY A  53      -9.876   1.772 -11.947  1.00 31.30
ATOM    829  N   THR A  54      -9.072  -0.162 -12.680  1.00  3.11
ATOM    830  H   THR A  54      -8.500  -0.601 -13.345  1.00 54.14
ATOM    831  CA  THR A  54      -9.702  -0.937 -11.643  1.00 12.21
ATOM    832  HA  THR A  54     -10.397  -0.295 -11.120  1.00  4.55
ATOM    833  CB  THR A  54     -10.486  -2.154 -12.246  1.00 13.43
ATOM    834  HB  THR A  54     -11.175  -1.766 -12.983  1.00 35.12
ATOM    835  OG1 THR A  54     -11.250  -2.831 -11.225  1.00 71.44
ATOM    836  HG1 THR A  54     -10.602  -3.081 -10.554  1.00 11.52
ATOM    837  CG2 THR A  54      -9.542  -3.147 -12.926  1.00 75.53
ATOM    838 1HG2 THR A  54     -10.112  -3.976 -13.323  1.00 61.13
ATOM    839 2HG2 THR A  54      -8.828  -3.515 -12.204  1.00 55.32
ATOM    840 3HG2 THR A  54      -9.016  -2.653 -13.728  1.00 11.50
ATOM    841  C   THR A  54      -8.644  -1.387 -10.636  1.00  4.20
ATOM    842  O   THR A  54      -8.891  -2.246  -9.779  1.00 72.34
ATOM    843  N   ASP A  55      -7.475  -0.808 -10.760  1.00 55.34
ATOM    844  H   ASP A  55      -7.326  -0.167 -11.487  1.00 12.31
ATOM    845  CA  ASP A  55      -6.371  -1.030  -9.866  1.00 33.20
ATOM    846  HA  ASP A  55      -6.770  -0.838  -8.879  1.00  5.40
ATOM    847  CB  ASP A  55      -5.800  -2.464  -9.902  1.00 14.14
ATOM    848 1HB  ASP A  55      -5.001  -2.553  -9.184  1.00 43.22
ATOM    849 2HB  ASP A  55      -6.601  -3.127  -9.610  1.00 30.10
ATOM    850  CG  ASP A  55      -5.272  -2.941 -11.209  1.00 24.34
ATOM    851  OD1 ASP A  55      -6.061  -3.529 -11.974  1.00 42.21
ATOM    852  OD2 ASP A  55      -4.073  -2.890 -11.421  1.00 71.03
ATOM    853  C   ASP A  55      -5.319   0.008 -10.092  1.00 32.44
ATOM    854  O   ASP A  55      -5.384   0.750 -11.072  1.00 64.30
ATOM    855  N   ALA A  56      -4.414   0.129  -9.168  1.00 31.14
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ATOM    856  H   ALA A  56      -4.446  -0.470  -8.387  1.00 42.42
ATOM    857  CA  ALA A  56      -3.343   1.084  -9.257  1.00 31.54
ATOM    858  HA  ALA A  56      -3.142   1.264 -10.302  1.00 24.43
ATOM    859  CB  ALA A  56      -3.739   2.401  -8.598  1.00 63.44
ATOM    860 1HB  ALA A  56      -2.917   3.099  -8.663  1.00 55.13
ATOM    861 2HB  ALA A  56      -3.992   2.227  -7.565  1.00 31.12
ATOM    862 3HB  ALA A  56      -4.596   2.811  -9.111  1.00 50.30
ATOM    863  C   ALA A  56      -2.103   0.508  -8.607  1.00 54.34
ATOM    864  O   ALA A  56      -2.188  -0.188  -7.581  1.00 14.53
ATOM    865  N   GLU A  57      -0.974   0.805  -9.176  1.00 61.10
ATOM    866  H   GLU A  57      -0.969   1.427  -9.936  1.00 14.33
ATOM    867  CA  GLU A  57       0.283   0.274  -8.711  1.00 10.54
ATOM    868  HA  GLU A  57       0.117  -0.393  -7.879  1.00 31.42
ATOM    869  CB  GLU A  57       0.958  -0.481  -9.850  1.00  3.00
ATOM    870 1HB  GLU A  57       0.234  -1.100 -10.357  1.00 32.30
ATOM    871 2HB  GLU A  57       1.334   0.253 -10.549  1.00 74.21
ATOM    872  CG  GLU A  57       2.128  -1.357  -9.444  1.00 71.52
ATOM    873 1HG  GLU A  57       2.797  -0.783  -8.821  1.00 51.34
ATOM    874 2HG  GLU A  57       1.760  -2.212  -8.898  1.00 14.00
ATOM    875  CD  GLU A  57       2.881  -1.841 -10.653  1.00 74.44
ATOM    876  OE1 GLU A  57       2.318  -2.567 -11.491  1.00  0.10
ATOM    877  OE2 GLU A  57       4.039  -1.436 -10.849  1.00  2.52
ATOM    878  C   GLU A  57       1.165   1.440  -8.304  1.00 63.21
ATOM    879  O   GLU A  57       1.294   2.420  -9.064  1.00 63.35
ATOM    880  N   ILE A  58       1.727   1.381  -7.124  1.00 52.41
ATOM    881  H   ILE A  58       1.560   0.612  -6.535  1.00  3.31
ATOM    882  CA  ILE A  58       2.621   2.427  -6.677  1.00 64.13
ATOM    883  HA  ILE A  58       2.715   3.177  -7.448  1.00 12.50
ATOM    884  CB  ILE A  58       2.147   3.092  -5.350  1.00  1.44
ATOM    885  HB  ILE A  58       2.390   2.419  -4.541  1.00 30.24
ATOM    886  CG2 ILE A  58       2.929   4.383  -5.119  1.00 23.31
ATOM    887 1HG2 ILE A  58       3.980   4.153  -5.014  1.00 74.11
ATOM    888 2HG2 ILE A  58       2.569   4.878  -4.229  1.00 62.04
ATOM    889 3HG2 ILE A  58       2.793   5.026  -5.978  1.00 35.14
ATOM    890  CG1 ILE A  58       0.631   3.383  -5.339  1.00 61.23
ATOM    891 1HG1 ILE A  58       0.112   2.455  -5.521  1.00 62.15
ATOM    892 2HG1 ILE A  58       0.348   3.754  -4.365  1.00  4.21
ATOM    893  CD1 ILE A  58       0.148   4.369  -6.379  1.00 42.52
ATOM    894 1HD1 ILE A  58      -0.921   4.488  -6.286  1.00 20.35
ATOM    895 2HD1 ILE A  58       0.385   4.000  -7.366  1.00 21.42
ATOM    896 3HD1 ILE A  58       0.631   5.323  -6.224  1.00 30.24
ATOM    897  C   ILE A  58       3.964   1.788  -6.397  1.00 52.02
ATOM    898  O   ILE A  58       4.038   0.844  -5.605  1.00  2.33
ATOM    899  N   VAL A  59       5.005   2.279  -7.023  1.00  3.01
ATOM    900  H   VAL A  59       4.901   3.018  -7.663  1.00 73.40
ATOM    901  CA  VAL A  59       6.331   1.750  -6.802  1.00  1.21
ATOM    902  HA  VAL A  59       6.281   0.997  -6.030  1.00 72.12
ATOM    903  CB  VAL A  59       6.931   1.110  -8.092  1.00 51.11
ATOM    904  HB  VAL A  59       7.100   1.910  -8.798  1.00 44.30
ATOM    905  CG1 VAL A  59       8.283   0.462  -7.807  1.00 64.55
ATOM    906 1HG1 VAL A  59       8.969   1.208  -7.438  1.00 12.44
ATOM    907 2HG1 VAL A  59       8.676   0.032  -8.717  1.00 22.43
ATOM    908 3HG1 VAL A  59       8.159  -0.314  -7.066  1.00 44.40
ATOM    909  CG2 VAL A  59       5.979   0.106  -8.717  1.00 65.53
ATOM    910 1HG2 VAL A  59       5.797  -0.699  -8.022  1.00 23.34
ATOM    911 2HG2 VAL A  59       6.418  -0.292  -9.620  1.00 42.02
ATOM    912 3HG2 VAL A  59       5.045   0.594  -8.956  1.00  4.24
ATOM    913  C   VAL A  59       7.252   2.870  -6.368  1.00 40.24
ATOM    914  O   VAL A  59       7.510   3.801  -7.141  1.00 53.14
ATOM    915  N   SER A  60       7.718   2.796  -5.164  1.00 63.13
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ATOM    916  H   SER A  60       7.401   2.094  -4.552  1.00 43.55
ATOM    917  CA  SER A  60       8.678   3.719  -4.663  1.00 11.51
ATOM    918  HA  SER A  60       8.890   4.440  -5.439  1.00 23.02
ATOM    919  CB  SER A  60       8.157   4.452  -3.415  1.00 72.31
ATOM    920 1HB  SER A  60       8.340   4.000  -2.448  1.00 32.42
ATOM    921 2HB  SER A  60       8.716   5.376  -3.380  1.00 23.01
ATOM    922  OG  SER A  60       6.815   4.839  -3.602  1.00 31.21
ATOM    923  HG  SER A  60       6.727   5.662  -3.112  1.00 52.41
ATOM    924  C   SER A  60       9.938   2.960  -4.339  1.00  4.42
ATOM    925  O   SER A  60       9.891   1.755  -4.156  1.00 74.13
ATOM    926  N   ALA A  61      11.040   3.624  -4.300  1.00 23.12
ATOM    927  H   ALA A  61      11.024   4.587  -4.517  1.00 74.40
ATOM    928  CA  ALA A  61      12.280   2.992  -3.957  1.00 71.24
ATOM    929  HA  ALA A  61      12.136   1.923  -3.989  1.00 25.44
ATOM    930  CB  ALA A  61      13.364   3.368  -4.956  1.00 54.54
ATOM    931 1HB  ALA A  61      14.286   2.871  -4.692  1.00 42.22
ATOM    932 2HB  ALA A  61      13.513   4.438  -4.937  1.00 23.40
ATOM    933 3HB  ALA A  61      13.062   3.065  -5.947  1.00 44.30
ATOM    934  C   ALA A  61      12.679   3.402  -2.564  1.00 35.23
ATOM    935  O   ALA A  61      12.351   4.511  -2.121  1.00 13.11
ATOM    936  N   SER A  62      13.317   2.510  -1.848  1.00 12.14
ATOM    937  H   SER A  62      13.476   1.595  -2.171  1.00 64.43
ATOM    938  CA  SER A  62      13.824   2.837  -0.562  1.00 43.23
ATOM    939  HA  SER A  62      13.092   3.469  -0.081  1.00  1.54
ATOM    940  CB  SER A  62      14.041   1.580   0.263  1.00 75.15
ATOM    941 1HB  SER A  62      14.749   0.938  -0.241  1.00 44.44
ATOM    942 2HB  SER A  62      14.417   1.845   1.239  1.00 61.41
ATOM    943  OG  SER A  62      12.804   0.878   0.420  1.00 32.23
ATOM    944  HG  SER A  62      12.956   0.102   0.976  1.00  5.34
ATOM    945  C   SER A  62      15.091   3.652  -0.749  1.00 54.40
ATOM    946  O   SER A  62      16.072   3.189  -1.334  1.00 11.33
ATOM    947  N   ASP A  63      15.020   4.871  -0.277  1.00 43.35
ATOM    948  H   ASP A  63      14.211   5.146   0.213  1.00 55.50
ATOM    949  CA  ASP A  63      16.020   5.930  -0.466  1.00 31.41
ATOM    950  HA  ASP A  63      16.033   6.221  -1.504  1.00 61.03
ATOM    951  CB  ASP A  63      15.607   7.154   0.364  1.00 14.53
ATOM    952 1HB  ASP A  63      15.819   6.962   1.405  1.00 52.21
ATOM    953 2HB  ASP A  63      16.198   8.002   0.046  1.00 72.41
ATOM    954  CG  ASP A  63      14.127   7.523   0.234  1.00 12.45
ATOM    955  OD1 ASP A  63      13.252   6.707   0.690  1.00  3.32
ATOM    956  OD2 ASP A  63      13.826   8.609  -0.225  1.00 24.41
ATOM    957  C   ASP A  63      17.428   5.507  -0.040  1.00 50.23
ATOM    958  O   ASP A  63      18.415   5.984  -0.585  1.00 31.11
ATOM    959  N   SER A  64      17.519   4.627   0.925  1.00 15.41
ATOM    960  H   SER A  64      16.694   4.264   1.306  1.00 54.01
ATOM    961  CA  SER A  64      18.807   4.197   1.412  1.00 43.41
ATOM    962  HA  SER A  64      19.515   4.999   1.268  1.00 74.04
ATOM    963  CB  SER A  64      18.699   3.914   2.898  1.00 20.11
ATOM    964 1HB  SER A  64      18.091   3.033   3.051  1.00 53.12
ATOM    965 2HB  SER A  64      19.683   3.750   3.312  1.00 41.22
ATOM    966  OG  SER A  64      18.098   5.010   3.564  1.00 60.43
ATOM    967  HG  SER A  64      17.983   5.727   2.933  1.00 52.12
ATOM    968  C   SER A  64      19.295   2.943   0.673  1.00 23.24
ATOM    969  O   SER A  64      20.460   2.841   0.289  1.00 60.25
ATOM    970  N   ASP A  65      18.402   2.015   0.463  1.00 52.30
ATOM    971  H   ASP A  65      17.461   2.137   0.716  1.00 72.12
ATOM    972  CA  ASP A  65      18.725   0.753  -0.146  1.00 72.44
ATOM    973  HA  ASP A  65      19.744   0.835  -0.489  1.00 65.13
ATOM    974  CB  ASP A  65      18.648  -0.415   0.883  1.00 24.21
ATOM    975 1HB  ASP A  65      18.853  -1.343   0.373  1.00 71.33
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ATOM    976 2HB  ASP A  65      19.408  -0.259   1.637  1.00 74.05
ATOM    977  CG  ASP A  65      17.295  -0.563   1.586  1.00 74.34
ATOM    978  OD1 ASP A  65      16.563   0.454   1.740  1.00 70.04
ATOM    979  OD2 ASP A  65      16.970  -1.681   2.052  1.00  3.24
ATOM    980  C   ASP A  65      17.854   0.502  -1.363  1.00 63.35
ATOM    981  O   ASP A  65      16.737   0.040  -1.269  1.00 13.32
ATOM    982  N   SER A  66      18.401   0.833  -2.515  1.00  5.32
ATOM    983  H   SER A  66      19.292   1.237  -2.482  1.00 23.04
ATOM    984  CA  SER A  66      17.733   0.707  -3.818  1.00 72.30
ATOM    985  HA  SER A  66      16.879   1.368  -3.793  1.00 52.24
ATOM    986  CB  SER A  66      18.675   1.198  -4.931  1.00 60.25
ATOM    987 1HB  SER A  66      18.973   2.217  -4.726  1.00 72.50
ATOM    988 2HB  SER A  66      19.554   0.569  -4.948  1.00 50.22
ATOM    989  OG  SER A  66      18.060   1.157  -6.206  1.00 45.45
ATOM    990  HG  SER A  66      17.237   0.660  -6.144  1.00 32.14
ATOM    991  C   SER A  66      17.213  -0.729  -4.121  1.00 15.42
ATOM    992  O   SER A  66      16.370  -0.913  -5.003  1.00 22.23
ATOM    993  N   THR A  67      17.721  -1.727  -3.408  1.00 53.12
ATOM    994  H   THR A  67      18.381  -1.524  -2.716  1.00 51.15
ATOM    995  CA  THR A  67      17.290  -3.101  -3.605  1.00 62.12
ATOM    996  HA  THR A  67      17.164  -3.247  -4.668  1.00 73.44
ATOM    997  CB  THR A  67      18.361  -4.111  -3.071  1.00 23.05
ATOM    998  HB  THR A  67      19.276  -3.942  -3.621  1.00 54.34
ATOM    999  OG1 THR A  67      17.954  -5.463  -3.300  1.00 21.55
ATOM   1000  HG1 THR A  67      17.065  -5.583  -2.948  1.00 62.14
ATOM   1001  CG2 THR A  67      18.642  -3.905  -1.585  1.00  1.02
ATOM   1002 1HG2 THR A  67      17.728  -4.035  -1.023  1.00  5.02
ATOM   1003 2HG2 THR A  67      19.023  -2.906  -1.425  1.00 35.22
ATOM   1004 3HG2 THR A  67      19.374  -4.626  -1.253  1.00  0.23
ATOM   1005  C   THR A  67      15.921  -3.319  -2.926  1.00 71.34
ATOM   1006  O   THR A  67      15.193  -4.306  -3.203  1.00 73.13
ATOM   1007  N   ASP A  68      15.561  -2.392  -2.081  1.00  2.24
ATOM   1008  H   ASP A  68      16.136  -1.613  -1.905  1.00 43.34
ATOM   1009  CA  ASP A  68      14.307  -2.404  -1.413  1.00 34.11
ATOM   1010  HA  ASP A  68      13.836  -3.356  -1.608  1.00 73.03
ATOM   1011  CB  ASP A  68      14.485  -2.217   0.092  1.00 64.22
ATOM   1012 1HB  ASP A  68      15.088  -3.026   0.476  1.00 64.21
ATOM   1013 2HB  ASP A  68      15.003  -1.287   0.265  1.00 45.41
ATOM   1014  CG  ASP A  68      13.183  -2.193   0.864  1.00 23.14
ATOM   1015  OD1 ASP A  68      13.149  -1.607   1.968  1.00 52.32
ATOM   1016  OD2 ASP A  68      12.164  -2.760   0.396  1.00 62.21
ATOM   1017  C   ASP A  68      13.464  -1.314  -2.009  1.00 10.40
ATOM   1018  O   ASP A  68      13.966  -0.257  -2.400  1.00  2.52
ATOM   1019  N   SER A  69      12.234  -1.596  -2.173  1.00 32.44
ATOM   1020  H   SER A  69      11.879  -2.430  -1.802  1.00  1.13
ATOM   1021  CA  SER A  69      11.325  -0.699  -2.770  1.00  3.25
ATOM   1022  HA  SER A  69      11.662   0.301  -2.546  1.00  1.44
ATOM   1023  CB  SER A  69      11.348  -0.891  -4.301  1.00 64.02
ATOM   1024 1HB  SER A  69      10.341  -0.821  -4.683  1.00 61.21
ATOM   1025 2HB  SER A  69      11.957  -0.124  -4.754  1.00 40.12
ATOM   1026  OG  SER A  69      11.886  -2.175  -4.655  1.00 10.45
ATOM   1027  HG  SER A  69      12.823  -1.989  -4.790  1.00 32.21
ATOM   1028  C   SER A  69       9.949  -0.889  -2.173  1.00 22.24
ATOM   1029  O   SER A  69       9.535  -2.041  -1.898  1.00 44.03
ATOM   1030  N   LEU A  70       9.237   0.189  -1.971  1.00 33.24
ATOM   1031  H   LEU A  70       9.591   1.084  -2.185  1.00 10.40
ATOM   1032  CA  LEU A  70       7.916   0.108  -1.463  1.00 72.30
ATOM   1033  HA  LEU A  70       7.818  -0.789  -0.871  1.00 53.50
ATOM   1034  CB  LEU A  70       7.644   1.364  -0.578  1.00 64.31
ATOM   1035 1HB  LEU A  70       8.376   1.331   0.213  1.00 33.03
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ATOM   1036 2HB  LEU A  70       7.855   2.236  -1.179  1.00 25.33
ATOM   1037  CG  LEU A  70       6.252   1.567   0.109  1.00 44.51
ATOM   1038  HG  LEU A  70       6.363   2.384   0.811  1.00 74.31
ATOM   1039  CD1 LEU A  70       5.156   1.970  -0.877  1.00 34.12
ATOM   1040 1HD1 LEU A  70       5.054   1.206  -1.633  1.00 24.30
ATOM   1041 2HD1 LEU A  70       5.413   2.905  -1.350  1.00 11.43
ATOM   1042 3HD1 LEU A  70       4.218   2.078  -0.350  1.00 64.43
ATOM   1043  CD2 LEU A  70       5.836   0.330   0.887  1.00 12.34
ATOM   1044 1HD2 LEU A  70       4.880   0.506   1.359  1.00 41.13
ATOM   1045 2HD2 LEU A  70       6.577   0.114   1.644  1.00 71.24
ATOM   1046 3HD2 LEU A  70       5.755  -0.508   0.213  1.00 73.44
ATOM   1047  C   LEU A  70       7.016   0.043  -2.666  1.00 70.44
ATOM   1048  O   LEU A  70       6.906   0.976  -3.419  1.00 12.34
ATOM   1049  N   GLN A  71       6.426  -1.077  -2.855  1.00 24.54
ATOM   1050  H   GLN A  71       6.567  -1.813  -2.227  1.00 22.44
ATOM   1051  CA  GLN A  71       5.545  -1.283  -3.949  1.00 53.51
ATOM   1052  HA  GLN A  71       5.350  -0.320  -4.402  1.00 35.52
ATOM   1053  CB  GLN A  71       6.159  -2.213  -5.000  1.00 34.54
ATOM   1054 1HB  GLN A  71       7.000  -1.713  -5.456  1.00 74.54
ATOM   1055 2HB  GLN A  71       6.510  -3.105  -4.504  1.00 31.33
ATOM   1056  CG  GLN A  71       5.186  -2.632  -6.103  1.00 72.31
ATOM   1057 1HG  GLN A  71       4.393  -3.210  -5.650  1.00 60.12
ATOM   1058 2HG  GLN A  71       4.762  -1.747  -6.551  1.00 25.14
ATOM   1059  CD  GLN A  71       5.827  -3.482  -7.187  1.00 23.31
ATOM   1060  OE1 GLN A  71       5.192  -4.341  -7.761  1.00 31.11
ATOM   1061  NE2 GLN A  71       7.075  -3.220  -7.503  1.00 33.23
ATOM   1062 2HE2 GLN A  71       7.539  -2.498  -7.036  1.00  2.43
ATOM   1063 1HE2 GLN A  71       7.453  -3.763  -8.223  1.00 51.34
ATOM   1064  C   GLN A  71       4.275  -1.828  -3.427  1.00 20.22
ATOM   1065  O   GLN A  71       4.263  -2.887  -2.785  1.00 21.04
ATOM   1066  N   VAL A  72       3.233  -1.101  -3.646  1.00 10.34
ATOM   1067  H   VAL A  72       3.335  -0.276  -4.174  1.00 15.23
ATOM   1068  CA  VAL A  72       1.943  -1.482  -3.203  1.00 12.11
ATOM   1069  HA  VAL A  72       2.003  -2.449  -2.726  1.00 44.13
ATOM   1070  CB  VAL A  72       1.357  -0.451  -2.191  1.00 62.12
ATOM   1071  HB  VAL A  72       1.265   0.500  -2.696  1.00 54.41
ATOM   1072  CG1 VAL A  72      -0.025  -0.871  -1.710  1.00 10.32
ATOM   1073 1HG1 VAL A  72       0.050  -1.824  -1.207  1.00 54.32
ATOM   1074 2HG1 VAL A  72      -0.688  -0.964  -2.557  1.00 45.44
ATOM   1075 3HG1 VAL A  72      -0.412  -0.130  -1.026  1.00 63.11
ATOM   1076  CG2 VAL A  72       2.285  -0.269  -1.006  1.00  3.41
ATOM   1077 1HG2 VAL A  72       2.404  -1.208  -0.485  1.00  1.14
ATOM   1078 2HG2 VAL A  72       1.870   0.467  -0.333  1.00 31.01
ATOM   1079 3HG2 VAL A  72       3.248   0.069  -1.357  1.00  2.24
ATOM   1080  C   VAL A  72       1.048  -1.556  -4.406  1.00  2.10
ATOM   1081  O   VAL A  72       0.914  -0.582  -5.158  1.00 11.23
ATOM   1082  N   ALA A  73       0.471  -2.685  -4.600  1.00 11.24
ATOM   1083  H   ALA A  73       0.683  -3.441  -4.004  1.00 41.44
ATOM   1084  CA  ALA A  73      -0.462  -2.878  -5.648  1.00 12.04
ATOM   1085  HA  ALA A  73      -0.420  -2.026  -6.310  1.00 32.00
ATOM   1086  CB  ALA A  73      -0.158  -4.146  -6.428  1.00 40.54
ATOM   1087 1HB  ALA A  73      -0.207  -4.996  -5.764  1.00 51.43
ATOM   1088 2HB  ALA A  73       0.832  -4.078  -6.853  1.00 21.02
ATOM   1089 3HB  ALA A  73      -0.882  -4.266  -7.221  1.00 11.31
ATOM   1090  C   ALA A  73      -1.822  -2.927  -5.035  1.00 25.43
ATOM   1091  O   ALA A  73      -2.087  -3.751  -4.140  1.00 70.45
ATOM   1092  N   MET A  74      -2.661  -2.054  -5.468  1.00 52.13
ATOM   1093  H   MET A  74      -2.408  -1.453  -6.207  1.00 55.52
ATOM   1094  CA  MET A  74      -3.983  -1.949  -4.935  1.00 62.32
ATOM   1095  HA  MET A  74      -4.108  -2.600  -4.084  1.00  2.52
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ATOM   1096  CB  MET A  74      -4.235  -0.495  -4.519  1.00 32.50
ATOM   1097 1HB  MET A  74      -4.211   0.125  -5.401  1.00 43.32
ATOM   1098 2HB  MET A  74      -5.220  -0.437  -4.080  1.00 30.35
ATOM   1099  CG  MET A  74      -3.237   0.057  -3.516  1.00 64.42
ATOM   1100 1HG  MET A  74      -3.376  -0.437  -2.570  1.00 12.50
ATOM   1101 2HG  MET A  74      -2.241  -0.150  -3.882  1.00  4.53
ATOM   1102  SD  MET A  74      -3.397   1.831  -3.259  1.00  2.03
ATOM   1103  CE  MET A  74      -2.825   2.437  -4.838  1.00 63.33
ATOM   1104 1HE  MET A  74      -2.802   3.517  -4.832  1.00 50.14
ATOM   1105 2HE  MET A  74      -3.496   2.100  -5.613  1.00 54.22
ATOM   1106 3HE  MET A  74      -1.835   2.053  -5.032  1.00 31.45
ATOM   1107  C   MET A  74      -4.914  -2.294  -6.043  1.00 34.05
ATOM   1108  O   MET A  74      -4.912  -1.633  -7.064  1.00 64.33
ATOM   1109  N   LYS A  75      -5.703  -3.306  -5.861  1.00 41.10
ATOM   1110  H   LYS A  75      -5.692  -3.816  -5.021  1.00 14.23
ATOM   1111  CA  LYS A  75      -6.600  -3.725  -6.883  1.00  4.34
ATOM   1112  HA  LYS A  75      -6.528  -3.002  -7.679  1.00 61.40
ATOM   1113  CB  LYS A  75      -6.179  -5.099  -7.424  1.00 32.13
ATOM   1114 1HB  LYS A  75      -5.199  -5.004  -7.867  1.00 74.40
ATOM   1115 2HB  LYS A  75      -6.115  -5.785  -6.593  1.00  3.13
ATOM   1116  CG  LYS A  75      -7.118  -5.697  -8.466  1.00  5.41
ATOM   1117 1HG  LYS A  75      -8.045  -5.951  -7.973  1.00 52.23
ATOM   1118 2HG  LYS A  75      -7.306  -4.980  -9.251  1.00 11.14
ATOM   1119  CD  LYS A  75      -6.546  -6.965  -9.071  1.00 14.31
ATOM   1120 1HD  LYS A  75      -6.215  -7.608  -8.268  1.00 71.14
ATOM   1121 2HD  LYS A  75      -7.342  -7.449  -9.611  1.00 42.40
ATOM   1122  CE  LYS A  75      -5.361  -6.699 -10.017  1.00 20.13
ATOM   1123 1HE  LYS A  75      -4.627  -6.098  -9.502  1.00 31.31
ATOM   1124 2HE  LYS A  75      -4.916  -7.649 -10.276  1.00 42.54
ATOM   1125  NZ  LYS A  75      -5.759  -5.991 -11.273  1.00 11.23
ATOM   1126 1HZ  LYS A  75      -6.479  -6.501 -11.818  1.00 44.13
ATOM   1127 2HZ  LYS A  75      -4.935  -5.819 -11.885  1.00 34.41
ATOM   1128 3HZ  LYS A  75      -6.109  -5.014 -11.132  1.00 51.13
ATOM   1129  C   LYS A  75      -8.004  -3.718  -6.364  1.00 52.42
ATOM   1130  O   LYS A  75      -8.253  -4.153  -5.234  1.00  1.00
ATOM   1131  N   LYS A  76      -8.913  -3.235  -7.173  1.00 53.31
ATOM   1132  H   LYS A  76      -8.667  -2.941  -8.080  1.00 13.12
ATOM   1133  CA  LYS A  76     -10.278  -3.136  -6.781  1.00 54.21
ATOM   1134  HA  LYS A  76     -10.330  -2.813  -5.753  1.00  1.03
ATOM   1135  CB  LYS A  76     -11.047  -2.147  -7.648  1.00 23.30
ATOM   1136 1HB  LYS A  76     -10.496  -1.220  -7.721  1.00 44.02
ATOM   1137 2HB  LYS A  76     -11.137  -2.566  -8.639  1.00  5.15
ATOM   1138  CG  LYS A  76     -12.447  -1.855  -7.129  1.00  0.15
ATOM   1139 1HG  LYS A  76     -12.824  -2.735  -6.627  1.00  4.21
ATOM   1140 2HG  LYS A  76     -12.399  -1.039  -6.422  1.00 30.30
ATOM   1141  CD  LYS A  76     -13.402  -1.487  -8.239  1.00  2.11
ATOM   1142 1HD  LYS A  76     -14.283  -1.018  -7.828  1.00 21.50
ATOM   1143 2HD  LYS A  76     -12.900  -0.806  -8.913  1.00 24.24
ATOM   1144  CE  LYS A  76     -13.797  -2.722  -9.010  1.00 11.42
ATOM   1145 1HE  LYS A  76     -12.916  -3.156  -9.457  1.00 11.14
ATOM   1146 2HE  LYS A  76     -14.220  -3.410  -8.293  1.00 31.11
ATOM   1147  NZ  LYS A  76     -14.795  -2.431 -10.057  1.00 74.23
ATOM   1148 1HZ  LYS A  76     -14.412  -1.732 -10.724  1.00 61.54
ATOM   1149 2HZ  LYS A  76     -15.666  -2.070  -9.616  1.00 53.25
ATOM   1150 3HZ  LYS A  76     -15.018  -3.309 -10.568  1.00  5.55
ATOM   1151  C   LYS A  76     -10.939  -4.475  -6.945  1.00 23.24
ATOM   1152  O   LYS A  76     -10.903  -5.083  -8.020  1.00 53.15
ATOM   1153  N   LEU A  77     -11.529  -4.899  -5.907  1.00 44.12
ATOM   1154  H   LEU A  77     -11.480  -4.316  -5.113  1.00 35.22
ATOM   1155  CA  LEU A  77     -12.294  -6.092  -5.879  1.00 24.22
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ATOM   1156  HA  LEU A  77     -11.863  -6.794  -6.576  1.00 44.13
ATOM   1157  CB  LEU A  77     -12.290  -6.682  -4.463  1.00 42.33
ATOM   1158 1HB  LEU A  77     -12.637  -5.902  -3.804  1.00  0.33
ATOM   1159 2HB  LEU A  77     -12.976  -7.515  -4.420  1.00 22.32
ATOM   1160  CG  LEU A  77     -10.931  -7.138  -3.925  1.00 44.41
ATOM   1161  HG  LEU A  77     -10.268  -6.285  -3.883  1.00 32.44
ATOM   1162  CD1 LEU A  77     -11.077  -7.681  -2.521  1.00 21.35
ATOM   1163 1HD1 LEU A  77     -10.114  -8.012  -2.160  1.00 60.13
ATOM   1164 2HD1 LEU A  77     -11.764  -8.514  -2.525  1.00 63.10
ATOM   1165 3HD1 LEU A  77     -11.456  -6.906  -1.871  1.00 23.45
ATOM   1166  CD2 LEU A  77     -10.305  -8.188  -4.838  1.00 42.23
ATOM   1167 1HD2 LEU A  77     -10.971  -9.033  -4.926  1.00 73.21
ATOM   1168 2HD2 LEU A  77      -9.367  -8.516  -4.415  1.00  4.42
ATOM   1169 3HD2 LEU A  77     -10.127  -7.763  -5.815  1.00 24.50
ATOM   1170  C   LEU A  77     -13.703  -5.724  -6.327  1.00 23.40
ATOM   1171  O   LEU A  77     -14.139  -4.600  -6.050  1.00 60.23
ATOM   1172  N   PRO A  78     -14.413  -6.660  -7.031  1.00 41.50
ATOM   1173  CD  PRO A  78     -14.001  -8.051  -7.238  1.00 11.23
ATOM   1174  CA  PRO A  78     -15.722  -6.469  -7.668  1.00 64.05
ATOM   1175  HA  PRO A  78     -15.613  -6.444  -8.740  1.00 73.21
ATOM   1176  CB  PRO A  78     -16.436  -7.766  -7.305  1.00 42.41
ATOM   1177 1HB  PRO A  78     -16.935  -7.649  -6.353  1.00 12.43
ATOM   1178 2HB  PRO A  78     -17.140  -8.041  -8.075  1.00 52.22
ATOM   1179  CG  PRO A  78     -15.333  -8.801  -7.243  1.00 44.43
ATOM   1180 1HG  PRO A  78     -15.440  -9.388  -6.341  1.00 24.01
ATOM   1181 2HG  PRO A  78     -15.379  -9.440  -8.111  1.00 74.22
ATOM   1182 1HD  PRO A  78     -13.375  -8.396  -6.429  1.00 61.12
ATOM   1183 2HD  PRO A  78     -13.495  -8.169  -8.184  1.00 22.42
ATOM   1184  C   PRO A  78     -16.528  -5.221  -7.270  1.00 34.41
ATOM   1185  O   PRO A  78     -16.603  -4.248  -8.050  1.00 61.42
ATOM   1186  N   ASN A  79     -17.065  -5.214  -6.071  1.00 22.34
ATOM   1187  H   ASN A  79     -16.868  -5.951  -5.460  1.00 65.23
ATOM   1188  CA  ASN A  79     -17.906  -4.109  -5.635  1.00 43.24
ATOM   1189  HA  ASN A  79     -18.146  -3.542  -6.524  1.00 23.22
ATOM   1190  CB  ASN A  79     -19.223  -4.597  -5.003  1.00  4.14
ATOM   1191 1HB  ASN A  79     -19.729  -5.252  -5.695  1.00 64.24
ATOM   1192 2HB  ASN A  79     -18.999  -5.142  -4.098  1.00 64.51
ATOM   1193  CG  ASN A  79     -20.170  -3.448  -4.650  1.00 62.21
ATOM   1194  OD1 ASN A  79     -20.192  -2.421  -5.310  1.00 44.23
ATOM   1195  ND2 ASN A  79     -20.954  -3.621  -3.611  1.00  3.24
ATOM   1196 2HD2 ASN A  79     -20.898  -4.460  -3.113  1.00 60.33
ATOM   1197 1HD2 ASN A  79     -21.553  -2.880  -3.391  1.00 14.54
ATOM   1198  C   ASN A  79     -17.169  -3.170  -4.687  1.00 14.23
ATOM   1199  O   ASN A  79     -17.250  -3.312  -3.469  1.00 60.34
ATOM   1200  N   ASN A  80     -16.345  -2.318  -5.281  1.00 24.45
ATOM   1201  H   ASN A  80     -16.203  -2.448  -6.240  1.00 62.04
ATOM   1202  CA  ASN A  80     -15.647  -1.192  -4.610  1.00 23.35
ATOM   1203  HA  ASN A  80     -14.954  -0.820  -5.350  1.00 34.50
ATOM   1204  CB  ASN A  80     -16.614  -0.039  -4.298  1.00 20.24
ATOM   1205 1HB  ASN A  80     -17.533  -0.447  -3.904  1.00 50.21
ATOM   1206 2HB  ASN A  80     -16.165   0.606  -3.556  1.00 20.21
ATOM   1207  CG  ASN A  80     -16.949   0.794  -5.526  1.00 51.52
ATOM   1208  OD1 ASN A  80     -16.924   0.304  -6.664  1.00 54.12
ATOM   1209  ND2 ASN A  80     -17.245   2.061  -5.319  1.00 35.24
ATOM   1210 2HD2 ASN A  80     -17.237   2.414  -4.400  1.00 51.45
ATOM   1211 1HD2 ASN A  80     -17.475   2.606  -6.097  1.00 44.41
ATOM   1212  C   ASN A  80     -14.796  -1.545  -3.388  1.00 70.30
ATOM   1213  O   ASN A  80     -14.479  -0.672  -2.592  1.00 64.22
ATOM   1214  N   ALA A  81     -14.380  -2.776  -3.277  1.00 72.34
ATOM   1215  H   ALA A  81     -14.670  -3.428  -3.949  1.00 24.41
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ATOM   1216  CA  ALA A  81     -13.487  -3.188  -2.206  1.00 13.05
ATOM   1217  HA  ALA A  81     -13.539  -2.436  -1.430  1.00 34.32
ATOM   1218  CB  ALA A  81     -13.884  -4.546  -1.643  1.00 35.24
ATOM   1219 1HB  ALA A  81     -14.874  -4.474  -1.215  1.00 34.44
ATOM   1220 2HB  ALA A  81     -13.182  -4.829  -0.874  1.00 21.42
ATOM   1221 3HB  ALA A  81     -13.888  -5.286  -2.428  1.00  4.40
ATOM   1222  C   ALA A  81     -12.080  -3.203  -2.767  1.00 35.04
ATOM   1223  O   ALA A  81     -11.923  -3.170  -3.970  1.00 72.33
ATOM   1224  N   THR A  82     -11.065  -3.206  -1.944  1.00 25.51
ATOM   1225  H   THR A  82     -11.175  -3.276  -0.969  1.00 52.23
ATOM   1226  CA  THR A  82      -9.718  -3.134  -2.478  1.00 23.44
ATOM   1227  HA  THR A  82      -9.751  -3.316  -3.541  1.00 32.24
ATOM   1228  CB  THR A  82      -9.153  -1.723  -2.242  1.00 52.42
ATOM   1229  HB  THR A  82      -8.836  -1.644  -1.214  1.00 21.23
ATOM   1230  OG1 THR A  82     -10.172  -0.755  -2.523  1.00 52.14
ATOM   1231  HG1 THR A  82     -10.929  -0.904  -1.944  1.00 64.31
ATOM   1232  CG2 THR A  82      -7.968  -1.450  -3.159  1.00 64.31
ATOM   1233 1HG2 THR A  82      -7.587  -0.457  -2.977  1.00  4.10
ATOM   1234 2HG2 THR A  82      -8.285  -1.530  -4.189  1.00  1.34
ATOM   1235 3HG2 THR A  82      -7.191  -2.175  -2.968  1.00 32.41
ATOM   1236  C   THR A  82      -8.794  -4.165  -1.800  1.00  3.50
ATOM   1237  O   THR A  82      -8.856  -4.354  -0.598  1.00 44.01
ATOM   1238  N   ARG A  83      -7.981  -4.849  -2.568  1.00 12.15
ATOM   1239  H   ARG A  83      -8.018  -4.756  -3.545  1.00 51.53
ATOM   1240  CA  ARG A  83      -7.020  -5.757  -2.013  1.00 74.20
ATOM   1241  HA  ARG A  83      -7.201  -5.823  -0.951  1.00 73.23
ATOM   1242  CB  ARG A  83      -7.078  -7.135  -2.628  1.00 34.20
ATOM   1243 1HB  ARG A  83      -8.106  -7.385  -2.849  1.00 60.04
ATOM   1244 2HB  ARG A  83      -6.500  -7.145  -3.539  1.00  2.10
ATOM   1245  CG  ARG A  83      -6.503  -8.175  -1.690  1.00  4.04
ATOM   1246 1HG  ARG A  83      -5.618  -7.769  -1.221  1.00 52.44
ATOM   1247 2HG  ARG A  83      -7.236  -8.397  -0.928  1.00 34.32
ATOM   1248  CD  ARG A  83      -6.119  -9.443  -2.388  1.00 72.33
ATOM   1249 1HD  ARG A  83      -6.074 -10.199  -1.623  1.00 72.41
ATOM   1250 2HD  ARG A  83      -6.885  -9.688  -3.109  1.00  2.13
ATOM   1251  NE  ARG A  83      -4.806  -9.319  -3.075  1.00 52.03
ATOM   1252  HE  ARG A  83      -4.450  -8.403  -3.117  1.00  3.00
ATOM   1253  CZ  ARG A  83      -4.077 -10.344  -3.567  1.00 52.23
ATOM   1254  NH1 ARG A  83      -4.575 -11.586  -3.566  1.00 40.21
ATOM   1255 1HH1 ARG A  83      -5.489 -11.775  -3.204  1.00 12.11
ATOM   1256 2HH1 ARG A  83      -4.067 -12.371  -3.927  1.00 43.04
ATOM   1257  NH2 ARG A  83      -2.851 -10.118  -4.057  1.00  3.32
ATOM   1258 1HH2 ARG A  83      -2.457  -9.185  -4.059  1.00  5.30
ATOM   1259 2HH2 ARG A  83      -2.241 -10.817  -4.439  1.00 12.33
ATOM   1260  C   ARG A  83      -5.636  -5.191  -2.238  1.00 13.02
ATOM   1261  O   ARG A  83      -5.324  -4.732  -3.347  1.00 62.40
ATOM   1262  N   ILE A  84      -4.820  -5.221  -1.225  1.00 54.13
ATOM   1263  H   ILE A  84      -5.085  -5.648  -0.377  1.00 15.22
ATOM   1264  CA  ILE A  84      -3.499  -4.663  -1.288  1.00 71.33
ATOM   1265  HA  ILE A  84      -3.408  -4.171  -2.246  1.00 12.33
ATOM   1266  CB  ILE A  84      -3.266  -3.590  -0.151  1.00 53.32
ATOM   1267  HB  ILE A  84      -3.899  -3.871   0.678  1.00 51.35
ATOM   1268  CG2 ILE A  84      -1.837  -3.566   0.361  1.00 73.01
ATOM   1269 1HG2 ILE A  84      -1.726  -2.780   1.094  1.00 72.12
ATOM   1270 2HG2 ILE A  84      -1.163  -3.400  -0.466  1.00 75.00
ATOM   1271 3HG2 ILE A  84      -1.615  -4.519   0.817  1.00 35.31
ATOM   1272  CG1 ILE A  84      -3.677  -2.191  -0.605  1.00 74.11
ATOM   1273 1HG1 ILE A  84      -3.416  -1.472   0.157  1.00 20.42
ATOM   1274 2HG1 ILE A  84      -3.107  -1.992  -1.499  1.00 62.54
ATOM   1275  CD1 ILE A  84      -5.139  -2.018  -0.925  1.00 13.42
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ATOM   1276 1HD1 ILE A  84      -5.739  -2.177  -0.041  1.00 63.21
ATOM   1277 2HD1 ILE A  84      -5.415  -2.736  -1.681  1.00 61.44
ATOM   1278 3HD1 ILE A  84      -5.301  -1.021  -1.305  1.00 12.25
ATOM   1279  C   ILE A  84      -2.457  -5.771  -1.225  1.00 50.12
ATOM   1280  O   ILE A  84      -2.573  -6.730  -0.448  1.00 41.00
ATOM   1281  N   SER A  85      -1.503  -5.662  -2.119  1.00 22.22
ATOM   1282  H   SER A  85      -1.524  -4.892  -2.733  1.00  2.34
ATOM   1283  CA  SER A  85      -0.405  -6.588  -2.235  1.00 13.21
ATOM   1284  HA  SER A  85      -0.440  -7.309  -1.432  1.00 12.14
ATOM   1285  CB  SER A  85      -0.532  -7.290  -3.585  1.00  1.34
ATOM   1286 1HB  SER A  85      -0.160  -6.645  -4.368  1.00 32.23
ATOM   1287 2HB  SER A  85       0.031  -8.210  -3.571  1.00 60.10
ATOM   1288  OG  SER A  85      -1.910  -7.599  -3.834  1.00 54.43
ATOM   1289  HG  SER A  85      -2.341  -6.754  -3.652  1.00  1.34
ATOM   1290  C   SER A  85       0.882  -5.760  -2.178  1.00 51.14
ATOM   1291  O   SER A  85       1.020  -4.796  -2.931  1.00 41.41
ATOM   1292  N   ILE A  86       1.782  -6.085  -1.282  1.00 14.35
ATOM   1293  H   ILE A  86       1.640  -6.877  -0.717  1.00 43.32
ATOM   1294  CA  ILE A  86       2.998  -5.292  -1.113  1.00 11.22
ATOM   1295  HA  ILE A  86       2.988  -4.526  -1.874  1.00 54.24
ATOM   1296  CB  ILE A  86       3.031  -4.603   0.301  1.00 43.21
ATOM   1297  HB  ILE A  86       3.131  -5.364   1.060  1.00 54.54
ATOM   1298  CG2 ILE A  86       4.220  -3.640   0.422  1.00 41.32
ATOM   1299 1HG2 ILE A  86       5.140  -4.196   0.304  1.00 14.21
ATOM   1300 2HG2 ILE A  86       4.213  -3.173   1.396  1.00 61.03
ATOM   1301 3HG2 ILE A  86       4.156  -2.883  -0.346  1.00 22.31
ATOM   1302  CG1 ILE A  86       1.716  -3.838   0.532  1.00 62.13
ATOM   1303 1HG1 ILE A  86       1.611  -3.079  -0.227  1.00 51.41
ATOM   1304 2HG1 ILE A  86       0.896  -4.533   0.436  1.00 13.34
ATOM   1305  CD1 ILE A  86       1.599  -3.162   1.878  1.00 44.20
ATOM   1306 1HD1 ILE A  86       1.645  -3.912   2.653  1.00  0.50
ATOM   1307 2HD1 ILE A  86       0.656  -2.638   1.939  1.00 42.22
ATOM   1308 3HD1 ILE A  86       2.413  -2.464   2.003  1.00  1.30
ATOM   1309  C   ILE A  86       4.242  -6.170  -1.333  1.00 32.15
ATOM   1310  O   ILE A  86       4.249  -7.346  -0.955  1.00 64.22
ATOM   1311  N   LYS A  87       5.305  -5.575  -1.863  1.00 62.12
ATOM   1312  H   LYS A  87       5.254  -4.607  -2.021  1.00 52.23
ATOM   1313  CA  LYS A  87       6.518  -6.294  -2.234  1.00  3.13
ATOM   1314  HA  LYS A  87       6.313  -7.344  -2.084  1.00 31.22
ATOM   1315  CB  LYS A  87       6.892  -6.035  -3.749  1.00 21.13
ATOM   1316 1HB  LYS A  87       7.120  -6.983  -4.208  1.00 71.30
ATOM   1317 2HB  LYS A  87       6.015  -5.633  -4.238  1.00 24.34
ATOM   1318  CG  LYS A  87       8.083  -5.090  -4.051  1.00 14.34
ATOM   1319 1HG  LYS A  87       8.009  -4.741  -5.070  1.00 33.13
ATOM   1320 2HG  LYS A  87       8.031  -4.246  -3.377  1.00 74.53
ATOM   1321  CD  LYS A  87       9.439  -5.786  -3.871  1.00 10.22
ATOM   1322 1HD  LYS A  87       9.485  -6.219  -2.882  1.00 51.14
ATOM   1323 2HD  LYS A  87       9.528  -6.571  -4.608  1.00 10.42
ATOM   1324  CE  LYS A  87      10.598  -4.816  -4.035  1.00 45.31
ATOM   1325 1HE  LYS A  87      10.619  -4.470  -5.058  1.00 12.33
ATOM   1326 2HE  LYS A  87      10.447  -3.973  -3.376  1.00 53.52
ATOM   1327  NZ  LYS A  87      11.917  -5.444  -3.722  1.00 32.42
ATOM   1328 1HZ  LYS A  87      11.876  -5.848  -2.760  1.00 65.52
ATOM   1329 2HZ  LYS A  87      12.676  -4.731  -3.744  1.00 35.55
ATOM   1330 3HZ  LYS A  87      12.149  -6.203  -4.392  1.00 15.32
ATOM   1331  C   LYS A  87       7.632  -5.896  -1.259  1.00 52.43
ATOM   1332  O   LYS A  87       7.728  -4.740  -0.834  1.00 44.41
ATOM   1333  N   TYR A  88       8.382  -6.879  -0.835  1.00 54.23
ATOM   1334  H   TYR A  88       8.295  -7.756  -1.263  1.00 74.51
ATOM   1335  CA  TYR A  88       9.355  -6.745   0.241  1.00 13.12
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ATOM   1336  HA  TYR A  88       9.034  -5.946   0.890  1.00 63.40
ATOM   1337  CB  TYR A  88       9.370  -8.032   1.075  1.00 64.33
ATOM   1338 1HB  TYR A  88      10.134  -7.924   1.827  1.00 32.04
ATOM   1339 2HB  TYR A  88       8.410  -8.170   1.551  1.00 50.34
ATOM   1340  CG  TYR A  88       9.704  -9.303   0.290  1.00 72.12
ATOM   1341  CD1 TYR A  88       8.749  -9.926  -0.515  1.00 64.00
ATOM   1342  HD1 TYR A  88       7.762  -9.495  -0.584  1.00 52.42
ATOM   1343  CE1 TYR A  88       9.044 -11.071  -1.219  1.00 45.20
ATOM   1344  HE1 TYR A  88       8.289 -11.536  -1.838  1.00  4.43
ATOM   1345  CZ  TYR A  88      10.301 -11.619  -1.132  1.00 50.24
ATOM   1346  CE2 TYR A  88      11.268 -11.031  -0.340  1.00 53.14
ATOM   1347  HE2 TYR A  88      12.254 -11.463  -0.273  1.00 64.53
ATOM   1348  CD2 TYR A  88      10.966  -9.880   0.364  1.00 24.33
ATOM   1349  HD2 TYR A  88      11.722  -9.418   0.984  1.00 75.40
ATOM   1350  OH  TYR A  88      10.594 -12.761  -1.832  1.00 51.55
ATOM   1351  HH  TYR A  88      10.957 -13.400  -1.215  1.00 55.24
ATOM   1352  C   TYR A  88      10.764  -6.451  -0.251  1.00 55.15
ATOM   1353  O   TYR A  88      11.115  -6.719  -1.411  1.00 30.11
ATOM   1354  N   GLY A  89      11.542  -5.866   0.619  1.00 63.00
ATOM   1355  H   GLY A  89      11.206  -5.623   1.506  1.00 21.32
ATOM   1356  CA  GLY A  89      12.903  -5.563   0.317  1.00  3.50
ATOM   1357 1HA  GLY A  89      13.107  -5.848  -0.705  1.00 33.15
ATOM   1358 2HA  GLY A  89      13.060  -4.500   0.424  1.00 41.01
ATOM   1359  C   GLY A  89      13.851  -6.284   1.224  1.00 75.12
ATOM   1360  O   GLY A  89      13.567  -7.405   1.627  1.00 71.24
ATOM   1361  N   SER A  90      14.910  -5.609   1.613  1.00 54.13
ATOM   1362  H   SER A  90      15.001  -4.650   1.426  1.00  3.52
ATOM   1363  CA  SER A  90      16.023  -6.209   2.317  1.00 34.14
ATOM   1364  HA  SER A  90      16.500  -6.936   1.679  1.00 71.23
ATOM   1365  CB  SER A  90      17.031  -5.089   2.558  1.00 42.30
ATOM   1366 1HB  SER A  90      16.705  -4.482   3.389  1.00 15.15
ATOM   1367 2HB  SER A  90      18.001  -5.512   2.773  1.00 41.05
ATOM   1368  OG  SER A  90      17.135  -4.270   1.395  1.00 42.23
ATOM   1369  HG  SER A  90      17.096  -3.331   1.663  1.00 63.42
ATOM   1370  C   SER A  90      15.633  -6.856   3.674  1.00  0.45
ATOM   1371  O   SER A  90      16.101  -7.944   4.001  1.00 11.30
ATOM   1372  N   GLN A  91      14.830  -6.175   4.474  1.00 31.13
ATOM   1373  H   GLN A  91      14.543  -5.272   4.209  1.00 53.21
ATOM   1374  CA  GLN A  91      14.371  -6.751   5.752  1.00 63.41
ATOM   1375  HA  GLN A  91      14.930  -7.671   5.853  1.00  1.34
ATOM   1376  CB  GLN A  91      14.723  -5.857   6.937  1.00 12.44
ATOM   1377 1HB  GLN A  91      14.324  -4.869   6.758  1.00  2.01
ATOM   1378 2HB  GLN A  91      14.269  -6.264   7.829  1.00 61.33
ATOM   1379  CG  GLN A  91      16.224  -5.743   7.173  1.00 41.11
ATOM   1380 1HG  GLN A  91      16.692  -5.436   6.250  1.00  3.34
ATOM   1381 2HG  GLN A  91      16.403  -4.995   7.930  1.00 13.44
ATOM   1382  CD  GLN A  91      16.856  -7.056   7.622  1.00  1.21
ATOM   1383  OE1 GLN A  91      16.970  -7.321   8.805  1.00 32.12
ATOM   1384  NE2 GLN A  91      17.230  -7.897   6.687  1.00 34.15
ATOM   1385 2HE2 GLN A  91      17.090  -7.671   5.741  1.00 42.51
ATOM   1386 1HE2 GLN A  91      17.630  -8.738   6.987  1.00  3.52
ATOM   1387  C   GLN A  91      12.908  -7.156   5.746  1.00 65.43
ATOM   1388  O   GLN A  91      12.356  -7.529   6.775  1.00 64.22
ATOM   1389  N   GLY A  92      12.285  -7.103   4.601  1.00  2.32
ATOM   1390  H   GLY A  92      12.801  -6.909   3.792  1.00 72.43
ATOM   1391  CA  GLY A  92      10.868  -7.357   4.561  1.00 21.33
ATOM   1392 1HA  GLY A  92      10.606  -7.892   3.662  1.00 20.25
ATOM   1393 2HA  GLY A  92      10.608  -7.970   5.412  1.00 30.15
ATOM   1394  C   GLY A  92      10.094  -6.055   4.659  1.00 21.42
ATOM   1395  O   GLY A  92      10.604  -5.066   5.160  1.00 54.42
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ATOM   1396  N   ASN A  93       8.877  -6.039   4.187  1.00 22.44
ATOM   1397  H   ASN A  93       8.474  -6.855   3.822  1.00 12.22
ATOM   1398  CA  ASN A  93       8.093  -4.808   4.195  1.00 63.13
ATOM   1399  HA  ASN A  93       8.787  -3.984   4.271  1.00 73.33
ATOM   1400  CB  ASN A  93       7.299  -4.654   2.874  1.00 24.25
ATOM   1401 1HB  ASN A  93       6.790  -3.702   2.895  1.00 11.54
ATOM   1402 2HB  ASN A  93       7.992  -4.651   2.047  1.00 13.20
ATOM   1403  CG  ASN A  93       6.239  -5.741   2.632  1.00 71.12
ATOM   1404  OD1 ASN A  93       5.593  -6.242   3.541  1.00 61.53
ATOM   1405  ND2 ASN A  93       6.068  -6.106   1.412  1.00 41.42
ATOM   1406 2HD2 ASN A  93       6.605  -5.673   0.714  1.00 55.20
ATOM   1407 1HD2 ASN A  93       5.419  -6.820   1.234  1.00  2.31
ATOM   1408  C   ASN A  93       7.153  -4.754   5.382  1.00 54.12
ATOM   1409  O   ASN A  93       6.574  -3.720   5.664  1.00 35.32
ATOM   1410  N   SER A  94       7.046  -5.869   6.081  1.00 12.20
ATOM   1411  H   SER A  94       7.669  -6.602   5.900  1.00 23.44
ATOM   1412  CA  SER A  94       6.048  -6.101   7.117  1.00 64.14
ATOM   1413  HA  SER A  94       5.107  -6.246   6.608  1.00 50.14
ATOM   1414  CB  SER A  94       6.384  -7.407   7.811  1.00  2.45
ATOM   1415 1HB  SER A  94       7.294  -7.291   8.383  1.00 71.15
ATOM   1416 2HB  SER A  94       5.573  -7.696   8.462  1.00 52.21
ATOM   1417  OG  SER A  94       6.570  -8.424   6.828  1.00 65.25
ATOM   1418  HG  SER A  94       5.839  -8.390   6.204  1.00 21.22
ATOM   1419  C   SER A  94       5.860  -4.938   8.122  1.00 53.10
ATOM   1420  O   SER A  94       4.734  -4.614   8.468  1.00 12.33
ATOM   1421  N   ILE A  95       6.932  -4.292   8.537  1.00 51.31
ATOM   1422  H   ILE A  95       7.811  -4.560   8.196  1.00 30.31
ATOM   1423  CA  ILE A  95       6.829  -3.178   9.488  1.00 51.35
ATOM   1424  HA  ILE A  95       6.162  -3.524  10.264  1.00  1.10
ATOM   1425  CB  ILE A  95       8.220  -2.812  10.149  1.00 30.14
ATOM   1426  HB  ILE A  95       8.975  -2.882   9.379  1.00 11.43
ATOM   1427  CG2 ILE A  95       8.244  -1.379  10.691  1.00  2.21
ATOM   1428 1HG2 ILE A  95       9.212  -1.177  11.130  1.00 32.04
ATOM   1429 2HG2 ILE A  95       7.479  -1.264  11.444  1.00 45.12
ATOM   1430 3HG2 ILE A  95       8.062  -0.686   9.884  1.00 11.50
ATOM   1431  CG1 ILE A  95       8.588  -3.806  11.284  1.00 73.44
ATOM   1432 1HG1 ILE A  95       9.557  -3.541  11.681  1.00 14.43
ATOM   1433 2HG1 ILE A  95       7.856  -3.712  12.073  1.00 53.33
ATOM   1434  CD1 ILE A  95       8.659  -5.267  10.884  1.00 12.41
ATOM   1435 1HD1 ILE A  95       8.930  -5.866  11.740  1.00 34.20
ATOM   1436 2HD1 ILE A  95       9.382  -5.397  10.094  1.00 52.53
ATOM   1437 3HD1 ILE A  95       7.680  -5.564  10.535  1.00 74.41
ATOM   1438  C   ILE A  95       6.151  -1.952   8.850  1.00 13.12
ATOM   1439  O   ILE A  95       5.147  -1.447   9.374  1.00 12.22
ATOM   1440  N   ARG A  96       6.640  -1.539   7.688  1.00 31.05
ATOM   1441  H   ARG A  96       7.366  -2.045   7.269  1.00 41.24
ATOM   1442  CA  ARG A  96       6.098  -0.360   7.020  1.00 72.44
ATOM   1443  HA  ARG A  96       6.037   0.416   7.766  1.00 12.35
ATOM   1444  CB  ARG A  96       7.011   0.121   5.871  1.00 61.03
ATOM   1445 1HB  ARG A  96       6.593   1.029   5.463  1.00 42.32
ATOM   1446 2HB  ARG A  96       7.985   0.343   6.276  1.00 40.14
ATOM   1447  CG  ARG A  96       7.185  -0.858   4.726  1.00  2.04
ATOM   1448 1HG  ARG A  96       7.516  -1.808   5.119  1.00 14.02
ATOM   1449 2HG  ARG A  96       6.234  -0.989   4.230  1.00 41.32
ATOM   1450  CD  ARG A  96       8.198  -0.361   3.727  1.00 74.13
ATOM   1451 1HD  ARG A  96       7.879   0.603   3.358  1.00 62.22
ATOM   1452 2HD  ARG A  96       9.146  -0.254   4.230  1.00 62.32
ATOM   1453  NE  ARG A  96       8.357  -1.286   2.593  1.00 70.23
ATOM   1454  HE  ARG A  96       7.515  -1.583   2.190  1.00 42.21
ATOM   1455  CZ  ARG A  96       9.544  -1.645   2.081  1.00 72.04
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ATOM   1456  NH1 ARG A  96      10.647  -1.339   2.707  1.00 42.13
ATOM   1457 1HH1 ARG A  96      10.696  -0.842   3.589  1.00 35.03
ATOM   1458 2HH1 ARG A  96      11.563  -1.562   2.337  1.00 73.23
ATOM   1459  NH2 ARG A  96       9.616  -2.358   0.969  1.00 11.32
ATOM   1460 1HH2 ARG A  96       8.848  -2.688   0.421  1.00 55.00
ATOM   1461 2HH2 ARG A  96      10.548  -2.572   0.625  1.00 14.13
ATOM   1462  C   ARG A  96       4.688  -0.630   6.518  1.00 23.51
ATOM   1463  O   ARG A  96       3.831   0.243   6.575  1.00 32.14
ATOM   1464  N   SER A  97       4.452  -1.855   6.072  1.00 11.20
ATOM   1465  H   SER A  97       5.177  -2.518   6.052  1.00 12.43
ATOM   1466  CA  SER A  97       3.165  -2.265   5.565  1.00 44.20
ATOM   1467  HA  SER A  97       2.887  -1.593   4.766  1.00  3.11
ATOM   1468  CB  SER A  97       3.275  -3.662   4.993  1.00 70.33
ATOM   1469 1HB  SER A  97       3.554  -4.345   5.782  1.00 74.51
ATOM   1470 2HB  SER A  97       2.324  -3.962   4.579  1.00 24.03
ATOM   1471  OG  SER A  97       4.259  -3.714   3.978  1.00 45.03
ATOM   1472  HG  SER A  97       4.447  -4.646   3.812  1.00 13.22
ATOM   1473  C   SER A  97       2.098  -2.228   6.647  1.00 14.43
ATOM   1474  O   SER A  97       1.013  -1.712   6.424  1.00 43.54
ATOM   1475  N   SER A  98       2.430  -2.728   7.828  1.00 71.45
ATOM   1476  H   SER A  98       3.333  -3.078   7.977  1.00 63.04
ATOM   1477  CA  SER A  98       1.485  -2.773   8.930  1.00 51.51
ATOM   1478  HA  SER A  98       0.611  -3.304   8.583  1.00  0.31
ATOM   1479  CB  SER A  98       2.100  -3.544  10.099  1.00 70.32
ATOM   1480 1HB  SER A  98       3.012  -3.051  10.399  1.00 30.34
ATOM   1481 2HB  SER A  98       1.433  -3.595  10.945  1.00  5.40
ATOM   1482  OG  SER A  98       2.420  -4.870   9.686  1.00 31.21
ATOM   1483  HG  SER A  98       3.341  -4.866   9.396  1.00 64.24
ATOM   1484  C   SER A  98       1.056  -1.361   9.337  1.00 53.32
ATOM   1485  O   SER A  98      -0.129  -1.101   9.576  1.00  1.32
ATOM   1486  N   ALA A  99       2.010  -0.444   9.362  1.00 70.21
ATOM   1487  H   ALA A  99       2.935  -0.707   9.166  1.00  4.11
ATOM   1488  CA  ALA A  99       1.712   0.933   9.680  1.00 71.12
ATOM   1489  HA  ALA A  99       1.089   0.936  10.563  1.00 62.31
ATOM   1490  CB  ALA A  99       2.988   1.711   9.967  1.00 12.35
ATOM   1491 1HB  ALA A  99       3.605   1.731   9.081  1.00 41.23
ATOM   1492 2HB  ALA A  99       3.530   1.234  10.770  1.00 33.51
ATOM   1493 3HB  ALA A  99       2.737   2.722  10.253  1.00 75.54
ATOM   1494  C   ALA A  99       0.918   1.575   8.550  1.00 63.23
ATOM   1495  O   ALA A  99      -0.071   2.251   8.792  1.00 54.33
ATOM   1496  N   LEU A 100       1.338   1.296   7.317  1.00 32.42
ATOM   1497  H   LEU A 100       2.107   0.696   7.194  1.00 45.41
ATOM   1498  CA  LEU A 100       0.728   1.835   6.113  1.00 11.51
ATOM   1499  HA  LEU A 100       0.869   2.905   6.090  1.00 14.33
ATOM   1500  CB  LEU A 100       1.413   1.227   4.901  1.00 30.53
ATOM   1501 1HB  LEU A 100       2.478   1.310   5.042  1.00 40.23
ATOM   1502 2HB  LEU A 100       1.174   0.173   4.903  1.00 22.43
ATOM   1503  CG  LEU A 100       1.037   1.786   3.539  1.00 25.44
ATOM   1504  HG  LEU A 100      -0.031   1.712   3.410  1.00 51.13
ATOM   1505  CD1 LEU A 100       1.425   3.246   3.437  1.00 13.20
ATOM   1506 1HD1 LEU A 100       2.488   3.339   3.605  1.00 31.42
ATOM   1507 2HD1 LEU A 100       0.891   3.810   4.189  1.00 21.54
ATOM   1508 3HD1 LEU A 100       1.179   3.621   2.455  1.00  1.21
ATOM   1509  CD2 LEU A 100       1.704   0.980   2.449  1.00 11.11
ATOM   1510 1HD2 LEU A 100       1.369  -0.045   2.507  1.00 10.10
ATOM   1511 2HD2 LEU A 100       2.774   1.017   2.590  1.00 62.02
ATOM   1512 3HD2 LEU A 100       1.443   1.396   1.489  1.00 53.32
ATOM   1513  C   LEU A 100      -0.744   1.493   6.067  1.00  3.20
ATOM   1514  O   LEU A 100      -1.579   2.362   5.864  1.00 62.41
ATOM   1515  N   ILE A 101      -1.042   0.236   6.307  1.00 62.43
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ATOM   1516  H   ILE A 101      -0.295  -0.382   6.484  1.00 41.35
ATOM   1517  CA  ILE A 101      -2.409  -0.262   6.289  1.00 22.31
ATOM   1518  HA  ILE A 101      -2.815  -0.041   5.313  1.00 35.50
ATOM   1519  CB  ILE A 101      -2.455  -1.807   6.505  1.00 33.11
ATOM   1520  HB  ILE A 101      -1.891  -2.022   7.401  1.00 43.31
ATOM   1521  CG2 ILE A 101      -3.874  -2.319   6.729  1.00 62.23
ATOM   1522 1HG2 ILE A 101      -3.851  -3.390   6.875  1.00 54.44
ATOM   1523 2HG2 ILE A 101      -4.483  -2.078   5.872  1.00 11.31
ATOM   1524 3HG2 ILE A 101      -4.276  -1.841   7.610  1.00 32.25
ATOM   1525  CG1 ILE A 101      -1.784  -2.543   5.330  1.00  3.51
ATOM   1526 1HG1 ILE A 101      -0.744  -2.259   5.286  1.00 44.02
ATOM   1527 2HG1 ILE A 101      -1.851  -3.606   5.506  1.00 53.44
ATOM   1528  CD1 ILE A 101      -2.397  -2.250   3.970  1.00 52.21
ATOM   1529 1HD1 ILE A 101      -2.288  -1.205   3.722  1.00 54.53
ATOM   1530 2HD1 ILE A 101      -3.444  -2.514   3.987  1.00 32.24
ATOM   1531 3HD1 ILE A 101      -1.902  -2.853   3.224  1.00 64.05
ATOM   1532  C   ILE A 101      -3.279   0.460   7.318  1.00  3.24
ATOM   1533  O   ILE A 101      -4.388   0.891   6.990  1.00 31.01
ATOM   1534  N   GLY A 102      -2.738   0.654   8.528  1.00 43.22
ATOM   1535  H   GLY A 102      -1.830   0.321   8.706  1.00 54.45
ATOM   1536  CA  GLY A 102      -3.466   1.350   9.582  1.00 14.03
ATOM   1537 1HA  GLY A 102      -4.372   0.809   9.799  1.00  4.33
ATOM   1538 2HA  GLY A 102      -2.854   1.387  10.472  1.00 34.31
ATOM   1539  C   GLY A 102      -3.830   2.764   9.181  1.00 11.32
ATOM   1540  O   GLY A 102      -4.928   3.262   9.489  1.00 43.40
ATOM   1541  N   ILE A 103      -2.924   3.390   8.473  1.00 73.31
ATOM   1542  H   ILE A 103      -2.087   2.913   8.282  1.00 33.42
ATOM   1543  CA  ILE A 103      -3.099   4.731   7.973  1.00  4.42
ATOM   1544  HA  ILE A 103      -3.419   5.366   8.786  1.00 24.12
ATOM   1545  CB  ILE A 103      -1.762   5.267   7.427  1.00 51.22
ATOM   1546  HB  ILE A 103      -1.418   4.599   6.651  1.00 11.33
ATOM   1547  CG2 ILE A 103      -1.931   6.670   6.827  1.00 64.52
ATOM   1548 1HG2 ILE A 103      -0.976   7.020   6.464  1.00 64.24
ATOM   1549 2HG2 ILE A 103      -2.299   7.346   7.582  1.00 13.35
ATOM   1550 3HG2 ILE A 103      -2.632   6.626   6.008  1.00 11.30
ATOM   1551  CG1 ILE A 103      -0.735   5.284   8.547  1.00 62.44
ATOM   1552 1HG1 ILE A 103      -0.928   6.126   9.193  1.00 13.44
ATOM   1553 2HG1 ILE A 103      -0.819   4.371   9.117  1.00  0.23
ATOM   1554  CD1 ILE A 103       0.673   5.397   8.059  1.00 32.53
ATOM   1555 1HD1 ILE A 103       1.339   5.465   8.907  1.00 70.53
ATOM   1556 2HD1 ILE A 103       0.775   6.262   7.421  1.00 31.32
ATOM   1557 3HD1 ILE A 103       0.902   4.501   7.503  1.00 75.13
ATOM   1558  C   ILE A 103      -4.145   4.745   6.872  1.00 32.03
ATOM   1559  O   ILE A 103      -5.070   5.540   6.917  1.00 53.21
ATOM   1560  N   ILE A 104      -4.025   3.818   5.931  1.00 73.35
ATOM   1561  H   ILE A 104      -3.302   3.157   6.011  1.00 40.43
ATOM   1562  CA  ILE A 104      -4.926   3.761   4.783  1.00 63.01
ATOM   1563  HA  ILE A 104      -4.859   4.700   4.255  1.00 13.01
ATOM   1564  CB  ILE A 104      -4.521   2.613   3.806  1.00 41.24
ATOM   1565  HB  ILE A 104      -4.513   1.689   4.365  1.00 75.12
ATOM   1566  CG2 ILE A 104      -5.539   2.470   2.669  1.00 33.42
ATOM   1567 1HG2 ILE A 104      -5.582   3.386   2.100  1.00 34.32
ATOM   1568 2HG2 ILE A 104      -6.515   2.255   3.080  1.00 51.05
ATOM   1569 3HG2 ILE A 104      -5.234   1.659   2.024  1.00 23.23
ATOM   1570  CG1 ILE A 104      -3.119   2.856   3.235  1.00 62.00
ATOM   1571 1HG1 ILE A 104      -3.142   3.729   2.600  1.00 71.15
ATOM   1572 2HG1 ILE A 104      -2.430   3.033   4.049  1.00 22.22
ATOM   1573  CD1 ILE A 104      -2.586   1.698   2.411  1.00 14.51
ATOM   1574 1HD1 ILE A 104      -1.618   1.955   2.008  1.00 61.04
ATOM   1575 2HD1 ILE A 104      -3.271   1.492   1.602  1.00 63.22
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ATOM   1576 3HD1 ILE A 104      -2.496   0.824   3.037  1.00  2.13
ATOM   1577  C   ILE A 104      -6.365   3.543   5.238  1.00 42.31
ATOM   1578  O   ILE A 104      -7.256   4.314   4.873  1.00 54.14
ATOM   1579  N   GLU A 105      -6.581   2.551   6.088  1.00  4.55
ATOM   1580  H   GLU A 105      -5.818   2.010   6.400  1.00 50.11
ATOM   1581  CA  GLU A 105      -7.917   2.267   6.557  1.00 71.24
ATOM   1582  HA  GLU A 105      -8.532   2.246   5.667  1.00  5.14
ATOM   1583  CB  GLU A 105      -8.013   0.891   7.252  1.00 62.15
ATOM   1584 1HB  GLU A 105      -9.032   0.748   7.578  1.00 55.20
ATOM   1585 2HB  GLU A 105      -7.774   0.125   6.529  1.00 45.52
ATOM   1586  CG  GLU A 105      -7.115   0.702   8.461  1.00 13.01
ATOM   1587 1HG  GLU A 105      -6.085   0.827   8.161  1.00 23.34
ATOM   1588 2HG  GLU A 105      -7.378   1.459   9.186  1.00 33.15
ATOM   1589  CD  GLU A 105      -7.281  -0.660   9.097  1.00 61.21
ATOM   1590  OE1 GLU A 105      -8.159  -0.799   9.973  1.00 22.41
ATOM   1591  OE2 GLU A 105      -6.558  -1.605   8.725  1.00 60.22
ATOM   1592  C   GLU A 105      -8.460   3.403   7.428  1.00 52.22
ATOM   1593  O   GLU A 105      -9.615   3.811   7.287  1.00 25.51
ATOM   1594  N   GLY A 106      -7.606   3.954   8.273  1.00 42.51
ATOM   1595  H   GLY A 106      -6.676   3.634   8.288  1.00 41.22
ATOM   1596  CA  GLY A 106      -8.013   5.014   9.161  1.00 31.13
ATOM   1597 1HA  GLY A 106      -8.927   4.698   9.643  1.00 62.33
ATOM   1598 2HA  GLY A 106      -7.272   5.165   9.928  1.00 32.14
ATOM   1599  C   GLY A 106      -8.289   6.326   8.452  1.00 64.42
ATOM   1600  O   GLY A 106      -9.196   7.052   8.839  1.00 71.13
ATOM   1601  N   ASN A 107      -7.523   6.613   7.408  1.00 23.41
ATOM   1602  H   ASN A 107      -6.802   5.991   7.150  1.00 32.30
ATOM   1603  CA  ASN A 107      -7.674   7.856   6.628  1.00 24.23
ATOM   1604  HA  ASN A 107      -7.595   8.701   7.296  1.00 54.32
ATOM   1605  CB  ASN A 107      -6.566   7.943   5.543  1.00 70.31
ATOM   1606 1HB  ASN A 107      -5.614   7.736   6.009  1.00 51.41
ATOM   1607 2HB  ASN A 107      -6.756   7.175   4.808  1.00 63.43
ATOM   1608  CG  ASN A 107      -6.433   9.302   4.802  1.00  2.43
ATOM   1609  OD1 ASN A 107      -5.348   9.655   4.368  1.00 12.33
ATOM   1610  ND2 ASN A 107      -7.502  10.058   4.643  1.00 31.32
ATOM   1611 2HD2 ASN A 107      -8.373   9.762   4.990  1.00 10.21
ATOM   1612 1HD2 ASN A 107      -7.362  10.905   4.175  1.00 45.15
ATOM   1613  C   ASN A 107      -9.035   7.849   5.962  1.00 12.03
ATOM   1614  O   ASN A 107      -9.714   8.878   5.897  1.00  1.22
ATOM   1615  N   ILE A 108      -9.426   6.693   5.482  1.00 63.22
ATOM   1616  H   ILE A 108      -8.815   5.927   5.542  1.00 71.12
ATOM   1617  CA  ILE A 108     -10.718   6.522   4.857  1.00 61.24
ATOM   1618  HA  ILE A 108     -10.826   7.301   4.115  1.00 31.23
ATOM   1619  CB  ILE A 108     -10.815   5.150   4.162  1.00 71.25
ATOM   1620  HB  ILE A 108     -10.675   4.374   4.900  1.00 61.45
ATOM   1621  CG2 ILE A 108     -12.191   4.973   3.515  1.00  3.14
ATOM   1622 1HG2 ILE A 108     -12.225   4.031   2.987  1.00  4.24
ATOM   1623 2HG2 ILE A 108     -12.371   5.785   2.827  1.00 51.55
ATOM   1624 3HG2 ILE A 108     -12.952   4.984   4.282  1.00 40.43
ATOM   1625  CG1 ILE A 108      -9.702   5.042   3.113  1.00 32.41
ATOM   1626 1HG1 ILE A 108      -9.880   5.762   2.330  1.00 61.35
ATOM   1627 2HG1 ILE A 108      -8.758   5.267   3.588  1.00 31.32
ATOM   1628  CD1 ILE A 108      -9.584   3.690   2.468  1.00 71.41
ATOM   1629 1HD1 ILE A 108     -10.507   3.453   1.961  1.00 51.25
ATOM   1630 2HD1 ILE A 108      -9.384   2.944   3.225  1.00 51.54
ATOM   1631 3HD1 ILE A 108      -8.775   3.706   1.754  1.00 22.11
ATOM   1632  C   ILE A 108     -11.822   6.685   5.895  1.00 50.01
ATOM   1633  O   ILE A 108     -12.797   7.380   5.661  1.00 62.25
ATOM   1634  N   ARG A 109     -11.631   6.076   7.064  1.00  4.23
ATOM   1635  H   ARG A 109     -10.847   5.498   7.183  1.00 54.50
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ATOM   1636  CA  ARG A 109     -12.587   6.207   8.154  1.00 30.51
ATOM   1637  HA  ARG A 109     -13.537   5.856   7.780  1.00 72.21
ATOM   1638  CB  ARG A 109     -12.190   5.348   9.355  1.00 65.22
ATOM   1639 1HB  ARG A 109     -11.223   5.673   9.712  1.00 73.51
ATOM   1640 2HB  ARG A 109     -12.920   5.477  10.139  1.00 54.40
ATOM   1641  CG  ARG A 109     -12.113   3.887   9.008  1.00  3.14
ATOM   1642 1HG  ARG A 109     -12.943   3.611   8.387  1.00  2.32
ATOM   1643 2HG  ARG A 109     -11.222   3.764   8.409  1.00 14.41
ATOM   1644  CD  ARG A 109     -11.986   2.991  10.223  1.00 23.53
ATOM   1645 1HD  ARG A 109     -12.725   3.292  10.951  1.00 22.41
ATOM   1646 2HD  ARG A 109     -12.179   1.972   9.922  1.00 11.14
ATOM   1647  NE  ARG A 109     -10.656   3.065  10.845  1.00 42.32
ATOM   1648  HE  ARG A 109     -10.438   3.935  11.246  1.00 22.21
ATOM   1649  CZ  ARG A 109      -9.792   2.029  10.878  1.00 51.33
ATOM   1650 NH1  ARG A 109     -10.118   0.879  10.313  1.00 64.44
ATOM   1651 1HH1 ARG A 109     -10.989   0.706   9.843  1.00 72.30
ATOM   1652 2HH1 ARG A 109      -9.456   0.106  10.305  1.00 51.41
ATOM   1653 NH2  ARG A 109      -8.603   2.148  11.463  1.00 44.54
ATOM   1654 1HH2 ARG A 109      -8.271   2.981  11.907  1.00 44.04
ATOM   1655 2HH2 ARG A 109      -7.981   1.359  11.458  1.00  2.34
ATOM   1656  C   ARG A 109     -12.761   7.656   8.565  1.00 12.34
ATOM   1657  O   ARG A 109     -13.854   8.084   8.825  1.00 43.31
ATOM   1658  N   TYR A 110     -11.679   8.403   8.573  1.00 62.52
ATOM   1659  H   TYR A 110     -10.818   7.982   8.358  1.00 23.44
ATOM   1660  CA  TYR A 110     -11.705   9.824   8.906  1.00 13.24
ATOM   1661  HA  TYR A 110     -12.187   9.917   9.869  1.00 73.12
ATOM   1662  CB  TYR A 110     -10.276  10.386   8.995  1.00 24.41
ATOM   1663 1HB  TYR A 110      -9.701   9.779   9.680  1.00 73.44
ATOM   1664 2HB  TYR A 110      -9.822  10.331   8.016  1.00 32.21
ATOM   1665  CG  TYR A 110     -10.188  11.823   9.471  1.00 22.12
ATOM   1666  CD1 TYR A 110     -10.204  12.121  10.827  1.00 24.13
ATOM   1667  HD1 TYR A 110     -10.285  11.313  11.540  1.00 40.24
ATOM   1668  CE1 TYR A 110     -10.119  13.424  11.274  1.00 55.24
ATOM   1669  HE1 TYR A 110     -10.134  13.635  12.333  1.00 63.33
ATOM   1670  CZ  TYR A 110     -10.016  14.451  10.364  1.00 32.34
ATOM   1671  CE2 TYR A 110      -9.997  14.185   9.012  1.00 74.25
ATOM   1672  HE2 TYR A 110      -9.918  14.991   8.297  1.00  1.52
ATOM   1673  CD2 TYR A 110     -10.084  12.880   8.570  1.00 24.42
ATOM   1674  HD2 TYR A 110     -10.070  12.669   7.511  1.00 14.01
ATOM   1675  OH  TYR A 110      -9.938  15.751  10.808  1.00 61.24
ATOM   1676  HH  TYR A 110     -10.640  16.252  10.371  1.00 74.44
ATOM   1677  C   TYR A 110     -12.542  10.602   7.876  1.00 60.41
ATOM   1678  O   TYR A 110     -13.208  11.562   8.202  1.00 32.10
ATOM   1679  N   ALA A 111     -12.445  10.194   6.626  1.00 42.44
ATOM   1680  H   ALA A 111     -11.873   9.426   6.423  1.00 63.24
ATOM   1681  CA  ALA A 111     -13.208  10.823   5.559  1.00 65.34
ATOM   1682  HA  ALA A 111     -13.036  11.888   5.622  1.00 63.43
ATOM   1683  CB  ALA A 111     -12.729  10.333   4.197  1.00 71.33
ATOM   1684 1HB  ALA A 111     -11.672  10.531   4.093  1.00 53.11
ATOM   1685 2HB  ALA A 111     -13.270  10.847   3.416  1.00  4.02
ATOM   1686 3HB  ALA A 111     -12.905   9.270   4.114  1.00  4.24
ATOM   1687  C   ALA A 111     -14.705  10.561   5.737  1.00 23.41
ATOM   1688  O   ALA A 111     -15.534  11.424   5.464  1.00  0.41
ATOM   1689  N   ASN A 112     -15.035   9.354   6.170  1.00 62.01
ATOM   1690  H   ASN A 112     -14.315   8.701   6.313  1.00 51.12
ATOM   1691  CA  ASN A 112     -16.424   8.974   6.412  1.00 53.21
ATOM   1692  HA  ASN A 112     -17.006   9.410   5.615  1.00 32.03
ATOM   1693  CB  ASN A 112     -16.629   7.450   6.374  1.00 34.23
ATOM   1694 1HB  ASN A 112     -15.900   6.985   7.022  1.00  1.12
ATOM   1695 2HB  ASN A 112     -17.620   7.223   6.744  1.00 62.24
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ATOM   1696  CG  ASN A 112     -16.479   6.842   4.989  1.00 15.41
ATOM   1697  OD1 ASN A 112     -15.409   6.414   4.591  1.00 44.31
ATOM   1698  ND2 ASN A 112     -17.561   6.799   4.245  1.00 51.01
ATOM   1699 2HD2 ASN A 112     -18.396   7.151   4.614  1.00 70.52
ATOM   1700 1HD2 ASN A 112     -17.465   6.417   3.349  1.00 31.32
ATOM   1701  C   ASN A 112     -16.959   9.530   7.723  1.00 72.52
ATOM   1702  O   ASN A 112     -18.120   9.926   7.806  1.00  3.34
ATOM   1703  N   THR A 113     -16.137   9.522   8.742  1.00 70.10
ATOM   1704  H   THR A 113     -15.218   9.191   8.632  1.00 42.22
ATOM   1705  CA  THR A 113     -16.530   9.995  10.044  1.00 34.34
ATOM   1706  HA  THR A 113     -17.528  10.402   9.963  1.00 71.44
ATOM   1707  CB  THR A 113     -16.550   8.835  11.093  1.00 34.11
ATOM   1708  HB  THR A 113     -16.863   9.228  12.049  1.00 13.12
ATOM   1709  OG1 THR A 113     -15.247   8.245  11.221  1.00 43.11
ATOM   1710  HG1 THR A 113     -14.621   8.921  10.923  1.00 74.44
ATOM   1711  CG2 THR A 113     -17.517   7.749  10.670  1.00 45.04
ATOM   1712 1HG2 THR A 113     -17.515   6.958  11.405  1.00 41.15
ATOM   1713 2HG2 THR A 113     -17.170   7.365   9.720  1.00 31.10
ATOM   1714 3HG2 THR A 113     -18.508   8.162  10.558  1.00 44.32
ATOM   1715  C   THR A 113     -15.589  11.093  10.502  1.00 25.10
ATOM   1716  O   THR A 113     -14.402  10.833  10.769  1.00 71.30
ATOM   1717  N   HIS A 114     -16.103  12.280  10.592  1.00 11.41
ATOM   1718  H   HIS A 114     -17.056  12.472  10.453  1.00 65.23
ATOM   1719  CA  HIS A 114     -15.355  13.429  10.970  1.00 43.44
ATOM   1720  HA  HIS A 114     -14.467  13.121  11.500  1.00 44.05
ATOM   1721  CB  HIS A 114     -14.974  14.265   9.724  1.00 60.42
ATOM   1722 1HB  HIS A 114     -14.484  13.620   9.009  1.00 10.03
ATOM   1723 2HB  HIS A 114     -15.876  14.655   9.279  1.00 74.24
ATOM   1724  CG  HIS A 114     -14.046  15.428  10.000  1.00 34.23
ATOM   1725  ND1 HIS A 114     -14.043  16.147  11.172  1.00 31.14
ATOM   1726  CD2 HIS A 114     -13.074  15.970   9.233  1.00 41.44
ATOM   1727  HD1 HIS A 114     -14.646  15.945  11.934  1.00 54.11
ATOM   1728  CE1 HIS A 114     -13.106  17.079  11.096  1.00 42.43
ATOM   1729  NE2 HIS A 114     -12.472  17.024   9.929  1.00 22.40
ATOM   1730  HD2 HIS A 114     -12.796  15.649   8.239  1.00 51.53
ATOM   1731  HE1 HIS A 114     -12.886  17.791  11.877  1.00  3.41
ATOM   1732  C   HIS A 114     -16.259  14.225  11.877  1.00 24.02
ATOM   1733  O   HIS A 114     -17.469  14.257  11.583  1.00 32.33
TER    1734      HIS A 114
ENDMDL
END
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