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# The tegumental allergen-like proteins of *Schistosoma mansoni*: A biochemical study of SmTAL4-TAL13

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ABSTRACT

*Schistosoma mansoni*, like other trematodes, expresses a number of unusual calcium binding proteins which consist of an EF-hand domain joined to a dynein light chain-like (DLC-like) domain by a flexible linker. These proteins have been implicated in host immune responses and drug binding. Three members of this protein family from *S. mansoni* (SmTAL1, SmTAL2 and SmTAL3) have been well characterised biochemically. Here we characterise the remaining family members from this species (SmTAL4-13). All of these proteins form homodimers and all except SmTAL5 bind to calcium and manganese ions. SmTAL9, 10 and 11 also bind to magnesium ions. The antischistosomal drug, praziquantel interacts with SmTAL4, 5 and 8. Some family members also bind to calmodulin antagonists such as chlorpromazine and trifluoperazine. Molecular modelling suggests that all ten proteins adopt similar overall folds with the EF-hand and DLC-like domains folding discretely. Bioinformatics analyses suggest that the proteins may fall into two main categories: (i) those which bind calcium ions reversibly at the second EF-hand and may play a role in signalling (SmTAL1, 2, 8 and 12) and (ii) those which bind calcium ions at the first EF-hand and may play either signalling or structural roles (SmTAL7, 9, 10 and 13). The remaining proteins include those which do not bind calcium ions (SmTAL3 and 5) and three other proteins (SmTAL4, 6 and 11). The roles of these proteins are less clear, but they may also have structural roles.

## 1. Introduction

*Schistosoma mansoni* and related blood flukes from the same genus cause a substantial burden of disease on humanity. It is estimated that 207 million people are infected by *S. mansoni* and every year it accounts for up to 280,000 deaths, second only to malaria among parasitic diseases [1–3]. The infection can be treated by the drug praziquantel [4]. This is generally well tolerated and effective [5,6]. In the absence of a vaccine, mass drug administration projects are using praziquantel to break the cycle of infection in large populations [7,8]. Interestingly, despite widespread use of the drug, reports of resistance to it are rare [6,9]. However, *bone fide* resistance has been generated in the laboratory and it is assumed that it will eventually emerge in clinically relevant populations of the parasite [10]. Praziquantel's molecular target and mechanism of action are unknown [6,11–13]. However, it is well-established that one of its effects is to disrupt calcium ion homeostasis resulting in uncontrolled influx of the ion and subsequent paralysis of the organism [4]. Therefore, calcium-regulatory systems in *S. mansoni* are of interest since they may provide clues about praziquantel's mode of action or identify potential novel targets which could be antagonised by new anti-schistosomal drugs.

In trematodes, there is a family of unusual calcium binding proteins which consist of an N-terminal EF-hand containing domain and a C-terminal dynein light chain-like (DLC-like) domain [14,15]. Typically, trematodes have multiple isoforms of these proteins and their functions are not known. In *S. mansoni* there are 13 known members of the tegumental allergen (TAL) family of proteins, referred to as SmTAL1 etc [16]. These proteins have been linked to IgE-mediated immune responses in the host [17–19]. Partial protection from infection resulted from immunisation of mice with SmTAL1 [20]. Immunisation of mice with the *Schistosoma japonicum* protein SjTP22.4 (equivalent to SmTAL11) was synergistic with PZQ in killing the worm [21]. One family member (SmTAL3) has been identified as part of a complex which also includes a component of the microbule motor, dynein [22]. In the liver flukes *Fasciola hepatica* and *Facsiola gigantica* four members of the family have been identified and characterised [23–30]. It seems likely that further family members will be revealed in these species once their genomes are fully annotated. The four family members from

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*F. hepatica* characterised so far differ in their ion and drug binding properties, but all are predicted to have similar structures and all are able to dimerise. Family members have also been identified in the Chinese liver fluke *Clonorchis sinensis* and the carcinogenic liver fluke *Opisthorchis viverrini* [31–33].

As likely calcium-signalling proteins which appear to be unique to helminths, these proteins are of interest as potential drug targets. They are also of fundamental interest given that no similar proteins have been reported in other taxa. Although the protein family has high levels of sequence and predicted structural similarity, substantial variation in their biochemical properties has been observed. For example, while the majority of family members bind to calcium ions, some (e.g. SmTAL3) do not [34,35]. However, the *in vivo* roles for the proteins and the need for large numbers of family members in each species remain largely unclear.

We have previously characterised the biochemical properties of SmTAL1 (Smp_045200.1; Sm22.6), SmTAL2 (Smp_086480.1; Sm21.7) and SmTAL3 (Smp_086530.1; Sm20.8) [34]. Here, we extend that work by reporting the characterisation of the remaining, known SmTAL proteins, namely: SmTAL4 (Smp_169190.1), SmTAL5 (Smp_195090.1), SmTAL6 (Smp_072620.1), SmTAL7 (Smp_042140.1), SmTAL8 (Smp_086470.1; Sm21.6), SmTAL9 (Smp_077310.1) SmTAL10 (Smp_074460.1), SmTAL11 (Smp_169200.1), SmTAL12 (Smp_045010.1) and SmTAL13 (Smp_042150.1). We investigated their ion binding properties, calmodulin antagonist interactions, oligomerisation properties and predicted three-dimensional structures. Based on these data, and associated bioinformatics analyses, we propose some functional classifications for this group of proteins.

## 2. Materials and methods

### 2.1. Bioinformatics and molecular modelling

SmTAL proteins were modelled using Phyre2 in the intensive mode [36,37]. These initial models were energy minimised using YASARA [38]. Where our analyses suggested that the proteins bound calcium ions at the second EF-hand (SmTAL8 and SmTAL12; see Results), the models were aligned to the EF-hand from Reps1 (PDB: 1FI6 [39]) which was a highly ranked template for the majority of the models and contained a bound calcium ion. Where our analyses suggested that the first EF-hand binds calcium ions (SmTAL7, 9, 10 and 13; see Results), the models were aligned to human CaBP7 (PDB: 2LV7 [40]), another highly ranked template. A new structure was generated by saving the SmTAL protein together with the calcium ion in the appropriate EF-hand and then this structure was minimised using YASARA. The final, minimised models are provided as supplementary information to this paper. Ramachadran plots were calculated using RAMPAGE (http://mordred.bioc.cam.ac.uk/~rapper/rampage.php) [41].

To investigate relationships between SmTAL proteins we constructed phylogenetic trees based on Kraemer et al's analysis of S100 proteins [42]. Multiple sequence alignments were performed in MEGA, version 6.06 [43,44], using MUSCLE with the default parameters [45,46]. Trees were optimised for maximum likelihood analysis, and the substitution method with the lowest Bayesian information criterion (BIC) score was chosen for the final tree. Neighbour-joining analyses were also carried out using MEGA. In both cases, evolutionary distances were estimated using the JTT method [47]. Both trees were tested with 1000 bootstrap replications [48], and rooted using several representatives of another EF-hand protein, calmodulin (CaM) as an outgroup.

### 2.2. Expression and purification of SmTAL proteins

DNA sequences coding for SmTAL4-SmTAL13 were amplified by PCR. SmTAL4, 5 and 8 coding sequences were amplified from plasmids kindly provided by Dr Colin Fitzsimmons (University of Cambridge, UK) [16]. The remaining coding sequences were amplified from *S. mansoni* cDNA provided by the Schistosomiasis Resource Center for distribution by BEI Resources, NIAID, NIH (Manassas, VA, USA; https://www.beiresources.org/) [49]. SmTAL7, 8 10 and 12 coding sequences were amplified from adult *S. mansoni* cDNA (Strain PR-1, NR-48633, Lot 62506671), SmTAL6 and 9 from miracidia cDNA (Strain PR-1, NR-48631, Lot 62506669) and SmTAL13 from cercariae cDNA (Strain PR-1, NR-48632, Lot 62506670). Primers were designed to facilitate insertion of the amplicons into pET43 Ek/LIC (Merck, Nottingham, UK) using ligation independent cloning and following the manufacturer's protocol. This vector introduces bases coding for the amino acid sequence MAHHHHHHVDDDDK at the 5′-end of the amplicon facilitating the purification of the recombinant protein by metal ion affinity chromatography. Correct insertion of the amplicons was checked by PCR and sequencing of the complete gene sequences (GATC Biotech, London, UK).

All SmTAL proteins were expressed in, and purified from, *Escherichia coli*. SmTAL5 and SmTAL9 were expressed in *E. coli* Rosetta (DE3) (Merck, Nottingham, UK) and the remaining SmTAL proteins in *E. coli* HMS174(DE3) (Merck). Single, recombinant colonies containing expression vectors for SmTAL4 and SmTAL6 were picked and cultured overnight, shaking at 37 °C in 5 ml of LB (Miller) broth supplemented with 100 $\mu g ml^{-1}$ ampicillin. This culture was diluted into 1 l of LB (Miller) broth supplemented with 100 $\mu g ml^{-1}$ ampicillin and grown, shaking at 37 °C for 3–4 h. After this time protein expression was induced by the addition of 0.3 g IPTG and the culture was grown, shaking at 37 °C for a further 4–5 h. SmTAL7, SmTAL8, SmTAL10, SmTAL11, SmTAL12 and SmTAL13 were expressed using the same protocol except that 0.4 g IPTG was used to induce expression. For SmTAL5, a recombinant colony was picked and cultured in 5 ml LB (Miller) supplemented with 100 $\mu g ml^{-1}$ ampicillin and 34 $\mu g ml^{-1}$ chloramphenicol overnight shaking at 30 °C. This culture was diluted into 1 l of LB (Miller) supplemented with 100 $\mu g ml^{-1}$ ampicillin and 34 $\mu g ml^{-1}$ chloramphenicol and grown shaking at 30 °C for 8–9 h before induction with 0.3 g IPTG. The temperature of the culture was reduced to 16 °C and the cells grown overnight. For SmTAL9, a single recombinant colony was cultured in 5 ml LB (Miller) supplemented with 100 $\mu g ml^{-1}$ ampicillin and 34 $\mu g ml^{-1}$ chloramphenicol for 9 h shaking at 37 °C. This culture was diluted into 100 ml LB(Miller) supplemented with 100 $\mu g ml^{-1}$ ampicillin and 34 $\mu g ml^{-1}$ chloramphenicol and grown overnight shaking at 37 °C before being diluted into 1 l of LB(Miller) supplemented with 100 $\mu g ml^{-1}$ ampicillin and 34 $\mu g ml^{-1}$ chloramphenicol and grown for a further 9 h shaking at 37 °C. Protein expression was then induced by the addition of 0.25 g IPTG, the temperature of the culture was reduced to 16 °C and the cells grown overnight. In all cases, cells were harvested by centrifugation at 4200*g* for 20 min. Cell pellets were resuspended in approximately 25 ml buffer R (50 mM Hepes-OH, pH 7.5, 150 mM NaCl, 10% (v/v) glycerol) and frozen at −80 °C until required.

All the SmTAL proteins were purified by cobalt affinity chromatography essentially as previously described [29]. Briefly, cells were thawed, disrupted by sonication and the suspension clarified by centrifugation (22,000*g* for 20 min). The cell extract was passed over a 1 ml cobalt agarose column (His-Select, Sigma, Poole, UK), which had been equilibrated in buffer W (buffer R, except 500 mM NaCl). The column was washed in 20 ml of buffer A and SmTAL proteins eluted with two 2 ml aliquots of buffer E (buffer A supplemented with 250 mM imidazole). Protein containing fractions were identified and dialysed overnight at 4 °C against buffer D (buffer R supplemented with 1 mM DTT). Purified proteins were frozen in aliquots of 20–100 µl at −80 °C until required. Once thawed, proteins were not refrozen.

### 2.3. Native gel electrophoresis

SmTAL4, 5, 6, 7, 8, 9, 10, 11, 12 and 13 were resolved by discontinuous gel electrophoresis under non-denaturing conditions to

detect ion binding. Proteins (SmTAL4, 52 μM; SmTAL5 and 10, 15 μM; SmTAL6 60 μM; SmTAL8, 40 μM; SmTAL12 and 13, 20 μM; all others 10 μM) were incubated at 37 °C for 30 min in the presence of either 2 mM EGTA or 2 mM EGTA/4 mM divalent cation in a total volume of 10 μl. Following incubation, 10 μl of native gel loading buffer (120 mM Tris-HCl, pH 6.8, 20% (v/v) glycerol, 0.005% (w/v) bromophenol blue, 1% (w/v) DTT) was added. The proteins were electrophoresed on 15%(w/v) polyacrylamide gels (buffer: 25 mM Tris, 160 mM glycine, pH 8.8) at 20 mA (constant current) for 4 h on ice, except for SmTAL10 (1.5 h) and SmTAL13 (3 h). Proteins were visualised using Coomassie blue stain.

### 2.4. Analytical methods

Protein concentrations were determined by the method of Bradford using BSA as a standard [50]. Differential scanning fluorimetry (DSF) was carried out as previously described [14,29].

Protein-protein crosslinking was carried out using bis(sulfosuccinimidyl)suberate ($BS^3$), a reagent which links exposed lysine residues [51]. SmTAL proteins (20 μM) were incubated in the presence of 2 mM EGTA or 2 mM EGTA/4 mM calcium chloride for 45 min at 37 °C. $BS^3$ (50–500 μM) was then added and the reaction allowed to proceed for 60 min at 37 °C before being terminated by the addition of SDS loading buffer (120 mM Tris-HCl, pH 6.8, 20% (v/v) glycerol, 0.005% (w/v) bromophenol blue, 1% (w/v) DTT, 4% (w/v) SDS) and heating to 95 °C for 3 min. Reactions were analysed by SDS-PAGE.

## 3. Results

### 3.1. Cloning, expression and purification of SmTAL4-13

In the case of SmTAL4-12, the DNA sequence amplified from *S. mansoni* cDNA was identical in sequence to those deposited in GenBank. However, a sequence variation was detected in SmTAL13 in which codon 26 (GAG encoding threonine) is substituted for GAA (alanine). This sequence (submitted to GenBank with the accession number KX951466) was detected in several different amplicons, suggesting that it represents real variation in the genome rather than a PCR amplification error. All ten SmTAL proteins could be expressed in, and purified from, *E. coli* cells with yields in the milligram per litre of bacterial culture range (Supplementary Fig. S1). The proteins were all released into the soluble fraction on sonication.

### 3.2. SmTAL proteins have different divalent ion binding properties

The mobility of all 10 SmTAL proteins was measured in native gel electrophoresis (Fig. 1). A shift in the mobility of the protein in the presence of calcium ions compared to the absence of calcium (ensured by the addition of the specific calcium chelator EGTA) indicates a change in conformation resulting from ion binding. The mobility SmTAL6, SmTAL7, SmTAL8 and SmTAL12 differed in the presence of calcium chloride suggesting that these proteins are able to bind the ion (Fig. 1). For all of these four proteins, the mobility of the untreated, recombinant protein was less than the EGTA treated protein (Fig. 1). This suggests that these proteins are purified largely in the calcium ion-bound form. Therefore, for all proteins, tests with other ions were carried in the presence of EGTA (to remove any bound calcium ions) and a molar excess of the ion. The four proteins which were shown to bind calcium ions in this assay also bound to manganese ions (Fig. 1). SmTAL6 and SmTAL7 also bound to cadmium and nickel. In addition, SmTAL6 interacted with lead ions (Fig. 1). In these assays, no interaction with any of the ten proteins was detected with magnesium, iron (II) or potassium ions. In a number of cases the presence of ion blurred the band in electrophoresis or even made it disappear entirely. Examples include cadmium with SmTAL10, cobalt (II) with SmTAL4, SmTAL5, SmTAL6, SmTAL9, SmTAL10 and SmTAL11, copper (II) with SmTAL10, nickel with SmTAL4, SmTAL9, SmTAL10 and SmTAL11, zinc with SmTAL10 and lead with SmTAL4, SmTAL10 and SmTAL13. This is consistent with the ion causing denaturation of the protein so that it no longer runs as a discrete band. In this assay, SmTAL4, SmTAL5, SmTAL9, SmTAL10, SmTAL11 and SmTAL13 were not shown to interact specifically with any ion.

In differential scanning fluorimetry assays, all SmTAL proteins tested except SmTAL5 showed a statistically significant change in thermal stability (as reflected by the "melting temperature", $T_m$) in the presence of calcium ions (Table 1). The same proteins showed a change in thermal stability with manganese ions. Three of the proteins (SmTAL9, SmTAL10 and SmTAL11) also showed significant changes in the presence of magnesium ions (Table 1).

### 3.3. Some SmTAL proteins bind to praziquantel and to calmodulin antagonists

DSF was also used to detect interactions between SmTAL proteins and the calmodulin antagonists CPZ, W7, TFP and thiamylal. Since there are previous reports showing that the antischistosomal drug PZQ interacts with the calmodulin-like protein myosin regulatory light chain and with SmTAL1, we also tested this drug [12,34]. CPZ affected the $T_m$ of SmTAL5, SmTAL9, SmTAL12 and SmTAL13 (Table 2). W7 affected just SmTAL9, SmTAL12 and SmTAL13, whereas TFP interacted with the majority of the proteins (i.e. SmTAL4, SmTAL5, SmTAL8, SmTAL9, SmTAL12 and SmTAL13). PZQ interacted with SmTAL4, SmTAL5 and SmTAL8. In the case of SmTAL6, SmTAL7, SmTAL10 and SmTAL11, no interaction was detected with any of the drugs used in these experiments.

### 3.4. All the SmTAL proteins homodimerise

In protein-protein crosslinking experiments, a new band corresponding to approximately twice the molecular mass of SmTALs was seen in all cases (Fig. 2). For some proteins (notably SmTAL9), this band was present even in the absence of crosslinker, suggesting a very high affinity interaction which was not completely dissociated under the conditions of SDS-PAGE. This effect was also seen in some of the purification gels (Supplementary Fig. S1) where, in general, the protein concentrations were higher. In some cases, notably SmTAL10, higher molecular mass species were also detected following crosslinking (Fig. 2). It is, therefore, possible that some of the proteins exist in higher order oligomers or aggregates in addition to dimers.

### 3.5. The SmTAL family proteins are predicted to have a broadly similar fold

Molecular modelling of the 10 SmTAL proteins revealed considerable similarities (Fig. 3). Each had a compact, N-terminal domain with two EF-hand structures present and a C-terminal DLC-like domain largely composed of β-sheet structures. These two domains are joined by a linker, which is predicted to lack any defined secondary structure and is, most likely, quite flexible. The mobility in this part of the proteins means that the two domains are likely to adopt a range of orientations with respect to each other. There is also some variation in the length of the linker which is also likely to affect the relative orientations of the two globular domains. The most extreme case of this is SmTAL8 which has a 31 residue linker resulting in considerable separation between the two domain (Fig. 3). In the case of SmTAL13 where our sequence differs from that previously reported, we made models corresponding to both sequences. The N-terminal domains (residue 1–76) of these models align well with a root means square deviation (rmsd) of 0.826 Å over 995 equivalent atoms, as do the C-terminal domains (residues 106–176; rmsd of 1.307 Å over 878 equivalent atoms).

Although the overall fold of the EF-hand domain is well conserved between the ten proteins, the sequence in the two EF-hands varies considerably. A typical EF-hand provides six ligands from the protein to

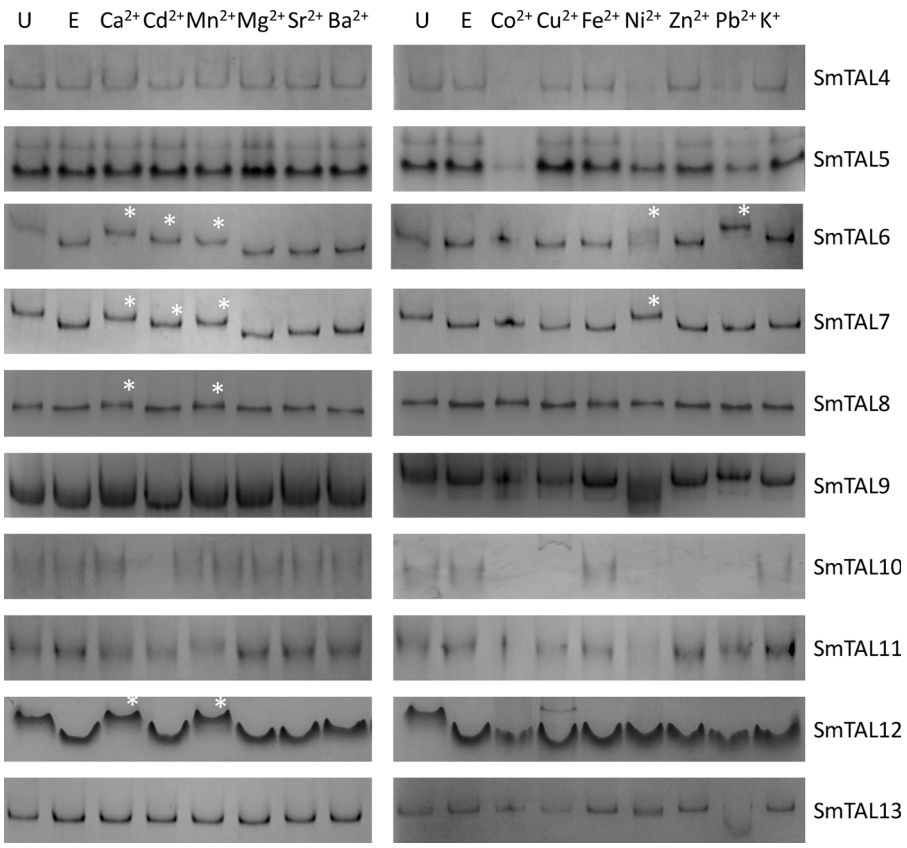



**Fig. 1.** Ion binding of SmTAL proteins. Native gel electrophoresis (for conditions, see Materials and Methods) was used to assess binding to a range of divalent metal cations. A discrete shift in electrophoretic mobility (marked with an asterisk, *) indicates interaction with the ion.

**Table 1**
Thermal stability ($T_m$ in °C) of SmTAL proteins in the presence and absence of selected divalent metal ions.

| Protein | Untreated | EGTA | $CaCl_2$ | $MnCl_2$ | $MgCl_2$ |
|---|---|---|---|---|---|
| **SmTAL4** | 59.1 ± 0.2$^{ns}$ | 58.7 ± 0.2 | 60.3 ± 0.4**** | 60.4 ± 0.1**** | 58.9 ± 0.1$^{ns}$ |
| **SmTAL5** | 47.6 ± 0.1$^{ns}$ | 47.9 ± 0.1 | 47.7 ± 0.4$^{ns}$ | 47.8 ± 0.2$^{ns}$ | 48.0 ± 0.3$^{ns}$ |
| **SmTAL6** | 73.9 ± 0.4$^{ns}$ | 74.1 ± 0.1 | 76.5 ± 0.3**** | 68.6 ± 0.1**** | 74.1 ± 0.3$^{ns}$ |
| **SmTAL7** | 64.8 ± 0.3* | 63.9 ± 0.4 | 69.5 ± 0.3**** | 67.6 ± 0.1**** | 64.6 ± 0.3$^{ns}$ |
| **SmTAL8** | 58.7 ± 0.2**** | 61.4 ± 0.4 | 59.3 ± 0.3*** | 60.0 ± 0.7** | 61.2 ± 0.3$^{ns}$ |
| **SmTAL9** | 68.6 ± 0.1$^{ns}$ | 68.8 ± 0.2 | 59.5 ± 0.0**** | 53.6 ± 0.2**** | 62.5 ± 0.0**** |
| **SmTAL10** | 67.6 ± 0.5**** | 64.5 ± 0.3 | 72.0 ± 0.2**** | 73.8 ± 0.3**** | 74.5 ± 0.0**** |
| **SmTAL11** | 49.8 ± 0.4**** | 47.2 ± 0.4 | 49.5 ± 0.0**** | 49.4 ± 0.1**** | 50.1 ± 0.1**** |
| **SmTAL12** | 69.7 ± 0.5** | 66.8 ± 0.2 | 71.5 ± 0.2**** | 71.4 ± 0.1**** | 63.1 ± 1.4$^{ns}$ |
| **SmTAL13** | 63.2 ± 0.1$^{ns}$ | 63.2 ± 0.2 | 62.3 ± 0.3*** | 60.6 ± 0.2**** | 63.1 ± 0.1$^{ns}$ |

In all cases, the protein concentration was 10 μM buffered by Hepes-OH (20 mM; pH 7.4). Where present, EGTA was 1 mM. Ions were present at 2 mM with 1 mM EGTA. Significance was determined *versus* EGTA treatment group using ANOVA (n = 3; significance threshold of $p \leq 0.05$) and Tukey's post-hoc test (mean of each group tested against the mean of every other group). $^{ns}$, not significant; * $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$; ****$P \leq 0.0001$.

coordinate the ion, which are arranged approximately at right angles to each other. Consequently, they are known as the X, Y, Z, −X, −Y and −Z groups [52]. Detailed bioinformatics studies have identified the residues most commonly found at these positions. Aspartate is favoured at X, Y, Z and −X although considerable variation is possible at −X. At the −Z position, glutamate is favoured, although aspartate is used in a minority of cases. The −Y position is unique among the six in that the backbone carbonyl, not side chain groups are used for coordination. Threonine is the preferred residue at this positon, but a wide variety of alternative residues are possible. Between the Z and −Y residues a glycine is almost always found to facilitate the tight turn which enables the EF-hand to wrap around the ion [52]. In previous work on FhCaBP2, the second EF-hand was shown to be the main site of interaction with calcium and manganese ions. This EF-hand largely conforms to the consensus, with a lysine at position −Y [26].

The first EF-hand deviates from the consensus in almost all of the 10 SmTAL proteins studied here. Only SmTAL10 and SmTAL13 have the central glycine residue required to create the tight turn in the middle of the motif. In general, the lack of the glycine appears not to affect the fold of the EF-hand greatly. This could result from the use of homology modelling which estimates structures by comparison to the closest available experimentally determined ones. This might be expected to "force" residues into modelled structures which are not, in reality, favoured. Examination of the Ramachandran plots for the first EF- hands for all ten proteins showed that, for SmTAL4, SmTAL6, SmTAL9, SmTAL10 and SmTAL13 all the residues were in the "favoured" regions of the plot. For the remainder of the proteins, some residues (typically the residue on the turn or those adjacent to it) were in the "allowed" or "outlier" regions of the Ramachandran plot (data not shown). This suggests that the EF-hand motif may be distorted from the ideal

**Table 2**
Thermal stability ($T_m$ in °C) of SmTAL proteins in the presence and absence of selected drugs.

| Protein | Untreated (+Calcium) | DMSO | PZQ | CPZ | W7 | TFP | ThA |
|---|---|---|---|---|---|---|---|
| **SmTAL4** | 60.7 ± 0.2$^{ns}$ | 60.7 ± 0.3 | 60.1 ± 0.1** | 60.3 ± 0.2$^{ns}$ | 60.5 ± 0.0$^{ns}$ | 60.2 ± 0.2* | 60.6 ± 0.1$^{ns}$ |
| **SmTAL5** | 47.5 ± 0.2$^{ns}$ | 47.7 ± 0.3 | 46.4 ± 0.7* | 45.8 ± 0.3*** | 47.8 ± 0.3$^{ns}$ | 44.4 ± 0.4**** | 47.3 ± 0.4$^{ns}$ |
| **SmTAL6** | 76.7 ± 0.2$^{ns}$ | 76.4 ± 0.2 | 76.3 ± 0.2$^{ns}$ | 76.2 ± 0.2$^{ns}$ | 76.2 ± 0.2$^{ns}$ | 76.4 ± 0.1$^{ns}$ | 76.1 ± 0.1$^{ns}$ |
| **SmTAL7** | 69.6 ± 0.4$^{ns}$ | 69.5 ± 0.2 | 69.3 ± 0.2$^{ns}$ | 69.2 ± 0.0$^{ns}$ | 69.1 ± 0.3$^{ns}$ | 68.9 ± 0.2$^{ns}$ | 69.4 ± 0.3$^{ns}$ |
| **SmTAL8** | 58.8 ± 0.4$^{ns}$ | 58.6 ± 0.4 | 56.6 ± 0.1**** | 58.7 ± 0.4$^{ns}$ | 58.4 ± 0.2$^{ns}$ | 57.2 ± 0.3*** | 58.6 ± 0.2$^{ns}$ |
| **SmTAL9** | 59.5 ± 0.0$^{ns}$ | 59.8 ± 0.1 | 59.9 ± 0.1$^{ns}$ | 59.2 ± 0.2*** | 58.9 ± 0.1**** | 58.9 ± 0.1**** | 59.9 ± 0.1$^{ns}$ |
| **SmTAL10** | 72.1 ± 0.4$^{ns}$ | 71.6 ± 0.9 | 71.7 ± 0.3$^{ns}$ | 71.6 ± 0.1$^{ns}$ | 71.7 ± 0.3$^{ns}$ | 71.3 ± 0.4$^{ns}$ | 71.5 ± 0.9$^{ns}$ |
| **SmTAL11** | 49.3 ± 0.3$^{ns}$ | 49.2 ± 0.3 | 49.1 ± 0.1$^{ns}$ | 49.4 ± 0.2$^{ns}$ | 49.6 ± 0.2$^{ns}$ | 49.1 ± 0.1$^{ns}$ | 49.3 ± 0.2$^{ns}$ |
| **SmTAL12** | 71.4 ± 0.1$^{ns}$ | 71.1 ± 0.1 | 70.8 ± 0.2$^{ns}$ | 70.5 ± 0.0*** | 70.6 ± 0.1** | 69.8 ± 0.2**** | 70.9 ± 0.1$^{ns}$ |
| **SmTAL13** | 62.4 ± 0.1$^{ns}$ | 62.3 ± 0.2 | 61.8 ± 0.4$^{ns}$ | 60.6 ± 0.2**** | 61.1 ± 0.1**** | 60.4 ± 0.1**** | 62.2 ± 0.1$^{ns}$ |

SmTAL proteins were present at 10 μM in the presence of EGTA (1 mM)/calcium chloride (2 mM) and buffered by Hepes-OH (20 mM; pH 7.4). All drugs were present at a concentration of 250 μM with DMSO at 1%(v/v). Significance was determined by comparison to the DMSO treated group using ANOVA (n = 3; significance threshold of $p \leq 0.05$) and Tukey's post-hoc test (mean of each group tested against the mean of every other group). $^{ns}$, not significant; * $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$; ****$P \leq 0{\cdot}0001$. PZQ, praziquantel; CPZ, chlorpromazine; W7, *N*-(6-Aminohexyl)-1-chloro-naphthalene-5-sulfonamide; TFP, trifluoperazine; ThA, thiamylal.

conformation in SmTAL5, SmTAL7, SmTAL8, SmTAL11 and SmTAL12.

In general, the second EF-hands in the ten SmTAL proteins are closer to the consensus. All but SmTAL6, SmTAL8 and SmTAL12 have the central, conserved glycine residue. Only SmTAL4's second EF-hand has a residue in the outlier region of the Ramachandran plot (Phe-55); SmTAL11 and SmTAL12 have one residue in the allowed region (Thr-50 and Lys-52 respectively). All the remaining proteins' second EF-hands have all the residues in the favoured region. However, the residue at the −Z position only conforms to the consensus (Glu) in the case of SmTAL8 and SmTAL12, suggesting that these two proteins interact with calcium ions through the second EF-hand. The other proteins have a range of residues which are all unable to provide oxygen atoms in their side chains for coordination of the ion. While this may suggest that these EF-hands are unable to bind calcium, the experimental evidence presented here clearly demonstrates that the majority of these proteins do so. Therefore, the ion must either bind elsewhere (most likely the first EF-hand) or the EF-hand must function differently to "classical" ones.

### 3.6. Bioinformatics analyses suggest functional groupings for this protein family

To assist understanding of the different biochemical properties of these proteins we conducted a phylogenetic analysis of all 13 SmTAL proteins, together with known family members from other trematodes using calmodulins as an out-group. Both maximum likelihood and neighbour-joining analyses gave similar results which revealed two clades (Fig. 4). One clade includes SmTAL1, 2, 8 and 12. It also includes all four *F. hepatica* CaBPs (and their *F. gigantica* homologues). FhCaBP2 has been shown to interact with calcium primarily through its second EF-hand and sequence similarities at the EF-hands suggests that the same will be true for the other three *F. hepatica* CaBPs [14,26]. In the four SmTAL proteins in this clade, the second EF-hand conforms to the consensus at the −Z position (Glu) suggesting that they also bind calcium at this site. Typically these SmTAL proteins are also associated with larger changes in thermal stability, suggesting greater conformational change on binding (Table 1 and [34]). This suggests a role for these proteins in calcium-mediated cellular signalling.

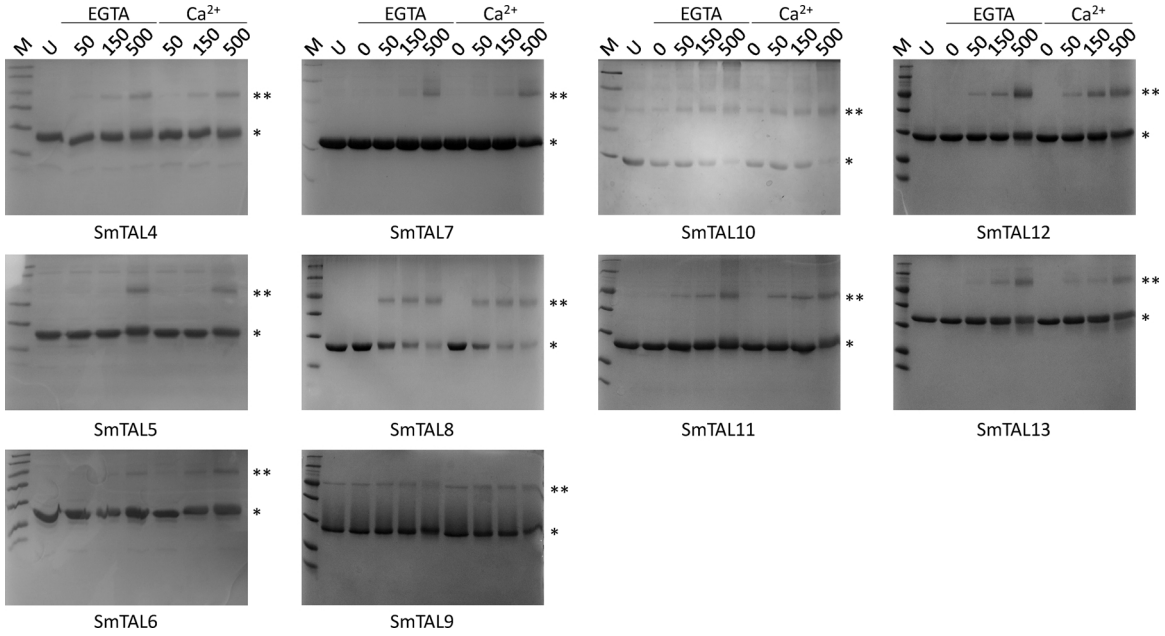



**Fig. 2.** Homodimerisation of SmTAL proteins. Protein-protein crosslinking was used to assess the ability of the SmTALs to dimerise. The appearance of additional band (**) at approximately twice the molecular mass of the native protein (*) indicates dimerization. In some cases (notably SmTAL5, 10 and 11) additional bands at higher molecular masses were detected suggesting oligomerisation or aggregation of these proteins also occurs. Note that SmTAL9 has a detectable amount of dimer present even in the absence of crosslinking agent. In each gel: M, molecular mass markers (116, 66, 45, 35, 25, 18, 14 kDa); U, untreated protein (20 μM); numbers, protein treated with the corresponding concentration (in μM) of $BS^3$. EGTA indicates experiments done in 2 mM EGTA; $Ca^{2+}$, experiments done in 2 mM EGTA/4 mM calcium chloride. For other experimental conditions, see Materials and Methods.

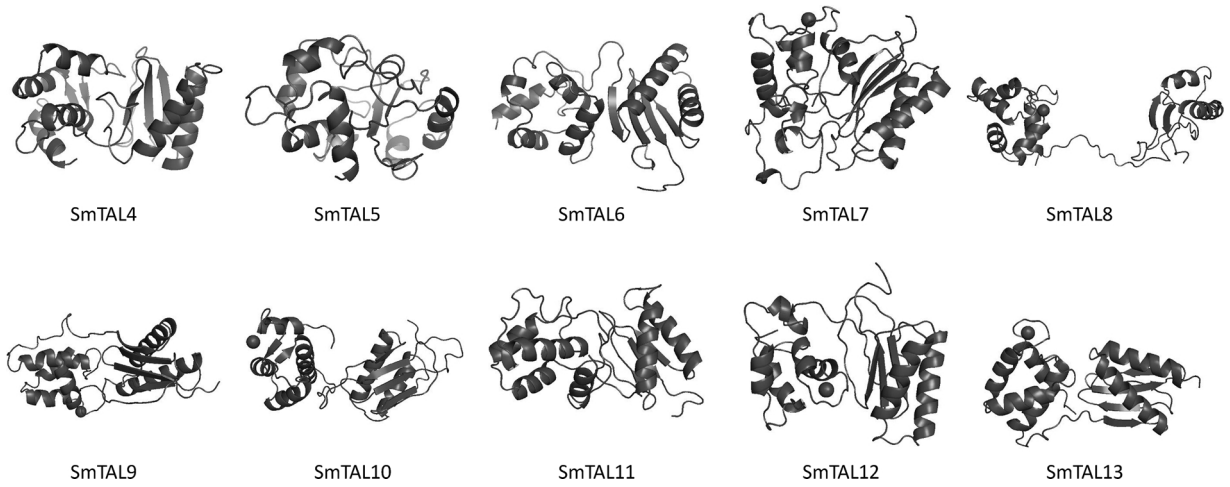



**Fig. 3.** Predicted EF-hand structures from SmTALs. The overall fold of the SmTAL proteins was predicted by molecular modelling (see Materials and Methods). In each case, the EF-hand domain is shown on the left and the DLC-like domain on the right. Calcium ions are shown in the first or second EF-hand according to the predictions made in this paper. Where no calcium ion binding is predicted, or the position of the ion is uncertain, the structure is shown with no ions bound.

The second clade includes all the remaining SmTAL proteins (SmTAL3, 4, 5, 6, 7, 9, 10, 11, 13) alongside similar proteins from other trematodes (Fig. 4). Four of these proteins (SmTAL7, 9, 10, 13) lack the critical glutamate in their second EF-hand sequences and are likely to bind divalent ions mainly at the first EF-hand. This conclusion is supported by the presence of the *C. sinensis* protein CsTAL3 (Cs20.8) in this clade. X-ray crystallographic studies have clearly demonstrated that this protein interacts through the first EF-hand [53]. However the biochemical properties of SmTAL proteins from this clade are diverse. Thus, this group may contain proteins with a mainly structural role and those which are involved in calcium signalling using the first EF-hand.

The remaining proteins (SmTAL3, 4, 5, 6 and 11) include proteins with no detectable divalent ion binding activity (SmTAL3 and SmTAL5) with some which have been shown to bind ions (SmTAL4, 6 and 11) (Fig. 1, Tables 1 and 3 [34]). SmTAL3 has been shown to form part of a high molecular mass complex [22]. This protein, and also SmTAL5, readily form higher order oligomers in crosslinking experiments (Fig. 2). This suggests that at least some of these proteins may have structural, rather than signalling, roles.

## 4. Discussion

Despite similarity in sequences and predicted domain organisation there is known to be considerable variation in the biochemical properties of this protein family [14]. Therefore, it was not surprising to discover diversity in this group of ten SmTAL proteins. The results from binding experiments described in this paper and our previous work are summarised in Table 3 [34]. Native gel electrophoresis demonstrated different ion binding properties for the ten proteins. In this assay calcium ion binding was not detected for six of the proteins. However, it should be noted that this assay will only detect ion binding where the interaction is long-lived under the conditions of the experiment and results in a conformational change which alters the electrophoretic mobility of the protein. Therefore, while the presence of a shift is strong evidence of ion binding, the absence of a shift does not necessarily indicate that there is no affinity for that ion. In DSF, calcium binding was detected for all of the proteins, except SmTAL5. Therefore, we conclude that SmTAL5, like SmTAL3, has no significant calcium binding activity [34].

The location of the calcium binding site(s) in the remaining SmTAL proteins is not always clear. While the known members of the FhCaBP family appear to bind divalent ions primarily through the second EF-hand, this seems unlikely to be the case for all SmTAL proteins. Based on our structural predictions and bioinformatics analyses, we hypothesise that SmTAL1, 2, 8 and 12 all interact through the second EF-hand. These four proteins are grouped in the same clade as the FhCaBP family and, except for SmTAL8, have a second EF-hand that conforms well to the consensus sequence. SmTAL10 and 13 are likely to bind through the first EF-hand. For these two proteins, the second EF-hand lacks the glycine residue required for the tight turn, but this residue is present in the first EF-hand. They also both appear in the second clade in our bioinformatics analysis. It is tempting to extend this argument to the other two SmTAL proteins in this clade (SmTAL7 and 9). While the *F. hepatica* proteins FhCaBP1, FhCaBP2, FhCaBP3 and FhCaBP4 all appear to interact primarily through the second EF-hand, there is experimental evidence for members of this protein family interacting through the first EF-hand [23,25,26,29]. The crystal structure of the EF-hand domain from the *C. sinensis* protein, CsTAL3 has been solved and clearly demonstrates that this protein interacts through the first EF-hand [53]. X-ray scattering data on the full-length protein in solution suggested that it undergoes conformational changes on binding to calcium ions, becoming more extended in response to ion binding. This suggests that binding at the first EF-hand can also elicit the kind of conformational changes involved in signalling [53]. The situation remaining SmTAL proteins for which there is evidence of calcium binding (SmTAL4, 6 and 11) is less clear. These protein sequences were not clearly grouped in our bioinformatics analysis. Further experimental work will be required to confirm the locations of divalent cation binding sites in the SmTAL protein family.

It is reasonable to assume that all 13 TAL proteins arose from a single ancestral protein which almost certainly bound calcium ions. If this is the case, then SmTAL3 and SmTAL5 have lost the ability to bind calcium through evolution. This suggests that, while the majority of SmTAL proteins reversibly interact with calcium ions in a functionally important way, there are calcium-independent functions of some family members. Other than a single report that SmTAL3 forms part of a larger complex which includes dynein components, no functional information is available for the SmTAL family [22]. The requirement for 13 different family members is also an unresolved mystery. We hypothesise that the majority of the proteins function in calcium signalling processes and that their functions are likely to partially overlap. The two non-calcium binding SmTAL proteins most likely function as structural components of larger complexes. Given the parasite's requirement to live in two hosts (a warm-blooded mammal and a cold-blooded snail) as well in several free living forms, it is possible that different family members fulfill similar role(s) but in different life cycle stages. Consistent with this hypothesis, mRNA coding for the 13 SmTAL proteins show different expression profiles [16]. While some of the mRNA molecules are

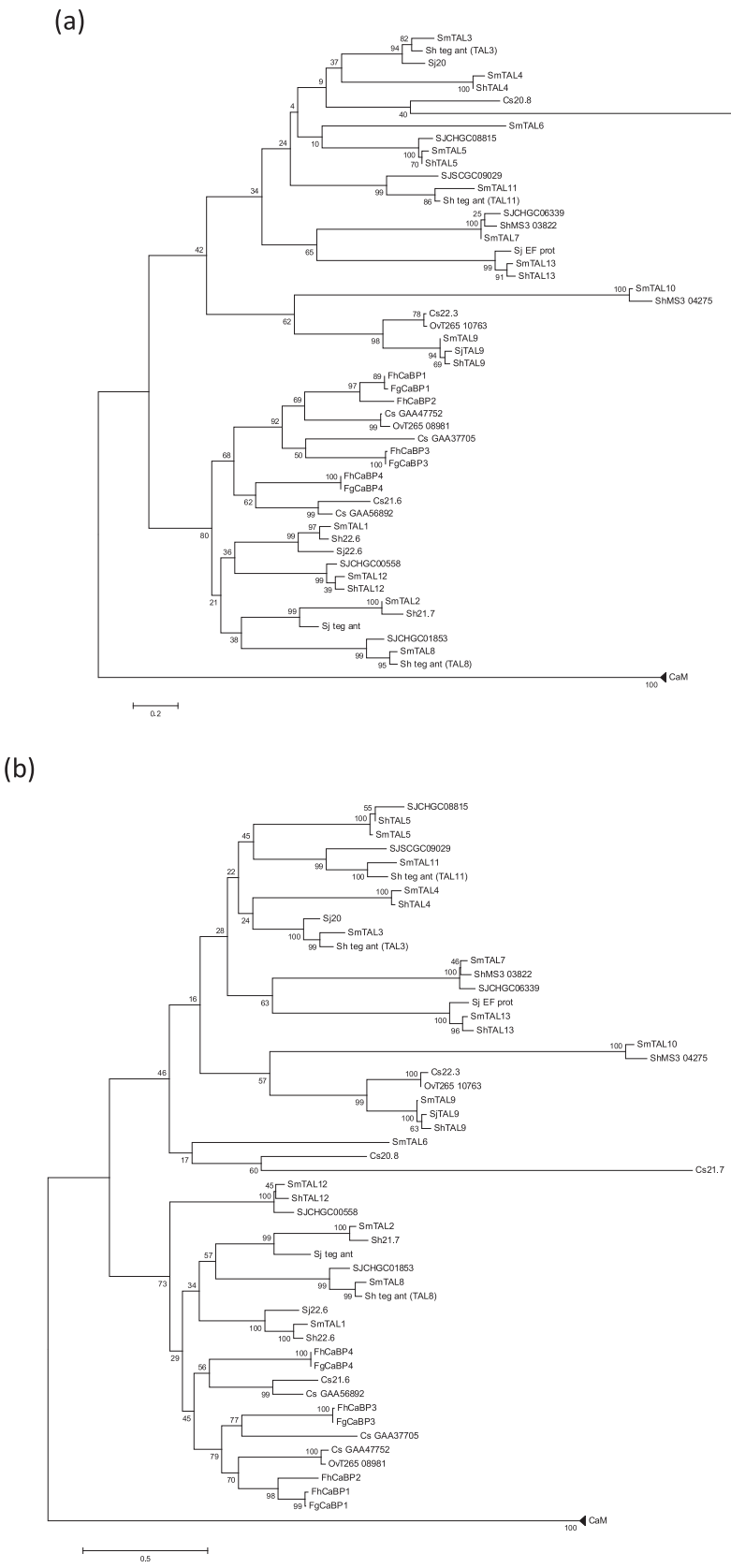



**Fig. 4.** Protein sequence analysis of the SmTAL family and related proteins. (a) Maximum likelihood and (b) neighbour-joining analyses were conducted as described in the Methods. Calmodulin (CaM) sequences were used as an outgroup. This figure displays the bootstrap consensus trees (1000 replicates). The trees are drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. Accession codes: FhCaBP1 (AML33332); FhCaBP2 (AJF23779); FhCaBP3 (AFX60920); FhCaBP4 (AFM84632); FgCaBP1 (AAZ20312); FgCaBP3 (AEX92828); FgCaBP4 (AEX92829); Cs GAA37705 (GAA37705); Cs GAA47752 (GAA47752); Cs GAA56892 (GAA56892); Cs20.8 (ABC47326): Cs21.6 (AEI69651); Cs21.7 (GAA49984); Cs22.3 (ABK60085); OvT265 08981 (XP_009173195); OvT265 10763 (XP_009175494); Sh21.7 (XP_012797374); Sh22.6 (BAF62289); Sh_teg_ant (SmTAL3) (XP_012797371); Sh_teg_ant (SmTAL8) (XP_012797375); Sh_teg_ant (SmTAL11) (XP_012797369); ShTAL4 (XP_012797370); ShTAL5 (XP_012797368); ShTAL9 (XP_012797728); ShTAL12 (XP_012799748); ShTAL13 (XP_012795330); ShMS3 03822 (XP_012795331); ShMS3 04275 (XP_012795756); Sj20 (AAP06272); Sj22.6 (AAB52407); Sj_teg_ant (CAX72713); Sj_EF_prot (CAX73132); SjTAL9 (CAX73272); SJCHGC00558 (AAW26845); SJCHGC01853 (AAW25529); SJCHGC06339 (AAP06136); SJCHGC08815 (AAX27568); SJSCG09029 (AAW26125); SmCaM1 (ADW78835), SmCaM2 (ADW78836); FhCaM (CAL91032); EmCaM (CDS37648); HmCaM (CDS28106); DjCaM (BAD88634); HsCaM (AAD45181).

expressed in all life cycle stages (e.g. SmTAL2, 7, 8 and 12), others are only produced early or late in the cycle. SmTAL6 mRNA is produced only in eggs, miracidia and sporocysts. In contrast, SmTAL3 and 11 mRNA are mainly produced in adult worms [16]. Of course, mRNA expression does not always correlate perfectly with the presence of the corresponding proteins. Some proteins can have long half-lives and persist after the corresponding mRNA is degraded. Indeed some human calcium binding proteins can persist in cells for days or weeks [54,55].

**Table 3**
Summary of experimental results from binding experiments.

| Protein | Ions bound (native gels) | Ions bound (DSF)[b] | Drugs bound (DSF) |
|---|---|---|---|
| **SmTAL1**[a] | $Ca^{2+}$, $Mn^{2+}$, $Ni^{2+}$, $Sr^{2+}$ | $Ca^{2+}$ | PZQ, CPZ, W7, TFP |
| **SmTAL2**[a] | $Ca^{2+}$, $Mn^{2+}$, $Mg^{2+}$ | nd | nd |
| **SmTAL3**[a] | None | None | CPZ, W7, TFP |
| **SmTAL4** | None | $Ca^{2+}$, $Mn^{2+}$ | PZQ, TFP |
| **SmTAL5** | None | None | PZQ, CPZ, TFP |
| **SmTAL6** | $Ca^{2+}$, $Mn^{2+}$, $Ni^{2+}$, $Pb^{2+}$ | $Ca^{2+}$, $Mn^{2+}$ | None |
| **SmTAL7** | $Ca^{2+}$, $Mn^{2+}$, $Ni^{2+}$ | $Ca^{2+}$, $Mn^{2+}$ | None |
| **SmTAL8** | $Ca^{2+}$, $Mn^{2+}$ | $Ca^{2+}$, $Mn^{2+}$ | PZQ, TFP |
| **SmTAL9** | None | $Ca^{2+}$, $Mn^{2+}$, $Mg^{2+}$ | CPZ, W7, TFP |
| **SmTAL10** | None | $Ca^{2+}$, $Mn^{2+}$, $Mg^{2+}$ | None |
| **SmTAL11** | None | $Ca^{2+}$, $Mn^{2+}$, $Mg^{2+}$ | None |
| **SmTAL12** | $Ca^{2+}$, $Mn^{2+}$ | $Ca^{2+}$, $Mn^{2+}$ | CPZ, W7, TFP |
| **SmTAL13** | None | $Ca^{2+}$, $Mn^{2+}$ | CPZ, W7, TFP |

None means "none of those ions or drugs tested".

[a] Data from previous work of Thomas et al [34]. Note that this study considered a slightly smaller range of ions in the native gel and DSF experiments. It was not possible to determine a $T_m$ value for SmTAL2 and so ion or drug binding by DSF were not determined (nd).

[b] Only calcium (SmTAL1-3) or calcium, magnesium and manganese (SmTAL4-13) ions were considered in this experiment.

Nevertheless, these differences in mRNA expression strongly suggest that the levels of each SmTAL protein will vary across the life-cycle. We did not observe any obvious correlation between the thermal stability of the proteins and their life cycle stage − for example SmTAL6 (whose mRNA is produced in the eggs) has the highest melting temperature in the DSF assay.

Although we have been able to make some broad functional predictions about these proteins based on sequence analysis and our biochemical data, further experiments will be required to elucidate their roles. Based on our drug-binding experiments, it seems unlikely that it will be possible to identify compounds which selectively antagonise one family member. Therefore, genetic methods are more likely to be successful in obtaining worms which lack a functional form of one family member. RNAi methods are now well-established in *S. mansoni* although some caution would be required since the proteins may have long half-lives (see above) [56]. CRISPR/Cas9 gene editing techniques may also become established for *Schistosoma* spp. and some enabling technologies have already been reported [57]. These methods may enable the selective knock-down or knock out of the individual family members and studies on the resulting phenotype to be undertaken. Classical biochemical techniques may also be useful. Affinity chromatography or pull-down experiments could be used to identify protein binding partners within cell extracts. The most commonly used forms of these assays tend to identify mainly soluble proteins. Given the SmTAL proteins' likely role in calcium signalling, it is possible that they interact with membrane bound or associated proteins (e.g. subunits of the voltage-gated calcium channels). Therefore, methods which enable the capture and identification of membrane proteins should also be used [58]. Such studies will be potentially valuable since they will permit the inference of functional roles for the SmTAL family members and may provide some clues into their different roles within the parasite.

The tantalising finding that praziquantel interacts with SmTAL1, 4, 5 and 8 suggests that these proteins may be pharmacologically important. This further suggests that novel drugs might be designed to antagonise the functions of family members. The protein kinase inhibitor, staurosporine has been identified by *in silico* methods as a likely binding partner for *C. sinensis* protein CsTegu20.6. This protein is a member of the same protein family as the SmTAL proteins [33]. Although this has not been tested experimentally, it does suggest that there are druggable pockets in these proteins which could be exploited in drug discovery. Overall, the work to date on this protein family suggests that they perform diverse roles are various life cycle stages in trematodes. Further elucidation of these roles is likely to increase our understanding of the basic biochemistry of these organisms and may pave the way to novel treatments for the infections they cause.

## Acknowledgements

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## Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at https://doi.org/10.1016/j.molbiopara.2018.02.002.

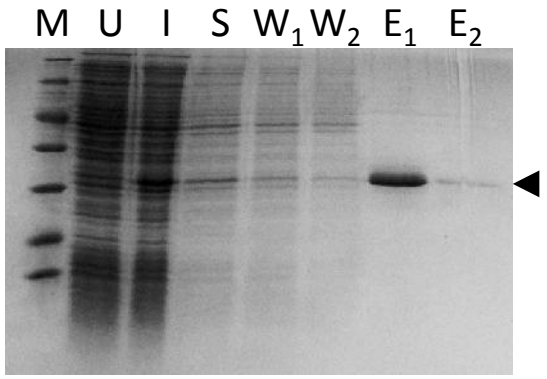
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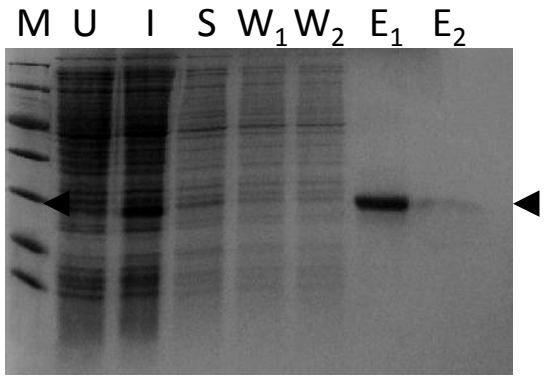
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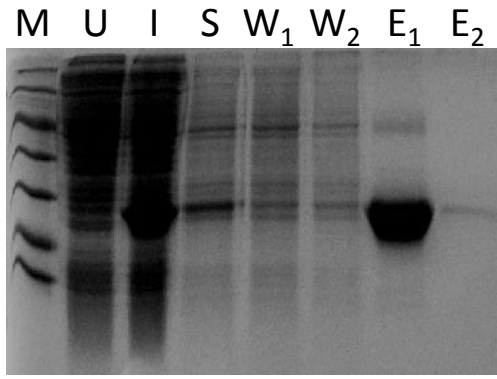

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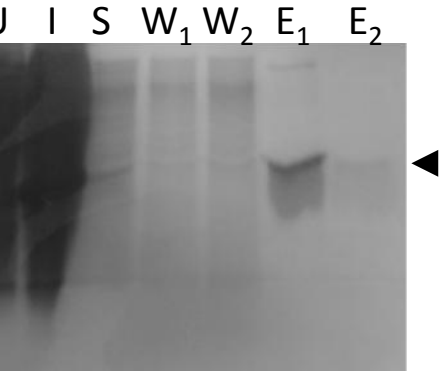

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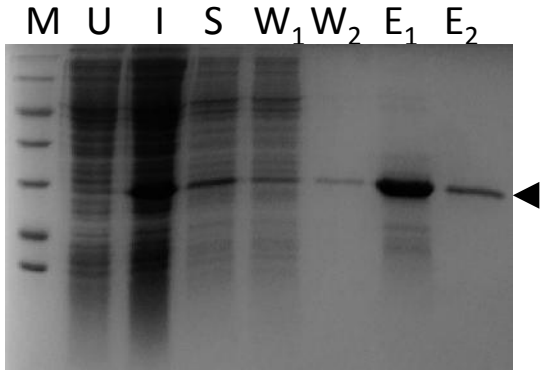

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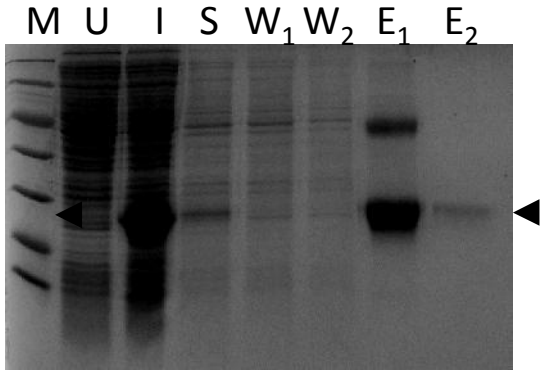

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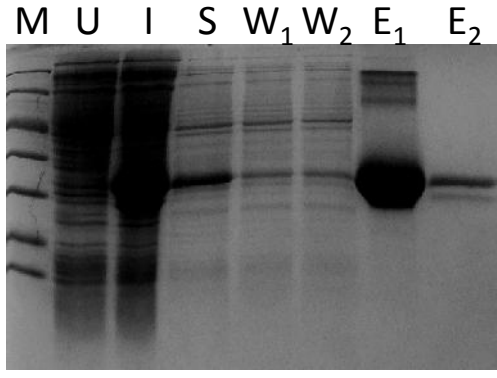

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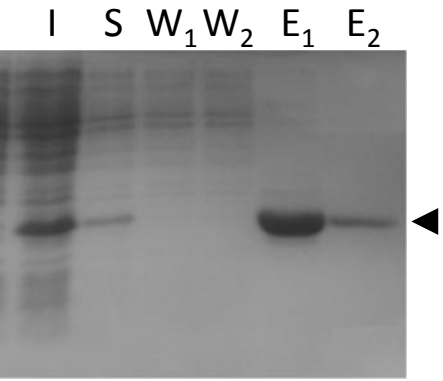

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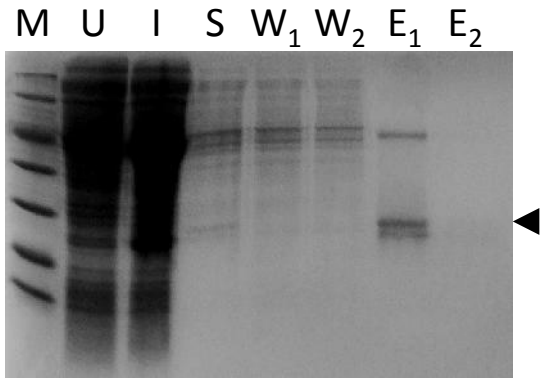

SmTAL11




SmTAL13




SmTAL6




SmTAL9

Supplementary Figure S1: **Expression and purification of SMTAL4-13**. The expression/purification of the proteins was monitored by SDS-PAGE. gel: M, molecular mass markers (116, 66, 45, 35, 25, 18, 14 kDa); U, extr cells prior to induction; I, extract from cells after induction, prior to harv soluble extract released on sonication; $W_1$ and $W_2$, material removed fro column in the first and second washes; $E_1$ and $E_2$, material eluted from th column in the first and second imidazole washes. Arrowheads indicate t position of the SmTAL protein on the gel. For conditions, concentrations Materials and Methods.

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REMARK YASARA
REMARK YASARA Written on:        Wed Oct 05 10:23:22 2016
REMARK YASARA Number of models: 1
REMARK YASARA Number of atoms:   2931
REMARK YASARA Please address questions or suggestions to:
Eliza@yasara.org
REMARK YASARA
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SEQRES   2    176  ARG GLY VAL ASN VAL ILE THR ILE ASN GLU LEU ARG ASN
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SEQRES   4    176  LYS TRP GLN ALA LEU PHE ASP PRO GLU GLY THR GLY LYS
SEQRES   5    176  ILE THR PHE ARG ARG PHE CYS GLU VAL LEU GLY VAL GLN
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SEQRES   7    176  GLY ILE PRO THR THR GLY LEU ARG PRO GLU ILE PHE VAL
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SEQRES  12    176  VAL ARG GLY SER TYR TRP THR THR TYR THR HIS ILE PRO
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SEQRES  14    176  ILE ILE TYR ARG THR ASN ALA
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C
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O
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H
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C
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C
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C
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ATOM    138  CA  GLY     9      20.656  -4.572   7.715  1.00  0.00
C
ATOM    139 1HA  GLY     9      20.668  -4.176   6.700  1.00  0.00
H
ATOM    140 2HA  GLY     9      20.878  -5.637   7.680  1.00  0.00
H
ATOM    141  C   GLY     9      19.273  -4.379   8.294  1.00  0.00
C
ATOM    142  O   GLY     9      18.287  -4.287   7.562  1.00  0.00
O
ATOM    143  N   ALA    10      19.209  -4.252   9.611  1.00  0.00
N
ATOM    144  H   ALA    10      20.059  -4.303  10.150  1.00  0.00
H
ATOM    145  CA  ALA    10      17.954  -4.037  10.319  1.00  0.00
C
ATOM    146  HA  ALA    10      17.243  -4.802  10.002  1.00  0.00
H
ATOM    147  C   ALA    10      17.332  -2.664  10.032  1.00  0.00
C
ATOM    148  O   ALA    10      16.111  -2.516  10.114  1.00  0.00
O
ATOM    149  CB  ALA    10      18.197  -4.197  11.824  1.00  0.00
C
ATOM    150 1HB  ALA    10      18.621  -5.182  12.029  1.00  0.00
H
ATOM    151 2HB  ALA    10      17.251  -4.102  12.357  1.00  0.00
H
ATOM    152 3HB  ALA    10      18.878  -3.424  12.180  1.00  0.00
H
ATOM    153  N   ILE    11      18.161  -1.671   9.731  1.00  0.00
N
ATOM    154  H   ILE    11      19.154  -1.859   9.659  1.00  0.00
H
ATOM    155  CA  ILE    11      17.707  -0.282   9.595  1.00  0.00
C
ATOM    156  HA  ILE    11      16.678  -0.222   9.946  1.00  0.00
H
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ATOM    157  C   ILE    11      17.667   0.207   8.140  1.00  0.00
C
ATOM    158  O   ILE    11      16.826   1.033   7.805  1.00  0.00
O
ATOM    159  CB  ILE    11      18.537   0.647  10.547  1.00  0.00
C
ATOM    160  HB  ILE    11      19.597   0.512  10.331  1.00  0.00
H
ATOM    161  CG1 ILE    11      18.256   0.215  12.006  1.00  0.00
C
ATOM    162 1HG1 ILE    11      17.200   0.387  12.207  1.00  0.00
H
ATOM    163 2HG1 ILE    11      18.434  -0.854  12.101  1.00  0.00
H
ATOM    164  CG2 ILE    11      18.177   2.145  10.330  1.00  0.00
C
ATOM    165 1HG2 ILE    11      18.660   2.783  11.066  1.00  0.00
H
ATOM    166 2HG2 ILE    11      17.101   2.283  10.387  1.00  0.00
H
ATOM    167 3HG2 ILE    11      18.499   2.460   9.340  1.00  0.00
H
ATOM    168  CD1 ILE    11      19.056   0.896  13.116  1.00  0.00
C
ATOM    169 1HD1 ILE    11      18.719   0.513  14.077  1.00  0.00
H
ATOM    170 2HD1 ILE    11      18.897   1.973  13.101  1.00  0.00
H
ATOM    171 3HD1 ILE    11      20.115   0.673  12.994  1.00  0.00
H
ATOM    172  N   ASP    12      18.472  -0.338   7.237  1.00  0.00
N
ATOM    173  H   ASP    12      19.184  -1.007   7.517  1.00  0.00
H
ATOM    174  CA  ASP    12      18.339   0.008   5.812  1.00  0.00
C
ATOM    175  HA  ASP    12      18.252   1.091   5.728  1.00  0.00
H
ATOM    176  C   ASP    12      17.064  -0.597   5.214  1.00  0.00
C
ATOM    177  O   ASP    12      17.018  -1.771   4.818  1.00  0.00
O
ATOM    178  CB  ASP    12      19.566  -0.431   5.005  1.00  0.00
C
ATOM    179 1HB  ASP    12      20.460  -0.021   5.469  1.00  0.00
H
ATOM    180 2HB  ASP    12      19.638  -1.518   5.029  1.00  0.00
H
ATOM    181  CG  ASP    12      19.508   0.027   3.550  1.00  0.00
C
ATOM    182  OD1 ASP    12      18.477   0.592   3.119  1.00  0.00
O
ATOM    183  OD2 ASP    12      20.451  -0.262   2.786  1.00  0.00
O
ATOM    184  N   LYS    13      16.007   0.205   5.167  1.00  0.00
N
ATOM    185  H   LYS    13      16.112   1.153   5.515  1.00  0.00
H
ATOM    186  CA  LYS    13      14.684  -0.232   4.713  1.00  0.00
C
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ATOM    187  HA  LYS    13      14.469  -1.204   5.157  1.00  0.00
H
ATOM    188  C   LYS    13      14.589  -0.363   3.199  1.00  0.00
C
ATOM    189  O   LYS    13      13.620  -0.922   2.681  1.00  0.00
O
ATOM    190  CB  LYS    13      13.620   0.770   5.185  1.00  0.00
C
ATOM    191 1HB  LYS    13      13.770   1.712   4.661  1.00  0.00
H
ATOM    192 2HB  LYS    13      12.635   0.384   4.921  1.00  0.00
H
ATOM    193  CG  LYS    13      13.663   1.041   6.685  1.00  0.00
C
ATOM    194 1HG  LYS    13      13.614   0.092   7.216  1.00  0.00
H
ATOM    195 2HG  LYS    13      14.599   1.537   6.926  1.00  0.00
H
ATOM    196  CD  LYS    13      12.539   1.927   7.172  1.00  0.00
C
ATOM    197 1HD  LYS    13      12.559   2.872   6.629  1.00  0.00
H
ATOM    198 2HD  LYS    13      11.588   1.428   6.997  1.00  0.00
H
ATOM    199  CE  LYS    13      12.714   2.186   8.665  1.00  0.00
C
ATOM    200 1HE  LYS    13      12.782   1.223   9.175  1.00  0.00
H
ATOM    201 2HE  LYS    13      13.651   2.724   8.823  1.00  0.00
H
ATOM    202  NZ  LYS    13      11.590   2.967   9.274  1.00  0.00
N
ATOM    203 1HZ  LYS    13      11.671   2.960  10.285  1.00  0.00
H
ATOM    204 2HZ  LYS    13      10.704   2.548   9.019  1.00  0.00
H
ATOM    205 3HZ  LYS    13      11.607   3.925   8.949  1.00  0.00
H
ATOM    206  N   ARG    14      15.578   0.163   2.491  1.00  0.00
N
ATOM    207  H   ARG    14      16.357   0.598   2.978  1.00  0.00
H
ATOM    208  CA  ARG    14      15.580   0.174   1.024  1.00  0.00
C
ATOM    209  HA  ARG    14      14.587  -0.070   0.647  1.00  0.00
H
ATOM    210  C   ARG    14      16.558  -0.842   0.438  1.00  0.00
C
ATOM    211  O   ARG    14      16.387  -1.282  -0.695  1.00  0.00
O
ATOM    212  CB  ARG    14      15.961   1.583   0.562  1.00  0.00
C
ATOM    213 1HB  ARG    14      16.906   1.827   1.038  1.00  0.00
H
ATOM    214 2HB  ARG    14      16.104   1.580  -0.518  1.00  0.00
H
ATOM    215  CG  ARG    14      14.986   2.701   0.913  1.00  0.00
C
ATOM    216 1HG  ARG    14      14.689   2.621   1.958  1.00  0.00
H
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ATOM    217 2HG  ARG    14      15.496   3.654   0.773  1.00  0.00
H
ATOM    218  CD  ARG    14      13.750   2.697   0.033  1.00  0.00
C
ATOM    219 1HD  ARG    14      14.061   2.753  -1.011  1.00  0.00
H
ATOM    220 2HD  ARG    14      13.192   1.774   0.193  1.00  0.00
H
ATOM    221  NE  ARG    14      12.897   3.851   0.346  1.00  0.00
N
ATOM    222  HE  ARG    14      13.200   4.452   1.099  1.00  0.00
H
ATOM    223  CZ  ARG    14      11.761   4.178  -0.251  1.00  0.00
C
ATOM    224  NH1 ARG    14      11.210   3.472  -1.201  1.00  0.00
N
ATOM    225 1HH1 ARG    14      11.646   2.617  -1.508  1.00  0.00
H
ATOM    226 2HH1 ARG    14      10.364   3.799  -1.642  1.00  0.00
H
ATOM    227  NH2 ARG    14      11.159   5.272   0.111  1.00  0.00
N
ATOM    228 1HH2 ARG    14      11.602   5.887   0.780  1.00  0.00
H
ATOM    229 2HH2 ARG    14      10.272   5.519  -0.293  1.00  0.00
H
ATOM    230  N   GLY    15      17.579  -1.218   1.191  1.00  0.00
N
ATOM    231  H   GLY    15      17.719  -0.774   2.093  1.00  0.00
H
ATOM    232  CA  GLY    15      18.547  -2.209   0.741  1.00  0.00
C
ATOM    233 1HA  GLY    15      19.079  -2.603   1.608  1.00  0.00
H
ATOM    234 2HA  GLY    15      18.018  -3.027   0.251  1.00  0.00
H
ATOM    235  C   GLY    15      19.563  -1.634  -0.229  1.00  0.00
C
ATOM    236  O   GLY    15      20.073  -2.338  -1.106  1.00  0.00
O
ATOM    237  N   VAL    16      19.831  -0.342  -0.104  1.00  0.00
N
ATOM    238  H   VAL    16      19.447   0.158   0.692  1.00  0.00
H
ATOM    239  CA  VAL    16      20.635   0.405  -1.079  1.00  0.00
C
ATOM    240  HA  VAL    16      20.856  -0.245  -1.922  1.00  0.00
H
ATOM    241  C   VAL    16      21.977   0.872  -0.516  1.00  0.00
C
ATOM    242  O   VAL    16      22.735   1.582  -1.187  1.00  0.00
O
ATOM    243  CB  VAL    16      19.833   1.611  -1.631  1.00  0.00
C
ATOM    244  HB  VAL    16      20.465   2.172  -2.318  1.00  0.00
H
ATOM    245  CG1 VAL    16      18.606   1.126  -2.410  1.00  0.00
C
ATOM    246 1HG1 VAL    16      18.066   1.986  -2.802  1.00  0.00
H
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ATOM    247 2HG1 VAL    16      17.939   0.554  -1.769  1.00  0.00
H
ATOM    248 3HG1 VAL    16      18.923   0.500  -3.245  1.00  0.00
H
ATOM    249  CG2 VAL    16      19.396   2.534  -0.498  1.00  0.00
C
ATOM    250 1HG2 VAL    16      18.881   3.404  -0.908  1.00  0.00
H
ATOM    251 2HG2 VAL    16      20.260   2.869   0.065  1.00  0.00
H
ATOM    252 3HG2 VAL    16      18.733   2.020   0.187  1.00  0.00
H
ATOM    253  N   ASN    17      22.264   0.448   0.709  1.00  0.00
N
ATOM    254  H   ASN    17      21.560  -0.094   1.212  1.00  0.00
H
ATOM    255  CA  ASN    17      23.510   0.715   1.438  1.00  0.00
C
ATOM    256  HA  ASN    17      23.431   0.160   2.370  1.00  0.00
H
ATOM    257  C   ASN    17      23.680   2.181   1.837  1.00  0.00
C
ATOM    258  O   ASN    17      24.772   2.617   2.216  1.00  0.00
O
ATOM    259  CB  ASN    17      24.746   0.163   0.712  1.00  0.00
C
ATOM    260 1HB  ASN    17      24.858   0.657  -0.250  1.00  0.00
H
ATOM    261 2HB  ASN    17      25.634   0.375   1.303  1.00  0.00
H
ATOM    262  CG  ASN    17      24.665  -1.320   0.499  1.00  0.00
C
ATOM    263  OD1 ASN    17      24.546  -2.092   1.440  1.00  0.00
O
ATOM    264  ND2 ASN    17      24.705  -1.743  -0.730  1.00  0.00
N
ATOM    265 1HD2 ASN    17      24.569  -2.727  -0.905  1.00  0.00
H
ATOM    266 2HD2 ASN    17      24.856  -1.100  -1.488  1.00  0.00
H
ATOM    267  N   VAL    18      22.580   2.922   1.811  1.00  0.00
N
ATOM    268  H   VAL    18      21.715   2.518   1.481  1.00  0.00
H
ATOM    269  CA  VAL    18      22.519   4.281   2.343  1.00  0.00
C
ATOM    270  HA  VAL    18      23.351   4.421   3.028  1.00  0.00
H
ATOM    271  C   VAL    18      21.223   4.326   3.143  1.00  0.00
C
ATOM    272  O   VAL    18      20.293   3.579   2.833  1.00  0.00
O
ATOM    273  CB  VAL    18      22.587   5.408   1.251  1.00  0.00
C
ATOM    274  HB  VAL    18      22.599   6.370   1.763  1.00  0.00
H
ATOM    275  CG1 VAL    18      23.860   5.277   0.412  1.00  0.00
C
ATOM    276 1HG1 VAL    18      23.996   6.172  -0.195  1.00  0.00
H
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ATOM    277 2HG1 VAL    18      23.795   4.409  -0.242  1.00  0.00
H
ATOM    278 3HG1 VAL    18      24.720   5.153   1.058  1.00  0.00
H
ATOM    279  CG2 VAL    18      21.404   5.404   0.284  1.00  0.00
C
ATOM    280 1HG2 VAL    18      21.440   6.308  -0.323  1.00  0.00
H
ATOM    281 2HG2 VAL    18      20.460   5.383   0.828  1.00  0.00
H
ATOM    282 3HG2 VAL    18      21.466   4.545  -0.383  1.00  0.00
H
ATOM    283  N   ILE    19      21.171   5.146   4.181  1.00  0.00
N
ATOM    284  H   ILE    19      21.975   5.732   4.394  1.00  0.00
H
ATOM    285  CA  ILE    19      20.017   5.235   5.079  1.00  0.00
C
ATOM    286  HA  ILE    19      19.157   4.720   4.654  1.00  0.00
H
ATOM    287  C   ILE    19      19.703   6.723   5.170  1.00  0.00
C
ATOM    288  O   ILE    19      20.623   7.537   5.292  1.00  0.00
O
ATOM    289  CB  ILE    19      20.349   4.598   6.469  1.00  0.00
C
ATOM    290  HB  ILE    19      21.255   5.062   6.861  1.00  0.00
H
ATOM    291  CG1 ILE    19      20.591   3.087   6.277  1.00  0.00
C
ATOM    292 1HG1 ILE    19      19.657   2.646   5.938  1.00  0.00
H
ATOM    293 2HG1 ILE    19      21.328   2.941   5.489  1.00  0.00
H
ATOM    294  CG2 ILE    19      19.202   4.820   7.484  1.00  0.00
C
ATOM    295 1HG2 ILE    19      19.486   4.442   8.465  1.00  0.00
H
ATOM    296 2HG2 ILE    19      18.296   4.311   7.146  1.00  0.00
H
ATOM    297 3HG2 ILE    19      18.995   5.883   7.586  1.00  0.00
H
ATOM    298  CD1 ILE    19      21.075   2.301   7.485  1.00  0.00
C
ATOM    299 1HD1 ILE    19      21.155   1.246   7.225  1.00  0.00
H
ATOM    300 2HD1 ILE    19      20.388   2.401   8.320  1.00  0.00
H
ATOM    301 3HD1 ILE    19      22.059   2.660   7.774  1.00  0.00
H
ATOM    302  N   THR    20      18.439   7.104   5.053  1.00  0.00
N
ATOM    303  H   THR    20      17.704   6.401   4.965  1.00  0.00
H
ATOM    304  CA  THR    20      18.082   8.523   5.087  1.00  0.00
C
ATOM    305  HA  THR    20      18.809   9.074   4.496  1.00  0.00
H
ATOM    306  C   THR    20      18.131   9.028   6.521  1.00  0.00
C
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ATOM    307  O   THR    20      18.103   8.244   7.474  1.00  0.00
O
ATOM    308  CB  THR    20      16.670   8.825   4.528  1.00  0.00
C
ATOM    309  HB  THR    20      16.592   9.893   4.332  1.00  0.00
H
ATOM    310  OG1 THR    20      15.671   8.472   5.486  1.00  0.00
O
ATOM    311  HG1 THR    20      14.808   8.547   5.057  1.00  0.00
H
ATOM    312  CG2 THR    20      16.383   8.069   3.250  1.00  0.00
C
ATOM    313 1HG2 THR    20      15.437   8.417   2.839  1.00  0.00
H
ATOM    314 2HG2 THR    20      16.304   7.000   3.445  1.00  0.00
H
ATOM    315 3HG2 THR    20      17.174   8.247   2.524  1.00  0.00
H
ATOM    316  N   ILE    21      18.154  10.342   6.690  1.00  0.00
N
ATOM    317  H   ILE    21      18.136  10.959   5.885  1.00  0.00
H
ATOM    318  CA  ILE    21      18.176  10.938   8.023  1.00  0.00
C
ATOM    319  HA  ILE    21      19.020  10.540   8.586  1.00  0.00
H
ATOM    320  C   ILE    21      16.896  10.530   8.745  1.00  0.00
C
ATOM    321  O   ILE    21      16.938  10.164   9.912  1.00  0.00
O
ATOM    322  CB  ILE    21      18.302  12.488   7.935  1.00  0.00
C
ATOM    323  HB  ILE    21      17.521  12.853   7.269  1.00  0.00
H
ATOM    324  CG1 ILE    21      19.677  12.860   7.342  1.00  0.00
C
ATOM    325 1HG1 ILE    21      20.439  12.695   8.105  1.00  0.00
H
ATOM    326 2HG1 ILE    21      19.900  12.196   6.509  1.00  0.00
H
ATOM    327  CG2 ILE    21      18.111  13.172   9.310  1.00  0.00
C
ATOM    328 1HG2 ILE    21      18.095  14.249   9.179  1.00  0.00
H
ATOM    329 2HG2 ILE    21      18.924  12.909   9.986  1.00  0.00
H
ATOM    330 3HG2 ILE    21      17.161  12.881   9.760  1.00  0.00
H
ATOM    331  CD1 ILE    21      19.802  14.294   6.827  1.00  0.00
C
ATOM    332 1HD1 ILE    21      20.803  14.445   6.422  1.00  0.00
H
ATOM    333 2HD1 ILE    21      19.643  15.005   7.632  1.00  0.00
H
ATOM    334 3HD1 ILE    21      19.067  14.470   6.040  1.00  0.00
H
ATOM    335  N   ASN    22      15.757  10.526   8.066  1.00  0.00
N
ATOM    336  H   ASN    22      15.754  10.763   7.084  1.00  0.00
H
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ATOM    337  CA  ASN    22      14.507  10.195   8.751  1.00  0.00
C
ATOM    338  HA  ASN    22      14.516  10.699   9.717  1.00  0.00
H
ATOM    339  C   ASN    22      14.327   8.715   9.058  1.00  0.00
C
ATOM    340  O   ASN    22      13.736   8.383  10.087  1.00  0.00
O
ATOM    341  CB  ASN    22      13.302  10.701   7.965  1.00  0.00
C
ATOM    342 1HB  ASN    22      13.488  10.585   6.901  1.00  0.00
H
ATOM    343 2HB  ASN    22      12.433  10.103   8.233  1.00  0.00
H
ATOM    344  CG  ASN    22      12.981  12.130   8.284  1.00  0.00
C
ATOM    345  OD1 ASN    22      12.786  12.484   9.441  1.00  0.00
O
ATOM    346  ND2 ASN    22      12.952  12.965   7.286  1.00  0.00
N
ATOM    347 1HD2 ASN    22      12.708  13.924   7.468  1.00  0.00
H
ATOM    348 2HD2 ASN    22      13.145  12.645   6.350  1.00  0.00
H
ATOM    349  N   GLU    23      14.859   7.827   8.230  1.00  0.00
N
ATOM    350  H   GLU    23      15.335   8.130   7.385  1.00  0.00
H
ATOM    351  CA  GLU    23      14.785   6.394   8.522  1.00  0.00
C
ATOM    352  HA  GLU    23      13.749   6.090   8.665  1.00  0.00
H
ATOM    353  C   GLU    23      15.553   6.157   9.811  1.00  0.00
C
ATOM    354  O   GLU    23      15.115   5.433  10.698  1.00  0.00
O
ATOM    355  CB  GLU    23      15.431   5.565   7.407  1.00  0.00
C
ATOM    356 1HB  GLU    23      16.382   6.033   7.157  1.00  0.00
H
ATOM    357 2HB  GLU    23      15.630   4.562   7.787  1.00  0.00
H
ATOM    358  CG  GLU    23      14.597   5.433   6.143  1.00  0.00
C
ATOM    359 1HG  GLU    23      13.686   4.884   6.383  1.00  0.00
H
ATOM    360 2HG  GLU    23      14.308   6.424   5.796  1.00  0.00
H
ATOM    361  CD  GLU    23      15.338   4.719   5.017  1.00  0.00
C
ATOM    362  OE1 GLU    23      16.571   4.880   4.869  1.00  0.00
O
ATOM    363  OE2 GLU    23      14.670   4.018   4.231  1.00  0.00
O
ATOM    364  N   LEU    24      16.693   6.820   9.922  1.00  0.00
N
ATOM    365  H   LEU    24      16.998   7.411   9.154  1.00  0.00
H
ATOM    366  CA  LEU    24      17.555   6.691  11.087  1.00  0.00
C
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ATOM    367  HA  LEU    24      17.703   5.629  11.290  1.00  0.00
H
ATOM    368  C   LEU    24      16.965   7.357  12.331  1.00  0.00
C
ATOM    369  O   LEU    24      17.009   6.808  13.433  1.00  0.00
O
ATOM    370  CB  LEU    24      18.889   7.317  10.695  1.00  0.00
C
ATOM    371 1HB  LEU    24      19.051   7.040   9.655  1.00  0.00
H
ATOM    372 2HB  LEU    24      18.793   8.401  10.723  1.00  0.00
H
ATOM    373  CG  LEU    24      20.157   6.915  11.443  1.00  0.00
C
ATOM    374  HG  LEU    24      20.187   5.829  11.497  1.00  0.00
H
ATOM    375  CD1 LEU    24      21.322   7.387  10.610  1.00  0.00
C
ATOM    376 1HD1 LEU    24      22.245   6.998  11.034  1.00  0.00
H
ATOM    377 2HD1 LEU    24      21.359   8.477  10.591  1.00  0.00
H
ATOM    378 3HD1 LEU    24      21.233   7.010   9.590  1.00  0.00
H
ATOM    379  CD2 LEU    24      20.276   7.458  12.841  1.00  0.00
C
ATOM    380 1HD2 LEU    24      21.253   7.216  13.253  1.00  0.00
H
ATOM    381 2HD2 LEU    24      19.525   6.987  13.466  1.00  0.00
H
ATOM    382 3HD2 LEU    24      20.140   8.540  12.848  1.00  0.00
H
ATOM    383  N   ARG    25      16.368   8.527  12.145  1.00  0.00
N
ATOM    384  H   ARG    25      16.361   8.920  11.206  1.00  0.00
H
ATOM    385  CA  ARG    25      15.749   9.302  13.227  1.00  0.00
C
ATOM    386  HA  ARG    25      16.508   9.546  13.969  1.00  0.00
H
ATOM    387  C   ARG    25      14.655   8.509  13.922  1.00  0.00
C
ATOM    388  O   ARG    25      14.489   8.617  15.134  1.00  0.00
O
ATOM    389  CB  ARG    25      15.162  10.600  12.657  1.00  0.00
C
ATOM    390 1HB  ARG    25      15.923  11.094  12.054  1.00  0.00
H
ATOM    391 2HB  ARG    25      14.329  10.333  12.007  1.00  0.00
H
ATOM    392  CG  ARG    25      14.671  11.598  13.701  1.00  0.00
C
ATOM    393 1HG  ARG    25      13.967  11.103  14.368  1.00  0.00
H
ATOM    394 2HG  ARG    25      15.523  11.944  14.286  1.00  0.00
H
ATOM    395  CD  ARG    25      13.969  12.804  13.071  1.00  0.00
C
ATOM    396 1HD  ARG    25      13.722  13.518  13.858  1.00  0.00
H
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ATOM    397 2HD  ARG    25      14.651  13.287  12.369  1.00  0.00
H
ATOM    398  NE  ARG    25      12.740  12.418  12.358  1.00  0.00
N
ATOM    399  HE  ARG    25      12.798  12.355  11.346  1.00  0.00
H
ATOM    400  CZ  ARG    25      11.560  12.150  12.901  1.00  0.00
C
ATOM    401  NH1 ARG    25      11.286  12.294  14.171  1.00  0.00
N
ATOM    402 1HH1 ARG    25      11.956  12.709  14.795  1.00  0.00
H
ATOM    403 2HH1 ARG    25      10.401  11.956  14.518  1.00  0.00
H
ATOM    404  NH2 ARG    25      10.629  11.632  12.155  1.00  0.00
N
ATOM    405 1HH2 ARG    25      10.802  11.453  11.179  1.00  0.00
H
ATOM    406 2HH2 ARG    25       9.745  11.383  12.566  1.00  0.00
H
ATOM    407  N   ASN    26      13.955   7.669  13.174  1.00  0.00
N
ATOM    408  H   ASN    26      14.137   7.616  12.179  1.00  0.00
H
ATOM    409  CA  ASN    26      12.932   6.807  13.760  1.00  0.00
C
ATOM    410  HA  ASN    26      12.167   7.428  14.230  1.00  0.00
H
ATOM    411  C   ASN    26      13.526   5.906  14.844  1.00  0.00
C
ATOM    412  O   ASN    26      12.982   5.800  15.941  1.00  0.00
O
ATOM    413  CB  ASN    26      12.277   5.956  12.668  1.00  0.00
C
ATOM    414 1HB  ASN    26      12.766   6.145  11.714  1.00  0.00
H
ATOM    415 2HB  ASN    26      12.398   4.904  12.918  1.00  0.00
H
ATOM    416  CG  ASN    26      10.809   6.251  12.519  1.00  0.00
C
ATOM    417  OD1 ASN    26      10.402   7.398  12.404  1.00  0.00
O
ATOM    418  ND2 ASN    26      10.001   5.232  12.529  1.00  0.00
N
ATOM    419 1HD2 ASN    26       9.011   5.401  12.500  1.00  0.00
H
ATOM    420 2HD2 ASN    26      10.374   4.296  12.572  1.00  0.00
H
ATOM    421  N   TYR    27      14.672   5.301  14.573  1.00  0.00
N
ATOM    422  H   TYR    27      15.109   5.431  13.670  1.00  0.00
H
ATOM    423  CA  TYR    27      15.330   4.449  15.563  1.00  0.00
C
ATOM    424  HA  TYR    27      14.576   3.804  16.014  1.00  0.00
H
ATOM    425  C   TYR    27      15.972   5.261  16.683  1.00  0.00
C
ATOM    426  O   TYR    27      15.962   4.828  17.826  1.00  0.00
O
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ATOM    427  CB  TYR    27      16.369   3.549  14.899  1.00  0.00
C
ATOM    428 1HB  TYR    27      17.094   4.162  14.364  1.00  0.00
H
ATOM    429 2HB  TYR    27      16.888   2.979  15.670  1.00  0.00
H
ATOM    430  CG  TYR    27      15.717   2.586  13.933  1.00  0.00
C
ATOM    431  CD1 TYR    27      15.557   2.931  12.582  1.00  0.00
C
ATOM    432  HD1 TYR    27      15.970   3.859  12.220  1.00  0.00
H
ATOM    433  CD2 TYR    27      15.213   1.346  14.370  1.00  0.00
C
ATOM    434  HD2 TYR    27      15.333   1.053  15.404  1.00  0.00
H
ATOM    435  CE1 TYR    27      14.858   2.084  11.688  1.00  0.00
C
ATOM    436  HE1 TYR    27      14.736   2.376  10.660  1.00  0.00
H
ATOM    437  CE2 TYR    27      14.527   0.480  13.468  1.00  0.00
C
ATOM    438  HE2 TYR    27      14.140  -0.468  13.810  1.00  0.00
H
ATOM    439  CZ  TYR    27      14.347   0.868  12.138  1.00  0.00
C
ATOM    440  OH  TYR    27      13.679   0.049  11.264  1.00  0.00
O
ATOM    441  HH  TYR    27      13.362  -0.750  11.690  1.00  0.00
H
ATOM    442  N   VAL    28      16.487   6.448  16.392  1.00  0.00
N
ATOM    443  H   VAL    28      16.518   6.756  15.424  1.00  0.00
H
ATOM    444  CA  VAL    28      17.013   7.329  17.445  1.00  0.00
C
ATOM    445  HA  VAL    28      17.815   6.814  17.973  1.00  0.00
H
ATOM    446  C   VAL    28      15.924   7.653  18.465  1.00  0.00
C
ATOM    447  O   VAL    28      16.177   7.642  19.672  1.00  0.00
O
ATOM    448  CB  VAL    28      17.577   8.658  16.850  1.00  0.00
C
ATOM    449  HB  VAL    28      16.827   9.090  16.190  1.00  0.00
H
ATOM    450  CG1 VAL    28      17.899   9.696  17.929  1.00  0.00
C
ATOM    451 1HG1 VAL    28      18.401  10.552  17.478  1.00  0.00
H
ATOM    452 2HG1 VAL    28      18.554   9.256  18.683  1.00  0.00
H
ATOM    453 3HG1 VAL    28      16.982  10.044  18.403  1.00  0.00
H
ATOM    454  CG2 VAL    28      18.835   8.375  16.038  1.00  0.00
C
ATOM    455 1HG2 VAL    28      19.185   9.289  15.558  1.00  0.00
H
ATOM    456 2HG2 VAL    28      18.619   7.638  15.272  1.00  0.00
H
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ATOM    457 3HG2 VAL    28      19.626   7.995  16.687  1.00  0.00
H
ATOM    458  N   ALA    29      14.707   7.911  18.004  1.00  0.00
N
ATOM    459  H   ALA    29      14.531   7.865  17.005  1.00  0.00
H
ATOM    460  CA  ALA    29      13.610   8.303  18.886  1.00  0.00
C
ATOM    461  HA  ALA    29      13.899   9.218  19.405  1.00  0.00
H
ATOM    462  C   ALA    29      13.297   7.249  19.957  1.00  0.00
C
ATOM    463  O   ALA    29      12.893   7.590  21.073  1.00  0.00
O
ATOM    464  CB  ALA    29      12.369   8.603  18.044  1.00  0.00
C
ATOM    465 1HB  ALA    29      12.597   9.372  17.304  1.00  0.00
H
ATOM    466 2HB  ALA    29      11.565   8.957  18.689  1.00  0.00
H
ATOM    467 3HB  ALA    29      12.037   7.699  17.532  1.00  0.00
H
ATOM    468  N   GLU    30      13.572   5.989  19.649  1.00  0.00
N
ATOM    469  H   GLU    30      13.965   5.781  18.740  1.00  0.00
H
ATOM    470  CA  GLU    30      13.340   4.876  20.570  1.00  0.00
C
ATOM    471  HA  GLU    30      12.279   4.827  20.814  1.00  0.00
H
ATOM    472  C   GLU    30      14.131   5.005  21.871  1.00  0.00
C
ATOM    473  O   GLU    30      13.740   4.455  22.891  1.00  0.00
O
ATOM    474  CB  GLU    30      13.772   3.556  19.926  1.00  0.00
C
ATOM    475 1HB  GLU    30      14.844   3.613  19.749  1.00  0.00
H
ATOM    476 2HB  GLU    30      13.591   2.750  20.637  1.00  0.00
H
ATOM    477  CG  GLU    30      13.082   3.204  18.611  1.00  0.00
C
ATOM    478 1HG  GLU    30      12.011   3.095  18.789  1.00  0.00
H
ATOM    479 2HG  GLU    30      13.233   4.015  17.900  1.00  0.00
H
ATOM    480  CD  GLU    30      13.628   1.920  17.998  1.00  0.00
C
ATOM    481  OE1 GLU    30      14.561   1.305  18.565  1.00  0.00
O
ATOM    482  OE2 GLU    30      13.115   1.482  16.941  1.00  0.00
O
ATOM    483  N   ASN    31      15.239   5.731  21.865  1.00  0.00
N
ATOM    484  H   ASN    31      15.527   6.203  21.011  1.00  0.00
H
ATOM    485  CA  ASN    31      16.076   5.833  23.061  1.00  0.00
C
ATOM    486  HA  ASN    31      15.975   4.903  23.621  1.00  0.00
H
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ATOM    487  C   ASN    31      15.672   6.958  24.011  1.00  0.00
C
ATOM    488  O   ASN    31      16.278   7.116  25.075  1.00  0.00
O
ATOM    489  CB  ASN    31      17.538   5.961  22.642  1.00  0.00
C
ATOM    490 1HB  ASN    31      17.652   6.847  22.019  1.00  0.00
H
ATOM    491 2HB  ASN    31      18.161   6.069  23.527  1.00  0.00
H
ATOM    492  CG  ASN    31      18.002   4.764  21.865  1.00  0.00
C
ATOM    493  OD1 ASN    31      18.243   4.854  20.675  1.00  0.00
O
ATOM    494  ND2 ASN    31      18.094   3.629  22.510  1.00  0.00
N
ATOM    495 1HD2 ASN    31      18.402   2.809  22.008  1.00  0.00
H
ATOM    496 2HD2 ASN    31      17.833   3.570  23.482  1.00  0.00
H
ATOM    497  N   HIS    32      14.625   7.693  23.653  1.00  0.00
N
ATOM    498  H   HIS    32      14.217   7.529  22.738  1.00  0.00
H
ATOM    499  CA  HIS    32      13.986   8.704  24.513  1.00  0.00
C
ATOM    500  HA  HIS    32      13.217   9.182  23.909  1.00  0.00
H
ATOM    501  C   HIS    32      14.884   9.831  25.030  1.00  0.00
C
ATOM    502  O   HIS    32      14.684  10.342  26.132  1.00  0.00
O
ATOM    503  CB  HIS    32      13.257   8.020  25.679  1.00  0.00
C
ATOM    504 1HB  HIS    32      13.992   7.642  26.390  1.00  0.00
H
ATOM    505 2HB  HIS    32      12.640   8.760  26.189  1.00  0.00
H
ATOM    506  CG  HIS    32      12.378   6.888  25.243  1.00  0.00
C
ATOM    507  ND1 HIS    32      12.571   5.567  25.635  1.00  0.00
N
ATOM    508  HD1 HIS    32      13.317   5.237  26.246  1.00  0.00
H
ATOM    509  CD2 HIS    32      11.335   6.844  24.377  1.00  0.00
C
ATOM    510  HD2 HIS    32      10.920   7.692  23.848  1.00  0.00
H
ATOM    511  CE1 HIS    32      11.665   4.802  25.042  1.00  0.00
C
ATOM    512  HE1 HIS    32      11.582   3.725  25.147  1.00  0.00
H
ATOM    513  NE2 HIS    32      10.920   5.549  24.263  1.00  0.00
N
ATOM    514  HE2 HIS    32      10.184   5.216  23.638  1.00  0.00
H
ATOM    515  N   LEU    33      15.862  10.233  24.234  1.00  0.00
N
ATOM    516  H   LEU    33      15.992   9.770  23.341  1.00  0.00
H
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ATOM    517  CA  LEU    33      16.705  11.393  24.529  1.00  0.00
C
ATOM    518  HA  LEU    33      16.943  11.431  25.592  1.00  0.00
H
ATOM    519  C   LEU    33      15.901  12.638  24.153  1.00  0.00
C
ATOM    520  O   LEU    33      14.850  12.529  23.511  1.00  0.00
O
ATOM    521  CB  LEU    33      18.005  11.325  23.713  1.00  0.00
C
ATOM    522 1HB  LEU    33      17.731  11.289  22.660  1.00  0.00
H
ATOM    523 2HB  LEU    33      18.567  12.244  23.878  1.00  0.00
H
ATOM    524  CG  LEU    33      18.941  10.139  24.008  1.00  0.00
C
ATOM    525  HG  LEU    33      18.365   9.216  23.955  1.00  0.00
H
ATOM    526  CD1 LEU    33      20.039  10.064  22.952  1.00  0.00
C
ATOM    527 1HD1 LEU    33      20.676   9.203  23.150  1.00  0.00
H
ATOM    528 2HD1 LEU    33      20.640  10.974  22.971  1.00  0.00
H
ATOM    529 3HD1 LEU    33      19.582   9.938  21.970  1.00  0.00
H
ATOM    530  CD2 LEU    33      19.583  10.230  25.394  1.00  0.00
C
ATOM    531 1HD2 LEU    33      20.216   9.361  25.565  1.00  0.00
H
ATOM    532 2HD2 LEU    33      18.810  10.239  26.162  1.00  0.00
H
ATOM    533 3HD2 LEU    33      20.179  11.140  25.478  1.00  0.00
H
ATOM    534  N   ASP    34      16.367  13.811  24.551  1.00  0.00
N
ATOM    535  H   ASP    34      17.253  13.850  25.047  1.00  0.00
H
ATOM    536  CA  ASP    34      15.652  15.066  24.287  1.00  0.00
C
ATOM    537  HA  ASP    34      14.645  15.008  24.703  1.00  0.00
H
ATOM    538  C   ASP    34      15.538  15.371  22.797  1.00  0.00
C
ATOM    539  O   ASP    34      16.427  15.012  22.020  1.00  0.00
O
ATOM    540  CB  ASP    34      16.402  16.242  24.918  1.00  0.00
C
ATOM    541 1HB  ASP    34      17.457  16.177  24.646  1.00  0.00
H
ATOM    542 2HB  ASP    34      16.004  17.170  24.516  1.00  0.00
H
ATOM    543  CG  ASP    34      16.273  16.289  26.422  1.00  0.00
C
ATOM    544  OD1 ASP    34      15.441  15.575  27.014  1.00  0.00
O
ATOM    545  OD2 ASP    34      17.005  17.080  27.050  1.00  0.00
O
ATOM    546  N   LYS    35      14.489  16.091  22.404  1.00  0.00
N
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ATOM    547  H   LYS    35      13.790  16.385  23.082  1.00  0.00
H
ATOM    548  CA  LYS    35      14.316  16.491  21.007  1.00  0.00
C
ATOM    549  HA  LYS    35      14.257  15.595  20.389  1.00  0.00
H
ATOM    550  C   LYS    35      15.513  17.284  20.543  1.00  0.00
C
ATOM    551  O   LYS    35      15.978  17.037  19.455  1.00  0.00
O
ATOM    552  CB  LYS    35      13.062  17.349  20.777  1.00  0.00
C
ATOM    553 1HB  LYS    35      12.189  16.807  21.136  1.00  0.00
H
ATOM    554 2HB  LYS    35      13.160  18.274  21.344  1.00  0.00
H
ATOM    555  CG  LYS    35      12.855  17.701  19.300  1.00  0.00
C
ATOM    556 1HG  LYS    35      13.755  18.177  18.918  1.00  0.00
H
ATOM    557 2HG  LYS    35      12.682  16.780  18.745  1.00  0.00
H
ATOM    558  CD  LYS    35      11.698  18.640  19.055  1.00  0.00
C
ATOM    559 1HD  LYS    35      10.796  18.195  19.466  1.00  0.00
H
ATOM    560 2HD  LYS    35      11.884  19.591  19.555  1.00  0.00
H
ATOM    561  CE  LYS    35      11.511  18.877  17.557  1.00  0.00
C
ATOM    562 1HE  LYS    35      11.433  17.911  17.053  1.00  0.00
H
ATOM    563 2HE  LYS    35      10.578  19.423  17.399  1.00  0.00
H
ATOM    564  NZ  LYS    35      12.643  19.668  16.962  1.00  0.00
N
ATOM    565 1HZ  LYS    35      12.604  19.644  15.951  1.00  0.00
H
ATOM    566 2HZ  LYS    35      13.531  19.292  17.263  1.00  0.00
H
ATOM    567 3HZ  LYS    35      12.582  20.633  17.268  1.00  0.00
H
ATOM    568  N   GLU    36      16.044  18.190  21.351  1.00  0.00
N
ATOM    569  H   GLU    36      15.645  18.327  22.275  1.00  0.00
H
ATOM    570  CA  GLU    36      17.175  19.020  20.919  1.00  0.00
C
ATOM    571  HA  GLU    36      16.852  19.659  20.097  1.00  0.00
H
ATOM    572  C   GLU    36      18.367  18.223  20.403  1.00  0.00
C
ATOM    573  O   GLU    36      19.058  18.665  19.497  1.00  0.00
O
ATOM    574  CB  GLU    36      17.663  19.898  22.071  1.00  0.00
C
ATOM    575 1HB  GLU    36      17.762  19.274  22.959  1.00  0.00
H
ATOM    576 2HB  GLU    36      18.650  20.285  21.817  1.00  0.00
H
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ATOM    577  CG  GLU    36      16.762  21.074  22.393  1.00  0.00
C
ATOM    578 1HG  GLU    36      15.760  20.707  22.616  1.00  0.00
H
ATOM    579 2HG  GLU    36      17.155  21.576  23.275  1.00  0.00
H
ATOM    580  CD  GLU    36      16.690  22.081  21.258  1.00  0.00
C
ATOM    581  OE1 GLU    36      17.752  22.590  20.818  1.00  0.00
O
ATOM    582  OE2 GLU    36      15.581  22.377  20.763  1.00  0.00
O
ATOM    583  N   MET    37      18.578  17.021  20.914  1.00  0.00
N
ATOM    584  H   MET    37      17.941  16.650  21.609  1.00  0.00
H
ATOM    585  CA  MET    37      19.692  16.193  20.469  1.00  0.00
C
ATOM    586  HA  MET    37      20.607  16.781  20.532  1.00  0.00
H
ATOM    587  C   MET    37      19.527  15.713  19.016  1.00  0.00
C
ATOM    588  O   MET    37      20.516  15.445  18.326  1.00  0.00
O
ATOM    589  CB  MET    37      19.803  15.008  21.436  1.00  0.00
C
ATOM    590 1HB  MET    37      19.764  15.395  22.455  1.00  0.00
H
ATOM    591 2HB  MET    37      18.940  14.360  21.287  1.00  0.00
H
ATOM    592  CG  MET    37      21.062  14.171  21.303  1.00  0.00
C
ATOM    593 1HG  MET    37      20.971  13.307  21.962  1.00  0.00
H
ATOM    594 2HG  MET    37      21.137  13.817  20.276  1.00  0.00
H
ATOM    595  SD  MET    37      22.580  15.041  21.717  1.00  0.00
S
ATOM    596  CE  MET    37      23.789  13.884  21.076  1.00  0.00
C
ATOM    597 1HE  MET    37      24.792  14.251  21.295  1.00  0.00
H
ATOM    598 2HE  MET    37      23.668  13.789  19.996  1.00  0.00
H
ATOM    599 3HE  MET    37      23.651  12.910  21.546  1.00  0.00
H
ATOM    600  N   ILE    38      18.297  15.613  18.519  1.00  0.00
N
ATOM    601  H   ILE    38      17.497  15.927  19.062  1.00  0.00
H
ATOM    602  CA  ILE    38      18.074  15.023  17.193  1.00  0.00
C
ATOM    603  HA  ILE    38      18.934  14.375  17.079  1.00  0.00
H
ATOM    604  C   ILE    38      18.226  15.940  15.964  1.00  0.00
C
ATOM    605  O   ILE    38      18.896  15.526  15.012  1.00  0.00
O
ATOM    606  CB  ILE    38      16.909  13.960  17.155  1.00  0.00
C
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ATOM    607  HB  ILE    38      17.308  13.140  16.558  1.00  0.00
H
ATOM    608  CG1 ILE    38      15.630  14.386  16.402  1.00  0.00
C
ATOM    609 1HG1 ILE    38      15.910  14.930  15.505  1.00  0.00
H
ATOM    610 2HG1 ILE    38      15.147  13.467  16.073  1.00  0.00
H
ATOM    611  CG2 ILE    38      16.639  13.368  18.568  1.00  0.00
C
ATOM    612 1HG2 ILE    38      15.919  12.553  18.492  1.00  0.00
H
ATOM    613 2HG2 ILE    38      16.231  14.128  19.239  1.00  0.00
H
ATOM    614 3HG2 ILE    38      17.563  12.977  18.995  1.00  0.00
H
ATOM    615  CD1 ILE    38      14.563  15.179  17.131  1.00  0.00
C
ATOM    616 1HD1 ILE    38      13.739  15.379  16.446  1.00  0.00
H
ATOM    617 2HD1 ILE    38      14.966  16.122  17.473  1.00  0.00
H
ATOM    618 3HD1 ILE    38      14.181  14.614  17.982  1.00  0.00
H
ATOM    619  N   PRO    39      17.770  17.216  15.985  1.00  0.00
N
ATOM    620  CA  PRO    39      18.336  17.987  14.875  1.00  0.00
C
ATOM    621  HA  PRO    39      18.268  17.444  13.933  1.00  0.00
H
ATOM    622  C   PRO    39      19.777  18.406  15.141  1.00  0.00
C
ATOM    623  O   PRO    39      20.454  18.797  14.204  1.00  0.00
O
ATOM    624  CB  PRO    39      17.423  19.205  14.801  1.00  0.00
C
ATOM    625 1HB  PRO    39      17.943  20.060  14.367  1.00  0.00
H
ATOM    626 2HB  PRO    39      16.530  18.966  14.226  1.00  0.00
H
ATOM    627  CG  PRO    39      17.091  19.450  16.176  1.00  0.00
C
ATOM    628 1HG  PRO    39      17.919  19.964  16.662  1.00  0.00
H
ATOM    629 2HG  PRO    39      16.180  20.040  16.251  1.00  0.00
H
ATOM    630  CD  PRO    39      16.905  18.097  16.790  1.00  0.00
C
ATOM    631 1HD  PRO    39      17.233  18.119  17.825  1.00  0.00
H
ATOM    632 2HD  PRO    39      15.864  17.790  16.708  1.00  0.00
H
ATOM    633  N   LYS    40      20.291  18.311  16.368  1.00  0.00
N
ATOM    634  H   LYS    40      19.716  18.045  17.159  1.00  0.00
H
ATOM    635  CA  LYS    40      21.711  18.607  16.571  1.00  0.00
C
ATOM    636  HA  LYS    40      21.926  19.604  16.185  1.00  0.00
H
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ATOM    637  C   LYS    40      22.554  17.646  15.771  1.00  0.00
C
ATOM    638  O   LYS    40      23.448  18.107  15.087  1.00  0.00
O
ATOM    639  CB  LYS    40      22.169  18.544  18.027  1.00  0.00
C
ATOM    640 1HB  LYS    40      21.665  17.723  18.531  1.00  0.00
H
ATOM    641 2HB  LYS    40      23.240  18.341  18.032  1.00  0.00
H
ATOM    642  CG  LYS    40      21.950  19.830  18.791  1.00  0.00
C
ATOM    643 1HG  LYS    40      22.486  20.638  18.295  1.00  0.00
H
ATOM    644 2HG  LYS    40      20.891  20.075  18.805  1.00  0.00
H
ATOM    645  CD  LYS    40      22.462  19.690  20.212  1.00  0.00
C
ATOM    646 1HD  LYS    40      21.993  18.828  20.689  1.00  0.00
H
ATOM    647 2HD  LYS    40      23.542  19.548  20.189  1.00  0.00
H
ATOM    648  CE  LYS    40      22.137  20.938  21.004  1.00  0.00
C
ATOM    649 1HE  LYS    40      22.517  21.811  20.470  1.00  0.00
H
ATOM    650 2HE  LYS    40      21.052  21.032  21.089  1.00  0.00
H
ATOM    651  NZ  LYS    40      22.736  20.908  22.370  1.00  0.00
N
ATOM    652 1HZ  LYS    40      22.360  21.675  22.914  1.00  0.00
H
ATOM    653 2HZ  LYS    40      23.742  21.001  22.307  1.00  0.00
H
ATOM    654 3HZ  LYS    40      22.503  20.037  22.831  1.00  0.00
H
ATOM    655  N   TRP    41      22.266  16.351  15.778  1.00  0.00
N
ATOM    656  H   TRP    41      21.509  15.983  16.341  1.00  0.00
H
ATOM    657  CA  TRP    41      23.107  15.453  14.987  1.00  0.00
C
ATOM    658  HA  TRP    41      24.139  15.707  15.228  1.00  0.00
H
ATOM    659  C   TRP    41      22.950  15.670  13.486  1.00  0.00
C
ATOM    660  O   TRP    41      23.859  15.385  12.721  1.00  0.00
O
ATOM    661  CB  TRP    41      22.917  13.973  15.343  1.00  0.00
C
ATOM    662 1HB  TRP    41      23.716  13.418  14.856  1.00  0.00
H
ATOM    663 2HB  TRP    41      23.039  13.858  16.420  1.00  0.00
H
ATOM    664  CG  TRP    41      21.628  13.317  14.937  1.00  0.00
C
ATOM    665  CD1 TRP    41      20.605  12.984  15.757  1.00  0.00
C
ATOM    666  HD1 TRP    41      20.570  13.245  16.807  1.00  0.00
H
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ATOM    667  CD2 TRP    41      21.309  12.705  13.667  1.00  0.00
C
ATOM    668  NE1 TRP    41      19.642  12.264  15.105  1.00  0.00
N
ATOM    669  HE1 TRP    41      18.797  11.922  15.533  1.00  0.00
H
ATOM    670  CE2 TRP    41      20.048  12.058  13.818  1.00  0.00
C
ATOM    671  CE3 TRP    41      21.990  12.579  12.437  1.00  0.00
C
ATOM    672  HE3 TRP    41      22.951  13.051  12.292  1.00  0.00
H
ATOM    673  CZ2 TRP    41      19.459  11.298  12.784  1.00  0.00
C
ATOM    674  HZ2 TRP    41      18.505  10.813  12.927  1.00  0.00
H
ATOM    675  CZ3 TRP    41      21.401  11.816  11.393  1.00  0.00
C
ATOM    676  HZ3 TRP    41      21.911  11.721  10.446  1.00  0.00
H
ATOM    677  CH2 TRP    41      20.143  11.175  11.589  1.00  0.00
C
ATOM    678  HH2 TRP    41      19.712  10.591  10.788  1.00  0.00
H
ATOM    679  N   GLN    42      21.802  16.191  13.077  1.00  0.00
N
ATOM    680  H   GLN    42      21.081  16.372  13.759  1.00  0.00
H
ATOM    681  CA  GLN    42      21.521  16.483  11.674  1.00  0.00
C
ATOM    682  HA  GLN    42      21.885  15.658  11.060  1.00  0.00
H
ATOM    683  C   GLN    42      22.157  17.781  11.158  1.00  0.00
C
ATOM    684  O   GLN    42      22.574  17.869  10.008  1.00  0.00
O
ATOM    685  CB  GLN    42      20.001  16.581  11.536  1.00  0.00
C
ATOM    686 1HB  GLN    42      19.561  15.669  11.941  1.00  0.00
H
ATOM    687 2HB  GLN    42      19.655  17.425  12.129  1.00  0.00
H
ATOM    688  CG  GLN    42      19.509  16.776  10.121  1.00  0.00
C
ATOM    689 1HG  GLN    42      19.889  17.721   9.736  1.00  0.00
H
ATOM    690 2HG  GLN    42      19.895  15.967   9.507  1.00  0.00
H
ATOM    691  CD  GLN    42      18.006  16.801  10.019  1.00  0.00
C
ATOM    692  OE1 GLN    42      17.290  16.737  11.013  1.00  0.00
O
ATOM    693  NE2 GLN    42      17.509  16.902   8.820  1.00  0.00
N
ATOM    694 1HE2 GLN    42      16.508  16.916   8.706  1.00  0.00
H
ATOM    695 2HE2 GLN    42      18.120  16.980   8.024  1.00  0.00
H
ATOM    696  N   ALA    43      22.173  18.826  11.973  1.00  0.00
N
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ATOM    697  H   ALA    43      21.747  18.748  12.891  1.00  0.00
H
ATOM    698  CA  ALA    43      22.724  20.113  11.558  1.00  0.00
C
ATOM    699  HA  ALA    43      22.541  20.261  10.493  1.00  0.00
H
ATOM    700  C   ALA    43      24.230  20.137  11.807  1.00  0.00
C
ATOM    701  O   ALA    43      25.012  20.687  11.027  1.00  0.00
O
ATOM    702  CB  ALA    43      22.039  21.230  12.330  1.00  0.00
C
ATOM    703 1HB  ALA    43      20.968  21.215  12.122  1.00  0.00
H
ATOM    704 2HB  ALA    43      22.448  22.191  12.017  1.00  0.00
H
ATOM    705 3HB  ALA    43      22.198  21.102  13.403  1.00  0.00
H
ATOM    706  N   LEU    44      24.626  19.508  12.900  1.00  0.00
N
ATOM    707  H   LEU    44      23.935  19.070  13.502  1.00  0.00
H
ATOM    708  CA  LEU    44      26.020  19.356  13.291  1.00  0.00
C
ATOM    709  HA  LEU    44      26.676  19.812  12.554  1.00  0.00
H
ATOM    710  C   LEU    44      26.238  17.841  13.336  1.00  0.00
C
ATOM    711  O   LEU    44      26.373  17.282  14.411  1.00  0.00
O
ATOM    712  CB  LEU    44      26.281  19.994  14.662  1.00  0.00
C
ATOM    713 1HB  LEU    44      25.635  19.501  15.387  1.00  0.00
H
ATOM    714 2HB  LEU    44      27.313  19.782  14.937  1.00  0.00
H
ATOM    715  CG  LEU    44      26.057  21.504  14.810  1.00  0.00
C
ATOM    716  HG  LEU    44      25.050  21.746  14.473  1.00  0.00
H
ATOM    717  CD1 LEU    44      26.169  21.887  16.281  1.00  0.00
C
ATOM    718 1HD1 LEU    44      25.978  22.954  16.392  1.00  0.00
H
ATOM    719 2HD1 LEU    44      27.166  21.660  16.658  1.00  0.00
H
ATOM    720 3HD1 LEU    44      25.423  21.341  16.859  1.00  0.00
H
ATOM    721  CD2 LEU    44      27.050  22.320  13.990  1.00  0.00
C
ATOM    722 1HD2 LEU    44      26.862  23.381  14.145  1.00  0.00
H
ATOM    723 2HD2 LEU    44      26.915  22.107  12.932  1.00  0.00
H
ATOM    724 3HD2 LEU    44      28.076  22.089  14.284  1.00  0.00
H
ATOM    725  N   PHE    45      26.196  17.150  12.202  1.00  0.00
N
ATOM    726  H   PHE    45      25.814  16.209  12.238  1.00  0.00
H
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ATOM    727  CA  PHE    45      26.614  17.651  10.890  1.00  0.00
C
ATOM    728  HA  PHE    45      26.719  18.732  10.878  1.00  0.00
H
ATOM    729  C   PHE    45      25.571  17.210   9.867  1.00  0.00
C
ATOM    730  O   PHE    45      24.989  16.158  10.043  1.00  0.00
O
ATOM    731  CB  PHE    45      27.913  16.998  10.397  1.00  0.00
C
ATOM    732 1HB  PHE    45      27.665  15.997  10.047  1.00  0.00
H
ATOM    733 2HB  PHE    45      28.284  17.572   9.550  1.00  0.00
H
ATOM    734  CG  PHE    45      29.028  16.844  11.403  1.00  0.00
C
ATOM    735  CD1 PHE    45      29.272  17.746  12.455  1.00  0.00
C
ATOM    736  HD1 PHE    45      28.626  18.593  12.612  1.00  0.00
H
ATOM    737  CD2 PHE    45      29.920  15.770  11.216  1.00  0.00
C
ATOM    738  HD2 PHE    45      29.750  15.069  10.412  1.00  0.00
H
ATOM    739  CE1 PHE    45      30.392  17.585  13.295  1.00  0.00
C
ATOM    740  HE1 PHE    45      30.572  18.289  14.092  1.00  0.00
H
ATOM    741  CE2 PHE    45      31.056  15.612  12.034  1.00  0.00
C
ATOM    742  HE2 PHE    45      31.742  14.793  11.862  1.00  0.00
H
ATOM    743  CZ  PHE    45      31.300  16.533  13.066  1.00  0.00
C
ATOM    744  HZ  PHE    45      32.183  16.437  13.681  1.00  0.00
H
ATOM    745  N   ASP    46      25.529  17.851   8.708  1.00  0.00
N
ATOM    746  H   ASP    46      25.439  18.861   8.679  1.00  0.00
H
ATOM    747  CA  ASP    46      25.723  17.138   7.443  1.00  0.00
C
ATOM    748  HA  ASP    46      26.102  16.143   7.658  1.00  0.00
H
ATOM    749  C   ASP    46      26.775  17.951   6.691  1.00  0.00
C
ATOM    750  O   ASP    46      26.518  19.078   6.256  1.00  0.00
O
ATOM    751  CB  ASP    46      24.444  16.973   6.618  1.00  0.00
C
ATOM    752 1HB  ASP    46      23.699  16.470   7.234  1.00  0.00
H
ATOM    753 2HB  ASP    46      24.066  17.956   6.339  1.00  0.00
H
ATOM    754  CG  ASP    46      24.666  16.148   5.348  1.00  0.00
C
ATOM    755  OD1 ASP    46      25.830  15.998   4.899  1.00  0.00
O
ATOM    756  OD2 ASP    46      23.669  15.706   4.733  1.00  0.00
O
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ATOM    757  N   PRO    47      28.005  17.429   6.575  1.00  0.00
N
ATOM    758  CA  PRO    47      29.029  18.281   5.963  1.00  0.00
C
ATOM    759  HA  PRO    47      29.006  19.279   6.397  1.00  0.00
H
ATOM    760  C   PRO    47      28.926  18.386   4.440  1.00  0.00
C
ATOM    761  O   PRO    47      29.557  19.250   3.835  1.00  0.00
O
ATOM    762  CB  PRO    47      30.318  17.582   6.381  1.00  0.00
C
ATOM    763 1HB  PRO    47      31.120  17.764   5.665  1.00  0.00
H
ATOM    764 2HB  PRO    47      30.610  17.907   7.379  1.00  0.00
H
ATOM    765  CG  PRO    47      29.934  16.172   6.404  1.00  0.00
C
ATOM    766 1HG  PRO    47      29.909  15.786   5.387  1.00  0.00
H
ATOM    767 2HG  PRO    47      30.620  15.593   7.019  1.00  0.00
H
ATOM    768  CD  PRO    47      28.568  16.124   6.968  1.00  0.00
C
ATOM    769 1HD  PRO    47      27.999  15.305   6.525  1.00  0.00
H
ATOM    770 2HD  PRO    47      28.612  16.022   8.048  1.00  0.00
H
ATOM    771  N   GLU    48      28.151  17.507   3.818  1.00  0.00
N
ATOM    772  H   GLU    48      27.599  16.849   4.365  1.00  0.00
H
ATOM    773  CA  GLU    48      28.095  17.396   2.360  1.00  0.00
C
ATOM    774  HA  GLU    48      28.860  18.030   1.912  1.00  0.00
H
ATOM    775  C   GLU    48      26.724  17.822   1.823  1.00  0.00
C
ATOM    776  O   GLU    48      26.585  18.301   0.700  1.00  0.00
O
ATOM    777  CB  GLU    48      28.402  15.933   2.021  1.00  0.00
C
ATOM    778 1HB  GLU    48      29.138  15.582   2.746  1.00  0.00
H
ATOM    779 2HB  GLU    48      27.498  15.351   2.170  1.00  0.00
H
ATOM    780  CG  GLU    48      28.978  15.648   0.637  1.00  0.00
C
ATOM    781 1HG  GLU    48      29.908  16.205   0.533  1.00  0.00
H
ATOM    782 2HG  GLU    48      29.211  14.585   0.576  1.00  0.00
H
ATOM    783  CD  GLU    48      28.059  16.010  -0.515  1.00  0.00
C
ATOM    784  OE1 GLU    48      26.962  15.423  -0.658  1.00  0.00
O
ATOM    785  OE2 GLU    48      28.446  16.891  -1.313  1.00  0.00
O
ATOM    786  N   GLY    49      25.703  17.685   2.654  1.00  0.00
N
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ATOM    787  H   GLY    49      25.855  17.297   3.580  1.00  0.00
H
ATOM    788  CA  GLY    49      24.341  18.005   2.257  1.00  0.00
C
ATOM    789 1HA  GLY    49      23.754  18.239   3.145  1.00  0.00
H
ATOM    790 2HA  GLY    49      24.337  18.865   1.587  1.00  0.00
H
ATOM    791  C   GLY    49      23.698  16.827   1.554  1.00  0.00
C
ATOM    792  O   GLY    49      22.693  16.984   0.868  1.00  0.00
O
ATOM    793  N   THR    50      24.273  15.642   1.715  1.00  0.00
N
ATOM    794  H   THR    50      25.069  15.554   2.331  1.00  0.00
H
ATOM    795  CA  THR    50      23.794  14.443   1.030  1.00  0.00
C
ATOM    796  HA  THR    50      23.830  14.618  -0.045  1.00  0.00
H
ATOM    797  C   THR    50      22.362  14.103   1.434  1.00  0.00
C
ATOM    798  O   THR    50      21.561  13.656   0.611  1.00  0.00
O
ATOM    799  CB  THR    50      24.698  13.240   1.381  1.00  0.00
C
ATOM    800  HB  THR    50      24.528  12.957   2.420  1.00  0.00
H
ATOM    801  OG1 THR    50      26.066  13.620   1.234  1.00  0.00
O
ATOM    802  HG1 THR    50      26.166  14.151   0.431  1.00  0.00
H
ATOM    803  CG2 THR    50      24.467  12.038   0.486  1.00  0.00
C
ATOM    804 1HG2 THR    50      25.136  11.235   0.791  1.00  0.00
H
ATOM    805 2HG2 THR    50      24.668  12.303  -0.553  1.00  0.00
H
ATOM    806 3HG2 THR    50      23.440  11.685   0.577  1.00  0.00
H
ATOM    807  N   GLY    51      22.022  14.328   2.697  1.00  0.00
N
ATOM    808  H   GLY    51      22.701  14.729   3.347  1.00  0.00
H
ATOM    809  CA  GLY    51      20.679  14.037   3.181  1.00  0.00
C
ATOM    810 1HA  GLY    51      20.488  14.645   4.064  1.00  0.00
H
ATOM    811 2HA  GLY    51      19.953  14.310   2.416  1.00  0.00
H
ATOM    812  C   GLY    51      20.470  12.578   3.541  1.00  0.00
C
ATOM    813  O   GLY    51      19.370  12.154   3.906  1.00  0.00
O
ATOM    814  N   LYS    52      21.535  11.795   3.426  1.00  0.00
N
ATOM    815  H   LYS    52      22.420  12.205   3.159  1.00  0.00
H
ATOM    816  CA  LYS    52      21.535  10.359   3.697  1.00  0.00
C
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ATOM    817  HA  LYS    52      20.777  10.096   4.434  1.00  0.00
H
ATOM    818  C   LYS    52      22.919  10.098   4.241  1.00  0.00
C
ATOM    819  O   LYS    52      23.817  10.896   3.983  1.00  0.00
O
ATOM    820  CB  LYS    52      21.358   9.530   2.418  1.00  0.00
C
ATOM    821 1HB  LYS    52      22.172   9.770   1.734  1.00  0.00
H
ATOM    822 2HB  LYS    52      21.431   8.474   2.679  1.00  0.00
H
ATOM    823  CG  LYS    52      20.046   9.758   1.692  1.00  0.00
C
ATOM    824 1HG  LYS    52      19.217   9.594   2.378  1.00  0.00
H
ATOM    825 2HG  LYS    52      20.016  10.785   1.338  1.00  0.00
H
ATOM    826  CD  LYS    52      19.904   8.824   0.512  1.00  0.00
C
ATOM    827 1HD  LYS    52      20.777   8.924  -0.135  1.00  0.00
H
ATOM    828 2HD  LYS    52      19.841   7.802   0.881  1.00  0.00
H
ATOM    829  CE  LYS    52      18.655   9.148  -0.284  1.00  0.00
C
ATOM    830 1HE  LYS    52      17.790   9.122   0.381  1.00  0.00
H
ATOM    831 2HE  LYS    52      18.745  10.154  -0.699  1.00  0.00
H
ATOM    832  NZ  LYS    52      18.447   8.170  -1.393  1.00  0.00
N
ATOM    833 1HZ  LYS    52      17.619   8.426  -1.921  1.00  0.00
H
ATOM    834 2HZ  LYS    52      18.303   7.243  -1.011  1.00  0.00
H
ATOM    835 3HZ  LYS    52      19.244   8.168  -2.016  1.00  0.00
H
ATOM    836  N   ILE    53      23.100   8.990   4.936  1.00  0.00
N
ATOM    837  H   ILE    53      22.307   8.376   5.103  1.00  0.00
H
ATOM    838  CA  ILE    53      24.406   8.579   5.440  1.00  0.00
C
ATOM    839  HA  ILE    53      25.178   9.258   5.079  1.00  0.00
H
ATOM    840  C   ILE    53      24.640   7.210   4.830  1.00  0.00
C
ATOM    841  O   ILE    53      23.730   6.383   4.802  1.00  0.00
O
ATOM    842  CB  ILE    53      24.502   8.466   6.992  1.00  0.00
C
ATOM    843  HB  ILE    53      24.954   7.497   7.202  1.00  0.00
H
ATOM    844  CG1 ILE    53      23.137   8.489   7.718  1.00  0.00
C
ATOM    845 1HG1 ILE    53      22.451   7.814   7.207  1.00  0.00
H
ATOM    846 2HG1 ILE    53      23.315   8.063   8.703  1.00  0.00
H
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ATOM    847  CG2 ILE    53      25.446   9.530   7.540  1.00  0.00
C
ATOM    848 1HG2 ILE    53      25.532   9.419   8.622  1.00  0.00
H
ATOM    849 2HG2 ILE    53      25.070  10.527   7.301  1.00  0.00
H
ATOM    850 3HG2 ILE    53      26.430   9.419   7.090  1.00  0.00
H
ATOM    851  CD1 ILE    53      22.425   9.862   7.962  1.00  0.00
C
ATOM    852 1HD1 ILE    53      21.429   9.681   8.368  1.00  0.00
H
ATOM    853 2HD1 ILE    53      22.328  10.418   7.031  1.00  0.00
H
ATOM    854 3HD1 ILE    53      22.993  10.457   8.679  1.00  0.00
H
ATOM    855  N   THR    54      25.831   6.979   4.303  1.00  0.00
N
ATOM    856  H   THR    54      26.553   7.680   4.339  1.00  0.00
H
ATOM    857  CA  THR    54      26.124   5.718   3.631  1.00  0.00
C
ATOM    858  HA  THR    54      25.189   5.298   3.271  1.00  0.00
H
ATOM    859  C   THR    54      26.743   4.729   4.616  1.00  0.00
C
ATOM    860  O   THR    54      27.353   5.142   5.602  1.00  0.00
O
ATOM    861  CB  THR    54      27.047   5.920   2.409  1.00  0.00
C
ATOM    862  HB  THR    54      26.911   5.085   1.724  1.00  0.00
H
ATOM    863  OG1 THR    54      28.406   5.945   2.828  1.00  0.00
O
ATOM    864  HG1 THR    54      28.833   5.174   2.437  1.00  0.00
H
ATOM    865  CG2 THR    54      26.781   7.236   1.680  1.00  0.00
C
ATOM    866 1HG2 THR    54      25.712   7.377   1.513  1.00  0.00
H
ATOM    867 2HG2 THR    54      27.284   7.208   0.714  1.00  0.00
H
ATOM    868 3HG2 THR    54      27.182   8.073   2.250  1.00  0.00
H
ATOM    869  N   PHE    55      26.547   3.442   4.364  1.00  0.00
N
ATOM    870  H   PHE    55      26.039   3.190   3.518  1.00  0.00
H
ATOM    871  CA  PHE    55      26.934   2.336   5.250  1.00  0.00
C
ATOM    872  HA  PHE    55      26.031   1.743   5.322  1.00  0.00
H
ATOM    873  C   PHE    55      27.299   2.627   6.720  1.00  0.00
C
ATOM    874  O   PHE    55      26.418   2.961   7.513  1.00  0.00
O
ATOM    875  CB  PHE    55      27.917   1.397   4.548  1.00  0.00
C
ATOM    876 1HB  PHE    55      27.836   1.573   3.476  1.00  0.00
H
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ATOM    877 2HB  PHE    55      28.944   1.614   4.834  1.00  0.00
H
ATOM    878  CG  PHE    55      27.607  -0.058   4.791  1.00  0.00
C
ATOM    879  CD1 PHE    55      27.084  -0.844   3.750  1.00  0.00
C
ATOM    880  HD1 PHE    55      26.956  -0.420   2.767  1.00  0.00
H
ATOM    881  CD2 PHE    55      27.790  -0.643   6.060  1.00  0.00
C
ATOM    882  HD2 PHE    55      28.209  -0.071   6.872  1.00  0.00
H
ATOM    883  CE1 PHE    55      26.712  -2.190   3.975  1.00  0.00
C
ATOM    884  HE1 PHE    55      26.303  -2.783   3.171  1.00  0.00
H
ATOM    885  CE2 PHE    55      27.411  -1.985   6.297  1.00  0.00
C
ATOM    886  HE2 PHE    55      27.529  -2.416   7.277  1.00  0.00
H
ATOM    887  CZ  PHE    55      26.869  -2.758   5.251  1.00  0.00
C
ATOM    888  HZ  PHE    55      26.569  -3.780   5.429  1.00  0.00
H
ATOM    889  N   ARG    56      28.557   2.506   7.132  1.00  0.00
N
ATOM    890  H   ARG    56      29.292   2.284   6.471  1.00  0.00
H
ATOM    891  CA  ARG    56      28.896   2.632   8.554  1.00  0.00
C
ATOM    892  HA  ARG    56      28.190   2.026   9.118  1.00  0.00
H
ATOM    893  C   ARG    56      28.784   4.059   9.075  1.00  0.00
C
ATOM    894  O   ARG    56      28.753   4.257  10.265  1.00  0.00
O
ATOM    895  CB  ARG    56      30.300   2.079   8.824  1.00  0.00
C
ATOM    896 1HB  ARG    56      30.418   1.173   8.237  1.00  0.00
H
ATOM    897 2HB  ARG    56      31.017   2.810   8.468  1.00  0.00
H
ATOM    898  CG  ARG    56      30.646   1.730  10.279  1.00  0.00
C
ATOM    899 1HG  ARG    56      30.248   2.487  10.947  1.00  0.00
H
ATOM    900 2HG  ARG    56      30.210   0.766  10.540  1.00  0.00
H
ATOM    901  CD  ARG    56      32.148   1.695  10.483  1.00  0.00
C
ATOM    902 1HD  ARG    56      32.551   2.662  10.190  1.00  0.00
H
ATOM    903 2HD  ARG    56      32.353   1.543  11.544  1.00  0.00
H
ATOM    904  NE  ARG    56      32.818   0.639   9.710  1.00  0.00
N
ATOM    905  HE  ARG    56      32.229  -0.037   9.237  1.00  0.00
H
ATOM    906  CZ  ARG    56      34.127   0.476   9.580  1.00  0.00
C
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ATOM    907  NH1 ARG    56      35.006   1.358   9.985  1.00  0.00
N
ATOM    908 1HH1 ARG    56      34.686   2.191  10.441  1.00  0.00
H
ATOM    909 2HH1 ARG    56      35.994   1.195   9.846  1.00  0.00
H
ATOM    910  NH2 ARG    56      34.567  -0.608   9.015  1.00  0.00
N
ATOM    911 1HH2 ARG    56      33.921  -1.292   8.658  1.00  0.00
H
ATOM    912 2HH2 ARG    56      35.563  -0.780   8.959  1.00  0.00
H
ATOM    913  N   ARG    57      28.618   5.076   8.246  1.00  0.00
N
ATOM    914  H   ARG    57      28.570   4.914   7.246  1.00  0.00
H
ATOM    915  CA  ARG    57      28.481   6.442   8.776  1.00  0.00
C
ATOM    916  HA  ARG    57      29.306   6.643   9.462  1.00  0.00
H
ATOM    917  C   ARG    57      27.175   6.581   9.551  1.00  0.00
C
ATOM    918  O   ARG    57      27.057   7.400  10.458  1.00  0.00
O
ATOM    919  CB  ARG    57      28.513   7.460   7.642  1.00  0.00
C
ATOM    920 1HB  ARG    57      27.672   7.247   6.984  1.00  0.00
H
ATOM    921 2HB  ARG    57      28.372   8.455   8.055  1.00  0.00
H
ATOM    922  CG  ARG    57      29.789   7.439   6.820  1.00  0.00
C
ATOM    923 1HG  ARG    57      30.516   8.137   7.222  1.00  0.00
H
ATOM    924 2HG  ARG    57      30.209   6.443   6.845  1.00  0.00
H
ATOM    925  CD  ARG    57      29.464   7.773   5.386  1.00  0.00
C
ATOM    926 1HD  ARG    57      28.663   7.111   5.065  1.00  0.00
H
ATOM    927 2HD  ARG    57      29.088   8.795   5.335  1.00  0.00
H
ATOM    928  NE  ARG    57      30.558   7.623   4.422  1.00  0.00
N
ATOM    929  HE  ARG    57      30.813   8.453   3.908  1.00  0.00
H
ATOM    930  CZ  ARG    57      31.068   6.479   3.985  1.00  0.00
C
ATOM    931  NH1 ARG    57      31.192   5.375   4.669  1.00  0.00
N
ATOM    932 1HH1 ARG    57      31.037   5.365   5.670  1.00  0.00
H
ATOM    933 2HH1 ARG    57      31.481   4.536   4.194  1.00  0.00
H
ATOM    934  NH2 ARG    57      31.522   6.453   2.775  1.00  0.00
N
ATOM    935 1HH2 ARG    57      31.407   7.267   2.189  1.00  0.00
H
ATOM    936 2HH2 ARG    57      31.916   5.602   2.403  1.00  0.00
H
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ATOM    937  N   PHE    58      26.206   5.737   9.224  1.00  0.00
N
ATOM    938  H   PHE    58      26.346   5.091   8.455  1.00  0.00
H
ATOM    939  CA  PHE    58      24.948   5.683   9.966  1.00  0.00
C
ATOM    940  HA  PHE    58      24.578   6.698  10.109  1.00  0.00
H
ATOM    941  C   PHE    58      25.155   5.047  11.347  1.00  0.00
C
ATOM    942  O   PHE    58      24.448   5.338  12.307  1.00  0.00
O
ATOM    943  CB  PHE    58      23.919   4.894   9.142  1.00  0.00
C
ATOM    944 1HB  PHE    58      23.089   5.554   8.895  1.00  0.00
H
ATOM    945 2HB  PHE    58      24.383   4.579   8.207  1.00  0.00
H
ATOM    946  CG  PHE    58      23.370   3.682   9.845  1.00  0.00
C
ATOM    947  CD1 PHE    58      22.136   3.746  10.502  1.00  0.00
C
ATOM    948  HD1 PHE    58      21.570   4.658  10.486  1.00  0.00
H
ATOM    949  CD2 PHE    58      24.077   2.471   9.857  1.00  0.00
C
ATOM    950  HD2 PHE    58      25.024   2.401   9.351  1.00  0.00
H
ATOM    951  CE1 PHE    58      21.619   2.627  11.177  1.00  0.00
C
ATOM    952  HE1 PHE    58      20.682   2.705  11.699  1.00  0.00
H
ATOM    953  CE2 PHE    58      23.573   1.339  10.535  1.00  0.00
C
ATOM    954  HE2 PHE    58      24.141   0.421  10.558  1.00  0.00
H
ATOM    955  CZ  PHE    58      22.331   1.410  11.178  1.00  0.00
C
ATOM    956  HZ  PHE    58      21.932   0.541  11.681  1.00  0.00
H
ATOM    957  N   CYS    59      26.169   4.202  11.464  1.00  0.00
N
ATOM    958  H   CYS    59      26.800   4.059  10.688  1.00  0.00
H
ATOM    959  CA  CYS    59      26.435   3.471  12.697  1.00  0.00
C
ATOM    960  HA  CYS    59      25.511   3.044  13.085  1.00  0.00
H
ATOM    961  C   CYS    59      27.033   4.400  13.739  1.00  0.00
C
ATOM    962  O   CYS    59      27.079   4.075  14.922  1.00  0.00
O
ATOM    963  CB  CYS    59      27.448   2.357  12.436  1.00  0.00
C
ATOM    964 1HB  CYS    59      28.350   2.801  12.023  1.00  0.00
H
ATOM    965 2HB  CYS    59      27.738   1.931  13.393  1.00  0.00
H
ATOM    966  SG  CYS    59      26.894   1.025  11.342  1.00  0.00
S
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ATOM    967  HG  CYS    59      26.334   1.808  10.415  1.00  0.00
H
ATOM    968  N   GLU    60      27.525   5.548  13.301  1.00  0.00
N
ATOM    969  H   GLU    60      27.486   5.775  12.318  1.00  0.00
H
ATOM    970  CA  GLU    60      28.250   6.425  14.205  1.00  0.00
C
ATOM    971  HA  GLU    60      28.697   5.801  14.975  1.00  0.00
H
ATOM    972  C   GLU    60      27.334   7.431  14.903  1.00  0.00
C
ATOM    973  O   GLU    60      27.524   7.744  16.072  1.00  0.00
O
ATOM    974  CB  GLU    60      29.401   7.098  13.466  1.00  0.00
C
ATOM    975 1HB  GLU    60      28.984   7.861  12.810  1.00  0.00
H
ATOM    976 2HB  GLU    60      30.033   7.593  14.201  1.00  0.00
H
ATOM    977  CG  GLU    60      30.267   6.157  12.593  1.00  0.00
C
ATOM    978 1HG  GLU    60      29.657   5.831  11.762  1.00  0.00
H
ATOM    979 2HG  GLU    60      31.069   6.744  12.165  1.00  0.00
H
ATOM    980  CD  GLU    60      30.865   4.909  13.278  1.00  0.00
C
ATOM    981  OE1 GLU    60      30.140   3.908  13.424  1.00  0.00
O
ATOM    982  OE2 GLU    60      32.069   4.872  13.620  1.00  0.00
O
ATOM    983  N   VAL    61      26.247   7.840  14.264  1.00  0.00
N
ATOM    984  H   VAL    61      26.108   7.610  13.292  1.00  0.00
H
ATOM    985  CA  VAL    61      25.223   8.598  14.994  1.00  0.00
C
ATOM    986  HA  VAL    61      25.714   9.377  15.574  1.00  0.00
H
ATOM    987  C   VAL    61      24.587   7.636  15.989  1.00  0.00
C
ATOM    988  O   VAL    61      24.326   7.990  17.142  1.00  0.00
O
ATOM    989  CB  VAL    61      24.175   9.289  14.067  1.00  0.00
C
ATOM    990  HB  VAL    61      24.603  10.233  13.746  1.00  0.00
H
ATOM    991  CG1 VAL    61      23.894   8.483  12.810  1.00  0.00
C
ATOM    992 1HG1 VAL    61      23.165   9.021  12.204  1.00  0.00
H
ATOM    993 2HG1 VAL    61      23.488   7.508  13.073  1.00  0.00
H
ATOM    994 3HG1 VAL    61      24.796   8.362  12.211  1.00  0.00
H
ATOM    995  CG2 VAL    61      22.868   9.612  14.794  1.00  0.00
C
ATOM    996 1HG2 VAL    61      22.204  10.157  14.126  1.00  0.00
H
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ATOM    997 2HG2 VAL    61      23.070  10.236  15.666  1.00  0.00
H
ATOM    998 3HG2 VAL    61      22.363   8.703  15.118  1.00  0.00
H
ATOM    999  N   LEU    62      24.445   6.380  15.583  1.00  0.00
N
ATOM   1000  H   LEU    62      24.673   6.131  14.630  1.00  0.00
H
ATOM   1001  CA  LEU    62      23.978   5.347  16.498  1.00  0.00
C
ATOM   1002  HA  LEU    62      23.009   5.640  16.893  1.00  0.00
H
ATOM   1003  C   LEU    62      24.947   5.227  17.669  1.00  0.00
C
ATOM   1004  O   LEU    62      24.531   5.260  18.805  1.00  0.00
O
ATOM   1005  CB  LEU    62      23.853   4.002  15.784  1.00  0.00
C
ATOM   1006 1HB  LEU    62      24.522   4.032  14.929  1.00  0.00
H
ATOM   1007 2HB  LEU    62      24.235   3.242  16.465  1.00  0.00
H
ATOM   1008  CG  LEU    62      22.493   3.499  15.282  1.00  0.00
C
ATOM   1009  HG  LEU    62      21.883   3.241  16.143  1.00  0.00
H
ATOM   1010  CD1 LEU    62      21.705   4.487  14.439  1.00  0.00
C
ATOM   1011 1HD1 LEU    62      20.768   4.034  14.116  1.00  0.00
H
ATOM   1012 2HD1 LEU    62      22.282   4.776  13.560  1.00  0.00
H
ATOM   1013 3HD1 LEU    62      21.476   5.376  15.026  1.00  0.00
H
ATOM   1014  CD2 LEU    62      22.750   2.235  14.476  1.00  0.00
C
ATOM   1015 1HD2 LEU    62      21.803   1.769  14.213  1.00  0.00
H
ATOM   1016 2HD2 LEU    62      23.339   1.526  15.051  1.00  0.00
H
ATOM   1017 3HD2 LEU    62      23.292   2.479  13.562  1.00  0.00
H
ATOM   1018  N   GLY    63      26.245   5.172  17.426  1.00  0.00
N
ATOM   1019  H   GLY    63      26.588   5.163  16.472  1.00  0.00
H
ATOM   1020  CA  GLY    63      27.185   5.071  18.529  1.00  0.00
C
ATOM   1021 1HA  GLY    63      26.932   4.191  19.117  1.00  0.00
H
ATOM   1022 2HA  GLY    63      28.185   4.932  18.131  1.00  0.00
H
ATOM   1023  C   GLY    63      27.189   6.244  19.484  1.00  0.00
C
ATOM   1024  O   GLY    63      27.441   6.048  20.663  1.00  0.00
O
ATOM   1025  N   VAL    64      26.877   7.446  19.026  1.00  0.00
N
ATOM   1026  H   VAL    64      26.719   7.584  18.032  1.00  0.00
H
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ATOM   1027  CA  VAL    64      26.721   8.576  19.943  1.00  0.00
C
ATOM   1028  HA  VAL    64      27.544   8.576  20.657  1.00  0.00
H
ATOM   1029  C   VAL    64      25.420   8.404  20.741  1.00  0.00
C
ATOM   1030  O   VAL    64      25.367   8.763  21.918  1.00  0.00
O
ATOM   1031  CB  VAL    64      26.765   9.929  19.163  1.00  0.00
C
ATOM   1032  HB  VAL    64      26.011   9.910  18.377  1.00  0.00
H
ATOM   1033  CG1 VAL    64      26.489  11.141  20.072  1.00  0.00
C
ATOM   1034 1HG1 VAL    64      26.576  12.062  19.495  1.00  0.00
H
ATOM   1035 2HG1 VAL    64      27.204  11.157  20.895  1.00  0.00
H
ATOM   1036 3HG1 VAL    64      25.479  11.076  20.472  1.00  0.00
H
ATOM   1037  CG2 VAL    64      28.158  10.117  18.521  1.00  0.00
C
ATOM   1038 1HG2 VAL    64      28.210  11.080  18.016  1.00  0.00
H
ATOM   1039 2HG2 VAL    64      28.339   9.336  17.784  1.00  0.00
H
ATOM   1040 3HG2 VAL    64      28.934  10.070  19.286  1.00  0.00
H
ATOM   1041  N   GLN    65      24.380   7.845  20.130  1.00  0.00
N
ATOM   1042  H   GLN    65      24.486   7.509  19.177  1.00  0.00
H
ATOM   1043  CA  GLN    65      23.064   7.715  20.768  1.00  0.00
C
ATOM   1044  HA  GLN    65      23.112   8.312  21.675  1.00  0.00
H
ATOM   1045  C   GLN    65      22.689   6.299  21.307  1.00  0.00
C
ATOM   1046  O   GLN    65      22.831   6.139  22.524  1.00  0.00
O
ATOM   1047  CB  GLN    65      22.017   8.441  19.910  1.00  0.00
C
ATOM   1048 1HB  GLN    65      21.998   7.998  18.916  1.00  0.00
H
ATOM   1049 2HB  GLN    65      21.037   8.319  20.371  1.00  0.00
H
ATOM   1050  CG  GLN    65      22.297   9.935  19.755  1.00  0.00
C
ATOM   1051 1HG  GLN    65      22.341  10.391  20.743  1.00  0.00
H
ATOM   1052 2HG  GLN    65      23.256  10.081  19.259  1.00  0.00
H
ATOM   1053  CD  GLN    65      21.235  10.630  18.942  1.00  0.00
C
ATOM   1054  OE1 GLN    65      21.160  10.490  17.740  1.00  0.00
O
ATOM   1055  NE2 GLN    65      20.391  11.379  19.597  1.00  0.00
N
ATOM   1056 1HE2 GLN    65      19.675  11.851  19.073  1.00  0.00
H
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ATOM   1057 2HE2 GLN    65      20.461  11.471  20.594  1.00  0.00
H
ATOM   1058  N   PRO    66      22.180   5.297  20.539  1.00  0.00
N
ATOM   1059  CA  PRO    66      22.300   3.901  21.021  1.00  0.00
C
ATOM   1060  HA  PRO    66      22.094   3.870  22.088  1.00  0.00
H
ATOM   1061  C   PRO    66      23.554   3.031  20.749  1.00  0.00
C
ATOM   1062  O   PRO    66      23.872   2.675  19.611  1.00  0.00
O
ATOM   1063  CB  PRO    66      21.142   3.215  20.299  1.00  0.00
C
ATOM   1064 1HB  PRO    66      21.333   2.150  20.172  1.00  0.00
H
ATOM   1065 2HB  PRO    66      20.225   3.362  20.857  1.00  0.00
H
ATOM   1066  CG  PRO    66      21.070   3.906  19.004  1.00  0.00
C
ATOM   1067 1HG  PRO    66      21.844   3.527  18.340  1.00  0.00
H
ATOM   1068 2HG  PRO    66      20.088   3.786  18.549  1.00  0.00
H
ATOM   1069  CD  PRO    66      21.336   5.338  19.325  1.00  0.00
C
ATOM   1070 1HD  PRO    66      21.857   5.823  18.502  1.00  0.00
H
ATOM   1071 2HD  PRO    66      20.400   5.854  19.540  1.00  0.00
H
ATOM   1072  N   GLU    67      24.204   2.527  21.790  1.00  0.00
N
ATOM   1073  H   GLU    67      23.909   2.744  22.729  1.00  0.00
H
ATOM   1074  CA  GLU    67      25.247   1.517  21.594  1.00  0.00
C
ATOM   1075  HA  GLU    67      25.865   1.797  20.743  1.00  0.00
H
ATOM   1076  C   GLU    67      24.517   0.214  21.300  1.00  0.00
C
ATOM   1077  O   GLU    67      23.689  -0.230  22.092  1.00  0.00
O
ATOM   1078  CB  GLU    67      26.132   1.317  22.826  1.00  0.00
C
ATOM   1079 1HB  GLU    67      25.945   2.109  23.545  1.00  0.00
H
ATOM   1080 2HB  GLU    67      25.873   0.371  23.289  1.00  0.00
H
ATOM   1081  CG  GLU    67      27.600   1.291  22.479  1.00  0.00
C
ATOM   1082 1HG  GLU    67      27.775   0.474  21.779  1.00  0.00
H
ATOM   1083 2HG  GLU    67      27.858   2.225  21.981  1.00  0.00
H
ATOM   1084  CD  GLU    67      28.506   1.106  23.685  1.00  0.00
C
ATOM   1085  OE1 GLU    67      28.294   0.166  24.480  1.00  0.00
O
ATOM   1086  OE2 GLU    67      29.514   1.835  23.800  1.00  0.00
O
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ATOM   1087  N   ARG    68      24.769  -0.390  20.148  1.00  0.00
N
ATOM   1088  H   ARG    68      25.514  -0.046  19.559  1.00  0.00
H
ATOM   1089  CA  ARG    68      23.898  -1.458  19.644  1.00  0.00
C
ATOM   1090  HA  ARG    68      22.882  -1.183  19.923  1.00  0.00
H
ATOM   1091  C   ARG    68      24.110  -2.845  20.251  1.00  0.00
C
ATOM   1092  O   ARG    68      24.098  -3.846  19.549  1.00  0.00
O
ATOM   1093  CB  ARG    68      23.951  -1.493  18.110  1.00  0.00
C
ATOM   1094 1HB  ARG    68      24.959  -1.778  17.806  1.00  0.00
H
ATOM   1095 2HB  ARG    68      23.259  -2.247  17.741  1.00  0.00
H
ATOM   1096  CG  ARG    68      23.606  -0.156  17.444  1.00  0.00
C
ATOM   1097 1HG  ARG    68      24.293   0.595  17.818  1.00  0.00
H
ATOM   1098 2HG  ARG    68      23.771  -0.251  16.372  1.00  0.00
H
ATOM   1099  CD  ARG    68      22.198   0.382  17.672  1.00  0.00
C
ATOM   1100 1HD  ARG    68      21.972   0.376  18.738  1.00  0.00
H
ATOM   1101 2HD  ARG    68      22.183   1.418  17.337  1.00  0.00
H
ATOM   1102  NE  ARG    68      21.162  -0.351  16.934  1.00  0.00
N
ATOM   1103  HE  ARG    68      21.470  -1.152  16.406  1.00  0.00
H
ATOM   1104  CZ  ARG    68      19.866  -0.063  16.911  1.00  0.00
C
ATOM   1105  NH1 ARG    68      19.363   1.009  17.466  1.00  0.00
N
ATOM   1106 1HH1 ARG    68      19.969   1.675  17.909  1.00  0.00
H
ATOM   1107 2HH1 ARG    68      18.366   1.160  17.486  1.00  0.00
H
ATOM   1108  NH2 ARG    68      19.034  -0.898  16.357  1.00  0.00
N
ATOM   1109 1HH2 ARG    68      19.368  -1.729  15.905  1.00  0.00
H
ATOM   1110 2HH2 ARG    68      18.041  -0.717  16.425  1.00  0.00
H
ATOM   1111  N   HIS    69      24.190  -2.905  21.568  1.00  0.00
N
ATOM   1112  H   HIS    69      24.256  -2.037  22.087  1.00  0.00
H
ATOM   1113  CA  HIS    69      23.978  -4.135  22.318  1.00  0.00
C
ATOM   1114  HA  HIS    69      24.342  -4.994  21.757  1.00  0.00
H
ATOM   1115  C   HIS    69      22.463  -4.212  22.497  1.00  0.00
C
ATOM   1116  O   HIS    69      21.915  -3.559  23.378  1.00  0.00
O
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ATOM   1117  CB  HIS    69      24.669  -4.062  23.680  1.00  0.00
C
ATOM   1118 1HB  HIS    69      25.715  -3.818  23.523  1.00  0.00
H
ATOM   1119 2HB  HIS    69      24.221  -3.267  24.275  1.00  0.00
H
ATOM   1120  CG  HIS    69      24.611  -5.340  24.452  1.00  0.00
C
ATOM   1121  ND1 HIS    69      25.701  -6.139  24.693  1.00  0.00
N
ATOM   1122  HD1 HIS    69      26.658  -5.946  24.413  1.00  0.00
H
ATOM   1123  CD2 HIS    69      23.570  -5.966  25.059  1.00  0.00
C
ATOM   1124  HD2 HIS    69      22.554  -5.593  25.085  1.00  0.00
H
ATOM   1125  CE1 HIS    69      25.292  -7.203  25.380  1.00  0.00
C
ATOM   1126  HE1 HIS    69      25.941  -8.009  25.699  1.00  0.00
H
ATOM   1127  NE2 HIS    69      23.996  -7.151  25.618  1.00  0.00
N
ATOM   1128  N   GLN    70      21.782  -4.919  21.606  1.00  0.00
N
ATOM   1129  H   GLN    70      22.298  -5.433  20.892  1.00  0.00
H
ATOM   1130  CA  GLN    70      20.317  -4.968  21.561  1.00  0.00
C
ATOM   1131  HA  GLN    70      20.034  -5.427  20.613  1.00  0.00
H
ATOM   1132  C   GLN    70      19.681  -3.568  21.589  1.00  0.00
C
ATOM   1133  O   GLN    70      18.719  -3.307  22.321  1.00  0.00
O
ATOM   1134  CB  GLN    70      19.752  -5.858  22.670  1.00  0.00
C
ATOM   1135 1HB  GLN    70      20.037  -5.452  23.639  1.00  0.00
H
ATOM   1136 2HB  GLN    70      18.670  -5.832  22.585  1.00  0.00
H
ATOM   1137  CG  GLN    70      20.184  -7.315  22.599  1.00  0.00
C
ATOM   1138 1HG  GLN    70      19.973  -7.700  21.602  1.00  0.00
H
ATOM   1139 2HG  GLN    70      21.256  -7.381  22.780  1.00  0.00
H
ATOM   1140  CD  GLN    70      19.454  -8.176  23.612  1.00  0.00
C
ATOM   1141  OE1 GLN    70      18.262  -8.002  23.860  1.00  0.00
O
ATOM   1142  NE2 GLN    70      20.149  -9.110  24.199  1.00  0.00
N
ATOM   1143 1HE2 GLN    70      19.692  -9.707  24.868  1.00  0.00
H
ATOM   1144 2HE2 GLN    70      21.127  -9.228  23.977  1.00  0.00
H
ATOM   1145  N   ALA    71      20.244  -2.694  20.763  1.00  0.00
N
ATOM   1146  H   ALA    71      21.033  -3.026  20.220  1.00  0.00
H
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ATOM   1147  CA  ALA    71      19.746  -1.348  20.454  1.00  0.00
C
ATOM   1148  HA  ALA    71      20.471  -0.919  19.766  1.00  0.00
H
ATOM   1149  C   ALA    71      19.548  -0.277  21.545  1.00  0.00
C
ATOM   1150  O   ALA    71      18.950   0.770  21.269  1.00  0.00
O
ATOM   1151  CB  ALA    71      18.453  -1.520  19.671  1.00  0.00
C
ATOM   1152 1HB  ALA    71      18.606  -2.207  18.837  1.00  0.00
H
ATOM   1153 2HB  ALA    71      18.118  -0.556  19.292  1.00  0.00
H
ATOM   1154 3HB  ALA    71      17.685  -1.921  20.326  1.00  0.00
H
ATOM   1155  N   ILE    72      20.009  -0.508  22.762  1.00  0.00
N
ATOM   1156  H   ILE    72      20.514  -1.364  22.952  1.00  0.00
H
ATOM   1157  CA  ILE    72      19.792   0.443  23.858  1.00  0.00
C
ATOM   1158  HA  ILE    72      18.898   1.022  23.631  1.00  0.00
H
ATOM   1159  C   ILE    72      20.919   1.470  23.996  1.00  0.00
C
ATOM   1160  O   ILE    72      21.786   1.568  23.152  1.00  0.00
O
ATOM   1161  CB  ILE    72      19.476  -0.305  25.173  1.00  0.00
C
ATOM   1162  HB  ILE    72      19.370   0.422  25.977  1.00  0.00
H
ATOM   1163  CG1 ILE    72      20.607  -1.275  25.537  1.00  0.00
C
ATOM   1164 1HG1 ILE    72      20.579  -2.109  24.841  1.00  0.00
H
ATOM   1165 2HG1 ILE    72      21.559  -0.762  25.421  1.00  0.00
H
ATOM   1166  CG2 ILE    72      18.124  -1.027  25.012  1.00  0.00
C
ATOM   1167 1HG2 ILE    72      17.845  -1.508  25.946  1.00  0.00
H
ATOM   1168 2HG2 ILE    72      18.182  -1.785  24.234  1.00  0.00
H
ATOM   1169 3HG2 ILE    72      17.346  -0.308  24.755  1.00  0.00
H
ATOM   1170  CD1 ILE    72      20.550  -1.840  26.943  1.00  0.00
C
ATOM   1171 1HD1 ILE    72      21.368  -2.545  27.069  1.00  0.00
H
ATOM   1172 2HD1 ILE    72      19.610  -2.367  27.110  1.00  0.00
H
ATOM   1173 3HD1 ILE    72      20.653  -1.035  27.672  1.00  0.00
H
ATOM   1174  N   ILE    73      20.866   2.303  25.022  1.00  0.00
N
ATOM   1175  H   ILE    73      20.264   2.079  25.799  1.00  0.00
H
ATOM   1176  CA  ILE    73      21.621   3.557  25.080  1.00  0.00
C
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ATOM   1177  HA  ILE    73      21.331   4.153  24.215  1.00  0.00
H
ATOM   1178  C   ILE    73      23.164   3.508  25.064  1.00  0.00
C
ATOM   1179  O   ILE    73      23.792   2.546  25.492  1.00  0.00
O
ATOM   1180  CB  ILE    73      21.181   4.317  26.362  1.00  0.00
C
ATOM   1181  HB  ILE    73      21.762   5.230  26.417  1.00  0.00
H
ATOM   1182  CG1 ILE    73      21.451   3.464  27.626  1.00  0.00
C
ATOM   1183 1HG1 ILE    73      20.766   2.616  27.630  1.00  0.00
H
ATOM   1184 2HG1 ILE    73      22.464   3.070  27.579  1.00  0.00
H
ATOM   1185  CG2 ILE    73      19.685   4.713  26.258  1.00  0.00
C
ATOM   1186 1HG2 ILE    73      19.424   5.389  27.074  1.00  0.00
H
ATOM   1187 2HG2 ILE    73      19.042   3.833  26.317  1.00  0.00
H
ATOM   1188 3HG2 ILE    73      19.500   5.232  25.318  1.00  0.00
H
ATOM   1189  CD1 ILE    73      21.309   4.176  28.968  1.00  0.00
C
ATOM   1190 1HD1 ILE    73      21.465   3.455  29.771  1.00  0.00
H
ATOM   1191 2HD1 ILE    73      20.313   4.605  29.074  1.00  0.00
H
ATOM   1192 3HD1 ILE    73      22.061   4.959  29.053  1.00  0.00
H
ATOM   1193  N   ASN    74      23.767   4.588  24.574  1.00  0.00
N
ATOM   1194  H   ASN    74      23.226   5.211  23.986  1.00  0.00
H
ATOM   1195  CA  ASN    74      25.161   4.961  24.855  1.00  0.00
C
ATOM   1196  HA  ASN    74      25.562   4.284  25.608  1.00  0.00
H
ATOM   1197  C   ASN    74      25.289   6.391  25.355  1.00  0.00
C
ATOM   1198  O   ASN    74      26.178   6.686  26.128  1.00  0.00
O
ATOM   1199  CB  ASN    74      26.065   4.930  23.616  1.00  0.00
C
ATOM   1200 1HB  ASN    74      25.745   4.148  22.947  1.00  0.00
H
ATOM   1201 2HB  ASN    74      25.980   5.876  23.080  1.00  0.00
H
ATOM   1202  CG  ASN    74      27.526   4.692  23.964  1.00  0.00
C
ATOM   1203  OD1 ASN    74      27.894   4.451  25.106  1.00  0.00
O
ATOM   1204  ND2 ASN    74      28.362   4.712  22.975  1.00  0.00
N
ATOM   1205 1HD2 ASN    74      29.297   4.376  23.124  1.00  0.00
H
ATOM   1206 2HD2 ASN    74      28.062   5.056  22.072  1.00  0.00
H
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ATOM   1207  N   ARG    75      24.441   7.312  24.915  1.00  0.00
N
ATOM   1208  H   ARG    75      23.720   7.068  24.248  1.00  0.00
H
ATOM   1209  CA  ARG    75      24.613   8.716  25.323  1.00  0.00
C
ATOM   1210  HA  ARG    75      25.589   9.005  24.932  1.00  0.00
H
ATOM   1211  C   ARG    75      24.707   8.993  26.837  1.00  0.00
C
ATOM   1212  O   ARG    75      25.636   9.674  27.240  1.00  0.00
O
ATOM   1213  CB  ARG    75      23.571   9.613  24.638  1.00  0.00
C
ATOM   1214 1HB  ARG    75      23.544   9.362  23.580  1.00  0.00
H
ATOM   1215 2HB  ARG    75      22.590   9.398  25.055  1.00  0.00
H
ATOM   1216  CG  ARG    75      23.830  11.112  24.765  1.00  0.00
C
ATOM   1217 1HG  ARG    75      22.986  11.653  24.335  1.00  0.00
H
ATOM   1218 2HG  ARG    75      23.893  11.360  25.820  1.00  0.00
H
ATOM   1219  CD  ARG    75      25.118  11.587  24.095  1.00  0.00
C
ATOM   1220 1HD  ARG    75      25.964  11.029  24.498  1.00  0.00
H
ATOM   1221 2HD  ARG    75      25.053  11.410  23.020  1.00  0.00
H
ATOM   1222  NE  ARG    75      25.327  13.018  24.356  1.00  0.00
N
ATOM   1223  HE  ARG    75      24.628  13.482  24.926  1.00  0.00
H
ATOM   1224  CZ  ARG    75      26.343  13.760  23.939  1.00  0.00
C
ATOM   1225  NH1 ARG    75      27.367  13.284  23.275  1.00  0.00
N
ATOM   1226 1HH1 ARG    75      27.433  12.296  23.101  1.00  0.00
H
ATOM   1227 2HH1 ARG    75      28.093  13.909  22.968  1.00  0.00
H
ATOM   1228  NH2 ARG    75      26.340  15.034  24.201  1.00  0.00
N
ATOM   1229 1HH2 ARG    75      25.619  15.439  24.776  1.00  0.00
H
ATOM   1230 2HH2 ARG    75      27.073  15.620  23.830  1.00  0.00
H
ATOM   1231  N   PRO    76      23.849   8.412  27.700  1.00  0.00
N
ATOM   1232  CA  PRO    76      24.127   8.558  29.141  1.00  0.00
C
ATOM   1233  HA  PRO    76      24.179   9.616  29.398  1.00  0.00
H
ATOM   1234  C   PRO    76      25.371   7.846  29.697  1.00  0.00
C
ATOM   1235  O   PRO    76      25.766   8.080  30.840  1.00  0.00
O
ATOM   1236  CB  PRO    76      22.884   7.938  29.789  1.00  0.00
C
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ATOM   1237 1HB  PRO    76      23.084   6.903  30.067  1.00  0.00
H
ATOM   1238 2HB  PRO    76      22.579   8.513  30.659  1.00  0.00
H
ATOM   1239  CG  PRO    76      21.842   7.995  28.737  1.00  0.00
C
ATOM   1240 1HG  PRO    76      21.049   7.273  28.928  1.00  0.00
H
ATOM   1241 2HG  PRO    76      21.438   9.006  28.659  1.00  0.00
H
ATOM   1242  CD  PRO    76      22.608   7.642  27.514  1.00  0.00
C
ATOM   1243 1HD  PRO    76      22.834   6.576  27.493  1.00  0.00
H
ATOM   1244 2HD  PRO    76      22.066   7.951  26.622  1.00  0.00
H
ATOM   1245  N   LEU    77      25.983   6.962  28.919  1.00  0.00
N
ATOM   1246  H   LEU    77      25.609   6.757  28.001  1.00  0.00
H
ATOM   1247  CA  LEU    77      27.240   6.303  29.286  1.00  0.00
C
ATOM   1248  HA  LEU    77      27.324   6.230  30.369  1.00  0.00
H
ATOM   1249  C   LEU    77      28.405   7.130  28.737  1.00  0.00
C
ATOM   1250  O   LEU    77      29.555   6.940  29.127  1.00  0.00
O
ATOM   1251  CB  LEU    77      27.320   4.894  28.678  1.00  0.00
C
ATOM   1252 1HB  LEU    77      27.349   5.005  27.598  1.00  0.00
H
ATOM   1253 2HB  LEU    77      28.272   4.458  28.981  1.00  0.00
H
ATOM   1254  CG  LEU    77      26.218   3.872  28.997  1.00  0.00
C
ATOM   1255  HG  LEU    77      25.255   4.298  28.718  1.00  0.00
H
ATOM   1256  CD1 LEU    77      26.433   2.604  28.171  1.00  0.00
C
ATOM   1257 1HD1 LEU    77      25.616   1.905  28.351  1.00  0.00
H
ATOM   1258 2HD1 LEU    77      27.377   2.131  28.443  1.00  0.00
H
ATOM   1259 3HD1 LEU    77      26.450   2.847  27.109  1.00  0.00
H
ATOM   1260  CD2 LEU    77      26.178   3.515  30.479  1.00  0.00
C
ATOM   1261 1HD2 LEU    77      25.424   2.747  30.649  1.00  0.00
H
ATOM   1262 2HD2 LEU    77      25.919   4.394  31.068  1.00  0.00
H
ATOM   1263 3HD2 LEU    77      27.150   3.137  30.802  1.00  0.00
H
ATOM   1264  N   TYR    78      28.081   8.039  27.824  1.00  0.00
N
ATOM   1265  H   TYR    78      27.111   8.111  27.552  1.00  0.00
H
ATOM   1266  CA  TYR    78      29.007   8.962  27.165  1.00  0.00
C
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ATOM   1267  HA  TYR    78      28.433   9.505  26.414  1.00  0.00
H
ATOM   1268  C   TYR    78      30.135   8.259  26.410  1.00  0.00
C
ATOM   1269  O   TYR    78      31.280   8.720  26.382  1.00  0.00
O
ATOM   1270  CB  TYR    78      29.512  10.014  28.160  1.00  0.00
C
ATOM   1271 1HB  TYR    78      30.064   9.531  28.965  1.00  0.00
H
ATOM   1272 2HB  TYR    78      30.181  10.699  27.641  1.00  0.00
H
ATOM   1273  CG  TYR    78      28.365  10.816  28.743  1.00  0.00
C
ATOM   1274  CD1 TYR    78      27.781  10.461  29.977  1.00  0.00
C
ATOM   1275  HD1 TYR    78      28.182   9.632  30.543  1.00  0.00
H
ATOM   1276  CD2 TYR    78      27.829  11.917  28.041  1.00  0.00
C
ATOM   1277  HD2 TYR    78      28.265  12.219  27.101  1.00  0.00
H
ATOM   1278  CE1 TYR    78      26.658  11.171  30.483  1.00  0.00
C
ATOM   1279  HE1 TYR    78      26.210  10.882  31.423  1.00  0.00
H
ATOM   1280  CE2 TYR    78      26.707  12.627  28.544  1.00  0.00
C
ATOM   1281  HE2 TYR    78      26.303  13.460  27.991  1.00  0.00
H
ATOM   1282  CZ  TYR    78      26.127  12.235  29.754  1.00  0.00
C
ATOM   1283  OH  TYR    78      25.019  12.892  30.226  1.00  0.00
O
ATOM   1284  HH  TYR    78      24.765  13.628  29.662  1.00  0.00
H
ATOM   1285  N   GLY    79      29.815   7.131  25.791  1.00  0.00
N
ATOM   1286  H   GLY    79      28.876   6.762  25.865  1.00  0.00
H
ATOM   1287  CA  GLY    79      30.773   6.445  24.937  1.00  0.00
C
ATOM   1288 1HA  GLY    79      31.778   6.565  25.340  1.00  0.00
H
ATOM   1289 2HA  GLY    79      30.536   5.383  24.910  1.00  0.00
H
ATOM   1290  C   GLY    79      30.744   6.984  23.520  1.00  0.00
C
ATOM   1291  O   GLY    79      29.867   7.793  23.200  1.00  0.00
O
ATOM   1292  N   ILE    80      31.686   6.560  22.682  1.00  0.00
N
ATOM   1293  H   ILE    80      32.399   5.921  23.021  1.00  0.00
H
ATOM   1294  CA  ILE    80      31.755   6.990  21.277  1.00  0.00
C
ATOM   1295  HA  ILE    80      30.782   7.406  21.027  1.00  0.00
H
ATOM   1296  C   ILE    80      32.053   5.820  20.302  1.00  0.00
C
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ATOM   1297  O   ILE    80      32.638   4.811  20.710  1.00  0.00
O
ATOM   1298  CB  ILE    80      32.823   8.127  21.081  1.00  0.00
C
ATOM   1299  HB  ILE    80      32.888   8.355  20.018  1.00  0.00
H
ATOM   1300  CG1 ILE    80      34.214   7.675  21.568  1.00  0.00
C
ATOM   1301 1HG1 ILE    80      34.174   7.532  22.648  1.00  0.00
H
ATOM   1302 2HG1 ILE    80      34.448   6.716  21.108  1.00  0.00
H
ATOM   1303  CG2 ILE    80      32.369   9.420  21.807  1.00  0.00
C
ATOM   1304 1HG2 ILE    80      33.003  10.256  21.520  1.00  0.00
H
ATOM   1305 2HG2 ILE    80      32.425   9.286  22.889  1.00  0.00
H
ATOM   1306 3HG2 ILE    80      31.339   9.656  21.533  1.00  0.00
H
ATOM   1307  CD1 ILE    80      35.368   8.631  21.271  1.00  0.00
C
ATOM   1308 1HD1 ILE    80      36.287   8.229  21.695  1.00  0.00
H
ATOM   1309 2HD1 ILE    80      35.181   9.606  21.717  1.00  0.00
H
ATOM   1310 3HD1 ILE    80      35.492   8.732  20.196  1.00  0.00
H
ATOM   1311  N   PRO    81      31.630   5.909  19.021  1.00  0.00
N
ATOM   1312  CA  PRO    81      32.039   5.058  17.886  1.00  0.00
C
ATOM   1313  HA  PRO    81      32.119   4.016  18.193  1.00  0.00
H
ATOM   1314  C   PRO    81      33.389   5.489  17.287  1.00  0.00
C
ATOM   1315  O   PRO    81      34.123   6.119  18.016  1.00  0.00
O
ATOM   1316  CB  PRO    81      30.853   5.193  16.946  1.00  0.00
C
ATOM   1317 1HB  PRO    81      31.136   5.060  15.910  1.00  0.00
H
ATOM   1318 2HB  PRO    81      30.097   4.462  17.227  1.00  0.00
H
ATOM   1319  CG  PRO    81      30.340   6.524  17.191  1.00  0.00
C
ATOM   1320 1HG  PRO    81      30.792   7.242  16.522  1.00  0.00
H
ATOM   1321 2HG  PRO    81      29.272   6.517  17.040  1.00  0.00
H
ATOM   1322  CD  PRO    81      30.630   6.900  18.585  1.00  0.00
C
ATOM   1323 1HD  PRO    81      31.031   7.913  18.627  1.00  0.00
H
ATOM   1324 2HD  PRO    81      29.729   6.818  19.191  1.00  0.00
H
ATOM   1325  N   THR    82      33.795   5.122  16.069  1.00  0.00
N
ATOM   1326  H   THR    82      33.104   5.026  15.322  1.00  0.00
H
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ATOM   1327  CA  THR    82      35.179   4.674  15.794  1.00  0.00
C
ATOM   1328  HA  THR    82      35.539   4.391  16.781  1.00  0.00
H
ATOM   1329  C   THR    82      36.419   5.419  15.187  1.00  0.00
C
ATOM   1330  O   THR    82      37.504   5.174  15.695  1.00  0.00
O
ATOM   1331  CB  THR    82      35.057   3.338  15.034  1.00  0.00
C
ATOM   1332  HB  THR    82      35.532   3.412  14.058  1.00  0.00
H
ATOM   1333  OG1 THR    82      33.671   3.006  14.875  1.00  0.00
O
ATOM   1334  HG1 THR    82      33.266   3.617  14.236  1.00  0.00
H
ATOM   1335  CG2 THR    82      35.680   2.209  15.840  1.00  0.00
C
ATOM   1336 1HG2 THR    82      36.753   2.374  15.943  1.00  0.00
H
ATOM   1337 2HG2 THR    82      35.510   1.268  15.325  1.00  0.00
H
ATOM   1338 3HG2 THR    82      35.219   2.153  16.827  1.00  0.00
H
ATOM   1339  N   THR    83      36.383   6.251  14.142  1.00  0.00
N
ATOM   1340  H   THR    83      35.492   6.402  13.677  1.00  0.00
H
ATOM   1341  CA  THR    83      37.625   6.769  13.476  1.00  0.00
C
ATOM   1342  HA  THR    83      38.464   6.496  14.111  1.00  0.00
H
ATOM   1343  C   THR    83      37.916   8.232  13.006  1.00  0.00
C
ATOM   1344  O   THR    83      38.916   8.442  12.319  1.00  0.00
O
ATOM   1345  CB  THR    83      37.833   6.011  12.127  1.00  0.00
C
ATOM   1346  HB  THR    83      38.835   6.205  11.749  1.00  0.00
H
ATOM   1347  OG1 THR    83      36.885   6.478  11.169  1.00  0.00
O
ATOM   1348  HG1 THR    83      36.024   6.125  11.436  1.00  0.00
H
ATOM   1349  CG2 THR    83      37.651   4.506  12.227  1.00  0.00
C
ATOM   1350 1HG2 THR    83      38.226   4.122  13.064  1.00  0.00
H
ATOM   1351 2HG2 THR    83      38.014   4.042  11.312  1.00  0.00
H
ATOM   1352 3HG2 THR    83      36.600   4.252  12.354  1.00  0.00
H
ATOM   1353  N   GLY    84      37.117   9.253  13.302  1.00  0.00
N
ATOM   1354  H   GLY    84      36.381   9.146  13.978  1.00  0.00
H
ATOM   1355  CA  GLY    84      37.232  10.545  12.622  1.00  0.00
C
ATOM   1356 1HA  GLY    84      38.287  10.769  12.468  1.00  0.00
H
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ATOM   1357 2HA  GLY    84      36.779  10.441  11.639  1.00  0.00
H
ATOM   1358  C   GLY    84      36.603  11.761  13.300  1.00  0.00
C
ATOM   1359  O   GLY    84      36.206  11.661  14.455  1.00  0.00
O
ATOM   1360  N   LEU    85      36.550  12.910  12.632  1.00  0.00
N
ATOM   1361  H   LEU    85      36.707  12.916  11.628  1.00  0.00
H
ATOM   1362  CA  LEU    85      36.382  14.196  13.328  1.00  0.00
C
ATOM   1363  HA  LEU    85      36.938  14.070  14.225  1.00  0.00
H
ATOM   1364  C   LEU    85      34.964  14.664  13.719  1.00  0.00
C
ATOM   1365  O   LEU    85      34.114  14.619  12.842  1.00  0.00
O
ATOM   1366  CB  LEU    85      37.069  15.300  12.532  1.00  0.00
C
ATOM   1367 1HB  LEU    85      37.061  15.025  11.480  1.00  0.00
H
ATOM   1368 2HB  LEU    85      36.486  16.213  12.647  1.00  0.00
H
ATOM   1369  CG  LEU    85      38.511  15.592  12.963  1.00  0.00
C
ATOM   1370  HG  LEU    85      38.725  15.038  13.873  1.00  0.00
H
ATOM   1371  CD1 LEU    85      39.505  15.148  11.896  1.00  0.00
C
ATOM   1372 1HD1 LEU    85      40.522  15.296  12.253  1.00  0.00
H
ATOM   1373 2HD1 LEU    85      39.361  15.730  10.989  1.00  0.00
H
ATOM   1374 3HD1 LEU    85      39.352  14.094  11.664  1.00  0.00
H
ATOM   1375  CD2 LEU    85      38.682  17.071  13.276  1.00  0.00
C
ATOM   1376 1HD2 LEU    85      39.678  17.249  13.673  1.00  0.00
H
ATOM   1377 2HD2 LEU    85      37.956  17.377  14.026  1.00  0.00
H
ATOM   1378 3HD2 LEU    85      38.534  17.667  12.375  1.00  0.00
H
ATOM   1379  N   ARG    86      34.588  15.074  14.942  1.00  0.00
N
ATOM   1380  H   ARG    86      33.601  14.910  15.117  1.00  0.00
H
ATOM   1381  CA  ARG    86      35.324  15.809  16.026  1.00  0.00
C
ATOM   1382  HA  ARG    86      34.610  15.909  16.841  1.00  0.00
H
ATOM   1383  C   ARG    86      35.685  17.286  15.705  1.00  0.00
C
ATOM   1384  O   ARG    86      35.417  17.694  14.580  1.00  0.00
O
ATOM   1385  CB  ARG    86      36.465  14.977  16.624  1.00  0.00
C
ATOM   1386 1HB  ARG    86      37.158  14.636  15.888  1.00  0.00
H
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ATOM   1387 2HB  ARG    86      37.068  15.602  17.240  1.00  0.00
H
ATOM   1388  CG  ARG    86      35.996  13.832  17.467  1.00  0.00
C
ATOM   1389 1HG  ARG    86      35.276  14.205  18.193  1.00  0.00
H
ATOM   1390 2HG  ARG    86      35.523  13.079  16.840  1.00  0.00
H
ATOM   1391  CD  ARG    86      37.179  13.247  18.207  1.00  0.00
C
ATOM   1392 1HD  ARG    86      37.672  12.505  17.577  1.00  0.00
H
ATOM   1393 2HD  ARG    86      37.886  14.047  18.423  1.00  0.00
H
ATOM   1394  NE  ARG    86      36.766  12.639  19.476  1.00  0.00
N
ATOM   1395  HE  ARG    86      35.780  12.435  19.589  1.00  0.00
H
ATOM   1396  CZ  ARG    86      37.563  12.341  20.490  1.00  0.00
C
ATOM   1397  NH1 ARG    86      38.845  12.594  20.499  1.00  0.00
N
ATOM   1398 1HH1 ARG    86      39.269  13.043  19.708  1.00  0.00
H
ATOM   1399 2HH1 ARG    86      39.412  12.319  21.286  1.00  0.00
H
ATOM   1400  NH2 ARG    86      37.046  11.785  21.545  1.00  0.00
N
ATOM   1401 1HH2 ARG    86      36.052  11.670  21.619  1.00  0.00
H
ATOM   1402 2HH2 ARG    86      37.658  11.462  22.278  1.00  0.00
H
ATOM   1403  N   PRO    87      36.152  18.146  16.665  1.00  0.00
N
ATOM   1404  CA  PRO    87      37.097  18.127  17.808  1.00  0.00
C
ATOM   1405  HA  PRO    87      38.085  17.879  17.420  1.00  0.00
H
ATOM   1406  C   PRO    87      36.831  17.210  19.003  1.00  0.00
C
ATOM   1407  O   PRO    87      37.695  16.396  19.317  1.00  0.00
O
ATOM   1408  CB  PRO    87      37.126  19.586  18.288  1.00  0.00
C
ATOM   1409 1HB  PRO    87      36.426  19.743  19.105  1.00  0.00
H
ATOM   1410 2HB  PRO    87      38.132  19.868  18.599  1.00  0.00
H
ATOM   1411  CG  PRO    87      36.725  20.353  17.141  1.00  0.00
C
ATOM   1412 1HG  PRO    87      36.346  21.331  17.436  1.00  0.00
H
ATOM   1413 2HG  PRO    87      37.572  20.458  16.463  1.00  0.00
H
ATOM   1414  CD  PRO    87      35.651  19.527  16.499  1.00  0.00
C
ATOM   1415 1HD  PRO    87      34.708  19.656  17.030  1.00  0.00
H
ATOM   1416 2HD  PRO    87      35.544  19.814  15.455  1.00  0.00
H
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ATOM   1417  N   GLU    88      35.658  17.275  19.623  1.00  0.00
N
ATOM   1418  H   GLU    88      35.123  18.138  19.563  1.00  0.00
H
ATOM   1419  CA  GLU    88      35.159  16.216  20.516  1.00  0.00
C
ATOM   1420  HA  GLU    88      35.638  15.274  20.250  1.00  0.00
H
ATOM   1421  C   GLU    88      33.637  16.025  20.380  1.00  0.00
C
ATOM   1422  O   GLU    88      33.053  15.130  20.991  1.00  0.00
O
ATOM   1423  CB  GLU    88      35.506  16.531  21.984  1.00  0.00
C
ATOM   1424 1HB  GLU    88      35.144  17.531  22.223  1.00  0.00
H
ATOM   1425 2HB  GLU    88      34.987  15.819  22.624  1.00  0.00
H
ATOM   1426  CG  GLU    88      37.005  16.452  22.301  1.00  0.00
C
ATOM   1427 1HG  GLU    88      37.369  15.460  22.027  1.00  0.00
H
ATOM   1428 2HG  GLU    88      37.528  17.192  21.698  1.00  0.00
H
ATOM   1429  CD  GLU    88      37.355  16.717  23.747  1.00  0.00
C
ATOM   1430  OE1 GLU    88      36.932  15.952  24.642  1.00  0.00
O
ATOM   1431  OE2 GLU    88      38.117  17.676  24.015  1.00  0.00
O
ATOM   1432  N   ILE    89      32.984  16.872  19.592  1.00  0.00
N
ATOM   1433  H   ILE    89      33.501  17.586  19.105  1.00  0.00
H
ATOM   1434  CA  ILE    89      31.517  16.904  19.495  1.00  0.00
C
ATOM   1435  HA  ILE    89      31.149  16.977  20.518  1.00  0.00
H
ATOM   1436  C   ILE    89      30.738  15.727  18.875  1.00  0.00
C
ATOM   1437  O   ILE    89      29.930  15.105  19.564  1.00  0.00
O
ATOM   1438  CB  ILE    89      31.029  18.195  18.746  1.00  0.00
C
ATOM   1439  HB  ILE    89      30.069  17.963  18.305  1.00  0.00
H
ATOM   1440  CG1 ILE    89      31.984  18.599  17.600  1.00  0.00
C
ATOM   1441 1HG1 ILE    89      32.887  19.031  18.026  1.00  0.00
H
ATOM   1442 2HG1 ILE    89      32.264  17.706  17.041  1.00  0.00
H
ATOM   1443  CG2 ILE    89      30.783  19.341  19.732  1.00  0.00
C
ATOM   1444 1HG2 ILE    89      30.395  20.217  19.211  1.00  0.00
H
ATOM   1445 2HG2 ILE    89      31.702  19.613  20.246  1.00  0.00
H
ATOM   1446 3HG2 ILE    89      30.044  19.031  20.471  1.00  0.00
H
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ATOM   1447  CD1 ILE    89      31.403  19.602  16.600  1.00  0.00
C
ATOM   1448 1HD1 ILE    89      32.078  19.696  15.750  1.00  0.00
H
ATOM   1449 2HD1 ILE    89      31.285  20.579  17.072  1.00  0.00
H
ATOM   1450 3HD1 ILE    89      30.433  19.256  16.241  1.00  0.00
H
ATOM   1451  N   PHE    90      30.878  15.485  17.578  1.00  0.00
N
ATOM   1452  H   PHE    90      31.721  15.760  17.098  1.00  0.00
H
ATOM   1453  CA  PHE    90      29.788  14.976  16.739  1.00  0.00
C
ATOM   1454  HA  PHE    90      29.190  14.235  17.264  1.00  0.00
H
ATOM   1455  C   PHE    90      30.413  14.347  15.488  1.00  0.00
C
ATOM   1456  O   PHE    90      31.628  14.520  15.351  1.00  0.00
O
ATOM   1457  CB  PHE    90      28.928  16.178  16.294  1.00  0.00
C
ATOM   1458 1HB  PHE    90      29.590  17.007  16.050  1.00  0.00
H
ATOM   1459 2HB  PHE    90      28.398  15.922  15.385  1.00  0.00
H
ATOM   1460  CG  PHE    90      27.900  16.647  17.308  1.00  0.00
C
ATOM   1461  CD1 PHE    90      27.595  18.018  17.394  1.00  0.00
C
ATOM   1462  HD1 PHE    90      28.106  18.720  16.752  1.00  0.00
H
ATOM   1463  CD2 PHE    90      27.195  15.748  18.138  1.00  0.00
C
ATOM   1464  HD2 PHE    90      27.384  14.688  18.086  1.00  0.00
H
ATOM   1465  CE1 PHE    90      26.617  18.497  18.300  1.00  0.00
C
ATOM   1466  HE1 PHE    90      26.380  19.549  18.337  1.00  0.00
H
ATOM   1467  CE2 PHE    90      26.232  16.217  19.063  1.00  0.00
C
ATOM   1468  HE2 PHE    90      25.712  15.521  19.700  1.00  0.00
H
ATOM   1469  CZ  PHE    90      25.943  17.593  19.143  1.00  0.00
C
ATOM   1470  HZ  PHE    90      25.203  17.950  19.845  1.00  0.00
H
ATOM   1471  N   VAL    91      29.685  13.747  14.534  1.00  0.00
N
ATOM   1472  H   VAL    91      29.954  13.965  13.587  1.00  0.00
H
ATOM   1473  CA  VAL    91      28.636  12.704  14.709  1.00  0.00
C
ATOM   1474  HA  VAL    91      28.975  12.035  15.500  1.00  0.00
H
ATOM   1475  C   VAL    91      28.382  11.814  13.465  1.00  0.00
C
ATOM   1476  O   VAL    91      28.149  10.620  13.631  1.00  0.00
O
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ATOM   1477  CB  VAL    91      27.247  13.276  15.161  1.00  0.00
C
ATOM   1478  HB  VAL    91      27.416  13.887  16.034  1.00  0.00
H
ATOM   1479  CG1 VAL    91      26.625  14.170  14.106  1.00  0.00
C
ATOM   1480 1HG1 VAL    91      25.843  14.761  14.571  1.00  0.00
H
ATOM   1481 2HG1 VAL    91      26.186  13.592  13.300  1.00  0.00
H
ATOM   1482 3HG1 VAL    91      27.361  14.861  13.701  1.00  0.00
H
ATOM   1483  CG2 VAL    91      26.281  12.195  15.615  1.00  0.00
C
ATOM   1484 1HG2 VAL    91      25.456  12.647  16.164  1.00  0.00
H
ATOM   1485 2HG2 VAL    91      26.787  11.485  16.265  1.00  0.00
H
ATOM   1486 3HG2 VAL    91      25.888  11.660  14.752  1.00  0.00
H
ATOM   1487  N   ILE    92      28.451  12.335  12.236  1.00  0.00
N
ATOM   1488  H   ILE    92      28.652  13.314  12.114  1.00  0.00
H
ATOM   1489  CA  ILE    92      28.215  11.532  11.016  1.00  0.00
C
ATOM   1490  HA  ILE    92      28.304  10.477  11.276  1.00  0.00
H
ATOM   1491  C   ILE    92      29.202  11.787   9.870  1.00  0.00
C
ATOM   1492  O   ILE    92      30.019  12.699   9.927  1.00  0.00
O
ATOM   1493  CB  ILE    92      26.779  11.728  10.409  1.00  0.00
C
ATOM   1494  HB  ILE    92      26.704  11.073   9.549  1.00  0.00
H
ATOM   1495  CG1 ILE    92      26.527  13.159   9.904  1.00  0.00
C
ATOM   1496 1HG1 ILE    92      26.233  13.790  10.743  1.00  0.00
H
ATOM   1497 2HG1 ILE    92      27.442  13.566   9.479  1.00  0.00
H
ATOM   1498  CG2 ILE    92      25.695  11.265  11.368  1.00  0.00
C
ATOM   1499 1HG2 ILE    92      24.740  11.185  10.847  1.00  0.00
H
ATOM   1500 2HG2 ILE    92      25.584  11.959  12.196  1.00  0.00
H
ATOM   1501 3HG2 ILE    92      25.962  10.285  11.764  1.00  0.00
H
ATOM   1502  CD1 ILE    92      25.442  13.221   8.813  1.00  0.00
C
ATOM   1503 1HD1 ILE    92      25.329  14.246   8.469  1.00  0.00
H
ATOM   1504 2HD1 ILE    92      24.484  12.881   9.210  1.00  0.00
H
ATOM   1505 3HD1 ILE    92      25.730  12.603   7.962  1.00  0.00
H
ATOM   1506  N   MET    93      29.044  10.988   8.816  1.00  0.00
N
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ATOM   1507  H   MET    93      28.391  10.226   8.925  1.00  0.00
H
ATOM   1508  CA  MET    93      29.637  11.152   7.475  1.00  0.00
C
ATOM   1509  HA  MET    93      29.162  10.391   6.864  1.00  0.00
H
ATOM   1510  C   MET    93      31.132  10.856   7.368  1.00  0.00
C
ATOM   1511  O   MET    93      31.776  10.982   6.317  1.00  0.00
O
ATOM   1512  CB  MET    93      29.242  12.492   6.851  1.00  0.00
C
ATOM   1513 1HB  MET    93      28.369  12.874   7.378  1.00  0.00
H
ATOM   1514 2HB  MET    93      30.060  13.197   6.987  1.00  0.00
H
ATOM   1515  CG  MET    93      28.883  12.395   5.372  1.00  0.00
C
ATOM   1516 1HG  MET    93      28.681  13.394   4.987  1.00  0.00
H
ATOM   1517 2HG  MET    93      29.723  11.966   4.829  1.00  0.00
H
ATOM   1518  SD  MET    93      27.430  11.361   5.115  1.00  0.00
S
ATOM   1519  CE  MET    93      27.378  11.214   3.332  1.00  0.00
C
ATOM   1520 1HE  MET    93      26.467  10.692   3.038  1.00  0.00
H
ATOM   1521 2HE  MET    93      28.246  10.658   2.976  1.00  0.00
H
ATOM   1522 3HE  MET    93      27.372  12.207   2.882  1.00  0.00
H
ATOM   1523  N   GLN    94      31.607  10.289   8.460  1.00  0.00
N
ATOM   1524  H   GLN    94      30.996  10.214   9.260  1.00  0.00
H
ATOM   1525  CA  GLN    94      32.909   9.665   8.590  1.00  0.00
C
ATOM   1526  HA  GLN    94      33.387   9.477   7.629  1.00  0.00
H
ATOM   1527  C   GLN    94      32.563   8.362   9.292  1.00  0.00
C
ATOM   1528  O   GLN    94      31.457   8.228   9.802  1.00  0.00
O
ATOM   1529  CB  GLN    94      33.788  10.498   9.516  1.00  0.00
C
ATOM   1530 1HB  GLN    94      33.150  11.000  10.237  1.00  0.00
H
ATOM   1531 2HB  GLN    94      34.444   9.828  10.067  1.00  0.00
H
ATOM   1532  CG  GLN    94      34.622  11.538   8.856  1.00  0.00
C
ATOM   1533 1HG  GLN    94      34.492  11.469   7.780  1.00  0.00
H
ATOM   1534 2HG  GLN    94      34.290  12.516   9.192  1.00  0.00
H
ATOM   1535  CD  GLN    94      36.069  11.367   9.210  1.00  0.00
C
ATOM   1536  OE1 GLN    94      36.680  12.222   9.833  1.00  0.00
O
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ATOM   1537  NE2 GLN    94      36.626  10.243   8.850  1.00  0.00
N
ATOM   1538 1HE2 GLN    94      37.585  10.075   9.110  1.00  0.00
H
ATOM   1539 2HE2 GLN    94      36.127   9.593   8.263  1.00  0.00
H
ATOM   1540  N   GLU    95      33.515   7.451   9.398  1.00  0.00
N
ATOM   1541  H   GLU    95      34.400   7.603   8.940  1.00  0.00
H
ATOM   1542  CA  GLU    95      33.351   6.218  10.173  1.00  0.00
C
ATOM   1543  HA  GLU    95      32.310   5.890  10.128  1.00  0.00
H
ATOM   1544  C   GLU    95      33.753   6.492  11.643  1.00  0.00
C
ATOM   1545  O   GLU    95      34.505   5.735  12.229  1.00  0.00
O
ATOM   1546  CB  GLU    95      34.255   5.125   9.568  1.00  0.00
C
ATOM   1547 1HB  GLU    95      35.279   5.365   9.831  1.00  0.00
H
ATOM   1548 2HB  GLU    95      34.016   4.170  10.030  1.00  0.00
H
ATOM   1549  CG  GLU    95      34.263   4.960   8.040  1.00  0.00
C
ATOM   1550 1HG  GLU    95      34.399   5.928   7.556  1.00  0.00
H
ATOM   1551 2HG  GLU    95      35.132   4.352   7.791  1.00  0.00
H
ATOM   1552  CD  GLU    95      33.043   4.275   7.460  1.00  0.00
C
ATOM   1553  OE1 GLU    95      33.192   3.132   6.970  1.00  0.00
O
ATOM   1554  OE2 GLU    95      31.948   4.868   7.423  1.00  0.00
O
ATOM   1555  N   LEU    96      33.414   7.672  12.154  1.00  0.00
N
ATOM   1556  H   LEU    96      32.692   8.179  11.659  1.00  0.00
H
ATOM   1557  CA  LEU    96      33.987   8.329  13.349  1.00  0.00
C
ATOM   1558  HA  LEU    96      35.048   8.173  13.300  1.00  0.00
H
ATOM   1559  C   LEU    96      33.539   7.987  14.784  1.00  0.00
C
ATOM   1560  O   LEU    96      32.489   7.400  14.909  1.00  0.00
O
ATOM   1561  CB  LEU    96      33.724   9.827  13.190  1.00  0.00
C
ATOM   1562 1HB  LEU    96      34.360  10.316  13.909  1.00  0.00
H
ATOM   1563 2HB  LEU    96      34.084  10.120  12.213  1.00  0.00
H
ATOM   1564  CG  LEU    96      32.343  10.461  13.392  1.00  0.00
C
ATOM   1565  HG  LEU    96      31.978  10.206  14.384  1.00  0.00
H
ATOM   1566  CD1 LEU    96      32.538  11.951  13.326  1.00  0.00
C
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ATOM   1567 1HD1 LEU    96      31.585  12.452  13.431  1.00  0.00
H
ATOM   1568 2HD1 LEU    96      32.981  12.246  12.372  1.00  0.00
H
ATOM   1569 3HD1 LEU    96      33.189  12.280  14.137  1.00  0.00
H
ATOM   1570  CD2 LEU    96      31.298  10.066  12.400  1.00  0.00
C
ATOM   1571 1HD2 LEU    96      30.353  10.468  12.717  1.00  0.00
H
ATOM   1572 2HD2 LEU    96      31.191   8.988  12.375  1.00  0.00
H
ATOM   1573 3HD2 LEU    96      31.527  10.444  11.410  1.00  0.00
H
ATOM   1574  N   PRO    97      34.186   8.534  15.862  1.00  0.00
N
ATOM   1575  CA  PRO    97      35.502   9.040  16.339  1.00  0.00
C
ATOM   1576  HA  PRO    97      35.952   9.569  15.511  1.00  0.00
H
ATOM   1577  C   PRO    97      36.674   8.365  17.114  1.00  0.00
C
ATOM   1578  O   PRO    97      37.685   9.027  17.285  1.00  0.00
O
ATOM   1579  CB  PRO    97      35.072  10.102  17.357  1.00  0.00
C
ATOM   1580 1HB  PRO    97      35.240   9.734  18.365  1.00  0.00
H
ATOM   1581 2HB  PRO    97      35.637  11.012  17.197  1.00  0.00
H
ATOM   1582  CG  PRO    97      33.652  10.335  17.162  1.00  0.00
C
ATOM   1583 1HG  PRO    97      33.183  10.713  18.069  1.00  0.00
H
ATOM   1584 2HG  PRO    97      33.490  11.014  16.323  1.00  0.00
H
ATOM   1585  CD  PRO    97      33.168   8.978  16.838  1.00  0.00
C
ATOM   1586 1HD  PRO    97      33.169   8.342  17.724  1.00  0.00
H
ATOM   1587 2HD  PRO    97      32.165   9.055  16.418  1.00  0.00
H
ATOM   1588  N   LEU    98      36.580   7.181  17.699  1.00  0.00
N
ATOM   1589  H   LEU    98      35.736   6.635  17.562  1.00  0.00
H
ATOM   1590  CA  LEU    98      37.548   6.673  18.696  1.00  0.00
C
ATOM   1591  HA  LEU    98      37.469   7.355  19.542  1.00  0.00
H
ATOM   1592  C   LEU    98      39.065   6.541  18.447  1.00  0.00
C
ATOM   1593  O   LEU    98      39.830   7.183  19.159  1.00  0.00
O
ATOM   1594  CB  LEU    98      37.062   5.294  19.175  1.00  0.00
C
ATOM   1595 1HB  LEU    98      35.998   5.367  19.383  1.00  0.00
H
ATOM   1596 2HB  LEU    98      37.179   4.601  18.343  1.00  0.00
H
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ATOM   1597  CG  LEU    98      37.710   4.641  20.404  1.00  0.00
C
ATOM   1598  HG  LEU    98      38.793   4.684  20.310  1.00  0.00
H
ATOM   1599  CD1 LEU    98      37.299   5.352  21.681  1.00  0.00
C
ATOM   1600 1HD1 LEU    98      37.701   4.823  22.541  1.00  0.00
H
ATOM   1601 2HD1 LEU    98      36.212   5.372  21.767  1.00  0.00
H
ATOM   1602 3HD1 LEU    98      37.689   6.369  21.684  1.00  0.00
H
ATOM   1603  CD2 LEU    98      37.302   3.175  20.476  1.00  0.00
C
ATOM   1604 1HD2 LEU    98      37.756   2.709  21.351  1.00  0.00
H
ATOM   1605 2HD2 LEU    98      37.646   2.649  19.586  1.00  0.00
H
ATOM   1606 3HD2 LEU    98      36.218   3.090  20.552  1.00  0.00
H
ATOM   1607  N   GLN    99      39.532   5.640  17.588  1.00  0.00
N
ATOM   1608  H   GLN    99      38.885   5.187  16.946  1.00  0.00
H
ATOM   1609  CA  GLN    99      40.932   5.180  17.659  1.00  0.00
C
ATOM   1610  HA  GLN    99      41.415   5.685  18.494  1.00  0.00
H
ATOM   1611  C   GLN    99      41.799   5.485  16.441  1.00  0.00
C
ATOM   1612  O   GLN    99      42.904   6.006  16.596  1.00  0.00
O
ATOM   1613  CB  GLN    99      40.965   3.677  17.981  1.00  0.00
C
ATOM   1614 1HB  GLN    99      40.465   3.522  18.937  1.00  0.00
H
ATOM   1615 2HB  GLN    99      40.391   3.152  17.221  1.00  0.00
H
ATOM   1616  CG  GLN    99      42.358   3.028  18.045  1.00  0.00
C
ATOM   1617 1HG  GLN    99      42.235   1.953  18.177  1.00  0.00
H
ATOM   1618 2HG  GLN    99      42.871   3.189  17.098  1.00  0.00
H
ATOM   1619  CD  GLN    99      43.238   3.545  19.168  1.00  0.00
C
ATOM   1620  OE1 GLN    99      43.091   3.163  20.326  1.00  0.00
O
ATOM   1621  NE2 GLN    99      44.177   4.388  18.841  1.00  0.00
N
ATOM   1622 1HE2 GLN    99      44.794   4.744  19.559  1.00  0.00
H
ATOM   1623 2HE2 GLN    99      44.268   4.696  17.887  1.00  0.00
H
ATOM   1624  N   ASP   100      41.335   5.227  15.225  1.00  0.00
N
ATOM   1625  H   ASP   100      40.439   4.757  15.108  1.00  0.00
H
ATOM   1626  CA  ASP   100      42.150   5.546  14.038  1.00  0.00
C
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ATOM   1627  HA  ASP   100      43.151   5.136  14.155  1.00  0.00
H
ATOM   1628  C   ASP   100      42.272   7.057  13.885  1.00  0.00
C
ATOM   1629  O   ASP   100      43.174   7.581  13.236  1.00  0.00
O
ATOM   1630  CB  ASP   100      41.535   5.001  12.749  1.00  0.00
C
ATOM   1631 1HB  ASP   100      40.496   5.308  12.710  1.00  0.00
H
ATOM   1632 2HB  ASP   100      42.060   5.435  11.900  1.00  0.00
H
ATOM   1633  CG  ASP   100      41.613   3.493  12.636  1.00  0.00
C
ATOM   1634  OD1 ASP   100      42.504   2.847  13.237  1.00  0.00
O
ATOM   1635  OD2 ASP   100      40.764   2.926  11.915  1.00  0.00
O
ATOM   1636  N   GLN   101      41.359   7.743  14.552  1.00  0.00
N
ATOM   1637  H   GLN   101      40.689   7.230  15.101  1.00  0.00
H
ATOM   1638  CA  GLN   101      41.274   9.192  14.548  1.00  0.00
C
ATOM   1639  HA  GLN   101      41.043   9.528  13.537  1.00  0.00
H
ATOM   1640  C   GLN   101      42.516   9.935  15.008  1.00  0.00
C
ATOM   1641  O   GLN   101      42.810  10.981  14.449  1.00  0.00
O
ATOM   1642  CB  GLN   101      40.127   9.576  15.491  1.00  0.00
C
ATOM   1643 1HB  GLN   101      39.186   9.291  15.032  1.00  0.00
H
ATOM   1644 2HB  GLN   101      40.244   8.963  16.385  1.00  0.00
H
ATOM   1645  CG  GLN   101      40.016  11.030  15.982  1.00  0.00
C
ATOM   1646 1HG  GLN   101      39.297  11.054  16.798  1.00  0.00
H
ATOM   1647 2HG  GLN   101      40.965  11.349  16.395  1.00  0.00
H
ATOM   1648  CD  GLN   101      39.571  12.054  14.966  1.00  0.00
C
ATOM   1649  OE1 GLN   101      38.683  12.812  15.252  1.00  0.00
O
ATOM   1650  NE2 GLN   101      40.211  12.154  13.834  1.00  0.00
N
ATOM   1651 1HE2 GLN   101      39.900  12.844  13.173  1.00  0.00
H
ATOM   1652 2HE2 GLN   101      41.015  11.573  13.657  1.00  0.00
H
ATOM   1653  N   ILE   102      43.147   9.496  16.089  1.00  0.00
N
ATOM   1654  H   ILE   102      43.181   8.502  16.279  1.00  0.00
H
ATOM   1655  CA  ILE   102      43.627  10.435  17.117  1.00  0.00
C
ATOM   1656  HA  ILE   102      42.777  11.053  17.403  1.00  0.00
H
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ATOM   1657  C   ILE   102      44.693  11.414  16.602  1.00  0.00
C
ATOM   1658  O   ILE   102      44.704  12.593  16.966  1.00  0.00
O
ATOM   1659  CB  ILE   102      44.068   9.676  18.412  1.00  0.00
C
ATOM   1660  HB  ILE   102      44.935   9.057  18.182  1.00  0.00
H
ATOM   1661  CG1 ILE   102      42.916   8.769  18.908  1.00  0.00
C
ATOM   1662 1HG1 ILE   102      42.089   9.405  19.225  1.00  0.00
H
ATOM   1663 2HG1 ILE   102      42.559   8.152  18.087  1.00  0.00
H
ATOM   1664  CG2 ILE   102      44.433  10.679  19.534  1.00  0.00
C
ATOM   1665 1HG2 ILE   102      44.767  10.148  20.425  1.00  0.00
H
ATOM   1666 2HG2 ILE   102      43.567  11.293  19.791  1.00  0.00
H
ATOM   1667 3HG2 ILE   102      45.243  11.331  19.209  1.00  0.00
H
ATOM   1668  CD1 ILE   102      43.257   7.813  20.062  1.00  0.00
C
ATOM   1669 1HD1 ILE   102      42.403   7.161  20.251  1.00  0.00
H
ATOM   1670 2HD1 ILE   102      43.473   8.373  20.972  1.00  0.00
H
ATOM   1671 3HD1 ILE   102      44.118   7.202  19.795  1.00  0.00
H
ATOM   1672  N   LYS   103      45.521  10.973  15.664  1.00  0.00
N
ATOM   1673  H   LYS   103      45.467  10.008  15.370  1.00  0.00
H
ATOM   1674  CA  LYS   103      46.492  11.865  15.025  1.00  0.00
C
ATOM   1675  HA  LYS   103      47.150  12.267  15.791  1.00  0.00
H
ATOM   1676  C   LYS   103      45.815  13.031  14.306  1.00  0.00
C
ATOM   1677  O   LYS   103      46.228  14.181  14.416  1.00  0.00
O
ATOM   1678  CB  LYS   103      47.303  11.051  14.012  1.00  0.00
C
ATOM   1679 1HB  LYS   103      47.615  10.123  14.487  1.00  0.00
H
ATOM   1680 2HB  LYS   103      46.647  10.793  13.182  1.00  0.00
H
ATOM   1681  CG  LYS   103      48.539  11.728  13.438  1.00  0.00
C
ATOM   1682 1HG  LYS   103      48.690  11.358  12.425  1.00  0.00
H
ATOM   1683 2HG  LYS   103      48.396  12.806  13.396  1.00  0.00
H
ATOM   1684  CD  LYS   103      49.777  11.395  14.260  1.00  0.00
C
ATOM   1685 1HD  LYS   103      49.664  11.788  15.271  1.00  0.00
H
ATOM   1686 2HD  LYS   103      49.875  10.311  14.310  1.00  0.00
H
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ATOM   1687  CE  LYS   103      51.039  11.965  13.625  1.00  0.00
C
ATOM   1688 1HE  LYS   103      51.093  11.626  12.588  1.00  0.00
H
ATOM   1689 2HE  LYS   103      50.981  13.055  13.630  1.00  0.00
H
ATOM   1690  NZ  LYS   103      52.276  11.522  14.345  1.00  0.00
N
ATOM   1691 1HZ  LYS   103      53.102  11.869  13.875  1.00  0.00
H
ATOM   1692 2HZ  LYS   103      52.313  10.509  14.374  1.00  0.00
H
ATOM   1693 3HZ  LYS   103      52.264  11.864  15.297  1.00  0.00
H
ATOM   1694  N   ILE   104      44.775  12.708  13.556  1.00  0.00
N
ATOM   1695  H   ILE   104      44.383  11.780  13.663  1.00  0.00
H
ATOM   1696  CA  ILE   104      44.187  13.576  12.538  1.00  0.00
C
ATOM   1697  HA  ILE   104      44.990  14.015  11.945  1.00  0.00
H
ATOM   1698  C   ILE   104      43.375  14.687  13.193  1.00  0.00
C
ATOM   1699  O   ILE   104      43.380  15.826  12.725  1.00  0.00
O
ATOM   1700  CB  ILE   104      43.238  12.761  11.593  1.00  0.00
C
ATOM   1701  HB  ILE   104      42.368  12.454  12.171  1.00  0.00
H
ATOM   1702  CG1 ILE   104      43.932  11.478  11.088  1.00  0.00
C
ATOM   1703 1HG1 ILE   104      44.729  11.760  10.402  1.00  0.00
H
ATOM   1704 2HG1 ILE   104      44.384  10.951  11.924  1.00  0.00
H
ATOM   1705  CG2 ILE   104      42.759  13.631  10.398  1.00  0.00
C
ATOM   1706 1HG2 ILE   104      42.054  13.075   9.779  1.00  0.00
H
ATOM   1707 2HG2 ILE   104      43.614  13.926   9.786  1.00  0.00
H
ATOM   1708 3HG2 ILE   104      42.259  14.529  10.757  1.00  0.00
H
ATOM   1709  CD1 ILE   104      43.014  10.468  10.398  1.00  0.00
C
ATOM   1710 1HD1 ILE   104      43.580   9.569  10.157  1.00  0.00
H
ATOM   1711 2HD1 ILE   104      42.621  10.883   9.471  1.00  0.00
H
ATOM   1712 3HD1 ILE   104      42.191  10.198  11.061  1.00  0.00
H
ATOM   1713  N   SER   105      42.694  14.376  14.291  1.00  0.00
N
ATOM   1714  H   SER   105      42.719  13.437  14.670  1.00  0.00
H
ATOM   1715  CA  SER   105      41.902  15.390  14.985  1.00  0.00
C
ATOM   1716  HA  SER   105      41.180  15.834  14.307  1.00  0.00
H
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ATOM   1717  C   SER   105      42.824  16.469  15.487  1.00  0.00
C
ATOM   1718  O   SER   105      42.546  17.654  15.347  1.00  0.00
O
ATOM   1719  CB  SER   105      41.188  14.810  16.196  1.00  0.00
C
ATOM   1720 1HB  SER   105      41.118  15.575  16.969  1.00  0.00
H
ATOM   1721 2HB  SER   105      40.184  14.509  15.911  1.00  0.00
H
ATOM   1722  OG  SER   105      41.904  13.690  16.685  1.00  0.00
O
ATOM   1723  HG  SER   105      41.711  13.600  17.629  1.00  0.00
H
ATOM   1724  N   GLU   106      43.946  16.041  16.041  1.00  0.00
N
ATOM   1725  H   GLU   106      44.119  15.047  16.128  1.00  0.00
H
ATOM   1726  CA  GLU   106      44.926  16.979  16.553  1.00  0.00
C
ATOM   1727  HA  GLU   106      44.424  17.667  17.234  1.00  0.00
H
ATOM   1728  C   GLU   106      45.507  17.807  15.412  1.00  0.00
C
ATOM   1729  O   GLU   106      45.673  19.006  15.574  1.00  0.00
O
ATOM   1730  CB  GLU   106      45.988  16.216  17.342  1.00  0.00
C
ATOM   1731 1HB  GLU   106      45.458  15.612  18.078  1.00  0.00
H
ATOM   1732 2HB  GLU   106      46.529  15.549  16.674  1.00  0.00
H
ATOM   1733  CG  GLU   106      46.983  17.101  18.072  1.00  0.00
C
ATOM   1734 1HG  GLU   106      47.657  17.557  17.346  1.00  0.00
H
ATOM   1735 2HG  GLU   106      46.434  17.894  18.580  1.00  0.00
H
ATOM   1736  CD  GLU   106      47.785  16.333  19.110  1.00  0.00
C
ATOM   1737  OE1 GLU   106      47.674  15.091  19.195  1.00  0.00
O
ATOM   1738  OE2 GLU   106      48.523  16.964  19.899  1.00  0.00
O
ATOM   1739  N   GLU   107      45.739  17.235  14.237  1.00  0.00
N
ATOM   1740  H   GLU   107      45.588  16.240  14.111  1.00  0.00
H
ATOM   1741  CA  GLU   107      46.227  18.053  13.123  1.00  0.00
C
ATOM   1742  HA  GLU   107      47.119  18.577  13.463  1.00  0.00
H
ATOM   1743  C   GLU   107      45.213  19.106  12.691  1.00  0.00
C
ATOM   1744  O   GLU   107      45.572  20.256  12.457  1.00  0.00
O
ATOM   1745  CB  GLU   107      46.582  17.246  11.866  1.00  0.00
C
ATOM   1746 1HB  GLU   107      45.675  16.779  11.484  1.00  0.00
H
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ATOM   1747 2HB  GLU   107      46.934  17.952  11.113  1.00  0.00
H
ATOM   1748  CG  GLU   107      47.635  16.160  12.015  1.00  0.00
C
ATOM   1749 1HG  GLU   107      47.245  15.385  12.660  1.00  0.00
H
ATOM   1750 2HG  GLU   107      47.802  15.714  11.036  1.00  0.00
H
ATOM   1751  CD  GLU   107      48.968  16.627  12.584  1.00  0.00
C
ATOM   1752  OE1 GLU   107      49.290  17.833  12.581  1.00  0.00
O
ATOM   1753  OE2 GLU   107      49.716  15.757  13.091  1.00  0.00
O
ATOM   1754  N   ALA   108      43.947  18.729  12.586  1.00  0.00
N
ATOM   1755  H   ALA   108      43.693  17.766  12.795  1.00  0.00
H
ATOM   1756  CA  ALA   108      42.917  19.664  12.147  1.00  0.00
C
ATOM   1757  HA  ALA   108      43.255  20.147  11.230  1.00  0.00
H
ATOM   1758  C   ALA   108      42.686  20.750  13.203  1.00  0.00
C
ATOM   1759  O   ALA   108      42.486  21.922  12.877  1.00  0.00
O
ATOM   1760  CB  ALA   108      41.626  18.903  11.860  1.00  0.00
C
ATOM   1761 1HB  ALA   108      41.809  18.132  11.110  1.00  0.00
H
ATOM   1762 2HB  ALA   108      40.866  19.594  11.491  1.00  0.00
H
ATOM   1763 3HB  ALA   108      41.273  18.433  12.776  1.00  0.00
H
ATOM   1764  N   TYR   109      42.729  20.378  14.474  1.00  0.00
N
ATOM   1765  H   TYR   109      42.860  19.396  14.711  1.00  0.00
H
ATOM   1766  CA  TYR   109      42.556  21.348  15.551  1.00  0.00
C
ATOM   1767  HA  TYR   109      41.637  21.904  15.365  1.00  0.00
H
ATOM   1768  C   TYR   109      43.744  22.311  15.540  1.00  0.00
C
ATOM   1769  O   TYR   109      43.576  23.528  15.640  1.00  0.00
O
ATOM   1770  CB  TYR   109      42.438  20.624  16.897  1.00  0.00
C
ATOM   1771 1HB  TYR   109      41.811  19.746  16.747  1.00  0.00
H
ATOM   1772 2HB  TYR   109      43.427  20.277  17.196  1.00  0.00
H
ATOM   1773  CG  TYR   109      41.824  21.408  18.050  1.00  0.00
C
ATOM   1774  CD1 TYR   109      41.425  22.763  17.929  1.00  0.00
C
ATOM   1775  HD1 TYR   109      41.542  23.304  17.005  1.00  0.00
H
ATOM   1776  CD2 TYR   109      41.609  20.763  19.287  1.00  0.00
C
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ATOM   1777  HD2 TYR   109      41.890  19.725  19.407  1.00  0.00
H
ATOM   1778  CE1 TYR   109      40.846  23.446  19.024  1.00  0.00
C
ATOM   1779  HE1 TYR   109      40.537  24.471  18.918  1.00  0.00
H
ATOM   1780  CE2 TYR   109      41.026  21.455  20.384  1.00  0.00
C
ATOM   1781  HE2 TYR   109      40.874  20.950  21.327  1.00  0.00
H
ATOM   1782  CZ  TYR   109      40.663  22.793  20.240  1.00  0.00
C
ATOM   1783  OH  TYR   109      40.121  23.495  21.285  1.00  0.00
O
ATOM   1784  HH  TYR   109      39.980  22.947  22.067  1.00  0.00
H
ATOM   1785  N   ARG   110      44.940  21.785  15.301  1.00  0.00
N
ATOM   1786  H   ARG   110      45.036  20.774  15.212  1.00  0.00
H
ATOM   1787  CA  ARG   110      46.143  22.612  15.170  1.00  0.00
C
ATOM   1788  HA  ARG   110      46.222  23.240  16.056  1.00  0.00
H
ATOM   1789  C   ARG   110      46.115  23.554  13.978  1.00  0.00
C
ATOM   1790  O   ARG   110      46.868  24.514  13.980  1.00  0.00
O
ATOM   1791  CB  ARG   110      47.406  21.748  15.081  1.00  0.00
C
ATOM   1792 1HB  ARG   110      47.223  20.921  14.399  1.00  0.00
H
ATOM   1793 2HB  ARG   110      48.213  22.355  14.669  1.00  0.00
H
ATOM   1794  CG  ARG   110      47.881  21.206  16.420  1.00  0.00
C
ATOM   1795 1HG  ARG   110      48.186  22.045  17.043  1.00  0.00
H
ATOM   1796 2HG  ARG   110      47.068  20.679  16.917  1.00  0.00
H
ATOM   1797  CD  ARG   110      49.063  20.260  16.252  1.00  0.00
C
ATOM   1798 1HD  ARG   110      48.743  19.387  15.681  1.00  0.00
H
ATOM   1799 2HD  ARG   110      49.855  20.775  15.706  1.00  0.00
H
ATOM   1800  NE  ARG   110      49.578  19.837  17.561  1.00  0.00
N
ATOM   1801  HE  ARG   110      49.117  20.218  18.376  1.00  0.00
H
ATOM   1802  CZ  ARG   110      50.596  19.021  17.792  1.00  0.00
C
ATOM   1803  NH1 ARG   110      51.272  18.413  16.857  1.00  0.00
N
ATOM   1804 1HH1 ARG   110      51.039  18.556  15.886  1.00  0.00
H
ATOM   1805 2HH1 ARG   110      52.029  17.798  17.106  1.00  0.00
H
ATOM   1806  NH2 ARG   110      50.952  18.809  19.025  1.00  0.00
N
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ATOM   1807 1HH2 ARG   110      50.453  19.266  19.769  1.00  0.00
H
ATOM   1808 2HH2 ARG   110      51.712  18.179  19.230  1.00  0.00
H
ATOM   1809  N   LEU   111      45.250  23.330  12.998  1.00  0.00
N
ATOM   1810  H   LEU   111      44.715  22.472  13.004  1.00  0.00
H
ATOM   1811  CA  LEU   111      45.060  24.279  11.891  1.00  0.00
C
ATOM   1812  HA  LEU   111      45.977  24.845  11.724  1.00  0.00
H
ATOM   1813  C   LEU   111      43.945  25.278  12.171  1.00  0.00
C
ATOM   1814  O   LEU   111      43.942  26.380  11.627  1.00  0.00
O
ATOM   1815  CB  LEU   111      44.693  23.536  10.602  1.00  0.00
C
ATOM   1816 1HB  LEU   111      43.983  22.755  10.868  1.00  0.00
H
ATOM   1817 2HB  LEU   111      44.158  24.240   9.965  1.00  0.00
H
ATOM   1818  CG  LEU   111      45.789  22.910   9.726  1.00  0.00
C
ATOM   1819  HG  LEU   111      46.015  23.610   8.923  1.00  0.00
H
ATOM   1820  CD1 LEU   111      47.097  22.596  10.440  1.00  0.00
C
ATOM   1821 1HD1 LEU   111      47.769  22.050   9.784  1.00  0.00
H
ATOM   1822 2HD1 LEU   111      46.905  21.987  11.318  1.00  0.00
H
ATOM   1823 3HD1 LEU   111      47.586  23.520  10.748  1.00  0.00
H
ATOM   1824  CD2 LEU   111      45.229  21.643   9.105  1.00  0.00
C
ATOM   1825 1HD2 LEU   111      45.960  21.212   8.425  1.00  0.00
H
ATOM   1826 2HD2 LEU   111      44.325  21.870   8.540  1.00  0.00
H
ATOM   1827 3HD2 LEU   111      45.002  20.913   9.883  1.00  0.00
H
ATOM   1828  N   THR   112      42.986  24.902  12.998  1.00  0.00
N
ATOM   1829  H   THR   112      43.018  23.974  13.404  1.00  0.00
H
ATOM   1830  CA  THR   112      41.846  25.768  13.306  1.00  0.00
C
ATOM   1831  HA  THR   112      41.552  26.300  12.402  1.00  0.00
H
ATOM   1832  C   THR   112      42.203  26.797  14.382  1.00  0.00
C
ATOM   1833  O   THR   112      41.797  27.961  14.321  1.00  0.00
O
ATOM   1834  CB  THR   112      40.658  24.890  13.759  1.00  0.00
C
ATOM   1835  HB  THR   112      40.895  24.415  14.712  1.00  0.00
H
ATOM   1836  OG1 THR   112      40.443  23.881  12.767  1.00  0.00
O
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ATOM   1837  HG1 THR   112      41.156  23.233  12.816  1.00  0.00
H
ATOM   1838  CG2 THR   112      39.360  25.665  13.883  1.00  0.00
C
ATOM   1839 1HG2 THR   112      38.559  24.977  14.154  1.00  0.00
H
ATOM   1840 2HG2 THR   112      39.114  26.131  12.929  1.00  0.00
H
ATOM   1841 3HG2 THR   112      39.447  26.429  14.654  1.00  0.00
H
ATOM   1842  N   GLN   113      43.002  26.381  15.352  1.00  0.00
N
ATOM   1843  H   GLN   113      43.325  25.417  15.352  1.00  0.00
H
ATOM   1844  CA  GLN   113      43.394  27.240  16.472  1.00  0.00
C
ATOM   1845  HA  GLN   113      42.468  27.662  16.862  1.00  0.00
H
ATOM   1846  C   GLN   113      44.343  28.445  16.252  1.00  0.00
C
ATOM   1847  O   GLN   113      44.209  29.437  16.975  1.00  0.00
O
ATOM   1848  CB  GLN   113      43.972  26.326  17.564  1.00  0.00
C
ATOM   1849 1HB  GLN   113      43.344  25.437  17.622  1.00  0.00
H
ATOM   1850 2HB  GLN   113      44.973  26.012  17.269  1.00  0.00
H
ATOM   1851  CG  GLN   113      44.035  26.939  18.961  1.00  0.00
C
ATOM   1852 1HG  GLN   113      44.473  26.216  19.648  1.00  0.00
H
ATOM   1853 2HG  GLN   113      44.675  27.819  18.941  1.00  0.00
H
ATOM   1854  CD  GLN   113      42.668  27.339  19.469  1.00  0.00
C
ATOM   1855  OE1 GLN   113      41.787  26.504  19.661  1.00  0.00
O
ATOM   1856  NE2 GLN   113      42.454  28.613  19.641  1.00  0.00
N
ATOM   1857 1HE2 GLN   113      41.543  28.914  19.960  1.00  0.00
H
ATOM   1858 2HE2 GLN   113      43.180  29.281  19.444  1.00  0.00
H
ATOM   1859  N   PRO   114      45.314  28.402  15.310  1.00  0.00
N
ATOM   1860  CA  PRO   114      46.204  29.573  15.273  1.00  0.00
C
ATOM   1861  HA  PRO   114      46.684  29.703  16.242  1.00  0.00
H
ATOM   1862  C   PRO   114      45.566  30.881  14.838  1.00  0.00
C
ATOM   1863  O   PRO   114      46.020  31.943  15.257  1.00  0.00
O
ATOM   1864  CB  PRO   114      47.252  29.184  14.223  1.00  0.00
C
ATOM   1865 1HB  PRO   114      46.977  29.588  13.249  1.00  0.00
H
ATOM   1866 2HB  PRO   114      48.240  29.536  14.515  1.00  0.00
H
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ATOM   1867  CG  PRO   114      47.220  27.736  14.180  1.00  0.00
C
ATOM   1868 1HG  PRO   114      47.620  27.360  13.238  1.00  0.00
H
ATOM   1869 2HG  PRO   114      47.775  27.329  15.025  1.00  0.00
H
ATOM   1870  CD  PRO   114      45.764  27.421  14.311  1.00  0.00
C
ATOM   1871 1HD  PRO   114      45.249  27.579  13.364  1.00  0.00
H
ATOM   1872 2HD  PRO   114      45.616  26.406  14.674  1.00  0.00
H
ATOM   1873  N   GLN   115      44.560  30.790  13.970  1.00  0.00
N
ATOM   1874  H   GLN   115      44.287  29.869  13.645  1.00  0.00
H
ATOM   1875  CA  GLN   115      43.785  31.913  13.418  1.00  0.00
C
ATOM   1876  HA  GLN   115      43.021  31.479  12.774  1.00  0.00
H
ATOM   1877  C   GLN   115      44.572  32.885  12.530  1.00  0.00
C
ATOM   1878  O   GLN   115      43.988  33.706  11.834  1.00  0.00
O
ATOM   1879  CB  GLN   115      43.042  32.657  14.532  1.00  0.00
C
ATOM   1880 1HB  GLN   115      43.780  33.100  15.195  1.00  0.00
H
ATOM   1881 2HB  GLN   115      42.457  33.458  14.087  1.00  0.00
H
ATOM   1882  CG  GLN   115      42.104  31.778  15.357  1.00  0.00
C
ATOM   1883 1HG  GLN   115      41.269  31.465  14.736  1.00  0.00
H
ATOM   1884 2HG  GLN   115      42.630  30.888  15.685  1.00  0.00
H
ATOM   1885  CD  GLN   115      41.573  32.472  16.589  1.00  0.00
C
ATOM   1886  OE1 GLN   115      41.955  33.592  16.917  1.00  0.00
O
ATOM   1887  NE2 GLN   115      40.723  31.797  17.312  1.00  0.00
N
ATOM   1888 1HE2 GLN   115      40.361  32.212  18.157  1.00  0.00
H
ATOM   1889 2HE2 GLN   115      40.444  30.870  17.023  1.00  0.00
H
ATOM   1890  N   ASP   116      45.889  32.737  12.481  1.00  0.00
N
ATOM   1891  H   ASP   116      46.319  32.084  13.117  1.00  0.00
H
ATOM   1892  CA  ASP   116      46.754  33.502  11.575  1.00  0.00
C
ATOM   1893  HA  ASP   116      46.483  34.557  11.640  1.00  0.00
H
ATOM   1894  C   ASP   116      46.565  33.089  10.119  1.00  0.00
C
ATOM   1895  O   ASP   116      46.816  33.873   9.200  1.00  0.00
O
ATOM   1896  CB  ASP   116      48.230  33.368  11.988  1.00  0.00
C
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ATOM   1897 1HB  ASP   116      48.861  33.873  11.256  1.00  0.00
H
ATOM   1898 2HB  ASP   116      48.352  33.869  12.948  1.00  0.00
H
ATOM   1899  CG  ASP   116      48.696  31.921  12.164  1.00  0.00
C
ATOM   1900  OD1 ASP   116      48.427  31.011  11.350  1.00  0.00
O
ATOM   1901  OD2 ASP   116      49.340  31.674  13.201  1.00  0.00
O
ATOM   1902  N   LYS   117      46.075  31.871   9.925  1.00  0.00
N
ATOM   1903  H   LYS   117      45.948  31.289  10.740  1.00  0.00
H
ATOM   1904  CA  LYS   117      45.733  31.317   8.617  1.00  0.00
C
ATOM   1905  HA  LYS   117      45.577  32.131   7.908  1.00  0.00
H
ATOM   1906  C   LYS   117      44.429  30.548   8.777  1.00  0.00
C
ATOM   1907  O   LYS   117      44.392  29.326   8.631  1.00  0.00
O
ATOM   1908  CB  LYS   117      46.835  30.380   8.091  1.00  0.00
C
ATOM   1909 1HB  LYS   117      46.977  29.589   8.823  1.00  0.00
H
ATOM   1910 2HB  LYS   117      46.487  29.923   7.166  1.00  0.00
H
ATOM   1911  CG  LYS   117      48.207  31.002   7.819  1.00  0.00
C
ATOM   1912 1HG  LYS   117      48.556  31.512   8.715  1.00  0.00
H
ATOM   1913 2HG  LYS   117      48.906  30.198   7.589  1.00  0.00
H
ATOM   1914  CD  LYS   117      48.208  31.982   6.654  1.00  0.00
C
ATOM   1915 1HD  LYS   117      47.845  31.483   5.761  1.00  0.00
H
ATOM   1916 2HD  LYS   117      47.562  32.830   6.881  1.00  0.00
H
ATOM   1917  CE  LYS   117      49.614  32.482   6.397  1.00  0.00
C
ATOM   1918 1HE  LYS   117      49.989  32.963   7.303  1.00  0.00
H
ATOM   1919 2HE  LYS   117      50.257  31.632   6.159  1.00  0.00
H
ATOM   1920  NZ  LYS   117      49.651  33.461   5.267  1.00  0.00
N
ATOM   1921 1HZ  LYS   117      50.589  33.829   5.161  1.00  0.00
H
ATOM   1922 2HZ  LYS   117      49.018  34.230   5.451  1.00  0.00
H
ATOM   1923 3HZ  LYS   117      49.372  33.011   4.404  1.00  0.00
H
ATOM   1924  N   PHE   118      43.346  31.258   9.059  1.00  0.00
N
ATOM   1925  H   PHE   118      43.425  32.267   9.183  1.00  0.00
H
ATOM   1926  CA  PHE   118      42.008  30.656   9.133  1.00  0.00
C
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ATOM   1927  HA  PHE   118      42.086  29.682   9.615  1.00  0.00
H
ATOM   1928  C   PHE   118      41.459  30.475   7.708  1.00  0.00
C
ATOM   1929  O   PHE   118      40.338  30.022   7.479  1.00  0.00
O
ATOM   1930  CB  PHE   118      41.065  31.547   9.950  1.00  0.00
C
ATOM   1931 1HB  PHE   118      41.665  32.276  10.495  1.00  0.00
H
ATOM   1932 2HB  PHE   118      40.412  32.092   9.267  1.00  0.00
H
ATOM   1933  CG  PHE   118      40.214  30.796  10.954  1.00  0.00
C
ATOM   1934  CD1 PHE   118      39.947  31.377  12.208  1.00  0.00
C
ATOM   1935  HD1 PHE   118      40.352  32.351  12.447  1.00  0.00
H
ATOM   1936  CD2 PHE   118      39.658  29.530  10.663  1.00  0.00
C
ATOM   1937  HD2 PHE   118      39.825  29.065   9.704  1.00  0.00
H
ATOM   1938  CE1 PHE   118      39.137  30.709  13.164  1.00  0.00
C
ATOM   1939  HE1 PHE   118      38.926  31.176  14.116  1.00  0.00
H
ATOM   1940  CE2 PHE   118      38.862  28.847  11.614  1.00  0.00
C
ATOM   1941  HE2 PHE   118      38.447  27.878  11.375  1.00  0.00
H
ATOM   1942  CZ  PHE   118      38.601  29.439  12.868  1.00  0.00
C
ATOM   1943  HZ  PHE   118      37.984  28.927  13.593  1.00  0.00
H
ATOM   1944  N   ILE   119      42.293  30.841   6.746  1.00  0.00
N
ATOM   1945  H   ILE   119      43.172  31.243   7.020  1.00  0.00
H
ATOM   1946  CA  ILE   119      42.050  30.698   5.315  1.00  0.00
C
ATOM   1947  HA  ILE   119      41.169  31.271   5.032  1.00  0.00
H
ATOM   1948  C   ILE   119      41.825  29.216   4.994  1.00  0.00
C
ATOM   1949  O   ILE   119      42.595  28.350   5.422  1.00  0.00
O
ATOM   1950  CB  ILE   119      43.294  31.222   4.540  1.00  0.00
C
ATOM   1951  HB  ILE   119      44.132  30.596   4.824  1.00  0.00
H
ATOM   1952  CG1 ILE   119      43.647  32.671   4.940  1.00  0.00
C
ATOM   1953 1HG1 ILE   119      42.874  33.336   4.557  1.00  0.00
H
ATOM   1954 2HG1 ILE   119      43.659  32.763   6.023  1.00  0.00
H
ATOM   1955  CG2 ILE   119      43.091  31.125   3.016  1.00  0.00
C
ATOM   1956 1HG2 ILE   119      43.990  31.441   2.487  1.00  0.00
H
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ATOM   1957 2HG2 ILE   119      42.258  31.762   2.711  1.00  0.00
H
ATOM   1958 3HG2 ILE   119      42.879  30.100   2.723  1.00  0.00
H
ATOM   1959  CD1 ILE   119      45.014  33.162   4.440  1.00  0.00
C
ATOM   1960 1HD1 ILE   119      45.220  34.141   4.871  1.00  0.00
H
ATOM   1961 2HD1 ILE   119      45.014  33.254   3.354  1.00  0.00
H
ATOM   1962 3HD1 ILE   119      45.796  32.469   4.747  1.00  0.00
H
ATOM   1963  N   GLU   120      40.779  28.919   4.237  1.00  0.00
N
ATOM   1964  H   GLU   120      40.217  29.673   3.848  1.00  0.00
H
ATOM   1965  CA  GLU   120      40.360  27.542   3.955  1.00  0.00
C
ATOM   1966  HA  GLU   120      40.154  27.026   4.893  1.00  0.00
H
ATOM   1967  C   GLU   120      41.443  26.773   3.198  1.00  0.00
C
ATOM   1968  O   GLU   120      41.796  25.633   3.517  1.00  0.00
O
ATOM   1969  CB  GLU   120      39.100  27.557   3.074  1.00  0.00
C
ATOM   1970 1HB  GLU   120      39.332  28.057   2.137  1.00  0.00
H
ATOM   1971 2HB  GLU   120      38.857  26.533   2.825  1.00  0.00
H
ATOM   1972  CG  GLU   120      37.847  28.196   3.669  1.00  0.00
C
ATOM   1973 1HG  GLU   120      36.985  27.858   3.092  1.00  0.00
H
ATOM   1974 2HG  GLU   120      37.727  27.849   4.694  1.00  0.00
H
ATOM   1975  CD  GLU   120      37.864  29.721   3.652  1.00  0.00
C
ATOM   1976  OE1 GLU   120      38.658  30.338   2.903  1.00  0.00
O
ATOM   1977  OE2 GLU   120      37.102  30.336   4.431  1.00  0.00
O
ATOM   1978  N   LYS   121      42.010  27.440   2.202  1.00  0.00
N
ATOM   1979  H   LYS   121      41.679  28.380   1.995  1.00  0.00
H
ATOM   1980  CA  LYS   121      43.056  26.861   1.361  1.00  0.00
C
ATOM   1981  HA  LYS   121      42.661  25.976   0.860  1.00  0.00
H
ATOM   1982  C   LYS   121      44.283  26.440   2.162  1.00  0.00
C
ATOM   1983  O   LYS   121      44.927  25.429   1.874  1.00  0.00
O
ATOM   1984  CB  LYS   121      43.443  27.903   0.306  1.00  0.00
C
ATOM   1985 1HB  LYS   121      42.537  28.218  -0.214  1.00  0.00
H
ATOM   1986 2HB  LYS   121      43.870  28.772   0.806  1.00  0.00
H
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ATOM   1987  CG  LYS   121      44.437  27.403  -0.718  1.00  0.00
C
ATOM   1988 1HG  LYS   121      45.346  27.100  -0.203  1.00  0.00
H
ATOM   1989 2HG  LYS   121      44.013  26.543  -1.238  1.00  0.00
H
ATOM   1990  CD  LYS   121      44.778  28.476  -1.732  1.00  0.00
C
ATOM   1991 1HD  LYS   121      43.866  28.793  -2.237  1.00  0.00
H
ATOM   1992 2HD  LYS   121      45.212  29.333  -1.217  1.00  0.00
H
ATOM   1993  CE  LYS   121      45.766  27.960  -2.767  1.00  0.00
C
ATOM   1994 1HE  LYS   121      45.341  27.085  -3.264  1.00  0.00
H
ATOM   1995 2HE  LYS   121      45.924  28.736  -3.518  1.00  0.00
H
ATOM   1996  NZ  LYS   121      47.088  27.596  -2.147  1.00  0.00
N
ATOM   1997 1HZ  LYS   121      47.755  27.353  -2.869  1.00  0.00
H
ATOM   1998 2HZ  LYS   121      46.974  26.800  -1.531  1.00  0.00
H
ATOM   1999 3HZ  LYS   121      47.448  28.384  -1.622  1.00  0.00
H
ATOM   2000  N   GLU   122      44.608  27.194   3.195  1.00  0.00
N
ATOM   2001  H   GLU   122      44.032  27.984   3.442  1.00  0.00
H
ATOM   2002  CA  GLU   122      45.811  26.912   3.969  1.00  0.00
C
ATOM   2003  HA  GLU   122      46.634  26.714   3.280  1.00  0.00
H
ATOM   2004  C   GLU   122      45.632  25.681   4.848  1.00  0.00
C
ATOM   2005  O   GLU   122      46.558  24.875   4.990  1.00  0.00
O
ATOM   2006  CB  GLU   122      46.170  28.128   4.816  1.00  0.00
C
ATOM   2007 1HB  GLU   122      45.341  28.346   5.488  1.00  0.00
H
ATOM   2008 2HB  GLU   122      47.047  27.897   5.415  1.00  0.00
H
ATOM   2009  CG  GLU   122      46.448  29.361   3.969  1.00  0.00
C
ATOM   2010 1HG  GLU   122      45.552  29.602   3.399  1.00  0.00
H
ATOM   2011 2HG  GLU   122      46.662  30.202   4.623  1.00  0.00
H
ATOM   2012  CD  GLU   122      47.589  29.184   2.992  1.00  0.00
C
ATOM   2013  OE1 GLU   122      48.760  29.092   3.412  1.00  0.00
O
ATOM   2014  OE2 GLU   122      47.323  29.168   1.771  1.00  0.00
O
ATOM   2015  N   ALA   123      44.431  25.491   5.382  1.00  0.00
N
ATOM   2016  H   ALA   123      43.697  26.174   5.237  1.00  0.00
H
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ATOM   2017  CA  ALA   123      44.149  24.294   6.168  1.00  0.00
C
ATOM   2018  HA  ALA   123      44.908  24.192   6.945  1.00  0.00
H
ATOM   2019  C   ALA   123      44.226  23.076   5.257  1.00  0.00
C
ATOM   2020  O   ALA   123      44.759  22.035   5.644  1.00  0.00
O
ATOM   2021  CB  ALA   123      42.763  24.380   6.820  1.00  0.00
C
ATOM   2022 1HB  ALA   123      42.773  25.139   7.599  1.00  0.00
H
ATOM   2023 2HB  ALA   123      42.511  23.420   7.274  1.00  0.00
H
ATOM   2024 3HB  ALA   123      42.005  24.631   6.075  1.00  0.00
H
ATOM   2025  N   SER   124      43.708  23.213   4.042  1.00  0.00
N
ATOM   2026  H   SER   124      43.277  24.094   3.777  1.00  0.00
H
ATOM   2027  CA  SER   124      43.670  22.085   3.116  1.00  0.00
C
ATOM   2028  HA  SER   124      43.118  21.287   3.607  1.00  0.00
H
ATOM   2029  C   SER   124      45.056  21.553   2.784  1.00  0.00
C
ATOM   2030  O   SER   124      45.244  20.353   2.602  1.00  0.00
O
ATOM   2031  CB  SER   124      42.941  22.443   1.815  1.00  0.00
C
ATOM   2032 1HB  SER   124      42.689  21.521   1.291  1.00  0.00
H
ATOM   2033 2HB  SER   124      42.021  22.976   2.050  1.00  0.00
H
ATOM   2034  OG  SER   124      43.733  23.235   0.950  1.00  0.00
O
ATOM   2035  HG  SER   124      44.009  24.040   1.412  1.00  0.00
H
ATOM   2036  N   GLU   125      46.046  22.429   2.706  1.00  0.00
N
ATOM   2037  H   GLU   125      45.868  23.414   2.861  1.00  0.00
H
ATOM   2038  CA  GLU   125      47.382  21.987   2.332  1.00  0.00
C
ATOM   2039  HA  GLU   125      47.288  21.282   1.508  1.00  0.00
H
ATOM   2040  C   GLU   125      48.073  21.275   3.481  1.00  0.00
C
ATOM   2041  O   GLU   125      48.699  20.230   3.303  1.00  0.00
O
ATOM   2042  CB  GLU   125      48.219  23.177   1.864  1.00  0.00
C
ATOM   2043 1HB  GLU   125      47.568  23.849   1.308  1.00  0.00
H
ATOM   2044 2HB  GLU   125      48.600  23.718   2.728  1.00  0.00
H
ATOM   2045  CG  GLU   125      49.376  22.769   0.964  1.00  0.00
C
ATOM   2046 1HG  GLU   125      49.975  23.650   0.732  1.00  0.00
H
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ATOM   2047 2HG  GLU   125      50.002  22.054   1.498  1.00  0.00
H
ATOM   2048  CD  GLU   125      48.889  22.127  -0.332  1.00  0.00
C
ATOM   2049  OE1 GLU   125      47.802  22.495  -0.846  1.00  0.00
O
ATOM   2050  OE2 GLU   125      49.560  21.207  -0.835  1.00  0.00
O
ATOM   2051  N   LYS   126      47.941  21.823   4.679  1.00  0.00
N
ATOM   2052  H   LYS   126      47.402  22.676   4.792  1.00  0.00
H
ATOM   2053  CA  LYS   126      48.596  21.220   5.834  1.00  0.00
C
ATOM   2054  HA  LYS   126      49.643  21.036   5.592  1.00  0.00
H
ATOM   2055  C   LYS   126      47.971  19.875   6.159  1.00  0.00
C
ATOM   2056  O   LYS   126      48.686  18.915   6.422  1.00  0.00
O
ATOM   2057  CB  LYS   126      48.537  22.160   7.037  1.00  0.00
C
ATOM   2058 1HB  LYS   126      47.502  22.460   7.195  1.00  0.00
H
ATOM   2059 2HB  LYS   126      48.889  21.617   7.914  1.00  0.00
H
ATOM   2060  CG  LYS   126      49.390  23.407   6.871  1.00  0.00
C
ATOM   2061 1HG  LYS   126      50.429  23.104   6.753  1.00  0.00
H
ATOM   2062 2HG  LYS   126      49.077  23.934   5.973  1.00  0.00
H
ATOM   2063  CD  LYS   126      49.296  24.364   8.050  1.00  0.00
C
ATOM   2064 1HD  LYS   126      48.261  24.687   8.172  1.00  0.00
H
ATOM   2065 2HD  LYS   126      49.632  23.860   8.956  1.00  0.00
H
ATOM   2066  CE  LYS   126      50.182  25.569   7.781  1.00  0.00
C
ATOM   2067 1HE  LYS   126      51.213  25.224   7.673  1.00  0.00
H
ATOM   2068 2HE  LYS   126      49.879  26.011   6.832  1.00  0.00
H
ATOM   2069  NZ  LYS   126      50.138  26.630   8.839  1.00  0.00
N
ATOM   2070 1HZ  LYS   126      50.745  27.394   8.576  1.00  0.00
H
ATOM   2071 2HZ  LYS   126      50.458  26.259   9.726  1.00  0.00
H
ATOM   2072 3HZ  LYS   126      49.198  26.984   8.954  1.00  0.00
H
ATOM   2073  N   LEU   127      46.650  19.773   6.093  1.00  0.00
N
ATOM   2074  H   LEU   127      46.084  20.585   5.864  1.00  0.00
H
ATOM   2075  CA  LEU   127      46.001  18.493   6.377  1.00  0.00
C
ATOM   2076  HA  LEU   127      46.358  18.134   7.343  1.00  0.00
H
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ATOM   2077  C   LEU   127      46.369  17.451   5.337  1.00  0.00
C
ATOM   2078  O   LEU   127      46.624  16.306   5.694  1.00  0.00
O
ATOM   2079  CB  LEU   127      44.479  18.635   6.435  1.00  0.00
C
ATOM   2080 1HB  LEU   127      44.216  19.636   6.101  1.00  0.00
H
ATOM   2081 2HB  LEU   127      44.030  17.923   5.742  1.00  0.00
H
ATOM   2082  CG  LEU   127      43.871  18.405   7.826  1.00  0.00
C
ATOM   2083  HG  LEU   127      44.434  18.990   8.549  1.00  0.00
H
ATOM   2084  CD1 LEU   127      42.440  18.916   7.822  1.00  0.00
C
ATOM   2085 1HD1 LEU   127      41.984  18.744   8.796  1.00  0.00
H
ATOM   2086 2HD1 LEU   127      41.858  18.408   7.055  1.00  0.00
H
ATOM   2087 3HD1 LEU   127      42.436  19.987   7.619  1.00  0.00
H
ATOM   2088  CD2 LEU   127      43.909  16.943   8.272  1.00  0.00
C
ATOM   2089 1HD2 LEU   127      43.488  16.852   9.274  1.00  0.00
H
ATOM   2090 2HD2 LEU   127      44.939  16.586   8.300  1.00  0.00
H
ATOM   2091 3HD2 LEU   127      43.339  16.322   7.583  1.00  0.00
H
ATOM   2092  N   LYS   128      46.440  17.842   4.068  1.00  0.00
N
ATOM   2093  H   LYS   128      46.219  18.801   3.818  1.00  0.00
H
ATOM   2094  CA  LYS   128      46.819  16.900   3.012  1.00  0.00
C
ATOM   2095  HA  LYS   128      46.119  16.063   3.014  1.00  0.00
H
ATOM   2096  C   LYS   128      48.203  16.342   3.288  1.00  0.00
C
ATOM   2097  O   LYS   128      48.398  15.134   3.288  1.00  0.00
O
ATOM   2098  CB  LYS   128      46.804  17.581   1.638  1.00  0.00
C
ATOM   2099 1HB  LYS   128      45.828  18.036   1.478  1.00  0.00
H
ATOM   2100 2HB  LYS   128      47.556  18.371   1.628  1.00  0.00
H
ATOM   2101  CG  LYS   128      47.088  16.634   0.488  1.00  0.00
C
ATOM   2102 1HG  LYS   128      48.044  16.143   0.657  1.00  0.00
H
ATOM   2103 2HG  LYS   128      46.304  15.880   0.449  1.00  0.00
H
ATOM   2104  CD  LYS   128      47.151  17.371  -0.838  1.00  0.00
C
ATOM   2105 1HD  LYS   128      46.195  17.856  -1.031  1.00  0.00
H
ATOM   2106 2HD  LYS   128      47.935  18.127  -0.788  1.00  0.00
H
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ATOM   2107  CE  LYS   128      47.471  16.401  -1.966  1.00  0.00
C
ATOM   2108 1HE  LYS   128      48.419  15.906  -1.743  1.00  0.00
H
ATOM   2109 2HE  LYS   128      46.690  15.639  -2.012  1.00  0.00
H
ATOM   2110  NZ  LYS   128      47.576  17.069  -3.297  1.00  0.00
N
ATOM   2111 1HZ  LYS   128      47.886  16.401  -3.992  1.00  0.00
H
ATOM   2112 2HZ  LYS   128      48.242  17.832  -3.247  1.00  0.00
H
ATOM   2113 3HZ  LYS   128      46.674  17.444  -3.567  1.00  0.00
H
ATOM   2114  N   ARG   129      49.162  17.215   3.563  1.00  0.00
N
ATOM   2115  H   ARG   129      48.951  18.209   3.585  1.00  0.00
H
ATOM   2116  CA  ARG   129      50.532  16.758   3.787  1.00  0.00
C
ATOM   2117  HA  ARG   129      50.818  16.115   2.954  1.00  0.00
H
ATOM   2118  C   ARG   129      50.664  15.916   5.044  1.00  0.00
C
ATOM   2119  O   ARG   129      51.360  14.908   5.017  1.00  0.00
O
ATOM   2120  CB  ARG   129      51.495  17.942   3.834  1.00  0.00
C
ATOM   2121 1HB  ARG   129      51.144  18.654   4.582  1.00  0.00
H
ATOM   2122 2HB  ARG   129      52.477  17.578   4.135  1.00  0.00
H
ATOM   2123  CG  ARG   129      51.643  18.651   2.494  1.00  0.00
C
ATOM   2124 1HG  ARG   129      52.038  17.953   1.759  1.00  0.00
H
ATOM   2125 2HG  ARG   129      50.673  19.014   2.156  1.00  0.00
H
ATOM   2126  CD  ARG   129      52.587  19.821   2.635  1.00  0.00
C
ATOM   2127 1HD  ARG   129      52.216  20.465   3.430  1.00  0.00
H
ATOM   2128 2HD  ARG   129      53.572  19.449   2.922  1.00  0.00
H
ATOM   2129  NE  ARG   129      52.715  20.609   1.403  1.00  0.00
N
ATOM   2130  HE  ARG   129      52.291  20.233   0.569  1.00  0.00
H
ATOM   2131  CZ  ARG   129      53.354  21.766   1.283  1.00  0.00
C
ATOM   2132  NH1 ARG   129      53.929  22.393   2.276  1.00  0.00
N
ATOM   2133 1HH1 ARG   129      54.000  21.945   3.177  1.00  0.00
H
ATOM   2134 2HH1 ARG   129      54.292  23.324   2.141  1.00  0.00
H
ATOM   2135  NH2 ARG   129      53.400  22.326   0.112  1.00  0.00
N
ATOM   2136 1HH2 ARG   129      52.930  21.892  -0.669  1.00  0.00
H
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ATOM   2137 2HH2 ARG   129      53.939  23.170  -0.008  1.00  0.00
H
ATOM   2138  N   TRP   130      49.990  16.272   6.128  1.00  0.00
N
ATOM   2139  H   TRP   130      49.432  17.120   6.131  1.00  0.00
H
ATOM   2140  CA  TRP   130      50.060  15.450   7.337  1.00  0.00
C
ATOM   2141  HA  TRP   130      51.106  15.300   7.602  1.00  0.00
H
ATOM   2142  C   TRP   130      49.452  14.068   7.146  1.00  0.00
C
ATOM   2143  O   TRP   130      50.006  13.068   7.612  1.00  0.00
O
ATOM   2144  CB  TRP   130      49.348  16.122   8.509  1.00  0.00
C
ATOM   2145 1HB  TRP   130      48.388  16.521   8.180  1.00  0.00
H
ATOM   2146 2HB  TRP   130      49.161  15.357   9.261  1.00  0.00
H
ATOM   2147  CG  TRP   130      50.160  17.198   9.158  1.00  0.00
C
ATOM   2148  CD1 TRP   130      49.890  18.529   9.202  1.00  0.00
C
ATOM   2149  HD1 TRP   130      49.028  18.987   8.732  1.00  0.00
H
ATOM   2150  CD2 TRP   130      51.374  17.029   9.913  1.00  0.00
C
ATOM   2151  NE1 TRP   130      50.837  19.211   9.915  1.00  0.00
N
ATOM   2152  HE1 TRP   130      50.828  20.217  10.072  1.00  0.00
H
ATOM   2153  CE2 TRP   130      51.758  18.316  10.387  1.00  0.00
C
ATOM   2154  CE3 TRP   130      52.195  15.922  10.216  1.00  0.00
C
ATOM   2155  HE3 TRP   130      51.952  14.941   9.838  1.00  0.00
H
ATOM   2156  CZ2 TRP   130      52.907  18.515  11.175  1.00  0.00
C
ATOM   2157  HZ2 TRP   130      53.172  19.501  11.527  1.00  0.00
H
ATOM   2158  CZ3 TRP   130      53.353  16.118  11.009  1.00  0.00
C
ATOM   2159  HZ3 TRP   130      53.991  15.279  11.247  1.00  0.00
H
ATOM   2160  CH2 TRP   130      53.689  17.417  11.487  1.00  0.00
C
ATOM   2161  HH2 TRP   130      54.571  17.547  12.096  1.00  0.00
H
ATOM   2162  N   LEU   131      48.324  13.990   6.457  1.00  0.00
N
ATOM   2163  H   LEU   131      47.878  14.831   6.101  1.00  0.00
H
ATOM   2164  CA  LEU   131      47.692  12.699   6.213  1.00  0.00
C
ATOM   2165  HA  LEU   131      47.598  12.157   7.153  1.00  0.00
H
ATOM   2166  C   LEU   131      48.542  11.861   5.277  1.00  0.00
C
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ATOM   2167  O   LEU   131      48.738  10.673   5.517  1.00  0.00
O
ATOM   2168  CB  LEU   131      46.309  12.904   5.607  1.00  0.00
C
ATOM   2169 1HB  LEU   131      46.380  13.687   4.853  1.00  0.00
H
ATOM   2170 2HB  LEU   131      46.025  11.984   5.111  1.00  0.00
H
ATOM   2171  CG  LEU   131      45.189  13.252   6.591  1.00  0.00
C
ATOM   2172  HG  LEU   131      45.529  14.037   7.264  1.00  0.00
H
ATOM   2173  CD1 LEU   131      43.985  13.763   5.834  1.00  0.00
C
ATOM   2174 1HD1 LEU   131      43.188  14.005   6.536  1.00  0.00
H
ATOM   2175 2HD1 LEU   131      43.633  13.001   5.137  1.00  0.00
H
ATOM   2176 3HD1 LEU   131      44.259  14.663   5.283  1.00  0.00
H
ATOM   2177  CD2 LEU   131      44.790  12.027   7.406  1.00  0.00
C
ATOM   2178 1HD2 LEU   131      43.920  12.258   8.015  1.00  0.00
H
ATOM   2179 2HD2 LEU   131      45.606  11.739   8.067  1.00  0.00
H
ATOM   2180 3HD2 LEU   131      44.546  11.192   6.746  1.00  0.00
H
ATOM   2181  N   ASP   132      49.108  12.493   4.260  1.00  0.00
N
ATOM   2182  H   ASP   132      48.913  13.479   4.106  1.00  0.00
H
ATOM   2183  CA  ASP   132      49.980  11.798   3.317  1.00  0.00
C
ATOM   2184  HA  ASP   132      49.445  10.947   2.900  1.00  0.00
H
ATOM   2185  C   ASP   132      51.228  11.267   4.016  1.00  0.00
C
ATOM   2186  O   ASP   132      51.724  10.193   3.682  1.00  0.00
O
ATOM   2187  CB  ASP   132      50.419  12.722   2.177  1.00  0.00
C
ATOM   2188 1HB  ASP   132      50.736  13.677   2.594  1.00  0.00
H
ATOM   2189 2HB  ASP   132      51.275  12.268   1.680  1.00  0.00
H
ATOM   2190  CG  ASP   132      49.337  12.958   1.130  1.00  0.00
C
ATOM   2191  OD1 ASP   132      48.348  12.204   1.017  1.00  0.00
O
ATOM   2192  OD2 ASP   132      49.538  13.886   0.313  1.00  0.00
O
ATOM   2193  N   THR   133      51.741  11.981   5.009  1.00  0.00
N
ATOM   2194  H   THR   133      51.348  12.889   5.235  1.00  0.00
H
ATOM   2195  CA  THR   133      52.891  11.486   5.765  1.00  0.00
C
ATOM   2196  HA  THR   133      53.650  11.155   5.058  1.00  0.00
H
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ATOM   2197  C   THR   133      52.511  10.302   6.649  1.00  0.00
C
ATOM   2198  O   THR   133      53.153   9.248   6.605  1.00  0.00
O
ATOM   2199  CB  THR   133      53.497  12.590   6.668  1.00  0.00
C
ATOM   2200  HB  THR   133      52.766  12.888   7.420  1.00  0.00
H
ATOM   2201  OG1 THR   133      53.826  13.723   5.863  1.00  0.00
O
ATOM   2202  HG1 THR   133      54.762  13.922   5.997  1.00  0.00
H
ATOM   2203  CG2 THR   133      54.778  12.151   7.359  1.00  0.00
C
ATOM   2204 1HG2 THR   133      55.201  12.995   7.905  1.00  0.00
H
ATOM   2205 2HG2 THR   133      55.501  11.800   6.623  1.00  0.00
H
ATOM   2206 3HG2 THR   133      54.567  11.352   8.069  1.00  0.00
H
ATOM   2207  N   THR   134      51.499  10.452   7.488  1.00  0.00
N
ATOM   2208  H   THR   134      50.957  11.315   7.499  1.00  0.00
H
ATOM   2209  CA  THR   134      51.228   9.424   8.492  1.00  0.00
C
ATOM   2210  HA  THR   134      52.181   9.089   8.899  1.00  0.00
H
ATOM   2211  C   THR   134      50.511   8.206   7.923  1.00  0.00
C
ATOM   2212  O   THR   134      50.867   7.073   8.241  1.00  0.00
O
ATOM   2213  CB  THR   134      50.410  10.016   9.655  1.00  0.00
C
ATOM   2214  HB  THR   134      49.409  10.261   9.308  1.00  0.00
H
ATOM   2215  OG1 THR   134      51.054  11.213  10.098  1.00  0.00
O
ATOM   2216  HG1 THR   134      51.984  11.002  10.271  1.00  0.00
H
ATOM   2217  CG2 THR   134      50.329   9.070  10.844  1.00  0.00
C
ATOM   2218 1HG2 THR   134      49.775   9.549  11.647  1.00  0.00
H
ATOM   2219 2HG2 THR   134      51.330   8.819  11.195  1.00  0.00
H
ATOM   2220 3HG2 THR   134      49.803   8.157  10.562  1.00  0.00
H
ATOM   2221  N   TYR   135      49.533   8.420   7.055  1.00  0.00
N
ATOM   2222  H   TYR   135      49.338   9.364   6.726  1.00  0.00
H
ATOM   2223  CA  TYR   135      48.657   7.346   6.585  1.00  0.00
C
ATOM   2224  HA  TYR   135      48.803   6.465   7.204  1.00  0.00
H
ATOM   2225  C   TYR   135      48.967   6.946   5.146  1.00  0.00
C
ATOM   2226  O   TYR   135      48.345   6.040   4.600  1.00  0.00
O
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ATOM   2227  CB  TYR   135      47.193   7.777   6.728  1.00  0.00
C
ATOM   2228 1HB  TYR   135      47.045   8.704   6.178  1.00  0.00
H
ATOM   2229 2HB  TYR   135      46.558   7.008   6.290  1.00  0.00
H
ATOM   2230  CG  TYR   135      46.756   7.990   8.166  1.00  0.00
C
ATOM   2231  CD1 TYR   135      46.988   9.214   8.825  1.00  0.00
C
ATOM   2232  HD1 TYR   135      47.454  10.031   8.292  1.00  0.00
H
ATOM   2233  CD2 TYR   135      46.102   6.963   8.880  1.00  0.00
C
ATOM   2234  HD2 TYR   135      45.901   6.018   8.395  1.00  0.00
H
ATOM   2235  CE1 TYR   135      46.631   9.390  10.188  1.00  0.00
C
ATOM   2236  HE1 TYR   135      46.842  10.325  10.686  1.00  0.00
H
ATOM   2237  CE2 TYR   135      45.698   7.153  10.234  1.00  0.00
C
ATOM   2238  HE2 TYR   135      45.186   6.364  10.764  1.00  0.00
H
ATOM   2239  CZ  TYR   135      45.980   8.361  10.875  1.00  0.00
C
ATOM   2240  OH  TYR   135      45.604   8.559  12.181  1.00  0.00
O
ATOM   2241  HH  TYR   135      44.917   7.944  12.469  1.00  0.00
H
ATOM   2242  N   GLY   136      49.957   7.591   4.547  1.00  0.00
N
ATOM   2243  H   GLY   136      50.413   8.355   5.020  1.00  0.00
H
ATOM   2244  CA  GLY   136      50.378   7.275   3.190  1.00  0.00
C
ATOM   2245 1HA  GLY   136      51.446   7.471   3.093  1.00  0.00
H
ATOM   2246 2HA  GLY   136      50.192   6.226   2.963  1.00  0.00
H
ATOM   2247  C   GLY   136      49.635   8.149   2.202  1.00  0.00
C
ATOM   2248  O   GLY   136      48.617   8.728   2.552  1.00  0.00
O
ATOM   2249  N   ARG   137      50.163   8.292   0.996  1.00  0.00
N
ATOM   2250  H   ARG   137      50.961   7.724   0.732  1.00  0.00
H
ATOM   2251  CA  ARG   137      49.690   9.305   0.043  1.00  0.00
C
ATOM   2252  HA  ARG   137      49.648  10.252   0.574  1.00  0.00
H
ATOM   2253  C   ARG   137      48.299   9.121  -0.566  1.00  0.00
C
ATOM   2254  O   ARG   137      47.608   8.123  -0.328  1.00  0.00
O
ATOM   2255  CB  ARG   137      50.744   9.453  -1.061  1.00  0.00
C
ATOM   2256 1HB  ARG   137      50.986   8.467  -1.452  1.00  0.00
H
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ATOM   2257 2HB  ARG   137      50.359  10.061  -1.878  1.00  0.00
H
ATOM   2258  CG  ARG   137      52.006  10.119  -0.560  1.00  0.00
C
ATOM   2259 1HG  ARG   137      51.758  11.110  -0.188  1.00  0.00
H
ATOM   2260 2HG  ARG   137      52.439   9.538   0.254  1.00  0.00
H
ATOM   2261  CD  ARG   137      53.024  10.249  -1.666  1.00  0.00
C
ATOM   2262 1HD  ARG   137      53.318   9.254  -1.998  1.00  0.00
H
ATOM   2263 2HD  ARG   137      52.582  10.796  -2.501  1.00  0.00
H
ATOM   2264  NE  ARG   137      54.200  10.975  -1.180  1.00  0.00
N
ATOM   2265  HE  ARG   137      54.155  11.330  -0.230  1.00  0.00
H
ATOM   2266  CZ  ARG   137      55.305  11.231  -1.863  1.00  0.00
C
ATOM   2267  NH1 ARG   137      55.544  10.793  -3.071  1.00  0.00
N
ATOM   2268 1HH1 ARG   137      54.859  10.229  -3.550  1.00  0.00
H
ATOM   2269 2HH1 ARG   137      56.421  11.017  -3.519  1.00  0.00
H
ATOM   2270  NH2 ARG   137      56.218  11.940  -1.272  1.00  0.00
N
ATOM   2271 1HH2 ARG   137      56.056  12.272  -0.338  1.00  0.00
H
ATOM   2272 2HH2 ARG   137      57.089  12.148  -1.745  1.00  0.00
H
ATOM   2273  N   HIS   138      47.943  10.118  -1.370  1.00  0.00
N
ATOM   2274  H   HIS   138      48.596  10.880  -1.474  1.00  0.00
H
ATOM   2275  CA  HIS   138      46.694  10.233  -2.126  1.00  0.00
C
ATOM   2276  HA  HIS   138      46.778  11.136  -2.731  1.00  0.00
H
ATOM   2277  C   HIS   138      45.485  10.489  -1.250  1.00  0.00
C
ATOM   2278  O   HIS   138      44.380  10.033  -1.540  1.00  0.00
O
ATOM   2279  CB  HIS   138      46.488   9.090  -3.124  1.00  0.00
C
ATOM   2280 1HB  HIS   138      46.536   8.129  -2.616  1.00  0.00
H
ATOM   2281 2HB  HIS   138      45.501   9.195  -3.570  1.00  0.00
H
ATOM   2282  CG  HIS   138      47.466   9.119  -4.254  1.00  0.00
C
ATOM   2283  ND1 HIS   138      48.668   8.439  -4.242  1.00  0.00
N
ATOM   2284  CD2 HIS   138      47.395   9.788  -5.435  1.00  0.00
C
ATOM   2285  HD2 HIS   138      46.563  10.415  -5.725  1.00  0.00
H
ATOM   2286  CE1 HIS   138      49.278   8.754  -5.427  1.00  0.00
C
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ATOM   2287  HE1 HIS   138      50.253   8.392  -5.722  1.00  0.00
H
ATOM   2288  NE2 HIS   138      48.512   9.566  -6.191  1.00  0.00
N
ATOM   2289  HE2 HIS   138      48.718   9.932  -7.115  1.00  0.00
H
ATOM   2290  N   TRP   139      45.687  11.305  -0.225  1.00  0.00
N
ATOM   2291  H   TRP   139      46.634  11.529   0.076  1.00  0.00
H
ATOM   2292  CA  TRP   139      44.583  12.030   0.394  1.00  0.00
C
ATOM   2293  HA  TRP   139      43.689  11.416   0.370  1.00  0.00
H
ATOM   2294  C   TRP   139      44.356  13.314  -0.399  1.00  0.00
C
ATOM   2295  O   TRP   139      45.315  13.934  -0.853  1.00  0.00
O
ATOM   2296  CB  TRP   139      44.909  12.393   1.838  1.00  0.00
C
ATOM   2297 1HB  TRP   139      45.846  12.951   1.859  1.00  0.00
H
ATOM   2298 2HB  TRP   139      44.118  13.026   2.238  1.00  0.00
H
ATOM   2299  CG  TRP   139      45.050  11.187   2.699  1.00  0.00
C
ATOM   2300  CD1 TRP   139      46.177  10.473   2.910  1.00  0.00
C
ATOM   2301  HD1 TRP   139      47.133  10.691   2.441  1.00  0.00
H
ATOM   2302  CD2 TRP   139      44.037  10.549   3.499  1.00  0.00
C
ATOM   2303  NE1 TRP   139      45.971   9.453   3.790  1.00  0.00
N
ATOM   2304  HE1 TRP   139      46.700   8.807   4.067  1.00  0.00
H
ATOM   2305  CE2 TRP   139      44.668   9.484   4.205  1.00  0.00
C
ATOM   2306  CE3 TRP   139      42.657  10.759   3.686  1.00  0.00
C
ATOM   2307  HE3 TRP   139      42.149  11.525   3.129  1.00  0.00
H
ATOM   2308  CZ2 TRP   139      43.966   8.663   5.114  1.00  0.00
C
ATOM   2309  HZ2 TRP   139      44.466   7.866   5.641  1.00  0.00
H
ATOM   2310  CZ3 TRP   139      41.948   9.945   4.600  1.00  0.00
C
ATOM   2311  HZ3 TRP   139      40.893  10.107   4.752  1.00  0.00
H
ATOM   2312  CH2 TRP   139      42.619   8.910   5.316  1.00  0.00
C
ATOM   2313  HH2 TRP   139      42.066   8.307   6.022  1.00  0.00
H
ATOM   2314  N   HIS   140      43.110  13.729  -0.565  1.00  0.00
N
ATOM   2315  H   HIS   140      42.350  13.172  -0.187  1.00  0.00
H
ATOM   2316  CA  HIS   140      42.778  14.943  -1.316  1.00  0.00
C
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ATOM   2317  HA  HIS   140      43.665  15.559  -1.458  1.00  0.00
H
ATOM   2318  C   HIS   140      41.736  15.723  -0.518  1.00  0.00
C
ATOM   2319  O   HIS   140      40.813  15.104   0.009  1.00  0.00
O
ATOM   2320  CB  HIS   140      42.218  14.533  -2.678  1.00  0.00
C
ATOM   2321 1HB  HIS   140      41.336  13.925  -2.500  1.00  0.00
H
ATOM   2322 2HB  HIS   140      41.919  15.422  -3.232  1.00  0.00
H
ATOM   2323  CG  HIS   140      43.181  13.740  -3.510  1.00  0.00
C
ATOM   2324  ND1 HIS   140      44.047  14.285  -4.428  1.00  0.00
N
ATOM   2325  HD1 HIS   140      44.097  15.262  -4.695  1.00  0.00
H
ATOM   2326  CD2 HIS   140      43.428  12.402  -3.546  1.00  0.00
C
ATOM   2327  HD2 HIS   140      42.919  11.662  -2.944  1.00  0.00
H
ATOM   2328  CE1 HIS   140      44.789  13.299  -4.937  1.00  0.00
C
ATOM   2329  HE1 HIS   140      45.576  13.440  -5.668  1.00  0.00
H
ATOM   2330  NE2 HIS   140      44.432  12.129  -4.449  1.00  0.00
N
ATOM   2331  N   VAL   141      41.898  17.036  -0.375  1.00  0.00
N
ATOM   2332  H   VAL   141      42.606  17.511  -0.926  1.00  0.00
H
ATOM   2333  CA  VAL   141      41.150  17.848   0.603  1.00  0.00
C
ATOM   2334  HA  VAL   141      40.419  17.220   1.109  1.00  0.00
H
ATOM   2335  C   VAL   141      40.433  19.053  -0.032  1.00  0.00
C
ATOM   2336  O   VAL   141      41.052  19.804  -0.793  1.00  0.00
O
ATOM   2337  CB  VAL   141      42.128  18.459   1.674  1.00  0.00
C
ATOM   2338  HB  VAL   141      42.785  19.165   1.169  1.00  0.00
H
ATOM   2339  CG1 VAL   141      41.360  19.208   2.768  1.00  0.00
C
ATOM   2340 1HG1 VAL   141      42.020  19.441   3.603  1.00  0.00
H
ATOM   2341 2HG1 VAL   141      40.528  18.607   3.130  1.00  0.00
H
ATOM   2342 3HG1 VAL   141      40.966  20.140   2.366  1.00  0.00
H
ATOM   2343  CG2 VAL   141      43.027  17.417   2.348  1.00  0.00
C
ATOM   2344 1HG2 VAL   141      43.806  17.935   2.907  1.00  0.00
H
ATOM   2345 2HG2 VAL   141      43.508  16.775   1.611  1.00  0.00
H
ATOM   2346 3HG2 VAL   141      42.452  16.817   3.045  1.00  0.00
H
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ATOM   2347  N   THR   142      39.180  19.294   0.342  1.00  0.00
N
ATOM   2348  H   THR   142      38.701  18.621   0.935  1.00  0.00
H
ATOM   2349  CA  THR   142      38.452  20.530   0.030  1.00  0.00
C
ATOM   2350  HA  THR   142      39.122  21.262  -0.417  1.00  0.00
H
ATOM   2351  C   THR   142      37.901  21.071   1.353  1.00  0.00
C
ATOM   2352  O   THR   142      37.471  20.282   2.197  1.00  0.00
O
ATOM   2353  CB  THR   142      37.259  20.275  -0.930  1.00  0.00
C
ATOM   2354  HB  THR   142      36.506  19.671  -0.423  1.00  0.00
H
ATOM   2355  OG1 THR   142      37.705  19.576  -2.095  1.00  0.00
O
ATOM   2356  HG1 THR   142      36.931  19.432  -2.654  1.00  0.00
H
ATOM   2357  CG2 THR   142      36.635  21.569  -1.423  1.00  0.00
C
ATOM   2358 1HG2 THR   142      35.939  21.353  -2.232  1.00  0.00
H
ATOM   2359 2HG2 THR   142      37.407  22.244  -1.794  1.00  0.00
H
ATOM   2360 3HG2 THR   142      36.089  22.048  -0.612  1.00  0.00
H
ATOM   2361  N   ILE   143      37.925  22.384   1.552  1.00  0.00
N
ATOM   2362  H   ILE   143      38.314  22.991   0.833  1.00  0.00
H
ATOM   2363  CA  ILE   143      37.433  23.020   2.779  1.00  0.00
C
ATOM   2364  HA  ILE   143      36.950  22.281   3.418  1.00  0.00
H
ATOM   2365  C   ILE   143      36.425  24.115   2.409  1.00  0.00
C
ATOM   2366  O   ILE   143      36.804  25.094   1.770  1.00  0.00
O
ATOM   2367  CB  ILE   143      38.604  23.707   3.557  1.00  0.00
C
ATOM   2368  HB  ILE   143      38.992  24.492   2.916  1.00  0.00
H
ATOM   2369  CG1 ILE   143      39.800  22.767   3.808  1.00  0.00
C
ATOM   2370 1HG1 ILE   143      40.127  22.355   2.856  1.00  0.00
H
ATOM   2371 2HG1 ILE   143      40.617  23.378   4.190  1.00  0.00
H
ATOM   2372  CG2 ILE   143      38.093  24.360   4.865  1.00  0.00
C
ATOM   2373 1HG2 ILE   143      38.934  24.721   5.460  1.00  0.00
H
ATOM   2374 2HG2 ILE   143      37.523  23.637   5.448  1.00  0.00
H
ATOM   2375 3HG2 ILE   143      37.447  25.207   4.633  1.00  0.00
H
ATOM   2376  CD1 ILE   143      39.615  21.633   4.769  1.00  0.00
C
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ATOM   2377 1HD1 ILE   143      40.536  21.054   4.831  1.00  0.00
H
ATOM   2378 2HD1 ILE   143      38.802  20.985   4.444  1.00  0.00
H
ATOM   2379 3HD1 ILE   143      39.400  22.031   5.757  1.00  0.00
H
ATOM   2380  N   VAL   144      35.161  23.961   2.786  1.00  0.00
N
ATOM   2381  H   VAL   144      34.893  23.107   3.265  1.00  0.00
H
ATOM   2382  CA  VAL   144      34.119  24.995   2.630  1.00  0.00
C
ATOM   2383  HA  VAL   144      34.471  25.955   3.006  1.00  0.00
H
ATOM   2384  C   VAL   144      32.949  24.503   3.464  1.00  0.00
C
ATOM   2385  O   VAL   144      32.644  23.312   3.412  1.00  0.00
O
ATOM   2386  CB  VAL   144      33.526  25.158   1.190  1.00  0.00
C
ATOM   2387  HB  VAL   144      32.445  25.236   1.294  1.00  0.00
H
ATOM   2388  CG1 VAL   144      34.010  26.459   0.539  1.00  0.00
C
ATOM   2389 1HG1 VAL   144      33.511  26.599  -0.418  1.00  0.00
H
ATOM   2390 2HG1 VAL   144      35.088  26.422   0.381  1.00  0.00
H
ATOM   2391 3HG1 VAL   144      33.773  27.307   1.182  1.00  0.00
H
ATOM   2392  CG2 VAL   144      33.813  23.954   0.282  1.00  0.00
C
ATOM   2393 1HG2 VAL   144      33.240  24.051  -0.636  1.00  0.00
H
ATOM   2394 2HG2 VAL   144      33.519  23.029   0.778  1.00  0.00
H
ATOM   2395 3HG2 VAL   144      34.874  23.916   0.035  1.00  0.00
H
ATOM   2396  N   ARG   145      32.256  25.357   4.207  1.00  0.00
N
ATOM   2397  H   ARG   145      32.500  26.345   4.201  1.00  0.00
H
ATOM   2398  CA  ARG   145      31.157  24.882   5.060  1.00  0.00
C
ATOM   2399  HA  ARG   145      31.462  23.902   5.406  1.00  0.00
H
ATOM   2400  C   ARG   145      29.814  24.611   4.377  1.00  0.00
C
ATOM   2401  O   ARG   145      28.796  25.246   4.648  1.00  0.00
O
ATOM   2402  CB  ARG   145      31.034  25.719   6.335  1.00  0.00
C
ATOM   2403 1HB  ARG   145      30.215  25.308   6.923  1.00  0.00
H
ATOM   2404 2HB  ARG   145      31.950  25.580   6.902  1.00  0.00
H
ATOM   2405  CG  ARG   145      30.830  27.214   6.194  1.00  0.00
C
ATOM   2406 1HG  ARG   145      31.688  27.658   5.693  1.00  0.00
H
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ATOM   2407 2HG  ARG   145      29.926  27.416   5.624  1.00  0.00
H
ATOM   2408  CD  ARG   145      30.696  27.815   7.578  1.00  0.00
C
ATOM   2409 1HD  ARG   145      29.837  27.361   8.075  1.00  0.00
H
ATOM   2410 2HD  ARG   145      31.595  27.587   8.152  1.00  0.00
H
ATOM   2411  NE  ARG   145      30.523  29.272   7.536  1.00  0.00
N
ATOM   2412  HE  ARG   145      30.584  29.715   6.628  1.00  0.00
H
ATOM   2413  CZ  ARG   145      30.293  30.057   8.577  1.00  0.00
C
ATOM   2414  NH1 ARG   145      30.149  29.606   9.793  1.00  0.00
N
ATOM   2415 1HH1 ARG   145      30.100  28.614   9.948  1.00  0.00
H
ATOM   2416 2HH1 ARG   145      30.072  30.250  10.567  1.00  0.00
H
ATOM   2417  NH2 ARG   145      30.157  31.334   8.383  1.00  0.00
N
ATOM   2418 1HH2 ARG   145      30.328  31.730   7.476  1.00  0.00
H
ATOM   2419 2HH2 ARG   145      29.867  31.924   9.149  1.00  0.00
H
ATOM   2420  N   GLY   146      29.808  23.623   3.495  1.00  0.00
N
ATOM   2421  H   GLY   146      30.680  23.146   3.281  1.00  0.00
H
ATOM   2422  CA  GLY   146      28.580  23.175   2.856  1.00  0.00
C
ATOM   2423 1HA  GLY   146      28.705  22.140   2.542  1.00  0.00
H
ATOM   2424 2HA  GLY   146      27.767  23.218   3.581  1.00  0.00
H
ATOM   2425  C   GLY   146      28.173  23.991   1.650  1.00  0.00
C
ATOM   2426  O   GLY   146      27.052  23.900   1.168  1.00  0.00
O
ATOM   2427  N   SER   147      29.078  24.824   1.162  1.00  0.00
N
ATOM   2428  H   SER   147      29.993  24.886   1.579  1.00  0.00
H
ATOM   2429  CA  SER   147      28.760  25.726   0.061  1.00  0.00
C
ATOM   2430  HA  SER   147      27.872  26.298   0.332  1.00  0.00
H
ATOM   2431  C   SER   147      28.504  25.039  -1.272  1.00  0.00
C
ATOM   2432  O   SER   147      27.764  25.555  -2.107  1.00  0.00
O
ATOM   2433  CB  SER   147      29.934  26.679  -0.105  1.00  0.00
C
ATOM   2434 1HB  SER   147      30.724  26.191  -0.676  1.00  0.00
H
ATOM   2435 2HB  SER   147      29.609  27.582  -0.624  1.00  0.00
H
ATOM   2436  OG  SER   147      30.426  26.989   1.188  1.00  0.00
O
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ATOM   2437  HG  SER   147      30.810  27.879   1.158  1.00  0.00
H
ATOM   2438  N   TYR   148      29.125  23.886  -1.478  1.00  0.00
N
ATOM   2439  H   TYR   148      29.641  23.458  -0.725  1.00  0.00
H
ATOM   2440  CA  TYR   148      29.098  23.193  -2.765  1.00  0.00
C
ATOM   2441  HA  TYR   148      28.388  23.666  -3.441  1.00  0.00
H
ATOM   2442  C   TYR   148      28.678  21.754  -2.507  1.00  0.00
C
ATOM   2443  O   TYR   148      28.752  21.297  -1.363  1.00  0.00
O
ATOM   2444  CB  TYR   148      30.493  23.199  -3.406  1.00  0.00
C
ATOM   2445 1HB  TYR   148      31.125  22.525  -2.829  1.00  0.00
H
ATOM   2446 2HB  TYR   148      30.422  22.801  -4.417  1.00  0.00
H
ATOM   2447  CG  TYR   148      31.194  24.547  -3.455  1.00  0.00
C
ATOM   2448  CD1 TYR   148      30.505  25.745  -3.757  1.00  0.00
C
ATOM   2449  HD1 TYR   148      29.457  25.719  -4.026  1.00  0.00
H
ATOM   2450  CD2 TYR   148      32.573  24.625  -3.181  1.00  0.00
C
ATOM   2451  HD2 TYR   148      33.134  23.720  -2.988  1.00  0.00
H
ATOM   2452  CE1 TYR   148      31.172  27.003  -3.685  1.00  0.00
C
ATOM   2453  HE1 TYR   148      30.633  27.919  -3.881  1.00  0.00
H
ATOM   2454  CE2 TYR   148      33.242  25.872  -3.141  1.00  0.00
C
ATOM   2455  HE2 TYR   148      34.297  25.912  -2.926  1.00  0.00
H
ATOM   2456  CZ  TYR   148      32.532  27.049  -3.366  1.00  0.00
C
ATOM   2457  OH  TYR   148      33.182  28.251  -3.262  1.00  0.00
O
ATOM   2458  HH  TYR   148      34.118  28.151  -3.043  1.00  0.00
H
ATOM   2459  N   TRP   149      28.303  21.023  -3.544  1.00  0.00
N
ATOM   2460  H   TRP   149      28.251  21.450  -4.464  1.00  0.00
H
ATOM   2461  CA  TRP   149      28.051  19.583  -3.436  1.00  0.00
C
ATOM   2462  HA  TRP   149      28.031  19.258  -2.396  1.00  0.00
H
ATOM   2463  C   TRP   149      29.205  18.906  -4.160  1.00  0.00
C
ATOM   2464  O   TRP   149      29.764  19.495  -5.087  1.00  0.00
O
ATOM   2465  CB  TRP   149      26.737  19.202  -4.112  1.00  0.00
C
ATOM   2466 1HB  TRP   149      26.763  19.563  -5.140  1.00  0.00
H
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ATOM   2467 2HB  TRP   149      26.666  18.116  -4.132  1.00  0.00
H
ATOM   2468  CG  TRP   149      25.500  19.743  -3.451  1.00  0.00
C
ATOM   2469  CD1 TRP   149      25.397  20.375  -2.247  1.00  0.00
C
ATOM   2470  HD1 TRP   149      26.231  20.556  -1.581  1.00  0.00
H
ATOM   2471  CD2 TRP   149      24.161  19.713  -3.979  1.00  0.00
C
ATOM   2472  NE1 TRP   149      24.112  20.763  -1.993  1.00  0.00
N
ATOM   2473  HE1 TRP   149      23.816  21.262  -1.156  1.00  0.00
H
ATOM   2474  CE2 TRP   149      23.323  20.389  -3.046  1.00  0.00
C
ATOM   2475  CE3 TRP   149      23.592  19.230  -5.176  1.00  0.00
C
ATOM   2476  HE3 TRP   149      24.203  18.712  -5.901  1.00  0.00
H
ATOM   2477  CZ2 TRP   149      21.951  20.604  -3.285  1.00  0.00
C
ATOM   2478  HZ2 TRP   149      21.340  21.130  -2.566  1.00  0.00
H
ATOM   2479  CZ3 TRP   149      22.209  19.430  -5.414  1.00  0.00
C
ATOM   2480  HZ3 TRP   149      21.759  19.048  -6.321  1.00  0.00
H
ATOM   2481  CH2 TRP   149      21.405  20.119  -4.461  1.00  0.00
C
ATOM   2482  HH2 TRP   149      20.351  20.262  -4.657  1.00  0.00
H
ATOM   2483  N   THR   150      29.583  17.701  -3.764  1.00  0.00
N
ATOM   2484  H   THR   150      29.096  17.245  -2.989  1.00  0.00
H
ATOM   2485  CA  THR   150      30.697  16.995  -4.393  1.00  0.00
C
ATOM   2486  HA  THR   150      30.835  17.385  -5.400  1.00  0.00
H
ATOM   2487  C   THR   150      30.369  15.511  -4.522  1.00  0.00
C
ATOM   2488  O   THR   150      29.569  14.969  -3.755  1.00  0.00
O
ATOM   2489  CB  THR   150      32.014  17.240  -3.597  1.00  0.00
C
ATOM   2490  HB  THR   150      32.144  18.316  -3.476  1.00  0.00
H
ATOM   2491  OG1 THR   150      33.142  16.719  -4.305  1.00  0.00
O
ATOM   2492  HG1 THR   150      33.054  16.954  -5.239  1.00  0.00
H
ATOM   2493  CG2 THR   150      32.015  16.595  -2.222  1.00  0.00
C
ATOM   2494 1HG2 THR   150      32.939  16.860  -1.711  1.00  0.00
H
ATOM   2495 2HG2 THR   150      31.959  15.510  -2.317  1.00  0.00
H
ATOM   2496 3HG2 THR   150      31.169  16.957  -1.639  1.00  0.00
H
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ATOM   2497  N   THR   151      30.958  14.858  -5.513  1.00  0.00
N
ATOM   2498  H   THR   151      31.587  15.362  -6.136  1.00  0.00
H
ATOM   2499  CA  THR   151      30.779  13.426  -5.750  1.00  0.00
C
ATOM   2500  HA  THR   151      30.342  12.956  -4.871  1.00  0.00
H
ATOM   2501  C   THR   151      32.183  12.874  -5.989  1.00  0.00
C
ATOM   2502  O   THR   151      32.996  13.530  -6.651  1.00  0.00
O
ATOM   2503  CB  THR   151      29.851  13.192  -6.959  1.00  0.00
C
ATOM   2504  HB  THR   151      30.351  13.509  -7.874  1.00  0.00
H
ATOM   2505  OG1 THR   151      28.658  13.959  -6.777  1.00  0.00
O
ATOM   2506  HG1 THR   151      28.875  14.729  -6.242  1.00  0.00
H
ATOM   2507  CG2 THR   151      29.402  11.753  -7.074  1.00  0.00
C
ATOM   2508 1HG2 THR   151      28.751  11.652  -7.943  1.00  0.00
H
ATOM   2509 2HG2 THR   151      28.848  11.466  -6.181  1.00  0.00
H
ATOM   2510 3HG2 THR   151      30.260  11.095  -7.199  1.00  0.00
H
ATOM   2511  N   TYR   152      32.508  11.737  -5.391  1.00  0.00
N
ATOM   2512  H   TYR   152      31.801  11.204  -4.900  1.00  0.00
H
ATOM   2513  CA  TYR   152      33.881  11.230  -5.361  1.00  0.00
C
ATOM   2514  HA  TYR   152      34.369  11.434  -6.315  1.00  0.00
H
ATOM   2515  C   TYR   152      33.867   9.725  -5.102  1.00  0.00
C
ATOM   2516  O   TYR   152      32.813   9.169  -4.762  1.00  0.00
O
ATOM   2517  CB  TYR   152      34.656  11.920  -4.224  1.00  0.00
C
ATOM   2518 1HB  TYR   152      35.721  11.741  -4.373  1.00  0.00
H
ATOM   2519 2HB  TYR   152      34.486  12.996  -4.277  1.00  0.00
H
ATOM   2520  CG  TYR   152      34.287  11.418  -2.837  1.00  0.00
C
ATOM   2521  CD1 TYR   152      35.242  10.762  -2.043  1.00  0.00
C
ATOM   2522  HD1 TYR   152      36.253  10.648  -2.408  1.00  0.00
H
ATOM   2523  CD2 TYR   152      32.980  11.551  -2.321  1.00  0.00
C
ATOM   2524  HD2 TYR   152      32.232  12.096  -2.876  1.00  0.00
H
ATOM   2525  CE1 TYR   152      34.896  10.243  -0.771  1.00  0.00
C
ATOM   2526  HE1 TYR   152      35.633   9.773  -0.146  1.00  0.00
H
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ATOM   2527  CE2 TYR   152      32.618  10.947  -1.090  1.00  0.00
C
ATOM   2528  HE2 TYR   152      31.593  10.984  -0.755  1.00  0.00
H
ATOM   2529  CZ  TYR   152      33.592  10.311  -0.322  1.00  0.00
C
ATOM   2530  OH  TYR   152      33.339   9.714   0.886  1.00  0.00
O
ATOM   2531  HH  TYR   152      32.395   9.565   1.030  1.00  0.00
H
ATOM   2532  N   THR   153      35.021   9.077  -5.198  1.00  0.00
N
ATOM   2533  H   THR   153      35.841   9.563  -5.546  1.00  0.00
H
ATOM   2534  CA  THR   153      35.192   7.685  -4.774  1.00  0.00
C
ATOM   2535  HA  THR   153      34.271   7.305  -4.334  1.00  0.00
H
ATOM   2536  C   THR   153      36.306   7.649  -3.731  1.00  0.00
C
ATOM   2537  O   THR   153      37.117   8.578  -3.663  1.00  0.00
O
ATOM   2538  CB  THR   153      35.601   6.789  -5.963  1.00  0.00
C
ATOM   2539  HB  THR   153      35.740   5.764  -5.621  1.00  0.00
H
ATOM   2540  OG1 THR   153      36.825   7.280  -6.514  1.00  0.00
O
ATOM   2541  HG1 THR   153      36.797   7.132  -7.466  1.00  0.00
H
ATOM   2542  CG2 THR   153      34.571   6.817  -7.076  1.00  0.00
C
ATOM   2543 1HG2 THR   153      34.865   6.116  -7.857  1.00  0.00
H
ATOM   2544 2HG2 THR   153      34.499   7.816  -7.507  1.00  0.00
H
ATOM   2545 3HG2 THR   153      33.598   6.518  -6.688  1.00  0.00
H
ATOM   2546  N   HIS   154      36.382   6.602  -2.922  1.00  0.00
N
ATOM   2547  H   HIS   154      35.726   5.834  -3.010  1.00  0.00
H
ATOM   2548  CA  HIS   154      37.411   6.499  -1.885  1.00  0.00
C
ATOM   2549  HA  HIS   154      38.342   6.945  -2.236  1.00  0.00
H
ATOM   2550  C   HIS   154      37.659   5.035  -1.562  1.00  0.00
C
ATOM   2551  O   HIS   154      36.835   4.185  -1.907  1.00  0.00
O
ATOM   2552  CB  HIS   154      36.937   7.223  -0.624  1.00  0.00
C
ATOM   2553 1HB  HIS   154      37.711   7.168   0.142  1.00  0.00
H
ATOM   2554 2HB  HIS   154      36.788   8.264  -0.886  1.00  0.00
H
ATOM   2555  CG  HIS   154      35.652   6.687  -0.072  1.00  0.00
C
ATOM   2556  ND1 HIS   154      35.573   5.719   0.894  1.00  0.00
N
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ATOM   2557  HD1 HIS   154      36.361   5.275   1.353  1.00  0.00
H
ATOM   2558  CD2 HIS   154      34.360   6.957  -0.401  1.00  0.00
C
ATOM   2559  HD2 HIS   154      34.051   7.674  -1.148  1.00  0.00
H
ATOM   2560  CE1 HIS   154      34.291   5.432   1.098  1.00  0.00
C
ATOM   2561  HE1 HIS   154      33.938   4.688   1.801  1.00  0.00
H
ATOM   2562  NE2 HIS   154      33.506   6.173   0.341  1.00  0.00
N
ATOM   2563  N   ILE   155      38.759   4.732  -0.888  1.00  0.00
N
ATOM   2564  H   ILE   155      39.445   5.457  -0.697  1.00  0.00
H
ATOM   2565  CA  ILE   155      38.973   3.388  -0.347  1.00  0.00
C
ATOM   2566  HA  ILE   155      38.550   2.668  -1.046  1.00  0.00
H
ATOM   2567  C   ILE   155      38.164   3.310   0.956  1.00  0.00
C
ATOM   2568  O   ILE   155      37.933   4.347   1.596  1.00  0.00
O
ATOM   2569  CB  ILE   155      40.482   3.046  -0.185  1.00  0.00
C
ATOM   2570  HB  ILE   155      40.559   2.012   0.150  1.00  0.00
H
ATOM   2571  CG1 ILE   155      41.164   3.935   0.866  1.00  0.00
C
ATOM   2572 1HG1 ILE   155      41.223   4.956   0.492  1.00  0.00
H
ATOM   2573 2HG1 ILE   155      40.556   3.937   1.767  1.00  0.00
H
ATOM   2574  CG2 ILE   155      41.176   3.158  -1.553  1.00  0.00
C
ATOM   2575 1HG2 ILE   155      42.190   2.765  -1.493  1.00  0.00
H
ATOM   2576 2HG2 ILE   155      41.212   4.198  -1.878  1.00  0.00
H
ATOM   2577 3HG2 ILE   155      40.628   2.573  -2.293  1.00  0.00
H
ATOM   2578  CD1 ILE   155      42.561   3.477   1.257  1.00  0.00
C
ATOM   2579 1HD1 ILE   155      42.891   4.030   2.135  1.00  0.00
H
ATOM   2580 2HD1 ILE   155      43.259   3.656   0.440  1.00  0.00
H
ATOM   2581 3HD1 ILE   155      42.550   2.413   1.500  1.00  0.00
H
ATOM   2582  N   PRO   156      37.620   2.129   1.306  1.00  0.00
N
ATOM   2583  CA  PRO   156      36.286   2.135   1.929  1.00  0.00
C
ATOM   2584  HA  PRO   156      35.572   2.539   1.211  1.00  0.00
H
ATOM   2585  C   PRO   156      36.069   2.857   3.259  1.00  0.00
C
ATOM   2586  O   PRO   156      34.959   3.319   3.509  1.00  0.00
O
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ATOM   2587  CB  PRO   156      35.997   0.644   2.134  1.00  0.00
C
ATOM   2588 1HB  PRO   156      36.289   0.343   3.140  1.00  0.00
H
ATOM   2589 2HB  PRO   156      34.942   0.428   1.965  1.00  0.00
H
ATOM   2590  CG  PRO   156      36.824  -0.043   1.130  1.00  0.00
C
ATOM   2591 1HG  PRO   156      37.029  -1.070   1.430  1.00  0.00
H
ATOM   2592 2HG  PRO   156      36.322  -0.022   0.163  1.00  0.00
H
ATOM   2593  CD  PRO   156      38.084   0.749   1.066  1.00  0.00
C
ATOM   2594 1HD  PRO   156      38.771   0.439   1.853  1.00  0.00
H
ATOM   2595 2HD  PRO   156      38.546   0.643   0.084  1.00  0.00
H
ATOM   2596  N   ASN   157      37.069   2.960   4.124  1.00  0.00
N
ATOM   2597  H   ASN   157      37.986   2.581   3.888  1.00  0.00
H
ATOM   2598  CA  ASN   157      36.887   3.588   5.436  1.00  0.00
C
ATOM   2599  HA  ASN   157      35.824   3.760   5.608  1.00  0.00
H
ATOM   2600  C   ASN   157      37.589   4.938   5.522  1.00  0.00
C
ATOM   2601  O   ASN   157      37.565   5.603   6.557  1.00  0.00
O
ATOM   2602  CB  ASN   157      37.400   2.663   6.544  1.00  0.00
C
ATOM   2603 1HB  ASN   157      38.473   2.521   6.420  1.00  0.00
H
ATOM   2604 2HB  ASN   157      37.219   3.128   7.512  1.00  0.00
H
ATOM   2605  CG  ASN   157      36.740   1.312   6.524  1.00  0.00
C
ATOM   2606  OD1 ASN   157      37.413   0.294   6.470  1.00  0.00
O
ATOM   2607  ND2 ASN   157      35.436   1.273   6.526  1.00  0.00
N
ATOM   2608 1HD2 ASN   157      34.982   0.377   6.445  1.00  0.00
H
ATOM   2609 2HD2 ASN   157      34.884   2.117   6.613  1.00  0.00
H
ATOM   2610  N   CYS   158      38.206   5.359   4.427  1.00  0.00
N
ATOM   2611  H   CYS   158      38.189   4.783   3.593  1.00  0.00
H
ATOM   2612  CA  CYS   158      38.910   6.641   4.367  1.00  0.00
C
ATOM   2613  HA  CYS   158      39.190   6.937   5.377  1.00  0.00
H
ATOM   2614  C   CYS   158      38.013   7.742   3.804  1.00  0.00
C
ATOM   2615  O   CYS   158      38.477   8.689   3.172  1.00  0.00
O
ATOM   2616  CB  CYS   158      40.191   6.501   3.550  1.00  0.00
C
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ATOM   2617 1HB  CYS   158      39.940   6.147   2.550  1.00  0.00
H
ATOM   2618 2HB  CYS   158      40.662   7.482   3.463  1.00  0.00
H
ATOM   2619  SG  CYS   158      41.373   5.359   4.316  1.00  0.00
S
ATOM   2620  HG  CYS   158      41.546   6.044   5.452  1.00  0.00
H
ATOM   2621  N   SER   159      36.722   7.616   4.059  1.00  0.00
N
ATOM   2622  H   SER   159      36.382   6.792   4.536  1.00  0.00
H
ATOM   2623  CA  SER   159      35.739   8.654   3.791  1.00  0.00
C
ATOM   2624  HA  SER   159      35.926   9.132   2.829  1.00  0.00
H
ATOM   2625  C   SER   159      35.815   9.676   4.925  1.00  0.00
C
ATOM   2626  O   SER   159      35.521   9.356   6.080  1.00  0.00
O
ATOM   2627  CB  SER   159      34.378   7.970   3.797  1.00  0.00
C
ATOM   2628 1HB  SER   159      33.661   8.568   4.360  1.00  0.00
H
ATOM   2629 2HB  SER   159      34.032   7.852   2.770  1.00  0.00
H
ATOM   2630  OG  SER   159      34.529   6.684   4.394  1.00  0.00
O
ATOM   2631  HG  SER   159      33.685   6.225   4.368  1.00  0.00
H
ATOM   2632  N   PHE   160      36.250  10.892   4.621  1.00  0.00
N
ATOM   2633  H   PHE   160      36.473  11.130   3.660  1.00  0.00
H
ATOM   2634  CA  PHE   160      36.511  11.908   5.642  1.00  0.00
C
ATOM   2635  HA  PHE   160      36.198  11.527   6.603  1.00  0.00
H
ATOM   2636  C   PHE   160      35.710  13.197   5.407  1.00  0.00
C
ATOM   2637  O   PHE   160      36.269  14.284   5.307  1.00  0.00
O
ATOM   2638  CB  PHE   160      38.026  12.161   5.739  1.00  0.00
C
ATOM   2639 1HB  PHE   160      38.469  11.982   4.762  1.00  0.00
H
ATOM   2640 2HB  PHE   160      38.214  13.192   6.026  1.00  0.00
H
ATOM   2641  CG  PHE   160      38.735  11.303   6.748  1.00  0.00
C
ATOM   2642  CD1 PHE   160      38.924   9.928   6.528  1.00  0.00
C
ATOM   2643  HD1 PHE   160      38.584   9.486   5.608  1.00  0.00
H
ATOM   2644  CD2 PHE   160      39.211  11.875   7.942  1.00  0.00
C
ATOM   2645  HD2 PHE   160      39.088  12.934   8.120  1.00  0.00
H
ATOM   2646  CE1 PHE   160      39.542   9.111   7.509  1.00  0.00
C
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ATOM   2647  HE1 PHE   160      39.672   8.053   7.335  1.00  0.00
H
ATOM   2648  CE2 PHE   160      39.822  11.074   8.936  1.00  0.00
C
ATOM   2649  HE2 PHE   160      40.158  11.521   9.860  1.00  0.00
H
ATOM   2650  CZ  PHE   160      39.980   9.686   8.721  1.00  0.00
C
ATOM   2651  HZ  PHE   160      40.436   9.069   9.481  1.00  0.00
H
ATOM   2652  N   HIS   161      34.386  13.113   5.338  1.00  0.00
N
ATOM   2653  H   HIS   161      33.917  12.217   5.399  1.00  0.00
H
ATOM   2654  CA  HIS   161      33.584  14.342   5.352  1.00  0.00
C
ATOM   2655  HA  HIS   161      34.133  15.171   4.908  1.00  0.00
H
ATOM   2656  C   HIS   161      33.295  14.620   6.828  1.00  0.00
C
ATOM   2657  O   HIS   161      32.755  13.742   7.488  1.00  0.00
O
ATOM   2658  CB  HIS   161      32.207  14.206   4.698  1.00  0.00
C
ATOM   2659 1HB  HIS   161      31.562  13.653   5.375  1.00  0.00
H
ATOM   2660 2HB  HIS   161      31.793  15.201   4.562  1.00  0.00
H
ATOM   2661  CG  HIS   161      32.161  13.486   3.391  1.00  0.00
C
ATOM   2662  ND1 HIS   161      32.111  14.135   2.161  1.00  0.00
N
ATOM   2663  HD1 HIS   161      32.314  15.114   2.006  1.00  0.00
H
ATOM   2664  CD2 HIS   161      31.804  12.209   3.120  1.00  0.00
C
ATOM   2665  HD2 HIS   161      31.681  11.421   3.854  1.00  0.00
H
ATOM   2666  CE1 HIS   161      31.727  13.276   1.230  1.00  0.00
C
ATOM   2667  HE1 HIS   161      31.574  13.499   0.175  1.00  0.00
H
ATOM   2668  NE2 HIS   161      31.522  12.111   1.791  1.00  0.00
N
ATOM   2669  HE2 HIS   161      31.164  11.272   1.331  1.00  0.00
H
ATOM   2670  N   PHE   162      33.573  15.798   7.357  1.00  0.00
N
ATOM   2671  H   PHE   162      34.031  16.520   6.801  1.00  0.00
H
ATOM   2672  CA  PHE   162      33.221  16.110   8.746  1.00  0.00
C
ATOM   2673  HA  PHE   162      32.290  15.612   9.017  1.00  0.00
H
ATOM   2674  C   PHE   162      33.013  17.606   8.859  1.00  0.00
C
ATOM   2675  O   PHE   162      33.329  18.323   7.921  1.00  0.00
O
ATOM   2676  CB  PHE   162      34.319  15.658   9.714  1.00  0.00
C
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ATOM   2677 1HB  PHE   162      34.071  16.004  10.715  1.00  0.00
H
ATOM   2678 2HB  PHE   162      34.338  14.572   9.732  1.00  0.00
H
ATOM   2679  CG  PHE   162      35.699  16.141   9.361  1.00  0.00
C
ATOM   2680  CD1 PHE   162      36.214  17.323   9.926  1.00  0.00
C
ATOM   2681  HD1 PHE   162      35.593  17.927  10.572  1.00  0.00
H
ATOM   2682  CD2 PHE   162      36.523  15.369   8.521  1.00  0.00
C
ATOM   2683  HD2 PHE   162      36.141  14.458   8.084  1.00  0.00
H
ATOM   2684  CE1 PHE   162      37.556  17.710   9.688  1.00  0.00
C
ATOM   2685  HE1 PHE   162      37.950  18.607  10.144  1.00  0.00
H
ATOM   2686  CE2 PHE   162      37.851  15.758   8.248  1.00  0.00
C
ATOM   2687  HE2 PHE   162      38.464  15.157   7.593  1.00  0.00
H
ATOM   2688  CZ  PHE   162      38.375  16.924   8.842  1.00  0.00
C
ATOM   2689  HZ  PHE   162      39.399  17.214   8.656  1.00  0.00
H
ATOM   2690  N   LYS   163      32.504  18.091   9.983  1.00  0.00
N
ATOM   2691  H   LYS   163      32.228  17.462  10.729  1.00  0.00
H
ATOM   2692  CA  LYS   163      32.396  19.531  10.219  1.00  0.00
C
ATOM   2693  HA  LYS   163      32.919  20.069   9.436  1.00  0.00
H
ATOM   2694  C   LYS   163      33.120  19.807  11.525  1.00  0.00
C
ATOM   2695  O   LYS   163      32.661  19.419  12.591  1.00  0.00
O
ATOM   2696  CB  LYS   163      30.929  19.984  10.237  1.00  0.00
C
ATOM   2697 1HB  LYS   163      30.455  19.666   9.309  1.00  0.00
H
ATOM   2698 2HB  LYS   163      30.435  19.492  11.064  1.00  0.00
H
ATOM   2699  CG  LYS   163      30.731  21.484  10.408  1.00  0.00
C
ATOM   2700 1HG  LYS   163      31.333  21.811  11.254  1.00  0.00
H
ATOM   2701 2HG  LYS   163      31.084  21.999   9.517  1.00  0.00
H
ATOM   2702  CD  LYS   163      29.277  21.889  10.677  1.00  0.00
C
ATOM   2703 1HD  LYS   163      28.877  21.283  11.490  1.00  0.00
H
ATOM   2704 2HD  LYS   163      29.275  22.930  10.997  1.00  0.00
H
ATOM   2705  CE  LYS   163      28.368  21.778   9.456  1.00  0.00
C
ATOM   2706 1HE  LYS   163      28.839  22.303   8.622  1.00  0.00
H
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ATOM   2707 2HE  LYS   163      28.231  20.730   9.185  1.00  0.00
H
ATOM   2708  NZ  LYS   163      27.033  22.416   9.729  1.00  0.00
N
ATOM   2709 1HZ  LYS   163      26.494  22.471   8.874  1.00  0.00
H
ATOM   2710 2HZ  LYS   163      27.158  23.358  10.088  1.00  0.00
H
ATOM   2711 3HZ  LYS   163      26.507  21.878  10.407  1.00  0.00
H
ATOM   2712  N   ILE   164      34.285  20.425  11.443  1.00  0.00
N
ATOM   2713  H   ILE   164      34.619  20.765  10.547  1.00  0.00
H
ATOM   2714  CA  ILE   164      35.066  20.716  12.640  1.00  0.00
C
ATOM   2715  HA  ILE   164      34.889  19.925  13.367  1.00  0.00
H
ATOM   2716  C   ILE   164      34.430  21.992  13.187  1.00  0.00
C
ATOM   2717  O   ILE   164      34.586  23.084  12.643  1.00  0.00
O
ATOM   2718  CB  ILE   164      36.604  20.759  12.381  1.00  0.00
C
ATOM   2719  HB  ILE   164      36.952  19.725  12.386  1.00  0.00
H
ATOM   2720  CG1 ILE   164      37.337  21.500  13.512  1.00  0.00
C
ATOM   2721 1HG1 ILE   164      37.263  22.574  13.334  1.00  0.00
H
ATOM   2722 2HG1 ILE   164      36.829  21.283  14.445  1.00  0.00
H
ATOM   2723  CG2 ILE   164      36.942  21.350  11.010  1.00  0.00
C
ATOM   2724 1HG2 ILE   164      38.022  21.425  10.893  1.00  0.00
H
ATOM   2725 2HG2 ILE   164      36.512  22.348  10.912  1.00  0.00
H
ATOM   2726 3HG2 ILE   164      36.565  20.712  10.211  1.00  0.00
H
ATOM   2727  CD1 ILE   164      38.816  21.126  13.683  1.00  0.00
C
ATOM   2728 1HD1 ILE   164      39.236  21.693  14.514  1.00  0.00
H
ATOM   2729 2HD1 ILE   164      39.372  21.367  12.776  1.00  0.00
H
ATOM   2730 3HD1 ILE   164      38.909  20.061  13.896  1.00  0.00
H
ATOM   2731  N   ASN   165      33.596  21.776  14.196  1.00  0.00
N
ATOM   2732  H   ASN   165      33.502  20.824  14.518  1.00  0.00
H
ATOM   2733  CA  ASN   165      32.697  22.771  14.788  1.00  0.00
C
ATOM   2734  HA  ASN   165      32.056  22.243  15.493  1.00  0.00
H
ATOM   2735  C   ASN   165      31.734  23.395  13.769  1.00  0.00
C
ATOM   2736  O   ASN   165      30.641  22.870  13.601  1.00  0.00
O
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ATOM   2737  CB  ASN   165      33.470  23.807  15.610  1.00  0.00
C
ATOM   2738 1HB  ASN   165      34.026  23.294  16.392  1.00  0.00
H
ATOM   2739 2HB  ASN   165      34.184  24.320  14.972  1.00  0.00
H
ATOM   2740  CG  ASN   165      32.563  24.825  16.250  1.00  0.00
C
ATOM   2741  OD1 ASN   165      31.464  24.509  16.691  1.00  0.00
O
ATOM   2742  ND2 ASN   165      32.991  26.051  16.279  1.00  0.00
N
ATOM   2743 1HD2 ASN   165      32.413  26.763  16.703  1.00  0.00
H
ATOM   2744 2HD2 ASN   165      33.877  26.283  15.864  1.00  0.00
H
ATOM   2745  N   GLN   166      32.108  24.465  13.077  1.00  0.00
N
ATOM   2746  H   GLN   166      33.023  24.879  13.251  1.00  0.00
H
ATOM   2747  CA  GLN   166      31.251  25.069  12.055  1.00  0.00
C
ATOM   2748  HA  GLN   166      30.264  24.611  12.098  1.00  0.00
H
ATOM   2749  C   GLN   166      31.781  24.871  10.636  1.00  0.00
C
ATOM   2750  O   GLN   166      31.071  25.141   9.667  1.00  0.00
O
ATOM   2751  CB  GLN   166      31.079  26.569  12.321  1.00  0.00
C
ATOM   2752 1HB  GLN   166      32.054  27.052  12.275  1.00  0.00
H
ATOM   2753 2HB  GLN   166      30.455  26.987  11.533  1.00  0.00
H
ATOM   2754  CG  GLN   166      30.431  26.891  13.666  1.00  0.00
C
ATOM   2755 1HG  GLN   166      31.088  26.561  14.466  1.00  0.00
H
ATOM   2756 2HG  GLN   166      30.304  27.969  13.751  1.00  0.00
H
ATOM   2757  CD  GLN   166      29.083  26.226  13.843  1.00  0.00
C
ATOM   2758  OE1 GLN   166      28.184  26.370  13.014  1.00  0.00
O
ATOM   2759  NE2 GLN   166      28.918  25.505  14.919  1.00  0.00
N
ATOM   2760 1HE2 GLN   166      28.035  25.047  15.069  1.00  0.00
H
ATOM   2761 2HE2 GLN   166      29.672  25.397  15.580  1.00  0.00
H
ATOM   2762  N   HIS   167      33.016  24.416  10.485  1.00  0.00
N
ATOM   2763  H   HIS   167      33.565  24.138  11.296  1.00  0.00
H
ATOM   2764  CA  HIS   167      33.639  24.338   9.163  1.00  0.00
C
ATOM   2765  HA  HIS   167      33.103  24.995   8.487  1.00  0.00
H
ATOM   2766  C   HIS   167      33.627  22.941   8.562  1.00  0.00
C
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ATOM   2767  O   HIS   167      34.315  22.045   9.043  1.00  0.00
O
ATOM   2768  CB  HIS   167      35.072  24.853   9.240  1.00  0.00
C
ATOM   2769 1HB  HIS   167      35.639  24.247   9.945  1.00  0.00
H
ATOM   2770 2HB  HIS   167      35.522  24.755   8.252  1.00  0.00
H
ATOM   2771  CG  HIS   167      35.160  26.287   9.652  1.00  0.00
C
ATOM   2772  ND1 HIS   167      35.609  26.684  10.895  1.00  0.00
N
ATOM   2773  CD2 HIS   167      34.814  27.413   8.971  1.00  0.00
C
ATOM   2774  HD2 HIS   167      34.424  27.422   7.964  1.00  0.00
H
ATOM   2775  CE1 HIS   167      35.537  28.050  10.893  1.00  0.00
C
ATOM   2776  HE1 HIS   167      35.845  28.674  11.722  1.00  0.00
H
ATOM   2777  NE2 HIS   167      35.042  28.531   9.729  1.00  0.00
N
ATOM   2778  HE2 HIS   167      34.889  29.500   9.469  1.00  0.00
H
ATOM   2779  N   SER   168      32.836  22.735   7.518  1.00  0.00
N
ATOM   2780  H   SER   168      32.239  23.469   7.177  1.00  0.00
H
ATOM   2781  CA  SER   168      32.832  21.442   6.841  1.00  0.00
C
ATOM   2782  HA  SER   168      32.799  20.674   7.603  1.00  0.00
H
ATOM   2783  C   SER   168      34.121  21.259   6.043  1.00  0.00
C
ATOM   2784  O   SER   168      34.567  22.147   5.312  1.00  0.00
O
ATOM   2785  CB  SER   168      31.601  21.257   5.957  1.00  0.00
C
ATOM   2786 1HB  SER   168      31.673  21.909   5.092  1.00  0.00
H
ATOM   2787 2HB  SER   168      31.552  20.224   5.614  1.00  0.00
H
ATOM   2788  OG  SER   168      30.429  21.586   6.691  1.00  0.00
O
ATOM   2789  HG  SER   168      29.654  21.464   6.125  1.00  0.00
H
ATOM   2790  N   PHE   169      34.737  20.109   6.245  1.00  0.00
N
ATOM   2791  H   PHE   169      34.303  19.423   6.857  1.00  0.00
H
ATOM   2792  CA  PHE   169      35.998  19.727   5.629  1.00  0.00
C
ATOM   2793  HA  PHE   169      36.371  20.470   4.924  1.00  0.00
H
ATOM   2794  C   PHE   169      35.615  18.436   4.919  1.00  0.00
C
ATOM   2795  O   PHE   169      34.918  17.600   5.503  1.00  0.00
O
ATOM   2796  CB  PHE   169      37.042  19.356   6.693  1.00  0.00
C
```

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ATOM   2797 1HB  PHE   169      36.545  18.749   7.446  1.00  0.00
H
ATOM   2798 2HB  PHE   169      37.804  18.741   6.213  1.00  0.00
H
ATOM   2799  CG  PHE   169      37.757  20.517   7.378  1.00  0.00
C
ATOM   2800  CD1 PHE   169      37.226  21.819   7.493  1.00  0.00
C
ATOM   2801  HD1 PHE   169      36.246  22.051   7.119  1.00  0.00
H
ATOM   2802  CD2 PHE   169      39.037  20.274   7.921  1.00  0.00
C
ATOM   2803  HD2 PHE   169      39.466  19.287   7.849  1.00  0.00
H
ATOM   2804  CE1 PHE   169      37.979  22.867   8.098  1.00  0.00
C
ATOM   2805  HE1 PHE   169      37.573  23.865   8.151  1.00  0.00
H
ATOM   2806  CE2 PHE   169      39.784  21.305   8.551  1.00  0.00
C
ATOM   2807  HE2 PHE   169      40.757  21.095   8.968  1.00  0.00
H
ATOM   2808  CZ  PHE   169      39.258  22.606   8.622  1.00  0.00
C
ATOM   2809  HZ  PHE   169      39.826  23.400   9.085  1.00  0.00
H
ATOM   2810  N   ILE   170      36.061  18.238   3.690  1.00  0.00
N
ATOM   2811  H   ILE   170      36.571  18.976   3.206  1.00  0.00
H
ATOM   2812  CA  ILE   170      35.859  16.967   2.998  1.00  0.00
C
ATOM   2813  HA  ILE   170      35.478  16.225   3.695  1.00  0.00
H
ATOM   2814  C   ILE   170      37.222  16.501   2.537  1.00  0.00
C
ATOM   2815  O   ILE   170      37.916  17.184   1.786  1.00  0.00
O
ATOM   2816  CB  ILE   170      34.859  17.076   1.814  1.00  0.00
C
ATOM   2817  HB  ILE   170      35.176  17.889   1.159  1.00  0.00
H
ATOM   2818  CG1 ILE   170      33.464  17.407   2.386  1.00  0.00
C
ATOM   2819 1HG1 ILE   170      33.147  16.578   3.015  1.00  0.00
H
ATOM   2820 2HG1 ILE   170      33.548  18.286   3.023  1.00  0.00
H
ATOM   2821  CG2 ILE   170      34.854  15.756   0.982  1.00  0.00
C
ATOM   2822 1HG2 ILE   170      34.090  15.790   0.206  1.00  0.00
H
ATOM   2823 2HG2 ILE   170      34.693  14.892   1.628  1.00  0.00
H
ATOM   2824 3HG2 ILE   170      35.815  15.637   0.478  1.00  0.00
H
ATOM   2825  CD1 ILE   170      32.366  17.688   1.376  1.00  0.00
C
ATOM   2826 1HD1 ILE   170      31.456  17.970   1.907  1.00  0.00
H
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ATOM   2827 2HD1 ILE   170      32.161  16.808   0.770  1.00  0.00
H
ATOM   2828 3HD1 ILE   170      32.663  18.514   0.728  1.00  0.00
H
ATOM   2829  N   ILE   171      37.611  15.328   3.005  1.00  0.00
N
ATOM   2830  H   ILE   171      37.021  14.832   3.668  1.00  0.00
H
ATOM   2831  CA  ILE   171      38.853  14.692   2.606  1.00  0.00
C
ATOM   2832  HA  ILE   171      39.285  15.235   1.774  1.00  0.00
H
ATOM   2833  C   ILE   171      38.432  13.298   2.153  1.00  0.00
C
ATOM   2834  O   ILE   171      37.374  12.807   2.560  1.00  0.00
O
ATOM   2835  CB  ILE   171      39.902  14.619   3.766  1.00  0.00
C
ATOM   2836  HB  ILE   171      39.632  13.800   4.416  1.00  0.00
H
ATOM   2837  CG1 ILE   171      39.873  15.899   4.628  1.00  0.00
C
ATOM   2838 1HG1 ILE   171      40.136  16.744   4.001  1.00  0.00
H
ATOM   2839 2HG1 ILE   171      38.860  16.055   5.000  1.00  0.00
H
ATOM   2840  CG2 ILE   171      41.298  14.302   3.198  1.00  0.00
C
ATOM   2841 1HG2 ILE   171      42.049  14.328   3.981  1.00  0.00
H
ATOM   2842 2HG2 ILE   171      41.559  15.016   2.423  1.00  0.00
H
ATOM   2843 3HG2 ILE   171      41.304  13.309   2.763  1.00  0.00
H
ATOM   2844  CD1 ILE   171      40.783  15.896   5.850  1.00  0.00
C
ATOM   2845 1HD1 ILE   171      40.508  16.728   6.497  1.00  0.00
H
ATOM   2846 2HD1 ILE   171      41.823  16.014   5.544  1.00  0.00
H
ATOM   2847 3HD1 ILE   171      40.665  14.964   6.404  1.00  0.00
H
ATOM   2848  N   TYR   172      39.251  12.650   1.343  1.00  0.00
N
ATOM   2849  H   TYR   172      40.054  13.128   0.950  1.00  0.00
H
ATOM   2850  CA  TYR   172      39.103  11.235   1.044  1.00  0.00
C
ATOM   2851  HA  TYR   172      38.718  10.708   1.913  1.00  0.00
H
ATOM   2852  C   TYR   172      40.488  10.719   0.705  1.00  0.00
C
ATOM   2853  O   TYR   172      41.366  11.545   0.453  1.00  0.00
O
ATOM   2854  CB  TYR   172      38.163  11.038  -0.140  1.00  0.00
C
ATOM   2855 1HB  TYR   172      38.114   9.977  -0.370  1.00  0.00
H
ATOM   2856 2HB  TYR   172      37.173  11.370   0.167  1.00  0.00
H
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ATOM   2857  CG  TYR   172      38.535  11.784  -1.406  1.00  0.00
C
ATOM   2858  CD1 TYR   172      39.477  11.251  -2.306  1.00  0.00
C
ATOM   2859  HD1 TYR   172      39.979  10.325  -2.069  1.00  0.00
H
ATOM   2860  CD2 TYR   172      37.909  13.004  -1.738  1.00  0.00
C
ATOM   2861  HD2 TYR   172      37.184  13.440  -1.064  1.00  0.00
H
ATOM   2862  CE1 TYR   172      39.779  11.916  -3.522  1.00  0.00
C
ATOM   2863  HE1 TYR   172      40.517  11.516  -4.200  1.00  0.00
H
ATOM   2864  CE2 TYR   172      38.207  13.668  -2.963  1.00  0.00
C
ATOM   2865  HE2 TYR   172      37.717  14.597  -3.211  1.00  0.00
H
ATOM   2866  CZ  TYR   172      39.137  13.108  -3.842  1.00  0.00
C
ATOM   2867  OH  TYR   172      39.467  13.709  -5.028  1.00  0.00
O
ATOM   2868  HH  TYR   172      39.090  14.593  -5.113  1.00  0.00
H
ATOM   2869  N   ARG   173      40.666   9.402   0.640  1.00  0.00
N
ATOM   2870  H   ARG   173      39.906   8.788   0.899  1.00  0.00
H
ATOM   2871  CA  ARG   173      41.901   8.800   0.122  1.00  0.00
C
ATOM   2872  HA  ARG   173      42.543   9.593  -0.249  1.00  0.00
H
ATOM   2873  C   ARG   173      41.540   7.870  -1.025  1.00  0.00
C
ATOM   2874  O   ARG   173      40.581   7.108  -0.893  1.00  0.00
O
ATOM   2875  CB  ARG   173      42.651   8.006   1.197  1.00  0.00
C
ATOM   2876 1HB  ARG   173      42.655   8.578   2.119  1.00  0.00
H
ATOM   2877 2HB  ARG   173      42.114   7.076   1.376  1.00  0.00
H
ATOM   2878  CG  ARG   173      44.098   7.679   0.833  1.00  0.00
C
ATOM   2879 1HG  ARG   173      44.130   7.246  -0.166  1.00  0.00
H
ATOM   2880 2HG  ARG   173      44.687   8.596   0.841  1.00  0.00
H
ATOM   2881  CD  ARG   173      44.706   6.685   1.800  1.00  0.00
C
ATOM   2882 1HD  ARG   173      44.655   7.083   2.813  1.00  0.00
H
ATOM   2883 2HD  ARG   173      44.132   5.763   1.754  1.00  0.00
H
ATOM   2884  NE  ARG   173      46.105   6.400   1.456  1.00  0.00
N
ATOM   2885  HE  ARG   173      46.570   7.056   0.833  1.00  0.00
H
ATOM   2886  CZ  ARG   173      46.835   5.386   1.896  1.00  0.00
C
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ATOM   2887  NH1 ARG   173      46.377   4.453   2.694  1.00  0.00
N
ATOM   2888 1HH1 ARG   173      45.443   4.515   3.051  1.00  0.00
H
ATOM   2889 2HH1 ARG   173      46.963   3.674   2.958  1.00  0.00
H
ATOM   2890  NH2 ARG   173      48.048   5.266   1.447  1.00  0.00
N
ATOM   2891 1HH2 ARG   173      48.382   5.916   0.753  1.00  0.00
H
ATOM   2892 2HH2 ARG   173      48.637   4.527   1.791  1.00  0.00
H
ATOM   2893  N   THR   174      42.265   7.929  -2.132  1.00  0.00
N
ATOM   2894  H   THR   174      43.024   8.607  -2.201  1.00  0.00
H
ATOM   2895  CA  THR   174      41.940   7.135  -3.321  1.00  0.00
C
ATOM   2896  HA  THR   174      40.921   6.759  -3.240  1.00  0.00
H
ATOM   2897  C   THR   174      42.824   5.954  -3.709  1.00  0.00
C
ATOM   2898  O   THR   174      42.312   4.903  -4.081  1.00  0.00
O
ATOM   2899  CB  THR   174      42.015   8.068  -4.528  1.00  0.00
C
ATOM   2900  HB  THR   174      42.300   7.508  -5.417  1.00  0.00
H
ATOM   2901  OG1 THR   174      42.989   9.073  -4.237  1.00  0.00
O
ATOM   2902  HG1 THR   174      43.171   9.572  -5.043  1.00  0.00
H
ATOM   2903  CG2 THR   174      40.707   8.754  -4.771  1.00  0.00
C
ATOM   2904 1HG2 THR   174      40.845   9.545  -5.506  1.00  0.00
H
ATOM   2905 2HG2 THR   174      40.326   9.178  -3.847  1.00  0.00
H
ATOM   2906 3HG2 THR   174      39.986   8.039  -5.157  1.00  0.00
H
ATOM   2907  N   ASN   175      44.142   6.105  -3.694  1.00  0.00
N
ATOM   2908  H   ASN   175      44.553   6.956  -3.337  1.00  0.00
H
ATOM   2909  CA  ASN   175      44.997   5.114  -4.367  1.00  0.00
C
ATOM   2910  HA  ASN   175      44.409   4.621  -5.143  1.00  0.00
H
ATOM   2911  C   ASN   175      45.530   4.015  -3.456  1.00  0.00
C
ATOM   2912  O   ASN   175      46.157   3.071  -3.952  1.00  0.00
O
ATOM   2913  CB  ASN   175      46.193   5.781  -5.063  1.00  0.00
C
ATOM   2914 1HB  ASN   175      46.736   6.392  -4.348  1.00  0.00
H
ATOM   2915 2HB  ASN   175      46.866   5.005  -5.420  1.00  0.00
H
ATOM   2916  CG  ASN   175      45.801   6.613  -6.264  1.00  0.00
C
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ATOM   2917  OD1 ASN   175      44.686   7.099  -6.385  1.00  0.00
O
ATOM   2918  ND2 ASN   175      46.714   6.777  -7.172  1.00  0.00
N
ATOM   2919 1HD2 ASN   175      46.500   7.336  -7.979  1.00  0.00
H
ATOM   2920 2HD2 ASN   175      47.616   6.339  -7.065  1.00  0.00
H
ATOM   2921  N   ALA   176      45.290   4.156  -2.156  1.00  0.00
N
ATOM   2922  H   ALA   176      44.740   4.945  -1.864  1.00  0.00
H
ATOM   2923  CA  ALA   176      45.865   3.302  -1.107  1.00  0.00
C
ATOM   2924  HA  ALA   176      45.557   3.698  -0.140  1.00  0.00
H
ATOM   2925  C   ALA   176      47.396   3.373  -1.155  1.00  0.00
C
ATOM   2926  O   ALA   176      47.900   4.427  -1.582  1.00  0.00
O
ATOM   2927  OXT ALA   176      48.090   2.412  -0.750  1.00  0.00
O
ATOM   2928  CB  ALA   176      45.341   1.848  -1.206  1.00  0.00
C
ATOM   2929 1HB  ALA   176      44.253   1.842  -1.192  1.00  0.00
H
ATOM   2930 2HB  ALA   176      45.704   1.265  -0.359  1.00  0.00
H
ATOM   2931 3HB  ALA   176      45.694   1.379  -2.126  1.00  0.00
H
TER    2932      ALA   176
END
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REMARK YASARA
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REMARK YASARA
REMARK YASARA Written on:        Wed Oct 05 10:22:57 2016
REMARK YASARA Number of models: 1
REMARK YASARA Number of atoms:   2888
REMARK YASARA Please address questions or suggestions to:
Eliza@yasara.org
REMARK YASARA
SEQRES   1    172  MET GLU PRO PHE VAL ASN ILE PHE PHE ALA ILE ASP GLU
SEQRES   2    172  GLN GLN ASN GLU THR ILE THR ARG ASP GLU LEU ARG ARG
SEQRES   3    172  TYR VAL LYS HIS ASN HIS LEU ASP GLU GLY MET ILE THR
SEQRES   4    172  ARG TRP GLN SER LEU PHE ASP PRO THR ASN SER GLY ILE
SEQRES   5    172  ILE THR PHE GLN LYS PHE CYS ASP VAL LEU GLY VAL LYS
SEQRES   6    172  PRO GLU GLN ALA ARG THR LEU ARG LYS SER VAL ILE ASN
SEQRES   7    172  ASN ARG PRO LEU PRO LYS ASP LEU GLN ILE ILE SER GLN
SEQRES   8    172  ASN MET SER SER GLU ASP GLN PHE GLN ILE PHE GLU PHE
SEQRES   9    172  VAL ARG SER LEU LEU ASP LYS ASN LEU SER VAL GLN ASP
SEQRES  10    172  MET THR GLN MET ILE LYS GLN TRP LEU ASP LYS THR PHE
SEQRES  11    172  ASP PRO SER ARG HIS VAL VAL ILE ILE ASP GLY SER TYR
SEQRES  12    172  TRP ILE SER TYR SER HIS LEU PRO GLU GLN SER LEU GLN
SEQRES  13    172  PHE ARG LEU LYS GLU LYS CYS TYR LEU VAL TRP ARG THR
SEQRES  14    172  PRO LYS HIS
ATOM      1  N   MET     1       1.944  -0.258   2.751  1.00  0.00
N
ATOM      2 1H   MET     1       2.205   0.375   2.007  1.00  0.00
H
ATOM      3 2H   MET     1       2.782  -0.601   3.203  1.00  0.00
H
ATOM      4 3H   MET     1       1.380   0.242   3.426  1.00  0.00
H
ATOM      5  CA  MET     1       1.171  -1.393   2.188  1.00  0.00
C
ATOM      6  HA  MET     1       0.290  -0.981   1.702  1.00  0.00
H
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ATOM      7  C   MET     1       0.689  -2.331   3.284  1.00  0.00
C
ATOM      8  O   MET     1      -0.502  -2.594   3.352  1.00  0.00
O
ATOM      9  CB  MET     1       1.993  -2.139   1.135  1.00  0.00
C
ATOM     10 1HB  MET     1       2.320  -1.417   0.387  1.00  0.00
H
ATOM     11 2HB  MET     1       2.879  -2.558   1.603  1.00  0.00
H
ATOM     12  CG  MET     1       1.237  -3.263   0.439  1.00  0.00
C
ATOM     13 1HG  MET     1       1.888  -3.715  -0.308  1.00  0.00
H
ATOM     14 2HG  MET     1       0.978  -4.022   1.177  1.00  0.00
H
ATOM     15  SD  MET     1      -0.282  -2.708  -0.363  1.00  0.00
S
ATOM     16  CE  MET     1       0.319  -1.686  -1.710  1.00  0.00
C
ATOM     17 1HE  MET     1      -0.527  -1.304  -2.280  1.00  0.00
H
ATOM     18 2HE  MET     1       0.953  -2.283  -2.366  1.00  0.00
H
ATOM     19 3HE  MET     1       0.895  -0.847  -1.319  1.00  0.00
H
ATOM     20  N   GLU     2       1.543  -2.821   4.174  1.00  0.00
N
ATOM     21  H   GLU     2       2.535  -2.587   4.141  1.00  0.00
H
ATOM     22  CA  GLU     2       1.098  -3.738   5.236  1.00  0.00
C
ATOM     23  HA  GLU     2       0.757  -4.646   4.738  1.00  0.00
H
ATOM     24  C   GLU     2      -0.083  -3.303   6.130  1.00  0.00
C
ATOM     25  O   GLU     2      -0.951  -4.140   6.400  1.00  0.00
O
ATOM     26  CB  GLU     2       2.300  -4.139   6.094  1.00  0.00
C
ATOM     27 1HB  GLU     2       3.091  -4.458   5.418  1.00  0.00
H
ATOM     28 2HB  GLU     2       2.651  -3.276   6.659  1.00  0.00
H
ATOM     29  CG  GLU     2       2.009  -5.277   7.055  1.00  0.00
C
ATOM     30 1HG  GLU     2       1.458  -4.895   7.915  1.00  0.00
H
ATOM     31 2HG  GLU     2       1.382  -6.001   6.537  1.00  0.00
H
ATOM     32  CD  GLU     2       3.264  -5.990   7.522  1.00  0.00
C
ATOM     33  OE1 GLU     2       4.354  -5.370   7.608  1.00  0.00
O
ATOM     34  OE2 GLU     2       3.190  -7.217   7.766  1.00  0.00
O
ATOM     35  N   PRO     3      -0.209  -2.015   6.528  1.00  0.00
N
ATOM     36  CA  PRO     3      -1.466  -1.709   7.232  1.00  0.00
C
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ATOM     37  HA  PRO     3      -1.501  -2.237   8.181  1.00  0.00
H
ATOM     38  C   PRO     3      -2.745  -2.001   6.452  1.00  0.00
C
ATOM     39  O   PRO     3      -3.771  -2.320   7.040  1.00  0.00
O
ATOM     40  CB  PRO     3      -1.367  -0.201   7.489  1.00  0.00
C
ATOM     41 1HB  PRO     3      -1.845   0.352   6.680  1.00  0.00
H
ATOM     42 2HB  PRO     3      -1.819   0.058   8.446  1.00  0.00
H
ATOM     43  CG  PRO     3       0.071   0.069   7.511  1.00  0.00
C
ATOM     44 1HG  PRO     3       0.275   1.119   7.308  1.00  0.00
H
ATOM     45 2HG  PRO     3       0.487  -0.221   8.475  1.00  0.00
H
ATOM     46  CD  PRO     3       0.625  -0.802   6.430  1.00  0.00
C
ATOM     47 1HD  PRO     3       0.499  -0.333   5.454  1.00  0.00
H
ATOM     48 2HD  PRO     3       1.673  -1.029   6.627  1.00  0.00
H
ATOM     49  N   PHE     4      -2.699  -1.925   5.129  1.00  0.00
N
ATOM     50  H   PHE     4      -1.816  -1.773   4.656  1.00  0.00
H
ATOM     51  CA  PHE     4      -3.907  -2.047   4.318  1.00  0.00
C
ATOM     52  HA  PHE     4      -4.661  -1.363   4.701  1.00  0.00
H
ATOM     53  C   PHE     4      -4.451  -3.468   4.379  1.00  0.00
C
ATOM     54  O   PHE     4      -5.651  -3.697   4.242  1.00  0.00
O
ATOM     55  CB  PHE     4      -3.622  -1.741   2.838  1.00  0.00
C
ATOM     56 1HB  PHE     4      -2.966  -2.521   2.453  1.00  0.00
H
ATOM     57 2HB  PHE     4      -4.554  -1.794   2.279  1.00  0.00
H
ATOM     58  CG  PHE     4      -2.956  -0.407   2.560  1.00  0.00
C
ATOM     59  CD1 PHE     4      -2.932   0.664   3.481  1.00  0.00
C
ATOM     60  HD1 PHE     4      -3.405   0.568   4.442  1.00  0.00
H
ATOM     61  CD2 PHE     4      -2.319  -0.235   1.319  1.00  0.00
C
ATOM     62  HD2 PHE     4      -2.340  -1.035   0.593  1.00  0.00
H
ATOM     63  CE1 PHE     4      -2.268   1.879   3.169  1.00  0.00
C
ATOM     64  HE1 PHE     4      -2.252   2.690   3.883  1.00  0.00
H
ATOM     65  CE2 PHE     4      -1.638   0.961   1.006  1.00  0.00
C
ATOM     66  HE2 PHE     4      -1.124   1.055   0.063  1.00  0.00
H
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ATOM     67  CZ  PHE     4      -1.619   2.024   1.927  1.00  0.00
C
ATOM     68  HZ  PHE     4      -1.107   2.945   1.684  1.00  0.00
H
ATOM     69  N   VAL     5      -3.537  -4.413   4.561  1.00  0.00
N
ATOM     70  H   VAL     5      -2.582  -4.142   4.760  1.00  0.00
H
ATOM     71  CA  VAL     5      -3.827  -5.839   4.438  1.00  0.00
C
ATOM     72  HA  VAL     5      -4.240  -6.034   3.451  1.00  0.00
H
ATOM     73  C   VAL     5      -4.867  -6.258   5.464  1.00  0.00
C
ATOM     74  O   VAL     5      -5.840  -6.929   5.129  1.00  0.00
O
ATOM     75  CB  VAL     5      -2.511  -6.659   4.600  1.00  0.00
C
ATOM     76  HB  VAL     5      -2.091  -6.442   5.580  1.00  0.00
H
ATOM     77  CG1 VAL     5      -2.745  -8.166   4.499  1.00  0.00
C
ATOM     78 1HG1 VAL     5      -1.801  -8.694   4.645  1.00  0.00
H
ATOM     79 2HG1 VAL     5      -3.146  -8.420   3.517  1.00  0.00
H
ATOM     80 3HG1 VAL     5      -3.441  -8.495   5.271  1.00  0.00
H
ATOM     81  CG2 VAL     5      -1.486  -6.237   3.529  1.00  0.00
C
ATOM     82 1HG2 VAL     5      -0.568  -6.806   3.664  1.00  0.00
H
ATOM     83 2HG2 VAL     5      -1.246  -5.180   3.618  1.00  0.00
H
ATOM     84 3HG2 VAL     5      -1.884  -6.436   2.534  1.00  0.00
H
ATOM     85  N   ASN     6      -4.700  -5.819   6.703  1.00  0.00
N
ATOM     86  H   ASN     6      -3.905  -5.236   6.925  1.00  0.00
H
ATOM     87  CA  ASN     6      -5.631  -6.217   7.756  1.00  0.00
C
ATOM     88  HA  ASN     6      -5.936  -7.250   7.585  1.00  0.00
H
ATOM     89  C   ASN     6      -6.885  -5.346   7.731  1.00  0.00
C
ATOM     90  O   ASN     6      -7.979  -5.812   8.030  1.00  0.00
O
ATOM     91  CB  ASN     6      -4.958  -6.128   9.129  1.00  0.00
C
ATOM     92 1HB  ASN     6      -4.579  -5.121   9.259  1.00  0.00
H
ATOM     93 2HB  ASN     6      -5.698  -6.332   9.903  1.00  0.00
H
ATOM     94  CG  ASN     6      -3.811  -7.100   9.290  1.00  0.00
C
ATOM     95  OD1 ASN     6      -3.733  -8.127   8.622  1.00  0.00
O
ATOM     96  ND2 ASN     6      -2.887  -6.770  10.145  1.00  0.00
N
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ATOM     97 1HD2 ASN     6      -2.081  -7.369  10.255  1.00  0.00
H
ATOM     98 2HD2 ASN     6      -2.959  -5.917  10.681  1.00  0.00
H
ATOM     99  N   ILE     7      -6.733  -4.089   7.328  1.00  0.00
N
ATOM    100  H   ILE     7      -5.816  -3.772   7.044  1.00  0.00
H
ATOM    101  CA  ILE     7      -7.843  -3.125   7.297  1.00  0.00
C
ATOM    102  HA  ILE     7      -8.319  -3.113   8.269  1.00  0.00
H
ATOM    103  C   ILE     7      -8.924  -3.554   6.296  1.00  0.00
C
ATOM    104  O   ILE     7     -10.117  -3.310   6.509  1.00  0.00
O
ATOM    105  CB  ILE     7      -7.309  -1.682   7.011  1.00  0.00
C
ATOM    106  HB  ILE     7      -6.687  -1.737   6.118  1.00  0.00
H
ATOM    107  CG1 ILE     7      -6.424  -1.176   8.177  1.00  0.00
C
ATOM    108 1HG1 ILE     7      -5.805  -2.000   8.521  1.00  0.00
H
ATOM    109 2HG1 ILE     7      -5.748  -0.424   7.773  1.00  0.00
H
ATOM    110  CG2 ILE     7      -8.448  -0.690   6.732  1.00  0.00
C
ATOM    111 1HG2 ILE     7      -8.059   0.329   6.692  1.00  0.00
H
ATOM    112 2HG2 ILE     7      -9.207  -0.767   7.506  1.00  0.00
H
ATOM    113 3HG2 ILE     7      -8.911  -0.924   5.775  1.00  0.00
H
ATOM    114  CD1 ILE     7      -7.113  -0.553   9.411  1.00  0.00
C
ATOM    115 1HD1 ILE     7      -6.384  -0.437  10.212  1.00  0.00
H
ATOM    116 2HD1 ILE     7      -7.921  -1.192   9.755  1.00  0.00
H
ATOM    117 3HD1 ILE     7      -7.507   0.432   9.159  1.00  0.00
H
ATOM    118  N   PHE     8      -8.526  -4.281   5.259  1.00  0.00
N
ATOM    119  H   PHE     8      -7.538  -4.472   5.140  1.00  0.00
H
ATOM    120  CA  PHE     8      -9.466  -4.845   4.287  1.00  0.00
C
ATOM    121  HA  PHE     8      -9.917  -4.042   3.713  1.00  0.00
H
ATOM    122  C   PHE     8     -10.600  -5.638   4.940  1.00  0.00
C
ATOM    123  O   PHE     8     -11.763  -5.569   4.530  1.00  0.00
O
ATOM    124  CB  PHE     8      -8.688  -5.767   3.339  1.00  0.00
C
ATOM    125 1HB  PHE     8      -7.860  -5.206   2.907  1.00  0.00
H
ATOM    126 2HB  PHE     8      -8.275  -6.595   3.916  1.00  0.00
H
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ATOM    127  CG  PHE     8      -9.522  -6.337   2.222  1.00  0.00
C
ATOM    128  CD1 PHE     8      -9.553  -5.708   0.972  1.00  0.00
C
ATOM    129  HD1 PHE     8      -8.953  -4.829   0.810  1.00  0.00
H
ATOM    130  CD2 PHE     8     -10.291  -7.496   2.416  1.00  0.00
C
ATOM    131  HD2 PHE     8     -10.277  -7.995   3.372  1.00  0.00
H
ATOM    132  CE1 PHE     8     -10.370  -6.205  -0.076  1.00  0.00
C
ATOM    133  HE1 PHE     8     -10.412  -5.690  -1.022  1.00  0.00
H
ATOM    134  CE2 PHE     8     -11.103  -8.008   1.382  1.00  0.00
C
ATOM    135  HE2 PHE     8     -11.711  -8.874   1.568  1.00  0.00
H
ATOM    136  CZ  PHE     8     -11.137  -7.368   0.126  1.00  0.00
C
ATOM    137  HZ  PHE     8     -11.760  -7.755  -0.668  1.00  0.00
H
ATOM    138  N   PHE     9     -10.270  -6.384   5.982  1.00  0.00
N
ATOM    139  H   PHE     9      -9.347  -6.306   6.393  1.00  0.00
H
ATOM    140  CA  PHE     9     -11.187  -7.376   6.518  1.00  0.00
C
ATOM    141  HA  PHE     9     -11.679  -7.851   5.674  1.00  0.00
H
ATOM    142  C   PHE     9     -12.307  -6.859   7.407  1.00  0.00
C
ATOM    143  O   PHE     9     -13.124  -7.649   7.872  1.00  0.00
O
ATOM    144  CB  PHE     9     -10.381  -8.453   7.227  1.00  0.00
C
ATOM    145 1HB  PHE     9      -9.825  -8.001   8.048  1.00  0.00
H
ATOM    146 2HB  PHE     9     -11.069  -9.188   7.637  1.00  0.00
H
ATOM    147  CG  PHE     9      -9.431  -9.165   6.313  1.00  0.00
C
ATOM    148  CD1 PHE     9      -8.046  -9.120   6.536  1.00  0.00
C
ATOM    149  HD1 PHE     9      -7.656  -8.586   7.391  1.00  0.00
H
ATOM    150  CD2 PHE     9      -9.924  -9.874   5.201  1.00  0.00
C
ATOM    151  HD2 PHE     9     -10.989  -9.931   5.024  1.00  0.00
H
ATOM    152  CE1 PHE     9      -7.152  -9.765   5.648  1.00  0.00
C
ATOM    153  HE1 PHE     9      -6.087  -9.727   5.827  1.00  0.00
H
ATOM    154  CE2 PHE     9      -9.045 -10.500   4.296  1.00  0.00
C
ATOM    155  HE2 PHE     9      -9.436 -11.015   3.433  1.00  0.00
H
ATOM    156  CZ  PHE     9      -7.658 -10.449   4.519  1.00  0.00
C
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ATOM    157  HZ  PHE     9      -6.983 -10.924   3.823  1.00  0.00
H
ATOM    158  N   ALA    10     -12.407  -5.548   7.583  1.00  0.00
N
ATOM    159  H   ALA    10     -11.688  -4.933   7.225  1.00  0.00
H
ATOM    160  CA  ALA    10     -13.580  -4.990   8.250  1.00  0.00
C
ATOM    161  HA  ALA    10     -13.701  -5.465   9.226  1.00  0.00
H
ATOM    162  C   ALA    10     -14.793  -5.324   7.391  1.00  0.00
C
ATOM    163  O   ALA    10     -15.735  -5.955   7.840  1.00  0.00
O
ATOM    164  CB  ALA    10     -13.461  -3.455   8.421  1.00  0.00
C
ATOM    165 1HB  ALA    10     -12.767  -3.223   9.225  1.00  0.00
H
ATOM    166 2HB  ALA    10     -14.437  -3.043   8.685  1.00  0.00
H
ATOM    167 3HB  ALA    10     -13.111  -2.992   7.498  1.00  0.00
H
ATOM    168  N   ILE    11     -14.766  -4.843   6.156  1.00  0.00
N
ATOM    169  H   ILE    11     -13.923  -4.406   5.815  1.00  0.00
H
ATOM    170  CA  ILE    11     -15.962  -4.835   5.314  1.00  0.00
C
ATOM    171  HA  ILE    11     -16.823  -4.710   5.966  1.00  0.00
H
ATOM    172  C   ILE    11     -16.109  -6.189   4.624  1.00  0.00
C
ATOM    173  O   ILE    11     -17.181  -6.581   4.173  1.00  0.00
O
ATOM    174  CB  ILE    11     -15.971  -3.639   4.314  1.00  0.00
C
ATOM    175  HB  ILE    11     -15.395  -3.916   3.435  1.00  0.00
H
ATOM    176  CG1 ILE    11     -15.306  -2.397   4.955  1.00  0.00
C
ATOM    177 1HG1 ILE    11     -15.823  -2.172   5.888  1.00  0.00
H
ATOM    178 2HG1 ILE    11     -14.268  -2.629   5.188  1.00  0.00
H
ATOM    179  CG2 ILE    11     -17.428  -3.325   3.881  1.00  0.00
C
ATOM    180 1HG2 ILE    11     -17.437  -2.610   3.063  1.00  0.00
H
ATOM    181 2HG2 ILE    11     -17.994  -2.925   4.720  1.00  0.00
H
ATOM    182 3HG2 ILE    11     -17.924  -4.235   3.541  1.00  0.00
H
ATOM    183  CD1 ILE    11     -15.285  -1.125   4.108  1.00  0.00
C
ATOM    184 1HD1 ILE    11     -14.629  -0.391   4.578  1.00  0.00
H
ATOM    185 2HD1 ILE    11     -16.287  -0.704   4.047  1.00  0.00
H
ATOM    186 3HD1 ILE    11     -14.916  -1.348   3.107  1.00  0.00
H
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ATOM    187  N   ASP    12      -15.043  -6.974   4.661  1.00  0.00
N
ATOM    188  H   ASP    12      -14.176  -6.614   5.029  1.00  0.00
H
ATOM    189  CA  ASP    12      -15.097  -8.378   4.252  1.00  0.00
C
ATOM    190  HA  ASP    12      -15.814  -8.483   3.438  1.00  0.00
H
ATOM    191  C   ASP    12      -15.569  -9.221   5.444  1.00  0.00
C
ATOM    192  O   ASP    12      -14.982 -10.247   5.775  1.00  0.00
O
ATOM    193  CB  ASP    12      -13.719  -8.839   3.769  1.00  0.00
C
ATOM    194 1HB  ASP    12      -13.295  -8.057   3.141  1.00  0.00
H
ATOM    195 2HB  ASP    12      -13.068  -8.981   4.628  1.00  0.00
H
ATOM    196  CG  ASP    12      -13.776 -10.128   2.965  1.00  0.00
C
ATOM    197  OD1 ASP    12      -14.673 -10.271   2.106  1.00  0.00
O
ATOM    198  OD2 ASP    12      -12.891 -10.995   3.133  1.00  0.00
O
ATOM    199  N   GLU    13      -16.614  -8.762   6.123  1.00  0.00
N
ATOM    200  H   GLU    13      -17.065  -7.912   5.798  1.00  0.00
H
ATOM    201  CA  GLU    13      -17.110  -9.384   7.359  1.00  0.00
C
ATOM    202  HA  GLU    13      -16.287  -9.459   8.070  1.00  0.00
H
ATOM    203  C   GLU    13      -17.642 -10.787   7.063  1.00  0.00
C
ATOM    204  O   GLU    13      -17.595 -11.696   7.896  1.00  0.00
O
ATOM    205  CB  GLU    13      -18.224  -8.518   7.971  1.00  0.00
C
ATOM    206 1HB  GLU    13      -17.902  -7.479   7.945  1.00  0.00
H
ATOM    207 2HB  GLU    13      -19.113  -8.614   7.349  1.00  0.00
H
ATOM    208  CG  GLU    13      -18.591  -8.869   9.425  1.00  0.00
C
ATOM    209 1HG  GLU    13      -18.822  -9.933   9.481  1.00  0.00
H
ATOM    210 2HG  GLU    13      -17.728  -8.672  10.062  1.00  0.00
H
ATOM    211  CD  GLU    13      -19.795  -8.089   9.955  1.00  0.00
C
ATOM    212  OE1 GLU    13      -20.077  -6.969   9.481  1.00  0.00
O
ATOM    213  OE2 GLU    13      -20.528  -8.619  10.825  1.00  0.00
O
ATOM    214  N   GLN    14      -18.099 -10.970   5.832  1.00  0.00
N
ATOM    215  H   GLN    14      -18.102 -10.185   5.197  1.00  0.00
H
ATOM    216  CA  GLN    14      -18.577 -12.266   5.354  1.00  0.00
C
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ATOM    217  HA  GLN    14      -19.240 -12.697   6.103  1.00  0.00
H
ATOM    218  C   GLN    14      -17.435 -13.251   5.098  1.00  0.00
C
ATOM    219  O   GLN    14      -17.674 -14.460   5.031  1.00  0.00
O
ATOM    220  CB  GLN    14      -19.351 -12.096   4.040  1.00  0.00
C
ATOM    221 1HB  GLN    14      -18.680 -11.681   3.288  1.00  0.00
H
ATOM    222 2HB  GLN    14      -19.673 -13.082   3.705  1.00  0.00
H
ATOM    223  CG  GLN    14      -20.580 -11.201   4.141  1.00  0.00
C
ATOM    224 1HG  GLN    14      -21.184 -11.538   4.980  1.00  0.00
H
ATOM    225 2HG  GLN    14      -20.268 -10.175   4.328  1.00  0.00
H
ATOM    226  CD  GLN    14      -21.443 -11.237   2.892  1.00  0.00
C
ATOM    227  OE1 GLN    14      -20.959 -11.245   1.759  1.00  0.00
O
ATOM    228  NE2 GLN    14      -22.729 -11.298   3.083  1.00  0.00
N
ATOM    229 1HE2 GLN    14      -23.348 -11.390   2.290  1.00  0.00
H
ATOM    230 2HE2 GLN    14      -23.100 -11.230   4.023  1.00  0.00
H
ATOM    231  N   GLN    15      -16.224 -12.719   4.956  1.00  0.00
N
ATOM    232  H   GLN    15      -16.083 -11.766   5.271  1.00  0.00
H
ATOM    233  CA  GLN    15      -15.083 -13.340   4.267  1.00  0.00
C
ATOM    234  HA  GLN    15      -14.267 -12.620   4.306  1.00  0.00
H
ATOM    235  C   GLN    15      -15.374 -13.568   2.779  1.00  0.00
C
ATOM    236  O   GLN    15      -16.501 -13.333   2.340  1.00  0.00
O
ATOM    237  CB  GLN    15      -14.567 -14.606   4.969  1.00  0.00
C
ATOM    238 1HB  GLN    15      -15.341 -15.371   4.992  1.00  0.00
H
ATOM    239 2HB  GLN    15      -13.728 -14.996   4.400  1.00  0.00
H
ATOM    240  CG  GLN    15      -14.085 -14.331   6.383  1.00  0.00
C
ATOM    241 1HG  GLN    15      -13.451 -13.453   6.362  1.00  0.00
H
ATOM    242 2HG  GLN    15      -14.939 -14.130   7.029  1.00  0.00
H
ATOM    243  CD  GLN    15      -13.272 -15.466   6.952  1.00  0.00
C
ATOM    244  OE1 GLN    15      -12.275 -15.884   6.376  1.00  0.00
O
ATOM    245  NE2 GLN    15      -13.652 -15.944   8.099  1.00  0.00
N
ATOM    246 1HE2 GLN    15      -13.147 -16.729   8.486  1.00  0.00
H
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ATOM    247 2HE2 GLN    15     -14.433 -15.531   8.593  1.00  0.00
H
ATOM    248  N   ASN    16     -14.337 -13.987   2.050  1.00  0.00
N
ATOM    249  H   ASN    16     -13.464 -14.101   2.559  1.00  0.00
H
ATOM    250  CA  ASN    16     -14.268 -14.334   0.606  1.00  0.00
C
ATOM    251  HA  ASN    16     -13.746 -15.290   0.543  1.00  0.00
H
ATOM    252  C   ASN    16     -13.410 -13.340  -0.174  1.00  0.00
C
ATOM    253  O   ASN    16     -13.196 -13.529  -1.369  1.00  0.00
O
ATOM    254  CB  ASN    16     -15.594 -14.501  -0.169  1.00  0.00
C
ATOM    255 1HB  ASN    16     -16.153 -13.569  -0.148  1.00  0.00
H
ATOM    256 2HB  ASN    16     -15.367 -14.728  -1.208  1.00  0.00
H
ATOM    257  CG  ASN    16     -16.463 -15.613   0.356  1.00  0.00
C
ATOM    258  OD1 ASN    16     -16.015 -16.515   1.062  1.00  0.00
O
ATOM    259  ND2 ASN    16     -17.706 -15.599  -0.031  1.00  0.00
N
ATOM    260 1HD2 ASN    16     -18.321 -16.340   0.259  1.00  0.00
H
ATOM    261 2HD2 ASN    16     -18.035 -14.864  -0.639  1.00  0.00
H
ATOM    262  N   GLU    17     -12.902 -12.314   0.499  1.00  0.00
N
ATOM    263  H   GLU    17     -13.139 -12.195   1.482  1.00  0.00
H
ATOM    264  CA  GLU    17     -12.003 -11.302  -0.077  1.00  0.00
C
ATOM    265  HA  GLU    17     -11.828 -10.574   0.705  1.00  0.00
H
ATOM    266  C   GLU    17     -12.596 -10.537  -1.262  1.00  0.00
C
ATOM    267  O   GLU    17     -11.882 -10.107  -2.179  1.00  0.00
O
ATOM    268  CB  GLU    17     -10.638 -11.901  -0.441  1.00  0.00
C
ATOM    269 1HB  GLU    17     -10.787 -12.650  -1.215  1.00  0.00
H
ATOM    270 2HB  GLU    17     -10.006 -11.110  -0.840  1.00  0.00
H
ATOM    271  CG  GLU    17      -9.900 -12.543   0.720  1.00  0.00
C
ATOM    272 1HG  GLU    17      -9.713 -11.783   1.478  1.00  0.00
H
ATOM    273 2HG  GLU    17     -10.523 -13.321   1.155  1.00  0.00
H
ATOM    274  CD  GLU    17      -8.579 -13.167   0.300  1.00  0.00
C
ATOM    275  OE1 GLU    17      -8.191 -13.087  -0.889  1.00  0.00
O
ATOM    276  OE2 GLU    17      -7.884 -13.741   1.167  1.00  0.00
O
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ATOM    277  N   THR    18     -13.913 -10.392  -1.244  1.00  0.00
N
ATOM    278  H   THR    18     -14.427 -10.772  -0.458  1.00  0.00
H
ATOM    279  CA  THR    18     -14.681  -9.761  -2.323  1.00  0.00
C
ATOM    280  HA  THR    18     -14.032  -9.124  -2.922  1.00  0.00
H
ATOM    281  C   THR    18     -15.802  -8.894  -1.752  1.00  0.00
C
ATOM    282  O   THR    18     -16.974  -9.278  -1.772  1.00  0.00
O
ATOM    283  CB  THR    18     -15.308 -10.838  -3.240  1.00  0.00
C
ATOM    284  HB  THR    18     -16.054 -10.377  -3.887  1.00  0.00
H
ATOM    285  OG1 THR    18     -15.902 -11.863  -2.436  1.00  0.00
O
ATOM    286  HG1 THR    18     -16.472 -11.431  -1.786  1.00  0.00
H
ATOM    287  CG2 THR    18     -14.270 -11.522  -4.106  1.00  0.00
C
ATOM    288 1HG2 THR    18     -14.771 -12.125  -4.861  1.00  0.00
H
ATOM    289 2HG2 THR    18     -13.639 -12.165  -3.494  1.00  0.00
H
ATOM    290 3HG2 THR    18     -13.650 -10.781  -4.607  1.00  0.00
H
ATOM    291  N   ILE    19     -15.432  -7.736  -1.222  1.00  0.00
N
ATOM    292  H   ILE    19     -14.465  -7.445  -1.310  1.00  0.00
H
ATOM    293  CA  ILE    19     -16.363  -6.829  -0.543  1.00  0.00
C
ATOM    294  HA  ILE    19     -16.854  -7.353   0.278  1.00  0.00
H
ATOM    295  C   ILE    19     -17.414  -6.375  -1.552  1.00  0.00
C
ATOM    296  O   ILE    19     -17.065  -5.931  -2.639  1.00  0.00
O
ATOM    297  CB  ILE    19     -15.611  -5.577  -0.001  1.00  0.00
C
ATOM    298  HB  ILE    19     -15.111  -5.099  -0.841  1.00  0.00
H
ATOM    299  CG1 ILE    19     -14.535  -5.990   1.022  1.00  0.00
C
ATOM    300 1HG1 ILE    19     -15.031  -6.268   1.949  1.00  0.00
H
ATOM    301 2HG1 ILE    19     -14.003  -6.866   0.655  1.00  0.00
H
ATOM    302  CG2 ILE    19     -16.600  -4.561   0.620  1.00  0.00
C
ATOM    303 1HG2 ILE    19     -16.061  -3.701   1.014  1.00  0.00
H
ATOM    304 2HG2 ILE    19     -17.159  -5.034   1.430  1.00  0.00
H
ATOM    305 3HG2 ILE    19     -17.301  -4.200  -0.135  1.00  0.00
H
ATOM    306  CD1 ILE    19     -13.480  -4.918   1.328  1.00  0.00
C
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ATOM    307 1HD1 ILE    19     -12.760  -5.318   2.043  1.00  0.00
H
ATOM    308 2HD1 ILE    19     -13.942  -4.030   1.754  1.00  0.00
H
ATOM    309 3HD1 ILE    19     -12.952  -4.649   0.412  1.00  0.00
H
ATOM    310  N   THR    20     -18.692  -6.488  -1.226  1.00  0.00
N
ATOM    311  H   THR    20     -18.955  -6.823  -0.312  1.00  0.00
H
ATOM    312  CA  THR    20     -19.754  -6.179  -2.182  1.00  0.00
C
ATOM    313  HA  THR    20     -19.350  -6.203  -3.192  1.00  0.00
H
ATOM    314  C   THR    20     -20.398  -4.823  -1.959  1.00  0.00
C
ATOM    315  O   THR    20     -20.211  -4.196  -0.914  1.00  0.00
O
ATOM    316  CB  THR    20     -20.865  -7.234  -2.085  1.00  0.00
C
ATOM    317  HB  THR    20     -21.634  -7.028  -2.823  1.00  0.00
H
ATOM    318  OG1 THR    20     -21.435  -7.224  -0.774  1.00  0.00
O
ATOM    319  HG1 THR    20     -21.818  -8.100  -0.614  1.00  0.00
H
ATOM    320  CG2 THR    20     -20.322  -8.604  -2.313  1.00  0.00
C
ATOM    321 1HG2 THR    20     -21.152  -9.297  -2.427  1.00  0.00
H
ATOM    322 2HG2 THR    20     -19.711  -8.922  -1.467  1.00  0.00
H
ATOM    323 3HG2 THR    20     -19.723  -8.624  -3.223  1.00  0.00
H
ATOM    324  N   ARG    21     -21.214  -4.388  -2.912  1.00  0.00
N
ATOM    325  H   ARG    21     -21.329  -4.933  -3.766  1.00  0.00
H
ATOM    326  CA  ARG    21     -22.011  -3.177  -2.720  1.00  0.00
C
ATOM    327  HA  ARG    21     -21.376  -2.345  -2.411  1.00  0.00
H
ATOM    328  C   ARG    21     -23.026  -3.425  -1.627  1.00  0.00
C
ATOM    329  O   ARG    21     -23.338  -2.515  -0.882  1.00  0.00
O
ATOM    330  CB  ARG    21     -22.824  -2.788  -3.953  1.00  0.00
C
ATOM    331 1HB  ARG    21     -23.379  -3.661  -4.298  1.00  0.00
H
ATOM    332 2HB  ARG    21     -23.553  -2.047  -3.623  1.00  0.00
H
ATOM    333  CG  ARG    21     -22.083  -2.187  -5.129  1.00  0.00
C
ATOM    334 1HG  ARG    21     -21.456  -1.365  -4.796  1.00  0.00
H
ATOM    335 2HG  ARG    21     -21.486  -2.943  -5.638  1.00  0.00
H
ATOM    336  CD  ARG    21     -23.169  -1.658  -6.036  1.00  0.00
C
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ATOM    337 1HD  ARG    21      -23.833  -2.486  -6.289  1.00  0.00
H
ATOM    338 2HD  ARG    21      -23.746  -0.926  -5.470  1.00  0.00
H
ATOM    339  NE  ARG    21      -22.734  -1.021  -7.284  1.00  0.00
N
ATOM    340  HE  ARG    21      -21.753  -1.057  -7.522  1.00  0.00
H
ATOM    341  CZ  ARG    21      -23.544  -0.421  -8.146  1.00  0.00
C
ATOM    342  NH1 ARG    21      -24.828  -0.282  -7.932  1.00  0.00
N
ATOM    343 1HH1 ARG    21      -25.227  -0.629  -7.076  1.00  0.00
H
ATOM    344 2HH1 ARG    21      -25.410   0.138  -8.641  1.00  0.00
H
ATOM    345  NH2 ARG    21      -23.059   0.043  -9.256  1.00  0.00
N
ATOM    346 1HH2 ARG    21      -22.069  -0.042  -9.435  1.00  0.00
H
ATOM    347 2HH2 ARG    21      -23.675   0.467  -9.939  1.00  0.00
H
ATOM    348  N   ASP    22      -23.562  -4.634  -1.541  1.00  0.00
N
ATOM    349  H   ASP    22      -23.309  -5.345  -2.219  1.00  0.00
H
ATOM    350  CA  ASP    22      -24.564  -4.931  -0.516  1.00  0.00
C
ATOM    351  HA  ASP    22      -25.384  -4.218  -0.612  1.00  0.00
H
ATOM    352  C   ASP    22      -23.958  -4.784   0.868  1.00  0.00
C
ATOM    353  O   ASP    22      -24.547  -4.137   1.728  1.00  0.00
O
ATOM    354  CB  ASP    22      -25.118  -6.352  -0.626  1.00  0.00
C
ATOM    355 1HB  ASP    22      -24.288  -7.058  -0.621  1.00  0.00
H
ATOM    356 2HB  ASP    22      -25.748  -6.550   0.242  1.00  0.00
H
ATOM    357  CG  ASP    22      -25.940  -6.571  -1.876  1.00  0.00
C
ATOM    358  OD1 ASP    22      -26.817  -5.748  -2.222  1.00  0.00
O
ATOM    359  OD2 ASP    22      -25.698  -7.594  -2.554  1.00  0.00
O
ATOM    360  N   GLU    23      -22.776  -5.351   1.077  1.00  0.00
N
ATOM    361  H   GLU    23      -22.321  -5.866   0.331  1.00  0.00
H
ATOM    362  CA  GLU    23      -22.116  -5.273   2.378  1.00  0.00
C
ATOM    363  HA  GLU    23      -22.797  -5.617   3.155  1.00  0.00
H
ATOM    364  C   GLU    23      -21.755  -3.839   2.694  1.00  0.00
C
ATOM    365  O   GLU    23      -21.932  -3.380   3.818  1.00  0.00
O
ATOM    366  CB  GLU    23      -20.834  -6.110   2.410  1.00  0.00
C
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ATOM    367 1HB  GLU    23      -20.348  -6.052   1.436  1.00  0.00
H
ATOM    368 2HB  GLU    23      -20.158  -5.681   3.149  1.00  0.00
H
ATOM    369  CG  GLU    23      -21.069  -7.563   2.774  1.00  0.00
C
ATOM    370 1HG  GLU    23      -21.758  -8.005   2.052  1.00  0.00
H
ATOM    371 2HG  GLU    23      -20.121  -8.100   2.725  1.00  0.00
H
ATOM    372  CD  GLU    23      -21.647  -7.698   4.177  1.00  0.00
C
ATOM    373  OE1 GLU    23      -21.039  -7.190   5.142  1.00  0.00
O
ATOM    374  OE2 GLU    23      -22.733  -8.285   4.333  1.00  0.00
O
ATOM    375  N   LEU    24      -21.284  -3.103   1.701  1.00  0.00
N
ATOM    376  H   LEU    24      -21.132  -3.507   0.781  1.00  0.00
H
ATOM    377  CA  LEU    24      -20.944  -1.716   1.957  1.00  0.00
C
ATOM    378  HA  LEU    24      -20.350  -1.698   2.870  1.00  0.00
H
ATOM    379  C   LEU    24      -22.210  -0.895   2.220  1.00  0.00
C
ATOM    380  O   LEU    24      -22.230  -0.066   3.105  1.00  0.00
O
ATOM    381  CB  LEU    24      -20.089  -1.161   0.812  1.00  0.00
C
ATOM    382 1HB  LEU    24      -19.315  -1.898   0.599  1.00  0.00
H
ATOM    383 2HB  LEU    24      -20.717  -1.074  -0.075  1.00  0.00
H
ATOM    384  CG  LEU    24      -19.386   0.187   1.047  1.00  0.00
C
ATOM    385  HG  LEU    24      -20.146   0.953   1.186  1.00  0.00
H
ATOM    386  CD1 LEU    24      -18.468   0.202   2.266  1.00  0.00
C
ATOM    387 1HD1 LEU    24      -18.054   1.200   2.401  1.00  0.00
H
ATOM    388 2HD1 LEU    24      -17.665  -0.522   2.141  1.00  0.00
H
ATOM    389 3HD1 LEU    24      -19.029  -0.049   3.164  1.00  0.00
H
ATOM    390  CD2 LEU    24      -18.537   0.547  -0.174  1.00  0.00
C
ATOM    391 1HD2 LEU    24      -18.106   1.541  -0.046  1.00  0.00
H
ATOM    392 2HD2 LEU    24      -19.162   0.559  -1.065  1.00  0.00
H
ATOM    393 3HD2 LEU    24      -17.751  -0.191  -0.313  1.00  0.00
H
ATOM    394  N   ARG    25      -23.318  -1.122   1.534  1.00  0.00
N
ATOM    395  H   ARG    25      -23.330  -1.820   0.790  1.00  0.00
H
ATOM    396  CA  ARG    25      -24.525  -0.340   1.832  1.00  0.00
C
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ATOM    397  HA  ARG    25     -24.246   0.713   1.847  1.00  0.00
H
ATOM    398  C   ARG    25     -25.103  -0.682   3.210  1.00  0.00
C
ATOM    399  O   ARG    25     -25.708   0.168   3.855  1.00  0.00
O
ATOM    400  CB  ARG    25     -25.586  -0.529   0.745  1.00  0.00
C
ATOM    401 1HB  ARG    25     -25.095  -0.588  -0.226  1.00  0.00
H
ATOM    402 2HB  ARG    25     -26.100  -1.470   0.929  1.00  0.00
H
ATOM    403  CG  ARG    25     -26.607   0.611   0.693  1.00  0.00
C
ATOM    404 1HG  ARG    25     -26.767   0.994   1.699  1.00  0.00
H
ATOM    405 2HG  ARG    25     -26.219   1.420   0.073  1.00  0.00
H
ATOM    406  CD  ARG    25     -27.946   0.146   0.159  1.00  0.00
C
ATOM    407 1HD  ARG    25     -28.292  -0.676   0.783  1.00  0.00
H
ATOM    408 2HD  ARG    25     -28.660   0.966   0.253  1.00  0.00
H
ATOM    409  NE  ARG    25     -27.917  -0.301  -1.241  1.00  0.00
N
ATOM    410  HE  ARG    25     -27.124  -0.023  -1.803  1.00  0.00
H
ATOM    411  CZ  ARG    25     -28.862  -1.014  -1.840  1.00  0.00
C
ATOM    412  NH1 ARG    25     -29.921  -1.471  -1.230  1.00  0.00
N
ATOM    413 1HH1 ARG    25     -29.999  -1.393  -0.227  1.00  0.00
H
ATOM    414 2HH1 ARG    25     -30.644  -1.933  -1.764  1.00  0.00
H
ATOM    415  NH2 ARG    25     -28.766  -1.246  -3.115  1.00  0.00
N
ATOM    416 1HH2 ARG    25     -27.959  -0.924  -3.625  1.00  0.00
H
ATOM    417 2HH2 ARG    25     -29.501  -1.760  -3.574  1.00  0.00
H
ATOM    418  N   ARG    26     -24.881  -1.894   3.705  1.00  0.00
N
ATOM    419  H   ARG    26     -24.335  -2.557   3.163  1.00  0.00
H
ATOM    420  CA  ARG    26     -25.429  -2.316   5.005  1.00  0.00
C
ATOM    421  HA  ARG    26     -26.512  -2.213   4.958  1.00  0.00
H
ATOM    422  C   ARG    26     -25.015  -1.506   6.230  1.00  0.00
C
ATOM    423  O   ARG    26     -25.658  -1.643   7.258  1.00  0.00
O
ATOM    424  CB  ARG    26     -25.120  -3.797   5.265  1.00  0.00
C
ATOM    425 1HB  ARG    26     -24.103  -3.998   4.944  1.00  0.00
H
ATOM    426 2HB  ARG    26     -25.189  -3.993   6.333  1.00  0.00
H
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ATOM    427  CG  ARG    26     -26.057  -4.761   4.569  1.00  0.00
C
ATOM    428 1HG  ARG    26     -27.039  -4.696   5.036  1.00  0.00
H
ATOM    429 2HG  ARG    26     -26.156  -4.476   3.529  1.00  0.00
H
ATOM    430  CD  ARG    26     -25.562  -6.200   4.633  1.00  0.00
C
ATOM    431 1HD  ARG    26     -24.572  -6.265   4.182  1.00  0.00
H
ATOM    432 2HD  ARG    26     -25.504  -6.518   5.675  1.00  0.00
H
ATOM    433  NE  ARG    26     -26.494  -7.067   3.903  1.00  0.00
N
ATOM    434  HE  ARG    26     -27.276  -6.617   3.445  1.00  0.00
H
ATOM    435  CZ  ARG    26     -26.435  -8.383   3.783  1.00  0.00
C
ATOM    436  NH1 ARG    26     -25.426  -9.121   4.152  1.00  0.00
N
ATOM    437 1HH1 ARG    26     -24.554  -8.684   4.454  1.00  0.00
H
ATOM    438 2HH1 ARG    26     -25.497 -10.123   4.094  1.00  0.00
H
ATOM    439  NH2 ARG    26     -27.443  -8.989   3.232  1.00  0.00
N
ATOM    440 1HH2 ARG    26     -28.230  -8.451   2.901  1.00  0.00
H
ATOM    441 2HH2 ARG    26     -27.431  -9.993   3.150  1.00  0.00
H
ATOM    442  N   TYR    27     -23.995  -0.663   6.149  1.00  0.00
N
ATOM    443  H   TYR    27     -23.488  -0.586   5.279  1.00  0.00
H
ATOM    444  CA  TYR    27     -23.588   0.166   7.294  1.00  0.00
C
ATOM    445  HA  TYR    27     -24.282   0.008   8.117  1.00  0.00
H
ATOM    446  C   TYR    27     -23.620   1.659   6.953  1.00  0.00
C
ATOM    447  O   TYR    27     -23.046   2.478   7.656  1.00  0.00
O
ATOM    448  CB  TYR    27     -22.194  -0.281   7.753  1.00  0.00
C
ATOM    449 1HB  TYR    27     -22.177  -1.372   7.741  1.00  0.00
H
ATOM    450 2HB  TYR    27     -21.465   0.061   7.026  1.00  0.00
H
ATOM    451  CG  TYR    27     -21.759   0.161   9.145  1.00  0.00
C
ATOM    452  CD1 TYR    27     -22.239  -0.507  10.282  1.00  0.00
C
ATOM    453  HD1 TYR    27     -22.977  -1.280  10.174  1.00  0.00
H
ATOM    454  CD2 TYR    27     -20.834   1.215   9.341  1.00  0.00
C
ATOM    455  HD2 TYR    27     -20.522   1.832   8.523  1.00  0.00
H
ATOM    456  CE1 TYR    27     -21.755  -0.187  11.572  1.00  0.00
C
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ATOM    457  HE1 TYR    27     -22.123  -0.723  12.428  1.00  0.00
H
ATOM    458  CE2 TYR    27     -20.312   1.506  10.618  1.00  0.00
C
ATOM    459  HE2 TYR    27     -19.574   2.286  10.743  1.00  0.00
H
ATOM    460  CZ  TYR    27     -20.780   0.808  11.723  1.00  0.00
C
ATOM    461  OH  TYR    27     -20.300   1.162  12.953  1.00  0.00
O
ATOM    462  HH  TYR    27     -19.645   1.875  12.916  1.00  0.00
H
ATOM    463  N   VAL    28     -24.250   2.024   5.839  1.00  0.00
N
ATOM    464  H   VAL    28     -24.797   1.338   5.327  1.00  0.00
H
ATOM    465  CA  VAL    28     -24.106   3.370   5.251  1.00  0.00
C
ATOM    466  HA  VAL    28     -23.042   3.550   5.122  1.00  0.00
H
ATOM    467  C   VAL    28     -24.622   4.525   6.119  1.00  0.00
C
ATOM    468  O   VAL    28     -24.374   5.696   5.849  1.00  0.00
O
ATOM    469  CB  VAL    28     -24.731   3.373   3.817  1.00  0.00
C
ATOM    470  HB  VAL    28     -24.452   2.428   3.355  1.00  0.00
H
ATOM    471  CG1 VAL    28     -26.261   3.428   3.857  1.00  0.00
C
ATOM    472 1HG1 VAL    28     -26.655   3.301   2.851  1.00  0.00
H
ATOM    473 2HG1 VAL    28     -26.600   4.383   4.254  1.00  0.00
H
ATOM    474 3HG1 VAL    28     -26.649   2.620   4.479  1.00  0.00
H
ATOM    475  CG2 VAL    28     -24.150   4.476   2.917  1.00  0.00
C
ATOM    476 1HG2 VAL    28     -24.556   4.379   1.912  1.00  0.00
H
ATOM    477 2HG2 VAL    28     -23.065   4.380   2.873  1.00  0.00
H
ATOM    478 3HG2 VAL    28     -24.404   5.461   3.309  1.00  0.00
H
ATOM    479  N   LYS    29     -25.311   4.219   7.208  1.00  0.00
N
ATOM    480  H   LYS    29     -25.444   3.246   7.452  1.00  0.00
H
ATOM    481  CA  LYS    29     -25.858   5.251   8.084  1.00  0.00
C
ATOM    482  HA  LYS    29     -26.245   6.062   7.468  1.00  0.00
H
ATOM    483  C   LYS    29     -24.854   5.853   9.066  1.00  0.00
C
ATOM    484  O   LYS    29     -25.257   6.672   9.884  1.00  0.00
O
ATOM    485  CB  LYS    29     -27.010   4.661   8.903  1.00  0.00
C
ATOM    486 1HB  LYS    29     -26.580   3.956   9.611  1.00  0.00
H
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ATOM    487 2HB  LYS    29      -27.472   5.461   9.480  1.00  0.00
H
ATOM    488  CG  LYS    29      -28.102   3.922   8.114  1.00  0.00
C
ATOM    489 1HG  LYS    29      -27.655   3.069   7.603  1.00  0.00
H
ATOM    490 2HG  LYS    29      -28.827   3.533   8.829  1.00  0.00
H
ATOM    491  CD  LYS    29      -28.858   4.756   7.078  1.00  0.00
C
ATOM    492 1HD  LYS    29      -28.160   5.137   6.333  1.00  0.00
H
ATOM    493 2HD  LYS    29      -29.569   4.099   6.576  1.00  0.00
H
ATOM    494  CE  LYS    29      -29.624   5.924   7.691  1.00  0.00
C
ATOM    495 1HE  LYS    29      -30.221   5.562   8.529  1.00  0.00
H
ATOM    496 2HE  LYS    29      -28.920   6.674   8.058  1.00  0.00
H
ATOM    497  NZ  LYS    29      -30.529   6.539   6.671  1.00  0.00
N
ATOM    498 1HZ  LYS    29      -31.004   7.341   7.064  1.00  0.00
H
ATOM    499 2HZ  LYS    29      -31.223   5.863   6.382  1.00  0.00
H
ATOM    500 3HZ  LYS    29      -29.993   6.833   5.862  1.00  0.00
H
ATOM    501  N   HIS    30      -23.591   5.446   9.053  1.00  0.00
N
ATOM    502  H   HIS    30      -23.271   4.791   8.346  1.00  0.00
H
ATOM    503  CA  HIS    30      -22.638   5.919  10.067  1.00  0.00
C
ATOM    504  HA  HIS    30      -23.229   6.201  10.937  1.00  0.00
H
ATOM    505  C   HIS    30      -21.923   7.221   9.691  1.00  0.00
C
ATOM    506  O   HIS    30      -22.636   8.204   9.674  1.00  0.00
O
ATOM    507  CB  HIS    30      -21.781   4.765  10.560  1.00  0.00
C
ATOM    508 1HB  HIS    30      -21.336   4.247   9.710  1.00  0.00
H
ATOM    509 2HB  HIS    30      -20.985   5.162  11.173  1.00  0.00
H
ATOM    510  CG  HIS    30      -22.561   3.791  11.386  1.00  0.00
C
ATOM    511  ND1 HIS    30      -22.583   3.809  12.777  1.00  0.00
N
ATOM    512  HD1 HIS    30      -22.034   4.426  13.379  1.00  0.00
H
ATOM    513  CD2 HIS    30      -23.433   2.809  11.038  1.00  0.00
C
ATOM    514  HD2 HIS    30      -23.681   2.514  10.023  1.00  0.00
H
ATOM    515  CE1 HIS    30      -23.432   2.889  13.209  1.00  0.00
C
ATOM    516  HE1 HIS    30      -23.660   2.690  14.251  1.00  0.00
H
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ATOM    517  NE2 HIS    30     -23.954   2.269  12.178  1.00  0.00
N
ATOM    518  HE2 HIS    30     -24.635   1.511  12.221  1.00  0.00
H
ATOM    519  N   ASN    31     -20.617   7.368   9.457  1.00  0.00
N
ATOM    520  H   ASN    31     -19.988   6.558   9.482  1.00  0.00
H
ATOM    521  CA  ASN    31     -20.033   8.729   9.278  1.00  0.00
C
ATOM    522  HA  ASN    31     -20.852   9.440   9.286  1.00  0.00
H
ATOM    523  C   ASN    31     -19.228   9.121   8.004  1.00  0.00
C
ATOM    524  O   ASN    31     -18.018   8.939   7.953  1.00  0.00
O
ATOM    525  CB  ASN    31     -19.137   9.123  10.472  1.00  0.00
C
ATOM    526 1HB  ASN    31     -18.298   8.436  10.533  1.00  0.00
H
ATOM    527 2HB  ASN    31     -18.747  10.109  10.264  1.00  0.00
H
ATOM    528  CG  ASN    31     -19.851   9.211  11.826  1.00  0.00
C
ATOM    529  OD1 ASN    31     -19.211   9.240  12.874  1.00  0.00
O
ATOM    530  ND2 ASN    31     -21.146   9.329  11.833  1.00  0.00
N
ATOM    531 1HD2 ASN    31     -21.607   9.469  12.711  1.00  0.00
H
ATOM    532 2HD2 ASN    31     -21.675   9.270  10.972  1.00  0.00
H
ATOM    533  N   HIS    32     -19.921   9.791   7.074  1.00  0.00
N
ATOM    534  H   HIS    32     -20.923   9.760   7.177  1.00  0.00
H
ATOM    535  CA  HIS    32     -19.438  10.682   5.973  1.00  0.00
C
ATOM    536  HA  HIS    32     -20.231  11.415   5.864  1.00  0.00
H
ATOM    537  C   HIS    32     -19.262  10.202   4.523  1.00  0.00
C
ATOM    538  O   HIS    32     -18.157  10.077   4.020  1.00  0.00
O
ATOM    539  CB  HIS    32     -18.231  11.508   6.407  1.00  0.00
C
ATOM    540 1HB  HIS    32     -18.200  11.496   7.485  1.00  0.00
H
ATOM    541 2HB  HIS    32     -17.330  11.039   6.040  1.00  0.00
H
ATOM    542  CG  HIS    32     -18.271  12.948   5.996  1.00  0.00
C
ATOM    543  ND1 HIS    32     -18.605  13.372   4.729  1.00  0.00
N
ATOM    544  CD2 HIS    32     -18.005  14.064   6.733  1.00  0.00
C
ATOM    545  HD2 HIS    32     -17.721  14.052   7.774  1.00  0.00
H
ATOM    546  CE1 HIS    32     -18.537  14.737   4.767  1.00  0.00
C
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ATOM    547  HE1 HIS    32     -18.761  15.376   3.926  1.00  0.00
H
ATOM    548  NE2 HIS    32     -18.137  15.194   5.974  1.00  0.00
N
ATOM    549  HE2 HIS    32     -17.985  16.154   6.244  1.00  0.00
H
ATOM    550  N   LEU    33     -20.392   9.982   3.860  1.00  0.00
N
ATOM    551  H   LEU    33     -21.227   9.755   4.385  1.00  0.00
H
ATOM    552  CA  LEU    33     -20.649  10.221   2.434  1.00  0.00
C
ATOM    553  HA  LEU    33     -20.302  11.209   2.131  1.00  0.00
H
ATOM    554  C   LEU    33     -22.180  10.219   2.563  1.00  0.00
C
ATOM    555  O   LEU    33     -22.675  10.666   3.598  1.00  0.00
O
ATOM    556  CB  LEU    33     -20.141   9.128   1.465  1.00  0.00
C
ATOM    557 1HB  LEU    33     -20.456   8.162   1.858  1.00  0.00
H
ATOM    558 2HB  LEU    33     -20.661   9.269   0.526  1.00  0.00
H
ATOM    559  CG  LEU    33     -18.650   9.035   1.085  1.00  0.00
C
ATOM    560  HG  LEU    33     -18.068   8.819   1.973  1.00  0.00
H
ATOM    561  CD1 LEU    33     -18.425   7.881   0.122  1.00  0.00
C
ATOM    562 1HD1 LEU    33     -17.358   7.771  -0.070  1.00  0.00
H
ATOM    563 2HD1 LEU    33     -18.938   8.072  -0.816  1.00  0.00
H
ATOM    564 3HD1 LEU    33     -18.801   6.957   0.560  1.00  0.00
H
ATOM    565  CD2 LEU    33     -18.114  10.328   0.468  1.00  0.00
C
ATOM    566 1HD2 LEU    33     -17.074  10.190   0.173  1.00  0.00
H
ATOM    567 2HD2 LEU    33     -18.154  11.123   1.215  1.00  0.00
H
ATOM    568 3HD2 LEU    33     -18.708  10.614  -0.397  1.00  0.00
H
ATOM    569  N   ASP    34     -22.912   9.636   1.621  1.00  0.00
N
ATOM    570  H   ASP    34     -22.479   9.326   0.767  1.00  0.00
H
ATOM    571  CA  ASP    34     -24.317   9.260   1.809  1.00  0.00
C
ATOM    572  HA  ASP    34     -24.452   8.841   2.807  1.00  0.00
H
ATOM    573  C   ASP    34     -24.597   8.192   0.745  1.00  0.00
C
ATOM    574  O   ASP    34     -23.696   7.904  -0.057  1.00  0.00
O
ATOM    575  CB  ASP    34     -25.258  10.458   1.620  1.00  0.00
C
ATOM    576 1HB  ASP    34     -24.866  11.314   2.169  1.00  0.00
H
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ATOM    577 2HB  ASP    34      -25.297  10.713   0.561  1.00  0.00
H
ATOM    578  CG  ASP    34      -26.663  10.170   2.117  1.00  0.00
C
ATOM    579  OD1 ASP    34      -26.865   9.179   2.848  1.00  0.00
O
ATOM    580  OD2 ASP    34      -27.612  10.880   1.726  1.00  0.00
O
ATOM    581  N   GLU    35      -25.811   7.655   0.658  1.00  0.00
N
ATOM    582  H   GLU    35      -26.509   7.901   1.353  1.00  0.00
H
ATOM    583  CA  GLU    35      -26.190   6.790  -0.465  1.00  0.00
C
ATOM    584  HA  GLU    35      -25.526   5.937  -0.467  1.00  0.00
H
ATOM    585  C   GLU    35      -25.986   7.536  -1.791  1.00  0.00
C
ATOM    586  O   GLU    35      -26.104   8.764  -1.869  1.00  0.00
O
ATOM    587  CB  GLU    35      -27.615   6.234  -0.367  1.00  0.00
C
ATOM    588 1HB  GLU    35      -28.252   6.926   0.179  1.00  0.00
H
ATOM    589 2HB  GLU    35      -27.997   6.139  -1.382  1.00  0.00
H
ATOM    590  CG  GLU    35      -27.672   4.848   0.286  1.00  0.00
C
ATOM    591 1HG  GLU    35      -26.853   4.246  -0.109  1.00  0.00
H
ATOM    592 2HG  GLU    35      -27.532   4.957   1.362  1.00  0.00
H
ATOM    593  CD  GLU    35      -28.976   4.101   0.010  1.00  0.00
C
ATOM    594  OE1 GLU    35      -29.317   3.867  -1.175  1.00  0.00
O
ATOM    595  OE2 GLU    35      -29.678   3.700   0.963  1.00  0.00
O
ATOM    596  N   GLY    36      -25.598   6.807  -2.827  1.00  0.00
N
ATOM    597  H   GLY    36      -25.562   5.793  -2.742  1.00  0.00
H
ATOM    598  CA  GLY    36      -25.198   7.398  -4.097  1.00  0.00
C
ATOM    599 1HA  GLY    36      -25.335   6.657  -4.885  1.00  0.00
H
ATOM    600 2HA  GLY    36      -25.829   8.259  -4.320  1.00  0.00
H
ATOM    601  C   GLY    36      -23.745   7.836  -4.107  1.00  0.00
C
ATOM    602  O   GLY    36      -22.974   7.442  -4.976  1.00  0.00
O
ATOM    603  N   MET    37      -23.314   8.576  -3.095  1.00  0.00
N
ATOM    604  H   MET    37      -23.965   8.860  -2.370  1.00  0.00
H
ATOM    605  CA  MET    37      -21.908   8.976  -3.004  1.00  0.00
C
ATOM    606  HA  MET    37      -21.579   9.359  -3.970  1.00  0.00
H
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ATOM    607  C   MET    37     -21.046   7.767  -2.659  1.00  0.00
C
ATOM    608  O   MET    37     -19.893   7.675  -3.075  1.00  0.00
O
ATOM    609  CB  MET    37     -21.717  10.059  -1.945  1.00  0.00
C
ATOM    610 1HB  MET    37     -22.247   9.759  -1.047  1.00  0.00
H
ATOM    611 2HB  MET    37     -20.657  10.123  -1.707  1.00  0.00
H
ATOM    612  CG  MET    37     -22.205  11.435  -2.356  1.00  0.00
C
ATOM    613 1HG  MET    37     -23.250  11.367  -2.655  1.00  0.00
H
ATOM    614 2HG  MET    37     -22.129  12.108  -1.501  1.00  0.00
H
ATOM    615  SD  MET    37     -21.240  12.121  -3.721  1.00  0.00
S
ATOM    616  CE  MET    37     -19.660  12.469  -2.932  1.00  0.00
C
ATOM    617 1HE  MET    37     -19.022  13.033  -3.615  1.00  0.00
H
ATOM    618 2HE  MET    37     -19.164  11.537  -2.665  1.00  0.00
H
ATOM    619 3HE  MET    37     -19.826  13.064  -2.034  1.00  0.00
H
ATOM    620  N   ILE    38     -21.626   6.809  -1.950  1.00  0.00
N
ATOM    621  H   ILE    38     -22.548   6.976  -1.562  1.00  0.00
H
ATOM    622  CA  ILE    38     -20.976   5.521  -1.692  1.00  0.00
C
ATOM    623  HA  ILE    38     -20.028   5.718  -1.192  1.00  0.00
H
ATOM    624  C   ILE    38     -20.624   4.828  -3.008  1.00  0.00
C
ATOM    625  O   ILE    38     -19.485   4.414  -3.184  1.00  0.00
O
ATOM    626  CB  ILE    38     -21.844   4.636  -0.726  1.00  0.00
C
ATOM    627  HB  ILE    38     -21.816   5.140   0.241  1.00  0.00
H
ATOM    628  CG1 ILE    38     -21.259   3.225  -0.501  1.00  0.00
C
ATOM    629 1HG1 ILE    38     -20.172   3.287  -0.563  1.00  0.00
H
ATOM    630 2HG1 ILE    38     -21.508   2.934   0.519  1.00  0.00
H
ATOM    631  CG2 ILE    38     -23.319   4.594  -1.149  1.00  0.00
C
ATOM    632 1HG2 ILE    38     -23.891   4.008  -0.427  1.00  0.00
H
ATOM    633 2HG2 ILE    38     -23.439   4.152  -2.138  1.00  0.00
H
ATOM    634 3HG2 ILE    38     -23.716   5.598  -1.159  1.00  0.00
H
ATOM    635  CD1 ILE    38     -21.756   2.074  -1.439  1.00  0.00
C
ATOM    636 1HD1 ILE    38     -21.266   1.144  -1.166  1.00  0.00
H
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ATOM    637 2HD1 ILE    38      -21.514   2.297  -2.477  1.00  0.00
H
ATOM    638 3HD1 ILE    38      -22.831   1.924  -1.333  1.00  0.00
H
ATOM    639  N   THR    39      -21.536   4.755  -3.969  1.00  0.00
N
ATOM    640  H   THR    39      -22.457   5.146  -3.841  1.00  0.00
H
ATOM    641  CA  THR    39      -21.233   4.084  -5.232  1.00  0.00
C
ATOM    642  HA  THR    39      -20.656   3.184  -5.021  1.00  0.00
H
ATOM    643  C   THR    39      -20.362   4.970  -6.118  1.00  0.00
C
ATOM    644  O   THR    39      -19.545   4.462  -6.881  1.00  0.00
O
ATOM    645  CB  THR    39      -22.521   3.650  -5.965  1.00  0.00
C
ATOM    646  HB  THR    39      -22.281   3.324  -6.976  1.00  0.00
H
ATOM    647  OG1 THR    39      -23.450   4.737  -5.996  1.00  0.00
O
ATOM    648  HG1 THR    39      -23.177   5.343  -6.706  1.00  0.00
H
ATOM    649  CG2 THR    39      -23.220   2.517  -5.226  1.00  0.00
C
ATOM    650 1HG2 THR    39      -24.083   2.195  -5.808  1.00  0.00
H
ATOM    651 2HG2 THR    39      -23.556   2.853  -4.246  1.00  0.00
H
ATOM    652 3HG2 THR    39      -22.536   1.675  -5.112  1.00  0.00
H
ATOM    653  N   ARG    40      -20.436   6.287  -5.961  1.00  0.00
N
ATOM    654  H   ARG    40      -21.149   6.682  -5.355  1.00  0.00
H
ATOM    655  CA  ARG    40      -19.508   7.184  -6.661  1.00  0.00
C
ATOM    656  HA  ARG    40      -19.590   7.015  -7.735  1.00  0.00
H
ATOM    657  C   ARG    40      -18.076   6.870  -6.255  1.00  0.00
C
ATOM    658  O   ARG    40      -17.218   6.674  -7.109  1.00  0.00
O
ATOM    659  CB  ARG    40      -19.829   8.653  -6.350  1.00  0.00
C
ATOM    660 1HB  ARG    40      -20.870   8.846  -6.605  1.00  0.00
H
ATOM    661 2HB  ARG    40      -19.705   8.816  -5.283  1.00  0.00
H
ATOM    662  CG  ARG    40      -18.949   9.665  -7.070  1.00  0.00
C
ATOM    663 1HG  ARG    40      -17.902   9.466  -6.841  1.00  0.00
H
ATOM    664 2HG  ARG    40      -19.104   9.580  -8.143  1.00  0.00
H
ATOM    665  CD  ARG    40      -19.281  11.071  -6.628  1.00  0.00
C
ATOM    666 1HD  ARG    40      -20.328  11.277  -6.856  1.00  0.00
H
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ATOM    667 2HD  ARG    40     -19.136  11.136  -5.549  1.00  0.00
H
ATOM    668  NE  ARG    40     -18.431  12.079  -7.279  1.00  0.00
N
ATOM    669  HE  ARG    40     -17.770  11.749  -7.966  1.00  0.00
H
ATOM    670  CZ  ARG    40     -18.451  13.383  -7.036  1.00  0.00
C
ATOM    671  NH1 ARG    40     -19.292  13.953  -6.215  1.00  0.00
N
ATOM    672 1HH1 ARG    40     -20.014  13.411  -5.771  1.00  0.00
H
ATOM    673 2HH1 ARG    40     -19.216  14.943  -6.044  1.00  0.00
H
ATOM    674  NH2 ARG    40     -17.599  14.160  -7.635  1.00  0.00
N
ATOM    675 1HH2 ARG    40     -16.950  13.785  -8.311  1.00  0.00
H
ATOM    676 2HH2 ARG    40     -17.605  15.146  -7.416  1.00  0.00
H
ATOM    677  N   TRP    41     -17.808   6.774  -4.964  1.00  0.00
N
ATOM    678  H   TRP    41     -18.536   6.945  -4.276  1.00  0.00
H
ATOM    679  CA  TRP    41     -16.453   6.465  -4.523  1.00  0.00
C
ATOM    680  HA  TRP    41     -15.758   7.032  -5.139  1.00  0.00
H
ATOM    681  C   TRP    41     -16.074   5.004  -4.705  1.00  0.00
C
ATOM    682  O   TRP    41     -14.934   4.713  -5.042  1.00  0.00
O
ATOM    683  CB  TRP    41     -16.236   6.918  -3.085  1.00  0.00
C
ATOM    684 1HB  TRP    41     -17.100   6.654  -2.476  1.00  0.00
H
ATOM    685 2HB  TRP    41     -15.354   6.412  -2.691  1.00  0.00
H
ATOM    686  CG  TRP    41     -15.980   8.397  -3.034  1.00  0.00
C
ATOM    687  CD1 TRP    41     -16.876   9.397  -2.804  1.00  0.00
C
ATOM    688  HD1 TRP    41     -17.929   9.233  -2.609  1.00  0.00
H
ATOM    689  CD2 TRP    41     -14.724   9.060  -3.275  1.00  0.00
C
ATOM    690  NE1 TRP    41     -16.269  10.627  -2.841  1.00  0.00
N
ATOM    691  HE1 TRP    41     -16.733  11.518  -2.701  1.00  0.00
H
ATOM    692  CE2 TRP    41     -14.939  10.456  -3.102  1.00  0.00
C
ATOM    693  CE3 TRP    41     -13.441   8.618  -3.653  1.00  0.00
C
ATOM    694  HE3 TRP    41     -13.267   7.575  -3.858  1.00  0.00
H
ATOM    695  CZ2 TRP    41     -13.898  11.401  -3.228  1.00  0.00
C
ATOM    696  HZ2 TRP    41     -14.084  12.454  -3.085  1.00  0.00
H
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ATOM    697  CZ3 TRP    41     -12.388   9.562  -3.773  1.00  0.00
C
ATOM    698  HZ3 TRP    41     -11.395   9.230  -4.044  1.00  0.00
H
ATOM    699  CH2 TRP    41     -12.632  10.945  -3.546  1.00  0.00
C
ATOM    700  HH2 TRP    41     -11.819  11.651  -3.637  1.00  0.00
H
ATOM    701  N   GLN    42     -17.008   4.076  -4.554  1.00  0.00
N
ATOM    702  H   GLN    42     -17.944   4.331  -4.249  1.00  0.00
H
ATOM    703  CA  GLN    42     -16.696   2.669  -4.796  1.00  0.00
C
ATOM    704  HA  GLN    42     -15.852   2.390  -4.166  1.00  0.00
H
ATOM    705  C   GLN    42     -16.276   2.474  -6.251  1.00  0.00
C
ATOM    706  O   GLN    42     -15.293   1.795  -6.523  1.00  0.00
O
ATOM    707  CB  GLN    42     -17.896   1.786  -4.436  1.00  0.00
C
ATOM    708 1HB  GLN    42     -18.212   2.054  -3.429  1.00  0.00
H
ATOM    709 2HB  GLN    42     -18.714   1.999  -5.125  1.00  0.00
H
ATOM    710  CG  GLN    42     -17.612   0.286  -4.463  1.00  0.00
C
ATOM    711 1HG  GLN    42     -17.402  -0.022  -5.487  1.00  0.00
H
ATOM    712 2HG  GLN    42     -16.733   0.086  -3.854  1.00  0.00
H
ATOM    713  CD  GLN    42     -18.766  -0.541  -3.926  1.00  0.00
C
ATOM    714  OE1 GLN    42     -19.779  -0.020  -3.487  1.00  0.00
O
ATOM    715  NE2 GLN    42     -18.615  -1.836  -3.941  1.00  0.00
N
ATOM    716 1HE2 GLN    42     -19.352  -2.411  -3.571  1.00  0.00
H
ATOM    717 2HE2 GLN    42     -17.790  -2.252  -4.336  1.00  0.00
H
ATOM    718  N   SER    43     -16.964   3.121  -7.182  1.00  0.00
N
ATOM    719  H   SER    43     -17.786   3.659  -6.927  1.00  0.00
H
ATOM    720  CA  SER    43     -16.575   3.041  -8.587  1.00  0.00
C
ATOM    721  HA  SER    43     -16.384   1.996  -8.825  1.00  0.00
H
ATOM    722  C   SER    43     -15.296   3.809  -8.907  1.00  0.00
C
ATOM    723  O   SER    43     -14.519   3.378  -9.758  1.00  0.00
O
ATOM    724  CB  SER    43     -17.707   3.519  -9.491  1.00  0.00
C
ATOM    725 1HB  SER    43     -17.374   3.477 -10.527  1.00  0.00
H
ATOM    726 2HB  SER    43     -18.558   2.850  -9.366  1.00  0.00
H
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ATOM    727  OG  SER    43     -18.120   4.838  -9.176  1.00  0.00
O
ATOM    728  HG  SER    43     -18.645   4.796  -8.358  1.00  0.00
H
ATOM    729  N   LEU    44     -15.012   4.897  -8.199  1.00  0.00
N
ATOM    730  H   LEU    44     -15.681   5.242  -7.521  1.00  0.00
H
ATOM    731  CA  LEU    44     -13.748   5.623  -8.383  1.00  0.00
C
ATOM    732  HA  LEU    44     -13.654   5.910  -9.429  1.00  0.00
H
ATOM    733  C   LEU    44     -12.554   4.741  -8.043  1.00  0.00
C
ATOM    734  O   LEU    44     -11.486   4.878  -8.647  1.00  0.00
O
ATOM    735  CB  LEU    44     -13.688   6.886  -7.513  1.00  0.00
C
ATOM    736 1HB  LEU    44     -14.155   6.660  -6.559  1.00  0.00
H
ATOM    737 2HB  LEU    44     -12.640   7.112  -7.314  1.00  0.00
H
ATOM    738  CG  LEU    44     -14.331   8.157  -8.087  1.00  0.00
C
ATOM    739  HG  LEU    44     -15.317   7.903  -8.463  1.00  0.00
H
ATOM    740  CD1 LEU    44     -14.496   9.221  -7.010  1.00  0.00
C
ATOM    741 1HD1 LEU    44     -14.976  10.102  -7.431  1.00  0.00
H
ATOM    742 2HD1 LEU    44     -13.524   9.503  -6.600  1.00  0.00
H
ATOM    743 3HD1 LEU    44     -15.125   8.841  -6.208  1.00  0.00
H
ATOM    744  CD2 LEU    44     -13.507   8.734  -9.240  1.00  0.00
C
ATOM    745 1HD2 LEU    44     -13.982   9.640  -9.613  1.00  0.00
H
ATOM    746 2HD2 LEU    44     -13.448   8.017 -10.057  1.00  0.00
H
ATOM    747 3HD2 LEU    44     -12.499   8.978  -8.900  1.00  0.00
H
ATOM    748  N   PHE    45     -12.743   3.797  -7.133  1.00  0.00
N
ATOM    749  H   PHE    45     -13.637   3.729  -6.660  1.00  0.00
H
ATOM    750  CA  PHE    45     -11.687   2.858  -6.771  1.00  0.00
C
ATOM    751  HA  PHE    45     -10.734   3.279  -7.075  1.00  0.00
H
ATOM    752  C   PHE    45     -11.787   1.493  -7.451  1.00  0.00
C
ATOM    753  O   PHE    45     -10.959   0.628  -7.189  1.00  0.00
O
ATOM    754  CB  PHE    45     -11.640   2.697  -5.252  1.00  0.00
C
ATOM    755 1HB  PHE    45     -12.577   2.256  -4.913  1.00  0.00
H
ATOM    756 2HB  PHE    45     -10.826   2.016  -5.002  1.00  0.00
H
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ATOM    757  CG  PHE    45     -11.403   3.990  -4.512  1.00  0.00
C
ATOM    758  CD1 PHE    45     -10.262   4.768  -4.780  1.00  0.00
C
ATOM    759  HD1 PHE    45      -9.562   4.454  -5.536  1.00  0.00
H
ATOM    760  CD2 PHE    45     -12.304   4.428  -3.527  1.00  0.00
C
ATOM    761  HD2 PHE    45     -13.199   3.857  -3.326  1.00  0.00
H
ATOM    762  CE1 PHE    45     -10.013   5.963  -4.066  1.00  0.00
C
ATOM    763  HE1 PHE    45      -9.137   6.554  -4.287  1.00  0.00
H
ATOM    764  CE2 PHE    45     -12.053   5.600  -2.781  1.00  0.00
C
ATOM    765  HE2 PHE    45     -12.742   5.913  -2.011  1.00  0.00
H
ATOM    766  CZ  PHE    45     -10.906   6.373  -3.058  1.00  0.00
C
ATOM    767  HZ  PHE    45     -10.720   7.282  -2.506  1.00  0.00
H
ATOM    768  N   ASP    46     -12.747   1.301  -8.346  1.00  0.00
N
ATOM    769  H   ASP    46     -13.396   2.051  -8.548  1.00  0.00
H
ATOM    770  CA  ASP    46     -12.916   0.032  -9.068  1.00  0.00
C
ATOM    771  HA  ASP    46     -12.220  -0.703  -8.672  1.00  0.00
H
ATOM    772  C   ASP    46     -12.652   0.181 -10.576  1.00  0.00
C
ATOM    773  O   ASP    46     -13.553   0.558 -11.344  1.00  0.00
O
ATOM    774  CB  ASP    46     -14.326  -0.522  -8.830  1.00  0.00
C
ATOM    775 1HB  ASP    46     -14.474  -0.666  -7.759  1.00  0.00
H
ATOM    776 2HB  ASP    46     -15.053   0.207  -9.178  1.00  0.00
H
ATOM    777  CG  ASP    46     -14.576  -1.843  -9.549  1.00  0.00
C
ATOM    778  OD1 ASP    46     -13.655  -2.393 -10.187  1.00  0.00
O
ATOM    779  OD2 ASP    46     -15.717  -2.350  -9.500  1.00  0.00
O
ATOM    780  N   PRO    47     -11.425  -0.131 -11.035  1.00  0.00
N
ATOM    781  CA  PRO    47     -11.183  -0.028 -12.481  1.00  0.00
C
ATOM    782  HA  PRO    47     -11.386   0.987 -12.820  1.00  0.00
H
ATOM    783  C   PRO    47     -11.929  -1.025 -13.365  1.00  0.00
C
ATOM    784  O   PRO    47     -12.107  -0.780 -14.555  1.00  0.00
O
ATOM    785  CB  PRO    47      -9.683  -0.331 -12.602  1.00  0.00
C
ATOM    786 1HB  PRO    47      -9.535  -1.379 -12.863  1.00  0.00
H
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ATOM    787 2HB  PRO    47      -9.218   0.314 -13.347  1.00  0.00
H
ATOM    788  CG  PRO    47      -9.127  -0.066 -11.257  1.00  0.00
C
ATOM    789 1HG  PRO    47      -8.191  -0.604 -11.105  1.00  0.00
H
ATOM    790 2HG  PRO    47      -8.985   1.006 -11.116  1.00  0.00
H
ATOM    791  CD  PRO    47     -10.197  -0.570 -10.345  1.00  0.00
C
ATOM    792 1HD  PRO    47     -10.167  -1.659 -10.273  1.00  0.00
H
ATOM    793 2HD  PRO    47     -10.099  -0.111  -9.364  1.00  0.00
H
ATOM    794  N   THR    48     -12.340  -2.171 -12.833  1.00  0.00
N
ATOM    795  H   THR    48     -12.255  -2.343 -11.837  1.00  0.00
H
ATOM    796  CA  THR    48     -12.903  -3.223 -13.683  1.00  0.00
C
ATOM    797  HA  THR    48     -12.476  -3.129 -14.679  1.00  0.00
H
ATOM    798  C   THR    48     -14.411  -3.098 -13.799  1.00  0.00
C
ATOM    799  O   THR    48     -15.021  -3.694 -14.685  1.00  0.00
O
ATOM    800  CB  THR    48     -12.582  -4.640 -13.176  1.00  0.00
C
ATOM    801  HB  THR    48     -12.953  -5.368 -13.895  1.00  0.00
H
ATOM    802  OG1 THR    48     -13.213  -4.861 -11.916  1.00  0.00
O
ATOM    803  HG1 THR    48     -13.019  -5.774 -11.659  1.00  0.00
H
ATOM    804  CG2 THR    48     -11.092  -4.839 -12.982  1.00  0.00
C
ATOM    805 1HG2 THR    48     -10.898  -5.884 -12.742  1.00  0.00
H
ATOM    806 2HG2 THR    48     -10.726  -4.216 -12.166  1.00  0.00
H
ATOM    807 3HG2 THR    48     -10.561  -4.586 -13.899  1.00  0.00
H
ATOM    808  N   ASN    49     -14.991  -2.296 -12.913  1.00  0.00
N
ATOM    809  H   ASN    49     -14.396  -1.869 -12.211  1.00  0.00
H
ATOM    810  CA  ASN    49     -16.430  -2.017 -12.835  1.00  0.00
C
ATOM    811  HA  ASN    49     -16.570  -1.309 -12.019  1.00  0.00
H
ATOM    812  C   ASN    49     -17.252  -3.258 -12.483  1.00  0.00
C
ATOM    813  O   ASN    49     -18.442  -3.319 -12.793  1.00  0.00
O
ATOM    814  CB  ASN    49     -16.984  -1.359 -14.117  1.00  0.00
C
ATOM    815 1HB  ASN    49     -16.907  -2.057 -14.947  1.00  0.00
H
ATOM    816 2HB  ASN    49     -18.036  -1.119 -13.969  1.00  0.00
H
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ATOM    817  CG  ASN    49     -16.269  -0.091 -14.481  1.00  0.00
C
ATOM    818  OD1 ASN    49     -16.509   0.956 -13.899  1.00  0.00
O
ATOM    819  ND2 ASN    49     -15.406  -0.154 -15.451  1.00  0.00
N
ATOM    820 1HD2 ASN    49     -14.860   0.667 -15.673  1.00  0.00
H
ATOM    821 2HD2 ASN    49     -15.290  -1.009 -15.972  1.00  0.00
H
ATOM    822  N   SER    50     -16.660  -4.256 -11.840  1.00  0.00
N
ATOM    823  H   SER    50     -15.678  -4.196 -11.599  1.00  0.00
H
ATOM    824  CA  SER    50     -17.421  -5.451 -11.460  1.00  0.00
C
ATOM    825  HA  SER    50     -18.068  -5.735 -12.290  1.00  0.00
H
ATOM    826  C   SER    50     -18.313  -5.177 -10.249  1.00  0.00
C
ATOM    827  O   SER    50     -19.307  -5.867 -10.011  1.00  0.00
O
ATOM    828  CB  SER    50     -16.490  -6.627 -11.170  1.00  0.00
C
ATOM    829 1HB  SER    50     -17.094  -7.511 -10.961  1.00  0.00
H
ATOM    830 2HB  SER    50     -15.881  -6.820 -12.053  1.00  0.00
H
ATOM    831  OG  SER    50     -15.632  -6.381 -10.069  1.00  0.00
O
ATOM    832  HG  SER    50     -15.196  -7.223  -9.865  1.00  0.00
H
ATOM    833  N   GLY    51     -17.989  -4.137  -9.493  1.00  0.00
N
ATOM    834  H   GLY    51     -17.151  -3.594  -9.701  1.00  0.00
H
ATOM    835  CA  GLY    51     -18.814  -3.730  -8.367  1.00  0.00
C
ATOM    836 1HA  GLY    51     -18.729  -2.651  -8.250  1.00  0.00
H
ATOM    837 2HA  GLY    51     -19.857  -3.972  -8.567  1.00  0.00
H
ATOM    838  C   GLY    51     -18.412  -4.370  -7.059  1.00  0.00
C
ATOM    839  O   GLY    51     -19.037  -4.118  -6.031  1.00  0.00
O
ATOM    840  N   ILE    52     -17.358  -5.172  -7.075  1.00  0.00
N
ATOM    841  H   ILE    52     -16.878  -5.347  -7.946  1.00  0.00
H
ATOM    842  CA  ILE    52     -16.817  -5.760  -5.851  1.00  0.00
C
ATOM    843  HA  ILE    52     -17.423  -5.443  -5.006  1.00  0.00
H
ATOM    844  C   ILE    52     -15.428  -5.184  -5.636  1.00  0.00
C
ATOM    845  O   ILE    52     -14.716  -4.869  -6.593  1.00  0.00
O
ATOM    846  CB  ILE    52     -16.804  -7.316  -5.850  1.00  0.00
C
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ATOM    847  HB  ILE    52     -16.342  -7.643  -4.918  1.00  0.00
H
ATOM    848  CG1 ILE    52     -15.986  -7.884  -7.024  1.00  0.00
C
ATOM    849 1HG1 ILE    52     -16.551  -7.745  -7.946  1.00  0.00
H
ATOM    850 2HG1 ILE    52     -15.051  -7.335  -7.111  1.00  0.00
H
ATOM    851  CG2 ILE    52     -18.248  -7.853  -5.881  1.00  0.00
C
ATOM    852 1HG2 ILE    52     -18.252  -8.933  -5.728  1.00  0.00
H
ATOM    853 2HG2 ILE    52     -18.719  -7.629  -6.839  1.00  0.00
H
ATOM    854 3HG2 ILE    52     -18.827  -7.393  -5.082  1.00  0.00
H
ATOM    855  CD1 ILE    52     -15.635  -9.355  -6.889  1.00  0.00
C
ATOM    856 1HD1 ILE    52     -15.090  -9.679  -7.772  1.00  0.00
H
ATOM    857 2HD1 ILE    52     -16.536  -9.961  -6.796  1.00  0.00
H
ATOM    858 3HD1 ILE    52     -15.004  -9.497  -6.015  1.00  0.00
H
ATOM    859  N   ILE    53     -15.056  -5.013  -4.378  1.00  0.00
N
ATOM    860  H   ILE    53     -15.695  -5.288  -3.633  1.00  0.00
H
ATOM    861  CA  ILE    53     -13.760  -4.457  -4.018  1.00  0.00
C
ATOM    862  HA  ILE    53     -13.309  -4.044  -4.916  1.00  0.00
H
ATOM    863  C   ILE    53     -12.884  -5.603  -3.535  1.00  0.00
C
ATOM    864  O   ILE    53     -13.212  -6.328  -2.597  1.00  0.00
O
ATOM    865  CB  ILE    53     -13.818  -3.306  -2.968  1.00  0.00
C
ATOM    866  HB  ILE    53     -13.506  -3.697  -1.999  1.00  0.00
H
ATOM    867  CG1 ILE    53     -15.243  -2.731  -2.815  1.00  0.00
C
ATOM    868 1HG1 ILE    53     -15.545  -2.283  -3.763  1.00  0.00
H
ATOM    869 2HG1 ILE    53     -15.931  -3.541  -2.581  1.00  0.00
H
ATOM    870  CG2 ILE    53     -12.827  -2.201  -3.407  1.00  0.00
C
ATOM    871 1HG2 ILE    53     -12.851  -1.361  -2.718  1.00  0.00
H
ATOM    872 2HG2 ILE    53     -13.080  -1.836  -4.406  1.00  0.00
H
ATOM    873 3HG2 ILE    53     -11.816  -2.605  -3.411  1.00  0.00
H
ATOM    874  CD1 ILE    53     -15.414  -1.685  -1.707  1.00  0.00
C
ATOM    875 1HD1 ILE    53     -16.475  -1.478  -1.583  1.00  0.00
H
ATOM    876 2HD1 ILE    53     -14.902  -0.761  -1.974  1.00  0.00
H
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ATOM    877 3HD1 ILE    53     -15.015  -2.070  -0.767  1.00  0.00
H
ATOM    878  N   THR    54     -11.777  -5.769  -4.234  1.00  0.00
N
ATOM    879  H   THR    54     -11.570  -5.136  -4.987  1.00  0.00
H
ATOM    880  CA  THR    54     -10.798  -6.814  -3.985  1.00  0.00
C
ATOM    881  HA  THR    54     -11.127  -7.502  -3.206  1.00  0.00
H
ATOM    882  C   THR    54      -9.570  -6.057  -3.513  1.00  0.00
C
ATOM    883  O   THR    54      -9.559  -4.831  -3.617  1.00  0.00
O
ATOM    884  CB  THR    54     -10.537  -7.577  -5.287  1.00  0.00
C
ATOM    885  HB  THR    54      -9.696  -8.254  -5.153  1.00  0.00
H
ATOM    886  OG1 THR    54     -10.256  -6.639  -6.330  1.00  0.00
O
ATOM    887  HG1 THR    54     -10.116  -7.148  -7.142  1.00  0.00
H
ATOM    888  CG2 THR    54     -11.768  -8.364  -5.708  1.00  0.00
C
ATOM    889 1HG2 THR    54     -11.518  -8.989  -6.564  1.00  0.00
H
ATOM    890 2HG2 THR    54     -12.579  -7.690  -5.982  1.00  0.00
H
ATOM    891 3HG2 THR    54     -12.090  -9.010  -4.890  1.00  0.00
H
ATOM    892  N   PHE    55      -8.570  -6.718  -2.951  1.00  0.00
N
ATOM    893  H   PHE    55      -8.574  -7.735  -2.955  1.00  0.00
H
ATOM    894  CA  PHE    55      -7.484  -6.016  -2.265  1.00  0.00
C
ATOM    895  HA  PHE    55      -7.924  -5.462  -1.437  1.00  0.00
H
ATOM    896  C   PHE    55      -6.730  -4.993  -3.112  1.00  0.00
C
ATOM    897  O   PHE    55      -6.438  -3.902  -2.630  1.00  0.00
O
ATOM    898  CB  PHE    55      -6.493  -7.016  -1.671  1.00  0.00
C
ATOM    899 1HB  PHE    55      -7.041  -7.701  -1.026  1.00  0.00
H
ATOM    900 2HB  PHE    55      -6.036  -7.591  -2.476  1.00  0.00
H
ATOM    901  CG  PHE    55      -5.409  -6.358  -0.867  1.00  0.00
C
ATOM    902  CD1 PHE    55      -5.715  -5.744   0.358  1.00  0.00
C
ATOM    903  HD1 PHE    55      -6.716  -5.808   0.758  1.00  0.00
H
ATOM    904  CD2 PHE    55      -4.094  -6.292  -1.357  1.00  0.00
C
ATOM    905  HD2 PHE    55      -3.847  -6.767  -2.294  1.00  0.00
H
ATOM    906  CE1 PHE    55      -4.734  -5.022   1.067  1.00  0.00
C
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ATOM    907  HE1 PHE    55      -4.997  -4.525   1.984  1.00  0.00
H
ATOM    908  CE2 PHE    55      -3.088  -5.593  -0.643  1.00  0.00
C
ATOM    909  HE2 PHE    55      -2.082  -5.538  -1.036  1.00  0.00
H
ATOM    910  CZ  PHE    55      -3.411  -4.953   0.574  1.00  0.00
C
ATOM    911  HZ  PHE    55      -2.654  -4.409   1.118  1.00  0.00
H
ATOM    912  N   GLN    56      -6.481  -5.280  -4.381  1.00  0.00
N
ATOM    913  H   GLN    56      -6.750  -6.193  -4.748  1.00  0.00
H
ATOM    914  CA  GLN    56      -5.811  -4.315  -5.260  1.00  0.00
C
ATOM    915  HA  GLN    56      -4.831  -4.072  -4.847  1.00  0.00
H
ATOM    916  C   GLN    56      -6.611  -3.019  -5.367  1.00  0.00
C
ATOM    917  O   GLN    56      -6.057  -1.926  -5.289  1.00  0.00
O
ATOM    918  CB  GLN    56      -5.643  -4.911  -6.660  1.00  0.00
C
ATOM    919 1HB  GLN    56      -6.609  -5.299  -6.983  1.00  0.00
H
ATOM    920 2HB  GLN    56      -5.338  -4.121  -7.346  1.00  0.00
H
ATOM    921  CG  GLN    56      -4.612  -6.026  -6.727  1.00  0.00
C
ATOM    922 1HG  GLN    56      -3.613  -5.595  -6.683  1.00  0.00
H
ATOM    923 2HG  GLN    56      -4.739  -6.672  -5.865  1.00  0.00
H
ATOM    924  CD  GLN    56      -4.735  -6.882  -7.971  1.00  0.00
C
ATOM    925  OE1 GLN    56      -5.157  -6.428  -9.034  1.00  0.00
O
ATOM    926  NE2 GLN    56      -4.398  -8.136  -7.845  1.00  0.00
N
ATOM    927 1HE2 GLN    56      -4.387  -8.730  -8.659  1.00  0.00
H
ATOM    928 2HE2 GLN    56      -4.167  -8.506  -6.933  1.00  0.00
H
ATOM    929  N   LYS    57      -7.925  -3.139  -5.486  1.00  0.00
N
ATOM    930  H   LYS    57      -8.332  -4.065  -5.509  1.00  0.00
H
ATOM    931  CA  LYS    57      -8.808  -1.974  -5.585  1.00  0.00
C
ATOM    932  HA  LYS    57      -8.421  -1.275  -6.329  1.00  0.00
H
ATOM    933  C   LYS    57      -8.901  -1.275  -4.240  1.00  0.00
C
ATOM    934  O   LYS    57      -8.942  -0.054  -4.124  1.00  0.00
O
ATOM    935  CB  LYS    57     -10.208  -2.444  -5.982  1.00  0.00
C
ATOM    936 1HB  LYS    57     -10.575  -3.107  -5.204  1.00  0.00
H
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ATOM    937 2HB  LYS    57     -10.872  -1.584  -6.033  1.00  0.00
H
ATOM    938  CG  LYS    57     -10.270  -3.201  -7.287  1.00  0.00
C
ATOM    939 1HG  LYS    57      -9.927  -2.563  -8.099  1.00  0.00
H
ATOM    940 2HG  LYS    57      -9.632  -4.082  -7.225  1.00  0.00
H
ATOM    941  CD  LYS    57     -11.685  -3.654  -7.554  1.00  0.00
C
ATOM    942 1HD  LYS    57     -12.059  -4.183  -6.681  1.00  0.00
H
ATOM    943 2HD  LYS    57     -12.315  -2.786  -7.742  1.00  0.00
H
ATOM    944  CE  LYS    57     -11.736  -4.597  -8.734  1.00  0.00
C
ATOM    945 1HE  LYS    57     -11.314  -4.106  -9.614  1.00  0.00
H
ATOM    946 2HE  LYS    57     -11.153  -5.491  -8.509  1.00  0.00
H
ATOM    947  NZ  LYS    57     -13.147  -4.976  -9.012  1.00  0.00
N
ATOM    948 1HZ  LYS    57     -13.170  -5.769  -9.639  1.00  0.00
H
ATOM    949 2HZ  LYS    57     -13.618  -4.194  -9.460  1.00  0.00
H
ATOM    950 3HZ  LYS    57     -13.632  -5.200  -8.151  1.00  0.00
H
ATOM    951  N   PHE    58      -8.936  -2.080  -3.192  1.00  0.00
N
ATOM    952  H   PHE    58      -8.883  -3.084  -3.334  1.00  0.00
H
ATOM    953  CA  PHE    58      -9.109  -1.571  -1.842  1.00  0.00
C
ATOM    954  HA  PHE    58      -9.919  -0.848  -1.865  1.00  0.00
H
ATOM    955  C   PHE    58      -7.862  -0.853  -1.344  1.00  0.00
C
ATOM    956  O   PHE    58      -7.959   0.024  -0.510  1.00  0.00
O
ATOM    957  CB  PHE    58      -9.530  -2.701  -0.907  1.00  0.00
C
ATOM    958 1HB  PHE    58     -10.176  -3.376  -1.466  1.00  0.00
H
ATOM    959 2HB  PHE    58      -8.644  -3.251  -0.593  1.00  0.00
H
ATOM    960  CG  PHE    58     -10.307  -2.236   0.299  1.00  0.00
C
ATOM    961  CD1 PHE    58     -11.658  -1.869   0.168  1.00  0.00
C
ATOM    962  HD1 PHE    58     -12.137  -1.932  -0.792  1.00  0.00
H
ATOM    963  CD2 PHE    58      -9.715  -2.181   1.569  1.00  0.00
C
ATOM    964  HD2 PHE    58      -8.683  -2.474   1.693  1.00  0.00
H
ATOM    965  CE1 PHE    58     -12.410  -1.425   1.281  1.00  0.00
C
ATOM    966  HE1 PHE    58     -13.446  -1.144   1.161  1.00  0.00
H
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ATOM    967  CE2 PHE    58     -10.464  -1.751   2.701  1.00  0.00
C
ATOM    968  HE2 PHE    58     -10.007  -1.728   3.678  1.00  0.00
H
ATOM    969  CZ  PHE    58     -11.807  -1.365   2.551  1.00  0.00
C
ATOM    970  HZ  PHE    58     -12.375  -1.037   3.409  1.00  0.00
H
ATOM    971  N   CYS    59      -6.697  -1.114  -1.918  1.00  0.00
N
ATOM    972  H   CYS    59      -6.616  -1.876  -2.583  1.00  0.00
H
ATOM    973  CA  CYS    59      -5.522  -0.305  -1.596  1.00  0.00
C
ATOM    974  HA  CYS    59      -5.348  -0.337  -0.520  1.00  0.00
H
ATOM    975  C   CYS    59      -5.727   1.153  -2.000  1.00  0.00
C
ATOM    976  O   CYS    59      -5.227   2.056  -1.340  1.00  0.00
O
ATOM    977  CB  CYS    59      -4.287  -0.831  -2.321  1.00  0.00
C
ATOM    978 1HB  CYS    59      -4.499  -0.852  -3.390  1.00  0.00
H
ATOM    979 2HB  CYS    59      -3.470  -0.130  -2.149  1.00  0.00
H
ATOM    980  SG  CYS    59      -3.739  -2.459  -1.803  1.00  0.00
S
ATOM    981  HG  CYS    59      -4.898  -3.107  -2.003  1.00  0.00
H
ATOM    982  N   ASP    60      -6.468   1.408  -3.069  1.00  0.00
N
ATOM    983  H   ASP    60      -6.857   0.651  -3.619  1.00  0.00
H
ATOM    984  CA  ASP    60      -6.732   2.785  -3.484  1.00  0.00
C
ATOM    985  HA  ASP    60      -5.825   3.373  -3.350  1.00  0.00
H
ATOM    986  C   ASP    60      -7.809   3.417  -2.600  1.00  0.00
C
ATOM    987  O   ASP    60      -7.718   4.603  -2.282  1.00  0.00
O
ATOM    988  CB  ASP    60      -7.087   2.847  -4.971  1.00  0.00
C
ATOM    989 1HB  ASP    60      -7.843   2.096  -5.198  1.00  0.00
H
ATOM    990 2HB  ASP    60      -7.495   3.833  -5.185  1.00  0.00
H
ATOM    991  CG  ASP    60      -5.869   2.644  -5.863  1.00  0.00
C
ATOM    992  OD1 ASP    60      -5.235   3.661  -6.223  1.00  0.00
O
ATOM    993  OD2 ASP    60      -5.485   1.494  -6.187  1.00  0.00
O
ATOM    994  N   VAL    61      -8.737   2.612  -2.088  1.00  0.00
N
ATOM    995  H   VAL    61      -8.760   1.646  -2.385  1.00  0.00
H
ATOM    996  CA  VAL    61      -9.710   3.064  -1.071  1.00  0.00
C
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ATOM    997  HA  VAL    61     -10.255   3.928  -1.446  1.00  0.00
H
ATOM    998  C   VAL    61      -8.937   3.468   0.186  1.00  0.00
C
ATOM    999  O   VAL    61      -9.285   4.398   0.913  1.00  0.00
O
ATOM   1000  CB  VAL    61     -10.728   1.931  -0.665  1.00  0.00
C
ATOM   1001  HB  VAL    61     -10.172   1.106  -0.231  1.00  0.00
H
ATOM   1002  CG1 VAL    61     -11.751   2.408   0.382  1.00  0.00
C
ATOM   1003 1HG1 VAL    61     -12.446   1.602   0.617  1.00  0.00
H
ATOM   1004 2HG1 VAL    61     -12.302   3.270   0.004  1.00  0.00
H
ATOM   1005 3HG1 VAL    61     -11.238   2.688   1.302  1.00  0.00
H
ATOM   1006  CG2 VAL    61     -11.500   1.382  -1.869  1.00  0.00
C
ATOM   1007 1HG2 VAL    61     -12.075   0.512  -1.561  1.00  0.00
H
ATOM   1008 2HG2 VAL    61     -10.815   1.084  -2.660  1.00  0.00
H
ATOM   1009 3HG2 VAL    61     -12.181   2.135  -2.253  1.00  0.00
H
ATOM   1010  N   LEU    62      -7.842   2.763   0.424  1.00  0.00
N
ATOM   1011  H   LEU    62      -7.612   2.003  -0.206  1.00  0.00
H
ATOM   1012  CA  LEU    62      -6.986   2.966   1.586  1.00  0.00
C
ATOM   1013  HA  LEU    62      -7.568   3.454   2.361  1.00  0.00
H
ATOM   1014  C   LEU    62      -5.796   3.888   1.328  1.00  0.00
C
ATOM   1015  O   LEU    62      -4.909   4.033   2.173  1.00  0.00
O
ATOM   1016  CB  LEU    62      -6.564   1.599   2.120  1.00  0.00
C
ATOM   1017 1HB  LEU    62      -6.076   1.044   1.319  1.00  0.00
H
ATOM   1018 2HB  LEU    62      -5.835   1.742   2.905  1.00  0.00
H
ATOM   1019  CG  LEU    62      -7.716   0.751   2.691  1.00  0.00
C
ATOM   1020  HG  LEU    62      -8.398   0.494   1.887  1.00  0.00
H
ATOM   1021  CD1 LEU    62      -7.113  -0.530   3.229  1.00  0.00
C
ATOM   1022 1HD1 LEU    62      -7.892  -1.168   3.636  1.00  0.00
H
ATOM   1023 2HD1 LEU    62      -6.396  -0.310   4.015  1.00  0.00
H
ATOM   1024 3HD1 LEU    62      -6.626  -1.071   2.418  1.00  0.00
H
ATOM   1025  CD2 LEU    62      -8.547   1.437   3.784  1.00  0.00
C
ATOM   1026 1HD2 LEU    62      -9.293   0.741   4.162  1.00  0.00
H
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ATOM   1027 2HD2 LEU    62      -9.075   2.292   3.364  1.00  0.00
H
ATOM   1028 3HD2 LEU    62      -7.907   1.766   4.602  1.00  0.00
H
ATOM   1029  N   GLY    63      -5.841   4.599   0.211  1.00  0.00
N
ATOM   1030  H   GLY    63      -6.575   4.425  -0.467  1.00  0.00
H
ATOM   1031  CA  GLY    63      -4.926   5.704  -0.011  1.00  0.00
C
ATOM   1032 1HA  GLY    63      -5.418   6.401  -0.683  1.00  0.00
H
ATOM   1033 2HA  GLY    63      -4.779   6.221   0.937  1.00  0.00
H
ATOM   1034  C   GLY    63      -3.556   5.416  -0.589  1.00  0.00
C
ATOM   1035  O   GLY    63      -2.660   6.236  -0.417  1.00  0.00
O
ATOM   1036  N   VAL    64      -3.354   4.295  -1.272  1.00  0.00
N
ATOM   1037  H   VAL    64      -4.100   3.607  -1.351  1.00  0.00
H
ATOM   1038  CA  VAL    64      -2.046   4.008  -1.883  1.00  0.00
C
ATOM   1039  HA  VAL    64      -1.292   4.125  -1.104  1.00  0.00
H
ATOM   1040  C   VAL    64      -1.703   4.997  -3.008  1.00  0.00
C
ATOM   1041  O   VAL    64      -0.534   5.243  -3.314  1.00  0.00
O
ATOM   1042  CB  VAL    64      -1.967   2.532  -2.397  1.00  0.00
C
ATOM   1043  HB  VAL    64      -2.433   1.900  -1.643  1.00  0.00
H
ATOM   1044  CG1 VAL    64      -2.714   2.311  -3.723  1.00  0.00
C
ATOM   1045 1HG1 VAL    64      -2.713   1.251  -3.974  1.00  0.00
H
ATOM   1046 2HG1 VAL    64      -2.225   2.854  -4.534  1.00  0.00
H
ATOM   1047 3HG1 VAL    64      -3.743   2.648  -3.638  1.00  0.00
H
ATOM   1048  CG2 VAL    64      -0.519   2.072  -2.541  1.00  0.00
C
ATOM   1049 1HG2 VAL    64      -0.494   1.021  -2.826  1.00  0.00
H
ATOM   1050 2HG2 VAL    64       0.007   2.193  -1.594  1.00  0.00
H
ATOM   1051 3HG2 VAL    64      -0.013   2.657  -3.309  1.00  0.00
H
ATOM   1052  N   LYS    65      -2.720   5.584  -3.626  1.00  0.00
N
ATOM   1053  H   LYS    65      -3.658   5.369  -3.332  1.00  0.00
H
ATOM   1054  CA  LYS    65      -2.517   6.542  -4.712  1.00  0.00
C
ATOM   1055  HA  LYS    65      -1.891   6.089  -5.479  1.00  0.00
H
ATOM   1056  C   LYS    65      -1.846   7.797  -4.159  1.00  0.00
C
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ATOM   1057  O   LYS    65      -2.397   8.402  -3.234  1.00  0.00
O
ATOM   1058  CB  LYS    65      -3.877   6.911  -5.315  1.00  0.00
C
ATOM   1059 1HB  LYS    65      -4.370   6.002  -5.656  1.00  0.00
H
ATOM   1060 2HB  LYS    65      -4.486   7.346  -4.527  1.00  0.00
H
ATOM   1061  CG  LYS    65      -3.828   7.901  -6.470  1.00  0.00
C
ATOM   1062 1HG  LYS    65      -3.293   8.792  -6.150  1.00  0.00
H
ATOM   1063 2HG  LYS    65      -3.314   7.454  -7.319  1.00  0.00
H
ATOM   1064  CD  LYS    65      -5.236   8.307  -6.868  1.00  0.00
C
ATOM   1065 1HD  LYS    65      -5.768   7.440  -7.262  1.00  0.00
H
ATOM   1066 2HD  LYS    65      -5.754   8.659  -5.985  1.00  0.00
H
ATOM   1067  CE  LYS    65      -5.253   9.430  -7.890  1.00  0.00
C
ATOM   1068 1HE  LYS    65      -4.608  10.243  -7.550  1.00  0.00
H
ATOM   1069 2HE  LYS    65      -4.883   9.060  -8.847  1.00  0.00
H
ATOM   1070  NZ  LYS    65      -6.645   9.952  -8.052  1.00  0.00
N
ATOM   1071 1HZ  LYS    65      -6.684  10.571  -8.856  1.00  0.00
H
ATOM   1072 2HZ  LYS    65      -6.908  10.489  -7.229  1.00  0.00
H
ATOM   1073 3HZ  LYS    65      -7.294   9.191  -8.190  1.00  0.00
H
ATOM   1074  N   PRO    66      -0.704   8.236  -4.724  1.00  0.00
N
ATOM   1075  CA  PRO    66      -0.225   9.564  -4.323  1.00  0.00
C
ATOM   1076  HA  PRO    66      -0.006   9.588  -3.255  1.00  0.00
H
ATOM   1077  C   PRO    66      -1.261  10.617  -4.699  1.00  0.00
C
ATOM   1078  O   PRO    66      -1.598  10.729  -5.880  1.00  0.00
O
ATOM   1079  CB  PRO    66       1.060   9.732  -5.145  1.00  0.00
C
ATOM   1080 1HB  PRO    66       0.856  10.268  -6.071  1.00  0.00
H
ATOM   1081 2HB  PRO    66       1.822  10.250  -4.567  1.00  0.00
H
ATOM   1082  CG  PRO    66       1.485   8.349  -5.458  1.00  0.00
C
ATOM   1083 1HG  PRO    66       2.147   8.327  -6.324  1.00  0.00
H
ATOM   1084 2HG  PRO    66       1.965   7.897  -4.589  1.00  0.00
H
ATOM   1085  CD  PRO    66       0.184   7.665  -5.752  1.00  0.00
C
ATOM   1086 1HD  PRO    66      -0.172   7.920  -6.752  1.00  0.00
H
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ATOM   1087 2HD  PRO    66       0.286   6.586  -5.636  1.00  0.00
H
ATOM   1088  N   GLU    67      -1.764  11.303  -3.673  1.00  0.00
N
ATOM   1089  H   GLU    67      -1.275  11.190  -2.794  1.00  0.00
H
ATOM   1090  CA  GLU    67      -2.963  12.173  -3.612  1.00  0.00
C
ATOM   1091  HA  GLU    67      -2.650  13.185  -3.357  1.00  0.00
H
ATOM   1092  C   GLU    67      -3.850  11.662  -2.477  1.00  0.00
C
ATOM   1093  O   GLU    67      -4.087  12.358  -1.501  1.00  0.00
O
ATOM   1094  CB  GLU    67      -3.841  12.235  -4.877  1.00  0.00
C
ATOM   1095 1HB  GLU    67      -3.247  12.599  -5.713  1.00  0.00
H
ATOM   1096 2HB  GLU    67      -4.176  11.226  -5.112  1.00  0.00
H
ATOM   1097  CG  GLU    67      -5.055  13.127  -4.759  1.00  0.00
C
ATOM   1098 1HG  GLU    67      -5.554  12.923  -3.821  1.00  0.00
H
ATOM   1099 2HG  GLU    67      -4.737  14.170  -4.772  1.00  0.00
H
ATOM   1100  CD  GLU    67      -6.053  12.877  -5.858  1.00  0.00
C
ATOM   1101  OE1 GLU    67      -6.665  11.786  -5.869  1.00  0.00
O
ATOM   1102  OE2 GLU    67      -6.258  13.766  -6.717  1.00  0.00
O
ATOM   1103  N   GLN    68      -4.322  10.428  -2.575  1.00  0.00
N
ATOM   1104  H   GLN    68      -4.007   9.842  -3.338  1.00  0.00
H
ATOM   1105  CA  GLN    68      -5.285   9.866  -1.620  1.00  0.00
C
ATOM   1106  HA  GLN    68      -6.047  10.609  -1.392  1.00  0.00
H
ATOM   1107  C   GLN    68      -4.619   9.475  -0.306  1.00  0.00
C
ATOM   1108  O   GLN    68      -5.287   9.124   0.658  1.00  0.00
O
ATOM   1109  CB  GLN    68      -5.973   8.646  -2.231  1.00  0.00
C
ATOM   1110 1HB  GLN    68      -5.200   7.940  -2.527  1.00  0.00
H
ATOM   1111 2HB  GLN    68      -6.586   8.170  -1.469  1.00  0.00
H
ATOM   1112  CG  GLN    68      -6.857   8.944  -3.443  1.00  0.00
C
ATOM   1113 1HG  GLN    68      -6.308   9.570  -4.143  1.00  0.00
H
ATOM   1114 2HG  GLN    68      -7.093   8.001  -3.934  1.00  0.00
H
ATOM   1115  CD  GLN    68      -8.165   9.626  -3.103  1.00  0.00
C
ATOM   1116  OE1 GLN    68      -8.906   9.173  -2.245  1.00  0.00
O
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ATOM   1117  NE2 GLN    68      -8.485  10.682  -3.803  1.00  0.00
N
ATOM   1118 1HE2 GLN    68      -9.378  11.113  -3.643  1.00  0.00
H
ATOM   1119 2HE2 GLN    68      -7.856  11.042  -4.516  1.00  0.00
H
ATOM   1120  N   ALA    69      -3.303   9.622  -0.254  1.00  0.00
N
ATOM   1121  H   ALA    69      -2.802   9.829  -1.102  1.00  0.00
H
ATOM   1122  CA  ALA    69      -2.563   9.524   0.997  1.00  0.00
C
ATOM   1123  HA  ALA    69      -2.654   8.504   1.374  1.00  0.00
H
ATOM   1124  C   ALA    69      -3.162  10.468   2.052  1.00  0.00
C
ATOM   1125  O   ALA    69      -3.272  10.089   3.221  1.00  0.00
O
ATOM   1126  CB  ALA    69      -1.082   9.833   0.747  1.00  0.00
C
ATOM   1127 1HB  ALA    69      -0.678   9.126   0.019  1.00  0.00
H
ATOM   1128 2HB  ALA    69      -0.526   9.728   1.679  1.00  0.00
H
ATOM   1129 3HB  ALA    69      -0.964  10.851   0.371  1.00  0.00
H
ATOM   1130  N   ARG    70      -3.621  11.651   1.652  1.00  0.00
N
ATOM   1131  H   ARG    70      -3.377  12.005   0.732  1.00  0.00
H
ATOM   1132  CA  ARG    70      -4.518  12.435   2.510  1.00  0.00
C
ATOM   1133  HA  ARG    70      -4.905  11.757   3.267  1.00  0.00
H
ATOM   1134  C   ARG    70      -5.747  13.034   1.825  1.00  0.00
C
ATOM   1135  O   ARG    70      -6.589  13.590   2.498  1.00  0.00
O
ATOM   1136  CB  ARG    70      -3.740  13.535   3.240  1.00  0.00
C
ATOM   1137 1HB  ARG    70      -2.676  13.355   3.104  1.00  0.00
H
ATOM   1138 2HB  ARG    70      -3.965  14.480   2.754  1.00  0.00
H
ATOM   1139  CG  ARG    70      -4.045  13.675   4.744  1.00  0.00
C
ATOM   1140 1HG  ARG    70      -3.958  14.727   5.011  1.00  0.00
H
ATOM   1141 2HG  ARG    70      -5.073  13.361   4.927  1.00  0.00
H
ATOM   1142  CD  ARG    70      -3.106  12.884   5.663  1.00  0.00
C
ATOM   1143 1HD  ARG    70      -3.498  12.925   6.681  1.00  0.00
H
ATOM   1144 2HD  ARG    70      -3.078  11.841   5.346  1.00  0.00
H
ATOM   1145  NE  ARG    70      -1.752  13.465   5.654  1.00  0.00
N
ATOM   1146  HE  ARG    70      -1.601  14.292   6.210  1.00  0.00
H
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ATOM   1147  CZ  ARG    70      -0.724  13.042   4.932  1.00  0.00
C
ATOM   1148  NH1 ARG    70      -0.682  11.891   4.318  1.00  0.00
N
ATOM   1149 1HH1 ARG    70      -1.403  11.205   4.489  1.00  0.00
H
ATOM   1150 2HH1 ARG    70       0.081  11.695   3.684  1.00  0.00
H
ATOM   1151  NH2 ARG    70       0.303  13.824   4.791  1.00  0.00
N
ATOM   1152 1HH2 ARG    70       0.323  14.722   5.255  1.00  0.00
H
ATOM   1153 2HH2 ARG    70       1.066  13.530   4.205  1.00  0.00
H
ATOM   1154  N   THR    71      -5.935  12.942   0.523  1.00  0.00
N
ATOM   1155  H   THR    71      -5.207  12.567  -0.076  1.00  0.00
H
ATOM   1156  CA  THR    71      -7.222  13.333  -0.073  1.00  0.00
C
ATOM   1157  HA  THR    71      -7.524  14.300   0.324  1.00  0.00
H
ATOM   1158  C   THR    71      -8.256  12.289   0.350  1.00  0.00
C
ATOM   1159  O   THR    71      -7.861  11.181   0.708  1.00  0.00
O
ATOM   1160  CB  THR    71      -7.076  13.477  -1.589  1.00  0.00
C
ATOM   1161  HB  THR    71      -6.818  12.514  -2.027  1.00  0.00
H
ATOM   1162  OG1 THR    71      -6.023  14.414  -1.820  1.00  0.00
O
ATOM   1163  HG1 THR    71      -5.178  13.954  -1.720  1.00  0.00
H
ATOM   1164  CG2 THR    71      -8.297  14.035  -2.278  1.00  0.00
C
ATOM   1165 1HG2 THR    71      -8.064  14.198  -3.331  1.00  0.00
H
ATOM   1166 2HG2 THR    71      -8.580  14.986  -1.830  1.00  0.00
H
ATOM   1167 3HG2 THR    71      -9.125  13.330  -2.214  1.00  0.00
H
ATOM   1168  N   LEU    72      -9.522  12.706   0.451  1.00  0.00
N
ATOM   1169  H   LEU    72      -9.751  13.619   0.085  1.00  0.00
H
ATOM   1170  CA  LEU    72     -10.643  11.980   1.088  1.00  0.00
C
ATOM   1171  HA  LEU    72     -11.543  12.571   0.916  1.00  0.00
H
ATOM   1172  C   LEU    72     -10.477  11.901   2.615  1.00  0.00
C
ATOM   1173  O   LEU    72     -11.367  11.466   3.348  1.00  0.00
O
ATOM   1174  CB  LEU    72     -10.879  10.603   0.425  1.00  0.00
C
ATOM   1175 1HB  LEU    72     -10.952  10.779  -0.649  1.00  0.00
H
ATOM   1176 2HB  LEU    72      -9.986  10.003   0.585  1.00  0.00
H
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ATOM   1177  CG  LEU    72     -12.066   9.700   0.812  1.00  0.00
C
ATOM   1178  HG  LEU    72     -11.972   9.432   1.862  1.00  0.00
H
ATOM   1179  CD1 LEU    72     -13.418  10.367   0.610  1.00  0.00
C
ATOM   1180 1HD1 LEU    72     -14.218   9.674   0.862  1.00  0.00
H
ATOM   1181 2HD1 LEU    72     -13.525  10.687  -0.427  1.00  0.00
H
ATOM   1182 3HD1 LEU    72     -13.490  11.232   1.269  1.00  0.00
H
ATOM   1183  CD2 LEU    72     -12.016   8.408  -0.001  1.00  0.00
C
ATOM   1184 1HD2 LEU    72     -12.829   7.750   0.296  1.00  0.00
H
ATOM   1185 2HD2 LEU    72     -11.067   7.899   0.174  1.00  0.00
H
ATOM   1186 3HD2 LEU    72     -12.104   8.635  -1.064  1.00  0.00
H
ATOM   1187  N   ARG    73      -9.325  12.347   3.103  1.00  0.00
N
ATOM   1188  H   ARG    73      -8.641  12.718   2.463  1.00  0.00
H
ATOM   1189  CA  ARG    73      -8.979  12.251   4.519  1.00  0.00
C
ATOM   1190  HA  ARG    73      -9.818  11.795   5.030  1.00  0.00
H
ATOM   1191  C   ARG    73      -8.722  13.560   5.231  1.00  0.00
C
ATOM   1192  O   ARG    73      -9.090  13.690   6.381  1.00  0.00
O
ATOM   1193  CB  ARG    73      -7.750  11.352   4.674  1.00  0.00
C
ATOM   1194 1HB  ARG    73      -6.945  11.761   4.076  1.00  0.00
H
ATOM   1195 2HB  ARG    73      -7.428  11.353   5.713  1.00  0.00
H
ATOM   1196  CG  ARG    73      -7.983   9.925   4.247  1.00  0.00
C
ATOM   1197 1HG  ARG    73      -8.536   9.410   5.030  1.00  0.00
H
ATOM   1198 2HG  ARG    73      -8.574   9.898   3.332  1.00  0.00
H
ATOM   1199  CD  ARG    73      -6.682   9.199   3.985  1.00  0.00
C
ATOM   1200 1HD  ARG    73      -6.214   9.597   3.083  1.00  0.00
H
ATOM   1201 2HD  ARG    73      -6.009   9.340   4.832  1.00  0.00
H
ATOM   1202  NE  ARG    73      -6.971   7.771   3.828  1.00  0.00
N
ATOM   1203  HE  ARG    73      -6.757   7.186   4.620  1.00  0.00
H
ATOM   1204  CZ  ARG    73      -7.524   7.195   2.769  1.00  0.00
C
ATOM   1205  NH1 ARG    73      -7.705   7.784   1.619  1.00  0.00
N
ATOM   1206 1HH1 ARG    73      -7.322   8.707   1.461  1.00  0.00
H
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ATOM   1207 2HH1 ARG    73       -8.191   7.304   0.867  1.00  0.00
H
ATOM   1208  NH2 ARG    73       -7.972   5.984   2.905  1.00  0.00
N
ATOM   1209 1HH2 ARG    73       -7.855   5.496   3.771  1.00  0.00
H
ATOM   1210 2HH2 ARG    73       -8.454   5.546   2.121  1.00  0.00
H
ATOM   1211  N   LYS    74       -8.072  14.510   4.583  1.00  0.00
N
ATOM   1212  H   LYS    74       -7.720  14.304   3.656  1.00  0.00
H
ATOM   1213  CA  LYS    74       -7.869  15.851   5.124  1.00  0.00
C
ATOM   1214  HA  LYS    74       -7.672  15.790   6.190  1.00  0.00
H
ATOM   1215  C   LYS    74       -9.182  16.576   4.941  1.00  0.00
C
ATOM   1216  O   LYS    74      -10.102  16.039   4.337  1.00  0.00
O
ATOM   1217  CB  LYS    74       -6.691  16.557   4.434  1.00  0.00
C
ATOM   1218 1HB  LYS    74       -6.501  17.508   4.929  1.00  0.00
H
ATOM   1219 2HB  LYS    74       -5.817  15.928   4.574  1.00  0.00
H
ATOM   1220  CG  LYS    74       -6.845  16.822   2.945  1.00  0.00
C
ATOM   1221 1HG  LYS    74       -7.266  15.943   2.466  1.00  0.00
H
ATOM   1222 2HG  LYS    74       -7.524  17.655   2.801  1.00  0.00
H
ATOM   1223  CD  LYS    74       -5.506  17.133   2.286  1.00  0.00
C
ATOM   1224 1HD  LYS    74       -5.177  18.133   2.572  1.00  0.00
H
ATOM   1225 2HD  LYS    74       -4.770  16.412   2.630  1.00  0.00
H
ATOM   1226  CE  LYS    74       -5.605  17.025   0.766  1.00  0.00
C
ATOM   1227 1HE  LYS    74       -6.060  16.069   0.506  1.00  0.00
H
ATOM   1228 2HE  LYS    74       -6.238  17.832   0.390  1.00  0.00
H
ATOM   1229  NZ  LYS    74       -4.253  17.099   0.122  1.00  0.00
N
ATOM   1230 1HZ  LYS    74       -4.338  16.998  -0.882  1.00  0.00
H
ATOM   1231 2HZ  LYS    74       -3.652  16.352   0.459  1.00  0.00
H
ATOM   1232 3HZ  LYS    74       -3.820  17.992   0.325  1.00  0.00
H
ATOM   1233  N   SER    75       -9.263  17.797   5.437  1.00  0.00
N
ATOM   1234  H   SER    75       -8.470  18.200   5.908  1.00  0.00
H
ATOM   1235  CA  SER    75      -10.473  18.591   5.308  1.00  0.00
C
ATOM   1236  HA  SER    75      -11.333  17.942   5.471  1.00  0.00
H
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ATOM   1237  C   SER    75     -10.559  19.174   3.893  1.00  0.00
C
ATOM   1238  O   SER    75     -10.108  20.285   3.628  1.00  0.00
O
ATOM   1239  CB  SER    75     -10.451  19.661   6.392  1.00  0.00
C
ATOM   1240 1HB  SER    75      -9.805  20.480   6.078  1.00  0.00
H
ATOM   1241 2HB  SER    75     -11.460  20.037   6.562  1.00  0.00
H
ATOM   1242  OG  SER    75      -9.917  19.097   7.586  1.00  0.00
O
ATOM   1243  HG  SER    75      -9.981  18.130   7.530  1.00  0.00
H
ATOM   1244  N   VAL    76     -11.041  18.356   2.969  1.00  0.00
N
ATOM   1245  H   VAL    76     -11.385  17.446   3.266  1.00  0.00
H
ATOM   1246  CA  VAL    76     -11.054  18.641   1.534  1.00  0.00
C
ATOM   1247  HA  VAL    76     -10.926  19.710   1.372  1.00  0.00
H
ATOM   1248  C   VAL    76     -12.456  18.242   1.078  1.00  0.00
C
ATOM   1249  O   VAL    76     -13.340  18.071   1.924  1.00  0.00
O
ATOM   1250  CB  VAL    76      -9.859  17.884   0.849  1.00  0.00
C
ATOM   1251  HB  VAL    76      -8.987  18.120   1.446  1.00  0.00
H
ATOM   1252  CG1 VAL    76     -10.018  16.353   0.858  1.00  0.00
C
ATOM   1253 1HG1 VAL    76      -9.098  15.896   0.505  1.00  0.00
H
ATOM   1254 2HG1 VAL    76     -10.841  16.052   0.211  1.00  0.00
H
ATOM   1255 3HG1 VAL    76     -10.225  15.999   1.867  1.00  0.00
H
ATOM   1256  CG2 VAL    76      -9.537  18.386  -0.563  1.00  0.00
C
ATOM   1257 1HG2 VAL    76      -8.531  18.070  -0.837  1.00  0.00
H
ATOM   1258 2HG2 VAL    76      -9.574  19.475  -0.584  1.00  0.00
H
ATOM   1259 3HG2 VAL    76     -10.237  17.981  -1.292  1.00  0.00
H
ATOM   1260  N   ILE    77     -12.687  18.124  -0.220  1.00  0.00
N
ATOM   1261  H   ILE    77     -11.952  18.348  -0.871  1.00  0.00
H
ATOM   1262  CA  ILE    77     -13.938  17.599  -0.750  1.00  0.00
C
ATOM   1263  HA  ILE    77     -14.772  18.111  -0.273  1.00  0.00
H
ATOM   1264  C   ILE    77     -13.969  16.110  -0.389  1.00  0.00
C
ATOM   1265  O   ILE    77     -13.089  15.353  -0.809  1.00  0.00
O
ATOM   1266  CB  ILE    77     -14.022  17.791  -2.292  1.00  0.00
C
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ATOM   1267  HB  ILE    77     -13.188  17.261  -2.750  1.00  0.00
H
ATOM   1268  CG1 ILE    77     -13.895  19.285  -2.655  1.00  0.00
C
ATOM   1269 1HG1 ILE    77     -14.808  19.797  -2.351  1.00  0.00
H
ATOM   1270 2HG1 ILE    77     -13.066  19.721  -2.103  1.00  0.00
H
ATOM   1271  CG2 ILE    77     -15.334  17.208  -2.841  1.00  0.00
C
ATOM   1272 1HG2 ILE    77     -15.378  17.321  -3.924  1.00  0.00
H
ATOM   1273 2HG2 ILE    77     -16.189  17.715  -2.391  1.00  0.00
H
ATOM   1274 3HG2 ILE    77     -15.392  16.143  -2.618  1.00  0.00
H
ATOM   1275  CD1 ILE    77     -13.640  19.570  -4.133  1.00  0.00
C
ATOM   1276 1HD1 ILE    77     -13.521  20.644  -4.274  1.00  0.00
H
ATOM   1277 2HD1 ILE    77     -14.478  19.230  -4.737  1.00  0.00
H
ATOM   1278 3HD1 ILE    77     -12.729  19.065  -4.456  1.00  0.00
H
ATOM   1279  N   ASN    78     -14.980  15.741   0.390  1.00  0.00
N
ATOM   1280  H   ASN    78     -15.630  16.472   0.665  1.00  0.00
H
ATOM   1281  CA  ASN    78     -15.211  14.406   0.967  1.00  0.00
C
ATOM   1282  HA  ASN    78     -16.150  14.477   1.516  1.00  0.00
H
ATOM   1283  C   ASN    78     -14.157  14.001   2.012  1.00  0.00
C
ATOM   1284  O   ASN    78     -13.001  14.412   1.981  1.00  0.00
O
ATOM   1285  CB  ASN    78     -15.414  13.320  -0.100  1.00  0.00
C
ATOM   1286 1HB  ASN    78     -14.468  13.140  -0.608  1.00  0.00
H
ATOM   1287 2HB  ASN    78     -15.728  12.400   0.389  1.00  0.00
H
ATOM   1288  CG  ASN    78     -16.442  13.696  -1.139  1.00  0.00
C
ATOM   1289  OD1 ASN    78     -16.199  13.568  -2.326  1.00  0.00
O
ATOM   1290  ND2 ASN    78     -17.595  14.132  -0.727  1.00  0.00
N
ATOM   1291 1HD2 ASN    78     -18.243  14.487  -1.413  1.00  0.00
H
ATOM   1292 2HD2 ASN    78     -17.840  14.114   0.257  1.00  0.00
H
ATOM   1293  N   ASN    79     -14.630  13.311   3.042  1.00  0.00
N
ATOM   1294  H   ASN    79     -15.476  12.759   2.950  1.00  0.00
H
ATOM   1295  CA  ASN    79     -14.072  13.405   4.390  1.00  0.00
C
ATOM   1296  HA  ASN    79     -12.988  13.530   4.397  1.00  0.00
H
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ATOM   1297  C   ASN    79      -14.524  12.127   5.087  1.00  0.00
C
ATOM   1298  O   ASN    79      -15.485  11.571   4.585  1.00  0.00
O
ATOM   1299  CB  ASN    79      -14.800  14.558   5.086  1.00  0.00
C
ATOM   1300 1HB  ASN    79      -15.857  14.438   4.889  1.00  0.00
H
ATOM   1301 2HB  ASN    79      -14.650  14.501   6.155  1.00  0.00
H
ATOM   1302  CG  ASN    79      -14.381  15.916   4.597  1.00  0.00
C
ATOM   1303  OD1 ASN    79      -13.345  16.449   4.968  1.00  0.00
O
ATOM   1304  ND2 ASN    79      -15.212  16.513   3.790  1.00  0.00
N
ATOM   1305 1HD2 ASN    79      -14.924  17.370   3.343  1.00  0.00
H
ATOM   1306 2HD2 ASN    79      -16.105  16.106   3.585  1.00  0.00
H
ATOM   1307  N   ARG    80      -13.957  11.728   6.231  1.00  0.00
N
ATOM   1308  H   ARG    80      -13.016  12.035   6.434  1.00  0.00
H
ATOM   1309  CA  ARG    80      -14.645  10.923   7.274  1.00  0.00
C
ATOM   1310  HA  ARG    80      -15.711  11.073   7.185  1.00  0.00
H
ATOM   1311  C   ARG    80      -14.213  11.243   8.723  1.00  0.00
C
ATOM   1312  O   ARG    80      -13.020  11.329   8.981  1.00  0.00
O
ATOM   1313  CB  ARG    80      -14.365   9.430   7.089  1.00  0.00
C
ATOM   1314 1HB  ARG    80      -13.292   9.279   7.175  1.00  0.00
H
ATOM   1315 2HB  ARG    80      -14.856   8.894   7.902  1.00  0.00
H
ATOM   1316  CG  ARG    80      -14.812   8.811   5.787  1.00  0.00
C
ATOM   1317 1HG  ARG    80      -15.879   8.984   5.646  1.00  0.00
H
ATOM   1318 2HG  ARG    80      -14.259   9.267   4.966  1.00  0.00
H
ATOM   1319  CD  ARG    80      -14.541   7.330   5.782  1.00  0.00
C
ATOM   1320 1HD  ARG    80      -13.496   7.151   6.041  1.00  0.00
H
ATOM   1321 2HD  ARG    80      -15.180   6.848   6.523  1.00  0.00
H
ATOM   1322  NE  ARG    80      -14.810   6.788   4.445  1.00  0.00
N
ATOM   1323  HE  ARG    80      -14.969   7.462   3.717  1.00  0.00
H
ATOM   1324  CZ  ARG    80      -14.879   5.505   4.121  1.00  0.00
C
ATOM   1325  NH1 ARG    80      -14.848   4.538   4.991  1.00  0.00
N
ATOM   1326 1HH1 ARG    80      -14.716   4.740   5.970  1.00  0.00
H
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ATOM   1327 2HH1 ARG    80     -14.992   3.586   4.676  1.00  0.00
H
ATOM   1328  NH2 ARG    80     -15.027   5.168   2.874  1.00  0.00
N
ATOM   1329 1HH2 ARG    80     -15.035   5.867   2.154  1.00  0.00
H
ATOM   1330 2HH2 ARG    80     -15.152   4.186   2.660  1.00  0.00
H
ATOM   1331  N   PRO    81     -15.139  11.453   9.681  1.00  0.00
N
ATOM   1332  CA  PRO    81     -14.780  11.364  11.104  1.00  0.00
C
ATOM   1333  HA  PRO    81     -13.730  11.602  11.267  1.00  0.00
H
ATOM   1334  C   PRO    81     -15.141  10.013  11.727  1.00  0.00
C
ATOM   1335  O   PRO    81     -15.625   9.136  11.021  1.00  0.00
O
ATOM   1336  CB  PRO    81     -15.660  12.449  11.700  1.00  0.00
C
ATOM   1337 1HB  PRO    81     -15.801  12.322  12.768  1.00  0.00
H
ATOM   1338 2HB  PRO    81     -15.224  13.418  11.491  1.00  0.00
H
ATOM   1339  CG  PRO    81     -16.934  12.280  10.970  1.00  0.00
C
ATOM   1340 1HG  PRO    81     -17.524  11.502  11.450  1.00  0.00
H
ATOM   1341 2HG  PRO    81     -17.490  13.215  10.953  1.00  0.00
H
ATOM   1342  CD  PRO    81     -16.552  11.850   9.560  1.00  0.00
C
ATOM   1343 1HD  PRO    81     -17.153  11.000   9.244  1.00  0.00
H
ATOM   1344 2HD  PRO    81     -16.656  12.681   8.865  1.00  0.00
H
ATOM   1345  N   LEU    82     -14.966   9.856  13.038  1.00  0.00
N
ATOM   1346  H   LEU    82     -14.470  10.571  13.559  1.00  0.00
H
ATOM   1347  CA  LEU    82     -15.425   8.649  13.742  1.00  0.00
C
ATOM   1348  HA  LEU    82     -15.930   8.060  12.986  1.00  0.00
H
ATOM   1349  C   LEU    82     -16.403   8.639  14.932  1.00  0.00
C
ATOM   1350  O   LEU    82     -16.632   7.553  15.483  1.00  0.00
O
ATOM   1351  CB  LEU    82     -14.204   7.815  14.137  1.00  0.00
C
ATOM   1352 1HB  LEU    82     -14.501   6.773  14.026  1.00  0.00
H
ATOM   1353 2HB  LEU    82     -13.452   8.001  13.380  1.00  0.00
H
ATOM   1354  CG  LEU    82     -13.501   7.919  15.501  1.00  0.00
C
ATOM   1355  HG  LEU    82     -14.219   7.699  16.289  1.00  0.00
H
ATOM   1356  CD1 LEU    82     -12.429   6.860  15.546  1.00  0.00
C
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ATOM   1357 1HD1 LEU    82     -11.931   6.760  14.584  1.00  0.00
H
ATOM   1358 2HD1 LEU    82     -12.883   5.911  15.810  1.00  0.00
H
ATOM   1359 3HD1 LEU    82     -11.680   7.099  16.290  1.00  0.00
H
ATOM   1360  CD2 LEU    82     -12.881   9.245  15.820  1.00  0.00
C
ATOM   1361 1HD2 LEU    82     -12.538   9.248  16.852  1.00  0.00
H
ATOM   1362 2HD2 LEU    82     -13.613  10.040  15.688  1.00  0.00
H
ATOM   1363 3HD2 LEU    82     -12.031   9.439  15.171  1.00  0.00
H
ATOM   1364  N   PRO    83     -17.008   9.774  15.353  1.00  0.00
N
ATOM   1365  CA  PRO    83     -17.536   9.682  16.724  1.00  0.00
C
ATOM   1366  HA  PRO    83     -16.744   9.346  17.394  1.00  0.00
H
ATOM   1367  C   PRO    83     -18.744   8.768  16.942  1.00  0.00
C
ATOM   1368  O   PRO    83     -18.935   8.281  18.053  1.00  0.00
O
ATOM   1369  CB  PRO    83     -17.883  11.136  17.053  1.00  0.00
C
ATOM   1370 1HB  PRO    83     -18.703  11.191  17.768  1.00  0.00
H
ATOM   1371 2HB  PRO    83     -17.008  11.657  17.441  1.00  0.00
H
ATOM   1372  CG  PRO    83     -18.263  11.712  15.753  1.00  0.00
C
ATOM   1373 1HG  PRO    83     -19.266  11.388  15.473  1.00  0.00
H
ATOM   1374 2HG  PRO    83     -18.204  12.800  15.775  1.00  0.00
H
ATOM   1375  CD  PRO    83     -17.229  11.133  14.822  1.00  0.00
C
ATOM   1376 1HD  PRO    83     -17.611  11.096  13.802  1.00  0.00
H
ATOM   1377 2HD  PRO    83     -16.305  11.710  14.872  1.00  0.00
H
ATOM   1378  N   LYS    84     -19.512   8.444  15.907  1.00  0.00
N
ATOM   1379  H   LYS    84     -19.394   8.921  15.018  1.00  0.00
H
ATOM   1380  CA  LYS    84     -20.482   7.345  16.007  1.00  0.00
C
ATOM   1381  HA  LYS    84     -20.294   6.793  16.927  1.00  0.00
H
ATOM   1382  C   LYS    84     -20.269   6.359  14.872  1.00  0.00
C
ATOM   1383  O   LYS    84     -21.090   5.489  14.590  1.00  0.00
O
ATOM   1384  CB  LYS    84     -21.925   7.851  16.095  1.00  0.00
C
ATOM   1385 1HB  LYS    84     -22.559   6.994  16.325  1.00  0.00
H
ATOM   1386 2HB  LYS    84     -21.993   8.549  16.928  1.00  0.00
H
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ATOM   1387  CG  LYS    84      -22.480   8.522  14.853  1.00  0.00
C
ATOM   1388 1HG  LYS    84      -21.919   9.429  14.628  1.00  0.00
H
ATOM   1389 2HG  LYS    84      -22.412   7.831  14.013  1.00  0.00
H
ATOM   1390  CD  LYS    84      -23.938   8.858  15.088  1.00  0.00
C
ATOM   1391 1HD  LYS    84      -24.433   7.970  15.480  1.00  0.00
H
ATOM   1392 2HD  LYS    84      -24.020   9.656  15.825  1.00  0.00
H
ATOM   1393  CE  LYS    84      -24.642   9.266  13.811  1.00  0.00
C
ATOM   1394 1HE  LYS    84      -24.247  10.218  13.451  1.00  0.00
H
ATOM   1395 2HE  LYS    84      -24.484   8.497  13.052  1.00  0.00
H
ATOM   1396  NZ  LYS    84      -26.109   9.379  14.085  1.00  0.00
N
ATOM   1397 1HZ  LYS    84      -26.603   9.584  13.227  1.00  0.00
H
ATOM   1398 2HZ  LYS    84      -26.287  10.109  14.764  1.00  0.00
H
ATOM   1399 3HZ  LYS    84      -26.455   8.496  14.444  1.00  0.00
H
ATOM   1400  N   ASP    85      -19.134   6.505  14.211  1.00  0.00
N
ATOM   1401  H   ASP    85      -18.490   7.236  14.468  1.00  0.00
H
ATOM   1402  CA  ASP    85      -18.767   5.588  13.144  1.00  0.00
C
ATOM   1403  HA  ASP    85      -19.638   5.352  12.548  1.00  0.00
H
ATOM   1404  C   ASP    85      -18.245   4.337  13.804  1.00  0.00
C
ATOM   1405  O   ASP    85      -18.689   3.235  13.523  1.00  0.00
O
ATOM   1406  CB  ASP    85      -17.662   6.163  12.257  1.00  0.00
C
ATOM   1407 1HB  ASP    85      -17.831   7.224  12.141  1.00  0.00
H
ATOM   1408 2HB  ASP    85      -16.695   6.036  12.739  1.00  0.00
H
ATOM   1409  CG  ASP    85      -17.613   5.524  10.884  1.00  0.00
C
ATOM   1410  OD1 ASP    85      -18.670   5.443  10.217  1.00  0.00
O
ATOM   1411  OD2 ASP    85      -16.515   5.140  10.452  1.00  0.00
O
ATOM   1412  N   LEU    86      -17.273   4.521  14.688  1.00  0.00
N
ATOM   1413  H   LEU    86      -17.040   5.450  15.018  1.00  0.00
H
ATOM   1414  CA  LEU    86      -16.387   3.411  14.983  1.00  0.00
C
ATOM   1415  HA  LEU    86      -16.209   2.911  14.037  1.00  0.00
H
ATOM   1416  C   LEU    86      -16.899   2.346  15.911  1.00  0.00
C
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ATOM   1417  O   LEU    86     -16.564   1.194  15.727  1.00  0.00
O
ATOM   1418  CB  LEU    86     -15.034   3.879  15.512  1.00  0.00
C
ATOM   1419 1HB  LEU    86     -14.920   4.950  15.366  1.00  0.00
H
ATOM   1420 2HB  LEU    86     -14.973   3.645  16.573  1.00  0.00
H
ATOM   1421  CG  LEU    86     -13.934   3.123  14.752  1.00  0.00
C
ATOM   1422  HG  LEU    86     -14.292   2.113  14.558  1.00  0.00
H
ATOM   1423  CD1 LEU    86     -13.676   3.804  13.421  1.00  0.00
C
ATOM   1424 1HD1 LEU    86     -13.175   3.107  12.753  1.00  0.00
H
ATOM   1425 2HD1 LEU    86     -13.053   4.682  13.567  1.00  0.00
H
ATOM   1426 3HD1 LEU    86     -14.606   4.112  12.939  1.00  0.00
H
ATOM   1427  CD2 LEU    86     -12.626   2.990  15.507  1.00  0.00
C
ATOM   1428 1HD2 LEU    86     -11.980   2.290  14.986  1.00  0.00
H
ATOM   1429 2HD2 LEU    86     -12.815   2.605  16.502  1.00  0.00
H
ATOM   1430 3HD2 LEU    86     -12.117   3.947  15.591  1.00  0.00
H
ATOM   1431  N   GLN    87     -17.683   2.698  16.916  1.00  0.00
N
ATOM   1432  H   GLN    87     -17.989   3.657  17.000  1.00  0.00
H
ATOM   1433  CA  GLN    87     -18.015   1.742  17.973  1.00  0.00
C
ATOM   1434  HA  GLN    87     -17.074   1.454  18.438  1.00  0.00
H
ATOM   1435  C   GLN    87     -18.688   0.447  17.509  1.00  0.00
C
ATOM   1436  O   GLN    87     -18.665  -0.544  18.234  1.00  0.00
O
ATOM   1437  CB  GLN    87     -18.850   2.444  19.044  1.00  0.00
C
ATOM   1438 1HB  GLN    87     -18.488   3.467  19.114  1.00  0.00
H
ATOM   1439 2HB  GLN    87     -19.891   2.479  18.729  1.00  0.00
H
ATOM   1440  CG  GLN    87     -18.736   1.844  20.449  1.00  0.00
C
ATOM   1441 1HG  GLN    87     -17.710   1.517  20.607  1.00  0.00
H
ATOM   1442 2HG  GLN    87     -18.958   2.627  21.173  1.00  0.00
H
ATOM   1443  CD  GLN    87     -19.660   0.683  20.737  1.00  0.00
C
ATOM   1444  OE1 GLN    87     -20.832   0.690  20.383  1.00  0.00
O
ATOM   1445  NE2 GLN    87     -19.150  -0.309  21.409  1.00  0.00
N
ATOM   1446 1HE2 GLN    87     -19.746  -1.073  21.684  1.00  0.00
H
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ATOM   1447 2HE2 GLN    87     -18.177  -0.293  21.672  1.00  0.00
H
ATOM   1448  N   ILE    88     -19.223   0.413  16.296  1.00  0.00
N
ATOM   1449  H   ILE    88     -19.189   1.237  15.712  1.00  0.00
H
ATOM   1450  CA  ILE    88     -19.833  -0.794  15.748  1.00  0.00
C
ATOM   1451  HA  ILE    88     -19.809  -1.565  16.515  1.00  0.00
H
ATOM   1452  C   ILE    88     -19.060  -1.370  14.539  1.00  0.00
C
ATOM   1453  O   ILE    88     -19.642  -2.174  13.835  1.00  0.00
O
ATOM   1454  CB  ILE    88     -21.353  -0.589  15.366  1.00  0.00
C
ATOM   1455  HB  ILE    88     -21.402  -0.551  14.289  1.00  0.00
H
ATOM   1456  CG1 ILE    88     -21.983   0.741  15.849  1.00  0.00
C
ATOM   1457 1HG1 ILE    88     -21.348   1.574  15.546  1.00  0.00
H
ATOM   1458 2HG1 ILE    88     -22.920   0.858  15.307  1.00  0.00
H
ATOM   1459  CG2 ILE    88     -22.202  -1.796  15.802  1.00  0.00
C
ATOM   1460 1HG2 ILE    88     -23.239  -1.646  15.504  1.00  0.00
H
ATOM   1461 2HG2 ILE    88     -22.159  -1.927  16.882  1.00  0.00
H
ATOM   1462 3HG2 ILE    88     -21.825  -2.694  15.312  1.00  0.00
H
ATOM   1463  CD1 ILE    88     -22.323   0.887  17.339  1.00  0.00
C
ATOM   1464 1HD1 ILE    88     -22.657   1.905  17.534  1.00  0.00
H
ATOM   1465 2HD1 ILE    88     -21.445   0.678  17.943  1.00  0.00
H
ATOM   1466 3HD1 ILE    88     -23.122   0.198  17.611  1.00  0.00
H
ATOM   1467  N   ILE    89     -17.793  -1.017  14.294  1.00  0.00
N
ATOM   1468  H   ILE    89     -17.332  -0.351  14.900  1.00  0.00
H
ATOM   1469  CA  ILE    89     -17.043  -1.569  13.135  1.00  0.00
C
ATOM   1470  HA  ILE    89     -17.799  -1.782  12.385  1.00  0.00
H
ATOM   1471  C   ILE    89     -16.282  -2.909  13.265  1.00  0.00
C
ATOM   1472  O   ILE    89     -16.714  -3.875  12.625  1.00  0.00
O
ATOM   1473  CB  ILE    89     -16.108  -0.509  12.481  1.00  0.00
C
ATOM   1474  HB  ILE    89     -15.380  -0.169  13.219  1.00  0.00
H
ATOM   1475  CG1 ILE    89     -16.972   0.683  12.039  1.00  0.00
C
ATOM   1476 1HG1 ILE    89     -17.671   0.340  11.278  1.00  0.00
H
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ATOM   1477 2HG1 ILE    89     -17.551   1.032  12.889  1.00  0.00
H
ATOM   1478  CG2 ILE    89     -15.340  -1.105  11.254  1.00  0.00
C
ATOM   1479 1HG2 ILE    89     -14.792  -0.330  10.721  1.00  0.00
H
ATOM   1480 2HG2 ILE    89     -16.042  -1.592  10.576  1.00  0.00
H
ATOM   1481 3HG2 ILE    89     -14.611  -1.839  11.591  1.00  0.00
H
ATOM   1482  CD1 ILE    89     -16.218   1.871  11.499  1.00  0.00
C
ATOM   1483 1HD1 ILE    89     -16.912   2.694  11.331  1.00  0.00
H
ATOM   1484 2HD1 ILE    89     -15.729   1.625  10.564  1.00  0.00
H
ATOM   1485 3HD1 ILE    89     -15.464   2.173  12.212  1.00  0.00
H
ATOM   1486  N   SER    90     -15.166  -3.021  13.993  1.00  0.00
N
ATOM   1487  H   SER    90     -14.807  -2.220  14.494  1.00  0.00
H
ATOM   1488  CA  SER    90     -14.407  -4.290  14.016  1.00  0.00
C
ATOM   1489  HA  SER    90     -15.141  -5.076  13.911  1.00  0.00
H
ATOM   1490  C   SER    90     -13.532  -4.759  15.202  1.00  0.00
C
ATOM   1491  O   SER    90     -13.569  -5.948  15.541  1.00  0.00
O
ATOM   1492  CB  SER    90     -13.559  -4.363  12.738  1.00  0.00
C
ATOM   1493 1HB  SER    90     -13.092  -5.345  12.677  1.00  0.00
H
ATOM   1494 2HB  SER    90     -14.220  -4.250  11.878  1.00  0.00
H
ATOM   1495  OG  SER    90     -12.558  -3.357  12.666  1.00  0.00
O
ATOM   1496  HG  SER    90     -12.824  -2.592  13.212  1.00  0.00
H
ATOM   1497  N   GLN    91     -12.700  -3.912  15.797  1.00  0.00
N
ATOM   1498  H   GLN    91     -12.706  -2.942  15.505  1.00  0.00
H
ATOM   1499  CA  GLN    91     -11.719  -4.349  16.811  1.00  0.00
C
ATOM   1500  HA  GLN    91     -11.485  -5.391  16.611  1.00  0.00
H
ATOM   1501  C   GLN    91     -12.116  -4.254  18.298  1.00  0.00
C
ATOM   1502  O   GLN    91     -12.477  -3.198  18.788  1.00  0.00
O
ATOM   1503  CB  GLN    91     -10.427  -3.548  16.599  1.00  0.00
C
ATOM   1504 1HB  GLN    91     -10.146  -3.630  15.553  1.00  0.00
H
ATOM   1505 2HB  GLN    91     -10.617  -2.501  16.806  1.00  0.00
H
ATOM   1506  CG  GLN    91      -9.255  -3.974  17.462  1.00  0.00
C
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ATOM   1507 1HG  GLN    91      -8.401  -3.335  17.247  1.00  0.00
H
ATOM   1508 2HG  GLN    91      -9.525  -3.845  18.504  1.00  0.00
H
ATOM   1509  CD  GLN    91      -8.853  -5.408  17.256  1.00  0.00
C
ATOM   1510  OE1 GLN    91      -9.186  -6.279  18.047  1.00  0.00
O
ATOM   1511  NE2 GLN    91      -8.131  -5.666  16.209  1.00  0.00
N
ATOM   1512 1HE2 GLN    91      -7.810  -6.608  16.065  1.00  0.00
H
ATOM   1513 2HE2 GLN    91      -7.899  -4.922  15.560  1.00  0.00
H
ATOM   1514  N   ASN    92     -11.926  -5.316  19.071  1.00  0.00
N
ATOM   1515  H   ASN    92     -11.499  -6.143  18.664  1.00  0.00
H
ATOM   1516  CA  ASN    92     -12.327  -5.358  20.493  1.00  0.00
C
ATOM   1517  HA  ASN    92     -13.354  -4.997  20.556  1.00  0.00
H
ATOM   1518  C   ASN    92     -11.505  -4.519  21.501  1.00  0.00
C
ATOM   1519  O   ASN    92     -11.529  -4.789  22.702  1.00  0.00
O
ATOM   1520  CB  ASN    92     -12.304  -6.815  20.979  1.00  0.00
C
ATOM   1521 1HB  ASN    92     -11.296  -7.212  20.867  1.00  0.00
H
ATOM   1522 2HB  ASN    92     -12.578  -6.856  22.032  1.00  0.00
H
ATOM   1523  CG  ASN    92     -13.266  -7.700  20.238  1.00  0.00
C
ATOM   1524  OD1 ASN    92     -14.380  -7.312  19.905  1.00  0.00
O
ATOM   1525  ND2 ASN    92     -12.853  -8.906  19.980  1.00  0.00
N
ATOM   1526 1HD2 ASN    92     -13.448  -9.522  19.452  1.00  0.00
H
ATOM   1527 2HD2 ASN    92     -11.948  -9.208  20.301  1.00  0.00
H
ATOM   1528  N   MET    93     -10.765  -3.517  21.050  1.00  0.00
N
ATOM   1529  H   MET    93     -10.820  -3.279  20.071  1.00  0.00
H
ATOM   1530  CA  MET    93      -9.938  -2.696  21.942  1.00  0.00
C
ATOM   1531  HA  MET    93      -9.441  -3.352  22.658  1.00  0.00
H
ATOM   1532  C   MET    93     -10.776  -1.702  22.757  1.00  0.00
C
ATOM   1533  O   MET    93     -11.904  -1.357  22.390  1.00  0.00
O
ATOM   1534  CB  MET    93      -8.844  -1.977  21.149  1.00  0.00
C
ATOM   1535 1HB  MET    93      -9.289  -1.485  20.284  1.00  0.00
H
ATOM   1536 2HB  MET    93      -8.396  -1.218  21.788  1.00  0.00
H
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ATOM   1537  CG  MET    93      -7.737  -2.926  20.692  1.00  0.00
C
ATOM   1538 1HG  MET    93      -7.314  -3.414  21.570  1.00  0.00
H
ATOM   1539 2HG  MET    93      -8.169  -3.697  20.061  1.00  0.00
H
ATOM   1540  SD  MET    93      -6.398  -2.115  19.790  1.00  0.00
S
ATOM   1541  CE  MET    93      -5.486  -1.356  21.165  1.00  0.00
C
ATOM   1542 1HE  MET    93      -4.577  -0.889  20.791  1.00  0.00
H
ATOM   1543 2HE  MET    93      -5.215  -2.121  21.895  1.00  0.00
H
ATOM   1544 3HE  MET    93      -6.103  -0.601  21.652  1.00  0.00
H
ATOM   1545  N   SER    94     -10.238  -1.302  23.901  1.00  0.00
N
ATOM   1546  H   SER    94      -9.264  -1.526  24.078  1.00  0.00
H
ATOM   1547  CA  SER    94     -10.988  -0.627  24.967  1.00  0.00
C
ATOM   1548  HA  SER    94     -11.848  -1.249  25.215  1.00  0.00
H
ATOM   1549  C   SER    94     -11.493   0.791  24.697  1.00  0.00
C
ATOM   1550  O   SER    94     -11.031   1.482  23.788  1.00  0.00
O
ATOM   1551  CB  SER    94     -10.087  -0.545  26.201  1.00  0.00
C
ATOM   1552 1HB  SER    94     -10.693  -0.304  27.073  1.00  0.00
H
ATOM   1553 2HB  SER    94      -9.604  -1.509  26.367  1.00  0.00
H
ATOM   1554  OG  SER    94      -9.105   0.466  26.041  1.00  0.00
O
ATOM   1555  HG  SER    94      -8.540   0.245  25.282  1.00  0.00
H
ATOM   1556  N   SER    95     -12.387   1.266  25.555  1.00  0.00
N
ATOM   1557  H   SER    95     -12.763   0.663  26.283  1.00  0.00
H
ATOM   1558  CA  SER    95     -12.824   2.662  25.525  1.00  0.00
C
ATOM   1559  HA  SER    95     -12.912   2.988  24.491  1.00  0.00
H
ATOM   1560  C   SER    95     -11.825   3.567  26.234  1.00  0.00
C
ATOM   1561  O   SER    95     -11.800   4.772  26.017  1.00  0.00
O
ATOM   1562  CB  SER    95     -14.185   2.810  26.198  1.00  0.00
C
ATOM   1563 1HB  SER    95     -14.137   2.399  27.206  1.00  0.00
H
ATOM   1564 2HB  SER    95     -14.443   3.868  26.256  1.00  0.00
H
ATOM   1565  OG  SER    95     -15.176   2.132  25.445  1.00  0.00
O
ATOM   1566  HG  SER    95     -15.806   1.735  26.067  1.00  0.00
H
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ATOM   1567  N   GLU    96     -10.949   2.995  27.046  1.00  0.00
N
ATOM   1568  H   GLU    96     -10.992   1.999  27.212  1.00  0.00
H
ATOM   1569  CA  GLU    96      -9.906   3.784  27.705  1.00  0.00
C
ATOM   1570  HA  GLU    96     -10.351   4.643  28.208  1.00  0.00
H
ATOM   1571  C   GLU    96      -8.891   4.297  26.692  1.00  0.00
C
ATOM   1572  O   GLU    96      -8.265   5.343  26.875  1.00  0.00
O
ATOM   1573  CB  GLU    96      -9.164   2.930  28.727  1.00  0.00
C
ATOM   1574 1HB  GLU    96      -8.837   2.008  28.248  1.00  0.00
H
ATOM   1575 2HB  GLU    96      -8.281   3.478  29.050  1.00  0.00
H
ATOM   1576  CG  GLU    96      -9.981   2.594  29.953  1.00  0.00
C
ATOM   1577 1HG  GLU    96     -10.371   3.520  30.379  1.00  0.00
H
ATOM   1578 2HG  GLU    96     -10.816   1.951  29.674  1.00  0.00
H
ATOM   1579  CD  GLU    96      -9.128   1.900  30.989  1.00  0.00
C
ATOM   1580  OE1 GLU    96      -8.654   0.772  30.733  1.00  0.00
O
ATOM   1581  OE2 GLU    96      -8.857   2.496  32.058  1.00  0.00
O
ATOM   1582  N   ASP    97      -8.757   3.572  25.592  1.00  0.00
N
ATOM   1583  H   ASP    97      -9.297   2.721  25.491  1.00  0.00
H
ATOM   1584  CA  ASP    97      -7.835   3.953  24.526  1.00  0.00
C
ATOM   1585  HA  ASP    97      -6.858   4.171  24.955  1.00  0.00
H
ATOM   1586  C   ASP    97      -8.319   5.187  23.768  1.00  0.00
C
ATOM   1587  O   ASP    97      -7.535   5.821  23.069  1.00  0.00
O
ATOM   1588  CB  ASP    97      -7.684   2.817  23.511  1.00  0.00
C
ATOM   1589 1HB  ASP    97      -8.674   2.534  23.168  1.00  0.00
H
ATOM   1590 2HB  ASP    97      -7.107   3.177  22.660  1.00  0.00
H
ATOM   1591  CG  ASP    97      -6.988   1.598  24.080  1.00  0.00
C
ATOM   1592  OD1 ASP    97      -5.956   1.740  24.770  1.00  0.00
O
ATOM   1593  OD2 ASP    97      -7.456   0.464  23.836  1.00  0.00
O
ATOM   1594  N   GLN    98      -9.592   5.544  23.905  1.00  0.00
N
ATOM   1595  H   GLN    98     -10.176   5.058  24.576  1.00  0.00
H
ATOM   1596  CA  GLN    98     -10.184   6.615  23.099  1.00  0.00
C
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ATOM   1597  HA  GLN    98     -10.146   6.325  22.060  1.00  0.00
H
ATOM   1598  C   GLN    98      -9.447   7.938  23.202  1.00  0.00
C
ATOM   1599  O   GLN    98      -8.853   8.408  22.227  1.00  0.00
O
ATOM   1600  CB  GLN    98     -11.644   6.852  23.479  1.00  0.00
C
ATOM   1601 1HB  GLN    98     -11.691   6.964  24.557  1.00  0.00
H
ATOM   1602 2HB  GLN    98     -11.974   7.787  23.024  1.00  0.00
H
ATOM   1603  CG  GLN    98     -12.616   5.761  23.068  1.00  0.00
C
ATOM   1604 1HG  GLN    98     -12.697   5.731  21.984  1.00  0.00
H
ATOM   1605 2HG  GLN    98     -12.244   4.798  23.410  1.00  0.00
H
ATOM   1606  CD  GLN    98     -13.987   5.996  23.673  1.00  0.00
C
ATOM   1607  OE1 GLN    98     -14.290   7.063  24.192  1.00  0.00
O
ATOM   1608  NE2 GLN    98     -14.817   4.999  23.644  1.00  0.00
N
ATOM   1609 1HE2 GLN    98     -15.714   5.108  24.086  1.00  0.00
H
ATOM   1610 2HE2 GLN    98     -14.574   4.136  23.187  1.00  0.00
H
ATOM   1611  N   PHE    99      -9.448   8.544  24.379  1.00  0.00
N
ATOM   1612  H   PHE    99      -9.935   8.152  25.177  1.00  0.00
H
ATOM   1613  CA  PHE    99      -8.761   9.816  24.497  1.00  0.00
C
ATOM   1614  HA  PHE    99      -8.940  10.363  23.575  1.00  0.00
H
ATOM   1615  C   PHE    99      -7.256   9.633  24.615  1.00  0.00
C
ATOM   1616  O   PHE    99      -6.515  10.562  24.357  1.00  0.00
O
ATOM   1617  CB  PHE    99      -9.325  10.689  25.611  1.00  0.00
C
ATOM   1618 1HB  PHE    99     -10.242  10.235  25.986  1.00  0.00
H
ATOM   1619 2HB  PHE    99      -8.604  10.736  26.426  1.00  0.00
H
ATOM   1620  CG  PHE    99      -9.640  12.082  25.143  1.00  0.00
C
ATOM   1621  CD1 PHE    99     -10.948  12.426  24.758  1.00  0.00
C
ATOM   1622  HD1 PHE    99     -11.741  11.695  24.834  1.00  0.00
H
ATOM   1623  CD2 PHE    99      -8.620  13.038  25.020  1.00  0.00
C
ATOM   1624  HD2 PHE    99      -7.608  12.782  25.301  1.00  0.00
H
ATOM   1625  CE1 PHE    99     -11.241  13.725  24.262  1.00  0.00
C
ATOM   1626  HE1 PHE    99     -12.250  13.982  23.976  1.00  0.00
H
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ATOM   1627  CE2 PHE    99      -8.891  14.329  24.507  1.00  0.00
C
ATOM   1628  HE2 PHE    99      -8.090  15.042  24.396  1.00  0.00
H
ATOM   1629  CZ  PHE    99     -10.205  14.677  24.135  1.00  0.00
C
ATOM   1630  HZ  PHE    99     -10.414  15.661  23.745  1.00  0.00
H
ATOM   1631  N   GLN   100      -6.780   8.426  24.896  1.00  0.00
N
ATOM   1632  H   GLN   100      -7.414   7.664  25.083  1.00  0.00
H
ATOM   1633  CA  GLN   100      -5.335   8.193  24.898  1.00  0.00
C
ATOM   1634  HA  GLN   100      -4.861   8.893  25.583  1.00  0.00
H
ATOM   1635  C   GLN   100      -4.773   8.436  23.507  1.00  0.00
C
ATOM   1636  O   GLN   100      -3.797   9.160  23.340  1.00  0.00
O
ATOM   1637  CB  GLN   100      -4.975   6.762  25.290  1.00  0.00
C
ATOM   1638 1HB  GLN   100      -5.617   6.074  24.746  1.00  0.00
H
ATOM   1639 2HB  GLN   100      -3.954   6.584  24.971  1.00  0.00
H
ATOM   1640  CG  GLN   100      -5.052   6.441  26.762  1.00  0.00
C
ATOM   1641 1HG  GLN   100      -4.374   7.092  27.309  1.00  0.00
H
ATOM   1642 2HG  GLN   100      -6.062   6.608  27.120  1.00  0.00
H
ATOM   1643  CD  GLN   100      -4.666   5.008  27.021  1.00  0.00
C
ATOM   1644  OE1 GLN   100      -3.692   4.499  26.469  1.00  0.00
O
ATOM   1645  NE2 GLN   100      -5.443   4.329  27.814  1.00  0.00
N
ATOM   1646 1HE2 GLN   100      -5.221   3.358  27.987  1.00  0.00
H
ATOM   1647 2HE2 GLN   100      -6.261   4.759  28.213  1.00  0.00
H
ATOM   1648  N   ILE   101      -5.429   7.874  22.503  1.00  0.00
N
ATOM   1649  H   ILE   101      -6.243   7.293  22.693  1.00  0.00
H
ATOM   1650  CA  ILE   101      -5.001   8.052  21.119  1.00  0.00
C
ATOM   1651  HA  ILE   101      -3.949   7.790  21.029  1.00  0.00
H
ATOM   1652  C   ILE   101      -5.133   9.525  20.763  1.00  0.00
C
ATOM   1653  O   ILE   101      -4.247  10.091  20.123  1.00  0.00
O
ATOM   1654  CB  ILE   101      -5.821   7.128  20.182  1.00  0.00
C
ATOM   1655  HB  ILE   101      -6.877   7.240  20.434  1.00  0.00
H
ATOM   1656  CG1 ILE   101      -5.397   5.668  20.445  1.00  0.00
C
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ATOM   1657 1HG1 ILE   101      -4.447   5.488  19.944  1.00  0.00
H
ATOM   1658 2HG1 ILE   101      -5.229   5.531  21.513  1.00  0.00
H
ATOM   1659  CG2 ILE   101      -5.633   7.524  18.693  1.00  0.00
C
ATOM   1660 1HG2 ILE   101      -6.016   6.745  18.035  1.00  0.00
H
ATOM   1661 2HG2 ILE   101      -4.579   7.694  18.478  1.00  0.00
H
ATOM   1662 3HG2 ILE   101      -6.183   8.445  18.492  1.00  0.00
H
ATOM   1663  CD1 ILE   101      -6.394   4.601  20.014  1.00  0.00
C
ATOM   1664 1HD1 ILE   101      -5.956   3.616  20.174  1.00  0.00
H
ATOM   1665 2HD1 ILE   101      -6.659   4.725  18.966  1.00  0.00
H
ATOM   1666 3HD1 ILE   101      -7.292   4.680  20.625  1.00  0.00
H
ATOM   1667  N   PHE   102      -6.183  10.172  21.247  1.00  0.00
N
ATOM   1668  H   PHE   102      -6.872   9.670  21.792  1.00  0.00
H
ATOM   1669  CA  PHE   102      -6.380  11.598  20.997  1.00  0.00
C
ATOM   1670  HA  PHE   102      -6.393  11.732  19.918  1.00  0.00
H
ATOM   1671  C   PHE   102      -5.258  12.469  21.593  1.00  0.00
C
ATOM   1672  O   PHE   102      -4.936  13.531  21.063  1.00  0.00
O
ATOM   1673  CB  PHE   102      -7.737  12.015  21.572  1.00  0.00
C
ATOM   1674 1HB  PHE   102      -8.344  11.117  21.670  1.00  0.00
H
ATOM   1675 2HB  PHE   102      -7.584  12.435  22.563  1.00  0.00
H
ATOM   1676  CG  PHE   102      -8.527  12.993  20.730  1.00  0.00
C
ATOM   1677  CD1 PHE   102      -9.900  13.134  21.002  1.00  0.00
C
ATOM   1678  HD1 PHE   102     -10.346  12.561  21.803  1.00  0.00
H
ATOM   1679  CD2 PHE   102      -7.963  13.757  19.682  1.00  0.00
C
ATOM   1680  HD2 PHE   102      -6.910  13.699  19.456  1.00  0.00
H
ATOM   1681  CE1 PHE   102     -10.711  14.015  20.252  1.00  0.00
C
ATOM   1682  HE1 PHE   102     -11.756  14.127  20.494  1.00  0.00
H
ATOM   1683  CE2 PHE   102      -8.774  14.608  18.896  1.00  0.00
C
ATOM   1684  HE2 PHE   102      -8.338  15.151  18.074  1.00  0.00
H
ATOM   1685  CZ  PHE   102     -10.154  14.737  19.186  1.00  0.00
C
ATOM   1686  HZ  PHE   102     -10.778  15.391  18.596  1.00  0.00
H
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ATOM   1687  N   GLU   103      -4.632  12.040  22.680  1.00  0.00
N
ATOM   1688  H   GLU   103      -4.970  11.207  23.156  1.00  0.00
H
ATOM   1689  CA  GLU   103      -3.470  12.747  23.228  1.00  0.00
C
ATOM   1690  HA  GLU   103      -3.652  13.821  23.182  1.00  0.00
H
ATOM   1691  C   GLU   103      -2.192  12.451  22.440  1.00  0.00
C
ATOM   1692  O   GLU   103      -1.387  13.354  22.180  1.00  0.00
O
ATOM   1693  CB  GLU   103      -3.224  12.347  24.688  1.00  0.00
C
ATOM   1694 1HB  GLU   103      -3.100  11.266  24.736  1.00  0.00
H
ATOM   1695 2HB  GLU   103      -2.294  12.807  25.012  1.00  0.00
H
ATOM   1696  CG  GLU   103      -4.322  12.748  25.664  1.00  0.00
C
ATOM   1697 1HG  GLU   103      -5.258  12.305  25.355  1.00  0.00
H
ATOM   1698 2HG  GLU   103      -4.076  12.367  26.656  1.00  0.00
H
ATOM   1699  CD  GLU   103      -4.515  14.242  25.750  1.00  0.00
C
ATOM   1700  OE1 GLU   103      -3.615  14.954  26.249  1.00  0.00
O
ATOM   1701  OE2 GLU   103      -5.584  14.743  25.341  1.00  0.00
O
ATOM   1702  N   PHE   104      -2.001  11.201  22.034  1.00  0.00
N
ATOM   1703  H   PHE   104      -2.700  10.491  22.244  1.00  0.00
H
ATOM   1704  CA  PHE   104      -0.771  10.802  21.340  1.00  0.00
C
ATOM   1705  HA  PHE   104       0.090  11.086  21.946  1.00  0.00
H
ATOM   1706  C   PHE   104      -0.666  11.494  19.992  1.00  0.00
C
ATOM   1707  O   PHE   104       0.416  11.828  19.501  1.00  0.00
O
ATOM   1708  CB  PHE   104      -0.744   9.290  21.074  1.00  0.00
C
ATOM   1709 1HB  PHE   104      -1.560   9.046  20.395  1.00  0.00
H
ATOM   1710 2HB  PHE   104       0.192   9.042  20.577  1.00  0.00
H
ATOM   1711  CG  PHE   104      -0.892   8.429  22.304  1.00  0.00
C
ATOM   1712  CD1 PHE   104      -0.394   8.825  23.563  1.00  0.00
C
ATOM   1713  HD1 PHE   104       0.154   9.748  23.671  1.00  0.00
H
ATOM   1714  CD2 PHE   104      -1.560   7.196  22.196  1.00  0.00
C
ATOM   1715  HD2 PHE   104      -1.935   6.871  21.239  1.00  0.00
H
ATOM   1716  CE1 PHE   104      -0.620   8.028  24.710  1.00  0.00
C
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ATOM   1717  HE1 PHE   104      -0.268   8.359  25.676  1.00  0.00
H
ATOM   1718  CE2 PHE   104      -1.770   6.379  23.329  1.00  0.00
C
ATOM   1719  HE2 PHE   104      -2.290   5.438  23.231  1.00  0.00
H
ATOM   1720  CZ  PHE   104      -1.316   6.808  24.592  1.00  0.00
C
ATOM   1721  HZ  PHE   104      -1.506   6.206  25.469  1.00  0.00
H
ATOM   1722  N   VAL   105      -1.819  11.713  19.386  1.00  0.00
N
ATOM   1723  H   VAL   105      -2.680  11.406  19.832  1.00  0.00
H
ATOM   1724  CA  VAL   105      -1.887  12.274  18.047  1.00  0.00
C
ATOM   1725  HA  VAL   105      -1.041  11.877  17.488  1.00  0.00
H
ATOM   1726  C   VAL   105      -1.782  13.805  17.980  1.00  0.00
C
ATOM   1727  O   VAL   105      -1.549  14.346  16.901  1.00  0.00
O
ATOM   1728  CB  VAL   105      -3.167  11.712  17.370  1.00  0.00
C
ATOM   1729  HB  VAL   105      -3.246  10.666  17.661  1.00  0.00
H
ATOM   1730  CG1 VAL   105      -4.439  12.412  17.839  1.00  0.00
C
ATOM   1731 1HG1 VAL   105      -5.312  11.898  17.437  1.00  0.00
H
ATOM   1732 2HG1 VAL   105      -4.451  13.451  17.526  1.00  0.00
H
ATOM   1733 3HG1 VAL   105      -4.489  12.373  18.920  1.00  0.00
H
ATOM   1734  CG2 VAL   105      -3.056  11.730  15.872  1.00  0.00
C
ATOM   1735 1HG2 VAL   105      -3.920  11.224  15.444  1.00  0.00
H
ATOM   1736 2HG2 VAL   105      -2.152  11.212  15.564  1.00  0.00
H
ATOM   1737 3HG2 VAL   105      -3.015  12.754  15.507  1.00  0.00
H
ATOM   1738  N   ARG   106      -1.916  14.528  19.089  1.00  0.00
N
ATOM   1739  H   ARG   106      -2.052  14.061  19.979  1.00  0.00
H
ATOM   1740  CA  ARG   106      -1.921  16.003  19.042  1.00  0.00
C
ATOM   1741  HA  ARG   106      -1.704  16.305  18.019  1.00  0.00
H
ATOM   1742  C   ARG   106      -0.884  16.722  19.904  1.00  0.00
C
ATOM   1743  O   ARG   106      -1.115  17.023  21.074  1.00  0.00
O
ATOM   1744  CB  ARG   106      -3.340  16.492  19.372  1.00  0.00
C
ATOM   1745 1HB  ARG   106      -4.037  15.962  18.723  1.00  0.00
H
ATOM   1746 2HB  ARG   106      -3.574  16.217  20.401  1.00  0.00
H
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ATOM   1747  CG  ARG   106      -3.584  17.995  19.206  1.00  0.00
C
ATOM   1748 1HG  ARG   106      -4.608  18.214  19.501  1.00  0.00
H
ATOM   1749 2HG  ARG   106      -2.924  18.540  19.873  1.00  0.00
H
ATOM   1750  CD  ARG   106      -3.346  18.490  17.788  1.00  0.00
C
ATOM   1751 1HD  ARG   106      -2.390  19.010  17.763  1.00  0.00
H
ATOM   1752 2HD  ARG   106      -3.294  17.633  17.116  1.00  0.00
H
ATOM   1753  NE  ARG   106      -4.401  19.392  17.311  1.00  0.00
N
ATOM   1754  HE  ARG   106      -5.302  19.309  17.764  1.00  0.00
H
ATOM   1755  CZ  ARG   106      -4.311  20.250  16.305  1.00  0.00
C
ATOM   1756  NH1 ARG   106      -3.222  20.424  15.606  1.00  0.00
N
ATOM   1757 1HH1 ARG   106      -2.355  19.992  15.888  1.00  0.00
H
ATOM   1758 2HH1 ARG   106      -3.246  21.000  14.778  1.00  0.00
H
ATOM   1759  NH2 ARG   106      -5.377  20.889  15.925  1.00  0.00
N
ATOM   1760 1HH2 ARG   106      -6.261  20.756  16.410  1.00  0.00
H
ATOM   1761 2HH2 ARG   106      -5.331  21.533  15.155  1.00  0.00
H
ATOM   1762  N   SER   107       0.228  17.103  19.295  1.00  0.00
N
ATOM   1763  H   SER   107       0.383  16.832  18.325  1.00  0.00
H
ATOM   1764  CA  SER   107       1.260  17.892  19.974  1.00  0.00
C
ATOM   1765  HA  SER   107       1.529  17.390  20.905  1.00  0.00
H
ATOM   1766  C   SER   107       0.829  19.313  20.311  1.00  0.00
C
ATOM   1767  O   SER   107       1.374  19.935  21.224  1.00  0.00
O
ATOM   1768  CB  SER   107       2.502  17.992  19.089  1.00  0.00
C
ATOM   1769 1HB  SER   107       3.290  18.511  19.636  1.00  0.00
H
ATOM   1770 2HB  SER   107       2.846  16.989  18.844  1.00  0.00
H
ATOM   1771  OG  SER   107       2.222  18.701  17.888  1.00  0.00
O
ATOM   1772  HG  SER   107       1.437  18.324  17.458  1.00  0.00
H
ATOM   1773  N   LEU   108      -0.144  19.855  19.587  1.00  0.00
N
ATOM   1774  H   LEU   108      -0.526  19.341  18.802  1.00  0.00
H
ATOM   1775  CA  LEU   108      -0.609  21.217  19.872  1.00  0.00
C
ATOM   1776  HA  LEU   108       0.265  21.808  20.129  1.00  0.00
H
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ATOM   1777  C   LEU   108      -1.544  21.338  21.071  1.00  0.00
C
ATOM   1778  O   LEU   108      -1.895  22.454  21.450  1.00  0.00
O
ATOM   1779  CB  LEU   108      -1.254  21.886  18.654  1.00  0.00
C
ATOM   1780 1HB  LEU   108      -2.134  21.315  18.365  1.00  0.00
H
ATOM   1781 2HB  LEU   108      -1.604  22.866  18.980  1.00  0.00
H
ATOM   1782  CG  LEU   108      -0.399  22.131  17.403  1.00  0.00
C
ATOM   1783  HG  LEU   108      -0.271  21.186  16.881  1.00  0.00
H
ATOM   1784  CD1 LEU   108      -1.128  23.109  16.490  1.00  0.00
C
ATOM   1785 1HD1 LEU   108      -0.608  23.178  15.536  1.00  0.00
H
ATOM   1786 2HD1 LEU   108      -1.162  24.097  16.949  1.00  0.00
H
ATOM   1787 3HD1 LEU   108      -2.148  22.772  16.309  1.00  0.00
H
ATOM   1788  CD2 LEU   108       0.984  22.705  17.702  1.00  0.00
C
ATOM   1789 1HD2 LEU   108       1.484  22.973  16.771  1.00  0.00
H
ATOM   1790 2HD2 LEU   108       1.592  21.955  18.206  1.00  0.00
H
ATOM   1791 3HD2 LEU   108       0.902  23.594  18.328  1.00  0.00
H
ATOM   1792  N   LEU   109      -1.903  20.209  21.674  1.00  0.00
N
ATOM   1793  H   LEU   109      -1.561  19.334  21.300  1.00  0.00
H
ATOM   1794  CA  LEU   109      -2.718  20.133  22.897  1.00  0.00
C
ATOM   1795  HA  LEU   109      -2.827  19.077  23.134  1.00  0.00
H
ATOM   1796  C   LEU   109      -4.130  20.713  22.743  1.00  0.00
C
ATOM   1797  O   LEU   109      -4.753  21.184  23.697  1.00  0.00
O
ATOM   1798  CB  LEU   109      -1.995  20.781  24.090  1.00  0.00
C
ATOM   1799 1HB  LEU   109      -2.067  21.861  23.976  1.00  0.00
H
ATOM   1800 2HB  LEU   109      -2.540  20.512  24.995  1.00  0.00
H
ATOM   1801  CG  LEU   109      -0.510  20.450  24.317  1.00  0.00
C
ATOM   1802  HG  LEU   109       0.055  20.784  23.449  1.00  0.00
H
ATOM   1803  CD1 LEU   109       0.004  21.222  25.524  1.00  0.00
C
ATOM   1804 1HD1 LEU   109       1.072  21.042  25.646  1.00  0.00
H
ATOM   1805 2HD1 LEU   109      -0.518  20.901  26.426  1.00  0.00
H
ATOM   1806 3HD1 LEU   109      -0.153  22.290  25.378  1.00  0.00
H
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ATOM   1807  CD2 LEU   109      -0.250  18.960  24.503  1.00  0.00
C
ATOM   1808 1HD2 LEU   109       0.804  18.791  24.720  1.00  0.00
H
ATOM   1809 2HD2 LEU   109      -0.497  18.419  23.592  1.00  0.00
H
ATOM   1810 3HD2 LEU   109      -0.849  18.572  25.325  1.00  0.00
H
ATOM   1811  N   ASP   110      -4.631  20.724  21.518  1.00  0.00
N
ATOM   1812  H   ASP   110      -4.094  20.313  20.774  1.00  0.00
H
ATOM   1813  CA  ASP   110      -5.916  21.357  21.207  1.00  0.00
C
ATOM   1814  HA  ASP   110      -5.999  22.275  21.789  1.00  0.00
H
ATOM   1815  C   ASP   110      -7.163  20.525  21.514  1.00  0.00
C
ATOM   1816  O   ASP   110      -8.272  21.039  21.389  1.00  0.00
O
ATOM   1817  CB  ASP   110      -5.968  21.731  19.724  1.00  0.00
C
ATOM   1818 1HB  ASP   110      -5.652  20.879  19.127  1.00  0.00
H
ATOM   1819 2HB  ASP   110      -6.991  21.978  19.461  1.00  0.00
H
ATOM   1820  CG  ASP   110      -5.130  22.942  19.386  1.00  0.00
C
ATOM   1821  OD1 ASP   110      -5.166  23.941  20.139  1.00  0.00
O
ATOM   1822  OD2 ASP   110      -4.480  22.945  18.323  1.00  0.00
O
ATOM   1823  N   LYS   111      -7.001  19.258  21.889  1.00  0.00
N
ATOM   1824  H   LYS   111      -6.052  18.899  21.994  1.00  0.00
H
ATOM   1825  CA  LYS   111      -8.111  18.319  22.174  1.00  0.00
C
ATOM   1826  HA  LYS   111      -7.666  17.349  22.395  1.00  0.00
H
ATOM   1827  C   LYS   111      -9.027  18.105  20.962  1.00  0.00
C
ATOM   1828  O   LYS   111     -10.196  17.743  21.073  1.00  0.00
O
ATOM   1829  CB  LYS   111      -8.909  18.740  23.426  1.00  0.00
C
ATOM   1830 1HB  LYS   111      -9.461  19.648  23.191  1.00  0.00
H
ATOM   1831 2HB  LYS   111      -9.635  17.961  23.658  1.00  0.00
H
ATOM   1832  CG  LYS   111      -8.073  19.017  24.690  1.00  0.00
C
ATOM   1833 1HG  LYS   111      -7.323  19.776  24.468  1.00  0.00
H
ATOM   1834 2HG  LYS   111      -8.737  19.416  25.455  1.00  0.00
H
ATOM   1835  CD  LYS   111      -7.378  17.784  25.269  1.00  0.00
C
ATOM   1836 1HD  LYS   111      -8.129  17.031  25.504  1.00  0.00
H
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ATOM   1837 2HD  LYS   111      -6.674  17.378  24.544  1.00  0.00
H
ATOM   1838  CE  LYS   111      -6.623  18.154  26.540  1.00  0.00
C
ATOM   1839 1HE  LYS   111      -5.874  18.909  26.295  1.00  0.00
H
ATOM   1840 2HE  LYS   111      -7.328  18.588  27.251  1.00  0.00
H
ATOM   1841  NZ  LYS   111      -5.940  16.989  27.195  1.00  0.00
N
ATOM   1842 1HZ  LYS   111      -5.414  17.294  28.008  1.00  0.00
H
ATOM   1843 2HZ  LYS   111      -5.312  16.533  26.542  1.00  0.00
H
ATOM   1844 3HZ  LYS   111      -6.626  16.306  27.494  1.00  0.00
H
ATOM   1845  N   ASN   112      -8.448  18.326  19.792  1.00  0.00
N
ATOM   1846  H   ASN   112      -7.481  18.613  19.794  1.00  0.00
H
ATOM   1847  CA  ASN   112      -9.049  18.099  18.480  1.00  0.00
C
ATOM   1848  HA  ASN   112      -9.693  17.225  18.502  1.00  0.00
H
ATOM   1849  C   ASN   112      -7.797  17.826  17.664  1.00  0.00
C
ATOM   1850  O   ASN   112      -6.714  17.928  18.234  1.00  0.00
O
ATOM   1851  CB  ASN   112      -9.828  19.304  17.947  1.00  0.00
C
ATOM   1852 1HB  ASN   112     -10.262  19.057  16.982  1.00  0.00
H
ATOM   1853 2HB  ASN   112     -10.638  19.513  18.635  1.00  0.00
H
ATOM   1854  CG  ASN   112      -8.983  20.541  17.796  1.00  0.00
C
ATOM   1855  OD1 ASN   112      -8.006  20.583  17.065  1.00  0.00
O
ATOM   1856  ND2 ASN   112      -9.346  21.561  18.500  1.00  0.00
N
ATOM   1857 1HD2 ASN   112      -8.826  22.416  18.409  1.00  0.00
H
ATOM   1858 2HD2 ASN   112     -10.115  21.482  19.141  1.00  0.00
H
ATOM   1859  N   LEU   113      -7.897  17.528  16.377  1.00  0.00
N
ATOM   1860  H   LEU   113      -8.798  17.520  15.922  1.00  0.00
H
ATOM   1861  CA  LEU   113      -6.724  17.217  15.563  1.00  0.00
C
ATOM   1862  HA  LEU   113      -5.818  17.541  16.068  1.00  0.00
H
ATOM   1863  C   LEU   113      -6.823  17.923  14.217  1.00  0.00
C
ATOM   1864  O   LEU   113      -7.917  18.035  13.692  1.00  0.00
O
ATOM   1865  CB  LEU   113      -6.680  15.701  15.368  1.00  0.00
C
ATOM   1866 1HB  LEU   113      -6.688  15.237  16.354  1.00  0.00
H
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ATOM   1867 2HB  LEU   113      -7.594  15.406  14.856  1.00  0.00
H
ATOM   1868  CG  LEU   113      -5.495  15.124  14.586  1.00  0.00
C
ATOM   1869  HG  LEU   113      -5.478  15.561  13.594  1.00  0.00
H
ATOM   1870  CD1 LEU   113      -4.168  15.439  15.238  1.00  0.00
C
ATOM   1871 1HD1 LEU   113      -3.365  14.936  14.699  1.00  0.00
H
ATOM   1872 2HD1 LEU   113      -4.162  15.111  16.274  1.00  0.00
H
ATOM   1873 3HD1 LEU   113      -3.983  16.506  15.205  1.00  0.00
H
ATOM   1874  CD2 LEU   113      -5.699  13.639  14.439  1.00  0.00
C
ATOM   1875 1HD2 LEU   113      -4.849  13.211  13.918  1.00  0.00
H
ATOM   1876 2HD2 LEU   113      -6.591  13.442  13.849  1.00  0.00
H
ATOM   1877 3HD2 LEU   113      -5.806  13.165  15.413  1.00  0.00
H
ATOM   1878  N   SER   114      -5.710  18.362  13.642  1.00  0.00
N
ATOM   1879  H   SER   114      -4.821  18.219  14.091  1.00  0.00
H
ATOM   1880  CA  SER   114      -5.702  18.989  12.320  1.00  0.00
C
ATOM   1881  HA  SER   114      -6.685  18.893  11.862  1.00  0.00
H
ATOM   1882  C   SER   114      -4.693  18.271  11.432  1.00  0.00
C
ATOM   1883  O   SER   114      -3.948  17.397  11.890  1.00  0.00
O
ATOM   1884  CB  SER   114      -5.364  20.476  12.414  1.00  0.00
C
ATOM   1885 1HB  SER   114      -5.490  20.936  11.435  1.00  0.00
H
ATOM   1886 2HB  SER   114      -6.042  20.956  13.119  1.00  0.00
H
ATOM   1887  OG  SER   114      -4.027  20.654  12.840  1.00  0.00
O
ATOM   1888  HG  SER   114      -3.697  21.490  12.467  1.00  0.00
H
ATOM   1889  N   VAL   115      -4.683  18.636  10.158  1.00  0.00
N
ATOM   1890  H   VAL   115      -5.208  19.449   9.874  1.00  0.00
H
ATOM   1891  CA  VAL   115      -3.971  17.901   9.115  1.00  0.00
C
ATOM   1892  HA  VAL   115      -4.352  16.884   9.106  1.00  0.00
H
ATOM   1893  C   VAL   115      -2.464  17.829   9.347  1.00  0.00
C
ATOM   1894  O   VAL   115      -1.852  16.783   9.139  1.00  0.00
O
ATOM   1895  CB  VAL   115      -4.262  18.549   7.726  1.00  0.00
C
ATOM   1896  HB  VAL   115      -3.744  19.504   7.679  1.00  0.00
H
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ATOM   1897  CG1 VAL   115      -3.762  17.666   6.577  1.00  0.00
C
ATOM   1898 1HG1 VAL   115      -3.942  18.170   5.626  1.00  0.00
H
ATOM   1899 2HG1 VAL   115      -4.274  16.706   6.581  1.00  0.00
H
ATOM   1900 3HG1 VAL   115      -2.689  17.501   6.672  1.00  0.00
H
ATOM   1901  CG2 VAL   115      -5.776  18.832   7.555  1.00  0.00
C
ATOM   1902 1HG2 VAL   115      -5.971  19.134   6.526  1.00  0.00
H
ATOM   1903 2HG2 VAL   115      -6.079  19.660   8.193  1.00  0.00
H
ATOM   1904 3HG2 VAL   115      -6.369  17.951   7.791  1.00  0.00
H
ATOM   1905  N   GLN   116      -1.847  18.907   9.806  1.00  0.00
N
ATOM   1906  H   GLN   116      -2.370  19.763   9.963  1.00  0.00
H
ATOM   1907  CA  GLN   116      -0.401  18.884  10.021  1.00  0.00
C
ATOM   1908  HA  GLN   116       0.058  18.507   9.107  1.00  0.00
H
ATOM   1909  C   GLN   116       0.022  17.951  11.160  1.00  0.00
C
ATOM   1910  O   GLN   116       1.013  17.237  11.035  1.00  0.00
O
ATOM   1911  CB  GLN   116       0.124  20.303  10.256  1.00  0.00
C
ATOM   1912 1HB  GLN   116      -0.261  20.942   9.460  1.00  0.00
H
ATOM   1913 2HB  GLN   116      -0.260  20.670  11.205  1.00  0.00
H
ATOM   1914  CG  GLN   116       1.650  20.413  10.267  1.00  0.00
C
ATOM   1915 1HG  GLN   116       1.926  21.456  10.414  1.00  0.00
H
ATOM   1916 2HG  GLN   116       2.044  19.832  11.100  1.00  0.00
H
ATOM   1917  CD  GLN   116       2.288  19.911   8.985  1.00  0.00
C
ATOM   1918  OE1 GLN   116       1.871  20.256   7.887  1.00  0.00
O
ATOM   1919  NE2 GLN   116       3.278  19.070   9.106  1.00  0.00
N
ATOM   1920 1HE2 GLN   116       3.713  18.712   8.275  1.00  0.00
H
ATOM   1921 2HE2 GLN   116       3.618  18.814  10.023  1.00  0.00
H
ATOM   1922  N   ASP   117      -0.732  17.888  12.249  1.00  0.00
N
ATOM   1923  H   ASP   117      -1.552  18.470  12.336  1.00  0.00
H
ATOM   1924  CA  ASP   117      -0.366  16.979  13.344  1.00  0.00
C
ATOM   1925  HA  ASP   117       0.700  17.067  13.544  1.00  0.00
H
ATOM   1926  C   ASP   117      -0.643  15.538  12.916  1.00  0.00
C
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ATOM   1927  O   ASP   117       0.054  14.608  13.313  1.00  0.00
O
ATOM   1928  CB  ASP   117      -1.122  17.277  14.643  1.00  0.00
C
ATOM   1929 1HB  ASP   117      -2.168  17.467  14.409  1.00  0.00
H
ATOM   1930 2HB  ASP   117      -1.057  16.400  15.285  1.00  0.00
H
ATOM   1931  CG  ASP   117      -0.556  18.459  15.411  1.00  0.00
C
ATOM   1932  OD1 ASP   117      -0.335  18.352  16.638  1.00  0.00
O
ATOM   1933  OD2 ASP   117      -0.434  19.552  14.824  1.00  0.00
O
ATOM   1934  N   MET   118      -1.614  15.333  12.040  1.00  0.00
N
ATOM   1935  H   MET   118      -2.213  16.100  11.753  1.00  0.00
H
ATOM   1936  CA  MET   118      -1.831  13.999  11.483  1.00  0.00
C
ATOM   1937  HA  MET   118      -1.860  13.279  12.298  1.00  0.00
H
ATOM   1938  C   MET   118      -0.709  13.601  10.529  1.00  0.00
C
ATOM   1939  O   MET   118      -0.324  12.448  10.441  1.00  0.00
O
ATOM   1940  CB  MET   118      -3.161  13.971  10.741  1.00  0.00
C
ATOM   1941 1HB  MET   118      -3.928  14.364  11.407  1.00  0.00
H
ATOM   1942 2HB  MET   118      -3.085  14.637   9.883  1.00  0.00
H
ATOM   1943  CG  MET   118      -3.621  12.610  10.238  1.00  0.00
C
ATOM   1944 1HG  MET   118      -4.167  12.757   9.308  1.00  0.00
H
ATOM   1945 2HG  MET   118      -2.764  11.970  10.033  1.00  0.00
H
ATOM   1946  SD  MET   118      -4.725  11.794  11.408  1.00  0.00
S
ATOM   1947  CE  MET   118      -3.578  11.070  12.527  1.00  0.00
C
ATOM   1948 1HE  MET   118      -4.101  10.378  13.185  1.00  0.00
H
ATOM   1949 2HE  MET   118      -3.108  11.849  13.123  1.00  0.00
H
ATOM   1950 3HE  MET   118      -2.803  10.537  11.974  1.00  0.00
H
ATOM   1951  N   THR   119      -0.145  14.575   9.835  1.00  0.00
N
ATOM   1952  H   THR   119      -0.526  15.513   9.898  1.00  0.00
H
ATOM   1953  CA  THR   119       1.005  14.338   8.967  1.00  0.00
C
ATOM   1954  HA  THR   119       0.801  13.474   8.336  1.00  0.00
H
ATOM   1955  C   THR   119       2.245  14.011   9.803  1.00  0.00
C
ATOM   1956  O   THR   119       3.088  13.218   9.390  1.00  0.00
O
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ATOM   1957  CB  THR   119       1.217  15.557   8.047  1.00  0.00
C
ATOM   1958  HB  THR   119       1.396  16.448   8.648  1.00  0.00
H
ATOM   1959  OG1 THR   119       0.028  15.741   7.268  1.00  0.00
O
ATOM   1960  HG1 THR   119      -0.606  16.237   7.806  1.00  0.00
H
ATOM   1961  CG2 THR   119       2.367  15.374   7.082  1.00  0.00
C
ATOM   1962 1HG2 THR   119       2.312  16.140   6.312  1.00  0.00
H
ATOM   1963 2HG2 THR   119       2.320  14.393   6.615  1.00  0.00
H
ATOM   1964 3HG2 THR   119       3.312  15.473   7.615  1.00  0.00
H
ATOM   1965  N   GLN   120       2.334  14.532  11.020  1.00  0.00
N
ATOM   1966  H   GLN   120       1.663  15.228  11.324  1.00  0.00
H
ATOM   1967  CA  GLN   120       3.383  14.085  11.941  1.00  0.00
C
ATOM   1968  HA  GLN   120       4.349  14.161  11.441  1.00  0.00
H
ATOM   1969  C   GLN   120       3.152  12.614  12.307  1.00  0.00
C
ATOM   1970  O   GLN   120       4.096  11.822  12.266  1.00  0.00
O
ATOM   1971  CB  GLN   120       3.412  14.952  13.204  1.00  0.00
C
ATOM   1972 1HB  GLN   120       2.423  14.931  13.648  1.00  0.00
H
ATOM   1973 2HB  GLN   120       4.110  14.519  13.920  1.00  0.00
H
ATOM   1974  CG  GLN   120       3.811  16.406  12.956  1.00  0.00
C
ATOM   1975 1HG  GLN   120       4.898  16.475  12.913  1.00  0.00
H
ATOM   1976 2HG  GLN   120       3.415  16.730  11.996  1.00  0.00
H
ATOM   1977  CD  GLN   120       3.285  17.359  14.012  1.00  0.00
C
ATOM   1978  OE1 GLN   120       2.816  16.964  15.071  1.00  0.00
O
ATOM   1979  NE2 GLN   120       3.305  18.621  13.705  1.00  0.00
N
ATOM   1980 1HE2 GLN   120       2.902  19.290  14.349  1.00  0.00
H
ATOM   1981 2HE2 GLN   120       3.729  18.919  12.835  1.00  0.00
H
ATOM   1982  N   MET   121       1.912  12.222  12.586  1.00  0.00
N
ATOM   1983  H   MET   121       1.164  12.904  12.579  1.00  0.00
H
ATOM   1984  CA  MET   121       1.583  10.822  12.893  1.00  0.00
C
ATOM   1985  HA  MET   121       2.511  10.314  13.141  1.00  0.00
H
ATOM   1986  C   MET   121       0.950  10.066  11.720  1.00  0.00
C
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ATOM   1987  O   MET   121      -0.233   9.711  11.760  1.00  0.00
O
ATOM   1988  CB  MET   121       0.668  10.692  14.124  1.00  0.00
C
ATOM   1989 1HB  MET   121       1.023  11.370  14.892  1.00  0.00
H
ATOM   1990 2HB  MET   121      -0.345  10.988  13.854  1.00  0.00
H
ATOM   1991  CG  MET   121       0.654   9.274  14.729  1.00  0.00
C
ATOM   1992 1HG  MET   121       0.696   8.551  13.916  1.00  0.00
H
ATOM   1993 2HG  MET   121       1.555   9.154  15.326  1.00  0.00
H
ATOM   1994  SD  MET   121      -0.754   8.846  15.753  1.00  0.00
S
ATOM   1995  CE  MET   121      -1.932   8.296  14.503  1.00  0.00
C
ATOM   1996 1HE  MET   121      -2.914   8.170  14.961  1.00  0.00
H
ATOM   1997 2HE  MET   121      -1.604   7.348  14.080  1.00  0.00
H
ATOM   1998 3HE  MET   121      -1.996   9.041  13.711  1.00  0.00
H
ATOM   1999  N   ILE   122       1.727   9.726  10.699  1.00  0.00
N
ATOM   2000  H   ILE   122       2.685  10.048  10.664  1.00  0.00
H
ATOM   2001  CA  ILE   122       1.225   8.835   9.642  1.00  0.00
C
ATOM   2002  HA  ILE   122       0.151   8.994   9.557  1.00  0.00
H
ATOM   2003  C   ILE   122       1.438   7.409  10.162  1.00  0.00
C
ATOM   2004  O   ILE   122       2.315   6.663   9.740  1.00  0.00
O
ATOM   2005  CB  ILE   122       1.829   9.111   8.228  1.00  0.00
C
ATOM   2006  HB  ILE   122       2.909   8.964   8.264  1.00  0.00
H
ATOM   2007  CG1 ILE   122       1.525  10.567   7.824  1.00  0.00
C
ATOM   2008 1HG1 ILE   122       0.447  10.675   7.700  1.00  0.00
H
ATOM   2009 2HG1 ILE   122       1.829  11.220   8.636  1.00  0.00
H
ATOM   2010  CG2 ILE   122       1.212   8.168   7.149  1.00  0.00
C
ATOM   2011 1HG2 ILE   122       1.696   8.334   6.186  1.00  0.00
H
ATOM   2012 2HG2 ILE   122       0.140   8.351   7.048  1.00  0.00
H
ATOM   2013 3HG2 ILE   122       1.379   7.129   7.421  1.00  0.00
H
ATOM   2014  CD1 ILE   122       2.212  11.067   6.550  1.00  0.00
C
ATOM   2015 1HD1 ILE   122       2.036  12.135   6.444  1.00  0.00
H
ATOM   2016 2HD1 ILE   122       1.811  10.555   5.675  1.00  0.00
H
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ATOM   2017 3HD1 ILE   122       3.286  10.890   6.614  1.00  0.00
H
ATOM   2018  N   LYS   123       0.620   7.085  11.155  1.00  0.00
N
ATOM   2019  H   LYS   123      -0.019   7.815  11.458  1.00  0.00
H
ATOM   2020  CA  LYS   123       0.569   5.798  11.858  1.00  0.00
C
ATOM   2021  HA  LYS   123       0.234   6.037  12.866  1.00  0.00
H
ATOM   2022  C   LYS   123       1.868   5.004  12.076  1.00  0.00
C
ATOM   2023  O   LYS   123       1.905   3.805  11.845  1.00  0.00
O
ATOM   2024  CB  LYS   123      -0.539   4.905  11.268  1.00  0.00
C
ATOM   2025 1HB  LYS   123      -0.623   4.048  11.934  1.00  0.00
H
ATOM   2026 2HB  LYS   123      -1.485   5.440  11.324  1.00  0.00
H
ATOM   2027  CG  LYS   123      -0.380   4.348   9.836  1.00  0.00
C
ATOM   2028 1HG  LYS   123       0.680   4.247   9.620  1.00  0.00
H
ATOM   2029 2HG  LYS   123      -0.825   3.354   9.822  1.00  0.00
H
ATOM   2030  CD  LYS   123      -1.025   5.157   8.720  1.00  0.00
C
ATOM   2031 1HD  LYS   123      -2.055   5.385   8.989  1.00  0.00
H
ATOM   2032 2HD  LYS   123      -0.478   6.088   8.588  1.00  0.00
H
ATOM   2033  CE  LYS   123      -1.025   4.370   7.401  1.00  0.00
C
ATOM   2034 1HE  LYS   123      -1.678   3.501   7.518  1.00  0.00
H
ATOM   2035 2HE  LYS   123      -1.444   5.004   6.615  1.00  0.00
H
ATOM   2036  NZ  LYS   123       0.339   3.889   6.974  1.00  0.00
N
ATOM   2037 1HZ  LYS   123       0.292   3.476   6.050  1.00  0.00
H
ATOM   2038 2HZ  LYS   123       0.685   3.200   7.630  1.00  0.00
H
ATOM   2039 3HZ  LYS   123       1.000   4.657   6.954  1.00  0.00
H
ATOM   2040  N   GLN   124       2.919   5.638  12.575  1.00  0.00
N
ATOM   2041  H   GLN   124       2.892   6.642  12.713  1.00  0.00
H
ATOM   2042  CA  GLN   124       4.130   4.904  12.962  1.00  0.00
C
ATOM   2043  HA  GLN   124       4.170   3.953  12.431  1.00  0.00
H
ATOM   2044  C   GLN   124       4.065   4.615  14.463  1.00  0.00
C
ATOM   2045  O   GLN   124       4.242   3.477  14.890  1.00  0.00
O
ATOM   2046  CB  GLN   124       5.391   5.701  12.613  1.00  0.00
C
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ATOM   2047 1HB  GLN   124       5.364   6.654  13.135  1.00  0.00
H
ATOM   2048 2HB  GLN   124       6.261   5.145  12.961  1.00  0.00
H
ATOM   2049  CG  GLN   124       5.544   5.970  11.116  1.00  0.00
C
ATOM   2050 1HG  GLN   124       5.625   5.021  10.590  1.00  0.00
H
ATOM   2051 2HG  GLN   124       4.661   6.491  10.755  1.00  0.00
H
ATOM   2052  CD  GLN   124       6.748   6.825  10.782  1.00  0.00
C
ATOM   2053  OE1 GLN   124       7.677   6.971  11.574  1.00  0.00
O
ATOM   2054  NE2 GLN   124       6.739   7.416   9.620  1.00  0.00
N
ATOM   2055 1HE2 GLN   124       7.508   8.018   9.379  1.00  0.00
H
ATOM   2056 2HE2 GLN   124       5.967   7.274   8.982  1.00  0.00
H
ATOM   2057  N   TRP   125       3.698   5.628  15.244  1.00  0.00
N
ATOM   2058  H   TRP   125       3.559   6.541  14.820  1.00  0.00
H
ATOM   2059  CA  TRP   125       3.524   5.518  16.701  1.00  0.00
C
ATOM   2060  HA  TRP   125       4.477   5.271  17.170  1.00  0.00
H
ATOM   2061  C   TRP   125       2.516   4.422  17.021  1.00  0.00
C
ATOM   2062  O   TRP   125       2.713   3.589  17.907  1.00  0.00
O
ATOM   2063  CB  TRP   125       3.010   6.872  17.230  1.00  0.00
C
ATOM   2064 1HB  TRP   125       3.696   7.646  16.887  1.00  0.00
H
ATOM   2065 2HB  TRP   125       2.041   7.073  16.773  1.00  0.00
H
ATOM   2066  CG  TRP   125       2.846   7.033  18.740  1.00  0.00
C
ATOM   2067  CD1 TRP   125       2.368   6.123  19.638  1.00  0.00
C
ATOM   2068  HD1 TRP   125       2.072   5.114  19.386  1.00  0.00
H
ATOM   2069  CD2 TRP   125       3.074   8.229  19.516  1.00  0.00
C
ATOM   2070  NE1 TRP   125       2.298   6.638  20.900  1.00  0.00
N
ATOM   2071  HE1 TRP   125       1.968   6.124  21.716  1.00  0.00
H
ATOM   2072  CE2 TRP   125       2.724   7.934  20.867  1.00  0.00
C
ATOM   2073  CE3 TRP   125       3.543   9.522  19.209  1.00  0.00
C
ATOM   2074  HE3 TRP   125       3.836   9.771  18.201  1.00  0.00
H
ATOM   2075  CZ2 TRP   125       2.818   8.889  21.899  1.00  0.00
C
ATOM   2076  HZ2 TRP   125       2.544   8.637  22.912  1.00  0.00
H
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ATOM   2077  CZ3 TRP   125       3.629  10.492  20.243  1.00  0.00
C
ATOM   2078  HZ3 TRP   125       3.982  11.488  20.017  1.00  0.00
H
ATOM   2079  CH2 TRP   125       3.257  10.160  21.578  1.00  0.00
C
ATOM   2080  HH2 TRP   125       3.322  10.911  22.352  1.00  0.00
H
ATOM   2081  N   LEU   126       1.431   4.425  16.265  1.00  0.00
N
ATOM   2082  H   LEU   126       1.365   5.100  15.523  1.00  0.00
H
ATOM   2083  CA  LEU   126       0.297   3.542  16.513  1.00  0.00
C
ATOM   2084  HA  LEU   126       0.465   2.988  17.436  1.00  0.00
H
ATOM   2085  C   LEU   126       0.129   2.523  15.399  1.00  0.00
C
ATOM   2086  O   LEU   126      -0.977   2.056  15.172  1.00  0.00
O
ATOM   2087  CB  LEU   126      -0.980   4.377  16.684  1.00  0.00
C
ATOM   2088 1HB  LEU   126      -1.166   4.905  15.749  1.00  0.00
H
ATOM   2089 2HB  LEU   126      -1.810   3.693  16.856  1.00  0.00
H
ATOM   2090  CG  LEU   126      -1.001   5.405  17.826  1.00  0.00
C
ATOM   2091  HG  LEU   126      -0.183   6.109  17.682  1.00  0.00
H
ATOM   2092  CD1 LEU   126      -2.307   6.174  17.791  1.00  0.00
C
ATOM   2093 1HD1 LEU   126      -2.281   6.959  18.550  1.00  0.00
H
ATOM   2094 2HD1 LEU   126      -3.147   5.511  17.991  1.00  0.00
H
ATOM   2095 3HD1 LEU   126      -2.437   6.644  16.820  1.00  0.00
H
ATOM   2096  CD2 LEU   126      -0.855   4.764  19.196  1.00  0.00
C
ATOM   2097 1HD2 LEU   126      -0.816   5.540  19.958  1.00  0.00
H
ATOM   2098 2HD2 LEU   126       0.073   4.202  19.254  1.00  0.00
H
ATOM   2099 3HD2 LEU   126      -1.693   4.099  19.404  1.00  0.00
H
ATOM   2100  N   ASP   127       1.215   2.166  14.722  1.00  0.00
N
ATOM   2101  H   ASP   127       2.113   2.571  14.956  1.00  0.00
H
ATOM   2102  CA  ASP   127       1.153   1.149  13.659  1.00  0.00
C
ATOM   2103  HA  ASP   127       0.506   1.486  12.848  1.00  0.00
H
ATOM   2104  C   ASP   127       0.590  -0.140  14.231  1.00  0.00
C
ATOM   2105  O   ASP   127      -0.238  -0.818  13.625  1.00  0.00
O
ATOM   2106  CB  ASP   127       2.556   0.830  13.128  1.00  0.00
C
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ATOM   2107 1HB  ASP   127       3.029   1.739  12.764  1.00  0.00
H
ATOM   2108 2HB  ASP   127       3.160   0.444  13.950  1.00  0.00
H
ATOM   2109  CG  ASP   127       2.543  -0.213  12.019  1.00  0.00
C
ATOM   2110  OD1 ASP   127       1.684  -0.162  11.114  1.00  0.00
O
ATOM   2111  OD2 ASP   127       3.450  -1.077  12.008  1.00  0.00
O
ATOM   2112  N   LYS   128       1.048  -0.428  15.441  1.00  0.00
N
ATOM   2113  H   LYS   128       1.716   0.206  15.862  1.00  0.00
H
ATOM   2114  CA  LYS   128       0.675  -1.621  16.189  1.00  0.00
C
ATOM   2115  HA  LYS   128      -0.299  -1.957  15.837  1.00  0.00
H
ATOM   2116  C   LYS   128       0.520  -1.274  17.662  1.00  0.00
C
ATOM   2117  O   LYS   128       1.426  -1.433  18.473  1.00  0.00
O
ATOM   2118  CB  LYS   128       1.688  -2.736  15.895  1.00  0.00
C
ATOM   2119 1HB  LYS   128       1.442  -3.612  16.496  1.00  0.00
H
ATOM   2120 2HB  LYS   128       1.554  -3.002  14.851  1.00  0.00
H
ATOM   2121  CG  LYS   128       3.170  -2.418  16.057  1.00  0.00
C
ATOM   2122 1HG  LYS   128       3.414  -1.462  15.597  1.00  0.00
H
ATOM   2123 2HG  LYS   128       3.422  -2.389  17.114  1.00  0.00
H
ATOM   2124  CD  LYS   128       3.970  -3.490  15.368  1.00  0.00
C
ATOM   2125 1HD  LYS   128       3.591  -4.463  15.671  1.00  0.00
H
ATOM   2126 2HD  LYS   128       3.843  -3.385  14.291  1.00  0.00
H
ATOM   2127  CE  LYS   128       5.443  -3.403  15.712  1.00  0.00
C
ATOM   2128 1HE  LYS   128       5.826  -2.422  15.424  1.00  0.00
H
ATOM   2129 2HE  LYS   128       5.574  -3.533  16.789  1.00  0.00
H
ATOM   2130  NZ  LYS   128       6.200  -4.468  14.986  1.00  0.00
N
ATOM   2131 1HZ  LYS   128       7.184  -4.404  15.231  1.00  0.00
H
ATOM   2132 2HZ  LYS   128       6.092  -4.350  13.987  1.00  0.00
H
ATOM   2133 3HZ  LYS   128       5.859  -5.381  15.257  1.00  0.00
H
ATOM   2134  N   THR   129      -0.608  -0.667  17.991  1.00  0.00
N
ATOM   2135  H   THR   129      -1.314  -0.525  17.286  1.00  0.00
H
ATOM   2136  CA  THR   129      -0.849  -0.214  19.367  1.00  0.00
C
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ATOM   2137  HA  THR   129       0.021   0.343  19.708  1.00  0.00
H
ATOM   2138  C   THR   129      -0.993  -1.429  20.284  1.00  0.00
C
ATOM   2139  O   THR   129      -0.398  -1.498  21.359  1.00  0.00
O
ATOM   2140  CB  THR   129      -2.076   0.725  19.453  1.00  0.00
C
ATOM   2141  HB  THR   129      -1.749   1.749  19.272  1.00  0.00
H
ATOM   2142  OG1 THR   129      -2.658   0.644  20.752  1.00  0.00
O
ATOM   2143  HG1 THR   129      -2.844   1.546  21.058  1.00  0.00
H
ATOM   2144  CG2 THR   129      -3.161   0.374  18.440  1.00  0.00
C
ATOM   2145 1HG2 THR   129      -4.073   0.899  18.715  1.00  0.00
H
ATOM   2146 2HG2 THR   129      -3.374  -0.695  18.458  1.00  0.00
H
ATOM   2147 3HG2 THR   129      -2.861   0.683  17.438  1.00  0.00
H
ATOM   2148  N   PHE   130      -1.665  -2.445  19.768  1.00  0.00
N
ATOM   2149  H   PHE   130      -2.240  -2.299  18.949  1.00  0.00
H
ATOM   2150  CA  PHE   130      -1.547  -3.829  20.195  1.00  0.00
C
ATOM   2151  HA  PHE   130      -0.538  -4.090  20.508  1.00  0.00
H
ATOM   2152  C   PHE   130      -1.875  -4.411  18.836  1.00  0.00
C
ATOM   2153  O   PHE   130      -2.908  -4.024  18.314  1.00  0.00
O
ATOM   2154  CB  PHE   130      -2.602  -4.226  21.229  1.00  0.00
C
ATOM   2155 1HB  PHE   130      -2.332  -3.801  22.196  1.00  0.00
H
ATOM   2156 2HB  PHE   130      -3.560  -3.805  20.925  1.00  0.00
H
ATOM   2157  CG  PHE   130      -2.774  -5.713  21.360  1.00  0.00
C
ATOM   2158  CD1 PHE   130      -1.951  -6.461  22.218  1.00  0.00
C
ATOM   2159  HD1 PHE   130      -1.203  -5.963  22.818  1.00  0.00
H
ATOM   2160  CD2 PHE   130      -3.745  -6.380  20.592  1.00  0.00
C
ATOM   2161  HD2 PHE   130      -4.394  -5.816  19.937  1.00  0.00
H
ATOM   2162  CE1 PHE   130      -2.085  -7.873  22.297  1.00  0.00
C
ATOM   2163  HE1 PHE   130      -1.444  -8.444  22.952  1.00  0.00
H
ATOM   2164  CE2 PHE   130      -3.876  -7.785  20.649  1.00  0.00
C
ATOM   2165  HE2 PHE   130      -4.610  -8.284  20.035  1.00  0.00
H
ATOM   2166  CZ  PHE   130      -3.048  -8.533  21.508  1.00  0.00
C
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ATOM   2167  HZ  PHE   130      -3.151  -9.607  21.562  1.00  0.00
H
ATOM   2168  N   ASP   131      -0.981  -5.220  18.275  1.00  0.00
N
ATOM   2169  H   ASP   131      -0.184  -5.483  18.843  1.00  0.00
H
ATOM   2170  CA  ASP   131      -1.023  -5.769  16.900  1.00  0.00
C
ATOM   2171  HA  ASP   131      -0.030  -6.188  16.749  1.00  0.00
H
ATOM   2172  C   ASP   131      -1.242  -4.815  15.696  1.00  0.00
C
ATOM   2173  O   ASP   131      -1.870  -3.762  15.814  1.00  0.00
O
ATOM   2174  CB  ASP   131      -1.992  -6.957  16.836  1.00  0.00
C
ATOM   2175 1HB  ASP   131      -2.353  -7.177  17.841  1.00  0.00
H
ATOM   2176 2HB  ASP   131      -2.843  -6.686  16.212  1.00  0.00
H
ATOM   2177  CG  ASP   131      -1.336  -8.211  16.270  1.00  0.00
C
ATOM   2178  OD1 ASP   131      -0.221  -8.572  16.714  1.00  0.00
O
ATOM   2179  OD2 ASP   131      -1.903  -8.856  15.358  1.00  0.00
O
ATOM   2180  N   PRO   132      -0.651  -5.122  14.523  1.00  0.00
N
ATOM   2181  CA  PRO   132      -0.754  -4.062  13.511  1.00  0.00
C
ATOM   2182  HA  PRO   132      -0.493  -3.114  13.962  1.00  0.00
H
ATOM   2183  C   PRO   132      -2.079  -3.884  12.774  1.00  0.00
C
ATOM   2184  O   PRO   132      -2.788  -4.865  12.526  1.00  0.00
O
ATOM   2185  CB  PRO   132       0.344  -4.450  12.522  1.00  0.00
C
ATOM   2186 1HB  PRO   132       0.114  -4.088  11.524  1.00  0.00
H
ATOM   2187 2HB  PRO   132       1.308  -4.066  12.853  1.00  0.00
H
ATOM   2188  CG  PRO   132       0.350  -5.911  12.561  1.00  0.00
C
ATOM   2189 1HG  PRO   132      -0.491  -6.302  11.988  1.00  0.00
H
ATOM   2190 2HG  PRO   132       1.290  -6.308  12.180  1.00  0.00
H
ATOM   2191  CD  PRO   132       0.183  -6.231  14.020  1.00  0.00
C
ATOM   2192 1HD  PRO   132      -0.317  -7.190  14.137  1.00  0.00
H
ATOM   2193 2HD  PRO   132       1.151  -6.231  14.524  1.00  0.00
H
ATOM   2194  N   SER   133      -2.305  -2.623  12.396  1.00  0.00
N
ATOM   2195  H   SER   133      -1.665  -1.933  12.783  1.00  0.00
H
ATOM   2196  CA  SER   133      -3.312  -2.087  11.450  1.00  0.00
C
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ATOM   2197  HA  SER   133      -2.821  -1.995  10.482  1.00  0.00
H
ATOM   2198  C   SER   133      -3.757  -0.686  11.868  1.00  0.00
C
ATOM   2199  O   SER   133      -4.275  -0.496  12.964  1.00  0.00
O
ATOM   2200  CB  SER   133      -4.567  -2.948  11.235  1.00  0.00
C
ATOM   2201 1HB  SER   133      -5.221  -2.448  10.527  1.00  0.00
H
ATOM   2202 2HB  SER   133      -4.255  -3.893  10.803  1.00  0.00
H
ATOM   2203  OG  SER   133      -5.301  -3.223  12.418  1.00  0.00
O
ATOM   2204  HG  SER   133      -5.983  -3.879  12.196  1.00  0.00
H
ATOM   2205  N   ARG   134      -3.574   0.314  11.010  1.00  0.00
N
ATOM   2206  H   ARG   134      -3.109   0.153  10.128  1.00  0.00
H
ATOM   2207  CA  ARG   134      -4.059   1.667  11.312  1.00  0.00
C
ATOM   2208  HA  ARG   134      -5.042   1.573  11.764  1.00  0.00
H
ATOM   2209  C   ARG   134      -4.168   2.565  10.084  1.00  0.00
C
ATOM   2210  O   ARG   134      -3.369   2.441   9.157  1.00  0.00
O
ATOM   2211  CB  ARG   134      -3.117   2.347  12.312  1.00  0.00
C
ATOM   2212 1HB  ARG   134      -2.560   1.587  12.860  1.00  0.00
H
ATOM   2213 2HB  ARG   134      -2.403   2.924  11.741  1.00  0.00
H
ATOM   2214  CG  ARG   134      -3.811   3.272  13.315  1.00  0.00
C
ATOM   2215 1HG  ARG   134      -3.190   4.156  13.461  1.00  0.00
H
ATOM   2216 2HG  ARG   134      -4.771   3.586  12.910  1.00  0.00
H
ATOM   2217  CD  ARG   134      -4.031   2.609  14.673  1.00  0.00
C
ATOM   2218 1HD  ARG   134      -3.712   1.566  14.614  1.00  0.00
H
ATOM   2219 2HD  ARG   134      -3.399   3.114  15.400  1.00  0.00
H
ATOM   2220  NE  ARG   134      -5.433   2.647  15.122  1.00  0.00
N
ATOM   2221  HE  ARG   134      -6.123   2.457  14.408  1.00  0.00
H
ATOM   2222  CZ  ARG   134      -5.866   2.828  16.366  1.00  0.00
C
ATOM   2223  NH1 ARG   134      -5.062   3.039  17.374  1.00  0.00
N
ATOM   2224 1HH1 ARG   134      -4.070   3.053  17.220  1.00  0.00
H
ATOM   2225 2HH1 ARG   134      -5.441   3.172  18.298  1.00  0.00
H
ATOM   2226  NH2 ARG   134      -7.147   2.786  16.616  1.00  0.00
N
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ATOM   2227 1HH2 ARG   134      -7.805   2.683  15.866  1.00  0.00
H
ATOM   2228 2HH2 ARG   134      -7.485   2.825  17.571  1.00  0.00
H
ATOM   2229  N   HIS   135      -5.086   3.522  10.136  1.00  0.00
N
ATOM   2230  H   HIS   135      -5.694   3.567  10.937  1.00  0.00
H
ATOM   2231  CA  HIS   135      -5.245   4.564   9.117  1.00  0.00
C
ATOM   2232  HA  HIS   135      -4.329   4.658   8.535  1.00  0.00
H
ATOM   2233  C   HIS   135      -5.516   5.894   9.800  1.00  0.00
C
ATOM   2234  O   HIS   135      -5.753   5.900  11.007  1.00  0.00
O
ATOM   2235  CB  HIS   135      -6.385   4.221   8.170  1.00  0.00
C
ATOM   2236 1HB  HIS   135      -7.119   3.614   8.699  1.00  0.00
H
ATOM   2237 2HB  HIS   135      -6.866   5.142   7.841  1.00  0.00
H
ATOM   2238  CG  HIS   135      -5.926   3.494   6.952  1.00  0.00
C
ATOM   2239  ND1 HIS   135      -5.877   2.123   6.880  1.00  0.00
N
ATOM   2240  CD2 HIS   135      -5.425   3.979   5.785  1.00  0.00
C
ATOM   2241  HD2 HIS   135      -5.327   5.028   5.550  1.00  0.00
H
ATOM   2242  CE1 HIS   135      -5.328   1.840   5.667  1.00  0.00
C
ATOM   2243  HE1 HIS   135      -5.155   0.836   5.308  1.00  0.00
H
ATOM   2244  NE2 HIS   135      -5.046   2.964   4.961  1.00  0.00
N
ATOM   2245  HE2 HIS   135      -4.661   3.038   4.022  1.00  0.00
H
ATOM   2246  N   VAL   136      -5.385   6.989   9.055  1.00  0.00
N
ATOM   2247  H   VAL   136      -5.270   6.889   8.051  1.00  0.00
H
ATOM   2248  CA  VAL   136      -5.296   8.356   9.595  1.00  0.00
C
ATOM   2249  HA  VAL   136      -5.715   8.359  10.600  1.00  0.00
H
ATOM   2250  C   VAL   136      -6.085   9.409   8.776  1.00  0.00
C
ATOM   2251  O   VAL   136      -5.904   9.523   7.557  1.00  0.00
O
ATOM   2252  CB  VAL   136      -3.779   8.740   9.707  1.00  0.00
C
ATOM   2253  HB  VAL   136      -3.710   9.781   9.980  1.00  0.00
H
ATOM   2254  CG1 VAL   136      -3.099   7.916  10.809  1.00  0.00
C
ATOM   2255 1HG1 VAL   136      -2.086   8.278  10.954  1.00  0.00
H
ATOM   2256 2HG1 VAL   136      -3.074   6.863  10.540  1.00  0.00
H
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ATOM   2257 3HG1 VAL   136      -3.650   8.030  11.743  1.00  0.00
H
ATOM   2258  CG2 VAL   136      -2.987   8.549   8.400  1.00  0.00
C
ATOM   2259 1HG2 VAL   136      -1.958   8.877   8.548  1.00  0.00
H
ATOM   2260 2HG2 VAL   136      -3.416   9.166   7.612  1.00  0.00
H
ATOM   2261 3HG2 VAL   136      -2.990   7.508   8.084  1.00  0.00
H
ATOM   2262  N   VAL   137      -7.032  10.100   9.414  1.00  0.00
N
ATOM   2263  H   VAL   137      -7.151   9.967  10.412  1.00  0.00
H
ATOM   2264  CA  VAL   137      -8.036  10.961   8.750  1.00  0.00
C
ATOM   2265  HA  VAL   137      -7.659  11.301   7.790  1.00  0.00
H
ATOM   2266  C   VAL   137      -8.400  12.179   9.645  1.00  0.00
C
ATOM   2267  O   VAL   137      -8.391  12.020  10.863  1.00  0.00
O
ATOM   2268  CB  VAL   137      -9.336  10.112   8.537  1.00  0.00
C
ATOM   2269  HB  VAL   137      -9.814  10.041   9.500  1.00  0.00
H
ATOM   2270  CG1 VAL   137     -10.308  10.735   7.570  1.00  0.00
C
ATOM   2271 1HG1 VAL   137     -11.257  10.209   7.637  1.00  0.00
H
ATOM   2272 2HG1 VAL   137      -9.937  10.634   6.562  1.00  0.00
H
ATOM   2273 3HG1 VAL   137     -10.479  11.782   7.811  1.00  0.00
H
ATOM   2274  CG2 VAL   137      -9.055   8.668   8.041  1.00  0.00
C
ATOM   2275 1HG2 VAL   137      -9.987   8.174   7.771  1.00  0.00
H
ATOM   2276 2HG2 VAL   137      -8.592   8.090   8.841  1.00  0.00
H
ATOM   2277 3HG2 VAL   137      -8.394   8.686   7.177  1.00  0.00
H
ATOM   2278  N   ILE   138      -8.697  13.361   9.089  1.00  0.00
N
ATOM   2279  H   ILE   138      -8.750  13.413   8.073  1.00  0.00
H
ATOM   2280  CA  ILE   138      -8.953  14.638   9.809  1.00  0.00
C
ATOM   2281  HA  ILE   138      -9.471  14.401  10.735  1.00  0.00
H
ATOM   2282  C   ILE   138      -9.789  15.712   9.075  1.00  0.00
C
ATOM   2283  O   ILE   138      -9.365  16.244   8.048  1.00  0.00
O
ATOM   2284  CB  ILE   138      -7.660  15.429  10.168  1.00  0.00
C
ATOM   2285  HB  ILE   138      -7.727  16.440   9.770  1.00  0.00
H
ATOM   2286  CG1 ILE   138      -6.351  14.805   9.654  1.00  0.00
C
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ATOM   2287 1HG1 ILE   138      -5.548  15.350  10.145  1.00  0.00
H
ATOM   2288 2HG1 ILE   138      -6.294  13.777  10.002  1.00  0.00
H
ATOM   2289  CG2 ILE   138      -7.574  15.543  11.663  1.00  0.00
C
ATOM   2290 1HG2 ILE   138      -6.724  16.164  11.933  1.00  0.00
H
ATOM   2291 2HG2 ILE   138      -7.455  14.553  12.104  1.00  0.00
H
ATOM   2292 3HG2 ILE   138      -8.480  16.007  12.060  1.00  0.00
H
ATOM   2293  CD1 ILE   138      -6.042  14.831   8.149  1.00  0.00
C
ATOM   2294 1HD1 ILE   138      -5.004  14.541   7.990  1.00  0.00
H
ATOM   2295 2HD1 ILE   138      -6.195  15.832   7.761  1.00  0.00
H
ATOM   2296 3HD1 ILE   138      -6.686  14.135   7.616  1.00  0.00
H
ATOM   2297  N   ILE   139     -10.979  16.037   9.574  1.00  0.00
N
ATOM   2298  H   ILE   139     -11.206  15.783  10.532  1.00  0.00
H
ATOM   2299  CA  ILE   139     -12.038  16.653   8.751  1.00  0.00
C
ATOM   2300  HA  ILE   139     -11.574  17.097   7.874  1.00  0.00
H
ATOM   2301  C   ILE   139     -12.970  17.720   9.364  1.00  0.00
C
ATOM   2302  O   ILE   139     -12.994  17.928  10.585  1.00  0.00
O
ATOM   2303  CB  ILE   139     -12.968  15.521   8.239  1.00  0.00
C
ATOM   2304  HB  ILE   139     -13.626  15.944   7.485  1.00  0.00
H
ATOM   2305  CG1 ILE   139     -13.851  14.943   9.356  1.00  0.00
C
ATOM   2306 1HG1 ILE   139     -13.693  13.869   9.405  1.00  0.00
H
ATOM   2307 2HG1 ILE   139     -13.551  15.360  10.315  1.00  0.00
H
ATOM   2308  CG2 ILE   139     -12.161  14.399   7.574  1.00  0.00
C
ATOM   2309 1HG2 ILE   139     -12.835  13.723   7.087  1.00  0.00
H
ATOM   2310 2HG2 ILE   139     -11.584  13.836   8.307  1.00  0.00
H
ATOM   2311 3HG2 ILE   139     -11.490  14.819   6.818  1.00  0.00
H
ATOM   2312  CD1 ILE   139     -15.347  15.209   9.138  1.00  0.00
C
ATOM   2313 1HD1 ILE   139     -15.915  14.857   9.993  1.00  0.00
H
ATOM   2314 2HD1 ILE   139     -15.685  14.695   8.239  1.00  0.00
H
ATOM   2315 3HD1 ILE   139     -15.530  16.272   9.032  1.00  0.00
H
ATOM   2316  N   ASP   140     -13.823  18.290   8.512  1.00  0.00
N
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ATOM   2317  H   ASP   140     -13.744  18.083   7.524  1.00  0.00
H
ATOM   2318  CA  ASP   140     -15.006  19.073   8.902  1.00  0.00
C
ATOM   2319  HA  ASP   140     -15.278  18.844   9.929  1.00  0.00
H
ATOM   2320  C   ASP   140     -16.138  18.600   7.963  1.00  0.00
C
ATOM   2321  O   ASP   140     -15.838  18.104   6.873  1.00  0.00
O
ATOM   2322  CB  ASP   140     -14.729  20.581   8.766  1.00  0.00
C
ATOM   2323 1HB  ASP   140     -13.759  20.797   9.213  1.00  0.00
H
ATOM   2324 2HB  ASP   140     -14.686  20.839   7.707  1.00  0.00
H
ATOM   2325  CG  ASP   140     -15.781  21.453   9.457  1.00  0.00
C
ATOM   2326  OD1 ASP   140     -16.815  20.936   9.932  1.00  0.00
O
ATOM   2327  OD2 ASP   140     -15.597  22.691   9.524  1.00  0.00
O
ATOM   2328  N   GLY   141     -17.401  18.711   8.368  1.00  0.00
N
ATOM   2329  H   GLY   141     -17.575  19.140   9.272  1.00  0.00
H
ATOM   2330  CA  GLY   141     -18.560  18.316   7.566  1.00  0.00
C
ATOM   2331 1HA  GLY   141     -19.023  19.220   7.170  1.00  0.00
H
ATOM   2332 2HA  GLY   141     -18.233  17.720   6.719  1.00  0.00
H
ATOM   2333  C   GLY   141     -19.623  17.540   8.335  1.00  0.00
C
ATOM   2334  O   GLY   141     -19.438  17.302   9.527  1.00  0.00
O
ATOM   2335  N   SER   142     -20.716  17.152   7.684  1.00  0.00
N
ATOM   2336  H   SER   142     -20.795  17.348   6.692  1.00  0.00
H
ATOM   2337  CA  SER   142     -21.826  16.387   8.290  1.00  0.00
C
ATOM   2338  HA  SER   142     -21.658  16.231   9.355  1.00  0.00
H
ATOM   2339  C   SER   142     -21.846  15.042   7.566  1.00  0.00
C
ATOM   2340  O   SER   142     -21.228  14.967   6.510  1.00  0.00
O
ATOM   2341  CB  SER   142     -23.148  17.119   8.078  1.00  0.00
C
ATOM   2342 1HB  SER   142     -23.316  17.237   7.007  1.00  0.00
H
ATOM   2343 2HB  SER   142     -23.963  16.532   8.504  1.00  0.00
H
ATOM   2344  OG  SER   142     -23.111  18.401   8.686  1.00  0.00
O
ATOM   2345  HG  SER   142     -23.733  18.974   8.211  1.00  0.00
H
ATOM   2346  N   TYR   143     -22.425  13.973   8.107  1.00  0.00
N
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ATOM   2347  H   TYR   143     -23.147  14.056   8.818  1.00  0.00
H
ATOM   2348  CA  TYR   143     -21.896  12.641   7.805  1.00  0.00
C
ATOM   2349  HA  TYR   143     -21.465  12.691   6.809  1.00  0.00
H
ATOM   2350  C   TYR   143     -22.731  11.331   7.791  1.00  0.00
C
ATOM   2351  O   TYR   143     -23.200  10.922   8.841  1.00  0.00
O
ATOM   2352  CB  TYR   143     -20.723  12.469   8.789  1.00  0.00
C
ATOM   2353 1HB  TYR   143     -20.523  11.419   8.906  1.00  0.00
H
ATOM   2354 2HB  TYR   143     -19.850  12.922   8.333  1.00  0.00
H
ATOM   2355  CG  TYR   143     -20.830  13.064  10.179  1.00  0.00
C
ATOM   2356  CD1 TYR   143     -21.589  12.439  11.186  1.00  0.00
C
ATOM   2357  HD1 TYR   143     -22.191  11.577  10.946  1.00  0.00
H
ATOM   2358  CD2 TYR   143     -20.078  14.206  10.525  1.00  0.00
C
ATOM   2359  HD2 TYR   143     -19.494  14.715   9.770  1.00  0.00
H
ATOM   2360  CE1 TYR   143     -21.560  12.911  12.522  1.00  0.00
C
ATOM   2361  HE1 TYR   143     -22.132  12.411  13.289  1.00  0.00
H
ATOM   2362  CE2 TYR   143     -20.062  14.693  11.858  1.00  0.00
C
ATOM   2363  HE2 TYR   143     -19.481  15.567  12.109  1.00  0.00
H
ATOM   2364  CZ  TYR   143     -20.795  14.032  12.845  1.00  0.00
C
ATOM   2365  OH  TYR   143     -20.785  14.477  14.142  1.00  0.00
O
ATOM   2366  HH  TYR   143     -20.276  15.291  14.254  1.00  0.00
H
ATOM   2367  N   TRP   144     -22.779  10.597   6.666  1.00  0.00
N
ATOM   2368  H   TRP   144     -22.544  11.039   5.779  1.00  0.00
H
ATOM   2369  CA  TRP   144     -23.233   9.172   6.605  1.00  0.00
C
ATOM   2370  HA  TRP   144     -23.259   8.787   7.614  1.00  0.00
H
ATOM   2371  C   TRP   144     -22.434   8.125   5.749  1.00  0.00
C
ATOM   2372  O   TRP   144     -22.632   8.049   4.549  1.00  0.00
O
ATOM   2373  CB  TRP   144     -24.687   9.161   6.124  1.00  0.00
C
ATOM   2374 1HB  TRP   144     -24.762   9.689   5.174  1.00  0.00
H
ATOM   2375 2HB  TRP   144     -24.992   8.130   5.976  1.00  0.00
H
ATOM   2376  CG  TRP   144     -25.625   9.779   7.116  1.00  0.00
C
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ATOM   2377  CD1 TRP   144     -26.153   9.185   8.216  1.00  0.00
C
ATOM   2378  HD1 TRP   144     -25.970   8.157   8.493  1.00  0.00
H
ATOM   2379  CD2 TRP   144     -26.102  11.137   7.152  1.00  0.00
C
ATOM   2380  NE1 TRP   144     -26.923  10.049   8.940  1.00  0.00
N
ATOM   2381  HE1 TRP   144     -27.402   9.807   9.797  1.00  0.00
H
ATOM   2382  CE2 TRP   144     -26.905  11.269   8.323  1.00  0.00
C
ATOM   2383  CE3 TRP   144     -25.915  12.264   6.328  1.00  0.00
C
ATOM   2384  HE3 TRP   144     -25.305  12.196   5.438  1.00  0.00
H
ATOM   2385  CZ2 TRP   144     -27.509  12.489   8.688  1.00  0.00
C
ATOM   2386  HZ2 TRP   144     -28.105  12.562   9.585  1.00  0.00
H
ATOM   2387  CZ3 TRP   144     -26.538  13.488   6.682  1.00  0.00
C
ATOM   2388  HZ3 TRP   144     -26.419  14.351   6.046  1.00  0.00
H
ATOM   2389  CH2 TRP   144     -27.330  13.584   7.862  1.00  0.00
C
ATOM   2390  HH2 TRP   144     -27.801  14.525   8.111  1.00  0.00
H
ATOM   2391  N   ILE   145     -21.526   7.319   6.307  1.00  0.00
N
ATOM   2392  H   ILE   145     -21.411   7.312   7.306  1.00  0.00
H
ATOM   2393  CA  ILE   145     -20.685   6.369   5.527  1.00  0.00
C
ATOM   2394  HA  ILE   145     -21.060   6.315   4.506  1.00  0.00
H
ATOM   2395  C   ILE   145     -20.774   4.977   6.131  1.00  0.00
C
ATOM   2396  O   ILE   145     -21.273   4.826   7.239  1.00  0.00
O
ATOM   2397  CB  ILE   145     -19.163   6.793   5.464  1.00  0.00
C
ATOM   2398  HB  ILE   145     -19.151   7.842   5.704  1.00  0.00
H
ATOM   2399  CG1 ILE   145     -18.587   6.734   4.036  1.00  0.00
C
ATOM   2400 1HG1 ILE   145     -19.222   7.363   3.426  1.00  0.00
H
ATOM   2401 2HG1 ILE   145     -17.606   7.206   4.067  1.00  0.00
H
ATOM   2402  CG2 ILE   145     -18.247   6.112   6.529  1.00  0.00
C
ATOM   2403 1HG2 ILE   145     -17.329   6.687   6.630  1.00  0.00
H
ATOM   2404 2HG2 ILE   145     -17.994   5.090   6.248  1.00  0.00
H
ATOM   2405 3HG2 ILE   145     -18.732   6.102   7.506  1.00  0.00
H
ATOM   2406  CD1 ILE   145     -18.435   5.399   3.293  1.00  0.00
C
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ATOM   2407 1HD1 ILE   145     -19.416   5.008   3.023  1.00  0.00
H
ATOM   2408 2HD1 ILE   145     -17.900   4.678   3.912  1.00  0.00
H
ATOM   2409 3HD1 ILE   145     -17.870   5.565   2.376  1.00  0.00
H
ATOM   2410  N   SER   146     -20.258   3.991   5.412  1.00  0.00
N
ATOM   2411  H   SER   146     -19.883   4.196   4.502  1.00  0.00
H
ATOM   2412  CA  SER   146     -20.187   2.607   5.826  1.00  0.00
C
ATOM   2413  HA  SER   146     -20.769   2.482   6.731  1.00  0.00
H
ATOM   2414  C   SER   146     -18.851   1.891   6.004  1.00  0.00
C
ATOM   2415  O   SER   146     -17.862   2.152   5.308  1.00  0.00
O
ATOM   2416  CB  SER   146     -20.847   1.846   4.713  1.00  0.00
C
ATOM   2417 1HB  SER   146     -20.356   0.881   4.592  1.00  0.00
H
ATOM   2418 2HB  SER   146     -21.885   1.670   4.969  1.00  0.00
H
ATOM   2419  OG  SER   146     -20.791   2.572   3.493  1.00  0.00
O
ATOM   2420  HG  SER   146     -21.224   2.025   2.827  1.00  0.00
H
ATOM   2421  N   TYR   147     -18.929   0.875   6.852  1.00  0.00
N
ATOM   2422  H   TYR   147     -19.775   0.778   7.393  1.00  0.00
H
ATOM   2423  CA  TYR   147     -17.950  -0.189   7.028  1.00  0.00
C
ATOM   2424  HA  TYR   147     -17.386  -0.334   6.108  1.00  0.00
H
ATOM   2425  C   TYR   147     -18.762  -1.464   7.324  1.00  0.00
C
ATOM   2426  O   TYR   147     -19.437  -1.958   6.430  1.00  0.00
O
ATOM   2427  CB  TYR   147     -16.986   0.115   8.174  1.00  0.00
C
ATOM   2428 1HB  TYR   147     -17.570   0.415   9.043  1.00  0.00
H
ATOM   2429 2HB  TYR   147     -16.444  -0.798   8.416  1.00  0.00
H
ATOM   2430  CG  TYR   147     -15.945   1.181   7.910  1.00  0.00
C
ATOM   2431  CD1 TYR   147     -16.231   2.549   8.116  1.00  0.00
C
ATOM   2432  HD1 TYR   147     -17.231   2.862   8.386  1.00  0.00
H
ATOM   2433  CD2 TYR   147     -14.629   0.816   7.558  1.00  0.00
C
ATOM   2434  HD2 TYR   147     -14.390  -0.223   7.381  1.00  0.00
H
ATOM   2435  CE1 TYR   147     -15.207   3.524   8.030  1.00  0.00
C
ATOM   2436  HE1 TYR   147     -15.432   4.561   8.237  1.00  0.00
H
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ATOM   2437  CE2 TYR   147     -13.603   1.795   7.465  1.00  0.00
C
ATOM   2438  HE2 TYR   147     -12.597   1.502   7.211  1.00  0.00
H
ATOM   2439  CZ  TYR   147     -13.905   3.137   7.717  1.00  0.00
C
ATOM   2440  OH  TYR   147     -12.927   4.093   7.637  1.00  0.00
O
ATOM   2441  HH  TYR   147     -12.045   3.715   7.582  1.00  0.00
H
ATOM   2442  N   SER   148     -18.736  -1.974   8.551  1.00  0.00
N
ATOM   2443  H   SER   148     -18.296  -1.465   9.305  1.00  0.00
H
ATOM   2444  CA  SER   148     -19.260  -3.298   8.901  1.00  0.00
C
ATOM   2445  HA  SER   148     -20.134  -3.549   8.301  1.00  0.00
H
ATOM   2446  C   SER   148     -19.636  -3.310  10.381  1.00  0.00
C
ATOM   2447  O   SER   148     -19.618  -2.241  10.962  1.00  0.00
O
ATOM   2448  CB  SER   148     -18.164  -4.308   8.638  1.00  0.00
C
ATOM   2449 1HB  SER   148     -18.488  -5.302   8.934  1.00  0.00
H
ATOM   2450 2HB  SER   148     -17.949  -4.313   7.572  1.00  0.00
H
ATOM   2451  OG  SER   148     -16.987  -3.959   9.341  1.00  0.00
O
ATOM   2452  HG  SER   148     -16.381  -4.707   9.258  1.00  0.00
H
ATOM   2453  N   HIS   149     -20.024  -4.453  10.950  1.00  0.00
N
ATOM   2454  H   HIS   149     -19.834  -5.329  10.466  1.00  0.00
H
ATOM   2455  CA  HIS   149     -20.865  -4.516  12.163  1.00  0.00
C
ATOM   2456  HA  HIS   149     -21.116  -3.491  12.432  1.00  0.00
H
ATOM   2457  C   HIS   149     -20.360  -5.199  13.457  1.00  0.00
C
ATOM   2458  O   HIS   149     -21.173  -5.827  14.152  1.00  0.00
O
ATOM   2459  CB  HIS   149     -22.168  -5.224  11.762  1.00  0.00
C
ATOM   2460 1HB  HIS   149     -21.942  -6.274  11.587  1.00  0.00
H
ATOM   2461 2HB  HIS   149     -22.897  -5.154  12.568  1.00  0.00
H
ATOM   2462  CG  HIS   149     -22.793  -4.682  10.519  1.00  0.00
C
ATOM   2463  ND1 HIS   149     -23.791  -3.718  10.515  1.00  0.00
N
ATOM   2464  HD1 HIS   149     -24.186  -3.279  11.346  1.00  0.00
H
ATOM   2465  CD2 HIS   149     -22.593  -4.982   9.215  1.00  0.00
C
ATOM   2466  HD2 HIS   149     -21.888  -5.713   8.837  1.00  0.00
H
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ATOM   2467  CE1 HIS   149     -24.141  -3.463   9.263  1.00  0.00
C
ATOM   2468  HE1 HIS   149     -24.910  -2.758   8.959  1.00  0.00
H
ATOM   2469  NE2 HIS   149     -23.407  -4.197   8.460  1.00  0.00
N
ATOM   2470  HE2 HIS   149     -23.406  -4.191   7.440  1.00  0.00
H
ATOM   2471  N   LEU   150     -19.084  -5.145  13.811  1.00  0.00
N
ATOM   2472  H   LEU   150     -18.441  -4.577  13.262  1.00  0.00
H
ATOM   2473  CA  LEU   150     -18.552  -5.823  15.013  1.00  0.00
C
ATOM   2474  HA  LEU   150     -19.336  -6.382  15.523  1.00  0.00
H
ATOM   2475  C   LEU   150     -18.012  -4.740  15.962  1.00  0.00
C
ATOM   2476  O   LEU   150     -17.751  -3.658  15.513  1.00  0.00
O
ATOM   2477  CB  LEU   150     -17.444  -6.789  14.584  1.00  0.00
C
ATOM   2478 1HB  LEU   150     -16.673  -6.192  14.120  1.00  0.00
H
ATOM   2479 2HB  LEU   150     -17.024  -7.248  15.477  1.00  0.00
H
ATOM   2480  CG  LEU   150     -17.788  -7.908  13.590  1.00  0.00
C
ATOM   2481  HG  LEU   150     -18.296  -7.476  12.729  1.00  0.00
H
ATOM   2482  CD1 LEU   150     -16.495  -8.545  13.099  1.00  0.00
C
ATOM   2483 1HD1 LEU   150     -16.723  -9.339  12.387  1.00  0.00
H
ATOM   2484 2HD1 LEU   150     -15.937  -8.966  13.934  1.00  0.00
H
ATOM   2485 3HD1 LEU   150     -15.885  -7.798  12.591  1.00  0.00
H
ATOM   2486  CD2 LEU   150     -18.690  -8.971  14.201  1.00  0.00
C
ATOM   2487 1HD2 LEU   150     -18.926  -9.725  13.449  1.00  0.00
H
ATOM   2488 2HD2 LEU   150     -19.617  -8.514  14.539  1.00  0.00
H
ATOM   2489 3HD2 LEU   150     -18.198  -9.447  15.049  1.00  0.00
H
ATOM   2490  N   PRO   151     -17.888  -4.954  17.280  1.00  0.00
N
ATOM   2491  CA  PRO   151     -17.596  -3.697  17.997  1.00  0.00
C
ATOM   2492  HA  PRO   151     -18.312  -2.935  17.694  1.00  0.00
H
ATOM   2493  C   PRO   151     -16.181  -3.097  17.891  1.00  0.00
C
ATOM   2494  O   PRO   151     -15.206  -3.825  17.741  1.00  0.00
O
ATOM   2495  CB  PRO   151     -17.882  -4.083  19.443  1.00  0.00
C
ATOM   2496 1HB  PRO   151     -17.286  -3.485  20.127  1.00  0.00
H
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ATOM   2497 2HB  PRO   151      -18.943  -3.971  19.666  1.00  0.00
H
ATOM   2498  CG  PRO   151      -17.503  -5.517  19.501  1.00  0.00
C
ATOM   2499 1HG  PRO   151      -16.419  -5.617  19.529  1.00  0.00
H
ATOM   2500 2HG  PRO   151      -17.953  -6.005  20.363  1.00  0.00
H
ATOM   2501  CD  PRO   151      -18.063  -6.075  18.219  1.00  0.00
C
ATOM   2502 1HD  PRO   151      -17.506  -6.954  17.899  1.00  0.00
H
ATOM   2503 2HD  PRO   151      -19.123  -6.305  18.335  1.00  0.00
H
ATOM   2504   N  GLU   152      -16.072  -1.775  18.033  1.00  0.00
N
ATOM   2505   H  GLU   152      -16.925  -1.235  18.128  1.00  0.00
H
ATOM   2506  CA  GLU   152      -14.783  -1.059  18.115  1.00  0.00
C
ATOM   2507  HA  GLU   152      -14.099  -1.755  18.566  1.00  0.00
H
ATOM   2508   C  GLU   152      -14.812   0.139  19.093  1.00  0.00
C
ATOM   2509   O  GLU   152      -15.380  -0.011  20.178  1.00  0.00
O
ATOM   2510  CB  GLU   152      -14.208  -0.774  16.716  1.00  0.00
C
ATOM   2511 1HB  GLU   152      -14.437  -1.650  16.119  1.00  0.00
H
ATOM   2512 2HB  GLU   152      -14.699   0.070  16.273  1.00  0.00
H
ATOM   2513  CG  GLU   152      -12.702  -0.522  16.627  1.00  0.00
C
ATOM   2514 1HG  GLU   152      -12.485   0.470  17.005  1.00  0.00
H
ATOM   2515 2HG  GLU   152      -12.194  -1.234  17.266  1.00  0.00
H
ATOM   2516  CD  GLU   152      -12.141  -0.634  15.219  1.00  0.00
C
ATOM   2517  OE1 GLU   152      -12.756  -1.325  14.383  1.00  0.00
O
ATOM   2518  OE2 GLU   152      -11.044  -0.100  14.957  1.00  0.00
O
ATOM   2519   N  GLN   153      -14.145   1.255  18.806  1.00  0.00
N
ATOM   2520   H  GLN   153      -13.743   1.355  17.885  1.00  0.00
H
ATOM   2521  CA  GLN   153      -13.870   2.329  19.777  1.00  0.00
C
ATOM   2522  HA  GLN   153      -14.581   2.255  20.597  1.00  0.00
H
ATOM   2523   C  GLN   153      -13.987   3.748  19.188  1.00  0.00
C
ATOM   2524   O  GLN   153      -13.141   4.172  18.415  1.00  0.00
O
ATOM   2525  CB  GLN   153      -12.448   2.145  20.360  1.00  0.00
C
ATOM   2526 1HB  GLN   153      -12.105   3.108  20.738  1.00  0.00
H
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ATOM   2527 2HB  GLN   153     -12.513   1.462  21.205  1.00  0.00
H
ATOM   2528  CG  GLN   153     -11.391   1.580  19.375  1.00  0.00
C
ATOM   2529 1HG  GLN   153     -11.624   0.534  19.184  1.00  0.00
H
ATOM   2530 2HG  GLN   153     -11.450   2.130  18.437  1.00  0.00
H
ATOM   2531  CD  GLN   153      -9.951   1.646  19.856  1.00  0.00
C
ATOM   2532  OE1 GLN   153      -9.034   1.930  19.084  1.00  0.00
O
ATOM   2533  NE2 GLN   153      -9.729   1.366  21.107  1.00  0.00
N
ATOM   2534 1HE2 GLN   153      -8.781   1.349  21.440  1.00  0.00
H
ATOM   2535 2HE2 GLN   153     -10.493   1.189  21.748  1.00  0.00
H
ATOM   2536  N   SER   154     -15.011   4.511  19.543  1.00  0.00
N
ATOM   2537  H   SER   154     -15.692   4.160  20.213  1.00  0.00
H
ATOM   2538  CA  SER   154     -15.161   5.876  19.013  1.00  0.00
C
ATOM   2539  HA  SER   154     -14.887   5.879  17.959  1.00  0.00
H
ATOM   2540  C   SER   154     -14.260   6.878  19.740  1.00  0.00
C
ATOM   2541  O   SER   154     -14.586   7.361  20.819  1.00  0.00
O
ATOM   2542  CB  SER   154     -16.605   6.354  19.133  1.00  0.00
C
ATOM   2543 1HB  SER   154     -16.935   6.261  20.168  1.00  0.00
H
ATOM   2544 2HB  SER   154     -16.645   7.404  18.843  1.00  0.00
H
ATOM   2545  OG  SER   154     -17.476   5.619  18.287  1.00  0.00
O
ATOM   2546  HG  SER   154     -18.312   6.104  18.264  1.00  0.00
H
ATOM   2547  N   LEU   155     -13.112   7.174  19.147  1.00  0.00
N
ATOM   2548  H   LEU   155     -12.931   6.775  18.237  1.00  0.00
H
ATOM   2549  CA  LEU   155     -12.032   7.946  19.780  1.00  0.00
C
ATOM   2550  HA  LEU   155     -11.908   7.562  20.788  1.00  0.00
H
ATOM   2551  C   LEU   155     -12.171   9.477  19.891  1.00  0.00
C
ATOM   2552  O   LEU   155     -11.170  10.171  20.061  1.00  0.00
O
ATOM   2553  CB  LEU   155     -10.732   7.663  19.011  1.00  0.00
C
ATOM   2554 1HB  LEU   155     -10.774   8.264  18.103  1.00  0.00
H
ATOM   2555 2HB  LEU   155      -9.907   8.050  19.609  1.00  0.00
H
ATOM   2556  CG  LEU   155     -10.338   6.243  18.571  1.00  0.00
C
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ATOM   2557  HG  LEU   155     -11.145   5.821  17.980  1.00  0.00
H
ATOM   2558  CD1 LEU   155      -9.117   6.339  17.677  1.00  0.00
C
ATOM   2559 1HD1 LEU   155      -8.847   5.347  17.317  1.00  0.00
H
ATOM   2560 2HD1 LEU   155      -8.290   6.773  18.231  1.00  0.00
H
ATOM   2561 3HD1 LEU   155      -9.340   6.967  16.815  1.00  0.00
H
ATOM   2562  CD2 LEU   155     -10.057   5.296  19.699  1.00  0.00
C
ATOM   2563 1HD2 LEU   155      -9.764   4.331  19.296  1.00  0.00
H
ATOM   2564 2HD2 LEU   155     -10.956   5.164  20.296  1.00  0.00
H
ATOM   2565 3HD2 LEU   155      -9.252   5.688  20.321  1.00  0.00
H
ATOM   2566  N   GLN   156     -13.363  10.033  19.713  1.00  0.00
N
ATOM   2567  H   GLN   156     -14.184   9.447  19.652  1.00  0.00
H
ATOM   2568  CA  GLN   156     -13.525  11.486  19.576  1.00  0.00
C
ATOM   2569  HA  GLN   156     -12.678  12.000  20.030  1.00  0.00
H
ATOM   2570  C   GLN   156     -14.817  12.040  20.168  1.00  0.00
C
ATOM   2571  O   GLN   156     -15.886  11.514  19.883  1.00  0.00
O
ATOM   2572  CB  GLN   156     -13.564  11.799  18.076  1.00  0.00
C
ATOM   2573 1HB  GLN   156     -12.694  11.346  17.611  1.00  0.00
H
ATOM   2574 2HB  GLN   156     -14.451  11.316  17.666  1.00  0.00
H
ATOM   2575  CG  GLN   156     -13.598  13.257  17.654  1.00  0.00
C
ATOM   2576 1HG  GLN   156     -14.061  13.851  18.425  1.00  0.00
H
ATOM   2577 2HG  GLN   156     -12.585  13.625  17.508  1.00  0.00
H
ATOM   2578  CD  GLN   156     -14.406  13.453  16.401  1.00  0.00
C
ATOM   2579  OE1 GLN   156     -14.069  12.961  15.337  1.00  0.00
O
ATOM   2580  NE2 GLN   156     -15.480  14.185  16.512  1.00  0.00
N
ATOM   2581 1HE2 GLN   156     -16.023  14.378  15.688  1.00  0.00
H
ATOM   2582 2HE2 GLN   156     -15.753  14.557  17.406  1.00  0.00
H
ATOM   2583  N   PHE   157     -14.723  13.203  20.805  1.00  0.00
N
ATOM   2584  H   PHE   157     -13.854  13.465  21.245  1.00  0.00
H
ATOM   2585  CA  PHE   157     -15.777  14.219  20.740  1.00  0.00
C
ATOM   2586  HA  PHE   157     -16.571  13.876  20.077  1.00  0.00
H
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ATOM   2587  C   PHE   157     -15.125  15.465  20.138  1.00  0.00
C
ATOM   2588  O   PHE   157     -13.917  15.656  20.294  1.00  0.00
O
ATOM   2589  CB  PHE   157     -16.374  14.482  22.119  1.00  0.00
C
ATOM   2590 1HB  PHE   157     -15.598  14.885  22.771  1.00  0.00
H
ATOM   2591 2HB  PHE   157     -17.167  15.221  22.021  1.00  0.00
H
ATOM   2592  CG  PHE   157     -16.947  13.248  22.753  1.00  0.00
C
ATOM   2593  CD1 PHE   157     -16.434  12.775  23.970  1.00  0.00
C
ATOM   2594  HD1 PHE   157     -15.652  13.322  24.475  1.00  0.00
H
ATOM   2595  CD2 PHE   157     -17.975  12.526  22.114  1.00  0.00
C
ATOM   2596  HD2 PHE   157     -18.388  12.883  21.181  1.00  0.00
H
ATOM   2597  CE1 PHE   157     -16.924  11.582  24.544  1.00  0.00
C
ATOM   2598  HE1 PHE   157     -16.525  11.236  25.484  1.00  0.00
H
ATOM   2599  CE2 PHE   157     -18.462  11.318  22.666  1.00  0.00
C
ATOM   2600  HE2 PHE   157     -19.227  10.757  22.150  1.00  0.00
H
ATOM   2601  CZ  PHE   157     -17.935  10.845  23.886  1.00  0.00
C
ATOM   2602  HZ  PHE   157     -18.304   9.925  24.316  1.00  0.00
H
ATOM   2603  N   ARG   158     -15.861  16.241  19.354  1.00  0.00
N
ATOM   2604  H   ARG   158     -16.858  16.048  19.270  1.00  0.00
H
ATOM   2605  CA  ARG   158     -15.280  17.347  18.572  1.00  0.00
C
ATOM   2606  HA  ARG   158     -14.399  16.977  18.047  1.00  0.00
H
ATOM   2607  C   ARG   158     -14.848  18.563  19.389  1.00  0.00
C
ATOM   2608  O   ARG   158     -15.366  18.800  20.481  1.00  0.00
O
ATOM   2609  CB  ARG   158     -16.293  17.819  17.522  1.00  0.00
C
ATOM   2610 1HB  ARG   158     -15.780  18.519  16.863  1.00  0.00
H
ATOM   2611 2HB  ARG   158     -16.603  16.963  16.925  1.00  0.00
H
ATOM   2612  CG  ARG   158     -17.553  18.496  18.090  1.00  0.00
C
ATOM   2613 1HG  ARG   158     -18.105  17.783  18.695  1.00  0.00
H
ATOM   2614 2HG  ARG   158     -17.266  19.339  18.718  1.00  0.00
H
ATOM   2615  CD  ARG   158     -18.457  19.020  16.997  1.00  0.00
C
ATOM   2616 1HD  ARG   158     -18.701  18.211  16.311  1.00  0.00
H
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ATOM   2617 2HD  ARG   158     -19.376  19.399  17.444  1.00  0.00
H
ATOM   2618  NE  ARG   158     -17.773  20.114  16.297  1.00  0.00
N
ATOM   2619  HE  ARG   158     -17.530  20.923  16.859  1.00  0.00
H
ATOM   2620  CZ  ARG   158     -17.374  20.125  15.036  1.00  0.00
C
ATOM   2621  NH1 ARG   158     -17.711  19.224  14.155  1.00  0.00
N
ATOM   2622 1HH1 ARG   158     -18.367  18.499  14.401  1.00  0.00
H
ATOM   2623 2HH1 ARG   158     -17.296  19.258  13.235  1.00  0.00
H
ATOM   2624  NH2 ARG   158     -16.559  21.062  14.652  1.00  0.00
N
ATOM   2625 1HH2 ARG   158     -16.229  21.751  15.313  1.00  0.00
H
ATOM   2626 2HH2 ARG   158     -16.280  21.083  13.685  1.00  0.00
H
ATOM   2627  N   LEU   159     -13.973  19.382  18.819  1.00  0.00
N
ATOM   2628  H   LEU   159     -13.565  19.139  17.924  1.00  0.00
H
ATOM   2629  CA  LEU   159     -13.640  20.695  19.377  1.00  0.00
C
ATOM   2630  HA  LEU   159     -14.513  21.128  19.867  1.00  0.00
H
ATOM   2631  C   LEU   159     -13.234  21.582  18.204  1.00  0.00
C
ATOM   2632  O   LEU   159     -12.757  21.064  17.188  1.00  0.00
O
ATOM   2633  CB  LEU   159     -12.483  20.599  20.379  1.00  0.00
C
ATOM   2634 1HB  LEU   159     -12.177  19.557  20.457  1.00  0.00
H
ATOM   2635 2HB  LEU   159     -11.646  21.156  19.967  1.00  0.00
H
ATOM   2636  CG  LEU   159     -12.744  21.135  21.795  1.00  0.00
C
ATOM   2637  HG  LEU   159     -13.644  21.745  21.778  1.00  0.00
H
ATOM   2638  CD1 LEU   159     -12.940  20.000  22.793  1.00  0.00
C
ATOM   2639 1HD1 LEU   159     -13.149  20.410  23.781  1.00  0.00
H
ATOM   2640 2HD1 LEU   159     -12.043  19.380  22.845  1.00  0.00
H
ATOM   2641 3HD1 LEU   159     -13.782  19.381  22.488  1.00  0.00
H
ATOM   2642  CD2 LEU   159     -11.592  22.018  22.244  1.00  0.00
C
ATOM   2643 1HD2 LEU   159     -11.791  22.388  23.250  1.00  0.00
H
ATOM   2644 2HD2 LEU   159     -11.495  22.870  21.573  1.00  0.00
H
ATOM   2645 3HD2 LEU   159     -10.665  21.446  22.251  1.00  0.00
H
ATOM   2646  N   LYS   160     -13.404  22.893  18.353  1.00  0.00
N
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ATOM   2647  H   LYS   160     -13.822  23.231  19.222  1.00  0.00
H
ATOM   2648  CA  LYS   160     -13.073  23.898  17.330  1.00  0.00
C
ATOM   2649  HA  LYS   160     -13.469  24.861  17.652  1.00  0.00
H
ATOM   2650  C   LYS   160     -13.776  23.537  16.020  1.00  0.00
C
ATOM   2651  O   LYS   160     -14.989  23.311  16.006  1.00  0.00
O
ATOM   2652  CB  LYS   160     -11.549  24.050  17.164  1.00  0.00
C
ATOM   2653 1HB  LYS   160     -11.143  23.089  16.853  1.00  0.00
H
ATOM   2654 2HB  LYS   160     -11.347  24.772  16.373  1.00  0.00
H
ATOM   2655  CG  LYS   160     -10.769  24.503  18.405  1.00  0.00
C
ATOM   2656 1HG  LYS   160     -11.081  23.931  19.279  1.00  0.00
H
ATOM   2657 2HG  LYS   160      -9.718  24.289  18.217  1.00  0.00
H
ATOM   2658  CD  LYS   160     -10.874  25.991  18.696  1.00  0.00
C
ATOM   2659 1HD  LYS   160     -10.702  26.538  17.770  1.00  0.00
H
ATOM   2660 2HD  LYS   160     -11.864  26.234  19.083  1.00  0.00
H
ATOM   2661  CE  LYS   160      -9.792  26.389  19.700  1.00  0.00
C
ATOM   2662 1HE  LYS   160      -9.980  25.886  20.650  1.00  0.00
H
ATOM   2663 2HE  LYS   160      -8.826  26.048  19.319  1.00  0.00
H
ATOM   2664  NZ  LYS   160      -9.703  27.869  19.925  1.00  0.00
N
ATOM   2665 1HZ  LYS   160      -8.909  28.078  20.519  1.00  0.00
H
ATOM   2666 2HZ  LYS   160     -10.550  28.208  20.365  1.00  0.00
H
ATOM   2667 3HZ  LYS   160      -9.566  28.337  19.038  1.00  0.00
H
ATOM   2668  N   GLU   161     -13.041  23.457  14.922  1.00  0.00
N
ATOM   2669  H   GLU   161     -12.051  23.650  14.979  1.00  0.00
H
ATOM   2670  CA  GLU   161     -13.614  23.114  13.621  1.00  0.00
C
ATOM   2671  HA  GLU   161     -14.695  23.228  13.673  1.00  0.00
H
ATOM   2672  C   GLU   161     -13.352  21.667  13.209  1.00  0.00
C
ATOM   2673  O   GLU   161     -13.647  21.292  12.077  1.00  0.00
O
ATOM   2674  CB  GLU   161     -13.131  24.087  12.530  1.00  0.00
C
ATOM   2675 1HB  GLU   161     -13.656  23.840  11.608  1.00  0.00
H
ATOM   2676 2HB  GLU   161     -13.439  25.091  12.815  1.00  0.00
H
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ATOM   2677  CG  GLU   161     -11.630  24.112  12.220  1.00  0.00
C
ATOM   2678 1HG  GLU   161     -11.270  23.092  12.111  1.00  0.00
H
ATOM   2679 2HG  GLU   161     -11.484  24.626  11.270  1.00  0.00
H
ATOM   2680  CD  GLU   161     -10.812  24.836  13.278  1.00  0.00
C
ATOM   2681  OE1 GLU   161     -11.087  26.029  13.525  1.00  0.00
O
ATOM   2682  OE2 GLU   161      -9.896  24.239  13.890  1.00  0.00
O
ATOM   2683  N   LYS   162     -12.791  20.846  14.093  1.00  0.00
N
ATOM   2684  H   LYS   162     -12.675  21.132  15.061  1.00  0.00
H
ATOM   2685  CA  LYS   162     -12.273  19.536  13.678  1.00  0.00
C
ATOM   2686  HA  LYS   162     -12.458  19.419  12.612  1.00  0.00
H
ATOM   2687  C   LYS   162     -12.832  18.279  14.329  1.00  0.00
C
ATOM   2688  O   LYS   162     -13.083  18.207  15.535  1.00  0.00
O
ATOM   2689  CB  LYS   162     -10.759  19.506  13.881  1.00  0.00
C
ATOM   2690 1HB  LYS   162     -10.558  19.657  14.938  1.00  0.00
H
ATOM   2691 2HB  LYS   162     -10.402  18.515  13.605  1.00  0.00
H
ATOM   2692  CG  LYS   162      -9.948  20.534  13.099  1.00  0.00
C
ATOM   2693 1HG  LYS   162     -10.277  21.535  13.368  1.00  0.00
H
ATOM   2694 2HG  LYS   162      -8.904  20.433  13.393  1.00  0.00
H
ATOM   2695  CD  LYS   162     -10.037  20.360  11.584  1.00  0.00
C
ATOM   2696 1HD  LYS   162      -9.785  19.332  11.319  1.00  0.00
H
ATOM   2697 2HD  LYS   162     -11.050  20.584  11.247  1.00  0.00
H
ATOM   2698  CE  LYS   162      -9.061  21.310  10.913  1.00  0.00
C
ATOM   2699 1HE  LYS   162      -9.269  22.328  11.251  1.00  0.00
H
ATOM   2700 2HE  LYS   162      -8.047  21.050  11.219  1.00  0.00
H
ATOM   2701  NZ  LYS   162      -9.155  21.271   9.422  1.00  0.00
N
ATOM   2702 1HZ  LYS   162      -8.408  21.819   9.015  1.00  0.00
H
ATOM   2703 2HZ  LYS   162     -10.043  21.668   9.125  1.00  0.00
H
ATOM   2704 3HZ  LYS   162      -9.105  20.321   9.081  1.00  0.00
H
ATOM   2705  N   CYS   163     -12.902  17.259  13.486  1.00  0.00
N
ATOM   2706  H   CYS   163     -12.676  17.432  12.511  1.00  0.00
H
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ATOM   2707  CA  CYS   163     -13.218  15.881  13.842  1.00  0.00
C
ATOM   2708  HA  CYS   163     -13.208  15.737  14.923  1.00  0.00
H
ATOM   2709  C   CYS   163     -12.115  15.048  13.182  1.00  0.00
C
ATOM   2710  O   CYS   163     -11.393  15.594  12.349  1.00  0.00
O
ATOM   2711  CB  CYS   163     -14.585  15.511  13.271  1.00  0.00
C
ATOM   2712 1HB  CYS   163     -14.575  15.702  12.199  1.00  0.00
H
ATOM   2713 2HB  CYS   163     -14.744  14.446  13.431  1.00  0.00
H
ATOM   2714  SG  CYS   163     -15.967  16.404  14.004  1.00  0.00
S
ATOM   2715  HG  CYS   163     -16.911  15.978  13.157  1.00  0.00
H
ATOM   2716  N   TYR   164     -11.969  13.768  13.500  1.00  0.00
N
ATOM   2717  H   TYR   164     -12.624  13.314  14.136  1.00  0.00
H
ATOM   2718  CA  TYR   164     -10.889  12.946  12.941  1.00  0.00
C
ATOM   2719  HA  TYR   164     -10.696  13.260  11.918  1.00  0.00
H
ATOM   2720  C   TYR   164     -11.327  11.486  12.918  1.00  0.00
C
ATOM   2721  O   TYR   164     -12.386  11.199  13.462  1.00  0.00
O
ATOM   2722  CB  TYR   164      -9.601  13.139  13.759  1.00  0.00
C
ATOM   2723 1HB  TYR   164      -8.761  12.902  13.115  1.00  0.00
H
ATOM   2724 2HB  TYR   164      -9.515  14.192  14.024  1.00  0.00
H
ATOM   2725  CG  TYR   164      -9.434  12.300  15.011  1.00  0.00
C
ATOM   2726  CD1 TYR   164      -8.453  11.287  15.056  1.00  0.00
C
ATOM   2727  HD1 TYR   164      -7.863  11.080  14.175  1.00  0.00
H
ATOM   2728  CD2 TYR   164     -10.189  12.548  16.172  1.00  0.00
C
ATOM   2729  HD2 TYR   164     -10.942  13.319  16.163  1.00  0.00
H
ATOM   2730  CE1 TYR   164      -8.209  10.556  16.253  1.00  0.00
C
ATOM   2731  HE1 TYR   164      -7.445   9.795  16.286  1.00  0.00
H
ATOM   2732  CE2 TYR   164      -9.955  11.804  17.366  1.00  0.00
C
ATOM   2733  HE2 TYR   164     -10.530  12.001  18.257  1.00  0.00
H
ATOM   2734  CZ  TYR   164      -8.956  10.831  17.397  1.00  0.00
C
ATOM   2735  OH  TYR   164      -8.691  10.147  18.553  1.00  0.00
O
ATOM   2736  HH  TYR   164      -9.338  10.333  19.248  1.00  0.00
H
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ATOM   2737  N   LEU   165     -10.561  10.587  12.307  1.00  0.00
N
ATOM   2738  H   LEU   165      -9.726  10.903  11.821  1.00  0.00
H
ATOM   2739  CA  LEU   165     -10.836   9.140  12.324  1.00  0.00
C
ATOM   2740  HA  LEU   165     -11.350   8.880  13.245  1.00  0.00
H
ATOM   2741  C   LEU   165      -9.520   8.354  12.284  1.00  0.00
C
ATOM   2742  O   LEU   165      -8.654   8.623  11.458  1.00  0.00
O
ATOM   2743  CB  LEU   165     -11.745   8.759  11.141  1.00  0.00
C
ATOM   2744 1HB  LEU   165     -12.766   8.974  11.436  1.00  0.00
H
ATOM   2745 2HB  LEU   165     -11.528   9.450  10.337  1.00  0.00
H
ATOM   2746  CG  LEU   165     -11.725   7.348  10.528  1.00  0.00
C
ATOM   2747  HG  LEU   165     -10.700   7.104  10.257  1.00  0.00
H
ATOM   2748  CD1 LEU   165     -12.249   6.262  11.433  1.00  0.00
C
ATOM   2749 1HD1 LEU   165     -12.188   5.297  10.928  1.00  0.00
H
ATOM   2750 2HD1 LEU   165     -13.297   6.451  11.674  1.00  0.00
H
ATOM   2751 3HD1 LEU   165     -11.664   6.211  12.346  1.00  0.00
H
ATOM   2752  CD2 LEU   165     -12.553   7.327   9.265  1.00  0.00
C
ATOM   2753 1HD2 LEU   165     -12.505   6.340   8.807  1.00  0.00
H
ATOM   2754 2HD2 LEU   165     -12.162   8.059   8.565  1.00  0.00
H
ATOM   2755 3HD2 LEU   165     -13.597   7.560   9.497  1.00  0.00
H
ATOM   2756  N   VAL   166      -9.366   7.399  13.194  1.00  0.00
N
ATOM   2757  H   VAL   166     -10.080   7.263  13.895  1.00  0.00
H
ATOM   2758  CA  VAL   166      -8.220   6.483  13.249  1.00  0.00
C
ATOM   2759  HA  VAL   166      -7.755   6.386  12.270  1.00  0.00
H
ATOM   2760  C   VAL   166      -8.860   5.148  13.672  1.00  0.00
C
ATOM   2761  O   VAL   166      -9.722   5.182  14.540  1.00  0.00
O
ATOM   2762  CB  VAL   166      -7.164   6.999  14.296  1.00  0.00
C
ATOM   2763  HB  VAL   166      -7.682   7.212  15.228  1.00  0.00
H
ATOM   2764  CG1 VAL   166      -6.084   5.974  14.584  1.00  0.00
C
ATOM   2765 1HG1 VAL   166      -5.373   6.378  15.305  1.00  0.00
H
ATOM   2766 2HG1 VAL   166      -5.562   5.716  13.662  1.00  0.00
H
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ATOM   2767 3HG1 VAL   166      -6.542   5.090  15.013  1.00  0.00
H
ATOM   2768  CG2 VAL   166      -6.474   8.290  13.822  1.00  0.00
C
ATOM   2769 1HG2 VAL   166      -5.772   8.641  14.579  1.00  0.00
H
ATOM   2770 2HG2 VAL   166      -7.218   9.065  13.656  1.00  0.00
H
ATOM   2771 3HG2 VAL   166      -5.945   8.107  12.886  1.00  0.00
H
ATOM   2772  N   TRP   167      -8.504   4.000  13.093  1.00  0.00
N
ATOM   2773  H   TRP   167      -7.783   3.995  12.388  1.00  0.00
H
ATOM   2774  CA  TRP   167      -9.146   2.712  13.438  1.00  0.00
C
ATOM   2775  HA  TRP   167      -9.494   2.773  14.469  1.00  0.00
H
ATOM   2776  C   TRP   167      -8.177   1.524  13.353  1.00  0.00
C
ATOM   2777  O   TRP   167      -7.061   1.749  12.895  1.00  0.00
O
ATOM   2778  CB  TRP   167     -10.388   2.504  12.570  1.00  0.00
C
ATOM   2779 1HB  TRP   167     -10.997   1.733  13.039  1.00  0.00
H
ATOM   2780 2HB  TRP   167     -10.959   3.430  12.584  1.00  0.00
H
ATOM   2781  CG  TRP   167     -10.202   2.094  11.149  1.00  0.00
C
ATOM   2782  CD1 TRP   167     -10.426   0.854  10.658  1.00  0.00
C
ATOM   2783  HD1 TRP   167     -10.666  -0.005  11.273  1.00  0.00
H
ATOM   2784  CD2 TRP   167     -10.001   2.931   9.992  1.00  0.00
C
ATOM   2785  NE1 TRP   167     -10.358   0.828   9.298  1.00  0.00
N
ATOM   2786  HE1 TRP   167     -10.495  -0.007   8.744  1.00  0.00
H
ATOM   2787  CE2 TRP   167     -10.104   2.092   8.845  1.00  0.00
C
ATOM   2788  CE3 TRP   167      -9.788   4.311   9.802  1.00  0.00
C
ATOM   2789  HE3 TRP   167      -9.704   4.972  10.651  1.00  0.00
H
ATOM   2790  CZ2 TRP   167      -9.993   2.591   7.529  1.00  0.00
C
ATOM   2791  HZ2 TRP   167     -10.067   1.930   6.679  1.00  0.00
H
ATOM   2792  CZ3 TRP   167      -9.709   4.823   8.480  1.00  0.00
C
ATOM   2793  HZ3 TRP   167      -9.570   5.882   8.324  1.00  0.00
H
ATOM   2794  CH2 TRP   167      -9.802   3.950   7.357  1.00  0.00
C
ATOM   2795  HH2 TRP   167      -9.725   4.356   6.358  1.00  0.00
H
ATOM   2796  N   ARG   168      -8.519   0.344  13.881  1.00  0.00
N
```

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ATOM   2797  H   ARG   168      -9.491   0.208  14.192  1.00  0.00
H
ATOM   2798  CA  ARG   168      -7.565  -0.762  14.159  1.00  0.00
C
ATOM   2799  HA  ARG   168      -6.649  -0.563  13.601  1.00  0.00
H
ATOM   2800  C   ARG   168      -8.022  -2.186  13.763  1.00  0.00
C
ATOM   2801  O   ARG   168      -7.859  -3.157  14.500  1.00  0.00
O
ATOM   2802  CB  ARG   168      -7.229  -0.721  15.666  1.00  0.00
C
ATOM   2803 1HB  ARG   168      -7.638   0.206  16.060  1.00  0.00
H
ATOM   2804 2HB  ARG   168      -7.739  -1.520  16.195  1.00  0.00
H
ATOM   2805  CG  ARG   168      -5.737  -0.746  16.028  1.00  0.00
C
ATOM   2806 1HG  ARG   168      -5.260   0.079  15.512  1.00  0.00
H
ATOM   2807 2HG  ARG   168      -5.635  -0.582  17.100  1.00  0.00
H
ATOM   2808  CD  ARG   168      -4.976  -2.004  15.654  1.00  0.00
C
ATOM   2809 1HD  ARG   168      -5.224  -2.269  14.630  1.00  0.00
H
ATOM   2810 2HD  ARG   168      -3.907  -1.786  15.690  1.00  0.00
H
ATOM   2811  NE  ARG   168      -5.236  -3.144  16.538  1.00  0.00
N
ATOM   2812  HE  ARG   168      -5.469  -2.943  17.495  1.00  0.00
H
ATOM   2813  CZ  ARG   168      -5.113  -4.420  16.205  1.00  0.00
C
ATOM   2814  NH1 ARG   168      -4.938  -4.834  14.978  1.00  0.00
N
ATOM   2815 1HH1 ARG   168      -4.861  -4.155  14.234  1.00  0.00
H
ATOM   2816 2HH1 ARG   168      -4.865  -5.817  14.772  1.00  0.00
H
ATOM   2817  NH2 ARG   168      -5.233  -5.317  17.137  1.00  0.00
N
ATOM   2818 1HH2 ARG   168      -5.266  -5.034  18.099  1.00  0.00
H
ATOM   2819 2HH2 ARG   168      -5.255  -6.297  16.888  1.00  0.00
H
ATOM   2820  N   THR   169      -8.635  -2.316  12.600  1.00  0.00
N
ATOM   2821  H   THR   169      -8.709  -1.514  11.996  1.00  0.00
H
ATOM   2822  CA  THR   169      -9.258  -3.569  12.148  1.00  0.00
C
ATOM   2823  HA  THR   169     -10.162  -3.702  12.731  1.00  0.00
H
ATOM   2824  C   THR   169      -8.458  -4.896  12.151  1.00  0.00
C
ATOM   2825  O   THR   169      -7.330  -4.929  11.647  1.00  0.00
O
ATOM   2826  CB  THR   169      -9.657  -3.323  10.698  1.00  0.00
C
```

```
ATOM   2827  HB  THR   169      -8.753  -3.124  10.132  1.00  0.00
H
ATOM   2828  OG1 THR   169     -10.506  -2.175  10.655  1.00  0.00
O
ATOM   2829  HG1 THR   169     -11.300  -2.388  11.162  1.00  0.00
H
ATOM   2830  CG2 THR   169     -10.382  -4.449  10.048  1.00  0.00
C
ATOM   2831 1HG2 THR   169     -10.680  -4.131   9.054  1.00  0.00
H
ATOM   2832 2HG2 THR   169     -11.261  -4.733  10.627  1.00  0.00
H
ATOM   2833 3HG2 THR   169      -9.724  -5.308   9.933  1.00  0.00
H
ATOM   2834  N   PRO   170      -9.039  -6.007  12.670  1.00  0.00
N
ATOM   2835  CA  PRO   170      -8.576  -7.384  12.439  1.00  0.00
C
ATOM   2836  HA  PRO   170      -7.498  -7.413  12.280  1.00  0.00
H
ATOM   2837  C   PRO   170      -9.321  -8.149  11.327  1.00  0.00
C
ATOM   2838  O   PRO   170     -10.282  -7.651  10.745  1.00  0.00
O
ATOM   2839  CB  PRO   170      -8.929  -8.038  13.773  1.00  0.00
C
ATOM   2840 1HB  PRO   170      -8.991  -9.121  13.697  1.00  0.00
H
ATOM   2841 2HB  PRO   170      -8.203  -7.753  14.531  1.00  0.00
H
ATOM   2842  CG  PRO   170     -10.261  -7.459  14.071  1.00  0.00
C
ATOM   2843 1HG  PRO   170     -11.031  -8.016  13.537  1.00  0.00
H
ATOM   2844 2HG  PRO   170     -10.455  -7.478  15.142  1.00  0.00
H
ATOM   2845  CD  PRO   170     -10.218  -6.040  13.561  1.00  0.00
C
ATOM   2846 1HD  PRO   170     -11.124  -5.813  13.004  1.00  0.00
H
ATOM   2847 2HD  PRO   170     -10.086  -5.347  14.387  1.00  0.00
H
ATOM   2848  N   LYS   171      -8.967  -9.412  11.112  1.00  0.00
N
ATOM   2849  H   LYS   171      -8.142  -9.785  11.575  1.00  0.00
H
ATOM   2850  CA  LYS   171      -9.810 -10.348  10.356  1.00  0.00
C
ATOM   2851  HA  LYS   171     -10.468  -9.789   9.692  1.00  0.00
H
ATOM   2852  C   LYS   171     -10.673 -11.109  11.366  1.00  0.00
C
ATOM   2853  O   LYS   171     -10.294 -11.183  12.542  1.00  0.00
O
ATOM   2854  CB  LYS   171      -8.931 -11.293   9.517  1.00  0.00
C
ATOM   2855 1HB  LYS   171      -8.223 -10.681   8.959  1.00  0.00
H
ATOM   2856 2HB  LYS   171      -8.365 -11.944  10.185  1.00  0.00
H
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ATOM   2857  CG  LYS   171      -9.705 -12.155   8.514  1.00  0.00
C
ATOM   2858 1HG  LYS   171     -10.346 -12.845   9.059  1.00  0.00
H
ATOM   2859 2HG  LYS   171     -10.328 -11.502   7.909  1.00  0.00
H
ATOM   2860  CD  LYS   171      -8.817 -12.966   7.592  1.00  0.00
C
ATOM   2861 1HD  LYS   171      -8.200 -12.298   6.991  1.00  0.00
H
ATOM   2862 2HD  LYS   171      -8.169 -13.598   8.197  1.00  0.00
H
ATOM   2863  CE  LYS   171      -9.659 -13.859   6.675  1.00  0.00
C
ATOM   2864 1HE  LYS   171      -8.985 -14.526   6.135  1.00  0.00
H
ATOM   2865 2HE  LYS   171     -10.316 -14.475   7.291  1.00  0.00
H
ATOM   2866  NZ  LYS   171     -10.491 -13.111   5.667  1.00  0.00
N
ATOM   2867 1HZ  LYS   171     -11.012 -13.764   5.091  1.00  0.00
H
ATOM   2868 2HZ  LYS   171      -9.885 -12.571   5.064  1.00  0.00
H
ATOM   2869 3HZ  LYS   171     -11.142 -12.484   6.129  1.00  0.00
H
ATOM   2870  N   HIS   172     -11.781 -11.671  10.889  1.00  0.00
N
ATOM   2871  H   HIS   172     -12.010 -11.466   9.925  1.00  0.00
H
ATOM   2872  CA  HIS   172     -12.772 -12.489  11.612  1.00  0.00
C
ATOM   2873  HA  HIS   172     -13.379 -13.003  10.868  1.00  0.00
H
ATOM   2874  C   HIS   172     -13.702 -11.537  12.345  1.00  0.00
C
ATOM   2875  O   HIS   172     -14.178 -10.619  11.651  1.00  0.00
O
ATOM   2876  OXT HIS   172     -13.952 -11.672  13.563  1.00  0.00
O
ATOM   2877  CB  HIS   172     -12.182 -13.560  12.544  1.00  0.00
C
ATOM   2878 1HB  HIS   172     -11.680 -13.068  13.375  1.00  0.00
H
ATOM   2879 2HB  HIS   172     -12.998 -14.152  12.958  1.00  0.00
H
ATOM   2880  CG  HIS   172     -11.207 -14.480  11.878  1.00  0.00
C
ATOM   2881  ND1 HIS   172     -11.561 -15.704  11.323  1.00  0.00
N
ATOM   2882  HD1 HIS   172     -12.509 -16.087  11.299  1.00  0.00
H
ATOM   2883  CD2 HIS   172      -9.860 -14.410  11.730  1.00  0.00
C
ATOM   2884  HD2 HIS   172      -9.228 -13.600  12.074  1.00  0.00
H
ATOM   2885  CE1 HIS   172     -10.473 -16.310  10.871  1.00  0.00
C
ATOM   2886  HE1 HIS   172     -10.447 -17.295  10.411  1.00  0.00
H
```

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ATOM   2887  NE2 HIS   172      -9.434 -15.540  11.094  1.00  0.00
N
ATOM   2888  HE2 HIS   172      -8.459 -15.748  10.852  1.00  0.00
H
TER    2889      HIS   172
END
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REMARK YASARA
REMARK YASARA Written on:        Wed Oct 05 10:22:29 2016
REMARK YASARA Number of models: 1
REMARK YASARA Number of atoms:   2995
REMARK YASARA Please address questions or suggestions to:
Eliza@yasara.org
REMARK YASARA
SEQRES   1    181  MET ASP ASN PHE ILE ASP ILE PHE SER LYS ILE ASP LYS
SEQRES   2    181  ASN TYR ASP ASP VAL ILE THR LYS GLU GLU LEU GLU LYS
SEQRES   3    181  PHE THR ARG GLU ASN HIS LEU ASP LYS GLN MET VAL ASN
SEQRES   4    181  ARG TRP LEU ASP LEU PHE SER GLU GLU THR SER ASN TYR
SEQRES   5    181  ILE THR LEU GLN ARG PHE LEU SER VAL LEU GLY ILE ALA
SEQRES   6    181  LYS GLU GLN TYR GLU ILE ILE ARG ARG ASN THR THR GLN
SEQRES   7    181  GLN ASN ALA ALA LEU PHE LYS LEU GLY SER ASP ILE GLU
SEQRES   8    181  TYR ILE SER GLY ASP MET MET LEU SER GLN GLN ILE ASN
SEQRES   9    181  VAL THR ASN GLU ALA ARG LYS LEU TYR GLN GLU TYR LYS
SEQRES  10    181  SER GLU ASN LYS LEU LEU ILE ALA THR LYS LEU LYS GLU
SEQRES  11    181  PHE LEU ASP LYS THR PHE GLY ARG ALA TRP HIS VAL THR
SEQRES  12    181  VAL VAL ASP GLY SER PHE ALA SER ALA HIS THR GLU GLU
SEQRES  13    181  VAL ASN THR SER PHE HIS PHE LYS MET LYS ASN LEU CYS
SEQRES  14    181  PHE ILE ILE TRP LYS THR PRO ASP CYS ARG ASN GLU
ATOM      1  N   MET     1      10.499  -7.042  12.106  1.00  0.00
N
ATOM      2 1H   MET     1      10.921  -7.918  11.827  1.00  0.00
H
ATOM      3 2H   MET     1       9.525  -7.197  12.329  1.00  0.00
H
ATOM      4 3H   MET     1      10.976  -6.688  12.925  1.00  0.00
H
ATOM      5  CA  MET     1      10.614  -6.057  10.995  1.00  0.00
C
ATOM      6  HA  MET     1      11.669  -5.922  10.773  1.00  0.00
H
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ATOM      7  C   MET     1      10.059  -4.704  11.403  1.00  0.00
C
ATOM      8  O   MET     1      10.810  -3.742  11.503  1.00  0.00
O
ATOM      9  CB  MET     1       9.912  -6.571   9.732  1.00  0.00
C
ATOM     10 1HB  MET     1      10.415  -7.480   9.406  1.00  0.00
H
ATOM     11 2HB  MET     1       8.885  -6.827   9.987  1.00  0.00
H
ATOM     12  CG  MET     1       9.868  -5.587   8.561  1.00  0.00
C
ATOM     13 1HG  MET     1       9.308  -6.044   7.747  1.00  0.00
H
ATOM     14 2HG  MET     1       9.327  -4.696   8.880  1.00  0.00
H
ATOM     15  SD  MET     1      11.470  -5.066   7.923  1.00  0.00
S
ATOM     16  CE  MET     1      11.960  -6.469   6.924  1.00  0.00
C
ATOM     17 1HE  MET     1      12.926  -6.269   6.460  1.00  0.00
H
ATOM     18 2HE  MET     1      11.219  -6.644   6.143  1.00  0.00
H
ATOM     19 3HE  MET     1      12.040  -7.357   7.549  1.00  0.00
H
ATOM     20  N   ASP     2       8.754  -4.580  11.609  1.00  0.00
N
ATOM     21  H   ASP     2       8.141  -5.393  11.597  1.00  0.00
H
ATOM     22  CA  ASP     2       8.146  -3.259  11.786  1.00  0.00
C
ATOM     23  HA  ASP     2       8.445  -2.628  10.949  1.00  0.00
H
ATOM     24  C   ASP     2       8.593  -2.556  13.057  1.00  0.00
C
ATOM     25  O   ASP     2       8.723  -1.332  13.066  1.00  0.00
O
ATOM     26  CB  ASP     2       6.624  -3.365  11.776  1.00  0.00
C
ATOM     27 1HB  ASP     2       6.316  -4.101  12.516  1.00  0.00
H
ATOM     28 2HB  ASP     2       6.201  -2.398  12.048  1.00  0.00
H
ATOM     29  CG  ASP     2       6.090  -3.759  10.419  1.00  0.00
C
ATOM     30  OD1 ASP     2       6.463  -3.120   9.415  1.00  0.00
O
ATOM     31  OD2 ASP     2       5.309  -4.731  10.321  1.00  0.00
O
ATOM     32  N   ASN     3       8.916  -3.311  14.099  1.00  0.00
N
ATOM     33  H   ASN     3       8.791  -4.318  14.063  1.00  0.00
H
ATOM     34  CA  ASN     3       9.450  -2.695  15.311  1.00  0.00
C
ATOM     35  HA  ASN     3       8.752  -1.935  15.664  1.00  0.00
H
ATOM     36  C   ASN     3      10.766  -2.008  15.008  1.00  0.00
C
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ATOM     37  O   ASN     3      11.028  -0.942  15.537  1.00  0.00
O
ATOM     38  CB  ASN     3       9.714  -3.714  16.422  1.00  0.00
C
ATOM     39 1HB  ASN     3      10.265  -4.559  16.014  1.00  0.00
H
ATOM     40 2HB  ASN     3      10.324  -3.241  17.191  1.00  0.00
H
ATOM     41  CG  ASN     3       8.460  -4.211  17.072  1.00  0.00
C
ATOM     42  OD1 ASN     3       7.416  -3.571  17.031  1.00  0.00
O
ATOM     43  ND2 ASN     3       8.545  -5.348  17.693  1.00  0.00
N
ATOM     44 1HD2 ASN     3       7.723  -5.701  18.167  1.00  0.00
H
ATOM     45 2HD2 ASN     3       9.418  -5.849  17.723  1.00  0.00
H
ATOM     46  N   PHE     4      11.588  -2.583  14.142  1.00  0.00
N
ATOM     47  H   PHE     4      11.337  -3.449  13.687  1.00  0.00
H
ATOM     48  CA  PHE     4      12.862  -1.953  13.827  1.00  0.00
C
ATOM     49  HA  PHE     4      13.267  -1.564  14.753  1.00  0.00
H
ATOM     50  C   PHE     4      12.687  -0.759  12.899  1.00  0.00
C
ATOM     51  O   PHE     4      13.449   0.184  12.974  1.00  0.00
O
ATOM     52  CB  PHE     4      13.887  -2.963  13.318  1.00  0.00
C
ATOM     53 1HB  PHE     4      13.413  -3.941  13.255  1.00  0.00
H
ATOM     54 2HB  PHE     4      14.211  -2.673  12.319  1.00  0.00
H
ATOM     55  CG  PHE     4      15.094  -3.068  14.221  1.00  0.00
C
ATOM     56  CD1 PHE     4      14.945  -3.432  15.573  1.00  0.00
C
ATOM     57  HD1 PHE     4      13.966  -3.677  15.961  1.00  0.00
H
ATOM     58  CD2 PHE     4      16.378  -2.767  13.741  1.00  0.00
C
ATOM     59  HD2 PHE     4      16.514  -2.526  12.701  1.00  0.00
H
ATOM     60  CE1 PHE     4      16.065  -3.472  16.442  1.00  0.00
C
ATOM     61  HE1 PHE     4      15.937  -3.762  17.470  1.00  0.00
H
ATOM     62  CE2 PHE     4      17.509  -2.792  14.600  1.00  0.00
C
ATOM     63  HE2 PHE     4      18.489  -2.548  14.214  1.00  0.00
H
ATOM     64  CZ  PHE     4      17.350  -3.144  15.955  1.00  0.00
C
ATOM     65  HZ  PHE     4      18.207  -3.172  16.613  1.00  0.00
H
ATOM     66  N   ILE     5      11.627  -0.727  12.107  1.00  0.00
N
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ATOM     67  H   ILE     5      11.021  -1.536  12.054  1.00  0.00
H
ATOM     68  CA  ILE     5      11.301   0.466  11.316  1.00  0.00
C
ATOM     69  HA  ILE     5      12.190   0.789  10.783  1.00  0.00
H
ATOM     70  C   ILE     5      10.897   1.614  12.250  1.00  0.00
C
ATOM     71  O   ILE     5      11.340   2.759  12.090  1.00  0.00
O
ATOM     72  CB  ILE     5      10.198   0.151  10.263  1.00  0.00
C
ATOM     73  HB  ILE     5       9.346  -0.296  10.773  1.00  0.00
H
ATOM     74  CG1 ILE     5      10.762  -0.868   9.250  1.00  0.00
C
ATOM     75 1HG1 ILE     5      11.553  -0.384   8.678  1.00  0.00
H
ATOM     76 2HG1 ILE     5      11.209  -1.700   9.791  1.00  0.00
H
ATOM     77  CG2 ILE     5       9.707   1.439   9.560  1.00  0.00
C
ATOM     78 1HG2 ILE     5       8.967   1.200   8.797  1.00  0.00
H
ATOM     79 2HG2 ILE     5      10.546   1.964   9.101  1.00  0.00
H
ATOM     80 3HG2 ILE     5       9.233   2.102  10.284  1.00  0.00
H
ATOM     81  CD1 ILE     5       9.753  -1.458   8.270  1.00  0.00
C
ATOM     82 1HD1 ILE     5      10.243  -2.221   7.668  1.00  0.00
H
ATOM     83 2HD1 ILE     5       9.370  -0.684   7.607  1.00  0.00
H
ATOM     84 3HD1 ILE     5       8.925  -1.912   8.816  1.00  0.00
H
ATOM     85  N   ASP     6      10.116   1.309  13.277  1.00  0.00
N
ATOM     86  H   ASP     6       9.768   0.361  13.384  1.00  0.00
H
ATOM     87  CA  ASP     6       9.755   2.318  14.276  1.00  0.00
C
ATOM     88  HA  ASP     6       9.304   3.178  13.780  1.00  0.00
H
ATOM     89  C   ASP     6      11.011   2.775  15.011  1.00  0.00
C
ATOM     90  O   ASP     6      11.210   3.950  15.299  1.00  0.00
O
ATOM     91  CB  ASP     6       8.764   1.745  15.289  1.00  0.00
C
ATOM     92 1HB  ASP     6       7.936   1.284  14.753  1.00  0.00
H
ATOM     93 2HB  ASP     6       9.261   0.982  15.884  1.00  0.00
H
ATOM     94  CG  ASP     6       8.213   2.806  16.220  1.00  0.00
C
ATOM     95  OD1 ASP     6       7.751   3.863  15.737  1.00  0.00
O
ATOM     96  OD2 ASP     6       8.175   2.591  17.454  1.00  0.00
O
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ATOM     97  N   ILE     7      11.907   1.835  15.254  1.00  0.00
N
ATOM     98  H   ILE     7      11.690   0.870  15.023  1.00  0.00
H
ATOM     99  CA  ILE     7      13.185   2.132  15.882  1.00  0.00
C
ATOM    100  HA  ILE     7      12.977   2.722  16.774  1.00  0.00
H
ATOM    101  C   ILE     7      14.074   3.008  14.998  1.00  0.00
C
ATOM    102  O   ILE     7      14.694   3.929  15.513  1.00  0.00
O
ATOM    103  CB  ILE     7      13.847   0.804  16.350  1.00  0.00
C
ATOM    104  HB  ILE     7      13.277  -0.006  15.920  1.00  0.00
H
ATOM    105  CG1 ILE     7      13.706   0.672  17.872  1.00  0.00
C
ATOM    106 1HG1 ILE     7      14.381  -0.112  18.209  1.00  0.00
H
ATOM    107 2HG1 ILE     7      14.020   1.610  18.321  1.00  0.00
H
ATOM    108  CG2 ILE     7      15.301   0.625  15.863  1.00  0.00
C
ATOM    109 1HG2 ILE     7      15.709  -0.309  16.252  1.00  0.00
H
ATOM    110 2HG2 ILE     7      15.921   1.456  16.199  1.00  0.00
H
ATOM    111 3HG2 ILE     7      15.326   0.570  14.774  1.00  0.00
H
ATOM    112  CD1 ILE     7      12.306   0.345  18.395  1.00  0.00
C
ATOM    113 1HD1 ILE     7      12.327   0.301  19.484  1.00  0.00
H
ATOM    114 2HD1 ILE     7      11.981  -0.621  18.007  1.00  0.00
H
ATOM    115 3HD1 ILE     7      11.596   1.114  18.088  1.00  0.00
H
ATOM    116  N   PHE     8      14.095   2.843  13.680  1.00  0.00
N
ATOM    117  H   PHE     8      13.579   2.073  13.258  1.00  0.00
H
ATOM    118  CA  PHE     8      14.907   3.720  12.829  1.00  0.00
C
ATOM    119  HA  PHE     8      15.930   3.728  13.205  1.00  0.00
H
ATOM    120  C   PHE     8      14.358   5.134  12.874  1.00  0.00
C
ATOM    121  O   PHE     8      15.101   6.114  12.786  1.00  0.00
O
ATOM    122  CB  PHE     8      14.910   3.293  11.358  1.00  0.00
C
ATOM    123 1HB  PHE     8      13.904   3.428  10.959  1.00  0.00
H
ATOM    124 2HB  PHE     8      15.585   3.946  10.805  1.00  0.00
H
ATOM    125  CG  PHE     8      15.309   1.866  11.121  1.00  0.00
C
ATOM    126  CD1 PHE     8      16.319   1.233  11.869  1.00  0.00
C
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ATOM    127  HD1 PHE     8      16.867   1.777  12.621  1.00  0.00
H
ATOM    128  CD2 PHE     8      14.641   1.137  10.127  1.00  0.00
C
ATOM    129  HD2 PHE     8      13.869   1.615   9.545  1.00  0.00
H
ATOM    130  CE1 PHE     8      16.619  -0.129  11.652  1.00  0.00
C
ATOM    131  HE1 PHE     8      17.382  -0.612  12.243  1.00  0.00
H
ATOM    132  CE2 PHE     8      14.948  -0.216   9.883  1.00  0.00
C
ATOM    133  HE2 PHE     8      14.420  -0.756   9.113  1.00  0.00
H
ATOM    134  CZ  PHE     8      15.932  -0.856  10.655  1.00  0.00
C
ATOM    135  HZ  PHE     8      16.164  -1.896  10.489  1.00  0.00
H
ATOM    136  N   SER     9      13.050   5.240  13.064  1.00  0.00
N
ATOM    137  H   SER     9      12.493   4.395  13.144  1.00  0.00
H
ATOM    138  CA  SER     9      12.387   6.538  13.175  1.00  0.00
C
ATOM    139  HA  SER     9      12.673   7.151  12.323  1.00  0.00
H
ATOM    140  C   SER     9      12.812   7.254  14.453  1.00  0.00
C
ATOM    141  O   SER     9      12.702   8.471  14.556  1.00  0.00
O
ATOM    142  CB  SER     9      10.868   6.364  13.158  1.00  0.00
C
ATOM    143 1HB  SER     9      10.546   5.884  14.079  1.00  0.00
H
ATOM    144 2HB  SER     9      10.395   7.344  13.092  1.00  0.00
H
ATOM    145  OG  SER     9      10.471   5.565  12.054  1.00  0.00
O
ATOM    146  HG  SER     9      10.910   4.703  12.102  1.00  0.00
H
ATOM    147  N   LYS    10      13.325   6.498  15.418  1.00  0.00
N
ATOM    148  H   LYS    10      13.350   5.491  15.288  1.00  0.00
H
ATOM    149  CA  LYS    10      13.840   7.042  16.677  1.00  0.00
C
ATOM    150  HA  LYS    10      13.509   8.072  16.771  1.00  0.00
H
ATOM    151  C   LYS    10      15.357   7.087  16.791  1.00  0.00
C
ATOM    152  O   LYS    10      15.871   7.794  17.643  1.00  0.00
O
ATOM    153  CB  LYS    10      13.257   6.250  17.848  1.00  0.00
C
ATOM    154 1HB  LYS    10      13.572   5.210  17.763  1.00  0.00
H
ATOM    155 2HB  LYS    10      13.665   6.657  18.773  1.00  0.00
H
ATOM    156  CG  LYS    10      11.728   6.295  17.934  1.00  0.00
C
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ATOM    157 1HG  LYS    10      11.296   5.869  17.030  1.00  0.00
H
ATOM    158 2HG  LYS    10      11.412   5.688  18.782  1.00  0.00
H
ATOM    159  CD  LYS    10      11.191   7.714  18.121  1.00  0.00
C
ATOM    160 1HD  LYS    10      11.662   8.162  18.996  1.00  0.00
H
ATOM    161 2HD  LYS    10      11.413   8.322  17.245  1.00  0.00
H
ATOM    162  CE  LYS    10       9.697   7.685  18.323  1.00  0.00
C
ATOM    163 1HE  LYS    10       9.228   7.227  17.451  1.00  0.00
H
ATOM    164 2HE  LYS    10       9.472   7.080  19.202  1.00  0.00
H
ATOM    165  NZ  LYS    10       9.144   9.055  18.523  1.00  0.00
N
ATOM    166 1HZ  LYS    10       8.138   8.999  18.648  1.00  0.00
H
ATOM    167 2HZ  LYS    10       9.341   9.641  17.721  1.00  0.00
H
ATOM    168 3HZ  LYS    10       9.552   9.468  19.355  1.00  0.00
H
ATOM    169  N   ILE    11      16.099   6.393  15.943  1.00  0.00
N
ATOM    170  H   ILE    11      15.661   5.704  15.343  1.00  0.00
H
ATOM    171  CA  ILE    11      17.550   6.603  15.875  1.00  0.00
C
ATOM    172  HA  ILE    11      17.955   6.700  16.881  1.00  0.00
H
ATOM    173  C   ILE    11      17.741   7.923  15.131  1.00  0.00
C
ATOM    174  O   ILE    11      18.546   8.770  15.523  1.00  0.00
O
ATOM    175  CB  ILE    11      18.303   5.456  15.148  1.00  0.00
C
ATOM    176  HB  ILE    11      17.901   5.366  14.141  1.00  0.00
H
ATOM    177  CG1 ILE    11      18.087   4.126  15.886  1.00  0.00
C
ATOM    178 1HG1 ILE    11      18.663   4.145  16.810  1.00  0.00
H
ATOM    179 2HG1 ILE    11      17.042   4.030  16.149  1.00  0.00
H
ATOM    180  CG2 ILE    11      19.828   5.746  15.078  1.00  0.00
C
ATOM    181 1HG2 ILE    11      20.336   4.957  14.520  1.00  0.00
H
ATOM    182 2HG2 ILE    11      20.252   5.789  16.082  1.00  0.00
H
ATOM    183 3HG2 ILE    11      20.012   6.692  14.572  1.00  0.00
H
ATOM    184  CD1 ILE    11      18.464   2.892  15.103  1.00  0.00
C
ATOM    185 1HD1 ILE    11      18.176   2.003  15.662  1.00  0.00
H
ATOM    186 2HD1 ILE    11      19.542   2.868  14.958  1.00  0.00
H
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ATOM    187 3HD1 ILE    11      17.965   2.891  14.136  1.00  0.00
H
ATOM    188  N   ASP    12      16.933   8.133  14.100  1.00  0.00
N
ATOM    189  H   ASP    12      16.280   7.408  13.818  1.00  0.00
H
ATOM    190  CA  ASP    12      16.915   9.395  13.361  1.00  0.00
C
ATOM    191  HA  ASP    12      17.940   9.719  13.177  1.00  0.00
H
ATOM    192  C   ASP    12      16.213  10.486  14.169  1.00  0.00
C
ATOM    193  O   ASP    12      15.027  10.771  13.991  1.00  0.00
O
ATOM    194  CB  ASP    12      16.201   9.229  12.017  1.00  0.00
C
ATOM    195 1HB  ASP    12      16.725   8.491  11.414  1.00  0.00
H
ATOM    196 2HB  ASP    12      15.192   8.863  12.205  1.00  0.00
H
ATOM    197  CG  ASP    12      16.099  10.534  11.248  1.00  0.00
C
ATOM    198  OD1 ASP    12      16.863  11.471  11.542  1.00  0.00
O
ATOM    199  OD2 ASP    12      15.187  10.675  10.403  1.00  0.00
O
ATOM    200  N   LYS    13      16.953  11.134  15.057  1.00  0.00
N
ATOM    201  H   LYS    13      17.913  10.837  15.206  1.00  0.00
H
ATOM    202  CA  LYS    13      16.399  12.232  15.854  1.00  0.00
C
ATOM    203  HA  LYS    13      15.477  11.899  16.327  1.00  0.00
H
ATOM    204  C   LYS    13      16.065  13.415  14.981  1.00  0.00
C
ATOM    205  O   LYS    13      15.273  14.257  15.366  1.00  0.00
O
ATOM    206  CB  LYS    13      17.363  12.708  16.942  1.00  0.00
C
ATOM    207 1HB  LYS    13      18.215  13.187  16.461  1.00  0.00
H
ATOM    208 2HB  LYS    13      16.853  13.455  17.550  1.00  0.00
H
ATOM    209  CG  LYS    13      17.889  11.618  17.851  1.00  0.00
C
ATOM    210 1HG  LYS    13      18.454  10.915  17.244  1.00  0.00
H
ATOM    211 2HG  LYS    13      18.567  12.069  18.575  1.00  0.00
H
ATOM    212  CD  LYS    13      16.807  10.862  18.599  1.00  0.00
C
ATOM    213 1HD  LYS    13      16.203  11.564  19.167  1.00  0.00
H
ATOM    214 2HD  LYS    13      16.166  10.337  17.892  1.00  0.00
H
ATOM    215  CE  LYS    13      17.418   9.855  19.547  1.00  0.00
C
ATOM    216 1HE  LYS    13      18.036  10.378  20.277  1.00  0.00
H
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ATOM    217 2HE  LYS    13      16.614   9.339  20.075  1.00  0.00
H
ATOM    218  NZ  LYS    13      18.255   8.844  18.830  1.00  0.00
N
ATOM    219 1HZ  LYS    13      18.684   8.221  19.507  1.00  0.00
H
ATOM    220 2HZ  LYS    13      18.987   9.304  18.299  1.00  0.00
H
ATOM    221 3HZ  LYS    13      17.665   8.312  18.201  1.00  0.00
H
ATOM    222  N   ASN    14      16.673  13.486  13.808  1.00  0.00
N
ATOM    223  H   ASN    14      17.276  12.732  13.509  1.00  0.00
H
ATOM    224  CA  ASN    14      16.482  14.628  12.929  1.00  0.00
C
ATOM    225  HA  ASN    14      16.641  15.540  13.502  1.00  0.00
H
ATOM    226  C   ASN    14      15.071  14.624  12.354  1.00  0.00
C
ATOM    227  O   ASN    14      14.572  15.667  11.928  1.00  0.00
O
ATOM    228  CB  ASN    14      17.455  14.583  11.743  1.00  0.00
C
ATOM    229 1HB  ASN    14      17.112  13.834  11.036  1.00  0.00
H
ATOM    230 2HB  ASN    14      17.449  15.541  11.236  1.00  0.00
H
ATOM    231  CG  ASN    14      18.863  14.229  12.132  1.00  0.00
C
ATOM    232  OD1 ASN    14      19.506  14.876  12.950  1.00  0.00
O
ATOM    233  ND2 ASN    14      19.344  13.152  11.584  1.00  0.00
N
ATOM    234 1HD2 ASN    14      20.303  12.914  11.749  1.00  0.00
H
ATOM    235 2HD2 ASN    14      18.748  12.564  11.008  1.00  0.00
H
ATOM    236  N   TYR    15      14.490  13.427  12.279  1.00  0.00
N
ATOM    237  H   TYR    15      14.960  12.633  12.701  1.00  0.00
H
ATOM    238  CA  TYR    15      13.274  13.146  11.511  1.00  0.00
C
ATOM    239  HA  TYR    15      13.195  12.065  11.406  1.00  0.00
H
ATOM    240  C   TYR    15      13.434  13.706  10.096  1.00  0.00
C
ATOM    241  O   TYR    15      12.547  14.351   9.528  1.00  0.00
O
ATOM    242  CB  TYR    15      12.004  13.611  12.232  1.00  0.00
C
ATOM    243 1HB  TYR    15      12.228  14.476  12.853  1.00  0.00
H
ATOM    244 2HB  TYR    15      11.252  13.897  11.499  1.00  0.00
H
ATOM    245  CG  TYR    15      11.392  12.513  13.073  1.00  0.00
C
ATOM    246  CD1 TYR    15      11.507  12.515  14.474  1.00  0.00
C
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ATOM    247  HD1 TYR    15      12.071  13.294  14.961  1.00  0.00
H
ATOM    248  CD2 TYR    15      10.669  11.470  12.460  1.00  0.00
C
ATOM    249  HD2 TYR    15      10.569  11.446  11.384  1.00  0.00
H
ATOM    250  CE1 TYR    15      10.867  11.510  15.258  1.00  0.00
C
ATOM    251  HE1 TYR    15      10.936  11.533  16.335  1.00  0.00
H
ATOM    252  CE2 TYR    15      10.059  10.451  13.235  1.00  0.00
C
ATOM    253  HE2 TYR    15       9.518   9.654  12.747  1.00  0.00
H
ATOM    254  CZ  TYR    15      10.152  10.487  14.628  1.00  0.00
C
ATOM    255  OH  TYR    15       9.525   9.517  15.371  1.00  0.00
O
ATOM    256  HH  TYR    15       8.994   8.932  14.818  1.00  0.00
H
ATOM    257  N   ASP    16      14.609  13.467   9.531  1.00  0.00
N
ATOM    258  H   ASP    16      15.281  12.889  10.030  1.00  0.00
H
ATOM    259  CA  ASP    16      14.973  13.998   8.215  1.00  0.00
C
ATOM    260  HA  ASP    16      14.132  14.564   7.823  1.00  0.00
H
ATOM    261  C   ASP    16      15.244  12.858   7.244  1.00  0.00
C
ATOM    262  O   ASP    16      15.747  13.059   6.142  1.00  0.00
O
ATOM    263  CB  ASP    16      16.173  14.940   8.321  1.00  0.00
C
ATOM    264 1HB  ASP    16      16.075  15.525   9.235  1.00  0.00
H
ATOM    265 2HB  ASP    16      17.089  14.351   8.377  1.00  0.00
H
ATOM    266  CG  ASP    16      16.255  15.906   7.155  1.00  0.00
C
ATOM    267  OD1 ASP    16      15.218  16.527   6.809  1.00  0.00
O
ATOM    268  OD2 ASP    16      17.354  16.101   6.594  1.00  0.00
O
ATOM    269  N   ASP    17      14.862  11.666   7.683  1.00  0.00
N
ATOM    270  H   ASP    17      14.553  11.587   8.646  1.00  0.00
H
ATOM    271  CA  ASP    17      14.829  10.432   6.891  1.00  0.00
C
ATOM    272  HA  ASP    17      14.382   9.676   7.536  1.00  0.00
H
ATOM    273  C   ASP    17      16.203   9.887   6.511  1.00  0.00
C
ATOM    274  O   ASP    17      16.346   9.064   5.603  1.00  0.00
O
ATOM    275  CB  ASP    17      13.918  10.583   5.667  1.00  0.00
C
ATOM    276 1HB  ASP    17      13.133  11.302   5.901  1.00  0.00
H
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ATOM    277 2HB  ASP    17      14.500  10.968   4.830  1.00  0.00
H
ATOM    278  CG  ASP    17      13.262   9.280   5.269  1.00  0.00
C
ATOM    279  OD1 ASP    17      12.689   8.600   6.153  1.00  0.00
O
ATOM    280  OD2 ASP    17      13.263   8.937   4.063  1.00  0.00
O
ATOM    281  N   VAL    18      17.208  10.325   7.253  1.00  0.00
N
ATOM    282  H   VAL    18      17.029  11.026   7.959  1.00  0.00
H
ATOM    283  CA  VAL    18      18.567   9.799   7.164  1.00  0.00
C
ATOM    284  HA  VAL    18      18.554   8.792   6.750  1.00  0.00
H
ATOM    285  C   VAL    18      19.115   9.732   8.579  1.00  0.00
C
ATOM    286  O   VAL    18      18.906  10.642   9.383  1.00  0.00
O
ATOM    287  CB  VAL    18      19.530  10.684   6.316  1.00  0.00
C
ATOM    288  HB  VAL    18      20.545  10.470   6.642  1.00  0.00
H
ATOM    289  CG1 VAL    18      19.430  10.316   4.839  1.00  0.00
C
ATOM    290 1HG1 VAL    18      20.122  10.926   4.258  1.00  0.00
H
ATOM    291 2HG1 VAL    18      18.414  10.487   4.483  1.00  0.00
H
ATOM    292 3HG1 VAL    18      19.687   9.266   4.702  1.00  0.00
H
ATOM    293  CG2 VAL    18      19.277  12.192   6.503  1.00  0.00
C
ATOM    294 1HG2 VAL    18      20.054  12.756   5.986  1.00  0.00
H
ATOM    295 2HG2 VAL    18      19.312  12.452   7.560  1.00  0.00
H
ATOM    296 3HG2 VAL    18      18.307  12.470   6.094  1.00  0.00
H
ATOM    297  N   ILE    19      19.838   8.668   8.883  1.00  0.00
N
ATOM    298  H   ILE    19      19.963   7.924   8.201  1.00  0.00
H
ATOM    299  CA  ILE    19      20.554   8.580  10.149  1.00  0.00
C
ATOM    300  HA  ILE    19      20.106   9.253  10.879  1.00  0.00
H
ATOM    301  C   ILE    19      21.917   9.128   9.763  1.00  0.00
C
ATOM    302  O   ILE    19      22.611   8.607   8.889  1.00  0.00
O
ATOM    303  CB  ILE    19      20.552   7.147  10.735  1.00  0.00
C
ATOM    304  HB  ILE    19      20.890   6.451   9.968  1.00  0.00
H
ATOM    305  CG1 ILE    19      19.101   6.809  11.137  1.00  0.00
C
ATOM    306 1HG1 ILE    19      18.859   7.385  12.028  1.00  0.00
H
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ATOM    307 2HG1 ILE    19      18.431   7.137  10.344  1.00  0.00
H
ATOM    308  CG2 ILE    19      21.510   7.059  11.950  1.00  0.00
C
ATOM    309 1HG2 ILE    19      21.477   6.056  12.376  1.00  0.00
H
ATOM    310 2HG2 ILE    19      21.219   7.778  12.718  1.00  0.00
H
ATOM    311 3HG2 ILE    19      22.534   7.263  11.634  1.00  0.00
H
ATOM    312  CD1 ILE    19      18.769   5.354  11.410  1.00  0.00
C
ATOM    313 1HD1 ILE    19      17.728   5.275  11.725  1.00  0.00
H
ATOM    314 2HD1 ILE    19      19.410   4.954  12.193  1.00  0.00
H
ATOM    315 3HD1 ILE    19      18.900   4.772  10.500  1.00  0.00
H
ATOM    316  N   THR    20      22.228  10.278  10.332  1.00  0.00
N
ATOM    317  H   THR    20      21.620  10.668  11.033  1.00  0.00
H
ATOM    318  CA  THR    20      23.409  11.039   9.954  1.00  0.00
C
ATOM    319  HA  THR    20      23.636  10.865   8.905  1.00  0.00
H
ATOM    320  C   THR    20      24.574  10.564  10.808  1.00  0.00
C
ATOM    321  O   THR    20      24.352   9.887  11.815  1.00  0.00
O
ATOM    322  CB  THR    20      23.141  12.542  10.179  1.00  0.00
C
ATOM    323  HB  THR    20      24.023  13.120   9.910  1.00  0.00
H
ATOM    324  OG1 THR    20      22.822  12.761  11.556  1.00  0.00
O
ATOM    325  HG1 THR    20      22.683  13.709  11.680  1.00  0.00
H
ATOM    326  CG2 THR    20      21.948  13.020   9.356  1.00  0.00
C
ATOM    327 1HG2 THR    20      21.783  14.083   9.529  1.00  0.00
H
ATOM    328 2HG2 THR    20      21.044  12.478   9.625  1.00  0.00
H
ATOM    329 3HG2 THR    20      22.139  12.869   8.295  1.00  0.00
H
ATOM    330  N   LYS    21      25.809  10.921  10.469  1.00  0.00
N
ATOM    331  H   LYS    21      25.968  11.494   9.649  1.00  0.00
H
ATOM    332  CA  LYS    21      26.958  10.509  11.284  1.00  0.00
C
ATOM    333  HA  LYS    21      26.936   9.424  11.390  1.00  0.00
H
ATOM    334  C   LYS    21      26.843  11.121  12.665  1.00  0.00
C
ATOM    335  O   LYS    21      27.244  10.531  13.663  1.00  0.00
O
ATOM    336  CB  LYS    21      28.291  10.924  10.643  1.00  0.00
C
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ATOM    337 1HB  LYS    21      28.208  10.836   9.559  1.00  0.00
H
ATOM    338 2HB  LYS    21      28.495  11.967  10.887  1.00  0.00
H
ATOM    339  CG  LYS    21      29.458  10.041  11.098  1.00  0.00
C
ATOM    340 1HG  LYS    21      29.174   9.532  12.014  1.00  0.00
H
ATOM    341 2HG  LYS    21      29.630   9.285  10.333  1.00  0.00
H
ATOM    342  CD  LYS    21      30.763  10.789  11.350  1.00  0.00
C
ATOM    343 1HD  LYS    21      31.586  10.150  11.028  1.00  0.00
H
ATOM    344 2HD  LYS    21      30.786  11.697  10.748  1.00  0.00
H
ATOM    345  CE  LYS    21      30.974  11.130  12.838  1.00  0.00
C
ATOM    346 1HE  LYS    21      30.946  10.201  13.411  1.00  0.00
H
ATOM    347 2HE  LYS    21      31.972  11.555  12.948  1.00  0.00
H
ATOM    348  NZ  LYS    21      29.981  12.093  13.436  1.00  0.00
N
ATOM    349 1HZ  LYS    21      30.213  12.277  14.407  1.00  0.00
H
ATOM    350 2HZ  LYS    21      29.053  11.697  13.404  1.00  0.00
H
ATOM    351 3HZ  LYS    21      29.986  12.973  12.923  1.00  0.00
H
ATOM    352  N   GLU    22      26.277  12.313  12.729  1.00  0.00
N
ATOM    353  H   GLU    22      26.021  12.795  11.874  1.00  0.00
H
ATOM    354  CA  GLU    22      26.037  12.945  14.018  1.00  0.00
C
ATOM    355  HA  GLU    22      26.971  12.961  14.578  1.00  0.00
H
ATOM    356  C   GLU    22      25.028  12.196  14.863  1.00  0.00
C
ATOM    357  O   GLU    22      25.229  12.065  16.065  1.00  0.00
O
ATOM    358  CB  GLU    22      25.532  14.372  13.836  1.00  0.00
C
ATOM    359 1HB  GLU    22      24.685  14.367  13.151  1.00  0.00
H
ATOM    360 2HB  GLU    22      25.200  14.749  14.802  1.00  0.00
H
ATOM    361  CG  GLU    22      26.593  15.290  13.307  1.00  0.00
C
ATOM    362 1HG  GLU    22      26.887  14.961  12.312  1.00  0.00
H
ATOM    363 2HG  GLU    22      26.175  16.293  13.235  1.00  0.00
H
ATOM    364  CD  GLU    22      27.821  15.302  14.207  1.00  0.00
C
ATOM    365  OE1 GLU    22      27.724  15.661  15.401  1.00  0.00
O
ATOM    366  OE2 GLU    22      28.897  14.878  13.757  1.00  0.00
O
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ATOM    367  N   GLU    23      23.956  11.690  14.275  1.00  0.00
N
ATOM    368  H   GLU    23      23.805  11.797  13.278  1.00  0.00
H
ATOM    369  CA  GLU    23      22.974  10.983  15.086  1.00  0.00
C
ATOM    370  HA  GLU    23      22.909  11.487  16.047  1.00  0.00
H
ATOM    371  C   GLU    23      23.394   9.575  15.412  1.00  0.00
C
ATOM    372  O   GLU    23      23.028   9.080  16.467  1.00  0.00
O
ATOM    373  CB  GLU    23      21.578  10.981  14.467  1.00  0.00
C
ATOM    374 1HB  GLU    23      21.615  10.579  13.454  1.00  0.00
H
ATOM    375 2HB  GLU    23      20.942  10.336  15.073  1.00  0.00
H
ATOM    376  CG  GLU    23      20.963  12.362  14.451  1.00  0.00
C
ATOM    377 1HG  GLU    23      21.458  12.954  13.685  1.00  0.00
H
ATOM    378 2HG  GLU    23      19.905  12.276  14.200  1.00  0.00
H
ATOM    379  CD  GLU    23      21.121  13.079  15.781  1.00  0.00
C
ATOM    380  OE1 GLU    23      20.772  12.497  16.823  1.00  0.00
O
ATOM    381  OE2 GLU    23      21.652  14.215  15.809  1.00  0.00
O
ATOM    382  N   LEU    24      24.213   8.960  14.576  1.00  0.00
N
ATOM    383  H   LEU    24      24.452   9.391  13.687  1.00  0.00
H
ATOM    384  CA  LEU    24      24.771   7.658  14.914  1.00  0.00
C
ATOM    385  HA  LEU    24      23.952   6.984  15.165  1.00  0.00
H
ATOM    386  C   LEU    24      25.675   7.820  16.143  1.00  0.00
C
ATOM    387  O   LEU    24      25.650   7.015  17.072  1.00  0.00
O
ATOM    388  CB  LEU    24      25.534   7.108  13.701  1.00  0.00
C
ATOM    389 1HB  LEU    24      24.925   7.289  12.816  1.00  0.00
H
ATOM    390 2HB  LEU    24      26.452   7.682  13.590  1.00  0.00
H
ATOM    391  CG  LEU    24      25.886   5.614  13.715  1.00  0.00
C
ATOM    392  HG  LEU    24      26.405   5.385  14.641  1.00  0.00
H
ATOM    393  CD1 LEU    24      24.629   4.747  13.625  1.00  0.00
C
ATOM    394 1HD1 LEU    24      24.910   3.696  13.562  1.00  0.00
H
ATOM    395 2HD1 LEU    24      24.043   5.016  12.747  1.00  0.00
H
ATOM    396 3HD1 LEU    24      24.022   4.873  14.522  1.00  0.00
H
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ATOM    397  CD2 LEU    24      26.810   5.270  12.550  1.00  0.00
C
ATOM    398 1HD2 LEU    24      27.044   4.206  12.571  1.00  0.00
H
ATOM    399 2HD2 LEU    24      27.741   5.827  12.638  1.00  0.00
H
ATOM    400 3HD2 LEU    24      26.330   5.515  11.604  1.00  0.00
H
ATOM    401  N   GLU    25      26.420   8.919  16.185  1.00  0.00
N
ATOM    402  H   GLU    25      26.419   9.548  15.390  1.00  0.00
H
ATOM    403  CA  GLU    25      27.271   9.232  17.335  1.00  0.00
C
ATOM    404  HA  GLU    25      27.902   8.366  17.535  1.00  0.00
H
ATOM    405  C   GLU    25      26.480   9.537  18.609  1.00  0.00
C
ATOM    406  O   GLU    25      26.848   9.079  19.696  1.00  0.00
O
ATOM    407  CB  GLU    25      28.166  10.433  17.002  1.00  0.00
C
ATOM    408 1HB  GLU    25      28.655  10.237  16.052  1.00  0.00
H
ATOM    409 2HB  GLU    25      27.544  11.318  16.887  1.00  0.00
H
ATOM    410  CG  GLU    25      29.238  10.733  18.040  1.00  0.00
C
ATOM    411 1HG  GLU    25      28.759  10.951  18.995  1.00  0.00
H
ATOM    412 2HG  GLU    25      29.868   9.854  18.166  1.00  0.00
H
ATOM    413  CD  GLU    25      30.112  11.912  17.652  1.00  0.00
C
ATOM    414  OE1 GLU    25      30.244  12.243  16.447  1.00  0.00
O
ATOM    415  OE2 GLU    25      30.711  12.518  18.570  1.00  0.00
O
ATOM    416  N   LYS    26      25.404  10.310  18.500  1.00  0.00
N
ATOM    417  H   LYS    26      25.151  10.695  17.593  1.00  0.00
H
ATOM    418  CA  LYS    26      24.593  10.628  19.682  1.00  0.00
C
ATOM    419  HA  LYS    26      25.251  10.935  20.495  1.00  0.00
H
ATOM    420  C   LYS    26      23.821   9.413  20.145  1.00  0.00
C
ATOM    421  O   LYS    26      23.596   9.245  21.339  1.00  0.00
O
ATOM    422  CB  LYS    26      23.569  11.734  19.430  1.00  0.00
C
ATOM    423 1HB  LYS    26      22.941  11.448  18.587  1.00  0.00
H
ATOM    424 2HB  LYS    26      22.941  11.810  20.317  1.00  0.00
H
ATOM    425  CG  LYS    26      24.150  13.097  19.161  1.00  0.00
C
ATOM    426 1HG  LYS    26      24.850  13.368  19.952  1.00  0.00
H
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ATOM    427 2HG  LYS    26      24.668  13.070  18.213  1.00  0.00
H
ATOM    428  CD  LYS    26      23.032  14.119  19.104  1.00  0.00
C
ATOM    429 1HD  LYS    26      22.261  13.767  18.424  1.00  0.00
H
ATOM    430 2HD  LYS    26      22.602  14.215  20.099  1.00  0.00
H
ATOM    431  CE  LYS    26      23.500  15.481  18.642  1.00  0.00
C
ATOM    432 1HE  LYS    26      22.677  16.190  18.743  1.00  0.00
H
ATOM    433 2HE  LYS    26      24.324  15.803  19.277  1.00  0.00
H
ATOM    434  NZ  LYS    26      23.945  15.439  17.216  1.00  0.00
N
ATOM    435 1HZ  LYS    26      24.164  16.374  16.892  1.00  0.00
H
ATOM    436 2HZ  LYS    26      23.203  15.048  16.641  1.00  0.00
H
ATOM    437 3HZ  LYS    26      24.771  14.861  17.139  1.00  0.00
H
ATOM    438  N   PHE    27      23.420   8.556  19.222  1.00  0.00
N
ATOM    439  H   PHE    27      23.610   8.729  18.240  1.00  0.00
H
ATOM    440  CA  PHE    27      22.677   7.363  19.592  1.00  0.00
C
ATOM    441  HA  PHE    27      21.791   7.654  20.156  1.00  0.00
H
ATOM    442  C   PHE    27      23.532   6.490  20.504  1.00  0.00
C
ATOM    443  O   PHE    27      23.052   6.016  21.527  1.00  0.00
O
ATOM    444  CB  PHE    27      22.231   6.564  18.366  1.00  0.00
C
ATOM    445 1HB  PHE    27      21.341   7.028  17.941  1.00  0.00
H
ATOM    446 2HB  PHE    27      23.026   6.588  17.622  1.00  0.00
H
ATOM    447  CG  PHE    27      21.954   5.138  18.695  1.00  0.00
C
ATOM    448  CD1 PHE    27      20.841   4.793  19.477  1.00  0.00
C
ATOM    449  HD1 PHE    27      20.075   5.525  19.679  1.00  0.00
H
ATOM    450  CD2 PHE    27      22.898   4.156  18.369  1.00  0.00
C
ATOM    451  HD2 PHE    27      23.722   4.396  17.711  1.00  0.00
H
ATOM    452  CE1 PHE    27      20.748   3.512  20.055  1.00  0.00
C
ATOM    453  HE1 PHE    27      19.921   3.270  20.704  1.00  0.00
H
ATOM    454  CE2 PHE    27      22.815   2.873  18.930  1.00  0.00
C
ATOM    455  HE2 PHE    27      23.580   2.148  18.713  1.00  0.00
H
ATOM    456  CZ  PHE    27      21.743   2.545  19.777  1.00  0.00
C
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ATOM    457  HZ  PHE    27      21.675   1.555  20.200  1.00  0.00
H
ATOM    458  N   THR    28      24.814   6.331  20.219  1.00  0.00
N
ATOM    459  H   THR    28      25.216   6.726  19.373  1.00  0.00
H
ATOM    460  CA  THR    28      25.673   5.543  21.100  1.00  0.00
C
ATOM    461  HA  THR    28      25.089   4.720  21.508  1.00  0.00
H
ATOM    462  C   THR    28      26.238   6.293  22.305  1.00  0.00
C
ATOM    463  O   THR    28      27.102   5.763  22.972  1.00  0.00
O
ATOM    464  CB  THR    28      26.837   4.916  20.303  1.00  0.00
C
ATOM    465  HB  THR    28      27.602   4.530  20.976  1.00  0.00
H
ATOM    466  OG1 THR    28      27.393   5.891  19.416  1.00  0.00
O
ATOM    467  HG1 THR    28      28.029   6.424  19.909  1.00  0.00
H
ATOM    468  CG2 THR    28      26.337   3.779  19.444  1.00  0.00
C
ATOM    469 1HG2 THR    28      27.188   3.263  19.004  1.00  0.00
H
ATOM    470 2HG2 THR    28      25.711   4.169  18.643  1.00  0.00
H
ATOM    471 3HG2 THR    28      25.767   3.074  20.047  1.00  0.00
H
ATOM    472  N   ARG    29      25.779   7.498  22.625  1.00  0.00
N
ATOM    473  H   ARG    29      25.002   7.886  22.103  1.00  0.00
H
ATOM    474  CA  ARG    29      26.388   8.303  23.701  1.00  0.00
C
ATOM    475  HA  ARG    29      27.411   8.512  23.399  1.00  0.00
H
ATOM    476  C   ARG    29      26.490   7.658  25.089  1.00  0.00
C
ATOM    477  O   ARG    29      27.463   7.907  25.802  1.00  0.00
O
ATOM    478  CB  ARG    29      25.629   9.631  23.806  1.00  0.00
C
ATOM    479 1HB  ARG    29      25.533  10.042  22.802  1.00  0.00
H
ATOM    480 2HB  ARG    29      24.630   9.420  24.186  1.00  0.00
H
ATOM    481  CG  ARG    29      26.272  10.705  24.681  1.00  0.00
C
ATOM    482 1HG  ARG    29      26.381  10.333  25.699  1.00  0.00
H
ATOM    483 2HG  ARG    29      27.257  10.944  24.283  1.00  0.00
H
ATOM    484  CD  ARG    29      25.427  11.975  24.707  1.00  0.00
C
ATOM    485 1HD  ARG    29      25.996  12.767  25.195  1.00  0.00
H
ATOM    486 2HD  ARG    29      25.229  12.285  23.679  1.00  0.00
H
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ATOM    487  NE  ARG    29      24.147  11.791  25.409  1.00  0.00
N
ATOM    488  HE  ARG    29      23.338  11.575  24.845  1.00  0.00
H
ATOM    489  CZ  ARG    29      23.939  11.893  26.717  1.00  0.00
C
ATOM    490  NH1 ARG    29      24.876  12.155  27.589  1.00  0.00
N
ATOM    491 1HH1 ARG    29      25.819  12.326  27.275  1.00  0.00
H
ATOM    492 2HH1 ARG    29      24.642  12.192  28.572  1.00  0.00
H
ATOM    493  NH2 ARG    29      22.736  11.717  27.167  1.00  0.00
N
ATOM    494 1HH2 ARG    29      21.989  11.483  26.523  1.00  0.00
H
ATOM    495 2HH2 ARG    29      22.544  11.785  28.153  1.00  0.00
H
ATOM    496  N   GLU    30      25.544   6.823  25.491  1.00  0.00
N
ATOM    497  H   GLU    30      24.743   6.641  24.888  1.00  0.00
H
ATOM    498  CA  GLU    30      25.618   6.147  26.791  1.00  0.00
C
ATOM    499  HA  GLU    30      25.729   6.889  27.581  1.00  0.00
H
ATOM    500  C   GLU    30      26.826   5.210  26.857  1.00  0.00
C
ATOM    501  O   GLU    30      27.488   5.101  27.891  1.00  0.00
O
ATOM    502  CB  GLU    30      24.339   5.348  27.048  1.00  0.00
C
ATOM    503 1HB  GLU    30      24.116   4.761  26.157  1.00  0.00
H
ATOM    504 2HB  GLU    30      24.520   4.664  27.875  1.00  0.00
H
ATOM    505  CG  GLU    30      23.133   6.217  27.402  1.00  0.00
C
ATOM    506 1HG  GLU    30      23.360   6.772  28.312  1.00  0.00
H
ATOM    507 2HG  GLU    30      22.958   6.938  26.605  1.00  0.00
H
ATOM    508  CD  GLU    30      21.857   5.414  27.618  1.00  0.00
C
ATOM    509  OE1 GLU    30      21.752   4.243  27.184  1.00  0.00
O
ATOM    510  OE2 GLU    30      20.904   5.964  28.222  1.00  0.00
O
ATOM    511  N   ASN    31      27.166   4.589  25.739  1.00  0.00
N
ATOM    512  H   ASN    31      26.596   4.720  24.906  1.00  0.00
H
ATOM    513  CA  ASN    31      28.367   3.765  25.611  1.00  0.00
C
ATOM    514  HA  ASN    31      28.955   3.804  26.528  1.00  0.00
H
ATOM    515  C   ASN    31      29.197   4.372  24.481  1.00  0.00
C
ATOM    516  O   ASN    31      29.359   3.768  23.418  1.00  0.00
O
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ATOM    517  CB  ASN    31      27.990   2.310  25.318  1.00  0.00
C
ATOM    518 1HB  ASN    31      27.338   1.946  26.110  1.00  0.00
H
ATOM    519 2HB  ASN    31      27.446   2.263  24.378  1.00  0.00
H
ATOM    520  CG  ASN    31      29.198   1.413  25.226  1.00  0.00
C
ATOM    521  OD1 ASN    31      30.202   1.646  25.886  1.00  0.00
O
ATOM    522  ND2 ASN    31      29.130   0.401  24.410  1.00  0.00
N
ATOM    523 1HD2 ASN    31      29.918  -0.221  24.341  1.00  0.00
H
ATOM    524 2HD2 ASN    31      28.314   0.269  23.834  1.00  0.00
H
ATOM    525  N   HIS    32      29.629   5.612  24.694  1.00  0.00
N
ATOM    526  H   HIS    32      29.554   6.001  25.627  1.00  0.00
H
ATOM    527  CA  HIS    32      30.124   6.477  23.618  1.00  0.00
C
ATOM    528  HA  HIS    32      29.304   6.643  22.922  1.00  0.00
H
ATOM    529  C   HIS    32      31.257   5.834  22.840  1.00  0.00
C
ATOM    530  O   HIS    32      32.165   5.238  23.426  1.00  0.00
O
ATOM    531  CB  HIS    32      30.556   7.830  24.194  1.00  0.00
C
ATOM    532 1HB  HIS    32      29.823   8.136  24.937  1.00  0.00
H
ATOM    533 2HB  HIS    32      31.517   7.710  24.693  1.00  0.00
H
ATOM    534  CG  HIS    32      30.652   8.925  23.174  1.00  0.00
C
ATOM    535  ND1 HIS    32      31.778   9.165  22.394  1.00  0.00
N
ATOM    536  HD1 HIS    32      32.652   8.637  22.432  1.00  0.00
H
ATOM    537  CD2 HIS    32      29.765   9.884  22.803  1.00  0.00
C
ATOM    538  HD2 HIS    32      28.774  10.017  23.212  1.00  0.00
H
ATOM    539  CE1 HIS    32      31.537  10.184  21.581  1.00  0.00
C
ATOM    540  HE1 HIS    32      32.231  10.577  20.843  1.00  0.00
H
ATOM    541  NE2 HIS    32      30.333  10.645  21.822  1.00  0.00
N
ATOM    542  HE2 HIS    32      29.894  11.452  21.365  1.00  0.00
H
ATOM    543  N   LEU    33      31.202   5.969  21.526  1.00  0.00
N
ATOM    544  H   LEU    33      30.442   6.499  21.115  1.00  0.00
H
ATOM    545  CA  LEU    33      32.202   5.403  20.630  1.00  0.00
C
ATOM    546  HA  LEU    33      32.939   4.837  21.199  1.00  0.00
H
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ATOM    547  C   LEU    33      32.896   6.579  19.972  1.00  0.00
C
ATOM    548  O   LEU    33      32.303   7.648  19.816  1.00  0.00
O
ATOM    549  CB  LEU    33      31.542   4.481  19.600  1.00  0.00
C
ATOM    550 1HB  LEU    33      30.846   5.075  19.007  1.00  0.00
H
ATOM    551 2HB  LEU    33      32.316   4.106  18.933  1.00  0.00
H
ATOM    552  CG  LEU    33      30.774   3.275  20.168  1.00  0.00
C
ATOM    553  HG  LEU    33      29.970   3.647  20.800  1.00  0.00
H
ATOM    554  CD1 LEU    33      30.147   2.488  19.038  1.00  0.00
C
ATOM    555 1HD1 LEU    33      29.570   1.657  19.440  1.00  0.00
H
ATOM    556 2HD1 LEU    33      30.915   2.105  18.365  1.00  0.00
H
ATOM    557 3HD1 LEU    33      29.471   3.134  18.478  1.00  0.00
H
ATOM    558  CD2 LEU    33      31.644   2.335  21.007  1.00  0.00
C
ATOM    559 1HD2 LEU    33      31.046   1.487  21.339  1.00  0.00
H
ATOM    560 2HD2 LEU    33      32.007   2.856  21.892  1.00  0.00
H
ATOM    561 3HD2 LEU    33      32.485   1.978  20.417  1.00  0.00
H
ATOM    562  N   ASP    34      34.169   6.406  19.663  1.00  0.00
N
ATOM    563  H   ASP    34      34.585   5.495  19.773  1.00  0.00
H
ATOM    564  CA  ASP    34      35.000   7.515  19.196  1.00  0.00
C
ATOM    565  HA  ASP    34      34.913   8.347  19.894  1.00  0.00
H
ATOM    566  C   ASP    34      34.556   7.992  17.819  1.00  0.00
C
ATOM    567  O   ASP    34      33.983   7.216  17.061  1.00  0.00
O
ATOM    568  CB  ASP    34      36.466   7.086  19.099  1.00  0.00
C
ATOM    569 1HB  ASP    34      36.527   6.153  18.542  1.00  0.00
H
ATOM    570 2HB  ASP    34      37.015   7.850  18.552  1.00  0.00
H
ATOM    571  CG  ASP    34      37.127   6.908  20.457  1.00  0.00
C
ATOM    572  OD1 ASP    34      36.540   7.262  21.501  1.00  0.00
O
ATOM    573  OD2 ASP    34      38.280   6.413  20.491  1.00  0.00
O
ATOM    574  N   LYS    35      34.887   9.225  17.452  1.00  0.00
N
ATOM    575  H   LYS    35      35.399   9.808  18.117  1.00  0.00
H
ATOM    576  CA  LYS    35      34.521   9.789  16.139  1.00  0.00
C
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ATOM    577  HA  LYS    35      33.441   9.929  16.096  1.00  0.00
H
ATOM    578  C   LYS    35      34.930   8.880  14.989  1.00  0.00
C
ATOM    579  O   LYS    35      34.186   8.665  14.036  1.00  0.00
O
ATOM    580  CB  LYS    35      35.244  11.121  15.912  1.00  0.00
C
ATOM    581 1HB  LYS    35      36.312  10.918  15.900  1.00  0.00
H
ATOM    582 2HB  LYS    35      34.972  11.496  14.927  1.00  0.00
H
ATOM    583  CG  LYS    35      35.017  12.221  16.932  1.00  0.00
C
ATOM    584 1HG  LYS    35      35.178  11.839  17.933  1.00  0.00
H
ATOM    585 2HG  LYS    35      35.755  12.998  16.753  1.00  0.00
H
ATOM    586  CD  LYS    35      33.653  12.851  16.862  1.00  0.00
C
ATOM    587 1HD  LYS    35      33.451  13.174  15.842  1.00  0.00
H
ATOM    588 2HD  LYS    35      32.899  12.131  17.173  1.00  0.00
H
ATOM    589  CE  LYS    35      33.639  14.054  17.786  1.00  0.00
C
ATOM    590 1HE  LYS    35      33.855  13.721  18.803  1.00  0.00
H
ATOM    591 2HE  LYS    35      34.425  14.747  17.483  1.00  0.00
H
ATOM    592  NZ  LYS    35      32.329  14.765  17.769  1.00  0.00
N
ATOM    593 1HZ  LYS    35      32.347  15.537  18.421  1.00  0.00
H
ATOM    594 2HZ  LYS    35      31.592  14.119  18.036  1.00  0.00
H
ATOM    595 3HZ  LYS    35      32.124  15.109  16.838  1.00  0.00
H
ATOM    596  N   GLN    36      36.125   8.325  15.118  1.00  0.00
N
ATOM    597  H   GLN    36      36.677   8.571  15.921  1.00  0.00
H
ATOM    598  CA  GLN    36      36.674   7.388  14.146  1.00  0.00
C
ATOM    599  HA  GLN    36      36.697   7.863  13.164  1.00  0.00
H
ATOM    600  C   GLN    36      35.834   6.115  14.049  1.00  0.00
C
ATOM    601  O   GLN    36      35.593   5.622  12.957  1.00  0.00
O
ATOM    602  CB  GLN    36      38.099   7.039  14.576  1.00  0.00
C
ATOM    603 1HB  GLN    36      38.649   7.970  14.712  1.00  0.00
H
ATOM    604 2HB  GLN    36      38.046   6.532  15.539  1.00  0.00
H
ATOM    605  CG  GLN    36      38.887   6.161  13.613  1.00  0.00
C
ATOM    606 1HG  GLN    36      38.312   5.263  13.389  1.00  0.00
H
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ATOM    607 2HG  GLN    36      39.068   6.705  12.686  1.00  0.00
H
ATOM    608  CD  GLN    36      40.208   5.738  14.213  1.00  0.00
C
ATOM    609  OE1 GLN    36      41.260   6.291  13.920  1.00  0.00
O
ATOM    610  NE2 GLN    36      40.164   4.776  15.088  1.00  0.00
N
ATOM    611 1HE2 GLN    36      41.019   4.493  15.539  1.00  0.00
H
ATOM    612 2HE2 GLN    36      39.294   4.324  15.308  1.00  0.00
H
ATOM    613  N   MET    37      35.359   5.589  15.171  1.00  0.00
N
ATOM    614  H   MET    37      35.498   6.059  16.054  1.00  0.00
H
ATOM    615  CA  MET    37      34.571   4.356  15.151  1.00  0.00
C
ATOM    616  HA  MET    37      35.096   3.600  14.566  1.00  0.00
H
ATOM    617  C   MET    37      33.226   4.629  14.502  1.00  0.00
C
ATOM    618  O   MET    37      32.753   3.834  13.700  1.00  0.00
O
ATOM    619  CB  MET    37      34.309   3.818  16.558  1.00  0.00
C
ATOM    620 1HB  MET    37      33.799   4.581  17.142  1.00  0.00
H
ATOM    621 2HB  MET    37      33.644   2.960  16.467  1.00  0.00
H
ATOM    622  CG  MET    37      35.559   3.391  17.308  1.00  0.00
C
ATOM    623 1HG  MET    37      36.097   2.658  16.710  1.00  0.00
H
ATOM    624 2HG  MET    37      36.201   4.258  17.458  1.00  0.00
H
ATOM    625  SD  MET    37      35.164   2.659  18.913  1.00  0.00
S
ATOM    626  CE  MET    37      34.521   1.015  18.411  1.00  0.00
C
ATOM    627 1HE  MET    37      34.315   0.411  19.295  1.00  0.00
H
ATOM    628 2HE  MET    37      35.260   0.502  17.793  1.00  0.00
H
ATOM    629 3HE  MET    37      33.598   1.134  17.842  1.00  0.00
H
ATOM    630  N   VAL    38      32.643   5.781  14.799  1.00  0.00
N
ATOM    631  H   VAL    38      33.069   6.404  15.479  1.00  0.00
H
ATOM    632  CA  VAL    38      31.357   6.141  14.210  1.00  0.00
C
ATOM    633  HA  VAL    38      30.668   5.311  14.361  1.00  0.00
H
ATOM    634  C   VAL    38      31.528   6.325  12.707  1.00  0.00
C
ATOM    635  O   VAL    38      30.709   5.855  11.928  1.00  0.00
O
ATOM    636  CB  VAL    38      30.746   7.400  14.881  1.00  0.00
C
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ATOM    637  HB  VAL    38      31.404   8.250  14.703  1.00  0.00
H
ATOM    638  CG1 VAL    38      29.365   7.704  14.306  1.00  0.00
C
ATOM    639 1HG1 VAL    38      29.010   8.660  14.677  1.00  0.00
H
ATOM    640 2HG1 VAL    38      28.662   6.923  14.602  1.00  0.00
H
ATOM    641 3HG1 VAL    38      29.401   7.746  13.220  1.00  0.00
H
ATOM    642  CG2 VAL    38      30.601   7.198  16.401  1.00  0.00
C
ATOM    643 1HG2 VAL    38      30.182   8.091  16.850  1.00  0.00
H
ATOM    644 2HG2 VAL    38      31.566   7.009  16.862  1.00  0.00
H
ATOM    645 3HG2 VAL    38      29.944   6.350  16.606  1.00  0.00
H
ATOM    646  N   ASN    39      32.628   6.930  12.275  1.00  0.00
N
ATOM    647  H   ASN    39      33.276   7.332  12.945  1.00  0.00
H
ATOM    648  CA  ASN    39      32.921   7.025  10.844  1.00  0.00
C
ATOM    649  HA  ASN    39      32.096   7.538  10.346  1.00  0.00
H
ATOM    650  C   ASN    39      33.056   5.642  10.206  1.00  0.00
C
ATOM    651  O   ASN    39      32.544   5.409   9.118  1.00  0.00
O
ATOM    652  CB  ASN    39      34.213   7.817  10.614  1.00  0.00
C
ATOM    653 1HB  ASN    39      34.126   8.793  11.088  1.00  0.00
H
ATOM    654 2HB  ASN    39      35.047   7.283  11.065  1.00  0.00
H
ATOM    655  CG  ASN    39      34.517   8.011   9.151  1.00  0.00
C
ATOM    656  OD1 ASN    39      34.033   8.942   8.522  1.00  0.00
O
ATOM    657  ND2 ASN    39      35.327   7.154   8.603  1.00  0.00
N
ATOM    658 1HD2 ASN    39      35.520   7.242   7.617  1.00  0.00
H
ATOM    659 2HD2 ASN    39      35.733   6.412   9.140  1.00  0.00
H
ATOM    660  N   ARG    40      33.723   4.709  10.876  1.00  0.00
N
ATOM    661  H   ARG    40      34.143   4.941  11.773  1.00  0.00
H
ATOM    662  CA  ARG    40      33.878   3.351  10.340  1.00  0.00
C
ATOM    663  HA  ARG    40      34.276   3.415   9.326  1.00  0.00
H
ATOM    664  C   ARG    40      32.537   2.640  10.250  1.00  0.00
C
ATOM    665  O   ARG    40      32.250   1.998   9.245  1.00  0.00
O
ATOM    666  CB  ARG    40      34.826   2.516  11.215  1.00  0.00
C
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ATOM    667 1HB  ARG    40      34.486   2.580  12.247  1.00  0.00
H
ATOM    668 2HB  ARG    40      34.759   1.472  10.906  1.00  0.00
H
ATOM    669  CG  ARG    40      36.295   2.932  11.169  1.00  0.00
C
ATOM    670 1HG  ARG    40      36.375   4.014  11.235  1.00  0.00
H
ATOM    671 2HG  ARG    40      36.813   2.487  12.018  1.00  0.00
H
ATOM    672  CD  ARG    40      36.967   2.468   9.892  1.00  0.00
C
ATOM    673 1HD  ARG    40      36.915   1.381   9.838  1.00  0.00
H
ATOM    674 2HD  ARG    40      36.438   2.888   9.039  1.00  0.00
H
ATOM    675  NE  ARG    40      38.372   2.887   9.845  1.00  0.00
N
ATOM    676  HE  ARG    40      38.751   3.347  10.663  1.00  0.00
H
ATOM    677  CZ  ARG    40      39.207   2.724   8.828  1.00  0.00
C
ATOM    678  NH1 ARG    40      38.928   2.026   7.754  1.00  0.00
N
ATOM    679 1HH1 ARG    40      38.036   1.558   7.679  1.00  0.00
H
ATOM    680 2HH1 ARG    40      39.604   1.949   7.013  1.00  0.00
H
ATOM    681  NH2 ARG    40      40.377   3.284   8.910  1.00  0.00
N
ATOM    682 1HH2 ARG    40      40.586   3.875   9.702  1.00  0.00
H
ATOM    683 2HH2 ARG    40      41.055   3.152   8.176  1.00  0.00
H
ATOM    684  N   TRP    41      31.713   2.739  11.281  1.00  0.00
N
ATOM    685  H   TRP    41      31.988   3.271  12.105  1.00  0.00
H
ATOM    686  CA  TRP    41      30.420   2.061  11.270  1.00  0.00
C
ATOM    687  HA  TRP    41      30.557   1.012  11.009  1.00  0.00
H
ATOM    688  C   TRP    41      29.523   2.688  10.220  1.00  0.00
C
ATOM    689  O   TRP    41      28.809   1.988   9.510  1.00  0.00
O
ATOM    690  CB  TRP    41      29.717   2.163  12.623  1.00  0.00
C
ATOM    691 1HB  TRP    41      29.707   3.205  12.943  1.00  0.00
H
ATOM    692 2HB  TRP    41      28.684   1.842  12.482  1.00  0.00
H
ATOM    693  CG  TRP    41      30.308   1.315  13.718  1.00  0.00
C
ATOM    694  CD1 TRP    41      31.593   0.879  13.851  1.00  0.00
C
ATOM    695  HD1 TRP    41      32.389   1.109  13.154  1.00  0.00
H
ATOM    696  CD2 TRP    41      29.619   0.818  14.877  1.00  0.00
C
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ATOM    697  NE1 TRP    41      31.752   0.126  14.980  1.00  0.00
N
ATOM    698  HE1 TRP    41      32.629  -0.305  15.266  1.00  0.00
H
ATOM    699  CE2 TRP    41      30.558   0.070  15.643  1.00  0.00
C
ATOM    700  CE3 TRP    41      28.302   0.949  15.362  1.00  0.00
C
ATOM    701  HE3 TRP    41      27.571   1.515  14.803  1.00  0.00
H
ATOM    702  CZ2 TRP    41      30.212  -0.556  16.855  1.00  0.00
C
ATOM    703  HZ2 TRP    41      30.944  -1.120  17.411  1.00  0.00
H
ATOM    704  CZ3 TRP    41      27.955   0.343  16.594  1.00  0.00
C
ATOM    705  HZ3 TRP    41      26.951   0.450  16.981  1.00  0.00
H
ATOM    706  CH2 TRP    41      28.916  -0.416  17.321  1.00  0.00
C
ATOM    707  HH2 TRP    41      28.632  -0.879  18.255  1.00  0.00
H
ATOM    708  N   LEU    42      29.563   4.004  10.092  1.00  0.00
N
ATOM    709  H   LEU    42      30.145   4.571  10.704  1.00  0.00
H
ATOM    710  CA  LEU    42      28.734   4.654   9.094  1.00  0.00
C
ATOM    711  HA  LEU    42      27.717   4.285   9.213  1.00  0.00
H
ATOM    712  C   LEU    42      29.198   4.276   7.698  1.00  0.00
C
ATOM    713  O   LEU    42      28.376   3.967   6.858  1.00  0.00
O
ATOM    714  CB  LEU    42      28.716   6.173   9.268  1.00  0.00
C
ATOM    715 1HB  LEU    42      28.435   6.413  10.292  1.00  0.00
H
ATOM    716 2HB  LEU    42      29.705   6.584   9.063  1.00  0.00
H
ATOM    717  CG  LEU    42      27.689   6.776   8.302  1.00  0.00
C
ATOM    718  HG  LEU    42      27.078   5.967   7.908  1.00  0.00
H
ATOM    719  CD1 LEU    42      26.750   7.752   8.965  1.00  0.00
C
ATOM    720 1HD1 LEU    42      25.971   8.045   8.263  1.00  0.00
H
ATOM    721 2HD1 LEU    42      27.303   8.633   9.264  1.00  0.00
H
ATOM    722 3HD1 LEU    42      26.281   7.292   9.834  1.00  0.00
H
ATOM    723  CD2 LEU    42      28.378   7.441   7.142  1.00  0.00
C
ATOM    724 1HD2 LEU    42      27.635   7.671   6.387  1.00  0.00
H
ATOM    725 2HD2 LEU    42      29.116   6.773   6.697  1.00  0.00
H
ATOM    726 3HD2 LEU    42      28.882   8.354   7.466  1.00  0.00
H
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ATOM    727  N   ASP    43      30.495   4.241   7.439  1.00  0.00
N
ATOM    728  H   ASP    43      31.167   4.475   8.165  1.00  0.00
H
ATOM    729  CA  ASP    43      30.984   3.906   6.099  1.00  0.00
C
ATOM    730  HA  ASP    43      30.519   4.575   5.373  1.00  0.00
H
ATOM    731  C   ASP    43      30.605   2.481   5.690  1.00  0.00
C
ATOM    732  O   ASP    43      30.432   2.205   4.502  1.00  0.00
O
ATOM    733  CB  ASP    43      32.505   4.066   6.006  1.00  0.00
C
ATOM    734 1HB  ASP    43      32.968   3.625   6.889  1.00  0.00
H
ATOM    735 2HB  ASP    43      32.853   3.525   5.127  1.00  0.00
H
ATOM    736  CG  ASP    43      32.953   5.513   5.857  1.00  0.00
C
ATOM    737  OD1 ASP    43      32.168   6.406   5.452  1.00  0.00
O
ATOM    738  OD2 ASP    43      34.167   5.761   6.037  1.00  0.00
O
ATOM    739  N   LEU    44      30.396   1.590   6.651  1.00  0.00
N
ATOM    740  H   LEU    44      30.551   1.854   7.616  1.00  0.00
H
ATOM    741  CA  LEU    44      29.922   0.238   6.348  1.00  0.00
C
ATOM    742  HA  LEU    44      30.563  -0.193   5.580  1.00  0.00
H
ATOM    743  C   LEU    44      28.484   0.226   5.819  1.00  0.00
C
ATOM    744  O   LEU    44      28.153  -0.555   4.922  1.00  0.00
O
ATOM    745  CB  LEU    44      30.000  -0.629   7.612  1.00  0.00
C
ATOM    746 1HB  LEU    44      31.029  -0.611   7.968  1.00  0.00
H
ATOM    747 2HB  LEU    44      29.379  -0.158   8.370  1.00  0.00
H
ATOM    748  CG  LEU    44      29.545  -2.095   7.519  1.00  0.00
C
ATOM    749  HG  LEU    44      28.504  -2.118   7.202  1.00  0.00
H
ATOM    750  CD1 LEU    44      30.367  -2.912   6.523  1.00  0.00
C
ATOM    751 1HD1 LEU    44      30.012  -3.943   6.514  1.00  0.00
H
ATOM    752 2HD1 LEU    44      31.421  -2.892   6.800  1.00  0.00
H
ATOM    753 3HD1 LEU    44      30.247  -2.503   5.520  1.00  0.00
H
ATOM    754  CD2 LEU    44      29.628  -2.736   8.899  1.00  0.00
C
ATOM    755 1HD2 LEU    44      29.219  -3.745   8.856  1.00  0.00
H
ATOM    756 2HD2 LEU    44      29.041  -2.153   9.606  1.00  0.00
H
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ATOM    757 3HD2 LEU    44      30.664  -2.777   9.236  1.00  0.00
H
ATOM    758  N   PHE    45      27.623   1.073   6.369  1.00  0.00
N
ATOM    759  H   PHE    45      27.948   1.712   7.085  1.00  0.00
H
ATOM    760  CA  PHE    45      26.202   1.077   6.001  1.00  0.00
C
ATOM    761  HA  PHE    45      25.971   0.142   5.492  1.00  0.00
H
ATOM    762  C   PHE    45      25.808   2.205   5.046  1.00  0.00
C
ATOM    763  O   PHE    45      24.767   2.153   4.407  1.00  0.00
O
ATOM    764  CB  PHE    45      25.344   1.128   7.265  1.00  0.00
C
ATOM    765 1HB  PHE    45      25.559   2.053   7.796  1.00  0.00
H
ATOM    766 2HB  PHE    45      24.296   1.130   6.974  1.00  0.00
H
ATOM    767  CG  PHE    45      25.571  -0.033   8.195  1.00  0.00
C
ATOM    768  CD1 PHE    45      26.195   0.161   9.438  1.00  0.00
C
ATOM    769  HD1 PHE    45      26.491   1.155   9.742  1.00  0.00
H
ATOM    770  CD2 PHE    45      25.164  -1.329   7.830  1.00  0.00
C
ATOM    771  HD2 PHE    45      24.664  -1.491   6.885  1.00  0.00
H
ATOM    772  CE1 PHE    45      26.444  -0.930  10.304  1.00  0.00
C
ATOM    773  HE1 PHE    45      26.927  -0.760  11.255  1.00  0.00
H
ATOM    774  CE2 PHE    45      25.408  -2.435   8.684  1.00  0.00
C
ATOM    775  HE2 PHE    45      25.103  -3.428   8.388  1.00  0.00
H
ATOM    776  CZ  PHE    45      26.048  -2.236   9.922  1.00  0.00
C
ATOM    777  HZ  PHE    45      26.223  -3.077  10.575  1.00  0.00
H
ATOM    778  N   SER    46      26.646   3.213   4.883  1.00  0.00
N
ATOM    779  H   SER    46      27.467   3.281   5.481  1.00  0.00
H
ATOM    780  CA  SER    46      26.455   4.226   3.849  1.00  0.00
C
ATOM    781  HA  SER    46      25.390   4.426   3.727  1.00  0.00
H
ATOM    782  C   SER    46      27.019   3.642   2.564  1.00  0.00
C
ATOM    783  O   SER    46      28.097   4.007   2.115  1.00  0.00
O
ATOM    784  CB  SER    46      27.169   5.533   4.196  1.00  0.00
C
ATOM    785 1HB  SER    46      26.914   5.805   5.220  1.00  0.00
H
ATOM    786 2HB  SER    46      28.250   5.405   4.124  1.00  0.00
H
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ATOM    787  OG  SER    46      26.735   6.574   3.333  1.00  0.00
O
ATOM    788  HG  SER    46      25.835   6.808   3.610  1.00  0.00
H
ATOM    789  N   GLU    47      26.326   2.672   1.995  1.00  0.00
N
ATOM    790  H   GLU    47      25.450   2.385   2.420  1.00  0.00
H
ATOM    791  CA  GLU    47      26.836   1.929   0.842  1.00  0.00
C
ATOM    792  HA  GLU    47      27.806   1.499   1.097  1.00  0.00
H
ATOM    793  C   GLU    47      27.025   2.835  -0.369  1.00  0.00
C
ATOM    794  O   GLU    47      27.981   2.702  -1.126  1.00  0.00
O
ATOM    795  CB  GLU    47      25.863   0.801   0.510  1.00  0.00
C
ATOM    796 1HB  GLU    47      24.892   1.244   0.294  1.00  0.00
H
ATOM    797 2HB  GLU    47      26.213   0.275  -0.377  1.00  0.00
H
ATOM    798  CG  GLU    47      25.714  -0.192   1.653  1.00  0.00
C
ATOM    799 1HG  GLU    47      26.685  -0.635   1.866  1.00  0.00
H
ATOM    800 2HG  GLU    47      25.377   0.330   2.545  1.00  0.00
H
ATOM    801  CD  GLU    47      24.723  -1.293   1.347  1.00  0.00
C
ATOM    802  OE1 GLU    47      23.672  -1.026   0.720  1.00  0.00
O
ATOM    803  OE2 GLU    47      24.964  -2.449   1.765  1.00  0.00
O
ATOM    804  N   GLU    48      26.149   3.819  -0.500  1.00  0.00
N
ATOM    805  H   GLU    48      25.394   3.888   0.165  1.00  0.00
H
ATOM    806  CA  GLU    48      26.235   4.821  -1.566  1.00  0.00
C
ATOM    807  HA  GLU    48      26.581   4.343  -2.483  1.00  0.00
H
ATOM    808  C   GLU    48      27.221   5.944  -1.230  1.00  0.00
C
ATOM    809  O   GLU    48      27.445   6.860  -2.022  1.00  0.00
O
ATOM    810  CB  GLU    48      24.843   5.398  -1.826  1.00  0.00
C
ATOM    811 1HB  GLU    48      24.904   6.101  -2.656  1.00  0.00
H
ATOM    812 2HB  GLU    48      24.197   4.574  -2.121  1.00  0.00
H
ATOM    813  CG  GLU    48      24.205   6.095  -0.634  1.00  0.00
C
ATOM    814 1HG  GLU    48      24.115   5.387   0.190  1.00  0.00
H
ATOM    815 2HG  GLU    48      24.848   6.914  -0.317  1.00  0.00
H
ATOM    816  CD  GLU    48      22.827   6.639  -0.968  1.00  0.00
C
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ATOM    817  OE1 GLU    48      22.017   5.921  -1.603  1.00  0.00
O
ATOM    818  OE2 GLU    48      22.525   7.789  -0.595  1.00  0.00
O
ATOM    819  N   THR    49      27.836   5.842  -0.058  1.00  0.00
N
ATOM    820  H   THR    49      27.621   5.053   0.541  1.00  0.00
H
ATOM    821  CA  THR    49      28.877   6.756   0.414  1.00  0.00
C
ATOM    822  HA  THR    49      29.099   6.473   1.443  1.00  0.00
H
ATOM    823  C   THR    49      28.411   8.215   0.446  1.00  0.00
C
ATOM    824  O   THR    49      29.073   9.148  -0.012  1.00  0.00
O
ATOM    825  CB  THR    49      30.171   6.521  -0.393  1.00  0.00
C
ATOM    826  HB  THR    49      30.125   7.063  -1.336  1.00  0.00
H
ATOM    827  OG1 THR    49      30.296   5.119  -0.656  1.00  0.00
O
ATOM    828  HG1 THR    49      29.571   4.855  -1.229  1.00  0.00
H
ATOM    829  CG2 THR    49      31.396   6.918   0.381  1.00  0.00
C
ATOM    830 1HG2 THR    49      32.281   6.697  -0.215  1.00  0.00
H
ATOM    831 2HG2 THR    49      31.440   6.355   1.314  1.00  0.00
H
ATOM    832 3HG2 THR    49      31.371   7.983   0.604  1.00  0.00
H
ATOM    833  N   SER    50      27.214   8.405   0.979  1.00  0.00
N
ATOM    834  H   SER    50      26.700   7.607   1.333  1.00  0.00
H
ATOM    835  CA  SER    50      26.586   9.721   1.106  1.00  0.00
C
ATOM    836  HA  SER    50      26.882  10.378   0.288  1.00  0.00
H
ATOM    837  C   SER    50      26.936  10.373   2.436  1.00  0.00
C
ATOM    838  O   SER    50      26.484  11.479   2.739  1.00  0.00
O
ATOM    839  CB  SER    50      25.078   9.518   1.093  1.00  0.00
C
ATOM    840 1HB  SER    50      24.570  10.470   1.250  1.00  0.00
H
ATOM    841 2HB  SER    50      24.779   9.103   0.131  1.00  0.00
H
ATOM    842  OG  SER    50      24.741   8.604   2.123  1.00  0.00
O
ATOM    843  HG  SER    50      23.776   8.497   2.128  1.00  0.00
H
ATOM    844  N   ASN    51      27.682   9.629   3.244  1.00  0.00
N
ATOM    845  H   ASN    51      28.024   8.744   2.891  1.00  0.00
H
ATOM    846  CA  ASN    51      28.010   9.942   4.637  1.00  0.00
C
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ATOM    847  HA  ASN    51      28.613   9.107   4.991  1.00  0.00
H
ATOM    848  C   ASN    51      26.763   9.986   5.532  1.00  0.00
C
ATOM    849  O   ASN    51      26.795  10.556   6.625  1.00  0.00
O
ATOM    850  CB  ASN    51      28.887  11.194   4.785  1.00  0.00
C
ATOM    851 1HB  ASN    51      28.318  12.070   4.495  1.00  0.00
H
ATOM    852 2HB  ASN    51      29.183  11.303   5.828  1.00  0.00
H
ATOM    853  CG  ASN    51      30.133  11.132   3.943  1.00  0.00
C
ATOM    854  OD1 ASN    51      30.901  10.172   3.991  1.00  0.00
O
ATOM    855  ND2 ASN    51      30.345  12.148   3.153  1.00  0.00
N
ATOM    856 1HD2 ASN    51      31.146  12.131   2.543  1.00  0.00
H
ATOM    857 2HD2 ASN    51      29.702  12.928   3.144  1.00  0.00
H
ATOM    858  N   TYR    52      25.690   9.344   5.076  1.00  0.00
N
ATOM    859  H   TYR    52      25.727   8.938   4.150  1.00  0.00
H
ATOM    860  CA  TYR    52      24.444   9.143   5.826  1.00  0.00
C
ATOM    861  HA  TYR    52      24.602   9.319   6.889  1.00  0.00
H
ATOM    862  C   TYR    52      23.969   7.703   5.607  1.00  0.00
C
ATOM    863  O   TYR    52      24.395   7.069   4.642  1.00  0.00
O
ATOM    864  CB  TYR    52      23.324  10.047   5.305  1.00  0.00
C
ATOM    865 1HB  TYR    52      23.163   9.820   4.252  1.00  0.00
H
ATOM    866 2HB  TYR    52      22.417   9.779   5.840  1.00  0.00
H
ATOM    867  CG  TYR    52      23.504  11.546   5.446  1.00  0.00
C
ATOM    868  CD1 TYR    52      22.906  12.411   4.510  1.00  0.00
C
ATOM    869  HD1 TYR    52      22.386  12.003   3.654  1.00  0.00
H
ATOM    870  CD2 TYR    52      24.199  12.120   6.532  1.00  0.00
C
ATOM    871  HD2 TYR    52      24.682  11.491   7.260  1.00  0.00
H
ATOM    872  CE1 TYR    52      22.949  13.816   4.689  1.00  0.00
C
ATOM    873  HE1 TYR    52      22.458  14.466   3.981  1.00  0.00
H
ATOM    874  CE2 TYR    52      24.269  13.526   6.695  1.00  0.00
C
ATOM    875  HE2 TYR    52      24.803  13.957   7.529  1.00  0.00
H
ATOM    876  CZ  TYR    52      23.616  14.357   5.789  1.00  0.00
C
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ATOM    877  OH  TYR    52      23.624  15.709   5.989  1.00  0.00
O
ATOM    878  HH  TYR    52      22.994  16.159   5.416  1.00  0.00
H
ATOM    879  N   ILE    53      23.076   7.192   6.445  1.00  0.00
N
ATOM    880  H   ILE    53      22.762   7.746   7.241  1.00  0.00
H
ATOM    881  CA  ILE    53      22.523   5.840   6.296  1.00  0.00
C
ATOM    882  HA  ILE    53      22.974   5.356   5.432  1.00  0.00
H
ATOM    883  C   ILE    53      21.007   5.925   6.084  1.00  0.00
C
ATOM    884  O   ILE    53      20.307   6.609   6.845  1.00  0.00
O
ATOM    885  CB  ILE    53      22.800   4.946   7.550  1.00  0.00
C
ATOM    886  HB  ILE    53      22.228   5.342   8.390  1.00  0.00
H
ATOM    887  CG1 ILE    53      24.290   4.956   7.941  1.00  0.00
C
ATOM    888 1HG1 ILE    53      24.853   4.383   7.205  1.00  0.00
H
ATOM    889 2HG1 ILE    53      24.658   5.977   7.924  1.00  0.00
H
ATOM    890  CG2 ILE    53      22.362   3.485   7.269  1.00  0.00
C
ATOM    891 1HG2 ILE    53      22.588   2.840   8.118  1.00  0.00
H
ATOM    892 2HG2 ILE    53      22.880   3.101   6.388  1.00  0.00
H
ATOM    893 3HG2 ILE    53      21.286   3.442   7.104  1.00  0.00
H
ATOM    894  CD1 ILE    53      24.586   4.401   9.344  1.00  0.00
C
ATOM    895 1HD1 ILE    53      25.652   4.472   9.542  1.00  0.00
H
ATOM    896 2HD1 ILE    53      24.287   3.356   9.419  1.00  0.00
H
ATOM    897 3HD1 ILE    53      24.049   4.988  10.091  1.00  0.00
H
ATOM    898  N   THR    54      20.500   5.230   5.073  1.00  0.00
N
ATOM    899  H   THR    54      21.114   4.731   4.445  1.00  0.00
H
ATOM    900  CA  THR    54      19.062   5.116   4.833  1.00  0.00
C
ATOM    901  HA  THR    54      18.537   5.916   5.352  1.00  0.00
H
ATOM    902  C   THR    54      18.507   3.778   5.338  1.00  0.00
C
ATOM    903  O   THR    54      19.268   2.859   5.653  1.00  0.00
O
ATOM    904  CB  THR    54      18.769   5.234   3.327  1.00  0.00
C
ATOM    905  HB  THR    54      17.713   5.041   3.146  1.00  0.00
H
ATOM    906  OG1 THR    54      19.565   4.283   2.614  1.00  0.00
O
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ATOM    907  HG1 THR    54      19.083   4.060   1.803  1.00  0.00
H
ATOM    908  CG2 THR    54      19.106   6.610   2.788  1.00  0.00
C
ATOM    909 1HG2 THR    54      18.884   6.643   1.722  1.00  0.00
H
ATOM    910 2HG2 THR    54      20.161   6.827   2.941  1.00  0.00
H
ATOM    911 3HG2 THR    54      18.502   7.362   3.297  1.00  0.00
H
ATOM    912  N   LEU    55      17.185   3.685   5.425  1.00  0.00
N
ATOM    913  H   LEU    55      16.621   4.443   5.059  1.00  0.00
H
ATOM    914  CA  LEU    55      16.491   2.581   6.096  1.00  0.00
C
ATOM    915  HA  LEU    55      16.714   2.646   7.162  1.00  0.00
H
ATOM    916  C   LEU    55      16.892   1.182   5.656  1.00  0.00
C
ATOM    917  O   LEU    55      17.084   0.306   6.494  1.00  0.00
O
ATOM    918  CB  LEU    55      14.980   2.749   5.901  1.00  0.00
C
ATOM    919 1HB  LEU    55      14.716   3.728   6.299  1.00  0.00
H
ATOM    920 2HB  LEU    55      14.775   2.766   4.831  1.00  0.00
H
ATOM    921  CG  LEU    55      14.042   1.705   6.536  1.00  0.00
C
ATOM    922  HG  LEU    55      14.542   1.276   7.399  1.00  0.00
H
ATOM    923  CD1 LEU    55      12.771   2.385   7.015  1.00  0.00
C
ATOM    924 1HD1 LEU    55      12.122   1.653   7.491  1.00  0.00
H
ATOM    925 2HD1 LEU    55      12.251   2.839   6.173  1.00  0.00
H
ATOM    926 3HD1 LEU    55      13.017   3.156   7.747  1.00  0.00
H
ATOM    927  CD2 LEU    55      13.643   0.564   5.586  1.00  0.00
C
ATOM    928 1HD2 LEU    55      12.942  -0.104   6.087  1.00  0.00
H
ATOM    929 2HD2 LEU    55      14.522  -0.013   5.308  1.00  0.00
H
ATOM    930 3HD2 LEU    55      13.176   0.967   4.686  1.00  0.00
H
ATOM    931  N   GLN    56      17.054   0.949   4.363  1.00  0.00
N
ATOM    932  H   GLN    56      16.920   1.705   3.691  1.00  0.00
H
ATOM    933  CA  GLN    56      17.375  -0.397   3.885  1.00  0.00
C
ATOM    934  HA  GLN    56      16.622  -1.086   4.263  1.00  0.00
H
ATOM    935  C   GLN    56      18.721  -0.887   4.396  1.00  0.00
C
ATOM    936  O   GLN    56      18.924  -2.081   4.585  1.00  0.00
O
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ATOM    937  CB  GLN    56      17.352  -0.460   2.364  1.00  0.00
C
ATOM    938 1HB  GLN    56      17.998   0.324   1.966  1.00  0.00
H
ATOM    939 2HB  GLN    56      17.747  -1.428   2.057  1.00  0.00
H
ATOM    940  CG  GLN    56      15.955  -0.320   1.786  1.00  0.00
C
ATOM    941 1HG  GLN    56      15.312  -1.081   2.227  1.00  0.00
H
ATOM    942 2HG  GLN    56      15.549   0.658   2.035  1.00  0.00
H
ATOM    943  CD  GLN    56      15.937  -0.481   0.286  1.00  0.00
C
ATOM    944  OE1 GLN    56      16.935  -0.274  -0.399  1.00  0.00
O
ATOM    945  NE2 GLN    56      14.804  -0.831  -0.247  1.00  0.00
N
ATOM    946 1HE2 GLN    56      14.763  -0.989  -1.246  1.00  0.00
H
ATOM    947 2HE2 GLN    56      13.980  -0.912   0.335  1.00  0.00
H
ATOM    948  N   ARG    57      19.632   0.031   4.674  1.00  0.00
N
ATOM    949  H   ARG    57      19.420   1.012   4.524  1.00  0.00
H
ATOM    950  CA  ARG    57      20.931  -0.344   5.223  1.00  0.00
C
ATOM    951  HA  ARG    57      21.216  -1.331   4.854  1.00  0.00
H
ATOM    952  C   ARG    57      20.904  -0.414   6.733  1.00  0.00
C
ATOM    953  O   ARG    57      21.716  -1.094   7.338  1.00  0.00
O
ATOM    954  CB  ARG    57      21.972   0.657   4.763  1.00  0.00
C
ATOM    955 1HB  ARG    57      21.637   1.664   5.003  1.00  0.00
H
ATOM    956 2HB  ARG    57      22.905   0.456   5.286  1.00  0.00
H
ATOM    957  CG  ARG    57      22.222   0.544   3.282  1.00  0.00
C
ATOM    958 1HG  ARG    57      23.254   0.247   3.135  1.00  0.00
H
ATOM    959 2HG  ARG    57      21.581  -0.231   2.864  1.00  0.00
H
ATOM    960  CD  ARG    57      21.968   1.837   2.543  1.00  0.00
C
ATOM    961 1HD  ARG    57      20.931   2.137   2.692  1.00  0.00
H
ATOM    962 2HD  ARG    57      22.631   2.615   2.926  1.00  0.00
H
ATOM    963  NE  ARG    57      22.218   1.627   1.113  1.00  0.00
N
ATOM    964  HE  ARG    57      22.533   0.701   0.843  1.00  0.00
H
ATOM    965  CZ  ARG    57      22.052   2.514   0.144  1.00  0.00
C
ATOM    966  NH1 ARG    57      21.636   3.738   0.348  1.00  0.00
N
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ATOM    967 1HH1 ARG    57      21.382   4.028   1.278  1.00  0.00
H
ATOM    968 2HH1 ARG    57      21.568   4.384  -0.427  1.00  0.00
H
ATOM    969  NH2 ARG    57      22.350   2.163  -1.072  1.00  0.00
N
ATOM    970 1HH2 ARG    57      22.691   1.235  -1.264  1.00  0.00
H
ATOM    971 2HH2 ARG    57      22.212   2.813  -1.835  1.00  0.00
H
ATOM    972  N   PHE    58      19.929   0.221   7.358  1.00  0.00
N
ATOM    973  H   PHE    58      19.285   0.810   6.846  1.00  0.00
H
ATOM    974  CA  PHE    58      19.769   0.059   8.796  1.00  0.00
C
ATOM    975  HA  PHE    58      20.765  -0.032   9.229  1.00  0.00
H
ATOM    976  C   PHE    58      19.021  -1.234   9.138  1.00  0.00
C
ATOM    977  O   PHE    58      19.166  -1.780  10.231  1.00  0.00
O
ATOM    978  CB  PHE    58      19.156   1.300   9.431  1.00  0.00
C
ATOM    979 1HB  PHE    58      19.118   2.093   8.684  1.00  0.00
H
ATOM    980 2HB  PHE    58      18.138   1.078   9.741  1.00  0.00
H
ATOM    981  CG  PHE    58      19.956   1.790  10.606  1.00  0.00
C
ATOM    982  CD1 PHE    58      20.840   2.871  10.462  1.00  0.00
C
ATOM    983  HD1 PHE    58      20.874   3.411   9.530  1.00  0.00
H
ATOM    984  CD2 PHE    58      19.896   1.127  11.840  1.00  0.00
C
ATOM    985  HD2 PHE    58      19.235   0.286  11.968  1.00  0.00
H
ATOM    986  CE1 PHE    58      21.681   3.272  11.529  1.00  0.00
C
ATOM    987  HE1 PHE    58      22.361   4.098  11.401  1.00  0.00
H
ATOM    988  CE2 PHE    58      20.715   1.522  12.916  1.00  0.00
C
ATOM    989  HE2 PHE    58      20.655   0.999  13.859  1.00  0.00
H
ATOM    990  CZ  PHE    58      21.611   2.597  12.764  1.00  0.00
C
ATOM    991  HZ  PHE    58      22.230   2.905  13.595  1.00  0.00
H
ATOM    992  N   LEU    59      18.371  -1.840   8.150  1.00  0.00
N
ATOM    993  H   LEU    59      18.211  -1.341   7.282  1.00  0.00
H
ATOM    994  CA  LEU    59      17.895  -3.224   8.283  1.00  0.00
C
ATOM    995  HA  LEU    59      17.251  -3.302   9.158  1.00  0.00
H
ATOM    996  C   LEU    59      19.078  -4.169   8.484  1.00  0.00
C
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ATOM    997  O   LEU    59      18.964  -5.204   9.142  1.00  0.00
O
ATOM    998  CB  LEU    59      17.121  -3.684   7.039  1.00  0.00
C
ATOM    999 1HB  LEU    59      17.803  -3.619   6.195  1.00  0.00
H
ATOM   1000 2HB  LEU    59      16.890  -4.740   7.175  1.00  0.00
H
ATOM   1001  CG  LEU    59      15.814  -2.985   6.635  1.00  0.00
C
ATOM   1002  HG  LEU    59      15.990  -1.917   6.570  1.00  0.00
H
ATOM   1003  CD1 LEU    59      15.361  -3.478   5.263  1.00  0.00
C
ATOM   1004 1HD1 LEU    59      14.468  -2.933   4.953  1.00  0.00
H
ATOM   1005 2HD1 LEU    59      15.139  -4.545   5.296  1.00  0.00
H
ATOM   1006 3HD1 LEU    59      16.148  -3.302   4.530  1.00  0.00
H
ATOM   1007  CD2 LEU    59      14.697  -3.230   7.634  1.00  0.00
C
ATOM   1008 1HD2 LEU    59      13.811  -2.668   7.337  1.00  0.00
H
ATOM   1009 2HD2 LEU    59      15.004  -2.899   8.624  1.00  0.00
H
ATOM   1010 3HD2 LEU    59      14.460  -4.293   7.665  1.00  0.00
H
ATOM   1011  N   SER    60      20.244  -3.806   7.971  1.00  0.00
N
ATOM   1012  H   SER    60      20.322  -2.966   7.414  1.00  0.00
H
ATOM   1013  CA  SER    60      21.443  -4.609   8.175  1.00  0.00
C
ATOM   1014  HA  SER    60      21.187  -5.648   7.985  1.00  0.00
H
ATOM   1015  C   SER    60      22.006  -4.511   9.590  1.00  0.00
C
ATOM   1016  O   SER    60      22.824  -5.333   9.978  1.00  0.00
O
ATOM   1017  CB  SER    60      22.504  -4.188   7.166  1.00  0.00
C
ATOM   1018 1HB  SER    60      22.885  -3.205   7.434  1.00  0.00
H
ATOM   1019 2HB  SER    60      23.325  -4.902   7.180  1.00  0.00
H
ATOM   1020  OG  SER    60      21.920  -4.126   5.875  1.00  0.00
O
ATOM   1021  HG  SER    60      22.598  -3.842   5.244  1.00  0.00
H
ATOM   1022  N   VAL    61      21.541  -3.549  10.378  1.00  0.00
N
ATOM   1023  H   VAL    61      20.872  -2.882  10.010  1.00  0.00
H
ATOM   1024  CA  VAL    61      21.946  -3.405  11.782  1.00  0.00
C
ATOM   1025  HA  VAL    61      22.963  -3.779  11.899  1.00  0.00
H
ATOM   1026  C   VAL    61      21.014  -4.255  12.658  1.00  0.00
C
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ATOM   1027  O   VAL    61      21.351  -4.664  13.772  1.00  0.00
O
ATOM   1028  CB  VAL    61      21.931  -1.905  12.209  1.00  0.00
C
ATOM   1029  HB  VAL    61      20.907  -1.541  12.164  1.00  0.00
H
ATOM   1030  CG1 VAL    61      22.460  -1.704  13.635  1.00  0.00
C
ATOM   1031 1HG1 VAL    61      22.483  -0.640  13.873  1.00  0.00
H
ATOM   1032 2HG1 VAL    61      23.465  -2.118  13.723  1.00  0.00
H
ATOM   1033 3HG1 VAL    61      21.800  -2.197  14.347  1.00  0.00
H
ATOM   1034  CG2 VAL    61      22.790  -1.061  11.246  1.00  0.00
C
ATOM   1035 1HG2 VAL    61      22.749  -0.013  11.540  1.00  0.00
H
ATOM   1036 2HG2 VAL    61      22.420  -1.139  10.225  1.00  0.00
H
ATOM   1037 3HG2 VAL    61      23.823  -1.401  11.277  1.00  0.00
H
ATOM   1038  N   LEU    62      19.855  -4.626  12.127  1.00  0.00
N
ATOM   1039  H   LEU    62      19.529  -4.219  11.262  1.00  0.00
H
ATOM   1040  CA  LEU    62      19.083  -5.690  12.771  1.00  0.00
C
ATOM   1041  HA  LEU    62      19.038  -5.491  13.839  1.00  0.00
H
ATOM   1042  C   LEU    62      19.818  -7.007  12.544  1.00  0.00
C
ATOM   1043  O   LEU    62      19.876  -7.869  13.420  1.00  0.00
O
ATOM   1044  CB  LEU    62      17.653  -5.799  12.233  1.00  0.00
C
ATOM   1045 1HB  LEU    62      17.177  -4.828  12.327  1.00  0.00
H
ATOM   1046 2HB  LEU    62      17.696  -6.048  11.175  1.00  0.00
H
ATOM   1047  CG  LEU    62      16.769  -6.851  12.928  1.00  0.00
C
ATOM   1048  HG  LEU    62      17.180  -7.834  12.707  1.00  0.00
H
ATOM   1049  CD1 LEU    62      16.676  -6.715  14.447  1.00  0.00
C
ATOM   1050 1HD1 LEU    62      15.987  -7.459  14.842  1.00  0.00
H
ATOM   1051 2HD1 LEU    62      16.323  -5.720  14.711  1.00  0.00
H
ATOM   1052 3HD1 LEU    62      17.653  -6.880  14.899  1.00  0.00
H
ATOM   1053  CD2 LEU    62      15.375  -6.801  12.353  1.00  0.00
C
ATOM   1054 1HD2 LEU    62      14.770  -7.597  12.781  1.00  0.00
H
ATOM   1055 2HD2 LEU    62      15.427  -6.938  11.276  1.00  0.00
H
ATOM   1056 3HD2 LEU    62      14.911  -5.837  12.567  1.00  0.00
H
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ATOM   1057  N   GLY    63      20.387  -7.153  11.355  1.00  0.00
N
ATOM   1058  H   GLY    63      20.291  -6.421  10.667  1.00  0.00
H
ATOM   1059  CA  GLY    63      21.132  -8.356  11.023  1.00  0.00
C
ATOM   1060 1HA  GLY    63      20.508  -9.226  11.220  1.00  0.00
H
ATOM   1061 2HA  GLY    63      21.390  -8.342   9.965  1.00  0.00
H
ATOM   1062  C   GLY    63      22.406  -8.490  11.833  1.00  0.00
C
ATOM   1063  O   GLY    63      22.547  -9.406  12.645  1.00  0.00
O
ATOM   1064  N   ILE    64      23.323  -7.553  11.651  1.00  0.00
N
ATOM   1065  H   ILE    64      23.150  -6.802  10.986  1.00  0.00
H
ATOM   1066  CA  ILE    64      24.568  -7.512  12.411  1.00  0.00
C
ATOM   1067  HA  ILE    64      24.846  -8.519  12.720  1.00  0.00
H
ATOM   1068  C   ILE    64      24.202  -6.673  13.625  1.00  0.00
C
ATOM   1069  O   ILE    64      24.167  -5.444  13.552  1.00  0.00
O
ATOM   1070  CB  ILE    64      25.741  -6.863  11.625  1.00  0.00
C
ATOM   1071  HB  ILE    64      25.492  -5.823  11.415  1.00  0.00
H
ATOM   1072  CG1 ILE    64      25.938  -7.583  10.277  1.00  0.00
C
ATOM   1073 1HG1 ILE    64      26.300  -8.592  10.470  1.00  0.00
H
ATOM   1074 2HG1 ILE    64      24.979  -7.661   9.769  1.00  0.00
H
ATOM   1075  CG2 ILE    64      27.040  -6.913  12.475  1.00  0.00
C
ATOM   1076 1HG2 ILE    64      27.855  -6.421  11.946  1.00  0.00
H
ATOM   1077 2HG2 ILE    64      27.320  -7.951  12.671  1.00  0.00
H
ATOM   1078 3HG2 ILE    64      26.884  -6.404  13.425  1.00  0.00
H
ATOM   1079  CD1 ILE    64      26.896  -6.891   9.310  1.00  0.00
C
ATOM   1080 1HD1 ILE    64      26.888  -7.425   8.359  1.00  0.00
H
ATOM   1081 2HD1 ILE    64      27.909  -6.901   9.710  1.00  0.00
H
ATOM   1082 3HD1 ILE    64      26.576  -5.862   9.141  1.00  0.00
H
ATOM   1083  N   ALA    65      23.845  -7.346  14.709  1.00  0.00
N
ATOM   1084  H   ALA    65      23.954  -8.351  14.712  1.00  0.00
H
ATOM   1085  CA  ALA    65      23.234  -6.712  15.872  1.00  0.00
C
ATOM   1086  HA  ALA    65      22.455  -6.043  15.507  1.00  0.00
H
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ATOM   1087  C   ALA    65      24.200  -5.863  16.704  1.00  0.00
C
ATOM   1088  O   ALA    65      24.660  -6.273  17.771  1.00  0.00
O
ATOM   1089  CB  ALA    65      22.566  -7.780  16.734  1.00  0.00
C
ATOM   1090 1HB  ALA    65      21.822  -8.314  16.138  1.00  0.00
H
ATOM   1091 2HB  ALA    65      22.063  -7.310  17.580  1.00  0.00
H
ATOM   1092 3HB  ALA    65      23.310  -8.485  17.101  1.00  0.00
H
ATOM   1093  N   LYS    66      24.520  -4.681  16.200  1.00  0.00
N
ATOM   1094  H   LYS    66      24.176  -4.460  15.266  1.00  0.00
H
ATOM   1095  CA  LYS    66      25.365  -3.708  16.904  1.00  0.00
C
ATOM   1096  HA  LYS    66      26.149  -4.225  17.457  1.00  0.00
H
ATOM   1097  C   LYS    66      24.523  -2.903  17.878  1.00  0.00
C
ATOM   1098  O   LYS    66      25.035  -2.183  18.738  1.00  0.00
O
ATOM   1099  CB  LYS    66      25.992  -2.742  15.891  1.00  0.00
C
ATOM   1100 1HB  LYS    66      25.191  -2.228  15.362  1.00  0.00
H
ATOM   1101 2HB  LYS    66      26.577  -2.002  16.432  1.00  0.00
H
ATOM   1102  CG  LYS    66      26.884  -3.421  14.869  1.00  0.00
C
ATOM   1103 1HG  LYS    66      27.683  -3.933  15.398  1.00  0.00
H
ATOM   1104 2HG  LYS    66      26.304  -4.152  14.311  1.00  0.00
H
ATOM   1105  CD  LYS    66      27.487  -2.437  13.885  1.00  0.00
C
ATOM   1106 1HD  LYS    66      26.688  -1.826  13.464  1.00  0.00
H
ATOM   1107 2HD  LYS    66      28.194  -1.790  14.402  1.00  0.00
H
ATOM   1108  CE  LYS    66      28.196  -3.172  12.755  1.00  0.00
C
ATOM   1109 1HE  LYS    66      27.498  -3.886  12.312  1.00  0.00
H
ATOM   1110 2HE  LYS    66      28.482  -2.450  11.987  1.00  0.00
H
ATOM   1111  NZ  LYS    66      29.421  -3.905  13.208  1.00  0.00
N
ATOM   1112 1HZ  LYS    66      29.785  -4.462  12.442  1.00  0.00
H
ATOM   1113 2HZ  LYS    66      29.199  -4.519  13.985  1.00  0.00
H
ATOM   1114 3HZ  LYS    66      30.131  -3.240  13.490  1.00  0.00
H
ATOM   1115  N   GLU    67      23.217  -3.002  17.698  1.00  0.00
N
ATOM   1116  H   GLU    67      22.861  -3.646  17.009  1.00  0.00
H
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ATOM   1117  CA  GLU    67      22.230  -2.225  18.431  1.00  0.00
C
ATOM   1118  HA  GLU    67      22.632  -1.868  19.378  1.00  0.00
H
ATOM   1119  C   GLU    67      21.093  -3.209  18.646  1.00  0.00
C
ATOM   1120  O   GLU    67      21.042  -4.212  17.934  1.00  0.00
O
ATOM   1121  CB  GLU    67      21.734  -1.056  17.576  1.00  0.00
C
ATOM   1122 1HB  GLU    67      21.221  -1.460  16.703  1.00  0.00
H
ATOM   1123 2HB  GLU    67      21.024  -0.478  18.166  1.00  0.00
H
ATOM   1124  CG  GLU    67      22.853  -0.144  17.089  1.00  0.00
C
ATOM   1125 1HG  GLU    67      23.422   0.200  17.949  1.00  0.00
H
ATOM   1126 2HG  GLU    67      23.523  -0.714  16.445  1.00  0.00
H
ATOM   1127  CD  GLU    67      22.358   1.050  16.304  1.00  0.00
C
ATOM   1128  OE1 GLU    67      21.141   1.284  16.246  1.00  0.00
O
ATOM   1129  OE2 GLU    67      23.214   1.756  15.718  1.00  0.00
O
ATOM   1130  N   GLN    68      20.195  -2.945  19.583  1.00  0.00
N
ATOM   1131  H   GLN    68      20.267  -2.097  20.130  1.00  0.00
H
ATOM   1132  CA  GLN    68      19.031  -3.794  19.834  1.00  0.00
C
ATOM   1133  HA  GLN    68      18.763  -4.364  18.944  1.00  0.00
H
ATOM   1134  C   GLN    68      17.933  -2.809  20.190  1.00  0.00
C
ATOM   1135  O   GLN    68      18.270  -1.720  20.656  1.00  0.00
O
ATOM   1136  CB  GLN    68      19.258  -4.725  21.024  1.00  0.00
C
ATOM   1137 1HB  GLN    68      19.503  -4.120  21.896  1.00  0.00
H
ATOM   1138 2HB  GLN    68      18.324  -5.247  21.215  1.00  0.00
H
ATOM   1139  CG  GLN    68      20.346  -5.769  20.837  1.00  0.00
C
ATOM   1140 1HG  GLN    68      20.113  -6.380  19.965  1.00  0.00
H
ATOM   1141 2HG  GLN    68      21.301  -5.271  20.671  1.00  0.00
H
ATOM   1142  CD  GLN    68      20.476  -6.665  22.046  1.00  0.00
C
ATOM   1143  OE1 GLN    68      19.604  -6.712  22.913  1.00  0.00
O
ATOM   1144  NE2 GLN    68      21.571  -7.359  22.138  1.00  0.00
N
ATOM   1145 1HE2 GLN    68      21.711  -7.964  22.930  1.00  0.00
H
ATOM   1146 2HE2 GLN    68      22.280  -7.281  21.418  1.00  0.00
H
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ATOM   1147  N   TYR    69      16.663  -3.154  20.021  1.00  0.00
N
ATOM   1148  H   TYR    69      16.435  -4.092  19.707  1.00  0.00
H
ATOM   1149  CA  TYR    69      15.587  -2.172  20.213  1.00  0.00
C
ATOM   1150  HA  TYR    69      15.794  -1.351  19.530  1.00  0.00
H
ATOM   1151  C   TYR    69      15.528  -1.559  21.614  1.00  0.00
C
ATOM   1152  O   TYR    69      15.171  -0.398  21.764  1.00  0.00
O
ATOM   1153  CB  TYR    69      14.211  -2.731  19.820  1.00  0.00
C
ATOM   1154 1HB  TYR    69      13.481  -1.927  19.896  1.00  0.00
H
ATOM   1155 2HB  TYR    69      14.248  -3.052  18.780  1.00  0.00
H
ATOM   1156  CG  TYR    69      13.722  -3.888  20.662  1.00  0.00
C
ATOM   1157  CD1 TYR    69      12.973  -3.667  21.839  1.00  0.00
C
ATOM   1158  HD1 TYR    69      12.712  -2.659  22.129  1.00  0.00
H
ATOM   1159  CD2 TYR    69      13.990  -5.214  20.277  1.00  0.00
C
ATOM   1160  HD2 TYR    69      14.501  -5.409  19.347  1.00  0.00
H
ATOM   1161  CE1 TYR    69      12.545  -4.762  22.640  1.00  0.00
C
ATOM   1162  HE1 TYR    69      11.961  -4.596  23.531  1.00  0.00
H
ATOM   1163  CE2 TYR    69      13.589  -6.300  21.084  1.00  0.00
C
ATOM   1164  HE2 TYR    69      13.827  -7.308  20.787  1.00  0.00
H
ATOM   1165  CZ  TYR    69      12.876  -6.065  22.259  1.00  0.00
C
ATOM   1166  OH  TYR    69      12.522  -7.132  23.037  1.00  0.00
O
ATOM   1167  HH  TYR    69      12.855  -7.964  22.687  1.00  0.00
H
ATOM   1168  N   GLU    70      15.924  -2.281  22.652  1.00  0.00
N
ATOM   1169  H   GLU    70      16.195  -3.252  22.519  1.00  0.00
H
ATOM   1170  CA  GLU    70      15.920  -1.727  24.010  1.00  0.00
C
ATOM   1171  HA  GLU    70      14.954  -1.257  24.182  1.00  0.00
H
ATOM   1172  C   GLU    70      16.999  -0.666  24.253  1.00  0.00
C
ATOM   1173  O   GLU    70      16.931   0.105  25.203  1.00  0.00
O
ATOM   1174  CB  GLU    70      16.066  -2.879  25.003  1.00  0.00
C
ATOM   1175 1HB  GLU    70      15.420  -3.681  24.653  1.00  0.00
H
ATOM   1176 2HB  GLU    70      17.097  -3.232  24.985  1.00  0.00
H
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ATOM   1177  CG  GLU    70      15.659  -2.552  26.439  1.00  0.00
C
ATOM   1178 1HG  GLU    70      16.321  -1.787  26.841  1.00  0.00
H
ATOM   1179 2HG  GLU    70      14.639  -2.164  26.428  1.00  0.00
H
ATOM   1180  CD  GLU    70      15.706  -3.768  27.345  1.00  0.00
C
ATOM   1181  OE1 GLU    70      16.164  -4.847  26.903  1.00  0.00
O
ATOM   1182  OE2 GLU    70      15.267  -3.680  28.511  1.00  0.00
O
ATOM   1183  N   ILE    71      17.992  -0.602  23.378  1.00  0.00
N
ATOM   1184  H   ILE    71      18.021  -1.249  22.597  1.00  0.00
H
ATOM   1185  CA  ILE    71      19.043   0.411  23.493  1.00  0.00
C
ATOM   1186  HA  ILE    71      19.260   0.584  24.545  1.00  0.00
H
ATOM   1187  C   ILE    71      18.490   1.707  22.886  1.00  0.00
C
ATOM   1188  O   ILE    71      18.852   2.809  23.298  1.00  0.00
O
ATOM   1189  CB  ILE    71      20.368  -0.050  22.796  1.00  0.00
C
ATOM   1190  HB  ILE    71      20.186  -0.162  21.727  1.00  0.00
H
ATOM   1191  CG1 ILE    71      20.812  -1.419  23.365  1.00  0.00
C
ATOM   1192 1HG1 ILE    71      21.014  -1.297  24.430  1.00  0.00
H
ATOM   1193 2HG1 ILE    71      19.993  -2.129  23.261  1.00  0.00
H
ATOM   1194  CG2 ILE    71      21.498   0.994  23.006  1.00  0.00
C
ATOM   1195 1HG2 ILE    71      22.390   0.708  22.447  1.00  0.00
H
ATOM   1196 2HG2 ILE    71      21.750   1.073  24.065  1.00  0.00
H
ATOM   1197 3HG2 ILE    71      21.181   1.973  22.644  1.00  0.00
H
ATOM   1198  CD1 ILE    71      22.054  -2.061  22.714  1.00  0.00
C
ATOM   1199 1HD1 ILE    71      22.174  -3.076  23.093  1.00  0.00
H
ATOM   1200 2HD1 ILE    71      22.948  -1.489  22.965  1.00  0.00
H
ATOM   1201 3HD1 ILE    71      21.937  -2.095  21.633  1.00  0.00
H
ATOM   1202  N   ILE    72      17.598   1.557  21.911  1.00  0.00
N
ATOM   1203  H   ILE    72      17.349   0.623  21.621  1.00  0.00
H
ATOM   1204  CA  ILE    72      16.961   2.685  21.218  1.00  0.00
C
ATOM   1205  HA  ILE    72      17.696   3.476  21.076  1.00  0.00
H
ATOM   1206  C   ILE    72      15.772   3.233  22.015  1.00  0.00
C
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ATOM   1207  O   ILE    72      15.508   4.436  22.045  1.00  0.00
O
ATOM   1208  CB  ILE    72      16.380   2.296  19.836  1.00  0.00
C
ATOM   1209  HB  ILE    72      15.381   1.905  20.019  1.00  0.00
H
ATOM   1210  CG1 ILE    72      17.156   1.160  19.136  1.00  0.00
C
ATOM   1211 1HG1 ILE    72      17.103   0.277  19.760  1.00  0.00
H
ATOM   1212 2HG1 ILE    72      16.615   0.921  18.229  1.00  0.00
H
ATOM   1213  CG2 ILE    72      16.231   3.549  18.948  1.00  0.00
C
ATOM   1214 1HG2 ILE    72      15.818   3.268  17.979  1.00  0.00
H
ATOM   1215 2HG2 ILE    72      17.200   4.027  18.800  1.00  0.00
H
ATOM   1216 3HG2 ILE    72      15.551   4.262  19.416  1.00  0.00
H
ATOM   1217  CD1 ILE    72      18.601   1.354  18.738  1.00  0.00
C
ATOM   1218 1HD1 ILE    72      18.889   0.570  18.036  1.00  0.00
H
ATOM   1219 2HD1 ILE    72      19.234   1.281  19.618  1.00  0.00
H
ATOM   1220 3HD1 ILE    72      18.747   2.318  18.255  1.00  0.00
H
ATOM   1221  N   ARG    73      15.084   2.365  22.743  1.00  0.00
N
ATOM   1222  H   ARG    73      15.260   1.373  22.627  1.00  0.00
H
ATOM   1223  CA  ARG    73      14.159   2.819  23.789  1.00  0.00
C
ATOM   1224  HA  ARG    73      13.449   3.538  23.380  1.00  0.00
H
ATOM   1225  C   ARG    73      15.066   3.522  24.793  1.00  0.00
C
ATOM   1226  O   ARG    73      16.257   3.230  24.779  1.00  0.00
O
ATOM   1227  CB  ARG    73      13.410   1.637  24.411  1.00  0.00
C
ATOM   1228 1HB  ARG    73      14.130   0.904  24.776  1.00  0.00
H
ATOM   1229 2HB  ARG    73      12.833   2.006  25.259  1.00  0.00
H
ATOM   1230  CG  ARG    73      12.451   0.966  23.425  1.00  0.00
C
ATOM   1231 1HG  ARG    73      11.902   1.747  22.898  1.00  0.00
H
ATOM   1232 2HG  ARG    73      13.009   0.387  22.695  1.00  0.00
H
ATOM   1233  CD  ARG    73      11.439   0.068  24.115  1.00  0.00
C
ATOM   1234 1HD  ARG    73      10.935   0.660  24.875  1.00  0.00
H
ATOM   1235 2HD  ARG    73      10.697  -0.242  23.378  1.00  0.00
H
ATOM   1236  NE  ARG    73      11.996  -1.138  24.749  1.00  0.00
N
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ATOM   1237  HE  ARG    73      12.963  -1.341  24.577  1.00  0.00
H
ATOM   1238  CZ  ARG    73      11.318  -1.984  25.518  1.00  0.00
C
ATOM   1239  NH1 ARG    73      10.089  -1.776  25.913  1.00  0.00
N
ATOM   1240 1HH1 ARG    73       9.636  -0.893  25.714  1.00  0.00
H
ATOM   1241 2HH1 ARG    73       9.596  -2.503  26.411  1.00  0.00
H
ATOM   1242  NH2 ARG    73      11.887  -3.079  25.932  1.00  0.00
N
ATOM   1243 1HH2 ARG    73      12.800  -3.349  25.616  1.00  0.00
H
ATOM   1244 2HH2 ARG    73      11.391  -3.658  26.595  1.00  0.00
H
ATOM   1245  N   ARG    74      14.555   4.479  25.572  1.00  0.00
N
ATOM   1246  H   ARG    74      13.552   4.630  25.535  1.00  0.00
H
ATOM   1247  CA  ARG    74      15.335   5.367  26.477  1.00  0.00
C
ATOM   1248  HA  ARG    74      14.625   5.926  27.084  1.00  0.00
H
ATOM   1249  C   ARG    74      16.175   6.416  25.726  1.00  0.00
C
ATOM   1250  O   ARG    74      16.278   7.565  26.170  1.00  0.00
O
ATOM   1251  CB  ARG    74      16.191   4.516  27.435  1.00  0.00
C
ATOM   1252 1HB  ARG    74      15.551   3.745  27.864  1.00  0.00
H
ATOM   1253 2HB  ARG    74      16.940   4.030  26.827  1.00  0.00
H
ATOM   1254  CG  ARG    74      16.961   5.168  28.562  1.00  0.00
C
ATOM   1255 1HG  ARG    74      17.620   5.932  28.156  1.00  0.00
H
ATOM   1256 2HG  ARG    74      16.265   5.620  29.269  1.00  0.00
H
ATOM   1257  CD  ARG    74      17.818   4.101  29.280  1.00  0.00
C
ATOM   1258 1HD  ARG    74      18.282   4.566  30.150  1.00  0.00
H
ATOM   1259 2HD  ARG    74      17.168   3.299  29.632  1.00  0.00
H
ATOM   1260  NE  ARG    74      18.886   3.534  28.433  1.00  0.00
N
ATOM   1261  HE  ARG    74      19.745   4.070  28.369  1.00  0.00
H
ATOM   1262  CZ  ARG    74      18.840   2.408  27.724  1.00  0.00
C
ATOM   1263  NH1 ARG    74      17.818   1.592  27.673  1.00  0.00
N
ATOM   1264 1HH1 ARG    74      17.049   1.693  28.323  1.00  0.00
H
ATOM   1265 2HH1 ARG    74      17.775   0.876  26.961  1.00  0.00
H
ATOM   1266  NH2 ARG    74      19.875   2.100  27.001  1.00  0.00
N
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ATOM   1267 1HH2 ARG    74      20.671   2.725  26.992  1.00  0.00
H
ATOM   1268 2HH2 ARG    74      19.885   1.244  26.484  1.00  0.00
H
ATOM   1269  N   ASN    75      16.683   6.071  24.551  1.00  0.00
N
ATOM   1270  H   ASN    75      16.590   5.101  24.259  1.00  0.00
H
ATOM   1271  CA  ASN    75      17.397   6.989  23.655  1.00  0.00
C
ATOM   1272  HA  ASN    75      18.185   7.503  24.204  1.00  0.00
H
ATOM   1273  C   ASN    75      16.474   8.022  23.016  1.00  0.00
C
ATOM   1274  O   ASN    75      16.892   9.097  22.590  1.00  0.00
O
ATOM   1275  CB  ASN    75      18.022   6.154  22.540  1.00  0.00
C
ATOM   1276 1HB  ASN    75      18.224   5.163  22.928  1.00  0.00
H
ATOM   1277 2HB  ASN    75      17.326   6.071  21.707  1.00  0.00
H
ATOM   1278  CG  ASN    75      19.302   6.713  22.031  1.00  0.00
C
ATOM   1279  OD1 ASN    75      19.336   7.489  21.091  1.00  0.00
O
ATOM   1280  ND2 ASN    75      20.374   6.273  22.602  1.00  0.00
N
ATOM   1281 1HD2 ASN    75      21.273   6.519  22.218  1.00  0.00
H
ATOM   1282 2HD2 ASN    75      20.303   5.667  23.408  1.00  0.00
H
ATOM   1283  N   THR    76      15.199   7.670  22.986  1.00  0.00
N
ATOM   1284  H   THR    76      14.935   6.795  23.420  1.00  0.00
H
ATOM   1285  CA  THR    76      14.106   8.401  22.347  1.00  0.00
C
ATOM   1286  HA  THR    76      14.243   8.383  21.266  1.00  0.00
H
ATOM   1287  C   THR    76      13.824   9.854  22.744  1.00  0.00
C
ATOM   1288  O   THR    76      12.984  10.509  22.130  1.00  0.00
O
ATOM   1289  CB  THR    76      12.842   7.599  22.709  1.00  0.00
C
ATOM   1290  HB  THR    76      11.968   8.249  22.747  1.00  0.00
H
ATOM   1291  OG1 THR    76      13.068   6.988  23.986  1.00  0.00
O
ATOM   1292  HG1 THR    76      12.804   7.628  24.661  1.00  0.00
H
ATOM   1293  CG2 THR    76      12.588   6.467  21.746  1.00  0.00
C
ATOM   1294 1HG2 THR    76      11.733   5.886  22.093  1.00  0.00
H
ATOM   1295 2HG2 THR    76      13.459   5.818  21.678  1.00  0.00
H
ATOM   1296 3HG2 THR    76      12.360   6.875  20.767  1.00  0.00
H
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ATOM   1297  N   THR    77      14.487  10.380  23.763  1.00  0.00
N
ATOM   1298  H   THR    77      15.186   9.838  24.253  1.00  0.00
H
ATOM   1299  CA  THR    77      14.219  11.731  24.247  1.00  0.00
C
ATOM   1300  HA  THR    77      13.144  11.848  24.376  1.00  0.00
H
ATOM   1301  C   THR    77      14.711  12.894  23.391  1.00  0.00
C
ATOM   1302  O   THR    77      14.182  13.999  23.495  1.00  0.00
O
ATOM   1303  CB  THR    77      14.900  11.893  25.610  1.00  0.00
C
ATOM   1304  HB  THR    77      15.591  12.735  25.580  1.00  0.00
H
ATOM   1305  OG1 THR    77      15.622  10.688  25.893  1.00  0.00
O
ATOM   1306  HG1 THR    77      15.956  10.757  26.800  1.00  0.00
H
ATOM   1307  CG2 THR    77      13.885  12.109  26.717  1.00  0.00
C
ATOM   1308 1HG2 THR    77      14.405  12.213  27.668  1.00  0.00
H
ATOM   1309 2HG2 THR    77      13.204  11.261  26.770  1.00  0.00
H
ATOM   1310 3HG2 THR    77      13.317  13.020  26.524  1.00  0.00
H
ATOM   1311  N   GLN    78      15.744  12.692  22.586  1.00  0.00
N
ATOM   1312  H   GLN    78      16.138  11.767  22.500  1.00  0.00
H
ATOM   1313  CA  GLN    78      16.329  13.804  21.826  1.00  0.00
C
ATOM   1314  HA  GLN    78      16.360  14.682  22.469  1.00  0.00
H
ATOM   1315  C   GLN    78      15.487  14.153  20.596  1.00  0.00
C
ATOM   1316  O   GLN    78      14.699  13.319  20.150  1.00  0.00
O
ATOM   1317  CB  GLN    78      17.760  13.473  21.413  1.00  0.00
C
ATOM   1318 1HB  GLN    78      17.757  12.577  20.801  1.00  0.00
H
ATOM   1319 2HB  GLN    78      18.133  14.302  20.816  1.00  0.00
H
ATOM   1320  CG  GLN    78      18.702  13.262  22.593  1.00  0.00
C
ATOM   1321 1HG  GLN    78      18.609  14.108  23.271  1.00  0.00
H
ATOM   1322 2HG  GLN    78      18.425  12.355  23.129  1.00  0.00
H
ATOM   1323  CD  GLN    78      20.145  13.162  22.158  1.00  0.00
C
ATOM   1324  OE1 GLN    78      20.448  13.168  20.969  1.00  0.00
O
ATOM   1325  NE2 GLN    78      21.044  13.112  23.094  1.00  0.00
N
ATOM   1326 1HE2 GLN    78      22.023  13.145  22.837  1.00  0.00
H
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ATOM   1327 2HE2 GLN    78      20.762  13.056  24.066  1.00  0.00
H
ATOM   1328  N   GLN    79      15.605  15.372  20.072  1.00  0.00
N
ATOM   1329  H   GLN    79      16.313  16.013  20.417  1.00  0.00
H
ATOM   1330  CA  GLN    79      14.679  15.844  19.038  1.00  0.00
C
ATOM   1331  HA  GLN    79      14.389  14.976  18.446  1.00  0.00
H
ATOM   1332  C   GLN    79      15.173  16.927  18.051  1.00  0.00
C
ATOM   1333  O   GLN    79      15.702  17.971  18.441  1.00  0.00
O
ATOM   1334  CB  GLN    79      13.432  16.342  19.784  1.00  0.00
C
ATOM   1335 1HB  GLN    79      13.277  15.684  20.638  1.00  0.00
H
ATOM   1336 2HB  GLN    79      13.615  17.347  20.164  1.00  0.00
H
ATOM   1337  CG  GLN    79      12.146  16.324  18.983  1.00  0.00
C
ATOM   1338 1HG  GLN    79      12.183  17.092  18.217  1.00  0.00
H
ATOM   1339 2HG  GLN    79      12.050  15.351  18.501  1.00  0.00
H
ATOM   1340  CD  GLN    79      10.923  16.547  19.843  1.00  0.00
C
ATOM   1341  OE1 GLN    79      10.992  17.139  20.922  1.00  0.00
O
ATOM   1342  NE2 GLN    79       9.798  16.066  19.395  1.00  0.00
N
ATOM   1343 1HE2 GLN    79       8.945  16.209  19.919  1.00  0.00
H
ATOM   1344 2HE2 GLN    79       9.787  15.546  18.522  1.00  0.00
H
ATOM   1345  N   ASN    80      14.973  16.639  16.770  1.00  0.00
N
ATOM   1346  H   ASN    80      14.903  15.653  16.523  1.00  0.00
H
ATOM   1347  CA  ASN    80      14.727  17.564  15.650  1.00  0.00
C
ATOM   1348  HA  ASN    80      14.891  16.961  14.755  1.00  0.00
H
ATOM   1349  C   ASN    80      15.558  18.827  15.397  1.00  0.00
C
ATOM   1350  O   ASN    80      15.191  19.943  15.777  1.00  0.00
O
ATOM   1351  CB  ASN    80      13.236  17.920  15.583  1.00  0.00
C
ATOM   1352 1HB  ASN    80      12.905  18.302  16.545  1.00  0.00
H
ATOM   1353 2HB  ASN    80      13.103  18.707  14.841  1.00  0.00
H
ATOM   1354  CG  ASN    80      12.372  16.746  15.164  1.00  0.00
C
ATOM   1355  OD1 ASN    80      12.467  15.641  15.687  1.00  0.00
O
ATOM   1356  ND2 ASN    80      11.519  16.975  14.214  1.00  0.00
N
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ATOM   1357 1HD2 ASN    80      10.968  16.211  13.862  1.00  0.00
H
ATOM   1358 2HD2 ASN    80      11.404  17.911  13.847  1.00  0.00
H
ATOM   1359  N   ALA    81      16.602  18.645  14.601  1.00  0.00
N
ATOM   1360  H   ALA    81      16.998  17.716  14.522  1.00  0.00
H
ATOM   1361  CA  ALA    81      17.115  19.638  13.651  1.00  0.00
C
ATOM   1362  HA  ALA    81      16.305  20.249  13.252  1.00  0.00
H
ATOM   1363  C   ALA    81      17.689  18.720  12.568  1.00  0.00
C
ATOM   1364  O   ALA    81      17.945  17.574  12.910  1.00  0.00
O
ATOM   1365  CB  ALA    81      18.200  20.505  14.281  1.00  0.00
C
ATOM   1366 1HB  ALA    81      17.778  21.084  15.102  1.00  0.00
H
ATOM   1367 2HB  ALA    81      18.614  21.184  13.535  1.00  0.00
H
ATOM   1368 3HB  ALA    81      18.997  19.874  14.664  1.00  0.00
H
ATOM   1369  N   ALA    82      17.887  19.143  11.323  1.00  0.00
N
ATOM   1370  H   ALA    82      17.700  20.107  11.072  1.00  0.00
H
ATOM   1371  CA  ALA    82      18.348  18.214  10.278  1.00  0.00
C
ATOM   1372  HA  ALA    82      17.655  17.374  10.243  1.00  0.00
H
ATOM   1373  C   ALA    82      19.747  17.653  10.547  1.00  0.00
C
ATOM   1374  O   ALA    82      20.032  16.487  10.280  1.00  0.00
O
ATOM   1375  CB  ALA    82      18.328  18.899   8.917  1.00  0.00
C
ATOM   1376 1HB  ALA    82      17.328  19.266   8.700  1.00  0.00
H
ATOM   1377 2HB  ALA    82      18.618  18.182   8.146  1.00  0.00
H
ATOM   1378 3HB  ALA    82      19.031  19.733   8.902  1.00  0.00
H
ATOM   1379  N   LEU    83      20.599  18.514  11.078  1.00  0.00
N
ATOM   1380  H   LEU    83      20.295  19.463  11.242  1.00  0.00
H
ATOM   1381  CA  LEU    83      21.936  18.173  11.545  1.00  0.00
C
ATOM   1382  HA  LEU    83      22.027  17.110  11.757  1.00  0.00
H
ATOM   1383  C   LEU    83      21.952  18.986  12.822  1.00  0.00
C
ATOM   1384  O   LEU    83      21.292  20.031  12.852  1.00  0.00
O
ATOM   1385  CB  LEU    83      23.025  18.645  10.574  1.00  0.00
C
ATOM   1386 1HB  LEU    83      22.792  19.669  10.283  1.00  0.00
H
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ATOM   1387 2HB  LEU    83      23.977  18.657  11.104  1.00  0.00
H
ATOM   1388  CG  LEU    83      23.207  17.804   9.301  1.00  0.00
C
ATOM   1389  HG  LEU    83      22.239  17.682   8.817  1.00  0.00
H
ATOM   1390  CD1 LEU    83      24.133  18.518   8.329  1.00  0.00
C
ATOM   1391 1HD1 LEU    83      24.254  17.912   7.432  1.00  0.00
H
ATOM   1392 2HD1 LEU    83      25.109  18.674   8.791  1.00  0.00
H
ATOM   1393 3HD1 LEU    83      23.696  19.475   8.049  1.00  0.00
H
ATOM   1394  CD2 LEU    83      23.773  16.422   9.623  1.00  0.00
C
ATOM   1395 1HD2 LEU    83      23.914  15.865   8.697  1.00  0.00
H
ATOM   1396 2HD2 LEU    83      23.072  15.876  10.251  1.00  0.00
H
ATOM   1397 3HD2 LEU    83      24.729  16.518  10.137  1.00  0.00
H
ATOM   1398  N   PHE    84      22.630  18.539  13.867  1.00  0.00
N
ATOM   1399  H   PHE    84      23.156  17.677  13.801  1.00  0.00
H
ATOM   1400  CA  PHE    84      22.564  19.239  15.147  1.00  0.00
C
ATOM   1401  HA  PHE    84      22.356  20.290  14.953  1.00  0.00
H
ATOM   1402  C   PHE    84      23.827  19.165  15.992  1.00  0.00
C
ATOM   1403  O   PHE    84      24.481  18.120  16.046  1.00  0.00
O
ATOM   1404  CB  PHE    84      21.401  18.643  15.946  1.00  0.00
C
ATOM   1405 1HB  PHE    84      20.552  18.523  15.277  1.00  0.00
H
ATOM   1406 2HB  PHE    84      21.685  17.653  16.304  1.00  0.00
H
ATOM   1407  CG  PHE    84      20.964  19.488  17.111  1.00  0.00
C
ATOM   1408  CD1 PHE    84      20.650  20.849  16.929  1.00  0.00
C
ATOM   1409  HD1 PHE    84      20.722  21.298  15.949  1.00  0.00
H
ATOM   1410  CD2 PHE    84      20.848  18.925  18.395  1.00  0.00
C
ATOM   1411  HD2 PHE    84      21.095  17.885  18.553  1.00  0.00
H
ATOM   1412  CE1 PHE    84      20.229  21.644  18.014  1.00  0.00
C
ATOM   1413  HE1 PHE    84      20.005  22.690  17.862  1.00  0.00
H
ATOM   1414  CE2 PHE    84      20.398  19.704  19.487  1.00  0.00
C
ATOM   1415  HE2 PHE    84      20.299  19.259  20.467  1.00  0.00
H
ATOM   1416  CZ  PHE    84      20.084  21.069  19.292  1.00  0.00
C
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ATOM   1417  HZ  PHE    84      19.736  21.670  20.120  1.00  0.00
H
ATOM   1418  N   LYS    85      24.120  20.250  16.698  1.00  0.00
N
ATOM   1419  H   LYS    85      23.546  21.080  16.583  1.00  0.00
H
ATOM   1420  CA  LYS    85      25.167  20.308  17.720  1.00  0.00
C
ATOM   1421  HA  LYS    85      25.334  19.313  18.127  1.00  0.00
H
ATOM   1422  C   LYS    85      24.616  21.210  18.811  1.00  0.00
C
ATOM   1423  O   LYS    85      23.652  21.937  18.556  1.00  0.00
O
ATOM   1424  CB  LYS    85      26.484  20.862  17.153  1.00  0.00
C
ATOM   1425 1HB  LYS    85      27.274  20.710  17.888  1.00  0.00
H
ATOM   1426 2HB  LYS    85      26.732  20.280  16.266  1.00  0.00
H
ATOM   1427  CG  LYS    85      26.446  22.360  16.802  1.00  0.00
C
ATOM   1428 1HG  LYS    85      25.550  22.573  16.230  1.00  0.00
H
ATOM   1429 2HG  LYS    85      26.393  22.928  17.731  1.00  0.00
H
ATOM   1430  CD  LYS    85      27.657  22.849  16.014  1.00  0.00
C
ATOM   1431 1HD  LYS    85      27.642  23.938  15.992  1.00  0.00
H
ATOM   1432 2HD  LYS    85      28.560  22.530  16.527  1.00  0.00
H
ATOM   1433  CE  LYS    85      27.688  22.331  14.576  1.00  0.00
C
ATOM   1434 1HE  LYS    85      28.614  22.659  14.101  1.00  0.00
H
ATOM   1435 2HE  LYS    85      27.695  21.243  14.604  1.00  0.00
H
ATOM   1436  NZ  LYS    85      26.530  22.760  13.722  1.00  0.00
N
ATOM   1437 1HZ  LYS    85      26.551  22.238  12.847  1.00  0.00
H
ATOM   1438 2HZ  LYS    85      26.582  23.753  13.529  1.00  0.00
H
ATOM   1439 3HZ  LYS    85      25.654  22.558  14.191  1.00  0.00
H
ATOM   1440  N   LEU    86      25.236  21.208  19.980  1.00  0.00
N
ATOM   1441  H   LEU    86      26.042  20.605  20.114  1.00  0.00
H
ATOM   1442  CA  LEU    86      24.840  22.067  21.094  1.00  0.00
C
ATOM   1443  HA  LEU    86      24.065  22.766  20.783  1.00  0.00
H
ATOM   1444  C   LEU    86      26.059  22.854  21.535  1.00  0.00
C
ATOM   1445  O   LEU    86      27.171  22.324  21.545  1.00  0.00
O
ATOM   1446  CB  LEU    86      24.339  21.217  22.263  1.00  0.00
C
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ATOM   1447 1HB  LEU    86      25.067  20.423  22.427  1.00  0.00
H
ATOM   1448 2HB  LEU    86      24.324  21.840  23.157  1.00  0.00
H
ATOM   1449  CG  LEU    86      22.954  20.579  22.118  1.00  0.00
C
ATOM   1450  HG  LEU    86      22.884  20.093  21.146  1.00  0.00
H
ATOM   1451  CD1 LEU    86      22.755  19.528  23.194  1.00  0.00
C
ATOM   1452 1HD1 LEU    86      21.778  19.069  23.062  1.00  0.00
H
ATOM   1453 2HD1 LEU    86      22.808  19.979  24.185  1.00  0.00
H
ATOM   1454 3HD1 LEU    86      23.512  18.750  23.093  1.00  0.00
H
ATOM   1455  CD2 LEU    86      21.857  21.633  22.234  1.00  0.00
C
ATOM   1456 1HD2 LEU    86      20.881  21.150  22.191  1.00  0.00
H
ATOM   1457 2HD2 LEU    86      21.929  22.338  21.406  1.00  0.00
H
ATOM   1458 3HD2 LEU    86      21.945  22.165  23.181  1.00  0.00
H
ATOM   1459  N   GLY    87      25.857  24.115  21.886  1.00  0.00
N
ATOM   1460  H   GLY    87      24.928  24.514  21.825  1.00  0.00
H
ATOM   1461  CA  GLY    87      26.974  24.959  22.268  1.00  0.00
C
ATOM   1462 1HA  GLY    87      26.625  25.915  22.656  1.00  0.00
H
ATOM   1463 2HA  GLY    87      27.571  24.450  23.024  1.00  0.00
H
ATOM   1464  C   GLY    87      27.808  25.174  21.023  1.00  0.00
C
ATOM   1465  O   GLY    87      27.279  25.481  19.949  1.00  0.00
O
ATOM   1466  N   SER    88      29.103  24.930  21.127  1.00  0.00
N
ATOM   1467  H   SER    88      29.508  24.740  22.041  1.00  0.00
H
ATOM   1468  CA  SER    88      29.955  24.789  19.955  1.00  0.00
C
ATOM   1469  HA  SER    88      29.343  24.643  19.065  1.00  0.00
H
ATOM   1470  C   SER    88      30.809  23.551  20.172  1.00  0.00
C
ATOM   1471  O   SER    88      31.665  23.521  21.058  1.00  0.00
O
ATOM   1472  CB  SER    88      30.838  26.018  19.757  1.00  0.00
C
ATOM   1473 1HB  SER    88      30.209  26.901  19.652  1.00  0.00
H
ATOM   1474 2HB  SER    88      31.482  26.142  20.628  1.00  0.00
H
ATOM   1475  OG  SER    88      31.636  25.868  18.594  1.00  0.00
O
ATOM   1476  HG  SER    88      32.439  26.406  18.708  1.00  0.00
H
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ATOM   1477  N   ASP    89      30.587  22.530  19.363  1.00  0.00
N
ATOM   1478  H   ASP    89      29.866  22.585  18.658  1.00  0.00
H
ATOM   1479  CA  ASP    89      31.398  21.318  19.384  1.00  0.00
C
ATOM   1480  HA  ASP    89      32.381  21.540  19.797  1.00  0.00
H
ATOM   1481  C   ASP    89      31.535  20.953  17.917  1.00  0.00
C
ATOM   1482  O   ASP    89      30.810  21.516  17.096  1.00  0.00
O
ATOM   1483  CB  ASP    89      30.731  20.191  20.178  1.00  0.00
C
ATOM   1484 1HB  ASP    89      30.309  20.604  21.094  1.00  0.00
H
ATOM   1485 2HB  ASP    89      29.923  19.770  19.579  1.00  0.00
H
ATOM   1486  CG  ASP    89      31.708  19.090  20.549  1.00  0.00
C
ATOM   1487  OD1 ASP    89      32.931  19.292  20.363  1.00  0.00
O
ATOM   1488  OD2 ASP    89      31.289  18.026  21.060  1.00  0.00
O
ATOM   1489  N   ILE    90      32.476  20.098  17.560  1.00  0.00
N
ATOM   1490  H   ILE    90      33.015  19.616  18.272  1.00  0.00
H
ATOM   1491  CA  ILE    90      32.775  19.854  16.152  1.00  0.00
C
ATOM   1492  HA  ILE    90      32.551  20.759  15.589  1.00  0.00
H
ATOM   1493  C   ILE    90      31.886  18.752  15.589  1.00  0.00
C
ATOM   1494  O   ILE    90      31.762  17.658  16.145  1.00  0.00
O
ATOM   1495  CB  ILE    90      34.276  19.533  15.957  1.00  0.00
C
ATOM   1496  HB  ILE    90      34.506  18.619  16.501  1.00  0.00
H
ATOM   1497  CG1 ILE    90      35.157  20.664  16.524  1.00  0.00
C
ATOM   1498 1HG1 ILE    90      35.033  20.701  17.607  1.00  0.00
H
ATOM   1499 2HG1 ILE    90      36.184  20.389  16.318  1.00  0.00
H
ATOM   1500  CG2 ILE    90      34.615  19.320  14.474  1.00  0.00
C
ATOM   1501 1HG2 ILE    90      35.692  19.181  14.348  1.00  0.00
H
ATOM   1502 2HG2 ILE    90      34.291  20.178  13.887  1.00  0.00
H
ATOM   1503 3HG2 ILE    90      34.112  18.432  14.095  1.00  0.00
H
ATOM   1504  CD1 ILE    90      34.957  22.077  15.969  1.00  0.00
C
ATOM   1505 1HD1 ILE    90      35.682  22.747  16.428  1.00  0.00
H
ATOM   1506 2HD1 ILE    90      33.954  22.438  16.195  1.00  0.00
H
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ATOM   1507 3HD1 ILE    90      35.117  22.085  14.891  1.00  0.00
H
ATOM   1508  N   GLU    91      31.255  19.079  14.474  1.00  0.00
N
ATOM   1509  H   GLU    91      31.437  19.989  14.059  1.00  0.00
H
ATOM   1510  CA  GLU    91      30.322  18.205  13.775  1.00  0.00
C
ATOM   1511  HA  GLU    91      29.866  17.501  14.472  1.00  0.00
H
ATOM   1512  C   GLU    91      31.072  17.449  12.678  1.00  0.00
C
ATOM   1513  O   GLU    91      31.247  17.964  11.576  1.00  0.00
O
ATOM   1514  CB  GLU    91      29.251  19.106  13.160  1.00  0.00
C
ATOM   1515 1HB  GLU    91      28.891  19.773  13.938  1.00  0.00
H
ATOM   1516 2HB  GLU    91      29.717  19.712  12.391  1.00  0.00
H
ATOM   1517  CG  GLU    91      28.070  18.396  12.568  1.00  0.00
C
ATOM   1518 1HG  GLU    91      28.425  17.555  11.972  1.00  0.00
H
ATOM   1519 2HG  GLU    91      27.459  18.022  13.386  1.00  0.00
H
ATOM   1520  CD  GLU    91      27.230  19.297  11.686  1.00  0.00
C
ATOM   1521  OE1 GLU    91      26.847  20.406  12.120  1.00  0.00
O
ATOM   1522  OE2 GLU    91      26.959  18.897  10.533  1.00  0.00
O
ATOM   1523  N   TYR    92      31.592  16.268  12.979  1.00  0.00
N
ATOM   1524  H   TYR    92      31.419  15.860  13.892  1.00  0.00
H
ATOM   1525  CA  TYR    92      32.388  15.514  12.013  1.00  0.00
C
ATOM   1526  HA  TYR    92      33.120  16.165  11.538  1.00  0.00
H
ATOM   1527  C   TYR    92      31.437  14.966  10.949  1.00  0.00
C
ATOM   1528  O   TYR    92      30.532  14.194  11.260  1.00  0.00
O
ATOM   1529  CB  TYR    92      33.110  14.336  12.686  1.00  0.00
C
ATOM   1530 1HB  TYR    92      32.383  13.781  13.272  1.00  0.00
H
ATOM   1531 2HB  TYR    92      33.468  13.674  11.897  1.00  0.00
H
ATOM   1532  CG  TYR    92      34.300  14.657  13.585  1.00  0.00
C
ATOM   1533  CD1 TYR    92      35.451  13.847  13.525  1.00  0.00
C
ATOM   1534  HD1 TYR    92      35.490  13.014  12.837  1.00  0.00
H
ATOM   1535  CD2 TYR    92      34.289  15.714  14.528  1.00  0.00
C
ATOM   1536  HD2 TYR    92      33.417  16.335  14.647  1.00  0.00
H
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ATOM   1537  CE1 TYR    92      36.564  14.096  14.367  1.00  0.00
C
ATOM   1538  HE1 TYR    92      37.414  13.443  14.333  1.00  0.00
H
ATOM   1539  CE2 TYR    92      35.426  15.976  15.346  1.00  0.00
C
ATOM   1540  HE2 TYR    92      35.419  16.788  16.054  1.00  0.00
H
ATOM   1541  CZ  TYR    92      36.554  15.172  15.249  1.00  0.00
C
ATOM   1542  OH  TYR    92      37.644  15.440  16.038  1.00  0.00
O
ATOM   1543  HH  TYR    92      38.329  14.774  15.954  1.00  0.00
H
ATOM   1544  N   ILE    93      31.632  15.360   9.699  1.00  0.00
N
ATOM   1545  H   ILE    93      32.398  15.989   9.484  1.00  0.00
H
ATOM   1546  CA  ILE    93      30.773  14.913   8.601  1.00  0.00
C
ATOM   1547  HA  ILE    93      29.747  14.806   8.953  1.00  0.00
H
ATOM   1548  C   ILE    93      31.278  13.550   8.147  1.00  0.00
C
ATOM   1549  O   ILE    93      30.500  12.600   8.016  1.00  0.00
O
ATOM   1550  CB  ILE    93      30.807  15.927   7.412  1.00  0.00
C
ATOM   1551  HB  ILE    93      31.846  16.102   7.137  1.00  0.00
H
ATOM   1552  CG1 ILE    93      30.186  17.267   7.861  1.00  0.00
C
ATOM   1553 1HG1 ILE    93      29.110  17.129   7.959  1.00  0.00
H
ATOM   1554 2HG1 ILE    93      30.576  17.534   8.841  1.00  0.00
H
ATOM   1555  CG2 ILE    93      30.078  15.362   6.165  1.00  0.00
C
ATOM   1556 1HG2 ILE    93      30.077  16.094   5.358  1.00  0.00
H
ATOM   1557 2HG2 ILE    93      29.047  15.108   6.409  1.00  0.00
H
ATOM   1558 3HG2 ILE    93      30.589  14.471   5.801  1.00  0.00
H
ATOM   1559  CD1 ILE    93      30.434  18.448   6.932  1.00  0.00
C
ATOM   1560 1HD1 ILE    93      29.939  19.330   7.326  1.00  0.00
H
ATOM   1561 2HD1 ILE    93      30.030  18.244   5.941  1.00  0.00
H
ATOM   1562 3HD1 ILE    93      31.504  18.642   6.859  1.00  0.00
H
ATOM   1563  N   SER    94      32.580  13.470   7.910  1.00  0.00
N
ATOM   1564  H   SER    94      33.167  14.289   8.033  1.00  0.00
H
ATOM   1565  CA  SER    94      33.234  12.265   7.412  1.00  0.00
C
ATOM   1566  HA  SER    94      32.853  11.375   7.914  1.00  0.00
H
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ATOM   1567  C   SER    94      34.725  12.426   7.665  1.00  0.00
C
ATOM   1568  O   SER    94      35.195  13.537   7.928  1.00  0.00
O
ATOM   1569  CB  SER    94      33.017  12.154   5.901  1.00  0.00
C
ATOM   1570 1HB  SER    94      33.535  11.273   5.523  1.00  0.00
H
ATOM   1571 2HB  SER    94      31.950  12.055   5.704  1.00  0.00
H
ATOM   1572  OG  SER    94      33.501  13.315   5.247  1.00  0.00
O
ATOM   1573  HG  SER    94      33.545  13.153   4.297  1.00  0.00
H
ATOM   1574  N   GLY    95      35.495  11.356   7.545  1.00  0.00
N
ATOM   1575  H   GLY    95      35.085  10.433   7.431  1.00  0.00
H
ATOM   1576  CA  GLY    95      36.938  11.498   7.533  1.00  0.00
C
ATOM   1577 1HA  GLY    95      37.202  12.280   6.820  1.00  0.00
H
ATOM   1578 2HA  GLY    95      37.281  11.802   8.522  1.00  0.00
H
ATOM   1579  C   GLY    95      37.661  10.235   7.130  1.00  0.00
C
ATOM   1580  O   GLY    95      37.086   9.148   7.103  1.00  0.00
O
ATOM   1581  N   ASP    96      38.937  10.388   6.827  1.00  0.00
N
ATOM   1582  H   ASP    96      39.336  11.326   6.844  1.00  0.00
H
ATOM   1583  CA  ASP    96      39.853   9.310   6.472  1.00  0.00
C
ATOM   1584  HA  ASP    96      39.513   8.358   6.881  1.00  0.00
H
ATOM   1585  C   ASP    96      41.185   9.701   7.098  1.00  0.00
C
ATOM   1586  O   ASP    96      42.067  10.208   6.416  1.00  0.00
O
ATOM   1587  CB  ASP    96      40.018   9.194   4.956  1.00  0.00
C
ATOM   1588 1HB  ASP    96      39.044   9.002   4.512  1.00  0.00
H
ATOM   1589 2HB  ASP    96      40.393  10.138   4.563  1.00  0.00
H
ATOM   1590  CG  ASP    96      40.980   8.089   4.568  1.00  0.00
C
ATOM   1591  OD1 ASP    96      41.125   7.118   5.342  1.00  0.00
O
ATOM   1592  OD2 ASP    96      41.630   8.162   3.500  1.00  0.00
O
ATOM   1593  N   MET    97      41.305   9.569   8.410  1.00  0.00
N
ATOM   1594  H   MET    97      40.547   9.159   8.947  1.00  0.00
H
ATOM   1595  CA  MET    97      42.513   9.979   9.130  1.00  0.00
C
ATOM   1596  HA  MET    97      43.402   9.717   8.557  1.00  0.00
H
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ATOM   1597  C   MET    97      42.476   9.218  10.450  1.00  0.00
C
ATOM   1598  O   MET    97      41.397   8.752  10.820  1.00  0.00
O
ATOM   1599  CB  MET    97      42.475  11.492   9.387  1.00  0.00
C
ATOM   1600 1HB  MET    97      41.798  11.950   8.670  1.00  0.00
H
ATOM   1601 2HB  MET    97      42.078  11.664  10.384  1.00  0.00
H
ATOM   1602  CG  MET    97      43.822  12.181   9.270  1.00  0.00
C
ATOM   1603 1HG  MET    97      44.514  11.680   9.941  1.00  0.00
H
ATOM   1604 2HG  MET    97      44.194  12.078   8.252  1.00  0.00
H
ATOM   1605  SD  MET    97      43.757  13.940   9.717  1.00  0.00
S
ATOM   1606  CE  MET    97      43.114  14.705   8.275  1.00  0.00
C
ATOM   1607 1HE  MET    97      42.911  15.758   8.470  1.00  0.00
H
ATOM   1608 2HE  MET    97      42.190  14.209   7.984  1.00  0.00
H
ATOM   1609 3HE  MET    97      43.833  14.619   7.461  1.00  0.00
H
ATOM   1610  N   MET    98      43.576   9.100  11.182  1.00  0.00
N
ATOM   1611  H   MET    98      44.460   9.474  10.854  1.00  0.00
H
ATOM   1612  CA  MET    98      43.517   8.485  12.513  1.00  0.00
C
ATOM   1613  HA  MET    98      42.946   7.558  12.464  1.00  0.00
H
ATOM   1614  C   MET    98      42.826   9.448  13.474  1.00  0.00
C
ATOM   1615  O   MET    98      42.913  10.660  13.291  1.00  0.00
O
ATOM   1616  CB  MET    98      44.916   8.185  13.056  1.00  0.00
C
ATOM   1617 1HB  MET    98      45.493   9.107  13.074  1.00  0.00
H
ATOM   1618 2HB  MET    98      44.816   7.829  14.080  1.00  0.00
H
ATOM   1619  CG  MET    98      45.683   7.136  12.272  1.00  0.00
C
ATOM   1620 1HG  MET    98      45.102   6.215  12.249  1.00  0.00
H
ATOM   1621 2HG  MET    98      45.849   7.482  11.251  1.00  0.00
H
ATOM   1622  SD  MET    98      47.269   6.815  13.067  1.00  0.00
S
ATOM   1623  CE  MET    98      47.924   5.472  12.059  1.00  0.00
C
ATOM   1624 1HE  MET    98      48.883   5.144  12.460  1.00  0.00
H
ATOM   1625 2HE  MET    98      48.062   5.812  11.033  1.00  0.00
H
ATOM   1626 3HE  MET    98      47.229   4.631  12.066  1.00  0.00
H
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ATOM   1627  N   LEU    99      42.198   8.941  14.525  1.00  0.00
N
ATOM   1628  H   LEU    99      42.183   7.932  14.649  1.00  0.00
H
ATOM   1629  CA  LEU    99      41.498   9.779  15.502  1.00  0.00
C
ATOM   1630  HA  LEU    99      40.680  10.296  15.000  1.00  0.00
H
ATOM   1631  C   LEU    99      42.400  10.830  16.134  1.00  0.00
C
ATOM   1632  O   LEU    99      41.999  11.976  16.291  1.00  0.00
O
ATOM   1633  CB  LEU    99      40.942   8.910  16.634  1.00  0.00
C
ATOM   1634 1HB  LEU    99      40.335   8.115  16.209  1.00  0.00
H
ATOM   1635 2HB  LEU    99      41.789   8.447  17.134  1.00  0.00
H
ATOM   1636  CG  LEU    99      40.128   9.634  17.714  1.00  0.00
C
ATOM   1637  HG  LEU    99      40.688  10.501  18.051  1.00  0.00
H
ATOM   1638  CD1 LEU    99      38.769  10.105  17.217  1.00  0.00
C
ATOM   1639 1HD1 LEU    99      38.252  10.632  18.021  1.00  0.00
H
ATOM   1640 2HD1 LEU    99      38.176   9.253  16.903  1.00  0.00
H
ATOM   1641 3HD1 LEU    99      38.895  10.796  16.382  1.00  0.00
H
ATOM   1642  CD2 LEU    99      39.967   8.716  18.903  1.00  0.00
C
ATOM   1643 1HD2 LEU    99      39.373   9.213  19.670  1.00  0.00
H
ATOM   1644 2HD2 LEU    99      40.947   8.484  19.323  1.00  0.00
H
ATOM   1645 3HD2 LEU    99      39.474   7.793  18.603  1.00  0.00
H
ATOM   1646  N   SER   100      43.635  10.472  16.452  1.00  0.00
N
ATOM   1647  H   SER   100      43.944   9.522  16.292  1.00  0.00
H
ATOM   1648  CA  SER   100      44.566  11.426  17.051  1.00  0.00
C
ATOM   1649  HA  SER   100      44.152  11.809  17.982  1.00  0.00
H
ATOM   1650  C   SER   100      44.817  12.607  16.120  1.00  0.00
C
ATOM   1651  O   SER   100      44.907  13.760  16.540  1.00  0.00
O
ATOM   1652  CB  SER   100      45.879  10.702  17.329  1.00  0.00
C
ATOM   1653 1HB  SER   100      46.669  11.427  17.533  1.00  0.00
H
ATOM   1654 2HB  SER   100      45.751  10.056  18.197  1.00  0.00
H
ATOM   1655  OG  SER   100      46.213   9.898  16.205  1.00  0.00
O
ATOM   1656  HG  SER   100      47.041  10.236  15.820  1.00  0.00
H
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ATOM   1657  N   GLN   101      44.871  12.326  14.829  1.00  0.00
N
ATOM   1658  H   GLN   101      44.746  11.370  14.526  1.00  0.00
H
ATOM   1659  CA  GLN   101      45.087  13.363  13.834  1.00  0.00
C
ATOM   1660  HA  GLN   101      45.892  14.017  14.170  1.00  0.00
H
ATOM   1661  C   GLN   101      43.815  14.193  13.666  1.00  0.00
C
ATOM   1662  O   GLN   101      43.891  15.412  13.540  1.00  0.00
O
ATOM   1663  CB  GLN   101      45.481  12.732  12.500  1.00  0.00
C
ATOM   1664 1HB  GLN   101      44.669  12.090  12.172  1.00  0.00
H
ATOM   1665 2HB  GLN   101      45.610  13.528  11.771  1.00  0.00
H
ATOM   1666  CG  GLN   101      46.753  11.905  12.525  1.00  0.00
C
ATOM   1667 1HG  GLN   101      47.592  12.551  12.782  1.00  0.00
H
ATOM   1668 2HG  GLN   101      46.670  11.125  13.279  1.00  0.00
H
ATOM   1669  CD  GLN   101      47.025  11.244  11.192  1.00  0.00
C
ATOM   1670  OE1 GLN   101      46.400  10.249  10.834  1.00  0.00
O
ATOM   1671  NE2 GLN   101      47.938  11.788  10.442  1.00  0.00
N
ATOM   1672 1HE2 GLN   101      48.230  11.328   9.590  1.00  0.00
H
ATOM   1673 2HE2 GLN   101      48.333  12.685  10.705  1.00  0.00
H
ATOM   1674  N   GLN   102      42.649  13.560  13.719  1.00  0.00
N
ATOM   1675  H   GLN   102      42.638  12.549  13.823  1.00  0.00
H
ATOM   1676  CA  GLN   102      41.373  14.278  13.621  1.00  0.00
C
ATOM   1677  HA  GLN   102      41.356  14.854  12.695  1.00  0.00
H
ATOM   1678  C   GLN   102      41.206  15.241  14.798  1.00  0.00
C
ATOM   1679  O   GLN   102      40.823  16.393  14.620  1.00  0.00
O
ATOM   1680  CB  GLN   102      40.187  13.305  13.646  1.00  0.00
C
ATOM   1681 1HB  GLN   102      40.244  12.727  14.566  1.00  0.00
H
ATOM   1682 2HB  GLN   102      39.281  13.904  13.677  1.00  0.00
H
ATOM   1683  CG  GLN   102      40.062  12.327  12.477  1.00  0.00
C
ATOM   1684 1HG  GLN   102      39.789  12.878  11.577  1.00  0.00
H
ATOM   1685 2HG  GLN   102      41.020  11.852  12.306  1.00  0.00
H
ATOM   1686  CD  GLN   102      39.033  11.228  12.728  1.00  0.00
C
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ATOM   1687  OE1 GLN   102      38.215  11.304  13.632  1.00  0.00
O
ATOM   1688  NE2 GLN   102      39.084  10.186  11.947  1.00  0.00
N
ATOM   1689 1HE2 GLN   102      38.375   9.483  12.033  1.00  0.00
H
ATOM   1690 2HE2 GLN   102      39.838  10.067  11.287  1.00  0.00
H
ATOM   1691  N   ILE   103      41.523  14.781  16.002  1.00  0.00
N
ATOM   1692  H   ILE   103      41.818  13.810  16.104  1.00  0.00
H
ATOM   1693  CA  ILE   103      41.441  15.612  17.206  1.00  0.00
C
ATOM   1694  HA  ILE   103      40.453  16.071  17.256  1.00  0.00
H
ATOM   1695  C   ILE   103      42.465  16.740  17.103  1.00  0.00
C
ATOM   1696  O   ILE   103      42.173  17.882  17.450  1.00  0.00
O
ATOM   1697  CB  ILE   103      41.644  14.756  18.500  1.00  0.00
C
ATOM   1698  HB  ILE   103      42.548  14.157  18.385  1.00  0.00
H
ATOM   1699  CG1 ILE   103      40.429  13.821  18.680  1.00  0.00
C
ATOM   1700 1HG1 ILE   103      39.549  14.437  18.863  1.00  0.00
H
ATOM   1701 2HG1 ILE   103      40.261  13.276  17.752  1.00  0.00
H
ATOM   1702  CG2 ILE   103      41.808  15.650  19.756  1.00  0.00
C
ATOM   1703 1HG2 ILE   103      41.968  15.035  20.642  1.00  0.00
H
ATOM   1704 2HG2 ILE   103      40.916  16.260  19.898  1.00  0.00
H
ATOM   1705 3HG2 ILE   103      42.675  16.299  19.645  1.00  0.00
H
ATOM   1706  CD1 ILE   103      40.533  12.788  19.815  1.00  0.00
C
ATOM   1707 1HD1 ILE   103      39.661  12.134  19.783  1.00  0.00
H
ATOM   1708 2HD1 ILE   103      40.556  13.285  20.785  1.00  0.00
H
ATOM   1709 3HD1 ILE   103      41.433  12.186  19.688  1.00  0.00
H
ATOM   1710  N   ASN   104      43.647  16.475  16.568  1.00  0.00
N
ATOM   1711  H   ASN   104      43.881  15.528  16.290  1.00  0.00
H
ATOM   1712  CA  ASN   104      44.626  17.549  16.404  1.00  0.00
C
ATOM   1713  HA  ASN   104      44.739  18.051  17.366  1.00  0.00
H
ATOM   1714  C   ASN   104      44.158  18.620  15.417  1.00  0.00
C
ATOM   1715  O   ASN   104      44.395  19.802  15.661  1.00  0.00
O
ATOM   1716  CB  ASN   104      45.992  17.004  15.979  1.00  0.00
C
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ATOM   1717 1HB  ASN   104      45.863  16.293  15.168  1.00  0.00
H
ATOM   1718 2HB  ASN   104      46.606  17.830  15.624  1.00  0.00
H
ATOM   1719  CG  ASN   104      46.726  16.334  17.108  1.00  0.00
C
ATOM   1720  OD1 ASN   104      46.460  16.589  18.276  1.00  0.00
O
ATOM   1721  ND2 ASN   104      47.661  15.487  16.783  1.00  0.00
N
ATOM   1722 1HD2 ASN   104      48.199  15.052  17.515  1.00  0.00
H
ATOM   1723 2HD2 ASN   104      47.839  15.276  15.817  1.00  0.00
H
ATOM   1724  N   VAL   105      43.456  18.243  14.355  1.00  0.00
N
ATOM   1725  H   VAL   105      43.298  17.254  14.185  1.00  0.00
H
ATOM   1726  CA  VAL   105      42.884  19.222  13.423  1.00  0.00
C
ATOM   1727  HA  VAL   105      43.658  19.923  13.112  1.00  0.00
H
ATOM   1728  C   VAL   105      41.785  20.015  14.128  1.00  0.00
C
ATOM   1729  O   VAL   105      41.742  21.245  14.044  1.00  0.00
O
ATOM   1730  CB  VAL   105      42.274  18.533  12.163  1.00  0.00
C
ATOM   1731  HB  VAL   105      41.590  17.753  12.488  1.00  0.00
H
ATOM   1732  CG1 VAL   105      41.496  19.519  11.311  1.00  0.00
C
ATOM   1733 1HG1 VAL   105      41.164  19.031  10.394  1.00  0.00
H
ATOM   1734 2HG1 VAL   105      42.120  20.375  11.058  1.00  0.00
H
ATOM   1735 3HG1 VAL   105      40.612  19.863  11.847  1.00  0.00
H
ATOM   1736  CG2 VAL   105      43.358  17.898  11.289  1.00  0.00
C
ATOM   1737 1HG2 VAL   105      42.893  17.355  10.466  1.00  0.00
H
ATOM   1738 2HG2 VAL   105      43.945  17.198  11.871  1.00  0.00
H
ATOM   1739 3HG2 VAL   105      44.017  18.666  10.886  1.00  0.00
H
ATOM   1740  N   THR   106      40.924  19.317  14.856  1.00  0.00
N
ATOM   1741  H   THR   106      40.998  18.302  14.878  1.00  0.00
H
ATOM   1742  CA  THR   106      39.844  19.939  15.620  1.00  0.00
C
ATOM   1743  HA  THR   106      39.169  20.453  14.936  1.00  0.00
H
ATOM   1744  C   THR   106      40.399  20.974  16.593  1.00  0.00
C
ATOM   1745  O   THR   106      39.881  22.087  16.702  1.00  0.00
O
ATOM   1746  CB  THR   106      39.054  18.830  16.367  1.00  0.00
C
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ATOM   1747  HB  THR   106      39.749  18.042  16.649  1.00  0.00
H
ATOM   1748  OG1 THR   106      38.077  18.277  15.481  1.00  0.00
O
ATOM   1749  HG1 THR   106      37.897  17.372  15.763  1.00  0.00
H
ATOM   1750  CG2 THR   106      38.355  19.308  17.627  1.00  0.00
C
ATOM   1751 1HG2 THR   106      37.570  18.602  17.895  1.00  0.00
H
ATOM   1752 2HG2 THR   106      37.921  20.293  17.476  1.00  0.00
H
ATOM   1753 3HG2 THR   106      39.077  19.362  18.440  1.00  0.00
H
ATOM   1754  N   ASN   107      41.488  20.642  17.268  1.00  0.00
N
ATOM   1755  H   ASN   107      41.890  19.717  17.144  1.00  0.00
H
ATOM   1756  CA  ASN   107      42.076  21.555  18.238  1.00  0.00
C
ATOM   1757  HA  ASN   107      41.302  21.868  18.940  1.00  0.00
H
ATOM   1758  C   ASN   107      42.598  22.814  17.561  1.00  0.00
C
ATOM   1759  O   ASN   107      42.386  23.914  18.064  1.00  0.00
O
ATOM   1760  CB  ASN   107      43.193  20.853  19.014  1.00  0.00
C
ATOM   1761 1HB  ASN   107      43.868  20.361  18.316  1.00  0.00
H
ATOM   1762 2HB  ASN   107      43.755  21.603  19.567  1.00  0.00
H
ATOM   1763  CG  ASN   107      42.663  19.836  20.001  1.00  0.00
C
ATOM   1764  OD1 ASN   107      41.504  19.869  20.389  1.00  0.00
O
ATOM   1765  ND2 ASN   107      43.500  18.935  20.425  1.00  0.00
N
ATOM   1766 1HD2 ASN   107      43.173  18.236  21.068  1.00  0.00
H
ATOM   1767 2HD2 ASN   107      44.457  18.941  20.099  1.00  0.00
H
ATOM   1768  N   GLU   108      43.242  22.692  16.408  1.00  0.00
N
ATOM   1769  H   GLU   108      43.409  21.777  16.004  1.00  0.00
H
ATOM   1770  CA  GLU   108      43.692  23.893  15.705  1.00  0.00
C
ATOM   1771  HA  GLU   108      44.294  24.496  16.382  1.00  0.00
H
ATOM   1772  C   GLU   108      42.505  24.736  15.276  1.00  0.00
C
ATOM   1773  O   GLU   108      42.518  25.950  15.442  1.00  0.00
O
ATOM   1774  CB  GLU   108      44.521  23.579  14.460  1.00  0.00
C
ATOM   1775 1HB  GLU   108      43.924  22.973  13.780  1.00  0.00
H
ATOM   1776 2HB  GLU   108      44.749  24.523  13.965  1.00  0.00
H
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ATOM   1777  CG  GLU   108      45.822  22.862  14.727  1.00  0.00
C
ATOM   1778 1HG  GLU   108      45.609  21.859  15.082  1.00  0.00
H
ATOM   1779 2HG  GLU   108      46.362  22.785  13.785  1.00  0.00
H
ATOM   1780  CD  GLU   108      46.691  23.559  15.762  1.00  0.00
C
ATOM   1781  OE1 GLU   108      46.946  24.779  15.655  1.00  0.00
O
ATOM   1782  OE2 GLU   108      47.095  22.895  16.746  1.00  0.00
O
ATOM   1783  N   ALA   109      41.462  24.100  14.760  1.00  0.00
N
ATOM   1784  H   ALA   109      41.484  23.087  14.668  1.00  0.00
H
ATOM   1785  CA  ALA   109      40.295  24.832  14.288  1.00  0.00
C
ATOM   1786  HA  ALA   109      40.624  25.529  13.516  1.00  0.00
H
ATOM   1787  C   ALA   109      39.659  25.655  15.414  1.00  0.00
C
ATOM   1788  O   ALA   109      39.340  26.825  15.217  1.00  0.00
O
ATOM   1789  CB  ALA   109      39.286  23.857  13.674  1.00  0.00
C
ATOM   1790 1HB  ALA   109      39.777  23.261  12.905  1.00  0.00
H
ATOM   1791 2HB  ALA   109      38.465  24.414  13.223  1.00  0.00
H
ATOM   1792 3HB  ALA   109      38.889  23.191  14.442  1.00  0.00
H
ATOM   1793  N   ARG   110      39.509  25.078  16.601  1.00  0.00
N
ATOM   1794  H   ARG   110      39.800  24.111  16.725  1.00  0.00
H
ATOM   1795  CA  ARG   110      38.898  25.815  17.716  1.00  0.00
C
ATOM   1796  HA  ARG   110      37.960  26.248  17.363  1.00  0.00
H
ATOM   1797  C   ARG   110      39.771  26.977  18.176  1.00  0.00
C
ATOM   1798  O   ARG   110      39.258  28.049  18.488  1.00  0.00
O
ATOM   1799  CB  ARG   110      38.585  24.881  18.891  1.00  0.00
C
ATOM   1800 1HB  ARG   110      39.509  24.405  19.221  1.00  0.00
H
ATOM   1801 2HB  ARG   110      38.187  25.480  19.711  1.00  0.00
H
ATOM   1802  CG  ARG   110      37.556  23.804  18.533  1.00  0.00
C
ATOM   1803 1HG  ARG   110      36.680  24.289  18.102  1.00  0.00
H
ATOM   1804 2HG  ARG   110      37.978  23.148  17.779  1.00  0.00
H
ATOM   1805  CD  ARG   110      37.097  22.947  19.708  1.00  0.00
C
ATOM   1806 1HD  ARG   110      36.545  23.577  20.404  1.00  0.00
H
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ATOM   1807 2HD  ARG   110      36.416  22.186  19.325  1.00  0.00
H
ATOM   1808  NE  ARG   110      38.193  22.291  20.440  1.00  0.00
N
ATOM   1809  HE  ARG   110      39.128  22.654  20.308  1.00  0.00
H
ATOM   1810  CZ  ARG   110      38.071  21.284  21.297  1.00  0.00
C
ATOM   1811  NH1 ARG   110      36.954  20.645  21.522  1.00  0.00
N
ATOM   1812 1HH1 ARG   110      36.102  20.943  21.083  1.00  0.00
H
ATOM   1813 2HH1 ARG   110      36.952  19.844  22.144  1.00  0.00
H
ATOM   1814  NH2 ARG   110      39.117  20.909  21.968  1.00  0.00
N
ATOM   1815 1HH2 ARG   110      40.001  21.373  21.810  1.00  0.00
H
ATOM   1816 2HH2 ARG   110      39.046  20.142  22.614  1.00  0.00
H
ATOM   1817  N   LYS   111      41.087  26.807  18.176  1.00  0.00
N
ATOM   1818  H   LYS   111      41.478  25.905  17.921  1.00  0.00
H
ATOM   1819  CA  LYS   111      41.982  27.915  18.535  1.00  0.00
C
ATOM   1820  HA  LYS   111      41.674  28.332  19.495  1.00  0.00
H
ATOM   1821  C   LYS   111      41.907  29.029  17.503  1.00  0.00
C
ATOM   1822  O   LYS   111      41.828  30.203  17.841  1.00  0.00
O
ATOM   1823  CB  LYS   111      43.429  27.432  18.634  1.00  0.00
C
ATOM   1824 1HB  LYS   111      43.688  26.926  17.705  1.00  0.00
H
ATOM   1825 2HB  LYS   111      44.075  28.303  18.746  1.00  0.00
H
ATOM   1826  CG  LYS   111      43.670  26.499  19.815  1.00  0.00
C
ATOM   1827 1HG  LYS   111      43.370  27.019  20.720  1.00  0.00
H
ATOM   1828 2HG  LYS   111      43.052  25.612  19.716  1.00  0.00
H
ATOM   1829  CD  LYS   111      45.125  26.073  19.963  1.00  0.00
C
ATOM   1830 1HD  LYS   111      45.757  26.959  20.006  1.00  0.00
H
ATOM   1831 2HD  LYS   111      45.229  25.524  20.898  1.00  0.00
H
ATOM   1832  CE  LYS   111      45.593  25.180  18.828  1.00  0.00
C
ATOM   1833 1HE  LYS   111      44.929  24.317  18.751  1.00  0.00
H
ATOM   1834 2HE  LYS   111      45.564  25.735  17.888  1.00  0.00
H
ATOM   1835  NZ  LYS   111      46.985  24.713  19.068  1.00  0.00
N
ATOM   1836 1HZ  LYS   111      47.293  24.133  18.293  1.00  0.00
H
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ATOM   1837 2HZ  LYS   111      47.031  24.174  19.925  1.00  0.00
H
ATOM   1838 3HZ  LYS   111      47.609  25.507  19.163  1.00  0.00
H
ATOM   1839  N   LEU   112      41.894  28.666  16.232  1.00  0.00
N
ATOM   1840  H   LEU   112      41.955  27.680  15.990  1.00  0.00
H
ATOM   1841  CA  LEU   112      41.839  29.654  15.158  1.00  0.00
C
ATOM   1842  HA  LEU   112      42.642  30.382  15.279  1.00  0.00
H
ATOM   1843  C   LEU   112      40.527  30.405  15.166  1.00  0.00
C
ATOM   1844  O   LEU   112      40.495  31.591  14.871  1.00  0.00
O
ATOM   1845  CB  LEU   112      41.971  28.970  13.804  1.00  0.00
C
ATOM   1846 1HB  LEU   112      41.431  28.025  13.856  1.00  0.00
H
ATOM   1847 2HB  LEU   112      41.450  29.594  13.082  1.00  0.00
H
ATOM   1848  CG  LEU   112      43.364  28.708  13.224  1.00  0.00
C
ATOM   1849  HG  LEU   112      43.630  29.577  12.627  1.00  0.00
H
ATOM   1850  CD1 LEU   112      44.507  28.466  14.212  1.00  0.00
C
ATOM   1851 1HD1 LEU   112      45.427  28.255  13.669  1.00  0.00
H
ATOM   1852 2HD1 LEU   112      44.278  27.618  14.855  1.00  0.00
H
ATOM   1853 3HD1 LEU   112      44.662  29.352  14.826  1.00  0.00
H
ATOM   1854  CD2 LEU   112      43.243  27.527  12.300  1.00  0.00
C
ATOM   1855 1HD2 LEU   112      44.210  27.328  11.849  1.00  0.00
H
ATOM   1856 2HD2 LEU   112      42.527  27.743  11.506  1.00  0.00
H
ATOM   1857 3HD2 LEU   112      42.926  26.642  12.854  1.00  0.00
H
ATOM   1858  N   TYR   113      39.452  29.725  15.530  1.00  0.00
N
ATOM   1859  H   TYR   113      39.527  28.733  15.734  1.00  0.00
H
ATOM   1860  CA  TYR   113      38.148  30.364  15.619  1.00  0.00
C
ATOM   1861  HA  TYR   113      37.896  30.795  14.650  1.00  0.00
H
ATOM   1862  C   TYR   113      38.145  31.482  16.654  1.00  0.00
C
ATOM   1863  O   TYR   113      37.546  32.535  16.444  1.00  0.00
O
ATOM   1864  CB  TYR   113      37.092  29.328  15.993  1.00  0.00
C
ATOM   1865 1HB  TYR   113      37.212  28.462  15.353  1.00  0.00
H
ATOM   1866 2HB  TYR   113      37.231  29.020  17.029  1.00  0.00
H
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ATOM   1867  CG  TYR   113      35.703  29.877  15.823  1.00  0.00
C
ATOM   1868  CD1 TYR   113      35.077  29.874  14.561  1.00  0.00
C
ATOM   1869  HD1 TYR   113      35.569  29.416  13.715  1.00  0.00
H
ATOM   1870  CD2 TYR   113      35.033  30.471  16.909  1.00  0.00
C
ATOM   1871  HD2 TYR   113      35.488  30.465  17.891  1.00  0.00
H
ATOM   1872  CE1 TYR   113      33.819  30.494  14.379  1.00  0.00
C
ATOM   1873  HE1 TYR   113      33.346  30.495  13.408  1.00  0.00
H
ATOM   1874  CE2 TYR   113      33.795  31.114  16.724  1.00  0.00
C
ATOM   1875  HE2 TYR   113      33.318  31.612  17.551  1.00  0.00
H
ATOM   1876  CZ  TYR   113      33.210  31.132  15.459  1.00  0.00
C
ATOM   1877  OH  TYR   113      32.032  31.799  15.289  1.00  0.00
O
ATOM   1878  HH  TYR   113      31.764  31.821  14.360  1.00  0.00
H
ATOM   1879  N   GLN   114      38.838  31.272  17.763  1.00  0.00
N
ATOM   1880  H   GLN   114      39.307  30.385  17.898  1.00  0.00
H
ATOM   1881  CA  GLN   114      38.944  32.297  18.799  1.00  0.00
C
ATOM   1882  HA  GLN   114      37.949  32.670  19.044  1.00  0.00
H
ATOM   1883  C   GLN   114      39.798  33.459  18.301  1.00  0.00
C
ATOM   1884  O   GLN   114      39.475  34.627  18.522  1.00  0.00
O
ATOM   1885  CB  GLN   114      39.593  31.696  20.047  1.00  0.00
C
ATOM   1886 1HB  GLN   114      40.549  31.268  19.756  1.00  0.00
H
ATOM   1887 2HB  GLN   114      39.780  32.487  20.774  1.00  0.00
H
ATOM   1888  CG  GLN   114      38.756  30.610  20.710  1.00  0.00
C
ATOM   1889 1HG  GLN   114      37.967  31.076  21.298  1.00  0.00
H
ATOM   1890 2HG  GLN   114      38.289  29.992  19.946  1.00  0.00
H
ATOM   1891  CD  GLN   114      39.571  29.702  21.599  1.00  0.00
C
ATOM   1892  OE1 GLN   114      40.670  30.028  22.037  1.00  0.00
O
ATOM   1893  NE2 GLN   114      39.047  28.541  21.868  1.00  0.00
N
ATOM   1894 1HE2 GLN   114      39.543  27.921  22.488  1.00  0.00
H
ATOM   1895 2HE2 GLN   114      38.151  28.288  21.480  1.00  0.00
H
ATOM   1896  N   GLU   115      40.884  33.142  17.613  1.00  0.00
N
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ATOM   1897  H   GLU   115      41.100  32.164  17.451  1.00  0.00
H
ATOM   1898  CA  GLU   115      41.825  34.158  17.143  1.00  0.00
C
ATOM   1899  HA  GLU   115      42.027  34.849  17.962  1.00  0.00
H
ATOM   1900  C   GLU   115      41.377  34.996  15.947  1.00  0.00
C
ATOM   1901  O   GLU   115      41.794  36.151  15.824  1.00  0.00
O
ATOM   1902  CB  GLU   115      43.140  33.480  16.747  1.00  0.00
C
ATOM   1903 1HB  GLU   115      42.922  32.681  16.039  1.00  0.00
H
ATOM   1904 2HB  GLU   115      43.770  34.217  16.252  1.00  0.00
H
ATOM   1905  CG  GLU   115      43.920  32.916  17.921  1.00  0.00
C
ATOM   1906 1HG  GLU   115      44.138  33.730  18.612  1.00  0.00
H
ATOM   1907 2HG  GLU   115      43.312  32.181  18.444  1.00  0.00
H
ATOM   1908  CD  GLU   115      45.232  32.261  17.512  1.00  0.00
C
ATOM   1909  OE1 GLU   115      45.516  32.054  16.303  1.00  0.00
O
ATOM   1910  OE2 GLU   115      46.034  31.956  18.430  1.00  0.00
O
ATOM   1911  N   TYR   116      40.600  34.434  15.030  1.00  0.00
N
ATOM   1912  H   TYR   116      40.229  33.496  15.176  1.00  0.00
H
ATOM   1913  CA  TYR   116      40.328  35.084  13.748  1.00  0.00
C
ATOM   1914  HA  TYR   116      40.516  36.151  13.851  1.00  0.00
H
ATOM   1915  C   TYR   116      38.879  34.917  13.280  1.00  0.00
C
ATOM   1916  O   TYR   116      38.188  33.984  13.685  1.00  0.00
O
ATOM   1917  CB  TYR   116      41.309  34.528  12.711  1.00  0.00
C
ATOM   1918 1HB  TYR   116      42.266  34.349  13.201  1.00  0.00
H
ATOM   1919 2HB  TYR   116      40.932  33.578  12.333  1.00  0.00
H
ATOM   1920  CG  TYR   116      41.546  35.480  11.562  1.00  0.00
C
ATOM   1921  CD1 TYR   116      42.543  36.473  11.644  1.00  0.00
C
ATOM   1922  HD1 TYR   116      43.185  36.524  12.510  1.00  0.00
H
ATOM   1923  CD2 TYR   116      40.748  35.431  10.408  1.00  0.00
C
ATOM   1924  HD2 TYR   116      39.991  34.668  10.306  1.00  0.00
H
ATOM   1925  CE1 TYR   116      42.707  37.425  10.603  1.00  0.00
C
ATOM   1926  HE1 TYR   116      43.473  38.181  10.677  1.00  0.00
H
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ATOM   1927  CE2 TYR   116      40.891  36.391   9.389  1.00  0.00
C
ATOM   1928  HE2 TYR   116      40.233  36.364   8.539  1.00  0.00
H
ATOM   1929  CZ  TYR   116      41.869  37.380   9.487  1.00  0.00
C
ATOM   1930  OH  TYR   116      42.004  38.299   8.479  1.00  0.00
O
ATOM   1931  HH  TYR   116      42.609  39.015   8.709  1.00  0.00
H
ATOM   1932  N   LYS   117      38.415  35.841  12.445  1.00  0.00
N
ATOM   1933  H   LYS   117      39.058  36.543  12.108  1.00  0.00
H
ATOM   1934  CA  LYS   117      37.019  35.918  11.999  1.00  0.00
C
ATOM   1935  HA  LYS   117      36.419  35.235  12.601  1.00  0.00
H
ATOM   1936  C   LYS   117      36.768  35.550  10.541  1.00  0.00
C
ATOM   1937  O   LYS   117      37.667  35.571   9.704  1.00  0.00
O
ATOM   1938  CB  LYS   117      36.500  37.339  12.252  1.00  0.00
C
ATOM   1939 1HB  LYS   117      35.474  37.402  11.898  1.00  0.00
H
ATOM   1940 2HB  LYS   117      36.493  37.506  13.327  1.00  0.00
H
ATOM   1941  CG  LYS   117      37.305  38.464  11.601  1.00  0.00
C
ATOM   1942 1HG  LYS   117      38.328  38.437  11.971  1.00  0.00
H
ATOM   1943 2HG  LYS   117      37.319  38.334  10.520  1.00  0.00
H
ATOM   1944  CD  LYS   117      36.678  39.815  11.937  1.00  0.00
C
ATOM   1945 1HD  LYS   117      35.875  40.013  11.227  1.00  0.00
H
ATOM   1946 2HD  LYS   117      36.252  39.775  12.939  1.00  0.00
H
ATOM   1947  CE  LYS   117      37.682  40.958  11.886  1.00  0.00
C
ATOM   1948 1HE  LYS   117      38.225  40.925  10.939  1.00  0.00
H
ATOM   1949 2HE  LYS   117      37.137  41.903  11.939  1.00  0.00
H
ATOM   1950  NZ  LYS   117      38.653  40.897  13.027  1.00  0.00
N
ATOM   1951 1HZ  LYS   117      39.225  41.734  13.040  1.00  0.00
H
ATOM   1952 2HZ  LYS   117      39.257  40.089  12.932  1.00  0.00
H
ATOM   1953 3HZ  LYS   117      38.148  40.832  13.906  1.00  0.00
H
ATOM   1954  N   SER   118      35.509  35.284  10.228  1.00  0.00
N
ATOM   1955  H   SER   118      34.800  35.349  10.955  1.00  0.00
H
ATOM   1956  CA  SER   118      35.072  34.869   8.893  1.00  0.00
C
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ATOM   1957  HA  SER   118      35.701  34.041   8.568  1.00  0.00
H
ATOM   1958  C   SER   118      35.138  35.945   7.808  1.00  0.00
C
ATOM   1959  O   SER   118      34.781  35.687   6.657  1.00  0.00
O
ATOM   1960  CB  SER   118      33.629  34.375   8.991  1.00  0.00
C
ATOM   1961 1HB  SER   118      33.299  34.019   8.016  1.00  0.00
H
ATOM   1962 2HB  SER   118      33.573  33.555   9.707  1.00  0.00
H
ATOM   1963  OG  SER   118      32.784  35.428   9.420  1.00  0.00
O
ATOM   1964  HG  SER   118      32.873  35.526  10.380  1.00  0.00
H
ATOM   1965  N   GLU   119      35.607  37.141   8.137  1.00  0.00
N
ATOM   1966  H   GLU   119      35.822  37.337   9.102  1.00  0.00
H
ATOM   1967  CA  GLU   119      35.850  38.179   7.133  1.00  0.00
C
ATOM   1968  HA  GLU   119      34.923  38.383   6.597  1.00  0.00
H
ATOM   1969  C   GLU   119      36.900  37.702   6.122  1.00  0.00
C
ATOM   1970  O   GLU   119      36.773  37.951   4.919  1.00  0.00
O
ATOM   1971  CB  GLU   119      36.331  39.467   7.808  1.00  0.00
C
ATOM   1972 1HB  GLU   119      35.623  39.737   8.590  1.00  0.00
H
ATOM   1973 2HB  GLU   119      37.293  39.261   8.272  1.00  0.00
H
ATOM   1974  CG  GLU   119      36.484  40.649   6.848  1.00  0.00
C
ATOM   1975 1HG  GLU   119      37.132  40.350   6.027  1.00  0.00
H
ATOM   1976 2HG  GLU   119      35.508  40.902   6.438  1.00  0.00
H
ATOM   1977  CD  GLU   119      37.092  41.887   7.490  1.00  0.00
C
ATOM   1978  OE1 GLU   119      37.376  41.893   8.711  1.00  0.00
O
ATOM   1979  OE2 GLU   119      37.353  42.875   6.766  1.00  0.00
O
ATOM   1980  N   ASN   120      37.898  36.962   6.592  1.00  0.00
N
ATOM   1981  H   ASN   120      37.955  36.776   7.587  1.00  0.00
H
ATOM   1982  CA  ASN   120      38.889  36.342   5.710  1.00  0.00
C
ATOM   1983  HA  ASN   120      38.499  36.348   4.695  1.00  0.00
H
ATOM   1984  C   ASN   120      39.091  34.875   6.087  1.00  0.00
C
ATOM   1985  O   ASN   120      39.983  34.498   6.850  1.00  0.00
O
ATOM   1986  CB  ASN   120      40.214  37.113   5.682  1.00  0.00
C
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ATOM   1987 1HB  ASN   120      40.013  38.161   5.467  1.00  0.00
H
ATOM   1988 2HB  ASN   120      40.697  37.046   6.649  1.00  0.00
H
ATOM   1989  CG  ASN   120      41.165  36.573   4.644  1.00  0.00
C
ATOM   1990  OD1 ASN   120      40.889  35.570   4.004  1.00  0.00
O
ATOM   1991  ND2 ASN   120      42.292  37.203   4.483  1.00  0.00
N
ATOM   1992 1HD2 ASN   120      42.961  36.839   3.817  1.00  0.00
H
ATOM   1993 2HD2 ASN   120      42.497  38.030   5.023  1.00  0.00
H
ATOM   1994  N   LYS   121      38.245  34.032   5.516  1.00  0.00
N
ATOM   1995  H   LYS   121      37.549  34.400   4.868  1.00  0.00
H
ATOM   1996  CA  LYS   121      38.285  32.592   5.776  1.00  0.00
C
ATOM   1997  HA  LYS   121      38.269  32.430   6.854  1.00  0.00
H
ATOM   1998  C   LYS   121      39.553  31.951   5.225  1.00  0.00
C
ATOM   1999  O   LYS   121      40.006  30.931   5.738  1.00  0.00
O
ATOM   2000  CB  LYS   121      37.060  31.917   5.154  1.00  0.00
C
ATOM   2001 1HB  LYS   121      37.101  32.064   4.076  1.00  0.00
H
ATOM   2002 2HB  LYS   121      37.108  30.851   5.363  1.00  0.00
H
ATOM   2003  CG  LYS   121      35.730  32.459   5.664  1.00  0.00
C
ATOM   2004 1HG  LYS   121      35.671  32.322   6.743  1.00  0.00
H
ATOM   2005 2HG  LYS   121      35.678  33.522   5.438  1.00  0.00
H
ATOM   2006  CD  LYS   121      34.537  31.782   5.003  1.00  0.00
C
ATOM   2007 1HD  LYS   121      34.649  31.837   3.919  1.00  0.00
H
ATOM   2008 2HD  LYS   121      34.489  30.737   5.309  1.00  0.00
H
ATOM   2009  CE  LYS   121      33.259  32.511   5.407  1.00  0.00
C
ATOM   2010 1HE  LYS   121      33.159  32.482   6.493  1.00  0.00
H
ATOM   2011 2HE  LYS   121      33.354  33.556   5.108  1.00  0.00
H
ATOM   2012  NZ  LYS   121      32.015  31.960   4.788  1.00  0.00
N
ATOM   2013 1HZ  LYS   121      31.259  32.629   4.884  1.00  0.00
H
ATOM   2014 2HZ  LYS   121      31.746  31.093   5.227  1.00  0.00
H
ATOM   2015 3HZ  LYS   121      32.160  31.793   3.797  1.00  0.00
H
ATOM   2016  N   LEU   122      40.172  32.569   4.228  1.00  0.00
N
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ATOM   2017  H   LEU   122      39.794  33.427   3.850  1.00  0.00
H
ATOM   2018  CA  LEU   122      41.416  32.040   3.670  1.00  0.00
C
ATOM   2019  HA  LEU   122      41.275  30.987   3.425  1.00  0.00
H
ATOM   2020  C   LEU   122      42.534  32.160   4.694  1.00  0.00
C
ATOM   2021  O   LEU   122      43.418  31.318   4.751  1.00  0.00
O
ATOM   2022  CB  LEU   122      41.846  32.795   2.406  1.00  0.00
C
ATOM   2023 1HB  LEU   122      42.084  33.816   2.692  1.00  0.00
H
ATOM   2024 2HB  LEU   122      42.770  32.339   2.051  1.00  0.00
H
ATOM   2025  CG  LEU   122      40.875  32.867   1.220  1.00  0.00
C
ATOM   2026  HG  LEU   122      39.949  33.327   1.558  1.00  0.00
H
ATOM   2027  CD1 LEU   122      41.479  33.755   0.143  1.00  0.00
C
ATOM   2028 1HD1 LEU   122      40.789  33.830  -0.698  1.00  0.00
H
ATOM   2029 2HD1 LEU   122      42.425  33.339  -0.204  1.00  0.00
H
ATOM   2030 3HD1 LEU   122      41.647  34.756   0.543  1.00  0.00
H
ATOM   2031  CD2 LEU   122      40.550  31.495   0.641  1.00  0.00
C
ATOM   2032 1HD2 LEU   122      39.898  31.608  -0.226  1.00  0.00
H
ATOM   2033 2HD2 LEU   122      40.030  30.897   1.387  1.00  0.00
H
ATOM   2034 3HD2 LEU   122      41.465  30.985   0.337  1.00  0.00
H
ATOM   2035  N   LEU   123      42.502  33.186   5.531  1.00  0.00
N
ATOM   2036  H   LEU   123      41.769  33.881   5.446  1.00  0.00
H
ATOM   2037  CA  LEU   123      43.527  33.342   6.563  1.00  0.00
C
ATOM   2038  HA  LEU   123      44.503  33.230   6.093  1.00  0.00
H
ATOM   2039  C   LEU   123      43.369  32.244   7.620  1.00  0.00
C
ATOM   2040  O   LEU   123      44.352  31.658   8.074  1.00  0.00
O
ATOM   2041  CB  LEU   123      43.434  34.752   7.161  1.00  0.00
C
ATOM   2042 1HB  LEU   123      43.285  35.425   6.319  1.00  0.00
H
ATOM   2043 2HB  LEU   123      42.530  34.798   7.764  1.00  0.00
H
ATOM   2044  CG  LEU   123      44.580  35.369   7.984  1.00  0.00
C
ATOM   2045  HG  LEU   123      44.316  36.410   8.161  1.00  0.00
H
ATOM   2046  CD1 LEU   123      44.781  34.727   9.343  1.00  0.00
C
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ATOM   2047 1HD1 LEU   123      45.440  35.357   9.941  1.00  0.00
H
ATOM   2048 2HD1 LEU   123      45.232  33.742   9.234  1.00  0.00
H
ATOM   2049 3HD1 LEU   123      43.822  34.637   9.851  1.00  0.00
H
ATOM   2050  CD2 LEU   123      45.910  35.362   7.227  1.00  0.00
C
ATOM   2051 1HD2 LEU   123      46.656  35.918   7.796  1.00  0.00
H
ATOM   2052 2HD2 LEU   123      45.784  35.845   6.259  1.00  0.00
H
ATOM   2053 3HD2 LEU   123      46.265  34.341   7.083  1.00  0.00
H
ATOM   2054  N   ILE   124      42.129  31.894   7.944  1.00  0.00
N
ATOM   2055  H   ILE   124      41.352  32.395   7.532  1.00  0.00
H
ATOM   2056  CA  ILE   124      41.855  30.786   8.871  1.00  0.00
C
ATOM   2057  HA  ILE   124      42.370  30.981   9.812  1.00  0.00
H
ATOM   2058  C   ILE   124      42.415  29.499   8.261  1.00  0.00
C
ATOM   2059  O   ILE   124      43.097  28.716   8.931  1.00  0.00
O
ATOM   2060  CB  ILE   124      40.320  30.605   9.152  1.00  0.00
C
ATOM   2061  HB  ILE   124      39.819  30.383   8.212  1.00  0.00
H
ATOM   2062  CG1 ILE   124      39.721  31.908   9.718  1.00  0.00
C
ATOM   2063 1HG1 ILE   124      40.178  32.103  10.687  1.00  0.00
H
ATOM   2064 2HG1 ILE   124      39.979  32.731   9.053  1.00  0.00
H
ATOM   2065  CG2 ILE   124      40.062  29.420  10.124  1.00  0.00
C
ATOM   2066 1HG2 ILE   124      38.990  29.245  10.228  1.00  0.00
H
ATOM   2067 2HG2 ILE   124      40.484  29.643  11.103  1.00  0.00
H
ATOM   2068 3HG2 ILE   124      40.513  28.506   9.740  1.00  0.00
H
ATOM   2069  CD1 ILE   124      38.191  31.925   9.893  1.00  0.00
C
ATOM   2070 1HD1 ILE   124      37.876  32.926  10.182  1.00  0.00
H
ATOM   2071 2HD1 ILE   124      37.891  31.230  10.678  1.00  0.00
H
ATOM   2072 3HD1 ILE   124      37.703  31.653   8.957  1.00  0.00
H
ATOM   2073  N   ALA   125      42.167  29.307   6.971  1.00  0.00
N
ATOM   2074  H   ALA   125      41.599  29.979   6.465  1.00  0.00
H
ATOM   2075  CA  ALA   125      42.662  28.134   6.261  1.00  0.00
C
ATOM   2076  HA  ALA   125      42.288  27.246   6.769  1.00  0.00
H
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ATOM   2077  C   ALA   125      44.191  28.083   6.286  1.00  0.00
C
ATOM   2078  O   ALA   125      44.790  27.037   6.517  1.00  0.00
O
ATOM   2079  CB  ALA   125      42.145  28.148   4.810  1.00  0.00
C
ATOM   2080 1HB  ALA   125      41.058  28.240   4.797  1.00  0.00
H
ATOM   2081 2HB  ALA   125      42.435  27.224   4.312  1.00  0.00
H
ATOM   2082 3HB  ALA   125      42.576  28.985   4.260  1.00  0.00
H
ATOM   2083  N   THR   126      44.811  29.234   6.079  1.00  0.00
N
ATOM   2084  H   THR   126      44.249  30.062   5.908  1.00  0.00
H
ATOM   2085  CA  THR   126      46.266  29.354   6.045  1.00  0.00
C
ATOM   2086  HA  THR   126      46.654  28.665   5.295  1.00  0.00
H
ATOM   2087  C   THR   126      46.883  28.986   7.386  1.00  0.00
C
ATOM   2088  O   THR   126      47.844  28.225   7.426  1.00  0.00
O
ATOM   2089  CB  THR   126      46.679  30.796   5.670  1.00  0.00
C
ATOM   2090  HB  THR   126      46.342  31.485   6.443  1.00  0.00
H
ATOM   2091  OG1 THR   126      46.071  31.151   4.424  1.00  0.00
O
ATOM   2092  HG1 THR   126      45.109  31.153   4.541  1.00  0.00
H
ATOM   2093  CG2 THR   126      48.168  30.946   5.490  1.00  0.00
C
ATOM   2094 1HG2 THR   126      48.392  31.950   5.133  1.00  0.00
H
ATOM   2095 2HG2 THR   126      48.528  30.218   4.764  1.00  0.00
H
ATOM   2096 3HG2 THR   126      48.679  30.792   6.442  1.00  0.00
H
ATOM   2097  N   LYS   127      46.327  29.468   8.492  1.00  0.00
N
ATOM   2098  H   LYS   127      45.523  30.089   8.425  1.00  0.00
H
ATOM   2099  CA  LYS   127      46.879  29.131   9.809  1.00  0.00
C
ATOM   2100  HA  LYS   127      47.924  29.441   9.852  1.00  0.00
H
ATOM   2101  C   LYS   127      46.836  27.631  10.062  1.00  0.00
C
ATOM   2102  O   LYS   127      47.786  27.055  10.601  1.00  0.00
O
ATOM   2103  CB  LYS   127      46.097  29.818  10.931  1.00  0.00
C
ATOM   2104 1HB  LYS   127      45.032  29.659  10.766  1.00  0.00
H
ATOM   2105 2HB  LYS   127      46.378  29.333  11.865  1.00  0.00
H
ATOM   2106  CG  LYS   127      46.357  31.302  11.099  1.00  0.00
C
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ATOM   2107 1HG  LYS   127      47.426  31.447  11.232  1.00  0.00
H
ATOM   2108 2HG  LYS   127      46.032  31.842  10.212  1.00  0.00
H
ATOM   2109  CD  LYS   127      45.634  31.844  12.332  1.00  0.00
C
ATOM   2110 1HD  LYS   127      44.556  31.765  12.187  1.00  0.00
H
ATOM   2111 2HD  LYS   127      45.923  31.246  13.197  1.00  0.00
H
ATOM   2112  CE  LYS   127      46.016  33.291  12.601  1.00  0.00
C
ATOM   2113 1HE  LYS   127      47.103  33.350  12.679  1.00  0.00
H
ATOM   2114 2HE  LYS   127      45.706  33.910  11.761  1.00  0.00
H
ATOM   2115  NZ  LYS   127      45.420  33.834  13.865  1.00  0.00
N
ATOM   2116 1HZ  LYS   127      45.857  34.722  14.095  1.00  0.00
H
ATOM   2117 2HZ  LYS   127      45.577  33.190  14.634  1.00  0.00
H
ATOM   2118 3HZ  LYS   127      44.429  33.985  13.754  1.00  0.00
H
ATOM   2119  N   LEU   128      45.733  27.003   9.683  1.00  0.00
N
ATOM   2120  H   LEU   128      44.981  27.529   9.252  1.00  0.00
H
ATOM   2121  CA  LEU   128      45.563  25.571   9.920  1.00  0.00
C
ATOM   2122  HA  LEU   128      45.810  25.362  10.962  1.00  0.00
H
ATOM   2123  C   LEU   128      46.507  24.776   9.029  1.00  0.00
C
ATOM   2124  O   LEU   128      47.160  23.836   9.472  1.00  0.00
O
ATOM   2125  CB  LEU   128      44.104  25.176   9.664  1.00  0.00
C
ATOM   2126 1HB  LEU   128      43.515  26.091   9.664  1.00  0.00
H
ATOM   2127 2HB  LEU   128      44.021  24.736   8.672  1.00  0.00
H
ATOM   2128  CG  LEU   128      43.471  24.222  10.689  1.00  0.00
C
ATOM   2129  HG  LEU   128      43.667  24.613  11.685  1.00  0.00
H
ATOM   2130  CD1 LEU   128      41.961  24.202  10.490  1.00  0.00
C
ATOM   2131 1HD1 LEU   128      41.505  23.497  11.187  1.00  0.00
H
ATOM   2132 2HD1 LEU   128      41.721  23.909   9.468  1.00  0.00
H
ATOM   2133 3HD1 LEU   128      41.553  25.194  10.684  1.00  0.00
H
ATOM   2134  CD2 LEU   128      44.022  22.809  10.624  1.00  0.00
C
ATOM   2135 1HD2 LEU   128      43.528  22.189  11.372  1.00  0.00
H
ATOM   2136 2HD2 LEU   128      45.090  22.818  10.841  1.00  0.00
H
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ATOM   2137 3HD2 LEU   128      43.860  22.388   9.632  1.00  0.00
H
ATOM   2138  N   LYS   129      46.616  25.185   7.773  1.00  0.00
N
ATOM   2139  H   LYS   129      46.063  25.977   7.451  1.00  0.00
H
ATOM   2140  CA  LYS   129      47.500  24.513   6.825  1.00  0.00
C
ATOM   2141  HA  LYS   129      47.248  23.453   6.787  1.00  0.00
H
ATOM   2142  C   LYS   129      48.946  24.628   7.267  1.00  0.00
C
ATOM   2143  O   LYS   129      49.671  23.647   7.236  1.00  0.00
O
ATOM   2144  CB  LYS   129      47.331  25.134   5.438  1.00  0.00
C
ATOM   2145 1HB  LYS   129      46.287  25.064   5.139  1.00  0.00
H
ATOM   2146 2HB  LYS   129      47.595  26.190   5.504  1.00  0.00
H
ATOM   2147  CG  LYS   129      48.195  24.496   4.374  1.00  0.00
C
ATOM   2148 1HG  LYS   129      49.232  24.551   4.695  1.00  0.00
H
ATOM   2149 2HG  LYS   129      47.919  23.450   4.240  1.00  0.00
H
ATOM   2150  CD  LYS   129      48.035  25.243   3.068  1.00  0.00
C
ATOM   2151 1HD  LYS   129      47.120  24.911   2.579  1.00  0.00
H
ATOM   2152 2HD  LYS   129      47.950  26.309   3.275  1.00  0.00
H
ATOM   2153  CE  LYS   129      49.219  25.027   2.141  1.00  0.00
C
ATOM   2154 1HE  LYS   129      49.333  23.962   1.945  1.00  0.00
H
ATOM   2155 2HE  LYS   129      49.016  25.535   1.199  1.00  0.00
H
ATOM   2156  NZ  LYS   129      50.501  25.554   2.712  1.00  0.00
N
ATOM   2157 1HZ  LYS   129      51.212  25.582   1.990  1.00  0.00
H
ATOM   2158 2HZ  LYS   129      50.821  24.950   3.464  1.00  0.00
H
ATOM   2159 3HZ  LYS   129      50.363  26.494   3.071  1.00  0.00
H
ATOM   2160  N   GLU   130      49.360  25.808   7.699  1.00  0.00
N
ATOM   2161  H   GLU   130      48.720  26.598   7.705  1.00  0.00
H
ATOM   2162  CA  GLU   130      50.740  26.021   8.121  1.00  0.00
C
ATOM   2163  HA  GLU   130      51.403  25.730   7.306  1.00  0.00
H
ATOM   2164  C   GLU   130      51.075  25.155   9.332  1.00  0.00
C
ATOM   2165  O   GLU   130      52.149  24.564   9.396  1.00  0.00
O
ATOM   2166  CB  GLU   130      50.952  27.507   8.433  1.00  0.00
C
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ATOM   2167 1HB  GLU   130      50.589  28.086   7.584  1.00  0.00
H
ATOM   2168 2HB  GLU   130      50.353  27.771   9.305  1.00  0.00
H
ATOM   2169  CG  GLU   130      52.394  27.901   8.699  1.00  0.00
C
ATOM   2170 1HG  GLU   130      52.419  28.930   9.058  1.00  0.00
H
ATOM   2171 2HG  GLU   130      52.792  27.258   9.483  1.00  0.00
H
ATOM   2172  CD  GLU   130      53.273  27.782   7.463  1.00  0.00
C
ATOM   2173  OE1 GLU   130      53.003  28.452   6.438  1.00  0.00
O
ATOM   2174  OE2 GLU   130      54.262  27.021   7.503  1.00  0.00
O
ATOM   2175  N   PHE   131      50.141  25.002  10.261  1.00  0.00
N
ATOM   2176  H   PHE   131      49.254  25.488  10.182  1.00  0.00
H
ATOM   2177  CA  PHE   131      50.382  24.112  11.394  1.00  0.00
C
ATOM   2178  HA  PHE   131      51.300  24.412  11.901  1.00  0.00
H
ATOM   2179  C   PHE   131      50.562  22.676  10.922  1.00  0.00
C
ATOM   2180  O   PHE   131      51.485  21.982  11.353  1.00  0.00
O
ATOM   2181  CB  PHE   131      49.217  24.134  12.386  1.00  0.00
C
ATOM   2182 1HB  PHE   131      49.133  25.126  12.823  1.00  0.00
H
ATOM   2183 2HB  PHE   131      48.295  23.916  11.849  1.00  0.00
H
ATOM   2184  CG  PHE   131      49.360  23.113  13.481  1.00  0.00
C
ATOM   2185  CD1 PHE   131      50.097  23.401  14.639  1.00  0.00
C
ATOM   2186  HD1 PHE   131      50.540  24.378  14.768  1.00  0.00
H
ATOM   2187  CD2 PHE   131      48.783  21.836  13.335  1.00  0.00
C
ATOM   2188  HD2 PHE   131      48.197  21.614  12.457  1.00  0.00
H
ATOM   2189  CE1 PHE   131      50.275  22.419  15.638  1.00  0.00
C
ATOM   2190  HE1 PHE   131      50.842  22.653  16.526  1.00  0.00
H
ATOM   2191  CE2 PHE   131      48.954  20.843  14.322  1.00  0.00
C
ATOM   2192  HE2 PHE   131      48.503  19.869  14.197  1.00  0.00
H
ATOM   2193  CZ  PHE   131      49.704  21.133  15.474  1.00  0.00
C
ATOM   2194  HZ  PHE   131      49.841  20.377  16.230  1.00  0.00
H
ATOM   2195  N   LEU   132      49.672  22.205  10.062  1.00  0.00
N
ATOM   2196  H   LEU   132      48.937  22.810   9.708  1.00  0.00
H
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ATOM   2197  CA  LEU   132      49.709  20.805   9.657  1.00  0.00
C
ATOM   2198  HA  LEU   132      49.782  20.184  10.548  1.00  0.00
H
ATOM   2199  C   LEU   132      50.933  20.520   8.801  1.00  0.00
C
ATOM   2200  O   LEU   132      51.551  19.469   8.938  1.00  0.00
O
ATOM   2201  CB  LEU   132      48.437  20.430   8.896  1.00  0.00
C
ATOM   2202 1HB  LEU   132      48.349  21.099   8.040  1.00  0.00
H
ATOM   2203 2HB  LEU   132      48.571  19.420   8.516  1.00  0.00
H
ATOM   2204  CG  LEU   132      47.109  20.454   9.665  1.00  0.00
C
ATOM   2205  HG  LEU   132      46.978  21.433  10.116  1.00  0.00
H
ATOM   2206  CD1 LEU   132      45.961  20.215   8.695  1.00  0.00
C
ATOM   2207 1HD1 LEU   132      45.014  20.265   9.230  1.00  0.00
H
ATOM   2208 2HD1 LEU   132      46.059  19.234   8.231  1.00  0.00
H
ATOM   2209 3HD1 LEU   132      45.967  20.984   7.923  1.00  0.00
H
ATOM   2210  CD2 LEU   132      47.059  19.417  10.781  1.00  0.00
C
ATOM   2211 1HD2 LEU   132      46.103  19.478  11.297  1.00  0.00
H
ATOM   2212 2HD2 LEU   132      47.846  19.613  11.504  1.00  0.00
H
ATOM   2213 3HD2 LEU   132      47.189  18.416  10.370  1.00  0.00
H
ATOM   2214  N   ASP   133      51.325  21.476   7.976  1.00  0.00
N
ATOM   2215  H   ASP   133      50.772  22.328   7.898  1.00  0.00
H
ATOM   2216  CA  ASP   133      52.516  21.341   7.141  1.00  0.00
C
ATOM   2217  HA  ASP   133      52.444  20.427   6.557  1.00  0.00
H
ATOM   2218  C   ASP   133      53.777  21.251   7.990  1.00  0.00
C
ATOM   2219  O   ASP   133      54.649  20.403   7.758  1.00  0.00
O
ATOM   2220  CB  ASP   133      52.658  22.550   6.210  1.00  0.00
C
ATOM   2221 1HB  ASP   133      52.396  23.458   6.753  1.00  0.00
H
ATOM   2222 2HB  ASP   133      53.698  22.625   5.906  1.00  0.00
H
ATOM   2223  CG  ASP   133      51.823  22.443   4.947  1.00  0.00
C
ATOM   2224  OD1 ASP   133      51.399  21.344   4.541  1.00  0.00
O
ATOM   2225  OD2 ASP   133      51.700  23.475   4.252  1.00  0.00
O
ATOM   2226  N   LYS   134      53.880  22.099   9.005  1.00  0.00
N
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ATOM   2227  H   LYS   134      53.156  22.800   9.155  1.00  0.00
H
ATOM   2228  CA  LYS   134      55.039  22.058   9.898  1.00  0.00
C
ATOM   2229  HA  LYS   134      55.957  22.105   9.313  1.00  0.00
H
ATOM   2230  C   LYS   134      55.059  20.785  10.718  1.00  0.00
C
ATOM   2231  O   LYS   134      56.120  20.216  10.979  1.00  0.00
O
ATOM   2232  CB  LYS   134      55.001  23.225  10.880  1.00  0.00
C
ATOM   2233 1HB  LYS   134      54.004  23.272  11.320  1.00  0.00
H
ATOM   2234 2HB  LYS   134      55.714  23.023  11.679  1.00  0.00
H
ATOM   2235  CG  LYS   134      55.339  24.574  10.288  1.00  0.00
C
ATOM   2236 1HG  LYS   134      56.379  24.586   9.967  1.00  0.00
H
ATOM   2237 2HG  LYS   134      54.696  24.785   9.434  1.00  0.00
H
ATOM   2238  CD  LYS   134      55.112  25.616  11.361  1.00  0.00
C
ATOM   2239 1HD  LYS   134      54.065  25.575  11.662  1.00  0.00
H
ATOM   2240 2HD  LYS   134      55.740  25.392  12.224  1.00  0.00
H
ATOM   2241  CE  LYS   134      55.423  27.008  10.872  1.00  0.00
C
ATOM   2242 1HE  LYS   134      56.491  27.100  10.663  1.00  0.00
H
ATOM   2243 2HE  LYS   134      54.864  27.199   9.956  1.00  0.00
H
ATOM   2244  NZ  LYS   134      55.012  27.985  11.918  1.00  0.00
N
ATOM   2245 1HZ  LYS   134      55.088  28.930  11.558  1.00  0.00
H
ATOM   2246 2HZ  LYS   134      55.610  27.889  12.732  1.00  0.00
H
ATOM   2247 3HZ  LYS   134      54.050  27.816  12.194  1.00  0.00
H
ATOM   2248  N   THR   135      53.895  20.363  11.182  1.00  0.00
N
ATOM   2249  H   THR   135      53.050  20.876  10.948  1.00  0.00
H
ATOM   2250  CA  THR   135      53.815  19.230  12.098  1.00  0.00
C
ATOM   2251  HA  THR   135      54.638  19.311  12.807  1.00  0.00
H
ATOM   2252  C   THR   135      53.936  17.878  11.402  1.00  0.00
C
ATOM   2253  O   THR   135      54.660  17.014  11.895  1.00  0.00
O
ATOM   2254  CB  THR   135      52.493  19.284  12.899  1.00  0.00
C
ATOM   2255  HB  THR   135      51.650  19.145  12.223  1.00  0.00
H
ATOM   2256  OG1 THR   135      52.383  20.564  13.530  1.00  0.00
O
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ATOM   2257  HG1 THR   135      51.962  21.164  12.894  1.00  0.00
H
ATOM   2258  CG2 THR   135      52.435  18.251  13.999  1.00  0.00
C
ATOM   2259 1HG2 THR   135      51.527  18.401  14.581  1.00  0.00
H
ATOM   2260 2HG2 THR   135      53.303  18.338  14.648  1.00  0.00
H
ATOM   2261 3HG2 THR   135      52.407  17.251  13.569  1.00  0.00
H
ATOM   2262  N   PHE   136      53.239  17.677  10.291  1.00  0.00
N
ATOM   2263  H   PHE   136      52.711  18.445   9.878  1.00  0.00
H
ATOM   2264  CA  PHE   136      53.078  16.347   9.694  1.00  0.00
C
ATOM   2265  HA  PHE   136      53.578  15.615  10.327  1.00  0.00
H
ATOM   2266  C   PHE   136      53.622  16.170   8.276  1.00  0.00
C
ATOM   2267  O   PHE   136      53.436  15.104   7.677  1.00  0.00
O
ATOM   2268  CB  PHE   136      51.587  15.997   9.675  1.00  0.00
C
ATOM   2269 1HB  PHE   136      51.073  16.679   9.000  1.00  0.00
H
ATOM   2270 2HB  PHE   136      51.467  14.984   9.298  1.00  0.00
H
ATOM   2271  CG  PHE   136      50.931  16.064  11.023  1.00  0.00
C
ATOM   2272  CD1 PHE   136      50.041  17.108  11.332  1.00  0.00
C
ATOM   2273  HD1 PHE   136      49.841  17.878  10.600  1.00  0.00
H
ATOM   2274  CD2 PHE   136      51.170  15.060  11.980  1.00  0.00
C
ATOM   2275  HD2 PHE   136      51.845  14.247  11.751  1.00  0.00
H
ATOM   2276  CE1 PHE   136      49.394  17.156  12.592  1.00  0.00
C
ATOM   2277  HE1 PHE   136      48.707  17.958  12.821  1.00  0.00
H
ATOM   2278  CE2 PHE   136      50.526  15.092  13.242  1.00  0.00
C
ATOM   2279  HE2 PHE   136      50.717  14.315  13.969  1.00  0.00
H
ATOM   2280  CZ  PHE   136      49.637  16.146  13.547  1.00  0.00
C
ATOM   2281  HZ  PHE   136      49.153  16.184  14.511  1.00  0.00
H
ATOM   2282  N   GLY   137      54.271  17.189   7.735  1.00  0.00
N
ATOM   2283  H   GLY   137      54.413  18.037   8.270  1.00  0.00
H
ATOM   2284  CA  GLY   137      54.807  17.139   6.383  1.00  0.00
C
ATOM   2285 1HA  GLY   137      55.846  17.463   6.408  1.00  0.00
H
ATOM   2286 2HA  GLY   137      54.773  16.123   5.994  1.00  0.00
H
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ATOM   2287  C   GLY   137      54.046  18.054   5.449  1.00  0.00
C
ATOM   2288  O   GLY   137      52.837  18.224   5.584  1.00  0.00
O
ATOM   2289  N   ARG   138      54.758  18.707   4.540  1.00  0.00
N
ATOM   2290  H   ARG   138      55.693  18.376   4.316  1.00  0.00
H
ATOM   2291  CA  ARG   138      54.278  19.946   3.915  1.00  0.00
C
ATOM   2292  HA  ARG   138      53.649  20.441   4.646  1.00  0.00
H
ATOM   2293  C   ARG   138      53.415  19.766   2.670  1.00  0.00
C
ATOM   2294  O   ARG   138      53.664  20.393   1.637  1.00  0.00
O
ATOM   2295  CB  ARG   138      55.453  20.887   3.618  1.00  0.00
C
ATOM   2296 1HB  ARG   138      56.107  20.411   2.893  1.00  0.00
H
ATOM   2297 2HB  ARG   138      55.062  21.810   3.189  1.00  0.00
H
ATOM   2298  CG  ARG   138      56.274  21.254   4.841  1.00  0.00
C
ATOM   2299 1HG  ARG   138      55.615  21.651   5.608  1.00  0.00
H
ATOM   2300 2HG  ARG   138      56.767  20.364   5.224  1.00  0.00
H
ATOM   2301  CD  ARG   138      57.325  22.299   4.525  1.00  0.00
C
ATOM   2302 1HD  ARG   138      57.979  21.925   3.737  1.00  0.00
H
ATOM   2303 2HD  ARG   138      56.825  23.204   4.175  1.00  0.00
H
ATOM   2304  NE  ARG   138      58.123  22.629   5.714  1.00  0.00
N
ATOM   2305  HE  ARG   138      57.898  22.135   6.564  1.00  0.00
H
ATOM   2306  CZ  ARG   138      59.095  23.530   5.776  1.00  0.00
C
ATOM   2307  NH1 ARG   138      59.531  24.212   4.750  1.00  0.00
N
ATOM   2308 1HH1 ARG   138      59.138  24.072   3.836  1.00  0.00
H
ATOM   2309 2HH1 ARG   138      60.267  24.889   4.892  1.00  0.00
H
ATOM   2310  NH2 ARG   138      59.669  23.764   6.917  1.00  0.00
N
ATOM   2311 1HH2 ARG   138      59.388  23.266   7.748  1.00  0.00
H
ATOM   2312 2HH2 ARG   138      60.399  24.467   6.955  1.00  0.00
H
ATOM   2313  N   ALA   139      52.399  18.920   2.764  1.00  0.00
N
ATOM   2314  H   ALA   139      52.246  18.462   3.656  1.00  0.00
H
ATOM   2315  CA  ALA   139      51.516  18.613   1.638  1.00  0.00
C
ATOM   2316  HA  ALA   139      51.900  19.117   0.752  1.00  0.00
H
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ATOM   2317  C   ALA   139      50.050  19.046   1.790  1.00  0.00
C
ATOM   2318  O   ALA   139      49.227  18.737   0.921  1.00  0.00
O
ATOM   2319  CB  ALA   139      51.586  17.112   1.371  1.00  0.00
C
ATOM   2320 1HB  ALA   139      52.599  16.835   1.087  1.00  0.00
H
ATOM   2321 2HB  ALA   139      50.917  16.848   0.556  1.00  0.00
H
ATOM   2322 3HB  ALA   139      51.310  16.567   2.270  1.00  0.00
H
ATOM   2323  N   TRP   140      49.690  19.694   2.886  1.00  0.00
N
ATOM   2324  H   TRP   140      50.395  20.035   3.539  1.00  0.00
H
ATOM   2325  CA  TRP   140      48.281  19.924   3.210  1.00  0.00
C
ATOM   2326  HA  TRP   140      47.742  18.990   3.072  1.00  0.00
H
ATOM   2327  C   TRP   140      47.590  20.977   2.354  1.00  0.00
C
ATOM   2328  O   TRP   140      48.215  21.900   1.831  1.00  0.00
O
ATOM   2329  CB  TRP   140      48.156  20.300   4.688  1.00  0.00
C
ATOM   2330 1HB  TRP   140      48.770  21.175   4.895  1.00  0.00
H
ATOM   2331 2HB  TRP   140      47.116  20.533   4.917  1.00  0.00
H
ATOM   2332  CG  TRP   140      48.597  19.160   5.546  1.00  0.00
C
ATOM   2333  CD1 TRP   140      49.856  18.897   5.972  1.00  0.00
C
ATOM   2334  HD1 TRP   140      50.709  19.542   5.784  1.00  0.00
H
ATOM   2335  CD2 TRP   140      47.798  18.062   6.019  1.00  0.00
C
ATOM   2336  NE1 TRP   140      49.925  17.712   6.644  1.00  0.00
N
ATOM   2337  HE1 TRP   140      50.783  17.340   7.029  1.00  0.00
H
ATOM   2338  CE2 TRP   140      48.678  17.154   6.679  1.00  0.00
C
ATOM   2339  CE3 TRP   140      46.431  17.733   5.923  1.00  0.00
C
ATOM   2340  HE3 TRP   140      45.742  18.404   5.432  1.00  0.00
H
ATOM   2341  CZ2 TRP   140      48.234  15.923   7.206  1.00  0.00
C
ATOM   2342  HZ2 TRP   140      48.925  15.244   7.686  1.00  0.00
H
ATOM   2343  CZ3 TRP   140      45.979  16.505   6.460  1.00  0.00
C
ATOM   2344  HZ3 TRP   140      44.934  16.243   6.380  1.00  0.00
H
ATOM   2345  CH2 TRP   140      46.894  15.602   7.079  1.00  0.00
C
ATOM   2346  HH2 TRP   140      46.536  14.652   7.454  1.00  0.00
H
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ATOM   2347  N   HIS   141      46.276  20.850   2.249  1.00  0.00
N
ATOM   2348  H   HIS   141      45.823  20.017   2.633  1.00  0.00
H
ATOM   2349  CA  HIS   141      45.408  21.861   1.658  1.00  0.00
C
ATOM   2350  HA  HIS   141      45.928  22.814   1.580  1.00  0.00
H
ATOM   2351  C   HIS   141      44.229  21.988   2.607  1.00  0.00
C
ATOM   2352  O   HIS   141      43.801  20.988   3.190  1.00  0.00
O
ATOM   2353  CB  HIS   141      44.913  21.413   0.287  1.00  0.00
C
ATOM   2354 1HB  HIS   141      44.376  20.476   0.416  1.00  0.00
H
ATOM   2355 2HB  HIS   141      44.219  22.161  -0.100  1.00  0.00
H
ATOM   2356  CG  HIS   141      46.006  21.199  -0.712  1.00  0.00
C
ATOM   2357  ND1 HIS   141      46.834  22.216  -1.173  1.00  0.00
N
ATOM   2358  HD1 HIS   141      46.801  23.191  -0.876  1.00  0.00
H
ATOM   2359  CD2 HIS   141      46.430  20.085  -1.361  1.00  0.00
C
ATOM   2360  HD2 HIS   141      46.010  19.091  -1.247  1.00  0.00
H
ATOM   2361  CE1 HIS   141      47.688  21.717  -2.053  1.00  0.00
C
ATOM   2362  HE1 HIS   141      48.458  22.279  -2.572  1.00  0.00
H
ATOM   2363  NE2 HIS   141      47.465  20.432  -2.183  1.00  0.00
N
ATOM   2364  HE2 HIS   141      47.992  19.802  -2.789  1.00  0.00
H
ATOM   2365  N   VAL   142      43.743  23.205   2.797  1.00  0.00
N
ATOM   2366  H   VAL   142      44.140  23.990   2.285  1.00  0.00
H
ATOM   2367  CA  VAL   142      42.637  23.477   3.715  1.00  0.00
C
ATOM   2368  HA  VAL   142      42.101  22.557   3.945  1.00  0.00
H
ATOM   2369  C   VAL   142      41.708  24.447   3.000  1.00  0.00
C
ATOM   2370  O   VAL   142      42.171  25.447   2.454  1.00  0.00
O
ATOM   2371  CB  VAL   142      43.149  24.124   5.044  1.00  0.00
C
ATOM   2372  HB  VAL   142      43.705  25.027   4.793  1.00  0.00
H
ATOM   2373  CG1 VAL   142      41.986  24.526   5.972  1.00  0.00
C
ATOM   2374 1HG1 VAL   142      42.379  24.876   6.927  1.00  0.00
H
ATOM   2375 2HG1 VAL   142      41.317  23.688   6.140  1.00  0.00
H
ATOM   2376 3HG1 VAL   142      41.419  25.334   5.517  1.00  0.00
H
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ATOM   2377  CG2 VAL   142      44.102  23.172   5.787  1.00  0.00
C
ATOM   2378 1HG2 VAL   142      44.409  23.618   6.731  1.00  0.00
H
ATOM   2379 2HG2 VAL   142      44.992  22.995   5.185  1.00  0.00
H
ATOM   2380 3HG2 VAL   142      43.613  22.221   5.978  1.00  0.00
H
ATOM   2381  N   THR   143      40.414  24.176   3.023  1.00  0.00
N
ATOM   2382  H   THR   143      40.097  23.294   3.423  1.00  0.00
H
ATOM   2383  CA  THR   143      39.404  25.097   2.507  1.00  0.00
C
ATOM   2384  HA  THR   143      39.871  26.034   2.218  1.00  0.00
H
ATOM   2385  C   THR   143      38.395  25.359   3.617  1.00  0.00
C
ATOM   2386  O   THR   143      37.923  24.409   4.251  1.00  0.00
O
ATOM   2387  CB  THR   143      38.693  24.494   1.279  1.00  0.00
C
ATOM   2388  HB  THR   143      38.137  23.608   1.581  1.00  0.00
H
ATOM   2389  OG1 THR   143      39.674  24.122   0.306  1.00  0.00
O
ATOM   2390  HG1 THR   143      39.256  23.484  -0.292  1.00  0.00
H
ATOM   2391  CG2 THR   143      37.749  25.481   0.613  1.00  0.00
C
ATOM   2392 1HG2 THR   143      37.358  25.042  -0.303  1.00  0.00
H
ATOM   2393 2HG2 THR   143      38.280  26.401   0.364  1.00  0.00
H
ATOM   2394 3HG2 THR   143      36.914  25.704   1.276  1.00  0.00
H
ATOM   2395  N   VAL   144      38.068  26.622   3.862  1.00  0.00
N
ATOM   2396  H   VAL   144      38.504  27.365   3.314  1.00  0.00
H
ATOM   2397  CA  VAL   144      37.084  27.011   4.877  1.00  0.00
C
ATOM   2398  HA  VAL   144      36.627  26.116   5.294  1.00  0.00
H
ATOM   2399  C   VAL   144      36.008  27.844   4.190  1.00  0.00
C
ATOM   2400  O   VAL   144      36.261  28.968   3.764  1.00  0.00
O
ATOM   2401  CB  VAL   144      37.730  27.819   6.041  1.00  0.00
C
ATOM   2402  HB  VAL   144      38.143  28.745   5.643  1.00  0.00
H
ATOM   2403  CG1 VAL   144      36.691  28.164   7.127  1.00  0.00
C
ATOM   2404 1HG1 VAL   144      37.176  28.707   7.938  1.00  0.00
H
ATOM   2405 2HG1 VAL   144      36.245  27.248   7.522  1.00  0.00
H
ATOM   2406 3HG1 VAL   144      35.909  28.794   6.706  1.00  0.00
H
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ATOM   2407  CG2 VAL   144      38.875  27.023   6.669  1.00  0.00
C
ATOM   2408 1HG2 VAL   144      39.279  27.564   7.524  1.00  0.00
H
ATOM   2409 2HG2 VAL   144      39.671  26.882   5.943  1.00  0.00
H
ATOM   2410 3HG2 VAL   144      38.513  26.047   6.989  1.00  0.00
H
ATOM   2411  N   VAL   145      34.818  27.285   4.041  1.00  0.00
N
ATOM   2412  H   VAL   145      34.658  26.349   4.398  1.00  0.00
H
ATOM   2413  CA  VAL   145      33.686  27.950   3.390  1.00  0.00
C
ATOM   2414  HA  VAL   145      33.797  29.032   3.439  1.00  0.00
H
ATOM   2415  C   VAL   145      32.469  27.535   4.196  1.00  0.00
C
ATOM   2416  O   VAL   145      32.532  26.545   4.906  1.00  0.00
O
ATOM   2417  CB  VAL   145      33.508  27.515   1.897  1.00  0.00
C
ATOM   2418  HB  VAL   145      32.568  27.925   1.533  1.00  0.00
H
ATOM   2419  CG1 VAL   145      34.628  28.087   1.034  1.00  0.00
C
ATOM   2420 1HG1 VAL   145      34.487  27.799  -0.004  1.00  0.00
H
ATOM   2421 2HG1 VAL   145      35.598  27.721   1.372  1.00  0.00
H
ATOM   2422 3HG1 VAL   145      34.614  29.174   1.098  1.00  0.00
H
ATOM   2423  CG2 VAL   145      33.465  25.983   1.730  1.00  0.00
C
ATOM   2424 1HG2 VAL   145      33.233  25.727   0.700  1.00  0.00
H
ATOM   2425 2HG2 VAL   145      32.713  25.540   2.380  1.00  0.00
H
ATOM   2426 3HG2 VAL   145      34.436  25.550   1.972  1.00  0.00
H
ATOM   2427  N   ASP   146      31.347  28.228   4.090  1.00  0.00
N
ATOM   2428  H   ASP   146      31.310  29.053   3.495  1.00  0.00
H
ATOM   2429  CA  ASP   146      30.118  27.808   4.776  1.00  0.00
C
ATOM   2430  HA  ASP   146      30.386  27.167   5.616  1.00  0.00
H
ATOM   2431  C   ASP   146      29.271  26.952   3.831  1.00  0.00
C
ATOM   2432  O   ASP   146      28.095  27.199   3.586  1.00  0.00
O
ATOM   2433  CB  ASP   146      29.342  28.988   5.377  1.00  0.00
C
ATOM   2434 1HB  ASP   146      28.493  28.592   5.932  1.00  0.00
H
ATOM   2435 2HB  ASP   146      29.993  29.521   6.068  1.00  0.00
H
ATOM   2436  CG  ASP   146      28.824  29.968   4.352  1.00  0.00
C
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ATOM   2437  OD1 ASP   146      29.638  30.571   3.627  1.00  0.00
O
ATOM   2438  OD2 ASP   146      27.599  30.222   4.323  1.00  0.00
O
ATOM   2439  N   GLY   147      29.916  25.952   3.245  1.00  0.00
N
ATOM   2440  H   GLY   147      30.879  25.773   3.498  1.00  0.00
H
ATOM   2441  CA  GLY   147      29.264  25.073   2.282  1.00  0.00
C
ATOM   2442 1HA  GLY   147      29.812  24.134   2.235  1.00  0.00
H
ATOM   2443 2HA  GLY   147      28.250  24.859   2.619  1.00  0.00
H
ATOM   2444  C   GLY   147      29.188  25.656   0.884  1.00  0.00
C
ATOM   2445  O   GLY   147      28.585  25.087  -0.024  1.00  0.00
O
ATOM   2446  N   SER   148      29.785  26.825   0.705  1.00  0.00
N
ATOM   2447  H   SER   148      30.258  27.262   1.480  1.00  0.00
H
ATOM   2448  CA  SER   148      29.708  27.569  -0.549  1.00  0.00
C
ATOM   2449  HA  SER   148      28.658  27.670  -0.823  1.00  0.00
H
ATOM   2450  C   SER   148      30.453  26.973  -1.736  1.00  0.00
C
ATOM   2451  O   SER   148      30.122  27.261  -2.881  1.00  0.00
O
ATOM   2452  CB  SER   148      30.272  28.957  -0.288  1.00  0.00
C
ATOM   2453 1HB  SER   148      31.358  28.896  -0.216  1.00  0.00
H
ATOM   2454 2HB  SER   148      29.997  29.630  -1.100  1.00  0.00
H
ATOM   2455  OG  SER   148      29.760  29.429   0.943  1.00  0.00
O
ATOM   2456  HG  SER   148      28.857  29.749   0.787  1.00  0.00
H
ATOM   2457  N   PHE   149      31.457  26.153  -1.471  1.00  0.00
N
ATOM   2458  H   PHE   149      31.661  25.912  -0.515  1.00  0.00
H
ATOM   2459  CA  PHE   149      32.284  25.556  -2.520  1.00  0.00
C
ATOM   2460  HA  PHE   149      31.899  25.800  -3.509  1.00  0.00
H
ATOM   2461  C   PHE   149      32.311  24.043  -2.374  1.00  0.00
C
ATOM   2462  O   PHE   149      32.915  23.519  -1.431  1.00  0.00
O
ATOM   2463  CB  PHE   149      33.732  26.033  -2.416  1.00  0.00
C
ATOM   2464 1HB  PHE   149      34.023  26.078  -1.370  1.00  0.00
H
ATOM   2465 2HB  PHE   149      34.360  25.293  -2.907  1.00  0.00
H
ATOM   2466  CG  PHE   149      34.011  27.352  -3.079  1.00  0.00
C
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ATOM   2467  CD1 PHE   149      33.610  28.570  -2.502  1.00  0.00
C
ATOM   2468  HD1 PHE   149      33.023  28.575  -1.598  1.00  0.00
H
ATOM   2469  CD2 PHE   149      34.752  27.374  -4.273  1.00  0.00
C
ATOM   2470  HD2 PHE   149      35.040  26.448  -4.748  1.00  0.00
H
ATOM   2471  CE1 PHE   149      33.993  29.803  -3.084  1.00  0.00
C
ATOM   2472  HE1 PHE   149      33.691  30.736  -2.632  1.00  0.00
H
ATOM   2473  CE2 PHE   149      35.152  28.594  -4.853  1.00  0.00
C
ATOM   2474  HE2 PHE   149      35.746  28.591  -5.755  1.00  0.00
H
ATOM   2475  CZ  PHE   149      34.786  29.812  -4.246  1.00  0.00
C
ATOM   2476  HZ  PHE   149      35.105  30.749  -4.677  1.00  0.00
H
ATOM   2477  N   ALA   150      31.718  23.347  -3.330  1.00  0.00
N
ATOM   2478  H   ALA   150      31.153  23.827  -4.024  1.00  0.00
H
ATOM   2479  CA  ALA   150      31.911  21.909  -3.458  1.00  0.00
C
ATOM   2480  HA  ALA   150      31.721  21.424  -2.500  1.00  0.00
H
ATOM   2481  C   ALA   150      33.369  21.675  -3.858  1.00  0.00
C
ATOM   2482  O   ALA   150      33.983  22.526  -4.510  1.00  0.00
O
ATOM   2483  CB  ALA   150      30.959  21.350  -4.517  1.00  0.00
C
ATOM   2484 1HB  ALA   150      29.926  21.533  -4.217  1.00  0.00
H
ATOM   2485 2HB  ALA   150      31.113  20.276  -4.624  1.00  0.00
H
ATOM   2486 3HB  ALA   150      31.145  21.832  -5.478  1.00  0.00
H
ATOM   2487  N   SER   151      33.916  20.528  -3.495  1.00  0.00
N
ATOM   2488  H   SER   151      33.374  19.856  -2.959  1.00  0.00
H
ATOM   2489  CA  SER   151      35.285  20.170  -3.846  1.00  0.00
C
ATOM   2490  HA  SER   151      35.687  20.872  -4.575  1.00  0.00
H
ATOM   2491  C   SER   151      35.301  18.777  -4.441  1.00  0.00
C
ATOM   2492  O   SER   151      34.409  17.968  -4.175  1.00  0.00
O
ATOM   2493  CB  SER   151      36.162  20.175  -2.593  1.00  0.00
C
ATOM   2494 1HB  SER   151      37.195  19.962  -2.871  1.00  0.00
H
ATOM   2495 2HB  SER   151      36.116  21.156  -2.129  1.00  0.00
H
ATOM   2496  OG  SER   151      35.710  19.200  -1.663  1.00  0.00
O
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ATOM   2497  HG  SER   151      34.765  19.345  -1.499  1.00  0.00
H
ATOM   2498  N   ALA   152      36.352  18.485  -5.188  1.00  0.00
N
ATOM   2499  H   ALA   152      36.984  19.229  -5.469  1.00  0.00
H
ATOM   2500  CA  ALA   152      36.723  17.127  -5.550  1.00  0.00
C
ATOM   2501  HA  ALA   152      36.266  16.406  -4.873  1.00  0.00
H
ATOM   2502  C   ALA   152      38.234  17.161  -5.349  1.00  0.00
C
ATOM   2503  O   ALA   152      38.868  18.143  -5.753  1.00  0.00
O
ATOM   2504  CB  ALA   152      36.345  16.829  -7.008  1.00  0.00
C
ATOM   2505 1HB  ALA   152      35.261  16.880  -7.121  1.00  0.00
H
ATOM   2506 2HB  ALA   152      36.684  15.828  -7.277  1.00  0.00
H
ATOM   2507 3HB  ALA   152      36.811  17.558  -7.673  1.00  0.00
H
ATOM   2508  N   HIS   153      38.816  16.163  -4.703  1.00  0.00
N
ATOM   2509  H   HIS   153      38.259  15.401  -4.333  1.00  0.00
H
ATOM   2510  CA  HIS   153      40.268  16.129  -4.534  1.00  0.00
C
ATOM   2511  HA  HIS   153      40.717  16.670  -5.367  1.00  0.00
H
ATOM   2512  C   HIS   153      40.817  14.713  -4.586  1.00  0.00
C
ATOM   2513  O   HIS   153      40.110  13.746  -4.274  1.00  0.00
O
ATOM   2514  CB  HIS   153      40.682  16.831  -3.225  1.00  0.00
C
ATOM   2515 1HB  HIS   153      41.767  16.894  -3.196  1.00  0.00
H
ATOM   2516 2HB  HIS   153      40.287  17.846  -3.233  1.00  0.00
H
ATOM   2517  CG  HIS   153      40.214  16.154  -1.970  1.00  0.00
C
ATOM   2518  ND1 HIS   153      39.478  16.799  -0.981  1.00  0.00
N
ATOM   2519  HD1 HIS   153      39.169  17.764  -1.012  1.00  0.00
H
ATOM   2520  CD2 HIS   153      40.419  14.903  -1.482  1.00  0.00
C
ATOM   2521  HD2 HIS   153      40.979  14.118  -1.973  1.00  0.00
H
ATOM   2522  CE1 HIS   153      39.243  15.952   0.013  1.00  0.00
C
ATOM   2523  HE1 HIS   153      38.676  16.175   0.916  1.00  0.00
H
ATOM   2524  NE2 HIS   153      39.789  14.796  -0.277  1.00  0.00
N
ATOM   2525  HE2 HIS   153      39.746  13.939   0.286  1.00  0.00
H
ATOM   2526  N   THR   154      42.095  14.595  -4.903  1.00  0.00
N
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ATOM   2527  H   THR   154      42.572  15.360  -5.367  1.00  0.00
H
ATOM   2528  CA  THR   154      42.864  13.418  -4.521  1.00  0.00
C
ATOM   2529  HA  THR   154      42.214  12.550  -4.454  1.00  0.00
H
ATOM   2530  C   THR   154      43.436  13.750  -3.149  1.00  0.00
C
ATOM   2531  O   THR   154      43.705  14.917  -2.853  1.00  0.00
O
ATOM   2532  CB  THR   154      44.014  13.112  -5.507  1.00  0.00
C
ATOM   2533  HB  THR   154      44.522  12.207  -5.195  1.00  0.00
H
ATOM   2534  OG1 THR   154      44.956  14.187  -5.507  1.00  0.00
O
ATOM   2535  HG1 THR   154      45.612  13.979  -4.826  1.00  0.00
H
ATOM   2536  CG2 THR   154      43.510  12.922  -6.922  1.00  0.00
C
ATOM   2537 1HG2 THR   154      44.352  12.684  -7.571  1.00  0.00
H
ATOM   2538 2HG2 THR   154      43.030  13.830  -7.287  1.00  0.00
H
ATOM   2539 3HG2 THR   154      42.803  12.094  -6.951  1.00  0.00
H
ATOM   2540  N   GLU   155      43.639  12.757  -2.306  1.00  0.00
N
ATOM   2541  H   GLU   155      43.382  11.807  -2.547  1.00  0.00
H
ATOM   2542  CA  GLU   155      44.371  12.946  -1.062  1.00  0.00
C
ATOM   2543  HA  GLU   155      45.083  13.763  -1.171  1.00  0.00
H
ATOM   2544  C   GLU   155      45.109  11.641  -0.926  1.00  0.00
C
ATOM   2545  O   GLU   155      44.609  10.624  -1.411  1.00  0.00
O
ATOM   2546  CB  GLU   155      43.480  13.182   0.164  1.00  0.00
C
ATOM   2547 1HB  GLU   155      44.133  13.511   0.972  1.00  0.00
H
ATOM   2548 2HB  GLU   155      42.794  13.997  -0.059  1.00  0.00
H
ATOM   2549  CG  GLU   155      42.672  11.992   0.706  1.00  0.00
C
ATOM   2550 1HG  GLU   155      43.259  11.079   0.677  1.00  0.00
H
ATOM   2551 2HG  GLU   155      42.453  12.186   1.751  1.00  0.00
H
ATOM   2552  CD  GLU   155      41.366  11.761  -0.017  1.00  0.00
C
ATOM   2553  OE1 GLU   155      41.350  11.199  -1.139  1.00  0.00
O
ATOM   2554  OE2 GLU   155      40.311  12.139   0.546  1.00  0.00
O
ATOM   2555  N   GLU   156      46.255  11.628  -0.277  1.00  0.00
N
ATOM   2556  H   GLU   156      46.640  12.489   0.099  1.00  0.00
H
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ATOM   2557  CA  GLU   156      46.907  10.356  -0.012  1.00  0.00
C
ATOM   2558  HA  GLU   156      46.922   9.753  -0.920  1.00  0.00
H
ATOM   2559  C   GLU   156      46.029   9.691   1.049  1.00  0.00
C
ATOM   2560  O   GLU   156      45.452  10.385   1.887  1.00  0.00
O
ATOM   2561  CB  GLU   156      48.333  10.595   0.469  1.00  0.00
C
ATOM   2562 1HB  GLU   156      48.800  11.283  -0.231  1.00  0.00
H
ATOM   2563 2HB  GLU   156      48.309  11.060   1.455  1.00  0.00
H
ATOM   2564  CG  GLU   156      49.175   9.339   0.510  1.00  0.00
C
ATOM   2565 1HG  GLU   156      48.786   8.666   1.275  1.00  0.00
H
ATOM   2566 2HG  GLU   156      49.108   8.844  -0.459  1.00  0.00
H
ATOM   2567  CD  GLU   156      50.629   9.642   0.797  1.00  0.00
C
ATOM   2568  OE1 GLU   156      50.933  10.639   1.489  1.00  0.00
O
ATOM   2569  OE2 GLU   156      51.501   8.852   0.367  1.00  0.00
O
ATOM   2570  N   VAL   157      45.867   8.378   1.021  1.00  0.00
N
ATOM   2571  H   VAL   157      46.344   7.812   0.342  1.00  0.00
H
ATOM   2572  CA  VAL   157      44.963   7.738   1.973  1.00  0.00
C
ATOM   2573  HA  VAL   157      43.983   8.196   1.852  1.00  0.00
H
ATOM   2574  C   VAL   157      45.393   7.996   3.415  1.00  0.00
C
ATOM   2575  O   VAL   157      46.579   8.187   3.714  1.00  0.00
O
ATOM   2576  CB  VAL   157      44.809   6.215   1.721  1.00  0.00
C
ATOM   2577  HB  VAL   157      44.115   5.822   2.459  1.00  0.00
H
ATOM   2578  CG1 VAL   157      44.215   5.958   0.333  1.00  0.00
C
ATOM   2579 1HG1 VAL   157      44.073   4.887   0.189  1.00  0.00
H
ATOM   2580 2HG1 VAL   157      44.870   6.333  -0.453  1.00  0.00
H
ATOM   2581 3HG1 VAL   157      43.245   6.446   0.251  1.00  0.00
H
ATOM   2582  CG2 VAL   157      46.140   5.469   1.880  1.00  0.00
C
ATOM   2583 1HG2 VAL   157      45.998   4.414   1.640  1.00  0.00
H
ATOM   2584 2HG2 VAL   157      46.489   5.547   2.908  1.00  0.00
H
ATOM   2585 3HG2 VAL   157      46.894   5.888   1.220  1.00  0.00
H
ATOM   2586  N   ASN   158      44.392   8.027   4.284  1.00  0.00
N
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ATOM   2587  H   ASN   158      43.447   7.867   3.931  1.00  0.00
H
ATOM   2588  CA  ASN   158      44.509   8.317   5.714  1.00  0.00
C
ATOM   2589  HA  ASN   158      43.507   8.201   6.126  1.00  0.00
H
ATOM   2590  C   ASN   158      44.944   9.759   6.012  1.00  0.00
C
ATOM   2591  O   ASN   158      45.530  10.011   7.070  1.00  0.00
O
ATOM   2592  CB  ASN   158      45.415   7.316   6.448  1.00  0.00
C
ATOM   2593 1HB  ASN   158      46.451   7.524   6.190  1.00  0.00
H
ATOM   2594 2HB  ASN   158      45.298   7.442   7.524  1.00  0.00
H
ATOM   2595  CG  ASN   158      45.122   5.886   6.093  1.00  0.00
C
ATOM   2596  OD1 ASN   158      43.990   5.412   6.181  1.00  0.00
O
ATOM   2597  ND2 ASN   158      46.131   5.177   5.675  1.00  0.00
N
ATOM   2598 1HD2 ASN   158      45.983   4.209   5.422  1.00  0.00
H
ATOM   2599 2HD2 ASN   158      47.046   5.596   5.598  1.00  0.00
H
ATOM   2600  N   THR   159      44.683  10.697   5.104  1.00  0.00
N
ATOM   2601  H   THR   159      44.248  10.436   4.230  1.00  0.00
H
ATOM   2602  CA  THR   159      45.027  12.110   5.329  1.00  0.00
C
ATOM   2603  HA  THR   159      45.352  12.202   6.363  1.00  0.00
H
ATOM   2604  C   THR   159      43.915  13.152   5.137  1.00  0.00
C
ATOM   2605  O   THR   159      44.231  14.324   4.954  1.00  0.00
O
ATOM   2606  CB  THR   159      46.232  12.569   4.459  1.00  0.00
C
ATOM   2607  HB  THR   159      46.564  13.543   4.813  1.00  0.00
H
ATOM   2608  OG1 THR   159      45.849  12.695   3.087  1.00  0.00
O
ATOM   2609  HG1 THR   159      45.713  11.808   2.719  1.00  0.00
H
ATOM   2610  CG2 THR   159      47.404  11.600   4.537  1.00  0.00
C
ATOM   2611 1HG2 THR   159      48.244  12.007   3.984  1.00  0.00
H
ATOM   2612 2HG2 THR   159      47.129  10.647   4.090  1.00  0.00
H
ATOM   2613 3HG2 THR   159      47.693  11.448   5.577  1.00  0.00
H
ATOM   2614  N   SER   160      42.634  12.798   5.194  1.00  0.00
N
ATOM   2615  H   SER   160      42.374  11.836   5.410  1.00  0.00
H
ATOM   2616  CA  SER   160      41.559  13.791   4.999  1.00  0.00
C
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ATOM   2617  HA  SER   160      42.000  14.781   5.071  1.00  0.00
H
ATOM   2618  C   SER   160      40.442  13.777   6.037  1.00  0.00
C
ATOM   2619  O   SER   160      40.284  12.826   6.794  1.00  0.00
O
ATOM   2620  CB  SER   160      40.965  13.680   3.599  1.00  0.00
C
ATOM   2621 1HB  SER   160      40.226  14.467   3.452  1.00  0.00
H
ATOM   2622 2HB  SER   160      41.767  13.822   2.878  1.00  0.00
H
ATOM   2623  OG  SER   160      40.366  12.420   3.370  1.00  0.00
O
ATOM   2624  HG  SER   160      40.343  12.271   2.415  1.00  0.00
H
ATOM   2625  N   PHE   161      39.712  14.880   6.128  1.00  0.00
N
ATOM   2626  H   PHE   161      39.879  15.639   5.471  1.00  0.00
H
ATOM   2627  CA  PHE   161      38.716  15.098   7.177  1.00  0.00
C
ATOM   2628  HA  PHE   161      38.172  14.178   7.381  1.00  0.00
H
ATOM   2629  C   PHE   161      37.749  16.172   6.666  1.00  0.00
C
ATOM   2630  O   PHE   161      38.179  17.102   5.966  1.00  0.00
O
ATOM   2631  CB  PHE   161      39.500  15.549   8.427  1.00  0.00
C
ATOM   2632 1HB  PHE   161      40.221  14.773   8.673  1.00  0.00
H
ATOM   2633 2HB  PHE   161      40.048  16.458   8.180  1.00  0.00
H
ATOM   2634  CG  PHE   161      38.683  15.805   9.671  1.00  0.00
C
ATOM   2635  CD1 PHE   161      37.406  15.253   9.884  1.00  0.00
C
ATOM   2636  HD1 PHE   161      36.971  14.579   9.168  1.00  0.00
H
ATOM   2637  CD2 PHE   161      39.253  16.593  10.688  1.00  0.00
C
ATOM   2638  HD2 PHE   161      40.251  16.980  10.562  1.00  0.00
H
ATOM   2639  CE1 PHE   161      36.663  15.583  11.033  1.00  0.00
C
ATOM   2640  HE1 PHE   161      35.661  15.201  11.150  1.00  0.00
H
ATOM   2641  CE2 PHE   161      38.543  16.885  11.877  1.00  0.00
C
ATOM   2642  HE2 PHE   161      38.996  17.486  12.653  1.00  0.00
H
ATOM   2643  CZ  PHE   161      37.232  16.406  12.032  1.00  0.00
C
ATOM   2644  HZ  PHE   161      36.662  16.668  12.910  1.00  0.00
H
ATOM   2645  N   HIS   162      36.466  16.069   6.991  1.00  0.00
N
ATOM   2646  H   HIS   162      36.132  15.258   7.508  1.00  0.00
H
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ATOM   2647  CA  HIS   162      35.475  17.089   6.657  1.00  0.00
C
ATOM   2648  HA  HIS   162      35.979  18.028   6.450  1.00  0.00
H
ATOM   2649  C   HIS   162      34.558  17.268   7.868  1.00  0.00
C
ATOM   2650  O   HIS   162      34.084  16.287   8.444  1.00  0.00
O
ATOM   2651  CB  HIS   162      34.697  16.644   5.416  1.00  0.00
C
ATOM   2652 1HB  HIS   162      35.412  16.430   4.623  1.00  0.00
H
ATOM   2653 2HB  HIS   162      34.161  15.726   5.651  1.00  0.00
H
ATOM   2654  CG  HIS   162      33.716  17.652   4.901  1.00  0.00
C
ATOM   2655  ND1 HIS   162      33.867  19.016   4.985  1.00  0.00
N
ATOM   2656  HD1 HIS   162      34.644  19.510   5.413  1.00  0.00
H
ATOM   2657  CD2 HIS   162      32.566  17.473   4.200  1.00  0.00
C
ATOM   2658  HD2 HIS   162      32.155  16.511   3.928  1.00  0.00
H
ATOM   2659  CE1 HIS   162      32.830  19.591   4.374  1.00  0.00
C
ATOM   2660  HE1 HIS   162      32.687  20.660   4.285  1.00  0.00
H
ATOM   2661  NE2 HIS   162      32.008  18.691   3.874  1.00  0.00
N
ATOM   2662  N   PHE   163      34.342  18.502   8.301  1.00  0.00
N
ATOM   2663  H   PHE   163      34.749  19.293   7.815  1.00  0.00
H
ATOM   2664  CA  PHE   163      33.519  18.775   9.478  1.00  0.00
C
ATOM   2665  HA  PHE   163      32.708  18.052   9.521  1.00  0.00
H
ATOM   2666  C   PHE   163      32.907  20.164   9.418  1.00  0.00
C
ATOM   2667  O   PHE   163      33.329  20.977   8.593  1.00  0.00
O
ATOM   2668  CB  PHE   163      34.352  18.649  10.763  1.00  0.00
C
ATOM   2669 1HB  PHE   163      33.698  18.772  11.623  1.00  0.00
H
ATOM   2670 2HB  PHE   163      34.770  17.645  10.804  1.00  0.00
H
ATOM   2671  CG  PHE   163      35.482  19.638  10.882  1.00  0.00
C
ATOM   2672  CD1 PHE   163      35.300  20.885  11.512  1.00  0.00
C
ATOM   2673  HD1 PHE   163      34.318  21.182  11.838  1.00  0.00
H
ATOM   2674  CD2 PHE   163      36.763  19.289  10.437  1.00  0.00
C
ATOM   2675  HD2 PHE   163      36.916  18.351   9.924  1.00  0.00
H
ATOM   2676  CE1 PHE   163      36.400  21.743  11.761  1.00  0.00
C
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ATOM   2677  HE1 PHE   163      36.251  22.687  12.264  1.00  0.00
H
ATOM   2678  CE2 PHE   163      37.867  20.131  10.673  1.00  0.00
C
ATOM   2679  HE2 PHE   163      38.842  19.833  10.327  1.00  0.00
H
ATOM   2680  CZ  PHE   163      37.693  21.354  11.348  1.00  0.00
C
ATOM   2681  HZ  PHE   163      38.541  21.995  11.532  1.00  0.00
H
ATOM   2682  N   LYS   164      31.975  20.448  10.322  1.00  0.00
N
ATOM   2683  H   LYS   164      31.625  19.698  10.919  1.00  0.00
H
ATOM   2684  CA  LYS   164      31.501  21.812  10.559  1.00  0.00
C
ATOM   2685  HA  LYS   164      31.971  22.476   9.839  1.00  0.00
H
ATOM   2686  C   LYS   164      31.882  22.265  11.956  1.00  0.00
C
ATOM   2687  O   LYS   164      31.973  21.461  12.886  1.00  0.00
O
ATOM   2688  CB  LYS   164      29.980  21.964  10.433  1.00  0.00
C
ATOM   2689 1HB  LYS   164      29.500  21.495  11.287  1.00  0.00
H
ATOM   2690 2HB  LYS   164      29.749  23.030  10.470  1.00  0.00
H
ATOM   2691  CG  LYS   164      29.372  21.385   9.183  1.00  0.00
C
ATOM   2692 1HG  LYS   164      29.949  21.697   8.314  1.00  0.00
H
ATOM   2693 2HG  LYS   164      29.389  20.299   9.259  1.00  0.00
H
ATOM   2694  CD  LYS   164      27.937  21.856   9.025  1.00  0.00
C
ATOM   2695 1HD  LYS   164      27.404  21.698   9.961  1.00  0.00
H
ATOM   2696 2HD  LYS   164      27.933  22.921   8.788  1.00  0.00
H
ATOM   2697  CE  LYS   164      27.230  21.082   7.929  1.00  0.00
C
ATOM   2698 1HE  LYS   164      27.780  21.197   6.993  1.00  0.00
H
ATOM   2699 2HE  LYS   164      27.207  20.024   8.200  1.00  0.00
H
ATOM   2700  NZ  LYS   164      25.832  21.581   7.752  1.00  0.00
N
ATOM   2701 1HZ  LYS   164      25.354  21.036   7.042  1.00  0.00
H
ATOM   2702 2HZ  LYS   164      25.852  22.549   7.452  1.00  0.00
H
ATOM   2703 3HZ  LYS   164      25.321  21.511   8.626  1.00  0.00
H
ATOM   2704  N   MET   165      32.031  23.567  12.106  1.00  0.00
N
ATOM   2705  H   MET   165      31.965  24.166  11.281  1.00  0.00
H
ATOM   2706  CA  MET   165      32.194  24.221  13.395  1.00  0.00
C
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ATOM   2707  HA  MET   165      31.898  23.557  14.207  1.00  0.00
H
ATOM   2708  C   MET   165      31.232  25.389  13.299  1.00  0.00
C
ATOM   2709  O   MET   165      31.359  26.219  12.402  1.00  0.00
O
ATOM   2710  CB  MET   165      33.633  24.687  13.587  1.00  0.00
C
ATOM   2711 1HB  MET   165      34.275  23.808  13.583  1.00  0.00
H
ATOM   2712 2HB  MET   165      33.906  25.316  12.741  1.00  0.00
H
ATOM   2713  CG  MET   165      33.864  25.462  14.881  1.00  0.00
C
ATOM   2714 1HG  MET   165      33.405  26.447  14.790  1.00  0.00
H
ATOM   2715 2HG  MET   165      33.387  24.930  15.705  1.00  0.00
H
ATOM   2716  SD  MET   165      35.620  25.649  15.269  1.00  0.00
S
ATOM   2717  CE  MET   165      36.251  26.381  13.785  1.00  0.00
C
ATOM   2718 1HE  MET   165      37.264  26.739  13.956  1.00  0.00
H
ATOM   2719 2HE  MET   165      35.619  27.217  13.488  1.00  0.00
H
ATOM   2720 3HE  MET   165      36.271  25.636  12.992  1.00  0.00
H
ATOM   2721  N   LYS   166      30.226  25.385  14.162  1.00  0.00
N
ATOM   2722  H   LYS   166      30.248  24.710  14.922  1.00  0.00
H
ATOM   2723  CA  LYS   166      29.059  26.264  14.056  1.00  0.00
C
ATOM   2724  HA  LYS   166      28.284  25.883  14.719  1.00  0.00
H
ATOM   2725  C   LYS   166      28.502  26.217  12.632  1.00  0.00
C
ATOM   2726  O   LYS   166      28.124  25.136  12.172  1.00  0.00
O
ATOM   2727  CB  LYS   166      29.396  27.679  14.529  1.00  0.00
C
ATOM   2728 1HB  LYS   166      30.146  28.112  13.868  1.00  0.00
H
ATOM   2729 2HB  LYS   166      28.488  28.283  14.479  1.00  0.00
H
ATOM   2730  CG  LYS   166      29.932  27.743  15.946  1.00  0.00
C
ATOM   2731 1HG  LYS   166      29.243  27.245  16.628  1.00  0.00
H
ATOM   2732 2HG  LYS   166      30.908  27.260  15.992  1.00  0.00
H
ATOM   2733  CD  LYS   166      30.068  29.192  16.337  1.00  0.00
C
ATOM   2734 1HD  LYS   166      30.661  29.704  15.582  1.00  0.00
H
ATOM   2735 2HD  LYS   166      29.076  29.642  16.369  1.00  0.00
H
ATOM   2736  CE  LYS   166      30.736  29.354  17.685  1.00  0.00
C
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ATOM   2737 1HE  LYS   166      30.192  28.775  18.432  1.00  0.00
H
ATOM   2738 2HE  LYS   166      31.769  29.000  17.631  1.00  0.00
H
ATOM   2739  NZ  LYS   166      30.707  30.799  18.059  1.00  0.00
N
ATOM   2740 1HZ  LYS   166      31.188  30.943  18.940  1.00  0.00
H
ATOM   2741 2HZ  LYS   166      29.744  31.106  18.155  1.00  0.00
H
ATOM   2742 3HZ  LYS   166      31.158  31.356  17.344  1.00  0.00
H
ATOM   2743  N   ASN   167      28.482  27.339  11.922  1.00  0.00
N
ATOM   2744  H   ASN   167      28.818  28.201  12.339  1.00  0.00
H
ATOM   2745  CA  ASN   167      27.996  27.386  10.541  1.00  0.00
C
ATOM   2746  HA  ASN   167      27.469  26.458  10.317  1.00  0.00
H
ATOM   2747  C   ASN   167      29.124  27.523   9.509  1.00  0.00
C
ATOM   2748  O   ASN   167      28.877  27.960   8.391  1.00  0.00
O
ATOM   2749  CB  ASN   167      26.993  28.538  10.385  1.00  0.00
C
ATOM   2750 1HB  ASN   167      27.462  29.470  10.694  1.00  0.00
H
ATOM   2751 2HB  ASN   167      26.703  28.623   9.339  1.00  0.00
H
ATOM   2752  CG  ASN   167      25.736  28.326  11.181  1.00  0.00
C
ATOM   2753  OD1 ASN   167      25.174  27.241  11.202  1.00  0.00
O
ATOM   2754  ND2 ASN   167      25.267  29.357  11.819  1.00  0.00
N
ATOM   2755 1HD2 ASN   167      24.393  29.266  12.321  1.00  0.00
H
ATOM   2756 2HD2 ASN   167      25.762  30.237  11.787  1.00  0.00
H
ATOM   2757  N   LEU   168      30.356  27.172   9.855  1.00  0.00
N
ATOM   2758  H   LEU   168      30.544  26.835  10.797  1.00  0.00
H
ATOM   2759  CA  LEU   168      31.465  27.154   8.893  1.00  0.00
C
ATOM   2760  HA  LEU   168      31.155  27.572   7.937  1.00  0.00
H
ATOM   2761  C   LEU   168      31.872  25.705   8.691  1.00  0.00
C
ATOM   2762  O   LEU   168      31.875  24.937   9.645  1.00  0.00
O
ATOM   2763  CB  LEU   168      32.690  27.913   9.420  1.00  0.00
C
ATOM   2764 1HB  LEU   168      32.972  27.459  10.370  1.00  0.00
H
ATOM   2765 2HB  LEU   168      33.506  27.733   8.720  1.00  0.00
H
ATOM   2766  CG  LEU   168      32.599  29.429   9.635  1.00  0.00
C
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ATOM   2767  HG  LEU   168      31.797  29.639  10.341  1.00  0.00
H
ATOM   2768  CD1 LEU   168      33.916  29.925  10.233  1.00  0.00
C
ATOM   2769 1HD1 LEU   168      33.854  30.998  10.419  1.00  0.00
H
ATOM   2770 2HD1 LEU   168      34.745  29.724   9.553  1.00  0.00
H
ATOM   2771 3HD1 LEU   168      34.098  29.425  11.184  1.00  0.00
H
ATOM   2772  CD2 LEU   168      32.315  30.181   8.332  1.00  0.00
C
ATOM   2773 1HD2 LEU   168      32.298  31.253   8.534  1.00  0.00
H
ATOM   2774 2HD2 LEU   168      31.335  29.892   7.956  1.00  0.00
H
ATOM   2775 3HD2 LEU   168      33.081  29.952   7.592  1.00  0.00
H
ATOM   2776  N   CYS   169      32.249  25.332   7.479  1.00  0.00
N
ATOM   2777  H   CYS   169      32.269  25.998   6.715  1.00  0.00
H
ATOM   2778  CA  CYS   169      32.680  23.973   7.187  1.00  0.00
C
ATOM   2779  HA  CYS   169      32.498  23.332   8.046  1.00  0.00
H
ATOM   2780  C   CYS   169      34.168  23.995   6.876  1.00  0.00
C
ATOM   2781  O   CYS   169      34.704  25.013   6.433  1.00  0.00
O
ATOM   2782  CB  CYS   169      31.903  23.431   5.989  1.00  0.00
C
ATOM   2783 1HB  CYS   169      32.220  23.967   5.093  1.00  0.00
H
ATOM   2784 2HB  CYS   169      32.134  22.373   5.858  1.00  0.00
H
ATOM   2785  SG  CYS   169      30.122  23.640   6.183  1.00  0.00
S
ATOM   2786  HG  CYS   169      29.779  22.963   5.075  1.00  0.00
H
ATOM   2787  N   PHE   170      34.837  22.876   7.090  1.00  0.00
N
ATOM   2788  H   PHE   170      34.343  22.069   7.470  1.00  0.00
H
ATOM   2789  CA  PHE   170      36.272  22.752   6.856  1.00  0.00
C
ATOM   2790  HA  PHE   170      36.662  23.618   6.324  1.00  0.00
H
ATOM   2791  C   PHE   170      36.477  21.501   6.015  1.00  0.00
C
ATOM   2792  O   PHE   170      35.939  20.444   6.354  1.00  0.00
O
ATOM   2793  CB  PHE   170      36.997  22.602   8.195  1.00  0.00
C
ATOM   2794 1HB  PHE   170      36.491  21.830   8.770  1.00  0.00
H
ATOM   2795 2HB  PHE   170      38.018  22.275   8.002  1.00  0.00
H
ATOM   2796  CG  PHE   170      37.053  23.872   9.012  1.00  0.00
C
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ATOM   2797  CD1 PHE   170      35.899  24.409   9.620  1.00  0.00
C
ATOM   2798  HD1 PHE   170      34.958  23.884   9.551  1.00  0.00
H
ATOM   2799  CD2 PHE   170      38.281  24.536   9.188  1.00  0.00
C
ATOM   2800  HD2 PHE   170      39.181  24.123   8.758  1.00  0.00
H
ATOM   2801  CE1 PHE   170      35.948  25.644  10.306  1.00  0.00
C
ATOM   2802  HE1 PHE   170      35.045  26.062  10.728  1.00  0.00
H
ATOM   2803  CE2 PHE   170      38.354  25.754   9.910  1.00  0.00
C
ATOM   2804  HE2 PHE   170      39.304  26.252  10.037  1.00  0.00
H
ATOM   2805  CZ  PHE   170      37.180  26.322  10.446  1.00  0.00
C
ATOM   2806  HZ  PHE   170      37.224  27.267  10.968  1.00  0.00
H
ATOM   2807  N   ILE   171      37.249  21.609   4.944  1.00  0.00
N
ATOM   2808  H   ILE   171      37.655  22.513   4.713  1.00  0.00
H
ATOM   2809  CA  ILE   171      37.586  20.483   4.066  1.00  0.00
C
ATOM   2810  HA  ILE   171      37.192  19.547   4.461  1.00  0.00
H
ATOM   2811  C   ILE   171      39.107  20.486   4.125  1.00  0.00
C
ATOM   2812  O   ILE   171      39.725  21.500   3.799  1.00  0.00
O
ATOM   2813  CB  ILE   171      37.104  20.696   2.595  1.00  0.00
C
ATOM   2814  HB  ILE   171      37.583  21.594   2.206  1.00  0.00
H
ATOM   2815  CG1 ILE   171      35.578  20.902   2.536  1.00  0.00
C
ATOM   2816 1HG1 ILE   171      35.098  19.938   2.692  1.00  0.00
H
ATOM   2817 2HG1 ILE   171      35.271  21.565   3.342  1.00  0.00
H
ATOM   2818  CG2 ILE   171      37.496  19.488   1.706  1.00  0.00
C
ATOM   2819 1HG2 ILE   171      37.252  19.700   0.664  1.00  0.00
H
ATOM   2820 2HG2 ILE   171      36.955  18.591   2.022  1.00  0.00
H
ATOM   2821 3HG2 ILE   171      38.564  19.300   1.773  1.00  0.00
H
ATOM   2822  CD1 ILE   171      35.045  21.502   1.232  1.00  0.00
C
ATOM   2823 1HD1 ILE   171      33.969  21.647   1.318  1.00  0.00
H
ATOM   2824 2HD1 ILE   171      35.243  20.831   0.397  1.00  0.00
H
ATOM   2825 3HD1 ILE   171      35.520  22.466   1.046  1.00  0.00
H
ATOM   2826  N   ILE   172      39.703  19.432   4.664  1.00  0.00
N
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ATOM   2827  H   ILE   172      39.154  18.625   4.944  1.00  0.00
H
ATOM   2828  CA  ILE   172      41.139  19.399   4.949  1.00  0.00
C
ATOM   2829  HA  ILE   172      41.652  20.204   4.424  1.00  0.00
H
ATOM   2830  C   ILE   172      41.663  18.074   4.437  1.00  0.00
C
ATOM   2831  O   ILE   172      41.072  17.036   4.727  1.00  0.00
O
ATOM   2832  CB  ILE   172      41.394  19.539   6.479  1.00  0.00
C
ATOM   2833  HB  ILE   172      40.797  18.793   7.002  1.00  0.00
H
ATOM   2834  CG1 ILE   172      40.932  20.944   6.908  1.00  0.00
C
ATOM   2835 1HG1 ILE   172      41.580  21.657   6.417  1.00  0.00
H
ATOM   2836 2HG1 ILE   172      39.921  21.114   6.548  1.00  0.00
H
ATOM   2837  CG2 ILE   172      42.887  19.296   6.830  1.00  0.00
C
ATOM   2838 1HG2 ILE   172      43.048  19.433   7.899  1.00  0.00
H
ATOM   2839 2HG2 ILE   172      43.526  19.983   6.275  1.00  0.00
H
ATOM   2840 3HG2 ILE   172      43.165  18.271   6.582  1.00  0.00
H
ATOM   2841  CD1 ILE   172      40.917  21.254   8.368  1.00  0.00
C
ATOM   2842 1HD1 ILE   172      40.499  22.248   8.517  1.00  0.00
H
ATOM   2843 2HD1 ILE   172      41.926  21.226   8.775  1.00  0.00
H
ATOM   2844 3HD1 ILE   172      40.285  20.531   8.879  1.00  0.00
H
ATOM   2845  N   TRP   173      42.737  18.105   3.661  1.00  0.00
N
ATOM   2846  H   TRP   173      43.184  18.993   3.439  1.00  0.00
H
ATOM   2847  CA  TRP   173      43.315  16.893   3.096  1.00  0.00
C
ATOM   2848  HA  TRP   173      43.217  16.090   3.819  1.00  0.00
H
ATOM   2849  C   TRP   173      44.794  17.129   2.812  1.00  0.00
C
ATOM   2850  O   TRP   173      45.214  18.288   2.804  1.00  0.00
O
ATOM   2851  CB  TRP   173      42.559  16.501   1.823  1.00  0.00
C
ATOM   2852 1HB  TRP   173      42.892  15.512   1.536  1.00  0.00
H
ATOM   2853 2HB  TRP   173      41.496  16.441   2.056  1.00  0.00
H
ATOM   2854  CG  TRP   173      42.735  17.408   0.635  1.00  0.00
C
ATOM   2855  CD1 TRP   173      43.470  17.146  -0.473  1.00  0.00
C
ATOM   2856  HD1 TRP   173      44.058  16.247  -0.613  1.00  0.00
H
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ATOM   2857  CD2 TRP   173      42.103  18.679   0.377  1.00  0.00
C
ATOM   2858  NE1 TRP   173      43.364  18.143  -1.401  1.00  0.00
N
ATOM   2859  HE1 TRP   173      43.828  18.132  -2.304  1.00  0.00
H
ATOM   2860  CE2 TRP   173      42.520  19.102  -0.918  1.00  0.00
C
ATOM   2861  CE3 TRP   173      41.223  19.506   1.105  1.00  0.00
C
ATOM   2862  HE3 TRP   173      40.870  19.205   2.075  1.00  0.00
H
ATOM   2863  CZ2 TRP   173      42.095  20.321  -1.486  1.00  0.00
C
ATOM   2864  HZ2 TRP   173      42.428  20.621  -2.467  1.00  0.00
H
ATOM   2865  CZ3 TRP   173      40.809  20.741   0.545  1.00  0.00
C
ATOM   2866  HZ3 TRP   173      40.146  21.390   1.102  1.00  0.00
H
ATOM   2867  CH2 TRP   173      41.250  21.130  -0.749  1.00  0.00
C
ATOM   2868  HH2 TRP   173      40.913  22.069  -1.166  1.00  0.00
H
ATOM   2869  N   LYS   174      45.586  16.091   2.566  1.00  0.00
N
ATOM   2870  H   LYS   174      45.226  15.144   2.635  1.00  0.00
H
ATOM   2871  CA  LYS   174      46.983  16.279   2.155  1.00  0.00
C
ATOM   2872  HA  LYS   174      47.148  17.340   1.986  1.00  0.00
H
ATOM   2873  C   LYS   174      47.249  15.599   0.821  1.00  0.00
C
ATOM   2874  O   LYS   174      46.752  14.511   0.541  1.00  0.00
O
ATOM   2875  CB  LYS   174      47.951  15.843   3.267  1.00  0.00
C
ATOM   2876 1HB  LYS   174      48.497  16.727   3.593  1.00  0.00
H
ATOM   2877 2HB  LYS   174      47.370  15.478   4.111  1.00  0.00
H
ATOM   2878  CG  LYS   174      48.970  14.787   2.885  1.00  0.00
C
ATOM   2879 1HG  LYS   174      48.453  13.867   2.616  1.00  0.00
H
ATOM   2880 2HG  LYS   174      49.522  15.144   2.023  1.00  0.00
H
ATOM   2881  CD  LYS   174      49.975  14.495   3.980  1.00  0.00
C
ATOM   2882 1HD  LYS   174      50.500  15.414   4.243  1.00  0.00
H
ATOM   2883 2HD  LYS   174      49.467  14.102   4.860  1.00  0.00
H
ATOM   2884  CE  LYS   174      50.972  13.469   3.451  1.00  0.00
C
ATOM   2885 1HE  LYS   174      50.445  12.536   3.243  1.00  0.00
H
ATOM   2886 2HE  LYS   174      51.397  13.838   2.516  1.00  0.00
H
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ATOM   2887  NZ  LYS   174      52.089  13.206   4.400  1.00  0.00
N
ATOM   2888 1HZ  LYS   174      52.647  12.424   4.076  1.00  0.00
H
ATOM   2889 2HZ  LYS   174      51.723  13.000   5.325  1.00  0.00
H
ATOM   2890 3HZ  LYS   174      52.684  14.025   4.458  1.00  0.00
H
ATOM   2891  N   THR   175      48.012  16.285  -0.014  1.00  0.00
N
ATOM   2892  H   THR   175      48.386  17.181   0.284  1.00  0.00
H
ATOM   2893  CA  THR   175      48.279  15.855  -1.382  1.00  0.00
C
ATOM   2894  HA  THR   175      47.933  14.832  -1.525  1.00  0.00
H
ATOM   2895  C   THR   175      49.765  15.925  -1.739  1.00  0.00
C
ATOM   2896  O   THR   175      50.236  16.939  -2.263  1.00  0.00
O
ATOM   2897  CB  THR   175      47.482  16.775  -2.332  1.00  0.00
C
ATOM   2898  HB  THR   175      47.913  17.773  -2.307  1.00  0.00
H
ATOM   2899  OG1 THR   175      46.133  16.853  -1.874  1.00  0.00
O
ATOM   2900  HG1 THR   175      45.702  16.016  -2.082  1.00  0.00
H
ATOM   2901  CG2 THR   175      47.421  16.294  -3.755  1.00  0.00
C
ATOM   2902 1HG2 THR   175      46.845  17.005  -4.344  1.00  0.00
H
ATOM   2903 2HG2 THR   175      46.941  15.321  -3.800  1.00  0.00
H
ATOM   2904 3HG2 THR   175      48.424  16.225  -4.174  1.00  0.00
H
ATOM   2905  N   PRO   176      50.536  14.855  -1.480  1.00  0.00
N
ATOM   2906  CA  PRO   176      51.562  14.636  -2.506  1.00  0.00
C
ATOM   2907  HA  PRO   176      52.218  15.499  -2.617  1.00  0.00
H
ATOM   2908  C   PRO   176      50.835  14.299  -3.804  1.00  0.00
C
ATOM   2909  O   PRO   176      49.667  13.917  -3.749  1.00  0.00
O
ATOM   2910  CB  PRO   176      52.328  13.419  -1.978  1.00  0.00
C
ATOM   2911 1HB  PRO   176      51.971  12.527  -2.479  1.00  0.00
H
ATOM   2912 2HB  PRO   176      53.402  13.537  -2.121  1.00  0.00
H
ATOM   2913  CG  PRO   176      51.984  13.344  -0.535  1.00  0.00
C
ATOM   2914 1HG  PRO   176      52.125  12.334  -0.155  1.00  0.00
H
ATOM   2915 2HG  PRO   176      52.578  14.062   0.032  1.00  0.00
H
ATOM   2916  CD  PRO   176      50.535  13.735  -0.526  1.00  0.00
C
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ATOM   2917 1HD  PRO   176      49.909  12.923  -0.896  1.00  0.00
H
ATOM   2918 2HD  PRO   176      50.227  14.054   0.464  1.00  0.00
H
ATOM   2919  N   ASP   177      51.483  14.417  -4.953  1.00  0.00
N
ATOM   2920  H   ASP   177      52.475  14.649  -4.949  1.00  0.00
H
ATOM   2921  CA  ASP   177      50.814  14.233  -6.247  1.00  0.00
C
ATOM   2922  HA  ASP   177      49.977  14.929  -6.301  1.00  0.00
H
ATOM   2923  C   ASP   177      50.260  12.819  -6.437  1.00  0.00
C
ATOM   2924  O   ASP   177      51.005  11.894  -6.762  1.00  0.00
O
ATOM   2925  CB  ASP   177      51.787  14.557  -7.380  1.00  0.00
C
ATOM   2926 1HB  ASP   177      52.220  15.541  -7.202  1.00  0.00
H
ATOM   2927 2HB  ASP   177      52.595  13.825  -7.380  1.00  0.00
H
ATOM   2928  CG  ASP   177      51.120  14.554  -8.743  1.00  0.00
C
ATOM   2929  OD1 ASP   177      49.878  14.424  -8.847  1.00  0.00
O
ATOM   2930  OD2 ASP   177      51.840  14.716  -9.754  1.00  0.00
O
ATOM   2931  N   CYS   178      48.960  12.692  -6.183  1.00  0.00
N
ATOM   2932  H   CYS   178      48.451  13.537  -5.976  1.00  0.00
H
ATOM   2933  CA  CYS   178      48.223  11.438  -6.003  1.00  0.00
C
ATOM   2934  HA  CYS   178      47.243  11.705  -5.607  1.00  0.00
H
ATOM   2935  C   CYS   178      48.845  10.504  -4.952  1.00  0.00
C
ATOM   2936  O   CYS   178      48.377  10.473  -3.814  1.00  0.00
O
ATOM   2937  CB  CYS   178      47.952  10.775  -7.350  1.00  0.00
C
ATOM   2938 1HB  CYS   178      48.899  10.546  -7.834  1.00  0.00
H
ATOM   2939 2HB  CYS   178      47.396   9.852  -7.187  1.00  0.00
H
ATOM   2940  SG  CYS   178      46.992  11.857  -8.433  1.00  0.00
S
ATOM   2941  HG  CYS   178      47.915  12.824  -8.524  1.00  0.00
H
ATOM   2942  N   ARG   179      49.913   9.793  -5.301  1.00  0.00
N
ATOM   2943  H   ARG   179      50.238   9.894  -6.262  1.00  0.00
H
ATOM   2944  CA  ARG   179      50.719   8.936  -4.410  1.00  0.00
C
ATOM   2945  HA  ARG   179      51.563   8.590  -4.999  1.00  0.00
H
ATOM   2946  C   ARG   179      50.063   7.673  -3.866  1.00  0.00
C
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ATOM   2947  O   ARG   179      50.755   6.762  -3.410  1.00  0.00
O
ATOM   2948  CB  ARG   179      51.281   9.764  -3.248  1.00  0.00
C
ATOM   2949 1HB  ARG   179      51.113  10.817  -3.464  1.00  0.00
H
ATOM   2950 2HB  ARG   179      50.720   9.513  -2.348  1.00  0.00
H
ATOM   2951  CG  ARG   179      52.759   9.569  -2.967  1.00  0.00
C
ATOM   2952 1HG  ARG   179      52.970   9.929  -1.961  1.00  0.00
H
ATOM   2953 2HG  ARG   179      53.005   8.510  -3.025  1.00  0.00
H
ATOM   2954  CD  ARG   179      53.628  10.340  -3.943  1.00  0.00
C
ATOM   2955 1HD  ARG   179      53.420  10.006  -4.958  1.00  0.00
H
ATOM   2956 2HD  ARG   179      53.390  11.401  -3.874  1.00  0.00
H
ATOM   2957  NE  ARG   179      55.048  10.147  -3.627  1.00  0.00
N
ATOM   2958  HE  ARG   179      55.420  10.668  -2.844  1.00  0.00
H
ATOM   2959  CZ  ARG   179      55.909   9.374  -4.272  1.00  0.00
C
ATOM   2960  NH1 ARG   179      55.605   8.665  -5.325  1.00  0.00
N
ATOM   2961 1HH1 ARG   179      54.652   8.634  -5.657  1.00  0.00
H
ATOM   2962 2HH1 ARG   179      56.322   8.161  -5.819  1.00  0.00
H
ATOM   2963  NH2 ARG   179      57.133   9.325  -3.837  1.00  0.00
N
ATOM   2964 1HH2 ARG   179      57.389   9.840  -3.011  1.00  0.00
H
ATOM   2965 2HH2 ARG   179      57.815   8.760  -4.325  1.00  0.00
H
ATOM   2966  N   ASN   180      48.746   7.605  -3.920  1.00  0.00
N
ATOM   2967  H   ASN   180      48.230   8.405  -4.272  1.00  0.00
H
ATOM   2968  CA  ASN   180      47.956   6.450  -3.518  1.00  0.00
C
ATOM   2969  HA  ASN   180      48.399   5.520  -3.877  1.00  0.00
H
ATOM   2970  C   ASN   180      46.651   6.755  -4.251  1.00  0.00
C
ATOM   2971  O   ASN   180      46.652   7.649  -5.111  1.00  0.00
O
ATOM   2972  CB  ASN   180      47.789   6.427  -1.993  1.00  0.00
C
ATOM   2973 1HB  ASN   180      48.726   6.741  -1.538  1.00  0.00
H
ATOM   2974 2HB  ASN   180      47.007   7.126  -1.699  1.00  0.00
H
ATOM   2975  CG  ASN   180      47.464   5.053  -1.464  1.00  0.00
C
ATOM   2976  OD1 ASN   180      46.448   4.466  -1.795  1.00  0.00
O
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ATOM   2977  ND2 ASN   180      48.314   4.531  -0.628  1.00  0.00
N
ATOM   2978 1HD2 ASN   180      48.088   3.631  -0.231  1.00  0.00
H
ATOM   2979 2HD2 ASN   180      49.169   5.005  -0.394  1.00  0.00
H
ATOM   2980  N   GLU   181      45.555   6.102  -3.902  1.00  0.00
N
ATOM   2981  H   GLU   181      45.619   5.346  -3.227  1.00  0.00
H
ATOM   2982  CA  GLU   181      44.229   6.531  -4.338  1.00  0.00
C
ATOM   2983  HA  GLU   181      44.206   6.661  -5.419  1.00  0.00
H
ATOM   2984  C   GLU   181      43.919   7.857  -3.670  1.00  0.00
C
ATOM   2985  O   GLU   181      44.181   7.979  -2.460  1.00  0.00
O
ATOM   2986  OXT GLU   181      43.407   8.771  -4.351  1.00  0.00
O
ATOM   2987  CB  GLU   181      43.155   5.535  -3.912  1.00  0.00
C
ATOM   2988 1HB  GLU   181      43.262   5.331  -2.846  1.00  0.00
H
ATOM   2989 2HB  GLU   181      42.188   6.008  -4.073  1.00  0.00
H
ATOM   2990  CG  GLU   181      43.177   4.224  -4.669  1.00  0.00
C
ATOM   2991 1HG  GLU   181      43.148   4.434  -5.740  1.00  0.00
H
ATOM   2992 2HG  GLU   181      44.097   3.685  -4.439  1.00  0.00
H
ATOM   2993  CD  GLU   181      41.978   3.367  -4.303  1.00  0.00
C
ATOM   2994  OE1 GLU   181      40.826   3.842  -4.453  1.00  0.00
O
ATOM   2995  OE2 GLU   181      42.146   2.215  -3.852  1.00  0.00
O
TER    2996       GLU   181
END
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REMARK YASARA
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REMARK YASARA
REMARK YASARA Written on:        Mon Sep 04 16:57:11 2017
REMARK YASARA Number of models: 1
REMARK YASARA Number of atoms:   3494
REMARK YASARA Please address questions or suggestions to:
Eliza@yasara.org
REMARK YASARA
SEQRES   1    215  MET ILE ASN MET ASP ALA PHE VAL GLU ALA PHE PHE ALA
SEQRES   2    215  ILE ASP GLN ASP ARG SER GLU THR ILE THR ILE ASP GLU
SEQRES   3    215  LEU GLN THR TYR MET VAL LYS ASN ASP MET ASP PRO ALA
SEQRES   4    215  PHE ILE ALA ARG TRP GLN GLU LEU PHE ASP PRO GLN LYS
SEQRES   5    215  THR GLY ILE ILE THR LEU SER LYS PHE CYS ASP VAL LEU
SEQRES   6    215  GLY LEU GLU LEU GLU ALA LEU ARG PHE LYS TYR VAL GLU
SEQRES   7    215  GLN GLU GLU LEU LYS VAL ALA THR ASP LEU HIS SER SER
SEQRES   8    215  LEU GLU ASN VAL HIS LYS PHE GLN GLU ASN GLY GLN THR
SEQRES   9    215  ASN ASN ASN VAL ASN ASN THR ASN SER ALA ASN ASN ARG
SEQRES  10    215  LEU SER ASN GLU LEU ILE LYS SER THR ASP TYR GLN GLU
SEQRES  11    215  ILE SER GLY ASP MET PRO ALA GLU LEU LYS GLU THR ILE
SEQRES  12    215  PHE ALA ILE VAL THR GLU GLY GLU ASP ILE TYR ASN ASN
SEQRES  13    215  ASN ASP LYS GLU LEU VAL LYS TRP ILE LYS LEU ARG LEU
SEQRES  14    215  ASP LYS HIS TYR LYS ARG LEU TRP HIS CYS VAL ILE VAL
SEQRES  15    215  ARG GLY GLN TYR SER SER PHE TYR SER TYR GLN PRO GLY
SEQRES  16    215  TYR SER PHE CYS PHE ARG HIS GLY PRO ARG VAL PHE LEU
SEQRES  17    215  LEU PHE LYS THR PRO ASN THR
HETATM    1 CA    CA A 201      10.850   0.642   1.881  1.00  0.00
CA
ATOM      2  N   MET     1      17.882  21.885  -0.281  1.00  0.00
N
ATOM      3 1H   MET     1      17.558  22.843  -0.282  1.00  0.00
H
ATOM      4 2H   MET     1      18.077  21.600  -1.230  1.00  0.00
H
ATOM      5 3H   MET     1      18.730  21.836   0.269  1.00  0.00
H
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ATOM      6  CA  MET     1      16.846  21.001   0.320  1.00  0.00
C
ATOM      7  HA  MET     1      16.617  21.400   1.302  1.00  0.00
H
ATOM      8  C   MET     1      17.381  19.580   0.508  1.00  0.00
C
ATOM      9  O   MET     1      17.142  18.955   1.534  1.00  0.00
O
ATOM     10  CB  MET     1      15.548  21.045  -0.494  1.00  0.00
C
ATOM     11 1HB  MET     1      15.663  20.433  -1.387  1.00  0.00
H
ATOM     12 2HB  MET     1      14.744  20.628   0.113  1.00  0.00
H
ATOM     13  CG  MET     1      15.174  22.471  -0.921  1.00  0.00
C
ATOM     14 1HG  MET     1      15.266  23.123  -0.059  1.00  0.00
H
ATOM     15 2HG  MET     1      15.897  22.800  -1.667  1.00  0.00
H
ATOM     16  SD  MET     1      13.534  22.720  -1.616  1.00  0.00
S
ATOM     17  CE  MET     1      12.508  23.080  -0.201  1.00  0.00
C
ATOM     18 1HE  MET     1      12.880  23.962   0.318  1.00  0.00
H
ATOM     19 2HE  MET     1      12.521  22.233   0.484  1.00  0.00
H
ATOM     20 3HE  MET     1      11.483  23.262  -0.528  1.00  0.00
H
ATOM     21  N   ILE     2      18.096  19.053  -0.478  1.00  0.00
N
ATOM     22  H   ILE     2      18.226  19.581  -1.335  1.00  0.00
H
ATOM     23  CA  ILE     2      18.643  17.687  -0.453  1.00  0.00
C
ATOM     24  HA  ILE     2      18.088  17.099   0.277  1.00  0.00
H
ATOM     25  C   ILE     2      20.103  17.786   0.056  1.00  0.00
C
ATOM     26  O   ILE     2      20.328  18.416   1.082  1.00  0.00
O
ATOM     27  CB  ILE     2      18.379  17.067  -1.877  1.00  0.00
C
ATOM     28  HB  ILE     2      18.967  17.617  -2.612  1.00  0.00
H
ATOM     29  CG1 ILE     2      16.885  17.231  -2.247  1.00  0.00
C
ATOM     30 1HG1 ILE     2      16.637  18.286  -2.325  1.00  0.00
H
ATOM     31 2HG1 ILE     2      16.752  16.822  -3.242  1.00  0.00
H
ATOM     32  CG2 ILE     2      18.720  15.565  -2.003  1.00  0.00
C
ATOM     33 1HG2 ILE     2      18.356  15.176  -2.956  1.00  0.00
H
ATOM     34 2HG2 ILE     2      18.258  14.997  -1.194  1.00  0.00
H
ATOM     35 3HG2 ILE     2      19.795  15.411  -1.987  1.00  0.00
H
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ATOM     36  CD1 ILE     2      15.834  16.570  -1.311  1.00  0.00
C
ATOM     37 1HD1 ILE     2      14.836  16.796  -1.686  1.00  0.00
H
ATOM     38 2HD1 ILE     2      15.915  16.963  -0.298  1.00  0.00
H
ATOM     39 3HD1 ILE     2      15.961  15.488  -1.295  1.00  0.00
H
ATOM     40  N   ASN     3      21.103  17.246  -0.630  1.00  0.00
N
ATOM     41  H   ASN     3      20.897  16.680  -1.447  1.00  0.00
H
ATOM     42  CA  ASN     3      22.531  17.494  -0.357  1.00  0.00
C
ATOM     43  HA  ASN     3      22.692  18.547  -0.139  1.00  0.00
H
ATOM     44  C   ASN     3      23.119  17.141  -1.729  1.00  0.00
C
ATOM     45  O   ASN     3      22.316  17.008  -2.643  1.00  0.00
O
ATOM     46  CB  ASN     3      23.086  16.665   0.807  1.00  0.00
C
ATOM     47 1HB  ASN     3      22.341  16.640   1.600  1.00  0.00
H
ATOM     48 2HB  ASN     3      23.287  15.652   0.481  1.00  0.00
H
ATOM     49  CG  ASN     3      24.348  17.256   1.388  1.00  0.00
C
ATOM     50  OD1 ASN     3      25.318  17.495   0.683  1.00  0.00
O
ATOM     51  ND2 ASN     3      24.350  17.484   2.668  1.00  0.00
N
ATOM     52 1HD2 ASN     3      25.194  17.791   3.123  1.00  0.00
H
ATOM     53 2HD2 ASN     3      23.504  17.397   3.204  1.00  0.00
H
ATOM     54  N   MET     4      24.423  17.001  -1.917  1.00  0.00
N
ATOM     55  H   MET     4      25.049  17.189  -1.138  1.00  0.00
H
ATOM     56  CA  MET     4      24.990  16.530  -3.193  1.00  0.00
C
ATOM     57  HA  MET     4      24.216  16.546  -3.961  1.00  0.00
H
ATOM     58  C   MET     4      25.405  15.059  -2.991  1.00  0.00
C
ATOM     59  O   MET     4      24.549  14.251  -2.657  1.00  0.00
O
ATOM     60  CB  MET     4      26.119  17.462  -3.655  1.00  0.00
C
ATOM     61 1HB  MET     4      25.748  18.485  -3.619  1.00  0.00
H
ATOM     62 2HB  MET     4      26.942  17.383  -2.953  1.00  0.00
H
ATOM     63  CG  MET     4      26.650  17.211  -5.063  1.00  0.00
C
ATOM     64 1HG  MET     4      26.856  16.148  -5.174  1.00  0.00
H
ATOM     65 2HG  MET     4      25.894  17.492  -5.798  1.00  0.00
H
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ATOM     66  SD  MET     4      28.183  18.098  -5.397  1.00  0.00
S
ATOM     67  CE  MET     4      27.632  19.711  -5.909  1.00  0.00
C
ATOM     68 1HE  MET     4      28.491  20.346  -6.130  1.00  0.00
H
ATOM     69 2HE  MET     4      27.031  20.173  -5.127  1.00  0.00
H
ATOM     70 3HE  MET     4      27.031  19.614  -6.814  1.00  0.00
H
ATOM     71  N   ASP     5      26.676  14.677  -3.082  1.00  0.00
N
ATOM     72  H   ASP     5      27.393  15.349  -3.312  1.00  0.00
H
ATOM     73  CA  ASP     5      27.059  13.261  -2.926  1.00  0.00
C
ATOM     74  HA  ASP     5      26.417  12.669  -3.566  1.00  0.00
H
ATOM     75  C   ASP     5      26.869  12.751  -1.496  1.00  0.00
C
ATOM     76  O   ASP     5      26.812  11.553  -1.228  1.00  0.00
O
ATOM     77  CB  ASP     5      28.502  12.986  -3.356  1.00  0.00
C
ATOM     78 1HB  ASP     5      29.161  13.657  -2.823  1.00  0.00
H
ATOM     79 2HB  ASP     5      28.760  11.962  -3.087  1.00  0.00
H
ATOM     80  CG  ASP     5      28.730  13.161  -4.842  1.00  0.00
C
ATOM     81  OD1 ASP     5      27.795  13.011  -5.652  1.00  0.00
O
ATOM     82  OD2 ASP     5      29.888  13.458  -5.223  1.00  0.00
O
ATOM     83  N   ALA     6      26.677  13.661  -0.558  1.00  0.00
N
ATOM     84  H   ALA     6      26.793  14.636  -0.775  1.00  0.00
H
ATOM     85  CA  ALA     6      26.254  13.265   0.776  1.00  0.00
C
ATOM     86  HA  ALA     6      26.927  12.489   1.146  1.00  0.00
H
ATOM     87  C   ALA     6      24.838  12.674   0.750  1.00  0.00
C
ATOM     88  O   ALA     6      24.534  11.791   1.533  1.00  0.00
O
ATOM     89  CB  ALA     6      26.339  14.452   1.719  1.00  0.00
C
ATOM     90 1HB  ALA     6      26.398  15.383   1.166  1.00  0.00
H
ATOM     91 2HB  ALA     6      27.242  14.357   2.324  1.00  0.00
H
ATOM     92 3HB  ALA     6      25.477  14.478   2.383  1.00  0.00
H
ATOM     93  N   PHE     7      23.962  13.103  -0.151  1.00  0.00
N
ATOM     94  H   PHE     7      24.219  13.801  -0.843  1.00  0.00
H
ATOM     95  CA  PHE     7      22.629  12.503  -0.206  1.00  0.00
C
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ATOM     96  HA  PHE     7      22.350  12.225   0.800  1.00  0.00
H
ATOM     97  C   PHE     7      22.639  11.246  -1.059  1.00  0.00
C
ATOM     98  O   PHE     7      21.735  10.429  -0.967  1.00  0.00
O
ATOM     99  CB  PHE     7      21.546  13.444  -0.712  1.00  0.00
C
ATOM    100 1HB  PHE     7      21.922  14.461  -0.707  1.00  0.00
H
ATOM    101 2HB  PHE     7      21.313  13.177  -1.740  1.00  0.00
H
ATOM    102  CG  PHE     7      20.272  13.386   0.102  1.00  0.00
C
ATOM    103  CD1 PHE     7      20.017  14.345   1.100  1.00  0.00
C
ATOM    104  HD1 PHE     7      20.748  15.107   1.315  1.00  0.00
H
ATOM    105  CD2 PHE     7      19.306  12.388  -0.138  1.00  0.00
C
ATOM    106  HD2 PHE     7      19.486  11.630  -0.882  1.00  0.00
H
ATOM    107  CE1 PHE     7      18.792  14.345   1.814  1.00  0.00
C
ATOM    108  HE1 PHE     7      18.592  15.112   2.547  1.00  0.00
H
ATOM    109  CE2 PHE     7      18.088  12.360   0.587  1.00  0.00
C
ATOM    110  HE2 PHE     7      17.357  11.589   0.389  1.00  0.00
H
ATOM    111  CZ  PHE     7      17.826  13.350   1.557  1.00  0.00
C
ATOM    112  HZ  PHE     7      16.888  13.350   2.094  1.00  0.00
H
ATOM    113  N   VAL     8      23.682  11.067  -1.853  1.00  0.00
N
ATOM    114  H   VAL     8      24.363  11.805  -1.961  1.00  0.00
H
ATOM    115  CA  VAL     8      23.904   9.801  -2.553  1.00  0.00
C
ATOM    116  HA  VAL     8      23.003   9.532  -3.098  1.00  0.00
H
ATOM    117  C   VAL     8      24.121   8.745  -1.456  1.00  0.00
C
ATOM    118  O   VAL     8      23.542   7.667  -1.481  1.00  0.00
O
ATOM    119  CB  VAL     8      25.083   9.953  -3.571  1.00  0.00
C
ATOM    120  HB  VAL     8      25.950  10.313  -3.039  1.00  0.00
H
ATOM    121  CG1 VAL     8      25.485   8.654  -4.225  1.00  0.00
C
ATOM    122 1HG1 VAL     8      26.332   8.821  -4.892  1.00  0.00
H
ATOM    123 2HG1 VAL     8      24.661   8.248  -4.795  1.00  0.00
H
ATOM    124 3HG1 VAL     8      25.778   7.933  -3.469  1.00  0.00
H
ATOM    125  CG2 VAL     8      24.727  10.986  -4.662  1.00  0.00
C
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ATOM    126 1HG2 VAL     8      25.596  11.157  -5.300  1.00  0.00
H
ATOM    127 2HG2 VAL     8      24.438  11.938  -4.218  1.00  0.00
H
ATOM    128 3HG2 VAL     8      23.910  10.624  -5.278  1.00  0.00
H
ATOM    129  N   GLU     9      24.866   9.091  -0.415  1.00  0.00
N
ATOM    130  H   GLU     9      25.376   9.965  -0.428  1.00  0.00
H
ATOM    131  CA  GLU     9      24.967   8.228   0.768  1.00  0.00
C
ATOM    132  HA  GLU     9      25.178   7.203   0.462  1.00  0.00
H
ATOM    133  C   GLU     9      23.676   8.190   1.581  1.00  0.00
C
ATOM    134  O   GLU     9      23.243   7.138   2.055  1.00  0.00
O
ATOM    135  CB  GLU     9      26.134   8.719   1.624  1.00  0.00
C
ATOM    136 1HB  GLU     9      27.052   8.472   1.097  1.00  0.00
H
ATOM    137 2HB  GLU     9      26.078   9.803   1.683  1.00  0.00
H
ATOM    138  CG  GLU     9      26.213   8.195   3.053  1.00  0.00
C
ATOM    139 1HG  GLU     9      27.020   8.710   3.568  1.00  0.00
H
ATOM    140 2HG  GLU     9      25.291   8.459   3.571  1.00  0.00
H
ATOM    141  CD  GLU     9      26.416   6.696   3.185  1.00  0.00
C
ATOM    142  OE1 GLU     9      26.892   5.999   2.269  1.00  0.00
O
ATOM    143  OE2 GLU     9      26.024   6.205   4.269  1.00  0.00
O
ATOM    144  N   ALA    10      23.017   9.329   1.731  1.00  0.00
N
ATOM    145  H   ALA    10      23.402  10.179   1.338  1.00  0.00
H
ATOM    146  CA  ALA    10      21.786   9.386   2.511  1.00  0.00
C
ATOM    147  HA  ALA    10      21.999   8.946   3.486  1.00  0.00
H
ATOM    148  C   ALA    10      20.636   8.589   1.905  1.00  0.00
C
ATOM    149  O   ALA    10      19.651   8.359   2.604  1.00  0.00
O
ATOM    150  CB  ALA    10      21.347  10.823   2.743  1.00  0.00
C
ATOM    151 1HB  ALA    10      22.214  11.462   2.895  1.00  0.00
H
ATOM    152 2HB  ALA    10      20.721  10.857   3.630  1.00  0.00
H
ATOM    153 3HB  ALA    10      20.775  11.176   1.886  1.00  0.00
H
ATOM    154  N   PHE    11      20.746   8.139   0.660  1.00  0.00
N
ATOM    155  H   PHE    11      21.549   8.384   0.092  1.00  0.00
H
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ATOM    156  CA  PHE    11      19.719   7.267   0.106  1.00  0.00
C
ATOM    157  HA  PHE    11      18.766   7.782   0.156  1.00  0.00
H
ATOM    158  C   PHE    11      19.650   6.002   0.939  1.00  0.00
C
ATOM    159  O   PHE    11      18.575   5.536   1.260  1.00  0.00
O
ATOM    160  CB  PHE    11      19.967   6.895  -1.348  1.00  0.00
C
ATOM    161 1HB  PHE    11      20.220   7.809  -1.877  1.00  0.00
H
ATOM    162 2HB  PHE    11      20.811   6.208  -1.412  1.00  0.00
H
ATOM    163  CG  PHE    11      18.759   6.288  -2.020  1.00  0.00
C
ATOM    164  CD1 PHE    11      17.950   7.090  -2.836  1.00  0.00
C
ATOM    165  HD1 PHE    11      18.226   8.118  -2.997  1.00  0.00
H
ATOM    166  CD2 PHE    11      18.396   4.944  -1.817  1.00  0.00
C
ATOM    167  HD2 PHE    11      19.002   4.312  -1.185  1.00  0.00
H
ATOM    168  CE1 PHE    11      16.772   6.574  -3.440  1.00  0.00
C
ATOM    169  HE1 PHE    11      16.153   7.209  -4.057  1.00  0.00
H
ATOM    170  CE2 PHE    11      17.225   4.408  -2.411  1.00  0.00
C
ATOM    171  HE2 PHE    11      16.946   3.382  -2.222  1.00  0.00
H
ATOM    172  CZ  PHE    11      16.416   5.225  -3.234  1.00  0.00
C
ATOM    173  HZ  PHE    11      15.527   4.822  -3.697  1.00  0.00
H
ATOM    174  N   PHE    12      20.794   5.491   1.369  1.00  0.00
N
ATOM    175  H   PHE    12      21.669   5.954   1.146  1.00  0.00
H
ATOM    176  CA  PHE    12      20.834   4.273   2.173  1.00  0.00
C
ATOM    177  HA  PHE    12      20.371   3.460   1.613  1.00  0.00
H
ATOM    178  C   PHE    12      20.060   4.468   3.484  1.00  0.00
C
ATOM    179  O   PHE    12      19.360   3.571   3.954  1.00  0.00
O
ATOM    180  CB  PHE    12      22.305   3.937   2.433  1.00  0.00
C
ATOM    181 1HB  PHE    12      22.843   3.991   1.486  1.00  0.00
H
ATOM    182 2HB  PHE    12      22.726   4.680   3.102  1.00  0.00
H
ATOM    183  CG  PHE    12      22.533   2.577   3.020  1.00  0.00
C
ATOM    184  CD1 PHE    12      22.887   1.513   2.177  1.00  0.00
C
ATOM    185  HD1 PHE    12      22.981   1.682   1.116  1.00  0.00
H
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ATOM    186  CD2 PHE    12      22.441   2.356   4.406  1.00  0.00
C
ATOM    187  HD2 PHE    12      22.168   3.167   5.066  1.00  0.00
H
ATOM    188  CE1 PHE    12      23.139   0.230   2.698  1.00  0.00
C
ATOM    189  HE1 PHE    12      23.400  -0.580   2.033  1.00  0.00
H
ATOM    190  CE2 PHE    12      22.711   1.077   4.949  1.00  0.00
C
ATOM    191  HE2 PHE    12      22.656   0.920   6.017  1.00  0.00
H
ATOM    192  CZ  PHE    12      23.065   0.013   4.089  1.00  0.00
C
ATOM    193  HZ  PHE    12      23.283  -0.962   4.493  1.00  0.00
H
ATOM    194  N   ALA    13      20.138   5.672   4.037  1.00  0.00
N
ATOM    195  H   ALA    13      20.713   6.373   3.599  1.00  0.00
H
ATOM    196  CA  ALA    13      19.431   6.018   5.267  1.00  0.00
C
ATOM    197  HA  ALA    13      19.579   5.201   5.975  1.00  0.00
H
ATOM    198  C   ALA    13      17.914   6.204   5.102  1.00  0.00
C
ATOM    199  O   ALA    13      17.177   5.920   6.032  1.00  0.00
O
ATOM    200  CB  ALA    13      20.052   7.282   5.876  1.00  0.00
C
ATOM    201 1HB  ALA    13      21.118   7.125   6.043  1.00  0.00
H
ATOM    202 2HB  ALA    13      19.574   7.486   6.836  1.00  0.00
H
ATOM    203 3HB  ALA    13      19.906   8.132   5.210  1.00  0.00
H
ATOM    204  N   ILE    14      17.434   6.686   3.962  1.00  0.00
N
ATOM    205  H   ILE    14      18.067   6.949   3.218  1.00  0.00
H
ATOM    206  CA  ILE    14      15.980   6.799   3.755  1.00  0.00
C
ATOM    207  HA  ILE    14      15.516   7.035   4.709  1.00  0.00
H
ATOM    208  C   ILE    14      15.431   5.427   3.343  1.00  0.00
C
ATOM    209  O   ILE    14      14.335   5.039   3.733  1.00  0.00
O
ATOM    210  CB  ILE    14      15.591   7.958   2.764  1.00  0.00
C
ATOM    211  HB  ILE    14      15.865   8.896   3.246  1.00  0.00
H
ATOM    212  CG1 ILE    14      14.070   7.991   2.526  1.00  0.00
C
ATOM    213 1HG1 ILE    14      13.786   7.096   1.981  1.00  0.00
H
ATOM    214 2HG1 ILE    14      13.566   7.955   3.491  1.00  0.00
H
ATOM    215  CG2 ILE    14      16.385   7.894   1.455  1.00  0.00
C
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ATOM    216 1HG2 ILE    14      16.081   8.684   0.771  1.00  0.00
H
ATOM    217 2HG2 ILE    14      16.246   6.928   0.966  1.00  0.00
H
ATOM    218 3HG2 ILE    14      17.433   8.038   1.670  1.00  0.00
H
ATOM    219  CD1 ILE    14      13.537   9.206   1.753  1.00  0.00
C
ATOM    220 1HD1 ILE    14      12.488   9.039   1.528  1.00  0.00
H
ATOM    221 2HD1 ILE    14      14.064   9.340   0.811  1.00  0.00
H
ATOM    222 3HD1 ILE    14      13.626  10.105   2.357  1.00  0.00
H
ATOM    223  N   ASP    15      16.230   4.669   2.605  1.00  0.00
N
ATOM    224  H   ASP    15      17.127   5.040   2.308  1.00  0.00
H
ATOM    225  CA  ASP    15      15.870   3.327   2.154  1.00  0.00
C
ATOM    226  HA  ASP    15      14.921   3.372   1.621  1.00  0.00
H
ATOM    227  C   ASP    15      15.712   2.371   3.332  1.00  0.00
C
ATOM    228  O   ASP    15      14.647   1.775   3.479  1.00  0.00
O
ATOM    229  CB  ASP    15      16.970   2.842   1.197  1.00  0.00
C
ATOM    230 1HB  ASP    15      17.071   3.570   0.395  1.00  0.00
H
ATOM    231 2HB  ASP    15      17.915   2.798   1.737  1.00  0.00
H
ATOM    232  CG  ASP    15      16.711   1.480   0.577  1.00  0.00
C
ATOM    233  OD1 ASP    15      15.807   0.710   0.966  1.00  0.00
O
ATOM    234  OD2 ASP    15      17.516   1.125  -0.305  1.00  0.00
O
ATOM    235  N   GLN    16      16.766   2.212   4.132  1.00  0.00
N
ATOM    236  H   GLN    16      17.576   2.804   3.960  1.00  0.00
H
ATOM    237  CA  GLN    16      16.901   1.229   5.230  1.00  0.00
C
ATOM    238  HA  GLN    16      17.911   1.336   5.626  1.00  0.00
H
ATOM    239  C   GLN    16      16.747  -0.257   4.869  1.00  0.00
C
ATOM    240  O   GLN    16      17.340  -1.121   5.505  1.00  0.00
O
ATOM    241  CB  GLN    16      15.937   1.526   6.388  1.00  0.00
C
ATOM    242 1HB  GLN    16      14.924   1.489   6.006  1.00  0.00
H
ATOM    243 2HB  GLN    16      16.030   0.732   7.127  1.00  0.00
H
ATOM    244  CG  GLN    16      16.131   2.855   7.099  1.00  0.00
C
ATOM    245 1HG  GLN    16      16.149   3.657   6.367  1.00  0.00
H
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ATOM    246 2HG  GLN    16      15.282   3.018   7.762  1.00  0.00
H
ATOM    247  CD  GLN    16      17.389   2.896   7.939  1.00  0.00
C
ATOM    248  OE1 GLN    16      17.839   1.882   8.466  1.00  0.00
O
ATOM    249  NE2 GLN    16      17.952   4.056   8.103  1.00  0.00
N
ATOM    250 1HE2 GLN    16      18.742   4.126   8.721  1.00  0.00
H
ATOM    251 2HE2 GLN    16      17.579   4.866   7.619  1.00  0.00
H
ATOM    252  N   ASP    17      15.951  -0.581   3.866  1.00  0.00
N
ATOM    253  H   ASP    17      15.463   0.172   3.375  1.00  0.00
H
ATOM    254  CA  ASP    17      15.647  -1.953   3.471  1.00  0.00
C
ATOM    255  HA  ASP    17      15.658  -2.603   4.346  1.00  0.00
H
ATOM    256  C   ASP    17      16.660  -2.452   2.457  1.00  0.00
C
ATOM    257  O   ASP    17      16.648  -3.618   2.059  1.00  0.00
O
ATOM    258  CB  ASP    17      14.258  -1.981   2.835  1.00  0.00
C
ATOM    259 1HB  ASP    17      14.260  -1.326   1.964  1.00  0.00
H
ATOM    260 2HB  ASP    17      14.036  -2.994   2.506  1.00  0.00
H
ATOM    261  CG  ASP    17      13.179  -1.515   3.788  1.00  0.00
C
ATOM    262  OD1 ASP    17      13.137  -1.992   4.947  1.00  0.00
O
ATOM    263  OD2 ASP    17      12.378  -0.631   3.413  1.00  0.00
O
ATOM    264  N   ARG    18      17.514  -1.528   2.028  1.00  0.00
N
ATOM    265  H   ARG    18      17.409  -0.597   2.405  1.00  0.00
H
ATOM    266  CA  ARG    18      18.530  -1.739   0.988  1.00  0.00
C
ATOM    267  HA  ARG    18      18.976  -0.771   0.756  1.00  0.00
H
ATOM    268  C   ARG    18      17.857  -2.236  -0.291  1.00  0.00
C
ATOM    269  O   ARG    18      18.375  -3.103  -1.003  1.00  0.00
O
ATOM    270  CB  ARG    18      19.656  -2.673   1.451  1.00  0.00
C
ATOM    271 1HB  ARG    18      19.250  -3.665   1.644  1.00  0.00
H
ATOM    272 2HB  ARG    18      20.366  -2.759   0.633  1.00  0.00
H
ATOM    273  CG  ARG    18      20.438  -2.206   2.678  1.00  0.00
C
ATOM    274 1HG  ARG    18      21.492  -2.412   2.494  1.00  0.00
H
ATOM    275 2HG  ARG    18      20.317  -1.131   2.814  1.00  0.00
H
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ATOM    276  CD  ARG    18      20.037  -2.937   3.956  1.00  0.00
C
ATOM    277 1HD  ARG    18      19.083  -2.558   4.321  1.00  0.00
H
ATOM    278 2HD  ARG    18      19.925  -3.997   3.726  1.00  0.00
H
ATOM    279  NE  ARG    18      21.082  -2.804   4.982  1.00  0.00
N
ATOM    280  HE  ARG    18      21.901  -3.387   4.850  1.00  0.00
H
ATOM    281  CZ  ARG    18      21.083  -2.002   6.038  1.00  0.00
C
ATOM    282  NH1 ARG    18      20.081  -1.245   6.392  1.00  0.00
N
ATOM    283 1HH1 ARG    18      19.202  -1.297   5.896  1.00  0.00
H
ATOM    284 2HH1 ARG    18      20.177  -0.617   7.178  1.00  0.00
H
ATOM    285  NH2 ARG    18      22.158  -1.956   6.771  1.00  0.00
N
ATOM    286 1HH2 ARG    18      22.979  -2.480   6.502  1.00  0.00
H
ATOM    287 2HH2 ARG    18      22.182  -1.387   7.607  1.00  0.00
H
ATOM    288  N   SER    19      16.678  -1.690  -0.545  1.00  0.00
N
ATOM    289  H   SER    19      16.348  -0.953   0.074  1.00  0.00
H
ATOM    290  CA  SER    19      15.826  -2.073  -1.668  1.00  0.00
C
ATOM    291  HA  SER    19      15.967  -3.130  -1.895  1.00  0.00
H
ATOM    292  C   SER    19      16.122  -1.244  -2.913  1.00  0.00
C
ATOM    293  O   SER    19      15.574  -1.509  -3.985  1.00  0.00
O
ATOM    294  CB  SER    19      14.366  -1.832  -1.283  1.00  0.00
C
ATOM    295 1HB  SER    19      13.720  -2.198  -2.081  1.00  0.00
H
ATOM    296 2HB  SER    19      14.136  -2.368  -0.362  1.00  0.00
H
ATOM    297  OG  SER    19      14.137  -0.444  -1.097  1.00  0.00
O
ATOM    298  HG  SER    19      14.498  -0.166  -0.243  1.00  0.00
H
ATOM    299  N   GLU    20      16.942  -0.212  -2.735  1.00  0.00
N
ATOM    300  H   GLU    20      17.319  -0.056  -1.801  1.00  0.00
H
ATOM    301  CA  GLU    20      17.308   0.788  -3.749  1.00  0.00
C
ATOM    302  HA  GLU    20      17.977   1.502  -3.267  1.00  0.00
H
ATOM    303  C   GLU    20      16.093   1.583  -4.230  1.00  0.00
C
ATOM    304  O   GLU    20      16.127   2.222  -5.283  1.00  0.00
O
ATOM    305  CB  GLU    20      18.056   0.179  -4.942  1.00  0.00
C
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ATOM    306 1HB  GLU    20      17.377  -0.496  -5.456  1.00  0.00
H
ATOM    307 2HB  GLU    20      18.326   0.980  -5.630  1.00  0.00
H
ATOM    308  CG  GLU    20      19.319  -0.590  -4.596  1.00  0.00
C
ATOM    309 1HG  GLU    20      20.041   0.091  -4.141  1.00  0.00
H
ATOM    310 2HG  GLU    20      19.080  -1.376  -3.881  1.00  0.00
H
ATOM    311  CD  GLU    20      19.934  -1.229  -5.833  1.00  0.00
C
ATOM    312  OE1 GLU    20      19.403  -1.062  -6.955  1.00  0.00
O
ATOM    313  OE2 GLU    20      20.976  -1.911  -5.721  1.00  0.00
O
ATOM    314  N   THR    21      15.023   1.553  -3.449  1.00  0.00
N
ATOM    315  H   THR    21      15.038   1.013  -2.592  1.00  0.00
H
ATOM    316  CA  THR    21      13.817   2.323  -3.734  1.00  0.00
C
ATOM    317  HA  THR    21      14.050   3.129  -4.426  1.00  0.00
H
ATOM    318  C   THR    21      13.344   2.910  -2.422  1.00  0.00
C
ATOM    319  O   THR    21      13.735   2.438  -1.351  1.00  0.00
O
ATOM    320  CB  THR    21      12.654   1.470  -4.305  1.00  0.00
C
ATOM    321  HB  THR    21      11.774   2.102  -4.426  1.00  0.00
H
ATOM    322  OG1 THR    21      12.348   0.399  -3.406  1.00  0.00
O
ATOM    323  HG1 THR    21      13.165  -0.074  -3.223  1.00  0.00
H
ATOM    324  CG2 THR    21      12.994   0.855  -5.639  1.00  0.00
C
ATOM    325 1HG2 THR    21      12.133   0.304  -6.013  1.00  0.00
H
ATOM    326 2HG2 THR    21      13.831   0.170  -5.529  1.00  0.00
H
ATOM    327 3HG2 THR    21      13.253   1.640  -6.350  1.00  0.00
H
ATOM    328  N   ILE    22      12.491   3.915  -2.508  1.00  0.00
N
ATOM    329  H   ILE    22      12.254   4.294  -3.417  1.00  0.00
H
ATOM    330  CA  ILE    22      11.819   4.496  -1.349  1.00  0.00
C
ATOM    331  HA  ILE    22      11.873   3.814  -0.502  1.00  0.00
H
ATOM    332  C   ILE    22      10.364   4.639  -1.776  1.00  0.00
C
ATOM    333  O   ILE    22      10.099   4.670  -2.980  1.00  0.00
O
ATOM    334  CB  ILE    22      12.447   5.860  -0.940  1.00  0.00
C
ATOM    335  HB  ILE    22      11.864   6.277  -0.120  1.00  0.00
H
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ATOM    336  CG1 ILE    22      12.420   6.853  -2.118  1.00  0.00
C
ATOM    337 1HG1 ILE    22      13.082   6.486  -2.903  1.00  0.00
H
ATOM    338 2HG1 ILE    22      11.408   6.888  -2.517  1.00  0.00
H
ATOM    339  CG2 ILE    22      13.887   5.634  -0.443  1.00  0.00
C
ATOM    340 1HG2 ILE    22      14.326   6.576  -0.133  1.00  0.00
H
ATOM    341 2HG2 ILE    22      14.505   5.200  -1.227  1.00  0.00
H
ATOM    342 3HG2 ILE    22      13.871   4.959   0.414  1.00  0.00
H
ATOM    343  CD1 ILE    22      12.823   8.279  -1.798  1.00  0.00
C
ATOM    344 1HD1 ILE    22      12.686   8.894  -2.687  1.00  0.00
H
ATOM    345 2HD1 ILE    22      13.871   8.322  -1.502  1.00  0.00
H
ATOM    346 3HD1 ILE    22      12.194   8.669  -0.996  1.00  0.00
H
ATOM    347  N   THR    23       9.445   4.698  -0.826  1.00  0.00
N
ATOM    348  H   THR    23       9.729   4.572   0.142  1.00  0.00
H
ATOM    349  CA  THR    23       8.020   4.898  -1.092  1.00  0.00
C
ATOM    350  HA  THR    23       7.803   4.673  -2.134  1.00  0.00
H
ATOM    351  C   THR    23       7.602   6.331  -0.783  1.00  0.00
C
ATOM    352  O   THR    23       8.407   7.108  -0.272  1.00  0.00
O
ATOM    353  CB  THR    23       7.151   3.996  -0.193  1.00  0.00
C
ATOM    354  HB  THR    23       6.110   4.118  -0.478  1.00  0.00
H
ATOM    355  OG1 THR    23       7.300   4.383   1.175  1.00  0.00
O
ATOM    356  HG1 THR    23       6.683   3.852   1.691  1.00  0.00
H
ATOM    357  CG2 THR    23       7.516   2.536  -0.313  1.00  0.00
C
ATOM    358 1HG2 THR    23       6.827   1.943   0.287  1.00  0.00
H
ATOM    359 2HG2 THR    23       8.529   2.367   0.047  1.00  0.00
H
ATOM    360 3HG2 THR    23       7.445   2.218  -1.349  1.00  0.00
H
ATOM    361  N   ILE    24       6.336   6.664  -1.008  1.00  0.00
N
ATOM    362  H   ILE    24       5.712   5.983  -1.417  1.00  0.00
H
ATOM    363  CA  ILE    24       5.797   7.990  -0.686  1.00  0.00
C
ATOM    364  HA  ILE    24       6.359   8.736  -1.246  1.00  0.00
H
ATOM    365  C   ILE    24       5.943   8.275   0.810  1.00  0.00
C
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ATOM    366  O   ILE    24       6.285   9.376   1.228  1.00  0.00
O
ATOM    367  CB  ILE    24       4.269   8.126  -1.034  1.00  0.00
C
ATOM    368  HB  ILE    24       3.701   7.599  -0.270  1.00  0.00
H
ATOM    369  CG1 ILE    24       3.925   7.460  -2.385  1.00  0.00
C
ATOM    370 1HG1 ILE    24       4.486   7.951  -3.174  1.00  0.00
H
ATOM    371 2HG1 ILE    24       4.234   6.418  -2.348  1.00  0.00
H
ATOM    372  CG2 ILE    24       3.847   9.621  -1.000  1.00  0.00
C
ATOM    373 1HG2 ILE    24       2.776   9.723  -1.178  1.00  0.00
H
ATOM    374 2HG2 ILE    24       4.397  10.182  -1.754  1.00  0.00
H
ATOM    375 3HG2 ILE    24       4.067  10.052  -0.028  1.00  0.00
H
ATOM    376  CD1 ILE    24       2.436   7.461  -2.773  1.00  0.00
C
ATOM    377 1HD1 ILE    24       2.296   6.861  -3.671  1.00  0.00
H
ATOM    378 2HD1 ILE    24       2.097   8.477  -2.976  1.00  0.00
H
ATOM    379 3HD1 ILE    24       1.842   7.032  -1.965  1.00  0.00
H
ATOM    380  N   ASP    25       5.696   7.270   1.636  1.00  0.00
N
ATOM    381  H   ASP    25       5.443   6.367   1.258  1.00  0.00
H
ATOM    382  CA  ASP    25       5.747   7.458   3.089  1.00  0.00
C
ATOM    383  HA  ASP    25       5.171   8.342   3.361  1.00  0.00
H
ATOM    384  C   ASP    25       7.171   7.672   3.572  1.00  0.00
C
ATOM    385  O   ASP    25       7.415   8.370   4.558  1.00  0.00
O
ATOM    386  CB  ASP    25       5.169   6.248   3.822  1.00  0.00
C
ATOM    387 1HB  ASP    25       5.623   5.341   3.426  1.00  0.00
H
ATOM    388 2HB  ASP    25       5.420   6.329   4.880  1.00  0.00
H
ATOM    389  CG  ASP    25       3.662   6.160   3.700  1.00  0.00
C
ATOM    390  OD1 ASP    25       3.019   7.144   3.287  1.00  0.00
O
ATOM    391  OD2 ASP    25       3.078   5.113   4.048  1.00  0.00
O
ATOM    392  N   GLU    26       8.121   7.080   2.868  1.00  0.00
N
ATOM    393  H   GLU    26       7.873   6.502   2.074  1.00  0.00
H
ATOM    394  CA  GLU    26       9.530   7.241   3.209  1.00  0.00
C
ATOM    395  HA  GLU    26       9.640   7.232   4.293  1.00  0.00
H
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ATOM    396  C   GLU    26      10.004   8.604   2.702  1.00  0.00
C
ATOM    397  O   GLU    26      10.747   9.285   3.393  1.00  0.00
O
ATOM    398  CB  GLU    26      10.334   6.068   2.636  1.00  0.00
C
ATOM    399 1HB  GLU    26      10.136   6.002   1.568  1.00  0.00
H
ATOM    400 2HB  GLU    26      11.398   6.242   2.791  1.00  0.00
H
ATOM    401  CG  GLU    26       9.937   4.748   3.312  1.00  0.00
C
ATOM    402 1HG  GLU    26      10.225   4.795   4.364  1.00  0.00
H
ATOM    403 2HG  GLU    26       8.854   4.639   3.270  1.00  0.00
H
ATOM    404  CD  GLU    26      10.543   3.503   2.683  1.00  0.00
C
ATOM    405  OE1 GLU    26      10.428   3.279   1.466  1.00  0.00
O
ATOM    406  OE2 GLU    26      11.044   2.631   3.413  1.00  0.00
O
ATOM    407  N   LEU    27       9.503   9.051   1.555  1.00  0.00
N
ATOM    408  H   LEU    27       8.873   8.450   1.028  1.00  0.00
H
ATOM    409  CA  LEU    27       9.834  10.367   0.989  1.00  0.00
C
ATOM    410  HA  LEU    27      10.910  10.428   0.840  1.00  0.00
H
ATOM    411  C   LEU    27       9.413  11.529   1.890  1.00  0.00
C
ATOM    412  O   LEU    27      10.035  12.590   1.934  1.00  0.00
O
ATOM    413  CB  LEU    27       9.127  10.529  -0.363  1.00  0.00
C
ATOM    414 1HB  LEU    27       9.304   9.638  -0.964  1.00  0.00
H
ATOM    415 2HB  LEU    27       8.058  10.599  -0.175  1.00  0.00
H
ATOM    416  CG  LEU    27       9.544  11.759  -1.182  1.00  0.00
C
ATOM    417  HG  LEU    27       9.543  12.626  -0.533  1.00  0.00
H
ATOM    418  CD1 LEU    27      10.949  11.591  -1.734  1.00  0.00
C
ATOM    419 1HD1 LEU    27      11.201  12.439  -2.365  1.00  0.00
H
ATOM    420 2HD1 LEU    27      11.017  10.678  -2.317  1.00  0.00
H
ATOM    421 3HD1 LEU    27      11.665  11.546  -0.916  1.00  0.00
H
ATOM    422  CD2 LEU    27       8.554  12.042  -2.294  1.00  0.00
C
ATOM    423 1HD2 LEU    27       8.854  12.928  -2.850  1.00  0.00
H
ATOM    424 2HD2 LEU    27       7.569  12.223  -1.864  1.00  0.00
H
ATOM    425 3HD2 LEU    27       8.489  11.190  -2.965  1.00  0.00
H
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ATOM    426  N   GLN    28       8.355  11.301   2.650  1.00  0.00
N
ATOM    427  H   GLN    28       7.871  10.415   2.554  1.00  0.00
H
ATOM    428  CA  GLN    28       7.870  12.272   3.627  1.00  0.00
C
ATOM    429  HA  GLN    28       7.789  13.245   3.152  1.00  0.00
H
ATOM    430  C   GLN    28       8.806  12.451   4.821  1.00  0.00
C
ATOM    431  O   GLN    28       8.614  13.366   5.625  1.00  0.00
O
ATOM    432  CB  GLN    28       6.480  11.849   4.090  1.00  0.00
C
ATOM    433 1HB  GLN    28       6.514  10.795   4.353  1.00  0.00
H
ATOM    434 2HB  GLN    28       6.199  12.418   4.974  1.00  0.00
H
ATOM    435  CG  GLN    28       5.418  12.061   3.026  1.00  0.00
C
ATOM    436 1HG  GLN    28       5.268  13.129   2.879  1.00  0.00
H
ATOM    437 2HG  GLN    28       5.751  11.633   2.085  1.00  0.00
H
ATOM    438  CD  GLN    28       4.108  11.423   3.404  1.00  0.00
C
ATOM    439  OE1 GLN    28       3.519  11.739   4.431  1.00  0.00
O
ATOM    440  NE2 GLN    28       3.656  10.501   2.607  1.00  0.00
N
ATOM    441 1HE2 GLN    28       2.753  10.091   2.793  1.00  0.00
H
ATOM    442 2HE2 GLN    28       4.216  10.199   1.827  1.00  0.00
H
ATOM    443  N   THR    29       9.850  11.642   4.899  1.00  0.00
N
ATOM    444  H   THR    29       9.982  10.927   4.189  1.00  0.00
H
ATOM    445  CA  THR    29      10.913  11.809   5.885  1.00  0.00
C
ATOM    446  HA  THR    29      10.705  12.670   6.519  1.00  0.00
H
ATOM    447  C   THR    29      12.182  12.095   5.090  1.00  0.00
C
ATOM    448  O   THR    29      12.212  11.905   3.881  1.00  0.00
O
ATOM    449  CB  THR    29      11.079  10.562   6.791  1.00  0.00
C
ATOM    450  HB  THR    29      11.926  10.715   7.460  1.00  0.00
H
ATOM    451  OG1 THR    29      11.296   9.382   6.014  1.00  0.00
O
ATOM    452  HG1 THR    29      11.061   9.556   5.090  1.00  0.00
H
ATOM    453  CG2 THR    29       9.846  10.303   7.616  1.00  0.00
C
ATOM    454 1HG2 THR    29      10.026   9.458   8.278  1.00  0.00
H
ATOM    455 2HG2 THR    29       8.999  10.071   6.968  1.00  0.00
H
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ATOM    456 3HG2 THR    29       9.620  11.179   8.217  1.00  0.00
H
ATOM    457  N   TYR    30      13.213  12.594   5.755  1.00  0.00
N
ATOM    458  H   TYR    30      13.090  12.767   6.753  1.00  0.00
H
ATOM    459  CA  TYR    30      14.525  12.909   5.171  1.00  0.00
C
ATOM    460  HA  TYR    30      15.124  13.244   6.010  1.00  0.00
H
ATOM    461  C   TYR    30      14.624  14.029   4.119  1.00  0.00
C
ATOM    462  O   TYR    30      15.600  14.770   4.144  1.00  0.00
O
ATOM    463  CB  TYR    30      15.243  11.661   4.640  1.00  0.00
C
ATOM    464 1HB  TYR    30      14.713  11.293   3.767  1.00  0.00
H
ATOM    465 2HB  TYR    30      16.241  11.948   4.319  1.00  0.00
H
ATOM    466  CG  TYR    30      15.369  10.533   5.645  1.00  0.00
C
ATOM    467  CD1 TYR    30      14.377   9.542   5.728  1.00  0.00
C
ATOM    468  HD1 TYR    30      13.524   9.587   5.065  1.00  0.00
H
ATOM    469  CD2 TYR    30      16.487  10.429   6.500  1.00  0.00
C
ATOM    470  HD2 TYR    30      17.266  11.174   6.462  1.00  0.00
H
ATOM    471  CE1 TYR    30      14.477   8.477   6.653  1.00  0.00
C
ATOM    472  HE1 TYR    30      13.699   7.732   6.702  1.00  0.00
H
ATOM    473  CE2 TYR    30      16.602   9.344   7.419  1.00  0.00
C
ATOM    474  HE2 TYR    30      17.456   9.262   8.075  1.00  0.00
H
ATOM    475  CZ  TYR    30      15.589   8.384   7.489  1.00  0.00
C
ATOM    476  OH  TYR    30      15.687   7.356   8.388  1.00  0.00
O
ATOM    477  HH  TYR    30      14.923   6.767   8.354  1.00  0.00
H
ATOM    478  N   MET    31      13.653  14.244   3.238  1.00  0.00
N
ATOM    479  H   MET    31      12.865  13.597   3.189  1.00  0.00
H
ATOM    480  CA  MET    31      13.722  15.400   2.325  1.00  0.00
C
ATOM    481  HA  MET    31      14.686  15.402   1.815  1.00  0.00
H
ATOM    482  C   MET    31      13.602  16.699   3.120  1.00  0.00
C
ATOM    483  O   MET    31      14.147  17.739   2.771  1.00  0.00
O
ATOM    484  CB  MET    31      12.604  15.369   1.278  1.00  0.00
C
ATOM    485 1HB  MET    31      11.640  15.305   1.784  1.00  0.00
H
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ATOM    486 2HB  MET    31      12.637  16.309   0.726  1.00  0.00
H
ATOM    487  CG  MET    31      12.713  14.231   0.276  1.00  0.00
C
ATOM    488 1HG  MET    31      13.651  13.701   0.440  1.00  0.00
H
ATOM    489 2HG  MET    31      11.887  13.538   0.435  1.00  0.00
H
ATOM    490  SD  MET    31      12.674  14.828  -1.437  1.00  0.00
S
ATOM    491  CE  MET    31      10.967  15.394  -1.649  1.00  0.00
C
ATOM    492 1HE  MET    31      10.848  15.835  -2.639  1.00  0.00
H
ATOM    493 2HE  MET    31      10.730  16.141  -0.894  1.00  0.00
H
ATOM    494 3HE  MET    31      10.283  14.554  -1.544  1.00  0.00
H
ATOM    495  N   VAL    32      12.907  16.593   4.240  1.00  0.00
N
ATOM    496  H   VAL    32      12.493  15.702   4.464  1.00  0.00
H
ATOM    497  CA  VAL    32      12.657  17.705   5.155  1.00  0.00
C
ATOM    498  HA  VAL    32      12.443  18.592   4.560  1.00  0.00
H
ATOM    499  C   VAL    32      13.859  18.034   6.065  1.00  0.00
C
ATOM    500  O   VAL    32      13.802  18.958   6.875  1.00  0.00
O
ATOM    501  CB  VAL    32      11.360  17.348   5.950  1.00  0.00
C
ATOM    502  HB  VAL    32      10.659  16.930   5.227  1.00  0.00
H
ATOM    503  CG1 VAL    32      11.610  16.266   7.007  1.00  0.00
C
ATOM    504 1HG1 VAL    32      10.661  15.978   7.462  1.00  0.00
H
ATOM    505 2HG1 VAL    32      12.274  16.642   7.788  1.00  0.00
H
ATOM    506 3HG1 VAL    32      12.051  15.380   6.554  1.00  0.00
H
ATOM    507  CG2 VAL    32      10.685  18.577   6.548  1.00  0.00
C
ATOM    508 1HG2 VAL    32       9.714  18.300   6.958  1.00  0.00
H
ATOM    509 2HG2 VAL    32      10.531  19.322   5.772  1.00  0.00
H
ATOM    510 3HG2 VAL    32      11.301  19.006   7.337  1.00  0.00
H
ATOM    511  N   LYS    33      14.974  17.318   5.934  1.00  0.00
N
ATOM    512  H   LYS    33      15.030  16.604   5.217  1.00  0.00
H
ATOM    513  CA  LYS    33      16.142  17.555   6.805  1.00  0.00
C
ATOM    514  HA  LYS    33      15.836  17.429   7.842  1.00  0.00
H
ATOM    515  C   LYS    33      16.729  18.953   6.707  1.00  0.00
C
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ATOM    516  O   LYS    33      17.246  19.457   7.692  1.00  0.00
O
ATOM    517  CB  LYS    33      17.281  16.580   6.507  1.00  0.00
C
ATOM    518 1HB  LYS    33      17.421  16.530   5.429  1.00  0.00
H
ATOM    519 2HB  LYS    33      18.192  16.976   6.956  1.00  0.00
H
ATOM    520  CG  LYS    33      17.069  15.195   7.073  1.00  0.00
C
ATOM    521 1HG  LYS    33      16.954  15.284   8.152  1.00  0.00
H
ATOM    522 2HG  LYS    33      16.154  14.783   6.669  1.00  0.00
H
ATOM    523  CD  LYS    33      18.232  14.241   6.788  1.00  0.00
C
ATOM    524 1HD  LYS    33      19.149  14.703   7.149  1.00  0.00
H
ATOM    525 2HD  LYS    33      18.057  13.326   7.352  1.00  0.00
H
ATOM    526  CE  LYS    33      18.435  13.869   5.332  1.00  0.00
C
ATOM    527 1HE  LYS    33      17.498  13.486   4.934  1.00  0.00
H
ATOM    528 2HE  LYS    33      18.717  14.757   4.762  1.00  0.00
H
ATOM    529  NZ  LYS    33      19.492  12.815   5.190  1.00  0.00
N
ATOM    530 1HZ  LYS    33      19.500  12.464   4.241  1.00  0.00
H
ATOM    531 2HZ  LYS    33      19.298  12.035   5.812  1.00  0.00
H
ATOM    532 3HZ  LYS    33      20.397  13.193   5.427  1.00  0.00
H
ATOM    533  N   ASN    34      16.648  19.561   5.536  1.00  0.00
N
ATOM    534  H   ASN    34      16.216  19.085   4.760  1.00  0.00
H
ATOM    535  CA  ASN    34      17.100  20.937   5.362  1.00  0.00
C
ATOM    536  HA  ASN    34      17.892  21.159   6.078  1.00  0.00
H
ATOM    537  C   ASN    34      15.872  21.786   5.713  1.00  0.00
C
ATOM    538  O   ASN    34      15.682  22.112   6.880  1.00  0.00
O
ATOM    539  CB  ASN    34      17.621  21.096   3.932  1.00  0.00
C
ATOM    540 1HB  ASN    34      18.428  20.382   3.771  1.00  0.00
H
ATOM    541 2HB  ASN    34      16.814  20.868   3.247  1.00  0.00
H
ATOM    542  CG  ASN    34      18.141  22.475   3.626  1.00  0.00
C
ATOM    543  OD1 ASN    34      17.862  23.015   2.566  1.00  0.00
O
ATOM    544  ND2 ASN    34      18.909  23.035   4.502  1.00  0.00
N
ATOM    545 1HD2 ASN    34      19.182  23.996   4.361  1.00  0.00
H
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ATOM    546 2HD2 ASN    34      19.206  22.531   5.327  1.00  0.00
H
ATOM    547  N   ASP    35      14.952  21.967   4.776  1.00  0.00
N
ATOM    548  H   ASP    35      15.188  21.944   3.794  1.00  0.00
H
ATOM    549  CA  ASP    35      13.526  22.086   5.090  1.00  0.00
C
ATOM    550  HA  ASP    35      13.272  21.375   5.876  1.00  0.00
H
ATOM    551  C   ASP    35      12.787  21.745   3.800  1.00  0.00
C
ATOM    552  O   ASP    35      13.402  21.836   2.734  1.00  0.00
O
ATOM    553  CB  ASP    35      13.121  23.502   5.524  1.00  0.00
C
ATOM    554 1HB  ASP    35      13.918  23.935   6.129  1.00  0.00
H
ATOM    555 2HB  ASP    35      12.982  24.123   4.641  1.00  0.00
H
ATOM    556  CG  ASP    35      11.843  23.506   6.344  1.00  0.00
C
ATOM    557  OD1 ASP    35      11.238  22.422   6.552  1.00  0.00
O
ATOM    558  OD2 ASP    35      11.454  24.552   6.891  1.00  0.00
O
ATOM    559  N   MET    36      11.509  21.391   3.896  1.00  0.00
N
ATOM    560  H   MET    36      11.122  21.252   4.823  1.00  0.00
H
ATOM    561  CA  MET    36      10.564  21.332   2.775  1.00  0.00
C
ATOM    562  HA  MET    36      10.662  22.244   2.186  1.00  0.00
H
ATOM    563  C   MET    36       9.146  21.232   3.354  1.00  0.00
C
ATOM    564  O   MET    36       8.911  20.403   4.231  1.00  0.00
O
ATOM    565  CB  MET    36      10.821  20.114   1.874  1.00  0.00
C
ATOM    566 1HB  MET    36      11.885  20.066   1.655  1.00  0.00
H
ATOM    567 2HB  MET    36      10.536  19.203   2.401  1.00  0.00
H
ATOM    568  CG  MET    36      10.062  20.198   0.552  1.00  0.00
C
ATOM    569 1HG  MET    36       8.995  20.213   0.768  1.00  0.00
H
ATOM    570 2HG  MET    36      10.324  21.136   0.064  1.00  0.00
H
ATOM    571  SD  MET    36      10.387  18.855  -0.607  1.00  0.00
S
ATOM    572  CE  MET    36      12.098  19.111  -1.077  1.00  0.00
C
ATOM    573 1HE  MET    36      12.386  18.362  -1.816  1.00  0.00
H
ATOM    574 2HE  MET    36      12.740  19.016  -0.201  1.00  0.00
H
ATOM    575 3HE  MET    36      12.213  20.106  -1.509  1.00  0.00
H
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ATOM    576  N   ASP    37       8.197  22.044   2.911  1.00  0.00
N
ATOM    577  H   ASP    37       8.419  22.783   2.264  1.00  0.00
H
ATOM    578  CA  ASP    37       6.801  21.873   3.343  1.00  0.00
C
ATOM    579  HA  ASP    37       6.787  21.767   4.425  1.00  0.00
H
ATOM    580  C   ASP    37       6.232  20.602   2.677  1.00  0.00
C
ATOM    581  O   ASP    37       6.494  20.362   1.491  1.00  0.00
O
ATOM    582  CB  ASP    37       5.955  23.102   2.970  1.00  0.00
C
ATOM    583 1HB  ASP    37       6.398  23.987   3.426  1.00  0.00
H
ATOM    584 2HB  ASP    37       5.967  23.229   1.892  1.00  0.00
H
ATOM    585  CG  ASP    37       4.501  22.979   3.415  1.00  0.00
C
ATOM    586  OD1 ASP    37       4.092  23.593   4.423  1.00  0.00
O
ATOM    587  OD2 ASP    37       3.737  22.269   2.727  1.00  0.00
O
ATOM    588  N   PRO    38       5.445  19.778   3.400  1.00  0.00
N
ATOM    589  CA  PRO    38       4.856  18.565   2.811  1.00  0.00
C
ATOM    590  HA  PRO    38       5.643  17.840   2.626  1.00  0.00
H
ATOM    591  C   PRO    38       4.035  18.698   1.528  1.00  0.00
C
ATOM    592  O   PRO    38       3.910  17.711   0.793  1.00  0.00
O
ATOM    593  CB  PRO    38       3.943  18.049   3.926  1.00  0.00
C
ATOM    594 1HB  PRO    38       2.940  18.455   3.805  1.00  0.00
H
ATOM    595 2HB  PRO    38       3.918  16.960   3.930  1.00  0.00
H
ATOM    596  CG  PRO    38       4.549  18.544   5.152  1.00  0.00
C
ATOM    597 1HG  PRO    38       3.817  18.589   5.957  1.00  0.00
H
ATOM    598 2HG  PRO    38       5.384  17.900   5.431  1.00  0.00
H
ATOM    599  CD  PRO    38       5.055  19.903   4.817  1.00  0.00
C
ATOM    600 1HD  PRO    38       4.271  20.648   4.926  1.00  0.00
H
ATOM    601 2HD  PRO    38       5.911  20.149   5.446  1.00  0.00
H
ATOM    602  N   ALA    39       3.490  19.863   1.202  1.00  0.00
N
ATOM    603  H   ALA    39       3.567  20.666   1.830  1.00  0.00
H
ATOM    604  CA  ALA    39       2.793  20.028  -0.073  1.00  0.00
C
ATOM    605  HA  ALA    39       2.030  19.256  -0.165  1.00  0.00
H
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ATOM    606  C   ALA    39       3.777  19.870  -1.233  1.00  0.00
C
ATOM    607  O   ALA    39       3.450  19.299  -2.276  1.00  0.00
O
ATOM    608  CB  ALA    39       2.118  21.388  -0.130  1.00  0.00
C
ATOM    609 1HB  ALA    39       1.369  21.459   0.658  1.00  0.00
H
ATOM    610 2HB  ALA    39       1.623  21.510  -1.095  1.00  0.00
H
ATOM    611 3HB  ALA    39       2.853  22.185   0.001  1.00  0.00
H
ATOM    612  N   PHE    40       4.999  20.345  -1.049  1.00  0.00
N
ATOM    613  H   PHE    40       5.249  20.797  -0.176  1.00  0.00
H
ATOM    614  CA  PHE    40       6.005  20.197  -2.092  1.00  0.00
C
ATOM    615  HA  PHE    40       5.549  20.429  -3.055  1.00  0.00
H
ATOM    616  C   PHE    40       6.500  18.763  -2.130  1.00  0.00
C
ATOM    617  O   PHE    40       6.822  18.269  -3.194  1.00  0.00
O
ATOM    618  CB  PHE    40       7.189  21.131  -1.876  1.00  0.00
C
ATOM    619 1HB  PHE    40       7.624  20.931  -0.899  1.00  0.00
H
ATOM    620 2HB  PHE    40       7.936  20.910  -2.636  1.00  0.00
H
ATOM    621  CG  PHE    40       6.830  22.586  -1.964  1.00  0.00
C
ATOM    622  CD1 PHE    40       6.774  23.369  -0.802  1.00  0.00
C
ATOM    623  HD1 PHE    40       7.012  22.923   0.150  1.00  0.00
H
ATOM    624  CD2 PHE    40       6.550  23.181  -3.208  1.00  0.00
C
ATOM    625  HD2 PHE    40       6.601  22.593  -4.113  1.00  0.00
H
ATOM    626  CE1 PHE    40       6.417  24.738  -0.864  1.00  0.00
C
ATOM    627  HE1 PHE    40       6.368  25.329   0.039  1.00  0.00
H
ATOM    628  CE2 PHE    40       6.203  24.552  -3.292  1.00  0.00
C
ATOM    629  HE2 PHE    40       5.991  25.000  -4.252  1.00  0.00
H
ATOM    630  CZ  PHE    40       6.139  25.334  -2.116  1.00  0.00
C
ATOM    631  HZ  PHE    40       5.884  26.382  -2.176  1.00  0.00
H
ATOM    632  N   ILE    41       6.525  18.070  -1.001  1.00  0.00
N
ATOM    633  H   ILE    41       6.264  18.516  -0.131  1.00  0.00
H
ATOM    634  CA  ILE    41       6.936  16.661  -0.999  1.00  0.00
C
ATOM    635  HA  ILE    41       7.911  16.582  -1.478  1.00  0.00
H
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ATOM    636  C   ILE    41       5.933  15.873  -1.851  1.00  0.00
C
ATOM    637  O   ILE    41       6.318  15.055  -2.690  1.00  0.00
O
ATOM    638  CB  ILE    41       7.041  16.074   0.448  1.00  0.00
C
ATOM    639  HB  ILE    41       6.078  16.184   0.941  1.00  0.00
H
ATOM    640  CG1 ILE    41       8.101  16.849   1.262  1.00  0.00
C
ATOM    641 1HG1 ILE    41       9.069  16.700   0.786  1.00  0.00
H
ATOM    642 2HG1 ILE    41       7.865  17.911   1.220  1.00  0.00
H
ATOM    643  CG2 ILE    41       7.391  14.577   0.402  1.00  0.00
C
ATOM    644 1HG2 ILE    41       7.380  14.163   1.403  1.00  0.00
H
ATOM    645 2HG2 ILE    41       8.378  14.433  -0.034  1.00  0.00
H
ATOM    646 3HG2 ILE    41       6.653  14.028  -0.184  1.00  0.00
H
ATOM    647  CD1 ILE    41       8.248  16.468   2.748  1.00  0.00
C
ATOM    648 1HD1 ILE    41       8.897  17.192   3.241  1.00  0.00
H
ATOM    649 2HD1 ILE    41       8.694  15.477   2.838  1.00  0.00
H
ATOM    650 3HD1 ILE    41       7.273  16.476   3.234  1.00  0.00
H
ATOM    651  N   ALA    42       4.650  16.180  -1.703  1.00  0.00
N
ATOM    652  H   ALA    42       4.381  16.868  -1.011  1.00  0.00
H
ATOM    653  CA  ALA    42       3.610  15.537  -2.503  1.00  0.00
C
ATOM    654  HA  ALA    42       3.697  14.456  -2.382  1.00  0.00
H
ATOM    655  C   ALA    42       3.767  15.856  -3.995  1.00  0.00
C
ATOM    656  O   ALA    42       3.625  14.977  -4.850  1.00  0.00
O
ATOM    657  CB  ALA    42       2.233  15.981  -2.001  1.00  0.00
C
ATOM    658 1HB  ALA    42       2.095  15.654  -0.971  1.00  0.00
H
ATOM    659 2HB  ALA    42       1.459  15.530  -2.622  1.00  0.00
H
ATOM    660 3HB  ALA    42       2.139  17.065  -2.055  1.00  0.00
H
ATOM    661  N   ARG    43       4.094  17.104  -4.306  1.00  0.00
N
ATOM    662  H   ARG    43       4.176  17.793  -3.566  1.00  0.00
H
ATOM    663  CA  ARG    43       4.331  17.506  -5.693  1.00  0.00
C
ATOM    664  HA  ARG    43       3.461  17.231  -6.290  1.00  0.00
H
ATOM    665  C   ARG    43       5.527  16.757  -6.265  1.00  0.00
C
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ATOM    666  O   ARG    43       5.451  16.222  -7.369  1.00  0.00
O
ATOM    667  CB  ARG    43       4.554  19.024  -5.777  1.00  0.00
C
ATOM    668 1HB  ARG    43       3.640  19.519  -5.453  1.00  0.00
H
ATOM    669 2HB  ARG    43       5.345  19.302  -5.083  1.00  0.00
H
ATOM    670  CG  ARG    43       4.942  19.568  -7.151  1.00  0.00
C
ATOM    671 1HG  ARG    43       5.121  20.640  -7.067  1.00  0.00
H
ATOM    672 2HG  ARG    43       5.859  19.085  -7.486  1.00  0.00
H
ATOM    673  CD  ARG    43       3.857  19.325  -8.179  1.00  0.00
C
ATOM    674 1HD  ARG    43       3.689  18.251  -8.270  1.00  0.00
H
ATOM    675 2HD  ARG    43       2.934  19.797  -7.842  1.00  0.00
H
ATOM    676  NE  ARG    43       4.212  19.858  -9.497  1.00  0.00
N
ATOM    677  HE  ARG    43       5.019  20.467  -9.556  1.00  0.00
H
ATOM    678  CZ  ARG    43       3.575  19.608 -10.630  1.00  0.00
C
ATOM    679  NH1 ARG    43       2.541  18.814 -10.726  1.00  0.00
N
ATOM    680 1HH1 ARG    43       2.159  18.390  -9.893  1.00  0.00
H
ATOM    681 2HH1 ARG    43       2.127  18.644 -11.624  1.00  0.00
H
ATOM    682  NH2 ARG    43       4.023  20.159 -11.718  1.00  0.00
N
ATOM    683 1HH2 ARG    43       4.811  20.788 -11.670  1.00  0.00
H
ATOM    684 2HH2 ARG    43       3.590  19.942 -12.602  1.00  0.00
H
ATOM    685  N   TRP    44       6.621  16.684  -5.524  1.00  0.00
N
ATOM    686  H   TRP    44       6.660  17.142  -4.616  1.00  0.00
H
ATOM    687  CA  TRP    44       7.793  15.979  -6.020  1.00  0.00
C
ATOM    688  HA  TRP    44       8.007  16.362  -7.017  1.00  0.00
H
ATOM    689  C   TRP    44       7.522  14.494  -6.190  1.00  0.00
C
ATOM    690  O   TRP    44       8.001  13.937  -7.162  1.00  0.00
O
ATOM    691  CB  TRP    44       9.031  16.232  -5.155  1.00  0.00
C
ATOM    692 1HB  TRP    44       8.815  15.981  -4.117  1.00  0.00
H
ATOM    693 2HB  TRP    44       9.834  15.590  -5.516  1.00  0.00
H
ATOM    694  CG  TRP    44       9.504  17.663  -5.254  1.00  0.00
C
ATOM    695  CD1 TRP    44       9.524  18.603  -4.273  1.00  0.00
C
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ATOM    696  HD1 TRP    44       9.213  18.419  -3.252  1.00  0.00
H
ATOM    697  CD2 TRP    44      10.001  18.332  -6.428  1.00  0.00
C
ATOM    698  NE1 TRP    44       9.947  19.816  -4.745  1.00  0.00
N
ATOM    699  HE1 TRP    44      10.004  20.665  -4.182  1.00  0.00
H
ATOM    700  CE2 TRP    44      10.245  19.688  -6.073  1.00  0.00
C
ATOM    701  CE3 TRP    44      10.230  17.933  -7.758  1.00  0.00
C
ATOM    702  HE3 TRP    44      10.003  16.924  -8.062  1.00  0.00
H
ATOM    703  CZ2 TRP    44      10.700  20.639  -7.010  1.00  0.00
C
ATOM    704  HZ2 TRP    44      10.840  21.669  -6.726  1.00  0.00
H
ATOM    705  CZ3 TRP    44      10.741  18.875  -8.691  1.00  0.00
C
ATOM    706  HZ3 TRP    44      10.934  18.576  -9.711  1.00  0.00
H
ATOM    707  CH2 TRP    44      10.973  20.219  -8.298  1.00  0.00
C
ATOM    708  HH2 TRP    44      11.352  20.927  -9.020  1.00  0.00
H
ATOM    709  N   GLN    45       6.708  13.863  -5.350  1.00  0.00
N
ATOM    710  H   GLN    45       6.334  14.352  -4.540  1.00  0.00
H
ATOM    711  CA  GLN    45       6.345  12.458  -5.569  1.00  0.00
C
ATOM    712  HA  GLN    45       7.242  11.849  -5.537  1.00  0.00
H
ATOM    713  C   GLN    45       5.703  12.253  -6.935  1.00  0.00
C
ATOM    714  O   GLN    45       6.050  11.319  -7.660  1.00  0.00
O
ATOM    715  CB  GLN    45       5.379  11.950  -4.495  1.00  0.00
C
ATOM    716 1HB  GLN    45       5.849  12.052  -3.518  1.00  0.00
H
ATOM    717 2HB  GLN    45       4.490  12.574  -4.509  1.00  0.00
H
ATOM    718  CG  GLN    45       4.933  10.497  -4.695  1.00  0.00
C
ATOM    719 1HG  GLN    45       4.193  10.249  -3.939  1.00  0.00
H
ATOM    720 2HG  GLN    45       4.451  10.396  -5.666  1.00  0.00
H
ATOM    721  CD  GLN    45       6.067   9.498  -4.615  1.00  0.00
C
ATOM    722  OE1 GLN    45       6.750   9.400  -3.616  1.00  0.00
O
ATOM    723  NE2 GLN    45       6.267   8.740  -5.660  1.00  0.00
N
ATOM    724 1HE2 GLN    45       6.994   8.048  -5.616  1.00  0.00
H
ATOM    725 2HE2 GLN    45       5.713   8.865  -6.491  1.00  0.00
H
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ATOM    726  N   GLU    46       4.779  13.125  -7.304  1.00  0.00
N
ATOM    727  H   GLU    46       4.536  13.905  -6.701  1.00  0.00
H
ATOM    728  CA  GLU    46       4.085  12.948  -8.572  1.00  0.00
C
ATOM    729  HA  GLU    46       3.754  11.914  -8.639  1.00  0.00
H
ATOM    730  C   GLU    46       5.021  13.187  -9.749  1.00  0.00
C
ATOM    731  O   GLU    46       4.871  12.565 -10.801  1.00  0.00
O
ATOM    732  CB  GLU    46       2.852  13.849  -8.656  1.00  0.00
C
ATOM    733 1HB  GLU    46       3.148  14.887  -8.506  1.00  0.00
H
ATOM    734 2HB  GLU    46       2.431  13.741  -9.653  1.00  0.00
H
ATOM    735  CG  GLU    46       1.782  13.468  -7.636  1.00  0.00
C
ATOM    736 1HG  GLU    46       1.600  12.398  -7.714  1.00  0.00
H
ATOM    737 2HG  GLU    46       2.151  13.678  -6.633  1.00  0.00
H
ATOM    738  CD  GLU    46       0.457  14.182  -7.839  1.00  0.00
C
ATOM    739  OE1 GLU    46       0.375  15.185  -8.587  1.00  0.00
O
ATOM    740  OE2 GLU    46      -0.549  13.745  -7.228  1.00  0.00
O
ATOM    741  N   LEU    47       6.018  14.039  -9.557  1.00  0.00
N
ATOM    742  H   LEU    47       6.081  14.535  -8.674  1.00  0.00
H
ATOM    743  CA  LEU    47       7.025  14.293 -10.586  1.00  0.00
C
ATOM    744  HA  LEU    47       6.528  14.318 -11.554  1.00  0.00
H
ATOM    745  C   LEU    47       8.097  13.204 -10.666  1.00  0.00
C
ATOM    746  O   LEU    47       8.603  12.926 -11.753  1.00  0.00
O
ATOM    747  CB  LEU    47       7.682  15.656 -10.344  1.00  0.00
C
ATOM    748 1HB  LEU    47       8.090  15.661  -9.334  1.00  0.00
H
ATOM    749 2HB  LEU    47       8.514  15.763 -11.041  1.00  0.00
H
ATOM    750  CG  LEU    47       6.765  16.881 -10.509  1.00  0.00
C
ATOM    751  HG  LEU    47       5.872  16.743  -9.904  1.00  0.00
H
ATOM    752  CD1 LEU    47       7.478  18.128 -10.016  1.00  0.00
C
ATOM    753 1HD1 LEU    47       6.849  19.002 -10.176  1.00  0.00
H
ATOM    754 2HD1 LEU    47       8.418  18.265 -10.551  1.00  0.00
H
ATOM    755 3HD1 LEU    47       7.677  18.037  -8.949  1.00  0.00
H
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ATOM    756  CD2 LEU    47       6.331  17.083 -11.960  1.00  0.00
C
ATOM    757 1HD2 LEU    47       5.726  17.983 -12.044  1.00  0.00
H
ATOM    758 2HD2 LEU    47       5.728  16.238 -12.292  1.00  0.00
H
ATOM    759 3HD2 LEU    47       7.204  17.180 -12.602  1.00  0.00
H
ATOM    760  N   PHE    48       8.429  12.548  -9.562  1.00  0.00
N
ATOM    761  H   PHE    48       8.030  12.828  -8.669  1.00  0.00
H
ATOM    762  CA  PHE    48       9.378  11.433  -9.601  1.00  0.00
C
ATOM    763  HA  PHE    48      10.293  11.739 -10.107  1.00  0.00
H
ATOM    764  C   PHE    48       8.792  10.240 -10.327  1.00  0.00
C
ATOM    765  O   PHE    48       9.523   9.455 -10.924  1.00  0.00
O
ATOM    766  CB  PHE    48       9.703  10.871  -8.213  1.00  0.00
C
ATOM    767 1HB  PHE    48       8.774  10.669  -7.681  1.00  0.00
H
ATOM    768 2HB  PHE    48      10.223   9.925  -8.354  1.00  0.00
H
ATOM    769  CG  PHE    48      10.579  11.739  -7.364  1.00  0.00
C
ATOM    770  CD1 PHE    48      10.116  12.191  -6.121  1.00  0.00
C
ATOM    771  HD1 PHE    48       9.129  11.926  -5.793  1.00  0.00
H
ATOM    772  CD2 PHE    48      11.890  12.043  -7.749  1.00  0.00
C
ATOM    773  HD2 PHE    48      12.276  11.684  -8.691  1.00  0.00
H
ATOM    774  CE1 PHE    48      10.919  12.973  -5.284  1.00  0.00
C
ATOM    775  HE1 PHE    48      10.536  13.327  -4.339  1.00  0.00
H
ATOM    776  CE2 PHE    48      12.715  12.829  -6.911  1.00  0.00
C
ATOM    777  HE2 PHE    48      13.723  13.071  -7.215  1.00  0.00
H
ATOM    778  CZ  PHE    48      12.218  13.285  -5.673  1.00  0.00
C
ATOM    779  HZ  PHE    48      12.840  13.861  -5.015  1.00  0.00
H
ATOM    780  N   ASP    49       7.498  10.026 -10.154  1.00  0.00
N
ATOM    781  H   ASP    49       6.927  10.726  -9.692  1.00  0.00
H
ATOM    782  CA  ASP    49       6.896   8.732 -10.462  1.00  0.00
C
ATOM    783  HA  ASP    49       7.684   8.053 -10.778  1.00  0.00
H
ATOM    784  C   ASP    49       5.835   8.718 -11.564  1.00  0.00
C
ATOM    785  O   ASP    49       4.637   8.762 -11.287  1.00  0.00
O
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ATOM    786  CB  ASP    49       6.316   8.136  -9.179  1.00  0.00
C
ATOM    787 1HB  ASP    49       7.089   8.146  -8.409  1.00  0.00
H
ATOM    788 2HB  ASP    49       5.479   8.747  -8.839  1.00  0.00
H
ATOM    789  CG  ASP    49       5.847   6.713  -9.373  1.00  0.00
C
ATOM    790  OD1 ASP    49       6.219   6.090 -10.393  1.00  0.00
O
ATOM    791  OD2 ASP    49       5.090   6.196  -8.535  1.00  0.00
O
ATOM    792  N   PRO    50       6.252   8.586 -12.835  1.00  0.00
N
ATOM    793  CA  PRO    50       5.209   8.423 -13.856  1.00  0.00
C
ATOM    794  HA  PRO    50       4.442   9.190 -13.746  1.00  0.00
H
ATOM    795  C   PRO    50       4.545   7.038 -13.852  1.00  0.00
C
ATOM    796  O   PRO    50       3.501   6.836 -14.477  1.00  0.00
O
ATOM    797  CB  PRO    50       5.985   8.658 -15.154  1.00  0.00
C
ATOM    798 1HB  PRO    50       5.528   8.125 -15.988  1.00  0.00
H
ATOM    799 2HB  PRO    50       6.040   9.726 -15.367  1.00  0.00
H
ATOM    800  CG  PRO    50       7.342   8.129 -14.857  1.00  0.00
C
ATOM    801 1HG  PRO    50       7.343   7.042 -14.925  1.00  0.00
H
ATOM    802 2HG  PRO    50       8.083   8.553 -15.534  1.00  0.00
H
ATOM    803  CD  PRO    50       7.601   8.556 -13.438  1.00  0.00
C
ATOM    804 1HD  PRO    50       8.245   7.835 -12.933  1.00  0.00
H
ATOM    805 2HD  PRO    50       8.044   9.554 -13.414  1.00  0.00
H
ATOM    806  N   GLN    51       5.123   6.072 -13.147  1.00  0.00
N
ATOM    807  H   GLN    51       5.958   6.270 -12.608  1.00  0.00
H
ATOM    808  CA  GLN    51       4.600   4.704 -13.130  1.00  0.00
C
ATOM    809  HA  GLN    51       4.285   4.437 -14.137  1.00  0.00
H
ATOM    810  C   GLN    51       3.422   4.566 -12.175  1.00  0.00
C
ATOM    811  O   GLN    51       2.640   3.613 -12.266  1.00  0.00
O
ATOM    812  CB  GLN    51       5.674   3.719 -12.667  1.00  0.00
C
ATOM    813 1HB  GLN    51       5.911   3.930 -11.628  1.00  0.00
H
ATOM    814 2HB  GLN    51       5.264   2.711 -12.726  1.00  0.00
H
ATOM    815  CG  GLN    51       6.960   3.768 -13.464  1.00  0.00
C
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ATOM    816 1HG  GLN    51       6.740   3.540 -14.505  1.00  0.00
H
ATOM    817 2HG  GLN    51       7.389   4.767 -13.407  1.00  0.00
H
ATOM    818  CD  GLN    51       7.989   2.786 -12.966  1.00  0.00
C
ATOM    819  OE1 GLN    51       7.745   1.993 -12.059  1.00  0.00
O
ATOM    820  NE2 GLN    51       9.147   2.815 -13.557  1.00  0.00
N
ATOM    821 1HE2 GLN    51       9.876   2.188 -13.250  1.00  0.00
H
ATOM    822 2HE2 GLN    51       9.306   3.471 -14.312  1.00  0.00
H
ATOM    823  N   LYS    52       3.344   5.508 -11.241  1.00  0.00
N
ATOM    824  H   LYS    52       4.069   6.217 -11.229  1.00  0.00
H
ATOM    825  CA  LYS    52       2.313   5.584 -10.193  1.00  0.00
C
ATOM    826  HA  LYS    52       2.593   6.401  -9.528  1.00  0.00
H
ATOM    827  C   LYS    52       2.292   4.343  -9.312  1.00  0.00
C
ATOM    828  O   LYS    52       1.275   3.956  -8.736  1.00  0.00
O
ATOM    829  CB  LYS    52       0.937   5.928 -10.786  1.00  0.00
C
ATOM    830 1HB  LYS    52       0.591   5.088 -11.387  1.00  0.00
H
ATOM    831 2HB  LYS    52       0.238   6.073  -9.965  1.00  0.00
H
ATOM    832  CG  LYS    52       0.920   7.195 -11.661  1.00  0.00
C
ATOM    833 1HG  LYS    52       1.591   7.054 -12.506  1.00  0.00
H
ATOM    834 2HG  LYS    52      -0.088   7.351 -12.043  1.00  0.00
H
ATOM    835  CD  LYS    52       1.355   8.434 -10.886  1.00  0.00
C
ATOM    836 1HD  LYS    52       0.667   8.614 -10.061  1.00  0.00
H
ATOM    837 2HD  LYS    52       2.344   8.264 -10.471  1.00  0.00
H
ATOM    838  CE  LYS    52       1.439   9.673 -11.745  1.00  0.00
C
ATOM    839 1HE  LYS    52       1.896   9.429 -12.706  1.00  0.00
H
ATOM    840 2HE  LYS    52       0.440  10.083 -11.903  1.00  0.00
H
ATOM    841  NZ  LYS    52       2.306  10.653 -11.019  1.00  0.00
N
ATOM    842 1HZ  LYS    52       2.192  11.577 -11.414  1.00  0.00
H
ATOM    843 2HZ  LYS    52       3.277  10.366 -11.093  1.00  0.00
H
ATOM    844 3HZ  LYS    52       2.055  10.672 -10.037  1.00  0.00
H
ATOM    845  N   THR    53       3.463   3.745  -9.178  1.00  0.00
N
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ATOM    846  H   THR    53       4.274   4.136  -9.644  1.00  0.00
H
ATOM    847  CA  THR    53       3.687   2.585  -8.325  1.00  0.00
C
ATOM    848  HA  THR    53       2.842   1.902  -8.359  1.00  0.00
H
ATOM    849  C   THR    53       3.884   3.056  -6.886  1.00  0.00
C
ATOM    850  O   THR    53       3.838   2.260  -5.948  1.00  0.00
O
ATOM    851  CB  THR    53       4.955   1.874  -8.804  1.00  0.00
C
ATOM    852  HB  THR    53       5.355   1.239  -8.014  1.00  0.00
H
ATOM    853  OG1 THR    53       5.895   2.883  -9.180  1.00  0.00
O
ATOM    854  HG1 THR    53       6.647   2.455  -9.601  1.00  0.00
H
ATOM    855  CG2 THR    53       4.696   1.039 -10.042  1.00  0.00
C
ATOM    856 1HG2 THR    53       5.632   0.595 -10.381  1.00  0.00
H
ATOM    857 2HG2 THR    53       4.286   1.658 -10.839  1.00  0.00
H
ATOM    858 3HG2 THR    53       3.993   0.239  -9.807  1.00  0.00
H
ATOM    859  N   GLY    54       4.084   4.353  -6.703  1.00  0.00
N
ATOM    860  H   GLY    54       4.178   4.976  -7.507  1.00  0.00
H
ATOM    861  CA  GLY    54       4.210   4.931  -5.378  1.00  0.00
C
ATOM    862 1HA  GLY    54       3.999   5.999  -5.434  1.00  0.00
H
ATOM    863 2HA  GLY    54       3.494   4.463  -4.701  1.00  0.00
H
ATOM    864  C   GLY    54       5.607   4.739  -4.834  1.00  0.00
C
ATOM    865  O   GLY    54       5.808   4.773  -3.619  1.00  0.00
O
ATOM    866  N   ILE    55       6.556   4.494  -5.730  1.00  0.00
N
ATOM    867  H   ILE    55       6.321   4.494  -6.714  1.00  0.00
H
ATOM    868  CA  ILE    55       7.951   4.258  -5.359  1.00  0.00
C
ATOM    869  HA  ILE    55       8.091   4.593  -4.334  1.00  0.00
H
ATOM    870  C   ILE    55       8.859   5.097  -6.251  1.00  0.00
C
ATOM    871  O   ILE    55       8.429   5.589  -7.302  1.00  0.00
O
ATOM    872  CB  ILE    55       8.362   2.752  -5.433  1.00  0.00
C
ATOM    873  HB  ILE    55       9.385   2.663  -5.068  1.00  0.00
H
ATOM    874  CG1 ILE    55       8.326   2.231  -6.881  1.00  0.00
C
ATOM    875 1HG1 ILE    55       7.292   2.214  -7.208  1.00  0.00
H
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ATOM    876 2HG1 ILE    55       8.875   2.918  -7.522  1.00  0.00
H
ATOM    877  CG2 ILE    55       7.450   1.906  -4.518  1.00  0.00
C
ATOM    878 1HG2 ILE    55       7.841   0.893  -4.428  1.00  0.00
H
ATOM    879 2HG2 ILE    55       6.436   1.861  -4.918  1.00  0.00
H
ATOM    880 3HG2 ILE    55       7.419   2.351  -3.525  1.00  0.00
H
ATOM    881  CD1 ILE    55       8.915   0.843  -7.097  1.00  0.00
C
ATOM    882 1HD1 ILE    55       8.922   0.616  -8.163  1.00  0.00
H
ATOM    883 2HD1 ILE    55       8.314   0.095  -6.584  1.00  0.00
H
ATOM    884 3HD1 ILE    55       9.938   0.812  -6.723  1.00  0.00
H
ATOM    885  N   ILE    56      10.098   5.282  -5.821  1.00  0.00
N
ATOM    886  H   ILE    56      10.372   4.882  -4.928  1.00  0.00
H
ATOM    887  CA  ILE    56      11.071   6.110  -6.534  1.00  0.00
C
ATOM    888  HA  ILE    56      10.688   6.348  -7.518  1.00  0.00
H
ATOM    889  C   ILE    56      12.383   5.354  -6.694  1.00  0.00
C
ATOM    890  O   ILE    56      12.873   4.759  -5.735  1.00  0.00
O
ATOM    891  CB  ILE    56      11.320   7.438  -5.765  1.00  0.00
C
ATOM    892  HB  ILE    56      11.750   7.190  -4.800  1.00  0.00
H
ATOM    893  CG1 ILE    56       9.990   8.179  -5.524  1.00  0.00
C
ATOM    894 1HG1 ILE    56       9.662   8.620  -6.462  1.00  0.00
H
ATOM    895 2HG1 ILE    56       9.221   7.481  -5.204  1.00  0.00
H
ATOM    896  CG2 ILE    56      12.312   8.351  -6.531  1.00  0.00
C
ATOM    897 1HG2 ILE    56      12.408   9.310  -6.029  1.00  0.00
H
ATOM    898 2HG2 ILE    56      11.960   8.520  -7.549  1.00  0.00
H
ATOM    899 3HG2 ILE    56      13.299   7.888  -6.561  1.00  0.00
H
ATOM    900  CD1 ILE    56      10.041   9.239  -4.471  1.00  0.00
C
ATOM    901 1HD1 ILE    56       9.113   9.804  -4.501  1.00  0.00
H
ATOM    902 2HD1 ILE    56      10.872   9.922  -4.637  1.00  0.00
H
ATOM    903 3HD1 ILE    56      10.140   8.776  -3.488  1.00  0.00
H
ATOM    904  N   THR    57      12.939   5.390  -7.898  1.00  0.00
N
ATOM    905  H   THR    57      12.476   5.895  -8.641  1.00  0.00
H
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ATOM    906  CA  THR    57      14.222   4.769  -8.228  1.00  0.00
C
ATOM    907  HA  THR    57      14.507   4.051  -7.459  1.00  0.00
H
ATOM    908  C   THR    57      15.317   5.829  -8.348  1.00  0.00
C
ATOM    909  O   THR    57      15.038   7.034  -8.376  1.00  0.00
O
ATOM    910  CB  THR    57      14.111   4.059  -9.582  1.00  0.00
C
ATOM    911  HB  THR    57      15.088   3.690  -9.892  1.00  0.00
H
ATOM    912  OG1 THR    57      13.610   4.997 -10.538  1.00  0.00
O
ATOM    913  HG1 THR    57      13.364   4.517 -11.339  1.00  0.00
H
ATOM    914  CG2 THR    57      13.140   2.897  -9.514  1.00  0.00
C
ATOM    915 1HG2 THR    57      13.169   2.355 -10.456  1.00  0.00
H
ATOM    916 2HG2 THR    57      12.125   3.258  -9.341  1.00  0.00
H
ATOM    917 3HG2 THR    57      13.427   2.216  -8.713  1.00  0.00
H
ATOM    918  N   LEU    58      16.571   5.398  -8.407  1.00  0.00
N
ATOM    919  H   LEU    58      16.763   4.405  -8.488  1.00  0.00
H
ATOM    920  CA  LEU    58      17.697   6.326  -8.294  1.00  0.00
C
ATOM    921  HA  LEU    58      17.590   6.868  -7.355  1.00  0.00
H
ATOM    922  C   LEU    58      17.787   7.363  -9.406  1.00  0.00
C
ATOM    923  O   LEU    58      18.141   8.503  -9.135  1.00  0.00
O
ATOM    924  CB  LEU    58      19.027   5.568  -8.271  1.00  0.00
C
ATOM    925 1HB  LEU    58      19.144   5.087  -9.240  1.00  0.00
H
ATOM    926 2HB  LEU    58      19.819   6.310  -8.176  1.00  0.00
H
ATOM    927  CG  LEU    58      19.268   4.495  -7.201  1.00  0.00
C
ATOM    928  HG  LEU    58      18.533   3.703  -7.328  1.00  0.00
H
ATOM    929  CD1 LEU    58      20.655   3.903  -7.435  1.00  0.00
C
ATOM    930 1HD1 LEU    58      20.834   3.091  -6.732  1.00  0.00
H
ATOM    931 2HD1 LEU    58      21.419   4.670  -7.297  1.00  0.00
H
ATOM    932 3HD1 LEU    58      20.731   3.517  -8.453  1.00  0.00
H
ATOM    933  CD2 LEU    58      19.149   5.014  -5.778  1.00  0.00
C
ATOM    934 1HD2 LEU    58      19.328   4.203  -5.076  1.00  0.00
H
ATOM    935 2HD2 LEU    58      18.138   5.383  -5.607  1.00  0.00
H
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ATOM    936 3HD2 LEU    58      19.860   5.818  -5.597  1.00  0.00
H
ATOM    937  N   SER    59      17.463   7.006 -10.641  1.00  0.00
N
ATOM    938  H   SER    59      17.146   6.060 -10.836  1.00  0.00
H
ATOM    939  CA  SER    59      17.576   7.952 -11.756  1.00  0.00
C
ATOM    940  HA  SER    59      18.594   8.336 -11.806  1.00  0.00
H
ATOM    941  C   SER    59      16.622   9.121 -11.572  1.00  0.00
C
ATOM    942  O   SER    59      16.935  10.271 -11.887  1.00  0.00
O
ATOM    943  CB  SER    59      17.226   7.247 -13.064  1.00  0.00
C
ATOM    944 1HB  SER    59      17.251   7.961 -13.888  1.00  0.00
H
ATOM    945 2HB  SER    59      17.954   6.457 -13.249  1.00  0.00
H
ATOM    946  OG  SER    59      15.932   6.671 -12.951  1.00  0.00
O
ATOM    947  HG  SER    59      15.801   6.032 -13.663  1.00  0.00
H
ATOM    948  N   LYS    60      15.455   8.835 -11.015  1.00  0.00
N
ATOM    949  H   LYS    60      15.254   7.877 -10.751  1.00  0.00
H
ATOM    950  CA  LYS    60      14.445   9.866 -10.813  1.00  0.00
C
ATOM    951  HA  LYS    60      14.391  10.486 -11.709  1.00  0.00
H
ATOM    952  C   LYS    60      14.899  10.746  -9.666  1.00  0.00
C
ATOM    953  O   LYS    60      14.769  11.951  -9.734  1.00  0.00
O
ATOM    954  CB  LYS    60      13.075   9.231 -10.554  1.00  0.00
C
ATOM    955 1HB  LYS    60      13.110   8.710  -9.598  1.00  0.00
H
ATOM    956 2HB  LYS    60      12.329  10.023 -10.487  1.00  0.00
H
ATOM    957  CG  LYS    60      12.637   8.217 -11.626  1.00  0.00
C
ATOM    958 1HG  LYS    60      13.354   7.398 -11.654  1.00  0.00
H
ATOM    959 2HG  LYS    60      11.674   7.806 -11.340  1.00  0.00
H
ATOM    960  CD  LYS    60      12.509   8.793 -13.033  1.00  0.00
C
ATOM    961 1HD  LYS    60      11.792   9.615 -13.031  1.00  0.00
H
ATOM    962 2HD  LYS    60      13.481   9.159 -13.361  1.00  0.00
H
ATOM    963  CE  LYS    60      12.048   7.710 -13.998  1.00  0.00
C
ATOM    964 1HE  LYS    60      12.725   6.858 -13.916  1.00  0.00
H
ATOM    965 2HE  LYS    60      11.043   7.383 -13.723  1.00  0.00
H
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ATOM    966  NZ  LYS    60      12.052   8.194 -15.415  1.00  0.00
N
ATOM    967 1HZ  LYS    60      11.829   7.431 -16.042  1.00  0.00
H
ATOM    968 2HZ  LYS    60      12.965   8.556 -15.655  1.00  0.00
H
ATOM    969 3HZ  LYS    60      11.364   8.931 -15.536  1.00  0.00
H
ATOM    970  N   PHE    61      15.534  10.147  -8.671  1.00  0.00
N
ATOM    971  H   PHE    61      15.628   9.138  -8.685  1.00  0.00
H
ATOM    972  CA  PHE    61      16.102  10.877  -7.535  1.00  0.00
C
ATOM    973  HA  PHE    61      15.361  11.599  -7.199  1.00  0.00
H
ATOM    974  C   PHE    61      17.378  11.674  -7.877  1.00  0.00
C
ATOM    975  O   PHE    61      17.943  12.377  -7.029  1.00  0.00
O
ATOM    976  CB  PHE    61      16.350   9.859  -6.411  1.00  0.00
C
ATOM    977 1HB  PHE    61      15.849   8.930  -6.680  1.00  0.00
H
ATOM    978 2HB  PHE    61      17.419   9.656  -6.340  1.00  0.00
H
ATOM    979  CG  PHE    61      15.825  10.282  -5.058  1.00  0.00
C
ATOM    980  CD1 PHE    61      14.531  10.802  -4.901  1.00  0.00
C
ATOM    981  HD1 PHE    61      13.879  10.877  -5.754  1.00  0.00
H
ATOM    982  CD2 PHE    61      16.619  10.122  -3.920  1.00  0.00
C
ATOM    983  HD2 PHE    61      17.589   9.667  -4.022  1.00  0.00
H
ATOM    984  CE1 PHE    61      14.067  11.236  -3.635  1.00  0.00
C
ATOM    985  HE1 PHE    61      13.078  11.653  -3.541  1.00  0.00
H
ATOM    986  CE2 PHE    61      16.177  10.541  -2.639  1.00  0.00
C
ATOM    987  HE2 PHE    61      16.815  10.416  -1.777  1.00  0.00
H
ATOM    988  CZ  PHE    61      14.898  11.116  -2.501  1.00  0.00
C
ATOM    989  HZ  PHE    61      14.550  11.451  -1.534  1.00  0.00
H
ATOM    990  N   CYS    62      17.815  11.581  -9.129  1.00  0.00
N
ATOM    991  H   CYS    62      17.386  10.905  -9.742  1.00  0.00
H
ATOM    992  CA  CYS    62      18.855  12.452  -9.676  1.00  0.00
C
ATOM    993  HA  CYS    62      19.418  12.908  -8.863  1.00  0.00
H
ATOM    994  C   CYS    62      18.276  13.560 -10.562  1.00  0.00
C
ATOM    995  O   CYS    62      18.637  14.729 -10.436  1.00  0.00
O
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ATOM    996  CB  CYS    62      19.810  11.637 -10.553  1.00  0.00
C
ATOM    997 1HB  CYS    62      19.254  11.247 -11.406  1.00  0.00
H
ATOM    998 2HB  CYS    62      20.580  12.308 -10.934  1.00  0.00
H
ATOM    999  SG  CYS    62      20.610  10.256  -9.725  1.00  0.00
S
ATOM   1000  HG  CYS    62      19.491   9.707  -9.222  1.00  0.00
H
ATOM   1001  N   ASP    63      17.439  13.174 -11.517  1.00  0.00
N
ATOM   1002  H   ASP    63      17.177  12.196 -11.586  1.00  0.00
H
ATOM   1003  CA  ASP    63      16.936  14.105 -12.536  1.00  0.00
C
ATOM   1004  HA  ASP    63      17.768  14.662 -12.964  1.00  0.00
H
ATOM   1005  C   ASP    63      15.950  15.094 -11.942  1.00  0.00
C
ATOM   1006  O   ASP    63      15.938  16.284 -12.257  1.00  0.00
O
ATOM   1007  CB  ASP    63      16.205  13.346 -13.646  1.00  0.00
C
ATOM   1008 1HB  ASP    63      15.476  12.670 -13.198  1.00  0.00
H
ATOM   1009 2HB  ASP    63      15.674  14.069 -14.266  1.00  0.00
H
ATOM   1010  CG  ASP    63      17.140  12.555 -14.538  1.00  0.00
C
ATOM   1011  OD1 ASP    63      18.380  12.700 -14.442  1.00  0.00
O
ATOM   1012  OD2 ASP    63      16.638  11.803 -15.405  1.00  0.00
O
ATOM   1013  N   VAL    64      15.128  14.585 -11.045  1.00  0.00
N
ATOM   1014  H   VAL    64      15.202  13.605 -10.790  1.00  0.00
H
ATOM   1015  CA  VAL    64      14.197  15.398 -10.284  1.00  0.00
C
ATOM   1016  HA  VAL    64      13.948  16.309 -10.818  1.00  0.00
H
ATOM   1017  C   VAL    64      15.093  15.709  -9.091  1.00  0.00
C
ATOM   1018  O   VAL    64      16.032  14.959  -8.834  1.00  0.00
O
ATOM   1019  CB  VAL    64      12.908  14.596  -9.971  1.00  0.00
C
ATOM   1020  HB  VAL    64      13.183  13.747  -9.367  1.00  0.00
H
ATOM   1021  CG1 VAL    64      11.894  15.417  -9.206  1.00  0.00
C
ATOM   1022 1HG1 VAL    64      11.012  14.805  -9.004  1.00  0.00
H
ATOM   1023 2HG1 VAL    64      11.597  16.288  -9.791  1.00  0.00
H
ATOM   1024 3HG1 VAL    64      12.310  15.729  -8.248  1.00  0.00
H
ATOM   1025  CG2 VAL    64      12.259  14.070 -11.263  1.00  0.00
C
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ATOM   1026 1HG2 VAL    64      11.335  13.545 -11.025  1.00  0.00
H
ATOM   1027 2HG2 VAL    64      12.929  13.369 -11.762  1.00  0.00
H
ATOM   1028 3HG2 VAL    64      12.034  14.897 -11.935  1.00  0.00
H
ATOM   1029  N   LEU    65      14.858  16.847  -8.446  1.00  0.00
N
ATOM   1030  H   LEU    65      14.029  17.354  -8.709  1.00  0.00
H
ATOM   1031  CA  LEU    65      15.711  17.446  -7.401  1.00  0.00
C
ATOM   1032  HA  LEU    65      15.131  18.250  -6.951  1.00  0.00
H
ATOM   1033  C   LEU    65      16.986  18.090  -7.965  1.00  0.00
C
ATOM   1034  O   LEU    65      17.196  19.283  -7.755  1.00  0.00
O
ATOM   1035  CB  LEU    65      16.081  16.474  -6.266  1.00  0.00
C
ATOM   1036 1HB  LEU    65      16.839  15.793  -6.649  1.00  0.00
H
ATOM   1037 2HB  LEU    65      16.556  17.052  -5.476  1.00  0.00
H
ATOM   1038  CG  LEU    65      14.984  15.607  -5.633  1.00  0.00
C
ATOM   1039  HG  LEU    65      14.428  15.121  -6.430  1.00  0.00
H
ATOM   1040  CD1 LEU    65      15.634  14.502  -4.797  1.00  0.00
C
ATOM   1041 1HD1 LEU    65      14.869  13.907  -4.302  1.00  0.00
H
ATOM   1042 2HD1 LEU    65      16.291  14.919  -4.043  1.00  0.00
H
ATOM   1043 3HD1 LEU    65      16.211  13.844  -5.451  1.00  0.00
H
ATOM   1044  CD2 LEU    65      13.995  16.431  -4.809  1.00  0.00
C
ATOM   1045 1HD2 LEU    65      13.269  15.777  -4.330  1.00  0.00
H
ATOM   1046 2HD2 LEU    65      13.459  17.123  -5.456  1.00  0.00
H
ATOM   1047 3HD2 LEU    65      14.521  16.985  -4.037  1.00  0.00
H
ATOM   1048  N   GLY    66      17.791  17.375  -8.740  1.00  0.00
N
ATOM   1049  H   GLY    66      17.562  16.404  -8.949  1.00  0.00
H
ATOM   1050  CA  GLY    66      19.043  17.945  -9.227  1.00  0.00
C
ATOM   1051 1HA  GLY    66      19.289  18.822  -8.631  1.00  0.00
H
ATOM   1052 2HA  GLY    66      19.817  17.217  -9.026  1.00  0.00
H
ATOM   1053  C   GLY    66      19.230  18.315 -10.681  1.00  0.00
C
ATOM   1054  O   GLY    66      19.512  19.465 -11.014  1.00  0.00
O
ATOM   1055  N   LEU    67      19.213  17.317 -11.547  1.00  0.00
N
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ATOM   1056  H   LEU    67      18.828  16.416 -11.262  1.00  0.00
H
ATOM   1057  CA  LEU    67      19.914  17.396 -12.829  1.00  0.00
C
ATOM   1058  HA  LEU    67      20.682  18.165 -12.743  1.00  0.00
H
ATOM   1059  C   LEU    67      19.042  17.791 -14.022  1.00  0.00
C
ATOM   1060  O   LEU    67      19.288  17.358 -15.148  1.00  0.00
O
ATOM   1061  CB  LEU    67      20.631  16.062 -13.093  1.00  0.00
C
ATOM   1062 1HB  LEU    67      19.872  15.292 -13.226  1.00  0.00
H
ATOM   1063 2HB  LEU    67      21.178  16.153 -14.030  1.00  0.00
H
ATOM   1064  CG  LEU    67      21.631  15.556 -12.037  1.00  0.00
C
ATOM   1065  HG  LEU    67      21.108  15.417 -11.092  1.00  0.00
H
ATOM   1066  CD1 LEU    67      22.183  14.206 -12.477  1.00  0.00
C
ATOM   1067 1HD1 LEU    67      22.816  13.795 -11.690  1.00  0.00
H
ATOM   1068 2HD1 LEU    67      22.772  14.315 -13.390  1.00  0.00
H
ATOM   1069 3HD1 LEU    67      21.364  13.513 -12.667  1.00  0.00
H
ATOM   1070  CD2 LEU    67      22.794  16.518 -11.798  1.00  0.00
C
ATOM   1071 1HD2 LEU    67      23.492  16.080 -11.083  1.00  0.00
H
ATOM   1072 2HD2 LEU    67      22.425  17.455 -11.383  1.00  0.00
H
ATOM   1073 3HD2 LEU    67      23.315  16.715 -12.734  1.00  0.00
H
ATOM   1074  N   GLU    68      18.034  18.616 -13.792  1.00  0.00
N
ATOM   1075  H   GLU    68      17.867  18.947 -12.853  1.00  0.00
H
ATOM   1076  CA  GLU    68      17.159  19.098 -14.861  1.00  0.00
C
ATOM   1077  HA  GLU    68      17.687  19.032 -15.810  1.00  0.00
H
ATOM   1078  C   GLU    68      16.809  20.569 -14.607  1.00  0.00
C
ATOM   1079  O   GLU    68      16.916  21.038 -13.475  1.00  0.00
O
ATOM   1080  CB  GLU    68      15.912  18.202 -14.925  1.00  0.00
C
ATOM   1081 1HB  GLU    68      16.253  17.168 -14.973  1.00  0.00
H
ATOM   1082 2HB  GLU    68      15.353  18.332 -14.003  1.00  0.00
H
ATOM   1083  CG  GLU    68      14.965  18.431 -16.098  1.00  0.00
C
ATOM   1084 1HG  GLU    68      14.189  17.665 -16.092  1.00  0.00
H
ATOM   1085 2HG  GLU    68      14.487  19.403 -15.978  1.00  0.00
H
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ATOM   1086  CD  GLU    68      15.700  18.413 -17.423  1.00  0.00
C
ATOM   1087  OE1 GLU    68      16.014  17.329 -17.959  1.00  0.00
O
ATOM   1088  OE2 GLU    68      16.034  19.514 -17.916  1.00  0.00
O
ATOM   1089  N   LEU    69      16.377  21.297 -15.628  1.00  0.00
N
ATOM   1090  H   LEU    69      16.290  20.862 -16.547  1.00  0.00
H
ATOM   1091  CA  LEU    69      16.003  22.711 -15.501  1.00  0.00
C
ATOM   1092  HA  LEU    69      16.813  23.256 -15.016  1.00  0.00
H
ATOM   1093  C   LEU    69      14.729  22.894 -14.677  1.00  0.00
C
ATOM   1094  O   LEU    69      14.420  23.974 -14.184  1.00  0.00
O
ATOM   1095  CB  LEU    69      15.753  23.306 -16.892  1.00  0.00
C
ATOM   1096 1HB  LEU    69      14.872  22.812 -17.302  1.00  0.00
H
ATOM   1097 2HB  LEU    69      15.507  24.359 -16.760  1.00  0.00
H
ATOM   1098  CG  LEU    69      16.858  23.214 -17.956  1.00  0.00
C
ATOM   1099  HG  LEU    69      17.092  22.164 -18.123  1.00  0.00
H
ATOM   1100  CD1 LEU    69      16.334  23.794 -19.267  1.00  0.00
C
ATOM   1101 1HD1 LEU    69      17.100  23.704 -20.038  1.00  0.00
H
ATOM   1102 2HD1 LEU    69      16.080  24.848 -19.142  1.00  0.00
H
ATOM   1103 3HD1 LEU    69      15.452  23.243 -19.592  1.00  0.00
H
ATOM   1104  CD2 LEU    69      18.144  23.926 -17.556  1.00  0.00
C
ATOM   1105 1HD2 LEU    69      18.887  23.806 -18.343  1.00  0.00
H
ATOM   1106 2HD2 LEU    69      18.541  23.500 -16.636  1.00  0.00
H
ATOM   1107 3HD2 LEU    69      17.951  24.989 -17.411  1.00  0.00
H
ATOM   1108  N   GLU    70      13.986  21.810 -14.526  1.00  0.00
N
ATOM   1109  H   GLU    70      14.278  20.958 -14.977  1.00  0.00
H
ATOM   1110  CA  GLU    70      12.745  21.794 -13.752  1.00  0.00
C
ATOM   1111  HA  GLU    70      12.276  22.779 -13.783  1.00  0.00
H
ATOM   1112  C   GLU    70      12.979  21.397 -12.295  1.00  0.00
C
ATOM   1113  O   GLU    70      12.040  21.289 -11.499  1.00  0.00
O
ATOM   1114  CB  GLU    70      11.789  20.768 -14.359  1.00  0.00
C
ATOM   1115 1HB  GLU    70      12.245  19.781 -14.283  1.00  0.00
H
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ATOM   1116 2HB  GLU    70      10.876  20.780 -13.772  1.00  0.00
H
ATOM   1117  CG  GLU    70      11.424  21.025 -15.810  1.00  0.00
C
ATOM   1118 1HG  GLU    70      11.064  22.050 -15.905  1.00  0.00
H
ATOM   1119 2HG  GLU    70      12.311  20.906 -16.434  1.00  0.00
H
ATOM   1120  CD  GLU    70      10.342  20.079 -16.306  1.00  0.00
C
ATOM   1121  OE1 GLU    70      10.020  19.073 -15.633  1.00  0.00
O
ATOM   1122  OE2 GLU    70       9.801  20.311 -17.412  1.00  0.00
O
ATOM   1123  N   ALA    71      14.228  21.109 -11.960  1.00  0.00
N
ATOM   1124  H   ALA    71      14.969  21.258 -12.633  1.00  0.00
H
ATOM   1125  CA  ALA    71      14.579  20.550 -10.661  1.00  0.00
C
ATOM   1126  HA  ALA    71      13.729  19.975 -10.292  1.00  0.00
H
ATOM   1127  C   ALA    71      14.927  21.620  -9.613  1.00  0.00
C
ATOM   1128  O   ALA    71      15.189  22.773  -9.942  1.00  0.00
O
ATOM   1129  CB  ALA    71      15.742  19.591 -10.863  1.00  0.00
C
ATOM   1130 1HB  ALA    71      15.555  18.958 -11.732  1.00  0.00
H
ATOM   1131 2HB  ALA    71      15.840  18.953  -9.999  1.00  0.00
H
ATOM   1132 3HB  ALA    71      16.667  20.150 -11.013  1.00  0.00
H
ATOM   1133  N   LEU    72      15.006  21.220  -8.351  1.00  0.00
N
ATOM   1134  H   LEU    72      14.872  20.247  -8.134  1.00  0.00
H
ATOM   1135  CA  LEU    72      15.297  22.141  -7.248  1.00  0.00
C
ATOM   1136  HA  LEU    72      14.529  22.913  -7.229  1.00  0.00
H
ATOM   1137  C   LEU    72      16.633  22.851  -7.334  1.00  0.00
C
ATOM   1138  O   LEU    72      16.743  23.989  -6.901  1.00  0.00
O
ATOM   1139  CB  LEU    72      15.304  21.400  -5.910  1.00  0.00
C
ATOM   1140 1HB  LEU    72      16.006  20.574  -5.981  1.00  0.00
H
ATOM   1141 2HB  LEU    72      15.687  22.085  -5.152  1.00  0.00
H
ATOM   1142  CG  LEU    72      13.973  20.855  -5.400  1.00  0.00
C
ATOM   1143  HG  LEU    72      13.515  20.239  -6.173  1.00  0.00
H
ATOM   1144  CD1 LEU    72      14.216  19.999  -4.177  1.00  0.00
C
ATOM   1145 1HD1 LEU    72      13.277  19.537  -3.872  1.00  0.00
H
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ATOM   1146 2HD1 LEU    72      14.596  20.612  -3.363  1.00  0.00
H
ATOM   1147 3HD1 LEU    72      14.937  19.217  -4.406  1.00  0.00
H
ATOM   1148  CD2 LEU    72      13.057  22.013  -5.062  1.00  0.00
C
ATOM   1149 1HD2 LEU    72      12.166  21.644  -4.558  1.00  0.00
H
ATOM   1150 2HD2 LEU    72      12.748  22.528  -5.970  1.00  0.00
H
ATOM   1151 3HD2 LEU    72      13.560  22.726  -4.409  1.00  0.00
H
ATOM   1152  N   ARG    73      17.647  22.205  -7.895  1.00  0.00
N
ATOM   1153  H   ARG    73      17.521  21.237  -8.180  1.00  0.00
H
ATOM   1154  CA  ARG    73      18.944  22.863  -8.075  1.00  0.00
C
ATOM   1155  HA  ARG    73      19.320  23.173  -7.099  1.00  0.00
H
ATOM   1156  C   ARG    73      18.790  24.112  -8.937  1.00  0.00
C
ATOM   1157  O   ARG    73      19.436  25.133  -8.684  1.00  0.00
O
ATOM   1158  CB  ARG    73      19.946  21.900  -8.719  1.00  0.00
C
ATOM   1159 1HB  ARG    73      19.925  20.961  -8.167  1.00  0.00
H
ATOM   1160 2HB  ARG    73      19.635  21.709  -9.744  1.00  0.00
H
ATOM   1161  CG  ARG    73      21.380  22.421  -8.727  1.00  0.00
C
ATOM   1162 1HG  ARG    73      21.429  23.354  -9.287  1.00  0.00
H
ATOM   1163 2HG  ARG    73      21.674  22.622  -7.698  1.00  0.00
H
ATOM   1164  CD  ARG    73      22.371  21.431  -9.330  1.00  0.00
C
ATOM   1165 1HD  ARG    73      23.379  21.742  -9.053  1.00  0.00
H
ATOM   1166 2HD  ARG    73      22.195  20.446  -8.894  1.00  0.00
H
ATOM   1167  NE  ARG    73      22.311  21.327 -10.797  1.00  0.00
N
ATOM   1168  HE  ARG    73      21.743  20.586 -11.176  1.00  0.00
H
ATOM   1169  CZ  ARG    73      22.988  22.075 -11.661  1.00  0.00
C
ATOM   1170  NH1 ARG    73      23.631  23.168 -11.337  1.00  0.00
N
ATOM   1171 1HH1 ARG    73      23.627  23.500 -10.386  1.00  0.00
H
ATOM   1172 2HH1 ARG    73      24.119  23.692 -12.050  1.00  0.00
H
ATOM   1173  NH2 ARG    73      23.037  21.714 -12.910  1.00  0.00
N
ATOM   1174 1HH2 ARG    73      22.584  20.869 -13.220  1.00  0.00
H
ATOM   1175 2HH2 ARG    73      23.546  22.272 -13.579  1.00  0.00
H
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ATOM   1176  N   PHE    74      17.924  24.039  -9.936  1.00  0.00
N
ATOM   1177  H   PHE    74      17.397  23.190 -10.082  1.00  0.00
H
ATOM   1178  CA  PHE    74      17.685  25.162 -10.835  1.00  0.00
C
ATOM   1179  HA  PHE    74      18.634  25.656 -11.045  1.00  0.00
H
ATOM   1180  C   PHE    74      16.726  26.183 -10.216  1.00  0.00
C
ATOM   1181  O   PHE    74      16.926  27.391 -10.364  1.00  0.00
O
ATOM   1182  CB  PHE    74      17.112  24.635 -12.150  1.00  0.00
C
ATOM   1183 1HB  PHE    74      17.701  23.776 -12.463  1.00  0.00
H
ATOM   1184 2HB  PHE    74      16.087  24.305 -11.990  1.00  0.00
H
ATOM   1185  CG  PHE    74      17.141  25.642 -13.262  1.00  0.00
C
ATOM   1186  CD1 PHE    74      18.236  25.687 -14.140  1.00  0.00
C
ATOM   1187  HD1 PHE    74      19.054  24.995 -14.014  1.00  0.00
H
ATOM   1188  CD2 PHE    74      16.085  26.551 -13.438  1.00  0.00
C
ATOM   1189  HD2 PHE    74      15.238  26.533 -12.767  1.00  0.00
H
ATOM   1190  CE1 PHE    74      18.285  26.630 -15.192  1.00  0.00
C
ATOM   1191  HE1 PHE    74      19.135  26.659 -15.858  1.00  0.00
H
ATOM   1192  CE2 PHE    74      16.111  27.489 -14.492  1.00  0.00
C
ATOM   1193  HE2 PHE    74      15.290  28.179 -14.616  1.00  0.00
H
ATOM   1194  CZ  PHE    74      17.213  27.524 -15.378  1.00  0.00
C
ATOM   1195  HZ  PHE    74      17.238  28.235 -16.191  1.00  0.00
H
ATOM   1196  N   LYS    75      15.712  25.708  -9.502  1.00  0.00
N
ATOM   1197  H   LYS    75      15.594  24.704  -9.423  1.00  0.00
H
ATOM   1198  CA  LYS    75      14.731  26.582  -8.845  1.00  0.00
C
ATOM   1199  HA  LYS    75      14.221  27.159  -9.615  1.00  0.00
H
ATOM   1200  C   LYS    75      15.408  27.558  -7.879  1.00  0.00
C
ATOM   1201  O   LYS    75      16.302  27.173  -7.129  1.00  0.00
O
ATOM   1202  CB  LYS    75      13.696  25.722  -8.099  1.00  0.00
C
ATOM   1203 1HB  LYS    75      13.387  24.916  -8.759  1.00  0.00
H
ATOM   1204 2HB  LYS    75      14.174  25.282  -7.224  1.00  0.00
H
ATOM   1205  CG  LYS    75      12.442  26.481  -7.652  1.00  0.00
C
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ATOM   1206 1HG  LYS    75      12.755  27.307  -7.022  1.00  0.00
H
ATOM   1207 2HG  LYS    75      11.940  26.884  -8.531  1.00  0.00
H
ATOM   1208  CD  LYS    75      11.446  25.636  -6.856  1.00  0.00
C
ATOM   1209 1HD  LYS    75      11.084  24.815  -7.475  1.00  0.00
H
ATOM   1210 2HD  LYS    75      11.950  25.225  -5.984  1.00  0.00
H
ATOM   1211  CE  LYS    75      10.260  26.499  -6.393  1.00  0.00
C
ATOM   1212 1HE  LYS    75      10.648  27.375  -5.869  1.00  0.00
H
ATOM   1213 2HE  LYS    75       9.718  26.847  -7.275  1.00  0.00
H
ATOM   1214  NZ  LYS    75       9.292  25.797  -5.477  1.00  0.00
N
ATOM   1215 1HZ  LYS    75       8.501  26.400  -5.284  1.00  0.00
H
ATOM   1216 2HZ  LYS    75       9.740  25.580  -4.594  1.00  0.00
H
ATOM   1217 3HZ  LYS    75       8.958  24.939  -5.903  1.00  0.00
H
ATOM   1218  N   TYR    76      15.001  28.820  -7.897  1.00  0.00
N
ATOM   1219  H   TYR    76      14.304  29.103  -8.578  1.00  0.00
H
ATOM   1220  CA  TYR    76      15.538  29.822  -6.970  1.00  0.00
C
ATOM   1221  HA  TYR    76      16.627  29.807  -7.020  1.00  0.00
H
ATOM   1222  C   TYR    76      15.118  29.526  -5.529  1.00  0.00
C
ATOM   1223  O   TYR    76      15.920  29.682  -4.605  1.00  0.00
O
ATOM   1224  CB  TYR    76      15.048  31.218  -7.365  1.00  0.00
C
ATOM   1225 1HB  TYR    76      15.353  31.415  -8.393  1.00  0.00
H
ATOM   1226 2HB  TYR    76      13.961  31.240  -7.322  1.00  0.00
H
ATOM   1227  CG  TYR    76      15.584  32.324  -6.477  1.00  0.00
C
ATOM   1228  CD1 TYR    76      16.888  32.826  -6.659  1.00  0.00
C
ATOM   1229  HD1 TYR    76      17.516  32.417  -7.439  1.00  0.00
H
ATOM   1230  CD2 TYR    76      14.793  32.870  -5.442  1.00  0.00
C
ATOM   1231  HD2 TYR    76      13.794  32.487  -5.268  1.00  0.00
H
ATOM   1232  CE1 TYR    76      17.391  33.867  -5.829  1.00  0.00
C
ATOM   1233  HE1 TYR    76      18.391  34.249  -5.973  1.00  0.00
H
ATOM   1234  CE2 TYR    76      15.293  33.912  -4.611  1.00  0.00
C
ATOM   1235  HE2 TYR    76      14.679  34.318  -3.821  1.00  0.00
H
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ATOM   1236  CZ  TYR    76      16.591  34.393  -4.811  1.00  0.00
C
ATOM   1237  OH  TYR    76      17.113  35.364  -3.997  1.00  0.00
O
ATOM   1238  HH  TYR    76      16.517  35.619  -3.284  1.00  0.00
H
ATOM   1239  N   VAL    77      13.875  29.070  -5.390  1.00  0.00
N
ATOM   1240  H   VAL    77      13.304  29.026  -6.225  1.00  0.00
H
ATOM   1241  CA  VAL    77      13.219  28.678  -4.129  1.00  0.00
C
ATOM   1242  HA  VAL    77      12.272  28.211  -4.395  1.00  0.00
H
ATOM   1243  C   VAL    77      12.878  29.920  -3.296  1.00  0.00
C
ATOM   1244  O   VAL    77      13.729  30.770  -3.031  1.00  0.00
O
ATOM   1245  CB  VAL    77      14.030  27.615  -3.300  1.00  0.00
C
ATOM   1246  HB  VAL    77      14.948  28.068  -2.932  1.00  0.00
H
ATOM   1247  CG1 VAL    77      13.234  27.124  -2.102  1.00  0.00
C
ATOM   1248 1HG1 VAL    77      13.757  26.306  -1.611  1.00  0.00
H
ATOM   1249 2HG1 VAL    77      12.253  26.778  -2.422  1.00  0.00
H
ATOM   1250 3HG1 VAL    77      13.115  27.936  -1.387  1.00  0.00
H
ATOM   1251  CG2 VAL    77      14.406  26.401  -4.164  1.00  0.00
C
ATOM   1252 1HG2 VAL    77      14.944  25.670  -3.560  1.00  0.00
H
ATOM   1253 2HG2 VAL    77      15.060  26.712  -4.975  1.00  0.00
H
ATOM   1254 3HG2 VAL    77      13.512  25.938  -4.574  1.00  0.00
H
ATOM   1255  N   GLU    78      11.622  30.048  -2.892  1.00  0.00
N
ATOM   1256  H   GLU    78      10.941  29.313  -3.088  1.00  0.00
H
ATOM   1257  CA  GLU    78      11.194  31.212  -2.117  1.00  0.00
C
ATOM   1258  HA  GLU    78      11.473  32.124  -2.645  1.00  0.00
H
ATOM   1259  C   GLU    78      11.879  31.197  -0.757  1.00  0.00
C
ATOM   1260  O   GLU    78      12.183  30.131  -0.212  1.00  0.00
O
ATOM   1261  CB  GLU    78       9.682  31.194  -1.872  1.00  0.00
C
ATOM   1262 1HB  GLU    78       9.432  30.255  -1.392  1.00  0.00
H
ATOM   1263 2HB  GLU    78       9.429  31.997  -1.179  1.00  0.00
H
ATOM   1264  CG  GLU    78       8.818  31.340  -3.112  1.00  0.00
C
ATOM   1265 1HG  GLU    78       9.073  30.555  -3.824  1.00  0.00
H
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ATOM   1266 2HG  GLU    78       7.775  31.216  -2.819  1.00  0.00
H
ATOM   1267  CD  GLU    78       8.968  32.697  -3.775  1.00  0.00
C
ATOM   1268  OE1 GLU    78       8.744  33.733  -3.105  1.00  0.00
O
ATOM   1269  OE2 GLU    78       9.295  32.763  -4.981  1.00  0.00
O
ATOM   1270  N   GLN    79      12.079  32.372  -0.177  1.00  0.00
N
ATOM   1271  H   GLN    79      11.797  33.224  -0.662  1.00  0.00
H
ATOM   1272  CA  GLN    79      12.704  32.483   1.140  1.00  0.00
C
ATOM   1273  HA  GLN    79      13.716  32.078   1.099  1.00  0.00
H
ATOM   1274  C   GLN    79      11.893  31.692   2.159  1.00  0.00
C
ATOM   1275  O   GLN    79      12.446  31.005   2.999  1.00  0.00
O
ATOM   1276  CB  GLN    79      12.751  33.956   1.552  1.00  0.00
C
ATOM   1277 1HB  GLN    79      13.218  34.522   0.745  1.00  0.00
H
ATOM   1278 2HB  GLN    79      11.726  34.292   1.663  1.00  0.00
H
ATOM   1279  CG  GLN    79      13.484  34.275   2.856  1.00  0.00
C
ATOM   1280 1HG  GLN    79      13.018  33.729   3.676  1.00  0.00
H
ATOM   1281 2HG  GLN    79      14.522  33.955   2.769  1.00  0.00
H
ATOM   1282  CD  GLN    79      13.449  35.761   3.181  1.00  0.00
C
ATOM   1283  OE1 GLN    79      12.792  36.545   2.506  1.00  0.00
O
ATOM   1284  NE2 GLN    79      14.169  36.166   4.187  1.00  0.00
N
ATOM   1285 1HE2 GLN    79      14.185  37.145   4.421  1.00  0.00
H
ATOM   1286 2HE2 GLN    79      14.700  35.501   4.729  1.00  0.00
H
ATOM   1287  N   GLU    80      10.575  31.749   2.060  1.00  0.00
N
ATOM   1288  H   GLU    80      10.156  32.296   1.325  1.00  0.00
H
ATOM   1289  CA  GLU    80       9.711  31.074   3.025  1.00  0.00
C
ATOM   1290  HA  GLU    80      10.044  31.355   4.025  1.00  0.00
H
ATOM   1291  C   GLU    80       9.752  29.546   2.945  1.00  0.00
C
ATOM   1292  O   GLU    80       9.491  28.861   3.927  1.00  0.00
O
ATOM   1293  CB  GLU    80       8.280  31.588   2.843  1.00  0.00
C
ATOM   1294 1HB  GLU    80       8.329  32.669   2.782  1.00  0.00
H
ATOM   1295 2HB  GLU    80       7.883  31.218   1.898  1.00  0.00
H
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ATOM   1296  CG  GLU    80       7.315  31.235   3.964  1.00  0.00
C
ATOM   1297 1HG  GLU    80       6.361  31.713   3.759  1.00  0.00
H
ATOM   1298 2HG  GLU    80       7.163  30.155   3.976  1.00  0.00
H
ATOM   1299  CD  GLU    80       7.795  31.679   5.335  1.00  0.00
C
ATOM   1300  OE1 GLU    80       8.329  32.799   5.497  1.00  0.00
O
ATOM   1301  OE2 GLU    80       7.650  30.892   6.289  1.00  0.00
O
ATOM   1302  N   GLU    81      10.121  28.978   1.807  1.00  0.00
N
ATOM   1303  H   GLU    81      10.381  29.544   1.008  1.00  0.00
H
ATOM   1304  CA  GLU    81      10.200  27.518   1.700  1.00  0.00
C
ATOM   1305  HA  GLU    81       9.283  27.067   2.078  1.00  0.00
H
ATOM   1306  C   GLU    81      11.374  26.972   2.509  1.00  0.00
C
ATOM   1307  O   GLU    81      11.358  25.808   2.913  1.00  0.00
O
ATOM   1308  CB  GLU    81      10.406  27.087   0.249  1.00  0.00
C
ATOM   1309 1HB  GLU    81      11.258  27.634  -0.142  1.00  0.00
H
ATOM   1310 2HB  GLU    81      10.646  26.023   0.234  1.00  0.00
H
ATOM   1311  CG  GLU    81       9.224  27.316  -0.673  1.00  0.00
C
ATOM   1312 1HG  GLU    81       8.377  26.730  -0.318  1.00  0.00
H
ATOM   1313 2HG  GLU    81       8.948  28.367  -0.644  1.00  0.00
H
ATOM   1314  CD  GLU    81       9.553  26.922  -2.107  1.00  0.00
C
ATOM   1315  OE1 GLU    81       9.761  27.815  -2.962  1.00  0.00
O
ATOM   1316  OE2 GLU    81       9.656  25.713  -2.400  1.00  0.00
O
ATOM   1317  N   LEU    82      12.388  27.806   2.717  1.00  0.00
N
ATOM   1318  H   LEU    82      12.304  28.763   2.402  1.00  0.00
H
ATOM   1319  CA  LEU    82      13.639  27.363   3.335  1.00  0.00
C
ATOM   1320  HA  LEU    82      13.482  26.369   3.749  1.00  0.00
H
ATOM   1321  C   LEU    82      14.275  28.175   4.452  1.00  0.00
C
ATOM   1322  O   LEU    82      14.763  27.580   5.406  1.00  0.00
O
ATOM   1323  CB  LEU    82      14.713  27.279   2.248  1.00  0.00
C
ATOM   1324 1HB  LEU    82      14.561  28.111   1.561  1.00  0.00
H
ATOM   1325 2HB  LEU    82      15.677  27.426   2.731  1.00  0.00
H
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ATOM   1326  CG  LEU    82      14.832  25.993   1.429  1.00  0.00
C
ATOM   1327  HG  LEU    82      13.880  25.789   0.943  1.00  0.00
H
ATOM   1328  CD1 LEU    82      15.905  26.179   0.359  1.00  0.00
C
ATOM   1329 1HD1 LEU    82      15.929  25.310  -0.294  1.00  0.00
H
ATOM   1330 2HD1 LEU    82      16.875  26.306   0.824  1.00  0.00
H
ATOM   1331 3HD1 LEU    82      15.678  27.060  -0.245  1.00  0.00
H
ATOM   1332  CD2 LEU    82      15.195  24.824   2.339  1.00  0.00
C
ATOM   1333 1HD2 LEU    82      15.429  23.944   1.754  1.00  0.00
H
ATOM   1334 2HD2 LEU    82      14.346  24.581   2.974  1.00  0.00
H
ATOM   1335 3HD2 LEU    82      16.054  25.072   2.965  1.00  0.00
H
ATOM   1336  N   LYS    83      14.380  29.490   4.278  1.00  0.00
N
ATOM   1337  H   LYS    83      13.876  29.917   3.507  1.00  0.00
H
ATOM   1338  CA  LYS    83      15.224  30.367   5.107  1.00  0.00
C
ATOM   1339  HA  LYS    83      15.322  31.336   4.617  1.00  0.00
H
ATOM   1340  C   LYS    83      16.616  29.770   5.261  1.00  0.00
C
ATOM   1341  O   LYS    83      17.099  29.659   6.370  1.00  0.00
O
ATOM   1342  CB  LYS    83      14.599  30.608   6.489  1.00  0.00
C
ATOM   1343 1HB  LYS    83      14.457  29.655   6.997  1.00  0.00
H
ATOM   1344 2HB  LYS    83      15.285  31.211   7.079  1.00  0.00
H
ATOM   1345  CG  LYS    83      13.286  31.344   6.436  1.00  0.00
C
ATOM   1346 1HG  LYS    83      13.426  32.274   5.885  1.00  0.00
H
ATOM   1347 2HG  LYS    83      12.545  30.739   5.920  1.00  0.00
H
ATOM   1348  CD  LYS    83      12.808  31.667   7.842  1.00  0.00
C
ATOM   1349 1HD  LYS    83      12.648  30.747   8.407  1.00  0.00
H
ATOM   1350 2HD  LYS    83      13.573  32.264   8.339  1.00  0.00
H
ATOM   1351  CE  LYS    83      11.527  32.474   7.786  1.00  0.00
C
ATOM   1352 1HE  LYS    83      11.371  32.937   8.762  1.00  0.00
H
ATOM   1353 2HE  LYS    83      11.654  33.271   7.050  1.00  0.00
H
ATOM   1354  NZ  LYS    83      10.306  31.679   7.451  1.00  0.00
N
ATOM   1355 1HZ  LYS    83       9.629  32.248   6.951  1.00  0.00
H
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ATOM   1356 2HZ  LYS    83       9.877  31.344   8.302  1.00  0.00
H
ATOM   1357 3HZ  LYS    83      10.547  30.880   6.875  1.00  0.00
H
ATOM   1358  N   VAL    84      17.178  29.281   4.161  1.00  0.00
N
ATOM   1359  H   VAL    84      16.745  29.519   3.277  1.00  0.00
H
ATOM   1360  CA  VAL    84      18.316  28.339   4.085  1.00  0.00
C
ATOM   1361  HA  VAL    84      18.271  27.993   3.055  1.00  0.00
H
ATOM   1362  C   VAL    84      18.244  27.009   4.870  1.00  0.00
C
ATOM   1363  O   VAL    84      18.559  25.974   4.280  1.00  0.00
O
ATOM   1364  CB  VAL    84      19.726  29.028   4.162  1.00  0.00
C
ATOM   1365  HB  VAL    84      20.475  28.253   4.022  1.00  0.00
H
ATOM   1366  CG1 VAL    84      19.877  30.041   3.020  1.00  0.00
C
ATOM   1367 1HG1 VAL    84      20.895  30.432   3.007  1.00  0.00
H
ATOM   1368 2HG1 VAL    84      19.182  30.872   3.155  1.00  0.00
H
ATOM   1369 3HG1 VAL    84      19.675  29.561   2.063  1.00  0.00
H
ATOM   1370  CG2 VAL    84      20.034  29.729   5.485  1.00  0.00
C
ATOM   1371 1HG2 VAL    84      21.076  30.051   5.500  1.00  0.00
H
ATOM   1372 2HG2 VAL    84      19.862  29.050   6.316  1.00  0.00
H
ATOM   1373 3HG2 VAL    84      19.394  30.604   5.613  1.00  0.00
H
ATOM   1374  N   ALA    85      17.754  27.042   6.105  1.00  0.00
N
ATOM   1375  H   ALA    85      17.585  27.975   6.482  1.00  0.00
H
ATOM   1376  CA  ALA    85      17.181  25.941   6.904  1.00  0.00
C
ATOM   1377  HA  ALA    85      16.331  25.503   6.378  1.00  0.00
H
ATOM   1378  C   ALA    85      16.705  26.649   8.182  1.00  0.00
C
ATOM   1379  O   ALA    85      15.684  26.335   8.789  1.00  0.00
O
ATOM   1380  CB  ALA    85      18.194  24.859   7.275  1.00  0.00
C
ATOM   1381 1HB  ALA    85      18.959  24.780   6.509  1.00  0.00
H
ATOM   1382 2HB  ALA    85      17.676  23.902   7.363  1.00  0.00
H
ATOM   1383 3HB  ALA    85      18.657  25.084   8.233  1.00  0.00
H
ATOM   1384  N   THR    86      17.517  27.622   8.567  1.00  0.00
N
ATOM   1385  H   THR    86      18.371  27.785   8.057  1.00  0.00
H
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ATOM   1386  CA  THR    86      17.240  28.543   9.660  1.00  0.00
C
ATOM   1387  HA  THR    86      16.165  28.702   9.750  1.00  0.00
H
ATOM   1388  C   THR    86      17.914  29.852   9.267  1.00  0.00
C
ATOM   1389  O   THR    86      19.033  29.842   8.739  1.00  0.00
O
ATOM   1390  CB  THR    86      17.816  28.042  11.011  1.00  0.00
C
ATOM   1391  HB  THR    86      17.174  27.249  11.385  1.00  0.00
H
ATOM   1392  OG1 THR    86      17.831  29.114  11.955  1.00  0.00
O
ATOM   1393  HG1 THR    86      18.581  29.679  11.749  1.00  0.00
H
ATOM   1394  CG2 THR    86      19.241  27.491  10.907  1.00  0.00
C
ATOM   1395 1HG2 THR    86      19.586  27.220  11.903  1.00  0.00
H
ATOM   1396 2HG2 THR    86      19.916  28.232  10.487  1.00  0.00
H
ATOM   1397 3HG2 THR    86      19.245  26.591  10.294  1.00  0.00
H
ATOM   1398  N   ASP    87      17.249  30.970   9.512  1.00  0.00
N
ATOM   1399  H   ASP    87      16.325  30.934   9.918  1.00  0.00
H
ATOM   1400  CA  ASP    87      17.814  32.290   9.258  1.00  0.00
C
ATOM   1401  HA  ASP    87      18.877  32.280   9.494  1.00  0.00
H
ATOM   1402  C   ASP    87      17.082  33.260  10.174  1.00  0.00
C
ATOM   1403  O   ASP    87      16.107  32.883  10.828  1.00  0.00
O
ATOM   1404  CB  ASP    87      17.620  32.727   7.803  1.00  0.00
C
ATOM   1405 1HB  ASP    87      17.702  31.859   7.162  1.00  0.00
H
ATOM   1406 2HB  ASP    87      16.624  33.155   7.688  1.00  0.00
H
ATOM   1407  CG  ASP    87      18.662  33.729   7.341  1.00  0.00
C
ATOM   1408  OD1 ASP    87      19.511  34.183   8.141  1.00  0.00
O
ATOM   1409  OD2 ASP    87      18.665  34.058   6.134  1.00  0.00
O
ATOM   1410  N   LEU    88      17.533  34.502  10.188  1.00  0.00
N
ATOM   1411  H   LEU    88      18.340  34.723   9.613  1.00  0.00
H
ATOM   1412  CA  LEU    88      16.903  35.588  10.926  1.00  0.00
C
ATOM   1413  HA  LEU    88      16.844  35.310  11.978  1.00  0.00
H
ATOM   1414  C   LEU    88      15.481  35.862  10.427  1.00  0.00
C
ATOM   1415  O   LEU    88      15.110  35.470   9.319  1.00  0.00
O
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ATOM   1416  CB  LEU    88      17.808  36.818  10.783  1.00  0.00
C
ATOM   1417 1HB  LEU    88      17.413  37.618  11.402  1.00  0.00
H
ATOM   1418 2HB  LEU    88      18.772  36.536  11.205  1.00  0.00
H
ATOM   1419  CG  LEU    88      18.088  37.380   9.375  1.00  0.00
C
ATOM   1420  HG  LEU    88      18.074  36.561   8.658  1.00  0.00
H
ATOM   1421  CD1 LEU    88      17.075  38.421   8.924  1.00  0.00
C
ATOM   1422 1HD1 LEU    88      17.356  38.801   7.941  1.00  0.00
H
ATOM   1423 2HD1 LEU    88      17.043  39.251   9.630  1.00  0.00
H
ATOM   1424 3HD1 LEU    88      16.088  37.971   8.845  1.00  0.00
H
ATOM   1425  CD2 LEU    88      19.486  37.984   9.351  1.00  0.00
C
ATOM   1426 1HD2 LEU    88      19.688  38.397   8.361  1.00  0.00
H
ATOM   1427 2HD2 LEU    88      20.226  37.211   9.560  1.00  0.00
H
ATOM   1428 3HD2 LEU    88      19.571  38.777  10.095  1.00  0.00
H
ATOM   1429  N   HIS    89      14.686  36.535  11.247  1.00  0.00
N
ATOM   1430  H   HIS    89      15.054  36.857  12.139  1.00  0.00
H
ATOM   1431  CA  HIS    89      13.282  36.823  10.945  1.00  0.00
C
ATOM   1432  HA  HIS    89      13.017  36.424   9.966  1.00  0.00
H
ATOM   1433  C   HIS    89      13.032  38.327  10.939  1.00  0.00
C
ATOM   1434  O   HIS    89      12.780  38.927  11.987  1.00  0.00
O
ATOM   1435  CB  HIS    89      12.367  36.193  11.998  1.00  0.00
C
ATOM   1436 1HB  HIS    89      12.628  36.590  12.978  1.00  0.00
H
ATOM   1437 2HB  HIS    89      11.340  36.482  11.776  1.00  0.00
H
ATOM   1438  CG  HIS    89      12.430  34.698  12.059  1.00  0.00
C
ATOM   1439  ND1 HIS    89      13.335  33.996  12.849  1.00  0.00
N
ATOM   1440  HD1 HIS    89      14.095  34.403  13.392  1.00  0.00
H
ATOM   1441  CD2 HIS    89      11.607  33.746  11.552  1.00  0.00
C
ATOM   1442  HD2 HIS    89      10.749  33.922  10.915  1.00  0.00
H
ATOM   1443  CE1 HIS    89      13.038  32.707  12.809  1.00  0.00
C
ATOM   1444  HE1 HIS    89      13.565  31.923  13.340  1.00  0.00
H
ATOM   1445  NE2 HIS    89      11.996  32.533  12.039  1.00  0.00
N
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ATOM   1446  HE2 HIS    89      11.518  31.636  11.880  1.00  0.00
H
ATOM   1447  N   SER    90      13.116  38.941   9.771  1.00  0.00
N
ATOM   1448  H   SER    90      13.391  38.411   8.951  1.00  0.00
H
ATOM   1449  CA  SER    90      12.837  40.372   9.634  1.00  0.00
C
ATOM   1450  HA  SER    90      12.422  40.752  10.565  1.00  0.00
H
ATOM   1451  C   SER    90      11.850  40.722   8.527  1.00  0.00
C
ATOM   1452  O   SER    90      11.231  41.781   8.579  1.00  0.00
O
ATOM   1453  CB  SER    90      14.142  41.114   9.363  1.00  0.00
C
ATOM   1454 1HB  SER    90      13.938  42.182   9.278  1.00  0.00
H
ATOM   1455 2HB  SER    90      14.826  40.947  10.196  1.00  0.00
H
ATOM   1456  OG  SER    90      14.746  40.647   8.168  1.00  0.00
O
ATOM   1457  HG  SER    90      15.555  41.161   8.028  1.00  0.00
H
ATOM   1458  N   SER    91      11.711  39.865   7.526  1.00  0.00
N
ATOM   1459  H   SER    91      12.191  38.973   7.553  1.00  0.00
H
ATOM   1460  CA  SER    91      10.984  40.209   6.302  1.00  0.00
C
ATOM   1461  HA  SER    91      10.409  41.116   6.474  1.00  0.00
H
ATOM   1462  C   SER    91      10.013  39.111   5.885  1.00  0.00
C
ATOM   1463  O   SER    91       9.974  38.677   4.738  1.00  0.00
O
ATOM   1464  CB  SER    91      12.000  40.485   5.195  1.00  0.00
C
ATOM   1465 1HB  SER    91      12.557  39.572   4.981  1.00  0.00
H
ATOM   1466 2HB  SER    91      11.482  40.810   4.294  1.00  0.00
H
ATOM   1467  OG  SER    91      12.899  41.499   5.623  1.00  0.00
O
ATOM   1468  HG  SER    91      13.753  41.373   5.189  1.00  0.00
H
ATOM   1469  N   LEU    92       9.256  38.619   6.853  1.00  0.00
N
ATOM   1470  H   LEU    92       9.276  39.052   7.772  1.00  0.00
H
ATOM   1471  CA  LEU    92       8.399  37.456   6.646  1.00  0.00
C
ATOM   1472  HA  LEU    92       8.961  36.692   6.108  1.00  0.00
H
ATOM   1473  C   LEU    92       7.161  37.802   5.837  1.00  0.00
C
ATOM   1474  O   LEU    92       6.602  36.963   5.148  1.00  0.00
O
ATOM   1475  CB  LEU    92       7.940  36.895   7.995  1.00  0.00
C
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ATOM   1476 1HB  LEU    92       7.289  37.634   8.462  1.00  0.00
H
ATOM   1477 2HB  LEU    92       7.338  36.010   7.794  1.00  0.00
H
ATOM   1478  CG  LEU    92       9.010  36.514   9.028  1.00  0.00
C
ATOM   1479  HG  LEU    92       9.556  37.411   9.316  1.00  0.00
H
ATOM   1480  CD1 LEU    92       8.330  35.944  10.268  1.00  0.00
C
ATOM   1481 1HD1 LEU    92       9.075  35.694  11.022  1.00  0.00
H
ATOM   1482 2HD1 LEU    92       7.764  35.044  10.015  1.00  0.00
H
ATOM   1483 3HD1 LEU    92       7.650  36.685  10.689  1.00  0.00
H
ATOM   1484  CD2 LEU    92      10.008  35.510   8.485  1.00  0.00
C
ATOM   1485 1HD2 LEU    92      10.723  35.250   9.261  1.00  0.00
H
ATOM   1486 2HD2 LEU    92      10.555  35.942   7.647  1.00  0.00
H
ATOM   1487 3HD2 LEU    92       9.481  34.614   8.154  1.00  0.00
H
ATOM   1488  N   GLU    93       6.724  39.048   5.933  1.00  0.00
N
ATOM   1489  H   GLU    93       7.248  39.711   6.486  1.00  0.00
H
ATOM   1490  CA  GLU    93       5.476  39.483   5.302  1.00  0.00
C
ATOM   1491  HA  GLU    93       4.690  38.762   5.529  1.00  0.00
H
ATOM   1492  C   GLU    93       5.622  39.572   3.786  1.00  0.00
C
ATOM   1493  O   GLU    93       4.647  39.463   3.036  1.00  0.00
O
ATOM   1494  CB  GLU    93       5.067  40.844   5.867  1.00  0.00
C
ATOM   1495 1HB  GLU    93       5.862  41.555   5.658  1.00  0.00
H
ATOM   1496 2HB  GLU    93       4.157  41.179   5.369  1.00  0.00
H
ATOM   1497  CG  GLU    93       4.824  40.802   7.370  1.00  0.00
C
ATOM   1498 1HG  GLU    93       4.018  40.096   7.574  1.00  0.00
H
ATOM   1499 2HG  GLU    93       5.726  40.448   7.871  1.00  0.00
H
ATOM   1500  CD  GLU    93       4.466  42.151   7.963  1.00  0.00
C
ATOM   1501  OE1 GLU    93       4.701  43.213   7.338  1.00  0.00
O
ATOM   1502  OE2 GLU    93       3.996  42.169   9.121  1.00  0.00
O
ATOM   1503  N   ASN    94       6.859  39.718   3.333  1.00  0.00
N
ATOM   1504  H   ASN    94       7.616  39.811   4.000  1.00  0.00
H
ATOM   1505  CA  ASN    94       7.172  39.740   1.905  1.00  0.00
C
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ATOM   1506  HA  ASN    94       6.575  40.497   1.398  1.00  0.00
H
ATOM   1507  C   ASN    94       6.932  38.404   1.220  1.00  0.00
C
ATOM   1508  O   ASN    94       6.798  38.345   0.000  1.00  0.00
O
ATOM   1509  CB  ASN    94       8.660  40.020   1.696  1.00  0.00
C
ATOM   1510 1HB  ASN    94       9.243  39.405   2.378  1.00  0.00
H
ATOM   1511 2HB  ASN    94       8.925  39.737   0.681  1.00  0.00
H
ATOM   1512  CG  ASN    94       9.034  41.457   1.876  1.00  0.00
C
ATOM   1513  OD1 ASN    94       8.218  42.369   1.761  1.00  0.00
O
ATOM   1514  ND2 ASN    94      10.289  41.684   2.118  1.00  0.00
N
ATOM   1515 1HD2 ASN    94      10.625  42.634   2.164  1.00  0.00
H
ATOM   1516 2HD2 ASN    94      10.922  40.902   2.220  1.00  0.00
H
ATOM   1517  N   VAL    95       6.998  37.325   1.982  1.00  0.00
N
ATOM   1518  H   VAL    95       7.005  37.418   2.992  1.00  0.00
H
ATOM   1519  CA  VAL    95       7.107  35.979   1.427  1.00  0.00
C
ATOM   1520  HA  VAL    95       6.935  36.010   0.352  1.00  0.00
H
ATOM   1521  C   VAL    95       5.992  35.144   2.031  1.00  0.00
C
ATOM   1522  O   VAL    95       5.330  35.589   2.965  1.00  0.00
O
ATOM   1523  CB  VAL    95       8.536  35.415   1.650  1.00  0.00
C
ATOM   1524  HB  VAL    95       8.565  34.391   1.280  1.00  0.00
H
ATOM   1525  CG1 VAL    95       9.540  36.243   0.839  1.00  0.00
C
ATOM   1526 1HG1 VAL    95      10.520  35.778   0.864  1.00  0.00
H
ATOM   1527 2HG1 VAL    95       9.630  37.248   1.248  1.00  0.00
H
ATOM   1528 3HG1 VAL    95       9.217  36.310  -0.201  1.00  0.00
H
ATOM   1529  CG2 VAL    95       8.942  35.428   3.133  1.00  0.00
C
ATOM   1530 1HG2 VAL    95       9.903  34.929   3.255  1.00  0.00
H
ATOM   1531 2HG2 VAL    95       8.200  34.902   3.734  1.00  0.00
H
ATOM   1532 3HG2 VAL    95       9.036  36.451   3.499  1.00  0.00
H
ATOM   1533  N   HIS    96       5.679  34.010   1.420  1.00  0.00
N
ATOM   1534  H   HIS    96       6.306  33.599   0.745  1.00  0.00
H
ATOM   1535  CA  HIS    96       4.362  33.400   1.602  1.00  0.00
C
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ATOM   1536  HA  HIS    96       3.837  33.929   2.394  1.00  0.00
H
ATOM   1537  C   HIS    96       4.387  31.933   1.982  1.00  0.00
C
ATOM   1538  O   HIS    96       4.994  31.111   1.300  1.00  0.00
O
ATOM   1539  CB  HIS    96       3.575  33.610   0.309  1.00  0.00
C
ATOM   1540 1HB  HIS    96       4.032  33.017  -0.483  1.00  0.00
H
ATOM   1541 2HB  HIS    96       2.553  33.260   0.456  1.00  0.00
H
ATOM   1542  CG  HIS    96       3.547  35.043  -0.120  1.00  0.00
C
ATOM   1543  ND1 HIS    96       2.837  36.023   0.561  1.00  0.00
N
ATOM   1544  HD1 HIS    96       2.200  35.846   1.340  1.00  0.00
H
ATOM   1545  CD2 HIS    96       4.248  35.716  -1.068  1.00  0.00
C
ATOM   1546  HD2 HIS    96       4.923  35.271  -1.789  1.00  0.00
H
ATOM   1547  CE1 HIS    96       3.132  37.208   0.049  1.00  0.00
C
ATOM   1548  HE1 HIS    96       2.719  38.157   0.375  1.00  0.00
H
ATOM   1549  NE2 HIS    96       3.994  37.049  -0.926  1.00  0.00
N
ATOM   1550  HE2 HIS    96       4.429  37.801  -1.473  1.00  0.00
H
ATOM   1551  N   LYS    97       3.738  31.620   3.094  1.00  0.00
N
ATOM   1552  H   LYS    97       3.319  32.362   3.644  1.00  0.00
H
ATOM   1553  CA  LYS    97       3.594  30.236   3.544  1.00  0.00
C
ATOM   1554  HA  LYS    97       4.561  29.733   3.536  1.00  0.00
H
ATOM   1555  C   LYS    97       2.665  29.562   2.552  1.00  0.00
C
ATOM   1556  O   LYS    97       1.661  30.155   2.144  1.00  0.00
O
ATOM   1557  CB  LYS    97       2.987  30.199   4.948  1.00  0.00
C
ATOM   1558 1HB  LYS    97       2.082  30.806   4.937  1.00  0.00
H
ATOM   1559 2HB  LYS    97       2.712  29.172   5.189  1.00  0.00
H
ATOM   1560  CG  LYS    97       3.925  30.724   6.039  1.00  0.00
C
ATOM   1561 1HG  LYS    97       4.601  29.927   6.344  1.00  0.00
H
ATOM   1562 2HG  LYS    97       4.519  31.543   5.637  1.00  0.00
H
ATOM   1563  CD  LYS    97       3.170  31.250   7.254  1.00  0.00
C
ATOM   1564 1HD  LYS    97       3.876  31.761   7.910  1.00  0.00
H
ATOM   1565 2HD  LYS    97       2.431  31.975   6.915  1.00  0.00
H
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ATOM   1566  CE  LYS    97       2.469  30.161   8.045  1.00  0.00
C
ATOM   1567 1HE  LYS    97       1.816  29.586   7.387  1.00  0.00
H
ATOM   1568 2HE  LYS    97       3.220  29.488   8.465  1.00  0.00
H
ATOM   1569  NZ  LYS    97       1.652  30.764   9.147  1.00  0.00
N
ATOM   1570 1HZ  LYS    97       1.190  30.036   9.673  1.00  0.00
H
ATOM   1571 2HZ  LYS    97       0.956  31.391   8.761  1.00  0.00
H
ATOM   1572 3HZ  LYS    97       2.247  31.297   9.775  1.00  0.00
H
ATOM   1573  N   PHE    98       2.982  28.334   2.173  1.00  0.00
N
ATOM   1574  H   PHE    98       3.819  27.896   2.542  1.00  0.00
H
ATOM   1575  CA  PHE    98       2.149  27.583   1.239  1.00  0.00
C
ATOM   1576  HA  PHE    98       1.967  28.192   0.354  1.00  0.00
H
ATOM   1577  C   PHE    98       0.814  27.288   1.915  1.00  0.00
C
ATOM   1578  O   PHE    98      -0.240  27.330   1.282  1.00  0.00
O
ATOM   1579  CB  PHE    98       2.840  26.283   0.818  1.00  0.00
C
ATOM   1580 1HB  PHE    98       3.877  26.509   0.570  1.00  0.00
H
ATOM   1581 2HB  PHE    98       2.831  25.582   1.652  1.00  0.00
H
ATOM   1582  CG  PHE    98       2.208  25.636  -0.380  1.00  0.00
C
ATOM   1583  CD1 PHE    98       2.698  25.917  -1.666  1.00  0.00
C
ATOM   1584  HD1 PHE    98       3.538  26.586  -1.789  1.00  0.00
H
ATOM   1585  CD2 PHE    98       1.108  24.771  -0.241  1.00  0.00
C
ATOM   1586  HD2 PHE    98       0.725  24.536   0.742  1.00  0.00
H
ATOM   1587  CE1 PHE    98       2.100  25.346  -2.809  1.00  0.00
C
ATOM   1588  HE1 PHE    98       2.495  25.568  -3.788  1.00  0.00
H
ATOM   1589  CE2 PHE    98       0.485  24.208  -1.384  1.00  0.00
C
ATOM   1590  HE2 PHE    98      -0.365  23.553  -1.273  1.00  0.00
H
ATOM   1591  CZ  PHE    98       0.980  24.497  -2.668  1.00  0.00
C
ATOM   1592  HZ  PHE    98       0.505  24.069  -3.539  1.00  0.00
H
ATOM   1593  N   GLN    99       0.861  27.075   3.223  1.00  0.00
N
ATOM   1594  H   GLN    99       1.764  26.987   3.683  1.00  0.00
H
ATOM   1595  CA  GLN    99      -0.338  26.994   4.046  1.00  0.00
C
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ATOM   1596  HA  GLN    99      -1.211  27.248   3.444  1.00  0.00
H
ATOM   1597  C   GLN    99      -0.237  27.994   5.193  1.00  0.00
C
ATOM   1598  O   GLN    99       0.531  27.820   6.130  1.00  0.00
O
ATOM   1599  CB  GLN    99      -0.507  25.576   4.589  1.00  0.00
C
ATOM   1600 1HB  GLN    99      -0.493  24.877   3.754  1.00  0.00
H
ATOM   1601 2HB  GLN    99       0.331  25.348   5.248  1.00  0.00
H
ATOM   1602  CG  GLN    99      -1.798  25.389   5.354  1.00  0.00
C
ATOM   1603 1HG  GLN    99      -1.838  26.104   6.168  1.00  0.00
H
ATOM   1604 2HG  GLN    99      -2.637  25.574   4.687  1.00  0.00
H
ATOM   1605  CD  GLN    99      -1.920  24.010   5.936  1.00  0.00
C
ATOM   1606  OE1 GLN    99      -1.278  23.680   6.926  1.00  0.00
O
ATOM   1607  NE2 GLN    99      -2.753  23.204   5.348  1.00  0.00
N
ATOM   1608 1HE2 GLN    99      -2.837  22.253   5.676  1.00  0.00
H
ATOM   1609 2HE2 GLN    99      -3.299  23.530   4.562  1.00  0.00
H
ATOM   1610  N   GLU   100      -1.037  29.044   5.136  1.00  0.00
N
ATOM   1611  H   GLU   100      -1.669  29.144   4.343  1.00  0.00
H
ATOM   1612  CA  GLU   100      -1.048  30.064   6.189  1.00  0.00
C
ATOM   1613  HA  GLU   100      -0.017  30.337   6.406  1.00  0.00
H
ATOM   1614  C   GLU   100      -1.644  29.525   7.491  1.00  0.00
C
ATOM   1615  O   GLU   100      -1.237  29.937   8.577  1.00  0.00
O
ATOM   1616  CB  GLU   100      -1.766  31.349   5.745  1.00  0.00
C
ATOM   1617 1HB  GLU   100      -1.855  31.998   6.616  1.00  0.00
H
ATOM   1618 2HB  GLU   100      -1.132  31.856   5.019  1.00  0.00
H
ATOM   1619  CG  GLU   100      -3.148  31.189   5.121  1.00  0.00
C
ATOM   1620 1HG  GLU   100      -3.739  30.507   5.731  1.00  0.00
H
ATOM   1621 2HG  GLU   100      -3.643  32.161   5.114  1.00  0.00
H
ATOM   1622  CD  GLU   100      -3.071  30.675   3.692  1.00  0.00
C
ATOM   1623  OE1 GLU   100      -2.668  31.441   2.791  1.00  0.00
O
ATOM   1624  OE2 GLU   100      -3.317  29.467   3.469  1.00  0.00
O
ATOM   1625  N   ASN   101      -2.533  28.540   7.392  1.00  0.00
N
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ATOM   1626  H   ASN   101      -2.879  28.285   6.476  1.00  0.00
H
ATOM   1627  CA  ASN   101      -3.045  27.810   8.560  1.00  0.00
C
ATOM   1628  HA  ASN   101      -3.488  28.529   9.251  1.00  0.00
H
ATOM   1629  C   ASN   101      -1.935  27.077   9.332  1.00  0.00
C
ATOM   1630  O   ASN   101      -2.029  26.884  10.546  1.00  0.00
O
ATOM   1631  CB  ASN   101      -4.150  26.847   8.099  1.00  0.00
C
ATOM   1632 1HB  ASN   101      -5.104  27.370   8.126  1.00  0.00
H
ATOM   1633 2HB  ASN   101      -3.958  26.540   7.075  1.00  0.00
H
ATOM   1634  CG  ASN   101      -4.246  25.601   8.940  1.00  0.00
C
ATOM   1635  OD1 ASN   101      -3.480  24.664   8.759  1.00  0.00
O
ATOM   1636  ND2 ASN   101      -5.199  25.552   9.824  1.00  0.00
N
ATOM   1637 1HD2 ASN   101      -5.319  24.714  10.361  1.00  0.00
H
ATOM   1638 2HD2 ASN   101      -5.815  26.343   9.964  1.00  0.00
H
ATOM   1639  N   GLY   102      -0.850  26.727   8.658  1.00  0.00
N
ATOM   1640  H   GLY   102      -0.812  26.842   7.655  1.00  0.00
H
ATOM   1641  CA  GLY   102       0.363  26.305   9.338  1.00  0.00
C
ATOM   1642 1HA  GLY   102       1.184  26.452   8.640  1.00  0.00
H
ATOM   1643 2HA  GLY   102       0.523  26.992  10.168  1.00  0.00
H
ATOM   1644  C   GLY   102       0.500  24.907   9.905  1.00  0.00
C
ATOM   1645  O   GLY   102       1.538  24.605  10.499  1.00  0.00
O
ATOM   1646  N   GLN   103      -0.481  24.029   9.758  1.00  0.00
N
ATOM   1647  H   GLN   103      -1.318  24.273   9.233  1.00  0.00
H
ATOM   1648  CA  GLN   103      -0.351  22.683  10.320  1.00  0.00
C
ATOM   1649  HA  GLN   103      -0.053  22.756  11.367  1.00  0.00
H
ATOM   1650  C   GLN   103       0.734  21.902   9.583  1.00  0.00
C
ATOM   1651  O   GLN   103       1.508  21.156  10.194  1.00  0.00
O
ATOM   1652  CB  GLN   103      -1.676  21.929  10.243  1.00  0.00
C
ATOM   1653 1HB  GLN   103      -2.047  21.960   9.219  1.00  0.00
H
ATOM   1654 2HB  GLN   103      -1.487  20.890  10.514  1.00  0.00
H
ATOM   1655  CG  GLN   103      -2.737  22.483  11.188  1.00  0.00
C
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ATOM   1656 1HG  GLN   103      -2.355  22.451  12.207  1.00  0.00
H
ATOM   1657 2HG  GLN   103      -2.946  23.520  10.938  1.00  0.00
H
ATOM   1658  CD  GLN   103      -4.027  21.698  11.137  1.00  0.00
C
ATOM   1659  OE1 GLN   103      -4.053  20.532  10.751  1.00  0.00
O
ATOM   1660  NE2 GLN   103      -5.097  22.307  11.566  1.00  0.00
N
ATOM   1661 1HE2 GLN   103      -5.982  21.823  11.508  1.00  0.00
H
ATOM   1662 2HE2 GLN   103      -5.029  23.227  11.973  1.00  0.00
H
ATOM   1663  N   THR   104       0.848  22.119   8.280  1.00  0.00
N
ATOM   1664  H   THR   104       0.193  22.733   7.796  1.00  0.00
H
ATOM   1665  CA  THR   104       1.898  21.465   7.504  1.00  0.00
C
ATOM   1666  HA  THR   104       1.898  20.403   7.749  1.00  0.00
H
ATOM   1667  C   THR   104       3.281  22.009   7.835  1.00  0.00
C
ATOM   1668  O   THR   104       4.267  21.322   7.624  1.00  0.00
O
ATOM   1669  CB  THR   104       1.664  21.603   5.990  1.00  0.00
C
ATOM   1670  HB  THR   104       2.477  21.123   5.456  1.00  0.00
H
ATOM   1671  OG1 THR   104       1.619  22.988   5.631  1.00  0.00
O
ATOM   1672  HG1 THR   104       2.502  23.241   5.320  1.00  0.00
H
ATOM   1673  CG2 THR   104       0.362  20.944   5.576  1.00  0.00
C
ATOM   1674 1HG2 THR   104       0.256  21.004   4.494  1.00  0.00
H
ATOM   1675 2HG2 THR   104      -0.487  21.437   6.042  1.00  0.00
H
ATOM   1676 3HG2 THR   104       0.373  19.892   5.864  1.00  0.00
H
ATOM   1677  N   ASN   105       3.389  23.196   8.421  1.00  0.00
N
ATOM   1678  H   ASN   105       2.570  23.761   8.592  1.00  0.00
H
ATOM   1679  CA  ASN   105       4.712  23.673   8.829  1.00  0.00
C
ATOM   1680  HA  ASN   105       5.416  23.484   8.018  1.00  0.00
H
ATOM   1681  C   ASN   105       5.175  22.901  10.057  1.00  0.00
C
ATOM   1682  O   ASN   105       6.361  22.636  10.211  1.00  0.00
O
ATOM   1683  CB  ASN   105       4.729  25.166   9.175  1.00  0.00
C
ATOM   1684 1HB  ASN   105       4.028  25.359   9.986  1.00  0.00
H
ATOM   1685 2HB  ASN   105       5.729  25.436   9.513  1.00  0.00
H
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ATOM   1686  CG  ASN   105       4.365  26.045   8.013  1.00  0.00
C
ATOM   1687  OD1 ASN   105       3.500  26.898   8.136  1.00  0.00
O
ATOM   1688  ND2 ASN   105       4.993  25.850   6.890  1.00  0.00
N
ATOM   1689 1HD2 ASN   105       4.713  26.394   6.090  1.00  0.00
H
ATOM   1690 2HD2 ASN   105       5.729  25.164   6.818  1.00  0.00
H
ATOM   1691  N   ASN   106       4.245  22.522  10.927  1.00  0.00
N
ATOM   1692  H   ASN   106       3.278  22.772  10.768  1.00  0.00
H
ATOM   1693  CA  ASN   106       4.608  21.745  12.117  1.00  0.00
C
ATOM   1694  HA  ASN   106       5.459  22.207  12.619  1.00  0.00
H
ATOM   1695  C   ASN   106       5.005  20.339  11.698  1.00  0.00
C
ATOM   1696  O   ASN   106       5.814  19.694  12.371  1.00  0.00
O
ATOM   1697  CB  ASN   106       3.437  21.610  13.102  1.00  0.00
C
ATOM   1698 1HB  ASN   106       2.539  21.312  12.566  1.00  0.00
H
ATOM   1699 2HB  ASN   106       3.679  20.831  13.822  1.00  0.00
H
ATOM   1700  CG  ASN   106       3.158  22.868  13.876  1.00  0.00
C
ATOM   1701  OD1 ASN   106       4.036  23.685  14.131  1.00  0.00
O
ATOM   1702  ND2 ASN   106       1.931  23.027  14.279  1.00  0.00
N
ATOM   1703 1HD2 ASN   106       1.694  23.844  14.819  1.00  0.00
H
ATOM   1704 2HD2 ASN   106       1.231  22.331  14.061  1.00  0.00
H
ATOM   1705  N   ASN   107       4.376  19.887  10.617  1.00  0.00
N
ATOM   1706  H   ASN   107       3.755  20.527  10.140  1.00  0.00
H
ATOM   1707  CA  ASN   107       4.448  18.523  10.085  1.00  0.00
C
ATOM   1708  HA  ASN   107       3.474  18.314   9.642  1.00  0.00
H
ATOM   1709  C   ASN   107       4.660  17.448  11.154  1.00  0.00
C
ATOM   1710  O   ASN   107       3.703  17.130  11.858  1.00  0.00
O
ATOM   1711  CB  ASN   107       5.466  18.424   8.949  1.00  0.00
C
ATOM   1712 1HB  ASN   107       5.243  19.177   8.202  1.00  0.00
H
ATOM   1713 2HB  ASN   107       6.460  18.621   9.332  1.00  0.00
H
ATOM   1714  CG  ASN   107       5.434  17.080   8.279  1.00  0.00
C
ATOM   1715  OD1 ASN   107       4.372  16.517   8.046  1.00  0.00
O
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ATOM   1716  ND2 ASN   107       6.581  16.525   8.033  1.00  0.00
N
ATOM   1717 1HD2 ASN   107       6.594  15.599   7.632  1.00  0.00
H
ATOM   1718 2HD2 ASN   107       7.438  17.011   8.258  1.00  0.00
H
ATOM   1719  N   VAL   108       5.869  16.915  11.304  1.00  0.00
N
ATOM   1720  H   VAL   108       6.616  17.191  10.681  1.00  0.00
H
ATOM   1721  CA  VAL   108       6.204  15.963  12.366  1.00  0.00
C
ATOM   1722  HA  VAL   108       5.433  15.979  13.134  1.00  0.00
H
ATOM   1723  C   VAL   108       7.524  16.451  12.966  1.00  0.00
C
ATOM   1724  O   VAL   108       8.596  16.156  12.428  1.00  0.00
O
ATOM   1725  CB  VAL   108       6.339  14.505  11.828  1.00  0.00
C
ATOM   1726  HB  VAL   108       7.164  14.473  11.122  1.00  0.00
H
ATOM   1727  CG1 VAL   108       6.621  13.517  12.967  1.00  0.00
C
ATOM   1728 1HG1 VAL   108       6.740  12.513  12.560  1.00  0.00
H
ATOM   1729 2HG1 VAL   108       5.794  13.516  13.679  1.00  0.00
H
ATOM   1730 3HG1 VAL   108       7.540  13.787  13.486  1.00  0.00
H
ATOM   1731  CG2 VAL   108       5.068  14.061  11.086  1.00  0.00
C
ATOM   1732 1HG2 VAL   108       5.179  13.027  10.758  1.00  0.00
H
ATOM   1733 2HG2 VAL   108       4.912  14.680  10.205  1.00  0.00
H
ATOM   1734 3HG2 VAL   108       4.200  14.135  11.743  1.00  0.00
H
ATOM   1735  N   ASN   109       7.438  17.263  14.012  1.00  0.00
N
ATOM   1736  H   ASN   109       6.521  17.465  14.397  1.00  0.00
H
ATOM   1737  CA  ASN   109       8.589  17.921  14.645  1.00  0.00
C
ATOM   1738  HA  ASN   109       8.200  18.647  15.360  1.00  0.00
H
ATOM   1739  C   ASN   109       9.440  18.696  13.635  1.00  0.00
C
ATOM   1740  O   ASN   109      10.666  18.569  13.592  1.00  0.00
O
ATOM   1741  CB  ASN   109       9.444  16.919  15.436  1.00  0.00
C
ATOM   1742 1HB  ASN   109       8.791  16.282  16.031  1.00  0.00
H
ATOM   1743 2HB  ASN   109      10.000  16.293  14.742  1.00  0.00
H
ATOM   1744  CG  ASN   109      10.431  17.598  16.359  1.00  0.00
C
ATOM   1745  OD1 ASN   109      10.367  18.797  16.601  1.00  0.00
O
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ATOM   1746  ND2 ASN   109      11.343  16.839  16.890  1.00  0.00
N
ATOM   1747 1HD2 ASN   109      12.007  17.245  17.531  1.00  0.00
H
ATOM   1748 2HD2 ASN   109      11.371  15.854  16.674  1.00  0.00
H
ATOM   1749  N   ASN   110       8.792  19.490  12.796  1.00  0.00
N
ATOM   1750  H   ASN   110       7.780  19.577  12.850  1.00  0.00
H
ATOM   1751  CA  ASN   110       9.497  20.308  11.815  1.00  0.00
C
ATOM   1752  HA  ASN   110      10.570  20.143  11.895  1.00  0.00
H
ATOM   1753  C   ASN   110       9.246  21.769  12.137  1.00  0.00
C
ATOM   1754  O   ASN   110       8.157  22.142  12.567  1.00  0.00
O
ATOM   1755  CB  ASN   110       9.044  19.953  10.399  1.00  0.00
C
ATOM   1756 1HB  ASN   110       7.957  19.988  10.353  1.00  0.00
H
ATOM   1757 2HB  ASN   110       9.438  20.690   9.705  1.00  0.00
H
ATOM   1758  CG  ASN   110       9.522  18.591   9.973  1.00  0.00
C
ATOM   1759  OD1 ASN   110       8.737  17.726   9.606  1.00  0.00
O
ATOM   1760  ND2 ASN   110      10.809  18.374  10.031  1.00  0.00
N
ATOM   1761 1HD2 ASN   110      11.167  17.457   9.816  1.00  0.00
H
ATOM   1762 2HD2 ASN   110      11.432  19.121  10.285  1.00  0.00
H
ATOM   1763  N   THR   111      10.289  22.571  11.994  1.00  0.00
N
ATOM   1764  H   THR   111      11.163  22.199  11.643  1.00  0.00
H
ATOM   1765  CA  THR   111      10.278  23.982  12.375  1.00  0.00
C
ATOM   1766  HA  THR   111       9.257  24.335  12.503  1.00  0.00
H
ATOM   1767  C   THR   111      10.957  24.761  11.264  1.00  0.00
C
ATOM   1768  O   THR   111      11.667  24.158  10.460  1.00  0.00
O
ATOM   1769  CB  THR   111      11.066  24.191  13.682  1.00  0.00
C
ATOM   1770  HB  THR   111      11.070  25.246  13.940  1.00  0.00
H
ATOM   1771  OG1 THR   111      12.412  23.736  13.508  1.00  0.00
O
ATOM   1772  HG1 THR   111      12.910  23.993  14.292  1.00  0.00
H
ATOM   1773  CG2 THR   111      10.466  23.399  14.822  1.00  0.00
C
ATOM   1774 1HG2 THR   111      10.951  23.695  15.744  1.00  0.00
H
ATOM   1775 2HG2 THR   111      10.620  22.331  14.666  1.00  0.00
H
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ATOM   1776 3HG2 THR   111       9.398  23.606  14.897  1.00  0.00
H
ATOM   1777  N   ASN   112      10.750  26.068  11.182  1.00  0.00
N
ATOM   1778  H   ASN   112      10.170  26.534  11.871  1.00  0.00
H
ATOM   1779  CA  ASN   112      11.351  26.871  10.111  1.00  0.00
C
ATOM   1780  HA  ASN   112      11.608  26.219   9.275  1.00  0.00
H
ATOM   1781  C   ASN   112      12.654  27.517  10.582  1.00  0.00
C
ATOM   1782  O   ASN   112      13.377  28.141   9.809  1.00  0.00
O
ATOM   1783  CB  ASN   112      10.353  27.916   9.603  1.00  0.00
C
ATOM   1784 1HB  ASN   112       9.993  28.508  10.440  1.00  0.00
H
ATOM   1785 2HB  ASN   112      10.858  28.577   8.902  1.00  0.00
H
ATOM   1786  CG  ASN   112       9.170  27.293   8.903  1.00  0.00
C
ATOM   1787  OD1 ASN   112       8.042  27.384   9.380  1.00  0.00
O
ATOM   1788  ND2 ASN   112       9.405  26.622   7.810  1.00  0.00
N
ATOM   1789 1HD2 ASN   112       8.631  26.220   7.312  1.00  0.00
H
ATOM   1790 2HD2 ASN   112      10.350  26.513   7.462  1.00  0.00
H
ATOM   1791  N   SER   113      12.973  27.293  11.848  1.00  0.00
N
ATOM   1792  H   SER   113      12.267  26.924  12.467  1.00  0.00
H
ATOM   1793  CA  SER   113      14.306  27.527  12.397  1.00  0.00
C
ATOM   1794  HA  SER   113      14.913  28.080  11.682  1.00  0.00
H
ATOM   1795  C   SER   113      14.965  26.181  12.683  1.00  0.00
C
ATOM   1796  O   SER   113      15.151  25.824  13.849  1.00  0.00
O
ATOM   1797  CB  SER   113      14.217  28.319  13.700  1.00  0.00
C
ATOM   1798 1HB  SER   113      13.618  27.765  14.421  1.00  0.00
H
ATOM   1799 2HB  SER   113      15.222  28.458  14.098  1.00  0.00
H
ATOM   1800  OG  SER   113      13.632  29.587  13.489  1.00  0.00
O
ATOM   1801  HG  SER   113      14.309  30.144  13.072  1.00  0.00
H
ATOM   1802  N   ALA   114      15.252  25.398  11.651  1.00  0.00
N
ATOM   1803  H   ALA   114      15.111  25.731  10.699  1.00  0.00
H
ATOM   1804  CA  ALA   114      15.792  24.054  11.853  1.00  0.00
C
ATOM   1805  HA  ALA   114      15.082  23.488  12.457  1.00  0.00
H
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ATOM   1806  C   ALA   114      17.124  24.128  12.614  1.00  0.00
C
ATOM   1807  O   ALA   114      17.997  24.906  12.256  1.00  0.00
O
ATOM   1808  CB  ALA   114      15.971  23.352  10.501  1.00  0.00
C
ATOM   1809 1HB  ALA   114      15.022  23.336   9.963  1.00  0.00
H
ATOM   1810 2HB  ALA   114      16.316  22.330  10.656  1.00  0.00
H
ATOM   1811 3HB  ALA   114      16.707  23.890   9.902  1.00  0.00
H
ATOM   1812  N   ASN   115      17.231  23.357  13.690  1.00  0.00
N
ATOM   1813  H   ASN   115      16.438  22.764  13.915  1.00  0.00
H
ATOM   1814  CA  ASN   115      18.374  23.304  14.624  1.00  0.00
C
ATOM   1815  HA  ASN   115      18.136  22.532  15.356  1.00  0.00
H
ATOM   1816  C   ASN   115      18.652  24.556  15.439  1.00  0.00
C
ATOM   1817  O   ASN   115      19.363  24.486  16.441  1.00  0.00
O
ATOM   1818  CB  ASN   115      19.688  22.885  13.959  1.00  0.00
C
ATOM   1819 1HB  ASN   115      19.899  23.515  13.097  1.00  0.00
H
ATOM   1820 2HB  ASN   115      20.495  23.014  14.678  1.00  0.00
H
ATOM   1821  CG  ASN   115      19.683  21.461  13.543  1.00  0.00
C
ATOM   1822  OD1 ASN   115      18.877  21.022  12.742  1.00  0.00
O
ATOM   1823  ND2 ASN   115      20.607  20.718  14.071  1.00  0.00
N
ATOM   1824 1HD2 ASN   115      20.653  19.753  13.802  1.00  0.00
H
ATOM   1825 2HD2 ASN   115      21.283  21.123  14.706  1.00  0.00
H
ATOM   1826  N   ASN   116      18.091  25.687  15.051  1.00  0.00
N
ATOM   1827  H   ASN   116      17.521  25.692  14.212  1.00  0.00
H
ATOM   1828  CA  ASN   116      18.238  26.919  15.808  1.00  0.00
C
ATOM   1829  HA  ASN   116      19.082  26.825  16.492  1.00  0.00
H
ATOM   1830  C   ASN   116      16.972  27.092  16.623  1.00  0.00
C
ATOM   1831  O   ASN   116      16.115  27.924  16.345  1.00  0.00
O
ATOM   1832  CB  ASN   116      18.489  28.113  14.897  1.00  0.00
C
ATOM   1833 1HB  ASN   116      19.215  27.829  14.140  1.00  0.00
H
ATOM   1834 2HB  ASN   116      17.568  28.405  14.398  1.00  0.00
H
ATOM   1835  CG  ASN   116      19.045  29.280  15.652  1.00  0.00
C
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ATOM   1836  OD1 ASN   116      18.870  29.400  16.859  1.00  0.00
O
ATOM   1837  ND2 ASN   116      19.792  30.099  14.985  1.00  0.00
N
ATOM   1838 1HD2 ASN   116      20.299  30.803  15.501  1.00  0.00
H
ATOM   1839 2HD2 ASN   116      19.911  29.997  13.989  1.00  0.00
H
ATOM   1840  N   ARG   117      16.841  26.254  17.637  1.00  0.00
N
ATOM   1841  H   ARG   117      17.615  25.634  17.873  1.00  0.00
H
ATOM   1842  CA  ARG   117      15.622  26.197  18.440  1.00  0.00
C
ATOM   1843  HA  ARG   117      14.760  26.248  17.775  1.00  0.00
H
ATOM   1844  C   ARG   117      15.547  27.403  19.364  1.00  0.00
C
ATOM   1845  O   ARG   117      14.484  27.745  19.876  1.00  0.00
O
ATOM   1846  CB  ARG   117      15.574  24.858  19.183  1.00  0.00
C
ATOM   1847 1HB  ARG   117      16.414  24.790  19.873  1.00  0.00
H
ATOM   1848 2HB  ARG   117      14.645  24.804  19.751  1.00  0.00
H
ATOM   1849  CG  ARG   117      15.630  23.684  18.197  1.00  0.00
C
ATOM   1850 1HG  ARG   117      14.922  23.884  17.395  1.00  0.00
H
ATOM   1851 2HG  ARG   117      16.628  23.611  17.764  1.00  0.00
H
ATOM   1852  CD  ARG   117      15.267  22.351  18.815  1.00  0.00
C
ATOM   1853 1HD  ARG   117      14.354  22.468  19.400  1.00  0.00
H
ATOM   1854 2HD  ARG   117      15.071  21.643  18.008  1.00  0.00
H
ATOM   1855  NE  ARG   117      16.324  21.787  19.661  1.00  0.00
N
ATOM   1856  HE  ARG   117      17.190  22.310  19.746  1.00  0.00
H
ATOM   1857  CZ  ARG   117      16.263  20.634  20.308  1.00  0.00
C
ATOM   1858  NH1 ARG   117      15.234  19.831  20.293  1.00  0.00
N
ATOM   1859 1HH1 ARG   117      14.413  20.068  19.755  1.00  0.00
H
ATOM   1860 2HH1 ARG   117      15.276  18.971  20.819  1.00  0.00
H
ATOM   1861  NH2 ARG   117      17.292  20.258  21.002  1.00  0.00
N
ATOM   1862 1HH2 ARG   117      18.103  20.852  21.047  1.00  0.00
H
ATOM   1863 2HH2 ARG   117      17.262  19.380  21.492  1.00  0.00
H
ATOM   1864  N   LEU   118      16.671  28.090  19.498  1.00  0.00
N
ATOM   1865  H   LEU   118      17.516  27.707  19.101  1.00  0.00
H
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ATOM   1866  CA  LEU   118      16.744  29.388  20.167  1.00  0.00
C
ATOM   1867  HA  LEU   118      16.086  29.384  21.037  1.00  0.00
H
ATOM   1868  C   LEU   118      16.341  30.561  19.261  1.00  0.00
C
ATOM   1869  O   LEU   118      16.105  31.668  19.751  1.00  0.00
O
ATOM   1870  CB  LEU   118      18.189  29.625  20.627  1.00  0.00
C
ATOM   1871 1HB  LEU   118      18.815  29.654  19.736  1.00  0.00
H
ATOM   1872 2HB  LEU   118      18.234  30.610  21.091  1.00  0.00
H
ATOM   1873  CG  LEU   118      18.826  28.625  21.607  1.00  0.00
C
ATOM   1874  HG  LEU   118      18.772  27.628  21.174  1.00  0.00
H
ATOM   1875  CD1 LEU   118      20.298  28.978  21.804  1.00  0.00
C
ATOM   1876 1HD1 LEU   118      20.763  28.249  22.469  1.00  0.00
H
ATOM   1877 2HD1 LEU   118      20.395  29.974  22.239  1.00  0.00
H
ATOM   1878 3HD1 LEU   118      20.818  28.950  20.846  1.00  0.00
H
ATOM   1879  CD2 LEU   118      18.117  28.604  22.960  1.00  0.00
C
ATOM   1880 1HD2 LEU   118      18.625  27.911  23.630  1.00  0.00
H
ATOM   1881 2HD2 LEU   118      17.089  28.264  22.837  1.00  0.00
H
ATOM   1882 3HD2 LEU   118      18.120  29.599  23.407  1.00  0.00
H
ATOM   1883  N   SER   119      16.321  30.329  17.952  1.00  0.00
N
ATOM   1884  H   SER   119      16.481  29.384  17.627  1.00  0.00
H
ATOM   1885  CA  SER   119      16.143  31.353  16.908  1.00  0.00
C
ATOM   1886  HA  SER   119      16.409  30.887  15.959  1.00  0.00
H
ATOM   1887  C   SER   119      17.075  32.557  17.088  1.00  0.00
C
ATOM   1888  O   SER   119      16.662  33.716  16.988  1.00  0.00
O
ATOM   1889  CB  SER   119      14.678  31.778  16.800  1.00  0.00
C
ATOM   1890 1HB  SER   119      14.382  32.304  17.707  1.00  0.00
H
ATOM   1891 2HB  SER   119      14.555  32.441  15.943  1.00  0.00
H
ATOM   1892  OG  SER   119      13.855  30.632  16.632  1.00  0.00
O
ATOM   1893  HG  SER   119      14.200  30.109  15.899  1.00  0.00
H
ATOM   1894  N   ASN   120      18.331  32.274  17.406  1.00  0.00
N
ATOM   1895  H   ASN   120      18.636  31.304  17.368  1.00  0.00
H
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ATOM   1896  CA  ASN   120      19.288  33.283  17.876  1.00  0.00
C
ATOM   1897  HA  ASN   120      18.718  34.050  18.397  1.00  0.00
H
ATOM   1898  C   ASN   120      20.126  34.002  16.813  1.00  0.00
C
ATOM   1899  O   ASN   120      21.056  34.722  17.157  1.00  0.00
O
ATOM   1900  CB  ASN   120      20.234  32.640  18.901  1.00  0.00
C
ATOM   1901 1HB  ASN   120      20.740  33.431  19.453  1.00  0.00
H
ATOM   1902 2HB  ASN   120      19.655  32.051  19.608  1.00  0.00
H
ATOM   1903  CG  ASN   120      21.296  31.761  18.272  1.00  0.00
C
ATOM   1904  OD1 ASN   120      21.260  31.418  17.099  1.00  0.00
O
ATOM   1905  ND2 ASN   120      22.249  31.382  19.062  1.00  0.00
N
ATOM   1906 1HD2 ASN   120      23.005  30.830  18.691  1.00  0.00
H
ATOM   1907 2HD2 ASN   120      22.231  31.650  20.039  1.00  0.00
H
ATOM   1908  N   GLU   121      19.806  33.790  15.543  1.00  0.00
N
ATOM   1909  H   GLU   121      19.012  33.192  15.343  1.00  0.00
H
ATOM   1910  CA  GLU   121      20.512  34.374  14.388  1.00  0.00
C
ATOM   1911  HA  GLU   121      20.026  33.964  13.506  1.00  0.00
H
ATOM   1912  C   GLU   121      22.005  34.036  14.231  1.00  0.00
C
ATOM   1913  O   GLU   121      22.736  34.761  13.547  1.00  0.00
O
ATOM   1914  CB  GLU   121      20.320  35.898  14.307  1.00  0.00
C
ATOM   1915 1HB  GLU   121      20.893  36.373  15.103  1.00  0.00
H
ATOM   1916 2HB  GLU   121      20.720  36.231  13.350  1.00  0.00
H
ATOM   1917  CG  GLU   121      18.879  36.380  14.398  1.00  0.00
C
ATOM   1918 1HG  GLU   121      18.280  35.821  13.680  1.00  0.00
H
ATOM   1919 2HG  GLU   121      18.495  36.181  15.400  1.00  0.00
H
ATOM   1920  CD  GLU   121      18.741  37.871  14.098  1.00  0.00
C
ATOM   1921  OE1 GLU   121      19.752  38.568  13.848  1.00  0.00
O
ATOM   1922  OE2 GLU   121      17.597  38.373  14.091  1.00  0.00
O
ATOM   1923  N   LEU   122      22.467  32.951  14.839  1.00  0.00
N
ATOM   1924  H   LEU   122      21.839  32.385  15.399  1.00  0.00
H
ATOM   1925  CA  LEU   122      23.869  32.521  14.769  1.00  0.00
C
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ATOM   1926  HA  LEU   122      24.423  33.138  14.063  1.00  0.00
H
ATOM   1927  C   LEU   122      23.929  31.071  14.297  1.00  0.00
C
ATOM   1928  O   LEU   122      22.911  30.386  14.298  1.00  0.00
O
ATOM   1929  CB  LEU   122      24.511  32.645  16.156  1.00  0.00
C
ATOM   1930 1HB  LEU   122      23.940  32.018  16.838  1.00  0.00
H
ATOM   1931 2HB  LEU   122      25.525  32.248  16.109  1.00  0.00
H
ATOM   1932  CG  LEU   122      24.584  34.059  16.755  1.00  0.00
C
ATOM   1933  HG  LEU   122      23.603  34.521  16.689  1.00  0.00
H
ATOM   1934  CD1 LEU   122      24.968  33.999  18.223  1.00  0.00
C
ATOM   1935 1HD1 LEU   122      24.944  35.003  18.646  1.00  0.00
H
ATOM   1936 2HD1 LEU   122      25.970  33.587  18.332  1.00  0.00
H
ATOM   1937 3HD1 LEU   122      24.257  33.379  18.767  1.00  0.00
H
ATOM   1938  CD2 LEU   122      25.580  34.942  16.008  1.00  0.00
C
ATOM   1939 1HD2 LEU   122      25.606  35.933  16.460  1.00  0.00
H
ATOM   1940 2HD2 LEU   122      25.282  35.041  14.966  1.00  0.00
H
ATOM   1941 3HD2 LEU   122      26.576  34.502  16.054  1.00  0.00
H
ATOM   1942  N   ILE   123      25.100  30.595  13.898  1.00  0.00
N
ATOM   1943  H   ILE   123      25.912  31.206  13.895  1.00  0.00
H
ATOM   1944  CA  ILE   123      25.272  29.210  13.438  1.00  0.00
C
ATOM   1945  HA  ILE   123      24.297  28.774  13.220  1.00  0.00
H
ATOM   1946  C   ILE   123      25.924  28.353  14.525  1.00  0.00
C
ATOM   1947  O   ILE   123      25.483  27.234  14.796  1.00  0.00
O
ATOM   1948  CB  ILE   123      26.119  29.174  12.122  1.00  0.00
C
ATOM   1949  HB  ILE   123      27.053  29.708  12.293  1.00  0.00
H
ATOM   1950  CG1 ILE   123      25.331  29.894  11.008  1.00  0.00
C
ATOM   1951 1HG1 ILE   123      24.397  29.358  10.850  1.00  0.00
H
ATOM   1952 2HG1 ILE   123      25.078  30.893  11.354  1.00  0.00
H
ATOM   1953  CG2 ILE   123      26.471  27.726  11.704  1.00  0.00
C
ATOM   1954 1HG2 ILE   123      27.098  27.730  10.813  1.00  0.00
H
ATOM   1955 2HG2 ILE   123      25.569  27.158  11.505  1.00  0.00
H
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ATOM   1956 3HG2 ILE   123      27.040  27.227  12.489  1.00  0.00
H
ATOM   1957  CD1 ILE   123      26.030  30.046   9.654  1.00  0.00
C
ATOM   1958 1HD1 ILE   123      25.404  30.643   8.993  1.00  0.00
H
ATOM   1959 2HD1 ILE   123      26.190  29.071   9.196  1.00  0.00
H
ATOM   1960 3HD1 ILE   123      26.985  30.552   9.786  1.00  0.00
H
ATOM   1961  N   LYS   124      26.959  28.865  15.173  1.00  0.00
N
ATOM   1962  H   LYS   124      27.240  29.825  14.981  1.00  0.00
H
ATOM   1963  CA  LYS   124      27.782  28.060  16.084  1.00  0.00
C
ATOM   1964  HA  LYS   124      28.198  27.229  15.518  1.00  0.00
H
ATOM   1965  C   LYS   124      27.026  27.462  17.259  1.00  0.00
C
ATOM   1966  O   LYS   124      27.209  26.297  17.608  1.00  0.00
O
ATOM   1967  CB  LYS   124      28.939  28.931  16.581  1.00  0.00
C
ATOM   1968 1HB  LYS   124      29.377  29.419  15.713  1.00  0.00
H
ATOM   1969 2HB  LYS   124      28.551  29.707  17.240  1.00  0.00
H
ATOM   1970  CG  LYS   124      30.047  28.185  17.300  1.00  0.00
C
ATOM   1971 1HG  LYS   124      29.706  27.879  18.289  1.00  0.00
H
ATOM   1972 2HG  LYS   124      30.324  27.308  16.720  1.00  0.00
H
ATOM   1973  CD  LYS   124      31.254  29.092  17.419  1.00  0.00
C
ATOM   1974 1HD  LYS   124      31.551  29.401  16.418  1.00  0.00
H
ATOM   1975 2HD  LYS   124      30.980  29.977  17.992  1.00  0.00
H
ATOM   1976  CE  LYS   124      32.433  28.406  18.082  1.00  0.00
C
ATOM   1977 1HE  LYS   124      32.161  28.114  19.099  1.00  0.00
H
ATOM   1978 2HE  LYS   124      32.702  27.519  17.509  1.00  0.00
H
ATOM   1979  NZ  LYS   124      33.596  29.343  18.115  1.00  0.00
N
ATOM   1980 1HZ  LYS   124      34.389  28.903  18.564  1.00  0.00
H
ATOM   1981 2HZ  LYS   124      33.353  30.184  18.625  1.00  0.00
H
ATOM   1982 3HZ  LYS   124      33.849  29.602  17.165  1.00  0.00
H
ATOM   1983  N   SER   125      26.137  28.252  17.832  1.00  0.00
N
ATOM   1984  H   SER   125      25.993  29.185  17.474  1.00  0.00
H
ATOM   1985  CA  SER   125      25.368  27.857  19.004  1.00  0.00
C
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ATOM   1986  HA  SER   125      26.023  27.340  19.706  1.00  0.00
H
ATOM   1987  C   SER   125      24.177  26.947  18.716  1.00  0.00
C
ATOM   1988  O   SER   125      23.541  26.455  19.649  1.00  0.00
O
ATOM   1989  CB  SER   125      24.870  29.141  19.653  1.00  0.00
C
ATOM   1990 1HB  SER   125      23.837  29.017  19.982  1.00  0.00
H
ATOM   1991 2HB  SER   125      25.500  29.382  20.509  1.00  0.00
H
ATOM   1992  OG  SER   125      24.959  30.187  18.692  1.00  0.00
O
ATOM   1993  HG  SER   125      25.770  30.691  18.869  1.00  0.00
H
ATOM   1994  N   THR   126      23.867  26.695  17.452  1.00  0.00
N
ATOM   1995  H   THR   126      24.431  27.075  16.705  1.00  0.00
H
ATOM   1996  CA  THR   126      22.726  25.838  17.113  1.00  0.00
C
ATOM   1997  HA  THR   126      21.855  26.168  17.679  1.00  0.00
H
ATOM   1998  C   THR   126      23.009  24.383  17.467  1.00  0.00
C
ATOM   1999  O   THR   126      24.158  23.982  17.660  1.00  0.00
O
ATOM   2000  CB  THR   126      22.381  25.892  15.617  1.00  0.00
C
ATOM   2001  HB  THR   126      21.514  25.263  15.426  1.00  0.00
H
ATOM   2002  OG1 THR   126      23.483  25.407  14.853  1.00  0.00
O
ATOM   2003  HG1 THR   126      24.178  26.081  14.852  1.00  0.00
H
ATOM   2004  CG2 THR   126      22.085  27.297  15.165  1.00  0.00
C
ATOM   2005 1HG2 THR   126      21.690  27.277  14.150  1.00  0.00
H
ATOM   2006 2HG2 THR   126      22.988  27.905  15.179  1.00  0.00
H
ATOM   2007 3HG2 THR   126      21.350  27.753  15.826  1.00  0.00
H
ATOM   2008  N   ASP   127      21.962  23.583  17.573  1.00  0.00
N
ATOM   2009  H   ASP   127      21.033  23.936  17.356  1.00  0.00
H
ATOM   2010  CA  ASP   127      22.101  22.193  18.004  1.00  0.00
C
ATOM   2011  HA  ASP   127      22.789  22.152  18.849  1.00  0.00
H
ATOM   2012  C   ASP   127      22.680  21.302  16.906  1.00  0.00
C
ATOM   2013  O   ASP   127      22.825  21.731  15.757  1.00  0.00
O
ATOM   2014  CB  ASP   127      20.737  21.692  18.477  1.00  0.00
C
ATOM   2015 1HB  ASP   127      19.998  21.883  17.698  1.00  0.00
H
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ATOM   2016 2HB  ASP   127      20.784  20.620  18.653  1.00  0.00
H
ATOM   2017  CG  ASP   127      20.301  22.369  19.760  1.00  0.00
C
ATOM   2018  OD1 ASP   127      21.167  22.679  20.613  1.00  0.00
O
ATOM   2019  OD2 ASP   127      19.091  22.627  19.940  1.00  0.00
O
ATOM   2020  N   TYR   128      23.023  20.069  17.252  1.00  0.00
N
ATOM   2021  H   TYR   128      22.801  19.730  18.188  1.00  0.00
H
ATOM   2022  CA  TYR   128      23.708  19.131  16.359  1.00  0.00
C
ATOM   2023  HA  TYR   128      23.834  19.578  15.375  1.00  0.00
H
ATOM   2024  C   TYR   128      22.825  17.890  16.238  1.00  0.00
C
ATOM   2025  O   TYR   128      23.234  16.787  16.606  1.00  0.00
O
ATOM   2026  CB  TYR   128      25.087  18.736  16.907  1.00  0.00
C
ATOM   2027 1HB  TYR   128      24.948  18.251  17.871  1.00  0.00
H
ATOM   2028 2HB  TYR   128      25.536  18.016  16.226  1.00  0.00
H
ATOM   2029  CG  TYR   128      26.065  19.877  17.100  1.00  0.00
C
ATOM   2030  CD1 TYR   128      25.996  20.697  18.246  1.00  0.00
C
ATOM   2031  HD1 TYR   128      25.240  20.510  18.996  1.00  0.00
H
ATOM   2032  CD2 TYR   128      27.095  20.117  16.163  1.00  0.00
C
ATOM   2033  HD2 TYR   128      27.178  19.491  15.286  1.00  0.00
H
ATOM   2034  CE1 TYR   128      26.912  21.757  18.438  1.00  0.00
C
ATOM   2035  HE1 TYR   128      26.845  22.384  19.314  1.00  0.00
H
ATOM   2036  CE2 TYR   128      28.036  21.168  16.370  1.00  0.00
C
ATOM   2037  HE2 TYR   128      28.826  21.342  15.656  1.00  0.00
H
ATOM   2038  CZ  TYR   128      27.918  21.983  17.503  1.00  0.00
C
ATOM   2039  OH  TYR   128      28.771  23.028  17.726  1.00  0.00
O
ATOM   2040  HH  TYR   128      29.521  23.033  17.121  1.00  0.00
H
ATOM   2041  N   GLN   129      21.588  18.105  15.804  1.00  0.00
N
ATOM   2042  H   GLN   129      21.340  19.035  15.513  1.00  0.00
H
ATOM   2043  CA  GLN   129      20.569  17.054  15.733  1.00  0.00
C
ATOM   2044  HA  GLN   129      20.348  16.718  16.745  1.00  0.00
H
ATOM   2045  C   GLN   129      21.068  15.860  14.929  1.00  0.00
C
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ATOM   2046  O   GLN   129      21.310  15.966  13.729  1.00  0.00
O
ATOM   2047  CB  GLN   129      19.284  17.575  15.076  1.00  0.00
C
ATOM   2048 1HB  GLN   129      18.951  18.466  15.608  1.00  0.00
H
ATOM   2049 2HB  GLN   129      19.516  17.856  14.049  1.00  0.00
H
ATOM   2050  CG  GLN   129      18.139  16.552  15.045  1.00  0.00
C
ATOM   2051 1HG  GLN   129      18.501  15.623  14.610  1.00  0.00
H
ATOM   2052 2HG  GLN   129      17.807  16.349  16.062  1.00  0.00
H
ATOM   2053  CD  GLN   129      16.956  17.009  14.217  1.00  0.00
C
ATOM   2054  OE1 GLN   129      16.787  18.187  13.934  1.00  0.00
O
ATOM   2055  NE2 GLN   129      16.147  16.076  13.790  1.00  0.00
N
ATOM   2056 1HE2 GLN   129      15.359  16.335  13.225  1.00  0.00
H
ATOM   2057 2HE2 GLN   129      16.309  15.108  14.041  1.00  0.00
H
ATOM   2058  N   GLU   130      21.224  14.731  15.596  1.00  0.00
N
ATOM   2059  H   GLU   130      20.983  14.702  16.584  1.00  0.00
H
ATOM   2060  CA  GLU   130      21.722  13.516  14.971  1.00  0.00
C
ATOM   2061  HA  GLU   130      22.487  13.757  14.236  1.00  0.00
H
ATOM   2062  C   GLU   130      20.532  12.859  14.297  1.00  0.00
C
ATOM   2063  O   GLU   130      19.405  13.004  14.773  1.00  0.00
O
ATOM   2064  CB  GLU   130      22.303  12.590  16.036  1.00  0.00
C
ATOM   2065 1HB  GLU   130      21.510  12.306  16.726  1.00  0.00
H
ATOM   2066 2HB  GLU   130      22.686  11.697  15.543  1.00  0.00
H
ATOM   2067  CG  GLU   130      23.419  13.253  16.826  1.00  0.00
C
ATOM   2068 1HG  GLU   130      24.157  13.633  16.122  1.00  0.00
H
ATOM   2069 2HG  GLU   130      23.007  14.095  17.379  1.00  0.00
H
ATOM   2070  CD  GLU   130      24.105  12.329  17.816  1.00  0.00
C
ATOM   2071  OE1 GLU   130      23.699  11.153  17.964  1.00  0.00
O
ATOM   2072  OE2 GLU   130      25.067  12.774  18.480  1.00  0.00
O
ATOM   2073  N   ILE   131      20.745  12.157  13.195  1.00  0.00
N
ATOM   2074  H   ILE   131      21.689  12.067  12.827  1.00  0.00
H
ATOM   2075  CA  ILE   131      19.632  11.562  12.453  1.00  0.00
C
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ATOM   2076  HA  ILE   131      18.697  11.744  12.977  1.00  0.00
H
ATOM   2077  C   ILE   131      19.800  10.057  12.317  1.00  0.00
C
ATOM   2078  O   ILE   131      18.896   9.293  12.664  1.00  0.00
O
ATOM   2079  CB  ILE   131      19.529  12.190  11.039  1.00  0.00
C
ATOM   2080  HB  ILE   131      20.473  12.017  10.522  1.00  0.00
H
ATOM   2081  CG1 ILE   131      19.297  13.710  11.131  1.00  0.00
C
ATOM   2082 1HG1 ILE   131      18.230  13.891  11.265  1.00  0.00
H
ATOM   2083 2HG1 ILE   131      19.813  14.127  11.993  1.00  0.00
H
ATOM   2084  CG2 ILE   131      18.379  11.548  10.213  1.00  0.00
C
ATOM   2085 1HG2 ILE   131      18.299  12.023   9.238  1.00  0.00
H
ATOM   2086 2HG2 ILE   131      17.427  11.664  10.739  1.00  0.00
H
ATOM   2087 3HG2 ILE   131      18.568  10.486  10.058  1.00  0.00
H
ATOM   2088  CD1 ILE   131      19.780  14.459   9.917  1.00  0.00
C
ATOM   2089 1HD1 ILE   131      19.107  15.288   9.713  1.00  0.00
H
ATOM   2090 2HD1 ILE   131      19.808  13.805   9.051  1.00  0.00
H
ATOM   2091 3HD1 ILE   131      20.783  14.840  10.097  1.00  0.00
H
ATOM   2092  N   SER   132      20.937   9.638  11.787  1.00  0.00
N
ATOM   2093  H   SER   132      21.677  10.296  11.574  1.00  0.00
H
ATOM   2094  CA  SER   132      21.181   8.242  11.450  1.00  0.00
C
ATOM   2095  HA  SER   132      20.736   7.587  12.197  1.00  0.00
H
ATOM   2096  C   SER   132      22.694   8.069  11.467  1.00  0.00
C
ATOM   2097  O   SER   132      23.420   9.067  11.499  1.00  0.00
O
ATOM   2098  CB  SER   132      20.575   7.928  10.076  1.00  0.00
C
ATOM   2099 1HB  SER   132      20.811   6.900   9.796  1.00  0.00
H
ATOM   2100 2HB  SER   132      19.491   8.031  10.144  1.00  0.00
H
ATOM   2101  OG  SER   132      21.044   8.822   9.075  1.00  0.00
O
ATOM   2102  HG  SER   132      21.938   8.537   8.818  1.00  0.00
H
ATOM   2103  N   GLY   133      23.175   6.835  11.455  1.00  0.00
N
ATOM   2104  H   GLY   133      22.547   6.035  11.422  1.00  0.00
H
ATOM   2105  CA  GLY   133      24.601   6.574  11.466  1.00  0.00
C
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ATOM   2106 1HA  GLY   133      24.947   6.516  10.433  1.00  0.00
H
ATOM   2107 2HA  GLY   133      25.120   7.400  11.950  1.00  0.00
H
ATOM   2108  C   GLY   133      25.004   5.296  12.171  1.00  0.00
C
ATOM   2109  O   GLY   133      24.246   4.672  12.920  1.00  0.00
O
ATOM   2110  N   ASP   134      26.243   4.925  11.913  1.00  0.00
N
ATOM   2111  H   ASP   134      26.804   5.517  11.300  1.00  0.00
H
ATOM   2112  CA  ASP   134      26.901   3.737  12.439  1.00  0.00
C
ATOM   2113  HA  ASP   134      26.490   3.451  13.406  1.00  0.00
H
ATOM   2114  C   ASP   134      28.369   4.129  12.589  1.00  0.00
C
ATOM   2115  O   ASP   134      29.149   3.964  11.653  1.00  0.00
O
ATOM   2116  CB  ASP   134      26.762   2.586  11.443  1.00  0.00
C
ATOM   2117 1HB  ASP   134      25.706   2.340  11.328  1.00  0.00
H
ATOM   2118 2HB  ASP   134      27.148   2.901  10.474  1.00  0.00
H
ATOM   2119  CG  ASP   134      27.520   1.355  11.877  1.00  0.00
C
ATOM   2120  OD1 ASP   134      27.799   1.175  13.083  1.00  0.00
O
ATOM   2121  OD2 ASP   134      27.849   0.524  11.004  1.00  0.00
O
ATOM   2122  N   MET   135      28.714   4.744  13.712  1.00  0.00
N
ATOM   2123  H   MET   135      28.025   4.849  14.455  1.00  0.00
H
ATOM   2124  CA  MET   135      30.052   5.303  13.936  1.00  0.00
C
ATOM   2125  HA  MET   135      30.798   4.657  13.486  1.00  0.00
H
ATOM   2126  C   MET   135      30.301   5.417  15.440  1.00  0.00
C
ATOM   2127  O   MET   135      29.351   5.686  16.180  1.00  0.00
O
ATOM   2128  CB  MET   135      30.105   6.692  13.285  1.00  0.00
C
ATOM   2129 1HB  MET   135      29.857   6.574  12.235  1.00  0.00
H
ATOM   2130 2HB  MET   135      29.344   7.318  13.748  1.00  0.00
H
ATOM   2131  CG  MET   135      31.428   7.420  13.369  1.00  0.00
C
ATOM   2132 1HG  MET   135      31.680   7.555  14.419  1.00  0.00
H
ATOM   2133 2HG  MET   135      32.206   6.822  12.893  1.00  0.00
H
ATOM   2134  SD  MET   135      31.362   9.037  12.593  1.00  0.00
S
ATOM   2135  CE  MET   135      31.447   8.632  10.848  1.00  0.00
C
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ATOM   2136 1HE  MET   135      31.450   9.550  10.260  1.00  0.00
H
ATOM   2137 2HE  MET   135      30.579   8.040  10.570  1.00  0.00
H
ATOM   2138 3HE  MET   135      32.355   8.066  10.644  1.00  0.00
H
ATOM   2139  N   PRO   136      31.541   5.212  15.929  1.00  0.00
N
ATOM   2140  CA  PRO   136      31.668   5.447  17.373  1.00  0.00
C
ATOM   2141  HA  PRO   136      30.949   4.841  17.922  1.00  0.00
H
ATOM   2142  C   PRO   136      31.484   6.914  17.756  1.00  0.00
C
ATOM   2143  O   PRO   136      31.805   7.827  16.990  1.00  0.00
O
ATOM   2144  CB  PRO   136      33.085   4.955  17.673  1.00  0.00
C
ATOM   2145 1HB  PRO   136      33.529   5.512  18.497  1.00  0.00
H
ATOM   2146 2HB  PRO   136      33.066   3.890  17.898  1.00  0.00
H
ATOM   2147  CG  PRO   136      33.822   5.185  16.416  1.00  0.00
C
ATOM   2148 1HG  PRO   136      34.088   6.237  16.329  1.00  0.00
H
ATOM   2149 2HG  PRO   136      34.714   4.560  16.364  1.00  0.00
H
ATOM   2150  CD  PRO   136      32.836   4.802  15.351  1.00  0.00
C
ATOM   2151 1HD  PRO   136      33.049   5.339  14.427  1.00  0.00
H
ATOM   2152 2HD  PRO   136      32.850   3.724  15.183  1.00  0.00
H
ATOM   2153  N   ALA   137      30.963   7.147  18.952  1.00  0.00
N
ATOM   2154  H   ALA   137      30.754   6.364  19.560  1.00  0.00
H
ATOM   2155  CA  ALA   137      30.658   8.499  19.414  1.00  0.00
C
ATOM   2156  HA  ALA   137      29.996   8.964  18.686  1.00  0.00
H
ATOM   2157  C   ALA   137      31.898   9.384  19.531  1.00  0.00
C
ATOM   2158  O   ALA   137      31.818  10.578  19.292  1.00  0.00
O
ATOM   2159  CB  ALA   137      29.925   8.437  20.743  1.00  0.00
C
ATOM   2160 1HB  ALA   137      28.983   7.903  20.618  1.00  0.00
H
ATOM   2161 2HB  ALA   137      29.711   9.451  21.089  1.00  0.00
H
ATOM   2162 3HB  ALA   137      30.536   7.929  21.490  1.00  0.00
H
ATOM   2163  N   GLU   138      33.050   8.798  19.825  1.00  0.00
N
ATOM   2164  H   GLU   138      33.060   7.805  20.036  1.00  0.00
H
ATOM   2165  CA  GLU   138      34.306   9.553  19.863  1.00  0.00
C
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ATOM   2166  HA  GLU   138      34.231  10.325  20.628  1.00  0.00
H
ATOM   2167  C   GLU   138      34.577  10.241  18.522  1.00  0.00
C
ATOM   2168  O   GLU   138      35.002  11.401  18.460  1.00  0.00
O
ATOM   2169  CB  GLU   138      35.455   8.597  20.213  1.00  0.00
C
ATOM   2170 1HB  GLU   138      35.221   8.134  21.171  1.00  0.00
H
ATOM   2171 2HB  GLU   138      35.495   7.817  19.453  1.00  0.00
H
ATOM   2172  CG  GLU   138      36.839   9.240  20.308  1.00  0.00
C
ATOM   2173 1HG  GLU   138      37.089   9.681  19.342  1.00  0.00
H
ATOM   2174 2HG  GLU   138      36.809  10.035  21.050  1.00  0.00
H
ATOM   2175  CD  GLU   138      37.943   8.260  20.695  1.00  0.00
C
ATOM   2176  OE1 GLU   138      37.682   7.101  21.088  1.00  0.00
O
ATOM   2177  OE2 GLU   138      39.130   8.658  20.627  1.00  0.00
O
ATOM   2178  N   LEU   139      34.282   9.534  17.440  1.00  0.00
N
ATOM   2179  H   LEU   139      33.891   8.608  17.546  1.00  0.00
H
ATOM   2180  CA  LEU   139      34.494  10.053  16.095  1.00  0.00
C
ATOM   2181  HA  LEU   139      35.430  10.612  16.078  1.00  0.00
H
ATOM   2182  C   LEU   139      33.369  11.004  15.695  1.00  0.00
C
ATOM   2183  O   LEU   139      33.637  12.047  15.106  1.00  0.00
O
ATOM   2184  CB  LEU   139      34.622   8.868  15.135  1.00  0.00
C
ATOM   2185 1HB  LEU   139      35.394   8.222  15.553  1.00  0.00
H
ATOM   2186 2HB  LEU   139      33.689   8.311  15.174  1.00  0.00
H
ATOM   2187  CG  LEU   139      34.964   9.066  13.650  1.00  0.00
C
ATOM   2188  HG  LEU   139      34.064   9.366  13.122  1.00  0.00
H
ATOM   2189  CD1 LEU   139      36.022  10.117  13.381  1.00  0.00
C
ATOM   2190 1HD1 LEU   139      36.290  10.112  12.326  1.00  0.00
H
ATOM   2191 2HD1 LEU   139      36.907   9.910  13.979  1.00  0.00
H
ATOM   2192 3HD1 LEU   139      35.637  11.104  13.634  1.00  0.00
H
ATOM   2193  CD2 LEU   139      35.426   7.708  13.109  1.00  0.00
C
ATOM   2194 1HD2 LEU   139      35.645   7.786  12.049  1.00  0.00
H
ATOM   2195 2HD2 LEU   139      34.640   6.963  13.245  1.00  0.00
H
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ATOM   2196 3HD2 LEU   139      36.327   7.378  13.630  1.00  0.00
H
ATOM   2197  N   LYS   140      32.130  10.710  16.077  1.00  0.00
N
ATOM   2198  H   LYS   140      31.952   9.827  16.548  1.00  0.00
H
ATOM   2199  CA  LYS   140      31.014  11.644  15.845  1.00  0.00
C
ATOM   2200  HA  LYS   140      30.894  11.801  14.773  1.00  0.00
H
ATOM   2201  C   LYS   140      31.302  12.994  16.497  1.00  0.00
C
ATOM   2202  O   LYS   140      31.111  14.049  15.901  1.00  0.00
O
ATOM   2203  CB  LYS   140      29.704  11.108  16.436  1.00  0.00
C
ATOM   2204 1HB  LYS   140      29.863  10.884  17.489  1.00  0.00
H
ATOM   2205 2HB  LYS   140      28.958  11.901  16.373  1.00  0.00
H
ATOM   2206  CG  LYS   140      29.133   9.865  15.761  1.00  0.00
C
ATOM   2207 1HG  LYS   140      28.943  10.078  14.711  1.00  0.00
H
ATOM   2208 2HG  LYS   140      29.846   9.047  15.833  1.00  0.00
H
ATOM   2209  CD  LYS   140      27.831   9.456  16.443  1.00  0.00
C
ATOM   2210 1HD  LYS   140      28.042   9.204  17.482  1.00  0.00
H
ATOM   2211 2HD  LYS   140      27.138  10.297  16.423  1.00  0.00
H
ATOM   2212  CE  LYS   140      27.180   8.258  15.766  1.00  0.00
C
ATOM   2213 1HE  LYS   140      26.932   8.518  14.736  1.00  0.00
H
ATOM   2214 2HE  LYS   140      27.889   7.432  15.755  1.00  0.00
H
ATOM   2215  NZ  LYS   140      25.939   7.828  16.489  1.00  0.00
N
ATOM   2216 1HZ  LYS   140      25.547   6.999  16.059  1.00  0.00
H
ATOM   2217 2HZ  LYS   140      25.240   8.562  16.468  1.00  0.00
H
ATOM   2218 3HZ  LYS   140      26.154   7.612  17.455  1.00  0.00
H
ATOM   2219  N   GLU   141      31.812  12.951  17.717  1.00  0.00
N
ATOM   2220  H   GLU   141      31.935  12.049  18.172  1.00  0.00
H
ATOM   2221  CA  GLU   141      32.153  14.153  18.468  1.00  0.00
C
ATOM   2222  HA  GLU   141      31.279  14.799  18.518  1.00  0.00
H
ATOM   2223  C   GLU   141      33.296  14.927  17.827  1.00  0.00
C
ATOM   2224  O   GLU   141      33.294  16.161  17.797  1.00  0.00
O
ATOM   2225  CB  GLU   141      32.558  13.744  19.881  1.00  0.00
C
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ATOM   2226 1HB  GLU   141      31.781  13.095  20.275  1.00  0.00
H
ATOM   2227 2HB  GLU   141      33.487  13.179  19.828  1.00  0.00
H
ATOM   2228  CG  GLU   141      32.741  14.902  20.833  1.00  0.00
C
ATOM   2229 1HG  GLU   141      33.531  15.553  20.459  1.00  0.00
H
ATOM   2230 2HG  GLU   141      31.812  15.461  20.869  1.00  0.00
H
ATOM   2231  CD  GLU   141      33.097  14.457  22.234  1.00  0.00
C
ATOM   2232  OE1 GLU   141      33.210  13.236  22.488  1.00  0.00
O
ATOM   2233  OE2 GLU   141      33.305  15.331  23.101  1.00  0.00
O
ATOM   2234  N   THR   142      34.262  14.201  17.284  1.00  0.00
N
ATOM   2235  H   THR   142      34.226  13.191  17.353  1.00  0.00
H
ATOM   2236  CA  THR   142      35.379  14.828  16.584  1.00  0.00
C
ATOM   2237  HA  THR   142      35.843  15.564  17.240  1.00  0.00
H
ATOM   2238  C   THR   142      34.854  15.547  15.349  1.00  0.00
C
ATOM   2239  O   THR   142      35.231  16.682  15.074  1.00  0.00
O
ATOM   2240  CB  THR   142      36.441  13.785  16.170  1.00  0.00
C
ATOM   2241  HB  THR   142      36.003  13.063  15.482  1.00  0.00
H
ATOM   2242  OG1 THR   142      36.910  13.105  17.339  1.00  0.00
O
ATOM   2243  HG1 THR   142      36.226  12.491  17.639  1.00  0.00
H
ATOM   2244  CG2 THR   142      37.643  14.436  15.513  1.00  0.00
C
ATOM   2245 1HG2 THR   142      38.430  13.697  15.392  1.00  0.00
H
ATOM   2246 2HG2 THR   142      38.018  15.255  16.130  1.00  0.00
H
ATOM   2247 3HG2 THR   142      37.367  14.818  14.532  1.00  0.00
H
ATOM   2248  N   ILE   143      33.934  14.923  14.629  1.00  0.00
N
ATOM   2249  H   ILE   143      33.636  13.984  14.888  1.00  0.00
H
ATOM   2250  CA  ILE   143      33.339  15.556  13.457  1.00  0.00
C
ATOM   2251  HA  ILE   143      34.139  15.882  12.793  1.00  0.00
H
ATOM   2252  C   ILE   143      32.578  16.808  13.887  1.00  0.00
C
ATOM   2253  O   ILE   143      32.742  17.851  13.253  1.00  0.00
O
ATOM   2254  CB  ILE   143      32.436  14.562  12.677  1.00  0.00
C
ATOM   2255  HB  ILE   143      31.733  14.106  13.373  1.00  0.00
H
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ATOM   2256  CG1 ILE   143      33.320  13.463  12.057  1.00  0.00
C
ATOM   2257 1HG1 ILE   143      33.903  13.909  11.254  1.00  0.00
H
ATOM   2258 2HG1 ILE   143      34.021  13.103  12.807  1.00  0.00
H
ATOM   2259  CG2 ILE   143      31.632  15.286  11.581  1.00  0.00
C
ATOM   2260 1HG2 ILE   143      31.033  14.567  11.026  1.00  0.00
H
ATOM   2261 2HG2 ILE   143      32.303  15.809  10.898  1.00  0.00
H
ATOM   2262 3HG2 ILE   143      30.953  16.007  12.035  1.00  0.00
H
ATOM   2263  CD1 ILE   143      32.582  12.251  11.505  1.00  0.00
C
ATOM   2264 1HD1 ILE   143      33.307  11.499  11.192  1.00  0.00
H
ATOM   2265 2HD1 ILE   143      31.973  12.533  10.648  1.00  0.00
H
ATOM   2266 3HD1 ILE   143      31.944  11.828  12.281  1.00  0.00
H
ATOM   2267  N   PHE   144      31.828  16.767  14.983  1.00  0.00
N
ATOM   2268  H   PHE   144      31.716  15.896  15.499  1.00  0.00
H
ATOM   2269  CA  PHE   144      31.149  17.979  15.448  1.00  0.00
C
ATOM   2270  HA  PHE   144      30.497  18.344  14.655  1.00  0.00
H
ATOM   2271  C   PHE   144      32.161  19.072  15.763  1.00  0.00
C
ATOM   2272  O   PHE   144      31.934  20.231  15.436  1.00  0.00
O
ATOM   2273  CB  PHE   144      30.342  17.783  16.737  1.00  0.00
C
ATOM   2274 1HB  PHE   144      31.012  17.449  17.526  1.00  0.00
H
ATOM   2275 2HB  PHE   144      29.933  18.750  17.030  1.00  0.00
H
ATOM   2276  CG  PHE   144      29.200  16.811  16.647  1.00  0.00
C
ATOM   2277  CD1 PHE   144      28.915  16.002  17.762  1.00  0.00
C
ATOM   2278  HD1 PHE   144      29.550  16.043  18.634  1.00  0.00
H
ATOM   2279  CD2 PHE   144      28.350  16.751  15.526  1.00  0.00
C
ATOM   2280  HD2 PHE   144      28.544  17.362  14.658  1.00  0.00
H
ATOM   2281  CE1 PHE   144      27.787  15.157  17.777  1.00  0.00
C
ATOM   2282  HE1 PHE   144      27.574  14.549  18.643  1.00  0.00
H
ATOM   2283  CE2 PHE   144      27.213  15.910  15.538  1.00  0.00
C
ATOM   2284  HE2 PHE   144      26.555  15.874  14.688  1.00  0.00
H
ATOM   2285  CZ  PHE   144      26.929  15.126  16.672  1.00  0.00
C
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ATOM   2286  HZ  PHE   144      26.049  14.508  16.698  1.00  0.00
H
ATOM   2287  N   ALA   145      33.275  18.725  16.390  1.00  0.00
N
ATOM   2288  H   ALA   145      33.435  17.750  16.631  1.00  0.00
H
ATOM   2289  CA  ALA   145      34.261  19.724  16.782  1.00  0.00
C
ATOM   2290  HA  ALA   145      33.749  20.505  17.346  1.00  0.00
H
ATOM   2291  C   ALA   145      34.912  20.379  15.562  1.00  0.00
C
ATOM   2292  O   ALA   145      35.105  21.590  15.532  1.00  0.00
O
ATOM   2293  CB  ALA   145      35.322  19.081  17.680  1.00  0.00
C
ATOM   2294 1HB  ALA   145      34.853  18.661  18.569  1.00  0.00
H
ATOM   2295 2HB  ALA   145      36.041  19.841  17.984  1.00  0.00
H
ATOM   2296 3HB  ALA   145      35.846  18.290  17.141  1.00  0.00
H
ATOM   2297  N   ILE   146      35.243  19.593  14.546  1.00  0.00
N
ATOM   2298  H   ILE   146      35.072  18.591  14.605  1.00  0.00
H
ATOM   2299  CA  ILE   146      35.882  20.153  13.353  1.00  0.00
C
ATOM   2300  HA  ILE   146      36.702  20.797  13.673  1.00  0.00
H
ATOM   2301  C   ILE   146      34.861  21.028  12.620  1.00  0.00
C
ATOM   2302  O   ILE   146      35.198  22.114  12.162  1.00  0.00
O
ATOM   2303  CB  ILE   146      36.467  19.060  12.403  1.00  0.00
C
ATOM   2304  HB  ILE   146      35.652  18.429  12.047  1.00  0.00
H
ATOM   2305  CG1 ILE   146      37.506  18.182  13.132  1.00  0.00
C
ATOM   2306 1HG1 ILE   146      38.408  18.770  13.288  1.00  0.00
H
ATOM   2307 2HG1 ILE   146      37.127  17.911  14.112  1.00  0.00
H
ATOM   2308  CG2 ILE   146      37.186  19.717  11.203  1.00  0.00
C
ATOM   2309 1HG2 ILE   146      37.549  18.960  10.513  1.00  0.00
H
ATOM   2310 2HG2 ILE   146      38.024  20.320  11.553  1.00  0.00
H
ATOM   2311 3HG2 ILE   146      36.504  20.373  10.666  1.00  0.00
H
ATOM   2312  CD1 ILE   146      37.885  16.882  12.407  1.00  0.00
C
ATOM   2313 1HD1 ILE   146      38.592  16.325  13.021  1.00  0.00
H
ATOM   2314 2HD1 ILE   146      38.350  17.097  11.447  1.00  0.00
H
ATOM   2315 3HD1 ILE   146      36.993  16.273  12.252  1.00  0.00
H
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ATOM   2316  N   VAL   147      33.601  20.614  12.558  1.00  0.00
N
ATOM   2317  H   VAL   147      33.343  19.705  12.934  1.00  0.00
H
ATOM   2318  CA  VAL   147      32.557  21.462  11.969  1.00  0.00
C
ATOM   2319  HA  VAL   147      32.839  21.716  10.948  1.00  0.00
H
ATOM   2320  C   VAL   147      32.438  22.771  12.743  1.00  0.00
C
ATOM   2321  O   VAL   147      32.428  23.840  12.144  1.00  0.00
O
ATOM   2322  CB  VAL   147      31.184  20.723  11.942  1.00  0.00
C
ATOM   2323  HB  VAL   147      31.013  20.271  12.917  1.00  0.00
H
ATOM   2324  CG1 VAL   147      30.008  21.664  11.651  1.00  0.00
C
ATOM   2325 1HG1 VAL   147      29.082  21.092  11.598  1.00  0.00
H
ATOM   2326 2HG1 VAL   147      30.163  22.186  10.706  1.00  0.00
H
ATOM   2327 3HG1 VAL   147      29.901  22.401  12.449  1.00  0.00
H
ATOM   2328  CG2 VAL   147      31.212  19.616  10.883  1.00  0.00
C
ATOM   2329 1HG2 VAL   147      30.259  19.093  10.879  1.00  0.00
H
ATOM   2330 2HG2 VAL   147      32.005  18.902  11.098  1.00  0.00
H
ATOM   2331 3HG2 VAL   147      31.376  20.050   9.898  1.00  0.00
H
ATOM   2332  N   THR   148      32.392  22.702  14.065  1.00  0.00
N
ATOM   2333  H   THR   148      32.457  21.796  14.516  1.00  0.00
H
ATOM   2334  CA  THR   148      32.195  23.892  14.893  1.00  0.00
C
ATOM   2335  HA  THR   148      31.242  24.345  14.624  1.00  0.00
H
ATOM   2336  C   THR   148      33.297  24.919  14.644  1.00  0.00
C
ATOM   2337  O   THR   148      33.027  26.109  14.472  1.00  0.00
O
ATOM   2338  CB  THR   148      32.157  23.498  16.389  1.00  0.00
C
ATOM   2339  HB  THR   148      33.128  23.106  16.690  1.00  0.00
H
ATOM   2340  OG1 THR   148      31.162  22.489  16.579  1.00  0.00
O
ATOM   2341  HG1 THR   148      31.462  21.682  16.135  1.00  0.00
H
ATOM   2342  CG2 THR   148      31.778  24.645  17.288  1.00  0.00
C
ATOM   2343 1HG2 THR   148      31.668  24.282  18.310  1.00  0.00
H
ATOM   2344 2HG2 THR   148      30.832  25.080  16.963  1.00  0.00
H
ATOM   2345 3HG2 THR   148      32.560  25.401  17.266  1.00  0.00
H
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ATOM   2346  N   GLU   149      34.532  24.445  14.575  1.00  0.00
N
ATOM   2347  H   GLU   149      34.695  23.454  14.729  1.00  0.00
H
ATOM   2348  CA  GLU   149      35.683  25.308  14.316  1.00  0.00
C
ATOM   2349  HA  GLU   149      35.659  26.161  14.996  1.00  0.00
H
ATOM   2350  C   GLU   149      35.707  25.833  12.882  1.00  0.00
C
ATOM   2351  O   GLU   149      36.036  26.992  12.633  1.00  0.00
O
ATOM   2352  CB  GLU   149      36.959  24.494  14.555  1.00  0.00
C
ATOM   2353 1HB  GLU   149      36.883  23.576  13.973  1.00  0.00
H
ATOM   2354 2HB  GLU   149      37.821  25.060  14.202  1.00  0.00
H
ATOM   2355  CG  GLU   149      37.175  24.129  16.017  1.00  0.00
C
ATOM   2356 1HG  GLU   149      37.487  25.022  16.561  1.00  0.00
H
ATOM   2357 2HG  GLU   149      36.234  23.788  16.446  1.00  0.00
H
ATOM   2358  CD  GLU   149      38.205  23.026  16.219  1.00  0.00
C
ATOM   2359  OE1 GLU   149      39.069  22.795  15.344  1.00  0.00
O
ATOM   2360  OE2 GLU   149      38.181  22.366  17.284  1.00  0.00
O
ATOM   2361  N   GLY   150      35.379  24.973  11.930  1.00  0.00
N
ATOM   2362  H   GLY   150      35.080  24.032  12.176  1.00  0.00
H
ATOM   2363  CA  GLY   150      35.518  25.319  10.527  1.00  0.00
C
ATOM   2364 1HA  GLY   150      36.472  25.823  10.384  1.00  0.00
H
ATOM   2365 2HA  GLY   150      35.524  24.401   9.941  1.00  0.00
H
ATOM   2366  C   GLY   150      34.427  26.214   9.996  1.00  0.00
C
ATOM   2367  O   GLY   150      34.644  26.989   9.075  1.00  0.00
O
ATOM   2368  N   GLU   151      33.244  26.155  10.576  1.00  0.00
N
ATOM   2369  H   GLU   151      33.075  25.493  11.333  1.00  0.00
H
ATOM   2370  CA  GLU   151      32.154  27.018  10.133  1.00  0.00
C
ATOM   2371  HA  GLU   151      32.012  26.918   9.057  1.00  0.00
H
ATOM   2372  C   GLU   151      32.451  28.482  10.435  1.00  0.00
C
ATOM   2373  O   GLU   151      31.916  29.368   9.775  1.00  0.00
O
ATOM   2374  CB  GLU   151      30.871  26.625  10.845  1.00  0.00
C
ATOM   2375 1HB  GLU   151      31.128  26.434  11.883  1.00  0.00
H
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ATOM   2376 2HB  GLU   151      30.174  27.461  10.808  1.00  0.00
H
ATOM   2377  CG  GLU   151      30.182  25.406  10.273  1.00  0.00
C
ATOM   2378 1HG  GLU   151      29.941  25.590   9.226  1.00  0.00
H
ATOM   2379 2HG  GLU   151      30.850  24.548  10.322  1.00  0.00
H
ATOM   2380  CD  GLU   151      28.916  25.101  11.043  1.00  0.00
C
ATOM   2381  OE1 GLU   151      28.948  25.180  12.295  1.00  0.00
O
ATOM   2382  OE2 GLU   151      27.872  24.815  10.414  1.00  0.00
O
ATOM   2383  N   ASP   152      33.323  28.754  11.396  1.00  0.00
N
ATOM   2384  H   ASP   152      33.707  28.004  11.957  1.00  0.00
H
ATOM   2385  CA  ASP   152      33.755  30.130  11.649  1.00  0.00
C
ATOM   2386  HA  ASP   152      32.890  30.794  11.630  1.00  0.00
H
ATOM   2387  C   ASP   152      34.738  30.601  10.575  1.00  0.00
C
ATOM   2388  O   ASP   152      34.829  31.798  10.289  1.00  0.00
O
ATOM   2389  CB  ASP   152      34.437  30.258  13.016  1.00  0.00
C
ATOM   2390 1HB  ASP   152      35.156  29.450  13.135  1.00  0.00
H
ATOM   2391 2HB  ASP   152      34.972  31.207  13.045  1.00  0.00
H
ATOM   2392  CG  ASP   152      33.455  30.242  14.177  1.00  0.00
C
ATOM   2393  OD1 ASP   152      32.227  30.361  13.967  1.00  0.00
O
ATOM   2394  OD2 ASP   152      33.915  30.172  15.339  1.00  0.00
O
ATOM   2395  N   ILE   153      35.481  29.672   9.986  1.00  0.00
N
ATOM   2396  H   ILE   153      35.349  28.703  10.245  1.00  0.00
H
ATOM   2397  CA  ILE   153      36.502  29.988   8.979  1.00  0.00
C
ATOM   2398  HA  ILE   153      37.013  30.908   9.261  1.00  0.00
H
ATOM   2399  C   ILE   153      35.854  30.173   7.604  1.00  0.00
C
ATOM   2400  O   ILE   153      36.184  31.098   6.856  1.00  0.00
O
ATOM   2401  CB  ILE   153      37.564  28.835   8.840  1.00  0.00
C
ATOM   2402  HB  ILE   153      37.051  27.941   8.497  1.00  0.00
H
ATOM   2403  CG1 ILE   153      38.211  28.503  10.199  1.00  0.00
C
ATOM   2404 1HG1 ILE   153      38.834  29.342  10.509  1.00  0.00
H
ATOM   2405 2HG1 ILE   153      37.428  28.375  10.942  1.00  0.00
H
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ATOM   2406  CG2 ILE   153      38.663  29.200   7.799  1.00  0.00
C
ATOM   2407 1HG2 ILE   153      39.392  28.396   7.712  1.00  0.00
H
ATOM   2408 2HG2 ILE   153      39.177  30.117   8.099  1.00  0.00
H
ATOM   2409 3HG2 ILE   153      38.218  29.346   6.815  1.00  0.00
H
ATOM   2410  CD1 ILE   153      39.067  27.217  10.207  1.00  0.00
C
ATOM   2411 1HD1 ILE   153      39.284  26.936  11.237  1.00  0.00
H
ATOM   2412 2HD1 ILE   153      40.008  27.388   9.684  1.00  0.00
H
ATOM   2413 3HD1 ILE   153      38.528  26.400   9.727  1.00  0.00
H
ATOM   2414  N   TYR   154      34.952  29.271   7.250  1.00  0.00
N
ATOM   2415  H   TYR   154      34.640  28.584   7.929  1.00  0.00
H
ATOM   2416  CA  TYR   154      34.486  29.145   5.870  1.00  0.00
C
ATOM   2417  HA  TYR   154      35.196  29.652   5.218  1.00  0.00
H
ATOM   2418  C   TYR   154      33.113  29.757   5.578  1.00  0.00
C
ATOM   2419  O   TYR   154      32.313  30.001   6.478  1.00  0.00
O
ATOM   2420  CB  TYR   154      34.515  27.663   5.500  1.00  0.00
C
ATOM   2421 1HB  TYR   154      33.896  27.107   6.204  1.00  0.00
H
ATOM   2422 2HB  TYR   154      34.095  27.550   4.508  1.00  0.00
H
ATOM   2423  CG  TYR   154      35.917  27.085   5.489  1.00  0.00
C
ATOM   2424  CD1 TYR   154      36.336  26.171   6.476  1.00  0.00
C
ATOM   2425  HD1 TYR   154      35.647  25.858   7.242  1.00  0.00
H
ATOM   2426  CD2 TYR   154      36.841  27.458   4.492  1.00  0.00
C
ATOM   2427  HD2 TYR   154      36.548  28.159   3.722  1.00  0.00
H
ATOM   2428  CE1 TYR   154      37.659  25.664   6.489  1.00  0.00
C
ATOM   2429  HE1 TYR   154      37.975  24.988   7.267  1.00  0.00
H
ATOM   2430  CE2 TYR   154      38.158  26.928   4.485  1.00  0.00
C
ATOM   2431  HE2 TYR   154      38.854  27.214   3.713  1.00  0.00
H
ATOM   2432  CZ  TYR   154      38.553  26.044   5.489  1.00  0.00
C
ATOM   2433  OH  TYR   154      39.829  25.542   5.496  1.00  0.00
O
ATOM   2434  HH  TYR   154      40.357  25.858   4.758  1.00  0.00
H
ATOM   2435  N   ASN   155      32.868  30.050   4.309  1.00  0.00
N
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ATOM   2436  H   ASN   155      33.542  29.760   3.604  1.00  0.00
H
ATOM   2437  CA  ASN   155      31.686  30.782   3.845  1.00  0.00
C
ATOM   2438  HA  ASN   155      31.257  31.342   4.676  1.00  0.00
H
ATOM   2439  C   ASN   155      30.620  29.825   3.295  1.00  0.00
C
ATOM   2440  O   ASN   155      30.766  28.616   3.403  1.00  0.00
O
ATOM   2441  CB  ASN   155      32.150  31.781   2.784  1.00  0.00
C
ATOM   2442 1HB  ASN   155      33.179  32.047   3.005  1.00  0.00
H
ATOM   2443 2HB  ASN   155      32.128  31.312   1.806  1.00  0.00
H
ATOM   2444  CG  ASN   155      31.333  33.055   2.765  1.00  0.00
C
ATOM   2445  OD1 ASN   155      30.129  33.059   2.543  1.00  0.00
O
ATOM   2446  ND2 ASN   155      31.984  34.148   3.010  1.00  0.00
N
ATOM   2447 1HD2 ASN   155      31.486  35.025   3.034  1.00  0.00
H
ATOM   2448 2HD2 ASN   155      32.977  34.114   3.185  1.00  0.00
H
ATOM   2449  N   ASN   156      29.547  30.347   2.718  1.00  0.00
N
ATOM   2450  H   ASN   156      29.524  31.350   2.557  1.00  0.00
H
ATOM   2451  CA  ASN   156      28.375  29.550   2.353  1.00  0.00
C
ATOM   2452  HA  ASN   156      28.054  28.999   3.238  1.00  0.00
H
ATOM   2453  C   ASN   156      28.572  28.516   1.247  1.00  0.00
C
ATOM   2454  O   ASN   156      27.828  27.534   1.212  1.00  0.00
O
ATOM   2455  CB  ASN   156      27.238  30.480   1.922  1.00  0.00
C
ATOM   2456 1HB  ASN   156      27.590  31.122   1.116  1.00  0.00
H
ATOM   2457 2HB  ASN   156      26.413  29.877   1.548  1.00  0.00
H
ATOM   2458  CG  ASN   156      26.724  31.337   3.047  1.00  0.00
C
ATOM   2459  OD1 ASN   156      26.616  30.899   4.186  1.00  0.00
O
ATOM   2460  ND2 ASN   156      26.413  32.564   2.750  1.00  0.00
N
ATOM   2461 1HD2 ASN   156      26.101  33.186   3.481  1.00  0.00
H
ATOM   2462 2HD2 ASN   156      26.488  32.895   1.802  1.00  0.00
H
ATOM   2463  N   ASN   157      29.542  28.688   0.357  1.00  0.00
N
ATOM   2464  H   ASN   157      30.122  29.519   0.378  1.00  0.00
H
ATOM   2465  CA  ASN   157      29.843  27.637  -0.617  1.00  0.00
C
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ATOM   2466  HA  ASN   157      28.918  27.160  -0.931  1.00  0.00
H
ATOM   2467  C   ASN   157      30.703  26.616   0.120  1.00  0.00
C
ATOM   2468  O   ASN   157      31.881  26.846   0.381  1.00  0.00
O
ATOM   2469  CB  ASN   157      30.560  28.189  -1.851  1.00  0.00
C
ATOM   2470 1HB  ASN   157      30.007  29.052  -2.217  1.00  0.00
H
ATOM   2471 2HB  ASN   157      31.563  28.511  -1.575  1.00  0.00
H
ATOM   2472  CG  ASN   157      30.659  27.180  -2.967  1.00  0.00
C
ATOM   2473  OD1 ASN   157      30.719  25.971  -2.758  1.00  0.00
O
ATOM   2474  ND2 ASN   157      30.650  27.670  -4.175  1.00  0.00
N
ATOM   2475 1HD2 ASN   157      30.711  27.052  -4.968  1.00  0.00
H
ATOM   2476 2HD2 ASN   157      30.586  28.668  -4.311  1.00  0.00
H
ATOM   2477  N   ASP   158      30.089  25.520   0.539  1.00  0.00
N
ATOM   2478  H   ASP   158      29.171  25.299   0.166  1.00  0.00
H
ATOM   2479  CA  ASP   158      30.620  24.682   1.618  1.00  0.00
C
ATOM   2480  HA  ASP   158      30.987  25.333   2.406  1.00  0.00
H
ATOM   2481  C   ASP   158      31.787  23.788   1.219  1.00  0.00
C
ATOM   2482  O   ASP   158      32.367  23.096   2.048  1.00  0.00
O
ATOM   2483  CB  ASP   158      29.505  23.812   2.201  1.00  0.00
C
ATOM   2484 1HB  ASP   158      28.901  23.422   1.384  1.00  0.00
H
ATOM   2485 2HB  ASP   158      29.949  22.978   2.741  1.00  0.00
H
ATOM   2486  CG  ASP   158      28.619  24.562   3.170  1.00  0.00
C
ATOM   2487  OD1 ASP   158      29.132  25.419   3.914  1.00  0.00
O
ATOM   2488  OD2 ASP   158      27.402  24.287   3.235  1.00  0.00
O
ATOM   2489  N   LYS   159      32.180  23.821  -0.044  1.00  0.00
N
ATOM   2490  H   LYS   159      31.730  24.474  -0.676  1.00  0.00
H
ATOM   2491  CA  LYS   159      33.232  22.934  -0.552  1.00  0.00
C
ATOM   2492  HA  LYS   159      32.938  21.901  -0.366  1.00  0.00
H
ATOM   2493  C   LYS   159      34.591  23.120   0.110  1.00  0.00
C
ATOM   2494  O   LYS   159      35.407  22.200   0.132  1.00  0.00
O
ATOM   2495  CB  LYS   159      33.367  23.152  -2.061  1.00  0.00
C
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ATOM   2496 1HB  LYS   159      33.530  24.216  -2.233  1.00  0.00
H
ATOM   2497 2HB  LYS   159      34.238  22.610  -2.429  1.00  0.00
H
ATOM   2498  CG  LYS   159      32.146  22.712  -2.864  1.00  0.00
C
ATOM   2499 1HG  LYS   159      31.237  23.081  -2.389  1.00  0.00
H
ATOM   2500 2HG  LYS   159      32.215  23.143  -3.861  1.00  0.00
H
ATOM   2501  CD  LYS   159      32.073  21.201  -3.007  1.00  0.00
C
ATOM   2502 1HD  LYS   159      32.968  20.867  -3.532  1.00  0.00
H
ATOM   2503 2HD  LYS   159      32.043  20.731  -2.023  1.00  0.00
H
ATOM   2504  CE  LYS   159      30.847  20.773  -3.794  1.00  0.00
C
ATOM   2505 1HE  LYS   159      29.949  20.999  -3.215  1.00  0.00
H
ATOM   2506 2HE  LYS   159      30.812  21.327  -4.734  1.00  0.00
H
ATOM   2507  NZ  LYS   159      30.923  19.304  -4.085  1.00  0.00
N
ATOM   2508 1HZ  LYS   159      30.051  18.976  -4.478  1.00  0.00
H
ATOM   2509 2HZ  LYS   159      31.124  18.791  -3.233  1.00  0.00
H
ATOM   2510 3HZ  LYS   159      31.664  19.116  -4.748  1.00  0.00
H
ATOM   2511  N   GLU   160      34.857  24.288   0.668  1.00  0.00
N
ATOM   2512  H   GLU   160      34.165  25.025   0.657  1.00  0.00
H
ATOM   2513  CA  GLU   160      36.145  24.519   1.320  1.00  0.00
C
ATOM   2514  HA  GLU   160      36.917  23.985   0.766  1.00  0.00
H
ATOM   2515  C   GLU   160      36.136  23.982   2.752  1.00  0.00
C
ATOM   2516  O   GLU   160      37.132  23.424   3.213  1.00  0.00
O
ATOM   2517  CB  GLU   160      36.487  26.005   1.284  1.00  0.00
C
ATOM   2518 1HB  GLU   160      35.752  26.556   1.863  1.00  0.00
H
ATOM   2519 2HB  GLU   160      37.465  26.146   1.738  1.00  0.00
H
ATOM   2520  CG  GLU   160      36.511  26.557  -0.132  1.00  0.00
C
ATOM   2521 1HG  GLU   160      37.172  25.935  -0.736  1.00  0.00
H
ATOM   2522 2HG  GLU   160      35.507  26.517  -0.558  1.00  0.00
H
ATOM   2523  CD  GLU   160      37.005  27.984  -0.186  1.00  0.00
C
ATOM   2524  OE1 GLU   160      36.366  28.891   0.387  1.00  0.00
O
ATOM   2525  OE2 GLU   160      38.052  28.227  -0.831  1.00  0.00
O
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ATOM   2526  N   LEU   161      34.991  24.071   3.416  1.00  0.00
N
ATOM   2527  H   LEU   161      34.216  24.578   2.999  1.00  0.00
H
ATOM   2528  CA  LEU   161      34.787  23.451   4.727  1.00  0.00
C
ATOM   2529  HA  LEU   161      35.569  23.773   5.413  1.00  0.00
H
ATOM   2530  C   LEU   161      34.854  21.940   4.589  1.00  0.00
C
ATOM   2531  O   LEU   161      35.502  21.256   5.377  1.00  0.00
O
ATOM   2532  CB  LEU   161      33.410  23.848   5.276  1.00  0.00
C
ATOM   2533 1HB  LEU   161      33.406  24.928   5.385  1.00  0.00
H
ATOM   2534 2HB  LEU   161      32.673  23.599   4.516  1.00  0.00
H
ATOM   2535  CG  LEU   161      32.896  23.241   6.589  1.00  0.00
C
ATOM   2536  HG  LEU   161      32.848  22.162   6.470  1.00  0.00
H
ATOM   2537  CD1 LEU   161      33.797  23.554   7.770  1.00  0.00
C
ATOM   2538 1HD1 LEU   161      33.368  23.142   8.684  1.00  0.00
H
ATOM   2539 2HD1 LEU   161      33.893  24.633   7.875  1.00  0.00
H
ATOM   2540 3HD1 LEU   161      34.781  23.112   7.615  1.00  0.00
H
ATOM   2541  CD2 LEU   161      31.482  23.747   6.876  1.00  0.00
C
ATOM   2542 1HD2 LEU   161      31.102  23.289   7.789  1.00  0.00
H
ATOM   2543 2HD2 LEU   161      30.821  23.486   6.049  1.00  0.00
H
ATOM   2544 3HD2 LEU   161      31.489  24.832   6.993  1.00  0.00
H
ATOM   2545  N   VAL   162      34.220  21.429   3.545  1.00  0.00
N
ATOM   2546  H   VAL   162      33.687  22.052   2.938  1.00  0.00
H
ATOM   2547  CA  VAL   162      34.244  20.002   3.238  1.00  0.00
C
ATOM   2548  HA  VAL   162      33.774  19.445   4.046  1.00  0.00
H
ATOM   2549  C   VAL   162      35.677  19.517   3.105  1.00  0.00
C
ATOM   2550  O   VAL   162      36.064  18.508   3.710  1.00  0.00
O
ATOM   2551  CB  VAL   162      33.495  19.735   1.907  1.00  0.00
C
ATOM   2552  HB  VAL   162      33.803  20.483   1.184  1.00  0.00
H
ATOM   2553  CG1 VAL   162      33.833  18.380   1.332  1.00  0.00
C
ATOM   2554 1HG1 VAL   162      33.139  18.125   0.533  1.00  0.00
H
ATOM   2555 2HG1 VAL   162      33.778  17.623   2.113  1.00  0.00
H
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ATOM   2556 3HG1 VAL   162      34.839  18.391   0.911  1.00  0.00
H
ATOM   2557  CG2 VAL   162      31.998  19.847   2.106  1.00  0.00
C
ATOM   2558 1HG2 VAL   162      31.501  19.801   1.137  1.00  0.00
H
ATOM   2559 2HG2 VAL   162      31.742  20.796   2.574  1.00  0.00
H
ATOM   2560 3HG2 VAL   162      31.649  19.037   2.746  1.00  0.00
H
ATOM   2561  N   LYS   163      36.471  20.255   2.341  1.00  0.00
N
ATOM   2562  H   LYS   163      36.096  21.082   1.887  1.00  0.00
H
ATOM   2563  CA  LYS   163      37.857  19.881   2.097  1.00  0.00
C
ATOM   2564  HA  LYS   163      37.879  18.881   1.667  1.00  0.00
H
ATOM   2565  C   LYS   163      38.626  19.852   3.402  1.00  0.00
C
ATOM   2566  O   LYS   163      39.343  18.898   3.684  1.00  0.00
O
ATOM   2567  CB  LYS   163      38.477  20.876   1.116  1.00  0.00
C
ATOM   2568 1HB  LYS   163      37.830  20.932   0.242  1.00  0.00
H
ATOM   2569 2HB  LYS   163      38.497  21.858   1.583  1.00  0.00
H
ATOM   2570  CG  LYS   163      39.880  20.543   0.650  1.00  0.00
C
ATOM   2571 1HG  LYS   163      40.552  20.513   1.507  1.00  0.00
H
ATOM   2572 2HG  LYS   163      39.881  19.577   0.147  1.00  0.00
H
ATOM   2573  CD  LYS   163      40.344  21.616  -0.313  1.00  0.00
C
ATOM   2574 1HD  LYS   163      39.659  21.648  -1.159  1.00  0.00
H
ATOM   2575 2HD  LYS   163      40.323  22.582   0.193  1.00  0.00
H
ATOM   2576  CE  LYS   163      41.745  21.358  -0.825  1.00  0.00
C
ATOM   2577 1HE  LYS   163      42.446  21.347   0.011  1.00  0.00
H
ATOM   2578 2HE  LYS   163      41.773  20.395  -1.338  1.00  0.00
H
ATOM   2579  NZ  LYS   163      42.100  22.450  -1.784  1.00  0.00
N
ATOM   2580 1HZ  LYS   163      43.077  22.384  -2.042  1.00  0.00
H
ATOM   2581 2HZ  LYS   163      41.924  23.354  -1.363  1.00  0.00
H
ATOM   2582 3HZ  LYS   163      41.528  22.364  -2.618  1.00  0.00
H
ATOM   2583  N   TRP   164      38.445  20.878   4.217  1.00  0.00
N
ATOM   2584  H   TRP   164      37.818  21.631   3.950  1.00  0.00
H
ATOM   2585  CA  TRP   164      39.164  20.974   5.478  1.00  0.00
C
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ATOM   2586  HA  TRP   164      40.231  20.935   5.264  1.00  0.00
H
ATOM   2587  C   TRP   164      38.832  19.831   6.433  1.00  0.00
C
ATOM   2588  O   TRP   164      39.737  19.236   7.023  1.00  0.00
O
ATOM   2589  CB  TRP   164      38.842  22.316   6.126  1.00  0.00
C
ATOM   2590 1HB  TRP   164      38.961  23.089   5.369  1.00  0.00
H
ATOM   2591 2HB  TRP   164      37.805  22.322   6.461  1.00  0.00
H
ATOM   2592  CG  TRP   164      39.737  22.647   7.273  1.00  0.00
C
ATOM   2593  CD1 TRP   164      41.070  22.890   7.219  1.00  0.00
C
ATOM   2594  HD1 TRP   164      41.656  22.849   6.311  1.00  0.00
H
ATOM   2595  CD2 TRP   164      39.368  22.846   8.649  1.00  0.00
C
ATOM   2596  NE1 TRP   164      41.577  23.197   8.449  1.00  0.00
N
ATOM   2597  HE1 TRP   164      42.558  23.371   8.643  1.00  0.00
H
ATOM   2598  CE2 TRP   164      40.549  23.232   9.347  1.00  0.00
C
ATOM   2599  CE3 TRP   164      38.155  22.776   9.361  1.00  0.00
C
ATOM   2600  HE3 TRP   164      37.244  22.472   8.866  1.00  0.00
H
ATOM   2601  CZ2 TRP   164      40.539  23.582  10.710  1.00  0.00
C
ATOM   2602  HZ2 TRP   164      41.447  23.883  11.211  1.00  0.00
H
ATOM   2603  CZ3 TRP   164      38.145  23.124  10.737  1.00  0.00
C
ATOM   2604  HZ3 TRP   164      37.227  23.074  11.297  1.00  0.00
H
ATOM   2605  CH2 TRP   164      39.334  23.551  11.385  1.00  0.00
C
ATOM   2606  HH2 TRP   164      39.296  23.849  12.425  1.00  0.00
H
ATOM   2607  N   ILE   165      37.556  19.485   6.553  1.00  0.00
N
ATOM   2608  H   ILE   165      36.840  19.997   6.040  1.00  0.00
H
ATOM   2609  CA  ILE   165      37.162  18.395   7.448  1.00  0.00
C
ATOM   2610  HA  ILE   165      37.619  18.570   8.419  1.00  0.00
H
ATOM   2611  C   ILE   165      37.693  17.073   6.904  1.00  0.00
C
ATOM   2612  O   ILE   165      38.287  16.295   7.649  1.00  0.00
O
ATOM   2613  CB  ILE   165      35.618  18.263   7.632  1.00  0.00
C
ATOM   2614  HB  ILE   165      35.173  18.043   6.661  1.00  0.00
H
ATOM   2615  CG1 ILE   165      34.983  19.555   8.176  1.00  0.00
C
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ATOM   2616 1HG1 ILE   165      35.108  19.576   9.254  1.00  0.00
H
ATOM   2617 2HG1 ILE   165      35.491  20.422   7.761  1.00  0.00
H
ATOM   2618  CG2 ILE   165      35.288  17.117   8.626  1.00  0.00
C
ATOM   2619 1HG2 ILE   165      34.224  17.098   8.855  1.00  0.00
H
ATOM   2620 2HG2 ILE   165      35.841  17.252   9.558  1.00  0.00
H
ATOM   2621 3HG2 ILE   165      35.561  16.155   8.192  1.00  0.00
H
ATOM   2622  CD1 ILE   165      33.500  19.684   7.866  1.00  0.00
C
ATOM   2623 1HD1 ILE   165      33.121  20.602   8.312  1.00  0.00
H
ATOM   2624 2HD1 ILE   165      32.945  18.840   8.275  1.00  0.00
H
ATOM   2625 3HD1 ILE   165      33.355  19.727   6.786  1.00  0.00
H
ATOM   2626  N   LYS   166      37.523  16.816   5.610  1.00  0.00
N
ATOM   2627  H   LYS   166      37.071  17.504   5.008  1.00  0.00
H
ATOM   2628  CA  LYS   166      37.971  15.543   5.035  1.00  0.00
C
ATOM   2629  HA  LYS   166      37.490  14.723   5.569  1.00  0.00
H
ATOM   2630  C   LYS   166      39.465  15.369   5.223  1.00  0.00
C
ATOM   2631  O   LYS   166      39.905  14.305   5.633  1.00  0.00
O
ATOM   2632  CB  LYS   166      37.619  15.438   3.546  1.00  0.00
C
ATOM   2633 1HB  LYS   166      36.536  15.428   3.442  1.00  0.00
H
ATOM   2634 2HB  LYS   166      38.005  16.316   3.029  1.00  0.00
H
ATOM   2635  CG  LYS   166      38.208  14.193   2.878  1.00  0.00
C
ATOM   2636 1HG  LYS   166      39.294  14.277   2.884  1.00  0.00
H
ATOM   2637 2HG  LYS   166      37.924  13.309   3.447  1.00  0.00
H
ATOM   2638  CD  LYS   166      37.761  14.009   1.445  1.00  0.00
C
ATOM   2639 1HD  LYS   166      36.701  13.753   1.429  1.00  0.00
H
ATOM   2640 2HD  LYS   166      37.918  14.932   0.889  1.00  0.00
H
ATOM   2641  CE  LYS   166      38.574  12.899   0.799  1.00  0.00
C
ATOM   2642 1HE  LYS   166      39.623  13.200   0.768  1.00  0.00
H
ATOM   2643 2HE  LYS   166      38.495  11.996   1.409  1.00  0.00
H
ATOM   2644  NZ  LYS   166      38.094  12.601  -0.587  1.00  0.00
N
ATOM   2645 1HZ  LYS   166      38.695  11.917  -1.025  1.00  0.00
H
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ATOM   2646 2HZ  LYS   166      38.086  13.447  -1.146  1.00  0.00
H
ATOM   2647 3HZ  LYS   166      37.150  12.229  -0.563  1.00  0.00
H
ATOM   2648  N   LEU   167      40.253  16.403   4.981  1.00  0.00
N
ATOM   2649  H   LEU   167      39.860  17.286   4.666  1.00  0.00
H
ATOM   2650  CA  LEU   167      41.697  16.264   5.134  1.00  0.00
C
ATOM   2651  HA  LEU   167      42.017  15.376   4.588  1.00  0.00
H
ATOM   2652  C   LEU   167      42.105  16.053   6.589  1.00  0.00
C
ATOM   2653  O   LEU   167      43.077  15.353   6.857  1.00  0.00
O
ATOM   2654  CB  LEU   167      42.423  17.479   4.555  1.00  0.00
C
ATOM   2655 1HB  LEU   167      42.027  18.365   5.045  1.00  0.00
H
ATOM   2656 2HB  LEU   167      43.477  17.392   4.820  1.00  0.00
H
ATOM   2657  CG  LEU   167      42.348  17.704   3.038  1.00  0.00
C
ATOM   2658  HG  LEU   167      41.308  17.795   2.745  1.00  0.00
H
ATOM   2659  CD1 LEU   167      43.052  19.009   2.691  1.00  0.00
C
ATOM   2660 1HD1 LEU   167      42.993  19.184   1.616  1.00  0.00
H
ATOM   2661 2HD1 LEU   167      44.100  18.966   2.990  1.00  0.00
H
ATOM   2662 3HD1 LEU   167      42.566  19.838   3.206  1.00  0.00
H
ATOM   2663  CD2 LEU   167      42.942  16.553   2.248  1.00  0.00
C
ATOM   2664 1HD2 LEU   167      42.962  16.805   1.186  1.00  0.00
H
ATOM   2665 2HD2 LEU   167      42.328  15.661   2.374  1.00  0.00
H
ATOM   2666 3HD2 LEU   167      43.953  16.345   2.590  1.00  0.00
H
ATOM   2667  N   ARG   168      41.385  16.617   7.550  1.00  0.00
N
ATOM   2668  H   ARG   168      40.607  17.229   7.318  1.00  0.00
H
ATOM   2669  CA  ARG   168      41.701  16.337   8.957  1.00  0.00
C
ATOM   2670  HA  ARG   168      42.780  16.410   9.097  1.00  0.00
H
ATOM   2671  C   ARG   168      41.312  14.909   9.323  1.00  0.00
C
ATOM   2672  O   ARG   168      42.051  14.233  10.037  1.00  0.00
O
ATOM   2673  CB  ARG   168      41.028  17.343   9.899  1.00  0.00
C
ATOM   2674 1HB  ARG   168      39.973  17.430   9.641  1.00  0.00
H
ATOM   2675 2HB  ARG   168      41.105  16.956  10.914  1.00  0.00
H
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ATOM   2676  CG  ARG   168      41.682  18.726   9.861  1.00  0.00
C
ATOM   2677 1HG  ARG   168      42.736  18.621  10.120  1.00  0.00
H
ATOM   2678 2HG  ARG   168      41.613  19.121   8.851  1.00  0.00
H
ATOM   2679  CD  ARG   168      41.048  19.733  10.815  1.00  0.00
C
ATOM   2680 1HD  ARG   168      41.498  20.710  10.635  1.00  0.00
H
ATOM   2681 2HD  ARG   168      39.981  19.796  10.603  1.00  0.00
H
ATOM   2682  NE  ARG   168      41.251  19.370  12.228  1.00  0.00
N
ATOM   2683  HE  ARG   168      41.739  18.501  12.417  1.00  0.00
H
ATOM   2684  CZ  ARG   168      40.867  20.067  13.289  1.00  0.00
C
ATOM   2685  NH1 ARG   168      40.236  21.206  13.224  1.00  0.00
N
ATOM   2686 1HH1 ARG   168      40.070  21.633  12.332  1.00  0.00
H
ATOM   2687 2HH1 ARG   168      39.919  21.668  14.072  1.00  0.00
H
ATOM   2688  NH2 ARG   168      41.121  19.587  14.469  1.00  0.00
N
ATOM   2689 1HH2 ARG   168      41.584  18.699  14.562  1.00  0.00
H
ATOM   2690 2HH2 ARG   168      40.859  20.111  15.294  1.00  0.00
H
ATOM   2691  N   LEU   169      40.194  14.410   8.822  1.00  0.00
N
ATOM   2692  H   LEU   169      39.593  14.988   8.241  1.00  0.00
H
ATOM   2693  CA  LEU   169      39.796  13.035   9.129  1.00  0.00
C
ATOM   2694  HA  LEU   169      39.917  12.873  10.198  1.00  0.00
H
ATOM   2695  C   LEU   169      40.667  12.002   8.420  1.00  0.00
C
ATOM   2696  O   LEU   169      41.032  11.001   9.028  1.00  0.00
O
ATOM   2697  CB  LEU   169      38.333  12.786   8.767  1.00  0.00
C
ATOM   2698 1HB  LEU   169      38.208  12.996   7.705  1.00  0.00
H
ATOM   2699 2HB  LEU   169      38.141  11.726   8.917  1.00  0.00
H
ATOM   2700  CG  LEU   169      37.255  13.555   9.542  1.00  0.00
C
ATOM   2701  HG  LEU   169      37.421  14.622   9.417  1.00  0.00
H
ATOM   2702  CD1 LEU   169      35.907  13.206   8.947  1.00  0.00
C
ATOM   2703 1HD1 LEU   169      35.139  13.817   9.414  1.00  0.00
H
ATOM   2704 2HD1 LEU   169      35.680  12.152   9.118  1.00  0.00
H
ATOM   2705 3HD1 LEU   169      35.909  13.405   7.875  1.00  0.00
H
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ATOM   2706  CD2 LEU   169      37.244  13.245  11.041  1.00  0.00
C
ATOM   2707 1HD2 LEU   169      36.421  13.776  11.520  1.00  0.00
H
ATOM   2708 2HD2 LEU   169      38.175  13.578  11.497  1.00  0.00
H
ATOM   2709 3HD2 LEU   169      37.120  12.174  11.203  1.00  0.00
H
ATOM   2710  N   ASP   170      41.066  12.273   7.184  1.00  0.00
N
ATOM   2711  H   ASP   170      40.744  13.125   6.729  1.00  0.00
H
ATOM   2712  CA  ASP   170      41.927  11.362   6.420  1.00  0.00
C
ATOM   2713  HA  ASP   170      41.449  10.389   6.337  1.00  0.00
H
ATOM   2714  C   ASP   170      43.261  11.165   7.135  1.00  0.00
C
ATOM   2715  O   ASP   170      43.832  10.075   7.116  1.00  0.00
O
ATOM   2716  CB  ASP   170      42.245  11.911   5.019  1.00  0.00
C
ATOM   2717 1HB  ASP   170      42.380  12.991   5.079  1.00  0.00
H
ATOM   2718 2HB  ASP   170      43.186  11.469   4.691  1.00  0.00
H
ATOM   2719  CG  ASP   170      41.194  11.576   3.961  1.00  0.00
C
ATOM   2720  OD1 ASP   170      40.345  10.677   4.130  1.00  0.00
O
ATOM   2721  OD2 ASP   170      41.308  12.158   2.854  1.00  0.00
O
ATOM   2722  N   LYS   171      43.764  12.203   7.794  1.00  0.00
N
ATOM   2723  H   LYS   171      43.284  13.095   7.756  1.00  0.00
H
ATOM   2724  CA  LYS   171      45.007  12.076   8.563  1.00  0.00
C
ATOM   2725  HA  LYS   171      45.761  11.594   7.939  1.00  0.00
H
ATOM   2726  C   LYS   171      44.866  11.230   9.823  1.00  0.00
C
ATOM   2727  O   LYS   171      45.829  10.575  10.220  1.00  0.00
O
ATOM   2728  CB  LYS   171      45.537  13.447   8.993  1.00  0.00
C
ATOM   2729 1HB  LYS   171      44.720  14.015   9.437  1.00  0.00
H
ATOM   2730 2HB  LYS   171      46.297  13.288   9.759  1.00  0.00
H
ATOM   2731  CG  LYS   171      46.171  14.271   7.882  1.00  0.00
C
ATOM   2732 1HG  LYS   171      46.995  13.707   7.444  1.00  0.00
H
ATOM   2733 2HG  LYS   171      45.433  14.479   7.112  1.00  0.00
H
ATOM   2734  CD  LYS   171      46.699  15.585   8.453  1.00  0.00
C
ATOM   2735 1HD  LYS   171      45.879  16.097   8.959  1.00  0.00
H
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ATOM   2736 2HD  LYS   171      47.477  15.369   9.186  1.00  0.00
H
ATOM   2737  CE  LYS   171      47.266  16.523   7.388  1.00  0.00
C
ATOM   2738 1HE  LYS   171      46.472  16.764   6.677  1.00  0.00
H
ATOM   2739 2HE  LYS   171      47.573  17.450   7.877  1.00  0.00
H
ATOM   2740  NZ  LYS   171      48.436  15.972   6.633  1.00  0.00
N
ATOM   2741 1HZ  LYS   171      48.843  16.702   6.062  1.00  0.00
H
ATOM   2742 2HZ  LYS   171      48.129  15.216   6.034  1.00  0.00
H
ATOM   2743 3HZ  LYS   171      49.137  15.630   7.282  1.00  0.00
H
ATOM   2744  N   HIS   172      43.713  11.253  10.475  1.00  0.00
N
ATOM   2745  H   HIS   172      42.919  11.726  10.064  1.00  0.00
H
ATOM   2746  CA  HIS   172      43.591  10.683  11.824  1.00  0.00
C
ATOM   2747  HA  HIS   172      44.585  10.402  12.170  1.00  0.00
H
ATOM   2748  C   HIS   172      42.726   9.431  11.964  1.00  0.00
C
ATOM   2749  O   HIS   172      42.816   8.741  12.976  1.00  0.00
O
ATOM   2750  CB  HIS   172      43.081  11.757  12.787  1.00  0.00
C
ATOM   2751 1HB  HIS   172      42.104  12.100  12.450  1.00  0.00
H
ATOM   2752 2HB  HIS   172      42.966  11.311  13.776  1.00  0.00
H
ATOM   2753  CG  HIS   172      43.998  12.935  12.912  1.00  0.00
C
ATOM   2754  ND1 HIS   172      43.871  14.100  12.197  1.00  0.00
N
ATOM   2755  HD1 HIS   172      43.162  14.296  11.493  1.00  0.00
H
ATOM   2756  CD2 HIS   172      45.084  13.130  13.705  1.00  0.00
C
ATOM   2757  HD2 HIS   172      45.474  12.405  14.404  1.00  0.00
H
ATOM   2758  CE1 HIS   172      44.838  14.933  12.573  1.00  0.00
C
ATOM   2759  HE1 HIS   172      44.970  15.931  12.176  1.00  0.00
H
ATOM   2760  NE2 HIS   172      45.606  14.388  13.495  1.00  0.00
N
ATOM   2761  N   TYR   173      41.906   9.121  10.971  1.00  0.00
N
ATOM   2762  H   TYR   173      41.845   9.728  10.156  1.00  0.00
H
ATOM   2763  CA  TYR   173      40.996   7.972  11.029  1.00  0.00
C
ATOM   2764  HA  TYR   173      41.293   7.312  11.843  1.00  0.00
H
ATOM   2765  C   TYR   173      41.073   7.182   9.729  1.00  0.00
C
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ATOM   2766  O   TYR   173      40.088   6.586   9.279  1.00  0.00
O
ATOM   2767  CB  TYR   173      39.572   8.458  11.302  1.00  0.00
C
ATOM   2768 1HB  TYR   173      39.242   9.078  10.471  1.00  0.00
H
ATOM   2769 2HB  TYR   173      38.910   7.596  11.389  1.00  0.00
H
ATOM   2770  CG  TYR   173      39.487   9.266  12.575  1.00  0.00
C
ATOM   2771  CD1 TYR   173      39.453  10.673  12.533  1.00  0.00
C
ATOM   2772  HD1 TYR   173      39.446  11.178  11.579  1.00  0.00
H
ATOM   2773  CD2 TYR   173      39.482   8.629  13.833  1.00  0.00
C
ATOM   2774  HD2 TYR   173      39.495   7.550  13.887  1.00  0.00
H
ATOM   2775  CE1 TYR   173      39.443  11.433  13.730  1.00  0.00
C
ATOM   2776  HE1 TYR   173      39.411  12.510  13.688  1.00  0.00
H
ATOM   2777  CE2 TYR   173      39.472   9.387  15.034  1.00  0.00
C
ATOM   2778  HE2 TYR   173      39.474   8.888  15.992  1.00  0.00
H
ATOM   2779  CZ  TYR   173      39.471  10.781  14.969  1.00  0.00
C
ATOM   2780  OH  TYR   173      39.510  11.527  16.119  1.00  0.00
O
ATOM   2781  HH  TYR   173      39.506  10.987  16.919  1.00  0.00
H
ATOM   2782  N   LYS   174      42.274   7.224   9.157  1.00  0.00
N
ATOM   2783  H   LYS   174      43.005   7.719   9.654  1.00  0.00
H
ATOM   2784  CA  LYS   174      42.649   6.638   7.858  1.00  0.00
C
ATOM   2785  HA  LYS   174      43.710   6.828   7.721  1.00  0.00
H
ATOM   2786  C   LYS   174      41.960   7.323   6.682  1.00  0.00
C
ATOM   2787  O   LYS   174      40.998   8.058   6.850  1.00  0.00
O
ATOM   2788  CB  LYS   174      42.456   5.113   7.826  1.00  0.00
C
ATOM   2789 1HB  LYS   174      41.391   4.902   7.844  1.00  0.00
H
ATOM   2790 2HB  LYS   174      42.853   4.726   6.889  1.00  0.00
H
ATOM   2791  CG  LYS   174      43.113   4.348   8.982  1.00  0.00
C
ATOM   2792 1HG  LYS   174      42.711   4.710   9.927  1.00  0.00
H
ATOM   2793 2HG  LYS   174      42.859   3.294   8.884  1.00  0.00
H
ATOM   2794  CD  LYS   174      44.633   4.468   9.009  1.00  0.00
C
ATOM   2795 1HD  LYS   174      45.037   4.097   8.068  1.00  0.00
H
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ATOM   2796 2HD  LYS   174      44.924   5.509   9.139  1.00  0.00
H
ATOM   2797  CE  LYS   174      45.195   3.653  10.160  1.00  0.00
C
ATOM   2798 1HE  LYS   174      44.781   4.028  11.098  1.00  0.00
H
ATOM   2799 2HE  LYS   174      44.887   2.613  10.040  1.00  0.00
H
ATOM   2800  NZ  LYS   174      46.686   3.715  10.220  1.00  0.00
N
ATOM   2801 1HZ  LYS   174      47.022   3.165  11.001  1.00  0.00
H
ATOM   2802 2HZ  LYS   174      46.999   4.670  10.336  1.00  0.00
H
ATOM   2803 3HZ  LYS   174      47.081   3.351   9.359  1.00  0.00
H
ATOM   2804  N   ARG   175      42.510   7.125   5.493  1.00  0.00
N
ATOM   2805  H   ARG   175      43.290   6.483   5.415  1.00  0.00
H
ATOM   2806  CA  ARG   175      42.027   7.794   4.281  1.00  0.00
C
ATOM   2807  HA  ARG   175      41.866   8.848   4.497  1.00  0.00
H
ATOM   2808  C   ARG   175      40.704   7.223   3.781  1.00  0.00
C
ATOM   2809  O   ARG   175      40.217   6.225   4.309  1.00  0.00
O
ATOM   2810  CB  ARG   175      43.076   7.672   3.170  1.00  0.00
C
ATOM   2811 1HB  ARG   175      43.321   6.619   3.031  1.00  0.00
H
ATOM   2812 2HB  ARG   175      42.649   8.040   2.239  1.00  0.00
H
ATOM   2813  CG  ARG   175      44.357   8.456   3.397  1.00  0.00
C
ATOM   2814 1HG  ARG   175      44.117   9.502   3.583  1.00  0.00
H
ATOM   2815 2HG  ARG   175      44.918   8.045   4.237  1.00  0.00
H
ATOM   2816  CD  ARG   175      45.161   8.340   2.117  1.00  0.00
C
ATOM   2817 1HD  ARG   175      45.387   7.287   1.946  1.00  0.00
H
ATOM   2818 2HD  ARG   175      44.539   8.689   1.292  1.00  0.00
H
ATOM   2819  NE  ARG   175      46.414   9.105   2.094  1.00  0.00
N
ATOM   2820  HE  ARG   175      46.660   9.626   2.925  1.00  0.00
H
ATOM   2821  CZ  ARG   175      47.246   9.176   1.064  1.00  0.00
C
ATOM   2822  NH1 ARG   175      47.092   8.500  -0.043  1.00  0.00
N
ATOM   2823 1HH1 ARG   175      46.288   7.900  -0.156  1.00  0.00
H
ATOM   2824 2HH1 ARG   175      47.786   8.566  -0.768  1.00  0.00
H
ATOM   2825  NH2 ARG   175      48.289   9.946   1.141  1.00  0.00
N
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ATOM   2826 1HH2 ARG   175      48.442  10.504   1.964  1.00  0.00
H
ATOM   2827 2HH2 ARG   175      48.934   9.982   0.367  1.00  0.00
H
ATOM   2828  N   LEU   176      40.216   7.821   2.699  1.00  0.00
N
ATOM   2829  H   LEU   176      40.724   8.627   2.344  1.00  0.00
H
ATOM   2830  CA  LEU   176      39.033   7.429   1.923  1.00  0.00
C
ATOM   2831  HA  LEU   176      39.066   8.029   1.015  1.00  0.00
H
ATOM   2832  C   LEU   176      37.739   7.839   2.608  1.00  0.00
C
ATOM   2833  O   LEU   176      36.679   7.230   2.421  1.00  0.00
O
ATOM   2834  CB  LEU   176      39.050   5.955   1.471  1.00  0.00
C
ATOM   2835 1HB  LEU   176      38.930   5.322   2.349  1.00  0.00
H
ATOM   2836 2HB  LEU   176      38.188   5.787   0.825  1.00  0.00
H
ATOM   2837  CG  LEU   176      40.311   5.501   0.713  1.00  0.00
C
ATOM   2838  HG  LEU   176      41.185   5.719   1.323  1.00  0.00
H
ATOM   2839  CD1 LEU   176      40.280   4.001   0.477  1.00  0.00
C
ATOM   2840 1HD1 LEU   176      41.188   3.691  -0.042  1.00  0.00
H
ATOM   2841 2HD1 LEU   176      39.414   3.735  -0.128  1.00  0.00
H
ATOM   2842 3HD1 LEU   176      40.234   3.484   1.434  1.00  0.00
H
ATOM   2843  CD2 LEU   176      40.473   6.220  -0.626  1.00  0.00
C
ATOM   2844 1HD2 LEU   176      41.345   5.830  -1.151  1.00  0.00
H
ATOM   2845 2HD2 LEU   176      40.624   7.286  -0.459  1.00  0.00
H
ATOM   2846 3HD2 LEU   176      39.586   6.071  -1.244  1.00  0.00
H
ATOM   2847  N   TRP   177      37.817   8.938   3.344  1.00  0.00
N
ATOM   2848  H   TRP   177      38.719   9.367   3.537  1.00  0.00
H
ATOM   2849  CA  TRP   177      36.615   9.618   3.808  1.00  0.00
C
ATOM   2850  HA  TRP   177      35.950   8.905   4.290  1.00  0.00
H
ATOM   2851  C   TRP   177      35.871  10.246   2.645  1.00  0.00
C
ATOM   2852  O   TRP   177      36.453  10.723   1.673  1.00  0.00
O
ATOM   2853  CB  TRP   177      36.955  10.714   4.814  1.00  0.00
C
ATOM   2854 1HB  TRP   177      37.816  11.280   4.464  1.00  0.00
H
ATOM   2855 2HB  TRP   177      36.103  11.387   4.908  1.00  0.00
H
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ATOM   2856  CG  TRP   177      37.229  10.133   6.146  1.00  0.00
C
ATOM   2857  CD1 TRP   177      38.414   9.686   6.620  1.00  0.00
C
ATOM   2858  HD1 TRP   177      39.348   9.736   6.070  1.00  0.00
H
ATOM   2859  CD2 TRP   177      36.269   9.855   7.178  1.00  0.00
C
ATOM   2860  NE1 TRP   177      38.281   9.136   7.862  1.00  0.00
N
ATOM   2861  HE1 TRP   177      39.049   8.710   8.369  1.00  0.00
H
ATOM   2862  CE2 TRP   177      36.973   9.238   8.251  1.00  0.00
C
ATOM   2863  CE3 TRP   177      34.879  10.061   7.305  1.00  0.00
C
ATOM   2864  HE3 TRP   177      34.320  10.518   6.503  1.00  0.00
H
ATOM   2865  CZ2 TRP   177      36.330   8.841   9.440  1.00  0.00
C
ATOM   2866  HZ2 TRP   177      36.886   8.379  10.239  1.00  0.00
H
ATOM   2867  CZ3 TRP   177      34.228   9.662   8.496  1.00  0.00
C
ATOM   2868  HZ3 TRP   177      33.164   9.819   8.603  1.00  0.00
H
ATOM   2869  CH2 TRP   177      34.968   9.064   9.556  1.00  0.00
C
ATOM   2870  HH2 TRP   177      34.456   8.782  10.463  1.00  0.00
H
ATOM   2871  N   HIS   178      34.563  10.289   2.789  1.00  0.00
N
ATOM   2872  H   HIS   178      34.137   9.821   3.591  1.00  0.00
H
ATOM   2873  CA  HIS   178      33.674  11.008   1.899  1.00  0.00
C
ATOM   2874  HA  HIS   178      34.233  11.568   1.150  1.00  0.00
H
ATOM   2875  C   HIS   178      32.914  11.964   2.801  1.00  0.00
C
ATOM   2876  O   HIS   178      32.172  11.556   3.693  1.00  0.00
O
ATOM   2877  CB  HIS   178      32.718  10.040   1.221  1.00  0.00
C
ATOM   2878 1HB  HIS   178      32.267   9.410   1.985  1.00  0.00
H
ATOM   2879 2HB  HIS   178      31.934  10.612   0.729  1.00  0.00
H
ATOM   2880  CG  HIS   178      33.369   9.166   0.198  1.00  0.00
C
ATOM   2881  ND1 HIS   178      33.704   9.629  -1.056  1.00  0.00
N
ATOM   2882  CD2 HIS   178      33.718   7.851   0.249  1.00  0.00
C
ATOM   2883  HD2 HIS   178      33.563   7.212   1.110  1.00  0.00
H
ATOM   2884  CE1 HIS   178      34.241   8.558  -1.715  1.00  0.00
C
ATOM   2885  HE1 HIS   178      34.601   8.595  -2.736  1.00  0.00
H
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ATOM   2886  NE2 HIS   178      34.278   7.452  -0.937  1.00  0.00
N
ATOM   2887  HE2 HIS   178      34.634   6.530  -1.192  1.00  0.00
H
ATOM   2888  N   CYS   179      33.119  13.247   2.573  1.00  0.00
N
ATOM   2889  H   CYS   179      33.693  13.522   1.785  1.00  0.00
H
ATOM   2890  CA  CYS   179      32.497  14.312   3.349  1.00  0.00
C
ATOM   2891  HA  CYS   179      31.688  13.951   3.985  1.00  0.00
H
ATOM   2892  C   CYS   179      31.962  15.202   2.253  1.00  0.00
C
ATOM   2893  O   CYS   179      32.736  15.528   1.359  1.00  0.00
O
ATOM   2894  CB  CYS   179      33.554  15.083   4.148  1.00  0.00
C
ATOM   2895 1HB  CYS   179      33.961  14.435   4.924  1.00  0.00
H
ATOM   2896 2HB  CYS   179      34.360  15.351   3.464  1.00  0.00
H
ATOM   2897  SG  CYS   179      32.936  16.616   4.895  1.00  0.00
S
ATOM   2898  HG  CYS   179      34.133  17.124   5.212  1.00  0.00
H
ATOM   2899  N   VAL   180      30.683  15.545   2.274  1.00  0.00
N
ATOM   2900  H   VAL   180      30.062  15.145   2.969  1.00  0.00
H
ATOM   2901  CA  VAL   180      30.111  16.536   1.363  1.00  0.00
C
ATOM   2902  HA  VAL   180      30.882  17.242   1.059  1.00  0.00
H
ATOM   2903  C   VAL   180      29.054  17.250   2.194  1.00  0.00
C
ATOM   2904  O   VAL   180      28.338  16.619   2.970  1.00  0.00
O
ATOM   2905  CB  VAL   180      29.478  15.906   0.083  1.00  0.00
C
ATOM   2906  HB  VAL   180      28.722  15.188   0.380  1.00  0.00
H
ATOM   2907  CG1 VAL   180      28.820  16.970  -0.804  1.00  0.00
C
ATOM   2908 1HG1 VAL   180      28.503  16.520  -1.741  1.00  0.00
H
ATOM   2909 2HG1 VAL   180      29.537  17.765  -1.024  1.00  0.00
H
ATOM   2910 3HG1 VAL   180      27.950  17.392  -0.299  1.00  0.00
H
ATOM   2911  CG2 VAL   180      30.531  15.177  -0.742  1.00  0.00
C
ATOM   2912 1HG2 VAL   180      30.169  14.972  -1.742  1.00  0.00
H
ATOM   2913 2HG2 VAL   180      30.785  14.236  -0.256  1.00  0.00
H
ATOM   2914 3HG2 VAL   180      31.424  15.793  -0.829  1.00  0.00
H
ATOM   2915  N   ILE   181      28.986  18.562   2.059  1.00  0.00
N
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ATOM   2916  H   ILE   181      29.630  19.044   1.448  1.00  0.00
H
ATOM   2917  CA  ILE   181      28.006  19.392   2.740  1.00  0.00
C
ATOM   2918  HA  ILE   181      27.159  18.802   3.087  1.00  0.00
H
ATOM   2919  C   ILE   181      27.629  20.328   1.602  1.00  0.00
C
ATOM   2920  O   ILE   181      28.523  20.948   1.034  1.00  0.00
O
ATOM   2921  CB  ILE   181      28.636  20.221   3.896  1.00  0.00
C
ATOM   2922  HB  ILE   181      29.377  20.890   3.463  1.00  0.00
H
ATOM   2923  CG1 ILE   181      29.371  19.327   4.913  1.00  0.00
C
ATOM   2924 1HG1 ILE   181      28.640  18.894   5.595  1.00  0.00
H
ATOM   2925 2HG1 ILE   181      29.871  18.510   4.400  1.00  0.00
H
ATOM   2926  CG2 ILE   181      27.562  21.062   4.603  1.00  0.00
C
ATOM   2927 1HG2 ILE   181      28.022  21.667   5.382  1.00  0.00
H
ATOM   2928 2HG2 ILE   181      26.806  20.415   5.054  1.00  0.00
H
ATOM   2929 3HG2 ILE   181      27.083  21.738   3.892  1.00  0.00
H
ATOM   2930  CD1 ILE   181      30.447  20.064   5.711  1.00  0.00
C
ATOM   2931 1HD1 ILE   181      30.884  19.381   6.437  1.00  0.00
H
ATOM   2932 2HD1 ILE   181      30.015  20.915   6.236  1.00  0.00
H
ATOM   2933 3HD1 ILE   181      31.230  20.419   5.041  1.00  0.00
H
ATOM   2934  N   VAL   182      26.369  20.345   1.200  1.00  0.00
N
ATOM   2935  H   VAL   182      25.710  19.694   1.610  1.00  0.00
H
ATOM   2936  CA  VAL   182      25.824  21.263   0.197  1.00  0.00
C
ATOM   2937  HA  VAL   182      26.333  22.228   0.218  1.00  0.00
H
ATOM   2938  C   VAL   182      24.400  21.365   0.734  1.00  0.00
C
ATOM   2939  O   VAL   182      23.876  20.328   1.144  1.00  0.00
O
ATOM   2940  CB  VAL   182      25.841  20.643  -1.245  1.00  0.00
C
ATOM   2941  HB  VAL   182      25.366  19.664  -1.210  1.00  0.00
H
ATOM   2942  CG1 VAL   182      25.080  21.506  -2.237  1.00  0.00
C
ATOM   2943 1HG1 VAL   182      25.183  21.100  -3.243  1.00  0.00
H
ATOM   2944 2HG1 VAL   182      25.474  22.523  -2.224  1.00  0.00
H
ATOM   2945 3HG1 VAL   182      24.026  21.529  -1.981  1.00  0.00
H
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ATOM   2946  CG2 VAL   182      27.276  20.470  -1.773  1.00  0.00
C
ATOM   2947 1HG2 VAL   182      27.266  20.121  -2.803  1.00  0.00
H
ATOM   2948 2HG2 VAL   182      27.803  19.742  -1.161  1.00  0.00
H
ATOM   2949 3HG2 VAL   182      27.807  21.423  -1.721  1.00  0.00
H
ATOM   2950  N   ARG   183      23.757  22.528   0.795  1.00  0.00
N
ATOM   2951  H   ARG   183      24.183  23.378   0.435  1.00  0.00
H
ATOM   2952  CA  ARG   183      22.417  22.593   1.404  1.00  0.00
C
ATOM   2953  HA  ARG   183      22.441  22.017   2.329  1.00  0.00
H
ATOM   2954  C   ARG   183      21.348  21.943   0.527  1.00  0.00
C
ATOM   2955  O   ARG   183      20.391  21.376   1.046  1.00  0.00
O
ATOM   2956  CB  ARG   183      22.015  24.018   1.780  1.00  0.00
C
ATOM   2957 1HB  ARG   183      21.962  24.615   0.870  1.00  0.00
H
ATOM   2958 2HB  ARG   183      21.021  23.978   2.227  1.00  0.00
H
ATOM   2959  CG  ARG   183      22.965  24.692   2.778  1.00  0.00
C
ATOM   2960 1HG  ARG   183      23.149  24.021   3.617  1.00  0.00
H
ATOM   2961 2HG  ARG   183      23.908  24.905   2.283  1.00  0.00
H
ATOM   2962  CD  ARG   183      22.374  25.992   3.307  1.00  0.00
C
ATOM   2963 1HD  ARG   183      21.496  25.746   3.906  1.00  0.00
H
ATOM   2964 2HD  ARG   183      23.099  26.494   3.949  1.00  0.00
H
ATOM   2965  NE  ARG   183      21.950  26.876   2.212  1.00  0.00
N
ATOM   2966  HE  ARG   183      21.042  26.670   1.811  1.00  0.00
H
ATOM   2967  CZ  ARG   183      22.608  27.905   1.699  1.00  0.00
C
ATOM   2968  NH1 ARG   183      23.716  28.394   2.190  1.00  0.00
N
ATOM   2969 1HH1 ARG   183      24.149  27.975   2.999  1.00  0.00
H
ATOM   2970 2HH1 ARG   183      24.106  29.226   1.780  1.00  0.00
H
ATOM   2971  NH2 ARG   183      22.081  28.525   0.682  1.00  0.00
N
ATOM   2972 1HH2 ARG   183      21.216  28.207   0.280  1.00  0.00
H
ATOM   2973 2HH2 ARG   183      22.546  29.331   0.299  1.00  0.00
H
ATOM   2974  N   GLY   184      21.586  21.856  -0.775  1.00  0.00
N
ATOM   2975  H   GLY   184      22.050  22.614  -1.268  1.00  0.00
H
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ATOM   2976  CA  GLY   184      21.293  20.620  -1.481  1.00  0.00
C
ATOM   2977 1HA  GLY   184      22.184  20.008  -1.389  1.00  0.00
H
ATOM   2978 2HA  GLY   184      20.493  20.113  -0.953  1.00  0.00
H
ATOM   2979  C   GLY   184      20.932  20.600  -2.948  1.00  0.00
C
ATOM   2980  O   GLY   184      20.538  21.610  -3.519  1.00  0.00
O
ATOM   2981  N   GLN   185      21.105  19.426  -3.548  1.00  0.00
N
ATOM   2982  H   GLN   185      21.435  18.632  -3.012  1.00  0.00
H
ATOM   2983  CA  GLN   185      20.882  19.205  -4.978  1.00  0.00
C
ATOM   2984  HA  GLN   185      20.228  19.994  -5.347  1.00  0.00
H
ATOM   2985  C   GLN   185      20.210  17.861  -5.324  1.00  0.00
C
ATOM   2986  O   GLN   185      19.069  17.877  -5.747  1.00  0.00
O
ATOM   2987  CB  GLN   185      22.219  19.319  -5.722  1.00  0.00
C
ATOM   2988 1HB  GLN   185      22.889  18.531  -5.374  1.00  0.00
H
ATOM   2989 2HB  GLN   185      22.027  19.169  -6.784  1.00  0.00
H
ATOM   2990  CG  GLN   185      22.923  20.667  -5.534  1.00  0.00
C
ATOM   2991 1HG  GLN   185      22.233  21.467  -5.797  1.00  0.00
H
ATOM   2992 2HG  GLN   185      23.201  20.787  -4.491  1.00  0.00
H
ATOM   2993  CD  GLN   185      24.165  20.813  -6.368  1.00  0.00
C
ATOM   2994  OE1 GLN   185      24.542  19.916  -7.103  1.00  0.00
O
ATOM   2995  NE2 GLN   185      24.809  21.943  -6.276  1.00  0.00
N
ATOM   2996 1HE2 GLN   185      25.632  22.084  -6.840  1.00  0.00
H
ATOM   2997 2HE2 GLN   185      24.497  22.671  -5.647  1.00  0.00
H
ATOM   2998  N   TYR   186      20.869  16.719  -5.145  1.00  0.00
N
ATOM   2999  H   TYR   186      21.739  16.708  -4.626  1.00  0.00
H
ATOM   3000  CA  TYR   186      20.408  15.428  -5.688  1.00  0.00
C
ATOM   3001  HA  TYR   186      19.318  15.408  -5.715  1.00  0.00
H
ATOM   3002  C   TYR   186      20.887  14.236  -4.860  1.00  0.00
C
ATOM   3003  O   TYR   186      21.638  14.411  -3.909  1.00  0.00
O
ATOM   3004  CB  TYR   186      20.934  15.243  -7.117  1.00  0.00
C
ATOM   3005 1HB  TYR   186      20.616  14.274  -7.499  1.00  0.00
H
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ATOM   3006 2HB  TYR   186      20.476  15.997  -7.735  1.00  0.00
H
ATOM   3007  CG  TYR   186      22.438  15.359  -7.284  1.00  0.00
C
ATOM   3008  CD1 TYR   186      23.301  14.310  -6.898  1.00  0.00
C
ATOM   3009  HD1 TYR   186      22.899  13.415  -6.447  1.00  0.00
H
ATOM   3010  CD2 TYR   186      23.005  16.508  -7.874  1.00  0.00
C
ATOM   3011  HD2 TYR   186      22.371  17.327  -8.182  1.00  0.00
H
ATOM   3012  CE1 TYR   186      24.697  14.401  -7.107  1.00  0.00
C
ATOM   3013  HE1 TYR   186      25.343  13.592  -6.801  1.00  0.00
H
ATOM   3014  CE2 TYR   186      24.406  16.598  -8.090  1.00  0.00
C
ATOM   3015  HE2 TYR   186      24.834  17.480  -8.544  1.00  0.00
H
ATOM   3016  CZ  TYR   186      25.232  15.533  -7.725  1.00  0.00
C
ATOM   3017  OH  TYR   186      26.579  15.590  -7.965  1.00  0.00
O
ATOM   3018  HH  TYR   186      27.014  14.759  -7.755  1.00  0.00
H
ATOM   3019  N   SER   187      20.487  13.034  -5.252  1.00  0.00
N
ATOM   3020  H   SER   187      19.881  12.949  -6.064  1.00  0.00
H
ATOM   3021  CA  SER   187      20.882  11.786  -4.597  1.00  0.00
C
ATOM   3022  HA  SER   187      21.759  11.946  -3.971  1.00  0.00
H
ATOM   3023  C   SER   187      21.220  10.754  -5.688  1.00  0.00
C
ATOM   3024  O   SER   187      21.353  11.153  -6.840  1.00  0.00
O
ATOM   3025  CB  SER   187      19.708  11.363  -3.725  1.00  0.00
C
ATOM   3026 1HB  SER   187      19.471  12.176  -3.040  1.00  0.00
H
ATOM   3027 2HB  SER   187      18.856  11.214  -4.382  1.00  0.00
H
ATOM   3028  OG  SER   187      19.933  10.177  -2.979  1.00  0.00
O
ATOM   3029  HG  SER   187      20.557  10.350  -2.257  1.00  0.00
H
ATOM   3030  N   SER   188      21.397   9.489  -5.310  1.00  0.00
N
ATOM   3031  H   SER   188      21.239   9.280  -4.325  1.00  0.00
H
ATOM   3032  CA  SER   188      21.760   8.300  -6.116  1.00  0.00
C
ATOM   3033  HA  SER   188      20.882   7.924  -6.640  1.00  0.00
H
ATOM   3034  C   SER   188      22.119   7.359  -4.954  1.00  0.00
C
ATOM   3035  O   SER   188      21.626   7.631  -3.875  1.00  0.00
O
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ATOM   3036  CB  SER   188      22.914   8.491  -7.114  1.00  0.00
C
ATOM   3037 1HB  SER   188      22.622   9.228  -7.861  1.00  0.00
H
ATOM   3038 2HB  SER   188      23.795   8.856  -6.594  1.00  0.00
H
ATOM   3039  OG  SER   188      23.229   7.274  -7.777  1.00  0.00
O
ATOM   3040  HG  SER   188      22.924   7.331  -8.697  1.00  0.00
H
ATOM   3041  N   PHE   189      22.947   6.327  -5.092  1.00  0.00
N
ATOM   3042  H   PHE   189      23.378   6.162  -5.993  1.00  0.00
H
ATOM   3043  CA  PHE   189      23.269   5.413  -3.976  1.00  0.00
C
ATOM   3044  HA  PHE   189      22.748   5.743  -3.077  1.00  0.00
H
ATOM   3045  C   PHE   189      24.773   5.314  -3.658  1.00  0.00
C
ATOM   3046  O   PHE   189      25.594   5.289  -4.580  1.00  0.00
O
ATOM   3047  CB  PHE   189      22.746   4.029  -4.360  1.00  0.00
C
ATOM   3048 1HB  PHE   189      21.821   4.172  -4.907  1.00  0.00
H
ATOM   3049 2HB  PHE   189      23.463   3.542  -5.022  1.00  0.00
H
ATOM   3050  CG  PHE   189      22.433   3.125  -3.198  1.00  0.00
C
ATOM   3051  CD1 PHE   189      21.107   3.016  -2.741  1.00  0.00
C
ATOM   3052  HD1 PHE   189      20.339   3.640  -3.173  1.00  0.00
H
ATOM   3053  CD2 PHE   189      23.425   2.322  -2.608  1.00  0.00
C
ATOM   3054  HD2 PHE   189      24.452   2.404  -2.932  1.00  0.00
H
ATOM   3055  CE1 PHE   189      20.755   2.084  -1.733  1.00  0.00
C
ATOM   3056  HE1 PHE   189      19.730   2.004  -1.399  1.00  0.00
H
ATOM   3057  CE2 PHE   189      23.090   1.380  -1.602  1.00  0.00
C
ATOM   3058  HE2 PHE   189      23.860   0.761  -1.163  1.00  0.00
H
ATOM   3059  CZ  PHE   189      21.746   1.252  -1.176  1.00  0.00
C
ATOM   3060  HZ  PHE   189      21.482   0.526  -0.420  1.00  0.00
H
ATOM   3061  N   TYR   190      25.146   5.205  -2.388  1.00  0.00
N
ATOM   3062  H   TYR   190      24.439   5.214  -1.663  1.00  0.00
H
ATOM   3063  CA  TYR   190      26.538   5.020  -1.946  1.00  0.00
C
ATOM   3064  HA  TYR   190      27.158   4.667  -2.768  1.00  0.00
H
ATOM   3065  C   TYR   190      26.530   3.973  -0.835  1.00  0.00
C
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ATOM   3066  O   TYR   190      25.458   3.538  -0.414  1.00  0.00
O
ATOM   3067  CB  TYR   190      27.123   6.320  -1.380  1.00  0.00
C
ATOM   3068 1HB  TYR   190      26.370   7.093  -1.486  1.00  0.00
H
ATOM   3069 2HB  TYR   190      27.314   6.192  -0.316  1.00  0.00
H
ATOM   3070  CG  TYR   190      28.393   6.826  -2.034  1.00  0.00
C
ATOM   3071  CD1 TYR   190      28.487   8.174  -2.434  1.00  0.00
C
ATOM   3072  HD1 TYR   190      27.665   8.850  -2.246  1.00  0.00
H
ATOM   3073  CD2 TYR   190      29.514   5.988  -2.235  1.00  0.00
C
ATOM   3074  HD2 TYR   190      29.492   4.956  -1.918  1.00  0.00
H
ATOM   3075  CE1 TYR   190      29.651   8.667  -3.070  1.00  0.00
C
ATOM   3076  HE1 TYR   190      29.703   9.700  -3.377  1.00  0.00
H
ATOM   3077  CE2 TYR   190      30.688   6.485  -2.867  1.00  0.00
C
ATOM   3078  HE2 TYR   190      31.535   5.835  -3.024  1.00  0.00
H
ATOM   3079  CZ  TYR   190      30.734   7.815  -3.293  1.00  0.00
C
ATOM   3080  OH  TYR   190      31.834   8.300  -3.953  1.00  0.00
O
ATOM   3081  HH  TYR   190      31.688   9.201  -4.263  1.00  0.00
H
ATOM   3082  N   SER   191      27.706   3.588  -0.361  1.00  0.00
N
ATOM   3083  H   SER   191      28.554   4.010  -0.703  1.00  0.00
H
ATOM   3084  CA  SER   191      27.854   2.622   0.717  1.00  0.00
C
ATOM   3085  HA  SER   191      26.987   2.673   1.373  1.00  0.00
H
ATOM   3086  C   SER   191      29.100   3.017   1.502  1.00  0.00
C
ATOM   3087  O   SER   191      29.917   3.803   1.009  1.00  0.00
O
ATOM   3088  CB  SER   191      27.984   1.207   0.149  1.00  0.00
C
ATOM   3089 1HB  SER   191      28.027   0.488   0.968  1.00  0.00
H
ATOM   3090 2HB  SER   191      27.108   0.991  -0.464  1.00  0.00
H
ATOM   3091  OG  SER   191      29.153   1.084  -0.648  1.00  0.00
O
ATOM   3092  HG  SER   191      29.856   0.733  -0.084  1.00  0.00
H
ATOM   3093  N   TYR   192      29.248   2.467   2.698  1.00  0.00
N
ATOM   3094  H   TYR   192      28.588   1.765   3.003  1.00  0.00
H
ATOM   3095  CA  TYR   192      30.281   2.872   3.652  1.00  0.00
C
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ATOM   3096  HA  TYR   192      31.072   3.422   3.144  1.00  0.00
H
ATOM   3097  C   TYR   192      30.898   1.656   4.336  1.00  0.00
C
ATOM   3098  O   TYR   192      30.349   0.553   4.236  1.00  0.00
O
ATOM   3099  CB  TYR   192      29.628   3.782   4.697  1.00  0.00
C
ATOM   3100 1HB  TYR   192      30.368   4.048   5.452  1.00  0.00
H
ATOM   3101 2HB  TYR   192      29.310   4.695   4.196  1.00  0.00
H
ATOM   3102  CG  TYR   192      28.408   3.190   5.389  1.00  0.00
C
ATOM   3103  CD1 TYR   192      28.532   2.438   6.573  1.00  0.00
C
ATOM   3104  HD1 TYR   192      29.505   2.252   6.975  1.00  0.00
H
ATOM   3105  CD2 TYR   192      27.111   3.437   4.899  1.00  0.00
C
ATOM   3106  HD2 TYR   192      26.987   4.015   3.992  1.00  0.00
H
ATOM   3107  CE1 TYR   192      27.394   1.951   7.262  1.00  0.00
C
ATOM   3108  HE1 TYR   192      27.513   1.388   8.175  1.00  0.00
H
ATOM   3109  CE2 TYR   192      25.961   2.963   5.592  1.00  0.00
C
ATOM   3110  HE2 TYR   192      24.973   3.185   5.219  1.00  0.00
H
ATOM   3111  CZ  TYR   192      26.117   2.220   6.763  1.00  0.00
C
ATOM   3112  OH  TYR   192      25.013   1.740   7.418  1.00  0.00
O
ATOM   3113  HH  TYR   192      25.241   1.217   8.196  1.00  0.00
H
ATOM   3114  N   GLN   193      32.008   1.833   5.040  1.00  0.00
N
ATOM   3115  H   GLN   193      32.476   2.738   5.036  1.00  0.00
H
ATOM   3116  CA  GLN   193      32.528   0.786   5.918  1.00  0.00
C
ATOM   3117  HA  GLN   193      32.418  -0.179   5.435  1.00  0.00
H
ATOM   3118  C   GLN   193      31.712   0.855   7.210  1.00  0.00
C
ATOM   3119  O   GLN   193      31.593   1.942   7.782  1.00  0.00
O
ATOM   3120  CB  GLN   193      34.004   1.017   6.268  1.00  0.00
C
ATOM   3121 1HB  GLN   193      34.564   1.151   5.347  1.00  0.00
H
ATOM   3122 2HB  GLN   193      34.083   1.927   6.862  1.00  0.00
H
ATOM   3123  CG  GLN   193      34.620  -0.147   7.048  1.00  0.00
C
ATOM   3124 1HG  GLN   193      33.950  -0.424   7.858  1.00  0.00
H
ATOM   3125 2HG  GLN   193      34.720  -1.006   6.385  1.00  0.00
H
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ATOM   3126  CD  GLN   193      35.965   0.158   7.669  1.00  0.00
C
ATOM   3127  OE1 GLN   193      36.676   1.084   7.290  1.00  0.00
O
ATOM   3128  NE2 GLN   193      36.338  -0.637   8.635  1.00  0.00
N
ATOM   3129 1HE2 GLN   193      37.208  -0.471   9.108  1.00  0.00
H
ATOM   3130 2HE2 GLN   193      35.742  -1.411   8.907  1.00  0.00
H
ATOM   3131  N   PRO   194      31.154  -0.269   7.698  1.00  0.00
N
ATOM   3132  CA  PRO   194      30.491  -0.172   9.005  1.00  0.00
C
ATOM   3133  HA  PRO   194      29.604   0.457   8.932  1.00  0.00
H
ATOM   3134  C   PRO   194      31.414   0.365  10.097  1.00  0.00
C
ATOM   3135  O   PRO   194      32.626   0.152  10.072  1.00  0.00
O
ATOM   3136  CB  PRO   194      30.102  -1.620   9.300  1.00  0.00
C
ATOM   3137 1HB  PRO   194      30.894  -2.106   9.866  1.00  0.00
H
ATOM   3138 2HB  PRO   194      29.161  -1.665   9.842  1.00  0.00
H
ATOM   3139  CG  PRO   194      29.970  -2.241   7.979  1.00  0.00
C
ATOM   3140 1HG  PRO   194      30.062  -3.325   8.045  1.00  0.00
H
ATOM   3141 2HG  PRO   194      29.016  -1.965   7.534  1.00  0.00
H
ATOM   3142  CD  PRO   194      31.094  -1.650   7.189  1.00  0.00
C
ATOM   3143 1HD  PRO   194      32.031  -2.170   7.391  1.00  0.00
H
ATOM   3144 2HD  PRO   194      30.854  -1.667   6.127  1.00  0.00
H
ATOM   3145  N   GLY   195      30.842   1.120  11.021  1.00  0.00
N
ATOM   3146  H   GLY   195      29.833   1.225  11.027  1.00  0.00
H
ATOM   3147  CA  GLY   195      31.628   1.833  12.017  1.00  0.00
C
ATOM   3148 1HA  GLY   195      31.006   1.994  12.898  1.00  0.00
H
ATOM   3149 2HA  GLY   195      32.493   1.236  12.305  1.00  0.00
H
ATOM   3150  C   GLY   195      32.108   3.187  11.522  1.00  0.00
C
ATOM   3151  O   GLY   195      32.711   3.944  12.274  1.00  0.00
O
ATOM   3152  N   TYR   196      31.836   3.513  10.265  1.00  0.00
N
ATOM   3153  H   TYR   196      31.390   2.836   9.660  1.00  0.00
H
ATOM   3154  CA  TYR   196      32.186   4.810   9.692  1.00  0.00
C
ATOM   3155  HA  TYR   196      32.362   5.517  10.502  1.00  0.00
H
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ATOM   3156  C   TYR   196      31.080   5.381   8.800  1.00  0.00
C
ATOM   3157  O   TYR   196      31.310   5.596   7.613  1.00  0.00
O
ATOM   3158  CB  TYR   196      33.470   4.708   8.860  1.00  0.00
C
ATOM   3159 1HB  TYR   196      33.310   4.004   8.044  1.00  0.00
H
ATOM   3160 2HB  TYR   196      33.673   5.690   8.435  1.00  0.00
H
ATOM   3161  CG  TYR   196      34.704   4.286   9.623  1.00  0.00
C
ATOM   3162  CD1 TYR   196      35.035   2.924   9.768  1.00  0.00
C
ATOM   3163  HD1 TYR   196      34.379   2.165   9.364  1.00  0.00
H
ATOM   3164  CD2 TYR   196      35.565   5.251  10.182  1.00  0.00
C
ATOM   3165  HD2 TYR   196      35.321   6.299  10.095  1.00  0.00
H
ATOM   3166  CE1 TYR   196      36.215   2.534  10.450  1.00  0.00
C
ATOM   3167  HE1 TYR   196      36.455   1.488  10.554  1.00  0.00
H
ATOM   3168  CE2 TYR   196      36.749   4.863  10.866  1.00  0.00
C
ATOM   3169  HE2 TYR   196      37.402   5.609  11.295  1.00  0.00
H
ATOM   3170  CZ  TYR   196      37.062   3.507  10.985  1.00  0.00
C
ATOM   3171  OH  TYR   196      38.233   3.141  11.599  1.00  0.00
O
ATOM   3172  HH  TYR   196      38.317   2.183  11.691  1.00  0.00
H
ATOM   3173  N   SER   197      29.904   5.666   9.346  1.00  0.00
N
ATOM   3174  H   SER   197      29.680   5.325  10.279  1.00  0.00
H
ATOM   3175  CA  SER   197      28.932   6.542   8.671  1.00  0.00
C
ATOM   3176  HA  SER   197      29.466   7.231   8.021  1.00  0.00
H
ATOM   3177  C   SER   197      28.145   7.359   9.682  1.00  0.00
C
ATOM   3178  O   SER   197      27.890   6.878  10.779  1.00  0.00
O
ATOM   3179  CB  SER   197      27.943   5.733   7.839  1.00  0.00
C
ATOM   3180 1HB  SER   197      27.254   6.411   7.338  1.00  0.00
H
ATOM   3181 2HB  SER   197      28.493   5.169   7.090  1.00  0.00
H
ATOM   3182  OG  SER   197      27.214   4.840   8.663  1.00  0.00
O
ATOM   3183  HG  SER   197      27.807   4.134   8.934  1.00  0.00
H
ATOM   3184  N   PHE   198      27.771   8.586   9.351  1.00  0.00
N
ATOM   3185  H   PHE   198      28.029   8.966   8.443  1.00  0.00
H
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ATOM   3186  CA  PHE   198      27.024   9.436  10.281  1.00  0.00
C
ATOM   3187  HA  PHE   198      26.296   8.826  10.810  1.00  0.00
H
ATOM   3188  C   PHE   198      26.285  10.555   9.554  1.00  0.00
C
ATOM   3189  O   PHE   198      26.828  11.147   8.619  1.00  0.00
O
ATOM   3190  CB  PHE   198      28.023  10.030  11.283  1.00  0.00
C
ATOM   3191 1HB  PHE   198      28.550   9.209  11.765  1.00  0.00
H
ATOM   3192 2HB  PHE   198      28.751  10.634  10.742  1.00  0.00
H
ATOM   3193  CG  PHE   198      27.406  10.868  12.368  1.00  0.00
C
ATOM   3194  CD1 PHE   198      26.201  10.494  13.000  1.00  0.00
C
ATOM   3195  HD1 PHE   198      25.677   9.599  12.698  1.00  0.00
H
ATOM   3196  CD2 PHE   198      28.079  12.020  12.809  1.00  0.00
C
ATOM   3197  HD2 PHE   198      29.008  12.316  12.341  1.00  0.00
H
ATOM   3198  CE1 PHE   198      25.662  11.275  14.042  1.00  0.00
C
ATOM   3199  HE1 PHE   198      24.729  10.990  14.506  1.00  0.00
H
ATOM   3200  CE2 PHE   198      27.569  12.789  13.876  1.00  0.00
C
ATOM   3201  HE2 PHE   198      28.110  13.657  14.225  1.00  0.00
H
ATOM   3202  CZ  PHE   198      26.356  12.416  14.488  1.00  0.00
C
ATOM   3203  HZ  PHE   198      25.964  13.000  15.301  1.00  0.00
H
ATOM   3204  N   CYS   199      25.064  10.851   9.978  1.00  0.00
N
ATOM   3205  H   CYS   199      24.642  10.304  10.727  1.00  0.00
H
ATOM   3206  CA  CYS   199      24.278  11.958   9.448  1.00  0.00
C
ATOM   3207  HA  CYS   199      24.909  12.587   8.823  1.00  0.00
H
ATOM   3208  C   CYS   199      23.728  12.793  10.595  1.00  0.00
C
ATOM   3209  O   CYS   199      23.148  12.254  11.545  1.00  0.00
O
ATOM   3210  CB  CYS   199      23.106  11.432   8.623  1.00  0.00
C
ATOM   3211 1HB  CYS   199      23.491  10.756   7.860  1.00  0.00
H
ATOM   3212 2HB  CYS   199      22.443  10.869   9.281  1.00  0.00
H
ATOM   3213  SG  CYS   199      22.157  12.758   7.825  1.00  0.00
S
ATOM   3214  HG  CYS   199      23.226  13.441   7.382  1.00  0.00
H
ATOM   3215  N   PHE   200      23.883  14.103  10.488  1.00  0.00
N
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ATOM   3216  H   PHE   200      24.341  14.495   9.669  1.00  0.00
H
ATOM   3217  CA  PHE   200      23.388  15.038  11.491  1.00  0.00
C
ATOM   3218  HA  PHE   200      22.455  14.663  11.909  1.00  0.00
H
ATOM   3219  C   PHE   200      23.115  16.363  10.797  1.00  0.00
C
ATOM   3220  O   PHE   200      23.525  16.557   9.654  1.00  0.00
O
ATOM   3221  CB  PHE   200      24.397  15.220  12.632  1.00  0.00
C
ATOM   3222 1HB  PHE   200      23.946  15.834  13.410  1.00  0.00
H
ATOM   3223 2HB  PHE   200      24.614  14.242  13.059  1.00  0.00
H
ATOM   3224  CG  PHE   200      25.694  15.858  12.219  1.00  0.00
C
ATOM   3225  CD1 PHE   200      25.921  17.230  12.443  1.00  0.00
C
ATOM   3226  HD1 PHE   200      25.135  17.845  12.856  1.00  0.00
H
ATOM   3227  CD2 PHE   200      26.724  15.075  11.673  1.00  0.00
C
ATOM   3228  HD2 PHE   200      26.556  14.025  11.482  1.00  0.00
H
ATOM   3229  CE1 PHE   200      27.182  17.809  12.163  1.00  0.00
C
ATOM   3230  HE1 PHE   200      27.352  18.861  12.346  1.00  0.00
H
ATOM   3231  CE2 PHE   200      27.987  15.633  11.396  1.00  0.00
C
ATOM   3232  HE2 PHE   200      28.770  15.014  10.988  1.00  0.00
H
ATOM   3233  CZ  PHE   200      28.222  17.001  11.654  1.00  0.00
C
ATOM   3234  HZ  PHE   200      29.190  17.426  11.452  1.00  0.00
H
ATOM   3235  N   ARG   201      22.441  17.273  11.478  1.00  0.00
N
ATOM   3236  H   ARG   201      22.118  17.040  12.419  1.00  0.00
H
ATOM   3237  CA  ARG   201      22.195  18.626  10.980  1.00  0.00
C
ATOM   3238  HA  ARG   201      22.589  18.760   9.974  1.00  0.00
H
ATOM   3239  C   ARG   201      22.898  19.538  11.965  1.00  0.00
C
ATOM   3240  O   ARG   201      22.986  19.167  13.132  1.00  0.00
O
ATOM   3241  CB  ARG   201      20.709  18.974  11.041  1.00  0.00
C
ATOM   3242 1HB  ARG   201      20.446  19.014  12.093  1.00  0.00
H
ATOM   3243 2HB  ARG   201      20.564  19.967  10.617  1.00  0.00
H
ATOM   3244  CG  ARG   201      19.729  18.017  10.412  1.00  0.00
C
ATOM   3245 1HG  ARG   201      19.900  17.935   9.339  1.00  0.00
H
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ATOM   3246 2HG  ARG   201      19.844  17.049  10.891  1.00  0.00
H
ATOM   3247  CD  ARG   201      18.328  18.528  10.694  1.00  0.00
C
ATOM   3248 1HD  ARG   201      18.276  18.806  11.747  1.00  0.00
H
ATOM   3249 2HD  ARG   201      18.154  19.424  10.096  1.00  0.00
H
ATOM   3250  NE  ARG   201      17.255  17.554  10.445  1.00  0.00
N
ATOM   3251  HE  ARG   201      17.521  16.649  10.103  1.00  0.00
H
ATOM   3252  CZ  ARG   201      15.966  17.765  10.672  1.00  0.00
C
ATOM   3253  NH1 ARG   201      15.486  18.891  11.126  1.00  0.00
N
ATOM   3254 1HH1 ARG   201      16.106  19.665  11.281  1.00  0.00
H
ATOM   3255 2HH1 ARG   201      14.505  18.965  11.339  1.00  0.00
H
ATOM   3256  NH2 ARG   201      15.121  16.792  10.497  1.00  0.00
N
ATOM   3257 1HH2 ARG   201      15.430  15.886  10.174  1.00  0.00
H
ATOM   3258 2HH2 ARG   201      14.147  16.933  10.724  1.00  0.00
H
ATOM   3259  N   HIS   202      23.329  20.717  11.549  1.00  0.00
N
ATOM   3260  H   HIS   202      23.285  20.941  10.554  1.00  0.00
H
ATOM   3261  CA  HIS   202      23.804  21.760  12.466  1.00  0.00
C
ATOM   3262  HA  HIS   202      23.139  21.831  13.325  1.00  0.00
H
ATOM   3263  C   HIS   202      23.752  23.066  11.691  1.00  0.00
C
ATOM   3264  O   HIS   202      24.114  23.095  10.517  1.00  0.00
O
ATOM   3265  CB  HIS   202      25.231  21.482  12.953  1.00  0.00
C
ATOM   3266 1HB  HIS   202      25.233  20.581  13.568  1.00  0.00
H
ATOM   3267 2HB  HIS   202      25.870  21.307  12.092  1.00  0.00
H
ATOM   3268  CG  HIS   202      25.831  22.611  13.730  1.00  0.00
C
ATOM   3269  ND1 HIS   202      25.480  22.941  15.035  1.00  0.00
N
ATOM   3270  HD1 HIS   202      24.771  22.471  15.599  1.00  0.00
H
ATOM   3271  CD2 HIS   202      26.744  23.544  13.371  1.00  0.00
C
ATOM   3272  HD2 HIS   202      27.221  23.631  12.399  1.00  0.00
H
ATOM   3273  CE1 HIS   202      26.199  23.987  15.424  1.00  0.00
C
ATOM   3274  HE1 HIS   202      26.148  24.456  16.404  1.00  0.00
H
ATOM   3275  NE2 HIS   202      26.963  24.371  14.431  1.00  0.00
N
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ATOM   3276  HE2 HIS   202      27.607  25.157  14.428  1.00  0.00
H
ATOM   3277  N   GLY   203      23.287  24.139  12.312  1.00  0.00
N
ATOM   3278  H   GLY   203      23.014  24.100  13.284  1.00  0.00
H
ATOM   3279  CA  GLY   203      23.172  25.400  11.601  1.00  0.00
C
ATOM   3280 1HA  GLY   203      22.802  26.179  12.267  1.00  0.00
H
ATOM   3281 2HA  GLY   203      24.162  25.670  11.244  1.00  0.00
H
ATOM   3282  C   GLY   203      22.243  25.249  10.414  1.00  0.00
C
ATOM   3283  O   GLY   203      21.323  24.427  10.460  1.00  0.00
O
ATOM   3284  N   PRO   204      22.480  25.969   9.307  1.00  0.00
N
ATOM   3285  CA  PRO   204      21.635  25.757   8.130  1.00  0.00
C
ATOM   3286  HA  PRO   204      20.592  25.704   8.425  1.00  0.00
H
ATOM   3287  C   PRO   204      21.997  24.516   7.299  1.00  0.00
C
ATOM   3288  O   PRO   204      21.501  24.353   6.187  1.00  0.00
O
ATOM   3289  CB  PRO   204      21.867  27.043   7.339  1.00  0.00
C
ATOM   3290 1HB  PRO   204      21.675  26.903   6.275  1.00  0.00
H
ATOM   3291 2HB  PRO   204      21.237  27.837   7.738  1.00  0.00
H
ATOM   3292  CG  PRO   204      23.285  27.350   7.587  1.00  0.00
C
ATOM   3293 1HG  PRO   204      23.915  26.732   6.949  1.00  0.00
H
ATOM   3294 2HG  PRO   204      23.489  28.407   7.410  1.00  0.00
H
ATOM   3295  CD  PRO   204      23.503  26.999   9.040  1.00  0.00
C
ATOM   3296 1HD  PRO   204      24.510  26.607   9.192  1.00  0.00
H
ATOM   3297 2HD  PRO   204      23.324  27.871   9.669  1.00  0.00
H
ATOM   3298  N   ARG   205      22.876  23.648   7.787  1.00  0.00
N
ATOM   3299  H   ARG   205      23.183  23.721   8.753  1.00  0.00
H
ATOM   3300  CA  ARG   205      23.467  22.576   6.976  1.00  0.00
C
ATOM   3301  HA  ARG   205      23.168  22.682   5.934  1.00  0.00
H
ATOM   3302  C   ARG   205      23.099  21.171   7.448  1.00  0.00
C
ATOM   3303  O   ARG   205      23.011  20.918   8.650  1.00  0.00
O
ATOM   3304  CB  ARG   205      24.987  22.709   7.086  1.00  0.00
C
ATOM   3305 1HB  ARG   205      25.240  22.672   8.142  1.00  0.00
H
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ATOM   3306 2HB  ARG   205      25.454  21.857   6.593  1.00  0.00
H
ATOM   3307  CG  ARG   205      25.583  23.983   6.516  1.00  0.00
C
ATOM   3308 1HG  ARG   205      25.552  23.938   5.427  1.00  0.00
H
ATOM   3309 2HG  ARG   205      25.019  24.847   6.855  1.00  0.00
H
ATOM   3310  CD  ARG   205      27.021  24.136   6.982  1.00  0.00
C
ATOM   3311 1HD  ARG   205      27.045  24.256   8.065  1.00  0.00
H
ATOM   3312 2HD  ARG   205      27.572  23.233   6.723  1.00  0.00
H
ATOM   3313  NE  ARG   205      27.659  25.278   6.322  1.00  0.00
N
ATOM   3314  HE  ARG   205      27.925  25.147   5.347  1.00  0.00
H
ATOM   3315  CZ  ARG   205      27.942  26.463   6.839  1.00  0.00
C
ATOM   3316  NH1 ARG   205      27.788  26.781   8.099  1.00  0.00
N
ATOM   3317 1HH1 ARG   205      27.471  26.082   8.759  1.00  0.00
H
ATOM   3318 2HH1 ARG   205      28.052  27.700   8.419  1.00  0.00
H
ATOM   3319  NH2 ARG   205      28.472  27.339   6.037  1.00  0.00
N
ATOM   3320 1HH2 ARG   205      28.669  27.063   5.082  1.00  0.00
H
ATOM   3321 2HH2 ARG   205      28.709  28.264   6.357  1.00  0.00
H
ATOM   3322  N   VAL   206      22.988  20.241   6.508  1.00  0.00
N
ATOM   3323  H   VAL   206      23.045  20.499   5.535  1.00  0.00
H
ATOM   3324  CA  VAL   206      22.880  18.815   6.821  1.00  0.00
C
ATOM   3325  HA  VAL   206      22.711  18.676   7.886  1.00  0.00
H
ATOM   3326  C   VAL   206      24.238  18.250   6.429  1.00  0.00
C
ATOM   3327  O   VAL   206      24.809  18.636   5.408  1.00  0.00
O
ATOM   3328  CB  VAL   206      21.753  18.095   6.025  1.00  0.00
C
ATOM   3329  HB  VAL   206      22.027  18.079   4.974  1.00  0.00
H
ATOM   3330  CG1 VAL   206      21.567  16.638   6.494  1.00  0.00
C
ATOM   3331 1HG1 VAL   206      20.762  16.177   5.925  1.00  0.00
H
ATOM   3332 2HG1 VAL   206      21.319  16.616   7.558  1.00  0.00
H
ATOM   3333 3HG1 VAL   206      22.482  16.071   6.328  1.00  0.00
H
ATOM   3334  CG2 VAL   206      20.428  18.844   6.155  1.00  0.00
C
ATOM   3335 1HG2 VAL   206      19.644  18.307   5.626  1.00  0.00
H
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ATOM   3336 2HG2 VAL   206      20.516  19.830   5.699  1.00  0.00
H
ATOM   3337 3HG2 VAL   206      20.149  18.964   7.203  1.00  0.00
H
ATOM   3338  N   PHE   207      24.766  17.356   7.244  1.00  0.00
N
ATOM   3339  H   PHE   207      24.238  17.045   8.059  1.00  0.00
H
ATOM   3340  CA  PHE   207      26.095  16.799   7.066  1.00  0.00
C
ATOM   3341  HA  PHE   207      26.593  17.230   6.197  1.00  0.00
H
ATOM   3342  C   PHE   207      25.936  15.299   6.902  1.00  0.00
C
ATOM   3343  O   PHE   207      25.152  14.690   7.636  1.00  0.00
O
ATOM   3344  CB  PHE   207      26.911  17.052   8.335  1.00  0.00
C
ATOM   3345 1HB  PHE   207      26.386  16.593   9.171  1.00  0.00
H
ATOM   3346 2HB  PHE   207      27.881  16.573   8.235  1.00  0.00
H
ATOM   3347  CG  PHE   207      27.119  18.505   8.655  1.00  0.00
C
ATOM   3348  CD1 PHE   207      26.103  19.261   9.265  1.00  0.00
C
ATOM   3349  HD1 PHE   207      25.164  18.795   9.524  1.00  0.00
H
ATOM   3350  CD2 PHE   207      28.347  19.123   8.373  1.00  0.00
C
ATOM   3351  HD2 PHE   207      29.151  18.548   7.939  1.00  0.00
H
ATOM   3352  CE1 PHE   207      26.290  20.627   9.534  1.00  0.00
C
ATOM   3353  HE1 PHE   207      25.488  21.202   9.961  1.00  0.00
H
ATOM   3354  CE2 PHE   207      28.547  20.499   8.654  1.00  0.00
C
ATOM   3355  HE2 PHE   207      29.495  20.968   8.437  1.00  0.00
H
ATOM   3356  CZ  PHE   207      27.511  21.250   9.231  1.00  0.00
C
ATOM   3357  HZ  PHE   207      27.653  22.300   9.450  1.00  0.00
H
ATOM   3358  N   LEU   208      26.687  14.700   5.989  1.00  0.00
N
ATOM   3359  H   LEU   208      27.203  15.244   5.308  1.00  0.00
H
ATOM   3360  CA  LEU   208      26.904  13.255   6.007  1.00  0.00
C
ATOM   3361  HA  LEU   208      26.643  12.866   6.988  1.00  0.00
H
ATOM   3362  C   LEU   208      28.378  13.020   5.776  1.00  0.00
C
ATOM   3363  O   LEU   208      28.955  13.566   4.828  1.00  0.00
O
ATOM   3364  CB  LEU   208      26.110  12.492   4.946  1.00  0.00
C
ATOM   3365 1HB  LEU   208      26.232  12.968   3.983  1.00  0.00
H
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ATOM   3366 2HB  LEU   208      26.537  11.492   4.876  1.00  0.00
H
ATOM   3367  CG  LEU   208      24.624  12.344   5.271  1.00  0.00
C
ATOM   3368  HG  LEU   208      24.514  12.493   6.338  1.00  0.00
H
ATOM   3369  CD1 LEU   208      23.735  13.370   4.561  1.00  0.00
C
ATOM   3370 1HD1 LEU   208      22.706  13.243   4.885  1.00  0.00
H
ATOM   3371 2HD1 LEU   208      23.796  13.233   3.484  1.00  0.00
H
ATOM   3372 3HD1 LEU   208      24.065  14.376   4.818  1.00  0.00
H
ATOM   3373  CD2 LEU   208      24.173  10.931   4.974  1.00  0.00
C
ATOM   3374 1HD2 LEU   208      23.125  10.810   5.244  1.00  0.00
H
ATOM   3375 2HD2 LEU   208      24.761  10.227   5.563  1.00  0.00
H
ATOM   3376 3HD2 LEU   208      24.311  10.707   3.917  1.00  0.00
H
ATOM   3377  N   LEU   209      28.982  12.243   6.659  1.00  0.00
N
ATOM   3378  H   LEU   209      28.447  11.827   7.416  1.00  0.00
H
ATOM   3379  CA  LEU   209      30.399  11.923   6.577  1.00  0.00
C
ATOM   3380  HA  LEU   209      30.768  12.141   5.578  1.00  0.00
H
ATOM   3381  C   LEU   209      30.531  10.437   6.839  1.00  0.00
C
ATOM   3382  O   LEU   209      29.986   9.923   7.815  1.00  0.00
O
ATOM   3383  CB  LEU   209      31.226  12.700   7.602  1.00  0.00
C
ATOM   3384 1HB  LEU   209      30.804  12.545   8.594  1.00  0.00
H
ATOM   3385 2HB  LEU   209      32.224  12.261   7.595  1.00  0.00
H
ATOM   3386  CG  LEU   209      31.386  14.207   7.353  1.00  0.00
C
ATOM   3387  HG  LEU   209      31.428  14.368   6.279  1.00  0.00
H
ATOM   3388  CD1 LEU   209      30.277  15.089   7.926  1.00  0.00
C
ATOM   3389 1HD1 LEU   209      30.509  16.139   7.748  1.00  0.00
H
ATOM   3390 2HD1 LEU   209      30.168  14.916   8.993  1.00  0.00
H
ATOM   3391 3HD1 LEU   209      29.337  14.859   7.433  1.00  0.00
H
ATOM   3392  CD2 LEU   209      32.707  14.646   7.932  1.00  0.00
C
ATOM   3393 1HD2 LEU   209      32.832  15.715   7.774  1.00  0.00
H
ATOM   3394 2HD2 LEU   209      33.519  14.127   7.424  1.00  0.00
H
ATOM   3395 3HD2 LEU   209      32.748  14.428   8.998  1.00  0.00
H
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ATOM   3396  N   PHE   210      31.243   9.759   5.959  1.00  0.00
N
ATOM   3397  H   PHE   210      31.711  10.240   5.195  1.00  0.00
H
ATOM   3398  CA  PHE   210      31.374   8.313   6.018  1.00  0.00
C
ATOM   3399  HA  PHE   210      31.374   7.993   7.059  1.00  0.00
H
ATOM   3400  C   PHE   210      32.714   7.969   5.405  1.00  0.00
C
ATOM   3401  O   PHE   210      33.322   8.839   4.790  1.00  0.00
O
ATOM   3402  CB  PHE   210      30.214   7.631   5.276  1.00  0.00
C
ATOM   3403 1HB  PHE   210      30.295   6.556   5.412  1.00  0.00
H
ATOM   3404 2HB  PHE   210      29.278   7.957   5.726  1.00  0.00
H
ATOM   3405  CG  PHE   210      30.153   7.920   3.799  1.00  0.00
C
ATOM   3406  CD1 PHE   210      30.561   6.948   2.871  1.00  0.00
C
ATOM   3407  HD1 PHE   210      30.989   6.020   3.218  1.00  0.00
H
ATOM   3408  CD2 PHE   210      29.611   9.126   3.324  1.00  0.00
C
ATOM   3409  HD2 PHE   210      29.282   9.881   4.024  1.00  0.00
H
ATOM   3410  CE1 PHE   210      30.392   7.154   1.478  1.00  0.00
C
ATOM   3411  HE1 PHE   210      30.684   6.388   0.775  1.00  0.00
H
ATOM   3412  CE2 PHE   210      29.445   9.347   1.939  1.00  0.00
C
ATOM   3413  HE2 PHE   210      28.999  10.263   1.590  1.00  0.00
H
ATOM   3414  CZ  PHE   210      29.828   8.353   1.013  1.00  0.00
C
ATOM   3415  HZ  PHE   210      29.697   8.516  -0.044  1.00  0.00
H
ATOM   3416  N   LYS   211      33.199   6.749   5.572  1.00  0.00
N
ATOM   3417  H   LYS   211      32.654   6.061   6.088  1.00  0.00
H
ATOM   3418  CA  LYS   211      34.497   6.360   5.015  1.00  0.00
C
ATOM   3419  HA  LYS   211      34.859   7.136   4.345  1.00  0.00
H
ATOM   3420  C   LYS   211      34.300   5.085   4.223  1.00  0.00
C
ATOM   3421  O   LYS   211      33.607   4.185   4.694  1.00  0.00
O
ATOM   3422  CB  LYS   211      35.507   6.151   6.145  1.00  0.00
C
ATOM   3423 1HB  LYS   211      35.434   6.992   6.834  1.00  0.00
H
ATOM   3424 2HB  LYS   211      35.231   5.244   6.676  1.00  0.00
H
ATOM   3425  CG  LYS   211      36.953   6.042   5.685  1.00  0.00
C
```

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ATOM   3426 1HG  LYS   211      37.039   5.267   4.927  1.00  0.00
H
ATOM   3427 2HG  LYS   211      37.244   6.992   5.245  1.00  0.00
H
ATOM   3428  CD  LYS   211      37.911   5.730   6.819  1.00  0.00
C
ATOM   3429 1HD  LYS   211      38.927   5.905   6.471  1.00  0.00
H
ATOM   3430 2HD  LYS   211      37.714   6.402   7.654  1.00  0.00
H
ATOM   3431  CE  LYS   211      37.804   4.293   7.298  1.00  0.00
C
ATOM   3432 1HE  LYS   211      36.823   4.127   7.747  1.00  0.00
H
ATOM   3433 2HE  LYS   211      37.934   3.611   6.456  1.00  0.00
H
ATOM   3434  NZ  LYS   211      38.868   4.041   8.302  1.00  0.00
N
ATOM   3435 1HZ  LYS   211      38.593   3.285   8.913  1.00  0.00
H
ATOM   3436 2HZ  LYS   211      39.037   4.880   8.849  1.00  0.00
H
ATOM   3437 3HZ  LYS   211      39.724   3.778   7.829  1.00  0.00
H
ATOM   3438  N   THR   212      34.883   5.011   3.036  1.00  0.00
N
ATOM   3439  H   THR   212      35.438   5.795   2.701  1.00  0.00
H
ATOM   3440  CA  THR   212      34.708   3.845   2.167  1.00  0.00
C
ATOM   3441  HA  THR   212      34.278   3.042   2.764  1.00  0.00
H
ATOM   3442  C   THR   212      36.009   3.301   1.556  1.00  0.00
C
ATOM   3443  O   THR   212      36.304   3.521   0.370  1.00  0.00
O
ATOM   3444  CB  THR   212      33.667   4.162   1.074  1.00  0.00
C
ATOM   3445  HB  THR   212      34.111   4.785   0.301  1.00  0.00
H
ATOM   3446  OG1 THR   212      32.581   4.867   1.673  1.00  0.00
O
ATOM   3447  HG1 THR   212      31.757   4.561   1.273  1.00  0.00
H
ATOM   3448  CG2 THR   212      33.076   2.911   0.467  1.00  0.00
C
ATOM   3449 1HG2 THR   212      32.339   3.191  -0.286  1.00  0.00
H
ATOM   3450 2HG2 THR   212      32.586   2.316   1.239  1.00  0.00
H
ATOM   3451 3HG2 THR   212      33.859   2.321  -0.004  1.00  0.00
H
ATOM   3452  N   PRO   213      36.787   2.531   2.340  1.00  0.00
N
ATOM   3453  CA  PRO   213      37.724   1.579   1.725  1.00  0.00
C
ATOM   3454  HA  PRO   213      38.389   2.074   1.023  1.00  0.00
H
ATOM   3455  C   PRO   213      36.982   0.450   1.009  1.00  0.00
C
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ATOM   3456  O   PRO   213      35.751   0.465   0.932  1.00  0.00
O
ATOM   3457  CB  PRO   213      38.519   1.069   2.932  1.00  0.00
C
ATOM   3458 1HB  PRO   213      38.883   0.053   2.777  1.00  0.00
H
ATOM   3459 2HB  PRO   213      39.352   1.739   3.146  1.00  0.00
H
ATOM   3460  CG  PRO   213      37.550   1.112   4.027  1.00  0.00
C
ATOM   3461 1HG  PRO   213      36.865   0.266   3.956  1.00  0.00
H
ATOM   3462 2HG  PRO   213      38.059   1.113   4.989  1.00  0.00
H
ATOM   3463  CD  PRO   213      36.820   2.404   3.809  1.00  0.00
C
ATOM   3464 1HD  PRO   213      35.819   2.355   4.231  1.00  0.00
H
ATOM   3465 2HD  PRO   213      37.382   3.232   4.242  1.00  0.00
H
ATOM   3466  N   ASN   214      37.706  -0.527   0.479  1.00  0.00
N
ATOM   3467  H   ASN   214      38.716  -0.511   0.586  1.00  0.00
H
ATOM   3468  CA  ASN   214      37.100  -1.667  -0.220  1.00  0.00
C
ATOM   3469  HA  ASN   214      36.303  -1.297  -0.865  1.00  0.00
H
ATOM   3470  C   ASN   214      36.468  -2.640   0.783  1.00  0.00
C
ATOM   3471  O   ASN   214      37.079  -3.615   1.233  1.00  0.00
O
ATOM   3472  CB  ASN   214      38.151  -2.361  -1.092  1.00  0.00
C
ATOM   3473 1HB  ASN   214      38.676  -1.606  -1.673  1.00  0.00
H
ATOM   3474 2HB  ASN   214      38.873  -2.870  -0.456  1.00  0.00
H
ATOM   3475  CG  ASN   214      37.551  -3.362  -2.052  1.00  0.00
C
ATOM   3476  OD1 ASN   214      36.380  -3.724  -1.979  1.00  0.00
O
ATOM   3477  ND2 ASN   214      38.347  -3.807  -2.978  1.00  0.00
N
ATOM   3478 1HD2 ASN   214      37.987  -4.429  -3.686  1.00  0.00
H
ATOM   3479 2HD2 ASN   214      39.318  -3.533  -2.977  1.00  0.00
H
ATOM   3480  N   THR   215      35.248  -2.313   1.175  1.00  0.00
N
ATOM   3481  H   THR   215      34.807  -1.500   0.761  1.00  0.00
H
ATOM   3482  CA  THR   215      34.501  -3.044   2.190  1.00  0.00
C
ATOM   3483  HA  THR   215      35.185  -3.458   2.927  1.00  0.00
H
ATOM   3484  C   THR   215      33.724  -4.172   1.533  1.00  0.00
C
ATOM   3485  O   THR   215      33.077  -3.907   0.500  1.00  0.00
O
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ATOM   3486  OXT THR   215      33.745  -5.309   2.045  1.00  0.00
O
ATOM   3487  CB  THR   215      33.537  -2.077   2.887  1.00  0.00
C
ATOM   3488  HB  THR   215      32.788  -1.743   2.171  1.00  0.00
H
ATOM   3489  OG1 THR   215      34.278  -0.942   3.346  1.00  0.00
O
ATOM   3490  HG1 THR   215      34.722  -0.553   2.588  1.00  0.00
H
ATOM   3491  CG2 THR   215      32.856  -2.712   4.074  1.00  0.00
C
ATOM   3492 1HG2 THR   215      32.104  -2.026   4.448  1.00  0.00
H
ATOM   3493 2HG2 THR   215      33.586  -2.921   4.856  1.00  0.00
H
ATOM   3494 3HG2 THR   215      32.360  -3.637   3.780  1.00  0.00
H
TER    3495      THR   215
END
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REMARK YASARA
REMARK YASARA Written on:        Tue Nov 29 18:01:14 2016
REMARK YASARA Number of models: 1
REMARK YASARA Number of atoms:   3014
REMARK YASARA Please address questions or suggestions to:
Eliza@yasara.org
REMARK YASARA
SEQRES   1    183  MET LEU GLU GLU PHE ILE LYS ALA TYR LEU ASP VAL CYS
SEQRES   2    183  SER ASP GLY ASP LEU VAL ALA GLU ARG HIS GLU LEU VAL
SEQRES   3    183  ASP TYR CYS LYS LYS LYS ASN LEU ASP GLN ASN LEU VAL
SEQRES   4    183  GLN GLN TRP ILE ASP HIS PHE ASP VAL ASP LYS ASP ASP
SEQRES   5    183  GLN ILE SER MET GLU GLU PHE CYS ARG ALA LEU GLY LEU
SEQRES   6    183  ASN GLN SER GLU MET CYS ILE GLU LYS VAL GLN ARG ASN
SEQRES   7    183  LYS VAL ASN ALA THR SER THR PRO LYS VAL SER LYS ASP
SEQRES   8    183  PHE GLU ILE ILE LEU SER LYS MET SER PRO GLN ALA GLU
SEQRES   9    183  TYR ASP ILE THR GLU HIS VAL ARG GLU LEU ILE GLY ASP
SEQRES  10    183  LEU LYS GLU PHE LYS GLN PRO GLU THR LYS GLU ILE SER
SEQRES  11    183  ASN LYS LEU LYS GLN TYR LEU ASP GLU THR TYR ASP ARG
SEQRES  12    183  VAL TRP GLN VAL VAL ILE LEU ASN GLY SER TYR CYS MET
SEQRES  13    183  ASN PHE SER HIS GLU PRO PHE LYS ALA LEU HIS PHE LYS
SEQRES  14    183  TYR GLY PRO TYR ILE PHE LEU LEU TRP ARG THR PRO LYS
SEQRES  15    183  GLY
HETATM    1 CA    CA A 100       4.875  -8.793  -0.498  1.00  0.00
CA
ATOM      2  N   MET     1      11.920   5.284 -16.182  1.00  0.00
N
ATOM      3 1H   MET     1      12.011   5.480 -17.170  1.00  0.00
H
ATOM      4 2H   MET     1      12.838   5.167 -15.774  1.00  0.00
H
ATOM      5 3H   MET     1      11.456   6.061 -15.731  1.00  0.00
H
ATOM      6  CA  MET     1      11.120   4.046 -15.986  1.00  0.00
C
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ATOM      7  HA  MET     1      10.164   4.169 -16.495  1.00  0.00
H
ATOM      8  C   MET     1      10.825   3.828 -14.509  1.00  0.00
C
ATOM      9  O   MET     1       9.874   4.414 -13.993  1.00  0.00
O
ATOM     10  CB  MET     1      11.834   2.830 -16.581  1.00  0.00
C
ATOM     11 1HB  MET     1      12.849   2.819 -16.197  1.00  0.00
H
ATOM     12 2HB  MET     1      11.327   1.925 -16.247  1.00  0.00
H
ATOM     13  CG  MET     1      11.913   2.795 -18.095  1.00  0.00
C
ATOM     14 1HG  MET     1      12.420   3.695 -18.444  1.00  0.00
H
ATOM     15 2HG  MET     1      12.512   1.932 -18.381  1.00  0.00
H
ATOM     16  SD  MET     1      10.316   2.667 -18.922  1.00  0.00
S
ATOM     17  CE  MET     1       9.765   0.983 -18.507  1.00  0.00
C
ATOM     18 1HE  MET     1       8.850   0.755 -19.056  1.00  0.00
H
ATOM     19 2HE  MET     1       9.563   0.910 -17.438  1.00  0.00
H
ATOM     20 3HE  MET     1      10.535   0.261 -18.780  1.00  0.00
H
ATOM     21  N   LEU     2      11.576   2.979 -13.813  1.00  0.00
N
ATOM     22  H   LEU     2      12.382   2.521 -14.235  1.00  0.00
H
ATOM     23  CA  LEU     2      11.254   2.639 -12.427  1.00  0.00
C
ATOM     24  HA  LEU     2      10.174   2.672 -12.288  1.00  0.00
H
ATOM     25  C   LEU     2      11.893   3.605 -11.448  1.00  0.00
C
ATOM     26  O   LEU     2      11.605   3.570 -10.265  1.00  0.00
O
ATOM     27  CB  LEU     2      11.752   1.230 -12.087  1.00  0.00
C
ATOM     28 1HB  LEU     2      12.839   1.240 -12.163  1.00  0.00
H
ATOM     29 2HB  LEU     2      11.500   1.027 -11.046  1.00  0.00
H
ATOM     30  CG  LEU     2      11.236   0.053 -12.928  1.00  0.00
C
ATOM     31  HG  LEU     2      11.445   0.253 -13.978  1.00  0.00
H
ATOM     32  CD1 LEU     2      11.984  -1.207 -12.528  1.00  0.00
C
ATOM     33 1HD1 LEU     2      11.657  -2.039 -13.153  1.00  0.00
H
ATOM     34 2HD1 LEU     2      11.792  -1.448 -11.481  1.00  0.00
H
ATOM     35 3HD1 LEU     2      13.054  -1.065 -12.675  1.00  0.00
H
ATOM     36  CD2 LEU     2       9.738  -0.171 -12.772  1.00  0.00
C
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ATOM     37 1HD2 LEU     2       9.438  -1.045 -13.348  1.00  0.00
H
ATOM     38 2HD2 LEU     2       9.192   0.692 -13.150  1.00  0.00
H
ATOM     39 3HD2 LEU     2       9.489  -0.332 -11.723  1.00  0.00
H
ATOM     40  N   GLU     3      12.771   4.471 -11.927  1.00  0.00
N
ATOM     41  H   GLU     3      12.964   4.497 -12.925  1.00  0.00
H
ATOM     42  CA  GLU     3      13.525   5.370 -11.057  1.00  0.00
C
ATOM     43  HA  GLU     3      14.068   4.780 -10.318  1.00  0.00
H
ATOM     44  C   GLU     3      12.610   6.327 -10.304  1.00  0.00
C
ATOM     45  O   GLU     3      12.857   6.661  -9.146  1.00  0.00
O
ATOM     46  CB  GLU     3      14.526   6.178 -11.882  1.00  0.00
C
ATOM     47 1HB  GLU     3      13.995   6.722 -12.664  1.00  0.00
H
ATOM     48 2HB  GLU     3      14.978   6.909 -11.213  1.00  0.00
H
ATOM     49  CG  GLU     3      15.658   5.358 -12.507  1.00  0.00
C
ATOM     50 1HG  GLU     3      16.484   6.033 -12.736  1.00  0.00
H
ATOM     51 2HG  GLU     3      16.006   4.639 -11.765  1.00  0.00
H
ATOM     52  CD  GLU     3      15.296   4.602 -13.787  1.00  0.00
C
ATOM     53  OE1 GLU     3      14.194   4.779 -14.367  1.00  0.00
O
ATOM     54  OE2 GLU     3      16.140   3.788 -14.229  1.00  0.00
O
ATOM     55  N   GLU     4      11.512   6.708 -10.937  1.00  0.00
N
ATOM     56  H   GLU     4      11.372   6.429 -11.903  1.00  0.00
H
ATOM     57  CA  GLU     4      10.469   7.496 -10.284  1.00  0.00
C
ATOM     58  HA  GLU     4      10.866   8.453  -9.945  1.00  0.00
H
ATOM     59  C   GLU     4       9.879   6.756  -9.092  1.00  0.00
C
ATOM     60  O   GLU     4       9.609   7.324  -8.030  1.00  0.00
O
ATOM     61  CB  GLU     4       9.342   7.704 -11.296  1.00  0.00
C
ATOM     62 1HB  GLU     4       9.737   8.247 -12.150  1.00  0.00
H
ATOM     63 2HB  GLU     4       9.018   6.722 -11.641  1.00  0.00
H
ATOM     64  CG  GLU     4       8.127   8.433 -10.767  1.00  0.00
C
ATOM     65 1HG  GLU     4       7.784   7.951  -9.852  1.00  0.00
H
ATOM     66 2HG  GLU     4       8.392   9.465 -10.540  1.00  0.00
H
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ATOM     67  CD  GLU     4       6.991   8.407 -11.752  1.00  0.00
C
ATOM     68  OE1 GLU     4       7.261   8.296 -12.963  1.00  0.00
O
ATOM     69  OE2 GLU     4       5.820   8.486 -11.328  1.00  0.00
O
ATOM     70  N   PHE     5       9.635   5.475  -9.302  1.00  0.00
N
ATOM     71  H   PHE     5       9.931   5.040 -10.164  1.00  0.00
H
ATOM     72  CA  PHE     5       8.881   4.685  -8.346  1.00  0.00
C
ATOM     73  HA  PHE     5       8.036   5.274  -7.988  1.00  0.00
H
ATOM     74  C   PHE     5       9.791   4.365  -7.183  1.00  0.00
C
ATOM     75  O   PHE     5       9.383   4.455  -6.038  1.00  0.00
O
ATOM     76  CB  PHE     5       8.375   3.401  -9.004  1.00  0.00
C
ATOM     77 1HB  PHE     5       9.231   2.763  -9.218  1.00  0.00
H
ATOM     78 2HB  PHE     5       7.726   2.867  -8.315  1.00  0.00
H
ATOM     79  CG  PHE     5       7.639   3.623 -10.298  1.00  0.00
C
ATOM     80  CD1 PHE     5       6.907   4.804 -10.570  1.00  0.00
C
ATOM     81  HD1 PHE     5       6.805   5.575  -9.820  1.00  0.00
H
ATOM     82  CD2 PHE     5       7.694   2.621 -11.276  1.00  0.00
C
ATOM     83  HD2 PHE     5       8.215   1.698 -11.068  1.00  0.00
H
ATOM     84  CE1 PHE     5       6.308   5.004 -11.834  1.00  0.00
C
ATOM     85  HE1 PHE     5       5.768   5.918 -12.041  1.00  0.00
H
ATOM     86  CE2 PHE     5       7.081   2.799 -12.526  1.00  0.00
C
ATOM     87  HE2 PHE     5       7.125   2.009 -13.258  1.00  0.00
H
ATOM     88  CZ  PHE     5       6.405   4.002 -12.817  1.00  0.00
C
ATOM     89  HZ  PHE     5       5.944   4.145 -13.780  1.00  0.00
H
ATOM     90  N   ILE     6      11.047   4.074  -7.485  1.00  0.00
N
ATOM     91  H   ILE     6      11.321   4.018  -8.463  1.00  0.00
H
ATOM     92  CA  ILE     6      12.048   3.808  -6.457  1.00  0.00
C
ATOM     93  HA  ILE     6      11.684   3.012  -5.809  1.00  0.00
H
ATOM     94  C   ILE     6      12.180   5.070  -5.611  1.00  0.00
C
ATOM     95  O   ILE     6      12.167   4.998  -4.388  1.00  0.00
O
ATOM     96  CB  ILE     6      13.411   3.371  -7.089  1.00  0.00
C
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ATOM     97  HB  ILE     6      13.703   4.125  -7.819  1.00  0.00
H
ATOM     98  CG1 ILE     6      13.249   2.016  -7.812  1.00  0.00
C
ATOM     99 1HG1 ILE     6      13.184   1.229  -7.062  1.00  0.00
H
ATOM    100 2HG1 ILE     6      12.313   2.015  -8.366  1.00  0.00
H
ATOM    101  CG2 ILE     6      14.524   3.271  -6.015  1.00  0.00
C
ATOM    102 1HG2 ILE     6      15.447   2.882  -6.444  1.00  0.00
H
ATOM    103 2HG2 ILE     6      14.212   2.610  -5.205  1.00  0.00
H
ATOM    104 3HG2 ILE     6      14.732   4.258  -5.603  1.00  0.00
H
ATOM    105  CD1 ILE     6      14.370   1.655  -8.804  1.00  0.00
C
ATOM    106 1HD1 ILE     6      14.114   0.721  -9.308  1.00  0.00
H
ATOM    107 2HD1 ILE     6      15.315   1.520  -8.278  1.00  0.00
H
ATOM    108 3HD1 ILE     6      14.474   2.442  -9.552  1.00  0.00
H
ATOM    109  N   LYS     7      12.214   6.239  -6.239  1.00  0.00
N
ATOM    110  H   LYS     7      12.174   6.268  -7.252  1.00  0.00
H
ATOM    111  CA  LYS     7      12.327   7.492  -5.489  1.00  0.00
C
ATOM    112  HA  LYS     7      13.233   7.447  -4.884  1.00  0.00
H
ATOM    113  C   LYS     7      11.150   7.704  -4.538  1.00  0.00
C
ATOM    114  O   LYS     7      11.354   8.009  -3.359  1.00  0.00
O
ATOM    115  CB  LYS     7      12.442   8.661  -6.469  1.00  0.00
C
ATOM    116 1HB  LYS     7      13.227   8.427  -7.187  1.00  0.00
H
ATOM    117 2HB  LYS     7      11.502   8.752  -7.008  1.00  0.00
H
ATOM    118  CG  LYS     7      12.778   9.998  -5.824  1.00  0.00
C
ATOM    119 1HG  LYS     7      11.989  10.278  -5.130  1.00  0.00
H
ATOM    120 2HG  LYS     7      13.708   9.889  -5.268  1.00  0.00
H
ATOM    121  CD  LYS     7      12.969  11.101  -6.859  1.00  0.00
C
ATOM    122 1HD  LYS     7      13.376  11.981  -6.359  1.00  0.00
H
ATOM    123 2HD  LYS     7      13.697  10.760  -7.592  1.00  0.00
H
ATOM    124  CE  LYS     7      11.687  11.503  -7.590  1.00  0.00
C
ATOM    125 1HE  LYS     7      11.944  12.209  -8.381  1.00  0.00
H
ATOM    126 2HE  LYS     7      11.237  10.625  -8.056  1.00  0.00
H
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ATOM    127  NZ  LYS     7      10.690  12.142  -6.682  1.00  0.00
N
ATOM    128 1HZ  LYS     7       9.856  12.393  -7.197  1.00  0.00
H
ATOM    129 2HZ  LYS     7      11.085  12.977  -6.266  1.00  0.00
H
ATOM    130 3HZ  LYS     7      10.428  11.505  -5.938  1.00  0.00
H
ATOM    131  N   ALA     8       9.934   7.509  -5.031  1.00  0.00
N
ATOM    132  H   ALA     8       9.825   7.247  -6.004  1.00  0.00
H
ATOM    133  CA  ALA     8       8.741   7.704  -4.211  1.00  0.00
C
ATOM    134  HA  ALA     8       8.793   8.695  -3.759  1.00  0.00
H
ATOM    135  C   ALA     8       8.672   6.678  -3.080  1.00  0.00
C
ATOM    136  O   ALA     8       8.336   7.005  -1.945  1.00  0.00
O
ATOM    137  CB  ALA     8       7.481   7.615  -5.089  1.00  0.00
C
ATOM    138 1HB  ALA     8       7.490   8.417  -5.826  1.00  0.00
H
ATOM    139 2HB  ALA     8       6.593   7.721  -4.464  1.00  0.00
H
ATOM    140 3HB  ALA     8       7.446   6.652  -5.601  1.00  0.00
H
ATOM    141  N   TYR     9       9.003   5.437  -3.400  1.00  0.00
N
ATOM    142  H   TYR     9       9.274   5.223  -4.356  1.00  0.00
H
ATOM    143  CA  TYR     9       8.956   4.341  -2.442  1.00  0.00
C
ATOM    144  HA  TYR     9       7.955   4.275  -2.014  1.00  0.00
H
ATOM    145  C   TYR     9       9.953   4.543  -1.312  1.00  0.00
C
ATOM    146  O   TYR     9       9.628   4.333  -0.147  1.00  0.00
O
ATOM    147  CB  TYR     9       9.279   3.046  -3.181  1.00  0.00
C
ATOM    148 1HB  TYR     9       8.615   2.959  -4.038  1.00  0.00
H
ATOM    149 2HB  TYR     9      10.303   3.098  -3.548  1.00  0.00
H
ATOM    150  CG  TYR     9       9.135   1.807  -2.345  1.00  0.00
C
ATOM    151  CD1 TYR     9       7.907   1.123  -2.283  1.00  0.00
C
ATOM    152  HD1 TYR     9       7.048   1.506  -2.818  1.00  0.00
H
ATOM    153  CD2 TYR     9      10.234   1.290  -1.630  1.00  0.00
C
ATOM    154  HD2 TYR     9      11.184   1.806  -1.650  1.00  0.00
H
ATOM    155  CE1 TYR     9       7.787  -0.067  -1.536  1.00  0.00
C
ATOM    156  HE1 TYR     9       6.858  -0.603  -1.516  1.00  0.00
H
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ATOM    157  CE2 TYR     9      10.115   0.094  -0.892  1.00  0.00
C
ATOM    158  HE2 TYR     9      10.957  -0.301  -0.348  1.00  0.00
H
ATOM    159  CZ  TYR     9       8.889  -0.557  -0.839  1.00  0.00
C
ATOM    160  OH  TYR     9       8.777  -1.688  -0.092  1.00  0.00
O
ATOM    161  HH  TYR     9       7.862  -1.961   0.050  1.00  0.00
H
ATOM    162  N   LEU    10      11.161   4.980  -1.642  1.00  0.00
N
ATOM    163  H   LEU    10      11.390   5.143  -2.619  1.00  0.00
H
ATOM    164  CA  LEU    10      12.189   5.209  -0.629  1.00  0.00
C
ATOM    165  HA  LEU    10      12.303   4.308  -0.027  1.00  0.00
H
ATOM    166  C   LEU    10      11.803   6.338   0.314  1.00  0.00
C
ATOM    167  O   LEU    10      12.182   6.316   1.486  1.00  0.00
O
ATOM    168  CB  LEU    10      13.531   5.549  -1.286  1.00  0.00
C
ATOM    169 1HB  LEU    10      13.350   6.335  -2.016  1.00  0.00
H
ATOM    170 2HB  LEU    10      14.180   5.961  -0.514  1.00  0.00
H
ATOM    171  CG  LEU    10      14.311   4.420  -1.980  1.00  0.00
C
ATOM    172  HG  LEU    10      13.658   3.921  -2.691  1.00  0.00
H
ATOM    173  CD1 LEU    10      15.498   5.003  -2.741  1.00  0.00
C
ATOM    174 1HD1 LEU    10      16.030   4.203  -3.256  1.00  0.00
H
ATOM    175 2HD1 LEU    10      16.180   5.502  -2.053  1.00  0.00
H
ATOM    176 3HD1 LEU    10      15.141   5.719  -3.482  1.00  0.00
H
ATOM    177  CD2 LEU    10      14.807   3.379  -0.992  1.00  0.00
C
ATOM    178 1HD2 LEU    10      15.375   2.613  -1.523  1.00  0.00
H
ATOM    179 2HD2 LEU    10      13.961   2.907  -0.497  1.00  0.00
H
ATOM    180 3HD2 LEU    10      15.448   3.845  -0.243  1.00  0.00
H
ATOM    181  N   ASP    11      11.040   7.308  -0.169  1.00  0.00
N
ATOM    182  H   ASP    11      10.783   7.310  -1.148  1.00  0.00
H
ATOM    183  CA  ASP    11      10.546   8.370   0.707  1.00  0.00
C
ATOM    184  HA  ASP    11      11.373   8.745   1.308  1.00  0.00
H
ATOM    185  C   ASP    11       9.487   7.846   1.667  1.00  0.00
C
ATOM    186  O   ASP    11       9.512   8.176   2.855  1.00  0.00
O
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ATOM    187  CB  ASP    11       9.947   9.529  -0.095  1.00  0.00
C
ATOM    188 1HB  ASP    11       9.287   9.137  -0.867  1.00  0.00
H
ATOM    189 2HB  ASP    11       9.358  10.151   0.577  1.00  0.00
H
ATOM    190  CG  ASP    11      11.003  10.402  -0.728  1.00  0.00
C
ATOM    191  OD1 ASP    11      12.073  10.601  -0.113  1.00  0.00
O
ATOM    192  OD2 ASP    11      10.781  10.927  -1.840  1.00  0.00
O
ATOM    193  N   VAL    12       8.568   7.024   1.175  1.00  0.00
N
ATOM    194  H   VAL    12       8.585   6.774   0.191  1.00  0.00
H
ATOM    195  CA  VAL    12       7.506   6.490   2.030  1.00  0.00
C
ATOM    196  HA  VAL    12       7.073   7.315   2.586  1.00  0.00
H
ATOM    197  C   VAL    12       8.106   5.534   3.054  1.00  0.00
C
ATOM    198  O   VAL    12       7.723   5.577   4.223  1.00  0.00
O
ATOM    199  CB  VAL    12       6.360   5.832   1.210  1.00  0.00
C
ATOM    200  HB  VAL    12       6.771   5.028   0.601  1.00  0.00
H
ATOM    201  CG1 VAL    12       5.272   5.258   2.127  1.00  0.00
C
ATOM    202 1HG1 VAL    12       4.460   4.849   1.525  1.00  0.00
H
ATOM    203 2HG1 VAL    12       4.874   6.040   2.773  1.00  0.00
H
ATOM    204 3HG1 VAL    12       5.684   4.457   2.737  1.00  0.00
H
ATOM    205  CG2 VAL    12       5.704   6.876   0.292  1.00  0.00
C
ATOM    206 1HG2 VAL    12       4.887   6.415  -0.261  1.00  0.00
H
ATOM    207 2HG2 VAL    12       6.427   7.257  -0.422  1.00  0.00
H
ATOM    208 3HG2 VAL    12       5.311   7.707   0.881  1.00  0.00
H
ATOM    209  N   CYS    13       9.097   4.745   2.660  1.00  0.00
N
ATOM    210  H   CYS    13       9.371   4.755   1.681  1.00  0.00
H
ATOM    211  CA  CYS    13       9.832   3.863   3.572  1.00  0.00
C
ATOM    212  HA  CYS    13       9.108   3.356   4.212  1.00  0.00
H
ATOM    213  C   CYS    13      10.823   4.594   4.479  1.00  0.00
C
ATOM    214  O   CYS    13      12.015   4.281   4.512  1.00  0.00
O
ATOM    215  CB  CYS    13      10.596   2.803   2.782  1.00  0.00
C
ATOM    216 1HB  CYS    13      11.324   3.292   2.134  1.00  0.00
H
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ATOM    217 2HB  CYS    13      11.130   2.158   3.481  1.00  0.00
H
ATOM    218  SG  CYS    13       9.523   1.789   1.790  1.00  0.00
S
ATOM    219  HG  CYS    13       9.304   2.698   0.827  1.00  0.00
H
ATOM    220  N   SER    14      10.318   5.541   5.249  1.00  0.00
N
ATOM    221  H   SER    14       9.320   5.722   5.173  1.00  0.00
H
ATOM    222  CA  SER    14      11.091   6.299   6.225  1.00  0.00
C
ATOM    223  HA  SER    14      11.875   6.851   5.709  1.00  0.00
H
ATOM    224  C   SER    14      11.752   5.389   7.261  1.00  0.00
C
ATOM    225  O   SER    14      12.819   5.703   7.779  1.00  0.00
O
ATOM    226  CB  SER    14      10.149   7.284   6.916  1.00  0.00
C
ATOM    227 1HB  SER    14      10.711   7.881   7.634  1.00  0.00
H
ATOM    228 2HB  SER    14       9.718   7.946   6.163  1.00  0.00
H
ATOM    229  OG  SER    14       9.096   6.600   7.583  1.00  0.00
O
ATOM    230  HG  SER    14       8.852   5.806   7.078  1.00  0.00
H
ATOM    231  N   ASP    15      11.166   4.227   7.513  1.00  0.00
N
ATOM    232  H   ASP    15      10.253   4.039   7.097  1.00  0.00
H
ATOM    233  CA  ASP    15      11.753   3.230   8.409  1.00  0.00
C
ATOM    234  HA  ASP    15      11.892   3.674   9.394  1.00  0.00
H
ATOM    235  C   ASP    15      13.102   2.699   7.931  1.00  0.00
C
ATOM    236  O   ASP    15      13.896   2.221   8.735  1.00  0.00
O
ATOM    237  CB  ASP    15      10.830   2.014   8.526  1.00  0.00
C
ATOM    238 1HB  ASP    15      10.594   1.657   7.522  1.00  0.00
H
ATOM    239 2HB  ASP    15      11.355   1.222   9.059  1.00  0.00
H
ATOM    240  CG  ASP    15       9.540   2.311   9.260  1.00  0.00
C
ATOM    241  OD1 ASP    15       9.470   3.228  10.115  1.00  0.00
O
ATOM    242  OD2 ASP    15       8.562   1.574   8.991  1.00  0.00
O
ATOM    243  N   GLY    16      13.357   2.731   6.630  1.00  0.00
N
ATOM    244  H   GLY    16      12.692   3.159   5.993  1.00  0.00
H
ATOM    245  CA  GLY    16      14.593   2.186   6.084  1.00  0.00
C
ATOM    246 1HA  GLY    16      14.746   2.596   5.087  1.00  0.00
H
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ATOM    247 2HA  GLY    16      15.427   2.495   6.715  1.00  0.00
H
ATOM    248  C   GLY    16      14.610   0.669   5.993  1.00  0.00
C
ATOM    249  O   GLY    16      15.610   0.059   5.614  1.00  0.00
O
ATOM    250  N   ASP    17      13.498   0.043   6.354  1.00  0.00
N
ATOM    251  H   ASP    17      12.696   0.594   6.605  1.00  0.00
H
ATOM    252  CA  ASP    17      13.409  -1.416   6.477  1.00  0.00
C
ATOM    253  HA  ASP    17      14.392  -1.792   6.758  1.00  0.00
H
ATOM    254  C   ASP    17      13.001  -2.116   5.182  1.00  0.00
C
ATOM    255  O   ASP    17      12.487  -3.228   5.201  1.00  0.00
O
ATOM    256  CB  ASP    17      12.415  -1.787   7.585  1.00  0.00
C
ATOM    257 1HB  ASP    17      12.579  -1.132   8.440  1.00  0.00
H
ATOM    258 2HB  ASP    17      11.401  -1.627   7.217  1.00  0.00
H
ATOM    259  CG  ASP    17      12.559  -3.237   8.042  1.00  0.00
C
ATOM    260  OD1 ASP    17      13.686  -3.789   8.015  1.00  0.00
O
ATOM    261  OD2 ASP    17      11.542  -3.844   8.448  1.00  0.00
O
ATOM    262  N   LEU    18      13.185  -1.437   4.057  1.00  0.00
N
ATOM    263  H   LEU    18      13.568  -0.500   4.117  1.00  0.00
H
ATOM    264  CA  LEU    18      12.919  -1.959   2.707  1.00  0.00
C
ATOM    265  HA  LEU    18      13.195  -1.165   2.018  1.00  0.00
H
ATOM    266  C   LEU    18      11.466  -2.307   2.379  1.00  0.00
C
ATOM    267  O   LEU    18      11.180  -2.733   1.258  1.00  0.00
O
ATOM    268  CB  LEU    18      13.831  -3.157   2.385  1.00  0.00
C
ATOM    269 1HB  LEU    18      13.500  -3.998   2.992  1.00  0.00
H
ATOM    270 2HB  LEU    18      13.675  -3.435   1.343  1.00  0.00
H
ATOM    271  CG  LEU    18      15.343  -2.996   2.604  1.00  0.00
C
ATOM    272  HG  LEU    18      15.517  -2.666   3.626  1.00  0.00
H
ATOM    273  CD1 LEU    18      16.014  -4.350   2.433  1.00  0.00
C
ATOM    274 1HD1 LEU    18      17.082  -4.256   2.623  1.00  0.00
H
ATOM    275 2HD1 LEU    18      15.857  -4.723   1.422  1.00  0.00
H
ATOM    276 3HD1 LEU    18      15.598  -5.059   3.149  1.00  0.00
H
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ATOM    277  CD2 LEU    18      15.976  -1.977   1.656  1.00  0.00
C
ATOM    278 1HD2 LEU    18      17.050  -1.934   1.826  1.00  0.00
H
ATOM    279 2HD2 LEU    18      15.559  -0.988   1.847  1.00  0.00
H
ATOM    280 3HD2 LEU    18      15.785  -2.257   0.619  1.00  0.00
H
ATOM    281  N   VAL    19      10.563  -2.107   3.330  1.00  0.00
N
ATOM    282  H   VAL    19      10.881  -1.813   4.239  1.00  0.00
H
ATOM    283  CA  VAL    19       9.122  -2.276   3.144  1.00  0.00
C
ATOM    284  HA  VAL    19       8.910  -2.347   2.084  1.00  0.00
H
ATOM    285  C   VAL    19       8.411  -1.039   3.678  1.00  0.00
C
ATOM    286  O   VAL    19       8.846  -0.429   4.673  1.00  0.00
O
ATOM    287  CB  VAL    19       8.560  -3.565   3.822  1.00  0.00
C
ATOM    288  HB  VAL    19       7.476  -3.564   3.709  1.00  0.00
H
ATOM    289  CG1 VAL    19       9.098  -4.813   3.117  1.00  0.00
C
ATOM    290 1HG1 VAL    19       8.659  -5.706   3.561  1.00  0.00
H
ATOM    291 2HG1 VAL    19      10.183  -4.865   3.212  1.00  0.00
H
ATOM    292 3HG1 VAL    19       8.833  -4.780   2.060  1.00  0.00
H
ATOM    293  CG2 VAL    19       8.892  -3.630   5.324  1.00  0.00
C
ATOM    294 1HG2 VAL    19       8.476  -4.540   5.754  1.00  0.00
H
ATOM    295 2HG2 VAL    19       8.457  -2.778   5.842  1.00  0.00
H
ATOM    296 3HG2 VAL    19       9.969  -3.637   5.481  1.00  0.00
H
ATOM    297  N   ALA    20       7.321  -0.669   3.022  1.00  0.00
N
ATOM    298  H   ALA    20       7.019  -1.202   2.214  1.00  0.00
H
ATOM    299  CA  ALA    20       6.509   0.456   3.463  1.00  0.00
C
ATOM    300  HA  ALA    20       7.120   1.129   4.060  1.00  0.00
H
ATOM    301  C   ALA    20       5.387  -0.121   4.323  1.00  0.00
C
ATOM    302  O   ALA    20       4.894  -1.212   4.060  1.00  0.00
O
ATOM    303  CB  ALA    20       5.946   1.236   2.276  1.00  0.00
C
ATOM    304 1HB  ALA    20       6.750   1.529   1.602  1.00  0.00
H
ATOM    305 2HB  ALA    20       5.441   2.130   2.638  1.00  0.00
H
ATOM    306 3HB  ALA    20       5.230   0.626   1.735  1.00  0.00
H
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ATOM    307  N   GLU    21       4.991   0.601   5.353  1.00  0.00
N
ATOM    308  H   GLU    21       5.464   1.481   5.539  1.00  0.00
H
ATOM    309  CA  GLU    21       3.925   0.167   6.253  1.00  0.00
C
ATOM    310  HA  GLU    21       3.775  -0.908   6.156  1.00  0.00
H
ATOM    311  C   GLU    21       2.615   0.895   5.926  1.00  0.00
C
ATOM    312  O   GLU    21       2.630   1.908   5.223  1.00  0.00
O
ATOM    313  CB  GLU    21       4.379   0.483   7.679  1.00  0.00
C
ATOM    314 1HB  GLU    21       5.459   0.625   7.662  1.00  0.00
H
ATOM    315 2HB  GLU    21       3.929   1.425   7.993  1.00  0.00
H
ATOM    316  CG  GLU    21       4.073  -0.591   8.711  1.00  0.00
C
ATOM    317 1HG  GLU    21       3.662  -1.470   8.212  1.00  0.00
H
ATOM    318 2HG  GLU    21       5.000  -0.872   9.211  1.00  0.00
H
ATOM    319  CD  GLU    21       3.087  -0.098   9.743  1.00  0.00
C
ATOM    320  OE1 GLU    21       3.447   0.066  10.931  1.00  0.00
O
ATOM    321  OE2 GLU    21       1.931   0.171   9.363  1.00  0.00
O
ATOM    322  N   ARG    22       1.485   0.447   6.466  1.00  0.00
N
ATOM    323  H   ARG    22       1.500  -0.376   7.058  1.00  0.00
H
ATOM    324  CA  ARG    22       0.214   1.164   6.279  1.00  0.00
C
ATOM    325  HA  ARG    22       0.019   1.297   5.215  1.00  0.00
H
ATOM    326  C   ARG    22       0.314   2.530   6.941  1.00  0.00
C
ATOM    327  O   ARG    22      -0.126   3.542   6.401  1.00  0.00
O
ATOM    328  CB  ARG    22      -0.956   0.434   6.942  1.00  0.00
C
ATOM    329 1HB  ARG    22      -0.800   0.461   8.017  1.00  0.00
H
ATOM    330 2HB  ARG    22      -1.868   0.991   6.725  1.00  0.00
H
ATOM    331  CG  ARG    22      -1.164  -1.015   6.535  1.00  0.00
C
ATOM    332 1HG  ARG    22      -1.246  -1.080   5.454  1.00  0.00
H
ATOM    333 2HG  ARG    22      -0.315  -1.614   6.862  1.00  0.00
H
ATOM    334  CD  ARG    22      -2.434  -1.566   7.168  1.00  0.00
C
ATOM    335 1HD  ARG    22      -3.281  -0.934   6.898  1.00  0.00
H
ATOM    336 2HD  ARG    22      -2.606  -2.567   6.778  1.00  0.00
H
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ATOM    337  NE  ARG    22      -2.322  -1.637   8.633  1.00  0.00
N
ATOM    338  HE  ARG    22      -1.537  -1.167   9.061  1.00  0.00
H
ATOM    339  CZ  ARG    22      -3.140  -2.274   9.456  1.00  0.00
C
ATOM    340  NH1 ARG    22      -4.232  -2.888   9.087  1.00  0.00
N
ATOM    341 1HH1 ARG    22      -4.500  -2.885   8.115  1.00  0.00
H
ATOM    342 2HH1 ARG    22      -4.792  -3.373   9.770  1.00  0.00
H
ATOM    343  NH2 ARG    22      -2.848  -2.289  10.721  1.00  0.00
N
ATOM    344 1HH2 ARG    22      -1.994  -1.863  11.050  1.00  0.00
H
ATOM    345 2HH2 ARG    22      -3.471  -2.744  11.373  1.00  0.00
H
ATOM    346  N   HIS    23       0.975   2.545   8.091  1.00  0.00
N
ATOM    347  H   HIS    23       1.290   1.660   8.486  1.00  0.00
H
ATOM    348  CA  HIS    23       1.259   3.773   8.824  1.00  0.00
C
ATOM    349  HA  HIS    23       0.323   4.253   9.105  1.00  0.00
H
ATOM    350  C   HIS    23       2.068   4.745   7.982  1.00  0.00
C
ATOM    351  O   HIS    23       1.847   5.946   7.990  1.00  0.00
O
ATOM    352  CB  HIS    23       2.043   3.453  10.093  1.00  0.00
C
ATOM    353 1HB  HIS    23       1.439   2.804  10.725  1.00  0.00
H
ATOM    354 2HB  HIS    23       2.954   2.918   9.822  1.00  0.00
H
ATOM    355  CG  HIS    23       2.435   4.671  10.864  1.00  0.00
C
ATOM    356  ND1 HIS    23       1.525   5.503  11.506  1.00  0.00
N
ATOM    357  HD1 HIS    23       0.511   5.365  11.543  1.00  0.00
H
ATOM    358  CD2 HIS    23       3.638   5.265  11.045  1.00  0.00
C
ATOM    359  HD2 HIS    23       4.584   4.908  10.659  1.00  0.00
H
ATOM    360  CE1 HIS    23       2.178   6.516  12.054  1.00  0.00
C
ATOM    361  HE1 HIS    23       1.727   7.314  12.635  1.00  0.00
H
ATOM    362  NE2 HIS    23       3.455   6.393  11.789  1.00  0.00
N
ATOM    363  HE2 HIS    23       4.192   7.031  12.077  1.00  0.00
H
ATOM    364  N   GLU    24       3.011   4.226   7.219  1.00  0.00
N
ATOM    365  H   GLU    24       3.159   3.231   7.198  1.00  0.00
H
ATOM    366  CA  GLU    24       3.843   5.088   6.395  1.00  0.00
C
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ATOM    367  HA  GLU    24       4.168   5.940   6.993  1.00  0.00
H
ATOM    368  C   GLU    24       3.094   5.641   5.188  1.00  0.00
C
ATOM    369  O   GLU    24       3.347   6.779   4.783  1.00  0.00
O
ATOM    370  CB  GLU    24       5.079   4.323   5.955  1.00  0.00
C
ATOM    371 1HB  GLU    24       4.781   3.355   5.560  1.00  0.00
H
ATOM    372 2HB  GLU    24       5.566   4.882   5.165  1.00  0.00
H
ATOM    373  CG  GLU    24       6.058   4.138   7.097  1.00  0.00
C
ATOM    374 1HG  GLU    24       6.309   5.115   7.512  1.00  0.00
H
ATOM    375 2HG  GLU    24       5.587   3.537   7.875  1.00  0.00
H
ATOM    376  CD  GLU    24       7.320   3.451   6.643  1.00  0.00
C
ATOM    377  OE1 GLU    24       7.205   2.336   6.100  1.00  0.00
O
ATOM    378  OE2 GLU    24       8.436   3.977   6.832  1.00  0.00
O
ATOM    379  N   LEU    25       2.142   4.886   4.652  1.00  0.00
N
ATOM    380  H   LEU    25       1.996   3.940   4.987  1.00  0.00
H
ATOM    381  CA  LEU    25       1.287   5.415   3.589  1.00  0.00
C
ATOM    382  HA  LEU    25       1.919   5.814   2.795  1.00  0.00
H
ATOM    383  C   LEU    25       0.443   6.550   4.150  1.00  0.00
C
ATOM    384  O   LEU    25       0.359   7.623   3.555  1.00  0.00
O
ATOM    385  CB  LEU    25       0.346   4.341   3.015  1.00  0.00
C
ATOM    386 1HB  LEU    25       0.950   3.524   2.629  1.00  0.00
H
ATOM    387 2HB  LEU    25      -0.258   3.948   3.831  1.00  0.00
H
ATOM    388  CG  LEU    25      -0.627   4.797   1.908  1.00  0.00
C
ATOM    389  HG  LEU    25      -1.258   5.588   2.312  1.00  0.00
H
ATOM    390  CD1 LEU    25       0.088   5.352   0.672  1.00  0.00
C
ATOM    391 1HD1 LEU    25      -0.642   5.591  -0.101  1.00  0.00
H
ATOM    392 2HD1 LEU    25       0.794   4.616   0.286  1.00  0.00
H
ATOM    393 3HD1 LEU    25       0.624   6.265   0.931  1.00  0.00
H
ATOM    394  CD2 LEU    25      -1.545   3.648   1.490  1.00  0.00
C
ATOM    395 1HD2 LEU    25      -2.281   4.008   0.772  1.00  0.00
H
ATOM    396 2HD2 LEU    25      -2.067   3.252   2.357  1.00  0.00
H
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ATOM    397 3HD2 LEU    25      -0.963   2.849   1.034  1.00  0.00
H
ATOM    398  N   VAL    26      -0.181   6.333   5.299  1.00  0.00
N
ATOM    399  H   VAL    26      -0.086   5.439   5.774  1.00  0.00
H
ATOM    400  CA  VAL    26      -1.069   7.352   5.852  1.00  0.00
C
ATOM    401  HA  VAL    26      -1.669   7.721   5.026  1.00  0.00
H
ATOM    402  C   VAL    26      -0.274   8.552   6.374  1.00  0.00
C
ATOM    403  O   VAL    26      -0.775   9.664   6.341  1.00  0.00
O
ATOM    404  CB  VAL    26      -2.080   6.761   6.877  1.00  0.00
C
ATOM    405  HB  VAL    26      -2.488   5.850   6.442  1.00  0.00
H
ATOM    406  CG1 VAL    26      -1.431   6.388   8.184  1.00  0.00
C
ATOM    407 1HG1 VAL    26      -2.171   5.958   8.855  1.00  0.00
H
ATOM    408 2HG1 VAL    26      -0.979   7.259   8.656  1.00  0.00
H
ATOM    409 3HG1 VAL    26      -0.670   5.643   7.995  1.00  0.00
H
ATOM    410  CG2 VAL    26      -3.243   7.716   7.117  1.00  0.00
C
ATOM    411 1HG2 VAL    26      -3.968   7.247   7.784  1.00  0.00
H
ATOM    412 2HG2 VAL    26      -3.733   7.948   6.172  1.00  0.00
H
ATOM    413 3HG2 VAL    26      -2.880   8.638   7.571  1.00  0.00
H
ATOM    414  N   ASP    27       0.994   8.386   6.729  1.00  0.00
N
ATOM    415  H   ASP    27       1.377   7.449   6.802  1.00  0.00
H
ATOM    416  CA  ASP    27       1.850   9.534   7.053  1.00  0.00
C
ATOM    417  HA  ASP    27       1.396  10.108   7.858  1.00  0.00
H
ATOM    418  C   ASP    27       2.000  10.462   5.849  1.00  0.00
C
ATOM    419  O   ASP    27       1.919  11.689   5.977  1.00  0.00
O
ATOM    420  CB  ASP    27       3.261   9.099   7.461  1.00  0.00
C
ATOM    421 1HB  ASP    27       3.558   8.229   6.881  1.00  0.00
H
ATOM    422 2HB  ASP    27       3.946   9.913   7.226  1.00  0.00
H
ATOM    423  CG  ASP    27       3.404   8.803   8.944  1.00  0.00
C
ATOM    424  OD1 ASP    27       2.471   9.015   9.754  1.00  0.00
O
ATOM    425  OD2 ASP    27       4.540   8.434   9.329  1.00  0.00
O
ATOM    426  N   TYR    28       2.189   9.907   4.660  1.00  0.00
N
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ATOM    427  H   TYR    28       2.265   8.898   4.577  1.00  0.00
H
ATOM    428  CA  TYR    28       2.279  10.735   3.455  1.00  0.00
C
ATOM    429  HA  TYR    28       2.846  11.636   3.687  1.00  0.00
H
ATOM    430  C   TYR    28       0.907  11.192   2.978  1.00  0.00
C
ATOM    431  O   TYR    28       0.783  12.176   2.248  1.00  0.00
O
ATOM    432  CB  TYR    28       3.034  10.010   2.345  1.00  0.00
C
ATOM    433 1HB  TYR    28       2.806   8.944   2.371  1.00  0.00
H
ATOM    434 2HB  TYR    28       2.719  10.415   1.384  1.00  0.00
H
ATOM    435  CG  TYR    28       4.521  10.244   2.484  1.00  0.00
C
ATOM    436  CD1 TYR    28       5.320   9.419   3.293  1.00  0.00
C
ATOM    437  HD1 TYR    28       4.872   8.580   3.803  1.00  0.00
H
ATOM    438  CD2 TYR    28       5.129  11.340   1.841  1.00  0.00
C
ATOM    439  HD2 TYR    28       4.528  11.998   1.231  1.00  0.00
H
ATOM    440  CE1 TYR    28       6.709   9.685   3.456  1.00  0.00
C
ATOM    441  HE1 TYR    28       7.315   9.050   4.084  1.00  0.00
H
ATOM    442  CE2 TYR    28       6.518  11.598   1.991  1.00  0.00
C
ATOM    443  HE2 TYR    28       6.974  12.434   1.485  1.00  0.00
H
ATOM    444  CZ  TYR    28       7.295  10.758   2.786  1.00  0.00
C
ATOM    445  OH  TYR    28       8.643  10.974   2.907  1.00  0.00
O
ATOM    446  HH  TYR    28       9.081  10.241   3.355  1.00  0.00
H
ATOM    447  N   CYS    29      -0.134  10.543   3.472  1.00  0.00
N
ATOM    448  H   CYS    29       0.022   9.716   4.037  1.00  0.00
H
ATOM    449  CA  CYS    29      -1.505  10.981   3.239  1.00  0.00
C
ATOM    450  HA  CYS    29      -1.510  11.605   2.350  1.00  0.00
H
ATOM    451  C   CYS    29      -2.071  11.834   4.374  1.00  0.00
C
ATOM    452  O   CYS    29      -3.267  12.124   4.398  1.00  0.00
O
ATOM    453  CB  CYS    29      -2.397   9.777   2.959  1.00  0.00
C
ATOM    454 1HB  CYS    29      -2.428   9.139   3.841  1.00  0.00
H
ATOM    455 2HB  CYS    29      -3.406  10.130   2.751  1.00  0.00
H
ATOM    456  SG  CYS    29      -1.803   8.821   1.543  1.00  0.00
S
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ATOM    457  HG  CYS    29      -0.674   8.379   2.124  1.00  0.00
H
ATOM    458  N   LYS    30      -1.223  12.304   5.280  1.00  0.00
N
ATOM    459  H   LYS    30      -0.298  11.902   5.357  1.00  0.00
H
ATOM    460  CA  LYS    30      -1.585  13.443   6.122  1.00  0.00
C
ATOM    461  HA  LYS    30      -2.559  13.276   6.585  1.00  0.00
H
ATOM    462  C   LYS    30      -1.677  14.599   5.146  1.00  0.00
C
ATOM    463  O   LYS    30      -0.952  14.609   4.145  1.00  0.00
O
ATOM    464  CB  LYS    30      -0.544  13.723   7.205  1.00  0.00
C
ATOM    465 1HB  LYS    30       0.439  13.807   6.743  1.00  0.00
H
ATOM    466 2HB  LYS    30      -0.783  14.674   7.682  1.00  0.00
H
ATOM    467  CG  LYS    30      -0.503  12.647   8.275  1.00  0.00
C
ATOM    468 1HG  LYS    30      -1.485  12.568   8.742  1.00  0.00
H
ATOM    469 2HG  LYS    30      -0.252  11.694   7.818  1.00  0.00
H
ATOM    470  CD  LYS    30       0.530  12.965   9.335  1.00  0.00
C
ATOM    471 1HD  LYS    30       1.512  13.051   8.868  1.00  0.00
H
ATOM    472 2HD  LYS    30       0.277  13.911   9.810  1.00  0.00
H
ATOM    473  CE  LYS    30       0.560  11.870  10.379  1.00  0.00
C
ATOM    474 1HE  LYS    30      -0.429  11.782  10.832  1.00  0.00
H
ATOM    475 2HE  LYS    30       0.800  10.925   9.887  1.00  0.00
H
ATOM    476  NZ  LYS    30       1.570  12.126  11.448  1.00  0.00
N
ATOM    477 1HZ  LYS    30       1.578  11.353  12.105  1.00  0.00
H
ATOM    478 2HZ  LYS    30       1.350  12.982  11.945  1.00  0.00
H
ATOM    479 3HZ  LYS    30       2.496  12.201  11.042  1.00  0.00
H
ATOM    480  N   LYS    31      -2.586  15.526   5.415  1.00  0.00
N
ATOM    481  H   LYS    31      -3.088  15.454   6.299  1.00  0.00
H
ATOM    482  CA  LYS    31      -2.958  16.627   4.512  1.00  0.00
C
ATOM    483  HA  LYS    31      -3.749  17.188   5.011  1.00  0.00
H
ATOM    484  C   LYS    31      -3.541  16.130   3.190  1.00  0.00
C
ATOM    485  O   LYS    31      -3.481  16.819   2.172  1.00  0.00
O
ATOM    486  CB  LYS    31      -1.799  17.597   4.250  1.00  0.00
C
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ATOM    487 1HB  LYS    31      -1.043  17.089   3.653  1.00  0.00
H
ATOM    488 2HB  LYS    31      -2.174  18.440   3.670  1.00  0.00
H
ATOM    489  CG  LYS    31      -1.131  18.143   5.495  1.00  0.00
C
ATOM    490 1HG  LYS    31      -1.865  18.667   6.103  1.00  0.00
H
ATOM    491 2HG  LYS    31      -0.688  17.329   6.069  1.00  0.00
H
ATOM    492  CD  LYS    31      -0.046  19.101   5.071  1.00  0.00
C
ATOM    493 1HD  LYS    31       0.648  18.579   4.412  1.00  0.00
H
ATOM    494 2HD  LYS    31      -0.500  19.927   4.524  1.00  0.00
H
ATOM    495  CE  LYS    31       0.720  19.649   6.253  1.00  0.00
C
ATOM    496 1HE  LYS    31       0.033  20.136   6.949  1.00  0.00
H
ATOM    497 2HE  LYS    31       1.239  18.833   6.762  1.00  0.00
H
ATOM    498  NZ  LYS    31       1.712  20.640   5.738  1.00  0.00
N
ATOM    499 1HZ  LYS    31       2.382  20.872   6.462  1.00  0.00
H
ATOM    500 2HZ  LYS    31       1.233  21.484   5.449  1.00  0.00
H
ATOM    501 3HZ  LYS    31       2.210  20.259   4.943  1.00  0.00
H
ATOM    502  N   LYS    32      -4.133  14.945   3.214  1.00  0.00
N
ATOM    503  H   LYS    32      -4.091  14.386   4.059  1.00  0.00
H
ATOM    504  CA  LYS    32      -4.984  14.440   2.137  1.00  0.00
C
ATOM    505  HA  LYS    32      -5.294  15.245   1.471  1.00  0.00
H
ATOM    506  C   LYS    32      -6.153  13.941   2.959  1.00  0.00
C
ATOM    507  O   LYS    32      -5.939  13.553   4.112  1.00  0.00
O
ATOM    508  CB  LYS    32      -4.356  13.281   1.349  1.00  0.00
C
ATOM    509 1HB  LYS    32      -4.121  12.478   2.044  1.00  0.00
H
ATOM    510 2HB  LYS    32      -5.101  12.905   0.647  1.00  0.00
H
ATOM    511  CG  LYS    32      -3.090  13.626   0.570  1.00  0.00
C
ATOM    512 1HG  LYS    32      -3.296  14.455  -0.106  1.00  0.00
H
ATOM    513 2HG  LYS    32      -2.310  13.920   1.271  1.00  0.00
H
ATOM    514  CD  LYS    32      -2.605  12.423  -0.244  1.00  0.00
C
ATOM    515 1HD  LYS    32      -2.467  11.575   0.423  1.00  0.00
H
ATOM    516 2HD  LYS    32      -3.359  12.163  -0.988  1.00  0.00
H
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ATOM    517  CE  LYS    32      -1.284  12.718  -0.948  1.00  0.00
C
ATOM    518 1HE  LYS    32      -1.438  13.534  -1.659  1.00  0.00
H
ATOM    519 2HE  LYS    32      -0.551  13.040  -0.206  1.00  0.00
H
ATOM    520  NZ  LYS    32      -0.739  11.519  -1.670  1.00  0.00
N
ATOM    521 1HZ  LYS    32       0.025  11.788  -2.282  1.00  0.00
H
ATOM    522 2HZ  LYS    32      -1.464  11.076  -2.220  1.00  0.00
H
ATOM    523 3HZ  LYS    32      -0.386  10.837  -1.006  1.00  0.00
H
ATOM    524  N   ASN    33      -7.358  13.907   2.418  1.00  0.00
N
ATOM    525  H   ASN    33      -7.498  14.211   1.460  1.00  0.00
H
ATOM    526  CA  ASN    33      -8.494  13.383   3.172  1.00  0.00
C
ATOM    527  HA  ASN    33      -8.306  13.519   4.238  1.00  0.00
H
ATOM    528  C   ASN    33      -8.589  11.888   2.901  1.00  0.00
C
ATOM    529  O   ASN    33      -9.451  11.419   2.149  1.00  0.00
O
ATOM    530  CB  ASN    33      -9.800  14.094   2.824  1.00  0.00
C
ATOM    531 1HB  ASN    33      -9.659  15.168   2.929  1.00  0.00
H
ATOM    532 2HB  ASN    33     -10.068  13.877   1.792  1.00  0.00
H
ATOM    533  CG  ASN    33     -10.935  13.672   3.720  1.00  0.00
C
ATOM    534  OD1 ASN    33     -10.721  13.154   4.810  1.00  0.00
O
ATOM    535  ND2 ASN    33     -12.139  13.880   3.277  1.00  0.00
N
ATOM    536 1HD2 ASN    33     -12.923  13.635   3.864  1.00  0.00
H
ATOM    537 2HD2 ASN    33     -12.274  14.294   2.364  1.00  0.00
H
ATOM    538  N   LEU    34      -7.652  11.157   3.482  1.00  0.00
N
ATOM    539  H   LEU    34      -6.988  11.618   4.094  1.00  0.00
H
ATOM    540  CA  LEU    34      -7.547   9.714   3.300  1.00  0.00
C
ATOM    541  HA  LEU    34      -8.388   9.376   2.699  1.00  0.00
H
ATOM    542  C   LEU    34      -7.660   9.049   4.664  1.00  0.00
C
ATOM    543  O   LEU    34      -6.662   8.772   5.340  1.00  0.00
O
ATOM    544  CB  LEU    34      -6.248   9.339   2.570  1.00  0.00
C
ATOM    545 1HB  LEU    34      -6.001  10.123   1.855  1.00  0.00
H
ATOM    546 2HB  LEU    34      -5.436   9.269   3.291  1.00  0.00
H
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ATOM    547  CG  LEU    34      -6.371   8.011   1.808  1.00  0.00
C
ATOM    548  HG  LEU    34      -6.940   7.313   2.420  1.00  0.00
H
ATOM    549  CD1 LEU    34      -7.111   8.249   0.495  1.00  0.00
C
ATOM    550 1HD1 LEU    34      -7.283   7.295  -0.002  1.00  0.00
H
ATOM    551 2HD1 LEU    34      -6.521   8.891  -0.161  1.00  0.00
H
ATOM    552 3HD1 LEU    34      -8.070   8.727   0.676  1.00  0.00
H
ATOM    553  CD2 LEU    34      -5.035   7.368   1.485  1.00  0.00
C
ATOM    554 1HD2 LEU    34      -5.200   6.389   1.035  1.00  0.00
H
ATOM    555 2HD2 LEU    34      -4.456   7.241   2.398  1.00  0.00
H
ATOM    556 3HD2 LEU    34      -4.474   7.992   0.789  1.00  0.00
H
ATOM    557  N   ASP    35      -8.899   8.874   5.097  1.00  0.00
N
ATOM    558  H   ASP    35      -9.681   9.185   4.531  1.00  0.00
H
ATOM    559  CA  ASP    35      -9.187   8.219   6.367  1.00  0.00
C
ATOM    560  HA  ASP    35      -8.594   8.687   7.150  1.00  0.00
H
ATOM    561  C   ASP    35      -8.807   6.743   6.255  1.00  0.00
C
ATOM    562  O   ASP    35      -8.676   6.203   5.153  1.00  0.00
O
ATOM    563  CB  ASP    35     -10.669   8.374   6.709  1.00  0.00
C
ATOM    564 1HB  ASP    35     -10.993   9.369   6.409  1.00  0.00
H
ATOM    565 2HB  ASP    35     -11.242   7.639   6.143  1.00  0.00
H
ATOM    566  CG  ASP    35     -10.957   8.206   8.195  1.00  0.00
C
ATOM    567  OD1 ASP    35     -10.038   7.926   9.002  1.00  0.00
O
ATOM    568  OD2 ASP    35     -12.141   8.338   8.574  1.00  0.00
O
ATOM    569  N   GLN    36      -8.638   6.077   7.384  1.00  0.00
N
ATOM    570  H   GLN    36      -8.891   6.534   8.256  1.00  0.00
H
ATOM    571  CA  GLN    36      -8.062   4.737   7.431  1.00  0.00
C
ATOM    572  HA  GLN    36      -7.085   4.785   6.958  1.00  0.00
H
ATOM    573  C   GLN    36      -8.832   3.645   6.690  1.00  0.00
C
ATOM    574  O   GLN    36      -8.238   2.645   6.293  1.00  0.00
O
ATOM    575  CB  GLN    36      -7.842   4.328   8.888  1.00  0.00
C
ATOM    576 1HB  GLN    36      -8.790   4.426   9.415  1.00  0.00
H
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ATOM    577 2HB  GLN    36      -7.541   3.282   8.924  1.00  0.00
H
ATOM    578  CG  GLN    36      -6.782   5.155   9.621  1.00  0.00
C
ATOM    579 1HG  GLN    36      -6.915   6.213   9.404  1.00  0.00
H
ATOM    580 2HG  GLN    36      -6.929   5.011  10.687  1.00  0.00
H
ATOM    581  CD  GLN    36      -5.352   4.750   9.297  1.00  0.00
C
ATOM    582  OE1 GLN    36      -5.073   4.041   8.340  1.00  0.00
O
ATOM    583  NE2 GLN    36      -4.435   5.174  10.117  1.00  0.00
N
ATOM    584 1HE2 GLN    36      -3.489   4.854   9.993  1.00  0.00
H
ATOM    585 2HE2 GLN    36      -4.678   5.809  10.867  1.00  0.00
H
ATOM    586  N   ASN    37     -10.116   3.821   6.413  1.00  0.00
N
ATOM    587  H   ASN    37     -10.615   4.623   6.789  1.00  0.00
H
ATOM    588  CA  ASN    37     -10.812   2.858   5.558  1.00  0.00
C
ATOM    589  HA  ASN    37     -10.595   1.849   5.910  1.00  0.00
H
ATOM    590  C   ASN    37     -10.319   2.951   4.117  1.00  0.00
C
ATOM    591  O   ASN    37     -10.168   1.934   3.454  1.00  0.00
O
ATOM    592  CB  ASN    37     -12.327   3.074   5.573  1.00  0.00
C
ATOM    593 1HB  ASN    37     -12.549   4.126   5.404  1.00  0.00
H
ATOM    594 2HB  ASN    37     -12.768   2.493   4.764  1.00  0.00
H
ATOM    595  CG  ASN    37     -12.969   2.629   6.861  1.00  0.00
C
ATOM    596  OD1 ASN    37     -12.459   1.771   7.577  1.00  0.00
O
ATOM    597  ND2 ASN    37     -14.102   3.186   7.159  1.00  0.00
N
ATOM    598 1HD2 ASN    37     -14.578   2.897   8.002  1.00  0.00
H
ATOM    599 2HD2 ASN    37     -14.500   3.901   6.569  1.00  0.00
H
ATOM    600  N   LEU    38     -10.017   4.146   3.627  1.00  0.00
N
ATOM    601  H   LEU    38     -10.105   4.972   4.208  1.00  0.00
H
ATOM    602  CA  LEU    38      -9.496   4.286   2.267  1.00  0.00
C
ATOM    603  HA  LEU    38     -10.067   3.654   1.587  1.00  0.00
H
ATOM    604  C   LEU    38      -8.052   3.824   2.231  1.00  0.00
C
ATOM    605  O   LEU    38      -7.621   3.217   1.256  1.00  0.00
O
ATOM    606  CB  LEU    38      -9.549   5.733   1.780  1.00  0.00
C
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ATOM    607 1HB  LEU    38      -9.118   6.365   2.554  1.00  0.00
H
ATOM    608 2HB  LEU    38      -8.907   5.802   0.902  1.00  0.00
H
ATOM    609  CG  LEU    38     -10.912   6.313   1.386  1.00  0.00
C
ATOM    610  HG  LEU    38     -11.606   6.185   2.216  1.00  0.00
H
ATOM    611  CD1 LEU    38     -10.772   7.795   1.093  1.00  0.00
C
ATOM    612 1HD1 LEU    38     -11.757   8.220   0.918  1.00  0.00
H
ATOM    613 2HD1 LEU    38     -10.155   7.950   0.207  1.00  0.00
H
ATOM    614 3HD1 LEU    38     -10.319   8.297   1.945  1.00  0.00
H
ATOM    615  CD2 LEU    38     -11.479   5.625   0.149  1.00  0.00
C
ATOM    616 1HD2 LEU    38     -12.411   6.105  -0.147  1.00  0.00
H
ATOM    617 2HD2 LEU    38     -11.686   4.581   0.368  1.00  0.00
H
ATOM    618 3HD2 LEU    38     -10.769   5.686  -0.677  1.00  0.00
H
ATOM    619  N   VAL    39      -7.323   4.057   3.314  1.00  0.00
N
ATOM    620  H   VAL    39      -7.717   4.594   4.079  1.00  0.00
H
ATOM    621  CA  VAL    39      -5.951   3.558   3.418  1.00  0.00
C
ATOM    622  HA  VAL    39      -5.370   3.946   2.582  1.00  0.00
H
ATOM    623  C   VAL    39      -6.015   2.041   3.306  1.00  0.00
C
ATOM    624  O   VAL    39      -5.310   1.453   2.495  1.00  0.00
O
ATOM    625  CB  VAL    39      -5.278   3.965   4.761  1.00  0.00
C
ATOM    626  HB  VAL    39      -5.889   3.580   5.573  1.00  0.00
H
ATOM    627  CG1 VAL    39      -3.863   3.383   4.916  1.00  0.00
C
ATOM    628 1HG1 VAL    39      -3.470   3.646   5.900  1.00  0.00
H
ATOM    629 2HG1 VAL    39      -3.203   3.786   4.151  1.00  0.00
H
ATOM    630 3HG1 VAL    39      -3.889   2.296   4.842  1.00  0.00
H
ATOM    631  CG2 VAL    39      -5.211   5.487   4.896  1.00  0.00
C
ATOM    632 1HG2 VAL    39      -4.911   5.732   5.914  1.00  0.00
H
ATOM    633 2HG2 VAL    39      -6.182   5.943   4.714  1.00  0.00
H
ATOM    634 3HG2 VAL    39      -4.484   5.897   4.198  1.00  0.00
H
ATOM    635  N   GLN    40      -6.898   1.396   4.058  1.00  0.00
N
ATOM    636  H   GLN    40      -7.483   1.909   4.712  1.00  0.00
H
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ATOM    637  CA  GLN    40      -6.997  -0.057   4.003  1.00  0.00
C
ATOM    638  HA  GLN    40      -6.000  -0.460   4.184  1.00  0.00
H
ATOM    639  C   GLN    40      -7.449  -0.543   2.634  1.00  0.00
C
ATOM    640  O   GLN    40      -6.920  -1.526   2.149  1.00  0.00
O
ATOM    641  CB  GLN    40      -7.932  -0.597   5.086  1.00  0.00
C
ATOM    642 1HB  GLN    40      -7.683  -0.106   6.024  1.00  0.00
H
ATOM    643 2HB  GLN    40      -8.960  -0.346   4.826  1.00  0.00
H
ATOM    644  CG  GLN    40      -7.820  -2.110   5.292  1.00  0.00
C
ATOM    645 1HG  GLN    40      -8.568  -2.424   6.020  1.00  0.00
H
ATOM    646 2HG  GLN    40      -8.022  -2.618   4.352  1.00  0.00
H
ATOM    647  CD  GLN    40      -6.451  -2.529   5.793  1.00  0.00
C
ATOM    648  OE1 GLN    40      -6.005  -2.080   6.846  1.00  0.00
O
ATOM    649  NE2 GLN    40      -5.772  -3.365   5.057  1.00  0.00
N
ATOM    650 1HE2 GLN    40      -4.876  -3.690   5.388  1.00  0.00
H
ATOM    651 2HE2 GLN    40      -6.146  -3.705   4.179  1.00  0.00
H
ATOM    652  N   GLN    41      -8.360   0.153   1.967  1.00  0.00
N
ATOM    653  H   GLN    41      -8.802   0.958   2.400  1.00  0.00
H
ATOM    654  CA  GLN    41      -8.740  -0.238   0.608  1.00  0.00
C
ATOM    655  HA  GLN    41      -9.124  -1.257   0.622  1.00  0.00
H
ATOM    656  C   GLN    41      -7.538  -0.199  -0.330  1.00  0.00
C
ATOM    657  O   GLN    41      -7.358  -1.083  -1.165  1.00  0.00
O
ATOM    658  CB  GLN    41      -9.802   0.705   0.031  1.00  0.00
C
ATOM    659 1HB  GLN    41      -9.466   1.729   0.183  1.00  0.00
H
ATOM    660 2HB  GLN    41      -9.867   0.530  -1.043  1.00  0.00
H
ATOM    661  CG  GLN    41     -11.201   0.563   0.608  1.00  0.00
C
ATOM    662 1HG  GLN    41     -11.643  -0.368   0.256  1.00  0.00
H
ATOM    663 2HG  GLN    41     -11.149   0.526   1.692  1.00  0.00
H
ATOM    664  CD  GLN    41     -12.087   1.725   0.205  1.00  0.00
C
ATOM    665  OE1 GLN    41     -12.034   2.213  -0.922  1.00  0.00
O
ATOM    666  NE2 GLN    41     -12.900   2.191   1.110  1.00  0.00
N
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ATOM    667 1HE2 GLN    41     -13.477   2.987   0.879  1.00  0.00
H
ATOM    668 2HE2 GLN    41     -12.958   1.753   2.020  1.00  0.00
H
ATOM    669  N   TRP    42      -6.711   0.829  -0.236  1.00  0.00
N
ATOM    670  H   TRP    42      -6.867   1.553   0.465  1.00  0.00
H
ATOM    671  CA  TRP    42      -5.609   0.985  -1.184  1.00  0.00
C
ATOM    672  HA  TRP    42      -5.965   0.707  -2.175  1.00  0.00
H
ATOM    673  C   TRP    42      -4.456   0.037  -0.842  1.00  0.00
C
ATOM    674  O   TRP    42      -3.737  -0.420  -1.734  1.00  0.00
O
ATOM    675  CB  TRP    42      -5.168   2.452  -1.244  1.00  0.00
C
ATOM    676 1HB  TRP    42      -4.851   2.766  -0.249  1.00  0.00
H
ATOM    677 2HB  TRP    42      -4.314   2.522  -1.915  1.00  0.00
H
ATOM    678  CG  TRP    42      -6.255   3.412  -1.745  1.00  0.00
C
ATOM    679  CD1 TRP    42      -7.572   3.132  -1.997  1.00  0.00
C
ATOM    680  HD1 TRP    42      -8.019   2.156  -1.876  1.00  0.00
H
ATOM    681  CD2 TRP    42      -6.116   4.818  -2.039  1.00  0.00
C
ATOM    682  NE1 TRP    42      -8.263   4.242  -2.386  1.00  0.00
N
ATOM    683  HE1 TRP    42      -9.259   4.254  -2.603  1.00  0.00
H
ATOM    684  CE2 TRP    42      -7.404   5.303  -2.415  1.00  0.00
C
ATOM    685  CE3 TRP    42      -5.031   5.718  -2.043  1.00  0.00
C
ATOM    686  HE3 TRP    42      -4.053   5.395  -1.726  1.00  0.00
H
ATOM    687  CZ2 TRP    42      -7.625   6.641  -2.796  1.00  0.00
C
ATOM    688  HZ2 TRP    42      -8.613   6.978  -3.064  1.00  0.00
H
ATOM    689  CZ3 TRP    42      -5.242   7.059  -2.463  1.00  0.00
C
ATOM    690  HZ3 TRP    42      -4.412   7.750  -2.487  1.00  0.00
H
ATOM    691  CH2 TRP    42      -6.543   7.503  -2.833  1.00  0.00
C
ATOM    692  HH2 TRP    42      -6.691   8.532  -3.125  1.00  0.00
H
ATOM    693  N   ILE    43      -4.336  -0.336   0.425  1.00  0.00
N
ATOM    694  H   ILE    43      -4.889   0.134   1.138  1.00  0.00
H
ATOM    695  CA  ILE    43      -3.442  -1.421   0.836  1.00  0.00
C
ATOM    696  HA  ILE    43      -2.460  -1.260   0.398  1.00  0.00
H
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ATOM    697  C   ILE    43      -3.992  -2.733   0.269  1.00  0.00
C
ATOM    698  O   ILE    43      -3.286  -3.474  -0.403  1.00  0.00
O
ATOM    699  CB  ILE    43      -3.310  -1.468   2.398  1.00  0.00
C
ATOM    700  HB  ILE    43      -4.318  -1.420   2.805  1.00  0.00
H
ATOM    701  CG1 ILE    43      -2.543  -0.228   2.914  1.00  0.00
C
ATOM    702 1HG1 ILE    43      -3.020   0.665   2.521  1.00  0.00
H
ATOM    703 2HG1 ILE    43      -2.655  -0.197   3.996  1.00  0.00
H
ATOM    704  CG2 ILE    43      -2.687  -2.794   2.918  1.00  0.00
C
ATOM    705 1HG2 ILE    43      -2.564  -2.748   4.002  1.00  0.00
H
ATOM    706 2HG2 ILE    43      -1.720  -2.982   2.459  1.00  0.00
H
ATOM    707 3HG2 ILE    43      -3.350  -3.630   2.692  1.00  0.00
H
ATOM    708  CD1 ILE    43      -1.039  -0.115   2.588  1.00  0.00
C
ATOM    709 1HD1 ILE    43      -0.651   0.812   3.009  1.00  0.00
H
ATOM    710 2HD1 ILE    43      -0.888  -0.093   1.508  1.00  0.00
H
ATOM    711 3HD1 ILE    43      -0.492  -0.953   3.020  1.00  0.00
H
ATOM    712  N   ASP    44      -5.273  -3.007   0.461  1.00  0.00
N
ATOM    713  H   ASP    44      -5.857  -2.345   0.967  1.00  0.00
H
ATOM    714  CA  ASP    44      -5.862  -4.279   0.040  1.00  0.00
C
ATOM    715  HA  ASP    44      -5.326  -5.096   0.523  1.00  0.00
H
ATOM    716  C   ASP    44      -5.755  -4.474  -1.463  1.00  0.00
C
ATOM    717  O   ASP    44      -5.555  -5.590  -1.955  1.00  0.00
O
ATOM    718  CB  ASP    44      -7.349  -4.354   0.402  1.00  0.00
C
ATOM    719 1HB  ASP    44      -7.846  -3.455   0.041  1.00  0.00
H
ATOM    720 2HB  ASP    44      -7.785  -5.216  -0.102  1.00  0.00
H
ATOM    721  CG  ASP    44      -7.604  -4.497   1.892  1.00  0.00
C
ATOM    722  OD1 ASP    44      -6.697  -4.859   2.671  1.00  0.00
O
ATOM    723  OD2 ASP    44      -8.774  -4.314   2.295  1.00  0.00
O
ATOM    724  N   HIS    45      -5.864  -3.388  -2.210  1.00  0.00
N
ATOM    725  H   HIS    45      -6.058  -2.496  -1.763  1.00  0.00
H
ATOM    726  CA  HIS    45      -5.725  -3.463  -3.658  1.00  0.00
C
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ATOM    727  HA  HIS    45      -6.401  -4.234  -4.028  1.00  0.00
H
ATOM    728  C   HIS    45      -4.337  -3.863  -4.152  1.00  0.00
C
ATOM    729  O   HIS    45      -4.271  -4.525  -5.182  1.00  0.00
O
ATOM    730  CB  HIS    45      -6.126  -2.145  -4.310  1.00  0.00
C
ATOM    731 1HB  HIS    45      -5.676  -1.319  -3.762  1.00  0.00
H
ATOM    732 2HB  HIS    45      -5.725  -2.151  -5.319  1.00  0.00
H
ATOM    733  CG  HIS    45      -7.605  -1.941  -4.425  1.00  0.00
C
ATOM    734  ND1 HIS    45      -8.424  -2.734  -5.220  1.00  0.00
N
ATOM    735  HD1 HIS    45      -8.113  -3.532  -5.779  1.00  0.00
H
ATOM    736  CD2 HIS    45      -8.432  -0.992  -3.918  1.00  0.00
C
ATOM    737  HD2 HIS    45      -8.140  -0.194  -3.248  1.00  0.00
H
ATOM    738  CE1 HIS    45      -9.666  -2.279  -5.161  1.00  0.00
C
ATOM    739  HE1 HIS    45     -10.519  -2.706  -5.679  1.00  0.00
H
ATOM    740  NE2 HIS    45      -9.694  -1.220  -4.388  1.00  0.00
N
ATOM    741  HE2 HIS    45     -10.522  -0.651  -4.184  1.00  0.00
H
ATOM    742  N   PHE    46      -3.241  -3.535  -3.477  1.00  0.00
N
ATOM    743  H   PHE    46      -3.290  -3.000  -2.617  1.00  0.00
H
ATOM    744  CA  PHE    46      -1.942  -3.992  -3.988  1.00  0.00
C
ATOM    745  HA  PHE    46      -1.988  -3.986  -5.078  1.00  0.00
H
ATOM    746  C   PHE    46      -1.651  -5.417  -3.533  1.00  0.00
C
ATOM    747  O   PHE    46      -0.839  -6.112  -4.142  1.00  0.00
O
ATOM    748  CB  PHE    46      -0.766  -3.081  -3.586  1.00  0.00
C
ATOM    749 1HB  PHE    46       0.029  -3.219  -4.318  1.00  0.00
H
ATOM    750 2HB  PHE    46      -1.093  -2.044  -3.632  1.00  0.00
H
ATOM    751  CG  PHE    46      -0.181  -3.366  -2.216  1.00  0.00
C
ATOM    752  CD1 PHE    46       0.734  -4.424  -2.017  1.00  0.00
C
ATOM    753  HD1 PHE    46       1.064  -5.012  -2.857  1.00  0.00
H
ATOM    754  CD2 PHE    46      -0.535  -2.577  -1.118  1.00  0.00
C
ATOM    755  HD2 PHE    46      -1.180  -1.724  -1.257  1.00  0.00
H
ATOM    756  CE1 PHE    46       1.169  -4.781  -0.720  1.00  0.00
C
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ATOM    757  HE1 PHE    46       1.817  -5.634  -0.576  1.00  0.00
H
ATOM    758  CE2 PHE    46      -0.089  -2.908   0.181  1.00  0.00
C
ATOM    759  HE2 PHE    46      -0.378  -2.299   1.017  1.00  0.00
H
ATOM    760  CZ  PHE    46       0.724  -4.038   0.386  1.00  0.00
C
ATOM    761  HZ  PHE    46       1.017  -4.321   1.386  1.00  0.00
H
ATOM    762  N   ASP    47      -2.216  -5.787  -2.391  1.00  0.00
N
ATOM    763  H   ASP    47      -2.960  -5.229  -1.996  1.00  0.00
H
ATOM    764  CA  ASP    47      -1.651  -6.846  -1.556  1.00  0.00
C
ATOM    765  HA  ASP    47      -0.566  -6.773  -1.632  1.00  0.00
H
ATOM    766  C   ASP    47      -2.031  -8.261  -1.975  1.00  0.00
C
ATOM    767  O   ASP    47      -3.053  -8.822  -1.564  1.00  0.00
O
ATOM    768  CB  ASP    47      -2.027  -6.566  -0.101  1.00  0.00
C
ATOM    769 1HB  ASP    47      -1.928  -5.498   0.076  1.00  0.00
H
ATOM    770 2HB  ASP    47      -3.064  -6.851   0.079  1.00  0.00
H
ATOM    771  CG  ASP    47      -1.121  -7.265   0.882  1.00  0.00
C
ATOM    772  OD1 ASP    47      -0.173  -7.976   0.481  1.00  0.00
O
ATOM    773  OD2 ASP    47      -1.359  -7.115   2.099  1.00  0.00
O
ATOM    774  N   VAL    48      -1.226  -8.832  -2.855  1.00  0.00
N
ATOM    775  H   VAL    48      -0.392  -8.327  -3.160  1.00  0.00
H
ATOM    776  CA  VAL    48      -1.469 -10.166  -3.395  1.00  0.00
C
ATOM    777  HA  VAL    48      -2.529 -10.295  -3.606  1.00  0.00
H
ATOM    778  C   VAL    48      -1.036 -11.156  -2.320  1.00  0.00
C
ATOM    779  O   VAL    48      -1.671 -12.191  -2.084  1.00  0.00
O
ATOM    780  CB  VAL    48      -0.643 -10.380  -4.704  1.00  0.00
C
ATOM    781  HB  VAL    48       0.415 -10.260  -4.473  1.00  0.00
H
ATOM    782  CG1 VAL    48      -0.853 -11.780  -5.291  1.00  0.00
C
ATOM    783 1HG1 VAL    48      -0.315 -11.869  -6.235  1.00  0.00
H
ATOM    784 2HG1 VAL    48      -1.915 -11.961  -5.463  1.00  0.00
H
ATOM    785 3HG1 VAL    48      -0.463 -12.529  -4.604  1.00  0.00
H
ATOM    786  CG2 VAL    48      -1.024  -9.327  -5.759  1.00  0.00
C
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ATOM    787 1HG2 VAL    48      -0.463  -9.508  -6.675  1.00  0.00
H
ATOM    788 2HG2 VAL    48      -0.773  -8.331  -5.400  1.00  0.00
H
ATOM    789 3HG2 VAL    48      -2.092  -9.375  -5.975  1.00  0.00
H
ATOM    790  N   ASP    49       0.045 -10.805  -1.639  1.00  0.00
N
ATOM    791  H   ASP    49       0.489  -9.910  -1.849  1.00  0.00
H
ATOM    792  CA  ASP    49       0.668 -11.685  -0.648  1.00  0.00
C
ATOM    793  HA  ASP    49       0.664 -12.708  -1.024  1.00  0.00
H
ATOM    794  C   ASP    49      -0.016 -11.669   0.717  1.00  0.00
C
ATOM    795  O   ASP    49       0.285 -12.501   1.580  1.00  0.00
O
ATOM    796  CB  ASP    49       2.110 -11.247  -0.421  1.00  0.00
C
ATOM    797 1HB  ASP    49       2.112 -10.192  -0.146  1.00  0.00
H
ATOM    798 2HB  ASP    49       2.531 -11.824   0.401  1.00  0.00
H
ATOM    799  CG  ASP    49       2.994 -11.437  -1.633  1.00  0.00
C
ATOM    800  OD1 ASP    49       2.827 -12.388  -2.425  1.00  0.00
O
ATOM    801  OD2 ASP    49       3.950 -10.643  -1.771  1.00  0.00
O
ATOM    802  N   LYS    50      -0.899 -10.694   0.908  1.00  0.00
N
ATOM    803  H   LYS    50      -1.039 -10.037   0.149  1.00  0.00
H
ATOM    804  CA  LYS    50      -1.622 -10.436   2.167  1.00  0.00
C
ATOM    805  HA  LYS    50      -2.199  -9.521   2.038  1.00  0.00
H
ATOM    806  C   LYS    50      -0.640 -10.153   3.298  1.00  0.00
C
ATOM    807  O   LYS    50      -0.809 -10.589   4.437  1.00  0.00
O
ATOM    808  CB  LYS    50      -2.613 -11.560   2.504  1.00  0.00
C
ATOM    809 1HB  LYS    50      -2.054 -12.475   2.694  1.00  0.00
H
ATOM    810 2HB  LYS    50      -3.150 -11.293   3.413  1.00  0.00
H
ATOM    811  CG  LYS    50      -3.636 -11.845   1.407  1.00  0.00
C
ATOM    812 1HG  LYS    50      -3.111 -12.081   0.484  1.00  0.00
H
ATOM    813 2HG  LYS    50      -4.225 -12.715   1.698  1.00  0.00
H
ATOM    814  CD  LYS    50      -4.590 -10.676   1.166  1.00  0.00
C
ATOM    815 1HD  LYS    50      -5.119 -10.454   2.094  1.00  0.00
H
ATOM    816 2HD  LYS    50      -4.033  -9.792   0.859  1.00  0.00
H
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ATOM    817  CE  LYS    50      -5.600 -11.011   0.085  1.00  0.00
C
ATOM    818 1HE  LYS    50      -6.111 -11.943   0.338  1.00  0.00
H
ATOM    819 2HE  LYS    50      -6.338 -10.209   0.036  1.00  0.00
H
ATOM    820  NZ  LYS    50      -4.926 -11.142  -1.249  1.00  0.00
N
ATOM    821 1HZ  LYS    50      -5.617 -11.155  -1.987  1.00  0.00
H
ATOM    822 2HZ  LYS    50      -4.389 -12.000  -1.280  1.00  0.00
H
ATOM    823 3HZ  LYS    50      -4.307 -10.351  -1.397  1.00  0.00
H
ATOM    824  N   ASP    51       0.436  -9.462   2.957  1.00  0.00
N
ATOM    825  H   ASP    51       0.490  -9.089   2.012  1.00  0.00
H
ATOM    826  CA  ASP    51       1.522  -9.197   3.901  1.00  0.00
C
ATOM    827  HA  ASP    51       1.690 -10.077   4.518  1.00  0.00
H
ATOM    828  C   ASP    51       1.213  -8.032   4.827  1.00  0.00
C
ATOM    829  O   ASP    51       1.796  -7.924   5.903  1.00  0.00
O
ATOM    830  CB  ASP    51       2.813  -8.853   3.160  1.00  0.00
C
ATOM    831 1HB  ASP    51       2.589  -8.135   2.370  1.00  0.00
H
ATOM    832 2HB  ASP    51       3.508  -8.395   3.861  1.00  0.00
H
ATOM    833  CG  ASP    51       3.493 -10.065   2.568  1.00  0.00
C
ATOM    834  OD1 ASP    51       3.334 -11.199   3.069  1.00  0.00
O
ATOM    835  OD2 ASP    51       4.230  -9.889   1.567  1.00  0.00
O
ATOM    836  N   ASP    52       0.319  -7.156   4.386  1.00  0.00
N
ATOM    837  H   ASP    52      -0.137  -7.336   3.491  1.00  0.00
H
ATOM    838  CA  ASP    52      -0.086  -5.932   5.095  1.00  0.00
C
ATOM    839  HA  ASP    52      -0.838  -5.454   4.468  1.00  0.00
H
ATOM    840  C   ASP    52       1.043  -4.908   5.270  1.00  0.00
C
ATOM    841  O   ASP    52       0.964  -3.959   6.051  1.00  0.00
O
ATOM    842  CB  ASP    52      -0.756  -6.274   6.429  1.00  0.00
C
ATOM    843 1HB  ASP    52      -1.297  -7.215   6.320  1.00  0.00
H
ATOM    844 2HB  ASP    52       0.011  -6.397   7.193  1.00  0.00
H
ATOM    845  CG  ASP    52      -1.729  -5.216   6.872  1.00  0.00
C
ATOM    846  OD1 ASP    52      -2.647  -4.876   6.084  1.00  0.00
O
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ATOM    847  OD2 ASP    52      -1.631  -4.758   8.033  1.00  0.00
O
ATOM    848  N   GLN    53       2.088  -5.090   4.480  1.00  0.00
N
ATOM    849  H   GLN    53       2.097  -5.893   3.866  1.00  0.00
H
ATOM    850  CA  GLN    53       3.201  -4.154   4.364  1.00  0.00
C
ATOM    851  HA  GLN    53       2.870  -3.143   4.603  1.00  0.00
H
ATOM    852  C   GLN    53       3.500  -4.256   2.876  1.00  0.00
C
ATOM    853  O   GLN    53       3.221  -5.300   2.275  1.00  0.00
O
ATOM    854  CB  GLN    53       4.395  -4.540   5.255  1.00  0.00
C
ATOM    855 1HB  GLN    53       5.139  -3.745   5.195  1.00  0.00
H
ATOM    856 2HB  GLN    53       4.039  -4.597   6.284  1.00  0.00
H
ATOM    857  CG  GLN    53       5.079  -5.864   4.903  1.00  0.00
C
ATOM    858 1HG  GLN    53       4.338  -6.659   4.918  1.00  0.00
H
ATOM    859 2HG  GLN    53       5.495  -5.793   3.899  1.00  0.00
H
ATOM    860  CD  GLN    53       6.199  -6.240   5.855  1.00  0.00
C
ATOM    861  OE1 GLN    53       6.313  -5.724   6.956  1.00  0.00
O
ATOM    862  NE2 GLN    53       7.045  -7.136   5.437  1.00  0.00
N
ATOM    863 1HE2 GLN    53       7.811  -7.401   6.033  1.00  0.00
H
ATOM    864 2HE2 GLN    53       6.918  -7.563   4.531  1.00  0.00
H
ATOM    865  N   ILE    54       3.988  -3.192   2.262  1.00  0.00
N
ATOM    866  H   ILE    54       4.263  -2.381   2.813  1.00  0.00
H
ATOM    867  CA  ILE    54       4.102  -3.116   0.806  1.00  0.00
C
ATOM    868  HA  ILE    54       3.563  -3.960   0.382  1.00  0.00
H
ATOM    869  C   ILE    54       5.568  -3.295   0.425  1.00  0.00
C
ATOM    870  O   ILE    54       6.462  -2.654   0.984  1.00  0.00
O
ATOM    871  CB  ILE    54       3.413  -1.815   0.230  1.00  0.00
C
ATOM    872  HB  ILE    54       2.641  -2.150  -0.460  1.00  0.00
H
ATOM    873  CG1 ILE    54       4.386  -0.966  -0.606  1.00  0.00
C
ATOM    874 1HG1 ILE    54       5.201  -0.639   0.035  1.00  0.00
H
ATOM    875 2HG1 ILE    54       4.804  -1.599  -1.387  1.00  0.00
H
ATOM    876  CG2 ILE    54       2.681  -1.010   1.349  1.00  0.00
C
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ATOM    877 1HG2 ILE    54       2.100  -0.204   0.901  1.00  0.00
H
ATOM    878 2HG2 ILE    54       3.396  -0.577   2.046  1.00  0.00
H
ATOM    879 3HG2 ILE    54       1.983  -1.652   1.887  1.00  0.00
H
ATOM    880  CD1 ILE    54       3.814   0.266  -1.278  1.00  0.00
C
ATOM    881 1HD1 ILE    54       4.576   0.714  -1.916  1.00  0.00
H
ATOM    882 2HD1 ILE    54       3.522   0.997  -0.528  1.00  0.00
H
ATOM    883 3HD1 ILE    54       2.947   0.001  -1.882  1.00  0.00
H
ATOM    884  N   SER    55       5.821  -4.204  -0.503  1.00  0.00
N
ATOM    885  H   SER    55       5.068  -4.747  -0.898  1.00  0.00
H
ATOM    886  CA  SER    55       7.167  -4.442  -1.009  1.00  0.00
C
ATOM    887  HA  SER    55       7.910  -4.191  -0.253  1.00  0.00
H
ATOM    888  C   SER    55       7.395  -3.595  -2.254  1.00  0.00
C
ATOM    889  O   SER    55       6.431  -3.194  -2.911  1.00  0.00
O
ATOM    890  CB  SER    55       7.307  -5.912  -1.377  1.00  0.00
C
ATOM    891 1HB  SER    55       8.306  -6.089  -1.764  1.00  0.00
H
ATOM    892 2HB  SER    55       7.158  -6.520  -0.485  1.00  0.00
H
ATOM    893  OG  SER    55       6.350  -6.275  -2.356  1.00  0.00
O
ATOM    894  HG  SER    55       6.474  -7.217  -2.569  1.00  0.00
H
ATOM    895  N   MET    56       8.654  -3.373  -2.607  1.00  0.00
N
ATOM    896  H   MET    56       9.405  -3.717  -2.009  1.00  0.00
H
ATOM    897  CA  MET    56       9.023  -2.644  -3.822  1.00  0.00
C
ATOM    898  HA  MET    56       8.552  -1.661  -3.830  1.00  0.00
H
ATOM    899  C   MET    56       8.531  -3.449  -5.014  1.00  0.00
C
ATOM    900  O   MET    56       8.074  -2.904  -6.021  1.00  0.00
O
ATOM    901  CB  MET    56      10.548  -2.497  -3.888  1.00  0.00
C
ATOM    902 1HB  MET    56      10.888  -1.953  -3.007  1.00  0.00
H
ATOM    903 2HB  MET    56      10.984  -3.496  -3.855  1.00  0.00
H
ATOM    904  CG  MET    56      11.077  -1.798  -5.138  1.00  0.00
C
ATOM    905 1HG  MET    56      12.157  -1.938  -5.179  1.00  0.00
H
ATOM    906 2HG  MET    56      10.643  -2.276  -6.016  1.00  0.00
H
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ATOM    907  SD  MET    56      10.739  -0.032  -5.212  1.00  0.00
S
ATOM    908  CE  MET    56      12.140   0.590  -4.268  1.00  0.00
C
ATOM    909 1HE  MET    56      12.050   1.668  -4.145  1.00  0.00
H
ATOM    910 2HE  MET    56      13.067   0.362  -4.792  1.00  0.00
H
ATOM    911 3HE  MET    56      12.157   0.120  -3.284  1.00  0.00
H
ATOM    912  N   GLU    57       8.581  -4.764  -4.861  1.00  0.00
N
ATOM    913  H   GLU    57       8.965  -5.157  -4.006  1.00  0.00
H
ATOM    914  CA  GLU    57       8.128  -5.676  -5.897  1.00  0.00
C
ATOM    915  HA  GLU    57       8.692  -5.482  -6.808  1.00  0.00
H
ATOM    916  C   GLU    57       6.657  -5.445  -6.199  1.00  0.00
C
ATOM    917  O   GLU    57       6.319  -5.174  -7.338  1.00  0.00
O
ATOM    918  CB  GLU    57       8.328  -7.135  -5.475  1.00  0.00
C
ATOM    919 1HB  GLU    57       7.887  -7.285  -4.491  1.00  0.00
H
ATOM    920 2HB  GLU    57       7.786  -7.763  -6.183  1.00  0.00
H
ATOM    921  CG  GLU    57       9.778  -7.612  -5.459  1.00  0.00
C
ATOM    922 1HG  GLU    57       9.771  -8.699  -5.406  1.00  0.00
H
ATOM    923 2HG  GLU    57      10.251  -7.321  -6.396  1.00  0.00
H
ATOM    924  CD  GLU    57      10.616  -7.085  -4.301  1.00  0.00
C
ATOM    925  OE1 GLU    57      10.077  -6.661  -3.259  1.00  0.00
O
ATOM    926  OE2 GLU    57      11.862  -7.080  -4.431  1.00  0.00
O
ATOM    927  N   GLU    58       5.776  -5.509  -5.210  1.00  0.00
N
ATOM    928  H   GLU    58       6.088  -5.691  -4.262  1.00  0.00
H
ATOM    929  CA  GLU    58       4.343  -5.345  -5.470  1.00  0.00
C
ATOM    930  HA  GLU    58       4.054  -6.000  -6.291  1.00  0.00
H
ATOM    931  C   GLU    58       4.001  -3.919  -5.884  1.00  0.00
C
ATOM    932  O   GLU    58       3.088  -3.703  -6.688  1.00  0.00
O
ATOM    933  CB  GLU    58       3.525  -5.738  -4.240  1.00  0.00
C
ATOM    934 1HB  GLU    58       4.020  -5.348  -3.351  1.00  0.00
H
ATOM    935 2HB  GLU    58       2.542  -5.281  -4.317  1.00  0.00
H
ATOM    936  CG  GLU    58       3.340  -7.248  -4.115  1.00  0.00
C
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ATOM    937 1HG  GLU    58       2.729  -7.600  -4.948  1.00  0.00
H
ATOM    938 2HG  GLU    58       4.319  -7.720  -4.184  1.00  0.00
H
ATOM    939  CD  GLU    58       2.702  -7.668  -2.799  1.00  0.00
C
ATOM    940  OE1 GLU    58       3.359  -7.439  -1.755  1.00  0.00
O
ATOM    941  OE2 GLU    58       1.622  -8.295  -2.776  1.00  0.00
O
ATOM    942  N   PHE    59       4.764  -2.960  -5.375  1.00  0.00
N
ATOM    943  H   PHE    59       5.512  -3.205  -4.733  1.00  0.00
H
ATOM    944  CA  PHE    59       4.559  -1.550  -5.697  1.00  0.00
C
ATOM    945  HA  PHE    59       3.528  -1.278  -5.472  1.00  0.00
H
ATOM    946  C   PHE    59       4.793  -1.308  -7.182  1.00  0.00
C
ATOM    947  O   PHE    59       3.953  -0.720  -7.865  1.00  0.00
O
ATOM    948  CB  PHE    59       5.512  -0.708  -4.840  1.00  0.00
C
ATOM    949 1HB  PHE    59       5.288  -0.899  -3.791  1.00  0.00
H
ATOM    950 2HB  PHE    59       6.535  -1.025  -5.030  1.00  0.00
H
ATOM    951  CG  PHE    59       5.427   0.770  -5.086  1.00  0.00
C
ATOM    952  CD1 PHE    59       4.312   1.508  -4.661  1.00  0.00
C
ATOM    953  HD1 PHE    59       3.486   1.006  -4.178  1.00  0.00
H
ATOM    954  CD2 PHE    59       6.493   1.444  -5.705  1.00  0.00
C
ATOM    955  HD2 PHE    59       7.366   0.895  -6.032  1.00  0.00
H
ATOM    956  CE1 PHE    59       4.254   2.914  -4.857  1.00  0.00
C
ATOM    957  HE1 PHE    59       3.393   3.474  -4.526  1.00  0.00
H
ATOM    958  CE2 PHE    59       6.449   2.846  -5.883  1.00  0.00
C
ATOM    959  HE2 PHE    59       7.280   3.356  -6.327  1.00  0.00
H
ATOM    960  CZ  PHE    59       5.327   3.579  -5.472  1.00  0.00
C
ATOM    961  HZ  PHE    59       5.292   4.649  -5.620  1.00  0.00
H
ATOM    962  N   CYS    60       5.900  -1.810  -7.709  1.00  0.00
N
ATOM    963  H   CYS    60       6.573  -2.296  -7.120  1.00  0.00
H
ATOM    964  CA  CYS    60       6.184  -1.636  -9.128  1.00  0.00
C
ATOM    965  HA  CYS    60       5.911  -0.618  -9.412  1.00  0.00
H
ATOM    966  C   CYS    60       5.369  -2.598  -9.993  1.00  0.00
C
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ATOM    967  O   CYS    60       5.024  -2.264 -11.129  1.00  0.00
O
ATOM    968  CB  CYS    60       7.679  -1.819  -9.386  1.00  0.00
C
ATOM    969 1HB  CYS    60       7.968  -2.836  -9.118  1.00  0.00
H
ATOM    970 2HB  CYS    60       7.871  -1.677 -10.451  1.00  0.00
H
ATOM    971  SG  CYS    60       8.699  -0.656  -8.444  1.00  0.00
S
ATOM    972  HG  CYS    60       8.588  -1.287  -7.263  1.00  0.00
H
ATOM    973  N   ARG    61       5.032  -3.769  -9.459  1.00  0.00
N
ATOM    974  H   ARG    61       5.331  -3.984  -8.511  1.00  0.00
H
ATOM    975  CA  ARG    61       4.288  -4.793 -10.205  1.00  0.00
C
ATOM    976  HA  ARG    61       4.873  -5.089 -11.075  1.00  0.00
H
ATOM    977  C   ARG    61       2.956  -4.260 -10.681  1.00  0.00
C
ATOM    978  O   ARG    61       2.651  -4.330 -11.871  1.00  0.00
O
ATOM    979  CB  ARG    61       4.012  -6.023  -9.328  1.00  0.00
C
ATOM    980 1HB  ARG    61       4.953  -6.400  -8.935  1.00  0.00
H
ATOM    981 2HB  ARG    61       3.406  -5.700  -8.484  1.00  0.00
H
ATOM    982  CG  ARG    61       3.302  -7.188 -10.013  1.00  0.00
C
ATOM    983 1HG  ARG    61       2.578  -6.815 -10.736  1.00  0.00
H
ATOM    984 2HG  ARG    61       4.040  -7.795 -10.536  1.00  0.00
H
ATOM    985  CD  ARG    61       2.559  -8.046  -8.990  1.00  0.00
C
ATOM    986 1HD  ARG    61       2.273  -8.989  -9.454  1.00  0.00
H
ATOM    987 2HD  ARG    61       3.226  -8.263  -8.153  1.00  0.00
H
ATOM    988  NE  ARG    61       1.349  -7.370  -8.491  1.00  0.00
N
ATOM    989  HE  ARG    61       1.425  -6.868  -7.614  1.00  0.00
H
ATOM    990  CZ  ARG    61       0.152  -7.355  -9.061  1.00  0.00
C
ATOM    991  NH1 ARG    61      -0.129  -7.933 -10.198  1.00  0.00
N
ATOM    992 1HH1 ARG    61       0.600  -8.399 -10.716  1.00  0.00
H
ATOM    993 2HH1 ARG    61      -1.077  -7.925 -10.541  1.00  0.00
H
ATOM    994  NH2 ARG    61      -0.800  -6.710  -8.457  1.00  0.00
N
ATOM    995 1HH2 ARG    61      -0.600  -6.249  -7.581  1.00  0.00
H
ATOM    996 2HH2 ARG    61      -1.725  -6.661  -8.865  1.00  0.00
H
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ATOM    997  N   ALA    62       2.168  -3.742  -9.750  1.00  0.00
N
ATOM    998  H   ALA    62       2.491  -3.688  -8.790  1.00  0.00
H
ATOM    999  CA  ALA    62       0.816  -3.308 -10.065  1.00  0.00
C
ATOM   1000  HA  ALA    62       0.284  -4.127 -10.552  1.00  0.00
H
ATOM   1001  C   ALA    62       0.852  -2.126 -11.032  1.00  0.00
C
ATOM   1002  O   ALA    62       0.092  -2.064 -11.994  1.00  0.00
O
ATOM   1003  CB  ALA    62       0.093  -2.943  -8.770  1.00  0.00
C
ATOM   1004 1HB  ALA    62      -0.028  -3.831  -8.150  1.00  0.00
H
ATOM   1005 2HB  ALA    62      -0.895  -2.547  -9.005  1.00  0.00
H
ATOM   1006 3HB  ALA    62       0.654  -2.191  -8.211  1.00  0.00
H
ATOM   1007  N   LEU    63       1.781  -1.215 -10.778  1.00  0.00
N
ATOM   1008  H   LEU    63       2.386  -1.347  -9.979  1.00  0.00
H
ATOM   1009  CA  LEU    63       1.948  -0.001 -11.575  1.00  0.00
C
ATOM   1010  HA  LEU    63       1.001   0.540 -11.584  1.00  0.00
H
ATOM   1011  C   LEU    63       2.355  -0.297 -13.022  1.00  0.00
C
ATOM   1012  O   LEU    63       1.941   0.386 -13.968  1.00  0.00
O
ATOM   1013  CB  LEU    63       3.005   0.846 -10.857  1.00  0.00
C
ATOM   1014 1HB  LEU    63       2.943   0.569  -9.807  1.00  0.00
H
ATOM   1015 2HB  LEU    63       3.989   0.536 -11.208  1.00  0.00
H
ATOM   1016  CG  LEU    63       2.943   2.378 -10.878  1.00  0.00
C
ATOM   1017  HG  LEU    63       1.966   2.683 -10.522  1.00  0.00
H
ATOM   1018  CD1 LEU    63       3.970   2.909  -9.890  1.00  0.00
C
ATOM   1019 1HD1 LEU    63       3.936   3.997  -9.875  1.00  0.00
H
ATOM   1020 2HD1 LEU    63       4.970   2.585 -10.177  1.00  0.00
H
ATOM   1021 3HD1 LEU    63       3.747   2.540  -8.887  1.00  0.00
H
ATOM   1022  CD2 LEU    63       3.147   2.988 -12.250  1.00  0.00
C
ATOM   1023 1HD2 LEU    63       3.264   4.067 -12.164  1.00  0.00
H
ATOM   1024 2HD2 LEU    63       2.281   2.780 -12.875  1.00  0.00
H
ATOM   1025 3HD2 LEU    63       4.039   2.568 -12.715  1.00  0.00
H
ATOM   1026  N   GLY    64       3.159  -1.335 -13.203  1.00  0.00
N
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ATOM   1027  H   GLY    64       3.497  -1.857 -12.401  1.00  0.00
H
ATOM   1028  CA  GLY    64       3.600  -1.723 -14.533  1.00  0.00
C
ATOM   1029 1HA  GLY    64       3.785  -0.828 -15.126  1.00  0.00
H
ATOM   1030 2HA  GLY    64       4.536  -2.276 -14.448  1.00  0.00
H
ATOM   1031  C   GLY    64       2.596  -2.586 -15.268  1.00  0.00
C
ATOM   1032  O   GLY    64       2.449  -2.469 -16.487  1.00  0.00
O
ATOM   1033  N   LEU    65       1.881  -3.444 -14.553  1.00  0.00
N
ATOM   1034  H   LEU    65       2.027  -3.522 -13.552  1.00  0.00
H
ATOM   1035  CA  LEU    65       0.887  -4.301 -15.191  1.00  0.00
C
ATOM   1036  HA  LEU    65       1.330  -4.739 -16.084  1.00  0.00
H
ATOM   1037  C   LEU    65      -0.328  -3.488 -15.613  1.00  0.00
C
ATOM   1038  O   LEU    65      -0.733  -3.524 -16.774  1.00  0.00
O
ATOM   1039  CB  LEU    65       0.454  -5.424 -14.238  1.00  0.00
C
ATOM   1040 1HB  LEU    65       1.342  -5.994 -13.964  1.00  0.00
H
ATOM   1041 2HB  LEU    65       0.063  -4.965 -13.330  1.00  0.00
H
ATOM   1042  CG  LEU    65      -0.611  -6.410 -14.752  1.00  0.00
C
ATOM   1043  HG  LEU    65      -1.515  -5.852 -14.992  1.00  0.00
H
ATOM   1044  CD1 LEU    65      -0.174  -7.170 -16.005  1.00  0.00
C
ATOM   1045 1HD1 LEU    65      -0.944  -7.889 -16.284  1.00  0.00
H
ATOM   1046 2HD1 LEU    65       0.762  -7.696 -15.822  1.00  0.00
H
ATOM   1047 3HD1 LEU    65      -0.045  -6.473 -16.832  1.00  0.00
H
ATOM   1048  CD2 LEU    65      -0.958  -7.403 -13.648  1.00  0.00
C
ATOM   1049 1HD2 LEU    65      -1.754  -8.065 -13.988  1.00  0.00
H
ATOM   1050 2HD2 LEU    65      -1.311  -6.862 -12.769  1.00  0.00
H
ATOM   1051 3HD2 LEU    65      -0.083  -7.996 -13.383  1.00  0.00
H
ATOM   1052  N   ASN    66      -0.918  -2.767 -14.673  1.00  0.00
N
ATOM   1053  H   ASN    66      -0.514  -2.726 -13.740  1.00  0.00
H
ATOM   1054  CA  ASN    66      -2.151  -2.024 -14.912  1.00  0.00
C
ATOM   1055  HA  ASN    66      -2.077  -1.504 -15.868  1.00  0.00
H
ATOM   1056  C   ASN    66      -2.282  -0.981 -13.800  1.00  0.00
C
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ATOM   1057  O   ASN    66      -1.514  -0.023 -13.751  1.00  0.00
O
ATOM   1058  CB  ASN    66      -3.355  -2.988 -14.964  1.00  0.00
C
ATOM   1059 1HB  ASN    66      -3.124  -3.796 -15.654  1.00  0.00
H
ATOM   1060 2HB  ASN    66      -3.529  -3.438 -13.989  1.00  0.00
H
ATOM   1061  CG  ASN    66      -4.624  -2.324 -15.452  1.00  0.00
C
ATOM   1062  OD1 ASN    66      -4.684  -1.117 -15.665  1.00  0.00
O
ATOM   1063  ND2 ASN    66      -5.647  -3.105 -15.631  1.00  0.00
N
ATOM   1064 1HD2 ASN    66      -6.523  -2.704 -15.931  1.00  0.00
H
ATOM   1065 2HD2 ASN    66      -5.552  -4.097 -15.462  1.00  0.00
H
ATOM   1066  N   GLN    67      -3.231  -1.181 -12.899  1.00  0.00
N
ATOM   1067  H   GLN    67      -3.825  -1.995 -12.970  1.00  0.00
H
ATOM   1068  CA  GLN    67      -3.495  -0.309 -11.770  1.00  0.00
C
ATOM   1069  HA  GLN    67      -2.575   0.012 -11.292  1.00  0.00
H
ATOM   1070  C   GLN    67      -4.315  -1.234 -10.887  1.00  0.00
C
ATOM   1071  O   GLN    67      -4.924  -2.160 -11.422  1.00  0.00
O
ATOM   1072  CB  GLN    67      -4.338   0.877 -12.236  1.00  0.00
C
ATOM   1073 1HB  GLN    67      -3.806   1.364 -13.050  1.00  0.00
H
ATOM   1074 2HB  GLN    67      -5.274   0.484 -12.629  1.00  0.00
H
ATOM   1075  CG  GLN    67      -4.670   1.931 -11.191  1.00  0.00
C
ATOM   1076 1HG  GLN    67      -5.252   1.482 -10.387  1.00  0.00
H
ATOM   1077 2HG  GLN    67      -3.747   2.329 -10.779  1.00  0.00
H
ATOM   1078  CD  GLN    67      -5.467   3.065 -11.787  1.00  0.00
C
ATOM   1079  OE1 GLN    67      -5.895   3.004 -12.936  1.00  0.00
O
ATOM   1080  NE2 GLN    67      -5.697   4.092 -11.020  1.00  0.00
N
ATOM   1081 1HE2 GLN    67      -6.177   4.885 -11.416  1.00  0.00
H
ATOM   1082 2HE2 GLN    67      -5.404   4.083 -10.059  1.00  0.00
H
ATOM   1083  N   SER    68      -4.385  -0.980  -9.592  1.00  0.00
N
ATOM   1084  H   SER    68      -3.813  -0.253  -9.192  1.00  0.00
H
ATOM   1085  CA  SER    68      -5.331  -1.673  -8.722  1.00  0.00
C
ATOM   1086  HA  SER    68      -6.250  -1.889  -9.268  1.00  0.00
H
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ATOM   1087  C   SER    68      -5.652  -0.708  -7.592  1.00  0.00
C
ATOM   1088  O   SER    68      -6.794  -0.323  -7.369  1.00  0.00
O
ATOM   1089  CB  SER    68      -4.727  -2.982  -8.201  1.00  0.00
C
ATOM   1090 1HB  SER    68      -4.982  -3.112  -7.151  1.00  0.00
H
ATOM   1091 2HB  SER    68      -5.153  -3.810  -8.768  1.00  0.00
H
ATOM   1092  OG  SER    68      -3.316  -3.003  -8.367  1.00  0.00
O
ATOM   1093  HG  SER    68      -2.893  -2.549  -7.614  1.00  0.00
H
ATOM   1094  N   GLU    69      -4.613  -0.257  -6.913  1.00  0.00
N
ATOM   1095  H   GLU    69      -3.695  -0.676  -7.064  1.00  0.00
H
ATOM   1096  CA  GLU    69      -4.716   0.782  -5.901  1.00  0.00
C
ATOM   1097  HA  GLU    69      -5.665   0.666  -5.378  1.00  0.00
H
ATOM   1098  C   GLU    69      -4.701   2.164  -6.549  1.00  0.00
C
ATOM   1099  O   GLU    69      -4.071   2.376  -7.588  1.00  0.00
O
ATOM   1100  CB  GLU    69      -3.581   0.627  -4.873  1.00  0.00
C
ATOM   1101 1HB  GLU    69      -3.753   1.369  -4.093  1.00  0.00
H
ATOM   1102 2HB  GLU    69      -3.668  -0.356  -4.414  1.00  0.00
H
ATOM   1103  CG  GLU    69      -2.130   0.791  -5.353  1.00  0.00
C
ATOM   1104 1HG  GLU    69      -2.081   1.609  -6.069  1.00  0.00
H
ATOM   1105 2HG  GLU    69      -1.537   1.084  -4.487  1.00  0.00
H
ATOM   1106  CD  GLU    69      -1.476  -0.464  -5.953  1.00  0.00
C
ATOM   1107  OE1 GLU    69      -2.162  -1.354  -6.503  1.00  0.00
O
ATOM   1108  OE2 GLU    69      -0.230  -0.542  -5.892  1.00  0.00
O
ATOM   1109  N   MET    70      -5.370   3.128  -5.932  1.00  0.00
N
ATOM   1110  H   MET    70      -5.884   2.933  -5.085  1.00  0.00
H
ATOM   1111  CA  MET    70      -5.404   4.487  -6.477  1.00  0.00
C
ATOM   1112  HA  MET    70      -5.444   4.426  -7.564  1.00  0.00
H
ATOM   1113  C   MET    70      -4.150   5.266  -6.115  1.00  0.00
C
ATOM   1114  O   MET    70      -3.923   6.359  -6.626  1.00  0.00
O
ATOM   1115  CB  MET    70      -6.637   5.247  -5.997  1.00  0.00
C
ATOM   1116 1HB  MET    70      -6.606   5.296  -4.916  1.00  0.00
H
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ATOM   1117 2HB  MET    70      -6.592   6.264  -6.386  1.00  0.00
H
ATOM   1118  CG  MET    70      -7.956   4.618  -6.428  1.00  0.00
C
ATOM   1119 1HG  MET    70      -8.047   3.633  -5.970  1.00  0.00
H
ATOM   1120 2HG  MET    70      -8.779   5.242  -6.078  1.00  0.00
H
ATOM   1121  SD  MET    70      -8.070   4.433  -8.227  1.00  0.00
S
ATOM   1122  CE  MET    70      -8.205   6.140  -8.800  1.00  0.00
C
ATOM   1123 1HE  MET    70      -8.324   6.152  -9.883  1.00  0.00
H
ATOM   1124 2HE  MET    70      -7.309   6.700  -8.534  1.00  0.00
H
ATOM   1125 3HE  MET    70      -9.074   6.613  -8.341  1.00  0.00
H
ATOM   1126  N   CYS    71      -3.278   4.664  -5.319  1.00  0.00
N
ATOM   1127  H   CYS    71      -3.503   3.777  -4.899  1.00  0.00
H
ATOM   1128  CA  CYS    71      -1.962   5.238  -5.067  1.00  0.00
C
ATOM   1129  HA  CYS    71      -2.071   6.228  -4.621  1.00  0.00
H
ATOM   1130  C   CYS    71      -1.203   5.367  -6.384  1.00  0.00
C
ATOM   1131  O   CYS    71      -0.491   6.329  -6.592  1.00  0.00
O
ATOM   1132  CB  CYS    71      -1.170   4.331  -4.131  1.00  0.00
C
ATOM   1133 1HB  CYS    71      -0.981   3.391  -4.646  1.00  0.00
H
ATOM   1134 2HB  CYS    71      -0.206   4.798  -3.923  1.00  0.00
H
ATOM   1135  SG  CYS    71      -1.994   3.960  -2.577  1.00  0.00
S
ATOM   1136  HG  CYS    71      -1.146   3.004  -2.165  1.00  0.00
H
ATOM   1137  N   ILE    72      -1.427   4.443  -7.309  1.00  0.00
N
ATOM   1138  H   ILE    72      -2.062   3.682  -7.107  1.00  0.00
H
ATOM   1139  CA  ILE    72      -0.785   4.471  -8.627  1.00  0.00
C
ATOM   1140  HA  ILE    72       0.298   4.485  -8.502  1.00  0.00
H
ATOM   1141  C   ILE    72      -1.169   5.729  -9.401  1.00  0.00
C
ATOM   1142  O   ILE    72      -0.334   6.337 -10.071  1.00  0.00
O
ATOM   1143  CB  ILE    72      -1.186   3.191  -9.407  1.00  0.00
C
ATOM   1144  HB  ILE    72      -2.261   3.065  -9.299  1.00  0.00
H
ATOM   1145  CG1 ILE    72      -0.488   1.988  -8.752  1.00  0.00
C
ATOM   1146 1HG1 ILE    72       0.575   2.037  -8.978  1.00  0.00
H
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ATOM   1147 2HG1 ILE    72      -0.591   2.062  -7.672  1.00  0.00
H
ATOM   1148  CG2 ILE    72      -0.888   3.298 -10.918  1.00  0.00
C
ATOM   1149 1HG2 ILE    72      -1.031   2.336 -11.411  1.00  0.00
H
ATOM   1150 2HG2 ILE    72       0.135   3.633 -11.083  1.00  0.00
H
ATOM   1151 3HG2 ILE    72      -1.571   4.011 -11.380  1.00  0.00
H
ATOM   1152  CD1 ILE    72      -1.003   0.633  -9.159  1.00  0.00
C
ATOM   1153 1HD1 ILE    72      -0.482  -0.125  -8.578  1.00  0.00
H
ATOM   1154 2HD1 ILE    72      -0.811   0.454 -10.216  1.00  0.00
H
ATOM   1155 3HD1 ILE    72      -2.069   0.566  -8.952  1.00  0.00
H
ATOM   1156  N   GLU    73      -2.411   6.173  -9.267  1.00  0.00
N
ATOM   1157  H   GLU    73      -3.060   5.688  -8.667  1.00  0.00
H
ATOM   1158  CA  GLU    73      -2.841   7.389  -9.951  1.00  0.00
C
ATOM   1159  HA  GLU    73      -2.618   7.311 -11.015  1.00  0.00
H
ATOM   1160  C   GLU    73      -2.063   8.564  -9.366  1.00  0.00
C
ATOM   1161  O   GLU    73      -1.582   9.433 -10.087  1.00  0.00
O
ATOM   1162  CB  GLU    73      -4.344   7.616  -9.752  1.00  0.00
C
ATOM   1163 1HB  GLU    73      -4.883   6.734 -10.096  1.00  0.00
H
ATOM   1164 2HB  GLU    73      -4.534   7.739  -8.689  1.00  0.00
H
ATOM   1165  CG  GLU    73      -4.888   8.838 -10.475  1.00  0.00
C
ATOM   1166 1HG  GLU    73      -4.302   9.710 -10.186  1.00  0.00
H
ATOM   1167 2HG  GLU    73      -4.787   8.690 -11.551  1.00  0.00
H
ATOM   1168  CD  GLU    73      -6.341   9.111 -10.135  1.00  0.00
C
ATOM   1169  OE1 GLU    73      -6.666   9.316  -8.945  1.00  0.00
O
ATOM   1170  OE2 GLU    73      -7.185   9.167 -11.060  1.00  0.00
O
ATOM   1171  N   LYS    74      -1.915   8.578  -8.050  1.00  0.00
N
ATOM   1172  H   LYS    74      -2.290   7.813  -7.499  1.00  0.00
H
ATOM   1173  CA  LYS    74      -1.246   9.687  -7.368  1.00  0.00
C
ATOM   1174  HA  LYS    74      -1.618  10.624  -7.784  1.00  0.00
H
ATOM   1175  C   LYS    74       0.263   9.678  -7.609  1.00  0.00
C
ATOM   1176  O   LYS    74       0.864  10.744  -7.728  1.00  0.00
O
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ATOM   1177  CB  LYS    74       -1.573   9.674  -5.868  1.00  0.00
C
ATOM   1178 1HB  LYS    74       -1.578   8.646  -5.507  1.00  0.00
H
ATOM   1179 2HB  LYS    74       -0.775  10.209  -5.352  1.00  0.00
H
ATOM   1180  CG  LYS    74       -2.899  10.364  -5.484  1.00  0.00
C
ATOM   1181 1HG  LYS    74       -2.932  10.459  -4.399  1.00  0.00
H
ATOM   1182 2HG  LYS    74       -2.894  11.366  -5.912  1.00  0.00
H
ATOM   1183  CD  LYS    74       -4.178   9.651  -5.941  1.00  0.00
C
ATOM   1184 1HD  LYS    74       -4.154   9.520  -7.022  1.00  0.00
H
ATOM   1185 2HD  LYS    74       -4.240   8.675  -5.460  1.00  0.00
H
ATOM   1186  CE  LYS    74       -5.411  10.468  -5.593  1.00  0.00
C
ATOM   1187 1HE  LYS    74       -5.470  10.590  -4.510  1.00  0.00
H
ATOM   1188 2HE  LYS    74       -5.310  11.457  -6.046  1.00  0.00
H
ATOM   1189  NZ  LYS    74       -6.678   9.837  -6.099  1.00  0.00
N
ATOM   1190 1HZ  LYS    74       -7.460  10.452  -5.907  1.00  0.00
H
ATOM   1191 2HZ  LYS    74       -6.841   8.950  -5.644  1.00  0.00
H
ATOM   1192 3HZ  LYS    74       -6.618   9.690  -7.103  1.00  0.00
H
ATOM   1193   N  VAL    75        0.869   8.509  -7.762  1.00  0.00
N
ATOM   1194   H  VAL    75        0.349   7.652  -7.597  1.00  0.00
H
ATOM   1195  CA  VAL    75        2.284   8.424  -8.131  1.00  0.00
C
ATOM   1196  HA  VAL    75        2.853   9.057  -7.454  1.00  0.00
H
ATOM   1197   C  VAL    75        2.450   8.989  -9.541  1.00  0.00
C
ATOM   1198   O  VAL    75        3.239   9.905  -9.749  1.00  0.00
O
ATOM   1199  CB  VAL    75        2.832   6.960  -8.027  1.00  0.00
C
ATOM   1200  HB  VAL    75        2.180   6.305  -8.604  1.00  0.00
H
ATOM   1201  CG1 VAL    75        4.258   6.826  -8.578  1.00  0.00
C
ATOM   1202 1HG1 VAL    75        4.604   5.798  -8.461  1.00  0.00
H
ATOM   1203 2HG1 VAL    75        4.934   7.491  -8.040  1.00  0.00
H
ATOM   1204 3HG1 VAL    75        4.279   7.076  -9.640  1.00  0.00
H
ATOM   1205  CG2 VAL    75        2.845   6.483  -6.562  1.00  0.00
C
ATOM   1206 1HG2 VAL    75        3.088   5.421  -6.526  1.00  0.00
H
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ATOM   1207 2HG2 VAL    75       1.872   6.629  -6.100  1.00  0.00
H
ATOM   1208 3HG2 VAL    75       3.586   7.043  -5.989  1.00  0.00
H
ATOM   1209  N   GLN    76       1.662   8.523 -10.502  1.00  0.00
N
ATOM   1210  H   GLN    76       0.958   7.822 -10.285  1.00  0.00
H
ATOM   1211  CA  GLN    76       1.837   8.954 -11.893  1.00  0.00
C
ATOM   1212  HA  GLN    76       2.898   8.892 -12.142  1.00  0.00
H
ATOM   1213  C   GLN    76       1.397  10.390 -12.158  1.00  0.00
C
ATOM   1214  O   GLN    76       1.809  11.005 -13.142  1.00  0.00
O
ATOM   1215  CB  GLN    76       1.064   8.035 -12.834  1.00  0.00
C
ATOM   1216 1HB  GLN    76       0.016   8.033 -12.536  1.00  0.00
H
ATOM   1217 2HB  GLN    76       1.135   8.438 -13.844  1.00  0.00
H
ATOM   1218  CG  GLN    76       1.579   6.605 -12.862  1.00  0.00
C
ATOM   1219 1HG  GLN    76       2.640   6.613 -13.112  1.00  0.00
H
ATOM   1220 2HG  GLN    76       1.454   6.146 -11.884  1.00  0.00
H
ATOM   1221  CD  GLN    76       0.843   5.780 -13.887  1.00  0.00
C
ATOM   1222  OE1 GLN    76       1.387   5.430 -14.929  1.00  0.00
O
ATOM   1223  NE2 GLN    76      -0.396   5.489 -13.624  1.00  0.00
N
ATOM   1224 1HE2 GLN    76      -0.923   4.958 -14.299  1.00  0.00
H
ATOM   1225 2HE2 GLN    76      -0.818   5.797 -12.764  1.00  0.00
H
ATOM   1226  N   ARG    77       0.594  10.949 -11.261  1.00  0.00
N
ATOM   1227  H   ARG    77       0.213  10.373 -10.517  1.00  0.00
H
ATOM   1228  CA  ARG    77       0.233  12.369 -11.306  1.00  0.00
C
ATOM   1229  HA  ARG    77      -0.195  12.607 -12.281  1.00  0.00
H
ATOM   1230  C   ARG    77       1.472  13.234 -11.117  1.00  0.00
C
ATOM   1231  O   ARG    77       1.545  14.342 -11.647  1.00  0.00
O
ATOM   1232  CB  ARG    77      -0.803  12.665 -10.217  1.00  0.00
C
ATOM   1233 1HB  ARG    77      -1.674  12.034 -10.391  1.00  0.00
H
ATOM   1234 2HB  ARG    77      -0.376  12.407  -9.251  1.00  0.00
H
ATOM   1235  CG  ARG    77      -1.263  14.109 -10.153  1.00  0.00
C
ATOM   1236 1HG  ARG    77      -0.432  14.733  -9.824  1.00  0.00
H
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ATOM   1237 2HG  ARG    77      -1.584  14.432 -11.143  1.00  0.00
H
ATOM   1238  CD  ARG    77      -2.410  14.278  -9.185  1.00  0.00
C
ATOM   1239 1HD  ARG    77      -3.277  13.744  -9.569  1.00  0.00
H
ATOM   1240 2HD  ARG    77      -2.135  13.857  -8.218  1.00  0.00
H
ATOM   1241  NE  ARG    77      -2.737  15.698  -9.017  1.00  0.00
N
ATOM   1242  HE  ARG    77      -2.070  16.364  -9.383  1.00  0.00
H
ATOM   1243  CZ  ARG    77      -3.805  16.192  -8.409  1.00  0.00
C
ATOM   1244  NH1 ARG    77      -4.783  15.468  -7.936  1.00  0.00
N
ATOM   1245 1HH1 ARG    77      -4.757  14.460  -8.016  1.00  0.00
H
ATOM   1246 2HH1 ARG    77      -5.566  15.933  -7.498  1.00  0.00
H
ATOM   1247  NH2 ARG    77      -3.921  17.481  -8.303  1.00  0.00
N
ATOM   1248 1HH2 ARG    77      -3.183  18.082  -8.624  1.00  0.00
H
ATOM   1249 2HH2 ARG    77      -4.759  17.858  -7.879  1.00  0.00
H
ATOM   1250  N   ASN    78       2.470  12.721 -10.416  1.00  0.00
N
ATOM   1251  H   ASN    78       2.382  11.786 -10.031  1.00  0.00
H
ATOM   1252  CA  ASN    78       3.728  13.431 -10.201  1.00  0.00
C
ATOM   1253  HA  ASN    78       3.719  14.376 -10.744  1.00  0.00
H
ATOM   1254  C   ASN    78       4.842  12.578 -10.789  1.00  0.00
C
ATOM   1255  O   ASN    78       5.657  11.998 -10.076  1.00  0.00
O
ATOM   1256  CB  ASN    78       3.923  13.729  -8.714  1.00  0.00
C
ATOM   1257 1HB  ASN    78       3.858  12.800  -8.151  1.00  0.00
H
ATOM   1258 2HB  ASN    78       4.910  14.165  -8.563  1.00  0.00
H
ATOM   1259  CG  ASN    78       2.890  14.689  -8.191  1.00  0.00
C
ATOM   1260  OD1 ASN    78       2.025  14.329  -7.401  1.00  0.00
O
ATOM   1261  ND2 ASN    78       2.936  15.905  -8.654  1.00  0.00
N
ATOM   1262 1HD2 ASN    78       2.245  16.573  -8.353  1.00  0.00
H
ATOM   1263 2HD2 ASN    78       3.672  16.170  -9.301  1.00  0.00
H
ATOM   1264  N   LYS    79       4.819  12.473 -12.111  1.00  0.00
N
ATOM   1265  H   LYS    79       4.128  13.006 -12.627  1.00  0.00
H
ATOM   1266  CA  LYS    79       5.733  11.629 -12.882  1.00  0.00
C
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ATOM   1267  HA  LYS    79       5.761  10.641 -12.426  1.00  0.00
H
ATOM   1268  C   LYS    79       7.151  12.203 -12.896  1.00  0.00
C
ATOM   1269  O   LYS    79       7.521  12.928 -13.823  1.00  0.00
O
ATOM   1270  CB  LYS    79       5.175  11.500 -14.309  1.00  0.00
C
ATOM   1271 1HB  LYS    79       4.109  11.302 -14.238  1.00  0.00
H
ATOM   1272 2HB  LYS    79       5.288  12.458 -14.816  1.00  0.00
H
ATOM   1273  CG  LYS    79       5.818  10.417 -15.178  1.00  0.00
C
ATOM   1274 1HG  LYS    79       5.818  10.756 -16.214  1.00  0.00
H
ATOM   1275 2HG  LYS    79       6.854  10.286 -14.867  1.00  0.00
H
ATOM   1276  CD  LYS    79       5.104   9.062 -15.115  1.00  0.00
C
ATOM   1277 1HD  LYS    79       5.760   8.318 -15.565  1.00  0.00
H
ATOM   1278 2HD  LYS    79       4.924   8.785 -14.076  1.00  0.00
H
ATOM   1279  CE  LYS    79       3.792   9.067 -15.879  1.00  0.00
C
ATOM   1280 1HE  LYS    79       3.068   9.691 -15.351  1.00  0.00
H
ATOM   1281 2HE  LYS    79       3.969   9.501 -16.864  1.00  0.00
H
ATOM   1282  NZ  LYS    79       3.228   7.694 -16.065  1.00  0.00
N
ATOM   1283 1HZ  LYS    79       2.287   7.764 -16.441  1.00  0.00
H
ATOM   1284 2HZ  LYS    79       3.190   7.204 -15.184  1.00  0.00
H
ATOM   1285 3HZ  LYS    79       3.798   7.165 -16.714  1.00  0.00
H
ATOM   1286  N   VAL    80       7.934  11.933 -11.863  1.00  0.00
N
ATOM   1287  H   VAL    80       7.567  11.361 -11.114  1.00  0.00
H
ATOM   1288  CA  VAL    80       9.287  12.484 -11.724  1.00  0.00
C
ATOM   1289  HA  VAL    80       9.513  13.079 -12.607  1.00  0.00
H
ATOM   1290  C   VAL    80      10.332  11.371 -11.635  1.00  0.00
C
ATOM   1291  O   VAL    80      10.668  10.887 -10.556  1.00  0.00
O
ATOM   1292  CB  VAL    80       9.402  13.433 -10.487  1.00  0.00
C
ATOM   1293  HB  VAL    80       9.315  12.845  -9.574  1.00  0.00
H
ATOM   1294  CG1 VAL    80      10.754  14.175 -10.483  1.00  0.00
C
ATOM   1295 1HG1 VAL    80      10.815  14.823  -9.608  1.00  0.00
H
ATOM   1296 2HG1 VAL    80      10.857  14.781 -11.384  1.00  0.00
H
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ATOM   1297 3HG1 VAL    80      11.575  13.459 -10.439  1.00  0.00
H
ATOM   1298  CG2 VAL    80       8.269  14.471 -10.481  1.00  0.00
C
ATOM   1299 1HG2 VAL    80       8.435  15.198  -9.686  1.00  0.00
H
ATOM   1300 2HG2 VAL    80       7.317  13.980 -10.290  1.00  0.00
H
ATOM   1301 3HG2 VAL    80       8.221  14.989 -11.437  1.00  0.00
H
ATOM   1302  N   ASN    81      10.868  10.958 -12.773  1.00  0.00
N
ATOM   1303  H   ASN    81      10.541  11.333 -13.656  1.00  0.00
H
ATOM   1304  CA  ASN    81      12.017  10.054 -12.761  1.00  0.00
C
ATOM   1305  HA  ASN    81      11.861   9.254 -12.041  1.00  0.00
H
ATOM   1306  C   ASN    81      13.217  10.876 -12.322  1.00  0.00
C
ATOM   1307  O   ASN    81      13.246  12.095 -12.500  1.00  0.00
O
ATOM   1308  CB  ASN    81      12.292   9.452 -14.140  1.00  0.00
C
ATOM   1309 1HB  ASN    81      12.279  10.247 -14.883  1.00  0.00
H
ATOM   1310 2HB  ASN    81      13.279   8.992 -14.139  1.00  0.00
H
ATOM   1311  CG  ASN    81      11.297   8.399 -14.518  1.00  0.00
C
ATOM   1312  OD1 ASN    81      11.359   7.263 -14.051  1.00  0.00
O
ATOM   1313  ND2 ASN    81      10.385   8.748 -15.373  1.00  0.00
N
ATOM   1314 1HD2 ASN    81       9.646   8.103 -15.608  1.00  0.00
H
ATOM   1315 2HD2 ASN    81      10.414   9.668 -15.791  1.00  0.00
H
ATOM   1316  N   ALA    82      14.215  10.200 -11.782  1.00  0.00
N
ATOM   1317  H   ALA    82      14.149   9.200 -11.676  1.00  0.00
H
ATOM   1318  CA  ALA    82      15.464  10.830 -11.394  1.00  0.00
C
ATOM   1319  HA  ALA    82      15.503  11.858 -11.752  1.00  0.00
H
ATOM   1320  C   ALA    82      16.547  10.009 -12.078  1.00  0.00
C
ATOM   1321  O   ALA    82      16.339   8.833 -12.353  1.00  0.00
O
ATOM   1322  CB  ALA    82      15.617  10.804  -9.874  1.00  0.00
C
ATOM   1323 1HB  ALA    82      14.842  11.426  -9.426  1.00  0.00
H
ATOM   1324 2HB  ALA    82      16.592  11.205  -9.596  1.00  0.00
H
ATOM   1325 3HB  ALA    82      15.527   9.783  -9.502  1.00  0.00
H
ATOM   1326  N   THR    83      17.704  10.597 -12.316  1.00  0.00
N
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ATOM   1327  H   THR    83      17.815  11.582 -12.101  1.00  0.00
H
ATOM   1328  CA  THR    83      18.853   9.896 -12.892  1.00  0.00
C
ATOM   1329  HA  THR    83      18.513   9.099 -13.550  1.00  0.00
H
ATOM   1330  C   THR    83      19.699   9.263 -11.787  1.00  0.00
C
ATOM   1331  O   THR    83      20.928   9.205 -11.861  1.00  0.00
O
ATOM   1332  CB  THR    83      19.684  10.892 -13.715  1.00  0.00
C
ATOM   1333  HB  THR    83      20.635  10.446 -14.005  1.00  0.00
H
ATOM   1334  OG1 THR    83      19.893  12.072 -12.933  1.00  0.00
O
ATOM   1335  HG1 THR    83      20.024  12.808 -13.544  1.00  0.00
H
ATOM   1336  CG2 THR    83      18.934  11.314 -14.968  1.00  0.00
C
ATOM   1337 1HG2 THR    83      19.579  11.948 -15.574  1.00  0.00
H
ATOM   1338 2HG2 THR    83      18.029  11.862 -14.708  1.00  0.00
H
ATOM   1339 3HG2 THR    83      18.666  10.432 -15.551  1.00  0.00
H
ATOM   1340  N   SER    84      19.031   8.808 -10.739  1.00  0.00
N
ATOM   1341  H   SER    84      18.019   8.819 -10.752  1.00  0.00
H
ATOM   1342  CA  SER    84      19.659   8.232  -9.559  1.00  0.00
C
ATOM   1343  HA  SER    84      20.355   8.941  -9.122  1.00  0.00
H
ATOM   1344  C   SER    84      20.401   6.948  -9.893  1.00  0.00
C
ATOM   1345  O   SER    84      19.968   6.183 -10.756  1.00  0.00
O
ATOM   1346  CB  SER    84      18.540   7.935  -8.571  1.00  0.00
C
ATOM   1347 1HB  SER    84      18.770   7.032  -8.005  1.00  0.00
H
ATOM   1348 2HB  SER    84      18.429   8.777  -7.889  1.00  0.00
H
ATOM   1349  OG  SER    84      17.335   7.771  -9.306  1.00  0.00
O
ATOM   1350  HG  SER    84      16.659   7.408  -8.714  1.00  0.00
H
ATOM   1351  N   THR    85      21.523   6.714  -9.230  1.00  0.00
N
ATOM   1352  H   THR    85      21.841   7.362  -8.523  1.00  0.00
H
ATOM   1353  CA  THR    85      22.346   5.537  -9.501  1.00  0.00
C
ATOM   1354  HA  THR    85      21.777   4.824 -10.093  1.00  0.00
H
ATOM   1355  C   THR    85      22.763   4.921  -8.167  1.00  0.00
C
ATOM   1356  O   THR    85      23.127   5.670  -7.248  1.00  0.00
O
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ATOM   1357  CB  THR    85      23.611   5.954 -10.292  1.00  0.00
C
ATOM   1358  HB  THR    85      24.311   6.454  -9.624  1.00  0.00
H
ATOM   1359  OG1 THR    85      23.236   6.869 -11.326  1.00  0.00
O
ATOM   1360  HG1 THR    85      23.069   7.724 -10.909  1.00  0.00
H
ATOM   1361  CG2 THR    85      24.294   4.780 -10.965  1.00  0.00
C
ATOM   1362 1HG2 THR    85      25.088   5.153 -11.608  1.00  0.00
H
ATOM   1363 2HG2 THR    85      23.577   4.226 -11.573  1.00  0.00
H
ATOM   1364 3HG2 THR    85      24.729   4.120 -10.215  1.00  0.00
H
ATOM   1365  N   PRO    86      22.723   3.583  -8.027  1.00  0.00
N
ATOM   1366  CA  PRO    86      23.267   3.009  -6.790  1.00  0.00
C
ATOM   1367  HA  PRO    86      22.863   3.506  -5.910  1.00  0.00
H
ATOM   1368  C   PRO    86      24.796   3.079  -6.783  1.00  0.00
C
ATOM   1369  O   PRO    86      25.408   3.580  -7.732  1.00  0.00
O
ATOM   1370  CB  PRO    86      22.766   1.562  -6.853  1.00  0.00
C
ATOM   1371 1HB  PRO    86      23.426   0.884  -6.314  1.00  0.00
H
ATOM   1372 2HB  PRO    86      21.752   1.497  -6.456  1.00  0.00
H
ATOM   1373  CG  PRO    86      22.768   1.260  -8.287  1.00  0.00
C
ATOM   1374 1HG  PRO    86      23.786   1.058  -8.621  1.00  0.00
H
ATOM   1375 2HG  PRO    86      22.117   0.414  -8.506  1.00  0.00
H
ATOM   1376  CD  PRO    86      22.247   2.516  -8.929  1.00  0.00
C
ATOM   1377 1HD  PRO    86      22.657   2.626  -9.933  1.00  0.00
H
ATOM   1378 2HD  PRO    86      21.157   2.508  -8.954  1.00  0.00
H
ATOM   1379  N   LYS    87      25.424   2.548  -5.742  1.00  0.00
N
ATOM   1380  H   LYS    87      24.878   2.156  -4.979  1.00  0.00
H
ATOM   1381  CA  LYS    87      26.886   2.450  -5.688  1.00  0.00
C
ATOM   1382  HA  LYS    87      27.327   3.445  -5.736  1.00  0.00
H
ATOM   1383  C   LYS    87      27.385   1.655  -6.882  1.00  0.00
C
ATOM   1384  O   LYS    87      26.707   0.731  -7.347  1.00  0.00
O
ATOM   1385  CB  LYS    87      27.332   1.763  -4.399  1.00  0.00
C
ATOM   1386 1HB  LYS    87      26.779   0.829  -4.291  1.00  0.00
H
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ATOM   1387 2HB  LYS    87      28.394   1.530  -4.480  1.00  0.00
H
ATOM   1388  CG  LYS    87      27.125   2.611  -3.160  1.00  0.00
C
ATOM   1389 1HG  LYS    87      27.699   3.531  -3.256  1.00  0.00
H
ATOM   1390 2HG  LYS    87      26.070   2.855  -3.053  1.00  0.00
H
ATOM   1391  CD  LYS    87      27.587   1.859  -1.936  1.00  0.00
C
ATOM   1392 1HD  LYS    87      27.052   0.911  -1.887  1.00  0.00
H
ATOM   1393 2HD  LYS    87      28.654   1.662  -2.018  1.00  0.00
H
ATOM   1394  CE  LYS    87      27.316   2.650  -0.671  1.00  0.00
C
ATOM   1395 1HE  LYS    87      27.858   3.596  -0.718  1.00  0.00
H
ATOM   1396 2HE  LYS    87      26.247   2.865  -0.616  1.00  0.00
H
ATOM   1397  NZ  LYS    87      27.725   1.907   0.565  1.00  0.00
N
ATOM   1398 1HZ  LYS    87      27.471   2.441   1.386  1.00  0.00
H
ATOM   1399 2HZ  LYS    87      28.726   1.746   0.571  1.00  0.00
H
ATOM   1400 3HZ  LYS    87      27.254   1.009   0.606  1.00  0.00
H
ATOM   1401  N   VAL    88      28.556   2.012  -7.381  1.00  0.00
N
ATOM   1402  H   VAL    88      29.097   2.736  -6.912  1.00  0.00
H
ATOM   1403  CA  VAL    88      29.114   1.387  -8.576  1.00  0.00
C
ATOM   1404  HA  VAL    88      28.342   1.360  -9.343  1.00  0.00
H
ATOM   1405  C   VAL    88      29.512  -0.043  -8.230  1.00  0.00
C
ATOM   1406  O   VAL    88      30.384  -0.286  -7.388  1.00  0.00
O
ATOM   1407  CB  VAL    88      30.341   2.176  -9.121  1.00  0.00
C
ATOM   1408  HB  VAL    88      31.117   2.187  -8.357  1.00  0.00
H
ATOM   1409  CG1 VAL    88      30.913   1.518 -10.389  1.00  0.00
C
ATOM   1410 1HG1 VAL    88      31.751   2.107 -10.761  1.00  0.00
H
ATOM   1411 2HG1 VAL    88      30.149   1.460 -11.165  1.00  0.00
H
ATOM   1412 3HG1 VAL    88      31.276   0.516 -10.161  1.00  0.00
H
ATOM   1413  CG2 VAL    88      29.951   3.631  -9.430  1.00  0.00
C
ATOM   1414 1HG2 VAL    88      30.809   4.159  -9.845  1.00  0.00
H
ATOM   1415 2HG2 VAL    88      29.648   4.143  -8.516  1.00  0.00
H
ATOM   1416 3HG2 VAL    88      29.129   3.660 -10.147  1.00  0.00
H
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ATOM   1417  N   SER    89      28.840  -0.993  -8.860  1.00  0.00
N
ATOM   1418  H   SER    89      28.064  -0.742  -9.464  1.00  0.00
H
ATOM   1419  CA  SER    89      29.163  -2.405  -8.718  1.00  0.00
C
ATOM   1420  HA  SER    89      30.236  -2.525  -8.576  1.00  0.00
H
ATOM   1421  C   SER    89      28.724  -3.090 -10.001  1.00  0.00
C
ATOM   1422  O   SER    89      27.536  -3.112 -10.313  1.00  0.00
O
ATOM   1423  CB  SER    89      28.422  -3.017  -7.529  1.00  0.00
C
ATOM   1424 1HB  SER    89      28.630  -2.427  -6.636  1.00  0.00
H
ATOM   1425 2HB  SER    89      27.350  -3.003  -7.720  1.00  0.00
H
ATOM   1426  OG  SER    89      28.858  -4.349  -7.310  1.00  0.00
O
ATOM   1427  HG  SER    89      29.593  -4.311  -6.678  1.00  0.00
H
ATOM   1428  N   LYS    90      29.670  -3.623 -10.757  1.00  0.00
N
ATOM   1429  H   LYS    90      30.639  -3.539 -10.453  1.00  0.00
H
ATOM   1430  CA  LYS    90      29.404  -4.328 -12.015  1.00  0.00
C
ATOM   1431  HA  LYS    90      28.379  -4.695 -12.032  1.00  0.00
H
ATOM   1432  C   LYS    90      30.328  -5.529 -12.052  1.00  0.00
C
ATOM   1433  O   LYS    90      31.309  -5.559 -12.794  1.00  0.00
O
ATOM   1434  CB  LYS    90      29.645  -3.415 -13.229  1.00  0.00
C
ATOM   1435 1HB  LYS    90      30.637  -2.973 -13.137  1.00  0.00
H
ATOM   1436 2HB  LYS    90      29.633  -4.027 -14.129  1.00  0.00
H
ATOM   1437  CG  LYS    90      28.627  -2.288 -13.421  1.00  0.00
C
ATOM   1438 1HG  LYS    90      28.604  -1.668 -12.526  1.00  0.00
H
ATOM   1439 2HG  LYS    90      28.943  -1.674 -14.264  1.00  0.00
H
ATOM   1440  CD  LYS    90      27.223  -2.817 -13.705  1.00  0.00
C
ATOM   1441 1HD  LYS    90      27.264  -3.466 -14.578  1.00  0.00
H
ATOM   1442 2HD  LYS    90      26.871  -3.396 -12.853  1.00  0.00
H
ATOM   1443  CE  LYS    90      26.224  -1.702 -13.961  1.00  0.00
C
ATOM   1444 1HE  LYS    90      26.198  -1.028 -13.103  1.00  0.00
H
ATOM   1445 2HE  LYS    90      26.519  -1.145 -14.852  1.00  0.00
H
ATOM   1446  NZ  LYS    90      24.875  -2.315 -14.166  1.00  0.00
N
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ATOM   1447 1HZ  LYS    90      24.191  -1.602 -14.395  1.00  0.00
H
ATOM   1448 2HZ  LYS    90      24.579  -2.796 -13.325  1.00  0.00
H
ATOM   1449 3HZ  LYS    90      24.916  -2.985 -14.927  1.00  0.00
H
ATOM   1450  N   ASP    91      30.053  -6.479 -11.173  1.00  0.00
N
ATOM   1451  H   ASP    91      29.236  -6.396 -10.586  1.00  0.00
H
ATOM   1452  CA  ASP    91      30.901  -7.660 -11.032  1.00  0.00
C
ATOM   1453  HA  ASP    91      31.934  -7.327 -10.946  1.00  0.00
H
ATOM   1454  C   ASP    91      30.817  -8.605 -12.228  1.00  0.00
C
ATOM   1455  O   ASP    91      29.876  -9.394 -12.353  1.00  0.00
O
ATOM   1456  CB  ASP    91      30.555  -8.454  -9.772  1.00  0.00
C
ATOM   1457 1HB  ASP    91      30.620  -7.797  -8.905  1.00  0.00
H
ATOM   1458 2HB  ASP    91      29.532  -8.824  -9.852  1.00  0.00
H
ATOM   1459  CG  ASP    91      31.490  -9.634  -9.577  1.00  0.00
C
ATOM   1460  OD1 ASP    91      32.638  -9.566 -10.074  1.00  0.00
O
ATOM   1461  OD2 ASP    91      31.095 -10.643  -8.945  1.00  0.00
O
ATOM   1462  N   PHE    92      31.822  -8.533 -13.087  1.00  0.00
N
ATOM   1463  H   PHE    92      32.534  -7.829 -12.935  1.00  0.00
H
ATOM   1464  CA  PHE    92      31.938  -9.405 -14.255  1.00  0.00
C
ATOM   1465  HA  PHE    92      31.204 -10.207 -14.184  1.00  0.00
H
ATOM   1466  C   PHE    92      33.324 -10.047 -14.295  1.00  0.00
C
ATOM   1467  O   PHE    92      33.876 -10.324 -15.361  1.00  0.00
O
ATOM   1468  CB  PHE    92      31.660  -8.613 -15.539  1.00  0.00
C
ATOM   1469 1HB  PHE    92      32.347  -7.770 -15.598  1.00  0.00
H
ATOM   1470 2HB  PHE    92      31.836  -9.265 -16.392  1.00  0.00
H
ATOM   1471  CG  PHE    92      30.245  -8.112 -15.644  1.00  0.00
C
ATOM   1472  CD1 PHE    92      29.939  -6.750 -15.484  1.00  0.00
C
ATOM   1473  HD1 PHE    92      30.727  -6.039 -15.292  1.00  0.00
H
ATOM   1474  CD2 PHE    92      29.204  -9.013 -15.921  1.00  0.00
C
ATOM   1475  HD2 PHE    92      29.425 -10.058 -16.068  1.00  0.00
H
ATOM   1476  CE1 PHE    92      28.601  -6.292 -15.586  1.00  0.00
C
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ATOM   1477  HE1 PHE    92      28.375  -5.242 -15.480  1.00  0.00
H
ATOM   1478  CE2 PHE    92      27.864  -8.574 -16.011  1.00  0.00
C
ATOM   1479  HE2 PHE    92      27.076  -9.283 -16.217  1.00  0.00
H
ATOM   1480  CZ  PHE    92      27.562  -7.208 -15.837  1.00  0.00
C
ATOM   1481  HZ  PHE    92      26.541  -6.863 -15.905  1.00  0.00
H
ATOM   1482  N   GLU    93      33.925 -10.259 -13.133  1.00  0.00
N
ATOM   1483  H   GLU    93      33.469 -10.008 -12.262  1.00  0.00
H
ATOM   1484  CA  GLU    93      35.214 -10.947 -13.096  1.00  0.00
C
ATOM   1485  HA  GLU    93      35.797 -10.669 -13.973  1.00  0.00
H
ATOM   1486  C   GLU    93      34.973 -12.455 -13.130  1.00  0.00
C
ATOM   1487  O   GLU    93      34.225 -12.989 -12.318  1.00  0.00
O
ATOM   1488  CB  GLU    93      36.016 -10.601 -11.842  1.00  0.00
C
ATOM   1489 1HB  GLU    93      35.429 -10.876 -10.973  1.00  0.00
H
ATOM   1490 2HB  GLU    93      36.921 -11.201 -11.845  1.00  0.00
H
ATOM   1491  CG  GLU    93      36.411  -9.147 -11.692  1.00  0.00
C
ATOM   1492 1HG  GLU    93      35.505  -8.554 -11.605  1.00  0.00
H
ATOM   1493 2HG  GLU    93      36.982  -9.036 -10.770  1.00  0.00
H
ATOM   1494  CD  GLU    93      37.231  -8.602 -12.848  1.00  0.00
C
ATOM   1495  OE1 GLU    93      38.020  -9.338 -13.479  1.00  0.00
O
ATOM   1496  OE2 GLU    93      37.104  -7.391 -13.137  1.00  0.00
O
ATOM   1497  N   ILE    94      35.621 -13.151 -14.049  1.00  0.00
N
ATOM   1498  H   ILE    94      36.289 -12.678 -14.650  1.00  0.00
H
ATOM   1499  CA  ILE    94      35.381 -14.582 -14.282  1.00  0.00
C
ATOM   1500  HA  ILE    94      34.421 -14.862 -13.849  1.00  0.00
H
ATOM   1501  C   ILE    94      36.437 -15.468 -13.618  1.00  0.00
C
ATOM   1502  O   ILE    94      36.650 -16.625 -13.996  1.00  0.00
O
ATOM   1503  CB  ILE    94      35.305 -14.858 -15.810  1.00  0.00
C
ATOM   1504  HB  ILE    94      35.203 -15.931 -15.958  1.00  0.00
H
ATOM   1505  CG1 ILE    94      36.592 -14.377 -16.512  1.00  0.00
C
ATOM   1506 1HG1 ILE    94      36.577 -13.289 -16.567  1.00  0.00
H
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ATOM   1507 2HG1 ILE    94      37.453 -14.676 -15.915  1.00  0.00
H
ATOM   1508  CG2 ILE    94      34.042 -14.179 -16.401  1.00  0.00
C
ATOM   1509 1HG2 ILE    94      33.927 -14.454 -17.450  1.00  0.00
H
ATOM   1510 2HG2 ILE    94      34.115 -13.093 -16.325  1.00  0.00
H
ATOM   1511 3HG2 ILE    94      33.155 -14.514 -15.862  1.00  0.00
H
ATOM   1512  CD1 ILE    94      36.798 -14.917 -17.916  1.00  0.00
C
ATOM   1513 1HD1 ILE    94      37.718 -14.506 -18.330  1.00  0.00
H
ATOM   1514 2HD1 ILE    94      35.963 -14.639 -18.559  1.00  0.00
H
ATOM   1515 3HD1 ILE    94      36.878 -16.001 -17.879  1.00  0.00
H
ATOM   1516  N   ILE    95      37.104 -14.893 -12.626  1.00  0.00
N
ATOM   1517  H   ILE    95      36.743 -14.033 -12.250  1.00  0.00
H
ATOM   1518  CA  ILE    95      38.331 -15.446 -12.049  1.00  0.00
C
ATOM   1519  HA  ILE    95      39.057 -15.590 -12.848  1.00  0.00
H
ATOM   1520  C   ILE    95      38.033 -16.803 -11.410  1.00  0.00
C
ATOM   1521  O   ILE    95      37.154 -16.927 -10.559  1.00  0.00
O
ATOM   1522  CB  ILE    95      38.935 -14.479 -10.976  1.00  0.00
C
ATOM   1523  HB  ILE    95      38.197 -14.344 -10.185  1.00  0.00
H
ATOM   1524  CG1 ILE    95      39.234 -13.104 -11.608  1.00  0.00
C
ATOM   1525 1HG1 ILE    95      40.090 -13.211 -12.272  1.00  0.00
H
ATOM   1526 2HG1 ILE    95      38.387 -12.791 -12.213  1.00  0.00
H
ATOM   1527  CG2 ILE    95      40.233 -15.063 -10.350  1.00  0.00
C
ATOM   1528 1HG2 ILE    95      40.620 -14.395  -9.581  1.00  0.00
H
ATOM   1529 2HG2 ILE    95      40.994 -15.203 -11.120  1.00  0.00
H
ATOM   1530 3HG2 ILE    95      40.017 -16.023  -9.883  1.00  0.00
H
ATOM   1531  CD1 ILE    95      39.525 -11.976 -10.622  1.00  0.00
C
ATOM   1532 1HD1 ILE    95      39.618 -11.038 -11.169  1.00  0.00
H
ATOM   1533 2HD1 ILE    95      40.459 -12.172 -10.098  1.00  0.00
H
ATOM   1534 3HD1 ILE    95      38.711 -11.887  -9.903  1.00  0.00
H
ATOM   1535  N   LEU    96      38.779 -17.809 -11.846  1.00  0.00
N
ATOM   1536  H   LEU    96      39.490 -17.612 -12.543  1.00  0.00
H
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ATOM   1537  CA  LEU    96      38.650 -19.184 -11.368  1.00  0.00
C
ATOM   1538  HA  LEU    96      38.078 -19.200 -10.439  1.00  0.00
H
ATOM   1539  C   LEU    96      40.049 -19.733 -11.078  1.00  0.00
C
ATOM   1540  O   LEU    96      40.476 -19.781  -9.932  1.00  0.00
O
ATOM   1541  CB  LEU    96      37.924 -20.033 -12.427  1.00  0.00
C
ATOM   1542 1HB  LEU    96      36.939 -19.599 -12.592  1.00  0.00
H
ATOM   1543 2HB  LEU    96      38.471 -19.929 -13.361  1.00  0.00
H
ATOM   1544  CG  LEU    96      37.743 -21.541 -12.175  1.00  0.00
C
ATOM   1545  HG  LEU    96      38.708 -21.946 -11.884  1.00  0.00
H
ATOM   1546  CD1 LEU    96      36.749 -21.872 -11.083  1.00  0.00
C
ATOM   1547 1HD1 LEU    96      36.894 -22.906 -10.768  1.00  0.00
H
ATOM   1548 2HD1 LEU    96      35.731 -21.760 -11.449  1.00  0.00
H
ATOM   1549 3HD1 LEU    96      36.906 -21.221 -10.226  1.00  0.00
H
ATOM   1550  CD2 LEU    96      37.315 -22.242 -13.451  1.00  0.00
C
ATOM   1551 1HD2 LEU    96      37.230 -23.315 -13.271  1.00  0.00
H
ATOM   1552 2HD2 LEU    96      38.057 -22.082 -14.229  1.00  0.00
H
ATOM   1553 3HD2 LEU    96      36.354 -21.863 -13.792  1.00  0.00
H
ATOM   1554  N   SER    97      40.803 -20.086 -12.110  1.00  0.00
N
ATOM   1555  H   SER    97      40.474 -19.900 -13.052  1.00  0.00
H
ATOM   1556  CA  SER    97      42.075 -20.797 -11.950  1.00  0.00
C
ATOM   1557  HA  SER    97      41.902 -21.674 -11.327  1.00  0.00
H
ATOM   1558  C   SER    97      43.212 -20.005 -11.316  1.00  0.00
C
ATOM   1559  O   SER    97      44.171 -20.598 -10.822  1.00  0.00
O
ATOM   1560  CB  SER    97      42.555 -21.273 -13.319  1.00  0.00
C
ATOM   1561 1HB  SER    97      43.458 -21.867 -13.198  1.00  0.00
H
ATOM   1562 2HB  SER    97      41.783 -21.889 -13.776  1.00  0.00
H
ATOM   1563  OG  SER    97      42.820 -20.166 -14.164  1.00  0.00
O
ATOM   1564  HG  SER    97      41.968 -19.845 -14.511  1.00  0.00
H
ATOM   1565  N   LYS    98      43.123 -18.681 -11.337  1.00  0.00
N
ATOM   1566  H   LYS    98      42.324 -18.254 -11.801  1.00  0.00
H
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ATOM   1567  CA  LYS    98      44.173 -17.809 -10.794  1.00  0.00
C
ATOM   1568  HA  LYS    98      45.034 -18.420 -10.524  1.00  0.00
H
ATOM   1569  C   LYS    98      43.774 -17.075  -9.522  1.00  0.00
C
ATOM   1570  O   LYS    98      44.441 -16.133  -9.091  1.00  0.00
O
ATOM   1571  CB  LYS    98      44.636 -16.838 -11.880  1.00  0.00
C
ATOM   1572 1HB  LYS    98      43.779 -16.298 -12.281  1.00  0.00
H
ATOM   1573 2HB  LYS    98      45.328 -16.120 -11.441  1.00  0.00
H
ATOM   1574  CG  LYS    98      45.365 -17.563 -12.997  1.00  0.00
C
ATOM   1575 1HG  LYS    98      46.190 -18.126 -12.559  1.00  0.00
H
ATOM   1576 2HG  LYS    98      44.691 -18.258 -13.497  1.00  0.00
H
ATOM   1577  CD  LYS    98      45.925 -16.602 -14.015  1.00  0.00
C
ATOM   1578 1HD  LYS    98      45.107 -16.110 -14.540  1.00  0.00
H
ATOM   1579 2HD  LYS    98      46.535 -15.857 -13.507  1.00  0.00
H
ATOM   1580  CE  LYS    98      46.793 -17.364 -14.998  1.00  0.00
C
ATOM   1581 1HE  LYS    98      47.598 -17.858 -14.449  1.00  0.00
H
ATOM   1582 2HE  LYS    98      46.191 -18.134 -15.487  1.00  0.00
H
ATOM   1583  NZ  LYS    98      47.392 -16.479 -16.038  1.00  0.00
N
ATOM   1584 1HZ  LYS    98      48.103 -16.994 -16.547  1.00  0.00
H
ATOM   1585 2HZ  LYS    98      47.816 -15.668 -15.601  1.00  0.00
H
ATOM   1586 3HZ  LYS    98      46.676 -16.176 -16.686  1.00  0.00
H
ATOM   1587  N   MET    99      42.705 -17.526  -8.890  1.00  0.00
N
ATOM   1588  H   MET    99      42.163 -18.280  -9.291  1.00  0.00
H
ATOM   1589  CA  MET    99      42.372 -17.062  -7.546  1.00  0.00
C
ATOM   1590  HA  MET    99      42.437 -15.975  -7.483  1.00  0.00
H
ATOM   1591  C   MET    99      43.425 -17.705  -6.638  1.00  0.00
C
ATOM   1592  O   MET    99      43.565 -18.926  -6.621  1.00  0.00
O
ATOM   1593  CB  MET    99      40.958 -17.536  -7.212  1.00  0.00
C
ATOM   1594 1HB  MET    99      40.260 -17.065  -7.902  1.00  0.00
H
ATOM   1595 2HB  MET    99      40.927 -18.597  -7.399  1.00  0.00
H
ATOM   1596  CG  MET    99      40.464 -17.299  -5.804  1.00  0.00
C
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ATOM   1597 1HG  MET    99      39.534 -17.851  -5.664  1.00  0.00
H
ATOM   1598 2HG  MET    99      41.199 -17.653  -5.082  1.00  0.00
H
ATOM   1599  SD  MET    99      40.143 -15.561  -5.549  1.00  0.00
S
ATOM   1600  CE  MET    99      38.860 -15.631  -4.305  1.00  0.00
C
ATOM   1601 1HE  MET    99      38.583 -14.620  -4.011  1.00  0.00
H
ATOM   1602 2HE  MET    99      39.217 -16.176  -3.431  1.00  0.00
H
ATOM   1603 3HE  MET    99      37.986 -16.137  -4.717  1.00  0.00
H
ATOM   1604  N   SER   100      44.229 -16.898  -5.959  1.00  0.00
N
ATOM   1605  H   SER   100      44.108 -15.896  -6.010  1.00  0.00
H
ATOM   1606  CA  SER   100      45.331 -17.398  -5.137  1.00  0.00
C
ATOM   1607  HA  SER   100      45.033 -18.314  -4.637  1.00  0.00
H
ATOM   1608  C   SER   100      45.665 -16.316  -4.115  1.00  0.00
C
ATOM   1609  O   SER   100      45.358 -15.153  -4.394  1.00  0.00
O
ATOM   1610  CB  SER   100      46.552 -17.660  -6.020  1.00  0.00
C
ATOM   1611 1HB  SER   100      47.400 -17.949  -5.400  1.00  0.00
H
ATOM   1612 2HB  SER   100      46.322 -18.472  -6.711  1.00  0.00
H
ATOM   1613  OG  SER   100      46.870 -16.503  -6.776  1.00  0.00
O
ATOM   1614  HG  SER   100      46.891 -15.737  -6.191  1.00  0.00
H
ATOM   1615  N   PRO   101      46.312 -16.633  -2.969  1.00  0.00
N
ATOM   1616  CA  PRO   101      46.763 -17.864  -2.286  1.00  0.00
C
ATOM   1617  HA  PRO   101      47.609 -18.299  -2.815  1.00  0.00
H
ATOM   1618  C   PRO   101      45.694 -18.951  -2.105  1.00  0.00
C
ATOM   1619  O   PRO   101      44.536 -18.719  -2.381  1.00  0.00
O
ATOM   1620  CB  PRO   101      47.229 -17.336  -0.923  1.00  0.00
C
ATOM   1621 1HB  PRO   101      46.400 -17.328  -0.215  1.00  0.00
H
ATOM   1622 2HB  PRO   101      48.055 -17.924  -0.533  1.00  0.00
H
ATOM   1623  CG  PRO   101      47.683 -15.988  -1.209  1.00  0.00
C
ATOM   1624 1HG  PRO   101      47.717 -15.386  -0.303  1.00  0.00
H
ATOM   1625 2HG  PRO   101      48.668 -16.028  -1.676  1.00  0.00
H
ATOM   1626  CD  PRO   101      46.691 -15.444  -2.178  1.00  0.00
C
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ATOM   1627 1HD  PRO   101      45.829 -15.028  -1.660  1.00  0.00
H
ATOM   1628 2HD  PRO   101      47.163 -14.686  -2.801  1.00  0.00
H
ATOM   1629  N   GLN   102      46.083 -20.170  -1.753  1.00  0.00
N
ATOM   1630  H   GLN   102      47.043 -20.317  -1.447  1.00  0.00
H
ATOM   1631  CA  GLN   102      45.208 -21.350  -1.835  1.00  0.00
C
ATOM   1632  HA  GLN   102      44.161 -21.054  -1.777  1.00  0.00
H
ATOM   1633  C   GLN   102      45.579 -22.294  -0.673  1.00  0.00
C
ATOM   1634  O   GLN   102      46.712 -22.194  -0.216  1.00  0.00
O
ATOM   1635  CB  GLN   102      45.487 -22.061  -3.174  1.00  0.00
C
ATOM   1636 1HB  GLN   102      46.517 -22.405  -3.152  1.00  0.00
H
ATOM   1637 2HB  GLN   102      44.841 -22.932  -3.256  1.00  0.00
H
ATOM   1638  CG  GLN   102      45.312 -21.207  -4.434  1.00  0.00
C
ATOM   1639 1HG  GLN   102      44.277 -20.881  -4.507  1.00  0.00
H
ATOM   1640 2HG  GLN   102      45.942 -20.326  -4.353  1.00  0.00
H
ATOM   1641  CD  GLN   102      45.709 -21.900  -5.716  1.00  0.00
C
ATOM   1642  OE1 GLN   102      46.474 -22.854  -5.728  1.00  0.00
O
ATOM   1643  NE2 GLN   102      45.262 -21.368  -6.817  1.00  0.00
N
ATOM   1644 1HE2 GLN   102      45.547 -21.761  -7.700  1.00  0.00
H
ATOM   1645 2HE2 GLN   102      44.620 -20.583  -6.777  1.00  0.00
H
ATOM   1646  N   ALA   103      44.758 -23.224  -0.184  1.00  0.00
N
ATOM   1647  H   ALA   103      45.180 -24.040   0.234  1.00  0.00
H
ATOM   1648  CA  ALA   103      43.293 -23.162  -0.167  1.00  0.00
C
ATOM   1649  HA  ALA   103      42.982 -22.131  -0.338  1.00  0.00
H
ATOM   1650  C   ALA   103      42.652 -23.607   1.172  1.00  0.00
C
ATOM   1651  O   ALA   103      41.438 -23.697   1.257  1.00  0.00
O
ATOM   1652  CB  ALA   103      42.748 -24.042  -1.317  1.00  0.00
C
ATOM   1653 1HB  ALA   103      43.002 -23.605  -2.280  1.00  0.00
H
ATOM   1654 2HB  ALA   103      41.663 -24.123  -1.244  1.00  0.00
H
ATOM   1655 3HB  ALA   103      43.178 -25.042  -1.254  1.00  0.00
H
ATOM   1656  N   GLU   104      43.412 -23.980   2.195  1.00  0.00
N
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ATOM   1657  H   GLU   104      44.413 -23.881   2.156  1.00  0.00
H
ATOM   1658  CA  GLU   104      42.791 -24.613   3.374  1.00  0.00
C
ATOM   1659  HA  GLU   104      42.066 -25.342   3.028  1.00  0.00
H
ATOM   1660  C   GLU   104      42.060 -23.642   4.286  1.00  0.00
C
ATOM   1661  O   GLU   104      41.132 -23.989   5.016  1.00  0.00
O
ATOM   1662  CB  GLU   104      43.832 -25.344   4.228  1.00  0.00
C
ATOM   1663 1HB  GLU   104      44.629 -25.688   3.577  1.00  0.00
H
ATOM   1664 2HB  GLU   104      44.250 -24.641   4.949  1.00  0.00
H
ATOM   1665  CG  GLU   104      43.256 -26.562   4.950  1.00  0.00
C
ATOM   1666 1HG  GLU   104      42.171 -26.527   4.867  1.00  0.00
H
ATOM   1667 2HG  GLU   104      43.598 -27.463   4.442  1.00  0.00
H
ATOM   1668  CD  GLU   104      43.590 -26.666   6.429  1.00  0.00
C
ATOM   1669  OE1 GLU   104      44.680 -26.281   6.900  1.00  0.00
O
ATOM   1670  OE2 GLU   104      42.724 -27.196   7.153  1.00  0.00
O
ATOM   1671  N   TYR   105      42.527 -22.408   4.278  1.00  0.00
N
ATOM   1672  H   TYR   105      43.156 -22.118   3.540  1.00  0.00
H
ATOM   1673  CA  TYR   105      42.273 -21.502   5.387  1.00  0.00
C
ATOM   1674  HA  TYR   105      42.212 -22.104   6.291  1.00  0.00
H
ATOM   1675  C   TYR   105      40.953 -20.734   5.347  1.00  0.00
C
ATOM   1676  O   TYR   105      40.711 -19.824   6.138  1.00  0.00
O
ATOM   1677  CB  TYR   105      43.483 -20.592   5.527  1.00  0.00
C
ATOM   1678 1HB  TYR   105      43.699 -20.135   4.561  1.00  0.00
H
ATOM   1679 2HB  TYR   105      43.231 -19.798   6.225  1.00  0.00
H
ATOM   1680  CG  TYR   105      44.738 -21.276   6.060  1.00  0.00
C
ATOM   1681  CD1 TYR   105      44.683 -22.211   7.125  1.00  0.00
C
ATOM   1682  HD1 TYR   105      43.733 -22.570   7.496  1.00  0.00
H
ATOM   1683  CD2 TYR   105      46.007 -20.922   5.562  1.00  0.00
C
ATOM   1684  HD2 TYR   105      46.088 -20.275   4.702  1.00  0.00
H
ATOM   1685  CE1 TYR   105      45.866 -22.664   7.758  1.00  0.00
C
ATOM   1686  HE1 TYR   105      45.804 -23.357   8.583  1.00  0.00
H
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ATOM   1687  CE2 TYR   105      47.187 -21.370   6.202  1.00  0.00
C
ATOM   1688  HE2 TYR   105      48.149 -21.079   5.826  1.00  0.00
H
ATOM   1689  CZ  TYR   105      47.103 -22.199   7.316  1.00  0.00
C
ATOM   1690  OH  TYR   105      48.254 -22.572   7.960  1.00  0.00
O
ATOM   1691  HH  TYR   105      48.084 -23.241   8.629  1.00  0.00
H
ATOM   1692  N   ASP   106      40.032 -21.214   4.526  1.00  0.00
N
ATOM   1693  H   ASP   106      40.313 -21.841   3.783  1.00  0.00
H
ATOM   1694  CA  ASP   106      38.606 -20.984   4.767  1.00  0.00
C
ATOM   1695  HA  ASP   106      38.419 -19.917   4.853  1.00  0.00
H
ATOM   1696  C   ASP   106      38.158 -21.638   6.067  1.00  0.00
C
ATOM   1697  O   ASP   106      37.218 -21.167   6.716  1.00  0.00
O
ATOM   1698  CB  ASP   106      37.786 -21.547   3.614  1.00  0.00
C
ATOM   1699 1HB  ASP   106      37.891 -20.866   2.774  1.00  0.00
H
ATOM   1700 2HB  ASP   106      38.183 -22.526   3.342  1.00  0.00
H
ATOM   1701  CG  ASP   106      36.310 -21.693   3.936  1.00  0.00
C
ATOM   1702  OD1 ASP   106      35.533 -20.740   3.705  1.00  0.00
O
ATOM   1703  OD2 ASP   106      35.887 -22.782   4.367  1.00  0.00
O
ATOM   1704  N   ILE   107      38.861 -22.677   6.497  1.00  0.00
N
ATOM   1705  H   ILE   107      39.612 -23.059   5.925  1.00  0.00
H
ATOM   1706  CA  ILE   107      38.636 -23.239   7.822  1.00  0.00
C
ATOM   1707  HA  ILE   107      37.575 -23.177   8.055  1.00  0.00
H
ATOM   1708  C   ILE   107      39.409 -22.307   8.760  1.00  0.00
C
ATOM   1709  O   ILE   107      40.606 -22.477   9.016  1.00  0.00
O
ATOM   1710  CB  ILE   107      39.071 -24.727   7.946  1.00  0.00
C
ATOM   1711  HB  ILE   107      40.156 -24.791   7.861  1.00  0.00
H
ATOM   1712  CG1 ILE   107      38.445 -25.569   6.810  1.00  0.00
C
ATOM   1713 1HG1 ILE   107      37.366 -25.611   6.960  1.00  0.00
H
ATOM   1714 2HG1 ILE   107      38.631 -25.080   5.855  1.00  0.00
H
ATOM   1715  CG2 ILE   107      38.619 -25.266   9.327  1.00  0.00
C
ATOM   1716 1HG2 ILE   107      38.891 -26.314   9.431  1.00  0.00
H
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ATOM   1717 2HG2 ILE   107      37.535 -25.180   9.428  1.00  0.00
H
ATOM   1718 3HG2 ILE   107      39.099 -24.706  10.127  1.00  0.00
H
ATOM   1719  CD1 ILE   107      38.981 -27.005   6.681  1.00  0.00
C
ATOM   1720 1HD1 ILE   107      38.548 -27.470   5.795  1.00  0.00
H
ATOM   1721 2HD1 ILE   107      38.708 -27.594   7.557  1.00  0.00
H
ATOM   1722 3HD1 ILE   107      40.067 -26.986   6.574  1.00  0.00
H
ATOM   1723  N   THR   108      38.734 -21.266   9.226  1.00  0.00
N
ATOM   1724  H   THR   108      37.737 -21.207   9.060  1.00  0.00
H
ATOM   1725  CA  THR   108      39.389 -20.143   9.892  1.00  0.00
C
ATOM   1726  HA  THR   108      40.203 -19.808   9.257  1.00  0.00
H
ATOM   1727  C   THR   108      39.945 -20.572  11.241  1.00  0.00
C
ATOM   1728  O   THR   108      40.905 -20.016  11.769  1.00  0.00
O
ATOM   1729  CB  THR   108      38.425 -18.963  10.103  1.00  0.00
C
ATOM   1730  HB  THR   108      38.963 -18.135  10.566  1.00  0.00
H
ATOM   1731  OG1 THR   108      37.353 -19.377  10.952  1.00  0.00
O
ATOM   1732  HG1 THR   108      36.698 -18.661  10.967  1.00  0.00
H
ATOM   1733  CG2 THR   108      37.803 -18.500   8.796  1.00  0.00
C
ATOM   1734 1HG2 THR   108      37.374 -17.508   8.936  1.00  0.00
H
ATOM   1735 2HG2 THR   108      37.013 -19.187   8.494  1.00  0.00
H
ATOM   1736 3HG2 THR   108      38.559 -18.454   8.012  1.00  0.00
H
ATOM   1737  N   GLU   109      39.357 -21.617  11.792  1.00  0.00
N
ATOM   1738  H   GLU   109      38.544 -22.016  11.336  1.00  0.00
H
ATOM   1739  CA  GLU   109      39.824 -22.191  13.046  1.00  0.00
C
ATOM   1740  HA  GLU   109      39.882 -21.415  13.810  1.00  0.00
H
ATOM   1741  C   GLU   109      41.204 -22.825  12.890  1.00  0.00
C
ATOM   1742  O   GLU   109      42.054 -22.741  13.775  1.00  0.00
O
ATOM   1743  CB  GLU   109      38.822 -23.251  13.476  1.00  0.00
C
ATOM   1744 1HB  GLU   109      38.707 -23.962  12.658  1.00  0.00
H
ATOM   1745 2HB  GLU   109      39.213 -23.773  14.344  1.00  0.00
H
ATOM   1746  CG  GLU   109      37.464 -22.669  13.824  1.00  0.00
C
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ATOM   1747 1HG  GLU   109      37.590 -21.933  14.619  1.00  0.00
H
ATOM   1748 2HG  GLU   109      37.047 -22.169  12.950  1.00  0.00
H
ATOM   1749  CD  GLU   109      36.491 -23.731  14.280  1.00  0.00
C
ATOM   1750  OE1 GLU   109      36.597 -24.893  13.836  1.00  0.00
O
ATOM   1751  OE2 GLU   109      35.579 -23.421  15.078  1.00  0.00
O
ATOM   1752  N   HIS   110      41.462 -23.426  11.737  1.00  0.00
N
ATOM   1753  H   HIS   110      40.773 -23.420  10.993  1.00  0.00
H
ATOM   1754  CA  HIS   110      42.745 -24.086  11.512  1.00  0.00
C
ATOM   1755  HA  HIS   110      43.011 -24.656  12.404  1.00  0.00
H
ATOM   1756  C   HIS   110      43.857 -23.085  11.281  1.00  0.00
C
ATOM   1757  O   HIS   110      45.014 -23.407  11.537  1.00  0.00
O
ATOM   1758  CB  HIS   110      42.684 -25.056  10.333  1.00  0.00
C
ATOM   1759 1HB  HIS   110      42.320 -24.535   9.447  1.00  0.00
H
ATOM   1760 2HB  HIS   110      43.697 -25.402  10.126  1.00  0.00
H
ATOM   1761  CG  HIS   110      41.831 -26.258  10.591  1.00  0.00
C
ATOM   1762  ND1 HIS   110      41.599 -27.241   9.640  1.00  0.00
N
ATOM   1763  HD1 HIS   110      41.993 -27.246   8.693  1.00  0.00
H
ATOM   1764  CD2 HIS   110      41.168 -26.685  11.698  1.00  0.00
C
ATOM   1765  HD2 HIS   110      41.138 -26.181  12.655  1.00  0.00
H
ATOM   1766  CE1 HIS   110      40.810 -28.170  10.153  1.00  0.00
C
ATOM   1767  HE1 HIS   110      40.450 -29.049   9.630  1.00  0.00
H
ATOM   1768  NE2 HIS   110      40.534 -27.855  11.395  1.00  0.00
N
ATOM   1769  HE2 HIS   110      39.930 -28.393  12.024  1.00  0.00
H
ATOM   1770  N   VAL   111      43.540 -21.862  10.869  1.00  0.00
N
ATOM   1771  H   VAL   111      42.585 -21.622  10.639  1.00  0.00
H
ATOM   1772  CA  VAL   111      44.599 -20.860  10.746  1.00  0.00
C
ATOM   1773  HA  VAL   111      45.388 -21.301  10.137  1.00  0.00
H
ATOM   1774  C   VAL   111      45.192 -20.615  12.121  1.00  0.00
C
ATOM   1775  O   VAL   111      46.401 -20.551  12.250  1.00  0.00
O
ATOM   1776  CB  VAL   111      44.193 -19.518  10.044  1.00  0.00
C
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ATOM   1777  HB  VAL   111      45.057 -19.207   9.468  1.00  0.00
H
ATOM   1778  CG1 VAL   111      43.047 -19.718   9.081  1.00  0.00
C
ATOM   1779 1HG1 VAL   111      42.940 -18.836   8.449  1.00  0.00
H
ATOM   1780 2HG1 VAL   111      42.131 -19.874   9.627  1.00  0.00
H
ATOM   1781 3HG1 VAL   111      43.228 -20.576   8.446  1.00  0.00
H
ATOM   1782  CG2 VAL   111      43.837 -18.360  11.008  1.00  0.00
C
ATOM   1783 1HG2 VAL   111      43.505 -17.493  10.437  1.00  0.00
H
ATOM   1784 2HG2 VAL   111      44.717 -18.070  11.584  1.00  0.00
H
ATOM   1785 3HG2 VAL   111      43.036 -18.653  11.683  1.00  0.00
H
ATOM   1786  N   ARG   112      44.362 -20.560  13.159  1.00  0.00
N
ATOM   1787  H   ARG   112      43.371 -20.705  13.009  1.00  0.00
H
ATOM   1788  CA  ARG   112      44.839 -20.245  14.504  1.00  0.00
C
ATOM   1789  HA  ARG   112      45.369 -19.291  14.487  1.00  0.00
H
ATOM   1790  C   ARG   112      45.804 -21.314  14.975  1.00  0.00
C
ATOM   1791  O   ARG   112      46.837 -21.028  15.576  1.00  0.00
O
ATOM   1792  CB  ARG   112      43.645 -20.154  15.455  1.00  0.00
C
ATOM   1793 1HB  ARG   112      42.933 -19.435  15.050  1.00  0.00
H
ATOM   1794 2HB  ARG   112      43.163 -21.130  15.497  1.00  0.00
H
ATOM   1795  CG  ARG   112      44.010 -19.736  16.865  1.00  0.00
C
ATOM   1796 1HG  ARG   112      44.680 -20.478  17.298  1.00  0.00
H
ATOM   1797 2HG  ARG   112      44.524 -18.776  16.829  1.00  0.00
H
ATOM   1798  CD  ARG   112      42.784 -19.605  17.753  1.00  0.00
C
ATOM   1799 1HD  ARG   112      43.098 -19.248  18.734  1.00  0.00
H
ATOM   1800 2HD  ARG   112      42.121 -18.858  17.318  1.00  0.00
H
ATOM   1801  NE  ARG   112      42.042 -20.870  17.904  1.00  0.00
N
ATOM   1802  HE  ARG   112      41.242 -21.003  17.300  1.00  0.00
H
ATOM   1803  CZ  ARG   112      42.295 -21.838  18.776  1.00  0.00
C
ATOM   1804  NH1 ARG   112      43.262 -21.800  19.649  1.00  0.00
N
ATOM   1805 1HH1 ARG   112      43.868 -20.994  19.702  1.00  0.00
H
ATOM   1806 2HH1 ARG   112      43.404 -22.588  20.261  1.00  0.00
H
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ATOM   1807  NH2 ARG   112      41.568 -22.917  18.759  1.00  0.00
N
ATOM   1808 1HH2 ARG   112      40.814 -23.022  18.094  1.00  0.00
H
ATOM   1809 2HH2 ARG   112      41.766 -23.661  19.411  1.00  0.00
H
ATOM   1810  N   GLU   113      45.467 -22.554  14.673  1.00  0.00
N
ATOM   1811  H   GLU   113      44.607 -22.733  14.174  1.00  0.00
H
ATOM   1812  CA  GLU   113      46.308 -23.668  15.078  1.00  0.00
C
ATOM   1813  HA  GLU   113      46.557 -23.551  16.133  1.00  0.00
H
ATOM   1814  C   GLU   113      47.614 -23.698  14.293  1.00  0.00
C
ATOM   1815  O   GLU   113      48.674 -23.888  14.884  1.00  0.00
O
ATOM   1816  CB  GLU   113      45.552 -24.983  14.898  1.00  0.00
C
ATOM   1817 1HB  GLU   113      45.232 -25.074  13.860  1.00  0.00
H
ATOM   1818 2HB  GLU   113      46.226 -25.807  15.132  1.00  0.00
H
ATOM   1819  CG  GLU   113      44.338 -25.076  15.806  1.00  0.00
C
ATOM   1820 1HG  GLU   113      44.664 -24.927  16.836  1.00  0.00
H
ATOM   1821 2HG  GLU   113      43.627 -24.290  15.550  1.00  0.00
H
ATOM   1822  CD  GLU   113      43.644 -26.417  15.704  1.00  0.00
C
ATOM   1823  OE1 GLU   113      43.040 -26.730  14.651  1.00  0.00
O
ATOM   1824  OE2 GLU   113      43.661 -27.173  16.707  1.00  0.00
O
ATOM   1825  N   LEU   114      47.556 -23.498  12.981  1.00  0.00
N
ATOM   1826  H   LEU   114      46.659 -23.310  12.538  1.00  0.00
H
ATOM   1827  CA  LEU   114      48.741 -23.640  12.132  1.00  0.00
C
ATOM   1828  HA  LEU   114      49.394 -24.365  12.614  1.00  0.00
H
ATOM   1829  C   LEU   114      49.603 -22.396  11.918  1.00  0.00
C
ATOM   1830  O   LEU   114      50.700 -22.511  11.367  1.00  0.00
O
ATOM   1831  CB  LEU   114      48.362 -24.221  10.766  1.00  0.00
C
ATOM   1832 1HB  LEU   114      47.631 -23.554  10.312  1.00  0.00
H
ATOM   1833 2HB  LEU   114      49.259 -24.198  10.148  1.00  0.00
H
ATOM   1834  CG  LEU   114      47.816 -25.656  10.684  1.00  0.00
C
ATOM   1835  HG  LEU   114      46.855 -25.701  11.193  1.00  0.00
H
ATOM   1836  CD1 LEU   114      47.615 -26.008   9.210  1.00  0.00
C
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ATOM   1837 1HD1 LEU   114      47.257 -27.035   9.126  1.00  0.00
H
ATOM   1838 2HD1 LEU   114      48.550 -25.915   8.657  1.00  0.00
H
ATOM   1839 3HD1 LEU   114      46.858 -25.360   8.768  1.00  0.00
H
ATOM   1840  CD2 LEU   114      48.751 -26.695  11.316  1.00  0.00
C
ATOM   1841 1HD2 LEU   114      48.344 -27.695  11.161  1.00  0.00
H
ATOM   1842 2HD2 LEU   114      48.825 -26.523  12.389  1.00  0.00
H
ATOM   1843 3HD2 LEU   114      49.744 -26.635  10.870  1.00  0.00
H
ATOM   1844  N   ILE   115      49.179 -21.226  12.376  1.00  0.00
N
ATOM   1845  H   ILE   115      48.204 -21.099  12.636  1.00  0.00
H
ATOM   1846  CA  ILE   115      50.119 -20.110  12.546  1.00  0.00
C
ATOM   1847  HA  ILE   115      50.943 -20.240  11.847  1.00  0.00
H
ATOM   1848  C   ILE   115      50.702 -20.190  13.954  1.00  0.00
C
ATOM   1849  O   ILE   115      51.658 -19.503  14.286  1.00  0.00
O
ATOM   1850  CB  ILE   115      49.498 -18.703  12.262  1.00  0.00
C
ATOM   1851  HB  ILE   115      50.312 -17.981  12.283  1.00  0.00
H
ATOM   1852  CG1 ILE   115      48.510 -18.277  13.369  1.00  0.00
C
ATOM   1853 1HG1 ILE   115      47.734 -19.026  13.470  1.00  0.00
H
ATOM   1854 2HG1 ILE   115      49.050 -18.240  14.313  1.00  0.00
H
ATOM   1855  CG2 ILE   115      48.903 -18.669  10.828  1.00  0.00
C
ATOM   1856 1HG2 ILE   115      48.641 -17.647  10.557  1.00  0.00
H
ATOM   1857 2HG2 ILE   115      48.015 -19.296  10.765  1.00  0.00
H
ATOM   1858 3HG2 ILE   115      49.646 -19.027  10.115  1.00  0.00
H
ATOM   1859  CD1 ILE   115      47.840 -16.921  13.165  1.00  0.00
C
ATOM   1860 1HD1 ILE   115      47.246 -16.675  14.045  1.00  0.00
H
ATOM   1861 2HD1 ILE   115      47.178 -16.951  12.299  1.00  0.00
H
ATOM   1862 3HD1 ILE   115      48.599 -16.151  13.019  1.00  0.00
H
ATOM   1863  N   GLY   116      50.128 -21.050  14.785  1.00  0.00
N
ATOM   1864  H   GLY   116      49.355 -21.617  14.470  1.00  0.00
H
ATOM   1865  CA  GLY   116      50.618 -21.243  16.137  1.00  0.00
C
ATOM   1866 1HA  GLY   116      51.068 -20.322  16.507  1.00  0.00
H
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ATOM   1867 2HA  GLY   116      49.790 -21.518  16.784  1.00  0.00
H
ATOM   1868  C   GLY   116      51.648 -22.349  16.161  1.00  0.00
C
ATOM   1869  O   GLY   116      51.811 -23.039  15.156  1.00  0.00
O
ATOM   1870  N   ASP   117      52.331 -22.490  17.293  1.00  0.00
N
ATOM   1871  H   ASP   117      52.081 -21.873  18.062  1.00  0.00
H
ATOM   1872  CA  ASP   117      53.457 -23.413  17.551  1.00  0.00
C
ATOM   1873  HA  ASP   117      53.726 -23.285  18.599  1.00  0.00
H
ATOM   1874  C   ASP   117      54.723 -23.124  16.742  1.00  0.00
C
ATOM   1875  O   ASP   117      55.837 -23.164  17.268  1.00  0.00
O
ATOM   1876  CB  ASP   117      53.089 -24.892  17.357  1.00  0.00
C
ATOM   1877 1HB  ASP   117      52.840 -25.071  16.312  1.00  0.00
H
ATOM   1878 2HB  ASP   117      53.958 -25.500  17.607  1.00  0.00
H
ATOM   1879  CG  ASP   117      51.925 -25.333  18.216  1.00  0.00
C
ATOM   1880  OD1 ASP   117      51.887 -25.045  19.436  1.00  0.00
O
ATOM   1881  OD2 ASP   117      51.033 -26.029  17.686  1.00  0.00
O
ATOM   1882  N   LEU   118      54.556 -22.807  15.470  1.00  0.00
N
ATOM   1883  H   LEU   118      53.611 -22.808  15.097  1.00  0.00
H
ATOM   1884  CA  LEU   118      55.635 -22.415  14.577  1.00  0.00
C
ATOM   1885  HA  LEU   118      56.589 -22.777  14.955  1.00  0.00
H
ATOM   1886  C   LEU   118      55.640 -20.898  14.591  1.00  0.00
C
ATOM   1887  O   LEU   118      54.852 -20.251  13.910  1.00  0.00
O
ATOM   1888  CB  LEU   118      55.394 -22.968  13.167  1.00  0.00
C
ATOM   1889 1HB  LEU   118      54.440 -22.586  12.803  1.00  0.00
H
ATOM   1890 2HB  LEU   118      56.182 -22.597  12.513  1.00  0.00
H
ATOM   1891  CG  LEU   118      55.363 -24.502  13.077  1.00  0.00
C
ATOM   1892  HG  LEU   118      54.594 -24.877  13.751  1.00  0.00
H
ATOM   1893  CD1 LEU   118      55.007 -24.949  11.674  1.00  0.00
C
ATOM   1894 1HD1 LEU   118      54.920 -26.035  11.657  1.00  0.00
H
ATOM   1895 2HD1 LEU   118      55.778 -24.638  10.971  1.00  0.00
H
ATOM   1896 3HD1 LEU   118      54.048 -24.520  11.388  1.00  0.00
H
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ATOM   1897  CD2 LEU   118      56.688 -25.139  13.473  1.00  0.00
C
ATOM   1898 1HD2 LEU   118      56.631 -26.216  13.324  1.00  0.00
H
ATOM   1899 2HD2 LEU   118      56.889 -24.952  14.525  1.00  0.00
H
ATOM   1900 3HD2 LEU   118      57.498 -24.734  12.866  1.00  0.00
H
ATOM   1901  N   LYS   119      56.505 -20.337  15.422  1.00  0.00
N
ATOM   1902  H   LYS   119      57.139 -20.938  15.939  1.00  0.00
H
ATOM   1903  CA  LYS   119      56.575 -18.889  15.630  1.00  0.00
C
ATOM   1904  HA  LYS   119      55.644 -18.540  16.078  1.00  0.00
H
ATOM   1905  C   LYS   119      56.783 -18.137  14.323  1.00  0.00
C
ATOM   1906  O   LYS   119      56.247 -17.047  14.129  1.00  0.00
O
ATOM   1907  CB  LYS   119      57.738 -18.596  16.582  1.00  0.00
C
ATOM   1908 1HB  LYS   119      57.596 -19.181  17.491  1.00  0.00
H
ATOM   1909 2HB  LYS   119      58.659 -18.926  16.104  1.00  0.00
H
ATOM   1910  CG  LYS   119      57.904 -17.133  16.969  1.00  0.00
C
ATOM   1911 1HG  LYS   119      58.032 -16.531  16.070  1.00  0.00
H
ATOM   1912 2HG  LYS   119      57.020 -16.793  17.507  1.00  0.00
H
ATOM   1913  CD  LYS   119      59.132 -16.968  17.840  1.00  0.00
C
ATOM   1914 1HD  LYS   119      59.011 -17.565  18.744  1.00  0.00
H
ATOM   1915 2HD  LYS   119      60.005 -17.322  17.291  1.00  0.00
H
ATOM   1916  CE  LYS   119      59.347 -15.516  18.224  1.00  0.00
C
ATOM   1917 1HE  LYS   119      59.426 -14.912  17.320  1.00  0.00
H
ATOM   1918 2HE  LYS   119      58.495 -15.167  18.814  1.00  0.00
H
ATOM   1919  NZ  LYS   119      60.600 -15.387  19.022  1.00  0.00
N
ATOM   1920 1HZ  LYS   119      60.806 -14.414  19.213  1.00  0.00
H
ATOM   1921 2HZ  LYS   119      61.378 -15.802  18.523  1.00  0.00
H
ATOM   1922 3HZ  LYS   119      60.488 -15.876  19.902  1.00  0.00
H
ATOM   1923  N   GLU   120      57.553 -18.721  13.421  1.00  0.00
N
ATOM   1924  H   GLU   120      57.922 -19.650  13.609  1.00  0.00
H
ATOM   1925  CA  GLU   120      57.941 -18.070  12.174  1.00  0.00
C
ATOM   1926  HA  GLU   120      57.577 -17.043  12.181  1.00  0.00
H
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ATOM   1927  C   GLU   120      57.284 -18.775  10.986  1.00  0.00
C
ATOM   1928  O   GLU   120      57.915 -19.140   9.994  1.00  0.00
O
ATOM   1929  CB  GLU   120      59.468 -18.015  12.099  1.00  0.00
C
ATOM   1930 1HB  GLU   120      59.864 -19.028  12.047  1.00  0.00
H
ATOM   1931 2HB  GLU   120      59.755 -17.471  11.203  1.00  0.00
H
ATOM   1932  CG  GLU   120      60.071 -17.305  13.310  1.00  0.00
C
ATOM   1933 1HG  GLU   120      59.523 -16.375  13.472  1.00  0.00
H
ATOM   1934 2HG  GLU   120      59.954 -17.931  14.196  1.00  0.00
H
ATOM   1935  CD  GLU   120      61.537 -16.966  13.144  1.00  0.00
C
ATOM   1936  OE1 GLU   120      62.396 -17.864  12.975  1.00  0.00
O
ATOM   1937  OE2 GLU   120      61.861 -15.760  13.208  1.00  0.00
O
ATOM   1938  N   PHE   121      55.982 -18.982  11.119  1.00  0.00
N
ATOM   1939  H   PHE   121      55.526 -18.663  11.964  1.00  0.00
H
ATOM   1940  CA  PHE   121      55.156 -19.673  10.128  1.00  0.00
C
ATOM   1941  HA  PHE   121      55.519 -20.697  10.046  1.00  0.00
H
ATOM   1942  C   PHE   121      55.142 -19.102   8.702  1.00  0.00
C
ATOM   1943  O   PHE   121      54.869 -19.842   7.758  1.00  0.00
O
ATOM   1944  CB  PHE   121      53.715 -19.712  10.658  1.00  0.00
C
ATOM   1945 1HB  PHE   121      53.086 -20.232   9.937  1.00  0.00
H
ATOM   1946 2HB  PHE   121      53.700 -20.279  11.587  1.00  0.00
H
ATOM   1947  CG  PHE   121      53.127 -18.343  10.929  1.00  0.00
C
ATOM   1948  CD1 PHE   121      52.488 -17.623   9.906  1.00  0.00
C
ATOM   1949  HD1 PHE   121      52.399 -18.061   8.925  1.00  0.00
H
ATOM   1950  CD2 PHE   121      53.218 -17.760  12.208  1.00  0.00
C
ATOM   1951  HD2 PHE   121      53.686 -18.303  13.016  1.00  0.00
H
ATOM   1952  CE1 PHE   121      51.980 -16.317  10.139  1.00  0.00
C
ATOM   1953  HE1 PHE   121      51.524 -15.760   9.337  1.00  0.00
H
ATOM   1954  CE2 PHE   121      52.694 -16.469  12.462  1.00  0.00
C
ATOM   1955  HE2 PHE   121      52.767 -16.040  13.450  1.00  0.00
H
ATOM   1956  CZ  PHE   121      52.081 -15.743  11.422  1.00  0.00
C
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ATOM   1957  HZ  PHE   121      51.692 -14.752  11.608  1.00  0.00
H
ATOM   1958  N   LYS   122      55.429 -17.818   8.515  1.00  0.00
N
ATOM   1959  H   LYS   122      55.671 -17.243   9.324  1.00  0.00
H
ATOM   1960  CA  LYS   122      55.406 -17.173   7.191  1.00  0.00
C
ATOM   1961  HA  LYS   122      54.932 -17.847   6.479  1.00  0.00
H
ATOM   1962  C   LYS   122      56.823 -16.932   6.686  1.00  0.00
C
ATOM   1963  O   LYS   122      57.030 -16.247   5.683  1.00  0.00
O
ATOM   1964  CB  LYS   122      54.602 -15.860   7.237  1.00  0.00
C
ATOM   1965 1HB  LYS   122      54.516 -15.554   8.279  1.00  0.00
H
ATOM   1966 2HB  LYS   122      55.148 -15.074   6.718  1.00  0.00
H
ATOM   1967  CG  LYS   122      53.186 -15.948   6.645  1.00  0.00
C
ATOM   1968 1HG  LYS   122      52.659 -16.753   7.151  1.00  0.00
H
ATOM   1969 2HG  LYS   122      52.665 -15.015   6.865  1.00  0.00
H
ATOM   1970  CD  LYS   122      53.094 -16.203   5.129  1.00  0.00
C
ATOM   1971 1HD  LYS   122      53.640 -17.110   4.869  1.00  0.00
H
ATOM   1972 2HD  LYS   122      52.043 -16.364   4.885  1.00  0.00
H
ATOM   1973  CE  LYS   122      53.606 -15.038   4.277  1.00  0.00
C
ATOM   1974 1HE  LYS   122      52.887 -14.852   3.478  1.00  0.00
H
ATOM   1975 2HE  LYS   122      53.660 -14.139   4.896  1.00  0.00
H
ATOM   1976  NZ  LYS   122      54.952 -15.302   3.659  1.00  0.00
N
ATOM   1977 1HZ  LYS   122      55.271 -14.480   3.161  1.00  0.00
H
ATOM   1978 2HZ  LYS   122      54.892 -16.073   3.000  1.00  0.00
H
ATOM   1979 3HZ  LYS   122      55.630 -15.540   4.373  1.00  0.00
H
ATOM   1980  N   GLN   123      57.780 -17.522   7.382  1.00  0.00
N
ATOM   1981  H   GLN   123      57.519 -18.058   8.200  1.00  0.00
H
ATOM   1982  CA  GLN   123      59.186 -17.581   6.979  1.00  0.00
C
ATOM   1983  HA  GLN   123      59.382 -16.905   6.147  1.00  0.00
H
ATOM   1984  C   GLN   123      59.280 -19.048   6.483  1.00  0.00
C
ATOM   1985  O   GLN   123      58.221 -19.670   6.377  1.00  0.00
O
ATOM   1986  CB  GLN   123      60.050 -17.182   8.189  1.00  0.00
C
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ATOM   1987 1HB  GLN   123      59.848 -17.875   8.995  1.00  0.00
H
ATOM   1988 2HB  GLN   123      61.102 -17.259   7.931  1.00  0.00
H
ATOM   1989  CG  GLN   123      59.808 -15.774   8.722  1.00  0.00
C
ATOM   1990 1HG  GLN   123      58.765 -15.664   9.010  1.00  0.00
H
ATOM   1991 2HG  GLN   123      60.420 -15.641   9.609  1.00  0.00
H
ATOM   1992  CD  GLN   123      60.166 -14.688   7.733  1.00  0.00
C
ATOM   1993  OE1 GLN   123      61.222 -14.712   7.111  1.00  0.00
O
ATOM   1994  NE2 GLN   123      59.306 -13.721   7.585  1.00  0.00
N
ATOM   1995 1HE2 GLN   123      59.524 -12.974   6.939  1.00  0.00
H
ATOM   1996 2HE2 GLN   123      58.455 -13.708   8.132  1.00  0.00
H
ATOM   1997  N   PRO   124      60.455 -19.622   6.131  1.00  0.00
N
ATOM   1998  CA  PRO   124      60.397 -20.934   5.450  1.00  0.00
C
ATOM   1999  HA  PRO   124      59.946 -20.772   4.471  1.00  0.00
H
ATOM   2000  C   PRO   124      59.689 -22.174   6.029  1.00  0.00
C
ATOM   2001  O   PRO   124      59.496 -23.128   5.272  1.00  0.00
O
ATOM   2002  CB  PRO   124      61.873 -21.276   5.233  1.00  0.00
C
ATOM   2003 1HB  PRO   124      62.248 -21.877   6.061  1.00  0.00
H
ATOM   2004 2HB  PRO   124      62.011 -21.800   4.287  1.00  0.00
H
ATOM   2005  CG  PRO   124      62.543 -19.979   5.187  1.00  0.00
C
ATOM   2006 1HG  PRO   124      63.604 -20.080   5.412  1.00  0.00
H
ATOM   2007 2HG  PRO   124      62.401 -19.526   4.207  1.00  0.00
H
ATOM   2008  CD  PRO   124      61.855 -19.164   6.217  1.00  0.00
C
ATOM   2009 1HD  PRO   124      62.261 -19.373   7.208  1.00  0.00
H
ATOM   2010 2HD  PRO   124      61.940 -18.104   5.978  1.00  0.00
H
ATOM   2011  N   GLU   125      59.198 -22.187   7.266  1.00  0.00
N
ATOM   2012  H   GLU   125      59.416 -21.418   7.898  1.00  0.00
H
ATOM   2013  CA  GLU   125      58.268 -23.240   7.721  1.00  0.00
C
ATOM   2014  HA  GLU   125      58.770 -24.207   7.685  1.00  0.00
H
ATOM   2015  C   GLU   125      57.037 -23.330   6.811  1.00  0.00
C
ATOM   2016  O   GLU   125      56.416 -24.388   6.703  1.00  0.00
O
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ATOM   2017  CB  GLU   125      57.751 -23.006   9.149  1.00  0.00
C
ATOM   2018 1HB  GLU   125      57.298 -22.016   9.190  1.00  0.00
H
ATOM   2019 2HB  GLU   125      56.967 -23.738   9.334  1.00  0.00
H
ATOM   2020  CG  GLU   125      58.764 -23.122  10.287  1.00  0.00
C
ATOM   2021 1HG  GLU   125      59.502 -22.332  10.185  1.00  0.00
H
ATOM   2022 2HG  GLU   125      58.243 -22.974  11.233  1.00  0.00
H
ATOM   2023  CD  GLU   125      59.503 -24.450  10.335  1.00  0.00
C
ATOM   2024  OE1 GLU   125      58.895 -25.537  10.455  1.00  0.00
O
ATOM   2025  OE2 GLU   125      60.753 -24.410  10.276  1.00  0.00
O
ATOM   2026  N   THR   126      56.745 -22.261   6.079  1.00  0.00
N
ATOM   2027  H   THR   126      57.300 -21.415   6.199  1.00  0.00
H
ATOM   2028  CA  THR   126      55.693 -22.251   5.062  1.00  0.00
C
ATOM   2029  HA  THR   126      54.726 -22.277   5.561  1.00  0.00
H
ATOM   2030  C   THR   126      55.742 -23.440   4.095  1.00  0.00
C
ATOM   2031  O   THR   126      54.687 -23.946   3.719  1.00  0.00
O
ATOM   2032  CB  THR   126      55.784 -20.953   4.223  1.00  0.00
C
ATOM   2033  HB  THR   126      56.721 -20.952   3.667  1.00  0.00
H
ATOM   2034  OG1 THR   126      55.746 -19.808   5.078  1.00  0.00
O
ATOM   2035  HG1 THR   126      55.428 -20.079   5.952  1.00  0.00
H
ATOM   2036  CG2 THR   126      54.645 -20.788   3.262  1.00  0.00
C
ATOM   2037 1HG2 THR   126      54.699 -19.798   2.812  1.00  0.00
H
ATOM   2038 2HG2 THR   126      53.698 -20.890   3.793  1.00  0.00
H
ATOM   2039 3HG2 THR   126      54.705 -21.534   2.471  1.00  0.00
H
ATOM   2040  N   LYS   127      56.906 -23.952   3.703  1.00  0.00
N
ATOM   2041  H   LYS   127      57.781 -23.560   4.041  1.00  0.00
H
ATOM   2042  CA  LYS   127      56.915 -25.085   2.763  1.00  0.00
C
ATOM   2043  HA  LYS   127      56.283 -24.805   1.919  1.00  0.00
H
ATOM   2044  C   LYS   127      56.307 -26.351   3.362  1.00  0.00
C
ATOM   2045  O   LYS   127      55.644 -27.116   2.664  1.00  0.00
O
ATOM   2046  CB  LYS   127      58.316 -25.368   2.198  1.00  0.00
C
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ATOM   2047 1HB  LYS   127      58.200 -26.058   1.364  1.00  0.00
H
ATOM   2048 2HB  LYS   127      58.719 -24.435   1.806  1.00  0.00
H
ATOM   2049  CG  LYS   127      59.343 -25.972   3.152  1.00  0.00
C
ATOM   2050 1HG  LYS   127      59.462 -25.313   4.006  1.00  0.00
H
ATOM   2051 2HG  LYS   127      58.993 -26.945   3.495  1.00  0.00
H
ATOM   2052  CD  LYS   127      60.690 -26.143   2.459  1.00  0.00
C
ATOM   2053 1HD  LYS   127      60.573 -26.813   1.607  1.00  0.00
H
ATOM   2054 2HD  LYS   127      61.021 -25.170   2.095  1.00  0.00
H
ATOM   2055  CE  LYS   127      61.764 -26.698   3.394  1.00  0.00
C
ATOM   2056 1HE  LYS   127      62.723 -26.664   2.873  1.00  0.00
H
ATOM   2057 2HE  LYS   127      61.837 -26.046   4.266  1.00  0.00
H
ATOM   2058  NZ  LYS   127      61.530 -28.105   3.860  1.00  0.00
N
ATOM   2059 1HZ  LYS   127      62.278 -28.391   4.485  1.00  0.00
H
ATOM   2060 2HZ  LYS   127      61.519 -28.738   3.069  1.00  0.00
H
ATOM   2061 3HZ  LYS   127      60.648 -28.184   4.354  1.00  0.00
H
ATOM   2062   N  GLU   128      56.478 -26.555   4.658  1.00  0.00
N
ATOM   2063   H  GLU   128      56.988 -25.878   5.212  1.00  0.00
H
ATOM   2064  CA  GLU   128      55.931 -27.737   5.317  1.00  0.00
C
ATOM   2065  HA  GLU   128      56.103 -28.621   4.703  1.00  0.00
H
ATOM   2066   C  GLU   128      54.437 -27.540   5.491  1.00  0.00
C
ATOM   2067   O  GLU   128      53.633 -28.432   5.226  1.00  0.00
O
ATOM   2068  CB  GLU   128      56.577 -27.918   6.692  1.00  0.00
C
ATOM   2069 1HB  GLU   128      56.429 -27.007   7.270  1.00  0.00
H
ATOM   2070 2HB  GLU   128      56.077 -28.737   7.208  1.00  0.00
H
ATOM   2071  CG  GLU   128      58.066 -28.208   6.635  1.00  0.00
C
ATOM   2072 1HG  GLU   128      58.579 -27.374   6.156  1.00  0.00
H
ATOM   2073 2HG  GLU   128      58.444 -28.311   7.652  1.00  0.00
H
ATOM   2074  CD  GLU   128      58.356 -29.482   5.871  1.00  0.00
C
ATOM   2075  OE1 GLU   128      57.763 -30.535   6.202  1.00  0.00
O
ATOM   2076  OE2 GLU   128      59.170 -29.464   4.922  1.00  0.00
O
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ATOM   2077  N   ILE   129      54.077 -26.325   5.878  1.00  0.00
N
ATOM   2078  H   ILE   129      54.797 -25.627   6.042  1.00  0.00
H
ATOM   2079  CA  ILE   129      52.684 -25.956   6.113  1.00  0.00
C
ATOM   2080  HA  ILE   129      52.249 -26.648   6.833  1.00  0.00
H
ATOM   2081  C   ILE   129      51.922 -26.110   4.801  1.00  0.00
C
ATOM   2082  O   ILE   129      50.812 -26.622   4.787  1.00  0.00
O
ATOM   2083  CB  ILE   129      52.591 -24.507   6.686  1.00  0.00
C
ATOM   2084  HB  ILE   129      53.095 -23.833   5.995  1.00  0.00
H
ATOM   2085  CG1 ILE   129      53.309 -24.448   8.052  1.00  0.00
C
ATOM   2086 1HG1 ILE   129      52.705 -24.987   8.783  1.00  0.00
H
ATOM   2087 2HG1 ILE   129      54.263 -24.960   7.973  1.00  0.00
H
ATOM   2088  CG2 ILE   129      51.125 -24.048   6.830  1.00  0.00
C
ATOM   2089 1HG2 ILE   129      51.088 -23.028   7.211  1.00  0.00
H
ATOM   2090 2HG2 ILE   129      50.584 -24.707   7.510  1.00  0.00
H
ATOM   2091 3HG2 ILE   129      50.632 -24.056   5.858  1.00  0.00
H
ATOM   2092  CD1 ILE   129      53.605 -23.060   8.600  1.00  0.00
C
ATOM   2093 1HD1 ILE   129      54.250 -23.143   9.472  1.00  0.00
H
ATOM   2094 2HD1 ILE   129      52.680 -22.571   8.895  1.00  0.00
H
ATOM   2095 3HD1 ILE   129      54.115 -22.464   7.843  1.00  0.00
H
ATOM   2096  N   SER   130      52.541 -25.765   3.682  1.00  0.00
N
ATOM   2097  H   SER   130      53.474 -25.368   3.736  1.00  0.00
H
ATOM   2098  CA  SER   130      51.899 -25.912   2.379  1.00  0.00
C
ATOM   2099  HA  SER   130      50.999 -25.301   2.378  1.00  0.00
H
ATOM   2100  C   SER   130      51.496 -27.346   2.068  1.00  0.00
C
ATOM   2101  O   SER   130      50.428 -27.591   1.510  1.00  0.00
O
ATOM   2102  CB  SER   130      52.825 -25.440   1.257  1.00  0.00
C
ATOM   2103 1HB  SER   130      53.725 -26.053   1.252  1.00  0.00
H
ATOM   2104 2HB  SER   130      52.314 -25.558   0.300  1.00  0.00
H
ATOM   2105  OG  SER   130      53.190 -24.083   1.427  1.00  0.00
O
ATOM   2106  HG  SER   130      53.712 -24.000   2.242  1.00  0.00
H
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ATOM   2107  N   ASN   131      52.332 -28.308   2.431  1.00  0.00
N
ATOM   2108  H   ASN   131      53.192 -28.081   2.916  1.00  0.00
H
ATOM   2109  CA  ASN   131      52.007 -29.703   2.141  1.00  0.00
C
ATOM   2110  HA  ASN   131      51.657 -29.779   1.112  1.00  0.00
H
ATOM   2111  C   ASN   131      50.873 -30.148   3.055  1.00  0.00
C
ATOM   2112  O   ASN   131      49.945 -30.833   2.627  1.00  0.00
O
ATOM   2113  CB  ASN   131      53.232 -30.603   2.316  1.00  0.00
C
ATOM   2114 1HB  ASN   131      53.638 -30.467   3.317  1.00  0.00
H
ATOM   2115 2HB  ASN   131      52.926 -31.643   2.206  1.00  0.00
H
ATOM   2116  CG  ASN   131      54.312 -30.315   1.302  1.00  0.00
C
ATOM   2117  OD1 ASN   131      54.041 -29.910   0.171  1.00  0.00
O
ATOM   2118  ND2 ASN   131      55.540 -30.475   1.697  1.00  0.00
N
ATOM   2119 1HD2 ASN   131      56.293 -30.318   1.046  1.00  0.00
H
ATOM   2120 2HD2 ASN   131      55.725 -30.768   2.648  1.00  0.00
H
ATOM   2121  N   LYS   132      50.912 -29.695   4.301  1.00  0.00
N
ATOM   2122  H   LYS   132      51.689 -29.111   4.597  1.00  0.00
H
ATOM   2123  CA  LYS   132      49.865 -30.025   5.271  1.00  0.00
C
ATOM   2124  HA  LYS   132      49.757 -31.109   5.323  1.00  0.00
H
ATOM   2125  C   LYS   132      48.523 -29.456   4.848  1.00  0.00
C
ATOM   2126  O   LYS   132      47.509 -30.119   4.999  1.00  0.00
O
ATOM   2127  CB  LYS   132      50.240 -29.495   6.658  1.00  0.00
C
ATOM   2128 1HB  LYS   132      50.425 -28.424   6.588  1.00  0.00
H
ATOM   2129 2HB  LYS   132      49.406 -29.659   7.340  1.00  0.00
H
ATOM   2130  CG  LYS   132      51.474 -30.173   7.221  1.00  0.00
C
ATOM   2131 1HG  LYS   132      51.256 -31.227   7.367  1.00  0.00
H
ATOM   2132 2HG  LYS   132      52.291 -30.090   6.509  1.00  0.00
H
ATOM   2133  CD  LYS   132      51.931 -29.575   8.532  1.00  0.00
C
ATOM   2134 1HD  LYS   132      52.145 -28.515   8.393  1.00  0.00
H
ATOM   2135 2HD  LYS   132      51.151 -29.695   9.284  1.00  0.00
H
ATOM   2136  CE  LYS   132      53.195 -30.297   8.970  1.00  0.00
C
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ATOM   2137 1HE  LYS   132      52.975 -31.359   9.085  1.00  0.00
H
ATOM   2138 2HE  LYS   132      53.943 -30.186   8.183  1.00  0.00
H
ATOM   2139  NZ  LYS   132      53.766 -29.775  10.243  1.00  0.00
N
ATOM   2140 1HZ  LYS   132      54.599 -30.297  10.492  1.00  0.00
H
ATOM   2141 2HZ  LYS   132      53.092 -29.852  10.996  1.00  0.00
H
ATOM   2142 3HZ  LYS   132      54.017 -28.800  10.122  1.00  0.00
H
ATOM   2143  N   LEU   133      48.515 -28.267   4.264  1.00  0.00
N
ATOM   2144  H   LEU   133      49.386 -27.756   4.166  1.00  0.00
H
ATOM   2145  CA  LEU   133      47.270 -27.646   3.808  1.00  0.00
C
ATOM   2146  HA  LEU   133      46.586 -27.560   4.654  1.00  0.00
H
ATOM   2147  C   LEU   133      46.577 -28.478   2.739  1.00  0.00
C
ATOM   2148  O   LEU   133      45.350 -28.581   2.731  1.00  0.00
O
ATOM   2149  CB  LEU   133      47.523 -26.254   3.214  1.00  0.00
C
ATOM   2150 1HB  LEU   133      48.229 -26.377   2.398  1.00  0.00
H
ATOM   2151 2HB  LEU   133      46.586 -25.945   2.758  1.00  0.00
H
ATOM   2152  CG  LEU   133      48.018 -25.057   4.036  1.00  0.00
C
ATOM   2153  HG  LEU   133      49.098 -25.001   3.924  1.00  0.00
H
ATOM   2154  CD1 LEU   133      47.431 -23.766   3.464  1.00  0.00
C
ATOM   2155 1HD1 LEU   133      47.909 -22.912   3.943  1.00  0.00
H
ATOM   2156 2HD1 LEU   133      46.360 -23.720   3.658  1.00  0.00
H
ATOM   2157 3HD1 LEU   133      47.615 -23.710   2.393  1.00  0.00
H
ATOM   2158  CD2 LEU   133      47.710 -25.141   5.516  1.00  0.00
C
ATOM   2159 1HD2 LEU   133      48.137 -24.280   6.018  1.00  0.00
H
ATOM   2160 2HD2 LEU   133      48.160 -26.036   5.943  1.00  0.00
H
ATOM   2161 3HD2 LEU   133      46.633 -25.163   5.685  1.00  0.00
H
ATOM   2162  N   LYS   134      47.330 -29.072   1.822  1.00  0.00
N
ATOM   2163  H   LYS   134      48.337 -28.963   1.838  1.00  0.00
H
ATOM   2164  CA  LYS   134      46.691 -29.880   0.782  1.00  0.00
C
ATOM   2165  HA  LYS   134      45.847 -29.324   0.374  1.00  0.00
H
ATOM   2166  C   LYS   134      46.154 -31.154   1.410  1.00  0.00
C
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ATOM   2167  O   LYS   134      45.010 -31.523   1.181  1.00  0.00
O
ATOM   2168  CB  LYS   134      47.653 -30.222  -0.360  1.00  0.00
C
ATOM   2169 1HB  LYS   134      48.137 -29.310  -0.703  1.00  0.00
H
ATOM   2170 2HB  LYS   134      48.419 -30.904   0.011  1.00  0.00
H
ATOM   2171  CG  LYS   134      46.941 -30.868  -1.543  1.00  0.00
C
ATOM   2172 1HG  LYS   134      46.405 -31.744  -1.186  1.00  0.00
H
ATOM   2173 2HG  LYS   134      46.220 -30.167  -1.963  1.00  0.00
H
ATOM   2174  CD  LYS   134      47.901 -31.309  -2.631  1.00  0.00
C
ATOM   2175 1HD  LYS   134      48.317 -30.432  -3.128  1.00  0.00
H
ATOM   2176 2HD  LYS   134      48.709 -31.888  -2.183  1.00  0.00
H
ATOM   2177  CE  LYS   134      47.165 -32.188  -3.635  1.00  0.00
C
ATOM   2178 1HE  LYS   134      46.770 -33.059  -3.108  1.00  0.00
H
ATOM   2179 2HE  LYS   134      46.328 -31.632  -4.058  1.00  0.00
H
ATOM   2180  NZ  LYS   134      48.061 -32.650  -4.739  1.00  0.00
N
ATOM   2181 1HZ  LYS   134      47.615 -33.394  -5.264  1.00  0.00
H
ATOM   2182 2HZ  LYS   134      48.926 -33.009  -4.352  1.00  0.00
H
ATOM   2183 3HZ  LYS   134      48.270 -31.877  -5.362  1.00  0.00
H
ATOM   2184  N   GLN   135      46.965 -31.789   2.243  1.00  0.00
N
ATOM   2185  H   GLN   135      47.885 -31.409   2.427  1.00  0.00
H
ATOM   2186  CA  GLN   135      46.593 -33.057   2.870  1.00  0.00
C
ATOM   2187  HA  GLN   135      46.356 -33.780   2.088  1.00  0.00
H
ATOM   2188  C   GLN   135      45.357 -32.916   3.757  1.00  0.00
C
ATOM   2189  O   GLN   135      44.481 -33.790   3.757  1.00  0.00
O
ATOM   2190  CB  GLN   135      47.781 -33.581   3.684  1.00  0.00
C
ATOM   2191 1HB  GLN   135      48.100 -32.793   4.366  1.00  0.00
H
ATOM   2192 2HB  GLN   135      47.457 -34.438   4.274  1.00  0.00
H
ATOM   2193  CG  GLN   135      48.975 -34.010   2.827  1.00  0.00
C
ATOM   2194 1HG  GLN   135      48.719 -34.923   2.292  1.00  0.00
H
ATOM   2195 2HG  GLN   135      49.186 -33.238   2.090  1.00  0.00
H
ATOM   2196  CD  GLN   135      50.239 -34.241   3.629  1.00  0.00
C
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ATOM   2197  OE1 GLN   135      50.210 -34.478   4.833  1.00  0.00
O
ATOM   2198  NE2 GLN   135      51.366 -34.149   2.977  1.00  0.00
N
ATOM   2199 1HE2 GLN   135      52.231 -34.277   3.481  1.00  0.00
H
ATOM   2200 2HE2 GLN   135      51.358 -33.971   1.987  1.00  0.00
H
ATOM   2201  N   TYR   136      45.250 -31.812   4.483  1.00  0.00
N
ATOM   2202  H   TYR   136      46.014 -31.141   4.497  1.00  0.00
H
ATOM   2203  CA  TYR   136      44.073 -31.546   5.306  1.00  0.00
C
ATOM   2204  HA  TYR   136      43.913 -32.380   5.989  1.00  0.00
H
ATOM   2205  C   TYR   136      42.824 -31.364   4.460  1.00  0.00
C
ATOM   2206  O   TYR   136      41.757 -31.884   4.776  1.00  0.00
O
ATOM   2207  CB  TYR   136      44.260 -30.255   6.104  1.00  0.00
C
ATOM   2208 1HB  TYR   136      45.184 -29.768   5.803  1.00  0.00
H
ATOM   2209 2HB  TYR   136      43.437 -29.581   5.869  1.00  0.00
H
ATOM   2210  CG  TYR   136      44.271 -30.464   7.595  1.00  0.00
C
ATOM   2211  CD1 TYR   136      45.479 -30.675   8.290  1.00  0.00
C
ATOM   2212  HD1 TYR   136      46.414 -30.709   7.745  1.00  0.00
H
ATOM   2213  CD2 TYR   136      43.068 -30.437   8.325  1.00  0.00
C
ATOM   2214  HD2 TYR   136      42.129 -30.281   7.809  1.00  0.00
H
ATOM   2215  CE1 TYR   136      45.484 -30.835   9.704  1.00  0.00
C
ATOM   2216  HE1 TYR   136      46.414 -30.981  10.232  1.00  0.00
H
ATOM   2217  CE2 TYR   136      43.069 -30.623   9.731  1.00  0.00
C
ATOM   2218  HE2 TYR   136      42.143 -30.618  10.285  1.00  0.00
H
ATOM   2219  CZ  TYR   136      44.274 -30.799  10.404  1.00  0.00
C
ATOM   2220  OH  TYR   136      44.240 -30.920  11.765  1.00  0.00
O
ATOM   2221  HH  TYR   136      45.121 -30.922  12.153  1.00  0.00
H
ATOM   2222  N   LEU   137      42.937 -30.602   3.386  1.00  0.00
N
ATOM   2223  H   LEU   137      43.832 -30.196   3.136  1.00  0.00
H
ATOM   2224  CA  LEU   137      41.757 -30.259   2.604  1.00  0.00
C
ATOM   2225  HA  LEU   137      40.958 -30.026   3.305  1.00  0.00
H
ATOM   2226  C   LEU   137      41.281 -31.408   1.720  1.00  0.00
C
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ATOM   2227  O   LEU   137      40.077 -31.623   1.567  1.00  0.00
O
ATOM   2228  CB  LEU   137      42.071 -29.009   1.793  1.00  0.00
C
ATOM   2229 1HB  LEU   137      42.753 -28.403   2.386  1.00  0.00
H
ATOM   2230 2HB  LEU   137      42.593 -29.307   0.884  1.00  0.00
H
ATOM   2231  CG  LEU   137      40.889 -28.109   1.423  1.00  0.00
C
ATOM   2232  HG  LEU   137      40.193 -28.668   0.803  1.00  0.00
H
ATOM   2233  CD1 LEU   137      40.131 -27.554   2.630  1.00  0.00
C
ATOM   2234 1HD1 LEU   137      39.395 -26.822   2.297  1.00  0.00
H
ATOM   2235 2HD1 LEU   137      40.815 -27.074   3.323  1.00  0.00
H
ATOM   2236 3HD1 LEU   137      39.612 -28.358   3.146  1.00  0.00
H
ATOM   2237  CD2 LEU   137      41.456 -26.958   0.632  1.00  0.00
C
ATOM   2238 1HD2 LEU   137      40.641 -26.327   0.280  1.00  0.00
H
ATOM   2239 2HD2 LEU   137      42.001 -27.329  -0.231  1.00  0.00
H
ATOM   2240 3HD2 LEU   137      42.120 -26.363   1.249  1.00  0.00
H
ATOM   2241  N   ASP   138      42.236 -32.211   1.264  1.00  0.00
N
ATOM   2242  H   ASP   138      43.208 -31.957   1.426  1.00  0.00
H
ATOM   2243  CA  ASP   138      41.970 -33.463   0.548  1.00  0.00
C
ATOM   2244  HA  ASP   138      41.390 -33.280  -0.355  1.00  0.00
H
ATOM   2245  C   ASP   138      41.179 -34.396   1.458  1.00  0.00
C
ATOM   2246  O   ASP   138      40.295 -35.133   1.026  1.00  0.00
O
ATOM   2247  CB  ASP   138      43.279 -34.202   0.222  1.00  0.00
C
ATOM   2248 1HB  ASP   138      43.957 -34.116   1.070  1.00  0.00
H
ATOM   2249 2HB  ASP   138      43.050 -35.256   0.081  1.00  0.00
H
ATOM   2250  CG  ASP   138      43.979 -33.712  -1.040  1.00  0.00
C
ATOM   2251  OD1 ASP   138      43.367 -33.111  -1.947  1.00  0.00
O
ATOM   2252  OD2 ASP   138      45.172 -34.056  -1.197  1.00  0.00
O
ATOM   2253  N   GLU   139      41.504 -34.381   2.741  1.00  0.00
N
ATOM   2254  H   GLU   139      42.257 -33.786   3.063  1.00  0.00
H
ATOM   2255  CA  GLU   139      40.805 -35.232   3.695  1.00  0.00
C
ATOM   2256  HA  GLU   139      40.701 -36.226   3.262  1.00  0.00
H
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ATOM   2257  C   GLU   139      39.409 -34.692   4.011  1.00  0.00
C
ATOM   2258  O   GLU   139      38.448 -35.456   4.159  1.00  0.00
O
ATOM   2259  CB  GLU   139      41.631 -35.342   4.978  1.00  0.00
C
ATOM   2260 1HB  GLU   139      42.641 -35.641   4.704  1.00  0.00
H
ATOM   2261 2HB  GLU   139      41.676 -34.367   5.458  1.00  0.00
H
ATOM   2262  CG  GLU   139      41.083 -36.348   5.969  1.00  0.00
C
ATOM   2263 1HG  GLU   139      40.075 -36.047   6.253  1.00  0.00
H
ATOM   2264 2HG  GLU   139      41.030 -37.323   5.485  1.00  0.00
H
ATOM   2265  CD  GLU   139      41.924 -36.478   7.223  1.00  0.00
C
ATOM   2266  OE1 GLU   139      43.019 -35.883   7.327  1.00  0.00
O
ATOM   2267  OE2 GLU   139      41.502 -37.220   8.136  1.00  0.00
O
ATOM   2268  N   THR   140      39.300 -33.378   4.133  1.00  0.00
N
ATOM   2269  H   THR   140      40.123 -32.804   3.973  1.00  0.00
H
ATOM   2270  CA  THR   140      38.067 -32.727   4.585  1.00  0.00
C
ATOM   2271  HA  THR   140      37.674 -33.299   5.425  1.00  0.00
H
ATOM   2272  C   THR   140      36.956 -32.634   3.537  1.00  0.00
C
ATOM   2273  O   THR   140      35.789 -32.881   3.853  1.00  0.00
O
ATOM   2274  CB  THR   140      38.396 -31.300   5.097  1.00  0.00
C
ATOM   2275  HB  THR   140      38.738 -30.679   4.268  1.00  0.00
H
ATOM   2276  OG1 THR   140      39.429 -31.391   6.085  1.00  0.00
O
ATOM   2277  HG1 THR   140      40.276 -31.530   5.627  1.00  0.00
H
ATOM   2278  CG2 THR   140      37.218 -30.635   5.779  1.00  0.00
C
ATOM   2279 1HG2 THR   140      37.535 -29.683   6.202  1.00  0.00
H
ATOM   2280 2HG2 THR   140      36.838 -31.273   6.576  1.00  0.00
H
ATOM   2281 3HG2 THR   140      36.426 -30.447   5.057  1.00  0.00
H
ATOM   2282  N   TYR   141      37.282 -32.274   2.303  1.00  0.00
N
ATOM   2283  H   TYR   141      38.259 -32.108   2.063  1.00  0.00
H
ATOM   2284  CA  TYR   141      36.266 -32.018   1.274  1.00  0.00
C
ATOM   2285  HA  TYR   141      35.282 -32.279   1.652  1.00  0.00
H
ATOM   2286  C   TYR   141      36.506 -32.847   0.017  1.00  0.00
C
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ATOM   2287  O   TYR   141      36.070 -32.476  -1.080  1.00  0.00
O
ATOM   2288  CB  TYR   141      36.250 -30.531   0.919  1.00  0.00
C
ATOM   2289 1HB  TYR   141      37.241 -30.272   0.558  1.00  0.00
H
ATOM   2290 2HB  TYR   141      35.527 -30.360   0.122  1.00  0.00
H
ATOM   2291  CG  TYR   141      35.908 -29.597   2.058  1.00  0.00
C
ATOM   2292  CD1 TYR   141      36.786 -28.555   2.395  1.00  0.00
C
ATOM   2293  HD1 TYR   141      37.698 -28.432   1.831  1.00  0.00
H
ATOM   2294  CD2 TYR   141      34.697 -29.714   2.775  1.00  0.00
C
ATOM   2295  HD2 TYR   141      33.988 -30.488   2.519  1.00  0.00
H
ATOM   2296  CE1 TYR   141      36.486 -27.654   3.450  1.00  0.00
C
ATOM   2297  HE1 TYR   141      37.172 -26.858   3.702  1.00  0.00
H
ATOM   2298  CE2 TYR   141      34.389 -28.810   3.834  1.00  0.00
C
ATOM   2299  HE2 TYR   141      33.462 -28.905   4.379  1.00  0.00
H
ATOM   2300  CZ  TYR   141      35.291 -27.790   4.156  1.00  0.00
C
ATOM   2301  OH  TYR   141      35.025 -26.885   5.151  1.00  0.00
O
ATOM   2302  HH  TYR   141      34.208 -27.081   5.632  1.00  0.00
H
ATOM   2303  N   ASP   142      37.194 -33.964   0.218  1.00  0.00
N
ATOM   2304  H   ASP   142      37.460 -34.193   1.162  1.00  0.00
H
ATOM   2305  CA  ASP   142      37.657 -34.883  -0.829  1.00  0.00
C
ATOM   2306  HA  ASP   142      38.132 -35.719  -0.317  1.00  0.00
H
ATOM   2307  C   ASP   142      38.750 -34.222  -1.682  1.00  0.00
C
ATOM   2308  O   ASP   142      39.090 -33.067  -1.476  1.00  0.00
O
ATOM   2309  CB  ASP   142      36.487 -35.458  -1.647  1.00  0.00
C
ATOM   2310 1HB  ASP   142      35.644 -35.629  -0.977  1.00  0.00
H
ATOM   2311 2HB  ASP   142      36.187 -34.732  -2.401  1.00  0.00
H
ATOM   2312  CG  ASP   142      36.827 -36.771  -2.330  1.00  0.00
C
ATOM   2313  OD1 ASP   142      37.917 -37.337  -2.098  1.00  0.00
O
ATOM   2314  OD2 ASP   142      35.994 -37.275  -3.107  1.00  0.00
O
ATOM   2315  N   ARG   143      39.381 -34.981  -2.563  1.00  0.00
N
ATOM   2316  H   ARG   143      39.017 -35.914  -2.729  1.00  0.00
H
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ATOM   2317  CA  ARG   143      40.643 -34.601  -3.212  1.00  0.00
C
ATOM   2318  HA  ARG   143      41.308 -34.207  -2.446  1.00  0.00
H
ATOM   2319  C   ARG   143      40.572 -33.530  -4.298  1.00  0.00
C
ATOM   2320  O   ARG   143      39.498 -33.238  -4.820  1.00  0.00
O
ATOM   2321  CB  ARG   143      41.279 -35.877  -3.785  1.00  0.00
C
ATOM   2322 1HB  ARG   143      40.480 -36.537  -4.120  1.00  0.00
H
ATOM   2323 2HB  ARG   143      41.880 -35.623  -4.657  1.00  0.00
H
ATOM   2324  CG  ARG   143      42.186 -36.637  -2.809  1.00  0.00
C
ATOM   2325 1HG  ARG   143      42.630 -37.482  -3.336  1.00  0.00
H
ATOM   2326 2HG  ARG   143      42.989 -35.974  -2.490  1.00  0.00
H
ATOM   2327  CD  ARG   143      41.465 -37.149  -1.567  1.00  0.00
C
ATOM   2328 1HD  ARG   143      41.102 -36.296  -0.997  1.00  0.00
H
ATOM   2329 2HD  ARG   143      40.611 -37.754  -1.873  1.00  0.00
H
ATOM   2330  NE  ARG   143      42.338 -37.954  -0.705  1.00  0.00
N
ATOM   2331  HE  ARG   143      43.257 -38.178  -1.066  1.00  0.00
H
ATOM   2332  CZ  ARG   143      42.028 -38.436   0.489  1.00  0.00
C
ATOM   2333  NH1 ARG   143      40.967 -38.076   1.163  1.00  0.00
N
ATOM   2334 1HH1 ARG   143      40.405 -37.308   0.828  1.00  0.00
H
ATOM   2335 2HH1 ARG   143      40.739 -38.542   2.027  1.00  0.00
H
ATOM   2336  NH2 ARG   143      42.819 -39.310   1.034  1.00  0.00
N
ATOM   2337 1HH2 ARG   143      43.656 -39.612   0.554  1.00  0.00
H
ATOM   2338 2HH2 ARG   143      42.582 -39.689   1.938  1.00  0.00
H
ATOM   2339  N   VAL   144      41.756 -33.032  -4.639  1.00  0.00
N
ATOM   2340  H   VAL   144      42.546 -33.350  -4.090  1.00  0.00
H
ATOM   2341  CA  VAL   144      42.072 -32.081  -5.723  1.00  0.00
C
ATOM   2342  HA  VAL   144      43.129 -32.240  -5.933  1.00  0.00
H
ATOM   2343  C   VAL   144      41.978 -30.635  -5.259  1.00  0.00
C
ATOM   2344  O   VAL   144      40.939 -29.973  -5.307  1.00  0.00
O
ATOM   2345  CB  VAL   144      41.356 -32.332  -7.090  1.00  0.00
C
ATOM   2346  HB  VAL   144      40.285 -32.174  -6.984  1.00  0.00
H
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ATOM   2347  CG1 VAL   144      41.884 -31.381  -8.182  1.00  0.00
C
ATOM   2348 1HG1 VAL   144      41.389 -31.600  -9.129  1.00  0.00
H
ATOM   2349 2HG1 VAL   144      42.961 -31.498  -8.302  1.00  0.00
H
ATOM   2350 3HG1 VAL   144      41.653 -30.350  -7.915  1.00  0.00
H
ATOM   2351  CG2 VAL   144      41.607 -33.776  -7.536  1.00  0.00
C
ATOM   2352 1HG2 VAL   144      41.256 -33.916  -8.557  1.00  0.00
H
ATOM   2353 2HG2 VAL   144      41.069 -34.464  -6.887  1.00  0.00
H
ATOM   2354 3HG2 VAL   144      42.671 -34.004  -7.498  1.00  0.00
H
ATOM   2355  N   TRP   145      43.136 -30.183  -4.796  1.00  0.00
N
ATOM   2356  H   TRP   145      43.930 -30.807  -4.788  1.00  0.00
H
ATOM   2357  CA  TRP   145      43.379 -28.835  -4.299  1.00  0.00
C
ATOM   2358  HA  TRP   145      42.689 -28.121  -4.750  1.00  0.00
H
ATOM   2359  C   TRP   145      44.820 -28.544  -4.701  1.00  0.00
C
ATOM   2360  O   TRP   145      45.555 -29.476  -5.040  1.00  0.00
O
ATOM   2361  CB  TRP   145      43.254 -28.801  -2.774  1.00  0.00
C
ATOM   2362 1HB  TRP   145      44.000 -29.467  -2.342  1.00  0.00
H
ATOM   2363 2HB  TRP   145      43.441 -27.787  -2.420  1.00  0.00
H
ATOM   2364  CG  TRP   145      41.903 -29.239  -2.312  1.00  0.00
C
ATOM   2365  CD1 TRP   145      41.552 -30.470  -1.867  1.00  0.00
C
ATOM   2366  HD1 TRP   145      42.239 -31.301  -1.770  1.00  0.00
H
ATOM   2367  CD2 TRP   145      40.693 -28.462  -2.276  1.00  0.00
C
ATOM   2368  NE1 TRP   145      40.224 -30.534  -1.573  1.00  0.00
N
ATOM   2369  HE1 TRP   145      39.752 -31.381  -1.249  1.00  0.00
H
ATOM   2370  CE2 TRP   145      39.660 -29.312  -1.796  1.00  0.00
C
ATOM   2371  CE3 TRP   145      40.388 -27.114  -2.537  1.00  0.00
C
ATOM   2372  HE3 TRP   145      41.157 -26.448  -2.890  1.00  0.00
H
ATOM   2373  CZ2 TRP   145      38.344 -28.857  -1.593  1.00  0.00
C
ATOM   2374  HZ2 TRP   145      37.574 -29.535  -1.278  1.00  0.00
H
ATOM   2375  CZ3 TRP   145      39.067 -26.642  -2.300  1.00  0.00
C
ATOM   2376  HZ3 TRP   145      38.823 -25.607  -2.491  1.00  0.00
H
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ATOM   2377  CH2 TRP   145      38.063 -27.525  -1.823  1.00  0.00
C
ATOM   2378  HH2 TRP   145      37.065 -27.154  -1.647  1.00  0.00
H
ATOM   2379  N   GLN   146      45.244 -27.293  -4.631  1.00  0.00
N
ATOM   2380  H   GLN   146      44.617 -26.559  -4.323  1.00  0.00
H
ATOM   2381  CA  GLN   146      46.631 -26.896  -4.865  1.00  0.00
C
ATOM   2382  HA  GLN   146      47.314 -27.736  -4.735  1.00  0.00
H
ATOM   2383  C   GLN   146      46.840 -25.869  -3.773  1.00  0.00
C
ATOM   2384  O   GLN   146      45.849 -25.353  -3.251  1.00  0.00
O
ATOM   2385  CB  GLN   146      46.844 -26.239  -6.231  1.00  0.00
C
ATOM   2386 1HB  GLN   146      46.179 -25.382  -6.308  1.00  0.00
H
ATOM   2387 2HB  GLN   146      47.872 -25.878  -6.282  1.00  0.00
H
ATOM   2388  CG  GLN   146      46.599 -27.153  -7.416  1.00  0.00
C
ATOM   2389 1HG  GLN   146      47.224 -28.033  -7.310  1.00  0.00
H
ATOM   2390 2HG  GLN   146      45.558 -27.468  -7.427  1.00  0.00
H
ATOM   2391  CD  GLN   146      46.926 -26.501  -8.735  1.00  0.00
C
ATOM   2392  OE1 GLN   146      46.808 -25.294  -8.909  1.00  0.00
O
ATOM   2393  NE2 GLN   146      47.330 -27.296  -9.685  1.00  0.00
N
ATOM   2394 1HE2 GLN   146      47.550 -26.900 -10.586  1.00  0.00
H
ATOM   2395 2HE2 GLN   146      47.438 -28.288  -9.504  1.00  0.00
H
ATOM   2396  N   VAL   147      48.085 -25.600  -3.413  1.00  0.00
N
ATOM   2397  H   VAL   147      48.859 -26.071  -3.873  1.00  0.00
H
ATOM   2398  CA  VAL   147      48.395 -24.659  -2.342  1.00  0.00
C
ATOM   2399  HA  VAL   147      47.494 -24.121  -2.055  1.00  0.00
H
ATOM   2400  C   VAL   147      49.418 -23.650  -2.840  1.00  0.00
C
ATOM   2401  O   VAL   147      50.414 -24.005  -3.471  1.00  0.00
O
ATOM   2402  CB  VAL   147      48.917 -25.417  -1.096  1.00  0.00
C
ATOM   2403  HB  VAL   147      49.791 -25.995  -1.380  1.00  0.00
H
ATOM   2404  CG1 VAL   147      49.318 -24.466   0.028  1.00  0.00
C
ATOM   2405 1HG1 VAL   147      49.544 -25.037   0.924  1.00  0.00
H
ATOM   2406 2HG1 VAL   147      48.507 -23.778   0.251  1.00  0.00
H
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ATOM   2407 3HG1 VAL   147      50.204 -23.902  -0.260  1.00  0.00
H
ATOM   2408  CG2 VAL   147      47.848 -26.384  -0.591  1.00  0.00
C
ATOM   2409 1HG2 VAL   147      48.223 -26.922   0.275  1.00  0.00
H
ATOM   2410 2HG2 VAL   147      47.605 -27.116  -1.359  1.00  0.00
H
ATOM   2411 3HG2 VAL   147      46.944 -25.840  -0.318  1.00  0.00
H
ATOM   2412  N   VAL   148      49.143 -22.387  -2.554  1.00  0.00
N
ATOM   2413  H   VAL   148      48.289 -22.180  -2.052  1.00  0.00
H
ATOM   2414  CA  VAL   148      50.033 -21.266  -2.835  1.00  0.00
C
ATOM   2415  HA  VAL   148      51.054 -21.605  -3.010  1.00  0.00
H
ATOM   2416  C   VAL   148      49.938 -20.481  -1.542  1.00  0.00
C
ATOM   2417  O   VAL   148      48.832 -20.191  -1.108  1.00  0.00
O
ATOM   2418  CB  VAL   148      49.521 -20.387  -4.020  1.00  0.00
C
ATOM   2419  HB  VAL   148      48.486 -20.112  -3.822  1.00  0.00
H
ATOM   2420  CG1 VAL   148      50.338 -19.091  -4.171  1.00  0.00
C
ATOM   2421 1HG1 VAL   148      49.978 -18.527  -5.033  1.00  0.00
H
ATOM   2422 2HG1 VAL   148      51.393 -19.325  -4.317  1.00  0.00
H
ATOM   2423 3HG1 VAL   148      50.225 -18.470  -3.284  1.00  0.00
H
ATOM   2424  CG2 VAL   148      49.558 -21.167  -5.329  1.00  0.00
C
ATOM   2425 1HG2 VAL   148      49.180 -20.548  -6.143  1.00  0.00
H
ATOM   2426 2HG2 VAL   148      48.932 -22.055  -5.250  1.00  0.00
H
ATOM   2427 3HG2 VAL   148      50.580 -21.475  -5.553  1.00  0.00
H
ATOM   2428  N   ILE   149      51.047 -20.141  -0.911  1.00  0.00
N
ATOM   2429  H   ILE   149      51.939 -20.501  -1.241  1.00  0.00
H
ATOM   2430  CA  ILE   149      51.035 -19.267   0.260  1.00  0.00
C
ATOM   2431  HA  ILE   149      50.048 -18.828   0.396  1.00  0.00
H
ATOM   2432  C   ILE   149      52.022 -18.171  -0.092  1.00  0.00
C
ATOM   2433  O   ILE   149      53.227 -18.410  -0.164  1.00  0.00
O
ATOM   2434  CB  ILE   149      51.454 -19.992   1.565  1.00  0.00
C
ATOM   2435  HB  ILE   149      52.439 -20.430   1.406  1.00  0.00
H
ATOM   2436  CG1 ILE   149      50.469 -21.136   1.889  1.00  0.00
C
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ATOM   2437 1HG1 ILE   149      49.511 -20.704   2.182  1.00  0.00
H
ATOM   2438 2HG1 ILE   149      50.308 -21.723   0.987  1.00  0.00
H
ATOM   2439  CG2 ILE   149      51.551 -18.967   2.721  1.00  0.00
C
ATOM   2440 1HG2 ILE   149      51.790 -19.476   3.654  1.00  0.00
H
ATOM   2441 2HG2 ILE   149      50.606 -18.439   2.838  1.00  0.00
H
ATOM   2442 3HG2 ILE   149      52.348 -18.251   2.522  1.00  0.00
H
ATOM   2443  CD1 ILE   149      50.927 -22.109   2.983  1.00  0.00
C
ATOM   2444 1HD1 ILE   149      50.270 -22.978   2.992  1.00  0.00
H
ATOM   2445 2HD1 ILE   149      50.892 -21.631   3.957  1.00  0.00
H
ATOM   2446 3HD1 ILE   149      51.945 -22.437   2.787  1.00  0.00
H
ATOM   2447  N   LEU   150      51.517 -16.989  -0.401  1.00  0.00
N
ATOM   2448  H   LEU   150      50.523 -16.823  -0.345  1.00  0.00
H
ATOM   2449  CA  LEU   150      52.363 -15.903  -0.875  1.00  0.00
C
ATOM   2450  HA  LEU   150      53.365 -16.002  -0.459  1.00  0.00
H
ATOM   2451  C   LEU   150      51.731 -14.594  -0.417  1.00  0.00
C
ATOM   2452  O   LEU   150      50.527 -14.409  -0.575  1.00  0.00
O
ATOM   2453  CB  LEU   150      52.415 -15.991  -2.407  1.00  0.00
C
ATOM   2454 1HB  LEU   150      52.247 -17.034  -2.671  1.00  0.00
H
ATOM   2455 2HB  LEU   150      51.562 -15.436  -2.792  1.00  0.00
H
ATOM   2456  CG  LEU   150      53.660 -15.552  -3.193  1.00  0.00
C
ATOM   2457  HG  LEU   150      53.435 -15.677  -4.252  1.00  0.00
H
ATOM   2458  CD1 LEU   150      54.006 -14.098  -2.968  1.00  0.00
C
ATOM   2459 1HD1 LEU   150      54.739 -13.782  -3.709  1.00  0.00
H
ATOM   2460 2HD1 LEU   150      54.426 -13.952  -1.974  1.00  0.00
H
ATOM   2461 3HD1 LEU   150      53.113 -13.485  -3.075  1.00  0.00
H
ATOM   2462  CD2 LEU   150      54.873 -16.424  -2.875  1.00  0.00
C
ATOM   2463 1HD2 LEU   150      55.719 -16.114  -3.488  1.00  0.00
H
ATOM   2464 2HD2 LEU   150      54.645 -17.464  -3.109  1.00  0.00
H
ATOM   2465 3HD2 LEU   150      55.145 -16.342  -1.823  1.00  0.00
H
ATOM   2466  N   ASN   151      52.505 -13.700   0.176  1.00  0.00
N
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ATOM   2467  H   ASN   151      53.491 -13.899   0.327  1.00  0.00
H
ATOM   2468  CA  ASN   151      51.986 -12.386   0.551  1.00  0.00
C
ATOM   2469  HA  ASN   151      50.927 -12.458   0.800  1.00  0.00
H
ATOM   2470  C   ASN   151      52.153 -11.453  -0.649  1.00  0.00
C
ATOM   2471  O   ASN   151      53.214 -11.436  -1.270  1.00  0.00
O
ATOM   2472  CB  ASN   151      52.747 -11.844   1.760  1.00  0.00
C
ATOM   2473 1HB  ASN   151      52.679 -12.562   2.574  1.00  0.00
H
ATOM   2474 2HB  ASN   151      53.794 -11.706   1.497  1.00  0.00
H
ATOM   2475  CG  ASN   151      52.200 -10.530   2.229  1.00  0.00
C
ATOM   2476  OD1 ASN   151      52.553  -9.478   1.721  1.00  0.00
O
ATOM   2477  ND2 ASN   151      51.324 -10.574   3.183  1.00  0.00
N
ATOM   2478 1HD2 ASN   151      50.875  -9.716   3.474  1.00  0.00
H
ATOM   2479 2HD2 ASN   151      51.120 -11.444   3.655  1.00  0.00
H
ATOM   2480  N   GLY   152      51.126 -10.697  -1.004  1.00  0.00
N
ATOM   2481  H   GLY   152      50.266 -10.707  -0.473  1.00  0.00
H
ATOM   2482  CA  GLY   152      51.186  -9.843  -2.178  1.00  0.00
C
ATOM   2483 1HA  GLY   152      51.775  -8.953  -1.962  1.00  0.00
H
ATOM   2484 2HA  GLY   152      51.633 -10.386  -3.009  1.00  0.00
H
ATOM   2485  C   GLY   152      49.777  -9.440  -2.545  1.00  0.00
C
ATOM   2486  O   GLY   152      48.898  -9.535  -1.687  1.00  0.00
O
ATOM   2487  N   SER   153      49.527  -9.048  -3.783  1.00  0.00
N
ATOM   2488  H   SER   153      50.282  -9.005  -4.464  1.00  0.00
H
ATOM   2489  CA  SER   153      48.170  -8.731  -4.226  1.00  0.00
C
ATOM   2490  HA  SER   153      47.466  -8.984  -3.439  1.00  0.00
H
ATOM   2491  C   SER   153      47.825  -9.566  -5.447  1.00  0.00
C
ATOM   2492  O   SER   153      48.702  -9.906  -6.244  1.00  0.00
O
ATOM   2493  CB  SER   153      48.032  -7.243  -4.539  1.00  0.00
C
ATOM   2494 1HB  SER   153      48.635  -7.002  -5.411  1.00  0.00
H
ATOM   2495 2HB  SER   153      46.988  -7.010  -4.751  1.00  0.00
H
ATOM   2496  OG  SER   153      48.487  -6.472  -3.440  1.00  0.00
O
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ATOM   2497  HG  SER   153      49.453  -6.396  -3.512  1.00  0.00
H
ATOM   2498  N   TYR   154      46.555  -9.909  -5.574  1.00  0.00
N
ATOM   2499  H   TYR   154      45.885  -9.601  -4.875  1.00  0.00
H
ATOM   2500  CA  TYR   154      46.041 -10.701  -6.688  1.00  0.00
C
ATOM   2501  HA  TYR   154      46.684 -10.610  -7.562  1.00  0.00
H
ATOM   2502  C   TYR   154      44.670 -10.120  -6.979  1.00  0.00
C
ATOM   2503  O   TYR   154      44.043  -9.563  -6.072  1.00  0.00
O
ATOM   2504  CB  TYR   154      45.892 -12.175  -6.293  1.00  0.00
C
ATOM   2505 1HB  TYR   154      45.246 -12.242  -5.418  1.00  0.00
H
ATOM   2506 2HB  TYR   154      45.412 -12.708  -7.114  1.00  0.00
H
ATOM   2507  CG  TYR   154      47.206 -12.861  -5.987  1.00  0.00
C
ATOM   2508  CD1 TYR   154      47.763 -12.827  -4.688  1.00  0.00
C
ATOM   2509  HD1 TYR   154      47.241 -12.312  -3.895  1.00  0.00
H
ATOM   2510  CD2 TYR   154      47.902 -13.554  -6.997  1.00  0.00
C
ATOM   2511  HD2 TYR   154      47.498 -13.594  -8.000  1.00  0.00
H
ATOM   2512  CE1 TYR   154      49.002 -13.464  -4.410  1.00  0.00
C
ATOM   2513  HE1 TYR   154      49.426 -13.427  -3.417  1.00  0.00
H
ATOM   2514  CE2 TYR   154      49.126 -14.214  -6.714  1.00  0.00
C
ATOM   2515  HE2 TYR   154      49.640 -14.756  -7.494  1.00  0.00
H
ATOM   2516  CZ  TYR   154      49.663 -14.156  -5.426  1.00  0.00
C
ATOM   2517  OH  TYR   154      50.845 -14.784  -5.141  1.00  0.00
O
ATOM   2518  HH  TYR   154      51.103 -15.416  -5.830  1.00  0.00
H
ATOM   2519  N   CYS   155      44.185 -10.244  -8.202  1.00  0.00
N
ATOM   2520  H   CYS   155      44.758 -10.624  -8.947  1.00  0.00
H
ATOM   2521  CA  CYS   155      42.787  -9.935  -8.477  1.00  0.00
C
ATOM   2522  HA  CYS   155      42.484  -9.043  -7.927  1.00  0.00
H
ATOM   2523  C   CYS   155      42.007 -11.146  -7.974  1.00  0.00
C
ATOM   2524  O   CYS   155      42.516 -12.268  -8.040  1.00  0.00
O
ATOM   2525  CB  CYS   155      42.592  -9.712  -9.973  1.00  0.00
C
ATOM   2526 1HB  CYS   155      42.851 -10.627 -10.506  1.00  0.00
H
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ATOM   2527 2HB  CYS   155      41.546  -9.471 -10.168  1.00  0.00
H
ATOM   2528  SG  CYS   155      43.642  -8.367 -10.564  1.00  0.00
S
ATOM   2529  HG  CYS   155      43.194  -8.347 -11.830  1.00  0.00
H
ATOM   2530  N   MET   156      40.812 -10.947  -7.440  1.00  0.00
N
ATOM   2531  H   MET   156      40.388 -10.024  -7.451  1.00  0.00
H
ATOM   2532  CA  MET   156      40.092 -12.038  -6.785  1.00  0.00
C
ATOM   2533  HA  MET   156      40.334 -12.976  -7.285  1.00  0.00
H
ATOM   2534  C   MET   156      38.585 -11.852  -6.883  1.00  0.00
C
ATOM   2535  O   MET   156      38.084 -10.734  -6.762  1.00  0.00
O
ATOM   2536  CB  MET   156      40.538 -12.147  -5.318  1.00  0.00
C
ATOM   2537 1HB  MET   156      39.791 -12.713  -4.763  1.00  0.00
H
ATOM   2538 2HB  MET   156      41.468 -12.713  -5.305  1.00  0.00
H
ATOM   2539  CG  MET   156      40.786 -10.825  -4.596  1.00  0.00
C
ATOM   2540 1HG  MET   156      41.534 -10.251  -5.143  1.00  0.00
H
ATOM   2541 2HG  MET   156      39.856 -10.256  -4.575  1.00  0.00
H
ATOM   2542  SD  MET   156      41.381 -11.036  -2.902  1.00  0.00
S
ATOM   2543  CE  MET   156      43.042 -11.743  -3.117  1.00  0.00
C
ATOM   2544 1HE  MET   156      43.530 -11.818  -2.145  1.00  0.00
H
ATOM   2545 2HE  MET   156      43.633 -11.103  -3.771  1.00  0.00
H
ATOM   2546 3HE  MET   156      42.967 -12.739  -3.555  1.00  0.00
H
ATOM   2547  N   ASN   157      37.873 -12.941  -7.139  1.00  0.00
N
ATOM   2548  H   ASN   157      38.336 -13.839  -7.245  1.00  0.00
H
ATOM   2549  CA  ASN   157      36.416 -12.958  -7.233  1.00  0.00
C
ATOM   2550  HA  ASN   157      35.976 -12.428  -6.387  1.00  0.00
H
ATOM   2551  C   ASN   157      36.053 -14.432  -7.187  1.00  0.00
C
ATOM   2552  O   ASN   157      36.960 -15.261  -7.207  1.00  0.00
O
ATOM   2553  CB  ASN   157      35.908 -12.372  -8.556  1.00  0.00
C
ATOM   2554 1HB  ASN   157      36.456 -11.457  -8.773  1.00  0.00
H
ATOM   2555 2HB  ASN   157      36.082 -13.086  -9.360  1.00  0.00
H
ATOM   2556  CG  ASN   157      34.442 -12.030  -8.496  1.00  0.00
C
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ATOM   2557  OD1 ASN   157      33.970 -11.551  -7.475  1.00  0.00
O
ATOM   2558  ND2 ASN   157      33.712 -12.295  -9.530  1.00  0.00
N
ATOM   2559 1HD2 ASN   157      32.747 -11.998  -9.518  1.00  0.00
H
ATOM   2560 2HD2 ASN   157      34.096 -12.742 -10.350  1.00  0.00
H
ATOM   2561  N   PHE   158      34.770 -14.760  -7.200  1.00  0.00
N
ATOM   2562  H   PHE   158      34.059 -14.042  -7.187  1.00  0.00
H
ATOM   2563  CA  PHE   158      34.330 -16.144  -7.313  1.00  0.00
C
ATOM   2564  HA  PHE   158      35.183 -16.812  -7.210  1.00  0.00
H
ATOM   2565  C   PHE   158      33.724 -16.301  -8.701  1.00  0.00
C
ATOM   2566  O   PHE   158      33.029 -15.399  -9.167  1.00  0.00
O
ATOM   2567  CB  PHE   158      33.305 -16.443  -6.219  1.00  0.00
C
ATOM   2568 1HB  PHE   158      32.389 -15.900  -6.448  1.00  0.00
H
ATOM   2569 2HB  PHE   158      33.082 -17.510  -6.222  1.00  0.00
H
ATOM   2570  CG  PHE   158      33.759 -16.023  -4.845  1.00  0.00
C
ATOM   2571  CD1 PHE   158      32.927 -15.229  -4.036  1.00  0.00
C
ATOM   2572  HD1 PHE   158      31.951 -14.930  -4.393  1.00  0.00
H
ATOM   2573  CD2 PHE   158      35.033 -16.379  -4.365  1.00  0.00
C
ATOM   2574  HD2 PHE   158      35.695 -16.968  -4.982  1.00  0.00
H
ATOM   2575  CE1 PHE   158      33.357 -14.799  -2.757  1.00  0.00
C
ATOM   2576  HE1 PHE   158      32.715 -14.180  -2.148  1.00  0.00
H
ATOM   2577  CE2 PHE   158      35.471 -15.963  -3.087  1.00  0.00
C
ATOM   2578  HE2 PHE   158      36.450 -16.244  -2.732  1.00  0.00
H
ATOM   2579  CZ  PHE   158      34.630 -15.171  -2.283  1.00  0.00
C
ATOM   2580  HZ  PHE   158      34.962 -14.842  -1.312  1.00  0.00
H
ATOM   2581  N   SER   159      34.001 -17.402  -9.377  1.00  0.00
N
ATOM   2582  H   SER   159      34.588 -18.116  -8.973  1.00  0.00
H
ATOM   2583  CA  SER   159      33.497 -17.645 -10.724  1.00  0.00
C
ATOM   2584  HA  SER   159      33.614 -16.752 -11.338  1.00  0.00
H
ATOM   2585  C   SER   159      32.024 -18.061 -10.722  1.00  0.00
C
ATOM   2586  O   SER   159      31.429 -18.300  -9.663  1.00  0.00
O
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ATOM   2587  CB  SER   159      34.341 -18.764 -11.310  1.00  0.00
C
ATOM   2588 1HB  SER   159      33.989 -19.024 -12.304  1.00  0.00
H
ATOM   2589 2HB  SER   159      35.379 -18.441 -11.368  1.00  0.00
H
ATOM   2590  OG  SER   159      34.249 -19.874 -10.445  1.00  0.00
O
ATOM   2591  HG  SER   159      34.834 -20.568 -10.761  1.00  0.00
H
ATOM   2592  N   HIS   160      31.417 -18.132 -11.899  1.00  0.00
N
ATOM   2593  H   HIS   160      31.937 -17.879 -12.735  1.00  0.00
H
ATOM   2594  CA  HIS   160      30.010 -18.531 -12.030  1.00  0.00
C
ATOM   2595  HA  HIS   160      29.436 -18.045 -11.242  1.00  0.00
H
ATOM   2596  C   HIS   160      29.782 -20.035 -11.926  1.00  0.00
C
ATOM   2597  O   HIS   160      28.774 -20.499 -11.393  1.00  0.00
O
ATOM   2598  CB  HIS   160      29.486 -18.058 -13.384  1.00  0.00
C
ATOM   2599 1HB  HIS   160      30.012 -18.592 -14.176  1.00  0.00
H
ATOM   2600 2HB  HIS   160      28.424 -18.300 -13.450  1.00  0.00
H
ATOM   2601  CG  HIS   160      29.671 -16.591 -13.602  1.00  0.00
C
ATOM   2602  ND1 HIS   160      29.136 -15.622 -12.764  1.00  0.00
N
ATOM   2603  HD1 HIS   160      28.548 -15.807 -11.952  1.00  0.00
H
ATOM   2604  CD2 HIS   160      30.390 -15.900 -14.521  1.00  0.00
C
ATOM   2605  HD2 HIS   160      30.966 -16.334 -15.330  1.00  0.00
H
ATOM   2606  CE1 HIS   160      29.532 -14.427 -13.173  1.00  0.00
C
ATOM   2607  HE1 HIS   160      29.292 -13.483 -12.693  1.00  0.00
H
ATOM   2608  NE2 HIS   160      30.274 -14.569 -14.244  1.00  0.00
N
ATOM   2609  HE2 HIS   160      30.684 -13.807 -14.785  1.00  0.00
H
ATOM   2610  N   GLU   161      30.727 -20.784 -12.463  1.00  0.00
N
ATOM   2611  H   GLU   161      31.497 -20.318 -12.931  1.00  0.00
H
ATOM   2612  CA  GLU   161      30.751 -22.244 -12.412  1.00  0.00
C
ATOM   2613  HA  GLU   161      29.791 -22.640 -12.742  1.00  0.00
H
ATOM   2614  C   GLU   161      30.989 -22.680 -10.961  1.00  0.00
C
ATOM   2615  O   GLU   161      31.447 -21.861 -10.159  1.00  0.00
O
ATOM   2616  CB  GLU   161      31.851 -22.758 -13.360  1.00  0.00
C
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ATOM   2617 1HB  GLU   161      31.966 -23.829 -13.204  1.00  0.00
H
ATOM   2618 2HB  GLU   161      31.510 -22.610 -14.383  1.00  0.00
H
ATOM   2619  CG  GLU   161      33.229 -22.102 -13.236  1.00  0.00
C
ATOM   2620 1HG  GLU   161      33.368 -21.731 -12.221  1.00  0.00
H
ATOM   2621 2HG  GLU   161      33.985 -22.864 -13.424  1.00  0.00
H
ATOM   2622  CD  GLU   161      33.442 -20.963 -14.236  1.00  0.00
C
ATOM   2623  OE1 GLU   161      32.736 -19.931 -14.175  1.00  0.00
O
ATOM   2624  OE2 GLU   161      34.339 -21.065 -15.092  1.00  0.00
O
ATOM   2625  N   PRO   162      30.653 -23.934 -10.588  1.00  0.00
N
ATOM   2626  CA  PRO   162      30.894 -24.304  -9.184  1.00  0.00
C
ATOM   2627  HA  PRO   162      30.250 -23.714  -8.533  1.00  0.00
H
ATOM   2628  C   PRO   162      32.348 -24.130  -8.767  1.00  0.00
C
ATOM   2629  O   PRO   162      33.271 -24.404  -9.545  1.00  0.00
O
ATOM   2630  CB  PRO   162      30.503 -25.784  -9.137  1.00  0.00
C
ATOM   2631 1HB  PRO   162      31.378 -26.407  -9.319  1.00  0.00
H
ATOM   2632 2HB  PRO   162      30.048 -26.037  -8.180  1.00  0.00
H
ATOM   2633  CG  PRO   162      29.536 -25.936 -10.235  1.00  0.00
C
ATOM   2634 1HG  PRO   162      29.475 -26.974 -10.556  1.00  0.00
H
ATOM   2635 2HG  PRO   162      28.559 -25.574  -9.917  1.00  0.00
H
ATOM   2636  CD  PRO   162      30.073 -25.068 -11.331  1.00  0.00
C
ATOM   2637 1HD  PRO   162      30.851 -25.590 -11.888  1.00  0.00
H
ATOM   2638 2HD  PRO   162      29.268 -24.744 -11.991  1.00  0.00
H
ATOM   2639  N   PHE   163      32.545 -23.609  -7.565  1.00  0.00
N
ATOM   2640  H   PHE   163      31.761 -23.495  -6.935  1.00  0.00
H
ATOM   2641  CA  PHE   163      33.852 -23.127  -7.134  1.00  0.00
C
ATOM   2642  HA  PHE   163      34.616 -23.848  -7.421  1.00  0.00
H
ATOM   2643  C   PHE   163      33.879 -22.929  -5.625  1.00  0.00
C
ATOM   2644  O   PHE   163      33.360 -21.933  -5.114  1.00  0.00
O
ATOM   2645  CB  PHE   163      34.117 -21.792  -7.838  1.00  0.00
C
ATOM   2646 1HB  PHE   163      34.015 -21.952  -8.909  1.00  0.00
H
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ATOM   2647 2HB  PHE   163      33.361 -21.067  -7.538  1.00  0.00
H
ATOM   2648  CG  PHE   163      35.483 -21.204  -7.597  1.00  0.00
C
ATOM   2649  CD1 PHE   163      36.650 -21.994  -7.648  1.00  0.00
C
ATOM   2650  HD1 PHE   163      36.582 -23.066  -7.768  1.00  0.00
H
ATOM   2651  CD2 PHE   163      35.607 -19.815  -7.425  1.00  0.00
C
ATOM   2652  HD2 PHE   163      34.718 -19.208  -7.345  1.00  0.00
H
ATOM   2653  CE1 PHE   163      37.928 -21.388  -7.604  1.00  0.00
C
ATOM   2654  HE1 PHE   163      38.817 -21.991  -7.697  1.00  0.00
H
ATOM   2655  CE2 PHE   163      36.881 -19.197  -7.385  1.00  0.00
C
ATOM   2656  HE2 PHE   163      36.968 -18.123  -7.289  1.00  0.00
H
ATOM   2657  CZ  PHE   163      38.038 -19.990  -7.482  1.00  0.00
C
ATOM   2658  HZ  PHE   163      39.008 -19.528  -7.472  1.00  0.00
H
ATOM   2659  N   LYS   164      34.469 -23.873  -4.906  1.00  0.00
N
ATOM   2660  H   LYS   164      34.797 -24.720  -5.370  1.00  0.00
H
ATOM   2661  CA  LYS   164      34.725 -23.692  -3.476  1.00  0.00
C
ATOM   2662  HA  LYS   164      33.814 -23.384  -2.966  1.00  0.00
H
ATOM   2663  C   LYS   164      35.748 -22.570  -3.359  1.00  0.00
C
ATOM   2664  O   LYS   164      36.870 -22.728  -3.837  1.00  0.00
O
ATOM   2665  CB  LYS   164      35.292 -24.982  -2.866  1.00  0.00
C
ATOM   2666 1HB  LYS   164      36.049 -25.376  -3.546  1.00  0.00
H
ATOM   2667 2HB  LYS   164      35.788 -24.734  -1.933  1.00  0.00
H
ATOM   2668  CG  LYS   164      34.279 -26.087  -2.569  1.00  0.00
C
ATOM   2669 1HG  LYS   164      33.703 -26.309  -3.467  1.00  0.00
H
ATOM   2670 2HG  LYS   164      34.822 -26.982  -2.268  1.00  0.00
H
ATOM   2671  CD  LYS   164      33.330 -25.692  -1.436  1.00  0.00
C
ATOM   2672 1HD  LYS   164      33.914 -25.359  -0.578  1.00  0.00
H
ATOM   2673 2HD  LYS   164      32.696 -24.873  -1.772  1.00  0.00
H
ATOM   2674  CE  LYS   164      32.448 -26.855  -1.004  1.00  0.00
C
ATOM   2675 1HE  LYS   164      31.905 -27.230  -1.873  1.00  0.00
H
ATOM   2676 2HE  LYS   164      33.078 -27.657  -0.614  1.00  0.00
H
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ATOM   2677  NZ  LYS   164      31.454 -26.455   0.042  1.00  0.00
N
ATOM   2678 1HZ  LYS   164      30.976 -27.279   0.392  1.00  0.00
H
ATOM   2679 2HZ  LYS   164      30.775 -25.818  -0.357  1.00  0.00
H
ATOM   2680 3HZ  LYS   164      31.920 -25.991   0.813  1.00  0.00
H
ATOM   2681  N   ALA   165      35.359 -21.446  -2.767  1.00  0.00
N
ATOM   2682  H   ALA   165      34.412 -21.364  -2.413  1.00  0.00
H
ATOM   2683  CA  ALA   165      36.249 -20.297  -2.633  1.00  0.00
C
ATOM   2684  HA  ALA   165      37.245 -20.686  -2.462  1.00  0.00
H
ATOM   2685  C   ALA   165      35.931 -19.343  -1.468  1.00  0.00
C
ATOM   2686  O   ALA   165      34.811 -19.308  -0.954  1.00  0.00
O
ATOM   2687  CB  ALA   165      36.270 -19.533  -3.947  1.00  0.00
C
ATOM   2688 1HB  ALA   165      36.617 -20.196  -4.740  1.00  0.00
H
ATOM   2689 2HB  ALA   165      36.954 -18.687  -3.878  1.00  0.00
H
ATOM   2690 3HB  ALA   165      35.264 -19.185  -4.187  1.00  0.00
H
ATOM   2691  N   LEU   166      36.925 -18.562  -1.065  1.00  0.00
N
ATOM   2692  H   LEU   166      37.836 -18.655  -1.508  1.00  0.00
H
ATOM   2693  CA  LEU   166      36.798 -17.524  -0.034  1.00  0.00
C
ATOM   2694  HA  LEU   166      35.854 -16.989  -0.130  1.00  0.00
H
ATOM   2695  C   LEU   166      37.988 -16.603  -0.282  1.00  0.00
C
ATOM   2696  O   LEU   166      38.951 -17.080  -0.877  1.00  0.00
O
ATOM   2697  CB  LEU   166      36.950 -18.119   1.374  1.00  0.00
C
ATOM   2698 1HB  LEU   166      36.345 -19.022   1.443  1.00  0.00
H
ATOM   2699 2HB  LEU   166      37.993 -18.414   1.493  1.00  0.00
H
ATOM   2700  CG  LEU   166      36.571 -17.200   2.551  1.00  0.00
C
ATOM   2701  HG  LEU   166      36.985 -16.212   2.381  1.00  0.00
H
ATOM   2702  CD1 LEU   166      35.063 -17.059   2.699  1.00  0.00
C
ATOM   2703 1HD1 LEU   166      34.837 -16.386   3.526  1.00  0.00
H
ATOM   2704 2HD1 LEU   166      34.610 -18.031   2.895  1.00  0.00
H
ATOM   2705 3HD1 LEU   166      34.636 -16.636   1.790  1.00  0.00
H
ATOM   2706  CD2 LEU   166      37.171 -17.700   3.834  1.00  0.00
C
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ATOM   2707 1HD2 LEU   166      36.943 -17.008   4.641  1.00  0.00
H
ATOM   2708 2HD2 LEU   166      38.253 -17.781   3.731  1.00  0.00
H
ATOM   2709 3HD2 LEU   166      36.760 -18.673   4.080  1.00  0.00
H
ATOM   2710  N   HIS   167      37.977 -15.379   0.233  1.00  0.00
N
ATOM   2711  H   HIS   167      37.090 -14.970   0.520  1.00  0.00
H
ATOM   2712  CA  HIS   167      39.195 -14.628   0.554  1.00  0.00
C
ATOM   2713  HA  HIS   167      39.967 -15.344   0.823  1.00  0.00
H
ATOM   2714  C   HIS   167      38.998 -13.686   1.755  1.00  0.00
C
ATOM   2715  O   HIS   167      37.927 -13.088   1.898  1.00  0.00
O
ATOM   2716  CB  HIS   167      39.669 -13.831  -0.669  1.00  0.00
C
ATOM   2717 1HB  HIS   167      40.621 -13.355  -0.433  1.00  0.00
H
ATOM   2718 2HB  HIS   167      39.829 -14.525  -1.492  1.00  0.00
H
ATOM   2719  CG  HIS   167      38.703 -12.785  -1.127  1.00  0.00
C
ATOM   2720  ND1 HIS   167      38.763 -11.465  -0.754  1.00  0.00
N
ATOM   2721  HD1 HIS   167      39.456 -11.057  -0.132  1.00  0.00
H
ATOM   2722  CD2 HIS   167      37.636 -12.866  -1.964  1.00  0.00
C
ATOM   2723  HD2 HIS   167      37.295 -13.772  -2.442  1.00  0.00
H
ATOM   2724  CE1 HIS   167      37.764 -10.818  -1.351  1.00  0.00
C
ATOM   2725  HE1 HIS   167      37.564  -9.761  -1.232  1.00  0.00
H
ATOM   2726  NE2 HIS   167      37.052 -11.628  -2.109  1.00  0.00
N
ATOM   2727  N   PHE   168      40.003 -13.561   2.618  1.00  0.00
N
ATOM   2728  H   PHE   168      40.810 -14.176   2.528  1.00  0.00
H
ATOM   2729  CA  PHE   168      40.057 -12.560   3.697  1.00  0.00
C
ATOM   2730  HA  PHE   168      39.737 -11.596   3.301  1.00  0.00
H
ATOM   2731  C   PHE   168      41.522 -12.454   4.140  1.00  0.00
C
ATOM   2732  O   PHE   168      42.344 -13.230   3.657  1.00  0.00
O
ATOM   2733  CB  PHE   168      39.143 -12.912   4.885  1.00  0.00
C
ATOM   2734 1HB  PHE   168      39.069 -12.040   5.535  1.00  0.00
H
ATOM   2735 2HB  PHE   168      38.144 -13.130   4.510  1.00  0.00
H
ATOM   2736  CG  PHE   168      39.608 -14.076   5.722  1.00  0.00
C
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ATOM   2737  CD1 PHE   168      40.169 -13.851   6.993  1.00  0.00
C
ATOM   2738  HD1 PHE   168      40.321 -12.840   7.343  1.00  0.00
H
ATOM   2739  CD2 PHE   168      39.425 -15.397   5.283  1.00  0.00
C
ATOM   2740  HD2 PHE   168      39.015 -15.582   4.301  1.00  0.00
H
ATOM   2741  CE1 PHE   168      40.520 -14.934   7.835  1.00  0.00
C
ATOM   2742  HE1 PHE   168      40.939 -14.746   8.813  1.00  0.00
H
ATOM   2743  CE2 PHE   168      39.759 -16.493   6.119  1.00  0.00
C
ATOM   2744  HE2 PHE   168      39.605 -17.507   5.775  1.00  0.00
H
ATOM   2745  CZ  PHE   168      40.312 -16.259   7.397  1.00  0.00
C
ATOM   2746  HZ  PHE   168      40.583 -17.091   8.031  1.00  0.00
H
ATOM   2747  N   LYS   169      41.875 -11.540   5.039  1.00  0.00
N
ATOM   2748  H   LYS   169      41.167 -10.926   5.438  1.00  0.00
H
ATOM   2749  CA  LYS   169      43.263 -11.381   5.503  1.00  0.00
C
ATOM   2750  HA  LYS   169      43.886 -12.172   5.089  1.00  0.00
H
ATOM   2751  C   LYS   169      43.398 -11.436   7.018  1.00  0.00
C
ATOM   2752  O   LYS   169      42.428 -11.216   7.744  1.00  0.00
O
ATOM   2753  CB  LYS   169      43.818 -10.032   5.039  1.00  0.00
C
ATOM   2754 1HB  LYS   169      43.133  -9.247   5.359  1.00  0.00
H
ATOM   2755 2HB  LYS   169      44.780  -9.867   5.523  1.00  0.00
H
ATOM   2756  CG  LYS   169      44.032  -9.920   3.550  1.00  0.00
C
ATOM   2757 1HG  LYS   169      44.686 -10.730   3.234  1.00  0.00
H
ATOM   2758 2HG  LYS   169      43.077 -10.002   3.031  1.00  0.00
H
ATOM   2759  CD  LYS   169      44.684  -8.596   3.204  1.00  0.00
C
ATOM   2760 1HD  LYS   169      44.042  -7.784   3.543  1.00  0.00
H
ATOM   2761 2HD  LYS   169      45.647  -8.524   3.712  1.00  0.00
H
ATOM   2762  CE  LYS   169      44.898  -8.476   1.710  1.00  0.00
C
ATOM   2763 1HE  LYS   169      45.585  -9.259   1.385  1.00  0.00
H
ATOM   2764 2HE  LYS   169      43.943  -8.617   1.200  1.00  0.00
H
ATOM   2765  NZ  LYS   169      45.459  -7.139   1.335  1.00  0.00
N
ATOM   2766 1HZ  LYS   169      45.707  -7.139   0.354  1.00  0.00
H
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ATOM   2767 2HZ  LYS   169      46.291  -6.943   1.879  1.00  0.00
H
ATOM   2768 3HZ  LYS   169      44.765  -6.418   1.493  1.00  0.00
H
ATOM   2769  N   TYR   170      44.614 -11.696   7.475  1.00  0.00
N
ATOM   2770  H   TYR   170      45.356 -11.903   6.814  1.00  0.00
H
ATOM   2771  CA  TYR   170      44.981 -11.644   8.890  1.00  0.00
C
ATOM   2772  HA  TYR   170      44.420 -10.868   9.408  1.00  0.00
H
ATOM   2773  C   TYR   170      46.474 -11.350   8.928  1.00  0.00
C
ATOM   2774  O   TYR   170      47.240 -12.149   8.400  1.00  0.00
O
ATOM   2775  CB  TYR   170      44.744 -13.011   9.535  1.00  0.00
C
ATOM   2776 1HB  TYR   170      43.681 -13.247   9.491  1.00  0.00
H
ATOM   2777 2HB  TYR   170      45.278 -13.735   8.927  1.00  0.00
H
ATOM   2778  CG  TYR   170      45.232 -13.175  10.968  1.00  0.00
C
ATOM   2779  CD1 TYR   170      44.330 -13.121  12.049  1.00  0.00
C
ATOM   2780  HD1 TYR   170      43.278 -12.961  11.863  1.00  0.00
H
ATOM   2781  CD2 TYR   170      46.594 -13.430  11.250  1.00  0.00
C
ATOM   2782  HD2 TYR   170      47.305 -13.520  10.441  1.00  0.00
H
ATOM   2783  CE1 TYR   170      44.785 -13.290  13.388  1.00  0.00
C
ATOM   2784  HE1 TYR   170      44.082 -13.263  14.206  1.00  0.00
H
ATOM   2785  CE2 TYR   170      47.052 -13.565  12.584  1.00  0.00
C
ATOM   2786  HE2 TYR   170      48.100 -13.728  12.783  1.00  0.00
H
ATOM   2787  CZ  TYR   170      46.144 -13.500  13.640  1.00  0.00
C
ATOM   2788  OH  TYR   170      46.604 -13.661  14.924  1.00  0.00
O
ATOM   2789  HH  TYR   170      45.891 -13.628  15.571  1.00  0.00
H
ATOM   2790  N   GLY   171      46.909 -10.260   9.544  1.00  0.00
N
ATOM   2791  H   GLY   171      46.240  -9.607   9.935  1.00  0.00
H
ATOM   2792  CA  GLY   171      48.337 -10.002   9.700  1.00  0.00
C
ATOM   2793 1HA  GLY   171      48.478  -8.991  10.084  1.00  0.00
H
ATOM   2794 2HA  GLY   171      48.707 -10.695  10.452  1.00  0.00
H
ATOM   2795  C   GLY   171      49.155 -10.157   8.420  1.00  0.00
C
ATOM   2796  O   GLY   171      48.722  -9.654   7.379  1.00  0.00
O
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ATOM   2797  N   PRO   172      50.295 -10.881   8.412  1.00  0.00
N
ATOM   2798  CA  PRO   172      51.062 -11.089   7.172  1.00  0.00
C
ATOM   2799  HA  PRO   172      51.174 -10.148   6.633  1.00  0.00
H
ATOM   2800  C   PRO   172      50.490 -12.155   6.222  1.00  0.00
C
ATOM   2801  O   PRO   172      51.152 -12.586   5.272  1.00  0.00
O
ATOM   2802  CB  PRO   172      52.423 -11.540   7.712  1.00  0.00
C
ATOM   2803 1HB  PRO   172      52.968 -12.137   6.981  1.00  0.00
H
ATOM   2804 2HB  PRO   172      53.017 -10.676   8.011  1.00  0.00
H
ATOM   2805  CG  PRO   172      52.065 -12.350   8.895  1.00  0.00
C
ATOM   2806 1HG  PRO   172      51.712 -13.332   8.581  1.00  0.00
H
ATOM   2807 2HG  PRO   172      52.915 -12.449   9.571  1.00  0.00
H
ATOM   2808  CD  PRO   172      50.948 -11.570   9.546  1.00  0.00
C
ATOM   2809 1HD  PRO   172      50.255 -12.246  10.049  1.00  0.00
H
ATOM   2810 2HD  PRO   172      51.353 -10.838  10.247  1.00  0.00
H
ATOM   2811  N   TYR   173      49.280 -12.625   6.486  1.00  0.00
N
ATOM   2812  H   TYR   173      48.738 -12.232   7.251  1.00  0.00
H
ATOM   2813  CA  TYR   173      48.657 -13.706   5.732  1.00  0.00
C
ATOM   2814  HA  TYR   173      49.372 -14.131   5.029  1.00  0.00
H
ATOM   2815  C   TYR   173      47.420 -13.243   4.970  1.00  0.00
C
ATOM   2816  O   TYR   173      46.748 -12.276   5.341  1.00  0.00
O
ATOM   2817  CB  TYR   173      48.227 -14.792   6.713  1.00  0.00
C
ATOM   2818 1HB  TYR   173      48.546 -14.505   7.715  1.00  0.00
H
ATOM   2819 2HB  TYR   173      47.138 -14.852   6.711  1.00  0.00
H
ATOM   2820  CG  TYR   173      48.788 -16.157   6.404  1.00  0.00
C
ATOM   2821  CD1 TYR   173      48.448 -16.832   5.212  1.00  0.00
C
ATOM   2822  HD1 TYR   173      47.791 -16.374   4.498  1.00  0.00
H
ATOM   2823  CD2 TYR   173      49.609 -16.818   7.337  1.00  0.00
C
ATOM   2824  HD2 TYR   173      49.855 -16.335   8.270  1.00  0.00
H
ATOM   2825  CE1 TYR   173      48.913 -18.138   4.962  1.00  0.00
C
ATOM   2826  HE1 TYR   173      48.625 -18.662   4.064  1.00  0.00
H
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ATOM   2827  CE2 TYR   173      50.093 -18.122   7.076  1.00  0.00
C
ATOM   2828  HE2 TYR   173      50.715 -18.631   7.795  1.00  0.00
H
ATOM   2829  CZ  TYR   173      49.742 -18.759   5.889  1.00  0.00
C
ATOM   2830  OH  TYR   173      50.209 -20.004   5.598  1.00  0.00
O
ATOM   2831  HH  TYR   173      50.941 -20.272   6.178  1.00  0.00
H
ATOM   2832  N   ILE   174      47.099 -13.976   3.916  1.00  0.00
N
ATOM   2833  H   ILE   174      47.691 -14.746   3.645  1.00  0.00
H
ATOM   2834  CA  ILE   174      45.884 -13.777   3.136  1.00  0.00
C
ATOM   2835  HA  ILE   174      45.200 -13.104   3.650  1.00  0.00
H
ATOM   2836  C   ILE   174      45.346 -15.204   3.114  1.00  0.00
C
ATOM   2837  O   ILE   174      46.101 -16.127   2.790  1.00  0.00
O
ATOM   2838  CB  ILE   174      46.177 -13.271   1.693  1.00  0.00
C
ATOM   2839  HB  ILE   174      46.634 -14.089   1.140  1.00  0.00
H
ATOM   2840  CG1 ILE   174      47.181 -12.099   1.698  1.00  0.00
C
ATOM   2841 1HG1 ILE   174      46.699 -11.222   2.130  1.00  0.00
H
ATOM   2842 2HG1 ILE   174      48.038 -12.350   2.320  1.00  0.00
H
ATOM   2843  CG2 ILE   174      44.863 -12.857   0.982  1.00  0.00
C
ATOM   2844 1HG2 ILE   174      45.027 -12.789  -0.094  1.00  0.00
H
ATOM   2845 2HG2 ILE   174      44.512 -11.893   1.350  1.00  0.00
H
ATOM   2846 3HG2 ILE   174      44.081 -13.591   1.169  1.00  0.00
H
ATOM   2847  CD1 ILE   174      47.732 -11.737   0.335  1.00  0.00
C
ATOM   2848 1HD1 ILE   174      48.460 -10.937   0.456  1.00  0.00
H
ATOM   2849 2HD1 ILE   174      46.934 -11.390  -0.321  1.00  0.00
H
ATOM   2850 3HD1 ILE   174      48.223 -12.603  -0.113  1.00  0.00
H
ATOM   2851  N   PHE   175      44.104 -15.408   3.516  1.00  0.00
N
ATOM   2852  H   PHE   175      43.499 -14.610   3.704  1.00  0.00
H
ATOM   2853  CA  PHE   175      43.531 -16.737   3.695  1.00  0.00
C
ATOM   2854  HA  PHE   175      44.276 -17.505   3.502  1.00  0.00
H
ATOM   2855  C   PHE   175      42.388 -16.921   2.710  1.00  0.00
C
ATOM   2856  O   PHE   175      41.592 -16.009   2.503  1.00  0.00
O
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ATOM   2857  CB  PHE   175      43.010 -16.875   5.121  1.00  0.00
C
ATOM   2858 1HB  PHE   175      42.335 -16.046   5.321  1.00  0.00
H
ATOM   2859 2HB  PHE   175      42.445 -17.803   5.192  1.00  0.00
H
ATOM   2860  CG  PHE   175      44.085 -16.894   6.178  1.00  0.00
C
ATOM   2861  CD1 PHE   175      45.206 -17.733   6.056  1.00  0.00
C
ATOM   2862  HD1 PHE   175      45.356 -18.305   5.155  1.00  0.00
H
ATOM   2863  CD2 PHE   175      43.942 -16.132   7.348  1.00  0.00
C
ATOM   2864  HD2 PHE   175      43.103 -15.463   7.457  1.00  0.00
H
ATOM   2865  CE1 PHE   175      46.132 -17.868   7.114  1.00  0.00
C
ATOM   2866  HE1 PHE   175      46.965 -18.549   7.022  1.00  0.00
H
ATOM   2867  CE2 PHE   175      44.875 -16.256   8.407  1.00  0.00
C
ATOM   2868  HE2 PHE   175      44.726 -15.714   9.326  1.00  0.00
H
ATOM   2869  CZ  PHE   175      45.980 -17.108   8.279  1.00  0.00
C
ATOM   2870  HZ  PHE   175      46.697 -17.193   9.082  1.00  0.00
H
ATOM   2871  N   LEU   176      42.361 -18.070   2.051  1.00  0.00
N
ATOM   2872  H   LEU   176      42.992 -18.817   2.305  1.00  0.00
H
ATOM   2873  CA  LEU   176      41.489 -18.303   0.903  1.00  0.00
C
ATOM   2874  HA  LEU   176      40.594 -17.686   0.967  1.00  0.00
H
ATOM   2875  C   LEU   176      41.083 -19.763   0.836  1.00  0.00
C
ATOM   2876  O   LEU   176      41.630 -20.601   1.552  1.00  0.00
O
ATOM   2877  CB  LEU   176      42.241 -17.984  -0.396  1.00  0.00
C
ATOM   2878 1HB  LEU   176      43.264 -18.333  -0.276  1.00  0.00
H
ATOM   2879 2HB  LEU   176      41.808 -18.565  -1.206  1.00  0.00
H
ATOM   2880  CG  LEU   176      42.267 -16.533  -0.886  1.00  0.00
C
ATOM   2881  HG  LEU   176      41.432 -16.017  -0.435  1.00  0.00
H
ATOM   2882  CD1 LEU   176      43.521 -15.831  -0.468  1.00  0.00
C
ATOM   2883 1HD1 LEU   176      43.534 -14.824  -0.882  1.00  0.00
H
ATOM   2884 2HD1 LEU   176      44.379 -16.389  -0.826  1.00  0.00
H
ATOM   2885 3HD1 LEU   176      43.560 -15.769   0.616  1.00  0.00
H
ATOM   2886  CD2 LEU   176      42.105 -16.437  -2.399  1.00  0.00
C
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ATOM   2887 1HD2 LEU   176      42.039 -15.393  -2.700  1.00  0.00
H
ATOM   2888 2HD2 LEU   176      41.187 -16.945  -2.693  1.00  0.00
H
ATOM   2889 3HD2 LEU   176      42.946 -16.908  -2.904  1.00  0.00
H
ATOM   2890  N   LEU   177      40.187 -20.032  -0.101  1.00  0.00
N
ATOM   2891  H   LEU   177      39.800 -19.254  -0.625  1.00  0.00
H
ATOM   2892  CA  LEU   177      39.809 -21.363  -0.557  1.00  0.00
C
ATOM   2893  HA  LEU   177      40.568 -22.098  -0.308  1.00  0.00
H
ATOM   2894  C   LEU   177      39.747 -21.159  -2.061  1.00  0.00
C
ATOM   2895  O   LEU   177      39.479 -20.036  -2.499  1.00  0.00
O
ATOM   2896  CB  LEU   177      38.465 -21.756   0.052  1.00  0.00
C
ATOM   2897 1HB  LEU   177      38.641 -21.770   1.115  1.00  0.00
H
ATOM   2898 2HB  LEU   177      37.778 -20.942  -0.151  1.00  0.00
H
ATOM   2899  CG  LEU   177      37.721 -23.059  -0.272  1.00  0.00
C
ATOM   2900  HG  LEU   177      37.605 -23.136  -1.350  1.00  0.00
H
ATOM   2901  CD1 LEU   177      38.442 -24.292   0.225  1.00  0.00
C
ATOM   2902 1HD1 LEU   177      37.847 -25.182   0.025  1.00  0.00
H
ATOM   2903 2HD1 LEU   177      38.625 -24.217   1.299  1.00  0.00
H
ATOM   2904 3HD1 LEU   177      39.398 -24.390  -0.285  1.00  0.00
H
ATOM   2905  CD2 LEU   177      36.330 -23.005   0.366  1.00  0.00
C
ATOM   2906 1HD2 LEU   177      35.778 -23.913   0.130  1.00  0.00
H
ATOM   2907 2HD2 LEU   177      35.774 -22.147  -0.008  1.00  0.00
H
ATOM   2908 3HD2 LEU   177      36.415 -22.933   1.449  1.00  0.00
H
ATOM   2909  N   TRP   178      40.042 -22.197  -2.827  1.00  0.00
N
ATOM   2910  H   TRP   178      40.259 -23.088  -2.401  1.00  0.00
H
ATOM   2911  CA  TRP   178      40.094 -22.154  -4.285  1.00  0.00
C
ATOM   2912  HA  TRP   178      39.281 -21.565  -4.711  1.00  0.00
H
ATOM   2913  C   TRP   178      39.995 -23.613  -4.701  1.00  0.00
C
ATOM   2914  O   TRP   178      40.540 -24.432  -3.972  1.00  0.00
O
ATOM   2915  CB  TRP   178      41.466 -21.629  -4.712  1.00  0.00
C
ATOM   2916 1HB  TRP   178      41.504 -20.552  -4.548  1.00  0.00
H
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ATOM   2917 2HB  TRP   178      42.225 -22.101  -4.089  1.00  0.00
H
ATOM   2918  CG  TRP   178      41.786 -21.930  -6.137  1.00  0.00
C
ATOM   2919  CD1 TRP   178      41.406 -21.218  -7.208  1.00  0.00
C
ATOM   2920  HD1 TRP   178      40.826 -20.317  -7.148  1.00  0.00
H
ATOM   2921  CD2 TRP   178      42.465 -23.084  -6.670  1.00  0.00
C
ATOM   2922  NE1 TRP   178      41.827 -21.781  -8.372  1.00  0.00
N
ATOM   2923  HE1 TRP   178      41.625 -21.390  -9.285  1.00  0.00
H
ATOM   2924  CE2 TRP   178      42.504 -22.927  -8.084  1.00  0.00
C
ATOM   2925  CE3 TRP   178      42.985 -24.266  -6.106  1.00  0.00
C
ATOM   2926  HE3 TRP   178      42.951 -24.422  -5.037  1.00  0.00
H
ATOM   2927  CZ2 TRP   178      43.110 -23.870  -8.930  1.00  0.00
C
ATOM   2928  HZ2 TRP   178      43.157 -23.706  -9.997  1.00  0.00
H
ATOM   2929  CZ3 TRP   178      43.525 -25.252  -6.962  1.00  0.00
C
ATOM   2930  HZ3 TRP   178      43.882 -26.180  -6.550  1.00  0.00
H
ATOM   2931  CH2 TRP   178      43.616 -25.024  -8.364  1.00  0.00
C
ATOM   2932  HH2 TRP   178      44.077 -25.770  -8.996  1.00  0.00
H
ATOM   2933  N   ARG   179      39.414 -23.952  -5.848  1.00  0.00
N
ATOM   2934  H   ARG   179      38.949 -23.247  -6.401  1.00  0.00
H
ATOM   2935  CA  ARG   179      39.486 -25.319  -6.382  1.00  0.00
C
ATOM   2936  HA  ARG   179      40.377 -25.797  -5.974  1.00  0.00
H
ATOM   2937  C   ARG   179      39.574 -25.356  -7.908  1.00  0.00
C
ATOM   2938  O   ARG   179      39.208 -24.399  -8.586  1.00  0.00
O
ATOM   2939  CB  ARG   179      38.265 -26.122  -5.922  1.00  0.00
C
ATOM   2940 1HB  ARG   179      37.907 -25.697  -4.984  1.00  0.00
H
ATOM   2941 2HB  ARG   179      37.475 -26.028  -6.667  1.00  0.00
H
ATOM   2942  CG  ARG   179      38.573 -27.598  -5.681  1.00  0.00
C
ATOM   2943 1HG  ARG   179      38.964 -28.047  -6.584  1.00  0.00
H
ATOM   2944 2HG  ARG   179      39.335 -27.672  -4.910  1.00  0.00
H
ATOM   2945  CD  ARG   179      37.368 -28.382  -5.248  1.00  0.00
C
ATOM   2946 1HD  ARG   179      36.881 -27.841  -4.436  1.00  0.00
H
```

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ATOM   2947 2HD  ARG   179      36.672 -28.477  -6.083  1.00  0.00
H
ATOM   2948  NE  ARG   179      37.762 -29.713  -4.764  1.00  0.00
N
ATOM   2949  HE  ARG   179      38.709 -30.011  -4.964  1.00  0.00
H
ATOM   2950  CZ  ARG   179      37.010 -30.520  -4.028  1.00  0.00
C
ATOM   2951  NH1 ARG   179      35.790 -30.235  -3.670  1.00  0.00
N
ATOM   2952 1HH1 ARG   179      35.351 -29.407  -4.041  1.00  0.00
H
ATOM   2953 2HH1 ARG   179      35.286 -30.853  -3.053  1.00  0.00
H
ATOM   2954  NH2 ARG   179      37.509 -31.620  -3.565  1.00  0.00
N
ATOM   2955 1HH2 ARG   179      38.422 -31.931  -3.864  1.00  0.00
H
ATOM   2956 2HH2 ARG   179      36.991 -32.156  -2.882  1.00  0.00
H
ATOM   2957  N   THR   180      39.969 -26.503  -8.435  1.00  0.00
N
ATOM   2958  H   THR   180      40.327 -27.227  -7.825  1.00  0.00
H
ATOM   2959  CA  THR   180      39.716 -26.898  -9.821  1.00  0.00
C
ATOM   2960  HA  THR   180      39.096 -26.167 -10.338  1.00  0.00
H
ATOM   2961  C   THR   180      38.975 -28.212  -9.614  1.00  0.00
C
ATOM   2962  O   THR   180      39.414 -28.992  -8.768  1.00  0.00
O
ATOM   2963  CB  THR   180      41.028 -27.153 -10.590  1.00  0.00
C
ATOM   2964  HB  THR   180      41.594 -27.946 -10.100  1.00  0.00
H
ATOM   2965  OG1 THR   180      41.802 -25.955 -10.598  1.00  0.00
O
ATOM   2966  HG1 THR   180      42.062 -25.762  -9.691  1.00  0.00
H
ATOM   2967  CG2 THR   180      40.797 -27.515 -12.033  1.00  0.00
C
ATOM   2968 1HG2 THR   180      41.759 -27.608 -12.536  1.00  0.00
H
ATOM   2969 2HG2 THR   180      40.213 -26.738 -12.527  1.00  0.00
H
ATOM   2970 3HG2 THR   180      40.271 -28.468 -12.100  1.00  0.00
H
ATOM   2971  N   PRO   181      37.851 -28.462 -10.309  1.00  0.00
N
ATOM   2972  CA  PRO   181      37.182 -29.726  -9.970  1.00  0.00
C
ATOM   2973  HA  PRO   181      36.963 -29.765  -8.903  1.00  0.00
H
ATOM   2974  C   PRO   181      37.981 -30.965 -10.361  1.00  0.00
C
ATOM   2975  O   PRO   181      38.770 -30.951 -11.307  1.00  0.00
O
ATOM   2976  CB  PRO   181      35.878 -29.644 -10.767  1.00  0.00
C
```

```
ATOM   2977 1HB  PRO   181      35.543 -30.635 -11.073  1.00  0.00
H
ATOM   2978 2HB  PRO   181      35.108 -29.150 -10.176  1.00  0.00
H
ATOM   2979  CG  PRO   181      36.226 -28.804 -11.943  1.00  0.00
C
ATOM   2980 1HG  PRO   181      36.783 -29.393 -12.673  1.00  0.00
H
ATOM   2981 2HG  PRO   181      35.334 -28.375 -12.398  1.00  0.00
H
ATOM   2982  CD  PRO   181      37.102 -27.730 -11.349  1.00  0.00
C
ATOM   2983 1HD  PRO   181      37.771 -27.320 -12.105  1.00  0.00
H
ATOM   2984 2HD  PRO   181      36.495 -26.943 -10.897  1.00  0.00
H
ATOM   2985  N   LYS   182      37.761 -32.053  -9.636  1.00  0.00
N
ATOM   2986  H   LYS   182      37.101 -31.999  -8.859  1.00  0.00
H
ATOM   2987  CA  LYS   182      38.423 -33.333  -9.908  1.00  0.00
C
ATOM   2988  HA  LYS   182      39.503 -33.186  -9.936  1.00  0.00
H
ATOM   2989  C   LYS   182      37.988 -33.898 -11.253  1.00  0.00
C
ATOM   2990  O   LYS   182      38.780 -34.509 -11.976  1.00  0.00
O
ATOM   2991  CB  LYS   182      38.067 -34.303  -8.777  1.00  0.00
C
ATOM   2992 1HB  LYS   182      38.376 -33.843  -7.837  1.00  0.00
H
ATOM   2993 2HB  LYS   182      36.985 -34.417  -8.754  1.00  0.00
H
ATOM   2994  CG  LYS   182      38.703 -35.694  -8.869  1.00  0.00
C
ATOM   2995 1HG  LYS   182      38.262 -36.243  -9.702  1.00  0.00
H
ATOM   2996 2HG  LYS   182      39.770 -35.583  -9.050  1.00  0.00
H
ATOM   2997  CD  LYS   182      38.510 -36.483  -7.576  1.00  0.00
C
ATOM   2998 1HD  LYS   182      39.144 -37.370  -7.604  1.00  0.00
H
ATOM   2999 2HD  LYS   182      38.826 -35.858  -6.740  1.00  0.00
H
ATOM   3000  CE  LYS   182      37.062 -36.919  -7.355  1.00  0.00
C
ATOM   3001 1HE  LYS   182      36.400 -36.057  -7.458  1.00  0.00
H
ATOM   3002 2HE  LYS   182      36.790 -37.663  -8.106  1.00  0.00
H
ATOM   3003  NZ  LYS   182      36.885 -37.482  -5.982  1.00  0.00
N
ATOM   3004 1HZ  LYS   182      35.959 -37.875  -5.883  1.00  0.00
H
ATOM   3005 2HZ  LYS   182      36.989 -36.738  -5.299  1.00  0.00
H
ATOM   3006 3HZ  LYS   182      37.578 -38.195  -5.792  1.00  0.00
H
```

```
ATOM   3007  N   GLY   183      36.727 -33.681 -11.591  1.00  0.00
N
ATOM   3008  H   GLY   183      36.115 -33.188 -10.956  1.00  0.00
H
ATOM   3009  CA  GLY   183      36.162 -34.176 -12.833  1.00  0.00
C
ATOM   3010 1HA  GLY   183      36.160 -33.390 -13.588  1.00  0.00
H
ATOM   3011 2HA  GLY   183      36.721 -35.038 -13.190  1.00  0.00
H
ATOM   3012  C   GLY   183      34.751 -34.600 -12.534  1.00  0.00
C
ATOM   3013  O   GLY   183      34.139 -33.991 -11.637  1.00  0.00
O
ATOM   3014  OXT GLY   183      34.255 -35.557 -13.152  1.00  0.00
O
TER    3015      GLY   183
END
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REMARK YASARA
REMARK YASARA Written on:        Mon Sep 04 17:01:52 2017
REMARK YASARA Number of models: 1
REMARK YASARA Number of atoms:   3068
REMARK YASARA Please address questions or suggestions to:
Eliza@yasara.org
REMARK YASARA
SEQRES   1    184  MET ASP SER PHE LEU ASP ALA PHE PHE ALA LEU ASP THR
SEQRES   2    184  ASP ASN ARG GLU VAL ILE SER LEU ASN ASP LEU SER SER
SEQRES   3    184  TYR ASN LYS LYS HIS GLY LEU GLN ASP SER PHE PRO GLU
SEQRES   4    184  THR PHE LEU ARG ARG PHE ASP ALA GLU LYS THR GLY VAL
SEQRES   5    184  ILE THR LEU GLU GLN TYR CYS LYS ALA LEU GLY LEU VAL
SEQRES   6    184  PRO LYS GLN ALA ARG GLU LEU ARG ARG ARG ARG THR THR
SEQRES   7    184  VAL LEU LEU GLU GLN LEU ILE PRO ARG ASP LEU GLU ILE
SEQRES   8    184  ILE TYR ASP ASP MET GLU LEU GLU MET LYS VAL LYS VAL
SEQRES   9    184  MET GLU LEU PHE ILE ASN ASP LEU ARG GLU SER GLY ARG
SEQRES  10    184  LYS THR ASN ILE ASP MET GLU LYS LEU ASP GLN SER MET
SEQRES  11    184  GLN ARG LEU LYS GLU TYR LEU ASP THR ARG TYR GLY LYS
SEQRES  12    184  SER TRP HIS ILE ILE THR SER ILE ASN GLN HIS LEU GLY
SEQRES  13    184  ARG PHE SER TYR GLU PRO ASN THR LEU PHE HIS PHE CYS
SEQRES  14    184  LEU GLY ARG PHE VAL VAL LEU ILE TRP LYS THR PRO CYS
SEQRES  15    184  SER ALA
ATOM      1  N   MET     1      24.753  13.817  30.435  1.00  0.00
N
ATOM      2 1H   MET     1      24.746  13.981  31.434  1.00  0.00
H
ATOM      3 2H   MET     1      25.075  12.875  30.263  1.00  0.00
H
ATOM      4 3H   MET     1      23.816  13.920  30.072  1.00  0.00
H
ATOM      5  CA  MET     1      25.666  14.794  29.778  1.00  0.00
C
ATOM      6  HA  MET     1      25.333  15.797  30.036  1.00  0.00
H
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ATOM      7  C   MET     1      25.631  14.659  28.260  1.00  0.00
C
ATOM      8  O   MET     1      25.542  15.655  27.548  1.00  0.00
O
ATOM      9  CB  MET     1      27.094  14.597  30.299  1.00  0.00
C
ATOM     10 1HB  MET     1      27.077  14.673  31.386  1.00  0.00
H
ATOM     11 2HB  MET     1      27.429  13.596  30.036  1.00  0.00
H
ATOM     12  CG  MET     1      28.107  15.592  29.753  1.00  0.00
C
ATOM     13 1HG  MET     1      29.092  15.345  30.147  1.00  0.00
H
ATOM     14 2HG  MET     1      28.138  15.498  28.668  1.00  0.00
H
ATOM     15  SD  MET     1      27.725  17.300  30.166  1.00  0.00
S
ATOM     16  CE  MET     1      28.122  17.391  31.912  1.00  0.00
C
ATOM     17 1HE  MET     1      27.977  18.412  32.267  1.00  0.00
H
ATOM     18 2HE  MET     1      29.161  17.099  32.069  1.00  0.00
H
ATOM     19 3HE  MET     1      27.473  16.720  32.475  1.00  0.00
H
ATOM     20  N   ASP     2      25.731  13.451  27.725  1.00  0.00
N
ATOM     21  H   ASP     2      25.740  12.625  28.323  1.00  0.00
H
ATOM     22  CA  ASP     2      25.913  13.251  26.284  1.00  0.00
C
ATOM     23  HA  ASP     2      26.783  13.824  25.961  1.00  0.00
H
ATOM     24  C   ASP     2      24.722  13.704  25.441  1.00  0.00
C
ATOM     25  O   ASP     2      24.884  14.126  24.293  1.00  0.00
O
ATOM     26  CB  ASP     2      26.179  11.772  26.005  1.00  0.00
C
ATOM     27 1HB  ASP     2      25.337  11.190  26.379  1.00  0.00
H
ATOM     28 2HB  ASP     2      26.258  11.621  24.930  1.00  0.00
H
ATOM     29  CG  ASP     2      27.450  11.270  26.658  1.00  0.00
C
ATOM     30  OD1 ASP     2      28.432  12.034  26.816  1.00  0.00
O
ATOM     31  OD2 ASP     2      27.468  10.093  27.073  1.00  0.00
O
ATOM     32  N   SER     3      23.526  13.686  26.014  1.00  0.00
N
ATOM     33  H   SER     3      23.420  13.326  26.960  1.00  0.00
H
ATOM     34  CA  SER     3      22.335  14.178  25.322  1.00  0.00
C
ATOM     35  HA  SER     3      22.194  13.615  24.400  1.00  0.00
H
ATOM     36  C   SER     3      22.449  15.654  24.974  1.00  0.00
C
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ATOM     37  O   SER     3      21.811  16.139  24.032  1.00  0.00
O
ATOM     38  CB  SER     3      21.104  13.996  26.211  1.00  0.00
C
ATOM     39 1HB  SER     3      20.223  14.361  25.683  1.00  0.00
H
ATOM     40 2HB  SER     3      20.976  12.937  26.430  1.00  0.00
H
ATOM     41  OG  SER     3      21.253  14.707  27.430  1.00  0.00
O
ATOM     42  HG  SER     3      20.407  14.695  27.898  1.00  0.00
H
ATOM     43  N   PHE     4      23.255  16.387  25.727  1.00  0.00
N
ATOM     44  H   PHE     4      23.775  15.955  26.484  1.00  0.00
H
ATOM     45  CA  PHE     4      23.380  17.821  25.521  1.00  0.00
C
ATOM     46  HA  PHE     4      22.385  18.239  25.382  1.00  0.00
H
ATOM     47  C   PHE     4      24.193  18.086  24.261  1.00  0.00
C
ATOM     48  O   PHE     4      23.899  19.011  23.520  1.00  0.00
O
ATOM     49  CB  PHE     4      24.034  18.490  26.733  1.00  0.00
C
ATOM     50 1HB  PHE     4      25.073  18.167  26.781  1.00  0.00
H
ATOM     51 2HB  PHE     4      24.022  19.570  26.587  1.00  0.00
H
ATOM     52  CG  PHE     4      23.385  18.158  28.066  1.00  0.00
C
ATOM     53  CD1 PHE     4      22.021  17.802  28.191  1.00  0.00
C
ATOM     54  HD1 PHE     4      21.387  17.740  27.320  1.00  0.00
H
ATOM     55  CD2 PHE     4      24.169  18.212  29.230  1.00  0.00
C
ATOM     56  HD2 PHE     4      25.216  18.458  29.158  1.00  0.00
H
ATOM     57  CE1 PHE     4      21.457  17.510  29.458  1.00  0.00
C
ATOM     58  HE1 PHE     4      20.415  17.233  29.536  1.00  0.00
H
ATOM     59  CE2 PHE     4      23.612  17.952  30.501  1.00  0.00
C
ATOM     60  HE2 PHE     4      24.230  18.019  31.384  1.00  0.00
H
ATOM     61  CZ  PHE     4      22.254  17.593  30.616  1.00  0.00
C
ATOM     62  HZ  PHE     4      21.826  17.390  31.586  1.00  0.00
H
ATOM     63  N   LEU     5      25.165  17.228  23.978  1.00  0.00
N
ATOM     64  H   LEU     5      25.367  16.476  24.624  1.00  0.00
H
ATOM     65  CA  LEU     5      25.942  17.316  22.739  1.00  0.00
C
ATOM     66  HA  LEU     5      26.341  18.324  22.624  1.00  0.00
H
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ATOM     67  C   LEU     5      25.069  17.003  21.533  1.00  0.00
C
ATOM     68  O   LEU     5      25.186  17.625  20.478  1.00  0.00
O
ATOM     69  CB  LEU     5      27.098  16.311  22.769  1.00  0.00
C
ATOM     70 1HB  LEU     5      27.741  16.550  23.616  1.00  0.00
H
ATOM     71 2HB  LEU     5      26.673  15.326  22.943  1.00  0.00
H
ATOM     72  CG  LEU     5      27.966  16.201  21.504  1.00  0.00
C
ATOM     73  HG  LEU     5      27.327  15.946  20.660  1.00  0.00
H
ATOM     74  CD1 LEU     5      28.709  17.481  21.166  1.00  0.00
C
ATOM     75 1HD1 LEU     5      29.353  17.318  20.302  1.00  0.00
H
ATOM     76 2HD1 LEU     5      29.328  17.784  22.008  1.00  0.00
H
ATOM     77 3HD1 LEU     5      28.001  18.272  20.922  1.00  0.00
H
ATOM     78  CD2 LEU     5      28.954  15.071  21.683  1.00  0.00
C
ATOM     79 1HD2 LEU     5      29.565  14.970  20.787  1.00  0.00
H
ATOM     80 2HD2 LEU     5      28.420  14.135  21.845  1.00  0.00
H
ATOM     81 3HD2 LEU     5      29.601  15.270  22.539  1.00  0.00
H
ATOM     82  N   ASP     6      24.174  16.040  21.683  1.00  0.00
N
ATOM     83  H   ASP     6      24.101  15.548  22.565  1.00  0.00
H
ATOM     84  CA  ASP     6      23.322  15.659  20.558  1.00  0.00
C
ATOM     85  HA  ASP     6      23.951  15.457  19.697  1.00  0.00
H
ATOM     86  C   ASP     6      22.405  16.820  20.196  1.00  0.00
C
ATOM     87  O   ASP     6      22.203  17.127  19.018  1.00  0.00
O
ATOM     88  CB  ASP     6      22.496  14.411  20.867  1.00  0.00
C
ATOM     89 1HB  ASP     6      21.973  14.553  21.812  1.00  0.00
H
ATOM     90 2HB  ASP     6      21.759  14.279  20.076  1.00  0.00
H
ATOM     91  CG  ASP     6      23.338  13.151  20.950  1.00  0.00
C
ATOM     92  OD1 ASP     6      24.521  13.136  20.530  1.00  0.00
O
ATOM     93  OD2 ASP     6      22.821  12.143  21.478  1.00  0.00
O
ATOM     94  N   ALA     7      21.906  17.512  21.209  1.00  0.00
N
ATOM     95  H   ALA     7      22.087  17.205  22.156  1.00  0.00
H
ATOM     96  CA  ALA     7      21.089  18.699  20.994  1.00  0.00
C
```

```
ATOM     97  HA  ALA     7      20.326  18.473  20.248  1.00  0.00
H
ATOM     98  C   ALA     7      21.925  19.873  20.471  1.00  0.00
C
ATOM     99  O   ALA     7      21.435  20.688  19.698  1.00  0.00
O
ATOM    100  CB  ALA     7      20.396  19.075  22.299  1.00  0.00
C
ATOM    101 1HB  ALA     7      19.683  18.294  22.562  1.00  0.00
H
ATOM    102 2HB  ALA     7      19.859  20.016  22.169  1.00  0.00
H
ATOM    103 3HB  ALA     7      21.129  19.186  23.098  1.00  0.00
H
ATOM    104  N   PHE     8      23.185  19.954  20.875  1.00  0.00
N
ATOM    105  H   PHE     8      23.563  19.230  21.474  1.00  0.00
H
ATOM    106  CA  PHE     8      24.039  21.090  20.535  1.00  0.00
C
ATOM    107  HA  PHE     8      23.599  21.985  20.971  1.00  0.00
H
ATOM    108  C   PHE     8      24.142  21.305  19.034  1.00  0.00
C
ATOM    109  O   PHE     8      23.997  22.421  18.546  1.00  0.00
O
ATOM    110  CB  PHE     8      25.445  20.883  21.112  1.00  0.00
C
ATOM    111 1HB  PHE     8      25.358  20.673  22.176  1.00  0.00
H
ATOM    112 2HB  PHE     8      25.909  20.027  20.628  1.00  0.00
H
ATOM    113  CG  PHE     8      26.348  22.066  20.940  1.00  0.00
C
ATOM    114  CD1 PHE     8      26.388  23.058  21.927  1.00  0.00
C
ATOM    115  HD1 PHE     8      25.795  22.944  22.817  1.00  0.00
H
ATOM    116  CD2 PHE     8      27.152  22.209  19.795  1.00  0.00
C
ATOM    117  HD2 PHE     8      27.147  21.444  19.031  1.00  0.00
H
ATOM    118  CE1 PHE     8      27.168  24.219  21.763  1.00  0.00
C
ATOM    119  HE1 PHE     8      27.153  24.995  22.514  1.00  0.00
H
ATOM    120  CE2 PHE     8      27.960  23.358  19.627  1.00  0.00
C
ATOM    121  HE2 PHE     8      28.568  23.467  18.743  1.00  0.00
H
ATOM    122  CZ  PHE     8      27.957  24.366  20.618  1.00  0.00
C
ATOM    123  HZ  PHE     8      28.559  25.248  20.500  1.00  0.00
H
ATOM    124  N   PHE     9      24.350  20.235  18.283  1.00  0.00
N
ATOM    125  H   PHE     9      24.452  19.325  18.717  1.00  0.00
H
ATOM    126  CA  PHE     9      24.475  20.367  16.834  1.00  0.00
C
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ATOM    127  HA  PHE     9      25.174  21.176  16.620  1.00  0.00
H
ATOM    128  C   PHE     9      23.164  20.716  16.141  1.00  0.00
C
ATOM    129  O   PHE     9      23.172  21.313  15.063  1.00  0.00
O
ATOM    130  CB  PHE     9      25.038  19.079  16.243  1.00  0.00
C
ATOM    131 1HB  PHE     9      24.368  18.254  16.479  1.00  0.00
H
ATOM    132 2HB  PHE     9      25.080  19.188  15.161  1.00  0.00
H
ATOM    133  CG  PHE     9      26.420  18.754  16.730  1.00  0.00
C
ATOM    134  CD1 PHE     9      26.702  17.500  17.297  1.00  0.00
C
ATOM    135  HD1 PHE     9      25.915  16.773  17.414  1.00  0.00
H
ATOM    136  CD2 PHE     9      27.460  19.692  16.596  1.00  0.00
C
ATOM    137  HD2 PHE     9      27.267  20.659  16.151  1.00  0.00
H
ATOM    138  CE1 PHE     9      28.013  17.167  17.705  1.00  0.00
C
ATOM    139  HE1 PHE     9      28.221  16.192  18.121  1.00  0.00
H
ATOM    140  CE2 PHE     9      28.764  19.385  17.031  1.00  0.00
C
ATOM    141  HE2 PHE     9      29.546  20.121  16.944  1.00  0.00
H
ATOM    142  CZ  PHE     9      29.045  18.114  17.575  1.00  0.00
C
ATOM    143  HZ  PHE     9      30.046  17.870  17.899  1.00  0.00
H
ATOM    144  N   ALA    10      22.041  20.368  16.754  1.00  0.00
N
ATOM    145  H   ALA    10      22.081  19.871  17.632  1.00  0.00
H
ATOM    146  CA  ALA    10      20.738  20.724  16.206  1.00  0.00
C
ATOM    147  HA  ALA    10      20.734  20.512  15.136  1.00  0.00
H
ATOM    148  C   ALA    10      20.482  22.222  16.405  1.00  0.00
C
ATOM    149  O   ALA    10      19.955  22.898  15.519  1.00  0.00
O
ATOM    150  CB  ALA    10      19.646  19.887  16.885  1.00  0.00
C
ATOM    151 1HB  ALA    10      19.853  18.827  16.735  1.00  0.00
H
ATOM    152 2HB  ALA    10      18.682  20.121  16.440  1.00  0.00
H
ATOM    153 3HB  ALA    10      19.608  20.103  17.954  1.00  0.00
H
ATOM    154  N   LEU    11      20.843  22.734  17.574  1.00  0.00
N
ATOM    155  H   LEU    11      21.234  22.124  18.287  1.00  0.00
H
ATOM    156  CA  LEU    11      20.653  24.153  17.879  1.00  0.00
C
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ATOM    157  HA  LEU    11      19.650  24.454  17.575  1.00  0.00
H
ATOM    158  C   LEU    11      21.643  25.050  17.158  1.00  0.00
C
ATOM    159  O   LEU    11      21.290  26.157  16.758  1.00  0.00
O
ATOM    160  CB  LEU    11      20.816  24.438  19.369  1.00  0.00
C
ATOM    161 1HB  LEU    11      21.610  23.811  19.773  1.00  0.00
H
ATOM    162 2HB  LEU    11      21.139  25.475  19.449  1.00  0.00
H
ATOM    163  CG  LEU    11      19.564  24.302  20.238  1.00  0.00
C
ATOM    164  HG  LEU    11      18.741  24.757  19.701  1.00  0.00
H
ATOM    165  CD1 LEU    11      19.211  22.858  20.557  1.00  0.00
C
ATOM    166 1HD1 LEU    11      18.352  22.822  21.224  1.00  0.00
H
ATOM    167 2HD1 LEU    11      20.055  22.367  21.038  1.00  0.00
H
ATOM    168 3HD1 LEU    11      18.961  22.328  19.639  1.00  0.00
H
ATOM    169  CD2 LEU    11      19.742  25.091  21.511  1.00  0.00
C
ATOM    170 1HD2 LEU    11      18.840  25.022  22.119  1.00  0.00
H
ATOM    171 2HD2 LEU    11      19.920  26.134  21.261  1.00  0.00
H
ATOM    172 3HD2 LEU    11      20.588  24.704  22.069  1.00  0.00
H
ATOM    173  N   ASP    12      22.878  24.595  17.001  1.00  0.00
N
ATOM    174  H   ASP    12      23.139  23.694  17.393  1.00  0.00
H
ATOM    175  CA  ASP    12      23.889  25.363  16.278  1.00  0.00
C
ATOM    176  HA  ASP    12      23.820  26.406  16.589  1.00  0.00
H
ATOM    177  C   ASP    12      23.622  25.314  14.777  1.00  0.00
C
ATOM    178  O   ASP    12      24.167  24.511  14.017  1.00  0.00
O
ATOM    179  CB  ASP    12      25.308  24.880  16.558  1.00  0.00
C
ATOM    180 1HB  ASP    12      25.521  24.984  17.622  1.00  0.00
H
ATOM    181 2HB  ASP    12      25.379  23.825  16.290  1.00  0.00
H
ATOM    182  CG  ASP    12      26.336  25.649  15.751  1.00  0.00
C
ATOM    183  OD1 ASP    12      26.072  26.781  15.292  1.00  0.00
O
ATOM    184  OD2 ASP    12      27.419  25.090  15.498  1.00  0.00
O
ATOM    185  N   THR    13      22.738  26.203  14.367  1.00  0.00
N
ATOM    186  H   THR    13      22.285  26.779  15.070  1.00  0.00
H
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ATOM    187  CA  THR    13      22.334  26.364  12.981  1.00  0.00
C
ATOM    188  HA  THR    13      22.302  25.399  12.479  1.00  0.00
H
ATOM    189  C   THR    13      23.332  27.251  12.253  1.00  0.00
C
ATOM    190  O   THR    13      23.319  27.330  11.027  1.00  0.00
O
ATOM    191  CB  THR    13      20.938  27.013  12.936  1.00  0.00
C
ATOM    192  HB  THR    13      20.694  27.305  11.915  1.00  0.00
H
ATOM    193  OG1 THR    13      20.925  28.152  13.800  1.00  0.00
O
ATOM    194  HG1 THR    13      20.493  27.874  14.620  1.00  0.00
H
ATOM    195  CG2 THR    13      19.871  26.070  13.461  1.00  0.00
C
ATOM    196 1HG2 THR    13      18.893  26.540  13.359  1.00  0.00
H
ATOM    197 2HG2 THR    13      20.047  25.827  14.509  1.00  0.00
H
ATOM    198 3HG2 THR    13      19.881  25.150  12.878  1.00  0.00
H
ATOM    199  N   ASP    14      24.214  27.902  12.997  1.00  0.00
N
ATOM    200  H   ASP    14      24.207  27.788  14.003  1.00  0.00
H
ATOM    201  CA  ASP    14      25.224  28.782  12.405  1.00  0.00
C
ATOM    202  HA  ASP    14      24.799  29.333  11.567  1.00  0.00
H
ATOM    203  C   ASP    14      26.370  27.919  11.894  1.00  0.00
C
ATOM    204  O   ASP    14      27.116  28.324  11.002  1.00  0.00
O
ATOM    205  CB  ASP    14      25.785  29.785  13.423  1.00  0.00
C
ATOM    206 1HB  ASP    14      26.058  29.264  14.340  1.00  0.00
H
ATOM    207 2HB  ASP    14      26.679  30.228  12.995  1.00  0.00
H
ATOM    208  CG  ASP    14      24.823  30.917  13.745  1.00  0.00
C
ATOM    209  OD1 ASP    14      23.593  30.740  13.641  1.00  0.00
O
ATOM    210  OD2 ASP    14      25.281  32.018  14.125  1.00  0.00
O
ATOM    211  N   ASN    15      26.492  26.735  12.485  1.00  0.00
N
ATOM    212  H   ASN    15      25.831  26.504  13.220  1.00  0.00
H
ATOM    213  CA  ASN    15      27.560  25.765  12.228  1.00  0.00
C
ATOM    214  HA  ASN    15      27.440  24.944  12.936  1.00  0.00
H
ATOM    215  C   ASN    15      28.912  26.415  12.540  1.00  0.00
C
ATOM    216  O   ASN    15      29.877  26.304  11.786  1.00  0.00
O
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ATOM    217  CB  ASN    15      27.462  25.154  10.822  1.00  0.00
C
ATOM    218 1HB  ASN    15      27.529  25.941  10.076  1.00  0.00
H
ATOM    219 2HB  ASN    15      28.297  24.469  10.674  1.00  0.00
H
ATOM    220  CG  ASN    15      26.183  24.380  10.616  1.00  0.00
C
ATOM    221  OD1 ASN    15      25.887  23.433  11.341  1.00  0.00
O
ATOM    222  ND2 ASN    15      25.408  24.766   9.642  1.00  0.00
N
ATOM    223 1HD2 ASN    15      24.548  24.274   9.479  1.00  0.00
H
ATOM    224 2HD2 ASN    15      25.675  25.545   9.061  1.00  0.00
H
ATOM    225  N   ARG    16      28.949  27.112  13.674  1.00  0.00
N
ATOM    226  H   ARG    16      28.096  27.157  14.231  1.00  0.00
H
ATOM    227  CA  ARG    16      30.158  27.799  14.169  1.00  0.00
C
ATOM    228  HA  ARG    16      30.964  27.678  13.446  1.00  0.00
H
ATOM    229  C   ARG    16      30.640  27.202  15.489  1.00  0.00
C
ATOM    230  O   ARG    16      31.544  27.727  16.137  1.00  0.00
O
ATOM    231  CB  ARG    16      29.883  29.298  14.353  1.00  0.00
C
ATOM    232 1HB  ARG    16      29.005  29.415  14.988  1.00  0.00
H
ATOM    233 2HB  ARG    16      30.736  29.749  14.859  1.00  0.00
H
ATOM    234  CG  ARG    16      29.661  30.056  13.049  1.00  0.00
C
ATOM    235 1HG  ARG    16      30.574  30.021  12.458  1.00  0.00
H
ATOM    236 2HG  ARG    16      28.865  29.576  12.486  1.00  0.00
H
ATOM    237  CD  ARG    16      29.282  31.513  13.282  1.00  0.00
C
ATOM    238 1HD  ARG    16      29.036  31.965  12.319  1.00  0.00
H
ATOM    239 2HD  ARG    16      28.399  31.553  13.920  1.00  0.00
H
ATOM    240  NE  ARG    16      30.362  32.285  13.909  1.00  0.00
N
ATOM    241  HE  ARG    16      31.212  31.786  14.125  1.00  0.00
H
ATOM    242  CZ  ARG    16      30.332  33.575  14.209  1.00  0.00
C
ATOM    243  NH1 ARG    16      29.338  34.380  13.937  1.00  0.00
N
ATOM    244 1HH1 ARG    16      28.517  34.033  13.457  1.00  0.00
H
ATOM    245 2HH1 ARG    16      29.388  35.343  14.218  1.00  0.00
H
ATOM    246  NH2 ARG    16      31.351  34.090  14.828  1.00  0.00
N
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ATOM    247 1HH2 ARG    16      32.124  33.509  15.103  1.00  0.00
H
ATOM    248 2HH2 ARG    16      31.342  35.071  15.065  1.00  0.00
H
ATOM    249  N   GLU    17      29.995  26.109  15.866  1.00  0.00
N
ATOM    250  H   GLU    17      29.260  25.757  15.263  1.00  0.00
H
ATOM    251  CA  GLU    17      30.202  25.369  17.116  1.00  0.00
C
ATOM    252  HA  GLU    17      29.479  24.555  17.110  1.00  0.00
H
ATOM    253  C   GLU    17      29.900  26.206  18.363  1.00  0.00
C
ATOM    254  O   GLU    17      30.520  26.029  19.418  1.00  0.00
O
ATOM    255  CB  GLU    17      31.591  24.732  17.204  1.00  0.00
C
ATOM    256 1HB  GLU    17      32.316  25.536  17.276  1.00  0.00
H
ATOM    257 2HB  GLU    17      31.636  24.144  18.120  1.00  0.00
H
ATOM    258  CG  GLU    17      31.993  23.818  16.052  1.00  0.00
C
ATOM    259 1HG  GLU    17      31.248  23.029  15.957  1.00  0.00
H
ATOM    260 2HG  GLU    17      32.024  24.392  15.125  1.00  0.00
H
ATOM    261  CD  GLU    17      33.363  23.192  16.296  1.00  0.00
C
ATOM    262  OE1 GLU    17      34.141  23.792  17.070  1.00  0.00
O
ATOM    263  OE2 GLU    17      33.677  22.104  15.752  1.00  0.00
O
ATOM    264  N   VAL    18      28.921  27.096  18.235  1.00  0.00
N
ATOM    265  H   VAL    18      28.470  27.204  17.336  1.00  0.00
H
ATOM    266  CA  VAL    18      28.389  27.901  19.340  1.00  0.00
C
ATOM    267  HA  VAL    18      28.520  27.362  20.276  1.00  0.00
H
ATOM    268  C   VAL    18      26.890  28.096  19.101  1.00  0.00
C
ATOM    269  O   VAL    18      26.422  27.993  17.971  1.00  0.00
O
ATOM    270  CB  VAL    18      29.064  29.303  19.474  1.00  0.00
C
ATOM    271  HB  VAL    18      28.503  29.876  20.210  1.00  0.00
H
ATOM    272  CG1 VAL    18      30.503  29.194  19.986  1.00  0.00
C
ATOM    273 1HG1 VAL    18      30.909  30.190  20.158  1.00  0.00
H
ATOM    274 2HG1 VAL    18      31.125  28.679  19.250  1.00  0.00
H
ATOM    275 3HG1 VAL    18      30.515  28.633  20.917  1.00  0.00
H
ATOM    276  CG2 VAL    18      29.058  30.066  18.149  1.00  0.00
C
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ATOM    277 1HG2 VAL    18      29.470  31.059  18.308  1.00  0.00
H
ATOM    278 2HG2 VAL    18      28.040  30.167  17.772  1.00  0.00
H
ATOM    279 3HG2 VAL    18      29.671  29.548  17.411  1.00  0.00
H
ATOM    280  N   ILE    19      26.142  28.380  20.155  1.00  0.00
N
ATOM    281  H   ILE    19      26.588  28.431  21.067  1.00  0.00
H
ATOM    282  CA  ILE    19      24.691  28.579  20.097  1.00  0.00
C
ATOM    283  HA  ILE    19      24.326  28.428  19.082  1.00  0.00
H
ATOM    284  C   ILE    19      24.390  30.014  20.517  1.00  0.00
C
ATOM    285  O   ILE    19      24.836  30.467  21.564  1.00  0.00
O
ATOM    286  CB  ILE    19      23.983  27.566  21.045  1.00  0.00
C
ATOM    287  HB  ILE    19      24.440  27.645  22.032  1.00  0.00
H
ATOM    288  CG1 ILE    19      24.193  26.138  20.510  1.00  0.00
C
ATOM    289 1HG1 ILE    19      23.637  26.032  19.579  1.00  0.00
H
ATOM    290 2HG1 ILE    19      25.248  25.988  20.287  1.00  0.00
H
ATOM    291  CG2 ILE    19      22.472  27.858  21.193  1.00  0.00
C
ATOM    292 1HG2 ILE    19      22.029  27.187  21.926  1.00  0.00
H
ATOM    293 2HG2 ILE    19      21.966  27.727  20.236  1.00  0.00
H
ATOM    294 3HG2 ILE    19      22.318  28.875  21.550  1.00  0.00
H
ATOM    295  CD1 ILE    19      23.769  25.038  21.454  1.00  0.00
C
ATOM    296 1HD1 ILE    19      23.972  24.079  20.983  1.00  0.00
H
ATOM    297 2HD1 ILE    19      22.708  25.098  21.673  1.00  0.00
H
ATOM    298 3HD1 ILE    19      24.337  25.111  22.380  1.00  0.00
H
ATOM    299  N   SER    20      23.652  30.744  19.697  1.00  0.00
N
ATOM    300  H   SER    20      23.348  30.349  18.817  1.00  0.00
H
ATOM    301  CA  SER    20      23.242  32.109  20.016  1.00  0.00
C
ATOM    302  HA  SER    20      24.038  32.621  20.555  1.00  0.00
H
ATOM    303  C   SER    20      21.965  32.127  20.853  1.00  0.00
C
ATOM    304  O   SER    20      21.290  31.108  20.981  1.00  0.00
O
ATOM    305  CB  SER    20      22.967  32.831  18.706  1.00  0.00
C
ATOM    306 1HB  SER    20      22.785  33.886  18.901  1.00  0.00
H
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ATOM    307 2HB  SER    20      23.838  32.735  18.055  1.00  0.00
H
ATOM    308  OG  SER    20      21.834  32.259  18.071  1.00  0.00
O
ATOM    309  HG  SER    20      21.977  32.297  17.114  1.00  0.00
H
ATOM    310  N   LEU    21      21.568  33.281  21.373  1.00  0.00
N
ATOM    311  H   LEU    21      22.140  34.115  21.259  1.00  0.00
H
ATOM    312  CA  LEU    21      20.304  33.387  22.105  1.00  0.00
C
ATOM    313  HA  LEU    21      20.323  32.683  22.937  1.00  0.00
H
ATOM    314  C   LEU    21      19.105  33.051  21.222  1.00  0.00
C
ATOM    315  O   LEU    21      18.162  32.397  21.664  1.00  0.00
O
ATOM    316  CB  LEU    21      20.128  34.805  22.659  1.00  0.00
C
ATOM    317 1HB  LEU    21      21.013  35.044  23.241  1.00  0.00
H
ATOM    318 2HB  LEU    21      20.091  35.497  21.818  1.00  0.00
H
ATOM    319  CG  LEU    21      18.888  35.070  23.534  1.00  0.00
C
ATOM    320  HG  LEU    21      18.000  34.945  22.917  1.00  0.00
H
ATOM    321  CD1 LEU    21      18.766  34.126  24.731  1.00  0.00
C
ATOM    322 1HD1 LEU    21      17.886  34.396  25.314  1.00  0.00
H
ATOM    323 2HD1 LEU    21      19.653  34.195  25.362  1.00  0.00
H
ATOM    324 3HD1 LEU    21      18.642  33.101  24.388  1.00  0.00
H
ATOM    325  CD2 LEU    21      18.917  36.507  24.034  1.00  0.00
C
ATOM    326 1HD2 LEU    21      18.022  36.714  24.619  1.00  0.00
H
ATOM    327 2HD2 LEU    21      18.936  37.192  23.185  1.00  0.00
H
ATOM    328 3HD2 LEU    21      19.799  36.680  24.652  1.00  0.00
H
ATOM    329  N   ASN    22      19.135  33.460  19.961  1.00  0.00
N
ATOM    330  H   ASN    22      19.924  34.004  19.625  1.00  0.00
H
ATOM    331  CA  ASN    22      18.024  33.160  19.057  1.00  0.00
C
ATOM    332  HA  ASN    22      17.093  33.488  19.521  1.00  0.00
H
ATOM    333  C   ASN    22      17.914  31.662  18.792  1.00  0.00
C
ATOM    334  O   ASN    22      16.817  31.121  18.633  1.00  0.00
O
ATOM    335  CB  ASN    22      18.194  33.884  17.722  1.00  0.00
C
ATOM    336 1HB  ASN    22      19.174  33.658  17.305  1.00  0.00
H
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ATOM    337 2HB  ASN    22      17.431  33.521  17.038  1.00  0.00
H
ATOM    338  CG  ASN    22      18.034  35.371  17.845  1.00  0.00
C
ATOM    339  OD1 ASN    22      17.270  35.860  18.664  1.00  0.00
O
ATOM    340  ND2 ASN    22      18.755  36.105  17.046  1.00  0.00
N
ATOM    341 1HD2 ASN    22      18.675  37.103  17.115  1.00  0.00
H
ATOM    342 2HD2 ASN    22      19.383  35.674  16.389  1.00  0.00
H
ATOM    343  N   ASP    23      19.052  30.987  18.762  1.00  0.00
N
ATOM    344  H   ASP    23      19.933  31.471  18.888  1.00  0.00
H
ATOM    345  CA  ASP    23      19.066  29.546  18.524  1.00  0.00
C
ATOM    346  HA  ASP    23      18.367  29.306  17.721  1.00  0.00
H
ATOM    347  C   ASP    23      18.607  28.824  19.789  1.00  0.00
C
ATOM    348  O   ASP    23      17.800  27.894  19.731  1.00  0.00
O
ATOM    349  CB  ASP    23      20.470  29.083  18.122  1.00  0.00
C
ATOM    350 1HB  ASP    23      21.191  29.478  18.835  1.00  0.00
H
ATOM    351 2HB  ASP    23      20.497  27.998  18.170  1.00  0.00
H
ATOM    352  CG  ASP    23      20.866  29.531  16.717  1.00  0.00
C
ATOM    353  OD1 ASP    23      19.986  29.955  15.932  1.00  0.00
O
ATOM    354  OD2 ASP    23      22.060  29.516  16.350  1.00  0.00
O
ATOM    355  N   LEU    24      19.061  29.297  20.943  1.00  0.00
N
ATOM    356  H   LEU    24      19.725  30.068  20.938  1.00  0.00
H
ATOM    357  CA  LEU    24      18.666  28.718  22.228  1.00  0.00
C
ATOM    358  HA  LEU    24      18.908  27.660  22.230  1.00  0.00
H
ATOM    359  C   LEU    24      17.171  28.856  22.447  1.00  0.00
C
ATOM    360  O   LEU    24      16.493  27.911  22.845  1.00  0.00
O
ATOM    361  CB  LEU    24      19.402  29.413  23.383  1.00  0.00
C
ATOM    362 1HB  LEU    24      20.475  29.326  23.216  1.00  0.00
H
ATOM    363 2HB  LEU    24      19.146  30.471  23.353  1.00  0.00
H
ATOM    364  CG  LEU    24      19.081  28.896  24.798  1.00  0.00
C
ATOM    365  HG  LEU    24      18.002  28.922  24.936  1.00  0.00
H
ATOM    366  CD1 LEU    24      19.560  27.463  25.023  1.00  0.00
C
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ATOM    367 1HD1 LEU    24      19.368  27.161  26.051  1.00  0.00
H
ATOM    368 2HD1 LEU    24      20.629  27.387  24.818  1.00  0.00
H
ATOM    369 3HD1 LEU    24      19.018  26.785  24.363  1.00  0.00
H
ATOM    370  CD2 LEU    24      19.690  29.807  25.849  1.00  0.00
C
ATOM    371 1HD2 LEU    24      19.391  29.480  26.843  1.00  0.00
H
ATOM    372 2HD2 LEU    24      19.345  30.831  25.702  1.00  0.00
H
ATOM    373 3HD2 LEU    24      20.773  29.787  25.777  1.00  0.00
H
ATOM    374  N   SER    25      16.646  30.042  22.192  1.00  0.00
N
ATOM    375  H   SER    25      17.241  30.795  21.856  1.00  0.00
H
ATOM    376  CA  SER    25      15.233  30.294  22.424  1.00  0.00
C
ATOM    377  HA  SER    25      14.995  29.996  23.443  1.00  0.00
H
ATOM    378  C   SER    25      14.364  29.457  21.500  1.00  0.00
C
ATOM    379  O   SER    25      13.325  28.990  21.940  1.00  0.00
O
ATOM    380  CB  SER    25      14.903  31.778  22.278  1.00  0.00
C
ATOM    381 1HB  SER    25      13.823  31.911  22.338  1.00  0.00
H
ATOM    382 2HB  SER    25      15.375  32.329  23.091  1.00  0.00
H
ATOM    383  OG  SER    25      15.385  32.288  21.049  1.00  0.00
O
ATOM    384  HG  SER    25      16.325  32.491  21.162  1.00  0.00
H
ATOM    385  N   SER    26      14.778  29.197  20.264  1.00  0.00
N
ATOM    386  H   SER    26      15.655  29.576  19.927  1.00  0.00
H
ATOM    387  CA  SER    26      13.934  28.405  19.363  1.00  0.00
C
ATOM    388  HA  SER    26      12.978  28.919  19.270  1.00  0.00
H
ATOM    389  C   SER    26      13.649  27.012  19.923  1.00  0.00
C
ATOM    390  O   SER    26      12.514  26.534  19.900  1.00  0.00
O
ATOM    391  CB  SER    26      14.553  28.295  17.965  1.00  0.00
C
ATOM    392 1HB  SER    26      13.827  27.830  17.299  1.00  0.00
H
ATOM    393 2HB  SER    26      14.773  29.293  17.596  1.00  0.00
H
ATOM    394  OG  SER    26      15.743  27.525  17.942  1.00  0.00
O
ATOM    395  HG  SER    26      16.416  27.927  18.509  1.00  0.00
H
ATOM    396  N   TYR    27      14.656  26.370  20.493  1.00  0.00
N
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ATOM    397  H   TYR    27      15.583  26.780  20.490  1.00  0.00
H
ATOM    398  CA  TYR    27      14.455  25.055  21.087  1.00  0.00
C
ATOM    399  HA  TYR    27      13.709  24.512  20.506  1.00  0.00
H
ATOM    400  C   TYR    27      13.943  25.128  22.518  1.00  0.00
C
ATOM    401  O   TYR    27      13.226  24.236  22.957  1.00  0.00
O
ATOM    402  CB  TYR    27      15.745  24.253  21.021  1.00  0.00
C
ATOM    403 1HB  TYR    27      16.583  24.906  21.261  1.00  0.00
H
ATOM    404 2HB  TYR    27      15.704  23.459  21.765  1.00  0.00
H
ATOM    405  CG  TYR    27      15.958  23.610  19.663  1.00  0.00
C
ATOM    406  CD1 TYR    27      16.472  24.345  18.572  1.00  0.00
C
ATOM    407  HD1 TYR    27      16.697  25.396  18.690  1.00  0.00
H
ATOM    408  CD2 TYR    27      15.675  22.242  19.472  1.00  0.00
C
ATOM    409  HD2 TYR    27      15.271  21.653  20.284  1.00  0.00
H
ATOM    410  CE1 TYR    27      16.742  23.713  17.329  1.00  0.00
C
ATOM    411  HE1 TYR    27      17.162  24.280  16.510  1.00  0.00
H
ATOM    412  CE2 TYR    27      15.940  21.613  18.229  1.00  0.00
C
ATOM    413  HE2 TYR    27      15.740  20.562  18.094  1.00  0.00
H
ATOM    414  CZ  TYR    27      16.475  22.351  17.178  1.00  0.00
C
ATOM    415  OH  TYR    27      16.719  21.717  15.991  1.00  0.00
O
ATOM    416  HH  TYR    27      17.119  22.307  15.335  1.00  0.00
H
ATOM    417  N   ASN    28      14.231  26.187  23.258  1.00  0.00
N
ATOM    418  H   ASN    28      14.879  26.892  22.913  1.00  0.00
H
ATOM    419  CA  ASN    28      13.651  26.331  24.596  1.00  0.00
C
ATOM    420  HA  ASN    28      13.777  25.393  25.130  1.00  0.00
H
ATOM    421  C   ASN    28      12.151  26.604  24.551  1.00  0.00
C
ATOM    422  O   ASN    28      11.427  26.206  25.462  1.00  0.00
O
ATOM    423  CB  ASN    28      14.360  27.410  25.403  1.00  0.00
C
ATOM    424 1HB  ASN    28      14.508  28.289  24.781  1.00  0.00
H
ATOM    425 2HB  ASN    28      13.722  27.682  26.242  1.00  0.00
H
ATOM    426  CG  ASN    28      15.687  26.944  25.961  1.00  0.00
C
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ATOM    427  OD1 ASN    28      16.164  25.855  25.675  1.00  0.00
O
ATOM    428  ND2 ASN    28      16.273  27.745  26.805  1.00  0.00
N
ATOM    429 1HD2 ASN    28      17.151  27.456  27.199  1.00  0.00
H
ATOM    430 2HD2 ASN    28      15.853  28.625  27.039  1.00  0.00
H
ATOM    431  N   LYS    29      11.652  27.160  23.454  1.00  0.00
N
ATOM    432  H   LYS    29      12.278  27.572  22.764  1.00  0.00
H
ATOM    433  CA  LYS    29      10.206  27.200  23.222  1.00  0.00
C
ATOM    434  HA  LYS    29       9.715  27.655  24.084  1.00  0.00
H
ATOM    435  C   LYS    29       9.642  25.798  23.062  1.00  0.00
C
ATOM    436  O   LYS    29       8.576  25.508  23.590  1.00  0.00
O
ATOM    437  CB  LYS    29       9.878  28.018  21.978  1.00  0.00
C
ATOM    438 1HB  LYS    29      10.497  27.666  21.154  1.00  0.00
H
ATOM    439 2HB  LYS    29       8.833  27.851  21.717  1.00  0.00
H
ATOM    440  CG  LYS    29      10.085  29.508  22.157  1.00  0.00
C
ATOM    441 1HG  LYS    29       9.406  29.876  22.922  1.00  0.00
H
ATOM    442 2HG  LYS    29      11.104  29.712  22.472  1.00  0.00
H
ATOM    443  CD  LYS    29       9.818  30.211  20.851  1.00  0.00
C
ATOM    444 1HD  LYS    29      10.443  29.766  20.075  1.00  0.00
H
ATOM    445 2HD  LYS    29       8.770  30.066  20.587  1.00  0.00
H
ATOM    446  CE  LYS    29      10.113  31.696  20.919  1.00  0.00
C
ATOM    447 1HE  LYS    29       9.501  32.159  21.696  1.00  0.00
H
ATOM    448 2HE  LYS    29      11.169  31.854  21.145  1.00  0.00
H
ATOM    449  NZ  LYS    29       9.779  32.286  19.584  1.00  0.00
N
ATOM    450 1HZ  LYS    29       9.941  33.284  19.590  1.00  0.00
H
ATOM    451 2HZ  LYS    29       8.803  32.112  19.370  1.00  0.00
H
ATOM    452 3HZ  LYS    29      10.355  31.862  18.868  1.00  0.00
H
ATOM    453  N   LYS    30      10.371  24.893  22.420  1.00  0.00
N
ATOM    454  H   LYS    30      11.245  25.169  21.996  1.00  0.00
H
ATOM    455  CA  LYS    30       9.935  23.491  22.330  1.00  0.00
C
ATOM    456  HA  LYS    30       8.893  23.470  22.005  1.00  0.00
H
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ATOM    457  C   LYS    30      10.006  22.800  23.686  1.00  0.00
C
ATOM    458  O   LYS    30       9.145  21.986  24.010  1.00  0.00
O
ATOM    459  CB  LYS    30      10.769  22.695  21.327  1.00  0.00
C
ATOM    460 1HB  LYS    30      11.812  22.710  21.627  1.00  0.00
H
ATOM    461 2HB  LYS    30      10.427  21.661  21.353  1.00  0.00
H
ATOM    462  CG  LYS    30      10.669  23.193  19.904  1.00  0.00
C
ATOM    463 1HG  LYS    30       9.619  23.215  19.612  1.00  0.00
H
ATOM    464 2HG  LYS    30      11.085  24.196  19.832  1.00  0.00
H
ATOM    465  CD  LYS    30      11.420  22.267  18.970  1.00  0.00
C
ATOM    466 1HD  LYS    30      12.482  22.266  19.220  1.00  0.00
H
ATOM    467 2HD  LYS    30      11.025  21.261  19.090  1.00  0.00
H
ATOM    468  CE  LYS    30      11.223  22.700  17.531  1.00  0.00
C
ATOM    469 1HE  LYS    30      10.154  22.795  17.338  1.00  0.00
H
ATOM    470 2HE  LYS    30      11.695  23.671  17.374  1.00  0.00
H
ATOM    471  NZ  LYS    30      11.797  21.700  16.583  1.00  0.00
N
ATOM    472 1HZ  LYS    30      11.550  21.945  15.631  1.00  0.00
H
ATOM    473 2HZ  LYS    30      11.438  20.776  16.791  1.00  0.00
H
ATOM    474 3HZ  LYS    30      12.805  21.684  16.660  1.00  0.00
H
ATOM    475  N   HIS    31      10.968  23.184  24.513  1.00  0.00
N
ATOM    476  H   HIS    31      11.678  23.824  24.181  1.00  0.00
H
ATOM    477  CA  HIS    31      11.028  22.715  25.902  1.00  0.00
C
ATOM    478  HA  HIS    31      10.895  21.633  25.912  1.00  0.00
H
ATOM    479  C   HIS    31       9.906  23.332  26.748  1.00  0.00
C
ATOM    480  O   HIS    31       9.671  22.908  27.877  1.00  0.00
O
ATOM    481  CB  HIS    31      12.376  23.046  26.557  1.00  0.00
C
ATOM    482 1HB  HIS    31      12.541  24.120  26.519  1.00  0.00
H
ATOM    483 2HB  HIS    31      12.326  22.750  27.605  1.00  0.00
H
ATOM    484  CG  HIS    31      13.552  22.349  25.940  1.00  0.00
C
ATOM    485  ND1 HIS    31      13.763  20.993  25.993  1.00  0.00
N
ATOM    486  HD1 HIS    31      13.123  20.303  26.379  1.00  0.00
H
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ATOM    487  CD2 HIS    31      14.660  22.848  25.330  1.00  0.00
C
ATOM    488  HD2 HIS    31      14.845  23.895  25.147  1.00  0.00
H
ATOM    489  CE1 HIS    31      14.950  20.730  25.440  1.00  0.00
C
ATOM    490  HE1 HIS    31      15.380  19.739  25.356  1.00  0.00
H
ATOM    491  NE2 HIS    31      15.526  21.831  24.994  1.00  0.00
N
ATOM    492  N   GLY    32       9.187  24.306  26.202  1.00  0.00
N
ATOM    493  H   GLY    32       9.431  24.657  25.286  1.00  0.00
H
ATOM    494  CA  GLY    32       8.017  24.872  26.851  1.00  0.00
C
ATOM    495 1HA  GLY    32       7.357  25.273  26.082  1.00  0.00
H
ATOM    496 2HA  GLY    32       7.485  24.081  27.379  1.00  0.00
H
ATOM    497  C   GLY    32       8.321  25.984  27.833  1.00  0.00
C
ATOM    498  O   GLY    32       7.493  26.287  28.693  1.00  0.00
O
ATOM    499  N   LEU    33       9.505  26.573  27.748  1.00  0.00
N
ATOM    500  H   LEU    33      10.153  26.320  27.009  1.00  0.00
H
ATOM    501  CA  LEU    33       9.901  27.588  28.720  1.00  0.00
C
ATOM    502  HA  LEU    33       9.515  27.304  29.699  1.00  0.00
H
ATOM    503  C   LEU    33       9.384  28.978  28.399  1.00  0.00
C
ATOM    504  O   LEU    33       9.290  29.375  27.234  1.00  0.00
O
ATOM    505  CB  LEU    33      11.421  27.701  28.815  1.00  0.00
C
ATOM    506 1HB  LEU    33      11.798  28.031  27.847  1.00  0.00
H
ATOM    507 2HB  LEU    33      11.631  28.494  29.532  1.00  0.00
H
ATOM    508  CG  LEU    33      12.236  26.478  29.247  1.00  0.00
C
ATOM    509  HG  LEU    33      12.242  25.750  28.436  1.00  0.00
H
ATOM    510  CD1 LEU    33      13.652  26.979  29.476  1.00  0.00
C
ATOM    511 1HD1 LEU    33      14.266  26.165  29.847  1.00  0.00
H
ATOM    512 2HD1 LEU    33      13.654  27.762  30.236  1.00  0.00
H
ATOM    513 3HD1 LEU    33      14.075  27.359  28.551  1.00  0.00
H
ATOM    514  CD2 LEU    33      11.722  25.789  30.511  1.00  0.00
C
ATOM    515 1HD2 LEU    33      12.398  24.982  30.789  1.00  0.00
H
ATOM    516 2HD2 LEU    33      10.734  25.365  30.331  1.00  0.00
H
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ATOM    517 3HD2 LEU    33      11.666  26.505  31.333  1.00  0.00
H
ATOM    518  N   GLN    34       9.138  29.732  29.457  1.00  0.00
N
ATOM    519  H   GLN    34       9.218  29.315  30.382  1.00  0.00
H
ATOM    520  CA  GLN    34       8.846  31.157  29.378  1.00  0.00
C
ATOM    521  HA  GLN    34       7.973  31.330  28.748  1.00  0.00
H
ATOM    522  C   GLN    34      10.072  31.850  28.778  1.00  0.00
C
ATOM    523  O   GLN    34      11.200  31.516  29.137  1.00  0.00
O
ATOM    524  CB  GLN    34       8.584  31.658  30.803  1.00  0.00
C
ATOM    525 1HB  GLN    34       7.820  31.024  31.253  1.00  0.00
H
ATOM    526 2HB  GLN    34       9.502  31.550  31.375  1.00  0.00
H
ATOM    527  CG  GLN    34       8.133  33.093  30.903  1.00  0.00
C
ATOM    528 1HG  GLN    34       8.880  33.734  30.440  1.00  0.00
H
ATOM    529 2HG  GLN    34       7.198  33.201  30.361  1.00  0.00
H
ATOM    530  CD  GLN    34       7.925  33.561  32.327  1.00  0.00
C
ATOM    531  OE1 GLN    34       7.983  32.794  33.285  1.00  0.00
O
ATOM    532  NE2 GLN    34       7.685  34.834  32.476  1.00  0.00
N
ATOM    533 1HE2 GLN    34       7.554  35.207  33.400  1.00  0.00
H
ATOM    534 2HE2 GLN    34       7.643  35.431  31.663  1.00  0.00
H
ATOM    535  N   ASP    35       9.869  32.814  27.887  1.00  0.00
N
ATOM    536  H   ASP    35       8.913  33.077  27.650  1.00  0.00
H
ATOM    537  CA  ASP    35      10.965  33.475  27.161  1.00  0.00
C
ATOM    538  HA  ASP    35      11.562  32.704  26.674  1.00  0.00
H
ATOM    539  C   ASP    35      11.940  34.294  28.007  1.00  0.00
C
ATOM    540  O   ASP    35      12.993  34.726  27.521  1.00  0.00
O
ATOM    541  CB  ASP    35      10.406  34.406  26.082  1.00  0.00
C
ATOM    542 1HB  ASP    35       9.586  34.987  26.502  1.00  0.00
H
ATOM    543 2HB  ASP    35      11.190  35.094  25.769  1.00  0.00
H
ATOM    544  CG  ASP    35       9.933  33.668  24.846  1.00  0.00
C
ATOM    545  OD1 ASP    35      10.387  32.533  24.567  1.00  0.00
O
ATOM    546  OD2 ASP    35       9.137  34.256  24.086  1.00  0.00
O
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ATOM    547  N   SER    36      11.654  34.477  29.284  1.00  0.00
N
ATOM    548  H   SER    36      10.779  34.151  29.666  1.00  0.00
H
ATOM    549  CA  SER    36      12.634  35.068  30.183  1.00  0.00
C
ATOM    550  HA  SER    36      13.042  35.977  29.744  1.00  0.00
H
ATOM    551  C   SER    36      13.781  34.086  30.428  1.00  0.00
C
ATOM    552  O   SER    36      14.944  34.469  30.513  1.00  0.00
O
ATOM    553  CB  SER    36      11.948  35.408  31.500  1.00  0.00
C
ATOM    554 1HB  SER    36      12.695  35.724  32.228  1.00  0.00
H
ATOM    555 2HB  SER    36      11.242  36.223  31.332  1.00  0.00
H
ATOM    556  OG  SER    36      11.234  34.279  31.982  1.00  0.00
O
ATOM    557  HG  SER    36      10.842  34.513  32.839  1.00  0.00
H
ATOM    558  N   PHE    37      13.493  32.797  30.518  1.00  0.00
N
ATOM    559  H   PHE    37      12.543  32.471  30.367  1.00  0.00
H
ATOM    560  CA  PHE    37      14.538  31.842  30.876  1.00  0.00
C
ATOM    561  HA  PHE    37      15.032  32.271  31.745  1.00  0.00
H
ATOM    562  C   PHE    37      15.667  31.583  29.880  1.00  0.00
C
ATOM    563  O   PHE    37      16.810  31.504  30.329  1.00  0.00
O
ATOM    564  CB  PHE    37      13.933  30.528  31.349  1.00  0.00
C
ATOM    565 1HB  PHE    37      13.304  30.115  30.562  1.00  0.00
H
ATOM    566 2HB  PHE    37      14.744  29.830  31.549  1.00  0.00
H
ATOM    567  CG  PHE    37      13.135  30.678  32.606  1.00  0.00
C
ATOM    568  CD1 PHE    37      11.751  30.461  32.598  1.00  0.00
C
ATOM    569  HD1 PHE    37      11.260  30.151  31.686  1.00  0.00
H
ATOM    570  CD2 PHE    37      13.765  31.068  33.806  1.00  0.00
C
ATOM    571  HD2 PHE    37      14.833  31.235  33.826  1.00  0.00
H
ATOM    572  CE1 PHE    37      10.984  30.653  33.768  1.00  0.00
C
ATOM    573  HE1 PHE    37       9.916  30.501  33.739  1.00  0.00
H
ATOM    574  CE2 PHE    37      13.012  31.251  34.991  1.00  0.00
C
ATOM    575  HE2 PHE    37      13.500  31.554  35.905  1.00  0.00
H
ATOM    576  CZ  PHE    37      11.615  31.050  34.970  1.00  0.00
C
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ATOM    577  HZ  PHE    37      11.032  31.199  35.867  1.00  0.00
H
ATOM    578  N   PRO    38      15.421  31.512  28.551  1.00  0.00
N
ATOM    579  CA  PRO    38      16.617  31.433  27.698  1.00  0.00
C
ATOM    580  HA  PRO    38      17.140  30.492  27.869  1.00  0.00
H
ATOM    581  C   PRO    38      17.580  32.600  27.887  1.00  0.00
C
ATOM    582  O   PRO    38      18.796  32.430  27.849  1.00  0.00
O
ATOM    583  CB  PRO    38      16.039  31.489  26.278  1.00  0.00
C
ATOM    584 1HB  PRO    38      16.028  32.518  25.918  1.00  0.00
H
ATOM    585 2HB  PRO    38      16.610  30.858  25.597  1.00  0.00
H
ATOM    586  CG  PRO    38      14.670  30.999  26.418  1.00  0.00
C
ATOM    587 1HG  PRO    38      14.040  31.361  25.605  1.00  0.00
H
ATOM    588 2HG  PRO    38      14.671  29.917  26.443  1.00  0.00
H
ATOM    589  CD  PRO    38      14.200  31.513  27.726  1.00  0.00
C
ATOM    590 1HD  PRO    38      13.822  32.524  27.620  1.00  0.00
H
ATOM    591 2HD  PRO    38      13.439  30.853  28.144  1.00  0.00
H
ATOM    592  N   GLU    39      17.036  33.781  28.138  1.00  0.00
N
ATOM    593  H   GLU    39      16.030  33.883  28.175  1.00  0.00
H
ATOM    594  CA  GLU    39      17.861  34.955  28.372  1.00  0.00
C
ATOM    595  HA  GLU    39      18.577  35.055  27.556  1.00  0.00
H
ATOM    596  C   GLU    39      18.633  34.802  29.679  1.00  0.00
C
ATOM    597  O   GLU    39      19.835  35.037  29.719  1.00  0.00
O
ATOM    598  CB  GLU    39      16.965  36.189  28.413  1.00  0.00
C
ATOM    599 1HB  GLU    39      16.312  36.168  27.540  1.00  0.00
H
ATOM    600 2HB  GLU    39      16.347  36.138  29.304  1.00  0.00
H
ATOM    601  CG  GLU    39      17.699  37.503  28.432  1.00  0.00
C
ATOM    602 1HG  GLU    39      18.457  37.482  29.215  1.00  0.00
H
ATOM    603 2HG  GLU    39      18.190  37.656  27.469  1.00  0.00
H
ATOM    604  CD  GLU    39      16.743  38.644  28.709  1.00  0.00
C
ATOM    605  OE1 GLU    39      15.606  38.643  28.179  1.00  0.00
O
ATOM    606  OE2 GLU    39      17.105  39.561  29.478  1.00  0.00
O
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ATOM    607  N   THR    40      17.985  34.340  30.740  1.00  0.00
N
ATOM    608  H   THR    40      16.985  34.164  30.692  1.00  0.00
H
ATOM    609  CA  THR    40      18.703  34.142  32.002  1.00  0.00
C
ATOM    610  HA  THR    40      19.211  35.076  32.244  1.00  0.00
H
ATOM    611  C   THR    40      19.773  33.064  31.878  1.00  0.00
C
ATOM    612  O   THR    40      20.836  33.184  32.469  1.00  0.00
O
ATOM    613  CB  THR    40      17.783  33.789  33.193  1.00  0.00
C
ATOM    614  HB  THR    40      18.397  33.686  34.088  1.00  0.00
H
ATOM    615  OG1 THR    40      17.106  32.549  32.966  1.00  0.00
O
ATOM    616  HG1 THR    40      17.026  32.405  32.017  1.00  0.00
H
ATOM    617  CG2 THR    40      16.740  34.866  33.442  1.00  0.00
C
ATOM    618 1HG2 THR    40      16.072  34.544  34.239  1.00  0.00
H
ATOM    619 2HG2 THR    40      16.150  35.056  32.551  1.00  0.00
H
ATOM    620 3HG2 THR    40      17.231  35.792  33.743  1.00  0.00
H
ATOM    621  N   PHE    41      19.556  32.032  31.073  1.00  0.00
N
ATOM    622  H   PHE    41      18.666  31.934  30.592  1.00  0.00
H
ATOM    623  CA  PHE    41      20.592  31.022  30.885  1.00  0.00
C
ATOM    624  HA  PHE    41      20.995  30.768  31.863  1.00  0.00
H
ATOM    625  C   PHE    41      21.757  31.553  30.074  1.00  0.00
C
ATOM    626  O   PHE    41      22.895  31.201  30.365  1.00  0.00
O
ATOM    627  CB  PHE    41      20.034  29.745  30.259  1.00  0.00
C
ATOM    628 1HB  PHE    41      19.552  29.990  29.313  1.00  0.00
H
ATOM    629 2HB  PHE    41      20.865  29.069  30.061  1.00  0.00
H
ATOM    630  CG  PHE    41      19.054  29.037  31.150  1.00  0.00
C
ATOM    631  CD1 PHE    41      17.799  28.636  30.664  1.00  0.00
C
ATOM    632  HD1 PHE    41      17.540  28.803  29.629  1.00  0.00
H
ATOM    633  CD2 PHE    41      19.371  28.796  32.501  1.00  0.00
C
ATOM    634  HD2 PHE    41      20.341  29.066  32.888  1.00  0.00
H
ATOM    635  CE1 PHE    41      16.856  28.031  31.528  1.00  0.00
C
ATOM    636  HE1 PHE    41      15.890  27.730  31.154  1.00  0.00
H
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ATOM    637  CE2 PHE    41      18.428  28.221  33.369  1.00  0.00
C
ATOM    638  HE2 PHE    41      18.667  28.080  34.408  1.00  0.00
H
ATOM    639  CZ  PHE    41      17.175  27.830  32.884  1.00  0.00
C
ATOM    640  HZ  PHE    41      16.461  27.369  33.547  1.00  0.00
H
ATOM    641  N   LEU    42      21.517  32.458  29.136  1.00  0.00
N
ATOM    642  H   LEU    42      20.564  32.703  28.881  1.00  0.00
H
ATOM    643  CA  LEU    42      22.638  33.139  28.497  1.00  0.00
C
ATOM    644  HA  LEU    42      23.325  32.393  28.099  1.00  0.00
H
ATOM    645  C   LEU    42      23.385  33.951  29.547  1.00  0.00
C
ATOM    646  O   LEU    42      24.593  33.844  29.661  1.00  0.00
O
ATOM    647  CB  LEU    42      22.181  34.071  27.368  1.00  0.00
C
ATOM    648 1HB  LEU    42      21.682  33.478  26.602  1.00  0.00
H
ATOM    649 2HB  LEU    42      21.457  34.771  27.778  1.00  0.00
H
ATOM    650  CG  LEU    42      23.302  34.902  26.717  1.00  0.00
C
ATOM    651  HG  LEU    42      23.814  35.465  27.496  1.00  0.00
H
ATOM    652  CD1 LEU    42      24.336  34.046  25.994  1.00  0.00
C
ATOM    653 1HD1 LEU    42      25.134  34.680  25.620  1.00  0.00
H
ATOM    654 2HD1 LEU    42      23.878  33.514  25.160  1.00  0.00
H
ATOM    655 3HD1 LEU    42      24.785  33.328  26.681  1.00  0.00
H
ATOM    656  CD2 LEU    42      22.703  35.910  25.755  1.00  0.00
C
ATOM    657 1HD2 LEU    42      23.486  36.556  25.363  1.00  0.00
H
ATOM    658 2HD2 LEU    42      21.970  36.530  26.270  1.00  0.00
H
ATOM    659 3HD2 LEU    42      22.224  35.394  24.927  1.00  0.00
H
ATOM    660  N   ARG    43      22.696  34.749  30.349  1.00  0.00
N
ATOM    661  H   ARG    43      21.680  34.796  30.269  1.00  0.00
H
ATOM    662  CA  ARG    43      23.404  35.619  31.295  1.00  0.00
C
ATOM    663  HA  ARG    43      24.208  36.117  30.752  1.00  0.00
H
ATOM    664  C   ARG    43      24.099  34.853  32.418  1.00  0.00
C
ATOM    665  O   ARG    43      25.118  35.303  32.936  1.00  0.00
O
ATOM    666  CB  ARG    43      22.461  36.702  31.832  1.00  0.00
C
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ATOM    667 1HB  ARG    43      21.662  36.225  32.399  1.00  0.00
H
ATOM    668 2HB  ARG    43      23.028  37.340  32.510  1.00  0.00
H
ATOM    669  CG  ARG    43      21.826  37.590  30.740  1.00  0.00
C
ATOM    670 1HG  ARG    43      21.191  36.981  30.107  1.00  0.00
H
ATOM    671 2HG  ARG    43      21.194  38.338  31.218  1.00  0.00
H
ATOM    672  CD  ARG    43      22.838  38.296  29.837  1.00  0.00
C
ATOM    673 1HD  ARG    43      23.514  38.894  30.450  1.00  0.00
H
ATOM    674 2HD  ARG    43      23.415  37.548  29.293  1.00  0.00
H
ATOM    675  NE  ARG    43      22.160  39.166  28.868  1.00  0.00
N
ATOM    676  HE  ARG    43      21.184  39.384  29.044  1.00  0.00
H
ATOM    677  CZ  ARG    43      22.690  39.713  27.784  1.00  0.00
C
ATOM    678  NH1 ARG    43      23.917  39.526  27.373  1.00  0.00
N
ATOM    679 1HH1 ARG    43      24.553  38.950  27.908  1.00  0.00
H
ATOM    680 2HH1 ARG    43      24.225  39.963  26.523  1.00  0.00
H
ATOM    681  NH2 ARG    43      21.928  40.474  27.064  1.00  0.00
N
ATOM    682 1HH2 ARG    43      20.975  40.634  27.359  1.00  0.00
H
ATOM    683 2HH2 ARG    43      22.286  40.908  26.226  1.00  0.00
H
ATOM    684  N   ARG    44      23.613  33.666  32.752  1.00  0.00
N
ATOM    685  H   ARG    44      22.713  33.381  32.375  1.00  0.00
H
ATOM    686  CA  ARG    44      24.349  32.751  33.632  1.00  0.00
C
ATOM    687  HA  ARG    44      24.705  33.297  34.506  1.00  0.00
H
ATOM    688  C   ARG    44      25.569  32.120  32.973  1.00  0.00
C
ATOM    689  O   ARG    44      26.614  32.021  33.608  1.00  0.00
O
ATOM    690  CB  ARG    44      23.455  31.596  34.092  1.00  0.00
C
ATOM    691 1HB  ARG    44      22.950  31.180  33.221  1.00  0.00
H
ATOM    692 2HB  ARG    44      24.109  30.828  34.504  1.00  0.00
H
ATOM    693  CG  ARG    44      22.413  31.950  35.154  1.00  0.00
C
ATOM    694 1HG  ARG    44      22.926  32.200  36.082  1.00  0.00
H
ATOM    695 2HG  ARG    44      21.830  32.809  34.829  1.00  0.00
H
ATOM    696  CD  ARG    44      21.474  30.769  35.395  1.00  0.00
C
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ATOM    697 1HD  ARG    44      20.742  31.031  36.161  1.00  0.00
H
ATOM    698 2HD  ARG    44      20.947  30.549  34.466  1.00  0.00
H
ATOM    699  NE  ARG    44      22.241  29.580  35.802  1.00  0.00
N
ATOM    700  HE  ARG    44      22.590  28.998  35.058  1.00  0.00
H
ATOM    701  CZ  ARG    44      22.566  29.232  37.038  1.00  0.00
C
ATOM    702  NH1 ARG    44      22.044  29.759  38.104  1.00  0.00
N
ATOM    703 1HH1 ARG    44      21.212  30.330  38.035  1.00  0.00
H
ATOM    704 2HH1 ARG    44      22.455  29.579  39.006  1.00  0.00
H
ATOM    705  NH2 ARG    44      23.469  28.315  37.223  1.00  0.00
N
ATOM    706 1HH2 ARG    44      23.911  27.854  36.445  1.00  0.00
H
ATOM    707 2HH2 ARG    44      23.706  28.050  38.169  1.00  0.00
H
ATOM    708  N   PHE    45      25.437  31.628  31.750  1.00  0.00
N
ATOM    709  H   PHE    45      24.580  31.784  31.227  1.00  0.00
H
ATOM    710  CA  PHE    45      26.451  30.742  31.173  1.00  0.00
C
ATOM    711  HA  PHE    45      27.161  30.500  31.960  1.00  0.00
H
ATOM    712  C   PHE    45      27.297  31.308  30.041  1.00  0.00
C
ATOM    713  O   PHE    45      28.207  30.645  29.554  1.00  0.00
O
ATOM    714  CB  PHE    45      25.797  29.423  30.762  1.00  0.00
C
ATOM    715 1HB  PHE    45      25.091  29.607  29.952  1.00  0.00
H
ATOM    716 2HB  PHE    45      26.571  28.750  30.396  1.00  0.00
H
ATOM    717  CG  PHE    45      25.086  28.738  31.898  1.00  0.00
C
ATOM    718  CD1 PHE    45      25.779  28.431  33.085  1.00  0.00
C
ATOM    719  HD1 PHE    45      26.816  28.704  33.190  1.00  0.00
H
ATOM    720  CD2 PHE    45      23.724  28.408  31.801  1.00  0.00
C
ATOM    721  HD2 PHE    45      23.173  28.658  30.906  1.00  0.00
H
ATOM    722  CE1 PHE    45      25.142  27.759  34.144  1.00  0.00
C
ATOM    723  HE1 PHE    45      25.697  27.515  35.037  1.00  0.00
H
ATOM    724  CE2 PHE    45      23.072  27.727  32.856  1.00  0.00
C
ATOM    725  HE2 PHE    45      22.032  27.452  32.760  1.00  0.00
H
ATOM    726  CZ  PHE    45      23.795  27.371  34.014  1.00  0.00
C
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ATOM    727  HZ  PHE    45      23.324  26.790  34.793  1.00  0.00
H
ATOM    728  N   ASP    46      27.081  32.568  29.707  1.00  0.00
N
ATOM    729  H   ASP    46      26.219  33.028  29.986  1.00  0.00
H
ATOM    730  CA  ASP    46      28.077  33.367  29.000  1.00  0.00
C
ATOM    731  HA  ASP    46      28.434  32.832  28.118  1.00  0.00
H
ATOM    732  C   ASP    46      29.237  33.584  29.968  1.00  0.00
C
ATOM    733  O   ASP    46      29.214  34.474  30.830  1.00  0.00
O
ATOM    734  CB  ASP    46      27.469  34.705  28.571  1.00  0.00
C
ATOM    735 1HB  ASP    46      26.616  34.505  27.925  1.00  0.00
H
ATOM    736 2HB  ASP    46      27.111  35.236  29.453  1.00  0.00
H
ATOM    737  CG  ASP    46      28.441  35.600  27.825  1.00  0.00
C
ATOM    738  OD1 ASP    46      29.683  35.469  27.908  1.00  0.00
O
ATOM    739  OD2 ASP    46      27.931  36.523  27.159  1.00  0.00
O
ATOM    740  N   ALA    47      30.234  32.725  29.841  1.00  0.00
N
ATOM    741  H   ALA    47      30.126  31.960  29.188  1.00  0.00
H
ATOM    742  CA  ALA    47      31.496  32.844  30.551  1.00  0.00
C
ATOM    743  HA  ALA    47      31.451  33.641  31.290  1.00  0.00
H
ATOM    744  C   ALA    47      32.511  33.210  29.472  1.00  0.00
C
ATOM    745  O   ALA    47      32.987  32.339  28.743  1.00  0.00
O
ATOM    746  CB  ALA    47      31.851  31.535  31.257  1.00  0.00
C
ATOM    747 1HB  ALA    47      31.121  31.341  32.043  1.00  0.00
H
ATOM    748 2HB  ALA    47      32.842  31.621  31.704  1.00  0.00
H
ATOM    749 3HB  ALA    47      31.849  30.711  30.546  1.00  0.00
H
ATOM    750  N   GLU    48      32.806  34.500  29.383  1.00  0.00
N
ATOM    751  H   GLU    48      32.342  35.142  30.021  1.00  0.00
H
ATOM    752  CA  GLU    48      33.791  35.061  28.450  1.00  0.00
C
ATOM    753  HA  GLU    48      33.808  36.138  28.607  1.00  0.00
H
ATOM    754  C   GLU    48      33.436  34.833  26.972  1.00  0.00
C
ATOM    755  O   GLU    48      34.324  34.645  26.136  1.00  0.00
O
ATOM    756  CB  GLU    48      35.203  34.535  28.779  1.00  0.00
C
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ATOM    757 1HB  GLU    48      35.232  33.466  28.576  1.00  0.00
H
ATOM    758 2HB  GLU    48      35.924  35.024  28.125  1.00  0.00
H
ATOM    759  CG  GLU    48      35.632  34.761  30.235  1.00  0.00
C
ATOM    760 1HG  GLU    48      35.639  35.832  30.439  1.00  0.00
H
ATOM    761 2HG  GLU    48      34.911  34.287  30.902  1.00  0.00
H
ATOM    762  CD  GLU    48      37.003  34.182  30.548  1.00  0.00
C
ATOM    763  OE1 GLU    48      37.643  33.558  29.674  1.00  0.00
O
ATOM    764  OE2 GLU    48      37.467  34.332  31.705  1.00  0.00
O
ATOM    765  N   LYS    49      32.150  34.833  26.631  1.00  0.00
N
ATOM    766  H   LYS    49      31.440  35.005  27.347  1.00  0.00
H
ATOM    767  CA  LYS    49      31.694  34.566  25.257  1.00  0.00
C
ATOM    768  HA  LYS    49      32.569  34.551  24.615  1.00  0.00
H
ATOM    769  C   LYS    49      30.780  35.588  24.587  1.00  0.00
C
ATOM    770  O   LYS    49      30.371  35.384  23.445  1.00  0.00
O
ATOM    771  CB  LYS    49      31.043  33.179  25.192  1.00  0.00
C
ATOM    772 1HB  LYS    49      30.350  33.078  26.028  1.00  0.00
H
ATOM    773 2HB  LYS    49      30.459  33.109  24.279  1.00  0.00
H
ATOM    774  CG  LYS    49      32.014  31.995  25.206  1.00  0.00
C
ATOM    775 1HG  LYS    49      32.551  31.996  26.152  1.00  0.00
H
ATOM    776 2HG  LYS    49      31.429  31.081  25.144  1.00  0.00
H
ATOM    777  CD  LYS    49      33.049  31.995  24.066  1.00  0.00
C
ATOM    778 1HD  LYS    49      33.678  32.878  24.160  1.00  0.00
H
ATOM    779 2HD  LYS    49      33.692  31.122  24.178  1.00  0.00
H
ATOM    780  CE  LYS    49      32.443  31.988  22.664  1.00  0.00
C
ATOM    781 1HE  LYS    49      31.947  31.034  22.481  1.00  0.00
H
ATOM    782 2HE  LYS    49      31.718  32.798  22.571  1.00  0.00
H
ATOM    783  NZ  LYS    49      33.524  32.211  21.669  1.00  0.00
N
ATOM    784 1HZ  LYS    49      33.187  32.037  20.728  1.00  0.00
H
ATOM    785 2HZ  LYS    49      34.297  31.582  21.853  1.00  0.00
H
ATOM    786 3HZ  LYS    49      33.858  33.163  21.736  1.00  0.00
H
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ATOM    787  N   THR    50      30.538  36.722  25.227  1.00  0.00
N
ATOM    788  H   THR    50      30.863  36.817  26.182  1.00  0.00
H
ATOM    789  CA  THR    50      29.843  37.864  24.608  1.00  0.00
C
ATOM    790  HA  THR    50      29.518  38.513  25.421  1.00  0.00
H
ATOM    791  C   THR    50      28.579  37.548  23.789  1.00  0.00
C
ATOM    792  O   THR    50      28.451  37.931  22.621  1.00  0.00
O
ATOM    793  CB  THR    50      30.813  38.696  23.719  1.00  0.00
C
ATOM    794  HB  THR    50      30.272  39.538  23.289  1.00  0.00
H
ATOM    795  OG1 THR    50      31.357  37.883  22.673  1.00  0.00
O
ATOM    796  HG1 THR    50      30.919  37.022  22.712  1.00  0.00
H
ATOM    797  CG2 THR    50      31.998  39.227  24.497  1.00  0.00
C
ATOM    798 1HG2 THR    50      32.593  39.869  23.849  1.00  0.00
H
ATOM    799 2HG2 THR    50      32.620  38.401  24.838  1.00  0.00
H
ATOM    800 3HG2 THR    50      31.653  39.810  25.350  1.00  0.00
H
ATOM    801  N   GLY    51      27.626  36.864  24.401  1.00  0.00
N
ATOM    802  H   GLY    51      27.769  36.570  25.368  1.00  0.00
H
ATOM    803  CA  GLY    51      26.338  36.609  23.772  1.00  0.00
C
ATOM    804 1HA  GLY    51      25.579  36.709  24.545  1.00  0.00
H
ATOM    805 2HA  GLY    51      26.145  37.387  23.036  1.00  0.00
H
ATOM    806  C   GLY    51      26.106  35.269  23.098  1.00  0.00
C
ATOM    807  O   GLY    51      24.994  35.023  22.631  1.00  0.00
O
ATOM    808  N   VAL    52      27.094  34.386  23.060  1.00  0.00
N
ATOM    809  H   VAL    52      28.000  34.617  23.446  1.00  0.00
H
ATOM    810  CA  VAL    52      26.899  33.035  22.517  1.00  0.00
C
ATOM    811  HA  VAL    52      25.837  32.860  22.358  1.00  0.00
H
ATOM    812  C   VAL    52      27.367  32.023  23.552  1.00  0.00
C
ATOM    813  O   VAL    52      28.009  32.386  24.532  1.00  0.00
O
ATOM    814  CB  VAL    52      27.608  32.804  21.152  1.00  0.00
C
ATOM    815  HB  VAL    52      27.421  31.777  20.845  1.00  0.00
H
ATOM    816  CG1 VAL    52      27.025  33.722  20.075  1.00  0.00
C
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ATOM    817 1HG1 VAL    52      27.472  33.483  19.111  1.00  0.00
H
ATOM    818 2HG1 VAL    52      27.226  34.765  20.317  1.00  0.00
H
ATOM    819 3HG1 VAL    52      25.950  33.574  20.007  1.00  0.00
H
ATOM    820  CG2 VAL    52      29.115  33.001  21.254  1.00  0.00
C
ATOM    821 1HG2 VAL    52      29.575  32.741  20.302  1.00  0.00
H
ATOM    822 2HG2 VAL    52      29.522  32.351  22.026  1.00  0.00
H
ATOM    823 3HG2 VAL    52      29.349  34.039  21.490  1.00  0.00
H
ATOM    824  N   ILE    53      26.986  30.773  23.347  1.00  0.00
N
ATOM    825  H   ILE    53      26.447  30.563  22.512  1.00  0.00
H
ATOM    826  CA  ILE    53      27.159  29.689  24.308  1.00  0.00
C
ATOM    827  HA  ILE    53      27.706  30.045  25.179  1.00  0.00
H
ATOM    828  C   ILE    53      27.950  28.554  23.637  1.00  0.00
C
ATOM    829  O   ILE    53      27.546  28.061  22.588  1.00  0.00
O
ATOM    830  CB  ILE    53      25.727  29.223  24.745  1.00  0.00
C
ATOM    831  HB  ILE    53      25.187  28.903  23.853  1.00  0.00
H
ATOM    832  CG1 ILE    53      24.953  30.394  25.391  1.00  0.00
C
ATOM    833 1HG1 ILE    53      25.461  30.678  26.313  1.00  0.00
H
ATOM    834 2HG1 ILE    53      24.973  31.252  24.722  1.00  0.00
H
ATOM    835  CG2 ILE    53      25.768  28.049  25.715  1.00  0.00
C
ATOM    836 1HG2 ILE    53      24.769  27.636  25.845  1.00  0.00
H
ATOM    837 2HG2 ILE    53      26.151  28.376  26.681  1.00  0.00
H
ATOM    838 3HG2 ILE    53      26.405  27.262  25.316  1.00  0.00
H
ATOM    839  CD1 ILE    53      23.489  30.124  25.710  1.00  0.00
C
ATOM    840 1HD1 ILE    53      23.013  31.055  26.018  1.00  0.00
H
ATOM    841 2HD1 ILE    53      23.403  29.402  26.522  1.00  0.00
H
ATOM    842 3HD1 ILE    53      22.983  29.745  24.821  1.00  0.00
H
ATOM    843  N   THR    54      29.077  28.146  24.205  1.00  0.00
N
ATOM    844  H   THR    54      29.391  28.604  25.060  1.00  0.00
H
ATOM    845  CA  THR    54      29.875  27.020  23.687  1.00  0.00
C
ATOM    846  HA  THR    54      29.863  27.013  22.598  1.00  0.00
H
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ATOM    847  C   THR    54      29.320  25.695  24.206  1.00  0.00
C
ATOM    848  O   THR    54      28.406  25.685  25.022  1.00  0.00
O
ATOM    849  CB  THR    54      31.333  27.080  24.186  1.00  0.00
C
ATOM    850  HB  THR    54      31.870  26.191  23.859  1.00  0.00
H
ATOM    851  OG1 THR    54      31.327  27.133  25.611  1.00  0.00
O
ATOM    852  HG1 THR    54      32.206  26.896  25.935  1.00  0.00
H
ATOM    853  CG2 THR    54      32.061  28.300  23.681  1.00  0.00
C
ATOM    854 1HG2 THR    54      33.065  28.321  24.105  1.00  0.00
H
ATOM    855 2HG2 THR    54      31.528  29.198  23.984  1.00  0.00
H
ATOM    856 3HG2 THR    54      32.133  28.263  22.594  1.00  0.00
H
ATOM    857  N   LEU    55      29.876  24.569  23.775  1.00  0.00
N
ATOM    858  H   LEU    55      30.640  24.606  23.121  1.00  0.00
H
ATOM    859  CA  LEU    55      29.389  23.258  24.214  1.00  0.00
C
ATOM    860  HA  LEU    55      28.372  23.132  23.847  1.00  0.00
H
ATOM    861  C   LEU    55      29.318  23.062  25.723  1.00  0.00
C
ATOM    862  O   LEU    55      28.278  22.662  26.240  1.00  0.00
O
ATOM    863  CB  LEU    55      30.254  22.140  23.616  1.00  0.00
C
ATOM    864 1HB  LEU    55      30.244  22.235  22.530  1.00  0.00
H
ATOM    865 2HB  LEU    55      31.276  22.285  23.960  1.00  0.00
H
ATOM    866  CG  LEU    55      29.846  20.702  23.986  1.00  0.00
C
ATOM    867  HG  LEU    55      29.851  20.609  25.070  1.00  0.00
H
ATOM    868  CD1 LEU    55      28.453  20.328  23.491  1.00  0.00
C
ATOM    869 1HD1 LEU    55      28.238  19.297  23.770  1.00  0.00
H
ATOM    870 2HD1 LEU    55      28.399  20.429  22.407  1.00  0.00
H
ATOM    871 3HD1 LEU    55      27.704  20.967  23.956  1.00  0.00
H
ATOM    872  CD2 LEU    55      30.873  19.724  23.443  1.00  0.00
C
ATOM    873 1HD2 LEU    55      30.601  18.709  23.736  1.00  0.00
H
ATOM    874 2HD2 LEU    55      31.851  19.939  23.869  1.00  0.00
H
ATOM    875 3HD2 LEU    55      30.925  19.779  22.355  1.00  0.00
H
ATOM    876  N   GLU    56      30.381  23.354  26.457  1.00  0.00
N
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ATOM    877  H   GLU    56      31.232  23.718  26.028  1.00  0.00
H
ATOM    878  CA  GLU    56      30.379  23.094  27.896  1.00  0.00
C
ATOM    879  HA  GLU    56      30.027  22.072  28.047  1.00  0.00
H
ATOM    880  C   GLU    56      29.406  24.024  28.624  1.00  0.00
C
ATOM    881  O   GLU    56      28.864  23.697  29.681  1.00  0.00
O
ATOM    882  CB  GLU    56      31.802  23.175  28.474  1.00  0.00
C
ATOM    883 1HB  GLU    56      31.756  22.744  29.472  1.00  0.00
H
ATOM    884 2HB  GLU    56      32.454  22.539  27.876  1.00  0.00
H
ATOM    885  CG  GLU    56      32.463  24.559  28.615  1.00  0.00
C
ATOM    886 1HG  GLU    56      31.763  25.241  29.098  1.00  0.00
H
ATOM    887 2HG  GLU    56      33.320  24.446  29.280  1.00  0.00
H
ATOM    888  CD  GLU    56      32.965  25.197  27.315  1.00  0.00
C
ATOM    889  OE1 GLU    56      32.880  24.625  26.205  1.00  0.00
O
ATOM    890  OE2 GLU    56      33.468  26.338  27.399  1.00  0.00
O
ATOM    891  N   GLN    57      29.131  25.167  28.012  1.00  0.00
N
ATOM    892  H   GLN    57      29.578  25.371  27.127  1.00  0.00
H
ATOM    893  CA  GLN    57      28.191  26.142  28.554  1.00  0.00
C
ATOM    894  HA  GLN    57      28.283  26.179  29.633  1.00  0.00
H
ATOM    895  C   GLN    57      26.765  25.710  28.248  1.00  0.00
C
ATOM    896  O   GLN    57      25.867  25.857  29.074  1.00  0.00
O
ATOM    897  CB  GLN    57      28.518  27.520  27.970  1.00  0.00
C
ATOM    898 1HB  GLN    57      28.435  27.450  26.889  1.00  0.00
H
ATOM    899 2HB  GLN    57      27.786  28.242  28.328  1.00  0.00
H
ATOM    900  CG  GLN    57      29.921  28.027  28.312  1.00  0.00
C
ATOM    901 1HG  GLN    57      29.970  28.248  29.372  1.00  0.00
H
ATOM    902 2HG  GLN    57      30.654  27.254  28.093  1.00  0.00
H
ATOM    903  CD  GLN    57      30.324  29.269  27.554  1.00  0.00
C
ATOM    904  OE1 GLN    57      29.686  29.683  26.600  1.00  0.00
O
ATOM    905  NE2 GLN    57      31.423  29.848  27.948  1.00  0.00
N
ATOM    906 1HE2 GLN    57      31.732  30.684  27.480  1.00  0.00
H
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ATOM    907 2HE2 GLN    57      31.961  29.455  28.699  1.00  0.00
H
ATOM    908  N   TYR    58      26.556  25.092  27.097  1.00  0.00
N
ATOM    909  H   TYR    58      27.313  25.019  26.421  1.00  0.00
H
ATOM    910  CA  TYR    58      25.253  24.542  26.750  1.00  0.00
C
ATOM    911  HA  TYR    58      24.492  25.302  26.921  1.00  0.00
H
ATOM    912  C   TYR    58      24.931  23.340  27.621  1.00  0.00
C
ATOM    913  O   TYR    58      23.797  23.156  28.042  1.00  0.00
O
ATOM    914  CB  TYR    58      25.219  24.146  25.279  1.00  0.00
C
ATOM    915 1HB  TYR    58      25.534  25.000  24.679  1.00  0.00
H
ATOM    916 2HB  TYR    58      25.917  23.326  25.112  1.00  0.00
H
ATOM    917  CG  TYR    58      23.842  23.719  24.831  1.00  0.00
C
ATOM    918  CD1 TYR    58      22.737  24.591  24.955  1.00  0.00
C
ATOM    919  HD1 TYR    58      22.874  25.586  25.353  1.00  0.00
H
ATOM    920  CD2 TYR    58      23.629  22.437  24.288  1.00  0.00
C
ATOM    921  HD2 TYR    58      24.453  21.742  24.190  1.00  0.00
H
ATOM    922  CE1 TYR    58      21.439  24.172  24.568  1.00  0.00
C
ATOM    923  HE1 TYR    58      20.592  24.827  24.690  1.00  0.00
H
ATOM    924  CE2 TYR    58      22.345  22.042  23.853  1.00  0.00
C
ATOM    925  HE2 TYR    58      22.199  21.069  23.415  1.00  0.00
H
ATOM    926  CZ  TYR    58      21.259  22.904  24.015  1.00  0.00
C
ATOM    927  OH  TYR    58      20.003  22.492  23.652  1.00  0.00
O
ATOM    928  HH  TYR    58      19.323  23.155  23.828  1.00  0.00
H
ATOM    929  N   CYS    59      25.947  22.579  27.995  1.00  0.00
N
ATOM    930  H   CYS    59      26.869  22.746  27.601  1.00  0.00
H
ATOM    931  CA  CYS    59      25.770  21.484  28.944  1.00  0.00
C
ATOM    932  HA  CYS    59      24.969  20.840  28.581  1.00  0.00
H
ATOM    933  C   CYS    59      25.372  21.955  30.346  1.00  0.00
C
ATOM    934  O   CYS    59      24.812  21.191  31.132  1.00  0.00
O
ATOM    935  CB  CYS    59      27.055  20.667  29.014  1.00  0.00
C
ATOM    936 1HB  CYS    59      27.881  21.313  29.313  1.00  0.00
H
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ATOM    937 2HB  CYS    59      26.931  19.898  29.777  1.00  0.00
H
ATOM    938  SG  CYS    59      27.459  19.867  27.442  1.00  0.00
S
ATOM    939  HG  CYS    59      27.789  20.981  26.771  1.00  0.00
H
ATOM    940  N   LYS    60      25.610  23.223  30.657  1.00  0.00
N
ATOM    941  H   LYS    60      26.133  23.803  30.012  1.00  0.00
H
ATOM    942  CA  LYS    60      25.109  23.814  31.901  1.00  0.00
C
ATOM    943  HA  LYS    60      24.914  23.014  32.613  1.00  0.00
H
ATOM    944  C   LYS    60      23.775  24.520  31.706  1.00  0.00
C
ATOM    945  O   LYS    60      22.945  24.498  32.608  1.00  0.00
O
ATOM    946  CB  LYS    60      26.156  24.750  32.511  1.00  0.00
C
ATOM    947 1HB  LYS    60      26.482  25.459  31.749  1.00  0.00
H
ATOM    948 2HB  LYS    60      25.692  25.302  33.323  1.00  0.00
H
ATOM    949  CG  LYS    60      27.376  24.025  33.079  1.00  0.00
C
ATOM    950 1HG  LYS    60      27.750  23.314  32.344  1.00  0.00
H
ATOM    951 2HG  LYS    60      28.155  24.750  33.295  1.00  0.00
H
ATOM    952  CD  LYS    60      27.033  23.293  34.371  1.00  0.00
C
ATOM    953 1HD  LYS    60      26.705  24.019  35.115  1.00  0.00
H
ATOM    954 2HD  LYS    60      26.226  22.588  34.185  1.00  0.00
H
ATOM    955  CE  LYS    60      28.217  22.519  34.910  1.00  0.00
C
ATOM    956 1HE  LYS    60      28.534  21.787  34.165  1.00  0.00
H
ATOM    957 2HE  LYS    60      29.045  23.202  35.108  1.00  0.00
H
ATOM    958  NZ  LYS    60      27.821  21.811  36.173  1.00  0.00
N
ATOM    959 1HZ  LYS    60      28.563  21.188  36.473  1.00  0.00
H
ATOM    960 2HZ  LYS    60      26.983  21.265  36.014  1.00  0.00
H
ATOM    961 3HZ  LYS    60      27.650  22.481  36.908  1.00  0.00
H
ATOM    962  N   ALA    61      23.494  25.022  30.512  1.00  0.00
N
ATOM    963  H   ALA    61      24.220  25.072  29.808  1.00  0.00
H
ATOM    964  CA  ALA    61      22.151  25.508  30.192  1.00  0.00
C
ATOM    965  HA  ALA    61      21.857  26.246  30.936  1.00  0.00
H
ATOM    966  C   ALA    61      21.164  24.338  30.269  1.00  0.00
C
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ATOM    967  O   ALA    61      20.116  24.428  30.904  1.00  0.00
O
ATOM    968  CB  ALA    61      22.132  26.166  28.802  1.00  0.00
C
ATOM    969 1HB  ALA    61      22.870  26.970  28.765  1.00  0.00
H
ATOM    970 2HB  ALA    61      21.142  26.581  28.610  1.00  0.00
H
ATOM    971 3HB  ALA    61      22.364  25.428  28.033  1.00  0.00
H
ATOM    972  N   LEU    62      21.535  23.200  29.701  1.00  0.00
N
ATOM    973  H   LEU    62      22.402  23.161  29.170  1.00  0.00
H
ATOM    974  CA  LEU    62      20.726  21.986  29.799  1.00  0.00
C
ATOM    975  HA  LEU    62      19.681  22.280  29.838  1.00  0.00
H
ATOM    976  C   LEU    62      21.007  21.208  31.077  1.00  0.00
C
ATOM    977  O   LEU    62      20.420  20.167  31.336  1.00  0.00
O
ATOM    978  CB  LEU    62      20.909  21.071  28.592  1.00  0.00
C
ATOM    979 1HB  LEU    62      21.961  20.794  28.527  1.00  0.00
H
ATOM    980 2HB  LEU    62      20.345  20.163  28.804  1.00  0.00
H
ATOM    981  CG  LEU    62      20.448  21.551  27.211  1.00  0.00
C
ATOM    982  HG  LEU    62      21.124  22.332  26.867  1.00  0.00
H
ATOM    983  CD1 LEU    62      20.538  20.363  26.274  1.00  0.00
C
ATOM    984 1HD1 LEU    62      20.146  20.625  25.294  1.00  0.00
H
ATOM    985 2HD1 LEU    62      19.963  19.521  26.664  1.00  0.00
H
ATOM    986 3HD1 LEU    62      21.580  20.080  26.160  1.00  0.00
H
ATOM    987  CD2 LEU    62      19.025  22.097  27.173  1.00  0.00
C
ATOM    988 1HD2 LEU    62      18.744  22.312  26.142  1.00  0.00
H
ATOM    989 2HD2 LEU    62      18.976  23.025  27.737  1.00  0.00
H
ATOM    990 3HD2 LEU    62      18.327  21.368  27.586  1.00  0.00
H
ATOM    991  N   GLY    63      21.800  21.797  31.956  1.00  0.00
N
ATOM    992  H   GLY    63      22.331  22.614  31.698  1.00  0.00
H
ATOM    993  CA  GLY    63      21.832  21.346  33.332  1.00  0.00
C
ATOM    994 1HA  GLY    63      21.844  20.258  33.361  1.00  0.00
H
ATOM    995 2HA  GLY    63      22.722  21.735  33.826  1.00  0.00
H
ATOM    996  C   GLY    63      20.598  21.853  34.052  1.00  0.00
C
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ATOM    997  O   GLY    63      20.294  21.386  35.148  1.00  0.00
O
ATOM    998  N   LEU    64      19.897  22.811  33.449  1.00  0.00
N
ATOM    999  H   LEU    64      20.220  23.162  32.558  1.00  0.00
H
ATOM   1000  CA  LEU    64      18.716  23.443  34.047  1.00  0.00
C
ATOM   1001  HA  LEU    64      18.472  22.918  34.969  1.00  0.00
H
ATOM   1002  C   LEU    64      17.432  23.462  33.219  1.00  0.00
C
ATOM   1003  O   LEU    64      16.361  23.266  33.779  1.00  0.00
O
ATOM   1004  CB  LEU    64      19.076  24.884  34.405  1.00  0.00
C
ATOM   1005 1HB  LEU    64      19.436  25.376  33.501  1.00  0.00
H
ATOM   1006 2HB  LEU    64      18.171  25.396  34.732  1.00  0.00
H
ATOM   1007  CG  LEU    64      20.138  25.038  35.503  1.00  0.00
C
ATOM   1008  HG  LEU    64      21.005  24.428  35.253  1.00  0.00
H
ATOM   1009  CD1 LEU    64      20.605  26.469  35.603  1.00  0.00
C
ATOM   1010 1HD1 LEU    64      21.422  26.524  36.321  1.00  0.00
H
ATOM   1011 2HD1 LEU    64      19.792  27.108  35.943  1.00  0.00
H
ATOM   1012 3HD1 LEU    64      20.956  26.805  34.631  1.00  0.00
H
ATOM   1013  CD2 LEU    64      19.593  24.584  36.847  1.00  0.00
C
ATOM   1014 1HD2 LEU    64      20.293  24.836  37.637  1.00  0.00
H
ATOM   1015 2HD2 LEU    64      19.455  23.503  36.851  1.00  0.00
H
ATOM   1016 3HD2 LEU    64      18.639  25.062  37.061  1.00  0.00
H
ATOM   1017  N   VAL    65      17.491  23.656  31.909  1.00  0.00
N
ATOM   1018  H   VAL    65      18.386  23.839  31.463  1.00  0.00
H
ATOM   1019  CA  VAL    65      16.269  23.633  31.082  1.00  0.00
C
ATOM   1020  HA  VAL    65      15.625  24.442  31.427  1.00  0.00
H
ATOM   1021  C   VAL    65      15.454  22.329  31.256  1.00  0.00
C
ATOM   1022  O   VAL    65      14.264  22.397  31.594  1.00  0.00
O
ATOM   1023  CB  VAL    65      16.602  23.894  29.575  1.00  0.00
C
ATOM   1024  HB  VAL    65      17.361  23.185  29.271  1.00  0.00
H
ATOM   1025  CG1 VAL    65      15.393  23.674  28.673  1.00  0.00
C
ATOM   1026 1HG1 VAL    65      15.604  24.049  27.672  1.00  0.00
H
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ATOM   1027 2HG1 VAL    65      14.515  24.179  29.070  1.00  0.00
H
ATOM   1028 3HG1 VAL    65      15.179  22.607  28.594  1.00  0.00
H
ATOM   1029  CG2 VAL    65      17.184  25.292  29.354  1.00  0.00
C
ATOM   1030 1HG2 VAL    65      17.504  25.389  28.316  1.00  0.00
H
ATOM   1031 2HG2 VAL    65      18.045  25.457  29.998  1.00  0.00
H
ATOM   1032 3HG2 VAL    65      16.435  26.048  29.573  1.00  0.00
H
ATOM   1033  N   PRO    66      16.062  21.130  31.108  1.00  0.00
N
ATOM   1034  CA  PRO    66      15.265  19.925  31.375  1.00  0.00
C
ATOM   1035  HA  PRO    66      14.332  19.964  30.815  1.00  0.00
H
ATOM   1036  C   PRO    66      14.982  19.618  32.845  1.00  0.00
C
ATOM   1037  O   PRO    66      14.454  18.544  33.139  1.00  0.00
O
ATOM   1038  CB  PRO    66      16.147  18.800  30.815  1.00  0.00
C
ATOM   1039 1HB  PRO    66      16.682  18.312  31.626  1.00  0.00
H
ATOM   1040 2HB  PRO    66      15.549  18.076  30.264  1.00  0.00
H
ATOM   1041  CG  PRO    66      17.109  19.461  29.930  1.00  0.00
C
ATOM   1042 1HG  PRO    66      18.005  18.854  29.795  1.00  0.00
H
ATOM   1043 2HG  PRO    66      16.645  19.699  28.971  1.00  0.00
H
ATOM   1044  CD  PRO    66      17.406  20.701  30.692  1.00  0.00
C
ATOM   1045 1HD  PRO    66      18.022  20.489  31.567  1.00  0.00
H
ATOM   1046 2HD  PRO    66      17.885  21.427  30.046  1.00  0.00
H
ATOM   1047  N   LYS    67      15.371  20.502  33.760  1.00  0.00
N
ATOM   1048  H   LYS    67      15.899  21.317  33.474  1.00  0.00
H
ATOM   1049  CA  LYS    67      14.986  20.398  35.172  1.00  0.00
C
ATOM   1050  HA  LYS    67      14.723  19.367  35.409  1.00  0.00
H
ATOM   1051  C   LYS    67      13.777  21.282  35.434  1.00  0.00
C
ATOM   1052  O   LYS    67      12.974  20.985  36.307  1.00  0.00
O
ATOM   1053  CB  LYS    67      16.091  20.884  36.115  1.00  0.00
C
ATOM   1054 1HB  LYS    67      16.245  21.948  35.946  1.00  0.00
H
ATOM   1055 2HB  LYS    67      15.734  20.761  37.133  1.00  0.00
H
ATOM   1056  CG  LYS    67      17.437  20.204  36.016  1.00  0.00
C
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ATOM   1057 1HG  LYS    67      17.829  20.320  35.005  1.00  0.00
H
ATOM   1058 2HG  LYS    67      18.110  20.706  36.711  1.00  0.00
H
ATOM   1059  CD  LYS    67      17.393  18.733  36.375  1.00  0.00
C
ATOM   1060 1HD  LYS    67      16.799  18.605  37.279  1.00  0.00
H
ATOM   1061 2HD  LYS    67      16.931  18.175  35.561  1.00  0.00
H
ATOM   1062  CE  LYS    67      18.792  18.192  36.641  1.00  0.00
C
ATOM   1063 1HE  LYS    67      19.192  18.682  37.530  1.00  0.00
H
ATOM   1064 2HE  LYS    67      18.715  17.126  36.854  1.00  0.00
H
ATOM   1065  NZ  LYS    67      19.758  18.389  35.516  1.00  0.00
N
ATOM   1066 1HZ  LYS    67      20.608  17.868  35.696  1.00  0.00
H
ATOM   1067 2HZ  LYS    67      19.988  19.369  35.420  1.00  0.00
H
ATOM   1068 3HZ  LYS    67      19.357  18.067  34.643  1.00  0.00
H
ATOM   1069  N   GLN    68      13.651  22.380  34.701  1.00  0.00
N
ATOM   1070  H   GLN    68      14.372  22.627  34.035  1.00  0.00
H
ATOM   1071  CA  GLN    68      12.478  23.241  34.834  1.00  0.00
C
ATOM   1072  HA  GLN    68      12.265  23.414  35.890  1.00  0.00
H
ATOM   1073  C   GLN    68      11.297  22.523  34.195  1.00  0.00
C
ATOM   1074  O   GLN    68      10.196  22.474  34.758  1.00  0.00
O
ATOM   1075  CB  GLN    68      12.688  24.573  34.117  1.00  0.00
C
ATOM   1076 1HB  GLN    68      12.986  24.364  33.090  1.00  0.00
H
ATOM   1077 2HB  GLN    68      11.738  25.106  34.094  1.00  0.00
H
ATOM   1078  CG  GLN    68      13.723  25.490  34.743  1.00  0.00
C
ATOM   1079 1HG  GLN    68      13.410  25.749  35.753  1.00  0.00
H
ATOM   1080 2HG  GLN    68      14.684  24.983  34.790  1.00  0.00
H
ATOM   1081  CD  GLN    68      13.879  26.749  33.928  1.00  0.00
C
ATOM   1082  OE1 GLN    68      14.175  26.699  32.749  1.00  0.00
O
ATOM   1083  NE2 GLN    68      13.672  27.881  34.534  1.00  0.00
N
ATOM   1084 1HE2 GLN    68      13.712  28.726  33.993  1.00  0.00
H
ATOM   1085 2HE2 GLN    68      13.455  27.913  35.516  1.00  0.00
H
ATOM   1086  N   ALA    69      11.544  21.928  33.037  1.00  0.00
N
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ATOM   1087  H   ALA    69      12.438  22.070  32.581  1.00  0.00
H
ATOM   1088  CA  ALA    69      10.609  20.980  32.449  1.00  0.00
C
ATOM   1089  HA  ALA    69       9.588  21.358  32.513  1.00  0.00
H
ATOM   1090  C   ALA    69      10.764  19.719  33.302  1.00  0.00
C
ATOM   1091  O   ALA    69      11.839  19.506  33.850  1.00  0.00
O
ATOM   1092  CB  ALA    69      10.983  20.711  30.983  1.00  0.00
C
ATOM   1093 1HB  ALA    69      10.921  21.640  30.412  1.00  0.00
H
ATOM   1094 2HB  ALA    69      10.293  19.984  30.553  1.00  0.00
H
ATOM   1095 3HB  ALA    69      11.999  20.320  30.922  1.00  0.00
H
ATOM   1096  N   ARG    70       9.721  18.904  33.399  1.00  0.00
N
ATOM   1097  H   ARG    70       8.861  19.183  32.936  1.00  0.00
H
ATOM   1098  CA  ARG    70       9.696  17.631  34.144  1.00  0.00
C
ATOM   1099  HA  ARG    70       8.690  17.226  34.029  1.00  0.00
H
ATOM   1100  C   ARG    70       9.921  17.682  35.655  1.00  0.00
C
ATOM   1101  O   ARG    70       9.032  17.305  36.411  1.00  0.00
O
ATOM   1102  CB  ARG    70      10.650  16.608  33.501  1.00  0.00
C
ATOM   1103 1HB  ARG    70      10.417  16.550  32.438  1.00  0.00
H
ATOM   1104 2HB  ARG    70      11.678  16.951  33.607  1.00  0.00
H
ATOM   1105  CG  ARG    70      10.549  15.213  34.095  1.00  0.00
C
ATOM   1106 1HG  ARG    70      10.933  15.228  35.114  1.00  0.00
H
ATOM   1107 2HG  ARG    70       9.498  14.929  34.121  1.00  0.00
H
ATOM   1108  CD  ARG    70      11.303  14.160  33.291  1.00  0.00
C
ATOM   1109 1HD  ARG    70      11.069  13.176  33.700  1.00  0.00
H
ATOM   1110 2HD  ARG    70      10.935  14.192  32.266  1.00  0.00
H
ATOM   1111  NE  ARG    70      12.764  14.322  33.257  1.00  0.00
N
ATOM   1112  HE  ARG    70      13.148  14.823  32.468  1.00  0.00
H
ATOM   1113  CZ  ARG    70      13.641  13.801  34.104  1.00  0.00
C
ATOM   1114  NH1 ARG    70      13.328  13.209  35.226  1.00  0.00
N
ATOM   1115 1HH1 ARG    70      12.368  13.189  35.538  1.00  0.00
H
ATOM   1116 2HH1 ARG    70      14.048  12.784  35.782  1.00  0.00
H
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ATOM   1117  NH2 ARG    70      14.897  13.856  33.777  1.00  0.00
N
ATOM   1118 1HH2 ARG    70      15.166  14.320  32.924  1.00  0.00
H
ATOM   1119 2HH2 ARG    70      15.592  13.433  34.369  1.00  0.00
H
ATOM   1120  N   GLU    71      11.086  18.099  36.120  1.00  0.00
N
ATOM   1121  H   GLU    71      11.780  18.456  35.466  1.00  0.00
H
ATOM   1122  CA  GLU    71      11.404  18.001  37.545  1.00  0.00
C
ATOM   1123  HA  GLU    71      10.927  17.101  37.935  1.00  0.00
H
ATOM   1124  C   GLU    71      10.876  19.185  38.349  1.00  0.00
C
ATOM   1125  O   GLU    71      10.781  19.110  39.573  1.00  0.00
O
ATOM   1126  CB  GLU    71      12.909  17.842  37.770  1.00  0.00
C
ATOM   1127 1HB  GLU    71      13.428  18.753  37.480  1.00  0.00
H
ATOM   1128 2HB  GLU    71      13.062  17.679  38.837  1.00  0.00
H
ATOM   1129  CG  GLU    71      13.499  16.669  36.997  1.00  0.00
C
ATOM   1130 1HG  GLU    71      12.818  15.822  37.084  1.00  0.00
H
ATOM   1131 2HG  GLU    71      13.576  16.938  35.942  1.00  0.00
H
ATOM   1132  CD  GLU    71      14.864  16.229  37.505  1.00  0.00
C
ATOM   1133  OE1 GLU    71      15.401  16.786  38.488  1.00  0.00
O
ATOM   1134  OE2 GLU    71      15.409  15.250  36.951  1.00  0.00
O
ATOM   1135  N   LEU    72      10.526  20.258  37.649  1.00  0.00
N
ATOM   1136  H   LEU    72      10.667  20.226  36.648  1.00  0.00
H
ATOM   1137  CA  LEU    72      10.001  21.509  38.217  1.00  0.00
C
ATOM   1138  HA  LEU    72       9.860  22.200  37.388  1.00  0.00
H
ATOM   1139  C   LEU    72      10.983  22.171  39.185  1.00  0.00
C
ATOM   1140  O   LEU    72      10.596  22.808  40.168  1.00  0.00
O
ATOM   1141  CB  LEU    72       8.631  21.324  38.890  1.00  0.00
C
ATOM   1142 1HB  LEU    72       8.775  20.739  39.798  1.00  0.00
H
ATOM   1143 2HB  LEU    72       8.280  22.310  39.192  1.00  0.00
H
ATOM   1144  CG  LEU    72       7.496  20.666  38.094  1.00  0.00
C
ATOM   1145  HG  LEU    72       7.788  19.647  37.848  1.00  0.00
H
ATOM   1146  CD1 LEU    72       6.250  20.615  38.967  1.00  0.00
C
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ATOM   1147 1HD1 LEU    72       5.461  20.072  38.445  1.00  0.00
H
ATOM   1148 2HD1 LEU    72       5.906  21.626  39.191  1.00  0.00
H
ATOM   1149 3HD1 LEU    72       6.474  20.099  39.898  1.00  0.00
H
ATOM   1150  CD2 LEU    72       7.171  21.398  36.801  1.00  0.00
C
ATOM   1151 1HD2 LEU    72       6.304  20.940  36.324  1.00  0.00
H
ATOM   1152 2HD2 LEU    72       8.016  21.327  36.118  1.00  0.00
H
ATOM   1153 3HD2 LEU    72       6.954  22.447  37.004  1.00  0.00
H
ATOM   1154  N   ARG    73      12.269  22.034  38.905  1.00  0.00
N
ATOM   1155  H   ARG    73      12.540  21.525  38.066  1.00  0.00
H
ATOM   1156  CA  ARG    73      13.310  22.649  39.730  1.00  0.00
C
ATOM   1157  HA  ARG    73      12.914  22.871  40.721  1.00  0.00
H
ATOM   1158  C   ARG    73      13.752  23.950  39.088  1.00  0.00
C
ATOM   1159  O   ARG    73      14.056  23.992  37.895  1.00  0.00
O
ATOM   1160  CB  ARG    73      14.499  21.709  39.875  1.00  0.00
C
ATOM   1161 1HB  ARG    73      14.858  21.442  38.886  1.00  0.00
H
ATOM   1162 2HB  ARG    73      15.293  22.239  40.403  1.00  0.00
H
ATOM   1163  CG  ARG    73      14.184  20.447  40.639  1.00  0.00
C
ATOM   1164 1HG  ARG    73      13.802  20.723  41.621  1.00  0.00
H
ATOM   1165 2HG  ARG    73      13.436  19.856  40.114  1.00  0.00
H
ATOM   1166  CD  ARG    73      15.442  19.634  40.811  1.00  0.00
C
ATOM   1167 1HD  ARG    73      15.733  19.195  39.855  1.00  0.00
H
ATOM   1168 2HD  ARG    73      16.240  20.293  41.158  1.00  0.00
H
ATOM   1169  NE  ARG    73      15.238  18.586  41.814  1.00  0.00
N
ATOM   1170  HE  ARG    73      14.294  18.457  42.157  1.00  0.00
H
ATOM   1171  CZ  ARG    73      16.179  17.817  42.336  1.00  0.00
C
ATOM   1172  NH1 ARG    73      17.415  17.788  41.904  1.00  0.00
N
ATOM   1173 1HH1 ARG    73      17.677  18.354  41.112  1.00  0.00
H
ATOM   1174 2HH1 ARG    73      18.096  17.208  42.365  1.00  0.00
H
ATOM   1175  NH2 ARG    73      15.867  17.096  43.370  1.00  0.00
N
ATOM   1176 1HH2 ARG    73      14.934  17.143  43.753  1.00  0.00
H
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ATOM   1177 2HH2 ARG    73      16.560  16.509  43.810  1.00  0.00
H
ATOM   1178  N   ARG    74      13.771  25.016  39.873  1.00  0.00
N
ATOM   1179  H   ARG    74      13.554  24.903  40.863  1.00  0.00
H
ATOM   1180  CA  ARG    74      14.082  26.352  39.364  1.00  0.00
C
ATOM   1181  HA  ARG    74      13.513  26.508  38.447  1.00  0.00
H
ATOM   1182  C   ARG    74      15.552  26.515  39.016  1.00  0.00
C
ATOM   1183  O   ARG    74      16.407  25.775  39.500  1.00  0.00
O
ATOM   1184  CB  ARG    74      13.664  27.414  40.387  1.00  0.00
C
ATOM   1185 1HB  ARG    74      14.123  27.182  41.347  1.00  0.00
H
ATOM   1186 2HB  ARG    74      14.025  28.389  40.059  1.00  0.00
H
ATOM   1187  CG  ARG    74      12.156  27.501  40.572  1.00  0.00
C
ATOM   1188 1HG  ARG    74      11.689  27.753  39.620  1.00  0.00
H
ATOM   1189 2HG  ARG    74      11.772  26.542  40.918  1.00  0.00
H
ATOM   1190  CD  ARG    74      11.805  28.562  41.589  1.00  0.00
C
ATOM   1191 1HD  ARG    74      12.283  28.311  42.537  1.00  0.00
H
ATOM   1192 2HD  ARG    74      12.182  29.528  41.247  1.00  0.00
H
ATOM   1193  NE  ARG    74      10.353  28.647  41.789  1.00  0.00
N
ATOM   1194  HE  ARG    74       9.773  28.151  41.122  1.00  0.00
H
ATOM   1195  CZ  ARG    74       9.731  29.297  42.762  1.00  0.00
C
ATOM   1196  NH1 ARG    74      10.353  29.993  43.678  1.00  0.00
N
ATOM   1197 1HH1 ARG    74      11.355  30.102  43.631  1.00  0.00
H
ATOM   1198 2HH1 ARG    74       9.829  30.406  44.435  1.00  0.00
H
ATOM   1199  NH2 ARG    74       8.435  29.215  42.840  1.00  0.00
N
ATOM   1200 1HH2 ARG    74       7.927  28.665  42.168  1.00  0.00
H
ATOM   1201 2HH2 ARG    74       7.940  29.695  43.578  1.00  0.00
H
ATOM   1202  N   ARG    75      15.844  27.508  38.188  1.00  0.00
N
ATOM   1203  H   ARG    75      15.079  28.093  37.862  1.00  0.00
H
ATOM   1204  CA  ARG    75      17.205  27.782  37.694  1.00  0.00
C
ATOM   1205  HA  ARG    75      17.527  26.922  37.109  1.00  0.00
H
ATOM   1206  C   ARG    75      18.322  28.015  38.724  1.00  0.00
C
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ATOM   1207  O   ARG    75      19.488  27.765  38.412  1.00  0.00
O
ATOM   1208  CB  ARG    75      17.162  28.998  36.752  1.00  0.00
C
ATOM   1209 1HB  ARG    75      18.187  29.264  36.495  1.00  0.00
H
ATOM   1210 2HB  ARG    75      16.645  28.713  35.836  1.00  0.00
H
ATOM   1211  CG  ARG    75      16.458  30.232  37.322  1.00  0.00
C
ATOM   1212 1HG  ARG    75      15.381  30.111  37.213  1.00  0.00
H
ATOM   1213 2HG  ARG    75      16.688  30.325  38.381  1.00  0.00
H
ATOM   1214  CD  ARG    75      16.881  31.523  36.643  1.00  0.00
C
ATOM   1215 1HD  ARG    75      17.948  31.677  36.806  1.00  0.00
H
ATOM   1216 2HD  ARG    75      16.682  31.460  35.571  1.00  0.00
H
ATOM   1217  NE  ARG    75      16.121  32.641  37.218  1.00  0.00
N
ATOM   1218  HE  ARG    75      15.269  32.408  37.719  1.00  0.00
H
ATOM   1219  CZ  ARG    75      16.419  33.929  37.151  1.00  0.00
C
ATOM   1220  NH1 ARG    75      17.563  34.397  36.732  1.00  0.00
N
ATOM   1221 1HH1 ARG    75      18.293  33.771  36.441  1.00  0.00
H
ATOM   1222 2HH1 ARG    75      17.713  35.395  36.692  1.00  0.00
H
ATOM   1223  NH2 ARG    75      15.556  34.786  37.602  1.00  0.00
N
ATOM   1224 1HH2 ARG    75      14.651  34.475  37.921  1.00  0.00
H
ATOM   1225 2HH2 ARG    75      15.791  35.769  37.604  1.00  0.00
H
ATOM   1226  N   ARG    76      17.972  28.505  39.910  1.00  0.00
N
ATOM   1227  H   ARG    76      17.021  28.359  40.215  1.00  0.00
H
ATOM   1228  CA  ARG    76      18.810  29.376  40.757  1.00  0.00
C
ATOM   1229  HA  ARG    76      18.204  29.639  41.624  1.00  0.00
H
ATOM   1230  C   ARG    76      19.122  30.681  40.026  1.00  0.00
C
ATOM   1231  O   ARG    76      19.430  30.702  38.836  1.00  0.00
O
ATOM   1232  CB  ARG    76      20.095  28.718  41.284  1.00  0.00
C
ATOM   1233 1HB  ARG    76      20.785  28.555  40.459  1.00  0.00
H
ATOM   1234 2HB  ARG    76      20.565  29.411  41.979  1.00  0.00
H
ATOM   1235  CG  ARG    76      19.874  27.393  41.999  1.00  0.00
C
ATOM   1236 1HG  ARG    76      19.059  27.500  42.709  1.00  0.00
H
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ATOM   1237 2HG  ARG    76      19.613  26.627  41.268  1.00  0.00
H
ATOM   1238  CD  ARG    76      21.116  26.969  42.758  1.00  0.00
C
ATOM   1239 1HD  ARG    76      21.971  26.972  42.083  1.00  0.00
H
ATOM   1240 2HD  ARG    76      21.301  27.691  43.554  1.00  0.00
H
ATOM   1241  NE  ARG    76      20.962  25.635  43.355  1.00  0.00
N
ATOM   1242  HE  ARG    76      20.463  25.591  44.231  1.00  0.00
H
ATOM   1243  CZ  ARG    76      21.450  24.497  42.879  1.00  0.00
C
ATOM   1244  NH1 ARG    76      22.139  24.402  41.774  1.00  0.00
N
ATOM   1245 1HH1 ARG    76      22.228  25.202  41.168  1.00  0.00
H
ATOM   1246 2HH1 ARG    76      22.574  23.528  41.524  1.00  0.00
H
ATOM   1247  NH2 ARG    76      21.278  23.403  43.556  1.00  0.00
N
ATOM   1248 1HH2 ARG    76      20.717  23.401  44.394  1.00  0.00
H
ATOM   1249 2HH2 ARG    76      21.717  22.551  43.243  1.00  0.00
H
ATOM   1250  N   THR    77      18.987  31.795  40.722  1.00  0.00
N
ATOM   1251  H   THR    77      18.766  31.753  41.708  1.00  0.00
H
ATOM   1252  CA  THR    77      19.008  33.096  40.059  1.00  0.00
C
ATOM   1253  HA  THR    77      18.224  33.092  39.304  1.00  0.00
H
ATOM   1254  C   THR    77      20.327  33.423  39.357  1.00  0.00
C
ATOM   1255  O   THR    77      20.330  33.923  38.232  1.00  0.00
O
ATOM   1256  CB  THR    77      18.673  34.186  41.092  1.00  0.00
C
ATOM   1257  HB  THR    77      19.523  34.325  41.761  1.00  0.00
H
ATOM   1258  OG1 THR    77      17.548  33.750  41.862  1.00  0.00
O
ATOM   1259  HG1 THR    77      17.080  33.056  41.376  1.00  0.00
H
ATOM   1260  CG2 THR    77      18.304  35.510  40.454  1.00  0.00
C
ATOM   1261 1HG2 THR    77      18.065  36.229  41.238  1.00  0.00
H
ATOM   1262 2HG2 THR    77      17.434  35.387  39.810  1.00  0.00
H
ATOM   1263 3HG2 THR    77      19.139  35.895  39.868  1.00  0.00
H
ATOM   1264  N   THR    78      21.448  33.119  39.994  1.00  0.00
N
ATOM   1265  H   THR    78      21.410  32.660  40.898  1.00  0.00
H
ATOM   1266  CA  THR    78      22.767  33.469  39.463  1.00  0.00
C
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ATOM   1267  HA  THR    78      22.665  33.843  38.447  1.00  0.00
H
ATOM   1268  C   THR    78      23.747  32.301  39.419  1.00  0.00
C
ATOM   1269  O   THR    78      23.569  31.281  40.099  1.00  0.00
O
ATOM   1270  CB  THR    78      23.410  34.580  40.321  1.00  0.00
C
ATOM   1271  HB  THR    78      24.437  34.740  39.996  1.00  0.00
H
ATOM   1272  OG1 THR    78      23.381  34.193  41.699  1.00  0.00
O
ATOM   1273  HG1 THR    78      24.278  34.311  42.051  1.00  0.00
H
ATOM   1274  CG2 THR    78      22.649  35.887  40.210  1.00  0.00
C
ATOM   1275 1HG2 THR    78      23.190  36.658  40.757  1.00  0.00
H
ATOM   1276 2HG2 THR    78      21.649  35.785  40.629  1.00  0.00
H
ATOM   1277 3HG2 THR    78      22.576  36.187  39.164  1.00  0.00
H
ATOM   1278  N   VAL    79      24.774  32.461  38.598  1.00  0.00
N
ATOM   1279  H   VAL    79      24.821  33.308  38.033  1.00  0.00
H
ATOM   1280  CA  VAL    79      25.878  31.509  38.476  1.00  0.00
C
ATOM   1281  HA  VAL    79      25.466  30.532  38.233  1.00  0.00
H
ATOM   1282  C   VAL    79      26.596  31.409  39.834  1.00  0.00
C
ATOM   1283  O   VAL    79      26.667  32.380  40.588  1.00  0.00
O
ATOM   1284  CB  VAL    79      26.804  31.962  37.296  1.00  0.00
C
ATOM   1285  HB  VAL    79      26.155  32.149  36.441  1.00  0.00
H
ATOM   1286  CG1 VAL    79      27.549  33.271  37.597  1.00  0.00
C
ATOM   1287 1HG1 VAL    79      28.095  33.595  36.710  1.00  0.00
H
ATOM   1288 2HG1 VAL    79      28.255  33.128  38.416  1.00  0.00
H
ATOM   1289 3HG1 VAL    79      26.845  34.055  37.873  1.00  0.00
H
ATOM   1290  CG2 VAL    79      27.785  30.873  36.877  1.00  0.00
C
ATOM   1291 1HG2 VAL    79      28.348  31.212  36.006  1.00  0.00
H
ATOM   1292 2HG2 VAL    79      27.237  29.975  36.600  1.00  0.00
H
ATOM   1293 3HG2 VAL    79      28.484  30.654  37.686  1.00  0.00
H
ATOM   1294  N   LEU    80      27.083  30.223  40.173  1.00  0.00
N
ATOM   1295  H   LEU    80      27.081  29.475  39.499  1.00  0.00
H
ATOM   1296  CA  LEU    80      27.671  29.934  41.484  1.00  0.00
C
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ATOM   1297  HA  LEU    80      27.832  30.848  42.052  1.00  0.00
H
ATOM   1298  C   LEU    80      29.018  29.274  41.233  1.00  0.00
C
ATOM   1299  O   LEU    80      29.296  28.935  40.094  1.00  0.00
O
ATOM   1300  CB  LEU    80      26.759  28.999  42.286  1.00  0.00
C
ATOM   1301 1HB  LEU    80      26.624  28.086  41.708  1.00  0.00
H
ATOM   1302 2HB  LEU    80      27.283  28.738  43.202  1.00  0.00
H
ATOM   1303  CG  LEU    80      25.376  29.517  42.703  1.00  0.00
C
ATOM   1304  HG  LEU    80      24.816  29.780  41.809  1.00  0.00
H
ATOM   1305  CD1 LEU    80      24.610  28.423  43.437  1.00  0.00
C
ATOM   1306 1HD1 LEU    80      23.639  28.800  43.757  1.00  0.00
H
ATOM   1307 2HD1 LEU    80      25.172  28.099  44.315  1.00  0.00
H
ATOM   1308 3HD1 LEU    80      24.454  27.566  42.787  1.00  0.00
H
ATOM   1309  CD2 LEU    80      25.469  30.745  43.594  1.00  0.00
C
ATOM   1310 1HD2 LEU    80      24.473  31.047  43.908  1.00  0.00
H
ATOM   1311 2HD2 LEU    80      25.917  31.574  43.046  1.00  0.00
H
ATOM   1312 3HD2 LEU    80      26.072  30.530  44.478  1.00  0.00
H
ATOM   1313  N   LEU    81      29.827  29.077  42.265  1.00  0.00
N
ATOM   1314  H   LEU    81      29.499  29.308  43.197  1.00  0.00
H
ATOM   1315  CA  LEU    81      31.197  28.561  42.120  1.00  0.00
C
ATOM   1316  HA  LEU    81      31.760  29.254  41.495  1.00  0.00
H
ATOM   1317  C   LEU    81      31.316  27.175  41.479  1.00  0.00
C
ATOM   1318  O   LEU    81      32.285  26.884  40.776  1.00  0.00
O
ATOM   1319  CB  LEU    81      31.841  28.518  43.511  1.00  0.00
C
ATOM   1320 1HB  LEU    81      31.730  29.504  43.956  1.00  0.00
H
ATOM   1321 2HB  LEU    81      31.264  27.818  44.115  1.00  0.00
H
ATOM   1322  CG  LEU    81      33.321  28.116  43.636  1.00  0.00
C
ATOM   1323  HG  LEU    81      33.448  27.115  43.227  1.00  0.00
H
ATOM   1324  CD1 LEU    81      34.274  29.058  42.907  1.00  0.00
C
ATOM   1325 1HD1 LEU    81      35.301  28.725  43.055  1.00  0.00
H
ATOM   1326 2HD1 LEU    81      34.164  30.073  43.289  1.00  0.00
H
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ATOM   1327 3HD1 LEU    81      34.061  29.048  41.838  1.00  0.00
H
ATOM   1328  CD2 LEU    81      33.688  28.075  45.108  1.00  0.00
C
ATOM   1329 1HD2 LEU    81      34.714  27.729  45.217  1.00  0.00
H
ATOM   1330 2HD2 LEU    81      33.033  27.375  45.625  1.00  0.00
H
ATOM   1331 3HD2 LEU    81      33.590  29.065  45.554  1.00  0.00
H
ATOM   1332  N   GLU    82      30.331  26.314  41.683  1.00  0.00
N
ATOM   1333  H   GLU    82      29.556  26.573  42.290  1.00  0.00
H
ATOM   1334  CA  GLU    82      30.327  24.976  41.080  1.00  0.00
C
ATOM   1335  HA  GLU    82      31.356  24.657  40.932  1.00  0.00
H
ATOM   1336  C   GLU    82      29.667  24.979  39.705  1.00  0.00
C
ATOM   1337  O   GLU    82      29.288  23.949  39.146  1.00  0.00
O
ATOM   1338  CB  GLU    82      29.678  23.970  42.023  1.00  0.00
C
ATOM   1339 1HB  GLU    82      28.671  24.303  42.272  1.00  0.00
H
ATOM   1340 2HB  GLU    82      29.623  23.001  41.528  1.00  0.00
H
ATOM   1341  CG  GLU    82      30.499  23.819  43.290  1.00  0.00
C
ATOM   1342 1HG  GLU    82      31.495  23.466  43.021  1.00  0.00
H
ATOM   1343 2HG  GLU    82      30.596  24.789  43.778  1.00  0.00
H
ATOM   1344  CD  GLU    82      29.894  22.858  44.278  1.00  0.00
C
ATOM   1345  OE1 GLU    82      29.204  21.892  43.888  1.00  0.00
O
ATOM   1346  OE2 GLU    82      30.112  23.054  45.494  1.00  0.00
O
ATOM   1347  N   GLN    83      29.600  26.160  39.117  1.00  0.00
N
ATOM   1348  H   GLN    83      29.874  26.996  39.629  1.00  0.00
H
ATOM   1349  CA  GLN    83      29.334  26.329  37.700  1.00  0.00
C
ATOM   1350  HA  GLN    83      29.220  25.365  37.207  1.00  0.00
H
ATOM   1351  C   GLN    83      30.649  27.018  37.315  1.00  0.00
C
ATOM   1352  O   GLN    83      31.174  27.782  38.115  1.00  0.00
O
ATOM   1353  CB  GLN    83      28.113  27.226  37.469  1.00  0.00
C
ATOM   1354 1HB  GLN    83      28.382  28.221  37.810  1.00  0.00
H
ATOM   1355 2HB  GLN    83      27.904  27.284  36.400  1.00  0.00
H
ATOM   1356  CG  GLN    83      26.837  26.830  38.219  1.00  0.00
C
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ATOM   1357 1HG  GLN    83      27.072  26.646  39.266  1.00  0.00
H
ATOM   1358 2HG  GLN    83      26.148  27.672  38.180  1.00  0.00
H
ATOM   1359  CD  GLN    83      26.118  25.623  37.654  1.00  0.00
C
ATOM   1360  OE1 GLN    83      25.265  25.758  36.784  1.00  0.00
O
ATOM   1361  NE2 GLN    83      26.400  24.457  38.166  1.00  0.00
N
ATOM   1362 1HE2 GLN    83      25.821  23.667  37.923  1.00  0.00
H
ATOM   1363 2HE2 GLN    83      27.146  24.355  38.841  1.00  0.00
H
ATOM   1364  N   LEU    84      31.252  26.796  36.161  1.00  0.00
N
ATOM   1365  H   LEU    84      32.214  27.110  36.092  1.00  0.00
H
ATOM   1366  CA  LEU    84      30.643  26.224  34.969  1.00  0.00
C
ATOM   1367  HA  LEU    84      29.714  25.708  35.200  1.00  0.00
H
ATOM   1368  C   LEU    84      31.590  25.237  34.294  1.00  0.00
C
ATOM   1369  O   LEU    84      31.174  24.151  33.912  1.00  0.00
O
ATOM   1370  CB  LEU    84      30.345  27.420  34.058  1.00  0.00
C
ATOM   1371 1HB  LEU    84      29.799  28.140  34.667  1.00  0.00
H
ATOM   1372 2HB  LEU    84      31.300  27.886  33.822  1.00  0.00
H
ATOM   1373  CG  LEU    84      29.574  27.300  32.739  1.00  0.00
C
ATOM   1374  HG  LEU    84      28.573  26.927  32.946  1.00  0.00
H
ATOM   1375  CD1 LEU    84      29.459  28.702  32.170  1.00  0.00
C
ATOM   1376 1HD1 LEU    84      28.819  28.686  31.290  1.00  0.00
H
ATOM   1377 2HD1 LEU    84      30.442  29.072  31.883  1.00  0.00
H
ATOM   1378 3HD1 LEU    84      29.021  29.380  32.902  1.00  0.00
H
ATOM   1379  CD2 LEU    84      30.238  26.397  31.716  1.00  0.00
C
ATOM   1380 1HD2 LEU    84      29.800  26.542  30.746  1.00  0.00
H
ATOM   1381 2HD2 LEU    84      30.098  25.352  31.990  1.00  0.00
H
ATOM   1382 3HD2 LEU    84      31.298  26.612  31.646  1.00  0.00
H
ATOM   1383  N   ILE    85      32.833  25.653  34.091  1.00  0.00
N
ATOM   1384  H   ILE    85      33.199  26.429  34.629  1.00  0.00
H
ATOM   1385  CA  ILE    85      33.681  25.103  33.032  1.00  0.00
C
ATOM   1386  HA  ILE    85      33.051  24.828  32.187  1.00  0.00
H
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ATOM   1387  C   ILE    85      34.448  23.860  33.497  1.00  0.00
C
ATOM   1388  O   ILE    85      35.340  23.966  34.349  1.00  0.00
O
ATOM   1389  CB  ILE    85      34.709  26.189  32.549  1.00  0.00
C
ATOM   1390  HB  ILE    85      35.316  26.495  33.402  1.00  0.00
H
ATOM   1391  CG1 ILE    85      33.975  27.433  31.998  1.00  0.00
C
ATOM   1392 1HG1 ILE    85      33.411  27.133  31.115  1.00  0.00
H
ATOM   1393 2HG1 ILE    85      33.269  27.785  32.747  1.00  0.00
H
ATOM   1394  CG2 ILE    85      35.645  25.626  31.474  1.00  0.00
C
ATOM   1395 1HG2 ILE    85      36.371  26.380  31.173  1.00  0.00
H
ATOM   1396 2HG2 ILE    85      35.076  25.298  30.602  1.00  0.00
H
ATOM   1397 3HG2 ILE    85      36.209  24.784  31.868  1.00  0.00
H
ATOM   1398  CD1 ILE    85      34.856  28.631  31.609  1.00  0.00
C
ATOM   1399 1HD1 ILE    85      34.222  29.493  31.402  1.00  0.00
H
ATOM   1400 2HD1 ILE    85      35.434  28.401  30.714  1.00  0.00
H
ATOM   1401 3HD1 ILE    85      35.534  28.876  32.426  1.00  0.00
H
ATOM   1402  N   PRO    86      34.157  22.671  32.940  1.00  0.00
N
ATOM   1403  CA  PRO    86      35.223  21.663  32.981  1.00  0.00
C
ATOM   1404  HA  PRO    86      35.681  21.612  33.967  1.00  0.00
H
ATOM   1405  C   PRO    86      36.283  21.914  31.906  1.00  0.00
C
ATOM   1406  O   PRO    86      35.977  22.406  30.819  1.00  0.00
O
ATOM   1407  CB  PRO    86      34.461  20.368  32.693  1.00  0.00
C
ATOM   1408 1HB  PRO    86      35.112  19.625  32.234  1.00  0.00
H
ATOM   1409 2HB  PRO    86      34.023  19.980  33.612  1.00  0.00
H
ATOM   1410  CG  PRO    86      33.392  20.798  31.747  1.00  0.00
C
ATOM   1411 1HG  PRO    86      33.802  20.896  30.743  1.00  0.00
H
ATOM   1412 2HG  PRO    86      32.561  20.095  31.746  1.00  0.00
H
ATOM   1413  CD  PRO    86      32.957  22.145  32.259  1.00  0.00
C
ATOM   1414 1HD  PRO    86      32.659  22.791  31.435  1.00  0.00
H
ATOM   1415 2HD  PRO    86      32.142  22.030  32.974  1.00  0.00
H
ATOM   1416  N   ARG    87      37.524  21.532  32.167  1.00  0.00
N
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ATOM   1417  H   ARG    87      37.783  21.272  33.114  1.00  0.00
H
ATOM   1418  CA  ARG    87      38.521  21.342  31.111  1.00  0.00
C
ATOM   1419  HA  ARG    87      38.036  21.275  30.137  1.00  0.00
H
ATOM   1420  C   ARG    87      39.127  20.007  31.468  1.00  0.00
C
ATOM   1421  O   ARG    87      39.295  19.714  32.654  1.00  0.00
O
ATOM   1422  CB  ARG    87      39.621  22.413  31.104  1.00  0.00
C
ATOM   1423 1HB  ARG    87      40.090  22.424  32.089  1.00  0.00
H
ATOM   1424 2HB  ARG    87      40.378  22.118  30.377  1.00  0.00
H
ATOM   1425  CG  ARG    87      39.183  23.839  30.777  1.00  0.00
C
ATOM   1426 1HG  ARG    87      38.432  24.153  31.501  1.00  0.00
H
ATOM   1427 2HG  ARG    87      40.048  24.494  30.881  1.00  0.00
H
ATOM   1428  CD  ARG    87      38.614  24.011  29.370  1.00  0.00
C
ATOM   1429 1HD  ARG    87      39.346  23.676  28.634  1.00  0.00
H
ATOM   1430 2HD  ARG    87      37.707  23.416  29.272  1.00  0.00
H
ATOM   1431  NE  ARG    87      38.306  25.429  29.146  1.00  0.00
N
ATOM   1432  HE  ARG    87      38.944  26.102  29.550  1.00  0.00
H
ATOM   1433  CZ  ARG    87      37.262  25.933  28.505  1.00  0.00
C
ATOM   1434  NH1 ARG    87      36.286  25.230  27.994  1.00  0.00
N
ATOM   1435 1HH1 ARG    87      36.333  24.220  27.988  1.00  0.00
H
ATOM   1436 2HH1 ARG    87      35.476  25.695  27.617  1.00  0.00
H
ATOM   1437  NH2 ARG    87      37.156  27.229  28.474  1.00  0.00
N
ATOM   1438 1HH2 ARG    87      37.845  27.793  28.951  1.00  0.00
H
ATOM   1439 2HH2 ARG    87      36.398  27.660  27.970  1.00  0.00
H
ATOM   1440  N   ASP    88      39.452  19.194  30.486  1.00  0.00
N
ATOM   1441  H   ASP    88      39.290  19.447  29.524  1.00  0.00
H
ATOM   1442  CA  ASP    88      40.074  17.905  30.734  1.00  0.00
C
ATOM   1443  HA  ASP    88      40.674  17.938  31.643  1.00  0.00
H
ATOM   1444  C   ASP    88      40.966  17.713  29.526  1.00  0.00
C
ATOM   1445  O   ASP    88      40.712  18.343  28.496  1.00  0.00
O
ATOM   1446  CB  ASP    88      39.015  16.807  30.846  1.00  0.00
C
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ATOM   1447 1HB  ASP    88      38.145  17.225  31.349  1.00  0.00
H
ATOM   1448 2HB  ASP    88      38.722  16.480  29.850  1.00  0.00
H
ATOM   1449  CG  ASP    88      39.494  15.619  31.649  1.00  0.00
C
ATOM   1450  OD1 ASP    88      40.719  15.400  31.755  1.00  0.00
O
ATOM   1451  OD2 ASP    88      38.653  14.916  32.249  1.00  0.00
O
ATOM   1452  N   LEU    89      42.004  16.906  29.669  1.00  0.00
N
ATOM   1453  H   LEU    89      42.121  16.411  30.546  1.00  0.00
H
ATOM   1454  CA  LEU    89      42.963  16.629  28.609  1.00  0.00
C
ATOM   1455  HA  LEU    89      42.588  16.996  27.655  1.00  0.00
H
ATOM   1456  C   LEU    89      43.039  15.115  28.591  1.00  0.00
C
ATOM   1457  O   LEU    89      43.451  14.496  29.578  1.00  0.00
O
ATOM   1458  CB  LEU    89      44.337  17.240  28.894  1.00  0.00
C
ATOM   1459 1HB  LEU    89      44.708  16.854  29.841  1.00  0.00
H
ATOM   1460 2HB  LEU    89      45.010  16.898  28.109  1.00  0.00
H
ATOM   1461  CG  LEU    89      44.404  18.774  28.938  1.00  0.00
C
ATOM   1462  HG  LEU    89      43.614  19.168  28.303  1.00  0.00
H
ATOM   1463  CD1 LEU    89      44.229  19.353  30.347  1.00  0.00
C
ATOM   1464 1HD1 LEU    89      44.270  20.441  30.308  1.00  0.00
H
ATOM   1465 2HD1 LEU    89      45.018  18.984  31.004  1.00  0.00
H
ATOM   1466 3HD1 LEU    89      43.263  19.059  30.749  1.00  0.00
H
ATOM   1467  CD2 LEU    89      45.737  19.235  28.377  1.00  0.00
C
ATOM   1468 1HD2 LEU    89      45.779  20.321  28.372  1.00  0.00
H
ATOM   1469 2HD2 LEU    89      45.849  18.882  27.351  1.00  0.00
H
ATOM   1470 3HD2 LEU    89      46.558  18.844  28.981  1.00  0.00
H
ATOM   1471  N   GLU    90      42.527  14.513  27.534  1.00  0.00
N
ATOM   1472  H   GLU    90      42.250  15.070  26.726  1.00  0.00
H
ATOM   1473  CA  GLU    90      42.255  13.078  27.527  1.00  0.00
C
ATOM   1474  HA  GLU    90      42.744  12.604  28.375  1.00  0.00
H
ATOM   1475  C   GLU    90      42.745  12.398  26.260  1.00  0.00
C
ATOM   1476  O   GLU    90      42.276  12.710  25.176  1.00  0.00
O
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ATOM   1477  CB  GLU    90      40.745  12.872  27.665  1.00  0.00
C
ATOM   1478 1HB  GLU    90      40.411  13.398  28.559  1.00  0.00
H
ATOM   1479 2HB  GLU    90      40.245  13.307  26.800  1.00  0.00
H
ATOM   1480  CG  GLU    90      40.348  11.414  27.778  1.00  0.00
C
ATOM   1481 1HG  GLU    90      40.635  10.892  26.866  1.00  0.00
H
ATOM   1482 2HG  GLU    90      40.889  10.973  28.613  1.00  0.00
H
ATOM   1483  CD  GLU    90      38.861  11.216  28.003  1.00  0.00
C
ATOM   1484  OE1 GLU    90      38.061  12.169  27.890  1.00  0.00
O
ATOM   1485  OE2 GLU    90      38.459  10.075  28.324  1.00  0.00
O
ATOM   1486  N   ILE    91      43.670  11.459  26.382  1.00  0.00
N
ATOM   1487  H   ILE    91      44.053  11.238  27.296  1.00  0.00
H
ATOM   1488  CA  ILE    91      44.117  10.697  25.217  1.00  0.00
C
ATOM   1489  HA  ILE    91      44.281  11.380  24.384  1.00  0.00
H
ATOM   1490  C   ILE    91      42.980   9.735  24.873  1.00  0.00
C
ATOM   1491  O   ILE    91      42.455   9.046  25.752  1.00  0.00
O
ATOM   1492  CB  ILE    91      45.429   9.901  25.485  1.00  0.00
C
ATOM   1493  HB  ILE    91      45.242   9.173  26.274  1.00  0.00
H
ATOM   1494  CG1 ILE    91      46.535  10.861  25.968  1.00  0.00
C
ATOM   1495 1HG1 ILE    91      46.751  11.560  25.165  1.00  0.00
H
ATOM   1496 2HG1 ILE    91      46.163  11.435  26.815  1.00  0.00
H
ATOM   1497  CG2 ILE    91      45.871   9.149  24.200  1.00  0.00
C
ATOM   1498 1HG2 ILE    91      46.002   9.848  23.370  1.00  0.00
H
ATOM   1499 2HG2 ILE    91      45.126   8.403  23.929  1.00  0.00
H
ATOM   1500 3HG2 ILE    91      46.808   8.625  24.370  1.00  0.00
H
ATOM   1501  CD1 ILE    91      47.852  10.200  26.413  1.00  0.00
C
ATOM   1502 1HD1 ILE    91      48.527  10.967  26.795  1.00  0.00
H
ATOM   1503 2HD1 ILE    91      48.332   9.697  25.574  1.00  0.00
H
ATOM   1504 3HD1 ILE    91      47.653   9.474  27.202  1.00  0.00
H
ATOM   1505  N   ILE    92      42.601   9.678  23.607  1.00  0.00
N
ATOM   1506  H   ILE    92      43.052  10.289  22.930  1.00  0.00
H
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ATOM   1507  CA  ILE    92      41.581   8.744  23.134  1.00  0.00
C
ATOM   1508  HA  ILE    92      40.909   8.474  23.949  1.00  0.00
H
ATOM   1509  C   ILE    92      42.306   7.499  22.638  1.00  0.00
C
ATOM   1510  O   ILE    92      41.953   6.368  22.991  1.00  0.00
O
ATOM   1511  CB  ILE    92      40.762   9.342  21.954  1.00  0.00
C
ATOM   1512  HB  ILE    92      41.453   9.586  21.149  1.00  0.00
H
ATOM   1513  CG1 ILE    92      40.056  10.641  22.380  1.00  0.00
C
ATOM   1514 1HG1 ILE    92      39.215  10.391  23.028  1.00  0.00
H
ATOM   1515 2HG1 ILE    92      40.744  11.262  22.949  1.00  0.00
H
ATOM   1516  CG2 ILE    92      39.737   8.319  21.421  1.00  0.00
C
ATOM   1517 1HG2 ILE    92      39.152   8.751  20.610  1.00  0.00
H
ATOM   1518 2HG2 ILE    92      39.059   8.012  22.221  1.00  0.00
H
ATOM   1519 3HG2 ILE    92      40.250   7.442  21.027  1.00  0.00
H
ATOM   1520  CD1 ILE    92      39.554  11.474  21.207  1.00  0.00
C
ATOM   1521 1HD1 ILE    92      39.163  12.414  21.584  1.00  0.00
H
ATOM   1522 2HD1 ILE    92      38.759  10.951  20.675  1.00  0.00
H
ATOM   1523 3HD1 ILE    92      40.373  11.687  20.519  1.00  0.00
H
ATOM   1524  N   TYR    93      43.331   7.709  21.824  1.00  0.00
N
ATOM   1525  H   TYR    93      43.601   8.657  21.584  1.00  0.00
H
ATOM   1526  CA  TYR    93      44.113   6.626  21.239  1.00  0.00
C
ATOM   1527  HA  TYR    93      44.228   5.815  21.958  1.00  0.00
H
ATOM   1528  C   TYR    93      45.477   7.194  20.876  1.00  0.00
C
ATOM   1529  O   TYR    93      45.579   8.375  20.552  1.00  0.00
O
ATOM   1530  CB  TYR    93      43.435   6.093  19.972  1.00  0.00
C
ATOM   1531 1HB  TYR    93      42.400   5.847  20.206  1.00  0.00
H
ATOM   1532 2HB  TYR    93      43.443   6.866  19.204  1.00  0.00
H
ATOM   1533  CG  TYR    93      44.113   4.850  19.443  1.00  0.00
C
ATOM   1534  CD1 TYR    93      43.886   3.598  20.050  1.00  0.00
C
ATOM   1535  HD1 TYR    93      43.189   3.515  20.873  1.00  0.00
H
ATOM   1536  CD2 TYR    93      45.021   4.918  18.364  1.00  0.00
C
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ATOM   1537  HD2 TYR    93      45.212   5.866  17.881  1.00  0.00
H
ATOM   1538  CE1 TYR    93      44.575   2.438  19.604  1.00  0.00
C
ATOM   1539  HE1 TYR    93      44.406   1.487  20.084  1.00  0.00
H
ATOM   1540  CE2 TYR    93      45.703   3.754  17.917  1.00  0.00
C
ATOM   1541  HE2 TYR    93      46.403   3.806  17.100  1.00  0.00
H
ATOM   1542  CZ  TYR    93      45.467   2.530  18.539  1.00  0.00
C
ATOM   1543  OH  TYR    93      46.124   1.417  18.090  1.00  0.00
O
ATOM   1544  HH  TYR    93      45.868   0.612  18.559  1.00  0.00
H
ATOM   1545  N   ASP    94      46.513   6.377  20.929  1.00  0.00
N
ATOM   1546  H   ASP    94      46.380   5.410  21.214  1.00  0.00
H
ATOM   1547  CA  ASP    94      47.863   6.794  20.568  1.00  0.00
C
ATOM   1548  HA  ASP    94      47.798   7.624  19.865  1.00  0.00
H
ATOM   1549  C   ASP    94      48.644   5.679  19.870  1.00  0.00
C
ATOM   1550  O   ASP    94      48.341   4.492  20.009  1.00  0.00
O
ATOM   1551  CB  ASP    94      48.609   7.299  21.815  1.00  0.00
C
ATOM   1552 1HB  ASP    94      49.637   7.548  21.550  1.00  0.00
H
ATOM   1553 2HB  ASP    94      48.115   8.209  22.152  1.00  0.00
H
ATOM   1554  CG  ASP    94      48.598   6.312  22.984  1.00  0.00
C
ATOM   1555  OD1 ASP    94      48.610   5.077  22.815  1.00  0.00
O
ATOM   1556  OD2 ASP    94      48.567   6.799  24.138  1.00  0.00
O
ATOM   1557  N   ASP    95      49.648   6.089  19.112  1.00  0.00
N
ATOM   1558  H   ASP    95      49.684   7.074  18.849  1.00  0.00
H
ATOM   1559  CA  ASP    95      50.757   5.252  18.654  1.00  0.00
C
ATOM   1560  HA  ASP    95      51.070   4.588  19.459  1.00  0.00
H
ATOM   1561  C   ASP    95      51.900   6.206  18.314  1.00  0.00
C
ATOM   1562  O   ASP    95      52.107   6.539  17.152  1.00  0.00
O
ATOM   1563  CB  ASP    95      50.433   4.408  17.412  1.00  0.00
C
ATOM   1564 1HB  ASP    95      49.584   3.761  17.624  1.00  0.00
H
ATOM   1565 2HB  ASP    95      50.161   5.054  16.587  1.00  0.00
H
ATOM   1566  CG  ASP    95      51.615   3.564  16.975  1.00  0.00
C
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ATOM   1567  OD1 ASP    95      52.203   2.867  17.830  1.00  0.00
O
ATOM   1568  OD2 ASP    95      51.992   3.583  15.781  1.00  0.00
O
ATOM   1569  N   MET    96      52.585   6.708  19.332  1.00  0.00
N
ATOM   1570  H   MET    96      52.320   6.466  20.279  1.00  0.00
H
ATOM   1571  CA  MET    96      53.778   7.550  19.191  1.00  0.00
C
ATOM   1572  HA  MET    96      54.448   7.140  18.441  1.00  0.00
H
ATOM   1573  C   MET    96      54.460   7.464  20.548  1.00  0.00
C
ATOM   1574  O   MET    96      53.831   6.987  21.492  1.00  0.00
O
ATOM   1575  CB  MET    96      53.453   9.007  18.828  1.00  0.00
C
ATOM   1576 1HB  MET    96      54.382   9.576  18.839  1.00  0.00
H
ATOM   1577 2HB  MET    96      53.065   9.022  17.812  1.00  0.00
H
ATOM   1578  CG  MET    96      52.450   9.705  19.723  1.00  0.00
C
ATOM   1579 1HG  MET    96      51.463   9.281  19.546  1.00  0.00
H
ATOM   1580 2HG  MET    96      52.724   9.524  20.760  1.00  0.00
H
ATOM   1581  SD  MET    96      52.391  11.500  19.459  1.00  0.00
S
ATOM   1582  CE  MET    96      52.178  11.714  17.675  1.00  0.00
C
ATOM   1583 1HE  MET    96      52.012  12.768  17.452  1.00  0.00
H
ATOM   1584 2HE  MET    96      51.320  11.136  17.333  1.00  0.00
H
ATOM   1585 3HE  MET    96      53.075  11.380  17.154  1.00  0.00
H
ATOM   1586  N   GLU    97      55.710   7.882  20.663  1.00  0.00
N
ATOM   1587  H   GLU    97      56.197   8.253  19.848  1.00  0.00
H
ATOM   1588  CA  GLU    97      56.408   7.858  21.950  1.00  0.00
C
ATOM   1589  HA  GLU    97      56.222   6.903  22.441  1.00  0.00
H
ATOM   1590  C   GLU    97      55.884   8.975  22.854  1.00  0.00
C
ATOM   1591  O   GLU    97      55.361   9.976  22.362  1.00  0.00
O
ATOM   1592  CB  GLU    97      57.919   8.032  21.755  1.00  0.00
C
ATOM   1593 1HB  GLU    97      58.097   8.982  21.250  1.00  0.00
H
ATOM   1594 2HB  GLU    97      58.386   8.076  22.736  1.00  0.00
H
ATOM   1595  CG  GLU    97      58.604   6.923  20.954  1.00  0.00
C
ATOM   1596 1HG  GLU    97      58.204   6.918  19.940  1.00  0.00
H
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ATOM   1597 2HG  GLU    97      59.671   7.146  20.898  1.00  0.00
H
ATOM   1598  CD  GLU    97      58.419   5.533  21.556  1.00  0.00
C
ATOM   1599  OE1 GLU    97      58.366   5.371  22.800  1.00  0.00
O
ATOM   1600  OE2 GLU    97      58.290   4.564  20.773  1.00  0.00
O
ATOM   1601  N   LEU    98      56.051   8.832  24.163  1.00  0.00
N
ATOM   1602  H   LEU    98      56.556   8.024  24.515  1.00  0.00
H
ATOM   1603  CA  LEU    98      55.520   9.788  25.139  1.00  0.00
C
ATOM   1604  HA  LEU    98      54.437   9.806  25.056  1.00  0.00
H
ATOM   1605  C   LEU    98      56.019  11.205  24.913  1.00  0.00
C
ATOM   1606  O   LEU    98      55.259  12.157  25.043  1.00  0.00
O
ATOM   1607  CB  LEU    98      55.905   9.359  26.560  1.00  0.00
C
ATOM   1608 1HB  LEU    98      55.540   8.346  26.727  1.00  0.00
H
ATOM   1609 2HB  LEU    98      56.992   9.338  26.616  1.00  0.00
H
ATOM   1610  CG  LEU    98      55.402  10.254  27.711  1.00  0.00
C
ATOM   1611  HG  LEU    98      55.720  11.278  27.524  1.00  0.00
H
ATOM   1612  CD1 LEU    98      53.880  10.244  27.847  1.00  0.00
C
ATOM   1613 1HD1 LEU    98      53.586  10.837  28.713  1.00  0.00
H
ATOM   1614 2HD1 LEU    98      53.516   9.223  27.970  1.00  0.00
H
ATOM   1615 3HD1 LEU    98      53.427  10.689  26.963  1.00  0.00
H
ATOM   1616  CD2 LEU    98      56.037   9.818  29.016  1.00  0.00
C
ATOM   1617 1HD2 LEU    98      55.694  10.466  29.823  1.00  0.00
H
ATOM   1618 2HD2 LEU    98      57.122   9.905  28.946  1.00  0.00
H
ATOM   1619 3HD2 LEU    98      55.768   8.787  29.239  1.00  0.00
H
ATOM   1620  N   GLU    99      57.274  11.355  24.522  1.00  0.00
N
ATOM   1621  H   GLU    99      57.870  10.537  24.408  1.00  0.00
H
ATOM   1622  CA  GLU    99      57.828  12.682  24.277  1.00  0.00
C
ATOM   1623  HA  GLU    99      57.765  13.262  25.196  1.00  0.00
H
ATOM   1624  C   GLU    99      57.027  13.409  23.203  1.00  0.00
C
ATOM   1625  O   GLU    99      56.727  14.595  23.339  1.00  0.00
O
ATOM   1626  CB  GLU    99      59.291  12.558  23.855  1.00  0.00
C
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ATOM   1627 1HB  GLU    99      59.809  11.944  24.591  1.00  0.00
H
ATOM   1628 2HB  GLU    99      59.329  12.054  22.890  1.00  0.00
H
ATOM   1629  CG  GLU    99      60.010  13.887  23.747  1.00  0.00
C
ATOM   1630 1HG  GLU    99      59.496  14.509  23.016  1.00  0.00
H
ATOM   1631 2HG  GLU    99      59.968  14.383  24.716  1.00  0.00
H
ATOM   1632  CD  GLU    99      61.463  13.744  23.333  1.00  0.00
C
ATOM   1633  OE1 GLU    99      61.921  12.630  22.993  1.00  0.00
O
ATOM   1634  OE2 GLU    99      62.188  14.764  23.362  1.00  0.00
O
ATOM   1635  N   MET   100      56.612  12.688  22.172  1.00  0.00
N
ATOM   1636  H   MET   100      56.822  11.699  22.131  1.00  0.00
H
ATOM   1637  CA  MET   100      55.805  13.286  21.118  1.00  0.00
C
ATOM   1638  HA  MET   100      56.228  14.257  20.867  1.00  0.00
H
ATOM   1639  C   MET   100      54.376  13.528  21.586  1.00  0.00
C
ATOM   1640  O   MET   100      53.793  14.535  21.208  1.00  0.00
O
ATOM   1641  CB  MET   100      55.804  12.419  19.859  1.00  0.00
C
ATOM   1642 1HB  MET   100      55.585  11.388  20.134  1.00  0.00
H
ATOM   1643 2HB  MET   100      55.011  12.770  19.202  1.00  0.00
H
ATOM   1644  CG  MET   100      57.117  12.466  19.090  1.00  0.00
C
ATOM   1645 1HG  MET   100      57.920  12.117  19.739  1.00  0.00
H
ATOM   1646 2HG  MET   100      57.047  11.796  18.233  1.00  0.00
H
ATOM   1647  SD  MET   100      57.516  14.141  18.499  1.00  0.00
S
ATOM   1648  CE  MET   100      56.237  14.460  17.238  1.00  0.00
C
ATOM   1649 1HE  MET   100      56.417  15.429  16.772  1.00  0.00
H
ATOM   1650 2HE  MET   100      55.250  14.461  17.701  1.00  0.00
H
ATOM   1651 3HE  MET   100      56.274  13.684  16.473  1.00  0.00
H
ATOM   1652  N   LYS   101      53.829  12.686  22.456  1.00  0.00
N
ATOM   1653  H   LYS   101      54.356  11.871  22.757  1.00  0.00
H
ATOM   1654  CA  LYS   101      52.473  12.912  22.984  1.00  0.00
C
ATOM   1655  HA  LYS   101      51.770  12.979  22.152  1.00  0.00
H
ATOM   1656  C   LYS   101      52.434  14.218  23.756  1.00  0.00
C
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ATOM   1657  O   LYS   101      51.533  15.037  23.597  1.00  0.00
O
ATOM   1658  CB  LYS   101      52.041  11.795  23.943  1.00  0.00
C
ATOM   1659 1HB  LYS   101      52.719  11.784  24.794  1.00  0.00
H
ATOM   1660 2HB  LYS   101      51.042  12.025  24.312  1.00  0.00
H
ATOM   1661  CG  LYS   101      52.029  10.409  23.337  1.00  0.00
C
ATOM   1662 1HG  LYS   101      51.347  10.391  22.489  1.00  0.00
H
ATOM   1663 2HG  LYS   101      53.026  10.165  22.991  1.00  0.00
H
ATOM   1664  CD  LYS   101      51.600   9.361  24.341  1.00  0.00
C
ATOM   1665 1HD  LYS   101      52.130   9.515  25.280  1.00  0.00
H
ATOM   1666 2HD  LYS   101      50.528   9.448  24.516  1.00  0.00
H
ATOM   1667  CE  LYS   101      51.922   7.979  23.815  1.00  0.00
C
ATOM   1668 1HE  LYS   101      51.461   7.852  22.835  1.00  0.00
H
ATOM   1669 2HE  LYS   101      53.004   7.884  23.701  1.00  0.00
H
ATOM   1670  NZ  LYS   101      51.431   6.908  24.725  1.00  0.00
N
ATOM   1671 1HZ  LYS   101      51.706   5.998  24.371  1.00  0.00
H
ATOM   1672 2HZ  LYS   101      50.421   6.937  24.779  1.00  0.00
H
ATOM   1673 3HZ  LYS   101      51.811   7.030  25.656  1.00  0.00
H
ATOM   1674  N   VAL   102      53.441  14.418  24.588  1.00  0.00
N
ATOM   1675  H   VAL   102      54.160  13.703  24.685  1.00  0.00
H
ATOM   1676  CA  VAL   102      53.523  15.619  25.407  1.00  0.00
C
ATOM   1677  HA  VAL   102      52.559  15.778  25.890  1.00  0.00
H
ATOM   1678  C   VAL   102      53.795  16.825  24.516  1.00  0.00
C
ATOM   1679  O   VAL   102      53.202  17.879  24.716  1.00  0.00
O
ATOM   1680  CB  VAL   102      54.600  15.452  26.513  1.00  0.00
C
ATOM   1681  HB  VAL   102      55.550  15.216  26.039  1.00  0.00
H
ATOM   1682  CG1 VAL   102      54.762  16.725  27.337  1.00  0.00
C
ATOM   1683 1HG1 VAL   102      55.506  16.566  28.117  1.00  0.00
H
ATOM   1684 2HG1 VAL   102      53.812  17.003  27.793  1.00  0.00
H
ATOM   1685 3HG1 VAL   102      55.104  17.542  26.701  1.00  0.00
H
ATOM   1686  CG2 VAL   102      54.222  14.299  27.460  1.00  0.00
C
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ATOM   1687 1HG2 VAL   102      55.002  14.170  28.211  1.00  0.00
H
ATOM   1688 2HG2 VAL   102      54.124  13.365  26.912  1.00  0.00
H
ATOM   1689 3HG2 VAL   102      53.277  14.517  27.958  1.00  0.00
H
ATOM   1690  N   LYS   103      54.623  16.683  23.488  1.00  0.00
N
ATOM   1691  H   LYS   103      55.120  15.806  23.352  1.00  0.00
H
ATOM   1692  CA  LYS   103      54.843  17.791  22.549  1.00  0.00
C
ATOM   1693  HA  LYS   103      55.154  18.672  23.112  1.00  0.00
H
ATOM   1694  C   LYS   103      53.566  18.167  21.815  1.00  0.00
C
ATOM   1695  O   LYS   103      53.279  19.345  21.677  1.00  0.00
O
ATOM   1696  CB  LYS   103      55.934  17.448  21.533  1.00  0.00
C
ATOM   1697 1HB  LYS   103      55.789  16.424  21.196  1.00  0.00
H
ATOM   1698 2HB  LYS   103      55.835  18.111  20.673  1.00  0.00
H
ATOM   1699  CG  LYS   103      57.340  17.607  22.091  1.00  0.00
C
ATOM   1700 1HG  LYS   103      57.538  18.667  22.251  1.00  0.00
H
ATOM   1701 2HG  LYS   103      57.406  17.096  23.048  1.00  0.00
H
ATOM   1702  CD  LYS   103      58.402  17.035  21.163  1.00  0.00
C
ATOM   1703 1HD  LYS   103      58.207  15.973  21.009  1.00  0.00
H
ATOM   1704 2HD  LYS   103      58.371  17.553  20.205  1.00  0.00
H
ATOM   1705  CE  LYS   103      59.777  17.213  21.793  1.00  0.00
C
ATOM   1706 1HE  LYS   103      59.986  18.280  21.884  1.00  0.00
H
ATOM   1707 2HE  LYS   103      59.765  16.781  22.796  1.00  0.00
H
ATOM   1708  NZ  LYS   103      60.867  16.567  21.000  1.00  0.00
N
ATOM   1709 1HZ  LYS   103      61.759  16.695  21.463  1.00  0.00
H
ATOM   1710 2HZ  LYS   103      60.916  16.972  20.074  1.00  0.00
H
ATOM   1711 3HZ  LYS   103      60.690  15.574  20.912  1.00  0.00
H
ATOM   1712  N   VAL   104      52.784  17.193  21.374  1.00  0.00
N
ATOM   1713  H   VAL   104      53.066  16.223  21.503  1.00  0.00
H
ATOM   1714  CA  VAL   104      51.510  17.468  20.707  1.00  0.00
C
ATOM   1715  HA  VAL   104      51.681  18.130  19.859  1.00  0.00
H
ATOM   1716  C   VAL   104      50.562  18.186  21.661  1.00  0.00
C
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ATOM   1717  O   VAL   104      49.939  19.184  21.282  1.00  0.00
O
ATOM   1718  CB  VAL   104      50.842  16.155  20.204  1.00  0.00
C
ATOM   1719  HB  VAL   104      50.874  15.417  21.004  1.00  0.00
H
ATOM   1720  CG1 VAL   104      49.385  16.384  19.839  1.00  0.00
C
ATOM   1721 1HG1 VAL   104      49.003  15.528  19.285  1.00  0.00
H
ATOM   1722 2HG1 VAL   104      49.283  17.284  19.232  1.00  0.00
H
ATOM   1723 3HG1 VAL   104      48.790  16.495  20.746  1.00  0.00
H
ATOM   1724  CG2 VAL   104      51.583  15.591  18.982  1.00  0.00
C
ATOM   1725 1HG2 VAL   104      51.185  14.604  18.746  1.00  0.00
H
ATOM   1726 2HG2 VAL   104      52.645  15.489  19.196  1.00  0.00
H
ATOM   1727 3HG2 VAL   104      51.451  16.247  18.123  1.00  0.00
H
ATOM   1728  N   MET   105      50.475  17.717  22.899  1.00  0.00
N
ATOM   1729  H   MET   105      51.000  16.889  23.171  1.00  0.00
H
ATOM   1730  CA  MET   105      49.610  18.364  23.880  1.00  0.00
C
ATOM   1731  HA  MET   105      48.594  18.409  23.487  1.00  0.00
H
ATOM   1732  C   MET   105      50.075  19.793  24.113  1.00  0.00
C
ATOM   1733  O   MET   105      49.275  20.710  24.010  1.00  0.00
O
ATOM   1734  CB  MET   105      49.608  17.602  25.208  1.00  0.00
C
ATOM   1735 1HB  MET   105      50.633  17.326  25.453  1.00  0.00
H
ATOM   1736 2HB  MET   105      49.238  18.266  25.990  1.00  0.00
H
ATOM   1737  CG  MET   105      48.744  16.351  25.213  1.00  0.00
C
ATOM   1738 1HG  MET   105      48.992  15.727  24.354  1.00  0.00
H
ATOM   1739 2HG  MET   105      48.944  15.793  26.125  1.00  0.00
H
ATOM   1740  SD  MET   105      46.989  16.777  25.178  1.00  0.00
S
ATOM   1741  CE  MET   105      46.223  15.220  25.664  1.00  0.00
C
ATOM   1742 1HE  MET   105      45.142  15.347  25.711  1.00  0.00
H
ATOM   1743 2HE  MET   105      46.595  14.919  26.644  1.00  0.00
H
ATOM   1744 3HE  MET   105      46.463  14.449  24.932  1.00  0.00
H
ATOM   1745  N   GLU   106      51.359  20.006  24.365  1.00  0.00
N
ATOM   1746  H   GLU   106      52.007  19.220  24.387  1.00  0.00
H
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ATOM   1747  CA  GLU   106      51.871  21.347  24.647  1.00  0.00
C
ATOM   1748  HA  GLU   106      51.357  21.737  25.524  1.00  0.00
H
ATOM   1749  C   GLU   106      51.593  22.293  23.483  1.00  0.00
C
ATOM   1750  O   GLU   106      51.149  23.429  23.684  1.00  0.00
O
ATOM   1751  CB  GLU   106      53.379  21.298  24.930  1.00  0.00
C
ATOM   1752 1HB  GLU   106      53.568  20.552  25.702  1.00  0.00
H
ATOM   1753 2HB  GLU   106      53.895  20.994  24.019  1.00  0.00
H
ATOM   1754  CG  GLU   106      53.942  22.635  25.399  1.00  0.00
C
ATOM   1755 1HG  GLU   106      53.724  23.391  24.648  1.00  0.00
H
ATOM   1756 2HG  GLU   106      53.441  22.913  26.324  1.00  0.00
H
ATOM   1757  CD  GLU   106      55.441  22.631  25.640  1.00  0.00
C
ATOM   1758  OE1 GLU   106      56.206  22.049  24.842  1.00  0.00
O
ATOM   1759  OE2 GLU   106      55.894  23.287  26.612  1.00  0.00
O
ATOM   1760  N   LEU   107      51.800  21.811  22.266  1.00  0.00
N
ATOM   1761  H   LEU   107      52.151  20.863  22.146  1.00  0.00
H
ATOM   1762  CA  LEU   107      51.545  22.627  21.088  1.00  0.00
C
ATOM   1763  HA  LEU   107      52.112  23.552  21.179  1.00  0.00
H
ATOM   1764  C   LEU   107      50.078  23.000  20.975  1.00  0.00
C
ATOM   1765  O   LEU   107      49.776  24.172  20.773  1.00  0.00
O
ATOM   1766  CB  LEU   107      51.956  21.900  19.807  1.00  0.00
C
ATOM   1767 1HB  LEU   107      51.537  20.896  19.845  1.00  0.00
H
ATOM   1768 2HB  LEU   107      51.482  22.423  18.975  1.00  0.00
H
ATOM   1769  CG  LEU   107      53.447  21.780  19.468  1.00  0.00
C
ATOM   1770  HG  LEU   107      53.969  21.322  20.304  1.00  0.00
H
ATOM   1771  CD1 LEU   107      53.613  20.881  18.247  1.00  0.00
C
ATOM   1772 1HD1 LEU   107      54.666  20.801  17.986  1.00  0.00
H
ATOM   1773 2HD1 LEU   107      53.060  21.289  17.400  1.00  0.00
H
ATOM   1774 3HD1 LEU   107      53.230  19.886  18.478  1.00  0.00
H
ATOM   1775  CD2 LEU   107      54.069  23.140  19.214  1.00  0.00
C
ATOM   1776 1HD2 LEU   107      55.084  23.028  18.839  1.00  0.00
H
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ATOM   1777 2HD2 LEU   107      54.103  23.706  20.141  1.00  0.00
H
ATOM   1778 3HD2 LEU   107      53.475  23.692  18.488  1.00  0.00
H
ATOM   1779  N   PHE   108      49.158  22.055  21.118  1.00  0.00
N
ATOM   1780  H   PHE   108      49.430  21.091  21.310  1.00  0.00
H
ATOM   1781  CA  PHE   108      47.747  22.404  20.967  1.00  0.00
C
ATOM   1782  HA  PHE   108      47.648  22.995  20.056  1.00  0.00
H
ATOM   1783  C   PHE   108      47.251  23.264  22.119  1.00  0.00
C
ATOM   1784  O   PHE   108      46.471  24.180  21.893  1.00  0.00
O
ATOM   1785  CB  PHE   108      46.845  21.179  20.823  1.00  0.00
C
ATOM   1786 1HB  PHE   108      47.226  20.564  20.010  1.00  0.00
H
ATOM   1787 2HB  PHE   108      46.887  20.596  21.744  1.00  0.00
H
ATOM   1788  CG  PHE   108      45.404  21.537  20.533  1.00  0.00
C
ATOM   1789  CD1 PHE   108      45.050  22.189  19.335  1.00  0.00
C
ATOM   1790  HD1 PHE   108      45.805  22.407  18.596  1.00  0.00
H
ATOM   1791  CD2 PHE   108      44.401  21.275  21.478  1.00  0.00
C
ATOM   1792  HD2 PHE   108      44.649  20.750  22.385  1.00  0.00
H
ATOM   1793  CE1 PHE   108      43.709  22.585  19.091  1.00  0.00
C
ATOM   1794  HE1 PHE   108      43.448  23.068  18.164  1.00  0.00
H
ATOM   1795  CE2 PHE   108      43.061  21.701  21.263  1.00  0.00
C
ATOM   1796  HE2 PHE   108      42.302  21.510  22.005  1.00  0.00
H
ATOM   1797  CZ  PHE   108      42.719  22.361  20.069  1.00  0.00
C
ATOM   1798  HZ  PHE   108      41.701  22.682  19.899  1.00  0.00
H
ATOM   1799  N   ILE   109      47.743  23.041  23.332  1.00  0.00
N
ATOM   1800  H   ILE   109      48.397  22.272  23.479  1.00  0.00
H
ATOM   1801  CA  ILE   109      47.375  23.886  24.473  1.00  0.00
C
ATOM   1802  HA  ILE   109      46.294  23.864  24.611  1.00  0.00
H
ATOM   1803  C   ILE   109      47.778  25.318  24.137  1.00  0.00
C
ATOM   1804  O   ILE   109      46.988  26.250  24.304  1.00  0.00
O
ATOM   1805  CB  ILE   109      48.084  23.441  25.798  1.00  0.00
C
ATOM   1806  HB  ILE   109      49.155  23.372  25.604  1.00  0.00
H
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ATOM   1807  CG1 ILE   109      47.575  22.068  26.272  1.00  0.00
C
ATOM   1808 1HG1 ILE   109      46.620  22.205  26.778  1.00  0.00
H
ATOM   1809 2HG1 ILE   109      47.398  21.433  25.408  1.00  0.00
H
ATOM   1810  CG2 ILE   109      47.854  24.456  26.938  1.00  0.00
C
ATOM   1811 1HG2 ILE   109      48.325  24.109  27.859  1.00  0.00
H
ATOM   1812 2HG2 ILE   109      46.785  24.594  27.115  1.00  0.00
H
ATOM   1813 3HG2 ILE   109      48.300  25.412  26.675  1.00  0.00
H
ATOM   1814  CD1 ILE   109      48.522  21.324  27.218  1.00  0.00
C
ATOM   1815 1HD1 ILE   109      48.200  20.287  27.311  1.00  0.00
H
ATOM   1816 2HD1 ILE   109      48.506  21.790  28.202  1.00  0.00
H
ATOM   1817 3HD1 ILE   109      49.537  21.337  26.822  1.00  0.00
H
ATOM   1818  N   ASN   110      48.984  25.509  23.621  1.00  0.00
N
ATOM   1819  H   ASN   110      49.595  24.711  23.445  1.00  0.00
H
ATOM   1820  CA  ASN   110      49.457  26.856  23.321  1.00  0.00
C
ATOM   1821  HA  ASN   110      49.165  27.506  24.143  1.00  0.00
H
ATOM   1822  C   ASN   110      48.820  27.457  22.075  1.00  0.00
C
ATOM   1823  O   ASN   110      48.635  28.666  22.008  1.00  0.00
O
ATOM   1824  CB  ASN   110      50.983  26.871  23.221  1.00  0.00
C
ATOM   1825 1HB  ASN   110      51.316  26.056  22.578  1.00  0.00
H
ATOM   1826 2HB  ASN   110      51.297  27.815  22.777  1.00  0.00
H
ATOM   1827  CG  ASN   110      51.637  26.755  24.573  1.00  0.00
C
ATOM   1828  OD1 ASN   110      51.204  27.394  25.530  1.00  0.00
O
ATOM   1829  ND2 ASN   110      52.656  25.957  24.683  1.00  0.00
N
ATOM   1830 1HD2 ASN   110      53.100  25.861  25.578  1.00  0.00
H
ATOM   1831 2HD2 ASN   110      52.977  25.428  23.884  1.00  0.00
H
ATOM   1832  N   ASP   111      48.448  26.658  21.089  1.00  0.00
N
ATOM   1833  H   ASP   111      48.663  25.663  21.128  1.00  0.00
H
ATOM   1834  CA  ASP   111      47.766  27.198  19.911  1.00  0.00
C
ATOM   1835  HA  ASP   111      48.276  28.105  19.588  1.00  0.00
H
ATOM   1836  C   ASP   111      46.335  27.583  20.260  1.00  0.00
C
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ATOM   1837  O   ASP   111      45.822  28.605  19.794  1.00  0.00
O
ATOM   1838  CB  ASP   111      47.786  26.194  18.757  1.00  0.00
C
ATOM   1839 1HB  ASP   111      47.440  25.224  19.116  1.00  0.00
H
ATOM   1840 2HB  ASP   111      47.107  26.546  17.983  1.00  0.00
H
ATOM   1841  CG  ASP   111      49.168  26.049  18.148  1.00  0.00
C
ATOM   1842  OD1 ASP   111      49.948  27.032  18.221  1.00  0.00
O
ATOM   1843  OD2 ASP   111      49.507  24.984  17.606  1.00  0.00
O
ATOM   1844  N   LEU   112      45.703  26.811  21.131  1.00  0.00
N
ATOM   1845  H   LEU   112      46.146  25.954  21.461  1.00  0.00
H
ATOM   1846  CA  LEU   112      44.367  27.132  21.622  1.00  0.00
C
ATOM   1847  HA  LEU   112      43.719  27.316  20.766  1.00  0.00
H
ATOM   1848  C   LEU   112      44.418  28.399  22.471  1.00  0.00
C
ATOM   1849  O   LEU   112      43.541  29.261  22.362  1.00  0.00
O
ATOM   1850  CB  LEU   112      43.811  25.945  22.421  1.00  0.00
C
ATOM   1851 1HB  LEU   112      43.880  25.063  21.784  1.00  0.00
H
ATOM   1852 2HB  LEU   112      44.466  25.782  23.275  1.00  0.00
H
ATOM   1853  CG  LEU   112      42.369  26.018  22.948  1.00  0.00
C
ATOM   1854  HG  LEU   112      42.288  26.867  23.624  1.00  0.00
H
ATOM   1855  CD1 LEU   112      41.349  26.194  21.839  1.00  0.00
C
ATOM   1856 1HD1 LEU   112      40.350  26.250  22.264  1.00  0.00
H
ATOM   1857 2HD1 LEU   112      41.395  25.355  21.142  1.00  0.00
H
ATOM   1858 3HD1 LEU   112      41.535  27.118  21.297  1.00  0.00
H
ATOM   1859  CD2 LEU   112      42.041  24.748  23.725  1.00  0.00
C
ATOM   1860 1HD2 LEU   112      41.021  24.796  24.105  1.00  0.00
H
ATOM   1861 2HD2 LEU   112      42.726  24.643  24.566  1.00  0.00
H
ATOM   1862 3HD2 LEU   112      42.134  23.876  23.076  1.00  0.00
H
ATOM   1863  N   ARG   113      45.473  28.557  23.264  1.00  0.00
N
ATOM   1864  H   ARG   113      46.150  27.802  23.346  1.00  0.00
H
ATOM   1865  CA  ARG   113      45.675  29.793  24.031  1.00  0.00
C
ATOM   1866  HA  ARG   113      44.785  29.986  24.629  1.00  0.00
H
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ATOM   1867  C   ARG   113      45.875  30.985  23.111  1.00  0.00
C
ATOM   1868  O   ARG   113      45.208  31.999  23.283  1.00  0.00
O
ATOM   1869  CB  ARG   113      46.893  29.705  24.958  1.00  0.00
C
ATOM   1870 1HB  ARG   113      47.723  29.284  24.394  1.00  0.00
H
ATOM   1871 2HB  ARG   113      47.170  30.715  25.258  1.00  0.00
H
ATOM   1872  CG  ARG   113      46.699  28.891  26.230  1.00  0.00
C
ATOM   1873 1HG  ARG   113      46.077  29.450  26.929  1.00  0.00
H
ATOM   1874 2HG  ARG   113      46.209  27.953  25.991  1.00  0.00
H
ATOM   1875  CD  ARG   113      48.053  28.589  26.863  1.00  0.00
C
ATOM   1876 1HD  ARG   113      48.655  28.040  26.140  1.00  0.00
H
ATOM   1877 2HD  ARG   113      48.556  29.528  27.097  1.00  0.00
H
ATOM   1878  NE  ARG   113      47.939  27.785  28.087  1.00  0.00
N
ATOM   1879  HE  ARG   113      47.006  27.613  28.447  1.00  0.00
H
ATOM   1880  CZ  ARG   113      48.941  27.257  28.777  1.00  0.00
C
ATOM   1881  NH1 ARG   113      50.185  27.240  28.375  1.00  0.00
N
ATOM   1882 1HH1 ARG   113      50.430  27.593  27.462  1.00  0.00
H
ATOM   1883 2HH1 ARG   113      50.898  26.856  28.977  1.00  0.00
H
ATOM   1884  NH2 ARG   113      48.660  26.645  29.888  1.00  0.00
N
ATOM   1885 1HH2 ARG   113      47.703  26.611  30.201  1.00  0.00
H
ATOM   1886 2HH2 ARG   113      49.391  26.220  30.434  1.00  0.00
H
ATOM   1887  N   GLU   114      46.764  30.894  22.137  1.00  0.00
N
ATOM   1888  H   GLU   114      47.296  30.034  22.011  1.00  0.00
H
ATOM   1889  CA  GLU   114      47.043  32.042  21.272  1.00  0.00
C
ATOM   1890  HA  GLU   114      47.263  32.907  21.898  1.00  0.00
H
ATOM   1891  C   GLU   114      45.861  32.431  20.399  1.00  0.00
C
ATOM   1892  O   GLU   114      45.521  33.611  20.301  1.00  0.00
O
ATOM   1893  CB  GLU   114      48.251  31.766  20.375  1.00  0.00
C
ATOM   1894 1HB  GLU   114      48.141  30.779  19.925  1.00  0.00
H
ATOM   1895 2HB  GLU   114      48.260  32.506  19.576  1.00  0.00
H
ATOM   1896  CG  GLU   114      49.585  31.842  21.109  1.00  0.00
C
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ATOM   1897 1HG  GLU   114      49.615  31.083  21.889  1.00  0.00
H
ATOM   1898 2HG  GLU   114      50.386  31.645  20.397  1.00  0.00
H
ATOM   1899  CD  GLU   114      49.814  33.205  21.739  1.00  0.00
C
ATOM   1900  OE1 GLU   114      49.592  34.230  21.057  1.00  0.00
O
ATOM   1901  OE2 GLU   114      50.208  33.276  22.928  1.00  0.00
O
ATOM   1902  N   SER   115      45.185  31.458  19.808  1.00  0.00
N
ATOM   1903  H   SER   115      45.489  30.490  19.905  1.00  0.00
H
ATOM   1904  CA  SER   115      44.006  31.761  18.999  1.00  0.00
C
ATOM   1905  HA  SER   115      44.261  32.548  18.290  1.00  0.00
H
ATOM   1906  C   SER   115      42.883  32.286  19.897  1.00  0.00
C
ATOM   1907  O   SER   115      42.080  33.122  19.485  1.00  0.00
O
ATOM   1908  CB  SER   115      43.571  30.526  18.209  1.00  0.00
C
ATOM   1909 1HB  SER   115      42.692  30.771  17.617  1.00  0.00
H
ATOM   1910 2HB  SER   115      44.378  30.234  17.535  1.00  0.00
H
ATOM   1911  OG  SER   115      43.284  29.437  19.072  1.00  0.00
O
ATOM   1912  HG  SER   115      44.127  29.040  19.344  1.00  0.00
H
ATOM   1913  N   GLY   116      42.879  31.881  21.159  1.00  0.00
N
ATOM   1914  H   GLY   116      43.520  31.153  21.457  1.00  0.00
H
ATOM   1915  CA  GLY   116      41.975  32.457  22.139  1.00  0.00
C
ATOM   1916 1HA  GLY   116      40.956  32.389  21.767  1.00  0.00
H
ATOM   1917 2HA  GLY   116      42.049  31.876  23.058  1.00  0.00
H
ATOM   1918  C   GLY   116      42.267  33.907  22.468  1.00  0.00
C
ATOM   1919  O   GLY   116      41.353  34.728  22.552  1.00  0.00
O
ATOM   1920  N   ARG   117      43.534  34.260  22.629  1.00  0.00
N
ATOM   1921  H   ARG   117      44.263  33.553  22.555  1.00  0.00
H
ATOM   1922  CA  ARG   117      43.900  35.648  22.924  1.00  0.00
C
ATOM   1923  HA  ARG   117      43.308  36.008  23.767  1.00  0.00
H
ATOM   1924  C   ARG   117      43.619  36.553  21.737  1.00  0.00
C
ATOM   1925  O   ARG   117      43.119  37.669  21.895  1.00  0.00
O
ATOM   1926  CB  ARG   117      45.391  35.763  23.254  1.00  0.00
C
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ATOM   1927 1HB  ARG   117      45.969  35.313  22.446  1.00  0.00
H
ATOM   1928 2HB  ARG   117      45.644  36.822  23.303  1.00  0.00
H
ATOM   1929  CG  ARG   117      45.808  35.125  24.565  1.00  0.00
C
ATOM   1930 1HG  ARG   117      45.281  35.615  25.382  1.00  0.00
H
ATOM   1931 2HG  ARG   117      45.553  34.071  24.564  1.00  0.00
H
ATOM   1932  CD  ARG   117      47.303  35.269  24.775  1.00  0.00
C
ATOM   1933 1HD  ARG   117      47.826  34.768  23.959  1.00  0.00
H
ATOM   1934 2HD  ARG   117      47.568  36.327  24.757  1.00  0.00
H
ATOM   1935  NE  ARG   117      47.732  34.683  26.052  1.00  0.00
N
ATOM   1936  HE  ARG   117      48.097  33.737  26.010  1.00  0.00
H
ATOM   1937  CZ  ARG   117      47.734  35.286  27.233  1.00  0.00
C
ATOM   1938  NH1 ARG   117      47.322  36.511  27.423  1.00  0.00
N
ATOM   1939 1HH1 ARG   117      46.920  37.028  26.657  1.00  0.00
H
ATOM   1940 2HH1 ARG   117      47.417  36.951  28.327  1.00  0.00
H
ATOM   1941  NH2 ARG   117      48.159  34.628  28.269  1.00  0.00
N
ATOM   1942 1HH2 ARG   117      48.412  33.657  28.181  1.00  0.00
H
ATOM   1943 2HH2 ARG   117      48.222  35.087  29.165  1.00  0.00
H
ATOM   1944  N   LYS   118      43.980  36.090  20.551  1.00  0.00
N
ATOM   1945  H   LYS   118      44.393  35.161  20.486  1.00  0.00
H
ATOM   1946  CA  LYS   118      43.923  36.930  19.356  1.00  0.00
C
ATOM   1947  HA  LYS   118      44.097  37.964  19.657  1.00  0.00
H
ATOM   1948  C   LYS   118      42.612  36.918  18.585  1.00  0.00
C
ATOM   1949  O   LYS   118      42.070  37.973  18.272  1.00  0.00
O
ATOM   1950  CB  LYS   118      45.069  36.537  18.419  1.00  0.00
C
ATOM   1951 1HB  LYS   118      44.998  35.474  18.182  1.00  0.00
H
ATOM   1952 2HB  LYS   118      44.972  37.108  17.496  1.00  0.00
H
ATOM   1953  CG  LYS   118      46.440  36.829  19.024  1.00  0.00
C
ATOM   1954 1HG  LYS   118      46.481  37.885  19.290  1.00  0.00
H
ATOM   1955 2HG  LYS   118      46.583  36.235  19.927  1.00  0.00
H
ATOM   1956  CD  LYS   118      47.573  36.529  18.057  1.00  0.00
C
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ATOM   1957 1HD  LYS   118      47.576  35.466  17.815  1.00  0.00
H
ATOM   1958 2HD  LYS   118      47.429  37.108  17.144  1.00  0.00
H
ATOM   1959  CE  LYS   118      48.898  36.923  18.695  1.00  0.00
C
ATOM   1960 1HE  LYS   118      48.846  37.976  18.975  1.00  0.00
H
ATOM   1961 2HE  LYS   118      49.045  36.333  19.601  1.00  0.00
H
ATOM   1962  NZ  LYS   118      50.070  36.720  17.784  1.00  0.00
N
ATOM   1963 1HZ  LYS   118      50.890  37.169  18.172  1.00  0.00
H
ATOM   1964 2HZ  LYS   118      49.872  37.101  16.868  1.00  0.00
H
ATOM   1965 3HZ  LYS   118      50.256  35.729  17.690  1.00  0.00
H
ATOM   1966  N   THR   119      42.140  35.748  18.196  1.00  0.00
N
ATOM   1967  H   THR   119      42.477  34.886  18.613  1.00  0.00
H
ATOM   1968  CA  THR   119      41.281  35.655  17.020  1.00  0.00
C
ATOM   1969  HA  THR   119      41.727  36.292  16.259  1.00  0.00
H
ATOM   1970  C   THR   119      39.840  36.125  17.181  1.00  0.00
C
ATOM   1971  O   THR   119      39.356  36.873  16.332  1.00  0.00
O
ATOM   1972  CB  THR   119      41.344  34.207  16.507  1.00  0.00
C
ATOM   1973  HB  THR   119      40.845  33.542  17.212  1.00  0.00
H
ATOM   1974  OG1 THR   119      42.728  33.858  16.418  1.00  0.00
O
ATOM   1975  HG1 THR   119      42.815  33.046  15.896  1.00  0.00
H
ATOM   1976  CG2 THR   119      40.745  34.033  15.141  1.00  0.00
C
ATOM   1977 1HG2 THR   119      40.935  33.018  14.794  1.00  0.00
H
ATOM   1978 2HG2 THR   119      41.182  34.741  14.439  1.00  0.00
H
ATOM   1979 3HG2 THR   119      39.671  34.192  15.180  1.00  0.00
H
ATOM   1980  N   ASN   120      39.162  35.691  18.238  1.00  0.00
N
ATOM   1981  H   ASN   120      39.634  35.095  18.914  1.00  0.00
H
ATOM   1982  CA  ASN   120      37.743  35.993  18.504  1.00  0.00
C
ATOM   1983  HA  ASN   120      37.465  35.408  19.380  1.00  0.00
H
ATOM   1984  C   ASN   120      36.764  35.559  17.403  1.00  0.00
C
ATOM   1985  O   ASN   120      35.612  36.005  17.357  1.00  0.00
O
ATOM   1986  CB  ASN   120      37.550  37.468  18.894  1.00  0.00
C
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ATOM   1987 1HB  ASN   120      37.893  38.110  18.085  1.00  0.00
H
ATOM   1988 2HB  ASN   120      36.492  37.663  19.062  1.00  0.00
H
ATOM   1989  CG  ASN   120      38.284  37.823  20.159  1.00  0.00
C
ATOM   1990  OD1 ASN   120      38.127  37.161  21.178  1.00  0.00
O
ATOM   1991  ND2 ASN   120      39.110  38.826  20.111  1.00  0.00
N
ATOM   1992 1HD2 ASN   120      39.603  39.093  20.946  1.00  0.00
H
ATOM   1993 2HD2 ASN   120      39.266  39.315  19.241  1.00  0.00
H
ATOM   1994  N   ILE   121      37.209  34.658  16.539  1.00  0.00
N
ATOM   1995  H   ILE   121      38.159  34.335  16.617  1.00  0.00
H
ATOM   1996  CA  ILE   121      36.389  34.087  15.473  1.00  0.00
C
ATOM   1997  HA  ILE   121      35.348  34.354  15.621  1.00  0.00
H
ATOM   1998  C   ILE   121      36.569  32.586  15.654  1.00  0.00
C
ATOM   1999  O   ILE   121      37.637  32.049  15.374  1.00  0.00
O
ATOM   2000  CB  ILE   121      36.816  34.560  14.053  1.00  0.00
C
ATOM   2001  HB  ILE   121      37.843  34.251  13.873  1.00  0.00
H
ATOM   2002  CG1 ILE   121      36.748  36.097  13.959  1.00  0.00
C
ATOM   2003 1HG1 ILE   121      35.702  36.401  13.995  1.00  0.00
H
ATOM   2004 2HG1 ILE   121      37.247  36.528  14.822  1.00  0.00
H
ATOM   2005  CG2 ILE   121      35.902  33.921  12.984  1.00  0.00
C
ATOM   2006 1HG2 ILE   121      36.243  34.207  11.987  1.00  0.00
H
ATOM   2007 2HG2 ILE   121      34.874  34.268  13.105  1.00  0.00
H
ATOM   2008 3HG2 ILE   121      35.936  32.835  13.045  1.00  0.00
H
ATOM   2009  CD1 ILE   121      37.395  36.709  12.722  1.00  0.00
C
ATOM   2010 1HD1 ILE   121      37.375  37.794  12.812  1.00  0.00
H
ATOM   2011 2HD1 ILE   121      36.851  36.419  11.823  1.00  0.00
H
ATOM   2012 3HD1 ILE   121      38.432  36.380  12.644  1.00  0.00
H
ATOM   2013  N   ASP   122      35.570  31.926  16.218  1.00  0.00
N
ATOM   2014  H   ASP   122      34.694  32.412  16.407  1.00  0.00
H
ATOM   2015  CA  ASP   122      35.706  30.534  16.655  1.00  0.00
C
ATOM   2016  HA  ASP   122      36.519  30.485  17.378  1.00  0.00
H
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ATOM   2017  C   ASP   122      36.059  29.554  15.540  1.00  0.00
C
ATOM   2018  O   ASP   122      36.918  28.695  15.732  1.00  0.00
O
ATOM   2019  CB  ASP   122      34.420  30.073  17.347  1.00  0.00
C
ATOM   2020 1HB  ASP   122      33.567  30.290  16.702  1.00  0.00
H
ATOM   2021 2HB  ASP   122      34.474  28.997  17.504  1.00  0.00
H
ATOM   2022  CG  ASP   122      34.221  30.737  18.691  1.00  0.00
C
ATOM   2023  OD1 ASP   122      35.183  30.763  19.494  1.00  0.00
O
ATOM   2024  OD2 ASP   122      33.131  31.282  18.969  1.00  0.00
O
ATOM   2025  N   MET   123      35.472  29.698  14.361  1.00  0.00
N
ATOM   2026  H   MET   123      34.762  30.412  14.229  1.00  0.00
H
ATOM   2027  CA  MET   123      35.833  28.812  13.252  1.00  0.00
C
ATOM   2028  HA  MET   123      35.741  27.777  13.581  1.00  0.00
H
ATOM   2029  C   MET   123      37.271  29.024  12.799  1.00  0.00
C
ATOM   2030  O   MET   123      37.953  28.085  12.387  1.00  0.00
O
ATOM   2031  CB  MET   123      34.929  29.025  12.042  1.00  0.00
C
ATOM   2032 1HB  MET   123      34.939  30.080  11.771  1.00  0.00
H
ATOM   2033 2HB  MET   123      35.351  28.455  11.216  1.00  0.00
H
ATOM   2034  CG  MET   123      33.494  28.574  12.246  1.00  0.00
C
ATOM   2035 1HG  MET   123      33.484  27.511  12.490  1.00  0.00
H
ATOM   2036 2HG  MET   123      33.051  29.133  13.071  1.00  0.00
H
ATOM   2037  SD  MET   123      32.515  28.847  10.756  1.00  0.00
S
ATOM   2038  CE  MET   123      33.167  27.607   9.613  1.00  0.00
C
ATOM   2039 1HE  MET   123      32.629  27.666   8.668  1.00  0.00
H
ATOM   2040 2HE  MET   123      33.034  26.611  10.036  1.00  0.00
H
ATOM   2041 3HE  MET   123      34.226  27.786   9.426  1.00  0.00
H
ATOM   2042  N   GLU   124      37.764  30.251  12.877  1.00  0.00
N
ATOM   2043  H   GLU   124      37.200  31.011  13.224  1.00  0.00
H
ATOM   2044  CA  GLU   124      39.144  30.500  12.480  1.00  0.00
C
ATOM   2045  HA  GLU   124      39.337  30.027  11.517  1.00  0.00
H
ATOM   2046  C   GLU   124      40.084  29.886  13.494  1.00  0.00
C
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ATOM   2047  O   GLU   124      41.116  29.362  13.107  1.00  0.00
O
ATOM   2048  CB  GLU   124      39.476  31.980  12.359  1.00  0.00
C
ATOM   2049 1HB  GLU   124      39.138  32.498  13.251  1.00  0.00
H
ATOM   2050 2HB  GLU   124      40.560  32.065  12.293  1.00  0.00
H
ATOM   2051  CG  GLU   124      38.875  32.634  11.139  1.00  0.00
C
ATOM   2052 1HG  GLU   124      39.154  32.048  10.267  1.00  0.00
H
ATOM   2053 2HG  GLU   124      37.790  32.625  11.225  1.00  0.00
H
ATOM   2054  CD  GLU   124      39.360  34.060  10.940  1.00  0.00
C
ATOM   2055  OE1 GLU   124      40.442  34.437  11.447  1.00  0.00
O
ATOM   2056  OE2 GLU   124      38.683  34.827  10.226  1.00  0.00
O
ATOM   2057  N   LYS   125      39.726  29.886  14.773  1.00  0.00
N
ATOM   2058  H   LYS   125      38.840  30.302  15.049  1.00  0.00
H
ATOM   2059  CA  LYS   125      40.599  29.285  15.786  1.00  0.00
C
ATOM   2060  HA  LYS   125      41.556  29.806  15.793  1.00  0.00
H
ATOM   2061  C   LYS   125      40.859  27.818  15.480  1.00  0.00
C
ATOM   2062  O   LYS   125      41.982  27.342  15.629  1.00  0.00
O
ATOM   2063  CB  LYS   125      39.980  29.307  17.182  1.00  0.00
C
ATOM   2064 1HB  LYS   125      39.051  28.745  17.145  1.00  0.00
H
ATOM   2065 2HB  LYS   125      40.662  28.770  17.837  1.00  0.00
H
ATOM   2066  CG  LYS   125      39.687  30.633  17.839  1.00  0.00
C
ATOM   2067 1HG  LYS   125      40.594  31.233  17.902  1.00  0.00
H
ATOM   2068 2HG  LYS   125      38.924  31.170  17.285  1.00  0.00
H
ATOM   2069  CD  LYS   125      39.180  30.310  19.236  1.00  0.00
C
ATOM   2070 1HD  LYS   125      38.311  29.656  19.157  1.00  0.00
H
ATOM   2071 2HD  LYS   125      39.965  29.784  19.781  1.00  0.00
H
ATOM   2072  CE  LYS   125      38.793  31.542  20.010  1.00  0.00
C
ATOM   2073 1HE  LYS   125      39.648  32.218  20.056  1.00  0.00
H
ATOM   2074 2HE  LYS   125      37.967  32.046  19.506  1.00  0.00
H
ATOM   2075  NZ  LYS   125      38.384  31.158  21.402  1.00  0.00
N
ATOM   2076 1HZ  LYS   125      38.252  31.985  21.970  1.00  0.00
H
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ATOM   2077 2HZ  LYS   125      39.106  30.592  21.831  1.00  0.00
H
ATOM   2078 3HZ  LYS   125      37.520  30.632  21.388  1.00  0.00
H
ATOM   2079  N   LEU   126      39.830  27.115  15.023  1.00  0.00
N
ATOM   2080  H   LEU   126      38.937  27.572  14.892  1.00  0.00
H
ATOM   2081  CA  LEU   126      39.951  25.690  14.720  1.00  0.00
C
ATOM   2082  HA  LEU   126      40.266  25.155  15.616  1.00  0.00
H
ATOM   2083  C   LEU   126      40.980  25.457  13.629  1.00  0.00
C
ATOM   2084  O   LEU   126      41.797  24.545  13.712  1.00  0.00
O
ATOM   2085  CB  LEU   126      38.618  25.131  14.213  1.00  0.00
C
ATOM   2086 1HB  LEU   126      38.324  25.721  13.348  1.00  0.00
H
ATOM   2087 2HB  LEU   126      38.795  24.115  13.862  1.00  0.00
H
ATOM   2088  CG  LEU   126      37.419  25.083  15.165  1.00  0.00
C
ATOM   2089  HG  LEU   126      37.288  26.062  15.620  1.00  0.00
H
ATOM   2090  CD1 LEU   126      36.167  24.755  14.368  1.00  0.00
C
ATOM   2091 1HD1 LEU   126      35.297  24.825  15.016  1.00  0.00
H
ATOM   2092 2HD1 LEU   126      36.233  23.743  13.969  1.00  0.00
H
ATOM   2093 3HD1 LEU   126      36.047  25.461  13.546  1.00  0.00
H
ATOM   2094  CD2 LEU   126      37.629  24.051  16.263  1.00  0.00
C
ATOM   2095 1HD2 LEU   126      36.723  23.956  16.860  1.00  0.00
H
ATOM   2096 2HD2 LEU   126      38.444  24.361  16.917  1.00  0.00
H
ATOM   2097 3HD2 LEU   126      37.869  23.079  15.832  1.00  0.00
H
ATOM   2098  N   ASP   127      40.934  26.274  12.591  1.00  0.00
N
ATOM   2099  H   ASP   127      40.248  27.019  12.568  1.00  0.00
H
ATOM   2100  CA  ASP   127      41.823  26.072  11.449  1.00  0.00
C
ATOM   2101  HA  ASP   127      41.912  25.003  11.255  1.00  0.00
H
ATOM   2102  C   ASP   127      43.217  26.615  11.729  1.00  0.00
C
ATOM   2103  O   ASP   127      44.212  26.072  11.263  1.00  0.00
O
ATOM   2104  CB  ASP   127      41.278  26.745  10.194  1.00  0.00
C
ATOM   2105 1HB  ASP   127      41.023  27.782  10.419  1.00  0.00
H
ATOM   2106 2HB  ASP   127      42.057  26.729   9.438  1.00  0.00
H
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ATOM   2107  CG  ASP   127      40.071  26.037   9.616  1.00  0.00
C
ATOM   2108  OD1 ASP   127      39.661  24.950  10.085  1.00  0.00
O
ATOM   2109  OD2 ASP   127      39.504  26.580   8.642  1.00  0.00
O
ATOM   2110  N   GLN   128      43.307  27.673  12.519  1.00  0.00
N
ATOM   2111  H   GLN   128      42.462  28.117  12.869  1.00  0.00
H
ATOM   2112  CA  GLN   128      44.605  28.231  12.878  1.00  0.00
C
ATOM   2113  HA  GLN   128      45.201  28.371  11.976  1.00  0.00
H
ATOM   2114  C   GLN   128      45.347  27.271  13.788  1.00  0.00
C
ATOM   2115  O   GLN   128      46.533  27.058  13.605  1.00  0.00
O
ATOM   2116  CB  GLN   128      44.444  29.571  13.593  1.00  0.00
C
ATOM   2117 1HB  GLN   128      43.712  29.443  14.391  1.00  0.00
H
ATOM   2118 2HB  GLN   128      45.400  29.849  14.038  1.00  0.00
H
ATOM   2119  CG  GLN   128      44.001  30.700  12.673  1.00  0.00
C
ATOM   2120 1HG  GLN   128      44.811  30.930  11.983  1.00  0.00
H
ATOM   2121 2HG  GLN   128      43.142  30.383  12.087  1.00  0.00
H
ATOM   2122  CD  GLN   128      43.625  31.951  13.431  1.00  0.00
C
ATOM   2123  OE1 GLN   128      43.660  32.001  14.659  1.00  0.00
O
ATOM   2124  NE2 GLN   128      43.271  32.978  12.715  1.00  0.00
N
ATOM   2125 1HE2 GLN   128      43.008  33.834  13.172  1.00  0.00
H
ATOM   2126 2HE2 GLN   128      43.241  32.913  11.708  1.00  0.00
H
ATOM   2127  N   SER   129      44.674  26.661  14.752  1.00  0.00
N
ATOM   2128  H   SER   129      43.687  26.856  14.900  1.00  0.00
H
ATOM   2129  CA  SER   129      45.357  25.713  15.628  1.00  0.00
C
ATOM   2130  HA  SER   129      46.283  26.164  15.983  1.00  0.00
H
ATOM   2131  C   SER   129      45.729  24.458  14.851  1.00  0.00
C
ATOM   2132  O   SER   129      46.809  23.915  15.041  1.00  0.00
O
ATOM   2133  CB  SER   129      44.492  25.362  16.834  1.00  0.00
C
ATOM   2134 1HB  SER   129      44.985  24.581  17.414  1.00  0.00
H
ATOM   2135 2HB  SER   129      44.382  26.248  17.459  1.00  0.00
H
ATOM   2136  OG  SER   129      43.206  24.929  16.427  1.00  0.00
O
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ATOM   2137  HG  SER   129      42.648  25.713  16.323  1.00  0.00
H
ATOM   2138  N   MET   130      44.882  24.051  13.916  1.00  0.00
N
ATOM   2139  H   MET   130      43.990  24.521  13.815  1.00  0.00
H
ATOM   2140  CA  MET   130      45.188  22.931  13.026  1.00  0.00
C
ATOM   2141  HA  MET   130      45.355  22.032  13.617  1.00  0.00
H
ATOM   2142  C   MET   130      46.453  23.212  12.217  1.00  0.00
C
ATOM   2143  O   MET   130      47.359  22.381  12.141  1.00  0.00
O
ATOM   2144  CB  MET   130      43.995  22.724  12.087  1.00  0.00
C
ATOM   2145 1HB  MET   130      43.115  22.498  12.687  1.00  0.00
H
ATOM   2146 2HB  MET   130      43.813  23.659  11.570  1.00  0.00
H
ATOM   2147  CG  MET   130      44.145  21.648  11.040  1.00  0.00
C
ATOM   2148 1HG  MET   130      45.019  21.856  10.423  1.00  0.00
H
ATOM   2149 2HG  MET   130      44.277  20.692  11.538  1.00  0.00
H
ATOM   2150  SD  MET   130      42.682  21.563   9.985  1.00  0.00
S
ATOM   2151  CE  MET   130      42.857  23.024   8.936  1.00  0.00
C
ATOM   2152 1HE  MET   130      42.021  23.073   8.237  1.00  0.00
H
ATOM   2153 2HE  MET   130      43.790  22.963   8.375  1.00  0.00
H
ATOM   2154 3HE  MET   130      42.866  23.925   9.548  1.00  0.00
H
ATOM   2155  N   GLN   131      46.537  24.393  11.623  1.00  0.00
N
ATOM   2156  H   GLN   131      45.765  25.054  11.690  1.00  0.00
H
ATOM   2157  CA  GLN   131      47.694  24.743  10.811  1.00  0.00
C
ATOM   2158  HA  GLN   131      47.900  23.907  10.143  1.00  0.00
H
ATOM   2159  C   GLN   131      48.949  24.996  11.636  1.00  0.00
C
ATOM   2160  O   GLN   131      50.037  24.616  11.224  1.00  0.00
O
ATOM   2161  CB  GLN   131      47.371  25.971   9.959  1.00  0.00
C
ATOM   2162 1HB  GLN   131      46.440  25.780   9.425  1.00  0.00
H
ATOM   2163 2HB  GLN   131      47.217  26.826  10.618  1.00  0.00
H
ATOM   2164  CG  GLN   131      48.451  26.331   8.942  1.00  0.00
C
ATOM   2165 1HG  GLN   131      48.138  27.221   8.401  1.00  0.00
H
ATOM   2166 2HG  GLN   131      49.374  26.567   9.469  1.00  0.00
H
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ATOM   2167  CD  GLN   131      48.738  25.227   7.941  1.00  0.00
C
ATOM   2168  OE1 GLN   131      47.868  24.442   7.563  1.00  0.00
O
ATOM   2169  NE2 GLN   131      49.959  25.161   7.491  1.00  0.00
N
ATOM   2170 1HE2 GLN   131      50.180  24.472   6.789  1.00  0.00
H
ATOM   2171 2HE2 GLN   131      50.657  25.798   7.836  1.00  0.00
H
ATOM   2172  N   ARG   132      48.838  25.616  12.801  1.00  0.00
N
ATOM   2173  H   ARG   132      47.929  25.943  13.123  1.00  0.00
H
ATOM   2174  CA  ARG   132      50.024  25.853  13.625  1.00  0.00
C
ATOM   2175  HA  ARG   132      50.802  26.301  13.007  1.00  0.00
H
ATOM   2176  C   ARG   132      50.571  24.535  14.135  1.00  0.00
C
ATOM   2177  O   ARG   132      51.779  24.328  14.059  1.00  0.00
O
ATOM   2178  CB  ARG   132      49.717  26.799  14.782  1.00  0.00
C
ATOM   2179 1HB  ARG   132      48.828  26.439  15.300  1.00  0.00
H
ATOM   2180 2HB  ARG   132      50.556  26.782  15.477  1.00  0.00
H
ATOM   2181  CG  ARG   132      49.492  28.232  14.329  1.00  0.00
C
ATOM   2182 1HG  ARG   132      50.429  28.637  13.947  1.00  0.00
H
ATOM   2183 2HG  ARG   132      48.760  28.242  13.524  1.00  0.00
H
ATOM   2184  CD  ARG   132      48.978  29.119  15.453  1.00  0.00
C
ATOM   2185 1HD  ARG   132      48.681  30.083  15.039  1.00  0.00
H
ATOM   2186 2HD  ARG   132      48.098  28.647  15.893  1.00  0.00
H
ATOM   2187  NE  ARG   132      49.988  29.326  16.499  1.00  0.00
N
ATOM   2188  HE  ARG   132      49.996  28.645  17.254  1.00  0.00
H
ATOM   2189  CZ  ARG   132      50.891  30.296  16.549  1.00  0.00
C
ATOM   2190  NH1 ARG   132      51.078  31.165  15.589  1.00  0.00
N
ATOM   2191 1HH1 ARG   132      50.539  31.097  14.744  1.00  0.00
H
ATOM   2192 2HH1 ARG   132      51.755  31.906  15.700  1.00  0.00
H
ATOM   2193  NH2 ARG   132      51.628  30.402  17.614  1.00  0.00
N
ATOM   2194 1HH2 ARG   132      51.463  29.794  18.405  1.00  0.00
H
ATOM   2195 2HH2 ARG   132      52.371  31.079  17.649  1.00  0.00
H
ATOM   2196  N   LEU   133      49.702  23.609  14.518  1.00  0.00
N
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ATOM   2197  H   LEU   133      48.715  23.838  14.594  1.00  0.00
H
ATOM   2198  CA  LEU   133      50.138  22.255  14.854  1.00  0.00
C
ATOM   2199  HA  LEU   133      50.839  22.300  15.688  1.00  0.00
H
ATOM   2200  C   LEU   133      50.848  21.628  13.669  1.00  0.00
C
ATOM   2201  O   LEU   133      51.917  21.058  13.837  1.00  0.00
O
ATOM   2202  CB  LEU   133      48.948  21.363  15.216  1.00  0.00
C
ATOM   2203 1HB  LEU   133      48.099  21.687  14.618  1.00  0.00
H
ATOM   2204 2HB  LEU   133      49.187  20.346  14.907  1.00  0.00
H
ATOM   2205  CG  LEU   133      48.506  21.297  16.683  1.00  0.00
C
ATOM   2206  HG  LEU   133      48.470  22.304  17.096  1.00  0.00
H
ATOM   2207  CD1 LEU   133      47.111  20.693  16.749  1.00  0.00
C
ATOM   2208 1HD1 LEU   133      46.822  20.539  17.785  1.00  0.00
H
ATOM   2209 2HD1 LEU   133      47.085  19.740  16.227  1.00  0.00
H
ATOM   2210 3HD1 LEU   133      46.400  21.379  16.285  1.00  0.00
H
ATOM   2211  CD2 LEU   133      49.478  20.446  17.502  1.00  0.00
C
ATOM   2212 1HD2 LEU   133      49.165  20.433  18.546  1.00  0.00
H
ATOM   2213 2HD2 LEU   133      50.476  20.875  17.446  1.00  0.00
H
ATOM   2214 3HD2 LEU   133      49.506  19.426  17.121  1.00  0.00
H
ATOM   2215  N   LYS   134      50.282  21.751  12.475  1.00  0.00
N
ATOM   2216  H   LYS   134      49.385  22.223  12.393  1.00  0.00
H
ATOM   2217  CA  LYS   134      50.898  21.173  11.276  1.00  0.00
C
ATOM   2218  HA  LYS   134      51.001  20.099  11.427  1.00  0.00
H
ATOM   2219  C   LYS   134      52.288  21.729  11.056  1.00  0.00
C
ATOM   2220  O   LYS   134      53.222  20.974  10.849  1.00  0.00
O
ATOM   2221  CB  LYS   134      50.013  21.425  10.046  1.00  0.00
C
ATOM   2222 1HB  LYS   134      49.002  21.094  10.277  1.00  0.00
H
ATOM   2223 2HB  LYS   134      49.972  22.493   9.846  1.00  0.00
H
ATOM   2224  CG  LYS   134      50.477  20.732   8.779  1.00  0.00
C
ATOM   2225 1HG  LYS   134      51.439  21.146   8.485  1.00  0.00
H
ATOM   2226 2HG  LYS   134      50.588  19.663   8.963  1.00  0.00
H
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ATOM   2227  CD  LYS   134      49.462  20.952   7.666  1.00  0.00
C
ATOM   2228 1HD  LYS   134      48.508  20.531   7.985  1.00  0.00
H
ATOM   2229 2HD  LYS   134      49.339  22.021   7.492  1.00  0.00
H
ATOM   2230  CE  LYS   134      49.881  20.290   6.363  1.00  0.00
C
ATOM   2231 1HE  LYS   134      50.163  19.256   6.573  1.00  0.00
H
ATOM   2232 2HE  LYS   134      49.032  20.283   5.678  1.00  0.00
H
ATOM   2233  NZ  LYS   134      51.026  20.989   5.699  1.00  0.00
N
ATOM   2234 1HZ  LYS   134      51.361  20.429   4.925  1.00  0.00
H
ATOM   2235 2HZ  LYS   134      51.788  21.111   6.355  1.00  0.00
H
ATOM   2236 3HZ  LYS   134      50.737  21.898   5.359  1.00  0.00
H
ATOM   2237  N   GLU   135      52.433  23.040  11.136  1.00  0.00
N
ATOM   2238  H   GLU   135      51.622  23.620  11.332  1.00  0.00
H
ATOM   2239  CA  GLU   135      53.725  23.672  10.906  1.00  0.00
C
ATOM   2240  HA  GLU   135      54.113  23.342   9.945  1.00  0.00
H
ATOM   2241  C   GLU   135      54.745  23.303  11.973  1.00  0.00
C
ATOM   2242  O   GLU   135      55.892  22.995  11.664  1.00  0.00
O
ATOM   2243  CB  GLU   135      53.568  25.190  10.884  1.00  0.00
C
ATOM   2244 1HB  GLU   135      53.023  25.487  11.779  1.00  0.00
H
ATOM   2245 2HB  GLU   135      54.559  25.643  10.909  1.00  0.00
H
ATOM   2246  CG  GLU   135      52.830  25.708   9.661  1.00  0.00
C
ATOM   2247 1HG  GLU   135      53.405  25.455   8.773  1.00  0.00
H
ATOM   2248 2HG  GLU   135      51.859  25.223   9.591  1.00  0.00
H
ATOM   2249  CD  GLU   135      52.617  27.208   9.701  1.00  0.00
C
ATOM   2250  OE1 GLU   135      53.113  27.884  10.634  1.00  0.00
O
ATOM   2251  OE2 GLU   135      51.978  27.753   8.772  1.00  0.00
O
ATOM   2252  N   TYR   136      54.360  23.321  13.239  1.00  0.00
N
ATOM   2253  H   TYR   136      53.403  23.567  13.488  1.00  0.00
H
ATOM   2254  CA  TYR   136      55.323  23.015  14.290  1.00  0.00
C
ATOM   2255  HA  TYR   136      56.225  23.604  14.126  1.00  0.00
H
ATOM   2256  C   TYR   136      55.722  21.547  14.249  1.00  0.00
C
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ATOM   2257  O   TYR   136      56.902  21.210  14.360  1.00  0.00
O
ATOM   2258  CB  TYR   136      54.751  23.357  15.665  1.00  0.00
C
ATOM   2259 1HB  TYR   136      53.779  22.878  15.776  1.00  0.00
H
ATOM   2260 2HB  TYR   136      55.426  22.949  16.417  1.00  0.00
H
ATOM   2261  CG  TYR   136      54.607  24.844  15.931  1.00  0.00
C
ATOM   2262  CD1 TYR   136      53.391  25.393  16.398  1.00  0.00
C
ATOM   2263  HD1 TYR   136      52.529  24.754  16.546  1.00  0.00
H
ATOM   2264  CD2 TYR   136      55.703  25.711  15.752  1.00  0.00
C
ATOM   2265  HD2 TYR   136      56.648  25.321  15.404  1.00  0.00
H
ATOM   2266  CE1 TYR   136      53.282  26.780  16.693  1.00  0.00
C
ATOM   2267  HE1 TYR   136      52.351  27.188  17.056  1.00  0.00
H
ATOM   2268  CE2 TYR   136      55.593  27.090  16.033  1.00  0.00
C
ATOM   2269  HE2 TYR   136      56.444  27.733  15.887  1.00  0.00
H
ATOM   2270  CZ  TYR   136      54.387  27.612  16.507  1.00  0.00
C
ATOM   2271  OH  TYR   136      54.312  28.952  16.784  1.00  0.00
O
ATOM   2272  HH  TYR   136      55.123  29.411  16.554  1.00  0.00
H
ATOM   2273  N   LEU   137      54.758  20.661  14.053  1.00  0.00
N
ATOM   2274  H   LEU   137      53.791  20.964  13.944  1.00  0.00
H
ATOM   2275  CA  LEU   137      55.063  19.238  13.997  1.00  0.00
C
ATOM   2276  HA  LEU   137      55.669  18.974  14.863  1.00  0.00
H
ATOM   2277  C   LEU   137      55.881  18.917  12.761  1.00  0.00
C
ATOM   2278  O   LEU   137      56.805  18.122  12.847  1.00  0.00
O
ATOM   2279  CB  LEU   137      53.789  18.391  14.008  1.00  0.00
C
ATOM   2280 1HB  LEU   137      53.127  18.767  13.228  1.00  0.00
H
ATOM   2281 2HB  LEU   137      54.064  17.373  13.746  1.00  0.00
H
ATOM   2282  CG  LEU   137      53.009  18.324  15.329  1.00  0.00
C
ATOM   2283  HG  LEU   137      52.853  19.336  15.697  1.00  0.00
H
ATOM   2284  CD1 LEU   137      51.645  17.689  15.099  1.00  0.00
C
ATOM   2285 1HD1 LEU   137      51.087  17.671  16.034  1.00  0.00
H
ATOM   2286 2HD1 LEU   137      51.762  16.672  14.724  1.00  0.00
H
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ATOM   2287 3HD1 LEU   137      51.089  18.282  14.373  1.00  0.00
H
ATOM   2288  CD2 LEU   137      53.772  17.528  16.395  1.00  0.00
C
ATOM   2289 1HD2 LEU   137      53.203  17.530  17.323  1.00  0.00
H
ATOM   2290 2HD2 LEU   137      54.739  17.989  16.585  1.00  0.00
H
ATOM   2291 3HD2 LEU   137      53.917  16.499  16.061  1.00  0.00
H
ATOM   2292  N   ASP   138      55.615  19.539  11.623  1.00  0.00
N
ATOM   2293  H   ASP   138      54.836  20.192  11.546  1.00  0.00
H
ATOM   2294  CA  ASP   138      56.411  19.231  10.438  1.00  0.00
C
ATOM   2295  HA  ASP   138      56.571  18.155  10.452  1.00  0.00
H
ATOM   2296  C   ASP   138      57.799  19.861  10.452  1.00  0.00
C
ATOM   2297  O   ASP   138      58.735  19.317   9.866  1.00  0.00
O
ATOM   2298  CB  ASP   138      55.649  19.524   9.145  1.00  0.00
C
ATOM   2299 1HB  ASP   138      55.824  18.696   8.473  1.00  0.00
H
ATOM   2300 2HB  ASP   138      54.580  19.561   9.342  1.00  0.00
H
ATOM   2301  CG  ASP   138      56.100  20.784   8.446  1.00  0.00
C
ATOM   2302  OD1 ASP   138      55.563  21.867   8.735  1.00  0.00
O
ATOM   2303  OD2 ASP   138      56.920  20.705   7.510  1.00  0.00
O
ATOM   2304  N   THR   139      57.974  20.938  11.206  1.00  0.00
N
ATOM   2305  H   THR   139      57.166  21.391  11.627  1.00  0.00
H
ATOM   2306  CA  THR   139      59.314  21.483  11.446  1.00  0.00
C
ATOM   2307  HA  THR   139      59.809  21.639  10.488  1.00  0.00
H
ATOM   2308  C   THR   139      60.126  20.485  12.271  1.00  0.00
C
ATOM   2309  O   THR   139      61.290  20.181  11.974  1.00  0.00
O
ATOM   2310  CB  THR   139      59.268  22.829  12.224  1.00  0.00
C
ATOM   2311  HB  THR   139      58.895  22.657  13.234  1.00  0.00
H
ATOM   2312  OG1 THR   139      58.398  23.747  11.559  1.00  0.00
O
ATOM   2313  HG1 THR   139      57.483  23.469  11.733  1.00  0.00
H
ATOM   2314  CG2 THR   139      60.619  23.500  12.289  1.00  0.00
C
ATOM   2315 1HG2 THR   139      60.515  24.469  12.777  1.00  0.00
H
ATOM   2316 2HG2 THR   139      61.012  23.647  11.283  1.00  0.00
H
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ATOM   2317 3HG2 THR   139      61.312  22.893  12.865  1.00  0.00
H
ATOM   2318  N   ARG   140      59.507  19.953  13.316  1.00  0.00
N
ATOM   2319  H   ARG   140      58.546  20.229  13.516  1.00  0.00
H
ATOM   2320  CA  ARG   140      60.176  19.018  14.227  1.00  0.00
C
ATOM   2321  HA  ARG   140      61.164  19.401  14.480  1.00  0.00
H
ATOM   2322  C   ARG   140      60.371  17.615  13.669  1.00  0.00
C
ATOM   2323  O   ARG   140      61.355  16.949  13.988  1.00  0.00
O
ATOM   2324  CB  ARG   140      59.353  18.907  15.516  1.00  0.00
C
ATOM   2325 1HB  ARG   140      58.323  18.663  15.255  1.00  0.00
H
ATOM   2326 2HB  ARG   140      59.755  18.093  16.118  1.00  0.00
H
ATOM   2327  CG  ARG   140      59.364  20.180  16.361  1.00  0.00
C
ATOM   2328 1HG  ARG   140      60.375  20.354  16.726  1.00  0.00
H
ATOM   2329 2HG  ARG   140      59.066  21.026  15.744  1.00  0.00
H
ATOM   2330  CD  ARG   140      58.414  20.090  17.546  1.00  0.00
C
ATOM   2331 1HD  ARG   140      57.410  19.875  17.177  1.00  0.00
H
ATOM   2332 2HD  ARG   140      58.737  19.280  18.202  1.00  0.00
H
ATOM   2333  NE  ARG   140      58.391  21.354  18.299  1.00  0.00
N
ATOM   2334  HE  ARG   140      58.993  22.093  17.961  1.00  0.00
H
ATOM   2335  CZ  ARG   140      57.674  21.618  19.382  1.00  0.00
C
ATOM   2336  NH1 ARG   140      56.910  20.744  19.982  1.00  0.00
N
ATOM   2337 1HH1 ARG   140      56.854  19.805  19.637  1.00  0.00
H
ATOM   2338 2HH1 ARG   140      56.378  21.037  20.793  1.00  0.00
H
ATOM   2339  NH2 ARG   140      57.688  22.818  19.880  1.00  0.00
N
ATOM   2340 1HH2 ARG   140      58.189  23.561  19.413  1.00  0.00
H
ATOM   2341 2HH2 ARG   140      57.169  22.999  20.726  1.00  0.00
H
ATOM   2342  N   TYR   141      59.391  17.131  12.927  1.00  0.00
N
ATOM   2343  H   TYR   141      58.624  17.741  12.658  1.00  0.00
H
ATOM   2344  CA  TYR   141      59.215  15.699  12.700  1.00  0.00
C
ATOM   2345  HA  TYR   141      60.169  15.193  12.849  1.00  0.00
H
ATOM   2346  C   TYR   141      58.712  15.355  11.292  1.00  0.00
C
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ATOM   2347  O   TYR   141      57.922  14.435  11.121  1.00  0.00
O
ATOM   2348  CB  TYR   141      58.239  15.206  13.777  1.00  0.00
C
ATOM   2349 1HB  TYR   141      58.286  15.903  14.613  1.00  0.00
H
ATOM   2350 2HB  TYR   141      57.226  15.245  13.388  1.00  0.00
H
ATOM   2351  CG  TYR   141      58.521  13.824  14.333  1.00  0.00
C
ATOM   2352  CD1 TYR   141      59.360  13.662  15.456  1.00  0.00
C
ATOM   2353  HD1 TYR   141      59.853  14.522  15.888  1.00  0.00
H
ATOM   2354  CD2 TYR   141      57.910  12.677  13.788  1.00  0.00
C
ATOM   2355  HD2 TYR   141      57.269  12.773  12.925  1.00  0.00
H
ATOM   2356  CE1 TYR   141      59.545  12.382  16.051  1.00  0.00
C
ATOM   2357  HE1 TYR   141      60.169  12.275  16.925  1.00  0.00
H
ATOM   2358  CE2 TYR   141      58.107  11.397  14.370  1.00  0.00
C
ATOM   2359  HE2 TYR   141      57.631  10.525  13.951  1.00  0.00
H
ATOM   2360  CZ  TYR   141      58.903  11.267  15.506  1.00  0.00
C
ATOM   2361  OH  TYR   141      59.012  10.029  16.084  1.00  0.00
O
ATOM   2362  HH  TYR   141      59.512  10.047  16.909  1.00  0.00
H
ATOM   2363  N   GLY   142      59.147  16.088  10.278  1.00  0.00
N
ATOM   2364  H   GLY   142      59.699  16.922  10.451  1.00  0.00
H
ATOM   2365  CA  GLY   142      58.904  15.694   8.892  1.00  0.00
C
ATOM   2366 1HA  GLY   142      59.721  16.085   8.288  1.00  0.00
H
ATOM   2367 2HA  GLY   142      58.942  14.606   8.827  1.00  0.00
H
ATOM   2368  C   GLY   142      57.603  16.153   8.262  1.00  0.00
C
ATOM   2369  O   GLY   142      56.596  16.293   8.938  1.00  0.00
O
ATOM   2370  N   LYS   143      57.614  16.380   6.954  1.00  0.00
N
ATOM   2371  H   LYS   143      58.408  16.052   6.407  1.00  0.00
H
ATOM   2372  CA  LYS   143      56.596  17.212   6.284  1.00  0.00
C
ATOM   2373  HA  LYS   143      56.697  18.224   6.673  1.00  0.00
H
ATOM   2374  C   LYS   143      55.115  16.856   6.454  1.00  0.00
C
ATOM   2375  O   LYS   143      54.260  17.733   6.545  1.00  0.00
O
ATOM   2376  CB  LYS   143      56.880  17.261   4.775  1.00  0.00
C
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ATOM   2377 1HB  LYS   143      56.826  16.244   4.385  1.00  0.00
H
ATOM   2378 2HB  LYS   143      56.089  17.839   4.303  1.00  0.00
H
ATOM   2379  CG  LYS   143      58.224  17.865   4.346  1.00  0.00
C
ATOM   2380 1HG  LYS   143      59.034  17.293   4.788  1.00  0.00
H
ATOM   2381 2HG  LYS   143      58.299  17.786   3.263  1.00  0.00
H
ATOM   2382  CD  LYS   143      58.402  19.326   4.727  1.00  0.00
C
ATOM   2383 1HD  LYS   143      57.586  19.912   4.305  1.00  0.00
H
ATOM   2384 2HD  LYS   143      58.391  19.418   5.811  1.00  0.00
H
ATOM   2385  CE  LYS   143      59.725  19.868   4.207  1.00  0.00
C
ATOM   2386 1HE  LYS   143      60.535  19.240   4.580  1.00  0.00
H
ATOM   2387 2HE  LYS   143      59.724  19.837   3.115  1.00  0.00
H
ATOM   2388  NZ  LYS   143      59.943  21.273   4.671  1.00  0.00
N
ATOM   2389 1HZ  LYS   143      60.817  21.630   4.314  1.00  0.00
H
ATOM   2390 2HZ  LYS   143      59.952  21.301   5.682  1.00  0.00
H
ATOM   2391 3HZ  LYS   143      59.186  21.864   4.345  1.00  0.00
H
ATOM   2392   N  SER   144      54.783  15.581   6.403  1.00  0.00
N
ATOM   2393   H  SER   144      55.506  14.883   6.444  1.00  0.00
H
ATOM   2394  CA  SER   144      53.428  15.143   6.060  1.00  0.00
C
ATOM   2395  HA  SER   144      53.045  15.850   5.324  1.00  0.00
H
ATOM   2396   C  SER   144      52.344  15.010   7.142  1.00  0.00
C
ATOM   2397   O  SER   144      51.591  14.032   7.153  1.00  0.00
O
ATOM   2398  CB  SER   144      53.607  13.811   5.352  1.00  0.00
C
ATOM   2399 1HB  SER   144      53.642  13.004   6.084  1.00  0.00
H
ATOM   2400 2HB  SER   144      52.778  13.648   4.665  1.00  0.00
H
ATOM   2401  OG  SER   144      54.836  13.837   4.640  1.00  0.00
O
ATOM   2402  HG  SER   144      54.662  13.485   3.754  1.00  0.00
H
ATOM   2403   N  TRP   145      52.283  15.941   8.083  1.00  0.00
N
ATOM   2404   H  TRP   145      52.923  16.725   8.045  1.00  0.00
H
ATOM   2405  CA  TRP   145      51.294  15.884   9.168  1.00  0.00
C
ATOM   2406  HA  TRP   145      51.237  14.864   9.542  1.00  0.00
H
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ATOM   2407  C   TRP   145      49.888  16.303   8.740  1.00  0.00
C
ATOM   2408  O   TRP   145      49.724  17.200   7.915  1.00  0.00
O
ATOM   2409  CB  TRP   145      51.739  16.780  10.322  1.00  0.00
C
ATOM   2410 1HB  TRP   145      51.996  17.769   9.941  1.00  0.00
H
ATOM   2411 2HB  TRP   145      50.916  16.877  11.029  1.00  0.00
H
ATOM   2412  CG  TRP   145      52.905  16.195  11.044  1.00  0.00
C
ATOM   2413  CD1 TRP   145      54.217  16.438  10.821  1.00  0.00
C
ATOM   2414  HD1 TRP   145      54.592  17.118  10.065  1.00  0.00
H
ATOM   2415  CD2 TRP   145      52.872  15.223  12.103  1.00  0.00
C
ATOM   2416  NE1 TRP   145      55.014  15.711  11.658  1.00  0.00
N
ATOM   2417  HE1 TRP   145      56.027  15.740  11.640  1.00  0.00
H
ATOM   2418  CE2 TRP   145      54.221  14.957  12.475  1.00  0.00
C
ATOM   2419  CE3 TRP   145      51.840  14.531  12.765  1.00  0.00
C
ATOM   2420  HE3 TRP   145      50.810  14.695  12.487  1.00  0.00
H
ATOM   2421  CZ2 TRP   145      54.553  14.054  13.505  1.00  0.00
C
ATOM   2422  HZ2 TRP   145      55.576  13.889  13.790  1.00  0.00
H
ATOM   2423  CZ3 TRP   145      52.174  13.613  13.793  1.00  0.00
C
ATOM   2424  HZ3 TRP   145      51.392  13.079  14.312  1.00  0.00
H
ATOM   2425  CH2 TRP   145      53.530  13.392  14.155  1.00  0.00
C
ATOM   2426  HH2 TRP   145      53.762  12.696  14.949  1.00  0.00
H
ATOM   2427  N   HIS   146      48.877  15.665   9.317  1.00  0.00
N
ATOM   2428  H   HIS   146      49.077  14.922   9.986  1.00  0.00
H
ATOM   2429  CA  HIS   146      47.465  15.956   9.054  1.00  0.00
C
ATOM   2430  HA  HIS   146      47.362  16.880   8.484  1.00  0.00
H
ATOM   2431  C   HIS   146      46.766  16.085  10.398  1.00  0.00
C
ATOM   2432  O   HIS   146      47.044  15.278  11.287  1.00  0.00
O
ATOM   2433  CB  HIS   146      46.831  14.789   8.301  1.00  0.00
C
ATOM   2434 1HB  HIS   146      46.918  13.907   8.933  1.00  0.00
H
ATOM   2435 2HB  HIS   146      45.772  14.993   8.139  1.00  0.00
H
ATOM   2436  CG  HIS   146      47.488  14.488   6.992  1.00  0.00
C
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ATOM   2437  ND1 HIS   146      47.024  14.954   5.769  1.00  0.00
N
ATOM   2438  HD1 HIS   146      46.200  15.541   5.638  1.00  0.00
H
ATOM   2439  CD2 HIS   146      48.583  13.750   6.688  1.00  0.00
C
ATOM   2440  HD2 HIS   146      49.216  13.244   7.405  1.00  0.00
H
ATOM   2441  CE1 HIS   146      47.810  14.501   4.803  1.00  0.00
C
ATOM   2442  HE1 HIS   146      47.688  14.710   3.744  1.00  0.00
H
ATOM   2443  NE2 HIS   146      48.763  13.776   5.336  1.00  0.00
N
ATOM   2444  HE2 HIS   146      49.522  13.322   4.828  1.00  0.00
H
ATOM   2445  N   ILE   147      45.930  17.102  10.557  1.00  0.00
N
ATOM   2446  H   ILE   147      45.769  17.740   9.785  1.00  0.00
H
ATOM   2447  CA  ILE   147      45.257  17.405  11.824  1.00  0.00
C
ATOM   2448  HA  ILE   147      45.310  16.541  12.478  1.00  0.00
H
ATOM   2449  C   ILE   147      43.780  17.739  11.557  1.00  0.00
C
ATOM   2450  O   ILE   147      43.469  18.410  10.571  1.00  0.00
O
ATOM   2451  CB  ILE   147      45.970  18.601  12.552  1.00  0.00
C
ATOM   2452  HB  ILE   147      46.028  19.451  11.873  1.00  0.00
H
ATOM   2453  CG1 ILE   147      47.393  18.216  12.993  1.00  0.00
C
ATOM   2454 1HG1 ILE   147      47.582  18.666  13.967  1.00  0.00
H
ATOM   2455 2HG1 ILE   147      47.438  17.137  13.117  1.00  0.00
H
ATOM   2456  CG2 ILE   147      45.225  19.041  13.827  1.00  0.00
C
ATOM   2457 1HG2 ILE   147      45.752  19.869  14.300  1.00  0.00
H
ATOM   2458 2HG2 ILE   147      45.139  18.211  14.531  1.00  0.00
H
ATOM   2459 3HG2 ILE   147      44.227  19.389  13.570  1.00  0.00
H
ATOM   2460  CD1 ILE   147      48.505  18.649  12.081  1.00  0.00
C
ATOM   2461 1HD1 ILE   147      49.464  18.372  12.519  1.00  0.00
H
ATOM   2462 2HD1 ILE   147      48.461  19.730  11.969  1.00  0.00
H
ATOM   2463 3HD1 ILE   147      48.408  18.181  11.103  1.00  0.00
H
ATOM   2464  N   ILE   148      42.893  17.307  12.445  1.00  0.00
N
ATOM   2465  H   ILE   148      43.221  16.679  13.176  1.00  0.00
H
ATOM   2466  CA  ILE   148      41.482  17.727  12.517  1.00  0.00
C
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ATOM   2467  HA  ILE   148      41.267  18.526  11.808  1.00  0.00
H
ATOM   2468  C   ILE   148      41.342  18.247  13.955  1.00  0.00
C
ATOM   2469  O   ILE   148      41.961  17.650  14.827  1.00  0.00
O
ATOM   2470  CB  ILE   148      40.532  16.507  12.263  1.00  0.00
C
ATOM   2471  HB  ILE   148      40.822  15.711  12.942  1.00  0.00
H
ATOM   2472  CG1 ILE   148      40.710  16.001  10.815  1.00  0.00
C
ATOM   2473 1HG1 ILE   148      40.358  16.777  10.137  1.00  0.00
H
ATOM   2474 2HG1 ILE   148      41.771  15.850  10.624  1.00  0.00
H
ATOM   2475  CG2 ILE   148      39.049  16.859  12.558  1.00  0.00
C
ATOM   2476 1HG2 ILE   148      38.415  15.987  12.400  1.00  0.00
H
ATOM   2477 2HG2 ILE   148      38.713  17.664  11.904  1.00  0.00
H
ATOM   2478 3HG2 ILE   148      38.934  17.161  13.599  1.00  0.00
H
ATOM   2479  CD1 ILE   148      39.990  14.687  10.456  1.00  0.00
C
ATOM   2480 1HD1 ILE   148      40.222  14.422   9.424  1.00  0.00
H
ATOM   2481 2HD1 ILE   148      38.910  14.805  10.547  1.00  0.00
H
ATOM   2482 3HD1 ILE   148      40.329  13.886  11.112  1.00  0.00
H
ATOM   2483  N   THR   149      40.606  19.329  14.213  1.00  0.00
N
ATOM   2484  H   THR   149      40.136  19.799  13.442  1.00  0.00
H
ATOM   2485  CA  THR   149      40.454  19.925  15.560  1.00  0.00
C
ATOM   2486  HA  THR   149      40.945  19.288  16.292  1.00  0.00
H
ATOM   2487  C   THR   149      39.018  20.162  16.066  1.00  0.00
C
ATOM   2488  O   THR   149      38.821  20.705  17.154  1.00  0.00
O
ATOM   2489  CB  THR   149      41.125  21.326  15.611  1.00  0.00
C
ATOM   2490  HB  THR   149      40.912  21.807  16.565  1.00  0.00
H
ATOM   2491  OG1 THR   149      40.630  22.126  14.533  1.00  0.00
O
ATOM   2492  HG1 THR   149      41.150  22.938  14.505  1.00  0.00
H
ATOM   2493  CG2 THR   149      42.623  21.259  15.437  1.00  0.00
C
ATOM   2494 1HG2 THR   149      43.040  22.262  15.532  1.00  0.00
H
ATOM   2495 2HG2 THR   149      42.862  20.863  14.454  1.00  0.00
H
ATOM   2496 3HG2 THR   149      43.056  20.624  16.208  1.00  0.00
H
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ATOM   2497  N   SER   150      38.015  19.796  15.278  1.00  0.00
N
ATOM   2498  H   SER   150      38.222  19.314  14.417  1.00  0.00
H
ATOM   2499  CA  SER   150      36.604  20.084  15.586  1.00  0.00
C
ATOM   2500  HA  SER   150      36.473  21.161  15.694  1.00  0.00
H
ATOM   2501  C   SER   150      36.052  19.407  16.845  1.00  0.00
C
ATOM   2502  O   SER   150      36.671  18.498  17.393  1.00  0.00
O
ATOM   2503  CB  SER   150      35.763  19.603  14.406  1.00  0.00
C
ATOM   2504 1HB  SER   150      34.727  19.913  14.539  1.00  0.00
H
ATOM   2505 2HB  SER   150      36.153  20.036  13.485  1.00  0.00
H
ATOM   2506  OG  SER   150      35.831  18.188  14.336  1.00  0.00
O
ATOM   2507  HG  SER   150      35.664  17.915  13.416  1.00  0.00
H
ATOM   2508  N   ILE   151      34.855  19.774  17.290  1.00  0.00
N
ATOM   2509  H   ILE   151      34.365  20.545  16.831  1.00  0.00
H
ATOM   2510  CA  ILE   151      34.232  19.113  18.453  1.00  0.00
C
ATOM   2511  HA  ILE   151      35.051  18.913  19.143  1.00  0.00
H
ATOM   2512  C   ILE   151      33.612  17.720  18.200  1.00  0.00
C
ATOM   2513  O   ILE   151      32.432  17.466  18.441  1.00  0.00
O
ATOM   2514  CB  ILE   151      33.291  20.078  19.244  1.00  0.00
C
ATOM   2515  HB  ILE   151      32.959  19.558  20.143  1.00  0.00
H
ATOM   2516  CG1 ILE   151      32.045  20.538  18.457  1.00  0.00
C
ATOM   2517 1HG1 ILE   151      32.358  21.205  17.662  1.00  0.00
H
ATOM   2518 2HG1 ILE   151      31.575  19.677  17.992  1.00  0.00
H
ATOM   2519  CG2 ILE   151      34.097  21.312  19.668  1.00  0.00
C
ATOM   2520 1HG2 ILE   151      33.553  21.844  20.440  1.00  0.00
H
ATOM   2521 2HG2 ILE   151      34.283  21.968  18.815  1.00  0.00
H
ATOM   2522 3HG2 ILE   151      35.058  21.010  20.079  1.00  0.00
H
ATOM   2523  CD1 ILE   151      30.974  21.258  19.302  1.00  0.00
C
ATOM   2524 1HD1 ILE   151      30.127  21.510  18.666  1.00  0.00
H
ATOM   2525 2HD1 ILE   151      31.374  22.177  19.728  1.00  0.00
H
ATOM   2526 3HD1 ILE   151      30.632  20.600  20.102  1.00  0.00
H
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ATOM   2527  N   ASN   152      34.446  16.799  17.730  1.00  0.00
N
ATOM   2528  H   ASN   152      35.402  17.093  17.537  1.00  0.00
H
ATOM   2529  CA  ASN   152      34.103  15.385  17.503  1.00  0.00
C
ATOM   2530  HA  ASN   152      34.993  14.908  17.099  1.00  0.00
H
ATOM   2531  C   ASN   152      32.972  15.171  16.496  1.00  0.00
C
ATOM   2532  O   ASN   152      32.164  14.244  16.611  1.00  0.00
O
ATOM   2533  CB  ASN   152      33.757  14.693  18.831  1.00  0.00
C
ATOM   2534 1HB  ASN   152      34.359  15.121  19.622  1.00  0.00
H
ATOM   2535 2HB  ASN   152      32.710  14.871  19.070  1.00  0.00
H
ATOM   2536  CG  ASN   152      34.004  13.213  18.789  1.00  0.00
C
ATOM   2537  OD1 ASN   152      34.951  12.746  18.166  1.00  0.00
O
ATOM   2538  ND2 ASN   152      33.162  12.459  19.429  1.00  0.00
N
ATOM   2539 1HD2 ASN   152      33.263  11.459  19.357  1.00  0.00
H
ATOM   2540 2HD2 ASN   152      32.420  12.863  19.973  1.00  0.00
H
ATOM   2541  N   GLN   153      32.873  16.088  15.547  1.00  0.00
N
ATOM   2542  H   GLN   153      33.595  16.788  15.464  1.00  0.00
H
ATOM   2543  CA  GLN   153      31.714  16.159  14.663  1.00  0.00
C
ATOM   2544  HA  GLN   153      30.814  16.142  15.278  1.00  0.00
H
ATOM   2545  C   GLN   153      31.613  15.023  13.648  1.00  0.00
C
ATOM   2546  O   GLN   153      30.510  14.576  13.322  1.00  0.00
O
ATOM   2547  CB  GLN   153      31.755  17.482  13.901  1.00  0.00
C
ATOM   2548 1HB  GLN   153      32.645  17.504  13.272  1.00  0.00
H
ATOM   2549 2HB  GLN   153      30.875  17.536  13.260  1.00  0.00
H
ATOM   2550  CG  GLN   153      31.772  18.699  14.808  1.00  0.00
C
ATOM   2551 1HG  GLN   153      30.964  18.611  15.528  1.00  0.00
H
ATOM   2552 2HG  GLN   153      32.717  18.746  15.348  1.00  0.00
H
ATOM   2553  CD  GLN   153      31.593  19.979  14.037  1.00  0.00
C
ATOM   2554  OE1 GLN   153      32.209  20.197  13.001  1.00  0.00
O
ATOM   2555  NE2 GLN   153      30.725  20.822  14.505  1.00  0.00
N
ATOM   2556 1HE2 GLN   153      30.605  21.705  14.037  1.00  0.00
H
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ATOM   2557 2HE2 GLN   153      30.184  20.601  15.318  1.00  0.00
H
ATOM   2558  N   HIS   154      32.750  14.566  13.145  1.00  0.00
N
ATOM   2559  H   HIS   154      33.635  14.915  13.500  1.00  0.00
H
ATOM   2560  CA  HIS   154      32.786  13.595  12.052  1.00  0.00
C
ATOM   2561  HA  HIS   154      31.796  13.171  11.911  1.00  0.00
H
ATOM   2562  C   HIS   154      33.762  12.461  12.351  1.00  0.00
C
ATOM   2563  O   HIS   154      34.714  12.632  13.122  1.00  0.00
O
ATOM   2564  CB  HIS   154      33.205  14.299  10.755  1.00  0.00
C
ATOM   2565 1HB  HIS   154      34.244  14.614  10.853  1.00  0.00
H
ATOM   2566 2HB  HIS   154      33.143  13.590   9.929  1.00  0.00
H
ATOM   2567  CG  HIS   154      32.379  15.506  10.426  1.00  0.00
C
ATOM   2568  ND1 HIS   154      31.049  15.472  10.079  1.00  0.00
N
ATOM   2569  HD1 HIS   154      30.479  14.638   9.967  1.00  0.00
H
ATOM   2570  CD2 HIS   154      32.708  16.824  10.407  1.00  0.00
C
ATOM   2571  HD2 HIS   154      33.689  17.217  10.634  1.00  0.00
H
ATOM   2572  CE1 HIS   154      30.630  16.725   9.900  1.00  0.00
C
ATOM   2573  HE1 HIS   154      29.615  16.998   9.633  1.00  0.00
H
ATOM   2574  NE2 HIS   154      31.612  17.589  10.071  1.00  0.00
N
ATOM   2575  N   LEU   155      33.554  11.311  11.730  1.00  0.00
N
ATOM   2576  H   LEU   155      32.740  11.206  11.131  1.00  0.00
H
ATOM   2577  CA  LEU   155      34.514  10.210  11.813  1.00  0.00
C
ATOM   2578  HA  LEU   155      35.023  10.223  12.775  1.00  0.00
H
ATOM   2579  C   LEU   155      35.524  10.435  10.693  1.00  0.00
C
ATOM   2580  O   LEU   155      35.238  11.181   9.753  1.00  0.00
O
ATOM   2581  CB  LEU   155      33.824   8.854  11.620  1.00  0.00
C
ATOM   2582 1HB  LEU   155      33.406   8.833  10.617  1.00  0.00
H
ATOM   2583 2HB  LEU   155      34.594   8.084  11.671  1.00  0.00
H
ATOM   2584  CG  LEU   155      32.702   8.453  12.592  1.00  0.00
C
ATOM   2585  HG  LEU   155      31.870   9.144  12.465  1.00  0.00
H
ATOM   2586  CD1 LEU   155      32.219   7.046  12.240  1.00  0.00
C
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ATOM   2587 1HD1 LEU   155      31.395   6.766  12.896  1.00  0.00
H
ATOM   2588 2HD1 LEU   155      33.030   6.327  12.367  1.00  0.00
H
ATOM   2589 3HD1 LEU   155      31.878   7.019  11.205  1.00  0.00
H
ATOM   2590  CD2 LEU   155      33.131   8.487  14.052  1.00  0.00
C
ATOM   2591 1HD2 LEU   155      32.317   8.129  14.683  1.00  0.00
H
ATOM   2592 2HD2 LEU   155      33.362   9.509  14.349  1.00  0.00
H
ATOM   2593 3HD2 LEU   155      34.008   7.858  14.206  1.00  0.00
H
ATOM   2594  N   GLY   156      36.657   9.756  10.722  1.00  0.00
N
ATOM   2595  H   GLY   156      36.898   9.175  11.521  1.00  0.00
H
ATOM   2596  CA  GLY   156      37.557   9.770   9.582  1.00  0.00
C
ATOM   2597 1HA  GLY   156      36.978   9.630   8.669  1.00  0.00
H
ATOM   2598 2HA  GLY   156      38.086  10.722   9.531  1.00  0.00
H
ATOM   2599  C   GLY   156      38.551   8.637   9.697  1.00  0.00
C
ATOM   2600  O   GLY   156      38.738   8.102  10.788  1.00  0.00
O
ATOM   2601  N   ARG   157      39.156   8.239   8.587  1.00  0.00
N
ATOM   2602  H   ARG   157      38.933   8.706   7.711  1.00  0.00
H
ATOM   2603  CA  ARG   157      40.115   7.132   8.542  1.00  0.00
C
ATOM   2604  HA  ARG   157      40.494   6.917   9.542  1.00  0.00
H
ATOM   2605  C   ARG   157      41.271   7.563   7.660  1.00  0.00
C
ATOM   2606  O   ARG   157      41.131   8.526   6.902  1.00  0.00
O
ATOM   2607  CB  ARG   157      39.451   5.883   7.950  1.00  0.00
C
ATOM   2608 1HB  ARG   157      39.100   6.132   6.950  1.00  0.00
H
ATOM   2609 2HB  ARG   157      40.201   5.102   7.861  1.00  0.00
H
ATOM   2610  CG  ARG   157      38.275   5.317   8.742  1.00  0.00
C
ATOM   2611 1HG  ARG   157      37.530   6.096   8.892  1.00  0.00
H
ATOM   2612 2HG  ARG   157      37.820   4.510   8.168  1.00  0.00
H
ATOM   2613  CD  ARG   157      38.704   4.767  10.094  1.00  0.00
C
ATOM   2614 1HD  ARG   157      39.412   3.953   9.934  1.00  0.00
H
ATOM   2615 2HD  ARG   157      39.196   5.546  10.674  1.00  0.00
H
ATOM   2616  NE  ARG   157      37.549   4.258  10.841  1.00  0.00
N
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ATOM   2617  HE  ARG   157      37.272   3.309  10.633  1.00  0.00
H
ATOM   2618  CZ  ARG   157      36.855   4.907  11.765  1.00  0.00
C
ATOM   2619  NH1 ARG   157      37.114   6.122  12.168  1.00  0.00
N
ATOM   2620 1HH1 ARG   157      37.865   6.646  11.737  1.00  0.00
H
ATOM   2621 2HH1 ARG   157      36.578   6.534  12.912  1.00  0.00
H
ATOM   2622  NH2 ARG   157      35.855   4.300  12.324  1.00  0.00
N
ATOM   2623 1HH2 ARG   157      35.581   3.384  12.002  1.00  0.00
H
ATOM   2624 2HH2 ARG   157      35.359   4.740  13.085  1.00  0.00
H
ATOM   2625  N   PHE   158      42.405   6.895   7.793  1.00  0.00
N
ATOM   2626  H   PHE   158      42.448   6.106   8.425  1.00  0.00
H
ATOM   2627  CA  PHE   158      43.644   7.244   7.098  1.00  0.00
C
ATOM   2628  HA  PHE   158      43.475   7.408   6.035  1.00  0.00
H
ATOM   2629  C   PHE   158      44.580   6.063   7.313  1.00  0.00
C
ATOM   2630  O   PHE   158      44.322   5.257   8.206  1.00  0.00
O
ATOM   2631  CB  PHE   158      44.267   8.491   7.741  1.00  0.00
C
ATOM   2632 1HB  PHE   158      45.276   8.628   7.356  1.00  0.00
H
ATOM   2633 2HB  PHE   158      43.675   9.360   7.455  1.00  0.00
H
ATOM   2634  CG  PHE   158      44.310   8.434   9.246  1.00  0.00
C
ATOM   2635  CD1 PHE   158      45.360   7.785   9.919  1.00  0.00
C
ATOM   2636  HD1 PHE   158      46.176   7.362   9.359  1.00  0.00
H
ATOM   2637  CD2 PHE   158      43.279   9.019  10.001  1.00  0.00
C
ATOM   2638  HD2 PHE   158      42.484   9.551   9.501  1.00  0.00
H
ATOM   2639  CE1 PHE   158      45.352   7.666  11.326  1.00  0.00
C
ATOM   2640  HE1 PHE   158      46.152   7.149  11.833  1.00  0.00
H
ATOM   2641  CE2 PHE   158      43.262   8.912  11.405  1.00  0.00
C
ATOM   2642  HE2 PHE   158      42.461   9.357  11.973  1.00  0.00
H
ATOM   2643  CZ  PHE   158      44.287   8.218  12.065  1.00  0.00
C
ATOM   2644  HZ  PHE   158      44.253   8.102  13.135  1.00  0.00
H
ATOM   2645  N   SER   159      45.693   6.009   6.600  1.00  0.00
N
ATOM   2646  H   SER   159      45.845   6.673   5.847  1.00  0.00
H
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ATOM   2647  CA  SER   159      46.817   5.154   6.977  1.00  0.00
C
ATOM   2648  HA  SER   159      46.519   4.405   7.710  1.00  0.00
H
ATOM   2649  C   SER   159      47.806   6.118   7.609  1.00  0.00
C
ATOM   2650  O   SER   159      47.694   7.322   7.398  1.00  0.00
O
ATOM   2651  CB  SER   159      47.425   4.463   5.759  1.00  0.00
C
ATOM   2652 1HB  SER   159      48.303   3.894   6.064  1.00  0.00
H
ATOM   2653 2HB  SER   159      46.688   3.777   5.345  1.00  0.00
H
ATOM   2654  OG  SER   159      47.783   5.397   4.756  1.00  0.00
O
ATOM   2655  HG  SER   159      47.895   4.905   3.931  1.00  0.00
H
ATOM   2656  N   TYR   160      48.749   5.636   8.398  1.00  0.00
N
ATOM   2657  H   TYR   160      48.837   4.629   8.529  1.00  0.00
H
ATOM   2658  CA  TYR   160      49.674   6.509   9.114  1.00  0.00
C
ATOM   2659  HA  TYR   160      49.777   7.447   8.578  1.00  0.00
H
ATOM   2660  C   TYR   160      51.042   5.857   9.157  1.00  0.00
C
ATOM   2661  O   TYR   160      51.178   4.654   8.934  1.00  0.00
O
ATOM   2662  CB  TYR   160      49.147   6.818  10.525  1.00  0.00
C
ATOM   2663 1HB  TYR   160      49.875   7.443  11.042  1.00  0.00
H
ATOM   2664 2HB  TYR   160      48.230   7.394  10.420  1.00  0.00
H
ATOM   2665  CG  TYR   160      48.843   5.608  11.395  1.00  0.00
C
ATOM   2666  CD1 TYR   160      49.746   5.197  12.397  1.00  0.00
C
ATOM   2667  HD1 TYR   160      50.656   5.750  12.556  1.00  0.00
H
ATOM   2668  CD2 TYR   160      47.633   4.891  11.257  1.00  0.00
C
ATOM   2669  HD2 TYR   160      46.910   5.192  10.512  1.00  0.00
H
ATOM   2670  CE1 TYR   160      49.465   4.080  13.224  1.00  0.00
C
ATOM   2671  HE1 TYR   160      50.164   3.779  13.989  1.00  0.00
H
ATOM   2672  CE2 TYR   160      47.345   3.774  12.089  1.00  0.00
C
ATOM   2673  HE2 TYR   160      46.412   3.241  11.978  1.00  0.00
H
ATOM   2674  CZ  TYR   160      48.270   3.379  13.060  1.00  0.00
C
ATOM   2675  OH  TYR   160      48.018   2.303  13.866  1.00  0.00
O
ATOM   2676  HH  TYR   160      47.152   1.919  13.711  1.00  0.00
H
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ATOM   2677  N   GLU   161      52.071   6.642   9.414  1.00  0.00
N
ATOM   2678  H   GLU   161      51.938   7.647   9.511  1.00  0.00
H
ATOM   2679  CA  GLU   161      53.391   6.086   9.677  1.00  0.00
C
ATOM   2680  HA  GLU   161      53.611   5.264   8.997  1.00  0.00
H
ATOM   2681  C   GLU   161      53.327   5.597  11.121  1.00  0.00
C
ATOM   2682  O   GLU   161      52.825   6.332  11.979  1.00  0.00
O
ATOM   2683  CB  GLU   161      54.457   7.176   9.560  1.00  0.00
C
ATOM   2684 1HB  GLU   161      54.152   7.999  10.199  1.00  0.00
H
ATOM   2685 2HB  GLU   161      55.407   6.791   9.932  1.00  0.00
H
ATOM   2686  CG  GLU   161      54.659   7.735   8.160  1.00  0.00
C
ATOM   2687 1HG  GLU   161      53.691   7.979   7.722  1.00  0.00
H
ATOM   2688 2HG  GLU   161      55.226   8.659   8.251  1.00  0.00
H
ATOM   2689  CD  GLU   161      55.410   6.801   7.221  1.00  0.00
C
ATOM   2690  OE1 GLU   161      55.896   5.719   7.616  1.00  0.00
O
ATOM   2691  OE2 GLU   161      55.541   7.162   6.035  1.00  0.00
O
ATOM   2692  N   PRO   162      53.807   4.376  11.419  1.00  0.00
N
ATOM   2693  CA  PRO   162      53.802   4.023  12.845  1.00  0.00
C
ATOM   2694  HA  PRO   162      52.782   3.976  13.226  1.00  0.00
H
ATOM   2695  C   PRO   162      54.627   5.010  13.661  1.00  0.00
C
ATOM   2696  O   PRO   162      55.544   5.640  13.133  1.00  0.00
O
ATOM   2697  CB  PRO   162      54.454   2.637  12.864  1.00  0.00
C
ATOM   2698 1HB  PRO   162      55.527   2.732  13.033  1.00  0.00
H
ATOM   2699 2HB  PRO   162      54.002   2.005  13.627  1.00  0.00
H
ATOM   2700  CG  PRO   162      54.198   2.096  11.508  1.00  0.00
C
ATOM   2701 1HG  PRO   162      54.903   1.302  11.263  1.00  0.00
H
ATOM   2702 2HG  PRO   162      53.171   1.737  11.437  1.00  0.00
H
ATOM   2703  CD  PRO   162      54.396   3.289  10.618  1.00  0.00
C
ATOM   2704 1HD  PRO   162      55.457   3.474  10.455  1.00  0.00
H
ATOM   2705 2HD  PRO   162      53.869   3.157   9.674  1.00  0.00
H
ATOM   2706  N   ASN   163      54.283   5.140  14.935  1.00  0.00
N
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ATOM   2707  H   ASN   163      53.518   4.557  15.286  1.00  0.00
H
ATOM   2708  CA  ASN   163      54.897   6.075  15.887  1.00  0.00
C
ATOM   2709  HA  ASN   163      54.449   5.842  16.851  1.00  0.00
H
ATOM   2710  C   ASN   163      54.592   7.553  15.608  1.00  0.00
C
ATOM   2711  O   ASN   163      55.348   8.430  16.044  1.00  0.00
O
ATOM   2712  CB  ASN   163      56.411   5.866  16.047  1.00  0.00
C
ATOM   2713 1HB  ASN   163      56.921   6.198  15.147  1.00  0.00
H
ATOM   2714 2HB  ASN   163      56.774   6.464  16.882  1.00  0.00
H
ATOM   2715  CG  ASN   163      56.769   4.439  16.301  1.00  0.00
C
ATOM   2716  OD1 ASN   163      56.259   3.820  17.222  1.00  0.00
O
ATOM   2717  ND2 ASN   163      57.622   3.889  15.489  1.00  0.00
N
ATOM   2718 1HD2 ASN   163      57.915   2.943  15.676  1.00  0.00
H
ATOM   2719 2HD2 ASN   163      57.988   4.406  14.712  1.00  0.00
H
ATOM   2720  N   THR   164      53.513   7.845  14.887  1.00  0.00
N
ATOM   2721  H   THR   164      52.957   7.091  14.509  1.00  0.00
H
ATOM   2722  CA  THR   164      53.112   9.235  14.606  1.00  0.00
C
ATOM   2723  HA  THR   164      53.721   9.894  15.217  1.00  0.00
H
ATOM   2724  C   THR   164      51.655   9.579  14.899  1.00  0.00
C
ATOM   2725  O   THR   164      51.188  10.656  14.551  1.00  0.00
O
ATOM   2726  CB  THR   164      53.367   9.624  13.134  1.00  0.00
C
ATOM   2727  HB  THR   164      53.220  10.698  13.024  1.00  0.00
H
ATOM   2728  OG1 THR   164      52.449   8.955  12.264  1.00  0.00
O
ATOM   2729  HG1 THR   164      52.677   8.013  12.240  1.00  0.00
H
ATOM   2730  CG2 THR   164      54.778   9.271  12.699  1.00  0.00
C
ATOM   2731 1HG2 THR   164      54.904   9.544  11.659  1.00  0.00
H
ATOM   2732 2HG2 THR   164      54.953   8.199  12.789  1.00  0.00
H
ATOM   2733 3HG2 THR   164      55.500   9.812  13.310  1.00  0.00
H
ATOM   2734  N   LEU   165      50.911   8.666  15.504  1.00  0.00
N
ATOM   2735  H   LEU   165      51.346   7.827  15.880  1.00  0.00
H
ATOM   2736  CA  LEU   165      49.467   8.837  15.671  1.00  0.00
C
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ATOM   2737  HA  LEU   165      49.094   9.576  14.963  1.00  0.00
H
ATOM   2738  C   LEU   165      49.086   9.284  17.079  1.00  0.00
C
ATOM   2739  O   LEU   165      49.543   8.705  18.062  1.00  0.00
O
ATOM   2740  CB  LEU   165      48.806   7.492  15.376  1.00  0.00
C
ATOM   2741 1HB  LEU   165      49.021   7.240  14.338  1.00  0.00
H
ATOM   2742 2HB  LEU   165      49.306   6.765  15.999  1.00  0.00
H
ATOM   2743  CG  LEU   165      47.304   7.302  15.617  1.00  0.00
C
ATOM   2744  HG  LEU   165      47.098   7.434  16.679  1.00  0.00
H
ATOM   2745  CD1 LEU   165      46.457   8.277  14.842  1.00  0.00
C
ATOM   2746 1HD1 LEU   165      45.406   8.039  14.997  1.00  0.00
H
ATOM   2747 2HD1 LEU   165      46.693   8.216  13.781  1.00  0.00
H
ATOM   2748 3HD1 LEU   165      46.634   9.292  15.188  1.00  0.00
H
ATOM   2749  CD2 LEU   165      46.916   5.890  15.226  1.00  0.00
C
ATOM   2750 1HD2 LEU   165      45.874   5.705  15.484  1.00  0.00
H
ATOM   2751 2HD2 LEU   165      47.541   5.172  15.756  1.00  0.00
H
ATOM   2752 3HD2 LEU   165      47.042   5.748  14.152  1.00  0.00
H
ATOM   2753  N   PHE   166      48.210  10.273  17.181  1.00  0.00
N
ATOM   2754  H   PHE   166      47.889  10.753  16.340  1.00  0.00
H
ATOM   2755  CA  PHE   166      47.672  10.703  18.469  1.00  0.00
C
ATOM   2756  HA  PHE   166      47.635   9.850  19.146  1.00  0.00
H
ATOM   2757  C   PHE   166      46.262  11.259  18.291  1.00  0.00
C
ATOM   2758  O   PHE   166      46.017  12.067  17.399  1.00  0.00
O
ATOM   2759  CB  PHE   166      48.614  11.764  19.032  1.00  0.00
C
ATOM   2760 1HB  PHE   166      49.626  11.389  18.922  1.00  0.00
H
ATOM   2761 2HB  PHE   166      48.525  12.682  18.450  1.00  0.00
H
ATOM   2762  CG  PHE   166      48.414  12.062  20.487  1.00  0.00
C
ATOM   2763  CD1 PHE   166      48.711  11.094  21.457  1.00  0.00
C
ATOM   2764  HD1 PHE   166      49.034  10.110  21.153  1.00  0.00
H
ATOM   2765  CD2 PHE   166      47.995  13.332  20.897  1.00  0.00
C
ATOM   2766  HD2 PHE   166      47.731  14.069  20.158  1.00  0.00
H
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ATOM   2767  CE1 PHE   166      48.612  11.402  22.833  1.00  0.00
C
ATOM   2768  HE1 PHE   166      48.828  10.646  23.571  1.00  0.00
H
ATOM   2769  CE2 PHE   166      47.935  13.672  22.269  1.00  0.00
C
ATOM   2770  HE2 PHE   166      47.643  14.669  22.570  1.00  0.00
H
ATOM   2771  CZ  PHE   166      48.254  12.707  23.239  1.00  0.00
C
ATOM   2772  HZ  PHE   166      48.222  12.963  24.288  1.00  0.00
H
ATOM   2773  N   HIS   167      45.310  10.804  19.089  1.00  0.00
N
ATOM   2774  H   HIS   167      45.527  10.083  19.777  1.00  0.00
H
ATOM   2775  CA  HIS   167      43.937  11.313  19.063  1.00  0.00
C
ATOM   2776  HA  HIS   167      43.856  12.205  18.443  1.00  0.00
H
ATOM   2777  C   HIS   167      43.641  11.679  20.505  1.00  0.00
C
ATOM   2778  O   HIS   167      43.903  10.869  21.398  1.00  0.00
O
ATOM   2779  CB  HIS   167      42.936  10.245  18.603  1.00  0.00
C
ATOM   2780 1HB  HIS   167      43.114   9.327  19.162  1.00  0.00
H
ATOM   2781 2HB  HIS   167      41.933  10.599  18.840  1.00  0.00
H
ATOM   2782  CG  HIS   167      42.974   9.946  17.136  1.00  0.00
C
ATOM   2783  ND1 HIS   167      43.877  10.476  16.246  1.00  0.00
N
ATOM   2784  HD1 HIS   167      44.672  11.057  16.490  1.00  0.00
H
ATOM   2785  CD2 HIS   167      42.127   9.207  16.372  1.00  0.00
C
ATOM   2786  HD2 HIS   167      41.281   8.652  16.753  1.00  0.00
H
ATOM   2787  CE1 HIS   167      43.539  10.083  15.019  1.00  0.00
C
ATOM   2788  HE1 HIS   167      44.069  10.364  14.117  1.00  0.00
H
ATOM   2789  NE2 HIS   167      42.482   9.294  15.043  1.00  0.00
N
ATOM   2790  N   PHE   168      43.130  12.875  20.751  1.00  0.00
N
ATOM   2791  H   PHE   168      42.910  13.514  19.986  1.00  0.00
H
ATOM   2792  CA  PHE   168      42.908  13.343  22.115  1.00  0.00
C
ATOM   2793  HA  PHE   168      42.601  12.501  22.731  1.00  0.00
H
ATOM   2794  C   PHE   168      41.820  14.402  22.189  1.00  0.00
C
ATOM   2795  O   PHE   168      41.450  14.981  21.176  1.00  0.00
O
ATOM   2796  CB  PHE   168      44.210  13.916  22.689  1.00  0.00
C
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ATOM   2797 1HB  PHE   168      44.072  14.102  23.753  1.00  0.00
H
ATOM   2798 2HB  PHE   168      44.997  13.170  22.578  1.00  0.00
H
ATOM   2799  CG  PHE   168      44.666  15.197  22.038  1.00  0.00
C
ATOM   2800  CD1 PHE   168      44.500  16.428  22.699  1.00  0.00
C
ATOM   2801  HD1 PHE   168      43.980  16.467  23.645  1.00  0.00
H
ATOM   2802  CD2 PHE   168      45.318  15.179  20.793  1.00  0.00
C
ATOM   2803  HD2 PHE   168      45.418  14.250  20.251  1.00  0.00
H
ATOM   2804  CE1 PHE   168      45.037  17.621  22.156  1.00  0.00
C
ATOM   2805  HE1 PHE   168      44.916  18.556  22.681  1.00  0.00
H
ATOM   2806  CE2 PHE   168      45.871  16.354  20.245  1.00  0.00
C
ATOM   2807  HE2 PHE   168      46.386  16.318  19.297  1.00  0.00
H
ATOM   2808  CZ  PHE   168      45.741  17.578  20.933  1.00  0.00
C
ATOM   2809  HZ  PHE   168      46.168  18.476  20.518  1.00  0.00
H
ATOM   2810  N   CYS   169      41.340  14.674  23.390  1.00  0.00
N
ATOM   2811  H   CYS   169      41.649  14.115  24.180  1.00  0.00
H
ATOM   2812  CA  CYS   169      40.435  15.786  23.647  1.00  0.00
C
ATOM   2813  HA  CYS   169      40.108  16.228  22.709  1.00  0.00
H
ATOM   2814  C   CYS   169      41.179  16.818  24.483  1.00  0.00
C
ATOM   2815  O   CYS   169      41.987  16.439  25.337  1.00  0.00
O
ATOM   2816  CB  CYS   169      39.224  15.314  24.452  1.00  0.00
C
ATOM   2817 1HB  CYS   169      39.566  15.025  25.446  1.00  0.00
H
ATOM   2818 2HB  CYS   169      38.529  16.150  24.561  1.00  0.00
H
ATOM   2819  SG  CYS   169      38.354  13.913  23.729  1.00  0.00
S
ATOM   2820  HG  CYS   169      37.391  13.840  24.657  1.00  0.00
H
ATOM   2821  N   LEU   170      40.850  18.089  24.304  1.00  0.00
N
ATOM   2822  H   LEU   170      40.224  18.333  23.535  1.00  0.00
H
ATOM   2823  CA  LEU   170      41.247  19.152  25.226  1.00  0.00
C
ATOM   2824  HA  LEU   170      41.493  18.716  26.193  1.00  0.00
H
ATOM   2825  C   LEU   170      40.016  20.041  25.356  1.00  0.00
C
ATOM   2826  O   LEU   170      39.648  20.760  24.422  1.00  0.00
O
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ATOM   2827  CB  LEU   170      42.449  19.960  24.719  1.00  0.00
C
ATOM   2828 1HB  LEU   170      43.201  19.250  24.373  1.00  0.00
H
ATOM   2829 2HB  LEU   170      42.122  20.531  23.855  1.00  0.00
H
ATOM   2830  CG  LEU   170      43.151  20.926  25.699  1.00  0.00
C
ATOM   2831  HG  LEU   170      43.635  20.323  26.460  1.00  0.00
H
ATOM   2832  CD1 LEU   170      44.236  21.681  24.956  1.00  0.00
C
ATOM   2833 1HD1 LEU   170      44.723  22.384  25.627  1.00  0.00
H
ATOM   2834 2HD1 LEU   170      43.808  22.237  24.121  1.00  0.00
H
ATOM   2835 3HD1 LEU   170      44.983  20.980  24.585  1.00  0.00
H
ATOM   2836  CD2 LEU   170      42.273  21.953  26.427  1.00  0.00
C
ATOM   2837 1HD2 LEU   170      42.895  22.663  26.973  1.00  0.00
H
ATOM   2838 2HD2 LEU   170      41.637  21.441  27.146  1.00  0.00
H
ATOM   2839 3HD2 LEU   170      41.654  22.490  25.709  1.00  0.00
H
ATOM   2840  N   GLY   171      39.361  19.985  26.504  1.00  0.00
N
ATOM   2841  H   GLY   171      39.682  19.354  27.235  1.00  0.00
H
ATOM   2842  CA  GLY   171      38.155  20.775  26.684  1.00  0.00
C
ATOM   2843 1HA  GLY   171      37.793  20.700  27.709  1.00  0.00
H
ATOM   2844 2HA  GLY   171      38.362  21.816  26.440  1.00  0.00
H
ATOM   2845  C   GLY   171      37.112  20.233  25.728  1.00  0.00
C
ATOM   2846  O   GLY   171      36.982  19.016  25.592  1.00  0.00
O
ATOM   2847  N   ARG   172      36.391  21.098  25.029  1.00  0.00
N
ATOM   2848  H   ARG   172      36.536  22.097  25.163  1.00  0.00
H
ATOM   2849  CA  ARG   172      35.410  20.616  24.050  1.00  0.00
C
ATOM   2850  HA  ARG   172      34.891  19.767  24.496  1.00  0.00
H
ATOM   2851  C   ARG   172      36.040  20.102  22.755  1.00  0.00
C
ATOM   2852  O   ARG   172      35.375  19.412  21.988  1.00  0.00
O
ATOM   2853  CB  ARG   172      34.355  21.690  23.739  1.00  0.00
C
ATOM   2854 1HB  ARG   172      33.574  21.223  23.141  1.00  0.00
H
ATOM   2855 2HB  ARG   172      33.911  22.011  24.682  1.00  0.00
H
ATOM   2856  CG  ARG   172      34.827  22.936  22.987  1.00  0.00
C
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ATOM   2857 1HG  ARG   172      35.581  23.451  23.574  1.00  0.00
H
ATOM   2858 2HG  ARG   172      35.257  22.653  22.027  1.00  0.00
H
ATOM   2859  CD  ARG   172      33.648  23.878  22.758  1.00  0.00
C
ATOM   2860 1HD  ARG   172      32.895  23.375  22.152  1.00  0.00
H
ATOM   2861 2HD  ARG   172      33.208  24.110  23.729  1.00  0.00
H
ATOM   2862  NE  ARG   172      34.046  25.140  22.115  1.00  0.00
N
ATOM   2863  HE  ARG   172      34.396  25.865  22.725  1.00  0.00
H
ATOM   2864  CZ  ARG   172      34.014  25.423  20.820  1.00  0.00
C
ATOM   2865  NH1 ARG   172      33.678  24.566  19.902  1.00  0.00
N
ATOM   2866 1HH1 ARG   172      33.391  23.638  20.158  1.00  0.00
H
ATOM   2867 2HH1 ARG   172      33.734  24.815  18.922  1.00  0.00
H
ATOM   2868  NH2 ARG   172      34.379  26.605  20.424  1.00  0.00
N
ATOM   2869 1HH2 ARG   172      34.707  27.274  21.100  1.00  0.00
H
ATOM   2870 2HH2 ARG   172      34.364  26.821  19.438  1.00  0.00
H
ATOM   2871  N   PHE   173      37.279  20.466  22.474  1.00  0.00
N
ATOM   2872  H   PHE   173      37.842  20.934  23.172  1.00  0.00
H
ATOM   2873  CA  PHE   173      37.876  20.200  21.166  1.00  0.00
C
ATOM   2874  HA  PHE   173      37.117  20.310  20.393  1.00  0.00
H
ATOM   2875  C   PHE   173      38.437  18.794  21.100  1.00  0.00
C
ATOM   2876  O   PHE   173      39.038  18.330  22.067  1.00  0.00
O
ATOM   2877  CB  PHE   173      38.985  21.213  20.908  1.00  0.00
C
ATOM   2878 1HB  PHE   173      39.761  21.088  21.662  1.00  0.00
H
ATOM   2879 2HB  PHE   173      39.421  21.020  19.927  1.00  0.00
H
ATOM   2880  CG  PHE   173      38.493  22.627  20.953  1.00  0.00
C
ATOM   2881  CD1 PHE   173      38.656  23.405  22.115  1.00  0.00
C
ATOM   2882  HD1 PHE   173      39.182  22.997  22.968  1.00  0.00
H
ATOM   2883  CD2 PHE   173      37.813  23.171  19.852  1.00  0.00
C
ATOM   2884  HD2 PHE   173      37.688  22.582  18.953  1.00  0.00
H
ATOM   2885  CE1 PHE   173      38.127  24.714  22.185  1.00  0.00
C
ATOM   2886  HE1 PHE   173      38.248  25.300  23.084  1.00  0.00
H
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ATOM   2887  CE2 PHE   173      37.285  24.479  19.906  1.00  0.00
C
ATOM   2888  HE2 PHE   173      36.762  24.886  19.053  1.00  0.00
H
ATOM   2889  CZ  PHE   173      37.454  25.257  21.072  1.00  0.00
C
ATOM   2890  HZ  PHE   173      37.080  26.268  21.106  1.00  0.00
H
ATOM   2891  N   VAL   174      38.256  18.126  19.970  1.00  0.00
N
ATOM   2892  H   VAL   174      37.783  18.560  19.182  1.00  0.00
H
ATOM   2893  CA  VAL   174      38.733  16.758  19.795  1.00  0.00
C
ATOM   2894  HA  VAL   174      39.322  16.468  20.662  1.00  0.00
H
ATOM   2895  C   VAL   174      39.646  16.750  18.587  1.00  0.00
C
ATOM   2896  O   VAL   174      39.257  17.082  17.467  1.00  0.00
O
ATOM   2897  CB  VAL   174      37.565  15.760  19.659  1.00  0.00
C
ATOM   2898  HB  VAL   174      36.955  16.037  18.802  1.00  0.00
H
ATOM   2899  CG1 VAL   174      38.087  14.344  19.441  1.00  0.00
C
ATOM   2900 1HG1 VAL   174      37.262  13.631  19.469  1.00  0.00
H
ATOM   2901 2HG1 VAL   174      38.803  14.096  20.225  1.00  0.00
H
ATOM   2902 3HG1 VAL   174      38.579  14.273  18.472  1.00  0.00
H
ATOM   2903  CG2 VAL   174      36.699  15.823  20.924  1.00  0.00
C
ATOM   2904 1HG2 VAL   174      36.022  14.972  20.964  1.00  0.00
H
ATOM   2905 2HG2 VAL   174      36.115  16.743  20.931  1.00  0.00
H
ATOM   2906 3HG2 VAL   174      37.330  15.801  21.814  1.00  0.00
H
ATOM   2907  N   VAL   175      40.900  16.444  18.855  1.00  0.00
N
ATOM   2908  H   VAL   175      41.141  16.049  19.762  1.00  0.00
H
ATOM   2909  CA  VAL   175      41.978  16.709  17.926  1.00  0.00
C
ATOM   2910  HA  VAL   175      41.570  17.209  17.057  1.00  0.00
H
ATOM   2911  C   VAL   175      42.567  15.375  17.495  1.00  0.00
C
ATOM   2912  O   VAL   175      42.884  14.511  18.317  1.00  0.00
O
ATOM   2913  CB  VAL   175      43.015  17.646  18.581  1.00  0.00
C
ATOM   2914  HB  VAL   175      43.458  17.123  19.421  1.00  0.00
H
ATOM   2915  CG1 VAL   175      44.114  18.036  17.594  1.00  0.00
C
ATOM   2916 1HG1 VAL   175      44.816  18.720  18.073  1.00  0.00
H
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ATOM   2917 2HG1 VAL   175      43.681  18.514  16.716  1.00  0.00
H
ATOM   2918 3HG1 VAL   175      44.653  17.145  17.285  1.00  0.00
H
ATOM   2919  CG2 VAL   175      42.341  18.913  19.123  1.00  0.00
C
ATOM   2920 1HG2 VAL   175      43.104  19.598  19.484  1.00  0.00
H
ATOM   2921 2HG2 VAL   175      41.690  18.664  19.961  1.00  0.00
H
ATOM   2922 3HG2 VAL   175      41.757  19.403  18.345  1.00  0.00
H
ATOM   2923  N   LEU   176      42.644  15.189  16.188  1.00  0.00
N
ATOM   2924  H   LEU   176      42.395  15.959  15.572  1.00  0.00
H
ATOM   2925  CA  LEU   176      43.053  13.924  15.588  1.00  0.00
C
ATOM   2926  HA  LEU   176      43.284  13.200  16.367  1.00  0.00
H
ATOM   2927  C   LEU   176      44.289  14.221  14.753  1.00  0.00
C
ATOM   2928  O   LEU   176      44.206  15.060  13.863  1.00  0.00
O
ATOM   2929  CB  LEU   176      41.927  13.397  14.690  1.00  0.00
C
ATOM   2930 1HB  LEU   176      41.882  14.045  13.819  1.00  0.00
H
ATOM   2931 2HB  LEU   176      42.216  12.410  14.334  1.00  0.00
H
ATOM   2932  CG  LEU   176      40.490  13.317  15.233  1.00  0.00
C
ATOM   2933  HG  LEU   176      40.167  14.321  15.505  1.00  0.00
H
ATOM   2934  CD1 LEU   176      39.583  12.817  14.110  1.00  0.00
C
ATOM   2935 1HD1 LEU   176      38.553  12.781  14.460  1.00  0.00
H
ATOM   2936 2HD1 LEU   176      39.884  11.819  13.790  1.00  0.00
H
ATOM   2937 3HD1 LEU   176      39.629  13.501  13.266  1.00  0.00
H
ATOM   2938  CD2 LEU   176      40.324  12.425  16.455  1.00  0.00
C
ATOM   2939 1HD2 LEU   176      39.287  12.467  16.788  1.00  0.00
H
ATOM   2940 2HD2 LEU   176      40.964  12.782  17.263  1.00  0.00
H
ATOM   2941 3HD2 LEU   176      40.586  11.402  16.201  1.00  0.00
H
ATOM   2942  N   ILE   177      45.426  13.613  15.067  1.00  0.00
N
ATOM   2943  H   ILE   177      45.453  12.953  15.835  1.00  0.00
H
ATOM   2944  CA  ILE   177      46.708  13.922  14.423  1.00  0.00
C
ATOM   2945  HA  ILE   177      46.539  14.563  13.561  1.00  0.00
H
ATOM   2946  C   ILE   177      47.418  12.649  13.966  1.00  0.00
C
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ATOM   2947  O   ILE   177      47.487  11.677  14.722  1.00  0.00
O
ATOM   2948  CB  ILE   177      47.638  14.666  15.432  1.00  0.00
C
ATOM   2949  HB  ILE   177      47.829  14.004  16.276  1.00  0.00
H
ATOM   2950  CG1 ILE   177      46.903  15.908  15.968  1.00  0.00
C
ATOM   2951 1HG1 ILE   177      46.392  16.390  15.137  1.00  0.00
H
ATOM   2952 2HG1 ILE   177      46.146  15.570  16.675  1.00  0.00
H
ATOM   2953  CG2 ILE   177      49.004  15.010  14.794  1.00  0.00
C
ATOM   2954 1HG2 ILE   177      48.878  15.700  13.960  1.00  0.00
H
ATOM   2955 2HG2 ILE   177      49.482  14.103  14.437  1.00  0.00
H
ATOM   2956 3HG2 ILE   177      49.673  15.448  15.534  1.00  0.00
H
ATOM   2957  CD1 ILE   177      47.753  16.951  16.659  1.00  0.00
C
ATOM   2958 1HD1 ILE   177      47.118  17.599  17.263  1.00  0.00
H
ATOM   2959 2HD1 ILE   177      48.278  17.556  15.920  1.00  0.00
H
ATOM   2960 3HD1 ILE   177      48.478  16.463  17.300  1.00  0.00
H
ATOM   2961  N   TRP   178      47.959  12.656  12.754  1.00  0.00
N
ATOM   2962  H   TRP   178      47.804  13.456  12.143  1.00  0.00
H
ATOM   2963  CA  TRP   178      48.821  11.579  12.260  1.00  0.00
C
ATOM   2964  HA  TRP   178      49.418  11.194  13.082  1.00  0.00
H
ATOM   2965  C   TRP   178      49.754  12.146  11.189  1.00  0.00
C
ATOM   2966  O   TRP   178      49.486  13.227  10.659  1.00  0.00
O
ATOM   2967  CB  TRP   178      47.976  10.438  11.681  1.00  0.00
C
ATOM   2968 1HB  TRP   178      48.637   9.637  11.357  1.00  0.00
H
ATOM   2969 2HB  TRP   178      47.335  10.052  12.471  1.00  0.00
H
ATOM   2970  CG  TRP   178      47.102  10.848  10.531  1.00  0.00
C
ATOM   2971  CD1 TRP   178      47.346  10.662   9.204  1.00  0.00
C
ATOM   2972  HD1 TRP   178      48.227  10.172   8.813  1.00  0.00
H
ATOM   2973  CD2 TRP   178      45.813  11.489  10.596  1.00  0.00
C
ATOM   2974  NE1 TRP   178      46.329  11.159   8.433  1.00  0.00
N
ATOM   2975  HE1 TRP   178      46.291  11.108   7.419  1.00  0.00
H
ATOM   2976  CE2 TRP   178      45.377  11.693   9.257  1.00  0.00
C
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ATOM   2977  CE3 TRP   178      44.983  11.927  11.651  1.00  0.00
C
ATOM   2978  HE3 TRP   178      45.273  11.760  12.675  1.00  0.00
H
ATOM   2979  CZ2 TRP   178      44.163  12.336   8.952  1.00  0.00
C
ATOM   2980  HZ2 TRP   178      43.858  12.474   7.930  1.00  0.00
H
ATOM   2981  CZ3 TRP   178      43.773  12.598  11.346  1.00  0.00
C
ATOM   2982  HZ3 TRP   178      43.150  12.972  12.143  1.00  0.00
H
ATOM   2983  CH2 TRP   178      43.380  12.796   9.994  1.00  0.00
C
ATOM   2984  HH2 TRP   178      42.459  13.315   9.777  1.00  0.00
H
ATOM   2985  N   LYS   179      50.817  11.433  10.835  1.00  0.00
N
ATOM   2986  H   LYS   179      51.032  10.572  11.330  1.00  0.00
H
ATOM   2987  CA  LYS   179      51.683  11.818   9.711  1.00  0.00
C
ATOM   2988  HA  LYS   179      51.333  12.748   9.270  1.00  0.00
H
ATOM   2989  C   LYS   179      51.598  10.723   8.665  1.00  0.00
C
ATOM   2990  O   LYS   179      51.735   9.550   9.007  1.00  0.00
O
ATOM   2991  CB  LYS   179      53.136  11.991  10.173  1.00  0.00
C
ATOM   2992 1HB  LYS   179      53.163  12.732  10.967  1.00  0.00
H
ATOM   2993 2HB  LYS   179      53.475  11.040  10.577  1.00  0.00
H
ATOM   2994  CG  LYS   179      54.097  12.417   9.060  1.00  0.00
C
ATOM   2995 1HG  LYS   179      54.140  11.623   8.314  1.00  0.00
H
ATOM   2996 2HG  LYS   179      53.703  13.311   8.588  1.00  0.00
H
ATOM   2997  CD  LYS   179      55.515  12.732   9.517  1.00  0.00
C
ATOM   2998 1HD  LYS   179      56.082  13.070   8.650  1.00  0.00
H
ATOM   2999 2HD  LYS   179      55.490  13.540  10.244  1.00  0.00
H
ATOM   3000  CE  LYS   179      56.212  11.536  10.143  1.00  0.00
C
ATOM   3001 1HE  LYS   179      55.751  11.341  11.111  1.00  0.00
H
ATOM   3002 2HE  LYS   179      56.075  10.661   9.506  1.00  0.00
H
ATOM   3003  NZ  LYS   179      57.671  11.757  10.351  1.00  0.00
N
ATOM   3004 1HZ  LYS   179      58.057  11.025  10.936  1.00  0.00
H
ATOM   3005 2HZ  LYS   179      57.831  12.651  10.803  1.00  0.00
H
ATOM   3006 3HZ  LYS   179      58.161  11.757   9.467  1.00  0.00
H
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ATOM   3007  N   THR   180      51.357  11.083   7.410  1.00  0.00
N
ATOM   3008  H   THR   180      51.239  12.066   7.177  1.00  0.00
H
ATOM   3009  CA  THR   180      51.269  10.091   6.336  1.00  0.00
C
ATOM   3010  HA  THR   180      52.063   9.363   6.489  1.00  0.00
H
ATOM   3011  C   THR   180      51.405  10.728   4.945  1.00  0.00
C
ATOM   3012  O   THR   180      51.017  11.889   4.763  1.00  0.00
O
ATOM   3013  CB  THR   180      49.915   9.338   6.424  1.00  0.00
C
ATOM   3014  HB  THR   180      49.747   9.078   7.466  1.00  0.00
H
ATOM   3015  OG1 THR   180      49.961   8.127   5.669  1.00  0.00
O
ATOM   3016  HG1 THR   180      49.273   7.550   6.030  1.00  0.00
H
ATOM   3017  CG2 THR   180      48.726  10.138   5.950  1.00  0.00
C
ATOM   3018 1HG2 THR   180      47.820   9.565   6.145  1.00  0.00
H
ATOM   3019 2HG2 THR   180      48.792  10.333   4.880  1.00  0.00
H
ATOM   3020 3HG2 THR   180      48.667  11.073   6.497  1.00  0.00
H
ATOM   3021  N   PRO   181      51.900   9.988   3.937  1.00  0.00
N
ATOM   3022  CA  PRO   181      53.112   9.164   4.048  1.00  0.00
C
ATOM   3023  HA  PRO   181      53.055   8.477   4.891  1.00  0.00
H
ATOM   3024  C   PRO   181      54.312  10.100   4.194  1.00  0.00
C
ATOM   3025  O   PRO   181      54.313  11.194   3.640  1.00  0.00
O
ATOM   3026  CB  PRO   181      53.117   8.391   2.730  1.00  0.00
C
ATOM   3027 1HB  PRO   181      54.133   8.169   2.415  1.00  0.00
H
ATOM   3028 2HB  PRO   181      52.538   7.474   2.837  1.00  0.00
H
ATOM   3029  CG  PRO   181      52.455   9.306   1.762  1.00  0.00
C
ATOM   3030 1HG  PRO   181      53.173  10.045   1.403  1.00  0.00
H
ATOM   3031 2HG  PRO   181      52.033   8.749   0.925  1.00  0.00
H
ATOM   3032  CD  PRO   181      51.372   9.989   2.558  1.00  0.00
C
ATOM   3033 1HD  PRO   181      51.217  11.006   2.196  1.00  0.00
H
ATOM   3034 2HD  PRO   181      50.447   9.416   2.508  1.00  0.00
H
ATOM   3035  N   CYS   182      55.309   9.747   4.987  1.00  0.00
N
ATOM   3036  H   CYS   182      55.344   8.810   5.388  1.00  0.00
H
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ATOM   3037  CA  CYS   182      56.377  10.695   5.288  1.00  0.00
C
ATOM   3038  HA  CYS   182      55.952  11.693   5.384  1.00  0.00
H
ATOM   3039  C   CYS   182      57.426  10.714   4.190  1.00  0.00
C
ATOM   3040  O   CYS   182      57.981   9.670   3.841  1.00  0.00
O
ATOM   3041  CB  CYS   182      57.064  10.330   6.603  1.00  0.00
C
ATOM   3042 1HB  CYS   182      56.300  10.213   7.367  1.00  0.00
H
ATOM   3043 2HB  CYS   182      57.578   9.373   6.483  1.00  0.00
H
ATOM   3044  SG  CYS   182      58.254  11.573   7.171  1.00  0.00
S
ATOM   3045  HG  CYS   182      59.152  11.440   6.177  1.00  0.00
H
ATOM   3046  N   SER   183      57.762  11.897   3.707  1.00  0.00
N
ATOM   3047  H   SER   183      57.224  12.717   3.939  1.00  0.00
H
ATOM   3048  CA  SER   183      58.971  12.059   2.912  1.00  0.00
C
ATOM   3049  HA  SER   183      59.045  11.257   2.179  1.00  0.00
H
ATOM   3050  C   SER   183      60.149  12.001   3.881  1.00  0.00
C
ATOM   3051  O   SER   183      60.100  12.664   4.919  1.00  0.00
O
ATOM   3052  CB  SER   183      58.941  13.411   2.204  1.00  0.00
C
ATOM   3053 1HB  SER   183      58.932  14.208   2.948  1.00  0.00
H
ATOM   3054 2HB  SER   183      59.828  13.515   1.580  1.00  0.00
H
ATOM   3055  OG  SER   183      57.773  13.508   1.407  1.00  0.00
O
ATOM   3056  HG  SER   183      57.931  14.173   0.720  1.00  0.00
H
ATOM   3057  N   ALA   184      61.170  11.215   3.560  1.00  0.00
N
ATOM   3058  H   ALA   184      61.092  10.642   2.727  1.00  0.00
H
ATOM   3059  CA  ALA   184      62.391  11.088   4.368  1.00  0.00
C
ATOM   3060  HA  ALA   184      62.924  10.209   4.009  1.00  0.00
H
ATOM   3061  C   ALA   184      62.159  10.867   5.869  1.00  0.00
C
ATOM   3062  O   ALA   184      61.340   9.990   6.217  1.00  0.00
O
ATOM   3063  OXT ALA   184      62.844  11.516   6.694  1.00  0.00
O
ATOM   3064  CB  ALA   184      63.299  12.306   4.112  1.00  0.00
C
ATOM   3065 1HB  ALA   184      63.486  12.405   3.043  1.00  0.00
H
ATOM   3066 2HB  ALA   184      64.253  12.173   4.622  1.00  0.00
H
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ATOM   3067 3HB  ALA   184      62.817  13.215   4.477  1.00  0.00
H
TER    3068      ALA   184
HETATM 3069 CA    CA A 201      21.215  30.737  13.923  1.00  0.00
CA
END
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REMARK YASARA
REMARK YASARA Written on:        Mon Sep 04 17:00:44 2017
REMARK YASARA Number of models: 1
REMARK YASARA Number of atoms:   2996
REMARK YASARA Please address questions or suggestions to:
Eliza@yasara.org
REMARK YASARA
SEQRES   1    185  MET THR GLU GLN GLU ILE LEU HIS ALA PHE SER LEU ILE
SEQRES   2    185  ASP THR ASP ASN ASP GLY VAL ILE THR ILE GLU ASP LEU
SEQRES   3    185  GLU ARG TYR SER LYS LYS SER THR VAL ALA ASP ASP PHE
SEQRES   4    185  VAL ILE LYS TRP LYS ARG LEU PHE ASP GLU ASP ASN THR
SEQRES   5    185  GLY GLU ILE THR PHE ILE HIS PHE CYS ASP VAL LEU GLY
SEQRES   6    185  VAL SER LYS LYS LYS ARG ASP GLU ILE LEU LYS GLU ARG
SEQRES   7    185  ASN ILE VAL ILE PRO ASP SER LEU PRO LYS PRO ILE VAL
SEQRES   8    185  TYR SER SER ASN LEU SER PRO GLU MET GLN GLN LYS ILE
SEQRES   9    185  LEU ARG LEU ILE LYS TYR GLY TRP ASN LYS GLN ASN ASP
SEQRES  10    185  SER SER ASN LEU TYR GLU ILE THR ILE ARG CYS ASP ARG
SEQRES  11    185  GLU PHE GLY PRO ARG TRP ARG GLY ARG VAL ILE TYR ASN
SEQRES  12    185  THR GLN PRO ILE LYS GLU ALA ALA LYS GLY LYS TYR LEU
SEQRES  13    185  VAL PHE SER CYS ASP ASN GLY GLN THR ILE LEU CYS LEU
SEQRES  14    185  TRP LEU ALA ASN ASP ASP GLU ASP ARG PRO ALA GLY CYS
SEQRES  15    185  CYS CYS CYS
ATOM      1  N   MET     1       8.882  19.107   2.251  1.00  0.00
N
ATOM      2 1H   MET     1       9.278  18.777   3.122  1.00  0.00
H
ATOM      3 2H   MET     1       9.554  19.696   1.778  1.00  0.00
H
ATOM      4 3H   MET     1       8.662  18.311   1.668  1.00  0.00
H
ATOM      5  CA  MET     1       7.644  19.881   2.528  1.00  0.00
C
ATOM      6  HA  MET     1       6.966  19.251   3.101  1.00  0.00
H
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ATOM      7  C   MET     1       6.950  20.253   1.224  1.00  0.00
C
ATOM      8  O   MET     1       7.087  21.365   0.712  1.00  0.00
O
ATOM      9  CB  MET     1       8.003  21.108   3.374  1.00  0.00
C
ATOM     10 1HB  MET     1       8.533  20.763   4.262  1.00  0.00
H
ATOM     11 2HB  MET     1       8.684  21.728   2.796  1.00  0.00
H
ATOM     12  CG  MET     1       6.824  21.965   3.831  1.00  0.00
C
ATOM     13 1HG  MET     1       6.306  22.357   2.957  1.00  0.00
H
ATOM     14 2HG  MET     1       6.132  21.348   4.402  1.00  0.00
H
ATOM     15  SD  MET     1       7.354  23.349   4.860  1.00  0.00
S
ATOM     16  CE  MET     1       8.398  24.325   3.734  1.00  0.00
C
ATOM     17 1HE  MET     1       8.642  25.282   4.198  1.00  0.00
H
ATOM     18 2HE  MET     1       7.878  24.502   2.794  1.00  0.00
H
ATOM     19 3HE  MET     1       9.327  23.791   3.535  1.00  0.00
H
ATOM     20  N   THR     2       6.200  19.318   0.661  1.00  0.00
N
ATOM     21  H   THR     2       6.147  18.385   1.066  1.00  0.00
H
ATOM     22  CA  THR     2       5.364  19.586  -0.508  1.00  0.00
C
ATOM     23  HA  THR     2       5.886  20.219  -1.224  1.00  0.00
H
ATOM     24  C   THR     2       4.106  20.295  -0.018  1.00  0.00
C
ATOM     25  O   THR     2       3.841  20.301   1.183  1.00  0.00
O
ATOM     26  CB  THR     2       4.951  18.267  -1.180  1.00  0.00
C
ATOM     27  HB  THR     2       4.218  18.461  -1.964  1.00  0.00
H
ATOM     28  OG1 THR     2       4.393  17.406  -0.186  1.00  0.00
O
ATOM     29  HG1 THR     2       4.006  16.642  -0.637  1.00  0.00
H
ATOM     30  CG2 THR     2       6.150  17.547  -1.771  1.00  0.00
C
ATOM     31 1HG2 THR     2       5.809  16.661  -2.302  1.00  0.00
H
ATOM     32 2HG2 THR     2       6.839  17.243  -0.983  1.00  0.00
H
ATOM     33 3HG2 THR     2       6.667  18.199  -2.474  1.00  0.00
H
ATOM     34  N   GLU     3       3.333  20.902  -0.905  1.00  0.00
N
ATOM     35  H   GLU     3       3.581  20.887  -1.889  1.00  0.00
H
ATOM     36  CA  GLU     3       2.109  21.588  -0.487  1.00  0.00
C
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ATOM     37  HA  GLU     3       2.319  22.190   0.398  1.00  0.00
H
ATOM     38  C   GLU     3       1.047  20.536  -0.164  1.00  0.00
C
ATOM     39  O   GLU     3       0.797  19.658  -0.991  1.00  0.00
O
ATOM     40  CB  GLU     3       1.589  22.475  -1.615  1.00  0.00
C
ATOM     41 1HB  GLU     3       1.346  21.834  -2.461  1.00  0.00
H
ATOM     42 2HB  GLU     3       0.678  22.963  -1.271  1.00  0.00
H
ATOM     43  CG  GLU     3       2.565  23.536  -2.102  1.00  0.00
C
ATOM     44 1HG  GLU     3       2.802  24.210  -1.278  1.00  0.00
H
ATOM     45 2HG  GLU     3       3.484  23.053  -2.433  1.00  0.00
H
ATOM     46  CD  GLU     3       2.007  24.336  -3.268  1.00  0.00
C
ATOM     47  OE1 GLU     3       0.809  24.204  -3.614  1.00  0.00
O
ATOM     48  OE2 GLU     3       2.780  25.116  -3.878  1.00  0.00
O
ATOM     49  N   GLN     4       0.432  20.576   1.011  1.00  0.00
N
ATOM     50  H   GLN     4       0.625  21.336   1.659  1.00  0.00
H
ATOM     51  CA  GLN     4      -0.445  19.492   1.472  1.00  0.00
C
ATOM     52  HA  GLN     4      -0.772  18.877   0.634  1.00  0.00
H
ATOM     53  C   GLN     4      -1.696  19.992   2.199  1.00  0.00
C
ATOM     54  O   GLN     4      -1.842  21.188   2.452  1.00  0.00
O
ATOM     55  CB  GLN     4       0.367  18.609   2.430  1.00  0.00
C
ATOM     56 1HB  GLN     4       0.828  19.255   3.176  1.00  0.00
H
ATOM     57 2HB  GLN     4      -0.303  17.922   2.943  1.00  0.00
H
ATOM     58  CG  GLN     4       1.453  17.771   1.767  1.00  0.00
C
ATOM     59 1HG  GLN     4       0.993  17.079   1.063  1.00  0.00
H
ATOM     60 2HG  GLN     4       2.131  18.419   1.220  1.00  0.00
H
ATOM     61  CD  GLN     4       2.255  16.989   2.775  1.00  0.00
C
ATOM     62  OE1 GLN     4       1.710  16.420   3.711  1.00  0.00
O
ATOM     63  NE2 GLN     4       3.544  16.962   2.607  1.00  0.00
N
ATOM     64 1HE2 GLN     4       4.117  16.474   3.277  1.00  0.00
H
ATOM     65 2HE2 GLN     4       3.953  17.409   1.798  1.00  0.00
H
ATOM     66  N   GLU     5      -2.548  19.057   2.611  1.00  0.00
N
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ATOM     67  H   GLU     5      -2.358  18.091   2.351  1.00  0.00
H
ATOM     68  CA  GLU     5      -3.768  19.303   3.403  1.00  0.00
C
ATOM     69  HA  GLU     5      -4.436  19.948   2.834  1.00  0.00
H
ATOM     70  C   GLU     5      -3.532  19.937   4.779  1.00  0.00
C
ATOM     71  O   GLU     5      -4.460  20.256   5.527  1.00  0.00
O
ATOM     72  CB  GLU     5      -4.464  17.958   3.655  1.00  0.00
C
ATOM     73 1HB  GLU     5      -5.466  18.146   4.040  1.00  0.00
H
ATOM     74 2HB  GLU     5      -4.551  17.433   2.706  1.00  0.00
H
ATOM     75  CG  GLU     5      -3.711  17.063   4.654  1.00  0.00
C
ATOM     76 1HG  GLU     5      -2.682  16.945   4.315  1.00  0.00
H
ATOM     77 2HG  GLU     5      -3.688  17.546   5.630  1.00  0.00
H
ATOM     78  CD  GLU     5      -4.313  15.687   4.836  1.00  0.00
C
ATOM     79  OE1 GLU     5      -5.447  15.395   4.400  1.00  0.00
O
ATOM     80  OE2 GLU     5      -3.617  14.844   5.438  1.00  0.00
O
ATOM     81  N   ILE     6      -2.262  20.065   5.126  1.00  0.00
N
ATOM     82  H   ILE     6      -1.562  19.846   4.436  1.00  0.00
H
ATOM     83  CA  ILE     6      -1.810  20.487   6.443  1.00  0.00
C
ATOM     84  HA  ILE     6      -2.220  19.814   7.196  1.00  0.00
H
ATOM     85  C   ILE     6      -2.317  21.893   6.756  1.00  0.00
C
ATOM     86  O   ILE     6      -2.690  22.202   7.888  1.00  0.00
O
ATOM     87  CB  ILE     6      -0.253  20.418   6.495  1.00  0.00
C
ATOM     88  HB  ILE     6       0.148  21.030   5.687  1.00  0.00
H
ATOM     89  CG1 ILE     6       0.211  18.959   6.263  1.00  0.00
C
ATOM     90 1HG1 ILE     6      -0.174  18.342   7.065  1.00  0.00
H
ATOM     91 2HG1 ILE     6      -0.227  18.588   5.339  1.00  0.00
H
ATOM     92  CG2 ILE     6       0.241  21.006   7.818  1.00  0.00
C
ATOM     93 1HG2 ILE     6       1.210  20.616   8.097  1.00  0.00
H
ATOM     94 2HG2 ILE     6      -0.447  20.770   8.626  1.00  0.00
H
ATOM     95 3HG2 ILE     6       0.312  22.092   7.728  1.00  0.00
H
ATOM     96  CD1 ILE     6       1.728  18.727   6.169  1.00  0.00
C
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ATOM     97 1HD1 ILE     6       1.920  17.670   5.988  1.00  0.00
H
ATOM     98 2HD1 ILE     6       2.225  19.013   7.094  1.00  0.00
H
ATOM     99 3HD1 ILE     6       2.136  19.307   5.345  1.00  0.00
H
ATOM    100  N   LEU     7      -2.432  22.717   5.727  1.00  0.00
N
ATOM    101  H   LEU     7      -2.189  22.393   4.802  1.00  0.00
H
ATOM    102  CA  LEU     7      -2.900  24.089   5.898  1.00  0.00
C
ATOM    103  HA  LEU     7      -2.264  24.588   6.631  1.00  0.00
H
ATOM    104  C   LEU     7      -4.338  24.147   6.410  1.00  0.00
C
ATOM    105  O   LEU     7      -4.693  25.026   7.196  1.00  0.00
O
ATOM    106  CB  LEU     7      -2.802  24.823   4.560  1.00  0.00
C
ATOM    107 1HB  LEU     7      -3.479  24.334   3.860  1.00  0.00
H
ATOM    108 2HB  LEU     7      -3.156  25.842   4.708  1.00  0.00
H
ATOM    109  CG  LEU     7      -1.415  24.888   3.900  1.00  0.00
C
ATOM    110  HG  LEU     7      -1.048  23.873   3.753  1.00  0.00
H
ATOM    111  CD1 LEU     7      -1.549  25.535   2.536  1.00  0.00
C
ATOM    112 1HD1 LEU     7      -0.587  25.515   2.025  1.00  0.00
H
ATOM    113 2HD1 LEU     7      -1.879  26.570   2.638  1.00  0.00
H
ATOM    114 3HD1 LEU     7      -2.274  24.987   1.936  1.00  0.00
H
ATOM    115  CD2 LEU     7      -0.392  25.649   4.738  1.00  0.00
C
ATOM    116 1HD2 LEU     7       0.552  25.723   4.197  1.00  0.00
H
ATOM    117 2HD2 LEU     7      -0.209  25.116   5.669  1.00  0.00
H
ATOM    118 3HD2 LEU     7      -0.758  26.650   4.965  1.00  0.00
H
ATOM    119  N   HIS     8      -5.163  23.189   6.014  1.00  0.00
N
ATOM    120  H   HIS     8      -4.842  22.473   5.375  1.00  0.00
H
ATOM    121  CA  HIS     8      -6.533  23.135   6.510  1.00  0.00
C
ATOM    122  HA  HIS     8      -6.964  24.134   6.483  1.00  0.00
H
ATOM    123  C   HIS     8      -6.566  22.640   7.949  1.00  0.00
C
ATOM    124  O   HIS     8      -7.323  23.147   8.768  1.00  0.00
O
ATOM    125  CB  HIS     8      -7.371  22.216   5.630  1.00  0.00
C
ATOM    126 1HB  HIS     8      -7.289  22.558   4.600  1.00  0.00
H
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ATOM    127 2HB  HIS     8      -6.976  21.203   5.693  1.00  0.00
H
ATOM    128  CG  HIS     8      -8.819  22.190   6.001  1.00  0.00
C
ATOM    129  ND1 HIS     8      -9.676  23.252   5.850  1.00  0.00
N
ATOM    130  HD1 HIS     8      -9.441  24.163   5.477  1.00  0.00
H
ATOM    131  CD2 HIS     8      -9.579  21.194   6.525  1.00  0.00
C
ATOM    132  HD2 HIS     8      -9.213  20.210   6.783  1.00  0.00
H
ATOM    133  CE1 HIS     8     -10.882  22.873   6.270  1.00  0.00
C
ATOM    134  HE1 HIS     8     -11.752  23.514   6.275  1.00  0.00
H
ATOM    135  NE2 HIS     8     -10.883  21.615   6.664  1.00  0.00
N
ATOM    136  N   ALA     9      -5.709  21.685   8.283  1.00  0.00
N
ATOM    137  H   ALA     9      -5.081  21.305   7.589  1.00  0.00
H
ATOM    138  CA  ALA     9      -5.651  21.183   9.654  1.00  0.00
C
ATOM    139  HA  ALA     9      -6.646  20.844   9.945  1.00  0.00
H
ATOM    140  C   ALA     9      -5.242  22.321  10.597  1.00  0.00
C
ATOM    141  O   ALA     9      -5.746  22.431  11.711  1.00  0.00
O
ATOM    142  CB  ALA     9      -4.672  20.005   9.750  1.00  0.00
C
ATOM    143 1HB  ALA     9      -5.005  19.197   9.099  1.00  0.00
H
ATOM    144 2HB  ALA     9      -4.644  19.643  10.779  1.00  0.00
H
ATOM    145 3HB  ALA     9      -3.672  20.320   9.455  1.00  0.00
H
ATOM    146  N   PHE    10      -4.355  23.185  10.127  1.00  0.00
N
ATOM    147  H   PHE    10      -3.947  23.029   9.210  1.00  0.00
H
ATOM    148  CA  PHE    10      -3.925  24.345  10.899  1.00  0.00
C
ATOM    149  HA  PHE    10      -3.557  24.006  11.867  1.00  0.00
H
ATOM    150  C   PHE    10      -5.070  25.326  11.133  1.00  0.00
C
ATOM    151  O   PHE    10      -5.304  25.763  12.261  1.00  0.00
O
ATOM    152  CB  PHE    10      -2.796  25.037  10.139  1.00  0.00
C
ATOM    153 1HB  PHE    10      -2.035  24.297   9.908  1.00  0.00
H
ATOM    154 2HB  PHE    10      -3.177  25.426   9.197  1.00  0.00
H
ATOM    155  CG  PHE    10      -2.148  26.161  10.890  1.00  0.00
C
ATOM    156  CD1 PHE    10      -1.268  25.895  11.949  1.00  0.00
C
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ATOM    157  HD1 PHE    10      -1.129  24.881  12.285  1.00  0.00
H
ATOM    158  CD2 PHE    10      -2.379  27.493  10.514  1.00  0.00
C
ATOM    159  HD2 PHE    10      -3.081  27.719   9.723  1.00  0.00
H
ATOM    160  CE1 PHE    10      -0.546  26.937  12.570  1.00  0.00
C
ATOM    161  HE1 PHE    10       0.172  26.717  13.343  1.00  0.00
H
ATOM    162  CE2 PHE    10      -1.688  28.549  11.150  1.00  0.00
C
ATOM    163  HE2 PHE    10      -1.862  29.570  10.844  1.00  0.00
H
ATOM    164  CZ  PHE    10      -0.758  28.265  12.171  1.00  0.00
C
ATOM    165  HZ  PHE    10      -0.208  29.061  12.641  1.00  0.00
H
ATOM    166  N   SER    11      -5.821  25.646  10.086  1.00  0.00
N
ATOM    167  H   SER    11      -5.624  25.252   9.173  1.00  0.00
H
ATOM    168  CA  SER    11      -6.915  26.606  10.217  1.00  0.00
C
ATOM    169  HA  SER    11      -6.543  27.474  10.759  1.00  0.00
H
ATOM    170  C   SER    11      -8.075  26.040  11.029  1.00  0.00
C
ATOM    171  O   SER    11      -8.822  26.785  11.661  1.00  0.00
O
ATOM    172  CB  SER    11      -7.383  27.075   8.837  1.00  0.00
C
ATOM    173 1HB  SER    11      -8.182  27.805   8.961  1.00  0.00
H
ATOM    174 2HB  SER    11      -6.545  27.558   8.336  1.00  0.00
H
ATOM    175  OG  SER    11      -7.839  26.007   8.022  1.00  0.00
O
ATOM    176  HG  SER    11      -8.725  25.752   8.315  1.00  0.00
H
ATOM    177  N   LEU    12      -8.216  24.722  11.061  1.00  0.00
N
ATOM    178  H   LEU    12      -7.621  24.141  10.475  1.00  0.00
H
ATOM    179  CA  LEU    12      -9.214  24.081  11.916  1.00  0.00
C
ATOM    180  HA  LEU    12     -10.179  24.562  11.765  1.00  0.00
H
ATOM    181  C   LEU    12      -8.871  24.231  13.391  1.00  0.00
C
ATOM    182  O   LEU    12      -9.766  24.406  14.216  1.00  0.00
O
ATOM    183  CB  LEU    12      -9.342  22.590  11.593  1.00  0.00
C
ATOM    184 1HB  LEU    12      -8.340  22.179  11.499  1.00  0.00
H
ATOM    185 2HB  LEU    12      -9.813  22.108  12.447  1.00  0.00
H
ATOM    186  CG  LEU    12     -10.146  22.195  10.346  1.00  0.00
C
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ATOM    187  HG  LEU    12      -9.744  22.720   9.483  1.00  0.00
H
ATOM    188  CD1 LEU    12      -9.996  20.693  10.117  1.00  0.00
C
ATOM    189 1HD1 LEU    12     -10.555  20.399   9.231  1.00  0.00
H
ATOM    190 2HD1 LEU    12     -10.368  20.140  10.980  1.00  0.00
H
ATOM    191 3HD1 LEU    12      -8.945  20.451   9.958  1.00  0.00
H
ATOM    192  CD2 LEU    12     -11.629  22.549  10.472  1.00  0.00
C
ATOM    193 1HD2 LEU    12     -12.140  22.290   9.549  1.00  0.00
H
ATOM    194 2HD2 LEU    12     -11.754  23.617  10.640  1.00  0.00
H
ATOM    195 3HD2 LEU    12     -12.080  22.003  11.301  1.00  0.00
H
ATOM    196  N   ILE    13      -7.595  24.200  13.744  1.00  0.00
N
ATOM    197  H   ILE    13      -6.876  24.046  13.046  1.00  0.00
H
ATOM    198  CA  ILE    13      -7.210  24.381  15.145  1.00  0.00
C
ATOM    199  HA  ILE    13      -7.887  23.810  15.780  1.00  0.00
H
ATOM    200  C   ILE    13      -7.328  25.859  15.504  1.00  0.00
C
ATOM    201  O   ILE    13      -7.844  26.216  16.564  1.00  0.00
O
ATOM    202  CB  ILE    13      -5.752  23.921  15.428  1.00  0.00
C
ATOM    203  HB  ILE    13      -5.075  24.518  14.815  1.00  0.00
H
ATOM    204  CG1 ILE    13      -5.563  22.440  15.061  1.00  0.00
C
ATOM    205 1HG1 ILE    13      -5.928  21.824  15.882  1.00  0.00
H
ATOM    206 2HG1 ILE    13      -6.157  22.205  14.185  1.00  0.00
H
ATOM    207  CG2 ILE    13      -5.400  24.119  16.920  1.00  0.00
C
ATOM    208 1HG2 ILE    13      -4.477  23.605  17.170  1.00  0.00
H
ATOM    209 2HG2 ILE    13      -6.194  23.717  17.553  1.00  0.00
H
ATOM    210 3HG2 ILE    13      -5.271  25.180  17.133  1.00  0.00
H
ATOM    211  CD1 ILE    13      -4.122  22.058  14.750  1.00  0.00
C
ATOM    212 1HD1 ILE    13      -4.105  21.068  14.299  1.00  0.00
H
ATOM    213 2HD1 ILE    13      -3.531  22.046  15.665  1.00  0.00
H
ATOM    214 3HD1 ILE    13      -3.691  22.769  14.043  1.00  0.00
H
ATOM    215  N   ASP    14      -6.841  26.725  14.628  1.00  0.00
N
ATOM    216  H   ASP    14      -6.443  26.391  13.753  1.00  0.00
H
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ATOM    217  CA  ASP    14      -6.754  28.155  14.916  1.00  0.00
C
ATOM    218  HA  ASP    14      -7.478  28.420  15.685  1.00  0.00
H
ATOM    219  C   ASP    14      -7.053  29.022  13.693  1.00  0.00
C
ATOM    220  O   ASP    14      -6.213  29.201  12.814  1.00  0.00
O
ATOM    221  CB  ASP    14      -5.351  28.450  15.456  1.00  0.00
C
ATOM    222 1HB  ASP    14      -4.646  27.735  15.030  1.00  0.00
H
ATOM    223 2HB  ASP    14      -5.059  29.443  15.143  1.00  0.00
H
ATOM    224  CG  ASP    14      -5.289  28.387  16.971  1.00  0.00
C
ATOM    225  OD1 ASP    14      -6.129  29.021  17.648  1.00  0.00
O
ATOM    226  OD2 ASP    14      -4.443  27.672  17.542  1.00  0.00
O
ATOM    227  N   THR    15      -8.265  29.558  13.630  1.00  0.00
N
ATOM    228  H   THR    15      -8.921  29.396  14.388  1.00  0.00
H
ATOM    229  CA  THR    15      -8.678  30.412  12.510  1.00  0.00
C
ATOM    230  HA  THR    15      -8.390  29.925  11.579  1.00  0.00
H
ATOM    231  C   THR    15      -8.000  31.780  12.579  1.00  0.00
C
ATOM    232  O   THR    15      -8.188  32.518  13.549  1.00  0.00
O
ATOM    233  CB  THR    15     -10.212  30.633  12.524  1.00  0.00
C
ATOM    234  HB  THR    15     -10.498  31.144  13.445  1.00  0.00
H
ATOM    235  OG1 THR    15     -10.877  29.366  12.461  1.00  0.00
O
ATOM    236  HG1 THR    15     -10.524  28.798  13.163  1.00  0.00
H
ATOM    237  CG2 THR    15     -10.703  31.439  11.333  1.00  0.00
C
ATOM    238 1HG2 THR    15     -11.793  31.456  11.333  1.00  0.00
H
ATOM    239 2HG2 THR    15     -10.351  30.992  10.406  1.00  0.00
H
ATOM    240 3HG2 THR    15     -10.340  32.465  11.401  1.00  0.00
H
ATOM    241  N   ASP    16      -7.226  32.104  11.547  1.00  0.00
N
ATOM    242  H   ASP    16      -7.094  31.411  10.814  1.00  0.00
H
ATOM    243  CA  ASP    16      -6.546  33.397  11.365  1.00  0.00
C
ATOM    244  HA  ASP    16      -5.769  33.243  10.617  1.00  0.00
H
ATOM    245  C   ASP    16      -5.853  33.942  12.615  1.00  0.00
C
ATOM    246  O   ASP    16      -5.952  35.121  12.962  1.00  0.00
O
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ATOM    247  CB  ASP    16      -7.508  34.446  10.801  1.00  0.00
C
ATOM    248 1HB  ASP    16      -8.341  34.582  11.491  1.00  0.00
H
ATOM    249 2HB  ASP    16      -6.979  35.392  10.693  1.00  0.00
H
ATOM    250  CG  ASP    16      -8.044  34.067   9.443  1.00  0.00
C
ATOM    251  OD1 ASP    16      -7.257  33.637   8.567  1.00  0.00
O
ATOM    252  OD2 ASP    16      -9.261  34.235   9.205  1.00  0.00
O
ATOM    253  N   ASN    17      -5.199  33.059  13.348  1.00  0.00
N
ATOM    254  H   ASN    17      -5.075  32.119  12.995  1.00  0.00
H
ATOM    255  CA  ASN    17      -4.698  33.379  14.679  1.00  0.00
C
ATOM    256  HA  ASN    17      -5.297  34.194  15.084  1.00  0.00
H
ATOM    257  C   ASN    17      -3.245  33.850  14.599  1.00  0.00
C
ATOM    258  O   ASN    17      -2.326  33.219  15.112  1.00  0.00
O
ATOM    259  CB  ASN    17      -4.889  32.142  15.555  1.00  0.00
C
ATOM    260 1HB  ASN    17      -5.882  31.735  15.376  1.00  0.00
H
ATOM    261 2HB  ASN    17      -4.146  31.400  15.286  1.00  0.00
H
ATOM    262  CG  ASN    17      -4.756  32.422  17.017  1.00  0.00
C
ATOM    263  OD1 ASN    17      -4.134  31.662  17.739  1.00  0.00
O
ATOM    264  ND2 ASN    17      -5.386  33.456  17.490  1.00  0.00
N
ATOM    265 1HD2 ASN    17      -5.306  33.683  18.468  1.00  0.00
H
ATOM    266 2HD2 ASN    17      -5.963  34.026  16.886  1.00  0.00
H
ATOM    267  N   ASP    18      -3.066  34.933  13.851  1.00  0.00
N
ATOM    268  H   ASP    18      -3.897  35.348  13.439  1.00  0.00
H
ATOM    269  CA  ASP    18      -1.767  35.562  13.546  1.00  0.00
C
ATOM    270  HA  ASP    18      -1.962  36.382  12.855  1.00  0.00
H
ATOM    271  C   ASP    18      -0.774  34.633  12.842  1.00  0.00
C
ATOM    272  O   ASP    18       0.439  34.851  12.881  1.00  0.00
O
ATOM    273  CB  ASP    18      -1.104  36.169  14.796  1.00  0.00
C
ATOM    274 1HB  ASP    18      -0.971  35.400  15.554  1.00  0.00
H
ATOM    275 2HB  ASP    18      -0.124  36.559  14.528  1.00  0.00
H
ATOM    276  CG  ASP    18      -1.887  37.317  15.382  1.00  0.00
C
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ATOM    277  OD1 ASP    18      -2.337  38.218  14.635  1.00  0.00
O
ATOM    278  OD2 ASP    18      -2.022  37.378  16.623  1.00  0.00
O
ATOM    279  N   GLY    19      -1.271  33.581  12.207  1.00  0.00
N
ATOM    280  H   GLY    19      -2.271  33.422  12.197  1.00  0.00
H
ATOM    281  CA  GLY    19      -0.402  32.648  11.508  1.00  0.00
C
ATOM    282 1HA  GLY    19      -1.009  32.053  10.829  1.00  0.00
H
ATOM    283 2HA  GLY    19       0.312  33.216  10.912  1.00  0.00
H
ATOM    284  C   GLY    19       0.384  31.704  12.395  1.00  0.00
C
ATOM    285  O   GLY    19       1.298  31.045  11.892  1.00  0.00
O
ATOM    286  N   VAL    20       0.062  31.637  13.684  1.00  0.00
N
ATOM    287  H   VAL    20      -0.710  32.194  14.037  1.00  0.00
H
ATOM    288  CA  VAL    20       0.787  30.795  14.645  1.00  0.00
C
ATOM    289  HA  VAL    20       1.441  30.128  14.093  1.00  0.00
H
ATOM    290  C   VAL    20      -0.119  29.906  15.498  1.00  0.00
C
ATOM    291  O   VAL    20      -1.309  30.178  15.666  1.00  0.00
O
ATOM    292  CB  VAL    20       1.672  31.648  15.609  1.00  0.00
C
ATOM    293  HB  VAL    20       2.016  31.009  16.422  1.00  0.00
H
ATOM    294  CG1 VAL    20       2.915  32.175  14.899  1.00  0.00
C
ATOM    295 1HG1 VAL    20       3.481  32.821  15.570  1.00  0.00
H
ATOM    296 2HG1 VAL    20       2.635  32.736  14.006  1.00  0.00
H
ATOM    297 3HG1 VAL    20       3.548  31.337  14.615  1.00  0.00
H
ATOM    298  CG2 VAL    20       0.885  32.823  16.205  1.00  0.00
C
ATOM    299 1HG2 VAL    20       1.477  33.295  16.988  1.00  0.00
H
ATOM    300 2HG2 VAL    20      -0.049  32.472  16.641  1.00  0.00
H
ATOM    301 3HG2 VAL    20       0.658  33.561  15.437  1.00  0.00
H
ATOM    302  N   ILE    21       0.464  28.856  16.058  1.00  0.00
N
ATOM    303  H   ILE    21       1.444  28.677  15.853  1.00  0.00
H
ATOM    304  CA  ILE    21      -0.202  27.936  16.983  1.00  0.00
C
ATOM    305  HA  ILE    21      -1.154  28.359  17.304  1.00  0.00
H
ATOM    306  C   ILE    21       0.715  27.830  18.205  1.00  0.00
C
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ATOM    307  O   ILE    21       1.944  27.834  18.074  1.00  0.00
O
ATOM    308  CB  ILE    21      -0.471  26.549  16.300  1.00  0.00
C
ATOM    309  HB  ILE    21      -1.047  26.733  15.394  1.00  0.00
H
ATOM    310  CG1 ILE    21      -1.303  25.638  17.216  1.00  0.00
C
ATOM    311 1HG1 ILE    21      -0.711  25.404  18.099  1.00  0.00
H
ATOM    312 2HG1 ILE    21      -2.187  26.188  17.537  1.00  0.00
H
ATOM    313  CG2 ILE    21       0.840  25.836  15.891  1.00  0.00
C
ATOM    314 1HG2 ILE    21       0.622  24.967  15.274  1.00  0.00
H
ATOM    315 2HG2 ILE    21       1.396  25.525  16.778  1.00  0.00
H
ATOM    316 3HG2 ILE    21       1.458  26.510  15.305  1.00  0.00
H
ATOM    317  CD1 ILE    21      -1.754  24.318  16.595  1.00  0.00
C
ATOM    318 1HD1 ILE    21      -2.333  23.763  17.330  1.00  0.00
H
ATOM    319 2HD1 ILE    21      -0.897  23.710  16.311  1.00  0.00
H
ATOM    320 3HD1 ILE    21      -2.372  24.516  15.718  1.00  0.00
H
ATOM    321  N   THR    22       0.141  27.765  19.397  1.00  0.00
N
ATOM    322  H   THR    22      -0.862  27.806  19.483  1.00  0.00
H
ATOM    323  CA  THR    22       0.940  27.603  20.608  1.00  0.00
C
ATOM    324  HA  THR    22       1.770  28.310  20.598  1.00  0.00
H
ATOM    325  C   THR    22       1.490  26.186  20.687  1.00  0.00
C
ATOM    326  O   THR    22       0.869  25.245  20.185  1.00  0.00
O
ATOM    327  CB  THR    22       0.089  27.824  21.878  1.00  0.00
C
ATOM    328  HB  THR    22       0.694  27.625  22.757  1.00  0.00
H
ATOM    329  OG1 THR    22      -1.042  26.950  21.875  1.00  0.00
O
ATOM    330  HG1 THR    22      -1.616  27.213  22.607  1.00  0.00
H
ATOM    331  CG2 THR    22      -0.437  29.222  21.962  1.00  0.00
C
ATOM    332 1HG2 THR    22      -0.994  29.348  22.890  1.00  0.00
H
ATOM    333 2HG2 THR    22      -1.090  29.432  21.120  1.00  0.00
H
ATOM    334 3HG2 THR    22       0.396  29.925  21.949  1.00  0.00
H
ATOM    335  N   ILE    23       2.601  26.009  21.392  1.00  0.00
N
ATOM    336  H   ILE    23       3.102  26.818  21.738  1.00  0.00
H
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ATOM    337  CA  ILE    23       3.121  24.675  21.700  1.00  0.00
C
ATOM    338  HA  ILE    23       3.327  24.166  20.759  1.00  0.00
H
ATOM    339  C   ILE    23       2.045  23.858  22.419  1.00  0.00
C
ATOM    340  O   ILE    23       1.906  22.670  22.163  1.00  0.00
O
ATOM    341  CB  ILE    23       4.462  24.763  22.515  1.00  0.00
C
ATOM    342  HB  ILE    23       4.581  25.791  22.857  1.00  0.00
H
ATOM    343  CG1 ILE    23       5.632  24.434  21.572  1.00  0.00
C
ATOM    344 1HG1 ILE    23       5.544  23.394  21.257  1.00  0.00
H
ATOM    345 2HG1 ILE    23       5.532  25.063  20.690  1.00  0.00
H
ATOM    346  CG2 ILE    23       4.482  23.844  23.772  1.00  0.00
C
ATOM    347 1HG2 ILE    23       5.422  23.963  24.310  1.00  0.00
H
ATOM    348 2HG2 ILE    23       4.359  22.800  23.481  1.00  0.00
H
ATOM    349 3HG2 ILE    23       3.681  24.129  24.456  1.00  0.00
H
ATOM    350  CD1 ILE    23       7.041  24.646  22.148  1.00  0.00
C
ATOM    351 1HD1 ILE    23       7.779  24.545  21.352  1.00  0.00
H
ATOM    352 2HD1 ILE    23       7.248  23.907  22.918  1.00  0.00
H
ATOM    353 3HD1 ILE    23       7.122  25.639  22.589  1.00  0.00
H
ATOM    354  N   GLU    24       1.239  24.482  23.267  1.00  0.00
N
ATOM    355  H   GLU    24       1.381  25.472  23.450  1.00  0.00
H
ATOM    356  CA  GLU    24       0.182  23.767  23.982  1.00  0.00
C
ATOM    357  HA  GLU    24       0.629  22.940  24.531  1.00  0.00
H
ATOM    358  C   GLU    24      -0.913  23.192  23.093  1.00  0.00
C
ATOM    359  O   GLU    24      -1.345  22.050  23.293  1.00  0.00
O
ATOM    360  CB  GLU    24      -0.504  24.716  24.955  1.00  0.00
C
ATOM    361 1HB  GLU    24      -0.689  25.644  24.419  1.00  0.00
H
ATOM    362 2HB  GLU    24      -1.461  24.282  25.248  1.00  0.00
H
ATOM    363  CG  GLU    24       0.277  25.029  26.211  1.00  0.00
C
ATOM    364 1HG  GLU    24       0.366  24.122  26.809  1.00  0.00
H
ATOM    365 2HG  GLU    24       1.275  25.361  25.938  1.00  0.00
H
ATOM    366  CD  GLU    24      -0.387  26.116  27.033  1.00  0.00
C
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ATOM    367  OE1 GLU    24      -1.499  26.572  26.671  1.00  0.00
O
ATOM    368  OE2 GLU    24       0.194  26.545  28.057  1.00  0.00
O
ATOM    369  N   ASP    25      -1.383  23.969  22.127  1.00  0.00
N
ATOM    370  H   ASP    25      -1.000  24.900  21.990  1.00  0.00
H
ATOM    371  CA  ASP    25      -2.470  23.513  21.259  1.00  0.00
C
ATOM    372  HA  ASP    25      -3.256  23.051  21.858  1.00  0.00
H
ATOM    373  C   ASP    25      -1.888  22.472  20.322  1.00  0.00
C
ATOM    374  O   ASP    25      -2.520  21.468  19.990  1.00  0.00
O
ATOM    375  CB  ASP    25      -3.059  24.659  20.426  1.00  0.00
C
ATOM    376 1HB  ASP    25      -2.245  25.213  19.963  1.00  0.00
H
ATOM    377 2HB  ASP    25      -3.684  24.233  19.642  1.00  0.00
H
ATOM    378  CG  ASP    25      -3.905  25.616  21.244  1.00  0.00
C
ATOM    379  OD1 ASP    25      -4.261  25.295  22.398  1.00  0.00
O
ATOM    380  OD2 ASP    25      -4.250  26.714  20.749  1.00  0.00
O
ATOM    381  N   LEU    26      -0.650  22.698  19.918  1.00  0.00
N
ATOM    382  H   LEU    26      -0.170  23.547  20.212  1.00  0.00
H
ATOM    383  CA  LEU    26       0.044  21.778  19.034  1.00  0.00
C
ATOM    384  HA  LEU    26      -0.591  21.582  18.171  1.00  0.00
H
ATOM    385  C   LEU    26       0.343  20.454  19.721  1.00  0.00
C
ATOM    386  O   LEU    26       0.342  19.402  19.089  1.00  0.00
O
ATOM    387  CB  LEU    26       1.335  22.441  18.562  1.00  0.00
C
ATOM    388 1HB  LEU    26       1.063  23.404  18.131  1.00  0.00
H
ATOM    389 2HB  LEU    26       1.956  22.638  19.434  1.00  0.00
H
ATOM    390  CG  LEU    26       2.195  21.699  17.535  1.00  0.00
C
ATOM    391  HG  LEU    26       2.634  20.826  18.005  1.00  0.00
H
ATOM    392  CD1 LEU    26       1.399  21.239  16.324  1.00  0.00
C
ATOM    393 1HD1 LEU    26       2.063  20.785  15.595  1.00  0.00
H
ATOM    394 2HD1 LEU    26       0.892  22.091  15.879  1.00  0.00
H
ATOM    395 3HD1 LEU    26       0.665  20.491  16.620  1.00  0.00
H
ATOM    396  CD2 LEU    26       3.305  22.629  17.110  1.00  0.00
C
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ATOM    397 1HD2 LEU    26       3.996  22.105  16.450  1.00  0.00
H
ATOM    398 2HD2 LEU    26       3.861  22.967  17.985  1.00  0.00
H
ATOM    399 3HD2 LEU    26       2.892  23.497  16.597  1.00  0.00
H
ATOM    400  N   GLU    27       0.583  20.476  21.020  1.00  0.00
N
ATOM    401  H   GLU    27       0.631  21.369  21.508  1.00  0.00
H
ATOM    402  CA  GLU    27       0.826  19.247  21.765  1.00  0.00
C
ATOM    403  HA  GLU    27       1.610  18.685  21.263  1.00  0.00
H
ATOM    404  C   GLU    27      -0.438  18.397  21.774  1.00  0.00
C
ATOM    405  O   GLU    27      -0.394  17.207  21.455  1.00  0.00
O
ATOM    406  CB  GLU    27       1.302  19.567  23.181  1.00  0.00
C
ATOM    407 1HB  GLU    27       2.098  20.304  23.111  1.00  0.00
H
ATOM    408 2HB  GLU    27       0.481  20.000  23.750  1.00  0.00
H
ATOM    409  CG  GLU    27       1.849  18.374  23.923  1.00  0.00
C
ATOM    410 1HG  GLU    27       1.057  17.635  24.038  1.00  0.00
H
ATOM    411 2HG  GLU    27       2.659  17.935  23.343  1.00  0.00
H
ATOM    412  CD  GLU    27       2.376  18.763  25.285  1.00  0.00
C
ATOM    413  OE1 GLU    27       3.363  19.532  25.379  1.00  0.00
O
ATOM    414  OE2 GLU    27       1.797  18.317  26.301  1.00  0.00
O
ATOM    415  N   ARG    28      -1.584  19.015  22.030  1.00  0.00
N
ATOM    416  H   ARG    28      -1.579  20.005  22.260  1.00  0.00
H
ATOM    417  CA  ARG    28      -2.856  18.287  21.976  1.00  0.00
C
ATOM    418  HA  ARG    28      -2.799  17.417  22.630  1.00  0.00
H
ATOM    419  C   ARG    28      -3.135  17.770  20.576  1.00  0.00
C
ATOM    420  O   ARG    28      -3.545  16.625  20.401  1.00  0.00
O
ATOM    421  CB  ARG    28      -4.010  19.175  22.437  1.00  0.00
C
ATOM    422 1HB  ARG    28      -3.933  20.148  21.953  1.00  0.00
H
ATOM    423 2HB  ARG    28      -4.945  18.707  22.128  1.00  0.00
H
ATOM    424  CG  ARG    28      -4.053  19.352  23.945  1.00  0.00
C
ATOM    425 1HG  ARG    28      -4.151  18.368  24.403  1.00  0.00
H
ATOM    426 2HG  ARG    28      -3.132  19.816  24.298  1.00  0.00
H
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ATOM    427  CD  ARG    28      -5.241  20.201  24.359  1.00  0.00
C
ATOM    428 1HD  ARG    28      -6.117  19.882  23.794  1.00  0.00
H
ATOM    429 2HD  ARG    28      -5.440  20.031  25.416  1.00  0.00
H
ATOM    430  NE  ARG    28      -5.015  21.636  24.140  1.00  0.00
N
ATOM    431  HE  ARG    28      -5.288  22.005  23.239  1.00  0.00
H
ATOM    432  CZ  ARG    28      -4.530  22.493  25.033  1.00  0.00
C
ATOM    433  NH1 ARG    28      -4.156  22.169  26.241  1.00  0.00
N
ATOM    434 1HH1 ARG    28      -4.164  21.203  26.538  1.00  0.00
H
ATOM    435 2HH1 ARG    28      -3.852  22.899  26.872  1.00  0.00
H
ATOM    436  NH2 ARG    28      -4.429  23.750  24.739  1.00  0.00
N
ATOM    437 1HH2 ARG    28      -4.605  24.090  23.803  1.00  0.00
H
ATOM    438 2HH2 ARG    28      -4.161  24.388  25.474  1.00  0.00
H
ATOM    439  N   TYR    29      -2.849  18.575  19.567  1.00  0.00
N
ATOM    440  H   TYR    29      -2.530  19.523  19.747  1.00  0.00
H
ATOM    441  CA  TYR    29      -3.012  18.120  18.193  1.00  0.00
C
ATOM    442  HA  TYR    29      -4.040  17.781  18.061  1.00  0.00
H
ATOM    443  C   TYR    29      -2.091  16.945  17.863  1.00  0.00
C
ATOM    444  O   TYR    29      -2.495  15.997  17.200  1.00  0.00
O
ATOM    445  CB  TYR    29      -2.746  19.259  17.212  1.00  0.00
C
ATOM    446 1HB  TYR    29      -3.434  20.077  17.421  1.00  0.00
H
ATOM    447 2HB  TYR    29      -1.725  19.616  17.337  1.00  0.00
H
ATOM    448  CG  TYR    29      -2.932  18.802  15.788  1.00  0.00
C
ATOM    449  CD1 TYR    29      -4.221  18.532  15.287  1.00  0.00
C
ATOM    450  HD1 TYR    29      -5.088  18.707  15.909  1.00  0.00
H
ATOM    451  CD2 TYR    29      -1.821  18.585  14.947  1.00  0.00
C
ATOM    452  HD2 TYR    29      -0.823  18.795  15.306  1.00  0.00
H
ATOM    453  CE1 TYR    29      -4.400  18.037  13.972  1.00  0.00
C
ATOM    454  HE1 TYR    29      -5.393  17.844  13.595  1.00  0.00
H
ATOM    455  CE2 TYR    29      -1.997  18.078  13.637  1.00  0.00
C
ATOM    456  HE2 TYR    29      -1.144  17.913  12.998  1.00  0.00
H
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ATOM    457  CZ  TYR    29      -3.284  17.803  13.168  1.00  0.00
C
ATOM    458  OH  TYR    29      -3.436  17.285  11.913  1.00  0.00
O
ATOM    459  HH  TYR    29      -4.361  17.176  11.658  1.00  0.00
H
ATOM    460  N   SER    30      -0.855  16.959  18.336  1.00  0.00
N
ATOM    461  H   SER    30      -0.529  17.757  18.879  1.00  0.00
H
ATOM    462  CA  SER    30       0.069  15.865  18.039  1.00  0.00
C
ATOM    463  HA  SER    30       0.029  15.672  16.966  1.00  0.00
H
ATOM    464  C   SER    30      -0.322  14.566  18.737  1.00  0.00
C
ATOM    465  O   SER    30      -0.093  13.483  18.202  1.00  0.00
O
ATOM    466  CB  SER    30       1.503  16.258  18.386  1.00  0.00
C
ATOM    467 1HB  SER    30       2.175  15.448  18.101  1.00  0.00
H
ATOM    468 2HB  SER    30       1.767  17.149  17.816  1.00  0.00
H
ATOM    469  OG  SER    30       1.673  16.535  19.765  1.00  0.00
O
ATOM    470  HG  SER    30       0.822  16.749  20.175  1.00  0.00
H
ATOM    471  N   LYS    31      -1.015  14.644  19.866  1.00  0.00
N
ATOM    472  H   LYS    31      -1.200  15.552  20.284  1.00  0.00
H
ATOM    473  CA  LYS    31      -1.533  13.440  20.525  1.00  0.00
C
ATOM    474  HA  LYS    31      -0.716  12.731  20.668  1.00  0.00
H
ATOM    475  C   LYS    31      -2.586  12.738  19.676  1.00  0.00
C
ATOM    476  O   LYS    31      -2.741  11.521  19.771  1.00  0.00
O
ATOM    477  CB  LYS    31      -2.113  13.790  21.896  1.00  0.00
C
ATOM    478 1HB  LYS    31      -2.818  14.610  21.779  1.00  0.00
H
ATOM    479 2HB  LYS    31      -2.652  12.927  22.286  1.00  0.00
H
ATOM    480  CG  LYS    31      -1.054  14.180  22.911  1.00  0.00
C
ATOM    481 1HG  LYS    31      -0.437  13.310  23.136  1.00  0.00
H
ATOM    482 2HG  LYS    31      -0.417  14.955  22.494  1.00  0.00
H
ATOM    483  CD  LYS    31      -1.681  14.705  24.185  1.00  0.00
C
ATOM    484 1HD  LYS    31      -2.302  15.569  23.952  1.00  0.00
H
ATOM    485 2HD  LYS    31      -2.293  13.926  24.641  1.00  0.00
H
ATOM    486  CE  LYS    31      -0.585  15.119  25.144  1.00  0.00
C
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ATOM    487 1HE  LYS    31       0.017  14.241  25.384  1.00  0.00
H
ATOM    488 2HE  LYS    31       0.057  15.849  24.649  1.00  0.00
H
ATOM    489  NZ  LYS    31      -1.098  15.717  26.412  1.00  0.00
N
ATOM    490 1HZ  LYS    31      -0.331  15.850  27.060  1.00  0.00
H
ATOM    491 2HZ  LYS    31      -1.789  15.108  26.836  1.00  0.00
H
ATOM    492 3HZ  LYS    31      -1.517  16.624  26.229  1.00  0.00
H
ATOM    493  N   LYS    32      -3.241  13.453  18.768  1.00  0.00
N
ATOM    494  H   LYS    32      -3.069  14.450  18.699  1.00  0.00
H
ATOM    495  CA  LYS    32      -4.195  12.827  17.842  1.00  0.00
C
ATOM    496  HA  LYS    32      -4.907  12.239  18.423  1.00  0.00
H
ATOM    497  C   LYS    32      -3.535  11.875  16.849  1.00  0.00
C
ATOM    498  O   LYS    32      -4.227  11.056  16.238  1.00  0.00
O
ATOM    499  CB  LYS    32      -4.977  13.879  17.047  1.00  0.00
C
ATOM    500 1HB  LYS    32      -4.283  14.479  16.464  1.00  0.00
H
ATOM    501 2HB  LYS    32      -5.624  13.358  16.345  1.00  0.00
H
ATOM    502  CG  LYS    32      -5.849  14.797  17.885  1.00  0.00
C
ATOM    503 1HG  LYS    32      -6.516  14.187  18.495  1.00  0.00
H
ATOM    504 2HG  LYS    32      -5.231  15.416  18.534  1.00  0.00
H
ATOM    505  CD  LYS    32      -6.684  15.683  16.972  1.00  0.00
C
ATOM    506 1HD  LYS    32      -6.024  16.313  16.374  1.00  0.00
H
ATOM    507 2HD  LYS    32      -7.268  15.050  16.304  1.00  0.00
H
ATOM    508  CE  LYS    32      -7.638  16.552  17.772  1.00  0.00
C
ATOM    509 1HE  LYS    32      -8.256  15.914  18.408  1.00  0.00
H
ATOM    510 2HE  LYS    32      -7.063  17.230  18.405  1.00  0.00
H
ATOM    511  NZ  LYS    32      -8.525  17.343  16.860  1.00  0.00
N
ATOM    512 1HZ  LYS    32      -9.150  17.926  17.408  1.00  0.00
H
ATOM    513 2HZ  LYS    32      -9.072  16.720  16.276  1.00  0.00
H
ATOM    514 3HZ  LYS    32      -7.966  17.944  16.265  1.00  0.00
H
ATOM    515  N   SER    33      -2.218  11.950  16.690  1.00  0.00
N
ATOM    516  H   SER    33      -1.693  12.654  17.192  1.00  0.00
H
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ATOM    517  CA  SER    33      -1.489  11.026  15.815  1.00  0.00
C
ATOM    518  HA  SER    33      -2.137  10.746  14.986  1.00  0.00
H
ATOM    519  C   SER    33      -1.078   9.745  16.538  1.00  0.00
C
ATOM    520  O   SER    33      -0.504   8.846  15.930  1.00  0.00
O
ATOM    521  CB  SER    33      -0.246  11.691  15.221  1.00  0.00
C
ATOM    522 1HB  SER    33       0.171  11.031  14.460  1.00  0.00
H
ATOM    523 2HB  SER    33      -0.532  12.631  14.749  1.00  0.00
H
ATOM    524  OG  SER    33       0.753  11.935  16.196  1.00  0.00
O
ATOM    525  HG  SER    33       0.420  12.560  16.856  1.00  0.00
H
ATOM    526  N   THR    34      -1.404   9.658  17.824  1.00  0.00
N
ATOM    527  H   THR    34      -1.878  10.432  18.269  1.00  0.00
H
ATOM    528  CA  THR    34      -1.144   8.472  18.647  1.00  0.00
C
ATOM    529  HA  THR    34      -1.472   8.714  19.658  1.00  0.00
H
ATOM    530  C   THR    34       0.344   8.113  18.732  1.00  0.00
C
ATOM    531  O   THR    34       0.780   7.025  18.351  1.00  0.00
O
ATOM    532  CB  THR    34      -2.004   7.268  18.179  1.00  0.00
C
ATOM    533  HB  THR    34      -1.507   6.749  17.359  1.00  0.00
H
ATOM    534  OG1 THR    34      -3.268   7.756  17.715  1.00  0.00
O
ATOM    535  HG1 THR    34      -3.151   8.029  16.795  1.00  0.00
H
ATOM    536  CG2 THR    34      -2.291   6.297  19.311  1.00  0.00
C
ATOM    537 1HG2 THR    34      -2.901   5.477  18.936  1.00  0.00
H
ATOM    538 2HG2 THR    34      -2.825   6.807  20.114  1.00  0.00
H
ATOM    539 3HG2 THR    34      -1.356   5.892  19.698  1.00  0.00
H
ATOM    540  N   VAL    35       1.137   9.049  19.232  1.00  0.00
N
ATOM    541  H   VAL    35       0.747   9.934  19.513  1.00  0.00
H
ATOM    542  CA  VAL    35       2.568   8.836  19.464  1.00  0.00
C
ATOM    543  HA  VAL    35       2.832   7.803  19.245  1.00  0.00
H
ATOM    544  C   VAL    35       2.825   9.086  20.947  1.00  0.00
C
ATOM    545  O   VAL    35       1.974   9.678  21.622  1.00  0.00
O
ATOM    546  CB  VAL    35       3.441   9.763  18.578  1.00  0.00
C
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ATOM    547  HB  VAL    35       4.482   9.596  18.842  1.00  0.00
H
ATOM    548  CG1 VAL    35       3.264   9.412  17.097  1.00  0.00
C
ATOM    549 1HG1 VAL    35       3.940  10.014  16.494  1.00  0.00
H
ATOM    550 2HG1 VAL    35       2.238   9.601  16.776  1.00  0.00
H
ATOM    551 3HG1 VAL    35       3.501   8.360  16.940  1.00  0.00
H
ATOM    552  CG2 VAL    35       3.115  11.246  18.802  1.00  0.00
C
ATOM    553 1HG2 VAL    35       3.830  11.860  18.255  1.00  0.00
H
ATOM    554 2HG2 VAL    35       3.196  11.487  19.861  1.00  0.00
H
ATOM    555 3HG2 VAL    35       2.109  11.479  18.452  1.00  0.00
H
ATOM    556  N   ALA    36       3.952   8.624  21.471  1.00  0.00
N
ATOM    557  H   ALA    36       4.613   8.136  20.884  1.00  0.00
H
ATOM    558  CA  ALA    36       4.271   8.811  22.886  1.00  0.00
C
ATOM    559  HA  ALA    36       3.418   8.494  23.490  1.00  0.00
H
ATOM    560  C   ALA    36       4.547  10.291  23.168  1.00  0.00
C
ATOM    561  O   ALA    36       4.949  11.030  22.273  1.00  0.00
O
ATOM    562  CB  ALA    36       5.491   7.964  23.261  1.00  0.00
C
ATOM    563 1HB  ALA    36       5.304   6.919  23.013  1.00  0.00
H
ATOM    564 2HB  ALA    36       5.679   8.038  24.333  1.00  0.00
H
ATOM    565 3HB  ALA    36       6.370   8.311  22.718  1.00  0.00
H
ATOM    566  N   ASP    37       4.401  10.717  24.414  1.00  0.00
N
ATOM    567  H   ASP    37       4.090  10.069  25.135  1.00  0.00
H
ATOM    568  CA  ASP    37       4.664  12.113  24.778  1.00  0.00
C
ATOM    569  HA  ASP    37       4.066  12.769  24.145  1.00  0.00
H
ATOM    570  C   ASP    37       6.135  12.469  24.575  1.00  0.00
C
ATOM    571  O   ASP    37       6.465  13.583  24.185  1.00  0.00
O
ATOM    572  CB  ASP    37       4.317  12.377  26.244  1.00  0.00
C
ATOM    573 1HB  ASP    37       4.814  11.634  26.865  1.00  0.00
H
ATOM    574 2HB  ASP    37       4.690  13.364  26.517  1.00  0.00
H
ATOM    575  CG  ASP    37       2.829  12.336  26.525  1.00  0.00
C
ATOM    576  OD1 ASP    37       1.987  12.500  25.609  1.00  0.00
O
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ATOM    577  OD2 ASP    37       2.479  12.163  27.712  1.00  0.00
O
ATOM    578  N   ASP    38       7.028  11.512  24.780  1.00  0.00
N
ATOM    579  H   ASP    38       6.723  10.616  25.148  1.00  0.00
H
ATOM    580  CA  ASP    38       8.452  11.729  24.514  1.00  0.00
C
ATOM    581  HA  ASP    38       8.795  12.632  25.020  1.00  0.00
H
ATOM    582  C   ASP    38       8.711  11.893  23.027  1.00  0.00
C
ATOM    583  O   ASP    38       9.629  12.591  22.614  1.00  0.00
O
ATOM    584  CB  ASP    38       9.294  10.538  24.967  1.00  0.00
C
ATOM    585 1HB  ASP    38       8.793   9.613  24.681  1.00  0.00
H
ATOM    586 2HB  ASP    38      10.253  10.584  24.451  1.00  0.00
H
ATOM    587  CG  ASP    38       9.569  10.532  26.455  1.00  0.00
C
ATOM    588  OD1 ASP    38       9.223  11.487  27.179  1.00  0.00
O
ATOM    589  OD2 ASP    38      10.168   9.540  26.933  1.00  0.00
O
ATOM    590  N   PHE    39       7.893  11.261  22.203  1.00  0.00
N
ATOM    591  H   PHE    39       7.115  10.732  22.571  1.00  0.00
H
ATOM    592  CA  PHE    39       8.079  11.342  20.763  1.00  0.00
C
ATOM    593  HA  PHE    39       9.142  11.252  20.546  1.00  0.00
H
ATOM    594  C   PHE    39       7.590  12.708  20.289  1.00  0.00
C
ATOM    595  O   PHE    39       8.176  13.316  19.401  1.00  0.00
O
ATOM    596  CB  PHE    39       7.341  10.186  20.092  1.00  0.00
C
ATOM    597 1HB  PHE    39       7.464   9.310  20.726  1.00  0.00
H
ATOM    598 2HB  PHE    39       6.279  10.417  20.028  1.00  0.00
H
ATOM    599  CG  PHE    39       7.873   9.830  18.735  1.00  0.00
C
ATOM    600  CD1 PHE    39       9.148   9.248  18.608  1.00  0.00
C
ATOM    601  HD1 PHE    39       9.758   9.089  19.487  1.00  0.00
H
ATOM    602  CD2 PHE    39       7.095  10.029  17.584  1.00  0.00
C
ATOM    603  HD2 PHE    39       6.131  10.508  17.663  1.00  0.00
H
ATOM    604  CE1 PHE    39       9.639   8.848  17.342  1.00  0.00
C
ATOM    605  HE1 PHE    39      10.626   8.416  17.253  1.00  0.00
H
ATOM    606  CE2 PHE    39       7.555   9.598  16.317  1.00  0.00
C
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ATOM    607  HE2 PHE    39       6.938   9.736  15.443  1.00  0.00
H
ATOM    608  CZ  PHE    39       8.824   9.000  16.198  1.00  0.00
C
ATOM    609  HZ  PHE    39       9.179   8.671  15.232  1.00  0.00
H
ATOM    610  N   VAL    40       6.593  13.251  20.975  1.00  0.00
N
ATOM    611  H   VAL    40       6.102  12.698  21.670  1.00  0.00
H
ATOM    612  CA  VAL    40       6.198  14.645  20.766  1.00  0.00
C
ATOM    613  HA  VAL    40       6.022  14.798  19.701  1.00  0.00
H
ATOM    614  C   VAL    40       7.335  15.577  21.191  1.00  0.00
C
ATOM    615  O   VAL    40       7.626  16.530  20.487  1.00  0.00
O
ATOM    616  CB  VAL    40       4.893  15.013  21.535  1.00  0.00
C
ATOM    617  HB  VAL    40       5.045  14.837  22.595  1.00  0.00
H
ATOM    618  CG1 VAL    40       4.534  16.486  21.346  1.00  0.00
C
ATOM    619 1HG1 VAL    40       3.553  16.682  21.776  1.00  0.00
H
ATOM    620 2HG1 VAL    40       4.523  16.732  20.285  1.00  0.00
H
ATOM    621 3HG1 VAL    40       5.263  17.116  21.856  1.00  0.00
H
ATOM    622  CG2 VAL    40       3.723  14.141  21.074  1.00  0.00
C
ATOM    623 1HG2 VAL    40       2.812  14.444  21.593  1.00  0.00
H
ATOM    624 2HG2 VAL    40       3.918  13.099  21.315  1.00  0.00
H
ATOM    625 3HG2 VAL    40       3.575  14.244  19.998  1.00  0.00
H
ATOM    626  N   ILE    41       8.032  15.306  22.288  1.00  0.00
N
ATOM    627  H   ILE    41       7.765  14.516  22.867  1.00  0.00
H
ATOM    628  CA  ILE    41       9.177  16.141  22.693  1.00  0.00
C
ATOM    629  HA  ILE    41       8.853  17.180  22.731  1.00  0.00
H
ATOM    630  C   ILE    41      10.293  16.051  21.645  1.00  0.00
C
ATOM    631  O   ILE    41      10.897  17.064  21.270  1.00  0.00
O
ATOM    632  CB  ILE    41       9.708  15.745  24.108  1.00  0.00
C
ATOM    633  HB  ILE    41       9.917  14.677  24.118  1.00  0.00
H
ATOM    634  CG1 ILE    41       8.632  16.057  25.166  1.00  0.00
C
ATOM    635 1HG1 ILE    41       8.566  17.139  25.285  1.00  0.00
H
ATOM    636 2HG1 ILE    41       7.672  15.712  24.798  1.00  0.00
H
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ATOM    637  CG2 ILE    41      11.013  16.498  24.458  1.00  0.00
C
ATOM    638 1HG2 ILE    41      11.350  16.218  25.454  1.00  0.00
H
ATOM    639 2HG2 ILE    41      10.849  17.576  24.423  1.00  0.00
H
ATOM    640 3HG2 ILE    41      11.802  16.234  23.753  1.00  0.00
H
ATOM    641  CD1 ILE    41       8.843  15.425  26.545  1.00  0.00
C
ATOM    642 1HD1 ILE    41       7.984  15.651  27.175  1.00  0.00
H
ATOM    643 2HD1 ILE    41       9.739  15.829  27.014  1.00  0.00
H
ATOM    644 3HD1 ILE    41       8.937  14.343  26.449  1.00  0.00
H
ATOM    645  N   LYS    42      10.519  14.864  21.098  1.00  0.00
N
ATOM    646  H   LYS    42      10.015  14.051  21.449  1.00  0.00
H
ATOM    647  CA  LYS    42      11.484  14.696  20.007  1.00  0.00
C
ATOM    648  HA  LYS    42      12.456  15.064  20.336  1.00  0.00
H
ATOM    649  C   LYS    42      11.101  15.510  18.780  1.00  0.00
C
ATOM    650  O   LYS    42      11.978  16.059  18.113  1.00  0.00
O
ATOM    651  CB  LYS    42      11.619  13.223  19.616  1.00  0.00
C
ATOM    652 1HB  LYS    42      10.631  12.775  19.542  1.00  0.00
H
ATOM    653 2HB  LYS    42      12.082  13.175  18.633  1.00  0.00
H
ATOM    654  CG  LYS    42      12.473  12.408  20.569  1.00  0.00
C
ATOM    655 1HG  LYS    42      13.453  12.876  20.642  1.00  0.00
H
ATOM    656 2HG  LYS    42      12.019  12.379  21.559  1.00  0.00
H
ATOM    657  CD  LYS    42      12.639  10.997  20.039  1.00  0.00
C
ATOM    658 1HD  LYS    42      11.674  10.490  20.042  1.00  0.00
H
ATOM    659 2HD  LYS    42      13.007  11.051  19.015  1.00  0.00
H
ATOM    660  CE  LYS    42      13.641  10.209  20.868  1.00  0.00
C
ATOM    661 1HE  LYS    42      14.592  10.745  20.884  1.00  0.00
H
ATOM    662 2HE  LYS    42      13.272  10.116  21.891  1.00  0.00
H
ATOM    663  NZ  LYS    42      13.858   8.846  20.284  1.00  0.00
N
ATOM    664 1HZ  LYS    42      14.597   8.365  20.788  1.00  0.00
H
ATOM    665 2HZ  LYS    42      14.119   8.924  19.305  1.00  0.00
H
ATOM    666 3HZ  LYS    42      13.003   8.308  20.355  1.00  0.00
H
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ATOM    667  N   TRP    43       9.814  15.625  18.485  1.00  0.00
N
ATOM    668  H   TRP    43       9.124  15.096  19.012  1.00  0.00
H
ATOM    669  CA  TRP    43       9.373  16.503  17.403  1.00  0.00
C
ATOM    670  HA  TRP    43       9.980  16.309  16.519  1.00  0.00
H
ATOM    671  C   TRP    43       9.554  17.964  17.803  1.00  0.00
C
ATOM    672  O   TRP    43       9.977  18.773  16.990  1.00  0.00
O
ATOM    673  CB  TRP    43       7.891  16.292  17.062  1.00  0.00
C
ATOM    674 1HB  TRP    43       7.294  16.501  17.948  1.00  0.00
H
ATOM    675 2HB  TRP    43       7.614  17.013  16.296  1.00  0.00
H
ATOM    676  CG  TRP    43       7.517  14.929  16.563  1.00  0.00
C
ATOM    677  CD1 TRP    43       8.345  13.890  16.277  1.00  0.00
C
ATOM    678  HD1 TRP    43       9.420  13.923  16.388  1.00  0.00
H
ATOM    679  CD2 TRP    43       6.187  14.438  16.303  1.00  0.00
C
ATOM    680  NE1 TRP    43       7.647  12.796  15.857  1.00  0.00
N
ATOM    681  HE1 TRP    43       8.065  11.905  15.630  1.00  0.00
H
ATOM    682  CE2 TRP    43       6.317  13.100  15.835  1.00  0.00
C
ATOM    683  CE3 TRP    43       4.895  14.993  16.417  1.00  0.00
C
ATOM    684  HE3 TRP    43       4.764  16.002  16.778  1.00  0.00
H
ATOM    685  CZ2 TRP    43       5.207  12.317  15.467  1.00  0.00
C
ATOM    686  HZ2 TRP    43       5.336  11.309  15.104  1.00  0.00
H
ATOM    687  CZ3 TRP    43       3.769  14.201  16.054  1.00  0.00
C
ATOM    688  HZ3 TRP    43       2.773  14.610  16.130  1.00  0.00
H
ATOM    689  CH2 TRP    43       3.946  12.867  15.590  1.00  0.00
C
ATOM    690  HH2 TRP    43       3.081  12.272  15.333  1.00  0.00
H
ATOM    691  N   LYS    44       9.225  18.302  19.042  1.00  0.00
N
ATOM    692  H   LYS    44       8.914  17.568  19.676  1.00  0.00
H
ATOM    693  CA  LYS    44       9.184  19.686  19.533  1.00  0.00
C
ATOM    694  HA  LYS    44       8.494  20.248  18.916  1.00  0.00
H
ATOM    695  C   LYS    44      10.502  20.412  19.432  1.00  0.00
C
ATOM    696  O   LYS    44      10.556  21.534  18.930  1.00  0.00
O
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ATOM    697  CB  LYS    44       8.664  19.684  20.975  1.00  0.00
C
ATOM    698 1HB  LYS    44       7.731  19.122  20.991  1.00  0.00
H
ATOM    699 2HB  LYS    44       9.387  19.165  21.601  1.00  0.00
H
ATOM    700  CG  LYS    44       8.412  21.054  21.587  1.00  0.00
C
ATOM    701 1HG  LYS    44       9.325  21.645  21.512  1.00  0.00
H
ATOM    702 2HG  LYS    44       7.620  21.563  21.039  1.00  0.00
H
ATOM    703  CD  LYS    44       8.027  20.951  23.064  1.00  0.00
C
ATOM    704 1HD  LYS    44       8.741  20.310  23.579  1.00  0.00
H
ATOM    705 2HD  LYS    44       8.091  21.947  23.497  1.00  0.00
H
ATOM    706  CE  LYS    44       6.609  20.420  23.289  1.00  0.00
C
ATOM    707 1HE  LYS    44       5.916  21.022  22.699  1.00  0.00
H
ATOM    708 2HE  LYS    44       6.545  19.383  22.955  1.00  0.00
H
ATOM    709  NZ  LYS    44       6.215  20.508  24.734  1.00  0.00
N
ATOM    710 1HZ  LYS    44       5.249  20.220  24.859  1.00  0.00
H
ATOM    711 2HZ  LYS    44       6.326  21.462  25.063  1.00  0.00
H
ATOM    712 3HZ  LYS    44       6.816  19.918  25.297  1.00  0.00
H
ATOM    713   N  ARG    45      11.573  19.739  19.819  1.00  0.00
N
ATOM    714   H  ARG    45      11.456  18.809  20.214  1.00  0.00
H
ATOM    715  CA  ARG    45      12.910  20.322  19.714  1.00  0.00
C
ATOM    716  HA  ARG    45      12.940  21.252  20.285  1.00  0.00
H
ATOM    717   C  ARG    45      13.247  20.658  18.264  1.00  0.00
C
ATOM    718   O  ARG    45      13.967  21.615  17.976  1.00  0.00
O
ATOM    719  CB  ARG    45      13.923  19.335  20.298  1.00  0.00
C
ATOM    720 1HB  ARG    45      13.601  19.056  21.302  1.00  0.00
H
ATOM    721 2HB  ARG    45      13.921  18.441  19.674  1.00  0.00
H
ATOM    722  CG  ARG    45      15.339  19.888  20.373  1.00  0.00
C
ATOM    723 1HG  ARG    45      15.669  20.123  19.365  1.00  0.00
H
ATOM    724 2HG  ARG    45      15.344  20.803  20.966  1.00  0.00
H
ATOM    725  CD  ARG    45      16.318  18.898  20.978  1.00  0.00
C
ATOM    726 1HD  ARG    45      17.313  19.346  20.996  1.00  0.00
H
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ATOM    727 2HD  ARG    45      16.012  18.690  22.004  1.00  0.00
H
ATOM    728  NE  ARG    45      16.351  17.632  20.233  1.00  0.00
N
ATOM    729  HE  ARG    45      15.794  16.875  20.621  1.00  0.00
H
ATOM    730  CZ  ARG    45      17.032  17.372  19.125  1.00  0.00
C
ATOM    731  NH1 ARG    45      17.748  18.256  18.481  1.00  0.00
N
ATOM    732 1HH1 ARG    45      17.736  19.225  18.769  1.00  0.00
H
ATOM    733 2HH1 ARG    45      18.310  17.984  17.693  1.00  0.00
H
ATOM    734  NH2 ARG    45      16.972  16.168  18.634  1.00  0.00
N
ATOM    735 1HH2 ARG    45      16.448  15.453  19.116  1.00  0.00
H
ATOM    736 2HH2 ARG    45      17.452  15.941  17.773  1.00  0.00
H
ATOM    737  N   LEU    46      12.715  19.879  17.335  1.00  0.00
N
ATOM    738  H   LEU    46      12.099  19.125  17.604  1.00  0.00
H
ATOM    739  CA  LEU    46      13.006  20.087  15.923  1.00  0.00
C
ATOM    740  HA  LEU    46      13.992  20.542  15.846  1.00  0.00
H
ATOM    741  C   LEU    46      12.034  21.042  15.226  1.00  0.00
C
ATOM    742  O   LEU    46      12.467  21.779  14.345  1.00  0.00
O
ATOM    743  CB  LEU    46      13.082  18.740  15.197  1.00  0.00
C
ATOM    744 1HB  LEU    46      12.099  18.270  15.237  1.00  0.00
H
ATOM    745 2HB  LEU    46      13.317  18.939  14.151  1.00  0.00
H
ATOM    746  CG  LEU    46      14.116  17.731  15.733  1.00  0.00
C
ATOM    747  HG  LEU    46      13.852  17.469  16.755  1.00  0.00
H
ATOM    748  CD1 LEU    46      14.077  16.466  14.897  1.00  0.00
C
ATOM    749 1HD1 LEU    46      14.781  15.734  15.294  1.00  0.00
H
ATOM    750 2HD1 LEU    46      14.328  16.684  13.857  1.00  0.00
H
ATOM    751 3HD1 LEU    46      13.077  16.041  14.948  1.00  0.00
H
ATOM    752  CD2 LEU    46      15.538  18.271  15.745  1.00  0.00
C
ATOM    753 1HD2 LEU    46      16.233  17.476  16.011  1.00  0.00
H
ATOM    754 2HD2 LEU    46      15.624  19.066  16.485  1.00  0.00
H
ATOM    755 3HD2 LEU    46      15.793  18.669  14.766  1.00  0.00
H
ATOM    756  N   PHE    47      10.758  21.082  15.597  1.00  0.00
N
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ATOM    757  H   PHE    47      10.417  20.447  16.315  1.00  0.00
H
ATOM    758  CA  PHE    47       9.818  22.007  14.949  1.00  0.00
C
ATOM    759  HA  PHE    47      10.151  22.124  13.921  1.00  0.00
H
ATOM    760  C   PHE    47       9.829  23.417  15.516  1.00  0.00
C
ATOM    761  O   PHE    47       9.493  24.363  14.808  1.00  0.00
O
ATOM    762  CB  PHE    47       8.383  21.457  14.855  1.00  0.00
C
ATOM    763 1HB  PHE    47       7.793  22.153  14.256  1.00  0.00
H
ATOM    764 2HB  PHE    47       8.417  20.506  14.325  1.00  0.00
H
ATOM    765  CG  PHE    47       7.664  21.239  16.177  1.00  0.00
C
ATOM    766  CD1 PHE    47       7.339  22.300  17.042  1.00  0.00
C
ATOM    767  HD1 PHE    47       7.666  23.301  16.815  1.00  0.00
H
ATOM    768  CD2 PHE    47       7.191  19.957  16.497  1.00  0.00
C
ATOM    769  HD2 PHE    47       7.440  19.127  15.855  1.00  0.00
H
ATOM    770  CE1 PHE    47       6.562  22.087  18.208  1.00  0.00
C
ATOM    771  HE1 PHE    47       6.344  22.910  18.872  1.00  0.00
H
ATOM    772  CE2 PHE    47       6.362  19.734  17.629  1.00  0.00
C
ATOM    773  HE2 PHE    47       5.980  18.746  17.841  1.00  0.00
H
ATOM    774  CZ  PHE    47       6.051  20.805  18.485  1.00  0.00
C
ATOM    775  HZ  PHE    47       5.433  20.642  19.353  1.00  0.00
H
ATOM    776  N   ASP    48      10.251  23.595  16.760  1.00  0.00
N
ATOM    777  H   ASP    48      10.502  22.798  17.337  1.00  0.00
H
ATOM    778  CA  ASP    48      10.348  24.935  17.342  1.00  0.00
C
ATOM    779  HA  ASP    48       9.590  25.575  16.888  1.00  0.00
H
ATOM    780  C   ASP    48      11.722  25.499  16.988  1.00  0.00
C
ATOM    781  O   ASP    48      12.567  25.790  17.837  1.00  0.00
O
ATOM    782  CB  ASP    48      10.099  24.917  18.850  1.00  0.00
C
ATOM    783 1HB  ASP    48       9.175  24.373  19.046  1.00  0.00
H
ATOM    784 2HB  ASP    48      10.915  24.395  19.346  1.00  0.00
H
ATOM    785  CG  ASP    48       9.975  26.316  19.432  1.00  0.00
C
ATOM    786  OD1 ASP    48       9.701  27.289  18.692  1.00  0.00
O
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ATOM    787  OD2 ASP    48      10.181  26.470  20.652  1.00  0.00
O
ATOM    788  N   GLU    49      11.965  25.592  15.691  1.00  0.00
N
ATOM    789  H   GLU    49      11.233  25.302  15.048  1.00  0.00
H
ATOM    790  CA  GLU    49      13.233  26.069  15.144  1.00  0.00
C
ATOM    791  HA  GLU    49      14.059  25.509  15.581  1.00  0.00
H
ATOM    792  C   GLU    49      13.412  27.547  15.465  1.00  0.00
C
ATOM    793  O   GLU    49      14.520  28.032  15.682  1.00  0.00
O
ATOM    794  CB  GLU    49      13.226  25.863  13.630  1.00  0.00
C
ATOM    795 1HB  GLU    49      12.956  24.826  13.430  1.00  0.00
H
ATOM    796 2HB  GLU    49      12.461  26.510  13.206  1.00  0.00
H
ATOM    797  CG  GLU    49      14.553  26.157  12.947  1.00  0.00
C
ATOM    798 1HG  GLU    49      14.854  27.179  13.171  1.00  0.00
H
ATOM    799 2HG  GLU    49      15.308  25.478  13.343  1.00  0.00
H
ATOM    800  CD  GLU    49      14.481  25.999  11.438  1.00  0.00
C
ATOM    801  OE1 GLU    49      13.375  25.813  10.882  1.00  0.00
O
ATOM    802  OE2 GLU    49      15.532  26.102  10.765  1.00  0.00
O
ATOM    803  N   ASP    50      12.304  28.266  15.554  1.00  0.00
N
ATOM    804  H   ASP    50      11.414  27.834  15.352  1.00  0.00
H
ATOM    805  CA  ASP    50      12.340  29.673  15.952  1.00  0.00
C
ATOM    806  HA  ASP    50      13.112  30.198  15.392  1.00  0.00
H
ATOM    807  C   ASP    50      12.671  29.803  17.438  1.00  0.00
C
ATOM    808  O   ASP    50      13.215  30.816  17.871  1.00  0.00
O
ATOM    809  CB  ASP    50      10.996  30.342  15.667  1.00  0.00
C
ATOM    810 1HB  ASP    50      10.191  29.697  16.019  1.00  0.00
H
ATOM    811 2HB  ASP    50      10.956  31.282  16.212  1.00  0.00
H
ATOM    812  CG  ASP    50      10.796  30.661  14.196  1.00  0.00
C
ATOM    813  OD1 ASP    50      11.770  30.690  13.400  1.00  0.00
O
ATOM    814  OD2 ASP    50       9.642  30.963  13.826  1.00  0.00
O
ATOM    815  N   ASN    51      12.374  28.747  18.187  1.00  0.00
N
ATOM    816  H   ASN    51      11.957  27.947  17.729  1.00  0.00
H
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ATOM    817  CA  ASN    51      12.577  28.627  19.636  1.00  0.00
C
ATOM    818  HA  ASN    51      12.202  27.642  19.902  1.00  0.00
H
ATOM    819  C   ASN    51      11.731  29.629  20.421  1.00  0.00
C
ATOM    820  O   ASN    51      12.094  30.083  21.510  1.00  0.00
O
ATOM    821  CB  ASN    51      14.067  28.677  20.007  1.00  0.00
C
ATOM    822 1HB  ASN    51      14.629  28.105  19.273  1.00  0.00
H
ATOM    823 2HB  ASN    51      14.406  29.712  19.979  1.00  0.00
H
ATOM    824  CG  ASN    51      14.363  28.115  21.381  1.00  0.00
C
ATOM    825  OD1 ASN    51      15.239  28.618  22.079  1.00  0.00
O
ATOM    826  ND2 ASN    51      13.707  27.052  21.763  1.00  0.00
N
ATOM    827 1HD2 ASN    51      13.901  26.662  22.669  1.00  0.00
H
ATOM    828 2HD2 ASN    51      13.009  26.637  21.166  1.00  0.00
H
ATOM    829  N   THR    52      10.580  29.963  19.857  1.00  0.00
N
ATOM    830  H   THR    52      10.314  29.517  18.985  1.00  0.00
H
ATOM    831  CA  THR    52       9.660  30.940  20.435  1.00  0.00
C
ATOM    832  HA  THR    52      10.162  31.538  21.191  1.00  0.00
H
ATOM    833  C   THR    52       8.455  30.269  21.070  1.00  0.00
C
ATOM    834  O   THR    52       7.683  30.911  21.788  1.00  0.00
O
ATOM    835  CB  THR    52       9.113  31.862  19.337  1.00  0.00
C
ATOM    836  HB  THR    52       8.347  32.515  19.753  1.00  0.00
H
ATOM    837  OG1 THR    52       8.553  31.054  18.298  1.00  0.00
O
ATOM    838  HG1 THR    52       8.155  31.644  17.643  1.00  0.00
H
ATOM    839  CG2 THR    52      10.208  32.710  18.728  1.00  0.00
C
ATOM    840 1HG2 THR    52       9.778  33.332  17.945  1.00  0.00
H
ATOM    841 2HG2 THR    52      10.985  32.084  18.298  1.00  0.00
H
ATOM    842 3HG2 THR    52      10.646  33.352  19.491  1.00  0.00
H
ATOM    843  N   GLY    53       8.265  28.991  20.774  1.00  0.00
N
ATOM    844  H   GLY    53       8.927  28.495  20.180  1.00  0.00
H
ATOM    845  CA  GLY    53       7.109  28.257  21.264  1.00  0.00
C
ATOM    846 1HA  GLY    53       7.285  27.200  21.080  1.00  0.00
H
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ATOM    847 2HA  GLY    53       7.007  28.412  22.336  1.00  0.00
H
ATOM    848  C   GLY    53       5.808  28.644  20.593  1.00  0.00
C
ATOM    849  O   GLY    53       4.725  28.268  21.050  1.00  0.00
O
ATOM    850  N   GLU    54       5.920  29.417  19.522  1.00  0.00
N
ATOM    851  H   GLU    54       6.842  29.686  19.207  1.00  0.00
H
ATOM    852  CA  GLU    54       4.780  29.899  18.748  1.00  0.00
C
ATOM    853  HA  GLU    54       3.865  29.401  19.072  1.00  0.00
H
ATOM    854  C   GLU    54       5.094  29.505  17.312  1.00  0.00
C
ATOM    855  O   GLU    54       5.957  30.094  16.651  1.00  0.00
O
ATOM    856  CB  GLU    54       4.608  31.416  18.881  1.00  0.00
C
ATOM    857 1HB  GLU    54       5.497  31.894  18.476  1.00  0.00
H
ATOM    858 2HB  GLU    54       3.753  31.723  18.279  1.00  0.00
H
ATOM    859  CG  GLU    54       4.429  31.942  20.305  1.00  0.00
C
ATOM    860 1HG  GLU    54       5.301  31.669  20.897  1.00  0.00
H
ATOM    861 2HG  GLU    54       4.383  33.028  20.262  1.00  0.00
H
ATOM    862  CD  GLU    54       3.187  31.440  21.020  1.00  0.00
C
ATOM    863  OE1 GLU    54       2.262  30.892  20.396  1.00  0.00
O
ATOM    864  OE2 GLU    54       3.110  31.625  22.259  1.00  0.00
O
ATOM    865  N   ILE    55       4.503  28.400  16.898  1.00  0.00
N
ATOM    866  H   ILE    55       3.732  28.020  17.444  1.00  0.00
H
ATOM    867  CA  ILE    55       4.915  27.674  15.701  1.00  0.00
C
ATOM    868  HA  ILE    55       5.979  27.816  15.524  1.00  0.00
H
ATOM    869  C   ILE    55       4.144  28.302  14.553  1.00  0.00
C
ATOM    870  O   ILE    55       2.921  28.381  14.612  1.00  0.00
O
ATOM    871  CB  ILE    55       4.638  26.155  15.924  1.00  0.00
C
ATOM    872  HB  ILE    55       3.800  26.063  16.615  1.00  0.00
H
ATOM    873  CG1 ILE    55       5.873  25.483  16.549  1.00  0.00
C
ATOM    874 1HG1 ILE    55       5.688  24.412  16.553  1.00  0.00
H
ATOM    875 2HG1 ILE    55       6.733  25.668  15.905  1.00  0.00
H
ATOM    876  CG2 ILE    55       4.278  25.381  14.640  1.00  0.00
C
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ATOM    877 1HG2 ILE    55       4.045  24.346  14.879  1.00  0.00
H
ATOM    878 2HG2 ILE    55       5.110  25.392  13.953  1.00  0.00
H
ATOM    879 3HG2 ILE    55       3.408  25.826  14.157  1.00  0.00
H
ATOM    880  CD1 ILE    55       6.243  25.899  17.976  1.00  0.00
C
ATOM    881 1HD1 ILE    55       6.668  26.903  17.973  1.00  0.00
H
ATOM    882 2HD1 ILE    55       6.985  25.209  18.375  1.00  0.00
H
ATOM    883 3HD1 ILE    55       5.355  25.881  18.610  1.00  0.00
H
ATOM    884  N   THR    56       4.829  28.797  13.531  1.00  0.00
N
ATOM    885  H   THR    56       5.842  28.761  13.533  1.00  0.00
H
ATOM    886  CA  THR    56       4.114  29.406  12.407  1.00  0.00
C
ATOM    887  HA  THR    56       3.334  30.052  12.803  1.00  0.00
H
ATOM    888  C   THR    56       3.468  28.316  11.570  1.00  0.00
C
ATOM    889  O   THR    56       3.819  27.145  11.689  1.00  0.00
O
ATOM    890  CB  THR    56       4.995  30.246  11.452  1.00  0.00
C
ATOM    891  HB  THR    56       4.337  30.806  10.787  1.00  0.00
H
ATOM    892  OG1 THR    56       5.811  29.392  10.645  1.00  0.00
O
ATOM    893  HG1 THR    56       6.587  29.128  11.164  1.00  0.00
H
ATOM    894  CG2 THR    56       5.896  31.222  12.183  1.00  0.00
C
ATOM    895 1HG2 THR    56       6.352  31.898  11.461  1.00  0.00
H
ATOM    896 2HG2 THR    56       6.684  30.690  12.713  1.00  0.00
H
ATOM    897 3HG2 THR    56       5.312  31.811  12.890  1.00  0.00
H
ATOM    898  N   PHE    57       2.590  28.686  10.653  1.00  0.00
N
ATOM    899  H   PHE    57       2.295  29.656  10.615  1.00  0.00
H
ATOM    900  CA  PHE    57       1.999  27.730   9.720  1.00  0.00
C
ATOM    901  HA  PHE    57       1.440  27.005  10.312  1.00  0.00
H
ATOM    902  C   PHE    57       3.012  26.937   8.879  1.00  0.00
C
ATOM    903  O   PHE    57       2.731  25.799   8.498  1.00  0.00
O
ATOM    904  CB  PHE    57       1.002  28.461   8.814  1.00  0.00
C
ATOM    905 1HB  PHE    57       0.379  27.723   8.310  1.00  0.00
H
ATOM    906 2HB  PHE    57       0.361  29.083   9.435  1.00  0.00
H
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ATOM    907  CG  PHE    57       1.643  29.339   7.772  1.00  0.00
C
ATOM    908  CD1 PHE    57       1.708  28.908   6.435  1.00  0.00
C
ATOM    909  HD1 PHE    57       1.321  27.937   6.160  1.00  0.00
H
ATOM    910  CD2 PHE    57       2.162  30.605   8.107  1.00  0.00
C
ATOM    911  HD2 PHE    57       2.101  30.967   9.123  1.00  0.00
H
ATOM    912  CE1 PHE    57       2.260  29.740   5.433  1.00  0.00
C
ATOM    913  HE1 PHE    57       2.275  29.411   4.405  1.00  0.00
H
ATOM    914  CE2 PHE    57       2.760  31.425   7.120  1.00  0.00
C
ATOM    915  HE2 PHE    57       3.180  32.382   7.390  1.00  0.00
H
ATOM    916  CZ  PHE    57       2.794  30.996   5.779  1.00  0.00
C
ATOM    917  HZ  PHE    57       3.229  31.627   5.019  1.00  0.00
H
ATOM    918  N   ILE    58       4.204  27.471   8.633  1.00  0.00
N
ATOM    919  H   ILE    58       4.407  28.407   8.953  1.00  0.00
H
ATOM    920  CA  ILE    58       5.235  26.734   7.892  1.00  0.00
C
ATOM    921  HA  ILE    58       4.763  26.217   7.056  1.00  0.00
H
ATOM    922  C   ILE    58       5.865  25.685   8.812  1.00  0.00
C
ATOM    923  O   ILE    58       6.085  24.538   8.433  1.00  0.00
O
ATOM    924  CB  ILE    58       6.335  27.684   7.319  1.00  0.00
C
ATOM    925  HB  ILE    58       6.833  28.194   8.145  1.00  0.00
H
ATOM    926  CG1 ILE    58       5.673  28.739   6.411  1.00  0.00
C
ATOM    927 1HG1 ILE    58       5.138  28.218   5.620  1.00  0.00
H
ATOM    928 2HG1 ILE    58       4.944  29.297   6.995  1.00  0.00
H
ATOM    929  CG2 ILE    58       7.394  26.882   6.518  1.00  0.00
C
ATOM    930 1HG2 ILE    58       8.214  27.535   6.216  1.00  0.00
H
ATOM    931 2HG2 ILE    58       6.938  26.441   5.631  1.00  0.00
H
ATOM    932 3HG2 ILE    58       7.815  26.086   7.131  1.00  0.00
H
ATOM    933  CD1 ILE    58       6.608  29.754   5.749  1.00  0.00
C
ATOM    934 1HD1 ILE    58       6.009  30.532   5.277  1.00  0.00
H
ATOM    935 2HD1 ILE    58       7.217  29.269   4.985  1.00  0.00
H
ATOM    936 3HD1 ILE    58       7.257  30.210   6.498  1.00  0.00
H
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ATOM    937  N   HIS    59       6.095  26.033  10.067  1.00  0.00
N
ATOM    938  H   HIS    59       5.889  26.973  10.378  1.00  0.00
H
ATOM    939  CA  HIS    59       6.634  25.071  11.029  1.00  0.00
C
ATOM    940  HA  HIS    59       7.466  24.533  10.573  1.00  0.00
H
ATOM    941  C   HIS    59       5.560  24.045  11.402  1.00  0.00
C
ATOM    942  O   HIS    59       5.863  22.911  11.763  1.00  0.00
O
ATOM    943  CB  HIS    59       7.156  25.805  12.265  1.00  0.00
C
ATOM    944 1HB  HIS    59       6.354  26.417  12.668  1.00  0.00
H
ATOM    945 2HB  HIS    59       7.458  25.073  13.014  1.00  0.00
H
ATOM    946  CG  HIS    59       8.313  26.710  11.985  1.00  0.00
C
ATOM    947  ND1 HIS    59       8.150  27.974  11.457  1.00  0.00
N
ATOM    948  CD2 HIS    59       9.648  26.518  12.164  1.00  0.00
C
ATOM    949  HD2 HIS    59      10.085  25.609  12.558  1.00  0.00
H
ATOM    950  CE1 HIS    59       9.404  28.506  11.374  1.00  0.00
C
ATOM    951  HE1 HIS    59       9.616  29.504  11.016  1.00  0.00
H
ATOM    952  NE2 HIS    59      10.351  27.631  11.782  1.00  0.00
N
ATOM    953  HE2 HIS    59      11.354  27.779  11.783  1.00  0.00
H
ATOM    954  N   PHE    60       4.292  24.396  11.241  1.00  0.00
N
ATOM    955  H   PHE    60       4.065  25.367  11.045  1.00  0.00
H
ATOM    956  CA  PHE    60       3.211  23.420  11.371  1.00  0.00
C
ATOM    957  HA  PHE    60       3.358  22.877  12.297  1.00  0.00
H
ATOM    958  C   PHE    60       3.245  22.421  10.209  1.00  0.00
C
ATOM    959  O   PHE    60       3.038  21.219  10.400  1.00  0.00
O
ATOM    960  CB  PHE    60       1.851  24.104  11.469  1.00  0.00
C
ATOM    961 1HB  PHE    60       1.904  24.867  12.245  1.00  0.00
H
ATOM    962 2HB  PHE    60       1.626  24.591  10.523  1.00  0.00
H
ATOM    963  CG  PHE    60       0.730  23.158  11.807  1.00  0.00
C
ATOM    964  CD1 PHE    60       0.482  22.781  13.137  1.00  0.00
C
ATOM    965  HD1 PHE    60       1.113  23.160  13.926  1.00  0.00
H
ATOM    966  CD2 PHE    60      -0.103  22.658  10.798  1.00  0.00
C
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ATOM    967  HD2 PHE    60       0.065  22.956   9.776  1.00  0.00
H
ATOM    968  CE1 PHE    60      -0.605  21.915  13.456  1.00  0.00
C
ATOM    969  HE1 PHE    60      -0.808  21.646  14.481  1.00  0.00
H
ATOM    970  CE2 PHE    60      -1.180  21.787  11.098  1.00  0.00
C
ATOM    971  HE2 PHE    60      -1.815  21.421  10.306  1.00  0.00
H
ATOM    972  CZ  PHE    60      -1.430  21.416  12.428  1.00  0.00
C
ATOM    973  HZ  PHE    60      -2.255  20.759  12.661  1.00  0.00
H
ATOM    974  N   CYS    61       3.596  22.891   9.017  1.00  0.00
N
ATOM    975  H   CYS    61       3.738  23.885   8.887  1.00  0.00
H
ATOM    976  CA  CYS    61       3.817  21.991   7.885  1.00  0.00
C
ATOM    977  HA  CYS    61       2.947  21.364   7.763  1.00  0.00
H
ATOM    978  C   CYS    61       4.991  21.062   8.155  1.00  0.00
C
ATOM    979  O   CYS    61       4.948  19.887   7.782  1.00  0.00
O
ATOM    980  CB  CYS    61       4.032  22.755   6.576  1.00  0.00
C
ATOM    981 1HB  CYS    61       4.880  23.430   6.685  1.00  0.00
H
ATOM    982 2HB  CYS    61       4.282  22.031   5.800  1.00  0.00
H
ATOM    983  SG  CYS    61       2.588  23.697   6.032  1.00  0.00
S
ATOM    984  HG  CYS    61       2.628  24.622   7.004  1.00  0.00
H
ATOM    985  N   ASP    62       6.013  21.555   8.840  1.00  0.00
N
ATOM    986  H   ASP    62       6.033  22.544   9.066  1.00  0.00
H
ATOM    987  CA  ASP    62       7.128  20.696   9.227  1.00  0.00
C
ATOM    988  HA  ASP    62       7.511  20.220   8.325  1.00  0.00
H
ATOM    989  C   ASP    62       6.670  19.592  10.179  1.00  0.00
C
ATOM    990  O   ASP    62       6.905  18.417   9.906  1.00  0.00
O
ATOM    991  CB  ASP    62       8.270  21.465   9.903  1.00  0.00
C
ATOM    992 1HB  ASP    62       7.885  22.041  10.737  1.00  0.00
H
ATOM    993 2HB  ASP    62       8.980  20.739  10.296  1.00  0.00
H
ATOM    994  CG  ASP    62       9.012  22.392   8.962  1.00  0.00
C
ATOM    995  OD1 ASP    62       9.122  22.103   7.753  1.00  0.00
O
ATOM    996  OD2 ASP    62       9.586  23.394   9.445  1.00  0.00
O
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ATOM    997  N   VAL    63       6.013  19.925  11.284  1.00  0.00
N
ATOM    998  H   VAL    63       5.811  20.904  11.477  1.00  0.00
H
ATOM    999  CA  VAL    63       5.634  18.892  12.260  1.00  0.00
C
ATOM   1000  HA  VAL    63       6.523  18.292  12.449  1.00  0.00
H
ATOM   1001  C   VAL    63       4.587  17.919  11.740  1.00  0.00
C
ATOM   1002  O   VAL    63       4.717  16.717  11.968  1.00  0.00
O
ATOM   1003  CB  VAL    63       5.192  19.476  13.638  1.00  0.00
C
ATOM   1004  HB  VAL    63       6.036  20.039  14.023  1.00  0.00
H
ATOM   1005  CG1 VAL    63       4.039  20.445  13.530  1.00  0.00
C
ATOM   1006 1HG1 VAL    63       3.907  20.948  14.484  1.00  0.00
H
ATOM   1007 2HG1 VAL    63       3.116  19.933  13.252  1.00  0.00
H
ATOM   1008 3HG1 VAL    63       4.275  21.196  12.789  1.00  0.00
H
ATOM   1009  CG2 VAL    63       4.847  18.370  14.654  1.00  0.00
C
ATOM   1010 1HG2 VAL    63       4.639  18.819  15.626  1.00  0.00
H
ATOM   1011 2HG2 VAL    63       5.689  17.684  14.752  1.00  0.00
H
ATOM   1012 3HG2 VAL    63       3.968  17.811  14.331  1.00  0.00
H
ATOM   1013  N   LEU    64       3.576  18.361  11.006  1.00  0.00
N
ATOM   1014  H   LEU    64       3.467  19.354  10.802  1.00  0.00
H
ATOM   1015  CA  LEU    64       2.600  17.393  10.517  1.00  0.00
C
ATOM   1016  HA  LEU    64       2.372  16.715  11.338  1.00  0.00
H
ATOM   1017  C   LEU    64       3.254  16.560   9.417  1.00  0.00
C
ATOM   1018  O   LEU    64       2.967  15.382   9.299  1.00  0.00
O
ATOM   1019  CB  LEU    64       1.279  18.052  10.105  1.00  0.00
C
ATOM   1020 1HB  LEU    64       0.969  18.685  10.936  1.00  0.00
H
ATOM   1021 2HB  LEU    64       1.475  18.702   9.258  1.00  0.00
H
ATOM   1022  CG  LEU    64       0.083  17.140   9.748  1.00  0.00
C
ATOM   1023  HG  LEU    64       0.255  16.730   8.753  1.00  0.00
H
ATOM   1024  CD1 LEU    64      -0.154  15.959  10.695  1.00  0.00
C
ATOM   1025 1HD1 LEU    64      -1.103  15.476  10.457  1.00  0.00
H
ATOM   1026 2HD1 LEU    64      -0.174  16.299  11.730  1.00  0.00
H
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ATOM   1027 3HD1 LEU    64       0.636  15.224  10.565  1.00  0.00
H
ATOM   1028  CD2 LEU    64      -1.198  17.968   9.711  1.00  0.00
C
ATOM   1029 1HD2 LEU    64      -2.041  17.337   9.427  1.00  0.00
H
ATOM   1030 2HD2 LEU    64      -1.109  18.764   8.986  1.00  0.00
H
ATOM   1031 3HD2 LEU    64      -1.394  18.406  10.690  1.00  0.00
H
ATOM   1032  N   GLY    65       4.243  17.095   8.712  1.00  0.00
N
ATOM   1033  H   GLY    65       4.474  18.079   8.804  1.00  0.00
H
ATOM   1034  CA  GLY    65       5.042  16.263   7.822  1.00  0.00
C
ATOM   1035 1HA  GLY    65       4.379  15.783   7.102  1.00  0.00
H
ATOM   1036 2HA  GLY    65       5.738  16.899   7.277  1.00  0.00
H
ATOM   1037  C   GLY    65       5.832  15.178   8.543  1.00  0.00
C
ATOM   1038  O   GLY    65       5.919  14.051   8.051  1.00  0.00
O
ATOM   1039  N   VAL    66       6.369  15.461   9.725  1.00  0.00
N
ATOM   1040  H   VAL    66       6.295  16.407  10.086  1.00  0.00
H
ATOM   1041  CA  VAL    66       7.066  14.449  10.537  1.00  0.00
C
ATOM   1042  HA  VAL    66       7.765  13.905   9.904  1.00  0.00
H
ATOM   1043  C   VAL    66       6.058  13.447  11.105  1.00  0.00
C
ATOM   1044  O   VAL    66       6.305  12.242  11.127  1.00  0.00
O
ATOM   1045  CB  VAL    66       7.868  15.106  11.705  1.00  0.00
C
ATOM   1046  HB  VAL    66       7.189  15.711  12.305  1.00  0.00
H
ATOM   1047  CG1 VAL    66       8.523  14.063  12.619  1.00  0.00
C
ATOM   1048 1HG1 VAL    66       9.095  14.566  13.399  1.00  0.00
H
ATOM   1049 2HG1 VAL    66       9.189  13.421  12.042  1.00  0.00
H
ATOM   1050 3HG1 VAL    66       7.757  13.455  13.099  1.00  0.00
H
ATOM   1051  CG2 VAL    66       8.974  16.005  11.155  1.00  0.00
C
ATOM   1052 1HG2 VAL    66       9.494  16.491  11.980  1.00  0.00
H
ATOM   1053 2HG2 VAL    66       8.562  16.776  10.515  1.00  0.00
H
ATOM   1054 3HG2 VAL    66       9.691  15.416  10.581  1.00  0.00
H
ATOM   1055  N   SER    67       4.886  13.917  11.501  1.00  0.00
N
ATOM   1056  H   SER    67       4.723  14.922  11.498  1.00  0.00
H
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ATOM   1057  CA  SER    67       3.825  13.022  11.960  1.00  0.00
C
ATOM   1058  HA  SER    67       4.205  12.411  12.778  1.00  0.00
H
ATOM   1059  C   SER    67       3.398  12.092  10.831  1.00  0.00
C
ATOM   1060  O   SER    67       3.257  10.890  11.023  1.00  0.00
O
ATOM   1061  CB  SER    67       2.627  13.834  12.450  1.00  0.00
C
ATOM   1062 1HB  SER    67       2.937  14.466  13.283  1.00  0.00
H
ATOM   1063 2HB  SER    67       2.279  14.468  11.640  1.00  0.00
H
ATOM   1064  OG  SER    67       1.566  12.993  12.862  1.00  0.00
O
ATOM   1065  HG  SER    67       1.866  12.453  13.601  1.00  0.00
H
ATOM   1066  N   LYS    68       3.279  12.611   9.619  1.00  0.00
N
ATOM   1067  H   LYS    68       3.381  13.616   9.487  1.00  0.00
H
ATOM   1068  CA  LYS    68       2.987  11.768   8.463  1.00  0.00
C
ATOM   1069  HA  LYS    68       2.124  11.147   8.692  1.00  0.00
H
ATOM   1070  C   LYS    68       4.124  10.821   8.133  1.00  0.00
C
ATOM   1071  O   LYS    68       3.867   9.706   7.708  1.00  0.00
O
ATOM   1072  CB  LYS    68       2.655  12.610   7.238  1.00  0.00
C
ATOM   1073 1HB  LYS    68       3.436  13.353   7.082  1.00  0.00
H
ATOM   1074 2HB  LYS    68       2.631  11.945   6.375  1.00  0.00
H
ATOM   1075  CG  LYS    68       1.309  13.293   7.326  1.00  0.00
C
ATOM   1076 1HG  LYS    68       0.548  12.544   7.528  1.00  0.00
H
ATOM   1077 2HG  LYS    68       1.297  14.033   8.120  1.00  0.00
H
ATOM   1078  CD  LYS    68       1.018  13.952   6.006  1.00  0.00
C
ATOM   1079 1HD  LYS    68       1.778  14.705   5.797  1.00  0.00
H
ATOM   1080 2HD  LYS    68       1.053  13.189   5.231  1.00  0.00
H
ATOM   1081  CE  LYS    68      -0.350  14.590   5.987  1.00  0.00
C
ATOM   1082 1HE  LYS    68      -1.099  13.858   6.299  1.00  0.00
H
ATOM   1083 2HE  LYS    68      -0.373  15.446   6.663  1.00  0.00
H
ATOM   1084  NZ  LYS    68      -0.636  15.018   4.590  1.00  0.00
N
ATOM   1085 1HZ  LYS    68      -1.556  15.433   4.538  1.00  0.00
H
ATOM   1086 2HZ  LYS    68      -0.613  14.215   3.971  1.00  0.00
H
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ATOM   1087 3HZ  LYS    68       0.070  15.678   4.277  1.00  0.00
H
ATOM   1088  N   LYS    69       5.365  11.204   8.389  1.00  0.00
N
ATOM   1089  H   LYS    69       5.537  12.153   8.702  1.00  0.00
H
ATOM   1090  CA  LYS    69       6.490  10.279   8.237  1.00  0.00
C
ATOM   1091  HA  LYS    69       6.453   9.850   7.233  1.00  0.00
H
ATOM   1092  C   LYS    69       6.371   9.126   9.237  1.00  0.00
C
ATOM   1093  O   LYS    69       6.617   7.975   8.900  1.00  0.00
O
ATOM   1094  CB  LYS    69       7.815  11.033   8.400  1.00  0.00
C
ATOM   1095 1HB  LYS    69       7.789  11.919   7.766  1.00  0.00
H
ATOM   1096 2HB  LYS    69       7.928  11.348   9.435  1.00  0.00
H
ATOM   1097  CG  LYS    69       9.015  10.208   8.013  1.00  0.00
C
ATOM   1098 1HG  LYS    69       9.054   9.326   8.650  1.00  0.00
H
ATOM   1099 2HG  LYS    69       8.893   9.897   6.977  1.00  0.00
H
ATOM   1100  CD  LYS    69      10.316  10.971   8.152  1.00  0.00
C
ATOM   1101 1HD  LYS    69      10.288  11.843   7.499  1.00  0.00
H
ATOM   1102 2HD  LYS    69      10.425  11.302   9.185  1.00  0.00
H
ATOM   1103  CE  LYS    69      11.510  10.093   7.780  1.00  0.00
C
ATOM   1104 1HE  LYS    69      12.430  10.642   7.987  1.00  0.00
H
ATOM   1105 2HE  LYS    69      11.502   9.201   8.408  1.00  0.00
H
ATOM   1106  NZ  LYS    69      11.516   9.676   6.341  1.00  0.00
N
ATOM   1107 1HZ  LYS    69      12.410   9.252   6.111  1.00  0.00
H
ATOM   1108 2HZ  LYS    69      11.391  10.486   5.745  1.00  0.00
H
ATOM   1109 3HZ  LYS    69      10.771   9.018   6.153  1.00  0.00
H
ATOM   1110  N   LYS    70       5.918   9.399  10.453  1.00  0.00
N
ATOM   1111  H   LYS    70       5.741  10.363  10.723  1.00  0.00
H
ATOM   1112  CA  LYS    70       5.660   8.314  11.405  1.00  0.00
C
ATOM   1113  HA  LYS    70       6.530   7.656  11.398  1.00  0.00
H
ATOM   1114  C   LYS    70       4.466   7.459  10.978  1.00  0.00
C
ATOM   1115  O   LYS    70       4.518   6.236  11.086  1.00  0.00
O
ATOM   1116  CB  LYS    70       5.471   8.856  12.829  1.00  0.00
C
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ATOM   1117 1HB  LYS    70       6.363   9.418  13.104  1.00  0.00
H
ATOM   1118 2HB  LYS    70       4.621   9.537  12.834  1.00  0.00
H
ATOM   1119  CG  LYS    70       5.217   7.772  13.887  1.00  0.00
C
ATOM   1120 1HG  LYS    70       5.008   8.251  14.842  1.00  0.00
H
ATOM   1121 2HG  LYS    70       4.336   7.202  13.596  1.00  0.00
H
ATOM   1122  CD  LYS    70       6.374   6.799  14.067  1.00  0.00
C
ATOM   1123 1HD  LYS    70       6.676   6.395  13.103  1.00  0.00
H
ATOM   1124 2HD  LYS    70       7.221   7.312  14.518  1.00  0.00
H
ATOM   1125  CE  LYS    70       5.942   5.638  14.939  1.00  0.00
C
ATOM   1126 1HE  LYS    70       5.578   6.004  15.901  1.00  0.00
H
ATOM   1127 2HE  LYS    70       5.130   5.110  14.432  1.00  0.00
H
ATOM   1128  NZ  LYS    70       7.075   4.686  15.153  1.00  0.00
N
ATOM   1129 1HZ  LYS    70       6.703   3.781  15.419  1.00  0.00
H
ATOM   1130 2HZ  LYS    70       7.677   5.028  15.893  1.00  0.00
H
ATOM   1131 3HZ  LYS    70       7.613   4.592  14.296  1.00  0.00
H
ATOM   1132   N  ARG    71       3.427   8.058  10.410  1.00  0.00
N
ATOM   1133   H  ARG    71       3.387   9.072  10.390  1.00  0.00
H
ATOM   1134  CA  ARG    71       2.331   7.266   9.835  1.00  0.00
C
ATOM   1135  HA  ARG    71       1.922   6.613  10.607  1.00  0.00
H
ATOM   1136   C  ARG    71       2.860   6.383   8.719  1.00  0.00
C
ATOM   1137   O  ARG    71       2.491   5.226   8.630  1.00  0.00
O
ATOM   1138  CB  ARG    71       1.212   8.145   9.268  1.00  0.00
C
ATOM   1139 1HB  ARG    71       1.645   8.830   8.543  1.00  0.00
H
ATOM   1140 2HB  ARG    71       0.504   7.506   8.740  1.00  0.00
H
ATOM   1141  CG  ARG    71       0.439   8.955  10.292  1.00  0.00
C
ATOM   1142 1HG  ARG    71      -0.157   8.285  10.911  1.00  0.00
H
ATOM   1143 2HG  ARG    71       1.131   9.505  10.926  1.00  0.00
H
ATOM   1144  CD  ARG    71      -0.465   9.946   9.578  1.00  0.00
C
ATOM   1145 1HD  ARG    71       0.144  10.559   8.914  1.00  0.00
H
ATOM   1146 2HD  ARG    71      -1.196   9.403   8.976  1.00  0.00
H
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ATOM   1147  NE  ARG    71      -1.165  10.821  10.527  1.00  0.00
N
ATOM   1148  HE  ARG    71      -1.158  10.533  11.496  1.00  0.00
H
ATOM   1149  CZ  ARG    71      -1.831  11.928  10.231  1.00  0.00
C
ATOM   1150  NH1 ARG    71      -1.991  12.378   9.015  1.00  0.00
N
ATOM   1151 1HH1 ARG    71      -1.628  11.843   8.230  1.00  0.00
H
ATOM   1152 2HH1 ARG    71      -2.481  13.251   8.852  1.00  0.00
H
ATOM   1153  NH2 ARG    71      -2.387  12.593  11.201  1.00  0.00
N
ATOM   1154 1HH2 ARG    71      -2.315  12.265  12.149  1.00  0.00
H
ATOM   1155 2HH2 ARG    71      -2.929  13.420  10.998  1.00  0.00
H
ATOM   1156  N   ASP    72       3.759   6.896   7.893  1.00  0.00
N
ATOM   1157  H   ASP    72       4.034   7.867   8.000  1.00  0.00
H
ATOM   1158  CA  ASP    72       4.343   6.112   6.806  1.00  0.00
C
ATOM   1159  HA  ASP    72       3.543   5.727   6.176  1.00  0.00
H
ATOM   1160  C   ASP    72       5.118   4.924   7.344  1.00  0.00
C
ATOM   1161  O   ASP    72       5.098   3.865   6.739  1.00  0.00
O
ATOM   1162  CB  ASP    72       5.290   6.939   5.934  1.00  0.00
C
ATOM   1163 1HB  ASP    72       5.994   7.472   6.564  1.00  0.00
H
ATOM   1164 2HB  ASP    72       5.848   6.258   5.292  1.00  0.00
H
ATOM   1165  CG  ASP    72       4.568   7.923   5.055  1.00  0.00
C
ATOM   1166  OD1 ASP    72       3.510   7.565   4.493  1.00  0.00
O
ATOM   1167  OD2 ASP    72       5.049   9.062   4.885  1.00  0.00
O
ATOM   1168  N   GLU    73       5.755   5.058   8.496  1.00  0.00
N
ATOM   1169  H   GLU    73       5.776   5.960   8.960  1.00  0.00
H
ATOM   1170  CA  GLU    73       6.451   3.927   9.108  1.00  0.00
C
ATOM   1171  HA  GLU    73       7.180   3.543   8.399  1.00  0.00
H
ATOM   1172  C   GLU    73       5.493   2.783   9.433  1.00  0.00
C
ATOM   1173  O   GLU    73       5.807   1.600   9.265  1.00  0.00
O
ATOM   1174  CB  GLU    73       7.195   4.392  10.362  1.00  0.00
C
ATOM   1175 1HB  GLU    73       7.766   5.287  10.115  1.00  0.00
H
ATOM   1176 2HB  GLU    73       6.479   4.632  11.145  1.00  0.00
H
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ATOM   1177  CG  GLU    73       8.140   3.338  10.866  1.00  0.00
C
ATOM   1178 1HG  GLU    73       7.566   2.458  11.146  1.00  0.00
H
ATOM   1179 2HG  GLU    73       8.808   3.068  10.051  1.00  0.00
H
ATOM   1180  CD  GLU    73       8.969   3.759  12.058  1.00  0.00
C
ATOM   1181  OE1 GLU    73       8.744   4.811  12.692  1.00  0.00
O
ATOM   1182  OE2 GLU    73       9.872   2.964  12.407  1.00  0.00
O
ATOM   1183  N   ILE    74       4.293   3.131   9.862  1.00  0.00
N
ATOM   1184  H   ILE    74       4.080   4.116   9.986  1.00  0.00
H
ATOM   1185  CA  ILE    74       3.267   2.139  10.175  1.00  0.00
C
ATOM   1186  HA  ILE    74       3.720   1.324  10.740  1.00  0.00
H
ATOM   1187  C   ILE    74       2.703   1.584   8.859  1.00  0.00
C
ATOM   1188  O   ILE    74       2.437   0.381   8.724  1.00  0.00
O
ATOM   1189  CB  ILE    74       2.143   2.783  11.044  1.00  0.00
C
ATOM   1190  HB  ILE    74       1.680   3.586  10.472  1.00  0.00
H
ATOM   1191  CG1 ILE    74       2.739   3.386  12.336  1.00  0.00
C
ATOM   1192 1HG1 ILE    74       3.003   2.572  13.011  1.00  0.00
H
ATOM   1193 2HG1 ILE    74       3.652   3.929  12.104  1.00  0.00
H
ATOM   1194  CG2 ILE    74       1.064   1.741  11.406  1.00  0.00
C
ATOM   1195 1HG2 ILE    74       0.280   2.209  12.001  1.00  0.00
H
ATOM   1196 2HG2 ILE    74       1.504   0.919  11.973  1.00  0.00
H
ATOM   1197 3HG2 ILE    74       0.604   1.347  10.501  1.00  0.00
H
ATOM   1198  CD1 ILE    74       1.824   4.364  13.077  1.00  0.00
C
ATOM   1199 1HD1 ILE    74       2.357   4.761  13.940  1.00  0.00
H
ATOM   1200 2HD1 ILE    74       0.920   3.862  13.420  1.00  0.00
H
ATOM   1201 3HD1 ILE    74       1.554   5.191  12.419  1.00  0.00
H
ATOM   1202  N   LEU    75       2.531   2.448   7.868  1.00  0.00
N
ATOM   1203  H   LEU    75       2.787   3.421   8.021  1.00  0.00
H
ATOM   1204  CA  LEU    75       1.930   2.079   6.583  1.00  0.00
C
ATOM   1205  HA  LEU    75       1.073   1.443   6.784  1.00  0.00
H
ATOM   1206  C   LEU    75       2.820   1.323   5.591  1.00  0.00
C
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ATOM   1207  O   LEU    75       2.291   0.623   4.724  1.00  0.00
O
ATOM   1208  CB  LEU    75       1.418   3.347   5.883  1.00  0.00
C
ATOM   1209 1HB  LEU    75       2.264   4.024   5.779  1.00  0.00
H
ATOM   1210 2HB  LEU    75       1.094   3.075   4.879  1.00  0.00
H
ATOM   1211  CG  LEU    75       0.264   4.119   6.548  1.00  0.00
C
ATOM   1212  HG  LEU    75       0.490   4.258   7.601  1.00  0.00
H
ATOM   1213  CD1 LEU    75       0.111   5.496   5.916  1.00  0.00
C
ATOM   1214 1HD1 LEU    75      -0.684   6.047   6.421  1.00  0.00
H
ATOM   1215 2HD1 LEU    75      -0.139   5.402   4.859  1.00  0.00
H
ATOM   1216 3HD1 LEU    75       1.039   6.059   6.020  1.00  0.00
H
ATOM   1217  CD2 LEU    75      -1.057   3.374   6.464  1.00  0.00
C
ATOM   1218 1HD2 LEU    75      -1.840   3.962   6.946  1.00  0.00
H
ATOM   1219 2HD2 LEU    75      -0.980   2.412   6.965  1.00  0.00
H
ATOM   1220 3HD2 LEU    75      -1.333   3.220   5.420  1.00  0.00
H
ATOM   1221  N   LYS    76       4.138   1.472   5.659  1.00  0.00
N
ATOM   1222  H   LYS    76       4.534   2.043   6.405  1.00  0.00
H
ATOM   1223  CA  LYS    76       5.057   0.960   4.629  1.00  0.00
C
ATOM   1224  HA  LYS    76       4.500   0.373   3.900  1.00  0.00
H
ATOM   1225  C   LYS    76       6.168   0.081   5.190  1.00  0.00
C
ATOM   1226  O   LYS    76       6.615   0.254   6.315  1.00  0.00
O
ATOM   1227  CB  LYS    76       5.704   2.151   3.907  1.00  0.00
C
ATOM   1228 1HB  LYS    76       6.216   2.758   4.652  1.00  0.00
H
ATOM   1229 2HB  LYS    76       6.447   1.779   3.202  1.00  0.00
H
ATOM   1230  CG  LYS    76       4.721   3.041   3.147  1.00  0.00
C
ATOM   1231 1HG  LYS    76       4.295   2.470   2.322  1.00  0.00
H
ATOM   1232 2HG  LYS    76       3.921   3.357   3.813  1.00  0.00
H
ATOM   1233  CD  LYS    76       5.416   4.283   2.603  1.00  0.00
C
ATOM   1234 1HD  LYS    76       5.776   4.882   3.439  1.00  0.00
H
ATOM   1235 2HD  LYS    76       6.271   3.976   2.001  1.00  0.00
H
ATOM   1236  CE  LYS    76       4.489   5.132   1.731  1.00  0.00
C
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ATOM   1237 1HE  LYS    76       5.057   5.987   1.355  1.00  0.00
H
ATOM   1238 2HE  LYS    76       4.184   4.529   0.874  1.00  0.00
H
ATOM   1239  NZ  LYS    76       3.249   5.635   2.415  1.00  0.00
N
ATOM   1240 1HZ  LYS    76       2.695   6.180   1.765  1.00  0.00
H
ATOM   1241 2HZ  LYS    76       3.489   6.231   3.203  1.00  0.00
H
ATOM   1242 3HZ  LYS    76       2.691   4.859   2.740  1.00  0.00
H
ATOM   1243  N   GLU    77       6.627  -0.853   4.371  1.00  0.00
N
ATOM   1244  H   GLU    77       6.201  -0.945   3.451  1.00  0.00
H
ATOM   1245  CA  GLU    77       7.670  -1.822   4.730  1.00  0.00
C
ATOM   1246  HA  GLU    77       7.482  -2.153   5.751  1.00  0.00
H
ATOM   1247  C   GLU    77       9.112  -1.314   4.671  1.00  0.00
C
ATOM   1248  O   GLU    77      10.045  -2.020   5.056  1.00  0.00
O
ATOM   1249  CB  GLU    77       7.561  -3.052   3.810  1.00  0.00
C
ATOM   1250 1HB  GLU    77       8.164  -3.847   4.248  1.00  0.00
H
ATOM   1251 2HB  GLU    77       6.529  -3.391   3.807  1.00  0.00
H
ATOM   1252  CG  GLU    77       8.013  -2.886   2.348  1.00  0.00
C
ATOM   1253 1HG  GLU    77       9.046  -2.542   2.329  1.00  0.00
H
ATOM   1254 2HG  GLU    77       7.981  -3.865   1.876  1.00  0.00
H
ATOM   1255  CD  GLU    77       7.169  -1.931   1.519  1.00  0.00
C
ATOM   1256  OE1 GLU    77       5.963  -1.747   1.793  1.00  0.00
O
ATOM   1257  OE2 GLU    77       7.720  -1.309   0.589  1.00  0.00
O
ATOM   1258  N   ARG    78       9.320  -0.120   4.139  1.00  0.00
N
ATOM   1259  H   ARG    78       8.529   0.424   3.834  1.00  0.00
H
ATOM   1260  CA  ARG    78      10.663   0.460   4.035  1.00  0.00
C
ATOM   1261  HA  ARG    78      11.399  -0.308   3.802  1.00  0.00
H
ATOM   1262  C   ARG    78      11.015   1.075   5.382  1.00  0.00
C
ATOM   1263  O   ARG    78      10.138   1.249   6.222  1.00  0.00
O
ATOM   1264  CB  ARG    78      10.683   1.522   2.934  1.00  0.00
C
ATOM   1265 1HB  ARG    78       9.887   2.235   3.120  1.00  0.00
H
ATOM   1266 2HB  ARG    78      11.636   2.050   2.958  1.00  0.00
H
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ATOM   1267  CG  ARG    78      10.489   0.950   1.547  1.00  0.00
C
ATOM   1268 1HG  ARG    78      11.323   0.288   1.314  1.00  0.00
H
ATOM   1269 2HG  ARG    78       9.560   0.384   1.508  1.00  0.00
H
ATOM   1270  CD  ARG    78      10.425   2.060   0.523  1.00  0.00
C
ATOM   1271 1HD  ARG    78       9.584   2.716   0.751  1.00  0.00
H
ATOM   1272 2HD  ARG    78      11.349   2.634   0.566  1.00  0.00
H
ATOM   1273  NE  ARG    78      10.264   1.508  -0.827  1.00  0.00
N
ATOM   1274  HE  ARG    78      10.200   0.501  -0.904  1.00  0.00
H
ATOM   1275  CZ  ARG    78      10.204   2.201  -1.953  1.00  0.00
C
ATOM   1276  NH1 ARG    78      10.248   3.505  -2.020  1.00  0.00
N
ATOM   1277 1HH1 ARG    78      10.372   4.051  -1.184  1.00  0.00
H
ATOM   1278 2HH1 ARG    78      10.161   3.962  -2.913  1.00  0.00
H
ATOM   1279  NH2 ARG    78      10.082   1.558  -3.073  1.00  0.00
N
ATOM   1280 1HH2 ARG    78      10.056   0.548  -3.088  1.00  0.00
H
ATOM   1281 2HH2 ARG    78      10.002   2.084  -3.929  1.00  0.00
H
ATOM   1282  N   ASN    79      12.271   1.428   5.596  1.00  0.00
N
ATOM   1283  H   ASN    79      12.979   1.239   4.894  1.00  0.00
H
ATOM   1284  CA  ASN    79      12.630   2.168   6.805  1.00  0.00
C
ATOM   1285  HA  ASN    79      12.104   1.743   7.660  1.00  0.00
H
ATOM   1286  C   ASN    79      12.174   3.611   6.618  1.00  0.00
C
ATOM   1287  O   ASN    79      12.489   4.231   5.595  1.00  0.00
O
ATOM   1288  CB  ASN    79      14.140   2.136   7.062  1.00  0.00
C
ATOM   1289 1HB  ASN    79      14.671   2.411   6.152  1.00  0.00
H
ATOM   1290 2HB  ASN    79      14.379   2.866   7.835  1.00  0.00
H
ATOM   1291  CG  ASN    79      14.619   0.790   7.532  1.00  0.00
C
ATOM   1292  OD1 ASN    79      13.848  -0.015   8.042  1.00  0.00
O
ATOM   1293  ND2 ASN    79      15.881   0.530   7.379  1.00  0.00
N
ATOM   1294 1HD2 ASN    79      16.237  -0.354   7.710  1.00  0.00
H
ATOM   1295 2HD2 ASN    79      16.490   1.200   6.933  1.00  0.00
H
ATOM   1296  N   ILE    80      11.427   4.136   7.580  1.00  0.00
N
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ATOM   1297  H   ILE    80      11.184   3.565   8.387  1.00  0.00
H
ATOM   1298  CA  ILE    80      10.906   5.506   7.516  1.00  0.00
C
ATOM   1299  HA  ILE    80      11.486   6.054   6.774  1.00  0.00
H
ATOM   1300  C   ILE    80      11.107   6.210   8.869  1.00  0.00
C
ATOM   1301  O   ILE    80      10.399   7.158   9.197  1.00  0.00
O
ATOM   1302  CB  ILE    80       9.379   5.614   7.110  1.00  0.00
C
ATOM   1303  HB  ILE    80       8.805   5.724   8.028  1.00  0.00
H
ATOM   1304  CG1 ILE    80       8.778   4.384   6.392  1.00  0.00
C
ATOM   1305 1HG1 ILE    80       9.038   3.483   6.943  1.00  0.00
H
ATOM   1306 2HG1 ILE    80       7.700   4.487   6.468  1.00  0.00
H
ATOM   1307  CG2 ILE    80       9.154   6.872   6.254  1.00  0.00
C
ATOM   1308 1HG2 ILE    80       8.114   6.935   5.942  1.00  0.00
H
ATOM   1309 2HG2 ILE    80       9.794   6.866   5.371  1.00  0.00
H
ATOM   1310 3HG2 ILE    80       9.376   7.743   6.855  1.00  0.00
H
ATOM   1311  CD1 ILE    80       9.055   4.169   4.916  1.00  0.00
C
ATOM   1312 1HD1 ILE    80      10.123   4.102   4.739  1.00  0.00
H
ATOM   1313 2HD1 ILE    80       8.630   4.980   4.323  1.00  0.00
H
ATOM   1314 3HD1 ILE    80       8.584   3.236   4.610  1.00  0.00
H
ATOM   1315  N   VAL    81      12.060   5.751   9.674  1.00  0.00
N
ATOM   1316  H   VAL    81      12.650   4.992   9.379  1.00  0.00
H
ATOM   1317  CA  VAL    81      12.280   6.354  10.997  1.00  0.00
C
ATOM   1318  HA  VAL    81      11.358   6.244  11.564  1.00  0.00
H
ATOM   1319  C   VAL    81      12.558   7.856  10.897  1.00  0.00
C
ATOM   1320  O   VAL    81      13.251   8.328   9.985  1.00  0.00
O
ATOM   1321  CB  VAL    81      13.426   5.679  11.820  1.00  0.00
C
ATOM   1322  HB  VAL    81      13.576   6.265  12.726  1.00  0.00
H
ATOM   1323  CG1 VAL    81      13.044   4.267  12.250  1.00  0.00
C
ATOM   1324 1HG1 VAL    81      13.788   3.889  12.951  1.00  0.00
H
ATOM   1325 2HG1 VAL    81      12.997   3.605  11.389  1.00  0.00
H
ATOM   1326 3HG1 VAL    81      12.076   4.285  12.753  1.00  0.00
H
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ATOM   1327  CG2 VAL    81      14.758   5.623  11.054  1.00  0.00
C
ATOM   1328 1HG2 VAL    81      15.520   5.156  11.679  1.00  0.00
H
ATOM   1329 2HG2 VAL    81      15.088   6.633  10.817  1.00  0.00
H
ATOM   1330 3HG2 VAL    81      14.655   5.049  10.133  1.00  0.00
H
ATOM   1331  N   ILE    82      11.968   8.620  11.806  1.00  0.00
N
ATOM   1332  H   ILE    82      11.393   8.190  12.525  1.00  0.00
H
ATOM   1333  CA  ILE    82      12.103  10.075  11.771  1.00  0.00
C
ATOM   1334  HA  ILE    82      11.841  10.398  10.767  1.00  0.00
H
ATOM   1335  C   ILE    82      13.552  10.503  12.041  1.00  0.00
C
ATOM   1336  O   ILE    82      14.308   9.781  12.704  1.00  0.00
O
ATOM   1337  CB  ILE    82      11.128  10.779  12.771  1.00  0.00
C
ATOM   1338  HB  ILE    82      11.213  11.852  12.609  1.00  0.00
H
ATOM   1339  CG1 ILE    82      11.515  10.501  14.238  1.00  0.00
C
ATOM   1340 1HG1 ILE    82      11.217   9.486  14.497  1.00  0.00
H
ATOM   1341 2HG1 ILE    82      12.593  10.567  14.348  1.00  0.00
H
ATOM   1342  CG2 ILE    82       9.659  10.368  12.465  1.00  0.00
C
ATOM   1343 1HG2 ILE    82       8.971  10.969  13.058  1.00  0.00
H
ATOM   1344 2HG2 ILE    82       9.497   9.314  12.698  1.00  0.00
H
ATOM   1345 3HG2 ILE    82       9.437  10.532  11.411  1.00  0.00
H
ATOM   1346  CD1 ILE    82      10.919  11.472  15.250  1.00  0.00
C
ATOM   1347 1HD1 ILE    82      11.239  11.189  16.253  1.00  0.00
H
ATOM   1348 2HD1 ILE    82       9.835  11.436  15.202  1.00  0.00
H
ATOM   1349 3HD1 ILE    82      11.262  12.484  15.043  1.00  0.00
H
ATOM   1350  N   PRO    83      13.966  11.680  11.537  1.00  0.00
N
ATOM   1351  CA  PRO    83      15.335  12.070  11.886  1.00  0.00
C
ATOM   1352  HA  PRO    83      16.029  11.248  11.718  1.00  0.00
H
ATOM   1353  C   PRO    83      15.446  12.563  13.330  1.00  0.00
C
ATOM   1354  O   PRO    83      14.444  12.902  13.967  1.00  0.00
O
ATOM   1355  CB  PRO    83      15.614  13.193  10.893  1.00  0.00
C
ATOM   1356 1HB  PRO    83      16.356  13.882  11.283  1.00  0.00
H
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ATOM   1357 2HB  PRO    83      15.944  12.775   9.945  1.00  0.00
H
ATOM   1358  CG  PRO    83      14.313  13.853  10.731  1.00  0.00
C
ATOM   1359 1HG  PRO    83      14.112  14.491  11.591  1.00  0.00
H
ATOM   1360 2HG  PRO    83      14.281  14.436   9.812  1.00  0.00
H
ATOM   1361  CD  PRO    83      13.334  12.702  10.680  1.00  0.00
C
ATOM   1362 1HD  PRO    83      12.364  13.008  11.071  1.00  0.00
H
ATOM   1363 2HD  PRO    83      13.241  12.322   9.662  1.00  0.00
H
ATOM   1364  N   ASP    84      16.670  12.623  13.835  1.00  0.00
N
ATOM   1365  H   ASP    84      17.452  12.314  13.265  1.00  0.00
H
ATOM   1366  CA  ASP    84      16.984  13.086  15.194  1.00  0.00
C
ATOM   1367  HA  ASP    84      16.058  13.171  15.761  1.00  0.00
H
ATOM   1368  C   ASP    84      17.647  14.460  15.181  1.00  0.00
C
ATOM   1369  O   ASP    84      18.100  14.983  16.205  1.00  0.00
O
ATOM   1370  CB  ASP    84      17.906  12.089  15.909  1.00  0.00
C
ATOM   1371 1HB  ASP    84      17.997  12.385  16.954  1.00  0.00
H
ATOM   1372 2HB  ASP    84      17.453  11.098  15.869  1.00  0.00
H
ATOM   1373  CG  ASP    84      19.309  12.021  15.304  1.00  0.00
C
ATOM   1374  OD1 ASP    84      19.536  12.404  14.135  1.00  0.00
O
ATOM   1375  OD2 ASP    84      20.217  11.513  15.997  1.00  0.00
O
ATOM   1376  N   SER    85      17.692  15.053  14.000  1.00  0.00
N
ATOM   1377  H   SER    85      17.298  14.590  13.194  1.00  0.00
H
ATOM   1378  CA  SER    85      18.255  16.378  13.806  1.00  0.00
C
ATOM   1379  HA  SER    85      18.111  16.980  14.702  1.00  0.00
H
ATOM   1380  C   SER    85      17.460  16.977  12.662  1.00  0.00
C
ATOM   1381  O   SER    85      16.885  16.245  11.857  1.00  0.00
O
ATOM   1382  CB  SER    85      19.744  16.307  13.466  1.00  0.00
C
ATOM   1383 1HB  SER    85      20.144  17.318  13.380  1.00  0.00
H
ATOM   1384 2HB  SER    85      20.266  15.786  14.269  1.00  0.00
H
ATOM   1385  OG  SER    85      19.952  15.613  12.245  1.00  0.00
O
ATOM   1386  HG  SER    85      19.963  16.262  11.526  1.00  0.00
H
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ATOM   1387  N   LEU    86      17.401  18.294  12.609  1.00  0.00
N
ATOM   1388  H   LEU    86      17.923  18.842  13.289  1.00  0.00
H
ATOM   1389  CA  LEU    86      16.575  19.004  11.644  1.00  0.00
C
ATOM   1390  HA  LEU    86      15.583  18.555  11.634  1.00  0.00
H
ATOM   1391  C   LEU    86      17.171  18.978  10.233  1.00  0.00
C
ATOM   1392  O   LEU    86      18.281  19.494  10.035  1.00  0.00
O
ATOM   1393  CB  LEU    86      16.474  20.450  12.131  1.00  0.00
C
ATOM   1394 1HB  LEU    86      16.064  20.437  13.140  1.00  0.00
H
ATOM   1395 2HB  LEU    86      17.484  20.849  12.195  1.00  0.00
H
ATOM   1396  CG  LEU    86      15.648  21.434  11.304  1.00  0.00
C
ATOM   1397  HG  LEU    86      16.038  21.471  10.289  1.00  0.00
H
ATOM   1398  CD1 LEU    86      14.193  21.034  11.262  1.00  0.00
C
ATOM   1399 1HD1 LEU    86      13.619  21.805  10.746  1.00  0.00
H
ATOM   1400 2HD1 LEU    86      13.808  20.919  12.275  1.00  0.00
H
ATOM   1401 3HD1 LEU    86      14.075  20.098  10.723  1.00  0.00
H
ATOM   1402  CD2 LEU    86      15.780  22.805  11.915  1.00  0.00
C
ATOM   1403 1HD2 LEU    86      15.217  23.510  11.308  1.00  0.00
H
ATOM   1404 2HD2 LEU    86      16.826  23.114  11.920  1.00  0.00
H
ATOM   1405 3HD2 LEU    86      15.389  22.813  12.933  1.00  0.00
H
ATOM   1406  N   PRO    87      16.490  18.363   9.248  1.00  0.00
N
ATOM   1407  CA  PRO    87      17.085  18.449   7.908  1.00  0.00
C
ATOM   1408  HA  PRO    87      18.140  18.182   7.930  1.00  0.00
H
ATOM   1409  C   PRO    87      16.914  19.840   7.302  1.00  0.00
C
ATOM   1410  O   PRO    87      16.072  20.619   7.751  1.00  0.00
O
ATOM   1411  CB  PRO    87      16.304  17.396   7.124  1.00  0.00
C
ATOM   1412 1HB  PRO    87      16.250  17.649   6.065  1.00  0.00
H
ATOM   1413 2HB  PRO    87      16.765  16.420   7.261  1.00  0.00
H
ATOM   1414  CG  PRO    87      14.965  17.423   7.746  1.00  0.00
C
ATOM   1415 1HG  PRO    87      14.405  18.275   7.369  1.00  0.00
H
ATOM   1416 2HG  PRO    87      14.423  16.498   7.554  1.00  0.00
H
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ATOM   1417  CD  PRO    87      15.230  17.594   9.217  1.00  0.00
C
ATOM   1418 1HD  PRO    87      14.415  18.144   9.689  1.00  0.00
H
ATOM   1419 2HD  PRO    87      15.369  16.623   9.693  1.00  0.00
H
ATOM   1420  N   LYS    88      17.715  20.157   6.293  1.00  0.00
N
ATOM   1421  H   LYS    88      18.394  19.471   5.972  1.00  0.00
H
ATOM   1422  CA  LYS    88      17.718  21.490   5.673  1.00  0.00
C
ATOM   1423  HA  LYS    88      17.358  22.197   6.421  1.00  0.00
H
ATOM   1424  C   LYS    88      16.812  21.707   4.450  1.00  0.00
C
ATOM   1425  O   LYS    88      17.102  22.555   3.611  1.00  0.00
O
ATOM   1426  CB  LYS    88      19.168  21.871   5.323  1.00  0.00
C
ATOM   1427 1HB  LYS    88      19.554  21.139   4.614  1.00  0.00
H
ATOM   1428 2HB  LYS    88      19.176  22.847   4.842  1.00  0.00
H
ATOM   1429  CG  LYS    88      20.132  21.957   6.510  1.00  0.00
C
ATOM   1430 1HG  LYS    88      20.143  21.011   7.050  1.00  0.00
H
ATOM   1431 2HG  LYS    88      21.133  22.150   6.125  1.00  0.00
H
ATOM   1432  CD  LYS    88      19.755  23.085   7.469  1.00  0.00
C
ATOM   1433 1HD  LYS    88      19.679  24.016   6.907  1.00  0.00
H
ATOM   1434 2HD  LYS    88      18.791  22.866   7.927  1.00  0.00
H
ATOM   1435  CE  LYS    88      20.790  23.250   8.571  1.00  0.00
C
ATOM   1436 1HE  LYS    88      20.875  22.309   9.117  1.00  0.00
H
ATOM   1437 2HE  LYS    88      21.760  23.483   8.127  1.00  0.00
H
ATOM   1438  NZ  LYS    88      20.400  24.341   9.523  1.00  0.00
N
ATOM   1439 1HZ  LYS    88      20.996  24.315  10.343  1.00  0.00
H
ATOM   1440 2HZ  LYS    88      19.434  24.221   9.808  1.00  0.00
H
ATOM   1441 3HZ  LYS    88      20.496  25.244   9.071  1.00  0.00
H
ATOM   1442  N   PRO    89      15.633  21.075   4.384  1.00  0.00
N
ATOM   1443  CA  PRO    89      15.115  20.016   3.513  1.00  0.00
C
ATOM   1444  HA  PRO    89      14.997  19.117   4.118  1.00  0.00
H
ATOM   1445  C   PRO    89      15.851  19.615   2.233  1.00  0.00
C
ATOM   1446  O   PRO    89      16.941  20.080   1.905  1.00  0.00
O
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ATOM   1447  CB  PRO    89      13.711  20.543   3.165  1.00  0.00
C
ATOM   1448 1HB  PRO    89      13.669  20.870   2.126  1.00  0.00
H
ATOM   1449 2HB  PRO    89      12.968  19.767   3.350  1.00  0.00
H
ATOM   1450  CG  PRO    89      13.467  21.735   4.079  1.00  0.00
C
ATOM   1451 1HG  PRO    89      13.615  22.658   3.517  1.00  0.00
H
ATOM   1452 2HG  PRO    89      12.464  21.704   4.504  1.00  0.00
H
ATOM   1453  CD  PRO    89      14.505  21.636   5.143  1.00  0.00
C
ATOM   1454 1HD  PRO    89      14.737  22.618   5.556  1.00  0.00
H
ATOM   1455 2HD  PRO    89      14.192  20.941   5.919  1.00  0.00
H
ATOM   1456  N   ILE    90      15.216  18.694   1.526  1.00  0.00
N
ATOM   1457  H   ILE    90      14.311  18.383   1.851  1.00  0.00
H
ATOM   1458  CA  ILE    90      15.742  18.062   0.318  1.00  0.00
C
ATOM   1459  HA  ILE    90      16.743  17.689   0.536  1.00  0.00
H
ATOM   1460  C   ILE    90      15.818  19.067  -0.854  1.00  0.00
C
ATOM   1461  O   ILE    90      14.865  19.811  -1.100  1.00  0.00
O
ATOM   1462  CB  ILE    90      14.825  16.836  -0.047  1.00  0.00
C
ATOM   1463  HB  ILE    90      13.860  17.220  -0.379  1.00  0.00
H
ATOM   1464  CG1 ILE    90      14.579  15.923   1.181  1.00  0.00
C
ATOM   1465 1HG1 ILE    90      15.523  15.455   1.462  1.00  0.00
H
ATOM   1466 2HG1 ILE    90      14.239  16.520   2.023  1.00  0.00
H
ATOM   1467  CG2 ILE    90      15.433  15.973  -1.171  1.00  0.00
C
ATOM   1468 1HG2 ILE    90      14.674  15.295  -1.562  1.00  0.00
H
ATOM   1469 2HG2 ILE    90      16.273  15.388  -0.791  1.00  0.00
H
ATOM   1470 3HG2 ILE    90      15.784  16.588  -1.987  1.00  0.00
H
ATOM   1471  CD1 ILE    90      13.523  14.818   0.982  1.00  0.00
C
ATOM   1472 1HD1 ILE    90      13.318  14.340   1.940  1.00  0.00
H
ATOM   1473 2HD1 ILE    90      13.886  14.064   0.284  1.00  0.00
H
ATOM   1474 3HD1 ILE    90      12.597  15.252   0.601  1.00  0.00
H
ATOM   1475  N   VAL    91      16.942  19.024  -1.569  1.00  0.00
N
ATOM   1476  H   VAL    91      17.624  18.354  -1.255  1.00  0.00
H
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ATOM   1477  CA  VAL    91      17.305  19.808  -2.781  1.00  0.00
C
ATOM   1478  HA  VAL    91      18.148  19.286  -3.201  1.00  0.00
H
ATOM   1479  C   VAL    91      17.863  21.214  -2.562  1.00  0.00
C
ATOM   1480  O   VAL    91      17.263  22.053  -1.891  1.00  0.00
O
ATOM   1481  CB  VAL    91      16.250  19.775  -3.947  1.00  0.00
C
ATOM   1482  HB  VAL    91      15.390  20.385  -3.676  1.00  0.00
H
ATOM   1483  CG1 VAL    91      16.856  20.318  -5.257  1.00  0.00
C
ATOM   1484 1HG1 VAL    91      16.130  20.224  -6.066  1.00  0.00
H
ATOM   1485 2HG1 VAL    91      17.759  19.767  -5.524  1.00  0.00
H
ATOM   1486 3HG1 VAL    91      17.091  21.377  -5.148  1.00  0.00
H
ATOM   1487  CG2 VAL    91      15.773  18.337  -4.232  1.00  0.00
C
ATOM   1488 1HG2 VAL    91      15.163  18.321  -5.136  1.00  0.00
H
ATOM   1489 2HG2 VAL    91      15.146  17.997  -3.413  1.00  0.00
H
ATOM   1490 3HG2 VAL    91      16.621  17.665  -4.361  1.00  0.00
H
ATOM   1491  N   TYR    92      19.049  21.436  -3.128  1.00  0.00
N
ATOM   1492  H   TYR    92      19.500  20.686  -3.642  1.00  0.00
H
ATOM   1493  CA  TYR    92      19.747  22.722  -3.060  1.00  0.00
C
ATOM   1494  HA  TYR    92      19.063  23.464  -2.650  1.00  0.00
H
ATOM   1495  C   TYR    92      20.249  23.302  -4.382  1.00  0.00
C
ATOM   1496  O   TYR    92      20.226  24.522  -4.556  1.00  0.00
O
ATOM   1497  CB  TYR    92      20.924  22.613  -2.094  1.00  0.00
C
ATOM   1498 1HB  TYR    92      21.291  21.587  -2.066  1.00  0.00
H
ATOM   1499 2HB  TYR    92      21.726  23.269  -2.434  1.00  0.00
H
ATOM   1500  CG  TYR    92      20.497  23.055  -0.721  1.00  0.00
C
ATOM   1501  CD1 TYR    92      19.897  22.155   0.179  1.00  0.00
C
ATOM   1502  HD1 TYR    92      19.827  21.107  -0.071  1.00  0.00
H
ATOM   1503  CD2 TYR    92      20.610  24.407  -0.348  1.00  0.00
C
ATOM   1504  HD2 TYR    92      21.083  25.111  -1.016  1.00  0.00
H
ATOM   1505  CE1 TYR    92      19.356  22.614   1.400  1.00  0.00
C
ATOM   1506  HE1 TYR    92      18.881  21.919   2.074  1.00  0.00
H
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ATOM   1507  CE2 TYR    92      20.077  24.869   0.875  1.00  0.00
C
ATOM   1508  HE2 TYR    92      20.154  25.910   1.146  1.00  0.00
H
ATOM   1509  CZ  TYR    92      19.428  23.976   1.723  1.00  0.00
C
ATOM   1510  OH  TYR    92      18.858  24.455   2.867  1.00  0.00
O
ATOM   1511  HH  TYR    92      18.311  23.781   3.290  1.00  0.00
H
ATOM   1512  N   SER    93      20.693  22.476  -5.319  1.00  0.00
N
ATOM   1513  H   SER    93      20.732  21.475  -5.159  1.00  0.00
H
ATOM   1514  CA  SER    93      21.117  22.974  -6.630  1.00  0.00
C
ATOM   1515  HA  SER    93      20.569  23.881  -6.881  1.00  0.00
H
ATOM   1516  C   SER    93      20.809  21.904  -7.656  1.00  0.00
C
ATOM   1517  O   SER    93      20.974  20.722  -7.360  1.00  0.00
O
ATOM   1518  CB  SER    93      22.620  23.264  -6.657  1.00  0.00
C
ATOM   1519 1HB  SER    93      22.852  24.027  -5.915  1.00  0.00
H
ATOM   1520 2HB  SER    93      23.167  22.354  -6.416  1.00  0.00
H
ATOM   1521  OG  SER    93      23.020  23.719  -7.938  1.00  0.00
O
ATOM   1522  HG  SER    93      23.954  23.976  -7.900  1.00  0.00
H
ATOM   1523  N   SER    94      20.357  22.287  -8.840  1.00  0.00
N
ATOM   1524  H   SER    94      20.180  23.267  -9.018  1.00  0.00
H
ATOM   1525  CA  SER    94      20.115  21.323  -9.905  1.00  0.00
C
ATOM   1526  HA  SER    94      20.842  20.517  -9.819  1.00  0.00
H
ATOM   1527  C   SER    94      20.226  21.941 -11.288  1.00  0.00
C
ATOM   1528  O   SER    94      19.729  23.042 -11.540  1.00  0.00
O
ATOM   1529  CB  SER    94      18.712  20.739  -9.766  1.00  0.00
C
ATOM   1530 1HB  SER    94      18.582  20.365  -8.750  1.00  0.00
H
ATOM   1531 2HB  SER    94      17.972  21.518  -9.953  1.00  0.00
H
ATOM   1532  OG  SER    94      18.525  19.670 -10.675  1.00  0.00
O
ATOM   1533  HG  SER    94      17.682  19.246 -10.452  1.00  0.00
H
ATOM   1534  N   ASN    95      20.840  21.202 -12.196  1.00  0.00
N
ATOM   1535  H   ASN    95      21.397  20.406 -11.884  1.00  0.00
H
ATOM   1536  CA  ASN    95      20.742  21.446 -13.632  1.00  0.00
C
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ATOM   1537  HA  ASN    95      20.096  22.298 -13.836  1.00  0.00
H
ATOM   1538  C   ASN    95      20.152  20.211 -14.300  1.00  0.00
C
ATOM   1539  O   ASN    95      20.046  20.131 -15.522  1.00  0.00
O
ATOM   1540  CB  ASN    95      22.129  21.702 -14.208  1.00  0.00
C
ATOM   1541 1HB  ASN    95      22.810  20.937 -13.838  1.00  0.00
H
ATOM   1542 2HB  ASN    95      22.081  21.640 -15.294  1.00  0.00
H
ATOM   1543  CG  ASN    95      22.669  23.049 -13.855  1.00  0.00
C
ATOM   1544  OD1 ASN    95      23.574  23.185 -13.042  1.00  0.00
O
ATOM   1545  ND2 ASN    95      22.137  24.061 -14.473  1.00  0.00
N
ATOM   1546 1HD2 ASN    95      22.452  24.996 -14.260  1.00  0.00
H
ATOM   1547 2HD2 ASN    95      21.417  23.898 -15.168  1.00  0.00
H
ATOM   1548  N   LEU    96      19.801  19.227 -13.488  1.00  0.00
N
ATOM   1549  H   LEU    96      19.855  19.354 -12.488  1.00  0.00
H
ATOM   1550  CA  LEU    96      19.256  17.975 -13.994  1.00  0.00
C
ATOM   1551  HA  LEU    96      19.696  17.752 -14.964  1.00  0.00
H
ATOM   1552  C   LEU    96      17.762  18.168 -14.174  1.00  0.00
C
ATOM   1553  O   LEU    96      17.131  18.895 -13.406  1.00  0.00
O
ATOM   1554  CB  LEU    96      19.565  16.832 -13.023  1.00  0.00
C
ATOM   1555 1HB  LEU    96      19.779  17.258 -12.044  1.00  0.00
H
ATOM   1556 2HB  LEU    96      18.700  16.174 -12.940  1.00  0.00
H
ATOM   1557  CG  LEU    96      20.773  16.012 -13.501  1.00  0.00
C
ATOM   1558  HG  LEU    96      21.521  16.709 -13.873  1.00  0.00
H
ATOM   1559  CD1 LEU    96      21.408  15.209 -12.389  1.00  0.00
C
ATOM   1560 1HD1 LEU    96      22.075  14.449 -12.796  1.00  0.00
H
ATOM   1561 2HD1 LEU    96      20.643  14.736 -11.778  1.00  0.00
H
ATOM   1562 3HD1 LEU    96      22.011  15.874 -11.778  1.00  0.00
H
ATOM   1563  CD2 LEU    96      20.402  15.057 -14.626  1.00  0.00
C
ATOM   1564 1HD2 LEU    96      21.308  14.667 -15.083  1.00  0.00
H
ATOM   1565 2HD2 LEU    96      19.835  15.570 -15.399  1.00  0.00
H
ATOM   1566 3HD2 LEU    96      19.808  14.233 -14.237  1.00  0.00
H
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ATOM   1567  N   SER    97      17.199  17.536 -15.192  1.00  0.00
N
ATOM   1568  H   SER    97      17.760  16.945 -15.795  1.00  0.00
H
ATOM   1569  CA  SER    97      15.778  17.677 -15.484  1.00  0.00
C
ATOM   1570  HA  SER    97      15.555  18.733 -15.637  1.00  0.00
H
ATOM   1571  C   SER    97      14.967  17.142 -14.303  1.00  0.00
C
ATOM   1572  O   SER    97      15.432  16.228 -13.608  1.00  0.00
O
ATOM   1573  CB  SER    97      15.450  16.895 -16.754  1.00  0.00
C
ATOM   1574 1HB  SER    97      14.424  17.102 -17.051  1.00  0.00
H
ATOM   1575 2HB  SER    97      16.119  17.216 -17.552  1.00  0.00
H
ATOM   1576  OG  SER    97      15.607  15.504 -16.537  1.00  0.00
O
ATOM   1577  HG  SER    97      15.655  15.063 -17.400  1.00  0.00
H
ATOM   1578  N   PRO    98      13.771  17.697 -14.030  1.00  0.00
N
ATOM   1579  CA  PRO    98      13.052  17.179 -12.858  1.00  0.00
C
ATOM   1580  HA  PRO    98      13.626  17.402 -11.961  1.00  0.00
H
ATOM   1581  C   PRO    98      12.734  15.688 -12.870  1.00  0.00
C
ATOM   1582  O   PRO    98      12.711  15.077 -11.811  1.00  0.00
O
ATOM   1583  CB  PRO    98      11.760  18.000 -12.850  1.00  0.00
C
ATOM   1584 1HB  PRO    98      10.976  17.473 -13.395  1.00  0.00
H
ATOM   1585 2HB  PRO    98      11.441  18.208 -11.829  1.00  0.00
H
ATOM   1586  CG  PRO    98      12.124  19.252 -13.543  1.00  0.00
C
ATOM   1587 1HG  PRO    98      11.240  19.757 -13.929  1.00  0.00
H
ATOM   1588 2HG  PRO    98      12.676  19.905 -12.865  1.00  0.00
H
ATOM   1589  CD  PRO    98      13.013  18.796 -14.656  1.00  0.00
C
ATOM   1590 1HD  PRO    98      12.419  18.425 -15.490  1.00  0.00
H
ATOM   1591 2HD  PRO    98      13.672  19.603 -14.974  1.00  0.00
H
ATOM   1592  N   GLU    99      12.531  15.050 -14.014  1.00  0.00
N
ATOM   1593  H   GLU    99      12.483  15.555 -14.899  1.00  0.00
H
ATOM   1594  CA  GLU    99      12.362  13.597 -13.996  1.00  0.00
C
ATOM   1595  HA  GLU    99      11.625  13.342 -13.234  1.00  0.00
H
ATOM   1596  C   GLU    99      13.650  12.874 -13.621  1.00  0.00
C
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ATOM   1597  O   GLU    99      13.615  11.953 -12.812  1.00  0.00
O
ATOM   1598  CB  GLU    99      11.869  13.068 -15.340  1.00  0.00
C
ATOM   1599 1HB  GLU    99      12.532  13.427 -16.125  1.00  0.00
H
ATOM   1600 2HB  GLU    99      11.917  11.980 -15.316  1.00  0.00
H
ATOM   1601  CG  GLU    99      10.445  13.477 -15.668  1.00  0.00
C
ATOM   1602 1HG  GLU    99      10.403  14.558 -15.782  1.00  0.00
H
ATOM   1603 2HG  GLU    99      10.151  13.016 -16.612  1.00  0.00
H
ATOM   1604  CD  GLU    99       9.470  13.066 -14.582  1.00  0.00
C
ATOM   1605  OE1 GLU    99       9.399  11.861 -14.246  1.00  0.00
O
ATOM   1606  OE2 GLU    99       8.746  13.933 -14.051  1.00  0.00
O
ATOM   1607  N   MET   100      14.799  13.286 -14.142  1.00  0.00
N
ATOM   1608  H   MET   100      14.825  14.075 -14.779  1.00  0.00
H
ATOM   1609  CA  MET   100      16.045  12.609 -13.776  1.00  0.00
C
ATOM   1610  HA  MET   100      15.915  11.534 -13.894  1.00  0.00
H
ATOM   1611  C   MET   100      16.353  12.886 -12.312  1.00  0.00
C
ATOM   1612  O   MET   100      16.800  12.003 -11.595  1.00  0.00
O
ATOM   1613  CB  MET   100      17.215  13.058 -14.649  1.00  0.00
C
ATOM   1614 1HB  MET   100      17.281  14.145 -14.611  1.00  0.00
H
ATOM   1615 2HB  MET   100      18.132  12.636 -14.240  1.00  0.00
H
ATOM   1616  CG  MET   100      17.090  12.620 -16.097  1.00  0.00
C
ATOM   1617 1HG  MET   100      17.087  11.532 -16.146  1.00  0.00
H
ATOM   1618 2HG  MET   100      16.142  12.987 -16.488  1.00  0.00
H
ATOM   1619  SD  MET   100      18.414  13.262 -17.140  1.00  0.00
S
ATOM   1620  CE  MET   100      19.782  12.149 -16.819  1.00  0.00
C
ATOM   1621 1HE  MET   100      20.663  12.492 -17.361  1.00  0.00
H
ATOM   1622 2HE  MET   100      19.521  11.149 -17.163  1.00  0.00
H
ATOM   1623 3HE  MET   100      19.999  12.121 -15.751  1.00  0.00
H
ATOM   1624  N   GLN   101      16.034  14.082 -11.842  1.00  0.00
N
ATOM   1625  H   GLN   101      15.677  14.788 -12.485  1.00  0.00
H
ATOM   1626  CA  GLN   101      16.171  14.426 -10.430  1.00  0.00
C
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ATOM   1627  HA  GLN   101      17.209  14.288 -10.129  1.00  0.00
H
ATOM   1628  C   GLN   101      15.306  13.528  -9.554  1.00  0.00
C
ATOM   1629  O   GLN   101      15.773  13.014  -8.545  1.00  0.00
O
ATOM   1630  CB  GLN   101      15.774  15.892 -10.244  1.00  0.00
C
ATOM   1631 1HB  GLN   101      16.427  16.496 -10.875  1.00  0.00
H
ATOM   1632 2HB  GLN   101      14.754  16.020 -10.595  1.00  0.00
H
ATOM   1633  CG  GLN   101      15.831  16.423  -8.822  1.00  0.00
C
ATOM   1634 1HG  GLN   101      15.102  15.897  -8.208  1.00  0.00
H
ATOM   1635 2HG  GLN   101      16.822  16.251  -8.413  1.00  0.00
H
ATOM   1636  CD  GLN   101      15.536  17.904  -8.782  1.00  0.00
C
ATOM   1637  OE1 GLN   101      16.167  18.683  -9.479  1.00  0.00
O
ATOM   1638  NE2 GLN   101      14.570  18.303  -8.002  1.00  0.00
N
ATOM   1639 1HE2 GLN   101      14.369  19.289  -7.945  1.00  0.00
H
ATOM   1640 2HE2 GLN   101      14.023  17.642  -7.478  1.00  0.00
H
ATOM   1641  N   GLN   102      14.061  13.296  -9.938  1.00  0.00
N
ATOM   1642  H   GLN   102      13.695  13.745 -10.775  1.00  0.00
H
ATOM   1643  CA  GLN   102      13.186  12.420  -9.166  1.00  0.00
C
ATOM   1644  HA  GLN   102      13.215  12.723  -8.120  1.00  0.00
H
ATOM   1645  C   GLN   102      13.635  10.967  -9.222  1.00  0.00
C
ATOM   1646  O   GLN   102      13.542  10.263  -8.216  1.00  0.00
O
ATOM   1647  CB  GLN   102      11.751  12.554  -9.662  1.00  0.00
C
ATOM   1648 1HB  GLN   102      11.743  12.468 -10.748  1.00  0.00
H
ATOM   1649 2HB  GLN   102      11.155  11.744  -9.244  1.00  0.00
H
ATOM   1650  CG  GLN   102      11.121  13.874  -9.247  1.00  0.00
C
ATOM   1651 1HG  GLN   102      11.085  13.919  -8.160  1.00  0.00
H
ATOM   1652 2HG  GLN   102      11.733  14.699  -9.598  1.00  0.00
H
ATOM   1653  CD  GLN   102       9.727  14.046  -9.788  1.00  0.00
C
ATOM   1654  OE1 GLN   102       8.744  13.774  -9.103  1.00  0.00
O
ATOM   1655  NE2 GLN   102       9.623  14.499 -11.005  1.00  0.00
N
ATOM   1656 1HE2 GLN   102       8.707  14.598 -11.418  1.00  0.00
H
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ATOM   1657 2HE2 GLN   102      10.453  14.718 -11.532  1.00  0.00
H
ATOM   1658  N   LYS   103      14.176  10.525 -10.349  1.00  0.00
N
ATOM   1659  H   LYS   103      14.187  11.129 -11.169  1.00  0.00
H
ATOM   1660  CA  LYS   103      14.753   9.178 -10.439  1.00  0.00
C
ATOM   1661  HA  LYS   103      14.012   8.447 -10.111  1.00  0.00
H
ATOM   1662  C   LYS   103      15.955   9.050  -9.515  1.00  0.00
C
ATOM   1663  O   LYS   103      16.067   8.084  -8.778  1.00  0.00
O
ATOM   1664  CB  LYS   103      15.175   8.862 -11.879  1.00  0.00
C
ATOM   1665 1HB  LYS   103      15.740   9.711 -12.258  1.00  0.00
H
ATOM   1666 2HB  LYS   103      15.833   7.993 -11.879  1.00  0.00
H
ATOM   1667  CG  LYS   103      14.018   8.594 -12.834  1.00  0.00
C
ATOM   1668 1HG  LYS   103      13.541   7.652 -12.576  1.00  0.00
H
ATOM   1669 2HG  LYS   103      13.288   9.396 -12.748  1.00  0.00
H
ATOM   1670  CD  LYS   103      14.511   8.540 -14.272  1.00  0.00
C
ATOM   1671 1HD  LYS   103      14.986   9.489 -14.519  1.00  0.00
H
ATOM   1672 2HD  LYS   103      15.249   7.742 -14.356  1.00  0.00
H
ATOM   1673  CE  LYS   103      13.389   8.287 -15.266  1.00  0.00
C
ATOM   1674 1HE  LYS   103      12.845   7.390 -14.965  1.00  0.00
H
ATOM   1675 2HE  LYS   103      12.699   9.134 -15.251  1.00  0.00
H
ATOM   1676  NZ  LYS   103      13.920   8.087 -16.662  1.00  0.00
N
ATOM   1677 1HZ  LYS   103      13.165   7.842 -17.289  1.00  0.00
H
ATOM   1678 2HZ  LYS   103      14.605   7.338 -16.671  1.00  0.00
H
ATOM   1679 3HZ  LYS   103      14.371   8.931 -16.997  1.00  0.00
H
ATOM   1680  N   ILE   104      16.832  10.041  -9.498  1.00  0.00
N
ATOM   1681  H   ILE   104      16.704  10.832 -10.124  1.00  0.00
H
ATOM   1682  CA  ILE   104      18.012  10.011  -8.628  1.00  0.00
C
ATOM   1683  HA  ILE   104      18.518   9.055  -8.758  1.00  0.00
H
ATOM   1684  C   ILE   104      17.581  10.085  -7.165  1.00  0.00
C
ATOM   1685  O   ILE   104      18.141   9.391  -6.325  1.00  0.00
O
ATOM   1686  CB  ILE   104      19.019  11.135  -9.014  1.00  0.00
C
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ATOM   1687  HB  ILE   104      18.480  12.082  -9.057  1.00  0.00
H
ATOM   1688  CG1 ILE   104      19.610  10.815 -10.403  1.00  0.00
C
ATOM   1689 1HG1 ILE   104      20.372  10.046 -10.283  1.00  0.00
H
ATOM   1690 2HG1 ILE   104      18.829  10.400 -11.036  1.00  0.00
H
ATOM   1691  CG2 ILE   104      20.173  11.260  -7.983  1.00  0.00
C
ATOM   1692 1HG2 ILE   104      20.877  12.031  -8.295  1.00  0.00
H
ATOM   1693 2HG2 ILE   104      20.700  10.308  -7.894  1.00  0.00
H
ATOM   1694 3HG2 ILE   104      19.776  11.537  -7.008  1.00  0.00
H
ATOM   1695  CD1 ILE   104      20.215  11.991 -11.156  1.00  0.00
C
ATOM   1696 1HD1 ILE   104      20.633  11.639 -12.099  1.00  0.00
H
ATOM   1697 2HD1 ILE   104      21.004  12.457 -10.569  1.00  0.00
H
ATOM   1698 3HD1 ILE   104      19.438  12.728 -11.366  1.00  0.00
H
ATOM   1699  N   LEU   105      16.543  10.843  -6.843  1.00  0.00
N
ATOM   1700  H   LEU   105      16.107  11.429  -7.551  1.00  0.00
H
ATOM   1701  CA  LEU   105      16.015  10.855  -5.478  1.00  0.00
C
ATOM   1702  HA  LEU   105      16.825  11.089  -4.788  1.00  0.00
H
ATOM   1703  C   LEU   105      15.466   9.485  -5.087  1.00  0.00
C
ATOM   1704  O   LEU   105      15.709   9.014  -3.979  1.00  0.00
O
ATOM   1705  CB  LEU   105      14.910  11.909  -5.343  1.00  0.00
C
ATOM   1706 1HB  LEU   105      14.275  11.840  -6.223  1.00  0.00
H
ATOM   1707 2HB  LEU   105      14.301  11.660  -4.475  1.00  0.00
H
ATOM   1708  CG  LEU   105      15.372  13.365  -5.189  1.00  0.00
C
ATOM   1709  HG  LEU   105      16.164  13.564  -5.909  1.00  0.00
H
ATOM   1710  CD1 LEU   105      14.227  14.339  -5.458  1.00  0.00
C
ATOM   1711 1HD1 LEU   105      14.577  15.363  -5.330  1.00  0.00
H
ATOM   1712 2HD1 LEU   105      13.403  14.153  -4.769  1.00  0.00
H
ATOM   1713 3HD1 LEU   105      13.876  14.217  -6.482  1.00  0.00
H
ATOM   1714  CD2 LEU   105      15.911  13.603  -3.785  1.00  0.00
C
ATOM   1715 1HD2 LEU   105      16.302  14.617  -3.715  1.00  0.00
H
ATOM   1716 2HD2 LEU   105      16.722  12.912  -3.568  1.00  0.00
H
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ATOM   1717 3HD2 LEU   105      15.118  13.465  -3.049  1.00  0.00
H
ATOM   1718  N   ARG   106      14.777   8.812  -5.999  1.00  0.00
N
ATOM   1719  H   ARG   106      14.582   9.247  -6.898  1.00  0.00
H
ATOM   1720  CA  ARG   106      14.274   7.458  -5.743  1.00  0.00
C
ATOM   1721  HA  ARG   106      13.657   7.472  -4.844  1.00  0.00
H
ATOM   1722  C   ARG   106      15.435   6.496  -5.514  1.00  0.00
C
ATOM   1723  O   ARG   106      15.382   5.658  -4.616  1.00  0.00
O
ATOM   1724  CB  ARG   106      13.431   6.985  -6.932  1.00  0.00
C
ATOM   1725 1HB  ARG   106      12.710   7.761  -7.185  1.00  0.00
H
ATOM   1726 2HB  ARG   106      14.096   6.852  -7.782  1.00  0.00
H
ATOM   1727  CG  ARG   106      12.672   5.683  -6.696  1.00  0.00
C
ATOM   1728 1HG  ARG   106      13.344   4.939  -6.270  1.00  0.00
H
ATOM   1729 2HG  ARG   106      11.858   5.867  -5.996  1.00  0.00
H
ATOM   1730  CD  ARG   106      12.104   5.130  -7.997  1.00  0.00
C
ATOM   1731 1HD  ARG   106      11.444   4.294  -7.775  1.00  0.00
H
ATOM   1732 2HD  ARG   106      11.519   5.909  -8.487  1.00  0.00
H
ATOM   1733  NE  ARG   106      13.172   4.687  -8.906  1.00  0.00
N
ATOM   1734  HE  ARG   106      13.446   5.338  -9.631  1.00  0.00
H
ATOM   1735  CZ  ARG   106      13.801   3.518  -8.891  1.00  0.00
C
ATOM   1736  NH1 ARG   106      13.487   2.525  -8.103  1.00  0.00
N
ATOM   1737 1HH1 ARG   106      12.678   2.600  -7.503  1.00  0.00
H
ATOM   1738 2HH1 ARG   106      14.041   1.678  -8.103  1.00  0.00
H
ATOM   1739  NH2 ARG   106      14.807   3.355  -9.691  1.00  0.00
N
ATOM   1740 1HH2 ARG   106      15.121   4.124 -10.271  1.00  0.00
H
ATOM   1741 2HH2 ARG   106      15.287   2.470  -9.736  1.00  0.00
H
ATOM   1742  N   LEU   107      16.497   6.634  -6.295  1.00  0.00
N
ATOM   1743  H   LEU   107      16.470   7.316  -7.049  1.00  0.00
H
ATOM   1744  CA  LEU   107      17.700   5.815  -6.133  1.00  0.00
C
ATOM   1745  HA  LEU   107      17.412   4.764  -6.124  1.00  0.00
H
ATOM   1746  C   LEU   107      18.422   6.096  -4.821  1.00  0.00
C
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ATOM   1747  O   LEU   107      18.938   5.178  -4.188  1.00  0.00
O
ATOM   1748  CB  LEU   107      18.674   6.051  -7.294  1.00  0.00
C
ATOM   1749 1HB  LEU   107      18.846   7.121  -7.383  1.00  0.00
H
ATOM   1750 2HB  LEU   107      19.624   5.590  -7.028  1.00  0.00
H
ATOM   1751  CG  LEU   107      18.275   5.510  -8.675  1.00  0.00
C
ATOM   1752  HG  LEU   107      17.306   5.917  -8.949  1.00  0.00
H
ATOM   1753  CD1 LEU   107      19.296   5.958  -9.717  1.00  0.00
C
ATOM   1754 1HD1 LEU   107      19.019   5.563 -10.696  1.00  0.00
H
ATOM   1755 2HD1 LEU   107      20.291   5.602  -9.451  1.00  0.00
H
ATOM   1756 3HD1 LEU   107      19.305   7.046  -9.777  1.00  0.00
H
ATOM   1757  CD2 LEU   107      18.160   3.990  -8.669  1.00  0.00
C
ATOM   1758 1HD2 LEU   107      18.019   3.626  -9.689  1.00  0.00
H
ATOM   1759 2HD2 LEU   107      17.299   3.687  -8.075  1.00  0.00
H
ATOM   1760 3HD2 LEU   107      19.062   3.551  -8.245  1.00  0.00
H
ATOM   1761  N   ILE   108      18.440   7.345  -4.383  1.00  0.00
N
ATOM   1762  H   ILE   108      18.065   8.085  -4.974  1.00  0.00
H
ATOM   1763  CA  ILE   108      19.013   7.700  -3.086  1.00  0.00
C
ATOM   1764  HA  ILE   108      20.022   7.292  -3.038  1.00  0.00
H
ATOM   1765  C   ILE   108      18.205   7.030  -1.982  1.00  0.00
C
ATOM   1766  O   ILE   108      18.778   6.429  -1.076  1.00  0.00
O
ATOM   1767  CB  ILE   108      19.106   9.254  -2.944  1.00  0.00
C
ATOM   1768  HB  ILE   108      18.536   9.675  -3.771  1.00  0.00
H
ATOM   1769  CG1 ILE   108      20.569   9.685  -3.152  1.00  0.00
C
ATOM   1770 1HG1 ILE   108      20.988   9.092  -3.965  1.00  0.00
H
ATOM   1771 2HG1 ILE   108      20.572  10.713  -3.481  1.00  0.00
H
ATOM   1772  CG2 ILE   108      18.466   9.814  -1.636  1.00  0.00
C
ATOM   1773 1HG2 ILE   108      18.631  10.884  -1.564  1.00  0.00
H
ATOM   1774 2HG2 ILE   108      18.891   9.330  -0.756  1.00  0.00
H
ATOM   1775 3HG2 ILE   108      17.389   9.651  -1.652  1.00  0.00
H
ATOM   1776  CD1 ILE   108      21.499   9.600  -1.938  1.00  0.00
C
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ATOM   1777 1HD1 ILE   108      22.515   9.847  -2.246  1.00  0.00
H
ATOM   1778 2HD1 ILE   108      21.488   8.590  -1.532  1.00  0.00
H
ATOM   1779 3HD1 ILE   108      21.186  10.311  -1.174  1.00  0.00
H
ATOM   1780  N   LYS   109      16.882   7.066  -2.078  1.00  0.00
N
ATOM   1781  H   LYS   109      16.450   7.562  -2.856  1.00  0.00
H
ATOM   1782  CA  LYS   109      16.032   6.459  -1.055  1.00  0.00
C
ATOM   1783  HA  LYS   109      16.356   6.810  -0.075  1.00  0.00
H
ATOM   1784  C   LYS   109      16.196   4.945  -1.063  1.00  0.00
C
ATOM   1785  O   LYS   109      16.269   4.328  -0.005  1.00  0.00
O
ATOM   1786  CB  LYS   109      14.574   6.882  -1.264  1.00  0.00
C
ATOM   1787 1HB  LYS   109      14.290   6.683  -2.296  1.00  0.00
H
ATOM   1788 2HB  LYS   109      13.942   6.287  -0.609  1.00  0.00
H
ATOM   1789  CG  LYS   109      14.334   8.362  -0.947  1.00  0.00
C
ATOM   1790 1HG  LYS   109      14.624   8.547   0.086  1.00  0.00
H
ATOM   1791 2HG  LYS   109      14.950   8.979  -1.594  1.00  0.00
H
ATOM   1792  CD  LYS   109      12.876   8.762  -1.128  1.00  0.00
C
ATOM   1793 1HD  LYS   109      12.567   8.546  -2.151  1.00  0.00
H
ATOM   1794 2HD  LYS   109      12.263   8.182  -0.437  1.00  0.00
H
ATOM   1795  CE  LYS   109      12.674  10.247  -0.845  1.00  0.00
C
ATOM   1796 1HE  LYS   109      13.027  10.465   0.160  1.00  0.00
H
ATOM   1797 2HE  LYS   109      13.263  10.827  -1.558  1.00  0.00
H
ATOM   1798  NZ  LYS   109      11.238  10.659  -0.950  1.00  0.00
N
ATOM   1799 1HZ  LYS   109      11.139  11.642  -0.707  1.00  0.00
H
ATOM   1800 2HZ  LYS   109      10.665  10.108  -0.320  1.00  0.00
H
ATOM   1801 3HZ  LYS   109      10.920  10.541  -1.905  1.00  0.00
H
ATOM   1802  N   TYR   110      16.340   4.361  -2.243  1.00  0.00
N
ATOM   1803  H   TYR   110      16.246   4.920  -3.084  1.00  0.00
H
ATOM   1804  CA  TYR   110      16.609   2.930  -2.380  1.00  0.00
C
ATOM   1805  HA  TYR   110      15.826   2.368  -1.874  1.00  0.00
H
ATOM   1806  C   TYR   110      17.939   2.555  -1.736  1.00  0.00
C
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ATOM   1807  O   TYR   110      18.013   1.584  -0.986  1.00  0.00
O
ATOM   1808  CB  TYR   110      16.615   2.549  -3.865  1.00  0.00
C
ATOM   1809 1HB  TYR   110      15.624   2.735  -4.277  1.00  0.00
H
ATOM   1810 2HB  TYR   110      17.322   3.187  -4.388  1.00  0.00
H
ATOM   1811  CG  TYR   110      16.999   1.112  -4.144  1.00  0.00
C
ATOM   1812  CD1 TYR   110      16.069   0.066  -3.981  1.00  0.00
C
ATOM   1813  HD1 TYR   110      15.069   0.287  -3.634  1.00  0.00
H
ATOM   1814  CD2 TYR   110      18.296   0.792  -4.595  1.00  0.00
C
ATOM   1815  HD2 TYR   110      19.031   1.573  -4.718  1.00  0.00
H
ATOM   1816  CE1 TYR   110      16.427  -1.281  -4.280  1.00  0.00
C
ATOM   1817  HE1 TYR   110      15.709  -2.075  -4.154  1.00  0.00
H
ATOM   1818  CE2 TYR   110      18.652  -0.545  -4.904  1.00  0.00
C
ATOM   1819  HE2 TYR   110      19.644  -0.778  -5.256  1.00  0.00
H
ATOM   1820  CZ  TYR   110      17.716  -1.567  -4.744  1.00  0.00
C
ATOM   1821  OH  TYR   110      18.095  -2.850  -5.040  1.00  0.00
O
ATOM   1822  HH  TYR   110      17.395  -3.492  -4.895  1.00  0.00
H
ATOM   1823  N   GLY   111      18.985   3.331  -1.983  1.00  0.00
N
ATOM   1824  H   GLY   111      18.889   4.138  -2.594  1.00  0.00
H
ATOM   1825  CA  GLY   111      20.286   3.026  -1.413  1.00  0.00
C
ATOM   1826 1HA  GLY   111      20.574   2.020  -1.708  1.00  0.00
H
ATOM   1827 2HA  GLY   111      21.023   3.726  -1.805  1.00  0.00
H
ATOM   1828  C   GLY   111      20.276   3.113   0.103  1.00  0.00
C
ATOM   1829  O   GLY   111      20.582   2.139   0.809  1.00  0.00
O
ATOM   1830  N   TRP   112      19.815   4.252   0.605  1.00  0.00
N
ATOM   1831  H   TRP   112      19.537   4.994  -0.031  1.00  0.00
H
ATOM   1832  CA  TRP   112      19.717   4.509   2.042  1.00  0.00
C
ATOM   1833  HA  TRP   112      20.697   4.365   2.499  1.00  0.00
H
ATOM   1834  C   TRP   112      18.736   3.617   2.791  1.00  0.00
C
ATOM   1835  O   TRP   112      18.774   3.569   4.019  1.00  0.00
O
ATOM   1836  CB  TRP   112      19.286   5.953   2.290  1.00  0.00
C
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ATOM   1837 1HB  TRP   112      18.468   6.206   1.617  1.00  0.00
H
ATOM   1838 2HB  TRP   112      18.919   6.028   3.313  1.00  0.00
H
ATOM   1839  CG  TRP   112      20.387   6.951   2.147  1.00  0.00
C
ATOM   1840  CD1 TRP   112      20.670   7.724   1.068  1.00  0.00
C
ATOM   1841  HD1 TRP   112      20.128   7.675   0.132  1.00  0.00
H
ATOM   1842  CD2 TRP   112      21.344   7.330   3.152  1.00  0.00
C
ATOM   1843  NE1 TRP   112      21.707   8.578   1.322  1.00  0.00
N
ATOM   1844  HE1 TRP   112      22.059   9.266   0.669  1.00  0.00
H
ATOM   1845  CE2 TRP   112      22.164   8.346   2.588  1.00  0.00
C
ATOM   1846  CE3 TRP   112      21.605   6.904   4.470  1.00  0.00
C
ATOM   1847  HE3 TRP   112      20.998   6.136   4.928  1.00  0.00
H
ATOM   1848  CZ2 TRP   112      23.248   8.908   3.281  1.00  0.00
C
ATOM   1849  HZ2 TRP   112      23.862   9.653   2.810  1.00  0.00
H
ATOM   1850  CZ3 TRP   112      22.690   7.483   5.181  1.00  0.00
C
ATOM   1851  HZ3 TRP   112      22.905   7.160   6.190  1.00  0.00
H
ATOM   1852  CH2 TRP   112      23.508   8.471   4.568  1.00  0.00
C
ATOM   1853  HH2 TRP   112      24.347   8.876   5.115  1.00  0.00
H
ATOM   1854  N   ASN   113      17.864   2.894   2.101  1.00  0.00
N
ATOM   1855  H   ASN   113      17.828   2.965   1.091  1.00  0.00
H
ATOM   1856  CA  ASN   113      16.933   2.005   2.794  1.00  0.00
C
ATOM   1857  HA  ASN   113      16.370   2.591   3.522  1.00  0.00
H
ATOM   1858  C   ASN   113      17.661   0.904   3.559  1.00  0.00
C
ATOM   1859  O   ASN   113      17.152   0.418   4.567  1.00  0.00
O
ATOM   1860  CB  ASN   113      15.944   1.345   1.831  1.00  0.00
C
ATOM   1861 1HB  ASN   113      15.457   2.106   1.222  1.00  0.00
H
ATOM   1862 2HB  ASN   113      16.491   0.670   1.175  1.00  0.00
H
ATOM   1863  CG  ASN   113      14.888   0.553   2.565  1.00  0.00
C
ATOM   1864  OD1 ASN   113      14.182   1.078   3.422  1.00  0.00
O
ATOM   1865  ND2 ASN   113      14.801  -0.713   2.281  1.00  0.00
N
ATOM   1866 1HD2 ASN   113      14.200  -1.300   2.843  1.00  0.00
H
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ATOM   1867 2HD2 ASN   113      15.343  -1.098   1.516  1.00  0.00
H
ATOM   1868  N   LYS   114      18.836   0.498   3.089  1.00  0.00
N
ATOM   1869  H   LYS   114      19.206   0.923   2.246  1.00  0.00
H
ATOM   1870  CA  LYS   114      19.592  -0.561   3.771  1.00  0.00
C
ATOM   1871  HA  LYS   114      19.293  -0.543   4.820  1.00  0.00
H
ATOM   1872  C   LYS   114      21.117  -0.449   3.788  1.00  0.00
C
ATOM   1873  O   LYS   114      21.763  -1.286   4.420  1.00  0.00
O
ATOM   1874  CB  LYS   114      19.162  -1.927   3.213  1.00  0.00
C
ATOM   1875 1HB  LYS   114      19.536  -2.707   3.874  1.00  0.00
H
ATOM   1876 2HB  LYS   114      18.073  -1.972   3.227  1.00  0.00
H
ATOM   1877  CG  LYS   114      19.640  -2.225   1.803  1.00  0.00
C
ATOM   1878 1HG  LYS   114      19.321  -1.425   1.139  1.00  0.00
H
ATOM   1879 2HG  LYS   114      20.725  -2.280   1.803  1.00  0.00
H
ATOM   1880  CD  LYS   114      19.091  -3.541   1.284  1.00  0.00
C
ATOM   1881 1HD  LYS   114      19.330  -4.341   1.986  1.00  0.00
H
ATOM   1882 2HD  LYS   114      18.008  -3.459   1.185  1.00  0.00
H
ATOM   1883  CE  LYS   114      19.701  -3.866  -0.073  1.00  0.00
C
ATOM   1884 1HE  LYS   114      19.578  -3.003  -0.726  1.00  0.00
H
ATOM   1885 2HE  LYS   114      20.770  -4.053   0.051  1.00  0.00
H
ATOM   1886  NZ  LYS   114      19.059  -5.048  -0.725  1.00  0.00
N
ATOM   1887 1HZ  LYS   114      19.481  -5.212  -1.632  1.00  0.00
H
ATOM   1888 2HZ  LYS   114      18.068  -4.877  -0.856  1.00  0.00
H
ATOM   1889 3HZ  LYS   114      19.178  -5.878  -0.155  1.00  0.00
H
ATOM   1890  N   GLN   115      21.699   0.548   3.132  1.00  0.00
N
ATOM   1891  H   GLN   115      21.149   1.242   2.643  1.00  0.00
H
ATOM   1892  CA  GLN   115      23.155   0.720   3.114  1.00  0.00
C
ATOM   1893  HA  GLN   115      23.609   0.056   3.848  1.00  0.00
H
ATOM   1894  C   GLN   115      23.518   2.146   3.491  1.00  0.00
C
ATOM   1895  O   GLN   115      22.766   3.076   3.216  1.00  0.00
O
ATOM   1896  CB  GLN   115      23.743   0.396   1.733  1.00  0.00
C
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ATOM   1897 1HB  GLN   115      23.294   1.056   0.991  1.00  0.00
H
ATOM   1898 2HB  GLN   115      24.815   0.587   1.762  1.00  0.00
H
ATOM   1899  CG  GLN   115      23.527  -1.047   1.311  1.00  0.00
C
ATOM   1900 1HG  GLN   115      23.877  -1.700   2.106  1.00  0.00
H
ATOM   1901 2HG  GLN   115      22.465  -1.215   1.168  1.00  0.00
H
ATOM   1902  CD  GLN   115      24.240  -1.424   0.034  1.00  0.00
C
ATOM   1903  OE1 GLN   115      25.310  -2.020   0.051  1.00  0.00
O
ATOM   1904  NE2 GLN   115      23.633  -1.138  -1.080  1.00  0.00
N
ATOM   1905 1HE2 GLN   115      24.053  -1.442  -1.950  1.00  0.00
H
ATOM   1906 2HE2 GLN   115      22.746  -0.652  -1.062  1.00  0.00
H
ATOM   1907  N   ASN   116      24.682   2.305   4.105  1.00  0.00
N
ATOM   1908  H   ASN   116      25.265   1.496   4.288  1.00  0.00
H
ATOM   1909  CA  ASN   116      25.209   3.602   4.520  1.00  0.00
C
ATOM   1910  HA  ASN   116      24.672   4.423   4.042  1.00  0.00
H
ATOM   1911  C   ASN   116      26.670   3.571   4.091  1.00  0.00
C
ATOM   1912  O   ASN   116      27.196   2.480   3.890  1.00  0.00
O
ATOM   1913  CB  ASN   116      25.147   3.741   6.046  1.00  0.00
C
ATOM   1914 1HB  ASN   116      25.717   2.926   6.489  1.00  0.00
H
ATOM   1915 2HB  ASN   116      25.602   4.684   6.345  1.00  0.00
H
ATOM   1916  CG  ASN   116      23.742   3.687   6.585  1.00  0.00
C
ATOM   1917  OD1 ASN   116      22.873   4.449   6.192  1.00  0.00
O
ATOM   1918  ND2 ASN   116      23.506   2.794   7.502  1.00  0.00
N
ATOM   1919 1HD2 ASN   116      22.578   2.738   7.902  1.00  0.00
H
ATOM   1920 2HD2 ASN   116      24.242   2.178   7.813  1.00  0.00
H
ATOM   1921  N   ASP   117      27.316   4.727   4.005  1.00  0.00
N
ATOM   1922  H   ASP   117      26.794   5.587   4.142  1.00  0.00
H
ATOM   1923  CA  ASP   117      28.762   4.862   3.761  1.00  0.00
C
ATOM   1924  HA  ASP   117      28.950   5.918   3.570  1.00  0.00
H
ATOM   1925  C   ASP   117      29.359   4.095   2.573  1.00  0.00
C
ATOM   1926  O   ASP   117      29.751   2.934   2.679  1.00  0.00
O
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ATOM   1927  CB  ASP   117      29.536   4.518   5.039  1.00  0.00
C
ATOM   1928 1HB  ASP   117      29.088   5.058   5.872  1.00  0.00
H
ATOM   1929 2HB  ASP   117      29.449   3.452   5.239  1.00  0.00
H
ATOM   1930  CG  ASP   117      31.013   4.884   4.953  1.00  0.00
C
ATOM   1931  OD1 ASP   117      31.484   5.446   3.936  1.00  0.00
O
ATOM   1932  OD2 ASP   117      31.739   4.614   5.936  1.00  0.00
O
ATOM   1933  N   SER   118      29.491   4.800   1.457  1.00  0.00
N
ATOM   1934  H   SER   118      29.168   5.764   1.465  1.00  0.00
H
ATOM   1935  CA  SER   118      30.131   4.331   0.220  1.00  0.00
C
ATOM   1936  HA  SER   118      30.083   5.172  -0.468  1.00  0.00
H
ATOM   1937  C   SER   118      29.518   3.166  -0.550  1.00  0.00
C
ATOM   1938  O   SER   118      29.328   3.300  -1.747  1.00  0.00
O
ATOM   1939  CB  SER   118      31.618   4.059   0.446  1.00  0.00
C
ATOM   1940 1HB  SER   118      31.740   3.189   1.092  1.00  0.00
H
ATOM   1941 2HB  SER   118      32.094   3.856  -0.514  1.00  0.00
H
ATOM   1942  OG  SER   118      32.226   5.190   1.053  1.00  0.00
O
ATOM   1943  HG  SER   118      31.915   5.249   1.968  1.00  0.00
H
ATOM   1944  N   SER   119      29.109   2.077   0.082  1.00  0.00
N
ATOM   1945  H   SER   119      29.250   1.993   1.088  1.00  0.00
H
ATOM   1946  CA  SER   119      28.436   0.993  -0.636  1.00  0.00
C
ATOM   1947  HA  SER   119      29.044   0.670  -1.481  1.00  0.00
H
ATOM   1948  C   SER   119      27.105   1.525  -1.161  1.00  0.00
C
ATOM   1949  O   SER   119      26.674   1.230  -2.279  1.00  0.00
O
ATOM   1950  CB  SER   119      28.218  -0.174   0.321  1.00  0.00
C
ATOM   1951 1HB  SER   119      27.646  -0.957  -0.177  1.00  0.00
H
ATOM   1952 2HB  SER   119      29.187  -0.571   0.625  1.00  0.00
H
ATOM   1953  OG  SER   119      27.529   0.288   1.471  1.00  0.00
O
ATOM   1954  HG  SER   119      27.612  -0.378   2.171  1.00  0.00
H
ATOM   1955  N   ASN   120      26.530   2.416  -0.367  1.00  0.00
N
ATOM   1956  H   ASN   120      26.915   2.524   0.561  1.00  0.00
H
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ATOM   1957  CA  ASN   120      25.383   3.230  -0.752  1.00  0.00
C
ATOM   1958  HA  ASN   120      24.533   2.582  -0.973  1.00  0.00
H
ATOM   1959  C   ASN   120      25.667   4.086  -1.993  1.00  0.00
C
ATOM   1960  O   ASN   120      24.926   4.040  -2.970  1.00  0.00
O
ATOM   1961  CB  ASN   120      25.049   4.126   0.447  1.00  0.00
C
ATOM   1962 1HB  ASN   120      24.885   3.502   1.323  1.00  0.00
H
ATOM   1963 2HB  ASN   120      25.887   4.789   0.648  1.00  0.00
H
ATOM   1964  CG  ASN   120      23.825   4.970   0.227  1.00  0.00
C
ATOM   1965  OD1 ASN   120      22.926   4.616  -0.508  1.00  0.00
O
ATOM   1966  ND2 ASN   120      23.792   6.103   0.856  1.00  0.00
N
ATOM   1967 1HD2 ASN   120      22.959   6.664   0.792  1.00  0.00
H
ATOM   1968 2HD2 ASN   120      24.580   6.399   1.422  1.00  0.00
H
ATOM   1969  N   LEU   121      26.768   4.831  -1.983  1.00  0.00
N
ATOM   1970  H   LEU   121      27.389   4.787  -1.193  1.00  0.00
H
ATOM   1971  CA  LEU   121      27.112   5.715  -3.102  1.00  0.00
C
ATOM   1972  HA  LEU   121      26.257   6.364  -3.289  1.00  0.00
H
ATOM   1973  C   LEU   121      27.343   4.905  -4.371  1.00  0.00
C
ATOM   1974  O   LEU   121      26.899   5.301  -5.447  1.00  0.00
O
ATOM   1975  CB  LEU   121      28.318   6.618  -2.759  1.00  0.00
C
ATOM   1976 1HB  LEU   121      28.039   7.624  -3.063  1.00  0.00
H
ATOM   1977 2HB  LEU   121      28.372   6.640  -1.671  1.00  0.00
H
ATOM   1978  CG  LEU   121      29.766   6.420  -3.268  1.00  0.00
C
ATOM   1979  HG  LEU   121      30.052   5.382  -3.115  1.00  0.00
H
ATOM   1980  CD1 LEU   121      29.999   6.781  -4.744  1.00  0.00
C
ATOM   1981 1HD1 LEU   121      31.050   6.632  -4.993  1.00  0.00
H
ATOM   1982 2HD1 LEU   121      29.728   7.822  -4.928  1.00  0.00
H
ATOM   1983 3HD1 LEU   121      29.409   6.137  -5.390  1.00  0.00
H
ATOM   1984  CD2 LEU   121      30.705   7.293  -2.437  1.00  0.00
C
ATOM   1985 1HD2 LEU   121      31.738   7.086  -2.719  1.00  0.00
H
ATOM   1986 2HD2 LEU   121      30.589   7.076  -1.377  1.00  0.00
H
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ATOM   1987 3HD2 LEU   121      30.495   8.350  -2.613  1.00  0.00
H
ATOM   1988  N   TYR   122      27.990   3.755  -4.251  1.00  0.00
N
ATOM   1989  H   TYR   122      28.328   3.454  -3.340  1.00  0.00
H
ATOM   1990  CA  TYR   122      28.269   2.934  -5.419  1.00  0.00
C
ATOM   1991  HA  TYR   122      28.720   3.566  -6.182  1.00  0.00
H
ATOM   1992  C   TYR   122      26.992   2.374  -6.009  1.00  0.00
C
ATOM   1993  O   TYR   122      26.852   2.382  -7.220  1.00  0.00
O
ATOM   1994  CB  TYR   122      29.239   1.800  -5.088  1.00  0.00
C
ATOM   1995 1HB  TYR   122      28.839   1.216  -4.259  1.00  0.00
H
ATOM   1996 2HB  TYR   122      29.321   1.151  -5.960  1.00  0.00
H
ATOM   1997  CG  TYR   122      30.625   2.295  -4.730  1.00  0.00
C
ATOM   1998  CD1 TYR   122      31.265   1.866  -3.549  1.00  0.00
C
ATOM   1999  HD1 TYR   122      30.768   1.170  -2.888  1.00  0.00
H
ATOM   2000  CD2 TYR   122      31.314   3.189  -5.580  1.00  0.00
C
ATOM   2001  HD2 TYR   122      30.863   3.518  -6.506  1.00  0.00
H
ATOM   2002  CE1 TYR   122      32.551   2.355  -3.201  1.00  0.00
C
ATOM   2003  HE1 TYR   122      33.028   2.026  -2.290  1.00  0.00
H
ATOM   2004  CE2 TYR   122      32.597   3.676  -5.233  1.00  0.00
C
ATOM   2005  HE2 TYR   122      33.111   4.370  -5.880  1.00  0.00
H
ATOM   2006  CZ  TYR   122      33.199   3.259  -4.049  1.00  0.00
C
ATOM   2007  OH  TYR   122      34.446   3.740  -3.753  1.00  0.00
O
ATOM   2008  HH  TYR   122      34.749   3.460  -2.879  1.00  0.00
H
ATOM   2009  N   GLU   123      26.034   1.966  -5.188  1.00  0.00
N
ATOM   2010  H   GLU   123      26.175   1.996  -4.184  1.00  0.00
H
ATOM   2011  CA  GLU   123      24.764   1.471  -5.718  1.00  0.00
C
ATOM   2012  HA  GLU   123      24.957   0.614  -6.363  1.00  0.00
H
ATOM   2013  C   GLU   123      24.097   2.555  -6.560  1.00  0.00
C
ATOM   2014  O   GLU   123      23.696   2.310  -7.692  1.00  0.00
O
ATOM   2015  CB  GLU   123      23.836   1.045  -4.572  1.00  0.00
C
ATOM   2016 1HB  GLU   123      24.343   0.282  -3.982  1.00  0.00
H
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ATOM   2017 2HB  GLU   123      23.663   1.904  -3.926  1.00  0.00
H
ATOM   2018  CG  GLU   123      22.469   0.512  -5.013  1.00  0.00
C
ATOM   2019 1HG  GLU   123      21.858   0.347  -4.124  1.00  0.00
H
ATOM   2020 2HG  GLU   123      21.975   1.263  -5.627  1.00  0.00
H
ATOM   2021  CD  GLU   123      22.553  -0.784  -5.804  1.00  0.00
C
ATOM   2022  OE1 GLU   123      23.370  -1.665  -5.459  1.00  0.00
O
ATOM   2023  OE2 GLU   123      21.786  -0.971  -6.771  1.00  0.00
O
ATOM   2024  N   ILE   124      24.034   3.771  -6.035  1.00  0.00
N
ATOM   2025  H   ILE   124      24.433   3.938  -5.116  1.00  0.00
H
ATOM   2026  CA  ILE   124      23.387   4.877  -6.744  1.00  0.00
C
ATOM   2027  HA  ILE   124      22.369   4.588  -7.006  1.00  0.00
H
ATOM   2028  C   ILE   124      24.142   5.164  -8.041  1.00  0.00
C
ATOM   2029  O   ILE   124      23.539   5.312  -9.102  1.00  0.00
O
ATOM   2030  CB  ILE   124      23.345   6.153  -5.849  1.00  0.00
C
ATOM   2031  HB  ILE   124      24.370   6.404  -5.575  1.00  0.00
H
ATOM   2032  CG1 ILE   124      22.551   5.880  -4.556  1.00  0.00
C
ATOM   2033 1HG1 ILE   124      21.494   6.057  -4.753  1.00  0.00
H
ATOM   2034 2HG1 ILE   124      22.661   4.840  -4.257  1.00  0.00
H
ATOM   2035  CG2 ILE   124      22.718   7.366  -6.592  1.00  0.00
C
ATOM   2036 1HG2 ILE   124      22.667   8.230  -5.928  1.00  0.00
H
ATOM   2037 2HG2 ILE   124      21.711   7.120  -6.935  1.00  0.00
H
ATOM   2038 3HG2 ILE   124      23.330   7.635  -7.453  1.00  0.00
H
ATOM   2039  CD1 ILE   124      22.989   6.734  -3.380  1.00  0.00
C
ATOM   2040 1HD1 ILE   124      22.335   6.536  -2.530  1.00  0.00
H
ATOM   2041 2HD1 ILE   124      22.941   7.789  -3.642  1.00  0.00
H
ATOM   2042 3HD1 ILE   124      24.011   6.484  -3.101  1.00  0.00
H
ATOM   2043  N   THR   125      25.464   5.210  -7.974  1.00  0.00
N
ATOM   2044  H   THR   125      25.923   5.048  -7.083  1.00  0.00
H
ATOM   2045  CA  THR   125      26.281   5.529  -9.145  1.00  0.00
C
ATOM   2046  HA  THR   125      25.940   6.479  -9.554  1.00  0.00
H
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ATOM   2047  C   THR   125      26.153   4.473 -10.241  1.00  0.00
C
ATOM   2048  O   THR   125      25.983   4.810 -11.407  1.00  0.00
O
ATOM   2049  CB  THR   125      27.764   5.673  -8.736  1.00  0.00
C
ATOM   2050  HB  THR   125      28.147   4.710  -8.398  1.00  0.00
H
ATOM   2051  OG1 THR   125      27.862   6.623  -7.670  1.00  0.00
O
ATOM   2052  HG1 THR   125      27.533   6.210  -6.861  1.00  0.00
H
ATOM   2053  CG2 THR   125      28.629   6.196  -9.858  1.00  0.00
C
ATOM   2054 1HG2 THR   125      29.650   6.287  -9.497  1.00  0.00
H
ATOM   2055 2HG2 THR   125      28.273   7.177 -10.171  1.00  0.00
H
ATOM   2056 3HG2 THR   125      28.611   5.513 -10.708  1.00  0.00
H
ATOM   2057  N   ILE   126      26.185   3.197  -9.878  1.00  0.00
N
ATOM   2058  H   ILE   126      26.300   2.958  -8.894  1.00  0.00
H
ATOM   2059  CA  ILE   126      26.071   2.106 -10.850  1.00  0.00
C
ATOM   2060  HA  ILE   126      26.805   2.249 -11.644  1.00  0.00
H
ATOM   2061  C   ILE   126      24.687   2.143 -11.492  1.00  0.00
C
ATOM   2062  O   ILE   126      24.554   1.975 -12.706  1.00  0.00
O
ATOM   2063  CB  ILE   126      26.336   0.730 -10.162  1.00  0.00
C
ATOM   2064  HB  ILE   126      25.705   0.663  -9.275  1.00  0.00
H
ATOM   2065  CG1 ILE   126      27.817   0.646  -9.738  1.00  0.00
C
ATOM   2066 1HG1 ILE   126      28.422   0.475 -10.629  1.00  0.00
H
ATOM   2067 2HG1 ILE   126      28.124   1.599  -9.313  1.00  0.00
H
ATOM   2068  CG2 ILE   126      26.002  -0.457 -11.094  1.00  0.00
C
ATOM   2069 1HG2 ILE   126      26.222  -1.401 -10.596  1.00  0.00
H
ATOM   2070 2HG2 ILE   126      26.589  -0.390 -12.013  1.00  0.00
H
ATOM   2071 3HG2 ILE   126      24.941  -0.449 -11.344  1.00  0.00
H
ATOM   2072  CD1 ILE   126      28.145  -0.435  -8.713  1.00  0.00
C
ATOM   2073 1HD1 ILE   126      29.199  -0.369  -8.444  1.00  0.00
H
ATOM   2074 2HD1 ILE   126      27.948  -1.422  -9.128  1.00  0.00
H
ATOM   2075 3HD1 ILE   126      27.540  -0.289  -7.817  1.00  0.00
H
ATOM   2076  N   ARG   127      23.650   2.418 -10.712  1.00  0.00
N
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ATOM   2077  H   ARG   127      23.780   2.557  -9.712  1.00  0.00
H
ATOM   2078  CA  ARG   127      22.312   2.533 -11.294  1.00  0.00
C
ATOM   2079  HA  ARG   127      22.094   1.634 -11.870  1.00  0.00
H
ATOM   2080  C   ARG   127      22.261   3.703 -12.260  1.00  0.00
C
ATOM   2081  O   ARG   127      21.769   3.547 -13.363  1.00  0.00
O
ATOM   2082  CB  ARG   127      21.255   2.715 -10.206  1.00  0.00
C
ATOM   2083 1HB  ARG   127      21.548   3.561  -9.586  1.00  0.00
H
ATOM   2084 2HB  ARG   127      20.302   2.952 -10.681  1.00  0.00
H
ATOM   2085  CG  ARG   127      21.054   1.510  -9.300  1.00  0.00
C
ATOM   2086 1HG  ARG   127      22.018   1.099  -9.011  1.00  0.00
H
ATOM   2087 2HG  ARG   127      20.533   1.832  -8.400  1.00  0.00
H
ATOM   2088  CD  ARG   127      20.246   0.416  -9.948  1.00  0.00
C
ATOM   2089 1HD  ARG   127      19.275   0.812 -10.246  1.00  0.00
H
ATOM   2090 2HD  ARG   127      20.773   0.040 -10.825  1.00  0.00
H
ATOM   2091  NE  ARG   127      20.064  -0.668  -8.980  1.00  0.00
N
ATOM   2092  HE  ARG   127      20.570  -0.583  -8.101  1.00  0.00
H
ATOM   2093  CZ  ARG   127      19.326  -1.756  -9.128  1.00  0.00
C
ATOM   2094  NH1 ARG   127      18.712  -2.081 -10.238  1.00  0.00
N
ATOM   2095 1HH1 ARG   127      18.796  -1.482 -11.049  1.00  0.00
H
ATOM   2096 2HH1 ARG   127      18.179  -2.939 -10.284  1.00  0.00
H
ATOM   2097  NH2 ARG   127      19.231  -2.552  -8.104  1.00  0.00
N
ATOM   2098 1HH2 ARG   127      19.721  -2.326  -7.253  1.00  0.00
H
ATOM   2099 2HH2 ARG   127      18.655  -3.379  -8.154  1.00  0.00
H
ATOM   2100  N   CYS   128      22.816   4.850 -11.901  1.00  0.00
N
ATOM   2101  H   CYS   128      23.244   4.939 -10.986  1.00  0.00
H
ATOM   2102  CA  CYS   128      22.801   5.999 -12.805  1.00  0.00
C
ATOM   2103  HA  CYS   128      21.768   6.207 -13.085  1.00  0.00
H
ATOM   2104  C   CYS   128      23.586   5.730 -14.093  1.00  0.00
C
ATOM   2105  O   CYS   128      23.147   6.101 -15.189  1.00  0.00
O
ATOM   2106  CB  CYS   128      23.373   7.226 -12.089  1.00  0.00
C
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ATOM   2107 1HB  CYS   128      24.392   7.007 -11.768  1.00  0.00
H
ATOM   2108 2HB  CYS   128      23.414   8.050 -12.802  1.00  0.00
H
ATOM   2109  SG  CYS   128      22.403   7.762 -10.659  1.00  0.00
S
ATOM   2110  HG  CYS   128      22.651   6.686  -9.897  1.00  0.00
H
ATOM   2111  N   ASP   129      24.714   5.041 -13.967  1.00  0.00
N
ATOM   2112  H   ASP   129      25.022   4.761 -13.038  1.00  0.00
H
ATOM   2113  CA  ASP   129      25.565   4.697 -15.110  1.00  0.00
C
ATOM   2114  HA  ASP   129      25.873   5.609 -15.617  1.00  0.00
H
ATOM   2115  C   ASP   129      24.828   3.840 -16.123  1.00  0.00
C
ATOM   2116  O   ASP   129      25.018   3.971 -17.332  1.00  0.00
O
ATOM   2117  CB  ASP   129      26.810   3.913 -14.668  1.00  0.00
C
ATOM   2118 1HB  ASP   129      26.520   3.137 -13.963  1.00  0.00
H
ATOM   2119 2HB  ASP   129      27.245   3.435 -15.546  1.00  0.00
H
ATOM   2120  CG  ASP   129      27.876   4.791 -14.047  1.00  0.00
C
ATOM   2121  OD1 ASP   129      27.944   5.980 -14.402  1.00  0.00
O
ATOM   2122  OD2 ASP   129      28.730   4.294 -13.282  1.00  0.00
O
ATOM   2123  N   ARG   130      23.987   2.942 -15.635  1.00  0.00
N
ATOM   2124  H   ARG   130      23.891   2.845 -14.628  1.00  0.00
H
ATOM   2125  CA  ARG   130      23.208   2.080 -16.522  1.00  0.00
C
ATOM   2126  HA  ARG   130      23.816   1.793 -17.379  1.00  0.00
H
ATOM   2127  C   ARG   130      21.963   2.778 -17.048  1.00  0.00
C
ATOM   2128  O   ARG   130      21.625   2.671 -18.221  1.00  0.00
O
ATOM   2129  CB  ARG   130      22.795   0.820 -15.761  1.00  0.00
C
ATOM   2130 1HB  ARG   130      22.266   1.118 -14.855  1.00  0.00
H
ATOM   2131 2HB  ARG   130      22.116   0.240 -16.382  1.00  0.00
H
ATOM   2132  CG  ARG   130      23.969  -0.069 -15.376  1.00  0.00
C
ATOM   2133 1HG  ARG   130      24.424  -0.480 -16.277  1.00  0.00
H
ATOM   2134 2HG  ARG   130      24.714   0.516 -14.840  1.00  0.00
H
ATOM   2135  CD  ARG   130      23.506  -1.195 -14.477  1.00  0.00
C
ATOM   2136 1HD  ARG   130      23.001  -0.766 -13.610  1.00  0.00
H
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ATOM   2137 2HD  ARG   130      22.802  -1.825 -15.022  1.00  0.00
H
ATOM   2138  NE  ARG   130      24.645  -2.003 -14.021  1.00  0.00
N
ATOM   2139  HE  ARG   130      25.558  -1.756 -14.381  1.00  0.00
H
ATOM   2140  CZ  ARG   130      24.604  -3.008 -13.159  1.00  0.00
C
ATOM   2141  NH1 ARG   130      23.511  -3.430 -12.584  1.00  0.00
N
ATOM   2142 1HH1 ARG   130      22.612  -3.058 -12.863  1.00  0.00
H
ATOM   2143 2HH1 ARG   130      23.570  -4.125 -11.851  1.00  0.00
H
ATOM   2144  NH2 ARG   130      25.724  -3.582 -12.831  1.00  0.00
N
ATOM   2145 1HH2 ARG   130      26.585  -3.254 -13.239  1.00  0.00
H
ATOM   2146 2HH2 ARG   130      25.726  -4.352 -12.182  1.00  0.00
H
ATOM   2147  N   GLU   131      21.249   3.455 -16.167  1.00  0.00
N
ATOM   2148  H   GLU   131      21.589   3.550 -15.213  1.00  0.00
H
ATOM   2149  CA  GLU   131      19.907   3.947 -16.476  1.00  0.00
C
ATOM   2150  HA  GLU   131      19.403   3.191 -17.078  1.00  0.00
H
ATOM   2151  C   GLU   131      19.853   5.244 -17.270  1.00  0.00
C
ATOM   2152  O   GLU   131      18.854   5.491 -17.959  1.00  0.00
O
ATOM   2153  CB  GLU   131      19.116   4.099 -15.176  1.00  0.00
C
ATOM   2154 1HB  GLU   131      19.681   4.732 -14.493  1.00  0.00
H
ATOM   2155 2HB  GLU   131      18.162   4.578 -15.390  1.00  0.00
H
ATOM   2156  CG  GLU   131      18.853   2.738 -14.529  1.00  0.00
C
ATOM   2157 1HG  GLU   131      18.236   2.145 -15.206  1.00  0.00
H
ATOM   2158 2HG  GLU   131      19.798   2.212 -14.397  1.00  0.00
H
ATOM   2159  CD  GLU   131      18.171   2.805 -13.177  1.00  0.00
C
ATOM   2160  OE1 GLU   131      17.710   3.876 -12.721  1.00  0.00
O
ATOM   2161  OE2 GLU   131      18.057   1.718 -12.562  1.00  0.00
O
ATOM   2162  N   PHE   132      20.904   6.052 -17.209  1.00  0.00
N
ATOM   2163  H   PHE   132      21.680   5.816 -16.596  1.00  0.00
H
ATOM   2164  CA  PHE   132      20.962   7.292 -17.989  1.00  0.00
C
ATOM   2165  HA  PHE   132      19.996   7.470 -18.462  1.00  0.00
H
ATOM   2166  C   PHE   132      22.022   7.237 -19.084  1.00  0.00
C
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ATOM   2167  O   PHE   132      21.758   7.522 -20.254  1.00  0.00
O
ATOM   2168  CB  PHE   132      21.277   8.475 -17.072  1.00  0.00
C
ATOM   2169 1HB  PHE   132      22.292   8.371 -16.695  1.00  0.00
H
ATOM   2170 2HB  PHE   132      21.221   9.392 -17.659  1.00  0.00
H
ATOM   2171  CG  PHE   132      20.355   8.594 -15.891  1.00  0.00
C
ATOM   2172  CD1 PHE   132      20.875   8.600 -14.586  1.00  0.00
C
ATOM   2173  HD1 PHE   132      21.938   8.502 -14.431  1.00  0.00
H
ATOM   2174  CD2 PHE   132      18.968   8.720 -16.071  1.00  0.00
C
ATOM   2175  HD2 PHE   132      18.549   8.697 -17.065  1.00  0.00
H
ATOM   2176  CE1 PHE   132      20.024   8.745 -13.466  1.00  0.00
C
ATOM   2177  HE1 PHE   132      20.436   8.745 -12.469  1.00  0.00
H
ATOM   2178  CE2 PHE   132      18.109   8.887 -14.967  1.00  0.00
C
ATOM   2179  HE2 PHE   132      17.054   9.009 -15.132  1.00  0.00
H
ATOM   2180  CZ  PHE   132      18.636   8.898 -13.658  1.00  0.00
C
ATOM   2181  HZ  PHE   132      17.982   9.019 -12.807  1.00  0.00
H
ATOM   2182  N   GLY   133      23.233   6.873 -18.700  1.00  0.00
N
ATOM   2183  H   GLY   133      23.425   6.655 -17.727  1.00  0.00
H
ATOM   2184  CA  GLY   133      24.364   6.826 -19.610  1.00  0.00
C
ATOM   2185 1HA  GLY   133      24.327   5.916 -20.209  1.00  0.00
H
ATOM   2186 2HA  GLY   133      24.405   7.712 -20.242  1.00  0.00
H
ATOM   2187  C   GLY   133      25.550   6.796 -18.671  1.00  0.00
C
ATOM   2188  O   GLY   133      25.340   7.091 -17.493  1.00  0.00
O
ATOM   2189  N   PRO   134      26.750   6.392 -19.104  1.00  0.00
N
ATOM   2190  CA  PRO   134      27.812   6.130 -18.129  1.00  0.00
C
ATOM   2191  HA  PRO   134      27.406   5.596 -17.272  1.00  0.00
H
ATOM   2192  C   PRO   134      28.616   7.330 -17.632  1.00  0.00
C
ATOM   2193  O   PRO   134      28.627   8.392 -18.242  1.00  0.00
O
ATOM   2194  CB  PRO   134      28.727   5.195 -18.918  1.00  0.00
C
ATOM   2195 1HB  PRO   134      29.745   5.241 -18.546  1.00  0.00
H
ATOM   2196 2HB  PRO   134      28.351   4.173 -18.884  1.00  0.00
H
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ATOM   2197  CG  PRO   134      28.648   5.717 -20.287  1.00  0.00
C
ATOM   2198 1HG  PRO   134      29.253   6.619 -20.368  1.00  0.00
H
ATOM   2199 2HG  PRO   134      28.975   4.973 -21.013  1.00  0.00
H
ATOM   2200  CD  PRO   134      27.186   6.041 -20.469  1.00  0.00
C
ATOM   2201 1HD  PRO   134      27.062   6.885 -21.150  1.00  0.00
H
ATOM   2202 2HD  PRO   134      26.643   5.167 -20.827  1.00  0.00
H
ATOM   2203   N  ARG   135      29.359   7.066 -16.561  1.00  0.00
N
ATOM   2204   H  ARG   135      29.159   6.198 -16.076  1.00  0.00
H
ATOM   2205  CA  ARG   135      30.413   7.904 -15.968  1.00  0.00
C
ATOM   2206  HA  ARG   135      30.954   7.229 -15.311  1.00  0.00
H
ATOM   2207   C  ARG   135      29.936   8.990 -15.022  1.00  0.00
C
ATOM   2208   O  ARG   135      30.540  10.055 -14.873  1.00  0.00
O
ATOM   2209  CB  ARG   135      31.428   8.407 -17.002  1.00  0.00
C
ATOM   2210 1HB  ARG   135      31.305   7.826 -17.915  1.00  0.00
H
ATOM   2211 2HB  ARG   135      31.209   9.446 -17.249  1.00  0.00
H
ATOM   2212  CG  ARG   135      32.886   8.294 -16.545  1.00  0.00
C
ATOM   2213 1HG  ARG   135      33.515   8.784 -17.287  1.00  0.00
H
ATOM   2214 2HG  ARG   135      33.005   8.817 -15.597  1.00  0.00
H
ATOM   2215  CD  ARG   135      33.362   6.842 -16.369  1.00  0.00
C
ATOM   2216 1HD  ARG   135      34.424   6.845 -16.124  1.00  0.00
H
ATOM   2217 2HD  ARG   135      32.829   6.394 -15.533  1.00  0.00
H
ATOM   2218  NE  ARG   135      33.151   6.036 -17.581  1.00  0.00
N
ATOM   2219  HE  ARG   135      33.557   6.386 -18.441  1.00  0.00
H
ATOM   2220  CZ  ARG   135      32.447   4.917 -17.683  1.00  0.00
C
ATOM   2221 NH1  ARG   135      31.840   4.332 -16.681  1.00  0.00
N
ATOM   2222 1HH1 ARG   135      31.956   4.688 -15.749  1.00  0.00
H
ATOM   2223 2HH1 ARG   135      31.263   3.516 -16.839  1.00  0.00
H
ATOM   2224 NH2  ARG   135      32.304   4.405 -18.869  1.00  0.00
N
ATOM   2225 1HH2 ARG   135      32.730   4.866 -19.659  1.00  0.00
H
ATOM   2226 2HH2 ARG   135      31.761   3.564 -18.999  1.00  0.00
H
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ATOM   2227  N   TRP   136      28.909   8.650 -14.268  1.00  0.00
N
ATOM   2228  H   TRP   136      28.430   7.765 -14.434  1.00  0.00
H
ATOM   2229  CA  TRP   136      28.520   9.447 -13.117  1.00  0.00
C
ATOM   2230  HA  TRP   136      28.410  10.486 -13.419  1.00  0.00
H
ATOM   2231  C   TRP   136      29.605   9.334 -12.052  1.00  0.00
C
ATOM   2232  O   TRP   136      30.261   8.296 -11.909  1.00  0.00
O
ATOM   2233  CB  TRP   136      27.193   8.952 -12.551  1.00  0.00
C
ATOM   2234 1HB  TRP   136      27.270   7.887 -12.336  1.00  0.00
H
ATOM   2235 2HB  TRP   136      26.974   9.487 -11.627  1.00  0.00
H
ATOM   2236  CG  TRP   136      26.084   9.174 -13.515  1.00  0.00
C
ATOM   2237  CD1 TRP   136      25.669   8.328 -14.482  1.00  0.00
C
ATOM   2238  HD1 TRP   136      26.108   7.354 -14.665  1.00  0.00
H
ATOM   2239  CD2 TRP   136      25.259  10.343 -13.649  1.00  0.00
C
ATOM   2240  NE1 TRP   136      24.637   8.852 -15.201  1.00  0.00
N
ATOM   2241  HE1 TRP   136      24.203   8.368 -15.978  1.00  0.00
H
ATOM   2242  CE2 TRP   136      24.350  10.098 -14.717  1.00  0.00
C
ATOM   2243  CE3 TRP   136      25.215  11.588 -12.994  1.00  0.00
C
ATOM   2244  HE3 TRP   136      25.910  11.807 -12.202  1.00  0.00
H
ATOM   2245  CZ2 TRP   136      23.406  11.057 -15.139  1.00  0.00
C
ATOM   2246  HZ2 TRP   136      22.736  10.850 -15.959  1.00  0.00
H
ATOM   2247  CZ3 TRP   136      24.257  12.546 -13.398  1.00  0.00
C
ATOM   2248  HZ3 TRP   136      24.200  13.493 -12.883  1.00  0.00
H
ATOM   2249  CH2 TRP   136      23.361  12.267 -14.471  1.00  0.00
C
ATOM   2250  HH2 TRP   136      22.637  13.009 -14.765  1.00  0.00
H
ATOM   2251  N   ARG   137      29.773  10.404 -11.292  1.00  0.00
N
ATOM   2252  H   ARG   137      29.203  11.231 -11.476  1.00  0.00
H
ATOM   2253  CA  ARG   137      30.683  10.473 -10.151  1.00  0.00
C
ATOM   2254  HA  ARG   137      30.962   9.482  -9.802  1.00  0.00
H
ATOM   2255  C   ARG   137      29.856  11.175  -9.103  1.00  0.00
C
ATOM   2256  O   ARG   137      29.018  12.003  -9.461  1.00  0.00
O
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ATOM   2257  CB  ARG   137      31.919  11.318 -10.462  1.00  0.00
C
ATOM   2258 1HB  ARG   137      31.577  12.258 -10.892  1.00  0.00
H
ATOM   2259 2HB  ARG   137      32.433  11.542  -9.527  1.00  0.00
H
ATOM   2260  CG  ARG   137      32.923  10.682 -11.415  1.00  0.00
C
ATOM   2261 1HG  ARG   137      33.413   9.844 -10.922  1.00  0.00
H
ATOM   2262 2HG  ARG   137      32.414  10.325 -12.309  1.00  0.00
H
ATOM   2263  CD  ARG   137      33.957  11.730 -11.811  1.00  0.00
C
ATOM   2264 1HD  ARG   137      33.451  12.561 -12.304  1.00  0.00
H
ATOM   2265 2HD  ARG   137      34.427  12.108 -10.903  1.00  0.00
H
ATOM   2266  NE  ARG   137      35.008  11.208 -12.694  1.00  0.00
N
ATOM   2267  HE  ARG   137      35.878  10.944 -12.244  1.00  0.00
H
ATOM   2268  CZ  ARG   137      34.967  11.100 -14.015  1.00  0.00
C
ATOM   2269  NH1 ARG   137      33.932  11.408 -14.753  1.00  0.00
N
ATOM   2270 1HH1 ARG   137      33.077  11.717 -14.314  1.00  0.00
H
ATOM   2271 2HH1 ARG   137      33.996  11.325 -15.758  1.00  0.00
H
ATOM   2272  NH2 ARG   137      36.030  10.677 -14.631  1.00  0.00
N
ATOM   2273 1HH2 ARG   137      36.849  10.414 -14.112  1.00  0.00
H
ATOM   2274 2HH2 ARG   137      36.020  10.600 -15.637  1.00  0.00
H
ATOM   2275  N   GLY   138      30.059  10.854  -7.838  1.00  0.00
N
ATOM   2276  H   GLY   138      30.762  10.165  -7.583  1.00  0.00
H
ATOM   2277  CA  GLY   138      29.284  11.495  -6.797  1.00  0.00
C
ATOM   2278 1HA  GLY   138      29.205  12.557  -7.033  1.00  0.00
H
ATOM   2279 2HA  GLY   138      28.280  11.076  -6.781  1.00  0.00
H
ATOM   2280  C   GLY   138      29.877  11.374  -5.416  1.00  0.00
C
ATOM   2281  O   GLY   138      30.844  10.645  -5.197  1.00  0.00
O
ATOM   2282  N   ARG   139      29.311  12.132  -4.492  1.00  0.00
N
ATOM   2283  H   ARG   139      28.497  12.692  -4.753  1.00  0.00
H
ATOM   2284  CA  ARG   139      29.788  12.231  -3.116  1.00  0.00
C
ATOM   2285  HA  ARG   139      30.474  11.415  -2.882  1.00  0.00
H
ATOM   2286  C   ARG   139      28.519  12.119  -2.292  1.00  0.00
C
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ATOM   2287  O   ARG   139      27.533  12.750  -2.661  1.00  0.00
O
ATOM   2288  CB  ARG   139      30.451  13.602  -2.890  1.00  0.00
C
ATOM   2289 1HB  ARG   139      29.679  14.364  -2.990  1.00  0.00
H
ATOM   2290 2HB  ARG   139      30.832  13.645  -1.872  1.00  0.00
H
ATOM   2291  CG  ARG   139      31.582  13.972  -3.865  1.00  0.00
C
ATOM   2292 1HG  ARG   139      31.209  13.897  -4.885  1.00  0.00
H
ATOM   2293 2HG  ARG   139      31.873  15.007  -3.690  1.00  0.00
H
ATOM   2294  CD  ARG   139      32.818  13.093  -3.733  1.00  0.00
C
ATOM   2295 1HD  ARG   139      33.272  13.273  -2.757  1.00  0.00
H
ATOM   2296 2HD  ARG   139      32.528  12.045  -3.785  1.00  0.00
H
ATOM   2297  NE  ARG   139      33.806  13.375  -4.786  1.00  0.00
N
ATOM   2298  HE  ARG   139      34.379  14.203  -4.673  1.00  0.00
H
ATOM   2299  CZ  ARG   139      34.049  12.643  -5.866  1.00  0.00
C
ATOM   2300  NH1 ARG   139      33.424  11.540  -6.177  1.00  0.00
N
ATOM   2301 1HH1 ARG   139      32.656  11.208  -5.608  1.00  0.00
H
ATOM   2302 2HH1 ARG   139      33.723  11.015  -6.988  1.00  0.00
H
ATOM   2303  NH2 ARG   139      34.984  13.040  -6.678  1.00  0.00
N
ATOM   2304 1HH2 ARG   139      35.473  13.900  -6.476  1.00  0.00
H
ATOM   2305 2HH2 ARG   139      35.207  12.495  -7.497  1.00  0.00
H
ATOM   2306  N   VAL   140      28.511  11.310  -1.244  1.00  0.00
N
ATOM   2307  H   VAL   140      29.344  10.767  -1.022  1.00  0.00
H
ATOM   2308  CA  VAL   140      27.351  11.180  -0.355  1.00  0.00
C
ATOM   2309  HA  VAL   140      26.674  12.009  -0.543  1.00  0.00
H
ATOM   2310  C   VAL   140      27.913  11.304   1.059  1.00  0.00
C
ATOM   2311  O   VAL   140      28.204  10.304   1.723  1.00  0.00
O
ATOM   2312  CB  VAL   140      26.559   9.849  -0.564  1.00  0.00
C
ATOM   2313  HB  VAL   140      27.196   9.004  -0.306  1.00  0.00
H
ATOM   2314  CG1 VAL   140      25.296   9.816   0.310  1.00  0.00
C
ATOM   2315 1HG1 VAL   140      24.750   8.889   0.132  1.00  0.00
H
ATOM   2316 2HG1 VAL   140      24.655  10.670   0.081  1.00  0.00
H
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ATOM   2317 3HG1 VAL   140      25.580   9.848   1.360  1.00  0.00
H
ATOM   2318  CG2 VAL   140      26.135   9.694  -2.027  1.00  0.00
C
ATOM   2319 1HG2 VAL   140      25.531   8.795  -2.151  1.00  0.00
H
ATOM   2320 2HG2 VAL   140      27.014   9.613  -2.664  1.00  0.00
H
ATOM   2321 3HG2 VAL   140      25.561  10.568  -2.328  1.00  0.00
H
ATOM   2322  N   ILE   141      28.185  12.532   1.476  1.00  0.00
N
ATOM   2323  H   ILE   141      27.903  13.325   0.904  1.00  0.00
H
ATOM   2324  CA  ILE   141      28.889  12.802   2.733  1.00  0.00
C
ATOM   2325  HA  ILE   141      28.786  11.942   3.393  1.00  0.00
H
ATOM   2326  C   ILE   141      28.243  13.986   3.442  1.00  0.00
C
ATOM   2327  O   ILE   141      27.517  14.760   2.837  1.00  0.00
O
ATOM   2328  CB  ILE   141      30.418  13.047   2.524  1.00  0.00
C
ATOM   2329  HB  ILE   141      30.753  13.785   3.252  1.00  0.00
H
ATOM   2330  CG1 ILE   141      30.724  13.591   1.115  1.00  0.00
C
ATOM   2331 1HG1 ILE   141      30.510  12.814   0.381  1.00  0.00
H
ATOM   2332 2HG1 ILE   141      30.066  14.438   0.920  1.00  0.00
H
ATOM   2333  CG2 ILE   141      31.185  11.732   2.791  1.00  0.00
C
ATOM   2334 1HG2 ILE   141      32.260  11.900   2.727  1.00  0.00
H
ATOM   2335 2HG2 ILE   141      30.897  10.973   2.062  1.00  0.00
H
ATOM   2336 3HG2 ILE   141      30.960  11.369   3.795  1.00  0.00
H
ATOM   2337  CD1 ILE   141      32.177  14.047   0.894  1.00  0.00
C
ATOM   2338 1HD1 ILE   141      32.261  14.522  -0.084  1.00  0.00
H
ATOM   2339 2HD1 ILE   141      32.850  13.189   0.920  1.00  0.00
H
ATOM   2340 3HD1 ILE   141      32.467  14.761   1.664  1.00  0.00
H
ATOM   2341  N   TYR   142      28.446  14.078   4.745  1.00  0.00
N
ATOM   2342  H   TYR   142      29.110  13.452   5.187  1.00  0.00
H
ATOM   2343  CA  TYR   142      27.744  15.035   5.598  1.00  0.00
C
ATOM   2344  HA  TYR   142      26.694  15.080   5.318  1.00  0.00
H
ATOM   2345  C   TYR   142      28.342  16.426   5.475  1.00  0.00
C
ATOM   2346  O   TYR   142      27.647  17.443   5.519  1.00  0.00
O
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ATOM   2347  CB  TYR   142      27.859  14.552   7.045  1.00  0.00
C
ATOM   2348 1HB  TYR   142      28.906  14.539   7.335  1.00  0.00
H
ATOM   2349 2HB  TYR   142      27.328  15.249   7.694  1.00  0.00
H
ATOM   2350  CG  TYR   142      27.287  13.163   7.226  1.00  0.00
C
ATOM   2351  CD1 TYR   142      28.086  12.007   7.085  1.00  0.00
C
ATOM   2352  HD1 TYR   142      29.146  12.101   6.890  1.00  0.00
H
ATOM   2353  CD2 TYR   142      25.927  13.000   7.511  1.00  0.00
C
ATOM   2354  HD2 TYR   142      25.317  13.877   7.623  1.00  0.00
H
ATOM   2355  CE1 TYR   142      27.508  10.710   7.183  1.00  0.00
C
ATOM   2356  HE1 TYR   142      28.122   9.834   7.047  1.00  0.00
H
ATOM   2357  CE2 TYR   142      25.348  11.710   7.636  1.00  0.00
C
ATOM   2358  HE2 TYR   142      24.297  11.603   7.855  1.00  0.00
H
ATOM   2359  CZ  TYR   142      26.142  10.578   7.457  1.00  0.00
C
ATOM   2360  OH  TYR   142      25.567   9.336   7.542  1.00  0.00
O
ATOM   2361  HH  TYR   142      26.215   8.626   7.460  1.00  0.00
H
ATOM   2362  N   ASN   143      29.651  16.450   5.294  1.00  0.00
N
ATOM   2363  H   ASN   143      30.154  15.570   5.257  1.00  0.00
H
ATOM   2364  CA  ASN   143      30.412  17.683   5.155  1.00  0.00
C
ATOM   2365  HA  ASN   143      29.749  18.547   5.126  1.00  0.00
H
ATOM   2366  C   ASN   143      31.175  17.596   3.844  1.00  0.00
C
ATOM   2367  O   ASN   143      32.007  16.697   3.675  1.00  0.00
O
ATOM   2368  CB  ASN   143      31.364  17.809   6.345  1.00  0.00
C
ATOM   2369 1HB  ASN   143      30.791  17.733   7.268  1.00  0.00
H
ATOM   2370 2HB  ASN   143      32.084  16.993   6.318  1.00  0.00
H
ATOM   2371  CG  ASN   143      32.115  19.111   6.355  1.00  0.00
C
ATOM   2372  OD1 ASN   143      31.819  20.036   5.606  1.00  0.00
O
ATOM   2373  ND2 ASN   143      33.087  19.205   7.207  1.00  0.00
N
ATOM   2374 1HD2 ASN   143      33.621  20.066   7.251  1.00  0.00
H
ATOM   2375 2HD2 ASN   143      33.293  18.427   7.825  1.00  0.00
H
ATOM   2376  N   THR   144      30.874  18.482   2.908  1.00  0.00
N
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ATOM   2377  H   THR   144      30.198  19.214   3.104  1.00  0.00
H
ATOM   2378  CA  THR   144      31.499  18.453   1.586  1.00  0.00
C
ATOM   2379  HA  THR   144      32.534  18.138   1.705  1.00  0.00
H
ATOM   2380  C   THR   144      31.520  19.827   0.924  1.00  0.00
C
ATOM   2381  O   THR   144      30.639  20.664   1.150  1.00  0.00
O
ATOM   2382  CB  THR   144      30.786  17.419   0.664  1.00  0.00
C
ATOM   2383  HB  THR   144      30.759  16.470   1.192  1.00  0.00
H
ATOM   2384  OG1 THR   144      31.524  17.250  -0.550  1.00  0.00
O
ATOM   2385  HG1 THR   144      32.409  16.946  -0.330  1.00  0.00
H
ATOM   2386  CG2 THR   144      29.353  17.791   0.308  1.00  0.00
C
ATOM   2387 1HG2 THR   144      28.927  17.003  -0.314  1.00  0.00
H
ATOM   2388 2HG2 THR   144      29.327  18.728  -0.246  1.00  0.00
H
ATOM   2389 3HG2 THR   144      28.755  17.881   1.213  1.00  0.00
H
ATOM   2390  N   GLN   145      32.544  20.052   0.115  1.00  0.00
N
ATOM   2391  H   GLN   145      33.285  19.358   0.075  1.00  0.00
H
ATOM   2392  CA  GLN   145      32.655  21.206  -0.775  1.00  0.00
C
ATOM   2393  HA  GLN   145      31.675  21.659  -0.928  1.00  0.00
H
ATOM   2394  C   GLN   145      33.185  20.679  -2.112  1.00  0.00
C
ATOM   2395  O   GLN   145      34.391  20.762  -2.371  1.00  0.00
O
ATOM   2396  CB  GLN   145      33.623  22.262  -0.216  1.00  0.00
C
ATOM   2397 1HB  GLN   145      34.588  21.789  -0.038  1.00  0.00
H
ATOM   2398 2HB  GLN   145      33.757  23.032  -0.975  1.00  0.00
H
ATOM   2399  CG  GLN   145      33.191  22.946   1.079  1.00  0.00
C
ATOM   2400 1HG  GLN   145      33.093  22.197   1.863  1.00  0.00
H
ATOM   2401 2HG  GLN   145      33.964  23.654   1.376  1.00  0.00
H
ATOM   2402  CD  GLN   145      31.877  23.691   0.955  1.00  0.00
C
ATOM   2403  OE1 GLN   145      31.497  24.168  -0.112  1.00  0.00
O
ATOM   2404  NE2 GLN   145      31.164  23.792   2.038  1.00  0.00
N
ATOM   2405 1HE2 GLN   145      30.256  24.229   1.981  1.00  0.00
H
ATOM   2406 2HE2 GLN   145      31.525  23.443   2.914  1.00  0.00
H
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ATOM   2407  N   PRO   146      32.326  20.068  -2.947  1.00  0.00
N
ATOM   2408  CA  PRO   146      32.955  19.504  -4.148  1.00  0.00
C
ATOM   2409  HA  PRO   146      33.791  18.865  -3.870  1.00  0.00
H
ATOM   2410  C   PRO   146      33.433  20.570  -5.130  1.00  0.00
C
ATOM   2411  O   PRO   146      32.805  21.624  -5.288  1.00  0.00
O
ATOM   2412  CB  PRO   146      31.835  18.652  -4.750  1.00  0.00
C
ATOM   2413 1HB  PRO   146      31.921  18.598  -5.836  1.00  0.00
H
ATOM   2414 2HB  PRO   146      31.848  17.652  -4.314  1.00  0.00
H
ATOM   2415  CG  PRO   146      30.601  19.363  -4.346  1.00  0.00
C
ATOM   2416 1HG  PRO   146      30.447  20.232  -4.983  1.00  0.00
H
ATOM   2417 2HG  PRO   146      29.741  18.702  -4.394  1.00  0.00
H
ATOM   2418  CD  PRO   146      30.876  19.798  -2.928  1.00  0.00
C
ATOM   2419 1HD  PRO   146      30.307  20.696  -2.684  1.00  0.00
H
ATOM   2420 2HD  PRO   146      30.649  18.990  -2.232  1.00  0.00
H
ATOM   2421  N   ILE   147      34.541  20.292  -5.801  1.00  0.00
N
ATOM   2422  H   ILE   147      35.054  19.443  -5.581  1.00  0.00
H
ATOM   2423  CA  ILE   147      35.063  21.167  -6.852  1.00  0.00
C
ATOM   2424  HA  ILE   147      34.324  21.931  -7.091  1.00  0.00
H
ATOM   2425  C   ILE   147      35.249  20.272  -8.073  1.00  0.00
C
ATOM   2426  O   ILE   147      36.011  19.297  -8.038  1.00  0.00
O
ATOM   2427  CB  ILE   147      36.395  21.870  -6.447  1.00  0.00
C
ATOM   2428  HB  ILE   147      37.142  21.109  -6.232  1.00  0.00
H
ATOM   2429  CG1 ILE   147      36.195  22.724  -5.176  1.00  0.00
C
ATOM   2430 1HG1 ILE   147      35.508  23.537  -5.411  1.00  0.00
H
ATOM   2431 2HG1 ILE   147      35.735  22.108  -4.405  1.00  0.00
H
ATOM   2432  CG2 ILE   147      36.905  22.744  -7.611  1.00  0.00
C
ATOM   2433 1HG2 ILE   147      37.848  23.216  -7.346  1.00  0.00
H
ATOM   2434 2HG2 ILE   147      36.172  23.519  -7.844  1.00  0.00
H
ATOM   2435 3HG2 ILE   147      37.078  22.136  -8.499  1.00  0.00
H
ATOM   2436  CD1 ILE   147      37.474  23.328  -4.573  1.00  0.00
C
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ATOM   2437 1HD1 ILE   147      37.227  23.825  -3.635  1.00  0.00
H
ATOM   2438 2HD1 ILE   147      37.902  24.062  -5.256  1.00  0.00
H
ATOM   2439 3HD1 ILE   147      38.200  22.539  -4.376  1.00  0.00
H
ATOM   2440  N   LYS   148      34.495  20.550  -9.125  1.00  0.00
N
ATOM   2441  H   LYS   148      33.923  21.391  -9.110  1.00  0.00
H
ATOM   2442  CA  LYS   148      34.432  19.696 -10.312  1.00  0.00
C
ATOM   2443  HA  LYS   148      35.412  19.259 -10.503  1.00  0.00
H
ATOM   2444  C   LYS   148      34.022  20.535 -11.514  1.00  0.00
C
ATOM   2445  O   LYS   148      33.386  21.574 -11.345  1.00  0.00
O
ATOM   2446  CB  LYS   148      33.404  18.571 -10.070  1.00  0.00
C
ATOM   2447 1HB  LYS   148      33.438  17.871 -10.905  1.00  0.00
H
ATOM   2448 2HB  LYS   148      33.706  18.030  -9.173  1.00  0.00
H
ATOM   2449  CG  LYS   148      31.944  19.030  -9.869  1.00  0.00
C
ATOM   2450 1HG  LYS   148      31.476  18.405  -9.108  1.00  0.00
H
ATOM   2451 2HG  LYS   148      31.927  20.063  -9.526  1.00  0.00
H
ATOM   2452  CD  LYS   148      31.142  18.905 -11.159  1.00  0.00
C
ATOM   2453 1HD  LYS   148      31.683  19.372 -11.973  1.00  0.00
H
ATOM   2454 2HD  LYS   148      31.035  17.851 -11.391  1.00  0.00
H
ATOM   2455  CE  LYS   148      29.774  19.538 -11.094  1.00  0.00
C
ATOM   2456 1HE  LYS   148      29.161  19.135 -11.903  1.00  0.00
H
ATOM   2457 2HE  LYS   148      29.309  19.281 -10.144  1.00  0.00
H
ATOM   2458  NZ  LYS   148      29.827  21.026 -11.244  1.00  0.00
N
ATOM   2459 1HZ  LYS   148      28.890  21.407 -11.277  1.00  0.00
H
ATOM   2460 2HZ  LYS   148      30.299  21.281 -12.104  1.00  0.00
H
ATOM   2461 3HZ  LYS   148      30.316  21.447 -10.459  1.00  0.00
H
ATOM   2462  N   GLU   149      34.237  20.017 -12.711  1.00  0.00
N
ATOM   2463  H   GLU   149      34.852  19.219 -12.817  1.00  0.00
H
ATOM   2464  CA  GLU   149      33.498  20.468 -13.887  1.00  0.00
C
ATOM   2465  HA  GLU   149      32.744  21.194 -13.592  1.00  0.00
H
ATOM   2466  C   GLU   149      32.790  19.227 -14.419  1.00  0.00
C
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ATOM   2467  O   GLU   149      33.245  18.109 -14.162  1.00  0.00
O
ATOM   2468  CB  GLU   149      34.404  21.104 -14.944  1.00  0.00
C
ATOM   2469 1HB  GLU   149      35.134  20.363 -15.266  1.00  0.00
H
ATOM   2470 2HB  GLU   149      33.791  21.375 -15.804  1.00  0.00
H
ATOM   2471  CG  GLU   149      35.154  22.350 -14.465  1.00  0.00
C
ATOM   2472 1HG  GLU   149      35.828  22.069 -13.656  1.00  0.00
H
ATOM   2473 2HG  GLU   149      35.755  22.732 -15.289  1.00  0.00
H
ATOM   2474  CD  GLU   149      34.240  23.465 -13.969  1.00  0.00
C
ATOM   2475  OE1 GLU   149      33.117  23.649 -14.497  1.00  0.00
O
ATOM   2476  OE2 GLU   149      34.655  24.205 -13.047  1.00  0.00
O
ATOM   2477  N   ALA   150      31.662  19.409 -15.091  1.00  0.00
N
ATOM   2478  H   ALA   150      31.325  20.349 -15.267  1.00  0.00
H
ATOM   2479  CA  ALA   150      30.856  18.310 -15.619  1.00  0.00
C
ATOM   2480  HA  ALA   150      31.500  17.499 -15.953  1.00  0.00
H
ATOM   2481  C   ALA   150      30.080  18.870 -16.802  1.00  0.00
C
ATOM   2482  O   ALA   150      30.116  20.088 -17.010  1.00  0.00
O
ATOM   2483  CB  ALA   150      29.892  17.809 -14.552  1.00  0.00
C
ATOM   2484 1HB  ALA   150      30.458  17.451 -13.695  1.00  0.00
H
ATOM   2485 2HB  ALA   150      29.290  16.993 -14.949  1.00  0.00
H
ATOM   2486 3HB  ALA   150      29.227  18.619 -14.245  1.00  0.00
H
ATOM   2487  N   ALA   151      29.367  18.026 -17.536  1.00  0.00
N
ATOM   2488  H   ALA   151      29.375  17.034 -17.332  1.00  0.00
H
ATOM   2489  CA  ALA   151      28.449  18.519 -18.554  1.00  0.00
C
ATOM   2490  HA  ALA   151      28.958  19.236 -19.199  1.00  0.00
H
ATOM   2491  C   ALA   151      27.347  19.230 -17.758  1.00  0.00
C
ATOM   2492  O   ALA   151      26.930  18.736 -16.705  1.00  0.00
O
ATOM   2493  CB  ALA   151      27.904  17.357 -19.391  1.00  0.00
C
ATOM   2494 1HB  ALA   151      27.440  16.619 -18.740  1.00  0.00
H
ATOM   2495 2HB  ALA   151      28.721  16.889 -19.943  1.00  0.00
H
ATOM   2496 3HB  ALA   151      27.164  17.730 -20.101  1.00  0.00
H
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ATOM   2497  N   LYS   152      26.925  20.402 -18.216  1.00  0.00
N
ATOM   2498  H   LYS   152      27.258  20.733 -19.120  1.00  0.00
H
ATOM   2499  CA  LYS   152      26.067  21.280 -17.411  1.00  0.00
C
ATOM   2500  HA  LYS   152      26.618  21.565 -16.514  1.00  0.00
H
ATOM   2501  C   LYS   152      24.795  20.608 -16.950  1.00  0.00
C
ATOM   2502  O   LYS   152      24.497  20.627 -15.764  1.00  0.00
O
ATOM   2503  CB  LYS   152      25.710  22.543 -18.200  1.00  0.00
C
ATOM   2504 1HB  LYS   152      26.630  23.042 -18.497  1.00  0.00
H
ATOM   2505 2HB  LYS   152      25.184  22.248 -19.106  1.00  0.00
H
ATOM   2506  CG  LYS   152      24.832  23.542 -17.448  1.00  0.00
C
ATOM   2507 1HG  LYS   152      23.914  23.055 -17.122  1.00  0.00
H
ATOM   2508 2HG  LYS   152      25.368  23.925 -16.579  1.00  0.00
H
ATOM   2509  CD  LYS   152      24.473  24.687 -18.370  1.00  0.00
C
ATOM   2510 1HD  LYS   152      25.392  25.164 -18.705  1.00  0.00
H
ATOM   2511 2HD  LYS   152      23.942  24.296 -19.238  1.00  0.00
H
ATOM   2512  CE  LYS   152      23.599  25.719 -17.685  1.00  0.00
C
ATOM   2513 1HE  LYS   152      22.649  25.265 -17.398  1.00  0.00
H
ATOM   2514 2HE  LYS   152      24.104  26.080 -16.788  1.00  0.00
H
ATOM   2515  NZ  LYS   152      23.347  26.868 -18.608  1.00  0.00
N
ATOM   2516 1HZ  LYS   152      22.872  27.612 -18.110  1.00  0.00
H
ATOM   2517 2HZ  LYS   152      22.764  26.570 -19.383  1.00  0.00
H
ATOM   2518 3HZ  LYS   152      24.225  27.223 -18.975  1.00  0.00
H
ATOM   2519  N   GLY   153      24.077  19.969 -17.859  1.00  0.00
N
ATOM   2520  H   GLY   153      24.409  19.931 -18.818  1.00  0.00
H
ATOM   2521  CA  GLY   153      22.788  19.372 -17.536  1.00  0.00
C
ATOM   2522 1HA  GLY   153      22.193  20.118 -17.010  1.00  0.00
H
ATOM   2523 2HA  GLY   153      22.273  19.140 -18.467  1.00  0.00
H
ATOM   2524  C   GLY   153      22.804  18.119 -16.682  1.00  0.00
C
ATOM   2525  O   GLY   153      21.814  17.394 -16.627  1.00  0.00
O
ATOM   2526  N   LYS   154      23.932  17.830 -16.046  1.00  0.00
N
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ATOM   2527  H   LYS   154      24.719  18.465 -16.138  1.00  0.00
H
ATOM   2528  CA  LYS   154      24.109  16.614 -15.258  1.00  0.00
C
ATOM   2529  HA  LYS   154      23.209  16.006 -15.331  1.00  0.00
H
ATOM   2530  C   LYS   154      24.365  16.854 -13.781  1.00  0.00
C
ATOM   2531  O   LYS   154      24.531  15.893 -13.053  1.00  0.00
O
ATOM   2532  CB  LYS   154      25.281  15.817 -15.832  1.00  0.00
C
ATOM   2533 1HB  LYS   154      26.188  16.406 -15.699  1.00  0.00
H
ATOM   2534 2HB  LYS   154      25.389  14.891 -15.269  1.00  0.00
H
ATOM   2535  CG  LYS   154      25.155  15.470 -17.310  1.00  0.00
C
ATOM   2536 1HG  LYS   154      24.960  16.373 -17.886  1.00  0.00
H
ATOM   2537 2HG  LYS   154      26.108  15.062 -17.639  1.00  0.00
H
ATOM   2538  CD  LYS   154      24.059  14.442 -17.590  1.00  0.00
C
ATOM   2539 1HD  LYS   154      24.290  13.513 -17.069  1.00  0.00
H
ATOM   2540 2HD  LYS   154      23.099  14.821 -17.237  1.00  0.00
H
ATOM   2541  CE  LYS   154      23.953  14.182 -19.079  1.00  0.00
C
ATOM   2542 1HE  LYS   154      23.147  13.469 -19.260  1.00  0.00
H
ATOM   2543 2HE  LYS   154      23.687  15.118 -19.573  1.00  0.00
H
ATOM   2544  NZ  LYS   154      25.223  13.670 -19.679  1.00  0.00
N
ATOM   2545 1HZ  LYS   154      25.413  12.733 -19.355  1.00  0.00
H
ATOM   2546 2HZ  LYS   154      25.987  14.279 -19.430  1.00  0.00
H
ATOM   2547 3HZ  LYS   154      25.153  13.661 -20.694  1.00  0.00
H
ATOM   2548  N   TYR   155      24.453  18.095 -13.325  1.00  0.00
N
ATOM   2549  H   TYR   155      24.307  18.881 -13.943  1.00  0.00
H
ATOM   2550  CA  TYR   155      24.779  18.331 -11.915  1.00  0.00
C
ATOM   2551  HA  TYR   155      25.370  17.487 -11.566  1.00  0.00
H
ATOM   2552  C   TYR   155      23.540  18.434 -11.025  1.00  0.00
C
ATOM   2553  O   TYR   155      22.575  19.121 -11.367  1.00  0.00
O
ATOM   2554  CB  TYR   155      25.639  19.591 -11.779  1.00  0.00
C
ATOM   2555 1HB  TYR   155      26.437  19.523 -12.516  1.00  0.00
H
ATOM   2556 2HB  TYR   155      25.030  20.462 -12.023  1.00  0.00
H
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ATOM   2557  CG  TYR   155      26.292  19.808 -10.416  1.00  0.00
C
ATOM   2558  CD1 TYR   155      26.711  18.723  -9.606  1.00  0.00
C
ATOM   2559  HD1 TYR   155      26.518  17.709  -9.906  1.00  0.00
H
ATOM   2560  CD2 TYR   155      26.556  21.115  -9.953  1.00  0.00
C
ATOM   2561  HD2 TYR   155      26.222  21.967 -10.532  1.00  0.00
H
ATOM   2562  CE1 TYR   155      27.412  18.939  -8.394  1.00  0.00
C
ATOM   2563  HE1 TYR   155      27.728  18.103  -7.789  1.00  0.00
H
ATOM   2564  CE2 TYR   155      27.277  21.333  -8.740  1.00  0.00
C
ATOM   2565  HE2 TYR   155      27.487  22.338  -8.405  1.00  0.00
H
ATOM   2566  CZ  TYR   155      27.713  20.238  -7.987  1.00  0.00
C
ATOM   2567  OH  TYR   155      28.454  20.391  -6.845  1.00  0.00
O
ATOM   2568  HH  TYR   155      28.699  21.306  -6.671  1.00  0.00
H
ATOM   2569  N   LEU   156      23.576  17.763  -9.881  1.00  0.00
N
ATOM   2570  H   LEU   156      24.368  17.155  -9.687  1.00  0.00
H
ATOM   2571  CA  LEU   156      22.523  17.833  -8.869  1.00  0.00
C
ATOM   2572  HA  LEU   156      21.978  18.773  -8.955  1.00  0.00
H
ATOM   2573  C   LEU   156      23.129  17.740  -7.474  1.00  0.00
C
ATOM   2574  O   LEU   156      24.002  16.904  -7.226  1.00  0.00
O
ATOM   2575  CB  LEU   156      21.561  16.668  -9.092  1.00  0.00
C
ATOM   2576 1HB  LEU   156      21.134  16.816 -10.079  1.00  0.00
H
ATOM   2577 2HB  LEU   156      22.164  15.760  -9.125  1.00  0.00
H
ATOM   2578  CG  LEU   156      20.388  16.383  -8.150  1.00  0.00
C
ATOM   2579  HG  LEU   156      20.781  16.118  -7.170  1.00  0.00
H
ATOM   2580  CD1 LEU   156      19.428  17.550  -7.990  1.00  0.00
C
ATOM   2581 1HD1 LEU   156      18.614  17.274  -7.324  1.00  0.00
H
ATOM   2582 2HD1 LEU   156      19.020  17.831  -8.960  1.00  0.00
H
ATOM   2583 3HD1 LEU   156      19.946  18.403  -7.558  1.00  0.00
H
ATOM   2584  CD2 LEU   156      19.632  15.184  -8.722  1.00  0.00
C
ATOM   2585 1HD2 LEU   156      18.781  14.944  -8.087  1.00  0.00
H
ATOM   2586 2HD2 LEU   156      20.294  14.319  -8.762  1.00  0.00
H
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ATOM   2587 3HD2 LEU   156      19.273  15.409  -9.727  1.00  0.00
H
ATOM   2588  N   VAL   157      22.649  18.588  -6.576  1.00  0.00
N
ATOM   2589  H   VAL   157      21.959  19.280  -6.868  1.00  0.00
H
ATOM   2590  CA  VAL   157      23.034  18.586  -5.168  1.00  0.00
C
ATOM   2591  HA  VAL   157      23.603  17.685  -4.958  1.00  0.00
H
ATOM   2592  C   VAL   157      21.775  18.602  -4.307  1.00  0.00
C
ATOM   2593  O   VAL   157      20.906  19.478  -4.466  1.00  0.00
O
ATOM   2594  CB  VAL   157      23.895  19.830  -4.806  1.00  0.00
C
ATOM   2595  HB  VAL   157      23.308  20.725  -5.001  1.00  0.00
H
ATOM   2596  CG1 VAL   157      24.289  19.832  -3.324  1.00  0.00
C
ATOM   2597 1HG1 VAL   157      24.976  20.656  -3.127  1.00  0.00
H
ATOM   2598 2HG1 VAL   157      24.770  18.891  -3.057  1.00  0.00
H
ATOM   2599 3HG1 VAL   157      23.407  19.972  -2.700  1.00  0.00
H
ATOM   2600  CG2 VAL   157      25.154  19.890  -5.674  1.00  0.00
C
ATOM   2601 1HG2 VAL   157      25.781  20.726  -5.363  1.00  0.00
H
ATOM   2602 2HG2 VAL   157      24.879  20.043  -6.718  1.00  0.00
H
ATOM   2603 3HG2 VAL   157      25.721  18.964  -5.586  1.00  0.00
H
ATOM   2604  N   PHE   158      21.674  17.665  -3.375  1.00  0.00
N
ATOM   2605  H   PHE   158      22.403  16.957  -3.283  1.00  0.00
H
ATOM   2606  CA  PHE   158      20.593  17.686  -2.399  1.00  0.00
C
ATOM   2607  HA  PHE   158      20.346  18.732  -2.225  1.00  0.00
H
ATOM   2608  C   PHE   158      20.961  17.129  -1.032  1.00  0.00
C
ATOM   2609  O   PHE   158      21.760  16.209  -0.912  1.00  0.00
O
ATOM   2610  CB  PHE   158      19.321  17.002  -2.936  1.00  0.00
C
ATOM   2611 1HB  PHE   158      18.564  17.010  -2.156  1.00  0.00
H
ATOM   2612 2HB  PHE   158      18.960  17.579  -3.782  1.00  0.00
H
ATOM   2613  CG  PHE   158      19.474  15.593  -3.422  1.00  0.00
C
ATOM   2614  CD1 PHE   158      19.641  14.522  -2.535  1.00  0.00
C
ATOM   2615  HD1 PHE   158      19.793  14.705  -1.486  1.00  0.00
H
ATOM   2616  CD2 PHE   158      19.293  15.319  -4.788  1.00  0.00
C
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ATOM   2617  HD2 PHE   158      19.167  16.134  -5.482  1.00  0.00
H
ATOM   2618  CE1 PHE   158      19.598  13.199  -2.992  1.00  0.00
C
ATOM   2619  HE1 PHE   158      19.755  12.398  -2.294  1.00  0.00
H
ATOM   2620  CE2 PHE   158      19.227  13.988  -5.262  1.00  0.00
C
ATOM   2621  HE2 PHE   158      19.058  13.786  -6.306  1.00  0.00
H
ATOM   2622  CZ  PHE   158      19.366  12.927  -4.362  1.00  0.00
C
ATOM   2623  HZ  PHE   158      19.307  11.909  -4.718  1.00  0.00
H
ATOM   2624  N   SER   159      20.316  17.660  -0.005  1.00  0.00
N
ATOM   2625  H   SER   159      19.814  18.523  -0.115  1.00  0.00
H
ATOM   2626  CA  SER   159      20.263  16.993   1.289  1.00  0.00
C
ATOM   2627  HA  SER   159      21.270  16.774   1.644  1.00  0.00
H
ATOM   2628  C   SER   159      19.493  15.703   1.043  1.00  0.00
C
ATOM   2629  O   SER   159      18.514  15.712   0.293  1.00  0.00
O
ATOM   2630  CB  SER   159      19.517  17.861   2.302  1.00  0.00
C
ATOM   2631 1HB  SER   159      20.039  18.812   2.415  1.00  0.00
H
ATOM   2632 2HB  SER   159      18.510  18.050   1.934  1.00  0.00
H
ATOM   2633  OG  SER   159      19.439  17.222   3.560  1.00  0.00
O
ATOM   2634  HG  SER   159      20.325  17.209   3.948  1.00  0.00
H
ATOM   2635  N   CYS   160      19.956  14.600   1.611  1.00  0.00
N
ATOM   2636  H   CYS   160      20.774  14.666   2.209  1.00  0.00
H
ATOM   2637  CA  CYS   160      19.321  13.296   1.426  1.00  0.00
C
ATOM   2638  HA  CYS   160      19.128  13.141   0.365  1.00  0.00
H
ATOM   2639  C   CYS   160      17.979  13.263   2.165  1.00  0.00
C
ATOM   2640  O   CYS   160      17.626  14.223   2.842  1.00  0.00
O
ATOM   2641  CB  CYS   160      20.270  12.204   1.922  1.00  0.00
C
ATOM   2642 1HB  CYS   160      20.485  12.371   2.979  1.00  0.00
H
ATOM   2643 2HB  CYS   160      19.789  11.233   1.817  1.00  0.00
H
ATOM   2644  SG  CYS   160      21.824  12.186   0.990  1.00  0.00
S
ATOM   2645  HG  CYS   160      22.204  13.429   1.327  1.00  0.00
H
ATOM   2646  N   ASP   161      17.231  12.172   2.058  1.00  0.00
N
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ATOM   2647  H   ASP   161      17.607  11.340   1.617  1.00  0.00
H
ATOM   2648  CA  ASP   161      15.862  12.107   2.586  1.00  0.00
C
ATOM   2649  HA  ASP   161      15.294  12.934   2.166  1.00  0.00
H
ATOM   2650  C   ASP   161      15.811  12.235   4.107  1.00  0.00
C
ATOM   2651  O   ASP   161      16.126  11.291   4.840  1.00  0.00
O
ATOM   2652  CB  ASP   161      15.201  10.797   2.162  1.00  0.00
C
ATOM   2653 1HB  ASP   161      15.264  10.707   1.078  1.00  0.00
H
ATOM   2654 2HB  ASP   161      15.741   9.965   2.608  1.00  0.00
H
ATOM   2655  CG  ASP   161      13.751  10.708   2.586  1.00  0.00
C
ATOM   2656  OD1 ASP   161      13.127  11.741   2.913  1.00  0.00
O
ATOM   2657  OD2 ASP   161      13.191   9.593   2.522  1.00  0.00
O
ATOM   2658  N   ASN   162      15.491  13.448   4.548  1.00  0.00
N
ATOM   2659  H   ASN   162      15.257  14.149   3.858  1.00  0.00
H
ATOM   2660  CA  ASN   162      15.548  13.887   5.945  1.00  0.00
C
ATOM   2661  HA  ASN   162      15.394  14.964   5.950  1.00  0.00
H
ATOM   2662  C   ASN   162      16.930  13.651   6.569  1.00  0.00
C
ATOM   2663  O   ASN   162      17.086  13.518   7.789  1.00  0.00
O
ATOM   2664  CB  ASN   162      14.407  13.270   6.763  1.00  0.00
C
ATOM   2665 1HB  ASN   162      14.260  12.232   6.471  1.00  0.00
H
ATOM   2666 2HB  ASN   162      14.670  13.294   7.815  1.00  0.00
H
ATOM   2667  CG  ASN   162      13.117  14.027   6.608  1.00  0.00
C
ATOM   2668  OD1 ASN   162      12.912  14.776   5.663  1.00  0.00
O
ATOM   2669  ND2 ASN   162      12.259  13.892   7.572  1.00  0.00
N
ATOM   2670 1HD2 ASN   162      11.400  14.428   7.530  1.00  0.00
H
ATOM   2671 2HD2 ASN   162      12.461  13.296   8.350  1.00  0.00
H
ATOM   2672  N   GLY   163      17.945  13.593   5.722  1.00  0.00
N
ATOM   2673  H   GLY   163      17.788  13.782   4.736  1.00  0.00
H
ATOM   2674  CA  GLY   163      19.279  13.239   6.166  1.00  0.00
C
ATOM   2675 1HA  GLY   163      19.205  12.594   7.039  1.00  0.00
H
ATOM   2676 2HA  GLY   163      19.775  12.676   5.377  1.00  0.00
H
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ATOM   2677  C   GLY   163      20.142  14.429   6.514  1.00  0.00
C
ATOM   2678  O   GLY   163      19.882  15.556   6.100  1.00  0.00
O
ATOM   2679  N   GLN   164      21.211  14.166   7.248  1.00  0.00
N
ATOM   2680  H   GLN   164      21.326  13.232   7.640  1.00  0.00
H
ATOM   2681  CA  GLN   164      22.259  15.156   7.467  1.00  0.00
C
ATOM   2682  HA  GLN   164      21.826  16.149   7.580  1.00  0.00
H
ATOM   2683  C   GLN   164      23.180  15.137   6.244  1.00  0.00
C
ATOM   2684  O   GLN   164      23.869  16.106   5.930  1.00  0.00
O
ATOM   2685  CB  GLN   164      23.075  14.787   8.710  1.00  0.00
C
ATOM   2686 1HB  GLN   164      23.424  13.764   8.589  1.00  0.00
H
ATOM   2687 2HB  GLN   164      23.943  15.444   8.751  1.00  0.00
H
ATOM   2688  CG  GLN   164      22.353  14.873  10.043  1.00  0.00
C
ATOM   2689 1HG  GLN   164      21.996  15.890  10.180  1.00  0.00
H
ATOM   2690 2HG  GLN   164      21.501  14.194  10.042  1.00  0.00
H
ATOM   2691  CD  GLN   164      23.258  14.521  11.212  1.00  0.00
C
ATOM   2692  OE1 GLN   164      24.454  14.291  11.053  1.00  0.00
O
ATOM   2693  NE2 GLN   164      22.708  14.486  12.393  1.00  0.00
N
ATOM   2694 1HE2 GLN   164      23.274  14.249  13.190  1.00  0.00
H
ATOM   2695 2HE2 GLN   164      21.725  14.692  12.498  1.00  0.00
H
ATOM   2696  N   THR   165      23.212  14.003   5.562  1.00  0.00
N
ATOM   2697  H   THR   165      22.642  13.221   5.850  1.00  0.00
H
ATOM   2698  CA  THR   165      24.094  13.789   4.423  1.00  0.00
C
ATOM   2699  HA  THR   165      25.105  14.063   4.707  1.00  0.00
H
ATOM   2700  C   THR   165      23.711  14.564   3.172  1.00  0.00
C
ATOM   2701  O   THR   165      22.529  14.760   2.891  1.00  0.00
O
ATOM   2702  CB  THR   165      24.065  12.301   4.083  1.00  0.00
C
ATOM   2703  HB  THR   165      23.521  12.148   3.153  1.00  0.00
H
ATOM   2704  OG1 THR   165      23.379  11.620   5.140  1.00  0.00
O
ATOM   2705  HG1 THR   165      23.289  10.693   4.896  1.00  0.00
H
ATOM   2706  CG2 THR   165      25.467  11.737   3.951  1.00  0.00
C
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ATOM   2707 1HG2 THR   165      25.431  10.653   3.885  1.00  0.00
H
ATOM   2708 2HG2 THR   165      26.067  12.011   4.817  1.00  0.00
H
ATOM   2709 3HG2 THR   165      25.928  12.132   3.048  1.00  0.00
H
ATOM   2710  N   ILE   166      24.710  14.970   2.403  1.00  0.00
N
ATOM   2711  H   ILE   166      25.673  14.774   2.668  1.00  0.00
H
ATOM   2712  CA  ILE   166      24.520  15.715   1.165  1.00  0.00
C
ATOM   2713  HA  ILE   166      23.471  15.980   1.042  1.00  0.00
H
ATOM   2714  C   ILE   166      24.957  14.801   0.023  1.00  0.00
C
ATOM   2715  O   ILE   166      26.057  14.249   0.041  1.00  0.00
O
ATOM   2716  CB  ILE   166      25.385  17.016   1.154  1.00  0.00
C
ATOM   2717  HB  ILE   166      26.434  16.728   1.214  1.00  0.00
H
ATOM   2718  CG1 ILE   166      25.058  17.892   2.382  1.00  0.00
C
ATOM   2719 1HG1 ILE   166      24.051  18.289   2.263  1.00  0.00
H
ATOM   2720 2HG1 ILE   166      25.072  17.277   3.281  1.00  0.00
H
ATOM   2721  CG2 ILE   166      25.163  17.808  -0.159  1.00  0.00
C
ATOM   2722 1HG2 ILE   166      25.780  18.706  -0.173  1.00  0.00
H
ATOM   2723 2HG2 ILE   166      24.114  18.092  -0.258  1.00  0.00
H
ATOM   2724 3HG2 ILE   166      25.448  17.198  -1.016  1.00  0.00
H
ATOM   2725  CD1 ILE   166      26.023  19.061   2.632  1.00  0.00
C
ATOM   2726 1HD1 ILE   166      25.732  19.575   3.548  1.00  0.00
H
ATOM   2727 2HD1 ILE   166      25.985  19.768   1.804  1.00  0.00
H
ATOM   2728 3HD1 ILE   166      27.040  18.683   2.746  1.00  0.00
H
ATOM   2729  N   LEU   167      24.086  14.649  -0.962  1.00  0.00
N
ATOM   2730  H   LEU   167      23.185  15.119  -0.892  1.00  0.00
H
ATOM   2731  CA  LEU   167      24.393  13.986  -2.222  1.00  0.00
C
ATOM   2732  HA  LEU   167      25.187  13.251  -2.102  1.00  0.00
H
ATOM   2733  C   LEU   167      24.848  15.111  -3.138  1.00  0.00
C
ATOM   2734  O   LEU   167      24.142  16.107  -3.286  1.00  0.00
O
ATOM   2735  CB  LEU   167      23.123  13.329  -2.786  1.00  0.00
C
ATOM   2736 1HB  LEU   167      22.850  12.544  -2.082  1.00  0.00
H
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ATOM   2737 2HB  LEU   167      22.342  14.084  -2.721  1.00  0.00
H
ATOM   2738  CG  LEU   167      22.995  12.719  -4.200  1.00  0.00
C
ATOM   2739  HG  LEU   167      22.066  12.158  -4.202  1.00  0.00
H
ATOM   2740  CD1 LEU   167      22.851  13.751  -5.321  1.00  0.00
C
ATOM   2741 1HD1 LEU   167      22.536  13.255  -6.238  1.00  0.00
H
ATOM   2742 2HD1 LEU   167      23.793  14.263  -5.498  1.00  0.00
H
ATOM   2743 3HD1 LEU   167      22.097  14.488  -5.046  1.00  0.00
H
ATOM   2744  CD2 LEU   167      24.092  11.727  -4.552  1.00  0.00
C
ATOM   2745 1HD2 LEU   167      23.909  11.313  -5.544  1.00  0.00
H
ATOM   2746 2HD2 LEU   167      24.077  10.910  -3.837  1.00  0.00
H
ATOM   2747 3HD2 LEU   167      25.069  12.213  -4.540  1.00  0.00
H
ATOM   2748  N   CYS   168      25.978  14.922  -3.796  1.00  0.00
N
ATOM   2749  H   CYS   168      26.575  14.141  -3.532  1.00  0.00
H
ATOM   2750  CA  CYS   168      26.365  15.727  -4.948  1.00  0.00
C
ATOM   2751  HA  CYS   168      25.556  16.396  -5.240  1.00  0.00
H
ATOM   2752  C   CYS   168      26.626  14.691  -6.034  1.00  0.00
C
ATOM   2753  O   CYS   168      27.342  13.734  -5.758  1.00  0.00
O
ATOM   2754  CB  CYS   168      27.636  16.518  -4.635  1.00  0.00
C
ATOM   2755 1HB  CYS   168      28.440  15.812  -4.429  1.00  0.00
H
ATOM   2756 2HB  CYS   168      27.911  17.111  -5.508  1.00  0.00
H
ATOM   2757  SG  CYS   168      27.462  17.608  -3.202  1.00  0.00
S
ATOM   2758  HG  CYS   168      26.425  18.316  -3.664  1.00  0.00
H
ATOM   2759  N   LEU   169      26.054  14.822  -7.221  1.00  0.00
N
ATOM   2760  H   LEU   169      25.446  15.619  -7.408  1.00  0.00
H
ATOM   2761  CA  LEU   169      26.228  13.823  -8.281  1.00  0.00
C
ATOM   2762  HA  LEU   169      27.135  13.245  -8.108  1.00  0.00
H
ATOM   2763  C   LEU   169      26.333  14.530  -9.624  1.00  0.00
C
ATOM   2764  O   LEU   169      25.608  15.500  -9.853  1.00  0.00
O
ATOM   2765  CB  LEU   169      25.015  12.887  -8.297  1.00  0.00
C
ATOM   2766 1HB  LEU   169      24.847  12.536  -7.283  1.00  0.00
H
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ATOM   2767 2HB  LEU   169      24.152  13.488  -8.584  1.00  0.00
H
ATOM   2768  CG  LEU   169      25.054  11.654  -9.213  1.00  0.00
C
ATOM   2769  HG  LEU   169      25.441  11.959 -10.180  1.00  0.00
H
ATOM   2770  CD1 LEU   169      25.934  10.530  -8.672  1.00  0.00
C
ATOM   2771 1HD1 LEU   169      25.914   9.682  -9.358  1.00  0.00
H
ATOM   2772 2HD1 LEU   169      25.577  10.209  -7.693  1.00  0.00
H
ATOM   2773 3HD1 LEU   169      26.957  10.878  -8.585  1.00  0.00
H
ATOM   2774  CD2 LEU   169      23.655  11.120  -9.423  1.00  0.00
C
ATOM   2775 1HD2 LEU   169      23.683  10.292 -10.133  1.00  0.00
H
ATOM   2776 2HD2 LEU   169      23.028  11.903  -9.844  1.00  0.00
H
ATOM   2777 3HD2 LEU   169      23.231  10.775  -8.480  1.00  0.00
H
ATOM   2778  N   TRP   170      27.231  14.075 -10.489  1.00  0.00
N
ATOM   2779  H   TRP   170      27.833  13.294 -10.231  1.00  0.00
H
ATOM   2780  CA  TRP   170      27.406  14.668 -11.813  1.00  0.00
C
ATOM   2781  HA  TRP   170      26.440  15.002 -12.171  1.00  0.00
H
ATOM   2782  C   TRP   170      27.987  13.694 -12.833  1.00  0.00
C
ATOM   2783  O   TRP   170      28.592  12.693 -12.458  1.00  0.00
O
ATOM   2784  CB  TRP   170      28.345  15.867 -11.704  1.00  0.00
C
ATOM   2785 1HB  TRP   170      28.399  16.357 -12.672  1.00  0.00
H
ATOM   2786 2HB  TRP   170      27.930  16.573 -10.991  1.00  0.00
H
ATOM   2787  CG  TRP   170      29.735  15.505 -11.255  1.00  0.00
C
ATOM   2788  CD1 TRP   170      30.807  15.222 -12.045  1.00  0.00
C
ATOM   2789  HD1 TRP   170      30.774  15.189 -13.127  1.00  0.00
H
ATOM   2790  CD2 TRP   170      30.231  15.434  -9.902  1.00  0.00
C
ATOM   2791  NE1 TRP   170      31.935  15.014 -11.305  1.00  0.00
N
ATOM   2792  HE1 TRP   170      32.852  14.842 -11.701  1.00  0.00
H
ATOM   2793  CE2 TRP   170      31.617  15.110  -9.978  1.00  0.00
C
ATOM   2794  CE3 TRP   170      29.650  15.634  -8.631  1.00  0.00
C
ATOM   2795  HE3 TRP   170      28.606  15.890  -8.543  1.00  0.00
H
ATOM   2796  CZ2 TRP   170      32.424  14.976  -8.830  1.00  0.00
C
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ATOM   2797  HZ2 TRP   170      33.473  14.734  -8.917  1.00  0.00
H
ATOM   2798  CZ3 TRP   170      30.458  15.494  -7.471  1.00  0.00
C
ATOM   2799  HZ3 TRP   170      30.024  15.639  -6.493  1.00  0.00
H
ATOM   2800  CH2 TRP   170      31.842  15.171  -7.590  1.00  0.00
C
ATOM   2801  HH2 TRP   170      32.448  15.088  -6.699  1.00  0.00
H
ATOM   2802  N   LEU   171      27.862  14.013 -14.115  1.00  0.00
N
ATOM   2803  H   LEU   171      27.345  14.841 -14.367  1.00  0.00
H
ATOM   2804  CA  LEU   171      28.473  13.235 -15.196  1.00  0.00
C
ATOM   2805  HA  LEU   171      29.094  12.448 -14.774  1.00  0.00
H
ATOM   2806  C   LEU   171      29.373  14.173 -15.999  1.00  0.00
C
ATOM   2807  O   LEU   171      28.913  15.086 -16.690  1.00  0.00
O
ATOM   2808  CB  LEU   171      27.402  12.550 -16.055  1.00  0.00
C
ATOM   2809 1HB  LEU   171      26.764  12.001 -15.366  1.00  0.00
H
ATOM   2810 2HB  LEU   171      26.793  13.322 -16.506  1.00  0.00
H
ATOM   2811  CG  LEU   171      27.791  11.562 -17.171  1.00  0.00
C
ATOM   2812  HG  LEU   171      28.486  10.834 -16.757  1.00  0.00
H
ATOM   2813  CD1 LEU   171      26.529  10.823 -17.600  1.00  0.00
C
ATOM   2814 1HD1 LEU   171      26.738  10.200 -18.472  1.00  0.00
H
ATOM   2815 2HD1 LEU   171      25.718  11.511 -17.821  1.00  0.00
H
ATOM   2816 3HD1 LEU   171      26.228  10.156 -16.797  1.00  0.00
H
ATOM   2817  CD2 LEU   171      28.430  12.187 -18.412  1.00  0.00
C
ATOM   2818 1HD2 LEU   171      28.581  11.417 -19.173  1.00  0.00
H
ATOM   2819 2HD2 LEU   171      29.406  12.584 -18.153  1.00  0.00
H
ATOM   2820 3HD2 LEU   171      27.811  12.986 -18.806  1.00  0.00
H
ATOM   2821  N   ALA   172      30.669  13.960 -15.849  1.00  0.00
N
ATOM   2822  H   ALA   172      30.970  13.218 -15.229  1.00  0.00
H
ATOM   2823  CA  ALA   172      31.702  14.673 -16.584  1.00  0.00
C
ATOM   2824  HA  ALA   172      31.315  15.619 -16.960  1.00  0.00
H
ATOM   2825  C   ALA   172      32.091  13.786 -17.764  1.00  0.00
C
ATOM   2826  O   ALA   172      31.858  12.582 -17.727  1.00  0.00
O
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ATOM   2827  CB  ALA   172      32.889  14.931 -15.674  1.00  0.00
C
ATOM   2828 1HB  ALA   172      32.568  15.520 -14.815  1.00  0.00
H
ATOM   2829 2HB  ALA   172      33.651  15.488 -16.216  1.00  0.00
H
ATOM   2830 3HB  ALA   172      33.312  13.989 -15.329  1.00  0.00
H
ATOM   2831  N   ASN   173      32.657  14.385 -18.800  1.00  0.00
N
ATOM   2832  H   ASN   173      32.948  15.348 -18.711  1.00  0.00
H
ATOM   2833  CA  ASN   173      32.787  13.730 -20.102  1.00  0.00
C
ATOM   2834  HA  ASN   173      31.779  13.544 -20.471  1.00  0.00
H
ATOM   2835  C   ASN   173      33.499  12.378 -20.121  1.00  0.00
C
ATOM   2836  O   ASN   173      34.706  12.258 -19.910  1.00  0.00
O
ATOM   2837  CB  ASN   173      33.498  14.641 -21.109  1.00  0.00
C
ATOM   2838 1HB  ASN   173      34.387  15.070 -20.650  1.00  0.00
H
ATOM   2839 2HB  ASN   173      33.809  14.031 -21.950  1.00  0.00
H
ATOM   2840  CG  ASN   173      32.621  15.738 -21.645  1.00  0.00
C
ATOM   2841  OD1 ASN   173      31.930  16.425 -20.905  1.00  0.00
O
ATOM   2842  ND2 ASN   173      32.645  15.923 -22.935  1.00  0.00
N
ATOM   2843 1HD2 ASN   173      32.082  16.652 -23.334  1.00  0.00
H
ATOM   2844 2HD2 ASN   173      33.245  15.352 -23.515  1.00  0.00
H
ATOM   2845  N   ASP   174      32.710  11.374 -20.453  1.00  0.00
N
ATOM   2846  H   ASP   174      31.717  11.447 -20.245  1.00  0.00
H
ATOM   2847  CA  ASP   174      33.092  10.174 -21.193  1.00  0.00
C
ATOM   2848  HA  ASP   174      33.861  10.367 -21.940  1.00  0.00
H
ATOM   2849  C   ASP   174      31.737   9.929 -21.837  1.00  0.00
C
ATOM   2850  O   ASP   174      30.754  10.408 -21.264  1.00  0.00
O
ATOM   2851  CB  ASP   174      33.462   9.022 -20.261  1.00  0.00
C
ATOM   2852 1HB  ASP   174      34.328   9.302 -19.661  1.00  0.00
H
ATOM   2853 2HB  ASP   174      32.619   8.840 -19.600  1.00  0.00
H
ATOM   2854  CG  ASP   174      33.761   7.739 -21.007  1.00  0.00
C
ATOM   2855  OD1 ASP   174      34.173   7.778 -22.183  1.00  0.00
O
ATOM   2856  OD2 ASP   174      33.570   6.648 -20.424  1.00  0.00
O
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ATOM   2857  N   ASP   175      31.671   9.288 -23.002  1.00  0.00
N
ATOM   2858  H   ASP   175      32.539   8.934 -23.402  1.00  0.00
H
ATOM   2859  CA  ASP   175      30.435   9.024 -23.773  1.00  0.00
C
ATOM   2860  HA  ASP   175      30.729   8.413 -24.627  1.00  0.00
H
ATOM   2861  C   ASP   175      29.729  10.262 -24.359  1.00  0.00
C
ATOM   2862  O   ASP   175      29.200  10.225 -25.466  1.00  0.00
O
ATOM   2863  CB  ASP   175      29.463   8.177 -22.941  1.00  0.00
C
ATOM   2864 1HB  ASP   175      30.053   7.530 -22.293  1.00  0.00
H
ATOM   2865 2HB  ASP   175      28.848   8.827 -22.320  1.00  0.00
H
ATOM   2866  CG  ASP   175      28.572   7.301 -23.792  1.00  0.00
C
ATOM   2867  OD1 ASP   175      29.030   6.204 -24.182  1.00  0.00
O
ATOM   2868  OD2 ASP   175      27.419   7.675 -24.107  1.00  0.00
O
ATOM   2869  N   GLU   176      29.853  11.385 -23.668  1.00  0.00
N
ATOM   2870  H   GLU   176      30.205  11.293 -22.717  1.00  0.00
H
ATOM   2871  CA  GLU   176      29.546  12.736 -24.148  1.00  0.00
C
ATOM   2872  HA  GLU   176      28.557  12.777 -24.598  1.00  0.00
H
ATOM   2873  C   GLU   176      30.567  13.203 -25.181  1.00  0.00
C
ATOM   2874  O   GLU   176      30.348  14.165 -25.910  1.00  0.00
O
ATOM   2875  CB  GLU   176      29.616  13.709 -22.965  1.00  0.00
C
ATOM   2876 1HB  GLU   176      30.497  13.452 -22.377  1.00  0.00
H
ATOM   2877 2HB  GLU   176      29.760  14.719 -23.344  1.00  0.00
H
ATOM   2878  CG  GLU   176      28.400  13.707 -22.043  1.00  0.00
C
ATOM   2879 1HG  GLU   176      28.164  12.681 -21.757  1.00  0.00
H
ATOM   2880 2HG  GLU   176      28.654  14.263 -21.139  1.00  0.00
H
ATOM   2881  CD  GLU   176      27.170  14.358 -22.671  1.00  0.00
C
ATOM   2882  OE1 GLU   176      27.305  15.344 -23.432  1.00  0.00
O
ATOM   2883  OE2 GLU   176      26.033  13.939 -22.358  1.00  0.00
O
ATOM   2884  N   ASP   177      31.705  12.530 -25.245  1.00  0.00
N
ATOM   2885  H   ASP   177      31.833  11.726 -24.649  1.00  0.00
H
ATOM   2886  CA  ASP   177      32.788  12.923 -26.152  1.00  0.00
C
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ATOM   2887  HA  ASP   177      32.862  14.008 -26.159  1.00  0.00
H
ATOM   2888  C   ASP   177      32.555  12.480 -27.598  1.00  0.00
C
ATOM   2889  O   ASP   177      33.402  12.695 -28.468  1.00  0.00
O
ATOM   2890  CB  ASP   177      34.121  12.351 -25.654  1.00  0.00
C
ATOM   2891 1HB  ASP   177      33.983  11.302 -25.394  1.00  0.00
H
ATOM   2892 2HB  ASP   177      34.860  12.418 -26.451  1.00  0.00
H
ATOM   2893  CG  ASP   177      34.672  13.102 -24.458  1.00  0.00
C
ATOM   2894  OD1 ASP   177      34.755  14.357 -24.505  1.00  0.00
O
ATOM   2895  OD2 ASP   177      35.063  12.461 -23.461  1.00  0.00
O
ATOM   2896  N   ARG   178      31.418  11.853 -27.862  1.00  0.00
N
ATOM   2897  H   ARG   178      30.722  11.754 -27.128  1.00  0.00
H
ATOM   2898  CA  ARG   178      31.075  11.308 -29.176  1.00  0.00
C
ATOM   2899  HA  ARG   178      31.488  11.932 -29.971  1.00  0.00
H
ATOM   2900  C   ARG   178      29.550  11.374 -29.212  1.00  0.00
C
ATOM   2901  O   ARG   178      28.953  11.577 -28.149  1.00  0.00
O
ATOM   2902  CB  ARG   178      31.632   9.883 -29.288  1.00  0.00
C
ATOM   2903 1HB  ARG   178      31.461   9.505 -30.295  1.00  0.00
H
ATOM   2904 2HB  ARG   178      32.707   9.928 -29.120  1.00  0.00
H
ATOM   2905  CG  ARG   178      31.032   8.909 -28.295  1.00  0.00
C
ATOM   2906 1HG  ARG   178      31.027   9.358 -27.303  1.00  0.00
H
ATOM   2907 2HG  ARG   178      30.009   8.691 -28.592  1.00  0.00
H
ATOM   2908  CD  ARG   178      31.814   7.618 -28.214  1.00  0.00
C
ATOM   2909 1HD  ARG   178      31.825   7.135 -29.191  1.00  0.00
H
ATOM   2910 2HD  ARG   178      32.834   7.855 -27.916  1.00  0.00
H
ATOM   2911  NE  ARG   178      31.219   6.718 -27.218  1.00  0.00
N
ATOM   2912  HE  ARG   178      30.323   6.994 -26.840  1.00  0.00
H
ATOM   2913  CZ  ARG   178      31.726   5.572 -26.784  1.00  0.00
C
ATOM   2914  NH1 ARG   178      32.855   5.062 -27.200  1.00  0.00
N
ATOM   2915 1HH1 ARG   178      33.438   5.583 -27.844  1.00  0.00
H
ATOM   2916 2HH1 ARG   178      33.144   4.152 -26.869  1.00  0.00
H
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ATOM   2917  NH2 ARG   178      31.068   4.913 -25.878  1.00  0.00
N
ATOM   2918 1HH2 ARG   178      30.240   5.319 -25.458  1.00  0.00
H
ATOM   2919 2HH2 ARG   178      31.391   4.003 -25.597  1.00  0.00
H
ATOM   2920  N   PRO   179      28.907  11.261 -30.388  1.00  0.00
N
ATOM   2921  CA  PRO   179      27.451  11.432 -30.308  1.00  0.00
C
ATOM   2922  HA  PRO   179      27.219  12.350 -29.772  1.00  0.00
H
ATOM   2923  C   PRO   179      26.703  10.271 -29.654  1.00  0.00
C
ATOM   2924  O   PRO   179      26.940   9.100 -29.968  1.00  0.00
O
ATOM   2925  CB  PRO   179      27.053  11.587 -31.777  1.00  0.00
C
ATOM   2926 1HB  PRO   179      26.041  11.222 -31.950  1.00  0.00
H
ATOM   2927 2HB  PRO   179      27.140  12.631 -32.077  1.00  0.00
H
ATOM   2928  CG  PRO   179      28.053  10.770 -32.510  1.00  0.00
C
ATOM   2929 1HG  PRO   179      27.794   9.713 -32.443  1.00  0.00
H
ATOM   2930 2HG  PRO   179      28.122  11.079 -33.553  1.00  0.00
H
ATOM   2931  CD  PRO   179      29.341  11.038 -31.782  1.00  0.00
C
ATOM   2932 1HD  PRO   179      29.998  10.174 -31.849  1.00  0.00
H
ATOM   2933 2HD  PRO   179      29.827  11.927 -32.180  1.00  0.00
H
ATOM   2934  N   ALA   180      25.782  10.611 -28.763  1.00  0.00
N
ATOM   2935  H   ALA   180      25.696  11.589 -28.501  1.00  0.00
H
ATOM   2936  CA  ALA   180      24.830   9.691 -28.141  1.00  0.00
C
ATOM   2937  HA  ALA   180      24.352   9.067 -28.896  1.00  0.00
H
ATOM   2938  C   ALA   180      23.808  10.648 -27.517  1.00  0.00
C
ATOM   2939  O   ALA   180      23.712  11.795 -27.961  1.00  0.00
O
ATOM   2940  CB  ALA   180      25.511   8.810 -27.081  1.00  0.00
C
ATOM   2941 1HB  ALA   180      26.274   8.204 -27.565  1.00  0.00
H
ATOM   2942 2HB  ALA   180      24.792   8.137 -26.623  1.00  0.00
H
ATOM   2943 3HB  ALA   180      25.974   9.426 -26.313  1.00  0.00
H
ATOM   2944  N   GLY   181      23.092  10.230 -26.484  1.00  0.00
N
ATOM   2945  H   GLY   181      23.177   9.277 -26.150  1.00  0.00
H
ATOM   2946  CA  GLY   181      22.246  11.141 -25.732  1.00  0.00
C
```

```
ATOM   2947 1HA  GLY   181      22.655  12.150 -25.770  1.00  0.00
H
ATOM   2948 2HA  GLY   181      21.230  11.137 -26.127  1.00  0.00
H
ATOM   2949  C   GLY   181      22.247  10.657 -24.299  1.00  0.00
C
ATOM   2950  O   GLY   181      22.574   9.491 -24.068  1.00  0.00
O
ATOM   2951  N   CYS   182      21.906  11.502 -23.338  1.00  0.00
N
ATOM   2952  H   CYS   182      21.651  12.453 -23.585  1.00  0.00
H
ATOM   2953  CA  CYS   182      21.879  11.086 -21.935  1.00  0.00
C
ATOM   2954  HA  CYS   182      21.646  10.024 -21.890  1.00  0.00
H
ATOM   2955  C   CYS   182      20.803  11.804 -21.121  1.00  0.00
C
ATOM   2956  O   CYS   182      20.080  11.165 -20.364  1.00  0.00
O
ATOM   2957  CB  CYS   182      23.264  11.281 -21.322  1.00  0.00
C
ATOM   2958 1HB  CYS   182      23.996  10.782 -21.962  1.00  0.00
H
ATOM   2959 2HB  CYS   182      23.493  12.344 -21.314  1.00  0.00
H
ATOM   2960  SG  CYS   182      23.408  10.611 -19.645  1.00  0.00
S
ATOM   2961  HG  CYS   182      22.985   9.375 -19.952  1.00  0.00
H
ATOM   2962  N   CYS   183      20.636  13.108 -21.295  1.00  0.00
N
ATOM   2963  H   CYS   183      21.305  13.648 -21.835  1.00  0.00
H
ATOM   2964  CA  CYS   183      19.464  13.775 -20.726  1.00  0.00
C
ATOM   2965  HA  CYS   183      19.341  13.463 -19.690  1.00  0.00
H
ATOM   2966  C   CYS   183      18.214  13.364 -21.507  1.00  0.00
C
ATOM   2967  O   CYS   183      17.190  13.006 -20.916  1.00  0.00
O
ATOM   2968  CB  CYS   183      19.628  15.295 -20.774  1.00  0.00
C
ATOM   2969 1HB  CYS   183      19.804  15.602 -21.805  1.00  0.00
H
ATOM   2970 2HB  CYS   183      18.699  15.755 -20.435  1.00  0.00
H
ATOM   2971  SG  CYS   183      20.971  15.910 -19.742  1.00  0.00
S
ATOM   2972  HG  CYS   183      20.247  16.004 -18.614  1.00  0.00
H
ATOM   2973  N   CYS   184      18.346  13.400 -22.831  1.00  0.00
N
ATOM   2974  H   CYS   184      19.244  13.701 -23.193  1.00  0.00
H
ATOM   2975  CA  CYS   184      17.340  13.041 -23.846  1.00  0.00
C
ATOM   2976  HA  CYS   184      17.797  13.272 -24.807  1.00  0.00
H
```

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ATOM   2977  C   CYS   184      15.965  13.724 -23.890  1.00  0.00
C
ATOM   2978  O   CYS   184      15.486  14.046 -24.979  1.00  0.00
O
ATOM   2979  CB  CYS   184      17.128  11.528 -23.839  1.00  0.00
C
ATOM   2980 1HB  CYS   184      16.680  11.245 -22.887  1.00  0.00
H
ATOM   2981 2HB  CYS   184      16.430  11.268 -24.637  1.00  0.00
H
ATOM   2982  SG  CYS   184      18.659  10.599 -24.069  1.00  0.00
S
ATOM   2983  HG  CYS   184      18.129   9.385 -23.869  1.00  0.00
H
ATOM   2984  N   CYS   185      15.317  13.913 -22.752  1.00  0.00
N
ATOM   2985  H   CYS   185      15.781  13.657 -21.889  1.00  0.00
H
ATOM   2986  CA  CYS   185      13.956  14.439 -22.667  1.00  0.00
C
ATOM   2987  HA  CYS   185      13.574  14.654 -23.662  1.00  0.00
H
ATOM   2988  C   CYS   185      13.955  15.729 -21.862  1.00  0.00
C
ATOM   2989  O   CYS   185      13.375  16.740 -22.296  1.00  0.00
O
ATOM   2990  OXT CYS   185      14.591  15.727 -20.786  1.00  0.00
O
ATOM   2991  CB  CYS   185      13.066  13.381 -22.013  1.00  0.00
C
ATOM   2992 1HB  CYS   185      13.414  13.204 -20.995  1.00  0.00
H
ATOM   2993 2HB  CYS   185      12.042  13.755 -21.969  1.00  0.00
H
ATOM   2994  SG  CYS   185      13.102  11.816 -22.920  1.00  0.00
S
ATOM   2995  HG  CYS   185      12.170  11.174 -22.198  1.00  0.00
H
TER    2996      CYS   185
HETATM 2997 CA    CA A 201      -3.192  31.387  20.007  1.00  0.00
CA
END
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REMARK YASARA
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REMARK YASARA
REMARK YASARA Written on:        Wed Oct 05 10:24:50 2016
REMARK YASARA Number of models: 1
REMARK YASARA Number of atoms:   2952
REMARK YASARA Please address questions or suggestions to:
Eliza@yasara.org
REMARK YASARA
SEQRES   1    180  MET ASP PRO PHE LEU HIS ALA PHE PHE ALA VAL ASP LEU
SEQRES   2    180  ASP HIS ASP GLU LYS ILE SER MET THR GLU LEU LYS ASN
SEQRES   3    180  TYR VAL GLU THR ASN ASN LEU ASP GLU LYS MET ILE GLU
SEQRES   4    180  SER TRP ARG ASN LEU PHE ASP PRO MET HIS THR GLY TYR
SEQRES   5    180  ILE THR LEU THR LYS PHE CYS ASP VAL LEU GLY VAL LYS
SEQRES   6    180  MET GLU ASP ALA ARG LYS ALA LYS ASP GLU PHE LYS LYS
SEQRES   7    180  ARG PRO ALA ASN THR LEU ALA SER ASP ILE TYR ILE ILE
SEQRES   8    180  ALA HIS GLN MET SER ILE THR ASP GLN ILE LYS ILE SER
SEQRES   9    180  GLU GLN ALA ARG CYS LEU LEU PHE PRO PRO ASN ASP LEU
SEQRES  10    180  ASP ASN LYS GLU ILE ALA HIS ASN LEU LYS LEU TRP LEU
SEQRES  11    180  HIS LYS ILE TYR GLY PRO ILE TRP HIS VAL VAL VAL VAL
SEQRES  12    180  ARG GLY ASP TYR GLY ALA SER PHE THR HIS SER GLU ASN
SEQRES  13    180  ARG SER PHE GLN PHE ARG LEU ARG ASP LYS CYS PHE LEU
SEQRES  14    180  ILE TRP CYS THR PRO GLY GLN TYR GLN LEU CYS
ATOM      1  N   MET     1      34.298  18.566  28.243  1.00  0.00
N
ATOM      2 1H   MET     1      34.119  19.552  28.375  1.00  0.00
H
ATOM      3 2H   MET     1      34.851  18.224  29.017  1.00  0.00
H
ATOM      4 3H   MET     1      33.416  18.075  28.213  1.00  0.00
H
ATOM      5  CA  MET     1      35.032  18.362  26.963  1.00  0.00
C
ATOM      6  HA  MET     1      34.412  18.750  26.156  1.00  0.00
H
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ATOM      7  C   MET     1      35.276  16.886  26.689  1.00  0.00
C
ATOM      8  O   MET     1      34.674  16.330  25.775  1.00  0.00
O
ATOM      9  CB  MET     1      36.354  19.136  26.972  1.00  0.00
C
ATOM     10 1HB  MET     1      36.134  20.181  27.187  1.00  0.00
H
ATOM     11 2HB  MET     1      36.987  18.754  27.772  1.00  0.00
H
ATOM     12  CG  MET     1      37.126  19.058  25.658  1.00  0.00
C
ATOM     13 1HG  MET     1      38.047  19.631  25.750  1.00  0.00
H
ATOM     14 2HG  MET     1      37.386  18.017  25.462  1.00  0.00
H
ATOM     15  SD  MET     1      36.181  19.685  24.255  1.00  0.00
S
ATOM     16  CE  MET     1      36.175  21.455  24.537  1.00  0.00
C
ATOM     17 1HE  MET     1      35.689  21.953  23.699  1.00  0.00
H
ATOM     18 2HE  MET     1      37.200  21.823  24.620  1.00  0.00
H
ATOM     19 3HE  MET     1      35.631  21.689  25.452  1.00  0.00
H
ATOM     20  N   ASP     2      36.141  16.224  27.451  1.00  0.00
N
ATOM     21  H   ASP     2      36.505  16.648  28.300  1.00  0.00
H
ATOM     22  CA  ASP     2      36.611  14.877  27.099  1.00  0.00
C
ATOM     23  HA  ASP     2      37.158  14.967  26.164  1.00  0.00
H
ATOM     24  C   ASP     2      35.538  13.806  26.842  1.00  0.00
C
ATOM     25  O   ASP     2      35.660  13.083  25.848  1.00  0.00
O
ATOM     26  CB  ASP     2      37.603  14.346  28.142  1.00  0.00
C
ATOM     27 1HB  ASP     2      37.168  14.456  29.134  1.00  0.00
H
ATOM     28 2HB  ASP     2      37.772  13.286  27.950  1.00  0.00
H
ATOM     29  CG  ASP     2      38.952  15.054  28.105  1.00  0.00
C
ATOM     30  OD1 ASP     2      39.448  15.444  27.024  1.00  0.00
O
ATOM     31  OD2 ASP     2      39.559  15.224  29.187  1.00  0.00
O
ATOM     32  N   PRO     3      34.453  13.709  27.644  1.00  0.00
N
ATOM     33  CA  PRO     3      33.547  12.621  27.247  1.00  0.00
C
ATOM     34  HA  PRO     3      34.099  11.684  27.159  1.00  0.00
H
ATOM     35  C   PRO     3      32.785  12.865  25.945  1.00  0.00
C
ATOM     36  O   PRO     3      32.331  11.915  25.308  1.00  0.00
O
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ATOM     37  CB  PRO     3      32.583  12.533  28.432  1.00  0.00
C
ATOM     38 1HB  PRO     3      31.602  12.179  28.115  1.00  0.00
H
ATOM     39 2HB  PRO     3      32.993  11.882  29.202  1.00  0.00
H
ATOM     40  CG  PRO     3      32.510  13.915  28.934  1.00  0.00
C
ATOM     41 1HG  PRO     3      31.864  14.516  28.293  1.00  0.00
H
ATOM     42 2HG  PRO     3      32.155  13.937  29.964  1.00  0.00
H
ATOM     43  CD  PRO     3      33.935  14.391  28.847  1.00  0.00
C
ATOM     44 1HD  PRO     3      33.963  15.473  28.732  1.00  0.00
H
ATOM     45 2HD  PRO     3      34.496  14.083  29.730  1.00  0.00
H
ATOM     46  N   PHE     4      32.672  14.112  25.506  1.00  0.00
N
ATOM     47  H   PHE     4      33.080  14.876  26.031  1.00  0.00
H
ATOM     48  CA  PHE     4      31.975  14.416  24.259  1.00  0.00
C
ATOM     49  HA  PHE     4      31.058  13.830  24.197  1.00  0.00
H
ATOM     50  C   PHE     4      32.868  14.020  23.093  1.00  0.00
C
ATOM     51  O   PHE     4      32.384  13.588  22.049  1.00  0.00
O
ATOM     52  CB  PHE     4      31.621  15.906  24.168  1.00  0.00
C
ATOM     53 1HB  PHE     4      32.529  16.495  24.283  1.00  0.00
H
ATOM     54 2HB  PHE     4      31.221  16.098  23.172  1.00  0.00
H
ATOM     55  CG  PHE     4      30.594  16.381  25.183  1.00  0.00
C
ATOM     56  CD1 PHE     4      30.291  17.752  25.242  1.00  0.00
C
ATOM     57  HD1 PHE     4      30.812  18.445  24.598  1.00  0.00
H
ATOM     58  CD2 PHE     4      29.902  15.504  26.056  1.00  0.00
C
ATOM     59  HD2 PHE     4      30.088  14.442  26.043  1.00  0.00
H
ATOM     60  CE1 PHE     4      29.304  18.249  26.130  1.00  0.00
C
ATOM     61  HE1 PHE     4      29.076  19.305  26.154  1.00  0.00
H
ATOM     62  CE2 PHE     4      28.936  15.994  26.960  1.00  0.00
C
ATOM     63  HE2 PHE     4      28.433  15.310  27.627  1.00  0.00
H
ATOM     64  CZ  PHE     4      28.626  17.367  26.991  1.00  0.00
C
ATOM     65  HZ  PHE     4      27.876  17.742  27.672  1.00  0.00
H
ATOM     66  N   LEU     5      34.178  14.085  23.301  1.00  0.00
N
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ATOM     67  H   LEU     5      34.530  14.440  24.182  1.00  0.00
H
ATOM     68  CA  LEU     5      35.125  13.644  22.280  1.00  0.00
C
ATOM     69  HA  LEU     5      34.907  14.169  21.354  1.00  0.00
H
ATOM     70  C   LEU     5      34.938  12.145  22.065  1.00  0.00
C
ATOM     71  O   LEU     5      34.892  11.648  20.946  1.00  0.00
O
ATOM     72  CB  LEU     5      36.582  13.902  22.700  1.00  0.00
C
ATOM     73 1HB  LEU     5      36.818  13.184  23.483  1.00  0.00
H
ATOM     74 2HB  LEU     5      37.215  13.651  21.849  1.00  0.00
H
ATOM     75  CG  LEU     5      37.032  15.270  23.243  1.00  0.00
C
ATOM     76  HG  LEU     5      36.449  15.479  24.134  1.00  0.00
H
ATOM     77  CD1 LEU     5      38.493  15.169  23.653  1.00  0.00
C
ATOM     78 1HD1 LEU     5      38.807  16.103  24.120  1.00  0.00
H
ATOM     79 2HD1 LEU     5      39.123  14.975  22.784  1.00  0.00
H
ATOM     80 3HD1 LEU     5      38.625  14.366  24.379  1.00  0.00
H
ATOM     81  CD2 LEU     5      36.874  16.451  22.314  1.00  0.00
C
ATOM     82 1HD2 LEU     5      37.149  17.365  22.838  1.00  0.00
H
ATOM     83 2HD2 LEU     5      35.835  16.536  21.998  1.00  0.00
H
ATOM     84 3HD2 LEU     5      37.518  16.335  21.444  1.00  0.00
H
ATOM     85  N   HIS     6      34.790  11.430  23.171  1.00  0.00
N
ATOM     86  H   HIS     6      34.790  11.904  24.064  1.00  0.00
H
ATOM     87  CA  HIS     6      34.667   9.975  23.149  1.00  0.00
C
ATOM     88  HA  HIS     6      35.415   9.567  22.472  1.00  0.00
H
ATOM     89  C   HIS     6      33.310   9.513  22.634  1.00  0.00
C
ATOM     90  O   HIS     6      33.210   8.450  22.016  1.00  0.00
O
ATOM     91  CB  HIS     6      34.942   9.414  24.546  1.00  0.00
C
ATOM     92 1HB  HIS     6      34.309   9.923  25.273  1.00  0.00
H
ATOM     93 2HB  HIS     6      34.684   8.355  24.547  1.00  0.00
H
ATOM     94  CG  HIS     6      36.378   9.532  24.957  1.00  0.00
C
ATOM     95  ND1 HIS     6      37.024  10.712  25.238  1.00  0.00
N
ATOM     96  HD1 HIS     6      36.592  11.629  25.328  1.00  0.00
H
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ATOM     97  CD2 HIS     6      37.340   8.581  25.056  1.00  0.00
C
ATOM     98  HD2 HIS     6      37.178   7.525  24.904  1.00  0.00
H
ATOM     99  CE1 HIS     6      38.318  10.456  25.400  1.00  0.00
C
ATOM    100  HE1 HIS     6      39.072  11.209  25.590  1.00  0.00
H
ATOM    101  NE2 HIS     6      38.557   9.162  25.334  1.00  0.00
N
ATOM    102  N   ALA     7      32.277  10.323  22.828  1.00  0.00
N
ATOM    103  H   ALA     7      32.392  11.157  23.390  1.00  0.00
H
ATOM    104  CA  ALA     7      30.975  10.046  22.233  1.00  0.00
C
ATOM    105  HA  ALA     7      30.694   9.016  22.455  1.00  0.00
H
ATOM    106  C   ALA     7      31.057  10.201  20.713  1.00  0.00
C
ATOM    107  O   ALA     7      30.443   9.436  19.976  1.00  0.00
O
ATOM    108  CB  ALA     7      29.918  10.992  22.812  1.00  0.00
C
ATOM    109 1HB  ALA     7      28.950  10.779  22.355  1.00  0.00
H
ATOM    110 2HB  ALA     7      30.188  12.028  22.607  1.00  0.00
H
ATOM    111 3HB  ALA     7      29.842  10.846  23.889  1.00  0.00
H
ATOM    112  N   PHE     8      31.822  11.179  20.247  1.00  0.00
N
ATOM    113  H   PHE     8      32.291  11.808  20.889  1.00  0.00
H
ATOM    114  CA  PHE     8      31.989  11.382  18.812  1.00  0.00
C
ATOM    115  HA  PHE     8      31.009  11.401  18.332  1.00  0.00
H
ATOM    116  C   PHE     8      32.792  10.280  18.146  1.00  0.00
C
ATOM    117  O   PHE     8      32.286   9.614  17.252  1.00  0.00
O
ATOM    118  CB  PHE     8      32.699  12.703  18.528  1.00  0.00
C
ATOM    119 1HB  PHE     8      32.046  13.522  18.802  1.00  0.00
H
ATOM    120 2HB  PHE     8      33.593  12.770  19.142  1.00  0.00
H
ATOM    121  CG  PHE     8      33.116  12.858  17.096  1.00  0.00
C
ATOM    122  CD1 PHE     8      32.161  13.061  16.089  1.00  0.00
C
ATOM    123  HD1 PHE     8      31.118  13.185  16.347  1.00  0.00
H
ATOM    124  CD2 PHE     8      34.471  12.730  16.740  1.00  0.00
C
ATOM    125  HD2 PHE     8      35.223  12.619  17.507  1.00  0.00
H
ATOM    126  CE1 PHE     8      32.544  13.053  14.729  1.00  0.00
C
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ATOM    127  HE1 PHE     8      31.796  13.167  13.963  1.00  0.00
H
ATOM    128  CE2 PHE     8      34.860  12.704  15.388  1.00  0.00
C
ATOM    129  HE2 PHE     8      35.895  12.553  15.128  1.00  0.00
H
ATOM    130  CZ  PHE     8      33.892  12.852  14.376  1.00  0.00
C
ATOM    131  HZ  PHE     8      34.182  12.800  13.337  1.00  0.00
H
ATOM    132  N   PHE     9      34.040  10.072  18.556  1.00  0.00
N
ATOM    133  H   PHE     9      34.404  10.572  19.363  1.00  0.00
H
ATOM    134  CA  PHE     9      34.934   9.233  17.755  1.00  0.00
C
ATOM    135  HA  PHE     9      34.763   9.517  16.714  1.00  0.00
H
ATOM    136  C   PHE     9      34.583   7.750  17.840  1.00  0.00
C
ATOM    137  O   PHE     9      35.127   6.926  17.104  1.00  0.00
O
ATOM    138  CB  PHE     9      36.423   9.515  18.031  1.00  0.00
C
ATOM    139 1HB  PHE     9      37.008   9.002  17.275  1.00  0.00
H
ATOM    140 2HB  PHE     9      36.604  10.585  17.926  1.00  0.00
H
ATOM    141  CG  PHE     9      36.934   9.064  19.377  1.00  0.00
C
ATOM    142  CD1 PHE     9      37.115   7.697  19.666  1.00  0.00
C
ATOM    143  HD1 PHE     9      36.849   6.947  18.936  1.00  0.00
H
ATOM    144  CD2 PHE     9      37.341  10.014  20.330  1.00  0.00
C
ATOM    145  HD2 PHE     9      37.240  11.069  20.116  1.00  0.00
H
ATOM    146  CE1 PHE     9      37.661   7.281  20.897  1.00  0.00
C
ATOM    147  HE1 PHE     9      37.780   6.229  21.103  1.00  0.00
H
ATOM    148  CE2 PHE     9      37.900   9.611  21.568  1.00  0.00
C
ATOM    149  HE2 PHE     9      38.210  10.352  22.292  1.00  0.00
H
ATOM    150  CZ  PHE     9      38.063   8.237  21.846  1.00  0.00
C
ATOM    151  HZ  PHE     9      38.505   7.920  22.779  1.00  0.00
H
ATOM    152  N   ALA    10      33.624   7.421  18.693  1.00  0.00
N
ATOM    153  H   ALA    10      33.251   8.131  19.305  1.00  0.00
H
ATOM    154  CA  ALA    10      33.016   6.101  18.716  1.00  0.00
C
ATOM    155  HA  ALA    10      33.779   5.353  18.936  1.00  0.00
H
ATOM    156  C   ALA    10      32.363   5.764  17.373  1.00  0.00
C
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ATOM    157  O   ALA    10      32.384   4.612  16.934  1.00  0.00
O
ATOM    158  CB  ALA    10      31.950   6.076  19.800  1.00  0.00
C
ATOM    159 1HB  ALA    10      32.399   6.282  20.768  1.00  0.00
H
ATOM    160 2HB  ALA    10      31.489   5.089  19.822  1.00  0.00
H
ATOM    161 3HB  ALA    10      31.183   6.825  19.594  1.00  0.00
H
ATOM    162  N   VAL    11      31.755   6.759  16.747  1.00  0.00
N
ATOM    163  H   VAL    11      31.872   7.712  17.090  1.00  0.00
H
ATOM    164  CA  VAL    11      30.874   6.584  15.595  1.00  0.00
C
ATOM    165  HA  VAL    11      30.991   5.589  15.172  1.00  0.00
H
ATOM    166  C   VAL    11      31.270   7.604  14.532  1.00  0.00
C
ATOM    167  O   VAL    11      32.411   8.070  14.544  1.00  0.00
O
ATOM    168  CB  VAL    11      29.390   6.762  16.017  1.00  0.00
C
ATOM    169  HB  VAL    11      28.760   6.740  15.132  1.00  0.00
H
ATOM    170  CG1 VAL    11      28.938   5.611  16.905  1.00  0.00
C
ATOM    171 1HG1 VAL    11      27.872   5.707  17.109  1.00  0.00
H
ATOM    172 2HG1 VAL    11      29.482   5.610  17.849  1.00  0.00
H
ATOM    173 3HG1 VAL    11      29.100   4.664  16.390  1.00  0.00
H
ATOM    174  CG2 VAL    11      29.188   8.089  16.740  1.00  0.00
C
ATOM    175 1HG2 VAL    11      28.123   8.295  16.816  1.00  0.00
H
ATOM    176 2HG2 VAL    11      29.643   8.907  16.178  1.00  0.00
H
ATOM    177 3HG2 VAL    11      29.624   8.063  17.739  1.00  0.00
H
ATOM    178  N   ASP    12      30.367   7.875  13.591  1.00  0.00
N
ATOM    179  H   ASP    12      29.467   7.416  13.645  1.00  0.00
H
ATOM    180  CA  ASP    12      30.534   8.837  12.490  1.00  0.00
C
ATOM    181  HA  ASP    12      29.624   8.811  11.893  1.00  0.00
H
ATOM    182  C   ASP    12      31.680   8.424  11.573  1.00  0.00
C
ATOM    183  O   ASP    12      32.175   9.217  10.776  1.00  0.00
O
ATOM    184  CB  ASP    12      30.696  10.278  13.003  1.00  0.00
C
ATOM    185 1HB  ASP    12      31.594  10.348  13.616  1.00  0.00
H
ATOM    186 2HB  ASP    12      30.808  10.947  12.150  1.00  0.00
H
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ATOM    187  CG  ASP    12      29.502  10.748  13.816  1.00  0.00
C
ATOM    188  OD1 ASP    12      28.377  10.251  13.602  1.00  0.00
O
ATOM    189  OD2 ASP    12      29.653  11.639  14.676  1.00  0.00
O
ATOM    190  N   LEU    13      32.063   7.160  11.738  1.00  0.00
N
ATOM    191  H   LEU    13      31.527   6.621  12.400  1.00  0.00
H
ATOM    192  CA  LEU    13      33.189   6.458  11.111  1.00  0.00
C
ATOM    193  HA  LEU    13      33.116   5.418  11.425  1.00  0.00
H
ATOM    194  C   LEU    13      34.594   6.924  11.510  1.00  0.00
C
ATOM    195  O   LEU    13      35.563   6.205  11.269  1.00  0.00
O
ATOM    196  CB  LEU    13      33.062   6.477   9.580  1.00  0.00
C
ATOM    197 1HB  LEU    13      33.229   7.500   9.252  1.00  0.00
H
ATOM    198 2HB  LEU    13      33.867   5.874   9.162  1.00  0.00
H
ATOM    199  CG  LEU    13      31.738   6.007   8.957  1.00  0.00
C
ATOM    200  HG  LEU    13      30.912   6.526   9.440  1.00  0.00
H
ATOM    201  CD1 LEU    13      31.720   6.386   7.487  1.00  0.00
C
ATOM    202 1HD1 LEU    13      30.762   6.105   7.052  1.00  0.00
H
ATOM    203 2HD1 LEU    13      32.523   5.878   6.955  1.00  0.00
H
ATOM    204 3HD1 LEU    13      31.840   7.464   7.388  1.00  0.00
H
ATOM    205  CD2 LEU    13      31.515   4.506   9.101  1.00  0.00
C
ATOM    206 1HD2 LEU    13      30.564   4.233   8.644  1.00  0.00
H
ATOM    207 2HD2 LEU    13      31.481   4.237  10.156  1.00  0.00
H
ATOM    208 3HD2 LEU    13      32.320   3.954   8.616  1.00  0.00
H
ATOM    209  N   ASP    14      34.745   8.129  12.044  1.00  0.00
N
ATOM    210  H   ASP    14      33.972   8.583  12.515  1.00  0.00
H
ATOM    211  CA  ASP    14      35.926   8.928  11.719  1.00  0.00
C
ATOM    212  HA  ASP    14      36.699   8.251  11.387  1.00  0.00
H
ATOM    213  C   ASP    14      36.571   9.778  12.850  1.00  0.00
C
ATOM    214  O   ASP    14      35.889  10.146  13.803  1.00  0.00
O
ATOM    215  CB  ASP    14      35.491   9.781  10.518  1.00  0.00
C
ATOM    216 1HB  ASP    14      34.466  10.113  10.651  1.00  0.00
H
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ATOM    217 2HB  ASP    14      36.108  10.651  10.462  1.00  0.00
H
ATOM    218  CG  ASP    14      35.651   9.079   9.183  1.00  0.00
C
ATOM    219  OD1 ASP    14      36.636   8.322   9.025  1.00  0.00
O
ATOM    220  OD2 ASP    14      34.898   9.388   8.224  1.00  0.00
O
ATOM    221  N   HIS    15      37.900   9.988  12.816  1.00  0.00
N
ATOM    222  H   HIS    15      38.404   9.577  12.049  1.00  0.00
H
ATOM    223  CA  HIS    15      38.662  10.719  13.873  1.00  0.00
C
ATOM    224  HA  HIS    15      37.877  11.300  14.361  1.00  0.00
H
ATOM    225  C   HIS    15      39.843  11.808  13.806  1.00  0.00
C
ATOM    226  O   HIS    15      40.225  12.194  14.867  1.00  0.00
O
ATOM    227  CB  HIS    15      39.042   9.658  14.929  1.00  0.00
C
ATOM    228 1HB  HIS    15      40.115   9.631  15.003  1.00  0.00
H
ATOM    229 2HB  HIS    15      38.660   9.976  15.899  1.00  0.00
H
ATOM    230  CG  HIS    15      38.558   8.261  14.633  1.00  0.00
C
ATOM    231  ND1 HIS    15      37.296   7.783  14.982  1.00  0.00
N
ATOM    232  HD1 HIS    15      36.555   8.331  15.411  1.00  0.00
H
ATOM    233  CD2 HIS    15      39.161   7.200  14.029  1.00  0.00
C
ATOM    234  HD2 HIS    15      40.163   7.177  13.631  1.00  0.00
H
ATOM    235  CE1 HIS    15      37.182   6.519  14.606  1.00  0.00
C
ATOM    236  HE1 HIS    15      36.303   5.897  14.748  1.00  0.00
H
ATOM    237  NE2 HIS    15      38.292   6.148  14.022  1.00  0.00
N
ATOM    238  HE2 HIS    15      38.484   5.218  13.633  1.00  0.00
H
ATOM    239  N   ASP    16      40.424  12.356  12.719  1.00  0.00
N
ATOM    240  H   ASP    16      40.405  11.801  11.885  1.00  0.00
H
ATOM    241  CA  ASP    16      41.056  13.738  12.541  1.00  0.00
C
ATOM    242  HA  ASP    16      40.549  14.449  13.172  1.00  0.00
H
ATOM    243  C   ASP    16      41.008  14.335  11.089  1.00  0.00
C
ATOM    244  O   ASP    16      41.934  14.072  10.346  1.00  0.00
O
ATOM    245  CB  ASP    16      42.532  13.846  12.968  1.00  0.00
C
ATOM    246 1HB  ASP    16      43.139  13.079  12.503  1.00  0.00
H
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ATOM    247 2HB  ASP    16      42.910  14.809  12.630  1.00  0.00
H
ATOM    248  CG  ASP    16      42.712  13.810  14.453  1.00  0.00
C
ATOM    249  OD1 ASP    16      42.214  14.733  15.106  1.00  0.00
O
ATOM    250  OD2 ASP    16      43.339  12.861  14.971  1.00  0.00
O
ATOM    251  N   GLU    17      39.966  15.090  10.694  1.00  0.00
N
ATOM    252  H   GLU    17      39.291  15.343  11.400  1.00  0.00
H
ATOM    253  CA  GLU    17      39.714  15.702   9.341  1.00  0.00
C
ATOM    254  HA  GLU    17      40.519  16.409   9.154  1.00  0.00
H
ATOM    255  C   GLU    17      38.387  16.515   9.246  1.00  0.00
C
ATOM    256  O   GLU    17      38.388  17.712   9.523  1.00  0.00
O
ATOM    257  CB  GLU    17      39.719  14.708   8.166  1.00  0.00
C
ATOM    258 1HB  GLU    17      40.634  14.123   8.198  1.00  0.00
H
ATOM    259 2HB  GLU    17      38.874  14.049   8.282  1.00  0.00
H
ATOM    260  CG  GLU    17      39.616  15.369   6.786  1.00  0.00
C
ATOM    261 1HG  GLU    17      38.715  15.975   6.734  1.00  0.00
H
ATOM    262 2HG  GLU    17      40.461  16.028   6.671  1.00  0.00
H
ATOM    263  CD  GLU    17      39.597  14.405   5.613  1.00  0.00
C
ATOM    264  OE1 GLU    17      39.830  13.190   5.786  1.00  0.00
O
ATOM    265  OE2 GLU    17      39.370  14.876   4.477  1.00  0.00
O
ATOM    266  N   LYS    18      37.258  15.901   8.876  1.00  0.00
N
ATOM    267  H   LYS    18      37.294  14.938   8.562  1.00  0.00
H
ATOM    268  CA  LYS    18      35.918  16.510   8.936  1.00  0.00
C
ATOM    269  HA  LYS    18      35.803  17.020   9.887  1.00  0.00
H
ATOM    270  C   LYS    18      34.898  15.380   8.847  1.00  0.00
C
ATOM    271  O   LYS    18      35.267  14.289   8.406  1.00  0.00
O
ATOM    272  CB  LYS    18      35.658  17.526   7.812  1.00  0.00
C
ATOM    273 1HB  LYS    18      34.714  18.028   8.025  1.00  0.00
H
ATOM    274 2HB  LYS    18      36.446  18.278   7.841  1.00  0.00
H
ATOM    275  CG  LYS    18      35.581  16.966   6.398  1.00  0.00
C
ATOM    276 1HG  LYS    18      36.502  16.437   6.160  1.00  0.00
H
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ATOM    277 2HG  LYS    18      34.738  16.280   6.319  1.00  0.00
H
ATOM    278  CD  LYS    18      35.394  18.108   5.418  1.00  0.00
C
ATOM    279 1HD  LYS    18      34.499  18.670   5.680  1.00  0.00
H
ATOM    280 2HD  LYS    18      36.260  18.766   5.481  1.00  0.00
H
ATOM    281  CE  LYS    18      35.263  17.595   3.996  1.00  0.00
C
ATOM    282 1HE  LYS    18      36.095  16.919   3.787  1.00  0.00
H
ATOM    283 2HE  LYS    18      34.327  17.045   3.889  1.00  0.00
H
ATOM    284  NZ  LYS    18      35.305  18.727   3.020  1.00  0.00
N
ATOM    285 1HZ  LYS    18      35.163  18.376   2.080  1.00  0.00
H
ATOM    286 2HZ  LYS    18      36.211  19.179   3.070  1.00  0.00
H
ATOM    287 3HZ  LYS    18      34.579  19.397   3.230  1.00  0.00
H
ATOM    288  N   ILE    19      33.648  15.658   9.190  1.00  0.00
N
ATOM    289  H   ILE    19      33.435  16.541   9.646  1.00  0.00
H
ATOM    290  CA  ILE    19      32.503  14.815   8.841  1.00  0.00
C
ATOM    291  HA  ILE    19      32.794  14.109   8.066  1.00  0.00
H
ATOM    292  C   ILE    19      31.432  15.741   8.257  1.00  0.00
C
ATOM    293  O   ILE    19      31.498  16.968   8.394  1.00  0.00
O
ATOM    294  CB  ILE    19      31.907  14.001  10.038  1.00  0.00
C
ATOM    295  HB  ILE    19      30.994  13.522   9.684  1.00  0.00
H
ATOM    296  CG1 ILE    19      31.534  14.914  11.219  1.00  0.00
C
ATOM    297 1HG1 ILE    19      32.393  14.995  11.884  1.00  0.00
H
ATOM    298 2HG1 ILE    19      31.314  15.904  10.839  1.00  0.00
H
ATOM    299  CG2 ILE    19      32.870  12.879  10.475  1.00  0.00
C
ATOM    300 1HG2 ILE    19      32.444  12.319  11.309  1.00  0.00
H
ATOM    301 2HG2 ILE    19      33.832  13.286  10.779  1.00  0.00
H
ATOM    302 3HG2 ILE    19      33.031  12.188   9.649  1.00  0.00
H
ATOM    303  CD1 ILE    19      30.318  14.461  12.027  1.00  0.00
C
ATOM    304 1HD1 ILE    19      30.242  15.056  12.936  1.00  0.00
H
ATOM    305 2HD1 ILE    19      30.411  13.409  12.298  1.00  0.00
H
ATOM    306 3HD1 ILE    19      29.414  14.601  11.434  1.00  0.00
H
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ATOM    307  N   SER    20      30.454  15.156   7.589  1.00  0.00
N
ATOM    308  H   SER    20      30.454  14.147   7.484  1.00  0.00
H
ATOM    309  CA  SER    20      29.360  15.911   6.991  1.00  0.00
C
ATOM    310  HA  SER    20      29.740  16.845   6.578  1.00  0.00
H
ATOM    311  C   SER    20      28.253  16.213   8.003  1.00  0.00
C
ATOM    312  O   SER    20      28.190  15.623   9.088  1.00  0.00
O
ATOM    313  CB  SER    20      28.778  15.065   5.863  1.00  0.00
C
ATOM    314 1HB  SER    20      28.039  15.643   5.313  1.00  0.00
H
ATOM    315 2HB  SER    20      29.580  14.770   5.186  1.00  0.00
H
ATOM    316  OG  SER    20      28.172  13.911   6.416  1.00  0.00
O
ATOM    317  HG  SER    20      28.418  13.138   5.883  1.00  0.00
H
ATOM    318  N   MET    21      27.314  17.071   7.624  1.00  0.00
N
ATOM    319  H   MET    21      27.413  17.564   6.741  1.00  0.00
H
ATOM    320  CA  MET    21      26.113  17.301   8.433  1.00  0.00
C
ATOM    321  HA  MET    21      26.413  17.557   9.448  1.00  0.00
H
ATOM    322  C   MET    21      25.231  16.059   8.521  1.00  0.00
C
ATOM    323  O   MET    21      24.431  15.946   9.446  1.00  0.00
O
ATOM    324  CB  MET    21      25.265  18.445   7.867  1.00  0.00
C
ATOM    325 1HB  MET    21      25.071  18.257   6.811  1.00  0.00
H
ATOM    326 2HB  MET    21      24.311  18.445   8.390  1.00  0.00
H
ATOM    327  CG  MET    21      25.865  19.830   8.027  1.00  0.00
C
ATOM    328 1HG  MET    21      26.084  20.001   9.080  1.00  0.00
H
ATOM    329 2HG  MET    21      26.787  19.901   7.454  1.00  0.00
H
ATOM    330  SD  MET    21      24.702  21.088   7.460  1.00  0.00
S
ATOM    331  CE  MET    21      25.661  22.590   7.645  1.00  0.00
C
ATOM    332 1HE  MET    21      25.073  23.439   7.294  1.00  0.00
H
ATOM    333 2HE  MET    21      26.572  22.518   7.053  1.00  0.00
H
ATOM    334 3HE  MET    21      25.913  22.739   8.695  1.00  0.00
H
ATOM    335  N   THR    22      25.382  15.120   7.597  1.00  0.00
N
ATOM    336  H   THR    22      26.040  15.262   6.842  1.00  0.00
H
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ATOM    337  CA  THR    22      24.610  13.879   7.620  1.00  0.00
C
ATOM    338  HA  THR    22      23.549  14.121   7.595  1.00  0.00
H
ATOM    339  C   THR    22      24.887  13.054   8.864  1.00  0.00
C
ATOM    340  O   THR    22      23.967  12.566   9.516  1.00  0.00
O
ATOM    341  CB  THR    22      24.968  13.007   6.401  1.00  0.00
C
ATOM    342  HB  THR    22      25.990  12.644   6.508  1.00  0.00
H
ATOM    343  OG1 THR    22      24.890  13.800   5.213  1.00  0.00
O
ATOM    344  HG1 THR    22      25.260  13.261   4.499  1.00  0.00
H
ATOM    345  CG2 THR    22      24.041  11.830   6.237  1.00  0.00
C
ATOM    346 1HG2 THR    22      24.283  11.312   5.310  1.00  0.00
H
ATOM    347 2HG2 THR    22      23.008  12.171   6.202  1.00  0.00
H
ATOM    348 3HG2 THR    22      24.167  11.135   7.068  1.00  0.00
H
ATOM    349  N   GLU    23      26.154  12.910   9.225  1.00  0.00
N
ATOM    350  H   GLU    23      26.894  13.353   8.694  1.00  0.00
H
ATOM    351  CA  GLU    23      26.492  12.044  10.351  1.00  0.00
C
ATOM    352  HA  GLU    23      25.959  11.099  10.236  1.00  0.00
H
ATOM    353  C   GLU    23      26.020  12.712  11.637  1.00  0.00
C
ATOM    354  O   GLU    23      25.537  12.066  12.571  1.00  0.00
O
ATOM    355  CB  GLU    23      27.995  11.755  10.394  1.00  0.00
C
ATOM    356 1HB  GLU    23      28.518  12.656  10.700  1.00  0.00
H
ATOM    357 2HB  GLU    23      28.169  10.984  11.139  1.00  0.00
H
ATOM    358  CG  GLU    23      28.586  11.299   9.065  1.00  0.00
C
ATOM    359 1HG  GLU    23      28.611  12.152   8.386  1.00  0.00
H
ATOM    360 2HG  GLU    23      29.612  10.967   9.227  1.00  0.00
H
ATOM    361  CD  GLU    23      27.784  10.187   8.407  1.00  0.00
C
ATOM    362  OE1 GLU    23      27.551   9.123   9.020  1.00  0.00
O
ATOM    363  OE2 GLU    23      27.352  10.383   7.246  1.00  0.00
O
ATOM    364  N   LEU    24      26.081  14.038  11.642  1.00  0.00
N
ATOM    365  H   LEU    24      26.486  14.520  10.851  1.00  0.00
H
ATOM    366  CA  LEU    24      25.561  14.802  12.768  1.00  0.00
C
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ATOM    367  HA  LEU    24      26.022  14.419  13.673  1.00  0.00
H
ATOM    368  C   LEU    24      24.055  14.619  12.901  1.00  0.00
C
ATOM    369  O   LEU    24      23.544  14.380  13.994  1.00  0.00
O
ATOM    370  CB  LEU    24      25.895  16.291  12.628  1.00  0.00
C
ATOM    371 1HB  LEU    24      26.970  16.393  12.486  1.00  0.00
H
ATOM    372 2HB  LEU    24      25.396  16.676  11.742  1.00  0.00
H
ATOM    373  CG  LEU    24      25.468  17.149  13.830  1.00  0.00
C
ATOM    374  HG  LEU    24      24.402  17.008  13.997  1.00  0.00
H
ATOM    375  CD1 LEU    24      26.212  16.747  15.099  1.00  0.00
C
ATOM    376 1HD1 LEU    24      25.890  17.377  15.918  1.00  0.00
H
ATOM    377 2HD1 LEU    24      27.288  16.852  14.957  1.00  0.00
H
ATOM    378 3HD1 LEU    24      25.984  15.713  15.362  1.00  0.00
H
ATOM    379  CD2 LEU    24      25.694  18.630  13.554  1.00  0.00
C
ATOM    380 1HD2 LEU    24      25.256  19.223  14.356  1.00  0.00
H
ATOM    381 2HD2 LEU    24      25.219  18.908  12.614  1.00  0.00
H
ATOM    382 3HD2 LEU    24      26.760  18.842  13.494  1.00  0.00
H
ATOM    383  N   LYS    25      23.337  14.708  11.789  1.00  0.00
N
ATOM    384  H   LYS    25      23.805  14.884  10.904  1.00  0.00
H
ATOM    385  CA  LYS    25      21.882  14.571  11.809  1.00  0.00
C
ATOM    386  HA  LYS    25      21.462  15.298  12.503  1.00  0.00
H
ATOM    387  C   LYS    25      21.518  13.193  12.322  1.00  0.00
C
ATOM    388  O   LYS    25      20.675  13.078  13.201  1.00  0.00
O
ATOM    389  CB  LYS    25      21.298  14.805  10.412  1.00  0.00
C
ATOM    390 1HB  LYS    25      21.633  15.782  10.067  1.00  0.00
H
ATOM    391 2HB  LYS    25      21.685  14.050   9.727  1.00  0.00
H
ATOM    392  CG  LYS    25      19.776  14.767  10.361  1.00  0.00
C
ATOM    393 1HG  LYS    25      19.436  13.751  10.556  1.00  0.00
H
ATOM    394 2HG  LYS    25      19.380  15.430  11.129  1.00  0.00
H
ATOM    395  CD  LYS    25      19.268  15.227   9.002  1.00  0.00
C
ATOM    396 1HD  LYS    25      19.634  16.239   8.827  1.00  0.00
H
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ATOM    397 2HD  LYS    25      19.665  14.575   8.223  1.00  0.00
H
ATOM    398  CE  LYS    25      17.743  15.244   8.917  1.00  0.00
C
ATOM    399 1HE  LYS    25      17.339  15.683   9.829  1.00  0.00
H
ATOM    400 2HE  LYS    25      17.456  15.883   8.081  1.00  0.00
H
ATOM    401  NZ  LYS    25      17.136  13.894   8.702  1.00  0.00
N
ATOM    402 1HZ  LYS    25      16.128  13.976   8.622  1.00  0.00
H
ATOM    403 2HZ  LYS    25      17.357  13.274   9.477  1.00  0.00
H
ATOM    404 3HZ  LYS    25      17.496  13.490   7.848  1.00  0.00
H
ATOM    405   N  ASN    26      22.198  12.167  11.835  1.00  0.00
N
ATOM    406   H  ASN    26      22.912  12.330  11.131  1.00  0.00
H
ATOM    407  CA  ASN    26      21.907  10.795  12.246  1.00  0.00
C
ATOM    408  HA  ASN    26      20.868  10.573  11.997  1.00  0.00
H
ATOM    409   C  ASN    26      22.062  10.607  13.754  1.00  0.00
C
ATOM    410   O  ASN    26      21.231   9.957  14.391  1.00  0.00
O
ATOM    411  CB  ASN    26      22.808   9.802  11.500  1.00  0.00
C
ATOM    412 1HB  ASN    26      23.850  10.096  11.618  1.00  0.00
H
ATOM    413 2HB  ASN    26      22.677   8.815  11.941  1.00  0.00
H
ATOM    414  CG  ASN    26      22.485   9.707  10.024  1.00  0.00
C
ATOM    415  OD1 ASN    26      21.537  10.303   9.530  1.00  0.00
O
ATOM    416  ND2 ASN    26      23.260   8.946   9.310  1.00  0.00
N
ATOM    417 1HD2 ASN    26      23.081   8.879   8.319  1.00  0.00
H
ATOM    418 2HD2 ASN    26      24.004   8.424   9.751  1.00  0.00
H
ATOM    419   N  TYR    27      23.062  11.226  14.364  1.00  0.00
N
ATOM    420   H  TYR    27      23.752  11.744  13.827  1.00  0.00
H
ATOM    421  CA  TYR    27      23.186  11.143  15.818  1.00  0.00
C
ATOM    422  HA  TYR    27      23.081  10.097  16.104  1.00  0.00
H
ATOM    423   C  TYR    27      22.118  11.930  16.576  1.00  0.00
C
ATOM    424   O  TYR    27      21.547  11.419  17.534  1.00  0.00
O
ATOM    425  CB  TYR    27      24.568  11.612  16.264  1.00  0.00
C
ATOM    426 1HB  TYR    27      25.315  10.976  15.790  1.00  0.00
H
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ATOM    427 2HB  TYR    27      24.719  12.635  15.921  1.00  0.00
H
ATOM    428  CG  TYR    27      24.770  11.572  17.768  1.00  0.00
C
ATOM    429  CD1 TYR    27      24.435  10.427  18.525  1.00  0.00
C
ATOM    430  HD1 TYR    27      24.027   9.553  18.035  1.00  0.00
H
ATOM    431  CD2 TYR    27      25.313  12.684  18.443  1.00  0.00
C
ATOM    432  HD2 TYR    27      25.588  13.565  17.880  1.00  0.00
H
ATOM    433  CE1 TYR    27      24.614  10.406  19.934  1.00  0.00
C
ATOM    434  HE1 TYR    27      24.335   9.532  20.501  1.00  0.00
H
ATOM    435  CE2 TYR    27      25.537  12.646  19.845  1.00  0.00
C
ATOM    436  HE2 TYR    27      26.004  13.478  20.347  1.00  0.00
H
ATOM    437  CZ  TYR    27      25.171  11.513  20.574  1.00  0.00
C
ATOM    438  OH  TYR    27      25.367  11.526  21.929  1.00  0.00
O
ATOM    439  HH  TYR    27      25.093  10.709  22.367  1.00  0.00
H
ATOM    440  N   VAL    28      21.793  13.152  16.177  1.00  0.00
N
ATOM    441  H   VAL    28      22.240  13.568  15.363  1.00  0.00
H
ATOM    442  CA  VAL    28      20.807  13.909  16.956  1.00  0.00
C
ATOM    443  HA  VAL    28      21.033  13.715  18.003  1.00  0.00
H
ATOM    444  C   VAL    28      19.380  13.378  16.723  1.00  0.00
C
ATOM    445  O   VAL    28      18.532  13.441  17.614  1.00  0.00
O
ATOM    446  CB  VAL    28      20.942  15.452  16.784  1.00  0.00
C
ATOM    447  HB  VAL    28      20.509  15.751  15.832  1.00  0.00
H
ATOM    448  CG1 VAL    28      20.233  16.180  17.936  1.00  0.00
C
ATOM    449 1HG1 VAL    28      20.327  17.260  17.810  1.00  0.00
H
ATOM    450 2HG1 VAL    28      20.655  15.882  18.895  1.00  0.00
H
ATOM    451 3HG1 VAL    28      19.173  15.926  17.926  1.00  0.00
H
ATOM    452  CG2 VAL    28      22.423  15.893  16.816  1.00  0.00
C
ATOM    453 1HG2 VAL    28      22.495  16.975  16.936  1.00  0.00
H
ATOM    454 2HG2 VAL    28      22.896  15.638  15.876  1.00  0.00
H
ATOM    455 3HG2 VAL    28      22.952  15.393  17.623  1.00  0.00
H
ATOM    456  N   GLU    29      19.144  12.707  15.601  1.00  0.00
N
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ATOM    457  H   GLU    29      19.839  12.709  14.856  1.00  0.00
H
ATOM    458  CA  GLU    29      17.915  11.924  15.409  1.00  0.00
C
ATOM    459  HA  GLU    29      17.036  12.562  15.502  1.00  0.00
H
ATOM    460  C   GLU    29      17.827  10.804  16.443  1.00  0.00
C
ATOM    461  O   GLU    29      16.757  10.517  16.973  1.00  0.00
O
ATOM    462  CB  GLU    29      17.917  11.208  14.059  1.00  0.00
C
ATOM    463 1HB  GLU    29      18.901  10.763  13.941  1.00  0.00
H
ATOM    464 2HB  GLU    29      17.187  10.402  14.110  1.00  0.00
H
ATOM    465  CG  GLU    29      17.611  12.019  12.813  1.00  0.00
C
ATOM    466 1HG  GLU    29      16.574  12.350  12.849  1.00  0.00
H
ATOM    467 2HG  GLU    29      18.250  12.898  12.780  1.00  0.00
H
ATOM    468  CD  GLU    29      17.844  11.188  11.552  1.00  0.00
C
ATOM    469  OE1 GLU    29      18.219   9.996  11.652  1.00  0.00
O
ATOM    470  OE2 GLU    29      17.668  11.712  10.430  1.00  0.00
O
ATOM    471  N   THR    30      18.960  10.186  16.748  1.00  0.00
N
ATOM    472  H   THR    30      19.815  10.470  16.287  1.00  0.00
H
ATOM    473  CA  THR    30      19.028   9.090  17.719  1.00  0.00
C
ATOM    474  HA  THR    30      18.235   8.379  17.495  1.00  0.00
H
ATOM    475  C   THR    30      18.812   9.628  19.135  1.00  0.00
C
ATOM    476  O   THR    30      18.395   8.917  20.047  1.00  0.00
O
ATOM    477  CB  THR    30      20.389   8.348  17.615  1.00  0.00
C
ATOM    478  HB  THR    30      21.191   8.991  17.972  1.00  0.00
H
ATOM    479  OG1 THR    30      20.633   8.004  16.248  1.00  0.00
O
ATOM    480  HG1 THR    30      20.906   8.793  15.765  1.00  0.00
H
ATOM    481  CG2 THR    30      20.409   7.039  18.383  1.00  0.00
C
ATOM    482 1HG2 THR    30      21.330   6.507  18.152  1.00  0.00
H
ATOM    483 2HG2 THR    30      19.561   6.420  18.087  1.00  0.00
H
ATOM    484 3HG2 THR    30      20.368   7.231  19.454  1.00  0.00
H
ATOM    485  N   ASN    31      19.017  10.924  19.318  1.00  0.00
N
ATOM    486  H   ASN    31      19.365  11.484  18.549  1.00  0.00
H
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ATOM    487  CA  ASN    31      18.726  11.570  20.598  1.00  0.00
C
ATOM    488  HA  ASN    31      18.866  10.841  21.394  1.00  0.00
H
ATOM    489  C   ASN    31      17.273  12.037  20.670  1.00  0.00
C
ATOM    490  O   ASN    31      16.863  12.636  21.661  1.00  0.00
O
ATOM    491  CB  ASN    31      19.672  12.746  20.849  1.00  0.00
C
ATOM    492 1HB  ASN    31      19.535  13.488  20.065  1.00  0.00
H
ATOM    493 2HB  ASN    31      19.422  13.199  21.808  1.00  0.00
H
ATOM    494  CG  ASN    31      21.116  12.341  20.873  1.00  0.00
C
ATOM    495  OD1 ASN    31      21.938  12.983  20.248  1.00  0.00
O
ATOM    496  ND2 ASN    31      21.454  11.326  21.617  1.00  0.00
N
ATOM    497 1HD2 ASN    31      22.416  11.031  21.617  1.00  0.00
H
ATOM    498 2HD2 ASN    31      20.752  10.833  22.153  1.00  0.00
H
ATOM    499  N   ASN    32      16.496  11.704  19.646  1.00  0.00
N
ATOM    500  H   ASN    32      16.925  11.292  18.824  1.00  0.00
H
ATOM    501  CA  ASN    32      15.032  11.792  19.640  1.00  0.00
C
ATOM    502  HA  ASN    32      14.707  11.432  18.664  1.00  0.00
H
ATOM    503  C   ASN    32      14.452  13.200  19.795  1.00  0.00
C
ATOM    504  O   ASN    32      13.413  13.403  20.437  1.00  0.00
O
ATOM    505  CB  ASN    32      14.453  10.822  20.680  1.00  0.00
C
ATOM    506 1HB  ASN    32      14.685  11.186  21.679  1.00  0.00
H
ATOM    507 2HB  ASN    32      13.370  10.779  20.570  1.00  0.00
H
ATOM    508  CG  ASN    32      15.009   9.429  20.534  1.00  0.00
C
ATOM    509  OD1 ASN    32      15.019   8.858  19.449  1.00  0.00
O
ATOM    510  ND2 ASN    32      15.486   8.873  21.611  1.00  0.00
N
ATOM    511 1HD2 ASN    32      15.896   7.956  21.535  1.00  0.00
H
ATOM    512 2HD2 ASN    32      15.448   9.360  22.489  1.00  0.00
H
ATOM    513  N   LEU    33      15.116  14.176  19.189  1.00  0.00
N
ATOM    514  H   LEU    33      15.967  13.959  18.688  1.00  0.00
H
ATOM    515  CA  LEU    33      14.617  15.555  19.158  1.00  0.00
C
ATOM    516  HA  LEU    33      13.836  15.681  19.903  1.00  0.00
H
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ATOM    517  C   LEU    33      13.986  15.803  17.793  1.00  0.00
C
ATOM    518  O   LEU    33      14.265  15.077  16.838  1.00  0.00
O
ATOM    519  CB  LEU    33      15.724  16.579  19.449  1.00  0.00
C
ATOM    520 1HB  LEU    33      16.515  16.444  18.713  1.00  0.00
H
ATOM    521 2HB  LEU    33      15.296  17.566  19.275  1.00  0.00
H
ATOM    522  CG  LEU    33      16.365  16.630  20.850  1.00  0.00
C
ATOM    523  HG  LEU    33      16.552  17.677  21.071  1.00  0.00
H
ATOM    524  CD1 LEU    33      15.498  16.083  21.990  1.00  0.00
C
ATOM    525 1HD1 LEU    33      16.014  16.208  22.936  1.00  0.00
H
ATOM    526 2HD1 LEU    33      15.301  15.020  21.850  1.00  0.00
H
ATOM    527 3HD1 LEU    33      14.553  16.626  22.031  1.00  0.00
H
ATOM    528  CD2 LEU    33      17.714  15.927  20.865  1.00  0.00
C
ATOM    529 1HD2 LEU    33      18.382  16.405  20.155  1.00  0.00
H
ATOM    530 2HD2 LEU    33      17.584  14.882  20.592  1.00  0.00
H
ATOM    531 3HD2 LEU    33      18.153  15.986  21.861  1.00  0.00
H
ATOM    532  N   ASP    34      13.112  16.795  17.704  1.00  0.00
N
ATOM    533  H   ASP    34      12.920  17.364  18.516  1.00  0.00
H
ATOM    534  CA  ASP    34      12.416  17.103  16.454  1.00  0.00
C
ATOM    535  HA  ASP    34      12.021  16.184  16.027  1.00  0.00
H
ATOM    536  C   ASP    34      13.337  17.762  15.429  1.00  0.00
C
ATOM    537  O   ASP    34      14.216  18.538  15.791  1.00  0.00
O
ATOM    538  CB  ASP    34      11.249  18.053  16.720  1.00  0.00
C
ATOM    539 1HB  ASP    34      10.607  17.630  17.491  1.00  0.00
H
ATOM    540 2HB  ASP    34      11.643  19.003  17.077  1.00  0.00
H
ATOM    541  CG  ASP    34      10.430  18.313  15.473  1.00  0.00
C
ATOM    542  OD1 ASP    34       9.632  17.460  15.045  1.00  0.00
O
ATOM    543  OD2 ASP    34      10.602  19.389  14.873  1.00  0.00
O
ATOM    544  N   GLU    35      13.114  17.509  14.147  1.00  0.00
N
ATOM    545  H   GLU    35      12.364  16.873  13.889  1.00  0.00
H
ATOM    546  CA  GLU    35      13.934  18.089  13.079  1.00  0.00
C
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ATOM    547  HA  GLU    35      14.947  17.704  13.193  1.00  0.00
H
ATOM    548  C   GLU    35      14.034  19.624  13.111  1.00  0.00
C
ATOM    549  O   GLU    35      15.082  20.185  12.772  1.00  0.00
O
ATOM    550  CB  GLU    35      13.393  17.609  11.724  1.00  0.00
C
ATOM    551 1HB  GLU    35      13.264  16.528  11.783  1.00  0.00
H
ATOM    552 2HB  GLU    35      12.418  18.065  11.548  1.00  0.00
H
ATOM    553  CG  GLU    35      14.310  17.921  10.541  1.00  0.00
C
ATOM    554 1HG  GLU    35      14.415  19.001  10.452  1.00  0.00
H
ATOM    555 2HG  GLU    35      15.292  17.501  10.742  1.00  0.00
H
ATOM    556  CD  GLU    35      13.825  17.371   9.208  1.00  0.00
C
ATOM    557  OE1 GLU    35      12.840  16.595   9.145  1.00  0.00
O
ATOM    558  OE2 GLU    35      14.450  17.709   8.174  1.00  0.00
O
ATOM    559  N   LYS    36      12.999  20.326  13.565  1.00  0.00
N
ATOM    560  H   LYS    36      12.150  19.847  13.868  1.00  0.00
H
ATOM    561  CA  LYS    36      13.072  21.789  13.673  1.00  0.00
C
ATOM    562  HA  LYS    36      13.432  22.197  12.730  1.00  0.00
H
ATOM    563  C   LYS    36      14.052  22.204  14.759  1.00  0.00
C
ATOM    564  O   LYS    36      14.788  23.171  14.584  1.00  0.00
O
ATOM    565  CB  LYS    36      11.705  22.406  13.996  1.00  0.00
C
ATOM    566 1HB  LYS    36      11.388  22.026  14.966  1.00  0.00
H
ATOM    567 2HB  LYS    36      11.824  23.486  14.083  1.00  0.00
H
ATOM    568  CG  LYS    36      10.587  22.116  12.993  1.00  0.00
C
ATOM    569 1HG  LYS    36      10.493  21.040  12.883  1.00  0.00
H
ATOM    570 2HG  LYS    36       9.655  22.504  13.401  1.00  0.00
H
ATOM    571  CD  LYS    36      10.796  22.730  11.619  1.00  0.00
C
ATOM    572 1HD  LYS    36      10.949  23.802  11.737  1.00  0.00
H
ATOM    573 2HD  LYS    36      11.680  22.295  11.156  1.00  0.00
H
ATOM    574  CE  LYS    36       9.590  22.499  10.708  1.00  0.00
C
ATOM    575 1HE  LYS    36       8.711  22.960  11.162  1.00  0.00
H
ATOM    576 2HE  LYS    36       9.775  22.989   9.750  1.00  0.00
H
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ATOM    577  NZ  LYS    36       9.312  21.046  10.465  1.00  0.00
N
ATOM    578 1HZ  LYS    36       8.553  20.938   9.799  1.00  0.00
H
ATOM    579 2HZ  LYS    36       9.056  20.589  11.333  1.00  0.00
H
ATOM    580 3HZ  LYS    36      10.138  20.603  10.080  1.00  0.00
H
ATOM    581  N   MET    37      14.093  21.468  15.862  1.00  0.00
N
ATOM    582  H   MET    37      13.508  20.646  15.932  1.00  0.00
H
ATOM    583  CA  MET    37      14.992  21.794  16.972  1.00  0.00
C
ATOM    584  HA  MET    37      14.853  22.834  17.269  1.00  0.00
H
ATOM    585  C   MET    37      16.419  21.585  16.507  1.00  0.00
C
ATOM    586  O   MET    37      17.288  22.425  16.714  1.00  0.00
O
ATOM    587  CB  MET    37      14.776  20.867  18.175  1.00  0.00
C
ATOM    588 1HB  MET    37      14.941  19.841  17.854  1.00  0.00
H
ATOM    589 2HB  MET    37      15.521  21.104  18.934  1.00  0.00
H
ATOM    590  CG  MET    37      13.400  20.935  18.799  1.00  0.00
C
ATOM    591 1HG  MET    37      13.253  21.915  19.252  1.00  0.00
H
ATOM    592 2HG  MET    37      12.654  20.791  18.019  1.00  0.00
H
ATOM    593  SD  MET    37      13.173  19.639  20.038  1.00  0.00
S
ATOM    594  CE  MET    37      14.185  20.211  21.424  1.00  0.00
C
ATOM    595 1HE  MET    37      14.080  19.517  22.259  1.00  0.00
H
ATOM    596 2HE  MET    37      13.854  21.202  21.739  1.00  0.00
H
ATOM    597 3HE  MET    37      15.231  20.258  21.124  1.00  0.00
H
ATOM    598  N   ILE    38      16.642  20.454  15.852  1.00  0.00
N
ATOM    599  H   ILE    38      15.868  19.818  15.675  1.00  0.00
H
ATOM    600  CA  ILE    38      17.985  20.067  15.438  1.00  0.00
C
ATOM    601  HA  ILE    38      18.637  20.103  16.310  1.00  0.00
H
ATOM    602  C   ILE    38      18.505  21.074  14.424  1.00  0.00
C
ATOM    603  O   ILE    38      19.621  21.570  14.559  1.00  0.00
O
ATOM    604  CB  ILE    38      18.011  18.628  14.843  1.00  0.00
C
ATOM    605  HB  ILE    38      17.346  18.603  13.980  1.00  0.00
H
ATOM    606  CG1 ILE    38      17.492  17.619  15.888  1.00  0.00
C
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ATOM    607 1HG1 ILE    38      18.208  17.578  16.701  1.00  0.00
H
ATOM    608 2HG1 ILE    38      16.559  17.979  16.308  1.00  0.00
H
ATOM    609  CG2 ILE    38      19.447  18.248  14.379  1.00  0.00
C
ATOM    610 1HG2 ILE    38      19.448  17.248  13.945  1.00  0.00
H
ATOM    611 2HG2 ILE    38      20.139  18.280  15.221  1.00  0.00
H
ATOM    612 3HG2 ILE    38      19.785  18.942  13.608  1.00  0.00
H
ATOM    613  CD1 ILE    38      17.236  16.192  15.377  1.00  0.00
C
ATOM    614 1HD1 ILE    38      16.854  15.581  16.195  1.00  0.00
H
ATOM    615 2HD1 ILE    38      18.157  15.743  15.006  1.00  0.00
H
ATOM    616 3HD1 ILE    38      16.497  16.217  14.577  1.00  0.00
H
ATOM    617  N   GLU    39      17.711  21.424  13.423  1.00  0.00
N
ATOM    618  H   GLU    39      16.782  21.021  13.330  1.00  0.00
H
ATOM    619  CA  GLU    39      18.210  22.335  12.398  1.00  0.00
C
ATOM    620  HA  GLU    39      19.204  21.991  12.112  1.00  0.00
H
ATOM    621  C   GLU    39      18.347  23.764  12.933  1.00  0.00
C
ATOM    622  O   GLU    39      19.247  24.500  12.521  1.00  0.00
O
ATOM    623  CB  GLU    39      17.331  22.281  11.148  1.00  0.00
C
ATOM    624 1HB  GLU    39      17.067  21.240  10.960  1.00  0.00
H
ATOM    625 2HB  GLU    39      16.419  22.847  11.329  1.00  0.00
H
ATOM    626  CG  GLU    39      18.048  22.816   9.914  1.00  0.00
C
ATOM    627 1HG  GLU    39      18.337  23.852  10.091  1.00  0.00
H
ATOM    628 2HG  GLU    39      18.954  22.229   9.764  1.00  0.00
H
ATOM    629  CD  GLU    39      17.222  22.756   8.641  1.00  0.00
C
ATOM    630  OE1 GLU    39      16.001  22.499   8.676  1.00  0.00
O
ATOM    631  OE2 GLU    39      17.812  22.986   7.554  1.00  0.00
O
ATOM    632  N   SER    40      17.522  24.140  13.905  1.00  0.00
N
ATOM    633  H   SER    40      16.782  23.518  14.214  1.00  0.00
H
ATOM    634  CA  SER    40      17.688  25.438  14.566  1.00  0.00
C
ATOM    635  HA  SER    40      17.658  26.228  13.817  1.00  0.00
H
ATOM    636  C   SER    40      19.036  25.469  15.260  1.00  0.00
C
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ATOM    637  O   SER    40      19.784  26.433  15.129  1.00  0.00
O
ATOM    638  CB  SER    40      16.625  25.702  15.636  1.00  0.00
C
ATOM    639 1HB  SER    40      16.653  24.907  16.381  1.00  0.00
H
ATOM    640 2HB  SER    40      16.853  26.647  16.131  1.00  0.00
H
ATOM    641  OG  SER    40      15.323  25.775  15.081  1.00  0.00
O
ATOM    642  HG  SER    40      15.081  24.889  14.765  1.00  0.00
H
ATOM    643  N   TRP    41      19.373  24.402  15.967  1.00  0.00
N
ATOM    644  H   TRP    41      18.726  23.623  16.067  1.00  0.00
H
ATOM    645  CA  TRP    41      20.651  24.348  16.657  1.00  0.00
C
ATOM    646  HA  TRP    41      20.762  25.254  17.253  1.00  0.00
H
ATOM    647  C   TRP    41      21.827  24.282  15.679  1.00  0.00
C
ATOM    648  O   TRP    41      22.855  24.905  15.919  1.00  0.00
O
ATOM    649  CB  TRP    41      20.702  23.140  17.585  1.00  0.00
C
ATOM    650 1HB  TRP    41      20.590  22.236  16.988  1.00  0.00
H
ATOM    651 2HB  TRP    41      21.680  23.130  18.044  1.00  0.00
H
ATOM    652  CG  TRP    41      19.713  23.098  18.708  1.00  0.00
C
ATOM    653  CD1 TRP    41      19.218  24.144  19.433  1.00  0.00
C
ATOM    654  HD1 TRP    41      19.408  25.188  19.210  1.00  0.00
H
ATOM    655  CD2 TRP    41      19.227  21.914  19.367  1.00  0.00
C
ATOM    656  NE1 TRP    41      18.499  23.704  20.513  1.00  0.00
N
ATOM    657  HE1 TRP    41      18.129  24.301  21.249  1.00  0.00
H
ATOM    658  CE2 TRP    41      18.454  22.338  20.484  1.00  0.00
C
ATOM    659  CE3 TRP    41      19.394  20.531  19.143  1.00  0.00
C
ATOM    660  HE3 TRP    41      19.971  20.184  18.300  1.00  0.00
H
ATOM    661  CZ2 TRP    41      17.856  21.426  21.375  1.00  0.00
C
ATOM    662  HZ2 TRP    41      17.269  21.777  22.209  1.00  0.00
H
ATOM    663  CZ3 TRP    41      18.807  19.609  20.046  1.00  0.00
C
ATOM    664  HZ3 TRP    41      18.937  18.550  19.890  1.00  0.00
H
ATOM    665  CH2 TRP    41      18.051  20.074  21.161  1.00  0.00
C
ATOM    666  HH2 TRP    41      17.622  19.363  21.851  1.00  0.00
H
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ATOM    667  N   ARG    42      21.692  23.598  14.544  1.00  0.00
N
ATOM    668  H   ARG    42      20.830  23.082  14.375  1.00  0.00
H
ATOM    669  CA  ARG    42      22.781  23.559  13.549  1.00  0.00
C
ATOM    670  HA  ARG    42      23.691  23.218  14.032  1.00  0.00
H
ATOM    671  C   ARG    42      23.079  24.945  13.009  1.00  0.00
C
ATOM    672  O   ARG    42      24.232  25.292  12.754  1.00  0.00
O
ATOM    673  CB  ARG    42      22.486  22.639  12.361  1.00  0.00
C
ATOM    674 1HB  ARG    42      21.549  22.952  11.902  1.00  0.00
H
ATOM    675 2HB  ARG    42      23.287  22.785  11.635  1.00  0.00
H
ATOM    676  CG  ARG    42      22.410  21.151  12.670  1.00  0.00
C
ATOM    677 1HG  ARG    42      23.138  20.903  13.441  1.00  0.00
H
ATOM    678 2HG  ARG    42      21.416  20.914  13.036  1.00  0.00
H
ATOM    679  CD  ARG    42      22.695  20.293  11.437  1.00  0.00
C
ATOM    680 1HD  ARG    42      23.737  20.431  11.147  1.00  0.00
H
ATOM    681 2HD  ARG    42      22.547  19.247  11.708  1.00  0.00
H
ATOM    682  NE  ARG    42      21.846  20.628  10.284  1.00  0.00
N
ATOM    683  HE  ARG    42      21.547  21.591  10.192  1.00  0.00
H
ATOM    684  CZ  ARG    42      21.446  19.795   9.331  1.00  0.00
C
ATOM    685  NH1 ARG    42      21.744  18.523   9.277  1.00  0.00
N
ATOM    686 1HH1 ARG    42      22.295  18.101   9.999  1.00  0.00
H
ATOM    687 2HH1 ARG    42      21.398  17.980   8.498  1.00  0.00
H
ATOM    688  NH2 ARG    42      20.732  20.259   8.354  1.00  0.00
N
ATOM    689 1HH2 ARG    42      20.533  21.244   8.287  1.00  0.00
H
ATOM    690 2HH2 ARG    42      20.391  19.614   7.653  1.00  0.00
H
ATOM    691  N   ASN    43      22.043  25.758  12.900  1.00  0.00
N
ATOM    692  H   ASN    43      21.116  25.417  13.134  1.00  0.00
H
ATOM    693  CA  ASN    43      22.197  27.137  12.454  1.00  0.00
C
ATOM    694  HA  ASN    43      22.913  27.161  11.633  1.00  0.00
H
ATOM    695  C   ASN    43      22.732  28.052  13.557  1.00  0.00
C
ATOM    696  O   ASN    43      22.896  29.236  13.326  1.00  0.00
O
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ATOM    697  CB  ASN    43      20.850  27.680  11.951  1.00  0.00
C
ATOM    698 1HB  ASN    43      20.093  27.541  12.720  1.00  0.00
H
ATOM    699 2HB  ASN    43      20.949  28.746  11.756  1.00  0.00
H
ATOM    700  CG  ASN    43      20.394  27.020  10.675  1.00  0.00
C
ATOM    701  OD1 ASN    43      21.186  26.457   9.926  1.00  0.00
O
ATOM    702  ND2 ASN    43      19.129  27.126  10.379  1.00  0.00
N
ATOM    703 1HD2 ASN    43      18.811  26.718   9.512  1.00  0.00
H
ATOM    704 2HD2 ASN    43      18.494  27.604  11.000  1.00  0.00
H
ATOM    705  N   LEU    44      22.967  27.533  14.754  1.00  0.00
N
ATOM    706  H   LEU    44      22.835  26.539  14.901  1.00  0.00
H
ATOM    707  CA  LEU    44      23.296  28.352  15.921  1.00  0.00
C
ATOM    708  HA  LEU    44      23.207  29.405  15.659  1.00  0.00
H
ATOM    709  C   LEU    44      24.671  28.134  16.555  1.00  0.00
C
ATOM    710  O   LEU    44      25.167  29.002  17.276  1.00  0.00
O
ATOM    711  CB  LEU    44      22.242  28.018  16.979  1.00  0.00
C
ATOM    712 1HB  LEU    44      21.276  28.000  16.482  1.00  0.00
H
ATOM    713 2HB  LEU    44      22.448  27.007  17.325  1.00  0.00
H
ATOM    714  CG  LEU    44      22.085  28.891  18.225  1.00  0.00
C
ATOM    715  HG  LEU    44      23.049  29.003  18.714  1.00  0.00
H
ATOM    716  CD1 LEU    44      21.565  30.269  17.860  1.00  0.00
C
ATOM    717 1HD1 LEU    44      21.437  30.862  18.762  1.00  0.00
H
ATOM    718 2HD1 LEU    44      20.614  30.192  17.335  1.00  0.00
H
ATOM    719 3HD1 LEU    44      22.289  30.775  17.227  1.00  0.00
H
ATOM    720  CD2 LEU    44      21.154  28.173  19.184  1.00  0.00
C
ATOM    721 1HD2 LEU    44      21.005  28.785  20.068  1.00  0.00
H
ATOM    722 2HD2 LEU    44      21.598  27.225  19.491  1.00  0.00
H
ATOM    723 3HD2 LEU    44      20.189  27.984  18.713  1.00  0.00
H
ATOM    724  N   PHE    45      25.282  26.975  16.353  1.00  0.00
N
ATOM    725  H   PHE    45      24.903  26.310  15.695  1.00  0.00
H
ATOM    726  CA  PHE    45      26.441  26.586  17.166  1.00  0.00
C
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ATOM    727  HA  PHE    45      26.122  26.595  18.207  1.00  0.00
H
ATOM    728  C   PHE    45      27.698  27.454  17.109  1.00  0.00
C
ATOM    729  O   PHE    45      28.454  27.465  18.072  1.00  0.00
O
ATOM    730  CB  PHE    45      26.895  25.162  16.827  1.00  0.00
C
ATOM    731 1HB  PHE    45      27.166  25.124  15.774  1.00  0.00
H
ATOM    732 2HB  PHE    45      27.780  24.929  17.420  1.00  0.00
H
ATOM    733  CG  PHE    45      25.868  24.103  17.088  1.00  0.00
C
ATOM    734  CD1 PHE    45      25.481  23.236  16.051  1.00  0.00
C
ATOM    735  HD1 PHE    45      25.924  23.336  15.071  1.00  0.00
H
ATOM    736  CD2 PHE    45      25.303  23.942  18.366  1.00  0.00
C
ATOM    737  HD2 PHE    45      25.613  24.581  19.180  1.00  0.00
H
ATOM    738  CE1 PHE    45      24.505  22.236  16.274  1.00  0.00
C
ATOM    739  HE1 PHE    45      24.211  21.574  15.474  1.00  0.00
H
ATOM    740  CE2 PHE    45      24.328  22.950  18.599  1.00  0.00
C
ATOM    741  HE2 PHE    45      23.892  22.840  19.579  1.00  0.00
H
ATOM    742  CZ  PHE    45      23.927  22.098  17.550  1.00  0.00
C
ATOM    743  HZ  PHE    45      23.182  21.336  17.727  1.00  0.00
H
ATOM    744  N   ASP    46      27.970  28.160  16.023  1.00  0.00
N
ATOM    745  H   ASP    46      27.294  28.245  15.279  1.00  0.00
H
ATOM    746  CA  ASP    46      29.321  28.686  15.814  1.00  0.00
C
ATOM    747  HA  ASP    46      29.896  28.629  16.735  1.00  0.00
H
ATOM    748  C   ASP    46      29.403  30.112  15.220  1.00  0.00
C
ATOM    749  O   ASP    46      28.462  30.546  14.565  1.00  0.00
O
ATOM    750  CB  ASP    46      29.973  27.782  14.789  1.00  0.00
C
ATOM    751 1HB  ASP    46      29.336  27.752  13.919  1.00  0.00
H
ATOM    752 2HB  ASP    46      30.921  28.222  14.529  1.00  0.00
H
ATOM    753  CG  ASP    46      30.179  26.354  15.235  1.00  0.00
C
ATOM    754  OD1 ASP    46      31.192  26.057  15.899  1.00  0.00
O
ATOM    755  OD2 ASP    46      29.403  25.489  14.765  1.00  0.00
O
ATOM    756  N   PRO    47      30.498  30.874  15.434  1.00  0.00
N
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ATOM    757  CA  PRO    47      30.737  32.157  14.737  1.00  0.00
C
ATOM    758  HA  PRO    47      29.848  32.766  14.894  1.00  0.00
H
ATOM    759  C   PRO    47      31.135  32.339  13.247  1.00  0.00
C
ATOM    760  O   PRO    47      30.665  33.314  12.659  1.00  0.00
O
ATOM    761  CB  PRO    47      31.877  32.771  15.561  1.00  0.00
C
ATOM    762 1HB  PRO    47      32.837  32.567  15.090  1.00  0.00
H
ATOM    763 2HB  PRO    47      31.731  33.844  15.680  1.00  0.00
H
ATOM    764  CG  PRO    47      31.810  32.115  16.859  1.00  0.00
C
ATOM    765 1HG  PRO    47      32.769  32.167  17.368  1.00  0.00
H
ATOM    766 2HG  PRO    47      31.027  32.573  17.463  1.00  0.00
H
ATOM    767  CD  PRO    47      31.453  30.712  16.545  1.00  0.00
C
ATOM    768 1HD  PRO    47      32.327  30.156  16.226  1.00  0.00
H
ATOM    769 2HD  PRO    47      30.990  30.243  17.413  1.00  0.00
H
ATOM    770  N   MET    48      32.030  31.562  12.627  1.00  0.00
N
ATOM    771  H   MET    48      32.418  30.762  13.120  1.00  0.00
H
ATOM    772  CA  MET    48      32.575  31.915  11.278  1.00  0.00
C
ATOM    773  HA  MET    48      32.058  32.803  10.920  1.00  0.00
H
ATOM    774  C   MET    48      32.457  30.888  10.138  1.00  0.00
C
ATOM    775  O   MET    48      32.663  29.715  10.338  1.00  0.00
O
ATOM    776  CB  MET    48      34.058  32.276  11.405  1.00  0.00
C
ATOM    777 1HB  MET    48      34.595  31.425  11.819  1.00  0.00
H
ATOM    778 2HB  MET    48      34.452  32.472  10.408  1.00  0.00
H
ATOM    779  CG  MET    48      34.323  33.490  12.279  1.00  0.00
C
ATOM    780 1HG  MET    48      33.968  33.283  13.287  1.00  0.00
H
ATOM    781 2HG  MET    48      35.395  33.660  12.319  1.00  0.00
H
ATOM    782  SD  MET    48      33.533  34.992  11.683  1.00  0.00
S
ATOM    783  CE  MET    48      34.522  35.379  10.274  1.00  0.00
C
ATOM    784 1HE  MET    48      34.195  36.330   9.853  1.00  0.00
H
ATOM    785 2HE  MET    48      34.421  34.601   9.519  1.00  0.00
H
ATOM    786 3HE  MET    48      35.568  35.458  10.570  1.00  0.00
H
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ATOM    787  N   HIS    49      32.067  31.280   8.934  1.00  0.00
N
ATOM    788  H   HIS    49      32.172  32.253   8.661  1.00  0.00
H
ATOM    789  CA  HIS    49      31.426  30.336   7.998  1.00  0.00
C
ATOM    790  HA  HIS    49      30.615  29.860   8.538  1.00  0.00
H
ATOM    791  C   HIS    49      32.287  29.191   7.436  1.00  0.00
C
ATOM    792  O   HIS    49      33.411  29.412   7.012  1.00  0.00
O
ATOM    793  CB  HIS    49      30.789  31.141   6.860  1.00  0.00
C
ATOM    794 1HB  HIS    49      31.566  31.702   6.338  1.00  0.00
H
ATOM    795 2HB  HIS    49      30.337  30.453   6.149  1.00  0.00
H
ATOM    796  CG  HIS    49      29.731  32.092   7.332  1.00  0.00
C
ATOM    797  ND1 HIS    49      29.984  33.414   7.689  1.00  0.00
N
ATOM    798  HD1 HIS    49      30.885  33.888   7.611  1.00  0.00
H
ATOM    799  CD2 HIS    49      28.408  31.913   7.584  1.00  0.00
C
ATOM    800  HD2 HIS    49      27.851  30.995   7.436  1.00  0.00
H
ATOM    801  CE1 HIS    49      28.870  33.956   8.163  1.00  0.00
C
ATOM    802  HE1 HIS    49      28.777  34.967   8.550  1.00  0.00
H
ATOM    803  NE2 HIS    49      27.905  33.071   8.100  1.00  0.00
N
ATOM    804  HE2 HIS    49      26.939  33.219   8.403  1.00  0.00
H
ATOM    805  N   THR    50      31.734  27.979   7.423  1.00  0.00
N
ATOM    806  H   THR    50      30.817  27.871   7.844  1.00  0.00
H
ATOM    807  CA  THR    50      32.361  26.780   6.824  1.00  0.00
C
ATOM    808  HA  THR    50      33.029  27.096   6.022  1.00  0.00
H
ATOM    809  C   THR    50      31.392  25.737   6.242  1.00  0.00
C
ATOM    810  O   THR    50      31.506  25.360   5.078  1.00  0.00
O
ATOM    811  CB  THR    50      33.185  25.994   7.860  1.00  0.00
C
ATOM    812  HB  THR    50      32.998  24.927   7.732  1.00  0.00
H
ATOM    813  OG1 THR    50      32.780  26.387   9.174  1.00  0.00
O
ATOM    814  HG1 THR    50      33.098  27.286   9.321  1.00  0.00
H
ATOM    815  CG2 THR    50      34.665  26.240   7.702  1.00  0.00
C
ATOM    816 1HG2 THR    50      35.204  25.757   8.515  1.00  0.00
H
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ATOM    817 2HG2 THR    50      34.878  27.310   7.711  1.00  0.00
H
ATOM    818 3HG2 THR    50      35.007  25.823   6.754  1.00  0.00
H
ATOM    819  N   GLY    51      30.417  25.282   7.022  1.00  0.00
N
ATOM    820  H   GLY    51      30.327  25.636   7.965  1.00  0.00
H
ATOM    821  CA  GLY    51      29.420  24.331   6.533  1.00  0.00
C
ATOM    822 1HA  GLY    51      28.495  24.519   7.078  1.00  0.00
H
ATOM    823 2HA  GLY    51      29.219  24.555   5.487  1.00  0.00
H
ATOM    824  C   GLY    51      29.690  22.836   6.630  1.00  0.00
C
ATOM    825  O   GLY    51      28.910  22.042   6.107  1.00  0.00
O
ATOM    826  N   TYR    52      30.751  22.433   7.316  1.00  0.00
N
ATOM    827  H   TYR    52      31.357  23.113   7.739  1.00  0.00
H
ATOM    828  CA  TYR    52      31.063  21.015   7.535  1.00  0.00
C
ATOM    829  HA  TYR    52      30.237  20.386   7.204  1.00  0.00
H
ATOM    830  C   TYR    52      31.219  20.844   9.031  1.00  0.00
C
ATOM    831  O   TYR    52      31.423  21.841   9.724  1.00  0.00
O
ATOM    832  CB  TYR    52      32.326  20.604   6.778  1.00  0.00
C
ATOM    833 1HB  TYR    52      33.145  21.279   7.028  1.00  0.00
H
ATOM    834 2HB  TYR    52      32.598  19.588   7.063  1.00  0.00
H
ATOM    835  CG  TYR    52      32.064  20.635   5.294  1.00  0.00
C
ATOM    836  CD1 TYR    52      32.297  21.801   4.535  1.00  0.00
C
ATOM    837  HD1 TYR    52      32.777  22.657   4.989  1.00  0.00
H
ATOM    838  CD2 TYR    52      31.479  19.521   4.658  1.00  0.00
C
ATOM    839  HD2 TYR    52      31.318  18.605   5.213  1.00  0.00
H
ATOM    840  CE1 TYR    52      31.863  21.882   3.189  1.00  0.00
C
ATOM    841  HE1 TYR    52      32.012  22.789   2.621  1.00  0.00
H
ATOM    842  CE2 TYR    52      31.057  19.596   3.310  1.00  0.00
C
ATOM    843  HE2 TYR    52      30.589  18.743   2.841  1.00  0.00
H
ATOM    844  CZ  TYR    52      31.225  20.785   2.601  1.00  0.00
C
ATOM    845  OH  TYR    52      30.750  20.878   1.323  1.00  0.00
O
ATOM    846  HH  TYR    52      30.340  20.057   1.027  1.00  0.00
H
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ATOM    847  N   ILE    53      31.085  19.630   9.539  1.00  0.00
N
ATOM    848  H   ILE    53      31.022  18.815   8.929  1.00  0.00
H
ATOM    849  CA  ILE    53      31.008  19.406  10.977  1.00  0.00
C
ATOM    850  HA  ILE    53      30.867  20.357  11.481  1.00  0.00
H
ATOM    851  C   ILE    53      32.338  18.839  11.439  1.00  0.00
C
ATOM    852  O   ILE    53      32.913  17.931  10.848  1.00  0.00
O
ATOM    853  CB  ILE    53      29.803  18.495  11.347  1.00  0.00
C
ATOM    854  HB  ILE    53      29.929  17.536  10.850  1.00  0.00
H
ATOM    855  CG1 ILE    53      28.484  19.112  10.835  1.00  0.00
C
ATOM    856 1HG1 ILE    53      28.515  19.138   9.746  1.00  0.00
H
ATOM    857 2HG1 ILE    53      27.675  18.438  11.113  1.00  0.00
H
ATOM    858  CG2 ILE    53      29.738  18.238  12.879  1.00  0.00
C
ATOM    859 1HG2 ILE    53      28.866  17.626  13.109  1.00  0.00
H
ATOM    860 2HG2 ILE    53      29.676  19.176  13.431  1.00  0.00
H
ATOM    861 3HG2 ILE    53      30.623  17.687  13.199  1.00  0.00
H
ATOM    862  CD1 ILE    53      28.114  20.539  11.336  1.00  0.00
C
ATOM    863 1HD1 ILE    53      27.122  20.802  10.967  1.00  0.00
H
ATOM    864 2HD1 ILE    53      28.828  21.270  10.958  1.00  0.00
H
ATOM    865 3HD1 ILE    53      28.100  20.572  12.425  1.00  0.00
H
ATOM    866  N   THR    54      32.861  19.444  12.489  1.00  0.00
N
ATOM    867  H   THR    54      32.363  20.195  12.939  1.00  0.00
H
ATOM    868  CA  THR    54      34.139  19.062  13.059  1.00  0.00
C
ATOM    869  HA  THR    54      34.386  18.045  12.782  1.00  0.00
H
ATOM    870  C   THR    54      33.868  19.106  14.569  1.00  0.00
C
ATOM    871  O   THR    54      32.873  19.698  14.987  1.00  0.00
O
ATOM    872  CB  THR    54      35.247  20.018  12.541  1.00  0.00
C
ATOM    873  HB  THR    54      36.164  19.857  13.102  1.00  0.00
H
ATOM    874  OG1 THR    54      34.805  21.365  12.674  1.00  0.00
O
ATOM    875  HG1 THR    54      35.581  21.913  12.826  1.00  0.00
H
ATOM    876  CG2 THR    54      35.538  19.869  11.064  1.00  0.00
C
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ATOM    877 1HG2 THR    54      36.333  20.559  10.783  1.00  0.00
H
ATOM    878 2HG2 THR    54      34.650  20.092  10.473  1.00  0.00
H
ATOM    879 3HG2 THR    54      35.869  18.858  10.851  1.00  0.00
H
ATOM    880  N   LEU    55      34.677  18.457  15.398  1.00  0.00
N
ATOM    881  H   LEU    55      35.519  18.029  15.045  1.00  0.00
H
ATOM    882  CA  LEU    55      34.310  18.209  16.802  1.00  0.00
C
ATOM    883  HA  LEU    55      33.391  17.626  16.761  1.00  0.00
H
ATOM    884  C   LEU    55      34.004  19.337  17.791  1.00  0.00
C
ATOM    885  O   LEU    55      33.164  19.117  18.641  1.00  0.00
O
ATOM    886  CB  LEU    55      35.355  17.293  17.425  1.00  0.00
C
ATOM    887 1HB  LEU    55      35.475  16.483  16.716  1.00  0.00
H
ATOM    888 2HB  LEU    55      36.288  17.843  17.470  1.00  0.00
H
ATOM    889  CG  LEU    55      35.158  16.636  18.803  1.00  0.00
C
ATOM    890  HG  LEU    55      35.270  17.399  19.572  1.00  0.00
H
ATOM    891  CD1 LEU    55      33.827  15.956  19.007  1.00  0.00
C
ATOM    892 1HD1 LEU    55      33.869  15.257  19.840  1.00  0.00
H
ATOM    893 2HD1 LEU    55      33.536  15.423  18.102  1.00  0.00
H
ATOM    894 3HD1 LEU    55      33.079  16.701  19.252  1.00  0.00
H
ATOM    895  CD2 LEU    55      36.256  15.627  18.972  1.00  0.00
C
ATOM    896 1HD2 LEU    55      36.120  15.070  19.893  1.00  0.00
H
ATOM    897 2HD2 LEU    55      37.205  16.152  19.038  1.00  0.00
H
ATOM    898 3HD2 LEU    55      36.268  14.916  18.143  1.00  0.00
H
ATOM    899  N   THR    56      34.548  20.545  17.716  1.00  0.00
N
ATOM    900  H   THR    56      35.290  20.762  17.068  1.00  0.00
H
ATOM    901  CA  THR    56      34.060  21.599  18.616  1.00  0.00
C
ATOM    902  HA  THR    56      34.253  21.306  19.649  1.00  0.00
H
ATOM    903  C   THR    56      32.562  21.817  18.435  1.00  0.00
C
ATOM    904  O   THR    56      31.821  21.955  19.399  1.00  0.00
O
ATOM    905  CB  THR    56      34.733  22.946  18.338  1.00  0.00
C
ATOM    906  HB  THR    56      34.387  23.313  17.374  1.00  0.00
H
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ATOM    907  OG1 THR    56      36.146  22.754  18.266  1.00  0.00
O
ATOM    908  HG1 THR    56      36.444  22.237  19.022  1.00  0.00
H
ATOM    909  CG2 THR    56      34.405  23.985  19.382  1.00  0.00
C
ATOM    910 1HG2 THR    56      34.993  24.880  19.189  1.00  0.00
H
ATOM    911 2HG2 THR    56      34.634  23.607  20.378  1.00  0.00
H
ATOM    912 3HG2 THR    56      33.347  24.248  19.334  1.00  0.00
H
ATOM    913  N   LYS    57      32.100  21.745  17.193  1.00  0.00
N
ATOM    914  H   LYS    57      32.741  21.562  16.436  1.00  0.00
H
ATOM    915  CA  LYS    57      30.682  21.927  16.889  1.00  0.00
C
ATOM    916  HA  LYS    57      30.350  22.874  17.322  1.00  0.00
H
ATOM    917  C   LYS    57      29.883  20.798  17.506  1.00  0.00
C
ATOM    918  O   LYS    57      28.804  21.000  18.012  1.00  0.00
O
ATOM    919  CB  LYS    57      30.444  21.966  15.377  1.00  0.00
C
ATOM    920 1HB  LYS    57      30.458  20.950  14.984  1.00  0.00
H
ATOM    921 2HB  LYS    57      29.462  22.402  15.189  1.00  0.00
H
ATOM    922  CG  LYS    57      31.508  22.765  14.655  1.00  0.00
C
ATOM    923 1HG  LYS    57      31.621  23.729  15.143  1.00  0.00
H
ATOM    924 2HG  LYS    57      32.453  22.232  14.723  1.00  0.00
H
ATOM    925  CD  LYS    57      31.223  22.992  13.200  1.00  0.00
C
ATOM    926 1HD  LYS    57      31.033  22.045  12.701  1.00  0.00
H
ATOM    927 2HD  LYS    57      30.362  23.652  13.092  1.00  0.00
H
ATOM    928  CE  LYS    57      32.461  23.643  12.627  1.00  0.00
C
ATOM    929 1HE  LYS    57      32.689  24.519  13.231  1.00  0.00
H
ATOM    930 2HE  LYS    57      33.291  22.952  12.709  1.00  0.00
H
ATOM    931  NZ  LYS    57      32.304  24.056  11.214  1.00  0.00
N
ATOM    932 1HZ  LYS    57      33.162  24.456  10.865  1.00  0.00
H
ATOM    933 2HZ  LYS    57      31.573  24.759  11.168  1.00  0.00
H
ATOM    934 3HZ  LYS    57      32.037  23.257  10.650  1.00  0.00
H
ATOM    935  N   PHE    58      30.446  19.601  17.503  1.00  0.00
N
ATOM    936  H   PHE    58      31.352  19.489  17.075  1.00  0.00
H
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ATOM    937  CA  PHE    58      29.811  18.441  18.125  1.00  0.00
C
ATOM    938  HA  PHE    58      28.776  18.389  17.808  1.00  0.00
H
ATOM    939  C   PHE    58      29.830  18.517  19.658  1.00  0.00
C
ATOM    940  O   PHE    58      28.872  18.137  20.326  1.00  0.00
O
ATOM    941  CB  PHE    58      30.511  17.180  17.631  1.00  0.00
C
ATOM    942 1HB  PHE    58      30.495  17.174  16.542  1.00  0.00
H
ATOM    943 2HB  PHE    58      31.542  17.210  17.951  1.00  0.00
H
ATOM    944  CG  PHE    58      29.893  15.908  18.127  1.00  0.00
C
ATOM    945  CD1 PHE    58      28.967  15.223  17.329  1.00  0.00
C
ATOM    946  HD1 PHE    58      28.693  15.612  16.361  1.00  0.00
H
ATOM    947  CD2 PHE    58      30.245  15.372  19.381  1.00  0.00
C
ATOM    948  HD2 PHE    58      30.952  15.890  20.014  1.00  0.00
H
ATOM    949  CE1 PHE    58      28.399  14.014  17.768  1.00  0.00
C
ATOM    950  HE1 PHE    58      27.690  13.499  17.140  1.00  0.00
H
ATOM    951  CE2 PHE    58      29.697  14.148  19.822  1.00  0.00
C
ATOM    952  HE2 PHE    58      30.004  13.727  20.767  1.00  0.00
H
ATOM    953  CZ  PHE    58      28.771  13.466  19.013  1.00  0.00
C
ATOM    954  HZ  PHE    58      28.357  12.522  19.337  1.00  0.00
H
ATOM    955  N   CYS    59      30.886  19.063  20.241  1.00  0.00
N
ATOM    956  H   CYS    59      31.679  19.356  19.680  1.00  0.00
H
ATOM    957  CA  CYS    59      30.921  19.268  21.684  1.00  0.00
C
ATOM    958  HA  CYS    59      30.670  18.332  22.185  1.00  0.00
H
ATOM    959  C   CYS    59      29.870  20.305  22.051  1.00  0.00
C
ATOM    960  O   CYS    59      29.201  20.182  23.072  1.00  0.00
O
ATOM    961  CB  CYS    59      32.306  19.729  22.137  1.00  0.00
C
ATOM    962 1HB  CYS    59      32.567  20.651  21.614  1.00  0.00
H
ATOM    963 2HB  CYS    59      32.273  19.942  23.207  1.00  0.00
H
ATOM    964  SG  CYS    59      33.579  18.489  21.829  1.00  0.00
S
ATOM    965  HG  CYS    59      33.534  18.553  20.490  1.00  0.00
H
ATOM    966  N   ASP    60      29.677  21.293  21.191  1.00  0.00
N
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ATOM    967  H   ASP    60      30.317  21.422  20.412  1.00  0.00
H
ATOM    968  CA  ASP    60      28.576  22.236  21.347  1.00  0.00
C
ATOM    969  HA  ASP    60      28.570  22.594  22.377  1.00  0.00
H
ATOM    970  C   ASP    60      27.222  21.570  21.107  1.00  0.00
C
ATOM    971  O   ASP    60      26.294  21.899  21.823  1.00  0.00
O
ATOM    972  CB  ASP    60      28.733  23.463  20.440  1.00  0.00
C
ATOM    973 1HB  ASP    60      29.121  23.161  19.469  1.00  0.00
H
ATOM    974 2HB  ASP    60      27.748  23.905  20.297  1.00  0.00
H
ATOM    975  CG  ASP    60      29.630  24.534  21.052  1.00  0.00
C
ATOM    976  OD1 ASP    60      30.741  24.241  21.552  1.00  0.00
O
ATOM    977  OD2 ASP    60      29.198  25.711  21.086  1.00  0.00
O
ATOM    978  N   VAL    61      27.064  20.605  20.203  1.00  0.00
N
ATOM    979  H   VAL    61      27.826  20.355  19.582  1.00  0.00
H
ATOM    980  CA  VAL    61      25.752  19.949  20.074  1.00  0.00
C
ATOM    981  HA  VAL    61      25.025  20.756  19.999  1.00  0.00
H
ATOM    982  C   VAL    61      25.413  19.201  21.347  1.00  0.00
C
ATOM    983  O   VAL    61      24.264  19.207  21.776  1.00  0.00
O
ATOM    984  CB  VAL    61      25.503  19.022  18.814  1.00  0.00
C
ATOM    985  HB  VAL    61      24.420  18.975  18.695  1.00  0.00
H
ATOM    986  CG1 VAL    61      26.066  19.620  17.534  1.00  0.00
C
ATOM    987 1HG1 VAL    61      27.027  19.188  17.277  1.00  0.00
H
ATOM    988 2HG1 VAL    61      26.204  20.696  17.642  1.00  0.00
H
ATOM    989 3HG1 VAL    61      25.368  19.441  16.719  1.00  0.00
H
ATOM    990  CG2 VAL    61      25.978  17.550  18.938  1.00  0.00
C
ATOM    991 1HG2 VAL    61      25.570  16.968  18.114  1.00  0.00
H
ATOM    992 2HG2 VAL    61      25.647  17.112  19.872  1.00  0.00
H
ATOM    993 3HG2 VAL    61      27.061  17.494  18.891  1.00  0.00
H
ATOM    994  N   LEU    62      26.395  18.563  21.969  1.00  0.00
N
ATOM    995  H   LEU    62      27.334  18.574  21.577  1.00  0.00
H
ATOM    996  CA  LEU    62      26.128  17.830  23.198  1.00  0.00
C
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ATOM    997  HA  LEU    62      25.191  17.299  23.084  1.00  0.00
H
ATOM    998  C   LEU    62      25.932  18.801  24.343  1.00  0.00
C
ATOM    999  O   LEU    62      25.063  18.583  25.174  1.00  0.00
O
ATOM   1000  CB  LEU    62      27.228  16.812  23.495  1.00  0.00
C
ATOM   1001 1HB  LEU    62      28.185  17.244  23.206  1.00  0.00
H
ATOM   1002 2HB  LEU    62      27.244  16.620  24.567  1.00  0.00
H
ATOM   1003  CG  LEU    62      27.038  15.467  22.779  1.00  0.00
C
ATOM   1004  HG  LEU    62      26.840  15.659  21.725  1.00  0.00
H
ATOM   1005  CD1 LEU    62      28.283  14.618  22.881  1.00  0.00
C
ATOM   1006 1HD1 LEU    62      28.143  13.691  22.324  1.00  0.00
H
ATOM   1007 2HD1 LEU    62      28.497  14.377  23.923  1.00  0.00
H
ATOM   1008 3HD1 LEU    62      29.127  15.158  22.454  1.00  0.00
H
ATOM   1009  CD2 LEU    62      25.870  14.661  23.360  1.00  0.00
C
ATOM   1010 1HD2 LEU    62      25.680  13.796  22.732  1.00  0.00
H
ATOM   1011 2HD2 LEU    62      24.968  15.260  23.421  1.00  0.00
H
ATOM   1012 3HD2 LEU    62      26.124  14.309  24.359  1.00  0.00
H
ATOM   1013  N   GLY    63      26.661  19.905  24.336  1.00  0.00
N
ATOM   1014  H   GLY    63      27.367  20.044  23.620  1.00  0.00
H
ATOM   1015  CA  GLY    63      26.463  20.940  25.332  1.00  0.00
C
ATOM   1016 1HA  GLY    63      26.635  20.522  26.322  1.00  0.00
H
ATOM   1017 2HA  GLY    63      27.170  21.749  25.157  1.00  0.00
H
ATOM   1018  C   GLY    63      25.051  21.485  25.264  1.00  0.00
C
ATOM   1019  O   GLY    63      24.306  21.409  26.243  1.00  0.00
O
ATOM   1020  N   VAL    64      24.662  21.970  24.093  1.00  0.00
N
ATOM   1021  H   VAL    64      25.320  21.975  23.313  1.00  0.00
H
ATOM   1022  CA  VAL    64      23.328  22.518  23.866  1.00  0.00
C
ATOM   1023  HA  VAL    64      23.165  23.329  24.576  1.00  0.00
H
ATOM   1024  C   VAL    64      22.254  21.475  24.130  1.00  0.00
C
ATOM   1025  O   VAL    64      21.335  21.771  24.866  1.00  0.00
O
ATOM   1026  CB  VAL    64      23.186  23.093  22.420  1.00  0.00
C
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ATOM   1027  HB  VAL    64      23.490  22.321  21.715  1.00  0.00
H
ATOM   1028  CG1 VAL    64      21.743  23.493  22.085  1.00  0.00
C
ATOM   1029 1HG1 VAL    64      21.706  23.970  21.105  1.00  0.00
H
ATOM   1030 2HG1 VAL    64      21.356  24.186  22.832  1.00  0.00
H
ATOM   1031 3HG1 VAL    64      21.103  22.611  22.056  1.00  0.00
H
ATOM   1032  CG2 VAL    64      24.097  24.324  22.234  1.00  0.00
C
ATOM   1033 1HG2 VAL    64      24.029  24.680  21.206  1.00  0.00
H
ATOM   1034 2HG2 VAL    64      25.134  24.067  22.442  1.00  0.00
H
ATOM   1035 3HG2 VAL    64      23.787  25.124  22.906  1.00  0.00
H
ATOM   1036  N   LYS    65      22.323  20.250  23.621  1.00  0.00
N
ATOM   1037  H   LYS    65      23.109  19.970  23.038  1.00  0.00
H
ATOM   1038  CA  LYS    65      21.201  19.330  23.866  1.00  0.00
C
ATOM   1039  HA  LYS    65      20.289  19.891  23.651  1.00  0.00
H
ATOM   1040  C   LYS    65      21.119  18.913  25.331  1.00  0.00
C
ATOM   1041  O   LYS    65      20.030  18.670  25.844  1.00  0.00
O
ATOM   1042  CB  LYS    65      21.199  18.114  22.926  1.00  0.00
C
ATOM   1043 1HB  LYS    65      20.188  17.706  22.908  1.00  0.00
H
ATOM   1044 2HB  LYS    65      21.437  18.466  21.923  1.00  0.00
H
ATOM   1045  CG  LYS    65      22.144  16.978  23.320  1.00  0.00
C
ATOM   1046 1HG  LYS    65      23.134  17.388  23.500  1.00  0.00
H
ATOM   1047 2HG  LYS    65      21.785  16.536  24.250  1.00  0.00
H
ATOM   1048  CD  LYS    65      22.255  15.865  22.279  1.00  0.00
C
ATOM   1049 1HD  LYS    65      22.770  15.024  22.742  1.00  0.00
H
ATOM   1050 2HD  LYS    65      21.261  15.538  21.972  1.00  0.00
H
ATOM   1051  CE  LYS    65      23.055  16.313  21.062  1.00  0.00
C
ATOM   1052 1HE  LYS    65      22.432  16.957  20.438  1.00  0.00
H
ATOM   1053 2HE  LYS    65      23.905  16.895  21.412  1.00  0.00
H
ATOM   1054  NZ  LYS    65      23.583  15.175  20.258  1.00  0.00
N
ATOM   1055 1HZ  LYS    65      24.043  15.510  19.425  1.00  0.00
H
ATOM   1056 2HZ  LYS    65      22.826  14.549  19.996  1.00  0.00
H
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ATOM   1057 3HZ  LYS    65      24.239  14.638  20.808  1.00  0.00
H
ATOM   1058  N   MET    66      22.232  18.861  26.047  1.00  0.00
N
ATOM   1059  H   MET    66      23.137  19.055  25.627  1.00  0.00
H
ATOM   1060  CA  MET    66      22.153  18.510  27.459  1.00  0.00
C
ATOM   1061  HA  MET    66      21.449  17.688  27.555  1.00  0.00
H
ATOM   1062  C   MET    66      21.603  19.659  28.296  1.00  0.00
C
ATOM   1063  O   MET    66      20.989  19.429  29.334  1.00  0.00
O
ATOM   1064  CB  MET    66      23.485  18.012  28.009  1.00  0.00
C
ATOM   1065 1HB  MET    66      24.275  18.723  27.772  1.00  0.00
H
ATOM   1066 2HB  MET    66      23.401  17.932  29.087  1.00  0.00
H
ATOM   1067  CG  MET    66      23.844  16.639  27.480  1.00  0.00
C
ATOM   1068 1HG  MET    66      22.982  15.981  27.587  1.00  0.00
H
ATOM   1069 2HG  MET    66      24.101  16.710  26.425  1.00  0.00
H
ATOM   1070  SD  MET    66      25.217  15.930  28.388  1.00  0.00
S
ATOM   1071  CE  MET    66      25.616  14.588  27.315  1.00  0.00
C
ATOM   1072 1HE  MET    66      26.355  13.946  27.790  1.00  0.00
H
ATOM   1073 2HE  MET    66      26.029  14.982  26.387  1.00  0.00
H
ATOM   1074 3HE  MET    66      24.720  14.006  27.098  1.00  0.00
H
ATOM   1075  N   GLU    67      21.735  20.890  27.838  1.00  0.00
N
ATOM   1076  H   GLU    67      22.291  21.078  27.008  1.00  0.00
H
ATOM   1077  CA  GLU    67      21.067  21.998  28.512  1.00  0.00
C
ATOM   1078  HA  GLU    67      21.073  21.831  29.588  1.00  0.00
H
ATOM   1079  C   GLU    67      19.616  22.142  28.062  1.00  0.00
C
ATOM   1080  O   GLU    67      18.715  22.345  28.858  1.00  0.00
O
ATOM   1081  CB  GLU    67      21.797  23.301  28.206  1.00  0.00
C
ATOM   1082 1HB  GLU    67      21.865  23.421  27.125  1.00  0.00
H
ATOM   1083 2HB  GLU    67      21.206  24.118  28.607  1.00  0.00
H
ATOM   1084  CG  GLU    67      23.191  23.392  28.793  1.00  0.00
C
ATOM   1085 1HG  GLU    67      23.800  22.577  28.412  1.00  0.00
H
ATOM   1086 2HG  GLU    67      23.642  24.335  28.481  1.00  0.00
H
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ATOM   1087  CD  GLU    67      23.186  23.332  30.305  1.00  0.00
C
ATOM   1088  OE1 GLU    67      22.577  24.212  30.943  1.00  0.00
O
ATOM   1089  OE2 GLU    67      23.853  22.450  30.892  1.00  0.00
O
ATOM   1090  N   ASP    68      19.374  22.075  26.769  1.00  0.00
N
ATOM   1091  H   ASP    68      20.143  21.923  26.119  1.00  0.00
H
ATOM   1092  CA  ASP    68      18.064  22.396  26.218  1.00  0.00
C
ATOM   1093  HA  ASP    68      17.671  23.273  26.724  1.00  0.00
H
ATOM   1094  C   ASP    68      17.041  21.277  26.338  1.00  0.00
C
ATOM   1095  O   ASP    68      15.837  21.528  26.436  1.00  0.00
O
ATOM   1096  CB  ASP    68      18.190  22.705  24.729  1.00  0.00
C
ATOM   1097 1HB  ASP    68      18.768  21.921  24.241  1.00  0.00
H
ATOM   1098 2HB  ASP    68      17.188  22.705  24.302  1.00  0.00
H
ATOM   1099  CG  ASP    68      18.814  24.063  24.436  1.00  0.00
C
ATOM   1100  OD1 ASP    68      19.651  24.634  25.175  1.00  0.00
O
ATOM   1101  OD2 ASP    68      18.409  24.584  23.378  1.00  0.00
O
ATOM   1102  N   ALA    69      17.515  20.042  26.259  1.00  0.00
N
ATOM   1103  H   ALA    69      18.513  19.904  26.172  1.00  0.00
H
ATOM   1104  CA  ALA    69      16.639  18.873  26.212  1.00  0.00
C
ATOM   1105  HA  ALA    69      15.606  19.212  26.253  1.00  0.00
H
ATOM   1106  C   ALA    69      16.822  17.899  27.379  1.00  0.00
C
ATOM   1107  O   ALA    69      15.846  17.299  27.841  1.00  0.00
O
ATOM   1108  CB  ALA    69      16.828  18.159  24.877  1.00  0.00
C
ATOM   1109 1HB  ALA    69      16.647  18.857  24.059  1.00  0.00
H
ATOM   1110 2HB  ALA    69      16.108  17.344  24.809  1.00  0.00
H
ATOM   1111 3HB  ALA    69      17.837  17.755  24.799  1.00  0.00
H
ATOM   1112  N   ARG    70      18.044  17.715  27.864  1.00  0.00
N
ATOM   1113  H   ARG    70      18.834  18.152  27.401  1.00  0.00
H
ATOM   1114  CA  ARG    70      18.241  16.873  29.051  1.00  0.00
C
ATOM   1115  HA  ARG    70      17.556  16.028  28.986  1.00  0.00
H
ATOM   1116  C   ARG    70      17.879  17.661  30.310  1.00  0.00
C
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ATOM   1117  O   ARG    70      17.256  17.119  31.222  1.00  0.00
O
ATOM   1118  CB  ARG    70      19.668  16.327  29.107  1.00  0.00
C
ATOM   1119 1HB  ARG    70      19.923  15.933  28.123  1.00  0.00
H
ATOM   1120 2HB  ARG    70      20.344  17.138  29.340  1.00  0.00
H
ATOM   1121  CG  ARG    70      19.895  15.237  30.124  1.00  0.00
C
ATOM   1122 1HG  ARG    70      19.655  15.607  31.120  1.00  0.00
H
ATOM   1123 2HG  ARG    70      19.255  14.386  29.889  1.00  0.00
H
ATOM   1124  CD  ARG    70      21.346  14.797  30.095  1.00  0.00
C
ATOM   1125 1HD  ARG    70      21.609  14.506  29.077  1.00  0.00
H
ATOM   1126 2HD  ARG    70      21.979  15.630  30.403  1.00  0.00
H
ATOM   1127  NE  ARG    70      21.568  13.658  30.992  1.00  0.00
N
ATOM   1128  HE  ARG    70      20.758  13.317  31.496  1.00  0.00
H
ATOM   1129  CZ  ARG    70      22.719  13.033  31.195  1.00  0.00
C
ATOM   1130  NH1 ARG    70      23.852  13.409  30.659  1.00  0.00
N
ATOM   1131 1HH1 ARG    70      23.883  14.246  30.105  1.00  0.00
H
ATOM   1132 2HH1 ARG    70      24.683  12.854  30.795  1.00  0.00
H
ATOM   1133  NH2 ARG    70      22.735  11.985  31.962  1.00  0.00
N
ATOM   1134 1HH2 ARG    70      21.869  11.613  32.332  1.00  0.00
H
ATOM   1135 2HH2 ARG    70      23.623  11.561  32.193  1.00  0.00
H
ATOM   1136  N   LYS    71      18.213  18.945  30.333  1.00  0.00
N
ATOM   1137  H   LYS    71      18.829  19.294  29.611  1.00  0.00
H
ATOM   1138  CA  LYS    71      17.640  19.925  31.269  1.00  0.00
C
ATOM   1139  HA  LYS    71      17.156  19.425  32.106  1.00  0.00
H
ATOM   1140  C   LYS    71      16.579  20.623  30.409  1.00  0.00
C
ATOM   1141  O   LYS    71      16.140  20.018  29.436  1.00  0.00
O
ATOM   1142  CB  LYS    71      18.710  20.897  31.790  1.00  0.00
C
ATOM   1143 1HB  LYS    71      19.142  21.409  30.943  1.00  0.00
H
ATOM   1144 2HB  LYS    71      18.236  21.638  32.432  1.00  0.00
H
ATOM   1145  CG  LYS    71      19.862  20.274  32.555  1.00  0.00
C
ATOM   1146 1HG  LYS    71      19.497  19.851  33.489  1.00  0.00
H
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ATOM   1147 2HG  LYS    71      20.312  19.487  31.954  1.00  0.00
H
ATOM   1148  CD  LYS    71      20.916  21.347  32.830  1.00  0.00
C
ATOM   1149 1HD  LYS    71      21.211  21.795  31.881  1.00  0.00
H
ATOM   1150 2HD  LYS    71      20.485  22.121  33.463  1.00  0.00
H
ATOM   1151  CE  LYS    71      22.158  20.781  33.503  1.00  0.00
C
ATOM   1152 1HE  LYS    71      21.891  20.384  34.484  1.00  0.00
H
ATOM   1153 2HE  LYS    71      22.552  19.968  32.894  1.00  0.00
H
ATOM   1154  NZ  LYS    71      23.226  21.825  33.657  1.00  0.00
N
ATOM   1155 1HZ  LYS    71      24.057  21.406  34.054  1.00  0.00
H
ATOM   1156 2HZ  LYS    71      22.907  22.567  34.268  1.00  0.00
H
ATOM   1157 3HZ  LYS    71      23.457  22.222  32.749  1.00  0.00
H
ATOM   1158  N   ALA    72      16.154  21.843  30.703  1.00  0.00
N
ATOM   1159  H   ALA    72      16.542  22.339  31.496  1.00  0.00
H
ATOM   1160  CA  ALA    72      15.166  22.528  29.861  1.00  0.00
C
ATOM   1161  HA  ALA    72      15.207  22.099  28.859  1.00  0.00
H
ATOM   1162  C   ALA    72      15.493  24.016  29.703  1.00  0.00
C
ATOM   1163  O   ALA    72      14.726  24.891  30.114  1.00  0.00
O
ATOM   1164  CB  ALA    72      13.743  22.309  30.403  1.00  0.00
C
ATOM   1165 1HB  ALA    72      13.515  21.245  30.408  1.00  0.00
H
ATOM   1166 2HB  ALA    72      13.024  22.818  29.759  1.00  0.00
H
ATOM   1167 3HB  ALA    72      13.656  22.700  31.413  1.00  0.00
H
ATOM   1168  N   LYS    73      16.666  24.292  29.153  1.00  0.00
N
ATOM   1169  H   LYS    73      17.277  23.520  28.894  1.00  0.00
H
ATOM   1170  CA  LYS    73      17.119  25.653  28.864  1.00  0.00
C
ATOM   1171  HA  LYS    73      16.749  26.328  29.634  1.00  0.00
H
ATOM   1172  C   LYS    73      16.597  26.098  27.496  1.00  0.00
C
ATOM   1173  O   LYS    73      16.427  25.282  26.594  1.00  0.00
O
ATOM   1174  CB  LYS    73      18.652  25.671  28.862  1.00  0.00
C
ATOM   1175 1HB  LYS    73      18.999  25.083  29.712  1.00  0.00
H
ATOM   1176 2HB  LYS    73      18.996  25.187  27.949  1.00  0.00
H
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ATOM   1177  CG  LYS    73      19.277  27.061  28.975  1.00  0.00
C
ATOM   1178 1HG  LYS    73      18.900  27.697  28.179  1.00  0.00
H
ATOM   1179 2HG  LYS    73      18.974  27.490  29.930  1.00  0.00
H
ATOM   1180  CD  LYS    73      20.802  27.050  28.918  1.00  0.00
C
ATOM   1181 1HD  LYS    73      21.170  28.012  29.272  1.00  0.00
H
ATOM   1182 2HD  LYS    73      21.172  26.274  29.588  1.00  0.00
H
ATOM   1183  CE  LYS    73      21.356  26.809  27.512  1.00  0.00
C
ATOM   1184 1HE  LYS    73      22.433  26.648  27.585  1.00  0.00
H
ATOM   1185 2HE  LYS    73      20.907  25.903  27.096  1.00  0.00
H
ATOM   1186  NZ  LYS    73      21.109  27.943  26.571  1.00  0.00
N
ATOM   1187 1HZ  LYS    73      21.471  27.699  25.656  1.00  0.00
H
ATOM   1188 2HZ  LYS    73      21.563  28.781  26.906  1.00  0.00
H
ATOM   1189 3HZ  LYS    73      20.110  28.102  26.475  1.00  0.00
H
ATOM   1190  N   ASP    74      16.371  27.387  27.311  1.00  0.00
N
ATOM   1191  H   ASP    74      16.463  28.026  28.094  1.00  0.00
H
ATOM   1192  CA  ASP    74      16.084  27.918  25.978  1.00  0.00
C
ATOM   1193  HA  ASP    74      15.384  27.263  25.459  1.00  0.00
H
ATOM   1194  C   ASP    74      17.360  28.014  25.154  1.00  0.00
C
ATOM   1195  O   ASP    74      18.402  28.448  25.656  1.00  0.00
O
ATOM   1196  CB  ASP    74      15.487  29.321  26.062  1.00  0.00
C
ATOM   1197 1HB  ASP    74      15.985  29.880  26.855  1.00  0.00
H
ATOM   1198 2HB  ASP    74      15.663  29.831  25.116  1.00  0.00
H
ATOM   1199  CG  ASP    74      14.002  29.295  26.301  1.00  0.00
C
ATOM   1200  OD1 ASP    74      13.288  28.586  25.553  1.00  0.00
O
ATOM   1201  OD2 ASP    74      13.505  29.980  27.222  1.00  0.00
O
ATOM   1202  N   GLU    75      17.264  27.697  23.871  1.00  0.00
N
ATOM   1203  H   GLU    75      16.410  27.292  23.521  1.00  0.00
H
ATOM   1204  CA  GLU    75      18.371  27.920  22.943  1.00  0.00
C
ATOM   1205  HA  GLU    75      19.275  27.482  23.366  1.00  0.00
H
ATOM   1206  C   GLU    75      18.579  29.420  22.772  1.00  0.00
C
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ATOM   1207  O   GLU    75      17.671  30.227  23.003  1.00  0.00
O
ATOM   1208  CB  GLU    75      18.105  27.287  21.565  1.00  0.00
C
ATOM   1209 1HB  GLU    75      19.010  27.381  20.969  1.00  0.00
H
ATOM   1210 2HB  GLU    75      17.894  26.232  21.690  1.00  0.00
H
ATOM   1211  CG  GLU    75      16.948  27.895  20.791  1.00  0.00
C
ATOM   1212 1HG  GLU    75      16.042  27.789  21.387  1.00  0.00
H
ATOM   1213 2HG  GLU    75      17.135  28.956  20.636  1.00  0.00
H
ATOM   1214  CD  GLU    75      16.721  27.256  19.434  1.00  0.00
C
ATOM   1215  OE1 GLU    75      17.673  27.090  18.648  1.00  0.00
O
ATOM   1216  OE2 GLU    75      15.539  27.001  19.091  1.00  0.00
O
ATOM   1217  N   PHE    76      19.760  29.805  22.324  1.00  0.00
N
ATOM   1218  H   PHE    76      20.482  29.118  22.169  1.00  0.00
H
ATOM   1219  CA  PHE    76      20.029  31.196  21.984  1.00  0.00
C
ATOM   1220  HA  PHE    76      19.666  31.851  22.775  1.00  0.00
H
ATOM   1221  C   PHE    76      19.319  31.538  20.682  1.00  0.00
C
ATOM   1222  O   PHE    76      19.036  30.658  19.872  1.00  0.00
O
ATOM   1223  CB  PHE    76      21.532  31.403  21.809  1.00  0.00
C
ATOM   1224 1HB  PHE    76      21.906  30.696  21.070  1.00  0.00
H
ATOM   1225 2HB  PHE    76      21.705  32.412  21.438  1.00  0.00
H
ATOM   1226  CG  PHE    76      22.300  31.225  23.079  1.00  0.00
C
ATOM   1227  CD1 PHE    76      22.790  29.960  23.455  1.00  0.00
C
ATOM   1228  HD1 PHE    76      22.638  29.105  22.810  1.00  0.00
H
ATOM   1229  CD2 PHE    76      22.517  32.324  23.925  1.00  0.00
C
ATOM   1230  HD2 PHE    76      22.149  33.302  23.646  1.00  0.00
H
ATOM   1231  CE1 PHE    76      23.474  29.789  24.677  1.00  0.00
C
ATOM   1232  HE1 PHE    76      23.829  28.812  24.964  1.00  0.00
H
ATOM   1233  CE2 PHE    76      23.218  32.170  25.137  1.00  0.00
C
ATOM   1234  HE2 PHE    76      23.390  33.022  25.772  1.00  0.00
H
ATOM   1235  CZ  PHE    76      23.700  30.903  25.514  1.00  0.00
C
ATOM   1236  HZ  PHE    76      24.249  30.789  26.436  1.00  0.00
H
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ATOM   1237  N   LYS    77      19.061  32.814  20.440  1.00  0.00
N
ATOM   1238  H   LYS    77      19.233  33.506  21.163  1.00  0.00
H
ATOM   1239  CA  LYS    77      18.550  33.241  19.139  1.00  0.00
C
ATOM   1240  HA  LYS    77      18.065  32.398  18.650  1.00  0.00
H
ATOM   1241  C   LYS    77      19.667  33.698  18.216  1.00  0.00
C
ATOM   1242  O   LYS    77      19.594  33.456  17.012  1.00  0.00
O
ATOM   1243  CB  LYS    77      17.520  34.362  19.304  1.00  0.00
C
ATOM   1244 1HB  LYS    77      18.007  35.215  19.777  1.00  0.00
H
ATOM   1245 2HB  LYS    77      17.187  34.667  18.312  1.00  0.00
H
ATOM   1246  CG  LYS    77      16.287  33.990  20.134  1.00  0.00
C
ATOM   1247 1HG  LYS    77      16.596  33.713  21.141  1.00  0.00
H
ATOM   1248 2HG  LYS    77      15.642  34.865  20.200  1.00  0.00
H
ATOM   1249  CD  LYS    77      15.484  32.838  19.530  1.00  0.00
C
ATOM   1250 1HD  LYS    77      15.217  33.084  18.502  1.00  0.00
H
ATOM   1251 2HD  LYS    77      16.084  31.928  19.539  1.00  0.00
H
ATOM   1252  CE  LYS    77      14.221  32.593  20.332  1.00  0.00
C
ATOM   1253 1HE  LYS    77      14.487  32.395  21.372  1.00  0.00
H
ATOM   1254 2HE  LYS    77      13.594  33.483  20.295  1.00  0.00
H
ATOM   1255  NZ  LYS    77      13.459  31.427  19.786  1.00  0.00
N
ATOM   1256 1HZ  LYS    77      12.602  31.303  20.313  1.00  0.00
H
ATOM   1257 2HZ  LYS    77      14.004  30.576  19.863  1.00  0.00
H
ATOM   1258 3HZ  LYS    77      13.225  31.587  18.813  1.00  0.00
H
ATOM   1259  N   LYS    78      20.688  34.359  18.742  1.00  0.00
N
ATOM   1260  H   LYS    78      20.715  34.531  19.743  1.00  0.00
H
ATOM   1261  CA  LYS    78      21.772  34.875  17.899  1.00  0.00
C
ATOM   1262  HA  LYS    78      21.327  35.296  16.998  1.00  0.00
H
ATOM   1263  C   LYS    78      22.749  33.807  17.440  1.00  0.00
C
ATOM   1264  O   LYS    78      23.306  33.061  18.246  1.00  0.00
O
ATOM   1265  CB  LYS    78      22.517  36.004  18.603  1.00  0.00
C
ATOM   1266 1HB  LYS    78      22.827  35.680  19.595  1.00  0.00
H
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ATOM   1267 2HB  LYS    78      23.404  36.249  18.020  1.00  0.00
H
ATOM   1268  CG  LYS    78      21.658  37.243  18.710  1.00  0.00
C
ATOM   1269 1HG  LYS    78      21.316  37.515  17.711  1.00  0.00
H
ATOM   1270 2HG  LYS    78      20.791  37.037  19.336  1.00  0.00
H
ATOM   1271  CD  LYS    78      22.427  38.403  19.288  1.00  0.00
C
ATOM   1272 1HD  LYS    78      22.753  38.162  20.301  1.00  0.00
H
ATOM   1273 2HD  LYS    78      23.297  38.604  18.664  1.00  0.00
H
ATOM   1274  CE  LYS    78      21.526  39.619  19.309  1.00  0.00
C
ATOM   1275 1HE  LYS    78      21.158  39.808  18.298  1.00  0.00
H
ATOM   1276 2HE  LYS    78      20.673  39.413  19.956  1.00  0.00
H
ATOM   1277  NZ  LYS    78      22.240  40.834  19.797  1.00  0.00
N
ATOM   1278 1HZ  LYS    78      21.591  41.608  19.864  1.00  0.00
H
ATOM   1279 2HZ  LYS    78      22.977  41.079  19.146  1.00  0.00
H
ATOM   1280 3HZ  LYS    78      22.646  40.658  20.708  1.00  0.00
H
ATOM   1281  N   ARG    79      22.899  33.759  16.123  1.00  0.00
N
ATOM   1282  H   ARG    79      22.403  34.456  15.577  1.00  0.00
H
ATOM   1283  CA  ARG    79      23.690  32.775  15.372  1.00  0.00
C
ATOM   1284  HA  ARG    79      23.748  31.848  15.943  1.00  0.00
H
ATOM   1285  C   ARG    79      25.136  33.322  15.242  1.00  0.00
C
ATOM   1286  O   ARG    79      25.654  33.713  16.295  1.00  0.00
O
ATOM   1287  CB  ARG    79      22.898  32.503  14.087  1.00  0.00
C
ATOM   1288 1HB  ARG    79      22.855  33.419  13.499  1.00  0.00
H
ATOM   1289 2HB  ARG    79      23.406  31.737  13.514  1.00  0.00
H
ATOM   1290  CG  ARG    79      21.475  32.020  14.329  1.00  0.00
C
ATOM   1291 1HG  ARG    79      21.500  31.096  14.904  1.00  0.00
H
ATOM   1292 2HG  ARG    79      20.913  32.769  14.882  1.00  0.00
H
ATOM   1293  CD  ARG    79      20.759  31.768  13.026  1.00  0.00
C
ATOM   1294 1HD  ARG    79      20.704  32.701  12.463  1.00  0.00
H
ATOM   1295 2HD  ARG    79      21.310  31.028  12.445  1.00  0.00
H
ATOM   1296  NE  ARG    79      19.403  31.280  13.293  1.00  0.00
N
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ATOM   1297  HE  ARG    79      19.166  31.084  14.255  1.00  0.00
H
ATOM   1298  CZ  ARG    79      18.442  31.074  12.408  1.00  0.00
C
ATOM   1299  NH1 ARG    79      18.614  31.148  11.113  1.00  0.00
N
ATOM   1300 1HH1 ARG    79      19.531  31.357  10.746  1.00  0.00
H
ATOM   1301 2HH1 ARG    79      17.835  31.009  10.490  1.00  0.00
H
ATOM   1302  NH2 ARG    79      17.260  30.794  12.866  1.00  0.00
N
ATOM   1303 1HH2 ARG    79      17.129  30.700  13.861  1.00  0.00
H
ATOM   1304 2HH2 ARG    79      16.488  30.695  12.226  1.00  0.00
H
ATOM   1305  N   PRO    80      25.815  33.394  14.061  1.00  0.00
N
ATOM   1306  CA  PRO    80      25.745  33.027  12.629  1.00  0.00
C
ATOM   1307  HA  PRO    80      24.915  33.544  12.149  1.00  0.00
H
ATOM   1308  C   PRO    80      25.630  31.526  12.342  1.00  0.00
C
ATOM   1309  O   PRO    80      25.860  30.702  13.221  1.00  0.00
O
ATOM   1310  CB  PRO    80      27.069  33.554  12.069  1.00  0.00
C
ATOM   1311 1HB  PRO    80      27.829  32.782  12.112  1.00  0.00
H
ATOM   1312 2HB  PRO    80      26.944  33.919  11.051  1.00  0.00
H
ATOM   1313  CG  PRO    80      27.429  34.619  12.940  1.00  0.00
C
ATOM   1314 1HG  PRO    80      28.493  34.835  12.869  1.00  0.00
H
ATOM   1315 2HG  PRO    80      26.841  35.506  12.708  1.00  0.00
H
ATOM   1316  CD  PRO    80      27.090  34.109  14.287  1.00  0.00
C
ATOM   1317 1HD  PRO    80      27.855  33.417  14.641  1.00  0.00
H
ATOM   1318 2HD  PRO    80      26.986  34.962  14.961  1.00  0.00
H
ATOM   1319  N   ALA    81      25.247  31.182  11.116  1.00  0.00
N
ATOM   1320  H   ALA    81      25.135  31.899  10.411  1.00  0.00
H
ATOM   1321  CA  ALA    81      24.939  29.797  10.744  1.00  0.00
C
ATOM   1322  HA  ALA    81      24.884  29.200  11.655  1.00  0.00
H
ATOM   1323  C   ALA    81      25.955  29.127   9.816  1.00  0.00
C
ATOM   1324  O   ALA    81      26.567  29.792   8.980  1.00  0.00
O
ATOM   1325  CB  ALA    81      23.560  29.774  10.075  1.00  0.00
C
ATOM   1326 1HB  ALA    81      22.821  30.199  10.755  1.00  0.00
H
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ATOM   1327 2HB  ALA    81      23.280  28.747   9.838  1.00  0.00
H
ATOM   1328 3HB  ALA    81      23.587  30.362   9.156  1.00  0.00
H
ATOM   1329  N   ASN    82      26.031  27.801   9.912  1.00  0.00
N
ATOM   1330  H   ASN    82      25.470  27.343  10.617  1.00  0.00
H
ATOM   1331  CA  ASN    82      26.883  26.944   9.072  1.00  0.00
C
ATOM   1332  HA  ASN    82      26.768  25.917   9.421  1.00  0.00
H
ATOM   1333  C   ASN    82      28.359  27.329   9.239  1.00  0.00
C
ATOM   1334  O   ASN    82      29.086  27.586   8.271  1.00  0.00
O
ATOM   1335  CB  ASN    82      26.445  26.982   7.597  1.00  0.00
C
ATOM   1336 1HB  ASN    82      26.642  27.973   7.192  1.00  0.00
H
ATOM   1337 2HB  ASN    82      27.020  26.257   7.026  1.00  0.00
H
ATOM   1338  CG  ASN    82      24.974  26.694   7.415  1.00  0.00
C
ATOM   1339  OD1 ASN    82      24.408  25.801   8.029  1.00  0.00
O
ATOM   1340  ND2 ASN    82      24.338  27.459   6.579  1.00  0.00
N
ATOM   1341 1HD2 ASN    82      23.333  27.392   6.518  1.00  0.00
H
ATOM   1342 2HD2 ASN    82      24.847  28.105   5.995  1.00  0.00
H
ATOM   1343  N   THR    83      28.788  27.416  10.487  1.00  0.00
N
ATOM   1344  H   THR    83      28.213  27.039  11.239  1.00  0.00
H
ATOM   1345  CA  THR    83      29.959  28.184  10.910  1.00  0.00
C
ATOM   1346  HA  THR    83      30.501  28.565  10.054  1.00  0.00
H
ATOM   1347  C   THR    83      30.943  27.364  11.768  1.00  0.00
C
ATOM   1348  O   THR    83      30.698  26.188  11.968  1.00  0.00
O
ATOM   1349  CB  THR    83      29.376  29.376  11.690  1.00  0.00
C
ATOM   1350  HB  THR    83      30.061  29.699  12.473  1.00  0.00
H
ATOM   1351  OG1 THR    83      28.127  28.965  12.255  1.00  0.00
O
ATOM   1352  HG1 THR    83      27.850  29.635  12.898  1.00  0.00
H
ATOM   1353  CG2 THR    83      29.042  30.543  10.797  1.00  0.00
C
ATOM   1354 1HG2 THR    83      28.100  30.975  11.117  1.00  0.00
H
ATOM   1355 2HG2 THR    83      28.922  30.223   9.766  1.00  0.00
H
ATOM   1356 3HG2 THR    83      29.811  31.304  10.862  1.00  0.00
H
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ATOM   1357  N   LEU    84      32.050  27.949  12.226  1.00  0.00
N
ATOM   1358  H   LEU    84      32.228  28.902  11.933  1.00  0.00
H
ATOM   1359  CA  LEU    84      33.077  27.341  13.090  1.00  0.00
C
ATOM   1360  HA  LEU    84      32.694  26.395  13.461  1.00  0.00
H
ATOM   1361  C   LEU    84      33.419  28.211  14.313  1.00  0.00
C
ATOM   1362  O   LEU    84      33.337  29.445  14.233  1.00  0.00
O
ATOM   1363  CB  LEU    84      34.355  27.093  12.268  1.00  0.00
C
ATOM   1364 1HB  LEU    84      34.981  26.383  12.804  1.00  0.00
H
ATOM   1365 2HB  LEU    84      34.055  26.614  11.341  1.00  0.00
H
ATOM   1366  CG  LEU    84      35.234  28.310  11.911  1.00  0.00
C
ATOM   1367  HG  LEU    84      34.601  29.190  11.864  1.00  0.00
H
ATOM   1368  CD1 LEU    84      36.321  28.575  12.933  1.00  0.00
C
ATOM   1369 1HD1 LEU    84      36.925  29.425  12.619  1.00  0.00
H
ATOM   1370 2HD1 LEU    84      36.948  27.695  13.051  1.00  0.00
H
ATOM   1371 3HD1 LEU    84      35.885  28.827  13.894  1.00  0.00
H
ATOM   1372  CD2 LEU    84      35.879  28.142  10.553  1.00  0.00
C
ATOM   1373 1HD2 LEU    84      36.522  28.999  10.343  1.00  0.00
H
ATOM   1374 2HD2 LEU    84      35.104  28.126   9.792  1.00  0.00
H
ATOM   1375 3HD2 LEU    84      36.468  27.226  10.514  1.00  0.00
H
ATOM   1376  N   ALA    85      33.828  27.563  15.401  1.00  0.00
N
ATOM   1377  H   ALA    85      33.846  26.554  15.371  1.00  0.00
H
ATOM   1378  CA  ALA    85      34.259  28.182  16.663  1.00  0.00
C
ATOM   1379  HA  ALA    85      34.118  29.260  16.598  1.00  0.00
H
ATOM   1380  C   ALA    85      35.756  27.928  16.933  1.00  0.00
C
ATOM   1381  O   ALA    85      36.491  27.543  16.027  1.00  0.00
O
ATOM   1382  CB  ALA    85      33.382  27.651  17.808  1.00  0.00
C
ATOM   1383 1HB  ALA    85      32.328  27.775  17.551  1.00  0.00
H
ATOM   1384 2HB  ALA    85      33.578  28.202  18.728  1.00  0.00
H
ATOM   1385 3HB  ALA    85      33.574  26.590  17.967  1.00  0.00
H
ATOM   1386  N   SER    86      36.238  28.187  18.142  1.00  0.00
N
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ATOM   1387  H   SER    86      35.613  28.353  18.922  1.00  0.00
H
ATOM   1388  CA  SER    86      37.677  28.333  18.368  1.00  0.00
C
ATOM   1389  HA  SER    86      38.134  28.610  17.422  1.00  0.00
H
ATOM   1390  C   SER    86      38.465  27.137  18.913  1.00  0.00
C
ATOM   1391  O   SER    86      39.692  27.184  18.969  1.00  0.00
O
ATOM   1392  CB  SER    86      37.890  29.509  19.318  1.00  0.00
C
ATOM   1393 1HB  SER    86      38.959  29.695  19.432  1.00  0.00
H
ATOM   1394 2HB  SER    86      37.421  30.396  18.893  1.00  0.00
H
ATOM   1395  OG  SER    86      37.316  29.247  20.585  1.00  0.00
O
ATOM   1396  HG  SER    86      37.966  29.508  21.258  1.00  0.00
H
ATOM   1397  N   ASP    87      37.805  26.083  19.363  1.00  0.00
N
ATOM   1398  H   ASP    87      36.801  26.053  19.282  1.00  0.00
H
ATOM   1399  CA  ASP    87      38.508  24.985  20.039  1.00  0.00
C
ATOM   1400  HA  ASP    87      39.255  25.433  20.691  1.00  0.00
H
ATOM   1401  C   ASP    87      39.246  23.981  19.137  1.00  0.00
C
ATOM   1402  O   ASP    87      39.370  24.169  17.926  1.00  0.00
O
ATOM   1403  CB  ASP    87      37.520  24.245  20.944  1.00  0.00
C
ATOM   1404 1HB  ASP    87      36.618  24.848  21.025  1.00  0.00
H
ATOM   1405 2HB  ASP    87      37.255  23.285  20.506  1.00  0.00
H
ATOM   1406  CG  ASP    87      38.049  24.031  22.344  1.00  0.00
C
ATOM   1407  OD1 ASP    87      39.206  23.583  22.541  1.00  0.00
O
ATOM   1408  OD2 ASP    87      37.285  24.334  23.286  1.00  0.00
O
ATOM   1409  N   ILE    88      39.756  22.924  19.759  1.00  0.00
N
ATOM   1410  H   ILE    88      39.682  22.889  20.771  1.00  0.00
H
ATOM   1411  CA  ILE    88      40.367  21.771  19.091  1.00  0.00
C
ATOM   1412  HA  ILE    88      41.061  22.107  18.320  1.00  0.00
H
ATOM   1413  C   ILE    88      39.258  20.925  18.449  1.00  0.00
C
ATOM   1414  O   ILE    88      38.208  20.686  19.057  1.00  0.00
O
ATOM   1415  CB  ILE    88      41.139  20.905  20.152  1.00  0.00
C
ATOM   1416  HB  ILE    88      40.436  20.638  20.940  1.00  0.00
H
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ATOM   1417  CG1 ILE    88      42.280  21.734  20.779  1.00  0.00
C
ATOM   1418 1HG1 ILE    88      43.009  21.962  20.001  1.00  0.00
H
ATOM   1419 2HG1 ILE    88      41.877  22.676  21.146  1.00  0.00
H
ATOM   1420  CG2 ILE    88      41.710  19.589  19.555  1.00  0.00
C
ATOM   1421 1HG2 ILE    88      42.135  18.971  20.346  1.00  0.00
H
ATOM   1422 2HG2 ILE    88      42.487  19.806  18.826  1.00  0.00
H
ATOM   1423 3HG2 ILE    88      40.920  19.009  19.082  1.00  0.00
H
ATOM   1424  CD1 ILE    88      43.022  21.066  21.947  1.00  0.00
C
ATOM   1425 1HD1 ILE    88      43.659  21.804  22.432  1.00  0.00
H
ATOM   1426 2HD1 ILE    88      43.645  20.249  21.584  1.00  0.00
H
ATOM   1427 3HD1 ILE    88      42.306  20.684  22.677  1.00  0.00
H
ATOM   1428  N   TYR    89      39.501  20.434  17.241  1.00  0.00
N
ATOM   1429  H   TYR    89      40.363  20.695  16.769  1.00  0.00
H
ATOM   1430  CA  TYR    89      38.580  19.540  16.541  1.00  0.00
C
ATOM   1431  HA  TYR    89      37.718  19.333  17.168  1.00  0.00
H
ATOM   1432  C   TYR    89      39.282  18.227  16.143  1.00  0.00
C
ATOM   1433  O   TYR    89      40.374  18.298  15.593  1.00  0.00
O
ATOM   1434  CB  TYR    89      38.138  20.216  15.247  1.00  0.00
C
ATOM   1435 1HB  TYR    89      39.024  20.314  14.630  1.00  0.00
H
ATOM   1436 2HB  TYR    89      37.455  19.541  14.737  1.00  0.00
H
ATOM   1437  CG  TYR    89      37.482  21.587  15.334  1.00  0.00
C
ATOM   1438  CD1 TYR    89      38.234  22.780  15.402  1.00  0.00
C
ATOM   1439  HD1 TYR    89      39.297  22.745  15.554  1.00  0.00
H
ATOM   1440  CD2 TYR    89      36.093  21.709  15.237  1.00  0.00
C
ATOM   1441  HD2 TYR    89      35.488  20.829  15.231  1.00  0.00
H
ATOM   1442  CE1 TYR    89      37.608  24.050  15.288  1.00  0.00
C
ATOM   1443  HE1 TYR    89      38.191  24.955  15.342  1.00  0.00
H
ATOM   1444  CE2 TYR    89      35.471  22.964  15.096  1.00  0.00
C
ATOM   1445  HE2 TYR    89      34.403  23.040  14.987  1.00  0.00
H
ATOM   1446  CZ  TYR    89      36.233  24.116  15.116  1.00  0.00
C
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ATOM   1447  OH  TYR    89      35.553  25.283  14.973  1.00  0.00
O
ATOM   1448  HH  TYR    89      36.112  26.054  15.155  1.00  0.00
H
ATOM   1449  N   ILE    90      38.663  17.068  16.379  1.00  0.00
N
ATOM   1450  H   ILE    90      37.758  17.079  16.819  1.00  0.00
H
ATOM   1451  CA  ILE    90      39.219  15.721  16.107  1.00  0.00
C
ATOM   1452  HA  ILE    90      40.115  15.802  15.495  1.00  0.00
H
ATOM   1453  C   ILE    90      38.126  14.950  15.302  1.00  0.00
C
ATOM   1454  O   ILE    90      36.979  14.983  15.708  1.00  0.00
O
ATOM   1455  CB  ILE    90      39.609  15.087  17.507  1.00  0.00
C
ATOM   1456  HB  ILE    90      38.751  15.179  18.153  1.00  0.00
H
ATOM   1457  CG1 ILE    90      40.769  15.877  18.155  1.00  0.00
C
ATOM   1458 1HG1 ILE    90      41.677  15.696  17.579  1.00  0.00
H
ATOM   1459 2HG1 ILE    90      40.551  16.940  18.100  1.00  0.00
H
ATOM   1460  CG2 ILE    90      39.943  13.602  17.468  1.00  0.00
C
ATOM   1461 1HG2 ILE    90      40.051  13.207  18.477  1.00  0.00
H
ATOM   1462 2HG2 ILE    90      40.879  13.447  16.925  1.00  0.00
H
ATOM   1463 3HG2 ILE    90      39.141  13.053  16.978  1.00  0.00
H
ATOM   1464  CD1 ILE    90      41.057  15.556  19.629  1.00  0.00
C
ATOM   1465 1HD1 ILE    90      41.809  16.251  20.004  1.00  0.00
H
ATOM   1466 2HD1 ILE    90      41.445  14.541  19.725  1.00  0.00
H
ATOM   1467 3HD1 ILE    90      40.147  15.662  20.220  1.00  0.00
H
ATOM   1468  N   ILE    91      38.413  14.440  14.095  1.00  0.00
N
ATOM   1469  H   ILE    91      39.383  14.235  13.931  1.00  0.00
H
ATOM   1470  CA  ILE    91      37.414  14.163  13.007  1.00  0.00
C
ATOM   1471  HA  ILE    91      36.556  13.838  13.593  1.00  0.00
H
ATOM   1472  C   ILE    91      37.399  13.059  11.833  1.00  0.00
C
ATOM   1473  O   ILE    91      36.355  12.475  11.756  1.00  0.00
O
ATOM   1474  CB  ILE    91      36.906  15.490  12.335  1.00  0.00
C
ATOM   1475  HB  ILE    91      37.198  15.450  11.301  1.00  0.00
H
ATOM   1476  CG1 ILE    91      37.375  16.850  12.925  1.00  0.00
C
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ATOM   1477 1HG1 ILE    91      36.772  17.606  12.439  1.00  0.00
H
ATOM   1478 2HG1 ILE    91      37.105  16.888  13.977  1.00  0.00
H
ATOM   1479  CG2 ILE    91      35.369  15.529  12.421  1.00  0.00
C
ATOM   1480 1HG2 ILE    91      34.967  16.345  11.826  1.00  0.00
H
ATOM   1481 2HG2 ILE    91      35.044  15.623  13.461  1.00  0.00
H
ATOM   1482 3HG2 ILE    91      34.955  14.602  12.027  1.00  0.00
H
ATOM   1483  CD1 ILE    91      38.846  17.331  12.782  1.00  0.00
C
ATOM   1484 1HD1 ILE    91      38.940  18.326  13.210  1.00  0.00
H
ATOM   1485 2HD1 ILE    91      39.135  17.395  11.742  1.00  0.00
H
ATOM   1486 3HD1 ILE    91      39.530  16.666  13.303  1.00  0.00
H
ATOM   1487  N   ALA    92      38.378  12.763  10.938  1.00  0.00
N
ATOM   1488  H   ALA    92      39.066  13.476  10.778  1.00  0.00
H
ATOM   1489  CA  ALA    92      38.665  11.477  10.173  1.00  0.00
C
ATOM   1490  HA  ALA    92      38.129  10.682  10.654  1.00  0.00
H
ATOM   1491  C   ALA    92      40.178  11.004  10.061  1.00  0.00
C
ATOM   1492  O   ALA    92      40.922  11.683   9.386  1.00  0.00
O
ATOM   1493  CB  ALA    92      38.076  11.557   8.759  1.00  0.00
C
ATOM   1494 1HB  ALA    92      37.143  12.122   8.776  1.00  0.00
H
ATOM   1495 2HB  ALA    92      37.876  10.550   8.392  1.00  0.00
H
ATOM   1496 3HB  ALA    92      38.780  12.018   8.071  1.00  0.00
H
ATOM   1497  N   HIS    93      40.677   9.923  10.690  1.00  0.00
N
ATOM   1498  H   HIS    93      40.040   9.200  11.012  1.00  0.00
H
ATOM   1499  CA  HIS    93      42.150   9.631  10.800  1.00  0.00
C
ATOM   1500  HA  HIS    93      42.628  10.116   9.946  1.00  0.00
H
ATOM   1501  C   HIS    93      42.652   8.180  10.790  1.00  0.00
C
ATOM   1502  O   HIS    93      41.850   7.251  10.876  1.00  0.00
O
ATOM   1503  CB  HIS    93      42.795  10.266  12.049  1.00  0.00
C
ATOM   1504 1HB  HIS    93      43.870  10.290  11.917  1.00  0.00
H
ATOM   1505 2HB  HIS    93      42.481  11.285  12.087  1.00  0.00
H
ATOM   1506  CG  HIS    93      42.525   9.596  13.373  1.00  0.00
C
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ATOM   1507  ND1 HIS    93      42.740  10.238  14.588  1.00  0.00
N
ATOM   1508  HD1 HIS    93      42.976  11.230  14.710  1.00  0.00
H
ATOM   1509  CD2 HIS    93      42.229   8.316  13.725  1.00  0.00
C
ATOM   1510  HD2 HIS    93      42.025   7.499  13.046  1.00  0.00
H
ATOM   1511  CE1 HIS    93      42.585   9.377  15.579  1.00  0.00
C
ATOM   1512  HE1 HIS    93      42.666   9.604  16.636  1.00  0.00
H
ATOM   1513  NE2 HIS    93      42.279   8.208  15.084  1.00  0.00
N
ATOM   1514  HE2 HIS    93      42.096   7.355  15.628  1.00  0.00
H
ATOM   1515  N   GLN    94      43.970   8.007  10.900  1.00  0.00
N
ATOM   1516  H   GLN    94      44.596   8.688  10.480  1.00  0.00
H
ATOM   1517  CA  GLN    94      44.589   6.982  11.761  1.00  0.00
C
ATOM   1518  HA  GLN    94      43.835   6.533  12.402  1.00  0.00
H
ATOM   1519  C   GLN    94      45.682   7.623  12.636  1.00  0.00
C
ATOM   1520  O   GLN    94      46.677   8.068  12.077  1.00  0.00
O
ATOM   1521  CB  GLN    94      45.262   5.885  10.942  1.00  0.00
C
ATOM   1522 1HB  GLN    94      45.973   6.358  10.264  1.00  0.00
H
ATOM   1523 2HB  GLN    94      45.813   5.252  11.634  1.00  0.00
H
ATOM   1524  CG  GLN    94      44.355   4.979  10.140  1.00  0.00
C
ATOM   1525 1HG  GLN    94      43.641   4.497  10.806  1.00  0.00
H
ATOM   1526 2HG  GLN    94      43.815   5.569   9.404  1.00  0.00
H
ATOM   1527  CD  GLN    94      45.165   3.924   9.427  1.00  0.00
C
ATOM   1528  OE1 GLN    94      46.334   4.153   9.111  1.00  0.00
O
ATOM   1529  NE2 GLN    94      44.591   2.779   9.177  1.00  0.00
N
ATOM   1530 1HE2 GLN    94      45.110   2.063   8.696  1.00  0.00
H
ATOM   1531 2HE2 GLN    94      43.646   2.613   9.483  1.00  0.00
H
ATOM   1532  N   MET    95      45.540   7.662  13.960  1.00  0.00
N
ATOM   1533  H   MET    95      44.732   7.218  14.389  1.00  0.00
H
ATOM   1534  CA  MET    95      46.523   8.296  14.861  1.00  0.00
C
ATOM   1535  HA  MET    95      47.525   8.070  14.505  1.00  0.00
H
ATOM   1536  C   MET    95      46.408   7.846  16.325  1.00  0.00
C
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ATOM   1537  O   MET    95      45.315   7.498  16.774  1.00  0.00
O
ATOM   1538  CB  MET    95      46.329   9.815  14.856  1.00  0.00
C
ATOM   1539 1HB  MET    95      45.442  10.054  14.273  1.00  0.00
H
ATOM   1540 2HB  MET    95      46.170  10.153  15.879  1.00  0.00
H
ATOM   1541  CG  MET    95      47.496  10.575  14.276  1.00  0.00
C
ATOM   1542 1HG  MET    95      47.634  10.270  13.239  1.00  0.00
H
ATOM   1543 2HG  MET    95      47.256  11.635  14.298  1.00  0.00
H
ATOM   1544  SD  MET    95      49.035  10.319  15.158  1.00  0.00
S
ATOM   1545  CE  MET    95      50.111  11.424  14.258  1.00  0.00
C
ATOM   1546 1HE  MET    95      51.109  11.394  14.697  1.00  0.00
H
ATOM   1547 2HE  MET    95      49.723  12.440  14.321  1.00  0.00
H
ATOM   1548 3HE  MET    95      50.166  11.123  13.214  1.00  0.00
H
ATOM   1549  N   SER    96      47.495   7.903  17.089  1.00  0.00
N
ATOM   1550  H   SER    96      48.367   8.234  16.695  1.00  0.00
H
ATOM   1551  CA  SER    96      47.478   7.542  18.515  1.00  0.00
C
ATOM   1552  HA  SER    96      46.779   6.720  18.667  1.00  0.00
H
ATOM   1553  C   SER    96      47.067   8.714  19.405  1.00  0.00
C
ATOM   1554  O   SER    96      47.225   9.875  19.025  1.00  0.00
O
ATOM   1555  CB  SER    96      48.866   7.089  18.966  1.00  0.00
C
ATOM   1556 1HB  SER    96      48.803   6.706  19.985  1.00  0.00
H
ATOM   1557 2HB  SER    96      49.217   6.294  18.309  1.00  0.00
H
ATOM   1558  OG  SER    96      49.782   8.171  18.934  1.00  0.00
O
ATOM   1559  HG  SER    96      50.621   7.864  19.316  1.00  0.00
H
ATOM   1560  N   ILE    97      46.563   8.431  20.600  1.00  0.00
N
ATOM   1561  H   ILE    97      46.501   7.461  20.903  1.00  0.00
H
ATOM   1562  CA  ILE    97      46.058   9.476  21.499  1.00  0.00
C
ATOM   1563  HA  ILE    97      45.321  10.067  20.958  1.00  0.00
H
ATOM   1564  C   ILE    97      47.164  10.448  21.928  1.00  0.00
C
ATOM   1565  O   ILE    97      46.960  11.661  21.891  1.00  0.00
O
ATOM   1566  CB  ILE    97      45.341   8.830  22.733  1.00  0.00
C
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ATOM   1567  HB  ILE    97      46.023   8.117  23.194  1.00  0.00
H
ATOM   1568  CG1 ILE    97      44.079   8.081  22.248  1.00  0.00
C
ATOM   1569 1HG1 ILE    97      43.377   8.815  21.852  1.00  0.00
H
ATOM   1570 2HG1 ILE    97      44.353   7.415  21.432  1.00  0.00
H
ATOM   1571  CG2 ILE    97      44.950   9.882  23.803  1.00  0.00
C
ATOM   1572 1HG2 ILE    97      44.530   9.387  24.679  1.00  0.00
H
ATOM   1573 2HG2 ILE    97      44.212  10.576  23.402  1.00  0.00
H
ATOM   1574 3HG2 ILE    97      45.828  10.437  24.134  1.00  0.00
H
ATOM   1575  CD1 ILE    97      43.343   7.237  23.304  1.00  0.00
C
ATOM   1576 1HD1 ILE    97      42.539   6.682  22.821  1.00  0.00
H
ATOM   1577 2HD1 ILE    97      42.911   7.880  24.071  1.00  0.00
H
ATOM   1578 3HD1 ILE    97      44.034   6.531  23.764  1.00  0.00
H
ATOM   1579  N   THR    98      48.342   9.951  22.281  1.00  0.00
N
ATOM   1580  H   THR    98      48.477   8.944  22.273  1.00  0.00
H
ATOM   1581  CA  THR    98      49.447  10.814  22.722  1.00  0.00
C
ATOM   1582  HA  THR    98      49.126  11.386  23.592  1.00  0.00
H
ATOM   1583  C   THR    98      49.862  11.799  21.638  1.00  0.00
C
ATOM   1584  O   THR    98      50.126  12.975  21.912  1.00  0.00
O
ATOM   1585  CB  THR    98      50.695   9.971  23.102  1.00  0.00
C
ATOM   1586  HB  THR    98      51.032   9.411  22.229  1.00  0.00
H
ATOM   1587  OG1 THR    98      50.347   9.056  24.144  1.00  0.00
O
ATOM   1588  HG1 THR    98      49.723   8.412  23.780  1.00  0.00
H
ATOM   1589  CG2 THR    98      51.851  10.806  23.632  1.00  0.00
C
ATOM   1590 1HG2 THR    98      52.624  10.146  24.025  1.00  0.00
H
ATOM   1591 2HG2 THR    98      51.511  11.472  24.424  1.00  0.00
H
ATOM   1592 3HG2 THR    98      52.279  11.398  22.824  1.00  0.00
H
ATOM   1593  N   ASP    99      49.907  11.339  20.397  1.00  0.00
N
ATOM   1594  H   ASP    99      49.637  10.387  20.187  1.00  0.00
H
ATOM   1595  CA  ASP    99      50.394  12.194  19.323  1.00  0.00
C
ATOM   1596  HA  ASP    99      51.248  12.766  19.686  1.00  0.00
H
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ATOM   1597  C   ASP    99      49.313  13.187  18.923  1.00  0.00
C
ATOM   1598  O   ASP    99      49.625  14.315  18.569  1.00  0.00
O
ATOM   1599  CB  ASP    99      50.857  11.376  18.119  1.00  0.00
C
ATOM   1600 1HB  ASP    99      50.077  10.665  17.851  1.00  0.00
H
ATOM   1601 2HB  ASP    99      51.016  12.056  17.281  1.00  0.00
H
ATOM   1602  CG  ASP    99      52.159  10.628  18.376  1.00  0.00
C
ATOM   1603  OD1 ASP    99      52.744  10.702  19.485  1.00  0.00
O
ATOM   1604  OD2 ASP    99      52.641   9.954  17.441  1.00  0.00
O
ATOM   1605  N   GLN   100      48.043  12.833  19.077  1.00  0.00
N
ATOM   1606  H   GLN   100      47.808  11.884  19.348  1.00  0.00
H
ATOM   1607  CA  GLN   100      46.973  13.813  18.872  1.00  0.00
C
ATOM   1608  HA  GLN   100      47.040  14.222  17.865  1.00  0.00
H
ATOM   1609  C   GLN   100      47.113  14.952  19.872  1.00  0.00
C
ATOM   1610  O   GLN   100      46.991  16.119  19.508  1.00  0.00
O
ATOM   1611  CB  GLN   100      45.591  13.205  19.107  1.00  0.00
C
ATOM   1612 1HB  GLN   100      45.611  12.728  20.081  1.00  0.00
H
ATOM   1613 2HB  GLN   100      44.856  14.010  19.144  1.00  0.00
H
ATOM   1614  CG  GLN   100      45.114  12.184  18.104  1.00  0.00
C
ATOM   1615 1HG  GLN   100      44.688  12.689  17.241  1.00  0.00
H
ATOM   1616 2HG  GLN   100      45.952  11.579  17.769  1.00  0.00
H
ATOM   1617  CD  GLN   100      44.074  11.281  18.721  1.00  0.00
C
ATOM   1618  OE1 GLN   100      43.264  11.701  19.545  1.00  0.00
O
ATOM   1619  NE2 GLN   100      44.122  10.023  18.390  1.00  0.00
N
ATOM   1620 1HE2 GLN   100      43.410   9.397  18.741  1.00  0.00
H
ATOM   1621 2HE2 GLN   100      44.866   9.682  17.803  1.00  0.00
H
ATOM   1622  N   ILE   101      47.395  14.622  21.128  1.00  0.00
N
ATOM   1623  H   ILE   101      47.498  13.642  21.375  1.00  0.00
H
ATOM   1624  CA  ILE   101      47.545  15.641  22.173  1.00  0.00
C
ATOM   1625  HA  ILE   101      46.654  16.269  22.192  1.00  0.00
H
ATOM   1626  C   ILE   101      48.739  16.513  21.806  1.00  0.00
C
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ATOM   1627  O   ILE   101      48.649  17.745  21.823  1.00  0.00
O
ATOM   1628  CB  ILE   101      47.766  15.007  23.589  1.00  0.00
C
ATOM   1629  HB  ILE   101      48.617  14.330  23.532  1.00  0.00
H
ATOM   1630  CG1 ILE   101      46.528  14.200  24.022  1.00  0.00
C
ATOM   1631 1HG1 ILE   101      45.736  14.895  24.302  1.00  0.00
H
ATOM   1632 2HG1 ILE   101      46.170  13.622  23.178  1.00  0.00
H
ATOM   1633  CG2 ILE   101      48.071  16.081  24.662  1.00  0.00
C
ATOM   1634 1HG2 ILE   101      48.263  15.610  25.627  1.00  0.00
H
ATOM   1635 2HG2 ILE   101      47.227  16.765  24.764  1.00  0.00
H
ATOM   1636 3HG2 ILE   101      48.959  16.651  24.388  1.00  0.00
H
ATOM   1637  CD1 ILE   101      46.762  13.230  25.184  1.00  0.00
C
ATOM   1638 1HD1 ILE   101      45.862  12.636  25.338  1.00  0.00
H
ATOM   1639 2HD1 ILE   101      46.978  13.779  26.101  1.00  0.00
H
ATOM   1640 3HD1 ILE   101      47.591  12.562  24.953  1.00  0.00
H
ATOM   1641  N   LYS   102      49.844  15.878  21.434  1.00  0.00
N
ATOM   1642  H   LYS   102      49.839  14.863  21.379  1.00  0.00
H
ATOM   1643  CA  LYS   102      51.078  16.605  21.147  1.00  0.00
C
ATOM   1644  HA  LYS   102      51.317  17.225  22.008  1.00  0.00
H
ATOM   1645  C   LYS   102      50.939  17.536  19.968  1.00  0.00
C
ATOM   1646  O   LYS   102      51.292  18.700  20.056  1.00  0.00
O
ATOM   1647  CB  LYS   102      52.221  15.615  20.884  1.00  0.00
C
ATOM   1648 1HB  LYS   102      52.324  14.975  21.757  1.00  0.00
H
ATOM   1649 2HB  LYS   102      51.950  14.988  20.036  1.00  0.00
H
ATOM   1650  CG  LYS   102      53.588  16.234  20.582  1.00  0.00
C
ATOM   1651 1HG  LYS   102      54.292  15.424  20.393  1.00  0.00
H
ATOM   1652 2HG  LYS   102      53.517  16.849  19.685  1.00  0.00
H
ATOM   1653  CD  LYS   102      54.132  17.088  21.712  1.00  0.00
C
ATOM   1654 1HD  LYS   102      53.474  17.941  21.883  1.00  0.00
H
ATOM   1655 2HD  LYS   102      54.186  16.487  22.618  1.00  0.00
H
ATOM   1656  CE  LYS   102      55.522  17.585  21.371  1.00  0.00
C
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ATOM   1657 1HE  LYS   102      56.184  16.729  21.228  1.00  0.00
H
ATOM   1658 2HE  LYS   102      55.482  18.158  20.444  1.00  0.00
H
ATOM   1659  NZ  LYS   102      56.051  18.454  22.460  1.00  0.00
N
ATOM   1660 1HZ  LYS   102      56.969  18.803  22.213  1.00  0.00
H
ATOM   1661 2HZ  LYS   102      56.100  17.936  23.330  1.00  0.00
H
ATOM   1662 3HZ  LYS   102      55.432  19.248  22.584  1.00  0.00
H
ATOM   1663  N   ILE   103      50.438  17.041  18.854  1.00  0.00
N
ATOM   1664  H   ILE   103      50.106  16.079  18.819  1.00  0.00
H
ATOM   1665  CA  ILE   103      50.451  17.840  17.637  1.00  0.00
C
ATOM   1666  HA  ILE   103      51.409  18.357  17.585  1.00  0.00
H
ATOM   1667  C   ILE   103      49.362  18.913  17.742  1.00  0.00
C
ATOM   1668  O   ILE   103      49.551  20.020  17.249  1.00  0.00
O
ATOM   1669  CB  ILE   103      50.361  16.944  16.368  1.00  0.00
C
ATOM   1670  HB  ILE   103      49.405  16.422  16.377  1.00  0.00
H
ATOM   1671  CG1 ILE   103      51.499  15.898  16.368  1.00  0.00
C
ATOM   1672 1HG1 ILE   103      52.442  16.411  16.187  1.00  0.00
H
ATOM   1673 2HG1 ILE   103      51.572  15.430  17.346  1.00  0.00
H
ATOM   1674  CG2 ILE   103      50.487  17.803  15.081  1.00  0.00
C
ATOM   1675 1HG2 ILE   103      50.375  17.175  14.198  1.00  0.00
H
ATOM   1676 2HG2 ILE   103      51.458  18.301  15.054  1.00  0.00
H
ATOM   1677 3HG2 ILE   103      49.704  18.561  15.059  1.00  0.00
H
ATOM   1678  CD1 ILE   103      51.340  14.764  15.346  1.00  0.00
C
ATOM   1679 1HD1 ILE   103      52.129  14.028  15.503  1.00  0.00
H
ATOM   1680 2HD1 ILE   103      51.413  15.150  14.330  1.00  0.00
H
ATOM   1681 3HD1 ILE   103      50.372  14.282  15.488  1.00  0.00
H
ATOM   1682  N   SER   104      48.279  18.667  18.473  1.00  0.00
N
ATOM   1683  H   SER   104      48.119  17.747  18.870  1.00  0.00
H
ATOM   1684  CA  SER   104      47.306  19.737  18.726  1.00  0.00
C
ATOM   1685  HA  SER   104      47.000  20.146  17.767  1.00  0.00
H
ATOM   1686  C   SER   104      47.905  20.872  19.555  1.00  0.00
C
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ATOM   1687  O   SER   104      47.647  22.052  19.294  1.00  0.00
O
ATOM   1688  CB  SER   104      46.062  19.228  19.457  1.00  0.00
C
ATOM   1689 1HB  SER   104      46.350  18.835  20.432  1.00  0.00
H
ATOM   1690 2HB  SER   104      45.368  20.057  19.599  1.00  0.00
H
ATOM   1691  OG  SER   104      45.423  18.205  18.717  1.00  0.00
O
ATOM   1692  HG  SER   104      45.877  17.371  18.904  1.00  0.00
H
ATOM   1693  N   GLU   105      48.728  20.529  20.539  1.00  0.00
N
ATOM   1694  H   GLU   105      48.888  19.549  20.750  1.00  0.00
H
ATOM   1695  CA  GLU   105      49.419  21.539  21.338  1.00  0.00
C
ATOM   1696  HA  GLU   105      48.693  22.250  21.733  1.00  0.00
H
ATOM   1697  C   GLU   105      50.410  22.284  20.449  1.00  0.00
C
ATOM   1698  O   GLU   105      50.461  23.512  20.439  1.00  0.00
O
ATOM   1699  CB  GLU   105      50.177  20.880  22.498  1.00  0.00
C
ATOM   1700 1HB  GLU   105      49.475  20.290  23.086  1.00  0.00
H
ATOM   1701 2HB  GLU   105      50.922  20.207  22.079  1.00  0.00
H
ATOM   1702  CG  GLU   105      50.888  21.865  23.421  1.00  0.00
C
ATOM   1703 1HG  GLU   105      51.547  22.497  22.825  1.00  0.00
H
ATOM   1704 2HG  GLU   105      50.144  22.502  23.900  1.00  0.00
H
ATOM   1705  CD  GLU   105      51.733  21.185  24.489  1.00  0.00
C
ATOM   1706  OE1 GLU   105      52.224  20.048  24.292  1.00  0.00
O
ATOM   1707  OE2 GLU   105      51.982  21.817  25.541  1.00  0.00
O
ATOM   1708  N   GLN   106      51.189  21.545  19.672  1.00  0.00
N
ATOM   1709  H   GLN   106      51.118  20.531  19.705  1.00  0.00
H
ATOM   1710  CA  GLN   106      52.186  22.165  18.811  1.00  0.00
C
ATOM   1711  HA  GLN   106      52.840  22.784  19.426  1.00  0.00
H
ATOM   1712  C   GLN   106      51.562  23.067  17.767  1.00  0.00
C
ATOM   1713  O   GLN   106      52.091  24.133  17.507  1.00  0.00
O
ATOM   1714  CB  GLN   106      53.033  21.119  18.095  1.00  0.00
C
ATOM   1715 1HB  GLN   106      52.383  20.392  17.610  1.00  0.00
H
ATOM   1716 2HB  GLN   106      53.616  21.625  17.327  1.00  0.00
H
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ATOM   1717  CG  GLN   106      53.999  20.410  19.009  1.00  0.00
C
ATOM   1718 1HG  GLN   106      54.583  21.158  19.544  1.00  0.00
H
ATOM   1719 2HG  GLN   106      53.464  19.807  19.737  1.00  0.00
H
ATOM   1720  CD  GLN   106      54.941  19.538  18.236  1.00  0.00
C
ATOM   1721  OE1 GLN   106      54.600  18.475  17.745  1.00  0.00
O
ATOM   1722  NE2 GLN   106      56.148  19.993  18.108  1.00  0.00
N
ATOM   1723 1HE2 GLN   106      56.809  19.445  17.590  1.00  0.00
H
ATOM   1724 2HE2 GLN   106      56.412  20.869  18.540  1.00  0.00
H
ATOM   1725  N   ALA   107      50.439  22.694  17.179  1.00  0.00
N
ATOM   1726  H   ALA   107      50.020  21.792  17.396  1.00  0.00
H
ATOM   1727  CA  ALA   107      49.813  23.559  16.191  1.00  0.00
C
ATOM   1728  HA  ALA   107      50.540  23.783  15.409  1.00  0.00
H
ATOM   1729  C   ALA   107      49.403  24.877  16.837  1.00  0.00
C
ATOM   1730  O   ALA   107      49.603  25.923  16.242  1.00  0.00
O
ATOM   1731  CB  ALA   107      48.628  22.871  15.566  1.00  0.00
C
ATOM   1732 1HB  ALA   107      48.956  21.958  15.067  1.00  0.00
H
ATOM   1733 2HB  ALA   107      48.160  23.532  14.835  1.00  0.00
H
ATOM   1734 3HB  ALA   107      47.904  22.616  16.341  1.00  0.00
H
ATOM   1735  N   ARG   108      48.907  24.844  18.067  1.00  0.00
N
ATOM   1736  H   ARG   108      48.785  23.951  18.537  1.00  0.00
H
ATOM   1737  CA  ARG   108      48.554  26.081  18.768  1.00  0.00
C
ATOM   1738  HA  ARG   108      47.839  26.641  18.165  1.00  0.00
H
ATOM   1739  C   ARG   108      49.780  26.959  18.962  1.00  0.00
C
ATOM   1740  O   ARG   108      49.749  28.159  18.681  1.00  0.00
O
ATOM   1741  CB  ARG   108      47.939  25.745  20.130  1.00  0.00
C
ATOM   1742 1HB  ARG   108      47.115  25.051  19.981  1.00  0.00
H
ATOM   1743 2HB  ARG   108      48.696  25.247  20.729  1.00  0.00
H
ATOM   1744  CG  ARG   108      47.432  26.950  20.901  1.00  0.00
C
ATOM   1745 1HG  ARG   108      48.214  27.705  20.923  1.00  0.00
H
ATOM   1746 2HG  ARG   108      46.562  27.364  20.393  1.00  0.00
H
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ATOM   1747  CD  ARG   108      47.066  26.619  22.342  1.00  0.00
C
ATOM   1748 1HD  ARG   108      46.648  27.511  22.804  1.00  0.00
H
ATOM   1749 2HD  ARG   108      46.302  25.842  22.342  1.00  0.00
H
ATOM   1750  NE  ARG   108      48.216  26.152  23.133  1.00  0.00
N
ATOM   1751  HE  ARG   108      48.244  25.167  23.344  1.00  0.00
H
ATOM   1752  CZ  ARG   108      49.208  26.887  23.619  1.00  0.00
C
ATOM   1753  NH1 ARG   108      49.336  28.174  23.451  1.00  0.00
N
ATOM   1754 1HH1 ARG   108      48.624  28.692  22.955  1.00  0.00
H
ATOM   1755 2HH1 ARG   108      50.149  28.634  23.830  1.00  0.00
H
ATOM   1756  NH2 ARG   108      50.146  26.304  24.299  1.00  0.00
N
ATOM   1757 1HH2 ARG   108      50.056  25.335  24.561  1.00  0.00
H
ATOM   1758 2HH2 ARG   108      50.964  26.839  24.563  1.00  0.00
H
ATOM   1759  N   CYS   109      50.864  26.362  19.429  1.00  0.00
N
ATOM   1760  H   CYS   109      50.834  25.371  19.650  1.00  0.00
H
ATOM   1761  CA  CYS   109      52.084  27.112  19.696  1.00  0.00
C
ATOM   1762  HA  CYS   109      51.848  27.948  20.355  1.00  0.00
H
ATOM   1763  C   CYS   109      52.734  27.667  18.434  1.00  0.00
C
ATOM   1764  O   CYS   109      53.185  28.806  18.400  1.00  0.00
O
ATOM   1765  CB  CYS   109      53.080  26.189  20.397  1.00  0.00
C
ATOM   1766 1HB  CYS   109      53.323  25.359  19.733  1.00  0.00
H
ATOM   1767 2HB  CYS   109      53.992  26.748  20.606  1.00  0.00
H
ATOM   1768  SG  CYS   109      52.426  25.529  21.940  1.00  0.00
S
ATOM   1769  HG  CYS   109      53.435  24.689  22.192  1.00  0.00
H
ATOM   1770  N   LEU   110      52.808  26.850  17.396  1.00  0.00
N
ATOM   1771  H   LEU   110      52.392  25.923  17.465  1.00  0.00
H
ATOM   1772  CA  LEU   110      53.558  27.183  16.187  1.00  0.00
C
ATOM   1773  HA  LEU   110      54.424  27.782  16.466  1.00  0.00
H
ATOM   1774  C   LEU   110      52.746  28.009  15.200  1.00  0.00
C
ATOM   1775  O   LEU   110      53.312  28.660  14.326  1.00  0.00
O
ATOM   1776  CB  LEU   110      54.057  25.891  15.531  1.00  0.00
C
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ATOM   1777 1HB  LEU   110      53.187  25.297  15.251  1.00  0.00
H
ATOM   1778 2HB  LEU   110      54.594  26.150  14.622  1.00  0.00
H
ATOM   1779  CG  LEU   110      54.975  25.024  16.415  1.00  0.00
C
ATOM   1780  HG  LEU   110      54.478  24.834  17.362  1.00  0.00
H
ATOM   1781  CD1 LEU   110      55.221  23.679  15.759  1.00  0.00
C
ATOM   1782 1HD1 LEU   110      55.800  23.043  16.429  1.00  0.00
H
ATOM   1783 2HD1 LEU   110      55.763  23.808  14.825  1.00  0.00
H
ATOM   1784 3HD1 LEU   110      54.267  23.193  15.562  1.00  0.00
H
ATOM   1785  CD2 LEU   110      56.302  25.688  16.736  1.00  0.00
C
ATOM   1786 1HD2 LEU   110      56.876  25.044  17.400  1.00  0.00
H
ATOM   1787 2HD2 LEU   110      56.134  26.632  17.252  1.00  0.00
H
ATOM   1788 3HD2 LEU   110      56.866  25.870  15.824  1.00  0.00
H
ATOM   1789  N   LEU   111      51.433  28.033  15.375  1.00  0.00
N
ATOM   1790  H   LEU   111      50.993  27.356  15.991  1.00  0.00
H
ATOM   1791  CA  LEU   111      50.583  29.030  14.729  1.00  0.00
C
ATOM   1792  HA  LEU   111      50.763  29.041  13.655  1.00  0.00
H
ATOM   1793  C   LEU   111      50.864  30.412  15.294  1.00  0.00
C
ATOM   1794  O   LEU   111      50.854  31.389  14.556  1.00  0.00
O
ATOM   1795  CB  LEU   111      49.108  28.715  15.011  1.00  0.00
C
ATOM   1796 1HB  LEU   111      48.891  27.732  14.596  1.00  0.00
H
ATOM   1797 2HB  LEU   111      49.002  28.643  16.092  1.00  0.00
H
ATOM   1798  CG  LEU   111      48.012  29.678  14.532  1.00  0.00
C
ATOM   1799  HG  LEU   111      48.230  30.677  14.905  1.00  0.00
H
ATOM   1800  CD1 LEU   111      47.911  29.739  13.016  1.00  0.00
C
ATOM   1801 1HD1 LEU   111      47.123  30.439  12.741  1.00  0.00
H
ATOM   1802 2HD1 LEU   111      47.680  28.752  12.616  1.00  0.00
H
ATOM   1803 3HD1 LEU   111      48.852  30.097  12.605  1.00  0.00
H
ATOM   1804  CD2 LEU   111      46.684  29.238  15.125  1.00  0.00
C
ATOM   1805 1HD2 LEU   111      45.900  29.933  14.822  1.00  0.00
H
ATOM   1806 2HD2 LEU   111      46.741  29.241  16.214  1.00  0.00
H
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ATOM   1807 3HD2 LEU   111      46.421  28.238  14.779  1.00  0.00
H
ATOM   1808  N   PHE   112      51.040  30.506  16.605  1.00  0.00
N
ATOM   1809  H   PHE   112      51.160  29.670  17.162  1.00  0.00
H
ATOM   1810  CA  PHE   112      50.948  31.796  17.285  1.00  0.00
C
ATOM   1811  HA  PHE   112      49.945  32.170  17.082  1.00  0.00
H
ATOM   1812  C   PHE   112      51.897  32.893  16.783  1.00  0.00
C
ATOM   1813  O   PHE   112      51.398  33.968  16.420  1.00  0.00
O
ATOM   1814  CB  PHE   112      51.053  31.607  18.803  1.00  0.00
C
ATOM   1815 1HB  PHE   112      50.321  30.861  19.105  1.00  0.00
H
ATOM   1816 2HB  PHE   112      52.039  31.225  19.059  1.00  0.00
H
ATOM   1817  CG  PHE   112      50.803  32.865  19.589  1.00  0.00
C
ATOM   1818  CD1 PHE   112      49.494  33.353  19.755  1.00  0.00
C
ATOM   1819  HD1 PHE   112      48.661  32.822  19.313  1.00  0.00
H
ATOM   1820  CD2 PHE   112      51.873  33.562  20.180  1.00  0.00
C
ATOM   1821  HD2 PHE   112      52.885  33.198  20.062  1.00  0.00
H
ATOM   1822  CE1 PHE   112      49.246  34.531  20.504  1.00  0.00
C
ATOM   1823  HE1 PHE   112      48.235  34.894  20.624  1.00  0.00
H
ATOM   1824  CE2 PHE   112      51.641  34.737  20.943  1.00  0.00
C
ATOM   1825  HE2 PHE   112      52.470  35.263  21.394  1.00  0.00
H
ATOM   1826  CZ  PHE   112      50.323  35.221  21.104  1.00  0.00
C
ATOM   1827  HZ  PHE   112      50.139  36.109  21.692  1.00  0.00
H
ATOM   1828  N   PRO   113      53.229  32.678  16.732  1.00  0.00
N
ATOM   1829  CA  PRO   113      53.950  33.817  16.146  1.00  0.00
C
ATOM   1830  HA  PRO   113      53.636  34.721  16.666  1.00  0.00
H
ATOM   1831  C   PRO   113      53.776  34.114  14.642  1.00  0.00
C
ATOM   1832  O   PRO   113      53.600  35.291  14.319  1.00  0.00
O
ATOM   1833  CB  PRO   113      55.403  33.571  16.562  1.00  0.00
C
ATOM   1834 1HB  PRO   113      56.095  33.899  15.789  1.00  0.00
H
ATOM   1835 2HB  PRO   113      55.600  34.106  17.489  1.00  0.00
H
ATOM   1836  CG  PRO   113      55.523  32.128  16.816  1.00  0.00
C
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ATOM   1837 1HG  PRO   113      55.901  31.625  15.929  1.00  0.00
H
ATOM   1838 2HG  PRO   113      56.208  31.953  17.643  1.00  0.00
H
ATOM   1839  CD  PRO   113      54.154  31.610  17.165  1.00  0.00
C
ATOM   1840 1HD  PRO   113      53.951  30.680  16.633  1.00  0.00
H
ATOM   1841 2HD  PRO   113      54.077  31.461  18.242  1.00  0.00
H
ATOM   1842  N   PRO   114      53.806  33.131  13.705  1.00  0.00
N
ATOM   1843  CA  PRO   114      53.547  33.669  12.360  1.00  0.00
C
ATOM   1844  HA  PRO   114      54.265  34.454  12.128  1.00  0.00
H
ATOM   1845  C   PRO   114      52.126  34.164  12.101  1.00  0.00
C
ATOM   1846  O   PRO   114      51.935  35.176  11.427  1.00  0.00
O
ATOM   1847  CB  PRO   114      53.798  32.457  11.448  1.00  0.00
C
ATOM   1848 1HB  PRO   114      52.863  31.952  11.208  1.00  0.00
H
ATOM   1849 2HB  PRO   114      54.302  32.761  10.534  1.00  0.00
H
ATOM   1850  CG  PRO   114      54.646  31.562  12.233  1.00  0.00
C
ATOM   1851 1HG  PRO   114      54.582  30.538  11.864  1.00  0.00
H
ATOM   1852 2HG  PRO   114      55.678  31.917  12.227  1.00  0.00
H
ATOM   1853  CD  PRO   114      54.059  31.682  13.598  1.00  0.00
C
ATOM   1854 1HD  PRO   114      53.128  31.121  13.666  1.00  0.00
H
ATOM   1855 2HD  PRO   114      54.771  31.332  14.335  1.00  0.00
H
ATOM   1856  N   ASN   115      51.159  33.376  12.565  1.00  0.00
N
ATOM   1857  H   ASN   115      51.425  32.595  13.160  1.00  0.00
H
ATOM   1858  CA  ASN   115      49.725  33.484  12.273  1.00  0.00
C
ATOM   1859  HA  ASN   115      49.317  32.483  12.415  1.00  0.00
H
ATOM   1860  C   ASN   115      49.367  33.907  10.848  1.00  0.00
C
ATOM   1861  O   ASN   115      48.501  34.746  10.605  1.00  0.00
O
ATOM   1862  CB  ASN   115      49.036  34.377  13.298  1.00  0.00
C
ATOM   1863 1HB  ASN   115      49.453  34.161  14.279  1.00  0.00
H
ATOM   1864 2HB  ASN   115      49.225  35.422  13.057  1.00  0.00
H
ATOM   1865  CG  ASN   115      47.549  34.136  13.350  1.00  0.00
C
ATOM   1866  OD1 ASN   115      47.040  33.148  12.833  1.00  0.00
O
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ATOM   1867  ND2 ASN   115      46.843  35.024  13.979  1.00  0.00
N
ATOM   1868 1HD2 ASN   115      45.848  34.888  14.059  1.00  0.00
H
ATOM   1869 2HD2 ASN   115      47.294  35.829  14.384  1.00  0.00
H
ATOM   1870  N   ASP   116      50.114  33.386   9.890  1.00  0.00
N
ATOM   1871  H   ASP   116      50.796  32.682  10.112  1.00  0.00
H
ATOM   1872  CA  ASP   116      50.059  33.906   8.532  1.00  0.00
C
ATOM   1873  HA  ASP   116      49.684  34.928   8.567  1.00  0.00
H
ATOM   1874  C   ASP   116      49.128  33.082   7.651  1.00  0.00
C
ATOM   1875  O   ASP   116      49.571  32.125   7.029  1.00  0.00
O
ATOM   1876  CB  ASP   116      51.478  33.956   7.955  1.00  0.00
C
ATOM   1877 1HB  ASP   116      52.138  34.378   8.713  1.00  0.00
H
ATOM   1878 2HB  ASP   116      51.828  32.949   7.728  1.00  0.00
H
ATOM   1879  CG  ASP   116      51.576  34.829   6.718  1.00  0.00
C
ATOM   1880  OD1 ASP   116      50.648  35.612   6.425  1.00  0.00
O
ATOM   1881  OD2 ASP   116      52.640  34.815   6.058  1.00  0.00
O
ATOM   1882  N   LEU   117      47.838  33.412   7.660  1.00  0.00
N
ATOM   1883  H   LEU   117      47.482  33.975   8.428  1.00  0.00
H
ATOM   1884  CA  LEU   117      46.905  33.114   6.559  1.00  0.00
C
ATOM   1885  HA  LEU   117      45.907  33.406   6.883  1.00  0.00
H
ATOM   1886  C   LEU   117      46.803  31.669   6.079  1.00  0.00
C
ATOM   1887  O   LEU   117      46.615  31.444   4.883  1.00  0.00
O
ATOM   1888  CB  LEU   117      47.268  33.986   5.349  1.00  0.00
C
ATOM   1889 1HB  LEU   117      48.274  33.710   5.032  1.00  0.00
H
ATOM   1890 2HB  LEU   117      46.587  33.763   4.530  1.00  0.00
H
ATOM   1891  CG  LEU   117      47.223  35.503   5.527  1.00  0.00
C
ATOM   1892  HG  LEU   117      47.791  35.781   6.410  1.00  0.00
H
ATOM   1893  CD1 LEU   117      47.880  36.122   4.311  1.00  0.00
C
ATOM   1894 1HD1 LEU   117      47.913  37.201   4.430  1.00  0.00
H
ATOM   1895 2HD1 LEU   117      47.329  35.867   3.407  1.00  0.00
H
ATOM   1896 3HD1 LEU   117      48.905  35.758   4.221  1.00  0.00
H
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ATOM   1897  CD2 LEU   117      45.786  36.012   5.676  1.00  0.00
C
ATOM   1898 1HD2 LEU   117      45.786  37.098   5.736  1.00  0.00
H
ATOM   1899 2HD2 LEU   117      45.346  35.618   6.592  1.00  0.00
H
ATOM   1900 3HD2 LEU   117      45.183  35.699   4.824  1.00  0.00
H
ATOM   1901  N   ASP   118      46.960  30.704   6.980  1.00  0.00
N
ATOM   1902  H   ASP   118      47.114  30.974   7.936  1.00  0.00
H
ATOM   1903  CA  ASP   118      47.026  29.277   6.620  1.00  0.00
C
ATOM   1904  HA  ASP   118      47.469  28.756   7.466  1.00  0.00
H
ATOM   1905  C   ASP   118      48.005  29.073   5.460  1.00  0.00
C
ATOM   1906  O   ASP   118      47.679  28.521   4.417  1.00  0.00
O
ATOM   1907  CB  ASP   118      45.652  28.598   6.401  1.00  0.00
C
ATOM   1908 1HB  ASP   118      45.801  27.623   5.939  1.00  0.00
H
ATOM   1909 2HB  ASP   118      45.198  28.434   7.375  1.00  0.00
H
ATOM   1910  CG  ASP   118      44.674  29.404   5.556  1.00  0.00
C
ATOM   1911  OD1 ASP   118      43.979  30.269   6.144  1.00  0.00
O
ATOM   1912  OD2 ASP   118      44.474  29.118   4.353  1.00  0.00
O
ATOM   1913  N   ASN   119      49.210  29.595   5.642  1.00  0.00
N
ATOM   1914  H   ASN   119      49.404  30.107   6.493  1.00  0.00
H
ATOM   1915  CA  ASN   119      50.271  29.533   4.642  1.00  0.00
C
ATOM   1916  HA  ASN   119      49.902  28.991   3.771  1.00  0.00
H
ATOM   1917  C   ASN   119      51.498  28.776   5.184  1.00  0.00
C
ATOM   1918  O   ASN   119      51.526  28.337   6.344  1.00  0.00
O
ATOM   1919  CB  ASN   119      50.606  30.975   4.218  1.00  0.00
C
ATOM   1920 1HB  ASN   119      49.689  31.562   4.231  1.00  0.00
H
ATOM   1921 2HB  ASN   119      51.299  31.412   4.936  1.00  0.00
H
ATOM   1922  CG  ASN   119      51.192  31.070   2.829  1.00  0.00
C
ATOM   1923  OD1 ASN   119      51.417  30.067   2.166  1.00  0.00
O
ATOM   1924  ND2 ASN   119      51.466  32.262   2.384  1.00  0.00
N
ATOM   1925 1HD2 ASN   119      51.887  32.349   1.470  1.00  0.00
H
ATOM   1926 2HD2 ASN   119      51.277  33.081   2.944  1.00  0.00
H
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ATOM   1927  N   LYS   120      52.508  28.629   4.336  1.00  0.00
N
ATOM   1928  H   LYS   120      52.422  29.089   3.434  1.00  0.00
H
ATOM   1929  CA  LYS   120      53.710  27.820   4.564  1.00  0.00
C
ATOM   1930  HA  LYS   120      53.400  26.776   4.593  1.00  0.00
H
ATOM   1931  C   LYS   120      54.511  28.069   5.834  1.00  0.00
C
ATOM   1932  O   LYS   120      55.122  27.142   6.334  1.00  0.00
O
ATOM   1933  CB  LYS   120      54.620  28.005   3.347  1.00  0.00
C
ATOM   1934 1HB  LYS   120      53.996  27.915   2.460  1.00  0.00
H
ATOM   1935 2HB  LYS   120      55.034  29.013   3.369  1.00  0.00
H
ATOM   1936  CG  LYS   120      55.768  27.012   3.212  1.00  0.00
C
ATOM   1937 1HG  LYS   120      56.460  27.127   4.046  1.00  0.00
H
ATOM   1938 2HG  LYS   120      55.370  26.001   3.213  1.00  0.00
H
ATOM   1939  CD  LYS   120      56.506  27.254   1.912  1.00  0.00
C
ATOM   1940 1HD  LYS   120      55.796  27.220   1.088  1.00  0.00
H
ATOM   1941 2HD  LYS   120      56.963  28.241   1.943  1.00  0.00
H
ATOM   1942  CE  LYS   120      57.576  26.209   1.671  1.00  0.00
C
ATOM   1943 1HE  LYS   120      58.268  26.191   2.516  1.00  0.00
H
ATOM   1944 2HE  LYS   120      57.104  25.230   1.572  1.00  0.00
H
ATOM   1945  NZ  LYS   120      58.322  26.538   0.419  1.00  0.00
N
ATOM   1946 1HZ  LYS   120      58.858  25.736   0.113  1.00  0.00
H
ATOM   1947 2HZ  LYS   120      58.963  27.303   0.596  1.00  0.00
H
ATOM   1948 3HZ  LYS   120      57.674  26.803  -0.315  1.00  0.00
H
ATOM   1949  N   GLU   121      54.478  29.253   6.422  1.00  0.00
N
ATOM   1950  H   GLU   121      53.981  30.017   5.977  1.00  0.00
H
ATOM   1951  CA  GLU   121      55.169  29.462   7.701  1.00  0.00
C
ATOM   1952  HA  GLU   121      56.237  29.283   7.568  1.00  0.00
H
ATOM   1953  C   GLU   121      54.688  28.520   8.800  1.00  0.00
C
ATOM   1954  O   GLU   121      55.477  27.988   9.582  1.00  0.00
O
ATOM   1955  CB  GLU   121      54.937  30.884   8.212  1.00  0.00
C
ATOM   1956 1HB  GLU   121      53.874  31.116   8.133  1.00  0.00
H
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ATOM   1957 2HB  GLU   121      55.216  30.915   9.263  1.00  0.00
H
ATOM   1958  CG  GLU   121      55.728  31.942   7.492  1.00  0.00
C
ATOM   1959 1HG  GLU   121      55.462  31.929   6.437  1.00  0.00
H
ATOM   1960 2HG  GLU   121      55.478  32.919   7.906  1.00  0.00
H
ATOM   1961  CD  GLU   121      57.216  31.711   7.635  1.00  0.00
C
ATOM   1962  OE1 GLU   121      57.730  31.684   8.779  1.00  0.00
O
ATOM   1963  OE2 GLU   121      57.896  31.533   6.601  1.00  0.00
O
ATOM   1964  N   ILE   122      53.383  28.300   8.845  1.00  0.00
N
ATOM   1965  H   ILE   122      52.781  28.722   8.146  1.00  0.00
H
ATOM   1966  CA  ILE   122      52.784  27.469   9.886  1.00  0.00
C
ATOM   1967  HA  ILE   122      53.193  27.748  10.858  1.00  0.00
H
ATOM   1968  C   ILE   122      53.180  26.028   9.565  1.00  0.00
C
ATOM   1969  O   ILE   122      53.544  25.238  10.440  1.00  0.00
O
ATOM   1970  CB  ILE   122      51.232  27.647   9.901  1.00  0.00
C
ATOM   1971  HB  ILE   122      50.850  27.349   8.924  1.00  0.00
H
ATOM   1972  CG1 ILE   122      50.858  29.130  10.132  1.00  0.00
C
ATOM   1973 1HG1 ILE   122      50.960  29.356  11.193  1.00  0.00
H
ATOM   1974 2HG1 ILE   122      51.547  29.775   9.590  1.00  0.00
H
ATOM   1975  CG2 ILE   122      50.573  26.759  10.989  1.00  0.00
C
ATOM   1976 1HG2 ILE   122      49.491  26.888  10.981  1.00  0.00
H
ATOM   1977 2HG2 ILE   122      50.957  27.025  11.976  1.00  0.00
H
ATOM   1978 3HG2 ILE   122      50.794  25.709  10.799  1.00  0.00
H
ATOM   1979  CD1 ILE   122      49.448  29.508   9.670  1.00  0.00
C
ATOM   1980 1HD1 ILE   122      49.266  30.561   9.887  1.00  0.00
H
ATOM   1981 2HD1 ILE   122      48.702  28.904  10.186  1.00  0.00
H
ATOM   1982 3HD1 ILE   122      49.367  29.349   8.595  1.00  0.00
H
ATOM   1983  N   ALA   123      53.151  25.708   8.277  1.00  0.00
N
ATOM   1984  H   ALA   123      52.896  26.412   7.600  1.00  0.00
H
ATOM   1985  CA  ALA   123      53.463  24.365   7.808  1.00  0.00
C
ATOM   1986  HA  ALA   123      52.821  23.667   8.342  1.00  0.00
H
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ATOM   1987  C   ALA   123      54.909  23.968   8.082  1.00  0.00
C
ATOM   1988  O   ALA   123      55.172  22.888   8.591  1.00  0.00
O
ATOM   1989  CB  ALA   123      53.175  24.263   6.311  1.00  0.00
C
ATOM   1990 1HB  ALA   123      52.169  24.624   6.101  1.00  0.00
H
ATOM   1991 2HB  ALA   123      53.254  23.222   5.994  1.00  0.00
H
ATOM   1992 3HB  ALA   123      53.892  24.856   5.744  1.00  0.00
H
ATOM   1993  N   HIS   124      55.836  24.852   7.750  1.00  0.00
N
ATOM   1994  H   HIS   124      55.553  25.732   7.323  1.00  0.00
H
ATOM   1995  CA  HIS   124      57.257  24.603   7.939  1.00  0.00
C
ATOM   1996  HA  HIS   124      57.543  23.689   7.420  1.00  0.00
H
ATOM   1997  C   HIS   124      57.575  24.431   9.414  1.00  0.00
C
ATOM   1998  O   HIS   124      58.303  23.512   9.785  1.00  0.00
O
ATOM   1999  CB  HIS   124      58.073  25.773   7.389  1.00  0.00
C
ATOM   2000 1HB  HIS   124      57.928  25.830   6.310  1.00  0.00
H
ATOM   2001 2HB  HIS   124      57.703  26.697   7.834  1.00  0.00
H
ATOM   2002  CG  HIS   124      59.534  25.669   7.693  1.00  0.00
C
ATOM   2003  ND1 HIS   124      60.205  26.528   8.528  1.00  0.00
N
ATOM   2004  HD1 HIS   124      59.820  27.363   8.956  1.00  0.00
H
ATOM   2005  CD2 HIS   124      60.451  24.729   7.341  1.00  0.00
C
ATOM   2006  HD2 HIS   124      60.254  23.889   6.690  1.00  0.00
H
ATOM   2007  CE1 HIS   124      61.453  26.080   8.667  1.00  0.00
C
ATOM   2008  HE1 HIS   124      62.207  26.556   9.282  1.00  0.00
H
ATOM   2009  NE2 HIS   124      61.658  24.990   7.954  1.00  0.00
N
ATOM   2010  N   ASN   125      57.002  25.278  10.260  1.00  0.00
N
ATOM   2011  H   ASN   125      56.389  26.009   9.915  1.00  0.00
H
ATOM   2012  CA  ASN   125      57.285  25.189  11.690  1.00  0.00
C
ATOM   2013  HA  ASN   125      58.364  25.250  11.841  1.00  0.00
H
ATOM   2014  C   ASN   125      56.822  23.843  12.225  1.00  0.00
C
ATOM   2015  O   ASN   125      57.555  23.173  12.953  1.00  0.00
O
ATOM   2016  CB  ASN   125      56.594  26.312  12.469  1.00  0.00
C
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ATOM   2017 1HB  ASN   125      55.549  26.382  12.168  1.00  0.00
H
ATOM   2018 2HB  ASN   125      56.636  26.067  13.528  1.00  0.00
H
ATOM   2019  CG  ASN   125      57.256  27.651  12.285  1.00  0.00
C
ATOM   2020  OD1 ASN   125      58.289  27.776  11.632  1.00  0.00
O
ATOM   2021  ND2 ASN   125      56.701  28.660  12.891  1.00  0.00
N
ATOM   2022 1HD2 ASN   125      57.176  29.550  12.860  1.00  0.00
H
ATOM   2023 2HD2 ASN   125      55.830  28.545  13.384  1.00  0.00
H
ATOM   2024  N   LEU   126      55.623  23.426  11.838  1.00  0.00
N
ATOM   2025  H   LEU   126      55.047  24.015  11.243  1.00  0.00
H
ATOM   2026  CA  LEU   126      55.116  22.123  12.256  1.00  0.00
C
ATOM   2027  HA  LEU   126      55.151  22.058  13.343  1.00  0.00
H
ATOM   2028  C   LEU   126      55.988  21.008  11.703  1.00  0.00
C
ATOM   2029  O   LEU   126      56.445  20.155  12.454  1.00  0.00
O
ATOM   2030  CB  LEU   126      53.672  21.945  11.779  1.00  0.00
C
ATOM   2031 1HB  LEU   126      53.571  22.475  10.834  1.00  0.00
H
ATOM   2032 2HB  LEU   126      53.493  20.886  11.589  1.00  0.00
H
ATOM   2033  CG  LEU   126      52.578  22.443  12.734  1.00  0.00
C
ATOM   2034  HG  LEU   126      52.886  23.401  13.153  1.00  0.00
H
ATOM   2035  CD1 LEU   126      51.270  22.656  11.974  1.00  0.00
C
ATOM   2036 1HD1 LEU   126      50.496  22.998  12.662  1.00  0.00
H
ATOM   2037 2HD1 LEU   126      50.952  21.729  11.502  1.00  0.00
H
ATOM   2038 3HD1 LEU   126      51.419  23.418  11.209  1.00  0.00
H
ATOM   2039  CD2 LEU   126      52.362  21.443  13.876  1.00  0.00
C
ATOM   2040 1HD2 LEU   126      51.598  21.818  14.555  1.00  0.00
H
ATOM   2041 2HD2 LEU   126      53.285  21.305  14.437  1.00  0.00
H
ATOM   2042 3HD2 LEU   126      52.039  20.479  13.480  1.00  0.00
H
ATOM   2043  N   LYS   127      56.252  21.019  10.404  1.00  0.00
N
ATOM   2044  H   LYS   127      55.885  21.774   9.825  1.00  0.00
H
ATOM   2045  CA  LYS   127      57.006  19.942   9.763  1.00  0.00
C
ATOM   2046  HA  LYS   127      56.461  19.009   9.895  1.00  0.00
H
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ATOM   2047  C   LYS   127      58.374  19.758  10.374  1.00  0.00
C
ATOM   2048  O   LYS   127      58.775  18.635  10.642  1.00  0.00
O
ATOM   2049  CB  LYS   127      57.168  20.214   8.268  1.00  0.00
C
ATOM   2050 1HB  LYS   127      56.189  20.422   7.839  1.00  0.00
H
ATOM   2051 2HB  LYS   127      57.790  21.100   8.138  1.00  0.00
H
ATOM   2052  CG  LYS   127      57.794  19.056   7.504  1.00  0.00
C
ATOM   2053 1HG  LYS   127      58.791  18.858   7.895  1.00  0.00
H
ATOM   2054 2HG  LYS   127      57.178  18.163   7.608  1.00  0.00
H
ATOM   2055  CD  LYS   127      57.898  19.420   6.049  1.00  0.00
C
ATOM   2056 1HD  LYS   127      56.892  19.529   5.650  1.00  0.00
H
ATOM   2057 2HD  LYS   127      58.417  20.373   5.965  1.00  0.00
H
ATOM   2058  CE  LYS   127      58.656  18.380   5.245  1.00  0.00
C
ATOM   2059 1HE  LYS   127      59.695  18.346   5.580  1.00  0.00
H
ATOM   2060 2HE  LYS   127      58.203  17.402   5.401  1.00  0.00
H
ATOM   2061  NZ  LYS   127      58.600  18.731   3.794  1.00  0.00
N
ATOM   2062 1HZ  LYS   127      59.220  18.127   3.265  1.00  0.00
H
ATOM   2063 2HZ  LYS   127      58.880  19.695   3.661  1.00  0.00
H
ATOM   2064 3HZ  LYS   127      57.657  18.606   3.445  1.00  0.00
H
ATOM   2065  N   LEU   128      59.085  20.847  10.607  1.00  0.00
N
ATOM   2066  H   LEU   128      58.705  21.763  10.382  1.00  0.00
H
ATOM   2067  CA  LEU   128      60.438  20.745  11.127  1.00  0.00
C
ATOM   2068  HA  LEU   128      60.992  20.062  10.482  1.00  0.00
H
ATOM   2069  C   LEU   128      60.446  20.165  12.537  1.00  0.00
C
ATOM   2070  O   LEU   128      61.300  19.350  12.875  1.00  0.00
O
ATOM   2071  CB  LEU   128      61.110  22.117  11.086  1.00  0.00
C
ATOM   2072 1HB  LEU   128      60.976  22.526  10.085  1.00  0.00
H
ATOM   2073 2HB  LEU   128      60.600  22.774  11.790  1.00  0.00
H
ATOM   2074  CG  LEU   128      62.611  22.129  11.405  1.00  0.00
C
ATOM   2075  HG  LEU   128      62.751  21.766  12.421  1.00  0.00
H
ATOM   2076  CD1 LEU   128      63.433  21.243  10.468  1.00  0.00
C
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ATOM   2077 1HD1 LEU   128      64.493  21.367  10.674  1.00  0.00
H
ATOM   2078 2HD1 LEU   128      63.237  21.510   9.428  1.00  0.00
H
ATOM   2079 3HD1 LEU   128      63.177  20.194  10.619  1.00  0.00
H
ATOM   2080  CD2 LEU   128      63.121  23.553  11.338  1.00  0.00
C
ATOM   2081 1HD2 LEU   128      64.191  23.574  11.532  1.00  0.00
H
ATOM   2082 2HD2 LEU   128      62.614  24.158  12.087  1.00  0.00
H
ATOM   2083 3HD2 LEU   128      62.928  23.973  10.350  1.00  0.00
H
ATOM   2084  N   TRP   129      59.464  20.510  13.356  1.00  0.00
N
ATOM   2085  H   TRP   129      58.764  21.189  13.073  1.00  0.00
H
ATOM   2086  CA  TRP   129      59.363  19.857  14.656  1.00  0.00
C
ATOM   2087  HA  TRP   129      60.337  19.887  15.145  1.00  0.00
H
ATOM   2088  C   TRP   129      58.981  18.385  14.526  1.00  0.00
C
ATOM   2089  O   TRP   129      59.564  17.549  15.200  1.00  0.00
O
ATOM   2090  CB  TRP   129      58.352  20.556  15.555  1.00  0.00
C
ATOM   2091 1HB  TRP   129      57.454  20.798  14.987  1.00  0.00
H
ATOM   2092 2HB  TRP   129      58.085  19.856  16.343  1.00  0.00
H
ATOM   2093  CG  TRP   129      58.893  21.789  16.219  1.00  0.00
C
ATOM   2094  CD1 TRP   129      58.692  23.084  15.861  1.00  0.00
C
ATOM   2095  HD1 TRP   129      58.118  23.391  14.996  1.00  0.00
H
ATOM   2096  CD2 TRP   129      59.688  21.847  17.417  1.00  0.00
C
ATOM   2097  NE1 TRP   129      59.284  23.950  16.739  1.00  0.00
N
ATOM   2098  HE1 TRP   129      59.261  24.964  16.654  1.00  0.00
H
ATOM   2099  CE2 TRP   129      59.867  23.224  17.739  1.00  0.00
C
ATOM   2100  CE3 TRP   129      60.258  20.874  18.264  1.00  0.00
C
ATOM   2101  HE3 TRP   129      60.158  19.823  18.036  1.00  0.00
H
ATOM   2102  CZ2 TRP   129      60.536  23.645  18.905  1.00  0.00
C
ATOM   2103  HZ2 TRP   129      60.637  24.695  19.136  1.00  0.00
H
ATOM   2104  CZ3 TRP   129      60.951  21.294  19.428  1.00  0.00
C
ATOM   2105  HZ3 TRP   129      61.388  20.558  20.087  1.00  0.00
H
ATOM   2106  CH2 TRP   129      61.060  22.680  19.745  1.00  0.00
C
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ATOM   2107  HH2 TRP   129      61.566  22.983  20.650  1.00  0.00
H
ATOM   2108  N   LEU   130      58.051  18.032  13.651  1.00  0.00
N
ATOM   2109  H   LEU   130      57.594  18.744  13.085  1.00  0.00
H
ATOM   2110  CA  LEU   130      57.643  16.630  13.501  1.00  0.00
C
ATOM   2111  HA  LEU   130      57.319  16.246  14.468  1.00  0.00
H
ATOM   2112  C   LEU   130      58.796  15.758  13.007  1.00  0.00
C
ATOM   2113  O   LEU   130      59.003  14.650  13.497  1.00  0.00
O
ATOM   2114  CB  LEU   130      56.492  16.530  12.502  1.00  0.00
C
ATOM   2115 1HB  LEU   130      56.831  16.973  11.567  1.00  0.00
H
ATOM   2116 2HB  LEU   130      56.303  15.476  12.314  1.00  0.00
H
ATOM   2117  CG  LEU   130      55.152  17.177  12.869  1.00  0.00
C
ATOM   2118  HG  LEU   130      55.327  18.180  13.241  1.00  0.00
H
ATOM   2119  CD1 LEU   130      54.305  17.279  11.626  1.00  0.00
C
ATOM   2120 1HD1 LEU   130      53.370  17.784  11.861  1.00  0.00
H
ATOM   2121 2HD1 LEU   130      54.095  16.284  11.232  1.00  0.00
H
ATOM   2122 3HD1 LEU   130      54.832  17.860  10.873  1.00  0.00
H
ATOM   2123  CD2 LEU   130      54.410  16.420  13.938  1.00  0.00
C
ATOM   2124 1HD2 LEU   130      53.446  16.893  14.116  1.00  0.00
H
ATOM   2125 2HD2 LEU   130      54.980  16.455  14.865  1.00  0.00
H
ATOM   2126 3HD2 LEU   130      54.253  15.383  13.635  1.00  0.00
H
ATOM   2127  N   HIS   131      59.579  16.312  12.092  1.00  0.00
N
ATOM   2128  H   HIS   131      59.324  17.230  11.737  1.00  0.00
H
ATOM   2129  CA  HIS   131      60.781  15.686  11.541  1.00  0.00
C
ATOM   2130  HA  HIS   131      60.513  14.769  11.018  1.00  0.00
H
ATOM   2131  C   HIS   131      61.772  15.348  12.656  1.00  0.00
C
ATOM   2132  O   HIS   131      62.400  14.287  12.663  1.00  0.00
O
ATOM   2133  CB  HIS   131      61.374  16.702  10.551  1.00  0.00
C
ATOM   2134 1HB  HIS   131      60.615  16.928   9.803  1.00  0.00
H
ATOM   2135 2HB  HIS   131      61.607  17.619  11.085  1.00  0.00
H
ATOM   2136  CG  HIS   131      62.610  16.258   9.833  1.00  0.00
C
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ATOM   2137  ND1 HIS   131      63.881  16.316  10.357  1.00  0.00
N
ATOM   2138  HD1 HIS   131      64.129  16.532  11.312  1.00  0.00
H
ATOM   2139  CD2 HIS   131      62.787  15.920   8.529  1.00  0.00
C
ATOM   2140  HD2 HIS   131      61.987  15.806   7.810  1.00  0.00
H
ATOM   2141  CE1 HIS   131      64.746  16.024   9.383  1.00  0.00
C
ATOM   2142  HE1 HIS   131      65.820  15.990   9.509  1.00  0.00
H
ATOM   2143  NE2 HIS   131      64.127  15.786   8.244  1.00  0.00
N
ATOM   2144  N   LYS   132      61.902  16.250  13.620  1.00  0.00
N
ATOM   2145  H   LYS   132      61.374  17.115  13.555  1.00  0.00
H
ATOM   2146  CA  LYS   132      62.791  16.051  14.769  1.00  0.00
C
ATOM   2147  HA  LYS   132      63.730  15.618  14.424  1.00  0.00
H
ATOM   2148  C   LYS   132      62.233  15.122  15.844  1.00  0.00
C
ATOM   2149  O   LYS   132      62.989  14.392  16.485  1.00  0.00
O
ATOM   2150  CB  LYS   132      63.074  17.414  15.407  1.00  0.00
C
ATOM   2151 1HB  LYS   132      62.121  17.909  15.587  1.00  0.00
H
ATOM   2152 2HB  LYS   132      63.561  17.259  16.367  1.00  0.00
H
ATOM   2153  CG  LYS   132      63.949  18.331  14.560  1.00  0.00
C
ATOM   2154 1HG  LYS   132      64.960  17.928  14.524  1.00  0.00
H
ATOM   2155 2HG  LYS   132      63.556  18.376  13.546  1.00  0.00
H
ATOM   2156  CD  LYS   132      63.987  19.741  15.125  1.00  0.00
C
ATOM   2157 1HD  LYS   132      62.969  20.130  15.174  1.00  0.00
H
ATOM   2158 2HD  LYS   132      64.408  19.717  16.130  1.00  0.00
H
ATOM   2159  CE  LYS   132      64.829  20.654  14.244  1.00  0.00
C
ATOM   2160 1HE  LYS   132      65.853  20.276  14.215  1.00  0.00
H
ATOM   2161 2HE  LYS   132      64.424  20.642  13.231  1.00  0.00
H
ATOM   2162  NZ  LYS   132      64.834  22.062  14.757  1.00  0.00
N
ATOM   2163 1HZ  LYS   132      65.358  22.670  14.135  1.00  0.00
H
ATOM   2164 2HZ  LYS   132      65.259  22.091  15.675  1.00  0.00
H
ATOM   2165 3HZ  LYS   132      63.887  22.408  14.828  1.00  0.00
H
ATOM   2166  N   ILE   133      60.934  15.171  16.089  1.00  0.00
N
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ATOM   2167  H   ILE   133      60.353  15.809  15.553  1.00  0.00
H
ATOM   2168  CA  ILE   133      60.321  14.402  17.179  1.00  0.00
C
ATOM   2169  HA  ILE   133      61.008  14.376  18.023  1.00  0.00
H
ATOM   2170  C   ILE   133      60.048  12.959  16.771  1.00  0.00
C
ATOM   2171  O   ILE   133      60.366  12.030  17.516  1.00  0.00
O
ATOM   2172  CB  ILE   133      58.995  15.077  17.653  1.00  0.00
C
ATOM   2173  HB  ILE   133      58.340  15.193  16.788  1.00  0.00
H
ATOM   2174  CG1 ILE   133      59.303  16.465  18.245  1.00  0.00
C
ATOM   2175 1HG1 ILE   133      59.762  16.333  19.224  1.00  0.00
H
ATOM   2176 2HG1 ILE   133      60.024  16.982  17.616  1.00  0.00
H
ATOM   2177  CG2 ILE   133      58.253  14.234  18.728  1.00  0.00
C
ATOM   2178 1HG2 ILE   133      57.314  14.713  19.006  1.00  0.00
H
ATOM   2179 2HG2 ILE   133      58.875  14.116  19.616  1.00  0.00
H
ATOM   2180 3HG2 ILE   133      58.009  13.248  18.332  1.00  0.00
H
ATOM   2181  CD1 ILE   133      58.097  17.367  18.391  1.00  0.00
C
ATOM   2182 1HD1 ILE   133      58.424  18.345  18.742  1.00  0.00
H
ATOM   2183 2HD1 ILE   133      57.396  16.952  19.113  1.00  0.00
H
ATOM   2184 3HD1 ILE   133      57.600  17.478  17.426  1.00  0.00
H
ATOM   2185  N   TYR   134      59.470  12.754  15.596  1.00  0.00
N
ATOM   2186  H   TYR   134      59.321  13.535  14.960  1.00  0.00
H
ATOM   2187  CA  TYR   134      58.933  11.447  15.217  1.00  0.00
C
ATOM   2188  HA  TYR   134      58.931  10.788  16.084  1.00  0.00
H
ATOM   2189  C   TYR   134      59.697  10.756  14.103  1.00  0.00
C
ATOM   2190  O   TYR   134      59.295   9.691  13.635  1.00  0.00
O
ATOM   2191  CB  TYR   134      57.496  11.619  14.736  1.00  0.00
C
ATOM   2192 1HB  TYR   134      57.499  12.263  13.860  1.00  0.00
H
ATOM   2193 2HB  TYR   134      57.104  10.644  14.446  1.00  0.00
H
ATOM   2194  CG  TYR   134      56.561  12.204  15.762  1.00  0.00
C
ATOM   2195  CD1 TYR   134      55.965  13.467  15.565  1.00  0.00
C
ATOM   2196  HD1 TYR   134      56.209  14.046  14.685  1.00  0.00
H
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ATOM   2197  CD2 TYR   134      56.231  11.478  16.921  1.00  0.00
C
ATOM   2198  HD2 TYR   134      56.682  10.511  17.103  1.00  0.00
H
ATOM   2199  CE1 TYR   134      55.027  13.978  16.506  1.00  0.00
C
ATOM   2200  HE1 TYR   134      54.560  14.939  16.360  1.00  0.00
H
ATOM   2201  CE2 TYR   134      55.300  11.993  17.852  1.00  0.00
C
ATOM   2202  HE2 TYR   134      55.044  11.428  18.730  1.00  0.00
H
ATOM   2203  CZ  TYR   134      54.695  13.226  17.628  1.00  0.00
C
ATOM   2204  OH  TYR   134      53.763  13.694  18.510  1.00  0.00
O
ATOM   2205  HH  TYR   134      53.680  13.133  19.289  1.00  0.00
H
ATOM   2206  N   GLY   135      60.768  11.378  13.642  1.00  0.00
N
ATOM   2207  H   GLY   135      61.064  12.250  14.052  1.00  0.00
H
ATOM   2208  CA  GLY   135      61.500  10.862  12.501  1.00  0.00
C
ATOM   2209 1HA  GLY   135      62.554  11.111  12.616  1.00  0.00
H
ATOM   2210 2HA  GLY   135      61.398   9.780  12.432  1.00  0.00
H
ATOM   2211  C   GLY   135      60.989  11.510  11.231  1.00  0.00
C
ATOM   2212  O   GLY   135      59.984  12.223  11.263  1.00  0.00
O
ATOM   2213  N   PRO   136      61.733  11.380  10.124  1.00  0.00
N
ATOM   2214  CA  PRO   136      61.806  12.584   9.290  1.00  0.00
C
ATOM   2215  HA  PRO   136      61.996  13.429   9.949  1.00  0.00
H
ATOM   2216  C   PRO   136      60.649  12.965   8.361  1.00  0.00
C
ATOM   2217  O   PRO   136      60.284  14.141   8.289  1.00  0.00
O
ATOM   2218  CB  PRO   136      63.075  12.325   8.461  1.00  0.00
C
ATOM   2219 1HB  PRO   136      62.822  11.922   7.485  1.00  0.00
H
ATOM   2220 2HB  PRO   136      63.658  13.233   8.350  1.00  0.00
H
ATOM   2221  CG  PRO   136      63.845  11.319   9.232  1.00  0.00
C
ATOM   2222 1HG  PRO   136      64.548  10.786   8.593  1.00  0.00
H
ATOM   2223 2HG  PRO   136      64.362  11.795  10.064  1.00  0.00
H
ATOM   2224  CD  PRO   136      62.776  10.416   9.734  1.00  0.00
C
ATOM   2225 1HD  PRO   136      62.415   9.763   8.938  1.00  0.00
H
ATOM   2226 2HD  PRO   136      63.134   9.832  10.582  1.00  0.00
H
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ATOM   2227  N   ILE   137      60.145  12.045   7.546  1.00  0.00
N
ATOM   2228  H   ILE   137      60.308  11.062   7.709  1.00  0.00
H
ATOM   2229  CA  ILE   137      59.490  12.468   6.301  1.00  0.00
C
ATOM   2230  HA  ILE   137      59.895  13.454   6.077  1.00  0.00
H
ATOM   2231  C   ILE   137      57.982  12.653   6.426  1.00  0.00
C
ATOM   2232  O   ILE   137      57.167  11.784   6.105  1.00  0.00
O
ATOM   2233  CB  ILE   137      59.861  11.595   5.069  1.00  0.00
C
ATOM   2234  HB  ILE   137      59.321  10.648   5.111  1.00  0.00
H
ATOM   2235  CG1 ILE   137      61.373  11.299   5.093  1.00  0.00
C
ATOM   2236 1HG1 ILE   137      61.910  12.245   5.162  1.00  0.00
H
ATOM   2237 2HG1 ILE   137      61.599  10.710   5.981  1.00  0.00
H
ATOM   2238  CG2 ILE   137      59.480  12.354   3.762  1.00  0.00
C
ATOM   2239 1HG2 ILE   137      59.600  11.695   2.900  1.00  0.00
H
ATOM   2240 2HG2 ILE   137      60.114  13.234   3.634  1.00  0.00
H
ATOM   2241 3HG2 ILE   137      58.438  12.670   3.797  1.00  0.00
H
ATOM   2242  CD1 ILE   137      61.921  10.540   3.911  1.00  0.00
C
ATOM   2243 1HD1 ILE   137      62.931  10.209   4.148  1.00  0.00
H
ATOM   2244 2HD1 ILE   137      61.959  11.185   3.033  1.00  0.00
H
ATOM   2245 3HD1 ILE   137      61.297   9.674   3.704  1.00  0.00
H
ATOM   2246  N   TRP   138      57.629  13.834   6.898  1.00  0.00
N
ATOM   2247  H   TRP   138      58.359  14.471   7.188  1.00  0.00
H
ATOM   2248  CA  TRP   138      56.243  14.264   7.014  1.00  0.00
C
ATOM   2249  HA  TRP   138      55.589  13.398   7.087  1.00  0.00
H
ATOM   2250  C   TRP   138      55.827  15.087   5.805  1.00  0.00
C
ATOM   2251  O   TRP   138      56.654  15.680   5.116  1.00  0.00
O
ATOM   2252  CB  TRP   138      56.087  15.104   8.283  1.00  0.00
C
ATOM   2253 1HB  TRP   138      56.849  15.882   8.294  1.00  0.00
H
ATOM   2254 2HB  TRP   138      55.103  15.573   8.290  1.00  0.00
H
ATOM   2255  CG  TRP   138      56.222  14.259   9.507  1.00  0.00
C
ATOM   2256  CD1 TRP   138      57.370  13.876  10.123  1.00  0.00
C
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ATOM   2257  HD1 TRP   138      58.362  14.177   9.807  1.00  0.00
H
ATOM   2258  CD2 TRP   138      55.162  13.625  10.243  1.00  0.00
C
ATOM   2259  NE1 TRP   138      57.120  13.045  11.176  1.00  0.00
N
ATOM   2260  HE1 TRP   138      57.852  12.647  11.755  1.00  0.00
H
ATOM   2261  CE2 TRP   138      55.766  12.856  11.278  1.00  0.00
C
ATOM   2262  CE3 TRP   138      53.758  13.626  10.132  1.00  0.00
C
ATOM   2263  HE3 TRP   138      53.277  14.205   9.358  1.00  0.00
H
ATOM   2264  CZ2 TRP   138      55.004  12.080  12.178  1.00  0.00
C
ATOM   2265  HZ2 TRP   138      55.476  11.486  12.941  1.00  0.00
H
ATOM   2266  CZ3 TRP   138      52.988  12.855  11.042  1.00  0.00
C
ATOM   2267  HZ3 TRP   138      51.911  12.841  10.961  1.00  0.00
H
ATOM   2268  CH2 TRP   138      53.625  12.096  12.059  1.00  0.00
C
ATOM   2269  HH2 TRP   138      53.023  11.518  12.745  1.00  0.00
H
ATOM   2270  N   HIS   139      54.527  15.186   5.600  1.00  0.00
N
ATOM   2271  H   HIS   139      53.893  14.585   6.126  1.00  0.00
H
ATOM   2272  CA  HIS   139      53.932  16.217   4.763  1.00  0.00
C
ATOM   2273  HA  HIS   139      54.686  16.825   4.264  1.00  0.00
H
ATOM   2274  C   HIS   139      53.153  17.065   5.741  1.00  0.00
C
ATOM   2275  O   HIS   139      52.444  16.513   6.582  1.00  0.00
O
ATOM   2276  CB  HIS   139      52.944  15.630   3.755  1.00  0.00
C
ATOM   2277 1HB  HIS   139      52.281  14.931   4.268  1.00  0.00
H
ATOM   2278 2HB  HIS   139      52.339  16.443   3.355  1.00  0.00
H
ATOM   2279  CG  HIS   139      53.594  14.937   2.601  1.00  0.00
C
ATOM   2280  ND1 HIS   139      54.950  14.746   2.465  1.00  0.00
N
ATOM   2281  HD1 HIS   139      55.661  15.012   3.137  1.00  0.00
H
ATOM   2282  CD2 HIS   139      53.051  14.439   1.461  1.00  0.00
C
ATOM   2283  HD2 HIS   139      51.996  14.445   1.227  1.00  0.00
H
ATOM   2284  CE1 HIS   139      55.166  14.159   1.290  1.00  0.00
C
ATOM   2285  HE1 HIS   139      56.142  13.894   0.909  1.00  0.00
H
ATOM   2286  NE2 HIS   139      54.039  13.943   0.643  1.00  0.00
N
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ATOM   2287  N   VAL   140      53.271  18.379   5.620  1.00  0.00
N
ATOM   2288  H   VAL   140      53.951  18.769   4.973  1.00  0.00
H
ATOM   2289  CA  VAL   140      52.392  19.304   6.326  1.00  0.00
C
ATOM   2290  HA  VAL   140      51.559  18.744   6.737  1.00  0.00
H
ATOM   2291  C   VAL   140      51.873  20.268   5.269  1.00  0.00
C
ATOM   2292  O   VAL   140      52.643  20.972   4.616  1.00  0.00
O
ATOM   2293  CB  VAL   140      53.078  20.052   7.491  1.00  0.00
C
ATOM   2294  HB  VAL   140      53.898  20.652   7.099  1.00  0.00
H
ATOM   2295  CG1 VAL   140      52.076  20.972   8.191  1.00  0.00
C
ATOM   2296 1HG1 VAL   140      52.555  21.458   9.039  1.00  0.00
H
ATOM   2297 2HG1 VAL   140      51.212  20.408   8.537  1.00  0.00
H
ATOM   2298 3HG1 VAL   140      51.745  21.738   7.496  1.00  0.00
H
ATOM   2299  CG2 VAL   140      53.638  19.053   8.502  1.00  0.00
C
ATOM   2300 1HG2 VAL   140      54.009  19.582   9.377  1.00  0.00
H
ATOM   2301 2HG2 VAL   140      54.461  18.497   8.053  1.00  0.00
H
ATOM   2302 3HG2 VAL   140      52.865  18.349   8.808  1.00  0.00
H
ATOM   2303  N   VAL   141      50.569  20.231   5.045  1.00  0.00
N
ATOM   2304  H   VAL   141      50.000  19.592   5.600  1.00  0.00
H
ATOM   2305  CA  VAL   141      49.911  21.010   4.001  1.00  0.00
C
ATOM   2306  HA  VAL   141      50.627  21.710   3.573  1.00  0.00
H
ATOM   2307  C   VAL   141      48.793  21.809   4.681  1.00  0.00
C
ATOM   2308  O   VAL   141      47.679  21.335   4.908  1.00  0.00
O
ATOM   2309  CB  VAL   141      49.407  20.073   2.855  1.00  0.00
C
ATOM   2310  HB  VAL   141      48.618  19.438   3.236  1.00  0.00
H
ATOM   2311  CG1 VAL   141      48.855  20.870   1.688  1.00  0.00
C
ATOM   2312 1HG1 VAL   141      48.489  20.187   0.921  1.00  0.00
H
ATOM   2313 2HG1 VAL   141      49.631  21.506   1.265  1.00  0.00
H
ATOM   2314 3HG1 VAL   141      48.029  21.486   2.024  1.00  0.00
H
ATOM   2315  CG2 VAL   141      50.533  19.145   2.355  1.00  0.00
C
ATOM   2316 1HG2 VAL   141      50.167  18.540   1.527  1.00  0.00
H
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ATOM   2317 2HG2 VAL   141      50.842  18.468   3.150  1.00  0.00
H
ATOM   2318 3HG2 VAL   141      51.387  19.730   2.019  1.00  0.00
H
ATOM   2319  N   VAL   142      49.101  23.024   5.100  1.00  0.00
N
ATOM   2320  H   VAL   142      50.013  23.417   4.870  1.00  0.00
H
ATOM   2321  CA  VAL   142      48.140  23.855   5.823  1.00  0.00
C
ATOM   2322  HA  VAL   142      47.460  23.212   6.379  1.00  0.00
H
ATOM   2323  C   VAL   142      47.340  24.612   4.772  1.00  0.00
C
ATOM   2324  O   VAL   142      47.715  25.691   4.343  1.00  0.00
O
ATOM   2325  CB  VAL   142      48.828  24.817   6.836  1.00  0.00
C
ATOM   2326  HB  VAL   142      49.462  25.520   6.296  1.00  0.00
H
ATOM   2327  CG1 VAL   142      47.789  25.600   7.649  1.00  0.00
C
ATOM   2328 1HG1 VAL   142      48.294  26.253   8.361  1.00  0.00
H
ATOM   2329 2HG1 VAL   142      47.127  24.917   8.184  1.00  0.00
H
ATOM   2330 3HG1 VAL   142      47.199  26.215   6.975  1.00  0.00
H
ATOM   2331  CG2 VAL   142      49.707  24.017   7.799  1.00  0.00
C
ATOM   2332 1HG2 VAL   142      50.161  24.686   8.529  1.00  0.00
H
ATOM   2333 2HG2 VAL   142      50.502  23.526   7.246  1.00  0.00
H
ATOM   2334 3HG2 VAL   142      49.118  23.262   8.315  1.00  0.00
H
ATOM   2335  N   VAL   143      46.265  23.990   4.312  1.00  0.00
N
ATOM   2336  H   VAL   143      46.110  23.034   4.599  1.00  0.00
H
ATOM   2337  CA  VAL   143      45.351  24.593   3.330  1.00  0.00
C
ATOM   2338  HA  VAL   143      45.583  25.653   3.232  1.00  0.00
H
ATOM   2339  C   VAL   143      43.905  24.486   3.805  1.00  0.00
C
ATOM   2340  O   VAL   143      42.962  24.450   3.022  1.00  0.00
O
ATOM   2341  CB  VAL   143      45.509  23.947   1.924  1.00  0.00
C
ATOM   2342  HB  VAL   143      44.785  24.395   1.246  1.00  0.00
H
ATOM   2343  CG1 VAL   143      46.904  24.220   1.352  1.00  0.00
C
ATOM   2344 1HG1 VAL   143      46.982  23.793   0.352  1.00  0.00
H
ATOM   2345 2HG1 VAL   143      47.679  23.792   1.987  1.00  0.00
H
ATOM   2346 3HG1 VAL   143      47.061  25.296   1.281  1.00  0.00
H
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ATOM   2347  CG2 VAL   143      45.263  22.439   1.974  1.00  0.00
C
ATOM   2348 1HG2 VAL   143      45.398  22.036   0.972  1.00  0.00
H
ATOM   2349 2HG2 VAL   143      44.241  22.234   2.283  1.00  0.00
H
ATOM   2350 3HG2 VAL   143      45.962  21.945   2.646  1.00  0.00
H
ATOM   2351  N   ARG   144      43.744  24.345   5.118  1.00  0.00
N
ATOM   2352  H   ARG   144      44.577  24.330   5.694  1.00  0.00
H
ATOM   2353  CA  ARG   144      42.439  24.222   5.798  1.00  0.00
C
ATOM   2354  HA  ARG   144      42.654  24.088   6.850  1.00  0.00
H
ATOM   2355  C   ARG   144      41.552  23.051   5.375  1.00  0.00
C
ATOM   2356  O   ARG   144      40.375  22.996   5.735  1.00  0.00
O
ATOM   2357  CB  ARG   144      41.613  25.509   5.682  1.00  0.00
C
ATOM   2358 1HB  ARG   144      41.290  25.613   4.649  1.00  0.00
H
ATOM   2359 2HB  ARG   144      40.725  25.414   6.307  1.00  0.00
H
ATOM   2360  CG  ARG   144      42.341  26.767   6.096  1.00  0.00
C
ATOM   2361 1HG  ARG   144      42.693  26.661   7.120  1.00  0.00
H
ATOM   2362 2HG  ARG   144      43.196  26.923   5.439  1.00  0.00
H
ATOM   2363  CD  ARG   144      41.432  27.973   6.002  1.00  0.00
C
ATOM   2364 1HD  ARG   144      40.554  27.816   6.630  1.00  0.00
H
ATOM   2365 2HD  ARG   144      41.974  28.841   6.371  1.00  0.00
H
ATOM   2366  NE  ARG   144      41.002  28.219   4.618  1.00  0.00
N
ATOM   2367  HE  ARG   144      41.074  27.454   3.960  1.00  0.00
H
ATOM   2368  CZ  ARG   144      40.497  29.346   4.141  1.00  0.00
C
ATOM   2369  NH1 ARG   144      40.423  30.463   4.810  1.00  0.00
N
ATOM   2370 1HH1 ARG   144      40.805  30.510   5.742  1.00  0.00
H
ATOM   2371 2HH1 ARG   144      39.999  31.269   4.379  1.00  0.00
H
ATOM   2372  NH2 ARG   144      40.081  29.351   2.916  1.00  0.00
N
ATOM   2373 1HH2 ARG   144      40.171  28.509   2.363  1.00  0.00
H
ATOM   2374 2HH2 ARG   144      39.668  30.187   2.534  1.00  0.00
H
ATOM   2375  N   GLY   145      42.086  22.126   4.594  1.00  0.00
N
ATOM   2376  H   GLY   145      43.054  22.187   4.327  1.00  0.00
H
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ATOM   2377  CA  GLY   145      41.262  21.066   4.044  1.00  0.00
C
ATOM   2378 1HA  GLY   145      41.893  20.296   3.606  1.00  0.00
H
ATOM   2379 2HA  GLY   145      40.663  20.621   4.838  1.00  0.00
H
ATOM   2380  C   GLY   145      40.332  21.608   2.979  1.00  0.00
C
ATOM   2381  O   GLY   145      39.277  21.026   2.741  1.00  0.00
O
ATOM   2382  N   ASP   146      40.677  22.728   2.357  1.00  0.00
N
ATOM   2383  H   ASP   146      41.566  23.176   2.566  1.00  0.00
H
ATOM   2384  CA  ASP   146      39.793  23.380   1.387  1.00  0.00
C
ATOM   2385  HA  ASP   146      38.834  23.591   1.862  1.00  0.00
H
ATOM   2386  C   ASP   146      39.516  22.480   0.183  1.00  0.00
C
ATOM   2387  O   ASP   146      38.425  22.519  -0.389  1.00  0.00
O
ATOM   2388  CB  ASP   146      40.406  24.703   0.897  1.00  0.00
C
ATOM   2389 1HB  ASP   146      41.444  24.530   0.612  1.00  0.00
H
ATOM   2390 2HB  ASP   146      39.857  25.034   0.016  1.00  0.00
H
ATOM   2391  CG  ASP   146      40.341  25.817   1.941  1.00  0.00
C
ATOM   2392  OD1 ASP   146      39.425  25.805   2.795  1.00  0.00
O
ATOM   2393  OD2 ASP   146      41.156  26.770   1.890  1.00  0.00
O
ATOM   2394  N   TYR   147      40.465  21.622  -0.166  1.00  0.00
N
ATOM   2395  H   TYR   147      41.333  21.592   0.356  1.00  0.00
H
ATOM   2396  CA  TYR   147      40.314  20.719  -1.309  1.00  0.00
C
ATOM   2397  HA  TYR   147      39.576  21.131  -1.998  1.00  0.00
H
ATOM   2398  C   TYR   147      39.885  19.310  -0.910  1.00  0.00
C
ATOM   2399  O   TYR   147      39.610  18.464  -1.757  1.00  0.00
O
ATOM   2400  CB  TYR   147      41.654  20.597  -2.033  1.00  0.00
C
ATOM   2401 1HB  TYR   147      42.352  20.073  -1.384  1.00  0.00
H
ATOM   2402 2HB  TYR   147      41.513  19.999  -2.934  1.00  0.00
H
ATOM   2403  CG  TYR   147      42.277  21.919  -2.416  1.00  0.00
C
ATOM   2404  CD1 TYR   147      43.382  22.433  -1.701  1.00  0.00
C
ATOM   2405  HD1 TYR   147      43.770  21.894  -0.848  1.00  0.00
H
ATOM   2406  CD2 TYR   147      41.789  22.650  -3.513  1.00  0.00
C
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ATOM   2407  HD2 TYR   147      40.933  22.283  -4.064  1.00  0.00
H
ATOM   2408  CE1 TYR   147      44.003  23.648  -2.098  1.00  0.00
C
ATOM   2409  HE1 TYR   147      44.848  24.035  -1.547  1.00  0.00
H
ATOM   2410  CE2 TYR   147      42.412  23.858  -3.917  1.00  0.00
C
ATOM   2411  HE2 TYR   147      42.035  24.398  -4.770  1.00  0.00
H
ATOM   2412  CZ  TYR   147      43.522  24.337  -3.214  1.00  0.00
C
ATOM   2413  OH  TYR   147      44.152  25.481  -3.636  1.00  0.00
O
ATOM   2414  HH  TYR   147      43.703  25.887  -4.391  1.00  0.00
H
ATOM   2415  N   GLY   148      39.864  19.033   0.385  1.00  0.00
N
ATOM   2416  H   GLY   148      39.999  19.772   1.058  1.00  0.00
H
ATOM   2417  CA  GLY   148      39.744  17.659   0.852  1.00  0.00
C
ATOM   2418 1HA  GLY   148      39.287  17.640   1.837  1.00  0.00
H
ATOM   2419 2HA  GLY   148      39.121  17.084   0.169  1.00  0.00
H
ATOM   2420  C   GLY   148      41.116  17.016   0.928  1.00  0.00
C
ATOM   2421  O   GLY   148      42.117  17.693   0.662  1.00  0.00
O
ATOM   2422  N   ALA   149      41.192  15.746   1.299  1.00  0.00
N
ATOM   2423  H   ALA   149      40.346  15.223   1.495  1.00  0.00
H
ATOM   2424  CA  ALA   149      42.462  15.037   1.412  1.00  0.00
C
ATOM   2425  HA  ALA   149      43.169  15.438   0.684  1.00  0.00
H
ATOM   2426  C   ALA   149      42.252  13.553   1.120  1.00  0.00
C
ATOM   2427  O   ALA   149      41.140  13.040   1.210  1.00  0.00
O
ATOM   2428  CB  ALA   149      43.038  15.216   2.826  1.00  0.00
C
ATOM   2429 1HB  ALA   149      43.160  16.278   3.041  1.00  0.00
H
ATOM   2430 2HB  ALA   149      44.010  14.726   2.900  1.00  0.00
H
ATOM   2431 3HB  ALA   149      42.359  14.779   3.560  1.00  0.00
H
ATOM   2432  N   SER   150      43.350  12.881   0.820  1.00  0.00
N
ATOM   2433  H   SER   150      44.219  13.392   0.728  1.00  0.00
H
ATOM   2434  CA  SER   150      43.453  11.433   0.677  1.00  0.00
C
ATOM   2435  HA  SER   150      42.883  10.912   1.446  1.00  0.00
H
ATOM   2436  C   SER   150      44.951  11.276   0.894  1.00  0.00
C
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ATOM   2437  O   SER   150      45.650  12.295   0.842  1.00  0.00
O
ATOM   2438  CB  SER   150      43.053  10.964  -0.723  1.00  0.00
C
ATOM   2439 1HB  SER   150      43.164   9.881  -0.783  1.00  0.00
H
ATOM   2440 2HB  SER   150      42.010  11.224  -0.906  1.00  0.00
H
ATOM   2441  OG  SER   150      43.868  11.571  -1.711  1.00  0.00
O
ATOM   2442  HG  SER   150      43.648  12.515  -1.762  1.00  0.00
H
ATOM   2443  N   PHE   151      45.466  10.082   1.144  1.00  0.00
N
ATOM   2444  H   PHE   151      44.873   9.258   1.182  1.00  0.00
H
ATOM   2445  CA  PHE   151      46.899   9.933   1.396  1.00  0.00
C
ATOM   2446  HA  PHE   151      47.425  10.823   1.051  1.00  0.00
H
ATOM   2447  C   PHE   151      47.504   8.726   0.701  1.00  0.00
C
ATOM   2448  O   PHE   151      46.803   7.816   0.264  1.00  0.00
O
ATOM   2449  CB  PHE   151      47.187   9.761   2.893  1.00  0.00
C
ATOM   2450 1HB  PHE   151      47.387   8.709   3.084  1.00  0.00
H
ATOM   2451 2HB  PHE   151      48.081  10.330   3.146  1.00  0.00
H
ATOM   2452  CG  PHE   151      46.064  10.174   3.798  1.00  0.00
C
ATOM   2453  CD1 PHE   151      45.164   9.210   4.293  1.00  0.00
C
ATOM   2454  HD1 PHE   151      45.250   8.180   3.978  1.00  0.00
H
ATOM   2455  CD2 PHE   151      45.918  11.512   4.190  1.00  0.00
C
ATOM   2456  HD2 PHE   151      46.586  12.261   3.792  1.00  0.00
H
ATOM   2457  CE1 PHE   151      44.143   9.572   5.200  1.00  0.00
C
ATOM   2458  HE1 PHE   151      43.465   8.821   5.579  1.00  0.00
H
ATOM   2459  CE2 PHE   151      44.903  11.894   5.094  1.00  0.00
C
ATOM   2460  HE2 PHE   151      44.808  12.926   5.397  1.00  0.00
H
ATOM   2461  CZ  PHE   151      44.016  10.918   5.609  1.00  0.00
C
ATOM   2462  HZ  PHE   151      43.247  11.202   6.312  1.00  0.00
H
ATOM   2463  N   THR   152      48.824   8.682   0.743  1.00  0.00
N
ATOM   2464  H   THR   152      49.340   9.556   0.707  1.00  0.00
H
ATOM   2465  CA  THR   152      49.573   7.462   1.023  1.00  0.00
C
ATOM   2466  HA  THR   152      48.899   6.621   1.175  1.00  0.00
H
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ATOM   2467  C   THR   152      50.301   7.815   2.318  1.00  0.00
C
ATOM   2468  O   THR   152      50.965   8.852   2.354  1.00  0.00
O
ATOM   2469  CB  THR   152      50.565   7.151  -0.103  1.00  0.00
C
ATOM   2470  HB  THR   152      51.272   7.972  -0.195  1.00  0.00
H
ATOM   2471  OG1 THR   152      49.853   6.994  -1.333  1.00  0.00
O
ATOM   2472  HG1 THR   152      49.284   7.768  -1.458  1.00  0.00
H
ATOM   2473  CG2 THR   152      51.308   5.871   0.135  1.00  0.00
C
ATOM   2474 1HG2 THR   152      51.908   5.647  -0.745  1.00  0.00
H
ATOM   2475 2HG2 THR   152      50.602   5.058   0.293  1.00  0.00
H
ATOM   2476 3HG2 THR   152      51.961   5.967   1.002  1.00  0.00
H
ATOM   2477  N   HIS   153      50.144   7.046   3.390  1.00  0.00
N
ATOM   2478  H   HIS   153      49.666   6.151   3.307  1.00  0.00
H
ATOM   2479  CA  HIS   153      50.664   7.454   4.703  1.00  0.00
C
ATOM   2480  HA  HIS   153      51.539   8.084   4.543  1.00  0.00
H
ATOM   2481  C   HIS   153      51.095   6.279   5.564  1.00  0.00
C
ATOM   2482  O   HIS   153      50.573   5.181   5.399  1.00  0.00
O
ATOM   2483  CB  HIS   153      49.613   8.266   5.482  1.00  0.00
C
ATOM   2484 1HB  HIS   153      50.112   8.738   6.328  1.00  0.00
H
ATOM   2485 2HB  HIS   153      49.222   9.053   4.840  1.00  0.00
H
ATOM   2486  CG  HIS   153      48.477   7.447   6.025  1.00  0.00
C
ATOM   2487  ND1 HIS   153      47.482   6.870   5.246  1.00  0.00
N
ATOM   2488  HD1 HIS   153      47.406   6.917   4.229  1.00  0.00
H
ATOM   2489  CD2 HIS   153      48.177   7.066   7.293  1.00  0.00
C
ATOM   2490  HD2 HIS   153      48.748   7.324   8.175  1.00  0.00
H
ATOM   2491  CE1 HIS   153      46.651   6.194   6.021  1.00  0.00
C
ATOM   2492  HE1 HIS   153      45.780   5.636   5.682  1.00  0.00
H
ATOM   2493  NE2 HIS   153      47.059   6.283   7.260  1.00  0.00
N
ATOM   2494  HE2 HIS   153      46.631   5.810   8.055  1.00  0.00
H
ATOM   2495  N   SER   154      52.005   6.511   6.497  1.00  0.00
N
ATOM   2496  H   SER   154      52.443   7.424   6.560  1.00  0.00
H
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ATOM   2497  CA  SER   154      52.390   5.480   7.458  1.00  0.00
C
ATOM   2498  HA  SER   154      52.701   4.588   6.916  1.00  0.00
H
ATOM   2499  C   SER   154      51.197   5.157   8.355  1.00  0.00
C
ATOM   2500  O   SER   154      50.478   6.074   8.767  1.00  0.00
O
ATOM   2501  CB  SER   154      53.539   5.984   8.328  1.00  0.00
C
ATOM   2502 1HB  SER   154      53.165   6.764   8.991  1.00  0.00
H
ATOM   2503 2HB  SER   154      53.928   5.162   8.931  1.00  0.00
H
ATOM   2504  OG  SER   154      54.574   6.532   7.528  1.00  0.00
O
ATOM   2505  HG  SER   154      55.355   6.634   8.088  1.00  0.00
H
ATOM   2506  N   GLU   155      50.963   3.888   8.666  1.00  0.00
N
ATOM   2507  H   GLU   155      51.579   3.157   8.318  1.00  0.00
H
ATOM   2508  CA  GLU   155      49.811   3.519   9.492  1.00  0.00
C
ATOM   2509  HA  GLU   155      48.909   3.872   8.994  1.00  0.00
H
ATOM   2510  C   GLU   155      49.915   4.211  10.850  1.00  0.00
C
ATOM   2511  O   GLU   155      51.005   4.347  11.405  1.00  0.00
O
ATOM   2512  CB  GLU   155      49.700   1.997   9.674  1.00  0.00
C
ATOM   2513 1HB  GLU   155      49.772   1.528   8.694  1.00  0.00
H
ATOM   2514 2HB  GLU   155      50.532   1.657  10.289  1.00  0.00
H
ATOM   2515  CG  GLU   155      48.382   1.560  10.331  1.00  0.00
C
ATOM   2516 1HG  GLU   155      48.275   2.080  11.280  1.00  0.00
H
ATOM   2517 2HG  GLU   155      47.555   1.855   9.686  1.00  0.00
H
ATOM   2518  CD  GLU   155      48.274   0.071  10.607  1.00  0.00
C
ATOM   2519  OE1 GLU   155      49.130  -0.727  10.170  1.00  0.00
O
ATOM   2520  OE2 GLU   155      47.296  -0.336  11.277  1.00  0.00
O
ATOM   2521  N   ASN   156      48.774   4.678  11.343  1.00  0.00
N
ATOM   2522  H   ASN   156      47.929   4.521  10.809  1.00  0.00
H
ATOM   2523  CA  ASN   156      48.640   5.398  12.616  1.00  0.00
C
ATOM   2524  HA  ASN   156      47.588   5.644  12.733  1.00  0.00
H
ATOM   2525  C   ASN   156      49.391   6.730  12.657  1.00  0.00
C
ATOM   2526  O   ASN   156      49.671   7.248  13.741  1.00  0.00
O
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ATOM   2527  CB  ASN   156      49.021   4.518  13.817  1.00  0.00
C
ATOM   2528 1HB  ASN   156      50.080   4.275  13.769  1.00  0.00
H
ATOM   2529 2HB  ASN   156      48.838   5.072  14.737  1.00  0.00
H
ATOM   2530  CG  ASN   156      48.232   3.241  13.879  1.00  0.00
C
ATOM   2531  OD1 ASN   156      47.049   3.202  13.550  1.00  0.00
O
ATOM   2532  ND2 ASN   156      48.863   2.190  14.312  1.00  0.00
N
ATOM   2533 1HD2 ASN   156      48.371   1.313  14.400  1.00  0.00
H
ATOM   2534 2HD2 ASN   156      49.835   2.258  14.578  1.00  0.00
H
ATOM   2535  N   ARG   157      49.708   7.291  11.493  1.00  0.00
N
ATOM   2536  H   ARG   157      49.595   6.752  10.642  1.00  0.00
H
ATOM   2537  CA  ARG   157      50.237   8.657  11.389  1.00  0.00
C
ATOM   2538  HA  ARG   157      50.027   9.167  12.329  1.00  0.00
H
ATOM   2539  C   ARG   157      49.601   9.495  10.277  1.00  0.00
C
ATOM   2540  O   ARG   157      50.320  10.067   9.459  1.00  0.00
O
ATOM   2541  CB  ARG   157      51.763   8.656  11.208  1.00  0.00
C
ATOM   2542 1HB  ARG   157      52.005   8.190  10.253  1.00  0.00
H
ATOM   2543 2HB  ARG   157      52.099   9.692  11.181  1.00  0.00
H
ATOM   2544  CG  ARG   157      52.548   7.948  12.302  1.00  0.00
C
ATOM   2545 1HG  ARG   157      52.191   8.272  13.280  1.00  0.00
H
ATOM   2546 2HG  ARG   157      52.403   6.873  12.203  1.00  0.00
H
ATOM   2547  CD  ARG   157      54.026   8.272  12.187  1.00  0.00
C
ATOM   2548 1HD  ARG   157      54.307   8.192  11.137  1.00  0.00
H
ATOM   2549 2HD  ARG   157      54.204   9.295  12.518  1.00  0.00
H
ATOM   2550  NE  ARG   157      54.870   7.340  12.938  1.00  0.00
N
ATOM   2551  HE  ARG   157      55.260   6.563  12.416  1.00  0.00
H
ATOM   2552  CZ  ARG   157      55.220   7.401  14.213  1.00  0.00
C
ATOM   2553  NH1 ARG   157      54.847   8.330  15.049  1.00  0.00
N
ATOM   2554 1HH1 ARG   157      54.270   9.100  14.737  1.00  0.00
H
ATOM   2555 2HH1 ARG   157      55.134   8.268  16.015  1.00  0.00
H
ATOM   2556  NH2 ARG   157      56.019   6.476  14.653  1.00  0.00
N
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ATOM   2557 1HH2 ARG   157      56.372   5.788  14.004  1.00  0.00
H
ATOM   2558 2HH2 ARG   157      56.310   6.469  15.616  1.00  0.00
H
ATOM   2559  N   SER   158      48.278   9.598  10.242  1.00  0.00
N
ATOM   2560  H   SER   158      47.710   9.045  10.882  1.00  0.00
H
ATOM   2561  CA  SER   158      47.593  10.632   9.451  1.00  0.00
C
ATOM   2562  HA  SER   158      48.331  11.304   9.019  1.00  0.00
H
ATOM   2563  C   SER   158      46.739  11.447  10.409  1.00  0.00
C
ATOM   2564  O   SER   158      46.074  10.894  11.277  1.00  0.00
O
ATOM   2565  CB  SER   158      46.735  10.061   8.317  1.00  0.00
C
ATOM   2566 1HB  SER   158      46.204  10.881   7.832  1.00  0.00
H
ATOM   2567 2HB  SER   158      47.392   9.598   7.583  1.00  0.00
H
ATOM   2568  OG  SER   158      45.797   9.094   8.769  1.00  0.00
O
ATOM   2569  HG  SER   158      45.163   8.950   8.057  1.00  0.00
H
ATOM   2570  N   PHE   159      46.849  12.762  10.320  1.00  0.00
N
ATOM   2571  H   PHE   159      47.421  13.175   9.585  1.00  0.00
H
ATOM   2572  CA  PHE   159      46.286  13.672  11.306  1.00  0.00
C
ATOM   2573  HA  PHE   159      45.423  13.213  11.787  1.00  0.00
H
ATOM   2574  C   PHE   159      45.874  14.975  10.620  1.00  0.00
C
ATOM   2575  O   PHE   159      46.727  15.735  10.185  1.00  0.00
O
ATOM   2576  CB  PHE   159      47.398  13.921  12.337  1.00  0.00
C
ATOM   2577 1HB  PHE   159      47.741  12.956  12.697  1.00  0.00
H
ATOM   2578 2HB  PHE   159      48.241  14.405  11.845  1.00  0.00
H
ATOM   2579  CG  PHE   159      46.987  14.743  13.523  1.00  0.00
C
ATOM   2580  CD1 PHE   159      46.109  14.226  14.486  1.00  0.00
C
ATOM   2581  HD1 PHE   159      45.694  13.238  14.361  1.00  0.00
H
ATOM   2582  CD2 PHE   159      47.519  16.027  13.711  1.00  0.00
C
ATOM   2583  HD2 PHE   159      48.204  16.437  12.984  1.00  0.00
H
ATOM   2584  CE1 PHE   159      45.750  14.991  15.625  1.00  0.00
C
ATOM   2585  HE1 PHE   159      45.037  14.603  16.335  1.00  0.00
H
ATOM   2586  CE2 PHE   159      47.177  16.794  14.850  1.00  0.00
C
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ATOM   2587  HE2 PHE   159      47.577  17.788  14.975  1.00  0.00
H
ATOM   2588  CZ  PHE   159      46.310  16.265  15.819  1.00  0.00
C
ATOM   2589  HZ  PHE   159      46.052  16.845  16.693  1.00  0.00
H
ATOM   2590  N   GLN   160      44.589  15.264  10.494  1.00  0.00
N
ATOM   2591  H   GLN   160      43.881  14.593  10.771  1.00  0.00
H
ATOM   2592  CA  GLN   160      44.138  16.541   9.940  1.00  0.00
C
ATOM   2593  HA  GLN   160      44.993  17.198   9.844  1.00  0.00
H
ATOM   2594  C   GLN   160      43.184  17.202  10.935  1.00  0.00
C
ATOM   2595  O   GLN   160      42.004  17.431  10.686  1.00  0.00
O
ATOM   2596  CB  GLN   160      43.538  16.376   8.540  1.00  0.00
C
ATOM   2597 1HB  GLN   160      44.210  15.775   7.929  1.00  0.00
H
ATOM   2598 2HB  GLN   160      42.589  15.856   8.621  1.00  0.00
H
ATOM   2599  CG  GLN   160      43.313  17.708   7.850  1.00  0.00
C
ATOM   2600 1HG  GLN   160      42.841  18.375   8.553  1.00  0.00
H
ATOM   2601 2HG  GLN   160      44.262  18.145   7.571  1.00  0.00
H
ATOM   2602  CD  GLN   160      42.426  17.628   6.647  1.00  0.00
C
ATOM   2603  OE1 GLN   160      42.593  16.792   5.766  1.00  0.00
O
ATOM   2604  NE2 GLN   160      41.444  18.490   6.602  1.00  0.00
N
ATOM   2605 1HE2 GLN   160      40.805  18.456   5.823  1.00  0.00
H
ATOM   2606 2HE2 GLN   160      41.317  19.148   7.356  1.00  0.00
H
ATOM   2607  N   PHE   161      43.696  17.479  12.118  1.00  0.00
N
ATOM   2608  H   PHE   161      44.676  17.310  12.305  1.00  0.00
H
ATOM   2609  CA  PHE   161      42.881  18.117  13.137  1.00  0.00
C
ATOM   2610  HA  PHE   161      41.885  17.675  13.132  1.00  0.00
H
ATOM   2611  C   PHE   161      42.766  19.602  12.764  1.00  0.00
C
ATOM   2612  O   PHE   161      43.497  20.112  11.895  1.00  0.00
O
ATOM   2613  CB  PHE   161      43.505  17.853  14.509  1.00  0.00
C
ATOM   2614 1HB  PHE   161      42.735  17.484  15.184  1.00  0.00
H
ATOM   2615 2HB  PHE   161      44.245  17.068  14.393  1.00  0.00
H
ATOM   2616  CG  PHE   161      44.152  19.051  15.133  1.00  0.00
C
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ATOM   2617  CD1 PHE   161      43.549  19.690  16.227  1.00  0.00
C
ATOM   2618  HD1 PHE   161      42.633  19.293  16.640  1.00  0.00
H
ATOM   2619  CD2 PHE   161      45.352  19.559  14.622  1.00  0.00
C
ATOM   2620  HD2 PHE   161      45.833  19.069  13.789  1.00  0.00
H
ATOM   2621  CE1 PHE   161      44.120  20.858  16.786  1.00  0.00
C
ATOM   2622  HE1 PHE   161      43.640  21.356  17.616  1.00  0.00
H
ATOM   2623  CE2 PHE   161      45.934  20.709  15.168  1.00  0.00
C
ATOM   2624  HE2 PHE   161      46.852  21.083  14.748  1.00  0.00
H
ATOM   2625  CZ  PHE   161      45.311  21.375  16.247  1.00  0.00
C
ATOM   2626  HZ  PHE   161      45.749  22.269  16.665  1.00  0.00
H
ATOM   2627  N   ARG   162      41.836  20.306  13.391  1.00  0.00
N
ATOM   2628  H   ARG   162      41.304  19.862  14.134  1.00  0.00
H
ATOM   2629  CA  ARG   162      41.614  21.728  13.122  1.00  0.00
C
ATOM   2630  HA  ARG   162      42.402  22.120  12.481  1.00  0.00
H
ATOM   2631  C   ARG   162      41.712  22.410  14.469  1.00  0.00
C
ATOM   2632  O   ARG   162      41.383  21.796  15.479  1.00  0.00
O
ATOM   2633  CB  ARG   162      40.245  21.923  12.449  1.00  0.00
C
ATOM   2634 1HB  ARG   162      40.206  21.253  11.591  1.00  0.00
H
ATOM   2635 2HB  ARG   162      39.466  21.620  13.134  1.00  0.00
H
ATOM   2636  CG  ARG   162      39.908  23.330  11.964  1.00  0.00
C
ATOM   2637 1HG  ARG   162      39.776  24.000  12.811  1.00  0.00
H
ATOM   2638 2HG  ARG   162      40.723  23.689  11.351  1.00  0.00
H
ATOM   2639  CD  ARG   162      38.647  23.306  11.115  1.00  0.00
C
ATOM   2640 1HD  ARG   162      38.593  22.333  10.628  1.00  0.00
H
ATOM   2641 2HD  ARG   162      37.775  23.419  11.762  1.00  0.00
H
ATOM   2642  NE  ARG   162      38.644  24.348  10.073  1.00  0.00
N
ATOM   2643  HE  ARG   162      39.105  25.221  10.289  1.00  0.00
H
ATOM   2644  CZ  ARG   162      38.099  24.246   8.865  1.00  0.00
C
ATOM   2645  NH1 ARG   162      37.516  23.164   8.421  1.00  0.00
N
ATOM   2646 1HH1 ARG   162      37.593  22.300   8.942  1.00  0.00
H
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ATOM   2647 2HH1 ARG   162      37.010  23.179   7.544  1.00  0.00
H
ATOM   2648  NH2 ARG   162      38.165  25.255   8.048  1.00  0.00
N
ATOM   2649 1HH2 ARG   162      38.570  26.135   8.350  1.00  0.00
H
ATOM   2650 2HH2 ARG   162      37.821  25.165   7.104  1.00  0.00
H
ATOM   2651  N   LEU   163      42.133  23.663  14.476  1.00  0.00
N
ATOM   2652  H   LEU   163      42.428  24.101  13.607  1.00  0.00
H
ATOM   2653  CA  LEU   163      42.113  24.497  15.670  1.00  0.00
C
ATOM   2654  HA  LEU   163      41.423  24.100  16.415  1.00  0.00
H
ATOM   2655  C   LEU   163      41.625  25.834  15.159  1.00  0.00
C
ATOM   2656  O   LEU   163      42.193  26.344  14.186  1.00  0.00
O
ATOM   2657  CB  LEU   163      43.515  24.658  16.255  1.00  0.00
C
ATOM   2658 1HB  LEU   163      43.878  23.680  16.556  1.00  0.00
H
ATOM   2659 2HB  LEU   163      44.164  25.033  15.465  1.00  0.00
H
ATOM   2660  CG  LEU   163      43.634  25.611  17.452  1.00  0.00
C
ATOM   2661  HG  LEU   163      43.203  26.572  17.179  1.00  0.00
H
ATOM   2662  CD1 LEU   163      42.922  25.099  18.697  1.00  0.00
C
ATOM   2663 1HD1 LEU   163      43.080  25.793  19.523  1.00  0.00
H
ATOM   2664 2HD1 LEU   163      43.310  24.120  18.979  1.00  0.00
H
ATOM   2665 3HD1 LEU   163      41.851  25.026  18.515  1.00  0.00
H
ATOM   2666  CD2 LEU   163      45.098  25.833  17.752  1.00  0.00
C
ATOM   2667 1HD2 LEU   163      45.191  26.552  18.565  1.00  0.00
H
ATOM   2668 2HD2 LEU   163      45.601  26.237  16.874  1.00  0.00
H
ATOM   2669 3HD2 LEU   163      45.569  24.893  18.046  1.00  0.00
H
ATOM   2670  N   ARG   164      40.581  26.379  15.769  1.00  0.00
N
ATOM   2671  H   ARG   164      40.171  25.906  16.572  1.00  0.00
H
ATOM   2672  CA  ARG   164      39.945  27.602  15.265  1.00  0.00
C
ATOM   2673  HA  ARG   164      38.997  27.741  15.778  1.00  0.00
H
ATOM   2674  C   ARG   164      39.631  27.432  13.772  1.00  0.00
C
ATOM   2675  O   ARG   164      39.095  26.412  13.346  1.00  0.00
O
ATOM   2676  CB  ARG   164      40.816  28.849  15.516  1.00  0.00
C
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ATOM   2677 1HB  ARG   164      41.752  28.740  14.978  1.00  0.00
H
ATOM   2678 2HB  ARG   164      40.288  29.701  15.100  1.00  0.00
H
ATOM   2679  CG  ARG   164      41.158  29.192  16.958  1.00  0.00
C
ATOM   2680 1HG  ARG   164      40.243  29.239  17.535  1.00  0.00
H
ATOM   2681 2HG  ARG   164      41.810  28.426  17.377  1.00  0.00
H
ATOM   2682  CD  ARG   164      41.841  30.550  17.048  1.00  0.00
C
ATOM   2683 1HD  ARG   164      42.144  30.729  18.081  1.00  0.00
H
ATOM   2684 2HD  ARG   164      42.728  30.546  16.413  1.00  0.00
H
ATOM   2685  NE  ARG   164      40.931  31.622  16.613  1.00  0.00
N
ATOM   2686  HE  ARG   164      39.995  31.348  16.340  1.00  0.00
H
ATOM   2687  CZ  ARG   164      41.211  32.912  16.509  1.00  0.00
C
ATOM   2688  NH1 ARG   164      42.362  33.428  16.841  1.00  0.00
N
ATOM   2689 1HH1 ARG   164      43.102  32.823  17.159  1.00  0.00
H
ATOM   2690 2HH1 ARG   164      42.502  34.426  16.789  1.00  0.00
H
ATOM   2691  NH2 ARG   164      40.306  33.691  15.989  1.00  0.00
N
ATOM   2692 1HH2 ARG   164      39.406  33.310  15.744  1.00  0.00
H
ATOM   2693 2HH2 ARG   164      40.518  34.664  15.807  1.00  0.00
H
ATOM   2694  N   ASP   165      39.973  28.426  12.968  1.00  0.00
N
ATOM   2695  H   ASP   165      40.440  29.233  13.357  1.00  0.00
H
ATOM   2696  CA  ASP   165      39.647  28.445  11.547  1.00  0.00
C
ATOM   2697  HA  ASP   165      38.599  28.184  11.425  1.00  0.00
H
ATOM   2698  C   ASP   165      40.488  27.478  10.723  1.00  0.00
C
ATOM   2699  O   ASP   165      40.062  27.019   9.661  1.00  0.00
O
ATOM   2700  CB  ASP   165      39.868  29.860  10.992  1.00  0.00
C
ATOM   2701 1HB  ASP   165      40.930  30.082  11.025  1.00  0.00
H
ATOM   2702 2HB  ASP   165      39.537  29.897   9.954  1.00  0.00
H
ATOM   2703  CG  ASP   165      39.161  30.933  11.800  1.00  0.00
C
ATOM   2704  OD1 ASP   165      38.070  31.407  11.430  1.00  0.00
O
ATOM   2705  OD2 ASP   165      39.740  31.360  12.829  1.00  0.00
O
ATOM   2706  N   LYS   166      41.703  27.195  11.174  1.00  0.00
N
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ATOM   2707  H   LYS   166      41.922  27.343  12.154  1.00  0.00
H
ATOM   2708  CA  LYS   166      42.755  26.697  10.284  1.00  0.00
C
ATOM   2709  HA  LYS   166      42.402  26.767   9.258  1.00  0.00
H
ATOM   2710  C   LYS   166      43.002  25.231  10.594  1.00  0.00
C
ATOM   2711  O   LYS   166      42.894  24.784  11.729  1.00  0.00
O
ATOM   2712  CB  LYS   166      44.018  27.565  10.415  1.00  0.00
C
ATOM   2713 1HB  LYS   166      44.349  27.525  11.450  1.00  0.00
H
ATOM   2714 2HB  LYS   166      44.812  27.159   9.788  1.00  0.00
H
ATOM   2715  CG  LYS   166      43.761  29.035  10.019  1.00  0.00
C
ATOM   2716 1HG  LYS   166      43.786  29.129   8.935  1.00  0.00
H
ATOM   2717 2HG  LYS   166      42.764  29.304  10.343  1.00  0.00
H
ATOM   2718  CD  LYS   166      44.702  30.059  10.649  1.00  0.00
C
ATOM   2719 1HD  LYS   166      44.727  29.895  11.726  1.00  0.00
H
ATOM   2720 2HD  LYS   166      45.708  29.963  10.241  1.00  0.00
H
ATOM   2721  CE  LYS   166      44.139  31.462  10.381  1.00  0.00
C
ATOM   2722 1HE  LYS   166      44.281  31.706   9.326  1.00  0.00
H
ATOM   2723 2HE  LYS   166      43.063  31.432  10.567  1.00  0.00
H
ATOM   2724  NZ  LYS   166      44.704  32.566  11.230  1.00  0.00
N
ATOM   2725 1HZ  LYS   166      44.530  32.384  12.213  1.00  0.00
H
ATOM   2726 2HZ  LYS   166      44.257  33.444  10.993  1.00  0.00
H
ATOM   2727 3HZ  LYS   166      45.701  32.666  11.095  1.00  0.00
H
ATOM   2728  N   CYS   167      43.250  24.469   9.543  1.00  0.00
N
ATOM   2729  H   CYS   167      43.433  24.900   8.653  1.00  0.00
H
ATOM   2730  CA  CYS   167      43.296  23.016   9.619  1.00  0.00
C
ATOM   2731  HA  CYS   167      43.407  22.693  10.655  1.00  0.00
H
ATOM   2732  C   CYS   167      44.534  22.620   8.840  1.00  0.00
C
ATOM   2733  O   CYS   167      44.897  23.290   7.863  1.00  0.00
O
ATOM   2734  CB  CYS   167      42.016  22.424   9.020  1.00  0.00
C
ATOM   2735 1HB  CYS   167      41.162  22.922   9.471  1.00  0.00
H
ATOM   2736 2HB  CYS   167      41.991  22.634   7.959  1.00  0.00
H
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ATOM   2737  SG  CYS   167      41.802  20.663   9.225  1.00  0.00
S
ATOM   2738  HG  CYS   167      42.142  20.582  10.524  1.00  0.00
H
ATOM   2739  N   PHE   168      45.214  21.596   9.322  1.00  0.00
N
ATOM   2740  H   PHE   168      44.806  21.022  10.055  1.00  0.00
H
ATOM   2741  CA  PHE   168      46.590  21.321   8.938  1.00  0.00
C
ATOM   2742  HA  PHE   168      46.914  22.001   8.152  1.00  0.00
H
ATOM   2743  C   PHE   168      46.604  19.883   8.442  1.00  0.00
C
ATOM   2744  O   PHE   168      46.329  18.995   9.227  1.00  0.00
O
ATOM   2745  CB  PHE   168      47.480  21.492  10.187  1.00  0.00
C
ATOM   2746 1HB  PHE   168      47.451  20.572  10.768  1.00  0.00
H
ATOM   2747 2HB  PHE   168      48.512  21.656   9.876  1.00  0.00
H
ATOM   2748  CG  PHE   168      47.031  22.608  11.110  1.00  0.00
C
ATOM   2749  CD1 PHE   168      46.141  22.333  12.169  1.00  0.00
C
ATOM   2750  HD1 PHE   168      45.812  21.317  12.343  1.00  0.00
H
ATOM   2751  CD2 PHE   168      47.473  23.931  10.928  1.00  0.00
C
ATOM   2752  HD2 PHE   168      48.187  24.156  10.155  1.00  0.00
H
ATOM   2753  CE1 PHE   168      45.649  23.370  13.000  1.00  0.00
C
ATOM   2754  HE1 PHE   168      44.955  23.142  13.796  1.00  0.00
H
ATOM   2755  CE2 PHE   168      46.987  24.983  11.752  1.00  0.00
C
ATOM   2756  HE2 PHE   168      47.325  25.997  11.595  1.00  0.00
H
ATOM   2757  CZ  PHE   168      46.066  24.700  12.784  1.00  0.00
C
ATOM   2758  HZ  PHE   168      45.686  25.496  13.410  1.00  0.00
H
ATOM   2759  N   LEU   169      46.852  19.615   7.168  1.00  0.00
N
ATOM   2760  H   LEU   169      47.044  20.354   6.500  1.00  0.00
H
ATOM   2761  CA  LEU   169      46.918  18.226   6.708  1.00  0.00
C
ATOM   2762  HA  LEU   169      46.170  17.605   7.193  1.00  0.00
H
ATOM   2763  C   LEU   169      48.297  17.761   7.119  1.00  0.00
C
ATOM   2764  O   LEU   169      49.273  18.345   6.671  1.00  0.00
O
ATOM   2765  CB  LEU   169      46.796  18.113   5.188  1.00  0.00
C
ATOM   2766 1HB  LEU   169      47.472  18.845   4.772  1.00  0.00
H
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ATOM   2767 2HB  LEU   169      47.197  17.138   4.924  1.00  0.00
H
ATOM   2768  CG  LEU   169      45.460  18.253   4.442  1.00  0.00
C
ATOM   2769  HG  LEU   169      44.814  17.442   4.764  1.00  0.00
H
ATOM   2770  CD1 LEU   169      44.726  19.572   4.673  1.00  0.00
C
ATOM   2771 1HD1 LEU   169      43.811  19.572   4.085  1.00  0.00
H
ATOM   2772 2HD1 LEU   169      45.358  20.403   4.364  1.00  0.00
H
ATOM   2773 3HD1 LEU   169      44.472  19.675   5.725  1.00  0.00
H
ATOM   2774  CD2 LEU   169      45.699  18.104   2.943  1.00  0.00
C
ATOM   2775 1HD2 LEU   169      44.746  18.121   2.413  1.00  0.00
H
ATOM   2776 2HD2 LEU   169      46.189  17.156   2.731  1.00  0.00
H
ATOM   2777 3HD2 LEU   169      46.326  18.917   2.575  1.00  0.00
H
ATOM   2778  N   ILE   170      48.391  16.772   7.990  1.00  0.00
N
ATOM   2779  H   ILE   170      47.557  16.352   8.388  1.00  0.00
H
ATOM   2780  CA  ILE   170      49.678  16.276   8.460  1.00  0.00
C
ATOM   2781  HA  ILE   170      50.482  16.691   7.862  1.00  0.00
H
ATOM   2782  C   ILE   170      49.641  14.766   8.273  1.00  0.00
C
ATOM   2783  O   ILE   170      48.716  14.113   8.741  1.00  0.00
O
ATOM   2784  CB  ILE   170      49.912  16.650   9.963  1.00  0.00
C
ATOM   2785  HB  ILE   170      49.089  16.261  10.554  1.00  0.00
H
ATOM   2786  CG1 ILE   170      49.942  18.183  10.126  1.00  0.00
C
ATOM   2787 1HG1 ILE   170      50.800  18.561   9.581  1.00  0.00
H
ATOM   2788 2HG1 ILE   170      49.047  18.603   9.672  1.00  0.00
H
ATOM   2789  CG2 ILE   170      51.198  16.005  10.487  1.00  0.00
C
ATOM   2790 1HG2 ILE   170      51.361  16.270  11.532  1.00  0.00
H
ATOM   2791 2HG2 ILE   170      52.051  16.326   9.888  1.00  0.00
H
ATOM   2792 3HG2 ILE   170      51.110  14.921  10.436  1.00  0.00
H
ATOM   2793  CD1 ILE   170      50.015  18.716  11.555  1.00  0.00
C
ATOM   2794 1HD1 ILE   170      49.872  19.794  11.542  1.00  0.00
H
ATOM   2795 2HD1 ILE   170      50.987  18.492  11.994  1.00  0.00
H
ATOM   2796 3HD1 ILE   170      49.226  18.268  12.159  1.00  0.00
H
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ATOM   2797  N   TRP   171      50.631  14.182   7.617  1.00  0.00
N
ATOM   2798  H   TRP   171      51.321  14.740   7.122  1.00  0.00
H
ATOM   2799  CA  TRP   171      50.806  12.733   7.683  1.00  0.00
C
ATOM   2800  HA  TRP   171      50.534  12.407   8.686  1.00  0.00
H
ATOM   2801  C   TRP   171      52.265  12.386   7.466  1.00  0.00
C
ATOM   2802  O   TRP   171      53.014  13.188   6.915  1.00  0.00
O
ATOM   2803  CB  TRP   171      49.922  11.978   6.683  1.00  0.00
C
ATOM   2804 1HB  TRP   171      50.075  10.912   6.836  1.00  0.00
H
ATOM   2805 2HB  TRP   171      48.879  12.198   6.903  1.00  0.00
H
ATOM   2806  CG  TRP   171      50.162  12.282   5.245  1.00  0.00
C
ATOM   2807  CD1 TRP   171      51.053  11.683   4.416  1.00  0.00
C
ATOM   2808  HD1 TRP   171      51.755  10.920   4.731  1.00  0.00
H
ATOM   2809  CD2 TRP   171      49.419  13.193   4.417  1.00  0.00
C
ATOM   2810  NE1 TRP   171      50.942  12.152   3.136  1.00  0.00
N
ATOM   2811  HE1 TRP   171      51.518  11.844   2.358  1.00  0.00
H
ATOM   2812  CE2 TRP   171      49.928  13.068   3.092  1.00  0.00
C
ATOM   2813  CE3 TRP   171      48.333  14.062   4.648  1.00  0.00
C
ATOM   2814  HE3 TRP   171      47.926  14.174   5.642  1.00  0.00
H
ATOM   2815  CZ2 TRP   171      49.387  13.784   2.006  1.00  0.00
C
ATOM   2816  HZ2 TRP   171      49.794  13.673   1.012  1.00  0.00
H
ATOM   2817  CZ3 TRP   171      47.766  14.759   3.552  1.00  0.00
C
ATOM   2818  HZ3 TRP   171      46.907  15.391   3.710  1.00  0.00
H
ATOM   2819  CH2 TRP   171      48.311  14.621   2.243  1.00  0.00
C
ATOM   2820  HH2 TRP   171      47.871  15.170   1.422  1.00  0.00
H
ATOM   2821  N   CYS   172      52.672  11.210   7.914  1.00  0.00
N
ATOM   2822  H   CYS   172      52.008  10.598   8.375  1.00  0.00
H
ATOM   2823  CA  CYS   172      54.043  10.751   7.713  1.00  0.00
C
ATOM   2824  HA  CYS   172      54.704  11.601   7.552  1.00  0.00
H
ATOM   2825  C   CYS   172      54.029   9.869   6.474  1.00  0.00
C
ATOM   2826  O   CYS   172      52.993   9.270   6.170  1.00  0.00
O
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ATOM   2827  CB  CYS   172      54.530   9.968   8.926  1.00  0.00
C
ATOM   2828 1HB  CYS   172      54.199  10.481   9.828  1.00  0.00
H
ATOM   2829 2HB  CYS   172      54.087   8.973   8.903  1.00  0.00
H
ATOM   2830  SG  CYS   172      56.326   9.829   8.983  1.00  0.00
S
ATOM   2831  HG  CYS   172      56.382   8.599   9.519  1.00  0.00
H
ATOM   2832  N   THR   173      55.140   9.786   5.758  1.00  0.00
N
ATOM   2833  H   THR   173      55.983  10.258   6.080  1.00  0.00
H
ATOM   2834  CA  THR   173      55.197   9.053   4.495  1.00  0.00
C
ATOM   2835  HA  THR   173      54.252   8.537   4.347  1.00  0.00
H
ATOM   2836  C   THR   173      56.323   8.023   4.489  1.00  0.00
C
ATOM   2837  O   THR   173      57.305   8.180   5.220  1.00  0.00
O
ATOM   2838  CB  THR   173      55.415  10.023   3.303  1.00  0.00
C
ATOM   2839  HB  THR   173      55.423   9.455   2.373  1.00  0.00
H
ATOM   2840  OG1 THR   173      56.656  10.719   3.442  1.00  0.00
O
ATOM   2841  HG1 THR   173      56.745  11.007   4.360  1.00  0.00
H
ATOM   2842  CG2 THR   173      54.334  11.067   3.234  1.00  0.00
C
ATOM   2843 1HG2 THR   173      54.435  11.619   2.302  1.00  0.00
H
ATOM   2844 2HG2 THR   173      54.415  11.763   4.070  1.00  0.00
H
ATOM   2845 3HG2 THR   173      53.359  10.584   3.250  1.00  0.00
H
ATOM   2846  N   PRO   174      56.197   6.955   3.677  1.00  0.00
N
ATOM   2847  CA  PRO   174      57.328   6.024   3.565  1.00  0.00
C
ATOM   2848  HA  PRO   174      57.522   5.552   4.522  1.00  0.00
H
ATOM   2849  C   PRO   174      58.609   6.661   3.040  1.00  0.00
C
ATOM   2850  O   PRO   174      58.582   7.624   2.266  1.00  0.00
O
ATOM   2851  CB  PRO   174      56.822   4.981   2.569  1.00  0.00
C
ATOM   2852 1HB  PRO   174      57.135   5.245   1.560  1.00  0.00
H
ATOM   2853 2HB  PRO   174      57.184   3.990   2.836  1.00  0.00
H
ATOM   2854  CG  PRO   174      55.364   5.047   2.686  1.00  0.00
C
ATOM   2855 1HG  PRO   174      54.879   4.634   1.805  1.00  0.00
H
ATOM   2856 2HG  PRO   174      55.047   4.516   3.582  1.00  0.00
H
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ATOM   2857  CD  PRO   174      55.075   6.504   2.831  1.00  0.00
C
ATOM   2858 1HD  PRO   174      55.099   7.005   1.862  1.00  0.00
H
ATOM   2859 2HD  PRO   174      54.115   6.651   3.326  1.00  0.00
H
ATOM   2860  N   GLY   175      59.735   6.094   3.441  1.00  0.00
N
ATOM   2861  H   GLY   175      59.715   5.274   4.035  1.00  0.00
H
ATOM   2862  CA  GLY   175      61.042   6.607   3.080  1.00  0.00
C
ATOM   2863 1HA  GLY   175      61.202   6.528   2.005  1.00  0.00
H
ATOM   2864 2HA  GLY   175      61.144   7.640   3.403  1.00  0.00
H
ATOM   2865  C   GLY   175      62.030   5.738   3.820  1.00  0.00
C
ATOM   2866  O   GLY   175      61.607   4.736   4.410  1.00  0.00
O
ATOM   2867  N   GLN   176      63.305   6.095   3.818  1.00  0.00
N
ATOM   2868  H   GLN   176      63.584   6.943   3.326  1.00  0.00
H
ATOM   2869  CA  GLN   176      64.331   5.330   4.521  1.00  0.00
C
ATOM   2870  HA  GLN   176      64.383   4.324   4.107  1.00  0.00
H
ATOM   2871  C   GLN   176      63.975   5.233   5.997  1.00  0.00
C
ATOM   2872  O   GLN   176      63.590   6.232   6.609  1.00  0.00
O
ATOM   2873  CB  GLN   176      65.693   6.013   4.384  1.00  0.00
C
ATOM   2874 1HB  GLN   176      65.591   7.047   4.712  1.00  0.00
H
ATOM   2875 2HB  GLN   176      66.403   5.515   5.042  1.00  0.00
H
ATOM   2876  CG  GLN   176      66.272   6.001   2.982  1.00  0.00
C
ATOM   2877 1HG  GLN   176      66.510   4.975   2.706  1.00  0.00
H
ATOM   2878 2HG  GLN   176      65.542   6.390   2.275  1.00  0.00
H
ATOM   2879  CD  GLN   176      67.519   6.849   2.889  1.00  0.00
C
ATOM   2880  OE1 GLN   176      67.458   8.076   2.927  1.00  0.00
O
ATOM   2881  NE2 GLN   176      68.650   6.221   2.754  1.00  0.00
N
ATOM   2882 1HE2 GLN   176      69.497   6.764   2.682  1.00  0.00
H
ATOM   2883 2HE2 GLN   176      68.667   5.210   2.708  1.00  0.00
H
ATOM   2884  N   TYR   177      64.084   4.025   6.533  1.00  0.00
N
ATOM   2885  H   TYR   177      64.386   3.265   5.935  1.00  0.00
H
ATOM   2886  CA  TYR   177      63.808   3.702   7.937  1.00  0.00
C
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ATOM   2887  HA  TYR   177      63.840   2.615   8.018  1.00  0.00
H
ATOM   2888  C   TYR   177      62.432   4.124   8.445  1.00  0.00
C
ATOM   2889  O   TYR   177      62.246   4.358   9.641  1.00  0.00
O
ATOM   2890  CB  TYR   177      64.927   4.235   8.839  1.00  0.00
C
ATOM   2891 1HB  TYR   177      64.992   5.317   8.745  1.00  0.00
H
ATOM   2892 2HB  TYR   177      64.706   3.983   9.876  1.00  0.00
H
ATOM   2893  CG  TYR   177      66.253   3.613   8.483  1.00  0.00
C
ATOM   2894  CD1 TYR   177      67.134   4.242   7.581  1.00  0.00
C
ATOM   2895  HD1 TYR   177      66.891   5.219   7.187  1.00  0.00
H
ATOM   2896  CD2 TYR   177      66.614   2.361   9.015  1.00  0.00
C
ATOM   2897  HD2 TYR   177      65.958   1.865   9.720  1.00  0.00
H
ATOM   2898  CE1 TYR   177      68.330   3.600   7.173  1.00  0.00
C
ATOM   2899  HE1 TYR   177      68.981   4.076   6.456  1.00  0.00
H
ATOM   2900  CE2 TYR   177      67.821   1.734   8.634  1.00  0.00
C
ATOM   2901  HE2 TYR   177      68.083   0.776   9.051  1.00  0.00
H
ATOM   2902  CZ  TYR   177      68.666   2.353   7.713  1.00  0.00
C
ATOM   2903  OH  TYR   177      69.836   1.736   7.355  1.00  0.00
O
ATOM   2904  HH  TYR   177      70.386   2.298   6.789  1.00  0.00
H
ATOM   2905  N   GLN   178      61.451   4.212   7.559  1.00  0.00
N
ATOM   2906  H   GLN   178      61.645   4.083   6.573  1.00  0.00
H
ATOM   2907  CA  GLN   178      60.072   4.399   7.989  1.00  0.00
C
ATOM   2908  HA  GLN   178      60.051   4.964   8.921  1.00  0.00
H
ATOM   2909  C   GLN   178      59.513   3.002   8.228  1.00  0.00
C
ATOM   2910  O   GLN   178      59.607   2.126   7.363  1.00  0.00
O
ATOM   2911  CB  GLN   178      59.254   5.139   6.928  1.00  0.00
C
ATOM   2912 1HB  GLN   178      59.799   6.031   6.623  1.00  0.00
H
ATOM   2913 2HB  GLN   178      59.163   4.493   6.055  1.00  0.00
H
ATOM   2914  CG  GLN   178      57.843   5.546   7.378  1.00  0.00
C
ATOM   2915 1HG  GLN   178      57.308   5.949   6.525  1.00  0.00
H
ATOM   2916 2HG  GLN   178      57.310   4.657   7.714  1.00  0.00
H
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ATOM   2917  CD  GLN   178      57.791   6.585   8.487  1.00  0.00
C
ATOM   2918  OE1 GLN   178      56.858   6.582   9.282  1.00  0.00
O
ATOM   2919  NE2 GLN   178      58.748   7.471   8.557  1.00  0.00
N
ATOM   2920 1HE2 GLN   178      58.728   8.141   9.313  1.00  0.00
H
ATOM   2921 2HE2 GLN   178      59.486   7.495   7.866  1.00  0.00
H
ATOM   2922  N   LEU   179      58.958   2.791   9.408  1.00  0.00
N
ATOM   2923  H   LEU   179      58.941   3.539  10.096  1.00  0.00
H
ATOM   2924  CA  LEU   179      58.326   1.537   9.800  1.00  0.00
C
ATOM   2925  HA  LEU   179      57.775   1.094   8.971  1.00  0.00
H
ATOM   2926  C   LEU   179      57.365   2.009  10.876  1.00  0.00
C
ATOM   2927  O   LEU   179      57.505   3.140  11.336  1.00  0.00
O
ATOM   2928  CB  LEU   179      59.349   0.538  10.361  1.00  0.00
C
ATOM   2929 1HB  LEU   179      58.812  -0.358  10.668  1.00  0.00
H
ATOM   2930 2HB  LEU   179      60.013   0.250   9.546  1.00  0.00
H
ATOM   2931  CG  LEU   179      60.222   1.004  11.539  1.00  0.00
C
ATOM   2932  HG  LEU   179      59.909   1.999  11.846  1.00  0.00
H
ATOM   2933  CD1 LEU   179      60.078   0.081  12.738  1.00  0.00
C
ATOM   2934 1HD1 LEU   179      60.712   0.434  13.552  1.00  0.00
H
ATOM   2935 2HD1 LEU   179      60.371  -0.935  12.471  1.00  0.00
H
ATOM   2936 3HD1 LEU   179      59.043   0.083  13.080  1.00  0.00
H
ATOM   2937  CD2 LEU   179      61.681   1.080  11.112  1.00  0.00
C
ATOM   2938 1HD2 LEU   179      62.288   1.447  11.940  1.00  0.00
H
ATOM   2939 2HD2 LEU   179      61.787   1.765  10.273  1.00  0.00
H
ATOM   2940 3HD2 LEU   179      62.042   0.094  10.820  1.00  0.00
H
ATOM   2941  N   CYS   180      56.401   1.198  11.270  1.00  0.00
N
ATOM   2942  H   CYS   180      56.315   0.275  10.856  1.00  0.00
H
ATOM   2943  CA  CYS   180      55.472   1.586  12.324  1.00  0.00
C
ATOM   2944  HA  CYS   180      55.397   2.671  12.366  1.00  0.00
H
ATOM   2945  C   CYS   180      56.012   1.101  13.661  1.00  0.00
C
ATOM   2946  O   CYS   180      55.889  -0.106  13.953  1.00  0.00
O
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ATOM   2947  OXT CYS   180      56.570   1.922  14.413  1.00  0.00
O
ATOM   2948  CB  CYS   180      54.097   0.998  12.016  1.00  0.00
C
ATOM   2949 1HB  CYS   180      54.168  -0.090  12.046  1.00  0.00
H
ATOM   2950 2HB  CYS   180      53.393   1.318  12.783  1.00  0.00
H
ATOM   2951  SG  CYS   180      53.486   1.493  10.390  1.00  0.00
S
ATOM   2952  HG  CYS   180      52.464   0.626  10.344  1.00  0.00
H
TER    2953      CYS   180
END
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REMARK YASARA
REMARK YASARA Written on:        Tue Nov 29 18:02:55 2016
REMARK YASARA Number of models: 1
REMARK YASARA Number of atoms:   3054
REMARK YASARA Please address questions or suggestions to:
Eliza@yasara.org
REMARK YASARA
SEQRES   1    186  MET GLU LYS LEU ILE GLU LEU PHE PHE GLU LEU ASP LYS
SEQRES   2    186  ASP ASN ASN GLU ILE VAL ASP LYS GLN GLU LEU ILE ASN
SEQRES   3    186  TYR CYS GLN ALA ASN LYS LEU ASP MET GLU MET VAL ASN
SEQRES   4    186  ARG TRP LEU SER ARG CYS ASP THR ASP LYS ASN ASN LYS
SEQRES   5    186  ILE THR PHE ASP GLU PHE CYS ARG GLY PHE GLY ILE LYS
SEQRES   6    186  LEU ASN GLU MET ARG VAL GLU LYS VAL GLU ARG ALA LEU
SEQRES   7    186  ILE TRP ASP ASN VAL THR PRO VAL LYS PRO ALA ASN VAL
SEQRES   8    186  SER ILE ILE LYS SER ALA MET SER GLU THR LYS GLN ALA
SEQRES   9    186  LYS VAL ILE GLU LYS PHE GLN LYS LEU ILE GLN GLN TYR
SEQRES  10    186  GLY ALA ASP GLY LYS ASN LEU ASP LYS VAL SER SER GLU
SEQRES  11    186  LEU LYS LYS PHE LEU GLU GLU THR TYR ASP ASN VAL TRP
SEQRES  12    186  HIS VAL ILE ILE MET THR GLY SER PHE TRP MET SER TYR
SEQRES  13    186  SER HIS GLU PRO PHE CYS SER LEU GLN PHE LYS MET ASP
SEQRES  14    186  ASN TYR SER CYS SER VAL TRP ARG THR PRO SER GLY GLN
SEQRES  15    186  ARG TYR ASN SER
LINK         CA    CA A 100                OE1 GLU    57
2.72
LINK         CA    CA A 100                OD1 ASP    46
2.06
LINK         CA    CA A 100                OD2 ASP    46
2.49
HETATM    1 CA    CA A 100       3.233  -7.346   0.718  1.00  0.00
CA
ATOM      2  N   MET     1       7.882   3.564 -14.119  1.00  0.00
N
ATOM      3 1H   MET     1       7.210   3.046 -14.671  1.00  0.00
H
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ATOM      4 2H   MET     1       8.655   3.833 -14.712  1.00  0.00
H
ATOM      5 3H   MET     1       7.435   4.395 -13.757  1.00  0.00
H
ATOM      6  CA  MET     1       8.369   2.718 -12.997  1.00  0.00
C
ATOM      7  HA  MET     1       7.511   2.424 -12.393  1.00  0.00
H
ATOM      8  C   MET     1       9.332   3.492 -12.107  1.00  0.00
C
ATOM      9  O   MET     1       9.195   3.460 -10.893  1.00  0.00
O
ATOM     10  CB  MET     1       9.062   1.454 -13.521  1.00  0.00
C
ATOM     11 1HB  MET     1       9.943   1.752 -14.087  1.00  0.00
H
ATOM     12 2HB  MET     1       9.390   0.855 -12.671  1.00  0.00
H
ATOM     13  CG  MET     1       8.175   0.596 -14.420  1.00  0.00
C
ATOM     14 1HG  MET     1       7.815   1.209 -15.246  1.00  0.00
H
ATOM     15 2HG  MET     1       8.762  -0.224 -14.835  1.00  0.00
H
ATOM     16  SD  MET     1       6.753  -0.090 -13.546  1.00  0.00
S
ATOM     17  CE  MET     1       7.441  -1.587 -12.810  1.00  0.00
C
ATOM     18 1HE  MET     1       6.670  -2.091 -12.224  1.00  0.00
H
ATOM     19 2HE  MET     1       8.280  -1.334 -12.161  1.00  0.00
H
ATOM     20 3HE  MET     1       7.783  -2.259 -13.597  1.00  0.00
H
ATOM     21  N   GLU     2      10.317   4.185 -12.661  1.00  0.00
N
ATOM     22  H   GLU     2      10.396   4.268 -13.676  1.00  0.00
H
ATOM     23  CA  GLU     2      11.363   4.818 -11.851  1.00  0.00
C
ATOM     24  HA  GLU     2      11.852   4.049 -11.258  1.00  0.00
H
ATOM     25  C   GLU     2      10.860   5.881 -10.872  1.00  0.00
C
ATOM     26  O   GLU     2      11.296   5.939  -9.723  1.00  0.00
O
ATOM     27  CB  GLU     2      12.401   5.439 -12.783  1.00  0.00
C
ATOM     28 1HB  GLU     2      11.880   6.087 -13.486  1.00  0.00
H
ATOM     29 2HB  GLU     2      13.086   6.042 -12.190  1.00  0.00
H
ATOM     30  CG  GLU     2      13.212   4.412 -13.562  1.00  0.00
C
ATOM     31 1HG  GLU     2      13.725   3.766 -12.850  1.00  0.00
H
ATOM     32 2HG  GLU     2      12.538   3.799 -14.160  1.00  0.00
H
ATOM     33  CD  GLU     2      14.239   5.049 -14.487  1.00  0.00
C
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ATOM     34  OE1 GLU     2      14.202   6.282 -14.716  1.00  0.00
O
ATOM     35  OE2 GLU     2      15.095   4.315 -15.031  1.00  0.00
O
ATOM     36  N   LYS     3       9.874   6.671 -11.267  1.00  0.00
N
ATOM     37  H   LYS     3       9.514   6.593 -12.218  1.00  0.00
H
ATOM     38  CA  LYS     3       9.267   7.655 -10.364  1.00  0.00
C
ATOM     39  HA  LYS     3      10.008   7.959  -9.625  1.00  0.00
H
ATOM     40  C   LYS     3       8.111   7.043  -9.580  1.00  0.00
C
ATOM     41  O   LYS     3       7.181   7.734  -9.190  1.00  0.00
O
ATOM     42  CB  LYS     3       8.827   8.906 -11.137  1.00  0.00
C
ATOM     43 1HB  LYS     3       8.115   8.605 -11.904  1.00  0.00
H
ATOM     44 2HB  LYS     3       8.323   9.589 -10.452  1.00  0.00
H
ATOM     45  CG  LYS     3       9.970   9.679 -11.806  1.00  0.00
C
ATOM     46 1HG  LYS     3      10.521   9.017 -12.471  1.00  0.00
H
ATOM     47 2HG  LYS     3       9.539  10.485 -12.399  1.00  0.00
H
ATOM     48  CD  LYS     3      10.937  10.288 -10.790  1.00  0.00
C
ATOM     49 1HD  LYS     3      10.371  10.884 -10.074  1.00  0.00
H
ATOM     50 2HD  LYS     3      11.459   9.494 -10.256  1.00  0.00
H
ATOM     51  CE  LYS     3      11.964  11.177 -11.467  1.00  0.00
C
ATOM     52 1HE  LYS     3      12.545  10.583 -12.175  1.00  0.00
H
ATOM     53 2HE  LYS     3      11.451  11.974 -12.010  1.00  0.00
H
ATOM     54  NZ  LYS     3      12.881  11.779 -10.451  1.00  0.00
N
ATOM     55 1HZ  LYS     3      13.623  12.289 -10.913  1.00  0.00
H
ATOM     56 2HZ  LYS     3      13.290  11.055  -9.872  1.00  0.00
H
ATOM     57 3HZ  LYS     3      12.365  12.414  -9.853  1.00  0.00
H
ATOM     58  N   LEU     4       8.191   5.739  -9.349  1.00  0.00
N
ATOM     59  H   LEU     4       8.791   5.177  -9.936  1.00  0.00
H
ATOM     60  CA  LEU     4       7.492   5.079  -8.245  1.00  0.00
C
ATOM     61  HA  LEU     4       6.832   5.793  -7.758  1.00  0.00
H
ATOM     62  C   LEU     4       8.521   4.581  -7.223  1.00  0.00
C
ATOM     63  O   LEU     4       8.279   4.588  -6.022  1.00  0.00
O
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ATOM     64  CB  LEU     4       6.642   3.907  -8.752  1.00  0.00
C
ATOM     65 1HB  LEU     4       7.313   3.135  -9.125  1.00  0.00
H
ATOM     66 2HB  LEU     4       6.104   3.491  -7.900  1.00  0.00
H
ATOM     67  CG  LEU     4       5.622   4.220  -9.860  1.00  0.00
C
ATOM     68  HG  LEU     4       6.157   4.601 -10.729  1.00  0.00
H
ATOM     69  CD1 LEU     4       4.906   2.947 -10.273  1.00  0.00
C
ATOM     70 1HD1 LEU     4       4.213   3.162 -11.086  1.00  0.00
H
ATOM     71 2HD1 LEU     4       4.349   2.536  -9.427  1.00  0.00
H
ATOM     72 3HD1 LEU     4       5.628   2.209 -10.620  1.00  0.00
H
ATOM     73  CD2 LEU     4       4.585   5.255  -9.451  1.00  0.00
C
ATOM     74 1HD2 LEU     4       3.878   5.407 -10.265  1.00  0.00
H
ATOM     75 2HD2 LEU     4       5.067   6.208  -9.239  1.00  0.00
H
ATOM     76 3HD2 LEU     4       4.056   4.915  -8.563  1.00  0.00
H
ATOM     77  N   ILE     5       9.700   4.204  -7.701  1.00  0.00
N
ATOM     78  H   ILE     5       9.875   4.268  -8.693  1.00  0.00
H
ATOM     79  CA  ILE     5      10.773   3.667  -6.854  1.00  0.00
C
ATOM     80  HA  ILE     5      10.396   2.798  -6.313  1.00  0.00
H
ATOM     81  C   ILE     5      11.237   4.687  -5.815  1.00  0.00
C
ATOM     82  O   ILE     5      11.420   4.370  -4.640  1.00  0.00
O
ATOM     83  CB  ILE     5      11.991   3.232  -7.738  1.00  0.00
C
ATOM     84  HB  ILE     5      12.274   4.075  -8.364  1.00  0.00
H
ATOM     85  CG1 ILE     5      11.571   2.073  -8.667  1.00  0.00
C
ATOM     86 1HG1 ILE     5      11.339   1.206  -8.053  1.00  0.00
H
ATOM     87 2HG1 ILE     5      10.661   2.352  -9.188  1.00  0.00
H
ATOM     88  CG2 ILE     5      13.217   2.892  -6.871  1.00  0.00
C
ATOM     89 1HG2 ILE     5      13.992   2.402  -7.457  1.00  0.00
H
ATOM     90 2HG2 ILE     5      12.931   2.261  -6.030  1.00  0.00
H
ATOM     91 3HG2 ILE     5      13.646   3.815  -6.474  1.00  0.00
H
ATOM     92  CD1 ILE     5      12.604   1.657  -9.734  1.00  0.00
C
ATOM     93 1HD1 ILE     5      12.136   0.975 -10.445  1.00  0.00
H
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ATOM     94 2HD1 ILE     5      13.445   1.148  -9.264  1.00  0.00
H
ATOM     95 3HD1 ILE     5      12.971   2.533 -10.267  1.00  0.00
H
ATOM     96  N   GLU     6      11.375   5.939  -6.222  1.00  0.00
N
ATOM     97  H   GLU     6      11.183   6.174  -7.186  1.00  0.00
H
ATOM     98  CA  GLU     6      11.868   6.971  -5.309  1.00  0.00
C
ATOM     99  HA  GLU     6      12.826   6.657  -4.892  1.00  0.00
H
ATOM    100  C   GLU     6      10.898   7.211  -4.158  1.00  0.00
C
ATOM    101  O   GLU     6      11.281   7.545  -3.034  1.00  0.00
O
ATOM    102  CB  GLU     6      12.050   8.285  -6.070  1.00  0.00
C
ATOM    103 1HB  GLU     6      11.094   8.564  -6.514  1.00  0.00
H
ATOM    104 2HB  GLU     6      12.349   9.057  -5.364  1.00  0.00
H
ATOM    105  CG  GLU     6      13.089   8.195  -7.166  1.00  0.00
C
ATOM    106 1HG  GLU     6      14.029   7.865  -6.725  1.00  0.00
H
ATOM    107 2HG  GLU     6      12.768   7.456  -7.898  1.00  0.00
H
ATOM    108  CD  GLU     6      13.320   9.511  -7.886  1.00  0.00
C
ATOM    109  OE1 GLU     6      12.566  10.490  -7.694  1.00  0.00
O
ATOM    110  OE2 GLU     6      14.260   9.567  -8.711  1.00  0.00
O
ATOM    111  N   LEU     7       9.621   7.033  -4.450  1.00  0.00
N
ATOM    112  H   LEU     7       9.369   6.702  -5.370  1.00  0.00
H
ATOM    113  CA  LEU     7       8.562   7.320  -3.492  1.00  0.00
C
ATOM    114  HA  LEU     7       8.839   8.193  -2.900  1.00  0.00
H
ATOM    115  C   LEU     7       8.419   6.120  -2.569  1.00  0.00
C
ATOM    116  O   LEU     7       8.156   6.266  -1.385  1.00  0.00
O
ATOM    117  CB  LEU     7       7.234   7.601  -4.202  1.00  0.00
C
ATOM    118 1HB  LEU     7       6.624   6.708  -4.085  1.00  0.00
H
ATOM    119 2HB  LEU     7       6.731   8.400  -3.657  1.00  0.00
H
ATOM    120  CG  LEU     7       7.223   7.950  -5.701  1.00  0.00
C
ATOM    121  HG  LEU     7       7.718   7.143  -6.231  1.00  0.00
H
ATOM    122  CD1 LEU     7       5.773   7.956  -6.141  1.00  0.00
C
ATOM    123 1HD1 LEU     7       5.711   8.215  -7.200  1.00  0.00
H
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ATOM    124 2HD1 LEU     7       5.213   8.689  -5.572  1.00  0.00
H
ATOM    125 3HD1 LEU     7       5.346   6.963  -6.002  1.00  0.00
H
ATOM    126  CD2 LEU     7       7.904   9.247  -6.141  1.00  0.00
C
ATOM    127 1HD2 LEU     7       8.881   9.349  -5.669  1.00  0.00
H
ATOM    128 2HD2 LEU     7       7.298  10.107  -5.883  1.00  0.00
H
ATOM    129 3HD2 LEU     7       8.034   9.239  -7.222  1.00  0.00
H
ATOM    130  N   PHE     8       8.679   4.931  -3.092  1.00  0.00
N
ATOM    131  H   PHE     8       8.857   4.839  -4.087  1.00  0.00
H
ATOM    132  CA  PHE     8       8.708   3.734  -2.258  1.00  0.00
C
ATOM    133  HA  PHE     8       7.748   3.625  -1.753  1.00  0.00
H
ATOM    134  C   PHE     8       9.795   3.863  -1.201  1.00  0.00
C
ATOM    135  O   PHE     8       9.572   3.580  -0.024  1.00  0.00
O
ATOM    136  CB  PHE     8       8.984   2.494  -3.109  1.00  0.00
C
ATOM    137 1HB  PHE     8       8.199   2.402  -3.854  1.00  0.00
H
ATOM    138 2HB  PHE     8       9.932   2.615  -3.627  1.00  0.00
H
ATOM    139  CG  PHE     8       9.044   1.230  -2.310  1.00  0.00
C
ATOM    140  CD1 PHE     8       7.889   0.737  -1.687  1.00  0.00
C
ATOM    141  HD1 PHE     8       6.960   1.277  -1.775  1.00  0.00
H
ATOM    142  CD2 PHE     8      10.258   0.538  -2.152  1.00  0.00
C
ATOM    143  HD2 PHE     8      11.161   0.913  -2.616  1.00  0.00
H
ATOM    144  CE1 PHE     8       7.922  -0.450  -0.938  1.00  0.00
C
ATOM    145  HE1 PHE     8       7.017  -0.830  -0.489  1.00  0.00
H
ATOM    146  CE2 PHE     8      10.310  -0.648  -1.383  1.00  0.00
C
ATOM    147  HE2 PHE     8      11.242  -1.184  -1.270  1.00  0.00
H
ATOM    148  CZ  PHE     8       9.133  -1.132  -0.766  1.00  0.00
C
ATOM    149  HZ  PHE     8       9.159  -2.033  -0.175  1.00  0.00
H
ATOM    150  N   PHE     9      10.966   4.332  -1.608  1.00  0.00
N
ATOM    151  H   PHE     9      11.119   4.534  -2.593  1.00  0.00
H
ATOM    152  CA  PHE     9      12.063   4.521  -0.665  1.00  0.00
C
ATOM    153  HA  PHE     9      12.195   3.603  -0.092  1.00  0.00
H
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ATOM    154  C   PHE     9      11.780   5.636   0.343  1.00  0.00
C
ATOM    155  O   PHE     9      12.258   5.584   1.476  1.00  0.00
O
ATOM    156  CB  PHE     9      13.360   4.832  -1.420  1.00  0.00
C
ATOM    157 1HB  PHE     9      13.203   5.710  -2.046  1.00  0.00
H
ATOM    158 2HB  PHE     9      14.130   5.071  -0.688  1.00  0.00
H
ATOM    159  CG  PHE     9      13.880   3.699  -2.282  1.00  0.00
C
ATOM    160  CD1 PHE     9      14.629   3.999  -3.433  1.00  0.00
C
ATOM    161  HD1 PHE     9      14.756   5.028  -3.739  1.00  0.00
H
ATOM    162  CD2 PHE     9      13.704   2.344  -1.927  1.00  0.00
C
ATOM    163  HD2 PHE     9      13.132   2.076  -1.055  1.00  0.00
H
ATOM    164  CE1 PHE     9      15.254   2.972  -4.186  1.00  0.00
C
ATOM    165  HE1 PHE     9      15.859   3.224  -5.046  1.00  0.00
H
ATOM    166  CE2 PHE     9      14.297   1.307  -2.687  1.00  0.00
C
ATOM    167  HE2 PHE     9      14.158   0.276  -2.394  1.00  0.00
H
ATOM    168  CZ  PHE     9      15.088   1.623  -3.808  1.00  0.00
C
ATOM    169  HZ  PHE     9      15.573   0.837  -4.368  1.00  0.00
H
ATOM    170  N   GLU    10      10.989   6.631  -0.036  1.00  0.00
N
ATOM    171  H   GLU    10      10.633   6.651  -0.984  1.00  0.00
H
ATOM    172  CA  GLU    10      10.618   7.717   0.877  1.00  0.00
C
ATOM    173  HA  GLU    10      11.517   8.105   1.353  1.00  0.00
H
ATOM    174  C   GLU    10       9.666   7.221   1.968  1.00  0.00
C
ATOM    175  O   GLU    10       9.690   7.683   3.110  1.00  0.00
O
ATOM    176  CB  GLU    10       9.955   8.846   0.078  1.00  0.00
C
ATOM    177 1HB  GLU    10      10.616   9.090  -0.752  1.00  0.00
H
ATOM    178 2HB  GLU    10       9.013   8.484  -0.327  1.00  0.00
H
ATOM    179  CG  GLU    10       9.681  10.123   0.867  1.00  0.00
C
ATOM    180 1HG  GLU    10       9.008   9.893   1.694  1.00  0.00
H
ATOM    181 2HG  GLU    10      10.622  10.491   1.277  1.00  0.00
H
ATOM    182  CD  GLU    10       9.053  11.217   0.014  1.00  0.00
C
ATOM    183  OE1 GLU    10       9.210  11.201  -1.225  1.00  0.00
O
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ATOM    184  OE2 GLU    10       8.424  12.142   0.584  1.00  0.00
O
ATOM    185  N   LEU    11       8.840   6.248   1.616  1.00  0.00
N
ATOM    186  H   LEU    11       8.868   5.895   0.665  1.00  0.00
H
ATOM    187  CA  LEU    11       7.833   5.696   2.525  1.00  0.00
C
ATOM    188  HA  LEU    11       7.463   6.493   3.171  1.00  0.00
H
ATOM    189  C   LEU    11       8.390   4.607   3.436  1.00  0.00
C
ATOM    190  O   LEU    11       7.681   4.048   4.281  1.00  0.00
O
ATOM    191  CB  LEU    11       6.658   5.164   1.704  1.00  0.00
C
ATOM    192 1HB  LEU    11       7.021   4.864   0.721  1.00  0.00
H
ATOM    193 2HB  LEU    11       6.266   4.285   2.202  1.00  0.00
H
ATOM    194  CG  LEU    11       5.491   6.143   1.541  1.00  0.00
C
ATOM    195  HG  LEU    11       5.107   6.357   2.535  1.00  0.00
H
ATOM    196  CD1 LEU    11       5.883   7.462   0.889  1.00  0.00
C
ATOM    197 1HD1 LEU    11       5.010   8.103   0.830  1.00  0.00
H
ATOM    198 2HD1 LEU    11       6.277   7.291  -0.110  1.00  0.00
H
ATOM    199 3HD1 LEU    11       6.630   7.977   1.492  1.00  0.00
H
ATOM    200  CD2 LEU    11       4.371   5.502   0.738  1.00  0.00
C
ATOM    201 1HD2 LEU    11       3.512   6.170   0.709  1.00  0.00
H
ATOM    202 2HD2 LEU    11       4.068   4.570   1.208  1.00  0.00
H
ATOM    203 3HD2 LEU    11       4.712   5.306  -0.278  1.00  0.00
H
ATOM    204  N   ASP    12       9.683   4.351   3.306  1.00  0.00
N
ATOM    205  H   ASP    12      10.209   4.837   2.594  1.00  0.00
H
ATOM    206  CA  ASP    12      10.391   3.417   4.181  1.00  0.00
C
ATOM    207  HA  ASP    12       9.729   2.569   4.357  1.00  0.00
H
ATOM    208  C   ASP    12      10.725   4.055   5.537  1.00  0.00
C
ATOM    209  O   ASP    12      11.883   4.221   5.926  1.00  0.00
O
ATOM    210  CB  ASP    12      11.665   2.896   3.517  1.00  0.00
C
ATOM    211 1HB  ASP    12      11.449   2.645   2.481  1.00  0.00
H
ATOM    212 2HB  ASP    12      12.424   3.677   3.520  1.00  0.00
H
ATOM    213  CG  ASP    12      12.202   1.668   4.216  1.00  0.00
C
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ATOM    214  OD1 ASP    12      11.482   1.073   5.052  1.00  0.00
O
ATOM    215  OD2 ASP    12      13.358   1.278   3.963  1.00  0.00
O
ATOM    216  N   LYS    13       9.674   4.446   6.242  1.00  0.00
N
ATOM    217  H   LYS    13       8.762   4.247   5.842  1.00  0.00
H
ATOM    218  CA  LYS    13       9.724   5.166   7.516  1.00  0.00
C
ATOM    219  HA  LYS    13      10.099   6.175   7.342  1.00  0.00
H
ATOM    220  C   LYS    13      10.606   4.516   8.573  1.00  0.00
C
ATOM    221  O   LYS    13      11.363   5.201   9.254  1.00  0.00
O
ATOM    222  CB  LYS    13       8.280   5.223   8.029  1.00  0.00
C
ATOM    223 1HB  LYS    13       7.655   5.657   7.247  1.00  0.00
H
ATOM    224 2HB  LYS    13       7.949   4.197   8.177  1.00  0.00
H
ATOM    225  CG  LYS    13       8.008   5.972   9.327  1.00  0.00
C
ATOM    226 1HG  LYS    13       7.013   5.692   9.669  1.00  0.00
H
ATOM    227 2HG  LYS    13       8.727   5.674  10.089  1.00  0.00
H
ATOM    228  CD  LYS    13       8.035   7.480   9.147  1.00  0.00
C
ATOM    229 1HD  LYS    13       9.054   7.807   8.945  1.00  0.00
H
ATOM    230 2HD  LYS    13       7.400   7.746   8.301  1.00  0.00
H
ATOM    231  CE  LYS    13       7.497   8.181  10.387  1.00  0.00
C
ATOM    232 1HE  LYS    13       7.425   9.251  10.188  1.00  0.00
H
ATOM    233 2HE  LYS    13       6.492   7.803  10.592  1.00  0.00
H
ATOM    234  NZ  LYS    13       8.355   7.966  11.591  1.00  0.00
N
ATOM    235 1HZ  LYS    13       7.914   8.375  12.407  1.00  0.00
H
ATOM    236 2HZ  LYS    13       9.256   8.407  11.465  1.00  0.00
H
ATOM    237 3HZ  LYS    13       8.481   6.975  11.770  1.00  0.00
H
ATOM    238  N   ASP    14      10.516   3.201   8.694  1.00  0.00
N
ATOM    239  H   ASP    14       9.911   2.680   8.065  1.00  0.00
H
ATOM    240  CA  ASP    14      11.226   2.465   9.743  1.00  0.00
C
ATOM    241  HA  ASP    14      11.596   3.163  10.494  1.00  0.00
H
ATOM    242  C   ASP    14      12.430   1.729   9.158  1.00  0.00
C
ATOM    243  O   ASP    14      13.055   0.902   9.817  1.00  0.00
O
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ATOM    244  CB  ASP    14      10.270   1.490  10.438  1.00  0.00
C
ATOM    245 1HB  ASP    14       9.780   0.880   9.679  1.00  0.00
H
ATOM    246 2HB  ASP    14      10.839   0.840  11.100  1.00  0.00
H
ATOM    247  CG  ASP    14       9.208   2.196  11.267  1.00  0.00
C
ATOM    248  OD1 ASP    14       9.393   3.353  11.693  1.00  0.00
O
ATOM    249  OD2 ASP    14       8.141   1.587  11.500  1.00  0.00
O
ATOM    250  N   ASN    15      12.758   2.062   7.916  1.00  0.00
N
ATOM    251  H   ASN    15      12.169   2.720   7.420  1.00  0.00
H
ATOM    252  CA  ASN    15      13.955   1.579   7.221  1.00  0.00
C
ATOM    253  HA  ASN    15      13.898   1.978   6.212  1.00  0.00
H
ATOM    254  C   ASN    15      14.071   0.053   7.089  1.00  0.00
C
ATOM    255  O   ASN    15      15.152  -0.526   7.211  1.00  0.00
O
ATOM    256  CB  ASN    15      15.204   2.188   7.861  1.00  0.00
C
ATOM    257 1HB  ASN    15      14.964   3.197   8.187  1.00  0.00
H
ATOM    258 2HB  ASN    15      15.495   1.603   8.730  1.00  0.00
H
ATOM    259  CG  ASN    15      16.357   2.273   6.900  1.00  0.00
C
ATOM    260  OD1 ASN    15      16.174   2.594   5.734  1.00  0.00
O
ATOM    261  ND2 ASN    15      17.543   2.004   7.363  1.00  0.00
N
ATOM    262 1HD2 ASN    15      18.331   2.073   6.737  1.00  0.00
H
ATOM    263 2HD2 ASN    15      17.668   1.747   8.327  1.00  0.00
H
ATOM    264  N   ASN    16      12.948  -0.601   6.828  1.00  0.00
N
ATOM    265  H   ASN    16      12.113  -0.051   6.646  1.00  0.00
H
ATOM    266  CA  ASN    16      12.860  -2.064   6.749  1.00  0.00
C
ATOM    267  HA  ASN    16      13.765  -2.512   7.162  1.00  0.00
H
ATOM    268  C   ASN    16      12.702  -2.534   5.305  1.00  0.00
C
ATOM    269  O   ASN    16      12.379  -3.690   5.045  1.00  0.00
O
ATOM    270  CB  ASN    16      11.653  -2.559   7.548  1.00  0.00
C
ATOM    271 1HB  ASN    16      10.759  -2.066   7.177  1.00  0.00
H
ATOM    272 2HB  ASN    16      11.542  -3.634   7.409  1.00  0.00
H
ATOM    273  CG  ASN    16      11.785  -2.297   9.015  1.00  0.00
C
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ATOM    274  OD1 ASN    16      12.804  -2.587   9.628  1.00  0.00
O
ATOM    275  ND2 ASN    16      10.755  -1.767   9.601  1.00  0.00
N
ATOM    276 1HD2 ASN    16      10.815  -1.558  10.583  1.00  0.00
H
ATOM    277 2HD2 ASN    16       9.921  -1.568   9.068  1.00  0.00
H
ATOM    278  N   GLU    17      12.869  -1.600   4.379  1.00  0.00
N
ATOM    279  H   GLU    17      13.119  -0.660   4.680  1.00  0.00
H
ATOM    280  CA  GLU    17      12.685  -1.771   2.932  1.00  0.00
C
ATOM    281  HA  GLU    17      12.955  -0.814   2.492  1.00  0.00
H
ATOM    282  C   GLU    17      11.244  -2.055   2.505  1.00  0.00
C
ATOM    283  O   GLU    17      10.997  -2.416   1.351  1.00  0.00
O
ATOM    284  CB  GLU    17      13.614  -2.826   2.316  1.00  0.00
C
ATOM    285 1HB  GLU    17      13.291  -3.811   2.650  1.00  0.00
H
ATOM    286 2HB  GLU    17      13.504  -2.782   1.232  1.00  0.00
H
ATOM    287  CG  GLU    17      15.088  -2.672   2.647  1.00  0.00
C
ATOM    288 1HG  GLU    17      15.425  -1.685   2.327  1.00  0.00
H
ATOM    289 2HG  GLU    17      15.227  -2.760   3.725  1.00  0.00
H
ATOM    290  CD  GLU    17      15.929  -3.734   1.961  1.00  0.00
C
ATOM    291  OE1 GLU    17      15.409  -4.501   1.110  1.00  0.00
O
ATOM    292  OE2 GLU    17      17.139  -3.824   2.247  1.00  0.00
O
ATOM    293  N   ILE    18      10.304  -1.930   3.433  1.00  0.00
N
ATOM    294  H   ILE    18      10.573  -1.618   4.355  1.00  0.00
H
ATOM    295  CA  ILE    18       8.888  -2.232   3.205  1.00  0.00
C
ATOM    296  HA  ILE    18       8.686  -2.167   2.137  1.00  0.00
H
ATOM    297  C   ILE    18       8.029  -1.179   3.909  1.00  0.00
C
ATOM    298  O   ILE    18       8.423  -0.613   4.938  1.00  0.00
O
ATOM    299  CB  ILE    18       8.507  -3.679   3.682  1.00  0.00
C
ATOM    300  HB  ILE    18       7.447  -3.838   3.480  1.00  0.00
H
ATOM    301  CG1 ILE    18       8.739  -3.846   5.199  1.00  0.00
C
ATOM    302 1HG1 ILE    18       9.759  -3.553   5.431  1.00  0.00
H
ATOM    303 2HG1 ILE    18       8.068  -3.168   5.723  1.00  0.00
H
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ATOM    304  CG2 ILE    18       9.298  -4.739   2.874  1.00  0.00
C
ATOM    305 1HG2 ILE    18       8.888  -5.734   3.048  1.00  0.00
H
ATOM    306 2HG2 ILE    18      10.350  -4.729   3.167  1.00  0.00
H
ATOM    307 3HG2 ILE    18       9.229  -4.516   1.810  1.00  0.00
H
ATOM    308  CD1 ILE    18       8.532  -5.249   5.764  1.00  0.00
C
ATOM    309 1HD1 ILE    18       8.483  -5.196   6.852  1.00  0.00
H
ATOM    310 2HD1 ILE    18       9.371  -5.890   5.487  1.00  0.00
H
ATOM    311 3HD1 ILE    18       7.608  -5.678   5.381  1.00  0.00
H
ATOM    312  N   VAL    19       6.862  -0.907   3.346  1.00  0.00
N
ATOM    313  H   VAL    19       6.575  -1.437   2.526  1.00  0.00
H
ATOM    314  CA  VAL    19       5.980   0.155   3.828  1.00  0.00
C
ATOM    315  HA  VAL    19       6.565   0.850   4.427  1.00  0.00
H
ATOM    316  C   VAL    19       4.863  -0.426   4.685  1.00  0.00
C
ATOM    317  O   VAL    19       4.134  -1.313   4.244  1.00  0.00
O
ATOM    318  CB  VAL    19       5.353   0.941   2.643  1.00  0.00
C
ATOM    319  HB  VAL    19       4.720   0.265   2.070  1.00  0.00
H
ATOM    320  CG1 VAL    19       4.502   2.116   3.140  1.00  0.00
C
ATOM    321 1HG1 VAL    19       4.092   2.654   2.290  1.00  0.00
H
ATOM    322 2HG1 VAL    19       5.111   2.796   3.739  1.00  0.00
H
ATOM    323 3HG1 VAL    19       3.675   1.751   3.744  1.00  0.00
H
ATOM    324  CG2 VAL    19       6.446   1.467   1.714  1.00  0.00
C
ATOM    325 1HG2 VAL    19       6.001   2.044   0.903  1.00  0.00
H
ATOM    326 2HG2 VAL    19       6.997   0.637   1.286  1.00  0.00
H
ATOM    327 3HG2 VAL    19       7.141   2.098   2.272  1.00  0.00
H
ATOM    328  N   ASP    20       4.710   0.069   5.901  1.00  0.00
N
ATOM    329  H   ASP    20       5.344   0.806   6.210  1.00  0.00
H
ATOM    330  CA  ASP    20       3.646  -0.368   6.805  1.00  0.00
C
ATOM    331  HA  ASP    20       3.518  -1.448   6.719  1.00  0.00
H
ATOM    332  C   ASP    20       2.302   0.290   6.495  1.00  0.00
C
ATOM    333  O   ASP    20       2.225   1.334   5.839  1.00  0.00
O
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ATOM    334  CB  ASP    20       4.031  -0.051   8.247  1.00  0.00
C
ATOM    335 1HB  ASP    20       4.486   0.939   8.282  1.00  0.00
H
ATOM    336 2HB  ASP    20       3.136  -0.040   8.865  1.00  0.00
H
ATOM    337  CG  ASP    20       4.979  -1.078   8.822  1.00  0.00
C
ATOM    338  OD1 ASP    20       4.597  -2.269   8.945  1.00  0.00
O
ATOM    339  OD2 ASP    20       6.129  -0.719   9.147  1.00  0.00
O
ATOM    340  N   LYS    21       1.233  -0.322   6.988  1.00  0.00
N
ATOM    341  H   LYS    21       1.366  -1.153   7.559  1.00  0.00
H
ATOM    342  CA  LYS    21      -0.135   0.132   6.731  1.00  0.00
C
ATOM    343  HA  LYS    21      -0.334   0.038   5.663  1.00  0.00
H
ATOM    344  C   LYS    21      -0.393   1.590   7.089  1.00  0.00
C
ATOM    345  O   LYS    21      -0.933   2.327   6.272  1.00  0.00
O
ATOM    346  CB  LYS    21      -1.092  -0.789   7.497  1.00  0.00
C
ATOM    347 1HB  LYS    21      -0.928  -1.804   7.140  1.00  0.00
H
ATOM    348 2HB  LYS    21      -0.841  -0.761   8.558  1.00  0.00
H
ATOM    349  CG  LYS    21      -2.567  -0.453   7.355  1.00  0.00
C
ATOM    350 1HG  LYS    21      -2.783   0.467   7.895  1.00  0.00
H
ATOM    351 2HG  LYS    21      -2.798  -0.304   6.308  1.00  0.00
H
ATOM    352  CD  LYS    21      -3.441  -1.570   7.890  1.00  0.00
C
ATOM    353 1HD  LYS    21      -3.167  -2.504   7.400  1.00  0.00
H
ATOM    354 2HD  LYS    21      -3.282  -1.670   8.963  1.00  0.00
H
ATOM    355  CE  LYS    21      -4.907  -1.286   7.622  1.00  0.00
C
ATOM    356 1HE  LYS    21      -5.195  -0.364   8.131  1.00  0.00
H
ATOM    357 2HE  LYS    21      -5.058  -1.154   6.548  1.00  0.00
H
ATOM    358  NZ  LYS    21      -5.770  -2.410   8.097  1.00  0.00
N
ATOM    359 1HZ  LYS    21      -6.741  -2.187   7.924  1.00  0.00
H
ATOM    360 2HZ  LYS    21      -5.635  -2.570   9.088  1.00  0.00
H
ATOM    361 3HZ  LYS    21      -5.547  -3.260   7.590  1.00  0.00
H
ATOM    362  N   GLN    22      -0.001   2.020   8.279  1.00  0.00
N
ATOM    363  H   GLN    22       0.463   1.379   8.919  1.00  0.00
H
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ATOM    364  CA  GLN    22      -0.260   3.394   8.709  1.00  0.00
C
ATOM    365  HA  GLN    22      -1.331   3.587   8.643  1.00  0.00
H
ATOM    366  C   GLN    22       0.460   4.404   7.830  1.00  0.00
C
ATOM    367  O   GLN    22      -0.079   5.455   7.514  1.00  0.00
O
ATOM    368  CB  GLN    22       0.191   3.587  10.160  1.00  0.00
C
ATOM    369 1HB  GLN    22      -0.281   2.819  10.770  1.00  0.00
H
ATOM    370 2HB  GLN    22       1.270   3.445  10.210  1.00  0.00
H
ATOM    371  CG  GLN    22      -0.138   4.955  10.763  1.00  0.00
C
ATOM    372 1HG  GLN    22       0.269   4.999  11.771  1.00  0.00
H
ATOM    373 2HG  GLN    22       0.340   5.735  10.172  1.00  0.00
H
ATOM    374  CD  GLN    22      -1.626   5.235  10.823  1.00  0.00
C
ATOM    375  OE1 GLN    22      -2.418   4.386  11.226  1.00  0.00
O
ATOM    376  NE2 GLN    22      -2.027   6.407  10.413  1.00  0.00
N
ATOM    377 1HE2 GLN    22      -3.002   6.652  10.482  1.00  0.00
H
ATOM    378 2HE2 GLN    22      -1.367   7.063  10.017  1.00  0.00
H
ATOM    379  N   GLU    23       1.677   4.095   7.416  1.00  0.00
N
ATOM    380  H   GLU    23       2.092   3.207   7.652  1.00  0.00
H
ATOM    381  CA  GLU    23       2.444   5.065   6.647  1.00  0.00
C
ATOM    382  HA  GLU    23       2.364   6.037   7.134  1.00  0.00
H
ATOM    383  C   GLU    23       1.858   5.197   5.256  1.00  0.00
C
ATOM    384  O   GLU    23       1.714   6.298   4.733  1.00  0.00
O
ATOM    385  CB  GLU    23       3.916   4.661   6.592  1.00  0.00
C
ATOM    386 1HB  GLU    23       4.010   3.703   6.082  1.00  0.00
H
ATOM    387 2HB  GLU    23       4.465   5.416   6.030  1.00  0.00
H
ATOM    388  CG  GLU    23       4.510   4.537   7.985  1.00  0.00
C
ATOM    389 1HG  GLU    23       4.044   3.693   8.497  1.00  0.00
H
ATOM    390 2HG  GLU    23       5.575   4.336   7.903  1.00  0.00
H
ATOM    391  CD  GLU    23       4.285   5.793   8.811  1.00  0.00
C
ATOM    392  OE1 GLU    23       4.709   6.892   8.396  1.00  0.00
O
ATOM    393  OE2 GLU    23       3.637   5.695   9.875  1.00  0.00
O
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ATOM    394  N   LEU    24       1.435   4.084   4.678  1.00  0.00
N
ATOM    395  H   LEU    24       1.556   3.187   5.142  1.00  0.00
H
ATOM    396  CA  LEU    24       0.801   4.153   3.371  1.00  0.00
C
ATOM    397  HA  LEU    24       1.476   4.674   2.691  1.00  0.00
H
ATOM    398  C   LEU    24      -0.496   4.953   3.484  1.00  0.00
C
ATOM    399  O   LEU    24      -0.782   5.804   2.644  1.00  0.00
O
ATOM    400  CB  LEU    24       0.537   2.751   2.827  1.00  0.00
C
ATOM    401 1HB  LEU    24       1.414   2.137   3.013  1.00  0.00
H
ATOM    402 2HB  LEU    24      -0.314   2.312   3.348  1.00  0.00
H
ATOM    403  CG  LEU    24       0.276   2.773   1.316  1.00  0.00
C
ATOM    404  HG  LEU    24       0.108   3.803   1.022  1.00  0.00
H
ATOM    405  CD1 LEU    24       1.496   2.278   0.546  1.00  0.00
C
ATOM    406 1HD1 LEU    24       1.277   2.261  -0.522  1.00  0.00
H
ATOM    407 2HD1 LEU    24       1.774   1.277   0.875  1.00  0.00
H
ATOM    408 3HD1 LEU    24       2.331   2.955   0.716  1.00  0.00
H
ATOM    409  CD2 LEU    24      -0.966   1.977   0.954  1.00  0.00
C
ATOM    410 1HD2 LEU    24      -1.112   1.998  -0.127  1.00  0.00
H
ATOM    411 2HD2 LEU    24      -1.838   2.425   1.431  1.00  0.00
H
ATOM    412 3HD2 LEU    24      -0.860   0.948   1.285  1.00  0.00
H
ATOM    413  N   ILE    25      -1.240   4.737   4.561  1.00  0.00
N
ATOM    414  H   ILE    25      -0.956   4.026   5.230  1.00  0.00
H
ATOM    415  CA  ILE    25      -2.459   5.501   4.829  1.00  0.00
C
ATOM    416  HA  ILE    25      -3.128   5.371   3.990  1.00  0.00
H
ATOM    417  C   ILE    25      -2.158   6.997   4.917  1.00  0.00
C
ATOM    418  O   ILE    25      -2.848   7.808   4.288  1.00  0.00
O
ATOM    419  CB  ILE    25      -3.176   4.972   6.114  1.00  0.00
C
ATOM    420  HB  ILE    25      -2.416   4.714   6.847  1.00  0.00
H
ATOM    421  CG1 ILE    25      -3.954   3.689   5.757  1.00  0.00
C
ATOM    422 1HG1 ILE    25      -4.799   3.962   5.126  1.00  0.00
H
ATOM    423 2HG1 ILE    25      -3.301   3.039   5.176  1.00  0.00
H
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ATOM    424  CG2 ILE    25      -4.093   6.039   6.757  1.00  0.00
C
ATOM    425 1HG2 ILE    25      -4.646   5.610   7.588  1.00  0.00
H
ATOM    426 2HG2 ILE    25      -4.795   6.429   6.019  1.00  0.00
H
ATOM    427 3HG2 ILE    25      -3.492   6.861   7.151  1.00  0.00
H
ATOM    428  CD1 ILE    25      -4.485   2.879   6.947  1.00  0.00
C
ATOM    429 1HD1 ILE    25      -4.908   1.943   6.581  1.00  0.00
H
ATOM    430 2HD1 ILE    25      -5.266   3.435   7.465  1.00  0.00
H
ATOM    431 3HD1 ILE    25      -3.672   2.661   7.639  1.00  0.00
H
ATOM    432  N   ASN    26      -1.117   7.370   5.647  1.00  0.00
N
ATOM    433  H   ASN    26      -0.573   6.661   6.134  1.00  0.00
H
ATOM    434  CA  ASN    26      -0.768   8.778   5.820  1.00  0.00
C
ATOM    435  HA  ASN    26      -1.605   9.297   6.287  1.00  0.00
H
ATOM    436  C   ASN    26      -0.478   9.432   4.480  1.00  0.00
C
ATOM    437  O   ASN    26      -1.002  10.502   4.164  1.00  0.00
O
ATOM    438  CB  ASN    26       0.487   8.937   6.689  1.00  0.00
C
ATOM    439 1HB  ASN    26       1.302   8.351   6.270  1.00  0.00
H
ATOM    440 2HB  ASN    26       0.785   9.985   6.687  1.00  0.00
H
ATOM    441  CG  ASN    26       0.277   8.512   8.112  1.00  0.00
C
ATOM    442  OD1 ASN    26      -0.838   8.484   8.623  1.00  0.00
O
ATOM    443  ND2 ASN    26       1.349   8.192   8.775  1.00  0.00
N
ATOM    444 1HD2 ASN    26       1.259   7.932   9.746  1.00  0.00
H
ATOM    445 2HD2 ASN    26       2.253   8.234   8.332  1.00  0.00
H
ATOM    446  N   TYR    27       0.372   8.791   3.694  1.00  0.00
N
ATOM    447  H   TYR    27       0.747   7.890   3.990  1.00  0.00
H
ATOM    448  CA  TYR    27       0.843   9.378   2.447  1.00  0.00
C
ATOM    449  HA  TYR    27       1.063  10.432   2.620  1.00  0.00
H
ATOM    450  C   TYR    27      -0.133   9.325   1.267  1.00  0.00
C
ATOM    451  O   TYR    27      -0.140  10.237   0.447  1.00  0.00
O
ATOM    452  CB  TYR    27       2.143   8.691   2.042  1.00  0.00
C
ATOM    453 1HB  TYR    27       2.040   7.614   2.179  1.00  0.00
H
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ATOM    454 2HB  TYR    27       2.292   8.878   0.984  1.00  0.00
H
ATOM    455  CG  TYR    27       3.384   9.186   2.769  1.00  0.00
C
ATOM    456  CD1 TYR    27       3.983   8.438   3.806  1.00  0.00
C
ATOM    457  HD1 TYR    27       3.520   7.537   4.159  1.00  0.00
H
ATOM    458  CD2 TYR    27       4.027  10.371   2.357  1.00  0.00
C
ATOM    459  HD2 TYR    27       3.573  10.997   1.600  1.00  0.00
H
ATOM    460  CE1 TYR    27       5.232   8.821   4.362  1.00  0.00
C
ATOM    461  HE1 TYR    27       5.686   8.225   5.141  1.00  0.00
H
ATOM    462  CE2 TYR    27       5.290  10.743   2.896  1.00  0.00
C
ATOM    463  HE2 TYR    27       5.789  11.630   2.537  1.00  0.00
H
ATOM    464  CZ  TYR    27       5.885   9.955   3.883  1.00  0.00
C
ATOM    465  OH  TYR    27       7.116  10.281   4.390  1.00  0.00
O
ATOM    466  HH  TYR    27       7.474  11.092   4.000  1.00  0.00
H
ATOM    467  N   CYS    28      -0.977   8.308   1.146  1.00  0.00
N
ATOM    468  H   CYS    28      -0.995   7.569   1.848  1.00  0.00
H
ATOM    469  CA  CYS    28      -1.851   8.205  -0.034  1.00  0.00
C
ATOM    470  HA  CYS    28      -1.233   8.255  -0.930  1.00  0.00
H
ATOM    471  C   CYS    28      -2.894   9.309  -0.151  1.00  0.00
C
ATOM    472  O   CYS    28      -3.401   9.594  -1.237  1.00  0.00
O
ATOM    473  CB  CYS    28      -2.608   6.883  -0.036  1.00  0.00
C
ATOM    474 1HB  CYS    28      -3.134   6.788   0.912  1.00  0.00
H
ATOM    475 2HB  CYS    28      -3.349   6.921  -0.835  1.00  0.00
H
ATOM    476  SG  CYS    28      -1.599   5.421  -0.297  1.00  0.00
S
ATOM    477  HG  CYS    28      -0.970   5.461   0.888  1.00  0.00
H
ATOM    478  N   GLN    29      -3.207   9.956   0.960  1.00  0.00
N
ATOM    479  H   GLN    29      -2.741   9.717   1.826  1.00  0.00
H
ATOM    480  CA  GLN    29      -4.208  11.018   0.961  1.00  0.00
C
ATOM    481  HA  GLN    29      -5.096  10.656   0.443  1.00  0.00
H
ATOM    482  C   GLN    29      -3.707  12.254   0.199  1.00  0.00
C
ATOM    483  O   GLN    29      -4.499  13.119  -0.175  1.00  0.00
O
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ATOM    484  CB  GLN    29      -4.592  11.345   2.406  1.00  0.00
C
ATOM    485 1HB  GLN    29      -3.692  11.620   2.952  1.00  0.00
H
ATOM    486 2HB  GLN    29      -5.275  12.193   2.414  1.00  0.00
H
ATOM    487  CG  GLN    29      -5.260  10.171   3.124  1.00  0.00
C
ATOM    488 1HG  GLN    29      -6.213   9.948   2.645  1.00  0.00
H
ATOM    489 2HG  GLN    29      -4.623   9.292   3.048  1.00  0.00
H
ATOM    490  CD  GLN    29      -5.494  10.444   4.590  1.00  0.00
C
ATOM    491  OE1 GLN    29      -6.392  11.187   4.970  1.00  0.00
O
ATOM    492  NE2 GLN    29      -4.697   9.840   5.427  1.00  0.00
N
ATOM    493 1HE2 GLN    29      -4.767  10.041   6.410  1.00  0.00
H
ATOM    494 2HE2 GLN    29      -4.012   9.181   5.083  1.00  0.00
H
ATOM    495  N   ALA    30      -2.420  12.304  -0.126  1.00  0.00
N
ATOM    496  H   ALA    30      -1.787  11.589   0.218  1.00  0.00
H
ATOM    497  CA  ALA    30      -1.857  13.365  -0.959  1.00  0.00
C
ATOM    498  HA  ALA    30      -2.104  14.326  -0.506  1.00  0.00
H
ATOM    499  C   ALA    30      -2.427  13.358  -2.386  1.00  0.00
C
ATOM    500  O   ALA    30      -2.448  14.389  -3.058  1.00  0.00
O
ATOM    501  CB  ALA    30      -0.335  13.229  -0.994  1.00  0.00
C
ATOM    502 1HB  ALA    30       0.062  13.263   0.022  1.00  0.00
H
ATOM    503 2HB  ALA    30       0.096  14.050  -1.568  1.00  0.00
H
ATOM    504 3HB  ALA    30      -0.053  12.280  -1.454  1.00  0.00
H
ATOM    505  N   ASN    31      -2.944  12.219  -2.833  1.00  0.00
N
ATOM    506  H   ASN    31      -2.926  11.397  -2.236  1.00  0.00
H
ATOM    507  CA  ASN    31      -3.559  12.113  -4.163  1.00  0.00
C
ATOM    508  HA  ASN    31      -3.100  12.840  -4.835  1.00  0.00
H
ATOM    509  C   ASN    31      -5.050  12.441  -4.117  1.00  0.00
C
ATOM    510  O   ASN    31      -5.780  12.175  -5.071  1.00  0.00
O
ATOM    511  CB  ASN    31      -3.352  10.712  -4.752  1.00  0.00
C
ATOM    512 1HB  ASN    31      -3.518   9.958  -3.986  1.00  0.00
H
ATOM    513 2HB  ASN    31      -4.067  10.544  -5.556  1.00  0.00
H
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ATOM    514  CG  ASN    31      -1.991  10.533  -5.348  1.00  0.00
C
ATOM    515  OD1 ASN    31      -1.089  11.333  -5.157  1.00  0.00
O
ATOM    516  ND2 ASN    31      -1.835   9.497  -6.103  1.00  0.00
N
ATOM    517 1HD2 ASN    31      -0.916   9.318  -6.483  1.00  0.00
H
ATOM    518 2HD2 ASN    31      -2.613   8.867  -6.270  1.00  0.00
H
ATOM    519  N   LYS    32      -5.485  13.018  -3.001  1.00  0.00
N
ATOM    520  H   LYS    32      -4.813  13.194  -2.262  1.00  0.00
H
ATOM    521  CA  LYS    32      -6.873  13.444  -2.760  1.00  0.00
C
ATOM    522  HA  LYS    32      -6.910  13.849  -1.751  1.00  0.00
H
ATOM    523  C   LYS    32      -7.851  12.275  -2.789  1.00  0.00
C
ATOM    524  O   LYS    32      -9.050  12.425  -3.028  1.00  0.00
O
ATOM    525  CB  LYS    32      -7.289  14.567  -3.725  1.00  0.00
C
ATOM    526 1HB  LYS    32      -7.293  14.183  -4.744  1.00  0.00
H
ATOM    527 2HB  LYS    32      -8.301  14.877  -3.480  1.00  0.00
H
ATOM    528  CG  LYS    32      -6.379  15.791  -3.667  1.00  0.00
C
ATOM    529 1HG  LYS    32      -6.356  16.168  -2.645  1.00  0.00
H
ATOM    530 2HG  LYS    32      -5.370  15.510  -3.966  1.00  0.00
H
ATOM    531  CD  LYS    32      -6.872  16.892  -4.589  1.00  0.00
C
ATOM    532 1HD  LYS    32      -6.926  16.513  -5.610  1.00  0.00
H
ATOM    533 2HD  LYS    32      -7.866  17.206  -4.270  1.00  0.00
H
ATOM    534  CE  LYS    32      -5.928  18.086  -4.542  1.00  0.00
C
ATOM    535 1HE  LYS    32      -5.828  18.419  -3.506  1.00  0.00
H
ATOM    536 2HE  LYS    32      -4.943  17.774  -4.898  1.00  0.00
H
ATOM    537  NZ  LYS    32      -6.415  19.229  -5.375  1.00  0.00
N
ATOM    538 1HZ  LYS    32      -5.737  19.983  -5.359  1.00  0.00
H
ATOM    539 2HZ  LYS    32      -7.296  19.574  -5.011  1.00  0.00
H
ATOM    540 3HZ  LYS    32      -6.544  18.929  -6.335  1.00  0.00
H
ATOM    541  N   LEU    33      -7.319  11.093  -2.528  1.00  0.00
N
ATOM    542  H   LEU    33      -6.334  11.033  -2.343  1.00  0.00
H
ATOM    543  CA  LEU    33      -8.115   9.876  -2.489  1.00  0.00
C
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ATOM    544  HA  LEU    33      -8.723   9.805  -3.391  1.00  0.00
H
ATOM    545  C   LEU    33      -9.039   9.890  -1.282  1.00  0.00
C
ATOM    546  O   LEU    33      -8.706  10.439  -0.224  1.00  0.00
O
ATOM    547  CB  LEU    33      -7.192   8.659  -2.400  1.00  0.00
C
ATOM    548 1HB  LEU    33      -6.516   8.820  -1.561  1.00  0.00
H
ATOM    549 2HB  LEU    33      -7.800   7.783  -2.174  1.00  0.00
H
ATOM    550  CG  LEU    33      -6.353   8.338  -3.644  1.00  0.00
C
ATOM    551  HG  LEU    33      -5.847   9.244  -3.970  1.00  0.00
H
ATOM    552  CD1 LEU    33      -5.298   7.309  -3.282  1.00  0.00
C
ATOM    553 1HD1 LEU    33      -4.719   7.050  -4.173  1.00  0.00
H
ATOM    554 2HD1 LEU    33      -5.761   6.412  -2.874  1.00  0.00
H
ATOM    555 3HD1 LEU    33      -4.616   7.732  -2.547  1.00  0.00
H
ATOM    556  CD2 LEU    33      -7.210   7.817  -4.797  1.00  0.00
C
ATOM    557 1HD2 LEU    33      -6.568   7.604  -5.654  1.00  0.00
H
ATOM    558 2HD2 LEU    33      -7.929   8.578  -5.097  1.00  0.00
H
ATOM    559 3HD2 LEU    33      -7.741   6.913  -4.502  1.00  0.00
H
ATOM    560  N   ASP    34     -10.185   9.251  -1.444  1.00  0.00
N
ATOM    561  H   ASP    34     -10.420   8.879  -2.362  1.00  0.00
H
ATOM    562  CA  ASP    34     -11.092   8.992  -0.331  1.00  0.00
C
ATOM    563  HA  ASP    34     -11.314   9.911   0.209  1.00  0.00
H
ATOM    564  C   ASP    34     -10.349   8.011   0.567  1.00  0.00
C
ATOM    565  O   ASP    34      -9.649   7.137   0.061  1.00  0.00
O
ATOM    566  CB  ASP    34     -12.382   8.323  -0.815  1.00  0.00
C
ATOM    567 1HB  ASP    34     -12.116   7.460  -1.419  1.00  0.00
H
ATOM    568 2HB  ASP    34     -12.948   7.975   0.047  1.00  0.00
H
ATOM    569  CG  ASP    34     -13.263   9.242  -1.639  1.00  0.00
C
ATOM    570  OD1 ASP    34     -13.105  10.483  -1.611  1.00  0.00
O
ATOM    571  OD2 ASP    34     -14.174   8.715  -2.315  1.00  0.00
O
ATOM    572  N   MET    35     -10.508   8.093   1.878  1.00  0.00
N
ATOM    573  H   MET    35     -11.105   8.811   2.273  1.00  0.00
H
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ATOM    574  CA  MET    35      -9.823   7.163   2.774  1.00  0.00
C
ATOM    575  HA  MET    35      -8.762   7.178   2.533  1.00  0.00
H
ATOM    576  C   MET    35     -10.308   5.731   2.591  1.00  0.00
C
ATOM    577  O   MET    35      -9.553   4.782   2.793  1.00  0.00
O
ATOM    578  CB  MET    35      -9.998   7.572   4.235  1.00  0.00
C
ATOM    579 1HB  MET    35     -10.833   8.268   4.315  1.00  0.00
H
ATOM    580 2HB  MET    35     -10.245   6.683   4.815  1.00  0.00
H
ATOM    581  CG  MET    35      -8.753   8.213   4.833  1.00  0.00
C
ATOM    582 1HG  MET    35      -8.548   9.142   4.301  1.00  0.00
H
ATOM    583 2HG  MET    35      -8.954   8.450   5.877  1.00  0.00
H
ATOM    584  SD  MET    35      -7.279   7.167   4.752  1.00  0.00
S
ATOM    585  CE  MET    35      -7.717   5.762   5.800  1.00  0.00
C
ATOM    586 1HE  MET    35      -6.867   5.083   5.874  1.00  0.00
H
ATOM    587 2HE  MET    35      -8.558   5.226   5.363  1.00  0.00
H
ATOM    588 3HE  MET    35      -7.983   6.115   6.796  1.00  0.00
H
ATOM    589  N   GLU    36     -11.533   5.556   2.114  1.00  0.00
N
ATOM    590  H   GLU    36     -12.149   6.357   2.004  1.00  0.00
H
ATOM    591  CA  GLU    36     -11.988   4.219   1.730  1.00  0.00
C
ATOM    592  HA  GLU    36     -11.907   3.549   2.585  1.00  0.00
H
ATOM    593  C   GLU    36     -11.103   3.672   0.615  1.00  0.00
C
ATOM    594  O   GLU    36     -10.694   2.519   0.637  1.00  0.00
O
ATOM    595  CB  GLU    36     -13.433   4.233   1.226  1.00  0.00
C
ATOM    596 1HB  GLU    36     -13.529   5.008   0.465  1.00  0.00
H
ATOM    597 2HB  GLU    36     -13.635   3.267   0.765  1.00  0.00
H
ATOM    598  CG  GLU    36     -14.476   4.462   2.307  1.00  0.00
C
ATOM    599 1HG  GLU    36     -14.338   3.710   3.086  1.00  0.00
H
ATOM    600 2HG  GLU    36     -14.325   5.447   2.749  1.00  0.00
H
ATOM    601  CD  GLU    36     -15.902   4.362   1.775  1.00  0.00
C
ATOM    602  OE1 GLU    36     -16.126   4.405   0.540  1.00  0.00
O
ATOM    603  OE2 GLU    36     -16.838   4.214   2.592  1.00  0.00
O
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ATOM    604  N   MET    37     -10.759   4.508  -0.352  1.00  0.00
N
ATOM    605  H   MET    37     -11.035   5.480  -0.305  1.00  0.00
H
ATOM    606  CA  MET    37      -9.948   4.058  -1.478  1.00  0.00
C
ATOM    607  HA  MET    37     -10.326   3.094  -1.814  1.00  0.00
H
ATOM    608  C   MET    37      -8.505   3.860  -1.055  1.00  0.00
C
ATOM    609  O   MET    37      -7.836   2.979  -1.570  1.00  0.00
O
ATOM    610  CB  MET    37     -10.025   5.047  -2.642  1.00  0.00
C
ATOM    611 1HB  MET    37      -9.660   6.020  -2.316  1.00  0.00
H
ATOM    612 2HB  MET    37      -9.380   4.691  -3.444  1.00  0.00
H
ATOM    613  CG  MET    37     -11.442   5.201  -3.169  1.00  0.00
C
ATOM    614 1HG  MET    37     -12.069   5.604  -2.377  1.00  0.00
H
ATOM    615 2HG  MET    37     -11.442   5.903  -4.002  1.00  0.00
H
ATOM    616  SD  MET    37     -12.164   3.642  -3.712  1.00  0.00
S
ATOM    617  CE  MET    37     -11.289   3.366  -5.225  1.00  0.00
C
ATOM    618 1HE  MET    37     -11.662   2.455  -5.687  1.00  0.00
H
ATOM    619 2HE  MET    37     -10.222   3.259  -5.031  1.00  0.00
H
ATOM    620 3HE  MET    37     -11.456   4.203  -5.905  1.00  0.00
H
ATOM    621  N   VAL    38      -8.035   4.621  -0.080  1.00  0.00
N
ATOM    622  H   VAL    38      -8.612   5.371   0.292  1.00  0.00
H
ATOM    623  CA  VAL    38      -6.705   4.395   0.487  1.00  0.00
C
ATOM    624  HA  VAL    38      -5.969   4.400  -0.317  1.00  0.00
H
ATOM    625  C   VAL    38      -6.649   3.026   1.167  1.00  0.00
C
ATOM    626  O   VAL    38      -5.710   2.251   0.953  1.00  0.00
O
ATOM    627  CB  VAL    38      -6.345   5.511   1.501  1.00  0.00
C
ATOM    628  HB  VAL    38      -7.128   5.560   2.253  1.00  0.00
H
ATOM    629  CG1 VAL    38      -5.040   5.214   2.209  1.00  0.00
C
ATOM    630 1HG1 VAL    38      -4.746   6.077   2.809  1.00  0.00
H
ATOM    631 2HG1 VAL    38      -4.255   4.981   1.490  1.00  0.00
H
ATOM    632 3HG1 VAL    38      -5.170   4.364   2.879  1.00  0.00
H
ATOM    633  CG2 VAL    38      -6.260   6.875   0.802  1.00  0.00
C
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ATOM    634 1HG2 VAL    38      -5.953   7.636   1.518  1.00  0.00
H
ATOM    635 2HG2 VAL    38      -7.232   7.158   0.409  1.00  0.00
H
ATOM    636 3HG2 VAL    38      -5.545   6.838  -0.018  1.00  0.00
H
ATOM    637  N   ASN    39      -7.671   2.680   1.939  1.00  0.00
N
ATOM    638  H   ASN    39      -8.427   3.343   2.108  1.00  0.00
H
ATOM    639  CA  ASN    39      -7.707   1.362   2.575  1.00  0.00
C
ATOM    640  HA  ASN    39      -6.786   1.216   3.142  1.00  0.00
H
ATOM    641  C   ASN    39      -7.787   0.272   1.511  1.00  0.00
C
ATOM    642  O   ASN    39      -7.134  -0.770   1.624  1.00  0.00
O
ATOM    643  CB  ASN    39      -8.907   1.223   3.515  1.00  0.00
C
ATOM    644 1HB  ASN    39      -9.807   1.553   3.001  1.00  0.00
H
ATOM    645 2HB  ASN    39      -9.023   0.172   3.780  1.00  0.00
H
ATOM    646  CG  ASN    39      -8.747   2.004   4.792  1.00  0.00
C
ATOM    647  OD1 ASN    39      -7.739   1.905   5.478  1.00  0.00
O
ATOM    648  ND2 ASN    39      -9.747   2.762   5.140  1.00  0.00
N
ATOM    649 1HD2 ASN    39      -9.695   3.275   6.003  1.00  0.00
H
ATOM    650 2HD2 ASN    39     -10.551   2.832   4.540  1.00  0.00
H
ATOM    651  N   ARG    40      -8.555   0.507   0.453  1.00  0.00
N
ATOM    652  H   ARG    40      -9.119   1.355   0.420  1.00  0.00
H
ATOM    653  CA  ARG    40      -8.617  -0.452  -0.652  1.00  0.00
C
ATOM    654  HA  ARG    40      -8.861  -1.431  -0.239  1.00  0.00
H
ATOM    655  C   ARG    40      -7.269  -0.596  -1.344  1.00  0.00
C
ATOM    656  O   ARG    40      -6.884  -1.713  -1.660  1.00  0.00
O
ATOM    657  CB  ARG    40      -9.694  -0.091  -1.680  1.00  0.00
C
ATOM    658 1HB  ARG    40      -9.546   0.931  -2.026  1.00  0.00
H
ATOM    659 2HB  ARG    40      -9.565  -0.760  -2.530  1.00  0.00
H
ATOM    660  CG  ARG    40     -11.125  -0.258  -1.172  1.00  0.00
C
ATOM    661 1HG  ARG    40     -11.210  -1.219  -0.678  1.00  0.00
H
ATOM    662 2HG  ARG    40     -11.367   0.515  -0.451  1.00  0.00
H
ATOM    663  CD  ARG    40     -12.121  -0.211  -2.315  1.00  0.00
C
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ATOM    664 1HD  ARG    40     -12.064   0.760  -2.807  1.00  0.00
H
ATOM    665 2HD  ARG    40     -11.844  -0.976  -3.039  1.00  0.00
H
ATOM    666  NE  ARG    40     -13.500  -0.474  -1.876  1.00  0.00
N
ATOM    667  HE  ARG    40     -13.771  -1.442  -1.806  1.00  0.00
H
ATOM    668  CZ  ARG    40     -14.435   0.429  -1.610  1.00  0.00
C
ATOM    669  NH1 ARG    40     -14.230   1.721  -1.606  1.00  0.00
N
ATOM    670 1HH1 ARG    40     -13.319   2.082  -1.824  1.00  0.00
H
ATOM    671 2HH1 ARG    40     -14.996   2.346  -1.413  1.00  0.00
H
ATOM    672  NH2 ARG    40     -15.645   0.020  -1.355  1.00  0.00
N
ATOM    673 1HH2 ARG    40     -15.879  -0.957  -1.366  1.00  0.00
H
ATOM    674 2HH2 ARG    40     -16.361   0.711  -1.171  1.00  0.00
H
ATOM    675  N   TRP    41      -6.523   0.482  -1.540  1.00  0.00
N
ATOM    676  H   TRP    41      -6.882   1.397  -1.281  1.00  0.00
H
ATOM    677  CA  TRP    41      -5.189   0.392  -2.135  1.00  0.00
C
ATOM    678  HA  TRP    41      -5.269  -0.080  -3.110  1.00  0.00
H
ATOM    679  C   TRP    41      -4.242  -0.459  -1.301  1.00  0.00
C
ATOM    680  O   TRP    41      -3.585  -1.349  -1.840  1.00  0.00
O
ATOM    681  CB  TRP    41      -4.547   1.766  -2.318  1.00  0.00
C
ATOM    682 1HB  TRP    41      -4.723   2.378  -1.436  1.00  0.00
H
ATOM    683 2HB  TRP    41      -3.471   1.611  -2.409  1.00  0.00
H
ATOM    684  CG  TRP    41      -4.982   2.510  -3.546  1.00  0.00
C
ATOM    685  CD1 TRP    41      -5.656   3.686  -3.599  1.00  0.00
C
ATOM    686  HD1 TRP    41      -6.077   4.179  -2.732  1.00  0.00
H
ATOM    687  CD2 TRP    41      -4.599   2.230  -4.903  1.00  0.00
C
ATOM    688  NE1 TRP    41      -5.685   4.192  -4.871  1.00  0.00
N
ATOM    689  HE1 TRP    41      -6.085   5.087  -5.127  1.00  0.00
H
ATOM    690  CE2 TRP    41      -5.028   3.329  -5.700  1.00  0.00
C
ATOM    691  CE3 TRP    41      -3.865   1.196  -5.516  1.00  0.00
C
ATOM    692  HE3 TRP    41      -3.528   0.356  -4.932  1.00  0.00
H
ATOM    693  CZ2 TRP    41      -4.712   3.435  -7.070  1.00  0.00
C
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ATOM    694  HZ2 TRP    41      -5.010   4.304  -7.635  1.00  0.00
H
ATOM    695  CZ3 TRP    41      -3.554   1.290  -6.893  1.00  0.00
C
ATOM    696  HZ3 TRP    41      -2.975   0.510  -7.366  1.00  0.00
H
ATOM    697  CH2 TRP    41      -3.986   2.415  -7.657  1.00  0.00
C
ATOM    698  HH2 TRP    41      -3.725   2.476  -8.703  1.00  0.00
H
ATOM    699  N   LEU    42      -4.210  -0.252   0.009  1.00  0.00
N
ATOM    700  H   LEU    42      -4.776   0.492   0.416  1.00  0.00
H
ATOM    701  CA  LEU    42      -3.356  -1.065   0.879  1.00  0.00
C
ATOM    702  HA  LEU    42      -2.320  -0.963   0.563  1.00  0.00
H
ATOM    703  C   LEU    42      -3.752  -2.530   0.753  1.00  0.00
C
ATOM    704  O   LEU    42      -2.921  -3.433   0.616  1.00  0.00
O
ATOM    705  CB  LEU    42      -3.507  -0.589   2.331  1.00  0.00
C
ATOM    706 1HB  LEU    42      -3.214   0.460   2.347  1.00  0.00
H
ATOM    707 2HB  LEU    42      -4.568  -0.613   2.578  1.00  0.00
H
ATOM    708  CG  LEU    42      -2.769  -1.273   3.496  1.00  0.00
C
ATOM    709  HG  LEU    42      -2.740  -0.539   4.292  1.00  0.00
H
ATOM    710  CD1 LEU    42      -3.519  -2.494   4.043  1.00  0.00
C
ATOM    711 1HD1 LEU    42      -3.038  -2.842   4.956  1.00  0.00
H
ATOM    712 2HD1 LEU    42      -3.511  -3.307   3.317  1.00  0.00
H
ATOM    713 3HD1 LEU    42      -4.552  -2.228   4.271  1.00  0.00
H
ATOM    714  CD2 LEU    42      -1.327  -1.665   3.208  1.00  0.00
C
ATOM    715 1HD2 LEU    42      -0.846  -2.007   4.125  1.00  0.00
H
ATOM    716 2HD2 LEU    42      -0.779  -0.797   2.842  1.00  0.00
H
ATOM    717 3HD2 LEU    42      -1.285  -2.459   2.463  1.00  0.00
H
ATOM    718  N   SER    43      -5.054  -2.752   0.754  1.00  0.00
N
ATOM    719  H   SER    43      -5.693  -1.967   0.838  1.00  0.00
H
ATOM    720  CA  SER    43      -5.593  -4.098   0.694  1.00  0.00
C
ATOM    721  HA  SER    43      -5.145  -4.685   1.495  1.00  0.00
H
ATOM    722  C   SER    43      -5.349  -4.825  -0.623  1.00  0.00
C
ATOM    723  O   SER    43      -5.339  -6.058  -0.663  1.00  0.00
O
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ATOM    724  CB  SER    43      -7.094  -4.030   0.909  1.00  0.00
C
ATOM    725 1HB  SER    43      -7.544  -3.417   0.130  1.00  0.00
H
ATOM    726 2HB  SER    43      -7.490  -5.035   0.834  1.00  0.00
H
ATOM    727  OG  SER    43      -7.422  -3.493   2.177  1.00  0.00
O
ATOM    728  HG  SER    43      -7.255  -2.538   2.170  1.00  0.00
H
ATOM    729  N   ARG    44      -5.206  -4.082  -1.711  1.00  0.00
N
ATOM    730  H   ARG    44      -5.259  -3.070  -1.628  1.00  0.00
H
ATOM    731  CA  ARG    44      -5.062  -4.686  -3.035  1.00  0.00
C
ATOM    732  HA  ARG    44      -5.437  -5.708  -2.980  1.00  0.00
H
ATOM    733  C   ARG    44      -3.631  -4.775  -3.540  1.00  0.00
C
ATOM    734  O   ARG    44      -3.299  -5.710  -4.265  1.00  0.00
O
ATOM    735  CB  ARG    44      -5.978  -3.954  -4.021  1.00  0.00
C
ATOM    736 1HB  ARG    44      -6.191  -4.621  -4.853  1.00  0.00
H
ATOM    737 2HB  ARG    44      -6.921  -3.768  -3.507  1.00  0.00
H
ATOM    738  CG  ARG    44      -5.487  -2.641  -4.603  1.00  0.00
C
ATOM    739 1HG  ARG    44      -4.925  -2.080  -3.864  1.00  0.00
H
ATOM    740 2HG  ARG    44      -4.856  -2.846  -5.466  1.00  0.00
H
ATOM    741  CD  ARG    44      -6.701  -1.847  -5.019  1.00  0.00
C
ATOM    742 1HD  ARG    44      -7.408  -2.530  -5.484  1.00  0.00
H
ATOM    743 2HD  ARG    44      -7.173  -1.436  -4.127  1.00  0.00
H
ATOM    744  NE  ARG    44      -6.433  -0.763  -5.970  1.00  0.00
N
ATOM    745  HE  ARG    44      -5.489  -0.662  -6.311  1.00  0.00
H
ATOM    746  CZ  ARG    44      -7.345   0.077  -6.440  1.00  0.00
C
ATOM    747  NH1 ARG    44      -8.577   0.111  -6.010  1.00  0.00
N
ATOM    748 1HH1 ARG    44      -8.883  -0.523  -5.291  1.00  0.00
H
ATOM    749 2HH1 ARG    44      -9.222   0.763  -6.433  1.00  0.00
H
ATOM    750  NH2 ARG    44      -7.044   0.885  -7.411  1.00  0.00
N
ATOM    751 1HH2 ARG    44      -6.129   0.856  -7.834  1.00  0.00
H
ATOM    752 2HH2 ARG    44      -7.753   1.517  -7.749  1.00  0.00
H
ATOM    753  N   CYS    45      -2.763  -3.844  -3.172  1.00  0.00
N
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ATOM    754  H   CYS    45      -3.050  -3.071  -2.574  1.00  0.00
H
ATOM    755  CA  CYS    45      -1.395  -3.877  -3.681  1.00  0.00
C
ATOM    756  HA  CYS    45      -1.432  -4.071  -4.752  1.00  0.00
H
ATOM    757  C   CYS    45      -0.554  -4.977  -3.055  1.00  0.00
C
ATOM    758  O   CYS    45       0.352  -5.497  -3.699  1.00  0.00
O
ATOM    759  CB  CYS    45      -0.714  -2.528  -3.468  1.00  0.00
C
ATOM    760 1HB  CYS    45      -0.774  -2.256  -2.414  1.00  0.00
H
ATOM    761 2HB  CYS    45       0.339  -2.606  -3.749  1.00  0.00
H
ATOM    762  SG  CYS    45      -1.482  -1.241  -4.458  1.00  0.00
S
ATOM    763  HG  CYS    45      -1.088  -1.716  -5.647  1.00  0.00
H
ATOM    764  N   ASP    46      -0.840  -5.353  -1.818  1.00  0.00
N
ATOM    765  H   ASP    46      -1.589  -4.906  -1.305  1.00  0.00
H
ATOM    766  CA  ASP    46      -0.057  -6.407  -1.183  1.00  0.00
C
ATOM    767  HA  ASP    46       0.974  -6.263  -1.482  1.00  0.00
H
ATOM    768  C   ASP    46      -0.501  -7.794  -1.673  1.00  0.00
C
ATOM    769  O   ASP    46      -1.640  -8.220  -1.458  1.00  0.00
O
ATOM    770  CB  ASP    46      -0.110  -6.266   0.342  1.00  0.00
C
ATOM    771 1HB  ASP    46       0.036  -5.216   0.593  1.00  0.00
H
ATOM    772 2HB  ASP    46      -1.093  -6.573   0.701  1.00  0.00
H
ATOM    773  CG  ASP    46       0.966  -7.077   1.055  1.00  0.00
C
ATOM    774  OD1 ASP    46       1.346  -8.159   0.593  1.00  0.00
O
ATOM    775  OD2 ASP    46       1.325  -6.697   2.177  1.00  0.00
O
ATOM    776  N   THR    47       0.397  -8.500  -2.346  1.00  0.00
N
ATOM    777  H   THR    47       1.334  -8.126  -2.492  1.00  0.00
H
ATOM    778  CA  THR    47       0.120  -9.815  -2.928  1.00  0.00
C
ATOM    779  HA  THR    47      -0.932  -9.880  -3.198  1.00  0.00
H
ATOM    780  C   THR    47       0.406 -10.949  -1.952  1.00  0.00
C
ATOM    781  O   THR    47       0.236 -12.113  -2.278  1.00  0.00
O
ATOM    782  CB  THR    47       0.956 -10.023  -4.207  1.00  0.00
C
ATOM    783  HB  THR    47       0.824 -11.040  -4.577  1.00  0.00
H
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ATOM    784  OG1 THR    47       2.336  -9.774  -3.919  1.00  0.00
O
ATOM    785  HG1 THR    47       2.724 -10.590  -3.564  1.00  0.00
H
ATOM    786  CG2 THR    47       0.550  -9.041  -5.296  1.00  0.00
C
ATOM    787 1HG2 THR    47       1.104  -9.270  -6.205  1.00  0.00
H
ATOM    788 2HG2 THR    47       0.768  -8.018  -4.988  1.00  0.00
H
ATOM    789 3HG2 THR    47      -0.515  -9.140  -5.505  1.00  0.00
H
ATOM    790  N   ASP    48       0.795 -10.600  -0.732  1.00  0.00
N
ATOM    791  H   ASP    48       1.051  -9.635  -0.560  1.00  0.00
H
ATOM    792  CA  ASP    48       0.867 -11.551   0.384  1.00  0.00
C
ATOM    793  HA  ASP    48       0.672 -12.558   0.019  1.00  0.00
H
ATOM    794  C   ASP    48      -0.168 -11.202   1.460  1.00  0.00
C
ATOM    795  O   ASP    48      -0.335 -11.930   2.433  1.00  0.00
O
ATOM    796  CB  ASP    48       2.254 -11.541   1.024  1.00  0.00
C
ATOM    797 1HB  ASP    48       2.463 -10.536   1.387  1.00  0.00
H
ATOM    798 2HB  ASP    48       2.259 -12.227   1.869  1.00  0.00
H
ATOM    799  CG  ASP    48       3.343 -11.955   0.065  1.00  0.00
C
ATOM    800  OD1 ASP    48       3.233 -13.012  -0.593  1.00  0.00
O
ATOM    801  OD2 ASP    48       4.337 -11.204  -0.054  1.00  0.00
O
ATOM    802  N   LYS    49      -0.830 -10.056   1.291  1.00  0.00
N
ATOM    803  H   LYS    49      -0.668  -9.545   0.434  1.00  0.00
H
ATOM    804  CA  LYS    49      -1.747  -9.457   2.284  1.00  0.00
C
ATOM    805  HA  LYS    49      -2.008  -8.457   1.941  1.00  0.00
H
ATOM    806  C   LYS    49      -1.117  -9.283   3.676  1.00  0.00
C
ATOM    807  O   LYS    49      -1.807  -9.205   4.679  1.00  0.00
O
ATOM    808  CB  LYS    49      -3.063 -10.244   2.370  1.00  0.00
C
ATOM    809 1HB  LYS    49      -2.826 -11.290   2.554  1.00  0.00
H
ATOM    810 2HB  LYS    49      -3.646  -9.877   3.212  1.00  0.00
H
ATOM    811  CG  LYS    49      -3.954 -10.145   1.140  1.00  0.00
C
ATOM    812 1HG  LYS    49      -4.357  -9.137   1.063  1.00  0.00
H
ATOM    813 2HG  LYS    49      -3.375 -10.352   0.246  1.00  0.00
H
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ATOM    814  CD  LYS    49      -5.091 -11.156   1.244  1.00  0.00
C
ATOM    815 1HD  LYS    49      -4.667 -12.152   1.369  1.00  0.00
H
ATOM    816 2HD  LYS    49      -5.692 -10.922   2.120  1.00  0.00
H
ATOM    817  CE  LYS    49      -5.987 -11.155   0.017  1.00  0.00
C
ATOM    818 1HE  LYS    49      -6.449 -10.173  -0.086  1.00  0.00
H
ATOM    819 2HE  LYS    49      -5.385 -11.349  -0.871  1.00  0.00
H
ATOM    820  NZ  LYS    49      -7.053 -12.203   0.136  1.00  0.00
N
ATOM    821 1HZ  LYS    49      -7.772 -12.048  -0.565  1.00  0.00
H
ATOM    822 2HZ  LYS    49      -7.479 -12.157   1.055  1.00  0.00
H
ATOM    823 3HZ  LYS    49      -6.661 -13.125   0.007  1.00  0.00
H
ATOM    824  N   ASN    50       0.202  -9.149   3.726  1.00  0.00
N
ATOM    825  H   ASN    50       0.722  -9.225   2.870  1.00  0.00
H
ATOM    826  CA  ASN    50       0.941  -8.941   4.983  1.00  0.00
C
ATOM    827  HA  ASN    50       0.620  -9.686   5.713  1.00  0.00
H
ATOM    828  C   ASN    50       0.705  -7.555   5.600  1.00  0.00
C
ATOM    829  O   ASN    50       1.216  -7.283   6.681  1.00  0.00
O
ATOM    830  CB  ASN    50       2.464  -9.086   4.769  1.00  0.00
C
ATOM    831 1HB  ASN    50       2.776  -8.481   3.922  1.00  0.00
H
ATOM    832 2HB  ASN    50       2.977  -8.718   5.657  1.00  0.00
H
ATOM    833  CG  ASN    50       2.917 -10.516   4.565  1.00  0.00
C
ATOM    834  OD1 ASN    50       2.129 -11.420   4.358  1.00  0.00
O
ATOM    835  ND2 ASN    50       4.202 -10.728   4.611  1.00  0.00
N
ATOM    836 1HD2 ASN    50       4.539 -11.665   4.464  1.00  0.00
H
ATOM    837 2HD2 ASN    50       4.847  -9.976   4.818  1.00  0.00
H
ATOM    838  N   ASN    51       0.005  -6.676   4.885  1.00  0.00
N
ATOM    839  H   ASN    51      -0.416  -7.000   4.031  1.00  0.00
H
ATOM    840  CA  ASN    51      -0.188  -5.255   5.227  1.00  0.00
C
ATOM    841  HA  ASN    51      -0.780  -4.801   4.431  1.00  0.00
H
ATOM    842  C   ASN    51       1.157  -4.529   5.255  1.00  0.00
C
ATOM    843  O   ASN    51       1.363  -3.554   5.977  1.00  0.00
O
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ATOM    844  CB  ASN    51      -0.974  -5.069   6.534  1.00  0.00
C
ATOM    845 1HB  ASN    51      -0.408  -5.482   7.367  1.00  0.00
H
ATOM    846 2HB  ASN    51      -1.118  -4.007   6.714  1.00  0.00
H
ATOM    847  CG  ASN    51      -2.327  -5.724   6.489  1.00  0.00
C
ATOM    848  OD1 ASN    51      -3.039  -5.632   5.499  1.00  0.00
O
ATOM    849  ND2 ASN    51      -2.703  -6.377   7.550  1.00  0.00
N
ATOM    850 1HD2 ASN    51      -3.607  -6.816   7.555  1.00  0.00
H
ATOM    851 2HD2 ASN    51      -2.094  -6.426   8.356  1.00  0.00
H
ATOM    852  N   LYS    52       2.079  -5.050   4.456  1.00  0.00
N
ATOM    853  H   LYS    52       1.809  -5.834   3.871  1.00  0.00
H
ATOM    854  CA  LYS    52       3.455  -4.558   4.345  1.00  0.00
C
ATOM    855  HA  LYS    52       3.530  -3.556   4.764  1.00  0.00
H
ATOM    856  C   LYS    52       3.794  -4.519   2.862  1.00  0.00
C
ATOM    857  O   LYS    52       3.984  -5.570   2.233  1.00  0.00
O
ATOM    858  CB  LYS    52       4.419  -5.488   5.087  1.00  0.00
C
ATOM    859 1HB  LYS    52       4.255  -6.508   4.742  1.00  0.00
H
ATOM    860 2HB  LYS    52       5.438  -5.199   4.833  1.00  0.00
H
ATOM    861  CG  LYS    52       4.274  -5.455   6.604  1.00  0.00
C
ATOM    862 1HG  LYS    52       4.560  -4.469   6.972  1.00  0.00
H
ATOM    863 2HG  LYS    52       3.238  -5.646   6.876  1.00  0.00
H
ATOM    864  CD  LYS    52       5.147  -6.511   7.252  1.00  0.00
C
ATOM    865 1HD  LYS    52       4.858  -7.493   6.877  1.00  0.00
H
ATOM    866 2HD  LYS    52       6.186  -6.327   6.996  1.00  0.00
H
ATOM    867  CE  LYS    52       5.006  -6.496   8.759  1.00  0.00
C
ATOM    868 1HE  LYS    52       5.316  -5.522   9.144  1.00  0.00
H
ATOM    869 2HE  LYS    52       3.962  -6.669   9.026  1.00  0.00
H
ATOM    870  NZ  LYS    52       5.858  -7.566   9.358  1.00  0.00
N
ATOM    871 1HZ  LYS    52       5.740  -7.577  10.365  1.00  0.00
H
ATOM    872 2HZ  LYS    52       6.833  -7.399   9.147  1.00  0.00
H
ATOM    873 3HZ  LYS    52       5.596  -8.469   8.982  1.00  0.00
H
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ATOM    874  N   ILE    53       3.752  -3.344   2.262  1.00  0.00
N
ATOM    875  H   ILE    53       3.630  -2.504   2.820  1.00  0.00
H
ATOM    876  CA  ILE    53       3.909  -3.219   0.816  1.00  0.00
C
ATOM    877  HA  ILE    53       3.486  -4.101   0.359  1.00  0.00
H
ATOM    878  C   ILE    53       5.393  -3.228   0.472  1.00  0.00
C
ATOM    879  O   ILE    53       6.202  -2.569   1.116  1.00  0.00
O
ATOM    880  CB  ILE    53       3.098  -2.019   0.262  1.00  0.00
C
ATOM    881  HB  ILE    53       3.231  -1.162   0.922  1.00  0.00
H
ATOM    882  CG1 ILE    53       1.618  -2.457   0.259  1.00  0.00
C
ATOM    883 1HG1 ILE    53       1.503  -3.253  -0.478  1.00  0.00
H
ATOM    884 2HG1 ILE    53       1.376  -2.875   1.236  1.00  0.00
H
ATOM    885  CG2 ILE    53       3.551  -1.621  -1.162  1.00  0.00
C
ATOM    886 1HG2 ILE    53       2.967  -0.771  -1.519  1.00  0.00
H
ATOM    887 2HG2 ILE    53       3.419  -2.453  -1.853  1.00  0.00
H
ATOM    888 3HG2 ILE    53       4.600  -1.323  -1.154  1.00  0.00
H
ATOM    889  CD1 ILE    53       0.590  -1.391  -0.042  1.00  0.00
C
ATOM    890 1HD1 ILE    53      -0.401  -1.844  -0.046  1.00  0.00
H
ATOM    891 2HD1 ILE    53       0.774  -0.934  -1.014  1.00  0.00
H
ATOM    892 3HD1 ILE    53       0.627  -0.631   0.735  1.00  0.00
H
ATOM    893  N   THR    54       5.736  -4.050  -0.508  1.00  0.00
N
ATOM    894  H   THR    54       5.008  -4.538  -1.022  1.00  0.00
H
ATOM    895  CA  THR    54       7.115  -4.284  -0.923  1.00  0.00
C
ATOM    896  HA  THR    54       7.811  -3.923  -0.167  1.00  0.00
H
ATOM    897  C   THR    54       7.386  -3.561  -2.237  1.00  0.00
C
ATOM    898  O   THR    54       6.482  -2.994  -2.848  1.00  0.00
O
ATOM    899  CB  THR    54       7.354  -5.785  -1.159  1.00  0.00
C
ATOM    900  HB  THR    54       8.353  -5.944  -1.563  1.00  0.00
H
ATOM    901  OG1 THR    54       6.373  -6.260  -2.080  1.00  0.00
O
ATOM    902  HG1 THR    54       6.705  -7.072  -2.489  1.00  0.00
H
ATOM    903  CG2 THR    54       7.200  -6.600   0.104  1.00  0.00
C
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ATOM    904 1HG2 THR    54       7.268  -7.660  -0.142  1.00  0.00
H
ATOM    905 2HG2 THR    54       6.246  -6.401   0.584  1.00  0.00
H
ATOM    906 3HG2 THR    54       8.006  -6.355   0.794  1.00  0.00
H
ATOM    907  N   PHE    55       8.633  -3.595  -2.677  1.00  0.00
N
ATOM    908  H   PHE    55       9.332  -4.102  -2.145  1.00  0.00
H
ATOM    909  CA  PHE    55       9.076  -2.875  -3.865  1.00  0.00
C
ATOM    910  HA  PHE    55       8.988  -1.804  -3.678  1.00  0.00
H
ATOM    911  C   PHE    55       8.307  -3.167  -5.149  1.00  0.00
C
ATOM    912  O   PHE    55       7.837  -2.250  -5.825  1.00  0.00
O
ATOM    913  CB  PHE    55      10.547  -3.239  -4.058  1.00  0.00
C
ATOM    914 1HB  PHE    55      11.097  -2.937  -3.170  1.00  0.00
H
ATOM    915 2HB  PHE    55      10.630  -4.321  -4.161  1.00  0.00
H
ATOM    916  CG  PHE    55      11.171  -2.614  -5.260  1.00  0.00
C
ATOM    917  CD1 PHE    55      11.689  -1.314  -5.199  1.00  0.00
C
ATOM    918  HD1 PHE    55      11.642  -0.754  -4.276  1.00  0.00
H
ATOM    919  CD2 PHE    55      11.255  -3.334  -6.464  1.00  0.00
C
ATOM    920  HD2 PHE    55      10.877  -4.345  -6.514  1.00  0.00
H
ATOM    921  CE1 PHE    55      12.281  -0.732  -6.332  1.00  0.00
C
ATOM    922  HE1 PHE    55      12.696   0.254  -6.269  1.00  0.00
H
ATOM    923  CE2 PHE    55      11.827  -2.756  -7.612  1.00  0.00
C
ATOM    924  HE2 PHE    55      11.876  -3.318  -8.533  1.00  0.00
H
ATOM    925  CZ  PHE    55      12.340  -1.448  -7.547  1.00  0.00
C
ATOM    926  HZ  PHE    55      12.787  -0.998  -8.420  1.00  0.00
H
ATOM    927  N   ASP    56       8.152  -4.437  -5.494  1.00  0.00
N
ATOM    928  H   ASP    56       8.529  -5.173  -4.898  1.00  0.00
H
ATOM    929  CA  ASP    56       7.499  -4.789  -6.754  1.00  0.00
C
ATOM    930  HA  ASP    56       7.935  -4.211  -7.569  1.00  0.00
H
ATOM    931  C   ASP    56       6.023  -4.452  -6.673  1.00  0.00
C
ATOM    932  O   ASP    56       5.401  -4.080  -7.664  1.00  0.00
O
ATOM    933  CB  ASP    56       7.626  -6.283  -7.060  1.00  0.00
C
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ATOM    934 1HB  ASP    56       7.419  -6.851  -6.154  1.00  0.00
H
ATOM    935 2HB  ASP    56       6.884  -6.545  -7.811  1.00  0.00
H
ATOM    936  CG  ASP    56       8.986  -6.667  -7.606  1.00  0.00
C
ATOM    937  OD1 ASP    56       9.696  -5.818  -8.180  1.00  0.00
O
ATOM    938  OD2 ASP    56       9.338  -7.864  -7.507  1.00  0.00
O
ATOM    939  N   GLU    57       5.465  -4.553  -5.479  1.00  0.00
N
ATOM    940  H   GLU    57       6.030  -4.819  -4.684  1.00  0.00
H
ATOM    941  CA  GLU    57       4.051  -4.266  -5.280  1.00  0.00
C
ATOM    942  HA  GLU    57       3.463  -4.807  -6.020  1.00  0.00
H
ATOM    943  C   GLU    57       3.771  -2.780  -5.434  1.00  0.00
C
ATOM    944  O   GLU    57       2.752  -2.399  -6.009  1.00  0.00
O
ATOM    945  CB  GLU    57       3.633  -4.683  -3.878  1.00  0.00
C
ATOM    946 1HB  GLU    57       4.335  -4.232  -3.183  1.00  0.00
H
ATOM    947 2HB  GLU    57       2.644  -4.278  -3.673  1.00  0.00
H
ATOM    948  CG  GLU    57       3.608  -6.180  -3.637  1.00  0.00
C
ATOM    949 1HG  GLU    57       2.835  -6.632  -4.260  1.00  0.00
H
ATOM    950 2HG  GLU    57       4.571  -6.608  -3.913  1.00  0.00
H
ATOM    951  CD  GLU    57       3.338  -6.487  -2.177  1.00  0.00
C
ATOM    952  OE1 GLU    57       3.344  -5.593  -1.353  1.00  0.00
O
ATOM    953  OE2 GLU    57       3.114  -7.655  -1.780  1.00  0.00
O
ATOM    954  N   PHE    58       4.679  -1.947  -4.946  1.00  0.00
N
ATOM    955  H   PHE    58       5.497  -2.319  -4.466  1.00  0.00
H
ATOM    956  CA  PHE    58       4.521  -0.498  -5.033  1.00  0.00
C
ATOM    957  HA  PHE    58       3.523  -0.227  -4.691  1.00  0.00
H
ATOM    958  C   PHE    58       4.695  -0.032  -6.470  1.00  0.00
C
ATOM    959  O   PHE    58       4.000   0.859  -6.947  1.00  0.00
O
ATOM    960  CB  PHE    58       5.557   0.181  -4.146  1.00  0.00
C
ATOM    961 1HB  PHE    58       5.572  -0.332  -3.186  1.00  0.00
H
ATOM    962 2HB  PHE    58       6.542   0.081  -4.600  1.00  0.00
H
ATOM    963  CG  PHE    58       5.275   1.637  -3.888  1.00  0.00
C
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ATOM    964  CD1 PHE    58       4.591   2.021  -2.721  1.00  0.00
C
ATOM    965  HD1 PHE    58       4.220   1.268  -2.041  1.00  0.00
H
ATOM    966  CD2 PHE    58       5.712   2.631  -4.782  1.00  0.00
C
ATOM    967  HD2 PHE    58       6.218   2.352  -5.695  1.00  0.00
H
ATOM    968  CE1 PHE    58       4.393   3.385  -2.414  1.00  0.00
C
ATOM    969  HE1 PHE    58       3.864   3.662  -1.515  1.00  0.00
H
ATOM    970  CE2 PHE    58       5.510   4.003  -4.494  1.00  0.00
C
ATOM    971  HE2 PHE    58       5.849   4.754  -5.189  1.00  0.00
H
ATOM    972  CZ  PHE    58       4.874   4.381  -3.292  1.00  0.00
C
ATOM    973  HZ  PHE    58       4.735   5.425  -3.055  1.00  0.00
H
ATOM    974  N   CYS    59       5.569  -0.701  -7.207  1.00  0.00
N
ATOM    975  H   CYS    59       6.133  -1.431  -6.781  1.00  0.00
H
ATOM    976  CA  CYS    59       5.750  -0.392  -8.622  1.00  0.00
C
ATOM    977  HA  CYS    59       5.885   0.686  -8.716  1.00  0.00
H
ATOM    978  C   CYS    59       4.536  -0.766  -9.489  1.00  0.00
C
ATOM    979  O   CYS    59       4.449  -0.357 -10.646  1.00  0.00
O
ATOM    980  CB  CYS    59       7.019  -1.064  -9.143  1.00  0.00
C
ATOM    981 1HB  CYS    59       6.942  -2.141  -8.993  1.00  0.00
H
ATOM    982 2HB  CYS    59       7.086  -0.867 -10.210  1.00  0.00
H
ATOM    983  SG  CYS    59       8.535  -0.452  -8.356  1.00  0.00
S
ATOM    984  HG  CYS    59       8.347  -1.048  -7.165  1.00  0.00
H
ATOM    985  N   ARG    60       3.568  -1.478  -8.919  1.00  0.00
N
ATOM    986  H   ARG    60       3.707  -1.827  -7.976  1.00  0.00
H
ATOM    987  CA  ARG    60       2.279  -1.749  -9.574  1.00  0.00
C
ATOM    988  HA  ARG    60       2.303  -1.391 -10.604  1.00  0.00
H
ATOM    989  C   ARG    60       1.139  -1.042  -8.844  1.00  0.00
C
ATOM    990  O   ARG    60      -0.039  -1.291  -9.101  1.00  0.00
O
ATOM    991  CB  ARG    60       1.994  -3.254  -9.580  1.00  0.00
C
ATOM    992 1HB  ARG    60       1.916  -3.593  -8.548  1.00  0.00
H
ATOM    993 2HB  ARG    60       1.037  -3.413 -10.071  1.00  0.00
H
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ATOM    994  CG  ARG    60       3.029  -4.102 -10.298  1.00  0.00
C
ATOM    995 1HG  ARG    60       3.169  -3.712 -11.305  1.00  0.00
H
ATOM    996 2HG  ARG    60       3.972  -4.047  -9.766  1.00  0.00
H
ATOM    997  CD  ARG    60       2.585  -5.559 -10.388  1.00  0.00
C
ATOM    998 1HD  ARG    60       1.627  -5.592 -10.908  1.00  0.00
H
ATOM    999 2HD  ARG    60       3.312  -6.118 -10.980  1.00  0.00
H
ATOM   1000  NE  ARG    60       2.431  -6.194  -9.071  1.00  0.00
N
ATOM   1001  HE  ARG    60       1.518  -6.109  -8.635  1.00  0.00
H
ATOM   1002  CZ  ARG    60       3.353  -6.874  -8.402  1.00  0.00
C
ATOM   1003  NH1 ARG    60       4.515  -7.227  -8.888  1.00  0.00
N
ATOM   1004 1HH1 ARG    60       4.768  -6.978  -9.831  1.00  0.00
H
ATOM   1005 2HH1 ARG    60       5.149  -7.760  -8.319  1.00  0.00
H
ATOM   1006  NH2 ARG    60       3.067  -7.272  -7.197  1.00  0.00
N
ATOM   1007 1HH2 ARG    60       2.171  -7.052  -6.800  1.00  0.00
H
ATOM   1008 2HH2 ARG    60       3.757  -7.792  -6.670  1.00  0.00
H
ATOM   1009  N   GLY    61       1.489  -0.195  -7.889  1.00  0.00
N
ATOM   1010  H   GLY    61       2.465   0.057  -7.771  1.00  0.00
H
ATOM   1011  CA  GLY    61       0.540   0.324  -6.917  1.00  0.00
C
ATOM   1012 1HA  GLY    61      -0.470   0.019  -7.183  1.00  0.00
H
ATOM   1013 2HA  GLY    61       0.779  -0.114  -5.948  1.00  0.00
H
ATOM   1014  C   GLY    61       0.547   1.828  -6.758  1.00  0.00
C
ATOM   1015  O   GLY    61       0.631   2.301  -5.626  1.00  0.00
O
ATOM   1016  N   PHE    62       0.471   2.525  -7.888  1.00  0.00
N
ATOM   1017  H   PHE    62       0.437   2.004  -8.752  1.00  0.00
H
ATOM   1018  CA  PHE    62       0.448   3.993  -8.010  1.00  0.00
C
ATOM   1019  HA  PHE    62       0.628   4.176  -9.069  1.00  0.00
H
ATOM   1020  C   PHE    62       1.558   4.772  -7.291  1.00  0.00
C
ATOM   1021  O   PHE    62       2.470   4.194  -6.709  1.00  0.00
O
ATOM   1022  CB  PHE    62      -0.968   4.567  -7.770  1.00  0.00
C
ATOM   1023 1HB  PHE    62      -1.081   5.463  -8.380  1.00  0.00
H
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ATOM   1024 2HB  PHE    62       -1.698   3.840  -8.119  1.00  0.00
H
ATOM   1025  CG  PHE    62       -1.291   4.945  -6.338  1.00  0.00
C
ATOM   1026  CD1 PHE    62       -1.225   6.287  -5.930  1.00  0.00
C
ATOM   1027  HD1 PHE    62       -0.915   7.046  -6.629  1.00  0.00
H
ATOM   1028  CD2 PHE    62       -1.733   3.990  -5.413  1.00  0.00
C
ATOM   1029  HD2 PHE    62       -1.800   2.955  -5.704  1.00  0.00
H
ATOM   1030  CE1 PHE    62       -1.576   6.667  -4.613  1.00  0.00
C
ATOM   1031  HE1 PHE    62       -1.504   7.697  -4.304  1.00  0.00
H
ATOM   1032  CE2 PHE    62       -2.105   4.363  -4.101  1.00  0.00
C
ATOM   1033  HE2 PHE    62       -2.447   3.617  -3.402  1.00  0.00
H
ATOM   1034  CZ  PHE    62       -2.040   5.707  -3.716  1.00  0.00
C
ATOM   1035  HZ  PHE    62       -2.359   6.004  -2.734  1.00  0.00
H
ATOM   1036  N   GLY    63        1.519   6.093  -7.390  1.00  0.00
N
ATOM   1037  H   GLY    63        0.789   6.535  -7.925  1.00  0.00
H
ATOM   1038  CA  GLY    63        2.465   6.944  -6.693  1.00  0.00
C
ATOM   1039 1HA  GLY    63        3.134   6.339  -6.083  1.00  0.00
H
ATOM   1040 2HA  GLY    63        3.065   7.483  -7.427  1.00  0.00
H
ATOM   1041  C   GLY    63        1.780   7.958  -5.801  1.00  0.00
C
ATOM   1042  O   GLY    63        1.023   8.778  -6.304  1.00  0.00
O
ATOM   1043  N   ILE    64        2.068   7.943  -4.505  1.00  0.00
N
ATOM   1044  H   ILE    64        2.623   7.176  -4.143  1.00  0.00
H
ATOM   1045  CA  ILE    64        1.575   8.951  -3.550  1.00  0.00
C
ATOM   1046  HA  ILE    64        0.491   9.019  -3.645  1.00  0.00
H
ATOM   1047  C   ILE    64        2.149  10.350  -3.795  1.00  0.00
C
ATOM   1048  O   ILE    64        1.628  11.367  -3.341  1.00  0.00
O
ATOM   1049  CB  ILE    64        1.931   8.542  -2.083  1.00  0.00
C
ATOM   1050  HB  ILE    64        1.495   9.276  -1.405  1.00  0.00
H
ATOM   1051  CG1 ILE    64        3.456   8.482  -1.840  1.00  0.00
C
ATOM   1052 1HG1 ILE    64        3.651   7.668  -1.146  1.00  0.00
H
ATOM   1053 2HG1 ILE    64        3.967   8.237  -2.770  1.00  0.00
H
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ATOM   1054  CG2 ILE    64       1.339   7.161  -1.738  1.00  0.00
C
ATOM   1055 1HG2 ILE    64       1.338   7.024  -0.656  1.00  0.00
H
ATOM   1056 2HG2 ILE    64       1.924   6.361  -2.187  1.00  0.00
H
ATOM   1057 3HG2 ILE    64       0.312   7.090  -2.098  1.00  0.00
H
ATOM   1058  CD1 ILE    64       4.092   9.747  -1.250  1.00  0.00
C
ATOM   1059 1HD1 ILE    64       5.179   9.641  -1.240  1.00  0.00
H
ATOM   1060 2HD1 ILE    64       3.743   9.889  -0.236  1.00  0.00
H
ATOM   1061 3HD1 ILE    64       3.824  10.625  -1.827  1.00  0.00
H
ATOM   1062  N   LYS    65       3.256  10.385  -4.520  1.00  0.00
N
ATOM   1063  H   LYS    65       3.605   9.508  -4.872  1.00  0.00
H
ATOM   1064  CA  LYS    65       4.001  11.596  -4.864  1.00  0.00
C
ATOM   1065  HA  LYS    65       3.466  12.494  -4.556  1.00  0.00
H
ATOM   1066  C   LYS    65       3.959  11.485  -6.374  1.00  0.00
C
ATOM   1067  O   LYS    65       4.917  11.162  -7.067  1.00  0.00
O
ATOM   1068  CB  LYS    65       5.389  11.565  -4.218  1.00  0.00
C
ATOM   1069 1HB  LYS    65       5.256  11.587  -3.140  1.00  0.00
H
ATOM   1070 2HB  LYS    65       5.857  10.619  -4.468  1.00  0.00
H
ATOM   1071  CG  LYS    65       6.347  12.687  -4.578  1.00  0.00
C
ATOM   1072 1HG  LYS    65       6.521  12.690  -5.651  1.00  0.00
H
ATOM   1073 2HG  LYS    65       5.932  13.646  -4.271  1.00  0.00
H
ATOM   1074  CD  LYS    65       7.661  12.439  -3.862  1.00  0.00
C
ATOM   1075 1HD  LYS    65       7.489  12.450  -2.786  1.00  0.00
H
ATOM   1076 2HD  LYS    65       8.042  11.459  -4.144  1.00  0.00
H
ATOM   1077  CE  LYS    65       8.704  13.476  -4.212  1.00  0.00
C
ATOM   1078 1HE  LYS    65       8.848  13.492  -5.294  1.00  0.00
H
ATOM   1079 2HE  LYS    65       8.365  14.458  -3.882  1.00  0.00
H
ATOM   1080  NZ  LYS    65      10.001  13.136  -3.549  1.00  0.00
N
ATOM   1081 1HZ  LYS    65      10.695  13.841  -3.767  1.00  0.00
H
ATOM   1082 2HZ  LYS    65      10.327  12.235  -3.879  1.00  0.00
H
ATOM   1083 3HZ  LYS    65       9.881  13.087  -2.543  1.00  0.00
H
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ATOM   1084  N   LEU    66       2.722  11.594  -6.820  1.00  0.00
N
ATOM   1085  H   LEU    66       2.007  11.877  -6.164  1.00  0.00
H
ATOM   1086  CA  LEU    66       2.302  11.325  -8.184  1.00  0.00
C
ATOM   1087  HA  LEU    66       2.484  10.281  -8.440  1.00  0.00
H
ATOM   1088  C   LEU    66       3.047  12.227  -9.153  1.00  0.00
C
ATOM   1089  O   LEU    66       3.106  13.438  -8.927  1.00  0.00
O
ATOM   1090  CB  LEU    66       0.805  11.640  -8.193  1.00  0.00
C
ATOM   1091 1HB  LEU    66       0.351  11.007  -7.434  1.00  0.00
H
ATOM   1092 2HB  LEU    66       0.709  12.662  -7.839  1.00  0.00
H
ATOM   1093  CG  LEU    66      -0.090  11.551  -9.426  1.00  0.00
C
ATOM   1094  HG  LEU    66       0.286  12.230 -10.189  1.00  0.00
H
ATOM   1095  CD1 LEU    66      -0.139  10.150  -9.990  1.00  0.00
C
ATOM   1096 1HD1 LEU    66      -0.879  10.102 -10.785  1.00  0.00
H
ATOM   1097 2HD1 LEU    66      -0.404   9.437  -9.208  1.00  0.00
H
ATOM   1098 3HD1 LEU    66       0.835   9.895 -10.406  1.00  0.00
H
ATOM   1099  CD2 LEU    66      -1.484  12.009  -8.991  1.00  0.00
C
ATOM   1100 1HD2 LEU    66      -2.147  12.041  -9.849  1.00  0.00
H
ATOM   1101 2HD2 LEU    66      -1.433  13.017  -8.574  1.00  0.00
H
ATOM   1102 3HD2 LEU    66      -1.897  11.331  -8.246  1.00  0.00
H
ATOM   1103  N   ASN    67       3.603  11.667 -10.220  1.00  0.00
N
ATOM   1104  H   ASN    67       3.640  10.658 -10.318  1.00  0.00
H
ATOM   1105  CA  ASN    67       4.113  12.510 -11.295  1.00  0.00
C
ATOM   1106  HA  ASN    67       4.744  13.286 -10.864  1.00  0.00
H
ATOM   1107  C   ASN    67       2.882  13.169 -11.901  1.00  0.00
C
ATOM   1108  O   ASN    67       1.951  12.512 -12.370  1.00  0.00
O
ATOM   1109  CB  ASN    67       4.914  11.732 -12.342  1.00  0.00
C
ATOM   1110 1HB  ASN    67       5.720  11.198 -11.842  1.00  0.00
H
ATOM   1111 2HB  ASN    67       4.262  11.006 -12.821  1.00  0.00
H
ATOM   1112  CG  ASN    67       5.506  12.633 -13.408  1.00  0.00
C
ATOM   1113  OD1 ASN    67       4.819  13.447 -14.023  1.00  0.00
O
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ATOM   1114  ND2 ASN    67       6.784  12.508 -13.631  1.00  0.00
N
ATOM   1115 1HD2 ASN    67       7.218  13.076 -14.340  1.00  0.00
H
ATOM   1116 2HD2 ASN    67       7.335  11.876 -13.076  1.00  0.00
H
ATOM   1117  N   GLU    68       2.872  14.487 -11.823  1.00  0.00
N
ATOM   1118  H   GLU    68       3.705  14.972 -11.497  1.00  0.00
H
ATOM   1119  CA  GLU    68       1.681  15.293 -12.047  1.00  0.00
C
ATOM   1120  HA  GLU    68       0.867  14.912 -11.429  1.00  0.00
H
ATOM   1121  C   GLU    68       1.224  15.280 -13.494  1.00  0.00
C
ATOM   1122  O   GLU    68       0.083  15.603 -13.797  1.00  0.00
O
ATOM   1123  CB  GLU    68       1.977  16.740 -11.647  1.00  0.00
C
ATOM   1124 1HB  GLU    68       2.765  17.130 -12.288  1.00  0.00
H
ATOM   1125 2HB  GLU    68       1.080  17.324 -11.843  1.00  0.00
H
ATOM   1126  CG  GLU    68       2.366  16.949 -10.175  1.00  0.00
C
ATOM   1127 1HG  GLU    68       2.142  17.984  -9.922  1.00  0.00
H
ATOM   1128 2HG  GLU    68       1.744  16.306  -9.552  1.00  0.00
H
ATOM   1129  CD  GLU    68       3.844  16.696  -9.853  1.00  0.00
C
ATOM   1130  OE1 GLU    68       4.659  16.451 -10.776  1.00  0.00
O
ATOM   1131  OE2 GLU    68       4.235  16.772  -8.669  1.00  0.00
O
ATOM   1132  N   MET    69       2.111  14.882 -14.393  1.00  0.00
N
ATOM   1133  H   MET    69       3.035  14.592 -14.089  1.00  0.00
H
ATOM   1134  CA  MET    69       1.797  14.866 -15.817  1.00  0.00
C
ATOM   1135  HA  MET    69       0.857  15.389 -15.986  1.00  0.00
H
ATOM   1136  C   MET    69       1.627  13.438 -16.320  1.00  0.00
C
ATOM   1137  O   MET    69       1.578  13.195 -17.525  1.00  0.00
O
ATOM   1138  CB  MET    69       2.889  15.593 -16.604  1.00  0.00
C
ATOM   1139 1HB  MET    69       3.811  15.017 -16.541  1.00  0.00
H
ATOM   1140 2HB  MET    69       2.584  15.637 -17.648  1.00  0.00
H
ATOM   1141  CG  MET    69       3.178  17.016 -16.121  1.00  0.00
C
ATOM   1142 1HG  MET    69       3.645  16.961 -15.138  1.00  0.00
H
ATOM   1143 2HG  MET    69       3.890  17.477 -16.807  1.00  0.00
H
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ATOM   1144  SD  MET    69       1.721  18.079 -15.986  1.00  0.00
S
ATOM   1145  CE  MET    69       1.209  18.300 -17.695  1.00  0.00
C
ATOM   1146 1HE  MET    69       0.352  18.974 -17.735  1.00  0.00
H
ATOM   1147 2HE  MET    69       0.930  17.341 -18.132  1.00  0.00
H
ATOM   1148 3HE  MET    69       2.025  18.735 -18.266  1.00  0.00
H
ATOM   1149  N   ARG    70       1.570  12.477 -15.404  1.00  0.00
N
ATOM   1150  H   ARG    70       1.648  12.722 -14.418  1.00  0.00
H
ATOM   1151  CA  ARG    70       1.419  11.061 -15.766  1.00  0.00
C
ATOM   1152  HA  ARG    70       1.237  10.981 -16.835  1.00  0.00
H
ATOM   1153  C   ARG    70       0.226  10.432 -15.067  1.00  0.00
C
ATOM   1154  O   ARG    70       0.156   9.217 -14.934  1.00  0.00
O
ATOM   1155  CB  ARG    70       2.692  10.268 -15.429  1.00  0.00
C
ATOM   1156 1HB  ARG    70       2.860  10.336 -14.357  1.00  0.00
H
ATOM   1157 2HB  ARG    70       2.533   9.219 -15.682  1.00  0.00
H
ATOM   1158  CG  ARG    70       3.958  10.725 -16.152  1.00  0.00
C
ATOM   1159 1HG  ARG    70       4.101  11.791 -15.987  1.00  0.00
H
ATOM   1160 2HG  ARG    70       4.814  10.193 -15.738  1.00  0.00
H
ATOM   1161  CD  ARG    70       3.896  10.458 -17.654  1.00  0.00
C
ATOM   1162 1HD  ARG    70       3.831   9.382 -17.823  1.00  0.00
H
ATOM   1163 2HD  ARG    70       3.004  10.926 -18.071  1.00  0.00
H
ATOM   1164  NE  ARG    70       5.080  10.993 -18.339  1.00  0.00
N
ATOM   1165  HE  ARG    70       5.853  10.354 -18.484  1.00  0.00
H
ATOM   1166  CZ  ARG    70       5.226  12.229 -18.799  1.00  0.00
C
ATOM   1167  NH1 ARG    70       4.289  13.136 -18.765  1.00  0.00
N
ATOM   1168 1HH1 ARG    70       3.379  12.908 -18.399  1.00  0.00
H
ATOM   1169 2HH1 ARG    70       4.481  14.066 -19.111  1.00  0.00
H
ATOM   1170  NH2 ARG    70       6.368  12.582 -19.307  1.00  0.00
N
ATOM   1171 1HH2 ARG    70       7.140  11.935 -19.327  1.00  0.00
H
ATOM   1172 2HH2 ARG    70       6.487  13.515 -19.679  1.00  0.00
H
ATOM   1173  N   VAL    71      -0.713  11.245 -14.605  1.00  0.00
N
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ATOM   1174  H   VAL    71      -0.673  12.233 -14.817  1.00  0.00
H
ATOM   1175  CA  VAL    71      -1.801  10.748 -13.761  1.00  0.00
C
ATOM   1176  HA  VAL    71      -1.348  10.292 -12.883  1.00  0.00
H
ATOM   1177  C   VAL    71      -2.623   9.669 -14.459  1.00  0.00
C
ATOM   1178  O   VAL    71      -2.967   8.668 -13.839  1.00  0.00
O
ATOM   1179  CB  VAL    71      -2.722  11.905 -13.280  1.00  0.00
C
ATOM   1180  HB  VAL    71      -3.256  12.307 -14.140  1.00  0.00
H
ATOM   1181  CG1 VAL    71      -3.748  11.422 -12.242  1.00  0.00
C
ATOM   1182 1HG1 VAL    71      -4.375  12.258 -11.927  1.00  0.00
H
ATOM   1183 2HG1 VAL    71      -3.241  11.008 -11.375  1.00  0.00
H
ATOM   1184 3HG1 VAL    71      -4.389  10.653 -12.673  1.00  0.00
H
ATOM   1185  CG2 VAL    71      -1.880  13.030 -12.678  1.00  0.00
C
ATOM   1186 1HG2 VAL    71      -2.530  13.753 -12.185  1.00  0.00
H
ATOM   1187 2HG2 VAL    71      -1.337  13.548 -13.462  1.00  0.00
H
ATOM   1188 3HG2 VAL    71      -1.171  12.636 -11.953  1.00  0.00
H
ATOM   1189  N   GLU    72      -2.840   9.796 -15.762  1.00  0.00
N
ATOM   1190  H   GLU    72      -2.485  10.611 -16.257  1.00  0.00
H
ATOM   1191  CA  GLU    72      -3.588   8.786 -16.517  1.00  0.00
C
ATOM   1192  HA  GLU    72      -4.597   8.719 -16.116  1.00  0.00
H
ATOM   1193  C   GLU    72      -2.952   7.397 -16.424  1.00  0.00
C
ATOM   1194  O   GLU    72      -3.651   6.384 -16.353  1.00  0.00
O
ATOM   1195  CB  GLU    72      -3.662   9.209 -17.993  1.00  0.00
C
ATOM   1196 1HB  GLU    72      -4.060  10.222 -18.039  1.00  0.00
H
ATOM   1197 2HB  GLU    72      -2.649   9.217 -18.393  1.00  0.00
H
ATOM   1198  CG  GLU    72      -4.522   8.302 -18.879  1.00  0.00
C
ATOM   1199 1HG  GLU    72      -4.153   7.281 -18.796  1.00  0.00
H
ATOM   1200 2HG  GLU    72      -5.551   8.327 -18.520  1.00  0.00
H
ATOM   1201  CD  GLU    72      -4.499   8.685 -20.353  1.00  0.00
C
ATOM   1202  OE1 GLU    72      -3.881   9.702 -20.736  1.00  0.00
O
ATOM   1203  OE2 GLU    72      -5.081   7.931 -21.166  1.00  0.00
O
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ATOM   1204  N   LYS    73       -1.625   7.342 -16.412  1.00  0.00
N
ATOM   1205  H   LYS    73       -1.095   8.209 -16.392  1.00  0.00
H
ATOM   1206  CA  LYS    73       -0.889   6.075 -16.470  1.00  0.00
C
ATOM   1207  HA  LYS    73       -1.581   5.282 -16.749  1.00  0.00
H
ATOM   1208  C   LYS    73       -0.284   5.652 -15.138  1.00  0.00
C
ATOM   1209  O   LYS    73        0.396   4.627 -15.051  1.00  0.00
O
ATOM   1210  CB  LYS    73        0.186   6.164 -17.563  1.00  0.00
C
ATOM   1211 1HB  LYS    73        0.911   6.927 -17.275  1.00  0.00
H
ATOM   1212 2HB  LYS    73        0.702   5.206 -17.624  1.00  0.00
H
ATOM   1213  CG  LYS    73       -0.358   6.510 -18.960  1.00  0.00
C
ATOM   1214 1HG  LYS    73       -0.858   7.477 -18.928  1.00  0.00
H
ATOM   1215 2HG  LYS    73        0.482   6.584 -19.649  1.00  0.00
H
ATOM   1216  CD  LYS    73       -1.342   5.465 -19.495  1.00  0.00
C
ATOM   1217 1HD  LYS    73       -0.856   4.489 -19.508  1.00  0.00
H
ATOM   1218 2HD  LYS    73       -2.214   5.418 -18.844  1.00  0.00
H
ATOM   1219  CE  LYS    73       -1.813   5.808 -20.896  1.00  0.00
C
ATOM   1220 1HE  LYS    73       -2.286   6.792 -20.889  1.00  0.00
H
ATOM   1221 2HE  LYS    73       -0.953   5.835 -21.570  1.00  0.00
H
ATOM   1222  NZ  LYS    73       -2.792   4.784 -21.379  1.00  0.00
N
ATOM   1223 1HZ  LYS    73       -3.180   5.072 -22.270  1.00  0.00
H
ATOM   1224 2HZ  LYS    73       -3.548   4.681 -20.715  1.00  0.00
H
ATOM   1225 3HZ  LYS    73       -2.329   3.889 -21.490  1.00  0.00
H
ATOM   1226  N   VAL    74       -0.551   6.415 -14.090  1.00  0.00
N
ATOM   1227  H   VAL    74       -1.060   7.276 -14.234  1.00  0.00
H
ATOM   1228  CA  VAL    74       -0.120   6.057 -12.735  1.00  0.00
C
ATOM   1229  HA  VAL    74        0.449   5.130 -12.764  1.00  0.00
H
ATOM   1230  C   VAL    74       -1.324   5.824 -11.825  1.00  0.00
C
ATOM   1231  O   VAL    74       -1.363   4.846 -11.076  1.00  0.00
O
ATOM   1232  CB  VAL    74        0.798   7.162 -12.126  1.00  0.00
C
ATOM   1233  HB  VAL    74        0.257   8.107 -12.137  1.00  0.00
H
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ATOM   1234  CG1 VAL    74       1.187   6.838 -10.679  1.00  0.00
C
ATOM   1235 1HG1 VAL    74       1.920   7.563 -10.320  1.00  0.00
H
ATOM   1236 2HG1 VAL    74       1.615   5.837 -10.622  1.00  0.00
H
ATOM   1237 3HG1 VAL    74       0.305   6.895 -10.043  1.00  0.00
H
ATOM   1238  CG2 VAL    74       2.081   7.321 -12.944  1.00  0.00
C
ATOM   1239 1HG2 VAL    74       2.673   8.142 -12.540  1.00  0.00
H
ATOM   1240 2HG2 VAL    74       1.844   7.550 -13.981  1.00  0.00
H
ATOM   1241 3HG2 VAL    74       2.670   6.404 -12.906  1.00  0.00
H
ATOM   1242  N   GLU    75      -2.309   6.707 -11.858  1.00  0.00
N
ATOM   1243  H   GLU    75      -2.329   7.449 -12.553  1.00  0.00
H
ATOM   1244  CA  GLU    75      -3.383   6.669 -10.874  1.00  0.00
C
ATOM   1245  HA  GLU    75      -3.029   6.096 -10.019  1.00  0.00
H
ATOM   1246  C   GLU    75      -4.650   5.975 -11.358  1.00  0.00
C
ATOM   1247  O   GLU    75      -5.552   6.542 -11.993  1.00  0.00
O
ATOM   1248  CB  GLU    75      -3.672   8.072 -10.352  1.00  0.00
C
ATOM   1249 1HB  GLU    75      -3.040   8.773 -10.894  1.00  0.00
H
ATOM   1250 2HB  GLU    75      -4.709   8.334 -10.534  1.00  0.00
H
ATOM   1251  CG  GLU    75      -3.379   8.212  -8.871  1.00  0.00
C
ATOM   1252 1HG  GLU    75      -2.358   7.872  -8.684  1.00  0.00
H
ATOM   1253 2HG  GLU    75      -3.435   9.269  -8.609  1.00  0.00
H
ATOM   1254  CD  GLU    75      -4.332   7.433  -7.967  1.00  0.00
C
ATOM   1255  OE1 GLU    75      -4.172   7.576  -6.741  1.00  0.00
O
ATOM   1256  OE2 GLU    75      -5.216   6.676  -8.447  1.00  0.00
O
ATOM   1257  N   ARG    76      -4.703   4.686 -11.062  1.00  0.00
N
ATOM   1258  H   ARG    76      -3.938   4.261 -10.556  1.00  0.00
H
ATOM   1259  CA  ARG    76      -5.823   3.873 -11.514  1.00  0.00
C
ATOM   1260  HA  ARG    76      -5.998   4.149 -12.545  1.00  0.00
H
ATOM   1261  C   ARG    76      -7.130   4.138 -10.788  1.00  0.00
C
ATOM   1262  O   ARG    76      -8.190   3.909 -11.360  1.00  0.00
O
ATOM   1263  CB  ARG    76      -5.467   2.383 -11.496  1.00  0.00
C
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ATOM   1264 1HB  ARG    76       -5.237   2.074 -10.478  1.00  0.00
H
ATOM   1265 2HB  ARG    76       -6.328   1.818 -11.850  1.00  0.00
H
ATOM   1266  CG  ARG    76       -4.279   2.087 -12.404  1.00  0.00
C
ATOM   1267 1HG  ARG    76       -4.448   2.578 -13.359  1.00  0.00
H
ATOM   1268 2HG  ARG    76       -3.378   2.504 -11.956  1.00  0.00
H
ATOM   1269  CD  ARG    76       -4.049   0.615 -12.680  1.00  0.00
C
ATOM   1270 1HD  ARG    76       -3.968   0.078 -11.736  1.00  0.00
H
ATOM   1271 2HD  ARG    76       -4.890   0.218 -13.251  1.00  0.00
H
ATOM   1272  NE  ARG    76       -2.805   0.452 -13.447  1.00  0.00
N
ATOM   1273  HE  ARG    76       -2.288   1.298 -13.659  1.00  0.00
H
ATOM   1274  CZ  ARG    76       -2.282  -0.679 -13.894  1.00  0.00
C
ATOM   1275  NH1 ARG    76       -2.791  -1.857 -13.666  1.00  0.00
N
ATOM   1276 1HH1 ARG    76       -3.625  -1.939 -13.109  1.00  0.00
H
ATOM   1277 2HH1 ARG    76       -2.346  -2.675 -14.058  1.00  0.00
H
ATOM   1278  NH2 ARG    76       -1.180  -0.622 -14.582  1.00  0.00
N
ATOM   1279 1HH2 ARG    76       -0.764   0.269 -14.795  1.00  0.00
H
ATOM   1280 2HH2 ARG    76       -0.761  -1.470 -14.923  1.00  0.00
H
ATOM   1281  N   ALA    77       -7.071   4.650  -9.566  1.00  0.00
N
ATOM   1282  H   ALA    77       -6.176   4.881  -9.150  1.00  0.00
H
ATOM   1283  CA  ALA    77       -8.285   4.954  -8.816  1.00  0.00
C
ATOM   1284  HA  ALA    77       -9.026   4.178  -9.009  1.00  0.00
H
ATOM   1285  C   ALA    77       -8.867   6.295  -9.260  1.00  0.00
C
ATOM   1286  O   ALA    77      -10.079   6.509  -9.146  1.00  0.00
O
ATOM   1287  CB  ALA    77       -7.992   4.979  -7.317  1.00  0.00
C
ATOM   1288 1HB  ALA    77       -7.659   3.993  -6.993  1.00  0.00
H
ATOM   1289 2HB  ALA    77       -8.900   5.242  -6.772  1.00  0.00
H
ATOM   1290 3HB  ALA    77       -7.219   5.717  -7.102  1.00  0.00
H
ATOM   1291  N   LEU    78       -8.017   7.201  -9.727  1.00  0.00
N
ATOM   1292  H   LEU    78       -7.022   7.001  -9.731  1.00  0.00
H
ATOM   1293  CA  LEU    78       -8.495   8.502 -10.196  1.00  0.00
C
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ATOM   1294  HA  LEU    78      -9.384   8.763  -9.624  1.00  0.00
H
ATOM   1295  C   LEU    78      -8.899   8.526 -11.669  1.00  0.00
C
ATOM   1296  O   LEU    78      -9.911   9.147 -11.987  1.00  0.00
O
ATOM   1297  CB  LEU    78      -7.455   9.608  -9.972  1.00  0.00
C
ATOM   1298 1HB  LEU    78      -6.571   9.355 -10.551  1.00  0.00
H
ATOM   1299 2HB  LEU    78      -7.867  10.519 -10.404  1.00  0.00
H
ATOM   1300  CG  LEU    78      -7.003   9.958  -8.544  1.00  0.00
C
ATOM   1301  HG  LEU    78      -6.558   9.075  -8.092  1.00  0.00
H
ATOM   1302  CD1 LEU    78      -5.944  11.061  -8.603  1.00  0.00
C
ATOM   1303 1HD1 LEU    78      -5.552  11.236  -7.602  1.00  0.00
H
ATOM   1304 2HD1 LEU    78      -6.381  11.984  -8.988  1.00  0.00
H
ATOM   1305 3HD1 LEU    78      -5.124  10.757  -9.251  1.00  0.00
H
ATOM   1306  CD2 LEU    78      -8.153  10.425  -7.653  1.00  0.00
C
ATOM   1307 1HD2 LEU    78      -7.763  10.718  -6.676  1.00  0.00
H
ATOM   1308 2HD2 LEU    78      -8.863   9.612  -7.509  1.00  0.00
H
ATOM   1309 3HD2 LEU    78      -8.662  11.277  -8.105  1.00  0.00
H
ATOM   1310  N   ILE    79      -8.127   7.919 -12.567  1.00  0.00
N
ATOM   1311  H   ILE    79      -7.298   7.419 -12.262  1.00  0.00
H
ATOM   1312  CA  ILE    79      -8.405   8.037 -14.010  1.00  0.00
C
ATOM   1313  HA  ILE    79      -9.339   8.582 -14.131  1.00  0.00
H
ATOM   1314  C   ILE    79      -8.618   6.729 -14.778  1.00  0.00
C
ATOM   1315  O   ILE    79      -9.556   6.657 -15.572  1.00  0.00
O
ATOM   1316  CB  ILE    79      -7.306   8.907 -14.723  1.00  0.00
C
ATOM   1317  HB  ILE    79      -6.330   8.448 -14.562  1.00  0.00
H
ATOM   1318  CG1 ILE    79      -7.307  10.320 -14.098  1.00  0.00
C
ATOM   1319 1HG1 ILE    79      -8.321  10.716 -14.156  1.00  0.00
H
ATOM   1320 2HG1 ILE    79      -7.044  10.236 -13.045  1.00  0.00
H
ATOM   1321  CG2 ILE    79      -7.556   8.994 -16.260  1.00  0.00
C
ATOM   1322 1HG2 ILE    79      -6.806   9.618 -16.744  1.00  0.00
H
ATOM   1323 2HG2 ILE    79      -8.544   9.414 -16.454  1.00  0.00
H
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ATOM   1324 3HG2 ILE    79      -7.498   8.004 -16.713  1.00  0.00
H
ATOM   1325  CD1 ILE    79      -6.375  11.357 -14.723  1.00  0.00
C
ATOM   1326 1HD1 ILE    79      -6.308  12.223 -14.064  1.00  0.00
H
ATOM   1327 2HD1 ILE    79      -6.773  11.683 -15.684  1.00  0.00
H
ATOM   1328 3HD1 ILE    79      -5.381  10.934 -14.863  1.00  0.00
H
ATOM   1329  N   TRP    80      -7.769   5.721 -14.602  1.00  0.00
N
ATOM   1330  H   TRP    80      -7.111   5.760 -13.837  1.00  0.00
H
ATOM   1331  CA  TRP    80      -7.688   4.608 -15.566  1.00  0.00
C
ATOM   1332  HA  TRP    80      -7.257   5.009 -16.479  1.00  0.00
H
ATOM   1333  C   TRP    80      -9.003   3.945 -15.982  1.00  0.00
C
ATOM   1334  O   TRP    80      -9.370   3.994 -17.165  1.00  0.00
O
ATOM   1335  CB  TRP    80      -6.740   3.532 -15.043  1.00  0.00
C
ATOM   1336 1HB  TRP    80      -5.726   3.928 -15.028  1.00  0.00
H
ATOM   1337 2HB  TRP    80      -7.043   3.297 -14.028  1.00  0.00
H
ATOM   1338  CG  TRP    80      -6.764   2.241 -15.808  1.00  0.00
C
ATOM   1339  CD1 TRP    80      -6.373   2.022 -17.092  1.00  0.00
C
ATOM   1340  HD1 TRP    80      -5.961   2.784 -17.741  1.00  0.00
H
ATOM   1341  CD2 TRP    80      -7.247   0.970 -15.333  1.00  0.00
C
ATOM   1342  NE1 TRP    80      -6.576   0.721 -17.462  1.00  0.00
N
ATOM   1343  HE1 TRP    80      -6.380   0.340 -18.384  1.00  0.00
H
ATOM   1344  CE2 TRP    80      -7.098   0.038 -16.399  1.00  0.00
C
ATOM   1345  CE3 TRP    80      -7.806   0.525 -14.117  1.00  0.00
C
ATOM   1346  HE3 TRP    80      -7.966   1.216 -13.302  1.00  0.00
H
ATOM   1347  CZ2 TRP    80      -7.465  -1.315 -16.274  1.00  0.00
C
ATOM   1348  HZ2 TRP    80      -7.338  -2.000 -17.100  1.00  0.00
H
ATOM   1349  CZ3 TRP    80      -8.170  -0.835 -13.983  1.00  0.00
C
ATOM   1350  HZ3 TRP    80      -8.597  -1.185 -13.055  1.00  0.00
H
ATOM   1351  CH2 TRP    80      -7.987  -1.743 -15.068  1.00  0.00
C
ATOM   1352  HH2 TRP    80      -8.266  -2.780 -14.950  1.00  0.00
H
ATOM   1353  N   ASP    81      -9.698   3.327 -15.041  1.00  0.00
N
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ATOM   1354  H   ASP    81      -9.336   3.282 -14.095  1.00  0.00
H
ATOM   1355  CA  ASP    81     -10.997   2.697 -15.259  1.00  0.00
C
ATOM   1356  HA  ASP    81     -11.687   3.392 -15.736  1.00  0.00
H
ATOM   1357  C   ASP    81     -11.414   2.394 -13.828  1.00  0.00
C
ATOM   1358  O   ASP    81     -10.566   2.485 -12.939  1.00  0.00
O
ATOM   1359  CB  ASP    81     -10.896   1.388 -16.063  1.00  0.00
C
ATOM   1360 1HB  ASP    81     -10.110   1.493 -16.810  1.00  0.00
H
ATOM   1361 2HB  ASP    81     -10.623   0.572 -15.393  1.00  0.00
H
ATOM   1362  CG  ASP    81     -12.190   1.048 -16.786  1.00  0.00
C
ATOM   1363  OD1 ASP    81     -13.282   1.396 -16.289  1.00  0.00
O
ATOM   1364  OD2 ASP    81     -12.137   0.488 -17.902  1.00  0.00
O
ATOM   1365  N   ASN    82     -12.654   1.997 -13.594  1.00  0.00
N
ATOM   1366  H   ASN    82     -13.304   1.946 -14.373  1.00  0.00
H
ATOM   1367  CA  ASN    82     -13.079   1.507 -12.286  1.00  0.00
C
ATOM   1368  HA  ASN    82     -12.616   2.092 -11.492  1.00  0.00
H
ATOM   1369  C   ASN    82     -12.616   0.052 -12.228  1.00  0.00
C
ATOM   1370  O   ASN    82     -12.809  -0.671 -13.206  1.00  0.00
O
ATOM   1371  CB  ASN    82     -14.603   1.589 -12.170  1.00  0.00
C
ATOM   1372 1HB  ASN    82     -14.922   2.578 -12.494  1.00  0.00
H
ATOM   1373 2HB  ASN    82     -15.058   0.845 -12.821  1.00  0.00
H
ATOM   1374  CG  ASN    82     -15.095   1.383 -10.756  1.00  0.00
C
ATOM   1375  OD1 ASN    82     -14.361   0.976  -9.859  1.00  0.00
O
ATOM   1376  ND2 ASN    82     -16.336   1.701 -10.534  1.00  0.00
N
ATOM   1377 1HD2 ASN    82     -16.690   1.651  -9.590  1.00  0.00
H
ATOM   1378 2HD2 ASN    82     -16.923   2.014 -11.288  1.00  0.00
H
ATOM   1379  N   VAL    83     -11.994  -0.400 -11.150  1.00  0.00
N
ATOM   1380  H   VAL    83     -11.833   0.220 -10.367  1.00  0.00
H
ATOM   1381  CA  VAL    83     -11.552  -1.796 -11.060  1.00  0.00
C
ATOM   1382  HA  VAL    83     -10.946  -2.013 -11.938  1.00  0.00
H
ATOM   1383  C   VAL    83     -12.724  -2.788 -11.074  1.00  0.00
C
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ATOM   1384  O   VAL    83     -13.832  -2.508 -10.605  1.00  0.00
O
ATOM   1385  CB  VAL    83     -10.664  -2.060  -9.808  1.00  0.00
C
ATOM   1386  HB  VAL    83     -10.435  -3.124  -9.768  1.00  0.00
H
ATOM   1387  CG1 VAL    83      -9.334  -1.299  -9.909  1.00  0.00
C
ATOM   1388 1HG1 VAL    83      -8.711  -1.533  -9.045  1.00  0.00
H
ATOM   1389 2HG1 VAL    83      -9.505  -0.224  -9.943  1.00  0.00
H
ATOM   1390 3HG1 VAL    83      -8.804  -1.604 -10.810  1.00  0.00
H
ATOM   1391  CG2 VAL    83     -11.379  -1.665  -8.516  1.00  0.00
C
ATOM   1392 1HG2 VAL    83     -10.753  -1.923  -7.664  1.00  0.00
H
ATOM   1393 2HG2 VAL    83     -12.324  -2.202  -8.430  1.00  0.00
H
ATOM   1394 3HG2 VAL    83     -11.573  -0.594  -8.497  1.00  0.00
H
ATOM   1395  N   THR    84     -12.465  -3.956 -11.639  1.00  0.00
N
ATOM   1396  H   THR    84     -11.546  -4.122 -12.032  1.00  0.00
H
ATOM   1397  CA  THR    84     -13.440  -5.038 -11.734  1.00  0.00
C
ATOM   1398  HA  THR    84     -14.386  -4.643 -12.099  1.00  0.00
H
ATOM   1399  C   THR    84     -13.608  -5.698 -10.362  1.00  0.00
C
ATOM   1400  O   THR    84     -12.602  -5.987  -9.705  1.00  0.00
O
ATOM   1401  CB  THR    84     -12.905  -6.105 -12.719  1.00  0.00
C
ATOM   1402  HB  THR    84     -11.999  -6.547 -12.303  1.00  0.00
H
ATOM   1403  OG1 THR    84     -12.583  -5.477 -13.963  1.00  0.00
O
ATOM   1404  HG1 THR    84     -13.362  -5.534 -14.530  1.00  0.00
H
ATOM   1405  CG2 THR    84     -13.904  -7.198 -13.007  1.00  0.00
C
ATOM   1406 1HG2 THR    84     -13.465  -7.901 -13.708  1.00  0.00
H
ATOM   1407 2HG2 THR    84     -14.814  -6.782 -13.440  1.00  0.00
H
ATOM   1408 3HG2 THR    84     -14.149  -7.736 -12.093  1.00  0.00
H
ATOM   1409  N   PRO    85     -14.847  -5.962  -9.902  1.00  0.00
N
ATOM   1410  CA  PRO    85     -14.986  -6.636  -8.603  1.00  0.00
C
ATOM   1411  HA  PRO    85     -14.373  -6.133  -7.860  1.00  0.00
H
ATOM   1412  C   PRO    85     -14.610  -8.125  -8.612  1.00  0.00
C
ATOM   1413  O   PRO    85     -15.408  -9.003  -8.941  1.00  0.00
O
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ATOM   1414  CB  PRO    85     -16.458  -6.399  -8.264  1.00  0.00
C
ATOM   1415 1HB  PRO    85     -16.852  -7.187  -7.624  1.00  0.00
H
ATOM   1416 2HB  PRO    85     -16.568  -5.427  -7.785  1.00  0.00
H
ATOM   1417  CG  PRO    85     -17.134  -6.383  -9.571  1.00  0.00
C
ATOM   1418 1HG  PRO    85     -17.294  -7.403  -9.916  1.00  0.00
H
ATOM   1419 2HG  PRO    85     -18.083  -5.851  -9.513  1.00  0.00
H
ATOM   1420  CD  PRO    85     -16.172  -5.672 -10.486  1.00  0.00
C
ATOM   1421 1HD  PRO    85     -16.254  -6.062 -11.501  1.00  0.00
H
ATOM   1422 2HD  PRO    85     -16.359  -4.599 -10.470  1.00  0.00
H
ATOM   1423  N   VAL    86     -13.366  -8.410  -8.254  1.00  0.00
N
ATOM   1424  H   VAL    86     -12.730  -7.643  -8.091  1.00  0.00
H
ATOM   1425  CA  VAL    86     -12.839  -9.778  -8.204  1.00  0.00
C
ATOM   1426  HA  VAL    86     -13.600 -10.462  -8.575  1.00  0.00
H
ATOM   1427  C   VAL    86     -12.457 -10.281  -6.811  1.00  0.00
C
ATOM   1428  O   VAL    86     -12.031 -11.418  -6.683  1.00  0.00
O
ATOM   1429  CB  VAL    86     -11.603  -9.923  -9.150  1.00  0.00
C
ATOM   1430  HB  VAL    86     -11.233 -10.945  -9.089  1.00  0.00
H
ATOM   1431  CG1 VAL    86     -12.001  -9.656 -10.606  1.00  0.00
C
ATOM   1432 1HG1 VAL    86     -11.156  -9.875 -11.259  1.00  0.00
H
ATOM   1433 2HG1 VAL    86     -12.294  -8.617 -10.742  1.00  0.00
H
ATOM   1434 3HG1 VAL    86     -12.830 -10.307 -10.888  1.00  0.00
H
ATOM   1435  CG2 VAL    86     -10.465  -8.962  -8.754  1.00  0.00
C
ATOM   1436 1HG2 VAL    86      -9.580  -9.206  -9.340  1.00  0.00
H
ATOM   1437 2HG2 VAL    86     -10.218  -9.078  -7.702  1.00  0.00
H
ATOM   1438 3HG2 VAL    86     -10.743  -7.931  -8.967  1.00  0.00
H
ATOM   1439  N   LYS    87     -12.591  -9.463  -5.770  1.00  0.00
N
ATOM   1440  H   LYS    87     -13.024  -8.559  -5.907  1.00  0.00
H
ATOM   1441  CA  LYS    87     -12.177  -9.841  -4.401  1.00  0.00
C
ATOM   1442  HA  LYS    87     -12.085 -10.927  -4.345  1.00  0.00
H
ATOM   1443  C   LYS    87     -13.166  -9.414  -3.301  1.00  0.00
C
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ATOM   1444  O   LYS    87     -12.958  -8.394  -2.636  1.00  0.00
O
ATOM   1445  CB  LYS    87     -10.790  -9.274  -4.061  1.00  0.00
C
ATOM   1446 1HB  LYS    87     -10.749  -8.241  -4.389  1.00  0.00
H
ATOM   1447 2HB  LYS    87     -10.664  -9.292  -2.979  1.00  0.00
H
ATOM   1448  CG  LYS    87      -9.614 -10.046  -4.657  1.00  0.00
C
ATOM   1449 1HG  LYS    87      -9.636 -11.069  -4.284  1.00  0.00
H
ATOM   1450 2HG  LYS    87      -9.696 -10.060  -5.742  1.00  0.00
H
ATOM   1451  CD  LYS    87      -8.293  -9.401  -4.263  1.00  0.00
C
ATOM   1452 1HD  LYS    87      -8.257  -8.401  -4.688  1.00  0.00
H
ATOM   1453 2HD  LYS    87      -8.239  -9.325  -3.177  1.00  0.00
H
ATOM   1454  CE  LYS    87      -7.094 -10.187  -4.765  1.00  0.00
C
ATOM   1455 1HE  LYS    87      -7.092 -11.178  -4.306  1.00  0.00
H
ATOM   1456 2HE  LYS    87      -7.169 -10.303  -5.848  1.00  0.00
H
ATOM   1457  NZ  LYS    87      -5.816  -9.465  -4.438  1.00  0.00
N
ATOM   1458 1HZ  LYS    87      -5.029  -9.969  -4.826  1.00  0.00
H
ATOM   1459 2HZ  LYS    87      -5.696  -9.372  -3.435  1.00  0.00
H
ATOM   1460 3HZ  LYS    87      -5.834  -8.535  -4.841  1.00  0.00
H
ATOM   1461  N   PRO    88     -14.256 -10.174  -3.092  1.00  0.00
N
ATOM   1462  CA  PRO    88     -15.186  -9.921  -1.981  1.00  0.00
C
ATOM   1463  HA  PRO    88     -15.458  -8.869  -1.925  1.00  0.00
H
ATOM   1464  C   PRO    88     -14.610 -10.388  -0.639  1.00  0.00
C
ATOM   1465  O   PRO    88     -13.546 -11.005  -0.607  1.00  0.00
O
ATOM   1466  CB  PRO    88     -16.402 -10.750  -2.385  1.00  0.00
C
ATOM   1467 1HB  PRO    88     -16.979 -11.059  -1.514  1.00  0.00
H
ATOM   1468 2HB  PRO    88     -17.026 -10.187  -3.079  1.00  0.00
H
ATOM   1469  CG  PRO    88     -15.815 -11.900  -3.061  1.00  0.00
C
ATOM   1470 1HG  PRO    88     -15.431 -12.600  -2.324  1.00  0.00
H
ATOM   1471 2HG  PRO    88     -16.545 -12.385  -3.705  1.00  0.00
H
ATOM   1472  CD  PRO    88     -14.684 -11.356  -3.861  1.00  0.00
C
ATOM   1473 1HD  PRO    88     -13.883 -12.088  -3.914  1.00  0.00
H
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ATOM   1474 2HD  PRO    88      -15.019 -11.064  -4.856  1.00  0.00
H
ATOM   1475  N   ALA    89      -15.288 -10.118   0.468  1.00  0.00
N
ATOM   1476  H   ALA    89      -16.191  -9.656   0.403  1.00  0.00
H
ATOM   1477  CA  ALA    89      -14.798 -10.472   1.803  1.00  0.00
C
ATOM   1478  HA  ALA    89      -13.878 -11.050   1.722  1.00  0.00
H
ATOM   1479  C   ALA    89      -15.827 -11.321   2.545  1.00  0.00
C
ATOM   1480  O   ALA    89      -17.011 -11.253   2.212  1.00  0.00
O
ATOM   1481  CB  ALA    89      -14.509  -9.200   2.574  1.00  0.00
C
ATOM   1482 1HB  ALA    89      -13.775  -8.603   2.033  1.00  0.00
H
ATOM   1483 2HB  ALA    89      -14.116  -9.445   3.560  1.00  0.00
H
ATOM   1484 3HB  ALA    89      -15.425  -8.619   2.691  1.00  0.00
H
ATOM   1485  N   ASN    90      -15.367 -12.100   3.523  1.00  0.00
N
ATOM   1486  H   ASN    90      -14.375 -12.059   3.751  1.00  0.00
H
ATOM   1487  CA  ASN    90      -16.195 -13.068   4.263  1.00  0.00
C
ATOM   1488  HA  ASN    90      -15.535 -13.737   4.812  1.00  0.00
H
ATOM   1489  C   ASN    90      -16.966 -13.927   3.266  1.00  0.00
C
ATOM   1490  O   ASN    90      -18.186 -14.077   3.317  1.00  0.00
O
ATOM   1491  CB  ASN    90      -17.099 -12.386   5.290  1.00  0.00
C
ATOM   1492 1HB  ASN    90      -17.701 -11.629   4.795  1.00  0.00
H
ATOM   1493 2HB  ASN    90      -17.765 -13.131   5.723  1.00  0.00
H
ATOM   1494  CG  ASN    90      -16.317 -11.762   6.412  1.00  0.00
C
ATOM   1495  OD1 ASN    90      -15.385 -12.361   6.951  1.00  0.00
O
ATOM   1496  ND2 ASN    90      -16.665 -10.562   6.774  1.00  0.00
N
ATOM   1497 1HD2 ASN    90      -16.188 -10.132   7.548  1.00  0.00
H
ATOM   1498 2HD2 ASN    90      -17.406 -10.082   6.285  1.00  0.00
H
ATOM   1499  N   VAL    91      -16.215 -14.420   2.297  1.00  0.00
N
ATOM   1500  H   VAL    91      -15.206 -14.401   2.409  1.00  0.00
H
ATOM   1501  CA  VAL    91      -16.754 -14.983   1.073  1.00  0.00
C
ATOM   1502  HA  VAL    91      -17.767 -14.610   0.943  1.00  0.00
H
ATOM   1503  C   VAL    91      -16.856 -16.492   1.225  1.00  0.00
C
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ATOM   1504  O   VAL    91     -15.889 -17.225   1.069  1.00  0.00
O
ATOM   1505  CB  VAL    91     -15.917 -14.513  -0.163  1.00  0.00
C
ATOM   1506  HB  VAL    91     -16.226 -13.491  -0.378  1.00  0.00
H
ATOM   1507  CG1 VAL    91     -14.403 -14.467   0.120  1.00  0.00
C
ATOM   1508 1HG1 VAL    91     -13.866 -14.230  -0.798  1.00  0.00
H
ATOM   1509 2HG1 VAL    91     -14.058 -15.435   0.491  1.00  0.00
H
ATOM   1510 3HG1 VAL    91     -14.176 -13.692   0.849  1.00  0.00
H
ATOM   1511  CG2 VAL    91     -16.208 -15.346  -1.406  1.00  0.00
C
ATOM   1512 1HG2 VAL    91     -15.767 -14.877  -2.283  1.00  0.00
H
ATOM   1513 2HG2 VAL    91     -17.279 -15.437  -1.544  1.00  0.00
H
ATOM   1514 3HG2 VAL    91     -15.786 -16.345  -1.296  1.00  0.00
H
ATOM   1515  N   SER    92     -18.042 -16.971   1.562  1.00  0.00
N
ATOM   1516  H   SER    92     -18.820 -16.349   1.745  1.00  0.00
H
ATOM   1517  CA  SER    92     -18.255 -18.411   1.563  1.00  0.00
C
ATOM   1518  HA  SER    92     -17.339 -18.919   1.861  1.00  0.00
H
ATOM   1519  C   SER    92     -18.564 -18.742   0.108  1.00  0.00
C
ATOM   1520  O   SER    92     -17.823 -19.476  -0.530  1.00  0.00
O
ATOM   1521  CB  SER    92     -19.377 -18.821   2.517  1.00  0.00
C
ATOM   1522 1HB  SER    92     -19.199 -18.350   3.482  1.00  0.00
H
ATOM   1523 2HB  SER    92     -20.341 -18.491   2.130  1.00  0.00
H
ATOM   1524  OG  SER    92     -19.380 -20.225   2.699  1.00  0.00
O
ATOM   1525  HG  SER    92     -20.249 -20.569   2.432  1.00  0.00
H
ATOM   1526  N   ILE    93     -19.603 -18.128  -0.447  1.00  0.00
N
ATOM   1527  H   ILE    93     -20.203 -17.541   0.130  1.00  0.00
H
ATOM   1528  CA  ILE    93     -19.918 -18.231  -1.875  1.00  0.00
C
ATOM   1529  HA  ILE    93     -19.032 -18.556  -2.417  1.00  0.00
H
ATOM   1530  C   ILE    93     -20.309 -16.831  -2.349  1.00  0.00
C
ATOM   1531  O   ILE    93     -21.416 -16.373  -2.068  1.00  0.00
O
ATOM   1532  CB  ILE    93     -21.081 -19.237  -2.178  1.00  0.00
C
ATOM   1533  HB  ILE    93     -21.974 -18.911  -1.645  1.00  0.00
H
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ATOM   1534  CG1 ILE    93     -20.709 -20.654  -1.689  1.00  0.00
C
ATOM   1535 1HG1 ILE    93     -19.850 -21.003  -2.264  1.00  0.00
H
ATOM   1536 2HG1 ILE    93     -20.410 -20.596  -0.644  1.00  0.00
H
ATOM   1537  CG2 ILE    93     -21.392 -19.254  -3.698  1.00  0.00
C
ATOM   1538 1HG2 ILE    93     -22.216 -19.936  -3.909  1.00  0.00
H
ATOM   1539 2HG2 ILE    93     -20.512 -19.572  -4.260  1.00  0.00
H
ATOM   1540 3HG2 ILE    93     -21.693 -18.262  -4.036  1.00  0.00
H
ATOM   1541  CD1 ILE    93     -21.809 -21.711  -1.782  1.00  0.00
C
ATOM   1542 1HD1 ILE    93     -21.469 -22.622  -1.292  1.00  0.00
H
ATOM   1543 2HD1 ILE    93     -22.034 -21.937  -2.825  1.00  0.00
H
ATOM   1544 3HD1 ILE    93     -22.710 -21.357  -1.281  1.00  0.00
H
ATOM   1545  N   ILE    94     -19.396 -16.133  -3.017  1.00  0.00
N
ATOM   1546  H   ILE    94     -18.485 -16.557  -3.157  1.00  0.00
H
ATOM   1547  CA  ILE    94     -19.678 -14.802  -3.591  1.00  0.00
C
ATOM   1548  HA  ILE    94     -20.754 -14.736  -3.752  1.00  0.00
H
ATOM   1549  C   ILE    94     -18.990 -14.631  -4.960  1.00  0.00
C
ATOM   1550  O   ILE    94     -19.531 -13.970  -5.859  1.00  0.00
O
ATOM   1551  CB  ILE    94     -19.269 -13.589  -2.649  1.00  0.00
C
ATOM   1552  HB  ILE    94     -18.185 -13.550  -2.596  1.00  0.00
H
ATOM   1553  CG1 ILE    94     -19.807 -13.756  -1.208  1.00  0.00
C
ATOM   1554 1HG1 ILE    94     -20.893 -13.805  -1.250  1.00  0.00
H
ATOM   1555 2HG1 ILE    94     -19.447 -14.704  -0.814  1.00  0.00
H
ATOM   1556  CG2 ILE    94     -19.783 -12.241  -3.227  1.00  0.00
C
ATOM   1557 1HG2 ILE    94     -19.476 -11.405  -2.600  1.00  0.00
H
ATOM   1558 2HG2 ILE    94     -20.873 -12.252  -3.294  1.00  0.00
H
ATOM   1559 3HG2 ILE    94     -19.368 -12.071  -4.217  1.00  0.00
H
ATOM   1560  CD1 ILE    94     -19.422 -12.663  -0.187  1.00  0.00
C
ATOM   1561 1HD1 ILE    94     -19.700 -12.994   0.814  1.00  0.00
H
ATOM   1562 2HD1 ILE    94     -19.952 -11.736  -0.406  1.00  0.00
H
ATOM   1563 3HD1 ILE    94     -18.348 -12.482  -0.213  1.00  0.00
H
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ATOM   1564  N   LYS    95     -17.804 -15.207  -5.159  1.00  0.00
N
ATOM   1565  H   LYS    95     -17.386 -15.794  -4.444  1.00  0.00
H
ATOM   1566  CA  LYS    95     -17.074 -15.029  -6.424  1.00  0.00
C
ATOM   1567  HA  LYS    95     -17.813 -14.908  -7.212  1.00  0.00
H
ATOM   1568  C   LYS    95     -16.169 -16.182  -6.840  1.00  0.00
C
ATOM   1569  O   LYS    95     -15.260 -16.586  -6.114  1.00  0.00
O
ATOM   1570  CB  LYS    95     -16.217 -13.752  -6.357  1.00  0.00
C
ATOM   1571 1HB  LYS    95     -16.853 -12.933  -6.024  1.00  0.00
H
ATOM   1572 2HB  LYS    95     -15.442 -13.902  -5.608  1.00  0.00
H
ATOM   1573  CG  LYS    95     -15.539 -13.321  -7.670  1.00  0.00
C
ATOM   1574 1HG  LYS    95     -14.889 -12.470  -7.465  1.00  0.00
H
ATOM   1575 2HG  LYS    95     -14.930 -14.138  -8.055  1.00  0.00
H
ATOM   1576  CD  LYS    95     -16.565 -12.917  -8.724  1.00  0.00
C
ATOM   1577 1HD  LYS    95     -17.249 -13.744  -8.905  1.00  0.00
H
ATOM   1578 2HD  LYS    95     -17.135 -12.070  -8.347  1.00  0.00
H
ATOM   1579  CE  LYS    95     -15.935 -12.535 -10.048  1.00  0.00
C
ATOM   1580 1HE  LYS    95     -15.227 -11.717  -9.902  1.00  0.00
H
ATOM   1581 2HE  LYS    95     -15.412 -13.399 -10.465  1.00  0.00
H
ATOM   1582  NZ  LYS    95     -17.023 -12.100 -10.985  1.00  0.00
N
ATOM   1583 1HZ  LYS    95     -16.654 -11.981 -11.921  1.00  0.00
H
ATOM   1584 2HZ  LYS    95     -17.410 -11.216 -10.668  1.00  0.00
H
ATOM   1585 3HZ  LYS    95     -17.767 -12.789 -11.000  1.00  0.00
H
ATOM   1586  N   SER    96     -16.347 -16.604  -8.080  1.00  0.00
N
ATOM   1587  H   SER    96     -17.151 -16.298  -8.612  1.00  0.00
H
ATOM   1588  CA  SER    96     -15.397 -17.455  -8.776  1.00  0.00
C
ATOM   1589  HA  SER    96     -14.375 -17.215  -8.488  1.00  0.00
H
ATOM   1590  C   SER    96     -15.594 -17.158 -10.251  1.00  0.00
C
ATOM   1591  O   SER    96     -16.591 -16.536 -10.626  1.00  0.00
O
ATOM   1592  CB  SER    96     -15.694 -18.925  -8.497  1.00  0.00
C
ATOM   1593 1HB  SER    96     -15.018 -19.556  -9.075  1.00  0.00
H
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ATOM   1594 2HB  SER    96     -15.552 -19.121  -7.437  1.00  0.00
H
ATOM   1595  OG  SER    96     -17.036 -19.216  -8.832  1.00  0.00
O
ATOM   1596  HG  SER    96     -17.587 -18.990  -8.066  1.00  0.00
H
ATOM   1597  N   ALA    97     -14.658 -17.614 -11.067  1.00  0.00
N
ATOM   1598  H   ALA    97     -13.838 -18.054 -10.656  1.00  0.00
H
ATOM   1599  CA  ALA    97     -14.727 -17.521 -12.521  1.00  0.00
C
ATOM   1600  HA  ALA    97     -15.772 -17.503 -12.836  1.00  0.00
H
ATOM   1601  C   ALA    97     -14.065 -18.777 -13.088  1.00  0.00
C
ATOM   1602  O   ALA    97     -13.301 -18.732 -14.049  1.00  0.00
O
ATOM   1603  CB  ALA    97     -14.030 -16.254 -13.007  1.00  0.00
C
ATOM   1604 1HB  ALA    97     -14.513 -15.387 -12.561  1.00  0.00
H
ATOM   1605 2HB  ALA    97     -14.104 -16.182 -14.092  1.00  0.00
H
ATOM   1606 3HB  ALA    97     -12.980 -16.258 -12.725  1.00  0.00
H
ATOM   1607  N   MET    98     -14.314 -19.900 -12.438  1.00  0.00
N
ATOM   1608  H   MET    98     -14.967 -19.898 -11.666  1.00  0.00
H
ATOM   1609  CA  MET    98     -13.780 -21.186 -12.871  1.00  0.00
C
ATOM   1610  HA  MET    98     -13.349 -21.116 -13.868  1.00  0.00
H
ATOM   1611  C   MET    98     -14.954 -22.130 -12.908  1.00  0.00
C
ATOM   1612  O   MET    98     -15.918 -21.920 -12.178  1.00  0.00
O
ATOM   1613  CB  MET    98     -12.747 -21.751 -11.900  1.00  0.00
C
ATOM   1614 1HB  MET    98     -13.138 -21.718 -10.884  1.00  0.00
H
ATOM   1615 2HB  MET    98     -12.585 -22.787 -12.176  1.00  0.00
H
ATOM   1616  CG  MET    98     -11.414 -21.062 -11.964  1.00  0.00
C
ATOM   1617 1HG  MET    98     -11.159 -20.940 -13.015  1.00  0.00
H
ATOM   1618 2HG  MET    98     -11.488 -20.080 -11.504  1.00  0.00
H
ATOM   1619  SD  MET    98     -10.092 -22.007 -11.184  1.00  0.00
S
ATOM   1620  CE  MET    98     -10.468 -21.857  -9.467  1.00  0.00
C
ATOM   1621 1HE  MET    98      -9.692 -22.348  -8.884  1.00  0.00
H
ATOM   1622 2HE  MET    98     -11.429 -22.323  -9.252  1.00  0.00
H
ATOM   1623 3HE  MET    98     -10.503 -20.801  -9.196  1.00  0.00
H
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ATOM   1624  N   SER    99      -14.865 -23.175 -13.714  1.00  0.00
N
ATOM   1625  H   SER    99      -14.067 -23.287 -14.324  1.00  0.00
H
ATOM   1626  CA  SER    99      -15.897 -24.196 -13.710  1.00  0.00
C
ATOM   1627  HA  SER    99      -16.865 -23.716 -13.848  1.00  0.00
H
ATOM   1628  C   SER    99      -15.890 -24.882 -12.347  1.00  0.00
C
ATOM   1629  O   SER    99      -14.874 -24.904 -11.644  1.00  0.00
O
ATOM   1630  CB  SER    99      -15.679 -25.194 -14.846  1.00  0.00
C
ATOM   1631 1HB  SER    99      -16.496 -25.915 -14.843  1.00  0.00
H
ATOM   1632 2HB  SER    99      -15.691 -24.659 -15.796  1.00  0.00
H
ATOM   1633  OG  SER    99      -14.447 -25.886 -14.724  1.00  0.00
O
ATOM   1634  HG  SER    99      -14.581 -26.772 -15.099  1.00  0.00
H
ATOM   1635  N   GLU   100      -17.030 -25.425 -11.955  1.00  0.00
N
ATOM   1636  H   GLU   100      -17.823 -25.433 -12.595  1.00  0.00
H
ATOM   1637  CA  GLU   100      -17.205 -25.992 -10.620  1.00  0.00
C
ATOM   1638  HA  GLU   100      -17.003 -25.219  -9.879  1.00  0.00
H
ATOM   1639  C   GLU   100      -16.263 -27.152 -10.324  1.00  0.00
C
ATOM   1640  O   GLU   100      -15.824 -27.313  -9.186  1.00  0.00
O
ATOM   1641  CB  GLU   100      -18.649 -26.450 -10.458  1.00  0.00
C
ATOM   1642 1HB  GLU   100      -18.913 -27.070 -11.313  1.00  0.00
H
ATOM   1643 2HB  GLU   100      -18.730 -27.047  -9.550  1.00  0.00
H
ATOM   1644  CG  GLU   100      -19.614 -25.286 -10.367  1.00  0.00
C
ATOM   1645 1HG  GLU   100      -19.327 -24.673  -9.515  1.00  0.00
H
ATOM   1646 2HG  GLU   100      -19.531 -24.678 -11.266  1.00  0.00
H
ATOM   1647  CD  GLU   100      -21.059 -25.723 -10.211  1.00  0.00
C
ATOM   1648  OE1 GLU   100      -21.362 -26.931 -10.323  1.00  0.00
O
ATOM   1649  OE2 GLU   100      -21.935 -24.849  -9.998  1.00  0.00
O
ATOM   1650  N   THR   101      -15.879 -27.897 -11.350  1.00  0.00
N
ATOM   1651  H   THR   101      -16.303 -27.750 -12.263  1.00  0.00
H
ATOM   1652  CA  THR   101      -14.877 -28.951 -11.198  1.00  0.00
C
ATOM   1653  HA  THR   101      -15.256 -29.696 -10.500  1.00  0.00
H
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ATOM   1654  C   THR   101     -13.555 -28.402 -10.662  1.00  0.00
C
ATOM   1655  O   THR   101     -12.932 -28.968  -9.761  1.00  0.00
O
ATOM   1656  CB  THR   101     -14.618 -29.611 -12.567  1.00  0.00
C
ATOM   1657  HB  THR   101     -14.095 -28.906 -13.213  1.00  0.00
H
ATOM   1658  OG1 THR   101     -15.867 -29.941 -13.175  1.00  0.00
O
ATOM   1659  HG1 THR   101     -16.334 -30.534 -12.577  1.00  0.00
H
ATOM   1660  CG2 THR   101     -13.824 -30.880 -12.461  1.00  0.00
C
ATOM   1661 1HG2 THR   101     -13.770 -31.355 -13.441  1.00  0.00
H
ATOM   1662 2HG2 THR   101     -14.296 -31.565 -11.754  1.00  0.00
H
ATOM   1663 3HG2 THR   101     -12.816 -30.644 -12.127  1.00  0.00
H
ATOM   1664  N   LYS   102     -13.137 -27.255 -11.182  1.00  0.00
N
ATOM   1665  H   LYS   102     -13.699 -26.782 -11.879  1.00  0.00
H
ATOM   1666  CA  LYS   102     -11.879 -26.659 -10.744  1.00  0.00
C
ATOM   1667  HA  LYS   102     -11.114 -27.431 -10.722  1.00  0.00
H
ATOM   1668  C   LYS   102     -12.021 -26.085  -9.351  1.00  0.00
C
ATOM   1669  O   LYS   102     -11.115 -26.193  -8.531  1.00  0.00
O
ATOM   1670  CB  LYS   102     -11.440 -25.526 -11.667  1.00  0.00
C
ATOM   1671 1HB  LYS   102     -12.188 -24.742 -11.619  1.00  0.00
H
ATOM   1672 2HB  LYS   102     -10.499 -25.127 -11.287  1.00  0.00
H
ATOM   1673  CG  LYS   102     -11.256 -25.909 -13.119  1.00  0.00
C
ATOM   1674 1HG  LYS   102     -10.632 -26.798 -13.185  1.00  0.00
H
ATOM   1675 2HG  LYS   102     -12.226 -26.125 -13.559  1.00  0.00
H
ATOM   1676  CD  LYS   102     -10.589 -24.760 -13.868  1.00  0.00
C
ATOM   1677 1HD  LYS   102     -11.203 -23.865 -13.780  1.00  0.00
H
ATOM   1678 2HD  LYS   102      -9.617 -24.562 -13.412  1.00  0.00
H
ATOM   1679  CE  LYS   102     -10.380 -25.074 -15.337  1.00  0.00
C
ATOM   1680 1HE  LYS   102      -9.755 -24.296 -15.774  1.00  0.00
H
ATOM   1681 2HE  LYS   102      -9.856 -26.028 -15.429  1.00  0.00
H
ATOM   1682  NZ  LYS   102     -11.676 -25.137 -16.087  1.00  0.00
N
ATOM   1683 1HZ  LYS   102     -11.505 -25.349 -17.063  1.00  0.00
H
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ATOM   1684 2HZ  LYS   102      -12.154 -24.244 -16.032  1.00  0.00
H
ATOM   1685 3HZ  LYS   102      -12.269 -25.858 -15.698  1.00  0.00
H
ATOM   1686  N   GLN   103      -13.171 -25.480  -9.084  1.00  0.00
N
ATOM   1687  H   GLN   103      -13.889 -25.438  -9.798  1.00  0.00
H
ATOM   1688  CA  GLN   103      -13.406 -24.862  -7.781  1.00  0.00
C
ATOM   1689  HA  GLN   103      -12.634 -24.117  -7.598  1.00  0.00
H
ATOM   1690  C   GLN   103      -13.318 -25.925  -6.693  1.00  0.00
C
ATOM   1691  O   GLN   103      -12.666 -25.717  -5.671  1.00  0.00
O
ATOM   1692  CB  GLN   103      -14.789 -24.207  -7.702  1.00  0.00
C
ATOM   1693 1HB  GLN   103      -15.541 -24.966  -7.909  1.00  0.00
H
ATOM   1694 2HB  GLN   103      -14.933 -23.860  -6.678  1.00  0.00
H
ATOM   1695  CG  GLN   103      -15.035 -23.033  -8.640  1.00  0.00
C
ATOM   1696 1HG  GLN   103      -14.315 -22.244  -8.427  1.00  0.00
H
ATOM   1697 2HG  GLN   103      -14.904 -23.354  -9.669  1.00  0.00
H
ATOM   1698  CD  GLN   103      -16.439 -22.486  -8.475  1.00  0.00
C
ATOM   1699  OE1 GLN   103      -16.918 -22.300  -7.366  1.00  0.00
O
ATOM   1700  NE2 GLN   103      -17.114 -22.240  -9.561  1.00  0.00
N
ATOM   1701 1HE2 GLN   103      -18.046 -21.861  -9.473  1.00  0.00
H
ATOM   1702 2HE2 GLN   103      -16.699 -22.374 -10.474  1.00  0.00
H
ATOM   1703  N   ALA   104      -13.930 -27.075  -6.949  1.00  0.00
N
ATOM   1704  H   ALA   104      -14.441 -27.194  -7.819  1.00  0.00
H
ATOM   1705  CA  ALA   104      -13.931 -28.169  -5.990  1.00  0.00
C
ATOM   1706  HA  ALA   104      -14.378 -27.812  -5.061  1.00  0.00
H
ATOM   1707  C   ALA   104      -12.502 -28.613  -5.685  1.00  0.00
C
ATOM   1708  O   ALA   104      -12.113 -28.694  -4.524  1.00  0.00
O
ATOM   1709  CB  ALA   104      -14.767 -29.337  -6.531  1.00  0.00
C
ATOM   1710 1HB  ALA   104      -15.798 -29.015  -6.680  1.00  0.00
H
ATOM   1711 2HB  ALA   104      -14.759 -30.154  -5.807  1.00  0.00
H
ATOM   1712 3HB  ALA   104      -14.359 -29.692  -7.479  1.00  0.00
H
ATOM   1713  N   LYS   105      -11.694 -28.851  -6.710  1.00  0.00
N
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ATOM   1714  H   LYS   105     -12.036 -28.745  -7.661  1.00  0.00
H
ATOM   1715  CA  LYS   105     -10.319 -29.295  -6.469  1.00  0.00
C
ATOM   1716  HA  LYS   105     -10.355 -30.191  -5.847  1.00  0.00
H
ATOM   1717  C   LYS   105      -9.497 -28.274  -5.704  1.00  0.00
C
ATOM   1718  O   LYS   105      -8.734 -28.656  -4.824  1.00  0.00
O
ATOM   1719  CB  LYS   105      -9.596 -29.645  -7.769  1.00  0.00
C
ATOM   1720 1HB  LYS   105      -9.663 -28.804  -8.459  1.00  0.00
H
ATOM   1721 2HB  LYS   105      -8.546 -29.821  -7.534  1.00  0.00
H
ATOM   1722  CG  LYS   105     -10.144 -30.892  -8.434  1.00  0.00
C
ATOM   1723 1HG  LYS   105     -10.183 -31.695  -7.698  1.00  0.00
H
ATOM   1724 2HG  LYS   105     -11.151 -30.690  -8.793  1.00  0.00
H
ATOM   1725  CD  LYS   105      -9.261 -31.333  -9.592  1.00  0.00
C
ATOM   1726 1HD  LYS   105      -9.212 -30.537 -10.332  1.00  0.00
H
ATOM   1727 2HD  LYS   105      -8.255 -31.525  -9.220  1.00  0.00
H
ATOM   1728  CE  LYS   105      -9.790 -32.600 -10.249  1.00  0.00
C
ATOM   1729 1HE  LYS   105      -9.063 -32.945 -10.986  1.00  0.00
H
ATOM   1730 2HE  LYS   105      -9.911 -33.377  -9.492  1.00  0.00
H
ATOM   1731  NZ  LYS   105     -11.098 -32.359 -10.927  1.00  0.00
N
ATOM   1732 1HZ  LYS   105     -11.399 -33.194 -11.417  1.00  0.00
H
ATOM   1733 2HZ  LYS   105     -11.010 -31.595 -11.585  1.00  0.00
H
ATOM   1734 3HZ  LYS   105     -11.808 -32.129 -10.238  1.00  0.00
H
ATOM   1735  N   VAL   106      -9.640 -26.990  -5.992  1.00  0.00
N
ATOM   1736  H   VAL   106     -10.284 -26.699  -6.724  1.00  0.00
H
ATOM   1737  CA  VAL   106      -8.860 -25.987  -5.264  1.00  0.00
C
ATOM   1738  HA  VAL   106      -7.813 -26.286  -5.288  1.00  0.00
H
ATOM   1739  C   VAL   106      -9.273 -25.934  -3.796  1.00  0.00
C
ATOM   1740  O   VAL   106      -8.400 -25.926  -2.924  1.00  0.00
O
ATOM   1741  CB  VAL   106      -8.973 -24.581  -5.914  1.00  0.00
C
ATOM   1742  HB  VAL   106     -10.026 -24.313  -5.996  1.00  0.00
H
ATOM   1743  CG1 VAL   106      -8.261 -23.507  -5.076  1.00  0.00
C
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ATOM   1744 1HG1 VAL   106      -8.349 -22.548  -5.574  1.00  0.00
H
ATOM   1745 2HG1 VAL   106      -7.206 -23.757  -4.950  1.00  0.00
H
ATOM   1746 3HG1 VAL   106      -8.731 -23.420  -4.096  1.00  0.00
H
ATOM   1747  CG2 VAL   106      -8.351 -24.604  -7.317  1.00  0.00
C
ATOM   1748 1HG2 VAL   106      -8.384 -23.607  -7.753  1.00  0.00
H
ATOM   1749 2HG2 VAL   106      -8.903 -25.281  -7.965  1.00  0.00
H
ATOM   1750 3HG2 VAL   106      -7.312 -24.931  -7.263  1.00  0.00
H
ATOM   1751  N   ILE   107     -10.565 -25.938  -3.496  1.00  0.00
N
ATOM   1752  H   ILE   107     -11.270 -25.969  -4.233  1.00  0.00
H
ATOM   1753  CA  ILE   107     -10.996 -25.867  -2.097  1.00  0.00
C
ATOM   1754  HA  ILE   107     -10.480 -25.035  -1.620  1.00  0.00
H
ATOM   1755  C   ILE   107     -10.565 -27.143  -1.384  1.00  0.00
C
ATOM   1756  O   ILE   107     -10.053 -27.089  -0.273  1.00  0.00
O
ATOM   1757  CB  ILE   107     -12.529 -25.633  -1.948  1.00  0.00
C
ATOM   1758  HB  ILE   107     -13.062 -26.426  -2.473  1.00  0.00
H
ATOM   1759  CG1 ILE   107     -12.889 -24.277  -2.580  1.00  0.00
C
ATOM   1760 1HG1 ILE   107     -12.405 -23.490  -2.006  1.00  0.00
H
ATOM   1761 2HG1 ILE   107     -12.481 -24.251  -3.585  1.00  0.00
H
ATOM   1762  CG2 ILE   107     -12.952 -25.648  -0.455  1.00  0.00
C
ATOM   1763 1HG2 ILE   107     -14.023 -25.473  -0.364  1.00  0.00
H
ATOM   1764 2HG2 ILE   107     -12.414 -24.878   0.101  1.00  0.00
H
ATOM   1765 3HG2 ILE   107     -12.739 -26.623  -0.019  1.00  0.00
H
ATOM   1766  CD1 ILE   107     -14.377 -23.945  -2.687  1.00  0.00
C
ATOM   1767 1HD1 ILE   107     -14.502 -23.019  -3.248  1.00  0.00
H
ATOM   1768 2HD1 ILE   107     -14.811 -23.814  -1.696  1.00  0.00
H
ATOM   1769 3HD1 ILE   107     -14.894 -24.748  -3.208  1.00  0.00
H
ATOM   1770  N   GLU   108     -10.692 -28.297  -2.019  1.00  0.00
N
ATOM   1771  H   GLU   108     -11.107 -28.333  -2.951  1.00  0.00
H
ATOM   1772  CA  GLU   108     -10.262 -29.536  -1.377  1.00  0.00
C
ATOM   1773  HA  GLU   108     -10.758 -29.621  -0.409  1.00  0.00
H
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ATOM   1774  C   GLU   108      -8.761 -29.546  -1.123  1.00  0.00
C
ATOM   1775  O   GLU   108      -8.324 -29.941  -0.047  1.00  0.00
O
ATOM   1776  CB  GLU   108     -10.640 -30.740  -2.232  1.00  0.00
C
ATOM   1777 1HB  GLU   108     -10.306 -30.557  -3.253  1.00  0.00
H
ATOM   1778 2HB  GLU   108     -10.128 -31.621  -1.846  1.00  0.00
H
ATOM   1779  CG  GLU   108     -12.132 -31.006  -2.226  1.00  0.00
C
ATOM   1780 1HG  GLU   108     -12.444 -31.186  -1.200  1.00  0.00
H
ATOM   1781 2HG  GLU   108     -12.665 -30.129  -2.585  1.00  0.00
H
ATOM   1782  CD  GLU   108     -12.523 -32.197  -3.074  1.00  0.00
C
ATOM   1783  OE1 GLU   108     -11.753 -32.615  -3.972  1.00  0.00
O
ATOM   1784  OE2 GLU   108     -13.605 -32.776  -2.818  1.00  0.00
O
ATOM   1785  N   LYS   109      -7.955 -29.077  -2.068  1.00  0.00
N
ATOM   1786  H   LYS   109      -8.346 -28.753  -2.955  1.00  0.00
H
ATOM   1787  CA  LYS   109      -6.508 -29.006  -1.842  1.00  0.00
C
ATOM   1788  HA  LYS   109      -6.159 -29.988  -1.523  1.00  0.00
H
ATOM   1789  C   LYS   109      -6.183 -28.042  -0.711  1.00  0.00
C
ATOM   1790  O   LYS   109      -5.344 -28.367   0.124  1.00  0.00
O
ATOM   1791  CB  LYS   109      -5.747 -28.613  -3.115  1.00  0.00
C
ATOM   1792 1HB  LYS   109      -6.223 -27.739  -3.560  1.00  0.00
H
ATOM   1793 2HB  LYS   109      -4.724 -28.354  -2.843  1.00  0.00
H
ATOM   1794  CG  LYS   109      -5.697 -29.745  -4.138  1.00  0.00
C
ATOM   1795 1HG  LYS   109      -5.196 -30.599  -3.686  1.00  0.00
H
ATOM   1796 2HG  LYS   109      -6.711 -30.040  -4.393  1.00  0.00
H
ATOM   1797  CD  LYS   109      -4.970 -29.376  -5.420  1.00  0.00
C
ATOM   1798 1HD  LYS   109      -5.443 -28.502  -5.871  1.00  0.00
H
ATOM   1799 2HD  LYS   109      -3.933 -29.153  -5.184  1.00  0.00
H
ATOM   1800  CE  LYS   109      -5.027 -30.551  -6.390  1.00  0.00
C
ATOM   1801 1HE  LYS   109      -4.643 -31.435  -5.877  1.00  0.00
H
ATOM   1802 2HE  LYS   109      -6.072 -30.739  -6.642  1.00  0.00
H
ATOM   1803  NZ  LYS   109      -4.247 -30.371  -7.657  1.00  0.00
N
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ATOM   1804 1HZ  LYS   109      -4.274 -31.228  -8.197  1.00  0.00
H
ATOM   1805 2HZ  LYS   109      -3.273 -30.183  -7.444  1.00  0.00
H
ATOM   1806 3HZ  LYS   109      -4.620 -29.618  -8.217  1.00  0.00
H
ATOM   1807  N   PHE   110      -6.863 -26.905  -0.648  1.00  0.00
N
ATOM   1808  H   PHE   110      -7.544 -26.690  -1.374  1.00  0.00
H
ATOM   1809  CA  PHE   110      -6.676 -25.944   0.440  1.00  0.00
C
ATOM   1810  HA  PHE   110      -5.637 -25.615   0.453  1.00  0.00
H
ATOM   1811  C   PHE   110      -7.001 -26.597   1.779  1.00  0.00
C
ATOM   1812  O   PHE   110      -6.206 -26.549   2.709  1.00  0.00
O
ATOM   1813  CB  PHE   110      -7.599 -24.736   0.209  1.00  0.00
C
ATOM   1814 1HB  PHE   110      -7.373 -24.317  -0.770  1.00  0.00
H
ATOM   1815 2HB  PHE   110      -8.631 -25.077   0.202  1.00  0.00
H
ATOM   1816  CG  PHE   110      -7.479 -23.643   1.245  1.00  0.00
C
ATOM   1817  CD1 PHE   110      -6.865 -22.425   0.916  1.00  0.00
C
ATOM   1818  HD1 PHE   110      -6.485 -22.261  -0.079  1.00  0.00
H
ATOM   1819  CD2 PHE   110      -8.039 -23.780   2.530  1.00  0.00
C
ATOM   1820  HD2 PHE   110      -8.557 -24.685   2.805  1.00  0.00
H
ATOM   1821  CE1 PHE   110      -6.766 -21.385   1.860  1.00  0.00
C
ATOM   1822  HE1 PHE   110      -6.302 -20.457   1.583  1.00  0.00
H
ATOM   1823  CE2 PHE   110      -7.921 -22.740   3.484  1.00  0.00
C
ATOM   1824  HE2 PHE   110      -8.306 -22.876   4.480  1.00  0.00
H
ATOM   1825  CZ  PHE   110      -7.280 -21.546   3.148  1.00  0.00
C
ATOM   1826  HZ  PHE   110      -7.192 -20.752   3.876  1.00  0.00
H
ATOM   1827  N   GLN   111      -8.160 -27.232   1.880  1.00  0.00
N
ATOM   1828  H   GLN   111      -8.776 -27.294   1.069  1.00  0.00
H
ATOM   1829  CA  GLN   111      -8.606 -27.792   3.155  1.00  0.00
C
ATOM   1830  HA  GLN   111      -8.597 -27.011   3.915  1.00  0.00
H
ATOM   1831  C   GLN   111      -7.679 -28.903   3.612  1.00  0.00
C
ATOM   1832  O   GLN   111      -7.317 -28.982   4.785  1.00  0.00
O
ATOM   1833  CB  GLN   111     -10.018 -28.363   3.027  1.00  0.00
C
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ATOM   1834 1HB  GLN   111     -10.029 -29.048   2.179  1.00  0.00
H
ATOM   1835 2HB  GLN   111     -10.244 -28.931   3.931  1.00  0.00
H
ATOM   1836  CG  GLN   111     -11.118 -27.320   2.842  1.00  0.00
C
ATOM   1837 1HG  GLN   111     -11.171 -26.696   3.729  1.00  0.00
H
ATOM   1838 2HG  GLN   111     -10.889 -26.683   1.993  1.00  0.00
H
ATOM   1839  CD  GLN   111     -12.471 -27.957   2.621  1.00  0.00
C
ATOM   1840  OE1 GLN   111     -12.582 -29.135   2.295  1.00  0.00
O
ATOM   1841  NE2 GLN   111     -13.511 -27.200   2.806  1.00  0.00
N
ATOM   1842 1HE2 GLN   111     -14.427 -27.606   2.699  1.00  0.00
H
ATOM   1843 2HE2 GLN   111     -13.398 -26.221   3.032  1.00  0.00
H
ATOM   1844  N   LYS   112      -7.254 -29.748   2.685  1.00  0.00
N
ATOM   1845  H   LYS   112      -7.578 -29.656   1.722  1.00  0.00
H
ATOM   1846  CA  LYS   112      -6.349 -30.838   3.044  1.00  0.00
C
ATOM   1847  HA  LYS   112      -6.780 -31.383   3.884  1.00  0.00
H
ATOM   1848  C   LYS   112      -5.000 -30.310   3.491  1.00  0.00
C
ATOM   1849  O   LYS   112      -4.431 -30.848   4.436  1.00  0.00
O
ATOM   1850  CB  LYS   112      -6.184 -31.799   1.870  1.00  0.00
C
ATOM   1851 1HB  LYS   112      -5.937 -31.215   0.984  1.00  0.00
H
ATOM   1852 2HB  LYS   112      -5.367 -32.492   2.077  1.00  0.00
H
ATOM   1853  CG  LYS   112      -7.450 -32.593   1.604  1.00  0.00
C
ATOM   1854 1HG  LYS   112      -7.614 -33.299   2.415  1.00  0.00
H
ATOM   1855 2HG  LYS   112      -8.301 -31.917   1.549  1.00  0.00
H
ATOM   1856  CD  LYS   112      -7.347 -33.324   0.294  1.00  0.00
C
ATOM   1857 1HD  LYS   112      -7.104 -32.605  -0.486  1.00  0.00
H
ATOM   1858 2HD  LYS   112      -6.550 -34.063   0.360  1.00  0.00
H
ATOM   1859  CE  LYS   112      -8.661 -34.000  -0.060  1.00  0.00
C
ATOM   1860 1HE  LYS   112      -8.937 -34.707   0.725  1.00  0.00
H
ATOM   1861 2HE  LYS   112      -9.439 -33.238  -0.140  1.00  0.00
H
ATOM   1862  NZ  LYS   112      -8.531 -34.731  -1.357  1.00  0.00
N
ATOM   1863 1HZ  LYS   112      -9.429 -35.107  -1.638  1.00  0.00
H
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ATOM   1864 2HZ  LYS   112      -7.869 -35.495  -1.259  1.00  0.00
H
ATOM   1865 3HZ  LYS   112      -8.205 -34.098  -2.077  1.00  0.00
H
ATOM   1866  N   LEU   113      -4.514 -29.241   2.877  1.00  0.00
N
ATOM   1867  H   LEU   113      -5.014 -28.835   2.091  1.00  0.00
H
ATOM   1868  CA  LEU   113      -3.267 -28.623   3.318  1.00  0.00
C
ATOM   1869  HA  LEU   113      -2.493 -29.389   3.379  1.00  0.00
H
ATOM   1870  C   LEU   113      -3.421 -28.014   4.706  1.00  0.00
C
ATOM   1871  O   LEU   113      -2.563 -28.214   5.549  1.00  0.00
O
ATOM   1872  CB  LEU   113      -2.827 -27.545   2.326  1.00  0.00
C
ATOM   1873 1HB  LEU   113      -3.706 -26.962   2.059  1.00  0.00
H
ATOM   1874 2HB  LEU   113      -2.129 -26.880   2.829  1.00  0.00
H
ATOM   1875  CG  LEU   113      -2.159 -28.039   1.035  1.00  0.00
C
ATOM   1876  HG  LEU   113      -2.742 -28.866   0.635  1.00  0.00
H
ATOM   1877  CD1 LEU   113      -2.142 -26.929  -0.006  1.00  0.00
C
ATOM   1878 1HD1 LEU   113      -1.690 -27.287  -0.926  1.00  0.00
H
ATOM   1879 2HD1 LEU   113      -1.564 -26.078   0.355  1.00  0.00
H
ATOM   1880 3HD1 LEU   113      -3.162 -26.611  -0.221  1.00  0.00
H
ATOM   1881  CD2 LEU   113      -0.739 -28.527   1.291  1.00  0.00
C
ATOM   1882 1HD2 LEU   113      -0.315 -28.925   0.369  1.00  0.00
H
ATOM   1883 2HD2 LEU   113      -0.741 -29.318   2.038  1.00  0.00
H
ATOM   1884 3HD2 LEU   113      -0.112 -27.708   1.645  1.00  0.00
H
ATOM   1885  N   ILE   114      -4.524 -27.336   4.987  1.00  0.00
N
ATOM   1886  H   ILE   114      -5.230 -27.200   4.265  1.00  0.00
H
ATOM   1887  CA  ILE   114      -4.755 -26.768   6.322  1.00  0.00
C
ATOM   1888  HA  ILE   114      -3.939 -26.090   6.569  1.00  0.00
H
ATOM   1889  C   ILE   114      -4.733 -27.882   7.365  1.00  0.00
C
ATOM   1890  O   ILE   114      -4.058 -27.754   8.389  1.00  0.00
O
ATOM   1891  CB  ILE   114      -6.103 -25.988   6.370  1.00  0.00
C
ATOM   1892  HB  ILE   114      -6.870 -26.627   5.933  1.00  0.00
H
ATOM   1893  CG1 ILE   114      -6.022 -24.700   5.530  1.00  0.00
C
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ATOM   1894 1HG1 ILE   114      -5.725 -24.955   4.517  1.00  0.00
H
ATOM   1895 2HG1 ILE   114      -7.027 -24.292   5.485  1.00  0.00
H
ATOM   1896  CG2 ILE   114      -6.553 -25.652   7.806  1.00  0.00
C
ATOM   1897 1HG2 ILE   114      -7.464 -25.052   7.775  1.00  0.00
H
ATOM   1898 2HG2 ILE   114      -5.781 -25.088   8.322  1.00  0.00
H
ATOM   1899 3HG2 ILE   114      -6.768 -26.565   8.363  1.00  0.00
H
ATOM   1900  CD1 ILE   114      -5.102 -23.574   6.018  1.00  0.00
C
ATOM   1901 1HD1 ILE   114      -5.153 -22.746   5.311  1.00  0.00
H
ATOM   1902 2HD1 ILE   114      -4.073 -23.924   6.079  1.00  0.00
H
ATOM   1903 3HD1 ILE   114      -5.426 -23.211   6.993  1.00  0.00
H
ATOM   1904  N   GLN   115      -5.383 -29.002   7.082  1.00  0.00
N
ATOM   1905  H   GLN   115      -5.934 -29.055   6.228  1.00  0.00
H
ATOM   1906  CA  GLN   115      -5.343 -30.154   7.983  1.00  0.00
C
ATOM   1907  HA  GLN   115      -5.707 -29.847   8.961  1.00  0.00
H
ATOM   1908  C   GLN   115      -3.921 -30.702   8.161  1.00  0.00
C
ATOM   1909  O   GLN   115      -3.512 -31.034   9.271  1.00  0.00
O
ATOM   1910  CB  GLN   115      -6.253 -31.259   7.443  1.00  0.00
C
ATOM   1911 1HB  GLN   115      -5.946 -31.464   6.423  1.00  0.00
H
ATOM   1912 2HB  GLN   115      -6.102 -32.161   8.037  1.00  0.00
H
ATOM   1913  CG  GLN   115      -7.747 -30.922   7.445  1.00  0.00
C
ATOM   1914 1HG  GLN   115      -8.094 -30.842   8.474  1.00  0.00
H
ATOM   1915 2HG  GLN   115      -7.908 -29.961   6.966  1.00  0.00
H
ATOM   1916  CD  GLN   115      -8.583 -31.960   6.721  1.00  0.00
C
ATOM   1917  OE1 GLN   115      -8.065 -32.862   6.053  1.00  0.00
O
ATOM   1918  NE2 GLN   115      -9.876 -31.857   6.849  1.00  0.00
N
ATOM   1919 1HE2 GLN   115     -10.475 -32.548   6.413  1.00  0.00
H
ATOM   1920 2HE2 GLN   115     -10.276 -31.093   7.372  1.00  0.00
H
ATOM   1921  N   GLN   116      -3.137 -30.747   7.092  1.00  0.00
N
ATOM   1922  H   GLN   116      -3.504 -30.441   6.194  1.00  0.00
H
ATOM   1923  CA  GLN   116      -1.751 -31.228   7.145  1.00  0.00
C
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ATOM   1924  HA  GLN   116      -1.732 -32.190   7.658  1.00  0.00
H
ATOM   1925  C   GLN   116      -0.832 -30.282   7.922  1.00  0.00
C
ATOM   1926  O   GLN   116       0.205 -30.709   8.441  1.00  0.00
O
ATOM   1927  CB  GLN   116      -1.215 -31.429   5.720  1.00  0.00
C
ATOM   1928 1HB  GLN   116      -1.442 -30.536   5.142  1.00  0.00
H
ATOM   1929 2HB  GLN   116      -0.132 -31.550   5.756  1.00  0.00
H
ATOM   1930  CG  GLN   116      -1.812 -32.655   5.023  1.00  0.00
C
ATOM   1931 1HG  GLN   116      -1.326 -33.550   5.409  1.00  0.00
H
ATOM   1932 2HG  GLN   116      -2.869 -32.723   5.268  1.00  0.00
H
ATOM   1933  CD  GLN   116      -1.688 -32.640   3.509  1.00  0.00
C
ATOM   1934  OE1 GLN   116      -1.038 -31.789   2.905  1.00  0.00
O
ATOM   1935  NE2 GLN   116      -2.330 -33.586   2.877  1.00  0.00
N
ATOM   1936 1HE2 GLN   116      -2.270 -33.639   1.872  1.00  0.00
H
ATOM   1937 2HE2 GLN   116      -2.865 -34.269   3.395  1.00  0.00
H
ATOM   1938  N   TYR   117      -1.228 -29.025   8.067  1.00  0.00
N
ATOM   1939  H   TYR   117      -2.066 -28.718   7.580  1.00  0.00
H
ATOM   1940  CA  TYR   117      -0.502 -28.046   8.880  1.00  0.00
C
ATOM   1941  HA  TYR   117       0.520 -28.391   9.030  1.00  0.00
H
ATOM   1942  C   TYR   117      -1.119 -27.831  10.263  1.00  0.00
C
ATOM   1943  O   TYR   117      -0.669 -26.962  11.015  1.00  0.00
O
ATOM   1944  CB  TYR   117      -0.458 -26.701   8.151  1.00  0.00
C
ATOM   1945 1HB  TYR   117      -1.480 -26.375   7.957  1.00  0.00
H
ATOM   1946 2HB  TYR   117       0.014 -25.969   8.801  1.00  0.00
H
ATOM   1947  CG  TYR   117       0.309 -26.734   6.846  1.00  0.00
C
ATOM   1948  CD1 TYR   117      -0.310 -26.350   5.639  1.00  0.00
C
ATOM   1949  HD1 TYR   117      -1.333 -26.004   5.641  1.00  0.00
H
ATOM   1950  CD2 TYR   117       1.655 -27.159   6.802  1.00  0.00
C
ATOM   1951  HD2 TYR   117       2.172 -27.421   7.714  1.00  0.00
H
ATOM   1952  CE1 TYR   117       0.372 -26.455   4.409  1.00  0.00
C
ATOM   1953  HE1 TYR   117      -0.114 -26.186   3.487  1.00  0.00
H
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ATOM   1954  CE2 TYR   117       2.342 -27.261   5.560  1.00  0.00
C
ATOM   1955  HE2 TYR   117       3.366 -27.605   5.527  1.00  0.00
H
ATOM   1956  CZ  TYR   117       1.677 -26.926   4.377  1.00  0.00
C
ATOM   1957  OH  TYR   117       2.272 -27.028   3.151  1.00  0.00
O
ATOM   1958  HH  TYR   117       3.195 -27.310   3.201  1.00  0.00
H
ATOM   1959  N   GLY   118      -2.163 -28.576  10.601  1.00  0.00
N
ATOM   1960  H   GLY   118      -2.546 -29.249   9.946  1.00  0.00
H
ATOM   1961  CA  GLY   118      -2.789 -28.440  11.908  1.00  0.00
C
ATOM   1962 1HA  GLY   118      -3.533 -29.228  12.029  1.00  0.00
H
ATOM   1963 2HA  GLY   118      -2.028 -28.562  12.678  1.00  0.00
H
ATOM   1964  C   GLY   118      -3.460 -27.095  12.120  1.00  0.00
C
ATOM   1965  O   GLY   118      -3.532 -26.609  13.251  1.00  0.00
O
ATOM   1966  N   ALA   119      -3.881 -26.466  11.027  1.00  0.00
N
ATOM   1967  H   ALA   119      -3.798 -26.951  10.137  1.00  0.00
H
ATOM   1968  CA  ALA   119      -4.469 -25.120  11.006  1.00  0.00
C
ATOM   1969  HA  ALA   119      -4.624 -24.866   9.961  1.00  0.00
H
ATOM   1970  C   ALA   119      -3.596 -23.990  11.582  1.00  0.00
C
ATOM   1971  O   ALA   119      -4.097 -22.908  11.916  1.00  0.00
O
ATOM   1972  CB  ALA   119      -5.864 -25.147  11.663  1.00  0.00
C
ATOM   1973 1HB  ALA   119      -6.436 -25.992  11.277  1.00  0.00
H
ATOM   1974 2HB  ALA   119      -6.402 -24.227  11.438  1.00  0.00
H
ATOM   1975 3HB  ALA   119      -5.765 -25.247  12.743  1.00  0.00
H
ATOM   1976  N   ASP   120      -2.301 -24.242  11.711  1.00  0.00
N
ATOM   1977  H   ASP   120      -1.947 -25.146  11.425  1.00  0.00
H
ATOM   1978  CA  ASP   120      -1.361 -23.281  12.286  1.00  0.00
C
ATOM   1979  HA  ASP   120      -1.715 -23.004  13.279  1.00  0.00
H
ATOM   1980  C   ASP   120      -1.182 -22.000  11.461  1.00  0.00
C
ATOM   1981  O   ASP   120      -1.037 -22.038  10.237  1.00  0.00
O
ATOM   1982  CB  ASP   120      -0.014 -23.977  12.432  1.00  0.00
C
ATOM   1983 1HB  ASP   120      -0.174 -24.932  12.927  1.00  0.00
H
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ATOM   1984 2HB  ASP   120       0.399 -24.159  11.442  1.00  0.00
H
ATOM   1985  CG  ASP   120       0.972 -23.173  13.239  1.00  0.00
C
ATOM   1986  OD1 ASP   120       1.606 -22.256  12.682  1.00  0.00
O
ATOM   1987  OD2 ASP   120       1.184 -23.491  14.426  1.00  0.00
O
ATOM   1988  N   GLY   121      -1.198 -20.855  12.129  1.00  0.00
N
ATOM   1989  H   GLY   121      -1.278 -20.871  13.145  1.00  0.00
H
ATOM   1990  CA  GLY   121      -1.158 -19.567  11.450  1.00  0.00
C
ATOM   1991 1HA  GLY   121      -1.904 -19.573  10.655  1.00  0.00
H
ATOM   1992 2HA  GLY   121      -1.441 -18.794  12.165  1.00  0.00
H
ATOM   1993  C   GLY   121       0.170 -19.170  10.839  1.00  0.00
C
ATOM   1994  O   GLY   121       0.211 -18.322   9.946  1.00  0.00
O
ATOM   1995  N   LYS   122       1.268 -19.788  11.253  1.00  0.00
N
ATOM   1996  H   LYS   122       1.212 -20.503  11.982  1.00  0.00
H
ATOM   1997  CA  LYS   122       2.578 -19.493  10.659  1.00  0.00
C
ATOM   1998  HA  LYS   122       2.635 -18.433  10.406  1.00  0.00
H
ATOM   1999  C   LYS   122       2.759 -20.303   9.384  1.00  0.00
C
ATOM   2000  O   LYS   122       3.679 -20.072   8.607  1.00  0.00
O
ATOM   2001  CB  LYS   122       3.706 -19.821  11.638  1.00  0.00
C
ATOM   2002 1HB  LYS   122       3.664 -20.885  11.863  1.00  0.00
H
ATOM   2003 2HB  LYS   122       4.658 -19.610  11.150  1.00  0.00
H
ATOM   2004  CG  LYS   122       3.642 -19.024  12.943  1.00  0.00
C
ATOM   2005 1HG  LYS   122       3.596 -17.963  12.699  1.00  0.00
H
ATOM   2006 2HG  LYS   122       2.742 -19.297  13.493  1.00  0.00
H
ATOM   2007  CD  LYS   122       4.856 -19.265  13.837  1.00  0.00
C
ATOM   2008 1HD  LYS   122       5.765 -19.064  13.266  1.00  0.00
H
ATOM   2009 2HD  LYS   122       4.811 -18.570  14.676  1.00  0.00
H
ATOM   2010  CE  LYS   122       4.907 -20.690  14.385  1.00  0.00
C
ATOM   2011 1HE  LYS   122       3.976 -20.906  14.912  1.00  0.00
H
ATOM   2012 2HE  LYS   122       5.016 -21.394  13.558  1.00  0.00
H
ATOM   2013  NZ  LYS   122       6.059 -20.861  15.319  1.00  0.00
N
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ATOM   2014 1HZ  LYS   122       6.084 -21.813  15.667  1.00  0.00
H
ATOM   2015 2HZ  LYS   122       5.976 -20.225  16.101  1.00  0.00
H
ATOM   2016 3HZ  LYS   122       6.931 -20.672  14.833  1.00  0.00
H
ATOM   2017  N   ASN   123       1.848 -21.235   9.144  1.00  0.00
N
ATOM   2018  H   ASN   123       1.089 -21.367   9.802  1.00  0.00
H
ATOM   2019  CA  ASN   123       1.896 -22.077   7.952  1.00  0.00
C
ATOM   2020  HA  ASN   123       2.901 -22.044   7.528  1.00  0.00
H
ATOM   2021  C   ASN   123       0.944 -21.598   6.856  1.00  0.00
C
ATOM   2022  O   ASN   123       0.713 -22.333   5.899  1.00  0.00
O
ATOM   2023  CB  ASN   123       1.582 -23.537   8.309  1.00  0.00
C
ATOM   2024 1HB  ASN   123       0.693 -23.578   8.934  1.00  0.00
H
ATOM   2025 2HB  ASN   123       1.388 -24.095   7.396  1.00  0.00
H
ATOM   2026  CG  ASN   123       2.723 -24.232   8.995  1.00  0.00
C
ATOM   2027  OD1 ASN   123       3.883 -24.023   8.666  1.00  0.00
O
ATOM   2028  ND2 ASN   123       2.417 -25.094   9.919  1.00  0.00
N
ATOM   2029 1HD2 ASN   123       3.161 -25.626  10.348  1.00  0.00
H
ATOM   2030 2HD2 ASN   123       1.460 -25.235  10.192  1.00  0.00
H
ATOM   2031  N   LEU   124       0.401 -20.388   6.933  1.00  0.00
N
ATOM   2032  H   LEU   124       0.598 -19.776   7.715  1.00  0.00
H
ATOM   2033  CA  LEU   124      -0.447 -19.898   5.837  1.00  0.00
C
ATOM   2034  HA  LEU   124      -1.212 -20.638   5.625  1.00  0.00
H
ATOM   2035  C   LEU   124       0.416 -19.707   4.601  1.00  0.00
C
ATOM   2036  O   LEU   124       0.013 -20.016   3.491  1.00  0.00
O
ATOM   2037  CB  LEU   124      -1.133 -18.561   6.122  1.00  0.00
C
ATOM   2038 1HB  LEU   124      -0.360 -17.810   6.265  1.00  0.00
H
ATOM   2039 2HB  LEU   124      -1.675 -18.286   5.216  1.00  0.00
H
ATOM   2040  CG  LEU   124      -2.116 -18.437   7.289  1.00  0.00
C
ATOM   2041  HG  LEU   124      -1.587 -18.648   8.213  1.00  0.00
H
ATOM   2042  CD1 LEU   124      -2.598 -16.995   7.321  1.00  0.00
C
ATOM   2043 1HD1 LEU   124      -3.164 -16.826   8.230  1.00  0.00
H
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ATOM   2044 2HD1 LEU   124      -3.224 -16.778   6.454  1.00  0.00
H
ATOM   2045 3HD1 LEU   124      -1.748 -16.313   7.322  1.00  0.00
H
ATOM   2046  CD2 LEU   124      -3.299 -19.392   7.193  1.00  0.00
C
ATOM   2047 1HD2 LEU   124      -3.979 -19.213   8.025  1.00  0.00
H
ATOM   2048 2HD2 LEU   124      -2.950 -20.422   7.252  1.00  0.00
H
ATOM   2049 3HD2 LEU   124      -3.831 -19.243   6.257  1.00  0.00
H
ATOM   2050  N   ASP   125       1.646 -19.261   4.804  1.00  0.00
N
ATOM   2051  H   ASP   125       1.935 -19.009   5.744  1.00  0.00
H
ATOM   2052  CA  ASP   125       2.573 -19.079   3.686  1.00  0.00
C
ATOM   2053  HA  ASP   125       2.094 -18.461   2.929  1.00  0.00
H
ATOM   2054  C   ASP   125       2.922 -20.415   3.025  1.00  0.00
C
ATOM   2055  O   ASP   125       3.188 -20.473   1.821  1.00  0.00
O
ATOM   2056  CB  ASP   125       3.846 -18.369   4.155  1.00  0.00
C
ATOM   2057 1HB  ASP   125       4.259 -18.908   5.004  1.00  0.00
H
ATOM   2058 2HB  ASP   125       4.572 -18.381   3.342  1.00  0.00
H
ATOM   2059  CG  ASP   125       3.597 -16.923   4.557  1.00  0.00
C
ATOM   2060  OD1 ASP   125       2.891 -16.196   3.821  1.00  0.00
O
ATOM   2061  OD2 ASP   125       4.115 -16.484   5.610  1.00  0.00
O
ATOM   2062  N   LYS   126       2.868 -21.501   3.789  1.00  0.00
N
ATOM   2063  H   LYS   126       2.656 -21.397   4.770  1.00  0.00
H
ATOM   2064  CA  LYS   126       3.071 -22.847   3.241  1.00  0.00
C
ATOM   2065  HA  LYS   126       3.897 -22.809   2.532  1.00  0.00
H
ATOM   2066  C   LYS   126       1.867 -23.370   2.462  1.00  0.00
C
ATOM   2067  O   LYS   126       2.048 -23.924   1.386  1.00  0.00
O
ATOM   2068  CB  LYS   126       3.418 -23.847   4.353  1.00  0.00
C
ATOM   2069 1HB  LYS   126       2.640 -23.813   5.112  1.00  0.00
H
ATOM   2070 2HB  LYS   126       3.419 -24.843   3.917  1.00  0.00
H
ATOM   2071  CG  LYS   126       4.772 -23.647   5.031  1.00  0.00
C
ATOM   2072 1HG  LYS   126       4.854 -22.622   5.392  1.00  0.00
H
ATOM   2073 2HG  LYS   126       4.842 -24.327   5.879  1.00  0.00
H
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ATOM   2074  CD  LYS   126       5.915 -23.950   4.067  1.00  0.00
C
ATOM   2075 1HD  LYS   126       5.796 -24.963   3.685  1.00  0.00
H
ATOM   2076 2HD  LYS   126       5.870 -23.252   3.235  1.00  0.00
H
ATOM   2077  CE  LYS   126       7.282 -23.824   4.712  1.00  0.00
C
ATOM   2078 1HE  LYS   126       7.397 -22.813   5.109  1.00  0.00
H
ATOM   2079 2HE  LYS   126       7.373 -24.540   5.532  1.00  0.00
H
ATOM   2080  NZ  LYS   126       8.352 -24.084   3.692  1.00  0.00
N
ATOM   2081 1HZ  LYS   126       9.249 -23.780   4.053  1.00  0.00
H
ATOM   2082 2HZ  LYS   126       8.149 -23.576   2.840  1.00  0.00
H
ATOM   2083 3HZ  LYS   126       8.401 -25.072   3.473  1.00  0.00
H
ATOM   2084  N   VAL   127       0.644 -23.174   2.942  1.00  0.00
N
ATOM   2085  H   VAL   127       0.513 -22.720   3.838  1.00  0.00
H
ATOM   2086  CA  VAL   127      -0.521 -23.604   2.152  1.00  0.00
C
ATOM   2087  HA  VAL   127      -0.320 -24.614   1.793  1.00  0.00
H
ATOM   2088  C   VAL   127      -0.585 -22.728   0.903  1.00  0.00
C
ATOM   2089  O   VAL   127      -0.860 -23.240  -0.178  1.00  0.00
O
ATOM   2090  CB  VAL   127      -1.875 -23.681   2.957  1.00  0.00
C
ATOM   2091  HB  VAL   127      -1.828 -24.567   3.589  1.00  0.00
H
ATOM   2092  CG1 VAL   127      -2.072 -22.505   3.872  1.00  0.00
C
ATOM   2093 1HG1 VAL   127      -3.074 -22.517   4.296  1.00  0.00
H
ATOM   2094 2HG1 VAL   127      -1.931 -21.575   3.331  1.00  0.00
H
ATOM   2095 3HG1 VAL   127      -1.364 -22.562   4.686  1.00  0.00
H
ATOM   2096  CG2 VAL   127      -3.111 -23.825   2.054  1.00  0.00
C
ATOM   2097 1HG2 VAL   127      -3.993 -24.033   2.662  1.00  0.00
H
ATOM   2098 2HG2 VAL   127      -2.970 -24.645   1.358  1.00  0.00
H
ATOM   2099 3HG2 VAL   127      -3.277 -22.911   1.486  1.00  0.00
H
ATOM   2100  N   SER   128      -0.213 -21.456   0.991  1.00  0.00
N
ATOM   2101  H   SER   128       0.003 -21.037   1.893  1.00  0.00
H
ATOM   2102  CA  SER   128      -0.137 -20.628  -0.209  1.00  0.00
C
ATOM   2103  HA  SER   128      -1.115 -20.639  -0.683  1.00  0.00
H
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ATOM   2104  C   SER   128       0.874 -21.158  -1.214  1.00  0.00
C
ATOM   2105  O   SER   128       0.573 -21.224  -2.400  1.00  0.00
O
ATOM   2106  CB  SER   128       0.243 -19.181   0.113  1.00  0.00
C
ATOM   2107 1HB  SER   128       1.195 -19.173   0.641  1.00  0.00
H
ATOM   2108 2HB  SER   128       0.351 -18.625  -0.819  1.00  0.00
H
ATOM   2109  OG  SER   128      -0.734 -18.546   0.915  1.00  0.00
O
ATOM   2110  HG  SER   128      -0.297 -17.846   1.426  1.00  0.00
H
ATOM   2111  N   SER   129       2.067 -21.541  -0.783  1.00  0.00
N
ATOM   2112  H   SER   129       2.306 -21.504   0.203  1.00  0.00
H
ATOM   2113  CA  SER   129       3.081 -21.969  -1.741  1.00  0.00
C
ATOM   2114  HA  SER   129       3.078 -21.264  -2.566  1.00  0.00
H
ATOM   2115  C   SER   129       2.786 -23.347  -2.320  1.00  0.00
C
ATOM   2116  O   SER   129       3.021 -23.587  -3.504  1.00  0.00
O
ATOM   2117  CB  SER   129       4.467 -21.931  -1.105  1.00  0.00
C
ATOM   2118 1HB  SER   129       5.218 -22.165  -1.859  1.00  0.00
H
ATOM   2119 2HB  SER   129       4.654 -20.930  -0.717  1.00  0.00
H
ATOM   2120  OG  SER   129       4.555 -22.863  -0.046  1.00  0.00
O
ATOM   2121  HG  SER   129       4.891 -23.691  -0.423  1.00  0.00
H
ATOM   2122  N   GLU   130       2.208 -24.247  -1.539  1.00  0.00
N
ATOM   2123  H   GLU   130       2.063 -24.054  -0.547  1.00  0.00
H
ATOM   2124  CA  GLU   130       1.803 -25.533  -2.096  1.00  0.00
C
ATOM   2125  HA  GLU   130       2.632 -25.953  -2.667  1.00  0.00
H
ATOM   2126  C   GLU   130       0.646 -25.322  -3.063  1.00  0.00
C
ATOM   2127  O   GLU   130       0.603 -25.941  -4.113  1.00  0.00
O
ATOM   2128  CB  GLU   130       1.412 -26.521  -1.001  1.00  0.00
C
ATOM   2129 1HB  GLU   130       0.700 -26.035  -0.336  1.00  0.00
H
ATOM   2130 2HB  GLU   130       0.926 -27.376  -1.465  1.00  0.00
H
ATOM   2131  CG  GLU   130       2.585 -27.030  -0.176  1.00  0.00
C
ATOM   2132 1HG  GLU   130       3.059 -26.185   0.323  1.00  0.00
H
ATOM   2133 2HG  GLU   130       2.210 -27.715   0.584  1.00  0.00
H
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ATOM   2134  CD  GLU   130       3.629 -27.755  -1.009  1.00  0.00
C
ATOM   2135  OE1 GLU   130       3.330 -28.808  -1.616  1.00  0.00
O
ATOM   2136  OE2 GLU   130       4.789 -27.281  -1.043  1.00  0.00
O
ATOM   2137  N   LEU   131      -0.261 -24.396  -2.790  1.00  0.00
N
ATOM   2138  H   LEU   131      -0.238 -23.892  -1.905  1.00  0.00
H
ATOM   2139  CA  LEU   131      -1.310 -24.105  -3.763  1.00  0.00
C
ATOM   2140  HA  LEU   131      -1.766 -25.045  -4.071  1.00  0.00
H
ATOM   2141  C   LEU   131      -0.765 -23.453  -5.024  1.00  0.00
C
ATOM   2142  O   LEU   131      -1.240 -23.784  -6.096  1.00  0.00
O
ATOM   2143  CB  LEU   131      -2.398 -23.219  -3.166  1.00  0.00
C
ATOM   2144 1HB  LEU   131      -1.906 -22.432  -2.600  1.00  0.00
H
ATOM   2145 2HB  LEU   131      -2.953 -22.757  -3.983  1.00  0.00
H
ATOM   2146  CG  LEU   131      -3.404 -23.928  -2.253  1.00  0.00
C
ATOM   2147  HG  LEU   131      -2.856 -24.488  -1.498  1.00  0.00
H
ATOM   2148  CD1 LEU   131      -4.241 -22.888  -1.546  1.00  0.00
C
ATOM   2149 1HD1 LEU   131      -4.888 -23.389  -0.832  1.00  0.00
H
ATOM   2150 2HD1 LEU   131      -4.842 -22.324  -2.260  1.00  0.00
H
ATOM   2151 3HD1 LEU   131      -3.589 -22.206  -0.997  1.00  0.00
H
ATOM   2152  CD2 LEU   131      -4.325 -24.900  -3.006  1.00  0.00
C
ATOM   2153 1HD2 LEU   131      -5.059 -25.317  -2.318  1.00  0.00
H
ATOM   2154 2HD2 LEU   131      -3.738 -25.716  -3.423  1.00  0.00
H
ATOM   2155 3HD2 LEU   131      -4.845 -24.378  -3.810  1.00  0.00
H
ATOM   2156  N   LYS   132       0.242 -22.589  -4.942  1.00  0.00
N
ATOM   2157  H   LYS   132       0.570 -22.291  -4.025  1.00  0.00
H
ATOM   2158  CA  LYS   132       0.880 -22.048  -6.156  1.00  0.00
C
ATOM   2159  HA  LYS   132       0.143 -21.503  -6.746  1.00  0.00
H
ATOM   2160  C   LYS   132       1.392 -23.203  -7.007  1.00  0.00
C
ATOM   2161  O   LYS   132       1.124 -23.277  -8.207  1.00  0.00
O
ATOM   2162  CB  LYS   132       2.055 -21.121  -5.808  1.00  0.00
C
ATOM   2163 1HB  LYS   132       2.701 -21.639  -5.105  1.00  0.00
H
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ATOM   2164 2HB  LYS   132       2.629 -20.919  -6.709  1.00  0.00
H
ATOM   2165  CG  LYS   132       1.650 -19.792  -5.202  1.00  0.00
C
ATOM   2166 1HG  LYS   132       1.193 -19.165  -5.967  1.00  0.00
H
ATOM   2167 2HG  LYS   132       0.915 -19.976  -4.430  1.00  0.00
H
ATOM   2168  CD  LYS   132       2.820 -19.060  -4.565  1.00  0.00
C
ATOM   2169 1HD  LYS   132       3.332 -19.729  -3.879  1.00  0.00
H
ATOM   2170 2HD  LYS   132       3.521 -18.734  -5.333  1.00  0.00
H
ATOM   2171  CE  LYS   132       2.302 -17.864  -3.785  1.00  0.00
C
ATOM   2172 1HE  LYS   132       1.849 -17.164  -4.488  1.00  0.00
H
ATOM   2173 2HE  LYS   132       1.530 -18.205  -3.093  1.00  0.00
H
ATOM   2174  NZ  LYS   132       3.363 -17.158  -3.000  1.00  0.00
N
ATOM   2175 1HZ  LYS   132       2.957 -16.361  -2.523  1.00  0.00
H
ATOM   2176 2HZ  LYS   132       4.098 -16.829  -3.616  1.00  0.00
H
ATOM   2177 3HZ  LYS   132       3.764 -17.786  -2.313  1.00  0.00
H
ATOM   2178   N  LYS   133       2.065 -24.147  -6.361  1.00  0.00
N
ATOM   2179   H  LYS   133       2.236 -24.037  -5.365  1.00  0.00
H
ATOM   2180  CA  LYS   133       2.583 -25.331  -7.045  1.00  0.00
C
ATOM   2181  HA  LYS   133       3.260 -25.007  -7.837  1.00  0.00
H
ATOM   2182   C  LYS   133       1.453 -26.130  -7.682  1.00  0.00
C
ATOM   2183   O  LYS   133       1.531 -26.519  -8.845  1.00  0.00
O
ATOM   2184  CB  LYS   133       3.353 -26.198  -6.041  1.00  0.00
C
ATOM   2185 1HB  LYS   133       4.116 -25.582  -5.565  1.00  0.00
H
ATOM   2186 2HB  LYS   133       2.666 -26.540  -5.273  1.00  0.00
H
ATOM   2187  CG  LYS   133       4.020 -27.419  -6.635  1.00  0.00
C
ATOM   2188 1HG  LYS   133       3.277 -28.028  -7.149  1.00  0.00
H
ATOM   2189 2HG  LYS   133       4.777 -27.099  -7.346  1.00  0.00
H
ATOM   2190  CD  LYS   133       4.674 -28.254  -5.554  1.00  0.00
C
ATOM   2191 1HD  LYS   133       5.412 -27.648  -5.026  1.00  0.00
H
ATOM   2192 2HD  LYS   133       3.916 -28.596  -4.848  1.00  0.00
H
ATOM   2193  CE  LYS   133       5.359 -29.452  -6.185  1.00  0.00
C
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ATOM   2194 1HE  LYS   133       4.616 -30.037  -6.729  1.00  0.00
H
ATOM   2195 2HE  LYS   133       6.109 -29.099  -6.895  1.00  0.00
H
ATOM   2196  NZ  LYS   133       6.016 -30.321  -5.166  1.00  0.00
N
ATOM   2197 1HZ  LYS   133       6.406 -31.139  -5.620  1.00  0.00
H
ATOM   2198 2HZ  LYS   133       5.339 -30.615  -4.471  1.00  0.00
H
ATOM   2199 3HZ  LYS   133       6.764 -29.811  -4.708  1.00  0.00
H
ATOM   2200  N   PHE   134       0.392 -26.369  -6.930  1.00  0.00
N
ATOM   2201  H   PHE   134       0.371 -26.019  -5.974  1.00  0.00
H
ATOM   2202  CA  PHE   134      -0.710 -27.205  -7.398  1.00  0.00
C
ATOM   2203  HA  PHE   134      -0.296 -28.120  -7.820  1.00  0.00
H
ATOM   2204  C   PHE   134      -1.553 -26.551  -8.484  1.00  0.00
C
ATOM   2205  O   PHE   134      -2.074 -27.230  -9.371  1.00  0.00
O
ATOM   2206  CB  PHE   134      -1.617 -27.578  -6.221  1.00  0.00
C
ATOM   2207 1HB  PHE   134      -2.027 -26.663  -5.793  1.00  0.00
H
ATOM   2208 2HB  PHE   134      -2.442 -28.171  -6.610  1.00  0.00
H
ATOM   2209  CG  PHE   134      -0.934 -28.369  -5.117  1.00  0.00
C
ATOM   2210  CD1 PHE   134       0.303 -29.034  -5.304  1.00  0.00
C
ATOM   2211  HD1 PHE   134       0.798 -29.029  -6.262  1.00  0.00
H
ATOM   2212  CD2 PHE   134      -1.548 -28.443  -3.851  1.00  0.00
C
ATOM   2213  HD2 PHE   134      -2.490 -27.945  -3.681  1.00  0.00
H
ATOM   2214  CE1 PHE   134       0.930 -29.711  -4.237  1.00  0.00
C
ATOM   2215  HE1 PHE   134       1.887 -30.183  -4.388  1.00  0.00
H
ATOM   2216  CE2 PHE   134      -0.947 -29.164  -2.789  1.00  0.00
C
ATOM   2217  HE2 PHE   134      -1.442 -29.241  -1.834  1.00  0.00
H
ATOM   2218  CZ  PHE   134       0.308 -29.772  -2.978  1.00  0.00
C
ATOM   2219  HZ  PHE   134       0.789 -30.290  -2.160  1.00  0.00
H
ATOM   2220  N   LEU   135      -1.685 -25.234  -8.445  1.00  0.00
N
ATOM   2221  H   LEU   135      -1.287 -24.705  -7.672  1.00  0.00
H
ATOM   2222  CA  LEU   135      -2.405 -24.516  -9.488  1.00  0.00
C
ATOM   2223  HA  LEU   135      -3.369 -24.993  -9.656  1.00  0.00
H
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ATOM   2224  C   LEU   135      -1.626 -24.590 -10.787  1.00  0.00
C
ATOM   2225  O   LEU   135      -2.235 -24.733 -11.829  1.00  0.00
O
ATOM   2226  CB  LEU   135      -2.635 -23.054  -9.111  1.00  0.00
C
ATOM   2227 1HB  LEU   135      -1.687 -22.645  -8.759  1.00  0.00
H
ATOM   2228 2HB  LEU   135      -2.913 -22.518 -10.015  1.00  0.00
H
ATOM   2229  CG  LEU   135      -3.719 -22.767  -8.062  1.00  0.00
C
ATOM   2230  HG  LEU   135      -3.540 -23.389  -7.188  1.00  0.00
H
ATOM   2231  CD1 LEU   135      -3.634 -21.322  -7.637  1.00  0.00
C
ATOM   2232 1HD1 LEU   135      -4.295 -21.154  -6.790  1.00  0.00
H
ATOM   2233 2HD1 LEU   135      -3.922 -20.667  -8.457  1.00  0.00
H
ATOM   2234 3HD1 LEU   135      -2.613 -21.092  -7.335  1.00  0.00
H
ATOM   2235  CD2 LEU   135      -5.132 -23.048  -8.567  1.00  0.00
C
ATOM   2236 1HD2 LEU   135      -5.858 -22.750  -7.812  1.00  0.00
H
ATOM   2237 2HD2 LEU   135      -5.248 -24.113  -8.758  1.00  0.00
H
ATOM   2238 3HD2 LEU   135      -5.322 -22.488  -9.486  1.00  0.00
H
ATOM   2239  N   GLU   136      -0.302 -24.583 -10.753  1.00  0.00
N
ATOM   2240  H   GLU   136       0.196 -24.404  -9.886  1.00  0.00
H
ATOM   2241  CA  GLU   136       0.445 -24.832 -11.988  1.00  0.00
C
ATOM   2242  HA  GLU   136       0.086 -24.159 -12.766  1.00  0.00
H
ATOM   2243  C   GLU   136       0.257 -26.272 -12.471  1.00  0.00
C
ATOM   2244  O   GLU   136       0.068 -26.538 -13.654  1.00  0.00
O
ATOM   2245  CB  GLU   136       1.945 -24.625 -11.789  1.00  0.00
C
ATOM   2246 1HB  GLU   136       2.263 -25.240 -10.952  1.00  0.00
H
ATOM   2247 2HB  GLU   136       2.446 -24.982 -12.686  1.00  0.00
H
ATOM   2248  CG  GLU   136       2.398 -23.199 -11.538  1.00  0.00
C
ATOM   2249 1HG  GLU   136       2.064 -22.574 -12.364  1.00  0.00
H
ATOM   2250 2HG  GLU   136       1.944 -22.831 -10.620  1.00  0.00
H
ATOM   2251  CD  GLU   136       3.914 -23.100 -11.422  1.00  0.00
C
ATOM   2252  OE1 GLU   136       4.608 -24.140 -11.337  1.00  0.00
O
ATOM   2253  OE2 GLU   136       4.449 -21.966 -11.441  1.00  0.00
O
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ATOM   2254  N   GLU   137       0.319 -27.226 -11.555  1.00  0.00
N
ATOM   2255  H   GLU   137       0.476 -26.976 -10.582  1.00  0.00
H
ATOM   2256  CA  GLU   137       0.223 -28.641 -11.922  1.00  0.00
C
ATOM   2257  HA  GLU   137       0.985 -28.871 -12.668  1.00  0.00
H
ATOM   2258  C   GLU   137      -1.128 -29.012 -12.521  1.00  0.00
C
ATOM   2259  O   GLU   137      -1.222 -29.904 -13.367  1.00  0.00
O
ATOM   2260  CB  GLU   137       0.466 -29.513 -10.692  1.00  0.00
C
ATOM   2261 1HB  GLU   137      -0.149 -29.132  -9.879  1.00  0.00
H
ATOM   2262 2HB  GLU   137       0.155 -30.533 -10.918  1.00  0.00
H
ATOM   2263  CG  GLU   137       1.922 -29.544 -10.257  1.00  0.00
C
ATOM   2264 1HG  GLU   137       2.516 -29.975 -11.064  1.00  0.00
H
ATOM   2265 2HG  GLU   137       2.274 -28.531 -10.083  1.00  0.00
H
ATOM   2266  CD  GLU   137       2.135 -30.360  -8.998  1.00  0.00
C
ATOM   2267  OE1 GLU   137       1.169 -30.678  -8.273  1.00  0.00
O
ATOM   2268  OE2 GLU   137       3.296 -30.735  -8.724  1.00  0.00
O
ATOM   2269  N   THR   138      -2.182 -28.324 -12.112  1.00  0.00
N
ATOM   2270  H   THR   138      -2.057 -27.605 -11.406  1.00  0.00
H
ATOM   2271  CA  THR   138      -3.515 -28.609 -12.641  1.00  0.00
C
ATOM   2272  HA  THR   138      -3.510 -29.608 -13.074  1.00  0.00
H
ATOM   2273  C   THR   138      -3.940 -27.633 -13.742  1.00  0.00
C
ATOM   2274  O   THR   138      -4.411 -28.045 -14.809  1.00  0.00
O
ATOM   2275  CB  THR   138      -4.560 -28.614 -11.504  1.00  0.00
C
ATOM   2276  HB  THR   138      -4.964 -27.612 -11.368  1.00  0.00
H
ATOM   2277  OG1 THR   138      -3.942 -29.039 -10.284  1.00  0.00
O
ATOM   2278  HG1 THR   138      -3.242 -28.409 -10.060  1.00  0.00
H
ATOM   2279  CG2 THR   138      -5.672 -29.601 -11.784  1.00  0.00
C
ATOM   2280 1HG2 THR   138      -6.402 -29.561 -10.977  1.00  0.00
H
ATOM   2281 2HG2 THR   138      -5.266 -30.610 -11.845  1.00  0.00
H
ATOM   2282 3HG2 THR   138      -6.168 -29.354 -12.723  1.00  0.00
H
ATOM   2283  N   TYR   139      -3.725 -26.345 -13.516  1.00  0.00
N
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ATOM   2284  H   TYR   139      -3.199 -26.055 -12.696  1.00  0.00
H
ATOM   2285  CA  TYR   139      -4.257 -25.265 -14.348  1.00  0.00
C
ATOM   2286  HA  TYR   139      -4.780 -25.700 -15.196  1.00  0.00
H
ATOM   2287  C   TYR   139      -3.133 -24.382 -14.883  1.00  0.00
C
ATOM   2288  O   TYR   139      -3.154 -23.155 -14.759  1.00  0.00
O
ATOM   2289  CB  TYR   139      -5.270 -24.445 -13.547  1.00  0.00
C
ATOM   2290 1HB  TYR   139      -4.740 -23.872 -12.786  1.00  0.00
H
ATOM   2291 2HB  TYR   139      -5.779 -23.754 -14.218  1.00  0.00
H
ATOM   2292  CG  TYR   139      -6.293 -25.313 -12.852  1.00  0.00
C
ATOM   2293  CD1 TYR   139      -6.437 -25.262 -11.452  1.00  0.00
C
ATOM   2294  HD1 TYR   139      -5.861 -24.547 -10.884  1.00  0.00
H
ATOM   2295  CD2 TYR   139      -7.083 -26.229 -13.577  1.00  0.00
C
ATOM   2296  HD2 TYR   139      -7.017 -26.268 -14.656  1.00  0.00
H
ATOM   2297  CE1 TYR   139      -7.314 -26.152 -10.778  1.00  0.00
C
ATOM   2298  HE1 TYR   139      -7.412 -26.118  -9.705  1.00  0.00
H
ATOM   2299  CE2 TYR   139      -7.947 -27.129 -12.905  1.00  0.00
C
ATOM   2300  HE2 TYR   139      -8.523 -27.850 -13.466  1.00  0.00
H
ATOM   2301  CZ  TYR   139      -8.041 -27.089 -11.512  1.00  0.00
C
ATOM   2302  OH  TYR   139      -8.833 -27.989 -10.854  1.00  0.00
O
ATOM   2303  HH  TYR   139      -9.326 -28.561 -11.459  1.00  0.00
H
ATOM   2304  N   ASP   140      -2.167 -25.062 -15.485  1.00  0.00
N
ATOM   2305  H   ASP   140      -2.183 -26.066 -15.407  1.00  0.00
H
ATOM   2306  CA  ASP   140      -1.076 -24.487 -16.277  1.00  0.00
C
ATOM   2307  HA  ASP   140      -0.513 -25.336 -16.665  1.00  0.00
H
ATOM   2308  C   ASP   140      -0.047 -23.627 -15.540  1.00  0.00
C
ATOM   2309  O   ASP   140       1.011 -24.133 -15.167  1.00  0.00
O
ATOM   2310  CB  ASP   140      -1.637 -23.745 -17.501  1.00  0.00
C
ATOM   2311 1HB  ASP   140      -2.442 -24.343 -17.928  1.00  0.00
H
ATOM   2312 2HB  ASP   140      -2.061 -22.789 -17.196  1.00  0.00
H
ATOM   2313  CG  ASP   140      -0.595 -23.506 -18.583  1.00  0.00
C
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ATOM   2314  OD1 ASP   140       0.555 -23.994 -18.494  1.00  0.00
O
ATOM   2315  OD2 ASP   140      -0.950 -22.863 -19.595  1.00  0.00
O
ATOM   2316  N   ASN   141      -0.275 -22.331 -15.403  1.00  0.00
N
ATOM   2317  H   ASN   141      -1.177 -21.941 -15.644  1.00  0.00
H
ATOM   2318  CA  ASN   141       0.787 -21.409 -15.009  1.00  0.00
C
ATOM   2319  HA  ASN   141       1.365 -21.872 -14.213  1.00  0.00
H
ATOM   2320  C   ASN   141       0.282 -20.064 -14.483  1.00  0.00
C
ATOM   2321  O   ASN   141      -0.904 -19.750 -14.580  1.00  0.00
O
ATOM   2322  CB  ASN   141       1.736 -21.196 -16.206  1.00  0.00
C
ATOM   2323 1HB  ASN   141       2.557 -20.547 -15.919  1.00  0.00
H
ATOM   2324 2HB  ASN   141       2.157 -22.156 -16.492  1.00  0.00
H
ATOM   2325  CG  ASN   141       1.065 -20.608 -17.429  1.00  0.00
C
ATOM   2326  OD1 ASN   141      -0.108 -20.275 -17.462  1.00  0.00
O
ATOM   2327  ND2 ASN   141       1.833 -20.490 -18.469  1.00  0.00
N
ATOM   2328 1HD2 ASN   141       1.443 -20.112 -19.317  1.00  0.00
H
ATOM   2329 2HD2 ASN   141       2.791 -20.802 -18.427  1.00  0.00
H
ATOM   2330  N   VAL   142       1.227 -19.287 -13.965  1.00  0.00
N
ATOM   2331  H   VAL   142       2.174 -19.647 -13.936  1.00  0.00
H
ATOM   2332  CA  VAL   142       1.048 -17.908 -13.484  1.00  0.00
C
ATOM   2333  HA  VAL   142       1.821 -17.792 -12.725  1.00  0.00
H
ATOM   2334  C   VAL   142      -0.241 -17.534 -12.721  1.00  0.00
C
ATOM   2335  O   VAL   142      -1.190 -16.930 -13.231  1.00  0.00
O
ATOM   2336  CB  VAL   142       1.430 -16.857 -14.586  1.00  0.00
C
ATOM   2337  HB  VAL   142       0.721 -16.043 -14.566  1.00  0.00
H
ATOM   2338  CG1 VAL   142       2.815 -16.276 -14.293  1.00  0.00
C
ATOM   2339 1HG1 VAL   142       3.059 -15.512 -15.032  1.00  0.00
H
ATOM   2340 2HG1 VAL   142       3.571 -17.061 -14.330  1.00  0.00
H
ATOM   2341 3HG1 VAL   142       2.827 -15.816 -13.304  1.00  0.00
H
ATOM   2342  CG2 VAL   142       1.425 -17.427 -16.005  1.00  0.00
C
ATOM   2343 1HG2 VAL   142       1.615 -16.627 -16.716  1.00  0.00
H
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ATOM   2344 2HG2 VAL   142       0.449 -17.861 -16.228  1.00  0.00
H
ATOM   2345 3HG2 VAL   142       2.202 -18.180 -16.124  1.00  0.00
H
ATOM   2346  N   TRP   143      -0.226 -17.847 -11.434  1.00  0.00
N
ATOM   2347  H   TRP   143       0.582 -18.335 -11.052  1.00  0.00
H
ATOM   2348  CA  TRP   143      -1.301 -17.505 -10.503  1.00  0.00
C
ATOM   2349  HA  TRP   143      -2.071 -16.906 -10.989  1.00  0.00
H
ATOM   2350  C   TRP   143      -0.700 -16.726  -9.337  1.00  0.00
C
ATOM   2351  O   TRP   143       0.480 -16.901  -9.025  1.00  0.00
O
ATOM   2352  CB  TRP   143      -1.915 -18.790  -9.938  1.00  0.00
C
ATOM   2353 1HB  TRP   143      -1.109 -19.404  -9.534  1.00  0.00
H
ATOM   2354 2HB  TRP   143      -2.581 -18.526  -9.117  1.00  0.00
H
ATOM   2355  CG  TRP   143      -2.696 -19.617 -10.925  1.00  0.00
C
ATOM   2356  CD1 TRP   143      -2.213 -20.549 -11.791  1.00  0.00
C
ATOM   2357  HD1 TRP   143      -1.161 -20.775 -11.913  1.00  0.00
H
ATOM   2358  CD2 TRP   143      -4.126 -19.653 -11.085  1.00  0.00
C
ATOM   2359  NE1 TRP   143      -3.222 -21.169 -12.480  1.00  0.00
N
ATOM   2360  HE1 TRP   143      -3.075 -21.909 -13.167  1.00  0.00
H
ATOM   2361  CE2 TRP   143      -4.418 -20.639 -12.073  1.00  0.00
C
ATOM   2362  CE3 TRP   143      -5.198 -18.979 -10.462  1.00  0.00
C
ATOM   2363  HE3 TRP   143      -5.003 -18.246  -9.695  1.00  0.00
H
ATOM   2364  CZ2 TRP   143      -5.739 -20.943 -12.465  1.00  0.00
C
ATOM   2365  HZ2 TRP   143      -5.938 -21.683 -13.224  1.00  0.00
H
ATOM   2366  CZ3 TRP   143      -6.529 -19.289 -10.846  1.00  0.00
C
ATOM   2367  HZ3 TRP   143      -7.359 -18.785 -10.370  1.00  0.00
H
ATOM   2368  CH2 TRP   143      -6.780 -20.272 -11.847  1.00  0.00
C
ATOM   2369  HH2 TRP   143      -7.798 -20.505 -12.120  1.00  0.00
H
ATOM   2370  N   HIS   144      -1.518 -15.961  -8.626  1.00  0.00
N
ATOM   2371  H   HIS   144      -2.460 -15.779  -8.960  1.00  0.00
H
ATOM   2372  CA  HIS   144      -1.160 -15.486  -7.288  1.00  0.00
C
ATOM   2373  HA  HIS   144      -0.129 -15.748  -7.052  1.00  0.00
H
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ATOM   2374  C   HIS   144      -2.087 -16.200  -6.315  1.00  0.00
C
ATOM   2375  O   HIS   144      -3.256 -16.436  -6.639  1.00  0.00
O
ATOM   2376  CB  HIS   144      -1.347 -13.976  -7.128  1.00  0.00
C
ATOM   2377 1HB  HIS   144      -2.378 -13.727  -7.362  1.00  0.00
H
ATOM   2378 2HB  HIS   144      -1.164 -13.715  -6.086  1.00  0.00
H
ATOM   2379  CG  HIS   144      -0.435 -13.155  -7.983  1.00  0.00
C
ATOM   2380  ND1 HIS   144       0.930 -13.102  -7.836  1.00  0.00
N
ATOM   2381  HD1 HIS   144       1.477 -13.605  -7.149  1.00  0.00
H
ATOM   2382  CD2 HIS   144      -0.711 -12.284  -8.986  1.00  0.00
C
ATOM   2383  HD2 HIS   144      -1.701 -12.064  -9.353  1.00  0.00
H
ATOM   2384  CE1 HIS   144       1.416 -12.249  -8.740  1.00  0.00
C
ATOM   2385  HE1 HIS   144       2.466 -12.006  -8.847  1.00  0.00
H
ATOM   2386  NE2 HIS   144       0.453 -11.733  -9.478  1.00  0.00
N
ATOM   2387  N   VAL   145      -1.573 -16.517  -5.135  1.00  0.00
N
ATOM   2388  H   VAL   145      -0.615 -16.239  -4.926  1.00  0.00
H
ATOM   2389  CA  VAL   145      -2.325 -17.194  -4.078  1.00  0.00
C
ATOM   2390  HA  VAL   145      -3.384 -17.204  -4.326  1.00  0.00
H
ATOM   2391  C   VAL   145      -2.102 -16.399  -2.809  1.00  0.00
C
ATOM   2392  O   VAL   145      -0.959 -16.140  -2.427  1.00  0.00
O
ATOM   2393  CB  VAL   145      -1.833 -18.641  -3.822  1.00  0.00
C
ATOM   2394  HB  VAL   145      -0.781 -18.608  -3.545  1.00  0.00
H
ATOM   2395  CG1 VAL   145      -2.613 -19.298  -2.670  1.00  0.00
C
ATOM   2396 1HG1 VAL   145      -2.285 -20.326  -2.554  1.00  0.00
H
ATOM   2397 2HG1 VAL   145      -3.683 -19.284  -2.866  1.00  0.00
H
ATOM   2398 3HG1 VAL   145      -2.410 -18.775  -1.734  1.00  0.00
H
ATOM   2399  CG2 VAL   145      -1.963 -19.478  -5.087  1.00  0.00
C
ATOM   2400 1HG2 VAL   145      -1.686 -20.510  -4.877  1.00  0.00
H
ATOM   2401 2HG2 VAL   145      -1.297 -19.092  -5.858  1.00  0.00
H
ATOM   2402 3HG2 VAL   145      -2.985 -19.446  -5.458  1.00  0.00
H
ATOM   2403  N   ILE   146      -3.186 -15.976  -2.179  1.00  0.00
N
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ATOM   2404  H   ILE   146      -4.107 -16.193  -2.554  1.00  0.00
H
ATOM   2405  CA  ILE   146      -3.084 -15.166  -0.975  1.00  0.00
C
ATOM   2406  HA  ILE   146      -2.092 -15.313  -0.549  1.00  0.00
H
ATOM   2407  C   ILE   146      -4.101 -15.586   0.067  1.00  0.00
C
ATOM   2408  O   ILE   146      -5.267 -15.785  -0.268  1.00  0.00
O
ATOM   2409  CB  ILE   146      -3.274 -13.655  -1.257  1.00  0.00
C
ATOM   2410  HB  ILE   146      -4.277 -13.369  -0.949  1.00  0.00
H
ATOM   2411  CG1 ILE   146      -3.118 -13.288  -2.754  1.00  0.00
C
ATOM   2412 1HG1 ILE   146      -2.095 -13.509  -3.062  1.00  0.00
H
ATOM   2413 2HG1 ILE   146      -3.799 -13.899  -3.347  1.00  0.00
H
ATOM   2414  CG2 ILE   146      -2.265 -12.933  -0.395  1.00  0.00
C
ATOM   2415 1HG2 ILE   146      -2.252 -11.871  -0.611  1.00  0.00
H
ATOM   2416 2HG2 ILE   146      -1.267 -13.327  -0.595  1.00  0.00
H
ATOM   2417 3HG2 ILE   146      -2.494 -13.075   0.662  1.00  0.00
H
ATOM   2418  CD1 ILE   146      -3.420 -11.832  -3.117  1.00  0.00
C
ATOM   2419 1HD1 ILE   146      -3.263 -11.698  -4.186  1.00  0.00
H
ATOM   2420 2HD1 ILE   146      -2.754 -11.155  -2.586  1.00  0.00
H
ATOM   2421 3HD1 ILE   146      -4.455 -11.597  -2.874  1.00  0.00
H
ATOM   2422  N   ILE   147      -3.664 -15.741   1.311  1.00  0.00
N
ATOM   2423  H   ILE   147      -2.688 -15.554   1.529  1.00  0.00
H
ATOM   2424  CA  ILE   147      -4.518 -16.236   2.393  1.00  0.00
C
ATOM   2425  HA  ILE   147      -5.554 -16.214   2.069  1.00  0.00
H
ATOM   2426  C   ILE   147      -4.347 -15.334   3.615  1.00  0.00
C
ATOM   2427  O   ILE   147      -3.227 -15.161   4.091  1.00  0.00
O
ATOM   2428  CB  ILE   147      -4.142 -17.702   2.778  1.00  0.00
C
ATOM   2429  HB  ILE   147      -3.132 -17.705   3.189  1.00  0.00
H
ATOM   2430  CG1 ILE   147      -4.151 -18.601   1.524  1.00  0.00
C
ATOM   2431 1HG1 ILE   147      -5.176 -18.689   1.181  1.00  0.00
H
ATOM   2432 2HG1 ILE   147      -3.572 -18.132   0.732  1.00  0.00
H
ATOM   2433  CG2 ILE   147      -5.126 -18.246   3.848  1.00  0.00
C
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ATOM   2434 1HG2 ILE   147      -4.867 -19.272   4.112  1.00  0.00
H
ATOM   2435 2HG2 ILE   147      -6.149 -18.220   3.469  1.00  0.00
H
ATOM   2436 3HG2 ILE   147      -5.061 -17.642   4.753  1.00  0.00
H
ATOM   2437  CD1 ILE   147      -3.572 -19.984   1.699  1.00  0.00
C
ATOM   2438 1HD1 ILE   147      -3.574 -20.500   0.740  1.00  0.00
H
ATOM   2439 2HD1 ILE   147      -4.153 -20.561   2.416  1.00  0.00
H
ATOM   2440 3HD1 ILE   147      -2.545 -19.903   2.053  1.00  0.00
H
ATOM   2441  N   MET   148      -5.422 -14.725   4.100  1.00  0.00
N
ATOM   2442  H   MET   148      -6.332 -14.902   3.680  1.00  0.00
H
ATOM   2443  CA  MET   148      -5.339 -13.805   5.240  1.00  0.00
C
ATOM   2444  HA  MET   148      -4.627 -14.203   5.963  1.00  0.00
H
ATOM   2445  C   MET   148      -6.706 -13.664   5.904  1.00  0.00
C
ATOM   2446  O   MET   148      -7.722 -13.966   5.282  1.00  0.00
O
ATOM   2447  CB  MET   148      -4.845 -12.438   4.749  1.00  0.00
C
ATOM   2448 1HB  MET   148      -4.003 -12.612   4.082  1.00  0.00
H
ATOM   2449 2HB  MET   148      -5.637 -11.965   4.174  1.00  0.00
H
ATOM   2450  CG  MET   148      -4.373 -11.468   5.817  1.00  0.00
C
ATOM   2451 1HG  MET   148      -3.980 -10.577   5.329  1.00  0.00
H
ATOM   2452 2HG  MET   148      -5.214 -11.174   6.442  1.00  0.00
H
ATOM   2453  SD  MET   148      -3.096 -12.166   6.856  1.00  0.00
S
ATOM   2454  CE  MET   148      -2.581 -10.702   7.751  1.00  0.00
C
ATOM   2455 1HE  MET   148      -1.788 -10.961   8.452  1.00  0.00
H
ATOM   2456 2HE  MET   148      -3.427 -10.296   8.302  1.00  0.00
H
ATOM   2457 3HE  MET   148      -2.212  -9.952   7.051  1.00  0.00
H
ATOM   2458  N   THR   149      -6.737 -13.223   7.152  1.00  0.00
N
ATOM   2459  H   THR   149      -5.868 -12.991   7.617  1.00  0.00
H
ATOM   2460  CA  THR   149      -7.967 -13.100   7.933  1.00  0.00
C
ATOM   2461  HA  THR   149      -8.479 -14.061   7.922  1.00  0.00
H
ATOM   2462  C   THR   149      -8.968 -12.027   7.486  1.00  0.00
C
ATOM   2463  O   THR   149     -10.167 -12.291   7.403  1.00  0.00
O
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ATOM   2464  CB  THR   149      -7.532 -12.782   9.379  1.00  0.00
C
ATOM   2465  HB  THR   149      -7.062 -11.800   9.405  1.00  0.00
H
ATOM   2466  OG1 THR   149      -6.571 -13.764   9.771  1.00  0.00
O
ATOM   2467  HG1 THR   149      -5.898 -13.344  10.330  1.00  0.00
H
ATOM   2468  CG2 THR   149      -8.659 -12.814  10.373  1.00  0.00
C
ATOM   2469 1HG2 THR   149      -8.254 -12.662  11.372  1.00  0.00
H
ATOM   2470 2HG2 THR   149      -9.160 -13.778  10.332  1.00  0.00
H
ATOM   2471 3HG2 THR   149      -9.373 -12.019  10.157  1.00  0.00
H
ATOM   2472  N   GLY   150      -8.501 -10.809   7.247  1.00  0.00
N
ATOM   2473  H   GLY   150      -7.505 -10.627   7.301  1.00  0.00
H
ATOM   2474  CA  GLY   150      -9.399  -9.677   7.049  1.00  0.00
C
ATOM   2475 1HA  GLY   150     -10.193  -9.748   7.793  1.00  0.00
H
ATOM   2476 2HA  GLY   150      -8.837  -8.770   7.273  1.00  0.00
H
ATOM   2477  C   GLY   150     -10.064  -9.478   5.699  1.00  0.00
C
ATOM   2478  O   GLY   150     -10.058 -10.344   4.816  1.00  0.00
O
ATOM   2479  N   SER   151     -10.666  -8.308   5.535  1.00  0.00
N
ATOM   2480  H   SER   151     -10.650  -7.630   6.291  1.00  0.00
H
ATOM   2481  CA  SER   151     -11.295  -7.906   4.278  1.00  0.00
C
ATOM   2482  HA  SER   151     -11.693  -8.780   3.765  1.00  0.00
H
ATOM   2483  C   SER   151     -10.240  -7.240   3.412  1.00  0.00
C
ATOM   2484  O   SER   151      -9.531  -6.338   3.866  1.00  0.00
O
ATOM   2485  CB  SER   151     -12.423  -6.900   4.518  1.00  0.00
C
ATOM   2486 1HB  SER   151     -13.219  -7.379   5.089  1.00  0.00
H
ATOM   2487 2HB  SER   151     -12.038  -6.051   5.082  1.00  0.00
H
ATOM   2488  OG  SER   151     -12.932  -6.444   3.275  1.00  0.00
O
ATOM   2489  HG  SER   151     -13.824  -6.086   3.411  1.00  0.00
H
ATOM   2490  N   PHE   152     -10.128  -7.697   2.176  1.00  0.00
N
ATOM   2491  H   PHE   152     -10.746  -8.433   1.861  1.00  0.00
H
ATOM   2492  CA  PHE   152      -9.164  -7.169   1.219  1.00  0.00
C
ATOM   2493  HA  PHE   152      -8.791  -6.215   1.580  1.00  0.00
H
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ATOM   2494  C   PHE   152      -9.907  -6.935  -0.090  1.00  0.00
C
ATOM   2495  O   PHE   152     -11.040  -7.393  -0.230  1.00  0.00
O
ATOM   2496  CB  PHE   152      -7.981  -8.126   1.064  1.00  0.00
C
ATOM   2497 1HB  PHE   152      -8.358  -9.115   0.814  1.00  0.00
H
ATOM   2498 2HB  PHE   152      -7.352  -7.777   0.247  1.00  0.00
H
ATOM   2499  CG  PHE   152      -7.129  -8.222   2.301  1.00  0.00
C
ATOM   2500  CD1 PHE   152      -7.427  -9.144   3.317  1.00  0.00
C
ATOM   2501  HD1 PHE   152      -8.248  -9.831   3.194  1.00  0.00
H
ATOM   2502  CD2 PHE   152      -6.031  -7.365   2.467  1.00  0.00
C
ATOM   2503  HD2 PHE   152      -5.768  -6.680   1.684  1.00  0.00
H
ATOM   2504  CE1 PHE   152      -6.668  -9.175   4.510  1.00  0.00
C
ATOM   2505  HE1 PHE   152      -6.912  -9.880   5.287  1.00  0.00
H
ATOM   2506  CE2 PHE   152      -5.255  -7.389   3.646  1.00  0.00
C
ATOM   2507  HE2 PHE   152      -4.417  -6.717   3.756  1.00  0.00
H
ATOM   2508  CZ  PHE   152      -5.581  -8.289   4.678  1.00  0.00
C
ATOM   2509  HZ  PHE   152      -4.998  -8.304   5.589  1.00  0.00
H
ATOM   2510  N   TRP   153      -9.325  -6.178  -1.009  1.00  0.00
N
ATOM   2511  H   TRP   153      -8.335  -5.993  -0.962  1.00  0.00
H
ATOM   2512  CA  TRP   153     -10.093  -5.521  -2.065  1.00  0.00
C
ATOM   2513  HA  TRP   153     -11.104  -5.929  -2.086  1.00  0.00
H
ATOM   2514  C   TRP   153      -9.498  -5.727  -3.451  1.00  0.00
C
ATOM   2515  O   TRP   153      -8.353  -6.137  -3.591  1.00  0.00
O
ATOM   2516  CB  TRP   153     -10.204  -4.036  -1.723  1.00  0.00
C
ATOM   2517 1HB  TRP   153      -9.208  -3.620  -1.575  1.00  0.00
H
ATOM   2518 2HB  TRP   153     -10.683  -3.513  -2.550  1.00  0.00
H
ATOM   2519  CG  TRP   153     -11.037  -3.830  -0.482  1.00  0.00
C
ATOM   2520  CD1 TRP   153     -10.608  -3.728   0.808  1.00  0.00
C
ATOM   2521  HD1 TRP   153      -9.573  -3.763   1.116  1.00  0.00
H
ATOM   2522  CD2 TRP   153     -12.469  -3.714  -0.412  1.00  0.00
C
ATOM   2523  NE1 TRP   153     -11.652  -3.591   1.676  1.00  0.00
N
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ATOM   2524  HE1 TRP   153     -11.550  -3.529   2.689  1.00  0.00
H
ATOM   2525  CE2 TRP   153     -12.816  -3.566   0.963  1.00  0.00
C
ATOM   2526  CE3 TRP   153     -13.499  -3.703  -1.374  1.00  0.00
C
ATOM   2527  HE3 TRP   153     -13.268  -3.822  -2.421  1.00  0.00
H
ATOM   2528  CZ2 TRP   153     -14.151  -3.418   1.392  1.00  0.00
C
ATOM   2529  HZ2 TRP   153     -14.387  -3.331   2.443  1.00  0.00
H
ATOM   2530  CZ3 TRP   153     -14.840  -3.537  -0.949  1.00  0.00
C
ATOM   2531  HZ3 TRP   153     -15.636  -3.530  -1.678  1.00  0.00
H
ATOM   2532  CH2 TRP   153     -15.150  -3.396   0.435  1.00  0.00
C
ATOM   2533  HH2 TRP   153     -16.181  -3.284   0.742  1.00  0.00
H
ATOM   2534  N   MET   154     -10.326  -5.507  -4.461  1.00  0.00
N
ATOM   2535  H   MET   154     -11.232  -5.103  -4.266  1.00  0.00
H
ATOM   2536  CA  MET   154     -10.041  -5.869  -5.848  1.00  0.00
C
ATOM   2537  HA  MET   154      -9.567  -6.849  -5.851  1.00  0.00
H
ATOM   2538  C   MET   154      -9.151  -4.939  -6.671  1.00  0.00
C
ATOM   2539  O   MET   154      -9.204  -3.719  -6.528  1.00  0.00
O
ATOM   2540  CB  MET   154     -11.375  -5.983  -6.590  1.00  0.00
C
ATOM   2541 1HB  MET   154     -11.152  -6.184  -7.633  1.00  0.00
H
ATOM   2542 2HB  MET   154     -11.927  -6.831  -6.190  1.00  0.00
H
ATOM   2543  CG  MET   154     -12.288  -4.756  -6.521  1.00  0.00
C
ATOM   2544 1HG  MET   154     -11.684  -3.851  -6.540  1.00  0.00
H
ATOM   2545 2HG  MET   154     -12.926  -4.750  -7.403  1.00  0.00
H
ATOM   2546  SD  MET   154     -13.349  -4.735  -5.063  1.00  0.00
S
ATOM   2547  CE  MET   154     -14.340  -3.264  -5.375  1.00  0.00
C
ATOM   2548 1HE  MET   154     -15.057  -3.128  -4.565  1.00  0.00
H
ATOM   2549 2HE  MET   154     -14.883  -3.377  -6.314  1.00  0.00
H
ATOM   2550 3HE  MET   154     -13.695  -2.386  -5.435  1.00  0.00
H
ATOM   2551  N   SER   155      -8.391  -5.536  -7.581  1.00  0.00
N
ATOM   2552  H   SER   155      -8.346  -6.547  -7.611  1.00  0.00
H
ATOM   2553  CA  SER   155      -7.612  -4.836  -8.601  1.00  0.00
C
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ATOM   2554  HA  SER   155      -8.223  -4.100  -9.123  1.00  0.00
H
ATOM   2555  C   SER   155      -7.133  -5.937  -9.540  1.00  0.00
C
ATOM   2556  O   SER   155      -7.333  -7.106  -9.199  1.00  0.00
O
ATOM   2557  CB  SER   155      -6.387  -4.163  -7.986  1.00  0.00
C
ATOM   2558 1HB  SER   155      -6.702  -3.609  -7.109  1.00  0.00
H
ATOM   2559 2HB  SER   155      -5.669  -4.924  -7.684  1.00  0.00
H
ATOM   2560  OG  SER   155      -5.780  -3.260  -8.888  1.00  0.00
O
ATOM   2561  HG  SER   155      -5.004  -2.883  -8.449  1.00  0.00
H
ATOM   2562  N   TYR   156      -6.480  -5.554 -10.635  1.00  0.00
N
ATOM   2563  H   TYR   156      -6.765  -4.661 -11.033  1.00  0.00
H
ATOM   2564  CA  TYR   156      -5.283  -6.160 -11.262  1.00  0.00
C
ATOM   2565  HA  TYR   156      -4.510  -5.394 -11.206  1.00  0.00
H
ATOM   2566  C   TYR   156      -5.479  -6.437 -12.753  1.00  0.00
C
ATOM   2567  O   TYR   156      -4.540  -6.290 -13.534  1.00  0.00
O
ATOM   2568  CB  TYR   156      -4.721  -7.386 -10.520  1.00  0.00
C
ATOM   2569 1HB  TYR   156      -4.674  -7.133  -9.462  1.00  0.00
H
ATOM   2570 2HB  TYR   156      -5.412  -8.214 -10.639  1.00  0.00
H
ATOM   2571  CG  TYR   156      -3.340  -7.874 -10.910  1.00  0.00
C
ATOM   2572  CD1 TYR   156      -3.039  -9.248 -10.844  1.00  0.00
C
ATOM   2573  HD1 TYR   156      -3.814  -9.963 -10.599  1.00  0.00
H
ATOM   2574  CD2 TYR   156      -2.304  -6.983 -11.265  1.00  0.00
C
ATOM   2575  HD2 TYR   156      -2.502  -5.926 -11.366  1.00  0.00
H
ATOM   2576  CE1 TYR   156      -1.718  -9.713 -11.067  1.00  0.00
C
ATOM   2577  HE1 TYR   156      -1.500 -10.765 -11.009  1.00  0.00
H
ATOM   2578  CE2 TYR   156      -0.978  -7.452 -11.480  1.00  0.00
C
ATOM   2579  HE2 TYR   156      -0.191  -6.758 -11.737  1.00  0.00
H
ATOM   2580  CZ  TYR   156      -0.694  -8.811 -11.344  1.00  0.00
C
ATOM   2581  OH  TYR   156       0.593  -9.267 -11.463  1.00  0.00
O
ATOM   2582  HH  TYR   156       0.683 -10.177 -11.156  1.00  0.00
H
ATOM   2583  N   SER   157      -6.697  -6.727 -13.190  1.00  0.00
N
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ATOM   2584  H   SER   157      -7.458  -6.866 -12.539  1.00  0.00
H
ATOM   2585  CA  SER   157      -6.989  -6.784 -14.626  1.00  0.00
C
ATOM   2586  HA  SER   157      -6.365  -6.058 -15.145  1.00  0.00
H
ATOM   2587  C   SER   157      -8.449  -6.447 -14.904  1.00  0.00
C
ATOM   2588  O   SER   157      -9.326  -6.820 -14.121  1.00  0.00
O
ATOM   2589  CB  SER   157      -6.681  -8.172 -15.188  1.00  0.00
C
ATOM   2590 1HB  SER   157      -5.661  -8.450 -14.923  1.00  0.00
H
ATOM   2591 2HB  SER   157      -7.374  -8.900 -14.767  1.00  0.00
H
ATOM   2592  OG  SER   157      -6.803  -8.162 -16.594  1.00  0.00
O
ATOM   2593  HG  SER   157      -5.985  -7.821 -16.984  1.00  0.00
H
ATOM   2594  N   HIS   158      -8.710  -5.735 -15.992  1.00  0.00
N
ATOM   2595  H   HIS   158      -7.936  -5.393 -16.558  1.00  0.00
H
ATOM   2596  CA  HIS   158     -10.072  -5.463 -16.447  1.00  0.00
C
ATOM   2597  HA  HIS   158     -10.728  -5.357 -15.586  1.00  0.00
H
ATOM   2598  C   HIS   158     -10.580  -6.618 -17.303  1.00  0.00
C
ATOM   2599  O   HIS   158     -11.782  -6.887 -17.355  1.00  0.00
O
ATOM   2600  CB  HIS   158     -10.128  -4.175 -17.272  1.00  0.00
C
ATOM   2601 1HB  HIS   158      -9.663  -3.375 -16.700  1.00  0.00
H
ATOM   2602 2HB  HIS   158      -9.560  -4.314 -18.193  1.00  0.00
H
ATOM   2603  CG  HIS   158     -11.522  -3.755 -17.620  1.00  0.00
C
ATOM   2604  ND1 HIS   158     -12.385  -3.147 -16.743  1.00  0.00
N
ATOM   2605  HD1 HIS   158     -12.169  -2.868 -15.791  1.00  0.00
H
ATOM   2606  CD2 HIS   158     -12.240  -3.915 -18.761  1.00  0.00
C
ATOM   2607  HD2 HIS   158     -11.866  -4.376 -19.662  1.00  0.00
H
ATOM   2608  CE1 HIS   158     -13.554  -2.974 -17.355  1.00  0.00
C
ATOM   2609  HE1 HIS   158     -14.422  -2.516 -16.896  1.00  0.00
H
ATOM   2610  NE2 HIS   158     -13.516  -3.421 -18.595  1.00  0.00
N
ATOM   2611  N   GLU   159      -9.675  -7.316 -17.970  1.00  0.00
N
ATOM   2612  H   GLU   159      -8.692  -7.070 -17.919  1.00  0.00
H
ATOM   2613  CA  GLU   159     -10.041  -8.484 -18.767  1.00  0.00
C
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ATOM   2614  HA  GLU   159     -10.889  -8.240 -19.404  1.00  0.00
H
ATOM   2615  C   GLU   159     -10.413  -9.619 -17.811  1.00  0.00
C
ATOM   2616  O   GLU   159      -9.859  -9.699 -16.707  1.00  0.00
O
ATOM   2617  CB  GLU   159      -8.867  -8.937 -19.641  1.00  0.00
C
ATOM   2618 1HB  GLU   159      -8.000  -9.111 -19.012  1.00  0.00
H
ATOM   2619 2HB  GLU   159      -9.144  -9.887 -20.094  1.00  0.00
H
ATOM   2620  CG  GLU   159      -8.482  -7.984 -20.770  1.00  0.00
C
ATOM   2621 1HG  GLU   159      -7.995  -8.577 -21.544  1.00  0.00
H
ATOM   2622 2HG  GLU   159      -9.388  -7.551 -21.196  1.00  0.00
H
ATOM   2623  CD  GLU   159      -7.519  -6.865 -20.377  1.00  0.00
C
ATOM   2624  OE1 GLU   159      -7.068  -6.762 -19.214  1.00  0.00
O
ATOM   2625  OE2 GLU   159      -7.153  -6.079 -21.280  1.00  0.00
O
ATOM   2626  N   PRO   160     -11.374 -10.483 -18.182  1.00  0.00
N
ATOM   2627  CA  PRO   160     -11.682 -11.569 -17.242  1.00  0.00
C
ATOM   2628  HA  PRO   160     -11.804 -11.174 -16.236  1.00  0.00
H
ATOM   2629  C   PRO   160     -10.631 -12.679 -17.230  1.00  0.00
C
ATOM   2630  O   PRO   160      -9.991 -12.959 -18.244  1.00  0.00
O
ATOM   2631  CB  PRO   160     -13.026 -12.079 -17.760  1.00  0.00
C
ATOM   2632 1HB  PRO   160     -13.159 -13.135 -17.531  1.00  0.00
H
ATOM   2633 2HB  PRO   160     -13.838 -11.487 -17.337  1.00  0.00
H
ATOM   2634  CG  PRO   160     -12.945 -11.859 -19.220  1.00  0.00
C
ATOM   2635 1HG  PRO   160     -12.352 -12.648 -19.675  1.00  0.00
H
ATOM   2636 2HG  PRO   160     -13.938 -11.824 -19.664  1.00  0.00
H
ATOM   2637  CD  PRO   160     -12.245 -10.542 -19.372  1.00  0.00
C
ATOM   2638 1HD  PRO   160     -11.659 -10.524 -20.291  1.00  0.00
H
ATOM   2639 2HD  PRO   160     -12.966  -9.723 -19.352  1.00  0.00
H
ATOM   2640  N   PHE   161     -10.457 -13.324 -16.086  1.00  0.00
N
ATOM   2641  H   PHE   161     -11.007 -13.071 -15.273  1.00  0.00
H
ATOM   2642  CA  PHE   161      -9.521 -14.439 -15.942  1.00  0.00
C
ATOM   2643  HA  PHE   161      -9.369 -14.952 -16.892  1.00  0.00
H
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ATOM   2644  C   PHE   161     -10.149 -15.383 -14.939  1.00  0.00
C
ATOM   2645  O   PHE   161     -10.982 -14.967 -14.134  1.00  0.00
O
ATOM   2646  CB  PHE   161      -8.178 -13.992 -15.356  1.00  0.00
C
ATOM   2647 1HB  PHE   161      -8.369 -13.344 -14.508  1.00  0.00
H
ATOM   2648 2HB  PHE   161      -7.642 -14.870 -14.996  1.00  0.00
H
ATOM   2649  CG  PHE   161      -7.284 -13.284 -16.329  1.00  0.00
C
ATOM   2650  CD1 PHE   161      -7.469 -11.925 -16.626  1.00  0.00
C
ATOM   2651  HD1 PHE   161      -8.254 -11.373 -16.135  1.00  0.00
H
ATOM   2652  CD2 PHE   161      -6.215 -13.970 -16.926  1.00  0.00
C
ATOM   2653  HD2 PHE   161      -6.018 -14.993 -16.651  1.00  0.00
H
ATOM   2654  CE1 PHE   161      -6.637 -11.272 -17.561  1.00  0.00
C
ATOM   2655  HE1 PHE   161      -6.794 -10.234 -17.789  1.00  0.00
H
ATOM   2656  CE2 PHE   161      -5.388 -13.334 -17.880  1.00  0.00
C
ATOM   2657  HE2 PHE   161      -4.590 -13.877 -18.360  1.00  0.00
H
ATOM   2658  CZ  PHE   161      -5.604 -11.980 -18.195  1.00  0.00
C
ATOM   2659  HZ  PHE   161      -4.975 -11.485 -18.917  1.00  0.00
H
ATOM   2660  N   CYS   162      -9.694 -16.627 -14.936  1.00  0.00
N
ATOM   2661  H   CYS   162      -9.016 -16.916 -15.627  1.00  0.00
H
ATOM   2662  CA  CYS   162     -10.127 -17.583 -13.931  1.00  0.00
C
ATOM   2663  HA  CYS   162     -11.207 -17.679 -13.988  1.00  0.00
H
ATOM   2664  C   CYS   162      -9.775 -17.123 -12.520  1.00  0.00
C
ATOM   2665  O   CYS   162      -8.680 -16.610 -12.269  1.00  0.00
O
ATOM   2666  CB  CYS   162      -9.479 -18.940 -14.198  1.00  0.00
C
ATOM   2667 1HB  CYS   162      -8.402 -18.804 -14.310  1.00  0.00
H
ATOM   2668 2HB  CYS   162      -9.643 -19.574 -13.331  1.00  0.00
H
ATOM   2669  SG  CYS   162     -10.153 -19.768 -15.657  1.00  0.00
S
ATOM   2670  HG  CYS   162     -11.447 -19.635 -15.329  1.00  0.00
H
ATOM   2671  N   SER   163     -10.715 -17.335 -11.609  1.00  0.00
N
ATOM   2672  H   SER   163     -11.584 -17.766 -11.879  1.00  0.00
H
ATOM   2673  CA  SER   163     -10.566 -16.945 -10.213  1.00  0.00
C
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ATOM   2674  HA  SER   163      -9.515 -17.000  -9.939  1.00  0.00
H
ATOM   2675  C   SER   163     -11.371 -17.856  -9.300  1.00  0.00
C
ATOM   2676  O   SER   163     -12.310 -18.521  -9.749  1.00  0.00
O
ATOM   2677  CB  SER   163     -11.072 -15.511 -10.017  1.00  0.00
C
ATOM   2678 1HB  SER   163     -10.829 -15.180  -9.007  1.00  0.00
H
ATOM   2679 2HB  SER   163     -10.573 -14.857 -10.733  1.00  0.00
H
ATOM   2680  OG  SER   163     -12.472 -15.421 -10.205  1.00  0.00
O
ATOM   2681  HG  SER   163     -12.658 -14.609 -10.707  1.00  0.00
H
ATOM   2682  N   LEU   164     -11.045 -17.830  -8.017  1.00  0.00
N
ATOM   2683  H   LEU   164     -10.167 -17.391  -7.736  1.00  0.00
H
ATOM   2684  CA  LEU   164     -11.919 -18.315  -6.953  1.00  0.00
C
ATOM   2685  HA  LEU   164     -12.961 -18.116  -7.197  1.00  0.00
H
ATOM   2686  C   LEU   164     -11.541 -17.522  -5.714  1.00  0.00
C
ATOM   2687  O   LEU   164     -10.360 -17.277  -5.458  1.00  0.00
O
ATOM   2688  CB  LEU   164     -11.721 -19.810  -6.709  1.00  0.00
C
ATOM   2689 1HB  LEU   164     -12.027 -20.339  -7.609  1.00  0.00
H
ATOM   2690 2HB  LEU   164     -10.656 -19.975  -6.568  1.00  0.00
H
ATOM   2691  CG  LEU   164     -12.438 -20.454  -5.516  1.00  0.00
C
ATOM   2692  HG  LEU   164     -12.152 -19.913  -4.623  1.00  0.00
H
ATOM   2693  CD1 LEU   164     -13.956 -20.447  -5.589  1.00  0.00
C
ATOM   2694 1HD1 LEU   164     -14.369 -20.950  -4.712  1.00  0.00
H
ATOM   2695 2HD1 LEU   164     -14.301 -20.959  -6.484  1.00  0.00
H
ATOM   2696 3HD1 LEU   164     -14.327 -19.423  -5.587  1.00  0.00
H
ATOM   2697  CD2 LEU   164     -11.933 -21.870  -5.379  1.00  0.00
C
ATOM   2698 1HD2 LEU   164     -12.390 -22.320  -4.504  1.00  0.00
H
ATOM   2699 2HD2 LEU   164     -10.853 -21.871  -5.235  1.00  0.00
H
ATOM   2700 3HD2 LEU   164     -12.188 -22.458  -6.258  1.00  0.00
H
ATOM   2701  N   GLN   165     -12.549 -17.107  -4.969  1.00  0.00
N
ATOM   2702  H   GLN   165     -13.507 -17.323  -5.239  1.00  0.00
H
ATOM   2703  CA  GLN   165     -12.377 -16.352  -3.741  1.00  0.00
C
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ATOM   2704  HA  GLN   165     -11.332 -16.329  -3.435  1.00  0.00
H
ATOM   2705  C   GLN   165     -13.227 -17.163  -2.777  1.00  0.00
C
ATOM   2706  O   GLN   165     -14.358 -17.486  -3.133  1.00  0.00
O
ATOM   2707  CB  GLN   165     -12.941 -14.942  -3.936  1.00  0.00
C
ATOM   2708 1HB  GLN   165     -14.021 -15.024  -4.047  1.00  0.00
H
ATOM   2709 2HB  GLN   165     -12.737 -14.348  -3.046  1.00  0.00
H
ATOM   2710  CG  GLN   165     -12.416 -14.215  -5.179  1.00  0.00
C
ATOM   2711 1HG  GLN   165     -12.668 -14.783  -6.073  1.00  0.00
H
ATOM   2712 2HG  GLN   165     -12.918 -13.258  -5.254  1.00  0.00
H
ATOM   2713  CD  GLN   165     -10.926 -13.967  -5.162  1.00  0.00
C
ATOM   2714  OE1 GLN   165     -10.351 -13.662  -4.133  1.00  0.00
O
ATOM   2715  NE2 GLN   165     -10.288 -14.094  -6.296  1.00  0.00
N
ATOM   2716 1HE2 GLN   165      -9.292 -13.964  -6.307  1.00  0.00
H
ATOM   2717 2HE2 GLN   165     -10.799 -14.290  -7.136  1.00  0.00
H
ATOM   2718  N   PHE   166     -12.691 -17.584  -1.641  1.00  0.00
N
ATOM   2719  H   PHE   166     -11.749 -17.301  -1.384  1.00  0.00
H
ATOM   2720  CA  PHE   166     -13.411 -18.493  -0.745  1.00  0.00
C
ATOM   2721  HA  PHE   166     -14.467 -18.220  -0.740  1.00  0.00
H
ATOM   2722  C   PHE   166     -12.886 -18.369   0.682  1.00  0.00
C
ATOM   2723  O   PHE   166     -11.913 -17.651   0.920  1.00  0.00
O
ATOM   2724  CB  PHE   166     -13.311 -19.944  -1.245  1.00  0.00
C
ATOM   2725 1HB  PHE   166     -13.973 -20.570  -0.649  1.00  0.00
H
ATOM   2726 2HB  PHE   166     -13.663 -19.980  -2.276  1.00  0.00
H
ATOM   2727  CG  PHE   166     -11.925 -20.535  -1.198  1.00  0.00
C
ATOM   2728  CD1 PHE   166     -11.602 -21.498  -0.224  1.00  0.00
C
ATOM   2729  HD1 PHE   166     -12.317 -21.748   0.547  1.00  0.00
H
ATOM   2730  CD2 PHE   166     -10.963 -20.202  -2.171  1.00  0.00
C
ATOM   2731  HD2 PHE   166     -11.171 -19.425  -2.890  1.00  0.00
H
ATOM   2732  CE1 PHE   166     -10.360 -22.174  -0.263  1.00  0.00
C
ATOM   2733  HE1 PHE   166     -10.128 -22.921   0.481  1.00  0.00
H
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ATOM   2734  CE2 PHE   166      -9.728 -20.879  -2.235  1.00  0.00
C
ATOM   2735  HE2 PHE   166      -9.010 -20.627  -3.002  1.00  0.00
H
ATOM   2736  CZ  PHE   166      -9.431 -21.877  -1.289  1.00  0.00
C
ATOM   2737  HZ  PHE   166      -8.492 -22.403  -1.344  1.00  0.00
H
ATOM   2738  N   LYS   167     -13.517 -19.063   1.619  1.00  0.00
N
ATOM   2739  H   LYS   167     -14.289 -19.660   1.339  1.00  0.00
H
ATOM   2740  CA  LYS   167     -13.207 -18.979   3.049  1.00  0.00
C
ATOM   2741  HA  LYS   167     -12.345 -18.336   3.217  1.00  0.00
H
ATOM   2742  C   LYS   167     -12.916 -20.368   3.608  1.00  0.00
C
ATOM   2743  O   LYS   167     -13.471 -21.361   3.130  1.00  0.00
O
ATOM   2744  CB  LYS   167     -14.444 -18.380   3.736  1.00  0.00
C
ATOM   2745 1HB  LYS   167     -14.688 -17.449   3.230  1.00  0.00
H
ATOM   2746 2HB  LYS   167     -15.272 -19.073   3.584  1.00  0.00
H
ATOM   2747  CG  LYS   167     -14.357 -18.075   5.223  1.00  0.00
C
ATOM   2748 1HG  LYS   167     -14.058 -18.970   5.763  1.00  0.00
H
ATOM   2749 2HG  LYS   167     -13.627 -17.285   5.399  1.00  0.00
H
ATOM   2750  CD  LYS   167     -15.728 -17.644   5.727  1.00  0.00
C
ATOM   2751 1HD  LYS   167     -16.049 -16.742   5.204  1.00  0.00
H
ATOM   2752 2HD  LYS   167     -16.440 -18.446   5.530  1.00  0.00
H
ATOM   2753  CE  LYS   167     -15.685 -17.385   7.220  1.00  0.00
C
ATOM   2754 1HE  LYS   167     -15.235 -18.253   7.707  1.00  0.00
H
ATOM   2755 2HE  LYS   167     -15.049 -16.519   7.409  1.00  0.00
H
ATOM   2756  NZ  LYS   167     -17.038 -17.155   7.820  1.00  0.00
N
ATOM   2757 1HZ  LYS   167     -16.959 -17.111   8.830  1.00  0.00
H
ATOM   2758 2HZ  LYS   167     -17.652 -17.922   7.579  1.00  0.00
H
ATOM   2759 3HZ  LYS   167     -17.438 -16.287   7.480  1.00  0.00
H
ATOM   2760  N   MET   168     -12.110 -20.437   4.654  1.00  0.00
N
ATOM   2761  H   MET   168     -11.568 -19.618   4.927  1.00  0.00
H
ATOM   2762  CA  MET   168     -12.096 -21.592   5.542  1.00  0.00
C
ATOM   2763  HA  MET   168     -13.068 -22.082   5.496  1.00  0.00
H
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ATOM   2764  C   MET   168     -11.879 -21.077   6.962  1.00  0.00
C
ATOM   2765  O   MET   168     -10.772 -20.673   7.341  1.00  0.00
O
ATOM   2766  CB  MET   168     -11.024 -22.606   5.154  1.00  0.00
C
ATOM   2767 1HB  MET   168     -11.127 -22.845   4.096  1.00  0.00
H
ATOM   2768 2HB  MET   168     -10.051 -22.150   5.313  1.00  0.00
H
ATOM   2769  CG  MET   168     -11.104 -23.900   5.954  1.00  0.00
C
ATOM   2770 1HG  MET   168     -11.037 -23.664   7.015  1.00  0.00
H
ATOM   2771 2HG  MET   168     -12.064 -24.377   5.760  1.00  0.00
H
ATOM   2772  SD  MET   168      -9.787 -25.050   5.536  1.00  0.00
S
ATOM   2773  CE  MET   168     -10.104 -26.453   6.615  1.00  0.00
C
ATOM   2774 1HE  MET   168      -9.373 -27.237   6.418  1.00  0.00
H
ATOM   2775 2HE  MET   168     -11.106 -26.840   6.431  1.00  0.00
H
ATOM   2776 3HE  MET   168     -10.019 -26.142   7.656  1.00  0.00
H
ATOM   2777  N   ASP   169     -12.968 -21.070   7.718  1.00  0.00
N
ATOM   2778  H   ASP   169     -13.852 -21.336   7.293  1.00  0.00
H
ATOM   2779  CA  ASP   169     -12.996 -20.664   9.126  1.00  0.00
C
ATOM   2780  HA  ASP   169     -14.043 -20.616   9.420  1.00  0.00
H
ATOM   2781  C   ASP   169     -12.409 -19.269   9.381  1.00  0.00
C
ATOM   2782  O   ASP   169     -13.031 -18.267   9.031  1.00  0.00
O
ATOM   2783  CB  ASP   169     -12.344 -21.749   9.996  1.00  0.00
C
ATOM   2784 1HB  ASP   169     -12.757 -22.714   9.704  1.00  0.00
H
ATOM   2785 2HB  ASP   169     -11.272 -21.769   9.811  1.00  0.00
H
ATOM   2786  CG  ASP   169     -12.589 -21.549  11.483  1.00  0.00
C
ATOM   2787  OD1 ASP   169     -13.329 -20.626  11.880  1.00  0.00
O
ATOM   2788  OD2 ASP   169     -12.017 -22.328  12.278  1.00  0.00
O
ATOM   2789  N   ASN   170     -11.229 -19.169   9.979  1.00  0.00
N
ATOM   2790  H   ASN   170     -10.706 -20.007  10.195  1.00  0.00
H
ATOM   2791  CA  ASN   170     -10.671 -17.871  10.347  1.00  0.00
C
ATOM   2792  HA  ASN   170     -11.462 -17.247  10.762  1.00  0.00
H
ATOM   2793  C   ASN   170     -10.070 -17.118   9.170  1.00  0.00
C
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ATOM   2794  O   ASN   170      -9.783 -15.934   9.295  1.00  0.00
O
ATOM   2795  CB  ASN   170      -9.572 -18.041  11.401  1.00  0.00
C
ATOM   2796 1HB  ASN   170      -8.843 -18.770  11.052  1.00  0.00
H
ATOM   2797 2HB  ASN   170      -9.069 -17.086  11.535  1.00  0.00
H
ATOM   2798  CG  ASN   170     -10.104 -18.472  12.738  1.00  0.00
C
ATOM   2799  OD1 ASN   170      -9.709 -19.497  13.278  1.00  0.00
O
ATOM   2800  ND2 ASN   170     -10.972 -17.689  13.307  1.00  0.00
N
ATOM   2801 1HD2 ASN   170     -11.379 -17.963  14.186  1.00  0.00
H
ATOM   2802 2HD2 ASN   170     -11.248 -16.827  12.869  1.00  0.00
H
ATOM   2803  N   TYR   171      -9.855 -17.789   8.048  1.00  0.00
N
ATOM   2804  H   TYR   171     -10.205 -18.736   7.945  1.00  0.00
H
ATOM   2805  CA  TYR   171      -9.100 -17.199   6.948  1.00  0.00
C
ATOM   2806  HA  TYR   171      -8.872 -16.162   7.187  1.00  0.00
H
ATOM   2807  C   TYR   171      -9.854 -17.198   5.632  1.00  0.00
C
ATOM   2808  O   TYR   171     -10.704 -18.045   5.363  1.00  0.00
O
ATOM   2809  CB  TYR   171      -7.773 -17.939   6.783  1.00  0.00
C
ATOM   2810 1HB  TYR   171      -7.972 -18.979   6.526  1.00  0.00
H
ATOM   2811 2HB  TYR   171      -7.217 -17.478   5.967  1.00  0.00
H
ATOM   2812  CG  TYR   171      -6.921 -17.888   8.032  1.00  0.00
C
ATOM   2813  CD1 TYR   171      -6.828 -18.999   8.895  1.00  0.00
C
ATOM   2814  HD1 TYR   171      -7.382 -19.898   8.677  1.00  0.00
H
ATOM   2815  CD2 TYR   171      -6.210 -16.720   8.367  1.00  0.00
C
ATOM   2816  HD2 TYR   171      -6.280 -15.847   7.738  1.00  0.00
H
ATOM   2817  CE1 TYR   171      -6.005 -18.952  10.053  1.00  0.00
C
ATOM   2818  HE1 TYR   171      -5.931 -19.808  10.704  1.00  0.00
H
ATOM   2819  CE2 TYR   171      -5.393 -16.673   9.528  1.00  0.00
C
ATOM   2820  HE2 TYR   171      -4.846 -15.775   9.776  1.00  0.00
H
ATOM   2821  CZ  TYR   171      -5.277 -17.798  10.339  1.00  0.00
C
ATOM   2822  OH  TYR   171      -4.426 -17.775  11.412  1.00  0.00
O
ATOM   2823  HH  TYR   171      -4.438 -18.605  11.908  1.00  0.00
H
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ATOM   2824  N   SER   172      -9.501 -16.229   4.806  1.00  0.00
N
ATOM   2825  H   SER   172      -8.770 -15.580   5.085  1.00  0.00
H
ATOM   2826  CA  SER   172     -10.084 -16.027   3.490  1.00  0.00
C
ATOM   2827  HA  SER   172     -10.897 -16.727   3.306  1.00  0.00
H
ATOM   2828  C   SER   172      -8.957 -16.248   2.492  1.00  0.00
C
ATOM   2829  O   SER   172      -7.809 -15.921   2.790  1.00  0.00
O
ATOM   2830  CB  SER   172     -10.586 -14.589   3.424  1.00  0.00
C
ATOM   2831 1HB  SER   172     -11.323 -14.435   4.211  1.00  0.00
H
ATOM   2832 2HB  SER   172      -9.749 -13.921   3.608  1.00  0.00
H
ATOM   2833  OG  SER   172     -11.165 -14.270   2.173  1.00  0.00
O
ATOM   2834  HG  SER   172     -11.098 -13.308   2.065  1.00  0.00
H
ATOM   2835  N   CYS   173      -9.269 -16.808   1.333  1.00  0.00
N
ATOM   2836  H   CYS   173     -10.243 -17.035   1.138  1.00  0.00
H
ATOM   2837  CA  CYS   173      -8.281 -17.136   0.312  1.00  0.00
C
ATOM   2838  HA  CYS   173      -7.312 -16.732   0.597  1.00  0.00
H
ATOM   2839  C   CYS   173      -8.677 -16.553  -1.038  1.00  0.00
C
ATOM   2840  O   CYS   173      -9.855 -16.558  -1.406  1.00  0.00
O
ATOM   2841  CB  CYS   173      -8.166 -18.653   0.178  1.00  0.00
C
ATOM   2842 1HB  CYS   173      -7.954 -19.071   1.161  1.00  0.00
H
ATOM   2843 2HB  CYS   173      -9.128 -19.044  -0.157  1.00  0.00
H
ATOM   2844  SG  CYS   173      -6.879 -19.193  -0.992  1.00  0.00
S
ATOM   2845  HG  CYS   173      -5.851 -18.585  -0.388  1.00  0.00
H
ATOM   2846  N   SER   174      -7.681 -16.070  -1.763  1.00  0.00
N
ATOM   2847  H   SER   174      -6.740 -16.099  -1.376  1.00  0.00
H
ATOM   2848  CA  SER   174      -7.836 -15.517  -3.102  1.00  0.00
C
ATOM   2849  HA  SER   174      -8.859 -15.639  -3.455  1.00  0.00
H
ATOM   2850  C   SER   174      -6.879 -16.213  -4.050  1.00  0.00
C
ATOM   2851  O   SER   174      -5.668 -16.175  -3.811  1.00  0.00
O
ATOM   2852  CB  SER   174      -7.456 -14.036  -3.084  1.00  0.00
C
ATOM   2853 1HB  SER   174      -6.440 -13.928  -2.704  1.00  0.00
H
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ATOM   2854 2HB  SER   174      -7.501 -13.643  -4.100  1.00  0.00
H
ATOM   2855  OG  SER   174      -8.345 -13.301  -2.262  1.00  0.00
O
ATOM   2856  HG  SER   174      -9.218 -13.328  -2.693  1.00  0.00
H
ATOM   2857  N   VAL   175      -7.394 -16.812  -5.117  1.00  0.00
N
ATOM   2858  H   VAL   175      -8.405 -16.884  -5.229  1.00  0.00
H
ATOM   2859  CA  VAL   175      -6.546 -17.358  -6.180  1.00  0.00
C
ATOM   2860  HA  VAL   175      -5.539 -16.976  -6.034  1.00  0.00
H
ATOM   2861  C   VAL   175      -7.034 -16.838  -7.532  1.00  0.00
C
ATOM   2862  O   VAL   175      -8.188 -17.069  -7.899  1.00  0.00
O
ATOM   2863  CB  VAL   175      -6.452 -18.926  -6.141  1.00  0.00
C
ATOM   2864  HB  VAL   175      -5.792 -19.241  -6.948  1.00  0.00
H
ATOM   2865  CG1 VAL   175      -5.852 -19.392  -4.814  1.00  0.00
C
ATOM   2866 1HG1 VAL   175      -5.613 -20.454  -4.864  1.00  0.00
H
ATOM   2867 2HG1 VAL   175      -6.551 -19.216  -3.995  1.00  0.00
H
ATOM   2868 3HG1 VAL   175      -4.942 -18.832  -4.621  1.00  0.00
H
ATOM   2869  CG2 VAL   175      -7.796 -19.648  -6.311  1.00  0.00
C
ATOM   2870 1HG2 VAL   175      -7.632 -20.720  -6.273  1.00  0.00
H
ATOM   2871 2HG2 VAL   175      -8.227 -19.414  -7.282  1.00  0.00
H
ATOM   2872 3HG2 VAL   175      -8.493 -19.354  -5.524  1.00  0.00
H
ATOM   2873  N   TRP   176      -6.197 -16.090  -8.247  1.00  0.00
N
ATOM   2874  H   TRP   176      -5.283 -15.861  -7.869  1.00  0.00
H
ATOM   2875  CA  TRP   176      -6.522 -15.620  -9.603  1.00  0.00
C
ATOM   2876  HA  TRP   176      -6.879 -16.492 -10.152  1.00  0.00
H
ATOM   2877  C   TRP   176      -5.295 -15.090 -10.358  1.00  0.00
C
ATOM   2878  O   TRP   176      -4.196 -15.047  -9.793  1.00  0.00
O
ATOM   2879  CB  TRP   176      -7.698 -14.619  -9.603  1.00  0.00
C
ATOM   2880 1HB  TRP   176      -8.304 -14.857 -10.471  1.00  0.00
H
ATOM   2881 2HB  TRP   176      -8.317 -14.797  -8.728  1.00  0.00
H
ATOM   2882  CG  TRP   176      -7.451 -13.162  -9.671  1.00  0.00
C
ATOM   2883  CD1 TRP   176      -6.899 -12.372  -8.725  1.00  0.00
C
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ATOM   2884  HD1 TRP   176      -6.510 -12.735  -7.781  1.00  0.00
H
ATOM   2885  CD2 TRP   176      -7.892 -12.271 -10.711  1.00  0.00
C
ATOM   2886  NE1 TRP   176      -6.882 -11.064  -9.120  1.00  0.00
N
ATOM   2887  HE1 TRP   176      -6.501 -10.307  -8.559  1.00  0.00
H
ATOM   2888  CE2 TRP   176      -7.461 -10.965 -10.354  1.00  0.00
C
ATOM   2889  CE3 TRP   176      -8.622 -12.442 -11.906  1.00  0.00
C
ATOM   2890  HE3 TRP   176      -8.998 -13.416 -12.187  1.00  0.00
H
ATOM   2891  CZ2 TRP   176      -7.698  -9.844 -11.176  1.00  0.00
C
ATOM   2892  HZ2 TRP   176      -7.377  -8.863 -10.879  1.00  0.00
H
ATOM   2893  CZ3 TRP   176      -8.859 -11.316 -12.736  1.00  0.00
C
ATOM   2894  HZ3 TRP   176      -9.409 -11.434 -13.659  1.00  0.00
H
ATOM   2895  CH2 TRP   176      -8.386 -10.030 -12.359  1.00  0.00
C
ATOM   2896  HH2 TRP   176      -8.591  -9.183 -12.996  1.00  0.00
H
ATOM   2897  N   ARG   177      -5.520 -14.692 -11.609  1.00  0.00
N
ATOM   2898  H   ARG   177      -6.469 -14.802 -11.944  1.00  0.00
H
ATOM   2899  CA  ARG   177      -4.565 -14.060 -12.544  1.00  0.00
C
ATOM   2900  HA  ARG   177      -4.412 -14.753 -13.371  1.00  0.00
H
ATOM   2901  C   ARG   177      -3.176 -13.591 -12.104  1.00  0.00
C
ATOM   2902  O   ARG   177      -3.051 -12.678 -11.292  1.00  0.00
O
ATOM   2903  CB  ARG   177      -5.272 -12.806 -13.091  1.00  0.00
C
ATOM   2904 1HB  ARG   177      -6.270 -13.101 -13.400  1.00  0.00
H
ATOM   2905 2HB  ARG   177      -5.383 -12.083 -12.282  1.00  0.00
H
ATOM   2906  CG  ARG   177      -4.611 -12.103 -14.276  1.00  0.00
C
ATOM   2907 1HG  ARG   177      -3.873 -12.768 -14.722  1.00  0.00
H
ATOM   2908 2HG  ARG   177      -5.372 -11.902 -15.020  1.00  0.00
H
ATOM   2909  CD  ARG   177      -3.954 -10.772 -13.940  1.00  0.00
C
ATOM   2910 1HD  ARG   177      -4.707 -10.069 -13.582  1.00  0.00
H
ATOM   2911 2HD  ARG   177      -3.197 -10.923 -13.171  1.00  0.00
H
ATOM   2912  NE  ARG   177      -3.314 -10.259 -15.154  1.00  0.00
N
ATOM   2913  HE  ARG   177      -3.423 -10.824 -15.993  1.00  0.00
H
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ATOM   2914  CZ  ARG   177      -2.545  -9.189 -15.276  1.00  0.00
C
ATOM   2915  NH1 ARG   177      -2.282  -8.359 -14.310  1.00  0.00
N
ATOM   2916 1HH1 ARG   177      -2.725  -8.462 -13.416  1.00  0.00
H
ATOM   2917 2HH1 ARG   177      -1.603  -7.624 -14.463  1.00  0.00
H
ATOM   2918  NH2 ARG   177      -1.989  -8.965 -16.429  1.00  0.00
N
ATOM   2919 1HH2 ARG   177      -2.150  -9.608 -17.183  1.00  0.00
H
ATOM   2920 2HH2 ARG   177      -1.390  -8.161 -16.555  1.00  0.00
H
ATOM   2921  N   THR   178      -2.159 -14.045 -12.821  1.00  0.00
N
ATOM   2922  H   THR   178      -2.154 -15.010 -13.142  1.00  0.00
H
ATOM   2923  CA  THR   178      -1.023 -13.190 -13.194  1.00  0.00
C
ATOM   2924  HA  THR   178      -1.152 -12.238 -12.683  1.00  0.00
H
ATOM   2925  C   THR   178      -0.828 -12.848 -14.699  1.00  0.00
C
ATOM   2926  O   THR   178      -0.374 -11.737 -14.991  1.00  0.00
O
ATOM   2927  CB  THR   178       0.281 -13.809 -12.636  1.00  0.00
C
ATOM   2928  HB  THR   178       0.511 -14.699 -13.199  1.00  0.00
H
ATOM   2929  OG1 THR   178       0.085 -14.188 -11.272  1.00  0.00
O
ATOM   2930  HG1 THR   178       0.034 -13.383 -10.740  1.00  0.00
H
ATOM   2931  CG2 THR   178       1.473 -12.871 -12.683  1.00  0.00
C
ATOM   2932 1HG2 THR   178       1.769 -12.692 -13.717  1.00  0.00
H
ATOM   2933 2HG2 THR   178       2.314 -13.327 -12.161  1.00  0.00
H
ATOM   2934 3HG2 THR   178       1.230 -11.923 -12.207  1.00  0.00
H
ATOM   2935  N   PRO   179      -1.163 -13.733 -15.672  1.00  0.00
N
ATOM   2936  CA  PRO   179      -0.702 -13.358 -17.022  1.00  0.00
C
ATOM   2937  HA  PRO   179       0.332 -13.017 -16.996  1.00  0.00
H
ATOM   2938  C   PRO   179      -1.554 -12.329 -17.759  1.00  0.00
C
ATOM   2939  O   PRO   179      -2.615 -11.931 -17.292  1.00  0.00
O
ATOM   2940  CB  PRO   179      -0.771 -14.690 -17.772  1.00  0.00
C
ATOM   2941 1HB  PRO   179      -0.897 -14.546 -18.845  1.00  0.00
H
ATOM   2942 2HB  PRO   179       0.123 -15.277 -17.579  1.00  0.00
H
ATOM   2943  CG  PRO   179      -1.930 -15.341 -17.201  1.00  0.00
C
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ATOM   2944 1HG  PRO   179      -2.842 -14.914 -17.614  1.00  0.00
H
ATOM   2945 2HG  PRO   179      -1.893 -16.413 -17.382  1.00  0.00
H
ATOM   2946  CD  PRO   179      -1.827 -15.052 -15.736  1.00  0.00
C
ATOM   2947 1HD  PRO   179      -2.818 -15.018 -15.284  1.00  0.00
H
ATOM   2948 2HD  PRO   179      -1.209 -15.806 -15.262  1.00  0.00
H
ATOM   2949  N   SER   180      -1.127 -11.947 -18.952  1.00  0.00
N
ATOM   2950  H   SER   180      -0.234 -12.298 -19.304  1.00  0.00
H
ATOM   2951  CA  SER   180      -1.916 -11.100 -19.842  1.00  0.00
C
ATOM   2952  HA  SER   180      -2.900 -10.906 -19.419  1.00  0.00
H
ATOM   2953  C   SER   180      -2.066 -11.853 -21.155  1.00  0.00
C
ATOM   2954  O   SER   180      -1.110 -12.472 -21.616  1.00  0.00
O
ATOM   2955  CB  SER   180      -1.191  -9.777 -20.081  1.00  0.00
C
ATOM   2956 1HB  SER   180      -1.037  -9.283 -19.123  1.00  0.00
H
ATOM   2957 2HB  SER   180      -0.219  -9.977 -20.535  1.00  0.00
H
ATOM   2958  OG  SER   180      -1.935  -8.917 -20.926  1.00  0.00
O
ATOM   2959  HG  SER   180      -1.504  -8.049 -20.915  1.00  0.00
H
ATOM   2960  N   GLY   181      -3.252 -11.821 -21.746  1.00  0.00
N
ATOM   2961  H   GLY   181      -4.017 -11.324 -21.296  1.00  0.00
H
ATOM   2962  CA  GLY   181      -3.498 -12.394 -23.062  1.00  0.00
C
ATOM   2963 1HA  GLY   181      -4.461 -12.026 -23.409  1.00  0.00
H
ATOM   2964 2HA  GLY   181      -2.746 -11.983 -23.735  1.00  0.00
H
ATOM   2965  C   GLY   181      -3.491 -13.901 -23.265  1.00  0.00
C
ATOM   2966  O   GLY   181      -4.492 -14.499 -23.642  1.00  0.00
O
ATOM   2967  N   GLN   182      -2.351 -14.533 -23.040  1.00  0.00
N
ATOM   2968  H   GLN   182      -1.636 -14.046 -22.506  1.00  0.00
H
ATOM   2969  CA  GLN   182      -2.009 -15.818 -23.654  1.00  0.00
C
ATOM   2970  HA  GLN   182      -1.985 -15.675 -24.734  1.00  0.00
H
ATOM   2971  C   GLN   182      -2.976 -16.967 -23.374  1.00  0.00
C
ATOM   2972  O   GLN   182      -3.280 -17.776 -24.250  1.00  0.00
O
ATOM   2973  CB  GLN   182      -0.609 -16.220 -23.178  1.00  0.00
C
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ATOM   2974 1HB  GLN   182      -0.642 -16.361 -22.098  1.00  0.00
H
ATOM   2975 2HB  GLN   182      -0.337 -17.167 -23.644  1.00  0.00
H
ATOM   2976  CG  GLN   182       0.469 -15.194 -23.505  1.00  0.00
C
ATOM   2977 1HG  GLN   182       0.531 -15.080 -24.585  1.00  0.00
H
ATOM   2978 2HG  GLN   182       0.203 -14.235 -23.071  1.00  0.00
H
ATOM   2979  CD  GLN   182       1.829 -15.565 -22.971  1.00  0.00
C
ATOM   2980  OE1 GLN   182       1.962 -16.092 -21.873  1.00  0.00
O
ATOM   2981  NE2 GLN   182       2.849 -15.284 -23.727  1.00  0.00
N
ATOM   2982 1HE2 GLN   182       3.781 -15.483 -23.402  1.00  0.00
H
ATOM   2983 2HE2 GLN   182       2.707 -14.859 -24.634  1.00  0.00
H
ATOM   2984  N   ARG   183      -3.501 -17.019 -22.159  1.00  0.00
N
ATOM   2985  H   ARG   183      -3.258 -16.305 -21.490  1.00  0.00
H
ATOM   2986  CA  ARG   183      -4.397 -18.108 -21.765  1.00  0.00
C
ATOM   2987  HA  ARG   183      -4.011 -19.035 -22.191  1.00  0.00
H
ATOM   2988  C   ARG   183      -5.831 -17.961 -22.272  1.00  0.00
C
ATOM   2989  O   ARG   183      -6.620 -18.888 -22.108  1.00  0.00
O
ATOM   2990  CB  ARG   183      -4.392 -18.260 -20.242  1.00  0.00
C
ATOM   2991 1HB  ARG   183      -4.734 -17.329 -19.792  1.00  0.00
H
ATOM   2992 2HB  ARG   183      -5.095 -19.050 -19.978  1.00  0.00
H
ATOM   2993  CG  ARG   183      -3.017 -18.613 -19.662  1.00  0.00
C
ATOM   2994 1HG  ARG   183      -2.620 -19.487 -20.178  1.00  0.00
H
ATOM   2995 2HG  ARG   183      -2.336 -17.775 -19.808  1.00  0.00
H
ATOM   2996  CD  ARG   183      -3.110 -18.919 -18.174  1.00  0.00
C
ATOM   2997 1HD  ARG   183      -2.103 -18.998 -17.767  1.00  0.00
H
ATOM   2998 2HD  ARG   183      -3.626 -18.098 -17.675  1.00  0.00
H
ATOM   2999  NE  ARG   183      -3.833 -20.171 -17.922  1.00  0.00
N
ATOM   3000  HE  ARG   183      -4.094 -20.719 -18.733  1.00  0.00
H
ATOM   3001  CZ  ARG   183      -4.172 -20.661 -16.740  1.00  0.00
C
ATOM   3002  NH1 ARG   183      -3.706 -20.208 -15.606  1.00  0.00
N
ATOM   3003 1HH1 ARG   183      -2.957 -19.533 -15.602  1.00  0.00
H
```

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ATOM   3004 2HH1 ARG   183      -4.046 -20.578 -14.738  1.00  0.00
H
ATOM   3005  NH2 ARG   183      -5.022 -21.645 -16.709  1.00  0.00
N
ATOM   3006 1HH2 ARG   183      -5.376 -22.034 -17.567  1.00  0.00
H
ATOM   3007 2HH2 ARG   183      -5.319 -22.026 -15.827  1.00  0.00
H
ATOM   3008  N   TYR   184      -6.177 -16.823 -22.863  1.00  0.00
N
ATOM   3009  H   TYR   184      -5.488 -16.087 -22.955  1.00  0.00
H
ATOM   3010  CA  TYR   184      -7.548 -16.572 -23.338  1.00  0.00
C
ATOM   3011  HA  TYR   184      -8.105 -17.507 -23.304  1.00  0.00
H
ATOM   3012  C   TYR   184      -7.659 -16.037 -24.766  1.00  0.00
C
ATOM   3013  O   TYR   184      -8.722 -16.117 -25.383  1.00  0.00
O
ATOM   3014  CB  TYR   184      -8.234 -15.598 -22.378  1.00  0.00
C
ATOM   3015 1HB  TYR   184      -7.689 -14.656 -22.373  1.00  0.00
H
ATOM   3016 2HB  TYR   184      -9.249 -15.414 -22.724  1.00  0.00
H
ATOM   3017  CG  TYR   184      -8.290 -16.153 -20.973  1.00  0.00
C
ATOM   3018  CD1 TYR   184      -7.291 -15.831 -20.033  1.00  0.00
C
ATOM   3019  HD1 TYR   184      -6.535 -15.098 -20.281  1.00  0.00
H
ATOM   3020  CD2 TYR   184      -9.297 -17.068 -20.598  1.00  0.00
C
ATOM   3021  HD2 TYR   184     -10.089 -17.311 -21.293  1.00  0.00
H
ATOM   3022  CE1 TYR   184      -7.244 -16.487 -18.782  1.00  0.00
C
ATOM   3023  HE1 TYR   184      -6.437 -16.299 -18.100  1.00  0.00
H
ATOM   3024  CE2 TYR   184      -9.269 -17.694 -19.322  1.00  0.00
C
ATOM   3025  HE2 TYR   184     -10.038 -18.400 -19.046  1.00  0.00
H
ATOM   3026  CZ  TYR   184      -8.232 -17.401 -18.436  1.00  0.00
C
ATOM   3027  OH  TYR   184      -8.145 -18.006 -17.212  1.00  0.00
O
ATOM   3028  HH  TYR   184      -8.802 -18.704 -17.112  1.00  0.00
H
ATOM   3029  N   ASN   185      -6.548 -15.519 -25.271  1.00  0.00
N
ATOM   3030  H   ASN   185      -5.745 -15.453 -24.658  1.00  0.00
H
ATOM   3031  CA  ASN   185      -6.352 -14.964 -26.615  1.00  0.00
C
ATOM   3032  HA  ASN   185      -5.327 -14.598 -26.609  1.00  0.00
H
ATOM   3033  C   ASN   185      -7.154 -13.738 -27.050  1.00  0.00
C
```

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ATOM   3034  O   ASN   185      -6.537 -12.766 -27.496  1.00  0.00
O
ATOM   3035  CB  ASN   185      -6.392 -16.060 -27.687  1.00  0.00
C
ATOM   3036 1HB  ASN   185      -7.253 -16.706 -27.523  1.00  0.00
H
ATOM   3037 2HB  ASN   185      -6.495 -15.592 -28.665  1.00  0.00
H
ATOM   3038  CG  ASN   185      -5.135 -16.889 -27.699  1.00  0.00
C
ATOM   3039  OD1 ASN   185      -4.028 -16.354 -27.781  1.00  0.00
O
ATOM   3040  ND2 ASN   185      -5.271 -18.178 -27.590  1.00  0.00
N
ATOM   3041 1HD2 ASN   185      -4.439 -18.755 -27.556  1.00  0.00
H
ATOM   3042 2HD2 ASN   185      -6.189 -18.600 -27.539  1.00  0.00
H
ATOM   3043  N   SER   186      -8.471 -13.713 -26.903  1.00  0.00
N
ATOM   3044  H   SER   186      -8.947 -14.526 -26.524  1.00  0.00
H
ATOM   3045  CA  SER   186      -9.255 -12.521 -27.241  1.00  0.00
C
ATOM   3046  HA  SER   186      -8.740 -11.973 -28.028  1.00  0.00
H
ATOM   3047  C   SER   186      -9.359 -11.598 -26.042  1.00  0.00
C
ATOM   3048  O   SER   186      -9.418 -10.367 -26.244  1.00  0.00
O
ATOM   3049  OXT SER   186      -9.335 -12.094 -24.897  1.00  0.00
O
ATOM   3050  CB  SER   186     -10.637 -12.909 -27.759  1.00  0.00
C
ATOM   3051 1HB  SER   186     -11.207 -12.008 -27.994  1.00  0.00
H
ATOM   3052 2HB  SER   186     -10.512 -13.493 -28.670  1.00  0.00
H
ATOM   3053  OG  SER   186     -11.336 -13.692 -26.809  1.00  0.00
O
ATOM   3054  HG  SER   186     -11.800 -13.096 -26.200  1.00  0.00
H
TER    3055      SER   186
CONECT    1  774  775  952
CONECT  774    1  773
CONECT  775    1  773
CONECT  952    1  951
END
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REMARK YASARA
REMARK YASARA Written on:        Mon Sep 04 16:58:51 2017
REMARK YASARA Number of models: 1
REMARK YASARA Number of atoms:   2946
REMARK YASARA Please address questions or suggestions to:
Eliza@yasara.org
REMARK YASARA
SEQRES   1    176  MET GLN THR ILE HIS LYS LEU ASP GLY PHE THR GLU ILE
SEQRES   2    176  TYR PHE MET VAL ASP LYS ARG LYS LYS GLY TRP ILE ALA
SEQRES   3    176  MET PRO GLU LEU ARG LYS TYR MET GLU GLU ASN ASP VAL
SEQRES   4    176  ASP GLU LYS MET PHE GLU ARG TRP LYS THR LEU PHE ASP
SEQRES   5    176  PRO GLU SER THR GLY ARG ILE THR LEU GLU LYS PHE CYS
SEQRES   6    176  GLU VAL LEU GLY LEU GLN ASP GLU VAL ILE ASN VAL GLN
SEQRES   7    176  THR ALA ILE GLN GLY ASN GLU MET GLN ASP VAL HIS VAL
SEQRES   8    176  ILE GLN THR ASP MET ASN THR LYS MET LYS LEU THR ILE
SEQRES   9    176  CYS GLY LEU ILE ASP GLU GLY ILE LEU ILE TYR GLN ASP
SEQRES  10    176  ASP SER LYS LEU ALA GLU PHE LEU LYS ASN GLU LEU ASP
SEQRES  11    176  LYS TYR PHE GLY LYS LEU TRP ASN VAL ILE ILE ILE TYR
SEQRES  12    176  GLY ARG TYR TRP SER ARG TYR CYS HIS GLU THR GLY TYR
SEQRES  13    176  ASN PHE CYS PHE ILE LYS ASP ASP ARG ILE PHE LEU VAL
SEQRES  14    176  TYR LYS ILE PRO ASP LEU GLU
ATOM      1  N   MET     1      36.521 -13.926   9.005  1.00  0.00
N
ATOM      2 1H   MET     1      36.124 -13.158   9.529  1.00  0.00
H
ATOM      3 2H   MET     1      37.522 -13.947   9.142  1.00  0.00
H
ATOM      4 3H   MET     1      36.123 -14.796   9.332  1.00  0.00
H
ATOM      5  CA  MET     1      36.217 -13.758   7.561  1.00  0.00
C
ATOM      6  HA  MET     1      35.139 -13.744   7.427  1.00  0.00
H
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ATOM      7  C   MET     1      36.787 -14.917   6.775  1.00  0.00
C
ATOM      8  O   MET     1      37.837 -15.446   7.127  1.00  0.00
O
ATOM      9  CB  MET     1      36.813 -12.466   6.994  1.00  0.00
C
ATOM     10 1HB  MET     1      37.827 -12.344   7.376  1.00  0.00
H
ATOM     11 2HB  MET     1      36.875 -12.573   5.911  1.00  0.00
H
ATOM     12  CG  MET     1      36.013 -11.202   7.274  1.00  0.00
C
ATOM     13 1HG  MET     1      36.400 -10.408   6.635  1.00  0.00
H
ATOM     14 2HG  MET     1      34.970 -11.375   7.011  1.00  0.00
H
ATOM     15  SD  MET     1      36.101 -10.643   8.981  1.00  0.00
S
ATOM     16  CE  MET     1      35.346  -9.032   8.846  1.00  0.00
C
ATOM     17 1HE  MET     1      35.455  -8.507   9.793  1.00  0.00
H
ATOM     18 2HE  MET     1      34.287  -9.136   8.619  1.00  0.00
H
ATOM     19 3HE  MET     1      35.838  -8.456   8.061  1.00  0.00
H
ATOM     20  N   GLN     2      36.133 -15.268   5.679  1.00  0.00
N
ATOM     21  H   GLN     2      35.244 -14.829   5.468  1.00  0.00
H
ATOM     22  CA  GLN     2      36.646 -16.220   4.695  1.00  0.00
C
ATOM     23  HA  GLN     2      37.690 -16.466   4.892  1.00  0.00
H
ATOM     24  C   GLN     2      36.562 -15.465   3.368  1.00  0.00
C
ATOM     25  O   GLN     2      35.883 -14.440   3.306  1.00  0.00
O
ATOM     26  CB  GLN     2      35.802 -17.499   4.718  1.00  0.00
C
ATOM     27 1HB  GLN     2      34.750 -17.219   4.668  1.00  0.00
H
ATOM     28 2HB  GLN     2      36.039 -18.101   3.842  1.00  0.00
H
ATOM     29  CG  GLN     2      36.027 -18.351   5.969  1.00  0.00
C
ATOM     30 1HG  GLN     2      35.866 -17.738   6.853  1.00  0.00
H
ATOM     31 2HG  GLN     2      35.302 -19.164   5.980  1.00  0.00
H
ATOM     32  CD  GLN     2      37.421 -18.949   6.028  1.00  0.00
C
ATOM     33  OE1 GLN     2      37.838 -19.658   5.119  1.00  0.00
O
ATOM     34  NE2 GLN     2      38.154 -18.671   7.066  1.00  0.00
N
ATOM     35 1HE2 GLN     2      39.099 -19.020   7.100  1.00  0.00
H
ATOM     36 2HE2 GLN     2      37.779 -18.109   7.818  1.00  0.00
H
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ATOM     37  N   THR     3      37.275 -15.907   2.341  1.00  0.00
N
ATOM     38  H   THR     3      37.777 -16.792   2.423  1.00  0.00
H
ATOM     39  CA  THR     3      37.504 -15.104   1.132  1.00  0.00
C
ATOM     40  HA  THR     3      37.406 -14.050   1.392  1.00  0.00
H
ATOM     41  C   THR     3      36.597 -15.394  -0.062  1.00  0.00
C
ATOM     42  O   THR     3      36.868 -14.941  -1.181  1.00  0.00
O
ATOM     43  CB  THR     3      38.938 -15.343   0.620  1.00  0.00
C
ATOM     44  HB  THR     3      39.138 -14.670  -0.214  1.00  0.00
H
ATOM     45  OG1 THR     3      39.070 -16.697   0.173  1.00  0.00
O
ATOM     46  HG1 THR     3      39.875 -16.725  -0.368  1.00  0.00
H
ATOM     47  CG2 THR     3      39.972 -15.110   1.706  1.00  0.00
C
ATOM     48 1HG2 THR     3      40.963 -15.112   1.260  1.00  0.00
H
ATOM     49 2HG2 THR     3      39.922 -15.895   2.461  1.00  0.00
H
ATOM     50 3HG2 THR     3      39.806 -14.141   2.176  1.00  0.00
H
ATOM     51  N   ILE     4      35.558 -16.188   0.173  1.00  0.00
N
ATOM     52  H   ILE     4      35.371 -16.436   1.140  1.00  0.00
H
ATOM     53  CA  ILE     4      34.629 -16.744  -0.828  1.00  0.00
C
ATOM     54  HA  ILE     4      33.885 -17.304  -0.260  1.00  0.00
H
ATOM     55  C   ILE     4      35.282 -17.763  -1.765  1.00  0.00
C
ATOM     56  O   ILE     4      34.802 -18.881  -1.857  1.00  0.00
O
ATOM     57  CB  ILE     4      33.823 -15.673  -1.645  1.00  0.00
C
ATOM     58  HB  ILE     4      34.516 -15.121  -2.278  1.00  0.00
H
ATOM     59  CG1 ILE     4      33.134 -14.674  -0.692  1.00  0.00
C
ATOM     60 1HG1 ILE     4      32.347 -15.196  -0.147  1.00  0.00
H
ATOM     61 2HG1 ILE     4      33.865 -14.317   0.029  1.00  0.00
H
ATOM     62  CG2 ILE     4      32.763 -16.361  -2.551  1.00  0.00
C
ATOM     63 1HG2 ILE     4      32.205 -15.618  -3.121  1.00  0.00
H
ATOM     64 2HG2 ILE     4      32.071 -16.948  -1.947  1.00  0.00
H
ATOM     65 3HG2 ILE     4      33.253 -17.027  -3.264  1.00  0.00
H
ATOM     66  CD1 ILE     4      32.532 -13.438  -1.361  1.00  0.00
C
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ATOM     67 1HD1 ILE     4      32.184 -12.749  -0.592  1.00  0.00
H
ATOM     68 2HD1 ILE     4      31.692 -13.721  -1.994  1.00  0.00
H
ATOM     69 3HD1 ILE     4      33.290 -12.936  -1.964  1.00  0.00
H
ATOM     70  N   HIS     5      36.394 -17.452  -2.416  1.00  0.00
N
ATOM     71  H   HIS     5      36.789 -16.524  -2.309  1.00  0.00
H
ATOM     72  CA  HIS     5      37.029 -18.419  -3.313  1.00  0.00
C
ATOM     73  HA  HIS     5      36.298 -18.740  -4.056  1.00  0.00
H
ATOM     74  C   HIS     5      37.518 -19.661  -2.583  1.00  0.00
C
ATOM     75  O   HIS     5      37.268 -20.789  -3.011  1.00  0.00
O
ATOM     76  CB  HIS     5      38.215 -17.785  -4.036  1.00  0.00
C
ATOM     77 1HB  HIS     5      37.849 -16.947  -4.621  1.00  0.00
H
ATOM     78 2HB  HIS     5      38.923 -17.413  -3.295  1.00  0.00
H
ATOM     79  CG  HIS     5      38.941 -18.732  -4.941  1.00  0.00
C
ATOM     80  ND1 HIS     5      38.353 -19.439  -5.963  1.00  0.00
N
ATOM     81  HD1 HIS     5      37.368 -19.427  -6.215  1.00  0.00
H
ATOM     82  CD2 HIS     5      40.241 -19.127  -4.945  1.00  0.00
C
ATOM     83  HD2 HIS     5      40.993 -18.778  -4.253  1.00  0.00
H
ATOM     84  CE1 HIS     5      39.291 -20.177  -6.554  1.00  0.00
C
ATOM     85  HE1 HIS     5      39.114 -20.818  -7.409  1.00  0.00
H
ATOM     86  NE2 HIS     5      40.456 -20.047  -5.950  1.00  0.00
N
ATOM     87  N   LYS     6      38.206 -19.486  -1.463  1.00  0.00
N
ATOM     88  H   LYS     6      38.414 -18.554  -1.123  1.00  0.00
H
ATOM     89  CA  LYS     6      38.684 -20.657  -0.730  1.00  0.00
C
ATOM     90  HA  LYS     6      39.131 -21.356  -1.439  1.00  0.00
H
ATOM     91  C   LYS     6      37.514 -21.374  -0.075  1.00  0.00
C
ATOM     92  O   LYS     6      37.486 -22.593  -0.070  1.00  0.00
O
ATOM     93  CB  LYS     6      39.753 -20.276   0.290  1.00  0.00
C
ATOM     94 1HB  LYS     6      39.362 -19.496   0.933  1.00  0.00
H
ATOM     95 2HB  LYS     6      39.983 -21.152   0.896  1.00  0.00
H
ATOM     96  CG  LYS     6      41.039 -19.786  -0.357  1.00  0.00
C
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```
ATOM     97 1HG  LYS     6      41.416 -20.565  -1.019  1.00  0.00
H
ATOM     98 2HG  LYS     6      40.838 -18.888  -0.941  1.00  0.00
H
ATOM     99  CD  LYS     6      42.091 -19.474   0.691  1.00  0.00
C
ATOM    100 1HD  LYS     6      41.722 -18.688   1.349  1.00  0.00
H
ATOM    101 2HD  LYS     6      42.282 -20.372   1.280  1.00  0.00
H
ATOM    102  CE  LYS     6      43.387 -19.022   0.038  1.00  0.00
C
ATOM    103 1HE  LYS     6      43.710 -19.784  -0.672  1.00  0.00
H
ATOM    104 2HE  LYS     6      43.219 -18.085  -0.498  1.00  0.00
H
ATOM    105  NZ  LYS     6      44.451 -18.835   1.066  1.00  0.00
N
ATOM    106 1HZ  LYS     6      45.347 -18.671   0.620  1.00  0.00
H
ATOM    107 2HZ  LYS     6      44.520 -19.665   1.651  1.00  0.00
H
ATOM    108 3HZ  LYS     6      44.222 -18.044   1.657  1.00  0.00
H
ATOM    109  N   LEU     7      36.514 -20.628   0.372  1.00  0.00
N
ATOM    110  H   LEU     7      36.593 -19.628   0.325  1.00  0.00
H
ATOM    111  CA  LEU     7      35.292 -21.208   0.942  1.00  0.00
C
ATOM    112  HA  LEU     7      35.561 -21.846   1.785  1.00  0.00
H
ATOM    113  C   LEU     7      34.531 -22.070  -0.074  1.00  0.00
C
ATOM    114  O   LEU     7      34.097 -23.178   0.229  1.00  0.00
O
ATOM    115  CB  LEU     7      34.402 -20.065   1.447  1.00  0.00
C
ATOM    116 1HB  LEU     7      34.977 -19.493   2.174  1.00  0.00
H
ATOM    117 2HB  LEU     7      34.196 -19.407   0.607  1.00  0.00
H
ATOM    118  CG  LEU     7      33.049 -20.426   2.079  1.00  0.00
C
ATOM    119  HG  LEU     7      32.988 -21.507   2.191  1.00  0.00
H
ATOM    120  CD1 LEU     7      32.891 -19.790   3.452  1.00  0.00
C
ATOM    121 1HD1 LEU     7      31.921 -20.058   3.872  1.00  0.00
H
ATOM    122 2HD1 LEU     7      32.974 -18.707   3.381  1.00  0.00
H
ATOM    123 3HD1 LEU     7      33.671 -20.164   4.115  1.00  0.00
H
ATOM    124  CD2 LEU     7      31.906 -19.958   1.174  1.00  0.00
C
ATOM    125 1HD2 LEU     7      30.950 -20.261   1.603  1.00  0.00
H
ATOM    126 2HD2 LEU     7      32.002 -20.421   0.191  1.00  0.00
H
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ATOM    127 3HD2 LEU     7      31.926 -18.874   1.061  1.00  0.00
H
ATOM    128  N   ASP     8      34.396 -21.599  -1.303  1.00  0.00
N
ATOM    129  H   ASP     8      34.724 -20.661  -1.525  1.00  0.00
H
ATOM    130  CA  ASP     8      33.716 -22.367  -2.346  1.00  0.00
C
ATOM    131  HA  ASP     8      32.794 -22.784  -1.942  1.00  0.00
H
ATOM    132  C   ASP     8      34.586 -23.530  -2.812  1.00  0.00
C
ATOM    133  O   ASP     8      34.085 -24.590  -3.193  1.00  0.00
O
ATOM    134  CB  ASP     8      33.370 -21.486  -3.546  1.00  0.00
C
ATOM    135 1HB  ASP     8      34.222 -20.849  -3.785  1.00  0.00
H
ATOM    136 2HB  ASP     8      33.172 -22.133  -4.398  1.00  0.00
H
ATOM    137  CG  ASP     8      32.131 -20.635  -3.326  1.00  0.00
C
ATOM    138  OD1 ASP     8      31.370 -20.850  -2.362  1.00  0.00
O
ATOM    139  OD2 ASP     8      31.839 -19.792  -4.207  1.00  0.00
O
ATOM    140  N   GLY     9      35.897 -23.382  -2.710  1.00  0.00
N
ATOM    141  H   GLY     9      36.292 -22.483  -2.454  1.00  0.00
H
ATOM    142  CA  GLY     9      36.780 -24.505  -2.974  1.00  0.00
C
ATOM    143 1HA  GLY     9      36.527 -24.940  -3.941  1.00  0.00
H
ATOM    144 2HA  GLY     9      37.813 -24.161  -3.000  1.00  0.00
H
ATOM    145  C   GLY     9      36.630 -25.569  -1.903  1.00  0.00
C
ATOM    146  O   GLY     9      36.629 -26.759  -2.207  1.00  0.00
O
ATOM    147  N   PHE    10      36.428 -25.170  -0.654  1.00  0.00
N
ATOM    148  H   PHE    10      36.464 -24.179  -0.428  1.00  0.00
H
ATOM    149  CA  PHE    10      36.183 -26.128   0.423  1.00  0.00
C
ATOM    150  HA  PHE    10      36.932 -26.917   0.371  1.00  0.00
H
ATOM    151  C   PHE    10      34.806 -26.756   0.246  1.00  0.00
C
ATOM    152  O   PHE    10      34.603 -27.910   0.581  1.00  0.00
O
ATOM    153  CB  PHE    10      36.244 -25.468   1.807  1.00  0.00
C
ATOM    154 1HB  PHE    10      35.439 -24.738   1.881  1.00  0.00
H
ATOM    155 2HB  PHE    10      36.071 -26.234   2.563  1.00  0.00
H
ATOM    156  CG  PHE    10      37.548 -24.765   2.120  1.00  0.00
C
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ATOM    157  CD1 PHE    10      37.520 -23.645   2.966  1.00  0.00
C
ATOM    158  HD1 PHE    10      36.576 -23.310   3.365  1.00  0.00
H
ATOM    159  CD2 PHE    10      38.794 -25.199   1.617  1.00  0.00
C
ATOM    160  HD2 PHE    10      38.854 -26.062   0.973  1.00  0.00
H
ATOM    161  CE1 PHE    10      38.706 -22.950   3.309  1.00  0.00
C
ATOM    162  HE1 PHE    10      38.661 -22.088   3.960  1.00  0.00
H
ATOM    163  CE2 PHE    10      39.993 -24.517   1.955  1.00  0.00
C
ATOM    164  HE2 PHE    10      40.940 -24.859   1.564  1.00  0.00
H
ATOM    165  CZ  PHE    10      39.946 -23.391   2.805  1.00  0.00
C
ATOM    166  HZ  PHE    10      40.856 -22.873   3.073  1.00  0.00
H
ATOM    167  N   THR    11      33.867 -26.017  -0.323  1.00  0.00
N
ATOM    168  H   THR    11      34.069 -25.046  -0.532  1.00  0.00
H
ATOM    169  CA  THR    11      32.537 -26.547  -0.633  1.00  0.00
C
ATOM    170  HA  THR    11      32.116 -26.989   0.267  1.00  0.00
H
ATOM    171  C   THR    11      32.630 -27.645  -1.695  1.00  0.00
C
ATOM    172  O   THR    11      31.958 -28.676  -1.613  1.00  0.00
O
ATOM    173  CB  THR    11      31.605 -25.402  -1.109  1.00  0.00
C
ATOM    174  HB  THR    11      31.994 -24.978  -2.032  1.00  0.00
H
ATOM    175  OG1 THR    11      31.561 -24.377  -0.108  1.00  0.00
O
ATOM    176  HG1 THR    11      32.463 -24.085   0.090  1.00  0.00
H
ATOM    177  CG2 THR    11      30.183 -25.857  -1.350  1.00  0.00
C
ATOM    178 1HG2 THR    11      29.547 -24.983  -1.494  1.00  0.00
H
ATOM    179 2HG2 THR    11      29.818 -26.425  -0.496  1.00  0.00
H
ATOM    180 3HG2 THR    11      30.140 -26.477  -2.244  1.00  0.00
H
ATOM    181  N   GLU    12      33.511 -27.465  -2.669  1.00  0.00
N
ATOM    182  H   GLU    12      34.020 -26.589  -2.730  1.00  0.00
H
ATOM    183  CA  GLU    12      33.755 -28.496  -3.677  1.00  0.00
C
ATOM    184  HA  GLU    12      32.808 -28.778  -4.137  1.00  0.00
H
ATOM    185  C   GLU    12      34.389 -29.741  -3.044  1.00  0.00
C
ATOM    186  O   GLU    12      34.046 -30.878  -3.384  1.00  0.00
O
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ATOM    187  CB  GLU    12      34.692 -27.938  -4.750  1.00  0.00
C
ATOM    188 1HB  GLU    12      34.305 -26.976  -5.086  1.00  0.00
H
ATOM    189 2HB  GLU    12      35.669 -27.781  -4.301  1.00  0.00
H
ATOM    190  CG  GLU    12      34.853 -28.841  -5.954  1.00  0.00
C
ATOM    191 1HG  GLU    12      35.165 -29.829  -5.622  1.00  0.00
H
ATOM    192 2HG  GLU    12      33.886 -28.936  -6.449  1.00  0.00
H
ATOM    193  CD  GLU    12      35.872 -28.331  -6.952  1.00  0.00
C
ATOM    194  OE1 GLU    12      36.720 -27.470  -6.622  1.00  0.00
O
ATOM    195  OE2 GLU    12      35.823 -28.785  -8.115  1.00  0.00
O
ATOM    196  N   ILE    13      35.306 -29.525  -2.110  1.00  0.00
N
ATOM    197  H   ILE    13      35.570 -28.571  -1.889  1.00  0.00
H
ATOM    198  CA  ILE    13      35.973 -30.620  -1.399  1.00  0.00
C
ATOM    199  HA  ILE    13      36.350 -31.341  -2.124  1.00  0.00
H
ATOM    200  C   ILE    13      34.960 -31.346  -0.519  1.00  0.00
C
ATOM    201  O   ILE    13      34.966 -32.568  -0.464  1.00  0.00
O
ATOM    202  CB  ILE    13      37.178 -30.100  -0.552  1.00  0.00
C
ATOM    203  HB  ILE    13      36.833 -29.282   0.078  1.00  0.00
H
ATOM    204  CG1 ILE    13      38.290 -29.588  -1.488  1.00  0.00
C
ATOM    205 1HG1 ILE    13      38.774 -30.450  -1.946  1.00  0.00
H
ATOM    206 2HG1 ILE    13      37.841 -29.005  -2.287  1.00  0.00
H
ATOM    207  CG2 ILE    13      37.763 -31.206   0.355  1.00  0.00
C
ATOM    208 1HG2 ILE    13      38.581 -30.810   0.955  1.00  0.00
H
ATOM    209 2HG2 ILE    13      38.126 -32.042  -0.247  1.00  0.00
H
ATOM    210 3HG2 ILE    13      37.000 -31.572   1.038  1.00  0.00
H
ATOM    211  CD1 ILE    13      39.366 -28.719  -0.828  1.00  0.00
C
ATOM    212 1HD1 ILE    13      40.106 -28.440  -1.578  1.00  0.00
H
ATOM    213 2HD1 ILE    13      39.865 -29.265  -0.030  1.00  0.00
H
ATOM    214 3HD1 ILE    13      38.913 -27.814  -0.425  1.00  0.00
H
ATOM    215  N   TYR    14      34.051 -30.621   0.117  1.00  0.00
N
ATOM    216  H   TYR    14      34.060 -29.611   0.010  1.00  0.00
H
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ATOM    217  CA  TYR    14      33.058 -31.211   1.016  1.00  0.00
C
ATOM    218  HA  TYR    14      33.572 -31.646   1.874  1.00  0.00
H
ATOM    219  C   TYR    14      32.267 -32.317   0.337  1.00  0.00
C
ATOM    220  O   TYR    14      32.064 -33.382   0.904  1.00  0.00
O
ATOM    221  CB  TYR    14      32.096 -30.124   1.500  1.00  0.00
C
ATOM    222 1HB  TYR    14      32.680 -29.299   1.907  1.00  0.00
H
ATOM    223 2HB  TYR    14      31.522 -29.752   0.654  1.00  0.00
H
ATOM    224  CG  TYR    14      31.127 -30.591   2.560  1.00  0.00
C
ATOM    225  CD1 TYR    14      31.558 -30.762   3.882  1.00  0.00
C
ATOM    226  HD1 TYR    14      32.594 -30.608   4.110  1.00  0.00
H
ATOM    227  CD2 TYR    14      29.776 -30.855   2.257  1.00  0.00
C
ATOM    228  HD2 TYR    14      29.412 -30.725   1.246  1.00  0.00
H
ATOM    229  CE1 TYR    14      30.669 -31.169   4.904  1.00  0.00
C
ATOM    230  HE1 TYR    14      31.016 -31.274   5.920  1.00  0.00
H
ATOM    231  CE2 TYR    14      28.887 -31.308   3.271  1.00  0.00
C
ATOM    232  HE2 TYR    14      27.859 -31.523   3.038  1.00  0.00
H
ATOM    233  CZ  TYR    14      29.358 -31.487   4.574  1.00  0.00
C
ATOM    234  OH  TYR    14      28.552 -32.014   5.540  1.00  0.00
O
ATOM    235  HH  TYR    14      29.002 -32.141   6.383  1.00  0.00
H
ATOM    236  N   PHE    15      31.906 -32.101  -0.918  1.00  0.00
N
ATOM    237  H   PHE    15      32.153 -31.226  -1.360  1.00  0.00
H
ATOM    238  CA  PHE    15      31.163 -33.095  -1.687  1.00  0.00
C
ATOM    239  HA  PHE    15      30.243 -33.338  -1.153  1.00  0.00
H
ATOM    240  C   PHE    15      31.951 -34.393  -1.893  1.00  0.00
C
ATOM    241  O   PHE    15      31.389 -35.486  -1.913  1.00  0.00
O
ATOM    242  CB  PHE    15      30.804 -32.462  -3.030  1.00  0.00
C
ATOM    243 1HB  PHE    15      30.342 -31.494  -2.837  1.00  0.00
H
ATOM    244 2HB  PHE    15      31.717 -32.298  -3.601  1.00  0.00
H
ATOM    245  CG  PHE    15      29.853 -33.277  -3.853  1.00  0.00
C
ATOM    246  CD1 PHE    15      28.487 -33.313  -3.525  1.00  0.00
C
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ATOM    247  HD1 PHE    15      28.128 -32.774  -2.659  1.00  0.00
H
ATOM    248  CD2 PHE    15      30.306 -33.985  -4.979  1.00  0.00
C
ATOM    249  HD2 PHE    15      31.356 -33.974  -5.237  1.00  0.00
H
ATOM    250  CE1 PHE    15      27.569 -34.035  -4.322  1.00  0.00
C
ATOM    251  HE1 PHE    15      26.521 -34.048  -4.065  1.00  0.00
H
ATOM    252  CE2 PHE    15      29.396 -34.702  -5.794  1.00  0.00
C
ATOM    253  HE2 PHE    15      29.749 -35.224  -6.670  1.00  0.00
H
ATOM    254  CZ  PHE    15      28.025 -34.731  -5.458  1.00  0.00
C
ATOM    255  HZ  PHE    15      27.328 -35.290  -6.063  1.00  0.00
H
ATOM    256  N   MET    16      33.268 -34.292  -1.995  1.00  0.00
N
ATOM    257  H   MET    16      33.707 -33.381  -1.927  1.00  0.00
H
ATOM    258  CA  MET    16      34.119 -35.468  -2.180  1.00  0.00
C
ATOM    259  HA  MET    16      33.630 -36.142  -2.883  1.00  0.00
H
ATOM    260  C   MET    16      34.351 -36.219  -0.871  1.00  0.00
C
ATOM    261  O   MET    16      34.526 -37.437  -0.869  1.00  0.00
O
ATOM    262  CB  MET    16      35.478 -35.057  -2.755  1.00  0.00
C
ATOM    263 1HB  MET    16      36.012 -34.465  -2.012  1.00  0.00
H
ATOM    264 2HB  MET    16      36.058 -35.959  -2.950  1.00  0.00
H
ATOM    265  CG  MET    16      35.378 -34.237  -4.036  1.00  0.00
C
ATOM    266 1HG  MET    16      34.884 -33.294  -3.805  1.00  0.00
H
ATOM    267 2HG  MET    16      36.384 -34.014  -4.390  1.00  0.00
H
ATOM    268  SD  MET    16      34.456 -35.047  -5.359  1.00  0.00
S
ATOM    269  CE  MET    16      35.594 -36.311  -5.886  1.00  0.00
C
ATOM    270 1HE  MET    16      35.152 -36.877  -6.705  1.00  0.00
H
ATOM    271 2HE  MET    16      35.810 -36.986  -5.058  1.00  0.00
H
ATOM    272 3HE  MET    16      36.521 -35.849  -6.227  1.00  0.00
H
ATOM    273  N   VAL    17      34.344 -35.502   0.246  1.00  0.00
N
ATOM    274  H   VAL    17      34.231 -34.495   0.182  1.00  0.00
H
ATOM    275  CA  VAL    17      34.534 -36.099   1.575  1.00  0.00
C
ATOM    276  HA  VAL    17      35.297 -36.871   1.505  1.00  0.00
H
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ATOM    277  C   VAL    17      33.222 -36.760   2.031  1.00  0.00
C
ATOM    278  O   VAL    17      33.205 -37.681   2.849  1.00  0.00
O
ATOM    279  CB  VAL    17      35.050 -35.021   2.590  1.00  0.00
C
ATOM    280  HB  VAL    17      34.289 -34.253   2.710  1.00  0.00
H
ATOM    281  CG1 VAL    17      35.386 -35.625   3.961  1.00  0.00
C
ATOM    282 1HG1 VAL    17      35.693 -34.837   4.649  1.00  0.00
H
ATOM    283 2HG1 VAL    17      36.190 -36.356   3.867  1.00  0.00
H
ATOM    284 3HG1 VAL    17      34.513 -36.124   4.371  1.00  0.00
H
ATOM    285  CG2 VAL    17      36.329 -34.357   2.071  1.00  0.00
C
ATOM    286 1HG2 VAL    17      36.692 -33.627   2.794  1.00  0.00
H
ATOM    287 2HG2 VAL    17      36.144 -33.846   1.135  1.00  0.00
H
ATOM    288 3HG2 VAL    17      37.099 -35.108   1.900  1.00  0.00
H
ATOM    289  N   ASP    18      32.115 -36.325   1.444  1.00  0.00
N
ATOM    290  H   ASP    18      32.190 -35.559   0.785  1.00  0.00
H
ATOM    291  CA  ASP    18      30.770 -36.852   1.707  1.00  0.00
C
ATOM    292  HA  ASP    18      30.652 -36.976   2.781  1.00  0.00
H
ATOM    293  C   ASP    18      30.543 -38.219   1.045  1.00  0.00
C
ATOM    294  O   ASP    18      29.805 -38.355   0.071  1.00  0.00
O
ATOM    295  CB  ASP    18      29.762 -35.804   1.211  1.00  0.00
C
ATOM    296 1HB  ASP    18      30.108 -34.820   1.516  1.00  0.00
H
ATOM    297 2HB  ASP    18      29.717 -35.823   0.123  1.00  0.00
H
ATOM    298  CG  ASP    18      28.370 -35.984   1.773  1.00  0.00
C
ATOM    299  OD1 ASP    18      28.170 -36.295   2.968  1.00  0.00
O
ATOM    300  OD2 ASP    18      27.414 -35.701   1.023  1.00  0.00
O
ATOM    301  N   LYS    19      31.260 -39.230   1.524  1.00  0.00
N
ATOM    302  H   LYS    19      31.858 -39.053   2.327  1.00  0.00
H
ATOM    303  CA  LYS    19      31.287 -40.554   0.889  1.00  0.00
C
ATOM    304  HA  LYS    19      31.566 -40.419  -0.156  1.00  0.00
H
ATOM    305  C   LYS    19      29.932 -41.241   0.882  1.00  0.00
C
ATOM    306  O   LYS    19      29.533 -41.774  -0.155  1.00  0.00
O
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ATOM    307  CB  LYS    19      32.321 -41.471   1.553  1.00  0.00
C
ATOM    308 1HB  LYS    19      32.416 -41.201   2.603  1.00  0.00
H
ATOM    309 2HB  LYS    19      31.940 -42.491   1.501  1.00  0.00
H
ATOM    310  CG  LYS    19      33.708 -41.480   0.922  1.00  0.00
C
ATOM    311 1HG  LYS    19      34.281 -42.292   1.368  1.00  0.00
H
ATOM    312 2HG  LYS    19      33.609 -41.677  -0.145  1.00  0.00
H
ATOM    313  CD  LYS    19      34.485 -40.190   1.117  1.00  0.00
C
ATOM    314 1HD  LYS    19      33.933 -39.364   0.674  1.00  0.00
H
ATOM    315 2HD  LYS    19      34.624 -40.003   2.182  1.00  0.00
H
ATOM    316  CE  LYS    19      35.836 -40.309   0.442  1.00  0.00
C
ATOM    317 1HE  LYS    19      36.389 -41.126   0.910  1.00  0.00
H
ATOM    318 2HE  LYS    19      35.678 -40.557  -0.609  1.00  0.00
H
ATOM    319  NZ  LYS    19      36.656 -39.061   0.519  1.00  0.00
N
ATOM    320 1HZ  LYS    19      37.541 -39.203   0.046  1.00  0.00
H
ATOM    321 2HZ  LYS    19      36.838 -38.820   1.483  1.00  0.00
H
ATOM    322 3HZ  LYS    19      36.168 -38.295   0.067  1.00  0.00
H
ATOM    323   N  ARG    20      29.178 -41.182   1.971  1.00  0.00
N
ATOM    324   H  ARG    20      29.583 -40.858   2.843  1.00  0.00
H
ATOM    325  CA  ARG    20      27.731 -41.411   1.854  1.00  0.00
C
ATOM    326  HA  ARG    20      27.515 -42.175   1.106  1.00  0.00
H
ATOM    327   C  ARG    20      27.253 -40.052   1.383  1.00  0.00
C
ATOM    328   O  ARG    20      27.576 -39.081   2.047  1.00  0.00
O
ATOM    329  CB  ARG    20      27.055 -41.741   3.187  1.00  0.00
C
ATOM    330 1HB  ARG    20      27.299 -40.958   3.904  1.00  0.00
H
ATOM    331 2HB  ARG    20      25.977 -41.733   3.027  1.00  0.00
H
ATOM    332  CG  ARG    20      27.424 -43.077   3.795  1.00  0.00
C
ATOM    333 1HG  ARG    20      27.128 -43.879   3.120  1.00  0.00
H
ATOM    334 2HG  ARG    20      28.499 -43.118   3.964  1.00  0.00
H
ATOM    335  CD  ARG    20      26.698 -43.228   5.121  1.00  0.00
C
ATOM    336 1HD  ARG    20      26.955 -42.380   5.752  1.00  0.00
H
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ATOM    337 2HD  ARG    20      25.622 -43.206   4.953  1.00  0.00
H
ATOM    338  NE  ARG    20      27.064 -44.460   5.830  1.00  0.00
N
ATOM    339  HE  ARG    20      27.941 -44.443   6.332  1.00  0.00
H
ATOM    340  CZ  ARG    20      26.360 -45.582   5.887  1.00  0.00
C
ATOM    341  NH1 ARG    20      25.220 -45.768   5.273  1.00  0.00
N
ATOM    342 1HH1 ARG    20      24.854 -45.045   4.662  1.00  0.00
H
ATOM    343 2HH1 ARG    20      24.703 -46.617   5.412  1.00  0.00
H
ATOM    344  NH2 ARG    20      26.804 -46.545   6.638  1.00  0.00
N
ATOM    345 1HH2 ARG    20      27.673 -46.428   7.145  1.00  0.00
H
ATOM    346 2HH2 ARG    20      26.287 -47.411   6.710  1.00  0.00
H
ATOM    347  N   LYS    21      26.523 -39.933   0.287  1.00  0.00
N
ATOM    348  H   LYS    21      26.255 -40.762  -0.239  1.00  0.00
H
ATOM    349  CA  LYS    21      26.105 -38.609  -0.187  1.00  0.00
C
ATOM    350  HA  LYS    21      26.922 -37.912  -0.007  1.00  0.00
H
ATOM    351  C   LYS    21      24.913 -38.089   0.601  1.00  0.00
C
ATOM    352  O   LYS    21      23.758 -38.372   0.284  1.00  0.00
O
ATOM    353  CB  LYS    21      25.825 -38.638  -1.688  1.00  0.00
C
ATOM    354 1HB  LYS    21      25.214 -39.512  -1.911  1.00  0.00
H
ATOM    355 2HB  LYS    21      25.266 -37.747  -1.967  1.00  0.00
H
ATOM    356  CG  LYS    21      27.104 -38.686  -2.522  1.00  0.00
C
ATOM    357 1HG  LYS    21      27.769 -39.445  -2.114  1.00  0.00
H
ATOM    358 2HG  LYS    21      26.845 -38.958  -3.543  1.00  0.00
H
ATOM    359  CD  LYS    21      27.811 -37.323  -2.540  1.00  0.00
C
ATOM    360 1HD  LYS    21      27.122 -36.584  -2.947  1.00  0.00
H
ATOM    361 2HD  LYS    21      28.074 -37.026  -1.526  1.00  0.00
H
ATOM    362  CE  LYS    21      29.074 -37.312  -3.379  1.00  0.00
C
ATOM    363 1HE  LYS    21      28.846 -37.656  -4.388  1.00  0.00
H
ATOM    364 2HE  LYS    21      29.434 -36.283  -3.438  1.00  0.00
H
ATOM    365  NZ  LYS    21      30.153 -38.149  -2.792  1.00  0.00
N
ATOM    366 1HZ  LYS    21      31.006 -38.036  -3.328  1.00  0.00
H
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ATOM    367 2HZ  LYS    21      29.882 -39.124  -2.793  1.00  0.00
H
ATOM    368 3HZ  LYS    21      30.324 -37.859  -1.835  1.00  0.00
H
ATOM    369  N   LYS    22      25.215 -37.397   1.690  1.00  0.00
N
ATOM    370  H   LYS    22      26.199 -37.186   1.848  1.00  0.00
H
ATOM    371  CA  LYS    22      24.232 -36.992   2.699  1.00  0.00
C
ATOM    372  HA  LYS    22      23.225 -37.137   2.308  1.00  0.00
H
ATOM    373  C   LYS    22      24.318 -35.548   3.161  1.00  0.00
C
ATOM    374  O   LYS    22      23.326 -34.985   3.617  1.00  0.00
O
ATOM    375  CB  LYS    22      24.422 -37.880   3.936  1.00  0.00
C
ATOM    376 1HB  LYS    22      25.466 -37.811   4.246  1.00  0.00
H
ATOM    377 2HB  LYS    22      23.807 -37.486   4.741  1.00  0.00
H
ATOM    378  CG  LYS    22      24.073 -39.357   3.743  1.00  0.00
C
ATOM    379 1HG  LYS    22      24.627 -39.746   2.891  1.00  0.00
H
ATOM    380 2HG  LYS    22      24.370 -39.912   4.629  1.00  0.00
H
ATOM    381  CD  LYS    22      22.590 -39.586   3.510  1.00  0.00
C
ATOM    382 1HD  LYS    22      22.022 -39.210   4.361  1.00  0.00
H
ATOM    383 2HD  LYS    22      22.277 -39.053   2.614  1.00  0.00
H
ATOM    384  CE  LYS    22      22.308 -41.063   3.316  1.00  0.00
C
ATOM    385 1HE  LYS    22      22.966 -41.455   2.536  1.00  0.00
H
ATOM    386 2HE  LYS    22      22.505 -41.599   4.246  1.00  0.00
H
ATOM    387  NZ  LYS    22      20.889 -41.271   2.899  1.00  0.00
N
ATOM    388 1HZ  LYS    22      20.715 -42.262   2.770  1.00  0.00
H
ATOM    389 2HZ  LYS    22      20.720 -40.795   2.021  1.00  0.00
H
ATOM    390 3HZ  LYS    22      20.261 -40.906   3.607  1.00  0.00
H
ATOM    391  N   GLY    23      25.494 -34.949   3.100  1.00  0.00
N
ATOM    392  H   GLY    23      26.302 -35.422   2.694  1.00  0.00
H
ATOM    393  CA  GLY    23      25.670 -33.603   3.621  1.00  0.00
C
ATOM    394 1HA  GLY    23      26.538 -33.157   3.138  1.00  0.00
H
ATOM    395 2HA  GLY    23      24.792 -33.001   3.388  1.00  0.00
H
ATOM    396  C   GLY    23      25.891 -33.586   5.119  1.00  0.00
C
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ATOM    397  O   GLY    23      25.790 -32.540   5.748  1.00  0.00
O
ATOM    398  N   TRP    24      26.182 -34.748   5.687  1.00  0.00
N
ATOM    399  H   TRP    24      26.210 -35.573   5.107  1.00  0.00
H
ATOM    400  CA  TRP    24      26.546 -34.904   7.098  1.00  0.00
C
ATOM    401  HA  TRP    24      26.869 -33.953   7.522  1.00  0.00
H
ATOM    402  C   TRP    24      27.709 -35.888   7.079  1.00  0.00
C
ATOM    403  O   TRP    24      27.541 -37.055   6.707  1.00  0.00
O
ATOM    404  CB  TRP    24      25.406 -35.497   7.935  1.00  0.00
C
ATOM    405 1HB  TRP    24      24.990 -36.344   7.392  1.00  0.00
H
ATOM    406 2HB  TRP    24      25.830 -35.870   8.867  1.00  0.00
H
ATOM    407  CG  TRP    24      24.277 -34.557   8.287  1.00  0.00
C
ATOM    408  CD1 TRP    24      24.261 -33.200   8.201  1.00  0.00
C
ATOM    409  HD1 TRP    24      25.097 -32.604   7.854  1.00  0.00
H
ATOM    410  CD2 TRP    24      22.980 -34.914   8.801  1.00  0.00
C
ATOM    411  NE1 TRP    24      23.058 -32.679   8.583  1.00  0.00
N
ATOM    412  HE1 TRP    24      22.835 -31.687   8.587  1.00  0.00
H
ATOM    413  CE2 TRP    24      22.234 -33.708   8.944  1.00  0.00
C
ATOM    414  CE3 TRP    24      22.357 -36.136   9.123  1.00  0.00
C
ATOM    415  HE3 TRP    24      22.903 -37.062   9.047  1.00  0.00
H
ATOM    416  CZ2 TRP    24      20.888 -33.699   9.358  1.00  0.00
C
ATOM    417  HZ2 TRP    24      20.342 -32.771   9.449  1.00  0.00
H
ATOM    418  CZ3 TRP    24      21.002 -36.134   9.536  1.00  0.00
C
ATOM    419  HZ3 TRP    24      20.512 -37.067   9.772  1.00  0.00
H
ATOM    420  CH2 TRP    24      20.279 -34.911   9.634  1.00  0.00
C
ATOM    421  HH2 TRP    24      19.242 -34.930   9.937  1.00  0.00
H
ATOM    422  N   ILE    25      28.902 -35.421   7.403  1.00  0.00
N
ATOM    423  H   ILE    25      28.992 -34.461   7.730  1.00  0.00
H
ATOM    424  CA  ILE    25      30.127 -36.205   7.248  1.00  0.00
C
ATOM    425  HA  ILE    25      29.936 -37.083   6.636  1.00  0.00
H
ATOM    426  C   ILE    25      30.602 -36.678   8.621  1.00  0.00
C
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ATOM    427  O   ILE    25      30.641 -35.912   9.574  1.00  0.00
O
ATOM    428  CB  ILE    25      31.173 -35.348   6.505  1.00  0.00
C
ATOM    429  HB  ILE    25      31.267 -34.411   7.031  1.00  0.00
H
ATOM    430  CG1 ILE    25      30.662 -35.035   5.092  1.00  0.00
C
ATOM    431 1HG1 ILE    25      30.446 -35.977   4.594  1.00  0.00
H
ATOM    432 2HG1 ILE    25      29.732 -34.473   5.162  1.00  0.00
H
ATOM    433  CG2 ILE    25      32.557 -36.013   6.462  1.00  0.00
C
ATOM    434 1HG2 ILE    25      33.302 -35.291   6.127  1.00  0.00
H
ATOM    435 2HG2 ILE    25      32.543 -36.857   5.771  1.00  0.00
H
ATOM    436 3HG2 ILE    25      32.859 -36.351   7.451  1.00  0.00
H
ATOM    437  CD1 ILE    25      31.625 -34.251   4.227  1.00  0.00
C
ATOM    438 1HD1 ILE    25      31.086 -33.823   3.381  1.00  0.00
H
ATOM    439 2HD1 ILE    25      32.398 -34.912   3.850  1.00  0.00
H
ATOM    440 3HD1 ILE    25      32.088 -33.449   4.800  1.00  0.00
H
ATOM    441  N   ALA    26      30.922 -37.960   8.715  1.00  0.00
N
ATOM    442  H   ALA    26      30.949 -38.521   7.870  1.00  0.00
H
ATOM    443  CA  ALA    26      31.305 -38.608   9.961  1.00  0.00
C
ATOM    444  HA  ALA    26      30.678 -38.242  10.776  1.00  0.00
H
ATOM    445  C   ALA    26      32.770 -38.289  10.264  1.00  0.00
C
ATOM    446  O   ALA    26      33.541 -37.961   9.360  1.00  0.00
O
ATOM    447  CB  ALA    26      31.110 -40.126   9.809  1.00  0.00
C
ATOM    448 1HB  ALA    26      30.087 -40.341   9.504  1.00  0.00
H
ATOM    449 2HB  ALA    26      31.286 -40.617  10.766  1.00  0.00
H
ATOM    450 3HB  ALA    26      31.799 -40.524   9.063  1.00  0.00
H
ATOM    451  N   MET    27      33.188 -38.477  11.504  1.00  0.00
N
ATOM    452  H   MET    27      32.542 -38.825  12.212  1.00  0.00
H
ATOM    453  CA  MET    27      34.586 -38.255  11.868  1.00  0.00
C
ATOM    454  HA  MET    27      34.824 -37.223  11.612  1.00  0.00
H
ATOM    455  C   MET    27      35.605 -39.122  11.111  1.00  0.00
C
ATOM    456  O   MET    27      36.617 -38.573  10.683  1.00  0.00
O
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ATOM    457  CB  MET    27      34.792 -38.416  13.374  1.00  0.00
C
ATOM    458 1HB  MET    27      34.516 -39.429  13.662  1.00  0.00
H
ATOM    459 2HB  MET    27      35.850 -38.276  13.588  1.00  0.00
H
ATOM    460  CG  MET    27      34.002 -37.436  14.228  1.00  0.00
C
ATOM    461 1HG  MET    27      32.937 -37.582  14.056  1.00  0.00
H
ATOM    462 2HG  MET    27      34.218 -37.646  15.275  1.00  0.00
H
ATOM    463  SD  MET    27      34.418 -35.719  13.891  1.00  0.00
S
ATOM    464  CE  MET    27      33.723 -34.913  15.338  1.00  0.00
C
ATOM    465 1HE  MET    27      33.958 -33.848  15.316  1.00  0.00
H
ATOM    466 2HE  MET    27      34.143 -35.349  16.245  1.00  0.00
H
ATOM    467 3HE  MET    27      32.642 -35.038  15.341  1.00  0.00
H
ATOM    468  N   PRO    28      35.359 -40.431  10.869  1.00  0.00
N
ATOM    469  CA  PRO    28      36.369 -41.072  10.011  1.00  0.00
C
ATOM    470  HA  PRO    28      37.365 -40.909  10.422  1.00  0.00
H
ATOM    471  C   PRO    28      36.377 -40.648   8.538  1.00  0.00
C
ATOM    472  O   PRO    28      37.409 -40.757   7.879  1.00  0.00
O
ATOM    473  CB  PRO    28      36.019 -42.557  10.125  1.00  0.00
C
ATOM    474 1HB  PRO    28      36.283 -43.093   9.213  1.00  0.00
H
ATOM    475 2HB  PRO    28      36.522 -42.997  10.982  1.00  0.00
H
ATOM    476  CG  PRO    28      34.563 -42.563  10.350  1.00  0.00
C
ATOM    477 1HG  PRO    28      34.034 -42.378   9.415  1.00  0.00
H
ATOM    478 2HG  PRO    28      34.240 -43.504  10.794  1.00  0.00
H
ATOM    479  CD  PRO    28      34.361 -41.428  11.309  1.00  0.00
C
ATOM    480 1HD  PRO    28      33.349 -41.045  11.234  1.00  0.00
H
ATOM    481 2HD  PRO    28      34.575 -41.748  12.330  1.00  0.00
H
ATOM    482  N   GLU    29      35.271 -40.147   8.000  1.00  0.00
N
ATOM    483  H   GLU    29      34.430 -40.066   8.552  1.00  0.00
H
ATOM    484  CA  GLU    29      35.257 -39.668   6.612  1.00  0.00
C
ATOM    485  HA  GLU    29      35.713 -40.408   5.954  1.00  0.00
H
ATOM    486  C   GLU    29      36.107 -38.391   6.588  1.00  0.00
C
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ATOM    487  O   GLU    29      36.946 -38.180   5.713  1.00  0.00
O
ATOM    488  CB  GLU    29      33.822 -39.370   6.140  1.00  0.00
C
ATOM    489 1HB  GLU    29      33.370 -38.706   6.870  1.00  0.00
H
ATOM    490 2HB  GLU    29      33.875 -38.847   5.187  1.00  0.00
H
ATOM    491  CG  GLU    29      32.892 -40.578   5.972  1.00  0.00
C
ATOM    492 1HG  GLU    29      33.303 -41.228   5.201  1.00  0.00
H
ATOM    493 2HG  GLU    29      32.867 -41.131   6.912  1.00  0.00
H
ATOM    494  CD  GLU    29      31.446 -40.200   5.598  1.00  0.00
C
ATOM    495  OE1 GLU    29      30.794 -39.459   6.373  1.00  0.00
O
ATOM    496  OE2 GLU    29      30.888 -40.704   4.594  1.00  0.00
O
ATOM    497  N   LEU    30      35.934 -37.564   7.611  1.00  0.00
N
ATOM    498  H   LEU    30      35.223 -37.777   8.304  1.00  0.00
H
ATOM    499  CA  LEU    30      36.710 -36.335   7.759  1.00  0.00
C
ATOM    500  HA  LEU    30      36.626 -35.756   6.839  1.00  0.00
H
ATOM    501  C   LEU    30      38.196 -36.606   8.008  1.00  0.00
C
ATOM    502  O   LEU    30      39.060 -35.940   7.440  1.00  0.00
O
ATOM    503  CB  LEU    30      36.124 -35.525   8.921  1.00  0.00
C
ATOM    504 1HB  LEU    30      35.065 -35.368   8.718  1.00  0.00
H
ATOM    505 2HB  LEU    30      36.198 -36.136   9.820  1.00  0.00
H
ATOM    506  CG  LEU    30      36.756 -34.165   9.247  1.00  0.00
C
ATOM    507  HG  LEU    30      37.803 -34.325   9.493  1.00  0.00
H
ATOM    508  CD1 LEU    30      36.685 -33.175   8.085  1.00  0.00
C
ATOM    509 1HD1 LEU    30      37.045 -32.198   8.405  1.00  0.00
H
ATOM    510 2HD1 LEU    30      35.660 -33.083   7.729  1.00  0.00
H
ATOM    511 3HD1 LEU    30      37.319 -33.525   7.270  1.00  0.00
H
ATOM    512  CD2 LEU    30      36.067 -33.587  10.478  1.00  0.00
C
ATOM    513 1HD2 LEU    30      36.516 -32.630  10.742  1.00  0.00
H
ATOM    514 2HD2 LEU    30      36.185 -34.270  11.319  1.00  0.00
H
ATOM    515 3HD2 LEU    30      35.004 -33.443  10.290  1.00  0.00
H
ATOM    516  N   ARG    31      38.502 -37.601   8.832  1.00  0.00
N
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ATOM    517  H   ARG    31      37.746 -38.108   9.287  1.00  0.00
H
ATOM    518  CA  ARG    31      39.886 -37.983   9.136  1.00  0.00
C
ATOM    519  HA  ARG    31      40.419 -37.127   9.554  1.00  0.00
H
ATOM    520  C   ARG    31      40.602 -38.407   7.868  1.00  0.00
C
ATOM    521  O   ARG    31      41.751 -38.033   7.658  1.00  0.00
O
ATOM    522  CB  ARG    31      39.893 -39.147  10.135  1.00  0.00
C
ATOM    523 1HB  ARG    31      39.319 -38.851  11.012  1.00  0.00
H
ATOM    524 2HB  ARG    31      39.384 -39.990   9.670  1.00  0.00
H
ATOM    525  CG  ARG    31      41.264 -39.637  10.600  1.00  0.00
C
ATOM    526 1HG  ARG    31      41.846 -39.974   9.744  1.00  0.00
H
ATOM    527 2HG  ARG    31      41.793 -38.834  11.108  1.00  0.00
H
ATOM    528  CD  ARG    31      41.049 -40.801  11.557  1.00  0.00
C
ATOM    529 1HD  ARG    31      40.495 -40.433  12.421  1.00  0.00
H
ATOM    530 2HD  ARG    31      40.430 -41.549  11.060  1.00  0.00
H
ATOM    531  NE  ARG    31      42.280 -41.450  12.035  1.00  0.00
N
ATOM    532  HE  ARG    31      42.731 -41.047  12.846  1.00  0.00
H
ATOM    533  CZ  ARG    31      42.828 -42.561  11.559  1.00  0.00
C
ATOM    534  NH1 ARG    31      42.369 -43.223  10.533  1.00  0.00
N
ATOM    535 1HH1 ARG    31      41.637 -42.823   9.967  1.00  0.00
H
ATOM    536 2HH1 ARG    31      42.759 -44.125  10.300  1.00  0.00
H
ATOM    537  NH2 ARG    31      43.847 -43.064  12.191  1.00  0.00
N
ATOM    538 1HH2 ARG    31      44.203 -42.591  13.010  1.00  0.00
H
ATOM    539 2HH2 ARG    31      44.282 -43.916  11.859  1.00  0.00
H
ATOM    540  N   LYS    32      39.910 -39.137   7.005  1.00  0.00
N
ATOM    541  H   LYS    32      38.954 -39.400   7.219  1.00  0.00
H
ATOM    542  CA  LYS    32      40.509 -39.609   5.761  1.00  0.00
C
ATOM    543  HA  LYS    32      41.394 -40.194   6.011  1.00  0.00
H
ATOM    544  C   LYS    32      40.958 -38.430   4.911  1.00  0.00
C
ATOM    545  O   LYS    32      42.044 -38.462   4.344  1.00  0.00
O
ATOM    546  CB  LYS    32      39.504 -40.493   5.008  1.00  0.00
C
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ATOM    547 1HB  LYS    32      39.108 -41.225   5.707  1.00  0.00
H
ATOM    548 2HB  LYS    32      38.680 -39.868   4.666  1.00  0.00
H
ATOM    549  CG  LYS    32      40.061 -41.244   3.806  1.00  0.00
C
ATOM    550 1HG  LYS    32      39.229 -41.644   3.227  1.00  0.00
H
ATOM    551 2HG  LYS    32      40.612 -40.542   3.183  1.00  0.00
H
ATOM    552  CD  LYS    32      40.981 -42.402   4.186  1.00  0.00
C
ATOM    553 1HD  LYS    32      41.785 -42.038   4.826  1.00  0.00
H
ATOM    554 2HD  LYS    32      40.412 -43.160   4.725  1.00  0.00
H
ATOM    555  CE  LYS    32      41.590 -43.011   2.930  1.00  0.00
C
ATOM    556 1HE  LYS    32      40.790 -43.388   2.288  1.00  0.00
H
ATOM    557 2HE  LYS    32      42.127 -42.226   2.394  1.00  0.00
H
ATOM    558  NZ  LYS    32      42.547 -44.120   3.234  1.00  0.00
N
ATOM    559 1HZ  LYS    32      43.017 -44.411   2.385  1.00  0.00
H
ATOM    560 2HZ  LYS    32      42.054 -44.913   3.629  1.00  0.00
H
ATOM    561 3HZ  LYS    32      43.248 -43.805   3.895  1.00  0.00
H
ATOM    562   N  TYR    33      40.165 -37.369   4.868  1.00  0.00
N
ATOM    563   H  TYR    33      39.268 -37.389   5.336  1.00  0.00
H
ATOM    564  CA  TYR    33      40.587 -36.162   4.163  1.00  0.00
C
ATOM    565  HA  TYR    33      40.946 -36.447   3.174  1.00  0.00
H
ATOM    566   C  TYR    33      41.723 -35.411   4.858  1.00  0.00
C
ATOM    567   O  TYR    33      42.659 -34.954   4.209  1.00  0.00
O
ATOM    568  CB  TYR    33      39.415 -35.200   3.985  1.00  0.00
C
ATOM    569 1HB  TYR    33      38.639 -35.700   3.410  1.00  0.00
H
ATOM    570 2HB  TYR    33      39.014 -34.922   4.959  1.00  0.00
H
ATOM    571  CG  TYR    33      39.868 -33.953   3.262  1.00  0.00
C
ATOM    572  CD1 TYR    33      40.199 -34.000   1.892  1.00  0.00
C
ATOM    573  HD1 TYR    33      40.026 -34.905   1.326  1.00  0.00
H
ATOM    574  CD2 TYR    33      40.078 -32.747   3.964  1.00  0.00
C
ATOM    575  HD2 TYR    33      39.817 -32.680   5.011  1.00  0.00
H
ATOM    576  CE1 TYR    33      40.789 -32.882   1.250  1.00  0.00
C
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ATOM    577  HE1 TYR    33      41.058 -32.940   0.208  1.00  0.00
H
ATOM    578  CE2 TYR    33      40.668 -31.629   3.320  1.00  0.00
C
ATOM    579  HE2 TYR    33      40.861 -30.720   3.865  1.00  0.00
H
ATOM    580  CZ  TYR    33      41.026 -31.713   1.977  1.00  0.00
C
ATOM    581  OH  TYR    33      41.613 -30.627   1.386  1.00  0.00
O
ATOM    582  HH  TYR    33      41.894 -30.818   0.478  1.00  0.00
H
ATOM    583  N   MET    34      41.667 -35.278   6.175  1.00  0.00
N
ATOM    584  H   MET    34      40.895 -35.689   6.691  1.00  0.00
H
ATOM    585  CA  MET    34      42.690 -34.519   6.901  1.00  0.00
C
ATOM    586  HA  MET    34      42.742 -33.513   6.485  1.00  0.00
H
ATOM    587  C   MET    34      44.078 -35.148   6.749  1.00  0.00
C
ATOM    588  O   MET    34      45.082 -34.443   6.646  1.00  0.00
O
ATOM    589  CB  MET    34      42.327 -34.417   8.383  1.00  0.00
C
ATOM    590 1HB  MET    34      42.131 -35.419   8.764  1.00  0.00
H
ATOM    591 2HB  MET    34      43.182 -34.008   8.913  1.00  0.00
H
ATOM    592  CG  MET    34      41.132 -33.524   8.688  1.00  0.00
C
ATOM    593 1HG  MET    34      41.393 -32.493   8.451  1.00  0.00
H
ATOM    594 2HG  MET    34      40.277 -33.827   8.086  1.00  0.00
H
ATOM    595  SD  MET    34      40.703 -33.659  10.437  1.00  0.00
S
ATOM    596  CE  MET    34      39.684 -32.230  10.733  1.00  0.00
C
ATOM    597 1HE  MET    34      39.271 -32.285  11.741  1.00  0.00
H
ATOM    598 2HE  MET    34      38.871 -32.199  10.009  1.00  0.00
H
ATOM    599 3HE  MET    34      40.289 -31.328  10.643  1.00  0.00
H
ATOM    600  N   GLU    35      44.129 -36.466   6.626  1.00  0.00
N
ATOM    601  H   GLU    35      43.276 -37.009   6.725  1.00  0.00
H
ATOM    602  CA  GLU    35      45.380 -37.176   6.354  1.00  0.00
C
ATOM    603  HA  GLU    35      46.108 -36.960   7.135  1.00  0.00
H
ATOM    604  C   GLU    35      46.016 -36.816   5.016  1.00  0.00
C
ATOM    605  O   GLU    35      47.234 -36.885   4.866  1.00  0.00
O
ATOM    606  CB  GLU    35      45.115 -38.674   6.317  1.00  0.00
C
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ATOM    607 1HB  GLU    35      44.244 -38.838   5.688  1.00  0.00
H
ATOM    608 2HB  GLU    35      45.974 -39.158   5.856  1.00  0.00
H
ATOM    609  CG  GLU    35      44.877 -39.321   7.661  1.00  0.00
C
ATOM    610 1HG  GLU    35      45.769 -39.194   8.271  1.00  0.00
H
ATOM    611 2HG  GLU    35      44.046 -38.830   8.161  1.00  0.00
H
ATOM    612  CD  GLU    35      44.566 -40.798   7.531  1.00  0.00
C
ATOM    613  OE1 GLU    35      44.532 -41.325   6.394  1.00  0.00
O
ATOM    614  OE2 GLU    35      44.360 -41.469   8.567  1.00  0.00
O
ATOM    615  N   GLU    36      45.225 -36.397   4.038  1.00  0.00
N
ATOM    616  H   GLU    36      44.227 -36.298   4.197  1.00  0.00
H
ATOM    617  CA  GLU    36      45.761 -36.073   2.715  1.00  0.00
C
ATOM    618  HA  GLU    36      46.397 -36.895   2.385  1.00  0.00
H
ATOM    619  C   GLU    36      46.605 -34.802   2.760  1.00  0.00
C
ATOM    620  O   GLU    36      47.376 -34.517   1.840  1.00  0.00
O
ATOM    621  CB  GLU    36      44.643 -35.883   1.685  1.00  0.00
C
ATOM    622 1HB  GLU    36      44.036 -35.027   1.978  1.00  0.00
H
ATOM    623 2HB  GLU    36      45.108 -35.663   0.724  1.00  0.00
H
ATOM    624  CG  GLU    36      43.735 -37.096   1.520  1.00  0.00
C
ATOM    625 1HG  GLU    36      44.350 -37.969   1.294  1.00  0.00
H
ATOM    626 2HG  GLU    36      43.215 -37.272   2.458  1.00  0.00
H
ATOM    627  CD  GLU    36      42.699 -36.927   0.417  1.00  0.00
C
ATOM    628  OE1 GLU    36      42.756 -35.949  -0.362  1.00  0.00
O
ATOM    629  OE2 GLU    36      41.818 -37.809   0.274  1.00  0.00
O
ATOM    630  N   ASN    37      46.484 -34.044   3.841  1.00  0.00
N
ATOM    631  H   ASN    37      45.858 -34.340   4.583  1.00  0.00
H
ATOM    632  CA  ASN    37      47.237 -32.803   4.016  1.00  0.00
C
ATOM    633  HA  ASN    37      47.528 -32.415   3.040  1.00  0.00
H
ATOM    634  C   ASN    37      48.515 -33.043   4.819  1.00  0.00
C
ATOM    635  O   ASN    37      49.279 -32.107   5.048  1.00  0.00
O
ATOM    636  CB  ASN    37      46.373 -31.759   4.724  1.00  0.00
C
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ATOM    637 1HB  ASN    37      46.037 -32.165   5.676  1.00  0.00
H
ATOM    638 2HB  ASN    37      46.970 -30.870   4.921  1.00  0.00
H
ATOM    639  CG  ASN    37      45.170 -31.350   3.915  1.00  0.00
C
ATOM    640  OD1 ASN    37      45.268 -30.562   2.973  1.00  0.00
O
ATOM    641  ND2 ASN    37      44.029 -31.878   4.256  1.00  0.00
N
ATOM    642 1HD2 ASN    37      43.204 -31.656   3.725  1.00  0.00
H
ATOM    643 2HD2 ASN    37      43.985 -32.509   5.039  1.00  0.00
H
ATOM    644  N   ASP    38      48.740 -34.296   5.205  1.00  0.00
N
ATOM    645  H   ASP    38      48.050 -35.004   4.983  1.00  0.00
H
ATOM    646  CA  ASP    38      49.945 -34.743   5.917  1.00  0.00
C
ATOM    647  HA  ASP    38      49.784 -35.785   6.194  1.00  0.00
H
ATOM    648  C   ASP    38      50.235 -33.984   7.220  1.00  0.00
C
ATOM    649  O   ASP    38      51.256 -33.308   7.381  1.00  0.00
O
ATOM    650  CB  ASP    38      51.155 -34.718   4.976  1.00  0.00
C
ATOM    651 1HB  ASP    38      50.875 -35.178   4.029  1.00  0.00
H
ATOM    652 2HB  ASP    38      51.438 -33.688   4.790  1.00  0.00
H
ATOM    653  CG  ASP    38      52.355 -35.451   5.540  1.00  0.00
C
ATOM    654  OD1 ASP    38      52.242 -36.124   6.588  1.00  0.00
O
ATOM    655  OD2 ASP    38      53.445 -35.389   4.924  1.00  0.00
O
ATOM    656  N   VAL    39      49.320 -34.112   8.170  1.00  0.00
N
ATOM    657  H   VAL    39      48.503 -34.679   7.997  1.00  0.00
H
ATOM    658  CA  VAL    39      49.445 -33.476   9.485  1.00  0.00
C
ATOM    659  HA  VAL    39      50.429 -33.029   9.581  1.00  0.00
H
ATOM    660  C   VAL    39      49.318 -34.573  10.533  1.00  0.00
C
ATOM    661  O   VAL    39      48.825 -35.654  10.222  1.00  0.00
O
ATOM    662  CB  VAL    39      48.378 -32.363   9.717  1.00  0.00
C
ATOM    663  HB  VAL    39      47.640 -32.731  10.427  1.00  0.00
H
ATOM    664  CG1 VAL    39      49.043 -31.116  10.318  1.00  0.00
C
ATOM    665 1HG1 VAL    39      48.298 -30.344  10.496  1.00  0.00
H
ATOM    666 2HG1 VAL    39      49.800 -30.726   9.634  1.00  0.00
H
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ATOM    667 3HG1 VAL    39      49.509 -31.366  11.269  1.00  0.00
H
ATOM    668  CG2 VAL    39      47.647 -31.996   8.405  1.00  0.00
C
ATOM    669 1HG2 VAL    39      46.950 -31.180   8.579  1.00  0.00
H
ATOM    670 2HG2 VAL    39      47.074 -32.847   8.035  1.00  0.00
H
ATOM    671 3HG2 VAL    39      48.364 -31.678   7.645  1.00  0.00
H
ATOM    672  N   ASP    40      49.809 -34.344  11.741  1.00  0.00
N
ATOM    673  H   ASP    40      50.272 -33.465  11.944  1.00  0.00
H
ATOM    674  CA  ASP    40      49.690 -35.335  12.810  1.00  0.00
C
ATOM    675  HA  ASP    40      50.082 -36.288  12.454  1.00  0.00
H
ATOM    676  C   ASP    40      48.240 -35.546  13.256  1.00  0.00
C
ATOM    677  O   ASP    40      47.471 -34.594  13.379  1.00  0.00
O
ATOM    678  CB  ASP    40      50.506 -34.903  14.027  1.00  0.00
C
ATOM    679 1HB  ASP    40      51.515 -34.646  13.703  1.00  0.00
H
ATOM    680 2HB  ASP    40      50.045 -34.021  14.472  1.00  0.00
H
ATOM    681  CG  ASP    40      50.586 -35.997  15.067  1.00  0.00
C
ATOM    682  OD1 ASP    40      51.414 -36.922  14.909  1.00  0.00
O
ATOM    683  OD2 ASP    40      49.783 -36.000  16.020  1.00  0.00
O
ATOM    684  N   GLU    41      47.875 -36.788  13.542  1.00  0.00
N
ATOM    685  H   GLU    41      48.544 -37.539  13.425  1.00  0.00
H
ATOM    686  CA  GLU    41      46.516 -37.140  13.952  1.00  0.00
C
ATOM    687  HA  GLU    41      45.859 -36.881  13.127  1.00  0.00
H
ATOM    688  C   GLU    41      45.992 -36.406  15.195  1.00  0.00
C
ATOM    689  O   GLU    41      44.785 -36.205  15.351  1.00  0.00
O
ATOM    690  CB  GLU    41      46.428 -38.656  14.166  1.00  0.00
C
ATOM    691 1HB  GLU    41      47.008 -39.145  13.383  1.00  0.00
H
ATOM    692 2HB  GLU    41      46.875 -38.896  15.130  1.00  0.00
H
ATOM    693  CG  GLU    41      45.006 -39.211  14.113  1.00  0.00
C
ATOM    694 1HG  GLU    41      44.383 -38.668  14.820  1.00  0.00
H
ATOM    695 2HG  GLU    41      44.604 -39.047  13.114  1.00  0.00
H
ATOM    696  CD  GLU    41      44.906 -40.692  14.440  1.00  0.00
C
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ATOM    697  OE1 GLU    41      45.919 -41.405  14.615  1.00  0.00
O
ATOM    698  OE2 GLU    41      43.755 -41.180  14.516  1.00  0.00
O
ATOM    699  N   LYS    42      46.857 -35.941  16.085  1.00  0.00
N
ATOM    700  H   LYS    42      47.860 -36.091  15.967  1.00  0.00
H
ATOM    701  CA  LYS    42      46.368 -35.177  17.236  1.00  0.00
C
ATOM    702  HA  LYS    42      45.520 -35.707  17.665  1.00  0.00
H
ATOM    703  C   LYS    42      45.845 -33.810  16.827  1.00  0.00
C
ATOM    704  O   LYS    42      44.897 -33.318  17.441  1.00  0.00
O
ATOM    705  CB  LYS    42      47.451 -35.054  18.310  1.00  0.00
C
ATOM    706 1HB  LYS    42      48.350 -34.645  17.850  1.00  0.00
H
ATOM    707 2HB  LYS    42      47.116 -34.363  19.083  1.00  0.00
H
ATOM    708  CG  LYS    42      47.790 -36.393  18.965  1.00  0.00
C
ATOM    709 1HG  LYS    42      47.979 -37.126  18.183  1.00  0.00
H
ATOM    710 2HG  LYS    42      48.697 -36.279  19.557  1.00  0.00
H
ATOM    711  CD  LYS    42      46.677 -36.894  19.888  1.00  0.00
C
ATOM    712 1HD  LYS    42      46.593 -36.210  20.732  1.00  0.00
H
ATOM    713 2HD  LYS    42      45.727 -36.907  19.357  1.00  0.00
H
ATOM    714  CE  LYS    42      46.941 -38.298  20.403  1.00  0.00
C
ATOM    715 1HE  LYS    42      47.932 -38.341  20.859  1.00  0.00
H
ATOM    716 2HE  LYS    42      46.194 -38.535  21.164  1.00  0.00
H
ATOM    717  NZ  LYS    42      46.838 -39.305  19.296  1.00  0.00
N
ATOM    718 1HZ  LYS    42      46.941 -40.245  19.657  1.00  0.00
H
ATOM    719 2HZ  LYS    42      47.561 -39.143  18.605  1.00  0.00
H
ATOM    720 3HZ  LYS    42      45.938 -39.219  18.835  1.00  0.00
H
ATOM    721  N   MET    43      46.347 -33.245  15.737  1.00  0.00
N
ATOM    722  H   MET    43      47.100 -33.695  15.228  1.00  0.00
H
ATOM    723  CA  MET    43      45.772 -32.005  15.217  1.00  0.00
C
ATOM    724  HA  MET    43      45.678 -31.283  16.028  1.00  0.00
H
ATOM    725  C   MET    43      44.386 -32.279  14.677  1.00  0.00
C
ATOM    726  O   MET    43      43.515 -31.423  14.776  1.00  0.00
O
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ATOM    727  CB  MET    43      46.598 -31.390  14.084  1.00  0.00
C
ATOM    728 1HB  MET    43      46.783 -32.144  13.321  1.00  0.00
H
ATOM    729 2HB  MET    43      46.013 -30.592  13.630  1.00  0.00
H
ATOM    730  CG  MET    43      47.916 -30.812  14.545  1.00  0.00
C
ATOM    731 1HG  MET    43      48.508 -31.609  14.995  1.00  0.00
H
ATOM    732 2HG  MET    43      48.456 -30.419  13.683  1.00  0.00
H
ATOM    733  SD  MET    43      47.694 -29.486  15.762  1.00  0.00
S
ATOM    734  CE  MET    43      47.029 -28.138  14.776  1.00  0.00
C
ATOM    735 1HE  MET    43      46.906 -27.256  15.405  1.00  0.00
H
ATOM    736 2HE  MET    43      46.063 -28.424  14.361  1.00  0.00
H
ATOM    737 3HE  MET    43      47.721 -27.901  13.967  1.00  0.00
H
ATOM    738  N   PHE    44      44.153 -33.478  14.157  1.00  0.00
N
ATOM    739  H   PHE    44      44.888 -34.174  14.122  1.00  0.00
H
ATOM    740  CA  PHE    44      42.837 -33.794  13.612  1.00  0.00
C
ATOM    741  HA  PHE    44      42.561 -33.028  12.889  1.00  0.00
H
ATOM    742  C   PHE    44      41.845 -33.770  14.755  1.00  0.00
C
ATOM    743  O   PHE    44      40.754 -33.253  14.618  1.00  0.00
O
ATOM    744  CB  PHE    44      42.743 -35.181  12.963  1.00  0.00
C
ATOM    745 1HB  PHE    44      42.880 -35.937  13.734  1.00  0.00
H
ATOM    746 2HB  PHE    44      41.740 -35.307  12.559  1.00  0.00
H
ATOM    747  CG  PHE    44      43.745 -35.457  11.868  1.00  0.00
C
ATOM    748  CD1 PHE    44      44.505 -34.451  11.233  1.00  0.00
C
ATOM    749  HD1 PHE    44      44.370 -33.411  11.483  1.00  0.00
H
ATOM    750  CD2 PHE    44      43.933 -36.791  11.475  1.00  0.00
C
ATOM    751  HD2 PHE    44      43.351 -37.572  11.938  1.00  0.00
H
ATOM    752  CE1 PHE    44      45.460 -34.788  10.247  1.00  0.00
C
ATOM    753  HE1 PHE    44      46.026 -34.015   9.758  1.00  0.00
H
ATOM    754  CE2 PHE    44      44.895 -37.137  10.508  1.00  0.00
C
ATOM    755  HE2 PHE    44      45.048 -38.172  10.247  1.00  0.00
H
ATOM    756  CZ  PHE    44      45.664 -36.133   9.896  1.00  0.00
C
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ATOM    757  HZ  PHE    44      46.412 -36.393   9.164  1.00  0.00
H
ATOM    758  N   GLU    45      42.229 -34.310  15.899  1.00  0.00
N
ATOM    759  H   GLU    45      43.149 -34.730  15.971  1.00  0.00
H
ATOM    760  CA  GLU    45      41.331 -34.350  17.049  1.00  0.00
C
ATOM    761  HA  GLU    45      40.375 -34.766  16.733  1.00  0.00
H
ATOM    762  C   GLU    45      41.047 -32.958  17.602  1.00  0.00
C
ATOM    763  O   GLU    45      39.901 -32.643  17.941  1.00  0.00
O
ATOM    764  CB  GLU    45      41.920 -35.250  18.134  1.00  0.00
C
ATOM    765 1HB  GLU    45      42.927 -34.908  18.369  1.00  0.00
H
ATOM    766 2HB  GLU    45      41.307 -35.168  19.027  1.00  0.00
H
ATOM    767  CG  GLU    45      41.975 -36.709  17.727  1.00  0.00
C
ATOM    768 1HG  GLU    45      42.613 -36.815  16.850  1.00  0.00
H
ATOM    769 2HG  GLU    45      42.410 -37.287  18.542  1.00  0.00
H
ATOM    770  CD  GLU    45      40.597 -37.257  17.410  1.00  0.00
C
ATOM    771  OE1 GLU    45      39.709 -37.228  18.296  1.00  0.00
O
ATOM    772  OE2 GLU    45      40.368 -37.720  16.271  1.00  0.00
O
ATOM    773  N   ARG    46      42.050 -32.088  17.621  1.00  0.00
N
ATOM    774  H   ARG    46      42.982 -32.384  17.345  1.00  0.00
H
ATOM    775  CA  ARG    46      41.814 -30.705  18.042  1.00  0.00
C
ATOM    776  HA  ARG    46      41.307 -30.717  19.008  1.00  0.00
H
ATOM    777  C   ARG    46      40.878 -30.034  17.049  1.00  0.00
C
ATOM    778  O   ARG    46      39.887 -29.448  17.447  1.00  0.00
O
ATOM    779  CB  ARG    46      43.121 -29.916  18.185  1.00  0.00
C
ATOM    780 1HB  ARG    46      43.653 -29.936  17.233  1.00  0.00
H
ATOM    781 2HB  ARG    46      42.879 -28.880  18.426  1.00  0.00
H
ATOM    782  CG  ARG    46      44.035 -30.472  19.275  1.00  0.00
C
ATOM    783 1HG  ARG    46      43.526 -30.439  20.238  1.00  0.00
H
ATOM    784 2HG  ARG    46      44.258 -31.508  19.041  1.00  0.00
H
ATOM    785  CD  ARG    46      45.355 -29.725  19.375  1.00  0.00
C
ATOM    786 1HD  ARG    46      46.074 -30.377  19.867  1.00  0.00
H
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ATOM    787 2HD  ARG    46      45.719 -29.506  18.370  1.00  0.00
H
ATOM    788  NE  ARG    46      45.263 -28.485  20.160  1.00  0.00
N
ATOM    789  HE  ARG    46      44.387 -28.304  20.637  1.00  0.00
H
ATOM    790  CZ  ARG    46      46.237 -27.603  20.345  1.00  0.00
C
ATOM    791  NH1 ARG    46      47.406 -27.699  19.766  1.00  0.00
N
ATOM    792 1HH1 ARG    46      47.628 -28.513  19.216  1.00  0.00
H
ATOM    793 2HH1 ARG    46      48.090 -26.961  19.880  1.00  0.00
H
ATOM    794  NH2 ARG    46      46.029 -26.577  21.122  1.00  0.00
N
ATOM    795 1HH2 ARG    46      45.152 -26.472  21.613  1.00  0.00
H
ATOM    796 2HH2 ARG    46      46.768 -25.901  21.266  1.00  0.00
H
ATOM    797  N   TRP    47      41.112 -30.185  15.755  1.00  0.00
N
ATOM    798  H   TRP    47      41.931 -30.703  15.443  1.00  0.00
H
ATOM    799  CA  TRP    47      40.218 -29.598  14.756  1.00  0.00
C
ATOM    800  HA  TRP    47      40.147 -28.526  14.935  1.00  0.00
H
ATOM    801  C   TRP    47      38.801 -30.160  14.822  1.00  0.00
C
ATOM    802  O   TRP    47      37.834 -29.430  14.625  1.00  0.00
O
ATOM    803  CB  TRP    47      40.772 -29.833  13.353  1.00  0.00
C
ATOM    804 1HB  TRP    47      40.933 -30.902  13.216  1.00  0.00
H
ATOM    805 2HB  TRP    47      40.031 -29.504  12.634  1.00  0.00
H
ATOM    806  CG  TRP    47      42.048 -29.110  13.063  1.00  0.00
C
ATOM    807  CD1 TRP    47      42.431 -27.887  13.526  1.00  0.00
C
ATOM    808  HD1 TRP    47      41.840 -27.282  14.202  1.00  0.00
H
ATOM    809  CD2 TRP    47      43.108 -29.535  12.187  1.00  0.00
C
ATOM    810  NE1 TRP    47      43.646 -27.519  13.022  1.00  0.00
N
ATOM    811  HE1 TRP    47      44.115 -26.647  13.226  1.00  0.00
H
ATOM    812  CE2 TRP    47      44.098 -28.511  12.198  1.00  0.00
C
ATOM    813  CE3 TRP    47      43.319 -30.673  11.380  1.00  0.00
C
ATOM    814  HE3 TRP    47      42.589 -31.466  11.350  1.00  0.00
H
ATOM    815  CZ2 TRP    47      45.272 -28.591  11.429  1.00  0.00
C
ATOM    816  HZ2 TRP    47      45.999 -27.798  11.449  1.00  0.00
H
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ATOM    817  CZ3 TRP    47      44.500 -30.754  10.597  1.00  0.00
C
ATOM    818  HZ3 TRP    47      44.669 -31.611   9.960  1.00  0.00
H
ATOM    819  CH2 TRP    47      45.459 -29.701  10.631  1.00  0.00
C
ATOM    820  HH2 TRP    47      46.336 -29.757  10.007  1.00  0.00
H
ATOM    821  N   LYS    48      38.661 -31.441  15.138  1.00  0.00
N
ATOM    822  H   LYS    48      39.492 -32.018  15.261  1.00  0.00
H
ATOM    823  CA  LYS    48      37.342 -32.058  15.292  1.00  0.00
C
ATOM    824  HA  LYS    48      36.765 -31.867  14.400  1.00  0.00
H
ATOM    825  C   LYS    48      36.584 -31.460  16.462  1.00  0.00
C
ATOM    826  O   LYS    48      35.372 -31.277  16.412  1.00  0.00
O
ATOM    827  CB  LYS    48      37.462 -33.567  15.483  1.00  0.00
C
ATOM    828 1HB  LYS    48      38.246 -33.760  16.213  1.00  0.00
H
ATOM    829 2HB  LYS    48      36.523 -33.945  15.888  1.00  0.00
H
ATOM    830  CG  LYS    48      37.766 -34.336  14.204  1.00  0.00
C
ATOM    831 1HG  LYS    48      36.903 -34.300  13.542  1.00  0.00
H
ATOM    832 2HG  LYS    48      38.616 -33.895  13.692  1.00  0.00
H
ATOM    833  CD  LYS    48      38.088 -35.768  14.564  1.00  0.00
C
ATOM    834 1HD  LYS    48      38.919 -35.768  15.268  1.00  0.00
H
ATOM    835 2HD  LYS    48      37.221 -36.216  15.049  1.00  0.00
H
ATOM    836  CE  LYS    48      38.474 -36.611  13.364  1.00  0.00
C
ATOM    837 1HE  LYS    48      37.641 -36.661  12.659  1.00  0.00
H
ATOM    838 2HE  LYS    48      39.351 -36.179  12.876  1.00  0.00
H
ATOM    839  NZ  LYS    48      38.794 -37.974  13.890  1.00  0.00
N
ATOM    840 1HZ  LYS    48      39.013 -38.612  13.139  1.00  0.00
H
ATOM    841 2HZ  LYS    48      37.997 -38.344  14.398  1.00  0.00
H
ATOM    842 3HZ  LYS    48      39.571 -37.919  14.544  1.00  0.00
H
ATOM    843  N   THR    49      37.307 -31.139  17.519  1.00  0.00
N
ATOM    844  H   THR    49      38.301 -31.338  17.526  1.00  0.00
H
ATOM    845  CA  THR    49      36.702 -30.508  18.685  1.00  0.00
C
ATOM    846  HA  THR    49      35.797 -31.049  18.954  1.00  0.00
H
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ATOM    847  C   THR    49      36.333 -29.062  18.356  1.00  0.00
C
ATOM    848  O   THR    49      35.267 -28.567  18.729  1.00  0.00
O
ATOM    849  CB  THR    49      37.690 -30.575  19.865  1.00  0.00
C
ATOM    850  HB  THR    49      38.547 -29.933  19.667  1.00  0.00
H
ATOM    851  OG1 THR    49      38.138 -31.930  19.995  1.00  0.00
O
ATOM    852  HG1 THR    49      38.895 -32.060  19.401  1.00  0.00
H
ATOM    853  CG2 THR    49      37.047 -30.181  21.177  1.00  0.00
C
ATOM    854 1HG2 THR    49      37.778 -30.294  21.977  1.00  0.00
H
ATOM    855 2HG2 THR    49      36.187 -30.818  21.383  1.00  0.00
H
ATOM    856 3HG2 THR    49      36.731 -29.139  21.140  1.00  0.00
H
ATOM    857  N   LEU    50      37.206 -28.383  17.627  1.00  0.00
N
ATOM    858  H   LEU    50      38.072 -28.832  17.343  1.00  0.00
H
ATOM    859  CA  LEU    50      37.013 -26.976  17.287  1.00  0.00
C
ATOM    860  HA  LEU    50      36.788 -26.437  18.203  1.00  0.00
H
ATOM    861  C   LEU    50      35.879 -26.669  16.323  1.00  0.00
C
ATOM    862  O   LEU    50      35.208 -25.647  16.490  1.00  0.00
O
ATOM    863  CB  LEU    50      38.311 -26.411  16.710  1.00  0.00
C
ATOM    864 1HB  LEU    50      38.648 -27.075  15.915  1.00  0.00
H
ATOM    865 2HB  LEU    50      38.101 -25.438  16.269  1.00  0.00
H
ATOM    866  CG  LEU    50      39.443 -26.238  17.732  1.00  0.00
C
ATOM    867  HG  LEU    50      39.549 -27.154  18.304  1.00  0.00
H
ATOM    868  CD1 LEU    50      40.762 -25.974  17.027  1.00  0.00
C
ATOM    869 1HD1 LEU    50      41.541 -25.849  17.774  1.00  0.00
H
ATOM    870 2HD1 LEU    50      40.691 -25.074  16.418  1.00  0.00
H
ATOM    871 3HD1 LEU    50      41.014 -26.826  16.398  1.00  0.00
H
ATOM    872  CD2 LEU    50      39.157 -25.119  18.710  1.00  0.00
C
ATOM    873 1HD2 LEU    50      39.989 -25.034  19.404  1.00  0.00
H
ATOM    874 2HD2 LEU    50      38.261 -25.343  19.288  1.00  0.00
H
ATOM    875 3HD2 LEU    50      39.022 -24.175  18.181  1.00  0.00
H
ATOM    876  N   PHE    51      35.642 -27.499  15.317  1.00  0.00
N
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ATOM    877  H   PHE    51      36.211 -28.328  15.180  1.00  0.00
H
ATOM    878  CA  PHE    51      34.615 -27.146  14.336  1.00  0.00
C
ATOM    879  HA  PHE    51      34.791 -26.108  14.056  1.00  0.00
H
ATOM    880  C   PHE    51      33.196 -27.222  14.876  1.00  0.00
C
ATOM    881  O   PHE    51      32.289 -26.669  14.257  1.00  0.00
O
ATOM    882  CB  PHE    51      34.724 -27.972  13.043  1.00  0.00
C
ATOM    883 1HB  PHE    51      34.155 -27.457  12.270  1.00  0.00
H
ATOM    884 2HB  PHE    51      35.764 -27.999  12.737  1.00  0.00
H
ATOM    885  CG  PHE    51      34.192 -29.387  13.136  1.00  0.00
C
ATOM    886  CD1 PHE    51      32.811 -29.633  13.141  1.00  0.00
C
ATOM    887  HD1 PHE    51      32.125 -28.809  13.099  1.00  0.00
H
ATOM    888  CD2 PHE    51      35.059 -30.487  13.146  1.00  0.00
C
ATOM    889  HD2 PHE    51      36.124 -30.328  13.092  1.00  0.00
H
ATOM    890  CE1 PHE    51      32.293 -30.930  13.239  1.00  0.00
C
ATOM    891  HE1 PHE    51      31.227 -31.072  13.302  1.00  0.00
H
ATOM    892  CE2 PHE    51      34.544 -31.817  13.206  1.00  0.00
C
ATOM    893  HE2 PHE    51      35.214 -32.663  13.208  1.00  0.00
H
ATOM    894  CZ  PHE    51      33.158 -32.029  13.277  1.00  0.00
C
ATOM    895  HZ  PHE    51      32.758 -33.029  13.346  1.00  0.00
H
ATOM    896  N   ASP    52      32.993 -27.961  15.962  1.00  0.00
N
ATOM    897  H   ASP    52      33.786 -28.307  16.482  1.00  0.00
H
ATOM    898  CA  ASP    52      31.654 -28.425  16.336  1.00  0.00
C
ATOM    899  HA  ASP    52      31.002 -28.215  15.490  1.00  0.00
H
ATOM    900  C   ASP    52      30.992 -27.807  17.573  1.00  0.00
C
ATOM    901  O   ASP    52      30.937 -28.441  18.640  1.00  0.00
O
ATOM    902  CB  ASP    52      31.666 -29.950  16.496  1.00  0.00
C
ATOM    903 1HB  ASP    52      32.310 -30.378  15.738  1.00  0.00
H
ATOM    904 2HB  ASP    52      32.088 -30.226  17.462  1.00  0.00
H
ATOM    905  CG  ASP    52      30.278 -30.551  16.351  1.00  0.00
C
ATOM    906  OD1 ASP    52      29.309 -29.777  16.164  1.00  0.00
O
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ATOM    907  OD2 ASP    52      30.124 -31.786  16.471  1.00  0.00
O
ATOM    908  N   PRO    53      30.436 -26.587  17.456  1.00  0.00
N
ATOM    909  CA  PRO    53      29.765 -26.086  18.660  1.00  0.00
C
ATOM    910  HA  PRO    53      30.430 -26.138  19.519  1.00  0.00
H
ATOM    911  C   PRO    53      28.472 -26.820  18.985  1.00  0.00
C
ATOM    912  O   PRO    53      28.008 -26.802  20.123  1.00  0.00
O
ATOM    913  CB  PRO    53      29.487 -24.628  18.303  1.00  0.00
C
ATOM    914 1HB  PRO    53      28.595 -24.261  18.806  1.00  0.00
H
ATOM    915 2HB  PRO    53      30.344 -24.017  18.564  1.00  0.00
H
ATOM    916  CG  PRO    53      29.306 -24.640  16.846  1.00  0.00
C
ATOM    917 1HG  PRO    53      28.313 -25.008  16.594  1.00  0.00
H
ATOM    918 2HG  PRO    53      29.463 -23.648  16.426  1.00  0.00
H
ATOM    919  CD  PRO    53      30.350 -25.596  16.366  1.00  0.00
C
ATOM    920 1HD  PRO    53      30.043 -26.061  15.431  1.00  0.00
H
ATOM    921 2HD  PRO    53      31.308 -25.086  16.249  1.00  0.00
H
ATOM    922  N   GLU    54      27.891 -27.486  17.999  1.00  0.00
N
ATOM    923  H   GLU    54      28.297 -27.470  17.075  1.00  0.00
H
ATOM    924  CA  GLU    54      26.661 -28.239  18.197  1.00  0.00
C
ATOM    925  HA  GLU    54      25.946 -27.636  18.759  1.00  0.00
H
ATOM    926  C   GLU    54      26.957 -29.528  18.951  1.00  0.00
C
ATOM    927  O   GLU    54      26.090 -30.103  19.612  1.00  0.00
O
ATOM    928  CB  GLU    54      26.077 -28.591  16.835  1.00  0.00
C
ATOM    929 1HB  GLU    54      26.506 -27.920  16.096  1.00  0.00
H
ATOM    930 2HB  GLU    54      26.366 -29.610  16.581  1.00  0.00
H
ATOM    931  CG  GLU    54      24.574 -28.466  16.791  1.00  0.00
C
ATOM    932 1HG  GLU    54      24.149 -29.072  17.593  1.00  0.00
H
ATOM    933 2HG  GLU    54      24.297 -27.425  16.960  1.00  0.00
H
ATOM    934  CD  GLU    54      23.993 -28.929  15.470  1.00  0.00
C
ATOM    935  OE1 GLU    54      24.709 -29.049  14.450  1.00  0.00
O
ATOM    936  OE2 GLU    54      22.775 -29.215  15.447  1.00  0.00
O
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ATOM    937  N   SER    55      28.203 -29.965  18.818  1.00  0.00
N
ATOM    938  H   SER    55      28.831 -29.423  18.233  1.00  0.00
H
ATOM    939  CA  SER    55      28.733 -31.193  19.405  1.00  0.00
C
ATOM    940  HA  SER    55      29.718 -31.359  18.969  1.00  0.00
H
ATOM    941  C   SER    55      27.881 -32.406  19.030  1.00  0.00
C
ATOM    942  O   SER    55      27.593 -33.288  19.848  1.00  0.00
O
ATOM    943  CB  SER    55      28.936 -31.011  20.907  1.00  0.00
C
ATOM    944 1HB  SER    55      27.968 -30.903  21.393  1.00  0.00
H
ATOM    945 2HB  SER    55      29.453 -31.881  21.314  1.00  0.00
H
ATOM    946  OG  SER    55      29.710 -29.841  21.136  1.00  0.00
O
ATOM    947  HG  SER    55      30.097 -29.557  20.297  1.00  0.00
H
ATOM    948  N   THR    56      27.477 -32.448  17.766  1.00  0.00
N
ATOM    949  H   THR    56      27.756 -31.703  17.130  1.00  0.00
H
ATOM    950  CA  THR    56      26.702 -33.559  17.213  1.00  0.00
C
ATOM    951  HA  THR    56      26.067 -33.993  17.983  1.00  0.00
H
ATOM    952  C   THR    56      27.630 -34.652  16.699  1.00  0.00
C
ATOM    953  O   THR    56      27.189 -35.768  16.420  1.00  0.00
O
ATOM    954  CB  THR    56      25.814 -33.087  16.053  1.00  0.00
C
ATOM    955  HB  THR    56      25.429 -33.950  15.508  1.00  0.00
H
ATOM    956  OG1 THR    56      26.591 -32.260  15.185  1.00  0.00
O
ATOM    957  HG1 THR    56      26.011 -31.907  14.499  1.00  0.00
H
ATOM    958  CG2 THR    56      24.647 -32.268  16.559  1.00  0.00
C
ATOM    959 1HG2 THR    56      24.083 -31.881  15.710  1.00  0.00
H
ATOM    960 2HG2 THR    56      25.001 -31.437  17.166  1.00  0.00
H
ATOM    961 3HG2 THR    56      23.990 -32.896  17.160  1.00  0.00
H
ATOM    962  N   GLY    57      28.921 -34.360  16.613  1.00  0.00
N
ATOM    963  H   GLY    57      29.244 -33.402  16.769  1.00  0.00
H
ATOM    964  CA  GLY    57      29.902 -35.387  16.305  1.00  0.00
C
ATOM    965 1HA  GLY    57      30.883 -35.040  16.628  1.00  0.00
H
ATOM    966 2HA  GLY    57      29.655 -36.293  16.856  1.00  0.00
H
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ATOM    967  C   GLY    57      29.963 -35.725  14.832  1.00  0.00
C
ATOM    968  O   GLY    57      30.356 -36.835  14.457  1.00  0.00
O
ATOM    969  N   ARG    58      29.557 -34.778  13.997  1.00  0.00
N
ATOM    970  H   ARG    58      29.286 -33.872  14.373  1.00  0.00
H
ATOM    971  CA  ARG    58      29.520 -34.934  12.543  1.00  0.00
C
ATOM    972  HA  ARG    58      30.303 -35.617  12.212  1.00  0.00
H
ATOM    973  C   ARG    58      29.794 -33.540  12.017  1.00  0.00
C
ATOM    974  O   ARG    58      29.553 -32.586  12.745  1.00  0.00
O
ATOM    975  CB  ARG    58      28.143 -35.432  12.075  1.00  0.00
C
ATOM    976 1HB  ARG    58      28.182 -35.627  11.003  1.00  0.00
H
ATOM    977 2HB  ARG    58      27.930 -36.371  12.586  1.00  0.00
H
ATOM    978  CG  ARG    58      26.994 -34.458  12.349  1.00  0.00
C
ATOM    979 1HG  ARG    58      27.031 -34.148  13.392  1.00  0.00
H
ATOM    980 2HG  ARG    58      27.102 -33.579  11.714  1.00  0.00
H
ATOM    981  CD  ARG    58      25.645 -35.086  12.095  1.00  0.00
C
ATOM    982 1HD  ARG    58      25.595 -35.437  11.064  1.00  0.00
H
ATOM    983 2HD  ARG    58      25.527 -35.935  12.766  1.00  0.00
H
ATOM    984  NE  ARG    58      24.559 -34.130  12.341  1.00  0.00
N
ATOM    985  HE  ARG    58      24.818 -33.161  12.496  1.00  0.00
H
ATOM    986  CZ  ARG    58      23.266 -34.413  12.391  1.00  0.00
C
ATOM    987  NH1 ARG    58      22.786 -35.622  12.310  1.00  0.00
N
ATOM    988 1HH1 ARG    58      23.403 -36.406  12.164  1.00  0.00
H
ATOM    989 2HH1 ARG    58      21.786 -35.751  12.380  1.00  0.00
H
ATOM    990  NH2 ARG    58      22.412 -33.453  12.578  1.00  0.00
N
ATOM    991 1HH2 ARG    58      22.730 -32.502  12.691  1.00  0.00
H
ATOM    992 2HH2 ARG    58      21.429 -33.670  12.624  1.00  0.00
H
ATOM    993  N   ILE    59      30.267 -33.411  10.789  1.00  0.00
N
ATOM    994  H   ILE    59      30.421 -34.244  10.228  1.00  0.00
H
ATOM    995  CA  ILE    59      30.574 -32.106  10.212  1.00  0.00
C
ATOM    996  HA  ILE    59      30.369 -31.353  10.970  1.00  0.00
H
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ATOM    997  C   ILE    59      29.623 -31.806   9.057  1.00  0.00
C
ATOM    998  O   ILE    59      29.295 -32.660   8.225  1.00  0.00
O
ATOM    999  CB  ILE    59      32.092 -31.986   9.874  1.00  0.00
C
ATOM   1000  HB  ILE    59      32.637 -32.348  10.741  1.00  0.00
H
ATOM   1001  CG1 ILE    59      32.473 -30.517   9.672  1.00  0.00
C
ATOM   1002 1HG1 ILE    59      32.079 -30.173   8.717  1.00  0.00
H
ATOM   1003 2HG1 ILE    59      32.004 -29.939  10.463  1.00  0.00
H
ATOM   1004  CG2 ILE    59      32.525 -32.841   8.696  1.00  0.00
C
ATOM   1005 1HG2 ILE    59      33.601 -32.770   8.553  1.00  0.00
H
ATOM   1006 2HG2 ILE    59      32.025 -32.512   7.785  1.00  0.00
H
ATOM   1007 3HG2 ILE    59      32.282 -33.883   8.898  1.00  0.00
H
ATOM   1008  CD1 ILE    59      33.959 -30.249   9.720  1.00  0.00
C
ATOM   1009 1HD1 ILE    59      34.127 -29.181   9.851  1.00  0.00
H
ATOM   1010 2HD1 ILE    59      34.432 -30.578   8.799  1.00  0.00
H
ATOM   1011 3HD1 ILE    59      34.409 -30.777  10.558  1.00  0.00
H
ATOM   1012  N   THR    60      29.139 -30.577   9.064  1.00  0.00
N
ATOM   1013  H   THR    60      29.456 -29.927   9.767  1.00  0.00
H
ATOM   1014  CA  THR    60      28.171 -30.055   8.111  1.00  0.00
C
ATOM   1015  HA  THR    60      27.759 -30.834   7.475  1.00  0.00
H
ATOM   1016  C   THR    60      28.941 -29.039   7.283  1.00  0.00
C
ATOM   1017  O   THR    60      30.067 -28.706   7.651  1.00  0.00
O
ATOM   1018  CB  THR    60      27.059 -29.356   8.882  1.00  0.00
C
ATOM   1019  HB  THR    60      26.390 -28.841   8.194  1.00  0.00
H
ATOM   1020  OG1 THR    60      27.680 -28.434   9.777  1.00  0.00
O
ATOM   1021  HG1 THR    60      27.089 -27.669   9.890  1.00  0.00
H
ATOM   1022  CG2 THR    60      26.279 -30.344   9.736  1.00  0.00
C
ATOM   1023 1HG2 THR    60      25.432 -29.831  10.183  1.00  0.00
H
ATOM   1024 2HG2 THR    60      26.908 -30.745  10.532  1.00  0.00
H
ATOM   1025 3HG2 THR    60      25.908 -31.156   9.114  1.00  0.00
H
ATOM   1026  N   LEU    61      28.392 -28.550   6.182  1.00  0.00
N
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ATOM   1027  H   LEU    61      27.442 -28.818   5.927  1.00  0.00
H
ATOM   1028  CA  LEU    61      29.153 -27.681   5.286  1.00  0.00
C
ATOM   1029  HA  LEU    61      30.028 -28.235   4.948  1.00  0.00
H
ATOM   1030  C   LEU    61      29.662 -26.404   5.945  1.00  0.00
C
ATOM   1031  O   LEU    61      30.818 -26.038   5.760  1.00  0.00
O
ATOM   1032  CB  LEU    61      28.309 -27.300   4.064  1.00  0.00
C
ATOM   1033 1HB  LEU    61      28.008 -28.214   3.553  1.00  0.00
H
ATOM   1034 2HB  LEU    61      27.410 -26.800   4.423  1.00  0.00
H
ATOM   1035  CG  LEU    61      28.984 -26.359   3.048  1.00  0.00
C
ATOM   1036  HG  LEU    61      29.249 -25.435   3.560  1.00  0.00
H
ATOM   1037  CD1 LEU    61      30.256 -26.936   2.439  1.00  0.00
C
ATOM   1038 1HD1 LEU    61      30.703 -26.189   1.786  1.00  0.00
H
ATOM   1039 2HD1 LEU    61      30.027 -27.835   1.867  1.00  0.00
H
ATOM   1040 3HD1 LEU    61      30.979 -27.175   3.218  1.00  0.00
H
ATOM   1041  CD2 LEU    61      28.014 -25.998   1.938  1.00  0.00
C
ATOM   1042 1HD2 LEU    61      28.477 -25.269   1.271  1.00  0.00
H
ATOM   1043 2HD2 LEU    61      27.118 -25.548   2.365  1.00  0.00
H
ATOM   1044 3HD2 LEU    61      27.743 -26.887   1.369  1.00  0.00
H
ATOM   1045  N   GLU    62      28.848 -25.716   6.728  1.00  0.00
N
ATOM   1046  H   GLU    62      27.898 -26.036   6.906  1.00  0.00
H
ATOM   1047  CA  GLU    62      29.291 -24.446   7.302  1.00  0.00
C
ATOM   1048  HA  GLU    62      29.719 -23.852   6.494  1.00  0.00
H
ATOM   1049  C   GLU    62      30.399 -24.666   8.335  1.00  0.00
C
ATOM   1050  O   GLU    62      31.325 -23.861   8.472  1.00  0.00
O
ATOM   1051  CB  GLU    62      28.103 -23.649   7.861  1.00  0.00
C
ATOM   1052 1HB  GLU    62      28.447 -22.627   8.016  1.00  0.00
H
ATOM   1053 2HB  GLU    62      27.327 -23.617   7.096  1.00  0.00
H
ATOM   1054  CG  GLU    62      27.465 -24.109   9.178  1.00  0.00
C
ATOM   1055 1HG  GLU    62      28.234 -24.139   9.951  1.00  0.00
H
ATOM   1056 2HG  GLU    62      26.737 -23.353   9.461  1.00  0.00
H
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ATOM   1057  CD  GLU    62      26.749 -25.457   9.143  1.00  0.00
C
ATOM   1058  OE1 GLU    62      26.349 -25.963   8.068  1.00  0.00
O
ATOM   1059  OE2 GLU    62      26.585 -26.052  10.227  1.00  0.00
O
ATOM   1060  N   LYS    63      30.361 -25.813   9.002  1.00  0.00
N
ATOM   1061  H   LYS    63      29.593 -26.453   8.841  1.00  0.00
H
ATOM   1062  CA  LYS    63      31.407 -26.186   9.953  1.00  0.00
C
ATOM   1063  HA  LYS    63      31.667 -25.322  10.567  1.00  0.00
H
ATOM   1064  C   LYS    63      32.662 -26.635   9.208  1.00  0.00
C
ATOM   1065  O   LYS    63      33.777 -26.432   9.664  1.00  0.00
O
ATOM   1066  CB  LYS    63      30.902 -27.305  10.866  1.00  0.00
C
ATOM   1067 1HB  LYS    63      30.535 -28.121  10.247  1.00  0.00
H
ATOM   1068 2HB  LYS    63      31.745 -27.664  11.449  1.00  0.00
H
ATOM   1069  CG  LYS    63      29.791 -26.883  11.828  1.00  0.00
C
ATOM   1070 1HG  LYS    63      30.180 -26.117  12.497  1.00  0.00
H
ATOM   1071 2HG  LYS    63      28.969 -26.460  11.255  1.00  0.00
H
ATOM   1072  CD  LYS    63      29.261 -28.049  12.669  1.00  0.00
C
ATOM   1073 1HD  LYS    63      28.882 -28.833  12.015  1.00  0.00
H
ATOM   1074 2HD  LYS    63      30.076 -28.456  13.264  1.00  0.00
H
ATOM   1075  CE  LYS    63      28.154 -27.604  13.618  1.00  0.00
C
ATOM   1076 1HE  LYS    63      27.938 -28.427  14.304  1.00  0.00
H
ATOM   1077 2HE  LYS    63      28.527 -26.766  14.208  1.00  0.00
H
ATOM   1078  NZ  LYS    63      26.871 -27.183  12.960  1.00  0.00
N
ATOM   1079 1HZ  LYS    63      26.279 -26.727  13.648  1.00  0.00
H
ATOM   1080 2HZ  LYS    63      26.378 -27.988  12.597  1.00  0.00
H
ATOM   1081 3HZ  LYS    63      27.049 -26.539  12.197  1.00  0.00
H
ATOM   1082  N   PHE    64      32.494 -27.220   8.033  1.00  0.00
N
ATOM   1083  H   PHE    64      31.553 -27.399   7.698  1.00  0.00
H
ATOM   1084  CA  PHE    64      33.624 -27.646   7.208  1.00  0.00
C
ATOM   1085  HA  PHE    64      34.327 -28.196   7.827  1.00  0.00
H
ATOM   1086  C   PHE    64      34.350 -26.456   6.604  1.00  0.00
C
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ATOM   1087  O   PHE    64      35.576 -26.450   6.496  1.00  0.00
O
ATOM   1088  CB  PHE    64      33.124 -28.564   6.100  1.00  0.00
C
ATOM   1089 1HB  PHE    64      32.485 -29.324   6.548  1.00  0.00
H
ATOM   1090 2HB  PHE    64      32.525 -27.987   5.397  1.00  0.00
H
ATOM   1091  CG  PHE    64      34.216 -29.266   5.341  1.00  0.00
C
ATOM   1092  CD1 PHE    64      34.727 -30.492   5.809  1.00  0.00
C
ATOM   1093  HD1 PHE    64      34.383 -30.895   6.747  1.00  0.00
H
ATOM   1094  CD2 PHE    64      34.660 -28.769   4.104  1.00  0.00
C
ATOM   1095  HD2 PHE    64      34.282 -27.827   3.731  1.00  0.00
H
ATOM   1096  CE1 PHE    64      35.665 -31.227   5.044  1.00  0.00
C
ATOM   1097  HE1 PHE    64      36.047 -32.168   5.408  1.00  0.00
H
ATOM   1098  CE2 PHE    64      35.580 -29.506   3.320  1.00  0.00
C
ATOM   1099  HE2 PHE    64      35.900 -29.126   2.363  1.00  0.00
H
ATOM   1100  CZ  PHE    64      36.086 -30.735   3.797  1.00  0.00
C
ATOM   1101  HZ  PHE    64      36.802 -31.292   3.212  1.00  0.00
H
ATOM   1102  N   CYS    65      33.595 -25.417   6.280  1.00  0.00
N
ATOM   1103  H   CYS    65      32.586 -25.485   6.363  1.00  0.00
H
ATOM   1104  CA  CYS    65      34.183 -24.171   5.809  1.00  0.00
C
ATOM   1105  HA  CYS    65      34.795 -24.368   4.928  1.00  0.00
H
ATOM   1106  C   CYS    65      35.086 -23.613   6.907  1.00  0.00
C
ATOM   1107  O   CYS    65      36.207 -23.192   6.636  1.00  0.00
O
ATOM   1108  CB  CYS    65      33.082 -23.168   5.449  1.00  0.00
C
ATOM   1109 1HB  CYS    65      32.445 -23.007   6.320  1.00  0.00
H
ATOM   1110 2HB  CYS    65      33.553 -22.219   5.193  1.00  0.00
H
ATOM   1111  SG  CYS    65      32.053 -23.692   4.051  1.00  0.00
S
ATOM   1112  HG  CYS    65      31.576 -24.814   4.611  1.00  0.00
H
ATOM   1113  N   GLU    66      34.640 -23.663   8.153  1.00  0.00
N
ATOM   1114  H   GLU    66      33.698 -23.980   8.346  1.00  0.00
H
ATOM   1115  CA  GLU    66      35.492 -23.244   9.265  1.00  0.00
C
ATOM   1116  HA  GLU    66      35.904 -22.263   9.028  1.00  0.00
H
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ATOM   1117  C   GLU    66      36.677 -24.185   9.502  1.00  0.00
C
ATOM   1118  O   GLU    66      37.789 -23.720   9.756  1.00  0.00
O
ATOM   1119  CB  GLU    66      34.647 -23.116  10.540  1.00  0.00
C
ATOM   1120 1HB  GLU    66      33.860 -22.385  10.354  1.00  0.00
H
ATOM   1121 2HB  GLU    66      34.170 -24.075  10.734  1.00  0.00
H
ATOM   1122  CG  GLU    66      35.405 -22.717  11.813  1.00  0.00
C
ATOM   1123 1HG  GLU    66      34.723 -22.815  12.658  1.00  0.00
H
ATOM   1124 2HG  GLU    66      36.224 -23.416  11.965  1.00  0.00
H
ATOM   1125  CD  GLU    66      35.982 -21.306  11.815  1.00  0.00
C
ATOM   1126  OE1 GLU    66      35.785 -20.515  10.866  1.00  0.00
O
ATOM   1127  OE2 GLU    66      36.634 -20.949  12.820  1.00  0.00
O
ATOM   1128  N   VAL    67      36.490 -25.496   9.418  1.00  0.00
N
ATOM   1129  H   VAL    67      35.565 -25.869   9.220  1.00  0.00
H
ATOM   1130  CA  VAL    67      37.594 -26.410   9.718  1.00  0.00
C
ATOM   1131  HA  VAL    67      38.032 -26.051  10.649  1.00  0.00
H
ATOM   1132  C   VAL    67      38.699 -26.341   8.669  1.00  0.00
C
ATOM   1133  O   VAL    67      39.877 -26.394   9.014  1.00  0.00
O
ATOM   1134  CB  VAL    67      37.119 -27.873   9.997  1.00  0.00
C
ATOM   1135  HB  VAL    67      36.108 -27.822  10.395  1.00  0.00
H
ATOM   1136  CG1 VAL    67      37.100 -28.775   8.752  1.00  0.00
C
ATOM   1137 1HG1 VAL    67      36.678 -29.745   9.010  1.00  0.00
H
ATOM   1138 2HG1 VAL    67      38.108 -28.925   8.375  1.00  0.00
H
ATOM   1139 3HG1 VAL    67      36.491 -28.324   7.973  1.00  0.00
H
ATOM   1140  CG2 VAL    67      38.000 -28.514  11.063  1.00  0.00
C
ATOM   1141 1HG2 VAL    67      37.641 -29.518  11.289  1.00  0.00
H
ATOM   1142 2HG2 VAL    67      37.953 -27.921  11.979  1.00  0.00
H
ATOM   1143 3HG2 VAL    67      39.034 -28.558  10.726  1.00  0.00
H
ATOM   1144  N   LEU    68      38.363 -26.166   7.397  1.00  0.00
N
ATOM   1145  H   LEU    68      37.384 -26.135   7.120  1.00  0.00
H
ATOM   1146  CA  LEU    68      39.408 -26.036   6.386  1.00  0.00
C
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ATOM   1147  HA  LEU    68      40.250 -26.662   6.673  1.00  0.00
H
ATOM   1148  C   LEU    68      39.914 -24.605   6.373  1.00  0.00
C
ATOM   1149  O   LEU    68      41.068 -24.361   6.040  1.00  0.00
O
ATOM   1150  CB  LEU    68      38.957 -26.483   4.993  1.00  0.00
C
ATOM   1151 1HB  LEU    68      38.101 -25.878   4.700  1.00  0.00
H
ATOM   1152 2HB  LEU    68      39.775 -26.236   4.318  1.00  0.00
H
ATOM   1153  CG  LEU    68      38.606 -27.962   4.744  1.00  0.00
C
ATOM   1154  HG  LEU    68      37.573 -28.124   5.048  1.00  0.00
H
ATOM   1155  CD1 LEU    68      38.740 -28.274   3.251  1.00  0.00
C
ATOM   1156 1HD1 LEU    68      38.527 -29.327   3.069  1.00  0.00
H
ATOM   1157 2HD1 LEU    68      39.748 -28.047   2.902  1.00  0.00
H
ATOM   1158 3HD1 LEU    68      38.021 -27.679   2.694  1.00  0.00
H
ATOM   1159  CD2 LEU    68      39.475 -28.958   5.503  1.00  0.00
C
ATOM   1160 1HD2 LEU    68      39.164 -29.974   5.262  1.00  0.00
H
ATOM   1161 2HD2 LEU    68      39.349 -28.812   6.570  1.00  0.00
H
ATOM   1162 3HD2 LEU    68      40.526 -28.823   5.244  1.00  0.00
H
ATOM   1163  N   GLY    69      39.101 -23.679   6.860  1.00  0.00
N
ATOM   1164  H   GLY    69      38.140 -23.909   7.086  1.00  0.00
H
ATOM   1165  CA  GLY    69      39.567 -22.327   7.100  1.00  0.00
C
ATOM   1166 1HA  GLY    69      39.956 -21.912   6.170  1.00  0.00
H
ATOM   1167 2HA  GLY    69      38.736 -21.713   7.448  1.00  0.00
H
ATOM   1168  C   GLY    69      40.672 -22.313   8.139  1.00  0.00
C
ATOM   1169  O   GLY    69      41.639 -21.578   7.974  1.00  0.00
O
ATOM   1170  N   LEU    70      40.587 -23.131   9.182  1.00  0.00
N
ATOM   1171  H   LEU    70      39.739 -23.673   9.327  1.00  0.00
H
ATOM   1172  CA  LEU    70      41.699 -23.258  10.132  1.00  0.00
C
ATOM   1173  HA  LEU    70      42.010 -22.268  10.464  1.00  0.00
H
ATOM   1174  C   LEU    70      42.896 -23.945   9.501  1.00  0.00
C
ATOM   1175  O   LEU    70      44.030 -23.547   9.713  1.00  0.00
O
ATOM   1176  CB  LEU    70      41.341 -24.133  11.336  1.00  0.00
C
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ATOM   1177 1HB  LEU    70      40.885 -25.046  10.958  1.00  0.00
H
ATOM   1178 2HB  LEU    70      42.286 -24.423  11.795  1.00  0.00
H
ATOM   1179  CG  LEU    70      40.460 -23.614  12.473  1.00  0.00
C
ATOM   1180  HG  LEU    70      39.485 -23.332  12.078  1.00  0.00
H
ATOM   1181  CD1 LEU    70      40.294 -24.762  13.461  1.00  0.00
C
ATOM   1182 1HD1 LEU    70      39.624 -24.454  14.262  1.00  0.00
H
ATOM   1183 2HD1 LEU    70      41.257 -25.042  13.888  1.00  0.00
H
ATOM   1184 3HD1 LEU    70      39.848 -25.624  12.962  1.00  0.00
H
ATOM   1185  CD2 LEU    70      41.086 -22.413  13.181  1.00  0.00
C
ATOM   1186 1HD2 LEU    70      40.445 -22.103  14.005  1.00  0.00
H
ATOM   1187 2HD2 LEU    70      41.186 -21.584  12.484  1.00  0.00
H
ATOM   1188 3HD2 LEU    70      42.069 -22.674  13.574  1.00  0.00
H
ATOM   1189  N   GLN    71      42.645 -25.005   8.751  1.00  0.00
N
ATOM   1190  H   GLN    71      41.686 -25.286   8.584  1.00  0.00
H
ATOM   1191  CA  GLN    71      43.730 -25.811   8.198  1.00  0.00
C
ATOM   1192  HA  GLN    71      44.419 -26.079   9.000  1.00  0.00
H
ATOM   1193  C   GLN    71      44.537 -25.044   7.165  1.00  0.00
C
ATOM   1194  O   GLN    71      45.744 -25.220   7.065  1.00  0.00
O
ATOM   1195  CB  GLN    71      43.167 -27.096   7.600  1.00  0.00
C
ATOM   1196 1HB  GLN    71      42.329 -26.850   6.952  1.00  0.00
H
ATOM   1197 2HB  GLN    71      43.941 -27.573   7.003  1.00  0.00
H
ATOM   1198  CG  GLN    71      42.723 -28.063   8.682  1.00  0.00
C
ATOM   1199 1HG  GLN    71      43.600 -28.374   9.238  1.00  0.00
H
ATOM   1200 2HG  GLN    71      42.055 -27.555   9.373  1.00  0.00
H
ATOM   1201  CD  GLN    71      42.021 -29.292   8.162  1.00  0.00
C
ATOM   1202  OE1 GLN    71      42.503 -30.005   7.293  1.00  0.00
O
ATOM   1203  NE2 GLN    71      40.858 -29.547   8.688  1.00  0.00
N
ATOM   1204 1HE2 GLN    71      40.368 -30.369   8.386  1.00  0.00
H
ATOM   1205 2HE2 GLN    71      40.473 -28.910   9.366  1.00  0.00
H
ATOM   1206  N   ASP    72      43.915 -24.123   6.449  1.00  0.00
N
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ATOM   1207  H   ASP    72      42.908 -24.004   6.523  1.00  0.00
H
ATOM   1208  CA  ASP    72      44.665 -23.301   5.508  1.00  0.00
C
ATOM   1209  HA  ASP    72      45.191 -23.967   4.824  1.00  0.00
H
ATOM   1210  C   ASP    72      45.700 -22.424   6.213  1.00  0.00
C
ATOM   1211  O   ASP    72      46.791 -22.201   5.693  1.00  0.00
O
ATOM   1212  CB  ASP    72      43.720 -22.426   4.691  1.00  0.00
C
ATOM   1213 1HB  ASP    72      42.827 -23.003   4.456  1.00  0.00
H
ATOM   1214 2HB  ASP    72      43.431 -21.553   5.277  1.00  0.00
H
ATOM   1215  CG  ASP    72      44.347 -21.992   3.390  1.00  0.00
C
ATOM   1216  OD1 ASP    72      44.655 -22.892   2.575  1.00  0.00
O
ATOM   1217  OD2 ASP    72      44.528 -20.786   3.134  1.00  0.00
O
ATOM   1218  N   GLU    73      45.384 -22.000   7.432  1.00  0.00
N
ATOM   1219  H   GLU    73      44.494 -22.267   7.834  1.00  0.00
H
ATOM   1220  CA  GLU    73      46.282 -21.166   8.237  1.00  0.00
C
ATOM   1221  HA  GLU    73      46.699 -20.398   7.595  1.00  0.00
H
ATOM   1222  C   GLU    73      47.433 -21.952   8.858  1.00  0.00
C
ATOM   1223  O   GLU    73      48.395 -21.364   9.345  1.00  0.00
O
ATOM   1224  CB  GLU    73      45.529 -20.472   9.380  1.00  0.00
C
ATOM   1225 1HB  GLU    73      45.154 -21.230  10.065  1.00  0.00
H
ATOM   1226 2HB  GLU    73      46.233 -19.845   9.923  1.00  0.00
H
ATOM   1227  CG  GLU    73      44.365 -19.607   8.939  1.00  0.00
C
ATOM   1228 1HG  GLU    73      43.614 -20.246   8.488  1.00  0.00
H
ATOM   1229 2HG  GLU    73      43.924 -19.127   9.814  1.00  0.00
H
ATOM   1230  CD  GLU    73      44.757 -18.545   7.929  1.00  0.00
C
ATOM   1231  OE1 GLU    73      45.572 -17.642   8.237  1.00  0.00
O
ATOM   1232  OE2 GLU    73      44.219 -18.582   6.803  1.00  0.00
O
ATOM   1233  N   VAL    74      47.303 -23.272   8.851  1.00  0.00
N
ATOM   1234  H   VAL    74      46.459 -23.665   8.458  1.00  0.00
H
ATOM   1235  CA  VAL    74      48.306 -24.197   9.390  1.00  0.00
C
ATOM   1236  HA  VAL    74      48.943 -23.674  10.104  1.00  0.00
H
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ATOM   1237  C   VAL    74      49.199 -24.751   8.277  1.00  0.00
C
ATOM   1238  O   VAL    74      50.396 -24.986   8.480  1.00  0.00
O
ATOM   1239  CB  VAL    74      47.582 -25.368  10.134  1.00  0.00
C
ATOM   1240  HB  VAL    74      46.864 -25.821   9.452  1.00  0.00
H
ATOM   1241  CG1 VAL    74      48.552 -26.471  10.588  1.00  0.00
C
ATOM   1242 1HG1 VAL    74      48.057 -27.168  11.262  1.00  0.00
H
ATOM   1243 2HG1 VAL    74      49.409 -26.031  11.094  1.00  0.00
H
ATOM   1244 3HG1 VAL    74      48.907 -27.026   9.721  1.00  0.00
H
ATOM   1245  CG2 VAL    74      46.816 -24.823  11.352  1.00  0.00
C
ATOM   1246 1HG2 VAL    74      46.301 -25.633  11.863  1.00  0.00
H
ATOM   1247 2HG2 VAL    74      46.079 -24.087  11.035  1.00  0.00
H
ATOM   1248 3HG2 VAL    74      47.509 -24.343  12.044  1.00  0.00
H
ATOM   1249  N   ILE    75      48.625 -24.981   7.103  1.00  0.00
N
ATOM   1250  H   ILE    75      47.637 -24.785   6.992  1.00  0.00
H
ATOM   1251  CA  ILE    75      49.357 -25.595   5.992  1.00  0.00
C
ATOM   1252  HA  ILE    75      50.228 -26.103   6.401  1.00  0.00
H
ATOM   1253  C   ILE    75      49.887 -24.587   4.959  1.00  0.00
C
ATOM   1254  O   ILE    75      51.061 -24.660   4.584  1.00  0.00
O
ATOM   1255  CB  ILE    75      48.461 -26.685   5.308  1.00  0.00
C
ATOM   1256  HB  ILE    75      47.588 -26.189   4.883  1.00  0.00
H
ATOM   1257  CG1 ILE    75      47.958 -27.731   6.331  1.00  0.00
C
ATOM   1258 1HG1 ILE    75      47.358 -27.230   7.088  1.00  0.00
H
ATOM   1259 2HG1 ILE    75      47.294 -28.414   5.802  1.00  0.00
H
ATOM   1260  CG2 ILE    75      49.207 -27.410   4.167  1.00  0.00
C
ATOM   1261 1HG2 ILE    75      48.604 -28.238   3.790  1.00  0.00
H
ATOM   1262 2HG2 ILE    75      50.161 -27.802   4.523  1.00  0.00
H
ATOM   1263 3HG2 ILE    75      49.392 -26.715   3.349  1.00  0.00
H
ATOM   1264  CD1 ILE    75      49.016 -28.585   7.059  1.00  0.00
C
ATOM   1265 1HD1 ILE    75      48.515 -29.206   7.800  1.00  0.00
H
ATOM   1266 2HD1 ILE    75      49.737 -27.948   7.572  1.00  0.00
H
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ATOM   1267 3HD1 ILE    75      49.535 -29.235   6.354  1.00  0.00
H
ATOM   1268  N   ASN    76      49.072 -23.657   4.471  1.00  0.00
N
ATOM   1269  H   ASN    76      48.136 -23.558   4.849  1.00  0.00
H
ATOM   1270  CA  ASN    76      49.510 -22.735   3.409  1.00  0.00
C
ATOM   1271  HA  ASN    76      50.341 -23.181   2.862  1.00  0.00
H
ATOM   1272  C   ASN    76      50.018 -21.415   3.977  1.00  0.00
C
ATOM   1273  O   ASN    76      50.715 -20.646   3.311  1.00  0.00
O
ATOM   1274  CB  ASN    76      48.378 -22.468   2.414  1.00  0.00
C
ATOM   1275 1HB  ASN    76      47.453 -22.264   2.952  1.00  0.00
H
ATOM   1276 2HB  ASN    76      48.635 -21.590   1.822  1.00  0.00
H
ATOM   1277  CG  ASN    76      48.180 -23.611   1.458  1.00  0.00
C
ATOM   1278  OD1 ASN    76      49.136 -24.140   0.900  1.00  0.00
O
ATOM   1279  ND2 ASN    76      46.961 -24.000   1.243  1.00  0.00
N
ATOM   1280 1HD2 ASN    76      46.799 -24.739   0.582  1.00  0.00
H
ATOM   1281 2HD2 ASN    76      46.191 -23.551   1.730  1.00  0.00
H
ATOM   1282  N   VAL    77      49.708 -21.204   5.239  1.00  0.00
N
ATOM   1283  H   VAL    77      49.106 -21.876   5.705  1.00  0.00
H
ATOM   1284  CA  VAL    77      50.256 -20.160   6.098  1.00  0.00
C
ATOM   1285  HA  VAL    77      51.138 -19.688   5.667  1.00  0.00
H
ATOM   1286  C   VAL    77      50.635 -21.128   7.219  1.00  0.00
C
ATOM   1287  O   VAL    77      50.149 -22.249   7.170  1.00  0.00
O
ATOM   1288  CB  VAL    77      49.159 -19.110   6.439  1.00  0.00
C
ATOM   1289  HB  VAL    77      48.286 -19.643   6.790  1.00  0.00
H
ATOM   1290  CG1 VAL    77      49.588 -18.136   7.530  1.00  0.00
C
ATOM   1291 1HG1 VAL    77      48.795 -17.406   7.702  1.00  0.00
H
ATOM   1292 2HG1 VAL    77      50.497 -17.616   7.231  1.00  0.00
H
ATOM   1293 3HG1 VAL    77      49.756 -18.675   8.459  1.00  0.00
H
ATOM   1294  CG2 VAL    77      48.757 -18.329   5.181  1.00  0.00
C
ATOM   1295 1HG2 VAL    77      47.991 -17.598   5.434  1.00  0.00
H
ATOM   1296 2HG2 VAL    77      48.345 -19.012   4.438  1.00  0.00
H
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ATOM   1297 3HG2 VAL    77      49.624 -17.816   4.763  1.00  0.00
H
ATOM   1298  N   GLN    78      51.518 -20.797   8.150  1.00  0.00
N
ATOM   1299  H   GLN    78      51.901 -19.855   8.176  1.00  0.00
H
ATOM   1300  CA  GLN    78      51.996 -21.777   9.137  1.00  0.00
C
ATOM   1301  HA  GLN    78      51.454 -22.714   9.016  1.00  0.00
H
ATOM   1302  C   GLN    78      51.773 -21.313  10.573  1.00  0.00
C
ATOM   1303  O   GLN    78      52.462 -21.734  11.508  1.00  0.00
O
ATOM   1304  CB  GLN    78      53.480 -22.060   8.905  1.00  0.00
C
ATOM   1305 1HB  GLN    78      54.031 -21.126   9.007  1.00  0.00
H
ATOM   1306 2HB  GLN    78      53.823 -22.755   9.671  1.00  0.00
H
ATOM   1307  CG  GLN    78      53.790 -22.673   7.544  1.00  0.00
C
ATOM   1308 1HG  GLN    78      53.213 -23.590   7.426  1.00  0.00
H
ATOM   1309 2HG  GLN    78      53.507 -21.978   6.755  1.00  0.00
H
ATOM   1310  CD  GLN    78      55.258 -22.996   7.395  1.00  0.00
C
ATOM   1311  OE1 GLN    78      56.044 -22.847   8.328  1.00  0.00
O
ATOM   1312  NE2 GLN    78      55.651 -23.423   6.231  1.00  0.00
N
ATOM   1313 1HE2 GLN    78      56.628 -23.623   6.094  1.00  0.00
H
ATOM   1314 2HE2 GLN    78      54.980 -23.559   5.486  1.00  0.00
H
ATOM   1315  N   THR    79      50.820 -20.417  10.750  1.00  0.00
N
ATOM   1316  H   THR    79      50.249 -20.144   9.961  1.00  0.00
H
ATOM   1317  CA  THR    79      50.475 -19.898  12.069  1.00  0.00
C
ATOM   1318  HA  THR    79      51.372 -19.577  12.597  1.00  0.00
H
ATOM   1319  C   THR    79      49.790 -20.985  12.892  1.00  0.00
C
ATOM   1320  O   THR    79      49.272 -21.963  12.350  1.00  0.00
O
ATOM   1321  CB  THR    79      49.517 -18.711  11.931  1.00  0.00
C
ATOM   1322  HB  THR    79      49.064 -18.486  12.896  1.00  0.00
H
ATOM   1323  OG1 THR    79      48.507 -19.037  10.972  1.00  0.00
O
ATOM   1324  HG1 THR    79      48.475 -20.000  10.865  1.00  0.00
H
ATOM   1325  CG2 THR    79      50.239 -17.476  11.416  1.00  0.00
C
ATOM   1326 1HG2 THR    79      49.526 -16.659  11.313  1.00  0.00
H
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ATOM   1327 2HG2 THR    79      50.695 -17.673  10.447  1.00  0.00
H
ATOM   1328 3HG2 THR    79      51.012 -17.178  12.125  1.00  0.00
H
ATOM   1329  N   ALA    80      49.794 -20.833  14.206  1.00  0.00
N
ATOM   1330  H   ALA    80      50.191 -19.998  14.621  1.00  0.00
H
ATOM   1331  CA  ALA    80      49.181 -21.819  15.083  1.00  0.00
C
ATOM   1332  HA  ALA    80      49.305 -22.809  14.651  1.00  0.00
H
ATOM   1333  C   ALA    80      47.686 -21.524  15.221  1.00  0.00
C
ATOM   1334  O   ALA    80      47.266 -20.365  15.153  1.00  0.00
O
ATOM   1335  CB  ALA    80      49.872 -21.793  16.446  1.00  0.00
C
ATOM   1336 1HB  ALA    80      50.933 -22.018  16.327  1.00  0.00
H
ATOM   1337 2HB  ALA    80      49.424 -22.544  17.096  1.00  0.00
H
ATOM   1338 3HB  ALA    80      49.760 -20.811  16.904  1.00  0.00
H
ATOM   1339  N   ILE    81      46.893 -22.551  15.482  1.00  0.00
N
ATOM   1340  H   ILE    81      47.284 -23.492  15.478  1.00  0.00
H
ATOM   1341  CA  ILE    81      45.481 -22.374  15.827  1.00  0.00
C
ATOM   1342  HA  ILE    81      45.004 -21.767  15.057  1.00  0.00
H
ATOM   1343  C   ILE    81      45.366 -21.619  17.154  1.00  0.00
C
ATOM   1344  O   ILE    81      46.292 -21.626  17.970  1.00  0.00
O
ATOM   1345  CB  ILE    81      44.738 -23.744  15.910  1.00  0.00
C
ATOM   1346  HB  ILE    81      43.707 -23.552  16.200  1.00  0.00
H
ATOM   1347  CG1 ILE    81      45.379 -24.667  16.973  1.00  0.00
C
ATOM   1348 1HG1 ILE    81      46.385 -24.927  16.651  1.00  0.00
H
ATOM   1349 2HG1 ILE    81      45.464 -24.120  17.911  1.00  0.00
H
ATOM   1350  CG2 ILE    81      44.712 -24.408  14.516  1.00  0.00
C
ATOM   1351 1HG2 ILE    81      43.995 -25.225  14.523  1.00  0.00
H
ATOM   1352 2HG2 ILE    81      45.703 -24.788  14.258  1.00  0.00
H
ATOM   1353 3HG2 ILE    81      44.404 -23.683  13.760  1.00  0.00
H
ATOM   1354  CD1 ILE    81      44.636 -25.969  17.269  1.00  0.00
C
ATOM   1355 1HD1 ILE    81      45.216 -26.552  17.982  1.00  0.00
H
ATOM   1356 2HD1 ILE    81      44.508 -26.558  16.361  1.00  0.00
H
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ATOM   1357 3HD1 ILE    81      43.667 -25.743  17.705  1.00  0.00
H
ATOM   1358  N   GLN    82      44.244 -20.949  17.385  1.00  0.00
N
ATOM   1359  H   GLN    82      43.505 -20.938  16.695  1.00  0.00
H
ATOM   1360  CA  GLN    82      44.056 -20.225  18.643  1.00  0.00
C
ATOM   1361  HA  GLN    82      44.972 -19.681  18.874  1.00  0.00
H
ATOM   1362  C   GLN    82      43.784 -21.234  19.758  1.00  0.00
C
ATOM   1363  O   GLN    82      44.168 -21.027  20.905  1.00  0.00
O
ATOM   1364  CB  GLN    82      42.901 -19.225  18.524  1.00  0.00
C
ATOM   1365 1HB  GLN    82      42.995 -18.705  17.571  1.00  0.00
H
ATOM   1366 2HB  GLN    82      41.963 -19.776  18.524  1.00  0.00
H
ATOM   1367  CG  GLN    82      42.851 -18.177  19.634  1.00  0.00
C
ATOM   1368 1HG  GLN    82      41.959 -17.567  19.499  1.00  0.00
H
ATOM   1369 2HG  GLN    82      42.783 -18.681  20.597  1.00  0.00
H
ATOM   1370  CD  GLN    82      44.066 -17.270  19.643  1.00  0.00
C
ATOM   1371  OE1 GLN    82      44.410 -16.649  18.642  1.00  0.00
O
ATOM   1372  NE2 GLN    82      44.743 -17.207  20.750  1.00  0.00
N
ATOM   1373 1HE2 GLN    82      45.568 -16.623  20.793  1.00  0.00
H
ATOM   1374 2HE2 GLN    82      44.449 -17.745  21.557  1.00  0.00
H
ATOM   1375  N   GLY    83      43.162 -22.348  19.389  1.00  0.00
N
ATOM   1376  H   GLY    83      42.844 -22.448  18.429  1.00  0.00
H
ATOM   1377  CA  GLY    83      42.931 -23.453  20.308  1.00  0.00
C
ATOM   1378 1HA  GLY    83      43.033 -24.385  19.754  1.00  0.00
H
ATOM   1379 2HA  GLY    83      43.690 -23.439  21.087  1.00  0.00
H
ATOM   1380  C   GLY    83      41.561 -23.449  20.955  1.00  0.00
C
ATOM   1381  O   GLY    83      41.205 -24.371  21.687  1.00  0.00
O
ATOM   1382  N   ASN    84      40.752 -22.455  20.625  1.00  0.00
N
ATOM   1383  H   ASN    84      41.085 -21.719  20.018  1.00  0.00
H
ATOM   1384  CA  ASN    84      39.346 -22.398  21.021  1.00  0.00
C
ATOM   1385  HA  ASN    84      38.972 -23.409  21.183  1.00  0.00
H
ATOM   1386  C   ASN    84      38.626 -21.782  19.832  1.00  0.00
C
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ATOM   1387  O   ASN    84      39.264 -21.129  19.002  1.00  0.00
O
ATOM   1388  CB  ASN    84      39.113 -21.554  22.278  1.00  0.00
C
ATOM   1389 1HB  ASN    84      38.070 -21.656  22.576  1.00  0.00
H
ATOM   1390 2HB  ASN    84      39.740 -21.930  23.085  1.00  0.00
H
ATOM   1391  CG  ASN    84      39.402 -20.085  22.063  1.00  0.00
C
ATOM   1392  OD1 ASN    84      40.486 -19.692  21.640  1.00  0.00
O
ATOM   1393  ND2 ASN    84      38.448 -19.257  22.369  1.00  0.00
N
ATOM   1394 1HD2 ASN    84      38.612 -18.268  22.246  1.00  0.00
H
ATOM   1395 2HD2 ASN    84      37.564 -19.600  22.711  1.00  0.00
H
ATOM   1396  N   GLU    85      37.329 -22.015  19.712  1.00  0.00
N
ATOM   1397  H   GLU    85      36.847 -22.583  20.406  1.00  0.00
H
ATOM   1398  CA  GLU    85      36.579 -21.490  18.575  1.00  0.00
C
ATOM   1399  HA  GLU    85      37.150 -21.690  17.668  1.00  0.00
H
ATOM   1400  C   GLU    85      36.394 -19.979  18.698  1.00  0.00
C
ATOM   1401  O   GLU    85      36.371 -19.429  19.807  1.00  0.00
O
ATOM   1402  CB  GLU    85      35.223 -22.191  18.439  1.00  0.00
C
ATOM   1403 1HB  GLU    85      34.798 -21.907  17.477  1.00  0.00
H
ATOM   1404 2HB  GLU    85      35.394 -23.267  18.432  1.00  0.00
H
ATOM   1405  CG  GLU    85      34.201 -21.870  19.525  1.00  0.00
C
ATOM   1406 1HG  GLU    85      34.619 -22.118  20.500  1.00  0.00
H
ATOM   1407 2HG  GLU    85      33.979 -20.803  19.505  1.00  0.00
H
ATOM   1408  CD  GLU    85      32.909 -22.637  19.326  1.00  0.00
C
ATOM   1409  OE1 GLU    85      32.518 -22.878  18.161  1.00  0.00
O
ATOM   1410  OE2 GLU    85      32.251 -23.002  20.324  1.00  0.00
O
ATOM   1411  N   MET    86      36.226 -19.312  17.565  1.00  0.00
N
ATOM   1412  H   MET    86      36.179 -19.826  16.688  1.00  0.00
H
ATOM   1413  CA  MET    86      36.056 -17.860  17.513  1.00  0.00
C
ATOM   1414  HA  MET    86      35.959 -17.463  18.521  1.00  0.00
H
ATOM   1415  C   MET    86      34.776 -17.537  16.759  1.00  0.00
C
ATOM   1416  O   MET    86      34.785 -17.265  15.559  1.00  0.00
O
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ATOM   1417  CB  MET    86      37.249 -17.170  16.850  1.00  0.00
C
ATOM   1418 1HB  MET    86      37.402 -17.589  15.856  1.00  0.00
H
ATOM   1419 2HB  MET    86      37.014 -16.111  16.749  1.00  0.00
H
ATOM   1420  CG  MET    86      38.535 -17.287  17.649  1.00  0.00
C
ATOM   1421 1HG  MET    86      38.336 -16.980  18.676  1.00  0.00
H
ATOM   1422 2HG  MET    86      38.876 -18.322  17.650  1.00  0.00
H
ATOM   1423  SD  MET    86      39.820 -16.219  16.973  1.00  0.00
S
ATOM   1424  CE  MET    86      40.309 -17.026  15.448  1.00  0.00
C
ATOM   1425 1HE  MET    86      41.101 -16.447  14.973  1.00  0.00
H
ATOM   1426 2HE  MET    86      39.457 -17.090  14.771  1.00  0.00
H
ATOM   1427 3HE  MET    86      40.685 -18.024  15.665  1.00  0.00
H
ATOM   1428  N   GLN    87      33.672 -17.550  17.489  1.00  0.00
N
ATOM   1429  H   GLN    87      33.748 -17.771  18.475  1.00  0.00
H
ATOM   1430  CA  GLN    87      32.342 -17.230  16.969  1.00  0.00
C
ATOM   1431  HA  GLN    87      32.243 -17.651  15.971  1.00  0.00
H
ATOM   1432  C   GLN    87      32.148 -15.713  16.880  1.00  0.00
C
ATOM   1433  O   GLN    87      31.155 -15.153  17.347  1.00  0.00
O
ATOM   1434  CB  GLN    87      31.274 -17.836  17.883  1.00  0.00
C
ATOM   1435 1HB  GLN    87      31.370 -17.403  18.880  1.00  0.00
H
ATOM   1436 2HB  GLN    87      30.302 -17.567  17.483  1.00  0.00
H
ATOM   1437  CG  GLN    87      31.336 -19.351  18.003  1.00  0.00
C
ATOM   1438 1HG  GLN    87      31.397 -19.779  17.005  1.00  0.00
H
ATOM   1439 2HG  GLN    87      32.229 -19.635  18.556  1.00  0.00
H
ATOM   1440  CD  GLN    87      30.118 -19.926  18.702  1.00  0.00
C
ATOM   1441  OE1 GLN    87      29.236 -19.200  19.147  1.00  0.00
O
ATOM   1442  NE2 GLN    87      30.057 -21.219  18.816  1.00  0.00
N
ATOM   1443 1HE2 GLN    87      29.259 -21.634  19.267  1.00  0.00
H
ATOM   1444 2HE2 GLN    87      30.810 -21.799  18.465  1.00  0.00
H
ATOM   1445  N   ASP    88      33.183 -15.040  16.410  1.00  0.00
N
ATOM   1446  H   ASP    88      33.928 -15.555  15.957  1.00  0.00
H
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ATOM   1447  CA  ASP    88      33.316 -13.599  16.566  1.00  0.00
C
ATOM   1448  HA  ASP    88      33.053 -13.330  17.588  1.00  0.00
H
ATOM   1449  C   ASP    88      32.406 -12.823  15.630  1.00  0.00
C
ATOM   1450  O   ASP    88      32.237 -13.164  14.458  1.00  0.00
O
ATOM   1451  CB  ASP    88      34.756 -13.159  16.292  1.00  0.00
C
ATOM   1452 1HB  ASP    88      35.114 -13.641  15.382  1.00  0.00
H
ATOM   1453 2HB  ASP    88      34.758 -12.080  16.140  1.00  0.00
H
ATOM   1454  CG  ASP    88      35.702 -13.465  17.435  1.00  0.00
C
ATOM   1455  OD1 ASP    88      35.306 -14.077  18.448  1.00  0.00
O
ATOM   1456  OD2 ASP    88      36.861 -13.006  17.364  1.00  0.00
O
ATOM   1457  N   VAL    89      31.857 -11.746  16.170  1.00  0.00
N
ATOM   1458  H   VAL    89      32.037 -11.542  17.147  1.00  0.00
H
ATOM   1459  CA  VAL    89      31.037 -10.800  15.420  1.00  0.00
C
ATOM   1460  HA  VAL    89      30.577 -11.290  14.563  1.00  0.00
H
ATOM   1461  C   VAL    89      31.969  -9.689  14.944  1.00  0.00
C
ATOM   1462  O   VAL    89      32.801  -9.206  15.711  1.00  0.00
O
ATOM   1463  CB  VAL    89      29.936 -10.201  16.339  1.00  0.00
C
ATOM   1464  HB  VAL    89      30.420  -9.747  17.204  1.00  0.00
H
ATOM   1465  CG1 VAL    89      29.119  -9.122  15.623  1.00  0.00
C
ATOM   1466 1HG1 VAL    89      28.349  -8.753  16.296  1.00  0.00
H
ATOM   1467 2HG1 VAL    89      28.650  -9.529  14.730  1.00  0.00
H
ATOM   1468 3HG1 VAL    89      29.757  -8.279  15.359  1.00  0.00
H
ATOM   1469  CG2 VAL    89      28.994 -11.309  16.842  1.00  0.00
C
ATOM   1470 1HG2 VAL    89      28.257 -10.881  17.521  1.00  0.00
H
ATOM   1471 2HG2 VAL    89      29.555 -12.069  17.388  1.00  0.00
H
ATOM   1472 3HG2 VAL    89      28.480 -11.773  16.001  1.00  0.00
H
ATOM   1473  N   HIS    90      31.831  -9.277  13.693  1.00  0.00
N
ATOM   1474  H   HIS    90      31.173  -9.768  13.091  1.00  0.00
H
ATOM   1475  CA  HIS    90      32.612  -8.186  13.111  1.00  0.00
C
ATOM   1476  HA  HIS    90      33.192  -7.692  13.890  1.00  0.00
H
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ATOM   1477  C   HIS    90      31.681  -7.174  12.451  1.00  0.00
C
ATOM   1478  O   HIS    90      31.134  -7.455  11.388  1.00  0.00
O
ATOM   1479  CB  HIS    90      33.561  -8.768  12.063  1.00  0.00
C
ATOM   1480 1HB  HIS    90      32.980  -9.084  11.197  1.00  0.00
H
ATOM   1481 2HB  HIS    90      34.261  -7.998  11.745  1.00  0.00
H
ATOM   1482  CG  HIS    90      34.318  -9.964  12.545  1.00  0.00
C
ATOM   1483  ND1 HIS    90      35.436  -9.893  13.367  1.00  0.00
N
ATOM   1484  HD1 HIS    90      35.863  -9.033  13.714  1.00  0.00
H
ATOM   1485  CD2 HIS    90      34.114 -11.291  12.349  1.00  0.00
C
ATOM   1486  HD2 HIS    90      33.311 -11.729  11.767  1.00  0.00
H
ATOM   1487  CE1 HIS    90      35.871 -11.120  13.613  1.00  0.00
C
ATOM   1488  HE1 HIS    90      36.743 -11.370  14.211  1.00  0.00
H
ATOM   1489  NE2 HIS    90      35.082 -11.980  13.015  1.00  0.00
N
ATOM   1490  HE2 HIS    90      35.163 -13.000  13.047  1.00  0.00
H
ATOM   1491  N   VAL    91      31.435  -6.037  13.082  1.00  0.00
N
ATOM   1492  H   VAL    91      31.915  -5.832  13.955  1.00  0.00
H
ATOM   1493  CA  VAL    91      30.492  -5.048  12.548  1.00  0.00
C
ATOM   1494  HA  VAL    91      29.561  -5.552  12.307  1.00  0.00
H
ATOM   1495  C   VAL    91      31.046  -4.443  11.260  1.00  0.00
C
ATOM   1496  O   VAL    91      32.222  -4.093  11.170  1.00  0.00
O
ATOM   1497  CB  VAL    91      30.176  -3.949  13.601  1.00  0.00
C
ATOM   1498  HB  VAL    91      31.107  -3.461  13.888  1.00  0.00
H
ATOM   1499  CG1 VAL    91      29.212  -2.881  13.045  1.00  0.00
C
ATOM   1500 1HG1 VAL    91      28.942  -2.185  13.841  1.00  0.00
H
ATOM   1501 2HG1 VAL    91      28.310  -3.348  12.647  1.00  0.00
H
ATOM   1502 3HG1 VAL    91      29.706  -2.310  12.259  1.00  0.00
H
ATOM   1503  CG2 VAL    91      29.550  -4.593  14.854  1.00  0.00
C
ATOM   1504 1HG2 VAL    91      29.277  -3.817  15.569  1.00  0.00
H
ATOM   1505 2HG2 VAL    91      30.267  -5.255  15.340  1.00  0.00
H
ATOM   1506 3HG2 VAL    91      28.658  -5.162  14.588  1.00  0.00
H
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ATOM   1507  N   ILE    92      30.190  -4.332  10.256  1.00  0.00
N
ATOM   1508  H   ILE    92      29.233  -4.647  10.392  1.00  0.00
H
ATOM   1509  CA  ILE    92      30.542  -3.769   8.954  1.00  0.00
C
ATOM   1510  HA  ILE    92      31.622  -3.666   8.866  1.00  0.00
H
ATOM   1511  C   ILE    92      29.935  -2.374   8.842  1.00  0.00
C
ATOM   1512  O   ILE    92      30.619  -1.424   8.452  1.00  0.00
O
ATOM   1513  CB  ILE    92      30.020  -4.702   7.814  1.00  0.00
C
ATOM   1514  HB  ILE    92      28.953  -4.858   7.969  1.00  0.00
H
ATOM   1515  CG1 ILE    92      30.714  -6.078   7.879  1.00  0.00
C
ATOM   1516 1HG1 ILE    92      30.485  -6.538   8.838  1.00  0.00
H
ATOM   1517 2HG1 ILE    92      30.272  -6.707   7.106  1.00  0.00
H
ATOM   1518  CG2 ILE    92      30.193  -4.082   6.413  1.00  0.00
C
ATOM   1519 1HG2 ILE    92      29.844  -4.787   5.655  1.00  0.00
H
ATOM   1520 2HG2 ILE    92      31.240  -3.846   6.223  1.00  0.00
H
ATOM   1521 3HG2 ILE    92      29.598  -3.173   6.324  1.00  0.00
H
ATOM   1522  CD1 ILE    92      32.256  -6.109   7.696  1.00  0.00
C
ATOM   1523 1HD1 ILE    92      32.607  -7.135   7.796  1.00  0.00
H
ATOM   1524 2HD1 ILE    92      32.744  -5.504   8.459  1.00  0.00
H
ATOM   1525 3HD1 ILE    92      32.530  -5.741   6.707  1.00  0.00
H
ATOM   1526  N   GLN    93      28.669  -2.227   9.205  1.00  0.00
N
ATOM   1527  H   GLN    93      28.150  -3.017   9.577  1.00  0.00
H
ATOM   1528  CA  GLN    93      27.967  -0.954   9.066  1.00  0.00
C
ATOM   1529  HA  GLN    93      28.666  -0.123   9.157  1.00  0.00
H
ATOM   1530  C   GLN    93      26.917  -0.878  10.168  1.00  0.00
C
ATOM   1531  O   GLN    93      26.307  -1.897  10.475  1.00  0.00
O
ATOM   1532  CB  GLN    93      27.305  -0.939   7.680  1.00  0.00
C
ATOM   1533 1HB  GLN    93      28.063  -1.218   6.949  1.00  0.00
H
ATOM   1534 2HB  GLN    93      26.524  -1.697   7.666  1.00  0.00
H
ATOM   1535  CG  GLN    93      26.702   0.384   7.233  1.00  0.00
C
ATOM   1536 1HG  GLN    93      25.908   0.669   7.923  1.00  0.00
H
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ATOM   1537 2HG  GLN    93      27.475   1.151   7.253  1.00  0.00
H
ATOM   1538  CD  GLN    93      26.129   0.310   5.828  1.00  0.00
C
ATOM   1539  OE1 GLN    93      26.015  -0.759   5.235  1.00  0.00
O
ATOM   1540  NE2 GLN    93      25.757   1.435   5.285  1.00  0.00
N
ATOM   1541 1HE2 GLN    93      25.364   1.417   4.356  1.00  0.00
H
ATOM   1542 2HE2 GLN    93      25.866   2.307   5.782  1.00  0.00
H
ATOM   1543  N   THR    94      26.676   0.280  10.764  1.00  0.00
N
ATOM   1544  H   THR    94      27.221   1.108  10.527  1.00  0.00
H
ATOM   1545  CA  THR    94      25.592   0.410  11.739  1.00  0.00
C
ATOM   1546  HA  THR    94      24.754  -0.188  11.386  1.00  0.00
H
ATOM   1547  C   THR    94      25.109   1.851  11.844  1.00  0.00
C
ATOM   1548  O   THR    94      25.876   2.797  11.654  1.00  0.00
O
ATOM   1549  CB  THR    94      26.001  -0.126  13.143  1.00  0.00
C
ATOM   1550  HB  THR    94      26.411  -1.128  13.022  1.00  0.00
H
ATOM   1551  OG1 THR    94      24.841  -0.205  13.979  1.00  0.00
O
ATOM   1552  HG1 THR    94      24.431  -1.063  13.838  1.00  0.00
H
ATOM   1553  CG2 THR    94      27.052   0.718  13.837  1.00  0.00
C
ATOM   1554 1HG2 THR    94      27.367   0.217  14.750  1.00  0.00
H
ATOM   1555 2HG2 THR    94      26.647   1.699  14.086  1.00  0.00
H
ATOM   1556 3HG2 THR    94      27.923   0.836  13.192  1.00  0.00
H
ATOM   1557  N   ASP    95      23.825   2.007  12.126  1.00  0.00
N
ATOM   1558  H   ASP    95      23.226   1.187  12.137  1.00  0.00
H
ATOM   1559  CA  ASP    95      23.209   3.317  12.325  1.00  0.00
C
ATOM   1560  HA  ASP    95      23.980   4.063  12.514  1.00  0.00
H
ATOM   1561  C   ASP    95      22.254   3.268  13.518  1.00  0.00
C
ATOM   1562  O   ASP    95      21.378   4.119  13.695  1.00  0.00
O
ATOM   1563  CB  ASP    95      22.435   3.708  11.069  1.00  0.00
C
ATOM   1564 1HB  ASP    95      21.734   2.914  10.824  1.00  0.00
H
ATOM   1565 2HB  ASP    95      21.873   4.617  11.270  1.00  0.00
H
ATOM   1566  CG  ASP    95      23.337   3.978   9.883  1.00  0.00
C
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ATOM   1567  OD1 ASP    95      23.599   3.077   9.051  1.00  0.00
O
ATOM   1568  OD2 ASP    95      23.722   5.149   9.706  1.00  0.00
O
ATOM   1569  N   MET    96      22.369   2.212  14.310  1.00  0.00
N
ATOM   1570  H   MET    96      23.140   1.573  14.172  1.00  0.00
H
ATOM   1571  CA  MET    96      21.412   1.951  15.386  1.00  0.00
C
ATOM   1572  HA  MET    96      20.444   2.375  15.122  1.00  0.00
H
ATOM   1573  C   MET    96      21.856   2.492  16.736  1.00  0.00
C
ATOM   1574  O   MET    96      23.042   2.730  16.945  1.00  0.00
O
ATOM   1575  CB  MET    96      21.246   0.453  15.586  1.00  0.00
C
ATOM   1576 1HB  MET    96      22.151   0.068  16.047  1.00  0.00
H
ATOM   1577 2HB  MET    96      20.418   0.290  16.275  1.00  0.00
H
ATOM   1578  CG  MET    96      20.995  -0.338  14.340  1.00  0.00
C
ATOM   1579 1HG  MET    96      20.197   0.114  13.751  1.00  0.00
H
ATOM   1580 2HG  MET    96      21.911  -0.399  13.754  1.00  0.00
H
ATOM   1581  SD  MET    96      20.512  -1.963  14.886  1.00  0.00
S
ATOM   1582  CE  MET    96      18.773  -1.810  14.790  1.00  0.00
C
ATOM   1583 1HE  MET    96      18.311  -2.669  15.274  1.00  0.00
H
ATOM   1584 2HE  MET    96      18.469  -1.787  13.743  1.00  0.00
H
ATOM   1585 3HE  MET    96      18.448  -0.896  15.288  1.00  0.00
H
ATOM   1586  N   ASN    97      20.940   2.558  17.692  1.00  0.00
N
ATOM   1587  H   ASN    97      19.959   2.458  17.462  1.00  0.00
H
ATOM   1588  CA  ASN    97      21.337   2.684  19.092  1.00  0.00
C
ATOM   1589  HA  ASN    97      22.062   3.493  19.193  1.00  0.00
H
ATOM   1590  C   ASN    97      22.006   1.370  19.489  1.00  0.00
C
ATOM   1591  O   ASN    97      21.601   0.296  19.038  1.00  0.00
O
ATOM   1592  CB  ASN    97      20.128   2.965  19.988  1.00  0.00
C
ATOM   1593 1HB  ASN    97      19.352   2.228  19.791  1.00  0.00
H
ATOM   1594 2HB  ASN    97      20.430   2.881  21.030  1.00  0.00
H
ATOM   1595  CG  ASN    97      19.566   4.345  19.774  1.00  0.00
C
ATOM   1596  OD1 ASN    97      20.282   5.274  19.414  1.00  0.00
O
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ATOM   1597  ND2 ASN    97      18.289   4.492  19.962  1.00  0.00
N
ATOM   1598 1HD2 ASN    97      17.878   5.397  19.777  1.00  0.00
H
ATOM   1599 2HD2 ASN    97      17.726   3.719  20.282  1.00  0.00
H
ATOM   1600  N   THR    98      23.036   1.440  20.316  1.00  0.00
N
ATOM   1601  H   THR    98      23.319   2.338  20.694  1.00  0.00
H
ATOM   1602  CA  THR    98      23.843   0.267  20.653  1.00  0.00
C
ATOM   1603  HA  THR    98      24.254  -0.117  19.726  1.00  0.00
H
ATOM   1604  C   THR    98      23.082  -0.897  21.279  1.00  0.00
C
ATOM   1605  O   THR    98      23.332  -2.041  20.915  1.00  0.00
O
ATOM   1606  CB  THR    98      25.032   0.708  21.517  1.00  0.00
C
ATOM   1607  HB  THR    98      24.679   1.052  22.490  1.00  0.00
H
ATOM   1608  OG1 THR    98      25.685   1.780  20.833  1.00  0.00
O
ATOM   1609  HG1 THR    98      26.020   2.403  21.492  1.00  0.00
H
ATOM   1610  CG2 THR    98      26.056  -0.384  21.693  1.00  0.00
C
ATOM   1611 1HG2 THR    98      26.949   0.038  22.151  1.00  0.00
H
ATOM   1612 2HG2 THR    98      26.321  -0.818  20.730  1.00  0.00
H
ATOM   1613 3HG2 THR    98      25.661  -1.162  22.346  1.00  0.00
H
ATOM   1614  N   LYS    99      22.070  -0.631  22.094  1.00  0.00
N
ATOM   1615  H   LYS    99      21.884   0.337  22.354  1.00  0.00
H
ATOM   1616  CA  LYS    99      21.216  -1.695  22.643  1.00  0.00
C
ATOM   1617  HA  LYS    99      21.807  -2.324  23.312  1.00  0.00
H
ATOM   1618  C   LYS    99      20.636  -2.595  21.557  1.00  0.00
C
ATOM   1619  O   LYS    99      20.577  -3.819  21.687  1.00  0.00
O
ATOM   1620  CB  LYS    99      20.071  -1.042  23.423  1.00  0.00
C
ATOM   1621 1HB  LYS    99      20.499  -0.362  24.157  1.00  0.00
H
ATOM   1622 2HB  LYS    99      19.472  -0.457  22.727  1.00  0.00
H
ATOM   1623  CG  LYS    99      19.145  -2.008  24.147  1.00  0.00
C
ATOM   1624 1HG  LYS    99      18.718  -2.711  23.432  1.00  0.00
H
ATOM   1625 2HG  LYS    99      19.714  -2.559  24.894  1.00  0.00
H
ATOM   1626  CD  LYS    99      18.014  -1.254  24.827  1.00  0.00
C
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ATOM   1627 1HD  LYS    99      18.430  -0.514  25.511  1.00  0.00
H
ATOM   1628 2HD  LYS    99      17.415  -0.747  24.071  1.00  0.00
H
ATOM   1629  CE  LYS    99      17.135  -2.214  25.599  1.00  0.00
C
ATOM   1630 1HE  LYS    99      16.788  -2.996  24.925  1.00  0.00
H
ATOM   1631 2HE  LYS    99      17.736  -2.679  26.378  1.00  0.00
H
ATOM   1632  NZ  LYS    99      15.949  -1.544  26.219  1.00  0.00
N
ATOM   1633 1HZ  LYS    99      15.400  -2.220  26.740  1.00  0.00
H
ATOM   1634 2HZ  LYS    99      15.361  -1.139  25.501  1.00  0.00
H
ATOM   1635 3HZ  LYS    99      16.248  -0.811  26.852  1.00  0.00
H
ATOM   1636  N   MET   100      20.237  -1.991  20.451  1.00  0.00
N
ATOM   1637  H   MET   100      20.367  -0.994  20.349  1.00  0.00
H
ATOM   1638  CA  MET   100      19.620  -2.742  19.369  1.00  0.00
C
ATOM   1639  HA  MET   100      18.850  -3.391  19.787  1.00  0.00
H
ATOM   1640  C   MET   100      20.664  -3.603  18.664  1.00  0.00
C
ATOM   1641  O   MET   100      20.398  -4.756  18.341  1.00  0.00
O
ATOM   1642  CB  MET   100      18.976  -1.783  18.371  1.00  0.00
C
ATOM   1643 1HB  MET   100      19.769  -1.262  17.839  1.00  0.00
H
ATOM   1644 2HB  MET   100      18.403  -2.366  17.652  1.00  0.00
H
ATOM   1645  CG  MET   100      18.075  -0.732  19.003  1.00  0.00
C
ATOM   1646 1HG  MET   100      17.265  -1.217  19.546  1.00  0.00
H
ATOM   1647 2HG  MET   100      18.662  -0.140  19.704  1.00  0.00
H
ATOM   1648  SD  MET   100      17.388   0.386  17.777  1.00  0.00
S
ATOM   1649  CE  MET   100      15.945  -0.494  17.235  1.00  0.00
C
ATOM   1650 1HE  MET   100      15.467   0.064  16.433  1.00  0.00
H
ATOM   1651 2HE  MET   100      15.243  -0.589  18.064  1.00  0.00
H
ATOM   1652 3HE  MET   100      16.222  -1.485  16.875  1.00  0.00
H
ATOM   1653  N   LYS   101      21.870  -3.070  18.486  1.00  0.00
N
ATOM   1654  H   LYS   101      22.045  -2.129  18.817  1.00  0.00
H
ATOM   1655  CA  LYS   101      22.959  -3.811  17.831  1.00  0.00
C
ATOM   1656  HA  LYS   101      22.645  -4.112  16.830  1.00  0.00
H
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ATOM   1657  C   LYS   101      23.283  -5.050  18.646  1.00  0.00
C
ATOM   1658  O   LYS   101      23.364  -6.153  18.118  1.00  0.00
O
ATOM   1659  CB  LYS   101      24.259  -2.996  17.762  1.00  0.00
C
ATOM   1660 1HB  LYS   101      24.611  -2.848  18.781  1.00  0.00
H
ATOM   1661 2HB  LYS   101      25.013  -3.584  17.240  1.00  0.00
H
ATOM   1662  CG  LYS   101      24.177  -1.625  17.128  1.00  0.00
C
ATOM   1663 1HG  LYS   101      23.945  -1.702  16.066  1.00  0.00
H
ATOM   1664 2HG  LYS   101      23.398  -1.057  17.631  1.00  0.00
H
ATOM   1665  CD  LYS   101      25.507  -0.908  17.342  1.00  0.00
C
ATOM   1666 1HD  LYS   101      25.842  -1.112  18.358  1.00  0.00
H
ATOM   1667 2HD  LYS   101      26.257  -1.287  16.646  1.00  0.00
H
ATOM   1668  CE  LYS   101      25.362   0.599  17.203  1.00  0.00
C
ATOM   1669 1HE  LYS   101      25.181   0.862  16.160  1.00  0.00
H
ATOM   1670 2HE  LYS   101      24.497   0.915  17.787  1.00  0.00
H
ATOM   1671  NZ  LYS   101      26.557   1.340  17.716  1.00  0.00
N
ATOM   1672 1HZ  LYS   101      26.333   2.326  17.811  1.00  0.00
H
ATOM   1673 2HZ  LYS   101      27.340   1.246  17.080  1.00  0.00
H
ATOM   1674 3HZ  LYS   101      26.826   0.983  18.624  1.00  0.00
H
ATOM   1675  N   LEU   102      23.446  -4.847  19.947  1.00  0.00
N
ATOM   1676  H   LEU   102      23.328  -3.911  20.320  1.00  0.00
H
ATOM   1677  CA  LEU   102      23.841  -5.919  20.855  1.00  0.00
C
ATOM   1678  HA  LEU   102      24.783  -6.349  20.514  1.00  0.00
H
ATOM   1679  C   LEU   102      22.788  -7.013  20.851  1.00  0.00
C
ATOM   1680  O   LEU   102      23.117  -8.198  20.807  1.00  0.00
O
ATOM   1681  CB  LEU   102      24.000  -5.385  22.285  1.00  0.00
C
ATOM   1682 1HB  LEU   102      23.048  -4.939  22.574  1.00  0.00
H
ATOM   1683 2HB  LEU   102      24.167  -6.243  22.936  1.00  0.00
H
ATOM   1684  CG  LEU   102      25.101  -4.358  22.598  1.00  0.00
C
ATOM   1685  HG  LEU   102      25.013  -3.526  21.906  1.00  0.00
H
ATOM   1686  CD1 LEU   102      24.906  -3.825  24.016  1.00  0.00
C
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ATOM   1687 1HD1 LEU   102      25.680  -3.092  24.242  1.00  0.00
H
ATOM   1688 2HD1 LEU   102      24.964  -4.641  24.737  1.00  0.00
H
ATOM   1689 3HD1 LEU   102      23.933  -3.341  24.097  1.00  0.00
H
ATOM   1690  CD2 LEU   102      26.497  -4.929  22.457  1.00  0.00
C
ATOM   1691 1HD2 LEU   102      27.234  -4.155  22.670  1.00  0.00
H
ATOM   1692 2HD2 LEU   102      26.655  -5.286  21.440  1.00  0.00
H
ATOM   1693 3HD2 LEU   102      26.633  -5.752  23.156  1.00  0.00
H
ATOM   1694  N   THR   103      21.523  -6.621  20.854  1.00  0.00
N
ATOM   1695  H   THR   103      21.300  -5.635  20.893  1.00  0.00
H
ATOM   1696  CA  THR   103      20.448  -7.605  20.847  1.00  0.00
C
ATOM   1697  HA  THR   103      20.626  -8.304  21.665  1.00  0.00
H
ATOM   1698  C   THR   103      20.439  -8.398  19.541  1.00  0.00
C
ATOM   1699  O   THR   103      20.303  -9.614  19.563  1.00  0.00
O
ATOM   1700  CB  THR   103      19.068  -6.949  21.064  1.00  0.00
C
ATOM   1701  HB  THR   103      18.800  -6.358  20.188  1.00  0.00
H
ATOM   1702  OG1 THR   103      19.118  -6.088  22.209  1.00  0.00
O
ATOM   1703  HG1 THR   103      19.631  -5.299  21.972  1.00  0.00
H
ATOM   1704  CG2 THR   103      17.996  -7.990  21.333  1.00  0.00
C
ATOM   1705 1HG2 THR   103      17.067  -7.500  21.619  1.00  0.00
H
ATOM   1706 2HG2 THR   103      18.310  -8.651  22.142  1.00  0.00
H
ATOM   1707 3HG2 THR   103      17.820  -8.579  20.435  1.00  0.00
H
ATOM   1708  N   ILE   104      20.631  -7.747  18.401  1.00  0.00
N
ATOM   1709  H   ILE   104      20.761  -6.740  18.404  1.00  0.00
H
ATOM   1710  CA  ILE   104      20.649  -8.461  17.120  1.00  0.00
C
ATOM   1711  HA  ILE   104      19.738  -9.054  17.037  1.00  0.00
H
ATOM   1712  C   ILE   104      21.824  -9.434  17.059  1.00  0.00
C
ATOM   1713  O   ILE   104      21.651 -10.576  16.632  1.00  0.00
O
ATOM   1714  CB  ILE   104      20.703  -7.476  15.916  1.00  0.00
C
ATOM   1715  HB  ILE   104      21.526  -6.778  16.070  1.00  0.00
H
ATOM   1716  CG1 ILE   104      19.379  -6.697  15.834  1.00  0.00
C
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ATOM   1717 1HG1 ILE   104      18.613  -7.377  15.472  1.00  0.00
H
ATOM   1718 2HG1 ILE   104      19.088  -6.376  16.833  1.00  0.00
H
ATOM   1719  CG2 ILE   104      20.930  -8.230  14.584  1.00  0.00
C
ATOM   1720 1HG2 ILE   104      20.914  -7.539  13.743  1.00  0.00
H
ATOM   1721 2HG2 ILE   104      20.161  -8.990  14.445  1.00  0.00
H
ATOM   1722 3HG2 ILE   104      21.904  -8.719  14.596  1.00  0.00
H
ATOM   1723  CD1 ILE   104      19.390  -5.465  14.942  1.00  0.00
C
ATOM   1724 1HD1 ILE   104      18.410  -4.989  14.979  1.00  0.00
H
ATOM   1725 2HD1 ILE   104      19.611  -5.735  13.910  1.00  0.00
H
ATOM   1726 3HD1 ILE   104      20.144  -4.765  15.302  1.00  0.00
H
ATOM   1727  N   CYS   105      23.001  -9.036  17.522  1.00  0.00
N
ATOM   1728  H   CYS   105      23.123  -8.088  17.869  1.00  0.00
H
ATOM   1729  CA  CYS   105      24.144  -9.947  17.521  1.00  0.00
C
ATOM   1730  HA  CYS   105      24.320 -10.298  16.504  1.00  0.00
H
ATOM   1731  C   CYS   105      23.878 -11.160  18.403  1.00  0.00
C
ATOM   1732  O   CYS   105      24.179 -12.295  18.027  1.00  0.00
O
ATOM   1733  CB  CYS   105      25.390  -9.223  18.030  1.00  0.00
C
ATOM   1734 1HB  CYS   105      25.192  -8.834  19.030  1.00  0.00
H
ATOM   1735 2HB  CYS   105      26.212  -9.936  18.091  1.00  0.00
H
ATOM   1736  SG  CYS   105      25.871  -7.862  16.963  1.00  0.00
S
ATOM   1737  HG  CYS   105      26.854  -7.387  17.747  1.00  0.00
H
ATOM   1738  N   GLY   106      23.269 -10.925  19.557  1.00  0.00
N
ATOM   1739  H   GLY   106      23.014  -9.978  19.818  1.00  0.00
H
ATOM   1740  CA  GLY   106      22.978 -12.011  20.472  1.00  0.00
C
ATOM   1741 1HA  GLY   106      23.888 -12.589  20.633  1.00  0.00
H
ATOM   1742 2HA  GLY   106      22.644 -11.603  21.425  1.00  0.00
H
ATOM   1743  C   GLY   106      21.911 -12.937  19.930  1.00  0.00
C
ATOM   1744  O   GLY   106      22.026 -14.150  20.055  1.00  0.00
O
ATOM   1745  N   LEU   107      20.895 -12.391  19.279  1.00  0.00
N
ATOM   1746  H   LEU   107      20.832 -11.378  19.209  1.00  0.00
H
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ATOM   1747  CA  LEU   107      19.838 -13.205  18.689  1.00  0.00
C
ATOM   1748  HA  LEU   107      19.511 -13.946  19.417  1.00  0.00
H
ATOM   1749  C   LEU   107      20.296 -13.962  17.457  1.00  0.00
C
ATOM   1750  O   LEU   107      19.824 -15.062  17.224  1.00  0.00
O
ATOM   1751  CB  LEU   107      18.645 -12.338  18.296  1.00  0.00
C
ATOM   1752 1HB  LEU   107      19.026 -11.486  17.736  1.00  0.00
H
ATOM   1753 2HB  LEU   107      18.016 -12.924  17.626  1.00  0.00
H
ATOM   1754  CG  LEU   107      17.749 -11.818  19.425  1.00  0.00
C
ATOM   1755  HG  LEU   107      18.363 -11.308  20.164  1.00  0.00
H
ATOM   1756  CD1 LEU   107      16.766 -10.815  18.840  1.00  0.00
C
ATOM   1757 1HD1 LEU   107      16.152 -10.412  19.644  1.00  0.00
H
ATOM   1758 2HD1 LEU   107      16.132 -11.299  18.097  1.00  0.00
H
ATOM   1759 3HD1 LEU   107      17.314  -9.995  18.375  1.00  0.00
H
ATOM   1760  CD2 LEU   107      16.994 -12.951  20.120  1.00  0.00
C
ATOM   1761 1HD2 LEU   107      16.304 -12.537  20.853  1.00  0.00
H
ATOM   1762 2HD2 LEU   107      17.692 -13.607  20.640  1.00  0.00
H
ATOM   1763 3HD2 LEU   107      16.430 -13.535  19.393  1.00  0.00
H
ATOM   1764  N   ILE   108      21.222 -13.424  16.678  1.00  0.00
N
ATOM   1765  H   ILE   108      21.545 -12.475  16.846  1.00  0.00
H
ATOM   1766  CA  ILE   108      21.795 -14.198  15.578  1.00  0.00
C
ATOM   1767  HA  ILE   108      20.985 -14.696  15.049  1.00  0.00
H
ATOM   1768  C   ILE   108      22.647 -15.311  16.161  1.00  0.00
C
ATOM   1769  O   ILE   108      22.562 -16.438  15.693  1.00  0.00
O
ATOM   1770  CB  ILE   108      22.575 -13.302  14.565  1.00  0.00
C
ATOM   1771  HB  ILE   108      23.035 -12.487  15.125  1.00  0.00
H
ATOM   1772  CG1 ILE   108      21.590 -12.695  13.544  1.00  0.00
C
ATOM   1773 1HG1 ILE   108      20.866 -12.096  14.094  1.00  0.00
H
ATOM   1774 2HG1 ILE   108      22.149 -12.024  12.895  1.00  0.00
H
ATOM   1775  CG2 ILE   108      23.713 -14.056  13.833  1.00  0.00
C
ATOM   1776 1HG2 ILE   108      24.133 -13.427  13.046  1.00  0.00
H
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ATOM   1777 2HG2 ILE   108      23.338 -14.979  13.388  1.00  0.00
H
ATOM   1778 3HG2 ILE   108      24.506 -14.299  14.539  1.00  0.00
H
ATOM   1779  CD1 ILE   108      20.805 -13.690  12.626  1.00  0.00
C
ATOM   1780 1HD1 ILE   108      20.288 -13.131  11.847  1.00  0.00
H
ATOM   1781 2HD1 ILE   108      20.065 -14.241  13.207  1.00  0.00
H
ATOM   1782 3HD1 ILE   108      21.485 -14.395  12.150  1.00  0.00
H
ATOM   1783  N   ASP   109      23.405 -15.060  17.219  1.00  0.00
N
ATOM   1784  H   ASP   109      23.463 -14.121  17.604  1.00  0.00
H
ATOM   1785  CA  ASP   109      24.172 -16.142  17.835  1.00  0.00
C
ATOM   1786  HA  ASP   109      24.811 -16.594  17.077  1.00  0.00
H
ATOM   1787  C   ASP   109      23.247 -17.230  18.374  1.00  0.00
C
ATOM   1788  O   ASP   109      23.464 -18.410  18.123  1.00  0.00
O
ATOM   1789  CB  ASP   109      25.041 -15.614  18.973  1.00  0.00
C
ATOM   1790 1HB  ASP   109      25.647 -14.785  18.607  1.00  0.00
H
ATOM   1791 2HB  ASP   109      24.396 -15.246  19.768  1.00  0.00
H
ATOM   1792  CG  ASP   109      25.950 -16.681  19.546  1.00  0.00
C
ATOM   1793  OD1 ASP   109      26.634 -17.390  18.784  1.00  0.00
O
ATOM   1794  OD2 ASP   109      26.034 -16.815  20.784  1.00  0.00
O
ATOM   1795  N   GLU   110      22.178 -16.836  19.051  1.00  0.00
N
ATOM   1796  H   GLU   110      22.038 -15.843  19.223  1.00  0.00
H
ATOM   1797  CA  GLU   110      21.200 -17.782  19.590  1.00  0.00
C
ATOM   1798  HA  GLU   110      21.721 -18.539  20.172  1.00  0.00
H
ATOM   1799  C   GLU   110      20.433 -18.492  18.480  1.00  0.00
C
ATOM   1800  O   GLU   110      20.023 -19.645  18.625  1.00  0.00
O
ATOM   1801  CB  GLU   110      20.201 -17.055  20.494  1.00  0.00
C
ATOM   1802 1HB  GLU   110      19.849 -16.165  19.975  1.00  0.00
H
ATOM   1803 2HB  GLU   110      19.350 -17.710  20.668  1.00  0.00
H
ATOM   1804  CG  GLU   110      20.771 -16.653  21.845  1.00  0.00
C
ATOM   1805 1HG  GLU   110      21.005 -17.556  22.410  1.00  0.00
H
ATOM   1806 2HG  GLU   110      21.692 -16.099  21.689  1.00  0.00
H
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ATOM   1807  CD  GLU   110      19.816 -15.789  22.654  1.00  0.00
C
ATOM   1808  OE1 GLU   110      18.664 -16.219  22.886  1.00  0.00
O
ATOM   1809  OE2 GLU   110      20.203 -14.683  23.105  1.00  0.00
O
ATOM   1810  N   GLY   111      20.257 -17.811  17.360  1.00  0.00
N
ATOM   1811  H   GLY   111      20.569 -16.846  17.304  1.00  0.00
H
ATOM   1812  CA  GLY   111      19.600 -18.391  16.207  1.00  0.00
C
ATOM   1813 1HA  GLY   111      18.667 -18.859  16.518  1.00  0.00
H
ATOM   1814 2HA  GLY   111      19.381 -17.604  15.485  1.00  0.00
H
ATOM   1815  C   GLY   111      20.481 -19.429  15.553  1.00  0.00
C
ATOM   1816  O   GLY   111      19.984 -20.464  15.155  1.00  0.00
O
ATOM   1817  N   ILE   112      21.784 -19.197  15.482  1.00  0.00
N
ATOM   1818  H   ILE   112      22.147 -18.311  15.825  1.00  0.00
H
ATOM   1819  CA  ILE   112      22.727 -20.157  14.897  1.00  0.00
C
ATOM   1820  HA  ILE   112      22.389 -20.434  13.900  1.00  0.00
H
ATOM   1821  C   ILE   112      22.736 -21.434  15.741  1.00  0.00
C
ATOM   1822  O   ILE   112      22.816 -22.544  15.205  1.00  0.00
O
ATOM   1823  CB  ILE   112      24.145 -19.513  14.766  1.00  0.00
C
ATOM   1824  HB  ILE   112      24.384 -19.013  15.703  1.00  0.00
H
ATOM   1825  CG1 ILE   112      24.132 -18.474  13.626  1.00  0.00
C
ATOM   1826 1HG1 ILE   112      24.066 -19.006  12.677  1.00  0.00
H
ATOM   1827 2HG1 ILE   112      23.240 -17.861  13.721  1.00  0.00
H
ATOM   1828  CG2 ILE   112      25.240 -20.555  14.479  1.00  0.00
C
ATOM   1829 1HG2 ILE   112      26.220 -20.080  14.428  1.00  0.00
H
ATOM   1830 2HG2 ILE   112      25.033 -21.063  13.539  1.00  0.00
H
ATOM   1831 3HG2 ILE   112      25.273 -21.296  15.278  1.00  0.00
H
ATOM   1832  CD1 ILE   112      25.335 -17.533  13.573  1.00  0.00
C
ATOM   1833 1HD1 ILE   112      25.167 -16.781  12.803  1.00  0.00
H
ATOM   1834 2HD1 ILE   112      26.241 -18.088  13.331  1.00  0.00
H
ATOM   1835 3HD1 ILE   112      25.446 -17.037  14.536  1.00  0.00
H
ATOM   1836  N   LEU   113      22.559 -21.298  17.051  1.00  0.00
N
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ATOM   1837  H   LEU   113      22.448 -20.373  17.445  1.00  0.00
H
ATOM   1838  CA  LEU   113      22.514 -22.468  17.935  1.00  0.00
C
ATOM   1839  HA  LEU   113      23.440 -23.033  17.818  1.00  0.00
H
ATOM   1840  C   LEU   113      21.353 -23.397  17.594  1.00  0.00
C
ATOM   1841  O   LEU   113      21.476 -24.614  17.740  1.00  0.00
O
ATOM   1842  CB  LEU   113      22.353 -22.066  19.407  1.00  0.00
C
ATOM   1843 1HB  LEU   113      21.398 -21.554  19.494  1.00  0.00
H
ATOM   1844 2HB  LEU   113      22.273 -22.988  19.982  1.00  0.00
H
ATOM   1845  CG  LEU   113      23.402 -21.191  20.103  1.00  0.00
C
ATOM   1846  HG  LEU   113      23.534 -20.289  19.525  1.00  0.00
H
ATOM   1847  CD1 LEU   113      22.903 -20.790  21.481  1.00  0.00
C
ATOM   1848 1HD1 LEU   113      23.607 -20.088  21.930  1.00  0.00
H
ATOM   1849 2HD1 LEU   113      22.823 -21.667  22.117  1.00  0.00
H
ATOM   1850 3HD1 LEU   113      21.933 -20.302  21.407  1.00  0.00
H
ATOM   1851  CD2 LEU   113      24.750 -21.865  20.229  1.00  0.00
C
ATOM   1852 1HD2 LEU   113      25.450 -21.197  20.730  1.00  0.00
H
ATOM   1853 2HD2 LEU   113      25.142 -22.091  19.238  1.00  0.00
H
ATOM   1854 3HD2 LEU   113      24.659 -22.787  20.803  1.00  0.00
H
ATOM   1855  N   ILE   114      20.237 -22.845  17.133  1.00  0.00
N
ATOM   1856  H   ILE   114      20.192 -21.841  17.014  1.00  0.00
H
ATOM   1857  CA  ILE   114      19.056 -23.651  16.808  1.00  0.00
C
ATOM   1858  HA  ILE   114      19.193 -24.636  17.248  1.00  0.00
H
ATOM   1859  C   ILE   114      18.838 -23.900  15.310  1.00  0.00
C
ATOM   1860  O   ILE   114      18.174 -24.877  14.950  1.00  0.00
O
ATOM   1861  CB  ILE   114      17.773 -23.057  17.466  1.00  0.00
C
ATOM   1862  HB  ILE   114      16.934 -23.704  17.218  1.00  0.00
H
ATOM   1863  CG1 ILE   114      17.473 -21.643  16.934  1.00  0.00
C
ATOM   1864 1HG1 ILE   114      18.235 -20.965  17.309  1.00  0.00
H
ATOM   1865 2HG1 ILE   114      17.546 -21.658  15.851  1.00  0.00
H
ATOM   1866  CG2 ILE   114      17.932 -23.048  19.006  1.00  0.00
C
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ATOM   1867 1HG2 ILE   114      16.983 -22.792  19.478  1.00  0.00
H
ATOM   1868 2HG2 ILE   114      18.687 -22.322  19.311  1.00  0.00
H
ATOM   1869 3HG2 ILE   114      18.230 -24.037  19.356  1.00  0.00
H
ATOM   1870  CD1 ILE   114      16.111 -21.069  17.292  1.00  0.00
C
ATOM   1871 1HD1 ILE   114      16.005 -20.088  16.828  1.00  0.00
H
ATOM   1872 2HD1 ILE   114      16.011 -20.964  18.371  1.00  0.00
H
ATOM   1873 3HD1 ILE   114      15.324 -21.725  16.918  1.00  0.00
H
ATOM   1874  N   TYR   115      19.393 -23.063  14.442  1.00  0.00
N
ATOM   1875  H   TYR   115      19.915 -22.261  14.788  1.00  0.00
H
ATOM   1876  CA  TYR   115      19.251 -23.176  12.991  1.00  0.00
C
ATOM   1877  HA  TYR   115      18.938 -24.185  12.733  1.00  0.00
H
ATOM   1878  C   TYR   115      20.549 -22.859  12.253  1.00  0.00
C
ATOM   1879  O   TYR   115      21.048 -21.739  12.296  1.00  0.00
O
ATOM   1880  CB  TYR   115      18.213 -22.179  12.462  1.00  0.00
C
ATOM   1881 1HB  TYR   115      18.557 -21.169  12.682  1.00  0.00
H
ATOM   1882 2HB  TYR   115      18.164 -22.288  11.379  1.00  0.00
H
ATOM   1883  CG  TYR   115      16.814 -22.330  13.019  1.00  0.00
C
ATOM   1884  CD1 TYR   115      16.140 -21.217  13.561  1.00  0.00
C
ATOM   1885  HD1 TYR   115      16.632 -20.254  13.595  1.00  0.00
H
ATOM   1886  CD2 TYR   115      16.139 -23.569  12.981  1.00  0.00
C
ATOM   1887  HD2 TYR   115      16.630 -24.439  12.568  1.00  0.00
H
ATOM   1888  CE1 TYR   115      14.824 -21.346  14.076  1.00  0.00
C
ATOM   1889  HE1 TYR   115      14.315 -20.498  14.505  1.00  0.00
H
ATOM   1890  CE2 TYR   115      14.817 -23.692  13.490  1.00  0.00
C
ATOM   1891  HE2 TYR   115      14.308 -24.640  13.454  1.00  0.00
H
ATOM   1892  CZ  TYR   115      14.180 -22.578  14.040  1.00  0.00
C
ATOM   1893  OH  TYR   115      12.910 -22.679  14.544  1.00  0.00
O
ATOM   1894  HH  TYR   115      12.515 -23.535  14.369  1.00  0.00
H
ATOM   1895  N   GLN   116      21.046 -23.822  11.493  1.00  0.00
N
ATOM   1896  H   GLN   116      20.626 -24.745  11.515  1.00  0.00
H
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ATOM   1897  CA  GLN   116      22.141 -23.570  10.559  1.00  0.00
C
ATOM   1898  HA  GLN   116      22.613 -22.619  10.799  1.00  0.00
H
ATOM   1899  C   GLN   116      21.587 -23.477   9.145  1.00  0.00
C
ATOM   1900  O   GLN   116      22.278 -23.038   8.228  1.00  0.00
O
ATOM   1901  CB  GLN   116      23.195 -24.675  10.627  1.00  0.00
C
ATOM   1902 1HB  GLN   116      22.698 -25.621  10.414  1.00  0.00
H
ATOM   1903 2HB  GLN   116      23.938 -24.507   9.847  1.00  0.00
H
ATOM   1904  CG  GLN   116      23.916 -24.809  11.972  1.00  0.00
C
ATOM   1905 1HG  GLN   116      23.177 -24.857  12.769  1.00  0.00
H
ATOM   1906 2HG  GLN   116      24.457 -25.751  11.962  1.00  0.00
H
ATOM   1907  CD  GLN   116      24.926 -23.717  12.311  1.00  0.00
C
ATOM   1908  OE1 GLN   116      25.530 -23.771  13.371  1.00  0.00
O
ATOM   1909  NE2 GLN   116      25.161 -22.770  11.439  1.00  0.00
N
ATOM   1910 1HE2 GLN   116      25.854 -22.067  11.660  1.00  0.00
H
ATOM   1911 2HE2 GLN   116      24.678 -22.753  10.561  1.00  0.00
H
ATOM   1912  N   ASP   117      20.335 -23.871   8.972  1.00  0.00
N
ATOM   1913  H   ASP   117      19.839 -24.306   9.742  1.00  0.00
H
ATOM   1914  CA  ASP   117      19.596 -23.647   7.734  1.00  0.00
C
ATOM   1915  HA  ASP   117      20.166 -24.007   6.879  1.00  0.00
H
ATOM   1916  C   ASP   117      19.394 -22.139   7.621  1.00  0.00
C
ATOM   1917  O   ASP   117      18.755 -21.525   8.476  1.00  0.00
O
ATOM   1918  CB  ASP   117      18.255 -24.383   7.812  1.00  0.00
C
ATOM   1919 1HB  ASP   117      18.452 -25.434   8.023  1.00  0.00
H
ATOM   1920 2HB  ASP   117      17.670 -23.973   8.633  1.00  0.00
H
ATOM   1921  CG  ASP   117      17.442 -24.295   6.532  1.00  0.00
C
ATOM   1922  OD1 ASP   117      17.570 -23.344   5.734  1.00  0.00
O
ATOM   1923  OD2 ASP   117      16.611 -25.207   6.330  1.00  0.00
O
ATOM   1924  N   ASP   118      19.964 -21.549   6.580  1.00  0.00
N
ATOM   1925  H   ASP   118      20.421 -22.127   5.883  1.00  0.00
H
ATOM   1926  CA  ASP   118      19.984 -20.097   6.400  1.00  0.00
C
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ATOM   1927  HA  ASP   118      20.537 -19.635   7.219  1.00  0.00
H
ATOM   1928  C   ASP   118      18.572 -19.523   6.394  1.00  0.00
C
ATOM   1929  O   ASP   118      18.292 -18.499   7.021  1.00  0.00
O
ATOM   1930  CB  ASP   118      20.649 -19.748   5.064  1.00  0.00
C
ATOM   1931 1HB  ASP   118      20.210 -20.364   4.281  1.00  0.00
H
ATOM   1932 2HB  ASP   118      20.454 -18.707   4.828  1.00  0.00
H
ATOM   1933  CG  ASP   118      22.146 -19.963   5.069  1.00  0.00
C
ATOM   1934  OD1 ASP   118      22.899 -19.050   5.455  1.00  0.00
O
ATOM   1935  OD2 ASP   118      22.592 -21.051   4.630  1.00  0.00
O
ATOM   1936  N   SER   119      17.656 -20.211   5.728  1.00  0.00
N
ATOM   1937  H   SER   119      17.919 -21.066   5.251  1.00  0.00
H
ATOM   1938  CA  SER   119      16.286 -19.718   5.631  1.00  0.00
C
ATOM   1939  HA  SER   119      16.319 -18.702   5.237  1.00  0.00
H
ATOM   1940  C   SER   119      15.613 -19.672   7.000  1.00  0.00
C
ATOM   1941  O   SER   119      14.865 -18.743   7.302  1.00  0.00
O
ATOM   1942  CB  SER   119      15.465 -20.586   4.676  1.00  0.00
C
ATOM   1943 1HB  SER   119      14.473 -20.147   4.562  1.00  0.00
H
ATOM   1944 2HB  SER   119      15.954 -20.607   3.701  1.00  0.00
H
ATOM   1945  OG  SER   119      15.332 -21.915   5.162  1.00  0.00
O
ATOM   1946  HG  SER   119      16.205 -22.344   5.177  1.00  0.00
H
ATOM   1947  N   LYS   120      15.894 -20.649   7.853  1.00  0.00
N
ATOM   1948  H   LYS   120      16.561 -21.362   7.585  1.00  0.00
H
ATOM   1949  CA  LYS   120      15.257 -20.707   9.169  1.00  0.00
C
ATOM   1950  HA  LYS   120      14.202 -20.451   9.065  1.00  0.00
H
ATOM   1951  C   LYS   120      15.895 -19.706  10.116  1.00  0.00
C
ATOM   1952  O   LYS   120      15.220 -19.124  10.963  1.00  0.00
O
ATOM   1953  CB  LYS   120      15.369 -22.102   9.781  1.00  0.00
C
ATOM   1954 1HB  LYS   120      16.421 -22.361   9.888  1.00  0.00
H
ATOM   1955 2HB  LYS   120      14.923 -22.057  10.775  1.00  0.00
H
ATOM   1956  CG  LYS   120      14.674 -23.206   9.004  1.00  0.00
C
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ATOM   1957 1HG  LYS   120      13.666 -22.881   8.762  1.00  0.00
H
ATOM   1958 2HG  LYS   120      15.214 -23.410   8.080  1.00  0.00
H
ATOM   1959  CD  LYS   120      14.595 -24.468   9.860  1.00  0.00
C
ATOM   1960 1HD  LYS   120      15.599 -24.811  10.109  1.00  0.00
H
ATOM   1961 2HD  LYS   120      14.072 -24.215  10.782  1.00  0.00
H
ATOM   1962  CE  LYS   120      13.824 -25.590   9.182  1.00  0.00
C
ATOM   1963 1HE  LYS   120      13.560 -26.337   9.933  1.00  0.00
H
ATOM   1964 2HE  LYS   120      12.896 -25.179   8.778  1.00  0.00
H
ATOM   1965  NZ  LYS   120      14.578 -26.270   8.086  1.00  0.00
N
ATOM   1966 1HZ  LYS   120      13.923 -26.748   7.480  1.00  0.00
H
ATOM   1967 2HZ  LYS   120      15.225 -26.951   8.470  1.00  0.00
H
ATOM   1968 3HZ  LYS   120      15.095 -25.597   7.530  1.00  0.00
H
ATOM   1969  N   LEU   121      17.191 -19.493   9.947  1.00  0.00
N
ATOM   1970  H   LEU   121      17.694 -20.031   9.248  1.00  0.00
H
ATOM   1971  CA  LEU   121      17.934 -18.524  10.744  1.00  0.00
C
ATOM   1972  HA  LEU   121      17.820 -18.763  11.802  1.00  0.00
H
ATOM   1973  C   LEU   121      17.408 -17.110  10.513  1.00  0.00
C
ATOM   1974  O   LEU   121      17.187 -16.351  11.460  1.00  0.00
O
ATOM   1975  CB  LEU   121      19.416 -18.619  10.360  1.00  0.00
C
ATOM   1976 1HB  LEU   121      19.736 -19.644  10.548  1.00  0.00
H
ATOM   1977 2HB  LEU   121      19.494 -18.448   9.288  1.00  0.00
H
ATOM   1978  CG  LEU   121      20.430 -17.682  11.031  1.00  0.00
C
ATOM   1979  HG  LEU   121      20.203 -16.656  10.746  1.00  0.00
H
ATOM   1980  CD1 LEU   121      20.394 -17.775  12.542  1.00  0.00
C
ATOM   1981 1HD1 LEU   121      21.170 -17.143  12.974  1.00  0.00
H
ATOM   1982 2HD1 LEU   121      20.559 -18.809  12.850  1.00  0.00
H
ATOM   1983 3HD1 LEU   121      19.429 -17.432  12.914  1.00  0.00
H
ATOM   1984  CD2 LEU   121      21.826 -18.035  10.516  1.00  0.00
C
ATOM   1985 1HD2 LEU   121      22.565 -17.390  10.991  1.00  0.00
H
ATOM   1986 2HD2 LEU   121      21.868 -17.889   9.437  1.00  0.00
H
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ATOM   1987 3HD2 LEU   121      22.059 -19.074  10.761  1.00  0.00
H
ATOM   1988  N   ALA   122      17.164 -16.767   9.254  1.00  0.00
N
ATOM   1989  H   ALA   122      17.373 -17.415   8.500  1.00  0.00
H
ATOM   1990  CA  ALA   122      16.630 -15.449   8.934  1.00  0.00
C
ATOM   1991  HA  ALA   122      17.289 -14.695   9.366  1.00  0.00
H
ATOM   1992  C   ALA   122      15.238 -15.254   9.525  1.00  0.00
C
ATOM   1993  O   ALA   122      14.947 -14.211  10.106  1.00  0.00
O
ATOM   1994  CB  ALA   122      16.582 -15.269   7.430  1.00  0.00
C
ATOM   1995 1HB  ALA   122      17.578 -15.388   7.021  1.00  0.00
H
ATOM   1996 2HB  ALA   122      16.203 -14.275   7.187  1.00  0.00
H
ATOM   1997 3HB  ALA   122      15.933 -16.021   6.988  1.00  0.00
H
ATOM   1998  N   GLU   123      14.393 -16.267   9.394  1.00  0.00
N
ATOM   1999  H   GLU   123      14.688 -17.108   8.914  1.00  0.00
H
ATOM   2000  CA  GLU   123      13.024 -16.185   9.901  1.00  0.00
C
ATOM   2001  HA  GLU   123      12.528 -15.313   9.470  1.00  0.00
H
ATOM   2002  C   GLU   123      13.002 -16.037  11.412  1.00  0.00
C
ATOM   2003  O   GLU   123      12.169 -15.313  11.946  1.00  0.00
O
ATOM   2004  CB  GLU   123      12.233 -17.441   9.545  1.00  0.00
C
ATOM   2005 1HB  GLU   123      12.828 -18.309   9.829  1.00  0.00
H
ATOM   2006 2HB  GLU   123      11.313 -17.442  10.128  1.00  0.00
H
ATOM   2007  CG  GLU   123      11.866 -17.556   8.081  1.00  0.00
C
ATOM   2008 1HG  GLU   123      11.227 -16.717   7.810  1.00  0.00
H
ATOM   2009 2HG  GLU   123      12.769 -17.497   7.483  1.00  0.00
H
ATOM   2010  CD  GLU   123      11.154 -18.861   7.765  1.00  0.00
C
ATOM   2011  OE1 GLU   123      10.795 -19.618   8.700  1.00  0.00
O
ATOM   2012  OE2 GLU   123      10.918 -19.153   6.567  1.00  0.00
O
ATOM   2013  N   PHE   124      13.928 -16.684  12.105  1.00  0.00
N
ATOM   2014  H   PHE   124      14.604 -17.272  11.629  1.00  0.00
H
ATOM   2015  CA  PHE   124      13.976 -16.573  13.558  1.00  0.00
C
ATOM   2016  HA  PHE   124      13.003 -16.852  13.965  1.00  0.00
H
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ATOM   2017  C   PHE   124      14.253 -15.139  13.971  1.00  0.00
C
ATOM   2018  O   PHE   124      13.542 -14.584  14.811  1.00  0.00
O
ATOM   2019  CB  PHE   124      15.058 -17.480  14.144  1.00  0.00
C
ATOM   2020 1HB  PHE   124      14.805 -18.511  13.913  1.00  0.00
H
ATOM   2021 2HB  PHE   124      16.011 -17.248  13.671  1.00  0.00
H
ATOM   2022  CG  PHE   124      15.226 -17.323  15.631  1.00  0.00
C
ATOM   2023  CD1 PHE   124      14.258 -17.822  16.520  1.00  0.00
C
ATOM   2024  HD1 PHE   124      13.397 -18.353  16.138  1.00  0.00
H
ATOM   2025  CD2 PHE   124      16.345 -16.639  16.148  1.00  0.00
C
ATOM   2026  HD2 PHE   124      17.097 -16.249  15.476  1.00  0.00
H
ATOM   2027  CE1 PHE   124      14.389 -17.625  17.918  1.00  0.00
C
ATOM   2028  HE1 PHE   124      13.631 -18.001  18.590  1.00  0.00
H
ATOM   2029  CE2 PHE   124      16.495 -16.442  17.542  1.00  0.00
C
ATOM   2030  HE2 PHE   124      17.359 -15.917  17.926  1.00  0.00
H
ATOM   2031  CZ  PHE   124      15.509 -16.928  18.429  1.00  0.00
C
ATOM   2032  HZ  PHE   124      15.608 -16.764  19.492  1.00  0.00
H
ATOM   2033  N   LEU   125      15.258 -14.517  13.369  1.00  0.00
N
ATOM   2034  H   LEU   125      15.807 -14.996  12.662  1.00  0.00
H
ATOM   2035  CA  LEU   125      15.586 -13.146  13.745  1.00  0.00
C
ATOM   2036  HA  LEU   125      15.689 -13.101  14.829  1.00  0.00
H
ATOM   2037  C   LEU   125      14.454 -12.215  13.332  1.00  0.00
C
ATOM   2038  O   LEU   125      14.075 -11.316  14.079  1.00  0.00
O
ATOM   2039  CB  LEU   125      16.889 -12.676  13.090  1.00  0.00
C
ATOM   2040 1HB  LEU   125      17.684 -13.384  13.320  1.00  0.00
H
ATOM   2041 2HB  LEU   125      16.741 -12.663  12.011  1.00  0.00
H
ATOM   2042  CG  LEU   125      17.320 -11.269  13.543  1.00  0.00
C
ATOM   2043  HG  LEU   125      16.461 -10.611  13.461  1.00  0.00
H
ATOM   2044  CD1 LEU   125      17.806 -11.234  14.988  1.00  0.00
C
ATOM   2045 1HD1 LEU   125      18.115 -10.224  15.253  1.00  0.00
H
ATOM   2046 2HD1 LEU   125      18.649 -11.915  15.119  1.00  0.00
H
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ATOM   2047 3HD1 LEU   125      16.999 -11.528  15.656  1.00  0.00
H
ATOM   2048  CD2 LEU   125      18.380 -10.684  12.654  1.00  0.00
C
ATOM   2049 1HD2 LEU   125      18.563  -9.652  12.947  1.00  0.00
H
ATOM   2050 2HD2 LEU   125      18.039 -10.688  11.624  1.00  0.00
H
ATOM   2051 3HD2 LEU   125      19.301 -11.251  12.729  1.00  0.00
H
ATOM   2052  N   LYS   126      13.898 -12.432  12.147  1.00  0.00
N
ATOM   2053  H   LYS   126      14.222 -13.205  11.568  1.00  0.00
H
ATOM   2054  CA  LYS   126      12.851 -11.552  11.637  1.00  0.00
C
ATOM   2055  HA  LYS   126      13.227 -10.529  11.645  1.00  0.00
H
ATOM   2056  C   LYS   126      11.637 -11.611  12.548  1.00  0.00
C
ATOM   2057  O   LYS   126      11.121 -10.570  12.939  1.00  0.00
O
ATOM   2058  CB  LYS   126      12.490 -11.947  10.203  1.00  0.00
C
ATOM   2059 1HB  LYS   126      13.416 -12.135   9.660  1.00  0.00
H
ATOM   2060 2HB  LYS   126      11.919 -12.875  10.227  1.00  0.00
H
ATOM   2061  CG  LYS   126      11.713 -10.899   9.424  1.00  0.00
C
ATOM   2062 1HG  LYS   126      10.819 -10.607   9.974  1.00  0.00
H
ATOM   2063 2HG  LYS   126      12.346 -10.024   9.270  1.00  0.00
H
ATOM   2064  CD  LYS   126      11.317 -11.487   8.079  1.00  0.00
C
ATOM   2065 1HD  LYS   126      12.200 -11.912   7.611  1.00  0.00
H
ATOM   2066 2HD  LYS   126      10.595 -12.286   8.242  1.00  0.00
H
ATOM   2067  CE  LYS   126      10.713 -10.453   7.144  1.00  0.00
C
ATOM   2068 1HE  LYS   126       9.824 -10.020   7.608  1.00  0.00
H
ATOM   2069 2HE  LYS   126      11.440  -9.660   6.966  1.00  0.00
H
ATOM   2070  NZ  LYS   126      10.336 -11.082   5.838  1.00  0.00
N
ATOM   2071 1HZ  LYS   126       9.947 -10.384   5.213  1.00  0.00
H
ATOM   2072 2HZ  LYS   126       9.638 -11.804   5.996  1.00  0.00
H
ATOM   2073 3HZ  LYS   126      11.142 -11.509   5.403  1.00  0.00
H
ATOM   2074  N   ASN   127      11.236 -12.808  12.956  1.00  0.00
N
ATOM   2075  H   ASN   127      11.714 -13.640  12.618  1.00  0.00
H
ATOM   2076  CA  ASN   127      10.102 -12.962  13.865  1.00  0.00
C
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ATOM   2077  HA  ASN   127       9.233 -12.469  13.428  1.00  0.00
H
ATOM   2078  C   ASN   127      10.391 -12.294  15.203  1.00  0.00
C
ATOM   2079  O   ASN   127       9.537 -11.581  15.725  1.00  0.00
O
ATOM   2080  CB  ASN   127       9.772 -14.440  14.125  1.00  0.00
C
ATOM   2081 1HB  ASN   127      10.688 -14.982  14.355  1.00  0.00
H
ATOM   2082 2HB  ASN   127       9.110 -14.501  14.987  1.00  0.00
H
ATOM   2083  CG  ASN   127       9.075 -15.109  12.962  1.00  0.00
C
ATOM   2084  OD1 ASN   127       8.354 -14.485  12.197  1.00  0.00
O
ATOM   2085  ND2 ASN   127       9.269 -16.387  12.820  1.00  0.00
N
ATOM   2086 1HD2 ASN   127       8.785 -16.872  12.087  1.00  0.00
H
ATOM   2087 2HD2 ASN   127       9.911 -16.882  13.425  1.00  0.00
H
ATOM   2088  N   GLU   128      11.584 -12.499  15.751  1.00  0.00
N
ATOM   2089  H   GLU   128      12.264 -13.086  15.275  1.00  0.00
H
ATOM   2090  CA  GLU   128      11.946 -11.919  17.047  1.00  0.00
C
ATOM   2091  HA  GLU   128      11.223 -12.234  17.801  1.00  0.00
H
ATOM   2092  C   GLU   128      11.956 -10.397  17.021  1.00  0.00
C
ATOM   2093  O   GLU   128      11.479  -9.739  17.947  1.00  0.00
O
ATOM   2094  CB  GLU   128      13.355 -12.359  17.466  1.00  0.00
C
ATOM   2095 1HB  GLU   128      14.012 -12.284  16.600  1.00  0.00
H
ATOM   2096 2HB  GLU   128      13.719 -11.663  18.218  1.00  0.00
H
ATOM   2097  CG  GLU   128      13.470 -13.756  18.043  1.00  0.00
C
ATOM   2098 1HG  GLU   128      13.091 -14.476  17.322  1.00  0.00
H
ATOM   2099 2HG  GLU   128      14.522 -13.972  18.227  1.00  0.00
H
ATOM   2100  CD  GLU   128      12.708 -13.903  19.345  1.00  0.00
C
ATOM   2101  OE1 GLU   128      12.933 -13.107  20.282  1.00  0.00
O
ATOM   2102  OE2 GLU   128      11.857 -14.816  19.453  1.00  0.00
O
ATOM   2103  N   LEU   129      12.534  -9.805  15.990  1.00  0.00
N
ATOM   2104  H   LEU   129      12.932 -10.359  15.232  1.00  0.00
H
ATOM   2105  CA  LEU   129      12.641  -8.352  15.961  1.00  0.00
C
ATOM   2106  HA  LEU   129      12.940  -7.998  16.946  1.00  0.00
H
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ATOM   2107  C   LEU   129      11.295  -7.731  15.647  1.00  0.00
C
ATOM   2108  O   LEU   129      10.929  -6.728  16.242  1.00  0.00
O
ATOM   2109  CB  LEU   129      13.680  -7.895  14.945  1.00  0.00
C
ATOM   2110 1HB  LEU   129      13.394  -8.286  13.969  1.00  0.00
H
ATOM   2111 2HB  LEU   129      13.629  -6.813  14.901  1.00  0.00
H
ATOM   2112  CG  LEU   129      15.145  -8.258  15.203  1.00  0.00
C
ATOM   2113  HG  LEU   129      15.236  -9.338  15.284  1.00  0.00
H
ATOM   2114  CD1 LEU   129      15.949  -7.789  14.009  1.00  0.00
C
ATOM   2115 1HD1 LEU   129      15.555  -8.240  13.097  1.00  0.00
H
ATOM   2116 2HD1 LEU   129      16.984  -8.101  14.125  1.00  0.00
H
ATOM   2117 3HD1 LEU   129      15.906  -6.702  13.922  1.00  0.00
H
ATOM   2118  CD2 LEU   129      15.712  -7.633  16.477  1.00  0.00
C
ATOM   2119 1HD2 LEU   129      16.745  -7.949  16.611  1.00  0.00
H
ATOM   2120 2HD2 LEU   129      15.143  -7.962  17.342  1.00  0.00
H
ATOM   2121 3HD2 LEU   129      15.671  -6.544  16.416  1.00  0.00
H
ATOM   2122  N   ASP   130      10.513  -8.368  14.792  1.00  0.00
N
ATOM   2123  H   ASP   130      10.849  -9.203  14.316  1.00  0.00
H
ATOM   2124  CA  ASP   130       9.163  -7.891  14.498  1.00  0.00
C
ATOM   2125  HA  ASP   130       9.207  -6.855  14.174  1.00  0.00
H
ATOM   2126  C   ASP   130       8.292  -7.953  15.753  1.00  0.00
C
ATOM   2127  O   ASP   130       7.409  -7.123  15.959  1.00  0.00
O
ATOM   2128  CB  ASP   130       8.583  -8.732  13.360  1.00  0.00
C
ATOM   2129 1HB  ASP   130       9.263  -8.683  12.510  1.00  0.00
H
ATOM   2130 2HB  ASP   130       8.511  -9.768  13.687  1.00  0.00
H
ATOM   2131  CG  ASP   130       7.217  -8.268  12.918  1.00  0.00
C
ATOM   2132  OD1 ASP   130       7.125  -7.457  11.968  1.00  0.00
O
ATOM   2133  OD2 ASP   130       6.210  -8.767  13.479  1.00  0.00
O
ATOM   2134  N   LYS   131       8.560  -8.919  16.622  1.00  0.00
N
ATOM   2135  H   LYS   131       9.285  -9.595  16.399  1.00  0.00
H
ATOM   2136  CA  LYS   131       7.825  -9.063  17.882  1.00  0.00
C
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ATOM   2137  HA  LYS   131       6.764  -8.922  17.682  1.00  0.00
H
ATOM   2138  C   LYS   131       8.225  -8.051  18.956  1.00  0.00
C
ATOM   2139  O   LYS   131       7.359  -7.540  19.667  1.00  0.00
O
ATOM   2140  CB  LYS   131       8.033 -10.492  18.393  1.00  0.00
C
ATOM   2141 1HB  LYS   131       7.844 -11.165  17.559  1.00  0.00
H
ATOM   2142 2HB  LYS   131       9.073 -10.613  18.696  1.00  0.00
H
ATOM   2143  CG  LYS   131       7.144 -10.940  19.540  1.00  0.00
C
ATOM   2144 1HG  LYS   131       7.411 -10.396  20.446  1.00  0.00
H
ATOM   2145 2HG  LYS   131       6.100 -10.750  19.291  1.00  0.00
H
ATOM   2146  CD  LYS   131       7.358 -12.434  19.753  1.00  0.00
C
ATOM   2147 1HD  LYS   131       7.112 -12.968  18.834  1.00  0.00
H
ATOM   2148 2HD  LYS   131       8.410 -12.605  19.980  1.00  0.00
H
ATOM   2149  CE  LYS   131       6.520 -12.989  20.890  1.00  0.00
C
ATOM   2150 1HE  LYS   131       6.749 -12.440  21.805  1.00  0.00
H
ATOM   2151 2HE  LYS   131       5.460 -12.875  20.659  1.00  0.00
H
ATOM   2152  NZ  LYS   131       6.851 -14.439  21.086  1.00  0.00
N
ATOM   2153 1HZ  LYS   131       6.480 -14.769  21.970  1.00  0.00
H
ATOM   2154 2HZ  LYS   131       7.858 -14.566  21.096  1.00  0.00
H
ATOM   2155 3HZ  LYS   131       6.458 -14.995  20.334  1.00  0.00
H
ATOM   2156  N   TYR   132       9.512  -7.758  19.096  1.00  0.00
N
ATOM   2157  H   TYR   132      10.185  -8.187  18.472  1.00  0.00
H
ATOM   2158  CA  TYR   132       9.999  -6.929  20.212  1.00  0.00
C
ATOM   2159  HA  TYR   132       9.165  -6.750  20.888  1.00  0.00
H
ATOM   2160  C   TYR   132      10.567  -5.551  19.887  1.00  0.00
C
ATOM   2161  O   TYR   132      10.785  -4.745  20.791  1.00  0.00
O
ATOM   2162  CB  TYR   132      11.041  -7.717  21.005  1.00  0.00
C
ATOM   2163 1HB  TYR   132      11.883  -7.955  20.358  1.00  0.00
H
ATOM   2164 2HB  TYR   132      11.399  -7.096  21.827  1.00  0.00
H
ATOM   2165  CG  TYR   132      10.470  -8.989  21.586  1.00  0.00
C
ATOM   2166  CD1 TYR   132      10.895 -10.255  21.136  1.00  0.00
C
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ATOM   2167  HD1 TYR   132      11.656 -10.333  20.375  1.00  0.00
H
ATOM   2168  CD2 TYR   132       9.482  -8.930  22.589  1.00  0.00
C
ATOM   2169  HD2 TYR   132       9.144  -7.972  22.958  1.00  0.00
H
ATOM   2170  CE1 TYR   132      10.337 -11.439  21.673  1.00  0.00
C
ATOM   2171  HE1 TYR   132      10.671 -12.405  21.327  1.00  0.00
H
ATOM   2172  CE2 TYR   132       8.922 -10.112  23.123  1.00  0.00
C
ATOM   2173  HE2 TYR   132       8.159 -10.055  23.883  1.00  0.00
H
ATOM   2174  CZ  TYR   132       9.359 -11.353  22.664  1.00  0.00
C
ATOM   2175  OH  TYR   132       8.833 -12.496  23.194  1.00  0.00
O
ATOM   2176  HH  TYR   132       8.188 -12.316  23.898  1.00  0.00
H
ATOM   2177  N   PHE   133      10.766  -5.243  18.617  1.00  0.00
N
ATOM   2178  H   PHE   133      10.568  -5.927  17.889  1.00  0.00
H
ATOM   2179  CA  PHE   133      11.307  -3.949  18.196  1.00  0.00
C
ATOM   2180  HA  PHE   133      11.398  -3.278  19.050  1.00  0.00
H
ATOM   2181  C   PHE   133      10.353  -3.305  17.197  1.00  0.00
C
ATOM   2182  O   PHE   133      10.719  -2.380  16.467  1.00  0.00
O
ATOM   2183  CB  PHE   133      12.692  -4.128  17.568  1.00  0.00
C
ATOM   2184 1HB  PHE   133      12.639  -4.894  16.798  1.00  0.00
H
ATOM   2185 2HB  PHE   133      12.983  -3.189  17.103  1.00  0.00
H
ATOM   2186  CG  PHE   133      13.770  -4.490  18.546  1.00  0.00
C
ATOM   2187  CD1 PHE   133      13.953  -5.817  18.973  1.00  0.00
C
ATOM   2188  HD1 PHE   133      13.290  -6.593  18.623  1.00  0.00
H
ATOM   2189  CD2 PHE   133      14.636  -3.493  19.024  1.00  0.00
C
ATOM   2190  HD2 PHE   133      14.485  -2.467  18.730  1.00  0.00
H
ATOM   2191  CE1 PHE   133      14.997  -6.148  19.870  1.00  0.00
C
ATOM   2192  HE1 PHE   133      15.115  -7.167  20.211  1.00  0.00
H
ATOM   2193  CE2 PHE   133      15.699  -3.813  19.897  1.00  0.00
C
ATOM   2194  HE2 PHE   133      16.362  -3.040  20.252  1.00  0.00
H
ATOM   2195  CZ  PHE   133      15.876  -5.140  20.323  1.00  0.00
C
ATOM   2196  HZ  PHE   133      16.670  -5.378  21.012  1.00  0.00
H
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ATOM   2197  N   GLY   134       9.121  -3.789  17.175  1.00  0.00
N
ATOM   2198  H   GLY   134       8.854  -4.530  17.810  1.00  0.00
H
ATOM   2199  CA  GLY   134       8.112  -3.281  16.264  1.00  0.00
C
ATOM   2200 1HA  GLY   134       7.134  -3.521  16.679  1.00  0.00
H
ATOM   2201 2HA  GLY   134       8.195  -2.198  16.192  1.00  0.00
H
ATOM   2202  C   GLY   134       8.184  -3.869  14.873  1.00  0.00
C
ATOM   2203  O   GLY   134       9.147  -4.530  14.512  1.00  0.00
O
ATOM   2204  N   LYS   135       7.145  -3.625  14.091  1.00  0.00
N
ATOM   2205  H   LYS   135       6.416  -3.001  14.427  1.00  0.00
H
ATOM   2206  CA  LYS   135       6.966  -4.249  12.782  1.00  0.00
C
ATOM   2207  HA  LYS   135       7.061  -5.324  12.909  1.00  0.00
H
ATOM   2208  C   LYS   135       7.967  -3.841  11.713  1.00  0.00
C
ATOM   2209  O   LYS   135       8.638  -2.821  11.849  1.00  0.00
O
ATOM   2210  CB  LYS   135       5.556  -3.915  12.265  1.00  0.00
C
ATOM   2211 1HB  LYS   135       5.477  -2.832  12.164  1.00  0.00
H
ATOM   2212 2HB  LYS   135       5.426  -4.353  11.275  1.00  0.00
H
ATOM   2213  CG  LYS   135       4.402  -4.399  13.131  1.00  0.00
C
ATOM   2214 1HG  LYS   135       4.483  -3.982  14.134  1.00  0.00
H
ATOM   2215 2HG  LYS   135       3.471  -4.057  12.683  1.00  0.00
H
ATOM   2216  CD  LYS   135       4.383  -5.912  13.204  1.00  0.00
C
ATOM   2217 1HD  LYS   135       4.350  -6.316  12.192  1.00  0.00
H
ATOM   2218 2HD  LYS   135       5.290  -6.260  13.696  1.00  0.00
H
ATOM   2219  CE  LYS   135       3.207  -6.434  13.979  1.00  0.00
C
ATOM   2220 1HE  LYS   135       3.244  -6.053  15.001  1.00  0.00
H
ATOM   2221 2HE  LYS   135       2.274  -6.127  13.503  1.00  0.00
H
ATOM   2222  NZ  LYS   135       3.324  -7.925  13.975  1.00  0.00
N
ATOM   2223 1HZ  LYS   135       2.675  -8.328  14.639  1.00  0.00
H
ATOM   2224 2HZ  LYS   135       4.271  -8.191  14.224  1.00  0.00
H
ATOM   2225 3HZ  LYS   135       3.130  -8.282  13.046  1.00  0.00
H
ATOM   2226  N   LEU   136       7.924  -4.583  10.612  1.00  0.00
N
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ATOM   2227  H   LEU   136       7.375  -5.432  10.651  1.00  0.00
H
ATOM   2228  CA  LEU   136       8.531  -4.232   9.316  1.00  0.00
C
ATOM   2229  HA  LEU   136       8.146  -4.957   8.602  1.00  0.00
H
ATOM   2230  C   LEU   136      10.055  -4.366   9.240  1.00  0.00
C
ATOM   2231  O   LEU   136      10.746  -3.588   8.582  1.00  0.00
O
ATOM   2232  CB  LEU   136       8.078  -2.851   8.809  1.00  0.00
C
ATOM   2233 1HB  LEU   136       8.589  -2.096   9.404  1.00  0.00
H
ATOM   2234 2HB  LEU   136       8.448  -2.763   7.789  1.00  0.00
H
ATOM   2235  CG  LEU   136       6.591  -2.469   8.764  1.00  0.00
C
ATOM   2236  HG  LEU   136       6.167  -2.586   9.758  1.00  0.00
H
ATOM   2237  CD1 LEU   136       6.439  -1.006   8.364  1.00  0.00
C
ATOM   2238 1HD1 LEU   136       5.381  -0.743   8.324  1.00  0.00
H
ATOM   2239 2HD1 LEU   136       6.882  -0.841   7.383  1.00  0.00
H
ATOM   2240 3HD1 LEU   136       6.928  -0.372   9.100  1.00  0.00
H
ATOM   2241  CD2 LEU   136       5.809  -3.345   7.799  1.00  0.00
C
ATOM   2242 1HD2 LEU   136       4.765  -3.034   7.784  1.00  0.00
H
ATOM   2243 2HD2 LEU   136       5.855  -4.386   8.116  1.00  0.00
H
ATOM   2244 3HD2 LEU   136       6.221  -3.258   6.793  1.00  0.00
H
ATOM   2245  N   TRP   137      10.576  -5.397   9.886  1.00  0.00
N
ATOM   2246  H   TRP   137       9.979  -5.983  10.447  1.00  0.00
H
ATOM   2247  CA  TRP   137      11.982  -5.772   9.735  1.00  0.00
C
ATOM   2248  HA  TRP   137      12.600  -4.876   9.676  1.00  0.00
H
ATOM   2249  C   TRP   137      12.225  -6.607   8.488  1.00  0.00
C
ATOM   2250  O   TRP   137      11.371  -7.388   8.071  1.00  0.00
O
ATOM   2251  CB  TRP   137      12.438  -6.606  10.927  1.00  0.00
C
ATOM   2252 1HB  TRP   137      11.717  -7.402  11.116  1.00  0.00
H
ATOM   2253 2HB  TRP   137      13.405  -7.054  10.697  1.00  0.00
H
ATOM   2254  CG  TRP   137      12.594  -5.768  12.132  1.00  0.00
C
ATOM   2255  CD1 TRP   137      11.677  -5.542  13.096  1.00  0.00
C
ATOM   2256  HD1 TRP   137      10.681  -5.967  13.106  1.00  0.00
H
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ATOM   2257  CD2 TRP   137      13.747  -4.997  12.507  1.00  0.00
C
ATOM   2258  NE1 TRP   137      12.163  -4.723  14.069  1.00  0.00
N
ATOM   2259  HE1 TRP   137      11.630  -4.457  14.889  1.00  0.00
H
ATOM   2260  CE2 TRP   137      13.441  -4.361  13.742  1.00  0.00
C
ATOM   2261  CE3 TRP   137      15.005  -4.761  11.915  1.00  0.00
C
ATOM   2262  HE3 TRP   137      15.260  -5.227  10.975  1.00  0.00
H
ATOM   2263  CZ2 TRP   137      14.361  -3.529  14.406  1.00  0.00
C
ATOM   2264  HZ2 TRP   137      14.110  -3.053  15.338  1.00  0.00
H
ATOM   2265  CZ3 TRP   137      15.929  -3.912  12.574  1.00  0.00
C
ATOM   2266  HZ3 TRP   137      16.895  -3.716  12.129  1.00  0.00
H
ATOM   2267  CH2 TRP   137      15.596  -3.325  13.824  1.00  0.00
C
ATOM   2268  HH2 TRP   137      16.313  -2.699  14.323  1.00  0.00
H
ATOM   2269  N   ASN   138      13.423  -6.493   7.941  1.00  0.00
N
ATOM   2270  H   ASN   138      14.065  -5.786   8.298  1.00  0.00
H
ATOM   2271  CA  ASN   138      13.906  -7.340   6.860  1.00  0.00
C
ATOM   2272  HA  ASN   138      13.233  -8.183   6.705  1.00  0.00
H
ATOM   2273  C   ASN   138      15.272  -7.852   7.297  1.00  0.00
C
ATOM   2274  O   ASN   138      16.027  -7.125   7.952  1.00  0.00
O
ATOM   2275  CB  ASN   138      14.027  -6.529   5.571  1.00  0.00
C
ATOM   2276 1HB  ASN   138      14.616  -5.636   5.775  1.00  0.00
H
ATOM   2277 2HB  ASN   138      14.540  -7.125   4.819  1.00  0.00
H
ATOM   2278  CG  ASN   138      12.689  -6.111   5.025  1.00  0.00
C
ATOM   2279  OD1 ASN   138      12.162  -5.063   5.361  1.00  0.00
O
ATOM   2280  ND2 ASN   138      12.110  -6.937   4.205  1.00  0.00
N
ATOM   2281 1HD2 ASN   138      11.232  -6.668   3.787  1.00  0.00
H
ATOM   2282 2HD2 ASN   138      12.527  -7.840   4.014  1.00  0.00
H
ATOM   2283  N   VAL   139      15.562  -9.106   6.981  1.00  0.00
N
ATOM   2284  H   VAL   139      14.896  -9.652   6.446  1.00  0.00
H
ATOM   2285  CA  VAL   139      16.790  -9.780   7.408  1.00  0.00
C
ATOM   2286  HA  VAL   139      17.510  -9.049   7.775  1.00  0.00
H
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ATOM   2287  C   VAL   139      17.381 -10.514   6.209  1.00  0.00
C
ATOM   2288  O   VAL   139      16.655 -11.189   5.475  1.00  0.00
O
ATOM   2289  CB  VAL   139      16.477 -10.811   8.542  1.00  0.00
C
ATOM   2290  HB  VAL   139      15.742 -11.522   8.168  1.00  0.00
H
ATOM   2291  CG1 VAL   139      17.726 -11.598   8.961  1.00  0.00
C
ATOM   2292 1HG1 VAL   139      17.477 -12.270   9.784  1.00  0.00
H
ATOM   2293 2HG1 VAL   139      18.519 -10.917   9.273  1.00  0.00
H
ATOM   2294 3HG1 VAL   139      18.078 -12.204   8.129  1.00  0.00
H
ATOM   2295  CG2 VAL   139      15.875 -10.104   9.768  1.00  0.00
C
ATOM   2296 1HG2 VAL   139      15.707 -10.828  10.563  1.00  0.00
H
ATOM   2297 2HG2 VAL   139      14.917  -9.655   9.508  1.00  0.00
H
ATOM   2298 3HG2 VAL   139      16.551  -9.326  10.123  1.00  0.00
H
ATOM   2299  N   ILE   140      18.684 -10.403   6.006  1.00  0.00
N
ATOM   2300  H   ILE   140      19.232  -9.779   6.601  1.00  0.00
H
ATOM   2301  CA  ILE   140      19.402 -11.154   4.981  1.00  0.00
C
ATOM   2302  HA  ILE   140      18.763 -11.935   4.571  1.00  0.00
H
ATOM   2303  C   ILE   140      20.566 -11.775   5.749  1.00  0.00
C
ATOM   2304  O   ILE   140      21.213 -11.096   6.541  1.00  0.00
O
ATOM   2305  CB  ILE   140      19.911 -10.237   3.824  1.00  0.00
C
ATOM   2306  HB  ILE   140      20.627  -9.529   4.239  1.00  0.00
H
ATOM   2307  CG1 ILE   140      18.746  -9.435   3.205  1.00  0.00
C
ATOM   2308 1HG1 ILE   140      18.101 -10.126   2.662  1.00  0.00
H
ATOM   2309 2HG1 ILE   140      18.158  -8.981   4.001  1.00  0.00
H
ATOM   2310  CG2 ILE   140      20.610 -11.083   2.731  1.00  0.00
C
ATOM   2311 1HG2 ILE   140      20.937 -10.446   1.911  1.00  0.00
H
ATOM   2312 2HG2 ILE   140      19.925 -11.838   2.339  1.00  0.00
H
ATOM   2313 3HG2 ILE   140      21.495 -11.561   3.143  1.00  0.00
H
ATOM   2314  CD1 ILE   140      19.156  -8.304   2.263  1.00  0.00
C
ATOM   2315 1HD1 ILE   140      18.270  -7.744   1.978  1.00  0.00
H
ATOM   2316 2HD1 ILE   140      19.627  -8.704   1.366  1.00  0.00
H
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ATOM   2317 3HD1 ILE   140      19.845  -7.635   2.774  1.00  0.00
H
ATOM   2318  N   ILE   141      20.799 -13.066   5.559  1.00  0.00
N
ATOM   2319  H   ILE   141      20.179 -13.587   4.956  1.00  0.00
H
ATOM   2320  CA  ILE   141      21.875 -13.808   6.237  1.00  0.00
C
ATOM   2321  HA  ILE   141      22.414 -13.120   6.888  1.00  0.00
H
ATOM   2322  C   ILE   141      22.864 -14.363   5.215  1.00  0.00
C
ATOM   2323  O   ILE   141      23.765 -15.155   5.505  1.00  0.00
O
ATOM   2324  CB  ILE   141      21.309 -14.967   7.124  1.00  0.00
C
ATOM   2325  HB  ILE   141      22.135 -15.350   7.723  1.00  0.00
H
ATOM   2326  CG1 ILE   141      20.765 -16.170   6.315  1.00  0.00
C
ATOM   2327 1HG1 ILE   141      21.612 -16.668   5.844  1.00  0.00
H
ATOM   2328 2HG1 ILE   141      20.356 -16.875   7.037  1.00  0.00
H
ATOM   2329  CG2 ILE   141      20.241 -14.427   8.100  1.00  0.00
C
ATOM   2330 1HG2 ILE   141      19.956 -15.211   8.802  1.00  0.00
H
ATOM   2331 2HG2 ILE   141      19.357 -14.097   7.559  1.00  0.00
H
ATOM   2332 3HG2 ILE   141      20.640 -13.582   8.660  1.00  0.00
H
ATOM   2333  CD1 ILE   141      19.692 -15.952   5.207  1.00  0.00
C
ATOM   2334 1HD1 ILE   141      19.143 -16.879   5.043  1.00  0.00
H
ATOM   2335 2HD1 ILE   141      20.181 -15.675   4.277  1.00  0.00
H
ATOM   2336 3HD1 ILE   141      18.987 -15.176   5.492  1.00  0.00
H
ATOM   2337  N   ILE   142      22.602 -14.006   3.968  1.00  0.00
N
ATOM   2338  H   ILE   142      21.881 -13.330   3.791  1.00  0.00
H
ATOM   2339  CA  ILE   142      23.316 -14.580   2.839  1.00  0.00
C
ATOM   2340  HA  ILE   142      23.416 -15.652   3.000  1.00  0.00
H
ATOM   2341  C   ILE   142      24.696 -13.938   2.810  1.00  0.00
C
ATOM   2342  O   ILE   142      24.829 -12.714   2.868  1.00  0.00
O
ATOM   2343  CB  ILE   142      22.574 -14.355   1.489  1.00  0.00
C
ATOM   2344  HB  ILE   142      22.557 -13.287   1.270  1.00  0.00
H
ATOM   2345  CG1 ILE   142      21.116 -14.851   1.590  1.00  0.00
C
ATOM   2346 1HG1 ILE   142      21.125 -15.932   1.730  1.00  0.00
H
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ATOM   2347 2HG1 ILE   142      20.645 -14.403   2.463  1.00  0.00
H
ATOM   2348  CG2 ILE   142      23.304 -15.101   0.348  1.00  0.00
C
ATOM   2349 1HG2 ILE   142      22.773 -14.949  -0.588  1.00  0.00
H
ATOM   2350 2HG2 ILE   142      23.343 -16.172   0.559  1.00  0.00
H
ATOM   2351 3HG2 ILE   142      24.315 -14.716   0.230  1.00  0.00
H
ATOM   2352  CD1 ILE   142      20.222 -14.522   0.396  1.00  0.00
C
ATOM   2353 1HD1 ILE   142      19.207 -14.849   0.617  1.00  0.00
H
ATOM   2354 2HD1 ILE   142      20.567 -15.044  -0.497  1.00  0.00
H
ATOM   2355 3HD1 ILE   142      20.220 -13.446   0.213  1.00  0.00
H
ATOM   2356  N   TYR   143      25.718 -14.771   2.717  1.00  0.00
N
ATOM   2357  H   TYR   143      25.532 -15.765   2.730  1.00  0.00
H
ATOM   2358  CA  TYR   143      27.098 -14.323   2.579  1.00  0.00
C
ATOM   2359  HA  TYR   143      27.309 -13.632   3.393  1.00  0.00
H
ATOM   2360  C   TYR   143      27.362 -13.585   1.255  1.00  0.00
C
ATOM   2361  O   TYR   143      26.446 -13.382   0.455  1.00  0.00
O
ATOM   2362  CB  TYR   143      28.011 -15.539   2.747  1.00  0.00
C
ATOM   2363 1HB  TYR   143      29.020 -15.194   2.937  1.00  0.00
H
ATOM   2364 2HB  TYR   143      27.685 -16.087   3.631  1.00  0.00
H
ATOM   2365  CG  TYR   143      28.044 -16.500   1.574  1.00  0.00
C
ATOM   2366  CD1 TYR   143      29.133 -16.513   0.673  1.00  0.00
C
ATOM   2367  HD1 TYR   143      29.935 -15.796   0.779  1.00  0.00
H
ATOM   2368  CD2 TYR   143      27.014 -17.442   1.388  1.00  0.00
C
ATOM   2369  HD2 TYR   143      26.166 -17.453   2.056  1.00  0.00
H
ATOM   2370  CE1 TYR   143      29.210 -17.486  -0.359  1.00  0.00
C
ATOM   2371  HE1 TYR   143      30.056 -17.511  -1.029  1.00  0.00
H
ATOM   2372  CE2 TYR   143      27.083 -18.402   0.352  1.00  0.00
C
ATOM   2373  HE2 TYR   143      26.289 -19.125   0.228  1.00  0.00
H
ATOM   2374  CZ  TYR   143      28.191 -18.432  -0.492  1.00  0.00
C
ATOM   2375  OH  TYR   143      28.272 -19.406  -1.450  1.00  0.00
O
ATOM   2376  HH  TYR   143      27.626 -20.106  -1.311  1.00  0.00
H
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ATOM   2377  N   GLY   144      28.612 -13.215   0.991  1.00  0.00
N
ATOM   2378  H   GLY   144      29.357 -13.468   1.638  1.00  0.00
H
ATOM   2379  CA  GLY   144      28.977 -12.414  -0.174  1.00  0.00
C
ATOM   2380 1HA  GLY   144      28.379 -11.502  -0.138  1.00  0.00
H
ATOM   2381 2HA  GLY   144      30.018 -12.115  -0.058  1.00  0.00
H
ATOM   2382  C   GLY   144      28.817 -12.978  -1.578  1.00  0.00
C
ATOM   2383  O   GLY   144      29.350 -12.441  -2.545  1.00  0.00
O
ATOM   2384  N   ARG   145      28.031 -14.034  -1.717  1.00  0.00
N
ATOM   2385  H   ARG   145      27.672 -14.477  -0.881  1.00  0.00
H
ATOM   2386  CA  ARG   145      27.516 -14.476  -3.009  1.00  0.00
C
ATOM   2387  HA  ARG   145      28.331 -14.573  -3.729  1.00  0.00
H
ATOM   2388  C   ARG   145      26.521 -13.434  -3.530  1.00  0.00
C
ATOM   2389  O   ARG   145      26.372 -13.251  -4.737  1.00  0.00
O
ATOM   2390  CB  ARG   145      26.833 -15.831  -2.811  1.00  0.00
C
ATOM   2391 1HB  ARG   145      27.568 -16.525  -2.411  1.00  0.00
H
ATOM   2392 2HB  ARG   145      26.034 -15.717  -2.078  1.00  0.00
H
ATOM   2393  CG  ARG   145      26.245 -16.433  -4.065  1.00  0.00
C
ATOM   2394 1HG  ARG   145      25.446 -15.790  -4.432  1.00  0.00
H
ATOM   2395 2HG  ARG   145      27.018 -16.501  -4.829  1.00  0.00
H
ATOM   2396  CD  ARG   145      25.676 -17.809  -3.800  1.00  0.00
C
ATOM   2397 1HD  ARG   145      25.509 -17.942  -2.730  1.00  0.00
H
ATOM   2398 2HD  ARG   145      24.719 -17.885  -4.317  1.00  0.00
H
ATOM   2399  NE  ARG   145      26.578 -18.855  -4.299  1.00  0.00
N
ATOM   2400  HE  ARG   145      27.571 -18.681  -4.220  1.00  0.00
H
ATOM   2401  CZ  ARG   145      26.213 -19.977  -4.902  1.00  0.00
C
ATOM   2402  NH1 ARG   145      24.972 -20.371  -5.024  1.00  0.00
N
ATOM   2403 1HH1 ARG   145      24.237 -19.865  -4.554  1.00  0.00
H
ATOM   2404 2HH1 ARG   145      24.767 -21.179  -5.593  1.00  0.00
H
ATOM   2405  NH2 ARG   145      27.128 -20.722  -5.445  1.00  0.00
N
ATOM   2406 1HH2 ARG   145      28.106 -20.500  -5.334  1.00  0.00
H
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ATOM   2407 2HH2 ARG   145      26.855 -21.526  -5.992  1.00  0.00
H
ATOM   2408  N   TYR   146      25.859 -12.733  -2.621  1.00  0.00
N
ATOM   2409  H   TYR   146      26.036 -12.898  -1.638  1.00  0.00
H
ATOM   2410  CA  TYR   146      24.893 -11.693  -2.976  1.00  0.00
C
ATOM   2411  HA  TYR   146      24.933 -11.477  -4.042  1.00  0.00
H
ATOM   2412  C   TYR   146      25.231 -10.420  -2.220  1.00  0.00
C
ATOM   2413  O   TYR   146      25.763 -10.483  -1.107  1.00  0.00
O
ATOM   2414  CB  TYR   146      23.469 -12.122  -2.608  1.00  0.00
C
ATOM   2415 1HB  TYR   146      23.459 -12.461  -1.572  1.00  0.00
H
ATOM   2416 2HB  TYR   146      22.821 -11.249  -2.682  1.00  0.00
H
ATOM   2417  CG  TYR   146      22.882 -13.201  -3.497  1.00  0.00
C
ATOM   2418  CD1 TYR   146      23.131 -14.567  -3.255  1.00  0.00
C
ATOM   2419  HD1 TYR   146      23.800 -14.856  -2.460  1.00  0.00
H
ATOM   2420  CD2 TYR   146      22.035 -12.858  -4.570  1.00  0.00
C
ATOM   2421  HD2 TYR   146      21.838 -11.818  -4.785  1.00  0.00
H
ATOM   2422  CE1 TYR   146      22.506 -15.574  -4.037  1.00  0.00
C
ATOM   2423  HE1 TYR   146      22.681 -16.617  -3.823  1.00  0.00
H
ATOM   2424  CE2 TYR   146      21.418 -13.861  -5.365  1.00  0.00
C
ATOM   2425  HE2 TYR   146      20.763 -13.584  -6.177  1.00  0.00
H
ATOM   2426  CZ  TYR   146      21.651 -15.209  -5.079  1.00  0.00
C
ATOM   2427  OH  TYR   146      21.039 -16.185  -5.822  1.00  0.00
O
ATOM   2428  HH  TYR   146      20.508 -15.820  -6.541  1.00  0.00
H
ATOM   2429  N   TRP   147      24.892  -9.282  -2.809  1.00  0.00
N
ATOM   2430  H   TRP   147      24.505  -9.301  -3.746  1.00  0.00
H
ATOM   2431  CA  TRP   147      25.057  -7.971  -2.183  1.00  0.00
C
ATOM   2432  HA  TRP   147      25.284  -8.092  -1.123  1.00  0.00
H
ATOM   2433  C   TRP   147      23.734  -7.223  -2.308  1.00  0.00
C
ATOM   2434  O   TRP   147      22.919  -7.521  -3.193  1.00  0.00
O
ATOM   2435  CB  TRP   147      26.216  -7.219  -2.842  1.00  0.00
C
ATOM   2436 1HB  TRP   147      26.034  -7.140  -3.913  1.00  0.00
H
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ATOM   2437 2HB  TRP   147      26.287  -6.219  -2.416  1.00  0.00
H
ATOM   2438  CG  TRP   147      27.508  -7.951  -2.606  1.00  0.00
C
ATOM   2439  CD1 TRP   147      28.051  -8.929  -3.381  1.00  0.00
C
ATOM   2440  HD1 TRP   147      27.635  -9.252  -4.327  1.00  0.00
H
ATOM   2441  CD2 TRP   147      28.367  -7.860  -1.456  1.00  0.00
C
ATOM   2442  NE1 TRP   147      29.161  -9.471  -2.803  1.00  0.00
N
ATOM   2443  HE1 TRP   147      29.709 -10.221  -3.207  1.00  0.00
H
ATOM   2444  CE2 TRP   147      29.365  -8.866  -1.595  1.00  0.00
C
ATOM   2445  CE3 TRP   147      28.380  -7.050  -0.302  1.00  0.00
C
ATOM   2446  HE3 TRP   147      27.654  -6.261  -0.183  1.00  0.00
H
ATOM   2447  CZ2 TRP   147      30.330  -9.112  -0.600  1.00  0.00
C
ATOM   2448  HZ2 TRP   147      31.064  -9.894  -0.725  1.00  0.00
H
ATOM   2449  CZ3 TRP   147      29.356  -7.288   0.701  1.00  0.00
C
ATOM   2450  HZ3 TRP   147      29.369  -6.680   1.595  1.00  0.00
H
ATOM   2451  CH2 TRP   147      30.315  -8.329   0.539  1.00  0.00
C
ATOM   2452  HH2 TRP   147      31.043  -8.510   1.315  1.00  0.00
H
ATOM   2453  N   SER   148      23.483  -6.315  -1.380  1.00  0.00
N
ATOM   2454  H   SER   148      24.208  -6.067  -0.706  1.00  0.00
H
ATOM   2455  CA  SER   148      22.173  -5.692  -1.232  1.00  0.00
C
ATOM   2456  HA  SER   148      21.410  -6.455  -1.357  1.00  0.00
H
ATOM   2457  C   SER   148      21.889  -4.556  -2.206  1.00  0.00
C
ATOM   2458  O   SER   148      22.811  -3.969  -2.778  1.00  0.00
O
ATOM   2459  CB  SER   148      22.062  -5.158   0.187  1.00  0.00
C
ATOM   2460 1HB  SER   148      21.052  -4.787   0.359  1.00  0.00
H
ATOM   2461 2HB  SER   148      22.262  -5.973   0.883  1.00  0.00
H
ATOM   2462  OG  SER   148      23.005  -4.121   0.403  1.00  0.00
O
ATOM   2463  HG  SER   148      22.716  -3.316  -0.052  1.00  0.00
H
ATOM   2464  N   ARG   149      20.608  -4.235  -2.354  1.00  0.00
N
ATOM   2465  H   ARG   149      19.913  -4.800  -1.866  1.00  0.00
H
ATOM   2466  CA  ARG   149      20.107  -3.128  -3.182  1.00  0.00
C
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ATOM   2467  HA  ARG   149      20.904  -2.411  -3.379  1.00  0.00
H
ATOM   2468  C   ARG   149      18.997  -2.427  -2.408  1.00  0.00
C
ATOM   2469  O   ARG   149      17.893  -2.220  -2.912  1.00  0.00
O
ATOM   2470  CB  ARG   149      19.538  -3.660  -4.506  1.00  0.00
C
ATOM   2471 1HB  ARG   149      18.729  -4.355  -4.278  1.00  0.00
H
ATOM   2472 2HB  ARG   149      19.120  -2.823  -5.066  1.00  0.00
H
ATOM   2473  CG  ARG   149      20.529  -4.376  -5.409  1.00  0.00
C
ATOM   2474 1HG  ARG   149      20.988  -5.203  -4.869  1.00  0.00
H
ATOM   2475 2HG  ARG   149      19.983  -4.776  -6.262  1.00  0.00
H
ATOM   2476  CD  ARG   149      21.613  -3.446  -5.926  1.00  0.00
C
ATOM   2477 1HD  ARG   149      21.141  -2.631  -6.477  1.00  0.00
H
ATOM   2478 2HD  ARG   149      22.171  -3.023  -5.091  1.00  0.00
H
ATOM   2479  NE  ARG   149      22.534  -4.154  -6.822  1.00  0.00
N
ATOM   2480  HE  ARG   149      22.256  -4.211  -7.791  1.00  0.00
H
ATOM   2481  CZ  ARG   149      23.702  -4.689  -6.501  1.00  0.00
C
ATOM   2482  NH1 ARG   149      24.236  -4.650  -5.310  1.00  0.00
N
ATOM   2483 1HH1 ARG   149      23.720  -4.253  -4.534  1.00  0.00
H
ATOM   2484 2HH1 ARG   149      25.177  -4.999  -5.184  1.00  0.00
H
ATOM   2485  NH2 ARG   149      24.393  -5.271  -7.433  1.00  0.00
N
ATOM   2486 1HH2 ARG   149      24.017  -5.377  -8.365  1.00  0.00
H
ATOM   2487 2HH2 ARG   149      25.323  -5.601  -7.209  1.00  0.00
H
ATOM   2488  N   TYR   150      19.233  -2.212  -1.125  1.00  0.00
N
ATOM   2489  H   TYR   150      20.179  -2.285  -0.780  1.00  0.00
H
ATOM   2490  CA  TYR   150      18.158  -1.857  -0.195  1.00  0.00
C
ATOM   2491  HA  TYR   150      17.207  -2.072  -0.676  1.00  0.00
H
ATOM   2492  C   TYR   150      18.167  -0.385   0.190  1.00  0.00
C
ATOM   2493  O   TYR   150      19.222   0.254   0.252  1.00  0.00
O
ATOM   2494  CB  TYR   150      18.217  -2.705   1.088  1.00  0.00
C
ATOM   2495 1HB  TYR   150      17.265  -2.597   1.605  1.00  0.00
H
ATOM   2496 2HB  TYR   150      18.330  -3.753   0.810  1.00  0.00
H
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ATOM   2497  CG  TYR   150      19.312  -2.326   2.070  1.00  0.00
C
ATOM   2498  CD1 TYR   150      19.002  -1.912   3.380  1.00  0.00
C
ATOM   2499  HD1 TYR   150      17.968  -1.858   3.694  1.00  0.00
H
ATOM   2500  CD2 TYR   150      20.665  -2.384   1.703  1.00  0.00
C
ATOM   2501  HD2 TYR   150      20.929  -2.709   0.717  1.00  0.00
H
ATOM   2502  CE1 TYR   150      20.038  -1.578   4.301  1.00  0.00
C
ATOM   2503  HE1 TYR   150      19.799  -1.299   5.315  1.00  0.00
H
ATOM   2504  CE2 TYR   150      21.692  -2.020   2.593  1.00  0.00
C
ATOM   2505  HE2 TYR   150      22.724  -2.058   2.279  1.00  0.00
H
ATOM   2506  CZ  TYR   150      21.374  -1.627   3.882  1.00  0.00
C
ATOM   2507  OH  TYR   150      22.413  -1.322   4.716  1.00  0.00
O
ATOM   2508  HH  TYR   150      22.110  -1.182   5.626  1.00  0.00
H
ATOM   2509  N   CYS   151      16.993   0.118   0.530  1.00  0.00
N
ATOM   2510  H   CYS   151      16.158  -0.444   0.408  1.00  0.00
H
ATOM   2511  CA  CYS   151      16.858   1.381   1.242  1.00  0.00
C
ATOM   2512  HA  CYS   151      17.807   1.914   1.285  1.00  0.00
H
ATOM   2513  C   CYS   151      16.442   0.945   2.638  1.00  0.00
C
ATOM   2514  O   CYS   151      16.011  -0.198   2.819  1.00  0.00
O
ATOM   2515  CB  CYS   151      15.788   2.268   0.609  1.00  0.00
C
ATOM   2516 1HB  CYS   151      14.836   1.738   0.631  1.00  0.00
H
ATOM   2517 2HB  CYS   151      15.687   3.175   1.207  1.00  0.00
H
ATOM   2518  SG  CYS   151      16.165   2.739  -1.089  1.00  0.00
S
ATOM   2519  HG  CYS   151      15.090   3.516  -1.273  1.00  0.00
H
ATOM   2520  N   HIS   152      16.574   1.821   3.619  1.00  0.00
N
ATOM   2521  H   HIS   152      16.899   2.765   3.415  1.00  0.00
H
ATOM   2522  CA  HIS   152      16.233   1.484   4.994  1.00  0.00
C
ATOM   2523  HA  HIS   152      15.403   0.777   5.003  1.00  0.00
H
ATOM   2524  C   HIS   152      15.814   2.721   5.762  1.00  0.00
C
ATOM   2525  O   HIS   152      16.138   3.852   5.406  1.00  0.00
O
ATOM   2526  CB  HIS   152      17.444   0.854   5.689  1.00  0.00
C
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ATOM   2527 1HB  HIS   152      17.181   0.620   6.720  1.00  0.00
H
ATOM   2528 2HB  HIS   152      17.684  -0.077   5.179  1.00  0.00
H
ATOM   2529  CG  HIS   152      18.665   1.722   5.678  1.00  0.00
C
ATOM   2530  ND1 HIS   152      18.860   2.794   6.543  1.00  0.00
N
ATOM   2531  HD1 HIS   152      18.209   3.088   7.269  1.00  0.00
H
ATOM   2532  CD2 HIS   152      19.769   1.710   4.888  1.00  0.00
C
ATOM   2533  HD2 HIS   152      19.961   1.016   4.077  1.00  0.00
H
ATOM   2534  CE1 HIS   152      20.014   3.378   6.259  1.00  0.00
C
ATOM   2535  HE1 HIS   152      20.413   4.262   6.747  1.00  0.00
H
ATOM   2536  NE2 HIS   152      20.590   2.728   5.277  1.00  0.00
N
ATOM   2537  HE2 HIS   152      21.508   2.938   4.868  1.00  0.00
H
ATOM   2538  N   GLU   153      15.162   2.492   6.883  1.00  0.00
N
ATOM   2539  H   GLU   153      14.873   1.542   7.107  1.00  0.00
H
ATOM   2540  CA  GLU   153      14.878   3.552   7.829  1.00  0.00
C
ATOM   2541  HA  GLU   153      14.503   4.416   7.283  1.00  0.00
H
ATOM   2542  C   GLU   153      16.180   3.938   8.538  1.00  0.00
C
ATOM   2543  O   GLU   153      17.027   3.078   8.817  1.00  0.00
O
ATOM   2544  CB  GLU   153      13.798   3.075   8.798  1.00  0.00
C
ATOM   2545 1HB  GLU   153      12.972   2.663   8.217  1.00  0.00
H
ATOM   2546 2HB  GLU   153      14.200   2.280   9.424  1.00  0.00
H
ATOM   2547  CG  GLU   153      13.273   4.195   9.663  1.00  0.00
C
ATOM   2548 1HG  GLU   153      12.580   3.798  10.397  1.00  0.00
H
ATOM   2549 2HG  GLU   153      14.113   4.628  10.198  1.00  0.00
H
ATOM   2550  CD  GLU   153      12.606   5.286   8.842  1.00  0.00
C
ATOM   2551  OE1 GLU   153      11.995   5.004   7.791  1.00  0.00
O
ATOM   2552  OE2 GLU   153      12.787   6.472   9.177  1.00  0.00
O
ATOM   2553  N   THR   154      16.377   5.226   8.781  1.00  0.00
N
ATOM   2554  H   THR   154      15.651   5.901   8.572  1.00  0.00
H
ATOM   2555  CA  THR   154      17.648   5.755   9.270  1.00  0.00
C
ATOM   2556  HA  THR   154      18.398   5.572   8.501  1.00  0.00
H
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ATOM   2557  C   THR   154      18.162   5.153  10.576  1.00  0.00
C
ATOM   2558  O   THR   154      19.355   4.874  10.695  1.00  0.00
O
ATOM   2559  CB  THR   154      17.498   7.277   9.450  1.00  0.00
C
ATOM   2560  HB  THR   154      16.853   7.477  10.305  1.00  0.00
H
ATOM   2561  OG1 THR   154      16.877   7.798   8.273  1.00  0.00
O
ATOM   2562  HG1 THR   154      16.874   8.762   8.336  1.00  0.00
H
ATOM   2563  CG2 THR   154      18.828   7.986   9.643  1.00  0.00
C
ATOM   2564 1HG2 THR   154      18.662   9.061   9.686  1.00  0.00
H
ATOM   2565 2HG2 THR   154      19.496   7.762   8.810  1.00  0.00
H
ATOM   2566 3HG2 THR   154      19.290   7.672  10.577  1.00  0.00
H
ATOM   2567  N   GLY   155      17.293   4.926  11.552  1.00  0.00
N
ATOM   2568  H   GLY   155      16.312   5.172  11.434  1.00  0.00
H
ATOM   2569  CA  GLY   155      17.731   4.414  12.842  1.00  0.00
C
ATOM   2570 1HA  GLY   155      18.691   4.865  13.089  1.00  0.00
H
ATOM   2571 2HA  GLY   155      17.014   4.746  13.593  1.00  0.00
H
ATOM   2572  C   GLY   155      17.881   2.912  12.990  1.00  0.00
C
ATOM   2573  O   GLY   155      18.133   2.445  14.098  1.00  0.00
O
ATOM   2574  N   TYR   156      17.675   2.138  11.932  1.00  0.00
N
ATOM   2575  H   TYR   156      17.498   2.559  11.029  1.00  0.00
H
ATOM   2576  CA  TYR   156      17.591   0.677  12.073  1.00  0.00
C
ATOM   2577  HA  TYR   156      17.746   0.412  13.117  1.00  0.00
H
ATOM   2578  C   TYR   156      18.588  -0.142  11.264  1.00  0.00
C
ATOM   2579  O   TYR   156      18.544  -1.364  11.288  1.00  0.00
O
ATOM   2580  CB  TYR   156      16.180   0.227  11.701  1.00  0.00
C
ATOM   2581 1HB  TYR   156      15.970   0.528  10.675  1.00  0.00
H
ATOM   2582 2HB  TYR   156      16.126  -0.860  11.759  1.00  0.00
H
ATOM   2583  CG  TYR   156      15.111   0.788  12.610  1.00  0.00
C
ATOM   2584  CD1 TYR   156      14.474   2.005  12.315  1.00  0.00
C
ATOM   2585  HD1 TYR   156      14.803   2.591  11.472  1.00  0.00
H
ATOM   2586  CD2 TYR   156      14.716   0.094  13.768  1.00  0.00
C
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ATOM   2587  HD2 TYR   156      15.229  -0.809  14.050  1.00  0.00
H
ATOM   2588  CE1 TYR   156      13.393   2.465  13.098  1.00  0.00
C
ATOM   2589  HE1 TYR   156      12.900   3.390  12.848  1.00  0.00
H
ATOM   2590  CE2 TYR   156      13.634   0.555  14.559  1.00  0.00
C
ATOM   2591  HE2 TYR   156      13.318   0.004  15.432  1.00  0.00
H
ATOM   2592  CZ  TYR   156      12.954   1.712  14.187  1.00  0.00
C
ATOM   2593  OH  TYR   156      11.836   2.062  14.889  1.00  0.00
O
ATOM   2594  HH  TYR   156      11.347   2.781  14.469  1.00  0.00
H
ATOM   2595  N   ASN   157      19.459   0.510  10.514  1.00  0.00
N
ATOM   2596  H   ASN   157      19.476   1.517  10.520  1.00  0.00
H
ATOM   2597  CA  ASN   157      20.402  -0.219   9.667  1.00  0.00
C
ATOM   2598  HA  ASN   157      19.864  -0.980   9.098  1.00  0.00
H
ATOM   2599  C   ASN   157      21.530  -0.895  10.447  1.00  0.00
C
ATOM   2600  O   ASN   157      22.212  -0.227  11.232  1.00  0.00
O
ATOM   2601  CB  ASN   157      21.042   0.772   8.704  1.00  0.00
C
ATOM   2602 1HB  ASN   157      20.261   1.325   8.196  1.00  0.00
H
ATOM   2603 2HB  ASN   157      21.657   1.464   9.267  1.00  0.00
H
ATOM   2604  CG  ASN   157      21.905   0.101   7.688  1.00  0.00
C
ATOM   2605  OD1 ASN   157      21.579  -0.963   7.200  1.00  0.00
O
ATOM   2606  ND2 ASN   157      23.000   0.713   7.350  1.00  0.00
N
ATOM   2607 1HD2 ASN   157      23.565   0.329   6.612  1.00  0.00
H
ATOM   2608 2HD2 ASN   157      23.262   1.572   7.826  1.00  0.00
H
ATOM   2609  N   PHE   158      21.768  -2.179  10.213  1.00  0.00
N
ATOM   2610  H   PHE   158      21.149  -2.712   9.603  1.00  0.00
H
ATOM   2611  CA  PHE   158      22.879  -2.888  10.842  1.00  0.00
C
ATOM   2612  HA  PHE   158      23.686  -2.182  11.023  1.00  0.00
H
ATOM   2613  C   PHE   158      23.406  -4.024   9.973  1.00  0.00
C
ATOM   2614  O   PHE   158      22.634  -4.824   9.462  1.00  0.00
O
ATOM   2615  CB  PHE   158      22.379  -3.451  12.173  1.00  0.00
C
ATOM   2616 1HB  PHE   158      21.938  -2.629  12.723  1.00  0.00
H
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ATOM   2617 2HB  PHE   158      21.601  -4.190  11.981  1.00  0.00
H
ATOM   2618  CG  PHE   158      23.447  -4.065  13.041  1.00  0.00
C
ATOM   2619  CD1 PHE   158      24.717  -3.475  13.169  1.00  0.00
C
ATOM   2620  HD1 PHE   158      24.968  -2.603  12.592  1.00  0.00
H
ATOM   2621  CD2 PHE   158      23.158  -5.217  13.789  1.00  0.00
C
ATOM   2622  HD2 PHE   158      22.190  -5.685  13.697  1.00  0.00
H
ATOM   2623  CE1 PHE   158      25.679  -4.003  14.057  1.00  0.00
C
ATOM   2624  HE1 PHE   158      26.639  -3.525  14.164  1.00  0.00
H
ATOM   2625  CE2 PHE   158      24.113  -5.763  14.679  1.00  0.00
C
ATOM   2626  HE2 PHE   158      23.876  -6.643  15.258  1.00  0.00
H
ATOM   2627  CZ  PHE   158      25.378  -5.150  14.809  1.00  0.00
C
ATOM   2628  HZ  PHE   158      26.110  -5.554  15.493  1.00  0.00
H
ATOM   2629  N   CYS   159      24.716  -4.112   9.810  1.00  0.00
N
ATOM   2630  H   CYS   159      25.328  -3.422  10.242  1.00  0.00
H
ATOM   2631  CA  CYS   159      25.342  -5.183   9.049  1.00  0.00
C
ATOM   2632  HA  CYS   159      24.658  -6.028   8.992  1.00  0.00
H
ATOM   2633  C   CYS   159      26.611  -5.625   9.760  1.00  0.00
C
ATOM   2634  O   CYS   159      27.373  -4.785  10.253  1.00  0.00
O
ATOM   2635  CB  CYS   159      25.678  -4.702   7.636  1.00  0.00
C
ATOM   2636 1HB  CYS   159      24.770  -4.307   7.183  1.00  0.00
H
ATOM   2637 2HB  CYS   159      26.407  -3.896   7.703  1.00  0.00
H
ATOM   2638  SG  CYS   159      26.347  -5.998   6.568  1.00  0.00
S
ATOM   2639  HG  CYS   159      25.454  -6.947   6.896  1.00  0.00
H
ATOM   2640  N   PHE   160      26.849  -6.926   9.807  1.00  0.00
N
ATOM   2641  H   PHE   160      26.204  -7.572   9.354  1.00  0.00
H
ATOM   2642  CA  PHE   160      28.025  -7.493  10.455  1.00  0.00
C
ATOM   2643  HA  PHE   160      28.881  -6.843  10.290  1.00  0.00
H
ATOM   2644  C   PHE   160      28.313  -8.844   9.821  1.00  0.00
C
ATOM   2645  O   PHE   160      27.464  -9.391   9.133  1.00  0.00
O
ATOM   2646  CB  PHE   160      27.801  -7.644  11.967  1.00  0.00
C
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ATOM   2647 1HB  PHE   160      28.709  -8.034  12.425  1.00  0.00
H
ATOM   2648 2HB  PHE   160      27.608  -6.657  12.387  1.00  0.00
H
ATOM   2649  CG  PHE   160      26.654  -8.539  12.339  1.00  0.00
C
ATOM   2650  CD1 PHE   160      26.872  -9.893  12.658  1.00  0.00
C
ATOM   2651  HD1 PHE   160      27.863 -10.316  12.573  1.00  0.00
H
ATOM   2652  CD2 PHE   160      25.353  -8.016  12.426  1.00  0.00
C
ATOM   2653  HD2 PHE   160      25.170  -6.981  12.172  1.00  0.00
H
ATOM   2654  CE1 PHE   160      25.807 -10.706  13.116  1.00  0.00
C
ATOM   2655  HE1 PHE   160      25.984 -11.738  13.382  1.00  0.00
H
ATOM   2656  CE2 PHE   160      24.280  -8.818  12.858  1.00  0.00
C
ATOM   2657  HE2 PHE   160      23.286  -8.401  12.910  1.00  0.00
H
ATOM   2658  CZ  PHE   160      24.511 -10.156  13.234  1.00  0.00
C
ATOM   2659  HZ  PHE   160      23.700 -10.758  13.605  1.00  0.00
H
ATOM   2660  N   ILE   161      29.492  -9.389  10.060  1.00  0.00
N
ATOM   2661  H   ILE   161      30.178  -8.867  10.600  1.00  0.00
H
ATOM   2662  CA  ILE   161      29.841 -10.740   9.630  1.00  0.00
C
ATOM   2663  HA  ILE   161      29.038 -11.179   9.042  1.00  0.00
H
ATOM   2664  C   ILE   161      29.983 -11.497  10.937  1.00  0.00
C
ATOM   2665  O   ILE   161      30.594 -10.975  11.866  1.00  0.00
O
ATOM   2666  CB  ILE   161      31.164 -10.773   8.799  1.00  0.00
C
ATOM   2667  HB  ILE   161      31.972 -10.355   9.400  1.00  0.00
H
ATOM   2668  CG1 ILE   161      30.971  -9.889   7.554  1.00  0.00
C
ATOM   2669 1HG1 ILE   161      30.059 -10.210   7.060  1.00  0.00
H
ATOM   2670 2HG1 ILE   161      30.812  -8.869   7.887  1.00  0.00
H
ATOM   2671  CG2 ILE   161      31.550 -12.223   8.405  1.00  0.00
C
ATOM   2672 1HG2 ILE   161      32.528 -12.235   7.924  1.00  0.00
H
ATOM   2673 2HG2 ILE   161      30.809 -12.641   7.720  1.00  0.00
H
ATOM   2674 3HG2 ILE   161      31.611 -12.855   9.291  1.00  0.00
H
ATOM   2675  CD1 ILE   161      32.102  -9.872   6.508  1.00  0.00
C
ATOM   2676 1HD1 ILE   161      31.884  -9.109   5.761  1.00  0.00
H
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ATOM   2677 2HD1 ILE   161      32.171 -10.840   6.010  1.00  0.00
H
ATOM   2678 3HD1 ILE   161      33.051  -9.639   6.985  1.00  0.00
H
ATOM   2679  N   LYS   162      29.449 -12.704  11.024  1.00  0.00
N
ATOM   2680  H   LYS   162      28.939 -13.091  10.229  1.00  0.00
H
ATOM   2681  CA  LYS   162      29.711 -13.580  12.162  1.00  0.00
C
ATOM   2682  HA  LYS   162      30.611 -13.259  12.685  1.00  0.00
H
ATOM   2683  C   LYS   162      29.966 -14.918  11.510  1.00  0.00
C
ATOM   2684  O   LYS   162      29.284 -15.258  10.546  1.00  0.00
O
ATOM   2685  CB  LYS   162      28.537 -13.659  13.146  1.00  0.00
C
ATOM   2686 1HB  LYS   162      28.320 -12.659  13.520  1.00  0.00
H
ATOM   2687 2HB  LYS   162      27.662 -14.033  12.618  1.00  0.00
H
ATOM   2688  CG  LYS   162      28.820 -14.586  14.329  1.00  0.00
C
ATOM   2689 1HG  LYS   162      29.103 -15.562  13.945  1.00  0.00
H
ATOM   2690 2HG  LYS   162      29.647 -14.184  14.914  1.00  0.00
H
ATOM   2691  CD  LYS   162      27.616 -14.771  15.223  1.00  0.00
C
ATOM   2692 1HD  LYS   162      27.331 -13.806  15.643  1.00  0.00
H
ATOM   2693 2HD  LYS   162      26.787 -15.157  14.634  1.00  0.00
H
ATOM   2694  CE  LYS   162      27.924 -15.741  16.360  1.00  0.00
C
ATOM   2695 1HE  LYS   162      28.772 -15.354  16.926  1.00  0.00
H
ATOM   2696 2HE  LYS   162      27.064 -15.750  17.027  1.00  0.00
H
ATOM   2697  NZ  LYS   162      28.215 -17.168  15.957  1.00  0.00
N
ATOM   2698 1HZ  LYS   162      28.309 -17.745  16.785  1.00  0.00
H
ATOM   2699 2HZ  LYS   162      29.077 -17.223  15.422  1.00  0.00
H
ATOM   2700 3HZ  LYS   162      27.467 -17.540  15.389  1.00  0.00
H
ATOM   2701  N   ASP   163      30.942 -15.648  12.024  1.00  0.00
N
ATOM   2702  H   ASP   163      31.466 -15.282  12.806  1.00  0.00
H
ATOM   2703  CA  ASP   163      31.314 -16.961  11.500  1.00  0.00
C
ATOM   2704  HA  ASP   163      32.223 -17.284  12.005  1.00  0.00
H
ATOM   2705  C   ASP   163      31.624 -16.805  10.004  1.00  0.00
C
ATOM   2706  O   ASP   163      32.328 -15.873   9.600  1.00  0.00
O
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ATOM   2707  CB  ASP   163      30.226 -18.026  11.766  1.00  0.00
C
ATOM   2708 1HB  ASP   163      29.302 -17.739  11.265  1.00  0.00
H
ATOM   2709 2HB  ASP   163      30.555 -18.983  11.359  1.00  0.00
H
ATOM   2710  CG  ASP   163      29.928 -18.224  13.244  1.00  0.00
C
ATOM   2711  OD1 ASP   163      30.725 -17.840  14.124  1.00  0.00
O
ATOM   2712  OD2 ASP   163      28.850 -18.774  13.552  1.00  0.00
O
ATOM   2713  N   ASP   164      31.087 -17.674   9.162  1.00  0.00
N
ATOM   2714  H   ASP   164      30.500 -18.421   9.520  1.00  0.00
H
ATOM   2715  CA  ASP   164      31.296 -17.625   7.717  1.00  0.00
C
ATOM   2716  HA  ASP   164      32.257 -17.151   7.520  1.00  0.00
H
ATOM   2717  C   ASP   164      30.221 -16.829   6.962  1.00  0.00
C
ATOM   2718  O   ASP   164      30.192 -16.844   5.725  1.00  0.00
O
ATOM   2719  CB  ASP   164      31.362 -19.058   7.162  1.00  0.00
C
ATOM   2720 1HB  ASP   164      31.647 -19.015   6.112  1.00  0.00
H
ATOM   2721 2HB  ASP   164      32.130 -19.612   7.701  1.00  0.00
H
ATOM   2722  CG  ASP   164      30.043 -19.810   7.285  1.00  0.00
C
ATOM   2723  OD1 ASP   164      29.544 -19.995   8.421  1.00  0.00
O
ATOM   2724  OD2 ASP   164      29.500 -20.244   6.245  1.00  0.00
O
ATOM   2725  N   ARG   165      29.327 -16.131   7.658  1.00  0.00
N
ATOM   2726  H   ARG   165      29.432 -16.035   8.668  1.00  0.00
H
ATOM   2727  CA  ARG   165      28.158 -15.501   7.018  1.00  0.00
C
ATOM   2728  HA  ARG   165      28.226 -15.631   5.942  1.00  0.00
H
ATOM   2729  C   ARG   165      28.028 -14.005   7.278  1.00  0.00
C
ATOM   2730  O   ARG   165      28.408 -13.503   8.331  1.00  0.00
O
ATOM   2731  CB  ARG   165      26.884 -16.206   7.491  1.00  0.00
C
ATOM   2732 1HB  ARG   165      26.833 -16.138   8.577  1.00  0.00
H
ATOM   2733 2HB  ARG   165      26.019 -15.693   7.070  1.00  0.00
H
ATOM   2734  CG  ARG   165      26.821 -17.673   7.090  1.00  0.00
C
ATOM   2735 1HG  ARG   165      26.877 -17.752   6.004  1.00  0.00
H
ATOM   2736 2HG  ARG   165      27.665 -18.203   7.527  1.00  0.00
H
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ATOM   2737  CD  ARG   165      25.546 -18.334   7.569  1.00  0.00
C
ATOM   2738 1HD  ARG   165      25.474 -18.224   8.652  1.00  0.00
H
ATOM   2739 2HD  ARG   165      24.688 -17.850   7.099  1.00  0.00
H
ATOM   2740  NE  ARG   165      25.556 -19.761   7.223  1.00  0.00
N
ATOM   2741  HE  ARG   165      26.358 -20.097   6.718  1.00  0.00
H
ATOM   2742  CZ  ARG   165      24.622 -20.650   7.531  1.00  0.00
C
ATOM   2743  NH1 ARG   165      23.576 -20.383   8.270  1.00  0.00
N
ATOM   2744 1HH1 ARG   165      23.459 -19.458   8.640  1.00  0.00
H
ATOM   2745 2HH1 ARG   165      22.890 -21.105   8.427  1.00  0.00
H
ATOM   2746  NH2 ARG   165      24.737 -21.869   7.094  1.00  0.00
N
ATOM   2747 1HH2 ARG   165      25.499 -22.123   6.487  1.00  0.00
H
ATOM   2748 2HH2 ARG   165      24.026 -22.543   7.338  1.00  0.00
H
ATOM   2749  N   ILE   166      27.478 -13.298   6.301  1.00  0.00
N
ATOM   2750  H   ILE   166      27.131 -13.769   5.484  1.00  0.00
H
ATOM   2751  CA  ILE   166      27.281 -11.853   6.392  1.00  0.00
C
ATOM   2752  HA  ILE   166      27.919 -11.435   7.169  1.00  0.00
H
ATOM   2753  C   ILE   166      25.819 -11.695   6.780  1.00  0.00
C
ATOM   2754  O   ILE   166      24.960 -12.357   6.209  1.00  0.00
O
ATOM   2755  CB  ILE   166      27.560 -11.108   5.044  1.00  0.00
C
ATOM   2756  HB  ILE   166      26.834 -11.441   4.302  1.00  0.00
H
ATOM   2757  CG1 ILE   166      28.968 -11.471   4.526  1.00  0.00
C
ATOM   2758 1HG1 ILE   166      29.688 -11.278   5.313  1.00  0.00
H
ATOM   2759 2HG1 ILE   166      28.995 -12.539   4.320  1.00  0.00
H
ATOM   2760  CG2 ILE   166      27.392  -9.571   5.231  1.00  0.00
C
ATOM   2761 1HG2 ILE   166      27.526  -9.054   4.280  1.00  0.00
H
ATOM   2762 2HG2 ILE   166      28.117  -9.192   5.954  1.00  0.00
H
ATOM   2763 3HG2 ILE   166      26.387  -9.341   5.583  1.00  0.00
H
ATOM   2764  CD1 ILE   166      29.447 -10.742   3.265  1.00  0.00
C
ATOM   2765 1HD1 ILE   166      30.367 -11.206   2.908  1.00  0.00
H
ATOM   2766 2HD1 ILE   166      29.647  -9.694   3.490  1.00  0.00
H
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ATOM   2767 3HD1 ILE   166      28.686 -10.806   2.488  1.00  0.00
H
ATOM   2768  N   PHE   167      25.527 -10.822   7.726  1.00  0.00
N
ATOM   2769  H   PHE   167      26.275 -10.288   8.164  1.00  0.00
H
ATOM   2770  CA  PHE   167      24.170 -10.560   8.175  1.00  0.00
C
ATOM   2771  HA  PHE   167      23.462 -11.173   7.621  1.00  0.00
H
ATOM   2772  C   PHE   167      23.882  -9.092   7.912  1.00  0.00
C
ATOM   2773  O   PHE   167      24.724  -8.241   8.188  1.00  0.00
O
ATOM   2774  CB  PHE   167      24.065 -10.878   9.666  1.00  0.00
C
ATOM   2775 1HB  PHE   167      24.785 -10.263  10.206  1.00  0.00
H
ATOM   2776 2HB  PHE   167      23.063 -10.622  10.011  1.00  0.00
H
ATOM   2777  CG  PHE   167      24.331 -12.323   9.980  1.00  0.00
C
ATOM   2778  CD1 PHE   167      25.635 -12.786  10.240  1.00  0.00
C
ATOM   2779  HD1 PHE   167      26.460 -12.088  10.263  1.00  0.00
H
ATOM   2780  CD2 PHE   167      23.273 -13.240   9.970  1.00  0.00
C
ATOM   2781  HD2 PHE   167      22.268 -12.889   9.796  1.00  0.00
H
ATOM   2782  CE1 PHE   167      25.882 -14.166  10.441  1.00  0.00
C
ATOM   2783  HE1 PHE   167      26.889 -14.518  10.606  1.00  0.00
H
ATOM   2784  CE2 PHE   167      23.504 -14.620  10.171  1.00  0.00
C
ATOM   2785  HE2 PHE   167      22.677 -15.311  10.142  1.00  0.00
H
ATOM   2786  CZ  PHE   167      24.813 -15.086  10.401  1.00  0.00
C
ATOM   2787  HZ  PHE   167      24.999 -16.141  10.541  1.00  0.00
H
ATOM   2788  N   LEU   168      22.710  -8.798   7.375  1.00  0.00
N
ATOM   2789  H   LEU   168      22.074  -9.557   7.127  1.00  0.00
H
ATOM   2790  CA  LEU   168      22.247  -7.434   7.138  1.00  0.00
C
ATOM   2791  HA  LEU   168      22.834  -6.727   7.723  1.00  0.00
H
ATOM   2792  C   LEU   168      20.808  -7.390   7.619  1.00  0.00
C
ATOM   2793  O   LEU   168      20.002  -8.249   7.273  1.00  0.00
O
ATOM   2794  CB  LEU   168      22.332  -7.072   5.654  1.00  0.00
C
ATOM   2795 1HB  LEU   168      23.384  -7.036   5.371  1.00  0.00
H
ATOM   2796 2HB  LEU   168      21.864  -7.877   5.091  1.00  0.00
H
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ATOM   2797  CG  LEU   168      21.652  -5.761   5.220  1.00  0.00
C
ATOM   2798  HG  LEU   168      20.581  -5.867   5.387  1.00  0.00
H
ATOM   2799  CD1 LEU   168      22.120  -4.516   5.963  1.00  0.00
C
ATOM   2800 1HD1 LEU   168      21.527  -3.663   5.642  1.00  0.00
H
ATOM   2801 2HD1 LEU   168      23.172  -4.329   5.756  1.00  0.00
H
ATOM   2802 3HD1 LEU   168      21.976  -4.628   7.033  1.00  0.00
H
ATOM   2803  CD2 LEU   168      21.875  -5.552   3.735  1.00  0.00
C
ATOM   2804 1HD2 LEU   168      21.245  -4.734   3.386  1.00  0.00
H
ATOM   2805 2HD2 LEU   168      21.613  -6.454   3.187  1.00  0.00
H
ATOM   2806 3HD2 LEU   168      22.921  -5.313   3.536  1.00  0.00
H
ATOM   2807  N   VAL   169      20.517  -6.429   8.477  1.00  0.00
N
ATOM   2808  H   VAL   169      21.230  -5.745   8.724  1.00  0.00
H
ATOM   2809  CA  VAL   169      19.243  -6.328   9.166  1.00  0.00
C
ATOM   2810  HA  VAL   169      18.499  -6.967   8.692  1.00  0.00
H
ATOM   2811  C   VAL   169      18.818  -4.867   9.086  1.00  0.00
C
ATOM   2812  O   VAL   169      19.644  -3.981   9.318  1.00  0.00
O
ATOM   2813  CB  VAL   169      19.442  -6.755  10.646  1.00  0.00
C
ATOM   2814  HB  VAL   169      20.132  -6.057  11.120  1.00  0.00
H
ATOM   2815  CG1 VAL   169      18.129  -6.728  11.405  1.00  0.00
C
ATOM   2816 1HG1 VAL   169      18.289  -7.081  12.422  1.00  0.00
H
ATOM   2817 2HG1 VAL   169      17.390  -7.360  10.913  1.00  0.00
H
ATOM   2818 3HG1 VAL   169      17.757  -5.707  11.453  1.00  0.00
H
ATOM   2819  CG2 VAL   169      20.070  -8.161  10.731  1.00  0.00
C
ATOM   2820 1HG2 VAL   169      20.126  -8.479  11.767  1.00  0.00
H
ATOM   2821 2HG2 VAL   169      21.084  -8.144  10.332  1.00  0.00
H
ATOM   2822 3HG2 VAL   169      19.472  -8.875  10.163  1.00  0.00
H
ATOM   2823  N   TYR   170      17.568  -4.592   8.741  1.00  0.00
N
ATOM   2824  H   TYR   170      16.919  -5.345   8.523  1.00  0.00
H
ATOM   2825  CA  TYR   170      17.080  -3.216   8.679  1.00  0.00
C
ATOM   2826  HA  TYR   170      17.513  -2.652   9.503  1.00  0.00
H
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ATOM   2827  C   TYR   170      15.563  -3.189   8.817  1.00  0.00
C
ATOM   2828  O   TYR   170      14.924  -4.219   8.647  1.00  0.00
O
ATOM   2829  CB  TYR   170      17.501  -2.554   7.357  1.00  0.00
C
ATOM   2830 1HB  TYR   170      17.176  -1.517   7.383  1.00  0.00
H
ATOM   2831 2HB  TYR   170      18.589  -2.558   7.297  1.00  0.00
H
ATOM   2832  CG  TYR   170      16.950  -3.190   6.091  1.00  0.00
C
ATOM   2833  CD1 TYR   170      15.789  -2.673   5.478  1.00  0.00
C
ATOM   2834  HD1 TYR   170      15.269  -1.843   5.926  1.00  0.00
H
ATOM   2835  CD2 TYR   170      17.610  -4.271   5.464  1.00  0.00
C
ATOM   2836  HD2 TYR   170      18.503  -4.687   5.910  1.00  0.00
H
ATOM   2837  CE1 TYR   170      15.297  -3.215   4.267  1.00  0.00
C
ATOM   2838  HE1 TYR   170      14.406  -2.809   3.814  1.00  0.00
H
ATOM   2839  CE2 TYR   170      17.121  -4.813   4.235  1.00  0.00
C
ATOM   2840  HE2 TYR   170      17.636  -5.633   3.758  1.00  0.00
H
ATOM   2841  CZ  TYR   170      15.970  -4.267   3.650  1.00  0.00
C
ATOM   2842  OH  TYR   170      15.456  -4.734   2.466  1.00  0.00
O
ATOM   2843  HH  TYR   170      16.011  -5.405   2.044  1.00  0.00
H
ATOM   2844  N   LYS   171      14.983  -2.019   9.058  1.00  0.00
N
ATOM   2845  H   LYS   171      15.555  -1.218   9.269  1.00  0.00
H
ATOM   2846  CA  LYS   171      13.546  -1.809   8.856  1.00  0.00
C
ATOM   2847  HA  LYS   171      13.036  -2.752   8.661  1.00  0.00
H
ATOM   2848  C   LYS   171      13.393  -0.917   7.649  1.00  0.00
C
ATOM   2849  O   LYS   171      14.295  -0.134   7.352  1.00  0.00
O
ATOM   2850  CB  LYS   171      12.844  -1.061   9.991  1.00  0.00
C
ATOM   2851 1HB  LYS   171      13.413  -0.166  10.242  1.00  0.00
H
ATOM   2852 2HB  LYS   171      11.879  -0.734   9.604  1.00  0.00
H
ATOM   2853  CG  LYS   171      12.551  -1.836  11.246  1.00  0.00
C
ATOM   2854 1HG  LYS   171      12.113  -2.800  10.992  1.00  0.00
H
ATOM   2855 2HG  LYS   171      13.465  -1.977  11.822  1.00  0.00
H
ATOM   2856  CD  LYS   171      11.538  -1.019  12.028  1.00  0.00
C
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ATOM   2857 1HD  LYS   171      11.942  -0.022  12.196  1.00  0.00
H
ATOM   2858 2HD  LYS   171      10.627  -0.928  11.435  1.00  0.00
H
ATOM   2859  CE  LYS   171      11.183  -1.635  13.355  1.00  0.00
C
ATOM   2860 1HE  LYS   171      10.795  -2.642  13.189  1.00  0.00
H
ATOM   2861 2HE  LYS   171      12.080  -1.700  13.972  1.00  0.00
H
ATOM   2862  NZ  LYS   171      10.148  -0.822  14.064  1.00  0.00
N
ATOM   2863 1HZ  LYS   171      10.024  -1.171  15.006  1.00  0.00
H
ATOM   2864 2HZ  LYS   171       9.269  -0.873  13.561  1.00  0.00
H
ATOM   2865 3HZ  LYS   171      10.425   0.153  14.090  1.00  0.00
H
ATOM   2866  N   ILE   172      12.228  -0.967   7.035  1.00  0.00
N
ATOM   2867  H   ILE   172      11.540  -1.657   7.337  1.00  0.00
H
ATOM   2868  CA  ILE   172      11.808  -0.051   5.980  1.00  0.00
C
ATOM   2869  HA  ILE   172      12.243   0.940   6.112  1.00  0.00
H
ATOM   2870  C   ILE   172      10.310  -0.029   6.282  1.00  0.00
C
ATOM   2871  O   ILE   172       9.840  -0.920   6.972  1.00  0.00
O
ATOM   2872  CB  ILE   172      12.176  -0.625   4.577  1.00  0.00
C
ATOM   2873  HB  ILE   172      13.240  -0.862   4.592  1.00  0.00
H
ATOM   2874  CG1 ILE   172      11.954   0.433   3.484  1.00  0.00
C
ATOM   2875 1HG1 ILE   172      10.888   0.636   3.400  1.00  0.00
H
ATOM   2876 2HG1 ILE   172      12.452   1.352   3.793  1.00  0.00
H
ATOM   2877  CG2 ILE   172      11.410  -1.937   4.285  1.00  0.00
C
ATOM   2878 1HG2 ILE   172      11.808  -2.418   3.391  1.00  0.00
H
ATOM   2879 2HG2 ILE   172      10.348  -1.740   4.141  1.00  0.00
H
ATOM   2880 3HG2 ILE   172      11.527  -2.635   5.114  1.00  0.00
H
ATOM   2881  CD1 ILE   172      12.476   0.042   2.101  1.00  0.00
C
ATOM   2882 1HD1 ILE   172      12.359   0.881   1.421  1.00  0.00
H
ATOM   2883 2HD1 ILE   172      11.915  -0.806   1.706  1.00  0.00
H
ATOM   2884 3HD1 ILE   172      13.532  -0.216   2.163  1.00  0.00
H
ATOM   2885  N   PRO   173       9.540   0.994   5.891  1.00  0.00
N
ATOM   2886  CA  PRO   173       9.634   2.422   6.212  1.00  0.00
C
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ATOM   2887  HA  PRO   173      10.630   2.804   5.990  1.00  0.00
H
ATOM   2888  C   PRO   173       9.285   2.743   7.675  1.00  0.00
C
ATOM   2889  O   PRO   173       9.192   3.916   8.027  1.00  0.00
O
ATOM   2890  CB  PRO   173       8.617   3.036   5.246  1.00  0.00
C
ATOM   2891 1HB  PRO   173       8.205   3.967   5.635  1.00  0.00
H
ATOM   2892 2HB  PRO   173       9.078   3.201   4.273  1.00  0.00
H
ATOM   2893  CG  PRO   173       7.566   1.992   5.139  1.00  0.00
C
ATOM   2894 1HG  PRO   173       6.924   2.014   6.019  1.00  0.00
H
ATOM   2895 2HG  PRO   173       6.975   2.124   4.233  1.00  0.00
H
ATOM   2896  CD  PRO   173       8.332   0.703   5.095  1.00  0.00
C
ATOM   2897 1HD  PRO   173       7.749  -0.107   5.534  1.00  0.00
H
ATOM   2898 2HD  PRO   173       8.612   0.463   4.071  1.00  0.00
H
ATOM   2899  N   ASP   174       9.121   1.716   8.510  1.00  0.00
N
ATOM   2900  H   ASP   174       9.145   0.781   8.119  1.00  0.00
H
ATOM   2901  CA  ASP   174       8.948   1.816   9.977  1.00  0.00
C
ATOM   2902  HA  ASP   174       8.852   0.798  10.357  1.00  0.00
H
ATOM   2903  C   ASP   174       7.742   2.586  10.538  1.00  0.00
C
ATOM   2904  O   ASP   174       7.492   3.747  10.204  1.00  0.00
O
ATOM   2905  CB  ASP   174      10.219   2.397  10.601  1.00  0.00
C
ATOM   2906 1HB  ASP   174      11.065   1.750  10.369  1.00  0.00
H
ATOM   2907 2HB  ASP   174      10.402   3.378  10.167  1.00  0.00
H
ATOM   2908  CG  ASP   174      10.112   2.575  12.099  1.00  0.00
C
ATOM   2909  OD1 ASP   174       9.670   1.641  12.791  1.00  0.00
O
ATOM   2910  OD2 ASP   174      10.483   3.657  12.602  1.00  0.00
O
ATOM   2911  N   LEU   175       6.988   1.949  11.422  1.00  0.00
N
ATOM   2912  H   LEU   175       7.226   1.001  11.711  1.00  0.00
H
ATOM   2913  CA  LEU   175       5.825   2.585  12.038  1.00  0.00
C
ATOM   2914  HA  LEU   175       5.393   3.301  11.342  1.00  0.00
H
ATOM   2915  C   LEU   175       6.196   3.324  13.324  1.00  0.00
C
ATOM   2916  O   LEU   175       5.518   4.285  13.698  1.00  0.00
O
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ATOM   2917  CB  LEU   175       4.759   1.535  12.367  1.00  0.00
C
ATOM   2918 1HB  LEU   175       5.175   0.876  13.125  1.00  0.00
H
ATOM   2919 2HB  LEU   175       3.913   2.058  12.812  1.00  0.00
H
ATOM   2920  CG  LEU   175       4.217   0.646  11.235  1.00  0.00
C
ATOM   2921  HG  LEU   175       5.049   0.092  10.805  1.00  0.00
H
ATOM   2922  CD1 LEU   175       3.224  -0.368  11.803  1.00  0.00
C
ATOM   2923 1HD1 LEU   175       2.890  -1.037  11.010  1.00  0.00
H
ATOM   2924 2HD1 LEU   175       2.360   0.149  12.224  1.00  0.00
H
ATOM   2925 3HD1 LEU   175       3.703  -0.961  12.581  1.00  0.00
H
ATOM   2926  CD2 LEU   175       3.547   1.447  10.118  1.00  0.00
C
ATOM   2927 1HD2 LEU   175       3.154   0.766   9.364  1.00  0.00
H
ATOM   2928 2HD2 LEU   175       4.276   2.101   9.641  1.00  0.00
H
ATOM   2929 3HD2 LEU   175       2.731   2.047  10.522  1.00  0.00
H
ATOM   2930  N   GLU   176       7.270   2.878  13.970  1.00  0.00
N
ATOM   2931  H   GLU   176       7.844   2.170  13.520  1.00  0.00
H
ATOM   2932  CA  GLU   176       7.663   3.285  15.331  1.00  0.00
C
ATOM   2933  HA  GLU   176       8.425   2.583  15.667  1.00  0.00
H
ATOM   2934  C   GLU   176       6.492   3.143  16.314  1.00  0.00
C
ATOM   2935  O   GLU   176       6.040   4.104  16.963  1.00  0.00
O
ATOM   2936  OXT GLU   176       6.033   1.993  16.451  1.00  0.00
O
ATOM   2937  CB  GLU   176       8.320   4.680  15.323  1.00  0.00
C
ATOM   2938 1HB  GLU   176       8.333   5.030  14.293  1.00  0.00
H
ATOM   2939 2HB  GLU   176       7.731   5.386  15.903  1.00  0.00
H
ATOM   2940  CG  GLU   176       9.764   4.719  15.832  1.00  0.00
C
ATOM   2941 1HG  GLU   176      10.373   4.078  15.198  1.00  0.00
H
ATOM   2942 2HG  GLU   176      10.136   5.740  15.736  1.00  0.00
H
ATOM   2943  CD  GLU   176       9.935   4.275  17.283  1.00  0.00
C
ATOM   2944  OE1 GLU   176       9.287   4.837  18.195  1.00  0.00
O
ATOM   2945  OE2 GLU   176      10.766   3.380  17.563  1.00  0.00
O
TER    2946      GLU   176
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HETATM 2947 CA    CA A 201      28.366 -39.451   6.612  1.00  0.00
CA
END
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