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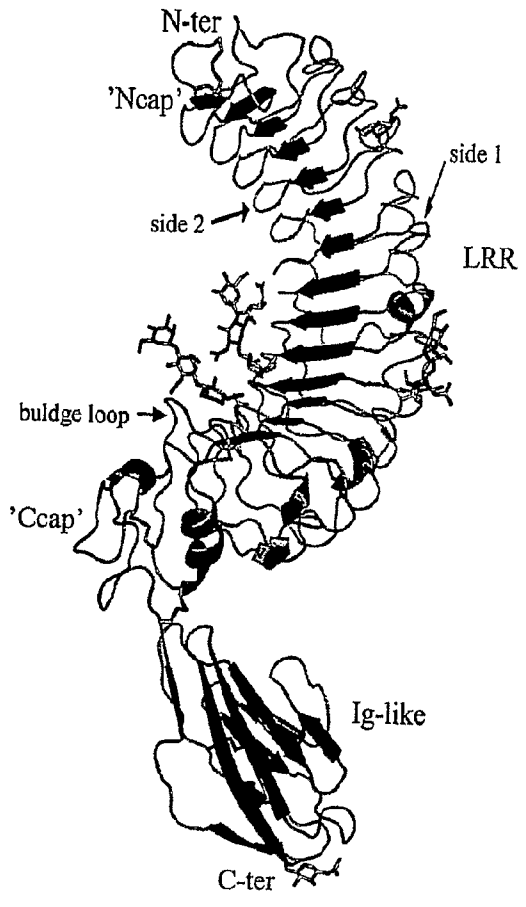
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(54) Title: STRUCTURE LINGO-1



(57) Abstract: Cette invention concerne des polypeptides LINGO-1, des complexes polypeptide/ligand LINGO-1, des cristaux de polypeptides LINGO-1, des cristaux de complexes polypeptide/ligand LINGO-1, ainsi que des méthodes associées et des systèmes logiciels.

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LINGO-1 Structure

RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Application No. 60/765,443, filed February 3, 2006, which is incorporated herein by reference in its entirety.

TECHNICAL FIELD

This disclosure relates to LINGO-1 polypeptides, LINGO-1 polypeptide/ligand complexes, crystals of LINGO-1 polypeptides, crystals of LINGO-1 polypeptide/ligand complexes, and related methods and software systems.

BACKGROUND

LINGO-1 (LRR and Ig domain-containing, Nogo Receptor-interacting protein) is a transmembrane coreceptor with p75. The coreceptors, with the ligand binding Nogo-66 receptor (NogoR), make up the Nogo receptor complex, which is commonly located on neurons. Disabling the Nogo receptor complex in which LINGO-1 is located can induce myelin and nerve fiber growth. LINGO-1 has been shown to be active in myelin-making cells known as oligodendrocytes, and inhibition of LINGO-1 has also been shown to induce myelin formation. Thus LINGO-1 signaling is predicted to be a negative regulator of myelin production.

SUMMARY

In one aspect, the invention features a crystallized LINGO-1 polypeptide.

In another aspect, the invention features a crystallized polypeptide-ligand complex that includes a LINGO-1 polypeptide and a ligand that is an agonist or an antagonist of the LINGO-1 polypeptide.

In yet another aspect, the invention features a method that includes using a three-dimensional model of a LINGO-1 polypeptide to design an agent that binds the LINGO-1 polypeptide.

In a further aspect, the invention features a method that includes using a three-dimensional model of a LINGO-1 polypeptide-ligand complex to design an agent that binds the LINGO-1 polypeptide.

In another aspect, the invention features a method that includes using a three-dimensional model of a complex including a LINGO-1 polypeptide to design an agent that binds the LINGO-1 polypeptide.

In another aspect, the invention features a method that includes selecting an agent by, *e.g.*, performing rational drug design with a three-dimensional structure of a LINGO-1 polypeptide, or a LINGO-1 polypeptide-ligand complex; contacting the agent with the LINGO-1 polypeptide; and detecting an ability of the agent to bind the LINGO-1 polypeptide. In embodiments, the method further includes one or more of: obtaining a supplemental crystalline complex that includes the LINGO-1 polypeptide and the agent; determining the three-dimensional structure of the supplemental crystalline complex; selecting a second agent by, *e.g.*, performing rational drug design with the three-dimensional structure of the supplemental crystalline complex; contacting the second agent with the LINGO-1 polypeptide; and/or detecting the ability of the second agent to bind the LINGO-1 polypeptide. The method can further include one or more of: synthesizing the second agent; detecting an ability of the second agent to inhibit LINGO-1 activity; and/or detecting an ability of the second agent to increase myelin levels *in vitro* or *in vivo*.

In embodiments, the LINGO-1 polypeptide in the compositions and methods disclosed herein includes (or consists essentially of) a leucine-rich repeat (LRR) domain, an immunoglobulin-like (Ig-like) domain, and/or a stalk domain, or a combination thereof. In other embodiments, the LINGO-1 polypeptide includes (or consists essentially of) the amino acid sequence from a mammalian (*e.g.*, human) or nonmammalian origin; for example, the LINGO-1 polypeptide can include (or consist of) the amino acid sequence of SEQ ID NO:1, or a variant thereof (*e.g.*, a conservative susbstitution thereof). In other embodiments, the LINGO-1 polypeptide is crystallized, *e.g.*, is capable of diffracting X-rays to a resolution of at least about 3.7 Å. In embodiments, the crystallized LINGO-1 polypeptide has a space group a $P2_12_12$ or I222. In other embodiments, the crystallized LINGO-1 polypeptide has unit cell dimensions chosen from one or more of: a=201.5 Å, b=149.7 Å, c=157.5 Å, and $\alpha=\beta=\gamma=90°$, a=148.7 Å, b=158.6 Å, c=200.0 Å, and $\alpha=\beta=\gamma=90°$, and a=149.6 Å, b=157.3 Å, c=200.3 Å, and/or $\alpha=\beta=\gamma=90°$. In yet another embodiment, the crystallized LINGO-1 polypeptide has a three-dimensional structure that includes the structural coordinates according to Table 2, +/- a root mean square

deviation for alpha carbon atoms of not more than 1.5 Å. In another embodiment, the crystallized LINGO-1 polypeptide has a three-dimensional structure that includes the structural coordinates of an atom chosen from one or more atoms of amino acids Asp13, Arg20, Arg22, Arg43, Glu60, Glu62, Leu94, Leu120, Met123, His176, Tyr142, His145, His185, His209, His233, Ala238, Trp346, Arg347, Asn349, Asn351, Arg352, Gln353, Phe396, Arg408, Leu420, Leu426, Phe438, Asp440, Arg446, Tyr447 and/or Ile459 of the LINGO-1 polypeptide as set forth in SEQ ID NO:1.

In other embodiments, the agent designed or screened using the methods disclosed herein inhibits LINGO-1 activity. For example, the agent can bind LINGO-1 at a ligand binding site and/or interfere with an interaction between LINGO-1 and a ligand. In embodiments, the ligand binding site is located on a concave surface of an LRR domain, *e.g.*, a surface of the LRR domain that includes one or more of Trp346 and Arg352; His185, His209 and His233; Asp13; Glu60 and Glu62; or Arg20, Arg22 and Arg43, according to SEQ ID NO:1. In other embodiments, the ligand binding site is located on a convex surface of an LRR domain, *e.g.*, a surface of the LRR domain that includes one or more of Tyr142 and His145; Leu94, Leu120, and Met123; His176; or Ala238, according to SEQ ID NO:1. In other embodiments, the ligand binding site is located on an Ig domain, *e.g.*, a domain that includes one or more of Arg446 and Tyr447; Arg408, Phe438 and Asp440; Phe396; or Leu420, Leu426 and Ile459, according to SEQ ID NO:1.

In embodiments, the methods disclosed herein include providing a composition including a LINGO-1 polypeptide, ora LINGO-1 polypeptide-ligand complex, and/or crystallizing the composition to form a crystalline complex that includes the LINGO-1 polypeptide, or the LINGO-1 polypeptide-ligand complex. The crystalline complex can diffract X-rays to a resolution of at least about 3.7 Å. The methods disclosed herein can additionally include one or more of the following steps: calculating a distance between an atom of the LINGO-1 polypeptide and an atom of the agent; determining the interaction of the agent with the LINGO-1 polypeptide; comparing the interaction of the agent with the LINGO-1 polypeptide to an interaction of a second agent with the LINGO-1 polypeptide; selecting the agent via computer modeling; synthesizing the agent; detecting the ability of the agent to inhibit LINGO-1 activity; and/or detecting the ability of the agent to increase myelin formation *in vitro* or *in vivo*.

In another aspect, the invention features an agent designed or selected using the methods disclosed herein.

In another aspect, the invention features a software system that includes instructions for causing a computer system to accept information relating to the structure of a LINGO-1 polypeptide, accept information relating to a candidate agent, and determine binding characteristics of the candidate agent to the LINGO-1 polypeptide. The determination of binding characteristics can be based on the information relating to the structure of the LINGO-1 polypeptide, and the information relating to the candidate agent.

In yet another aspect, the invention features a computer program residing on a computer readable medium having a plurality of instructions stored thereon, which, when executed by one or more processors, cause the one or more processors to accept information relating to the structure of a complex comprising a LINGO-1 polypeptide, accept information relating to a candidate agent, and determine binding characteristics of the candidate agent to the LINGO-1 polypeptide. The determination of binding characteristics can be based on the information relating to the structure of the LINGO-1 polypeptide and the information relating to the candidate agent.

In another aspect, the invention features a method that includes accepting information relating to the structure of a LINGO-1 polypeptide and modeling the binding characteristics of the LINGO-1 polypeptide with a candidate agent. The method can be implemented by a software system.

In yet another aspect, the invention features a computer program residing on a computer readable medium having a plurality of instructions stored thereon, which, when executed by one or more processors, cause the one or more processors to accept information relating to a structure of a LINGO-1 polypeptide and model the binding characteristics of the LINGO-1 polypeptide with a candidate agent.

In another aspect, the invention features a software system that includes instructions for causing a computer system to accept information relating to a structure of a LINGO-1 polypeptide and model the binding characteristics of the LINGO-1 polypeptide with a candidate agent.

In a further aspect, the invention features a method of modulating LINGO-1 activity in a subject that includes: selecting, *e.g.*, using the methods described herein (*e.g.*, by rational drug

design), an agent that is capable of modulating LINGO-1 activity and administering an effective amount of the agent to the subject, such that the LINGO-1 activity is modulated.

In another aspect, the invention features a method of treating a subject having a condition associated with LINGO-1 activity that includes: selecting, *e.g.*, using the methods described herein (*e.g.*, by rational drug design), an agent that is capable of affecting LINGO-1 activity and administering a therapeutically effective amount of the agent to a subject in need thereof.

In yet another aspect, the invention features a method of prophylactically treating a subject susceptible to a condition associated with LINGO-1 activity that includes determining that the subject is susceptible to the condition associated with LINGO-1 activity, selecting, *e.g.*, using the methods described herein (*e.g.*, by rational drug design),an agent that is capable of effecting LINGO-1 activity, and administering a therapeutically effective amount of the agent to the subject.

In embodiments, the agent used in the methods disclosed herein, *e.g.*, the therapeutic and prophylactic methods disclosed herein, inhibits LINGO-1 activity and/or increases myelin levels in vivo. In embodiments, the condition is a demyelinating disease, *e.g.*, multiple sclerosis.

Other features and advantages of the invention will be apparent from the description, drawings and claims.

DESCRIPTION OF DRAWINGS

FIG. 1 is the amino acid sequence of a histidine-tagged LINGO-1 polypeptide (amino acids 1-516 plus 6-His-tag) (SEQ ID NO:1). The fragment used for crystallization is underlined.

FIG. 2 is a 2fo-fc electron density map for the refined 2.7 Å resolution LINGO-1 structure (see also Table 1).

FIG. 3 is a ribbon diagram of a LINGO-1 monomer.

FIG. 4 is a space-filled model of a LINGO-1 monomer. The numbered residues denote glycosylated asparagine residues.

FIGs. 5A-5C are structure diagrams illustrating the tetrameric organization of the LINGO-1 crystal structure. FIG. 5A is a top view of the tetrameric structure; FIG. 5B is a view of the interacting surfaces between the two monomers; and FIG. 5C is a side view of the tetrameric structure.

FIG. 6 is a map of a pSMEG plasmid.

FIGs. 7A-1 to 7A-3 show the sequence of a pSMEG plasmid (SEQ ID NO:2).

FIGs. 8A-8B depict the full length amino acid and nucleotide sequence of human LINGO-1 (SEQ ID NO:3 and 4, respectively). The coding sequence is encoded by nucleotides 53 to 1915 of SEQ ID NO:4.

DETAILED DESCRIPTION

In general, this disclosure relates to LINGO-1 polypeptides, LINGO-1 polypeptide/ligand complexes, crystals of LINGO-1 polypeptides, crystals of LINGO-1 polypeptide/ligand complexes, and related methods and software systems. Without wishing to be bound by theory, it is believed that crystal structures of LINGO-1 polypeptides and crystals of LINGO-1 polypeptide/ligand complexes can be useful for designing or identifying ligands that can interact with LINGO-1 polypeptides.

Ligands that interact with LINGO-1 polypeptides can inhibit or increase LINGO-1 activity. As an example, LINGO-1 inhibition has been shown to induce myelin formation. Therefore, it is believed that identification of LINGO-1 inhibitors may be useful for treatment of disorders characterized by myelin deficiencies, such as multiple sclerosis, Pelizaeus-Merzbacher's disease, central nervous system trauma, leukodystrophies such as Krabbe disease or Canavan Disease, or vitamin B12 deficiencies.

FIG. 1 is the amino acid sequence (SEQ ID NO:1) of a fragment of human LINGO-1 polypeptide (LINGO-1K549$_{his6}$) that includes a leucine-rich repeat (LRR) domain (amino acids 1-382), an immunoglobulin-like (Ig-like) domain (residues 383-477), a stalk region (amino acids 478-516), and a hexahistidine tag fused to the C-terminus of the stalk region. The hexahistidine tag facilitated purification. Not present in the LINGO-1K549$_{his6}$ polypeptide is a 33 amino acid signal sequence that is found at the N-terminus of the full-length human LINGO-1. The wildtype sequence also includes a transmembrane domain and a short cytoplasmic tail at the C-terminus of the protein (Mi *et al., Nat. Neurosci.* 7:221-228, 2004). FIG. 2 is an electron density map for a LINGO-1K549$_{his6}$ structure solved to 2.7 Å resolution (see Table 1). FIG. 3 is a ribbon diagram illustrating the structure of the LINGO-1K549$_{his6}$ polypeptide. The coordinates of a crystal structure of the LINGO-1K549$_{his6}$ polypeptide are provided in Table 2.

To determine the structure of LINGO-1, a human LINGO-1-polypeptide can be prepared and crystallized as described below. In general, the human LINGO-1 polypeptide can be

prepared as desired. For example, in some embodiments, the human LINGO-1 polypeptide is expressed from a DNA plasmid. The expression can be driven by a promoter, such as an inducible promoter or a constitutive promoter, such as a cytomegalovirus promoter. The human LINGO-1 polypeptide can be expressed as a fusion protein with a suitable tag, such as a polyhistidine (*e.g.*, hexahistidine), glutathione-S-transferase (GST), myc, HA, Strep, or FLAG tag. The tag can facilitate isolation of the human LINGO-1 polypeptide from cells, such as from bacterial cells or from a mammalian cell line. For example, the human LINGO-1 polypeptide can be expressed in and isolated from Chinese Hamster Ovary (CHO) cells. For example, the human LINGO-1 polypeptide can be fused to a hexahistidine tag and isolated by contacting a cell extract with a Nickel resin (*e.g.*, a Nickel-nitrilotriacetic acid (Ni-NTA) resin) to bind the hexahistidine tag, and then releasing the polypeptide by washing the resin with a buffer containing imidazole. Further, a fusion LINGO-1 polypeptide can be cleaved at a protease site engineered into the fusion protein, such as at or near the site of fusion between the polypeptide and the tag.

The human LINGO-1 polypeptide can be placed in solution for collecting spectral data, NMR data, or for growing a crystal. For example, the human LINGO-1 polypeptide can be crystallized in the presence of a salt (*e.g.*, a sodium salt and/or ammonium salt). Crystals can be grown by various methods, such as, for example, sitting or hanging drop vapor diffusion. In general, crystallization can be performed at a temperature of from about 4°C to about 60°C (*e.g.*, from about 10°C to about 45°C, such as at about 12°C, about 15°C, about 18°C, about 20°C, about 25°C, about 30°C, about 32°C, about 35°C, about 37°C).

In general, a crystal of the human LINGO-1 polypeptide can diffract X-rays to a resolution of about 3.7 Å or less (*e.g.*, about 3.6 Å or less, about 3.5 Å or less, about 3.2 Å or less, about 3.0 Å or less, about 2.7 Å or less, about 2.4 Å or less, about 2.3 Å or less, about 2.2 Å or less, about 2.1 Å or less, about 2.0 Å or less, about 1.9 Å or less, about 1.8 Å or less, about 1.7 Å or less, about 1.6 Å or less, about 1.5 Å or less, or about 1.4 Å or less). In some embodiments, a crystal of the human LINGO-1 polypeptide can diffract X-rays to a resolution of from about 1.7 Å to about 3.7 Å (*e.g.*, the crystal of the human LINGO-1 polypeptide can diffract X-rays to about 2.7 Å, about 3.5 Å or about 3.6 Å).

In certain embodiments, a crystal of the human LINGO-1 polypeptide belongs to space group I222 with unit cell parameters a=148.7 Å, b=158.6 Å, c=200.0 Å, and $\alpha=\beta=\gamma=90°$. In

other embodiments, a crystal of the human LINGO-1 polypeptide belongs to space group I222 with unit cell parameters a=149.6 Å, b=157.3 Å, c=200.3 Å, and $\alpha=\beta=\gamma=90°$. In other embodiments, a crystal of the human LINGO-1 polypeptide belongs to space group $P2_12_12$ with unit cell parameters a=201.5 Å, b=149.7 Å, c=157.5 Å, and $\alpha=\beta=\gamma=90°$. The space group refers to the overall symmetry of the crystal, and includes point symmetry and space symmetry. In certain embodiments, a crystal of the human LINGO-1 polypeptide belongs to space group I222 and contains two molecules of the human LINGO-1 polypeptide in the asymmetric unit. In other embodiments, a crystal of the human LINGO-1 polypeptide belongs to space group $P2_12_12$ and contains four molecules of the human LINGO-1 polypeptide in the asymmetric unit. The asymmetric unit is the smallest unit from which the crystal structure can be generated by making use of the symmetry operations of the space group. A crystal is generally made up of the motif defined by the space-group symmetry operations on the asymmetric units, and a translation of that motif through the crystal lattice.

Structural data describing a crystal can be obtained, for example, by X-ray diffraction. X-ray diffraction data can be collected by a variety of sources, X-ray wavelengths and detectors. In some embodiments, rotating anodes and synchrotron sources (*e.g.*, Advanced Light Source (ALS), Berkeley, California; or Advanced Photon Source (APS), Argonne, Illinois) can be used as the source(s) of X-rays. In certain embodiments, X-rays for generating diffraction data can have a wavelength of from about 0.5 Å to about 1.6 Å (*e.g.*, about 0.7 Å, about 0.9 Å, about 1.0 Å, about 1.1 Å, about 1.3 Å, about 1.4 Å, about 1.5 Å, or about 1.6 Å). In some embodiments, area detectors and/or charge-couple devices (CCDs) can be used as the detector(s).

X-ray diffraction data of a crystal of the human LINGO-1 polypeptide can be used to obtain the structural coordinates of the atoms in the complex. The structural coordinates are Cartesian coordinates that describe the location of atoms in three-dimensional space in relation to other atoms in the complex. For example, the structural coordinates listed in Table 2 are the structural coordinates of a crystalline human LINGO-1 polypeptide. The structural coordinates of Table 2 describe the location of atoms of the human LINGO-1 polypeptide (SEQ ID NO:5), (SEQ ID NO:6), (SEQ ID NO:7) and (SEQ ID NO:8) in relation to each other. The structural coordinates can be modified by mathematical manipulation, such as by inversion or integer additions or subtractions. As such, structural coordinates are relative coordinates. For example,

structural coordinates describing the location of atoms in the human LINGO-1 polypeptide are not specifically limited by the actual x, y, and z coordinates of Table 2.

The structural coordinates of the human LINGO-1 polypeptide can be used to derive a representation (*e.g.*, a two dimensional representation or three dimensional representation) of the polypeptide or a fragment of the polypeptide. Such representations can be useful for a number of applications, including, for example, the visualization, identification and characterization of an active site of the polypeptide. In certain embodiments, a three-dimensional representation can include the structural coordinates of the human LINGO-1 polypeptide according to Table 2, ± a root mean square (rms) deviation from the alpha carbon atoms of amino acids of not more than about 1.5 Å (*e.g.*, not more than about 1.0 Å, not more than about 0.5 Å).

RMS deviation is the square root of the arithmetic mean of the squares of the deviations from the mean, and is a way of expressing deviation or variation from structural coordinates. Conservative substitutions (see discussion below) of amino acids can result in a molecular representation having structural coordinates within the stated rms deviation. For example, two molecular models of polypeptides that differ from one another by conservative amino acid substitutions can have coordinates of backbone atoms within a stated rms deviation, such as less than about 1.5 Å (*e.g.*, less than about 1.0 Å, less than about 0.5 Å). Backbone atoms of a polypeptide include the alpha carbon (C_α or CA) atoms, carbonyl carbon (C) atoms, and amide nitrogen (N) atoms.

Various software programs allow for the graphical representation of a set of structural coordinates to obtain a representation of the human LINGO-1 polypeptide or a fragment of the polypeptide. In general, such a representation should accurately reflect (relatively and/or absolutely) structural coordinates, or information derived from structural coordinates, such as distances or angles between features. In some embodiments, the representation is a two-dimensional figure, such as a stereoscopic two-dimensional figure. In certain embodiments, the representation is an interactive two-dimensional display, such as an interactive stereoscopic two-dimensional display. An interactive two-dimensional display can be, for example, a computer display that can be rotated to show different faces of a polypeptide or a fragment of a polypeptide. In some embodiments, the representation is a three-dimensional representation. As an example, a three-dimensional model can be a physical model of a molecular structure (*e.g.*, a ball-and-stick model). As another example, a three dimensional representation can be a

graphical representation of a molecular structure (*e.g.*, a drawing or a figure presented on a computer display). A two-dimensional graphical representation (*e.g.*, a drawing) can correspond to a three-dimensional representation when the two-dimensional representation reflects three-dimensional information, for example, through the use of perspective, shading, or the obstruction of features more distant from the viewer by features closer to the viewer. In some embodiments, a representation can be modeled at more than one level. As an example, when the three-dimensional representation includes a polypeptide, such as a human LINGO-1 polypeptide, the polypeptide can be represented at one or more different levels of structure, such as primary (amino acid sequence), secondary (*e.g.*, α-helices and β-sheets), tertiary (overall fold), and quaternary (oligomerization state) structure. A representation can include different levels of detail. For example, the representation can include the relative locations of secondary structural features of a protein without specifying the positions of atoms. A more detailed representation could, for example, include the positions of atoms.

In some embodiments, a representation can include information in addition to the structural coordinates of the atoms in the human LINGO-1 polypeptide. For example, a representation can provide information regarding the shape of a solvent accessible surface, the van der Waals radii of the atoms of the model, and the van der Waals radius of a solvent (*e.g.*, water). Other features that can be derived from a representation include, for example, electrostatic potential, the location of voids or pockets within a macromolecular structure, and the location of hydrogen bonds and salt bridges.

An agent that interacts with (*e.g.*, binds) the human LINGO-1 polypeptide can be identified or designed by a method that includes using a representation of the polypeptide or a fragment of the polypeptide. Exemplary types of representations include the representations discussed above. In some embodiments, the representation can be of an analog polypeptide or polypeptide fragment. A candidate agent that interacts with the representation can be designed or identified by performing computer fitting analysis of the candidate agent with the representation. In general, an agent is a molecule. Examples of agents include polypeptides, nucleic acids (including DNA or RNA), steroids and non-steroidal organic compounds. An agent that interacts with a polypeptide (*e.g.*, a human LINGO-1 polypeptide) can interact transiently or stably with the polypeptide. The interaction can be mediated by any of the forces

noted herein, including, for example, hydrogen bonding, electrostatic forces, hydrophobic interactions, and van der Waals interactions.

As noted above, X-ray crystallography can be used to obtain structural coordinates of the human LINGO-1 polypeptide. However, such structural coordinates can be obtained using other techniques including NMR techniques. Additional structural information can be obtained from spectral techniques (*e.g.*, optical rotary dispersion (ORD), circular dichroism (CD)), homology modeling, and computational methods (*e.g.*, computational methods that can include data from molecular mechanics, computational methods that include data from dynamics assays).

In some embodiments, the X-ray diffraction data can be used to construct an electron density map of the human LINGO-1 polypeptide or a fragment of the polypeptide, and the electron density map can be used to derive a representation (*e.g.*, a two dimensional representation, a three dimensional representation) of the human LINGO-1 polypeptide. Creation of an electron density map typically involves using information regarding the phase of the X-ray scatter. Phase information can be extracted, for example, either from the diffraction data or from supplementing diffraction experiments to complete the construction of the electron density map. Methods for calculating phase from X-ray diffraction data include, for example, multiwavelength anomalous dispersion (MAD), multiple isomorphous replacement (MIR), multiple isomorphous replacement with anomalous scattering (MIRAS), single isomorphous replacement with anomalous scattering (SIRAS), reciprocal space solvent flattening, molecular replacement, or any combination thereof. These methods generate phase information by making isomorphous structural modifications to the native protein, such as by including a heavy atom or changing the scattering strength of a heavy atom already present, and then measuring the diffraction amplitudes for the native protein and each of the modified cases. If the position of the additional heavy atom or the change in its scattering strength is known, then the phase of each diffracted X-ray can be determined by solving a set of simultaneous phase equations. The location of heavy atom sites can be identified using a computer program, such as SHELXD (Bruker-AXS, Madison, WI) or SHELXS (Sheldrick, Institut Anorg. Chemie, Göttingen, Germany), and XPREP (Bruker-AXS, Madison, WI); and diffraction data can be processed using computer programs such as MOSFLM, SCALA, SOLOMON, and SHARP ("The CCP4 Suite: Programs for Protein Crystallography," *Acta Crystallogr.* Sect. D, 54:905-921, 1997; deLa Fortelle and Brigogne, *Meth. Enzym.* 276:472-494, 1997). The phase of X-ray scatter for a

crystalline human LINGO-1 polypeptide, for example, can be determined by SIRAS using crystals of a platinum derivative of the LINGO-1 polypeptide. To create a platinum derivative of a crystalline LINGO-1 polypeptide, the crystalline LINGO-1 polypeptide can be soaked in a solution containing platinum. Phases obtained by SIRAS from the platinum derivative can then be refined using, for example, non-crystallographic symmetry (NCS) averaging and phase extension in a computer program such as DM (Cowtan and Main, *Acta Cryst.* D49:148-157, 1993). The resulting model can be further derived by molecular replacement with a second data set. For example, a model derived from a crystalline LINGO-1 polypeptide having space group I222 can be refined using molecule replacement with a data set from a crystalline LINGO-1 polypeptide having space group $P2_12_12$. Phases obtained by SIRAS from crystals of the native crystalline polypeptide and the platinum derivative can then be used to create an electron density map of the LINGO-1 polypeptide.

The electron density map can be used to derive a representation of a polypeptide or a fragment of a polypeptide by aligning a three-dimensional model of a polypeptide with the electron density map. For example, the electron density map corresponding to the native crystalline human LINGO-1 polypeptide can be aligned with the electron density map corresponding to the platinum derivative of the crystalline human LINGO-1 polypeptide complex derived by an isomorphous replacement method.

The alignment process results in a comparative model that shows the degree to which the calculated electron density map varies from the model of the previously known polypeptide or the previously known complex. The comparative model is then refined over one or more cycles (*e.g.*, two cycles, three cycles, four cycles, five cycles, six cycles, seven cycles, eight cycles, nine cycles, ten cycles) to generate a better fit with the electron density map. Software programs such as CNS (Brunger *et al, Acta Crystallogr.* D54:905-921, 1998) and REFMAC (Collaborative Computational Project, Number 4. The CCP4 suite: Programs for Protein Crystallography, *Acta Crystallogr.* D50:760-776, 1994) can be used to refine the model. The quality of fit in the comparative model can be measured by, for example, an R_{factor} or R_{free} value. A smaller value of R_{factor} or R_{free} generally indicates a better fit. Misalignments in the comparative model can be adjusted to provide a modified comparative model and a lower R_{factor} or R_{free} value. The adjustments can be based on information relating to variations of the human LINGO-1 polypeptide (*e.g.*, sequence variation information, alternative structure information, heavy atom

derivative information) as appropriate. As an example, in embodiments in which a model of a heavy atom derivative of a crystalline LINGO-1 polypeptide is used, an adjustment can include fitting an approximate model of the native LINGO-1 polypeptide over the model of the heavy atom derivative. As another example, in certain embodiments, an adjustment can include replacing an amino acid in the previously known LINGO-1 polypeptide with an amino acid having a similar structure (a conservative amino acid change). When adjustments to the modified comparative model satisfy a best fit to the electron density map, the resulting model is that which is determined to describe the polypeptide or complex from which the X-ray data was derived. Methods of such processes are disclosed, for example, in Carter and Sweet, eds., "Macromolecular Crystallography" in Methods in Enzymology, Vol. 277, Part B, New York: Academic Press, 1997, and articles therein, *e.g.*, Jones and Kjeldgaard, "Electron-Density Map Interpretation," p. 173, and Kleywegt and Jones, "Model Building and Refinement Practice," p. 208.

A machine, such as a computer, can be programmed in memory with the structural coordinates of the human LINGO-1 polypeptide together with a program capable of generating a graphical representation of the structural coordinates on a display connected to the machine. A software system can also be designed and/or utilized to accept and store the structural coordinates. The software system can be capable of generating a graphical representation of the structural coordinates. The software system can also be capable of accessing external databases to identify one or more candidate agents likely to interact with the human LINGO-1 polypeptide.

A machine having a memory containing structure data or a software system containing such data can aid in the rational design or selection of a human LINGO-1 polypeptide agonist of a human LINGO-1 polypeptide antagonist. For example, such a machine or software system can aid in the evaluation of the ability of an agent to associate with the human LINGO-1 polypeptide, or can aid in the modeling of compounds or proteins related by structural or sequence homology to the human LINGO-1 polypeptide. As used herein, an agonist refers to a compound that enhances at least one activity of the human LINGO-1 polypeptide, and an antagonist refers to a compound that inhibits or counteracts at least one activity of the human LINGO-1 polypeptide. For example, a compound may function as an antagonist of the human LINGO-1 polypeptide by, for example, increasing the rate of myelin production by a neural cell, or by inhibiting interaction of the human LINGO-1 polypeptide with the Nogo receptor complex.

The machine can produce a representation (*e.g.*, a two dimensional representation, a three dimensional representation) of the human LINGO-1 polypeptide or a fragment of the polypeptide. A software system, for example, can cause the machine to produce such information. The machine can include a machine-readable data storage medium including a data storage material encoded with machine-readable data. The machine-readable data can include structural coordinates of atoms of the human LINGO-1 polypeptide. Machine-readable storage media (*e.g.*, data storage material) include, for example, conventional computer hard drives, floppy disks, DAT tape, CD-ROM, DVD, and other magnetic, magneto-optical, optical, and other media which may be adapted for use with a machine (*e.g.*, a computer). The machine can also have a working memory for storing instructions for processing the machine-readable data, as well as a central processing unit (CPU) coupled to the working memory and to the machine-readable data storage medium for the purpose of processing the machine-readable data into the desired three-dimensional representation. A display can be connected to the CPU so that the three-dimensional representation can be visualized by the user. Accordingly, when used with a machine programmed with instructions for using the data (*e.g.*, a computer loaded with one or more programs of the sort described herein) the machine is capable of displaying a graphical representation (*e.g.*, a two dimensional graphical representation, a three-dimensional graphical representation) of any of the polypeptides, polypeptide fragments, complexes, or complex fragments described herein.

A display (*e.g.*, a computer display) can show a representation of the human LINGO-1 polypeptide or a fragment of the human LINGO-1 polypeptide. The user can inspect the representation and, using information gained from the representation, generate a model of the human LINGO-1 polypeptide or polypeptide fragment bound to a ligand. The model can be generated, for example, by altering a previously existing representation of the human LINGO-1 polypeptide. Optionally, the user can superimpose a three-dimensional model of an agent on the representation of the human LINGO-1 polypeptide. The agent can be an agonist (*e.g.*, a candidate agonist) of the human LINGO-1 polypeptide. In some embodiments, the agent can be a known compound or a fragment of a known compound. In certain embodiments, the agent can be a previously unknown compound, or a fragment of a previously unknown compound.

It can be desirable for the agent to have a shape that complements the shape of the active site. There can be a preferred distance, or range of distances, between atoms of the agent and

atoms of the human LINGO-1 polypeptide. Distances longer than a preferred distance may be associated with a weak interaction between the agent and active site (*e.g.*, the active site of the human LINGO-1 polypeptide). Distances shorter than a preferred distance may be associated with repulsive forces that can weaken the interaction between the agent and the polypeptide. A steric clash can occur when distances between atoms are too short. A steric clash occurs when the locations of two atoms are unreasonably close together, for example, when two atoms are separated by a distance less than the sum of their van der Waals radii. If a steric clash exists, the user can adjust the position of the agent relative to the human LINGO-1 polypeptide (*e.g.*, a rigid body translation or rotation of the agent) until the steric clash is relieved. The user can adjust the conformation of the agent or of the human LINGO-1 polypeptide in the vicinity of the agent in order to relieve a steric clash. Steric clashes can also be removed by altering the structure of the agent, for example, by changing a "bulky group," such as an aromatic ring, to a smaller group, such as to a methyl or hydroxyl group, or by changing a rigid group to a flexible group that can accommodate a conformation that does not produce a steric clash. Electrostatic forces can also influence an interaction between an agent and a ligand-binding domain. For example, electrostatic properties can be associated with repulsive forces that can weaken the interaction between the agent and the human LINGO-1 polypeptide. Electrostatic repulsion can be relieved by altering the charge of the agent, *e.g.*, by replacing a positively charged group with a neutral group.

Forces that influence binding strength between a candidate agent and the human LINGO-1 polypeptide, respectively, can be evaluated in the polypeptide/agent model. These can include, for example, hydrogen bonding, electrostatic forces, hydrophobic interactions, van der Waals interactions, dipole-dipole interactions, π-stacking forces, and cation-π interactions. The user can evaluate these forces visually, for example by noting a hydrogen bond donor/acceptor pair arranged with a distance and angle suitable for a hydrogen bond. Based on the evaluation, the user can alter the model to find a more favorable interaction between the human LINGO-1 polypeptide and the agent. Altering the model can include changing the three-dimensional structure of the polypeptide without altering its chemical structure, for example by altering the conformation of amino acid side chains or backbone dihedral angles. Altering the model can include altering the position or conformation of the agent, as described above. Altering the model can also include altering the chemical structure of the agent, for example by substituting,

adding, or removing groups. For example, if a hydrogen bond donor on the human LINGO-1 polypeptide is located near a hydrogen bond donor on the agent, the user can replace the hydrogen bond donor on the agent with a hydrogen bond acceptor.

The relative locations of an agent and the human LINGO-1 polypeptide, or their conformations, can be adjusted to find an optimized binding geometry for a particular agent to the human LINGO-1 polypeptide. An optimized binding geometry is characterized by, for example, favorable hydrogen bond distances and angles, maximal electrostatic attractions, minimal electrostatic repulsions, the sequestration of hydrophobic moieties away from an aqueous environment, and the absence of steric clashes. The optimized geometry can have the lowest calculated energy of a family of possible geometries for the human LINGO-1 polypeptide/agent complex. An optimized geometry can be determined, for example, through molecular mechanics or molecular dynamics calculations.

A series of representations of the human LINGO-1 polypeptide having different bound agents can be generated. A score can be calculated for each representation. The score can describe, for example, an expected strength of interaction between the human LINGO-1 polypeptide and the agent. The score can reflect one of the factors described above that influence binding strength. The score can be an aggregate score that reflects more than one of the factors. The different agents can be ranked according to their scores.

Steps in the design of the agent can be carried out in an automated fashion by a machine. For example, a representation of the human LINGO-1 polypeptide can be programmed in the machine, along with representations of candidate agents. The machine can find an optimized binding geometry for each of the candidate agents to an active site, and calculate a score to determine which of the agents in the series is likely to interact most strongly with the human LINGO-1 polypeptide.

A software system can be designed and/or implemented to facilitate these steps. Software systems (*e.g.*, computer programs) used to generate representations or perform the fitting analyses include, for example: MCSS, Ludi, QUANTA® (macromolecular X-ray crystallography software), Insight II® (biological compound modeling and simulation software), Cerius^2® (modeling and simulation software) , CHARMm® (software for simulation of biological macromolecules) CHARMm® (software for simulation of biological

macromolecules), and Modeler from Accelrys, Inc. (San Diego, CA); SYBYL® (molecular modeling software), Unity, FleXX, and LEAPFROG from TRIPOS, Inc. (St. Louis, MO); AUTODOCK (Scripps Research Institute, La Jolla, CA); GRID (Oxford University, Oxford, UK); DOCK (University of California, San Francisco, CA); and Flo+ and Flo99 (Thistlesoft, Morris Township, NJ). Other useful programs include ROCS, ZAP, FRED, Vida, and Szybki from Openeye Scientific Software (Santa Fe, NM); Maestro, Macromodel, and Glide from Schrodinger, LLC (Portland, OR); MOE (Chemical Computing Group, Montreal, Quebec), Allegrow (Boston De Novo, Boston, MA), CNS (Brunger, *et al., Acta Crystall.* Sect. D 54:905-921, 1997) and GOLD (Jones *et al., J. Mol. Biol.* 245:43-53, 1995). The structural coordinates can also be used to visualize the three-dimensional structure of the human LINGO-1 polypeptide using MOLSCRIPT, RASTER3D, or PYMOL (Kraulis, *J. Appl. Crystallogr.* 24: 946-950, 1991; Bacon and Anderson, *J. Mol. Graph.* 6: 219-220, 1998; DeLano, The PYMOL Molecular Graphics System (2002) DeLano Scientific, San Carlos, CA).

The agent can, for example, be selected by screening an appropriate database, can be designed *de novo* by analyzing the steric configurations and charge potentials of a human LINGO-1 polypeptide in conjunction with the appropriate software systems, and/or can be designed using characteristics of known ligands, such as the neurotrophin receptor p75 and the Nogo receptor (NogoR). The method can be used to design or select agonists or antagonists of the human LINGO-1 polypeptide. A software system can be designed and/or implemented to facilitate database searching, and/or agent selection and design.

Once an agent has been designed or identified, it can be obtained or synthesized and further evaluated for its effect on the activity of the human LINGO-1 polypeptide. For example, the agent can be evaluated by contacting it with the human LINGO-1 polypeptide and measuring the effect of the agent on polypeptide activity. A method for evaluating the agent can include an activity assay performed *in vitro* or *in vivo*.

An activity assay can be a cell-based assay, for example. A cell based assay can include monitoring the effect of a candidate agent on myelin production. Such assays for human LINGO-1 polypeptide inhibitors may involve contacting a candidate inhibitor with cells expressing the human LINGO-1 polypeptide and assaying for an effect on cell morphology. For example, a neural cell line can be contacted with a candidate agent and the cells monitored for an

effect on oligodendrocyte differentiation. Decreases in LINGO-1 activity have been shown to increase the differentiation of cells into mature oligodendrocytes, as evidenced by increases in the length of cell processes (Mi *et al., Nat. Neuroscience* 8:745-751, 2005). LINGO-1 activity can also be assayed by measuring levels of proteins involved in myelin production, such as myelin-associated glycoprotein (MAG), a protein expressed at the onset of myelination; myelin basic protein (MBP), the major protein component of myelin; and other myelin components including oligodendrocyte-myelin glycoprotein (OMpg), myelin oligodendrocyte glycoprotein (MOG) and cyclic nucleotide phosphodiesterase (CNPase). LINGO-1 inhibitors have been shown to promote the upregulation of expression of each of these proteins (Mi *et al., Nat. Neuroscience* 8:745-751, 2005). Protein levels can be assayed by standard protein detection techniques, such as immunohistochemistry by Western blot analysis or *in situ* hybridization in cultured cells or whole tissue sections.

Depending upon the action of the agent on the human LINGO-1 polypeptide, the agent can act either as an agonist or antagonist of human LINGO-1 polypeptide activity. An agonist, for example, may decrease the rate of myelin production, or increase the binding affinity of the human LINGO-1 polypeptide to the Nogo receptor complex. Conversely, an antagonist may increase the rate of myelin production or decrease the binding affinity of the human LINGO-1 polypeptide to the Nogo receptor complex. The agent can be contacted with the human LINGO-1 polypeptide in the presence of one or more components of the Nogo receptor complex (*e.g.*, p75 or Nogo-66) in order to determine whether or not the agent inhibits binding of the human LINGO-1 polypeptide to the Nogo receptor complex. A crystal containing the human LINGO-1 polypeptide bound to the identified agent can be grown and the structure determined by X-ray crystallography. A second agent can be designed or identified based on the interaction of the first agent with the human LINGO-1 polypeptide.

Various molecular analysis and rational drug design techniques are further disclosed in, for example, U.S. Patent Nos. 5,834,228, 5,939,528 and 5,856,116, as well as in PCT Application No. PCT/US98/16879, published as WO 99/09148.

While certain embodiments have been described, other embodiments are also contemplated.

As an example, while embodiments involving the human LINGO-1 polypeptide have been described, the description herein is more generally directed to any LINGO-1 polypeptide.

A LINGO-1 polypeptide can be a full-length, mature polypeptide, including the full-length amino acid sequence of any isoform of a LINGO-1 polypeptide. An isoform is any of several multiple forms of a protein that differ in their primary structure. The full length amino acid and nucleotide sequences of human LINGO-1 are disclosed in FIGs. 8A-8B.

A LINGO-1 polypeptide can be a fragment of a human LINGO-1 polypeptide, such as a signal sequence, an LRR-type domain, an Ig-like domain, a transmembrame domain, a cytoplasmic domain, or a combination thereof. A fragment of a LINGO-1 polypeptide can include more than 40%, 50%, 60%, 80%, 90% or more of a LINGO-1 polypeptide sequence (*e.g.*, SEQ ID NO:1). For example, a LINGO-1 polypeptide can include one or more of the following domains: an LRR-type domain (*e.g.*, about amino acids 1-382 of SEQ ID NO:1), or a fragment or selected residue thereof (*e.g.*, one or more of amino acids Asp13, Arg20, Arg22, Arg43, Glu60, Glu62, Leu94, Leu120, Met123, His176, Tyr142, His145, His185, His209, His233, Ala238, Trp346, Arg347, Asn349, Asn351, Arg352, and/or Gln353, of SEQ ID NO:1); an Ig-like domain (*e.g.*, about amino acids 383-477 of SEQ ID NO:1), or a fragment or selected residue thereof (*e.g.*, one or more of amino acids Phe396, Arg408, Leu420, Leu426, Phe438, Asp440, Arg446, Tyr447 and/or Ile459 of SEQ ID NO:1); and/or a stalk region (*e.g.*, about amino acids 478-516 of SEQ ID NO:1), or a fragment or selected residue thereof. In other embodiments, the LINGO-1 polypeptide can contain one or more of the active sites and/or structural folds, as described herein. The LINGO-1 polypeptide may contain one or more conservative amino acid substitutions that yield a similar three-dimensional structure, as described herein. For example, in some embodiments, the LINGO-1 polypeptide (or fragment thereof) includes up to 5, 10, 20, 30, 50, 75, 100, 150, or 200 or more conservative substitutions from a predetermined sequence, *e.g.*, a human LINGO-1 amino acid sequence (e.g., SEQ ID NO:1).

A LINGO-1 polypeptide can have an active site. For example, the LRR-like domain includes a likely active site of a LINGO-1 polypeptide. In general, an active site can include a site of ligand binding, or a site of phosphorylation, glycosylation, alkylation, acylation, or other covalent modification. A site of ligand binding can be a site of a site of binding of a component of the Nogo receptor complex, or an agonist or antagonist of LINGO-1 activity. An active site

can include a glycosylation site. A ligand binding site can include accessory binding sites adjacent to or proximal to the actual site of binding that may affect activity upon interaction with the ligand. Candidate active sites of the human LINGO-1 polypeptide can be identified by comparing the structure of the LINGO-1 polypeptide with homologous structures of other known polypeptides. For example, one or more active sites of the human LINGO-1 polypeptide can be identified by comparing the structure of the LINGO-1 polypeptide with the structure of the platelet membrane glycoprotein Gp1bα. A candidate active site on LINGO-1 including Trp346 and Arg352 was identified by its similarity to the structure of a ligand-binding site on Gp1bα. Cavities located on the surface of the human LINGO-1 polypeptide also represent candidate ligand-binding sites.

An active site of the human LINGO-1 polypeptide can include amino acids of SEQ ID NO:1 (FIG. 1). For example, an active site of the human LINGO-1 polypeptide can include one or more of amino acids Asp13, Arg20, Arg22, Arg43, Glu60, Glu62, Leu94, Leu120, Met123, His176, Tyr142, His145, His185, His209, His233, Ala238, Trp346, Arg347, Asn349, Asn351, Arg352, Gln353, Phe396, Arg408, Leu420, Leu426, Phe438, Asp440, Arg446, Tyr447 and Ile459 as set forth in the amino acid positions of SEQ ID NO:1. An active site can include a subset of amino acids located at a particular region of the human LINGO-1 polypeptide. For example, an active site can be located on the concave surface of the LRR-domain and include Trp346 and Arg352; His 185, His209, and His233; Asp13; Glu60 and Glu62; or Arg20, Arg22, and Arg43 of SEQ ID NO:1. In another example, an active site can be located on the convex surface of the LRR-domain and include Tyr142 and His145; Leu94, Leu120, and Met123; His176; or Ala238 of SEQ ID NO:1. In another example, an active site can be located on the Ig-domain and include Arg446 and Tyr447; Arg408, Phe438, and Asp440; Phe396; or Leu420, Leu426, and Ile459 of SEQ ID NO:1.

The numbering of the amino acids of the human LINGO-1 polypeptide may be different than that set forth herein, and the sequence of the human LINGO-1 polypeptide may contain certain conservative amino acid substitutions that yield the same three-dimensional structure. For example, the numbering of the human LINGO-1 polypeptide may be different than that set forth in FIG. 1, and the sequence of the human LINGO-1 polypeptide may contain conservative amino acid substitutions but yield the same structure as that defined by the coordinates of Table 2 and illustrated in FIGs. 2-4 and FIGs. 5A-5C. Corresponding amino acids and conservative

substitutions in other isoforms or analogs are easily identified by visual inspection of the relevant amino acid sequences or by using commercially available homology software programs (*e.g.*, MODELLAR, MSI Management Simulations, Inc., San Diego, CA). The crystal structure coordinates shown in Table 2 were determined from a crystal having space group $P2_12_12$, but the same coordinates +/- a root mean square deviation for alpha carbon atoms of not more than 1.5Å, can correspond to a crystalline LINGO-1 polypeptide having a different space group, such as I222.

An analog is a polypeptide having conservative amino acid substitutions. A conservative substitution can include switching one amino acid for another with similar polarity, steric arrangement, or of the same class (*e.g.*, hydrophobic, acidic or basic), and includes substitutions having an inconsequential effect on the three-dimensional structure of the human LINGO-1 polypeptide with respect to identification and design of agents that interact with the polypeptide, as well as for molecular replacement analyses and/or for homology modeling.

Variants or mutants of a LINGO-1 polypeptide can be used in the methods, compositions, and three-dimensional models disclosed herein. A variant or mutant of a LINGO-1 polypeptide, or fragment thereof, includes chimeric or fusion proteins, labeled proteins (*e.g.*, radiolabeled proteins), fusion proteins, mutant proteins, proteins having similar (*e.g.*, substantially similar) sequences (*e.g.*, proteins having amino acid substitutions (e.g., conserved amino acid substitutions), deletions, insertions), protein fragments, mimetics, so long as the variant has at least a portion of an amino acid sequence of a native protein, or at least a portion of an amino acid sequence of substantial sequence identity to the native protein. In embodiments, the mutant LINGO-1 differs from the amino acid sequence of SEQ ID NO:1 or a fragment thereof by up to 5, 10, 20, 30, 50, 75, 100, 150, or 200 or more amino acid residues. In other embodiments, the mutant LINGO-1 is at least about 70%, 80%, 90%, 95% or more identical to a LINGO-1 polypeptide sequence, e.g., a human LINGO-1 polypeptide (*e.g.*, SEQ ID NO:1).

A "chimeric protein"or "fusion protein" is a fusion of a first amino acid sequence encoding a polypeptide with a second amino acid sequence, wherein the first and second amino acid sequences do not occur naturally as part of a single polypeptide chain.

As used herein, the term "substantially similar" (or "substantially" or "sufficiently" "homologous" or "identical") is used herein to refer to a first amino acid or nucleotide sequence that contains a sufficient number of identical or equivalent (e.g., with a similar side chain, e.g.,

conserved amino acid substitutions) amino acid residues or nucleotides to a second amino acid or nucleotide sequence such that the first and second amino acid or nucleotide sequences have similar activities. Sequences similar or homologous (*e.g.*, at least about 85% sequence identity) to the sequences disclosed herein are also part of this application. In some embodiments, the sequence identity can be about 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99% or higher.

Calculations of "homology" or "sequence identity" between two sequences are performed as follows. The sequences are aligned for optimal comparison purposes (e.g., gaps can be introduced in one or both of a first and a second amino acid or nucleic acid sequence for optimal alignment and non- homologous sequences can be disregarded for comparison purposes). Typically, the length of a reference sequence aligned for comparison purposes is at least 30%, preferably at least 40%, more preferably at least 50%, even more preferably at lo least 60%, and even more preferably at least 70%, 80%, 90%, 100% of the length of the reference sequence. The amino acid residues or nucleotides at corresponding amino acid positions or nucleotide positions are then compared. When a position in the first sequence is occupied by the same amino acid residue or nucleotide as the corresponding position in the second sequence, then the molecules are identical at that position (as used herein amino acid or nucleic acid "identity" is equivalent to amino acid or nucleic acid "homology"). The percent identity between the two sequences is a function of the number of identical positions shared by the sequences, taking into account the number of gaps, and the length of each gap, which need to be introduced for optimal alignment of the two sequences.

The comparison of sequences and determination of percent identity between two sequences can be accomplished using a mathematical algorithm. In one embodiment, the percent identity between two amino acid sequences is determined using the Needleman and Wunsch ((1970) *J. Mol. Biol.* 48:444-453) algorithm which has been incorporated into the commercially available GAP program in the GCG software package, using either a Blossum 62 matrix or a PAM250 matrix, and a gap weight of 16, 14, 12, 10, 8, 6, or 4 and a length weight of 1, 2, 3, 4, 5, or 6. In yet another embodiment, the percent identity between two nucleotide sequences is determined using the commercially available GAP program in the GCG software package, using a NWSgapdna.CMP matrix and a gap weight of 40, 50, 60, 30 70, or 80 and a length weight of 1, 2, 3, 4, 5, or 6. Parameters typically used to determine percent homology are a Blossum 62

scoring matrix with a gap penalty of 12, a gap extend penalty of 4, and a frameshift gap penalty of 5. The percent identity between two amino acid or nucleotide sequences can also be determined using the s algorithm of E. Meyers and W. Miller ((1989) *CABIOS* 4:11-17) which has been incorporated into the ALIGN program (version 2.0), using a PAM120 weight residue table, a gap length penalty of 12 and a gap penalty of 4.

A LINGO-1 polypeptide can originate from a nonmammalian or mammalian species. A mammalian LINGO-1 polypeptide can originate from a human, for example. Exemplary nonhuman mammals include a nonhuman primate (such as a monkey or ape), a mouse, rat, goat, cow, bull, pig, horse, sheep, wild boar, sea otter, cat, and dog. Exemplary nonmammalian species include chicken, turkey, shrimp, alligator, and fish. The LINGO-1 amino acid and nucleotide sequences from several mammalian and nonmammalian species (including, for example, human, mouse, rat, dog, chimpanzee and chicken) are known in the art (*see e.g.*, Mi *et al.* (2005) *Nat. Neuroscience* 8:745-751; Carim-Todd, L. *et al.* (2003) *Eur. J. Neurosci.* 18(12):3167-3182; and Okafuji *et al.* (2005) *Gene Expr. Patterns* 6(1): 57-62).

An agent can be, for example, a chemical compound (*e.g.*, a polypeptide, nucleic acid, peptidomimetic). A peptidomimetic is a chemical compound that can mimic the ability of a peptide to recognize certain physiological molecules, such as proteins and nucleic acids. In some instances, the peptidomimetic includes non-peptidic structural elements that are capable of mimicking or antagonizing the biological action(s) of a natural parent peptide. For example, scissile peptide bonds can be replaced with one or more non-scissile dipeptide isosteres.

The following example is illustrative and not intended as limiting.

EXAMPLE

LINGO-1 was crystallized and its structure determined. The human LINGO-1 is a 614 amino acid protein containing a signal sequence, a leucine-rich repeat-like domain, an immunoglobulin-like domain, a stalk domain, a transmembrane domain and a short cytoplasmic tail (Mi *et al., Nat. Neurosci.* 7:221-228, 2004). The extracellular region of human LINGO-1 (including the LRR motifs, the Ig-like domain and the stalk region, and not including the signal sequence) was fused at its C-terminus to a hexahistidine tag (FIG. 1). The resulting LINGO-1K549$_{his6}$ construct was subcloned into a pSMEG vector (SEQ ID NO:2) (FIGs. 6, and 7A-1 to 7A-3) behind a murine cytomegalovirus (CMV) promoter (K549 refers to the lysine that occurs

at amino acid position 249 of the full-length human LINGO-1 construct, including the 33 amino acid signal sequence. The signal sequence was not present in the LINGO-1K549$_{his6}$ polypeptide.). The construct was verified by sequencing. Mammalian Chinese hamster ovary (CHO) cells were grown and maintained in a humidified incubator with 5% CO_2 at 37°C. Cell culture and DNA transfection for Lec3.2.8.1 cells are described in Zhong *et al. (Biochim. Biophys. Acta* 1723:143-150, 2005). A stable clone for LINGO-1K549$_{his6}$ construct in Lec3.2.8.1 (1042-5) was established by screening with anti-his4 antibody. Procedures for large-scale production of conditioned media for LINGO-1K549$_{his6}$ were as described previously (Zhong *et al., Biochim. Biophys. Acta* 1723:143-150, 2005).

To purify LINGO-1K549$_{his6}$, conditioned CHO media expressing the fusion protein (FIG. 1) was exchanged for a buffer of 50 mM Tris at pH 8.0, 100 mM NaCl, to which a cocktail of protease inhibitors was added (complete inhibitors from Roche, Nutley, NJ). To capture the fusion protein, Ni-NTA resin was equilibrated in 50 mM Tris, pH 8.0, 100 mM NaCl and then added to the cultured media for batch binding (end-over-end) for 2 hours. Once the cultured media was removed, the Ni-NTA resin was packed into a column. The column was connected to an AKTA Explorer (HPLC) and was washed with 4-5 column volumes of 50 mM Tris, pH 8.0; 100 mM NaCl. The protein was eluted with a 12-column volume gradient from 0% to 100% 50 mM Tris, pH 8.0; 100 mM NaCl, 300 mM imidazole. The collected protein fractions were dialyzed into 50 mM Tris, pH 8.0; 500 mM NaCl. For crystallization, the protein was incubated with Carboxypeptidase A (Sigma, St. Louis, MO) for 14-16 hours at 25°C, and then dialyzed into 50 mM MES, pH 6.1; 50 mM NaCl. After dialysis, the protein was loaded onto an SP sepharose column (GE Healthcare) and washed with 4-5 column volumes of 50 mM MES, pH 6.1; 50 mM NaCl. The protein was eluted with a 12-column volume gradient from 0% to 100% 50 mM MES, pH 6.1; 750 mM NaCl. The protein peak fractions were collected, concentrated to 5-8 mg/ml and then loaded onto the gel filtration Superdex 200 column equilibrated with TBS. The protein peak fractions were pooled together and concentrated to 4-5 mg/ml for crystallization. The purified protein was fully glycosylated.

LINGO-1K549$_{his6}$ crystals were obtained using the hanging drop vapor diffusion method at 18°C. Diffraction quality crystals were grown from protein solutions with 4 mg/mL of protein and precipitating solutions of 1.2 –1.4 M $(NH_4)_2SO_4$, 0.1 M Na-Citrate, pH 5.0. The protein crystallized in two forms under identical conditions, with both forms found in the same

crystallization droplets: I222, with two molecules per asymmetric unit and 74% solvent content, and $P2_12_12$, with four molecules per asymmetric unit and 73% solvent content. For data collection, crystals were gradually transferred from the mother liquor to the stabilizing-cryoprotecting solution containing 2.9 M sodium malonate, pH 5.2 (Holyoak *et al., Biological Crystallography* D59:2356-2358, 2003). This solution, in which crystals were found to be stable over the period of several days and over the pH range 5-7, was used for crystal derivatization. A single derivative that allowed structure determination by the method of single isomorphous replacement with anomalous scattering (SIRAS) was obtained from a platinum derivative, created by soaking the crystals in 50 mM K_2PtCl_6 and 2.9 M sodium malonate at pH 7.0 for 24 hours. Prior to data collection, all crystals were flush cooled under a nitrogen stream at 100 K.

Two data sets obtained from crystals of space group I222 were used for phase determination: the 3.5 Å native data set and the 3.6 Å data set for the platinum derivative, both measured in-house with a Saturn92 CCD mounted on an FR-E Cu Kα rotating anode source (Rigaku, Japan). The higher resolution native data set was collected to 2.7 Å at Advanced Photon Source (APS) (Argonne, Illinois) with beamline 22-ID of SER-CAT from a crystal that belongs to the $P2_12_12$ space group. All data were integrated and scaled with HKL2000 (Otwinowski and Minor, *Methods Enzymol.* 276:307-326, 1997).

The initial positions of the platinum (Pt) atoms in the derivative crystal were located with SHELXD (2001, Bruker-AXS, XM, Ver. 6.12; Bruker-AXS, Madison, WI) using anomalous differences of Pt atoms at the Cu Kα-edge. The input SAS coefficients were prepared with XPREP (2001 Bruker-AXS, Ver. 6.12; Bruker-AXS, Madison, WI). Refinement of heavy-atom parameters, phase calculation and density modification by SOLOMON (Abrahams and Leslie, *Acta Cryst.* D52: 30-42, 1996) were performed with SHARP (de La Fortelle and Bricogne, *Methods Enzymol.* 276:472–494, 1997) at 20-3.6 Å resolution, using both anomalous and isomorphous differences from the native and derivative data sets. The final 3.6 Å single isomorphous replacement with anomalous scattering (SIRAS) maps produced with SHARP were of interpretable quality and revealed two LINGO-1 molecules in the asymmetric unit. SHARP phases were further improved by two-fold non-crystallographic symmetry (NCS) averaging and phase extension to 3.5 Å in DM (Cowtan and Main, *Acta Cryst.* D49:148-157, 1993). The resulting maps allowed us to build an initial, 90% complete (~855 residues) model with QUANTA (Accelrys, Inc., San Diego, CA). This model was then used for molecular

replacement with the $P2_12_12$ data set to utilize the higher 2.7 Å resolution data. A clear solution for four molecules in the asymmetric unit was identified with PHASER (McCoy *et al., Acta Cryst.* D61:458-464, 2005). The I222 and $P2_12_12$ crystal forms share the same tetrameric packing, in which the tetramer can be built by replicating a dimer around the two-fold axis. Subsequent rounds of rebuilding and refinement against the 2.7 Å data set were done with the (Crystallographic Object)-Oriented Toolkit (COOT) (Emsley and Cowtan, *Acta Crys. D* 60:2126-2132, 2004) and REFMAC (Murshudov *et al., Acta Crystallogr. D* 53:240-255, 1997).

The final model contains four protein molecules (residues A1-477, B3-475, C2-477, and D3-476), 39 N-acetylglucosamine and 12 mannose residues, and 310 water molecules. Residues 1-2 at the N-termini of B, C and D; 476-477 at the C-termini of B and D; and residues D32-34 were not modeled into the structure due to the lack of adequate electron density, presumably because of disordering. Geometric analysis of the final refined structure performed with MolProbity places 94% of all residues in favored regions and 0.16% as outliers. Statistics for data collection, phasing and refinement are summarized in Table 1.

Table 2 lists the crystal structure coordinates as deduced from the crystal of space group $P2_12_12$ (see Table 1). The native and derivative structures having space group I222 revealed essentially the same structure and were used to help with phasing. In Table 2, the "#" column assigns an index to each atom for which coordinates are given. The "name" column indicates what type of atom, and the "res" column indicates what type of residue the atom belongs to. The "chain" indicates which polypeptide the atom belongs to. "Res #" gives the residue number for the atom. For example, atom number 1 (the first row in Table 2) is the Nitrogen (N) of Thr1 (according to the sequence set forth in SEQ ID NO:1). Its x, y, and z structural coordinates are given in the X, Y, and Z columns, respectively. The column headed "occ" describes the occupancy assigned to the atom (1.00 = full occupancy), and the "B" column provides B factors (or temperature factors) in units of $Å^2$. The column labeled "element" lists the atom's element symbol. Water is denoted by "HOH." "NAG" and "MAN" indicate N-acetylglucosamine and mannose residues, respectively.

Table 1. Statistics for data collection, phasing and refinement

Data collection	**Native 1**	**K_2PtCl_6**	**Native 2**
Space Group	I222	I222	$P2_12_12$
Unit Cell Dimensions			
a (Å)	148.7	149.6	201.5
b (Å)	158.6	157.3	149.7
c (Å)	200.0	200.3	157.5
$\alpha = \beta = \gamma$ (deg)	90	90	90
Source	FR-E CuKα	FR-E CuKα	APS ID-22
Max. resolution (Å)	3.5	3.6	2.7
Reflections (total/unique)	251,385/29,544	201,963/27,406	915,151/129,631
Completeness (%)	97.1 (98.8)	99.1 (99.8)	98.9 (94.7)
R_{sym} [a] (%)	11.7 (50.2)	10.5 (45.9)	9.0 (61.2)
I/σ(I)	16.1 (3.6)	15.3 (3.4)	20.6 (1.2)

Phasing	**SIRAS**	
Anom. I/σ(I) (4.5Å /3.6Å)	2.3 /1.2	
R_{iso} [b] (%)	43.6	
R_{ano} [b] (%)	8.6	
Number of Pt sites	15	
Phasing Power [c] (4.5Å/3.6Å)	anomalous	isomorphous
	1.13 /0.6	1.1 /0.73
Mean Figure of Merit [d] (4.5Å /3.6Å)	0.45 /0.25	

Model refinement	**Native 2**	
Resolution (Å)	50.0-2.7	
Number of Reflections	122,982	
Completeness (%)	98.7 (91.3)	
R_{factor}/R_{free} * (%)	21.5/25.5	
No. of protein atoms	15,114	
No. of carbohydrate atoms	700	
No. of waters	310	
r.m.s. deviations from ideal geometry	bonds (Å)	angles (deg)
	0.009	1.25

[a] $\mathbf{R_{sym}} = \sum \sum | \mathbf{I(h)_i} - \langle \mathbf{I(h)} \rangle | / \sum \sum \mathbf{I(h)_i}$, where $\langle \mathbf{I(h)} \rangle$ is the mean intensity. Numbers in parentheses reflect statistics for the highest resolution shells.

[b] $\mathbf{R_{iso}} = \sum | \mathbf{F_{nat}(h)} - \mathbf{F_{Pt}(h)} | / \sum \mathbf{F_{nat}(h)}$ and $\mathbf{R_{ano}}$ is calculated for the amplitudes of the positive and negative counterparts of the Bijvoet pairs.

[c] Phasing Power is defined by $\langle |\mathbf{F_H}| \rangle / \langle$(lack-of-closure)$\rangle$, where 'H' represents heavy-atom.

[d] Mean figure of merit is the estimated mean cosine of the phase error.

* $\mathbf{R_{free}}$ is calculated with 5% of the data.

Both crystal forms of LINGO-1 (I222 and $P2_12_12$) revealed a tetrameric structure, consistent with gel filtration data and dynamic light scattering measurements, showing that LINGO-1 exists as a tetramer in solution with a molecular weight of ~240 kDa. FIG. 2 shows a fragment of the electron density for the refined 2.7 Å resolution structure.

An overall view of the monomeric LINGO-1 structure is shown in FIG. 3. Each monomer is formed from two distinct domains: residues 1-382 constitute the N-terminal LRR-domain and residues 383-477 form the C-terminal Ig-like domain. The relative orientation of the two constituent domains gives the monomeric structure a question mark shape.

The LRR-domain (residues 1-382) adopts an elongated arc shape with a parallel 15-stranded ß-sheet on the concave inner face and with highly irregular secondary structures on the convex outer face (FIG. 3). In total, there are twelve LRRs, 23 to 25 residues each, that together create a continuous right-handed super-helical assembly. Each LRR begins with a ß-strand and has the consensus 24-residue sequence repeat motif: $xL^2xxL^5xL^7xxN^{10}xL^{12}xxL^{15}xxxxF^{20}xxL^{23}x$ (SEQ ID NO:9), where x can be any amino acid; **L** is a hydrophobic residue, preferentially Leu, but also Ile, Val, Met, Phe or Thr; **N** are less conserved in nature and includes mostly Asn, but also Cys, Asp, Leu or Trp; and **F** represents the hydrophobic residue Phe or Leu. The consensus residues at the indicated positions make up the interior of the LRR-domain. As in several other LRR proteins, the N- and C-termini of the LRR hydrophobic core are shielded from the solvent by two LRR caps: 'Ncap' and 'Ccap' (FIG. 3). The 'Ncap' has two anti-parallel ß-strands with two disulfide bridges at the base (Cys3-Cys9 and Cys7-Cys18), an arrangement that is very close in structure to NogoR (He, *et al., Neuron* 38:177-185, 2003). The 'Ccap' is also supported by two disulfide bridges (Cys334-Cys357 and Cys336-Cys382) and, like NogoR, has a characteristic motif consisting of one α-helix and three short 3_{10}-helices. Unlike in the NogoR, however, the interior of the 'Ccap' in LINGO-1 is filled almost entirely with a phenylalanine cluster (six aromatic rings from Phe342, Phe350, Phe362, Phe368, Phe371, Phe380 and one aromatic ring from Tyr379). In addition, a short loop segment (residues 349-353) following the α-helix is integrated into the canonical LRR structure in a slightly different way than in NogoR. The result is such that the top of the 5-residue loop bulges away from the ß-sheet into the concave space by at least 7.5 Å, therefore showing a more protruding character than the corresponding segment of the same length in NogoR. The position of the bulge loop (FIG. 3), which corresponds to the ligand binding ß-switch loop in the

platelet membrane glycoprotein Gp1bα (Huizinga *et al., Science* 297:1176-1179, 2002), combined with a character of the surface-exposed and protruding side chains (Trp346, Arg347, and Asn349, Asn351, Gln353, and Arg352 at the tip of the loop), suggests a likely candidate for interaction with a ligand. The electrostatic surface of the molecule (FIG. 4) reveals a pronounced set of electropositive and electronegative patches on all sides of the LRR-domain, except one relatively large hydrophobic patch found on the N-terminal convex side.

Based on the structure of the tetrameric complex, five subsets of amino acids located on the concave surface of the LRR domain were determined to be candidate ligand binding sites: (1) Trp346 and Arg352; (2) His185, His209, and His233; (3) Asp13; (4) Glu60 and Glu62; and (5) Arg20, Arg22, and Arg43. Likewise, four subsets of amino acids located on the convex surface of the LRR domain were determined to be candidate ligand binding sites: (1) Tyr142 and His145; (2) Leu94, Leu120, and Met123; (8) His176; and (9) Ala238.

After completing the LRR-domain, the polypeptide chain enters the compact Ig-like fold (residues 383-477) which represents the classical ß-sandwich of two ß-sheets cross-linked by one disulfide bond (Cys407-Cys458). Four strands (A, B, D and E) form one ß-sheet and five strands (A', C, C', F and G) make up the second ß-sheet. There is one 310 α-helical turn that connects the E and F strands. Comparison with other Ig-like structures indicates that the closest structural analog of the LINGO-1 Ig-like domain is the Ig3-module of the neural cell adhesion molecule, NCAM (Soroka *et al., Structure* 10:1291-1301, 2003), with the calculated identity between the two sequences of ~30%. Not surprisingly, the majority of the amino acid replacements occurs at the Ig-domain surfaces altering the side chain volumes and/or surface polarity, and most of the conserved amino acids map to the core of the structure and have equivalent conformations to satisfy the fold. The surface electrostatic potential is a combination of negative and positive patches on the ABDE-surface. On the contrary, the opposite A'CC'FG-surface is highly enriched in hydrophobic residues (Ala416, Leu418, Leu420, Leu426, Leu457, Ile459, Ala461, Ala463) surrounded by a number of polar and positively charged residues.

The Ig-domain orientation is such that it projects away from the convex LRR arc creating a wide solvent-exposed cleft at the back of the LRR-domain, with an elbow angle of ~90 degrees (FIG. 4). The walls of the cleft are formed by the C-terminal convex surface of LRR (repeats 10-12 and the Ccap), on one side, and by the A'CC'FG ß-sheet of the Ig-domain on the other. The opposing surfaces are relatively far apart and have different properties. The

convex surface is made up of mostly polar and charged residues, while the opposing Ig-surface is rather flat and is lined up with the amino acids that are predominantly hydrophobic (as indicated above). Small interdomain interactions occur at the tip of the elbow and involve van der Waals contacts between residues on the FG-loop (Ala463, Gly464) and on the C-terminal portion of LRR (Cys336, Arg337 and Cys382). Of note are the disulfide bond at the tip of the elbow, Cys336-Cys382, and the absence of an interdomain linker (as Arg383 is the first residue of the first ß-strand and a component of the ABDE ß-sheet). Such linkage between the domains constrains the positioning of the two relative to each other.

Based on the structure of the tetrameric complex, five subsets of amino acids on the Ig domain were determined to be candidate ligand binding sites: (1) Arg446 and Tyr447; (2) Arg408, Phe438, and Asp440; (3) Phe396; and (4) Leu420, Leu426, and Ile459.

The glycoform of LINGO-1 in CHO restricted cells is expected to be predominantly high-mannose type glycans such as $Man_5GlcNAc_2$, which is consistent with our mass spectrometry data. The crystallized glycoprotein contains eight typical N-glycosylation consensus sites. Six of them are located in the LRR-domain (Asn105, Asn163, Asn225, Asn235, Asn254, and Asn302) and two in the Ig-like domain (Asn466 and Asn453). All of these sites are positioned at the domain surfaces. Electron density can be assigned for carbohydrate moieties at all of these locations, except for the Asn466 site. The latter, although located at the surface, is wrapped up closely with a symmetry-related LINGO-1 partner, as described below and as shown in FIG. 5B. Since the protein packing leaves no room for glycosylation at Asn466, the N-glycan linked to Asn466 would prevent the LINGO-1 tetramerization observed in the crystals. The oligosaccharides at the remaining seven sites are spread over the structure as shown by the numbered residues in FIG. 4, where #1 corresponds to Asn 105, #2 to Asn163, #3 to Asn 225, #4 to Asn 235, #5 to Asn 254, #6 to Asn 302, and #7 to Asn 453. Out of four faces of the LRR-domain, only the convex outer surface is completely bare of carbohydrates, a finding consistent with its role in self-association. The concave and the two side surfaces, each bearing two N-glycan binding sites, are largely covered by carbohydrate. The last carbohydrate moiety maps to the Ig-face A'CC'FG, proximal to the C-terminus and remote from the intermolecular interface (FIG. 4).

In general, the presence of extensive glycosylation on glycoprotein surfaces limits their accessibility for interaction with ligands, and in most cases the surfaces that are not covered by

sugars are where the ligands are predicted to bind (Rudd *et al., JMB* 293:351-366, 1999). Therefore, it seems unlikely that the concave LRR surface of LINGO-1, with two sugar moieties right at the arc centre, can play a major role in accommodating such large protein partners as NogoR or p75. This would be contrary to the other LRR-containing receptors that frequently use the concave surfaces for interaction with their ligands (Bell *et al., Trends Immunol.* 24:528, 2003). Since there is no evidence to suggest that the Asn-linked N-glycans are directly associated with ligand binding, it is also possible that the LINGO-1 glycosylation helps prevent non-specific protein-protein interactions or helps maintain the proper scaffold for subsequent ligand binding.

Crystallization, size-exclusion chromatography and dynamic light scattering all indicate that LINGO-1 adopts a tetrameric form both in crystals and in solution. In the crystal, the four independent copies of LINGO-1 interact to constitute a condensed tetrameric structure. A pseudo four-fold axis of rotation relates the four molecules in a ring-like structure with a large hole at the center (~40 Å in diameter; outer ring diameter ~95 Å; FIG. 5A). This arrangement places the N-terminal convex side of each LRR-domain at the elbow between the domains of the adjacent molecule (FIG. 5B), reminiscent of a cytokine/receptor binding mode. As in the latter case, the attachment point between two molecules is provided by three surfaces: one formed by the N-terminal curved repeats 1-6 and two elbow surfaces formed, as described above, by the C-terminal curved repeats 11-12, the 'C-cap' and the A'CC'FG ß-strands, respectively. Hence, the four LRR-domains interlock the ring in a head-to-tail fashion, and the corresponding Ig-like modules extend from the perimeter of the ring in a landing gear fashion (see FIG. 5C). If we apply this geometry relative to a cell surface, then the protein rotation axis will lie approximately normal to the surface with the membrane-proximal C-terminal ends pointing in the same direction, *i.e.*, towards the cell membrane.

Each intermolecular interface reveals a tight geometric match between the binding surfaces and the precise stereochemical complementarity of the interaction. The solvent-accessible surface area buried at each intermolecular interface is relatively large, ~2400 $Å^2$ total from the three individual components, which suggests a strong association. The above evidence combined with the multivalent character of interaction suggest that the contacts in the tetramer are not just mere crystal contacts.

Table 2. Structure coordinates of a LINGO-1K549$_{his6}$ polypeptide (SEQ ID NOs:5-8, respectively)

	#	Name	Res./Chain/Res #	X	Y	Z	occ	B	Element
ATOM	1	N	THR A 1	42.331	50.830	14.706	1.00	89.28	N
ATOM	2	CA	THR A 1	40.923	51.340	14.774	1.00	89.33	C
ATOM	3	CB	THR A 1	40.855	52.898	14.619	1.00	89.45	C
ATOM	4	OG1	THR A 1	39.873	53.431	15.520	1.00	89.92	O
ATOM	5	CG2	THR A 1	40.558	53.349	13.165	1.00	89.33	C
ATOM	6	C	THR A 1	40.031	50.588	13.769	1.00	89.13	C
ATOM	7	O	THR A 1	40.408	50.395	12.604	1.00	89.32	O
ATOM	8	N	GLY A 2	38.856	50.159	14.229	1.00	88.62	N
ATOM	9	CA	GLY A 2	38.099	49.123	13.526	1.00	87.93	C
ATOM	10	C	GLY A 2	38.358	47.784	14.210	1.00	87.44	C
ATOM	11	O	GLY A 2	39.414	47.583	14.839	1.00	87.52	O
ATOM	12	N	CYS A 3	37.407	46.858	14.080	1.00	86.54	N
ATOM	13	CA	CYS A 3	37.338	45.699	14.971	1.00	85.47	C
ATOM	14	CB	CYS A 3	36.864	46.199	16.342	1.00	85.45	C
ATOM	15	SG	CYS A 3	37.077	45.100	17.735	1.00	86.38	S
ATOM	16	C	CYS A 3	36.359	44.656	14.412	1.00	84.50	C
ATOM	17	O	CYS A 3	35.337	45.039	13.824	1.00	84.80	O
ATOM	18	N	PRO A 4	36.667	43.345	14.562	1.00	83.28	N
ATOM	19	CA	PRO A 4	35.686	42.296	14.251	1.00	82.59	C
ATOM	20	CB	PRO A 4	36.426	40.999	14.596	1.00	82.55	C
ATOM	21	CG	PRO A 4	37.855	41.339	14.541	1.00	82.76	C
ATOM	22	CD	PRO A 4	37.950	42.770	14.996	1.00	83.37	C
ATOM	23	C	PRO A 4	34.429	42.436	15.117	1.00	82.07	C
ATOM	24	O	PRO A 4	34.503	43.014	16.205	1.00	82.38	O
ATOM	25	N	PRO A 5	33.272	41.927	14.641	1.00	81.40	N
ATOM	26	CA	PRO A 5	32.021	42.167	15.375	1.00	80.60	C
ATOM	27	CB	PRO A 5	30.956	41.501	14.497	1.00	80.48	C
ATOM	28	CG	PRO A 5	31.685	40.546	13.642	1.00	80.87	C
ATOM	29	CD	PRO A 5	33.050	41.119	13.427	1.00	81.31	C
ATOM	30	C	PRO A 5	32.009	41.576	16.783	1.00	79.99	C
ATOM	31	O	PRO A 5	32.234	40.375	16.967	1.00	79.72	O
ATOM	32	N	ARG A 6	31.760	42.437	17.764	1.00	79.62	N
ATOM	33	CA	ARG A 6	31.612	42.030	19.163	1.00	79.36	C
ATOM	34	CB	ARG A 6	30.676	40.817	19.279	1.00	79.50	C
ATOM	35	CG	ARG A 6	29.228	41.109	18.962	1.00	79.05	C
ATOM	36	CD	ARG A 6	28.475	41.469	20.217	1.00	79.97	C
ATOM	37	NE	ARG A 6	27.458	42.482	19.961	1.00	80.27	N
ATOM	38	CZ	ARG A 6	26.877	43.215	20.902	1.00	80.43	C
ATOM	39	NH1	ARG A 6	27.207	43.048	22.179	1.00	80.58	N
ATOM	40	NH2	ARG A 6	25.965	44.119	20.562	1.00	81.24	N
ATOM	41	C	ARG A 6	32.949	41.738	19.847	1.00	79.19	C
ATOM	42	O	ARG A 6	32.981	41.220	20.963	1.00	79.09	O
ATOM	43	N	CYS A 7	34.045	42.083	19.177	1.00	79.02	N
ATOM	44	CA	CYS A 7	35.390	41.861	19.702	1.00	78.76	C
ATOM	45	CB	CYS A 7	36.343	41.516	18.555	1.00	78.40	C
ATOM	46	SG	CYS A 7	36.106	39.842	17.900	1.00	77.65	S
ATOM	47	C	CYS A 7	35.913	43.056	20.499	1.00	78.96	C
ATOM	48	O	CYS A 7	35.362	44.149	20.426	1.00	78.85	O
ATOM	49	N	GLU A 8	36.976	42.840	21.264	1.00	79.46	N
ATOM	50	CA	GLU A 8	37.606	43.913	22.023	1.00	80.21	C
ATOM	51	CB	GLU A 8	37.800	43.502	23.481	1.00	80.43	C
ATOM	52	CG	GLU A 8	36.485	43.507	24.268	1.00	83.09	C

ATOM	53	CD	GLU	A	8	36.568	42.783	25.608	1.00	86.65	C
ATOM	54	OE1	GLU	A	8	37.345	41.797	25.739	1.00	87.97	O
ATOM	55	OE2	GLU	A	8	35.836	43.204	26.533	1.00	87.69	O
ATOM	56	C	GLU	A	8	38.914	44.348	21.383	1.00	80.22	C
ATOM	57	O	GLU	A	8	39.816	43.540	21.167	1.00	80.32	O
ATOM	58	N	CYS	A	9	38.999	45.638	21.077	1.00	80.48	N
ATOM	59	CA	CYS	A	9	40.087	46.186	20.281	1.00	80.99	C
ATOM	60	CB	CYS	A	9	39.600	46.430	18.851	1.00	81.32	C
ATOM	61	SG	CYS	A	9	39.097	44.919	17.975	1.00	84.46	S
ATOM	62	C	CYS	A	9	40.603	47.493	20.854	1.00	80.62	C
ATOM	63	O	CYS	A	9	39.821	48.408	21.122	1.00	80.91	O
ATOM	64	N	SER	A	10	41.914	47.591	21.037	1.00	80.21	N
ATOM	65	CA	SER	A	10	42.517	48.883	21.354	1.00	80.15	C
ATOM	66	CB	SER	A	10	43.231	48.861	22.703	1.00	80.07	C
ATOM	67	OG	SER	A	10	44.123	47.774	22.776	1.00	80.48	O
ATOM	68	C	SER	A	10	43.446	49.333	20.233	1.00	79.96	C
ATOM	69	O	SER	A	10	44.315	48.581	19.792	1.00	79.74	O
ATOM	70	N	ALA	A	11	43.240	50.563	19.772	1.00	79.78	N
ATOM	71	CA	ALA	A	11	43.956	51.089	18.616	1.00	79.90	C
ATOM	72	CB	ALA	A	11	43.196	52.256	18.009	1.00	80.01	C
ATOM	73	C	ALA	A	11	45.409	51.485	18.901	1.00	80.03	C
ATOM	74	O	ALA	A	11	46.189	51.706	17.967	1.00	80.30	O
ATOM	75	N	GLN	A	12	45.777	51.582	20.175	1.00	79.96	N
ATOM	76	CA	GLN	A	12	47.123	52.025	20.525	1.00	80.03	C
ATOM	77	CB	GLN	A	12	47.089	53.243	21.447	1.00	80.05	C
ATOM	78	CG	GLN	A	12	46.699	52.956	22.885	1.00	80.57	C
ATOM	79	CD	GLN	A	12	46.843	54.190	23.771	1.00	81.23	C
ATOM	80	OE1	GLN	A	12	46.517	55.329	23.364	1.00	81.49	O
ATOM	81	NE2	GLN	A	12	47.334	53.973	24.994	1.00	82.37	N
ATOM	82	C	GLN	A	12	48.007	50.921	21.094	1.00	79.51	C
ATOM	83	O	GLN	A	12	49.229	51.050	21.091	1.00	79.73	O
ATOM	84	N	ASP	A	13	47.397	49.847	21.591	1.00	78.92	N
ATOM	85	CA	ASP	A	13	48.129	48.590	21.785	1.00	78.28	C
ATOM	86	CB	ASP	A	13	47.453	47.695	22.823	1.00	78.35	C
ATOM	87	CG	ASP	A	13	47.615	48.216	24.239	1.00	79.47	C
ATOM	88	OD1	ASP	A	13	47.488	49.451	24.443	1.00	81.37	O
ATOM	89	OD2	ASP	A	13	47.859	47.394	25.151	1.00	79.74	O
ATOM	90	C	ASP	A	13	48.203	47.855	20.458	1.00	77.63	C
ATOM	91	O	ASP	A	13	49.050	46.981	20.275	1.00	77.60	O
ATOM	92	N	ARG	A	14	47.321	48.244	19.532	1.00	76.93	N
ATOM	93	CA	ARG	A	14	47.095	47.530	18.275	1.00	76.17	C
ATOM	94	CB	ARG	A	14	48.256	47.749	17.300	1.00	76.39	C
ATOM	95	CG	ARG	A	14	48.451	49.229	16.953	1.00	77.97	C
ATOM	96	CD	ARG	A	14	49.714	49.480	16.148	1.00	80.67	C
ATOM	97	NE	ARG	A	14	49.926	50.909	15.918	1.00	83.36	N
ATOM	98	CZ	ARG	A	14	50.617	51.425	14.899	1.00	84.74	C
ATOM	99	NH1	ARG	A	14	50.739	52.744	14.775	1.00	83.73	N
ATOM	100	NH2	ARG	A	14	51.179	50.627	13.994	1.00	85.78	N
ATOM	101	C	ARG	A	14	46.811	46.051	18.561	1.00	75.25	C
ATOM	102	O	ARG	A	14	47.408	45.163	17.971	1.00	75.14	O
ATOM	103	N	ALA	A	15	45.886	45.826	19.493	1.00	74.33	N
ATOM	104	CA	ALA	A	15	45.481	44.507	19.947	1.00	73.70	C
ATOM	105	CB	ALA	A	15	45.546	44.446	21.452	1.00	73.72	C
ATOM	106	C	ALA	A	15	44.072	44.180	19.480	1.00	73.38	C
ATOM	107	O	ALA	A	15	43.244	45.069	19.326	1.00	73.57	O
ATOM	108	N	VAL	A	16	43.809	42.901	19.243	1.00	73.08	N

ATOM	109	CA	VAL	A	16	42.483	42.431	18.867	1.00	72.86	C
ATOM	110	CB	VAL	A	16	42.353	42.200	17.338	1.00	72.76	C
ATOM	111	CG1	VAL	A	16	41.108	41.382	17.012	1.00	72.82	C
ATOM	112	CG2	VAL	A	16	42.309	43.527	16.594	1.00	72.51	C
ATOM	113	C	VAL	A	16	42.211	41.146	19.628	1.00	72.88	C
ATOM	114	O	VAL	A	16	42.976	40.199	19.550	1.00	72.71	O
ATOM	115	N	LEU	A	17	41.111	41.126	20.363	1.00	73.25	N
ATOM	116	CA	LEU	A	17	40.795	40.023	21.237	1.00	73.61	C
ATOM	117	CB	LEU	A	17	40.957	40.503	22.675	1.00	73.93	C
ATOM	118	CG	LEU	A	17	40.834	39.522	23.835	1.00	75.24	C
ATOM	119	CD1	LEU	A	17	41.875	39.870	24.885	1.00	77.28	C
ATOM	120	CD2	LEU	A	17	39.419	39.525	24.440	1.00	76.11	C
ATOM	121	C	LEU	A	17	39.384	39.500	20.955	1.00	73.77	C
ATOM	122	O	LEU	A	17	38.408	40.218	21.118	1.00	73.27	O
ATOM	123	N	CYS	A	18	39.291	38.246	20.520	1.00	74.57	N
ATOM	124	CA	CYS	A	18	38.015	37.638	20.128	1.00	75.47	C
ATOM	125	CB	CYS	A	18	37.944	37.500	18.608	1.00	75.44	C
ATOM	126	SG	CYS	A	18	38.025	39.059	17.741	1.00	76.95	S
ATOM	127	C	CYS	A	18	37.821	36.262	20.740	1.00	76.04	C
ATOM	128	O	CYS	A	18	38.233	35.262	20.156	1.00	76.18	O
ATOM	129	N	HIS	A	19	37.187	36.199	21.907	1.00	76.81	N
ATOM	130	CA	HIS	A	19	36.959	34.908	22.551	1.00	77.38	C
ATOM	131	CB	HIS	A	19	37.368	34.959	24.018	1.00	77.93	C
ATOM	132	CG	HIS	A	19	38.838	35.135	24.220	1.00	79.99	C
ATOM	133	ND1	HIS	A	19	39.410	36.357	24.493	1.00	81.52	N
ATOM	134	CE1	HIS	A	19	40.718	36.210	24.613	1.00	83.13	C
ATOM	135	NE2	HIS	A	19	41.015	34.938	24.414	1.00	83.73	N
ATOM	136	CD2	HIS	A	19	39.856	34.243	24.171	1.00	82.59	C
ATOM	137	C	HIS	A	19	35.515	34.467	22.431	1.00	77.21	C
ATOM	138	O	HIS	A	19	34.609	35.294	22.462	1.00	77.01	O
ATOM	139	N	ARG	A	20	35.323	33.158	22.279	1.00	77.16	N
ATOM	140	CA	ARG	A	20	34.002	32.521	22.341	1.00	77.64	C
ATOM	141	CB	ARG	A	20	33.419	32.638	23.757	1.00	77.35	C
ATOM	142	CG	ARG	A	20	34.125	31.770	24.784	1.00	78.80	C
ATOM	143	CD	ARG	A	20	33.602	32.022	26.193	1.00	80.18	C
ATOM	144	NE	ARG	A	20	33.972	33.354	26.686	1.00	86.15	N
ATOM	145	CZ	ARG	A	20	35.080	33.629	27.382	1.00	88.16	C
ATOM	146	NH1	ARG	A	20	35.957	32.668	27.695	1.00	87.59	N
ATOM	147	NH2	ARG	A	20	35.308	34.882	27.767	1.00	89.44	N
ATOM	148	C	ARG	A	20	33.000	33.028	21.307	1.00	76.83	C
ATOM	149	O	ARG	A	20	31.813	33.157	21.605	1.00	76.96	O
ATOM	150	N	LYS	A	21	33.470	33.294	20.090	1.00	76.32	N
ATOM	151	CA	LYS	A	21	32.624	33.923	19.075	1.00	75.59	C
ATOM	152	CB	LYS	A	21	33.366	35.048	18.355	1.00	75.55	C
ATOM	153	CG	LYS	A	21	33.829	36.196	19.216	1.00	74.86	C
ATOM	154	CD	LYS	A	21	32.687	36.985	19.794	1.00	73.78	C
ATOM	155	CE	LYS	A	21	33.233	38.080	20.682	1.00	73.77	C
ATOM	156	NZ	LYS	A	21	32.436	38.220	21.908	1.00	73.34	N
ATOM	157	C	LYS	A	21	32.081	32.958	18.032	1.00	75.41	C
ATOM	158	O	LYS	A	21	31.320	33.372	17.152	1.00	75.51	O
ATOM	159	N	ARG	A	22	32.473	31.690	18.117	1.00	74.86	N
ATOM	160	CA	ARG	A	22	32.006	30.662	17.180	1.00	74.68	C
ATOM	161	CB	ARG	A	22	30.493	30.455	17.300	1.00	74.56	C
ATOM	162	CG	ARG	A	22	30.061	30.012	18.666	1.00	76.09	C
ATOM	163	CD	ARG	A	22	28.607	30.326	18.916	1.00	80.33	C
ATOM	164	NE	ARG	A	22	28.369	31.678	19.441	1.00	83.23	N

ATOM	165	CZ	ARG	A	22	28.044	32.746	18.705	1.00	84.49	C
ATOM	166	NH1	ARG	A	22	27.931	32.657	17.381	1.00	84.64	N
ATOM	167	NH2	ARG	A	22	27.840	33.920	19.296	1.00	84.71	N
ATOM	168	C	ARG	A	22	32.408	30.938	15.724	1.00	74.31	C
ATOM	169	O	ARG	A	22	31.711	30.542	14.789	1.00	74.36	O
ATOM	170	N	PHE	A	23	33.533	31.624	15.546	1.00	73.86	N
ATOM	171	CA	PHE	A	23	34.119	31.826	14.229	1.00	73.46	C
ATOM	172	CB	PHE	A	23	35.326	32.770	14.309	1.00	73.37	C
ATOM	173	CG	PHE	A	23	34.985	34.179	14.694	1.00	72.83	C
ATOM	174	CD1	PHE	A	23	33.791	34.766	14.283	1.00	72.16	C
ATOM	175	CE1	PHE	A	23	33.487	36.077	14.635	1.00	72.32	C
ATOM	176	CZ	PHE	A	23	34.392	36.817	15.388	1.00	72.50	C
ATOM	177	CE2	PHE	A	23	35.595	36.243	15.789	1.00	71.64	C
ATOM	178	CD2	PHE	A	23	35.886	34.935	15.436	1.00	72.07	C
ATOM	179	C	PHE	A	23	34.618	30.498	13.693	1.00	73.27	C
ATOM	180	O	PHE	A	23	35.227	29.731	14.428	1.00	73.30	O
ATOM	181	N	VAL	A	24	34.378	30.241	12.414	1.00	72.93	N
ATOM	182	CA	VAL	A	24	34.945	29.075	11.753	1.00	72.55	C
ATOM	183	CB	VAL	A	24	33.899	28.346	10.902	1.00	72.66	C
ATOM	184	CG1	VAL	A	24	34.499	27.103	10.282	1.00	73.54	C
ATOM	185	CG2	VAL	A	24	32.708	27.954	11.753	1.00	72.79	C
ATOM	186	C	VAL	A	24	36.120	29.515	10.892	1.00	72.20	C
ATOM	187	O	VAL	A	24	36.998	28.727	10.556	1.00	72.41	O
ATOM	188	N	ALA	A	25	36.128	30.790	10.539	1.00	72.01	N
ATOM	189	CA	ALA	A	25	37.202	31.381	9.759	1.00	71.46	C
ATOM	190	CB	ALA	A	25	36.656	31.889	8.442	1.00	71.19	C
ATOM	191	C	ALA	A	25	37.759	32.534	10.571	1.00	71.27	C
ATOM	192	O	ALA	A	25	37.074	33.053	11.458	1.00	71.27	O
ATOM	193	N	VAL	A	26	38.995	32.933	10.288	1.00	70.91	N
ATOM	194	CA	VAL	A	26	39.530	34.172	10.859	1.00	70.52	C
ATOM	195	CB	VAL	A	26	41.013	34.364	10.505	1.00	70.41	C
ATOM	196	CG1	VAL	A	26	41.533	35.688	11.050	1.00	69.73	C
ATOM	197	CG2	VAL	A	26	41.822	33.207	11.052	1.00	70.43	C
ATOM	198	C	VAL	A	26	38.681	35.369	10.379	1.00	70.25	C
ATOM	199	O	VAL	A	26	38.555	35.594	9.171	1.00	70.46	O
ATOM	200	N	PRO	A	27	38.103	36.134	11.326	1.00	69.93	N
ATOM	201	CA	PRO	A	27	37.091	37.168	11.042	1.00	69.80	C
ATOM	202	CB	PRO	A	27	36.730	37.691	12.439	1.00	69.81	C
ATOM	203	CG	PRO	A	27	37.927	37.381	13.277	1.00	69.80	C
ATOM	204	CD	PRO	A	27	38.401	36.056	12.768	1.00	69.65	C
ATOM	205	C	PRO	A	27	37.541	38.338	10.172	1.00	69.66	C
ATOM	206	O	PRO	A	27	38.729	38.591	10.013	1.00	69.77	O
ATOM	207	N	GLU	A	28	36.568	39.039	9.607	1.00	69.92	N
ATOM	208	CA	GLU	A	28	36.785	40.342	8.981	1.00	70.20	C
ATOM	209	CB	GLU	A	28	35.515	40.761	8.256	1.00	70.37	C
ATOM	210	CG	GLU	A	28	34.297	40.707	9.186	1.00	72.04	C
ATOM	211	CD	GLU	A	28	33.237	41.731	8.877	1.00	74.26	C
ATOM	212	OE1	GLU	A	28	33.310	42.365	7.807	1.00	76.16	O
ATOM	213	OE2	GLU	A	28	32.317	41.898	9.710	1.00	75.81	O
ATOM	214	C	GLU	A	28	37.096	41.389	10.068	1.00	69.99	C
ATOM	215	O	GLU	A	28	36.927	41.118	11.259	1.00	70.17	O
ATOM	216	N	GLY	A	29	37.546	42.575	9.655	1.00	69.64	N
ATOM	217	CA	GLY	A	29	37.695	43.720	10.561	1.00	68.80	C
ATOM	218	C	GLY	A	29	38.955	43.812	11.410	1.00	68.48	C
ATOM	219	O	GLY	A	29	39.085	44.738	12.207	1.00	68.20	O
ATOM	220	N	ILE	A	30	39.875	42.856	11.265	1.00	68.18	N

ATOM	221	CA	ILE	A	30	41.161	42.936	11.955	1.00 67.77	C
ATOM	222	CB	ILE	A	30	41.899	41.595	11.979	1.00 67.32	C
ATOM	223	CG1	ILE	A	30	40.997	40.492	12.537	1.00 66.41	C
ATOM	224	CD1	ILE	A	30	41.450	39.079	12.185	1.00 63.80	C
ATOM	225	CG2	ILE	A	30	43.158	41.724	12.802	1.00 66.60	C
ATOM	226	C	ILE	A	30	42.031	43.967	11.240	1.00 68.25	C
ATOM	227	O	ILE	A	30	42.369	43.768	10.065	1.00 68.26	O
ATOM	228	N	PRO	A	31	42.396	45.070	11.940	1.00 68.53	N
ATOM	229	CA	PRO	A	31	43.157	46.135	11.291	1.00 68.65	C
ATOM	230	CB	PRO	A	31	43.348	47.170	12.396	1.00 68.32	C
ATOM	231	CG	PRO	A	31	42.301	46.875	13.373	1.00 68.45	C
ATOM	232	CD	PRO	A	31	42.151	45.386	13.355	1.00 68.36	C
ATOM	233	C	PRO	A	31	44.505	45.623	10.814	1.00 69.36	C
ATOM	234	O	PRO	A	31	45.109	44.713	11.408	1.00 68.99	O
ATOM	235	N	THR	A	32	44.968	46.217	9.729	1.00 70.15	N
ATOM	236	CA	THR	A	32	46.129	45.706	9.022	1.00 70.62	C
ATOM	237	CB	THR	A	32	46.131	46.274	7.576	1.00 70.50	C
ATOM	238	OG1	THR	A	32	46.695	45.304	6.693	1.00 71.13	O
ATOM	239	CG2	THR	A	32	46.849	47.622	7.470	1.00 70.30	C
ATOM	240	C	THR	A	32	47.442	45.913	9.823	1.00 70.93	C
ATOM	241	O	THR	A	32	48.406	45.168	9.659	1.00 70.72	O
ATOM	242	N	GLU	A	33	47.415	46.897	10.726	1.00 71.42	N
ATOM	243	CA	GLU	A	33	48.529	47.300	11.584	1.00 71.74	C
ATOM	244	CB	GLU	A	33	48.325	48.762	11.976	1.00 71.69	C
ATOM	245	CG	GLU	A	33	47.193	48.915	13.017	1.00 73.37	C
ATOM	246	CD	GLU	A	33	46.724	50.352	13.269	1.00 73.27	C
ATOM	247	OE1	GLU	A	33	46.550	51.124	12.291	1.00 73.99	O
ATOM	248	OE2	GLU	A	33	46.493	50.682	14.464	1.00 74.94	O
ATOM	249	C	GLU	A	33	48.618	46.471	12.876	1.00 71.24	C
ATOM	250	O	GLU	A	33	49.473	46.733	13.727	1.00 71.44	O
ATOM	251	N	THR	A	34	47.725	45.497	13.036	1.00 70.68	N
ATOM	252	CA	THR	A	34	47.607	44.759	14.298	1.00 70.12	C
ATOM	253	CB	THR	A	34	46.502	43.696	14.218	1.00 69.88	C
ATOM	254	OG1	THR	A	34	45.286	44.329	13.802	1.00 70.54	O
ATOM	255	CG2	THR	A	34	46.275	43.033	15.555	1.00 68.62	C
ATOM	256	C	THR	A	34	48.917	44.115	14.714	1.00 69.98	C
ATOM	257	O	THR	A	34	49.603	43.537	13.884	1.00 69.74	O
ATOM	258	N	ARG	A	35	49.248	44.249	16.001	1.00 70.23	N
ATOM	259	CA	ARG	A	35	50.433	43.645	16.622	1.00 70.76	C
ATOM	260	CB	ARG	A	35	51.190	44.671	17.469	1.00 70.71	C
ATOM	261	CG	ARG	A	35	52.033	45.684	16.692	1.00 72.02	C
ATOM	262	CD	ARG	A	35	52.631	46.726	17.641	1.00 72.56	C
ATOM	263	NE	ARG	A	35	52.833	48.002	16.952	1.00 78.39	N
ATOM	264	CZ	ARG	A	35	52.842	49.202	17.543	1.00 79.88	C
ATOM	265	NH1	ARG	A	35	52.658	49.322	18.857	1.00 80.99	N
ATOM	266	NH2	ARG	A	35	53.023	50.294	16.809	1.00 80.22	N
ATOM	267	C	ARG	A	35	50.081	42.443	17.503	1.00 70.31	C
ATOM	268	O	ARG	A	35	50.862	41.506	17.615	1.00 69.94	O
ATOM	269	N	LEU	A	36	48.916	42.486	18.141	1.00 70.23	N
ATOM	270	CA	LEU	A	36	48.460	41.388	18.983	1.00 70.36	C
ATOM	271	CB	LEU	A	36	48.316	41.859	20.432	1.00 70.44	C
ATOM	272	CG	LEU	A	36	48.390	40.863	21.603	1.00 70.50	C
ATOM	273	CD1	LEU	A	36	48.117	41.603	22.909	1.00 69.95	C
ATOM	274	CD2	LEU	A	36	47.445	39.664	21.470	1.00 69.94	C
ATOM	275	C	LEU	A	36	47.118	40.858	18.476	1.00 70.58	C
ATOM	276	O	LEU	A	36	46.137	41.603	18.432	1.00 70.35	O

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ATOM    277  N   LEU A  37      47.079  39.577  18.105  1.00 70.43           N
ATOM    278  CA  LEU A  37      45.865  38.967  17.591  1.00 70.57           C
ATOM    279  CB  LEU A  37      45.980  38.699  16.086  1.00 70.64           C
ATOM    280  CG  LEU A  37      44.809  38.035  15.339  1.00 70.56           C
ATOM    281  CD1 LEU A  37      43.544  38.867  15.397  1.00 69.13           C
ATOM    282  CD2 LEU A  37      45.175  37.751  13.884  1.00 70.29           C
ATOM    283  C   LEU A  37      45.551  37.694  18.350  1.00 71.12           C
ATOM    284  O   LEU A  37      46.260  36.697  18.236  1.00 70.77           O
ATOM    285  N   ASP A  38      44.478  37.748  19.134  1.00 72.02           N
ATOM    286  CA  ASP A  38      44.071  36.646  19.989  1.00 72.97           C
ATOM    287  CB  ASP A  38      44.028  37.118  21.440  1.00 73.66           C
ATOM    288  CG  ASP A  38      43.981  35.961  22.440  1.00 77.40           C
ATOM    289  OD1 ASP A  38      43.434  34.873  22.106  1.00 80.13           O
ATOM    290  OD2 ASP A  38      44.489  36.145  23.578  1.00 81.05           O
ATOM    291  C   ASP A  38      42.706  36.117  19.558  1.00 72.73           C
ATOM    292  O   ASP A  38      41.705  36.821  19.665  1.00 72.32           O
ATOM    293  N   LEU A  39      42.675  34.879  19.068  1.00 72.84           N
ATOM    294  CA  LEU A  39      41.431  34.263  18.609  1.00 73.18           C
ATOM    295  CB  LEU A  39      41.431  34.037  17.089  1.00 73.04           C
ATOM    296  CG  LEU A  39      41.796  35.154  16.112  1.00 73.43           C
ATOM    297  CD1 LEU A  39      41.820  34.617  14.695  1.00 73.46           C
ATOM    298  CD2 LEU A  39      40.837  36.321  16.214  1.00 73.96           C
ATOM    299  C   LEU A  39      41.177  32.939  19.317  1.00 73.68           C
ATOM    300  O   LEU A  39      40.602  32.014  18.727  1.00 73.91           O
ATOM    301  N   GLY A  40      41.601  32.851  20.577  1.00 74.02           N
ATOM    302  CA  GLY A  40      41.378  31.661  21.390  1.00 74.30           C
ATOM    303  C   GLY A  40      39.904  31.372  21.593  1.00 74.80           C
ATOM    304  O   GLY A  40      39.078  32.286  21.562  1.00 75.08           O
ATOM    305  N   LYS A  41      39.576  30.096  21.780  1.00 75.18           N
ATOM    306  CA  LYS A  41      38.206  29.647  22.064  1.00 75.90           C
ATOM    307  CB  LYS A  41      37.709  30.186  23.417  1.00 75.85           C
ATOM    308  CG  LYS A  41      38.669  29.991  24.591  1.00 77.23           C
ATOM    309  CD  LYS A  41      38.164  30.737  25.826  1.00 77.70           C
ATOM    310  CE  LYS A  41      39.237  30.869  26.899  1.00 80.35           C
ATOM    311  NZ  LYS A  41      39.265  29.683  27.797  1.00 81.94           N
ATOM    312  C   LYS A  41      37.198  29.977  20.952  1.00 75.44           C
ATOM    313  O   LYS A  41      36.129  30.523  21.211  1.00 75.63           O
ATOM    314  N   ASN A  42      37.550  29.656  19.716  1.00 75.17           N
ATOM    315  CA  ASN A  42      36.600  29.731  18.611  1.00 75.01           C
ATOM    316  CB  ASN A  42      36.985  30.821  17.606  1.00 74.82           C
ATOM    317  CG  ASN A  42      36.881  32.212  18.191  1.00 74.21           C
ATOM    318  OD1 ASN A  42      35.791  32.794  18.274  1.00 73.64           O
ATOM    319  ND2 ASN A  42      38.018  32.757  18.603  1.00 72.91           N
ATOM    320  C   ASN A  42      36.497  28.365  17.955  1.00 75.14           C
ATOM    321  O   ASN A  42      36.781  27.365  18.598  1.00 75.17           O
ATOM    322  N   ARG A  43      36.089  28.317  16.692  1.00 75.36           N
ATOM    323  CA  ARG A  43      35.883  27.044  16.015  1.00 75.72           C
ATOM    324  CB  ARG A  43      34.386  26.771  15.847  1.00 75.77           C
ATOM    325  CG  ARG A  43      33.684  26.266  17.103  1.00 76.82           C
ATOM    326  CD  ARG A  43      32.200  26.051  16.809  1.00 79.72           C
ATOM    327  NE  ARG A  43      31.416  25.748  18.014  1.00 81.63           N
ATOM    328  CZ  ARG A  43      30.094  25.911  18.138  1.00 81.59           C
ATOM    329  NH1 ARG A  43      29.351  26.396  17.140  1.00 80.96           N
ATOM    330  NH2 ARG A  43      29.514  25.592  19.284  1.00 82.19           N
ATOM    331  C   ARG A  43      36.601  26.975  14.666  1.00 75.80           C
ATOM    332  O   ARG A  43      36.047  26.469  13.681  1.00 76.18           O
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ATOM	333	N	ILE	A	44	37.833	27.474	14.630	1.00	75.72	N
ATOM	334	CA	ILE	A	44	38.620	27.520	13.405	1.00	75.97	C
ATOM	335	CB	ILE	A	44	39.749	28.562	13.522	1.00	75.68	C
ATOM	336	CG1	ILE	A	44	39.152	29.956	13.742	1.00	75.40	C
ATOM	337	CD1	ILE	A	44	40.138	31.010	14.199	1.00	74.52	C
ATOM	338	CG2	ILE	A	44	40.635	28.540	12.285	1.00	75.59	C
ATOM	339	C	ILE	A	44	39.190	26.137	13.090	1.00	76.80	C
ATOM	340	O	ILE	A	44	39.829	25.527	13.951	1.00	77.14	O
ATOM	341	N	LYS	A	45	38.963	25.659	11.862	1.00	77.45	N
ATOM	342	CA	LYS	A	45	39.343	24.302	11.442	1.00	78.27	C
ATOM	343	CB	LYS	A	45	38.247	23.693	10.568	1.00	78.30	C
ATOM	344	CG	LYS	A	45	37.141	22.982	11.325	1.00	79.35	C
ATOM	345	CD	LYS	A	45	35.925	22.713	10.424	1.00	79.14	C
ATOM	346	CE	LYS	A	45	34.616	22.747	11.225	1.00	80.02	C
ATOM	347	NZ	LYS	A	45	33.433	22.388	10.392	1.00	80.56	N
ATOM	348	C	LYS	A	45	40.647	24.223	10.661	1.00	78.51	C
ATOM	349	O	LYS	A	45	41.348	23.207	10.708	1.00	78.91	O
ATOM	350	N	THR	A	46	40.955	25.285	9.928	1.00	78.79	N
ATOM	351	CA	THR	A	46	42.007	25.264	8.920	1.00	79.02	C
ATOM	352	CB	THR	A	46	41.397	25.028	7.501	1.00	79.25	C
ATOM	353	OG1	THR	A	46	40.611	23.827	7.496	1.00	79.81	O
ATOM	354	CG2	THR	A	46	42.481	24.942	6.416	1.00	79.19	C
ATOM	355	C	THR	A	46	42.714	26.605	8.893	1.00	78.97	C
ATOM	356	O	THR	A	46	42.070	27.651	8.906	1.00	79.17	O
ATOM	357	N	LEU	A	47	44.037	26.580	8.850	1.00	78.77	N
ATOM	358	CA	LEU	A	47	44.790	27.790	8.584	1.00	78.56	C
ATOM	359	CB	LEU	A	47	45.866	28.002	9.646	1.00	78.57	C
ATOM	360	CG	LEU	A	47	45.390	28.003	11.101	1.00	77.90	C
ATOM	361	CD1	LEU	A	47	46.561	27.721	12.024	1.00	77.41	C
ATOM	362	CD2	LEU	A	47	44.727	29.319	11.454	1.00	76.78	C
ATOM	363	C	LEU	A	47	45.396	27.634	7.201	1.00	78.70	C
ATOM	364	O	LEU	A	47	46.220	26.749	6.971	1.00	78.91	O
ATOM	365	N	ASN	A	48	44.960	28.468	6.269	1.00	78.80	N
ATOM	366	CA	ASN	A	48	45.388	28.334	4.892	1.00	79.10	C
ATOM	367	CB	ASN	A	48	44.348	28.904	3.938	1.00	79.24	C
ATOM	368	CG	ASN	A	48	42.998	28.262	4.106	1.00	80.00	C
ATOM	369	OD1	ASN	A	48	42.232	28.634	4.993	1.00	79.95	O
ATOM	370	ND2	ASN	A	48	42.692	27.293	3.248	1.00	81.35	N
ATOM	371	C	ASN	A	48	46.707	29.017	4.648	1.00	79.41	C
ATOM	372	O	ASN	A	48	47.127	29.872	5.422	1.00	79.57	O
ATOM	373	N	GLN	A	49	47.356	28.628	3.558	1.00	79.71	N
ATOM	374	CA	GLN	A	49	48.530	29.315	3.056	1.00	79.91	C
ATOM	375	CB	GLN	A	49	48.851	28.780	1.665	1.00	80.11	C
ATOM	376	CG	GLN	A	49	50.308	28.454	1.440	1.00	81.14	C
ATOM	377	CD	GLN	A	49	50.771	28.821	0.049	1.00	82.13	C
ATOM	378	OE1	GLN	A	49	49.964	29.034	-0.853	1.00	81.72	O
ATOM	379	NE2	GLN	A	49	52.086	28.914	-0.127	1.00	83.18	N
ATOM	380	C	GLN	A	49	48.253	30.821	2.985	1.00	79.63	C
ATOM	381	O	GLN	A	49	47.180	31.236	2.536	1.00	79.53	O
ATOM	382	N	ASP	A	50	49.213	31.623	3.450	1.00	79.41	N
ATOM	383	CA	ASP	A	50	49.107	33.098	3.486	1.00	79.22	C
ATOM	384	CB	ASP	A	50	49.201	33.697	2.076	1.00	79.92	C
ATOM	385	CG	ASP	A	50	50.608	33.614	1.484	1.00	82.89	C
ATOM	386	OD1	ASP	A	50	51.544	33.139	2.178	1.00	85.37	O
ATOM	387	OD2	ASP	A	50	50.777	34.028	0.305	1.00	86.08	O
ATOM	388	C	ASP	A	50	47.877	33.659	4.208	1.00	78.19	C

ATOM	389	O	ASP	A	50	47.385	34.727	3.859	1.00 78.14	O
ATOM	390	N	GLU	A	51	47.405	32.940	5.223	1.00 77.30	N
ATOM	391	CA	GLU	A	51	46.254	33.328	6.044	1.00 76.14	C
ATOM	392	CB	GLU	A	51	46.019	32.260	7.106	1.00 76.39	C
ATOM	393	CG	GLU	A	51	44.881	32.542	8.054	1.00 79.09	C
ATOM	394	CD	GLU	A	51	43.573	31.910	7.621	1.00 82.33	C
ATOM	395	OE1	GLU	A	51	43.592	30.773	7.091	1.00 83.18	O
ATOM	396	OE2	GLU	A	51	42.516	32.551	7.826	1.00 84.40	O
ATOM	397	C	GLU	A	51	46.448	34.672	6.728	1.00 74.90	C
ATOM	398	O	GLU	A	51	45.544	35.485	6.750	1.00 75.00	O
ATOM	399	N	PHE	A	52	47.641	34.900	7.274	1.00 73.72	N
ATOM	400	CA	PHE	A	52	47.936	36.096	8.070	1.00 72.28	C
ATOM	401	CB	PHE	A	52	48.558	35.672	9.393	1.00 71.82	C
ATOM	402	CG	PHE	A	52	47.696	34.728	10.171	1.00 71.28	C
ATOM	403	CD1	PHE	A	52	46.641	35.203	10.934	1.00 70.19	C
ATOM	404	CE1	PHE	A	52	45.835	34.329	11.646	1.00 69.80	C
ATOM	405	CZ	PHE	A	52	46.068	32.978	11.586	1.00 69.56	C
ATOM	406	CE2	PHE	A	52	47.116	32.490	10.823	1.00 69.44	C
ATOM	407	CD2	PHE	A	52	47.919	33.359	10.119	1.00 69.83	C
ATOM	408	C	PHE	A	52	48.820	37.125	7.351	1.00 71.82	C
ATOM	409	O	PHE	A	52	49.295	38.100	7.959	1.00 71.29	O
ATOM	410	N	ALA	A	53	48.985	36.916	6.042	1.00 71.15	N
ATOM	411	CA	ALA	A	53	49.904	37.679	5.200	1.00 70.22	C
ATOM	412	CB	ALA	A	53	49.879	37.124	3.785	1.00 69.98	C
ATOM	413	C	ALA	A	53	49.611	39.182	5.203	1.00 69.70	C
ATOM	414	O	ALA	A	53	50.490	40.002	4.920	1.00 69.48	O
ATOM	415	N	SER	A	54	48.373	39.524	5.541	1.00 69.09	N
ATOM	416	CA	SER	A	54	47.920	40.905	5.621	1.00 68.68	C
ATOM	417	CB	SER	A	54	46.394	40.947	5.593	1.00 68.63	C
ATOM	418	OG	SER	A	54	45.855	39.821	6.267	1.00 68.75	O
ATOM	419	C	SER	A	54	48.413	41.600	6.878	1.00 68.45	C
ATOM	420	O	SER	A	54	48.221	42.798	7.026	1.00 68.49	O
ATOM	421	N	PHE	A	55	49.051	40.851	7.773	1.00 68.28	N
ATOM	422	CA	PHE	A	55	49.454	41.373	9.079	1.00 68.16	C
ATOM	423	CB	PHE	A	55	48.764	40.582	10.195	1.00 67.87	C
ATOM	424	CG	PHE	A	55	47.290	40.437	10.004	1.00 66.63	C
ATOM	425	CD1	PHE	A	55	46.449	41.533	10.138	1.00 65.57	C
ATOM	426	CE1	PHE	A	55	45.086	41.406	9.946	1.00 66.27	C
ATOM	427	CZ	PHE	A	55	44.546	40.161	9.637	1.00 66.34	C
ATOM	428	CE2	PHE	A	55	45.378	39.059	9.507	1.00 64.90	C
ATOM	429	CD2	PHE	A	55	46.742	39.205	9.683	1.00 65.12	C
ATOM	430	C	PHE	A	55	50.967	41.340	9.277	1.00 68.47	C
ATOM	431	O	PHE	A	55	51.469	40.599	10.121	1.00 67.65	O
ATOM	432	N	PRO	A	56	51.704	42.160	8.508	1.00 69.06	N
ATOM	433	CA	PRO	A	56	53.154	42.039	8.594	1.00 69.57	C
ATOM	434	CB	PRO	A	56	53.637	42.825	7.372	1.00 69.43	C
ATOM	435	CG	PRO	A	56	52.586	43.855	7.154	1.00 69.00	C
ATOM	436	CD	PRO	A	56	51.293	43.212	7.558	1.00 68.85	C
ATOM	437	C	PRO	A	56	53.754	42.607	9.894	1.00 70.13	C
ATOM	438	O	PRO	A	56	54.957	42.473	10.110	1.00 70.47	O
ATOM	439	N	HIS	A	57	52.940	43.212	10.758	1.00 70.39	N
ATOM	440	CA	HIS	A	57	53.473	43.793	11.989	1.00 70.91	C
ATOM	441	CB	HIS	A	57	53.016	45.234	12.129	1.00 71.16	C
ATOM	442	CG	HIS	A	57	53.582	46.141	11.084	1.00 73.53	C
ATOM	443	ND1	HIS	A	57	52.790	46.913	10.256	1.00 75.30	N
ATOM	444	CE1	HIS	A	57	53.560	47.612	9.441	1.00 75.49	C

ATOM	445	NE2	HIS	A	57	54.821	47.313	9.702	1.00 75.95	N
ATOM	446	CD2	HIS	A	57	54.864	46.394	10.724	1.00 74.50	C
ATOM	447	C	HIS	A	57	53.145	42.987	13.242	1.00 70.82	C
ATOM	448	O	HIS	A	57	53.501	43.353	14.361	1.00 70.95	O
ATOM	449	N	LEU	A	58	52.494	41.857	13.030	1.00 70.91	N
ATOM	450	CA	LEU	A	58	52.031	41.016	14.101	1.00 70.91	C
ATOM	451	CB	LEU	A	58	51.298	39.833	13.487	1.00 70.66	C
ATOM	452	CG	LEU	A	58	50.122	39.235	14.243	1.00 70.69	C
ATOM	453	CD1	LEU	A	58	48.922	40.179	14.250	1.00 68.09	C
ATOM	454	CD2	LEU	A	58	49.781	37.900	13.602	1.00 70.58	C
ATOM	455	C	LEU	A	58	53.198	40.541	14.969	1.00 71.33	C
ATOM	456	O	LEU	A	58	54.142	39.960	14.455	1.00 71.25	O
ATOM	457	N	GLU	A	59	53.134	40.823	16.273	1.00 71.87	N
ATOM	458	CA	GLU	A	59	54.126	40.347	17.246	1.00 72.62	C
ATOM	459	CB	GLU	A	59	54.435	41.419	18.295	1.00 72.28	C
ATOM	460	CG	GLU	A	59	55.319	42.580	17.813	1.00 73.97	C
ATOM	461	CD	GLU	A	59	55.043	43.921	18.557	1.00 74.88	C
ATOM	462	OE1	GLU	A	59	54.415	43.901	19.660	1.00 76.40	O
ATOM	463	OE2	GLU	A	59	55.448	45.000	18.027	1.00 77.20	O
ATOM	464	C	GLU	A	59	53.661	39.081	17.955	1.00 72.11	C
ATOM	465	O	GLU	A	59	54.466	38.232	18.312	1.00 71.81	O
ATOM	466	N	GLU	A	60	52.358	38.962	18.171	1.00 72.20	N
ATOM	467	CA	GLU	A	60	51.812	37.854	18.941	1.00 72.44	C
ATOM	468	CB	GLU	A	60	51.575	38.282	20.383	1.00 72.47	C
ATOM	469	CG	GLU	A	60	51.054	37.166	21.254	1.00 75.22	C
ATOM	470	CD	GLU	A	60	50.784	37.582	22.691	1.00 78.98	C
ATOM	471	OE1	GLU	A	60	50.741	38.816	22.973	1.00 79.51	O
ATOM	472	OE2	GLU	A	60	50.617	36.659	23.536	1.00 78.96	O
ATOM	473	C	GLU	A	60	50.513	37.360	18.316	1.00 72.24	C
ATOM	474	O	GLU	A	60	49.672	38.173	17.923	1.00 72.27	O
ATOM	475	N	LEU	A	61	50.365	36.035	18.233	1.00 71.64	N
ATOM	476	CA	LEU	A	61	49.220	35.394	17.609	1.00 71.56	C
ATOM	477	CB	LEU	A	61	49.548	35.045	16.149	1.00 71.56	C
ATOM	478	CG	LEU	A	61	48.633	34.160	15.282	1.00 71.31	C
ATOM	479	CD1	LEU	A	61	47.237	34.733	15.086	1.00 69.69	C
ATOM	480	CD2	LEU	A	61	49.285	33.871	13.934	1.00 70.79	C
ATOM	481	C	LEU	A	61	48.782	34.155	18.406	1.00 72.41	C
ATOM	482	O	LEU	A	61	49.498	33.141	18.474	1.00 72.50	O
ATOM	483	N	GLU	A	62	47.605	34.254	19.018	1.00 72.87	N
ATOM	484	CA	GLU	A	62	47.068	33.204	19.870	1.00 73.08	C
ATOM	485	CB	GLU	A	62	46.561	33.787	21.192	1.00 73.40	C
ATOM	486	CG	GLU	A	62	47.593	34.536	22.014	1.00 75.36	C
ATOM	487	CD	GLU	A	62	48.801	33.692	22.359	1.00 78.55	C
ATOM	488	OE1	GLU	A	62	48.646	32.457	22.558	1.00 80.67	O
ATOM	489	OE2	GLU	A	62	49.914	34.266	22.430	1.00 79.83	O
ATOM	490	C	GLU	A	62	45.911	32.546	19.172	1.00 73.05	C
ATOM	491	O	GLU	A	62	44.924	33.212	18.858	1.00 73.21	O
ATOM	492	N	LEU	A	63	46.021	31.242	18.940	1.00 73.07	N
ATOM	493	CA	LEU	A	63	44.957	30.486	18.296	1.00 73.25	C
ATOM	494	CB	LEU	A	63	45.361	30.083	16.876	1.00 72.96	C
ATOM	495	CG	LEU	A	63	45.586	31.256	15.919	1.00 72.56	C
ATOM	496	CD1	LEU	A	63	46.506	30.874	14.791	1.00 72.91	C
ATOM	497	CD2	LEU	A	63	44.278	31.768	15.380	1.00 72.54	C
ATOM	498	C	LEU	A	63	44.608	29.278	19.138	1.00 73.79	C
ATOM	499	O	LEU	A	63	44.184	28.246	18.629	1.00 73.93	O
ATOM	500	N	ASN	A	64	44.781	29.434	20.442	1.00 74.61	N

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ATOM    501  CA  ASN A  64      44.577  28.362  21.405  1.00 75.46           C
ATOM    502  CB  ASN A  64      45.104  28.800  22.766  1.00 75.37           C
ATOM    503  CG  ASN A  64      46.521  29.308  22.691  1.00 76.31           C
ATOM    504  OD1 ASN A  64      47.476  28.521  22.646  1.00 77.46           O
ATOM    505  ND2 ASN A  64      46.674  30.635  22.653  1.00 75.81           N
ATOM    506  C   ASN A  64      43.119  27.958  21.531  1.00 76.15           C
ATOM    507  O   ASN A  64      42.221  28.747  21.255  1.00 76.45           O
ATOM    508  N   GLU A  65      42.892  26.719  21.947  1.00 76.74           N
ATOM    509  CA  GLU A  65      41.548  26.206  22.170  1.00 77.83           C
ATOM    510  CB  GLU A  65      40.979  26.715  23.497  1.00 77.64           C
ATOM    511  CG  GLU A  65      41.816  26.377  24.722  1.00 79.62           C
ATOM    512  CD  GLU A  65      41.119  26.736  26.043  1.00 81.07           C
ATOM    513  OE1 GLU A  65      40.597  27.882  26.154  1.00 84.29           O
ATOM    514  OE2 GLU A  65      41.100  25.874  26.973  1.00 85.09           O
ATOM    515  C   GLU A  65      40.601  26.507  21.007  1.00 76.99           C
ATOM    516  O   GLU A  65      39.437  26.817  21.205  1.00 77.30           O
ATOM    517  N   ASN A  66      41.114  26.427  19.790  1.00 76.74           N
ATOM    518  CA  ASN A  66      40.257  26.368  18.623  1.00 76.47           C
ATOM    519  CB  ASN A  66      40.832  27.178  17.463  1.00 76.35           C
ATOM    520  CG  ASN A  66      40.464  28.631  17.540  1.00 75.85           C
ATOM    521  OD1 ASN A  66      39.508  29.065  16.910  1.00 76.62           O
ATOM    522  ND2 ASN A  66      41.204  29.390  18.324  1.00 75.18           N
ATOM    523  C   ASN A  66      40.097  24.912  18.243  1.00 76.64           C
ATOM    524  O   ASN A  66      40.026  24.045  19.113  1.00 76.91           O
ATOM    525  N   ILE A  67      40.069  24.625  16.951  1.00 76.79           N
ATOM    526  CA  ILE A  67      39.745  23.285  16.522  1.00 76.83           C
ATOM    527  CB  ILE A  67      38.195  23.127  16.483  1.00 77.05           C
ATOM    528  CG1 ILE A  67      37.789  21.829  17.157  1.00 78.07           C
ATOM    529  CD1 ILE A  67      36.566  21.980  18.054  1.00 81.30           C
ATOM    530  CG2 ILE A  67      37.562  23.357  15.092  1.00 77.24           C
ATOM    531  C   ILE A  67      40.528  22.928  15.257  1.00 76.75           C
ATOM    532  O   ILE A  67      40.128  22.087  14.456  1.00 76.91           O
ATOM    533  N   VAL A  68      41.691  23.567  15.140  1.00 76.89           N
ATOM    534  CA  VAL A  68      42.548  23.516  13.957  1.00 76.98           C
ATOM    535  CB  VAL A  68      43.733  24.505  14.095  1.00 76.63           C
ATOM    536  CG1 VAL A  68      44.672  24.395  12.917  1.00 76.38           C
ATOM    537  CG2 VAL A  68      43.228  25.918  14.220  1.00 76.18           C
ATOM    538  C   VAL A  68      43.090  22.118  13.735  1.00 77.39           C
ATOM    539  O   VAL A  68      43.841  21.618  14.557  1.00 77.53           O
ATOM    540  N   SER A  69      42.713  21.492  12.623  1.00 77.98           N
ATOM    541  CA  SER A  69      43.159  20.127  12.339  1.00 78.76           C
ATOM    542  CB  SER A  69      41.979  19.166  12.279  1.00 78.78           C
ATOM    543  OG  SER A  69      41.168  19.454  11.162  1.00 79.51           O
ATOM    544  C   SER A  69      43.943  20.041  11.051  1.00 79.20           C
ATOM    545  O   SER A  69      44.417  18.972  10.672  1.00 79.54           O
ATOM    546  N   ALA A  70      44.068  21.172  10.374  1.00 79.81           N
ATOM    547  CA  ALA A  70      44.836  21.258   9.145  1.00 80.27           C
ATOM    548  CB  ALA A  70      43.937  21.088   7.924  1.00 79.98           C
ATOM    549  C   ALA A  70      45.510  22.609   9.123  1.00 80.78           C
ATOM    550  O   ALA A  70      44.848  23.651   9.176  1.00 81.25           O
ATOM    551  N   VAL A  71      46.831  22.588   9.082  1.00 81.22           N
ATOM    552  CA  VAL A  71      47.587  23.799   8.862  1.00 81.71           C
ATOM    553  CB  VAL A  71      48.380  24.232  10.123  1.00 81.65           C
ATOM    554  CG1 VAL A  71      49.121  23.058  10.725  1.00 81.40           C
ATOM    555  CG2 VAL A  71      49.319  25.390   9.808  1.00 80.96           C
ATOM    556  C   VAL A  71      48.457  23.591   7.627  1.00 82.30           C
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ATOM	557	O	VAL	A	71	49.297	22.695	7.577	1.00	82.41	O
ATOM	558	N	GLU	A	72	48.204	24.398	6.609	1.00	83.03	N
ATOM	559	CA	GLU	A	72	48.930	24.286	5.354	1.00	83.93	C
ATOM	560	CB	GLU	A	72	48.141	24.943	4.220	1.00	84.26	C
ATOM	561	CG	GLU	A	72	47.001	24.069	3.703	1.00	87.10	C
ATOM	562	CD	GLU	A	72	45.941	24.866	2.958	1.00	91.90	C
ATOM	563	OE1	GLU	A	72	46.320	25.770	2.169	1.00	93.41	O
ATOM	564	OE2	GLU	A	72	44.724	24.589	3.160	1.00	93.63	O
ATOM	565	C	GLU	A	72	50.322	24.896	5.477	1.00	83.67	C
ATOM	566	O	GLU	A	72	50.485	25.964	6.079	1.00	83.89	O
ATOM	567	N	PRO	A	73	51.346	24.209	4.932	1.00	83.49	N
ATOM	568	CA	PRO	A	73	52.658	24.866	4.930	1.00	82.64	C
ATOM	569	CB	PRO	A	73	53.560	23.876	4.188	1.00	82.68	C
ATOM	570	CG	PRO	A	73	52.623	22.910	3.508	1.00	83.41	C
ATOM	571	CD	PRO	A	73	51.382	22.866	4.321	1.00	83.38	C
ATOM	572	C	PRO	A	73	52.524	26.184	4.173	1.00	81.69	C
ATOM	573	O	PRO	A	73	51.945	26.221	3.075	1.00	81.35	O
ATOM	574	N	GLY	A	74	52.997	27.255	4.803	1.00	80.67	N
ATOM	575	CA	GLY	A	74	52.859	28.603	4.267	1.00	79.15	C
ATOM	576	C	GLY	A	74	51.843	29.422	5.032	1.00	78.37	C
ATOM	577	O	GLY	A	74	51.667	30.612	4.756	1.00	78.26	O
ATOM	578	N	ALA	A	75	51.171	28.784	5.992	1.00	77.33	N
ATOM	579	CA	ALA	A	75	50.139	29.441	6.791	1.00	76.40	C
ATOM	580	CB	ALA	A	75	49.503	28.459	7.751	1.00	76.23	C
ATOM	581	C	ALA	A	75	50.661	30.661	7.552	1.00	75.91	C
ATOM	582	O	ALA	A	75	49.912	31.610	7.798	1.00	75.85	O
ATOM	583	N	PHE	A	76	51.942	30.640	7.909	1.00	75.13	N
ATOM	584	CA	PHE	A	76	52.530	31.715	8.702	1.00	74.58	C
ATOM	585	CB	PHE	A	76	53.215	31.124	9.938	1.00	73.82	C
ATOM	586	CG	PHE	A	76	52.284	30.344	10.819	1.00	72.72	C
ATOM	587	CD1	PHE	A	76	51.242	30.980	11.485	1.00	70.82	C
ATOM	588	CE1	PHE	A	76	50.378	30.252	12.292	1.00	70.88	C
ATOM	589	CZ	PHE	A	76	50.556	28.871	12.441	1.00	70.09	C
ATOM	590	CE2	PHE	A	76	51.592	28.239	11.783	1.00	69.01	C
ATOM	591	CD2	PHE	A	76	52.443	28.969	10.978	1.00	70.71	C
ATOM	592	C	PHE	A	76	53.481	32.619	7.903	1.00	74.79	C
ATOM	593	O	PHE	A	76	54.337	33.295	8.479	1.00	74.84	O
ATOM	594	N	ASN	A	77	53.320	32.628	6.579	1.00	74.72	N
ATOM	595	CA	ASN	A	77	54.115	33.472	5.705	1.00	74.67	C
ATOM	596	CB	ASN	A	77	53.713	33.272	4.243	1.00	75.00	C
ATOM	597	CG	ASN	A	77	54.186	31.946	3.673	1.00	75.89	C
ATOM	598	OD1	ASN	A	77	55.054	31.285	4.235	1.00	76.64	O
ATOM	599	ND2	ASN	A	77	53.614	31.556	2.538	1.00	77.23	N
ATOM	600	C	ASN	A	77	53.964	34.939	6.036	1.00	74.57	C
ATOM	601	O	ASN	A	77	52.906	35.391	6.468	1.00	74.91	O
ATOM	602	N	ASN	A	78	55.042	35.674	5.816	1.00	74.58	N
ATOM	603	CA	ASN	A	78	55.083	37.121	5.963	1.00	74.43	C
ATOM	604	CB	ASN	A	78	54.029	37.782	5.078	1.00	74.21	C
ATOM	605	CG	ASN	A	78	54.355	39.219	4.773	1.00	74.53	C
ATOM	606	OD1	ASN	A	78	55.512	39.566	4.533	1.00	75.56	O
ATOM	607	ND2	ASN	A	78	53.337	40.072	4.780	1.00	74.26	N
ATOM	608	C	ASN	A	78	54.999	37.626	7.407	1.00	74.53	C
ATOM	609	O	ASN	A	78	54.863	38.836	7.642	1.00	74.79	O
ATOM	610	N	LEU	A	79	55.103	36.709	8.370	1.00	74.10	N
ATOM	611	CA	LEU	A	79	55.068	37.081	9.782	1.00	74.02	C
ATOM	612	CB	LEU	A	79	54.259	36.078	10.597	1.00	73.49	C

ATOM	613	CG	LEU	A	79	52.823	35.810	10.160	1.00 72.53	C
ATOM	614	CD1	LEU	A	79	52.189	34.765	11.074	1.00 71.11	C
ATOM	615	CD2	LEU	A	79	52.018	37.085	10.146	1.00 70.36	C
ATOM	616	C	LEU	A	79	56.470	37.216	10.349	1.00 74.42	C
ATOM	617	O	LEU	A	79	56.812	36.566	11.327	1.00 74.45	O
ATOM	618	N	PHE	A	80	57.268	38.083	9.734	1.00 74.96	N
ATOM	619	CA	PHE	A	80	58.675	38.259	10.099	1.00 75.43	C
ATOM	620	CB	PHE	A	80	59.432	39.029	9.005	1.00 76.59	C
ATOM	621	CG	PHE	A	80	59.278	38.430	7.635	1.00 79.10	C
ATOM	622	CD1	PHE	A	80	59.483	37.048	7.431	1.00 81.12	C
ATOM	623	CE1	PHE	A	80	59.322	36.473	6.163	1.00 81.85	C
ATOM	624	CZ	PHE	A	80	58.956	37.287	5.080	1.00 81.06	C
ATOM	625	CE2	PHE	A	80	58.756	38.669	5.275	1.00 81.40	C
ATOM	626	CD2	PHE	A	80	58.915	39.229	6.551	1.00 80.18	C
ATOM	627	C	PHE	A	80	58.897	38.941	11.431	1.00 74.79	C
ATOM	628	O	PHE	A	80	60.017	38.958	11.917	1.00 74.96	O
ATOM	629	N	ASN	A	81	57.850	39.513	12.014	1.00 74.25	N
ATOM	630	CA	ASN	A	81	57.969	40.111	13.335	1.00 73.95	C
ATOM	631	CB	ASN	A	81	57.374	41.512	13.354	1.00 73.88	C
ATOM	632	CG	ASN	A	81	58.052	42.434	12.382	1.00 74.49	C
ATOM	633	OD1	ASN	A	81	59.266	42.385	12.205	1.00 76.02	O
ATOM	634	ND2	ASN	A	81	57.272	43.283	11.737	1.00 75.83	N
ATOM	635	C	ASN	A	81	57.349	39.272	14.437	1.00 73.91	C
ATOM	636	O	ASN	A	81	57.390	39.652	15.599	1.00 74.19	O
ATOM	637	N	LEU	A	82	56.788	38.123	14.081	1.00 73.86	N
ATOM	638	CA	LEU	A	82	56.068	37.328	15.047	1.00 73.81	C
ATOM	639	CB	LEU	A	82	55.393	36.133	14.392	1.00 73.34	C
ATOM	640	CG	LEU	A	82	54.302	35.461	15.218	1.00 72.60	C
ATOM	641	CD1	LEU	A	82	53.097	36.374	15.340	1.00 72.08	C
ATOM	642	CD2	LEU	A	82	53.914	34.125	14.601	1.00 71.55	C
ATOM	643	C	LEU	A	82	57.037	36.878	16.111	1.00 74.51	C
ATOM	644	O	LEU	A	82	58.100	36.360	15.802	1.00 75.09	O
ATOM	645	N	ARG	A	83	56.660	37.111	17.365	1.00 75.02	N
ATOM	646	CA	ARG	A	83	57.461	36.744	18.527	1.00 75.02	C
ATOM	647	CB	ARG	A	83	57.609	37.937	19.469	1.00 75.31	C
ATOM	648	CG	ARG	A	83	58.535	39.009	18.964	1.00 77.88	C
ATOM	649	CD	ARG	A	83	59.980	38.548	19.071	1.00 83.97	C
ATOM	650	NE	ARG	A	83	60.898	39.594	18.623	1.00 88.82	N
ATOM	651	CZ	ARG	A	83	62.213	39.451	18.460	1.00 89.93	C
ATOM	652	NH1	ARG	A	83	62.809	38.284	18.705	1.00 89.47	N
ATOM	653	NH2	ARG	A	83	62.931	40.492	18.037	1.00 91.04	N
ATOM	654	C	ARG	A	83	56.846	35.590	19.287	1.00 74.14	C
ATOM	655	O	ARG	A	83	57.562	34.780	19.854	1.00 74.28	O
ATOM	656	N	THR	A	84	55.523	35.519	19.302	1.00 73.54	N
ATOM	657	CA	THR	A	84	54.829	34.488	20.059	1.00 73.47	C
ATOM	658	CB	THR	A	84	54.285	35.049	21.395	1.00 73.65	C
ATOM	659	OG1	THR	A	84	55.391	35.351	22.245	1.00 75.11	O
ATOM	660	CG2	THR	A	84	53.366	34.054	22.119	1.00 73.68	C
ATOM	661	C	THR	A	84	53.712	33.875	19.239	1.00 73.03	C
ATOM	662	O	THR	A	84	52.945	34.598	18.594	1.00 73.15	O
ATOM	663	N	LEU	A	85	53.635	32.547	19.282	1.00 72.17	N
ATOM	664	CA	LEU	A	85	52.635	31.792	18.556	1.00 72.08	C
ATOM	665	CB	LEU	A	85	53.272	31.135	17.327	1.00 71.82	C
ATOM	666	CG	LEU	A	85	52.412	30.331	16.357	1.00 70.70	C
ATOM	667	CD1	LEU	A	85	51.233	31.127	15.836	1.00 69.21	C
ATOM	668	CD2	LEU	A	85	53.283	29.900	15.211	1.00 70.11	C

ATOM	669	C	LEU	A	85	52.027	30.717	19.452	1.00 72.37	C
ATOM	670	O	LEU	A	85	52.703	29.750	19.825	1.00 72.44	O
ATOM	671	N	GLY	A	86	50.751	30.889	19.786	1.00 72.15	N
ATOM	672	CA	GLY	A	86	50.029	29.931	20.599	1.00 72.01	C
ATOM	673	C	GLY	A	86	49.096	29.060	19.787	1.00 72.19	C
ATOM	674	O	GLY	A	86	48.243	29.575	19.059	1.00 72.19	O
ATOM	675	N	LEU	A	87	49.250	27.743	19.917	1.00 72.15	N
ATOM	676	CA	LEU	A	87	48.431	26.791	19.171	1.00 72.39	C
ATOM	677	CB	LEU	A	87	49.210	26.259	17.961	1.00 72.21	C
ATOM	678	CG	LEU	A	87	49.400	27.160	16.734	1.00 72.13	C
ATOM	679	CD1	LEU	A	87	50.618	26.757	15.934	1.00 71.31	C
ATOM	680	CD2	LEU	A	87	48.167	27.150	15.857	1.00 71.74	C
ATOM	681	C	LEU	A	87	48.000	25.626	20.057	1.00 73.01	C
ATOM	682	O	LEU	A	87	47.785	24.502	19.577	1.00 72.75	O
ATOM	683	N	ARG	A	88	47.867	25.878	21.354	1.00 73.44	N
ATOM	684	CA	ARG	A	88	47.622	24.778	22.252	1.00 74.08	C
ATOM	685	CB	ARG	A	88	48.175	25.053	23.650	1.00 74.28	C
ATOM	686	CG	ARG	A	88	47.280	25.833	24.501	1.00 76.66	C
ATOM	687	CD	ARG	A	88	47.672	25.827	25.968	1.00 81.43	C
ATOM	688	NE	ARG	A	88	46.440	26.097	26.715	1.00 87.76	N
ATOM	689	CZ	ARG	A	88	45.790	27.273	26.751	1.00 88.69	C
ATOM	690	NH1	ARG	A	88	46.262	28.351	26.114	1.00 87.99	N
ATOM	691	NH2	ARG	A	88	44.658	27.372	27.444	1.00 89.03	N
ATOM	692	C	ARG	A	88	46.159	24.320	22.249	1.00 74.29	C
ATOM	693	O	ARG	A	88	45.247	25.102	21.997	1.00 74.23	O
ATOM	694	N	SER	A	89	45.964	23.034	22.526	1.00 74.51	N
ATOM	695	CA	SER	A	89	44.672	22.368	22.413	1.00 75.00	C
ATOM	696	CB	SER	A	89	43.807	22.518	23.676	1.00 75.23	C
ATOM	697	OG	SER	A	89	43.602	23.878	23.987	1.00 77.12	O
ATOM	698	C	SER	A	89	43.923	22.764	21.158	1.00 74.76	C
ATOM	699	O	SER	A	89	42.917	23.443	21.203	1.00 75.02	O
ATOM	700	N	ASN	A	90	44.473	22.347	20.032	1.00 74.77	N
ATOM	701	CA	ASN	A	90	43.756	22.297	18.792	1.00 74.56	C
ATOM	702	CB	ASN	A	90	44.459	23.161	17.753	1.00 74.40	C
ATOM	703	CG	ASN	A	90	44.132	24.637	17.923	1.00 74.01	C
ATOM	704	OD1	ASN	A	90	43.058	25.077	17.540	1.00 74.57	O
ATOM	705	ND2	ASN	A	90	45.043	25.398	18.510	1.00 71.90	N
ATOM	706	C	ASN	A	90	43.676	20.829	18.416	1.00 74.89	C
ATOM	707	O	ASN	A	90	43.601	19.981	19.295	1.00 74.85	O
ATOM	708	N	ARG	A	91	43.685	20.508	17.134	1.00 75.41	N
ATOM	709	CA	ARG	A	91	43.436	19.137	16.728	1.00 76.03	C
ATOM	710	CB	ARG	A	91	42.009	18.992	16.195	1.00 76.18	C
ATOM	711	CG	ARG	A	91	40.921	19.044	17.269	1.00 77.46	C
ATOM	712	CD	ARG	A	91	39.579	18.568	16.718	1.00 80.47	C
ATOM	713	NE	ARG	A	91	38.497	18.666	17.703	1.00 83.32	N
ATOM	714	CZ	ARG	A	91	37.193	18.679	17.402	1.00 84.31	C
ATOM	715	NH1	ARG	A	91	36.787	18.611	16.138	1.00 84.22	N
ATOM	716	NH2	ARG	A	91	36.282	18.780	18.367	1.00 84.42	N
ATOM	717	C	ARG	A	91	44.467	18.697	15.705	1.00 76.39	C
ATOM	718	O	ARG	A	91	44.188	17.892	14.819	1.00 76.14	O
ATOM	719	N	LEU	A	92	45.667	19.248	15.850	1.00 77.20	N
ATOM	720	CA	LEU	A	92	46.807	18.882	15.041	1.00 78.25	C
ATOM	721	CB	LEU	A	92	47.930	19.890	15.248	1.00 78.06	C
ATOM	722	CG	LEU	A	92	47.582	21.348	14.935	1.00 78.29	C
ATOM	723	CD1	LEU	A	92	48.742	22.287	15.260	1.00 78.52	C
ATOM	724	CD2	LEU	A	92	47.158	21.499	13.483	1.00 78.71	C

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ATOM    725  C   LEU A  92      47.275  17.492  15.429  1.00 79.33           C
ATOM    726  O   LEU A  92      47.448  17.200  16.610  1.00 79.67           O
ATOM    727  N   LYS A  93      47.462  16.634  14.431  1.00 80.49           N
ATOM    728  CA  LYS A  93      47.886  15.258  14.659  1.00 81.56           C
ATOM    729  CB  LYS A  93      46.866  14.267  14.090  1.00 81.26           C
ATOM    730  CG  LYS A  93      47.184  12.821  14.433  1.00 82.01           C
ATOM    731  CD  LYS A  93      46.128  11.846  13.937  1.00 82.56           C
ATOM    732  CE  LYS A  93      46.661  10.397  13.986  1.00 84.33           C
ATOM    733  NZ  LYS A  93      45.629   9.378  13.623  1.00 84.15           N
ATOM    734  C   LYS A  93      49.268  15.010  14.051  1.00 82.11           C
ATOM    735  O   LYS A  93      50.162  14.445  14.704  1.00 82.38           O
ATOM    736  N   LEU A  94      49.433  15.425  12.798  1.00 82.49           N
ATOM    737  CA  LEU A  94      50.675  15.200  12.086  1.00 82.83           C
ATOM    738  CB  LEU A  94      50.506  14.061  11.075  1.00 82.62           C
ATOM    739  CG  LEU A  94      51.758  13.282  10.666  1.00 82.27           C
ATOM    740  CD1 LEU A  94      52.327  12.483  11.821  1.00 82.08           C
ATOM    741  CD2 LEU A  94      51.424  12.363   9.519  1.00 82.45           C
ATOM    742  C   LEU A  94      51.050  16.488  11.392  1.00 83.30           C
ATOM    743  O   LEU A  94      50.405  16.888  10.420  1.00 83.60           O
ATOM    744  N   ILE A  95      52.079  17.149  11.906  1.00 83.78           N
ATOM    745  CA  ILE A  95      52.457  18.468  11.397  1.00 84.30           C
ATOM    746  CB  ILE A  95      53.063  19.355  12.512  1.00 84.08           C
ATOM    747  CG1 ILE A  95      51.976  19.668  13.549  1.00 84.29           C
ATOM    748  CD1 ILE A  95      52.437  20.471  14.758  1.00 84.46           C
ATOM    749  CG2 ILE A  95      53.671  20.633  11.928  1.00 84.07           C
ATOM    750  C   ILE A  95      53.380  18.356  10.177  1.00 84.65           C
ATOM    751  O   ILE A  95      54.469  17.786  10.260  1.00 84.88           O
ATOM    752  N   PRO A  96      52.939  18.890   9.031  1.00 84.82           N
ATOM    753  CA  PRO A  96      53.807  18.854   7.867  1.00 84.98           C
ATOM    754  CB  PRO A  96      52.905  19.358   6.735  1.00 84.99           C
ATOM    755  CG  PRO A  96      51.851  20.146   7.394  1.00 85.06           C
ATOM    756  CD  PRO A  96      51.647  19.540   8.751  1.00 84.98           C
ATOM    757  C   PRO A  96      55.004  19.780   8.047  1.00 85.19           C
ATOM    758  O   PRO A  96      54.892  20.807   8.723  1.00 85.10           O
ATOM    759  N   LEU A  97      56.140  19.401   7.462  1.00 85.48           N
ATOM    760  CA  LEU A  97      57.319  20.268   7.422  1.00 85.65           C
ATOM    761  CB  LEU A  97      58.531  19.522   6.854  1.00 85.56           C
ATOM    762  CG  LEU A  97      59.247  18.465   7.703  1.00 85.68           C
ATOM    763  CD1 LEU A  97      60.065  17.525   6.824  1.00 85.55           C
ATOM    764  CD2 LEU A  97      60.136  19.100   8.748  1.00 85.26           C
ATOM    765  C   LEU A  97      57.037  21.538   6.600  1.00 85.84           C
ATOM    766  O   LEU A  97      56.262  21.527   5.627  1.00 85.67           O
ATOM    767  N   GLY A  98      57.669  22.632   7.005  1.00 86.02           N
ATOM    768  CA  GLY A  98      57.469  23.909   6.338  1.00 86.10           C
ATOM    769  C   GLY A  98      56.249  24.660   6.833  1.00 85.95           C
ATOM    770  O   GLY A  98      55.787  25.599   6.174  1.00 86.20           O
ATOM    771  N   VAL A  99      55.712  24.233   7.976  1.00 85.67           N
ATOM    772  CA  VAL A  99      54.724  25.030   8.705  1.00 85.55           C
ATOM    773  CB  VAL A  99      53.954  24.196   9.757  1.00 85.48           C
ATOM    774  CG1 VAL A  99      53.169  25.096  10.697  1.00 85.19           C
ATOM    775  CG2 VAL A  99      53.006  23.221   9.072  1.00 86.02           C
ATOM    776  C   VAL A  99      55.446  26.186   9.388  1.00 85.37           C
ATOM    777  O   VAL A  99      54.991  27.321   9.337  1.00 84.98           O
ATOM    778  N   PHE A 100      56.592  25.879   9.992  1.00 85.47           N
ATOM    779  CA  PHE A 100      57.328  26.831  10.813  1.00 85.52           C
ATOM    780  CB  PHE A 100      57.879  26.124  12.055  1.00 84.68           C
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ATOM    781  CG  PHE A 100      56.813  25.595  12.963  1.00 84.13           C
ATOM    782  CD1 PHE A 100      55.850  26.445  13.498  1.00 82.98           C
ATOM    783  CE1 PHE A 100      54.852  25.954  14.337  1.00 83.07           C
ATOM    784  CZ  PHE A 100      54.813  24.605  14.653  1.00 82.49           C
ATOM    785  CE2 PHE A 100      55.774  23.755  14.132  1.00 82.33           C
ATOM    786  CD2 PHE A 100      56.767  24.249  13.291  1.00 82.86           C
ATOM    787  C   PHE A 100      58.448  27.583  10.094  1.00 86.13           C
ATOM    788  O   PHE A 100      59.231  28.275  10.737  1.00 86.60           O
ATOM    789  N   THR A 101      58.534  27.465   8.774  1.00 86.50           N
ATOM    790  CA  THR A 101      59.605  28.142   8.048  1.00 87.09           C
ATOM    791  CB  THR A 101      59.691  27.676   6.580  1.00 87.46           C
ATOM    792  OG1 THR A 101      58.364  27.498   6.067  1.00 88.49           O
ATOM    793  CG2 THR A 101      60.492  26.353   6.454  1.00 88.00           C
ATOM    794  C   THR A 101      59.424  29.659   8.081  1.00 86.93           C
ATOM    795  O   THR A 101      58.295  30.151   8.056  1.00 86.82           O
ATOM    796  N   GLY A 102      60.540  30.386   8.158  1.00 86.78           N
ATOM    797  CA  GLY A 102      60.539  31.852   8.061  1.00 86.65           C
ATOM    798  C   GLY A 102      60.044  32.604   9.291  1.00 86.51           C
ATOM    799  O   GLY A 102      59.896  33.833   9.263  1.00 86.61           O
ATOM    800  N   LEU A 103      59.775  31.873  10.368  1.00 86.05           N
ATOM    801  CA  LEU A 103      59.404  32.498  11.627  1.00 85.70           C
ATOM    802  CB  LEU A 103      58.392  31.633  12.376  1.00 85.56           C
ATOM    803  CG  LEU A 103      57.001  31.454  11.782  1.00 84.39           C
ATOM    804  CD1 LEU A 103      56.281  30.379  12.554  1.00 83.28           C
ATOM    805  CD2 LEU A 103      56.223  32.753  11.816  1.00 83.73           C
ATOM    806  C   LEU A 103      60.669  32.702  12.457  1.00 85.74           C
ATOM    807  O   LEU A 103      60.770  32.242  13.594  1.00 85.94           O
ATOM    808  N   SER A 104      61.634  33.401  11.872  1.00 85.43           N
ATOM    809  CA  SER A 104      62.976  33.490  12.443  1.00 85.07           C
ATOM    810  CB  SER A 104      63.997  33.824  11.344  1.00 85.50           C
ATOM    811  OG  SER A 104      63.664  35.048  10.698  1.00 86.83           O
ATOM    812  C   SER A 104      63.089  34.484  13.603  1.00 84.13           C
ATOM    813  O   SER A 104      64.086  34.478  14.319  1.00 84.24           O
ATOM    814  N   ASN A 105      62.088  35.343  13.776  1.00 82.92           N
ATOM    815  CA  ASN A 105      62.010  36.174  14.972  1.00 81.69           C
ATOM    816  CB  ASN A 105      61.412  37.555  14.672  1.00 81.62           C
ATOM    817  CG  ASN A 105      62.446  38.675  14.755  1.00 82.14           C
ATOM    818  OD1 ASN A 105      62.192  39.828  14.344  1.00 80.80           O
ATOM    819  ND2 ASN A 105      63.635  38.338  15.276  1.00 83.27           N
ATOM    820  C   ASN A 105      61.240  35.496  16.101  1.00 80.94           C
ATOM    821  O   ASN A 105      61.175  36.022  17.208  1.00 81.25           O
ATOM    822  N   LEU A 106      60.666  34.328  15.831  1.00 79.67           N
ATOM    823  CA  LEU A 106      59.838  33.666  16.820  1.00 78.75           C
ATOM    824  CB  LEU A 106      59.151  32.444  16.221  1.00 78.31           C
ATOM    825  CG  LEU A 106      57.920  31.978  16.988  1.00 76.68           C
ATOM    826  CD1 LEU A 106      56.809  32.968  16.800  1.00 75.04           C
ATOM    827  CD2 LEU A 106      57.514  30.614  16.506  1.00 75.48           C
ATOM    828  C   LEU A 106      60.687  33.260  18.009  1.00 78.80           C
ATOM    829  O   LEU A 106      61.794  32.780  17.827  1.00 78.87           O
ATOM    830  N   THR A 107      60.174  33.462  19.222  1.00 78.79           N
ATOM    831  CA  THR A 107      60.921  33.131  20.431  1.00 78.65           C
ATOM    832  CB  THR A 107      61.418  34.381  21.153  1.00 78.57           C
ATOM    833  OG1 THR A 107      60.292  35.165  21.544  1.00 78.89           O
ATOM    834  CG2 THR A 107      62.331  35.211  20.262  1.00 78.58           C
ATOM    835  C   THR A 107      60.102  32.332  21.425  1.00 78.75           C
ATOM    836  O   THR A 107      60.640  31.835  22.414  1.00 78.85           O
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ATOM	837	N	LYS	A	108	58.803	32.217	21.181	1.00	79.06	N
ATOM	838	CA	LYS	A	108	57.939	31.419	22.052	1.00	79.93	C
ATOM	839	CB	LYS	A	108	57.317	32.275	23.159	1.00	79.77	C
ATOM	840	CG	LYS	A	108	56.620	31.436	24.214	1.00	82.09	C
ATOM	841	CD	LYS	A	108	55.869	32.271	25.249	1.00	83.22	C
ATOM	842	CE	LYS	A	108	55.258	31.349	26.329	1.00	88.37	C
ATOM	843	NZ	LYS	A	108	54.179	32.039	27.111	1.00	90.19	N
ATOM	844	C	LYS	A	108	56.844	30.747	21.255	1.00	78.88	C
ATOM	845	O	LYS	A	108	56.093	31.417	20.549	1.00	79.15	O
ATOM	846	N	LEU	A	109	56.757	29.427	21.383	1.00	78.21	N
ATOM	847	CA	LEU	A	109	55.793	28.624	20.658	1.00	77.67	C
ATOM	848	CB	LEU	A	109	56.477	27.931	19.475	1.00	77.59	C
ATOM	849	CG	LEU	A	109	55.810	26.755	18.753	1.00	75.95	C
ATOM	850	CD1	LEU	A	109	54.596	27.184	17.958	1.00	75.27	C
ATOM	851	CD2	LEU	A	109	56.802	26.110	17.845	1.00	76.57	C
ATOM	852	C	LEU	A	109	55.212	27.579	21.595	1.00	78.49	C
ATOM	853	O	LEU	A	109	55.957	26.917	22.319	1.00	79.07	O
ATOM	854	N	ASP	A	110	53.888	27.429	21.572	1.00	78.67	N
ATOM	855	CA	ASP	A	110	53.187	26.434	22.375	1.00	78.72	C
ATOM	856	CB	ASP	A	110	52.302	27.130	23.411	1.00	79.32	C
ATOM	857	CG	ASP	A	110	51.618	26.151	24.380	1.00	81.88	C
ATOM	858	OD1	ASP	A	110	51.537	24.921	24.109	1.00	82.71	O
ATOM	859	OD2	ASP	A	110	51.131	26.635	25.428	1.00	85.37	O
ATOM	860	C	ASP	A	110	52.337	25.565	21.457	1.00	78.39	C
ATOM	861	O	ASP	A	110	51.525	26.075	20.667	1.00	78.78	O
ATOM	862	N	ILE	A	111	52.497	24.253	21.604	1.00	77.49	N
ATOM	863	CA	ILE	A	111	51.994	23.268	20.660	1.00	76.52	C
ATOM	864	CB	ILE	A	111	53.190	22.806	19.759	1.00	76.77	C
ATOM	865	CG1	ILE	A	111	53.465	23.858	18.692	1.00	77.19	C
ATOM	866	CD1	ILE	A	111	52.278	24.160	17.802	1.00	77.43	C
ATOM	867	CG2	ILE	A	111	52.957	21.499	19.053	1.00	77.06	C
ATOM	868	C	ILE	A	111	51.335	22.129	21.450	1.00	75.86	C
ATOM	869	O	ILE	A	111	50.935	21.109	20.893	1.00	75.69	O
ATOM	870	N	SER	A	112	51.213	22.333	22.758	1.00	75.17	N
ATOM	871	CA	SER	A	112	50.747	21.308	23.677	1.00	74.70	C
ATOM	872	CB	SER	A	112	51.052	21.689	25.118	1.00	74.88	C
ATOM	873	OG	SER	A	112	50.867	23.085	25.332	1.00	75.72	O
ATOM	874	C	SER	A	112	49.268	21.061	23.548	1.00	74.60	C
ATOM	875	O	SER	A	112	48.544	21.855	22.954	1.00	73.64	O
ATOM	876	N	GLU	A	113	48.847	19.925	24.105	1.00	74.83	N
ATOM	877	CA	GLU	A	113	47.451	19.491	24.151	1.00	74.99	C
ATOM	878	CB	GLU	A	113	46.628	20.385	25.070	1.00	75.40	C
ATOM	879	CG	GLU	A	113	46.910	20.209	26.539	1.00	79.34	C
ATOM	880	CD	GLU	A	113	46.214	21.272	27.385	1.00	85.36	C
ATOM	881	OE1	GLU	A	113	44.962	21.386	27.303	1.00	88.10	O
ATOM	882	OE2	GLU	A	113	46.921	21.997	28.130	1.00	87.84	O
ATOM	883	C	GLU	A	113	46.777	19.365	22.792	1.00	74.29	C
ATOM	884	O	GLU	A	113	45.558	19.457	22.698	1.00	74.27	O
ATOM	885	N	ASN	A	114	47.559	19.136	21.742	1.00	73.70	N
ATOM	886	CA	ASN	A	114	46.973	18.777	20.453	1.00	73.22	C
ATOM	887	CB	ASN	A	114	47.830	19.278	19.307	1.00	72.84	C
ATOM	888	CG	ASN	A	114	47.560	20.714	19.001	1.00	72.57	C
ATOM	889	OD1	ASN	A	114	46.756	21.025	18.137	1.00	75.08	O
ATOM	890	ND2	ASN	A	114	48.183	21.603	19.736	1.00	71.74	N
ATOM	891	C	ASN	A	114	46.717	17.284	20.363	1.00	73.24	C
ATOM	892	O	ASN	A	114	46.473	16.636	21.382	1.00	73.23	O

ATOM	893	N	LYS	A	115	46.760	16.732	19.157	1.00	73.43	N
ATOM	894	CA	LYS	A	115	46.533	15.296	18.980	1.00	73.83	C
ATOM	895	CB	LYS	A	115	45.210	15.043	18.251	1.00	74.00	C
ATOM	896	CG	LYS	A	115	44.029	15.650	18.959	1.00	75.73	C
ATOM	897	CD	LYS	A	115	42.799	14.791	18.827	1.00	81.12	C
ATOM	898	CE	LYS	A	115	41.726	15.205	19.856	1.00	84.11	C
ATOM	899	NZ	LYS	A	115	40.326	15.009	19.315	1.00	85.85	N
ATOM	900	C	LYS	A	115	47.714	14.631	18.272	1.00	73.71	C
ATOM	901	O	LYS	A	115	47.580	13.554	17.675	1.00	74.15	O
ATOM	902	N	ILE	A	116	48.873	15.282	18.369	1.00	73.41	N
ATOM	903	CA	ILE	A	116	50.127	14.801	17.802	1.00	73.12	C
ATOM	904	CB	ILE	A	116	51.227	15.833	18.021	1.00	72.73	C
ATOM	905	CG1	ILE	A	116	50.871	17.129	17.284	1.00	72.44	C
ATOM	906	CD1	ILE	A	116	51.755	18.308	17.637	1.00	69.61	C
ATOM	907	CG2	ILE	A	116	52.560	15.304	17.554	1.00	72.59	C
ATOM	908	C	ILE	A	116	50.551	13.432	18.364	1.00	73.54	C
ATOM	909	O	ILE	A	116	50.727	13.268	19.567	1.00	73.50	O
ATOM	910	N	VAL	A	117	50.701	12.457	17.473	1.00	73.88	N
ATOM	911	CA	VAL	A	117	51.098	11.104	17.851	1.00	74.24	C
ATOM	912	CB	VAL	A	117	50.571	10.065	16.829	1.00	74.24	C
ATOM	913	CG1	VAL	A	117	51.069	8.660	17.146	1.00	74.08	C
ATOM	914	CG2	VAL	A	117	49.059	10.078	16.800	1.00	74.85	C
ATOM	915	C	VAL	A	117	52.619	10.983	17.950	1.00	74.55	C
ATOM	916	O	VAL	A	117	53.136	10.160	18.717	1.00	74.75	O
ATOM	917	N	ILE	A	118	53.335	11.808	17.186	1.00	74.43	N
ATOM	918	CA	ILE	A	118	54.773	11.598	16.997	1.00	74.29	C
ATOM	919	CB	ILE	A	118	55.028	10.447	15.978	1.00	73.91	C
ATOM	920	CG1	ILE	A	118	56.517	10.089	15.918	1.00	74.52	C
ATOM	921	CD1	ILE	A	118	56.871	9.076	14.851	1.00	74.56	C
ATOM	922	CG2	ILE	A	118	54.467	10.795	14.599	1.00	74.08	C
ATOM	923	C	ILE	A	118	55.501	12.868	16.566	1.00	73.77	C
ATOM	924	O	ILE	A	118	55.014	13.567	15.696	1.00	73.72	O
ATOM	925	N	LEU	A	119	56.654	13.160	17.175	1.00	73.74	N
ATOM	926	CA	LEU	A	119	57.510	14.278	16.719	1.00	74.05	C
ATOM	927	CB	LEU	A	119	58.085	15.091	17.884	1.00	73.79	C
ATOM	928	CG	LEU	A	119	57.112	15.705	18.886	1.00	73.19	C
ATOM	929	CD1	LEU	A	119	57.868	16.597	19.850	1.00	72.15	C
ATOM	930	CD2	LEU	A	119	56.015	16.470	18.174	1.00	71.84	C
ATOM	931	C	LEU	A	119	58.651	13.798	15.833	1.00	74.22	C
ATOM	932	O	LEU	A	119	59.584	13.153	16.312	1.00	74.03	O
ATOM	933	N	LEU	A	120	58.575	14.143	14.546	1.00	74.54	N
ATOM	934	CA	LEU	A	120	59.540	13.689	13.546	1.00	74.37	C
ATOM	935	CB	LEU	A	120	58.858	13.588	12.179	1.00	74.36	C
ATOM	936	CG	LEU	A	120	57.676	12.626	12.031	1.00	74.79	C
ATOM	937	CD1	LEU	A	120	56.829	12.990	10.808	1.00	74.09	C
ATOM	938	CD2	LEU	A	120	58.138	11.159	11.978	1.00	74.50	C
ATOM	939	C	LEU	A	120	60.780	14.596	13.449	1.00	74.41	C
ATOM	940	O	LEU	A	120	60.739	15.776	13.836	1.00	74.04	O
ATOM	941	N	ASP	A	121	61.869	14.034	12.917	1.00	74.22	N
ATOM	942	CA	ASP	A	121	63.115	14.770	12.699	1.00	74.16	C
ATOM	943	CB	ASP	A	121	64.109	13.899	11.936	1.00	74.06	C
ATOM	944	CG	ASP	A	121	64.674	12.757	12.776	1.00	74.99	C
ATOM	945	OD1	ASP	A	121	64.462	12.719	14.007	1.00	76.06	O
ATOM	946	OD2	ASP	A	121	65.364	11.888	12.200	1.00	75.46	O
ATOM	947	C	ASP	A	121	62.935	16.113	11.965	1.00	74.16	C
ATOM	948	O	ASP	A	121	62.206	16.195	10.977	1.00	74.14	O

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ATOM    949  N   TYR A 122      63.605  17.150  12.477  1.00 74.15           N
ATOM    950  CA  TYR A 122      63.763  18.468  11.827  1.00 74.15           C
ATOM    951  CB  TYR A 122      64.387  18.371  10.416  1.00 72.99           C
ATOM    952  CG  TYR A 122      65.511  17.390  10.256  1.00 71.24           C
ATOM    953  CD1 TYR A 122      66.728  17.576  10.906  1.00 70.26           C
ATOM    954  CE1 TYR A 122      67.769  16.658  10.756  1.00 69.93           C
ATOM    955  CZ  TYR A 122      67.590  15.557   9.941  1.00 70.33           C
ATOM    956  OH  TYR A 122      68.603  14.635   9.779  1.00 70.80           O
ATOM    957  CE2 TYR A 122      66.389  15.370   9.281  1.00 69.99           C
ATOM    958  CD2 TYR A 122      65.363  16.282   9.440  1.00 69.08           C
ATOM    959  C   TYR A 122      62.495  19.300  11.716  1.00 75.18           C
ATOM    960  O   TYR A 122      62.405  20.166  10.845  1.00 75.41           O
ATOM    961  N   MET A 123      61.514  19.060  12.573  1.00 76.00           N
ATOM    962  CA  MET A 123      60.280  19.834  12.476  1.00 77.24           C
ATOM    963  CB  MET A 123      59.130  19.108  13.166  1.00 76.89           C
ATOM    964  CG  MET A 123      59.337  18.846  14.635  1.00 77.73           C
ATOM    965  SD  MET A 123      57.763  18.464  15.426  1.00 80.60           S
ATOM    966  CE  MET A 123      56.787  19.927  15.051  1.00 81.65           C
ATOM    967  C   MET A 123      60.394  21.290  12.969  1.00 76.98           C
ATOM    968  O   MET A 123      59.512  22.098  12.711  1.00 77.06           O
ATOM    969  N   PHE A 124      61.468  21.605  13.688  1.00 77.24           N
ATOM    970  CA  PHE A 124      61.683  22.946  14.201  1.00 77.26           C
ATOM    971  CB  PHE A 124      61.742  22.954  15.732  1.00 77.40           C
ATOM    972  CG  PHE A 124      60.581  22.281  16.417  1.00 76.64           C
ATOM    973  CD1 PHE A 124      59.323  22.866  16.432  1.00 76.84           C
ATOM    974  CE1 PHE A 124      58.252  22.242  17.084  1.00 76.77           C
ATOM    975  CZ  PHE A 124      58.451  21.034  17.740  1.00 76.38           C
ATOM    976  CE2 PHE A 124      59.713  20.455  17.746  1.00 76.07           C
ATOM    977  CD2 PHE A 124      60.768  21.084  17.097  1.00 75.51           C
ATOM    978  C   PHE A 124      63.001  23.489  13.658  1.00 77.61           C
ATOM    979  O   PHE A 124      63.511  24.507  14.132  1.00 77.15           O
ATOM    980  N   GLN A 125      63.537  22.810  12.649  1.00 78.16           N
ATOM    981  CA  GLN A 125      64.870  23.089  12.116  1.00 78.50           C
ATOM    982  CB  GLN A 125      65.157  22.201  10.894  1.00 78.53           C
ATOM    983  CG  GLN A 125      66.619  22.165  10.408  1.00 79.95           C
ATOM    984  CD  GLN A 125      67.645  21.782  11.501  1.00 82.88           C
ATOM    985  OE1 GLN A 125      68.670  22.447  11.644  1.00 84.31           O
ATOM    986  NE2 GLN A 125      67.373  20.709  12.256  1.00 82.42           N
ATOM    987  C   GLN A 125      65.098  24.559  11.781  1.00 78.55           C
ATOM    988  O   GLN A 125      66.242  25.016  11.777  1.00 79.05           O
ATOM    989  N   ASP A 126      64.022  25.297  11.523  1.00 78.47           N
ATOM    990  CA  ASP A 126      64.145  26.680  11.089  1.00 78.66           C
ATOM    991  CB  ASP A 126      63.154  26.984   9.961  1.00 79.11           C
ATOM    992  CG  ASP A 126      63.601  28.174   9.092  1.00 80.92           C
ATOM    993  OD1 ASP A 126      64.826  28.300   8.838  1.00 81.24           O
ATOM    994  OD2 ASP A 126      62.735  28.983   8.664  1.00 82.71           O
ATOM    995  C   ASP A 126      63.982  27.705  12.205  1.00 78.28           C
ATOM    996  O   ASP A 126      64.212  28.893  11.994  1.00 78.32           O
ATOM    997  N   LEU A 127      63.587  27.259  13.390  1.00 77.96           N
ATOM    998  CA  LEU A 127      63.309  28.188  14.480  1.00 77.59           C
ATOM    999  CB  LEU A 127      62.163  27.674  15.356  1.00 77.28           C
ATOM   1000  CG  LEU A 127      60.808  27.499  14.674  1.00 75.81           C
ATOM   1001  CD1 LEU A 127      59.863  26.834  15.627  1.00 75.46           C
ATOM   1002  CD2 LEU A 127      60.241  28.818  14.235  1.00 75.84           C
ATOM   1003  C   LEU A 127      64.557  28.487  15.301  1.00 77.69           C
ATOM   1004  O   LEU A 127      64.615  28.193  16.488  1.00 78.22           O
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ATOM	1005	N	TYR	A	128	65.548	29.090	14.651	1.00	77.92	N
ATOM	1006	CA	TYR	A	128	66.847	29.386	15.259	1.00	77.73	C
ATOM	1007	CB	TYR	A	128	67.810	30.006	14.236	1.00	78.20	C
ATOM	1008	CG	TYR	A	128	69.186	30.277	14.824	1.00	79.79	C
ATOM	1009	CD1	TYR	A	128	70.153	29.264	14.893	1.00	80.45	C
ATOM	1010	CE1	TYR	A	128	71.414	29.504	15.436	1.00	80.50	C
ATOM	1011	CZ	TYR	A	128	71.726	30.768	15.933	1.00	80.47	C
ATOM	1012	OH	TYR	A	128	72.983	31.001	16.477	1.00	81.08	O
ATOM	1013	CE2	TYR	A	128	70.785	31.790	15.886	1.00	80.20	C
ATOM	1014	CD2	TYR	A	128	69.521	31.542	15.334	1.00	80.58	C
ATOM	1015	C	TYR	A	128	66.760	30.283	16.491	1.00	77.12	C
ATOM	1016	O	TYR	A	128	67.624	30.230	17.348	1.00	77.38	O
ATOM	1017	N	ASN	A	129	65.728	31.105	16.584	1.00	76.44	N
ATOM	1018	CA	ASN	A	129	65.659	32.065	17.669	1.00	75.81	C
ATOM	1019	CB	ASN	A	129	65.357	33.462	17.128	1.00	75.66	C
ATOM	1020	CG	ASN	A	129	66.557	34.099	16.464	1.00	75.76	C
ATOM	1021	OD1	ASN	A	129	67.691	33.975	16.932	1.00	76.24	O
ATOM	1022	ND2	ASN	A	129	66.316	34.795	15.367	1.00	76.55	N
ATOM	1023	C	ASN	A	129	64.681	31.708	18.772	1.00	75.63	C
ATOM	1024	O	ASN	A	129	64.527	32.469	19.727	1.00	75.89	O
ATOM	1025	N	LEU	A	130	64.023	30.559	18.650	1.00	75.22	N
ATOM	1026	CA	LEU	A	130	63.036	30.163	19.636	1.00	74.92	C
ATOM	1027	CB	LEU	A	130	62.367	28.852	19.247	1.00	74.59	C
ATOM	1028	CG	LEU	A	130	61.032	28.563	19.926	1.00	73.78	C
ATOM	1029	CD1	LEU	A	130	59.924	29.370	19.286	1.00	72.72	C
ATOM	1030	CD2	LEU	A	130	60.703	27.085	19.854	1.00	72.80	C
ATOM	1031	C	LEU	A	130	63.713	30.013	20.978	1.00	75.51	C
ATOM	1032	O	LEU	A	130	64.738	29.348	21.093	1.00	75.74	O
ATOM	1033	N	LYS	A	131	63.150	30.650	21.993	1.00	76.21	N
ATOM	1034	CA	LYS	A	131	63.685	30.527	23.330	1.00	76.78	C
ATOM	1035	CB	LYS	A	131	63.853	31.893	23.966	1.00	76.59	C
ATOM	1036	CG	LYS	A	131	65.101	32.586	23.435	1.00	78.57	C
ATOM	1037	CD	LYS	A	131	65.591	33.714	24.335	1.00	81.88	C
ATOM	1038	CE	LYS	A	131	64.795	34.991	24.085	1.00	84.06	C
ATOM	1039	NZ	LYS	A	131	65.380	36.148	24.825	1.00	86.99	N
ATOM	1040	C	LYS	A	131	62.871	29.604	24.203	1.00	77.12	C
ATOM	1041	O	LYS	A	131	63.403	29.001	25.123	1.00	77.28	O
ATOM	1042	N	SER	A	132	61.595	29.441	23.879	1.00	77.87	N
ATOM	1043	CA	SER	A	132	60.677	28.698	24.734	1.00	78.46	C
ATOM	1044	CB	SER	A	132	59.821	29.702	25.488	1.00	78.51	C
ATOM	1045	OG	SER	A	132	59.368	29.162	26.703	1.00	80.41	O
ATOM	1046	C	SER	A	132	59.788	27.751	23.921	1.00	78.65	C
ATOM	1047	O	SER	A	132	59.309	28.126	22.850	1.00	79.04	O
ATOM	1048	N	LEU	A	133	59.561	26.535	24.409	1.00	78.59	N
ATOM	1049	CA	LEU	A	133	58.720	25.596	23.665	1.00	79.01	C
ATOM	1050	CB	LEU	A	133	59.566	24.732	22.715	1.00	78.78	C
ATOM	1051	CG	LEU	A	133	58.880	23.593	21.941	1.00	78.08	C
ATOM	1052	CD1	LEU	A	133	57.892	24.091	20.908	1.00	77.10	C
ATOM	1053	CD2	LEU	A	133	59.893	22.714	21.266	1.00	78.54	C
ATOM	1054	C	LEU	A	133	57.893	24.708	24.580	1.00	79.88	C
ATOM	1055	O	LEU	A	133	58.433	24.117	25.509	1.00	80.24	O
ATOM	1056	N	GLU	A	134	56.590	24.617	24.317	1.00	80.43	N
ATOM	1057	CA	GLU	A	134	55.732	23.669	25.020	1.00	81.77	C
ATOM	1058	CB	GLU	A	134	54.594	24.384	25.748	1.00	82.08	C
ATOM	1059	CG	GLU	A	134	55.009	25.176	26.985	1.00	84.39	C
ATOM	1060	CD	GLU	A	134	53.840	25.932	27.631	1.00	85.17	C

ATOM	1061	OE1	GLU	A	134	52.853	25.272	28.090	1.00	87.41	O
ATOM	1062	OE2	GLU	A	134	53.924	27.196	27.680	1.00	90.34	O
ATOM	1063	C	GLU	A	134	55.145	22.647	24.062	1.00	80.83	C
ATOM	1064	O	GLU	A	134	54.490	23.005	23.086	1.00	80.87	O
ATOM	1065	N	VAL	A	135	55.384	21.374	24.341	1.00	80.32	N
ATOM	1066	CA	VAL	A	135	54.824	20.295	23.537	1.00	80.11	C
ATOM	1067	CB	VAL	A	135	55.866	19.648	22.579	1.00	79.96	C
ATOM	1068	CG1	VAL	A	135	56.175	20.558	21.435	1.00	81.37	C
ATOM	1069	CG2	VAL	A	135	57.152	19.298	23.311	1.00	80.18	C
ATOM	1070	C	VAL	A	135	54.275	19.214	24.448	1.00	79.92	C
ATOM	1071	O	VAL	A	135	54.537	19.220	25.650	1.00	79.81	O
ATOM	1072	N	GLY	A	136	53.530	18.283	23.855	1.00	79.90	N
ATOM	1073	CA	GLY	A	136	53.068	17.077	24.524	1.00	79.35	C
ATOM	1074	C	GLY	A	136	51.556	16.981	24.536	1.00	79.32	C
ATOM	1075	O	GLY	A	136	50.857	17.992	24.626	1.00	79.03	O
ATOM	1076	N	ASP	A	137	51.051	15.759	24.431	1.00	79.14	N
ATOM	1077	CA	ASP	A	137	49.624	15.512	24.564	1.00	79.48	C
ATOM	1078	CB	ASP	A	137	48.857	16.045	23.343	1.00	79.42	C
ATOM	1079	CG	ASP	A	137	49.438	15.565	22.030	1.00	79.50	C
ATOM	1080	OD1	ASP	A	137	49.520	14.333	21.827	1.00	81.45	O
ATOM	1081	OD2	ASP	A	137	49.806	16.414	21.194	1.00	78.48	O
ATOM	1082	C	ASP	A	137	49.382	14.018	24.776	1.00	79.74	C
ATOM	1083	O	ASP	A	137	50.288	13.210	24.550	1.00	80.08	O
ATOM	1084	N	ASN	A	138	48.175	13.648	25.205	1.00	79.68	N
ATOM	1085	CA	ASN	A	138	47.884	12.253	25.533	1.00	80.09	C
ATOM	1086	CB	ASN	A	138	46.427	12.089	25.995	1.00	80.57	C
ATOM	1087	CG	ASN	A	138	46.174	12.632	27.411	1.00	81.87	C
ATOM	1088	OD1	ASN	A	138	46.708	13.668	27.818	1.00	82.90	O
ATOM	1089	ND2	ASN	A	138	45.325	11.932	28.155	1.00	83.40	N
ATOM	1090	C	ASN	A	138	48.189	11.284	24.386	1.00	79.74	C
ATOM	1091	O	ASN	A	138	48.380	10.090	24.610	1.00	79.81	O
ATOM	1092	N	ASP	A	139	48.239	11.803	23.162	1.00	79.31	N
ATOM	1093	CA	ASP	A	139	48.439	10.968	21.979	1.00	78.98	C
ATOM	1094	CB	ASP	A	139	47.613	11.503	20.800	1.00	79.40	C
ATOM	1095	CG	ASP	A	139	46.136	11.054	20.841	1.00	81.09	C
ATOM	1096	OD1	ASP	A	139	45.724	10.315	21.774	1.00	82.45	O
ATOM	1097	OD2	ASP	A	139	45.377	11.441	19.921	1.00	82.86	O
ATOM	1098	C	ASP	A	139	49.909	10.805	21.575	1.00	78.38	C
ATOM	1099	O	ASP	A	139	50.234	9.929	20.774	1.00	77.97	O
ATOM	1100	N	LEU	A	140	50.786	11.653	22.121	1.00	77.74	N
ATOM	1101	CA	LEU	A	140	52.213	11.597	21.810	1.00	76.85	C
ATOM	1102	CB	LEU	A	140	52.930	12.885	22.215	1.00	76.81	C
ATOM	1103	CG	LEU	A	140	54.414	13.006	21.823	1.00	76.52	C
ATOM	1104	CD1	LEU	A	140	54.602	12.954	20.318	1.00	76.18	C
ATOM	1105	CD2	LEU	A	140	55.031	14.275	22.365	1.00	76.56	C
ATOM	1106	C	LEU	A	140	52.862	10.387	22.455	1.00	76.46	C
ATOM	1107	O	LEU	A	140	52.870	10.245	23.675	1.00	76.30	O
ATOM	1108	N	VAL	A	141	53.402	9.519	21.611	1.00	76.19	N
ATOM	1109	CA	VAL	A	141	53.933	8.223	22.048	1.00	75.96	C
ATOM	1110	CB	VAL	A	141	53.086	7.043	21.521	1.00	75.65	C
ATOM	1111	CG1	VAL	A	141	51.727	7.039	22.192	1.00	75.51	C
ATOM	1112	CG2	VAL	A	141	52.955	7.083	20.002	1.00	74.56	C
ATOM	1113	C	VAL	A	141	55.397	8.021	21.656	1.00	76.19	C
ATOM	1114	O	VAL	A	141	56.098	7.179	22.229	1.00	76.23	O
ATOM	1115	N	TYR	A	142	55.854	8.813	20.691	1.00	76.39	N
ATOM	1116	CA	TYR	A	142	57.224	8.732	20.235	1.00	76.27	C

ATOM	1117	CB	TYR	A	142	57.324	7.825	19.021	1.00	76.87	C
ATOM	1118	CG	TYR	A	142	58.746	7.537	18.634	1.00	77.98	C
ATOM	1119	CD1	TYR	A	142	59.553	6.727	19.438	1.00	79.05	C
ATOM	1120	CE1	TYR	A	142	60.860	6.460	19.100	1.00	79.44	C
ATOM	1121	CZ	TYR	A	142	61.378	7.004	17.940	1.00	79.39	C
ATOM	1122	OH	TYR	A	142	62.681	6.734	17.591	1.00	80.74	O
ATOM	1123	CE2	TYR	A	142	60.600	7.811	17.126	1.00	78.71	C
ATOM	1124	CD2	TYR	A	142	59.292	8.073	17.475	1.00	78.20	C
ATOM	1125	C	TYR	A	142	57.778	10.087	19.879	1.00	75.72	C
ATOM	1126	O	TYR	A	142	57.129	10.873	19.206	1.00	75.84	O
ATOM	1127	N	ILE	A	143	58.989	10.347	20.344	1.00	75.25	N
ATOM	1128	CA	ILE	A	143	59.771	11.489	19.882	1.00	74.77	C
ATOM	1129	CB	ILE	A	143	60.219	12.369	21.043	1.00	74.18	C
ATOM	1130	CG1	ILE	A	143	59.006	13.059	21.674	1.00	74.37	C
ATOM	1131	CD1	ILE	A	143	59.312	13.987	22.850	1.00	74.57	C
ATOM	1132	CG2	ILE	A	143	61.250	13.338	20.561	1.00	73.82	C
ATOM	1133	C	ILE	A	143	61.004	10.949	19.168	1.00	74.92	C
ATOM	1134	O	ILE	A	143	61.747	10.140	19.738	1.00	75.09	O
ATOM	1135	N	SER	A	144	61.222	11.373	17.926	1.00	74.96	N
ATOM	1136	CA	SER	A	144	62.403	10.927	17.182	1.00	75.15	C
ATOM	1137	CB	SER	A	144	62.174	11.002	15.680	1.00	75.09	C
ATOM	1138	OG	SER	A	144	61.808	12.318	15.328	1.00	77.03	O
ATOM	1139	C	SER	A	144	63.663	11.696	17.599	1.00	74.94	C
ATOM	1140	O	SER	A	144	63.580	12.803	18.151	1.00	74.77	O
ATOM	1141	N	HIS	A	145	64.818	11.080	17.351	1.00	74.61	N
ATOM	1142	CA	HIS	A	145	66.101	11.560	17.850	1.00	74.48	C
ATOM	1143	CB	HIS	A	145	67.208	10.641	17.360	1.00	74.83	C
ATOM	1144	CG	HIS	A	145	67.051	9.217	17.807	1.00	78.12	C
ATOM	1145	ND1	HIS	A	145	66.603	8.873	19.070	1.00	79.80	N
ATOM	1146	CE1	HIS	A	145	66.582	7.557	19.185	1.00	79.02	C
ATOM	1147	NE2	HIS	A	145	67.008	7.032	18.048	1.00	80.04	N
ATOM	1148	CD2	HIS	A	145	67.310	8.048	17.169	1.00	79.52	C
ATOM	1149	C	HIS	A	145	66.429	13.019	17.515	1.00	73.70	C
ATOM	1150	O	HIS	A	145	66.937	13.753	18.359	1.00	72.76	O
ATOM	1151	N	ARG	A	146	66.126	13.437	16.291	1.00	73.38	N
ATOM	1152	CA	ARG	A	146	66.409	14.806	15.870	1.00	73.41	C
ATOM	1153	CB	ARG	A	146	67.166	14.816	14.545	1.00	73.13	C
ATOM	1154	CG	ARG	A	146	68.441	14.011	14.592	1.00	72.89	C
ATOM	1155	CD	ARG	A	146	69.080	13.960	13.243	1.00	72.85	C
ATOM	1156	NE	ARG	A	146	70.294	13.158	13.277	1.00	73.23	N
ATOM	1157	CZ	ARG	A	146	71.156	13.070	12.270	1.00	72.66	C
ATOM	1158	NH1	ARG	A	146	70.938	13.753	11.152	1.00	72.20	N
ATOM	1159	NH2	ARG	A	146	72.236	12.308	12.385	1.00	71.08	N
ATOM	1160	C	ARG	A	146	65.160	15.672	15.778	1.00	73.54	C
ATOM	1161	O	ARG	A	146	65.064	16.528	14.914	1.00	74.03	O
ATOM	1162	N	ALA	A	147	64.209	15.453	16.678	1.00	73.71	N
ATOM	1163	CA	ALA	A	147	62.969	16.211	16.687	1.00	73.68	C
ATOM	1164	CB	ALA	A	147	61.980	15.583	17.630	1.00	73.69	C
ATOM	1165	C	ALA	A	147	63.249	17.636	17.110	1.00	73.92	C
ATOM	1166	O	ALA	A	147	62.662	18.573	16.585	1.00	73.88	O
ATOM	1167	N	PHE	A	148	64.160	17.792	18.060	1.00	74.31	N
ATOM	1168	CA	PHE	A	148	64.469	19.098	18.600	1.00	74.75	C
ATOM	1169	CB	PHE	A	148	64.709	19.000	20.103	1.00	74.68	C
ATOM	1170	CG	PHE	A	148	63.489	18.601	20.877	1.00	74.76	C
ATOM	1171	CD1	PHE	A	148	62.276	19.246	20.667	1.00	75.15	C
ATOM	1172	CE1	PHE	A	148	61.141	18.877	21.377	1.00	74.99	C

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ATOM   1173  CZ  PHE A 148      61.216  17.866  22.319  1.00 74.93           C
ATOM   1174  CE2 PHE A 148      62.421  17.213  22.536  1.00 75.20           C
ATOM   1175  CD2 PHE A 148      63.547  17.581  21.817  1.00 75.39           C
ATOM   1176  C   PHE A 148      65.644  19.773  17.897  1.00 75.32           C
ATOM   1177  O   PHE A 148      66.055  20.871  18.290  1.00 76.08           O
ATOM   1178  N   SER A 149      66.161  19.144  16.843  1.00 75.19           N
ATOM   1179  CA  SER A 149      67.274  19.702  16.084  1.00 75.09           C
ATOM   1180  CB  SER A 149      67.639  18.772  14.941  1.00 75.19           C
ATOM   1181  OG  SER A 149      68.727  19.284  14.200  1.00 75.65           O
ATOM   1182  C   SER A 149      66.975  21.084  15.531  1.00 75.06           C
ATOM   1183  O   SER A 149      65.917  21.319  14.960  1.00 75.37           O
ATOM   1184  N   GLY A 150      67.916  22.000  15.711  1.00 75.22           N
ATOM   1185  CA  GLY A 150      67.814  23.325  15.123  1.00 75.27           C
ATOM   1186  C   GLY A 150      67.388  24.410  16.088  1.00 75.41           C
ATOM   1187  O   GLY A 150      67.386  25.584  15.735  1.00 75.62           O
ATOM   1188  N   LEU A 151      67.033  24.022  17.305  1.00 75.80           N
ATOM   1189  CA  LEU A 151      66.561  24.960  18.324  1.00 76.34           C
ATOM   1190  CB  LEU A 151      65.552  24.272  19.269  1.00 76.06           C
ATOM   1191  CG  LEU A 151      64.264  23.684  18.679  1.00 75.75           C
ATOM   1192  CD1 LEU A 151      63.474  22.911  19.705  1.00 75.46           C
ATOM   1193  CD2 LEU A 151      63.395  24.767  18.110  1.00 76.40           C
ATOM   1194  C   LEU A 151      67.742  25.562  19.107  1.00 76.76           C
ATOM   1195  O   LEU A 151      67.800  25.488  20.339  1.00 77.11           O
ATOM   1196  N   ASN A 152      68.671  26.181  18.387  1.00 76.81           N
ATOM   1197  CA  ASN A 152      69.907  26.674  18.990  1.00 76.71           C
ATOM   1198  CB  ASN A 152      70.839  27.206  17.921  1.00 76.58           C
ATOM   1199  CG  ASN A 152      71.326  26.122  17.017  1.00 77.42           C
ATOM   1200  OD1 ASN A 152      70.640  25.720  16.085  1.00 79.14           O
ATOM   1201  ND2 ASN A 152      72.510  25.618  17.297  1.00 78.43           N
ATOM   1202  C   ASN A 152      69.759  27.705  20.086  1.00 76.60           C
ATOM   1203  O   ASN A 152      70.659  27.857  20.901  1.00 76.93           O
ATOM   1204  N   SER A 153      68.638  28.416  20.111  1.00 76.70           N
ATOM   1205  CA  SER A 153      68.447  29.454  21.112  1.00 76.58           C
ATOM   1206  CB  SER A 153      67.840  30.700  20.489  1.00 76.15           C
ATOM   1207  OG  SER A 153      68.698  31.216  19.507  1.00 75.73           O
ATOM   1208  C   SER A 153      67.584  28.987  22.267  1.00 76.95           C
ATOM   1209  O   SER A 153      67.372  29.733  23.222  1.00 77.53           O
ATOM   1210  N   LEU A 154      67.094  27.758  22.194  1.00 76.97           N
ATOM   1211  CA  LEU A 154      66.155  27.295  23.192  1.00 77.39           C
ATOM   1212  CB  LEU A 154      65.579  25.929  22.818  1.00 77.09           C
ATOM   1213  CG  LEU A 154      64.201  25.667  23.417  1.00 75.97           C
ATOM   1214  CD1 LEU A 154      63.179  26.556  22.747  1.00 74.49           C
ATOM   1215  CD2 LEU A 154      63.810  24.199  23.297  1.00 74.12           C
ATOM   1216  C   LEU A 154      66.777  27.285  24.577  1.00 78.03           C
ATOM   1217  O   LEU A 154      67.847  26.755  24.778  1.00 78.13           O
ATOM   1218  N   GLU A 155      66.103  27.936  25.512  1.00 79.44           N
ATOM   1219  CA  GLU A 155      66.543  28.022  26.895  1.00 81.01           C
ATOM   1220  CB  GLU A 155      66.628  29.484  27.342  1.00 80.51           C
ATOM   1221  CG  GLU A 155      67.758  30.251  26.684  1.00 82.18           C
ATOM   1222  CD  GLU A 155      67.859  31.728  27.128  1.00 83.49           C
ATOM   1223  OE1 GLU A 155      66.876  32.274  27.694  1.00 86.81           O
ATOM   1224  OE2 GLU A 155      68.935  32.351  26.895  1.00 86.09           O
ATOM   1225  C   GLU A 155      65.575  27.262  27.793  1.00 80.96           C
ATOM   1226  O   GLU A 155      65.945  26.789  28.874  1.00 81.50           O
ATOM   1227  N   GLN A 156      64.341  27.118  27.328  1.00 81.04           N
ATOM   1228  CA  GLN A 156      63.283  26.587  28.160  1.00 81.14           C
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ATOM   1229  CB  GLN A 156      62.472  27.756  28.659  1.00 81.38           C
ATOM   1230  CG  GLN A 156      61.649  27.479  29.874  1.00 85.18           C
ATOM   1231  CD  GLN A 156      61.111  28.768  30.460  1.00 89.29           C
ATOM   1232  OE1 GLN A 156      61.852  29.770  30.591  1.00 90.11           O
ATOM   1233  NE2 GLN A 156      59.820  28.764  30.807  1.00 88.67           N
ATOM   1234  C   GLN A 156      62.397  25.630  27.387  1.00 80.45           C
ATOM   1235  O   GLN A 156      61.861  25.996  26.346  1.00 80.59           O
ATOM   1236  N   LEU A 157      62.246  24.410  27.891  1.00 79.97           N
ATOM   1237  CA  LEU A 157      61.377  23.422  27.266  1.00 79.95           C
ATOM   1238  CB  LEU A 157      62.193  22.325  26.593  1.00 79.44           C
ATOM   1239  CG  LEU A 157      61.468  21.070  26.083  1.00 78.65           C
ATOM   1240  CD1 LEU A 157      60.797  21.299  24.749  1.00 78.24           C
ATOM   1241  CD2 LEU A 157      62.420  19.931  25.939  1.00 77.25           C
ATOM   1242  C   LEU A 157      60.450  22.814  28.304  1.00 80.68           C
ATOM   1243  O   LEU A 157      60.897  22.397  29.358  1.00 81.06           O
ATOM   1244  N   THR A 158      59.156  22.791  28.001  1.00 81.41           N
ATOM   1245  CA  THR A 158      58.160  22.143  28.827  1.00 82.13           C
ATOM   1246  CB  THR A 158      56.982  23.073  29.168  1.00 82.33           C
ATOM   1247  OG1 THR A 158      57.453  24.282  29.765  1.00 83.81           O
ATOM   1248  CG2 THR A 158      56.008  22.397  30.118  1.00 83.07           C
ATOM   1249  C   THR A 158      57.602  21.025  27.987  1.00 82.53           C
ATOM   1250  O   THR A 158      57.045  21.259  26.918  1.00 82.48           O
ATOM   1251  N   LEU A 159      57.741  19.806  28.473  1.00 83.36           N
ATOM   1252  CA  LEU A 159      57.235  18.664  27.763  1.00 84.38           C
ATOM   1253  CB  LEU A 159      58.395  17.718  27.482  1.00 84.20           C
ATOM   1254  CG  LEU A 159      58.184  16.312  26.942  1.00 84.96           C
ATOM   1255  CD1 LEU A 159      57.331  16.305  25.685  1.00 85.69           C
ATOM   1256  CD2 LEU A 159      59.547  15.730  26.661  1.00 86.82           C
ATOM   1257  C   LEU A 159      56.153  18.035  28.640  1.00 85.40           C
ATOM   1258  O   LEU A 159      56.453  17.403  29.651  1.00 86.18           O
ATOM   1259  N   GLU A 160      54.889  18.237  28.277  1.00 86.15           N
ATOM   1260  CA  GLU A 160      53.781  17.869  29.164  1.00 86.83           C
ATOM   1261  CB  GLU A 160      53.008  19.121  29.614  1.00 86.38           C
ATOM   1262  CG  GLU A 160      52.493  20.030  28.501  1.00 87.14           C
ATOM   1263  CD  GLU A 160      52.382  21.529  28.933  1.00 88.73           C
ATOM   1264  OE1 GLU A 160      52.227  21.813  30.159  1.00 89.93           O
ATOM   1265  OE2 GLU A 160      52.459  22.429  28.041  1.00 90.02           O
ATOM   1266  C   GLU A 160      52.831  16.812  28.602  1.00 86.69           C
ATOM   1267  O   GLU A 160      52.712  16.652  27.392  1.00 86.79           O
ATOM   1268  N   LYS A 161      52.190  16.068  29.499  1.00 86.62           N
ATOM   1269  CA  LYS A 161      51.015  15.256  29.159  1.00 86.81           C
ATOM   1270  CB  LYS A 161      49.848  16.171  28.751  1.00 86.54           C
ATOM   1271  CG  LYS A 161      49.061  16.681  29.944  1.00 88.17           C
ATOM   1272  CD  LYS A 161      48.232  17.921  29.641  1.00 90.67           C
ATOM   1273  CE  LYS A 161      48.950  19.212  30.047  1.00 90.85           C
ATOM   1274  NZ  LYS A 161      47.957  20.228  30.531  1.00 90.78           N
ATOM   1275  C   LYS A 161      51.180  14.111  28.146  1.00 86.71           C
ATOM   1276  O   LYS A 161      50.226  13.775  27.459  1.00 86.70           O
ATOM   1277  N   CYS A 162      52.358  13.497  28.079  1.00 86.88           N
ATOM   1278  CA  CYS A 162      52.633  12.436  27.088  1.00 87.52           C
ATOM   1279  CB  CYS A 162      54.084  12.475  26.652  1.00 87.50           C
ATOM   1280  SG  CYS A 162      54.494  13.987  25.900  1.00 92.68           S
ATOM   1281  C   CYS A 162      52.386  11.026  27.566  1.00 86.91           C
ATOM   1282  O   CYS A 162      52.284  10.767  28.767  1.00 87.07           O
ATOM   1283  N   ASN A 163      52.337  10.112  26.605  1.00 86.51           N
ATOM   1284  CA  ASN A 163      52.279   8.694  26.899  1.00 86.47           C
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ATOM	1285	CB	ASN	A	163	51.027	8.057	26.264	1.00	86.77	C
ATOM	1286	CG	ASN	A	163	49.739	8.318	27.077	1.00	87.86	C
ATOM	1287	OD1	ASN	A	163	48.921	7.409	27.259	1.00	88.84	O
ATOM	1288	ND2	ASN	A	163	49.552	9.559	27.553	1.00	88.33	N
ATOM	1289	C	ASN	A	163	53.592	7.995	26.498	1.00	85.97	C
ATOM	1290	O	ASN	A	163	53.598	6.891	25.945	1.00	86.26	O
ATOM	1291	N	LEU	A	164	54.705	8.664	26.788	1.00	85.38	N
ATOM	1292	CA	LEU	A	164	56.042	8.103	26.614	1.00	84.71	C
ATOM	1293	CB	LEU	A	164	57.077	9.222	26.519	1.00	84.47	C
ATOM	1294	CG	LEU	A	164	56.898	10.328	25.498	1.00	83.55	C
ATOM	1295	CD1	LEU	A	164	57.776	11.485	25.901	1.00	85.05	C
ATOM	1296	CD2	LEU	A	164	57.234	9.847	24.114	1.00	82.97	C
ATOM	1297	C	LEU	A	164	56.390	7.240	27.815	1.00	84.68	C
ATOM	1298	O	LEU	A	164	56.135	7.639	28.962	1.00	84.50	O
ATOM	1299	N	THR	A	165	56.991	6.079	27.560	1.00	84.55	N
ATOM	1300	CA	THR	A	165	57.366	5.160	28.639	1.00	84.77	C
ATOM	1301	CB	THR	A	165	57.676	3.743	28.126	1.00	85.01	C
ATOM	1302	OG1	THR	A	165	58.952	3.739	27.469	1.00	86.01	O
ATOM	1303	CG2	THR	A	165	56.591	3.246	27.163	1.00	85.83	C
ATOM	1304	C	THR	A	165	58.589	5.641	29.423	1.00	84.41	C
ATOM	1305	O	THR	A	165	58.720	5.347	30.612	1.00	84.59	O
ATOM	1306	N	SER	A	166	59.481	6.373	28.755	1.00	83.92	N
ATOM	1307	CA	SER	A	166	60.728	6.837	29.377	1.00	83.37	C
ATOM	1308	CB	SER	A	166	61.864	5.872	29.042	1.00	83.62	C
ATOM	1309	OG	SER	A	166	61.893	5.613	27.647	1.00	84.21	O
ATOM	1310	C	SER	A	166	61.109	8.241	28.941	1.00	82.64	C
ATOM	1311	O	SER	A	166	60.561	8.762	27.972	1.00	82.45	O
ATOM	1312	N	ILE	A	167	62.052	8.849	29.659	1.00	82.07	N
ATOM	1313	CA	ILE	A	167	62.586	10.167	29.282	1.00	81.37	C
ATOM	1314	CB	ILE	A	167	63.599	10.682	30.319	1.00	81.41	C
ATOM	1315	CG1	ILE	A	167	62.882	11.011	31.629	1.00	81.75	C
ATOM	1316	CD1	ILE	A	167	63.777	10.982	32.857	1.00	82.89	C
ATOM	1317	CG2	ILE	A	167	64.330	11.919	29.805	1.00	81.74	C
ATOM	1318	C	ILE	A	167	63.255	10.083	27.915	1.00	80.73	C
ATOM	1319	O	ILE	A	167	64.028	9.161	27.663	1.00	80.58	O
ATOM	1320	N	PRO	A	168	62.937	11.021	27.009	1.00	80.30	N
ATOM	1321	CA	PRO	A	168	63.607	10.994	25.705	1.00	80.15	C
ATOM	1322	CB	PRO	A	168	62.678	11.816	24.810	1.00	79.83	C
ATOM	1323	CG	PRO	A	168	61.960	12.718	25.735	1.00	80.33	C
ATOM	1324	CD	PRO	A	168	61.957	12.111	27.109	1.00	80.16	C
ATOM	1325	C	PRO	A	168	65.042	11.557	25.765	1.00	79.81	C
ATOM	1326	O	PRO	A	168	65.347	12.585	25.156	1.00	79.60	O
ATOM	1327	N	THR	A	169	65.897	10.852	26.510	1.00	79.49	N
ATOM	1328	CA	THR	A	169	67.311	11.176	26.692	1.00	78.95	C
ATOM	1329	CB	THR	A	169	68.091	9.968	27.276	1.00	78.96	C
ATOM	1330	OG1	THR	A	169	67.441	9.502	28.463	1.00	79.21	O
ATOM	1331	CG2	THR	A	169	69.515	10.360	27.620	1.00	78.76	C
ATOM	1332	C	THR	A	169	67.984	11.615	25.395	1.00	78.50	C
ATOM	1333	O	THR	A	169	68.518	12.716	25.323	1.00	78.56	O
ATOM	1334	N	GLU	A	170	67.952	10.758	24.380	1.00	77.93	N
ATOM	1335	CA	GLU	A	170	68.662	11.038	23.145	1.00	77.94	C
ATOM	1336	CB	GLU	A	170	68.640	9.842	22.201	1.00	77.98	C
ATOM	1337	CG	GLU	A	170	69.153	10.202	20.812	1.00	80.51	C
ATOM	1338	CD	GLU	A	170	69.803	9.041	20.070	1.00	84.42	C
ATOM	1339	OE1	GLU	A	170	69.836	7.913	20.621	1.00	86.43	O
ATOM	1340	OE2	GLU	A	170	70.291	9.267	18.930	1.00	85.31	O

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ATOM   1341  C   GLU A 170      68.155  12.295  22.431  1.00 77.59           C
ATOM   1342  O   GLU A 170      68.950  13.090  21.927  1.00 77.73           O
ATOM   1343  N   ALA A 171      66.840  12.471  22.387  1.00 76.81           N
ATOM   1344  CA  ALA A 171      66.273  13.600  21.683  1.00 76.03           C
ATOM   1345  CB  ALA A 171      64.812  13.391  21.445  1.00 76.25           C
ATOM   1346  C   ALA A 171      66.515  14.903  22.420  1.00 75.65           C
ATOM   1347  O   ALA A 171      66.677  15.932  21.794  1.00 75.80           O
ATOM   1348  N   LEU A 172      66.544  14.860  23.744  1.00 75.22           N
ATOM   1349  CA  LEU A 172      66.805  16.051  24.535  1.00 74.84           C
ATOM   1350  CB  LEU A 172      66.506  15.800  26.007  1.00 74.78           C
ATOM   1351  CG  LEU A 172      65.063  15.580  26.439  1.00 75.55           C
ATOM   1352  CD1 LEU A 172      65.040  15.224  27.925  1.00 75.79           C
ATOM   1353  CD2 LEU A 172      64.191  16.808  26.148  1.00 75.52           C
ATOM   1354  C   LEU A 172      68.252  16.486  24.407  1.00 74.60           C
ATOM   1355  O   LEU A 172      68.559  17.676  24.507  1.00 74.49           O
ATOM   1356  N   SER A 173      69.140  15.521  24.192  1.00 74.24           N
ATOM   1357  CA  SER A 173      70.577  15.789  24.201  1.00 74.08           C
ATOM   1358  CB  SER A 173      71.377  14.492  24.103  1.00 73.72           C
ATOM   1359  OG  SER A 173      71.303  13.970  22.800  1.00 73.27           O
ATOM   1360  C   SER A 173      71.002  16.765  23.102  1.00 74.16           C
ATOM   1361  O   SER A 173      72.101  17.301  23.144  1.00 74.88           O
ATOM   1362  N   HIS A 174      70.128  17.006  22.133  1.00 73.78           N
ATOM   1363  CA  HIS A 174      70.406  17.964  21.075  1.00 73.41           C
ATOM   1364  CB  HIS A 174      69.479  17.705  19.896  1.00 73.25           C
ATOM   1365  CG  HIS A 174      69.896  16.537  19.074  1.00 73.30           C
ATOM   1366  ND1 HIS A 174      70.003  15.268  19.593  1.00 75.20           N
ATOM   1367  CE1 HIS A 174      70.421  14.439  18.653  1.00 75.32           C
ATOM   1368  NE2 HIS A 174      70.599  15.131  17.542  1.00 75.33           N
ATOM   1369  CD2 HIS A 174      70.281  16.446  17.782  1.00 74.82           C
ATOM   1370  C   HIS A 174      70.321  19.418  21.536  1.00 73.35           C
ATOM   1371  O   HIS A 174      70.810  20.317  20.861  1.00 73.81           O
ATOM   1372  N   LEU A 175      69.722  19.644  22.696  1.00 73.24           N
ATOM   1373  CA  LEU A 175      69.491  20.992  23.197  1.00 72.85           C
ATOM   1374  CB  LEU A 175      68.110  21.084  23.835  1.00 72.25           C
ATOM   1375  CG  LEU A 175      66.902  20.730  22.979  1.00 72.10           C
ATOM   1376  CD1 LEU A 175      65.695  20.512  23.878  1.00 71.41           C
ATOM   1377  CD2 LEU A 175      66.614  21.821  21.948  1.00 70.65           C
ATOM   1378  C   LEU A 175      70.562  21.388  24.207  1.00 73.01           C
ATOM   1379  O   LEU A 175      70.282  21.548  25.397  1.00 73.17           O
ATOM   1380  N   HIS A 176      71.784  21.557  23.714  1.00 73.10           N
ATOM   1381  CA  HIS A 176      72.934  21.916  24.536  1.00 73.17           C
ATOM   1382  CB  HIS A 176      74.196  21.912  23.689  1.00 73.05           C
ATOM   1383  CG  HIS A 176      74.350  20.693  22.845  1.00 72.96           C
ATOM   1384  ND1 HIS A 176      74.682  19.464  23.370  1.00 73.50           N
ATOM   1385  CE1 HIS A 176      74.756  18.577  22.396  1.00 74.17           C
ATOM   1386  NE2 HIS A 176      74.478  19.187  21.257  1.00 75.37           N
ATOM   1387  CD2 HIS A 176      74.222  20.512  21.510  1.00 73.79           C
ATOM   1388  C   HIS A 176      72.837  23.271  25.233  1.00 73.36           C
ATOM   1389  O   HIS A 176      73.651  23.574  26.099  1.00 73.94           O
ATOM   1390  N   GLY A 177      71.865  24.091  24.864  1.00 73.41           N
ATOM   1391  CA  GLY A 177      71.764  25.422  25.450  1.00 73.84           C
ATOM   1392  C   GLY A 177      70.669  25.540  26.487  1.00 74.19           C
ATOM   1393  O   GLY A 177      70.538  26.571  27.150  1.00 74.26           O
ATOM   1394  N   LEU A 178      69.889  24.476  26.631  1.00 74.25           N
ATOM   1395  CA  LEU A 178      68.720  24.491  27.471  1.00 74.52           C
ATOM   1396  CB  LEU A 178      68.028  23.141  27.388  1.00 74.39           C
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ATOM	1397	CG	LEU	A	178	66.572	23.095	27.830	1.00	74.39	C
ATOM	1398	CD1	LEU	A	178	65.716	23.791	26.785	1.00	74.21	C
ATOM	1399	CD2	LEU	A	178	66.150	21.642	28.026	1.00	73.42	C
ATOM	1400	C	LEU	A	178	69.087	24.808	28.914	1.00	75.17	C
ATOM	1401	O	LEU	A	178	70.007	24.207	29.479	1.00	75.73	O
ATOM	1402	N	ILE	A	179	68.377	25.766	29.500	1.00	75.33	N
ATOM	1403	CA	ILE	A	179	68.602	26.148	30.889	1.00	75.40	C
ATOM	1404	CB	ILE	A	179	68.625	27.672	31.056	1.00	75.14	C
ATOM	1405	CG1	ILE	A	179	69.693	28.288	30.151	1.00	73.72	C
ATOM	1406	CD1	ILE	A	179	69.573	29.793	29.990	1.00	71.63	C
ATOM	1407	CG2	ILE	A	179	68.839	28.041	32.521	1.00	74.64	C
ATOM	1408	C	ILE	A	179	67.529	25.562	31.809	1.00	76.06	C
ATOM	1409	O	ILE	A	179	67.826	25.148	32.934	1.00	76.37	O
ATOM	1410	N	VAL	A	180	66.287	25.527	31.327	1.00	76.29	N
ATOM	1411	CA	VAL	A	180	65.151	25.078	32.134	1.00	76.31	C
ATOM	1412	CB	VAL	A	180	64.174	26.240	32.384	1.00	76.07	C
ATOM	1413	CG1	VAL	A	180	63.058	25.802	33.284	1.00	76.20	C
ATOM	1414	CG2	VAL	A	180	64.907	27.430	32.995	1.00	76.25	C
ATOM	1415	C	VAL	A	180	64.424	23.929	31.444	1.00	76.36	C
ATOM	1416	O	VAL	A	180	64.081	24.036	30.273	1.00	76.64	O
ATOM	1417	N	LEU	A	181	64.200	22.835	32.165	1.00	76.46	N
ATOM	1418	CA	LEU	A	181	63.499	21.671	31.611	1.00	76.52	C
ATOM	1419	CB	LEU	A	181	64.440	20.479	31.421	1.00	76.07	C
ATOM	1420	CG	LEU	A	181	63.781	19.233	30.827	1.00	76.35	C
ATOM	1421	CD1	LEU	A	181	63.205	19.547	29.476	1.00	77.17	C
ATOM	1422	CD2	LEU	A	181	64.699	18.012	30.723	1.00	76.03	C
ATOM	1423	C	LEU	A	181	62.369	21.279	32.532	1.00	77.14	C
ATOM	1424	O	LEU	A	181	62.592	20.985	33.705	1.00	77.68	O
ATOM	1425	N	ARG	A	182	61.152	21.277	32.000	1.00	77.63	N
ATOM	1426	CA	ARG	A	182	59.967	20.947	32.781	1.00	78.04	C
ATOM	1427	CB	ARG	A	182	59.024	22.137	32.812	1.00	77.71	C
ATOM	1428	CG	ARG	A	182	59.734	23.424	33.172	1.00	80.07	C
ATOM	1429	CD	ARG	A	182	58.777	24.523	33.535	1.00	83.55	C
ATOM	1430	NE	ARG	A	182	59.269	25.253	34.702	1.00	88.08	N
ATOM	1431	CZ	ARG	A	182	59.652	26.531	34.684	1.00	92.41	C
ATOM	1432	NH1	ARG	A	182	59.594	27.243	33.550	1.00	94.02	N
ATOM	1433	NH2	ARG	A	182	60.094	27.106	35.801	1.00	93.24	N
ATOM	1434	C	ARG	A	182	59.276	19.696	32.229	1.00	78.36	C
ATOM	1435	O	ARG	A	182	58.868	19.644	31.064	1.00	78.73	O
ATOM	1436	N	LEU	A	183	59.168	18.670	33.061	1.00	78.52	N
ATOM	1437	CA	LEU	A	183	58.486	17.450	32.651	1.00	78.52	C
ATOM	1438	CB	LEU	A	183	59.444	16.266	32.656	1.00	78.54	C
ATOM	1439	CG	LEU	A	183	60.753	16.370	31.867	1.00	78.27	C
ATOM	1440	CD1	LEU	A	183	61.519	15.050	31.959	1.00	77.22	C
ATOM	1441	CD2	LEU	A	183	60.491	16.742	30.421	1.00	77.38	C
ATOM	1442	C	LEU	A	183	57.269	17.195	33.534	1.00	78.78	C
ATOM	1443	O	LEU	A	183	57.389	16.761	34.681	1.00	78.52	O
ATOM	1444	N	ARG	A	184	56.095	17.480	32.973	1.00	79.25	N
ATOM	1445	CA	ARG	A	184	54.831	17.490	33.700	1.00	79.05	C
ATOM	1446	CB	ARG	A	184	54.166	18.846	33.550	1.00	78.74	C
ATOM	1447	CG	ARG	A	184	55.018	19.994	33.997	1.00	79.43	C
ATOM	1448	CD	ARG	A	184	54.286	21.309	33.813	1.00	80.49	C
ATOM	1449	NE	ARG	A	184	55.027	22.387	34.446	1.00	82.93	N
ATOM	1450	CZ	ARG	A	184	54.892	23.677	34.143	1.00	85.80	C
ATOM	1451	NH1	ARG	A	184	54.031	24.060	33.196	1.00	86.22	N
ATOM	1452	NH2	ARG	A	184	55.619	24.588	34.790	1.00	85.34	N

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ATOM   1453  C   ARG A 184      53.874  16.450  33.180  1.00 79.21           C
ATOM   1454  O   ARG A 184      53.831  16.173  31.979  1.00 79.41           O
ATOM   1455  N   HIS A 185      53.083  15.902  34.096  1.00 79.51           N
ATOM   1456  CA  HIS A 185      52.029  14.939  33.777  1.00 79.55           C
ATOM   1457  CB  HIS A 185      50.807  15.651  33.182  1.00 79.42           C
ATOM   1458  CG  HIS A 185      50.077  16.519  34.162  1.00 79.82           C
ATOM   1459  ND1 HIS A 185      50.279  17.884  34.247  1.00 79.35           N
ATOM   1460  CE1 HIS A 185      49.503  18.388  35.192  1.00 78.70           C
ATOM   1461  NE2 HIS A 185      48.805  17.399  35.724  1.00 79.82           N
ATOM   1462  CD2 HIS A 185      49.143  16.219  35.098  1.00 79.15           C
ATOM   1463  C   HIS A 185      52.498  13.810  32.868  1.00 79.52           C
ATOM   1464  O   HIS A 185      51.962  13.624  31.775  1.00 79.90           O
ATOM   1465  N   LEU A 186      53.503  13.063  33.313  1.00 79.42           N
ATOM   1466  CA  LEU A 186      53.976  11.907  32.539  1.00 79.54           C
ATOM   1467  CB  LEU A 186      55.455  12.055  32.150  1.00 79.70           C
ATOM   1468  CG  LEU A 186      55.924  13.352  31.483  1.00 79.30           C
ATOM   1469  CD1 LEU A 186      57.396  13.240  31.145  1.00 79.20           C
ATOM   1470  CD2 LEU A 186      55.121  13.643  30.232  1.00 80.19           C
ATOM   1471  C   LEU A 186      53.737  10.593  33.276  1.00 79.33           C
ATOM   1472  O   LEU A 186      53.604  10.576  34.486  1.00 79.43           O
ATOM   1473  N   ASN A 187      53.692   9.494  32.536  1.00 79.60           N
ATOM   1474  CA  ASN A 187      53.321   8.200  33.103  1.00 79.77           C
ATOM   1475  CB  ASN A 187      52.317   7.488  32.186  1.00 80.28           C
ATOM   1476  CG  ASN A 187      51.000   8.255  32.047  1.00 81.99           C
ATOM   1477  OD1 ASN A 187      50.595   9.014  32.950  1.00 83.24           O
ATOM   1478  ND2 ASN A 187      50.323   8.058  30.910  1.00 83.47           N
ATOM   1479  C   ASN A 187      54.519   7.310  33.387  1.00 79.27           C
ATOM   1480  O   ASN A 187      54.386   6.077  33.505  1.00 79.49           O
ATOM   1481  N   ILE A 188      55.686   7.939  33.497  1.00 78.31           N
ATOM   1482  CA  ILE A 188      56.942   7.226  33.710  1.00 77.74           C
ATOM   1483  CB  ILE A 188      58.133   8.092  33.240  1.00 77.88           C
ATOM   1484  CG1 ILE A 188      58.064   8.304  31.723  1.00 78.29           C
ATOM   1485  CD1 ILE A 188      58.610   9.664  31.270  1.00 79.72           C
ATOM   1486  CG2 ILE A 188      59.464   7.471  33.625  1.00 78.09           C
ATOM   1487  C   ILE A 188      57.071   6.833  35.191  1.00 77.18           C
ATOM   1488  O   ILE A 188      56.872   7.677  36.079  1.00 76.79           O
ATOM   1489  N   ASN A 189      57.383   5.558  35.461  1.00 75.91           N
ATOM   1490  CA  ASN A 189      57.445   5.094  36.844  1.00 75.02           C
ATOM   1491  CB  ASN A 189      56.830   3.700  36.975  1.00 75.70           C
ATOM   1492  CG  ASN A 189      57.715   2.612  36.400  1.00 75.46           C
ATOM   1493  OD1 ASN A 189      58.838   2.389  36.862  1.00 75.60           O
ATOM   1494  ND2 ASN A 189      57.205   1.921  35.390  1.00 75.36           N
ATOM   1495  C   ASN A 189      58.818   5.132  37.520  1.00 74.50           C
ATOM   1496  O   ASN A 189      58.916   4.945  38.732  1.00 74.35           O
ATOM   1497  N   ALA A 190      59.872   5.361  36.747  1.00 74.02           N
ATOM   1498  CA  ALA A 190      61.237   5.380  37.287  1.00 73.80           C
ATOM   1499  CB  ALA A 190      61.808   3.942  37.373  1.00 73.56           C
ATOM   1500  C   ALA A 190      62.171   6.264  36.460  1.00 73.63           C
ATOM   1501  O   ALA A 190      62.056   6.310  35.230  1.00 73.12           O
ATOM   1502  N   ILE A 191      63.089   6.955  37.143  1.00 73.63           N
ATOM   1503  CA  ILE A 191      64.197   7.635  36.479  1.00 73.70           C
ATOM   1504  CB  ILE A 191      64.372   9.069  36.961  1.00 73.64           C
ATOM   1505  CG1 ILE A 191      63.085   9.862  36.755  1.00 73.49           C
ATOM   1506  CD1 ILE A 191      63.163  11.277  37.285  1.00 72.48           C
ATOM   1507  CG2 ILE A 191      65.506   9.740  36.212  1.00 73.48           C
ATOM   1508  C   ILE A 191      65.495   6.858  36.698  1.00 74.19           C
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ATOM   1509  O   ILE A 191      66.068   6.881  37.793  1.00 73.91           O
ATOM   1510  N   ARG A 192      65.935   6.173  35.638  1.00 74.86           N
ATOM   1511  CA  ARG A 192      67.129   5.326  35.645  1.00 75.44           C
ATOM   1512  CB  ARG A 192      67.035   4.285  34.529  1.00 75.77           C
ATOM   1513  CG  ARG A 192      65.737   3.488  34.465  1.00 77.27           C
ATOM   1514  CD  ARG A 192      65.814   2.286  35.368  1.00 79.50           C
ATOM   1515  NE  ARG A 192      64.538   1.589  35.477  1.00 80.54           N
ATOM   1516  CZ  ARG A 192      64.072   1.064  36.609  1.00 81.09           C
ATOM   1517  NH1 ARG A 192      64.762   1.171  37.743  1.00 80.22           N
ATOM   1518  NH2 ARG A 192      62.901   0.442  36.611  1.00 81.91           N
ATOM   1519  C   ARG A 192      68.418   6.128  35.448  1.00 75.69           C
ATOM   1520  O   ARG A 192      68.388   7.346  35.216  1.00 75.49           O
ATOM   1521  N   ASP A 193      69.547   5.422  35.516  1.00 76.05           N
ATOM   1522  CA  ASP A 193      70.873   6.026  35.400  1.00 76.57           C
ATOM   1523  CB  ASP A 193      71.963   4.978  35.635  1.00 76.44           C
ATOM   1524  CG  ASP A 193      72.079   4.565  37.099  1.00 77.65           C
ATOM   1525  OD1 ASP A 193      71.772   5.397  37.994  1.00 76.34           O
ATOM   1526  OD2 ASP A 193      72.491   3.399  37.352  1.00 77.65           O
ATOM   1527  C   ASP A 193      71.109   6.720  34.064  1.00 76.90           C
ATOM   1528  O   ASP A 193      70.822   6.164  32.998  1.00 76.72           O
ATOM   1529  N   TYR A 194      71.637   7.940  34.142  1.00 77.57           N
ATOM   1530  CA  TYR A 194      72.062   8.719  32.970  1.00 78.57           C
ATOM   1531  CB  TYR A 194      73.208   8.015  32.200  1.00 78.71           C
ATOM   1532  CG  TYR A 194      74.244   7.328  33.078  1.00 79.28           C
ATOM   1533  CD1 TYR A 194      75.064   8.064  33.938  1.00 79.07           C
ATOM   1534  CE1 TYR A 194      76.012   7.433  34.744  1.00 78.83           C
ATOM   1535  CZ  TYR A 194      76.147   6.056  34.692  1.00 78.78           C
ATOM   1536  OH  TYR A 194      77.084   5.444  35.492  1.00 80.06           O
ATOM   1537  CE2 TYR A 194      75.354   5.297  33.848  1.00 78.32           C
ATOM   1538  CD2 TYR A 194      74.408   5.935  33.044  1.00 79.72           C
ATOM   1539  C   TYR A 194      70.900   9.055  32.025  1.00 78.81           C
ATOM   1540  O   TYR A 194      71.006   8.896  30.810  1.00 79.14           O
ATOM   1541  N   SER A 195      69.791   9.517  32.589  1.00 79.14           N
ATOM   1542  CA  SER A 195      68.632   9.900  31.790  1.00 79.03           C
ATOM   1543  CB  SER A 195      67.358   9.845  32.642  1.00 79.10           C
ATOM   1544  OG  SER A 195      67.149   8.547  33.174  1.00 78.02           O
ATOM   1545  C   SER A 195      68.794  11.288  31.163  1.00 79.17           C
ATOM   1546  O   SER A 195      68.002  11.670  30.304  1.00 79.48           O
ATOM   1547  N   PHE A 196      69.803  12.043  31.594  1.00 79.17           N
ATOM   1548  CA  PHE A 196      70.052  13.378  31.034  1.00 79.41           C
ATOM   1549  CB  PHE A 196      69.703  14.475  32.044  1.00 79.04           C
ATOM   1550  CG  PHE A 196      68.314  14.354  32.602  1.00 79.24           C
ATOM   1551  CD1 PHE A 196      67.224  14.876  31.913  1.00 79.55           C
ATOM   1552  CE1 PHE A 196      65.928  14.753  32.419  1.00 79.32           C
ATOM   1553  CZ  PHE A 196      65.713  14.099  33.626  1.00 78.92           C
ATOM   1554  CE2 PHE A 196      66.797  13.567  34.321  1.00 79.12           C
ATOM   1555  CD2 PHE A 196      68.089  13.695  33.803  1.00 79.25           C
ATOM   1556  C   PHE A 196      71.484  13.522  30.517  1.00 79.67           C
ATOM   1557  O   PHE A 196      72.435  13.667  31.285  1.00 80.19           O
ATOM   1558  N   LYS A 197      71.632  13.474  29.205  1.00 79.72           N
ATOM   1559  CA  LYS A 197      72.945  13.527  28.605  1.00 79.65           C
ATOM   1560  CB  LYS A 197      73.145  12.323  27.693  1.00 79.60           C
ATOM   1561  CG  LYS A 197      73.493  11.037  28.409  1.00 79.60           C
ATOM   1562  CD  LYS A 197      73.156   9.831  27.527  1.00 80.73           C
ATOM   1563  CE  LYS A 197      74.147   8.684  27.698  1.00 82.51           C
ATOM   1564  NZ  LYS A 197      74.217   8.181  29.104  1.00 83.87           N
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ATOM	1565	C	LYS	A	197	73.158	14.814	27.822	1.00	79.79	C
ATOM	1566	O	LYS	A	197	72.252	15.299	27.143	1.00	80.09	O
ATOM	1567	N	ARG	A	198	74.370	15.354	27.924	1.00	79.86	N
ATOM	1568	CA	ARG	A	198	74.832	16.506	27.127	1.00	80.03	C
ATOM	1569	CB	ARG	A	198	75.008	16.133	25.639	1.00	79.78	C
ATOM	1570	CG	ARG	A	198	75.998	15.002	25.370	1.00	80.07	C
ATOM	1571	CD	ARG	A	198	75.969	14.598	23.907	1.00	81.52	C
ATOM	1572	NE	ARG	A	198	77.110	15.105	23.122	1.00	85.43	N
ATOM	1573	CZ	ARG	A	198	77.021	15.655	21.900	1.00	86.35	C
ATOM	1574	NH1	ARG	A	198	78.123	16.068	21.281	1.00	86.06	N
ATOM	1575	NH2	ARG	A	198	75.839	15.819	21.294	1.00	86.07	N
ATOM	1576	C	ARG	A	198	73.986	17.778	27.297	1.00	79.63	C
ATOM	1577	O	ARG	A	198	74.026	18.665	26.452	1.00	79.57	O
ATOM	1578	N	LEU	A	199	73.232	17.859	28.393	1.00	79.71	N
ATOM	1579	CA	LEU	A	199	72.503	19.078	28.740	1.00	79.88	C
ATOM	1580	CB	LEU	A	199	71.168	18.767	29.429	1.00	79.38	C
ATOM	1581	CG	LEU	A	199	70.134	18.003	28.616	1.00	77.62	C
ATOM	1582	CD1	LEU	A	199	68.967	17.660	29.483	1.00	75.71	C
ATOM	1583	CD2	LEU	A	199	69.690	18.825	27.435	1.00	77.11	C
ATOM	1584	C	LEU	A	199	73.386	19.939	29.629	1.00	80.56	C
ATOM	1585	O	LEU	A	199	73.175	20.039	30.840	1.00	80.61	O
ATOM	1586	N	TYR	A	200	74.366	20.577	29.001	1.00	81.23	N
ATOM	1587	CA	TYR	A	200	75.462	21.226	29.717	1.00	81.86	C
ATOM	1588	CB	TYR	A	200	76.554	21.635	28.729	1.00	82.51	C
ATOM	1589	CG	TYR	A	200	77.014	20.530	27.799	1.00	82.88	C
ATOM	1590	CD1	TYR	A	200	77.627	19.374	28.307	1.00	82.85	C
ATOM	1591	CE1	TYR	A	200	78.068	18.354	27.452	1.00	83.59	C
ATOM	1592	CZ	TYR	A	200	77.898	18.497	26.066	1.00	84.17	C
ATOM	1593	OH	TYR	A	200	78.334	17.489	25.220	1.00	84.48	O
ATOM	1594	CE2	TYR	A	200	77.294	19.647	25.537	1.00	82.90	C
ATOM	1595	CD2	TYR	A	200	76.858	20.653	26.408	1.00	82.43	C
ATOM	1596	C	TYR	A	200	75.050	22.435	30.556	1.00	81.64	C
ATOM	1597	O	TYR	A	200	75.588	22.643	31.636	1.00	81.71	O
ATOM	1598	N	ARG	A	201	74.100	23.218	30.056	1.00	81.51	N
ATOM	1599	CA	ARG	A	201	73.753	24.499	30.660	1.00	81.32	C
ATOM	1600	CB	ARG	A	201	73.419	25.535	29.585	1.00	81.72	C
ATOM	1601	CG	ARG	A	201	74.367	25.618	28.418	1.00	83.55	C
ATOM	1602	CD	ARG	A	201	75.622	26.385	28.753	1.00	87.84	C
ATOM	1603	NE	ARG	A	201	76.228	26.912	27.532	1.00	91.78	N
ATOM	1604	CZ	ARG	A	201	77.512	27.240	27.395	1.00	93.89	C
ATOM	1605	NH1	ARG	A	201	78.364	27.099	28.408	1.00	94.78	N
ATOM	1606	NH2	ARG	A	201	77.945	27.709	26.231	1.00	94.57	N
ATOM	1607	C	ARG	A	201	72.557	24.407	31.590	1.00	80.70	C
ATOM	1608	O	ARG	A	201	72.127	25.431	32.126	1.00	80.88	O
ATOM	1609	N	LEU	A	202	72.013	23.203	31.771	1.00	79.71	N
ATOM	1610	CA	LEU	A	202	70.774	23.035	32.526	1.00	78.59	C
ATOM	1611	CB	LEU	A	202	70.249	21.606	32.428	1.00	78.26	C
ATOM	1612	CG	LEU	A	202	68.751	21.500	32.723	1.00	77.59	C
ATOM	1613	CD1	LEU	A	202	67.949	22.073	31.558	1.00	77.71	C
ATOM	1614	CD2	LEU	A	202	68.334	20.079	33.018	1.00	75.55	C
ATOM	1615	C	LEU	A	202	70.956	23.433	33.976	1.00	78.43	C
ATOM	1616	O	LEU	A	202	71.929	23.042	34.616	1.00	78.62	O
ATOM	1617	N	LYS	A	203	70.020	24.225	34.485	1.00	78.24	N
ATOM	1618	CA	LYS	A	203	70.128	24.798	35.826	1.00	77.80	C
ATOM	1619	CB	LYS	A	203	70.441	26.292	35.746	1.00	77.25	C
ATOM	1620	CG	LYS	A	203	71.843	26.595	35.266	1.00	77.31	C

ATOM	1621	CD	LYS	A	203	72.860	26.413	36.383	1.00	79.10	C
ATOM	1622	CE	LYS	A	203	74.289	26.444	35.883	1.00	80.16	C
ATOM	1623	NZ	LYS	A	203	74.637	25.214	35.103	1.00	83.10	N
ATOM	1624	C	LYS	A	203	68.868	24.565	36.642	1.00	77.73	C
ATOM	1625	O	LYS	A	203	68.916	24.510	37.875	1.00	78.08	O
ATOM	1626	N	VAL	A	204	67.743	24.424	35.946	1.00	77.35	N
ATOM	1627	CA	VAL	A	204	66.457	24.177	36.580	1.00	76.71	C
ATOM	1628	CB	VAL	A	204	65.507	25.356	36.361	1.00	76.31	C
ATOM	1629	CG1	VAL	A	204	64.127	25.036	36.901	1.00	75.89	C
ATOM	1630	CG2	VAL	A	204	66.050	26.603	37.003	1.00	76.20	C
ATOM	1631	C	VAL	A	204	65.838	22.918	35.981	1.00	76.57	C
ATOM	1632	O	VAL	A	204	65.655	22.837	34.769	1.00	76.75	O
ATOM	1633	N	LEU	A	205	65.528	21.941	36.824	1.00	76.49	N
ATOM	1634	CA	LEU	A	205	64.775	20.769	36.394	1.00	76.79	C
ATOM	1635	CB	LEU	A	205	65.625	19.506	36.521	1.00	76.56	C
ATOM	1636	CG	LEU	A	205	64.922	18.170	36.239	1.00	77.41	C
ATOM	1637	CD1	LEU	A	205	64.338	18.131	34.838	1.00	77.59	C
ATOM	1638	CD2	LEU	A	205	65.837	16.963	36.465	1.00	76.64	C
ATOM	1639	C	LEU	A	205	63.501	20.647	37.218	1.00	77.32	C
ATOM	1640	O	LEU	A	205	63.565	20.485	38.436	1.00	77.62	O
ATOM	1641	N	GLU	A	206	62.349	20.755	36.561	1.00	77.79	N
ATOM	1642	CA	GLU	A	206	61.057	20.559	37.223	1.00	78.56	C
ATOM	1643	CB	GLU	A	206	60.120	21.750	36.980	1.00	78.17	C
ATOM	1644	CG	GLU	A	206	58.668	21.436	37.452	1.00	81.35	C
ATOM	1645	CD	GLU	A	206	57.553	22.368	36.909	1.00	81.53	C
ATOM	1646	OE1	GLU	A	206	57.839	23.538	36.526	1.00	85.94	O
ATOM	1647	OE2	GLU	A	206	56.369	21.914	36.897	1.00	83.64	O
ATOM	1648	C	GLU	A	206	60.376	19.264	36.750	1.00	77.51	C
ATOM	1649	O	GLU	A	206	59.867	19.200	35.640	1.00	77.83	O
ATOM	1650	N	ILE	A	207	60.382	18.235	37.582	1.00	77.01	N
ATOM	1651	CA	ILE	A	207	59.579	17.038	37.335	1.00	76.38	C
ATOM	1652	CB	ILE	A	207	60.331	15.766	37.716	1.00	76.26	C
ATOM	1653	CG1	ILE	A	207	61.384	15.460	36.655	1.00	76.24	C
ATOM	1654	CD1	ILE	A	207	62.604	14.745	37.206	1.00	75.58	C
ATOM	1655	CG2	ILE	A	207	59.356	14.576	37.907	1.00	75.39	C
ATOM	1656	C	ILE	A	207	58.351	17.145	38.212	1.00	76.53	C
ATOM	1657	O	ILE	A	207	58.478	17.385	39.417	1.00	76.85	O
ATOM	1658	N	SER	A	208	57.162	16.982	37.632	1.00	76.12	N
ATOM	1659	CA	SER	A	208	55.935	17.142	38.418	1.00	75.60	C
ATOM	1660	CB	SER	A	208	55.609	18.623	38.613	1.00	75.20	C
ATOM	1661	OG	SER	A	208	54.896	19.080	37.499	1.00	75.44	O
ATOM	1662	C	SER	A	208	54.724	16.416	37.846	1.00	75.18	C
ATOM	1663	O	SER	A	208	54.573	16.281	36.629	1.00	74.97	O
ATOM	1664	N	HIS	A	209	53.855	15.971	38.750	1.00	74.84	N
ATOM	1665	CA	HIS	A	209	52.709	15.141	38.399	1.00	74.75	C
ATOM	1666	CB	HIS	A	209	51.658	15.959	37.633	1.00	74.35	C
ATOM	1667	CG	HIS	A	209	51.075	17.088	38.427	1.00	75.78	C
ATOM	1668	ND1	HIS	A	209	50.049	16.911	39.335	1.00	75.28	N
ATOM	1669	CE1	HIS	A	209	49.742	18.078	39.878	1.00	75.69	C
ATOM	1670	NE2	HIS	A	209	50.531	19.005	39.358	1.00	75.66	N
ATOM	1671	CD2	HIS	A	209	51.370	18.415	38.444	1.00	76.57	C
ATOM	1672	C	HIS	A	209	53.091	13.860	37.630	1.00	74.29	C
ATOM	1673	O	HIS	A	209	52.521	13.583	36.581	1.00	74.06	O
ATOM	1674	N	TRP	A	210	54.067	13.102	38.123	1.00	73.95	N
ATOM	1675	CA	TRP	A	210	54.229	11.723	37.627	1.00	74.67	C
ATOM	1676	CB	TRP	A	210	55.686	11.324	37.350	1.00	73.89	C

ATOM	1677	CG	TRP	A	210	56.454	12.240	36.423	1.00	73.90	C
ATOM	1678	CD1	TRP	A	210	56.131	13.524	36.062	1.00	72.19	C
ATOM	1679	NE1	TRP	A	210	57.097	14.043	35.237	1.00	70.62	N
ATOM	1680	CE2	TRP	A	210	58.085	13.118	35.067	1.00	71.34	C
ATOM	1681	CD2	TRP	A	210	57.713	11.959	35.803	1.00	72.48	C
ATOM	1682	CE3	TRP	A	210	58.560	10.847	35.792	1.00	71.76	C
ATOM	1683	CZ3	TRP	A	210	59.738	10.912	35.049	1.00	72.74	C
ATOM	1684	CH2	TRP	A	210	60.081	12.083	34.324	1.00	73.12	C
ATOM	1685	CZ2	TRP	A	210	59.263	13.189	34.319	1.00	72.15	C
ATOM	1686	C	TRP	A	210	53.625	10.803	38.676	1.00	75.18	C
ATOM	1687	O	TRP	A	210	54.301	10.416	39.636	1.00	75.42	O
ATOM	1688	N	PRO	A	211	52.336	10.473	38.518	1.00	75.66	N
ATOM	1689	CA	PRO	A	211	51.622	9.699	39.520	1.00	76.15	C
ATOM	1690	CB	PRO	A	211	50.286	9.412	38.831	1.00	76.29	C
ATOM	1691	CG	PRO	A	211	50.088	10.569	37.953	1.00	75.92	C
ATOM	1692	CD	PRO	A	211	51.459	10.802	37.382	1.00	75.71	C
ATOM	1693	C	PRO	A	211	52.305	8.382	39.917	1.00	76.41	C
ATOM	1694	O	PRO	A	211	52.164	7.965	41.062	1.00	75.82	O
ATOM	1695	N	TYR	A	212	53.049	7.761	38.999	1.00	77.09	N
ATOM	1696	CA	TYR	A	212	53.609	6.432	39.262	1.00	78.29	C
ATOM	1697	CB	TYR	A	212	53.281	5.422	38.139	1.00	78.79	C
ATOM	1698	CG	TYR	A	212	51.941	5.594	37.460	1.00	80.18	C
ATOM	1699	CD1	TYR	A	212	50.836	4.836	37.842	1.00	80.41	C
ATOM	1700	CE1	TYR	A	212	49.599	4.989	37.206	1.00	80.96	C
ATOM	1701	CZ	TYR	A	212	49.466	5.909	36.168	1.00	81.45	C
ATOM	1702	OH	TYR	A	212	48.259	6.078	35.524	1.00	80.92	O
ATOM	1703	CE2	TYR	A	212	50.551	6.676	35.765	1.00	83.24	C
ATOM	1704	CD2	TYR	A	212	51.784	6.512	36.412	1.00	83.13	C
ATOM	1705	C	TYR	A	212	55.114	6.389	39.563	1.00	78.30	C
ATOM	1706	O	TYR	A	212	55.667	5.291	39.738	1.00	78.55	O
ATOM	1707	N	LEU	A	213	55.768	7.547	39.647	1.00	78.00	N
ATOM	1708	CA	LEU	A	213	57.209	7.589	39.922	1.00	78.18	C
ATOM	1709	CB	LEU	A	213	57.749	8.989	39.630	1.00	78.49	C
ATOM	1710	CG	LEU	A	213	59.221	9.346	39.859	1.00	77.72	C
ATOM	1711	CD1	LEU	A	213	60.103	8.598	38.890	1.00	77.32	C
ATOM	1712	CD2	LEU	A	213	59.416	10.850	39.737	1.00	76.87	C
ATOM	1713	C	LEU	A	213	57.603	7.136	41.349	1.00	79.18	C
ATOM	1714	O	LEU	A	213	57.604	7.957	42.270	1.00	78.73	O
ATOM	1715	N	ASP	A	214	57.919	5.833	41.505	1.00	80.17	N
ATOM	1716	CA	ASP	A	214	58.414	5.229	42.762	1.00	81.38	C
ATOM	1717	CB	ASP	A	214	58.550	3.684	42.696	1.00	82.22	C
ATOM	1718	CG	ASP	A	214	57.342	2.958	42.100	1.00	85.20	C
ATOM	1719	OD1	ASP	A	214	56.348	2.729	42.843	1.00	87.35	O
ATOM	1720	OD2	ASP	A	214	57.435	2.532	40.909	1.00	88.23	O
ATOM	1721	C	ASP	A	214	59.846	5.666	43.033	1.00	81.47	C
ATOM	1722	O	ASP	A	214	60.198	6.081	44.140	1.00	81.73	O
ATOM	1723	N	THR	A	215	60.681	5.486	42.012	1.00	81.53	N
ATOM	1724	CA	THR	A	215	62.119	5.304	42.199	1.00	81.43	C
ATOM	1725	CB	THR	A	215	62.534	3.829	41.947	1.00	81.34	C
ATOM	1726	OG1	THR	A	215	61.942	3.382	40.730	1.00	80.37	O
ATOM	1727	CG2	THR	A	215	62.087	2.909	43.106	1.00	81.88	C
ATOM	1728	C	THR	A	215	63.007	6.180	41.325	1.00	81.44	C
ATOM	1729	O	THR	A	215	62.691	6.492	40.166	1.00	81.27	O
ATOM	1730	N	MET	A	216	64.138	6.544	41.919	1.00	81.41	N
ATOM	1731	CA	MET	A	216	65.169	7.366	41.306	1.00	81.38	C
ATOM	1732	CB	MET	A	216	65.141	8.775	41.899	1.00	80.38	C

ATOM	1733	CG	MET	A	216	63.920	9.564	41.521	1.00	80.55	C
ATOM	1734	SD	MET	A	216	64.015	11.328	41.988	1.00	82.99	S
ATOM	1735	CE	MET	A	216	65.586	11.870	41.285	1.00	81.59	C
ATOM	1736	C	MET	A	216	66.496	6.687	41.619	1.00	80.97	C
ATOM	1737	O	MET	A	216	66.929	6.659	42.778	1.00	81.27	O
ATOM	1738	N	THR	A	217	67.130	6.111	40.605	1.00	80.63	N
ATOM	1739	CA	THR	A	217	68.406	5.434	40.822	1.00	80.43	C
ATOM	1740	CB	THR	A	217	68.769	4.496	39.657	1.00	80.28	C
ATOM	1741	OG1	THR	A	217	69.073	5.269	38.497	1.00	81.17	O
ATOM	1742	CG2	THR	A	217	67.613	3.556	39.342	1.00	80.13	C
ATOM	1743	C	THR	A	217	69.508	6.474	41.100	1.00	80.35	C
ATOM	1744	O	THR	A	217	69.350	7.660	40.748	1.00	80.13	O
ATOM	1745	N	PRO	A	218	70.609	6.043	41.755	1.00	80.07	N
ATOM	1746	CA	PRO	A	218	71.675	6.930	42.246	1.00	80.00	C
ATOM	1747	CB	PRO	A	218	72.706	5.949	42.801	1.00	79.89	C
ATOM	1748	CG	PRO	A	218	71.912	4.765	43.175	1.00	79.91	C
ATOM	1749	CD	PRO	A	218	70.895	4.640	42.095	1.00	79.99	C
ATOM	1750	C	PRO	A	218	72.325	7.857	41.205	1.00	79.95	C
ATOM	1751	O	PRO	A	218	72.618	9.015	41.521	1.00	80.10	O
ATOM	1752	N	ASN	A	219	72.548	7.362	39.989	1.00	79.58	N
ATOM	1753	CA	ASN	A	219	73.160	8.180	38.944	1.00	79.29	C
ATOM	1754	CB	ASN	A	219	74.368	7.459	38.335	1.00	79.66	C
ATOM	1755	CG	ASN	A	219	75.453	7.182	39.359	1.00	80.90	C
ATOM	1756	OD1	ASN	A	219	75.543	7.862	40.388	1.00	82.95	O
ATOM	1757	ND2	ASN	A	219	76.277	6.179	39.091	1.00	81.68	N
ATOM	1758	C	ASN	A	219	72.170	8.631	37.870	1.00	78.78	C
ATOM	1759	O	ASN	A	219	72.535	8.860	36.721	1.00	78.77	O
ATOM	1760	N	CYS	A	220	70.914	8.771	38.257	1.00	78.23	N
ATOM	1761	CA	CYS	A	220	69.903	9.238	37.338	1.00	77.99	C
ATOM	1762	CB	CYS	A	220	68.510	8.938	37.899	1.00	78.26	C
ATOM	1763	SG	CYS	A	220	67.929	10.029	39.235	1.00	78.10	S
ATOM	1764	C	CYS	A	220	70.078	10.728	36.961	1.00	77.89	C
ATOM	1765	O	CYS	A	220	69.732	11.128	35.845	1.00	78.03	O
ATOM	1766	N	LEU	A	221	70.630	11.539	37.865	1.00	77.58	N
ATOM	1767	CA	LEU	A	221	70.962	12.937	37.521	1.00	77.64	C
ATOM	1768	CB	LEU	A	221	70.456	13.924	38.572	1.00	77.14	C
ATOM	1769	CG	LEU	A	221	69.113	13.651	39.235	1.00	77.30	C
ATOM	1770	CD1	LEU	A	221	68.956	14.590	40.405	1.00	76.88	C
ATOM	1771	CD2	LEU	A	221	67.960	13.779	38.243	1.00	77.22	C
ATOM	1772	C	LEU	A	221	72.458	13.162	37.297	1.00	77.81	C
ATOM	1773	O	LEU	A	221	72.947	14.285	37.439	1.00	78.01	O
ATOM	1774	N	TYR	A	222	73.179	12.103	36.943	1.00	77.86	N
ATOM	1775	CA	TYR	A	222	74.595	12.219	36.638	1.00	78.19	C
ATOM	1776	CB	TYR	A	222	75.164	10.908	36.112	1.00	78.70	C
ATOM	1777	CG	TYR	A	222	76.665	10.966	35.933	1.00	79.78	C
ATOM	1778	CD1	TYR	A	222	77.512	10.976	37.048	1.00	80.86	C
ATOM	1779	CE1	TYR	A	222	78.886	11.034	36.908	1.00	81.35	C
ATOM	1780	CZ	TYR	A	222	79.442	11.089	35.636	1.00	80.92	C
ATOM	1781	OH	TYR	A	222	80.817	11.144	35.521	1.00	81.13	O
ATOM	1782	CE2	TYR	A	222	78.629	11.086	34.505	1.00	80.45	C
ATOM	1783	CD2	TYR	A	222	77.242	11.029	34.662	1.00	80.33	C
ATOM	1784	C	TYR	A	222	74.861	13.289	35.605	1.00	77.89	C
ATOM	1785	O	TYR	A	222	74.155	13.398	34.606	1.00	78.41	O
ATOM	1786	N	GLY	A	223	75.895	14.075	35.850	1.00	77.51	N
ATOM	1787	CA	GLY	A	223	76.309	15.080	34.898	1.00	77.10	C
ATOM	1788	C	GLY	A	223	75.616	16.411	35.057	1.00	76.63	C

ATOM	1789	O	GLY	A	223	76.111	17.406	34.564	1.00	77.18	O
ATOM	1790	N	LEU	A	224	74.485	16.435	35.749	1.00	76.13	N
ATOM	1791	CA	LEU	A	224	73.701	17.658	35.911	1.00	75.80	C
ATOM	1792	CB	LEU	A	224	72.227	17.318	36.182	1.00	75.42	C
ATOM	1793	CG	LEU	A	224	71.343	16.795	35.041	1.00	74.45	C
ATOM	1794	CD1	LEU	A	224	69.880	16.827	35.455	1.00	73.46	C
ATOM	1795	CD2	LEU	A	224	71.543	17.575	33.754	1.00	73.13	C
ATOM	1796	C	LEU	A	224	74.229	18.551	37.031	1.00	75.75	C
ATOM	1797	O	LEU	A	224	74.509	18.067	38.121	1.00	76.65	O
ATOM	1798	N	ASN	A	225	74.348	19.848	36.760	1.00	75.21	N
ATOM	1799	CA	ASN	A	225	74.779	20.833	37.757	1.00	74.71	C
ATOM	1800	CB	ASN	A	225	76.073	21.522	37.288	1.00	74.50	C
ATOM	1801	CG	ASN	A	225	76.588	22.577	38.271	1.00	74.49	C
ATOM	1802	OD1	ASN	A	225	77.203	23.572	37.870	1.00	74.06	O
ATOM	1803	ND2	ASN	A	225	76.344	22.363	39.556	1.00	73.95	N
ATOM	1804	C	ASN	A	225	73.669	21.862	38.027	1.00	74.53	C
ATOM	1805	O	ASN	A	225	73.780	23.028	37.651	1.00	74.37	O
ATOM	1806	N	LEU	A	226	72.608	21.419	38.691	1.00	74.34	N
ATOM	1807	CA	LEU	A	226	71.401	22.228	38.879	1.00	74.46	C
ATOM	1808	CB	LEU	A	226	70.224	21.308	39.185	1.00	74.07	C
ATOM	1809	CG	LEU	A	226	69.887	20.263	38.127	1.00	73.92	C
ATOM	1810	CD1	LEU	A	226	68.746	19.382	38.610	1.00	72.71	C
ATOM	1811	CD2	LEU	A	226	69.569	20.928	36.768	1.00	73.57	C
ATOM	1812	C	LEU	A	226	71.496	23.275	39.982	1.00	74.76	C
ATOM	1813	O	LEU	A	226	72.186	23.077	40.966	1.00	75.14	O
ATOM	1814	N	THR	A	227	70.785	24.383	39.832	1.00	75.10	N
ATOM	1815	CA	THR	A	227	70.632	25.308	40.949	1.00	75.94	C
ATOM	1816	CB	THR	A	227	70.933	26.753	40.562	1.00	75.96	C
ATOM	1817	OG1	THR	A	227	70.335	27.043	39.295	1.00	76.43	O
ATOM	1818	CG2	THR	A	227	72.437	26.965	40.463	1.00	75.96	C
ATOM	1819	C	THR	A	227	69.241	25.209	41.569	1.00	76.50	C
ATOM	1820	O	THR	A	227	69.030	25.606	42.712	1.00	77.09	O
ATOM	1821	N	SER	A	228	68.303	24.624	40.832	1.00	76.86	N
ATOM	1822	CA	SER	A	228	66.927	24.493	41.293	1.00	76.91	C
ATOM	1823	CB	SER	A	228	66.101	25.592	40.627	1.00	77.18	C
ATOM	1824	OG	SER	A	228	64.877	25.854	41.285	1.00	78.92	O
ATOM	1825	C	SER	A	228	66.425	23.118	40.870	1.00	76.47	C
ATOM	1826	O	SER	A	228	66.547	22.765	39.708	1.00	76.68	O
ATOM	1827	N	LEU	A	229	65.888	22.330	41.799	1.00	76.26	N
ATOM	1828	CA	LEU	A	229	65.318	21.004	41.459	1.00	75.76	C
ATOM	1829	CB	LEU	A	229	66.265	19.870	41.845	1.00	75.71	C
ATOM	1830	CG	LEU	A	229	65.717	18.431	41.811	1.00	76.16	C
ATOM	1831	CD1	LEU	A	229	65.481	17.944	40.378	1.00	75.35	C
ATOM	1832	CD2	LEU	A	229	66.628	17.456	42.586	1.00	75.28	C
ATOM	1833	C	LEU	A	229	63.956	20.797	42.113	1.00	75.75	C
ATOM	1834	O	LEU	A	229	63.818	20.947	43.319	1.00	75.67	O
ATOM	1835	N	SER	A	230	62.954	20.469	41.301	1.00	75.90	N
ATOM	1836	CA	SER	A	230	61.599	20.227	41.779	1.00	75.95	C
ATOM	1837	CB	SER	A	230	60.651	21.276	41.242	1.00	75.99	C
ATOM	1838	OG	SER	A	230	60.928	22.539	41.816	1.00	78.12	O
ATOM	1839	C	SER	A	230	61.104	18.877	41.326	1.00	76.08	C
ATOM	1840	O	SER	A	230	60.974	18.634	40.134	1.00	76.59	O
ATOM	1841	N	ILE	A	231	60.855	17.989	42.278	1.00	75.98	N
ATOM	1842	CA	ILE	A	231	60.091	16.786	42.013	1.00	75.51	C
ATOM	1843	CB	ILE	A	231	60.898	15.539	42.286	1.00	75.10	C
ATOM	1844	CG1	ILE	A	231	62.259	15.638	41.587	1.00	74.94	C

ATOM	1845	CD1	ILE	A	231	63.330	14.687	42.134	1.00	71.33	C
ATOM	1846	CG2	ILE	A	231	60.119	14.341	41.835	1.00	74.47	C
ATOM	1847	C	ILE	A	231	58.858	16.834	42.914	1.00	75.86	C
ATOM	1848	O	ILE	A	231	58.951	16.594	44.117	1.00	76.31	O
ATOM	1849	N	THR	A	232	57.711	17.186	42.336	1.00	75.72	N
ATOM	1850	CA	THR	A	232	56.496	17.417	43.115	1.00	75.16	C
ATOM	1851	CB	THR	A	232	56.099	18.885	43.102	1.00	74.91	C
ATOM	1852	OG1	THR	A	232	55.721	19.235	41.772	1.00	74.18	O
ATOM	1853	CG2	THR	A	232	57.250	19.774	43.561	1.00	74.33	C
ATOM	1854	C	THR	A	232	55.329	16.616	42.546	1.00	75.48	C
ATOM	1855	O	THR	A	232	55.343	16.225	41.379	1.00	75.28	O
ATOM	1856	N	HIS	A	233	54.312	16.401	43.380	1.00	75.70	N
ATOM	1857	CA	HIS	A	233	53.148	15.584	43.032	1.00	75.86	C
ATOM	1858	CB	HIS	A	233	52.196	16.341	42.107	1.00	75.80	C
ATOM	1859	CG	HIS	A	233	51.495	17.477	42.771	1.00	76.41	C
ATOM	1860	ND1	HIS	A	233	50.455	17.290	43.656	1.00	76.46	N
ATOM	1861	CE1	HIS	A	233	50.036	18.469	44.086	1.00	77.90	C
ATOM	1862	NE2	HIS	A	233	50.770	19.411	43.516	1.00	77.50	N
ATOM	1863	CD2	HIS	A	233	51.689	18.817	42.687	1.00	76.83	C
ATOM	1864	C	HIS	A	233	53.507	14.243	42.415	1.00	75.75	C
ATOM	1865	O	HIS	A	233	52.881	13.828	41.443	1.00	76.04	O
ATOM	1866	N	CYS	A	234	54.515	13.571	42.952	1.00	75.41	N
ATOM	1867	CA	CYS	A	234	54.820	12.236	42.456	1.00	75.84	C
ATOM	1868	CB	CYS	A	234	56.239	12.156	41.889	1.00	75.97	C
ATOM	1869	SG	CYS	A	234	56.521	13.346	40.557	1.00	77.43	S
ATOM	1870	C	CYS	A	234	54.583	11.227	43.556	1.00	75.60	C
ATOM	1871	O	CYS	A	234	53.801	11.485	44.466	1.00	76.16	O
ATOM	1872	N	ASN	A	235	55.243	10.079	43.484	1.00	75.39	N
ATOM	1873	CA	ASN	A	235	54.973	9.023	44.442	1.00	74.91	C
ATOM	1874	CB	ASN	A	235	54.242	7.864	43.779	1.00	74.80	C
ATOM	1875	CG	ASN	A	235	53.174	7.266	44.676	1.00	76.38	C
ATOM	1876	OD1	ASN	A	235	52.919	6.048	44.656	1.00	74.97	O
ATOM	1877	ND2	ASN	A	235	52.539	8.126	45.481	1.00	77.15	N
ATOM	1878	C	ASN	A	235	56.245	8.566	45.123	1.00	74.58	C
ATOM	1879	O	ASN	A	235	56.432	7.371	45.413	1.00	74.84	O
ATOM	1880	N	LEU	A	236	57.122	9.537	45.373	1.00	73.89	N
ATOM	1881	CA	LEU	A	236	58.362	9.296	46.094	1.00	73.22	C
ATOM	1882	CB	LEU	A	236	59.308	10.474	45.914	1.00	73.05	C
ATOM	1883	CG	LEU	A	236	59.728	10.721	44.469	1.00	72.69	C
ATOM	1884	CD1	LEU	A	236	60.786	11.800	44.434	1.00	71.63	C
ATOM	1885	CD2	LEU	A	236	60.234	9.421	43.807	1.00	72.54	C
ATOM	1886	C	LEU	A	236	58.057	9.084	47.562	1.00	72.95	C
ATOM	1887	O	LEU	A	236	57.126	9.674	48.092	1.00	72.93	O
ATOM	1888	N	THR	A	237	58.818	8.221	48.220	1.00	72.75	N
ATOM	1889	CA	THR	A	237	58.518	7.921	49.613	1.00	72.58	C
ATOM	1890	CB	THR	A	237	58.117	6.435	49.850	1.00	72.29	C
ATOM	1891	OG1	THR	A	237	59.281	5.607	49.843	1.00	71.42	O
ATOM	1892	CG2	THR	A	237	57.133	5.960	48.799	1.00	71.78	C
ATOM	1893	C	THR	A	237	59.671	8.303	50.504	1.00	72.81	C
ATOM	1894	O	THR	A	237	59.477	8.555	51.692	1.00	73.38	O
ATOM	1895	N	ALA	A	238	60.868	8.333	49.932	1.00	72.82	N
ATOM	1896	CA	ALA	A	238	62.021	8.911	50.598	1.00	73.30	C
ATOM	1897	CB	ALA	A	238	63.124	7.915	50.679	1.00	72.76	C
ATOM	1898	C	ALA	A	238	62.490	10.144	49.828	1.00	74.05	C
ATOM	1899	O	ALA	A	238	62.107	10.363	48.676	1.00	73.63	O
ATOM	1900	N	LEU	A	239	63.320	10.954	50.468	1.00	75.05	N

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ATOM   1901  CA  LEU A 239      64.152  11.859  49.709  1.00 76.14           C
ATOM   1902  CB  LEU A 239      64.958  12.747  50.612  1.00 76.25           C
ATOM   1903  CG  LEU A 239      64.216  14.016  50.868  1.00 77.77           C
ATOM   1904  CD1 LEU A 239      63.444  13.854  52.158  1.00 78.87           C
ATOM   1905  CD2 LEU A 239      65.270  15.110  50.951  1.00 80.56           C
ATOM   1906  C   LEU A 239      65.130  11.049  48.904  1.00 76.41           C
ATOM   1907  O   LEU A 239      65.680  10.055  49.412  1.00 76.75           O
ATOM   1908  N   PRO A 240      65.368  11.478  47.654  1.00 76.66           N
ATOM   1909  CA  PRO A 240      66.382  10.845  46.821  1.00 76.80           C
ATOM   1910  CB  PRO A 240      66.015  11.322  45.411  1.00 76.95           C
ATOM   1911  CG  PRO A 240      65.323  12.638  45.620  1.00 76.45           C
ATOM   1912  CD  PRO A 240      64.694  12.606  46.975  1.00 76.24           C
ATOM   1913  C   PRO A 240      67.788  11.320  47.249  1.00 77.09           C
ATOM   1914  O   PRO A 240      68.456  12.071  46.513  1.00 77.37           O
ATOM   1915  N   TYR A 241      68.217  10.896  48.440  1.00 76.92           N
ATOM   1916  CA  TYR A 241      69.515  11.297  48.999  1.00 76.75           C
ATOM   1917  CB  TYR A 241      69.774  10.607  50.337  1.00 76.38           C
ATOM   1918  CG  TYR A 241      68.735  10.930  51.381  1.00 75.97           C
ATOM   1919  CD1 TYR A 241      68.565  12.240  51.847  1.00 75.10           C
ATOM   1920  CE1 TYR A 241      67.608  12.540  52.803  1.00 74.90           C
ATOM   1921  CZ  TYR A 241      66.811  11.526  53.308  1.00 75.52           C
ATOM   1922  OH  TYR A 241      65.853  11.807  54.249  1.00 76.28           O
ATOM   1923  CE2 TYR A 241      66.962  10.221  52.866  1.00 75.62           C
ATOM   1924  CD2 TYR A 241      67.920   9.929  51.905  1.00 75.35           C
ATOM   1925  C   TYR A 241      70.679  11.070  48.035  1.00 76.87           C
ATOM   1926  O   TYR A 241      71.379  12.022  47.676  1.00 77.04           O
ATOM   1927  N   LEU A 242      70.854   9.822  47.603  1.00 76.85           N
ATOM   1928  CA  LEU A 242      71.874   9.464  46.621  1.00 77.08           C
ATOM   1929  CB  LEU A 242      71.889   7.951  46.384  1.00 76.93           C
ATOM   1930  CG  LEU A 242      72.525   7.132  47.506  1.00 77.77           C
ATOM   1931  CD1 LEU A 242      72.211   5.647  47.340  1.00 79.11           C
ATOM   1932  CD2 LEU A 242      74.038   7.364  47.574  1.00 78.24           C
ATOM   1933  C   LEU A 242      71.731  10.196  45.286  1.00 77.22           C
ATOM   1934  O   LEU A 242      72.711  10.683  44.730  1.00 77.38           O
ATOM   1935  N   ALA A 243      70.515  10.273  44.764  1.00 77.39           N
ATOM   1936  CA  ALA A 243      70.320  10.868  43.452  1.00 77.57           C
ATOM   1937  CB  ALA A 243      68.890  10.719  43.005  1.00 77.57           C
ATOM   1938  C   ALA A 243      70.771  12.328  43.379  1.00 77.73           C
ATOM   1939  O   ALA A 243      71.206  12.783  42.317  1.00 77.96           O
ATOM   1940  N   VAL A 244      70.708  13.048  44.499  1.00 77.73           N
ATOM   1941  CA  VAL A 244      71.055  14.483  44.489  1.00 77.97           C
ATOM   1942  CB  VAL A 244      69.962  15.380  45.148  1.00 77.87           C
ATOM   1943  CG1 VAL A 244      68.596  15.028  44.607  1.00 77.63           C
ATOM   1944  CG2 VAL A 244      69.984  15.265  46.674  1.00 77.69           C
ATOM   1945  C   VAL A 244      72.444  14.836  45.046  1.00 78.08           C
ATOM   1946  O   VAL A 244      72.828  16.007  45.017  1.00 78.26           O
ATOM   1947  N   ARG A 245      73.192  13.828  45.507  1.00 78.01           N
ATOM   1948  CA  ARG A 245      74.513  14.018  46.153  1.00 78.13           C
ATOM   1949  CB  ARG A 245      75.150  12.669  46.542  1.00 78.07           C
ATOM   1950  CG  ARG A 245      75.283  11.673  45.371  1.00 79.71           C
ATOM   1951  CD  ARG A 245      76.511  10.759  45.494  1.00 82.47           C
ATOM   1952  NE  ARG A 245      76.420   9.464  44.796  1.00 84.03           N
ATOM   1953  CZ  ARG A 245      76.093   9.283  43.513  1.00 85.06           C
ATOM   1954  NH1 ARG A 245      76.069   8.065  43.002  1.00 84.97           N
ATOM   1955  NH2 ARG A 245      75.765  10.299  42.733  1.00 87.08           N
ATOM   1956  C   ARG A 245      75.541  14.884  45.390  1.00 77.98           C
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ATOM	1957	O	ARG	A	245	76.413	15.503	46.010	1.00 78.37	O
ATOM	1958	N	HIS	A	246	75.452	14.939	44.064	1.00 77.48	N
ATOM	1959	CA	HIS	A	246	76.397	15.755	43.309	1.00 77.07	C
ATOM	1960	CB	HIS	A	246	76.792	15.055	42.015	1.00 77.36	C
ATOM	1961	CG	HIS	A	246	77.597	13.812	42.234	1.00 79.13	C
ATOM	1962	ND1	HIS	A	246	77.550	12.730	41.380	1.00 80.11	N
ATOM	1963	CE1	HIS	A	246	78.369	11.790	41.822	1.00 80.41	C
ATOM	1964	NE2	HIS	A	246	78.927	12.213	42.943	1.00 79.73	N
ATOM	1965	CD2	HIS	A	246	78.464	13.475	43.223	1.00 79.73	C
ATOM	1966	C	HIS	A	246	75.963	17.200	43.040	1.00 76.43	C
ATOM	1967	O	HIS	A	246	76.721	17.973	42.473	1.00 76.17	O
ATOM	1968	N	LEU	A	247	74.762	17.570	43.468	1.00 75.81	N
ATOM	1969	CA	LEU	A	247	74.214	18.873	43.116	1.00 75.49	C
ATOM	1970	CB	LEU	A	247	72.683	18.807	43.049	1.00 75.80	C
ATOM	1971	CG	LEU	A	247	72.115	17.821	42.016	1.00 76.29	C
ATOM	1972	CD1	LEU	A	247	70.608	17.642	42.192	1.00 77.50	C
ATOM	1973	CD2	LEU	A	247	72.443	18.253	40.593	1.00 75.11	C
ATOM	1974	C	LEU	A	247	74.693	19.967	44.063	1.00 75.02	C
ATOM	1975	O	LEU	A	247	73.901	20.620	44.745	1.00 74.91	O
ATOM	1976	N	VAL	A	248	76.000	20.183	44.069	1.00 74.34	N
ATOM	1977	CA	VAL	A	248	76.639	20.974	45.112	1.00 73.91	C
ATOM	1978	CB	VAL	A	248	78.156	20.652	45.222	1.00 73.80	C
ATOM	1979	CG1	VAL	A	248	78.877	20.971	43.922	1.00 73.53	C
ATOM	1980	CG2	VAL	A	248	78.362	19.193	45.590	1.00 72.90	C
ATOM	1981	C	VAL	A	248	76.397	22.473	44.951	1.00 74.23	C
ATOM	1982	O	VAL	A	248	76.824	23.272	45.792	1.00 74.05	O
ATOM	1983	N	TYR	A	249	75.706	22.848	43.874	1.00 74.35	N
ATOM	1984	CA	TYR	A	249	75.364	24.235	43.629	1.00 74.33	C
ATOM	1985	CB	TYR	A	249	75.891	24.678	42.273	1.00 74.41	C
ATOM	1986	CG	TYR	A	249	77.362	24.982	42.322	1.00 75.01	C
ATOM	1987	CD1	TYR	A	249	77.816	26.251	42.684	1.00 74.36	C
ATOM	1988	CE1	TYR	A	249	79.151	26.527	42.754	1.00 73.82	C
ATOM	1989	CZ	TYR	A	249	80.069	25.534	42.466	1.00 74.45	C
ATOM	1990	OH	TYR	A	249	81.414	25.816	42.540	1.00 75.87	O
ATOM	1991	CE2	TYR	A	249	79.655	24.265	42.115	1.00 73.97	C
ATOM	1992	CD2	TYR	A	249	78.308	23.991	42.049	1.00 74.57	C
ATOM	1993	C	TYR	A	249	73.872	24.486	43.764	1.00 74.67	C
ATOM	1994	O	TYR	A	249	73.393	25.616	43.592	1.00 75.40	O
ATOM	1995	N	LEU	A	250	73.147	23.434	44.101	1.00 74.77	N
ATOM	1996	CA	LEU	A	250	71.714	23.518	44.314	1.00 75.44	C
ATOM	1997	CB	LEU	A	250	71.176	22.150	44.733	1.00 75.50	C
ATOM	1998	CG	LEU	A	250	69.683	21.928	44.565	1.00 75.38	C
ATOM	1999	CD1	LEU	A	250	69.343	22.030	43.084	1.00 74.99	C
ATOM	2000	CD2	LEU	A	250	69.299	20.571	45.145	1.00 75.09	C
ATOM	2001	C	LEU	A	250	71.371	24.547	45.377	1.00 75.66	C
ATOM	2002	O	LEU	A	250	71.977	24.553	46.442	1.00 75.70	O
ATOM	2003	N	ARG	A	251	70.403	25.409	45.076	1.00 76.18	N
ATOM	2004	CA	ARG	A	251	69.959	26.455	46.005	1.00 76.97	C
ATOM	2005	CB	ARG	A	251	70.094	27.846	45.386	1.00 76.39	C
ATOM	2006	CG	ARG	A	251	71.519	28.267	45.117	1.00 78.01	C
ATOM	2007	CD	ARG	A	251	71.642	29.753	44.753	1.00 78.01	C
ATOM	2008	NE	ARG	A	251	71.009	30.028	43.467	1.00 81.94	N
ATOM	2009	CZ	ARG	A	251	71.637	30.107	42.290	1.00 83.52	C
ATOM	2010	NH1	ARG	A	251	72.961	29.955	42.192	1.00 82.97	N
ATOM	2011	NH2	ARG	A	251	70.924	30.358	41.197	1.00 83.78	N
ATOM	2012	C	ARG	A	251	68.511	26.237	46.409	1.00 77.07	C

ATOM	2013	O	ARG	A	251	68.074	26.710	47.455	1.00	77.37	O
ATOM	2014	N	PHE	A	252	67.770	25.523	45.572	1.00	77.40	N
ATOM	2015	CA	PHE	A	252	66.334	25.397	45.737	1.00	77.70	C
ATOM	2016	CB	PHE	A	252	65.622	26.300	44.712	1.00	78.17	C
ATOM	2017	CG	PHE	A	252	64.111	26.300	44.830	1.00	80.27	C
ATOM	2018	CD1	PHE	A	252	63.438	27.415	45.355	1.00	81.56	C
ATOM	2019	CE1	PHE	A	252	62.024	27.411	45.468	1.00	81.78	C
ATOM	2020	CZ	PHE	A	252	61.286	26.276	45.049	1.00	80.49	C
ATOM	2021	CE2	PHE	A	252	61.951	25.172	44.522	1.00	80.31	C
ATOM	2022	CD2	PHE	A	252	63.350	25.183	44.415	1.00	80.90	C
ATOM	2023	C	PHE	A	252	65.917	23.943	45.556	1.00	77.28	C
ATOM	2024	O	PHE	A	252	66.204	23.337	44.528	1.00	77.54	O
ATOM	2025	N	LEU	A	253	65.231	23.391	46.551	1.00	77.00	N
ATOM	2026	CA	LEU	A	253	64.679	22.037	46.460	1.00	75.92	C
ATOM	2027	CB	LEU	A	253	65.439	21.103	47.380	1.00	75.90	C
ATOM	2028	CG	LEU	A	253	65.048	19.627	47.360	1.00	76.35	C
ATOM	2029	CD1	LEU	A	253	65.350	19.016	46.008	1.00	76.61	C
ATOM	2030	CD2	LEU	A	253	65.781	18.865	48.469	1.00	75.79	C
ATOM	2031	C	LEU	A	253	63.202	22.031	46.826	1.00	75.84	C
ATOM	2032	O	LEU	A	253	62.824	22.459	47.919	1.00	75.45	O
ATOM	2033	N	ASN	A	254	62.373	21.562	45.893	1.00	75.80	N
ATOM	2034	CA	ASN	A	254	60.931	21.398	46.102	1.00	75.69	C
ATOM	2035	CB	ASN	A	254	60.157	22.234	45.086	1.00	75.78	C
ATOM	2036	CG	ASN	A	254	58.712	22.484	45.494	1.00	76.85	C
ATOM	2037	OD1	ASN	A	254	58.157	21.758	46.329	1.00	77.75	O
ATOM	2038	ND2	ASN	A	254	58.093	23.534	44.894	1.00	77.45	N
ATOM	2039	C	ASN	A	254	60.542	19.928	45.954	1.00	75.48	C
ATOM	2040	O	ASN	A	254	60.591	19.382	44.850	1.00	75.99	O
ATOM	2041	N	LEU	A	255	60.174	19.286	47.057	1.00	74.70	N
ATOM	2042	CA	LEU	A	255	59.702	17.897	47.014	1.00	74.39	C
ATOM	2043	CB	LEU	A	255	60.599	16.971	47.834	1.00	73.34	C
ATOM	2044	CG	LEU	A	255	62.029	16.804	47.340	1.00	72.27	C
ATOM	2045	CD1	LEU	A	255	62.865	16.294	48.471	1.00	70.85	C
ATOM	2046	CD2	LEU	A	255	62.167	15.923	46.121	1.00	70.10	C
ATOM	2047	C	LEU	A	255	58.254	17.753	47.484	1.00	74.81	C
ATOM	2048	O	LEU	A	255	57.824	16.628	47.862	1.00	75.06	O
ATOM	2049	N	SER	A	256	57.523	18.876	47.430	1.00	74.28	N
ATOM	2050	CA	SER	A	256	56.138	18.983	47.887	1.00	74.38	C
ATOM	2051	CB	SER	A	256	55.567	20.369	47.566	1.00	74.59	C
ATOM	2052	OG	SER	A	256	56.183	21.402	48.318	1.00	75.53	O
ATOM	2053	C	SER	A	256	55.226	17.941	47.265	1.00	74.57	C
ATOM	2054	O	SER	A	256	55.386	17.566	46.097	1.00	74.64	O
ATOM	2055	N	TYR	A	257	54.255	17.491	48.051	1.00	74.82	N
ATOM	2056	CA	TYR	A	257	53.299	16.463	47.622	1.00	75.15	C
ATOM	2057	CB	TYR	A	257	52.296	17.038	46.609	1.00	74.86	C
ATOM	2058	CG	TYR	A	257	51.731	18.359	47.069	1.00	74.80	C
ATOM	2059	CD1	TYR	A	257	50.748	18.412	48.061	1.00	74.07	C
ATOM	2060	CE1	TYR	A	257	50.245	19.620	48.498	1.00	74.14	C
ATOM	2061	CZ	TYR	A	257	50.736	20.800	47.949	1.00	74.63	C
ATOM	2062	OH	TYR	A	257	50.248	22.009	48.377	1.00	75.90	O
ATOM	2063	CE2	TYR	A	257	51.714	20.779	46.974	1.00	73.64	C
ATOM	2064	CD2	TYR	A	257	52.203	19.563	46.539	1.00	74.55	C
ATOM	2065	C	TYR	A	257	53.943	15.159	47.120	1.00	75.24	C
ATOM	2066	O	TYR	A	257	53.659	14.712	46.016	1.00	75.81	O
ATOM	2067	N	ASN	A	258	54.829	14.576	47.923	1.00	75.19	N
ATOM	2068	CA	ASN	A	258	55.129	13.133	47.822	1.00	75.59	C

ATOM	2069	CB	ASN	A	258	56.580	12.840	47.415	1.00	75.80	C
ATOM	2070	CG	ASN	A	258	56.912	13.337	46.016	1.00	77.41	C
ATOM	2071	OD1	ASN	A	258	56.923	12.550	45.071	1.00	79.76	O
ATOM	2072	ND2	ASN	A	258	57.188	14.643	45.878	1.00	76.13	N
ATOM	2073	C	ASN	A	258	54.874	12.516	49.173	1.00	75.15	C
ATOM	2074	O	ASN	A	258	55.013	13.196	50.199	1.00	75.82	O
ATOM	2075	N	PRO	A	259	54.478	11.242	49.195	1.00	74.54	N
ATOM	2076	CA	PRO	A	259	54.299	10.546	50.463	1.00	74.13	C
ATOM	2077	CB	PRO	A	259	53.575	9.268	50.052	1.00	74.18	C
ATOM	2078	CG	PRO	A	259	53.970	9.052	48.624	1.00	74.33	C
ATOM	2079	CD	PRO	A	259	54.127	10.405	48.035	1.00	74.54	C
ATOM	2080	C	PRO	A	259	55.630	10.237	51.156	1.00	73.90	C
ATOM	2081	O	PRO	A	259	55.944	9.070	51.451	1.00	73.99	O
ATOM	2082	N	ILE	A	260	56.413	11.279	51.399	1.00	73.63	N
ATOM	2083	CA	ILE	A	260	57.667	11.133	52.113	1.00	73.85	C
ATOM	2084	CB	ILE	A	260	58.686	12.216	51.735	1.00	73.44	C
ATOM	2085	CG1	ILE	A	260	59.120	12.076	50.273	1.00	73.22	C
ATOM	2086	CD1	ILE	A	260	59.730	13.394	49.687	1.00	73.76	C
ATOM	2087	CG2	ILE	A	260	59.893	12.169	52.666	1.00	72.32	C
ATOM	2088	C	ILE	A	260	57.334	11.239	53.584	1.00	74.59	C
ATOM	2089	O	ILE	A	260	56.713	12.215	54.002	1.00	74.86	O
ATOM	2090	N	SER	A	261	57.741	10.245	54.371	1.00	75.20	N
ATOM	2091	CA	SER	A	261	57.353	10.221	55.776	1.00	76.06	C
ATOM	2092	CB	SER	A	261	56.877	8.826	56.185	1.00	75.99	C
ATOM	2093	OG	SER	A	261	57.943	7.896	56.116	1.00	76.86	O
ATOM	2094	C	SER	A	261	58.443	10.723	56.717	1.00	76.33	C
ATOM	2095	O	SER	A	261	58.196	10.960	57.899	1.00	76.62	O
ATOM	2096	N	THR	A	262	59.644	10.901	56.195	1.00	76.73	N
ATOM	2097	CA	THR	A	262	60.753	11.286	57.047	1.00	77.46	C
ATOM	2098	CB	THR	A	262	61.324	10.059	57.784	1.00	77.27	C
ATOM	2099	OG1	THR	A	262	62.555	10.416	58.412	1.00	78.56	O
ATOM	2100	CG2	THR	A	262	61.583	8.912	56.817	1.00	78.19	C
ATOM	2101	C	THR	A	262	61.887	12.013	56.317	1.00	77.67	C
ATOM	2102	O	THR	A	262	62.152	11.760	55.138	1.00	77.68	O
ATOM	2103	N	ILE	A	263	62.541	12.930	57.019	1.00	77.85	N
ATOM	2104	CA	ILE	A	263	63.843	13.385	56.569	1.00	78.48	C
ATOM	2105	CB	ILE	A	263	63.922	14.893	56.368	1.00	78.27	C
ATOM	2106	CG1	ILE	A	263	62.812	15.366	55.424	1.00	78.17	C
ATOM	2107	CD1	ILE	A	263	62.806	16.880	55.174	1.00	78.43	C
ATOM	2108	CG2	ILE	A	263	65.285	15.247	55.798	1.00	78.54	C
ATOM	2109	C	ILE	A	263	64.903	12.909	57.560	1.00	79.01	C
ATOM	2110	O	ILE	A	263	64.883	13.271	58.731	1.00	79.10	O
ATOM	2111	N	GLU	A	264	65.818	12.088	57.065	1.00	79.65	N
ATOM	2112	CA	GLU	A	264	66.855	11.480	57.880	1.00	80.70	C
ATOM	2113	CB	GLU	A	264	67.378	10.227	57.186	1.00	81.01	C
ATOM	2114	CG	GLU	A	264	66.330	9.135	57.165	1.00	85.03	C
ATOM	2115	CD	GLU	A	264	66.648	8.030	56.186	1.00	90.47	C
ATOM	2116	OE1	GLU	A	264	67.439	7.122	56.541	1.00	92.04	O
ATOM	2117	OE2	GLU	A	264	66.082	8.067	55.064	1.00	93.54	O
ATOM	2118	C	GLU	A	264	67.980	12.454	58.182	1.00	80.38	C
ATOM	2119	O	GLU	A	264	68.115	13.478	57.507	1.00	80.90	O
ATOM	2120	N	GLY	A	265	68.774	12.142	59.201	1.00	79.96	N
ATOM	2121	CA	GLY	A	265	69.845	13.023	59.639	1.00	79.52	C
ATOM	2122	C	GLY	A	265	71.131	12.801	58.881	1.00	79.51	C
ATOM	2123	O	GLY	A	265	71.458	11.675	58.530	1.00	79.55	O
ATOM	2124	N	SER	A	266	71.853	13.892	58.646	1.00	79.75	N

ATOM	2125	CA	SER A 266	73.150	13.904	57.961	1.00	80.15	C
ATOM	2126	CB	SER A 266	74.258	13.338	58.855	1.00	80.04	C
ATOM	2127	OG	SER A 266	74.125	13.794	60.183	1.00	80.74	O
ATOM	2128	C	SER A 266	73.138	13.186	56.616	1.00	80.31	C
ATOM	2129	O	SER A 266	73.985	12.342	56.349	1.00	80.91	O
ATOM	2130	N	MET A 267	72.188	13.525	55.764	1.00	80.37	N
ATOM	2131	CA	MET A 267	72.083	12.863	54.478	1.00	80.74	C
ATOM	2132	CB	MET A 267	70.835	12.008	54.456	1.00	80.77	C
ATOM	2133	CG	MET A 267	70.938	10.867	55.392	1.00	82.32	C
ATOM	2134	SD	MET A 267	71.496	9.416	54.540	1.00	85.51	S
ATOM	2135	CE	MET A 267	69.968	8.467	54.565	1.00	86.05	C
ATOM	2136	C	MET A 267	72.049	13.857	53.339	1.00	80.71	C
ATOM	2137	O	MET A 267	71.821	13.489	52.192	1.00	80.82	O
ATOM	2138	N	LEU A 268	72.272	15.120	53.669	1.00	80.81	N
ATOM	2139	CA	LEU A 268	72.238	16.178	52.690	1.00	80.95	C
ATOM	2140	CB	LEU A 268	70.955	16.991	52.837	1.00	80.82	C
ATOM	2141	CG	LEU A 268	69.598	16.351	52.560	1.00	80.21	C
ATOM	2142	CD1	LEU A 268	68.534	17.195	53.206	1.00	79.82	C
ATOM	2143	CD2	LEU A 268	69.349	16.236	51.068	1.00	79.70	C
ATOM	2144	C	LEU A 268	73.436	17.094	52.840	1.00	81.52	C
ATOM	2145	O	LEU A 268	73.521	18.101	52.150	1.00	82.06	O
ATOM	2146	N	HIS A 269	74.373	16.749	53.719	1.00	82.16	N
ATOM	2147	CA	HIS A 269	75.486	17.653	54.036	1.00	82.95	C
ATOM	2148	CB	HIS A 269	76.441	17.021	55.046	1.00	83.47	C
ATOM	2149	CG	HIS A 269	77.056	15.754	54.559	1.00	87.06	C
ATOM	2150	ND1	HIS A 269	76.446	14.526	54.715	1.00	90.00	N
ATOM	2151	CE1	HIS A 269	77.210	13.589	54.176	1.00	91.93	C
ATOM	2152	NE2	HIS A 269	78.281	14.168	53.659	1.00	91.99	N
ATOM	2153	CD2	HIS A 269	78.207	15.523	53.881	1.00	90.10	C
ATOM	2154	C	HIS A 269	76.266	18.134	52.814	1.00	82.49	C
ATOM	2155	O	HIS A 269	76.937	19.164	52.890	1.00	82.57	O
ATOM	2156	N	GLU A 270	76.162	17.399	51.703	1.00	82.19	N
ATOM	2157	CA	GLU A 270	76.918	17.693	50.478	1.00	82.09	C
ATOM	2158	CB	GLU A 270	76.918	16.482	49.540	1.00	82.48	C
ATOM	2159	CG	GLU A 270	77.740	15.286	50.045	1.00	86.00	C
ATOM	2160	CD	GLU A 270	79.264	15.554	50.096	1.00	90.99	C
ATOM	2161	OE1	GLU A 270	79.825	16.049	49.077	1.00	92.51	O
ATOM	2162	OE2	GLU A 270	79.901	15.256	51.151	1.00	91.75	O
ATOM	2163	C	GLU A 270	76.399	18.927	49.742	1.00	81.34	C
ATOM	2164	O	GLU A 270	77.104	19.506	48.907	1.00	81.08	O
ATOM	2165	N	LEU A 271	75.172	19.323	50.078	1.00	80.54	N
ATOM	2166	CA	LEU A 271	74.463	20.390	49.399	1.00	79.83	C
ATOM	2167	CB	LEU A 271	72.989	20.013	49.270	1.00	79.67	C
ATOM	2168	CG	LEU A 271	72.616	18.687	48.596	1.00	79.11	C
ATOM	2169	CD1	LEU A 271	71.122	18.574	48.481	1.00	78.91	C
ATOM	2170	CD2	LEU A 271	73.222	18.542	47.225	1.00	79.33	C
ATOM	2171	C	LEU A 271	74.637	21.742	50.109	1.00	79.86	C
ATOM	2172	O	LEU A 271	73.666	22.377	50.522	1.00	79.89	O
ATOM	2173	N	LEU A 272	75.890	22.175	50.217	1.00	79.72	N
ATOM	2174	CA	LEU A 272	76.289	23.357	50.972	1.00	79.76	C
ATOM	2175	CB	LEU A 272	77.730	23.728	50.640	1.00	80.26	C
ATOM	2176	CG	LEU A 272	78.859	22.714	50.547	1.00	81.52	C
ATOM	2177	CD1	LEU A 272	80.043	23.409	49.900	1.00	80.60	C
ATOM	2178	CD2	LEU A 272	79.207	22.121	51.948	1.00	83.22	C
ATOM	2179	C	LEU A 272	75.487	24.596	50.675	1.00	79.58	C
ATOM	2180	O	LEU A 272	75.274	25.422	51.557	1.00	80.00	O

ATOM	2181	N	ARG	A	273	75.095	24.755	49.419	1.00	79.36	N
ATOM	2182	CA	ARG	A	273	74.580	26.032	48.941	1.00	79.16	C
ATOM	2183	CB	ARG	A	273	75.109	26.307	47.545	1.00	78.92	C
ATOM	2184	CG	ARG	A	273	76.602	26.372	47.511	1.00	78.72	C
ATOM	2185	CD	ARG	A	273	77.104	26.750	46.146	1.00	78.00	C
ATOM	2186	NE	ARG	A	273	78.446	27.295	46.240	1.00	77.11	N
ATOM	2187	CZ	ARG	A	273	79.556	26.568	46.290	1.00	77.32	C
ATOM	2188	NH1	ARG	A	273	79.494	25.240	46.241	1.00	76.96	N
ATOM	2189	NH2	ARG	A	273	80.734	27.180	46.385	1.00	76.96	N
ATOM	2190	C	ARG	A	273	73.063	26.120	48.964	1.00	79.13	C
ATOM	2191	O	ARG	A	273	72.480	27.128	48.543	1.00	79.48	O
ATOM	2192	N	LEU	A	274	72.434	25.066	49.467	1.00	78.78	N
ATOM	2193	CA	LEU	A	274	70.987	24.998	49.554	1.00	78.74	C
ATOM	2194	CB	LEU	A	274	70.574	23.619	50.065	1.00	78.55	C
ATOM	2195	CG	LEU	A	274	69.208	23.058	49.693	1.00	78.06	C
ATOM	2196	CD1	LEU	A	274	68.992	23.055	48.207	1.00	78.03	C
ATOM	2197	CD2	LEU	A	274	69.100	21.657	50.226	1.00	78.41	C
ATOM	2198	C	LEU	A	274	70.473	26.101	50.471	1.00	78.76	C
ATOM	2199	O	LEU	A	274	71.006	26.306	51.557	1.00	78.71	O
ATOM	2200	N	GLN	A	275	69.464	26.838	50.019	1.00	78.89	N
ATOM	2201	CA	GLN	A	275	68.877	27.891	50.860	1.00	79.15	C
ATOM	2202	CB	GLN	A	275	69.310	29.296	50.423	1.00	79.06	C
ATOM	2203	CG	GLN	A	275	69.731	29.461	48.989	1.00	80.01	C
ATOM	2204	CD	GLN	A	275	70.455	30.796	48.766	1.00	80.46	C
ATOM	2205	OE1	GLN	A	275	69.861	31.868	48.909	1.00	82.31	O
ATOM	2206	NE2	GLN	A	275	71.741	30.729	48.415	1.00	81.12	N
ATOM	2207	C	GLN	A	275	67.364	27.826	51.062	1.00	78.49	C
ATOM	2208	O	GLN	A	275	66.846	28.390	52.015	1.00	78.46	O
ATOM	2209	N	GLU	A	276	66.671	27.117	50.181	1.00	78.12	N
ATOM	2210	CA	GLU	A	276	65.233	26.974	50.267	1.00	77.66	C
ATOM	2211	CB	GLU	A	276	64.572	27.894	49.239	1.00	77.65	C
ATOM	2212	CG	GLU	A	276	63.084	27.652	49.033	1.00	80.91	C
ATOM	2213	CD	GLU	A	276	62.292	28.901	48.618	1.00	84.83	C
ATOM	2214	OE1	GLU	A	276	62.885	29.974	48.325	1.00	86.74	O
ATOM	2215	OE2	GLU	A	276	61.044	28.799	48.592	1.00	86.60	O
ATOM	2216	C	GLU	A	276	64.852	25.507	50.050	1.00	77.12	C
ATOM	2217	O	GLU	A	276	65.200	24.913	49.021	1.00	76.93	O
ATOM	2218	N	ILE	A	277	64.159	24.928	51.035	1.00	76.56	N
ATOM	2219	CA	ILE	A	277	63.587	23.576	50.920	1.00	75.90	C
ATOM	2220	CB	ILE	A	277	64.155	22.598	51.959	1.00	75.52	C
ATOM	2221	CG1	ILE	A	277	65.661	22.446	51.773	1.00	75.21	C
ATOM	2222	CD1	ILE	A	277	66.308	21.437	52.679	1.00	72.83	C
ATOM	2223	CG2	ILE	A	277	63.469	21.220	51.838	1.00	75.88	C
ATOM	2224	C	ILE	A	277	62.077	23.631	51.087	1.00	75.78	C
ATOM	2225	O	ILE	A	277	61.591	24.071	52.128	1.00	76.50	O
ATOM	2226	N	GLN	A	278	61.343	23.201	50.062	1.00	75.21	N
ATOM	2227	CA	GLN	A	278	59.888	23.100	50.133	1.00	74.72	C
ATOM	2228	CB	GLN	A	278	59.214	23.740	48.916	1.00	74.89	C
ATOM	2229	CG	GLN	A	278	59.501	25.224	48.721	1.00	76.00	C
ATOM	2230	CD	GLN	A	278	58.595	26.109	49.545	1.00	78.06	C
ATOM	2231	OE1	GLN	A	278	57.473	25.725	49.879	1.00	79.18	O
ATOM	2232	NE2	GLN	A	278	59.068	27.309	49.866	1.00	77.17	N
ATOM	2233	C	GLN	A	278	59.498	21.639	50.191	1.00	74.40	C
ATOM	2234	O	GLN	A	278	59.930	20.825	49.381	1.00	74.46	O
ATOM	2235	N	LEU	A	279	58.675	21.308	51.166	1.00	73.78	N
ATOM	2236	CA	LEU	A	279	58.125	19.995	51.256	1.00	72.85	C

ATOM	2237	CB	LEU	A	279	59.065	19.087	52.037	1.00	72.95	C
ATOM	2238	CG	LEU	A	279	58.950	17.658	51.509	1.00	73.15	C
ATOM	2239	CD1	LEU	A	279	60.086	16.803	52.069	1.00	74.43	C
ATOM	2240	CD2	LEU	A	279	57.560	17.045	51.797	1.00	70.14	C
ATOM	2241	C	LEU	A	279	56.766	20.095	51.927	1.00	72.58	C
ATOM	2242	O	LEU	A	279	56.605	19.768	53.110	1.00	72.59	O
ATOM	2243	N	VAL	A	280	55.780	20.553	51.168	1.00	72.09	N
ATOM	2244	CA	VAL	A	280	54.476	20.787	51.754	1.00	72.16	C
ATOM	2245	CB	VAL	A	280	53.934	22.251	51.497	1.00	72.23	C
ATOM	2246	CG1	VAL	A	280	55.082	23.203	51.266	1.00	70.69	C
ATOM	2247	CG2	VAL	A	280	52.951	22.301	50.350	1.00	71.27	C
ATOM	2248	C	VAL	A	280	53.514	19.726	51.289	1.00	72.52	C
ATOM	2249	O	VAL	A	280	53.666	19.177	50.192	1.00	73.09	O
ATOM	2250	N	GLY	A	281	52.543	19.417	52.138	1.00	72.61	N
ATOM	2251	CA	GLY	A	281	51.546	18.414	51.822	1.00	73.10	C
ATOM	2252	C	GLY	A	281	52.136	17.031	51.643	1.00	73.32	C
ATOM	2253	O	GLY	A	281	51.572	16.189	50.936	1.00	73.31	O
ATOM	2254	N	GLY	A	282	53.274	16.792	52.279	1.00	73.58	N
ATOM	2255	CA	GLY	A	282	53.862	15.458	52.268	1.00	74.34	C
ATOM	2256	C	GLY	A	282	53.219	14.601	53.331	1.00	74.34	C
ATOM	2257	O	GLY	A	282	52.024	14.702	53.583	1.00	74.52	O
ATOM	2258	N	GLN	A	283	54.020	13.769	53.971	1.00	74.83	N
ATOM	2259	CA	GLN	A	283	53.541	12.922	55.051	1.00	75.27	C
ATOM	2260	CB	GLN	A	283	53.302	11.510	54.537	1.00	75.03	C
ATOM	2261	CG	GLN	A	283	51.967	11.292	53.857	1.00	75.49	C
ATOM	2262	CD	GLN	A	283	51.792	9.843	53.359	1.00	76.35	C
ATOM	2263	OE1	GLN	A	283	52.322	8.881	53.947	1.00	74.62	O
ATOM	2264	NE2	GLN	A	283	51.043	9.691	52.262	1.00	78.05	N
ATOM	2265	C	GLN	A	283	54.571	12.899	56.169	1.00	75.27	C
ATOM	2266	O	GLN	A	283	54.700	11.912	56.890	1.00	75.69	O
ATOM	2267	N	LEU	A	284	55.307	13.993	56.314	1.00	75.43	N
ATOM	2268	CA	LEU	A	284	56.414	14.024	57.248	1.00	75.34	C
ATOM	2269	CB	LEU	A	284	57.147	15.356	57.167	1.00	75.09	C
ATOM	2270	CG	LEU	A	284	58.000	15.559	55.923	1.00	74.35	C
ATOM	2271	CD1	LEU	A	284	58.720	16.871	56.039	1.00	73.44	C
ATOM	2272	CD2	LEU	A	284	58.991	14.413	55.774	1.00	74.55	C
ATOM	2273	C	LEU	A	284	55.925	13.794	58.657	1.00	75.56	C
ATOM	2274	O	LEU	A	284	55.138	14.582	59.173	1.00	76.01	O
ATOM	2275	N	ALA	A	285	56.375	12.697	59.256	1.00	75.34	N
ATOM	2276	CA	ALA	A	285	56.153	12.453	60.668	1.00	75.40	C
ATOM	2277	CB	ALA	A	285	55.885	10.981	60.925	1.00	75.44	C
ATOM	2278	C	ALA	A	285	57.350	12.929	61.482	1.00	75.50	C
ATOM	2279	O	ALA	A	285	57.199	13.296	62.643	1.00	75.88	O
ATOM	2280	N	VAL	A	286	58.540	12.912	60.879	1.00	75.52	N
ATOM	2281	CA	VAL	A	286	59.754	13.408	61.544	1.00	75.60	C
ATOM	2282	CB	VAL	A	286	60.590	12.298	62.204	1.00	75.37	C
ATOM	2283	CG1	VAL	A	286	61.304	12.844	63.431	1.00	75.53	C
ATOM	2284	CG2	VAL	A	286	59.758	11.133	62.561	1.00	75.51	C
ATOM	2285	C	VAL	A	286	60.736	14.067	60.593	1.00	75.73	C
ATOM	2286	O	VAL	A	286	61.034	13.529	59.520	1.00	76.19	O
ATOM	2287	N	VAL	A	287	61.255	15.214	61.016	1.00	75.34	N
ATOM	2288	CA	VAL	A	287	62.522	15.710	60.529	1.00	75.24	C
ATOM	2289	CB	VAL	A	287	62.427	17.190	60.208	1.00	75.11	C
ATOM	2290	CG1	VAL	A	287	63.728	17.705	59.638	1.00	75.30	C
ATOM	2291	CG2	VAL	A	287	61.297	17.420	59.231	1.00	75.09	C
ATOM	2292	C	VAL	A	287	63.513	15.456	61.667	1.00	75.61	C

ATOM	2293	O	VAL	A	287	63.411	16.076	62.723	1.00 75.81	O
ATOM	2294	N	GLU	A	288	64.442	14.518	61.457	1.00 75.88	N
ATOM	2295	CA	GLU	A	288	65.403	14.078	62.489	1.00 75.95	C
ATOM	2296	CB	GLU	A	288	66.138	12.811	62.038	1.00 76.14	C
ATOM	2297	CG	GLU	A	288	65.282	11.795	61.325	1.00 78.48	C
ATOM	2298	CD	GLU	A	288	64.947	10.576	62.166	1.00 82.56	C
ATOM	2299	OE1	GLU	A	288	64.782	10.700	63.410	1.00 83.30	O
ATOM	2300	OE2	GLU	A	288	64.838	9.479	61.562	1.00 84.41	O
ATOM	2301	C	GLU	A	288	66.449	15.148	62.803	1.00 75.35	C
ATOM	2302	O	GLU	A	288	66.773	15.951	61.949	1.00 75.11	O
ATOM	2303	N	PRO	A	289	67.011	15.141	64.028	1.00 75.40	N
ATOM	2304	CA	PRO	A	289	68.135	16.062	64.272	1.00 75.13	C
ATOM	2305	CB	PRO	A	289	68.636	15.648	65.657	1.00 74.87	C
ATOM	2306	CG	PRO	A	289	67.451	15.021	66.308	1.00 74.99	C
ATOM	2307	CD	PRO	A	289	66.696	14.327	65.220	1.00 75.20	C
ATOM	2308	C	PRO	A	289	69.230	15.850	63.234	1.00 74.68	C
ATOM	2309	O	PRO	A	289	69.413	14.727	62.774	1.00 74.60	O
ATOM	2310	N	TYR	A	290	69.921	16.929	62.869	1.00 74.31	N
ATOM	2311	CA	TYR	A	290	70.991	16.927	61.858	1.00 74.11	C
ATOM	2312	CB	TYR	A	290	72.117	15.942	62.217	1.00 74.27	C
ATOM	2313	CG	TYR	A	290	73.249	16.533	63.039	1.00 74.58	C
ATOM	2314	CD1	TYR	A	290	73.033	17.619	63.894	1.00 74.53	C
ATOM	2315	CE1	TYR	A	290	74.068	18.164	64.644	1.00 74.75	C
ATOM	2316	CZ	TYR	A	290	75.337	17.611	64.567	1.00 75.02	C
ATOM	2317	OH	TYR	A	290	76.354	18.152	65.322	1.00 75.12	O
ATOM	2318	CE2	TYR	A	290	75.583	16.523	63.737	1.00 74.73	C
ATOM	2319	CD2	TYR	A	290	74.537	15.990	62.980	1.00 74.75	C
ATOM	2320	C	TYR	A	290	70.526	16.732	60.411	1.00 74.19	C
ATOM	2321	O	TYR	A	290	71.354	16.706	59.497	1.00 74.53	O
ATOM	2322	N	ALA	A	291	69.216	16.611	60.193	1.00 73.94	N
ATOM	2323	CA	ALA	A	291	68.675	16.455	58.845	1.00 73.55	C
ATOM	2324	CB	ALA	A	291	67.169	16.567	58.851	1.00 73.32	C
ATOM	2325	C	ALA	A	291	69.277	17.487	57.911	1.00 73.75	C
ATOM	2326	O	ALA	A	291	69.527	17.206	56.745	1.00 73.72	O
ATOM	2327	N	PHE	A	292	69.527	18.682	58.434	1.00 74.05	N
ATOM	2328	CA	PHE	A	292	70.101	19.745	57.629	1.00 74.50	C
ATOM	2329	CB	PHE	A	292	69.205	20.981	57.644	1.00 74.35	C
ATOM	2330	CG	PHE	A	292	67.794	20.704	57.217	1.00 74.61	C
ATOM	2331	CD1	PHE	A	292	67.523	20.159	55.967	1.00 75.26	C
ATOM	2332	CE1	PHE	A	292	66.217	19.893	55.575	1.00 75.36	C
ATOM	2333	CZ	PHE	A	292	65.172	20.186	56.421	1.00 74.49	C
ATOM	2334	CE2	PHE	A	292	65.431	20.725	57.667	1.00 75.21	C
ATOM	2335	CD2	PHE	A	292	66.736	20.982	58.059	1.00 74.75	C
ATOM	2336	C	PHE	A	292	71.515	20.089	58.052	1.00 75.10	C
ATOM	2337	O	PHE	A	292	71.974	21.203	57.828	1.00 75.60	O
ATOM	2338	N	ARG	A	293	72.209	19.133	58.660	1.00 75.82	N
ATOM	2339	CA	ARG	A	293	73.629	19.295	58.934	1.00 76.54	C
ATOM	2340	CB	ARG	A	293	74.206	18.048	59.626	1.00 76.66	C
ATOM	2341	CG	ARG	A	293	75.573	18.262	60.294	1.00 78.40	C
ATOM	2342	CD	ARG	A	293	75.544	19.436	61.300	1.00 81.63	C
ATOM	2343	NE	ARG	A	293	76.818	19.621	62.005	1.00 83.16	N
ATOM	2344	CZ	ARG	A	293	77.006	20.460	63.026	1.00 83.77	C
ATOM	2345	NH1	ARG	A	293	78.201	20.546	63.603	1.00 83.46	N
ATOM	2346	NH2	ARG	A	293	76.001	21.208	63.478	1.00 83.48	N
ATOM	2347	C	ARG	A	293	74.356	19.588	57.617	1.00 76.64	C
ATOM	2348	O	ARG	A	293	74.066	18.976	56.587	1.00 76.28	O

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ATOM   2349  N   GLY A 294      75.270  20.553  57.660  1.00 77.09           N
ATOM   2350  CA  GLY A 294      76.062  20.926  56.496  1.00 77.50           C
ATOM   2351  C   GLY A 294      75.493  22.088  55.714  1.00 77.88           C
ATOM   2352  O   GLY A 294      76.180  22.677  54.883  1.00 78.38           O
ATOM   2353  N   LEU A 295      74.237  22.425  55.978  1.00 78.11           N
ATOM   2354  CA  LEU A 295      73.544  23.464  55.227  1.00 78.27           C
ATOM   2355  CB  LEU A 295      72.101  23.034  54.962  1.00 78.05           C
ATOM   2356  CG  LEU A 295      71.747  22.090  53.811  1.00 77.75           C
ATOM   2357  CD1 LEU A 295      72.678  20.908  53.661  1.00 77.62           C
ATOM   2358  CD2 LEU A 295      70.322  21.607  53.991  1.00 78.29           C
ATOM   2359  C   LEU A 295      73.594  24.802  55.968  1.00 78.65           C
ATOM   2360  O   LEU A 295      72.612  25.238  56.564  1.00 78.48           O
ATOM   2361  N   ASN A 296      74.754  25.446  55.924  1.00 79.40           N
ATOM   2362  CA  ASN A 296      74.976  26.702  56.632  1.00 80.41           C
ATOM   2363  CB  ASN A 296      76.432  27.158  56.471  1.00 81.03           C
ATOM   2364  CG  ASN A 296      77.355  26.559  57.525  1.00 83.12           C
ATOM   2365  OD1 ASN A 296      77.614  27.178  58.565  1.00 86.29           O
ATOM   2366  ND2 ASN A 296      77.839  25.341  57.275  1.00 84.27           N
ATOM   2367  C   ASN A 296      74.043  27.842  56.239  1.00 80.42           C
ATOM   2368  O   ASN A 296      73.838  28.764  57.025  1.00 80.51           O
ATOM   2369  N   TYR A 297      73.476  27.769  55.038  1.00 80.43           N
ATOM   2370  CA  TYR A 297      72.766  28.900  54.447  1.00 80.60           C
ATOM   2371  CB  TYR A 297      73.445  29.322  53.134  1.00 81.29           C
ATOM   2372  CG  TYR A 297      74.907  29.666  53.293  1.00 82.79           C
ATOM   2373  CD1 TYR A 297      75.307  30.756  54.072  1.00 83.13           C
ATOM   2374  CE1 TYR A 297      76.652  31.069  54.238  1.00 83.74           C
ATOM   2375  CZ  TYR A 297      77.623  30.292  53.613  1.00 83.98           C
ATOM   2376  OH  TYR A 297      78.958  30.614  53.772  1.00 83.72           O
ATOM   2377  CE2 TYR A 297      77.254  29.203  52.827  1.00 84.67           C
ATOM   2378  CD2 TYR A 297      75.898  28.893  52.674  1.00 84.44           C
ATOM   2379  C   TYR A 297      71.286  28.659  54.193  1.00 80.12           C
ATOM   2380  O   TYR A 297      70.683  29.355  53.375  1.00 80.19           O
ATOM   2381  N   LEU A 298      70.703  27.682  54.883  1.00 79.51           N
ATOM   2382  CA  LEU A 298      69.276  27.400  54.760  1.00 78.89           C
ATOM   2383  CB  LEU A 298      68.938  26.064  55.420  1.00 78.56           C
ATOM   2384  CG  LEU A 298      67.596  25.382  55.128  1.00 78.54           C
ATOM   2385  CD1 LEU A 298      67.344  25.217  53.637  1.00 77.51           C
ATOM   2386  CD2 LEU A 298      67.501  24.028  55.835  1.00 78.00           C
ATOM   2387  C   LEU A 298      68.461  28.556  55.364  1.00 79.20           C
ATOM   2388  O   LEU A 298      68.561  28.851  56.563  1.00 79.43           O
ATOM   2389  N   ARG A 299      67.687  29.225  54.513  1.00 78.96           N
ATOM   2390  CA  ARG A 299      66.881  30.379  54.902  1.00 79.12           C
ATOM   2391  CB  ARG A 299      67.001  31.481  53.854  1.00 78.81           C
ATOM   2392  CG  ARG A 299      68.218  32.370  53.981  1.00 80.66           C
ATOM   2393  CD  ARG A 299      68.368  33.322  52.770  1.00 81.30           C
ATOM   2394  NE  ARG A 299      67.079  33.823  52.268  1.00 85.82           N
ATOM   2395  CZ  ARG A 299      66.524  33.473  51.102  1.00 87.55           C
ATOM   2396  NH1 ARG A 299      67.138  32.620  50.277  1.00 87.99           N
ATOM   2397  NH2 ARG A 299      65.344  33.980  50.757  1.00 87.78           N
ATOM   2398  C   ARG A 299      65.405  30.023  55.053  1.00 78.16           C
ATOM   2399  O   ARG A 299      64.725  30.531  55.952  1.00 78.63           O
ATOM   2400  N   VAL A 300      64.911  29.170  54.158  1.00 76.87           N
ATOM   2401  CA  VAL A 300      63.489  28.890  54.065  1.00 75.90           C
ATOM   2402  CB  VAL A 300      62.884  29.369  52.726  1.00 75.96           C
ATOM   2403  CG1 VAL A 300      61.417  28.958  52.621  1.00 75.41           C
ATOM   2404  CG2 VAL A 300      63.035  30.876  52.562  1.00 76.04           C
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ATOM   2405  C   VAL A 300      63.215  27.408  54.190  1.00 75.52           C
ATOM   2406  O   VAL A 300      63.688  26.596  53.390  1.00 75.47           O
ATOM   2407  N   LEU A 301      62.442  27.063  55.206  1.00 74.89           N
ATOM   2408  CA  LEU A 301      61.901  25.734  55.308  1.00 73.96           C
ATOM   2409  CB  LEU A 301      62.400  25.028  56.566  1.00 73.95           C
ATOM   2410  CG  LEU A 301      61.917  23.579  56.621  1.00 73.88           C
ATOM   2411  CD1 LEU A 301      62.354  22.816  55.359  1.00 74.43           C
ATOM   2412  CD2 LEU A 301      62.408  22.895  57.867  1.00 73.21           C
ATOM   2413  C   LEU A 301      60.392  25.841  55.324  1.00 73.48           C
ATOM   2414  O   LEU A 301      59.822  26.569  56.150  1.00 73.45           O
ATOM   2415  N   ASN A 302      59.758  25.126  54.396  1.00 72.62           N
ATOM   2416  CA  ASN A 302      58.304  25.009  54.352  1.00 71.61           C
ATOM   2417  CB  ASN A 302      57.767  25.684  53.109  1.00 70.78           C
ATOM   2418  CG  ASN A 302      56.267  25.863  53.148  1.00 70.56           C
ATOM   2419  OD1 ASN A 302      55.665  26.289  52.164  1.00 67.16           O
ATOM   2420  ND2 ASN A 302      55.645  25.526  54.277  1.00 70.51           N
ATOM   2421  C   ASN A 302      57.814  23.546  54.426  1.00 71.70           C
ATOM   2422  O   ASN A 302      57.921  22.793  53.458  1.00 70.90           O
ATOM   2423  N   VAL A 303      57.273  23.175  55.589  1.00 71.74           N
ATOM   2424  CA  VAL A 303      56.780  21.820  55.835  1.00 71.59           C
ATOM   2425  CB  VAL A 303      57.601  21.086  56.929  1.00 71.67           C
ATOM   2426  CG1 VAL A 303      58.945  20.609  56.364  1.00 71.01           C
ATOM   2427  CG2 VAL A 303      57.771  21.960  58.188  1.00 70.49           C
ATOM   2428  C   VAL A 303      55.286  21.801  56.175  1.00 71.82           C
ATOM   2429  O   VAL A 303      54.812  20.950  56.944  1.00 71.50           O
ATOM   2430  N   SER A 304      54.549  22.738  55.578  1.00 72.09           N
ATOM   2431  CA  SER A 304      53.106  22.846  55.789  1.00 72.14           C
ATOM   2432  CB  SER A 304      52.569  24.071  55.071  1.00 71.62           C
ATOM   2433  OG  SER A 304      51.156  24.033  55.063  1.00 71.77           O
ATOM   2434  C   SER A 304      52.326  21.608  55.326  1.00 72.34           C
ATOM   2435  O   SER A 304      52.572  21.087  54.252  1.00 72.63           O
ATOM   2436  N   GLY A 305      51.379  21.153  56.133  1.00 72.55           N
ATOM   2437  CA  GLY A 305      50.466  20.110  55.707  1.00 73.32           C
ATOM   2438  C   GLY A 305      51.050  18.718  55.816  1.00 74.17           C
ATOM   2439  O   GLY A 305      50.899  17.895  54.911  1.00 74.21           O
ATOM   2440  N   ASN A 306      51.708  18.455  56.936  1.00 74.76           N
ATOM   2441  CA  ASN A 306      52.327  17.171  57.187  1.00 75.46           C
ATOM   2442  CB  ASN A 306      53.847  17.331  57.253  1.00 75.63           C
ATOM   2443  CG  ASN A 306      54.480  17.476  55.874  1.00 76.36           C
ATOM   2444  OD1 ASN A 306      54.765  16.474  55.209  1.00 76.91           O
ATOM   2445  ND2 ASN A 306      54.719  18.719  55.447  1.00 74.76           N
ATOM   2446  C   ASN A 306      51.760  16.600  58.477  1.00 75.95           C
ATOM   2447  O   ASN A 306      50.738  17.092  58.957  1.00 76.13           O
ATOM   2448  N   GLN A 307      52.401  15.564  59.021  1.00 76.33           N
ATOM   2449  CA  GLN A 307      51.991  14.974  60.285  1.00 76.99           C
ATOM   2450  CB  GLN A 307      51.861  13.460  60.176  1.00 76.86           C
ATOM   2451  CG  GLN A 307      51.017  12.885  59.042  1.00 78.97           C
ATOM   2452  CD  GLN A 307      51.221  11.334  58.894  1.00 79.34           C
ATOM   2453  OE1 GLN A 307      51.760  10.665  59.795  1.00 80.80           O
ATOM   2454  NE2 GLN A 307      50.799  10.782  57.751  1.00 81.75           N
ATOM   2455  C   GLN A 307      53.014  15.268  61.386  1.00 76.47           C
ATOM   2456  O   GLN A 307      53.172  14.454  62.309  1.00 76.54           O
ATOM   2457  N   LEU A 308      53.706  16.407  61.302  1.00 75.77           N
ATOM   2458  CA  LEU A 308      54.751  16.732  62.279  1.00 75.46           C
ATOM   2459  CB  LEU A 308      55.622  17.867  61.767  1.00 75.42           C
ATOM   2460  CG  LEU A 308      56.541  17.576  60.589  1.00 74.92           C
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ATOM	2461	CD1	LEU	A	308	57.224	18.859	60.219	1.00	73.68	C
ATOM	2462	CD2	LEU	A	308	57.552	16.495	60.945	1.00	74.26	C
ATOM	2463	C	LEU	A	308	54.211	17.117	63.651	1.00	75.64	C
ATOM	2464	O	LEU	A	308	53.279	17.911	63.748	1.00	75.69	O
ATOM	2465	N	THR	A	309	54.795	16.561	64.712	1.00	75.73	N
ATOM	2466	CA	THR	A	309	54.385	16.939	66.065	1.00	75.79	C
ATOM	2467	CB	THR	A	309	54.038	15.728	66.958	1.00	75.65	C
ATOM	2468	OG1	THR	A	309	55.232	15.046	67.343	1.00	75.33	O
ATOM	2469	CG2	THR	A	309	53.094	14.778	66.239	1.00	75.31	C
ATOM	2470	C	THR	A	309	55.372	17.872	66.765	1.00	76.14	C
ATOM	2471	O	THR	A	309	54.991	18.586	67.688	1.00	76.06	O
ATOM	2472	N	THR	A	310	56.632	17.855	66.338	1.00	76.73	N
ATOM	2473	CA	THR	A	310	57.579	18.944	66.642	1.00	77.44	C
ATOM	2474	CB	THR	A	310	58.448	18.701	67.898	1.00	77.53	C
ATOM	2475	OG1	THR	A	310	58.966	17.367	67.871	1.00	77.81	O
ATOM	2476	CG2	THR	A	310	57.670	18.996	69.207	1.00	78.51	C
ATOM	2477	C	THR	A	310	58.580	19.159	65.532	1.00	77.47	C
ATOM	2478	O	THR	A	310	58.746	18.310	64.653	1.00	77.92	O
ATOM	2479	N	LEU	A	311	59.256	20.302	65.602	1.00	77.23	N
ATOM	2480	CA	LEU	A	311	60.477	20.530	64.860	1.00	76.78	C
ATOM	2481	CB	LEU	A	311	60.285	21.656	63.849	1.00	76.68	C
ATOM	2482	CG	LEU	A	311	61.326	21.718	62.736	1.00	76.27	C
ATOM	2483	CD1	LEU	A	311	61.152	20.551	61.785	1.00	75.72	C
ATOM	2484	CD2	LEU	A	311	61.173	23.017	62.005	1.00	77.10	C
ATOM	2485	C	LEU	A	311	61.604	20.857	65.840	1.00	76.63	C
ATOM	2486	O	LEU	A	311	61.676	21.961	66.379	1.00	76.16	O
ATOM	2487	N	GLU	A	312	62.482	19.889	66.079	1.00	76.72	N
ATOM	2488	CA	GLU	A	312	63.612	20.123	66.976	1.00	77.12	C
ATOM	2489	CB	GLU	A	312	64.303	18.816	67.331	1.00	77.29	C
ATOM	2490	CG	GLU	A	312	63.439	17.883	68.169	1.00	79.57	C
ATOM	2491	CD	GLU	A	312	64.237	17.160	69.239	1.00	83.48	C
ATOM	2492	OE1	GLU	A	312	65.205	16.437	68.889	1.00	85.71	O
ATOM	2493	OE2	GLU	A	312	63.903	17.322	70.437	1.00	84.42	O
ATOM	2494	C	GLU	A	312	64.613	21.130	66.408	1.00	76.87	C
ATOM	2495	O	GLU	A	312	64.901	21.131	65.217	1.00	77.20	O
ATOM	2496	N	GLU	A	313	65.129	21.996	67.269	1.00	76.56	N
ATOM	2497	CA	GLU	A	313	66.079	23.025	66.872	1.00	76.29	C
ATOM	2498	CB	GLU	A	313	66.441	23.863	68.093	1.00	76.60	C
ATOM	2499	CG	GLU	A	313	67.339	25.041	67.809	1.00	77.89	C
ATOM	2500	CD	GLU	A	313	67.501	25.948	69.005	1.00	80.36	C
ATOM	2501	OE1	GLU	A	313	66.903	25.664	70.065	1.00	82.03	O
ATOM	2502	OE2	GLU	A	313	68.223	26.959	68.889	1.00	81.77	O
ATOM	2503	C	GLU	A	313	67.342	22.422	66.268	1.00	75.78	C
ATOM	2504	O	GLU	A	313	67.988	23.022	65.409	1.00	75.82	O
ATOM	2505	N	SER	A	314	67.682	21.224	66.721	1.00	75.40	N
ATOM	2506	CA	SER	A	314	68.905	20.555	66.308	1.00	75.14	C
ATOM	2507	CB	SER	A	314	69.213	19.395	67.247	1.00	75.02	C
ATOM	2508	OG	SER	A	314	68.126	18.489	67.296	1.00	76.10	O
ATOM	2509	C	SER	A	314	68.878	20.064	64.864	1.00	74.83	C
ATOM	2510	O	SER	A	314	69.898	19.611	64.351	1.00	74.91	O
ATOM	2511	N	VAL	A	315	67.729	20.152	64.205	1.00	74.53	N
ATOM	2512	CA	VAL	A	315	67.668	19.741	62.814	1.00	74.39	C
ATOM	2513	CB	VAL	A	315	66.218	19.477	62.278	1.00	74.24	C
ATOM	2514	CG1	VAL	A	315	65.384	18.733	63.288	1.00	73.41	C
ATOM	2515	CG2	VAL	A	315	65.535	20.742	61.870	1.00	73.84	C
ATOM	2516	C	VAL	A	315	68.432	20.737	61.943	1.00	74.60	C

ATOM	2517	O	VAL	A	315	68.905	20.382	60.863	1.00	74.91	O
ATOM	2518	N	PHE	A	316	68.592	21.962	62.437	1.00	74.46	N
ATOM	2519	CA	PHE	A	316	69.253	23.009	61.668	1.00	74.65	C
ATOM	2520	CB	PHE	A	316	68.525	24.339	61.867	1.00	73.86	C
ATOM	2521	CG	PHE	A	316	67.117	24.310	61.368	1.00	73.12	C
ATOM	2522	CD1	PHE	A	316	66.841	24.513	60.020	1.00	71.18	C
ATOM	2523	CE1	PHE	A	316	65.539	24.447	59.546	1.00	71.28	C
ATOM	2524	CZ	PHE	A	316	64.487	24.175	60.421	1.00	71.57	C
ATOM	2525	CE2	PHE	A	316	64.746	23.964	61.771	1.00	71.80	C
ATOM	2526	CD2	PHE	A	316	66.063	24.020	62.237	1.00	72.52	C
ATOM	2527	C	PHE	A	316	70.748	23.134	61.956	1.00	75.57	C
ATOM	2528	O	PHE	A	316	71.186	23.025	63.113	1.00	76.15	O
ATOM	2529	N	HIS	A	317	71.536	23.347	60.904	1.00	76.32	N
ATOM	2530	CA	HIS	A	317	72.945	23.654	61.096	1.00	77.07	C
ATOM	2531	CB	HIS	A	317	73.739	23.585	59.790	1.00	77.10	C
ATOM	2532	CG	HIS	A	317	75.217	23.730	59.988	1.00	78.01	C
ATOM	2533	ND1	HIS	A	317	76.063	22.646	60.104	1.00	78.96	N
ATOM	2534	CE1	HIS	A	317	77.299	23.073	60.292	1.00	78.83	C
ATOM	2535	NE2	HIS	A	317	77.284	24.395	60.313	1.00	79.38	N
ATOM	2536	CD2	HIS	A	317	75.994	24.831	60.129	1.00	78.51	C
ATOM	2537	C	HIS	A	317	73.059	25.039	61.701	1.00	77.44	C
ATOM	2538	O	HIS	A	317	73.644	25.211	62.767	1.00	77.23	O
ATOM	2539	N	SER	A	318	72.476	26.012	61.005	1.00	78.23	N
ATOM	2540	CA	SER	A	318	72.501	27.414	61.401	1.00	78.98	C
ATOM	2541	CB	SER	A	318	73.190	28.247	60.321	1.00	79.23	C
ATOM	2542	OG	SER	A	318	74.534	27.815	60.133	1.00	81.37	O
ATOM	2543	C	SER	A	318	71.088	27.926	61.614	1.00	79.07	C
ATOM	2544	O	SER	A	318	70.413	28.318	60.663	1.00	79.19	O
ATOM	2545	N	VAL	A	319	70.647	27.908	62.868	1.00	79.30	N
ATOM	2546	CA	VAL	A	319	69.333	28.409	63.244	1.00	79.55	C
ATOM	2547	CB	VAL	A	319	69.026	28.149	64.732	1.00	79.75	C
ATOM	2548	CG1	VAL	A	319	67.569	27.781	64.910	1.00	79.53	C
ATOM	2549	CG2	VAL	A	319	69.931	27.054	65.305	1.00	80.46	C
ATOM	2550	C	VAL	A	319	69.296	29.915	63.039	1.00	79.73	C
ATOM	2551	O	VAL	A	319	68.238	30.490	62.786	1.00	80.03	O
ATOM	2552	N	GLY	A	320	70.458	30.552	63.156	1.00	79.61	N
ATOM	2553	CA	GLY	A	320	70.558	31.995	63.018	1.00	79.58	C
ATOM	2554	C	GLY	A	320	70.293	32.496	61.616	1.00	79.79	C
ATOM	2555	O	GLY	A	320	70.009	33.682	61.423	1.00	79.82	O
ATOM	2556	N	ASN	A	321	70.386	31.595	60.641	1.00	79.71	N
ATOM	2557	CA	ASN	A	321	70.231	31.954	59.237	1.00	79.86	C
ATOM	2558	CB	ASN	A	321	71.289	31.258	58.385	1.00	80.28	C
ATOM	2559	CG	ASN	A	321	72.668	31.860	58.564	1.00	81.52	C
ATOM	2560	OD1	ASN	A	321	72.815	33.036	58.937	1.00	82.58	O
ATOM	2561	ND2	ASN	A	321	73.693	31.061	58.287	1.00	82.39	N
ATOM	2562	C	ASN	A	321	68.859	31.648	58.688	1.00	79.47	C
ATOM	2563	O	ASN	A	321	68.520	32.060	57.573	1.00	79.45	O
ATOM	2564	N	LEU	A	322	68.093	30.897	59.472	1.00	79.18	N
ATOM	2565	CA	LEU	A	322	66.704	30.597	59.175	1.00	78.86	C
ATOM	2566	CB	LEU	A	322	66.155	29.639	60.227	1.00	78.61	C
ATOM	2567	CG	LEU	A	322	64.908	28.816	59.923	1.00	78.67	C
ATOM	2568	CD1	LEU	A	322	64.942	28.234	58.514	1.00	78.53	C
ATOM	2569	CD2	LEU	A	322	64.768	27.709	60.954	1.00	78.64	C
ATOM	2570	C	LEU	A	322	65.941	31.909	59.204	1.00	78.88	C
ATOM	2571	O	LEU	A	322	66.130	32.716	60.112	1.00	78.94	O
ATOM	2572	N	GLU	A	323	65.110	32.141	58.196	1.00	78.79	N

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ATOM   2573  CA  GLU A 323      64.387  33.406  58.095  1.00 79.15           C
ATOM   2574  CB  GLU A 323      64.845  34.194  56.877  1.00 79.02           C
ATOM   2575  CG  GLU A 323      66.255  34.714  56.942  1.00 80.18           C
ATOM   2576  CD  GLU A 323      66.659  35.445  55.667  1.00 80.70           C
ATOM   2577  OE1 GLU A 323      65.909  35.384  54.655  1.00 81.75           O
ATOM   2578  OE2 GLU A 323      67.736  36.085  55.683  1.00 83.02           O
ATOM   2579  C   GLU A 323      62.904  33.173  57.952  1.00 78.52           C
ATOM   2580  O   GLU A 323      62.111  34.059  58.242  1.00 79.05           O
ATOM   2581  N   THR A 324      62.550  31.988  57.468  1.00 77.71           N
ATOM   2582  CA  THR A 324      61.186  31.641  57.124  1.00 76.90           C
ATOM   2583  CB  THR A 324      60.894  31.925  55.623  1.00 76.97           C
ATOM   2584  OG1 THR A 324      61.127  33.312  55.351  1.00 77.62           O
ATOM   2585  CG2 THR A 324      59.447  31.584  55.257  1.00 76.17           C
ATOM   2586  C   THR A 324      60.974  30.166  57.437  1.00 76.46           C
ATOM   2587  O   THR A 324      61.603  29.288  56.837  1.00 76.00           O
ATOM   2588  N   LEU A 325      60.094  29.917  58.400  1.00 75.87           N
ATOM   2589  CA  LEU A 325      59.755  28.579  58.821  1.00 75.36           C
ATOM   2590  CB  LEU A 325      60.256  28.335  60.242  1.00 75.28           C
ATOM   2591  CG  LEU A 325      60.068  26.899  60.717  1.00 74.57           C
ATOM   2592  CD1 LEU A 325      60.968  26.014  59.910  1.00 73.72           C
ATOM   2593  CD2 LEU A 325      60.371  26.772  62.189  1.00 74.34           C
ATOM   2594  C   LEU A 325      58.253  28.432  58.790  1.00 75.19           C
ATOM   2595  O   LEU A 325      57.553  29.163  59.473  1.00 75.68           O
ATOM   2596  N   ILE A 326      57.751  27.489  58.009  1.00 74.73           N
ATOM   2597  CA  ILE A 326      56.318  27.321  57.894  1.00 74.43           C
ATOM   2598  CB  ILE A 326      55.827  27.594  56.446  1.00 74.13           C
ATOM   2599  CG1 ILE A 326      56.384  28.920  55.891  1.00 73.31           C
ATOM   2600  CD1 ILE A 326      55.950  30.204  56.652  1.00 71.15           C
ATOM   2601  CG2 ILE A 326      54.309  27.548  56.370  1.00 73.42           C
ATOM   2602  C   ILE A 326      55.902  25.935  58.392  1.00 75.39           C
ATOM   2603  O   ILE A 326      56.221  24.900  57.780  1.00 74.95           O
ATOM   2604  N   LEU A 327      55.179  25.934  59.511  1.00 76.50           N
ATOM   2605  CA  LEU A 327      54.794  24.695  60.202  1.00 77.22           C
ATOM   2606  CB  LEU A 327      55.274  24.725  61.652  1.00 77.32           C
ATOM   2607  CG  LEU A 327      56.752  24.906  61.952  1.00 78.00           C
ATOM   2608  CD1 LEU A 327      56.932  25.414  63.380  1.00 77.39           C
ATOM   2609  CD2 LEU A 327      57.470  23.584  61.731  1.00 79.13           C
ATOM   2610  C   LEU A 327      53.288  24.454  60.236  1.00 77.67           C
ATOM   2611  O   LEU A 327      52.840  23.459  60.832  1.00 77.82           O
ATOM   2612  N   ASP A 328      52.509  25.351  59.623  1.00 77.62           N
ATOM   2613  CA  ASP A 328      51.046  25.260  59.690  1.00 77.90           C
ATOM   2614  CB  ASP A 328      50.377  26.456  59.001  1.00 78.43           C
ATOM   2615  CG  ASP A 328      50.261  26.287  57.490  1.00 81.17           C
ATOM   2616  OD1 ASP A 328      51.283  26.480  56.788  1.00 83.74           O
ATOM   2617  OD2 ASP A 328      49.140  25.983  57.002  1.00 83.15           O
ATOM   2618  C   ASP A 328      50.486  23.926  59.169  1.00 77.31           C
ATOM   2619  O   ASP A 328      51.114  23.254  58.352  1.00 77.28           O
ATOM   2620  N   SER A 329      49.308  23.561  59.670  1.00 76.63           N
ATOM   2621  CA  SER A 329      48.613  22.328  59.296  1.00 76.09           C
ATOM   2622  CB  SER A 329      48.263  22.316  57.810  1.00 76.10           C
ATOM   2623  OG  SER A 329      47.624  23.527  57.444  1.00 76.93           O
ATOM   2624  C   SER A 329      49.409  21.093  59.697  1.00 75.77           C
ATOM   2625  O   SER A 329      49.486  20.098  58.954  1.00 76.12           O
ATOM   2626  N   ASN A 330      50.004  21.185  60.882  1.00 74.80           N
ATOM   2627  CA  ASN A 330      50.715  20.087  61.503  1.00 73.93           C
ATOM   2628  CB  ASN A 330      52.220  20.362  61.529  1.00 73.82           C
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ATOM	2629	CG	ASN	A	330	52.879	20.113	60.197	1.00	73.11	C
ATOM	2630	OD1	ASN	A	330	53.055	18.971	59.792	1.00	72.77	O
ATOM	2631	ND2	ASN	A	330	53.262	21.182	59.512	1.00	72.56	N
ATOM	2632	C	ASN	A	330	50.196	19.913	62.916	1.00	73.59	C
ATOM	2633	O	ASN	A	330	49.964	20.904	63.618	1.00	73.44	O
ATOM	2634	N	PRO	A	331	50.000	18.653	63.342	1.00	73.15	N
ATOM	2635	CA	PRO	A	331	49.475	18.392	64.676	1.00	72.81	C
ATOM	2636	CB	PRO	A	331	49.053	16.925	64.595	1.00	72.84	C
ATOM	2637	CG	PRO	A	331	49.957	16.333	63.572	1.00	73.06	C
ATOM	2638	CD	PRO	A	331	50.245	17.413	62.581	1.00	72.74	C
ATOM	2639	C	PRO	A	331	50.545	18.593	65.748	1.00	72.79	C
ATOM	2640	O	PRO	A	331	50.942	17.632	66.414	1.00	72.90	O
ATOM	2641	N	LEU	A	332	50.991	19.835	65.920	1.00	72.61	N
ATOM	2642	CA	LEU	A	332	52.141	20.120	66.771	1.00	72.83	C
ATOM	2643	CB	LEU	A	332	52.639	21.549	66.566	1.00	72.60	C
ATOM	2644	CG	LEU	A	332	53.062	22.023	65.172	1.00	72.67	C
ATOM	2645	CD1	LEU	A	332	53.550	23.453	65.280	1.00	72.34	C
ATOM	2646	CD2	LEU	A	332	54.126	21.141	64.531	1.00	70.94	C
ATOM	2647	C	LEU	A	332	51.852	19.899	68.240	1.00	73.22	C
ATOM	2648	O	LEU	A	332	50.788	20.256	68.731	1.00	73.47	O
ATOM	2649	N	ALA	A	333	52.805	19.285	68.930	1.00	73.86	N
ATOM	2650	CA	ALA	A	333	52.764	19.166	70.380	1.00	74.62	C
ATOM	2651	CB	ALA	A	333	53.471	17.897	70.836	1.00	74.39	C
ATOM	2652	C	ALA	A	333	53.457	20.395	70.937	1.00	75.20	C
ATOM	2653	O	ALA	A	333	54.668	20.557	70.766	1.00	75.89	O
ATOM	2654	N	CYS	A	334	52.696	21.263	71.590	1.00	75.76	N
ATOM	2655	CA	CYS	A	334	53.221	22.551	72.010	1.00	76.61	C
ATOM	2656	CB	CYS	A	334	52.125	23.609	71.960	1.00	76.93	C
ATOM	2657	SG	CYS	A	334	51.777	24.008	70.237	1.00	80.16	S
ATOM	2658	C	CYS	A	334	53.904	22.496	73.361	1.00	76.59	C
ATOM	2659	O	CYS	A	334	53.424	23.066	74.339	1.00	76.86	O
ATOM	2660	N	ASP	A	335	55.026	21.781	73.390	1.00	76.72	N
ATOM	2661	CA	ASP	A	335	55.881	21.669	74.562	1.00	76.78	C
ATOM	2662	CB	ASP	A	335	56.079	20.204	74.966	1.00	77.13	C
ATOM	2663	CG	ASP	A	335	56.725	19.355	73.881	1.00	78.66	C
ATOM	2664	OD1	ASP	A	335	57.449	19.882	72.996	1.00	80.24	O
ATOM	2665	OD2	ASP	A	335	56.514	18.121	73.940	1.00	80.39	O
ATOM	2666	C	ASP	A	335	57.208	22.392	74.336	1.00	76.54	C
ATOM	2667	O	ASP	A	335	57.321	23.183	73.410	1.00	76.61	O
ATOM	2668	N	CYS	A	336	58.207	22.129	75.170	1.00	76.33	N
ATOM	2669	CA	CYS	A	336	59.394	22.971	75.186	1.00	76.68	C
ATOM	2670	CB	CYS	A	336	60.141	22.811	76.505	1.00	77.06	C
ATOM	2671	SG	CYS	A	336	61.123	21.306	76.589	1.00	81.85	S
ATOM	2672	C	CYS	A	336	60.328	22.750	73.993	1.00	75.91	C
ATOM	2673	O	CYS	A	336	61.211	23.567	73.733	1.00	75.95	O
ATOM	2674	N	ARG	A	337	60.134	21.648	73.271	1.00	75.21	N
ATOM	2675	CA	ARG	A	337	60.884	21.393	72.042	1.00	74.13	C
ATOM	2676	CB	ARG	A	337	60.606	19.988	71.513	1.00	73.89	C
ATOM	2677	CG	ARG	A	337	61.281	18.875	72.328	1.00	74.45	C
ATOM	2678	CD	ARG	A	337	60.763	17.495	71.969	1.00	73.83	C
ATOM	2679	NE	ARG	A	337	59.307	17.485	72.068	1.00	75.04	N
ATOM	2680	CZ	ARG	A	337	58.509	16.576	71.520	1.00	75.19	C
ATOM	2681	NH1	ARG	A	337	59.008	15.569	70.812	1.00	75.02	N
ATOM	2682	NH2	ARG	A	337	57.198	16.696	71.674	1.00	74.86	N
ATOM	2683	C	ARG	A	337	60.581	22.447	70.970	1.00	73.80	C
ATOM	2684	O	ARG	A	337	61.385	22.657	70.051	1.00	74.06	O

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ATOM   2685  N   LEU A 338      59.434  23.111  71.092  1.00 72.82           N
ATOM   2686  CA  LEU A 338      59.068  24.159  70.148  1.00 72.43           C
ATOM   2687  CB  LEU A 338      57.655  23.945  69.589  1.00 72.51           C
ATOM   2688  CG  LEU A 338      57.518  22.931  68.449  1.00 72.54           C
ATOM   2689  CD1 LEU A 338      56.068  22.778  68.072  1.00 73.00           C
ATOM   2690  CD2 LEU A 338      58.319  23.358  67.242  1.00 71.73           C
ATOM   2691  C   LEU A 338      59.207  25.552  70.737  1.00 72.06           C
ATOM   2692  O   LEU A 338      58.838  26.536  70.100  1.00 71.91           O
ATOM   2693  N   LEU A 339      59.762  25.636  71.942  1.00 71.81           N
ATOM   2694  CA  LEU A 339      59.963  26.918  72.596  1.00 71.71           C
ATOM   2695  CB  LEU A 339      60.565  26.740  73.994  1.00 71.70           C
ATOM   2696  CG  LEU A 339      60.669  28.002  74.861  1.00 71.98           C
ATOM   2697  CD1 LEU A 339      59.293  28.592  75.163  1.00 70.94           C
ATOM   2698  CD2 LEU A 339      61.455  27.753  76.149  1.00 71.49           C
ATOM   2699  C   LEU A 339      60.842  27.823  71.738  1.00 71.86           C
ATOM   2700  O   LEU A 339      60.606  29.030  71.660  1.00 72.04           O
ATOM   2701  N   TRP A 340      61.838  27.236  71.080  1.00 71.59           N
ATOM   2702  CA  TRP A 340      62.720  28.008  70.222  1.00 71.38           C
ATOM   2703  CB  TRP A 340      63.878  27.153  69.701  1.00 70.84           C
ATOM   2704  CG  TRP A 340      63.514  26.168  68.653  1.00 70.22           C
ATOM   2705  CD1 TRP A 340      63.040  24.901  68.844  1.00 69.83           C
ATOM   2706  NE1 TRP A 340      62.823  24.290  67.638  1.00 69.58           N
ATOM   2707  CE2 TRP A 340      63.169  25.156  66.635  1.00 69.15           C
ATOM   2708  CD2 TRP A 340      63.608  26.353  67.242  1.00 69.68           C
ATOM   2709  CE3 TRP A 340      64.013  27.419  66.427  1.00 69.72           C
ATOM   2710  CZ3 TRP A 340      63.967  27.257  65.043  1.00 69.89           C
ATOM   2711  CH2 TRP A 340      63.523  26.049  64.471  1.00 70.12           C
ATOM   2712  CZ2 TRP A 340      63.118  24.994  65.251  1.00 70.12           C
ATOM   2713  C   TRP A 340      61.960  28.699  69.087  1.00 71.73           C
ATOM   2714  O   TRP A 340      62.274  29.840  68.730  1.00 71.95           O
ATOM   2715  N   VAL A 341      60.955  28.016  68.538  1.00 71.98           N
ATOM   2716  CA  VAL A 341      60.125  28.576  67.465  1.00 72.23           C
ATOM   2717  CB  VAL A 341      59.257  27.514  66.784  1.00 71.85           C
ATOM   2718  CG1 VAL A 341      58.409  28.138  65.697  1.00 71.84           C
ATOM   2719  CG2 VAL A 341      60.117  26.457  66.193  1.00 72.38           C
ATOM   2720  C   VAL A 341      59.218  29.661  68.031  1.00 72.68           C
ATOM   2721  O   VAL A 341      59.163  30.777  67.501  1.00 72.64           O
ATOM   2722  N   PHE A 342      58.513  29.335  69.114  1.00 72.97           N
ATOM   2723  CA  PHE A 342      57.646  30.312  69.751  1.00 73.17           C
ATOM   2724  CB  PHE A 342      57.024  29.772  71.027  1.00 72.64           C
ATOM   2725  CG  PHE A 342      56.192  30.778  71.740  1.00 72.07           C
ATOM   2726  CD1 PHE A 342      54.923  31.102  71.270  1.00 71.26           C
ATOM   2727  CE1 PHE A 342      54.149  32.042  71.915  1.00 70.50           C
ATOM   2728  CZ  PHE A 342      54.638  32.680  73.037  1.00 71.39           C
ATOM   2729  CE2 PHE A 342      55.907  32.375  73.512  1.00 71.41           C
ATOM   2730  CD2 PHE A 342      56.678  31.429  72.861  1.00 71.35           C
ATOM   2731  C   PHE A 342      58.392  31.613  70.040  1.00 73.68           C
ATOM   2732  O   PHE A 342      57.898  32.678  69.725  1.00 74.16           O
ATOM   2733  N   ARG A 343      59.584  31.526  70.619  1.00 74.16           N
ATOM   2734  CA  ARG A 343      60.379  32.721  70.893  1.00 74.79           C
ATOM   2735  CB  ARG A 343      61.636  32.356  71.682  1.00 74.68           C
ATOM   2736  CG  ARG A 343      61.357  31.974  73.127  1.00 75.66           C
ATOM   2737  CD  ARG A 343      61.012  33.195  73.978  1.00 76.85           C
ATOM   2738  NE  ARG A 343      60.680  32.833  75.354  1.00 78.23           N
ATOM   2739  CZ  ARG A 343      59.514  33.092  75.949  1.00 79.06           C
ATOM   2740  NH1 ARG A 343      59.321  32.720  77.209  1.00 78.93           N
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ATOM	2741	NH2	ARG	A	343	58.543	33.726	75.299	1.00	79.23	N
ATOM	2742	C	ARG	A	343	60.725	33.564	69.653	1.00	75.28	C
ATOM	2743	O	ARG	A	343	61.059	34.742	69.785	1.00	75.15	O
ATOM	2744	N	ARG	A	344	60.620	32.966	68.464	1.00	76.04	N
ATOM	2745	CA	ARG	A	344	60.905	33.648	67.194	1.00	76.90	C
ATOM	2746	CB	ARG	A	344	61.938	32.858	66.378	1.00	76.99	C
ATOM	2747	CG	ARG	A	344	63.371	32.909	66.902	1.00	77.63	C
ATOM	2748	CD	ARG	A	344	64.220	31.821	66.246	1.00	77.96	C
ATOM	2749	NE	ARG	A	344	65.587	31.759	66.773	1.00	81.37	N
ATOM	2750	CZ	ARG	A	344	65.961	31.149	67.906	1.00	82.40	C
ATOM	2751	NH1	ARG	A	344	65.081	30.533	68.699	1.00	81.92	N
ATOM	2752	NH2	ARG	A	344	67.239	31.170	68.261	1.00	83.09	N
ATOM	2753	C	ARG	A	344	59.632	33.851	66.369	1.00	77.12	C
ATOM	2754	O	ARG	A	344	59.690	34.037	65.149	1.00	76.72	O
ATOM	2755	N	ARG	A	345	58.493	33.799	67.058	1.00	77.98	N
ATOM	2756	CA	ARG	A	345	57.157	34.094	66.516	1.00	79.01	C
ATOM	2757	CB	ARG	A	345	56.245	34.554	67.650	1.00	79.33	C
ATOM	2758	CG	ARG	A	345	55.417	33.485	68.299	1.00	79.61	C
ATOM	2759	CD	ARG	A	345	54.340	34.125	69.152	1.00	79.11	C
ATOM	2760	NE	ARG	A	345	54.857	34.821	70.324	1.00	79.02	N
ATOM	2761	CZ	ARG	A	345	54.101	35.580	71.116	1.00	80.36	C
ATOM	2762	NH1	ARG	A	345	54.633	36.191	72.172	1.00	79.59	N
ATOM	2763	NH2	ARG	A	345	52.805	35.735	70.846	1.00	80.06	N
ATOM	2764	C	ARG	A	345	57.092	35.192	65.468	1.00	79.66	C
ATOM	2765	O	ARG	A	345	56.483	35.009	64.418	1.00	79.83	O
ATOM	2766	N	TRP	A	346	57.720	36.327	65.757	1.00	80.48	N
ATOM	2767	CA	TRP	A	346	57.559	37.522	64.937	1.00	81.47	C
ATOM	2768	CB	TRP	A	346	57.449	38.767	65.820	1.00	82.18	C
ATOM	2769	CG	TRP	A	346	56.458	38.626	66.934	1.00	83.32	C
ATOM	2770	CD1	TRP	A	346	56.709	38.717	68.272	1.00	83.92	C
ATOM	2771	NE1	TRP	A	346	55.549	38.533	68.985	1.00	84.05	N
ATOM	2772	CE2	TRP	A	346	54.519	38.318	68.109	1.00	84.26	C
ATOM	2773	CD2	TRP	A	346	55.054	38.369	66.806	1.00	84.29	C
ATOM	2774	CE3	TRP	A	346	54.198	38.178	65.717	1.00	84.56	C
ATOM	2775	CZ3	TRP	A	346	52.856	37.945	65.961	1.00	84.04	C
ATOM	2776	CH2	TRP	A	346	52.354	37.900	67.267	1.00	83.84	C
ATOM	2777	CZ2	TRP	A	346	53.167	38.083	68.352	1.00	83.92	C
ATOM	2778	C	TRP	A	346	58.715	37.676	63.954	1.00	81.67	C
ATOM	2779	O	TRP	A	346	58.932	38.754	63.401	1.00	81.93	O
ATOM	2780	O	ARG	A	347	62.185	35.137	61.940	1.00	81.89	O
ATOM	2781	N	ARG	A	347	59.454	36.592	63.743	1.00	20.00	N
ATOM	2782	CA	ARG	A	347	60.774	36.673	63.129	1.00	20.00	C
ATOM	2783	C	ARG	A	347	61.036	35.474	62.223	1.00	20.00	C
ATOM	2784	CB	ARG	A	347	61.859	36.767	64.203	1.00	20.00	C
ATOM	2785	CG	ARG	A	347	61.803	38.040	65.033	1.00	20.00	C
ATOM	2786	CD	ARG	A	347	63.055	38.203	65.879	1.00	20.00	C
ATOM	2787	NE	ARG	A	347	63.274	37.058	66.758	1.00	20.00	N
ATOM	2788	CZ	ARG	A	347	64.393	36.846	67.443	1.00	20.00	C
ATOM	2789	NH1	ARG	A	347	65.401	37.703	67.353	1.00	20.00	N
ATOM	2790	NH2	ARG	A	347	64.504	35.777	68.220	1.00	20.00	N
ATOM	2791	N	LEU	A	348	59.962	34.834	61.772	1.00	81.73	N
ATOM	2792	CA	LEU	A	348	60.074	33.651	60.927	1.00	81.61	C
ATOM	2793	CB	LEU	A	348	59.883	32.380	61.757	1.00	81.34	C
ATOM	2794	CG	LEU	A	348	61.046	31.984	62.668	1.00	80.51	C
ATOM	2795	CD1	LEU	A	348	60.654	30.822	63.567	1.00	79.71	C
ATOM	2796	CD2	LEU	A	348	62.278	31.638	61.846	1.00	79.16	C

ATOM	2797	C	LEU	A	348	59.061	33.690	59.787	1.00	82.01	C
ATOM	2798	O	LEU	A	348	58.691	32.653	59.238	1.00	81.95	O
ATOM	2799	N	ASN	A	349	58.618	34.893	59.437	1.00	82.38	N
ATOM	2800	CA	ASN	A	349	57.684	35.076	58.317	1.00	82.99	C
ATOM	2801	CB	ASN	A	349	58.420	34.969	56.977	1.00	82.86	C
ATOM	2802	CG	ASN	A	349	59.189	36.218	56.635	1.00	83.52	C
ATOM	2803	OD1	ASN	A	349	60.411	36.183	56.532	1.00	84.81	O
ATOM	2804	ND2	ASN	A	349	58.481	37.333	56.451	1.00	83.05	N
ATOM	2805	C	ASN	A	349	56.467	34.148	58.295	1.00	83.44	C
ATOM	2806	O	ASN	A	349	56.038	33.719	57.221	1.00	83.41	O
ATOM	2807	N	PHE	A	350	55.915	33.829	59.466	1.00	84.18	N
ATOM	2808	CA	PHE	A	350	54.709	33.006	59.524	1.00	84.92	C
ATOM	2809	CB	PHE	A	350	54.197	32.835	60.958	1.00	84.71	C
ATOM	2810	CG	PHE	A	350	55.120	32.080	61.865	1.00	84.26	C
ATOM	2811	CD1	PHE	A	350	56.062	31.191	61.360	1.00	83.79	C
ATOM	2812	CE1	PHE	A	350	56.905	30.494	62.211	1.00	83.78	C
ATOM	2813	CZ	PHE	A	350	56.793	30.660	63.585	1.00	84.23	C
ATOM	2814	CE2	PHE	A	350	55.843	31.532	64.102	1.00	83.98	C
ATOM	2815	CD2	PHE	A	350	55.012	32.229	63.242	1.00	83.93	C
ATOM	2816	C	PHE	A	350	53.614	33.644	58.681	1.00	85.74	C
ATOM	2817	O	PHE	A	350	53.073	33.006	57.774	1.00	85.68	O
ATOM	2818	N	ASN	A	351	53.314	34.914	58.980	1.00	86.75	N
ATOM	2819	CA	ASN	A	351	52.215	35.645	58.342	1.00	87.85	C
ATOM	2820	CB	ASN	A	351	52.423	35.755	56.814	1.00	88.06	C
ATOM	2821	CG	ASN	A	351	53.530	36.730	56.440	1.00	89.03	C
ATOM	2822	OD1	ASN	A	351	53.582	37.862	56.950	1.00	90.76	O
ATOM	2823	ND2	ASN	A	351	54.413	36.304	55.535	1.00	88.27	N
ATOM	2824	C	ASN	A	351	50.855	35.017	58.657	1.00	88.20	C
ATOM	2825	O	ASN	A	351	50.420	34.990	59.818	1.00	88.17	O
ATOM	2826	N	ARG	A	352	50.207	34.500	57.613	1.00	88.70	N
ATOM	2827	CA	ARG	A	352	48.908	33.848	57.740	1.00	89.17	C
ATOM	2828	CB	ARG	A	352	47.997	34.248	56.573	1.00	89.87	C
ATOM	2829	CG	ARG	A	352	47.241	35.543	56.850	1.00	92.07	C
ATOM	2830	CD	ARG	A	352	46.744	36.236	55.586	1.00	96.02	C
ATOM	2831	NE	ARG	A	352	45.925	37.393	55.960	1.00	98.70	N
ATOM	2832	CZ	ARG	A	352	45.354	38.242	55.106	1.00	100.02	C
ATOM	2833	NH1	ARG	A	352	45.504	38.085	53.792	1.00	100.46	N
ATOM	2834	NH2	ARG	A	352	44.629	39.256	55.577	1.00	99.60	N
ATOM	2835	C	ARG	A	352	49.014	32.331	57.877	1.00	88.46	C
ATOM	2836	O	ARG	A	352	48.000	31.653	58.055	1.00	88.49	O
ATOM	2837	N	GLN	A	353	50.245	31.818	57.822	1.00	87.77	N
ATOM	2838	CA	GLN	A	353	50.524	30.384	57.986	1.00	87.20	C
ATOM	2839	CB	GLN	A	353	51.548	29.902	56.954	1.00	87.35	C
ATOM	2840	CG	GLN	A	353	50.974	29.538	55.587	1.00	88.51	C
ATOM	2841	CD	GLN	A	353	50.388	30.719	54.837	1.00	91.19	C
ATOM	2842	OE1	GLN	A	353	50.732	31.883	55.089	1.00	92.85	O
ATOM	2843	NE2	GLN	A	353	49.484	30.427	53.910	1.00	92.12	N
ATOM	2844	C	GLN	A	353	51.010	30.081	59.402	1.00	86.40	C
ATOM	2845	O	GLN	A	353	52.056	29.448	59.588	1.00	86.28	O
ATOM	2846	N	GLN	A	354	50.234	30.547	60.386	1.00	85.19	N
ATOM	2847	CA	GLN	A	354	50.498	30.318	61.804	1.00	83.67	C
ATOM	2848	CB	GLN	A	354	49.363	30.891	62.653	1.00	83.30	C
ATOM	2849	CG	GLN	A	354	49.297	32.405	62.685	1.00	82.27	C
ATOM	2850	CD	GLN	A	354	50.557	33.046	63.240	1.00	80.57	C
ATOM	2851	OE1	GLN	A	354	50.984	32.750	64.358	1.00	80.02	O
ATOM	2852	NE2	GLN	A	354	51.152	33.941	62.460	1.00	79.37	N

ATOM	2853	C	GLN	A	354	50.645	28.837	62.118	1.00	83.08	C
ATOM	2854	O	GLN	A	354	49.803	28.039	61.709	1.00	83.25	O
ATOM	2855	N	PRO	A	355	51.722	28.462	62.834	1.00	82.41	N
ATOM	2856	CA	PRO	A	355	51.775	27.120	63.403	1.00	82.02	C
ATOM	2857	CB	PRO	A	355	53.145	27.071	64.085	1.00	81.91	C
ATOM	2858	CG	PRO	A	355	53.609	28.474	64.187	1.00	81.64	C
ATOM	2859	CD	PRO	A	355	52.933	29.251	63.130	1.00	82.23	C
ATOM	2860	C	PRO	A	355	50.645	26.955	64.424	1.00	82.05	C
ATOM	2861	O	PRO	A	355	50.233	27.931	65.066	1.00	81.94	O
ATOM	2862	N	SER	A	356	50.144	25.732	64.567	1.00	81.96	N
ATOM	2863	CA	SER	A	356	48.923	25.506	65.332	1.00	81.61	C
ATOM	2864	CB	SER	A	356	47.730	25.442	64.382	1.00	81.41	C
ATOM	2865	OG	SER	A	356	46.547	25.700	65.098	1.00	81.76	O
ATOM	2866	C	SER	A	356	48.974	24.259	66.206	1.00	81.39	C
ATOM	2867	O	SER	A	356	49.107	23.150	65.704	1.00	81.47	O
ATOM	2868	N	CYS	A	357	48.850	24.452	67.516	1.00	81.32	N
ATOM	2869	CA	CYS	A	357	48.887	23.352	68.481	1.00	81.34	C
ATOM	2870	CB	CYS	A	357	48.828	23.897	69.902	1.00	81.43	C
ATOM	2871	SG	CYS	A	357	50.076	25.104	70.272	1.00	82.15	S
ATOM	2872	C	CYS	A	357	47.742	22.368	68.328	1.00	81.27	C
ATOM	2873	O	CYS	A	357	46.587	22.764	68.167	1.00	81.23	O
ATOM	2874	N	ALA	A	358	48.069	21.085	68.401	1.00	81.15	N
ATOM	2875	CA	ALA	A	358	47.058	20.049	68.501	1.00	81.20	C
ATOM	2876	CB	ALA	A	358	47.341	18.934	67.531	1.00	80.99	C
ATOM	2877	C	ALA	A	358	47.035	19.525	69.929	1.00	81.45	C
ATOM	2878	O	ALA	A	358	46.009	19.035	70.401	1.00	81.56	O
ATOM	2879	N	THR	A	359	48.177	19.627	70.606	1.00	81.64	N
ATOM	2880	CA	THR	A	359	48.304	19.236	72.007	1.00	81.84	C
ATOM	2881	CB	THR	A	359	48.852	17.796	72.159	1.00	81.73	C
ATOM	2882	OG1	THR	A	359	50.037	17.656	71.375	1.00	82.72	O
ATOM	2883	CG2	THR	A	359	47.828	16.759	71.718	1.00	81.28	C
ATOM	2884	C	THR	A	359	49.220	20.221	72.749	1.00	82.13	C
ATOM	2885	O	THR	A	359	49.933	20.997	72.110	1.00	81.95	O
ATOM	2886	N	PRO	A	360	49.193	20.208	74.101	1.00	82.67	N
ATOM	2887	CA	PRO	A	360	48.312	19.388	74.946	1.00	82.94	C
ATOM	2888	CB	PRO	A	360	48.831	19.649	76.359	1.00	82.88	C
ATOM	2889	CG	PRO	A	360	49.503	20.975	76.273	1.00	82.85	C
ATOM	2890	CD	PRO	A	360	50.101	21.042	74.910	1.00	82.65	C
ATOM	2891	C	PRO	A	360	46.863	19.831	74.792	1.00	83.24	C
ATOM	2892	O	PRO	A	360	46.614	20.975	74.409	1.00	83.14	O
ATOM	2893	N	GLU	A	361	45.929	18.925	75.085	1.00	83.76	N
ATOM	2894	CA	GLU	A	361	44.504	19.089	74.741	1.00	84.22	C
ATOM	2895	CB	GLU	A	361	43.651	17.998	75.407	1.00	84.47	C
ATOM	2896	CG	GLU	A	361	42.358	17.659	74.643	1.00	85.85	C
ATOM	2897	CD	GLU	A	361	41.189	17.292	75.559	1.00	87.81	C
ATOM	2898	OE1	GLU	A	361	41.358	16.462	76.486	1.00	88.14	O
ATOM	2899	OE2	GLU	A	361	40.086	17.838	75.342	1.00	88.81	O
ATOM	2900	C	GLU	A	361	43.879	20.471	75.003	1.00	84.06	C
ATOM	2901	O	GLU	A	361	43.037	20.920	74.222	1.00	84.26	O
ATOM	2902	N	PHE	A	362	44.288	21.144	76.077	1.00	83.85	N
ATOM	2903	CA	PHE	A	362	43.649	22.406	76.454	1.00	83.77	C
ATOM	2904	CB	PHE	A	362	43.693	22.614	77.973	1.00	84.29	C
ATOM	2905	CG	PHE	A	362	44.860	23.428	78.462	1.00	84.88	C
ATOM	2906	CD1	PHE	A	362	46.153	22.905	78.448	1.00	85.62	C
ATOM	2907	CE1	PHE	A	362	47.227	23.657	78.925	1.00	85.91	C
ATOM	2908	CZ	PHE	A	362	47.004	24.939	79.438	1.00	85.40	C

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ATOM   2909  CE2 PHE A 362      45.710  25.465  79.464  1.00 85.06           C
ATOM   2910  CD2 PHE A 362      44.651  24.707  78.985  1.00 84.89           C
ATOM   2911  C   PHE A 362      44.129  23.640  75.684  1.00 83.38           C
ATOM   2912  O   PHE A 362      43.644  24.749  75.912  1.00 83.27           O
ATOM   2913  N   VAL A 363      45.076  23.441  74.773  1.00 83.02           N
ATOM   2914  CA  VAL A 363      45.440  24.479  73.808  1.00 82.51           C
ATOM   2915  CB  VAL A 363      46.900  24.993  73.988  1.00 82.48           C
ATOM   2916  CG1 VAL A 363      47.047  25.754  75.298  1.00 82.46           C
ATOM   2917  CG2 VAL A 363      47.907  23.856  73.903  1.00 82.39           C
ATOM   2918  C   VAL A 363      45.187  24.032  72.364  1.00 82.27           C
ATOM   2919  O   VAL A 363      45.649  24.678  71.422  1.00 82.18           O
ATOM   2920  N   GLN A 364      44.448  22.934  72.193  1.00 81.99           N
ATOM   2921  CA  GLN A 364      44.088  22.453  70.861  1.00 81.96           C
ATOM   2922  CB  GLN A 364      43.074  21.309  70.926  1.00 82.16           C
ATOM   2923  CG  GLN A 364      42.623  20.830  69.532  1.00 83.74           C
ATOM   2924  CD  GLN A 364      41.190  20.281  69.494  1.00 86.73           C
ATOM   2925  OE1 GLN A 364      40.556  20.052  70.539  1.00 87.56           O
ATOM   2926  NE2 GLN A 364      40.671  20.076  68.273  1.00 87.20           N
ATOM   2927  C   GLN A 364      43.510  23.584  70.025  1.00 81.48           C
ATOM   2928  O   GLN A 364      42.549  24.228  70.427  1.00 81.63           O
ATOM   2929  N   GLY A 365      44.112  23.830  68.872  1.00 81.01           N
ATOM   2930  CA  GLY A 365      43.591  24.808  67.940  1.00 80.52           C
ATOM   2931  C   GLY A 365      44.253  26.164  68.031  1.00 80.37           C
ATOM   2932  O   GLY A 365      44.136  26.965  67.106  1.00 80.39           O
ATOM   2933  N   LYS A 366      44.947  26.421  69.137  1.00 80.20           N
ATOM   2934  CA  LYS A 366      45.587  27.718  69.375  1.00 80.26           C
ATOM   2935  CB  LYS A 366      46.078  27.799  70.818  1.00 80.20           C
ATOM   2936  CG  LYS A 366      46.131  29.195  71.404  1.00 80.46           C
ATOM   2937  CD  LYS A 366      46.218  29.124  72.932  1.00 81.23           C
ATOM   2938  CE  LYS A 366      46.023  30.497  73.555  1.00 82.49           C
ATOM   2939  NZ  LYS A 366      45.729  30.450  75.019  1.00 82.98           N
ATOM   2940  C   LYS A 366      46.746  28.006  68.407  1.00 80.51           C
ATOM   2941  O   LYS A 366      47.704  27.225  68.297  1.00 80.38           O
ATOM   2942  N   GLU A 367      46.637  29.134  67.705  1.00 80.58           N
ATOM   2943  CA  GLU A 367      47.699  29.632  66.834  1.00 80.72           C
ATOM   2944  CB  GLU A 367      47.133  30.600  65.794  1.00 80.46           C
ATOM   2945  CG  GLU A 367      46.179  29.942  64.811  1.00 81.84           C
ATOM   2946  CD  GLU A 367      45.792  30.835  63.632  1.00 82.71           C
ATOM   2947  OE1 GLU A 367      45.614  32.064  63.819  1.00 84.84           O
ATOM   2948  OE2 GLU A 367      45.651  30.288  62.508  1.00 86.04           O
ATOM   2949  C   GLU A 367      48.766  30.327  67.667  1.00 80.06           C
ATOM   2950  O   GLU A 367      48.467  30.907  68.712  1.00 80.08           O
ATOM   2951  N   PHE A 368      50.007  30.270  67.199  1.00 79.61           N
ATOM   2952  CA  PHE A 368      51.140  30.824  67.939  1.00 79.24           C
ATOM   2953  CB  PHE A 368      52.436  30.591  67.164  1.00 78.90           C
ATOM   2954  CG  PHE A 368      53.090  29.264  67.451  1.00 78.16           C
ATOM   2955  CD1 PHE A 368      54.465  29.181  67.616  1.00 77.48           C
ATOM   2956  CE1 PHE A 368      55.078  27.964  67.877  1.00 76.84           C
ATOM   2957  CZ  PHE A 368      54.315  26.815  67.981  1.00 77.38           C
ATOM   2958  CE2 PHE A 368      52.942  26.882  67.825  1.00 77.18           C
ATOM   2959  CD2 PHE A 368      52.337  28.101  67.560  1.00 77.59           C
ATOM   2960  C   PHE A 368      50.979  32.301  68.306  1.00 79.38           C
ATOM   2961  O   PHE A 368      51.333  32.713  69.409  1.00 79.34           O
ATOM   2962  N   LYS A 369      50.429  33.086  67.385  1.00 79.70           N
ATOM   2963  CA  LYS A 369      50.230  34.517  67.604  1.00 80.00           C
ATOM   2964  CB  LYS A 369      49.854  35.208  66.289  1.00 80.08           C
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ATOM	2965	CG	LYS	A	369	48.391	35.039	65.914	1.00	80.69	C
ATOM	2966	CD	LYS	A	369	48.077	35.645	64.584	1.00	81.83	C
ATOM	2967	CE	LYS	A	369	46.608	35.453	64.266	1.00	83.69	C
ATOM	2968	NZ	LYS	A	369	46.375	35.499	62.787	1.00	85.70	N
ATOM	2969	C	LYS	A	369	49.167	34.801	68.674	1.00	80.07	C
ATOM	2970	O	LYS	A	369	49.064	35.929	69.171	1.00	80.24	O
ATOM	2971	N	ASP	A	370	48.380	33.780	69.018	1.00	80.01	N
ATOM	2972	CA	ASP	A	370	47.325	33.907	70.031	1.00	79.98	C
ATOM	2973	CB	ASP	A	370	46.122	33.023	69.676	1.00	80.28	C
ATOM	2974	CG	ASP	A	370	45.310	33.573	68.513	1.00	81.41	C
ATOM	2975	OD1	ASP	A	370	44.926	34.768	68.547	1.00	81.91	O
ATOM	2976	OD2	ASP	A	370	45.046	32.796	67.565	1.00	83.09	O
ATOM	2977	C	ASP	A	370	47.795	33.597	71.453	1.00	79.53	C
ATOM	2978	O	ASP	A	370	46.990	33.579	72.382	1.00	79.73	O
ATOM	2979	N	PHE	A	371	49.091	33.352	71.621	1.00	79.11	N
ATOM	2980	CA	PHE	A	371	49.669	33.116	72.942	1.00	78.74	C
ATOM	2981	CB	PHE	A	371	50.855	32.164	72.845	1.00	78.34	C
ATOM	2982	CG	PHE	A	371	50.480	30.713	72.781	1.00	77.77	C
ATOM	2983	CD1	PHE	A	371	50.473	29.936	73.935	1.00	76.89	C
ATOM	2984	CE1	PHE	A	371	50.152	28.586	73.886	1.00	76.17	C
ATOM	2985	CZ	PHE	A	371	49.835	27.991	72.668	1.00	76.75	C
ATOM	2986	CE2	PHE	A	371	49.843	28.751	71.500	1.00	76.68	C
ATOM	2987	CD2	PHE	A	371	50.175	30.109	71.561	1.00	77.11	C
ATOM	2988	C	PHE	A	371	50.145	34.425	73.571	1.00	78.71	C
ATOM	2989	O	PHE	A	371	50.658	35.292	72.868	1.00	78.91	O
ATOM	2990	N	PRO	A	372	49.989	34.568	74.900	1.00	78.60	N
ATOM	2991	CA	PRO	A	372	50.590	35.699	75.600	1.00	78.47	C
ATOM	2992	CB	PRO	A	372	50.147	35.484	77.049	1.00	78.50	C
ATOM	2993	CG	PRO	A	372	49.862	34.022	77.144	1.00	78.54	C
ATOM	2994	CD	PRO	A	372	49.255	33.686	75.825	1.00	78.63	C
ATOM	2995	C	PRO	A	372	52.111	35.645	75.522	1.00	78.37	C
ATOM	2996	O	PRO	A	372	52.686	34.564	75.371	1.00	78.30	O
ATOM	2997	N	ASP	A	373	52.750	36.806	75.634	1.00	78.42	N
ATOM	2998	CA	ASP	A	373	54.211	36.903	75.572	1.00	78.47	C
ATOM	2999	CB	ASP	A	373	54.650	38.370	75.448	1.00	78.83	C
ATOM	3000	CG	ASP	A	373	56.121	38.511	75.067	1.00	79.78	C
ATOM	3001	OD1	ASP	A	373	56.559	37.869	74.081	1.00	79.80	O
ATOM	3002	OD2	ASP	A	373	56.838	39.268	75.761	1.00	81.35	O
ATOM	3003	C	ASP	A	373	54.905	36.225	76.763	1.00	77.98	C
ATOM	3004	O	ASP	A	373	55.934	35.565	76.594	1.00	77.97	O
ATOM	3005	N	VAL	A	374	54.343	36.407	77.958	1.00	77.42	N
ATOM	3006	CA	VAL	A	374	54.778	35.672	79.142	1.00	76.64	C
ATOM	3007	CB	VAL	A	374	54.610	36.502	80.435	1.00	76.46	C
ATOM	3008	CG1	VAL	A	374	55.152	35.739	81.634	1.00	75.73	C
ATOM	3009	CG2	VAL	A	374	55.304	37.857	80.298	1.00	75.77	C
ATOM	3010	C	VAL	A	374	53.964	34.381	79.212	1.00	76.56	C
ATOM	3011	O	VAL	A	374	52.738	34.406	79.097	1.00	76.66	O
ATOM	3012	N	LEU	A	375	54.649	33.257	79.382	1.00	76.35	N
ATOM	3013	CA	LEU	A	375	54.004	31.951	79.311	1.00	76.13	C
ATOM	3014	CB	LEU	A	375	55.016	30.887	78.907	1.00	76.15	C
ATOM	3015	CG	LEU	A	375	55.683	31.051	77.544	1.00	76.06	C
ATOM	3016	CD1	LEU	A	375	56.873	30.119	77.481	1.00	76.06	C
ATOM	3017	CD2	LEU	A	375	54.701	30.795	76.399	1.00	75.46	C
ATOM	3018	C	LEU	A	375	53.337	31.531	80.610	1.00	76.13	C
ATOM	3019	O	LEU	A	375	53.939	31.603	81.683	1.00	76.07	O
ATOM	3020	N	LEU	A	376	52.092	31.078	80.490	1.00	76.11	N

ATOM	3021	CA	LEU	A	376	51.329	30.522	81.606	1.00	75.90	C
ATOM	3022	CB	LEU	A	376	49.829	30.628	81.321	1.00	75.75	C
ATOM	3023	CG	LEU	A	376	49.259	31.933	80.759	1.00	75.28	C
ATOM	3024	CD1	LEU	A	376	47.783	31.757	80.480	1.00	75.03	C
ATOM	3025	CD2	LEU	A	376	49.493	33.108	81.691	1.00	74.69	C
ATOM	3026	C	LEU	A	376	51.727	29.058	81.815	1.00	76.02	C
ATOM	3027	O	LEU	A	376	52.516	28.523	81.034	1.00	75.92	O
ATOM	3028	N	PRO	A	377	51.216	28.412	82.884	1.00	76.22	N
ATOM	3029	CA	PRO	A	377	51.493	26.994	83.114	1.00	76.45	C
ATOM	3030	CB	PRO	A	377	50.666	26.680	84.359	1.00	76.33	C
ATOM	3031	CG	PRO	A	377	50.577	27.967	85.062	1.00	76.23	C
ATOM	3032	CD	PRO	A	377	50.405	28.974	83.977	1.00	76.28	C
ATOM	3033	C	PRO	A	377	51.059	26.098	81.961	1.00	76.73	C
ATOM	3034	O	PRO	A	377	49.973	26.288	81.405	1.00	77.00	O
ATOM	3035	N	ASN	A	378	51.921	25.142	81.613	1.00	76.86	N
ATOM	3036	CA	ASN	A	378	51.672	24.163	80.545	1.00	77.05	C
ATOM	3037	CB	ASN	A	378	50.396	23.359	80.834	1.00	77.13	C
ATOM	3038	CG	ASN	A	378	50.433	21.961	80.243	1.00	77.33	C
ATOM	3039	OD1	ASN	A	378	51.502	21.407	79.978	1.00	77.09	O
ATOM	3040	ND2	ASN	A	378	49.254	21.379	80.039	1.00	77.96	N
ATOM	3041	C	ASN	A	378	51.670	24.754	79.120	1.00	77.19	C
ATOM	3042	O	ASN	A	378	51.143	24.155	78.172	1.00	77.32	O
ATOM	3043	N	TYR	A	379	52.274	25.930	78.981	1.00	77.19	N
ATOM	3044	CA	TYR	A	379	52.465	26.566	77.690	1.00	77.06	C
ATOM	3045	CB	TYR	A	379	52.179	28.058	77.788	1.00	77.08	C
ATOM	3046	CG	TYR	A	379	50.723	28.472	77.755	1.00	77.36	C
ATOM	3047	CD1	TYR	A	379	49.698	27.583	78.087	1.00	77.39	C
ATOM	3048	CE1	TYR	A	379	48.368	27.981	78.062	1.00	76.91	C
ATOM	3049	CZ	TYR	A	379	48.053	29.284	77.723	1.00	77.11	C
ATOM	3050	OH	TYR	A	379	46.740	29.694	77.696	1.00	77.17	O
ATOM	3051	CE2	TYR	A	379	49.051	30.186	77.403	1.00	77.41	C
ATOM	3052	CD2	TYR	A	379	50.375	29.780	77.427	1.00	77.43	C
ATOM	3053	C	TYR	A	379	53.919	26.381	77.322	1.00	77.16	C
ATOM	3054	O	TYR	A	379	54.802	26.978	77.954	1.00	77.22	O
ATOM	3055	N	PHE	A	380	54.160	25.538	76.316	1.00	77.11	N
ATOM	3056	CA	PHE	A	380	55.507	25.224	75.812	1.00	76.88	C
ATOM	3057	CB	PHE	A	380	56.090	26.398	75.015	1.00	76.24	C
ATOM	3058	CG	PHE	A	380	55.316	26.717	73.780	1.00	75.55	C
ATOM	3059	CD1	PHE	A	380	55.479	25.960	72.626	1.00	74.64	C
ATOM	3060	CE1	PHE	A	380	54.747	26.241	71.475	1.00	73.86	C
ATOM	3061	CZ	PHE	A	380	53.844	27.285	71.472	1.00	74.29	C
ATOM	3062	CE2	PHE	A	380	53.670	28.048	72.618	1.00	74.75	C
ATOM	3063	CD2	PHE	A	380	54.406	27.760	73.769	1.00	75.15	C
ATOM	3064	C	PHE	A	380	56.472	24.760	76.895	1.00	77.30	C
ATOM	3065	O	PHE	A	380	57.635	25.153	76.913	1.00	77.47	O
ATOM	3066	N	THR	A	381	55.985	23.915	77.793	1.00	77.87	N
ATOM	3067	CA	THR	A	381	56.810	23.403	78.876	1.00	78.64	C
ATOM	3068	CB	THR	A	381	56.118	23.583	80.225	1.00	78.58	C
ATOM	3069	OG1	THR	A	381	54.836	22.946	80.174	1.00	79.02	O
ATOM	3070	CG2	THR	A	381	55.943	25.072	80.560	1.00	78.60	C
ATOM	3071	C	THR	A	381	57.069	21.916	78.693	1.00	79.23	C
ATOM	3072	O	THR	A	381	56.289	21.216	78.053	1.00	79.04	O
ATOM	3073	N	CYS	A	382	58.174	21.442	79.256	1.00	80.04	N
ATOM	3074	CA	CYS	A	382	58.413	20.015	79.377	1.00	80.90	C
ATOM	3075	CB	CYS	A	382	59.729	19.626	78.706	1.00	81.22	C
ATOM	3076	SG	CYS	A	382	59.747	19.811	76.894	1.00	84.23	S

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ATOM   3077  C   CYS A 382      58.476  19.669  80.843  1.00 80.69           C
ATOM   3078  O   CYS A 382      58.817  20.515  81.660  1.00 80.78           O
ATOM   3079  N   ARG A 383      58.138  18.432  81.187  1.00 80.84           N
ATOM   3080  CA  ARG A 383      58.433  17.943  82.524  1.00 80.99           C
ATOM   3081  CB  ARG A 383      57.387  16.944  83.005  1.00 81.11           C
ATOM   3082  CG  ARG A 383      57.358  16.765  84.520  1.00 82.05           C
ATOM   3083  CD  ARG A 383      56.060  16.095  85.000  1.00 83.98           C
ATOM   3084  NE  ARG A 383      55.759  14.852  84.276  1.00 84.81           N
ATOM   3085  CZ  ARG A 383      56.265  13.651  84.561  1.00 84.55           C
ATOM   3086  NH1 ARG A 383      57.117  13.491  85.567  1.00 84.60           N
ATOM   3087  NH2 ARG A 383      55.913  12.602  83.831  1.00 84.46           N
ATOM   3088  C   ARG A 383      59.827  17.333  82.480  1.00 80.90           C
ATOM   3089  O   ARG A 383      60.051  16.290  81.863  1.00 80.92           O
ATOM   3090  N   ARG A 384      60.767  18.030  83.110  1.00 80.89           N
ATOM   3091  CA  ARG A 384      62.183  17.679  83.094  1.00 80.93           C
ATOM   3092  CB  ARG A 384      62.927  18.651  83.993  1.00 81.06           C
ATOM   3093  CG  ARG A 384      64.406  18.698  83.766  1.00 82.15           C
ATOM   3094  CD  ARG A 384      65.002  19.796  84.609  1.00 82.90           C
ATOM   3095  NE  ARG A 384      65.251  19.351  85.974  1.00 82.52           N
ATOM   3096  CZ  ARG A 384      65.321  20.164  87.019  1.00 82.26           C
ATOM   3097  NH1 ARG A 384      65.141  21.470  86.859  1.00 82.27           N
ATOM   3098  NH2 ARG A 384      65.561  19.666  88.223  1.00 81.89           N
ATOM   3099  C   ARG A 384      62.426  16.257  83.579  1.00 80.70           C
ATOM   3100  O   ARG A 384      61.797  15.813  84.540  1.00 80.88           O
ATOM   3101  N   ALA A 385      63.339  15.551  82.921  1.00 80.49           N
ATOM   3102  CA  ALA A 385      63.627  14.161  83.269  1.00 80.56           C
ATOM   3103  CB  ALA A 385      64.544  13.530  82.251  1.00 80.54           C
ATOM   3104  C   ALA A 385      64.228  14.051  84.656  1.00 80.85           C
ATOM   3105  O   ALA A 385      65.133  14.808  85.016  1.00 80.88           O
ATOM   3106  N   ARG A 386      63.687  13.121  85.437  1.00 81.32           N
ATOM   3107  CA  ARG A 386      64.186  12.811  86.770  1.00 81.88           C
ATOM   3108  CB  ARG A 386      63.378  13.532  87.842  1.00 81.86           C
ATOM   3109  CG  ARG A 386      63.714  14.996  88.024  1.00 82.70           C
ATOM   3110  CD  ARG A 386      62.612  15.661  88.821  1.00 84.26           C
ATOM   3111  NE  ARG A 386      62.570  17.109  88.633  1.00 85.26           N
ATOM   3112  CZ  ARG A 386      62.757  18.001  89.605  1.00 86.19           C
ATOM   3113  NH1 ARG A 386      62.998  17.604  90.854  1.00 85.88           N
ATOM   3114  NH2 ARG A 386      62.692  19.299  89.328  1.00 86.41           N
ATOM   3115  C   ARG A 386      64.071  11.315  86.985  1.00 82.23           C
ATOM   3116  O   ARG A 386      63.035  10.719  86.679  1.00 82.36           O
ATOM   3117  N   ILE A 387      65.136  10.713  87.508  1.00 82.61           N
ATOM   3118  CA  ILE A 387      65.133   9.286  87.820  1.00 82.96           C
ATOM   3119  CB  ILE A 387      66.574   8.714  87.873  1.00 82.81           C
ATOM   3120  CG1 ILE A 387      67.230   8.831  86.492  1.00 82.22           C
ATOM   3121  CD1 ILE A 387      68.746   8.916  86.508  1.00 81.49           C
ATOM   3122  CG2 ILE A 387      66.570   7.255  88.332  1.00 82.77           C
ATOM   3123  C   ILE A 387      64.362   9.060  89.125  1.00 83.42           C
ATOM   3124  O   ILE A 387      64.514   9.826  90.081  1.00 83.39           O
ATOM   3125  N   ARG A 388      63.528   8.019  89.142  1.00 83.95           N
ATOM   3126  CA  ARG A 388      62.631   7.734  90.269  1.00 84.73           C
ATOM   3127  CB  ARG A 388      61.655   6.603  89.913  1.00 84.88           C
ATOM   3128  CG  ARG A 388      60.850   6.834  88.638  1.00 85.51           C
ATOM   3129  CD  ARG A 388      59.682   5.862  88.532  1.00 85.65           C
ATOM   3130  NE  ARG A 388      58.794   6.208  87.422  1.00 87.31           N
ATOM   3131  CZ  ARG A 388      57.470   6.058  87.436  1.00 88.18           C
ATOM   3132  NH1 ARG A 388      56.753   6.411  86.376  1.00 88.55           N
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ATOM	3133	NH2	ARG	A	388	56.854	5.569	88.510	1.00	88.11	N
ATOM	3134	C	ARG	A	388	63.375	7.388	91.563	1.00	84.64	C
ATOM	3135	O	ARG	A	388	63.337	8.151	92.533	1.00	84.55	O
ATOM	3136	N	ASP	A	389	64.047	6.237	91.558	1.00	84.73	N
ATOM	3137	CA	ASP	A	389	64.781	5.738	92.717	1.00	84.73	C
ATOM	3138	CB	ASP	A	389	65.104	4.250	92.534	1.00	84.76	C
ATOM	3139	CG	ASP	A	389	65.705	3.616	93.777	1.00	84.89	C
ATOM	3140	OD1	ASP	A	389	65.743	4.272	94.840	1.00	85.13	O
ATOM	3141	OD2	ASP	A	389	66.142	2.448	93.690	1.00	84.90	O
ATOM	3142	C	ASP	A	389	66.053	6.553	92.969	1.00	84.70	C
ATOM	3143	O	ASP	A	389	67.061	6.395	92.273	1.00	84.70	O
ATOM	3144	N	ARG	A	390	65.987	7.416	93.978	1.00	84.68	N
ATOM	3145	CA	ARG	A	390	67.067	8.346	94.301	1.00	84.69	C
ATOM	3146	CB	ARG	A	390	66.475	9.664	94.849	1.00	84.82	C
ATOM	3147	CG	ARG	A	390	67.424	10.879	95.031	1.00	85.21	C
ATOM	3148	CD	ARG	A	390	68.491	11.080	93.931	1.00	86.28	C
ATOM	3149	NE	ARG	A	390	68.069	10.684	92.583	1.00	86.79	N
ATOM	3150	CZ	ARG	A	390	67.574	11.506	91.659	1.00	87.00	C
ATOM	3151	NH1	ARG	A	390	67.231	11.023	90.469	1.00	86.85	N
ATOM	3152	NH2	ARG	A	390	67.418	12.801	91.913	1.00	86.62	N
ATOM	3153	C	ARG	A	390	68.113	7.730	95.245	1.00	84.49	C
ATOM	3154	O	ARG	A	390	69.187	8.297	95.443	1.00	84.50	O
ATOM	3155	N	LYS	A	391	67.808	6.565	95.814	1.00	84.32	N
ATOM	3156	CA	LYS	A	391	68.806	5.817	96.584	1.00	84.20	C
ATOM	3157	CB	LYS	A	391	68.152	4.865	97.595	1.00	84.21	C
ATOM	3158	CG	LYS	A	391	69.158	4.004	98.361	1.00	84.17	C
ATOM	3159	CD	LYS	A	391	68.527	3.233	99.504	1.00	84.13	C
ATOM	3160	CE	LYS	A	391	69.578	2.395	100.219	1.00	83.93	C
ATOM	3161	NZ	LYS	A	391	69.052	1.742	101.447	1.00	83.84	N
ATOM	3162	C	LYS	A	391	69.712	5.048	95.629	1.00	84.13	C
ATOM	3163	O	LYS	A	391	69.236	4.439	94.670	1.00	84.22	O
ATOM	3164	N	ALA	A	392	71.016	5.081	95.897	1.00	84.06	N
ATOM	3165	CA	ALA	A	392	72.011	4.440	95.030	1.00	83.91	C
ATOM	3166	CB	ALA	A	392	73.421	4.910	95.395	1.00	84.02	C
ATOM	3167	C	ALA	A	392	71.931	2.909	95.036	1.00	83.74	C
ATOM	3168	O	ALA	A	392	71.914	2.275	96.100	1.00	83.61	O
ATOM	3169	N	GLN	A	393	71.877	2.334	93.834	1.00	83.47	N
ATOM	3170	CA	GLN	A	393	71.874	0.885	93.654	1.00	83.21	C
ATOM	3171	CB	GLN	A	393	71.547	0.510	92.206	1.00	83.12	C
ATOM	3172	CG	GLN	A	393	70.316	1.181	91.622	1.00	83.16	C
ATOM	3173	CD	GLN	A	393	69.943	0.623	90.254	1.00	83.22	C
ATOM	3174	OE1	GLN	A	393	69.568	-0.547	90.125	1.00	82.80	O
ATOM	3175	NE2	GLN	A	393	70.037	1.463	89.227	1.00	82.44	N
ATOM	3176	C	GLN	A	393	73.234	0.308	94.021	1.00	83.09	C
ATOM	3177	O	GLN	A	393	74.271	0.918	93.747	1.00	82.99	O
ATOM	3178	N	GLN	A	394	73.221	-0.868	94.644	1.00	82.98	N
ATOM	3179	CA	GLN	A	394	74.447	-1.585	94.995	1.00	82.81	C
ATOM	3180	CB	GLN	A	394	74.951	-1.177	96.383	1.00	82.81	C
ATOM	3181	CG	GLN	A	394	75.984	-0.073	96.341	1.00	83.06	C
ATOM	3182	CD	GLN	A	394	76.529	0.279	97.700	1.00	83.30	C
ATOM	3183	OE1	GLN	A	394	76.924	-0.594	98.477	1.00	84.07	O
ATOM	3184	NE2	GLN	A	394	76.569	1.572	97.994	1.00	83.36	N
ATOM	3185	C	GLN	A	394	74.252	-3.091	94.931	1.00	82.60	C
ATOM	3186	O	GLN	A	394	73.929	-3.727	95.938	1.00	82.64	O
ATOM	3187	N	VAL	A	395	74.449	-3.656	93.743	1.00	82.29	N
ATOM	3188	CA	VAL	A	395	74.295	-5.098	93.561	1.00	81.99	C

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ATOM   3189  CB  VAL A 395      73.493  -5.483  92.268  1.00 82.10           C
ATOM   3190  CG1 VAL A 395      72.021  -5.078  92.396  1.00 82.06           C
ATOM   3191  CG2 VAL A 395      74.116  -4.889  91.017  1.00 81.89           C
ATOM   3192  C   VAL A 395      75.627  -5.846  93.652  1.00 81.69           C
ATOM   3193  O   VAL A 395      76.649  -5.408  93.113  1.00 81.52           O
ATOM   3194  N   PHE A 396      75.591  -6.970  94.359  1.00 81.37           N
ATOM   3195  CA  PHE A 396      76.757  -7.815  94.568  1.00 81.16           C
ATOM   3196  CB  PHE A 396      76.929  -8.123  96.063  1.00 81.25           C
ATOM   3197  CG  PHE A 396      77.018  -6.893  96.934  1.00 81.47           C
ATOM   3198  CD1 PHE A 396      78.256  -6.402  97.339  1.00 81.59           C
ATOM   3199  CE1 PHE A 396      78.347  -5.263  98.141  1.00 81.63           C
ATOM   3200  CZ  PHE A 396      77.186  -4.603  98.548  1.00 81.54           C
ATOM   3201  CE2 PHE A 396      75.940  -5.085  98.150  1.00 81.46           C
ATOM   3202  CD2 PHE A 396      75.862  -6.225  97.350  1.00 81.54           C
ATOM   3203  C   PHE A 396      76.569  -9.099  93.771  1.00 80.90           C
ATOM   3204  O   PHE A 396      75.577  -9.807  93.955  1.00 80.88           O
ATOM   3205  N   VAL A 397      77.512  -9.390  92.879  1.00 80.60           N
ATOM   3206  CA  VAL A 397      77.408 -10.562  92.007  1.00 80.45           C
ATOM   3207  CB  VAL A 397      76.914 -10.165  90.584  1.00 80.43           C
ATOM   3208  CG1 VAL A 397      78.008  -9.459  89.795  1.00 80.34           C
ATOM   3209  CG2 VAL A 397      76.393 -11.379  89.819  1.00 80.40           C
ATOM   3210  C   VAL A 397      78.718 -11.359  91.928  1.00 80.35           C
ATOM   3211  O   VAL A 397      79.803 -10.780  91.851  1.00 80.47           O
ATOM   3212  N   ASP A 398      78.609 -12.685  91.956  1.00 80.10           N
ATOM   3213  CA  ASP A 398      79.768 -13.552  91.753  1.00 79.94           C
ATOM   3214  CB  ASP A 398      79.519 -14.938  92.352  1.00 79.91           C
ATOM   3215  CG  ASP A 398      79.296 -14.897  93.857  1.00 79.85           C
ATOM   3216  OD1 ASP A 398      79.735 -13.925  94.511  1.00 79.86           O
ATOM   3217  OD2 ASP A 398      78.680 -15.845  94.387  1.00 79.73           O
ATOM   3218  C   ASP A 398      80.113 -13.657  90.267  1.00 79.82           C
ATOM   3219  O   ASP A 398      79.224 -13.636  89.416  1.00 79.85           O
ATOM   3220  N   GLU A 399      81.407 -13.761  89.967  1.00 79.69           N
ATOM   3221  CA  GLU A 399      81.901 -13.832  88.588  1.00 79.60           C
ATOM   3222  CB  GLU A 399      83.393 -14.169  88.570  1.00 79.57           C
ATOM   3223  CG  GLU A 399      84.311 -13.103  89.120  1.00 79.56           C
ATOM   3224  CD  GLU A 399      85.746 -13.590  89.255  1.00 79.92           C
ATOM   3225  OE1 GLU A 399      85.962 -14.810  89.490  1.00 80.16           O
ATOM   3226  OE2 GLU A 399      86.666 -12.747  89.143  1.00 80.78           O
ATOM   3227  C   GLU A 399      81.160 -14.871  87.748  1.00 79.41           C
ATOM   3228  O   GLU A 399      81.092 -16.047  88.123  1.00 79.40           O
ATOM   3229  N   GLY A 400      80.615 -14.431  86.615  1.00 79.11           N
ATOM   3230  CA  GLY A 400      79.957 -15.336  85.674  1.00 78.74           C
ATOM   3231  C   GLY A 400      78.471 -15.553  85.908  1.00 78.47           C
ATOM   3232  O   GLY A 400      77.829 -16.311  85.179  1.00 78.51           O
ATOM   3233  N   HIS A 401      77.927 -14.911  86.937  1.00 78.13           N
ATOM   3234  CA  HIS A 401      76.484 -14.872  87.141  1.00 77.79           C
ATOM   3235  CB  HIS A 401      76.139 -14.789  88.629  1.00 77.69           C
ATOM   3236  CG  HIS A 401      75.961 -16.120  89.291  1.00 77.20           C
ATOM   3237  ND1 HIS A 401      77.021 -16.877  89.742  1.00 76.48           N
ATOM   3238  CE1 HIS A 401      76.564 -17.990  90.286  1.00 76.30           C
ATOM   3239  NE2 HIS A 401      75.245 -17.979  90.210  1.00 76.48           N
ATOM   3240  CD2 HIS A 401      74.843 -16.819  89.594  1.00 76.74           C
ATOM   3241  C   HIS A 401      75.933 -13.652  86.417  1.00 77.76           C
ATOM   3242  O   HIS A 401      76.593 -12.609  86.357  1.00 77.72           O
ATOM   3243  N   THR A 402      74.728 -13.788  85.868  1.00 77.58           N
ATOM   3244  CA  THR A 402      74.056 -12.678  85.187  1.00 77.31           C
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ATOM   3245  CB  THR A 402      73.071 -13.185  84.080  1.00 77.35           C
ATOM   3246  OG1 THR A 402      72.530 -12.067  83.367  1.00 77.35           O
ATOM   3247  CG2 THR A 402      71.932 -14.054  84.653  1.00 77.24           C
ATOM   3248  C   THR A 402      73.367 -11.736  86.184  1.00 77.07           C
ATOM   3249  O   THR A 402      72.768 -12.187  87.160  1.00 77.10           O
ATOM   3250  N   VAL A 403      73.477 -10.430  85.952  1.00 76.82           N
ATOM   3251  CA  VAL A 403      72.841  -9.438  86.829  1.00 76.63           C
ATOM   3252  CB  VAL A 403      73.629  -9.258  88.167  1.00 76.65           C
ATOM   3253  CG1 VAL A 403      74.795  -8.282  88.005  1.00 76.37           C
ATOM   3254  CG2 VAL A 403      72.691  -8.838  89.305  1.00 76.65           C
ATOM   3255  C   VAL A 403      72.606  -8.097  86.114  1.00 76.50           C
ATOM   3256  O   VAL A 403      73.337  -7.741  85.182  1.00 76.40           O
ATOM   3257  N   GLN A 404      71.583  -7.364  86.556  1.00 76.36           N
ATOM   3258  CA  GLN A 404      71.169  -6.128  85.888  1.00 76.27           C
ATOM   3259  CB  GLN A 404      69.962  -6.399  84.984  1.00 76.13           C
ATOM   3260  CG  GLN A 404      68.692  -6.774  85.720  1.00 76.05           C
ATOM   3261  CD  GLN A 404      67.590  -7.224  84.784  1.00 76.27           C
ATOM   3262  OE1 GLN A 404      67.823  -8.012  83.865  1.00 76.13           O
ATOM   3263  NE2 GLN A 404      66.376  -6.729  85.017  1.00 76.09           N
ATOM   3264  C   GLN A 404      70.869  -4.948  86.823  1.00 76.23           C
ATOM   3265  O   GLN A 404      70.475  -5.136  87.975  1.00 76.18           O
ATOM   3266  N   PHE A 405      71.069  -3.734  86.312  1.00 76.19           N
ATOM   3267  CA  PHE A 405      70.616  -2.520  86.983  1.00 76.20           C
ATOM   3268  CB  PHE A 405      71.655  -1.409  86.882  1.00 76.13           C
ATOM   3269  CG  PHE A 405      72.924  -1.675  87.633  1.00 76.28           C
ATOM   3270  CD1 PHE A 405      72.956  -1.619  89.020  1.00 76.48           C
ATOM   3271  CE1 PHE A 405      74.143  -1.842  89.713  1.00 76.65           C
ATOM   3272  CZ  PHE A 405      75.316  -2.112  89.014  1.00 76.45           C
ATOM   3273  CE2 PHE A 405      75.298  -2.158  87.629  1.00 76.38           C
ATOM   3274  CD2 PHE A 405      74.107  -1.935  86.947  1.00 76.40           C
ATOM   3275  C   PHE A 405      69.340  -2.029  86.322  1.00 76.28           C
ATOM   3276  O   PHE A 405      69.194  -2.112  85.107  1.00 76.23           O
ATOM   3277  N   VAL A 406      68.421  -1.508  87.124  1.00 76.57           N
ATOM   3278  CA  VAL A 406      67.207  -0.890  86.592  1.00 76.90           C
ATOM   3279  CB  VAL A 406      65.930  -1.391  87.312  1.00 76.75           C
ATOM   3280  CG1 VAL A 406      65.719  -2.875  87.050  1.00 76.74           C
ATOM   3281  CG2 VAL A 406      66.001  -1.112  88.814  1.00 76.75           C
ATOM   3282  C   VAL A 406      67.298   0.638  86.662  1.00 77.22           C
ATOM   3283  O   VAL A 406      67.959   1.196  87.547  1.00 77.18           O
ATOM   3284  N   CYS A 407      66.651   1.313  85.718  1.00 77.61           N
ATOM   3285  CA  CYS A 407      66.599   2.768  85.752  1.00 77.89           C
ATOM   3286  CB  CYS A 407      67.872   3.377  85.159  1.00 78.03           C
ATOM   3287  SG  CYS A 407      68.221   5.086  85.678  1.00 78.06           S
ATOM   3288  C   CYS A 407      65.370   3.308  85.043  1.00 78.00           C
ATOM   3289  O   CYS A 407      65.368   3.474  83.820  1.00 78.22           O
ATOM   3290  N   ARG A 408      64.327   3.575  85.823  1.00 77.99           N
ATOM   3291  CA  ARG A 408      63.117   4.206  85.307  1.00 77.91           C
ATOM   3292  CB  ARG A 408      61.862   3.486  85.813  1.00 78.03           C
ATOM   3293  CG  ARG A 408      61.696   2.077  85.243  1.00 78.52           C
ATOM   3294  CD  ARG A 408      60.251   1.590  85.311  1.00 79.55           C
ATOM   3295  NE  ARG A 408      59.900   1.007  86.609  1.00 80.14           N
ATOM   3296  CZ  ARG A 408      59.104   1.579  87.514  1.00 80.30           C
ATOM   3297  NH1 ARG A 408      58.559   2.771  87.282  1.00 79.87           N
ATOM   3298  NH2 ARG A 408      58.850   0.954  88.659  1.00 80.03           N
ATOM   3299  C   ARG A 408      63.097   5.690  85.667  1.00 77.63           C
ATOM   3300  O   ARG A 408      63.435   6.073  86.792  1.00 77.62           O
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ATOM	3301	N	ALA	A	409	62.719	6.516	84.696	1.00	77.33	N
ATOM	3302	CA	ALA	A	409	62.707	7.964	84.875	1.00	77.00	C
ATOM	3303	CB	ALA	A	409	63.880	8.575	84.173	1.00	76.94	C
ATOM	3304	C	ALA	A	409	61.414	8.596	84.383	1.00	76.87	C
ATOM	3305	O	ALA	A	409	60.798	8.115	83.434	1.00	76.86	O
ATOM	3306	N	ASP	A	410	61.011	9.680	85.038	1.00	76.73	N
ATOM	3307	CA	ASP	A	410	59.810	10.412	84.663	1.00	76.59	C
ATOM	3308	CB	ASP	A	410	59.089	10.918	85.911	1.00	76.82	C
ATOM	3309	CG	ASP	A	410	58.707	9.797	86.861	1.00	78.01	C
ATOM	3310	OD1	ASP	A	410	59.085	8.632	86.596	1.00	79.50	O
ATOM	3311	OD2	ASP	A	410	58.031	10.076	87.876	1.00	78.92	O
ATOM	3312	C	ASP	A	410	60.162	11.583	83.767	1.00	76.26	C
ATOM	3313	O	ASP	A	410	61.316	12.000	83.706	1.00	76.22	O
ATOM	3314	N	GLY	A	411	59.156	12.102	83.069	1.00	76.06	N
ATOM	3315	CA	GLY	A	411	59.312	13.277	82.223	1.00	75.51	C
ATOM	3316	C	GLY	A	411	58.328	13.336	81.073	1.00	75.28	C
ATOM	3317	O	GLY	A	411	57.801	12.314	80.640	1.00	75.26	O
ATOM	3318	N	ASP	A	412	58.072	14.546	80.591	1.00	75.19	N
ATOM	3319	CA	ASP	A	412	57.327	14.750	79.357	1.00	75.06	C
ATOM	3320	CB	ASP	A	412	55.986	15.433	79.634	1.00	75.05	C
ATOM	3321	CG	ASP	A	412	54.885	14.963	78.694	1.00	75.61	C
ATOM	3322	OD1	ASP	A	412	55.167	14.098	77.832	1.00	76.62	O
ATOM	3323	OD2	ASP	A	412	53.734	15.444	78.824	1.00	75.15	O
ATOM	3324	C	ASP	A	412	58.179	15.607	78.424	1.00	74.84	C
ATOM	3325	O	ASP	A	412	58.458	16.762	78.744	1.00	75.15	O
ATOM	3326	N	PRO	A	413	58.615	15.051	77.275	1.00	74.49	N
ATOM	3327	CA	PRO	A	413	58.370	13.714	76.713	1.00	74.15	C
ATOM	3328	CB	PRO	A	413	58.926	13.829	75.284	1.00	74.20	C
ATOM	3329	CG	PRO	A	413	59.175	15.295	75.056	1.00	74.30	C
ATOM	3330	CD	PRO	A	413	59.478	15.854	76.392	1.00	74.30	C
ATOM	3331	C	PRO	A	413	59.104	12.597	77.464	1.00	73.81	C
ATOM	3332	O	PRO	A	413	60.041	12.885	78.207	1.00	73.53	O
ATOM	3333	N	PRO	A	414	58.677	11.327	77.278	1.00	73.76	N
ATOM	3334	CA	PRO	A	414	59.347	10.164	77.881	1.00	73.71	C
ATOM	3335	CB	PRO	A	414	58.768	8.986	77.099	1.00	73.58	C
ATOM	3336	CG	PRO	A	414	57.422	9.433	76.698	1.00	73.64	C
ATOM	3337	CD	PRO	A	414	57.507	10.921	76.475	1.00	73.76	C
ATOM	3338	C	PRO	A	414	60.863	10.222	77.687	1.00	73.85	C
ATOM	3339	O	PRO	A	414	61.330	10.295	76.546	1.00	74.20	O
ATOM	3340	N	PRO	A	415	61.634	10.191	78.789	1.00	73.72	N
ATOM	3341	CA	PRO	A	415	63.076	10.422	78.706	1.00	73.47	C
ATOM	3342	CB	PRO	A	415	63.475	10.635	80.162	1.00	73.39	C
ATOM	3343	CG	PRO	A	415	62.488	9.864	80.928	1.00	73.50	C
ATOM	3344	CD	PRO	A	415	61.198	9.935	80.173	1.00	73.69	C
ATOM	3345	C	PRO	A	415	63.853	9.252	78.119	1.00	73.34	C
ATOM	3346	O	PRO	A	415	63.414	8.110	78.196	1.00	73.35	O
ATOM	3347	N	ALA	A	416	65.005	9.558	77.532	1.00	73.31	N
ATOM	3348	CA	ALA	A	416	65.919	8.551	77.013	1.00	73.22	C
ATOM	3349	CB	ALA	A	416	66.670	9.105	75.805	1.00	73.12	C
ATOM	3350	C	ALA	A	416	66.900	8.141	78.112	1.00	73.24	C
ATOM	3351	O	ALA	A	416	67.486	9.001	78.788	1.00	73.27	O
ATOM	3352	N	ILE	A	417	67.077	6.835	78.299	1.00	73.00	N
ATOM	3353	CA	ILE	A	417	68.028	6.338	79.293	1.00	72.72	C
ATOM	3354	CB	ILE	A	417	67.481	5.125	80.074	1.00	72.71	C
ATOM	3355	CG1	ILE	A	417	66.029	5.350	80.512	1.00	72.87	C
ATOM	3356	CD1	ILE	A	417	65.833	6.480	81.507	1.00	73.69	C

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ATOM   3357  CG2 ILE A 417      68.377   4.809  81.266  1.00 72.78           C
ATOM   3358  C   ILE A 417      69.343   5.947  78.645  1.00 72.57           C
ATOM   3359  O   ILE A 417      69.376   5.125  77.737  1.00 72.60           O
ATOM   3360  N   LEU A 418      70.421   6.551  79.123  1.00 72.62           N
ATOM   3361  CA  LEU A 418      71.779   6.186  78.735  1.00 72.63           C
ATOM   3362  CB  LEU A 418      72.503   7.391  78.140  1.00 72.88           C
ATOM   3363  CG  LEU A 418      71.852   8.093  76.945  1.00 74.03           C
ATOM   3364  CD1 LEU A 418      72.447   9.490  76.773  1.00 73.90           C
ATOM   3365  CD2 LEU A 418      71.978   7.259  75.645  1.00 75.15           C
ATOM   3366  C   LEU A 418      72.546   5.689  79.959  1.00 72.37           C
ATOM   3367  O   LEU A 418      72.282   6.119  81.085  1.00 72.54           O
ATOM   3368  N   TRP A 419      73.484   4.775  79.737  1.00 72.03           N
ATOM   3369  CA  TRP A 419      74.335   4.265  80.803  1.00 71.65           C
ATOM   3370  CB  TRP A 419      74.114   2.764  81.004  1.00 70.76           C
ATOM   3371  CG  TRP A 419      72.936   2.405  81.855  1.00 69.76           C
ATOM   3372  CD1 TRP A 419      71.689   2.056  81.424  1.00 68.98           C
ATOM   3373  NE1 TRP A 419      70.874   1.781  82.497  1.00 68.60           N
ATOM   3374  CE2 TRP A 419      71.593   1.947  83.651  1.00 68.83           C
ATOM   3375  CD2 TRP A 419      72.898   2.334  83.286  1.00 68.76           C
ATOM   3376  CE3 TRP A 419      73.840   2.565  84.294  1.00 68.46           C
ATOM   3377  CZ3 TRP A 419      73.456   2.405  85.616  1.00 68.73           C
ATOM   3378  CH2 TRP A 419      72.152   2.021  85.948  1.00 69.13           C
ATOM   3379  CZ2 TRP A 419      71.207   1.787  84.983  1.00 69.28           C
ATOM   3380  C   TRP A 419      75.794   4.513  80.470  1.00 72.18           C
ATOM   3381  O   TRP A 419      76.203   4.361  79.317  1.00 72.22           O
ATOM   3382  N   LEU A 420      76.570   4.899  81.481  1.00 72.97           N
ATOM   3383  CA  LEU A 420      78.027   4.934  81.368  1.00 73.71           C
ATOM   3384  CB  LEU A 420      78.592   6.234  81.917  1.00 73.71           C
ATOM   3385  CG  LEU A 420      78.513   7.485  81.047  1.00 74.59           C
ATOM   3386  CD1 LEU A 420      78.856   8.685  81.902  1.00 75.02           C
ATOM   3387  CD2 LEU A 420      79.440   7.408  79.840  1.00 75.13           C
ATOM   3388  C   LEU A 420      78.668   3.781  82.113  1.00 74.24           C
ATOM   3389  O   LEU A 420      78.210   3.386  83.184  1.00 74.11           O
ATOM   3390  N   SER A 421      79.741   3.252  81.534  1.00 75.28           N
ATOM   3391  CA  SER A 421      80.566   2.236  82.181  1.00 76.19           C
ATOM   3392  CB  SER A 421      81.363   1.458  81.131  1.00 76.12           C
ATOM   3393  OG  SER A 421      82.274   2.301  80.451  1.00 76.73           O
ATOM   3394  C   SER A 421      81.495   2.887  83.219  1.00 76.84           C
ATOM   3395  O   SER A 421      81.653   4.111  83.226  1.00 76.57           O
ATOM   3396  N   PRO A 422      82.101   2.077  84.112  1.00 77.71           N
ATOM   3397  CA  PRO A 422      83.044   2.648  85.073  1.00 78.53           C
ATOM   3398  CB  PRO A 422      83.478   1.438  85.904  1.00 78.47           C
ATOM   3399  CG  PRO A 422      83.186   0.261  85.048  1.00 78.15           C
ATOM   3400  CD  PRO A 422      81.964   0.622  84.289  1.00 77.69           C
ATOM   3401  C   PRO A 422      84.239   3.275  84.355  1.00 79.37           C
ATOM   3402  O   PRO A 422      84.837   4.230  84.863  1.00 79.36           O
ATOM   3403  N   ARG A 423      84.550   2.738  83.172  1.00 80.31           N
ATOM   3404  CA  ARG A 423      85.553   3.291  82.251  1.00 81.28           C
ATOM   3405  CB  ARG A 423      85.688   2.376  81.025  1.00 81.25           C
ATOM   3406  CG  ARG A 423      86.039   0.934  81.365  1.00 81.92           C
ATOM   3407  CD  ARG A 423      85.745  -0.041  80.225  1.00 81.88           C
ATOM   3408  NE  ARG A 423      85.948  -1.422  80.670  1.00 82.99           N
ATOM   3409  CZ  ARG A 423      86.188  -2.464  79.874  1.00 83.27           C
ATOM   3410  NH1 ARG A 423      86.262  -2.307  78.557  1.00 83.30           N
ATOM   3411  NH2 ARG A 423      86.361  -3.673  80.401  1.00 83.03           N
ATOM   3412  C   ARG A 423      85.204   4.719  81.796  1.00 81.57           C
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ATOM   3413  O   ARG A 423      86.088   5.488  81.403  1.00 81.59           O
ATOM   3414  N   LYS A 424      83.910   5.050  81.871  1.00 81.96           N
ATOM   3415  CA  LYS A 424      83.332   6.329  81.422  1.00 82.28           C
ATOM   3416  CB  LYS A 424      84.175   7.540  81.859  1.00 82.30           C
ATOM   3417  CG  LYS A 424      84.229   7.744  83.370  1.00 82.87           C
ATOM   3418  CD  LYS A 424      85.383   8.669  83.755  1.00 84.32           C
ATOM   3419  CE  LYS A 424      85.778   8.511  85.226  1.00 84.66           C
ATOM   3420  NZ  LYS A 424      87.001   9.295  85.580  1.00 84.40           N
ATOM   3421  C   LYS A 424      83.007   6.350  79.918  1.00 82.35           C
ATOM   3422  O   LYS A 424      82.858   7.417  79.320  1.00 82.37           O
ATOM   3423  N   HIS A 425      82.882   5.162  79.326  1.00 82.41           N
ATOM   3424  CA  HIS A 425      82.375   5.016  77.961  1.00 82.50           C
ATOM   3425  CB  HIS A 425      83.093   3.889  77.224  1.00 82.58           C
ATOM   3426  CG  HIS A 425      84.577   4.061  77.150  1.00 83.06           C
ATOM   3427  ND1 HIS A 425      85.456   3.198  77.768  1.00 83.53           N
ATOM   3428  CE1 HIS A 425      86.696   3.591  77.532  1.00 83.73           C
ATOM   3429  NE2 HIS A 425      86.651   4.680  76.784  1.00 83.60           N
ATOM   3430  CD2 HIS A 425      85.337   4.995  76.531  1.00 83.21           C
ATOM   3431  C   HIS A 425      80.867   4.753  77.955  1.00 82.49           C
ATOM   3432  O   HIS A 425      80.304   4.248  78.925  1.00 82.49           O
ATOM   3433  N   LEU A 426      80.224   5.095  76.847  1.00 82.48           N
ATOM   3434  CA  LEU A 426      78.781   4.993  76.730  1.00 82.46           C
ATOM   3435  CB  LEU A 426      78.300   5.991  75.684  1.00 82.32           C
ATOM   3436  CG  LEU A 426      76.897   6.548  75.852  1.00 82.31           C
ATOM   3437  CD1 LEU A 426      76.841   7.542  76.997  1.00 82.60           C
ATOM   3438  CD2 LEU A 426      76.486   7.206  74.564  1.00 82.98           C
ATOM   3439  C   LEU A 426      78.358   3.582  76.342  1.00 82.62           C
ATOM   3440  O   LEU A 426      79.169   2.799  75.853  1.00 82.79           O
ATOM   3441  N   VAL A 427      77.090   3.254  76.581  1.00 82.84           N
ATOM   3442  CA  VAL A 427      76.512   1.985  76.133  1.00 82.93           C
ATOM   3443  CB  VAL A 427      76.400   0.939  77.273  1.00 82.91           C
ATOM   3444  CG1 VAL A 427      76.360  -0.467  76.691  1.00 83.20           C
ATOM   3445  CG2 VAL A 427      77.538   1.067  78.280  1.00 82.49           C
ATOM   3446  C   VAL A 427      75.114   2.234  75.566  1.00 83.22           C
ATOM   3447  O   VAL A 427      74.262   2.868  76.218  1.00 83.48           O
ATOM   3448  N   LEU A 435      77.256  -6.868  78.051  1.00 83.13           N
ATOM   3449  CA  LEU A 435      76.763  -5.533  78.386  1.00 83.18           C
ATOM   3450  CB  LEU A 435      77.920  -4.549  78.588  1.00 83.25           C
ATOM   3451  CG  LEU A 435      78.459  -4.344  80.006  1.00 83.73           C
ATOM   3452  CD1 LEU A 435      79.355  -3.115  80.051  1.00 84.19           C
ATOM   3453  CD2 LEU A 435      77.336  -4.196  81.023  1.00 84.19           C
ATOM   3454  C   LEU A 435      75.778  -4.980  77.358  1.00 83.05           C
ATOM   3455  O   LEU A 435      76.167  -4.595  76.251  1.00 83.03           O
ATOM   3456  N   THR A 436      74.504  -4.942  77.743  1.00 82.86           N
ATOM   3457  CA  THR A 436      73.430  -4.485  76.866  1.00 82.73           C
ATOM   3458  CB  THR A 436      72.610  -5.670  76.272  1.00 82.78           C
ATOM   3459  OG1 THR A 436      73.481  -6.759  75.928  1.00 82.86           O
ATOM   3460  CG2 THR A 436      71.832  -5.229  75.034  1.00 82.56           C
ATOM   3461  C   THR A 436      72.482  -3.565  77.627  1.00 82.69           C
ATOM   3462  O   THR A 436      72.037  -3.892  78.731  1.00 82.65           O
ATOM   3463  N   VAL A 437      72.196  -2.410  77.031  1.00 82.63           N
ATOM   3464  CA  VAL A 437      71.172  -1.496  77.531  1.00 82.55           C
ATOM   3465  CB  VAL A 437      71.561  -0.014  77.319  1.00 82.56           C
ATOM   3466  CG1 VAL A 437      70.422   0.919  77.748  1.00 82.29           C
ATOM   3467  CG2 VAL A 437      72.840   0.314  78.074  1.00 82.43           C
ATOM   3468  C   VAL A 437      69.881  -1.795  76.785  1.00 82.64           C
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ATOM   3469  O   VAL A 437      69.860  -1.830  75.550  1.00 82.75           O
ATOM   3470  N   PHE A 438      68.808  -2.018  77.535  1.00 82.59           N
ATOM   3471  CA  PHE A 438      67.523  -2.346  76.936  1.00 82.47           C
ATOM   3472  CB  PHE A 438      66.816  -3.429  77.754  1.00 82.52           C
ATOM   3473  CG  PHE A 438      67.464  -4.782  77.649  1.00 82.82           C
ATOM   3474  CD1 PHE A 438      67.451  -5.487  76.445  1.00 83.22           C
ATOM   3475  CE1 PHE A 438      68.054  -6.742  76.341  1.00 83.36           C
ATOM   3476  CZ  PHE A 438      68.676  -7.305  77.451  1.00 83.13           C
ATOM   3477  CE2 PHE A 438      68.692  -6.611  78.659  1.00 83.21           C
ATOM   3478  CD2 PHE A 438      68.088  -5.357  78.753  1.00 83.10           C
ATOM   3479  C   PHE A 438      66.645  -1.103  76.766  1.00 82.38           C
ATOM   3480  O   PHE A 438      66.789  -0.135  77.523  1.00 82.48           O
ATOM   3481  N   PRO A 439      65.740  -1.122  75.762  1.00 82.18           N
ATOM   3482  CA  PRO A 439      64.832   0.004  75.500  1.00 81.92           C
ATOM   3483  CB  PRO A 439      63.922  -0.536  74.393  1.00 82.01           C
ATOM   3484  CG  PRO A 439      64.740  -1.584  73.710  1.00 82.05           C
ATOM   3485  CD  PRO A 439      65.536  -2.223  74.799  1.00 82.12           C
ATOM   3486  C   PRO A 439      64.000   0.442  76.717  1.00 81.62           C
ATOM   3487  O   PRO A 439      63.639   1.619  76.818  1.00 81.73           O
ATOM   3488  N   ASP A 440      63.711  -0.494  77.624  1.00 81.05           N
ATOM   3489  CA  ASP A 440      62.994  -0.198  78.873  1.00 80.45           C
ATOM   3490  CB  ASP A 440      62.484  -1.496  79.516  1.00 80.42           C
ATOM   3491  CG  ASP A 440      63.600  -2.333  80.146  1.00 80.59           C
ATOM   3492  OD1 ASP A 440      64.803  -2.038  79.941  1.00 80.15           O
ATOM   3493  OD2 ASP A 440      63.263  -3.303  80.858  1.00 80.98           O
ATOM   3494  C   ASP A 440      63.817   0.615  79.891  1.00 79.99           C
ATOM   3495  O   ASP A 440      63.265   1.137  80.864  1.00 79.85           O
ATOM   3496  N   GLY A 441      65.130   0.695  79.670  1.00 79.46           N
ATOM   3497  CA  GLY A 441      66.028   1.494  80.509  1.00 78.91           C
ATOM   3498  C   GLY A 441      66.925   0.707  81.450  1.00 78.49           C
ATOM   3499  O   GLY A 441      67.711   1.281  82.200  1.00 78.30           O
ATOM   3500  N   THR A 442      66.813  -0.614  81.418  1.00 78.25           N
ATOM   3501  CA  THR A 442      67.590  -1.440  82.329  1.00 77.79           C
ATOM   3502  CB  THR A 442      66.770  -2.641  82.889  1.00 77.85           C
ATOM   3503  OG1 THR A 442      66.500  -3.591  81.850  1.00 78.05           O
ATOM   3504  CG2 THR A 442      65.446  -2.158  83.492  1.00 77.52           C
ATOM   3505  C   THR A 442      68.893  -1.885  81.672  1.00 77.50           C
ATOM   3506  O   THR A 442      68.942  -2.137  80.465  1.00 77.42           O
ATOM   3507  N   LEU A 443      69.950  -1.940  82.474  1.00 77.21           N
ATOM   3508  CA  LEU A 443      71.274  -2.325  82.007  1.00 76.82           C
ATOM   3509  CB  LEU A 443      72.340  -1.423  82.632  1.00 76.47           C
ATOM   3510  CG  LEU A 443      73.803  -1.794  82.390  1.00 75.88           C
ATOM   3511  CD1 LEU A 443      74.253  -1.329  81.025  1.00 75.73           C
ATOM   3512  CD2 LEU A 443      74.689  -1.204  83.462  1.00 75.15           C
ATOM   3513  C   LEU A 443      71.541  -3.762  82.395  1.00 76.92           C
ATOM   3514  O   LEU A 443      71.463  -4.105  83.571  1.00 76.92           O
ATOM   3515  N   GLU A 444      71.870  -4.594  81.410  1.00 77.07           N
ATOM   3516  CA  GLU A 444      72.179  -5.999  81.665  1.00 77.12           C
ATOM   3517  CB  GLU A 444      71.371  -6.900  80.740  1.00 77.12           C
ATOM   3518  CG  GLU A 444      71.320  -8.342  81.208  1.00 77.44           C
ATOM   3519  CD  GLU A 444      71.141  -9.299  80.055  1.00 78.00           C
ATOM   3520  OE1 GLU A 444      72.151  -9.929  79.656  1.00 78.25           O
ATOM   3521  OE2 GLU A 444      69.998  -9.408  79.538  1.00 78.36           O
ATOM   3522  C   GLU A 444      73.664  -6.312  81.513  1.00 77.14           C
ATOM   3523  O   GLU A 444      74.274  -5.993  80.491  1.00 77.14           O
ATOM   3524  N   VAL A 445      74.230  -6.945  82.537  1.00 77.22           N
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ATOM   3525  CA  VAL A 445      75.611  -7.424  82.498  1.00 77.40           C
ATOM   3526  CB  VAL A 445      76.396  -7.017  83.766  1.00 77.39           C
ATOM   3527  CG1 VAL A 445      77.886  -7.251  83.564  1.00 77.48           C
ATOM   3528  CG2 VAL A 445      76.134  -5.561  84.121  1.00 77.32           C
ATOM   3529  C   VAL A 445      75.606  -8.947  82.361  1.00 77.51           C
ATOM   3530  O   VAL A 445      75.485  -9.666  83.358  1.00 77.40           O
ATOM   3531  N   ARG A 446      75.741  -9.425  81.124  1.00 77.78           N
ATOM   3532  CA  ARG A 446      75.520 -10.846  80.787  1.00 78.32           C
ATOM   3533  CB  ARG A 446      75.862 -11.130  79.313  1.00 78.34           C
ATOM   3534  CG  ARG A 446      75.220 -10.151  78.333  1.00 78.89           C
ATOM   3535  CD  ARG A 446      75.521 -10.498  76.884  1.00 78.94           C
ATOM   3536  NE  ARG A 446      75.131  -9.406  75.989  1.00 80.55           N
ATOM   3537  CZ  ARG A 446      74.975  -9.520  74.669  1.00 81.02           C
ATOM   3538  NH1 ARG A 446      74.614  -8.460  73.953  1.00 81.33           N
ATOM   3539  NH2 ARG A 446      75.171 -10.686  74.060  1.00 80.70           N
ATOM   3540  C   ARG A 446      76.228 -11.840  81.723  1.00 78.15           C
ATOM   3541  O   ARG A 446      75.572 -12.624  82.405  1.00 78.28           O
ATOM   3542  N   TYR A 447      77.555 -11.814  81.742  1.00 77.93           N
ATOM   3543  CA  TYR A 447      78.322 -12.628  82.677  1.00 77.87           C
ATOM   3544  CB  TYR A 447      78.922 -13.859  81.996  1.00 77.56           C
ATOM   3545  CG  TYR A 447      77.900 -14.713  81.273  1.00 77.27           C
ATOM   3546  CD1 TYR A 447      77.259 -15.769  81.919  1.00 76.89           C
ATOM   3547  CE1 TYR A 447      76.317 -16.552  81.255  1.00 76.50           C
ATOM   3548  CZ  TYR A 447      76.009 -16.276  79.933  1.00 76.65           C
ATOM   3549  OH  TYR A 447      75.085 -17.043  79.268  1.00 76.85           O
ATOM   3550  CE2 TYR A 447      76.630 -15.232  79.270  1.00 76.54           C
ATOM   3551  CD2 TYR A 447      77.570 -14.459  79.938  1.00 76.90           C
ATOM   3552  C   TYR A 447      79.398 -11.730  83.257  1.00 78.10           C
ATOM   3553  O   TYR A 447      80.200 -11.140  82.522  1.00 78.11           O
ATOM   3554  N   ALA A 448      79.391 -11.612  84.580  1.00 78.28           N
ATOM   3555  CA  ALA A 448      80.172 -10.589  85.263  1.00 78.30           C
ATOM   3556  CB  ALA A 448      79.582 -10.293  86.638  1.00 78.26           C
ATOM   3557  C   ALA A 448      81.653 -10.944  85.368  1.00 78.29           C
ATOM   3558  O   ALA A 448      82.018 -12.053  85.782  1.00 78.32           O
ATOM   3559  N   GLN A 449      82.488  -9.990  84.959  1.00 78.12           N
ATOM   3560  CA  GLN A 449      83.937 -10.074  85.108  1.00 77.89           C
ATOM   3561  CB  GLN A 449      84.643  -9.736  83.783  1.00 78.01           C
ATOM   3562  CG  GLN A 449      84.610 -10.837  82.708  1.00 78.31           C
ATOM   3563  CD  GLN A 449      83.324 -10.857  81.877  1.00 78.68           C
ATOM   3564  OE1 GLN A 449      82.733  -9.814  81.576  1.00 77.95           O
ATOM   3565  NE2 GLN A 449      82.897 -12.059  81.491  1.00 78.75           N
ATOM   3566  C   GLN A 449      84.353  -9.083  86.191  1.00 77.58           C
ATOM   3567  O   GLN A 449      83.511  -8.353  86.717  1.00 77.49           O
ATOM   3568  N   VAL A 450      85.642  -9.067  86.525  1.00 77.28           N
ATOM   3569  CA  VAL A 450      86.203  -8.047  87.414  1.00 76.94           C
ATOM   3570  CB  VAL A 450      87.506  -8.540  88.111  1.00 76.92           C
ATOM   3571  CG1 VAL A 450      88.307  -7.379  88.719  1.00 76.87           C
ATOM   3572  CG2 VAL A 450      87.171  -9.566  89.181  1.00 76.59           C
ATOM   3573  C   VAL A 450      86.419  -6.743  86.634  1.00 76.80           C
ATOM   3574  O   VAL A 450      86.343  -5.654  87.204  1.00 76.80           O
ATOM   3575  N   GLN A 451      86.661  -6.863  85.327  1.00 76.54           N
ATOM   3576  CA  GLN A 451      86.805  -5.704  84.444  1.00 76.38           C
ATOM   3577  CB  GLN A 451      87.322  -6.127  83.065  1.00 76.38           C
ATOM   3578  CG  GLN A 451      86.278  -6.783  82.159  1.00 76.27           C
ATOM   3579  CD  GLN A 451      86.802  -7.091  80.766  1.00 76.21           C
ATOM   3580  OE1 GLN A 451      87.969  -6.852  80.457  1.00 76.58           O
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ATOM	3581	NE2	GLN	A	451	85.935	-7.628	79.918	1.00	75.49	N
ATOM	3582	C	GLN	A	451	85.477	-4.959	84.307	1.00	76.45	C
ATOM	3583	O	GLN	A	451	85.399	-3.903	83.668	1.00	76.54	O
ATOM	3584	N	ASP	A	452	84.437	-5.531	84.908	1.00	76.34	N
ATOM	3585	CA	ASP	A	452	83.113	-4.927	84.935	1.00	76.18	C
ATOM	3586	CB	ASP	A	452	82.040	-5.972	84.597	1.00	76.15	C
ATOM	3587	CG	ASP	A	452	82.140	-6.483	83.168	1.00	75.93	C
ATOM	3588	OD1	ASP	A	452	82.219	-5.655	82.236	1.00	75.87	O
ATOM	3589	OD2	ASP	A	452	82.118	-7.718	82.979	1.00	75.29	O
ATOM	3590	C	ASP	A	452	82.812	-4.284	86.290	1.00	76.13	C
ATOM	3591	O	ASP	A	452	81.768	-3.648	86.448	1.00	76.33	O
ATOM	3592	N	ASN	A	453	83.715	-4.455	87.261	1.00	75.96	N
ATOM	3593	CA	ASN	A	453	83.571	-3.835	88.585	1.00	75.76	C
ATOM	3594	CB	ASN	A	453	84.721	-4.245	89.519	1.00	75.82	C
ATOM	3595	CG	ASN	A	453	84.504	-3.791	90.965	1.00	76.15	C
ATOM	3596	OD1	ASN	A	453	85.043	-2.761	91.409	1.00	77.23	O
ATOM	3597	ND2	ASN	A	453	83.702	-4.557	91.703	1.00	75.84	N
ATOM	3598	C	ASN	A	453	83.519	-2.312	88.486	1.00	75.51	C
ATOM	3599	O	ASN	A	453	84.155	-1.721	87.609	1.00	75.37	O
ATOM	3600	N	GLY	A	454	82.748	-1.688	89.372	1.00	75.22	N
ATOM	3601	CA	GLY	A	454	82.793	-0.243	89.521	1.00	75.14	C
ATOM	3602	C	GLY	A	454	81.464	0.482	89.562	1.00	75.07	C
ATOM	3603	O	GLY	A	454	80.415	-0.101	89.859	1.00	75.10	O
ATOM	3604	N	THR	A	455	81.530	1.773	89.259	1.00	74.89	N
ATOM	3605	CA	THR	A	455	80.376	2.651	89.307	1.00	74.62	C
ATOM	3606	CB	THR	A	455	80.687	3.938	90.110	1.00	74.69	C
ATOM	3607	OG1	THR	A	455	80.970	3.586	91.472	1.00	74.58	O
ATOM	3608	CG2	THR	A	455	79.514	4.914	90.072	1.00	74.44	C
ATOM	3609	C	THR	A	455	79.899	2.981	87.899	1.00	74.42	C
ATOM	3610	O	THR	A	455	80.624	3.573	87.097	1.00	74.49	O
ATOM	3611	N	TYR	A	456	78.669	2.565	87.621	1.00	74.06	N
ATOM	3612	CA	TYR	A	456	77.987	2.857	86.376	1.00	73.71	C
ATOM	3613	CB	TYR	A	456	77.152	1.649	85.967	1.00	73.49	C
ATOM	3614	CG	TYR	A	456	77.976	0.479	85.497	1.00	72.97	C
ATOM	3615	CD1	TYR	A	456	78.012	0.134	84.156	1.00	72.49	C
ATOM	3616	CE1	TYR	A	456	78.768	-0.940	83.714	1.00	72.74	C
ATOM	3617	CZ	TYR	A	456	79.504	-1.678	84.619	1.00	72.69	C
ATOM	3618	OH	TYR	A	456	80.256	-2.735	84.169	1.00	73.01	O
ATOM	3619	CE2	TYR	A	456	79.491	-1.353	85.961	1.00	72.54	C
ATOM	3620	CD2	TYR	A	456	78.727	-0.279	86.393	1.00	72.77	C
ATOM	3621	C	TYR	A	456	77.092	4.077	86.567	1.00	73.72	C
ATOM	3622	O	TYR	A	456	76.549	4.290	87.651	1.00	73.75	O
ATOM	3623	N	LEU	A	457	76.941	4.882	85.521	1.00	73.60	N
ATOM	3624	CA	LEU	A	457	76.107	6.067	85.611	1.00	73.59	C
ATOM	3625	CB	LEU	A	457	76.873	7.301	85.143	1.00	73.37	C
ATOM	3626	CG	LEU	A	457	76.417	8.623	85.755	1.00	73.15	C
ATOM	3627	CD1	LEU	A	457	76.925	8.741	87.189	1.00	73.26	C
ATOM	3628	CD2	LEU	A	457	76.908	9.786	84.929	1.00	72.59	C
ATOM	3629	C	LEU	A	457	74.837	5.916	84.798	1.00	73.84	C
ATOM	3630	O	LEU	A	457	74.897	5.668	83.594	1.00	73.90	O
ATOM	3631	N	CYS	A	458	73.690	6.052	85.460	1.00	74.42	N
ATOM	3632	CA	CYS	A	458	72.424	6.163	84.752	1.00	74.27	C
ATOM	3633	CB	CYS	A	458	71.254	5.612	85.556	1.00	74.51	C
ATOM	3634	SG	CYS	A	458	69.794	5.609	84.493	1.00	76.34	S
ATOM	3635	C	CYS	A	458	72.136	7.608	84.391	1.00	73.97	C
ATOM	3636	O	CYS	A	458	72.154	8.488	85.243	1.00	74.13	O

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ATOM   3637  N   ILE A 459      71.861   7.846  83.118  1.00 73.70           N
ATOM   3638  CA  ILE A 459      71.595   9.189  82.637  1.00 73.42           C
ATOM   3639  CB  ILE A 459      72.649   9.622  81.623  1.00 73.42           C
ATOM   3640  CG1 ILE A 459      74.035   9.582  82.258  1.00 73.83           C
ATOM   3641  CD1 ILE A 459      75.114   9.124  81.318  1.00 74.83           C
ATOM   3642  CG2 ILE A 459      72.343  11.016  81.119  1.00 73.72           C
ATOM   3643  C   ILE A 459      70.247   9.229  81.959  1.00 73.11           C
ATOM   3644  O   ILE A 459      70.062   8.617  80.915  1.00 73.30           O
ATOM   3645  N   ALA A 460      69.299   9.937  82.555  1.00 72.92           N
ATOM   3646  CA  ALA A 460      68.001  10.145  81.917  1.00 72.87           C
ATOM   3647  CB  ALA A 460      66.881   9.925  82.899  1.00 72.61           C
ATOM   3648  C   ALA A 460      67.950  11.556  81.348  1.00 72.93           C
ATOM   3649  O   ALA A 460      68.317  12.520  82.026  1.00 73.05           O
ATOM   3650  N   ALA A 461      67.511  11.674  80.099  1.00 72.89           N
ATOM   3651  CA  ALA A 461      67.486  12.969  79.425  1.00 72.92           C
ATOM   3652  CB  ALA A 461      68.737  13.165  78.617  1.00 72.65           C
ATOM   3653  C   ALA A 461      66.264  13.158  78.541  1.00 73.12           C
ATOM   3654  O   ALA A 461      65.835  12.245  77.836  1.00 73.32           O
ATOM   3655  N   ASN A 462      65.704  14.357  78.609  1.00 73.40           N
ATOM   3656  CA  ASN A 462      64.711  14.821  77.655  1.00 73.64           C
ATOM   3657  CB  ASN A 462      63.278  14.482  78.108  1.00 73.42           C
ATOM   3658  CG  ASN A 462      62.788  15.339  79.271  1.00 72.65           C
ATOM   3659  OD1 ASN A 462      63.509  16.185  79.798  1.00 71.82           O
ATOM   3660  ND2 ASN A 462      61.541  15.113  79.674  1.00 72.21           N
ATOM   3661  C   ASN A 462      64.908  16.315  77.433  1.00 74.15           C
ATOM   3662  O   ASN A 462      65.762  16.944  78.076  1.00 74.09           O
ATOM   3663  N   ALA A 463      64.118  16.879  76.529  1.00 74.61           N
ATOM   3664  CA  ALA A 463      64.204  18.293  76.208  1.00 75.21           C
ATOM   3665  CB  ALA A 463      63.037  18.685  75.343  1.00 75.29           C
ATOM   3666  C   ALA A 463      64.268  19.175  77.459  1.00 75.71           C
ATOM   3667  O   ALA A 463      65.009  20.151  77.494  1.00 76.10           O
ATOM   3668  N   GLY A 464      63.504  18.818  78.488  1.00 76.11           N
ATOM   3669  CA  GLY A 464      63.460  19.595  79.724  1.00 76.39           C
ATOM   3670  C   GLY A 464      64.792  19.655  80.443  1.00 76.56           C
ATOM   3671  O   GLY A 464      65.073  20.615  81.158  1.00 76.88           O
ATOM   3672  N   GLY A 465      65.612  18.627  80.249  1.00 76.61           N
ATOM   3673  CA  GLY A 465      66.889  18.505  80.947  1.00 76.41           C
ATOM   3674  C   GLY A 465      67.218  17.061  81.265  1.00 76.16           C
ATOM   3675  O   GLY A 465      66.579  16.146  80.757  1.00 76.12           O
ATOM   3676  N   ASN A 466      68.213  16.858  82.117  1.00 76.09           N
ATOM   3677  CA  ASN A 466      68.699  15.523  82.410  1.00 76.21           C
ATOM   3678  CB  ASN A 466      69.986  15.255  81.640  1.00 76.45           C
ATOM   3679  CG  ASN A 466      71.082  16.254  81.972  1.00 77.51           C
ATOM   3680  OD1 ASN A 466      71.878  16.038  82.889  1.00 78.09           O
ATOM   3681  ND2 ASN A 466      71.119  17.363  81.234  1.00 78.84           N
ATOM   3682  C   ASN A 466      68.933  15.261  83.891  1.00 76.21           C
ATOM   3683  O   ASN A 466      68.991  16.188  84.697  1.00 76.00           O
ATOM   3684  N   ASP A 467      69.067  13.981  84.230  1.00 76.29           N
ATOM   3685  CA  ASP A 467      69.367  13.550  85.587  1.00 76.37           C
ATOM   3686  CB  ASP A 467      68.079  13.104  86.285  1.00 76.56           C
ATOM   3687  CG  ASP A 467      68.166  13.175  87.813  1.00 77.32           C
ATOM   3688  OD1 ASP A 467      69.043  13.890  88.359  1.00 77.72           O
ATOM   3689  OD2 ASP A 467      67.330  12.515  88.471  1.00 77.93           O
ATOM   3690  C   ASP A 467      70.348  12.389  85.512  1.00 76.19           C
ATOM   3691  O   ASP A 467      70.423  11.703  84.491  1.00 76.47           O
ATOM   3692  N   SER A 468      71.104  12.175  86.583  1.00 75.91           N
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ATOM	3693	CA	SER	A	468	72.001	11.024	86.663	1.00 75.62	C
ATOM	3694	CB	SER	A	468	73.423	11.387	86.206	1.00 75.56	C
ATOM	3695	OG	SER	A	468	73.882	12.598	86.786	1.00 74.81	O
ATOM	3696	C	SER	A	468	72.014	10.387	88.046	1.00 75.63	C
ATOM	3697	O	SER	A	468	71.805	11.054	89.056	1.00 75.66	O
ATOM	3698	N	MET	A	469	72.248	9.083	88.074	1.00 75.75	N
ATOM	3699	CA	MET	A	469	72.338	8.330	89.315	1.00 75.99	C
ATOM	3700	CB	MET	A	469	71.041	7.572	89.597	1.00 76.17	C
ATOM	3701	CG	MET	A	469	70.013	8.353	90.393	1.00 77.69	C
ATOM	3702	SD	MET	A	469	70.474	8.584	92.125	1.00 80.55	S
ATOM	3703	CE	MET	A	469	70.580	6.875	92.657	1.00 80.20	C
ATOM	3704	C	MET	A	469	73.458	7.331	89.191	1.00 75.87	C
ATOM	3705	O	MET	A	469	73.539	6.619	88.187	1.00 75.87	O
ATOM	3706	N	PRO	A	470	74.341	7.278	90.201	1.00 75.86	N
ATOM	3707	CA	PRO	A	470	75.337	6.217	90.246	1.00 75.74	C
ATOM	3708	CB	PRO	A	470	76.269	6.651	91.388	1.00 75.72	C
ATOM	3709	CG	PRO	A	470	75.951	8.102	91.637	1.00 75.77	C
ATOM	3710	CD	PRO	A	470	74.496	8.216	91.326	1.00 75.88	C
ATOM	3711	C	PRO	A	470	74.705	4.859	90.555	1.00 75.73	C
ATOM	3712	O	PRO	A	470	73.648	4.780	91.184	1.00 75.70	O
ATOM	3713	N	ALA	A	471	75.351	3.806	90.076	1.00 75.82	N
ATOM	3714	CA	ALA	A	471	74.993	2.440	90.409	1.00 75.93	C
ATOM	3715	CB	ALA	A	471	74.124	1.834	89.331	1.00 75.95	C
ATOM	3716	C	ALA	A	471	76.302	1.683	90.535	1.00 76.11	C
ATOM	3717	O	ALA	A	471	77.164	1.782	89.660	1.00 76.25	O
ATOM	3718	N	HIS	A	472	76.459	0.943	91.628	1.00 76.23	N
ATOM	3719	CA	HIS	A	472	77.726	0.290	91.926	1.00 76.20	C
ATOM	3720	CB	HIS	A	472	78.186	0.632	93.346	1.00 76.25	C
ATOM	3721	CG	HIS	A	472	78.075	2.086	93.684	1.00 76.55	C
ATOM	3722	ND1	HIS	A	472	79.071	2.995	93.395	1.00 76.82	N
ATOM	3723	CE1	HIS	A	472	78.699	4.196	93.804	1.00 77.04	C
ATOM	3724	NE2	HIS	A	472	77.497	4.099	94.344	1.00 76.93	N
ATOM	3725	CD2	HIS	A	472	77.084	2.790	94.280	1.00 76.70	C
ATOM	3726	C	HIS	A	472	77.615	-1.213	91.759	1.00 76.17	C
ATOM	3727	O	HIS	A	472	76.718	-1.844	92.323	1.00 76.21	O
ATOM	3728	N	LEU	A	473	78.531	-1.773	90.974	1.00 76.12	N
ATOM	3729	CA	LEU	A	473	78.622	-3.215	90.792	1.00 76.09	C
ATOM	3730	CB	LEU	A	473	78.696	-3.570	89.306	1.00 75.88	C
ATOM	3731	CG	LEU	A	473	78.711	-5.063	88.972	1.00 75.24	C
ATOM	3732	CD1	LEU	A	473	77.398	-5.716	89.357	1.00 74.74	C
ATOM	3733	CD2	LEU	A	473	78.988	-5.264	87.501	1.00 74.85	C
ATOM	3734	C	LEU	A	473	79.832	-3.782	91.527	1.00 76.29	C
ATOM	3735	O	LEU	A	473	80.973	-3.445	91.202	1.00 76.31	O
ATOM	3736	N	HIS	A	474	79.567	-4.644	92.509	1.00 76.44	N
ATOM	3737	CA	HIS	A	474	80.617	-5.299	93.288	1.00 76.56	C
ATOM	3738	CB	HIS	A	474	80.311	-5.231	94.787	1.00 76.49	C
ATOM	3739	CG	HIS	A	474	80.019	-3.850	95.286	1.00 76.52	C
ATOM	3740	ND1	HIS	A	474	78.784	-3.255	95.149	1.00 76.63	N
ATOM	3741	CE1	HIS	A	474	78.817	-2.046	95.679	1.00 76.20	C
ATOM	3742	NE2	HIS	A	474	80.029	-1.837	96.159	1.00 76.38	N
ATOM	3743	CD2	HIS	A	474	80.800	-2.951	95.928	1.00 76.32	C
ATOM	3744	C	HIS	A	474	80.744	-6.753	92.851	1.00 76.75	C
ATOM	3745	O	HIS	A	474	79.865	-7.574	93.131	1.00 76.84	O
ATOM	3746	N	VAL	A	475	81.837	-7.065	92.160	1.00 76.88	N
ATOM	3747	CA	VAL	A	475	82.063	-8.413	91.641	1.00 77.04	C
ATOM	3748	CB	VAL	A	475	82.521	-8.383	90.164	1.00 76.94	C

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ATOM   3749  CG1 VAL A 475      82.851  -9.783  89.671  1.00 77.09           C
ATOM   3750  CG2 VAL A 475      81.443  -7.763  89.295  1.00 76.90           C
ATOM   3751  C   VAL A 475      83.048  -9.205  92.512  1.00 77.28           C
ATOM   3752  O   VAL A 475      84.233  -8.868  92.604  1.00 77.36           O
ATOM   3753  N   ARG A 476      82.542 -10.261  93.146  1.00 77.44           N
ATOM   3754  CA  ARG A 476      83.339 -11.088  94.049  1.00 77.73           C
ATOM   3755  CB  ARG A 476      82.514 -11.481  95.281  1.00 77.76           C
ATOM   3756  CG  ARG A 476      81.739 -10.315  95.906  1.00 78.05           C
ATOM   3757  CD  ARG A 476      81.216 -10.660  97.293  1.00 78.28           C
ATOM   3758  NE  ARG A 476      80.434  -9.570  97.882  1.00 79.19           N
ATOM   3759  CZ  ARG A 476      80.163  -9.450  99.182  1.00 79.16           C
ATOM   3760  NH1 ARG A 476      80.616 -10.347 100.053  1.00 78.74           N
ATOM   3761  NH2 ARG A 476      79.442  -8.423  99.615  1.00 79.18           N
ATOM   3762  C   ARG A 476      83.865 -12.325  93.316  1.00 77.64           C
ATOM   3763  O   ARG A 476      83.122 -12.979  92.577  1.00 77.68           O
ATOM   3764  N   SER A 477      85.146 -12.634  93.519  1.00 77.50           N
ATOM   3765  CA  SER A 477      85.823 -13.689  92.758  1.00 77.39           C
ATOM   3766  CB  SER A 477      87.296 -13.331  92.530  1.00 77.36           C
ATOM   3767  OG  SER A 477      88.069 -13.560  93.695  1.00 77.51           O
ATOM   3768  C   SER A 477      85.703 -15.073  93.396  1.00 77.27           C
ATOM   3769  O   SER A 477      85.892 -16.090  92.726  1.00 77.07           O
ATOM   3770  N   CYS B   3     117.417  59.677 -15.610  1.00 97.86           N
ATOM   3771  CA  CYS B   3     117.705  58.224 -15.452  1.00 97.94           C
ATOM   3772  CB  CYS B   3     116.580  57.564 -14.650  1.00 98.00           C
ATOM   3773  SG  CYS B   3     115.237  56.826 -15.620  1.00 98.90           S
ATOM   3774  C   CYS B   3     117.918  57.540 -16.820  1.00 97.79           C
ATOM   3775  O   CYS B   3     117.779  58.199 -17.853  1.00 97.89           O
ATOM   3776  N   PRO B   4     118.268  56.227 -16.834  1.00 97.68           N
ATOM   3777  CA  PRO B   4     118.500  55.488 -18.085  1.00 97.54           C
ATOM   3778  CB  PRO B   4     118.568  54.017 -17.624  1.00 97.62           C
ATOM   3779  CG  PRO B   4     118.055  54.008 -16.210  1.00 97.59           C
ATOM   3780  CD  PRO B   4     118.467  55.342 -15.672  1.00 97.73           C
ATOM   3781  C   PRO B   4     117.383  55.663 -19.119  1.00 97.34           C
ATOM   3782  O   PRO B   4     116.206  55.600 -18.757  1.00 97.25           O
ATOM   3783  N   PRO B   5     117.754  55.874 -20.400  1.00 97.17           N
ATOM   3784  CA  PRO B   5     116.817  56.223 -21.480  1.00 97.05           C
ATOM   3785  CB  PRO B   5     117.710  56.243 -22.727  1.00 97.03           C
ATOM   3786  CG  PRO B   5     119.081  56.509 -22.204  1.00 97.11           C
ATOM   3787  CD  PRO B   5     119.142  55.789 -20.892  1.00 97.09           C
ATOM   3788  C   PRO B   5     115.638  55.251 -21.665  1.00 96.96           C
ATOM   3789  O   PRO B   5     114.484  55.646 -21.475  1.00 96.94           O
ATOM   3790  N   ARG B   6     115.930  54.001 -22.021  1.00 96.84           N
ATOM   3791  CA  ARG B   6     114.895  53.000 -22.318  1.00 96.78           C
ATOM   3792  CB  ARG B   6     115.542  51.674 -22.722  1.00 97.04           C
ATOM   3793  CG  ARG B   6     116.142  51.620 -24.112  1.00 97.71           C
ATOM   3794  CD  ARG B   6     116.624  50.204 -24.400  1.00 98.97           C
ATOM   3795  NE  ARG B   6     117.582  50.164 -25.497  1.00100.15           N
ATOM   3796  CZ  ARG B   6     118.342  49.116 -25.804  1.00100.65           C
ATOM   3797  NH1 ARG B   6     118.270  47.995 -25.096  1.00100.12           N
ATOM   3798  NH2 ARG B   6     119.184  49.195 -26.830  1.00101.40           N
ATOM   3799  C   ARG B   6     113.951  52.723 -21.148  1.00 96.45           C
ATOM   3800  O   ARG B   6     112.757  52.477 -21.342  1.00 96.42           O
ATOM   3801  N   CYS B   7     114.505  52.760 -19.940  1.00 95.94           N
ATOM   3802  CA  CYS B   7     113.820  52.316 -18.734  1.00 95.40           C
ATOM   3803  CB  CYS B   7     114.856  52.096 -17.635  1.00 95.34           C
ATOM   3804  SG  CYS B   7     116.035  50.767 -18.001  1.00 94.87           S
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ATOM	3805	C	CYS	B	7	112.720	53.255	-18.238	1.00	95.23	C
ATOM	3806	O	CYS	B	7	112.774	54.461	-18.457	1.00	95.33	O
ATOM	3807	N	GLU	B	8	111.718	52.684	-17.578	1.00	95.05	N
ATOM	3808	CA	GLU	B	8	110.676	53.462	-16.912	1.00	95.06	C
ATOM	3809	CB	GLU	B	8	109.303	52.793	-17.072	1.00	95.07	C
ATOM	3810	CG	GLU	B	8	108.198	53.411	-16.206	1.00	95.47	C
ATOM	3811	CD	GLU	B	8	106.829	52.789	-16.435	1.00	95.61	C
ATOM	3812	OE1	GLU	B	8	106.655	51.583	-16.143	1.00	95.69	O
ATOM	3813	OE2	GLU	B	8	105.920	53.521	-16.895	1.00	96.60	O
ATOM	3814	C	GLU	B	8	111.020	53.620	-15.432	1.00	94.80	C
ATOM	3815	O	GLU	B	8	110.894	52.673	-14.648	1.00	95.00	O
ATOM	3816	N	CYS	B	9	111.445	54.821	-15.053	1.00	94.33	N
ATOM	3817	CA	CYS	B	9	111.856	55.079	-13.679	1.00	94.14	C
ATOM	3818	CB	CYS	B	9	113.330	55.481	-13.650	1.00	94.29	C
ATOM	3819	SG	CYS	B	9	113.602	57.055	-14.424	1.00	96.94	S
ATOM	3820	C	CYS	B	9	110.973	56.127	-12.983	1.00	93.34	C
ATOM	3821	O	CYS	B	9	110.599	57.130	-13.584	1.00	93.43	O
ATOM	3822	N	SER	B	10	110.642	55.878	-11.718	1.00	92.59	N
ATOM	3823	CA	SER	B	10	109.784	56.764	-10.930	1.00	91.81	C
ATOM	3824	CB	SER	B	10	108.646	55.961	-10.292	1.00	91.80	C
ATOM	3825	OG	SER	B	10	108.020	56.685	-9.247	1.00	91.37	O
ATOM	3826	C	SER	B	10	110.566	57.526	-9.856	1.00	91.47	C
ATOM	3827	O	SER	B	10	110.892	56.972	-8.805	1.00	91.32	O
ATOM	3828	N	ALA	B	11	110.843	58.802	-10.123	1.00	91.06	N
ATOM	3829	CA	ALA	B	11	111.630	59.659	-9.224	1.00	90.79	C
ATOM	3830	CB	ALA	B	11	111.815	61.058	-9.839	1.00	90.66	C
ATOM	3831	C	ALA	B	11	111.055	59.766	-7.807	1.00	90.60	C
ATOM	3832	O	ALA	B	11	111.800	59.770	-6.827	1.00	90.40	O
ATOM	3833	N	GLN	B	12	109.730	59.840	-7.714	1.00	90.54	N
ATOM	3834	CA	GLN	B	12	109.031	59.993	-6.436	1.00	90.68	C
ATOM	3835	CB	GLN	B	12	107.541	60.304	-6.665	1.00	90.70	C
ATOM	3836	CG	GLN	B	12	106.822	59.326	-7.601	1.00	91.01	C
ATOM	3837	CD	GLN	B	12	105.307	59.327	-7.437	1.00	90.98	C
ATOM	3838	OE1	GLN	B	12	104.666	60.380	-7.451	1.00	90.98	O
ATOM	3839	NE2	GLN	B	12	104.726	58.133	-7.299	1.00	90.76	N
ATOM	3840	C	GLN	B	12	109.191	58.803	-5.475	1.00	90.61	C
ATOM	3841	O	GLN	B	12	108.941	58.939	-4.274	1.00	90.76	O
ATOM	3842	N	ASP	B	13	109.594	57.644	-6.000	1.00	90.32	N
ATOM	3843	CA	ASP	B	13	109.795	56.449	-5.178	1.00	90.06	C
ATOM	3844	CB	ASP	B	13	108.880	55.318	-5.642	1.00	90.22	C
ATOM	3845	CG	ASP	B	13	107.416	55.627	-5.441	1.00	90.97	C
ATOM	3846	OD1	ASP	B	13	107.041	56.819	-5.470	1.00	91.85	O
ATOM	3847	OD2	ASP	B	13	106.632	54.666	-5.270	1.00	91.65	O
ATOM	3848	C	ASP	B	13	111.227	55.934	-5.193	1.00	89.80	C
ATOM	3849	O	ASP	B	13	111.529	54.950	-4.522	1.00	89.86	O
ATOM	3850	N	ARG	B	14	112.098	56.588	-5.961	1.00	89.53	N
ATOM	3851	CA	ARG	B	14	113.463	56.107	-6.201	1.00	89.28	C
ATOM	3852	CB	ARG	B	14	114.328	56.232	-4.935	1.00	89.34	C
ATOM	3853	CG	ARG	B	14	114.661	57.667	-4.517	1.00	90.06	C
ATOM	3854	CD	ARG	B	14	115.545	58.343	-5.562	1.00	91.54	C
ATOM	3855	NE	ARG	B	14	116.147	59.601	-5.114	1.00	92.31	N
ATOM	3856	CZ	ARG	B	14	115.630	60.809	-5.331	1.00	92.89	C
ATOM	3857	NH1	ARG	B	14	116.268	61.889	-4.892	1.00	92.54	N
ATOM	3858	NH2	ARG	B	14	114.478	60.943	-5.981	1.00	92.95	N
ATOM	3859	C	ARG	B	14	113.440	54.669	-6.755	1.00	89.08	C
ATOM	3860	O	ARG	B	14	114.102	53.762	-6.238	1.00	88.99	O

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ATOM   3861  N   ALA B  15     112.652  54.485  -7.812  1.00 88.79           N
ATOM   3862  CA  ALA B  15     112.466  53.192  -8.458  1.00 88.35           C
ATOM   3863  CB  ALA B  15     111.022  52.760  -8.346  1.00 88.34           C
ATOM   3864  C   ALA B  15     112.886  53.264  -9.919  1.00 88.14           C
ATOM   3865  O   ALA B  15     112.674  54.269 -10.579  1.00 88.22           O
ATOM   3866  N   VAL B  16     113.497  52.195 -10.407  1.00 88.11           N
ATOM   3867  CA  VAL B  16     113.937  52.100 -11.789  1.00 88.19           C
ATOM   3868  CB  VAL B  16     115.477  52.212 -11.891  1.00 88.09           C
ATOM   3869  CG1 VAL B  16     115.971  51.761 -13.248  1.00 88.13           C
ATOM   3870  CG2 VAL B  16     115.944  53.637 -11.612  1.00 88.25           C
ATOM   3871  C   VAL B  16     113.467  50.754 -12.340  1.00 88.62           C
ATOM   3872  O   VAL B  16     113.751  49.701 -11.745  1.00 88.47           O
ATOM   3873  N   LEU B  17     112.735  50.793 -13.458  1.00 88.94           N
ATOM   3874  CA  LEU B  17     112.221  49.571 -14.101  1.00 89.30           C
ATOM   3875  CB  LEU B  17     110.690  49.564 -14.121  1.00 89.19           C
ATOM   3876  CG  LEU B  17     109.949  48.860 -12.969  1.00 89.80           C
ATOM   3877  CD1 LEU B  17     110.326  49.380 -11.568  1.00 89.93           C
ATOM   3878  CD2 LEU B  17     108.432  48.935 -13.179  1.00 89.68           C
ATOM   3879  C   LEU B  17     112.784  49.391 -15.507  1.00 89.39           C
ATOM   3880  O   LEU B  17     112.801  50.335 -16.288  1.00 89.33           O
ATOM   3881  N   CYS B  18     113.248  48.180 -15.816  1.00 89.66           N
ATOM   3882  CA  CYS B  18     113.959  47.906 -17.071  1.00 90.08           C
ATOM   3883  CB  CYS B  18     115.466  48.011 -16.857  1.00 90.26           C
ATOM   3884  SG  CYS B  18     116.017  49.617 -16.313  1.00 92.53           S
ATOM   3885  C   CYS B  18     113.652  46.539 -17.676  1.00 89.87           C
ATOM   3886  O   CYS B  18     114.560  45.727 -17.874  1.00 90.12           O
ATOM   3887  N   HIS B  19     112.383  46.298 -17.992  1.00 89.56           N
ATOM   3888  CA  HIS B  19     111.950  45.018 -18.535  1.00 89.15           C
ATOM   3889  CB  HIS B  19     110.488  44.763 -18.168  1.00 89.33           C
ATOM   3890  CG  HIS B  19     110.229  44.760 -16.691  1.00 90.55           C
ATOM   3891  ND1 HIS B  19     110.135  43.598 -15.952  1.00 91.93           N
ATOM   3892  CE1 HIS B  19     109.906  43.900 -14.685  1.00 91.91           C
ATOM   3893  NE2 HIS B  19     109.850  45.216 -14.575  1.00 91.69           N
ATOM   3894  CD2 HIS B  19     110.048  45.777 -15.814  1.00 91.10           C
ATOM   3895  C   HIS B  19     112.143  44.949 -20.049  1.00 88.75           C
ATOM   3896  O   HIS B  19     111.856  45.911 -20.763  1.00 88.77           O
ATOM   3897  N   ARG B  20     112.647  43.808 -20.516  1.00 88.27           N
ATOM   3898  CA  ARG B  20     112.758  43.481 -21.946  1.00 88.00           C
ATOM   3899  CB  ARG B  20     111.371  43.287 -22.580  1.00 87.92           C
ATOM   3900  CG  ARG B  20     110.716  41.956 -22.217  1.00 88.62           C
ATOM   3901  CD  ARG B  20     109.292  41.852 -22.734  1.00 88.92           C
ATOM   3902  NE  ARG B  20     108.300  42.317 -21.763  1.00 91.46           N
ATOM   3903  CZ  ARG B  20     107.542  41.515 -21.012  1.00 93.12           C
ATOM   3904  NH1 ARG B  20     107.654  40.193 -21.106  1.00 94.06           N
ATOM   3905  NH2 ARG B  20     106.663  42.032 -20.158  1.00 93.40           N
ATOM   3906  C   ARG B  20     113.616  44.448 -22.762  1.00 87.45           C
ATOM   3907  O   ARG B  20     113.253  44.831 -23.878  1.00 87.53           O
ATOM   3908  N   LYS B  21     114.759  44.833 -22.201  1.00 86.73           N
ATOM   3909  CA  LYS B  21     115.680  45.731 -22.891  1.00 85.86           C
ATOM   3910  CB  LYS B  21     116.048  46.932 -22.008  1.00 85.95           C
ATOM   3911  CG  LYS B  21     114.897  47.568 -21.222  1.00 86.19           C
ATOM   3912  CD  LYS B  21     113.928  48.363 -22.098  1.00 86.89           C
ATOM   3913  CE  LYS B  21     112.853  49.028 -21.238  1.00 87.42           C
ATOM   3914  NZ  LYS B  21     111.590  49.296 -21.982  1.00 87.36           N
ATOM   3915  C   LYS B  21     116.942  44.989 -23.333  1.00 85.27           C
ATOM   3916  O   LYS B  21     117.902  45.607 -23.789  1.00 85.05           O
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ATOM   3917  N   ARG B  22     116.929  43.663 -23.194  1.00 84.72           N
ATOM   3918  CA  ARG B  22     118.057  42.796 -23.579  1.00 84.22           C
ATOM   3919  CB  ARG B  22     118.155  42.660 -25.112  1.00 84.17           C
ATOM   3920  CG  ARG B  22     117.063  41.776 -25.753  1.00 84.71           C
ATOM   3921  CD  ARG B  22     117.402  41.348 -27.187  1.00 84.72           C
ATOM   3922  NE  ARG B  22     118.765  40.820 -27.288  1.00 86.89           N
ATOM   3923  CZ  ARG B  22     119.764  41.404 -27.953  1.00 88.14           C
ATOM   3924  NH1 ARG B  22     119.567  42.540 -28.621  1.00 88.69           N
ATOM   3925  NH2 ARG B  22     120.968  40.841 -27.964  1.00 88.12           N
ATOM   3926  C   ARG B  22     119.410  43.206 -22.962  1.00 83.47           C
ATOM   3927  O   ARG B  22     120.449  43.159 -23.625  1.00 83.38           O
ATOM   3928  N   PHE B  23     119.383  43.589 -21.686  1.00 82.73           N
ATOM   3929  CA  PHE B  23     120.588  44.010 -20.970  1.00 81.85           C
ATOM   3930  CB  PHE B  23     120.233  44.845 -19.737  1.00 81.46           C
ATOM   3931  CG  PHE B  23     119.813  46.250 -20.045  1.00 80.45           C
ATOM   3932  CD1 PHE B  23     120.420  46.971 -21.064  1.00 79.93           C
ATOM   3933  CE1 PHE B  23     120.032  48.275 -21.339  1.00 79.70           C
ATOM   3934  CZ  PHE B  23     119.036  48.874 -20.581  1.00 79.71           C
ATOM   3935  CE2 PHE B  23     118.435  48.168 -19.554  1.00 79.31           C
ATOM   3936  CD2 PHE B  23     118.828  46.866 -19.288  1.00 79.43           C
ATOM   3937  C   PHE B  23     121.449  42.832 -20.536  1.00 81.60           C
ATOM   3938  O   PHE B  23     120.936  41.797 -20.110  1.00 81.68           O
ATOM   3939  N   VAL B  24     122.759  43.024 -20.629  1.00 81.23           N
ATOM   3940  CA  VAL B  24     123.757  42.036 -20.234  1.00 81.05           C
ATOM   3941  CB  VAL B  24     124.910  42.004 -21.265  1.00 80.99           C
ATOM   3942  CG1 VAL B  24     125.793  40.789 -21.068  1.00 81.49           C
ATOM   3943  CG2 VAL B  24     124.354  42.002 -22.673  1.00 81.57           C
ATOM   3944  C   VAL B  24     124.314  42.359 -18.831  1.00 80.81           C
ATOM   3945  O   VAL B  24     124.753  41.465 -18.099  1.00 80.72           O
ATOM   3946  N   ALA B  25     124.281  43.642 -18.474  1.00 80.53           N
ATOM   3947  CA  ALA B  25     124.800  44.134 -17.204  1.00 80.34           C
ATOM   3948  CB  ALA B  25     126.232  44.591 -17.379  1.00 80.39           C
ATOM   3949  C   ALA B  25     123.940  45.276 -16.665  1.00 80.34           C
ATOM   3950  O   ALA B  25     122.835  45.501 -17.138  1.00 80.17           O
ATOM   3951  N   VAL B  26     124.453  45.996 -15.671  1.00 80.62           N
ATOM   3952  CA  VAL B  26     123.742  47.134 -15.092  1.00 80.81           C
ATOM   3953  CB  VAL B  26     124.234  47.454 -13.661  1.00 80.87           C
ATOM   3954  CG1 VAL B  26     123.497  48.667 -13.094  1.00 80.69           C
ATOM   3955  CG2 VAL B  26     124.057  46.243 -12.751  1.00 80.67           C
ATOM   3956  C   VAL B  26     123.903  48.364 -15.978  1.00 81.05           C
ATOM   3957  O   VAL B  26     125.026  48.846 -16.165  1.00 81.10           O
ATOM   3958  N   PRO B  27     122.780  48.883 -16.520  1.00 81.29           N
ATOM   3959  CA  PRO B  27     122.811  50.039 -17.413  1.00 81.65           C
ATOM   3960  CB  PRO B  27     121.360  50.153 -17.877  1.00 81.54           C
ATOM   3961  CG  PRO B  27     120.573  49.554 -16.788  1.00 81.08           C
ATOM   3962  CD  PRO B  27     121.403  48.412 -16.299  1.00 81.22           C
ATOM   3963  C   PRO B  27     123.219  51.306 -16.671  1.00 82.14           C
ATOM   3964  O   PRO B  27     122.963  51.428 -15.473  1.00 82.31           O
ATOM   3965  N   GLU B  28     123.847  52.239 -17.375  1.00 82.58           N
ATOM   3966  CA  GLU B  28     124.294  53.475 -16.744  1.00 83.18           C
ATOM   3967  CB  GLU B  28     125.449  54.115 -17.527  1.00 83.67           C
ATOM   3968  CG  GLU B  28     126.519  53.141 -18.046  1.00 85.07           C
ATOM   3969  CD  GLU B  28     126.188  52.601 -19.436  1.00 86.69           C
ATOM   3970  OE1 GLU B  28     125.217  51.800 -19.559  1.00 86.47           O
ATOM   3971  OE2 GLU B  28     126.901  52.991 -20.397  1.00 86.32           O
ATOM   3972  C   GLU B  28     123.133  54.463 -16.595  1.00 83.07           C
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ATOM	3973	O	GLU	B	28	122.043	54.241	-17.135	1.00	83.11	O
ATOM	3974	N	GLY	B	29	123.372	55.541	-15.850	1.00	82.94	N
ATOM	3975	CA	GLY	B	29	122.374	56.590	-15.643	1.00	82.70	C
ATOM	3976	C	GLY	B	29	121.478	56.393	-14.430	1.00	82.55	C
ATOM	3977	O	GLY	B	29	120.736	57.304	-14.056	1.00	82.75	O
ATOM	3978	N	ILE	B	30	121.538	55.205	-13.826	1.00	82.17	N
ATOM	3979	CA	ILE	B	30	120.762	54.885	-12.622	1.00	81.74	C
ATOM	3980	CB	ILE	B	30	120.868	53.380	-12.253	1.00	81.61	C
ATOM	3981	CG1	ILE	B	30	120.288	52.515	-13.374	1.00	81.52	C
ATOM	3982	CD1	ILE	B	30	120.579	51.034	-13.226	1.00	81.86	C
ATOM	3983	CG2	ILE	B	30	120.155	53.086	-10.932	1.00	81.35	C
ATOM	3984	C	ILE	B	30	121.207	55.746	-11.435	1.00	81.53	C
ATOM	3985	O	ILE	B	30	122.401	55.797	-11.117	1.00	81.46	O
ATOM	3986	N	PRO	B	31	120.246	56.432	-10.782	1.00	81.33	N
ATOM	3987	CA	PRO	B	31	120.558	57.267	-9.623	1.00	81.27	C
ATOM	3988	CB	PRO	B	31	119.192	57.832	-9.217	1.00	81.32	C
ATOM	3989	CG	PRO	B	31	118.343	57.707	-10.432	1.00	81.28	C
ATOM	3990	CD	PRO	B	31	118.807	56.462	-11.103	1.00	81.22	C
ATOM	3991	C	PRO	B	31	121.152	56.450	-8.476	1.00	81.19	C
ATOM	3992	O	PRO	B	31	120.835	55.270	-8.325	1.00	81.19	O
ATOM	3993	N	THR	B	32	122.015	57.077	-7.683	1.00	81.16	N
ATOM	3994	CA	THR	B	32	122.640	56.397	-6.550	1.00	81.10	C
ATOM	3995	CB	THR	B	32	124.080	56.892	-6.291	1.00	80.92	C
ATOM	3996	OG1	THR	B	32	124.062	58.304	-6.076	1.00	81.21	O
ATOM	3997	CG2	THR	B	32	124.989	56.574	-7.471	1.00	80.81	C
ATOM	3998	C	THR	B	32	121.809	56.529	-5.273	1.00	81.15	C
ATOM	3999	O	THR	B	32	122.281	56.192	-4.191	1.00	81.41	O
ATOM	4000	N	GLU	B	33	120.581	57.025	-5.402	1.00	81.03	N
ATOM	4001	CA	GLU	B	33	119.660	57.118	-4.272	1.00	80.98	C
ATOM	4002	CB	GLU	B	33	119.102	58.534	-4.114	1.00	81.11	C
ATOM	4003	CG	GLU	B	33	120.147	59.645	-4.180	1.00	82.43	C
ATOM	4004	CD	GLU	B	33	120.445	60.098	-5.611	1.00	84.17	C
ATOM	4005	OE1	GLU	B	33	119.480	60.349	-6.374	1.00	85.00	O
ATOM	4006	OE2	GLU	B	33	121.642	60.211	-5.967	1.00	84.00	O
ATOM	4007	C	GLU	B	33	118.532	56.130	-4.505	1.00	80.79	C
ATOM	4008	O	GLU	B	33	117.563	56.076	-3.739	1.00	80.80	O
ATOM	4009	N	THR	B	34	118.678	55.351	-5.577	1.00	80.52	N
ATOM	4010	CA	THR	B	34	117.713	54.329	-5.967	1.00	80.13	C
ATOM	4011	CB	THR	B	34	118.194	53.564	-7.220	1.00	79.98	C
ATOM	4012	OG1	THR	B	34	118.547	54.496	-8.246	1.00	79.77	O
ATOM	4013	CG2	THR	B	34	117.114	52.644	-7.747	1.00	79.88	C
ATOM	4014	C	THR	B	34	117.479	53.349	-4.825	1.00	80.08	C
ATOM	4015	O	THR	B	34	118.422	52.929	-4.154	1.00	80.06	O
ATOM	4016	N	ARG	B	35	116.216	53.005	-4.603	1.00	80.10	N
ATOM	4017	CA	ARG	B	35	115.844	52.061	-3.564	1.00	80.32	C
ATOM	4018	CB	ARG	B	35	114.873	52.708	-2.570	1.00	80.43	C
ATOM	4019	CG	ARG	B	35	115.568	53.657	-1.592	1.00	81.57	C
ATOM	4020	CD	ARG	B	35	114.806	53.780	-0.275	1.00	83.21	C
ATOM	4021	NE	ARG	B	35	113.995	54.993	-0.211	1.00	84.26	N
ATOM	4022	CZ	ARG	B	35	114.422	56.162	0.271	1.00	84.89	C
ATOM	4023	NH1	ARG	B	35	115.659	56.283	0.749	1.00	84.67	N
ATOM	4024	NH2	ARG	B	35	113.607	57.213	0.276	1.00	83.90	N
ATOM	4025	C	ARG	B	35	115.264	50.777	-4.150	1.00	80.26	C
ATOM	4026	O	ARG	B	35	115.345	49.712	-3.536	1.00	80.38	O
ATOM	4027	N	LEU	B	36	114.685	50.883	-5.341	1.00	80.20	N
ATOM	4028	CA	LEU	B	36	114.104	49.740	-6.026	1.00	79.93	C

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ATOM   4029  CB  LEU B  36     112.589  49.894  -6.117  1.00 80.06           C
ATOM   4030  CG  LEU B  36     111.767  48.646  -6.467  1.00 81.10           C
ATOM   4031  CD1 LEU B  36     110.315  48.841  -6.037  1.00 81.47           C
ATOM   4032  CD2 LEU B  36     111.840  48.287  -7.955  1.00 81.98           C
ATOM   4033  C   LEU B  36     114.699  49.631  -7.418  1.00 79.58           C
ATOM   4034  O   LEU B  36     114.613  50.559  -8.208  1.00 79.64           O
ATOM   4035  N   LEU B  37     115.300  48.489  -7.715  1.00 79.28           N
ATOM   4036  CA  LEU B  37     115.824  48.234  -9.047  1.00 78.72           C
ATOM   4037  CB  LEU B  37     117.354  48.231  -9.030  1.00 78.57           C
ATOM   4038  CG  LEU B  37     118.102  48.049 -10.347  1.00 78.10           C
ATOM   4039  CD1 LEU B  37     117.853  49.224 -11.242  1.00 78.81           C
ATOM   4040  CD2 LEU B  37     119.583  47.904 -10.102  1.00 78.16           C
ATOM   4041  C   LEU B  37     115.268  46.909  -9.568  1.00 78.76           C
ATOM   4042  O   LEU B  37     115.491  45.860  -8.966  1.00 78.53           O
ATOM   4043  N   ASP B  38     114.510  46.981 -10.663  1.00 78.75           N
ATOM   4044  CA  ASP B  38     114.033  45.798 -11.368  1.00 78.71           C
ATOM   4045  CB  ASP B  38     112.517  45.840 -11.590  1.00 79.06           C
ATOM   4046  CG  ASP B  38     111.902  44.437 -11.767  1.00 80.97           C
ATOM   4047  OD1 ASP B  38     112.634  43.478 -12.122  1.00 82.69           O
ATOM   4048  OD2 ASP B  38     110.677  44.285 -11.545  1.00 82.49           O
ATOM   4049  C   ASP B  38     114.750  45.705 -12.700  1.00 78.11           C
ATOM   4050  O   ASP B  38     114.729  46.640 -13.484  1.00 78.36           O
ATOM   4051  N   LEU B  39     115.404  44.577 -12.932  1.00 77.64           N
ATOM   4052  CA  LEU B  39     116.113  44.313 -14.178  1.00 77.10           C
ATOM   4053  CB  LEU B  39     117.629  44.335 -13.947  1.00 77.03           C
ATOM   4054  CG  LEU B  39     118.504  45.556 -14.221  1.00 76.79           C
ATOM   4055  CD1 LEU B  39     117.811  46.865 -13.918  1.00 77.61           C
ATOM   4056  CD2 LEU B  39     119.777  45.438 -13.418  1.00 76.82           C
ATOM   4057  C   LEU B  39     115.684  42.950 -14.710  1.00 76.88           C
ATOM   4058  O   LEU B  39     116.405  42.313 -15.476  1.00 76.83           O
ATOM   4059  N   GLY B  40     114.506  42.507 -14.284  1.00 76.66           N
ATOM   4060  CA  GLY B  40     113.925  41.263 -14.759  1.00 76.66           C
ATOM   4061  C   GLY B  40     113.652  41.261 -16.251  1.00 76.78           C
ATOM   4062  O   GLY B  40     113.551  42.323 -16.879  1.00 76.71           O
ATOM   4063  N   LYS B  41     113.530  40.059 -16.810  1.00 76.84           N
ATOM   4064  CA  LYS B  41     113.314  39.860 -18.246  1.00 76.90           C
ATOM   4065  CB  LYS B  41     111.917  40.330 -18.669  1.00 77.21           C
ATOM   4066  CG  LYS B  41     110.774  39.648 -17.927  1.00 78.64           C
ATOM   4067  CD  LYS B  41     109.456  40.388 -18.138  1.00 80.92           C
ATOM   4068  CE  LYS B  41     108.339  39.759 -17.314  1.00 82.31           C
ATOM   4069  NZ  LYS B  41     107.055  40.488 -17.481  1.00 83.90           N
ATOM   4070  C   LYS B  41     114.395  40.562 -19.049  1.00 76.52           C
ATOM   4071  O   LYS B  41     114.127  41.512 -19.776  1.00 76.79           O
ATOM   4072  N   ASN B  42     115.629  40.110 -18.870  1.00 76.23           N
ATOM   4073  CA  ASN B  42     116.774  40.616 -19.613  1.00 76.07           C
ATOM   4074  CB  ASN B  42     117.492  41.730 -18.850  1.00 76.06           C
ATOM   4075  CG  ASN B  42     116.727  43.035 -18.875  1.00 76.13           C
ATOM   4076  OD1 ASN B  42     116.965  43.894 -19.726  1.00 75.99           O
ATOM   4077  ND2 ASN B  42     115.790  43.185 -17.951  1.00 76.00           N
ATOM   4078  C   ASN B  42     117.712  39.463 -19.901  1.00 75.97           C
ATOM   4079  O   ASN B  42     117.345  38.310 -19.677  1.00 76.14           O
ATOM   4080  N   ARG B  43     118.914  39.759 -20.386  1.00 75.80           N
ATOM   4081  CA  ARG B  43     119.835  38.701 -20.778  1.00 75.96           C
ATOM   4082  CB  ARG B  43     120.199  38.823 -22.262  1.00 76.42           C
ATOM   4083  CG  ARG B  43     119.014  38.815 -23.229  1.00 78.72           C
ATOM   4084  CD  ARG B  43     118.265  37.488 -23.211  1.00 82.83           C
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ATOM   4085  NE  ARG B  43     118.970  36.453 -23.970  1.00 85.79           N
ATOM   4086  CZ  ARG B  43     118.621  35.164 -24.001  1.00 86.89           C
ATOM   4087  NH1 ARG B  43     117.567  34.720 -23.306  1.00 85.09           N
ATOM   4088  NH2 ARG B  43     119.343  34.316 -24.731  1.00 87.38           N
ATOM   4089  C   ARG B  43     121.100  38.633 -19.918  1.00 75.51           C
ATOM   4090  O   ARG B  43     122.154  38.221 -20.406  1.00 75.62           O
ATOM   4091  N   ILE B  44     120.990  39.020 -18.646  1.00 75.01           N
ATOM   4092  CA  ILE B  44     122.122  38.966 -17.712  1.00 74.51           C
ATOM   4093  CB  ILE B  44     121.824  39.705 -16.384  1.00 74.54           C
ATOM   4094  CG1 ILE B  44     121.493  41.175 -16.659  1.00 74.47           C
ATOM   4095  CD1 ILE B  44     120.782  41.865 -15.523  1.00 74.61           C
ATOM   4096  CG2 ILE B  44     123.010  39.604 -15.424  1.00 74.02           C
ATOM   4097  C   ILE B  44     122.502  37.517 -17.430  1.00 74.31           C
ATOM   4098  O   ILE B  44     121.648  36.711 -17.047  1.00 73.94           O
ATOM   4099  N   LYS B  45     123.784  37.206 -17.635  1.00 73.98           N
ATOM   4100  CA  LYS B  45     124.307  35.842 -17.536  1.00 73.76           C
ATOM   4101  CB  LYS B  45     125.141  35.508 -18.763  1.00 73.82           C
ATOM   4102  CG  LYS B  45     124.351  34.950 -19.899  1.00 74.92           C
ATOM   4103  CD  LYS B  45     125.212  34.867 -21.137  1.00 76.85           C
ATOM   4104  CE  LYS B  45     124.487  34.138 -22.251  1.00 77.73           C
ATOM   4105  NZ  LYS B  45     125.348  34.154 -23.465  1.00 80.14           N
ATOM   4106  C   LYS B  45     125.157  35.604 -16.300  1.00 73.43           C
ATOM   4107  O   LYS B  45     125.196  34.496 -15.768  1.00 73.48           O
ATOM   4108  N   THR B  46     125.879  36.626 -15.865  1.00 73.05           N
ATOM   4109  CA  THR B  46     126.673  36.481 -14.660  1.00 72.74           C
ATOM   4110  CB  THR B  46     128.137  36.043 -14.951  1.00 72.68           C
ATOM   4111  OG1 THR B  46     129.043  37.086 -14.583  1.00 72.98           O
ATOM   4112  CG2 THR B  46     128.339  35.653 -16.408  1.00 72.20           C
ATOM   4113  C   THR B  46     126.644  37.748 -13.823  1.00 72.57           C
ATOM   4114  O   THR B  46     126.561  38.853 -14.358  1.00 72.52           O
ATOM   4115  N   LEU B  47     126.695  37.584 -12.509  1.00 72.30           N
ATOM   4116  CA  LEU B  47     126.740  38.727 -11.621  1.00 72.42           C
ATOM   4117  CB  LEU B  47     125.599  38.676 -10.595  1.00 72.20           C
ATOM   4118  CG  LEU B  47     124.165  38.746 -11.146  1.00 71.51           C
ATOM   4119  CD1 LEU B  47     123.158  38.331 -10.092  1.00 70.52           C
ATOM   4120  CD2 LEU B  47     123.819  40.126 -11.709  1.00 70.69           C
ATOM   4121  C   LEU B  47     128.108  38.799 -10.949  1.00 72.82           C
ATOM   4122  O   LEU B  47     128.443  37.957 -10.115  1.00 73.18           O
ATOM   4123  N   ASN B  48     128.886  39.810 -11.329  1.00 72.89           N
ATOM   4124  CA  ASN B  48     130.261  39.992 -10.868  1.00 73.11           C
ATOM   4125  CB  ASN B  48     131.007  40.895 -11.845  1.00 73.32           C
ATOM   4126  CG  ASN B  48     131.139  40.280 -13.217  1.00 74.01           C
ATOM   4127  OD1 ASN B  48     131.147  39.055 -13.362  1.00 75.44           O
ATOM   4128  ND2 ASN B  48     131.248  41.126 -14.237  1.00 74.40           N
ATOM   4129  C   ASN B  48     130.381  40.599  -9.487  1.00 73.14           C
ATOM   4130  O   ASN B  48     129.442  41.217  -8.997  1.00 73.33           O
ATOM   4131  N   GLN B  49     131.555  40.450  -8.877  1.00 73.17           N
ATOM   4132  CA  GLN B  49     131.841  41.076  -7.590  1.00 73.20           C
ATOM   4133  CB  GLN B  49     133.284  40.791  -7.160  1.00 73.01           C
ATOM   4134  CG  GLN B  49     133.599  41.238  -5.735  1.00 73.33           C
ATOM   4135  CD  GLN B  49     135.077  41.146  -5.373  1.00 73.61           C
ATOM   4136  OE1 GLN B  49     135.477  41.526  -4.268  1.00 74.07           O
ATOM   4137  NE2 GLN B  49     135.892  40.642  -6.296  1.00 73.71           N
ATOM   4138  C   GLN B  49     131.587  42.581  -7.667  1.00 73.06           C
ATOM   4139  O   GLN B  49     132.019  43.239  -8.611  1.00 73.25           O
ATOM   4140  N   ASP B  50     130.859  43.102  -6.683  1.00 72.96           N
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ATOM   4141  CA  ASP B  50     130.561  44.540  -6.564  1.00 72.96           C
ATOM   4142  CB  ASP B  50     131.842  45.352  -6.319  1.00 72.88           C
ATOM   4143  CG  ASP B  50     132.436  45.124  -4.934  1.00 73.13           C
ATOM   4144  OD1 ASP B  50     131.712  44.674  -4.009  1.00 72.96           O
ATOM   4145  OD2 ASP B  50     133.642  45.408  -4.775  1.00 73.21           O
ATOM   4146  C   ASP B  50     129.761  45.142  -7.723  1.00 72.95           C
ATOM   4147  O   ASP B  50     129.865  46.336  -8.004  1.00 73.09           O
ATOM   4148  N   GLU B  51     128.949  44.320  -8.376  1.00 73.03           N
ATOM   4149  CA  GLU B  51     128.115  44.779  -9.482  1.00 73.25           C
ATOM   4150  CB  GLU B  51     127.378  43.598 -10.129  1.00 73.69           C
ATOM   4151  CG  GLU B  51     126.680  43.938 -11.462  1.00 76.23           C
ATOM   4152  CD  GLU B  51     126.819  42.844 -12.515  1.00 79.01           C
ATOM   4153  OE1 GLU B  51     127.519  41.843 -12.247  1.00 80.69           O
ATOM   4154  OE2 GLU B  51     126.242  42.990 -13.619  1.00 80.45           O
ATOM   4155  C   GLU B  51     127.137  45.891  -9.081  1.00 72.67           C
ATOM   4156  O   GLU B  51     126.956  46.851  -9.827  1.00 72.54           O
ATOM   4157  N   PHE B  52     126.526  45.760  -7.904  1.00 72.31           N
ATOM   4158  CA  PHE B  52     125.533  46.728  -7.425  1.00 71.77           C
ATOM   4159  CB  PHE B  52     124.271  45.998  -6.957  1.00 71.25           C
ATOM   4160  CG  PHE B  52     123.737  45.030  -7.966  1.00 70.54           C
ATOM   4161  CD1 PHE B  52     122.945  45.470  -9.019  1.00 69.71           C
ATOM   4162  CE1 PHE B  52     122.465  44.579  -9.965  1.00 68.59           C
ATOM   4163  CZ  PHE B  52     122.780  43.234  -9.865  1.00 69.37           C
ATOM   4164  CE2 PHE B  52     123.572  42.782  -8.822  1.00 68.58           C
ATOM   4165  CD2 PHE B  52     124.049  43.678  -7.883  1.00 69.60           C
ATOM   4166  C   PHE B  52     126.060  47.676  -6.337  1.00 71.83           C
ATOM   4167  O   PHE B  52     125.304  48.464  -5.770  1.00 71.86           O
ATOM   4168  N   ALA B  53     127.365  47.617  -6.079  1.00 71.81           N
ATOM   4169  CA  ALA B  53     128.003  48.398  -5.020  1.00 71.67           C
ATOM   4170  CB  ALA B  53     129.494  48.125  -5.006  1.00 71.72           C
ATOM   4171  C   ALA B  53     127.740  49.904  -5.107  1.00 71.76           C
ATOM   4172  O   ALA B  53     127.811  50.608  -4.100  1.00 71.81           O
ATOM   4173  N   SER B  54     127.437  50.392  -6.307  1.00 71.82           N
ATOM   4174  CA  SER B  54     127.153  51.812  -6.524  1.00 71.62           C
ATOM   4175  CB  SER B  54     127.276  52.145  -8.005  1.00 71.49           C
ATOM   4176  OG  SER B  54     128.626  52.365  -8.346  1.00 72.21           O
ATOM   4177  C   SER B  54     125.779  52.261  -6.014  1.00 71.53           C
ATOM   4178  O   SER B  54     125.455  53.449  -6.088  1.00 71.50           O
ATOM   4179  N   PHE B  55     124.985  51.319  -5.501  1.00 71.30           N
ATOM   4180  CA  PHE B  55     123.607  51.600  -5.079  1.00 71.40           C
ATOM   4181  CB  PHE B  55     122.596  50.962  -6.050  1.00 71.26           C
ATOM   4182  CG  PHE B  55     123.000  51.081  -7.488  1.00 71.25           C
ATOM   4183  CD1 PHE B  55     123.082  52.332  -8.100  1.00 70.43           C
ATOM   4184  CE1 PHE B  55     123.486  52.452  -9.418  1.00 70.46           C
ATOM   4185  CZ  PHE B  55     123.815  51.320 -10.146  1.00 70.98           C
ATOM   4186  CE2 PHE B  55     123.739  50.062  -9.548  1.00 71.11           C
ATOM   4187  CD2 PHE B  55     123.339  49.949  -8.221  1.00 71.01           C
ATOM   4188  C   PHE B  55     123.342  51.155  -3.640  1.00 71.46           C
ATOM   4189  O   PHE B  55     122.554  50.235  -3.410  1.00 71.09           O
ATOM   4190  N   PRO B  56     123.958  51.854  -2.665  1.00 71.66           N
ATOM   4191  CA  PRO B  56     123.972  51.435  -1.271  1.00 71.78           C
ATOM   4192  CB  PRO B  56     124.853  52.482  -0.592  1.00 71.81           C
ATOM   4193  CG  PRO B  56     125.574  53.175  -1.694  1.00 72.01           C
ATOM   4194  CD  PRO B  56     124.638  53.146  -2.842  1.00 71.66           C
ATOM   4195  C   PRO B  56     122.591  51.483  -0.653  1.00 72.09           C
ATOM   4196  O   PRO B  56     122.350  50.816   0.353  1.00 72.43           O
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ATOM	4197	N	HIS	B	57	121.686	52.236	-1.264	1.00	72.24	N
ATOM	4198	CA	HIS	B	57	120.373	52.453	-0.681	1.00	72.57	C
ATOM	4199	CB	HIS	B	57	119.905	53.871	-0.972	1.00	72.58	C
ATOM	4200	CG	HIS	B	57	120.779	54.921	-0.369	1.00	72.99	C
ATOM	4201	ND1	HIS	B	57	122.042	55.198	-0.845	1.00	73.97	N
ATOM	4202	CE1	HIS	B	57	122.580	56.168	-0.127	1.00	73.91	C
ATOM	4203	NE2	HIS	B	57	121.710	56.529	0.798	1.00	74.45	N
ATOM	4204	CD2	HIS	B	57	120.577	55.760	0.672	1.00	73.49	C
ATOM	4205	C	HIS	B	57	119.295	51.439	-1.070	1.00	72.72	C
ATOM	4206	O	HIS	B	57	118.194	51.483	-0.516	1.00	72.85	O
ATOM	4207	N	LEU	B	58	119.611	50.525	-1.990	1.00	72.77	N
ATOM	4208	CA	LEU	B	58	118.633	49.559	-2.488	1.00	72.95	C
ATOM	4209	CB	LEU	B	58	119.282	48.549	-3.432	1.00	72.62	C
ATOM	4210	CG	LEU	B	58	119.606	48.932	-4.876	1.00	72.48	C
ATOM	4211	CD1	LEU	B	58	120.195	47.746	-5.606	1.00	71.54	C
ATOM	4212	CD2	LEU	B	58	118.397	49.465	-5.629	1.00	72.44	C
ATOM	4213	C	LEU	B	58	117.937	48.807	-1.369	1.00	73.59	C
ATOM	4214	O	LEU	B	58	118.595	48.259	-0.491	1.00	73.80	O
ATOM	4215	N	GLU	B	59	116.606	48.808	-1.402	1.00	74.24	N
ATOM	4216	CA	GLU	B	59	115.785	47.998	-0.509	1.00	75.26	C
ATOM	4217	CB	GLU	B	59	114.539	48.760	-0.068	1.00	75.19	C
ATOM	4218	CG	GLU	B	59	114.763	50.033	0.753	1.00	76.90	C
ATOM	4219	CD	GLU	B	59	113.430	50.630	1.246	1.00	77.28	C
ATOM	4220	OE1	GLU	B	59	112.420	49.867	1.298	1.00	79.63	O
ATOM	4221	OE2	GLU	B	59	113.393	51.847	1.574	1.00	77.58	O
ATOM	4222	C	GLU	B	59	115.320	46.739	-1.232	1.00	74.99	C
ATOM	4223	O	GLU	B	59	115.095	45.691	-0.614	1.00	74.81	O
ATOM	4224	N	GLU	B	60	115.151	46.866	-2.545	1.00	74.97	N
ATOM	4225	CA	GLU	B	60	114.615	45.793	-3.370	1.00	74.90	C
ATOM	4226	CB	GLU	B	60	113.119	46.008	-3.598	1.00	75.19	C
ATOM	4227	CG	GLU	B	60	112.498	45.140	-4.672	1.00	76.89	C
ATOM	4228	CD	GLU	B	60	110.993	44.988	-4.505	1.00	79.03	C
ATOM	4229	OE1	GLU	B	60	110.288	46.023	-4.467	1.00	77.91	O
ATOM	4230	OE2	GLU	B	60	110.522	43.822	-4.410	1.00	80.52	O
ATOM	4231	C	GLU	B	60	115.377	45.682	-4.688	1.00	74.46	C
ATOM	4232	O	GLU	B	60	115.530	46.658	-5.429	1.00	74.18	O
ATOM	4233	N	LEU	B	61	115.867	44.477	-4.950	1.00	74.08	N
ATOM	4234	CA	LEU	B	61	116.596	44.173	-6.160	1.00	73.87	C
ATOM	4235	CB	LEU	B	61	118.065	43.904	-5.857	1.00	73.73	C
ATOM	4236	CG	LEU	B	61	119.016	43.653	-7.023	1.00	73.47	C
ATOM	4237	CD1	LEU	B	61	119.119	44.871	-7.955	1.00	72.66	C
ATOM	4238	CD2	LEU	B	61	120.379	43.274	-6.482	1.00	73.29	C
ATOM	4239	C	LEU	B	61	115.934	42.959	-6.779	1.00	74.30	C
ATOM	4240	O	LEU	B	61	115.780	41.901	-6.145	1.00	74.50	O
ATOM	4241	N	GLU	B	62	115.509	43.134	-8.020	1.00	74.52	N
ATOM	4242	CA	GLU	B	62	114.718	42.137	-8.693	1.00	74.53	C
ATOM	4243	CB	GLU	B	62	113.284	42.640	-8.861	1.00	74.73	C
ATOM	4244	CG	GLU	B	62	112.217	41.576	-8.608	1.00	75.99	C
ATOM	4245	CD	GLU	B	62	111.885	41.345	-7.130	1.00	78.18	C
ATOM	4246	OE1	GLU	B	62	111.737	42.333	-6.382	1.00	77.35	O
ATOM	4247	OE2	GLU	B	62	111.729	40.164	-6.718	1.00	80.30	O
ATOM	4248	C	GLU	B	62	115.398	41.815	-10.019	1.00	74.27	C
ATOM	4249	O	GLU	B	62	115.578	42.678	-10.879	1.00	73.66	O
ATOM	4250	N	LEU	B	63	115.809	40.558	-10.137	1.00	74.40	N
ATOM	4251	CA	LEU	B	63	116.595	40.077	-11.261	1.00	74.63	C
ATOM	4252	CB	LEU	B	63	118.036	39.821	-10.816	1.00	74.54	C

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ATOM   4253  CG  LEU B  63     118.878  41.056 -10.504  1.00 74.23           C
ATOM   4254  CD1 LEU B  63     120.000  40.709  -9.545  1.00 74.19           C
ATOM   4255  CD2 LEU B  63     119.424  41.640 -11.781  1.00 74.37           C
ATOM   4256  C   LEU B  63     115.983  38.794 -11.803  1.00 74.83           C
ATOM   4257  O   LEU B  63     116.686  37.914 -12.305  1.00 74.86           O
ATOM   4258  N   ASN B  64     114.664  38.699 -11.691  1.00 75.03           N
ATOM   4259  CA  ASN B  64     113.940  37.534 -12.143  1.00 75.44           C
ATOM   4260  CB  ASN B  64     112.510  37.567 -11.612  1.00 75.38           C
ATOM   4261  CG  ASN B  64     112.448  37.814 -10.115  1.00 76.09           C
ATOM   4262  OD1 ASN B  64     112.767  36.940  -9.308  1.00 77.72           O
ATOM   4263  ND2 ASN B  64     112.033  39.009  -9.737  1.00 75.89           N
ATOM   4264  C   ASN B  64     113.929  37.465 -13.658  1.00 75.96           C
ATOM   4265  O   ASN B  64     114.099  38.480 -14.344  1.00 75.97           O
ATOM   4266  N   GLU B  65     113.734  36.257 -14.179  1.00 76.49           N
ATOM   4267  CA  GLU B  65     113.541  36.034 -15.621  1.00 76.78           C
ATOM   4268  CB  GLU B  65     112.206  36.619 -16.110  1.00 77.16           C
ATOM   4269  CG  GLU B  65     111.058  35.627 -15.958  1.00 80.31           C
ATOM   4270  CD  GLU B  65     109.683  36.282 -15.799  1.00 84.56           C
ATOM   4271  OE1 GLU B  65     109.183  36.910 -16.769  1.00 84.90           O
ATOM   4272  OE2 GLU B  65     109.094  36.133 -14.698  1.00 86.19           O
ATOM   4273  C   GLU B  65     114.713  36.465 -16.490  1.00 75.96           C
ATOM   4274  O   GLU B  65     114.538  36.806 -17.654  1.00 76.19           O
ATOM   4275  N   ASN B  66     115.906  36.440 -15.905  1.00 75.25           N
ATOM   4276  CA  ASN B  66     117.149  36.623 -16.640  1.00 74.51           C
ATOM   4277  CB  ASN B  66     118.134  37.427 -15.802  1.00 74.33           C
ATOM   4278  CG  ASN B  66     118.005  38.906 -16.029  1.00 73.42           C
ATOM   4279  OD1 ASN B  66     118.640  39.454 -16.921  1.00 73.67           O
ATOM   4280  ND2 ASN B  66     117.194  39.568 -15.216  1.00 71.86           N
ATOM   4281  C   ASN B  66     117.722  35.262 -17.006  1.00 74.15           C
ATOM   4282  O   ASN B  66     116.980  34.293 -17.093  1.00 74.44           O
ATOM   4283  N   ILE B  67     119.027  35.182 -17.232  1.00 73.71           N
ATOM   4284  CA  ILE B  67     119.674  33.900 -17.507  1.00 73.23           C
ATOM   4285  CB  ILE B  67     119.885  33.655 -19.029  1.00 73.22           C
ATOM   4286  CG1 ILE B  67     120.515  34.869 -19.709  1.00 72.83           C
ATOM   4287  CD1 ILE B  67     120.837  34.644 -21.163  1.00 72.95           C
ATOM   4288  CG2 ILE B  67     118.560  33.301 -19.698  1.00 73.17           C
ATOM   4289  C   ILE B  67     120.979  33.767 -16.726  1.00 73.12           C
ATOM   4290  O   ILE B  67     121.991  33.291 -17.245  1.00 73.38           O
ATOM   4291  N   VAL B  68     120.935  34.189 -15.465  1.00 72.75           N
ATOM   4292  CA  VAL B  68     122.105  34.204 -14.601  1.00 72.23           C
ATOM   4293  CB  VAL B  68     121.820  34.961 -13.282  1.00 71.91           C
ATOM   4294  CG1 VAL B  68     123.015  34.913 -12.352  1.00 71.41           C
ATOM   4295  CG2 VAL B  68     121.436  36.401 -13.567  1.00 70.66           C
ATOM   4296  C   VAL B  68     122.512  32.770 -14.319  1.00 72.64           C
ATOM   4297  O   VAL B  68     121.697  31.964 -13.879  1.00 73.04           O
ATOM   4298  N   SER B  69     123.770  32.450 -14.598  1.00 72.83           N
ATOM   4299  CA  SER B  69     124.292  31.105 -14.362  1.00 73.06           C
ATOM   4300  CB  SER B  69     124.506  30.374 -15.687  1.00 72.90           C
ATOM   4301  OG  SER B  69     125.279  31.164 -16.564  1.00 73.38           O
ATOM   4302  C   SER B  69     125.583  31.108 -13.538  1.00 73.11           C
ATOM   4303  O   SER B  69     126.114  30.056 -13.201  1.00 73.44           O
ATOM   4304  N   ALA B  70     126.086  32.289 -13.215  1.00 73.09           N
ATOM   4305  CA  ALA B  70     127.272  32.395 -12.391  1.00 73.30           C
ATOM   4306  CB  ALA B  70     128.525  32.383 -13.239  1.00 73.23           C
ATOM   4307  C   ALA B  70     127.192  33.664 -11.577  1.00 73.64           C
ATOM   4308  O   ALA B  70     126.967  34.746 -12.118  1.00 73.47           O
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ATOM   4309  N   VAL B  71     127.355  33.519 -10.266  1.00 74.06           N
ATOM   4310  CA  VAL B  71     127.338  34.661  -9.370  1.00 74.41           C
ATOM   4311  CB  VAL B  71     125.983  34.780  -8.615  1.00 74.37           C
ATOM   4312  CG1 VAL B  71     125.634  33.499  -7.921  1.00 74.94           C
ATOM   4313  CG2 VAL B  71     126.007  35.932  -7.632  1.00 75.02           C
ATOM   4314  C   VAL B  71     128.560  34.624  -8.453  1.00 74.48           C
ATOM   4315  O   VAL B  71     128.657  33.777  -7.580  1.00 74.83           O
ATOM   4316  N   GLU B  72     129.505  35.528  -8.709  1.00 74.63           N
ATOM   4317  CA  GLU B  72     130.745  35.645  -7.944  1.00 74.85           C
ATOM   4318  CB  GLU B  72     131.637  36.750  -8.520  1.00 74.75           C
ATOM   4319  CG  GLU B  72     132.282  36.484  -9.879  1.00 76.05           C
ATOM   4320  CD  GLU B  72     133.483  37.423 -10.150  1.00 76.93           C
ATOM   4321  OE1 GLU B  72     133.275  38.629 -10.448  1.00 79.42           O
ATOM   4322  OE2 GLU B  72     134.646  36.957 -10.061  1.00 79.25           O
ATOM   4323  C   GLU B  72     130.436  36.017  -6.507  1.00 74.13           C
ATOM   4324  O   GLU B  72     129.511  36.796  -6.259  1.00 74.18           O
ATOM   4325  N   PRO B  73     131.210  35.472  -5.550  1.00 73.58           N
ATOM   4326  CA  PRO B  73     131.148  35.987  -4.188  1.00 72.88           C
ATOM   4327  CB  PRO B  73     132.287  35.242  -3.489  1.00 72.82           C
ATOM   4328  CG  PRO B  73     132.423  33.982  -4.250  1.00 72.61           C
ATOM   4329  CD  PRO B  73     132.166  34.355  -5.668  1.00 73.41           C
ATOM   4330  C   PRO B  73     131.402  37.499  -4.175  1.00 72.44           C
ATOM   4331  O   PRO B  73     132.298  37.985  -4.865  1.00 72.21           O
ATOM   4332  N   GLY B  74     130.590  38.227  -3.421  1.00 72.11           N
ATOM   4333  CA  GLY B  74     130.704  39.672  -3.334  1.00 71.90           C
ATOM   4334  C   GLY B  74     129.914  40.411  -4.396  1.00 71.96           C
ATOM   4335  O   GLY B  74     130.072  41.629  -4.560  1.00 72.21           O
ATOM   4336  N   ALA B  75     129.076  39.682  -5.129  1.00 71.60           N
ATOM   4337  CA  ALA B  75     128.204  40.292  -6.119  1.00 71.35           C
ATOM   4338  CB  ALA B  75     127.446  39.236  -6.884  1.00 71.19           C
ATOM   4339  C   ALA B  75     127.246  41.259  -5.432  1.00 71.34           C
ATOM   4340  O   ALA B  75     126.999  42.363  -5.931  1.00 71.27           O
ATOM   4341  N   PHE B  76     126.747  40.853  -4.266  1.00 71.30           N
ATOM   4342  CA  PHE B  76     125.777  41.652  -3.519  1.00 71.17           C
ATOM   4343  CB  PHE B  76     124.620  40.781  -3.014  1.00 70.76           C
ATOM   4344  CG  PHE B  76     123.941  40.011  -4.105  1.00 70.10           C
ATOM   4345  CD1 PHE B  76     123.242  40.677  -5.112  1.00 69.15           C
ATOM   4346  CE1 PHE B  76     122.626  39.973  -6.138  1.00 68.25           C
ATOM   4347  CZ  PHE B  76     122.709  38.591  -6.164  1.00 68.54           C
ATOM   4348  CE2 PHE B  76     123.407  37.918  -5.167  1.00 67.68           C
ATOM   4349  CD2 PHE B  76     124.020  38.628  -4.148  1.00 68.52           C
ATOM   4350  C   PHE B  76     126.402  42.430  -2.379  1.00 71.43           C
ATOM   4351  O   PHE B  76     125.690  42.926  -1.507  1.00 71.96           O
ATOM   4352  N   ASN B  77     127.727  42.551  -2.391  1.00 71.46           N
ATOM   4353  CA  ASN B  77     128.424  43.362  -1.401  1.00 71.45           C
ATOM   4354  CB  ASN B  77     129.939  43.190  -1.549  1.00 71.81           C
ATOM   4355  CG  ASN B  77     130.730  44.074  -0.583  1.00 72.72           C
ATOM   4356  OD1 ASN B  77     131.323  45.090  -0.977  1.00 70.56           O
ATOM   4357  ND2 ASN B  77     130.714  43.701   0.697  1.00 74.20           N
ATOM   4358  C   ASN B  77     128.030  44.849  -1.496  1.00 71.29           C
ATOM   4359  O   ASN B  77     127.812  45.373  -2.590  1.00 71.25           O
ATOM   4360  N   ASN B  78     127.950  45.495  -0.329  1.00 71.02           N
ATOM   4361  CA  ASN B  78     127.580  46.913  -0.136  1.00 70.38           C
ATOM   4362  CB  ASN B  78     128.434  47.868  -0.976  1.00 70.37           C
ATOM   4363  CG  ASN B  78     128.590  49.239  -0.320  1.00 70.84           C
ATOM   4364  OD1 ASN B  78     128.691  49.347   0.906  1.00 71.12           O
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ATOM   4365  ND2 ASN B  78     128.605  50.292  -1.133  1.00 70.59           N
ATOM   4366  C   ASN B  78     126.090  47.249  -0.262  1.00 70.10           C
ATOM   4367  O   ASN B  78     125.723  48.404  -0.461  1.00 70.03           O
ATOM   4368  N   LEU B  79     125.239  46.238  -0.115  1.00 69.78           N
ATOM   4369  CA  LEU B  79     123.794  46.437  -0.148  1.00 69.48           C
ATOM   4370  CB  LEU B  79     123.170  45.575  -1.249  1.00 69.24           C
ATOM   4371  CG  LEU B  79     123.738  45.699  -2.666  1.00 68.59           C
ATOM   4372  CD1 LEU B  79     123.154  44.608  -3.556  1.00 67.72           C
ATOM   4373  CD2 LEU B  79     123.467  47.080  -3.258  1.00 67.50           C
ATOM   4374  C   LEU B  79     123.173  46.129   1.219  1.00 69.41           C
ATOM   4375  O   LEU B  79     122.391  45.189   1.365  1.00 69.66           O
ATOM   4376  N   PHE B  80     123.521  46.936   2.219  1.00 69.21           N
ATOM   4377  CA  PHE B  80     123.147  46.653   3.603  1.00 68.88           C
ATOM   4378  CB  PHE B  80     124.159  47.240   4.596  1.00 68.60           C
ATOM   4379  CG  PHE B  80     125.588  46.907   4.273  1.00 68.51           C
ATOM   4380  CD1 PHE B  80     126.014  45.575   4.193  1.00 69.20           C
ATOM   4381  CE1 PHE B  80     127.354  45.263   3.879  1.00 68.79           C
ATOM   4382  CZ  PHE B  80     128.267  46.288   3.654  1.00 67.73           C
ATOM   4383  CE2 PHE B  80     127.849  47.622   3.743  1.00 67.51           C
ATOM   4384  CD2 PHE B  80     126.516  47.921   4.049  1.00 67.88           C
ATOM   4385  C   PHE B  80     121.722  47.059   3.968  1.00 69.12           C
ATOM   4386  O   PHE B  80     121.249  46.726   5.066  1.00 69.73           O
ATOM   4387  N   ASN B  81     121.023  47.749   3.068  1.00 68.82           N
ATOM   4388  CA  ASN B  81     119.595  47.966   3.278  1.00 68.76           C
ATOM   4389  CB  ASN B  81     119.188  49.388   2.930  1.00 68.66           C
ATOM   4390  CG  ASN B  81     120.158  50.417   3.468  1.00 67.96           C
ATOM   4391  OD1 ASN B  81     120.103  50.802   4.632  1.00 67.47           O
ATOM   4392  ND2 ASN B  81     121.047  50.872   2.615  1.00 66.91           N
ATOM   4393  C   ASN B  81     118.722  46.962   2.518  1.00 69.27           C
ATOM   4394  O   ASN B  81     117.505  46.920   2.709  1.00 69.83           O
ATOM   4395  N   LEU B  82     119.330  46.131   1.678  1.00 69.21           N
ATOM   4396  CA  LEU B  82     118.541  45.245   0.854  1.00 69.36           C
ATOM   4397  CB  LEU B  82     119.427  44.443  -0.090  1.00 69.00           C
ATOM   4398  CG  LEU B  82     118.704  43.993  -1.357  1.00 68.29           C
ATOM   4399  CD1 LEU B  82     118.549  45.157  -2.339  1.00 67.36           C
ATOM   4400  CD2 LEU B  82     119.445  42.855  -1.992  1.00 67.11           C
ATOM   4401  C   LEU B  82     117.669  44.323   1.715  1.00 70.22           C
ATOM   4402  O   LEU B  82     118.172  43.615   2.593  1.00 70.45           O
ATOM   4403  N   ARG B  83     116.359  44.355   1.472  1.00 70.68           N
ATOM   4404  CA  ARG B  83     115.430  43.490   2.185  1.00 70.82           C
ATOM   4405  CB  ARG B  83     114.353  44.318   2.877  1.00 70.99           C
ATOM   4406  CG  ARG B  83     114.870  45.232   3.978  1.00 73.50           C
ATOM   4407  CD  ARG B  83     115.265  44.453   5.242  1.00 78.14           C
ATOM   4408  NE  ARG B  83     115.466  45.333   6.404  1.00 81.86           N
ATOM   4409  CZ  ARG B  83     114.707  45.322   7.506  1.00 82.96           C
ATOM   4410  NH1 ARG B  83     113.696  44.468   7.619  1.00 83.84           N
ATOM   4411  NH2 ARG B  83     114.958  46.165   8.505  1.00 82.47           N
ATOM   4412  C   ARG B  83     114.812  42.427   1.283  1.00 70.70           C
ATOM   4413  O   ARG B  83     114.457  41.347   1.756  1.00 70.66           O
ATOM   4414  N   THR B  84     114.706  42.717  -0.011  1.00 70.74           N
ATOM   4415  CA  THR B  84     114.135  41.762  -0.959  1.00 71.33           C
ATOM   4416  CB  THR B  84     112.764  42.237  -1.506  1.00 71.81           C
ATOM   4417  OG1 THR B  84     111.912  42.620  -0.417  1.00 72.95           O
ATOM   4418  CG2 THR B  84     112.070  41.115  -2.309  1.00 72.92           C
ATOM   4419  C   THR B  84     115.071  41.481  -2.124  1.00 70.98           C
ATOM   4420  O   THR B  84     115.588  42.405  -2.739  1.00 71.19           O
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ATOM	4421	N	LEU	B	85	115.285	40.200	-2.408	1.00	70.84	N
ATOM	4422	CA	LEU	B	85	116.086	39.767	-3.550	1.00	71.12	C
ATOM	4423	CB	LEU	B	85	117.456	39.222	-3.100	1.00	70.95	C
ATOM	4424	CG	LEU	B	85	118.493	38.840	-4.172	1.00	70.58	C
ATOM	4425	CD1	LEU	B	85	118.933	40.042	-4.974	1.00	70.13	C
ATOM	4426	CD2	LEU	B	85	119.702	38.188	-3.557	1.00	70.91	C
ATOM	4427	C	LEU	B	85	115.323	38.724	-4.374	1.00	71.62	C
ATOM	4428	O	LEU	B	85	114.935	37.674	-3.865	1.00	71.48	O
ATOM	4429	N	GLY	B	86	115.092	39.034	-5.645	1.00	72.14	N
ATOM	4430	CA	GLY	B	86	114.371	38.126	-6.516	1.00	72.61	C
ATOM	4431	C	GLY	B	86	115.296	37.572	-7.568	1.00	73.16	C
ATOM	4432	O	GLY	B	86	115.933	38.332	-8.301	1.00	73.11	O
ATOM	4433	N	LEU	B	87	115.365	36.248	-7.643	1.00	73.60	N
ATOM	4434	CA	LEU	B	87	116.240	35.570	-8.591	1.00	74.32	C
ATOM	4435	CB	LEU	B	87	117.509	35.080	-7.883	1.00	73.96	C
ATOM	4436	CG	LEU	B	87	118.571	36.111	-7.506	1.00	74.10	C
ATOM	4437	CD1	LEU	B	87	119.496	35.573	-6.413	1.00	74.48	C
ATOM	4438	CD2	LEU	B	87	119.369	36.550	-8.730	1.00	74.09	C
ATOM	4439	C	LEU	B	87	115.559	34.392	-9.273	1.00	75.12	C
ATOM	4440	O	LEU	B	87	116.231	33.452	-9.685	1.00	75.15	O
ATOM	4441	N	ARG	B	88	114.235	34.419	-9.392	1.00	76.27	N
ATOM	4442	CA	ARG	B	88	113.555	33.273	-9.996	1.00	77.81	C
ATOM	4443	CB	ARG	B	88	112.097	33.114	-9.524	1.00	78.12	C
ATOM	4444	CG	ARG	B	88	111.201	34.343	-9.619	1.00	79.83	C
ATOM	4445	CD	ARG	B	88	109.720	33.941	-9.725	1.00	80.06	C
ATOM	4446	NE	ARG	B	88	109.384	33.556	-11.099	1.00	85.88	N
ATOM	4447	CZ	ARG	B	88	109.150	34.420	-12.099	1.00	87.55	C
ATOM	4448	NH1	ARG	B	88	109.205	35.740	-11.888	1.00	87.63	N
ATOM	4449	NH2	ARG	B	88	108.856	33.964	-13.321	1.00	86.72	N
ATOM	4450	C	ARG	B	88	113.661	33.276	-11.510	1.00	77.49	C
ATOM	4451	O	ARG	B	88	113.769	34.337	-12.120	1.00	77.68	O
ATOM	4452	N	SER	B	89	113.644	32.082	-12.100	1.00	77.48	N
ATOM	4453	CA	SER	B	89	113.780	31.898	-13.554	1.00	77.77	C
ATOM	4454	CB	SER	B	89	112.649	32.578	-14.337	1.00	77.65	C
ATOM	4455	OG	SER	B	89	111.389	32.231	-13.797	1.00	78.73	O
ATOM	4456	C	SER	B	89	115.137	32.351	-14.077	1.00	77.74	C
ATOM	4457	O	SER	B	89	115.226	33.121	-15.038	1.00	78.12	O
ATOM	4458	N	ASN	B	90	116.191	31.891	-13.420	1.00	77.28	N
ATOM	4459	CA	ASN	B	90	117.526	32.028	-13.955	1.00	76.81	C
ATOM	4460	CB	ASN	B	90	118.381	32.908	-13.056	1.00	76.83	C
ATOM	4461	CG	ASN	B	90	117.892	34.331	-13.017	1.00	76.75	C
ATOM	4462	OD1	ASN	B	90	117.988	35.063	-14.001	1.00	77.90	O
ATOM	4463	ND2	ASN	B	90	117.370	34.738	-11.876	1.00	76.20	N
ATOM	4464	C	ASN	B	90	118.108	30.639	-14.111	1.00	76.67	C
ATOM	4465	O	ASN	B	90	117.372	29.656	-14.074	1.00	76.75	O
ATOM	4466	N	ARG	B	91	119.417	30.552	-14.284	1.00	76.61	N
ATOM	4467	CA	ARG	B	91	120.043	29.280	-14.583	1.00	76.83	C
ATOM	4468	CB	ARG	B	91	120.745	29.365	-15.933	1.00	77.05	C
ATOM	4469	CG	ARG	B	91	119.801	29.523	-17.104	1.00	77.81	C
ATOM	4470	CD	ARG	B	91	120.582	29.616	-18.381	1.00	80.09	C
ATOM	4471	NE	ARG	B	91	119.709	29.704	-19.543	1.00	82.79	N
ATOM	4472	CZ	ARG	B	91	120.091	30.162	-20.737	1.00	84.19	C
ATOM	4473	NH1	ARG	B	91	121.334	30.590	-20.928	1.00	84.24	N
ATOM	4474	NH2	ARG	B	91	119.224	30.199	-21.745	1.00	85.08	N
ATOM	4475	C	ARG	B	91	121.011	28.835	-13.491	1.00	76.76	C
ATOM	4476	O	ARG	B	91	121.873	27.993	-13.721	1.00	76.74	O

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ATOM   4477  N   LEU B  92     120.850  29.395 -12.298  1.00 76.75           N
ATOM   4478  CA  LEU B  92     121.682  29.046 -11.162  1.00 76.76           C
ATOM   4479  CB  LEU B  92     121.231  29.832  -9.942  1.00 76.36           C
ATOM   4480  CG  LEU B  92     121.378  31.350 -10.059  1.00 75.94           C
ATOM   4481  CD1 LEU B  92     120.721  32.041  -8.873  1.00 75.24           C
ATOM   4482  CD2 LEU B  92     122.837  31.759 -10.170  1.00 75.52           C
ATOM   4483  C   LEU B  92     121.647  27.554 -10.857  1.00 77.27           C
ATOM   4484  O   LEU B  92     120.573  26.984 -10.694  1.00 77.39           O
ATOM   4485  N   LYS B  93     122.824  26.928 -10.798  1.00 77.83           N
ATOM   4486  CA  LYS B  93     122.959  25.539 -10.334  1.00 78.33           C
ATOM   4487  CB  LYS B  93     124.080  24.825 -11.076  1.00 78.33           C
ATOM   4488  CG  LYS B  93     123.637  24.075 -12.309  1.00 79.57           C
ATOM   4489  CD  LYS B  93     124.831  23.697 -13.171  1.00 81.62           C
ATOM   4490  CE  LYS B  93     124.401  22.881 -14.391  1.00 84.36           C
ATOM   4491  NZ  LYS B  93     125.580  22.381 -15.196  1.00 85.18           N
ATOM   4492  C   LYS B  93     123.204  25.433  -8.825  1.00 78.55           C
ATOM   4493  O   LYS B  93     123.008  24.370  -8.236  1.00 78.66           O
ATOM   4494  N   LEU B  94     123.624  26.535  -8.210  1.00 78.88           N
ATOM   4495  CA  LEU B  94     123.970  26.570  -6.788  1.00 79.37           C
ATOM   4496  CB  LEU B  94     125.196  25.684  -6.520  1.00 79.72           C
ATOM   4497  CG  LEU B  94     126.495  26.091  -7.225  1.00 79.73           C
ATOM   4498  CD1 LEU B  94     127.478  26.633  -6.223  1.00 79.39           C
ATOM   4499  CD2 LEU B  94     127.089  24.904  -7.939  1.00 81.19           C
ATOM   4500  C   LEU B  94     124.285  27.996  -6.341  1.00 79.42           C
ATOM   4501  O   LEU B  94     124.573  28.873  -7.172  1.00 80.16           O
ATOM   4502  N   ILE B  95     124.264  28.216  -5.033  1.00 78.85           N
ATOM   4503  CA  ILE B  95     124.698  29.486  -4.483  1.00 78.44           C
ATOM   4504  CB  ILE B  95     123.674  30.085  -3.473  1.00 78.60           C
ATOM   4505  CG1 ILE B  95     122.241  30.083  -4.039  1.00 78.72           C
ATOM   4506  CD1 ILE B  95     122.030  30.979  -5.262  1.00 78.83           C
ATOM   4507  CG2 ILE B  95     124.101  31.492  -3.051  1.00 78.45           C
ATOM   4508  C   ILE B  95     126.035  29.247  -3.801  1.00 78.21           C
ATOM   4509  O   ILE B  95     126.081  28.736  -2.682  1.00 78.33           O
ATOM   4510  N   PRO B  96     127.140  29.605  -4.474  1.00 77.99           N
ATOM   4511  CA  PRO B  96     128.439  29.390  -3.825  1.00 77.59           C
ATOM   4512  CB  PRO B  96     129.457  29.842  -4.888  1.00 77.36           C
ATOM   4513  CG  PRO B  96     128.698  30.670  -5.839  1.00 77.51           C
ATOM   4514  CD  PRO B  96     127.276  30.197  -5.818  1.00 77.86           C
ATOM   4515  C   PRO B  96     128.580  30.206  -2.542  1.00 77.21           C
ATOM   4516  O   PRO B  96     127.915  31.231  -2.384  1.00 76.92           O
ATOM   4517  N   LEU B  97     129.431  29.736  -1.634  1.00 77.02           N
ATOM   4518  CA  LEU B  97     129.675  30.439  -0.386  1.00 76.85           C
ATOM   4519  CB  LEU B  97     130.543  29.596   0.558  1.00 76.97           C
ATOM   4520  CG  LEU B  97     130.841  30.137   1.969  1.00 77.20           C
ATOM   4521  CD1 LEU B  97     129.561  30.493   2.740  1.00 78.21           C
ATOM   4522  CD2 LEU B  97     131.683  29.157   2.773  1.00 76.71           C
ATOM   4523  C   LEU B  97     130.334  31.778  -0.688  1.00 76.91           C
ATOM   4524  O   LEU B  97     131.259  31.853  -1.510  1.00 76.87           O
ATOM   4525  N   GLY B  98     129.839  32.826  -0.031  1.00 76.85           N
ATOM   4526  CA  GLY B  98     130.318  34.181  -0.251  1.00 76.79           C
ATOM   4527  C   GLY B  98     129.330  35.050  -1.005  1.00 77.01           C
ATOM   4528  O   GLY B  98     129.517  36.269  -1.101  1.00 77.17           O
ATOM   4529  N   VAL B  99     128.281  34.437  -1.551  1.00 76.86           N
ATOM   4530  CA  VAL B  99     127.236  35.197  -2.225  1.00 77.15           C
ATOM   4531  CB  VAL B  99     126.516  34.358  -3.303  1.00 76.93           C
ATOM   4532  CG1 VAL B  99     125.410  35.152  -3.965  1.00 76.05           C
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ATOM   4533  CG2 VAL B  99     127.506  33.885  -4.359  1.00 76.72           C
ATOM   4534  C   VAL B  99     126.243  35.817  -1.219  1.00 77.97           C
ATOM   4535  O   VAL B  99     125.770  36.935  -1.426  1.00 78.35           O
ATOM   4536  N   PHE B 100     125.940  35.113  -0.127  1.00 78.52           N
ATOM   4537  CA  PHE B 100     124.995  35.646   0.857  1.00 78.90           C
ATOM   4538  CB  PHE B 100     123.926  34.615   1.233  1.00 78.84           C
ATOM   4539  CG  PHE B 100     123.005  34.266   0.100  1.00 79.02           C
ATOM   4540  CD1 PHE B 100     122.695  35.215  -0.886  1.00 79.16           C
ATOM   4541  CE1 PHE B 100     121.858  34.903  -1.949  1.00 78.68           C
ATOM   4542  CZ  PHE B 100     121.303  33.630  -2.030  1.00 79.29           C
ATOM   4543  CE2 PHE B 100     121.592  32.676  -1.042  1.00 79.65           C
ATOM   4544  CD2 PHE B 100     122.446  32.999   0.012  1.00 78.61           C
ATOM   4545  C   PHE B 100     125.645  36.255   2.094  1.00 79.23           C
ATOM   4546  O   PHE B 100     124.964  36.882   2.910  1.00 79.37           O
ATOM   4547  N   THR B 101     126.955  36.074   2.229  1.00 79.45           N
ATOM   4548  CA  THR B 101     127.713  36.739   3.278  1.00 79.66           C
ATOM   4549  CB  THR B 101     129.221  36.462   3.146  1.00 79.43           C
ATOM   4550  OG1 THR B 101     129.444  35.059   2.962  1.00 79.89           O
ATOM   4551  CG2 THR B 101     129.934  36.904   4.391  1.00 79.54           C
ATOM   4552  C   THR B 101     127.478  38.224   3.076  1.00 79.80           C
ATOM   4553  O   THR B 101     127.680  38.732   1.976  1.00 80.45           O
ATOM   4554  N   GLY B 102     127.018  38.924   4.098  1.00 79.48           N
ATOM   4555  CA  GLY B 102     126.781  40.356   3.916  1.00 79.55           C
ATOM   4556  C   GLY B 102     125.398  40.739   3.408  1.00 79.33           C
ATOM   4557  O   GLY B 102     125.126  41.922   3.159  1.00 79.16           O
ATOM   4558  N   LEU B 103     124.535  39.736   3.244  1.00 78.95           N
ATOM   4559  CA  LEU B 103     123.112  39.965   3.074  1.00 78.55           C
ATOM   4560  CB  LEU B 103     122.581  39.273   1.820  1.00 78.38           C
ATOM   4561  CG  LEU B 103     122.984  39.793   0.446  1.00 77.69           C
ATOM   4562  CD1 LEU B 103     122.344  38.878  -0.572  1.00 77.13           C
ATOM   4563  CD2 LEU B 103     122.577  41.253   0.226  1.00 75.88           C
ATOM   4564  C   LEU B 103     122.362  39.460   4.296  1.00 78.50           C
ATOM   4565  O   LEU B 103     121.372  38.743   4.175  1.00 78.73           O
ATOM   4566  N   SER B 104     122.837  39.845   5.474  1.00 78.32           N
ATOM   4567  CA  SER B 104     122.215  39.433   6.723  1.00 78.02           C
ATOM   4568  CB  SER B 104     123.197  39.532   7.891  1.00 78.32           C
ATOM   4569  OG  SER B 104     124.301  38.658   7.713  1.00 79.88           O
ATOM   4570  C   SER B 104     120.981  40.250   7.036  1.00 77.59           C
ATOM   4571  O   SER B 104     120.098  39.752   7.720  1.00 78.12           O
ATOM   4572  N   ASN B 105     120.911  41.494   6.559  1.00 76.91           N
ATOM   4573  CA  ASN B 105     119.712  42.309   6.765  1.00 76.54           C
ATOM   4574  CB  ASN B 105     120.010  43.808   6.615  1.00 77.11           C
ATOM   4575  CG  ASN B 105     118.825  44.698   7.042  1.00 78.65           C
ATOM   4576  OD1 ASN B 105     118.699  45.868   6.621  1.00 77.41           O
ATOM   4577  ND2 ASN B 105     117.946  44.138   7.887  1.00 80.94           N
ATOM   4578  C   ASN B 105     118.526  41.879   5.878  1.00 76.21           C
ATOM   4579  O   ASN B 105     117.375  42.235   6.157  1.00 76.26           O
ATOM   4580  N   LEU B 106     118.803  41.086   4.838  1.00 75.72           N
ATOM   4581  CA  LEU B 106     117.769  40.567   3.931  1.00 74.85           C
ATOM   4582  CB  LEU B 106     118.381  39.647   2.867  1.00 74.75           C
ATOM   4583  CG  LEU B 106     117.595  39.500   1.558  1.00 73.44           C
ATOM   4584  CD1 LEU B 106     117.770  40.722   0.693  1.00 72.76           C
ATOM   4585  CD2 LEU B 106     118.009  38.266   0.791  1.00 73.97           C
ATOM   4586  C   LEU B 106     116.639  39.846   4.656  1.00 75.05           C
ATOM   4587  O   LEU B 106     116.866  39.115   5.614  1.00 75.39           O
ATOM   4588  N   THR B 107     115.427  40.029   4.143  1.00 75.28           N
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ATOM   4589  CA  THR B 107     114.188  39.629   4.803  1.00 75.27           C
ATOM   4590  CB  THR B 107     113.390  40.911   5.137  1.00 75.35           C
ATOM   4591  OG1 THR B 107     114.061  41.611   6.187  1.00 76.29           O
ATOM   4592  CG2 THR B 107     111.988  40.632   5.587  1.00 76.12           C
ATOM   4593  C   THR B 107     113.368  38.695   3.919  1.00 75.00           C
ATOM   4594  O   THR B 107     112.532  37.951   4.408  1.00 75.12           O
ATOM   4595  N   LYS B 108     113.619  38.733   2.616  1.00 75.08           N
ATOM   4596  CA  LYS B 108     112.855  37.960   1.651  1.00 75.32           C
ATOM   4597  CB  LYS B 108     111.682  38.791   1.137  1.00 76.20           C
ATOM   4598  CG  LYS B 108     110.808  38.049   0.134  1.00 78.33           C
ATOM   4599  CD  LYS B 108     109.661  38.894  -0.358  1.00 81.91           C
ATOM   4600  CE  LYS B 108     108.738  38.041  -1.210  1.00 83.94           C
ATOM   4601  NZ  LYS B 108     107.693  38.873  -1.863  1.00 86.02           N
ATOM   4602  C   LYS B 108     113.714  37.579   0.464  1.00 75.09           C
ATOM   4603  O   LYS B 108     114.400  38.433  -0.109  1.00 74.69           O
ATOM   4604  N   LEU B 109     113.640  36.307   0.071  1.00 74.72           N
ATOM   4605  CA  LEU B 109     114.449  35.793  -1.022  1.00 74.57           C
ATOM   4606  CB  LEU B 109     115.721  35.124  -0.481  1.00 74.32           C
ATOM   4607  CG  LEU B 109     116.578  34.354  -1.495  1.00 73.92           C
ATOM   4608  CD1 LEU B 109     117.302  35.305  -2.433  1.00 73.13           C
ATOM   4609  CD2 LEU B 109     117.560  33.439  -0.813  1.00 73.99           C
ATOM   4610  C   LEU B 109     113.680  34.794  -1.861  1.00 75.14           C
ATOM   4611  O   LEU B 109     113.159  33.810  -1.333  1.00 75.84           O
ATOM   4612  N   ASP B 110     113.639  35.031  -3.169  1.00 75.44           N
ATOM   4613  CA  ASP B 110     113.080  34.080  -4.117  1.00 76.00           C
ATOM   4614  CB  ASP B 110     111.983  34.743  -4.951  1.00 76.53           C
ATOM   4615  CG  ASP B 110     111.195  33.741  -5.807  1.00 79.58           C
ATOM   4616  OD1 ASP B 110     111.515  32.529  -5.816  1.00 82.17           O
ATOM   4617  OD2 ASP B 110     110.237  34.167  -6.488  1.00 84.06           O
ATOM   4618  C   ASP B 110     114.172  33.539  -5.036  1.00 75.88           C
ATOM   4619  O   ASP B 110     114.826  34.308  -5.747  1.00 75.86           O
ATOM   4620  N   ILE B 111     114.367  32.218  -5.013  1.00 75.73           N
ATOM   4621  CA  ILE B 111     115.299  31.543  -5.925  1.00 75.55           C
ATOM   4622  CB  ILE B 111     116.614  31.094  -5.226  1.00 75.23           C
ATOM   4623  CG1 ILE B 111     116.312  30.404  -3.905  1.00 74.74           C
ATOM   4624  CD1 ILE B 111     117.363  29.407  -3.502  1.00 74.38           C
ATOM   4625  CG2 ILE B 111     117.563  32.270  -5.015  1.00 75.07           C
ATOM   4626  C   ILE B 111     114.654  30.345  -6.629  1.00 75.80           C
ATOM   4627  O   ILE B 111     115.341  29.448  -7.110  1.00 76.00           O
ATOM   4628  N   SER B 112     113.331  30.333  -6.697  1.00 75.88           N
ATOM   4629  CA  SER B 112     112.613  29.251  -7.353  1.00 76.12           C
ATOM   4630  CB  SER B 112     111.115  29.411  -7.121  1.00 76.12           C
ATOM   4631  OG  SER B 112     110.732  30.766  -7.306  1.00 75.71           O
ATOM   4632  C   SER B 112     112.902  29.267  -8.842  1.00 76.39           C
ATOM   4633  O   SER B 112     113.447  30.235  -9.350  1.00 76.36           O
ATOM   4634  N   GLU B 113     112.543  28.187  -9.531  1.00 76.75           N
ATOM   4635  CA  GLU B 113     112.638  28.100 -10.997  1.00 77.58           C
ATOM   4636  CB  GLU B 113     111.619  29.032 -11.681  1.00 77.47           C
ATOM   4637  CG  GLU B 113     110.183  28.467 -11.773  1.00 79.57           C
ATOM   4638  CD  GLU B 113     109.097  29.557 -12.037  1.00 80.51           C
ATOM   4639  OE1 GLU B 113     109.138  30.245 -13.089  1.00 83.31           O
ATOM   4640  OE2 GLU B 113     108.185  29.720 -11.186  1.00 85.17           O
ATOM   4641  C   GLU B 113     114.049  28.286 -11.576  1.00 76.54           C
ATOM   4642  O   GLU B 113     114.215  28.870 -12.649  1.00 76.49           O
ATOM   4643  N   ASN B 114     115.058  27.783 -10.868  1.00 75.86           N
ATOM   4644  CA  ASN B 114     116.436  27.809 -11.368  1.00 74.91           C
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ATOM   4645  CB  ASN B 114     117.390  28.385 -10.318  1.00 74.47           C
ATOM   4646  CG  ASN B 114     117.384  29.919 -10.282  1.00 73.27           C
ATOM   4647  OD1 ASN B 114     118.158  30.573 -10.973  1.00 71.01           O
ATOM   4648  ND2 ASN B 114     116.536  30.486  -9.439  1.00 72.41           N
ATOM   4649  C   ASN B 114     116.850  26.410 -11.822  1.00 74.92           C
ATOM   4650  O   ASN B 114     116.008  25.648 -12.280  1.00 75.08           O
ATOM   4651  N   LYS B 115     118.130  26.070 -11.716  1.00 74.90           N
ATOM   4652  CA  LYS B 115     118.609  24.755 -12.147  1.00 74.75           C
ATOM   4653  CB  LYS B 115     119.597  24.886 -13.315  1.00 75.09           C
ATOM   4654  CG  LYS B 115     118.998  25.368 -14.643  1.00 76.01           C
ATOM   4655  CD  LYS B 115     117.815  24.504 -15.099  1.00 77.78           C
ATOM   4656  CE  LYS B 115     117.490  24.678 -16.591  1.00 78.26           C
ATOM   4657  NZ  LYS B 115     116.068  24.266 -16.909  1.00 78.95           N
ATOM   4658  C   LYS B 115     119.233  23.960 -10.994  1.00 74.56           C
ATOM   4659  O   LYS B 115     119.953  22.984 -11.222  1.00 74.36           O
ATOM   4660  N   ILE B 116     118.942  24.379  -9.765  1.00 74.32           N
ATOM   4661  CA  ILE B 116     119.430  23.708  -8.566  1.00 74.53           C
ATOM   4662  CB  ILE B 116     119.006  24.478  -7.309  1.00 74.16           C
ATOM   4663  CG1 ILE B 116     119.642  25.878  -7.345  1.00 74.22           C
ATOM   4664  CD1 ILE B 116     119.019  26.913  -6.431  1.00 72.63           C
ATOM   4665  CG2 ILE B 116     119.426  23.736  -6.049  1.00 73.67           C
ATOM   4666  C   ILE B 116     118.981  22.239  -8.508  1.00 75.32           C
ATOM   4667  O   ILE B 116     117.809  21.931  -8.718  1.00 75.57           O
ATOM   4668  N   VAL B 117     119.923  21.332  -8.257  1.00 75.88           N
ATOM   4669  CA  VAL B 117     119.618  19.902  -8.257  1.00 76.32           C
ATOM   4670  CB  VAL B 117     120.719  19.117  -8.992  1.00 76.08           C
ATOM   4671  CG1 VAL B 117     120.353  17.642  -9.133  1.00 75.56           C
ATOM   4672  CG2 VAL B 117     120.954  19.722 -10.358  1.00 76.04           C
ATOM   4673  C   VAL B 117     119.433  19.365  -6.832  1.00 76.98           C
ATOM   4674  O   VAL B 117     118.789  18.330  -6.609  1.00 76.89           O
ATOM   4675  N   ILE B 118     119.959  20.116  -5.871  1.00 77.55           N
ATOM   4676  CA  ILE B 118     120.270  19.596  -4.557  1.00 78.19           C
ATOM   4677  CB  ILE B 118     121.535  18.722  -4.670  1.00 78.41           C
ATOM   4678  CG1 ILE B 118     121.139  17.251  -4.707  1.00 79.42           C
ATOM   4679  CD1 ILE B 118     122.233  16.378  -5.221  1.00 81.77           C
ATOM   4680  CG2 ILE B 118     122.530  18.983  -3.563  1.00 78.61           C
ATOM   4681  C   ILE B 118     120.473  20.750  -3.591  1.00 78.35           C
ATOM   4682  O   ILE B 118     121.220  21.679  -3.884  1.00 79.13           O
ATOM   4683  N   LEU B 119     119.791  20.713  -2.455  1.00 78.44           N
ATOM   4684  CA  LEU B 119     120.035  21.694  -1.406  1.00 78.50           C
ATOM   4685  CB  LEU B 119     118.733  22.328  -0.922  1.00 78.39           C
ATOM   4686  CG  LEU B 119     117.835  23.079  -1.907  1.00 78.40           C
ATOM   4687  CD1 LEU B 119     116.498  23.372  -1.248  1.00 78.25           C
ATOM   4688  CD2 LEU B 119     118.460  24.374  -2.372  1.00 79.14           C
ATOM   4689  C   LEU B 119     120.792  21.033  -0.251  1.00 78.66           C
ATOM   4690  O   LEU B 119     120.260  20.173   0.439  1.00 78.86           O
ATOM   4691  N   LEU B 120     122.043  21.433  -0.056  1.00 79.00           N
ATOM   4692  CA  LEU B 120     122.889  20.832   0.965  1.00 79.11           C
ATOM   4693  CB  LEU B 120     124.295  20.601   0.417  1.00 79.07           C
ATOM   4694  CG  LEU B 120     124.426  19.601  -0.728  1.00 79.09           C
ATOM   4695  CD1 LEU B 120     125.882  19.411  -0.988  1.00 79.66           C
ATOM   4696  CD2 LEU B 120     123.765  18.254  -0.426  1.00 78.74           C
ATOM   4697  C   LEU B 120     122.963  21.646   2.249  1.00 79.43           C
ATOM   4698  O   LEU B 120     122.433  22.766   2.333  1.00 79.30           O
ATOM   4699  N   ASP B 121     123.647  21.077   3.238  1.00 79.84           N
ATOM   4700  CA  ASP B 121     123.744  21.663   4.565  1.00 80.46           C
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ATOM	4701	CB	ASP	B	121	124.667	20.807	5.433	1.00	80.48	C
ATOM	4702	CG	ASP	B	121	124.032	19.489	5.855	1.00	81.46	C
ATOM	4703	OD1	ASP	B	121	122.869	19.223	5.489	1.00	82.63	O
ATOM	4704	OD2	ASP	B	121	124.697	18.709	6.573	1.00	83.02	O
ATOM	4705	C	ASP	B	121	124.231	23.111	4.553	1.00	80.77	C
ATOM	4706	O	ASP	B	121	125.169	23.458	3.830	1.00	80.95	O
ATOM	4707	N	TYR	B	122	123.565	23.949	5.346	1.00	81.06	N
ATOM	4708	CA	TYR	B	122	124.036	25.305	5.691	1.00	81.67	C
ATOM	4709	CB	TYR	B	122	125.450	25.285	6.331	1.00	80.83	C
ATOM	4710	CG	TYR	B	122	125.684	24.166	7.313	1.00	79.68	C
ATOM	4711	CD1	TYR	B	122	124.894	24.037	8.457	1.00	79.17	C
ATOM	4712	CE1	TYR	B	122	125.092	22.997	9.356	1.00	78.67	C
ATOM	4713	CZ	TYR	B	122	126.095	22.082	9.120	1.00	78.89	C
ATOM	4714	OH	TYR	B	122	126.292	21.057	10.012	1.00	79.51	O
ATOM	4715	CE2	TYR	B	122	126.896	22.187	7.996	1.00	78.55	C
ATOM	4716	CD2	TYR	B	122	126.685	23.230	7.098	1.00	78.78	C
ATOM	4717	C	TYR	B	122	124.016	26.320	4.551	1.00	82.62	C
ATOM	4718	O	TYR	B	122	124.585	27.394	4.686	1.00	82.71	O
ATOM	4719	N	MET	B	123	123.366	26.000	3.441	1.00	83.67	N
ATOM	4720	CA	MET	B	123	123.360	26.903	2.291	1.00	85.48	C
ATOM	4721	CB	MET	B	123	122.580	26.273	1.152	1.00	85.27	C
ATOM	4722	CG	MET	B	123	122.613	27.070	-0.137	1.00	87.59	C
ATOM	4723	SD	MET	B	123	121.264	26.497	-1.201	1.00	90.66	S
ATOM	4724	CE	MET	B	123	121.989	24.903	-1.697	1.00	92.69	C
ATOM	4725	C	MET	B	123	122.813	28.312	2.576	1.00	84.38	C
ATOM	4726	O	MET	B	123	123.257	29.293	1.982	1.00	84.48	O
ATOM	4727	N	PHE	B	124	121.854	28.409	3.486	1.00	83.93	N
ATOM	4728	CA	PHE	B	124	121.180	29.673	3.718	1.00	83.24	C
ATOM	4729	CB	PHE	B	124	119.680	29.447	3.716	1.00	82.92	C
ATOM	4730	CG	PHE	B	124	119.151	29.025	2.389	1.00	82.35	C
ATOM	4731	CD1	PHE	B	124	118.983	29.955	1.371	1.00	81.34	C
ATOM	4732	CE1	PHE	B	124	118.500	29.559	0.139	1.00	82.16	C
ATOM	4733	CZ	PHE	B	124	118.177	28.223	-0.083	1.00	81.62	C
ATOM	4734	CE2	PHE	B	124	118.344	27.296	0.923	1.00	81.31	C
ATOM	4735	CD2	PHE	B	124	118.831	27.694	2.149	1.00	81.56	C
ATOM	4736	C	PHE	B	124	121.632	30.350	5.001	1.00	83.22	C
ATOM	4737	O	PHE	B	124	121.064	31.359	5.426	1.00	83.14	O
ATOM	4738	N	GLN	B	125	122.683	29.787	5.580	1.00	83.00	N
ATOM	4739	CA	GLN	B	125	123.228	30.143	6.884	1.00	82.69	C
ATOM	4740	CB	GLN	B	125	124.546	29.422	7.003	1.00	82.85	C
ATOM	4741	CG	GLN	B	125	125.184	29.503	8.316	1.00	84.51	C
ATOM	4742	CD	GLN	B	125	125.936	28.253	8.584	1.00	86.60	C
ATOM	4743	OE1	GLN	B	125	125.476	27.407	9.357	1.00	87.06	O
ATOM	4744	NE2	GLN	B	125	127.084	28.088	7.910	1.00	86.21	N
ATOM	4745	C	GLN	B	125	123.476	31.625	7.136	1.00	82.28	C
ATOM	4746	O	GLN	B	125	123.379	32.095	8.270	1.00	82.43	O
ATOM	4747	N	ASP	B	126	123.824	32.345	6.077	1.00	81.81	N
ATOM	4748	CA	ASP	B	126	124.167	33.754	6.159	1.00	81.15	C
ATOM	4749	CB	ASP	B	126	124.940	34.145	4.901	1.00	81.80	C
ATOM	4750	CG	ASP	B	126	126.416	33.742	4.970	1.00	84.94	C
ATOM	4751	OD1	ASP	B	126	127.162	34.320	5.825	1.00	88.35	O
ATOM	4752	OD2	ASP	B	126	126.833	32.862	4.164	1.00	86.62	O
ATOM	4753	C	ASP	B	126	122.955	34.669	6.354	1.00	79.95	C
ATOM	4754	O	ASP	B	126	123.094	35.803	6.822	1.00	79.72	O
ATOM	4755	N	LEU	B	127	121.777	34.161	5.997	1.00	78.59	N
ATOM	4756	CA	LEU	B	127	120.533	34.924	6.003	1.00	77.45	C

ATOM	4757	CB	LEU	B	127	119.692	34.575	4.770	1.00	76.90	C
ATOM	4758	CG	LEU	B	127	120.376	34.496	3.403	1.00	75.57	C
ATOM	4759	CD1	LEU	B	127	119.487	33.807	2.404	1.00	73.47	C
ATOM	4760	CD2	LEU	B	127	120.771	35.860	2.893	1.00	74.55	C
ATOM	4761	C	LEU	B	127	119.746	34.617	7.276	1.00	77.26	C
ATOM	4762	O	LEU	B	127	118.690	33.982	7.235	1.00	77.56	O
ATOM	4763	N	TYR	B	128	120.264	35.063	8.412	1.00	76.49	N
ATOM	4764	CA	TYR	B	128	119.661	34.722	9.684	1.00	75.67	C
ATOM	4765	CB	TYR	B	128	120.713	34.641	10.794	1.00	75.37	C
ATOM	4766	CG	TYR	B	128	121.688	35.785	10.848	1.00	74.79	C
ATOM	4767	CD1	TYR	B	128	122.970	35.658	10.304	1.00	74.15	C
ATOM	4768	CE1	TYR	B	128	123.883	36.713	10.361	1.00	74.02	C
ATOM	4769	CZ	TYR	B	128	123.516	37.902	10.978	1.00	74.32	C
ATOM	4770	OH	TYR	B	128	124.408	38.943	11.037	1.00	75.06	O
ATOM	4771	CE2	TYR	B	128	122.249	38.051	11.529	1.00	74.25	C
ATOM	4772	CD2	TYR	B	128	121.344	36.994	11.464	1.00	74.24	C
ATOM	4773	C	TYR	B	128	118.509	35.642	10.064	1.00	75.68	C
ATOM	4774	O	TYR	B	128	117.852	35.428	11.087	1.00	75.81	O
ATOM	4775	N	ASN	B	129	118.253	36.652	9.234	1.00	75.54	N
ATOM	4776	CA	ASN	B	129	117.093	37.523	9.425	1.00	75.47	C
ATOM	4777	CB	ASN	B	129	117.520	38.980	9.425	1.00	75.50	C
ATOM	4778	CG	ASN	B	129	118.238	39.359	10.679	1.00	76.62	C
ATOM	4779	OD1	ASN	B	129	117.955	38.831	11.757	1.00	78.11	O
ATOM	4780	ND2	ASN	B	129	119.176	40.286	10.560	1.00	77.60	N
ATOM	4781	C	ASN	B	129	115.986	37.326	8.398	1.00	75.28	C
ATOM	4782	O	ASN	B	129	115.039	38.110	8.359	1.00	75.52	O
ATOM	4783	N	LEU	B	130	116.106	36.281	7.579	1.00	74.79	N
ATOM	4784	CA	LEU	B	130	115.168	36.033	6.507	1.00	74.28	C
ATOM	4785	CB	LEU	B	130	115.675	34.928	5.587	1.00	73.77	C
ATOM	4786	CG	LEU	B	130	115.248	35.045	4.127	1.00	72.17	C
ATOM	4787	CD1	LEU	B	130	115.757	36.361	3.542	1.00	72.83	C
ATOM	4788	CD2	LEU	B	130	115.783	33.894	3.334	1.00	70.27	C
ATOM	4789	C	LEU	B	130	113.810	35.663	7.070	1.00	74.82	C
ATOM	4790	O	LEU	B	130	113.706	34.817	7.937	1.00	75.16	O
ATOM	4791	N	LYS	B	131	112.772	36.317	6.569	1.00	75.43	N
ATOM	4792	CA	LYS	B	131	111.419	36.085	7.018	1.00	75.82	C
ATOM	4793	CB	LYS	B	131	110.663	37.404	7.078	1.00	76.01	C
ATOM	4794	CG	LYS	B	131	111.072	38.318	8.205	1.00	77.12	C
ATOM	4795	CD	LYS	B	131	110.315	37.970	9.461	1.00	81.34	C
ATOM	4796	CE	LYS	B	131	110.497	39.039	10.530	1.00	85.71	C
ATOM	4797	NZ	LYS	B	131	110.049	40.400	10.066	1.00	86.87	N
ATOM	4798	C	LYS	B	131	110.723	35.161	6.053	1.00	76.00	C
ATOM	4799	O	LYS	B	131	109.865	34.379	6.454	1.00	76.28	O
ATOM	4800	N	SER	B	132	111.102	35.239	4.782	1.00	76.19	N
ATOM	4801	CA	SER	B	132	110.368	34.547	3.741	1.00	76.97	C
ATOM	4802	CB	SER	B	132	109.361	35.506	3.126	1.00	77.25	C
ATOM	4803	OG	SER	B	132	108.371	34.791	2.415	1.00	79.72	O
ATOM	4804	C	SER	B	132	111.261	33.969	2.648	1.00	77.17	C
ATOM	4805	O	SER	B	132	112.122	34.666	2.110	1.00	77.58	O
ATOM	4806	N	LEU	B	133	111.051	32.701	2.310	1.00	77.38	N
ATOM	4807	CA	LEU	B	133	111.885	32.046	1.320	1.00	77.68	C
ATOM	4808	CB	LEU	B	133	112.895	31.105	1.990	1.00	77.43	C
ATOM	4809	CG	LEU	B	133	113.738	30.242	1.036	1.00	76.81	C
ATOM	4810	CD1	LEU	B	133	114.754	31.093	0.297	1.00	76.20	C
ATOM	4811	CD2	LEU	B	133	114.423	29.065	1.738	1.00	76.98	C
ATOM	4812	C	LEU	B	133	111.063	31.266	0.311	1.00	78.65	C

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ATOM   4813  O   LEU B 133     110.312  30.373   0.686  1.00 78.90           O
ATOM   4814  N   GLU B 134     111.219  31.604  -0.966  1.00 79.24           N
ATOM   4815  CA  GLU B 134     110.666  30.805  -2.044  1.00 80.55           C
ATOM   4816  CB  GLU B 134     109.873  31.682  -3.007  1.00 80.47           C
ATOM   4817  CG  GLU B 134     109.103  30.908  -4.088  1.00 83.24           C
ATOM   4818  CD  GLU B 134     108.058  31.776  -4.845  1.00 84.83           C
ATOM   4819  OE1 GLU B 134     107.262  32.471  -4.170  1.00 91.51           O
ATOM   4820  OE2 GLU B 134     108.013  31.759  -6.110  1.00 90.07           O
ATOM   4821  C   GLU B 134     111.797  30.081  -2.772  1.00 79.55           C
ATOM   4822  O   GLU B 134     112.743  30.709  -3.251  1.00 79.92           O
ATOM   4823  N   VAL B 135     111.684  28.760  -2.848  1.00 78.61           N
ATOM   4824  CA  VAL B 135     112.699  27.904  -3.437  1.00 77.55           C
ATOM   4825  CB  VAL B 135     113.736  27.475  -2.360  1.00 77.56           C
ATOM   4826  CG1 VAL B 135     113.098  26.583  -1.292  1.00 76.51           C
ATOM   4827  CG2 VAL B 135     114.942  26.782  -2.992  1.00 77.05           C
ATOM   4828  C   VAL B 135     112.077  26.654  -4.082  1.00 77.73           C
ATOM   4829  O   VAL B 135     111.038  26.146  -3.638  1.00 77.89           O
ATOM   4830  N   GLY B 136     112.728  26.149  -5.121  1.00 77.51           N
ATOM   4831  CA  GLY B 136     112.330  24.897  -5.742  1.00 76.95           C
ATOM   4832  C   GLY B 136     112.317  25.038  -7.245  1.00 77.03           C
ATOM   4833  O   GLY B 136     112.009  26.106  -7.783  1.00 76.92           O
ATOM   4834  N   ASP B 137     112.665  23.957  -7.926  1.00 77.02           N
ATOM   4835  CA  ASP B 137     112.669  23.934  -9.378  1.00 77.13           C
ATOM   4836  CB  ASP B 137     113.919  24.629  -9.918  1.00 77.17           C
ATOM   4837  CG  ASP B 137     115.212  24.038  -9.362  1.00 77.22           C
ATOM   4838  OD1 ASP B 137     115.441  22.821  -9.508  1.00 77.15           O
ATOM   4839  OD2 ASP B 137     116.016  24.798  -8.794  1.00 77.96           O
ATOM   4840  C   ASP B 137     112.587  22.494  -9.853  1.00 77.39           C
ATOM   4841  O   ASP B 137     112.760  21.564  -9.066  1.00 77.62           O
ATOM   4842  N   ASN B 138     112.321  22.312 -11.139  1.00 77.80           N
ATOM   4843  CA  ASN B 138     112.147  20.984 -11.717  1.00 78.37           C
ATOM   4844  CB  ASN B 138     111.740  21.098 -13.185  1.00 78.41           C
ATOM   4845  CG  ASN B 138     110.243  21.146 -13.362  1.00 79.71           C
ATOM   4846  OD1 ASN B 138     109.514  21.567 -12.464  1.00 80.67           O
ATOM   4847  ND2 ASN B 138     109.766  20.690 -14.516  1.00 81.99           N
ATOM   4848  C   ASN B 138     113.334  20.037 -11.574  1.00 78.57           C
ATOM   4849  O   ASN B 138     113.171  18.827 -11.677  1.00 79.02           O
ATOM   4850  N   ASP B 139     114.521  20.582 -11.346  1.00 78.69           N
ATOM   4851  CA  ASP B 139     115.716  19.764 -11.228  1.00 78.87           C
ATOM   4852  CB  ASP B 139     116.921  20.509 -11.802  1.00 79.28           C
ATOM   4853  CG  ASP B 139     116.907  20.569 -13.322  1.00 81.10           C
ATOM   4854  OD1 ASP B 139     116.238  19.725 -13.972  1.00 83.15           O
ATOM   4855  OD2 ASP B 139     117.582  21.462 -13.879  1.00 83.37           O
ATOM   4856  C   ASP B 139     116.007  19.305  -9.798  1.00 78.57           C
ATOM   4857  O   ASP B 139     116.736  18.333  -9.594  1.00 78.46           O
ATOM   4858  N   LEU B 140     115.445  20.006  -8.816  1.00 78.12           N
ATOM   4859  CA  LEU B 140     115.681  19.686  -7.415  1.00 77.71           C
ATOM   4860  CB  LEU B 140     115.120  20.785  -6.514  1.00 77.47           C
ATOM   4861  CG  LEU B 140     115.158  20.589  -4.996  1.00 77.10           C
ATOM   4862  CD1 LEU B 140     116.554  20.296  -4.505  1.00 77.30           C
ATOM   4863  CD2 LEU B 140     114.623  21.820  -4.310  1.00 77.71           C
ATOM   4864  C   LEU B 140     115.109  18.318  -7.042  1.00 77.69           C
ATOM   4865  O   LEU B 140     113.914  18.075  -7.166  1.00 77.75           O
ATOM   4866  N   VAL B 141     115.978  17.426  -6.581  1.00 77.66           N
ATOM   4867  CA  VAL B 141     115.586  16.042  -6.288  1.00 77.33           C
ATOM   4868  CB  VAL B 141     116.216  15.043  -7.297  1.00 77.15           C
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ATOM	4869	CG1	VAL	B	141	115.614	15.229	-8.669	1.00	76.90	C
ATOM	4870	CG2	VAL	B	141	117.731	15.193	-7.351	1.00	76.20	C
ATOM	4871	C	VAL	B	141	115.937	15.617	-4.858	1.00	77.51	C
ATOM	4872	O	VAL	B	141	115.566	14.519	-4.418	1.00	77.79	O
ATOM	4873	N	TYR	B	142	116.651	16.482	-4.139	1.00	77.25	N
ATOM	4874	CA	TYR	B	142	117.108	16.156	-2.801	1.00	76.96	C
ATOM	4875	CB	TYR	B	142	118.375	15.308	-2.850	1.00	77.67	C
ATOM	4876	CG	TYR	B	142	118.793	14.822	-1.488	1.00	78.64	C
ATOM	4877	CD1	TYR	B	142	118.064	13.819	-0.842	1.00	80.11	C
ATOM	4878	CE1	TYR	B	142	118.423	13.363	0.418	1.00	80.05	C
ATOM	4879	CZ	TYR	B	142	119.523	13.914	1.051	1.00	79.72	C
ATOM	4880	OH	TYR	B	142	119.860	13.441	2.298	1.00	79.75	O
ATOM	4881	CE2	TYR	B	142	120.274	14.920	0.432	1.00	79.40	C
ATOM	4882	CD2	TYR	B	142	119.901	15.369	-0.833	1.00	78.79	C
ATOM	4883	C	TYR	B	142	117.369	17.368	-1.943	1.00	76.46	C
ATOM	4884	O	TYR	B	142	118.011	18.327	-2.372	1.00	76.09	O
ATOM	4885	N	ILE	B	143	116.876	17.293	-0.709	1.00	75.98	N
ATOM	4886	CA	ILE	B	143	117.128	18.297	0.320	1.00	75.04	C
ATOM	4887	CB	ILE	B	143	115.837	18.998	0.731	1.00	74.54	C
ATOM	4888	CG1	ILE	B	143	115.288	19.809	-0.444	1.00	73.62	C
ATOM	4889	CD1	ILE	B	143	113.850	20.179	-0.321	1.00	71.78	C
ATOM	4890	CG2	ILE	B	143	116.092	19.896	1.908	1.00	74.47	C
ATOM	4891	C	ILE	B	143	117.727	17.592	1.522	1.00	75.07	C
ATOM	4892	O	ILE	B	143	117.092	16.726	2.109	1.00	75.47	O
ATOM	4893	N	SER	B	144	118.958	17.945	1.871	1.00	74.93	N
ATOM	4894	CA	SER	B	144	119.622	17.378	3.044	1.00	74.71	C
ATOM	4895	CB	SER	B	144	121.093	17.754	3.034	1.00	74.82	C
ATOM	4896	OG	SER	B	144	121.201	19.145	3.293	1.00	75.12	O
ATOM	4897	C	SER	B	144	118.999	17.885	4.349	1.00	74.50	C
ATOM	4898	O	SER	B	144	118.432	18.994	4.393	1.00	74.29	O
ATOM	4899	N	HIS	B	145	119.148	17.077	5.404	1.00	73.95	N
ATOM	4900	CA	HIS	B	145	118.591	17.361	6.726	1.00	73.63	C
ATOM	4901	CB	HIS	B	145	119.103	16.364	7.754	1.00	73.48	C
ATOM	4902	CG	HIS	B	145	118.790	14.938	7.432	1.00	75.25	C
ATOM	4903	ND1	HIS	B	145	117.602	14.544	6.848	1.00	75.78	N
ATOM	4904	CE1	HIS	B	145	117.600	13.229	6.707	1.00	76.68	C
ATOM	4905	NE2	HIS	B	145	118.738	12.755	7.190	1.00	77.31	N
ATOM	4906	CD2	HIS	B	145	119.500	13.802	7.650	1.00	76.50	C
ATOM	4907	C	HIS	B	145	118.867	18.766	7.245	1.00	73.27	C
ATOM	4908	O	HIS	B	145	118.035	19.346	7.929	1.00	73.35	O
ATOM	4909	N	ARG	B	146	120.029	19.322	6.935	1.00	72.88	N
ATOM	4910	CA	ARG	B	146	120.350	20.632	7.472	1.00	72.72	C
ATOM	4911	CB	ARG	B	146	121.688	20.607	8.203	1.00	72.52	C
ATOM	4912	CG	ARG	B	146	121.618	19.992	9.550	1.00	72.21	C
ATOM	4913	CD	ARG	B	146	123.000	19.670	10.039	1.00	72.39	C
ATOM	4914	NE	ARG	B	146	122.958	18.745	11.167	1.00	72.23	N
ATOM	4915	CZ	ARG	B	146	123.943	18.600	12.046	1.00	71.80	C
ATOM	4916	NH1	ARG	B	146	125.048	19.332	11.933	1.00	70.77	N
ATOM	4917	NH2	ARG	B	146	123.815	17.730	13.039	1.00	70.80	N
ATOM	4918	C	ARG	B	146	120.342	21.739	6.435	1.00	72.63	C
ATOM	4919	O	ARG	B	146	120.958	22.773	6.650	1.00	72.93	O
ATOM	4920	N	ALA	B	147	119.637	21.540	5.328	1.00	72.55	N
ATOM	4921	CA	ALA	B	147	119.616	22.539	4.267	1.00	72.42	C
ATOM	4922	CB	ALA	B	147	118.813	22.064	3.119	1.00	72.19	C
ATOM	4923	C	ALA	B	147	119.094	23.874	4.770	1.00	72.83	C
ATOM	4924	O	ALA	B	147	119.646	24.922	4.446	1.00	73.15	O

ATOM	4925	N	PHE	B	148	118.051	23.838	5.592	1.00	73.24	N
ATOM	4926	CA	PHE	B	148	117.447	25.067	6.093	1.00	73.34	C
ATOM	4927	CB	PHE	B	148	115.924	24.931	6.149	1.00	73.36	C
ATOM	4928	CG	PHE	B	148	115.296	24.652	4.819	1.00	72.83	C
ATOM	4929	CD1	PHE	B	148	115.356	25.589	3.798	1.00	72.12	C
ATOM	4930	CE1	PHE	B	148	114.780	25.335	2.556	1.00	71.54	C
ATOM	4931	CZ	PHE	B	148	114.131	24.151	2.332	1.00	72.29	C
ATOM	4932	CE2	PHE	B	148	114.060	23.195	3.350	1.00	73.54	C
ATOM	4933	CD2	PHE	B	148	114.641	23.452	4.589	1.00	72.79	C
ATOM	4934	C	PHE	B	148	118.006	25.509	7.446	1.00	73.68	C
ATOM	4935	O	PHE	B	148	117.498	26.451	8.058	1.00	74.02	O
ATOM	4936	N	SER	B	149	119.062	24.841	7.904	1.00	73.97	N
ATOM	4937	CA	SER	B	149	119.727	25.219	9.145	1.00	73.84	C
ATOM	4938	CB	SER	B	149	120.893	24.293	9.416	1.00	73.68	C
ATOM	4939	OG	SER	B	149	121.595	24.705	10.575	1.00	74.97	O
ATOM	4940	C	SER	B	149	120.233	26.645	9.034	1.00	73.79	C
ATOM	4941	O	SER	B	149	120.791	27.029	7.999	1.00	74.09	O
ATOM	4942	N	GLY	B	150	120.008	27.433	10.079	1.00	73.66	N
ATOM	4943	CA	GLY	B	150	120.492	28.805	10.095	1.00	74.06	C
ATOM	4944	C	GLY	B	150	119.465	29.883	9.813	1.00	74.29	C
ATOM	4945	O	GLY	B	150	119.666	31.045	10.167	1.00	74.45	O
ATOM	4946	N	LEU	B	151	118.360	29.513	9.180	1.00	74.56	N
ATOM	4947	CA	LEU	B	151	117.292	30.470	8.911	1.00	74.85	C
ATOM	4948	CB	LEU	B	151	116.405	29.979	7.768	1.00	74.51	C
ATOM	4949	CG	LEU	B	151	117.082	29.836	6.412	1.00	73.97	C
ATOM	4950	CD1	LEU	B	151	116.203	29.031	5.474	1.00	75.16	C
ATOM	4951	CD2	LEU	B	151	117.406	31.175	5.824	1.00	71.48	C
ATOM	4952	C	LEU	B	151	116.483	30.721	10.182	1.00	75.33	C
ATOM	4953	O	LEU	B	151	115.315	30.342	10.271	1.00	75.56	O
ATOM	4954	N	ASN	B	152	117.115	31.364	11.162	1.00	75.73	N
ATOM	4955	CA	ASN	B	152	116.523	31.512	12.494	1.00	76.24	C
ATOM	4956	CB	ASN	B	152	117.520	32.128	13.476	1.00	76.63	C
ATOM	4957	CG	ASN	B	152	118.793	31.328	13.585	1.00	77.82	C
ATOM	4958	OD1	ASN	B	152	118.776	30.104	13.444	1.00	80.32	O
ATOM	4959	ND2	ASN	B	152	119.908	32.009	13.840	1.00	78.14	N
ATOM	4960	C	ASN	B	152	115.243	32.317	12.518	1.00	76.03	C
ATOM	4961	O	ASN	B	152	114.412	32.110	13.397	1.00	76.44	O
ATOM	4962	N	SER	B	153	115.087	33.228	11.559	1.00	75.57	N
ATOM	4963	CA	SER	B	153	113.926	34.101	11.530	1.00	75.10	C
ATOM	4964	CB	SER	B	153	114.352	35.528	11.211	1.00	74.98	C
ATOM	4965	OG	SER	B	153	115.372	35.951	12.088	1.00	75.86	O
ATOM	4966	C	SER	B	153	112.855	33.680	10.542	1.00	75.00	C
ATOM	4967	O	SER	B	153	111.894	34.419	10.349	1.00	75.08	O
ATOM	4968	N	LEU	B	154	113.003	32.523	9.898	1.00	75.06	N
ATOM	4969	CA	LEU	B	154	112.070	32.169	8.827	1.00	75.17	C
ATOM	4970	CB	LEU	B	154	112.522	30.949	8.022	1.00	74.94	C
ATOM	4971	CG	LEU	B	154	112.088	30.962	6.543	1.00	74.02	C
ATOM	4972	CD1	LEU	B	154	112.710	32.127	5.764	1.00	70.39	C
ATOM	4973	CD2	LEU	B	154	112.408	29.648	5.868	1.00	73.68	C
ATOM	4974	C	LEU	B	154	110.667	31.981	9.378	1.00	76.43	C
ATOM	4975	O	LEU	B	154	110.475	31.275	10.372	1.00	76.68	O
ATOM	4976	N	GLU	B	155	109.706	32.662	8.747	1.00	77.76	N
ATOM	4977	CA	GLU	B	155	108.303	32.637	9.151	1.00	78.86	C
ATOM	4978	CB	GLU	B	155	107.771	34.046	9.352	1.00	78.56	C
ATOM	4979	CG	GLU	B	155	108.021	34.595	10.729	1.00	81.48	C
ATOM	4980	CD	GLU	B	155	107.642	36.069	10.848	1.00	87.24	C

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ATOM   4981  OE1 GLU B 155     106.722  36.521  10.116  1.00 89.43           O
ATOM   4982  OE2 GLU B 155     108.264  36.790  11.669  1.00 89.18           O
ATOM   4983  C   GLU B 155     107.495  31.966   8.073  1.00 79.22           C
ATOM   4984  O   GLU B 155     106.447  31.378   8.341  1.00 79.48           O
ATOM   4985  N   GLN B 156     108.010  32.031   6.852  1.00 79.64           N
ATOM   4986  CA  GLN B 156     107.216  31.723   5.684  1.00 80.09           C
ATOM   4987  CB  GLN B 156     106.634  33.038   5.177  1.00 80.57           C
ATOM   4988  CG  GLN B 156     105.926  32.981   3.852  1.00 84.67           C
ATOM   4989  CD  GLN B 156     104.690  33.876   3.842  1.00 89.26           C
ATOM   4990  OE1 GLN B 156     104.504  34.729   4.737  1.00 89.26           O
ATOM   4991  NE2 GLN B 156     103.815  33.660   2.847  1.00 89.33           N
ATOM   4992  C   GLN B 156     108.076  31.038   4.635  1.00 79.41           C
ATOM   4993  O   GLN B 156     109.047  31.610   4.166  1.00 79.39           O
ATOM   4994  N   LEU B 157     107.730  29.803   4.292  1.00 79.04           N
ATOM   4995  CA  LEU B 157     108.469  29.054   3.289  1.00 79.15           C
ATOM   4996  CB  LEU B 157     109.221  27.895   3.940  1.00 78.90           C
ATOM   4997  CG  LEU B 157     109.878  26.862   3.015  1.00 78.72           C
ATOM   4998  CD1 LEU B 157     111.081  27.419   2.242  1.00 77.17           C
ATOM   4999  CD2 LEU B 157     110.293  25.657   3.805  1.00 77.94           C
ATOM   5000  C   LEU B 157     107.587  28.532   2.154  1.00 79.70           C
ATOM   5001  O   LEU B 157     106.598  27.844   2.393  1.00 80.31           O
ATOM   5002  N   THR B 158     107.958  28.847   0.918  1.00 80.11           N
ATOM   5003  CA  THR B 158     107.309  28.273  -0.256  1.00 80.38           C
ATOM   5004  CB  THR B 158     106.892  29.359  -1.219  1.00 80.19           C
ATOM   5005  OG1 THR B 158     106.178  30.364  -0.502  1.00 81.50           O
ATOM   5006  CG2 THR B 158     106.014  28.798  -2.313  1.00 80.59           C
ATOM   5007  C   THR B 158     108.247  27.303  -0.975  1.00 80.67           C
ATOM   5008  O   THR B 158     109.283  27.694  -1.500  1.00 80.61           O
ATOM   5009  N   LEU B 159     107.874  26.035  -0.994  1.00 81.17           N
ATOM   5010  CA  LEU B 159     108.673  25.011  -1.635  1.00 82.18           C
ATOM   5011  CB  LEU B 159     108.975  23.898  -0.632  1.00 82.04           C
ATOM   5012  CG  LEU B 159     109.779  22.672  -1.061  1.00 83.25           C
ATOM   5013  CD1 LEU B 159     111.098  23.054  -1.724  1.00 84.02           C
ATOM   5014  CD2 LEU B 159     110.038  21.819   0.160  1.00 83.13           C
ATOM   5015  C   LEU B 159     107.889  24.484  -2.826  1.00 82.50           C
ATOM   5016  O   LEU B 159     106.919  23.745  -2.658  1.00 82.80           O
ATOM   5017  N   GLU B 160     108.292  24.876  -4.033  1.00 83.03           N
ATOM   5018  CA  GLU B 160     107.466  24.614  -5.208  1.00 83.24           C
ATOM   5019  CB  GLU B 160     106.731  25.880  -5.624  1.00 82.86           C
ATOM   5020  CG  GLU B 160     107.579  26.863  -6.346  1.00 84.44           C
ATOM   5021  CD  GLU B 160     107.162  28.299  -6.084  1.00 88.09           C
ATOM   5022  OE1 GLU B 160     105.945  28.630  -6.100  1.00 90.10           O
ATOM   5023  OE2 GLU B 160     108.072  29.109  -5.862  1.00 88.29           O
ATOM   5024  C   GLU B 160     108.206  24.015  -6.395  1.00 83.47           C
ATOM   5025  O   GLU B 160     109.418  24.135  -6.500  1.00 83.73           O
ATOM   5026  N   LYS B 161     107.453  23.364  -7.277  1.00 83.86           N
ATOM   5027  CA  LYS B 161     107.941  22.924  -8.588  1.00 84.24           C
ATOM   5028  CB  LYS B 161     108.361  24.131  -9.430  1.00 84.02           C
ATOM   5029  CG  LYS B 161     107.184  24.971  -9.890  1.00 84.40           C
ATOM   5030  CD  LYS B 161     107.639  26.372 -10.265  1.00 86.12           C
ATOM   5031  CE  LYS B 161     106.561  27.428  -9.991  1.00 86.33           C
ATOM   5032  NZ  LYS B 161     105.498  27.438 -11.029  1.00 86.44           N
ATOM   5033  C   LYS B 161     109.037  21.857  -8.580  1.00 84.64           C
ATOM   5034  O   LYS B 161     109.724  21.680  -9.574  1.00 84.66           O
ATOM   5035  N   CYS B 162     109.170  21.130  -7.477  1.00 85.43           N
ATOM   5036  CA  CYS B 162     110.250  20.160  -7.308  1.00 86.67           C
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ATOM   5037  CB  CYS B 162     110.529  19.947  -5.839  1.00 86.80           C
ATOM   5038  SG  CYS B 162     110.959  21.451  -5.062  1.00 91.15           S
ATOM   5039  C   CYS B 162     109.895  18.824  -7.866  1.00 86.66           C
ATOM   5040  O   CYS B 162     108.740  18.584  -8.203  1.00 87.30           O
ATOM   5041  N   ASN B 163     110.890  17.946  -7.937  1.00 86.72           N
ATOM   5042  CA  ASN B 163     110.656  16.557  -8.288  1.00 87.13           C
ATOM   5043  CB  ASN B 163     111.312  16.189  -9.640  1.00 87.24           C
ATOM   5044  CG  ASN B 163     110.465  16.633 -10.862  1.00 88.86           C
ATOM   5045  OD1 ASN B 163     110.609  16.093 -11.969  1.00 91.18           O
ATOM   5046  ND2 ASN B 163     109.586  17.623 -10.661  1.00 90.19           N
ATOM   5047  C   ASN B 163     111.054  15.633  -7.128  1.00 87.10           C
ATOM   5048  O   ASN B 163     111.707  14.600  -7.318  1.00 87.63           O
ATOM   5049  N   LEU B 164     110.636  16.018  -5.921  1.00 86.76           N
ATOM   5050  CA  LEU B 164     110.805  15.196  -4.722  1.00 86.40           C
ATOM   5051  CB  LEU B 164     110.628  16.049  -3.473  1.00 86.34           C
ATOM   5052  CG  LEU B 164     111.503  17.277  -3.263  1.00 86.57           C
ATOM   5053  CD1 LEU B 164     110.723  18.286  -2.444  1.00 87.05           C
ATOM   5054  CD2 LEU B 164     112.824  16.910  -2.596  1.00 85.92           C
ATOM   5055  C   LEU B 164     109.784  14.058  -4.674  1.00 86.31           C
ATOM   5056  O   LEU B 164     108.610  14.259  -5.012  1.00 86.03           O
ATOM   5057  N   THR B 165     110.231  12.880  -4.230  1.00 86.11           N
ATOM   5058  CA  THR B 165     109.357  11.708  -4.095  1.00 86.14           C
ATOM   5059  CB  THR B 165     110.141  10.376  -4.020  1.00 86.47           C
ATOM   5060  OG1 THR B 165     111.172  10.477  -3.027  1.00 87.54           O
ATOM   5061  CG2 THR B 165     110.771  10.020  -5.368  1.00 86.65           C
ATOM   5062  C   THR B 165     108.472  11.790  -2.859  1.00 85.88           C
ATOM   5063  O   THR B 165     107.410  11.173  -2.832  1.00 86.37           O
ATOM   5064  N   SER B 166     108.903  12.529  -1.833  1.00 85.25           N
ATOM   5065  CA  SER B 166     108.059  12.760  -0.649  1.00 84.42           C
ATOM   5066  CB  SER B 166     108.213  11.625   0.348  1.00 84.47           C
ATOM   5067  OG  SER B 166     109.423  11.801   1.049  1.00 84.94           O
ATOM   5068  C   SER B 166     108.385  14.069   0.051  1.00 83.63           C
ATOM   5069  O   SER B 166     109.254  14.806  -0.394  1.00 83.45           O
ATOM   5070  N   ILE B 167     107.690  14.337   1.158  1.00 83.05           N
ATOM   5071  CA  ILE B 167     107.908  15.554   1.960  1.00 82.45           C
ATOM   5072  CB  ILE B 167     106.751  15.787   2.963  1.00 82.64           C
ATOM   5073  CG1 ILE B 167     105.446  16.083   2.200  1.00 83.45           C
ATOM   5074  CD1 ILE B 167     104.162  15.835   2.992  1.00 83.79           C
ATOM   5075  CG2 ILE B 167     107.074  16.942   3.915  1.00 82.11           C
ATOM   5076  C   ILE B 167     109.263  15.533   2.683  1.00 81.81           C
ATOM   5077  O   ILE B 167     109.628  14.524   3.301  1.00 81.63           O
ATOM   5078  N   PRO B 168     110.026  16.639   2.587  1.00 81.12           N
ATOM   5079  CA  PRO B 168     111.329  16.720   3.260  1.00 80.67           C
ATOM   5080  CB  PRO B 168     112.000  17.905   2.565  1.00 80.61           C
ATOM   5081  CG  PRO B 168     110.860  18.769   2.105  1.00 80.36           C
ATOM   5082  CD  PRO B 168     109.703  17.866   1.834  1.00 80.69           C
ATOM   5083  C   PRO B 168     111.145  16.973   4.762  1.00 80.37           C
ATOM   5084  O   PRO B 168     111.402  18.068   5.258  1.00 80.38           O
ATOM   5085  N   THR B 169     110.688  15.946   5.467  1.00 80.08           N
ATOM   5086  CA  THR B 169     110.280  16.058   6.866  1.00 79.70           C
ATOM   5087  CB  THR B 169     109.665  14.727   7.377  1.00 79.63           C
ATOM   5088  OG1 THR B 169     108.448  14.464   6.670  1.00 79.05           O
ATOM   5089  CG2 THR B 169     109.356  14.801   8.864  1.00 79.74           C
ATOM   5090  C   THR B 169     111.410  16.528   7.790  1.00 79.36           C
ATOM   5091  O   THR B 169     111.280  17.562   8.436  1.00 79.31           O
ATOM   5092  N   GLU B 170     112.507  15.780   7.845  1.00 79.01           N
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ATOM	5093	CA	GLU	B	170	113.636	16.174	8.690	1.00	78.99	C
ATOM	5094	CB	GLU	B	170	114.715	15.085	8.752	1.00	79.04	C
ATOM	5095	CG	GLU	B	170	115.864	15.463	9.682	1.00	81.85	C
ATOM	5096	CD	GLU	B	170	116.620	14.276	10.265	1.00	86.31	C
ATOM	5097	OE1	GLU	B	170	116.006	13.191	10.429	1.00	89.40	O
ATOM	5098	OE2	GLU	B	170	117.827	14.435	10.588	1.00	86.85	O
ATOM	5099	C	GLU	B	170	114.242	17.546	8.348	1.00	78.35	C
ATOM	5100	O	GLU	B	170	114.586	18.306	9.255	1.00	78.42	O
ATOM	5101	N	ALA	B	171	114.366	17.878	7.066	1.00	77.70	N
ATOM	5102	CA	ALA	B	171	114.826	19.219	6.700	1.00	77.23	C
ATOM	5103	CB	ALA	B	171	114.912	19.388	5.195	1.00	77.11	C
ATOM	5104	C	ALA	B	171	113.921	20.274	7.300	1.00	76.82	C
ATOM	5105	O	ALA	B	171	114.388	21.187	7.947	1.00	76.86	O
ATOM	5106	N	LEU	B	172	112.619	20.121	7.106	1.00	76.87	N
ATOM	5107	CA	LEU	B	172	111.640	21.122	7.527	1.00	77.07	C
ATOM	5108	CB	LEU	B	172	110.241	20.743	7.027	1.00	76.82	C
ATOM	5109	CG	LEU	B	172	109.963	20.880	5.528	1.00	76.50	C
ATOM	5110	CD1	LEU	B	172	108.578	20.336	5.201	1.00	74.64	C
ATOM	5111	CD2	LEU	B	172	110.094	22.335	5.081	1.00	75.96	C
ATOM	5112	C	LEU	B	172	111.603	21.320	9.034	1.00	77.29	C
ATOM	5113	O	LEU	B	172	111.194	22.378	9.522	1.00	77.58	O
ATOM	5114	N	SER	B	173	112.050	20.297	9.755	1.00	77.34	N
ATOM	5115	CA	SER	B	173	111.934	20.233	11.198	1.00	77.41	C
ATOM	5116	CB	SER	B	173	112.134	18.795	11.653	1.00	77.33	C
ATOM	5117	OG	SER	B	173	113.514	18.498	11.736	1.00	77.96	O
ATOM	5118	C	SER	B	173	112.933	21.136	11.913	1.00	77.62	C
ATOM	5119	O	SER	B	173	112.888	21.273	13.131	1.00	78.19	O
ATOM	5120	N	HIS	B	174	113.845	21.736	11.165	1.00	77.57	N
ATOM	5121	CA	HIS	B	174	114.768	22.696	11.734	1.00	77.65	C
ATOM	5122	CB	HIS	B	174	116.058	22.728	10.919	1.00	77.40	C
ATOM	5123	CG	HIS	B	174	116.886	21.498	11.084	1.00	77.75	C
ATOM	5124	ND1	HIS	B	174	118.099	21.502	11.735	1.00	78.01	N
ATOM	5125	CE1	HIS	B	174	118.587	20.273	11.755	1.00	78.29	C
ATOM	5126	NE2	HIS	B	174	117.732	19.473	11.144	1.00	77.41	N
ATOM	5127	CD2	HIS	B	174	116.653	20.212	10.726	1.00	78.08	C
ATOM	5128	C	HIS	B	174	114.146	24.078	11.798	1.00	77.96	C
ATOM	5129	O	HIS	B	174	114.687	24.974	12.435	1.00	78.64	O
ATOM	5130	N	LEU	B	175	113.006	24.246	11.143	1.00	77.90	N
ATOM	5131	CA	LEU	B	175	112.396	25.553	11.008	1.00	77.92	C
ATOM	5132	CB	LEU	B	175	111.759	25.664	9.631	1.00	78.14	C
ATOM	5133	CG	LEU	B	175	112.713	25.775	8.450	1.00	78.49	C
ATOM	5134	CD1	LEU	B	175	111.921	25.679	7.165	1.00	78.94	C
ATOM	5135	CD2	LEU	B	175	113.473	27.095	8.515	1.00	78.51	C
ATOM	5136	C	LEU	B	175	111.368	25.807	12.104	1.00	77.92	C
ATOM	5137	O	LEU	B	175	110.168	25.917	11.836	1.00	77.86	O
ATOM	5138	N	HIS	B	176	111.849	25.923	13.338	1.00	77.84	N
ATOM	5139	CA	HIS	B	176	110.971	25.948	14.507	1.00	77.92	C
ATOM	5140	CB	HIS	B	176	111.787	25.899	15.794	1.00	78.41	C
ATOM	5141	CG	HIS	B	176	112.710	24.727	15.870	1.00	79.96	C
ATOM	5142	ND1	HIS	B	176	112.275	23.430	15.720	1.00	81.28	N
ATOM	5143	CE1	HIS	B	176	113.303	22.608	15.832	1.00	82.36	C
ATOM	5144	NE2	HIS	B	176	114.390	23.328	16.041	1.00	82.76	N
ATOM	5145	CD2	HIS	B	176	114.046	24.657	16.075	1.00	81.93	C
ATOM	5146	C	HIS	B	176	109.974	27.093	14.580	1.00	77.34	C
ATOM	5147	O	HIS	B	176	108.975	26.985	15.274	1.00	77.49	O
ATOM	5148	N	GLY	B	177	110.243	28.184	13.879	1.00	77.03	N

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ATOM   5149  CA  GLY B 177     109.394  29.363  13.967  1.00 76.76           C
ATOM   5150  C   GLY B 177     108.522  29.560  12.748  1.00 76.92           C
ATOM   5151  O   GLY B 177     107.910  30.616  12.584  1.00 77.67           O
ATOM   5152  N   LEU B 178     108.461  28.551  11.887  1.00 76.40           N
ATOM   5153  CA  LEU B 178     107.701  28.656  10.665  1.00 75.89           C
ATOM   5154  CB  LEU B 178     107.928  27.418   9.794  1.00 75.52           C
ATOM   5155  CG  LEU B 178     107.715  27.610   8.290  1.00 74.26           C
ATOM   5156  CD1 LEU B 178     108.679  28.634   7.731  1.00 71.68           C
ATOM   5157  CD2 LEU B 178     107.860  26.292   7.574  1.00 72.19           C
ATOM   5158  C   LEU B 178     106.217  28.834  10.993  1.00 76.19           C
ATOM   5159  O   LEU B 178     105.659  28.071  11.767  1.00 76.84           O
ATOM   5160  N   ILE B 179     105.600  29.864  10.422  1.00 76.04           N
ATOM   5161  CA  ILE B 179     104.181  30.130  10.604  1.00 75.40           C
ATOM   5162  CB  ILE B 179     103.951  31.615  10.906  1.00 75.13           C
ATOM   5163  CG1 ILE B 179     104.688  31.990  12.194  1.00 73.94           C
ATOM   5164  CD1 ILE B 179     104.741  33.484  12.482  1.00 73.57           C
ATOM   5165  CG2 ILE B 179     102.460  31.929  10.992  1.00 73.83           C
ATOM   5166  C   ILE B 179     103.387  29.709   9.359  1.00 75.86           C
ATOM   5167  O   ILE B 179     102.255  29.197   9.460  1.00 76.20           O
ATOM   5168  N   VAL B 180     103.982  29.912   8.189  1.00 75.46           N
ATOM   5169  CA  VAL B 180     103.313  29.621   6.934  1.00 75.40           C
ATOM   5170  CB  VAL B 180     103.029  30.926   6.163  1.00 75.18           C
ATOM   5171  CG1 VAL B 180     102.414  30.630   4.816  1.00 75.88           C
ATOM   5172  CG2 VAL B 180     102.102  31.830   6.967  1.00 73.77           C
ATOM   5173  C   VAL B 180     104.150  28.649   6.100  1.00 75.78           C
ATOM   5174  O   VAL B 180     105.333  28.862   5.900  1.00 76.34           O
ATOM   5175  N   LEU B 181     103.553  27.565   5.638  1.00 76.15           N
ATOM   5176  CA  LEU B 181     104.269  26.643   4.774  1.00 76.62           C
ATOM   5177  CB  LEU B 181     104.604  25.353   5.521  1.00 76.10           C
ATOM   5178  CG  LEU B 181     105.162  24.139   4.764  1.00 75.98           C
ATOM   5179  CD1 LEU B 181     106.520  24.420   4.173  1.00 75.63           C
ATOM   5180  CD2 LEU B 181     105.242  22.927   5.672  1.00 75.71           C
ATOM   5181  C   LEU B 181     103.430  26.358   3.532  1.00 77.82           C
ATOM   5182  O   LEU B 181     102.304  25.859   3.641  1.00 78.60           O
ATOM   5183  N   ARG B 182     103.978  26.674   2.359  1.00 78.16           N
ATOM   5184  CA  ARG B 182     103.299  26.447   1.087  1.00 78.56           C
ATOM   5185  CB  ARG B 182     103.344  27.719   0.281  1.00 78.79           C
ATOM   5186  CG  ARG B 182     102.909  28.908   1.035  1.00 80.78           C
ATOM   5187  CD  ARG B 182     101.592  29.320   0.508  1.00 86.31           C
ATOM   5188  NE  ARG B 182     101.121  30.529   1.150  1.00 89.83           N
ATOM   5189  CZ  ARG B 182     101.614  31.733   0.904  1.00 93.53           C
ATOM   5190  NH1 ARG B 182     102.606  31.883   0.015  1.00 93.46           N
ATOM   5191  NH2 ARG B 182     101.104  32.783   1.550  1.00 95.23           N
ATOM   5192  C   ARG B 182     103.996  25.370   0.268  1.00 78.64           C
ATOM   5193  O   ARG B 182     105.150  25.525  -0.096  1.00 79.18           O
ATOM   5194  N   LEU B 183     103.305  24.286  -0.044  1.00 78.62           N
ATOM   5195  CA  LEU B 183     103.899  23.249  -0.867  1.00 78.71           C
ATOM   5196  CB  LEU B 183     103.854  21.921  -0.121  1.00 78.65           C
ATOM   5197  CG  LEU B 183     104.479  21.922   1.278  1.00 78.87           C
ATOM   5198  CD1 LEU B 183     104.406  20.543   1.915  1.00 76.51           C
ATOM   5199  CD2 LEU B 183     105.935  22.416   1.225  1.00 79.23           C
ATOM   5200  C   LEU B 183     103.189  23.155  -2.218  1.00 78.89           C
ATOM   5201  O   LEU B 183     102.157  22.510  -2.324  1.00 79.43           O
ATOM   5202  N   ARG B 184     103.743  23.795  -3.246  1.00 78.64           N
ATOM   5203  CA  ARG B 184     103.059  23.921  -4.535  1.00 78.41           C
ATOM   5204  CB  ARG B 184     103.009  25.386  -4.948  1.00 78.38           C
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ATOM   5205  CG  ARG B 184     102.290  26.283  -3.978  1.00 79.04           C
ATOM   5206  CD  ARG B 184     102.553  27.739  -4.310  1.00 80.52           C
ATOM   5207  NE  ARG B 184     101.680  28.629  -3.540  1.00 83.87           N
ATOM   5208  CZ  ARG B 184     101.797  29.959  -3.482  1.00 84.82           C
ATOM   5209  NH1 ARG B 184     102.768  30.585  -4.143  1.00 85.56           N
ATOM   5210  NH2 ARG B 184     100.939  30.671  -2.757  1.00 84.62           N
ATOM   5211  C   ARG B 184     103.693  23.103  -5.666  1.00 78.45           C
ATOM   5212  O   ARG B 184     104.911  22.987  -5.747  1.00 78.40           O
ATOM   5213  N   HIS B 185     102.863  22.545  -6.543  1.00 78.55           N
ATOM   5214  CA  HIS B 185     103.340  21.833  -7.747  1.00 78.93           C
ATOM   5215  CB  HIS B 185     103.911  22.824  -8.769  1.00 78.74           C
ATOM   5216  CG  HIS B 185     102.895  23.769  -9.319  1.00 79.05           C
ATOM   5217  ND1 HIS B 185     101.989  23.400 -10.293  1.00 79.72           N
ATOM   5218  CE1 HIS B 185     101.213  24.430 -10.580  1.00 79.93           C
ATOM   5219  NE2 HIS B 185     101.582  25.452  -9.827  1.00 81.01           N
ATOM   5220  CD2 HIS B 185     102.631  25.064  -9.027  1.00 79.24           C
ATOM   5221  C   HIS B 185     104.350  20.706  -7.489  1.00 79.05           C
ATOM   5222  O   HIS B 185     105.424  20.679  -8.081  1.00 79.36           O
ATOM   5223  N   LEU B 186     104.008  19.779  -6.612  1.00 79.10           N
ATOM   5224  CA  LEU B 186     104.893  18.666  -6.322  1.00 79.71           C
ATOM   5225  CB  LEU B 186     105.176  18.591  -4.819  1.00 79.77           C
ATOM   5226  CG  LEU B 186     105.616  19.928  -4.192  1.00 79.56           C
ATOM   5227  CD1 LEU B 186     105.760  19.822  -2.683  1.00 79.50           C
ATOM   5228  CD2 LEU B 186     106.915  20.430  -4.800  1.00 80.40           C
ATOM   5229  C   LEU B 186     104.304  17.364  -6.870  1.00 80.15           C
ATOM   5230  O   LEU B 186     103.117  17.294  -7.168  1.00 80.35           O
ATOM   5231  N   ASN B 187     105.134  16.342  -7.029  1.00 80.84           N
ATOM   5232  CA  ASN B 187     104.670  15.086  -7.617  1.00 81.66           C
ATOM   5233  CB  ASN B 187     105.652  14.618  -8.689  1.00 82.15           C
ATOM   5234  CG  ASN B 187     105.620  15.500  -9.926  1.00 83.78           C
ATOM   5235  OD1 ASN B 187     104.546  15.820 -10.455  1.00 85.50           O
ATOM   5236  ND2 ASN B 187     106.799  15.898 -10.396  1.00 84.97           N
ATOM   5237  C   ASN B 187     104.375  13.969  -6.610  1.00 81.74           C
ATOM   5238  O   ASN B 187     104.248  12.801  -6.982  1.00 81.61           O
ATOM   5239  N   ILE B 188     104.242  14.348  -5.341  1.00 81.71           N
ATOM   5240  CA  ILE B 188     103.991  13.413  -4.258  1.00 82.09           C
ATOM   5241  CB  ILE B 188     104.253  14.086  -2.901  1.00 82.20           C
ATOM   5242  CG1 ILE B 188     105.671  14.651  -2.839  1.00 82.69           C
ATOM   5243  CD1 ILE B 188     105.746  15.998  -2.099  1.00 83.71           C
ATOM   5244  CG2 ILE B 188     104.058  13.104  -1.766  1.00 83.56           C
ATOM   5245  C   ILE B 188     102.539  12.921  -4.313  1.00 82.01           C
ATOM   5246  O   ILE B 188     101.611  13.734  -4.446  1.00 82.15           O
ATOM   5247  N   ASN B 189     102.342  11.604  -4.220  1.00 81.42           N
ATOM   5248  CA  ASN B 189     100.994  11.044  -4.276  1.00 81.31           C
ATOM   5249  CB  ASN B 189     100.930   9.857  -5.235  1.00 81.70           C
ATOM   5250  CG  ASN B 189     101.809   8.713  -4.804  1.00 82.70           C
ATOM   5251  OD1 ASN B 189     102.499   8.790  -3.793  1.00 84.31           O
ATOM   5252  ND2 ASN B 189     101.798   7.642  -5.580  1.00 84.71           N
ATOM   5253  C   ASN B 189     100.394  10.653  -2.924  1.00 80.95           C
ATOM   5254  O   ASN B 189      99.244  10.209  -2.853  1.00 81.44           O
ATOM   5255  N   ALA B 190     101.160  10.823  -1.854  1.00 79.99           N
ATOM   5256  CA  ALA B 190     100.675  10.484  -0.521  1.00 78.76           C
ATOM   5257  CB  ALA B 190     100.980   9.029  -0.206  1.00 77.97           C
ATOM   5258  C   ALA B 190     101.276  11.398   0.544  1.00 78.00           C
ATOM   5259  O   ALA B 190     102.429  11.816   0.432  1.00 77.75           O
ATOM   5260  N   ILE B 191     100.486  11.716   1.563  1.00 77.08           N
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ATOM	5261	CA	ILE	B	191	101.025	12.267	2.792	1.00	76.55	C
ATOM	5262	CB	ILE	B	191	100.379	13.584	3.158	1.00	76.26	C
ATOM	5263	CG1	ILE	B	191	100.632	14.600	2.046	1.00	75.28	C
ATOM	5264	CD1	ILE	B	191	99.701	15.782	2.092	1.00	75.86	C
ATOM	5265	CG2	ILE	B	191	100.940	14.089	4.456	1.00	75.74	C
ATOM	5266	C	ILE	B	191	100.839	11.237	3.893	1.00	77.04	C
ATOM	5267	O	ILE	B	191	99.718	10.894	4.277	1.00	77.53	O
ATOM	5268	N	ARG	B	192	101.959	10.722	4.375	1.00	77.39	N
ATOM	5269	CA	ARG	B	192	101.978	9.602	5.301	1.00	77.30	C
ATOM	5270	CB	ARG	B	192	103.149	8.715	4.944	1.00	77.46	C
ATOM	5271	CG	ARG	B	192	103.086	8.208	3.518	1.00	78.42	C
ATOM	5272	CD	ARG	B	192	102.706	6.724	3.450	1.00	78.97	C
ATOM	5273	NE	ARG	B	192	102.722	6.275	2.059	1.00	79.35	N
ATOM	5274	CZ	ARG	B	192	101.651	5.888	1.362	1.00	79.18	C
ATOM	5275	NH1	ARG	B	192	100.436	5.840	1.914	1.00	77.65	N
ATOM	5276	NH2	ARG	B	192	101.806	5.534	0.093	1.00	79.27	N
ATOM	5277	C	ARG	B	192	102.067	10.077	6.753	1.00	77.30	C
ATOM	5278	O	ARG	B	192	102.195	11.289	7.015	1.00	77.18	O
ATOM	5279	N	ASP	B	193	101.982	9.130	7.689	1.00	77.01	N
ATOM	5280	CA	ASP	B	193	101.934	9.453	9.113	1.00	77.13	C
ATOM	5281	CB	ASP	B	193	101.704	8.197	9.946	1.00	77.12	C
ATOM	5282	CG	ASP	B	193	100.268	7.680	9.864	1.00	79.00	C
ATOM	5283	OD1	ASP	B	193	99.339	8.476	9.543	1.00	78.48	O
ATOM	5284	OD2	ASP	B	193	100.067	6.461	10.141	1.00	79.67	O
ATOM	5285	C	ASP	B	193	103.181	10.194	9.598	1.00	77.13	C
ATOM	5286	O	ASP	B	193	104.310	9.773	9.337	1.00	76.58	O
ATOM	5287	N	TYR	B	194	102.938	11.310	10.293	1.00	77.44	N
ATOM	5288	CA	TYR	B	194	103.962	12.170	10.922	1.00	77.50	C
ATOM	5289	CB	TYR	B	194	104.748	11.424	12.025	1.00	76.96	C
ATOM	5290	CG	TYR	B	194	103.935	10.415	12.790	1.00	75.63	C
ATOM	5291	CD1	TYR	B	194	102.918	10.819	13.646	1.00	74.76	C
ATOM	5292	CE1	TYR	B	194	102.159	9.892	14.342	1.00	75.07	C
ATOM	5293	CZ	TYR	B	194	102.426	8.533	14.189	1.00	75.77	C
ATOM	5294	OH	TYR	B	194	101.677	7.598	14.876	1.00	75.67	O
ATOM	5295	CE2	TYR	B	194	103.439	8.111	13.345	1.00	74.75	C
ATOM	5296	CD2	TYR	B	194	104.187	9.053	12.654	1.00	74.85	C
ATOM	5297	C	TYR	B	194	104.907	12.857	9.932	1.00	78.01	C
ATOM	5298	O	TYR	B	194	106.094	13.026	10.195	1.00	78.13	O
ATOM	5299	N	SER	B	195	104.359	13.274	8.802	1.00	79.03	N
ATOM	5300	CA	SER	B	195	105.105	14.041	7.801	1.00	79.90	C
ATOM	5301	CB	SER	B	195	104.307	14.123	6.476	1.00	80.11	C
ATOM	5302	OG	SER	B	195	104.146	12.842	5.867	1.00	80.09	O
ATOM	5303	C	SER	B	195	105.504	15.459	8.256	1.00	80.17	C
ATOM	5304	O	SER	B	195	106.251	16.133	7.557	1.00	80.77	O
ATOM	5305	N	PHE	B	196	105.008	15.935	9.394	1.00	80.44	N
ATOM	5306	CA	PHE	B	196	105.438	17.254	9.876	1.00	80.87	C
ATOM	5307	CB	PHE	B	196	104.361	18.316	9.642	1.00	80.71	C
ATOM	5308	CG	PHE	B	196	103.825	18.344	8.232	1.00	80.97	C
ATOM	5309	CD1	PHE	B	196	104.441	19.112	7.253	1.00	81.45	C
ATOM	5310	CE1	PHE	B	196	103.939	19.140	5.945	1.00	81.53	C
ATOM	5311	CZ	PHE	B	196	102.819	18.392	5.616	1.00	80.19	C
ATOM	5312	CE2	PHE	B	196	102.193	17.626	6.592	1.00	79.62	C
ATOM	5313	CD2	PHE	B	196	102.692	17.608	7.886	1.00	80.01	C
ATOM	5314	C	PHE	B	196	105.902	17.237	11.338	1.00	81.36	C
ATOM	5315	O	PHE	B	196	105.117	17.007	12.258	1.00	81.72	O
ATOM	5316	N	LYS	B	197	107.190	17.477	11.546	1.00	81.80	N

ATOM	5317	CA	LYS	B	197	107.776	17.371	12.877	1.00	81.97	C
ATOM	5318	CB	LYS	B	197	108.816	16.258	12.913	1.00	81.76	C
ATOM	5319	CG	LYS	B	197	108.244	14.918	12.543	1.00	82.09	C
ATOM	5320	CD	LYS	B	197	108.987	13.771	13.185	1.00	82.27	C
ATOM	5321	CE	LYS	B	197	108.547	12.478	12.553	1.00	83.06	C
ATOM	5322	NZ	LYS	B	197	108.505	11.408	13.560	1.00	84.98	N
ATOM	5323	C	LYS	B	197	108.403	18.671	13.320	1.00	82.28	C
ATOM	5324	O	LYS	B	197	109.006	19.382	12.517	1.00	82.69	O
ATOM	5325	N	ARG	B	198	108.240	18.981	14.602	1.00	82.51	N
ATOM	5326	CA	ARG	B	198	108.840	20.161	15.221	1.00	82.93	C
ATOM	5327	CB	ARG	B	198	110.368	20.040	15.253	1.00	83.26	C
ATOM	5328	CG	ARG	B	198	110.883	18.860	16.063	1.00	85.49	C
ATOM	5329	CD	ARG	B	198	112.086	18.283	15.381	1.00	90.43	C
ATOM	5330	NE	ARG	B	198	113.003	17.599	16.285	1.00	94.11	N
ATOM	5331	CZ	ARG	B	198	114.278	17.342	15.988	1.00	96.26	C
ATOM	5332	NH1	ARG	B	198	115.051	16.713	16.870	1.00	96.55	N
ATOM	5333	NH2	ARG	B	198	114.785	17.721	14.808	1.00	96.99	N
ATOM	5334	C	ARG	B	198	108.425	21.468	14.563	1.00	82.69	C
ATOM	5335	O	ARG	B	198	109.131	22.471	14.669	1.00	82.99	O
ATOM	5336	N	LEU	B	199	107.288	21.469	13.882	1.00	82.62	N
ATOM	5337	CA	LEU	B	199	106.787	22.711	13.316	1.00	82.83	C
ATOM	5338	CB	LEU	B	199	106.245	22.507	11.898	1.00	82.62	C
ATOM	5339	CG	LEU	B	199	107.303	22.251	10.824	1.00	81.76	C
ATOM	5340	CD1	LEU	B	199	106.666	21.746	9.558	1.00	81.46	C
ATOM	5341	CD2	LEU	B	199	108.110	23.494	10.542	1.00	81.03	C
ATOM	5342	C	LEU	B	199	105.739	23.260	14.266	1.00	83.21	C
ATOM	5343	O	LEU	B	199	104.571	23.451	13.907	1.00	83.32	O
ATOM	5344	N	TYR	B	200	106.190	23.527	15.489	1.00	83.58	N
ATOM	5345	CA	TYR	B	200	105.297	23.831	16.603	1.00	83.57	C
ATOM	5346	CB	TYR	B	200	106.067	23.951	17.912	1.00	84.01	C
ATOM	5347	CG	TYR	B	200	107.242	23.017	18.111	1.00	84.57	C
ATOM	5348	CD1	TYR	B	200	107.055	21.699	18.581	1.00	84.62	C
ATOM	5349	CE1	TYR	B	200	108.154	20.845	18.798	1.00	84.79	C
ATOM	5350	CZ	TYR	B	200	109.458	21.324	18.553	1.00	85.62	C
ATOM	5351	OH	TYR	B	200	110.562	20.508	18.758	1.00	85.69	O
ATOM	5352	CE2	TYR	B	200	109.663	22.636	18.101	1.00	85.12	C
ATOM	5353	CD2	TYR	B	200	108.555	23.472	17.889	1.00	84.81	C
ATOM	5354	C	TYR	B	200	104.507	25.115	16.387	1.00	83.11	C
ATOM	5355	O	TYR	B	200	103.384	25.235	16.867	1.00	83.62	O
ATOM	5356	N	ARG	B	201	105.086	26.068	15.666	1.00	82.19	N
ATOM	5357	CA	ARG	B	201	104.435	27.346	15.472	1.00	81.48	C
ATOM	5358	CB	ARG	B	201	105.445	28.475	15.648	1.00	82.07	C
ATOM	5359	CG	ARG	B	201	105.732	28.787	17.102	1.00	85.08	C
ATOM	5360	CD	ARG	B	201	106.521	30.067	17.222	1.00	90.88	C
ATOM	5361	NE	ARG	B	201	107.111	30.234	18.554	1.00	95.45	N
ATOM	5362	CZ	ARG	B	201	108.314	30.771	18.788	1.00	98.33	C
ATOM	5363	NH1	ARG	B	201	109.091	31.189	17.775	1.00	98.16	N
ATOM	5364	NH2	ARG	B	201	108.753	30.881	20.043	1.00	99.14	N
ATOM	5365	C	ARG	B	201	103.655	27.507	14.161	1.00	80.21	C
ATOM	5366	O	ARG	B	201	103.094	28.581	13.906	1.00	80.43	O
ATOM	5367	N	LEU	B	202	103.597	26.455	13.349	1.00	78.59	N
ATOM	5368	CA	LEU	B	202	102.943	26.539	12.050	1.00	77.04	C
ATOM	5369	CB	LEU	B	202	103.253	25.311	11.189	1.00	77.40	C
ATOM	5370	CG	LEU	B	202	102.903	25.414	9.694	1.00	75.66	C
ATOM	5371	CD1	LEU	B	202	103.828	26.387	9.010	1.00	73.72	C
ATOM	5372	CD2	LEU	B	202	102.949	24.042	9.019	1.00	75.25	C

ATOM	5373	C	LEU	B	202	101.438	26.756	12.170	1.00 77.24	C
ATOM	5374	O	LEU	B	202	100.748	26.037	12.894	1.00 77.21	O
ATOM	5375	N	LYS	B	203	100.935	27.759	11.459	1.00 77.01	N
ATOM	5376	CA	LYS	B	203	99.532	28.124	11.551	1.00 76.51	C
ATOM	5377	CB	LYS	B	203	99.373	29.577	11.995	1.00 76.46	C
ATOM	5378	CG	LYS	B	203	99.717	29.821	13.453	1.00 76.19	C
ATOM	5379	CD	LYS	B	203	99.185	28.710	14.343	1.00 75.11	C
ATOM	5380	CE	LYS	B	203	99.487	28.964	15.786	1.00 75.58	C
ATOM	5381	NZ	LYS	B	203	98.715	28.021	16.618	1.00 77.80	N
ATOM	5382	C	LYS	B	203	98.823	27.905	10.239	1.00 76.54	C
ATOM	5383	O	LYS	B	203	97.639	27.553	10.224	1.00 76.95	O
ATOM	5384	N	VAL	B	204	99.545	28.102	9.140	1.00 76.01	N
ATOM	5385	CA	VAL	B	204	98.955	27.990	7.822	1.00 75.58	C
ATOM	5386	CB	VAL	B	204	99.090	29.302	7.062	1.00 75.37	C
ATOM	5387	CG1	VAL	B	204	98.623	29.123	5.633	1.00 76.06	C
ATOM	5388	CG2	VAL	B	204	98.316	30.416	7.757	1.00 74.15	C
ATOM	5389	C	VAL	B	204	99.639	26.897	7.024	1.00 75.85	C
ATOM	5390	O	VAL	B	204	100.855	26.900	6.887	1.00 75.97	O
ATOM	5391	N	LEU	B	205	98.860	25.964	6.490	1.00 76.29	N
ATOM	5392	CA	LEU	B	205	99.401	24.949	5.578	1.00 76.58	C
ATOM	5393	CB	LEU	B	205	99.371	23.552	6.197	1.00 75.89	C
ATOM	5394	CG	LEU	B	205	99.939	22.465	5.303	1.00 76.27	C
ATOM	5395	CD1	LEU	B	205	101.366	22.814	4.908	1.00 77.36	C
ATOM	5396	CD2	LEU	B	205	99.912	21.102	5.979	1.00 76.72	C
ATOM	5397	C	LEU	B	205	98.658	24.972	4.250	1.00 77.18	C
ATOM	5398	O	LEU	B	205	97.438	24.770	4.198	1.00 77.14	O
ATOM	5399	N	GLU	B	206	99.400	25.251	3.182	1.00 78.10	N
ATOM	5400	CA	GLU	B	206	98.853	25.249	1.828	1.00 79.36	C
ATOM	5401	CB	GLU	B	206	99.023	26.614	1.153	1.00 78.67	C
ATOM	5402	CG	GLU	B	206	98.950	26.542	-0.396	1.00 81.34	C
ATOM	5403	CD	GLU	B	206	98.936	27.932	-1.095	1.00 82.39	C
ATOM	5404	OE1	GLU	B	206	98.648	28.952	-0.414	1.00 85.89	O
ATOM	5405	OE2	GLU	B	206	99.209	28.001	-2.326	1.00 84.87	O
ATOM	5406	C	GLU	B	206	99.499	24.145	0.991	1.00 78.65	C
ATOM	5407	O	GLU	B	206	100.699	24.105	0.804	1.00 79.41	O
ATOM	5408	N	ILE	B	207	98.697	23.228	0.502	1.00 78.43	N
ATOM	5409	CA	ILE	B	207	99.184	22.243	-0.437	1.00 77.86	C
ATOM	5410	CB	ILE	B	207	98.973	20.837	0.113	1.00 77.64	C
ATOM	5411	CG1	ILE	B	207	99.958	20.595	1.257	1.00 77.38	C
ATOM	5412	CD1	ILE	B	207	99.575	19.447	2.169	1.00 78.96	C
ATOM	5413	CG2	ILE	B	207	99.078	19.807	-1.002	1.00 76.62	C
ATOM	5414	C	ILE	B	207	98.363	22.457	-1.688	1.00 77.85	C
ATOM	5415	O	ILE	B	207	97.136	22.411	-1.626	1.00 78.19	O
ATOM	5416	N	SER	B	208	99.011	22.737	-2.810	1.00 77.39	N
ATOM	5417	CA	SER	B	208	98.254	22.962	-4.033	1.00 77.80	C
ATOM	5418	CB	SER	B	208	97.884	24.426	-4.209	1.00 77.58	C
ATOM	5419	OG	SER	B	208	98.949	25.239	-3.788	1.00 79.14	O
ATOM	5420	C	SER	B	208	98.957	22.463	-5.260	1.00 77.83	C
ATOM	5421	O	SER	B	208	100.180	22.521	-5.363	1.00 78.66	O
ATOM	5422	N	HIS	B	209	98.160	21.968	-6.194	1.00 77.41	N
ATOM	5423	CA	HIS	B	209	98.670	21.424	-7.420	1.00 76.83	C
ATOM	5424	CB	HIS	B	209	99.345	22.520	-8.247	1.00 76.57	C
ATOM	5425	CG	HIS	B	209	98.373	23.479	-8.858	1.00 76.76	C
ATOM	5426	ND1	HIS	B	209	98.133	24.737	-8.336	1.00 77.35	N
ATOM	5427	CE1	HIS	B	209	97.214	25.346	-9.064	1.00 75.48	C
ATOM	5428	NE2	HIS	B	209	96.842	24.525	-10.032	1.00 76.29	N

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ATOM   5429  CD2 HIS B 209      97.549  23.351  -9.926  1.00 75.05           C
ATOM   5430  C   HIS B 209      99.571  20.225  -7.187  1.00 76.64           C
ATOM   5431  O   HIS B 209     100.652  20.155  -7.730  1.00 76.83           O
ATOM   5432  N   TRP B 210      99.127  19.289  -6.359  1.00 76.72           N
ATOM   5433  CA  TRP B 210      99.725  17.951  -6.359  1.00 77.25           C
ATOM   5434  CB  TRP B 210      99.947  17.387  -4.952  1.00 76.95           C
ATOM   5435  CG  TRP B 210     100.752  18.223  -4.001  1.00 76.62           C
ATOM   5436  CD1 TRP B 210     100.982  19.578  -4.055  1.00 75.69           C
ATOM   5437  NE1 TRP B 210     101.737  19.968  -2.973  1.00 75.42           N
ATOM   5438  CE2 TRP B 210     101.988  18.874  -2.188  1.00 75.31           C
ATOM   5439  CD2 TRP B 210     101.378  17.756  -2.808  1.00 75.37           C
ATOM   5440  CE3 TRP B 210     101.483  16.500  -2.200  1.00 75.25           C
ATOM   5441  CZ3 TRP B 210     102.196  16.393  -1.014  1.00 76.25           C
ATOM   5442  CH2 TRP B 210     102.792  17.531  -0.420  1.00 76.30           C
ATOM   5443  CZ2 TRP B 210     102.697  18.772  -0.993  1.00 75.35           C
ATOM   5444  C   TRP B 210      98.753  17.052  -7.102  1.00 77.47           C
ATOM   5445  O   TRP B 210      97.848  16.464  -6.496  1.00 77.81           O
ATOM   5446  N   PRO B 211      98.929  16.936  -8.423  1.00 77.54           N
ATOM   5447  CA  PRO B 211      97.903  16.258  -9.204  1.00 77.25           C
ATOM   5448  CB  PRO B 211      98.271  16.624 -10.640  1.00 77.08           C
ATOM   5449  CG  PRO B 211      99.727  16.894 -10.607  1.00 76.94           C
ATOM   5450  CD  PRO B 211     100.067  17.387  -9.246  1.00 77.19           C
ATOM   5451  C   PRO B 211      97.894  14.738  -9.003  1.00 77.36           C
ATOM   5452  O   PRO B 211      97.021  14.066  -9.536  1.00 77.55           O
ATOM   5453  N   TYR B 212      98.846  14.200  -8.244  1.00 77.65           N
ATOM   5454  CA  TYR B 212      98.851  12.757  -7.958  1.00 77.92           C
ATOM   5455  CB  TYR B 212     100.230  12.120  -8.197  1.00 78.20           C
ATOM   5456  CG  TYR B 212     100.828  12.359  -9.567  1.00 78.98           C
ATOM   5457  CD1 TYR B 212     100.160  11.966 -10.726  1.00 79.57           C
ATOM   5458  CE1 TYR B 212     100.710  12.187 -11.989  1.00 79.40           C
ATOM   5459  CZ  TYR B 212     101.947  12.793 -12.093  1.00 79.62           C
ATOM   5460  OH  TYR B 212     102.499  13.011 -13.331  1.00 80.10           O
ATOM   5461  CE2 TYR B 212     102.640  13.177 -10.961  1.00 80.36           C
ATOM   5462  CD2 TYR B 212     102.079  12.955  -9.703  1.00 80.38           C
ATOM   5463  C   TYR B 212      98.378  12.432  -6.542  1.00 77.68           C
ATOM   5464  O   TYR B 212      98.213  11.261  -6.206  1.00 77.95           O
ATOM   5465  N   LEU B 213      98.157  13.457  -5.723  1.00 77.22           N
ATOM   5466  CA  LEU B 213      97.806  13.257  -4.324  1.00 77.00           C
ATOM   5467  CB  LEU B 213      97.958  14.569  -3.546  1.00 77.35           C
ATOM   5468  CG  LEU B 213      97.537  14.590  -2.071  1.00 76.29           C
ATOM   5469  CD1 LEU B 213      98.339  13.575  -1.252  1.00 74.24           C
ATOM   5470  CD2 LEU B 213      97.654  15.995  -1.509  1.00 75.43           C
ATOM   5471  C   LEU B 213      96.384  12.731  -4.169  1.00 77.67           C
ATOM   5472  O   LEU B 213      95.424  13.422  -4.489  1.00 77.83           O
ATOM   5473  N   ASP B 214      96.253  11.514  -3.660  1.00 78.05           N
ATOM   5474  CA  ASP B 214      94.936  10.918  -3.424  1.00 78.46           C
ATOM   5475  CB  ASP B 214      94.613   9.926  -4.536  1.00 78.48           C
ATOM   5476  CG  ASP B 214      95.563   8.756  -4.550  1.00 80.01           C
ATOM   5477  OD1 ASP B 214      96.668   8.880  -3.967  1.00 80.71           O
ATOM   5478  OD2 ASP B 214      95.204   7.704  -5.138  1.00 82.75           O
ATOM   5479  C   ASP B 214      94.857  10.201  -2.070  1.00 78.23           C
ATOM   5480  O   ASP B 214      93.805   9.660  -1.713  1.00 78.28           O
ATOM   5481  N   THR B 215      95.971  10.200  -1.337  1.00 77.74           N
ATOM   5482  CA  THR B 215      96.073   9.522  -0.063  1.00 77.50           C
ATOM   5483  CB  THR B 215      97.004   8.315  -0.183  1.00 77.48           C
ATOM   5484  OG1 THR B 215      96.349   7.311  -0.961  1.00 78.02           O
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ATOM	5485	CG2	THR	B	215	97.357	7.748	1.188	1.00	76.77	C
ATOM	5486	C	THR	B	215	96.591	10.420	1.039	1.00	77.57	C
ATOM	5487	O	THR	B	215	97.681	10.976	0.928	1.00	77.84	O
ATOM	5488	N	MET	B	216	95.802	10.551	2.103	1.00	77.65	N
ATOM	5489	CA	MET	B	216	96.235	11.209	3.345	1.00	77.94	C
ATOM	5490	CB	MET	B	216	95.539	12.548	3.548	1.00	76.47	C
ATOM	5491	CG	MET	B	216	95.830	13.521	2.447	1.00	77.44	C
ATOM	5492	SD	MET	B	216	95.138	15.170	2.795	1.00	79.97	S
ATOM	5493	CE	MET	B	216	96.210	15.728	4.130	1.00	80.05	C
ATOM	5494	C	MET	B	216	95.941	10.279	4.515	1.00	77.68	C
ATOM	5495	O	MET	B	216	94.780	10.082	4.884	1.00	77.91	O
ATOM	5496	N	THR	B	217	96.986	9.706	5.102	1.00	77.53	N
ATOM	5497	CA	THR	B	217	96.782	8.786	6.216	1.00	78.00	C
ATOM	5498	CB	THR	B	217	98.052	8.031	6.529	1.00	77.96	C
ATOM	5499	OG1	THR	B	217	99.110	8.982	6.682	1.00	79.52	O
ATOM	5500	CG2	THR	B	217	98.378	7.069	5.395	1.00	77.88	C
ATOM	5501	C	THR	B	217	96.296	9.555	7.453	1.00	77.73	C
ATOM	5502	O	THR	B	217	96.477	10.764	7.517	1.00	77.39	O
ATOM	5503	N	PRO	B	218	95.675	8.854	8.429	1.00	77.66	N
ATOM	5504	CA	PRO	B	218	95.022	9.514	9.565	1.00	77.57	C
ATOM	5505	CB	PRO	B	218	94.489	8.349	10.389	1.00	77.50	C
ATOM	5506	CG	PRO	B	218	94.392	7.203	9.417	1.00	77.30	C
ATOM	5507	CD	PRO	B	218	95.547	7.386	8.509	1.00	77.45	C
ATOM	5508	C	PRO	B	218	95.947	10.386	10.408	1.00	77.73	C
ATOM	5509	O	PRO	B	218	95.575	11.516	10.769	1.00	78.29	O
ATOM	5510	N	ASN	B	219	97.150	9.903	10.697	1.00	77.42	N
ATOM	5511	CA	ASN	B	219	98.094	10.709	11.472	1.00	77.14	C
ATOM	5512	CB	ASN	B	219	98.870	9.817	12.440	1.00	77.12	C
ATOM	5513	CG	ASN	B	219	98.027	9.374	13.606	1.00	77.74	C
ATOM	5514	OD1	ASN	B	219	96.891	9.815	13.764	1.00	78.83	O
ATOM	5515	ND2	ASN	B	219	98.578	8.504	14.437	1.00	78.82	N
ATOM	5516	C	ASN	B	219	99.046	11.586	10.646	1.00	76.65	C
ATOM	5517	O	ASN	B	219	100.102	11.995	11.123	1.00	76.41	O
ATOM	5518	N	CYS	B	220	98.675	11.893	9.415	1.00	76.06	N
ATOM	5519	CA	CYS	B	220	99.613	12.579	8.557	1.00	76.19	C
ATOM	5520	CB	CYS	B	220	99.230	12.428	7.084	1.00	76.12	C
ATOM	5521	SG	CYS	B	220	97.725	13.268	6.568	1.00	76.97	S
ATOM	5522	C	CYS	B	220	99.823	14.047	8.972	1.00	76.04	C
ATOM	5523	O	CYS	B	220	100.849	14.636	8.657	1.00	76.05	O
ATOM	5524	N	LEU	B	221	98.877	14.614	9.707	1.00	75.88	N
ATOM	5525	CA	LEU	B	221	99.034	15.969	10.208	1.00	76.29	C
ATOM	5526	CB	LEU	B	221	97.842	16.837	9.812	1.00	76.15	C
ATOM	5527	CG	LEU	B	221	97.491	16.907	8.328	1.00	76.78	C
ATOM	5528	CD1	LEU	B	221	96.302	17.826	8.137	1.00	77.22	C
ATOM	5529	CD2	LEU	B	221	98.669	17.402	7.521	1.00	77.41	C
ATOM	5530	C	LEU	B	221	99.249	16.015	11.723	1.00	76.42	C
ATOM	5531	O	LEU	B	221	99.058	17.056	12.355	1.00	76.43	O
ATOM	5532	N	TYR	B	222	99.662	14.887	12.291	1.00	76.45	N
ATOM	5533	CA	TYR	B	222	99.866	14.778	13.721	1.00	77.07	C
ATOM	5534	CB	TYR	B	222	100.510	13.443	14.057	1.00	77.78	C
ATOM	5535	CG	TYR	B	222	100.610	13.144	15.541	1.00	78.89	C
ATOM	5536	CD1	TYR	B	222	99.532	12.584	16.232	1.00	79.59	C
ATOM	5537	CE1	TYR	B	222	99.619	12.299	17.595	1.00	80.66	C
ATOM	5538	CZ	TYR	B	222	100.807	12.574	18.279	1.00	80.59	C
ATOM	5539	OH	TYR	B	222	100.909	12.276	19.637	1.00	80.49	O
ATOM	5540	CE2	TYR	B	222	101.890	13.136	17.605	1.00	79.34	C

ATOM	5541	CD2	TYR	B	222	101.786	13.412	16.249	1.00	79.15	C
ATOM	5542	C	TYR	B	222	100.742	15.897	14.242	1.00	76.92	C
ATOM	5543	O	TYR	B	222	101.692	16.302	13.594	1.00	77.43	O
ATOM	5544	N	GLY	B	223	100.404	16.403	15.415	1.00	76.73	N
ATOM	5545	CA	GLY	B	223	101.186	17.445	16.046	1.00	76.51	C
ATOM	5546	C	GLY	B	223	100.999	18.852	15.515	1.00	76.36	C
ATOM	5547	O	GLY	B	223	101.488	19.791	16.120	1.00	77.07	O
ATOM	5548	N	LEU	B	224	100.310	19.016	14.395	1.00	75.91	N
ATOM	5549	CA	LEU	B	224	100.111	20.341	13.833	1.00	75.67	C
ATOM	5550	CB	LEU	B	224	99.947	20.272	12.317	1.00	75.42	C
ATOM	5551	CG	LEU	B	224	101.139	19.977	11.398	1.00	75.03	C
ATOM	5552	CD1	LEU	B	224	100.781	20.365	9.971	1.00	75.36	C
ATOM	5553	CD2	LEU	B	224	102.385	20.720	11.811	1.00	73.57	C
ATOM	5554	C	LEU	B	224	98.888	21.002	14.450	1.00	76.10	C
ATOM	5555	O	LEU	B	224	97.851	20.353	14.628	1.00	76.27	O
ATOM	5556	N	ASN	B	225	99.012	22.292	14.773	1.00	76.06	N
ATOM	5557	CA	ASN	B	225	97.929	23.072	15.371	1.00	75.55	C
ATOM	5558	CB	ASN	B	225	98.320	23.608	16.765	1.00	75.53	C
ATOM	5559	CG	ASN	B	225	97.169	24.358	17.472	1.00	76.99	C
ATOM	5560	OD1	ASN	B	225	97.384	25.391	18.139	1.00	77.65	O
ATOM	5561	ND2	ASN	B	225	95.946	23.838	17.332	1.00	76.77	N
ATOM	5562	C	ASN	B	225	97.622	24.209	14.440	1.00	75.33	C
ATOM	5563	O	ASN	B	225	97.912	25.362	14.755	1.00	75.75	O
ATOM	5564	N	LEU	B	226	97.037	23.887	13.291	1.00	75.09	N
ATOM	5565	CA	LEU	B	226	96.807	24.883	12.234	1.00	75.21	C
ATOM	5566	CB	LEU	B	226	96.600	24.192	10.888	1.00	74.99	C
ATOM	5567	CG	LEU	B	226	97.761	23.362	10.364	1.00	75.39	C
ATOM	5568	CD1	LEU	B	226	97.346	22.663	9.080	1.00	75.12	C
ATOM	5569	CD2	LEU	B	226	98.959	24.264	10.154	1.00	74.71	C
ATOM	5570	C	LEU	B	226	95.610	25.777	12.488	1.00	75.20	C
ATOM	5571	O	LEU	B	226	94.726	25.434	13.249	1.00	75.69	O
ATOM	5572	N	THR	B	227	95.564	26.921	11.834	1.00	75.27	N
ATOM	5573	CA	THR	B	227	94.310	27.637	11.766	1.00	75.81	C
ATOM	5574	CB	THR	B	227	94.371	29.017	12.444	1.00	75.85	C
ATOM	5575	OG1	THR	B	227	95.281	29.859	11.729	1.00	77.56	O
ATOM	5576	CG2	THR	B	227	94.820	28.882	13.897	1.00	74.89	C
ATOM	5577	C	THR	B	227	93.818	27.731	10.317	1.00	76.09	C
ATOM	5578	O	THR	B	227	92.634	27.965	10.082	1.00	77.03	O
ATOM	5579	N	SER	B	228	94.716	27.521	9.355	1.00	75.61	N
ATOM	5580	CA	SER	B	228	94.347	27.429	7.939	1.00	74.91	C
ATOM	5581	CB	SER	B	228	94.951	28.567	7.151	1.00	75.06	C
ATOM	5582	OG	SER	B	228	93.969	29.523	6.907	1.00	77.19	O
ATOM	5583	C	SER	B	228	94.887	26.196	7.320	1.00	73.91	C
ATOM	5584	O	SER	B	228	96.028	25.832	7.583	1.00	74.28	O
ATOM	5585	N	LEU	B	229	94.092	25.585	6.449	1.00	73.01	N
ATOM	5586	CA	LEU	B	229	94.492	24.361	5.743	1.00	71.55	C
ATOM	5587	CB	LEU	B	229	93.938	23.113	6.441	1.00	70.91	C
ATOM	5588	CG	LEU	B	229	94.236	21.757	5.784	1.00	71.08	C
ATOM	5589	CD1	LEU	B	229	95.703	21.656	5.428	1.00	69.95	C
ATOM	5590	CD2	LEU	B	229	93.832	20.565	6.690	1.00	71.27	C
ATOM	5591	C	LEU	B	229	93.951	24.442	4.340	1.00	71.36	C
ATOM	5592	O	LEU	B	229	92.733	24.549	4.142	1.00	71.66	O
ATOM	5593	N	SER	B	230	94.829	24.402	3.352	1.00	70.65	N
ATOM	5594	CA	SER	B	230	94.335	24.389	1.990	1.00	70.53	C
ATOM	5595	CB	SER	B	230	94.676	25.684	1.277	1.00	70.53	C
ATOM	5596	OG	SER	B	230	94.143	26.756	2.006	1.00	71.21	O

ATOM	5597	C	SER	B	230	94.941	23.254	1.262	1.00	70.56	C
ATOM	5598	O	SER	B	230	96.142	23.174	1.129	1.00	71.00	O
ATOM	5599	N	ILE	B	231	94.104	22.344	0.816	1.00	71.12	N
ATOM	5600	CA	ILE	B	231	94.548	21.302	-0.081	1.00	71.09	C
ATOM	5601	CB	ILE	B	231	94.377	19.935	0.515	1.00	70.59	C
ATOM	5602	CG1	ILE	B	231	94.901	19.948	1.962	1.00	71.17	C
ATOM	5603	CD1	ILE	B	231	94.750	18.586	2.735	1.00	70.83	C
ATOM	5604	CG2	ILE	B	231	95.028	18.921	-0.403	1.00	69.23	C
ATOM	5605	C	ILE	B	231	93.701	21.451	-1.322	1.00	71.62	C
ATOM	5606	O	ILE	B	231	92.493	21.203	-1.294	1.00	71.83	O
ATOM	5607	N	THR	B	232	94.326	21.897	-2.399	1.00	71.79	N
ATOM	5608	CA	THR	B	232	93.582	22.279	-3.578	1.00	72.42	C
ATOM	5609	CB	THR	B	232	93.457	23.792	-3.665	1.00	71.79	C
ATOM	5610	OG1	THR	B	232	94.768	24.342	-3.627	1.00	72.62	O
ATOM	5611	CG2	THR	B	232	92.680	24.335	-2.490	1.00	70.34	C
ATOM	5612	C	THR	B	232	94.282	21.761	-4.823	1.00	73.51	C
ATOM	5613	O	THR	B	232	95.470	21.402	-4.778	1.00	74.00	O
ATOM	5614	N	HIS	B	233	93.539	21.725	-5.930	1.00	74.01	N
ATOM	5615	CA	HIS	B	233	94.025	21.192	-7.189	1.00	74.41	C
ATOM	5616	CB	HIS	B	233	94.882	22.221	-7.903	1.00	74.08	C
ATOM	5617	CG	HIS	B	233	94.091	23.342	-8.486	1.00	74.37	C
ATOM	5618	ND1	HIS	B	233	94.063	24.603	-7.926	1.00	74.62	N
ATOM	5619	CE1	HIS	B	233	93.275	25.381	-8.646	1.00	74.52	C
ATOM	5620	NE2	HIS	B	233	92.786	24.666	-9.645	1.00	75.02	N
ATOM	5621	CD2	HIS	B	233	93.283	23.388	-9.570	1.00	73.82	C
ATOM	5622	C	HIS	B	233	94.787	19.889	-7.027	1.00	74.91	C
ATOM	5623	O	HIS	B	233	95.838	19.708	-7.625	1.00	75.47	O
ATOM	5624	N	CYS	B	234	94.250	18.988	-6.215	1.00	75.29	N
ATOM	5625	CA	CYS	B	234	94.844	17.671	-6.012	1.00	75.85	C
ATOM	5626	CB	CYS	B	234	95.202	17.488	-4.543	1.00	75.81	C
ATOM	5627	SG	CYS	B	234	96.350	18.741	-3.957	1.00	77.83	S
ATOM	5628	C	CYS	B	234	93.875	16.588	-6.477	1.00	75.87	C
ATOM	5629	O	CYS	B	234	92.869	16.897	-7.119	1.00	76.55	O
ATOM	5630	N	ASN	B	235	94.164	15.328	-6.170	1.00	75.54	N
ATOM	5631	CA	ASN	B	235	93.287	14.246	-6.603	1.00	75.34	C
ATOM	5632	CB	ASN	B	235	94.064	13.223	-7.452	1.00	75.05	C
ATOM	5633	CG	ASN	B	235	93.267	12.717	-8.651	1.00	75.49	C
ATOM	5634	OD1	ASN	B	235	93.531	11.633	-9.189	1.00	76.11	O
ATOM	5635	ND2	ASN	B	235	92.303	13.506	-9.085	1.00	75.20	N
ATOM	5636	C	ASN	B	235	92.574	13.586	-5.410	1.00	75.33	C
ATOM	5637	O	ASN	B	235	92.416	12.367	-5.375	1.00	75.62	O
ATOM	5638	N	LEU	B	236	92.152	14.393	-4.432	1.00	75.09	N
ATOM	5639	CA	LEU	B	236	91.405	13.864	-3.280	1.00	74.85	C
ATOM	5640	CB	LEU	B	236	91.449	14.835	-2.081	1.00	74.52	C
ATOM	5641	CG	LEU	B	236	92.794	15.132	-1.381	1.00	73.85	C
ATOM	5642	CD1	LEU	B	236	92.554	15.905	-0.123	1.00	74.33	C
ATOM	5643	CD2	LEU	B	236	93.584	13.876	-1.027	1.00	75.99	C
ATOM	5644	C	LEU	B	236	89.959	13.533	-3.670	1.00	74.94	C
ATOM	5645	O	LEU	B	236	89.265	14.349	-4.281	1.00	75.06	O
ATOM	5646	N	THR	B	237	89.502	12.336	-3.334	1.00	74.68	N
ATOM	5647	CA	THR	B	237	88.154	11.949	-3.722	1.00	74.55	C
ATOM	5648	CB	THR	B	237	88.094	10.518	-4.272	1.00	74.81	C
ATOM	5649	OG1	THR	B	237	88.535	9.602	-3.267	1.00	75.66	O
ATOM	5650	CG2	THR	B	237	88.954	10.374	-5.528	1.00	74.62	C
ATOM	5651	C	THR	B	237	87.167	12.077	-2.578	1.00	74.33	C
ATOM	5652	O	THR	B	237	85.958	12.036	-2.793	1.00	74.57	O

ATOM	5653	N	ALA	B	238	87.682	12.226	-1.365	1.00	73.92	N
ATOM	5654	CA	ALA	B	238	86.853	12.374	-0.184	1.00	73.72	C
ATOM	5655	CB	ALA	B	238	86.817	11.080	0.595	1.00	73.23	C
ATOM	5656	C	ALA	B	238	87.473	13.454	0.663	1.00	74.15	C
ATOM	5657	O	ALA	B	238	88.613	13.834	0.443	1.00	74.48	O
ATOM	5658	N	LEU	B	239	86.737	13.953	1.644	1.00	74.70	N
ATOM	5659	CA	LEU	B	239	87.382	14.728	2.679	1.00	74.96	C
ATOM	5660	CB	LEU	B	239	86.387	15.363	3.600	1.00	74.96	C
ATOM	5661	CG	LEU	B	239	86.134	16.752	3.146	1.00	75.26	C
ATOM	5662	CD1	LEU	B	239	84.925	16.748	2.250	1.00	73.74	C
ATOM	5663	CD2	LEU	B	239	85.917	17.520	4.428	1.00	78.36	C
ATOM	5664	C	LEU	B	239	88.237	13.840	3.524	1.00	75.07	C
ATOM	5665	O	LEU	B	239	87.828	12.705	3.873	1.00	75.17	O
ATOM	5666	N	PRO	B	240	89.410	14.365	3.893	1.00	75.09	N
ATOM	5667	CA	PRO	B	240	90.322	13.675	4.773	1.00	74.92	C
ATOM	5668	CB	PRO	B	240	91.631	14.423	4.543	1.00	74.95	C
ATOM	5669	CG	PRO	B	240	91.199	15.840	4.227	1.00	75.03	C
ATOM	5670	CD	PRO	B	240	89.912	15.696	3.483	1.00	75.10	C
ATOM	5671	C	PRO	B	240	89.838	13.812	6.220	1.00	75.00	C
ATOM	5672	O	PRO	B	240	90.579	14.304	7.065	1.00	75.82	O
ATOM	5673	N	TYR	B	241	88.609	13.378	6.508	1.00	74.79	N
ATOM	5674	CA	TYR	B	241	88.007	13.584	7.839	1.00	74.43	C
ATOM	5675	CB	TYR	B	241	86.686	12.826	8.015	1.00	73.88	C
ATOM	5676	CG	TYR	B	241	85.666	13.090	6.946	1.00	73.44	C
ATOM	5677	CD1	TYR	B	241	85.046	14.356	6.822	1.00	72.76	C
ATOM	5678	CE1	TYR	B	241	84.108	14.594	5.826	1.00	71.45	C
ATOM	5679	CZ	TYR	B	241	83.792	13.555	4.949	1.00	72.73	C
ATOM	5680	OH	TYR	B	241	82.885	13.743	3.948	1.00	73.72	O
ATOM	5681	CE2	TYR	B	241	84.390	12.308	5.063	1.00	71.69	C
ATOM	5682	CD2	TYR	B	241	85.317	12.086	6.048	1.00	71.20	C
ATOM	5683	C	TYR	B	241	88.940	13.230	8.985	1.00	74.82	C
ATOM	5684	O	TYR	B	241	89.149	14.056	9.866	1.00	75.48	O
ATOM	5685	N	LEU	B	242	89.495	12.014	8.971	1.00	74.68	N
ATOM	5686	CA	LEU	B	242	90.356	11.549	10.044	1.00	74.79	C
ATOM	5687	CB	LEU	B	242	90.689	10.076	9.843	1.00	75.14	C
ATOM	5688	CG	LEU	B	242	89.618	9.097	10.278	1.00	75.31	C
ATOM	5689	CD1	LEU	B	242	89.963	7.737	9.735	1.00	76.51	C
ATOM	5690	CD2	LEU	B	242	89.513	9.077	11.798	1.00	75.74	C
ATOM	5691	C	LEU	B	242	91.657	12.326	10.129	1.00	74.99	C
ATOM	5692	O	LEU	B	242	92.209	12.534	11.214	1.00	74.67	O
ATOM	5693	N	ALA	B	243	92.160	12.731	8.972	1.00	75.41	N
ATOM	5694	CA	ALA	B	243	93.422	13.444	8.908	1.00	75.69	C
ATOM	5695	CB	ALA	B	243	93.865	13.594	7.471	1.00	75.87	C
ATOM	5696	C	ALA	B	243	93.348	14.809	9.597	1.00	75.71	C
ATOM	5697	O	ALA	B	243	94.351	15.280	10.134	1.00	76.17	O
ATOM	5698	N	VAL	B	244	92.164	15.416	9.618	1.00	75.41	N
ATOM	5699	CA	VAL	B	244	92.000	16.787	10.151	1.00	75.28	C
ATOM	5700	CB	VAL	B	244	91.196	17.683	9.175	1.00	74.59	C
ATOM	5701	CG1	VAL	B	244	91.746	17.556	7.772	1.00	74.18	C
ATOM	5702	CG2	VAL	B	244	89.742	17.276	9.154	1.00	73.91	C
ATOM	5703	C	VAL	B	244	91.370	16.826	11.559	1.00	75.57	C
ATOM	5704	O	VAL	B	244	91.146	17.901	12.118	1.00	75.46	O
ATOM	5705	N	ARG	B	245	91.127	15.654	12.136	1.00	75.68	N
ATOM	5706	CA	ARG	B	245	90.329	15.541	13.362	1.00	76.52	C
ATOM	5707	CB	ARG	B	245	90.012	14.065	13.679	1.00	76.35	C
ATOM	5708	CG	ARG	B	245	91.179	13.276	14.292	1.00	77.05	C

ATOM	5709	CD	ARG	B	245	90.950	11.784	14.167	1.00	79.01	C
ATOM	5710	NE	ARG	B	245	91.959	10.982	14.869	1.00	82.04	N
ATOM	5711	CZ	ARG	B	245	93.215	10.788	14.459	1.00	82.56	C
ATOM	5712	NH1	ARG	B	245	94.031	10.036	15.183	1.00	81.64	N
ATOM	5713	NH2	ARG	B	245	93.667	11.348	13.337	1.00	82.96	N
ATOM	5714	C	ARG	B	245	90.889	16.256	14.602	1.00	76.96	C
ATOM	5715	O	ARG	B	245	90.129	16.539	15.527	1.00	77.41	O
ATOM	5716	N	HIS	B	246	92.194	16.537	14.621	1.00	77.33	N
ATOM	5717	CA	HIS	B	246	92.842	17.266	15.731	1.00	77.80	C
ATOM	5718	CB	HIS	B	246	94.192	16.634	16.082	1.00	77.93	C
ATOM	5719	CG	HIS	B	246	94.091	15.214	16.551	1.00	80.70	C
ATOM	5720	ND1	HIS	B	246	94.946	14.222	16.112	1.00	81.86	N
ATOM	5721	CE1	HIS	B	246	94.613	13.077	16.685	1.00	83.04	C
ATOM	5722	NE2	HIS	B	246	93.573	13.288	17.476	1.00	82.57	N
ATOM	5723	CD2	HIS	B	246	93.230	14.617	17.414	1.00	82.05	C
ATOM	5724	C	HIS	B	246	93.040	18.778	15.486	1.00	77.72	C
ATOM	5725	O	HIS	B	246	93.532	19.492	16.365	1.00	77.29	O
ATOM	5726	N	LEU	B	247	92.667	19.262	14.299	1.00	77.76	N
ATOM	5727	CA	LEU	B	247	92.861	20.674	13.949	1.00	77.81	C
ATOM	5728	CB	LEU	B	247	92.928	20.869	12.439	1.00	77.82	C
ATOM	5729	CG	LEU	B	247	94.054	20.112	11.747	1.00	78.06	C
ATOM	5730	CD1	LEU	B	247	94.251	20.705	10.365	1.00	78.35	C
ATOM	5731	CD2	LEU	B	247	95.339	20.179	12.553	1.00	77.73	C
ATOM	5732	C	LEU	B	247	91.778	21.534	14.597	1.00	77.70	C
ATOM	5733	O	LEU	B	247	91.018	22.258	13.955	1.00	77.61	O
ATOM	5734	N	VAL	B	248	91.778	21.449	15.912	1.00	77.46	N
ATOM	5735	CA	VAL	B	248	90.734	21.932	16.773	1.00	76.90	C
ATOM	5736	CB	VAL	B	248	90.937	21.242	18.156	1.00	77.02	C
ATOM	5737	CG1	VAL	B	248	90.844	22.210	19.343	1.00	76.71	C
ATOM	5738	CG2	VAL	B	248	90.019	20.039	18.267	1.00	75.85	C
ATOM	5739	C	VAL	B	248	90.651	23.460	16.828	1.00	76.73	C
ATOM	5740	O	VAL	B	248	89.691	24.015	17.344	1.00	77.08	O
ATOM	5741	N	TYR	B	249	91.642	24.142	16.275	1.00	76.63	N
ATOM	5742	CA	TYR	B	249	91.609	25.597	16.216	1.00	76.33	C
ATOM	5743	CB	TYR	B	249	92.832	26.189	16.906	1.00	76.79	C
ATOM	5744	CG	TYR	B	249	92.759	26.147	18.409	1.00	77.68	C
ATOM	5745	CD1	TYR	B	249	92.284	27.244	19.129	1.00	79.04	C
ATOM	5746	CE1	TYR	B	249	92.213	27.223	20.519	1.00	79.09	C
ATOM	5747	CZ	TYR	B	249	92.625	26.091	21.209	1.00	79.01	C
ATOM	5748	OH	TYR	B	249	92.551	26.080	22.589	1.00	78.77	O
ATOM	5749	CE2	TYR	B	249	93.106	24.981	20.516	1.00	78.84	C
ATOM	5750	CD2	TYR	B	249	93.165	25.016	19.121	1.00	78.44	C
ATOM	5751	C	TYR	B	249	91.498	26.102	14.778	1.00	75.93	C
ATOM	5752	O	TYR	B	249	91.515	27.322	14.533	1.00	75.98	O
ATOM	5753	N	LEU	B	250	91.354	25.165	13.843	1.00	75.09	N
ATOM	5754	CA	LEU	B	250	91.201	25.489	12.436	1.00	75.26	C
ATOM	5755	CB	LEU	B	250	90.977	24.210	11.625	1.00	74.79	C
ATOM	5756	CG	LEU	B	250	91.289	24.302	10.123	1.00	74.42	C
ATOM	5757	CD1	LEU	B	250	92.781	24.258	9.856	1.00	73.33	C
ATOM	5758	CD2	LEU	B	250	90.588	23.207	9.351	1.00	73.25	C
ATOM	5759	C	LEU	B	250	90.068	26.504	12.192	1.00	75.66	C
ATOM	5760	O	LEU	B	250	88.970	26.339	12.705	1.00	76.40	O
ATOM	5761	N	ARG	B	251	90.337	27.554	11.426	1.00	75.70	N
ATOM	5762	CA	ARG	B	251	89.340	28.590	11.174	1.00	76.05	C
ATOM	5763	CB	ARG	B	251	89.883	29.950	11.592	1.00	76.51	C
ATOM	5764	CG	ARG	B	251	89.482	30.383	12.986	1.00	78.34	C

ATOM	5765	CD	ARG	B	251	90.204	31.649	13.379	1.00	81.20	C
ATOM	5766	NE	ARG	B	251	91.562	31.323	13.806	1.00	85.98	N
ATOM	5767	CZ	ARG	B	251	92.576	32.183	13.860	1.00	88.06	C
ATOM	5768	NH1	ARG	B	251	92.411	33.461	13.514	1.00	90.38	N
ATOM	5769	NH2	ARG	B	251	93.763	31.758	14.264	1.00	88.72	N
ATOM	5770	C	ARG	B	251	88.945	28.657	9.711	1.00	76.08	C
ATOM	5771	O	ARG	B	251	87.842	29.081	9.364	1.00	75.80	O
ATOM	5772	N	PHE	B	252	89.865	28.233	8.854	1.00	76.42	N
ATOM	5773	CA	PHE	B	252	89.692	28.288	7.416	1.00	76.48	C
ATOM	5774	CB	PHE	B	252	90.562	29.412	6.882	1.00	76.92	C
ATOM	5775	CG	PHE	B	252	90.506	29.598	5.389	1.00	79.82	C
ATOM	5776	CD1	PHE	B	252	89.775	30.659	4.832	1.00	81.98	C
ATOM	5777	CE1	PHE	B	252	89.741	30.856	3.428	1.00	81.31	C
ATOM	5778	CZ	PHE	B	252	90.453	29.994	2.591	1.00	80.97	C
ATOM	5779	CE2	PHE	B	252	91.201	28.937	3.142	1.00	81.68	C
ATOM	5780	CD2	PHE	B	252	91.233	28.753	4.528	1.00	81.13	C
ATOM	5781	C	PHE	B	252	90.090	26.924	6.830	1.00	75.92	C
ATOM	5782	O	PHE	B	252	91.161	26.405	7.118	1.00	75.85	O
ATOM	5783	N	LEU	B	253	89.205	26.338	6.032	1.00	75.36	N
ATOM	5784	CA	LEU	B	253	89.502	25.104	5.314	1.00	74.19	C
ATOM	5785	CB	LEU	B	253	88.727	23.939	5.920	1.00	74.16	C
ATOM	5786	CG	LEU	B	253	88.777	22.591	5.216	1.00	73.74	C
ATOM	5787	CD1	LEU	B	253	90.175	22.012	5.278	1.00	73.97	C
ATOM	5788	CD2	LEU	B	253	87.767	21.639	5.836	1.00	73.42	C
ATOM	5789	C	LEU	B	253	89.136	25.284	3.854	1.00	74.14	C
ATOM	5790	O	LEU	B	253	87.999	25.601	3.532	1.00	74.58	O
ATOM	5791	N	ASN	B	254	90.113	25.115	2.972	1.00	73.88	N
ATOM	5792	CA	ASN	B	254	89.896	25.203	1.532	1.00	73.32	C
ATOM	5793	CB	ASN	B	254	90.816	26.272	0.948	1.00	73.03	C
ATOM	5794	CG	ASN	B	254	90.405	26.715	-0.452	1.00	73.95	C
ATOM	5795	OD1	ASN	B	254	89.654	26.008	-1.136	1.00	74.26	O
ATOM	5796	ND2	ASN	B	254	90.910	27.912	-0.885	1.00	72.86	N
ATOM	5797	C	ASN	B	254	90.179	23.830	0.905	1.00	73.03	C
ATOM	5798	O	ASN	B	254	91.277	23.295	1.063	1.00	73.38	O
ATOM	5799	N	LEU	B	255	89.187	23.231	0.250	1.00	72.28	N
ATOM	5800	CA	LEU	B	255	89.439	21.999	-0.492	1.00	72.07	C
ATOM	5801	CB	LEU	B	255	88.775	20.784	0.164	1.00	71.70	C
ATOM	5802	CG	LEU	B	255	89.246	20.403	1.563	1.00	69.73	C
ATOM	5803	CD1	LEU	B	255	88.177	19.655	2.288	1.00	66.24	C
ATOM	5804	CD2	LEU	B	255	90.509	19.614	1.506	1.00	68.71	C
ATOM	5805	C	LEU	B	255	89.046	22.106	-1.964	1.00	72.53	C
ATOM	5806	O	LEU	B	255	88.879	21.074	-2.645	1.00	72.47	O
ATOM	5807	N	SER	B	256	88.956	23.347	-2.451	1.00	72.42	N
ATOM	5808	CA	SER	B	256	88.546	23.626	-3.814	1.00	73.40	C
ATOM	5809	CB	SER	B	256	88.695	25.107	-4.119	1.00	73.85	C
ATOM	5810	OG	SER	B	256	87.890	25.892	-3.252	1.00	76.20	O
ATOM	5811	C	SER	B	256	89.342	22.849	-4.827	1.00	73.62	C
ATOM	5812	O	SER	B	256	90.519	22.619	-4.646	1.00	73.89	O
ATOM	5813	N	TYR	B	257	88.681	22.456	-5.906	1.00	74.33	N
ATOM	5814	CA	TYR	B	257	89.286	21.690	-7.006	1.00	74.72	C
ATOM	5815	CB	TYR	B	257	90.263	22.560	-7.808	1.00	74.77	C
ATOM	5816	CG	TYR	B	257	89.677	23.922	-8.128	1.00	75.00	C
ATOM	5817	CD1	TYR	B	257	88.815	24.100	-9.213	1.00	73.66	C
ATOM	5818	CE1	TYR	B	257	88.262	25.329	-9.490	1.00	74.14	C
ATOM	5819	CZ	TYR	B	257	88.562	26.422	-8.672	1.00	76.10	C
ATOM	5820	OH	TYR	B	257	88.026	27.669	-8.933	1.00	77.34	O

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ATOM   5821  CE2 TYR B 257      89.397  26.276  -7.583  1.00 75.97           C
ATOM   5822  CD2 TYR B 257      89.953  25.024  -7.316  1.00 75.56           C
ATOM   5823  C   TYR B 257      89.882  20.327  -6.612  1.00 75.06           C
ATOM   5824  O   TYR B 257      91.006  20.006  -6.975  1.00 75.42           O
ATOM   5825  N   ASN B 258      89.110  19.532  -5.875  1.00 75.28           N
ATOM   5826  CA  ASN B 258      89.370  18.090  -5.751  1.00 75.96           C
ATOM   5827  CB  ASN B 258      89.671  17.688  -4.304  1.00 76.31           C
ATOM   5828  CG  ASN B 258      91.012  18.201  -3.822  1.00 78.05           C
ATOM   5829  OD1 ASN B 258      92.010  17.472  -3.873  1.00 80.27           O
ATOM   5830  ND2 ASN B 258      91.053  19.467  -3.374  1.00 77.57           N
ATOM   5831  C   ASN B 258      88.174  17.294  -6.252  1.00 75.55           C
ATOM   5832  O   ASN B 258      87.039  17.709  -6.080  1.00 75.91           O
ATOM   5833  N   PRO B 259      88.411  16.148  -6.878  1.00 75.24           N
ATOM   5834  CA  PRO B 259      87.269  15.330  -7.271  1.00 75.38           C
ATOM   5835  CB  PRO B 259      87.913  14.230  -8.114  1.00 75.29           C
ATOM   5836  CG  PRO B 259      89.298  14.135  -7.576  1.00 75.64           C
ATOM   5837  CD  PRO B 259      89.687  15.554  -7.295  1.00 75.28           C
ATOM   5838  C   PRO B 259      86.473  14.722  -6.087  1.00 75.29           C
ATOM   5839  O   PRO B 259      86.176  13.525  -6.083  1.00 75.44           O
ATOM   5840  N   ILE B 260      86.115  15.547  -5.109  1.00 75.06           N
ATOM   5841  CA  ILE B 260      85.315  15.088  -3.975  1.00 74.89           C
ATOM   5842  CB  ILE B 260      85.580  15.909  -2.693  1.00 74.46           C
ATOM   5843  CG1 ILE B 260      86.991  15.647  -2.193  1.00 73.76           C
ATOM   5844  CD1 ILE B 260      87.521  16.724  -1.298  1.00 75.97           C
ATOM   5845  CG2 ILE B 260      84.557  15.578  -1.612  1.00 72.52           C
ATOM   5846  C   ILE B 260      83.859  15.208  -4.366  1.00 75.69           C
ATOM   5847  O   ILE B 260      83.426  16.263  -4.862  1.00 76.43           O
ATOM   5848  N   SER B 261      83.098  14.146  -4.125  1.00 75.63           N
ATOM   5849  CA  SER B 261      81.744  14.089  -4.627  1.00 75.68           C
ATOM   5850  CB  SER B 261      81.547  12.803  -5.428  1.00 75.85           C
ATOM   5851  OG  SER B 261      81.435  11.708  -4.548  1.00 75.71           O
ATOM   5852  C   SER B 261      80.700  14.180  -3.537  1.00 75.70           C
ATOM   5853  O   SER B 261      79.523  14.308  -3.837  1.00 75.88           O
ATOM   5854  N   THR B 262      81.125  14.098  -2.280  1.00 76.01           N
ATOM   5855  CA  THR B 262      80.200  14.120  -1.138  1.00 76.48           C
ATOM   5856  CB  THR B 262      79.669  12.716  -0.787  1.00 76.86           C
ATOM   5857  OG1 THR B 262      78.819  12.816   0.357  1.00 78.88           O
ATOM   5858  CG2 THR B 262      80.814  11.747  -0.425  1.00 77.35           C
ATOM   5859  C   THR B 262      80.833  14.652   0.130  1.00 76.23           C
ATOM   5860  O   THR B 262      82.018  14.444   0.371  1.00 76.34           O
ATOM   5861  N   ILE B 263      80.044  15.330   0.951  1.00 76.31           N
ATOM   5862  CA  ILE B 263      80.476  15.587   2.313  1.00 76.45           C
ATOM   5863  CB  ILE B 263      80.426  17.048   2.706  1.00 76.11           C
ATOM   5864  CG1 ILE B 263      81.258  17.890   1.728  1.00 75.81           C
ATOM   5865  CD1 ILE B 263      81.158  19.402   1.967  1.00 74.47           C
ATOM   5866  CG2 ILE B 263      80.921  17.189   4.133  1.00 74.80           C
ATOM   5867  C   ILE B 263      79.552  14.815   3.204  1.00 77.12           C
ATOM   5868  O   ILE B 263      78.356  15.059   3.188  1.00 77.32           O
ATOM   5869  N   GLU B 264      80.118  13.874   3.957  1.00 77.93           N
ATOM   5870  CA  GLU B 264      79.368  12.988   4.835  1.00 78.88           C
ATOM   5871  CB  GLU B 264      80.271  11.895   5.364  1.00 79.37           C
ATOM   5872  CG  GLU B 264      80.713  10.852   4.375  1.00 82.74           C
ATOM   5873  CD  GLU B 264      81.332   9.644   5.087  1.00 88.66           C
ATOM   5874  OE1 GLU B 264      81.568   9.720   6.325  1.00 90.30           O
ATOM   5875  OE2 GLU B 264      81.582   8.610   4.415  1.00 91.18           O
ATOM   5876  C   GLU B 264      78.812  13.739   6.029  1.00 78.83           C
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ATOM	5877	O	GLU	B	264	79.201	14.878	6.299	1.00 78.94	O
ATOM	5878	N	GLY	B	265	77.910	13.085	6.758	1.00 79.04	N
ATOM	5879	CA	GLY	B	265	77.317	13.688	7.947	1.00 78.66	C
ATOM	5880	C	GLY	B	265	78.079	13.346	9.209	1.00 78.61	C
ATOM	5881	O	GLY	B	265	78.486	12.187	9.405	1.00 77.88	O
ATOM	5882	N	SER	B	266	78.270	14.367	10.051	1.00 78.62	N
ATOM	5883	CA	SER	B	266	78.858	14.222	11.397	1.00 79.29	C
ATOM	5884	CB	SER	B	266	78.031	13.243	12.246	1.00 79.10	C
ATOM	5885	OG	SER	B	266	76.652	13.552	12.195	1.00 79.19	O
ATOM	5886	C	SER	B	266	80.352	13.824	11.459	1.00 79.72	C
ATOM	5887	O	SER	B	266	80.790	13.219	12.430	1.00 80.08	O
ATOM	5888	N	MET	B	267	81.131	14.180	10.444	1.00 80.10	N
ATOM	5889	CA	MET	B	267	82.532	13.778	10.374	1.00 79.91	C
ATOM	5890	CB	MET	B	267	82.848	13.229	8.987	1.00 79.94	C
ATOM	5891	CG	MET	B	267	82.050	12.047	8.543	1.00 80.97	C
ATOM	5892	SD	MET	B	267	82.418	10.560	9.494	1.00 84.13	S
ATOM	5893	CE	MET	B	267	84.126	10.192	9.057	1.00 83.96	C
ATOM	5894	C	MET	B	267	83.491	14.938	10.642	1.00 80.07	C
ATOM	5895	O	MET	B	267	84.699	14.753	10.581	1.00 80.67	O
ATOM	5896	N	LEU	B	268	82.976	16.134	10.901	1.00 79.78	N
ATOM	5897	CA	LEU	B	268	83.844	17.282	11.086	1.00 79.79	C
ATOM	5898	CB	LEU	B	268	83.648	18.287	9.952	1.00 79.85	C
ATOM	5899	CG	LEU	B	268	83.911	17.847	8.510	1.00 80.52	C
ATOM	5900	CD1	LEU	B	268	83.477	18.931	7.558	1.00 79.23	C
ATOM	5901	CD2	LEU	B	268	85.386	17.507	8.293	1.00 81.82	C
ATOM	5902	C	LEU	B	268	83.594	17.956	12.420	1.00 80.17	C
ATOM	5903	O	LEU	B	268	84.004	19.093	12.635	1.00 79.57	O
ATOM	5904	N	HIS	B	269	82.957	17.232	13.333	1.00 81.21	N
ATOM	5905	CA	HIS	B	269	82.336	17.869	14.484	1.00 82.33	C
ATOM	5906	CB	HIS	B	269	81.252	16.978	15.090	1.00 82.86	C
ATOM	5907	CG	HIS	B	269	81.770	15.726	15.713	1.00 86.62	C
ATOM	5908	ND1	HIS	B	269	81.568	14.481	15.153	1.00 90.57	N
ATOM	5909	CE1	HIS	B	269	82.120	13.558	15.924	1.00 91.76	C
ATOM	5910	NE2	HIS	B	269	82.670	14.159	16.967	1.00 91.91	N
ATOM	5911	CD2	HIS	B	269	82.460	15.516	16.862	1.00 89.95	C
ATOM	5912	C	HIS	B	269	83.327	18.342	15.531	1.00 82.22	C
ATOM	5913	O	HIS	B	269	82.978	19.126	16.424	1.00 82.38	O
ATOM	5914	N	GLU	B	270	84.568	17.883	15.399	1.00 82.19	N
ATOM	5915	CA	GLU	B	270	85.624	18.258	16.324	1.00 81.99	C
ATOM	5916	CB	GLU	B	270	86.685	17.169	16.378	1.00 82.38	C
ATOM	5917	CG	GLU	B	270	86.413	16.135	17.461	1.00 85.77	C
ATOM	5918	CD	GLU	B	270	86.690	16.666	18.885	1.00 90.66	C
ATOM	5919	OE1	GLU	B	270	87.370	17.725	19.036	1.00 90.76	O
ATOM	5920	OE2	GLU	B	270	86.220	16.009	19.855	1.00 92.37	O
ATOM	5921	C	GLU	B	270	86.244	19.594	15.981	1.00 81.04	C
ATOM	5922	O	GLU	B	270	86.916	20.196	16.805	1.00 81.18	O
ATOM	5923	N	LEU	B	271	85.996	20.055	14.766	1.00 80.20	N
ATOM	5924	CA	LEU	B	271	86.520	21.312	14.293	1.00 79.82	C
ATOM	5925	CB	LEU	B	271	86.632	21.263	12.766	1.00 79.63	C
ATOM	5926	CG	LEU	B	271	87.387	20.075	12.150	1.00 78.27	C
ATOM	5927	CD1	LEU	B	271	87.295	20.073	10.630	1.00 77.30	C
ATOM	5928	CD2	LEU	B	271	88.831	20.083	12.574	1.00 76.96	C
ATOM	5929	C	LEU	B	271	85.637	22.486	14.752	1.00 80.04	C
ATOM	5930	O	LEU	B	271	85.045	23.184	13.933	1.00 80.17	O
ATOM	5931	N	LEU	B	272	85.576	22.704	16.066	1.00 79.98	N
ATOM	5932	CA	LEU	B	272	84.630	23.639	16.686	1.00 80.20	C

ATOM	5933	CB	LEU	B	272	84.781	23.621	18.209	1.00	80.70	C
ATOM	5934	CG	LEU	B	272	84.765	22.337	19.029	1.00	82.84	C
ATOM	5935	CD1	LEU	B	272	85.026	22.711	20.488	1.00	84.15	C
ATOM	5936	CD2	LEU	B	272	83.445	21.525	18.879	1.00	84.39	C
ATOM	5937	C	LEU	B	272	84.773	25.097	16.274	1.00	79.68	C
ATOM	5938	O	LEU	B	272	83.877	25.903	16.527	1.00	80.26	O
ATOM	5939	N	ARG	B	273	85.908	25.462	15.696	1.00	78.94	N
ATOM	5940	CA	ARG	B	273	86.231	26.877	15.557	1.00	77.76	C
ATOM	5941	CB	ARG	B	273	87.555	27.188	16.249	1.00	77.62	C
ATOM	5942	CG	ARG	B	273	87.435	27.028	17.755	1.00	77.75	C
ATOM	5943	CD	ARG	B	273	88.694	27.379	18.500	1.00	79.22	C
ATOM	5944	NE	ARG	B	273	88.422	27.532	19.922	1.00	80.28	N
ATOM	5945	CZ	ARG	B	273	88.548	26.564	20.829	1.00	81.54	C
ATOM	5946	NH1	ARG	B	273	88.969	25.351	20.481	1.00	81.93	N
ATOM	5947	NH2	ARG	B	273	88.253	26.816	22.096	1.00	81.15	N
ATOM	5948	C	ARG	B	273	86.196	27.342	14.119	1.00	76.92	C
ATOM	5949	O	ARG	B	273	86.368	28.529	13.838	1.00	77.06	O
ATOM	5950	N	LEU	B	274	85.908	26.390	13.236	1.00	75.81	N
ATOM	5951	CA	LEU	B	274	85.845	26.588	11.799	1.00	75.11	C
ATOM	5952	CB	LEU	B	274	85.472	25.263	11.147	1.00	74.31	C
ATOM	5953	CG	LEU	B	274	85.848	25.000	9.693	1.00	74.22	C
ATOM	5954	CD1	LEU	B	274	87.104	25.753	9.266	1.00	72.38	C
ATOM	5955	CD2	LEU	B	274	86.010	23.490	9.471	1.00	73.38	C
ATOM	5956	C	LEU	B	274	84.850	27.676	11.400	1.00	75.13	C
ATOM	5957	O	LEU	B	274	83.691	27.636	11.816	1.00	75.32	O
ATOM	5958	N	GLN	B	275	85.305	28.640	10.599	1.00	75.05	N
ATOM	5959	CA	GLN	B	275	84.456	29.743	10.151	1.00	75.49	C
ATOM	5960	CB	GLN	B	275	85.021	31.080	10.605	1.00	75.49	C
ATOM	5961	CG	GLN	B	275	85.204	31.175	12.084	1.00	77.12	C
ATOM	5962	CD	GLN	B	275	85.889	32.463	12.499	1.00	80.39	C
ATOM	5963	OE1	GLN	B	275	85.584	33.553	11.989	1.00	81.11	O
ATOM	5964	NE2	GLN	B	275	86.819	32.347	13.440	1.00	80.39	N
ATOM	5965	C	GLN	B	275	84.211	29.787	8.644	1.00	75.60	C
ATOM	5966	O	GLN	B	275	83.145	30.240	8.217	1.00	75.88	O
ATOM	5967	N	GLU	B	276	85.193	29.354	7.849	1.00	75.46	N
ATOM	5968	CA	GLU	B	276	85.055	29.285	6.385	1.00	75.68	C
ATOM	5969	CB	GLU	B	276	86.052	30.195	5.693	1.00	75.67	C
ATOM	5970	CG	GLU	B	276	85.606	31.594	5.459	1.00	79.92	C
ATOM	5971	CD	GLU	B	276	86.327	32.241	4.265	1.00	84.94	C
ATOM	5972	OE1	GLU	B	276	86.726	31.485	3.334	1.00	85.54	O
ATOM	5973	OE2	GLU	B	276	86.485	33.500	4.264	1.00	85.77	O
ATOM	5974	C	GLU	B	276	85.348	27.895	5.873	1.00	74.92	C
ATOM	5975	O	GLU	B	276	86.364	27.304	6.248	1.00	75.44	O
ATOM	5976	N	ILE	B	277	84.481	27.383	5.009	1.00	74.06	N
ATOM	5977	CA	ILE	B	277	84.814	26.225	4.192	1.00	73.58	C
ATOM	5978	CB	ILE	B	277	83.967	24.977	4.553	1.00	73.23	C
ATOM	5979	CG1	ILE	B	277	84.305	24.519	5.956	1.00	72.42	C
ATOM	5980	CD1	ILE	B	277	83.152	23.890	6.646	1.00	73.58	C
ATOM	5981	CG2	ILE	B	277	84.205	23.806	3.561	1.00	72.19	C
ATOM	5982	C	ILE	B	277	84.623	26.618	2.739	1.00	73.92	C
ATOM	5983	O	ILE	B	277	83.515	26.918	2.327	1.00	74.42	O
ATOM	5984	N	GLN	B	278	85.705	26.663	1.967	1.00	74.08	N
ATOM	5985	CA	GLN	B	278	85.558	26.784	0.515	1.00	73.95	C
ATOM	5986	CB	GLN	B	278	86.570	27.754	-0.095	1.00	73.43	C
ATOM	5987	CG	GLN	B	278	86.697	29.068	0.644	1.00	74.47	C
ATOM	5988	CD	GLN	B	278	85.847	30.189	0.060	1.00	77.23	C

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ATOM   5989  OE1 GLN B 278      85.496  30.187  -1.123  1.00 77.22           O
ATOM   5990  NE2 GLN B 278      85.523  31.173   0.898  1.00 78.46           N
ATOM   5991  C   GLN B 278      85.728  25.378  -0.061  1.00 73.51           C
ATOM   5992  O   GLN B 278      86.643  24.658   0.319  1.00 73.28           O
ATOM   5993  N   LEU B 279      84.806  24.976  -0.927  1.00 72.94           N
ATOM   5994  CA  LEU B 279      84.964  23.760  -1.688  1.00 72.64           C
ATOM   5995  CB  LEU B 279      84.298  22.569  -0.997  1.00 72.66           C
ATOM   5996  CG  LEU B 279      84.978  21.253  -1.376  1.00 72.47           C
ATOM   5997  CD1 LEU B 279      84.389  20.122  -0.547  1.00 74.09           C
ATOM   5998  CD2 LEU B 279      84.926  20.931  -2.890  1.00 69.82           C
ATOM   5999  C   LEU B 279      84.406  23.963  -3.079  1.00 72.57           C
ATOM   6000  O   LEU B 279      83.290  23.564  -3.390  1.00 72.77           O
ATOM   6001  N   VAL B 280      85.214  24.575  -3.925  1.00 72.71           N
ATOM   6002  CA  VAL B 280      84.759  25.051  -5.221  1.00 72.81           C
ATOM   6003  CB  VAL B 280      85.301  26.474  -5.449  1.00 72.51           C
ATOM   6004  CG1 VAL B 280      85.000  26.965  -6.831  1.00 72.18           C
ATOM   6005  CG2 VAL B 280      84.708  27.412  -4.417  1.00 72.57           C
ATOM   6006  C   VAL B 280      85.224  24.111  -6.320  1.00 72.98           C
ATOM   6007  O   VAL B 280      86.270  23.478  -6.201  1.00 73.41           O
ATOM   6008  N   GLY B 281      84.447  24.001  -7.381  1.00 72.90           N
ATOM   6009  CA  GLY B 281      84.908  23.292  -8.556  1.00 73.62           C
ATOM   6010  C   GLY B 281      85.236  21.831  -8.316  1.00 74.04           C
ATOM   6011  O   GLY B 281      86.028  21.244  -9.038  1.00 74.44           O
ATOM   6012  N   GLY B 282      84.636  21.236  -7.297  1.00 74.49           N
ATOM   6013  CA  GLY B 282      84.776  19.808  -7.094  1.00 74.75           C
ATOM   6014  C   GLY B 282      83.688  19.066  -7.841  1.00 74.98           C
ATOM   6015  O   GLY B 282      83.251  19.485  -8.906  1.00 75.19           O
ATOM   6016  N   GLN B 283      83.240  17.958  -7.271  1.00 75.34           N
ATOM   6017  CA  GLN B 283      82.169  17.168  -7.863  1.00 75.39           C
ATOM   6018  CB  GLN B 283      82.709  15.827  -8.324  1.00 75.65           C
ATOM   6019  CG  GLN B 283      83.755  15.873  -9.389  1.00 78.11           C
ATOM   6020  CD  GLN B 283      84.289  14.484  -9.678  1.00 83.01           C
ATOM   6021  OE1 GLN B 283      83.741  13.481  -9.199  1.00 83.62           O
ATOM   6022  NE2 GLN B 283      85.368  14.411 -10.458  1.00 85.96           N
ATOM   6023  C   GLN B 283      81.042  16.914  -6.865  1.00 74.76           C
ATOM   6024  O   GLN B 283      80.343  15.908  -6.964  1.00 74.97           O
ATOM   6025  N   LEU B 284      80.868  17.815  -5.907  1.00 73.96           N
ATOM   6026  CA  LEU B 284      79.866  17.621  -4.874  1.00 73.46           C
ATOM   6027  CB  LEU B 284      79.842  18.811  -3.903  1.00 73.23           C
ATOM   6028  CG  LEU B 284      81.036  18.949  -2.960  1.00 72.22           C
ATOM   6029  CD1 LEU B 284      80.857  20.150  -2.066  1.00 68.71           C
ATOM   6030  CD2 LEU B 284      81.242  17.674  -2.134  1.00 70.79           C
ATOM   6031  C   LEU B 284      78.471  17.365  -5.456  1.00 73.33           C
ATOM   6032  O   LEU B 284      77.893  18.242  -6.106  1.00 73.39           O
ATOM   6033  N   ALA B 285      77.956  16.154  -5.228  1.00 73.00           N
ATOM   6034  CA  ALA B 285      76.585  15.788  -5.600  1.00 72.79           C
ATOM   6035  CB  ALA B 285      76.520  14.353  -6.103  1.00 72.15           C
ATOM   6036  C   ALA B 285      75.664  15.970  -4.408  1.00 72.96           C
ATOM   6037  O   ALA B 285      74.473  16.210  -4.579  1.00 73.23           O
ATOM   6038  N   VAL B 286      76.216  15.846  -3.201  1.00 73.20           N
ATOM   6039  CA  VAL B 286      75.446  16.042  -1.969  1.00 73.45           C
ATOM   6040  CB  VAL B 286      74.684  14.767  -1.548  1.00 73.49           C
ATOM   6041  CG1 VAL B 286      75.662  13.662  -1.121  1.00 73.14           C
ATOM   6042  CG2 VAL B 286      73.698  15.077  -0.429  1.00 73.13           C
ATOM   6043  C   VAL B 286      76.302  16.501  -0.795  1.00 73.87           C
ATOM   6044  O   VAL B 286      77.473  16.140  -0.668  1.00 74.09           O
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ATOM	6045	N	VAL	B	287	75.695	17.310	0.056	1.00	74.42	N
ATOM	6046	CA	VAL	B	287	76.256	17.667	1.343	1.00	74.86	C
ATOM	6047	CB	VAL	B	287	76.391	19.197	1.508	1.00	74.59	C
ATOM	6048	CG1	VAL	B	287	76.989	19.536	2.850	1.00	74.96	C
ATOM	6049	CG2	VAL	B	287	77.252	19.784	0.396	1.00	73.38	C
ATOM	6050	C	VAL	B	287	75.224	17.096	2.282	1.00	75.61	C
ATOM	6051	O	VAL	B	287	74.064	17.507	2.275	1.00	76.19	O
ATOM	6052	N	GLU	B	288	75.612	16.106	3.062	1.00	76.35	N
ATOM	6053	CA	GLU	B	288	74.612	15.368	3.815	1.00	77.29	C
ATOM	6054	CB	GLU	B	288	75.149	14.012	4.230	1.00	77.46	C
ATOM	6055	CG	GLU	B	288	75.547	13.196	3.055	1.00	82.23	C
ATOM	6056	CD	GLU	B	288	75.084	11.769	3.191	1.00	90.42	C
ATOM	6057	OE1	GLU	B	288	75.547	11.081	4.148	1.00	94.42	O
ATOM	6058	OE2	GLU	B	288	74.249	11.342	2.349	1.00	91.79	O
ATOM	6059	C	GLU	B	288	74.133	16.160	5.016	1.00	76.65	C
ATOM	6060	O	GLU	B	288	74.906	16.904	5.601	1.00	76.64	O
ATOM	6061	N	PRO	B	289	72.847	16.011	5.380	1.00	76.44	N
ATOM	6062	CA	PRO	B	289	72.376	16.655	6.602	1.00	75.98	C
ATOM	6063	CB	PRO	B	289	70.982	16.053	6.807	1.00	76.10	C
ATOM	6064	CG	PRO	B	289	70.879	14.904	5.830	1.00	76.14	C
ATOM	6065	CD	PRO	B	289	71.769	15.264	4.707	1.00	76.39	C
ATOM	6066	C	PRO	B	289	73.295	16.322	7.776	1.00	75.52	C
ATOM	6067	O	PRO	B	289	73.747	15.176	7.909	1.00	75.58	O
ATOM	6068	N	TYR	B	290	73.576	17.334	8.592	1.00	74.64	N
ATOM	6069	CA	TYR	B	290	74.491	17.243	9.727	1.00	74.20	C
ATOM	6070	CB	TYR	B	290	74.150	16.057	10.630	1.00	73.96	C
ATOM	6071	CG	TYR	B	290	73.158	16.357	11.737	1.00	74.12	C
ATOM	6072	CD1	TYR	B	290	72.134	17.299	11.569	1.00	73.14	C
ATOM	6073	CE1	TYR	B	290	71.221	17.563	12.605	1.00	73.62	C
ATOM	6074	CZ	TYR	B	290	71.314	16.857	13.808	1.00	73.80	C
ATOM	6075	OH	TYR	B	290	70.427	17.093	14.833	1.00	73.51	O
ATOM	6076	CE2	TYR	B	290	72.307	15.912	13.989	1.00	73.25	C
ATOM	6077	CD2	TYR	B	290	73.225	15.667	12.958	1.00	73.87	C
ATOM	6078	C	TYR	B	290	75.972	17.237	9.328	1.00	74.21	C
ATOM	6079	O	TYR	B	290	76.854	17.107	10.180	1.00	74.09	O
ATOM	6080	N	ALA	B	291	76.248	17.423	8.040	1.00	74.25	N
ATOM	6081	CA	ALA	B	291	77.628	17.550	7.570	1.00	74.18	C
ATOM	6082	CB	ALA	B	291	77.668	17.996	6.132	1.00	73.72	C
ATOM	6083	C	ALA	B	291	78.425	18.509	8.450	1.00	74.39	C
ATOM	6084	O	ALA	B	291	79.576	18.241	8.769	1.00	74.75	O
ATOM	6085	N	PHE	B	292	77.809	19.613	8.859	1.00	74.68	N
ATOM	6086	CA	PHE	B	292	78.511	20.609	9.651	1.00	74.72	C
ATOM	6087	CB	PHE	B	292	78.460	21.964	8.962	1.00	75.01	C
ATOM	6088	CG	PHE	B	292	78.904	21.936	7.523	1.00	76.16	C
ATOM	6089	CD1	PHE	B	292	79.988	21.165	7.122	1.00	76.95	C
ATOM	6090	CE1	PHE	B	292	80.389	21.137	5.791	1.00	78.06	C
ATOM	6091	CZ	PHE	B	292	79.727	21.915	4.843	1.00	77.14	C
ATOM	6092	CE2	PHE	B	292	78.664	22.711	5.232	1.00	77.95	C
ATOM	6093	CD2	PHE	B	292	78.252	22.715	6.568	1.00	77.51	C
ATOM	6094	C	PHE	B	292	78.017	20.707	11.095	1.00	74.89	C
ATOM	6095	O	PHE	B	292	78.224	21.723	11.761	1.00	74.98	O
ATOM	6096	N	ARG	B	293	77.388	19.644	11.586	1.00	75.05	N
ATOM	6097	CA	ARG	B	293	77.008	19.574	12.987	1.00	75.52	C
ATOM	6098	CB	ARG	B	293	76.369	18.220	13.299	1.00	75.69	C
ATOM	6099	CG	ARG	B	293	75.618	18.156	14.628	1.00	75.30	C
ATOM	6100	CD	ARG	B	293	74.264	18.853	14.578	1.00	74.64	C

ATOM	6101	NE	ARG	B	293	73.699	19.017	15.918	1.00	76.04	N
ATOM	6102	CZ	ARG	B	293	72.488	19.502	16.179	1.00	76.40	C
ATOM	6103	NH1	ARG	B	293	71.689	19.865	15.185	1.00	77.83	N
ATOM	6104	NH2	ARG	B	293	72.069	19.614	17.433	1.00	75.59	N
ATOM	6105	C	ARG	B	293	78.272	19.762	13.808	1.00	75.99	C
ATOM	6106	O	ARG	B	293	79.338	19.310	13.398	1.00	76.16	O
ATOM	6107	N	GLY	B	294	78.159	20.431	14.953	1.00	76.57	N
ATOM	6108	CA	GLY	B	294	79.324	20.772	15.774	1.00	77.13	C
ATOM	6109	C	GLY	B	294	79.961	22.107	15.399	1.00	77.75	C
ATOM	6110	O	GLY	B	294	80.590	22.761	16.241	1.00	77.99	O
ATOM	6111	N	LEU	B	295	79.795	22.524	14.143	1.00	78.02	N
ATOM	6112	CA	LEU	B	295	80.430	23.748	13.645	1.00	78.37	C
ATOM	6113	CB	LEU	B	295	80.688	23.642	12.151	1.00	77.99	C
ATOM	6114	CG	LEU	B	295	82.013	23.033	11.730	1.00	77.83	C
ATOM	6115	CD1	LEU	B	295	82.013	21.538	11.874	1.00	77.08	C
ATOM	6116	CD2	LEU	B	295	82.261	23.418	10.291	1.00	77.94	C
ATOM	6117	C	LEU	B	295	79.607	25.000	13.944	1.00	78.80	C
ATOM	6118	O	LEU	B	295	79.071	25.641	13.037	1.00	78.97	O
ATOM	6119	N	ASN	B	296	79.525	25.349	15.222	1.00	79.05	N
ATOM	6120	CA	ASN	B	296	78.700	26.460	15.667	1.00	79.47	C
ATOM	6121	CB	ASN	B	296	78.801	26.613	17.189	1.00	79.73	C
ATOM	6122	CG	ASN	B	296	77.587	27.310	17.796	1.00	81.43	C
ATOM	6123	OD1	ASN	B	296	76.581	27.554	17.124	1.00	83.34	O
ATOM	6124	ND2	ASN	B	296	77.673	27.620	19.081	1.00	83.74	N
ATOM	6125	C	ASN	B	296	78.982	27.806	14.987	1.00	79.39	C
ATOM	6126	O	ASN	B	296	78.073	28.624	14.857	1.00	79.82	O
ATOM	6127	N	TYR	B	297	80.221	28.040	14.553	1.00	79.09	N
ATOM	6128	CA	TYR	B	297	80.615	29.385	14.119	1.00	78.89	C
ATOM	6129	CB	TYR	B	297	81.833	29.882	14.913	1.00	79.77	C
ATOM	6130	CG	TYR	B	297	81.580	29.847	16.399	1.00	81.38	C
ATOM	6131	CD1	TYR	B	297	80.788	30.824	17.011	1.00	82.02	C
ATOM	6132	CE1	TYR	B	297	80.521	30.784	18.370	1.00	82.87	C
ATOM	6133	CZ	TYR	B	297	81.042	29.752	19.141	1.00	82.80	C
ATOM	6134	OH	TYR	B	297	80.774	29.719	20.497	1.00	83.10	O
ATOM	6135	CE2	TYR	B	297	81.826	28.758	18.559	1.00	83.22	C
ATOM	6136	CD2	TYR	B	297	82.085	28.806	17.191	1.00	82.83	C
ATOM	6137	C	TYR	B	297	80.833	29.540	12.620	1.00	77.92	C
ATOM	6138	O	TYR	B	297	81.348	30.560	12.174	1.00	77.75	O
ATOM	6139	N	LEU	B	298	80.425	28.532	11.855	1.00	76.67	N
ATOM	6140	CA	LEU	B	298	80.583	28.551	10.410	1.00	75.41	C
ATOM	6141	CB	LEU	B	298	79.998	27.279	9.799	1.00	74.73	C
ATOM	6142	CG	LEU	B	298	80.173	27.003	8.306	1.00	74.77	C
ATOM	6143	CD1	LEU	B	298	81.621	27.145	7.863	1.00	74.14	C
ATOM	6144	CD2	LEU	B	298	79.665	25.598	7.984	1.00	74.84	C
ATOM	6145	C	LEU	B	298	79.918	29.796	9.842	1.00	74.78	C
ATOM	6146	O	LEU	B	298	78.719	29.954	9.954	1.00	75.22	O
ATOM	6147	N	ARG	B	299	80.692	30.701	9.266	1.00	73.98	N
ATOM	6148	CA	ARG	B	299	80.088	31.910	8.713	1.00	73.75	C
ATOM	6149	CB	ARG	B	299	80.876	33.174	9.064	1.00	73.09	C
ATOM	6150	CG	ARG	B	299	80.936	33.510	10.537	1.00	74.22	C
ATOM	6151	CD	ARG	B	299	81.829	34.731	10.824	1.00	75.64	C
ATOM	6152	NE	ARG	B	299	83.181	34.595	10.269	1.00	80.72	N
ATOM	6153	CZ	ARG	B	299	83.604	35.174	9.139	1.00	81.66	C
ATOM	6154	NH1	ARG	B	299	82.786	35.953	8.422	1.00	81.04	N
ATOM	6155	NH2	ARG	B	299	84.849	34.967	8.720	1.00	81.11	N
ATOM	6156	C	ARG	B	299	79.957	31.816	7.210	1.00	72.83	C

ATOM	6157	O	ARG	B	299	79.046	32.417	6.639	1.00	73.37	O
ATOM	6158	N	VAL	B	300	80.864	31.076	6.572	1.00	71.43	N
ATOM	6159	CA	VAL	B	300	81.000	31.132	5.125	1.00	70.28	C
ATOM	6160	CB	VAL	B	300	82.260	31.937	4.713	1.00	70.15	C
ATOM	6161	CG1	VAL	B	300	82.414	31.976	3.193	1.00	69.07	C
ATOM	6162	CG2	VAL	B	300	82.214	33.350	5.285	1.00	70.19	C
ATOM	6163	C	VAL	B	300	81.085	29.754	4.501	1.00	69.87	C
ATOM	6164	O	VAL	B	300	81.980	28.993	4.799	1.00	69.69	O
ATOM	6165	N	LEU	B	301	80.159	29.435	3.615	1.00	69.46	N
ATOM	6166	CA	LEU	B	301	80.296	28.217	2.837	1.00	69.35	C
ATOM	6167	CB	LEU	B	301	79.213	27.209	3.195	1.00	68.98	C
ATOM	6168	CG	LEU	B	301	79.185	26.008	2.259	1.00	70.36	C
ATOM	6169	CD1	LEU	B	301	80.432	25.194	2.434	1.00	71.16	C
ATOM	6170	CD2	LEU	B	301	77.955	25.145	2.492	1.00	71.63	C
ATOM	6171	C	LEU	B	301	80.247	28.531	1.352	1.00	69.11	C
ATOM	6172	O	LEU	B	301	79.259	29.087	0.858	1.00	69.66	O
ATOM	6173	N	ASN	B	302	81.302	28.175	0.634	1.00	68.34	N
ATOM	6174	CA	ASN	B	302	81.311	28.397	-0.793	1.00	68.22	C
ATOM	6175	CB	ASN	B	302	82.393	29.401	-1.145	1.00	67.71	C
ATOM	6176	CG	ASN	B	302	82.480	29.685	-2.620	1.00	66.75	C
ATOM	6177	OD1	ASN	B	302	81.655	29.227	-3.420	1.00	66.98	O
ATOM	6178	ND2	ASN	B	302	83.502	30.448	-2.994	1.00	65.09	N
ATOM	6179	C	ASN	B	302	81.488	27.099	-1.554	1.00	68.78	C
ATOM	6180	O	ASN	B	302	82.580	26.560	-1.597	1.00	69.28	O
ATOM	6181	N	VAL	B	303	80.399	26.608	-2.140	1.00	69.20	N
ATOM	6182	CA	VAL	B	303	80.408	25.398	-2.954	1.00	69.76	C
ATOM	6183	CB	VAL	B	303	79.490	24.301	-2.382	1.00	70.00	C
ATOM	6184	CG1	VAL	B	303	80.165	23.616	-1.222	1.00	69.59	C
ATOM	6185	CG2	VAL	B	303	78.150	24.882	-1.967	1.00	69.13	C
ATOM	6186	C	VAL	B	303	80.013	25.709	-4.387	1.00	70.27	C
ATOM	6187	O	VAL	B	303	79.438	24.881	-5.101	1.00	70.48	O
ATOM	6188	N	SER	B	304	80.339	26.924	-4.799	1.00	70.95	N
ATOM	6189	CA	SER	B	304	80.124	27.371	-6.155	1.00	71.30	C
ATOM	6190	CB	SER	B	304	80.798	28.717	-6.331	1.00	71.11	C
ATOM	6191	OG	SER	B	304	80.847	29.077	-7.694	1.00	72.43	O
ATOM	6192	C	SER	B	304	80.737	26.381	-7.124	1.00	71.64	C
ATOM	6193	O	SER	B	304	81.833	25.894	-6.900	1.00	72.09	O
ATOM	6194	N	GLY	B	305	80.025	26.072	-8.195	1.00	72.08	N
ATOM	6195	CA	GLY	B	305	80.588	25.278	-9.275	1.00	72.53	C
ATOM	6196	C	GLY	B	305	80.745	23.791	-9.051	1.00	72.98	C
ATOM	6197	O	GLY	B	305	81.681	23.195	-9.553	1.00	73.16	O
ATOM	6198	N	ASN	B	306	79.834	23.181	-8.302	1.00	73.75	N
ATOM	6199	CA	ASN	B	306	79.803	21.720	-8.179	1.00	74.05	C
ATOM	6200	CB	ASN	B	306	79.767	21.297	-6.708	1.00	73.84	C
ATOM	6201	CG	ASN	B	306	81.093	21.529	-6.001	1.00	74.00	C
ATOM	6202	OD1	ASN	B	306	81.945	20.632	-5.949	1.00	72.67	O
ATOM	6203	ND2	ASN	B	306	81.278	22.738	-5.458	1.00	72.26	N
ATOM	6204	C	ASN	B	306	78.611	21.153	-8.945	1.00	74.52	C
ATOM	6205	O	ASN	B	306	78.207	21.719	-9.970	1.00	74.59	O
ATOM	6206	N	GLN	B	307	78.044	20.052	-8.453	1.00	74.94	N
ATOM	6207	CA	GLN	B	307	76.867	19.464	-9.086	1.00	75.58	C
ATOM	6208	CB	GLN	B	307	77.262	18.248	-9.935	1.00	75.33	C
ATOM	6209	CG	GLN	B	307	77.826	17.083	-9.148	1.00	76.41	C
ATOM	6210	CD	GLN	B	307	78.126	15.861	-10.010	1.00	76.82	C
ATOM	6211	OE1	GLN	B	307	79.288	15.475	-10.170	1.00	79.64	O
ATOM	6212	NE2	GLN	B	307	77.084	15.247	-10.564	1.00	77.07	N

ATOM	6213	C	GLN	B	307	75.722	19.162	-8.092	1.00	75.50	C
ATOM	6214	O	GLN	B	307	75.065	18.122	-8.172	1.00	75.76	O
ATOM	6215	N	LEU	B	308	75.477	20.088	-7.168	1.00	75.42	N
ATOM	6216	CA	LEU	B	308	74.433	19.909	-6.162	1.00	75.50	C
ATOM	6217	CB	LEU	B	308	74.672	20.795	-4.940	1.00	75.04	C
ATOM	6218	CG	LEU	B	308	76.020	20.731	-4.241	1.00	74.16	C
ATOM	6219	CD1	LEU	B	308	76.212	21.982	-3.396	1.00	71.65	C
ATOM	6220	CD2	LEU	B	308	76.140	19.455	-3.426	1.00	72.13	C
ATOM	6221	C	LEU	B	308	73.064	20.236	-6.713	1.00	76.10	C
ATOM	6222	O	LEU	B	308	72.900	21.198	-7.470	1.00	76.27	O
ATOM	6223	N	THR	B	309	72.073	19.453	-6.296	1.00	76.77	N
ATOM	6224	CA	THR	B	309	70.693	19.717	-6.665	1.00	77.27	C
ATOM	6225	CB	THR	B	309	69.965	18.439	-7.098	1.00	77.53	C
ATOM	6226	OG1	THR	B	309	69.642	17.663	-5.936	1.00	79.35	O
ATOM	6227	CG2	THR	B	309	70.818	17.610	-8.062	1.00	77.25	C
ATOM	6228	C	THR	B	309	69.928	20.356	-5.511	1.00	77.21	C
ATOM	6229	O	THR	B	309	68.874	20.945	-5.719	1.00	77.36	O
ATOM	6230	N	THR	B	310	70.461	20.240	-4.300	1.00	77.41	N
ATOM	6231	CA	THR	B	310	69.820	20.805	-3.117	1.00	77.78	C
ATOM	6232	CB	THR	B	310	68.708	19.869	-2.582	1.00	78.14	C
ATOM	6233	OG1	THR	B	310	68.091	20.466	-1.433	1.00	80.04	O
ATOM	6234	CG2	THR	B	310	69.268	18.497	-2.197	1.00	78.42	C
ATOM	6235	C	THR	B	310	70.800	21.089	-1.986	1.00	77.50	C
ATOM	6236	O	THR	B	310	71.934	20.625	-2.001	1.00	77.89	O
ATOM	6237	N	LEU	B	311	70.354	21.857	-1.001	1.00	77.44	N
ATOM	6238	CA	LEU	B	311	71.110	22.032	0.237	1.00	77.16	C
ATOM	6239	CB	LEU	B	311	71.971	23.305	0.198	1.00	76.67	C
ATOM	6240	CG	LEU	B	311	73.035	23.418	1.289	1.00	75.78	C
ATOM	6241	CD1	LEU	B	311	74.215	22.566	0.963	1.00	74.99	C
ATOM	6242	CD2	LEU	B	311	73.489	24.843	1.451	1.00	76.52	C
ATOM	6243	C	LEU	B	311	70.149	22.053	1.419	1.00	77.29	C
ATOM	6244	O	LEU	B	311	69.544	23.077	1.737	1.00	76.84	O
ATOM	6245	N	GLU	B	312	70.008	20.908	2.071	1.00	77.55	N
ATOM	6246	CA	GLU	B	312	69.102	20.836	3.209	1.00	78.10	C
ATOM	6247	CB	GLU	B	312	68.767	19.380	3.547	1.00	78.24	C
ATOM	6248	CG	GLU	B	312	67.998	18.754	2.381	1.00	81.73	C
ATOM	6249	CD	GLU	B	312	67.180	17.511	2.720	1.00	86.93	C
ATOM	6250	OE1	GLU	B	312	67.765	16.519	3.232	1.00	89.52	O
ATOM	6251	OE2	GLU	B	312	65.951	17.512	2.423	1.00	88.26	O
ATOM	6252	C	GLU	B	312	69.602	21.665	4.395	1.00	77.55	C
ATOM	6253	O	GLU	B	312	70.807	21.787	4.613	1.00	77.69	O
ATOM	6254	N	GLU	B	313	68.665	22.269	5.124	1.00	77.04	N
ATOM	6255	CA	GLU	B	313	68.992	23.236	6.170	1.00	76.35	C
ATOM	6256	CB	GLU	B	313	67.728	23.952	6.648	1.00	76.12	C
ATOM	6257	CG	GLU	B	313	67.977	25.155	7.537	1.00	74.97	C
ATOM	6258	CD	GLU	B	313	66.701	25.873	7.951	1.00	75.91	C
ATOM	6259	OE1	GLU	B	313	65.598	25.284	7.827	1.00	75.20	O
ATOM	6260	OE2	GLU	B	313	66.797	27.042	8.402	1.00	75.29	O
ATOM	6261	C	GLU	B	313	69.715	22.581	7.340	1.00	76.50	C
ATOM	6262	O	GLU	B	313	70.526	23.213	8.016	1.00	76.63	O
ATOM	6263	N	SER	B	314	69.433	21.303	7.564	1.00	76.41	N
ATOM	6264	CA	SER	B	314	70.032	20.574	8.667	1.00	76.15	C
ATOM	6265	CB	SER	B	314	69.287	19.282	8.903	1.00	76.18	C
ATOM	6266	OG	SER	B	314	69.181	18.560	7.689	1.00	77.64	O
ATOM	6267	C	SER	B	314	71.503	20.267	8.451	1.00	76.07	C
ATOM	6268	O	SER	B	314	72.160	19.772	9.368	1.00	76.37	O

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ATOM   6269  N   VAL B 315      72.043  20.560   7.268  1.00 75.94           N
ATOM   6270  CA  VAL B 315      73.486  20.401   7.098  1.00 75.73           C
ATOM   6271  CB  VAL B 315      74.031  20.588   5.632  1.00 75.81           C
ATOM   6272  CG1 VAL B 315      73.191  19.810   4.619  1.00 75.23           C
ATOM   6273  CG2 VAL B 315      74.170  22.048   5.249  1.00 74.84           C
ATOM   6274  C   VAL B 315      74.204  21.311   8.083  1.00 75.72           C
ATOM   6275  O   VAL B 315      75.232  20.926   8.637  1.00 76.13           O
ATOM   6276  N   PHE B 316      73.638  22.488   8.333  1.00 75.17           N
ATOM   6277  CA  PHE B 316      74.270  23.453   9.217  1.00 75.29           C
ATOM   6278  CB  PHE B 316      73.919  24.876   8.787  1.00 74.94           C
ATOM   6279  CG  PHE B 316      74.318  25.161   7.386  1.00 74.93           C
ATOM   6280  CD1 PHE B 316      75.626  25.496   7.083  1.00 75.25           C
ATOM   6281  CE1 PHE B 316      76.013  25.723   5.775  1.00 75.20           C
ATOM   6282  CZ  PHE B 316      75.083  25.597   4.748  1.00 75.13           C
ATOM   6283  CE2 PHE B 316      73.782  25.254   5.035  1.00 74.32           C
ATOM   6284  CD2 PHE B 316      73.404  25.028   6.350  1.00 75.25           C
ATOM   6285  C   PHE B 316      73.919  23.230  10.667  1.00 75.69           C
ATOM   6286  O   PHE B 316      72.817  22.795  10.980  1.00 76.41           O
ATOM   6287  N   HIS B 317      74.868  23.512  11.551  1.00 75.97           N
ATOM   6288  CA  HIS B 317      74.604  23.492  12.981  1.00 76.03           C
ATOM   6289  CB  HIS B 317      75.902  23.291  13.755  1.00 76.02           C
ATOM   6290  CG  HIS B 317      75.698  23.122  15.226  1.00 76.25           C
ATOM   6291  ND1 HIS B 317      75.647  21.885  15.832  1.00 76.19           N
ATOM   6292  CE1 HIS B 317      75.450  22.043  17.127  1.00 75.92           C
ATOM   6293  NE2 HIS B 317      75.360  23.338  17.382  1.00 75.96           N
ATOM   6294  CD2 HIS B 317      75.509  24.035  16.209  1.00 75.72           C
ATOM   6295  C   HIS B 317      73.924  24.788  13.418  1.00 76.06           C
ATOM   6296  O   HIS B 317      73.016  24.766  14.243  1.00 75.45           O
ATOM   6297  N   SER B 318      74.375  25.910  12.853  1.00 76.71           N
ATOM   6298  CA  SER B 318      73.873  27.253  13.219  1.00 77.24           C
ATOM   6299  CB  SER B 318      74.873  27.995  14.112  1.00 77.08           C
ATOM   6300  OG  SER B 318      74.441  27.996  15.461  1.00 78.43           O
ATOM   6301  C   SER B 318      73.536  28.125  12.021  1.00 77.21           C
ATOM   6302  O   SER B 318      74.346  28.943  11.602  1.00 77.31           O
ATOM   6303  N   VAL B 319      72.328  27.960  11.494  1.00 77.45           N
ATOM   6304  CA  VAL B 319      71.856  28.756  10.368  1.00 77.67           C
ATOM   6305  CB  VAL B 319      70.439  28.342   9.951  1.00 77.90           C
ATOM   6306  CG1 VAL B 319      70.106  28.920   8.586  1.00 78.26           C
ATOM   6307  CG2 VAL B 319      70.319  26.814   9.921  1.00 79.02           C
ATOM   6308  C   VAL B 319      71.858  30.246  10.706  1.00 77.51           C
ATOM   6309  O   VAL B 319      72.129  31.079   9.846  1.00 77.89           O
ATOM   6310  N   GLY B 320      71.554  30.576  11.958  1.00 77.07           N
ATOM   6311  CA  GLY B 320      71.595  31.950  12.424  1.00 76.61           C
ATOM   6312  C   GLY B 320      72.972  32.575  12.307  1.00 76.67           C
ATOM   6313  O   GLY B 320      73.087  33.797  12.202  1.00 76.70           O
ATOM   6314  N   ASN B 321      74.018  31.750  12.331  1.00 76.23           N
ATOM   6315  CA  ASN B 321      75.385  32.261  12.255  1.00 76.22           C
ATOM   6316  CB  ASN B 321      76.333  31.445  13.138  1.00 76.39           C
ATOM   6317  CG  ASN B 321      76.253  31.828  14.602  1.00 77.82           C
ATOM   6318  OD1 ASN B 321      75.898  32.961  14.965  1.00 79.11           O
ATOM   6319  ND2 ASN B 321      76.607  30.882  15.459  1.00 78.94           N
ATOM   6320  C   ASN B 321      75.943  32.324  10.840  1.00 75.86           C
ATOM   6321  O   ASN B 321      77.000  32.905  10.619  1.00 75.97           O
ATOM   6322  N   LEU B 322      75.240  31.709   9.894  1.00 75.59           N
ATOM   6323  CA  LEU B 322      75.637  31.729   8.499  1.00 75.31           C
ATOM   6324  CB  LEU B 322      74.755  30.791   7.704  1.00 74.84           C
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ATOM	6325	CG	LEU	B	322	75.175	30.408	6.294	1.00	75.33	C
ATOM	6326	CD1	LEU	B	322	76.548	29.753	6.260	1.00	74.92	C
ATOM	6327	CD2	LEU	B	322	74.133	29.468	5.714	1.00	76.82	C
ATOM	6328	C	LEU	B	322	75.540	33.149	7.951	1.00	75.66	C
ATOM	6329	O	LEU	B	322	74.597	33.886	8.244	1.00	75.81	O
ATOM	6330	N	GLU	B	323	76.531	33.544	7.170	1.00	76.00	N
ATOM	6331	CA	GLU	B	323	76.591	34.916	6.703	1.00	76.56	C
ATOM	6332	CB	GLU	B	323	77.728	35.663	7.383	1.00	76.15	C
ATOM	6333	CG	GLU	B	323	77.417	36.096	8.805	1.00	77.13	C
ATOM	6334	CD	GLU	B	323	78.563	36.899	9.424	1.00	78.68	C
ATOM	6335	OE1	GLU	B	323	79.731	36.420	9.368	1.00	81.95	O
ATOM	6336	OE2	GLU	B	323	78.306	38.014	9.955	1.00	81.00	O
ATOM	6337	C	GLU	B	323	76.733	34.990	5.199	1.00	75.98	C
ATOM	6338	O	GLU	B	323	76.235	35.922	4.578	1.00	76.22	O
ATOM	6339	N	THR	B	324	77.395	33.992	4.629	1.00	75.52	N
ATOM	6340	CA	THR	B	324	77.682	33.951	3.208	1.00	75.20	C
ATOM	6341	CB	THR	B	324	79.102	34.483	2.924	1.00	75.20	C
ATOM	6342	OG1	THR	B	324	79.134	35.887	3.207	1.00	75.83	O
ATOM	6343	CG2	THR	B	324	79.496	34.264	1.472	1.00	74.80	C
ATOM	6344	C	THR	B	324	77.566	32.520	2.731	1.00	74.92	C
ATOM	6345	O	THR	B	324	78.247	31.633	3.238	1.00	75.27	O
ATOM	6346	N	LEU	B	325	76.697	32.294	1.759	1.00	74.51	N
ATOM	6347	CA	LEU	B	325	76.531	30.973	1.179	1.00	73.98	C
ATOM	6348	CB	LEU	B	325	75.242	30.332	1.694	1.00	73.92	C
ATOM	6349	CG	LEU	B	325	74.691	29.043	1.084	1.00	74.28	C
ATOM	6350	CD1	LEU	B	325	75.703	27.902	1.134	1.00	75.44	C
ATOM	6351	CD2	LEU	B	325	73.393	28.633	1.777	1.00	73.70	C
ATOM	6352	C	LEU	B	325	76.498	31.147	-0.324	1.00	73.82	C
ATOM	6353	O	LEU	B	325	75.627	31.810	-0.858	1.00	74.26	O
ATOM	6354	N	ILE	B	326	77.476	30.587	-1.006	1.00	73.77	N
ATOM	6355	CA	ILE	B	326	77.531	30.689	-2.450	1.00	73.66	C
ATOM	6356	CB	ILE	B	326	78.910	31.183	-2.928	1.00	73.45	C
ATOM	6357	CG1	ILE	B	326	79.351	32.436	-2.145	1.00	73.33	C
ATOM	6358	CD1	ILE	B	326	78.389	33.642	-2.200	1.00	72.88	C
ATOM	6359	CG2	ILE	B	326	78.933	31.364	-4.445	1.00	72.41	C
ATOM	6360	C	ILE	B	326	77.192	29.325	-3.060	1.00	74.38	C
ATOM	6361	O	ILE	B	326	77.833	28.311	-2.777	1.00	74.04	O
ATOM	6362	N	LEU	B	327	76.167	29.318	-3.900	1.00	75.24	N
ATOM	6363	CA	LEU	B	327	75.663	28.090	-4.476	1.00	75.68	C
ATOM	6364	CB	LEU	B	327	74.284	27.785	-3.912	1.00	75.75	C
ATOM	6365	CG	LEU	B	327	74.158	27.332	-2.469	1.00	75.77	C
ATOM	6366	CD1	LEU	B	327	72.714	27.502	-2.056	1.00	74.77	C
ATOM	6367	CD2	LEU	B	327	74.583	25.872	-2.387	1.00	77.23	C
ATOM	6368	C	LEU	B	327	75.540	28.195	-5.974	1.00	76.11	C
ATOM	6369	O	LEU	B	327	74.936	27.322	-6.591	1.00	76.66	O
ATOM	6370	N	ASP	B	328	76.091	29.252	-6.569	1.00	76.34	N
ATOM	6371	CA	ASP	B	328	75.955	29.422	-8.006	1.00	76.78	C
ATOM	6372	CB	ASP	B	328	76.358	30.824	-8.457	1.00	77.36	C
ATOM	6373	CG	ASP	B	328	77.847	30.998	-8.566	1.00	79.92	C
ATOM	6374	OD1	ASP	B	328	78.570	30.427	-7.717	1.00	82.52	O
ATOM	6375	OD2	ASP	B	328	78.292	31.725	-9.495	1.00	82.26	O
ATOM	6376	C	ASP	B	328	76.714	28.337	-8.763	1.00	76.31	C
ATOM	6377	O	ASP	B	328	77.609	27.703	-8.218	1.00	76.55	O
ATOM	6378	N	SER	B	329	76.319	28.129	-10.013	1.00	75.85	N
ATOM	6379	CA	SER	B	329	76.829	27.062	-10.864	1.00	75.49	C
ATOM	6380	CB	SER	B	329	78.306	27.261	-11.162	1.00	75.46	C

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ATOM   6381  OG  SER B 329      78.528  28.624 -11.439  1.00 76.81           O
ATOM   6382  C   SER B 329      76.565  25.674 -10.321  1.00 75.10           C
ATOM   6383  O   SER B 329      77.440  24.818 -10.356  1.00 75.42           O
ATOM   6384  N   ASN B 330      75.350  25.451  -9.835  1.00 74.69           N
ATOM   6385  CA  ASN B 330      74.909  24.116  -9.467  1.00 74.31           C
ATOM   6386  CB  ASN B 330      74.827  23.974  -7.948  1.00 74.21           C
ATOM   6387  CG  ASN B 330      76.189  23.960  -7.279  1.00 73.88           C
ATOM   6388  OD1 ASN B 330      76.849  22.930  -7.219  1.00 73.16           O
ATOM   6389  ND2 ASN B 330      76.600  25.102  -6.747  1.00 73.16           N
ATOM   6390  C   ASN B 330      73.542  23.867 -10.073  1.00 74.33           C
ATOM   6391  O   ASN B 330      72.726  24.787 -10.129  1.00 74.39           O
ATOM   6392  N   PRO B 331      73.280  22.625 -10.531  1.00 74.30           N
ATOM   6393  CA  PRO B 331      71.956  22.254 -11.059  1.00 74.11           C
ATOM   6394  CB  PRO B 331      72.218  20.893 -11.722  1.00 74.05           C
ATOM   6395  CG  PRO B 331      73.372  20.325 -10.951  1.00 73.95           C
ATOM   6396  CD  PRO B 331      74.234  21.499 -10.598  1.00 74.06           C
ATOM   6397  C   PRO B 331      70.874  22.139  -9.961  1.00 74.15           C
ATOM   6398  O   PRO B 331      70.328  21.041  -9.709  1.00 73.95           O
ATOM   6399  N   LEU B 332      70.557  23.270  -9.333  1.00 73.92           N
ATOM   6400  CA  LEU B 332      69.640  23.284  -8.197  1.00 74.12           C
ATOM   6401  CB  LEU B 332      69.709  24.620  -7.472  1.00 73.76           C
ATOM   6402  CG  LEU B 332      71.026  25.059  -6.839  1.00 73.25           C
ATOM   6403  CD1 LEU B 332      70.897  26.491  -6.328  1.00 71.91           C
ATOM   6404  CD2 LEU B 332      71.438  24.114  -5.726  1.00 72.42           C
ATOM   6405  C   LEU B 332      68.187  22.973  -8.558  1.00 74.67           C
ATOM   6406  O   LEU B 332      67.642  23.504  -9.537  1.00 74.53           O
ATOM   6407  N   ALA B 333      67.578  22.096  -7.758  1.00 75.31           N
ATOM   6408  CA  ALA B 333      66.152  21.787  -7.846  1.00 75.93           C
ATOM   6409  CB  ALA B 333      65.885  20.375  -7.376  1.00 75.58           C
ATOM   6410  C   ALA B 333      65.426  22.779  -6.961  1.00 76.58           C
ATOM   6411  O   ALA B 333      65.531  22.723  -5.740  1.00 76.94           O
ATOM   6412  N   CYS B 334      64.708  23.708  -7.567  1.00 77.40           N
ATOM   6413  CA  CYS B 334      64.068  24.749  -6.787  1.00 78.32           C
ATOM   6414  CB  CYS B 334      64.039  26.069  -7.560  1.00 78.29           C
ATOM   6415  SG  CYS B 334      65.700  26.813  -7.687  1.00 80.27           S
ATOM   6416  C   CYS B 334      62.692  24.317  -6.286  1.00 78.65           C
ATOM   6417  O   CYS B 334      61.655  24.848  -6.703  1.00 79.04           O
ATOM   6418  N   ASP B 335      62.702  23.323  -5.403  1.00 78.71           N
ATOM   6419  CA  ASP B 335      61.516  22.944  -4.659  1.00 79.11           C
ATOM   6420  CB  ASP B 335      61.292  21.429  -4.709  1.00 79.28           C
ATOM   6421  CG  ASP B 335      62.493  20.640  -4.248  1.00 80.03           C
ATOM   6422  OD1 ASP B 335      63.132  21.033  -3.240  1.00 80.95           O
ATOM   6423  OD2 ASP B 335      62.784  19.606  -4.894  1.00 81.21           O
ATOM   6424  C   ASP B 335      61.613  23.459  -3.223  1.00 79.13           C
ATOM   6425  O   ASP B 335      62.467  24.290  -2.916  1.00 79.09           O
ATOM   6426  N   CYS B 336      60.750  22.954  -2.348  1.00 79.18           N
ATOM   6427  CA  CYS B 336      60.605  23.498  -0.997  1.00 79.42           C
ATOM   6428  CB  CYS B 336      59.315  22.989  -0.340  1.00 79.83           C
ATOM   6429  SG  CYS B 336      59.244  21.211   0.055  1.00 83.51           S
ATOM   6430  C   CYS B 336      61.823  23.288  -0.097  1.00 78.73           C
ATOM   6431  O   CYS B 336      61.997  23.999   0.895  1.00 78.78           O
ATOM   6432  N   ARG B 337      62.687  22.344  -0.464  1.00 77.92           N
ATOM   6433  CA  ARG B 337      63.918  22.102   0.295  1.00 76.80           C
ATOM   6434  CB  ARG B 337      64.615  20.840  -0.206  1.00 76.59           C
ATOM   6435  CG  ARG B 337      63.917  19.549   0.210  1.00 76.72           C
ATOM   6436  CD  ARG B 337      64.497  18.350  -0.491  1.00 76.95           C
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ATOM   6437  NE  ARG B 337      64.540  18.599  -1.928  1.00 78.63           N
ATOM   6438  CZ  ARG B 337      65.102  17.796  -2.822  1.00 78.65           C
ATOM   6439  NH1 ARG B 337      65.672  16.659  -2.438  1.00 78.58           N
ATOM   6440  NH2 ARG B 337      65.083  18.137  -4.103  1.00 77.61           N
ATOM   6441  C   ARG B 337      64.884  23.294   0.293  1.00 76.33           C
ATOM   6442  O   ARG B 337      65.728  23.422   1.188  1.00 76.16           O
ATOM   6443  N   LEU B 338      64.744  24.161  -0.708  1.00 75.53           N
ATOM   6444  CA  LEU B 338      65.597  25.328  -0.865  1.00 74.85           C
ATOM   6445  CB  LEU B 338      65.987  25.478  -2.327  1.00 75.22           C
ATOM   6446  CG  LEU B 338      67.431  25.189  -2.726  1.00 76.64           C
ATOM   6447  CD1 LEU B 338      68.026  23.990  -1.989  1.00 77.74           C
ATOM   6448  CD2 LEU B 338      67.464  24.984  -4.234  1.00 78.10           C
ATOM   6449  C   LEU B 338      64.916  26.600  -0.399  1.00 74.11           C
ATOM   6450  O   LEU B 338      65.512  27.673  -0.408  1.00 73.87           O
ATOM   6451  N   LEU B 339      63.662  26.465   0.009  1.00 73.41           N
ATOM   6452  CA  LEU B 339      62.857  27.592   0.446  1.00 72.61           C
ATOM   6453  CB  LEU B 339      61.456  27.106   0.796  1.00 72.53           C
ATOM   6454  CG  LEU B 339      60.376  28.124   1.136  1.00 72.57           C
ATOM   6455  CD1 LEU B 339      60.337  29.272   0.126  1.00 72.51           C
ATOM   6456  CD2 LEU B 339      59.032  27.419   1.240  1.00 72.08           C
ATOM   6457  C   LEU B 339      63.489  28.335   1.623  1.00 72.54           C
ATOM   6458  O   LEU B 339      63.333  29.557   1.757  1.00 72.50           O
ATOM   6459  N   TRP B 340      64.223  27.606   2.462  1.00 72.02           N
ATOM   6460  CA  TRP B 340      64.879  28.231   3.595  1.00 71.54           C
ATOM   6461  CB  TRP B 340      65.424  27.178   4.551  1.00 71.01           C
ATOM   6462  CG  TRP B 340      66.638  26.464   4.081  1.00 70.55           C
ATOM   6463  CD1 TRP B 340      66.685  25.321   3.345  1.00 70.28           C
ATOM   6464  NE1 TRP B 340      67.986  24.956   3.118  1.00 69.88           N
ATOM   6465  CE2 TRP B 340      68.811  25.866   3.720  1.00 70.11           C
ATOM   6466  CD2 TRP B 340      67.993  26.827   4.346  1.00 69.79           C
ATOM   6467  CE3 TRP B 340      68.598  27.880   5.044  1.00 68.92           C
ATOM   6468  CZ3 TRP B 340      69.984  27.938   5.094  1.00 69.49           C
ATOM   6469  CH2 TRP B 340      70.777  26.965   4.467  1.00 69.78           C
ATOM   6470  CZ2 TRP B 340      70.212  25.918   3.778  1.00 70.76           C
ATOM   6471  C   TRP B 340      65.958  29.214   3.140  1.00 71.76           C
ATOM   6472  O   TRP B 340      66.128  30.273   3.747  1.00 71.71           O
ATOM   6473  N   VAL B 341      66.665  28.868   2.061  1.00 71.94           N
ATOM   6474  CA  VAL B 341      67.665  29.754   1.471  1.00 71.95           C
ATOM   6475  CB  VAL B 341      68.493  29.053   0.378  1.00 72.12           C
ATOM   6476  CG1 VAL B 341      69.339  30.076  -0.392  1.00 72.14           C
ATOM   6477  CG2 VAL B 341      69.387  27.969   0.983  1.00 72.02           C
ATOM   6478  C   VAL B 341      67.007  30.981   0.869  1.00 72.21           C
ATOM   6479  O   VAL B 341      67.417  32.115   1.149  1.00 71.95           O
ATOM   6480  N   PHE B 342      65.980  30.740   0.046  1.00 72.64           N
ATOM   6481  CA  PHE B 342      65.231  31.801  -0.620  1.00 72.61           C
ATOM   6482  CB  PHE B 342      64.060  31.242  -1.420  1.00 72.58           C
ATOM   6483  CG  PHE B 342      63.325  32.284  -2.185  1.00 72.34           C
ATOM   6484  CD1 PHE B 342      63.787  32.700  -3.427  1.00 72.97           C
ATOM   6485  CE1 PHE B 342      63.123  33.693  -4.139  1.00 73.57           C
ATOM   6486  CZ  PHE B 342      61.977  34.291  -3.602  1.00 73.57           C
ATOM   6487  CE2 PHE B 342      61.513  33.886  -2.352  1.00 73.48           C
ATOM   6488  CD2 PHE B 342      62.194  32.886  -1.651  1.00 72.79           C
ATOM   6489  C   PHE B 342      64.721  32.836   0.360  1.00 72.93           C
ATOM   6490  O   PHE B 342      64.884  34.015   0.137  1.00 72.85           O
ATOM   6491  N   ARG B 343      64.111  32.389   1.450  1.00 73.83           N
ATOM   6492  CA  ARG B 343      63.599  33.303   2.463  1.00 74.88           C
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ATOM	6493	CB	ARG	B	343	62.845	32.536	3.558	1.00	74.66	C
ATOM	6494	CG	ARG	B	343	61.514	31.902	3.112	1.00	74.73	C
ATOM	6495	CD	ARG	B	343	60.577	32.935	2.496	1.00	74.31	C
ATOM	6496	NE	ARG	B	343	59.317	32.369	2.006	1.00	74.37	N
ATOM	6497	CZ	ARG	B	343	58.471	33.019	1.204	1.00	73.94	C
ATOM	6498	NH1	ARG	B	343	57.337	32.451	0.815	1.00	73.50	N
ATOM	6499	NH2	ARG	B	343	58.762	34.244	0.783	1.00	73.93	N
ATOM	6500	C	ARG	B	343	64.688	34.198	3.061	1.00	75.94	C
ATOM	6501	O	ARG	B	343	64.380	35.190	3.719	1.00	75.67	O
ATOM	6502	N	ARG	B	344	65.952	33.846	2.802	1.00	77.76	N
ATOM	6503	CA	ARG	B	344	67.133	34.592	3.283	1.00	79.25	C
ATOM	6504	CB	ARG	B	344	68.023	33.696	4.158	1.00	79.12	C
ATOM	6505	CG	ARG	B	344	67.341	33.137	5.386	1.00	80.40	C
ATOM	6506	CD	ARG	B	344	68.176	32.038	6.018	1.00	83.08	C
ATOM	6507	NE	ARG	B	344	67.360	31.158	6.855	1.00	85.55	N
ATOM	6508	CZ	ARG	B	344	67.096	31.362	8.146	1.00	87.10	C
ATOM	6509	NH1	ARG	B	344	67.574	32.427	8.789	1.00	87.87	N
ATOM	6510	NH2	ARG	B	344	66.343	30.494	8.802	1.00	87.53	N
ATOM	6511	C	ARG	B	344	67.982	35.173	2.146	1.00	79.99	C
ATOM	6512	O	ARG	B	344	69.107	35.615	2.378	1.00	80.12	O
ATOM	6513	N	ARG	B	345	67.439	35.187	0.929	1.00	81.12	N
ATOM	6514	CA	ARG	B	345	68.188	35.608	-0.272	1.00	82.13	C
ATOM	6515	CB	ARG	B	345	67.314	35.508	-1.534	1.00	81.99	C
ATOM	6516	CG	ARG	B	345	66.201	36.543	-1.621	1.00	82.63	C
ATOM	6517	CD	ARG	B	345	65.082	36.096	-2.543	1.00	83.25	C
ATOM	6518	NE	ARG	B	345	64.006	37.087	-2.646	1.00	84.39	N
ATOM	6519	CZ	ARG	B	345	63.052	37.277	-1.733	1.00	84.70	C
ATOM	6520	NH1	ARG	B	345	62.118	38.204	-1.941	1.00	84.53	N
ATOM	6521	NH2	ARG	B	345	63.027	36.551	-0.613	1.00	83.08	N
ATOM	6522	C	ARG	B	345	68.828	36.998	-0.175	1.00	82.65	C
ATOM	6523	O	ARG	B	345	69.780	37.305	-0.892	1.00	82.75	O
ATOM	6524	N	TRP	B	346	68.296	37.828	0.716	1.00	83.54	N
ATOM	6525	CA	TRP	B	346	68.724	39.218	0.819	1.00	84.28	C
ATOM	6526	CB	TRP	B	346	67.541	40.117	1.184	1.00	85.23	C
ATOM	6527	CG	TRP	B	346	66.558	40.297	0.068	1.00	86.10	C
ATOM	6528	CD1	TRP	B	346	65.205	40.435	0.181	1.00	86.79	C
ATOM	6529	NE1	TRP	B	346	64.638	40.579	-1.062	1.00	87.21	N
ATOM	6530	CE2	TRP	B	346	65.628	40.535	-2.009	1.00	87.32	C
ATOM	6531	CD2	TRP	B	346	66.852	40.358	-1.333	1.00	87.08	C
ATOM	6532	CE3	TRP	B	346	68.030	40.281	-2.082	1.00	87.22	C
ATOM	6533	CZ3	TRP	B	346	67.949	40.381	-3.459	1.00	87.05	C
ATOM	6534	CH2	TRP	B	346	66.717	40.556	-4.102	1.00	86.74	C
ATOM	6535	CZ2	TRP	B	346	65.548	40.636	-3.396	1.00	87.06	C
ATOM	6536	C	TRP	B	346	69.839	39.377	1.847	1.00	84.11	C
ATOM	6537	O	TRP	B	346	70.374	40.470	2.033	1.00	84.37	O
ATOM	6538	O	ARG	B	347	72.040	36.430	4.785	1.00	82.63	O
ATOM	6539	N	ARG	B	347	70.186	38.279	2.511	1.00	20.00	N
ATOM	6540	CA	ARG	B	347	71.122	38.323	3.629	1.00	20.00	C
ATOM	6541	C	ARG	B	347	71.935	37.036	3.719	1.00	20.00	C
ATOM	6542	CB	ARG	B	347	70.377	38.567	4.942	1.00	20.00	C
ATOM	6543	CG	ARG	B	347	69.326	37.517	5.264	1.00	20.00	C
ATOM	6544	CD	ARG	B	347	68.677	37.780	6.614	1.00	20.00	C
ATOM	6545	NE	ARG	B	347	67.684	36.765	6.950	1.00	20.00	N
ATOM	6546	CZ	ARG	B	347	67.013	36.727	8.097	1.00	20.00	C
ATOM	6547	NH1	ARG	B	347	67.228	37.651	9.024	1.00	20.00	N
ATOM	6548	NH2	ARG	B	347	66.127	35.766	8.318	1.00	20.00	N

ATOM	6549	N	LEU	B	348	72.509	36.625	2.593	1.00	82.01	N
ATOM	6550	CA	LEU	B	348	73.580	35.636	2.596	1.00	81.25	C
ATOM	6551	CB	LEU	B	348	73.034	34.252	2.238	1.00	80.99	C
ATOM	6552	CG	LEU	B	348	72.106	33.603	3.267	1.00	79.84	C
ATOM	6553	CD1	LEU	B	348	71.463	32.349	2.695	1.00	79.24	C
ATOM	6554	CD2	LEU	B	348	72.862	33.286	4.548	1.00	78.03	C
ATOM	6555	C	LEU	B	348	74.693	36.027	1.629	1.00	81.46	C
ATOM	6556	O	LEU	B	348	75.402	35.168	1.103	1.00	81.64	O
ATOM	6557	N	ASN	B	349	74.841	37.327	1.398	1.00	81.30	N
ATOM	6558	CA	ASN	B	349	75.914	37.841	0.537	1.00	81.52	C
ATOM	6559	CB	ASN	B	349	77.259	37.846	1.262	1.00	81.61	C
ATOM	6560	CG	ASN	B	349	77.327	38.867	2.352	1.00	82.10	C
ATOM	6561	OD1	ASN	B	349	77.467	38.512	3.518	1.00	82.76	O
ATOM	6562	ND2	ASN	B	349	77.241	40.149	1.989	1.00	82.50	N
ATOM	6563	C	ASN	B	349	76.105	37.091	-0.761	1.00	81.80	C
ATOM	6564	O	ASN	B	349	77.240	36.841	-1.170	1.00	81.83	O
ATOM	6565	N	PHE	B	350	75.005	36.712	-1.401	1.00	82.35	N
ATOM	6566	CA	PHE	B	350	75.078	36.139	-2.737	1.00	82.83	C
ATOM	6567	CB	PHE	B	350	73.684	35.895	-3.312	1.00	82.17	C
ATOM	6568	CG	PHE	B	350	72.867	34.901	-2.549	1.00	81.54	C
ATOM	6569	CD1	PHE	B	350	73.467	33.986	-1.682	1.00	80.35	C
ATOM	6570	CE1	PHE	B	350	72.713	33.075	-0.993	1.00	79.52	C
ATOM	6571	CZ	PHE	B	350	71.344	33.035	-1.175	1.00	80.54	C
ATOM	6572	CE2	PHE	B	350	70.728	33.926	-2.051	1.00	80.09	C
ATOM	6573	CD2	PHE	B	350	71.493	34.850	-2.733	1.00	80.41	C
ATOM	6574	C	PHE	B	350	75.822	37.116	-3.636	1.00	83.86	C
ATOM	6575	O	PHE	B	350	76.786	36.743	-4.312	1.00	83.81	O
ATOM	6576	N	ASN	B	351	75.376	38.374	-3.617	1.00	85.04	N
ATOM	6577	CA	ASN	B	351	75.920	39.392	-4.495	1.00	86.31	C
ATOM	6578	CB	ASN	B	351	77.391	39.677	-4.158	1.00	86.56	C
ATOM	6579	CG	ASN	B	351	77.540	40.609	-2.974	1.00	88.02	C
ATOM	6580	OD1	ASN	B	351	76.925	41.696	-2.927	1.00	89.81	O
ATOM	6581	ND2	ASN	B	351	78.355	40.199	-2.007	1.00	88.15	N
ATOM	6582	C	ASN	B	351	75.751	38.984	-5.950	1.00	86.69	C
ATOM	6583	O	ASN	B	351	74.622	38.839	-6.423	1.00	86.65	O
ATOM	6584	N	ARG	B	352	76.867	38.768	-6.643	1.00	87.22	N
ATOM	6585	CA	ARG	B	352	76.815	38.468	-8.062	1.00	87.85	C
ATOM	6586	CB	ARG	B	352	78.066	38.981	-8.770	1.00	88.54	C
ATOM	6587	CG	ARG	B	352	77.828	39.308	-10.243	1.00	91.39	C
ATOM	6588	CD	ARG	B	352	78.985	38.798	-11.095	1.00	95.92	C
ATOM	6589	NE	ARG	B	352	78.795	39.101	-12.515	1.00	98.84	N
ATOM	6590	CZ	ARG	B	352	79.705	38.867	-13.460	1.00	100.37	C
ATOM	6591	NH1	ARG	B	352	80.879	38.318	-13.139	1.00	101.04	N
ATOM	6592	NH2	ARG	B	352	79.442	39.178	-14.725	1.00	100.68	N
ATOM	6593	C	ARG	B	352	76.667	36.975	-8.279	1.00	87.19	C
ATOM	6594	O	ARG	B	352	76.216	36.534	-9.338	1.00	87.33	O
ATOM	6595	N	GLN	B	353	77.044	36.214	-7.257	1.00	86.51	N
ATOM	6596	CA	GLN	B	353	77.013	34.755	-7.284	1.00	85.84	C
ATOM	6597	CB	GLN	B	353	78.117	34.199	-6.381	1.00	85.92	C
ATOM	6598	CG	GLN	B	353	79.520	34.141	-6.996	1.00	87.36	C
ATOM	6599	CD	GLN	B	353	80.028	35.477	-7.543	1.00	90.25	C
ATOM	6600	OE1	GLN	B	353	79.550	36.563	-7.176	1.00	91.41	O
ATOM	6601	NE2	GLN	B	353	81.008	35.398	-8.431	1.00	91.35	N
ATOM	6602	C	GLN	B	353	75.650	34.268	-6.816	1.00	85.13	C
ATOM	6603	O	GLN	B	353	75.497	33.761	-5.704	1.00	85.51	O
ATOM	6604	N	GLN	B	354	74.657	34.428	-7.677	1.00	84.25	N

ATOM	6605	CA	GLN	B	354	73.289	34.068	-7.350	1.00	83.39	C
ATOM	6606	CB	GLN	B	354	72.320	34.901	-8.191	1.00	83.32	C
ATOM	6607	CG	GLN	B	354	72.158	36.333	-7.709	1.00	83.78	C
ATOM	6608	CD	GLN	B	354	71.134	36.464	-6.594	1.00	84.42	C
ATOM	6609	OE1	GLN	B	354	69.995	36.013	-6.721	1.00	85.16	O
ATOM	6610	NE2	GLN	B	354	71.531	37.097	-5.502	1.00	84.49	N
ATOM	6611	C	GLN	B	354	73.035	32.581	-7.578	1.00	82.68	C
ATOM	6612	O	GLN	B	354	73.486	32.027	-8.582	1.00	82.82	O
ATOM	6613	N	PRO	B	355	72.303	31.930	-6.653	1.00	81.87	N
ATOM	6614	CA	PRO	B	355	71.854	30.571	-6.936	1.00	81.42	C
ATOM	6615	CB	PRO	B	355	71.077	30.175	-5.673	1.00	81.07	C
ATOM	6616	CG	PRO	B	355	71.428	31.162	-4.637	1.00	81.10	C
ATOM	6617	CD	PRO	B	355	71.854	32.408	-5.332	1.00	81.71	C
ATOM	6618	C	PRO	B	355	70.909	30.592	-8.133	1.00	81.21	C
ATOM	6619	O	PRO	B	355	70.066	31.484	-8.226	1.00	81.23	O
ATOM	6620	N	SER	B	356	71.057	29.648	-9.055	1.00	81.00	N
ATOM	6621	CA	SER	B	356	70.061	29.501	-10.114	1.00	80.92	C
ATOM	6622	CB	SER	B	356	70.562	30.035	-11.464	1.00	80.89	C
ATOM	6623	OG	SER	B	356	71.875	29.611	-11.736	1.00	81.35	O
ATOM	6624	C	SER	B	356	69.502	28.084	-10.224	1.00	80.72	C
ATOM	6625	O	SER	B	356	70.188	27.109	-9.953	1.00	80.61	O
ATOM	6626	N	CYS	B	357	68.236	27.998	-10.606	1.00	80.77	N
ATOM	6627	CA	CYS	B	357	67.528	26.734	-10.737	1.00	80.89	C
ATOM	6628	CB	CYS	B	357	66.029	26.984	-10.657	1.00	81.01	C
ATOM	6629	SG	CYS	B	357	65.551	28.050	-9.290	1.00	82.22	S
ATOM	6630	C	CYS	B	357	67.814	26.072	-12.066	1.00	80.74	C
ATOM	6631	O	CYS	B	357	67.836	26.735	-13.102	1.00	80.74	O
ATOM	6632	N	ALA	B	358	68.027	24.763	-12.031	1.00	80.68	N
ATOM	6633	CA	ALA	B	358	68.084	23.969	-13.246	1.00	80.83	C
ATOM	6634	CB	ALA	B	358	69.125	22.897	-13.126	1.00	80.79	C
ATOM	6635	C	ALA	B	358	66.709	23.358	-13.506	1.00	81.07	C
ATOM	6636	O	ALA	B	358	66.232	23.338	-14.643	1.00	81.14	O
ATOM	6637	N	THR	B	359	66.090	22.853	-12.441	1.00	81.37	N
ATOM	6638	CA	THR	B	359	64.712	22.382	-12.466	1.00	81.64	C
ATOM	6639	CB	THR	B	359	64.601	20.842	-12.276	1.00	81.63	C
ATOM	6640	OG1	THR	B	359	64.793	20.508	-10.896	1.00	82.05	O
ATOM	6641	CG2	THR	B	359	65.603	20.080	-13.154	1.00	81.25	C
ATOM	6642	C	THR	B	359	63.952	23.092	-11.343	1.00	81.91	C
ATOM	6643	O	THR	B	359	64.577	23.694	-10.468	1.00	82.14	O
ATOM	6644	N	PRO	B	360	62.606	23.036	-11.358	1.00	82.20	N
ATOM	6645	CA	PRO	B	360	61.766	22.424	-12.398	1.00	82.43	C
ATOM	6646	CB	PRO	B	360	60.348	22.548	-11.832	1.00	82.24	C
ATOM	6647	CG	PRO	B	360	60.426	23.651	-10.833	1.00	82.31	C
ATOM	6648	CD	PRO	B	360	61.800	23.585	-10.253	1.00	82.16	C
ATOM	6649	C	PRO	B	360	61.871	23.112	-13.764	1.00	82.61	C
ATOM	6650	O	PRO	B	360	62.312	24.262	-13.859	1.00	82.45	O
ATOM	6651	N	GLU	B	361	61.490	22.366	-14.797	1.00	82.92	N
ATOM	6652	CA	GLU	B	361	61.397	22.813	-16.189	1.00	83.30	C
ATOM	6653	CB	GLU	B	361	60.169	22.121	-16.831	1.00	83.85	C
ATOM	6654	CG	GLU	B	361	59.794	22.540	-18.273	1.00	85.82	C
ATOM	6655	CD	GLU	B	361	60.761	22.013	-19.343	1.00	88.29	C
ATOM	6656	OE1	GLU	B	361	61.943	21.717	-19.019	1.00	88.55	O
ATOM	6657	OE2	GLU	B	361	60.325	21.905	-20.517	1.00	88.53	O
ATOM	6658	C	GLU	B	361	61.341	24.335	-16.419	1.00	82.85	C
ATOM	6659	O	GLU	B	361	62.214	24.902	-17.072	1.00	82.61	O
ATOM	6660	N	PHE	B	362	60.321	24.976	-15.853	1.00	82.57	N

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ATOM   6661  CA  PHE B 362      59.908  26.326 -16.249  1.00 82.27           C
ATOM   6662  CB  PHE B 362      58.388  26.473 -16.078  1.00 82.54           C
ATOM   6663  CG  PHE B 362      57.943  26.697 -14.652  1.00 82.93           C
ATOM   6664  CD1 PHE B 362      58.242  25.770 -13.650  1.00 82.93           C
ATOM   6665  CE1 PHE B 362      57.830  25.980 -12.339  1.00 83.06           C
ATOM   6666  CZ  PHE B 362      57.094  27.121 -12.018  1.00 83.35           C
ATOM   6667  CE2 PHE B 362      56.775  28.049 -13.013  1.00 83.02           C
ATOM   6668  CD2 PHE B 362      57.199  27.832 -14.319  1.00 83.09           C
ATOM   6669  C   PHE B 362      60.632  27.491 -15.574  1.00 81.85           C
ATOM   6670  O   PHE B 362      60.461  28.638 -15.982  1.00 81.83           O
ATOM   6671  N   VAL B 363      61.409  27.203 -14.535  1.00 81.47           N
ATOM   6672  CA  VAL B 363      62.251  28.214 -13.898  1.00 80.98           C
ATOM   6673  CB  VAL B 363      62.040  28.294 -12.372  1.00 80.91           C
ATOM   6674  CG1 VAL B 363      60.759  29.032 -12.062  1.00 80.95           C
ATOM   6675  CG2 VAL B 363      62.055  26.911 -11.737  1.00 80.17           C
ATOM   6676  C   VAL B 363      63.716  27.947 -14.183  1.00 81.02           C
ATOM   6677  O   VAL B 363      64.593  28.410 -13.454  1.00 80.93           O
ATOM   6678  N   GLN B 364      63.973  27.196 -15.249  1.00 81.18           N
ATOM   6679  CA  GLN B 364      65.334  26.875 -15.654  1.00 81.58           C
ATOM   6680  CB  GLN B 364      65.324  25.915 -16.847  1.00 81.98           C
ATOM   6681  CG  GLN B 364      66.559  26.008 -17.746  1.00 84.17           C
ATOM   6682  CD  GLN B 364      66.926  24.678 -18.357  1.00 86.56           C
ATOM   6683  OE1 GLN B 364      67.637  23.880 -17.735  1.00 87.63           O
ATOM   6684  NE2 GLN B 364      66.446  24.425 -19.581  1.00 86.25           N
ATOM   6685  C   GLN B 364      66.144  28.140 -15.960  1.00 81.24           C
ATOM   6686  O   GLN B 364      65.758  28.956 -16.806  1.00 81.42           O
ATOM   6687  N   GLY B 365      67.254  28.300 -15.245  1.00 80.69           N
ATOM   6688  CA  GLY B 365      68.152  29.427 -15.449  1.00 79.99           C
ATOM   6689  C   GLY B 365      67.772  30.687 -14.696  1.00 79.45           C
ATOM   6690  O   GLY B 365      68.429  31.718 -14.843  1.00 79.70           O
ATOM   6691  N   LYS B 366      66.720  30.610 -13.888  1.00 78.68           N
ATOM   6692  CA  LYS B 366      66.269  31.749 -13.102  1.00 78.07           C
ATOM   6693  CB  LYS B 366      64.797  31.566 -12.744  1.00 78.13           C
ATOM   6694  CG  LYS B 366      64.028  32.837 -12.458  1.00 78.15           C
ATOM   6695  CD  LYS B 366      62.595  32.501 -12.086  1.00 77.67           C
ATOM   6696  CE  LYS B 366      61.834  33.719 -11.585  1.00 78.01           C
ATOM   6697  NZ  LYS B 366      60.991  34.347 -12.640  1.00 78.05           N
ATOM   6698  C   LYS B 366      67.113  31.891 -11.830  1.00 77.76           C
ATOM   6699  O   LYS B 366      67.351  30.912 -11.113  1.00 77.45           O
ATOM   6700  N   GLU B 367      67.564  33.113 -11.566  1.00 77.27           N
ATOM   6701  CA  GLU B 367      68.316  33.420 -10.357  1.00 77.00           C
ATOM   6702  CB  GLU B 367      69.300  34.565 -10.615  1.00 77.18           C
ATOM   6703  CG  GLU B 367      70.530  34.143 -11.451  1.00 78.05           C
ATOM   6704  CD  GLU B 367      71.395  35.310 -11.927  1.00 77.63           C
ATOM   6705  OE1 GLU B 367      70.869  36.430 -12.107  1.00 79.08           O
ATOM   6706  OE2 GLU B 367      72.609  35.099 -12.132  1.00 78.63           O
ATOM   6707  C   GLU B 367      67.360  33.762  -9.225  1.00 76.51           C
ATOM   6708  O   GLU B 367      66.249  34.221  -9.471  1.00 76.22           O
ATOM   6709  N   PHE B 368      67.789  33.519  -7.987  1.00 76.23           N
ATOM   6710  CA  PHE B 368      66.945  33.725  -6.805  1.00 75.94           C
ATOM   6711  CB  PHE B 368      67.698  33.353  -5.532  1.00 75.32           C
ATOM   6712  CG  PHE B 368      67.587  31.904  -5.154  1.00 74.34           C
ATOM   6713  CD1 PHE B 368      67.428  30.917  -6.123  1.00 73.44           C
ATOM   6714  CE1 PHE B 368      67.333  29.570  -5.764  1.00 73.18           C
ATOM   6715  CZ  PHE B 368      67.414  29.200  -4.419  1.00 73.83           C
ATOM   6716  CE2 PHE B 368      67.576  30.177  -3.445  1.00 73.37           C
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ATOM   6717  CD2 PHE B 368      67.667  31.521  -3.818  1.00 73.87           C
ATOM   6718  C   PHE B 368      66.411  35.147  -6.696  1.00 76.48           C
ATOM   6719  O   PHE B 368      65.293  35.358  -6.217  1.00 76.80           O
ATOM   6720  N   LYS B 369      67.197  36.118  -7.156  1.00 76.94           N
ATOM   6721  CA  LYS B 369      66.768  37.521  -7.150  1.00 77.53           C
ATOM   6722  CB  LYS B 369      67.962  38.459  -7.355  1.00 77.57           C
ATOM   6723  CG  LYS B 369      68.631  38.354  -8.720  1.00 78.23           C
ATOM   6724  CD  LYS B 369      69.864  39.239  -8.801  1.00 78.32           C
ATOM   6725  CE  LYS B 369      70.377  39.373 -10.240  1.00 79.75           C
ATOM   6726  NZ  LYS B 369      69.439  40.133 -11.121  1.00 79.75           N
ATOM   6727  C   LYS B 369      65.671  37.816  -8.174  1.00 77.51           C
ATOM   6728  O   LYS B 369      65.032  38.864  -8.116  1.00 77.81           O
ATOM   6729  N   ASP B 370      65.455  36.894  -9.108  1.00 77.71           N
ATOM   6730  CA  ASP B 370      64.434  37.064 -10.141  1.00 77.82           C
ATOM   6731  CB  ASP B 370      64.806  36.286 -11.407  1.00 77.95           C
ATOM   6732  CG  ASP B 370      66.046  36.839 -12.101  1.00 79.14           C
ATOM   6733  OD1 ASP B 370      66.061  38.049 -12.453  1.00 79.77           O
ATOM   6734  OD2 ASP B 370      67.000  36.050 -12.313  1.00 79.82           O
ATOM   6735  C   ASP B 370      63.041  36.653  -9.683  1.00 77.74           C
ATOM   6736  O   ASP B 370      62.063  36.973 -10.344  1.00 78.03           O
ATOM   6737  N   PHE B 371      62.945  35.937  -8.567  1.00 77.81           N
ATOM   6738  CA  PHE B 371      61.650  35.506  -8.044  1.00 77.87           C
ATOM   6739  CB  PHE B 371      61.827  34.313  -7.113  1.00 77.86           C
ATOM   6740  CG  PHE B 371      62.198  33.034  -7.813  1.00 77.91           C
ATOM   6741  CD1 PHE B 371      61.213  32.177  -8.289  1.00 78.36           C
ATOM   6742  CE1 PHE B 371      61.547  30.990  -8.925  1.00 78.18           C
ATOM   6743  CZ  PHE B 371      62.878  30.643  -9.077  1.00 78.28           C
ATOM   6744  CE2 PHE B 371      63.869  31.485  -8.599  1.00 78.18           C
ATOM   6745  CD2 PHE B 371      63.526  32.670  -7.967  1.00 78.11           C
ATOM   6746  C   PHE B 371      60.948  36.638  -7.288  1.00 77.99           C
ATOM   6747  O   PHE B 371      61.616  37.452  -6.662  1.00 78.20           O
ATOM   6748  N   PRO B 372      59.599  36.692  -7.338  1.00 78.07           N
ATOM   6749  CA  PRO B 372      58.850  37.716  -6.598  1.00 78.18           C
ATOM   6750  CB  PRO B 372      57.415  37.537  -7.107  1.00 78.06           C
ATOM   6751  CG  PRO B 372      57.518  36.677  -8.321  1.00 77.87           C
ATOM   6752  CD  PRO B 372      58.697  35.813  -8.102  1.00 78.00           C
ATOM   6753  C   PRO B 372      58.890  37.503  -5.081  1.00 78.51           C
ATOM   6754  O   PRO B 372      59.195  36.398  -4.623  1.00 78.58           O
ATOM   6755  N   ASP B 373      58.585  38.552  -4.313  1.00 78.93           N
ATOM   6756  CA  ASP B 373      58.519  38.462  -2.842  1.00 79.25           C
ATOM   6757  CB  ASP B 373      58.277  39.838  -2.201  1.00 79.62           C
ATOM   6758  CG  ASP B 373      59.384  40.846  -2.498  1.00 81.10           C
ATOM   6759  OD1 ASP B 373      60.587  40.480  -2.405  1.00 82.10           O
ATOM   6760  OD2 ASP B 373      59.035  42.018  -2.806  1.00 82.07           O
ATOM   6761  C   ASP B 373      57.407  37.504  -2.411  1.00 78.93           C
ATOM   6762  O   ASP B 373      57.623  36.618  -1.581  1.00 78.93           O
ATOM   6763  N   VAL B 374      56.218  37.705  -2.976  1.00 78.50           N
ATOM   6764  CA  VAL B 374      55.095  36.809  -2.759  1.00 78.15           C
ATOM   6765  CB  VAL B 374      53.748  37.552  -2.841  1.00 78.00           C
ATOM   6766  CG1 VAL B 374      52.595  36.596  -2.570  1.00 78.03           C
ATOM   6767  CG2 VAL B 374      53.721  38.702  -1.847  1.00 77.74           C
ATOM   6768  C   VAL B 374      55.163  35.683  -3.790  1.00 78.11           C
ATOM   6769  O   VAL B 374      54.977  35.904  -4.988  1.00 78.27           O
ATOM   6770  N   LEU B 375      55.446  34.480  -3.309  1.00 77.98           N
ATOM   6771  CA  LEU B 375      55.600  33.318  -4.168  1.00 77.93           C
ATOM   6772  CB  LEU B 375      56.254  32.165  -3.401  1.00 77.99           C
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ATOM   6773  CG  LEU B 375      57.758  32.231  -3.118  1.00 77.30           C
ATOM   6774  CD1 LEU B 375      58.167  30.975  -2.381  1.00 76.75           C
ATOM   6775  CD2 LEU B 375      58.585  32.399  -4.390  1.00 76.64           C
ATOM   6776  C   LEU B 375      54.290  32.852  -4.788  1.00 78.07           C
ATOM   6777  O   LEU B 375      53.265  32.718  -4.106  1.00 78.19           O
ATOM   6778  N   LEU B 376      54.350  32.598  -6.091  1.00 78.13           N
ATOM   6779  CA  LEU B 376      53.209  32.126  -6.864  1.00 78.27           C
ATOM   6780  CB  LEU B 376      53.272  32.726  -8.271  1.00 78.11           C
ATOM   6781  CG  LEU B 376      53.476  34.246  -8.339  1.00 77.82           C
ATOM   6782  CD1 LEU B 376      53.553  34.727  -9.783  1.00 77.35           C
ATOM   6783  CD2 LEU B 376      52.402  35.013  -7.563  1.00 77.04           C
ATOM   6784  C   LEU B 376      53.239  30.598  -6.896  1.00 78.52           C
ATOM   6785  O   LEU B 376      54.214  30.010  -6.437  1.00 78.72           O
ATOM   6786  N   PRO B 377      52.179  29.944  -7.417  1.00 78.80           N
ATOM   6787  CA  PRO B 377      52.135  28.478  -7.453  1.00 79.20           C
ATOM   6788  CB  PRO B 377      50.887  28.193  -8.293  1.00 79.25           C
ATOM   6789  CG  PRO B 377      50.034  29.358  -8.087  1.00 78.80           C
ATOM   6790  CD  PRO B 377      50.955  30.525  -7.997  1.00 78.87           C
ATOM   6791  C   PRO B 377      53.347  27.826  -8.120  1.00 79.67           C
ATOM   6792  O   PRO B 377      53.907  28.373  -9.074  1.00 79.76           O
ATOM   6793  N   ASN B 378      53.740  26.662  -7.606  1.00 80.22           N
ATOM   6794  CA  ASN B 378      54.838  25.860  -8.170  1.00 80.52           C
ATOM   6795  CB  ASN B 378      54.482  25.316  -9.565  1.00 80.93           C
ATOM   6796  CG  ASN B 378      53.316  24.319  -9.528  1.00 82.24           C
ATOM   6797  OD1 ASN B 378      53.373  23.301  -8.822  1.00 83.90           O
ATOM   6798  ND2 ASN B 378      52.259  24.606 -10.291  1.00 81.34           N
ATOM   6799  C   ASN B 378      56.200  26.539  -8.177  1.00 80.36           C
ATOM   6800  O   ASN B 378      57.119  26.085  -8.857  1.00 80.71           O
ATOM   6801  N   TYR B 379      56.325  27.628  -7.426  1.00 80.17           N
ATOM   6802  CA  TYR B 379      57.635  28.160  -7.079  1.00 79.96           C
ATOM   6803  CB  TYR B 379      57.624  29.687  -6.949  1.00 80.18           C
ATOM   6804  CG  TYR B 379      57.523  30.450  -8.245  1.00 80.85           C
ATOM   6805  CD1 TYR B 379      58.015  29.923  -9.436  1.00 81.36           C
ATOM   6806  CE1 TYR B 379      57.924  30.638 -10.628  1.00 81.68           C
ATOM   6807  CZ  TYR B 379      57.353  31.895 -10.629  1.00 81.47           C
ATOM   6808  OH  TYR B 379      57.266  32.607 -11.802  1.00 81.87           O
ATOM   6809  CE2 TYR B 379      56.863  32.443  -9.458  1.00 81.81           C
ATOM   6810  CD2 TYR B 379      56.956  31.722  -8.275  1.00 81.76           C
ATOM   6811  C   TYR B 379      58.004  27.560  -5.743  1.00 79.57           C
ATOM   6812  O   TYR B 379      57.241  27.679  -4.782  1.00 79.75           O
ATOM   6813  N   PHE B 380      59.169  26.924  -5.683  1.00 79.06           N
ATOM   6814  CA  PHE B 380      59.674  26.315  -4.454  1.00 78.65           C
ATOM   6815  CB  PHE B 380      60.219  27.377  -3.494  1.00 78.08           C
ATOM   6816  CG  PHE B 380      61.420  28.091  -4.007  1.00 76.96           C
ATOM   6817  CD1 PHE B 380      62.669  27.508  -3.936  1.00 75.83           C
ATOM   6818  CE1 PHE B 380      63.785  28.171  -4.411  1.00 75.61           C
ATOM   6819  CZ  PHE B 380      63.664  29.430  -4.961  1.00 75.84           C
ATOM   6820  CE2 PHE B 380      62.420  30.021  -5.043  1.00 76.47           C
ATOM   6821  CD2 PHE B 380      61.305  29.350  -4.565  1.00 76.51           C
ATOM   6822  C   PHE B 380      58.619  25.471  -3.755  1.00 78.91           C
ATOM   6823  O   PHE B 380      58.383  25.631  -2.556  1.00 78.91           O
ATOM   6824  N   THR B 381      57.977  24.586  -4.511  1.00 79.15           N
ATOM   6825  CA  THR B 381      57.017  23.660  -3.925  1.00 79.66           C
ATOM   6826  CB  THR B 381      55.615  23.794  -4.534  1.00 79.66           C
ATOM   6827  OG1 THR B 381      55.698  23.615  -5.955  1.00 80.39           O
ATOM   6828  CG2 THR B 381      55.001  25.151  -4.209  1.00 79.82           C
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ATOM   6829  C   THR B 381      57.460  22.229  -4.129  1.00 79.75           C
ATOM   6830  O   THR B 381      58.104  21.904  -5.125  1.00 79.48           O
ATOM   6831  N   CYS B 382      57.099  21.388  -3.165  1.00 80.15           N
ATOM   6832  CA  CYS B 382      57.212  19.943  -3.291  1.00 80.67           C
ATOM   6833  CB  CYS B 382      57.925  19.364  -2.071  1.00 80.88           C
ATOM   6834  SG  CYS B 382      59.533  20.158  -1.724  1.00 85.03           S
ATOM   6835  C   CYS B 382      55.807  19.368  -3.421  1.00 79.98           C
ATOM   6836  O   CYS B 382      54.837  20.015  -3.032  1.00 80.32           O
ATOM   6837  N   ARG B 383      55.692  18.176  -3.999  1.00 79.34           N
ATOM   6838  CA  ARG B 383      54.428  17.455  -4.010  1.00 78.59           C
ATOM   6839  CB  ARG B 383      54.301  16.598  -5.277  1.00 78.59           C
ATOM   6840  CG  ARG B 383      52.993  15.806  -5.388  1.00 78.55           C
ATOM   6841  CD  ARG B 383      52.677  15.373  -6.826  1.00 78.48           C
ATOM   6842  NE  ARG B 383      53.707  14.522  -7.433  1.00 78.30           N
ATOM   6843  CZ  ARG B 383      53.809  13.202  -7.268  1.00 78.03           C
ATOM   6844  NH1 ARG B 383      52.952  12.543  -6.494  1.00 77.93           N
ATOM   6845  NH2 ARG B 383      54.783  12.533  -7.875  1.00 77.34           N
ATOM   6846  C   ARG B 383      54.358  16.617  -2.734  1.00 78.22           C
ATOM   6847  O   ARG B 383      55.115  15.667  -2.569  1.00 78.15           O
ATOM   6848  N   ARG B 384      53.460  17.006  -1.832  1.00 78.02           N
ATOM   6849  CA  ARG B 384      53.279  16.388  -0.511  1.00 78.05           C
ATOM   6850  CB  ARG B 384      52.042  17.013   0.143  1.00 78.01           C
ATOM   6851  CG  ARG B 384      51.579  16.385   1.442  1.00 78.62           C
ATOM   6852  CD  ARG B 384      50.962  17.429   2.367  1.00 79.88           C
ATOM   6853  NE  ARG B 384      50.404  16.835   3.583  1.00 80.55           N
ATOM   6854  CZ  ARG B 384      49.913  17.528   4.608  1.00 81.06           C
ATOM   6855  NH1 ARG B 384      49.915  18.857   4.588  1.00 81.96           N
ATOM   6856  NH2 ARG B 384      49.417  16.890   5.660  1.00 81.08           N
ATOM   6857  C   ARG B 384      53.160  14.858  -0.550  1.00 78.13           C
ATOM   6858  O   ARG B 384      52.612  14.306  -1.501  1.00 78.40           O
ATOM   6859  N   ALA B 385      53.671  14.179   0.475  1.00 78.23           N
ATOM   6860  CA  ALA B 385      53.588  12.718   0.559  1.00 78.66           C
ATOM   6861  CB  ALA B 385      54.515  12.193   1.630  1.00 78.38           C
ATOM   6862  C   ALA B 385      52.165  12.266   0.838  1.00 79.27           C
ATOM   6863  O   ALA B 385      51.560  12.701   1.808  1.00 79.42           O
ATOM   6864  N   ARG B 386      51.632  11.396  -0.016  1.00 80.23           N
ATOM   6865  CA  ARG B 386      50.265  10.875   0.139  1.00 81.24           C
ATOM   6866  CB  ARG B 386      49.336  11.421  -0.955  1.00 81.04           C
ATOM   6867  CG  ARG B 386      48.924  12.869  -0.756  1.00 81.82           C
ATOM   6868  CD  ARG B 386      48.020  13.365  -1.876  1.00 82.14           C
ATOM   6869  NE  ARG B 386      48.117  14.820  -2.036  1.00 84.13           N
ATOM   6870  CZ  ARG B 386      47.379  15.548  -2.876  1.00 84.45           C
ATOM   6871  NH1 ARG B 386      46.465  14.967  -3.652  1.00 84.34           N
ATOM   6872  NH2 ARG B 386      47.553  16.865  -2.940  1.00 84.16           N
ATOM   6873  C   ARG B 386      50.236   9.353   0.114  1.00 81.54           C
ATOM   6874  O   ARG B 386      50.809   8.727  -0.778  1.00 81.82           O
ATOM   6875  N   ILE B 387      49.569   8.757   1.094  1.00 82.01           N
ATOM   6876  CA  ILE B 387      49.393   7.316   1.101  1.00 82.44           C
ATOM   6877  CB  ILE B 387      49.234   6.771   2.523  1.00 82.05           C
ATOM   6878  CG1 ILE B 387      50.547   6.972   3.276  1.00 81.28           C
ATOM   6879  CD1 ILE B 387      50.495   6.652   4.733  1.00 81.17           C
ATOM   6880  CG2 ILE B 387      48.872   5.301   2.490  1.00 82.23           C
ATOM   6881  C   ILE B 387      48.227   6.964   0.178  1.00 83.36           C
ATOM   6882  O   ILE B 387      47.083   7.341   0.428  1.00 83.25           O
ATOM   6883  N   ARG B 388      48.554   6.249  -0.899  1.00 84.56           N
ATOM   6884  CA  ARG B 388      47.639   6.007  -2.020  1.00 85.72           C
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ATOM   6885  CB  ARG B 388      48.343   5.242  -3.151  1.00 85.92           C
ATOM   6886  CG  ARG B 388      49.057   6.138  -4.144  1.00 86.96           C
ATOM   6887  CD  ARG B 388      48.070   6.869  -5.058  1.00 88.82           C
ATOM   6888  NE  ARG B 388      48.523   8.232  -5.363  1.00 89.95           N
ATOM   6889  CZ  ARG B 388      47.798   9.147  -6.006  1.00 90.12           C
ATOM   6890  NH1 ARG B 388      48.310  10.357  -6.222  1.00 89.93           N
ATOM   6891  NH2 ARG B 388      46.564   8.864  -6.431  1.00 89.80           N
ATOM   6892  C   ARG B 388      46.326   5.326  -1.650  1.00 86.16           C
ATOM   6893  O   ARG B 388      45.272   5.974  -1.628  1.00 86.30           O
ATOM   6894  N   ASP B 389      46.383   4.022  -1.382  1.00 86.68           N
ATOM   6895  CA  ASP B 389      45.188   3.288  -0.976  1.00 86.98           C
ATOM   6896  CB  ASP B 389      45.363   1.778  -1.127  1.00 86.91           C
ATOM   6897  CG  ASP B 389      44.213   1.000  -0.514  1.00 86.88           C
ATOM   6898  OD1 ASP B 389      43.073   1.517  -0.500  1.00 86.38           O
ATOM   6899  OD2 ASP B 389      44.449  -0.126  -0.035  1.00 87.48           O
ATOM   6900  C   ASP B 389      44.825   3.638   0.462  1.00 87.19           C
ATOM   6901  O   ASP B 389      45.630   3.465   1.381  1.00 87.26           O
ATOM   6902  N   ARG B 390      43.602   4.123   0.638  1.00 87.31           N
ATOM   6903  CA  ARG B 390      43.158   4.637   1.927  1.00 87.38           C
ATOM   6904  CB  ARG B 390      42.366   5.942   1.743  1.00 87.56           C
ATOM   6905  CG  ARG B 390      43.136   7.182   2.165  1.00 88.06           C
ATOM   6906  CD  ARG B 390      43.627   7.004   3.592  1.00 89.35           C
ATOM   6907  NE  ARG B 390      44.259   8.197   4.137  1.00 90.37           N
ATOM   6908  CZ  ARG B 390      44.814   8.259   5.343  1.00 91.00           C
ATOM   6909  NH1 ARG B 390      45.369   9.392   5.752  1.00 91.30           N
ATOM   6910  NH2 ARG B 390      44.822   7.191   6.137  1.00 90.93           N
ATOM   6911  C   ARG B 390      42.370   3.646   2.781  1.00 87.14           C
ATOM   6912  O   ARG B 390      42.166   3.885   3.975  1.00 87.24           O
ATOM   6913  N   LYS B 391      41.947   2.537   2.171  1.00 86.70           N
ATOM   6914  CA  LYS B 391      41.159   1.508   2.857  1.00 86.21           C
ATOM   6915  CB  LYS B 391      40.778   0.389   1.881  1.00 86.25           C
ATOM   6916  CG  LYS B 391      39.526  -0.385   2.274  1.00 86.24           C
ATOM   6917  CD  LYS B 391      39.029  -1.274   1.142  1.00 86.15           C
ATOM   6918  CE  LYS B 391      37.770  -2.025   1.552  1.00 85.90           C
ATOM   6919  NZ  LYS B 391      37.243  -2.870   0.451  1.00 85.78           N
ATOM   6920  C   LYS B 391      41.870   0.939   4.099  1.00 85.88           C
ATOM   6921  O   LYS B 391      43.090   0.730   4.097  1.00 85.89           O
ATOM   6922  N   ALA B 392      41.088   0.709   5.155  1.00 85.36           N
ATOM   6923  CA  ALA B 392      41.597   0.218   6.438  1.00 84.76           C
ATOM   6924  CB  ALA B 392      40.518   0.333   7.517  1.00 84.81           C
ATOM   6925  C   ALA B 392      42.101  -1.221   6.336  1.00 84.25           C
ATOM   6926  O   ALA B 392      41.407  -2.098   5.821  1.00 84.15           O
ATOM   6927  N   GLN B 393      43.314  -1.447   6.833  1.00 83.60           N
ATOM   6928  CA  GLN B 393      43.959  -2.752   6.752  1.00 82.94           C
ATOM   6929  CB  GLN B 393      45.419  -2.583   6.341  1.00 82.95           C
ATOM   6930  CG  GLN B 393      46.127  -3.876   5.992  1.00 82.93           C
ATOM   6931  CD  GLN B 393      47.466  -3.645   5.315  1.00 83.23           C
ATOM   6932  OE1 GLN B 393      47.966  -2.518   5.258  1.00 83.52           O
ATOM   6933  NE2 GLN B 393      48.052  -4.715   4.793  1.00 83.52           N
ATOM   6934  C   GLN B 393      43.861  -3.499   8.078  1.00 82.49           C
ATOM   6935  O   GLN B 393      44.235  -2.967   9.128  1.00 82.51           O
ATOM   6936  N   GLN B 394      43.362  -4.731   8.012  1.00 81.75           N
ATOM   6937  CA  GLN B 394      43.159  -5.572   9.189  1.00 81.16           C
ATOM   6938  CB  GLN B 394      41.663  -5.672   9.509  1.00 81.15           C
ATOM   6939  CG  GLN B 394      41.335  -6.109  10.932  1.00 80.90           C
ATOM   6940  CD  GLN B 394      40.766  -4.987  11.784  1.00 80.59           C
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ATOM   6941  OE1 GLN B 394      41.092  -3.816  11.596  1.00 80.19           O
ATOM   6942  NE2 GLN B 394      39.904  -5.345  12.730  1.00 80.94           N
ATOM   6943  C   GLN B 394      43.732  -6.965   8.920  1.00 80.78           C
ATOM   6944  O   GLN B 394      43.172  -7.727   8.130  1.00 80.72           O
ATOM   6945  N   VAL B 395      44.845  -7.294   9.572  1.00 80.29           N
ATOM   6946  CA  VAL B 395      45.549  -8.550   9.294  1.00 79.81           C
ATOM   6947  CB  VAL B 395      46.991  -8.303   8.761  1.00 79.88           C
ATOM   6948  CG1 VAL B 395      47.746  -9.617   8.589  1.00 79.82           C
ATOM   6949  CG2 VAL B 395      46.953  -7.553   7.436  1.00 79.86           C
ATOM   6950  C   VAL B 395      45.571  -9.499  10.491  1.00 79.42           C
ATOM   6951  O   VAL B 395      45.683  -9.071  11.643  1.00 79.21           O
ATOM   6952  N   PHE B 396      45.458 -10.790  10.188  1.00 79.04           N
ATOM   6953  CA  PHE B 396      45.490 -11.850  11.186  1.00 78.77           C
ATOM   6954  CB  PHE B 396      44.213 -12.692  11.102  1.00 78.81           C
ATOM   6955  CG  PHE B 396      42.994 -12.007  11.668  1.00 78.90           C
ATOM   6956  CD1 PHE B 396      42.455 -12.418  12.886  1.00 78.79           C
ATOM   6957  CE1 PHE B 396      41.333 -11.789  13.417  1.00 78.74           C
ATOM   6958  CZ  PHE B 396      40.737 -10.731  12.728  1.00 78.80           C
ATOM   6959  CE2 PHE B 396      41.267 -10.309  11.511  1.00 78.56           C
ATOM   6960  CD2 PHE B 396      42.388 -10.947  10.988  1.00 78.69           C
ATOM   6961  C   PHE B 396      46.733 -12.721  11.008  1.00 78.55           C
ATOM   6962  O   PHE B 396      47.241 -12.867   9.893  1.00 78.54           O
ATOM   6963  N   VAL B 397      47.217 -13.286  12.115  1.00 78.27           N
ATOM   6964  CA  VAL B 397      48.456 -14.072  12.134  1.00 77.96           C
ATOM   6965  CB  VAL B 397      49.709 -13.147  12.029  1.00 77.81           C
ATOM   6966  CG1 VAL B 397      49.994 -12.457  13.354  1.00 77.60           C
ATOM   6967  CG2 VAL B 397      50.924 -13.919  11.549  1.00 77.57           C
ATOM   6968  C   VAL B 397      48.534 -14.952  13.391  1.00 77.91           C
ATOM   6969  O   VAL B 397      47.879 -14.669  14.393  1.00 77.86           O
ATOM   6970  N   ASP B 398      49.329 -16.019  13.326  1.00 77.90           N
ATOM   6971  CA  ASP B 398      49.545 -16.899  14.478  1.00 77.87           C
ATOM   6972  CB  ASP B 398      49.459 -18.373  14.060  1.00 77.81           C
ATOM   6973  CG  ASP B 398      48.074 -18.775  13.566  1.00 77.69           C
ATOM   6974  OD1 ASP B 398      47.324 -17.904  13.078  1.00 77.59           O
ATOM   6975  OD2 ASP B 398      47.741 -19.978  13.657  1.00 77.29           O
ATOM   6976  C   ASP B 398      50.891 -16.629  15.157  1.00 77.85           C
ATOM   6977  O   ASP B 398      51.827 -16.138  14.521  1.00 77.79           O
ATOM   6978  N   GLU B 399      50.970 -16.956  16.449  1.00 77.84           N
ATOM   6979  CA  GLU B 399      52.212 -16.869  17.222  1.00 77.89           C
ATOM   6980  CB  GLU B 399      52.053 -17.534  18.597  1.00 77.92           C
ATOM   6981  CG  GLU B 399      50.914 -17.009  19.474  1.00 78.03           C
ATOM   6982  CD  GLU B 399      50.526 -17.982  20.594  1.00 78.16           C
ATOM   6983  OE1 GLU B 399      51.222 -19.007  20.785  1.00 78.57           O
ATOM   6984  OE2 GLU B 399      49.513 -17.723  21.282  1.00 78.30           O
ATOM   6985  C   GLU B 399      53.356 -17.545  16.470  1.00 77.85           C
ATOM   6986  O   GLU B 399      53.355 -18.768  16.286  1.00 77.86           O
ATOM   6987  N   GLY B 400      54.317 -16.741  16.021  1.00 77.80           N
ATOM   6988  CA  GLY B 400      55.498 -17.253  15.333  1.00 77.77           C
ATOM   6989  C   GLY B 400      55.420 -17.265  13.815  1.00 77.73           C
ATOM   6990  O   GLY B 400      56.412 -17.563  13.149  1.00 77.81           O
ATOM   6991  N   HIS B 401      54.250 -16.950  13.262  1.00 77.59           N
ATOM   6992  CA  HIS B 401      54.087 -16.875  11.808  1.00 77.51           C
ATOM   6993  CB  HIS B 401      52.645 -17.192  11.404  1.00 77.36           C
ATOM   6994  CG  HIS B 401      52.317 -18.654  11.427  1.00 77.19           C
ATOM   6995  ND1 HIS B 401      52.132 -19.360  12.597  1.00 76.75           N
ATOM   6996  CE1 HIS B 401      51.849 -20.618  12.311  1.00 76.28           C
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ATOM   6997  NE2 HIS B 401      51.842 -20.755  10.998  1.00 76.33           N
ATOM   6998  CD2 HIS B 401      52.132 -19.542  10.421  1.00 76.67           C
ATOM   6999  C   HIS B 401      54.522 -15.509  11.268  1.00 77.66           C
ATOM   7000  O   HIS B 401      54.541 -14.518  12.005  1.00 77.43           O
ATOM   7001  N   THR B 402      54.880 -15.471   9.985  1.00 77.87           N
ATOM   7002  CA  THR B 402      55.367 -14.251   9.335  1.00 78.11           C
ATOM   7003  CB  THR B 402      56.576 -14.543   8.405  1.00 78.14           C
ATOM   7004  OG1 THR B 402      57.552 -15.335   9.098  1.00 78.26           O
ATOM   7005  CG2 THR B 402      57.219 -13.249   7.922  1.00 77.81           C
ATOM   7006  C   THR B 402      54.265 -13.593   8.509  1.00 78.33           C
ATOM   7007  O   THR B 402      53.662 -14.234   7.650  1.00 78.49           O
ATOM   7008  N   VAL B 403      54.007 -12.315   8.761  1.00 78.54           N
ATOM   7009  CA  VAL B 403      53.003 -11.592   7.989  1.00 78.83           C
ATOM   7010  CB  VAL B 403      51.616 -11.643   8.684  1.00 79.01           C
ATOM   7011  CG1 VAL B 403      51.357 -10.384   9.529  1.00 78.86           C
ATOM   7012  CG2 VAL B 403      50.509 -11.879   7.648  1.00 79.37           C
ATOM   7013  C   VAL B 403      53.458 -10.160   7.691  1.00 78.88           C
ATOM   7014  O   VAL B 403      54.430  -9.683   8.281  1.00 78.94           O
ATOM   7015  N   GLN B 404      52.766  -9.485   6.772  1.00 78.92           N
ATOM   7016  CA  GLN B 404      53.171  -8.141   6.353  1.00 78.92           C
ATOM   7017  CB  GLN B 404      54.156  -8.229   5.181  1.00 78.93           C
ATOM   7018  CG  GLN B 404      53.679  -9.041   3.997  1.00 78.44           C
ATOM   7019  CD  GLN B 404      54.726  -9.126   2.909  1.00 78.45           C
ATOM   7020  OE1 GLN B 404      55.757  -9.779   3.070  1.00 77.52           O
ATOM   7021  NE2 GLN B 404      54.464  -8.464   1.790  1.00 77.81           N
ATOM   7022  C   GLN B 404      52.026  -7.161   6.039  1.00 79.15           C
ATOM   7023  O   GLN B 404      50.930  -7.571   5.661  1.00 79.21           O
ATOM   7024  N   PHE B 405      52.298  -5.868   6.215  1.00 79.33           N
ATOM   7025  CA  PHE B 405      51.344  -4.801   5.894  1.00 79.57           C
ATOM   7026  CB  PHE B 405      51.182  -3.822   7.058  1.00 79.67           C
ATOM   7027  CG  PHE B 405      51.000  -4.468   8.399  1.00 79.95           C
ATOM   7028  CD1 PHE B 405      49.730  -4.591   8.956  1.00 80.21           C
ATOM   7029  CE1 PHE B 405      49.554  -5.169  10.209  1.00 80.62           C
ATOM   7030  CZ  PHE B 405      50.664  -5.621  10.925  1.00 80.67           C
ATOM   7031  CE2 PHE B 405      51.943  -5.491  10.383  1.00 80.56           C
ATOM   7032  CD2 PHE B 405      52.104  -4.913   9.129  1.00 80.24           C
ATOM   7033  C   PHE B 405      51.852  -3.998   4.709  1.00 79.62           C
ATOM   7034  O   PHE B 405      53.053  -3.785   4.578  1.00 79.70           O
ATOM   7035  N   VAL B 406      50.938  -3.525   3.868  1.00 79.68           N
ATOM   7036  CA  VAL B 406      51.308  -2.681   2.730  1.00 79.76           C
ATOM   7037  CB  VAL B 406      50.516  -3.042   1.435  1.00 79.66           C
ATOM   7038  CG1 VAL B 406      50.886  -4.439   0.951  1.00 79.52           C
ATOM   7039  CG2 VAL B 406      49.007  -2.925   1.647  1.00 79.41           C
ATOM   7040  C   VAL B 406      51.150  -1.193   3.064  1.00 79.97           C
ATOM   7041  O   VAL B 406      50.326  -0.827   3.910  1.00 80.21           O
ATOM   7042  N   CYS B 407      51.954  -0.349   2.410  1.00 79.99           N
ATOM   7043  CA  CYS B 407      51.831   1.104   2.524  1.00 79.81           C
ATOM   7044  CB  CYS B 407      52.567   1.611   3.763  1.00 79.77           C
ATOM   7045  SG  CYS B 407      52.153   3.312   4.223  1.00 80.10           S
ATOM   7046  C   CYS B 407      52.338   1.815   1.266  1.00 79.81           C
ATOM   7047  O   CYS B 407      53.461   2.325   1.234  1.00 79.86           O
ATOM   7048  N   ARG B 408      51.499   1.849   0.234  1.00 79.82           N
ATOM   7049  CA  ARG B 408      51.859   2.471  -1.042  1.00 79.97           C
ATOM   7050  CB  ARG B 408      51.018   1.895  -2.199  1.00 80.01           C
ATOM   7051  CG  ARG B 408      51.154   0.382  -2.382  1.00 80.38           C
ATOM   7052  CD  ARG B 408      50.233  -0.177  -3.457  1.00 80.28           C
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ATOM	7053	NE	ARG	B	408	50.036	-1.617	-3.268	1.00	81.31	N
ATOM	7054	CZ	ARG	B	408	49.662	-2.479	-4.216	1.00	81.50	C
ATOM	7055	NH1	ARG	B	408	49.442	-2.072	-5.463	1.00	81.82	N
ATOM	7056	NH2	ARG	B	408	49.515	-3.765	-3.917	1.00	81.12	N
ATOM	7057	C	ARG	B	408	51.721	3.992	-0.969	1.00	79.89	C
ATOM	7058	O	ARG	B	408	50.608	4.526	-0.951	1.00	79.96	O
ATOM	7059	N	ALA	B	409	52.859	4.681	-0.920	1.00	79.77	N
ATOM	7060	CA	ALA	B	409	52.884	6.144	-0.869	1.00	79.68	C
ATOM	7061	CB	ALA	B	409	53.549	6.612	0.399	1.00	79.46	C
ATOM	7062	C	ALA	B	409	53.591	6.749	-2.076	1.00	79.67	C
ATOM	7063	O	ALA	B	409	54.502	6.145	-2.641	1.00	79.86	O
ATOM	7064	N	ASP	B	410	53.160	7.942	-2.473	1.00	79.54	N
ATOM	7065	CA	ASP	B	410	53.907	8.725	-3.454	1.00	79.56	C
ATOM	7066	CB	ASP	B	410	53.394	8.499	-4.882	1.00	79.87	C
ATOM	7067	CG	ASP	B	410	51.889	8.627	-4.997	1.00	80.85	C
ATOM	7068	OD1	ASP	B	410	51.341	9.713	-4.696	1.00	81.84	O
ATOM	7069	OD2	ASP	B	410	51.256	7.635	-5.414	1.00	81.96	O
ATOM	7070	C	ASP	B	410	53.952	10.209	-3.115	1.00	79.16	C
ATOM	7071	O	ASP	B	410	53.234	10.686	-2.239	1.00	79.08	O
ATOM	7072	N	GLY	B	411	54.817	10.921	-3.823	1.00	78.86	N
ATOM	7073	CA	GLY	B	411	55.050	12.339	-3.608	1.00	78.48	C
ATOM	7074	C	GLY	B	411	56.352	12.694	-4.283	1.00	78.24	C
ATOM	7075	O	GLY	B	411	57.018	11.828	-4.849	1.00	78.14	O
ATOM	7076	N	ASP	B	412	56.716	13.967	-4.238	1.00	78.21	N
ATOM	7077	CA	ASP	B	412	57.984	14.397	-4.811	1.00	78.23	C
ATOM	7078	CB	ASP	B	412	57.819	14.835	-6.264	1.00	78.42	C
ATOM	7079	CG	ASP	B	412	59.142	14.927	-6.988	1.00	79.20	C
ATOM	7080	OD1	ASP	B	412	59.875	13.911	-7.032	1.00	80.24	O
ATOM	7081	OD2	ASP	B	412	59.448	16.017	-7.513	1.00	80.27	O
ATOM	7082	C	ASP	B	412	58.642	15.499	-3.993	1.00	77.90	C
ATOM	7083	O	ASP	B	412	58.043	16.545	-3.765	1.00	78.01	O
ATOM	7084	N	PRO	B	413	59.878	15.262	-3.530	1.00	77.61	N
ATOM	7085	CA	PRO	B	413	60.681	14.042	-3.645	1.00	77.22	C
ATOM	7086	CB	PRO	B	413	61.940	14.384	-2.847	1.00	77.23	C
ATOM	7087	CG	PRO	B	413	61.548	15.524	-1.970	1.00	77.84	C
ATOM	7088	CD	PRO	B	413	60.601	16.313	-2.799	1.00	77.73	C
ATOM	7089	C	PRO	B	413	60.010	12.802	-3.042	1.00	76.88	C
ATOM	7090	O	PRO	B	413	59.197	12.938	-2.131	1.00	76.43	O
ATOM	7091	N	PRO	B	414	60.354	11.595	-3.554	1.00	76.86	N
ATOM	7092	CA	PRO	B	414	59.800	10.320	-3.082	1.00	76.72	C
ATOM	7093	CB	PRO	B	414	60.728	9.271	-3.710	1.00	76.60	C
ATOM	7094	CG	PRO	B	414	61.864	10.037	-4.308	1.00	76.68	C
ATOM	7095	CD	PRO	B	414	61.320	11.373	-4.643	1.00	76.70	C
ATOM	7096	C	PRO	B	414	59.844	10.216	-1.569	1.00	76.69	C
ATOM	7097	O	PRO	B	414	60.837	10.618	-0.968	1.00	76.91	O
ATOM	7098	N	PRO	B	415	58.769	9.694	-0.952	1.00	76.63	N
ATOM	7099	CA	PRO	B	415	58.649	9.738	0.498	1.00	76.40	C
ATOM	7100	CB	PRO	B	415	57.147	9.516	0.742	1.00	76.20	C
ATOM	7101	CG	PRO	B	415	56.509	9.422	-0.604	1.00	76.41	C
ATOM	7102	CD	PRO	B	415	57.598	9.044	-1.556	1.00	76.79	C
ATOM	7103	C	PRO	B	415	59.448	8.645	1.183	1.00	76.33	C
ATOM	7104	O	PRO	B	415	59.623	7.552	0.630	1.00	76.22	O
ATOM	7105	N	ALA	B	416	59.941	8.964	2.376	1.00	76.27	N
ATOM	7106	CA	ALA	B	416	60.520	7.977	3.263	1.00	76.11	C
ATOM	7107	CB	ALA	B	416	61.448	8.647	4.239	1.00	76.13	C
ATOM	7108	C	ALA	B	416	59.341	7.371	3.993	1.00	76.22	C

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ATOM   7109  O   ALA B 416      58.414   8.093   4.375  1.00 76.44           O
ATOM   7110  N   ILE B 417      59.357   6.053   4.173  1.00 75.95           N
ATOM   7111  CA  ILE B 417      58.264   5.369   4.864  1.00 75.54           C
ATOM   7112  CB  ILE B 417      57.761   4.162   4.054  1.00 75.50           C
ATOM   7113  CG1 ILE B 417      57.436   4.569   2.609  1.00 75.60           C
ATOM   7114  CD1 ILE B 417      56.491   5.752   2.463  1.00 74.36           C
ATOM   7115  CG2 ILE B 417      56.571   3.498   4.737  1.00 75.68           C
ATOM   7116  C   ILE B 417      58.700   4.904   6.244  1.00 75.45           C
ATOM   7117  O   ILE B 417      59.724   4.244   6.382  1.00 75.79           O
ATOM   7118  N   LEU B 418      57.913   5.241   7.260  1.00 75.17           N
ATOM   7119  CA  LEU B 418      58.197   4.827   8.627  1.00 74.94           C
ATOM   7120  CB  LEU B 418      58.511   6.038   9.510  1.00 75.17           C
ATOM   7121  CG  LEU B 418      59.692   6.916   9.091  1.00 75.51           C
ATOM   7122  CD1 LEU B 418      59.875   8.030  10.092  1.00 75.30           C
ATOM   7123  CD2 LEU B 418      60.973   6.103   8.944  1.00 75.28           C
ATOM   7124  C   LEU B 418      57.034   4.061   9.220  1.00 74.67           C
ATOM   7125  O   LEU B 418      55.872   4.342   8.909  1.00 74.78           O
ATOM   7126  N   TRP B 419      57.353   3.103  10.086  1.00 74.28           N
ATOM   7127  CA  TRP B 419      56.332   2.301  10.756  1.00 73.80           C
ATOM   7128  CB  TRP B 419      56.445   0.838  10.348  1.00 73.50           C
ATOM   7129  CG  TRP B 419      55.827   0.572   9.036  1.00 73.09           C
ATOM   7130  CD1 TRP B 419      56.465   0.459   7.841  1.00 72.93           C
ATOM   7131  NE1 TRP B 419      55.556   0.216   6.839  1.00 73.11           N
ATOM   7132  CE2 TRP B 419      54.300   0.175   7.382  1.00 72.83           C
ATOM   7133  CD2 TRP B 419      54.433   0.399   8.769  1.00 72.75           C
ATOM   7134  CE3 TRP B 419      53.284   0.407   9.565  1.00 72.56           C
ATOM   7135  CZ3 TRP B 419      52.053   0.193   8.959  1.00 73.03           C
ATOM   7136  CH2 TRP B 419      51.953  -0.031   7.573  1.00 72.81           C
ATOM   7137  CZ2 TRP B 419      53.061  -0.040   6.771  1.00 72.76           C
ATOM   7138  C   TRP B 419      56.361   2.427  12.269  1.00 73.70           C
ATOM   7139  O   TRP B 419      57.403   2.254  12.907  1.00 73.50           O
ATOM   7140  N   LEU B 420      55.197   2.729  12.833  1.00 73.78           N
ATOM   7141  CA  LEU B 420      55.054   2.836  14.275  1.00 73.92           C
ATOM   7142  CB  LEU B 420      54.277   4.100  14.651  1.00 73.59           C
ATOM   7143  CG  LEU B 420      54.437   4.551  16.104  1.00 73.94           C
ATOM   7144  CD1 LEU B 420      55.902   4.848  16.449  1.00 73.90           C
ATOM   7145  CD2 LEU B 420      53.555   5.753  16.398  1.00 73.92           C
ATOM   7146  C   LEU B 420      54.385   1.584  14.836  1.00 74.05           C
ATOM   7147  O   LEU B 420      53.197   1.343  14.604  1.00 74.10           O
ATOM   7148  N   SER B 421      55.166   0.784  15.562  1.00 74.21           N
ATOM   7149  CA  SER B 421      54.665  -0.439  16.184  1.00 74.24           C
ATOM   7150  CB  SER B 421      55.822  -1.383  16.542  1.00 74.12           C
ATOM   7151  OG  SER B 421      56.500  -0.963  17.711  1.00 73.75           O
ATOM   7152  C   SER B 421      53.838  -0.097  17.421  1.00 74.42           C
ATOM   7153  O   SER B 421      53.947   1.013  17.947  1.00 74.28           O
ATOM   7154  N   PRO B 422      52.997  -1.041  17.885  1.00 74.68           N
ATOM   7155  CA  PRO B 422      52.271  -0.835  19.134  1.00 74.96           C
ATOM   7156  CB  PRO B 422      51.215  -1.946  19.124  1.00 74.91           C
ATOM   7157  CG  PRO B 422      51.277  -2.557  17.764  1.00 75.02           C
ATOM   7158  CD  PRO B 422      52.659  -2.336  17.283  1.00 74.71           C
ATOM   7159  C   PRO B 422      53.178  -0.975  20.354  1.00 75.25           C
ATOM   7160  O   PRO B 422      52.730  -0.759  21.475  1.00 75.32           O
ATOM   7161  N   ARG B 423      54.442  -1.329  20.131  1.00 75.69           N
ATOM   7162  CA  ARG B 423      55.441  -1.347  21.197  1.00 76.35           C
ATOM   7163  CB  ARG B 423      56.456  -2.467  20.963  1.00 76.36           C
ATOM   7164  CG  ARG B 423      55.858  -3.867  21.030  1.00 77.21           C
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ATOM	7165	CD	ARG	B	423	56.895	-4.942	20.740	1.00	77.46	C
ATOM	7166	NE	ARG	B	423	57.826	-5.115	21.853	1.00	80.01	N
ATOM	7167	CZ	ARG	B	423	58.978	-5.775	21.775	1.00	80.80	C
ATOM	7168	NH1	ARG	B	423	59.356	-6.327	20.626	1.00	81.29	N
ATOM	7169	NH2	ARG	B	423	59.754	-5.878	22.847	1.00	81.17	N
ATOM	7170	C	ARG	B	423	56.146	0.005	21.299	1.00	76.30	C
ATOM	7171	O	ARG	B	423	57.123	0.150	22.038	1.00	76.26	O
ATOM	7172	N	LYS	B	424	55.625	0.983	20.553	1.00	76.56	N
ATOM	7173	CA	LYS	B	424	56.138	2.360	20.496	1.00	76.72	C
ATOM	7174	CB	LYS	B	424	56.010	3.071	21.855	1.00	76.73	C
ATOM	7175	CG	LYS	B	424	54.580	3.365	22.292	1.00	76.60	C
ATOM	7176	CD	LYS	B	424	54.533	3.834	23.742	1.00	76.60	C
ATOM	7177	CE	LYS	B	424	53.119	3.743	24.300	1.00	76.64	C
ATOM	7178	NZ	LYS	B	424	53.059	3.934	25.779	1.00	76.47	N
ATOM	7179	C	LYS	B	424	57.567	2.449	19.958	1.00	76.96	C
ATOM	7180	O	LYS	B	424	58.387	3.214	20.471	1.00	76.91	O
ATOM	7181	N	HIS	B	425	57.853	1.658	18.927	1.00	77.33	N
ATOM	7182	CA	HIS	B	425	59.145	1.708	18.247	1.00	77.89	C
ATOM	7183	CB	HIS	B	425	59.847	0.347	18.255	1.00	78.01	C
ATOM	7184	CG	HIS	B	425	60.303	-0.097	19.610	1.00	78.61	C
ATOM	7185	ND1	HIS	B	425	59.864	-1.266	20.197	1.00	78.76	N
ATOM	7186	CE1	HIS	B	425	60.431	-1.401	21.383	1.00	79.02	C
ATOM	7187	NE2	HIS	B	425	61.220	-0.361	21.589	1.00	79.15	N
ATOM	7188	CD2	HIS	B	425	61.160	0.469	20.495	1.00	79.10	C
ATOM	7189	C	HIS	B	425	58.975	2.195	16.819	1.00	78.20	C
ATOM	7190	O	HIS	B	425	57.942	1.961	16.183	1.00	78.06	O
ATOM	7191	N	LEU	B	426	60.000	2.877	16.325	1.00	78.76	N
ATOM	7192	CA	LEU	B	426	59.948	3.490	15.013	1.00	79.33	C
ATOM	7193	CB	LEU	B	426	60.434	4.945	15.089	1.00	79.22	C
ATOM	7194	CG	LEU	B	426	60.165	5.849	13.882	1.00	79.10	C
ATOM	7195	CD1	LEU	B	426	58.702	6.244	13.786	1.00	78.39	C
ATOM	7196	CD2	LEU	B	426	61.043	7.078	13.931	1.00	79.31	C
ATOM	7197	C	LEU	B	426	60.772	2.672	14.021	1.00	79.84	C
ATOM	7198	O	LEU	B	426	61.992	2.809	13.945	1.00	79.92	O
ATOM	7199	N	VAL	B	427	60.094	1.809	13.273	1.00	80.54	N
ATOM	7200	CA	VAL	B	427	60.752	0.963	12.279	1.00	81.18	C
ATOM	7201	CB	VAL	B	427	59.940	-0.327	11.967	1.00	81.16	C
ATOM	7202	CG1	VAL	B	427	60.851	-1.426	11.442	1.00	81.28	C
ATOM	7203	CG2	VAL	B	427	59.220	-0.831	13.206	1.00	81.29	C
ATOM	7204	C	VAL	B	427	61.014	1.779	11.002	1.00	81.62	C
ATOM	7205	O	VAL	B	427	60.210	2.639	10.615	1.00	81.66	O
ATOM	7206	N	SER	B	428	62.149	1.497	10.365	1.00	82.09	N
ATOM	7207	CA	SER	B	428	62.669	2.298	9.261	1.00	82.51	C
ATOM	7208	CB	SER	B	428	63.585	3.391	9.830	1.00	82.42	C
ATOM	7209	OG	SER	B	428	64.164	4.177	8.809	1.00	82.56	O
ATOM	7210	C	SER	B	428	63.433	1.418	8.257	1.00	82.86	C
ATOM	7211	O	SER	B	428	63.441	0.190	8.367	1.00	82.71	O
ATOM	7212	N	ALA	B	429	64.060	2.052	7.271	1.00	83.36	N
ATOM	7213	CA	ALA	B	429	64.969	1.358	6.367	1.00	83.88	C
ATOM	7214	CB	ALA	B	429	65.373	2.267	5.211	1.00	83.83	C
ATOM	7215	C	ALA	B	429	66.205	0.870	7.127	1.00	84.27	C
ATOM	7216	O	ALA	B	429	66.712	-0.227	6.860	1.00	84.34	O
ATOM	7217	N	LYS	B	430	66.672	1.682	8.080	1.00	84.62	N
ATOM	7218	CA	LYS	B	430	67.877	1.373	8.866	1.00	84.89	C
ATOM	7219	CB	LYS	B	430	68.460	2.640	9.515	1.00	84.94	C
ATOM	7220	CG	LYS	B	430	68.782	3.799	8.550	1.00	85.43	C

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ATOM   7221  CD  LYS B 430      69.478   4.990   9.254  1.00 85.39           C
ATOM   7222  CE  LYS B 430      68.763   5.453  10.550  1.00 86.12           C
ATOM   7223  NZ  LYS B 430      67.280   5.675  10.411  1.00 85.27           N
ATOM   7224  C   LYS B 430      67.638   0.308   9.940  1.00 84.69           C
ATOM   7225  O   LYS B 430      68.584  -0.322  10.406  1.00 84.66           O
ATOM   7226  N   SER B 431      66.378   0.117  10.328  1.00 84.60           N
ATOM   7227  CA  SER B 431      66.025  -0.836  11.380  1.00 84.64           C
ATOM   7228  CB  SER B 431      64.524  -0.771  11.685  1.00 84.66           C
ATOM   7229  OG  SER B 431      64.148   0.524  12.120  1.00 84.39           O
ATOM   7230  C   SER B 431      66.442  -2.268  11.029  1.00 84.61           C
ATOM   7231  O   SER B 431      66.063  -2.794   9.981  1.00 84.61           O
ATOM   7232  N   ASN B 432      67.225  -2.883  11.912  1.00 84.49           N
ATOM   7233  CA  ASN B 432      67.754  -4.225  11.680  1.00 84.51           C
ATOM   7234  CB  ASN B 432      69.291  -4.209  11.671  1.00 84.58           C
ATOM   7235  CG  ASN B 432      69.865  -3.125  10.770  1.00 85.20           C
ATOM   7236  OD1 ASN B 432      69.857  -3.244   9.542  1.00 85.76           O
ATOM   7237  ND2 ASN B 432      70.374  -2.060  11.381  1.00 85.29           N
ATOM   7238  C   ASN B 432      67.251  -5.214  12.724  1.00 84.34           C
ATOM   7239  O   ASN B 432      68.016  -5.660  13.583  1.00 84.47           O
ATOM   7240  N   GLY B 433      65.965  -5.547  12.650  1.00 84.07           N
ATOM   7241  CA  GLY B 433      65.362  -6.503  13.580  1.00 83.80           C
ATOM   7242  C   GLY B 433      64.494  -7.533  12.885  1.00 83.58           C
ATOM   7243  O   GLY B 433      64.650  -7.784  11.687  1.00 83.65           O
ATOM   7244  N   ARG B 434      63.581  -8.136  13.644  1.00 83.26           N
ATOM   7245  CA  ARG B 434      62.572  -9.050  13.092  1.00 82.94           C
ATOM   7246  CB  ARG B 434      62.012  -9.961  14.190  1.00 83.08           C
ATOM   7247  CG  ARG B 434      61.719  -9.238  15.500  1.00 83.85           C
ATOM   7248  CD  ARG B 434      61.674 -10.191  16.691  1.00 85.34           C
ATOM   7249  NE  ARG B 434      60.416 -10.934  16.778  1.00 86.16           N
ATOM   7250  CZ  ARG B 434      59.245 -10.401  17.125  1.00 86.57           C
ATOM   7251  NH1 ARG B 434      59.141  -9.106  17.411  1.00 86.30           N
ATOM   7252  NH2 ARG B 434      58.166 -11.166  17.178  1.00 86.80           N
ATOM   7253  C   ARG B 434      61.451  -8.267  12.398  1.00 82.44           C
ATOM   7254  O   ARG B 434      60.494  -8.846  11.875  1.00 82.19           O
ATOM   7255  N   LEU B 435      61.599  -6.943  12.405  1.00 81.97           N
ATOM   7256  CA  LEU B 435      60.684  -6.027  11.742  1.00 81.51           C
ATOM   7257  CB  LEU B 435      60.156  -4.985  12.733  1.00 81.53           C
ATOM   7258  CG  LEU B 435      59.404  -5.458  13.980  1.00 81.46           C
ATOM   7259  CD1 LEU B 435      59.474  -4.398  15.079  1.00 81.84           C
ATOM   7260  CD2 LEU B 435      57.963  -5.809  13.657  1.00 81.03           C
ATOM   7261  C   LEU B 435      61.425  -5.324  10.617  1.00 81.13           C
ATOM   7262  O   LEU B 435      62.422  -4.638  10.857  1.00 81.15           O
ATOM   7263  N   THR B 436      60.940  -5.489   9.393  1.00 80.67           N
ATOM   7264  CA  THR B 436      61.608  -4.898   8.239  1.00 80.42           C
ATOM   7265  CB  THR B 436      62.219  -5.983   7.322  1.00 80.46           C
ATOM   7266  OG1 THR B 436      62.779  -7.026   8.125  1.00 80.90           O
ATOM   7267  CG2 THR B 436      63.316  -5.400   6.430  1.00 80.63           C
ATOM   7268  C   THR B 436      60.696  -3.979   7.426  1.00 80.01           C
ATOM   7269  O   THR B 436      59.521  -4.279   7.219  1.00 79.91           O
ATOM   7270  N   VAL B 437      61.253  -2.859   6.977  1.00 79.58           N
ATOM   7271  CA  VAL B 437      60.565  -1.976   6.047  1.00 79.25           C
ATOM   7272  CB  VAL B 437      60.593  -0.498   6.504  1.00 79.37           C
ATOM   7273  CG1 VAL B 437      59.749   0.363   5.571  1.00 79.60           C
ATOM   7274  CG2 VAL B 437      60.087  -0.364   7.936  1.00 79.25           C
ATOM   7275  C   VAL B 437      61.217  -2.107   4.682  1.00 78.89           C
ATOM   7276  O   VAL B 437      62.419  -1.892   4.536  1.00 78.73           O
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ATOM	7277	N	PHE	B	438	60.409	-2.476	3.694	1.00	78.74	N
ATOM	7278	CA	PHE	B	438	60.867	-2.656	2.315	1.00	78.62	C
ATOM	7279	CB	PHE	B	438	59.986	-3.684	1.595	1.00	78.56	C
ATOM	7280	CG	PHE	B	438	60.322	-5.115	1.915	1.00	78.47	C
ATOM	7281	CD1	PHE	B	438	60.890	-5.936	0.945	1.00	78.48	C
ATOM	7282	CE1	PHE	B	438	61.201	-7.269	1.226	1.00	78.32	C
ATOM	7283	CZ	PHE	B	438	60.940	-7.790	2.490	1.00	78.09	C
ATOM	7284	CE2	PHE	B	438	60.368	-6.979	3.467	1.00	78.25	C
ATOM	7285	CD2	PHE	B	438	60.057	-5.650	3.176	1.00	78.20	C
ATOM	7286	C	PHE	B	438	60.839	-1.324	1.559	1.00	78.51	C
ATOM	7287	O	PHE	B	438	60.060	-0.431	1.916	1.00	78.54	O
ATOM	7288	N	PRO	B	439	61.701	-1.177	0.527	1.00	78.30	N
ATOM	7289	CA	PRO	B	439	61.754	0.034	-0.304	1.00	78.29	C
ATOM	7290	CB	PRO	B	439	62.593	-0.417	-1.501	1.00	78.10	C
ATOM	7291	CG	PRO	B	439	63.527	-1.377	-0.910	1.00	77.92	C
ATOM	7292	CD	PRO	B	439	62.727	-2.147	0.106	1.00	78.11	C
ATOM	7293	C	PRO	B	439	60.393	0.591	-0.762	1.00	78.19	C
ATOM	7294	O	PRO	B	439	60.196	1.810	-0.752	1.00	78.04	O
ATOM	7295	N	ASP	B	440	59.474	-0.295	-1.150	1.00	78.09	N
ATOM	7296	CA	ASP	B	440	58.132	0.108	-1.586	1.00	77.93	C
ATOM	7297	CB	ASP	B	440	57.477	-1.005	-2.415	1.00	77.72	C
ATOM	7298	CG	ASP	B	440	57.332	-2.300	-1.643	1.00	77.43	C
ATOM	7299	OD1	ASP	B	440	56.798	-2.276	-0.515	1.00	77.10	O
ATOM	7300	OD2	ASP	B	440	57.751	-3.347	-2.167	1.00	77.23	O
ATOM	7301	C	ASP	B	440	57.229	0.524	-0.412	1.00	77.93	C
ATOM	7302	O	ASP	B	440	56.154	1.094	-0.612	1.00	77.94	O
ATOM	7303	N	GLY	B	441	57.665	0.221	0.808	1.00	77.93	N
ATOM	7304	CA	GLY	B	441	56.969	0.673	2.006	1.00	77.95	C
ATOM	7305	C	GLY	B	441	56.242	-0.394	2.806	1.00	78.06	C
ATOM	7306	O	GLY	B	441	55.535	-0.068	3.765	1.00	78.00	O
ATOM	7307	N	THR	B	442	56.396	-1.665	2.429	1.00	78.06	N
ATOM	7308	CA	THR	B	442	55.775	-2.732	3.219	1.00	78.15	C
ATOM	7309	CB	THR	B	442	55.385	-4.014	2.400	1.00	78.12	C
ATOM	7310	OG1	THR	B	442	56.552	-4.760	2.032	1.00	78.12	O
ATOM	7311	CG2	THR	B	442	54.567	-3.659	1.167	1.00	78.16	C
ATOM	7312	C	THR	B	442	56.604	-3.104	4.448	1.00	78.11	C
ATOM	7313	O	THR	B	442	57.833	-3.177	4.393	1.00	78.15	O
ATOM	7314	N	LEU	B	443	55.904	-3.314	5.557	1.00	78.05	N
ATOM	7315	CA	LEU	B	443	56.507	-3.769	6.795	1.00	78.05	C
ATOM	7316	CB	LEU	B	443	55.899	-3.005	7.973	1.00	77.96	C
ATOM	7317	CG	LEU	B	443	56.199	-3.446	9.404	1.00	77.41	C
ATOM	7318	CD1	LEU	B	443	57.621	-3.088	9.814	1.00	76.92	C
ATOM	7319	CD2	LEU	B	443	55.195	-2.799	10.321	1.00	77.69	C
ATOM	7320	C	LEU	B	443	56.278	-5.269	6.966	1.00	78.22	C
ATOM	7321	O	LEU	B	443	55.178	-5.759	6.718	1.00	78.14	O
ATOM	7322	N	GLU	B	444	57.314	-5.986	7.394	1.00	78.47	N
ATOM	7323	CA	GLU	B	444	57.216	-7.425	7.647	1.00	78.94	C
ATOM	7324	CB	GLU	B	444	58.143	-8.200	6.704	1.00	78.67	C
ATOM	7325	CG	GLU	B	444	58.134	-9.714	6.883	1.00	79.12	C
ATOM	7326	CD	GLU	B	444	59.207	-10.424	6.048	1.00	79.61	C
ATOM	7327	OE1	GLU	B	444	60.213	-9.774	5.679	1.00	80.71	O
ATOM	7328	OE2	GLU	B	444	59.048	-11.636	5.763	1.00	79.89	O
ATOM	7329	C	GLU	B	444	57.543	-7.743	9.107	1.00	79.03	C
ATOM	7330	O	GLU	B	444	58.527	-7.236	9.656	1.00	79.22	O
ATOM	7331	N	VAL	B	445	56.701	-8.570	9.727	1.00	79.06	N
ATOM	7332	CA	VAL	B	445	56.922	-9.055	11.088	1.00	79.02	C

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ATOM   7333  CB  VAL B 445      55.692  -8.831  11.993  1.00 78.99           C
ATOM   7334  CG1 VAL B 445      56.065  -9.041  13.461  1.00 79.05           C
ATOM   7335  CG2 VAL B 445      55.109  -7.447  11.785  1.00 78.70           C
ATOM   7336  C   VAL B 445      57.214 -10.546  11.008  1.00 79.11           C
ATOM   7337  O   VAL B 445      56.349 -11.325  10.615  1.00 78.99           O
ATOM   7338  N   ARG B 446      58.427 -10.932  11.394  1.00 79.38           N
ATOM   7339  CA  ARG B 446      58.949 -12.269  11.109  1.00 79.73           C
ATOM   7340  CB  ARG B 446      60.480 -12.241  11.017  1.00 79.86           C
ATOM   7341  CG  ARG B 446      61.020 -12.008   9.602  1.00 80.05           C
ATOM   7342  CD  ARG B 446      62.548 -12.112   9.544  1.00 79.95           C
ATOM   7343  NE  ARG B 446      63.023 -13.443   9.930  1.00 80.76           N
ATOM   7344  CZ  ARG B 446      64.281 -13.865   9.820  1.00 80.95           C
ATOM   7345  NH1 ARG B 446      64.595 -15.096  10.204  1.00 80.92           N
ATOM   7346  NH2 ARG B 446      65.226 -13.070   9.326  1.00 81.05           N
ATOM   7347  C   ARG B 446      58.486 -13.379  12.056  1.00 79.86           C
ATOM   7348  O   ARG B 446      58.130 -14.476  11.610  1.00 79.93           O
ATOM   7349  N   TYR B 447      58.508 -13.114  13.355  1.00 79.83           N
ATOM   7350  CA  TYR B 447      58.080 -14.124  14.309  1.00 79.90           C
ATOM   7351  CB  TYR B 447      59.280 -14.742  15.031  1.00 79.80           C
ATOM   7352  CG  TYR B 447      60.096 -15.664  14.153  1.00 79.57           C
ATOM   7353  CD1 TYR B 447      59.660 -16.962  13.882  1.00 79.03           C
ATOM   7354  CE1 TYR B 447      60.400 -17.813  13.070  1.00 79.00           C
ATOM   7355  CZ  TYR B 447      61.597 -17.369  12.523  1.00 79.34           C
ATOM   7356  OH  TYR B 447      62.331 -18.218  11.726  1.00 79.40           O
ATOM   7357  CE2 TYR B 447      62.055 -16.082  12.778  1.00 79.24           C
ATOM   7358  CD2 TYR B 447      61.303 -15.237  13.589  1.00 79.30           C
ATOM   7359  C   TYR B 447      57.071 -13.539  15.276  1.00 80.11           C
ATOM   7360  O   TYR B 447      57.359 -13.332  16.460  1.00 80.16           O
ATOM   7361  N   ALA B 448      55.881 -13.275  14.740  1.00 80.22           N
ATOM   7362  CA  ALA B 448      54.799 -12.625  15.469  1.00 80.23           C
ATOM   7363  CB  ALA B 448      53.500 -12.741  14.691  1.00 80.25           C
ATOM   7364  C   ALA B 448      54.630 -13.187  16.875  1.00 80.27           C
ATOM   7365  O   ALA B 448      54.595 -14.403  17.073  1.00 80.36           O
ATOM   7366  N   GLN B 449      54.553 -12.282  17.844  1.00 80.26           N
ATOM   7367  CA  GLN B 449      54.300 -12.637  19.236  1.00 80.27           C
ATOM   7368  CB  GLN B 449      55.588 -12.526  20.070  1.00 80.32           C
ATOM   7369  CG  GLN B 449      56.306 -11.171  19.973  1.00 80.51           C
ATOM   7370  CD  GLN B 449      57.739 -11.207  20.494  1.00 80.37           C
ATOM   7371  OE1 GLN B 449      58.411 -12.238  20.439  1.00 80.31           O
ATOM   7372  NE2 GLN B 449      58.213 -10.069  20.994  1.00 80.29           N
ATOM   7373  C   GLN B 449      53.198 -11.735  19.789  1.00 80.14           C
ATOM   7374  O   GLN B 449      52.819 -10.749  19.149  1.00 80.16           O
ATOM   7375  N   VAL B 450      52.684 -12.078  20.968  1.00 79.94           N
ATOM   7376  CA  VAL B 450      51.646 -11.274  21.624  1.00 79.72           C
ATOM   7377  CB  VAL B 450      51.162 -11.923  22.938  1.00 79.66           C
ATOM   7378  CG1 VAL B 450      50.199 -13.058  22.636  1.00 79.68           C
ATOM   7379  CG2 VAL B 450      52.346 -12.413  23.771  1.00 79.52           C
ATOM   7380  C   VAL B 450      52.087  -9.825  21.869  1.00 79.64           C
ATOM   7381  O   VAL B 450      51.260  -8.909  21.892  1.00 79.55           O
ATOM   7382  N   GLN B 451      53.395  -9.632  22.036  1.00 79.58           N
ATOM   7383  CA  GLN B 451      53.993  -8.306  22.192  1.00 79.54           C
ATOM   7384  CB  GLN B 451      55.495  -8.421  22.497  1.00 79.62           C
ATOM   7385  CG  GLN B 451      55.840  -8.909  23.914  1.00 79.53           C
ATOM   7386  CD  GLN B 451      55.630 -10.411  24.118  1.00 79.69           C
ATOM   7387  OE1 GLN B 451      56.032 -11.233  23.291  1.00 79.45           O
ATOM   7388  NE2 GLN B 451      55.006 -10.771  25.236  1.00 79.78           N
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ATOM   7389  C   GLN B 451      53.774  -7.450  20.943  1.00 79.45           C
ATOM   7390  O   GLN B 451      53.734  -6.222  21.024  1.00 79.27           O
ATOM   7391  N   ASP B 452      53.616  -8.111  19.798  1.00 79.39           N
ATOM   7392  CA  ASP B 452      53.434  -7.431  18.517  1.00 79.48           C
ATOM   7393  CB  ASP B 452      54.152  -8.190  17.399  1.00 79.62           C
ATOM   7394  CG  ASP B 452      55.663  -8.122  17.525  1.00 80.13           C
ATOM   7395  OD1 ASP B 452      56.186  -7.070  17.964  1.00 80.43           O
ATOM   7396  OD2 ASP B 452      56.328  -9.122  17.178  1.00 80.54           O
ATOM   7397  C   ASP B 452      51.973  -7.193  18.142  1.00 79.39           C
ATOM   7398  O   ASP B 452      51.681  -6.729  17.040  1.00 79.41           O
ATOM   7399  N   ASN B 453      51.064  -7.504  19.060  1.00 79.41           N
ATOM   7400  CA  ASN B 453      49.638  -7.255  18.854  1.00 79.41           C
ATOM   7401  CB  ASN B 453      48.812  -8.054  19.867  1.00 79.47           C
ATOM   7402  CG  ASN B 453      47.335  -8.090  19.523  1.00 79.81           C
ATOM   7403  OD1 ASN B 453      46.501  -7.553  20.257  1.00 81.06           O
ATOM   7404  ND2 ASN B 453      47.004  -8.716  18.399  1.00 79.72           N
ATOM   7405  C   ASN B 453      49.287  -5.762  18.936  1.00 79.27           C
ATOM   7406  O   ASN B 453      49.889  -5.012  19.712  1.00 79.23           O
ATOM   7407  N   GLY B 454      48.321  -5.339  18.122  1.00 79.09           N
ATOM   7408  CA  GLY B 454      47.783  -3.982  18.193  1.00 78.88           C
ATOM   7409  C   GLY B 454      47.780  -3.200  16.890  1.00 78.76           C
ATOM   7410  O   GLY B 454      47.931  -3.763  15.803  1.00 78.72           O
ATOM   7411  N   THR B 455      47.608  -1.887  17.011  1.00 78.54           N
ATOM   7412  CA  THR B 455      47.517  -1.008  15.852  1.00 78.29           C
ATOM   7413  CB  THR B 455      46.599   0.206  16.129  1.00 78.31           C
ATOM   7414  OG1 THR B 455      47.315   1.188  16.883  1.00 78.88           O
ATOM   7415  CG2 THR B 455      45.356  -0.208  16.914  1.00 78.24           C
ATOM   7416  C   THR B 455      48.900  -0.524  15.412  1.00 78.00           C
ATOM   7417  O   THR B 455      49.709  -0.083  16.227  1.00 77.77           O
ATOM   7418  N   TYR B 456      49.162  -0.631  14.114  1.00 77.86           N
ATOM   7419  CA  TYR B 456      50.396  -0.136  13.513  1.00 77.67           C
ATOM   7420  CB  TYR B 456      51.008  -1.194  12.587  1.00 77.60           C
ATOM   7421  CG  TYR B 456      51.714  -2.322  13.316  1.00 77.77           C
ATOM   7422  CD1 TYR B 456      53.105  -2.355  13.400  1.00 77.76           C
ATOM   7423  CE1 TYR B 456      53.766  -3.390  14.068  1.00 77.57           C
ATOM   7424  CZ  TYR B 456      53.033  -4.403  14.660  1.00 77.34           C
ATOM   7425  OH  TYR B 456      53.692  -5.410  15.322  1.00 77.56           O
ATOM   7426  CE2 TYR B 456      51.647  -4.399  14.592  1.00 77.29           C
ATOM   7427  CD2 TYR B 456      50.993  -3.359  13.921  1.00 77.75           C
ATOM   7428  C   TYR B 456      50.110   1.154  12.748  1.00 77.53           C
ATOM   7429  O   TYR B 456      48.984   1.380  12.289  1.00 77.46           O
ATOM   7430  N   LEU B 457      51.123   2.006  12.626  1.00 77.33           N
ATOM   7431  CA  LEU B 457      50.954   3.284  11.945  1.00 77.05           C
ATOM   7432  CB  LEU B 457      50.938   4.435  12.946  1.00 76.90           C
ATOM   7433  CG  LEU B 457      50.404   5.735  12.357  1.00 76.76           C
ATOM   7434  CD1 LEU B 457      48.925   5.594  12.057  1.00 76.68           C
ATOM   7435  CD2 LEU B 457      50.652   6.884  13.312  1.00 77.07           C
ATOM   7436  C   LEU B 457      52.004   3.531  10.870  1.00 76.91           C
ATOM   7437  O   LEU B 457      53.207   3.562  11.144  1.00 76.80           O
ATOM   7438  N   CYS B 458      51.529   3.706   9.643  1.00 76.99           N
ATOM   7439  CA  CYS B 458      52.398   4.043   8.532  1.00 76.65           C
ATOM   7440  CB  CYS B 458      51.887   3.434   7.244  1.00 76.63           C
ATOM   7441  SG  CYS B 458      53.132   3.574   5.992  1.00 78.22           S
ATOM   7442  C   CYS B 458      52.510   5.556   8.354  1.00 76.42           C
ATOM   7443  O   CYS B 458      51.496   6.273   8.318  1.00 76.48           O
ATOM   7444  N   ILE B 459      53.744   6.040   8.252  1.00 75.77           N
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ATOM	7445	CA	ILE	B	459	53.983	7.459	8.051	1.00	75.10	C
ATOM	7446	CB	ILE	B	459	54.640	8.113	9.272	1.00	74.95	C
ATOM	7447	CG1	ILE	B	459	53.796	7.873	10.531	1.00	74.83	C
ATOM	7448	CD1	ILE	B	459	54.536	8.086	11.834	1.00	74.49	C
ATOM	7449	CG2	ILE	B	459	54.777	9.599	9.034	1.00	74.90	C
ATOM	7450	C	ILE	B	459	54.846	7.655	6.820	1.00	74.94	C
ATOM	7451	O	ILE	B	459	55.937	7.096	6.731	1.00	75.07	O
ATOM	7452	N	ALA	B	460	54.337	8.429	5.864	1.00	74.53	N
ATOM	7453	CA	ALA	B	460	55.074	8.766	4.654	1.00	74.07	C
ATOM	7454	CB	ALA	B	460	54.262	8.430	3.442	1.00	73.95	C
ATOM	7455	C	ALA	B	460	55.379	10.255	4.687	1.00	74.19	C
ATOM	7456	O	ALA	B	460	54.471	11.075	4.816	1.00	74.37	O
ATOM	7457	N	ALA	B	461	56.657	10.603	4.584	1.00	74.05	N
ATOM	7458	CA	ALA	B	461	57.082	11.993	4.712	1.00	73.81	C
ATOM	7459	CB	ALA	B	461	57.693	12.235	6.096	1.00	73.90	C
ATOM	7460	C	ALA	B	461	58.051	12.445	3.620	1.00	73.63	C
ATOM	7461	O	ALA	B	461	58.976	11.711	3.232	1.00	73.55	O
ATOM	7462	N	ASN	B	462	57.801	13.649	3.118	1.00	73.04	N
ATOM	7463	CA	ASN	B	462	58.800	14.398	2.386	1.00	72.84	C
ATOM	7464	CB	ASN	B	462	58.652	14.231	0.865	1.00	72.71	C
ATOM	7465	CG	ASN	B	462	57.403	14.883	0.301	1.00	72.09	C
ATOM	7466	OD1	ASN	B	462	56.604	15.474	1.027	1.00	71.81	O
ATOM	7467	ND2	ASN	B	462	57.229	14.771	-1.014	1.00	70.67	N
ATOM	7468	C	ASN	B	462	58.773	15.855	2.838	1.00	72.99	C
ATOM	7469	O	ASN	B	462	58.085	16.185	3.804	1.00	72.96	O
ATOM	7470	N	ALA	B	463	59.524	16.719	2.160	1.00	73.12	N
ATOM	7471	CA	ALA	B	463	59.607	18.117	2.559	1.00	73.27	C
ATOM	7472	CB	ALA	B	463	60.714	18.797	1.812	1.00	73.24	C
ATOM	7473	C	ALA	B	463	58.277	18.869	2.380	1.00	73.66	C
ATOM	7474	O	ALA	B	463	57.982	19.814	3.122	1.00	73.86	O
ATOM	7475	N	GLY	B	464	57.474	18.429	1.409	1.00	73.77	N
ATOM	7476	CA	GLY	B	464	56.207	19.072	1.072	1.00	73.91	C
ATOM	7477	C	GLY	B	464	55.093	18.794	2.057	1.00	74.23	C
ATOM	7478	O	GLY	B	464	54.050	19.468	2.041	1.00	74.45	O
ATOM	7479	N	GLY	B	465	55.311	17.804	2.917	1.00	74.19	N
ATOM	7480	CA	GLY	B	465	54.305	17.391	3.884	1.00	74.20	C
ATOM	7481	C	GLY	B	465	54.248	15.892	4.083	1.00	74.24	C
ATOM	7482	O	GLY	B	465	54.982	15.138	3.446	1.00	74.16	O
ATOM	7483	N	ASN	B	466	53.363	15.461	4.973	1.00	74.41	N
ATOM	7484	CA	ASN	B	466	53.290	14.059	5.348	1.00	74.60	C
ATOM	7485	CB	ASN	B	466	54.049	13.800	6.660	1.00	74.51	C
ATOM	7486	CG	ASN	B	466	53.786	14.855	7.719	1.00	74.59	C
ATOM	7487	OD1	ASN	B	466	52.684	15.394	7.841	1.00	74.02	O
ATOM	7488	ND2	ASN	B	466	54.807	15.146	8.504	1.00	75.80	N
ATOM	7489	C	ASN	B	466	51.877	13.500	5.411	1.00	74.84	C
ATOM	7490	O	ASN	B	466	50.893	14.240	5.343	1.00	74.60	O
ATOM	7491	N	ASP	B	467	51.802	12.177	5.518	1.00	75.51	N
ATOM	7492	CA	ASP	B	467	50.539	11.454	5.604	1.00	76.17	C
ATOM	7493	CB	ASP	B	467	50.030	11.072	4.208	1.00	76.31	C
ATOM	7494	CG	ASP	B	467	48.517	10.845	4.169	1.00	77.52	C
ATOM	7495	OD1	ASP	B	467	47.773	11.495	4.945	1.00	78.45	O
ATOM	7496	OD2	ASP	B	467	48.065	10.015	3.350	1.00	78.75	O
ATOM	7497	C	ASP	B	467	50.694	10.209	6.469	1.00	76.43	C
ATOM	7498	O	ASP	B	467	51.800	9.705	6.685	1.00	76.41	O
ATOM	7499	N	SER	B	468	49.564	9.718	6.950	1.00	77.09	N
ATOM	7500	CA	SER	B	468	49.528	8.615	7.884	1.00	77.82	C

ATOM	7501	CB	SER	B	468	49.290	9.168	9.291	1.00	77.90	C
ATOM	7502	OG	SER	B	468	49.117	8.128	10.230	1.00	78.87	O
ATOM	7503	C	SER	B	468	48.420	7.637	7.492	1.00	77.99	C
ATOM	7504	O	SER	B	468	47.400	8.043	6.939	1.00	77.98	O
ATOM	7505	N	MET	B	469	48.636	6.350	7.753	1.00	78.25	N
ATOM	7506	CA	MET	B	469	47.582	5.346	7.602	1.00	78.88	C
ATOM	7507	CB	MET	B	469	47.530	4.777	6.178	1.00	78.67	C
ATOM	7508	CG	MET	B	469	46.185	4.113	5.835	1.00	79.94	C
ATOM	7509	SD	MET	B	469	46.096	3.158	4.291	1.00	81.07	S
ATOM	7510	CE	MET	B	469	47.336	1.872	4.559	1.00	81.40	C
ATOM	7511	C	MET	B	469	47.758	4.229	8.630	1.00	78.33	C
ATOM	7512	O	MET	B	469	48.866	3.730	8.817	1.00	78.25	O
ATOM	7513	N	PRO	B	470	46.663	3.847	9.313	1.00	78.26	N
ATOM	7514	CA	PRO	B	470	46.734	2.807	10.333	1.00	78.33	C
ATOM	7515	CB	PRO	B	470	45.580	3.162	11.278	1.00	78.33	C
ATOM	7516	CG	PRO	B	470	44.736	4.193	10.551	1.00	78.21	C
ATOM	7517	CD	PRO	B	470	45.297	4.381	9.184	1.00	78.15	C
ATOM	7518	C	PRO	B	470	46.562	1.384	9.785	1.00	78.46	C
ATOM	7519	O	PRO	B	470	45.985	1.185	8.711	1.00	78.49	O
ATOM	7520	N	ALA	B	471	47.068	0.407	10.533	1.00	78.55	N
ATOM	7521	CA	ALA	B	471	46.987	-1.000	10.151	1.00	78.72	C
ATOM	7522	CB	ALA	B	471	48.159	-1.372	9.251	1.00	78.71	C
ATOM	7523	C	ALA	B	471	46.969	-1.873	11.402	1.00	78.83	C
ATOM	7524	O	ALA	B	471	47.875	-1.797	12.230	1.00	78.97	O
ATOM	7525	N	HIS	B	472	45.940	-2.702	11.536	1.00	78.82	N
ATOM	7526	CA	HIS	B	472	45.742	-3.471	12.759	1.00	78.89	C
ATOM	7527	CB	HIS	B	472	44.268	-3.457	13.154	1.00	79.02	C
ATOM	7528	CG	HIS	B	472	43.676	-2.085	13.203	1.00	79.32	C
ATOM	7529	ND1	HIS	B	472	43.618	-1.343	14.361	1.00	79.91	N
ATOM	7530	CE1	HIS	B	472	43.055	-0.175	14.106	1.00	80.02	C
ATOM	7531	NE2	HIS	B	472	42.751	-0.133	12.821	1.00	80.01	N
ATOM	7532	CD2	HIS	B	472	43.130	-1.314	12.233	1.00	79.50	C
ATOM	7533	C	HIS	B	472	46.241	-4.902	12.632	1.00	78.88	C
ATOM	7534	O	HIS	B	472	46.023	-5.555	11.610	1.00	79.03	O
ATOM	7535	N	LEU	B	473	46.907	-5.383	13.679	1.00	78.78	N
ATOM	7536	CA	LEU	B	473	47.412	-6.753	13.709	1.00	78.64	C
ATOM	7537	CB	LEU	B	473	48.943	-6.779	13.795	1.00	78.61	C
ATOM	7538	CG	LEU	B	473	49.618	-8.156	13.726	1.00	78.44	C
ATOM	7539	CD1	LEU	B	473	49.426	-8.793	12.357	1.00	78.26	C
ATOM	7540	CD2	LEU	B	473	51.094	-8.056	14.063	1.00	78.47	C
ATOM	7541	C	LEU	B	473	46.808	-7.559	14.854	1.00	78.66	C
ATOM	7542	O	LEU	B	473	46.912	-7.176	16.021	1.00	78.69	O
ATOM	7543	N	HIS	B	474	46.191	-8.681	14.498	1.00	78.51	N
ATOM	7544	CA	HIS	B	474	45.605	-9.593	15.464	1.00	78.46	C
ATOM	7545	CB	HIS	B	474	44.158	-9.916	15.072	1.00	78.58	C
ATOM	7546	CG	HIS	B	474	43.290	-8.705	14.891	1.00	79.12	C
ATOM	7547	ND1	HIS	B	474	42.172	-8.469	15.662	1.00	79.44	N
ATOM	7548	CE1	HIS	B	474	41.605	-7.337	15.281	1.00	79.62	C
ATOM	7549	NE2	HIS	B	474	42.319	-6.826	14.293	1.00	79.67	N
ATOM	7550	CD2	HIS	B	474	43.377	-7.663	14.028	1.00	79.57	C
ATOM	7551	C	HIS	B	474	46.454	-10.855	15.477	1.00	78.32	C
ATOM	7552	O	HIS	B	474	46.667	-11.463	14.428	1.00	78.33	O
ATOM	7553	N	VAL	B	475	46.952	-11.240	16.653	1.00	78.25	N
ATOM	7554	CA	VAL	B	475	47.853	-12.401	16.767	1.00	78.21	C
ATOM	7555	CB	VAL	B	475	49.205	-12.037	17.454	1.00	78.13	C
ATOM	7556	CG1	VAL	B	475	49.056	-11.972	18.971	1.00	78.24	C

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ATOM   7557  CG2 VAL B 475      50.286 -13.035  17.074  1.00 77.83           C
ATOM   7558  C   VAL B 475      47.213 -13.632  17.436  1.00 78.21           C
ATOM   7559  O   VAL B 475      46.300 -13.514  18.252  1.00 78.14           O
ATOM   7560  N   GLY C   2     151.618  62.138  67.064  1.00 93.75           N
ATOM   7561  CA  GLY C   2     151.633  60.712  67.511  1.00 93.64           C
ATOM   7562  C   GLY C   2     151.916  59.762  66.363  1.00 93.60           C
ATOM   7563  O   GLY C   2     151.166  59.727  65.382  1.00 93.74           O
ATOM   7564  N   CYS C   3     153.001  58.993  66.493  1.00 93.41           N
ATOM   7565  CA  CYS C   3     153.438  58.027  65.472  1.00 93.10           C
ATOM   7566  CB  CYS C   3     153.660  58.735  64.130  1.00 93.07           C
ATOM   7567  SG  CYS C   3     154.118  57.654  62.771  1.00 93.48           S
ATOM   7568  C   CYS C   3     154.723  57.298  65.896  1.00 92.74           C
ATOM   7569  O   CYS C   3     155.635  57.931  66.441  1.00 92.68           O
ATOM   7570  N   PRO C   4     154.795  55.966  65.662  1.00 92.36           N
ATOM   7571  CA  PRO C   4     156.043  55.233  65.885  1.00 92.24           C
ATOM   7572  CB  PRO C   4     155.714  53.822  65.387  1.00 92.04           C
ATOM   7573  CG  PRO C   4     154.264  53.708  65.505  1.00 91.86           C
ATOM   7574  CD  PRO C   4     153.717  55.066  65.215  1.00 92.18           C
ATOM   7575  C   PRO C   4     157.192  55.801  65.057  1.00 92.29           C
ATOM   7576  O   PRO C   4     156.980  56.157  63.894  1.00 92.45           O
ATOM   7577  N   PRO C   5     158.401  55.907  65.651  1.00 92.24           N
ATOM   7578  CA  PRO C   5     159.571  56.156  64.810  1.00 92.13           C
ATOM   7579  CB  PRO C   5     160.738  56.136  65.805  1.00 92.09           C
ATOM   7580  CG  PRO C   5     160.206  55.481  67.041  1.00 92.04           C
ATOM   7581  CD  PRO C   5     158.756  55.824  67.080  1.00 92.23           C
ATOM   7582  C   PRO C   5     159.718  55.020  63.802  1.00 92.15           C
ATOM   7583  O   PRO C   5     159.282  53.896  64.072  1.00 92.16           O
ATOM   7584  N   ARG C   6     160.307  55.317  62.648  1.00 92.13           N
ATOM   7585  CA  ARG C   6     160.490  54.332  61.572  1.00 92.16           C
ATOM   7586  CB  ARG C   6     161.076  53.011  62.101  1.00 92.19           C
ATOM   7587  CG  ARG C   6     162.444  53.157  62.778  1.00 92.75           C
ATOM   7588  CD  ARG C   6     162.771  51.979  63.696  1.00 92.80           C
ATOM   7589  NE  ARG C   6     163.109  50.769  62.946  1.00 93.88           N
ATOM   7590  CZ  ARG C   6     163.888  49.787  63.398  1.00 94.14           C
ATOM   7591  NH1 ARG C   6     164.130  48.735  62.627  1.00 94.46           N
ATOM   7592  NH2 ARG C   6     164.434  49.851  64.608  1.00 93.66           N
ATOM   7593  C   ARG C   6     159.213  54.087  60.757  1.00 91.83           C
ATOM   7594  O   ARG C   6     159.276  53.999  59.534  1.00 91.91           O
ATOM   7595  N   CYS C   7     158.064  53.978  61.425  1.00 91.44           N
ATOM   7596  CA  CYS C   7     156.779  53.783  60.739  1.00 90.95           C
ATOM   7597  CB  CYS C   7     155.740  53.213  61.707  1.00 90.67           C
ATOM   7598  SG  CYS C   7     156.174  51.597  62.403  1.00 89.34           S
ATOM   7599  C   CYS C   7     156.264  55.082  60.104  1.00 91.06           C
ATOM   7600  O   CYS C   7     156.733  56.166  60.448  1.00 91.16           O
ATOM   7601  N   GLU C   8     155.312  54.970  59.177  1.00 91.09           N
ATOM   7602  CA  GLU C   8     154.725  56.150  58.521  1.00 91.20           C
ATOM   7603  CB  GLU C   8     155.085  56.204  57.028  1.00 91.09           C
ATOM   7604  CG  GLU C   8     154.884  54.902  56.259  1.00 91.45           C
ATOM   7605  CD  GLU C   8     154.915  55.096  54.743  1.00 91.76           C
ATOM   7606  OE1 GLU C   8     155.691  55.952  54.257  1.00 92.37           O
ATOM   7607  OE2 GLU C   8     154.162  54.386  54.033  1.00 92.13           O
ATOM   7608  C   GLU C   8     153.212  56.264  58.741  1.00 91.06           C
ATOM   7609  O   GLU C   8     152.460  55.329  58.460  1.00 90.96           O
ATOM   7610  N   CYS C   9     152.785  57.428  59.231  1.00 91.07           N
ATOM   7611  CA  CYS C   9     151.424  57.638  59.743  1.00 91.13           C
ATOM   7612  CB  CYS C   9     151.488  57.950  61.242  1.00 91.27           C
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ATOM	7613	SG	CYS	C	9	152.382	56.724	62.232	1.00	92.65	S
ATOM	7614	C	CYS	C	9	150.637	58.754	59.041	1.00	90.78	C
ATOM	7615	O	CYS	C	9	151.187	59.820	58.752	1.00	91.02	O
ATOM	7616	N	SER	C	10	149.351	58.507	58.788	1.00	90.16	N
ATOM	7617	CA	SER	C	10	148.436	59.535	58.289	1.00	89.52	C
ATOM	7618	CB	SER	C	10	147.657	59.029	57.079	1.00	89.43	C
ATOM	7619	OG	SER	C	10	148.521	58.414	56.149	1.00	89.53	O
ATOM	7620	C	SER	C	10	147.458	59.950	59.382	1.00	89.18	C
ATOM	7621	O	SER	C	10	146.794	59.106	59.974	1.00	89.10	O
ATOM	7622	N	ALA	C	11	147.377	61.250	59.646	1.00	88.90	N
ATOM	7623	CA	ALA	C	11	146.441	61.791	60.634	1.00	88.59	C
ATOM	7624	CB	ALA	C	11	146.862	63.193	61.053	1.00	88.57	C
ATOM	7625	C	ALA	C	11	144.998	61.797	60.119	1.00	88.43	C
ATOM	7626	O	ALA	C	11	144.058	61.554	60.879	1.00	88.44	O
ATOM	7627	N	GLN	C	12	144.836	62.072	58.826	1.00	88.14	N
ATOM	7628	CA	GLN	C	12	143.521	62.160	58.201	1.00	87.78	C
ATOM	7629	CB	GLN	C	12	143.628	62.874	56.851	1.00	87.87	C
ATOM	7630	CG	GLN	C	12	142.378	63.643	56.434	1.00	88.14	C
ATOM	7631	CD	GLN	C	12	142.341	63.935	54.937	1.00	88.14	C
ATOM	7632	OE1	GLN	C	12	142.398	63.020	54.112	1.00	87.99	O
ATOM	7633	NE2	GLN	C	12	142.238	65.215	54.583	1.00	88.41	N
ATOM	7634	C	GLN	C	12	142.891	60.772	58.033	1.00	87.30	C
ATOM	7635	O	GLN	C	12	141.719	60.575	58.359	1.00	87.30	O
ATOM	7636	N	ASP	C	13	143.680	59.819	57.533	1.00	86.63	N
ATOM	7637	CA	ASP	C	13	143.228	58.435	57.341	1.00	85.93	C
ATOM	7638	CB	ASP	C	13	144.099	57.726	56.297	1.00	85.95	C
ATOM	7639	CG	ASP	C	13	144.032	58.384	54.930	1.00	86.01	C
ATOM	7640	OD1	ASP	C	13	144.323	59.597	54.834	1.00	86.16	O
ATOM	7641	OD2	ASP	C	13	143.698	57.680	53.949	1.00	85.65	O
ATOM	7642	C	ASP	C	13	143.225	57.620	58.643	1.00	85.47	C
ATOM	7643	O	ASP	C	13	142.541	56.590	58.739	1.00	85.29	O
ATOM	7644	N	ARG	C	14	143.988	58.096	59.632	1.00	84.76	N
ATOM	7645	CA	ARG	C	14	144.211	57.400	60.907	1.00	83.97	C
ATOM	7646	CB	ARG	C	14	142.911	57.292	61.720	1.00	83.98	C
ATOM	7647	CG	ARG	C	14	142.224	58.633	61.959	1.00	83.75	C
ATOM	7648	CD	ARG	C	14	140.897	58.482	62.678	1.00	84.06	C
ATOM	7649	NE	ARG	C	14	140.461	59.762	63.234	1.00	85.74	N
ATOM	7650	CZ	ARG	C	14	139.804	59.916	64.386	1.00	86.69	C
ATOM	7651	NH1	ARG	C	14	139.470	61.134	64.799	1.00	86.46	N
ATOM	7652	NH2	ARG	C	14	139.487	58.866	65.136	1.00	87.31	N
ATOM	7653	C	ARG	C	14	144.876	56.038	60.680	1.00	83.51	C
ATOM	7654	O	ARG	C	14	144.461	55.025	61.238	1.00	83.37	O
ATOM	7655	N	ALA	C	15	145.920	56.044	59.851	1.00	83.09	N
ATOM	7656	CA	ALA	C	15	146.643	54.836	59.455	1.00	82.85	C
ATOM	7657	CB	ALA	C	15	146.686	54.726	57.944	1.00	82.84	C
ATOM	7658	C	ALA	C	15	148.059	54.807	60.018	1.00	82.78	C
ATOM	7659	O	ALA	C	15	148.670	55.854	60.225	1.00	82.95	O
ATOM	7660	N	VAL	C	16	148.568	53.604	60.278	1.00	82.60	N
ATOM	7661	CA	VAL	C	16	149.943	53.413	60.746	1.00	82.45	C
ATOM	7662	CB	VAL	C	16	150.020	53.133	62.279	1.00	82.35	C
ATOM	7663	CG1	VAL	C	16	151.426	52.729	62.693	1.00	81.96	C
ATOM	7664	CG2	VAL	C	16	149.575	54.351	63.079	1.00	81.94	C
ATOM	7665	C	VAL	C	16	150.552	52.265	59.955	1.00	82.55	C
ATOM	7666	O	VAL	C	16	150.030	51.151	59.973	1.00	82.54	O
ATOM	7667	N	LEU	C	17	151.649	52.546	59.258	1.00	82.81	N
ATOM	7668	CA	LEU	C	17	152.260	51.578	58.349	1.00	83.19	C

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ATOM   7669  CB  LEU C  17     152.246  52.114  56.914  1.00 83.17           C
ATOM   7670  CG  LEU C  17     150.865  52.398  56.314  1.00 83.28           C
ATOM   7671  CD1 LEU C  17     150.914  53.577  55.345  1.00 82.93           C
ATOM   7672  CD2 LEU C  17     150.291  51.151  55.648  1.00 83.41           C
ATOM   7673  C   LEU C  17     153.677  51.213  58.780  1.00 83.41           C
ATOM   7674  O   LEU C  17     154.563  52.067  58.800  1.00 83.38           O
ATOM   7675  N   CYS C  18     153.877  49.937  59.114  1.00 83.83           N
ATOM   7676  CA  CYS C  18     155.143  49.452  59.666  1.00 84.28           C
ATOM   7677  CB  CYS C  18     154.974  49.105  61.146  1.00 84.45           C
ATOM   7678  SG  CYS C  18     154.473  50.480  62.190  1.00 86.18           S
ATOM   7679  C   CYS C  18     155.701  48.239  58.926  1.00 84.21           C
ATOM   7680  O   CYS C  18     155.915  47.188  59.531  1.00 84.21           O
ATOM   7681  N   HIS C  19     155.946  48.392  57.626  1.00 84.28           N
ATOM   7682  CA  HIS C  19     156.518  47.322  56.805  1.00 84.26           C
ATOM   7683  CB  HIS C  19     156.194  47.553  55.333  1.00 84.40           C
ATOM   7684  CG  HIS C  19     155.017  46.771  54.850  1.00 85.52           C
ATOM   7685  ND1 HIS C  19     155.136  45.711  53.974  1.00 86.92           N
ATOM   7686  CE1 HIS C  19     153.938  45.208  53.728  1.00 87.50           C
ATOM   7687  NE2 HIS C  19     153.047  45.898  54.419  1.00 87.76           N
ATOM   7688  CD2 HIS C  19     153.697  46.882  55.129  1.00 86.71           C
ATOM   7689  C   HIS C  19     158.027  47.159  56.990  1.00 84.03           C
ATOM   7690  O   HIS C  19     158.741  48.136  57.225  1.00 83.93           O
ATOM   7691  N   ARG C  20     158.496  45.913  56.887  1.00 83.72           N
ATOM   7692  CA  ARG C  20     159.927  45.568  56.972  1.00 83.40           C
ATOM   7693  CB  ARG C  20     160.629  45.829  55.629  1.00 83.45           C
ATOM   7694  CG  ARG C  20     160.567  44.662  54.667  1.00 83.62           C
ATOM   7695  CD  ARG C  20     160.693  45.094  53.211  1.00 84.06           C
ATOM   7696  NE  ARG C  20     159.812  44.276  52.373  1.00 85.15           N
ATOM   7697  CZ  ARG C  20     159.673  44.387  51.053  1.00 85.34           C
ATOM   7698  NH1 ARG C  20     160.371  45.287  50.369  1.00 86.28           N
ATOM   7699  NH2 ARG C  20     158.834  43.585  50.411  1.00 84.45           N
ATOM   7700  C   ARG C  20     160.712  46.227  58.111  1.00 83.05           C
ATOM   7701  O   ARG C  20     161.920  46.424  57.989  1.00 83.17           O
ATOM   7702  N   LYS C  21     160.045  46.550  59.217  1.00 82.64           N
ATOM   7703  CA  LYS C  21     160.716  47.259  60.317  1.00 82.36           C
ATOM   7704  CB  LYS C  21     159.729  48.113  61.121  1.00 82.55           C
ATOM   7705  CG  LYS C  21     158.906  49.108  60.314  1.00 83.28           C
ATOM   7706  CD  LYS C  21     159.754  50.177  59.636  1.00 84.07           C
ATOM   7707  CE  LYS C  21     158.888  50.984  58.681  1.00 84.73           C
ATOM   7708  NZ  LYS C  21     159.610  51.342  57.434  1.00 85.04           N
ATOM   7709  C   LYS C  21     161.481  46.337  61.264  1.00 81.88           C
ATOM   7710  O   LYS C  21     162.157  46.807  62.184  1.00 81.73           O
ATOM   7711  N   ARG C  22     161.360  45.029  61.036  1.00 81.31           N
ATOM   7712  CA  ARG C  22     162.049  44.006  61.831  1.00 80.78           C
ATOM   7713  CB  ARG C  22     163.568  44.188  61.754  1.00 80.96           C
ATOM   7714  CG  ARG C  22     164.355  42.894  61.670  1.00 81.83           C
ATOM   7715  CD  ARG C  22     165.839  43.179  61.465  1.00 83.82           C
ATOM   7716  NE  ARG C  22     166.112  43.888  60.209  1.00 85.46           N
ATOM   7717  CZ  ARG C  22     166.509  45.158  60.120  1.00 86.13           C
ATOM   7718  NH1 ARG C  22     166.691  45.889  61.214  1.00 86.15           N
ATOM   7719  NH2 ARG C  22     166.729  45.700  58.927  1.00 86.43           N
ATOM   7720  C   ARG C  22     161.573  43.961  63.289  1.00 80.07           C
ATOM   7721  O   ARG C  22     162.347  43.656  64.196  1.00 79.67           O
ATOM   7722  N   PHE C  23     160.291  44.263  63.491  1.00 79.39           N
ATOM   7723  CA  PHE C  23     159.647  44.154  64.795  1.00 78.68           C
ATOM   7724  CB  PHE C  23     158.300  44.876  64.790  1.00 78.70           C
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ATOM   7725  CG  PHE C  23     158.399  46.369  64.704  1.00 78.79           C
ATOM   7726  CD1 PHE C  23     159.392  47.064  65.388  1.00 79.34           C
ATOM   7727  CE1 PHE C  23     159.472  48.455  65.317  1.00 79.47           C
ATOM   7728  CZ  PHE C  23     158.542  49.161  64.564  1.00 79.04           C
ATOM   7729  CE2 PHE C  23     157.538  48.476  63.889  1.00 79.21           C
ATOM   7730  CD2 PHE C  23     157.467  47.088  63.968  1.00 78.84           C
ATOM   7731  C   PHE C  23     159.400  42.698  65.167  1.00 78.26           C
ATOM   7732  O   PHE C  23     159.230  41.846  64.294  1.00 78.15           O
ATOM   7733  N   VAL C  24     159.371  42.428  66.471  1.00 77.77           N
ATOM   7734  CA  VAL C  24     158.964  41.124  67.000  1.00 77.16           C
ATOM   7735  CB  VAL C  24     160.085  40.438  67.823  1.00 77.37           C
ATOM   7736  CG1 VAL C  24     161.245  40.023  66.920  1.00 77.34           C
ATOM   7737  CG2 VAL C  24     160.569  41.341  68.962  1.00 77.14           C
ATOM   7738  C   VAL C  24     157.715  41.266  67.859  1.00 76.72           C
ATOM   7739  O   VAL C  24     157.092  40.272  68.229  1.00 76.90           O
ATOM   7740  N   ALA C  25     157.362  42.510  68.170  1.00 76.16           N
ATOM   7741  CA  ALA C  25     156.150  42.828  68.919  1.00 75.89           C
ATOM   7742  CB  ALA C  25     156.487  43.041  70.394  1.00 75.73           C
ATOM   7743  C   ALA C  25     155.448  44.062  68.338  1.00 75.62           C
ATOM   7744  O   ALA C  25     155.952  44.679  67.403  1.00 75.69           O
ATOM   7745  N   VAL C  26     154.286  44.412  68.888  1.00 75.34           N
ATOM   7746  CA  VAL C  26     153.597  45.665  68.548  1.00 75.01           C
ATOM   7747  CB  VAL C  26     152.127  45.658  69.042  1.00 74.91           C
ATOM   7748  CG1 VAL C  26     151.406  46.930  68.622  1.00 74.75           C
ATOM   7749  CG2 VAL C  26     151.395  44.437  68.534  1.00 74.41           C
ATOM   7750  C   VAL C  26     154.347  46.870  69.151  1.00 74.96           C
ATOM   7751  O   VAL C  26     154.500  46.961  70.368  1.00 74.93           O
ATOM   7752  N   PRO C  27     154.808  47.802  68.298  1.00 75.02           N
ATOM   7753  CA  PRO C  27     155.674  48.904  68.735  1.00 75.07           C
ATOM   7754  CB  PRO C  27     156.182  49.479  67.415  1.00 75.10           C
ATOM   7755  CG  PRO C  27     155.068  49.195  66.447  1.00 74.95           C
ATOM   7756  CD  PRO C  27     154.523  47.866  66.851  1.00 74.85           C
ATOM   7757  C   PRO C  27     154.946  49.989  69.535  1.00 75.26           C
ATOM   7758  O   PRO C  27     153.717  49.980  69.631  1.00 75.28           O
ATOM   7759  N   GLU C  28     155.714  50.915  70.103  1.00 75.55           N
ATOM   7760  CA  GLU C  28     155.160  51.994  70.916  1.00 75.82           C
ATOM   7761  CB  GLU C  28     156.169  52.429  71.979  1.00 75.68           C
ATOM   7762  CG  GLU C  28     156.277  51.477  73.156  1.00 75.95           C
ATOM   7763  CD  GLU C  28     154.949  51.271  73.871  1.00 76.09           C
ATOM   7764  OE1 GLU C  28     154.487  52.217  74.548  1.00 75.64           O
ATOM   7765  OE2 GLU C  28     154.373  50.164  73.752  1.00 75.53           O
ATOM   7766  C   GLU C  28     154.739  53.199  70.081  1.00 76.11           C
ATOM   7767  O   GLU C  28     155.280  53.433  68.996  1.00 76.31           O
ATOM   7768  N   GLY C  29     153.767  53.957  70.588  1.00 76.24           N
ATOM   7769  CA  GLY C  29     153.388  55.239  69.985  1.00 76.28           C
ATOM   7770  C   GLY C  29     152.411  55.195  68.821  1.00 76.26           C
ATOM   7771  O   GLY C  29     152.305  56.159  68.060  1.00 76.38           O
ATOM   7772  N   ILE C  30     151.709  54.077  68.671  1.00 76.09           N
ATOM   7773  CA  ILE C  30     150.576  54.000  67.764  1.00 76.01           C
ATOM   7774  CB  ILE C  30     150.195  52.529  67.478  1.00 75.93           C
ATOM   7775  CG1 ILE C  30     151.327  51.832  66.712  1.00 75.86           C
ATOM   7776  CD1 ILE C  30     151.310  50.321  66.788  1.00 75.46           C
ATOM   7777  CG2 ILE C  30     148.881  52.443  66.702  1.00 75.75           C
ATOM   7778  C   ILE C  30     149.415  54.736  68.434  1.00 76.14           C
ATOM   7779  O   ILE C  30     149.047  54.394  69.551  1.00 76.36           O
ATOM   7780  N   PRO C  31     148.852  55.768  67.773  1.00 76.24           N
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ATOM   7781  CA  PRO C  31     147.735  56.522  68.363  1.00 76.38           C
ATOM   7782  CB  PRO C  31     147.376  57.527  67.266  1.00 76.31           C
ATOM   7783  CG  PRO C  31     148.616  57.660  66.460  1.00 76.21           C
ATOM   7784  CD  PRO C  31     149.233  56.304  66.455  1.00 76.13           C
ATOM   7785  C   PRO C  31     146.518  55.649  68.705  1.00 76.68           C
ATOM   7786  O   PRO C  31     146.247  54.666  68.010  1.00 76.75           O
ATOM   7787  N   THR C  32     145.806  56.010  69.774  1.00 76.89           N
ATOM   7788  CA  THR C  32     144.614  55.285  70.230  1.00 77.09           C
ATOM   7789  CB  THR C  32     144.110  55.838  71.578  1.00 77.07           C
ATOM   7790  OG1 THR C  32     145.137  55.692  72.561  1.00 77.16           O
ATOM   7791  CG2 THR C  32     142.869  55.096  72.061  1.00 77.26           C
ATOM   7792  C   THR C  32     143.477  55.319  69.207  1.00 77.46           C
ATOM   7793  O   THR C  32     142.697  54.368  69.107  1.00 77.72           O
ATOM   7794  N   GLU C  33     143.394  56.402  68.439  1.00 77.70           N
ATOM   7795  CA  GLU C  33     142.335  56.560  67.443  1.00 77.99           C
ATOM   7796  CB  GLU C  33     142.072  58.042  67.179  1.00 77.83           C
ATOM   7797  CG  GLU C  33     141.437  58.783  68.359  1.00 78.48           C
ATOM   7798  CD  GLU C  33     141.411  60.304  68.166  1.00 78.80           C
ATOM   7799  OE1 GLU C  33     141.167  60.756  67.019  1.00 80.02           O
ATOM   7800  OE2 GLU C  33     141.631  61.044  69.160  1.00 78.53           O
ATOM   7801  C   GLU C  33     142.608  55.812  66.131  1.00 77.91           C
ATOM   7802  O   GLU C  33     141.772  55.826  65.221  1.00 78.07           O
ATOM   7803  N   THR C  34     143.764  55.151  66.045  1.00 77.91           N
ATOM   7804  CA  THR C  34     144.189  54.439  64.829  1.00 77.98           C
ATOM   7805  CB  THR C  34     145.490  53.648  65.069  1.00 77.88           C
ATOM   7806  OG1 THR C  34     146.471  54.514  65.646  1.00 78.32           O
ATOM   7807  CG2 THR C  34     146.038  53.088  63.771  1.00 77.86           C
ATOM   7808  C   THR C  34     143.118  53.491  64.299  1.00 77.97           C
ATOM   7809  O   THR C  34     142.484  52.777  65.068  1.00 78.11           O
ATOM   7810  N   ARG C  35     142.922  53.499  62.984  1.00 78.09           N
ATOM   7811  CA  ARG C  35     141.939  52.635  62.341  1.00 78.19           C
ATOM   7812  CB  ARG C  35     140.945  53.460  61.524  1.00 78.36           C
ATOM   7813  CG  ARG C  35     139.792  53.959  62.368  1.00 79.76           C
ATOM   7814  CD  ARG C  35     139.089  55.154  61.760  1.00 82.06           C
ATOM   7815  NE  ARG C  35     138.364  55.891  62.797  1.00 84.17           N
ATOM   7816  CZ  ARG C  35     137.627  56.979  62.584  1.00 85.03           C
ATOM   7817  NH1 ARG C  35     137.497  57.482  61.360  1.00 85.14           N
ATOM   7818  NH2 ARG C  35     137.017  57.565  63.606  1.00 85.30           N
ATOM   7819  C   ARG C  35     142.579  51.550  61.486  1.00 77.98           C
ATOM   7820  O   ARG C  35     142.106  50.417  61.463  1.00 78.25           O
ATOM   7821  N   LEU C  36     143.647  51.899  60.780  1.00 77.71           N
ATOM   7822  CA  LEU C  36     144.404  50.926  60.003  1.00 77.43           C
ATOM   7823  CB  LEU C  36     144.495  51.357  58.532  1.00 77.41           C
ATOM   7824  CG  LEU C  36     145.571  50.771  57.601  1.00 77.59           C
ATOM   7825  CD1 LEU C  36     145.588  49.239  57.595  1.00 77.99           C
ATOM   7826  CD2 LEU C  36     145.393  51.306  56.180  1.00 77.47           C
ATOM   7827  C   LEU C  36     145.790  50.737  60.610  1.00 77.32           C
ATOM   7828  O   LEU C  36     146.546  51.696  60.778  1.00 77.51           O
ATOM   7829  N   LEU C  37     146.111  49.498  60.956  1.00 77.04           N
ATOM   7830  CA  LEU C  37     147.433  49.175  61.455  1.00 76.77           C
ATOM   7831  CB  LEU C  37     147.383  48.778  62.935  1.00 76.61           C
ATOM   7832  CG  LEU C  37     148.699  48.342  63.586  1.00 76.42           C
ATOM   7833  CD1 LEU C  37     149.716  49.466  63.547  1.00 76.55           C
ATOM   7834  CD2 LEU C  37     148.487  47.869  65.015  1.00 76.46           C
ATOM   7835  C   LEU C  37     148.005  48.057  60.607  1.00 76.90           C
ATOM   7836  O   LEU C  37     147.484  46.944  60.601  1.00 76.76           O
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ATOM   7837  N   ASP C  38     149.069  48.368  59.875  1.00 77.16           N
ATOM   7838  CA  ASP C  38     149.721  47.382  59.024  1.00 77.47           C
ATOM   7839  CB  ASP C  38     149.798  47.884  57.580  1.00 77.77           C
ATOM   7840  CG  ASP C  38     150.167  46.786  56.597  1.00 78.94           C
ATOM   7841  OD1 ASP C  38     151.314  46.293  56.647  1.00 79.83           O
ATOM   7842  OD2 ASP C  38     149.308  46.417  55.764  1.00 80.82           O
ATOM   7843  C   ASP C  38     151.110  47.038  59.558  1.00 77.31           C
ATOM   7844  O   ASP C  38     152.036  47.847  59.474  1.00 77.28           O
ATOM   7845  N   LEU C  39     151.236  45.834  60.111  1.00 77.15           N
ATOM   7846  CA  LEU C  39     152.498  45.344  60.652  1.00 77.04           C
ATOM   7847  CB  LEU C  39     152.315  44.891  62.102  1.00 77.01           C
ATOM   7848  CG  LEU C  39     151.946  45.946  63.145  1.00 77.18           C
ATOM   7849  CD1 LEU C  39     151.369  45.295  64.389  1.00 77.74           C
ATOM   7850  CD2 LEU C  39     153.143  46.796  63.501  1.00 76.77           C
ATOM   7851  C   LEU C  39     153.050  44.198  59.807  1.00 77.03           C
ATOM   7852  O   LEU C  39     153.743  43.316  60.314  1.00 77.27           O
ATOM   7853  N   GLY C  40     152.745  44.220  58.514  1.00 76.89           N
ATOM   7854  CA  GLY C  40     153.174  43.169  57.607  1.00 76.90           C
ATOM   7855  C   GLY C  40     154.677  43.077  57.432  1.00 77.12           C
ATOM   7856  O   GLY C  40     155.396  44.080  57.543  1.00 77.25           O
ATOM   7857  N   LYS C  41     155.142  41.859  57.165  1.00 77.16           N
ATOM   7858  CA  LYS C  41     156.535  41.582  56.793  1.00 77.21           C
ATOM   7859  CB  LYS C  41     156.865  42.214  55.431  1.00 77.26           C
ATOM   7860  CG  LYS C  41     158.051  41.584  54.721  1.00 78.62           C
ATOM   7861  CD  LYS C  41     157.992  41.801  53.220  1.00 80.19           C
ATOM   7862  CE  LYS C  41     157.284  40.641  52.534  1.00 81.36           C
ATOM   7863  NZ  LYS C  41     157.128  40.792  51.044  1.00 82.07           N
ATOM   7864  C   LYS C  41     157.550  41.951  57.897  1.00 76.94           C
ATOM   7865  O   LYS C  41     158.556  42.632  57.658  1.00 76.79           O
ATOM   7866  N   ASN C  42     157.256  41.486  59.108  1.00 76.54           N
ATOM   7867  CA  ASN C  42     158.143  41.639  60.248  1.00 76.27           C
ATOM   7868  CB  ASN C  42     157.510  42.532  61.317  1.00 76.11           C
ATOM   7869  CG  ASN C  42     157.359  43.967  60.860  1.00 76.20           C
ATOM   7870  OD1 ASN C  42     158.135  44.844  61.249  1.00 75.92           O
ATOM   7871  ND2 ASN C  42     156.364  44.214  60.019  1.00 76.31           N
ATOM   7872  C   ASN C  42     158.511  40.276  60.823  1.00 76.28           C
ATOM   7873  O   ASN C  42     158.352  39.258  60.149  1.00 76.22           O
ATOM   7874  N   ARG C  43     159.009  40.263  62.058  1.00 76.33           N
ATOM   7875  CA  ARG C  43     159.460  39.032  62.706  1.00 76.41           C
ATOM   7876  CB  ARG C  43     160.967  39.101  63.019  1.00 76.81           C
ATOM   7877  CG  ARG C  43     161.901  38.769  61.845  1.00 78.30           C
ATOM   7878  CD  ARG C  43     161.505  37.448  61.163  1.00 81.22           C
ATOM   7879  NE  ARG C  43     162.414  37.071  60.081  1.00 82.95           N
ATOM   7880  CZ  ARG C  43     162.071  36.337  59.023  1.00 83.95           C
ATOM   7881  NH1 ARG C  43     160.828  35.899  58.871  1.00 84.03           N
ATOM   7882  NH2 ARG C  43     162.975  36.051  58.097  1.00 85.57           N
ATOM   7883  C   ARG C  43     158.664  38.729  63.971  1.00 75.90           C
ATOM   7884  O   ARG C  43     159.224  38.323  64.982  1.00 76.21           O
ATOM   7885  N   ILE C  44     157.355  38.930  63.910  1.00 75.41           N
ATOM   7886  CA  ILE C  44     156.484  38.677  65.048  1.00 74.78           C
ATOM   7887  CB  ILE C  44     155.160  39.463  64.925  1.00 74.60           C
ATOM   7888  CG1 ILE C  44     155.453  40.967  64.909  1.00 74.20           C
ATOM   7889  CD1 ILE C  44     154.319  41.830  64.402  1.00 73.94           C
ATOM   7890  CG2 ILE C  44     154.210  39.115  66.071  1.00 74.32           C
ATOM   7891  C   ILE C  44     156.235  37.175  65.188  1.00 74.72           C
ATOM   7892  O   ILE C  44     155.783  36.534  64.245  1.00 74.74           O
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ATOM   7893  N   LYS C  45     156.545  36.633  66.369  1.00 74.54           N
ATOM   7894  CA  LYS C  45     156.445  35.193  66.656  1.00 74.19           C
ATOM   7895  CB  LYS C  45     157.603  34.761  67.556  1.00 74.24           C
ATOM   7896  CG  LYS C  45     158.897  34.496  66.833  1.00 74.91           C
ATOM   7897  CD  LYS C  45     159.787  33.569  67.640  1.00 75.79           C
ATOM   7898  CE  LYS C  45     160.848  32.945  66.755  1.00 76.68           C
ATOM   7899  NZ  LYS C  45     161.703  31.993  67.505  1.00 77.74           N
ATOM   7900  C   LYS C  45     155.141  34.779  67.336  1.00 73.77           C
ATOM   7901  O   LYS C  45     154.643  33.671  67.133  1.00 73.72           O
ATOM   7902  N   THR C  46     154.608  35.675  68.155  1.00 73.31           N
ATOM   7903  CA  THR C  46     153.548  35.344  69.087  1.00 72.98           C
ATOM   7904  CB  THR C  46     154.143  34.987  70.494  1.00 73.14           C
ATOM   7905  OG1 THR C  46     155.110  33.939  70.363  1.00 72.92           O
ATOM   7906  CG2 THR C  46     153.056  34.542  71.481  1.00 73.06           C
ATOM   7907  C   THR C  46     152.611  36.535  69.217  1.00 72.73           C
ATOM   7908  O   THR C  46     153.050  37.670  69.389  1.00 72.58           O
ATOM   7909  N   LEU C  47     151.316  36.271  69.121  1.00 72.59           N
ATOM   7910  CA  LEU C  47     150.317  37.265  69.464  1.00 72.53           C
ATOM   7911  CB  LEU C  47     149.187  37.302  68.427  1.00 72.18           C
ATOM   7912  CG  LEU C  47     149.615  37.594  66.985  1.00 71.55           C
ATOM   7913  CD1 LEU C  47     148.425  37.555  66.032  1.00 70.91           C
ATOM   7914  CD2 LEU C  47     150.339  38.927  66.882  1.00 70.77           C
ATOM   7915  C   LEU C  47     149.794  36.922  70.848  1.00 72.85           C
ATOM   7916  O   LEU C  47     149.285  35.828  71.074  1.00 73.02           O
ATOM   7917  N   ASN C  48     149.954  37.853  71.780  1.00 73.38           N
ATOM   7918  CA  ASN C  48     149.562  37.636  73.166  1.00 73.81           C
ATOM   7919  CB  ASN C  48     150.574  38.276  74.101  1.00 73.78           C
ATOM   7920  CG  ASN C  48     151.944  37.657  73.981  1.00 74.56           C
ATOM   7921  OD1 ASN C  48     152.911  38.331  73.632  1.00 75.71           O
ATOM   7922  ND2 ASN C  48     152.038  36.365  74.264  1.00 75.38           N
ATOM   7923  C   ASN C  48     148.178  38.175  73.460  1.00 74.10           C
ATOM   7924  O   ASN C  48     147.664  39.021  72.727  1.00 74.23           O
ATOM   7925  N   GLN C  49     147.574  37.676  74.534  1.00 74.37           N
ATOM   7926  CA  GLN C  49     146.245  38.102  74.930  1.00 74.72           C
ATOM   7927  CB  GLN C  49     145.784  37.329  76.160  1.00 74.83           C
ATOM   7928  CG  GLN C  49     144.598  37.955  76.873  1.00 76.80           C
ATOM   7929  CD  GLN C  49     144.035  37.075  77.968  1.00 78.77           C
ATOM   7930  OE1 GLN C  49     143.594  35.951  77.713  1.00 80.80           O
ATOM   7931  NE2 GLN C  49     144.025  37.588  79.190  1.00 78.05           N
ATOM   7932  C   GLN C  49     146.275  39.591  75.213  1.00 74.53           C
ATOM   7933  O   GLN C  49     147.239  40.090  75.777  1.00 74.41           O
ATOM   7934  N   ASP C  50     145.228  40.294  74.787  1.00 74.63           N
ATOM   7935  CA  ASP C  50     145.092  41.739  75.013  1.00 74.53           C
ATOM   7936  CB  ASP C  50     145.104  42.072  76.522  1.00 74.64           C
ATOM   7937  CG  ASP C  50     143.774  41.782  77.226  1.00 75.40           C
ATOM   7938  OD1 ASP C  50     142.718  41.672  76.565  1.00 76.38           O
ATOM   7939  OD2 ASP C  50     143.787  41.685  78.473  1.00 76.25           O
ATOM   7940  C   ASP C  50     146.155  42.589  74.297  1.00 74.24           C
ATOM   7941  O   ASP C  50     146.296  43.769  74.609  1.00 74.28           O
ATOM   7942  N   GLU C  51     146.892  42.008  73.349  1.00 73.85           N
ATOM   7943  CA  GLU C  51     147.986  42.735  72.688  1.00 73.70           C
ATOM   7944  CB  GLU C  51     148.794  41.825  71.761  1.00 73.73           C
ATOM   7945  CG  GLU C  51     150.212  42.346  71.509  1.00 74.75           C
ATOM   7946  CD  GLU C  51     151.192  41.281  71.022  1.00 75.97           C
ATOM   7947  OE1 GLU C  51     150.830  40.088  70.996  1.00 76.53           O
ATOM   7948  OE2 GLU C  51     152.337  41.643  70.670  1.00 76.43           O
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ATOM	7949	C	GLU	C	51	147.522	43.989	71.940	1.00	73.49	C
ATOM	7950	O	GLU	C	51	148.170	45.037	72.003	1.00	73.27	O
ATOM	7951	N	PHE	C	52	146.396	43.877	71.245	1.00	73.42	N
ATOM	7952	CA	PHE	C	52	145.834	45.007	70.512	1.00	73.28	C
ATOM	7953	CB	PHE	C	52	145.337	44.549	69.142	1.00	72.96	C
ATOM	7954	CG	PHE	C	52	146.360	43.804	68.356	1.00	72.62	C
ATOM	7955	CD1	PHE	C	52	147.303	44.485	67.603	1.00	72.52	C
ATOM	7956	CE1	PHE	C	52	148.261	43.794	66.875	1.00	72.63	C
ATOM	7957	CZ	PHE	C	52	148.283	42.404	66.899	1.00	72.72	C
ATOM	7958	CE2	PHE	C	52	147.351	41.717	67.651	1.00	72.62	C
ATOM	7959	CD2	PHE	C	52	146.395	42.419	68.378	1.00	72.66	C
ATOM	7960	C	PHE	C	52	144.711	45.705	71.279	1.00	73.40	C
ATOM	7961	O	PHE	C	52	143.948	46.477	70.695	1.00	73.31	O
ATOM	7962	N	ALA	C	53	144.631	45.451	72.586	1.00	73.57	N
ATOM	7963	CA	ALA	C	53	143.493	45.896	73.396	1.00	73.74	C
ATOM	7964	CB	ALA	C	53	143.516	45.244	74.763	1.00	73.51	C
ATOM	7965	C	ALA	C	53	143.439	47.408	73.526	1.00	73.87	C
ATOM	7966	O	ALA	C	53	142.375	47.984	73.751	1.00	73.80	O
ATOM	7967	N	SER	C	54	144.592	48.039	73.350	1.00	74.18	N
ATOM	7968	CA	SER	C	54	144.733	49.479	73.504	1.00	74.60	C
ATOM	7969	CB	SER	C	54	146.178	49.804	73.884	1.00	74.65	C
ATOM	7970	OG	SER	C	54	147.069	49.038	73.087	1.00	75.23	O
ATOM	7971	C	SER	C	54	144.328	50.251	72.245	1.00	74.68	C
ATOM	7972	O	SER	C	54	144.406	51.482	72.215	1.00	74.72	O
ATOM	7973	N	PHE	C	55	143.895	49.531	71.212	1.00	74.77	N
ATOM	7974	CA	PHE	C	55	143.503	50.158	69.946	1.00	75.06	C
ATOM	7975	CB	PHE	C	55	144.498	49.798	68.832	1.00	75.01	C
ATOM	7976	CG	PHE	C	55	145.939	49.885	69.259	1.00	75.29	C
ATOM	7977	CD1	PHE	C	55	146.540	51.120	69.488	1.00	75.43	C
ATOM	7978	CE1	PHE	C	55	147.869	51.201	69.900	1.00	75.20	C
ATOM	7979	CZ	PHE	C	55	148.613	50.041	70.083	1.00	75.01	C
ATOM	7980	CE2	PHE	C	55	148.027	48.806	69.862	1.00	75.04	C
ATOM	7981	CD2	PHE	C	55	146.693	48.731	69.451	1.00	75.48	C
ATOM	7982	C	PHE	C	55	142.074	49.773	69.556	1.00	75.17	C
ATOM	7983	O	PHE	C	55	141.867	49.117	68.530	1.00	75.15	O
ATOM	7984	N	PRO	C	56	141.079	50.204	70.364	1.00	75.27	N
ATOM	7985	CA	PRO	C	56	139.713	49.707	70.205	1.00	75.26	C
ATOM	7986	CB	PRO	C	56	138.978	50.310	71.405	1.00	75.33	C
ATOM	7987	CG	PRO	C	56	139.741	51.526	71.742	1.00	75.19	C
ATOM	7988	CD	PRO	C	56	141.171	51.198	71.450	1.00	75.18	C
ATOM	7989	C	PRO	C	56	139.059	50.158	68.909	1.00	75.27	C
ATOM	7990	O	PRO	C	56	138.123	49.506	68.442	1.00	75.51	O
ATOM	7991	N	HIS	C	57	139.564	51.243	68.323	1.00	75.06	N
ATOM	7992	CA	HIS	C	57	138.965	51.800	67.115	1.00	74.89	C
ATOM	7993	CB	HIS	C	57	139.160	53.313	67.078	1.00	74.93	C
ATOM	7994	CG	HIS	C	57	138.426	54.045	68.160	1.00	75.34	C
ATOM	7995	ND1	HIS	C	57	139.052	54.530	69.290	1.00	75.93	N
ATOM	7996	CE1	HIS	C	57	138.164	55.132	70.061	1.00	75.85	C
ATOM	7997	NE2	HIS	C	57	136.984	55.056	69.471	1.00	76.13	N
ATOM	7998	CD2	HIS	C	57	137.120	54.381	68.282	1.00	75.47	C
ATOM	7999	C	HIS	C	57	139.438	51.156	65.803	1.00	74.78	C
ATOM	8000	O	HIS	C	57	139.051	51.609	64.722	1.00	75.04	O
ATOM	8001	N	LEU	C	58	140.250	50.101	65.889	1.00	74.50	N
ATOM	8002	CA	LEU	C	58	140.820	49.463	64.693	1.00	74.24	C
ATOM	8003	CB	LEU	C	58	141.799	48.346	65.070	1.00	74.08	C
ATOM	8004	CG	LEU	C	58	143.266	48.638	65.397	1.00	74.11	C

ATOM	8005	CD1	LEU	C	58	144.018	47.329	65.592	1.00	74.06	C
ATOM	8006	CD2	LEU	C	58	143.948	49.473	64.322	1.00	73.69	C
ATOM	8007	C	LEU	C	58	139.763	48.901	63.750	1.00	74.30	C
ATOM	8008	O	LEU	C	58	138.921	48.107	64.164	1.00	74.36	O
ATOM	8009	N	GLU	C	59	139.818	49.318	62.485	1.00	74.24	N
ATOM	8010	CA	GLU	C	59	138.951	48.777	61.434	1.00	74.33	C
ATOM	8011	CB	GLU	C	59	138.447	49.893	60.512	1.00	74.27	C
ATOM	8012	CG	GLU	C	59	137.158	50.573	60.983	1.00	74.72	C
ATOM	8013	CD	GLU	C	59	136.888	51.913	60.286	1.00	75.14	C
ATOM	8014	OE1	GLU	C	59	136.680	51.935	59.048	1.00	75.68	O
ATOM	8015	OE2	GLU	C	59	136.868	52.953	60.988	1.00	76.41	O
ATOM	8016	C	GLU	C	59	139.671	47.705	60.615	1.00	74.08	C
ATOM	8017	O	GLU	C	59	139.049	46.764	60.117	1.00	74.04	O
ATOM	8018	N	GLU	C	60	140.985	47.853	60.479	1.00	73.73	N
ATOM	8019	CA	GLU	C	60	141.784	46.916	59.703	1.00	73.41	C
ATOM	8020	CB	GLU	C	60	142.069	47.494	58.318	1.00	73.57	C
ATOM	8021	CG	GLU	C	60	142.875	46.577	57.430	1.00	75.11	C
ATOM	8022	CD	GLU	C	60	142.948	47.055	55.990	1.00	77.45	C
ATOM	8023	OE1	GLU	C	60	143.080	48.283	55.771	1.00	78.04	O
ATOM	8024	OE2	GLU	C	60	142.879	46.193	55.078	1.00	77.30	O
ATOM	8025	C	GLU	C	60	143.088	46.576	60.420	1.00	72.85	C
ATOM	8026	O	GLU	C	60	143.815	47.470	60.853	1.00	72.77	O
ATOM	8027	N	LEU	C	61	143.368	45.282	60.553	1.00	72.20	N
ATOM	8028	CA	LEU	C	61	144.609	44.814	61.150	1.00	71.59	C
ATOM	8029	CB	LEU	C	61	144.356	44.143	62.501	1.00	71.47	C
ATOM	8030	CG	LEU	C	61	145.546	43.581	63.290	1.00	71.37	C
ATOM	8031	CD1	LEU	C	61	146.614	44.631	63.528	1.00	70.57	C
ATOM	8032	CD2	LEU	C	61	145.084	42.991	64.614	1.00	71.33	C
ATOM	8033	C	LEU	C	61	145.272	43.857	60.189	1.00	71.65	C
ATOM	8034	O	LEU	C	61	144.685	42.864	59.775	1.00	71.60	O
ATOM	8035	N	GLU	C	62	146.506	44.168	59.829	1.00	71.87	N
ATOM	8036	CA	GLU	C	62	147.204	43.431	58.795	1.00	72.04	C
ATOM	8037	CB	GLU	C	62	147.433	44.350	57.590	1.00	72.23	C
ATOM	8038	CG	GLU	C	62	147.065	43.732	56.241	1.00	74.49	C
ATOM	8039	CD	GLU	C	62	145.557	43.547	56.035	1.00	77.19	C
ATOM	8040	OE1	GLU	C	62	144.813	44.540	56.181	1.00	78.38	O
ATOM	8041	OE2	GLU	C	62	145.115	42.418	55.706	1.00	77.96	O
ATOM	8042	C	GLU	C	62	148.514	42.904	59.368	1.00	71.65	C
ATOM	8043	O	GLU	C	62	149.427	43.676	59.654	1.00	71.71	O
ATOM	8044	N	LEU	C	63	148.585	41.590	59.564	1.00	71.31	N
ATOM	8045	CA	LEU	C	63	149.730	40.957	60.214	1.00	71.08	C
ATOM	8046	CB	LEU	C	63	149.313	40.323	61.542	1.00	70.60	C
ATOM	8047	CG	LEU	C	63	148.875	41.262	62.662	1.00	70.15	C
ATOM	8048	CD1	LEU	C	63	147.990	40.548	63.653	1.00	70.10	C
ATOM	8049	CD2	LEU	C	63	150.080	41.844	63.368	1.00	70.73	C
ATOM	8050	C	LEU	C	63	150.361	39.915	59.307	1.00	71.41	C
ATOM	8051	O	LEU	C	63	150.913	38.919	59.773	1.00	71.35	O
ATOM	8052	N	ASN	C	64	150.288	40.162	58.006	1.00	71.98	N
ATOM	8053	CA	ASN	C	64	150.775	39.217	57.010	1.00	72.57	C
ATOM	8054	CB	ASN	C	64	150.272	39.612	55.627	1.00	72.53	C
ATOM	8055	CG	ASN	C	64	148.791	39.879	55.611	1.00	73.28	C
ATOM	8056	OD1	ASN	C	64	147.970	38.957	55.547	1.00	73.63	O
ATOM	8057	ND2	ASN	C	64	148.434	41.150	55.679	1.00	73.78	N
ATOM	8058	C	ASN	C	64	152.293	39.092	56.972	1.00	72.95	C
ATOM	8059	O	ASN	C	64	153.015	39.993	57.399	1.00	72.88	O
ATOM	8060	N	GLU	C	65	152.756	37.956	56.456	1.00	73.44	N

ATOM	8061	CA	GLU	C	65	154.169	37.724	56.134	1.00	73.75	C
ATOM	8062	CB	GLU	C	65	154.600	38.556	54.913	1.00	73.66	C
ATOM	8063	CG	GLU	C	65	153.525	38.640	53.814	1.00	74.50	C
ATOM	8064	CD	GLU	C	65	154.060	39.056	52.447	1.00	74.96	C
ATOM	8065	OE1	GLU	C	65	155.281	39.283	52.316	1.00	75.98	O
ATOM	8066	OE2	GLU	C	65	153.249	39.142	51.492	1.00	76.65	O
ATOM	8067	C	GLU	C	65	155.081	37.946	57.334	1.00	73.47	C
ATOM	8068	O	GLU	C	65	156.198	38.440	57.207	1.00	73.81	O
ATOM	8069	N	ASN	C	66	154.584	37.586	58.508	1.00	73.46	N
ATOM	8070	CA	ASN	C	66	155.411	37.516	59.701	1.00	73.29	C
ATOM	8071	CB	ASN	C	66	154.653	38.050	60.915	1.00	73.24	C
ATOM	8072	CG	ASN	C	66	154.562	39.559	60.927	1.00	72.78	C
ATOM	8073	OD1	ASN	C	66	155.366	40.225	61.566	1.00	72.58	O
ATOM	8074	ND2	ASN	C	66	153.582	40.106	60.223	1.00	72.36	N
ATOM	8075	C	ASN	C	66	155.836	36.071	59.921	1.00	73.28	C
ATOM	8076	O	ASN	C	66	155.797	35.257	58.989	1.00	73.18	O
ATOM	8077	N	ILE	C	67	156.242	35.754	61.144	1.00	73.22	N
ATOM	8078	CA	ILE	C	67	156.592	34.388	61.491	1.00	73.42	C
ATOM	8079	CB	ILE	C	67	158.157	34.199	61.546	1.00	73.60	C
ATOM	8080	CG1	ILE	C	67	158.548	32.750	61.181	1.00	73.85	C
ATOM	8081	CD1	ILE	C	67	160.027	32.368	61.463	1.00	73.92	C
ATOM	8082	CG2	ILE	C	67	158.799	34.776	62.876	1.00	73.80	C
ATOM	8083	C	ILE	C	67	155.823	33.939	62.752	1.00	73.25	C
ATOM	8084	O	ILE	C	67	156.369	33.280	63.644	1.00	73.46	O
ATOM	8085	N	VAL	C	68	154.540	34.306	62.807	1.00	73.13	N
ATOM	8086	CA	VAL	C	68	153.684	34.000	63.959	1.00	73.05	C
ATOM	8087	CB	VAL	C	68	152.337	34.781	63.941	1.00	72.82	C
ATOM	8088	CG1	VAL	C	68	151.491	34.414	65.138	1.00	72.26	C
ATOM	8089	CG2	VAL	C	68	152.571	36.270	63.943	1.00	72.63	C
ATOM	8090	C	VAL	C	68	153.405	32.508	64.038	1.00	73.37	C
ATOM	8091	O	VAL	C	68	152.750	31.948	63.163	1.00	73.23	O
ATOM	8092	N	SER	C	69	153.914	31.879	65.098	1.00	73.78	N
ATOM	8093	CA	SER	C	69	153.737	30.443	65.331	1.00	74.04	C
ATOM	8094	CB	SER	C	69	155.095	29.746	65.475	1.00	74.06	C
ATOM	8095	OG	SER	C	69	155.893	30.352	66.478	1.00	74.06	O
ATOM	8096	C	SER	C	69	152.861	30.147	66.547	1.00	74.22	C
ATOM	8097	O	SER	C	69	152.587	28.990	66.854	1.00	74.42	O
ATOM	8098	N	ALA	C	70	152.426	31.195	67.236	1.00	74.39	N
ATOM	8099	CA	ALA	C	70	151.555	31.051	68.393	1.00	74.44	C
ATOM	8100	CB	ALA	C	70	152.375	30.957	69.672	1.00	74.26	C
ATOM	8101	C	ALA	C	70	150.605	32.226	68.469	1.00	74.64	C
ATOM	8102	O	ALA	C	70	150.996	33.366	68.240	1.00	74.72	O
ATOM	8103	N	VAL	C	71	149.352	31.939	68.789	1.00	75.02	N
ATOM	8104	CA	VAL	C	71	148.382	32.983	69.076	1.00	75.42	C
ATOM	8105	CB	VAL	C	71	147.461	33.281	67.844	1.00	75.29	C
ATOM	8106	CG1	VAL	C	71	146.884	32.007	67.258	1.00	75.04	C
ATOM	8107	CG2	VAL	C	71	146.363	34.267	68.197	1.00	75.18	C
ATOM	8108	C	VAL	C	71	147.614	32.608	70.344	1.00	75.92	C
ATOM	8109	O	VAL	C	71	147.036	31.529	70.429	1.00	75.92	O
ATOM	8110	N	GLU	C	72	147.665	33.488	71.343	1.00	76.66	N
ATOM	8111	CA	GLU	C	72	146.947	33.291	72.604	1.00	77.58	C
ATOM	8112	CB	GLU	C	72	147.506	34.189	73.716	1.00	77.33	C
ATOM	8113	CG	GLU	C	72	148.876	33.783	74.278	1.00	78.35	C
ATOM	8114	CD	GLU	C	72	149.386	34.743	75.377	1.00	79.26	C
ATOM	8115	OE1	GLU	C	72	148.590	35.578	75.872	1.00	81.94	O
ATOM	8116	OE2	GLU	C	72	150.585	34.667	75.758	1.00	80.72	O

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ATOM   8117  C   GLU C  72     145.470  33.597  72.390  1.00 77.54           C
ATOM   8118  O   GLU C  72     145.140  34.588  71.747  1.00 77.68           O
ATOM   8119  N   PRO C  73     144.574  32.730  72.902  1.00 77.71           N
ATOM   8120  CA  PRO C  73     143.124  32.934  72.821  1.00 77.61           C
ATOM   8121  CB  PRO C  73     142.594  31.997  73.898  1.00 77.62           C
ATOM   8122  CG  PRO C  73     143.525  30.839  73.797  1.00 77.66           C
ATOM   8123  CD  PRO C  73     144.890  31.439  73.544  1.00 77.51           C
ATOM   8124  C   PRO C  73     142.594  34.372  73.000  1.00 77.38           C
ATOM   8125  O   PRO C  73     141.689  34.769  72.278  1.00 78.02           O
ATOM   8126  N   GLY C  74     143.132  35.165  73.906  1.00 76.89           N
ATOM   8127  CA  GLY C  74     142.617  36.538  74.007  1.00 76.62           C
ATOM   8128  C   GLY C  74     143.259  37.569  73.083  1.00 76.25           C
ATOM   8129  O   GLY C  74     143.145  38.774  73.321  1.00 76.22           O
ATOM   8130  N   ALA C  75     143.932  37.104  72.030  1.00 75.84           N
ATOM   8131  CA  ALA C  75     144.790  37.964  71.203  1.00 75.37           C
ATOM   8132  CB  ALA C  75     145.480  37.158  70.118  1.00 75.35           C
ATOM   8133  C   ALA C  75     144.079  39.164  70.589  1.00 75.13           C
ATOM   8134  O   ALA C  75     144.659  40.242  70.498  1.00 75.11           O
ATOM   8135  N   PHE C  76     142.828  38.977  70.176  1.00 74.80           N
ATOM   8136  CA  PHE C  76     142.091  40.044  69.509  1.00 74.49           C
ATOM   8137  CB  PHE C  76     141.584  39.555  68.152  1.00 74.30           C
ATOM   8138  CG  PHE C  76     142.655  38.911  67.314  1.00 74.04           C
ATOM   8139  CD1 PHE C  76     143.704  39.671  66.797  1.00 73.16           C
ATOM   8140  CE1 PHE C  76     144.703  39.081  66.039  1.00 72.10           C
ATOM   8141  CZ  PHE C  76     144.668  37.719  65.795  1.00 72.70           C
ATOM   8142  CE2 PHE C  76     143.631  36.949  66.303  1.00 73.22           C
ATOM   8143  CD2 PHE C  76     142.631  37.546  67.063  1.00 73.62           C
ATOM   8144  C   PHE C  76     140.981  40.679  70.356  1.00 74.52           C
ATOM   8145  O   PHE C  76     140.041  41.260  69.818  1.00 74.47           O
ATOM   8146  N   ASN C  77     141.122  40.592  71.680  1.00 74.65           N
ATOM   8147  CA  ASN C  77     140.206  41.246  72.619  1.00 74.84           C
ATOM   8148  CB  ASN C  77     140.645  41.023  74.067  1.00 74.76           C
ATOM   8149  CG  ASN C  77     140.402  39.608  74.551  1.00 75.13           C
ATOM   8150  OD1 ASN C  77     139.749  38.806  73.881  1.00 74.69           O
ATOM   8151  ND2 ASN C  77     140.937  39.293  75.733  1.00 75.24           N
ATOM   8152  C   ASN C  77     140.084  42.740  72.402  1.00 74.94           C
ATOM   8153  O   ASN C  77     141.077  43.435  72.171  1.00 74.92           O
ATOM   8154  N   ASN C  78     138.847  43.214  72.491  1.00 75.22           N
ATOM   8155  CA  ASN C  78     138.518  44.634  72.461  1.00 75.56           C
ATOM   8156  CB  ASN C  78     139.331  45.395  73.506  1.00 75.85           C
ATOM   8157  CG  ASN C  78     138.609  46.617  74.017  1.00 77.16           C
ATOM   8158  OD1 ASN C  78     137.395  46.586  74.235  1.00 78.35           O
ATOM   8159  ND2 ASN C  78     139.350  47.708  74.210  1.00 78.22           N
ATOM   8160  C   ASN C  78     138.609  45.305  71.084  1.00 75.52           C
ATOM   8161  O   ASN C  78     138.591  46.535  70.977  1.00 75.69           O
ATOM   8162  N   LEU C  79     138.693  44.490  70.039  1.00 75.45           N
ATOM   8163  CA  LEU C  79     138.632  44.975  68.670  1.00 75.48           C
ATOM   8164  CB  LEU C  79     139.674  44.266  67.808  1.00 75.32           C
ATOM   8165  CG  LEU C  79     141.132  44.292  68.262  1.00 74.60           C
ATOM   8166  CD1 LEU C  79     141.955  43.331  67.419  1.00 74.36           C
ATOM   8167  CD2 LEU C  79     141.706  45.688  68.196  1.00 73.91           C
ATOM   8168  C   LEU C  79     137.220  44.755  68.122  1.00 75.94           C
ATOM   8169  O   LEU C  79     137.006  44.012  67.159  1.00 76.08           O
ATOM   8170  N   PHE C  80     136.257  45.414  68.757  1.00 76.31           N
ATOM   8171  CA  PHE C  80     134.846  45.274  68.421  1.00 76.47           C
ATOM   8172  CB  PHE C  80     133.982  45.887  69.527  1.00 77.06           C
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ATOM	8173	CG	PHE	C	80	134.170	45.245	70.869	1.00	78.37	C
ATOM	8174	CD1	PHE	C	80	133.867	43.882	71.061	1.00	80.24	C
ATOM	8175	CE1	PHE	C	80	134.038	43.266	72.326	1.00	81.04	C
ATOM	8176	CZ	PHE	C	80	134.510	44.034	73.417	1.00	79.97	C
ATOM	8177	CE2	PHE	C	80	134.807	45.402	73.229	1.00	79.81	C
ATOM	8178	CD2	PHE	C	80	134.635	45.996	71.953	1.00	79.19	C
ATOM	8179	C	PHE	C	80	134.478	45.907	67.088	1.00	76.16	C
ATOM	8180	O	PHE	C	80	133.356	45.743	66.613	1.00	76.30	O
ATOM	8181	N	ASN	C	81	135.412	46.634	66.489	1.00	75.82	N
ATOM	8182	CA	ASN	C	81	135.124	47.342	65.250	1.00	75.70	C
ATOM	8183	CB	ASN	C	81	135.355	48.844	65.417	1.00	75.89	C
ATOM	8184	CG	ASN	C	81	134.374	49.481	66.377	1.00	76.09	C
ATOM	8185	OD1	ASN	C	81	133.396	50.099	65.961	1.00	76.36	O
ATOM	8186	ND2	ASN	C	81	134.628	49.331	67.669	1.00	76.25	N
ATOM	8187	C	ASN	C	81	135.939	46.828	64.083	1.00	75.49	C
ATOM	8188	O	ASN	C	81	135.888	47.396	62.985	1.00	75.67	O
ATOM	8189	N	LEU	C	82	136.694	45.758	64.322	1.00	75.05	N
ATOM	8190	CA	LEU	C	82	137.565	45.215	63.298	1.00	74.67	C
ATOM	8191	CB	LEU	C	82	138.488	44.140	63.871	1.00	74.45	C
ATOM	8192	CG	LEU	C	82	139.703	43.803	62.999	1.00	73.96	C
ATOM	8193	CD1	LEU	C	82	140.690	44.961	62.980	1.00	72.81	C
ATOM	8194	CD2	LEU	C	82	140.381	42.526	63.464	1.00	73.39	C
ATOM	8195	C	LEU	C	82	136.738	44.671	62.145	1.00	74.71	C
ATOM	8196	O	LEU	C	82	135.708	44.039	62.358	1.00	74.76	O
ATOM	8197	N	ARG	C	83	137.190	44.942	60.925	1.00	74.70	N
ATOM	8198	CA	ARG	C	83	136.503	44.498	59.719	1.00	74.67	C
ATOM	8199	CB	ARG	C	83	136.169	45.695	58.830	1.00	75.20	C
ATOM	8200	CG	ARG	C	83	135.103	46.619	59.393	1.00	77.80	C
ATOM	8201	CD	ARG	C	83	133.721	46.088	59.063	1.00	83.61	C
ATOM	8202	NE	ARG	C	83	132.673	46.777	59.817	1.00	88.13	N
ATOM	8203	CZ	ARG	C	83	131.370	46.506	59.726	1.00	89.83	C
ATOM	8204	NH1	ARG	C	83	130.933	45.551	58.908	1.00	89.92	N
ATOM	8205	NH2	ARG	C	83	130.501	47.200	60.455	1.00	90.79	N
ATOM	8206	C	ARG	C	83	137.353	43.505	58.949	1.00	73.95	C
ATOM	8207	O	ARG	C	83	136.850	42.479	58.490	1.00	73.84	O
ATOM	8208	N	THR	C	84	138.640	43.819	58.810	1.00	73.28	N
ATOM	8209	CA	THR	C	84	139.572	42.965	58.079	1.00	72.72	C
ATOM	8210	CB	THR	C	84	140.147	43.670	56.833	1.00	72.81	C
ATOM	8211	OG1	THR	C	84	139.079	44.242	56.068	1.00	73.44	O
ATOM	8212	CG2	THR	C	84	140.918	42.681	55.952	1.00	73.08	C
ATOM	8213	C	THR	C	84	140.717	42.532	58.977	1.00	72.18	C
ATOM	8214	O	THR	C	84	141.263	43.337	59.734	1.00	72.06	O
ATOM	8215	N	LEU	C	85	141.068	41.253	58.883	1.00	71.53	N
ATOM	8216	CA	LEU	C	85	142.171	40.688	59.640	1.00	70.96	C
ATOM	8217	CB	LEU	C	85	141.636	39.890	60.834	1.00	70.87	C
ATOM	8218	CG	LEU	C	85	142.537	39.075	61.764	1.00	70.55	C
ATOM	8219	CD1	LEU	C	85	143.514	39.939	62.564	1.00	70.01	C
ATOM	8220	CD2	LEU	C	85	141.657	38.288	62.702	1.00	70.61	C
ATOM	8221	C	LEU	C	85	142.971	39.802	58.705	1.00	71.01	C
ATOM	8222	O	LEU	C	85	142.460	38.790	58.221	1.00	71.28	O
ATOM	8223	N	GLY	C	86	144.210	40.207	58.428	1.00	70.80	N
ATOM	8224	CA	GLY	C	86	145.126	39.437	57.585	1.00	70.58	C
ATOM	8225	C	GLY	C	86	146.143	38.678	58.413	1.00	70.75	C
ATOM	8226	O	GLY	C	86	146.911	39.270	59.171	1.00	70.51	O
ATOM	8227	N	LEU	C	87	146.140	37.357	58.282	1.00	70.97	N
ATOM	8228	CA	LEU	C	87	147.106	36.518	58.983	1.00	71.11	C

ATOM	8229	CB	LEU	C	87	146.430	35.743	60.113	1.00	70.82	C
ATOM	8230	CG	LEU	C	87	146.018	36.564	61.333	1.00	70.40	C
ATOM	8231	CD1	LEU	C	87	144.967	35.831	62.142	1.00	70.60	C
ATOM	8232	CD2	LEU	C	87	147.224	36.869	62.190	1.00	69.52	C
ATOM	8233	C	LEU	C	87	147.791	35.585	57.995	1.00	71.74	C
ATOM	8234	O	LEU	C	87	148.345	34.549	58.374	1.00	71.55	O
ATOM	8235	N	ARG	C	88	147.750	35.985	56.724	1.00	72.63	N
ATOM	8236	CA	ARG	C	88	148.368	35.258	55.624	1.00	73.93	C
ATOM	8237	CB	ARG	C	88	148.077	35.982	54.318	1.00	73.87	C
ATOM	8238	CG	ARG	C	88	148.299	35.161	53.059	1.00	75.28	C
ATOM	8239	CD	ARG	C	88	148.070	36.009	51.797	1.00	75.50	C
ATOM	8240	NE	ARG	C	88	148.698	37.329	51.908	1.00	78.56	N
ATOM	8241	CZ	ARG	C	88	150.001	37.577	51.759	1.00	79.60	C
ATOM	8242	NH1	ARG	C	88	150.860	36.595	51.480	1.00	79.97	N
ATOM	8243	NH2	ARG	C	88	150.447	38.822	51.893	1.00	79.73	N
ATOM	8244	C	ARG	C	88	149.874	35.105	55.791	1.00	74.30	C
ATOM	8245	O	ARG	C	88	150.560	36.001	56.304	1.00	74.29	O
ATOM	8246	N	SER	C	89	150.373	33.953	55.351	1.00	74.97	N
ATOM	8247	CA	SER	C	89	151.799	33.653	55.328	1.00	75.56	C
ATOM	8248	CB	SER	C	89	152.512	34.465	54.245	1.00	75.55	C
ATOM	8249	OG	SER	C	89	153.897	34.172	54.229	1.00	76.72	O
ATOM	8250	C	SER	C	89	152.451	33.841	56.695	1.00	76.11	C
ATOM	8251	O	SER	C	89	153.284	34.734	56.891	1.00	76.40	O
ATOM	8252	N	ASN	C	90	152.036	33.000	57.640	1.00	76.67	N
ATOM	8253	CA	ASN	C	90	152.658	32.911	58.957	1.00	76.80	C
ATOM	8254	CB	ASN	C	90	151.710	33.421	60.047	1.00	76.54	C
ATOM	8255	CG	ASN	C	90	151.745	34.927	60.192	1.00	75.98	C
ATOM	8256	OD1	ASN	C	90	152.719	35.491	60.684	1.00	76.15	O
ATOM	8257	ND2	ASN	C	90	150.679	35.586	59.770	1.00	75.31	N
ATOM	8258	C	ASN	C	90	153.078	31.471	59.213	1.00	77.31	C
ATOM	8259	O	ASN	C	90	153.291	30.708	58.269	1.00	77.33	O
ATOM	8260	N	ARG	C	91	153.191	31.101	60.483	1.00	78.04	N
ATOM	8261	CA	ARG	C	91	153.660	29.778	60.864	1.00	78.85	C
ATOM	8262	CB	ARG	C	91	155.032	29.894	61.523	1.00	79.13	C
ATOM	8263	CG	ARG	C	91	156.239	29.855	60.599	1.00	80.78	C
ATOM	8264	CD	ARG	C	91	157.253	28.897	61.227	1.00	84.40	C
ATOM	8265	NE	ARG	C	91	158.663	29.259	61.051	1.00	87.37	N
ATOM	8266	CZ	ARG	C	91	159.406	28.939	59.990	1.00	88.30	C
ATOM	8267	NH1	ARG	C	91	158.875	28.270	58.963	1.00	88.80	N
ATOM	8268	NH2	ARG	C	91	160.681	29.307	59.951	1.00	87.69	N
ATOM	8269	C	ARG	C	91	152.688	29.069	61.822	1.00	79.10	C
ATOM	8270	O	ARG	C	91	153.118	28.291	62.687	1.00	79.33	O
ATOM	8271	N	LEU	C	92	151.388	29.338	61.677	1.00	79.11	N
ATOM	8272	CA	LEU	C	92	150.375	28.749	62.553	1.00	79.15	C
ATOM	8273	CB	LEU	C	92	149.047	29.508	62.442	1.00	78.97	C
ATOM	8274	CG	LEU	C	92	148.998	31.010	62.737	1.00	78.40	C
ATOM	8275	CD1	LEU	C	92	147.735	31.614	62.170	1.00	78.58	C
ATOM	8276	CD2	LEU	C	92	149.086	31.292	64.216	1.00	78.08	C
ATOM	8277	C	LEU	C	92	150.161	27.293	62.184	1.00	79.44	C
ATOM	8278	O	LEU	C	92	149.965	26.986	61.018	1.00	79.63	O
ATOM	8279	N	LYS	C	93	150.208	26.400	63.169	1.00	79.89	N
ATOM	8280	CA	LYS	C	93	149.973	24.976	62.921	1.00	80.69	C
ATOM	8281	CB	LYS	C	93	151.052	24.104	63.570	1.00	80.59	C
ATOM	8282	CG	LYS	C	93	152.439	24.251	62.955	1.00	81.70	C
ATOM	8283	CD	LYS	C	93	153.546	23.751	63.896	1.00	81.97	C
ATOM	8284	CE	LYS	C	93	154.910	24.402	63.579	1.00	84.21	C

ATOM	8285	NZ	LYS	C	93	155.247	24.387	62.114	1.00	84.71	N
ATOM	8286	C	LYS	C	93	148.603	24.547	63.421	1.00	80.71	C
ATOM	8287	O	LYS	C	93	147.784	24.021	62.663	1.00	80.92	O
ATOM	8288	N	LEU	C	94	148.358	24.778	64.702	1.00	80.73	N
ATOM	8289	CA	LEU	C	94	147.145	24.310	65.336	1.00	80.70	C
ATOM	8290	CB	LEU	C	94	147.474	23.133	66.263	1.00	80.73	C
ATOM	8291	CG	LEU	C	94	146.350	22.366	66.957	1.00	80.84	C
ATOM	8292	CD1	LEU	C	94	145.531	21.557	65.952	1.00	80.49	C
ATOM	8293	CD2	LEU	C	94	146.944	21.468	68.038	1.00	80.57	C
ATOM	8294	C	LEU	C	94	146.527	25.472	66.098	1.00	80.65	C
ATOM	8295	O	LEU	C	94	147.035	25.885	67.147	1.00	80.84	O
ATOM	8296	N	ILE	C	95	145.442	26.007	65.555	1.00	80.35	N
ATOM	8297	CA	ILE	C	95	144.802	27.176	66.137	1.00	80.26	C
ATOM	8298	CB	ILE	C	95	143.954	27.918	65.091	1.00	80.29	C
ATOM	8299	CG1	ILE	C	95	144.857	28.456	63.980	1.00	80.53	C
ATOM	8300	CD1	ILE	C	95	144.111	29.227	62.901	1.00	82.14	C
ATOM	8301	CG2	ILE	C	95	143.152	29.040	65.740	1.00	79.90	C
ATOM	8302	C	ILE	C	95	143.954	26.793	67.353	1.00	80.25	C
ATOM	8303	O	ILE	C	95	143.021	25.997	67.230	1.00	80.40	O
ATOM	8304	N	PRO	C	96	144.272	27.361	68.532	1.00	80.13	N
ATOM	8305	CA	PRO	C	96	143.493	27.029	69.716	1.00	80.03	C
ATOM	8306	CB	PRO	C	96	144.298	27.651	70.858	1.00	79.80	C
ATOM	8307	CG	PRO	C	96	145.024	28.756	70.247	1.00	80.03	C
ATOM	8308	CD	PRO	C	96	145.333	28.337	68.833	1.00	80.31	C
ATOM	8309	C	PRO	C	96	142.127	27.670	69.625	1.00	79.97	C
ATOM	8310	O	PRO	C	96	141.963	28.652	68.911	1.00	80.14	O
ATOM	8311	N	LEU	C	97	141.153	27.100	70.324	1.00	79.99	N
ATOM	8312	CA	LEU	C	97	139.815	27.663	70.353	1.00	79.96	C
ATOM	8313	CB	LEU	C	97	138.835	26.673	70.965	1.00	79.98	C
ATOM	8314	CG	LEU	C	97	137.981	25.917	69.962	1.00	79.89	C
ATOM	8315	CD1	LEU	C	97	137.180	24.857	70.706	1.00	79.59	C
ATOM	8316	CD2	LEU	C	97	137.078	26.895	69.227	1.00	79.56	C
ATOM	8317	C	LEU	C	97	139.761	28.986	71.110	1.00	79.94	C
ATOM	8318	O	LEU	C	97	140.521	29.212	72.059	1.00	80.02	O
ATOM	8319	N	GLY	C	98	138.856	29.856	70.675	1.00	79.90	N
ATOM	8320	CA	GLY	C	98	138.663	31.146	71.319	1.00	79.93	C
ATOM	8321	C	GLY	C	98	139.608	32.250	70.881	1.00	79.96	C
ATOM	8322	O	GLY	C	98	139.764	33.233	71.591	1.00	79.73	O
ATOM	8323	N	VAL	C	99	140.234	32.102	69.712	1.00	80.21	N
ATOM	8324	CA	VAL	C	99	141.030	33.191	69.150	1.00	80.17	C
ATOM	8325	CB	VAL	C	99	142.269	32.714	68.330	1.00	80.10	C
ATOM	8326	CG1	VAL	C	99	143.137	31.772	69.148	1.00	79.95	C
ATOM	8327	CG2	VAL	C	99	141.849	32.065	67.043	1.00	80.52	C
ATOM	8328	C	VAL	C	99	140.175	34.158	68.322	1.00	80.19	C
ATOM	8329	O	VAL	C	99	140.457	35.353	68.299	1.00	80.73	O
ATOM	8330	N	PHE	C	100	139.136	33.658	67.654	1.00	79.84	N
ATOM	8331	CA	PHE	C	100	138.297	34.538	66.835	1.00	79.61	C
ATOM	8332	CB	PHE	C	100	137.971	33.909	65.470	1.00	78.78	C
ATOM	8333	CG	PHE	C	100	139.184	33.551	64.679	1.00	77.57	C
ATOM	8334	CD1	PHE	C	100	140.074	34.533	64.271	1.00	76.26	C
ATOM	8335	CE1	PHE	C	100	141.222	34.204	63.561	1.00	76.14	C
ATOM	8336	CZ	PHE	C	100	141.483	32.879	63.250	1.00	76.95	C
ATOM	8337	CE2	PHE	C	100	140.596	31.886	63.652	1.00	76.79	C
ATOM	8338	CD2	PHE	C	100	139.455	32.227	64.365	1.00	76.88	C
ATOM	8339	C	PHE	C	100	137.031	34.965	67.554	1.00	80.11	C
ATOM	8340	O	PHE	C	100	136.010	35.209	66.925	1.00	80.59	O

ATOM	8341	N	THR	C	101	137.098	35.069	68.870	1.00	80.39	N
ATOM	8342	CA	THR	C	101	135.912	35.383	69.643	1.00	81.15	C
ATOM	8343	CB	THR	C	101	135.933	34.675	71.001	1.00	81.53	C
ATOM	8344	OG1	THR	C	101	137.261	34.741	71.534	1.00	82.47	O
ATOM	8345	CG2	THR	C	101	135.506	33.202	70.854	1.00	81.88	C
ATOM	8346	C	THR	C	101	135.765	36.885	69.853	1.00	81.13	C
ATOM	8347	O	THR	C	101	136.754	37.610	69.966	1.00	81.27	O
ATOM	8348	N	GLY	C	102	134.518	37.344	69.901	1.00	81.08	N
ATOM	8349	CA	GLY	C	102	134.217	38.758	70.094	1.00	80.63	C
ATOM	8350	C	GLY	C	102	134.546	39.642	68.902	1.00	80.28	C
ATOM	8351	O	GLY	C	102	134.415	40.864	68.989	1.00	80.75	O
ATOM	8352	N	LEU	C	103	134.982	39.038	67.796	1.00	79.46	N
ATOM	8353	CA	LEU	C	103	135.206	39.781	66.558	1.00	78.75	C
ATOM	8354	CB	LEU	C	103	136.319	39.146	65.721	1.00	78.57	C
ATOM	8355	CG	LEU	C	103	137.734	39.119	66.288	1.00	78.06	C
ATOM	8356	CD1	LEU	C	103	138.603	38.253	65.413	1.00	77.86	C
ATOM	8357	CD2	LEU	C	103	138.306	40.517	66.393	1.00	78.37	C
ATOM	8358	C	LEU	C	103	133.904	39.815	65.774	1.00	78.44	C
ATOM	8359	O	LEU	C	103	133.829	39.345	64.637	1.00	78.33	O
ATOM	8360	N	SER	C	104	132.879	40.382	66.400	1.00	78.04	N
ATOM	8361	CA	SER	C	104	131.532	40.361	65.860	1.00	77.66	C
ATOM	8362	CB	SER	C	104	130.521	40.766	66.934	1.00	77.99	C
ATOM	8363	OG	SER	C	104	130.761	42.086	67.403	1.00	78.85	O
ATOM	8364	C	SER	C	104	131.349	41.215	64.611	1.00	77.09	C
ATOM	8365	O	SER	C	104	130.453	40.953	63.828	1.00	77.32	O
ATOM	8366	N	ASN	C	105	132.182	42.228	64.416	1.00	76.39	N
ATOM	8367	CA	ASN	C	105	132.064	43.051	63.215	1.00	75.84	C
ATOM	8368	CB	ASN	C	105	132.292	44.528	63.550	1.00	76.05	C
ATOM	8369	CG	ASN	C	105	130.991	45.277	63.795	1.00	76.57	C
ATOM	8370	OD1	ASN	C	105	130.620	45.571	64.940	1.00	78.37	O
ATOM	8371	ND2	ASN	C	105	130.287	45.585	62.717	1.00	76.89	N
ATOM	8372	C	ASN	C	105	132.937	42.595	62.033	1.00	75.39	C
ATOM	8373	O	ASN	C	105	132.842	43.145	60.934	1.00	75.30	O
ATOM	8374	N	LEU	C	106	133.768	41.581	62.260	1.00	74.94	N
ATOM	8375	CA	LEU	C	106	134.709	41.088	61.256	1.00	74.43	C
ATOM	8376	CB	LEU	C	106	135.548	39.946	61.822	1.00	74.01	C
ATOM	8377	CG	LEU	C	106	136.842	39.644	61.075	1.00	73.12	C
ATOM	8378	CD1	LEU	C	106	137.880	40.707	61.376	1.00	73.05	C
ATOM	8379	CD2	LEU	C	106	137.365	38.283	61.444	1.00	71.75	C
ATOM	8380	C	LEU	C	106	133.998	40.623	59.995	1.00	74.71	C
ATOM	8381	O	LEU	C	106	133.039	39.863	60.063	1.00	74.89	O
ATOM	8382	N	THR	C	107	134.489	41.083	58.850	1.00	74.98	N
ATOM	8383	CA	THR	C	107	133.890	40.794	57.559	1.00	75.13	C
ATOM	8384	CB	THR	C	107	133.568	42.104	56.814	1.00	75.12	C
ATOM	8385	OG1	THR	C	107	132.597	42.847	57.556	1.00	75.14	O
ATOM	8386	CG2	THR	C	107	133.000	41.828	55.448	1.00	75.86	C
ATOM	8387	C	THR	C	107	134.831	39.935	56.723	1.00	75.38	C
ATOM	8388	O	THR	C	107	134.390	39.025	56.008	1.00	75.35	O
ATOM	8389	N	LYS	C	108	136.127	40.212	56.835	1.00	75.65	N
ATOM	8390	CA	LYS	C	108	137.134	39.568	55.998	1.00	76.04	C
ATOM	8391	CB	LYS	C	108	137.676	40.584	54.991	1.00	76.18	C
ATOM	8392	CG	LYS	C	108	138.466	39.975	53.855	1.00	78.45	C
ATOM	8393	CD	LYS	C	108	138.877	41.043	52.843	1.00	82.33	C
ATOM	8394	CE	LYS	C	108	140.203	40.684	52.155	1.00	83.86	C
ATOM	8395	NZ	LYS	C	108	140.497	41.588	51.005	1.00	84.74	N
ATOM	8396	C	LYS	C	108	138.277	38.969	56.824	1.00	75.81	C

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ATOM   8397  O   LYS C 108     138.850  39.642  57.688  1.00 75.94           O
ATOM   8398  N   LEU C 109     138.610  37.710  56.551  1.00 75.47           N
ATOM   8399  CA  LEU C 109     139.691  37.032  57.258  1.00 75.20           C
ATOM   8400  CB  LEU C 109     139.121  36.159  58.382  1.00 74.98           C
ATOM   8401  CG  LEU C 109     140.045  35.173  59.103  1.00 74.31           C
ATOM   8402  CD1 LEU C 109     141.041  35.923  59.923  1.00 74.24           C
ATOM   8403  CD2 LEU C 109     139.271  34.222  59.987  1.00 74.64           C
ATOM   8404  C   LEU C 109     140.521  36.190  56.296  1.00 75.72           C
ATOM   8405  O   LEU C 109     139.973  35.391  55.546  1.00 76.11           O
ATOM   8406  N   ASP C 110     141.837  36.381  56.314  1.00 76.17           N
ATOM   8407  CA  ASP C 110     142.761  35.575  55.513  1.00 76.58           C
ATOM   8408  CB  ASP C 110     143.558  36.454  54.543  1.00 77.02           C
ATOM   8409  CG  ASP C 110     144.290  35.640  53.463  1.00 79.85           C
ATOM   8410  OD1 ASP C 110     144.712  34.488  53.733  1.00 82.09           O
ATOM   8411  OD2 ASP C 110     144.450  36.156  52.329  1.00 83.59           O
ATOM   8412  C   ASP C 110     143.702  34.778  56.418  1.00 76.35           C
ATOM   8413  O   ASP C 110     144.455  35.337  57.216  1.00 76.26           O
ATOM   8414  N   ILE C 111     143.666  33.466  56.252  1.00 76.12           N
ATOM   8415  CA  ILE C 111     144.281  32.530  57.174  1.00 75.94           C
ATOM   8416  CB  ILE C 111     143.129  31.841  57.993  1.00 76.17           C
ATOM   8417  CG1 ILE C 111     142.869  32.610  59.290  1.00 76.86           C
ATOM   8418  CD1 ILE C 111     144.059  32.675  60.232  1.00 77.88           C
ATOM   8419  CG2 ILE C 111     143.337  30.351  58.260  1.00 76.42           C
ATOM   8420  C   ILE C 111     145.192  31.580  56.378  1.00 75.72           C
ATOM   8421  O   ILE C 111     145.760  30.627  56.912  1.00 75.78           O
ATOM   8422  N   SER C 112     145.356  31.893  55.095  1.00 75.43           N
ATOM   8423  CA  SER C 112     146.069  31.043  54.146  1.00 75.28           C
ATOM   8424  CB  SER C 112     145.607  31.362  52.731  1.00 74.96           C
ATOM   8425  OG  SER C 112     145.940  32.699  52.405  1.00 74.56           O
ATOM   8426  C   SER C 112     147.590  31.176  54.212  1.00 75.52           C
ATOM   8427  O   SER C 112     148.130  32.124  54.792  1.00 75.36           O
ATOM   8428  N   GLU C 113     148.260  30.206  53.590  1.00 75.76           N
ATOM   8429  CA  GLU C 113     149.721  30.134  53.504  1.00 76.26           C
ATOM   8430  CB  GLU C 113     150.274  31.288  52.657  1.00 76.24           C
ATOM   8431  CG  GLU C 113     149.989  31.143  51.159  1.00 78.03           C
ATOM   8432  CD  GLU C 113     150.331  32.403  50.362  1.00 78.51           C
ATOM   8433  OE1 GLU C 113     149.542  33.376  50.420  1.00 82.25           O
ATOM   8434  OE2 GLU C 113     151.380  32.419  49.671  1.00 80.53           O
ATOM   8435  C   GLU C 113     150.407  30.032  54.871  1.00 75.30           C
ATOM   8436  O   GLU C 113     151.466  30.592  55.088  1.00 75.24           O
ATOM   8437  N   ASN C 114     149.779  29.300  55.781  1.00 74.85           N
ATOM   8438  CA  ASN C 114     150.325  29.023  57.094  1.00 74.40           C
ATOM   8439  CB  ASN C 114     149.261  29.259  58.162  1.00 74.04           C
ATOM   8440  CG  ASN C 114     149.260  30.689  58.664  1.00 73.70           C
ATOM   8441  OD1 ASN C 114     150.045  31.049  59.539  1.00 72.58           O
ATOM   8442  ND2 ASN C 114     148.384  31.514  58.106  1.00 73.01           N
ATOM   8443  C   ASN C 114     150.867  27.607  57.153  1.00 74.49           C
ATOM   8444  O   ASN C 114     151.278  27.059  56.128  1.00 74.46           O
ATOM   8445  N   LYS C 115     150.887  27.023  58.347  1.00 74.64           N
ATOM   8446  CA  LYS C 115     151.350  25.651  58.526  1.00 74.76           C
ATOM   8447  CB  LYS C 115     152.599  25.606  59.405  1.00 75.00           C
ATOM   8448  CG  LYS C 115     153.747  26.500  58.956  1.00 76.48           C
ATOM   8449  CD  LYS C 115     154.264  26.121  57.575  1.00 78.23           C
ATOM   8450  CE  LYS C 115     155.480  26.958  57.195  1.00 79.14           C
ATOM   8451  NZ  LYS C 115     155.931  26.649  55.810  1.00 79.36           N
ATOM   8452  C   LYS C 115     150.258  24.813  59.165  1.00 74.55           C
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ATOM   8453  O   LYS C 115     150.548  23.788  59.788  1.00 74.71           O
ATOM   8454  N   ILE C 116     149.009  25.262  59.018  1.00 74.12           N
ATOM   8455  CA  ILE C 116     147.845  24.573  59.582  1.00 73.81           C
ATOM   8456  CB  ILE C 116     146.549  25.408  59.422  1.00 73.62           C
ATOM   8457  CG1 ILE C 116     146.736  26.785  60.064  1.00 72.95           C
ATOM   8458  CD1 ILE C 116     145.688  27.795  59.692  1.00 71.67           C
ATOM   8459  CG2 ILE C 116     145.346  24.680  60.019  1.00 73.15           C
ATOM   8460  C   ILE C 116     147.677  23.192  58.965  1.00 73.96           C
ATOM   8461  O   ILE C 116     147.763  23.032  57.746  1.00 73.84           O
ATOM   8462  N   VAL C 117     147.454  22.205  59.828  1.00 74.16           N
ATOM   8463  CA  VAL C 117     147.381  20.801  59.436  1.00 74.50           C
ATOM   8464  CB  VAL C 117     148.125  19.913  60.458  1.00 74.52           C
ATOM   8465  CG1 VAL C 117     148.124  18.448  60.029  1.00 74.70           C
ATOM   8466  CG2 VAL C 117     149.545  20.397  60.627  1.00 74.80           C
ATOM   8467  C   VAL C 117     145.930  20.348  59.336  1.00 74.71           C
ATOM   8468  O   VAL C 117     145.577  19.549  58.473  1.00 74.78           O
ATOM   8469  N   ILE C 118     145.099  20.887  60.222  1.00 75.07           N
ATOM   8470  CA  ILE C 118     143.705  20.482  60.371  1.00 75.24           C
ATOM   8471  CB  ILE C 118     143.582  19.344  61.420  1.00 75.20           C
ATOM   8472  CG1 ILE C 118     142.166  18.773  61.461  1.00 75.45           C
ATOM   8473  CD1 ILE C 118     142.091  17.399  62.113  1.00 75.89           C
ATOM   8474  CG2 ILE C 118     144.038  19.812  62.808  1.00 74.84           C
ATOM   8475  C   ILE C 118     142.847  21.682  60.784  1.00 75.46           C
ATOM   8476  O   ILE C 118     143.289  22.531  61.550  1.00 75.39           O
ATOM   8477  N   LEU C 119     141.636  21.769  60.256  1.00 75.73           N
ATOM   8478  CA  LEU C 119     140.681  22.747  60.748  1.00 76.22           C
ATOM   8479  CB  LEU C 119     139.934  23.429  59.594  1.00 76.17           C
ATOM   8480  CG  LEU C 119     140.780  24.203  58.570  1.00 75.88           C
ATOM   8481  CD1 LEU C 119     139.925  24.718  57.443  1.00 75.59           C
ATOM   8482  CD2 LEU C 119     141.539  25.358  59.218  1.00 76.29           C
ATOM   8483  C   LEU C 119     139.722  22.011  61.663  1.00 76.72           C
ATOM   8484  O   LEU C 119     139.085  21.033  61.255  1.00 77.07           O
ATOM   8485  N   LEU C 120     139.634  22.456  62.909  1.00 77.05           N
ATOM   8486  CA  LEU C 120     138.809  21.751  63.884  1.00 77.48           C
ATOM   8487  CB  LEU C 120     139.499  21.710  65.251  1.00 77.61           C
ATOM   8488  CG  LEU C 120     140.826  20.955  65.373  1.00 77.87           C
ATOM   8489  CD1 LEU C 120     141.403  21.150  66.767  1.00 78.34           C
ATOM   8490  CD2 LEU C 120     140.665  19.472  65.054  1.00 77.69           C
ATOM   8491  C   LEU C 120     137.418  22.355  64.018  1.00 77.59           C
ATOM   8492  O   LEU C 120     137.216  23.537  63.731  1.00 77.69           O
ATOM   8493  N   ASP C 121     136.475  21.532  64.474  1.00 77.68           N
ATOM   8494  CA  ASP C 121     135.101  21.949  64.741  1.00 77.66           C
ATOM   8495  CB  ASP C 121     134.348  20.826  65.446  1.00 77.69           C
ATOM   8496  CG  ASP C 121     134.027  19.682  64.529  1.00 78.76           C
ATOM   8497  OD1 ASP C 121     134.112  19.856  63.299  1.00 80.90           O
ATOM   8498  OD2 ASP C 121     133.672  18.602  65.032  1.00 80.12           O
ATOM   8499  C   ASP C 121     134.989  23.206  65.586  1.00 77.50           C
ATOM   8500  O   ASP C 121     135.654  23.333  66.612  1.00 77.77           O
ATOM   8501  N   TYR C 122     134.140  24.123  65.131  1.00 77.37           N
ATOM   8502  CA  TYR C 122     133.679  25.287  65.903  1.00 77.35           C
ATOM   8503  CB  TYR C 122     133.216  24.894  67.325  1.00 76.90           C
ATOM   8504  CG  TYR C 122     132.246  23.733  67.385  1.00 76.30           C
ATOM   8505  CD1 TYR C 122     131.010  23.793  66.744  1.00 76.60           C
ATOM   8506  CE1 TYR C 122     130.118  22.725  66.797  1.00 76.49           C
ATOM   8507  CZ  TYR C 122     130.462  21.586  67.506  1.00 76.37           C
ATOM   8508  OH  TYR C 122     129.583  20.528  67.560  1.00 76.72           O
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ATOM   8509  CE2 TYR C 122     131.682  21.506  68.152  1.00 75.25           C
ATOM   8510  CD2 TYR C 122     132.564  22.577  68.087  1.00 75.42           C
ATOM   8511  C   TYR C 122     134.644  26.470  65.963  1.00 77.55           C
ATOM   8512  O   TYR C 122     134.356  27.465  66.630  1.00 77.94           O
ATOM   8513  N   MET C 123     135.764  26.382  65.251  1.00 77.59           N
ATOM   8514  CA  MET C 123     136.781  27.434  65.283  1.00 77.82           C
ATOM   8515  CB  MET C 123     138.024  26.991  64.518  1.00 77.77           C
ATOM   8516  CG  MET C 123     137.841  26.824  63.016  1.00 77.81           C
ATOM   8517  SD  MET C 123     139.387  26.379  62.166  1.00 79.72           S
ATOM   8518  CE  MET C 123     140.491  27.737  62.597  1.00 78.59           C
ATOM   8519  C   MET C 123     136.311  28.810  64.792  1.00 77.50           C
ATOM   8520  O   MET C 123     136.960  29.818  65.044  1.00 77.58           O
ATOM   8521  N   PHE C 124     135.186  28.852  64.093  1.00 77.56           N
ATOM   8522  CA  PHE C 124     134.681  30.111  63.563  1.00 77.30           C
ATOM   8523  CB  PHE C 124     134.599  30.048  62.036  1.00 77.31           C
ATOM   8524  CG  PHE C 124     135.936  29.910  61.352  1.00 77.35           C
ATOM   8525  CD1 PHE C 124     136.890  30.918  61.441  1.00 76.93           C
ATOM   8526  CE1 PHE C 124     138.112  30.796  60.800  1.00 76.87           C
ATOM   8527  CZ  PHE C 124     138.394  29.662  60.052  1.00 76.75           C
ATOM   8528  CE2 PHE C 124     137.459  28.656  59.950  1.00 77.43           C
ATOM   8529  CD2 PHE C 124     136.228  28.784  60.593  1.00 77.33           C
ATOM   8530  C   PHE C 124     133.315  30.478  64.138  1.00 77.11           C
ATOM   8531  O   PHE C 124     132.689  31.445  63.683  1.00 77.07           O
ATOM   8532  N   GLN C 125     132.877  29.725  65.151  1.00 76.54           N
ATOM   8533  CA  GLN C 125     131.506  29.813  65.671  1.00 75.88           C
ATOM   8534  CB  GLN C 125     131.313  28.943  66.917  1.00 75.90           C
ATOM   8535  CG  GLN C 125     130.681  27.592  66.657  1.00 76.34           C
ATOM   8536  CD  GLN C 125     129.306  27.679  65.986  1.00 77.59           C
ATOM   8537  OE1 GLN C 125     129.007  26.909  65.079  1.00 76.87           O
ATOM   8538  NE2 GLN C 125     128.467  28.614  66.437  1.00 78.55           N
ATOM   8539  C   GLN C 125     131.014  31.218  65.960  1.00 75.41           C
ATOM   8540  O   GLN C 125     129.828  31.500  65.789  1.00 75.40           O
ATOM   8541  N   ASP C 126     131.917  32.093  66.390  1.00 74.98           N
ATOM   8542  CA  ASP C 126     131.522  33.432  66.795  1.00 74.65           C
ATOM   8543  CB  ASP C 126     132.413  33.952  67.918  1.00 74.72           C
ATOM   8544  CG  ASP C 126     131.701  34.965  68.797  1.00 75.50           C
ATOM   8545  OD1 ASP C 126     130.451  34.949  68.826  1.00 74.91           O
ATOM   8546  OD2 ASP C 126     132.386  35.767  69.472  1.00 76.64           O
ATOM   8547  C   ASP C 126     131.486  34.425  65.638  1.00 74.34           C
ATOM   8548  O   ASP C 126     130.848  35.468  65.741  1.00 74.38           O
ATOM   8549  N   LEU C 127     132.145  34.092  64.532  1.00 73.99           N
ATOM   8550  CA  LEU C 127     132.234  35.004  63.393  1.00 73.69           C
ATOM   8551  CB  LEU C 127     133.455  34.673  62.526  1.00 73.68           C
ATOM   8552  CG  LEU C 127     134.840  34.748  63.195  1.00 73.24           C
ATOM   8553  CD1 LEU C 127     135.953  34.453  62.200  1.00 71.81           C
ATOM   8554  CD2 LEU C 127     135.071  36.090  63.880  1.00 72.69           C
ATOM   8555  C   LEU C 127     130.964  35.031  62.549  1.00 73.68           C
ATOM   8556  O   LEU C 127     131.004  34.752  61.354  1.00 73.91           O
ATOM   8557  N   TYR C 128     129.843  35.380  63.180  1.00 73.69           N
ATOM   8558  CA  TYR C 128     128.542  35.427  62.517  1.00 73.52           C
ATOM   8559  CB  TYR C 128     127.427  35.792  63.509  1.00 73.56           C
ATOM   8560  CG  TYR C 128     126.039  35.813  62.875  1.00 74.63           C
ATOM   8561  CD1 TYR C 128     125.231  34.671  62.868  1.00 74.87           C
ATOM   8562  CE1 TYR C 128     123.969  34.685  62.284  1.00 74.13           C
ATOM   8563  CZ  TYR C 128     123.500  35.839  61.687  1.00 74.02           C
ATOM   8564  OH  TYR C 128     122.253  35.845  61.109  1.00 73.99           O
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ATOM	8565	CE2	TYR	C	128	124.272	36.984	61.673	1.00	74.50	C
ATOM	8566	CD2	TYR	C	128	125.537	36.970	62.266	1.00	75.13	C
ATOM	8567	C	TYR	C	128	128.511	36.389	61.330	1.00	73.41	C
ATOM	8568	O	TYR	C	128	127.772	36.160	60.375	1.00	73.66	O
ATOM	8569	N	ASN	C	129	129.300	37.460	61.394	1.00	73.27	N
ATOM	8570	CA	ASN	C	129	129.244	38.523	60.386	1.00	73.12	C
ATOM	8571	CB	ASN	C	129	129.398	39.895	61.044	1.00	72.97	C
ATOM	8572	CG	ASN	C	129	128.079	40.445	61.548	1.00	73.07	C
ATOM	8573	OD1	ASN	C	129	127.070	40.383	60.852	1.00	74.03	O
ATOM	8574	ND2	ASN	C	129	128.078	40.985	62.759	1.00	72.90	N
ATOM	8575	C	ASN	C	129	130.213	38.375	59.212	1.00	73.20	C
ATOM	8576	O	ASN	C	129	130.062	39.047	58.184	1.00	73.23	O
ATOM	8577	N	LEU	C	130	131.193	37.489	59.356	1.00	73.23	N
ATOM	8578	CA	LEU	C	130	132.179	37.266	58.312	1.00	73.35	C
ATOM	8579	CB	LEU	C	130	133.107	36.115	58.688	1.00	72.95	C
ATOM	8580	CG	LEU	C	130	134.434	36.103	57.945	1.00	71.95	C
ATOM	8581	CD1	LEU	C	130	135.388	37.036	58.636	1.00	71.99	C
ATOM	8582	CD2	LEU	C	130	135.004	34.724	57.915	1.00	71.07	C
ATOM	8583	C	LEU	C	130	131.499	36.984	56.975	1.00	73.95	C
ATOM	8584	O	LEU	C	130	130.546	36.204	56.908	1.00	74.02	O
ATOM	8585	N	LYS	C	131	131.987	37.636	55.923	1.00	74.55	N
ATOM	8586	CA	LYS	C	131	131.431	37.481	54.579	1.00	75.09	C
ATOM	8587	CB	LYS	C	131	131.078	38.835	53.977	1.00	75.17	C
ATOM	8588	CG	LYS	C	131	129.875	39.489	54.611	1.00	76.84	C
ATOM	8589	CD	LYS	C	131	129.419	40.688	53.804	1.00	79.95	C
ATOM	8590	CE	LYS	C	131	127.980	41.029	54.162	1.00	82.94	C
ATOM	8591	NZ	LYS	C	131	127.546	42.367	53.653	1.00	84.83	N
ATOM	8592	C	LYS	C	131	132.407	36.778	53.668	1.00	75.15	C
ATOM	8593	O	LYS	C	131	132.004	36.132	52.707	1.00	75.04	O
ATOM	8594	N	SER	C	132	133.691	36.894	53.990	1.00	75.45	N
ATOM	8595	CA	SER	C	132	134.757	36.402	53.132	1.00	75.55	C
ATOM	8596	CB	SER	C	132	135.376	37.581	52.388	1.00	75.58	C
ATOM	8597	OG	SER	C	132	136.287	37.139	51.406	1.00	76.71	O
ATOM	8598	C	SER	C	132	135.822	35.657	53.932	1.00	75.61	C
ATOM	8599	O	SER	C	132	136.273	36.130	54.972	1.00	75.59	O
ATOM	8600	N	LEU	C	133	136.226	34.492	53.442	1.00	75.96	N
ATOM	8601	CA	LEU	C	133	137.251	33.705	54.114	1.00	76.30	C
ATOM	8602	CB	LEU	C	133	136.596	32.603	54.946	1.00	75.92	C
ATOM	8603	CG	LEU	C	133	137.509	31.597	55.646	1.00	75.56	C
ATOM	8604	CD1	LEU	C	133	138.319	32.250	56.743	1.00	74.89	C
ATOM	8605	CD2	LEU	C	133	136.710	30.436	56.201	1.00	75.68	C
ATOM	8606	C	LEU	C	133	138.248	33.098	53.125	1.00	77.33	C
ATOM	8607	O	LEU	C	133	137.837	32.470	52.137	1.00	77.73	O
ATOM	8608	N	GLU	C	134	139.545	33.293	53.393	1.00	77.91	N
ATOM	8609	CA	GLU	C	134	140.632	32.612	52.669	1.00	78.79	C
ATOM	8610	CB	GLU	C	134	141.660	33.622	52.159	1.00	79.30	C
ATOM	8611	CG	GLU	C	134	141.300	34.348	50.868	1.00	83.09	C
ATOM	8612	CD	GLU	C	134	142.546	34.811	50.100	1.00	88.08	C
ATOM	8613	OE1	GLU	C	134	143.401	33.947	49.764	1.00	89.51	O
ATOM	8614	OE2	GLU	C	134	142.672	36.032	49.831	1.00	89.31	O
ATOM	8615	C	GLU	C	134	141.354	31.608	53.570	1.00	78.34	C
ATOM	8616	O	GLU	C	134	141.813	31.974	54.648	1.00	78.45	O
ATOM	8617	N	VAL	C	135	141.464	30.353	53.132	1.00	78.04	N
ATOM	8618	CA	VAL	C	135	142.139	29.307	53.916	1.00	77.79	C
ATOM	8619	CB	VAL	C	135	141.148	28.411	54.693	1.00	77.76	C
ATOM	8620	CG1	VAL	C	135	141.778	27.923	55.986	1.00	77.80	C

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ATOM   8621  CG2 VAL C 135     139.876  29.126  54.992  1.00 78.11           C
ATOM   8622  C   VAL C 135     142.907  28.347  53.027  1.00 77.70           C
ATOM   8623  O   VAL C 135     142.503  28.101  51.892  1.00 77.80           O
ATOM   8624  N   GLY C 136     143.996  27.786  53.555  1.00 77.65           N
ATOM   8625  CA  GLY C 136     144.653  26.640  52.930  1.00 77.48           C
ATOM   8626  C   GLY C 136     146.168  26.631  52.938  1.00 77.49           C
ATOM   8627  O   GLY C 136     146.802  27.677  52.788  1.00 77.36           O
ATOM   8628  N   ASP C 137     146.727  25.428  53.077  1.00 77.63           N
ATOM   8629  CA  ASP C 137     148.165  25.191  53.259  1.00 77.99           C
ATOM   8630  CB  ASP C 137     148.472  24.936  54.731  1.00 78.14           C
ATOM   8631  CG  ASP C 137     148.322  26.138  55.553  1.00 79.18           C
ATOM   8632  OD1 ASP C 137     148.717  27.212  55.063  1.00 81.54           O
ATOM   8633  OD2 ASP C 137     147.809  26.014  56.676  1.00 80.01           O
ATOM   8634  C   ASP C 137     148.596  23.922  52.592  1.00 78.02           C
ATOM   8635  O   ASP C 137     147.845  22.947  52.572  1.00 78.34           O
ATOM   8636  N   ASN C 138     149.836  23.891  52.126  1.00 77.86           N
ATOM   8637  CA  ASN C 138     150.449  22.628  51.783  1.00 78.03           C
ATOM   8638  CB  ASN C 138     151.914  22.838  51.442  1.00 78.24           C
ATOM   8639  CG  ASN C 138     152.106  23.481  50.088  1.00 78.87           C
ATOM   8640  OD1 ASN C 138     151.147  23.665  49.331  1.00 79.37           O
ATOM   8641  ND2 ASN C 138     153.352  23.816  49.764  1.00 79.48           N
ATOM   8642  C   ASN C 138     150.307  21.617  52.919  1.00 78.11           C
ATOM   8643  O   ASN C 138     150.212  20.419  52.678  1.00 78.43           O
ATOM   8644  N   ASP C 139     150.270  22.110  54.154  1.00 78.11           N
ATOM   8645  CA  ASP C 139     150.169  21.249  55.329  1.00 78.06           C
ATOM   8646  CB  ASP C 139     150.824  21.915  56.541  1.00 78.33           C
ATOM   8647  CG  ASP C 139     152.326  22.081  56.374  1.00 79.39           C
ATOM   8648  OD1 ASP C 139     153.090  21.200  56.833  1.00 79.22           O
ATOM   8649  OD2 ASP C 139     152.740  23.095  55.770  1.00 81.65           O
ATOM   8650  C   ASP C 139     148.742  20.826  55.679  1.00 77.78           C
ATOM   8651  O   ASP C 139     148.551  19.839  56.389  1.00 78.03           O
ATOM   8652  N   LEU C 140     147.745  21.569  55.198  1.00 77.23           N
ATOM   8653  CA  LEU C 140     146.348  21.255  55.499  1.00 76.38           C
ATOM   8654  CB  LEU C 140     145.430  22.403  55.084  1.00 76.44           C
ATOM   8655  CG  LEU C 140     143.975  22.372  55.554  1.00 75.56           C
ATOM   8656  CD1 LEU C 140     143.894  22.408  57.057  1.00 74.82           C
ATOM   8657  CD2 LEU C 140     143.234  23.546  54.974  1.00 75.83           C
ATOM   8658  C   LEU C 140     145.913  19.952  54.844  1.00 76.31           C
ATOM   8659  O   LEU C 140     145.846  19.845  53.617  1.00 76.01           O
ATOM   8660  N   VAL C 141     145.636  18.957  55.680  1.00 76.25           N
ATOM   8661  CA  VAL C 141     145.263  17.629  55.198  1.00 76.29           C
ATOM   8662  CB  VAL C 141     146.292  16.561  55.627  1.00 76.16           C
ATOM   8663  CG1 VAL C 141     147.596  16.745  54.871  1.00 75.81           C
ATOM   8664  CG2 VAL C 141     146.519  16.597  57.130  1.00 76.13           C
ATOM   8665  C   VAL C 141     143.851  17.183  55.606  1.00 76.51           C
ATOM   8666  O   VAL C 141     143.330  16.208  55.072  1.00 76.59           O
ATOM   8667  N   TYR C 142     143.233  17.894  56.543  1.00 76.74           N
ATOM   8668  CA  TYR C 142     141.920  17.512  57.031  1.00 77.04           C
ATOM   8669  CB  TYR C 142     142.054  16.526  58.185  1.00 77.58           C
ATOM   8670  CG  TYR C 142     140.758  15.852  58.574  1.00 78.58           C
ATOM   8671  CD1 TYR C 142     140.373  14.651  57.976  1.00 78.96           C
ATOM   8672  CE1 TYR C 142     139.189  14.021  58.330  1.00 79.22           C
ATOM   8673  CZ  TYR C 142     138.373  14.593  59.296  1.00 79.30           C
ATOM   8674  OH  TYR C 142     137.199  13.965  59.645  1.00 79.56           O
ATOM   8675  CE2 TYR C 142     138.728  15.789  59.907  1.00 79.32           C
ATOM   8676  CD2 TYR C 142     139.919  16.410  59.547  1.00 79.25           C
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ATOM	8677	C	TYR	C	142	141.107	18.703	57.486	1.00	76.90	C
ATOM	8678	O	TYR	C	142	141.613	19.585	58.169	1.00	76.85	O
ATOM	8679	N	ILE	C	143	139.835	18.705	57.102	1.00	77.05	N
ATOM	8680	CA	ILE	C	143	138.861	19.692	57.562	1.00	76.96	C
ATOM	8681	CB	ILE	C	143	138.349	20.584	56.403	1.00	76.79	C
ATOM	8682	CG1	ILE	C	143	139.515	21.331	55.748	1.00	76.64	C
ATOM	8683	CD1	ILE	C	143	139.120	22.261	54.611	1.00	76.88	C
ATOM	8684	CG2	ILE	C	143	137.323	21.575	56.908	1.00	76.63	C
ATOM	8685	C	ILE	C	143	137.691	18.971	58.221	1.00	77.04	C
ATOM	8686	O	ILE	C	143	136.977	18.220	57.565	1.00	76.91	O
ATOM	8687	N	SER	C	144	137.510	19.205	59.520	1.00	77.47	N
ATOM	8688	CA	SER	C	144	136.382	18.652	60.287	1.00	77.59	C
ATOM	8689	CB	SER	C	144	136.444	19.112	61.738	1.00	77.54	C
ATOM	8690	OG	SER	C	144	137.388	18.363	62.480	1.00	78.94	O
ATOM	8691	C	SER	C	144	135.037	19.059	59.701	1.00	77.47	C
ATOM	8692	O	SER	C	144	134.931	20.077	59.018	1.00	77.51	O
ATOM	8693	N	HIS	C	145	134.012	18.263	59.985	1.00	77.38	N
ATOM	8694	CA	HIS	C	145	132.669	18.492	59.454	1.00	77.14	C
ATOM	8695	CB	HIS	C	145	131.771	17.305	59.790	1.00	77.65	C
ATOM	8696	CG	HIS	C	145	132.330	15.988	59.343	1.00	80.07	C
ATOM	8697	ND1	HIS	C	145	132.892	15.800	58.095	1.00	81.95	N
ATOM	8698	CE1	HIS	C	145	133.297	14.548	57.977	1.00	82.51	C
ATOM	8699	NE2	HIS	C	145	133.016	13.914	59.103	1.00	83.44	N
ATOM	8700	CD2	HIS	C	145	132.414	14.792	59.975	1.00	82.12	C
ATOM	8701	C	HIS	C	145	132.045	19.811	59.909	1.00	76.39	C
ATOM	8702	O	HIS	C	145	131.338	20.465	59.143	1.00	75.92	O
ATOM	8703	N	ARG	C	146	132.341	20.211	61.141	1.00	75.83	N
ATOM	8704	CA	ARG	C	146	131.816	21.456	61.686	1.00	75.38	C
ATOM	8705	CB	ARG	C	146	131.157	21.196	63.032	1.00	75.26	C
ATOM	8706	CG	ARG	C	146	129.931	20.331	62.911	1.00	74.78	C
ATOM	8707	CD	ARG	C	146	129.501	19.803	64.243	1.00	74.00	C
ATOM	8708	NE	ARG	C	146	128.322	18.954	64.094	1.00	73.91	N
ATOM	8709	CZ	ARG	C	146	127.512	18.612	65.091	1.00	72.91	C
ATOM	8710	NH1	ARG	C	146	127.739	19.052	66.327	1.00	71.36	N
ATOM	8711	NH2	ARG	C	146	126.467	17.832	64.847	1.00	72.37	N
ATOM	8712	C	ARG	C	146	132.877	22.549	61.782	1.00	75.36	C
ATOM	8713	O	ARG	C	146	132.771	23.459	62.599	1.00	75.71	O
ATOM	8714	N	ALA	C	147	133.890	22.462	60.927	1.00	75.21	N
ATOM	8715	CA	ALA	C	147	134.925	23.479	60.838	1.00	75.02	C
ATOM	8716	CB	ALA	C	147	135.959	23.089	59.809	1.00	74.84	C
ATOM	8717	C	ALA	C	147	134.349	24.851	60.511	1.00	75.20	C
ATOM	8718	O	ALA	C	147	134.671	25.826	61.185	1.00	75.45	O
ATOM	8719	N	PHE	C	148	133.489	24.928	59.492	1.00	75.24	N
ATOM	8720	CA	PHE	C	148	132.972	26.223	59.031	1.00	75.09	C
ATOM	8721	CB	PHE	C	148	132.804	26.246	57.512	1.00	75.06	C
ATOM	8722	CG	PHE	C	148	134.047	25.916	56.755	1.00	74.71	C
ATOM	8723	CD1	PHE	C	148	135.174	26.714	56.861	1.00	74.30	C
ATOM	8724	CE1	PHE	C	148	136.321	26.415	56.155	1.00	74.41	C
ATOM	8725	CZ	PHE	C	148	136.344	25.305	55.320	1.00	75.54	C
ATOM	8726	CE2	PHE	C	148	135.218	24.501	55.196	1.00	75.06	C
ATOM	8727	CD2	PHE	C	148	134.078	24.812	55.910	1.00	75.25	C
ATOM	8728	C	PHE	C	148	131.650	26.598	59.693	1.00	75.11	C
ATOM	8729	O	PHE	C	148	130.936	27.489	59.227	1.00	75.41	O
ATOM	8730	N	SER	C	149	131.331	25.912	60.779	1.00	74.87	N
ATOM	8731	CA	SER	C	149	130.089	26.119	61.495	1.00	74.70	C
ATOM	8732	CB	SER	C	149	129.941	25.016	62.532	1.00	74.55	C

ATOM	8733	OG	SER	C	149	128.751	25.160	63.264	1.00	75.58	O
ATOM	8734	C	SER	C	149	130.079	27.494	62.152	1.00	74.55	C
ATOM	8735	O	SER	C	149	131.055	27.899	62.761	1.00	75.06	O
ATOM	8736	N	GLY	C	150	128.983	28.224	62.015	1.00	74.63	N
ATOM	8737	CA	GLY	C	150	128.883	29.546	62.623	1.00	74.76	C
ATOM	8738	C	GLY	C	150	129.020	30.695	61.638	1.00	74.98	C
ATOM	8739	O	GLY	C	150	128.693	31.836	61.963	1.00	75.15	O
ATOM	8740	N	LEU	C	151	129.500	30.389	60.435	1.00	75.05	N
ATOM	8741	CA	LEU	C	151	129.691	31.376	59.381	1.00	74.97	C
ATOM	8742	CB	LEU	C	151	130.825	30.933	58.459	1.00	74.70	C
ATOM	8743	CG	LEU	C	151	132.216	30.740	59.078	1.00	74.85	C
ATOM	8744	CD1	LEU	C	151	133.118	29.931	58.156	1.00	74.42	C
ATOM	8745	CD2	LEU	C	151	132.873	32.081	59.411	1.00	74.97	C
ATOM	8746	C	LEU	C	151	128.396	31.559	58.594	1.00	75.27	C
ATOM	8747	O	LEU	C	151	128.290	31.153	57.440	1.00	75.45	O
ATOM	8748	N	ASN	C	152	127.403	32.170	59.228	1.00	75.49	N
ATOM	8749	CA	ASN	C	152	126.103	32.354	58.594	1.00	75.41	C
ATOM	8750	CB	ASN	C	152	125.019	32.619	59.634	1.00	75.58	C
ATOM	8751	CG	ASN	C	152	124.948	31.543	60.681	1.00	75.66	C
ATOM	8752	OD1	ASN	C	152	125.944	31.229	61.320	1.00	76.40	O
ATOM	8753	ND2	ASN	C	152	123.765	30.977	60.873	1.00	76.29	N
ATOM	8754	C	ASN	C	152	126.066	33.455	57.557	1.00	75.26	C
ATOM	8755	O	ASN	C	152	125.176	33.467	56.715	1.00	75.84	O
ATOM	8756	N	SER	C	153	127.008	34.388	57.617	1.00	75.08	N
ATOM	8757	CA	SER	C	153	127.007	35.495	56.671	1.00	75.03	C
ATOM	8758	CB	SER	C	153	127.352	36.816	57.360	1.00	74.85	C
ATOM	8759	OG	SER	C	153	126.450	37.112	58.415	1.00	74.53	O
ATOM	8760	C	SER	C	153	127.943	35.254	55.499	1.00	75.31	C
ATOM	8761	O	SER	C	153	127.926	36.020	54.538	1.00	75.74	O
ATOM	8762	N	LEU	C	154	128.742	34.190	55.571	1.00	75.45	N
ATOM	8763	CA	LEU	C	154	129.786	33.930	54.578	1.00	75.63	C
ATOM	8764	CB	LEU	C	154	130.579	32.666	54.924	1.00	75.33	C
ATOM	8765	CG	LEU	C	154	131.960	32.557	54.271	1.00	74.24	C
ATOM	8766	CD1	LEU	C	154	132.943	33.470	54.958	1.00	72.71	C
ATOM	8767	CD2	LEU	C	154	132.461	31.134	54.289	1.00	72.42	C
ATOM	8768	C	LEU	C	154	129.239	33.842	53.159	1.00	76.25	C
ATOM	8769	O	LEU	C	154	128.333	33.064	52.879	1.00	76.54	O
ATOM	8770	N	GLU	C	155	129.796	34.653	52.270	1.00	76.98	N
ATOM	8771	CA	GLU	C	155	129.336	34.707	50.890	1.00	77.86	C
ATOM	8772	CB	GLU	C	155	128.868	36.111	50.539	1.00	77.42	C
ATOM	8773	CG	GLU	C	155	127.582	36.486	51.264	1.00	78.69	C
ATOM	8774	CD	GLU	C	155	126.990	37.823	50.820	1.00	79.34	C
ATOM	8775	OE1	GLU	C	155	127.754	38.683	50.321	1.00	81.47	O
ATOM	8776	OE2	GLU	C	155	125.754	38.012	50.980	1.00	80.88	O
ATOM	8777	C	GLU	C	155	130.406	34.241	49.928	1.00	77.97	C
ATOM	8778	O	GLU	C	155	130.100	33.718	48.867	1.00	78.27	O
ATOM	8779	N	GLN	C	156	131.660	34.415	50.322	1.00	78.70	N
ATOM	8780	CA	GLN	C	156	132.803	34.056	49.500	1.00	79.46	C
ATOM	8781	CB	GLN	C	156	133.464	35.325	48.954	1.00	79.78	C
ATOM	8782	CG	GLN	C	156	134.062	35.144	47.567	1.00	83.52	C
ATOM	8783	CD	GLN	C	156	135.220	36.097	47.252	1.00	87.91	C
ATOM	8784	OE1	GLN	C	156	135.526	37.018	48.027	1.00	89.25	O
ATOM	8785	NE2	GLN	C	156	135.876	35.868	46.104	1.00	88.33	N
ATOM	8786	C	GLN	C	156	133.816	33.235	50.305	1.00	79.22	C
ATOM	8787	O	GLN	C	156	134.329	33.696	51.324	1.00	79.37	O
ATOM	8788	N	LEU	C	157	134.082	32.013	49.854	1.00	79.20	N

ATOM	8789	CA	LEU	C	157	135.134	31.174	50.428	1.00	79.10	C
ATOM	8790	CB	LEU	C	157	134.566	29.847	50.945	1.00	79.02	C
ATOM	8791	CG	LEU	C	157	135.571	28.823	51.493	1.00	78.74	C
ATOM	8792	CD1	LEU	C	157	136.236	29.327	52.755	1.00	78.22	C
ATOM	8793	CD2	LEU	C	157	134.928	27.486	51.751	1.00	78.59	C
ATOM	8794	C	LEU	C	157	136.206	30.891	49.390	1.00	79.56	C
ATOM	8795	O	LEU	C	157	135.900	30.552	48.247	1.00	79.74	O
ATOM	8796	N	THR	C	158	137.464	31.027	49.792	1.00	80.02	N
ATOM	8797	CA	THR	C	158	138.583	30.642	48.947	1.00	80.40	C
ATOM	8798	CB	THR	C	158	139.484	31.841	48.618	1.00	80.47	C
ATOM	8799	OG1	THR	C	158	138.675	32.937	48.173	1.00	81.25	O
ATOM	8800	CG2	THR	C	158	140.502	31.483	47.542	1.00	79.90	C
ATOM	8801	C	THR	C	158	139.387	29.585	49.678	1.00	80.83	C
ATOM	8802	O	THR	C	158	139.922	29.828	50.762	1.00	81.10	O
ATOM	8803	N	LEU	C	159	139.453	28.404	49.091	1.00	81.20	N
ATOM	8804	CA	LEU	C	159	140.229	27.331	49.653	1.00	82.04	C
ATOM	8805	CB	LEU	C	159	139.341	26.103	49.809	1.00	81.91	C
ATOM	8806	CG	LEU	C	159	139.806	24.872	50.583	1.00	82.73	C
ATOM	8807	CD1	LEU	C	159	140.460	25.239	51.904	1.00	83.29	C
ATOM	8808	CD2	LEU	C	159	138.601	23.969	50.827	1.00	82.58	C
ATOM	8809	C	LEU	C	159	141.391	27.076	48.709	1.00	82.55	C
ATOM	8810	O	LEU	C	159	141.184	26.760	47.546	1.00	82.85	O
ATOM	8811	N	GLU	C	160	142.616	27.251	49.189	1.00	83.25	N
ATOM	8812	CA	GLU	C	160	143.778	27.162	48.302	1.00	84.17	C
ATOM	8813	CB	GLU	C	160	144.252	28.556	47.880	1.00	84.05	C
ATOM	8814	CG	GLU	C	160	144.417	29.560	49.010	1.00	84.66	C
ATOM	8815	CD	GLU	C	160	144.582	30.994	48.503	1.00	85.31	C
ATOM	8816	OE1	GLU	C	160	144.122	31.297	47.373	1.00	86.58	O
ATOM	8817	OE2	GLU	C	160	145.177	31.821	49.235	1.00	86.73	O
ATOM	8818	C	GLU	C	160	144.945	26.350	48.851	1.00	84.31	C
ATOM	8819	O	GLU	C	160	145.015	26.090	50.037	1.00	84.43	O
ATOM	8820	N	LYS	C	161	145.837	25.930	47.960	1.00	84.76	N
ATOM	8821	CA	LYS	C	161	147.130	25.333	48.326	1.00	85.33	C
ATOM	8822	CB	LYS	C	161	148.051	26.380	48.981	1.00	85.47	C
ATOM	8823	CG	LYS	C	161	148.305	27.640	48.154	1.00	86.53	C
ATOM	8824	CD	LYS	C	161	149.497	27.481	47.226	1.00	88.82	C
ATOM	8825	CE	LYS	C	161	149.651	28.706	46.327	1.00	90.33	C
ATOM	8826	NZ	LYS	C	161	150.562	28.457	45.158	1.00	91.03	N
ATOM	8827	C	LYS	C	161	147.088	24.068	49.190	1.00	85.39	C
ATOM	8828	O	LYS	C	161	148.135	23.573	49.580	1.00	85.41	O
ATOM	8829	N	CYS	C	162	145.899	23.543	49.470	1.00	85.90	N
ATOM	8830	CA	CYS	C	162	145.742	22.364	50.340	1.00	86.67	C
ATOM	8831	CB	CYS	C	162	144.273	22.126	50.659	1.00	86.86	C
ATOM	8832	SG	CYS	C	162	143.538	23.479	51.549	1.00	90.53	S
ATOM	8833	C	CYS	C	162	146.304	21.086	49.754	1.00	86.50	C
ATOM	8834	O	CYS	C	162	146.507	20.985	48.542	1.00	86.65	O
ATOM	8835	N	ASN	C	163	146.544	20.110	50.625	1.00	86.53	N
ATOM	8836	CA	ASN	C	163	146.975	18.781	50.199	1.00	86.69	C
ATOM	8837	CB	ASN	C	163	148.377	18.434	50.756	1.00	86.83	C
ATOM	8838	CG	ASN	C	163	149.543	19.022	49.903	1.00	87.98	C
ATOM	8839	OD1	ASN	C	163	150.599	18.383	49.742	1.00	89.49	O
ATOM	8840	ND2	ASN	C	163	149.355	20.234	49.370	1.00	88.12	N
ATOM	8841	C	ASN	C	163	145.909	17.741	50.573	1.00	86.45	C
ATOM	8842	O	ASN	C	163	146.217	16.654	51.069	1.00	86.56	O
ATOM	8843	N	LEU	C	164	144.649	18.107	50.320	1.00	86.29	N
ATOM	8844	CA	LEU	C	164	143.471	17.246	50.534	1.00	85.98	C

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ATOM   8845  CB  LEU C 164     142.209  18.107  50.655  1.00 85.94           C
ATOM   8846  CG  LEU C 164     141.690  18.659  51.983  1.00 85.75           C
ATOM   8847  CD1 LEU C 164     142.779  19.251  52.833  1.00 86.69           C
ATOM   8848  CD2 LEU C 164     140.645  19.712  51.702  1.00 86.00           C
ATOM   8849  C   LEU C 164     143.268  16.256  49.388  1.00 85.79           C
ATOM   8850  O   LEU C 164     143.557  16.577  48.227  1.00 85.64           O
ATOM   8851  N   THR C 165     142.753  15.069  49.717  1.00 85.57           N
ATOM   8852  CA  THR C 165     142.490  14.005  48.724  1.00 85.30           C
ATOM   8853  CB  THR C 165     142.356  12.611  49.375  1.00 85.46           C
ATOM   8854  OG1 THR C 165     142.038  12.760  50.769  1.00 86.04           O
ATOM   8855  CG2 THR C 165     143.665  11.827  49.237  1.00 85.62           C
ATOM   8856  C   THR C 165     141.260  14.276  47.862  1.00 84.78           C
ATOM   8857  O   THR C 165     141.311  14.115  46.642  1.00 84.82           O
ATOM   8858  N   SER C 166     140.163  14.681  48.501  1.00 84.18           N
ATOM   8859  CA  SER C 166     138.938  15.054  47.791  1.00 83.58           C
ATOM   8860  CB  SER C 166     137.910  13.918  47.830  1.00 83.63           C
ATOM   8861  OG  SER C 166     137.786  13.398  49.141  1.00 83.95           O
ATOM   8862  C   SER C 166     138.334  16.337  48.346  1.00 83.01           C
ATOM   8863  O   SER C 166     138.789  16.852  49.371  1.00 83.11           O
ATOM   8864  N   ILE C 167     137.321  16.849  47.648  1.00 82.21           N
ATOM   8865  CA  ILE C 167     136.583  18.039  48.060  1.00 81.52           C
ATOM   8866  CB  ILE C 167     135.493  18.386  47.013  1.00 81.69           C
ATOM   8867  CG1 ILE C 167     136.150  18.727  45.678  1.00 81.75           C
ATOM   8868  CD1 ILE C 167     135.224  18.597  44.505  1.00 83.05           C
ATOM   8869  CG2 ILE C 167     134.599  19.542  47.478  1.00 81.37           C
ATOM   8870  C   ILE C 167     135.948  17.801  49.429  1.00 80.87           C
ATOM   8871  O   ILE C 167     135.374  16.736  49.655  1.00 80.78           O
ATOM   8872  N   PRO C 168     136.057  18.781  50.351  1.00 80.26           N
ATOM   8873  CA  PRO C 168     135.460  18.579  51.671  1.00 79.80           C
ATOM   8874  CB  PRO C 168     136.216  19.569  52.562  1.00 79.54           C
ATOM   8875  CG  PRO C 168     136.671  20.651  51.640  1.00 79.87           C
ATOM   8876  CD  PRO C 168     136.711  20.100  50.233  1.00 80.15           C
ATOM   8877  C   PRO C 168     133.961  18.874  51.636  1.00 79.40           C
ATOM   8878  O   PRO C 168     133.504  19.865  52.205  1.00 79.48           O
ATOM   8879  N   THR C 169     133.216  17.996  50.970  1.00 78.90           N
ATOM   8880  CA  THR C 169     131.778  18.142  50.784  1.00 78.48           C
ATOM   8881  CB  THR C 169     131.187  16.911  50.097  1.00 78.33           C
ATOM   8882  OG1 THR C 169     131.873  16.690  48.857  1.00 77.85           O
ATOM   8883  CG2 THR C 169     129.696  17.119  49.834  1.00 78.12           C
ATOM   8884  C   THR C 169     131.046  18.375  52.095  1.00 78.46           C
ATOM   8885  O   THR C 169     130.396  19.403  52.269  1.00 78.63           O
ATOM   8886  N   GLU C 170     131.168  17.417  53.009  1.00 78.32           N
ATOM   8887  CA  GLU C 170     130.506  17.468  54.307  1.00 78.21           C
ATOM   8888  CB  GLU C 170     130.938  16.265  55.135  1.00 78.54           C
ATOM   8889  CG  GLU C 170     130.019  15.924  56.289  1.00 81.56           C
ATOM   8890  CD  GLU C 170     130.160  14.465  56.724  1.00 86.20           C
ATOM   8891  OE1 GLU C 170     130.405  13.597  55.842  1.00 87.65           O
ATOM   8892  OE2 GLU C 170     130.017  14.183  57.941  1.00 87.22           O
ATOM   8893  C   GLU C 170     130.775  18.781  55.059  1.00 77.53           C
ATOM   8894  O   GLU C 170     129.848  19.419  55.552  1.00 77.42           O
ATOM   8895  N   ALA C 171     132.036  19.189  55.135  1.00 76.70           N
ATOM   8896  CA  ALA C 171     132.368  20.472  55.730  1.00 76.17           C
ATOM   8897  CB  ALA C 171     133.858  20.660  55.771  1.00 76.34           C
ATOM   8898  C   ALA C 171     131.711  21.635  54.995  1.00 75.76           C
ATOM   8899  O   ALA C 171     131.160  22.517  55.619  1.00 75.95           O
ATOM   8900  N   LEU C 172     131.766  21.635  53.670  1.00 75.52           N
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ATOM	8901	CA	LEU	C	172	131.240	22.749	52.874	1.00	75.09	C
ATOM	8902	CB	LEU	C	172	131.662	22.605	51.420	1.00	74.97	C
ATOM	8903	CG	LEU	C	172	133.126	22.872	51.102	1.00	75.32	C
ATOM	8904	CD1	LEU	C	172	133.446	22.350	49.713	1.00	75.60	C
ATOM	8905	CD2	LEU	C	172	133.435	24.352	51.210	1.00	75.68	C
ATOM	8906	C	LEU	C	172	129.725	22.886	52.936	1.00	74.82	C
ATOM	8907	O	LEU	C	172	129.183	23.964	52.699	1.00	74.63	O
ATOM	8908	N	SER	C	173	129.048	21.790	53.255	1.00	74.55	N
ATOM	8909	CA	SER	C	173	127.595	21.766	53.258	1.00	74.40	C
ATOM	8910	CB	SER	C	173	127.087	20.335	53.431	1.00	74.09	C
ATOM	8911	OG	SER	C	173	127.237	19.916	54.770	1.00	74.84	O
ATOM	8912	C	SER	C	173	126.982	22.696	54.314	1.00	74.25	C
ATOM	8913	O	SER	C	173	125.821	23.065	54.215	1.00	74.89	O
ATOM	8914	N	HIS	C	174	127.761	23.079	55.313	1.00	73.96	N
ATOM	8915	CA	HIS	C	174	127.281	23.975	56.351	1.00	73.71	C
ATOM	8916	CB	HIS	C	174	128.223	23.923	57.543	1.00	73.36	C
ATOM	8917	CG	HIS	C	174	128.128	22.643	58.307	1.00	73.60	C
ATOM	8918	ND1	HIS	C	174	128.377	21.416	57.732	1.00	74.02	N
ATOM	8919	CE1	HIS	C	174	128.194	20.463	58.630	1.00	73.78	C
ATOM	8920	NE2	HIS	C	174	127.833	21.030	59.767	1.00	74.53	N
ATOM	8921	CD2	HIS	C	174	127.784	22.393	59.591	1.00	74.01	C
ATOM	8922	C	HIS	C	174	127.091	25.406	55.854	1.00	73.84	C
ATOM	8923	O	HIS	C	174	126.307	26.170	56.419	1.00	74.28	O
ATOM	8924	N	LEU	C	175	127.786	25.758	54.777	1.00	73.68	N
ATOM	8925	CA	LEU	C	175	127.743	27.117	54.245	1.00	73.21	C
ATOM	8926	CB	LEU	C	175	129.063	27.461	53.551	1.00	72.69	C
ATOM	8927	CG	LEU	C	175	130.321	27.331	54.411	1.00	71.69	C
ATOM	8928	CD1	LEU	C	175	131.546	27.524	53.567	1.00	71.14	C
ATOM	8929	CD2	LEU	C	175	130.322	28.332	55.525	1.00	71.49	C
ATOM	8930	C	LEU	C	175	126.560	27.293	53.302	1.00	73.23	C
ATOM	8931	O	LEU	C	175	126.730	27.462	52.097	1.00	73.70	O
ATOM	8932	N	HIS	C	176	125.357	27.263	53.860	1.00	73.12	N
ATOM	8933	CA	HIS	C	176	124.135	27.316	53.055	1.00	73.07	C
ATOM	8934	CB	HIS	C	176	122.911	27.060	53.922	1.00	72.86	C
ATOM	8935	CG	HIS	C	176	123.004	25.809	54.732	1.00	73.40	C
ATOM	8936	ND1	HIS	C	176	122.846	24.555	54.184	1.00	73.99	N
ATOM	8937	CE1	HIS	C	176	122.977	23.645	55.133	1.00	74.59	C
ATOM	8938	NE2	HIS	C	176	123.220	24.264	56.275	1.00	73.81	N
ATOM	8939	CD2	HIS	C	176	123.242	25.618	56.051	1.00	73.74	C
ATOM	8940	C	HIS	C	176	123.939	28.615	52.292	1.00	73.01	C
ATOM	8941	O	HIS	C	176	123.160	28.652	51.347	1.00	73.50	O
ATOM	8942	N	GLY	C	177	124.639	29.672	52.691	1.00	72.92	N
ATOM	8943	CA	GLY	C	177	124.450	30.977	52.076	1.00	73.00	C
ATOM	8944	C	GLY	C	177	125.580	31.412	51.165	1.00	73.16	C
ATOM	8945	O	GLY	C	177	125.591	32.544	50.692	1.00	73.48	O
ATOM	8946	N	LEU	C	178	126.522	30.514	50.909	1.00	73.04	N
ATOM	8947	CA	LEU	C	178	127.695	30.830	50.111	1.00	73.24	C
ATOM	8948	CB	LEU	C	178	128.677	29.659	50.152	1.00	73.31	C
ATOM	8949	CG	LEU	C	178	130.097	29.910	49.644	1.00	73.30	C
ATOM	8950	CD1	LEU	C	178	130.849	30.803	50.603	1.00	72.91	C
ATOM	8951	CD2	LEU	C	178	130.822	28.588	49.463	1.00	73.11	C
ATOM	8952	C	LEU	C	178	127.329	31.162	48.666	1.00	73.46	C
ATOM	8953	O	LEU	C	178	126.548	30.454	48.046	1.00	73.86	O
ATOM	8954	N	ILE	C	179	127.888	32.241	48.133	1.00	73.46	N
ATOM	8955	CA	ILE	C	179	127.583	32.638	46.769	1.00	73.57	C
ATOM	8956	CB	ILE	C	179	127.286	34.144	46.659	1.00	73.46	C

ATOM	8957	CG1	ILE	C	179	126.040	34.498	47.482	1.00	73.16	C
ATOM	8958	CD1	ILE	C	179	125.808	35.993	47.701	1.00	73.10	C
ATOM	8959	CG2	ILE	C	179	127.110	34.542	45.203	1.00	72.30	C
ATOM	8960	C	ILE	C	179	128.724	32.244	45.837	1.00	74.37	C
ATOM	8961	O	ILE	C	179	128.486	31.737	44.731	1.00	74.83	O
ATOM	8962	N	VAL	C	180	129.957	32.465	46.297	1.00	74.49	N
ATOM	8963	CA	VAL	C	180	131.153	32.229	45.499	1.00	74.56	C
ATOM	8964	CB	VAL	C	180	131.923	33.545	45.245	1.00	74.45	C
ATOM	8965	CG1	VAL	C	180	133.163	33.281	44.417	1.00	74.34	C
ATOM	8966	CG2	VAL	C	180	131.039	34.574	44.563	1.00	74.04	C
ATOM	8967	C	VAL	C	180	132.088	31.255	46.204	1.00	74.97	C
ATOM	8968	O	VAL	C	180	132.490	31.488	47.341	1.00	74.98	O
ATOM	8969	N	LEU	C	181	132.432	30.164	45.525	1.00	75.37	N
ATOM	8970	CA	LEU	C	181	133.401	29.210	46.049	1.00	75.66	C
ATOM	8971	CB	LEU	C	181	132.753	27.844	46.259	1.00	75.25	C
ATOM	8972	CG	LEU	C	181	133.658	26.682	46.681	1.00	75.44	C
ATOM	8973	CD1	LEU	C	181	134.346	26.942	48.022	1.00	75.48	C
ATOM	8974	CD2	LEU	C	181	132.894	25.362	46.708	1.00	75.45	C
ATOM	8975	C	LEU	C	181	134.575	29.097	45.088	1.00	76.33	C
ATOM	8976	O	LEU	C	181	134.374	28.945	43.880	1.00	76.61	O
ATOM	8977	N	ARG	C	182	135.793	29.170	45.626	1.00	76.81	N
ATOM	8978	CA	ARG	C	182	137.014	29.124	44.817	1.00	77.38	C
ATOM	8979	CB	ARG	C	182	137.736	30.458	44.845	1.00	77.18	C
ATOM	8980	CG	ARG	C	182	136.838	31.564	44.501	1.00	79.23	C
ATOM	8981	CD	ARG	C	182	137.533	32.871	44.343	1.00	84.10	C
ATOM	8982	NE	ARG	C	182	136.753	33.625	43.370	1.00	89.39	N
ATOM	8983	CZ	ARG	C	182	136.917	34.907	43.080	1.00	91.86	C
ATOM	8984	NH1	ARG	C	182	137.861	35.620	43.704	1.00	94.03	N
ATOM	8985	NH2	ARG	C	182	136.129	35.464	42.159	1.00	91.17	N
ATOM	8986	C	ARG	C	182	137.953	28.060	45.317	1.00	77.75	C
ATOM	8987	O	ARG	C	182	138.400	28.102	46.465	1.00	78.30	O
ATOM	8988	N	LEU	C	183	138.257	27.099	44.460	1.00	77.87	N
ATOM	8989	CA	LEU	C	183	139.199	26.066	44.834	1.00	78.04	C
ATOM	8990	CB	LEU	C	183	138.543	24.682	44.769	1.00	77.86	C
ATOM	8991	CG	LEU	C	183	137.191	24.525	45.486	1.00	77.36	C
ATOM	8992	CD1	LEU	C	183	136.459	23.272	45.022	1.00	76.54	C
ATOM	8993	CD2	LEU	C	183	137.337	24.520	46.999	1.00	76.33	C
ATOM	8994	C	LEU	C	183	140.428	26.182	43.940	1.00	78.42	C
ATOM	8995	O	LEU	C	183	140.373	25.860	42.749	1.00	78.64	O
ATOM	8996	N	ARG	C	184	141.525	26.668	44.521	1.00	78.55	N
ATOM	8997	CA	ARG	C	184	142.757	26.930	43.786	1.00	78.84	C
ATOM	8998	CB	ARG	C	184	143.152	28.388	43.946	1.00	78.92	C
ATOM	8999	CG	ARG	C	184	142.160	29.349	43.395	1.00	79.97	C
ATOM	9000	CD	ARG	C	184	142.508	30.759	43.784	1.00	82.10	C
ATOM	9001	NE	ARG	C	184	141.595	31.684	43.126	1.00	85.52	N
ATOM	9002	CZ	ARG	C	184	141.473	32.974	43.422	1.00	87.21	C
ATOM	9003	NH1	ARG	C	184	142.216	33.522	44.387	1.00	87.57	N
ATOM	9004	NH2	ARG	C	184	140.602	33.717	42.745	1.00	87.55	N
ATOM	9005	C	ARG	C	184	143.917	26.065	44.254	1.00	79.02	C
ATOM	9006	O	ARG	C	184	144.035	25.772	45.443	1.00	79.18	O
ATOM	9007	N	HIS	C	185	144.782	25.684	43.314	1.00	79.15	N
ATOM	9008	CA	HIS	C	185	146.014	24.937	43.607	1.00	79.23	C
ATOM	9009	CB	HIS	C	185	147.077	25.855	44.207	1.00	79.20	C
ATOM	9010	CG	HIS	C	185	147.479	26.984	43.315	1.00	79.52	C
ATOM	9011	ND1	HIS	C	185	148.400	26.838	42.301	1.00	80.11	N
ATOM	9012	CE1	HIS	C	185	148.565	27.998	41.689	1.00	80.10	C

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ATOM   9013  NE2 HIS C 185     147.790  28.892  42.276  1.00 80.34           N
ATOM   9014  CD2 HIS C 185     147.100  28.284  43.298  1.00 79.58           C
ATOM   9015  C   HIS C 185     145.796  23.742  44.526  1.00 79.31           C
ATOM   9016  O   HIS C 185     146.392  23.659  45.602  1.00 79.42           O
ATOM   9017  N   LEU C 186     144.926  22.832  44.107  1.00 79.34           N
ATOM   9018  CA  LEU C 186     144.705  21.592  44.834  1.00 79.53           C
ATOM   9019  CB  LEU C 186     143.225  21.403  45.154  1.00 79.24           C
ATOM   9020  CG  LEU C 186     142.503  22.526  45.899  1.00 78.82           C
ATOM   9021  CD1 LEU C 186     141.120  22.051  46.316  1.00 78.26           C
ATOM   9022  CD2 LEU C 186     143.290  22.993  47.118  1.00 79.28           C
ATOM   9023  C   LEU C 186     145.225  20.428  44.014  1.00 79.97           C
ATOM   9024  O   LEU C 186     145.348  20.527  42.797  1.00 80.20           O
ATOM   9025  N   ASN C 187     145.535  19.325  44.683  1.00 80.61           N
ATOM   9026  CA  ASN C 187     146.122  18.174  44.005  1.00 81.27           C
ATOM   9027  CB  ASN C 187     147.318  17.634  44.793  1.00 81.62           C
ATOM   9028  CG  ASN C 187     148.319  18.714  45.143  1.00 82.56           C
ATOM   9029  OD1 ASN C 187     148.740  18.827  46.306  1.00 83.95           O
ATOM   9030  ND2 ASN C 187     148.698  19.527  44.149  1.00 81.69           N
ATOM   9031  C   ASN C 187     145.137  17.048  43.715  1.00 81.26           C
ATOM   9032  O   ASN C 187     145.539  15.972  43.265  1.00 81.47           O
ATOM   9033  N   ILE C 188     143.858  17.297  43.973  1.00 81.15           N
ATOM   9034  CA  ILE C 188     142.803  16.333  43.687  1.00 81.34           C
ATOM   9035  CB  ILE C 188     141.434  16.890  44.126  1.00 81.28           C
ATOM   9036  CG1 ILE C 188     141.443  17.182  45.628  1.00 81.18           C
ATOM   9037  CD1 ILE C 188     140.482  18.262  46.056  1.00 81.49           C
ATOM   9038  CG2 ILE C 188     140.323  15.915  43.793  1.00 81.65           C
ATOM   9039  C   ILE C 188     142.794  16.029  42.187  1.00 81.46           C
ATOM   9040  O   ILE C 188     142.965  16.945  41.377  1.00 81.63           O
ATOM   9041  N   ASN C 189     142.612  14.757  41.818  1.00 81.47           N
ATOM   9042  CA  ASN C 189     142.565  14.374  40.392  1.00 81.59           C
ATOM   9043  CB  ASN C 189     143.554  13.246  40.086  1.00 81.79           C
ATOM   9044  CG  ASN C 189     143.288  12.004  40.897  1.00 82.44           C
ATOM   9045  OD1 ASN C 189     142.136  11.641  41.146  1.00 83.54           O
ATOM   9046  ND2 ASN C 189     144.358  11.338  41.316  1.00 83.04           N
ATOM   9047  C   ASN C 189     141.186  14.032  39.815  1.00 81.36           C
ATOM   9048  O   ASN C 189     141.062  13.781  38.612  1.00 81.38           O
ATOM   9049  N   ALA C 190     140.165  14.001  40.670  1.00 81.19           N
ATOM   9050  CA  ALA C 190     138.801  13.668  40.248  1.00 80.96           C
ATOM   9051  CB  ALA C 190     138.571  12.154  40.318  1.00 80.81           C
ATOM   9052  C   ALA C 190     137.750  14.390  41.079  1.00 80.80           C
ATOM   9053  O   ALA C 190     137.876  14.490  42.300  1.00 80.96           O
ATOM   9054  N   ILE C 191     136.719  14.898  40.414  1.00 80.57           N
ATOM   9055  CA  ILE C 191     135.514  15.346  41.102  1.00 80.46           C
ATOM   9056  CB  ILE C 191     135.049  16.746  40.637  1.00 80.47           C
ATOM   9057  CG1 ILE C 191     136.153  17.786  40.864  1.00 80.35           C
ATOM   9058  CD1 ILE C 191     135.994  19.051  40.042  1.00 79.29           C
ATOM   9059  CG2 ILE C 191     133.784  17.166  41.372  1.00 79.98           C
ATOM   9060  C   ILE C 191     134.434  14.297  40.846  1.00 80.63           C
ATOM   9061  O   ILE C 191     134.051  14.053  39.698  1.00 80.83           O
ATOM   9062  N   ARG C 192     133.967  13.674  41.923  1.00 80.69           N
ATOM   9063  CA  ARG C 192     133.019  12.574  41.848  1.00 81.04           C
ATOM   9064  CB  ARG C 192     133.343  11.532  42.922  1.00 81.47           C
ATOM   9065  CG  ARG C 192     134.733  10.918  42.838  1.00 83.15           C
ATOM   9066  CD  ARG C 192     134.838   9.903  41.706  1.00 86.41           C
ATOM   9067  NE  ARG C 192     136.157   9.273  41.685  1.00 89.09           N
ATOM   9068  CZ  ARG C 192     136.733   8.747  40.604  1.00 90.31           C
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ATOM   9069  NH1 ARG C 192     136.114   8.762  39.426  1.00 90.43           N
ATOM   9070  NH2 ARG C 192     137.941   8.205  40.704  1.00 91.00           N
ATOM   9071  C   ARG C 192     131.581  13.052  42.018  1.00 80.82           C
ATOM   9072  O   ARG C 192     131.342  14.214  42.341  1.00 80.73           O
ATOM   9073  N   ASP C 193     130.635  12.138  41.801  1.00 80.77           N
ATOM   9074  CA  ASP C 193     129.202  12.382  41.998  1.00 80.75           C
ATOM   9075  CB  ASP C 193     128.433  11.058  41.904  1.00 80.86           C
ATOM   9076  CG  ASP C 193     128.244  10.572  40.469  1.00 82.11           C
ATOM   9077  OD1 ASP C 193     128.676  11.262  39.519  1.00 82.68           O
ATOM   9078  OD2 ASP C 193     127.643   9.485  40.294  1.00 83.37           O
ATOM   9079  C   ASP C 193     128.870  13.047  43.339  1.00 80.48           C
ATOM   9080  O   ASP C 193     129.372  12.637  44.386  1.00 80.29           O
ATOM   9081  N   TYR C 194     128.014  14.066  43.290  1.00 80.38           N
ATOM   9082  CA  TYR C 194     127.447  14.715  44.487  1.00 80.37           C
ATOM   9083  CB  TYR C 194     126.547  13.746  45.283  1.00 80.18           C
ATOM   9084  CG  TYR C 194     125.686  12.860  44.403  1.00 80.02           C
ATOM   9085  CD1 TYR C 194     124.711  13.409  43.570  1.00 79.70           C
ATOM   9086  CE1 TYR C 194     123.930  12.607  42.745  1.00 80.19           C
ATOM   9087  CZ  TYR C 194     124.115  11.235  42.751  1.00 80.57           C
ATOM   9088  OH  TYR C 194     123.341  10.441  41.928  1.00 80.69           O
ATOM   9089  CE2 TYR C 194     125.077  10.662  43.578  1.00 80.40           C
ATOM   9090  CD2 TYR C 194     125.857  11.477  44.395  1.00 79.68           C
ATOM   9091  C   TYR C 194     128.511  15.347  45.378  1.00 80.42           C
ATOM   9092  O   TYR C 194     128.428  15.298  46.607  1.00 80.72           O
ATOM   9093  N   SER C 195     129.504  15.956  44.741  1.00 80.30           N
ATOM   9094  CA  SER C 195     130.607  16.591  45.441  1.00 79.99           C
ATOM   9095  CB  SER C 195     131.735  16.885  44.462  1.00 79.80           C
ATOM   9096  OG  SER C 195     132.571  15.755  44.331  1.00 79.48           O
ATOM   9097  C   SER C 195     130.211  17.866  46.179  1.00 80.15           C
ATOM   9098  O   SER C 195     130.935  18.323  47.066  1.00 80.17           O
ATOM   9099  N   PHE C 196     129.074  18.446  45.802  1.00 80.31           N
ATOM   9100  CA  PHE C 196     128.587  19.668  46.434  1.00 80.49           C
ATOM   9101  CB  PHE C 196     128.706  20.859  45.488  1.00 80.15           C
ATOM   9102  CG  PHE C 196     130.074  21.033  44.902  1.00 79.95           C
ATOM   9103  CD1 PHE C 196     130.999  21.868  45.507  1.00 80.11           C
ATOM   9104  CE1 PHE C 196     132.269  22.037  44.963  1.00 80.08           C
ATOM   9105  CZ  PHE C 196     132.622  21.360  43.801  1.00 79.84           C
ATOM   9106  CE2 PHE C 196     131.709  20.520  43.189  1.00 79.60           C
ATOM   9107  CD2 PHE C 196     130.441  20.362  43.739  1.00 80.04           C
ATOM   9108  C   PHE C 196     127.149  19.489  46.890  1.00 80.83           C
ATOM   9109  O   PHE C 196     126.228  19.420  46.084  1.00 81.53           O
ATOM   9110  N   LYS C 197     126.972  19.405  48.196  1.00 81.25           N
ATOM   9111  CA  LYS C 197     125.667  19.183  48.789  1.00 81.70           C
ATOM   9112  CB  LYS C 197     125.692  17.906  49.634  1.00 81.79           C
ATOM   9113  CG  LYS C 197     125.886  16.649  48.803  1.00 82.78           C
ATOM   9114  CD  LYS C 197     125.951  15.390  49.641  1.00 83.89           C
ATOM   9115  CE  LYS C 197     125.525  14.195  48.791  1.00 85.60           C
ATOM   9116  NZ  LYS C 197     125.705  12.887  49.477  1.00 86.87           N
ATOM   9117  C   LYS C 197     125.261  20.371  49.647  1.00 81.89           C
ATOM   9118  O   LYS C 197     126.066  20.881  50.430  1.00 82.19           O
ATOM   9119  N   ARG C 198     124.019  20.818  49.469  1.00 81.94           N
ATOM   9120  CA  ARG C 198     123.374  21.812  50.339  1.00 81.97           C
ATOM   9121  CB  ARG C 198     123.347  21.318  51.791  1.00 82.42           C
ATOM   9122  CG  ARG C 198     122.480  20.091  51.981  1.00 84.23           C
ATOM   9123  CD  ARG C 198     122.657  19.473  53.347  1.00 88.80           C
ATOM   9124  NE  ARG C 198     121.581  18.518  53.614  1.00 92.94           N
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ATOM	9125	CZ	ARG	C	198	120.636	18.671	54.546	1.00	94.82	C
ATOM	9126	NH1	ARG	C	198	119.699	17.734	54.698	1.00	94.64	N
ATOM	9127	NH2	ARG	C	198	120.631	19.747	55.337	1.00	95.75	N
ATOM	9128	C	ARG	C	198	123.945	23.229	50.244	1.00	81.57	C
ATOM	9129	O	ARG	C	198	123.760	24.044	51.156	1.00	81.32	O
ATOM	9130	N	LEU	C	199	124.636	23.513	49.141	1.00	81.25	N
ATOM	9131	CA	LEU	C	199	125.118	24.860	48.875	1.00	80.97	C
ATOM	9132	CB	LEU	C	199	126.487	24.841	48.205	1.00	80.68	C
ATOM	9133	CG	LEU	C	199	127.673	24.358	49.043	1.00	80.05	C
ATOM	9134	CD1	LEU	C	199	128.833	23.989	48.145	1.00	79.10	C
ATOM	9135	CD2	LEU	C	199	128.101	25.417	50.030	1.00	80.03	C
ATOM	9136	C	LEU	C	199	124.087	25.509	47.989	1.00	81.24	C
ATOM	9137	O	LEU	C	199	124.278	25.654	46.786	1.00	81.38	O
ATOM	9138	N	TYR	C	200	122.973	25.884	48.601	1.00	81.65	N
ATOM	9139	CA	TYR	C	200	121.775	26.250	47.849	1.00	81.97	C
ATOM	9140	CB	TYR	C	200	120.571	26.379	48.786	1.00	82.50	C
ATOM	9141	CG	TYR	C	200	120.344	25.214	49.739	1.00	83.21	C
ATOM	9142	CD1	TYR	C	200	119.911	23.964	49.266	1.00	83.17	C
ATOM	9143	CE1	TYR	C	200	119.679	22.899	50.146	1.00	83.41	C
ATOM	9144	CZ	TYR	C	200	119.869	23.084	51.519	1.00	84.24	C
ATOM	9145	OH	TYR	C	200	119.640	22.036	52.397	1.00	84.68	O
ATOM	9146	CE2	TYR	C	200	120.289	24.322	52.016	1.00	83.85	C
ATOM	9147	CD2	TYR	C	200	120.521	25.378	51.123	1.00	83.78	C
ATOM	9148	C	TYR	C	200	121.942	27.544	47.074	1.00	81.50	C
ATOM	9149	O	TYR	C	200	121.308	27.728	46.049	1.00	81.25	O
ATOM	9150	N	ARG	C	201	122.805	28.426	47.574	1.00	81.20	N
ATOM	9151	CA	ARG	C	201	122.916	29.788	47.068	1.00	80.90	C
ATOM	9152	CB	ARG	C	201	123.058	30.768	48.230	1.00	81.32	C
ATOM	9153	CG	ARG	C	201	121.928	30.758	49.232	1.00	83.13	C
ATOM	9154	CD	ARG	C	201	120.664	31.380	48.678	1.00	86.51	C
ATOM	9155	NE	ARG	C	201	119.791	31.795	49.772	1.00	90.27	N
ATOM	9156	CZ	ARG	C	201	118.517	32.160	49.639	1.00	92.83	C
ATOM	9157	NH1	ARG	C	201	117.925	32.163	48.438	1.00	93.58	N
ATOM	9158	NH2	ARG	C	201	117.831	32.518	50.722	1.00	93.19	N
ATOM	9159	C	ARG	C	201	124.098	29.991	46.142	1.00	80.32	C
ATOM	9160	O	ARG	C	201	124.339	31.112	45.695	1.00	80.43	O
ATOM	9161	N	LEU	C	202	124.838	28.922	45.863	1.00	79.53	N
ATOM	9162	CA	LEU	C	202	126.071	29.029	45.094	1.00	78.71	C
ATOM	9163	CB	LEU	C	202	126.850	27.716	45.131	1.00	78.49	C
ATOM	9164	CG	LEU	C	202	128.328	27.831	44.765	1.00	77.42	C
ATOM	9165	CD1	LEU	C	202	129.079	28.533	45.869	1.00	77.11	C
ATOM	9166	CD2	LEU	C	202	128.913	26.473	44.509	1.00	76.12	C
ATOM	9167	C	LEU	C	202	125.806	29.458	43.660	1.00	78.59	C
ATOM	9168	O	LEU	C	202	124.960	28.882	42.977	1.00	78.83	O
ATOM	9169	N	LYS	C	203	126.534	30.477	43.216	1.00	78.36	N
ATOM	9170	CA	LYS	C	203	126.357	31.034	41.878	1.00	77.99	C
ATOM	9171	CB	LYS	C	203	125.863	32.478	41.958	1.00	78.04	C
ATOM	9172	CG	LYS	C	203	124.440	32.620	42.469	1.00	78.71	C
ATOM	9173	CD	LYS	C	203	123.456	31.972	41.514	1.00	80.02	C
ATOM	9174	CE	LYS	C	203	122.131	31.712	42.183	1.00	81.22	C
ATOM	9175	NZ	LYS	C	203	121.300	30.824	41.337	1.00	82.91	N
ATOM	9176	C	LYS	C	203	127.634	30.989	41.067	1.00	77.79	C
ATOM	9177	O	LYS	C	203	127.584	30.835	39.846	1.00	77.73	O
ATOM	9178	N	VAL	C	204	128.772	31.131	41.747	1.00	77.45	N
ATOM	9179	CA	VAL	C	204	130.072	31.207	41.084	1.00	77.25	C
ATOM	9180	CB	VAL	C	204	130.749	32.602	41.275	1.00	77.01	C

ATOM	9181	CG1	VAL	C	204	132.063	32.672	40.538	1.00	76.44	C
ATOM	9182	CG2	VAL	C	204	129.849	33.719	40.812	1.00	76.87	C
ATOM	9183	C	VAL	C	204	130.987	30.133	41.648	1.00	77.45	C
ATOM	9184	O	VAL	C	204	131.372	30.191	42.816	1.00	77.88	O
ATOM	9185	N	LEU	C	205	131.332	29.157	40.816	1.00	77.42	N
ATOM	9186	CA	LEU	C	205	132.317	28.152	41.173	1.00	77.51	C
ATOM	9187	CB	LEU	C	205	131.745	26.749	40.977	1.00	77.18	C
ATOM	9188	CG	LEU	C	205	132.643	25.528	41.163	1.00	76.66	C
ATOM	9189	CD1	LEU	C	205	133.267	25.531	42.531	1.00	77.86	C
ATOM	9190	CD2	LEU	C	205	131.858	24.256	40.974	1.00	77.08	C
ATOM	9191	C	LEU	C	205	133.559	28.358	40.318	1.00	78.39	C
ATOM	9192	O	LEU	C	205	133.475	28.354	39.087	1.00	78.68	O
ATOM	9193	N	GLU	C	206	134.702	28.561	40.971	1.00	78.99	N
ATOM	9194	CA	GLU	C	206	135.975	28.721	40.283	1.00	80.02	C
ATOM	9195	CB	GLU	C	206	136.573	30.106	40.555	1.00	79.71	C
ATOM	9196	CG	GLU	C	206	137.949	30.334	39.900	1.00	82.41	C
ATOM	9197	CD	GLU	C	206	138.804	31.426	40.589	1.00	83.17	C
ATOM	9198	OE1	GLU	C	206	138.234	32.481	40.983	1.00	87.54	O
ATOM	9199	OE2	GLU	C	206	140.046	31.228	40.726	1.00	85.76	O
ATOM	9200	C	GLU	C	206	136.933	27.612	40.715	1.00	79.43	C
ATOM	9201	O	GLU	C	206	137.422	27.601	41.841	1.00	79.75	O
ATOM	9202	N	ILE	C	207	137.163	26.657	39.821	1.00	79.19	N
ATOM	9203	CA	ILE	C	207	138.136	25.596	40.041	1.00	78.52	C
ATOM	9204	CB	ILE	C	207	137.588	24.226	39.636	1.00	78.19	C
ATOM	9205	CG1	ILE	C	207	136.579	23.761	40.677	1.00	77.89	C
ATOM	9206	CD1	ILE	C	207	135.626	22.730	40.162	1.00	77.79	C
ATOM	9207	CG2	ILE	C	207	138.706	23.210	39.526	1.00	77.63	C
ATOM	9208	C	ILE	C	207	139.341	25.958	39.207	1.00	78.71	C
ATOM	9209	O	ILE	C	207	139.226	26.176	37.999	1.00	78.87	O
ATOM	9210	N	SER	C	208	140.498	26.031	39.852	1.00	78.56	N
ATOM	9211	CA	SER	C	208	141.652	26.630	39.226	1.00	78.60	C
ATOM	9212	CB	SER	C	208	141.642	28.126	39.535	1.00	78.63	C
ATOM	9213	OG	SER	C	208	142.860	28.728	39.152	1.00	81.27	O
ATOM	9214	C	SER	C	208	142.967	25.975	39.661	1.00	78.26	C
ATOM	9215	O	SER	C	208	143.159	25.671	40.838	1.00	78.48	O
ATOM	9216	N	HIS	C	209	143.868	25.764	38.702	1.00	77.78	N
ATOM	9217	CA	HIS	C	209	145.179	25.158	38.964	1.00	77.32	C
ATOM	9218	CB	HIS	C	209	146.097	26.132	39.718	1.00	77.12	C
ATOM	9219	CG	HIS	C	209	146.528	27.308	38.900	1.00	77.21	C
ATOM	9220	ND1	HIS	C	209	147.602	27.259	38.036	1.00	76.49	N
ATOM	9221	CE1	HIS	C	209	147.745	28.434	37.447	1.00	76.11	C
ATOM	9222	NE2	HIS	C	209	146.803	29.243	37.899	1.00	76.80	N
ATOM	9223	CD2	HIS	C	209	146.027	28.564	38.809	1.00	76.98	C
ATOM	9224	C	HIS	C	209	145.120	23.802	39.681	1.00	77.04	C
ATOM	9225	O	HIS	C	209	145.752	23.609	40.710	1.00	76.78	O
ATOM	9226	N	TRP	C	210	144.351	22.865	39.141	1.00	76.88	N
ATOM	9227	CA	TRP	C	210	144.432	21.493	39.616	1.00	76.82	C
ATOM	9228	CB	TRP	C	210	143.049	20.884	39.831	1.00	76.55	C
ATOM	9229	CG	TRP	C	210	142.166	21.549	40.865	1.00	75.96	C
ATOM	9230	CD1	TRP	C	210	142.237	22.835	41.322	1.00	75.71	C
ATOM	9231	NE1	TRP	C	210	141.242	23.071	42.240	1.00	75.00	N
ATOM	9232	CE2	TRP	C	210	140.493	21.934	42.376	1.00	75.26	C
ATOM	9233	CD2	TRP	C	210	141.044	20.956	41.521	1.00	75.34	C
ATOM	9234	CE3	TRP	C	210	140.455	19.687	41.476	1.00	75.31	C
ATOM	9235	CZ3	TRP	C	210	139.361	19.439	42.267	1.00	75.54	C
ATOM	9236	CH2	TRP	C	210	138.835	20.431	43.110	1.00	75.87	C

ATOM	9237	CZ2	TRP	C	210	139.384	21.683	43.175	1.00	75.64	C
ATOM	9238	C	TRP	C	210	145.184	20.715	38.546	1.00	77.13	C
ATOM	9239	O	TRP	C	210	144.584	20.266	37.572	1.00	77.01	O
ATOM	9240	N	PRO	C	211	146.508	20.550	38.722	1.00	77.52	N
ATOM	9241	CA	PRO	C	211	147.333	20.007	37.646	1.00	77.65	C
ATOM	9242	CB	PRO	C	211	148.745	19.980	38.262	1.00	77.62	C
ATOM	9243	CG	PRO	C	211	148.697	20.903	39.414	1.00	77.30	C
ATOM	9244	CD	PRO	C	211	147.301	20.816	39.937	1.00	77.57	C
ATOM	9245	C	PRO	C	211	146.921	18.590	37.261	1.00	77.80	C
ATOM	9246	O	PRO	C	211	147.089	18.203	36.111	1.00	77.81	O
ATOM	9247	N	TYR	C	212	146.386	17.841	38.223	1.00	78.11	N
ATOM	9248	CA	TYR	C	212	146.106	16.423	38.060	1.00	78.57	C
ATOM	9249	CB	TYR	C	212	146.462	15.662	39.338	1.00	78.86	C
ATOM	9250	CG	TYR	C	212	147.858	15.931	39.859	1.00	79.65	C
ATOM	9251	CD1	TYR	C	212	148.953	15.214	39.382	1.00	79.88	C
ATOM	9252	CE1	TYR	C	212	150.237	15.461	39.862	1.00	80.29	C
ATOM	9253	CZ	TYR	C	212	150.431	16.432	40.830	1.00	80.10	C
ATOM	9254	OH	TYR	C	212	151.695	16.676	41.300	1.00	79.80	O
ATOM	9255	CE2	TYR	C	212	149.361	17.153	41.328	1.00	80.22	C
ATOM	9256	CD2	TYR	C	212	148.082	16.902	40.840	1.00	80.46	C
ATOM	9257	C	TYR	C	212	144.659	16.118	37.693	1.00	78.83	C
ATOM	9258	O	TYR	C	212	144.348	14.973	37.358	1.00	78.97	O
ATOM	9259	N	LEU	C	213	143.780	17.122	37.758	1.00	79.00	N
ATOM	9260	CA	LEU	C	213	142.350	16.925	37.479	1.00	79.32	C
ATOM	9261	CB	LEU	C	213	141.545	18.189	37.793	1.00	79.36	C
ATOM	9262	CG	LEU	C	213	140.021	18.107	37.622	1.00	78.89	C
ATOM	9263	CD1	LEU	C	213	139.400	17.137	38.619	1.00	79.03	C
ATOM	9264	CD2	LEU	C	213	139.396	19.470	37.778	1.00	79.03	C
ATOM	9265	C	LEU	C	213	142.089	16.518	36.041	1.00	79.77	C
ATOM	9266	O	LEU	C	213	142.326	17.297	35.130	1.00	79.93	O
ATOM	9267	N	ASP	C	214	141.584	15.306	35.844	1.00	80.38	N
ATOM	9268	CA	ASP	C	214	141.319	14.795	34.499	1.00	81.26	C
ATOM	9269	CB	ASP	C	214	142.479	13.901	34.044	1.00	81.28	C
ATOM	9270	CG	ASP	C	214	142.536	12.573	34.800	1.00	82.40	C
ATOM	9271	OD1	ASP	C	214	141.972	12.482	35.918	1.00	83.52	O
ATOM	9272	OD2	ASP	C	214	143.150	11.614	34.274	1.00	83.31	O
ATOM	9273	C	ASP	C	214	139.985	14.039	34.403	1.00	81.66	C
ATOM	9274	O	ASP	C	214	139.625	13.525	33.338	1.00	81.76	O
ATOM	9275	N	THR	C	215	139.270	13.964	35.525	1.00	82.17	N
ATOM	9276	CA	THR	C	215	138.000	13.246	35.605	1.00	82.50	C
ATOM	9277	CB	THR	C	215	138.148	11.889	36.348	1.00	82.45	C
ATOM	9278	OG1	THR	C	215	139.218	11.142	35.766	1.00	83.12	O
ATOM	9279	CG2	THR	C	215	136.865	11.059	36.254	1.00	82.34	C
ATOM	9280	C	THR	C	215	136.927	14.081	36.297	1.00	82.63	C
ATOM	9281	O	THR	C	215	137.065	14.449	37.468	1.00	82.69	O
ATOM	9282	N	MET	C	216	135.865	14.380	35.552	1.00	82.71	N
ATOM	9283	CA	MET	C	216	134.626	14.896	36.122	1.00	82.89	C
ATOM	9284	CB	MET	C	216	134.326	16.288	35.593	1.00	82.22	C
ATOM	9285	CG	MET	C	216	135.354	17.278	36.058	1.00	82.90	C
ATOM	9286	SD	MET	C	216	135.045	18.991	35.595	1.00	84.52	S
ATOM	9287	CE	MET	C	216	133.595	19.394	36.583	1.00	85.29	C
ATOM	9288	C	MET	C	216	133.504	13.920	35.805	1.00	82.50	C
ATOM	9289	O	MET	C	216	133.227	13.644	34.648	1.00	82.72	O
ATOM	9290	N	THR	C	217	132.886	13.366	36.842	1.00	82.34	N
ATOM	9291	CA	THR	C	217	131.794	12.415	36.658	1.00	82.04	C
ATOM	9292	CB	THR	C	217	131.573	11.566	37.916	1.00	81.98	C

ATOM	9293	OG1	THR	C	217	131.349	12.426	39.040	1.00	81.90	O
ATOM	9294	CG2	THR	C	217	132.781	10.676	38.175	1.00	81.89	C
ATOM	9295	C	THR	C	217	130.507	13.148	36.272	1.00	81.94	C
ATOM	9296	O	THR	C	217	130.396	14.353	36.498	1.00	81.89	O
ATOM	9297	N	PRO	C	218	129.528	12.425	35.688	1.00	81.89	N
ATOM	9298	CA	PRO	C	218	128.313	13.074	35.174	1.00	81.66	C
ATOM	9299	CB	PRO	C	218	127.488	11.897	34.643	1.00	81.62	C
ATOM	9300	CG	PRO	C	218	128.498	10.825	34.368	1.00	81.75	C
ATOM	9301	CD	PRO	C	218	129.489	10.965	35.471	1.00	81.89	C
ATOM	9302	C	PRO	C	218	127.522	13.861	36.227	1.00	81.33	C
ATOM	9303	O	PRO	C	218	127.063	14.965	35.949	1.00	81.40	O
ATOM	9304	N	ASN	C	219	127.381	13.302	37.423	1.00	81.03	N
ATOM	9305	CA	ASN	C	219	126.629	13.941	38.492	1.00	80.77	C
ATOM	9306	CB	ASN	C	219	125.761	12.904	39.207	1.00	80.87	C
ATOM	9307	CG	ASN	C	219	124.586	12.441	38.375	1.00	80.67	C
ATOM	9308	OD1	ASN	C	219	124.483	12.736	37.185	1.00	79.65	O
ATOM	9309	ND2	ASN	C	219	123.686	11.703	39.010	1.00	81.43	N
ATOM	9310	C	ASN	C	219	127.499	14.660	39.522	1.00	80.61	C
ATOM	9311	O	ASN	C	219	127.096	14.823	40.671	1.00	80.81	O
ATOM	9312	N	CYS	C	220	128.684	15.098	39.123	1.00	80.31	N
ATOM	9313	CA	CYS	C	220	129.592	15.717	40.077	1.00	80.24	C
ATOM	9314	CB	CYS	C	220	131.020	15.710	39.541	1.00	80.24	C
ATOM	9315	SG	CYS	C	220	131.323	16.861	38.218	1.00	80.31	S
ATOM	9316	C	CYS	C	220	129.164	17.125	40.508	1.00	80.19	C
ATOM	9317	O	CYS	C	220	129.526	17.579	41.591	1.00	80.39	O
ATOM	9318	N	LEU	C	221	128.391	17.803	39.663	1.00	80.10	N
ATOM	9319	CA	LEU	C	221	127.875	19.141	39.967	1.00	79.73	C
ATOM	9320	CB	LEU	C	221	128.140	20.095	38.804	1.00	79.54	C
ATOM	9321	CG	LEU	C	221	129.543	20.244	38.218	1.00	79.35	C
ATOM	9322	CD1	LEU	C	221	129.553	21.430	37.276	1.00	79.00	C
ATOM	9323	CD2	LEU	C	221	130.595	20.428	39.292	1.00	79.18	C
ATOM	9324	C	LEU	C	221	126.373	19.128	40.274	1.00	79.81	C
ATOM	9325	O	LEU	C	221	125.752	20.186	40.397	1.00	79.84	O
ATOM	9326	N	TYR	C	222	125.796	17.933	40.390	1.00	79.60	N
ATOM	9327	CA	TYR	C	222	124.392	17.773	40.767	1.00	79.70	C
ATOM	9328	CB	TYR	C	222	124.122	16.335	41.205	1.00	80.26	C
ATOM	9329	CG	TYR	C	222	122.670	16.052	41.543	1.00	81.20	C
ATOM	9330	CD1	TYR	C	222	121.757	15.673	40.546	1.00	81.44	C
ATOM	9331	CE1	TYR	C	222	120.420	15.413	40.856	1.00	81.93	C
ATOM	9332	CZ	TYR	C	222	119.990	15.534	42.180	1.00	81.84	C
ATOM	9333	OH	TYR	C	222	118.674	15.274	42.504	1.00	82.53	O
ATOM	9334	CE2	TYR	C	222	120.876	15.908	43.182	1.00	80.98	C
ATOM	9335	CD2	TYR	C	222	122.207	16.162	42.861	1.00	81.06	C
ATOM	9336	C	TYR	C	222	123.950	18.729	41.876	1.00	79.30	C
ATOM	9337	O	TYR	C	222	124.646	18.910	42.873	1.00	79.76	O
ATOM	9338	N	GLY	C	223	122.786	19.336	41.688	1.00	78.75	N
ATOM	9339	CA	GLY	C	223	122.215	20.232	42.673	1.00	77.93	C
ATOM	9340	C	GLY	C	223	122.549	21.700	42.495	1.00	77.59	C
ATOM	9341	O	GLY	C	223	121.817	22.557	42.984	1.00	77.89	O
ATOM	9342	N	LEU	C	224	123.642	22.010	41.805	1.00	77.03	N
ATOM	9343	CA	LEU	C	224	124.081	23.402	41.695	1.00	76.65	C
ATOM	9344	CB	LEU	C	224	125.568	23.480	41.377	1.00	76.55	C
ATOM	9345	CG	LEU	C	224	126.574	22.939	42.381	1.00	76.59	C
ATOM	9346	CD1	LEU	C	224	127.945	23.094	41.780	1.00	76.84	C
ATOM	9347	CD2	LEU	C	224	126.489	23.670	43.718	1.00	77.32	C
ATOM	9348	C	LEU	C	224	123.314	24.182	40.638	1.00	76.50	C

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ATOM   9349  O   LEU C 224     122.974  23.647  39.590  1.00 76.61           O
ATOM   9350  N   ASN C 225     123.062  25.456  40.925  1.00 76.24           N
ATOM   9351  CA  ASN C 225     122.427  26.372  39.987  1.00 75.67           C
ATOM   9352  CB  ASN C 225     121.084  26.857  40.539  1.00 75.60           C
ATOM   9353  CG  ASN C 225     120.296  27.672  39.539  1.00 75.82           C
ATOM   9354  OD1 ASN C 225     119.451  28.492  39.910  1.00 76.04           O
ATOM   9355  ND2 ASN C 225     120.560  27.448  38.257  1.00 76.82           N
ATOM   9356  C   ASN C 225     123.345  27.557  39.744  1.00 75.68           C
ATOM   9357  O   ASN C 225     123.032  28.680  40.143  1.00 75.84           O
ATOM   9358  N   LEU C 226     124.476  27.301  39.089  1.00 75.43           N
ATOM   9359  CA  LEU C 226     125.505  28.319  38.903  1.00 75.59           C
ATOM   9360  CB  LEU C 226     126.858  27.670  38.630  1.00 75.76           C
ATOM   9361  CG  LEU C 226     127.400  26.679  39.658  1.00 76.22           C
ATOM   9362  CD1 LEU C 226     128.582  25.931  39.053  1.00 75.99           C
ATOM   9363  CD2 LEU C 226     127.770  27.377  40.952  1.00 75.40           C
ATOM   9364  C   LEU C 226     125.205  29.269  37.771  1.00 75.52           C
ATOM   9365  O   LEU C 226     124.482  28.933  36.857  1.00 76.07           O
ATOM   9366  N   THR C 227     125.788  30.457  37.835  1.00 75.64           N
ATOM   9367  CA  THR C 227     125.733  31.404  36.732  1.00 75.55           C
ATOM   9368  CB  THR C 227     125.080  32.735  37.154  1.00 75.50           C
ATOM   9369  OG1 THR C 227     125.754  33.263  38.299  1.00 75.33           O
ATOM   9370  CG2 THR C 227     123.625  32.513  37.502  1.00 74.81           C
ATOM   9371  C   THR C 227     127.127  31.638  36.134  1.00 75.87           C
ATOM   9372  O   THR C 227     127.235  32.066  34.989  1.00 76.31           O
ATOM   9373  N   SER C 228     128.177  31.357  36.911  1.00 75.80           N
ATOM   9374  CA  SER C 228     129.563  31.326  36.425  1.00 75.76           C
ATOM   9375  CB  SER C 228     130.375  32.443  37.061  1.00 76.13           C
ATOM   9376  OG  SER C 228     130.640  33.482  36.144  1.00 77.78           O
ATOM   9377  C   SER C 228     130.253  30.016  36.770  1.00 75.43           C
ATOM   9378  O   SER C 228     130.196  29.565  37.910  1.00 75.80           O
ATOM   9379  N   LEU C 229     130.923  29.411  35.797  1.00 74.88           N
ATOM   9380  CA  LEU C 229     131.771  28.249  36.068  1.00 74.04           C
ATOM   9381  CB  LEU C 229     131.136  26.963  35.542  1.00 73.75           C
ATOM   9382  CG  LEU C 229     131.928  25.660  35.710  1.00 73.63           C
ATOM   9383  CD1 LEU C 229     132.192  25.337  37.179  1.00 72.70           C
ATOM   9384  CD2 LEU C 229     131.232  24.483  35.034  1.00 73.16           C
ATOM   9385  C   LEU C 229     133.134  28.467  35.430  1.00 74.01           C
ATOM   9386  O   LEU C 229     133.221  28.824  34.261  1.00 74.32           O
ATOM   9387  N   SER C 230     134.192  28.292  36.210  1.00 73.68           N
ATOM   9388  CA  SER C 230     135.547  28.334  35.687  1.00 73.49           C
ATOM   9389  CB  SER C 230     136.304  29.537  36.232  1.00 73.66           C
ATOM   9390  OG  SER C 230     135.828  30.742  35.677  1.00 74.22           O
ATOM   9391  C   SER C 230     136.280  27.069  36.088  1.00 73.53           C
ATOM   9392  O   SER C 230     136.355  26.739  37.269  1.00 73.72           O
ATOM   9393  N   ILE C 231     136.797  26.345  35.101  1.00 73.51           N
ATOM   9394  CA  ILE C 231     137.717  25.238  35.357  1.00 73.25           C
ATOM   9395  CB  ILE C 231     137.071  23.860  35.104  1.00 72.91           C
ATOM   9396  CG1 ILE C 231     135.766  23.731  35.890  1.00 72.45           C
ATOM   9397  CD1 ILE C 231     134.841  22.627  35.396  1.00 71.89           C
ATOM   9398  CG2 ILE C 231     138.016  22.752  35.492  1.00 72.30           C
ATOM   9399  C   ILE C 231     138.933  25.486  34.470  1.00 73.61           C
ATOM   9400  O   ILE C 231     138.936  25.155  33.291  1.00 73.87           O
ATOM   9401  N   THR C 232     139.948  26.118  35.047  1.00 73.88           N
ATOM   9402  CA  THR C 232     141.107  26.584  34.294  1.00 74.27           C
ATOM   9403  CB  THR C 232     141.200  28.127  34.321  1.00 74.40           C
ATOM   9404  OG1 THR C 232     141.101  28.584  35.676  1.00 75.51           O
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ATOM   9405  CG2 THR C 232     140.081  28.751  33.508  1.00 74.41           C
ATOM   9406  C   THR C 232     142.415  26.006  34.837  1.00 74.31           C
ATOM   9407  O   THR C 232     142.500  25.634  36.012  1.00 74.33           O
ATOM   9408  N   HIS C 233     143.436  25.955  33.979  1.00 74.28           N
ATOM   9409  CA  HIS C 233     144.739  25.383  34.324  1.00 74.14           C
ATOM   9410  CB  HIS C 233     145.518  26.316  35.254  1.00 73.99           C
ATOM   9411  CG  HIS C 233     145.925  27.609  34.624  1.00 73.33           C
ATOM   9412  ND1 HIS C 233     147.027  27.722  33.806  1.00 72.66           N
ATOM   9413  CE1 HIS C 233     147.150  28.977  33.410  1.00 73.54           C
ATOM   9414  NE2 HIS C 233     146.169  29.683  33.945  1.00 73.53           N
ATOM   9415  CD2 HIS C 233     145.394  28.851  34.717  1.00 73.34           C
ATOM   9416  C   HIS C 233     144.624  23.994  34.966  1.00 74.37           C
ATOM   9417  O   HIS C 233     145.247  23.735  35.999  1.00 74.35           O
ATOM   9418  N   CYS C 234     143.820  23.116  34.370  1.00 74.34           N
ATOM   9419  CA  CYS C 234     143.724  21.743  34.846  1.00 74.68           C
ATOM   9420  CB  CYS C 234     142.304  21.439  35.298  1.00 74.82           C
ATOM   9421  SG  CYS C 234     141.777  22.463  36.675  1.00 75.54           S
ATOM   9422  C   CYS C 234     144.186  20.777  33.771  1.00 74.85           C
ATOM   9423  O   CYS C 234     144.790  21.207  32.795  1.00 75.41           O
ATOM   9424  N   ASN C 235     143.935  19.483  33.945  1.00 75.04           N
ATOM   9425  CA  ASN C 235     144.305  18.508  32.917  1.00 75.57           C
ATOM   9426  CB  ASN C 235     145.293  17.458  33.454  1.00 75.54           C
ATOM   9427  CG  ASN C 235     146.357  17.065  32.418  1.00 76.41           C
ATOM   9428  OD1 ASN C 235     146.907  15.954  32.452  1.00 78.91           O
ATOM   9429  ND2 ASN C 235     146.656  17.983  31.500  1.00 75.74           N
ATOM   9430  C   ASN C 235     143.091  17.845  32.257  1.00 75.81           C
ATOM   9431  O   ASN C 235     143.100  16.629  31.981  1.00 75.96           O
ATOM   9432  N   LEU C 236     142.053  18.648  32.013  1.00 75.72           N
ATOM   9433  CA  LEU C 236     140.862  18.182  31.310  1.00 75.83           C
ATOM   9434  CB  LEU C 236     139.708  19.163  31.496  1.00 75.67           C
ATOM   9435  CG  LEU C 236     139.086  19.320  32.883  1.00 76.12           C
ATOM   9436  CD1 LEU C 236     137.814  20.137  32.755  1.00 76.32           C
ATOM   9437  CD2 LEU C 236     138.787  17.969  33.552  1.00 76.51           C
ATOM   9438  C   LEU C 236     141.161  18.011  29.827  1.00 75.87           C
ATOM   9439  O   LEU C 236     141.780  18.877  29.219  1.00 76.09           O
ATOM   9440  N   THR C 237     140.726  16.895  29.251  1.00 75.94           N
ATOM   9441  CA  THR C 237     141.019  16.591  27.845  1.00 76.12           C
ATOM   9442  CB  THR C 237     141.639  15.193  27.674  1.00 76.20           C
ATOM   9443  OG1 THR C 237     140.924  14.245  28.471  1.00 76.56           O
ATOM   9444  CG2 THR C 237     143.107  15.208  28.093  1.00 76.26           C
ATOM   9445  C   THR C 237     139.822  16.738  26.913  1.00 76.06           C
ATOM   9446  O   THR C 237     139.962  16.684  25.697  1.00 76.31           O
ATOM   9447  N   ALA C 238     138.652  16.930  27.498  1.00 76.08           N
ATOM   9448  CA  ALA C 238     137.418  17.088  26.769  1.00 76.19           C
ATOM   9449  CB  ALA C 238     136.727  15.750  26.646  1.00 76.01           C
ATOM   9450  C   ALA C 238     136.575  18.034  27.593  1.00 76.53           C
ATOM   9451  O   ALA C 238     136.864  18.238  28.769  1.00 76.82           O
ATOM   9452  N   LEU C 239     135.542  18.625  27.000  1.00 76.86           N
ATOM   9453  CA  LEU C 239     134.566  19.341  27.801  1.00 77.04           C
ATOM   9454  CB  LEU C 239     133.588  20.103  26.948  1.00 77.39           C
ATOM   9455  CG  LEU C 239     134.011  21.518  26.669  1.00 78.67           C
ATOM   9456  CD1 LEU C 239     134.696  21.557  25.313  1.00 79.80           C
ATOM   9457  CD2 LEU C 239     132.765  22.389  26.715  1.00 80.32           C
ATOM   9458  C   LEU C 239     133.767  18.381  28.638  1.00 77.01           C
ATOM   9459  O   LEU C 239     133.389  17.301  28.164  1.00 76.79           O
ATOM   9460  N   PRO C 240     133.489  18.782  29.886  1.00 77.07           N
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ATOM	9461	CA	PRO	C	240	132.639	18.029	30.783	1.00	77.02	C
ATOM	9462	CB	PRO	C	240	132.966	18.640	32.139	1.00	77.11	C
ATOM	9463	CG	PRO	C	240	133.294	20.061	31.825	1.00	76.92	C
ATOM	9464	CD	PRO	C	240	133.976	20.031	30.501	1.00	77.04	C
ATOM	9465	C	PRO	C	240	131.179	18.276	30.373	1.00	77.06	C
ATOM	9466	O	PRO	C	240	130.443	18.990	31.056	1.00	77.39	O
ATOM	9467	N	TYR	C	241	130.790	17.703	29.237	1.00	76.79	N
ATOM	9468	CA	TYR	C	241	129.470	17.904	28.667	1.00	76.36	C
ATOM	9469	CB	TYR	C	241	129.342	17.141	27.355	1.00	75.99	C
ATOM	9470	CG	TYR	C	241	130.253	17.671	26.286	1.00	75.50	C
ATOM	9471	CD1	TYR	C	241	130.161	18.998	25.867	1.00	74.57	C
ATOM	9472	CE1	TYR	C	241	130.999	19.494	24.889	1.00	74.76	C
ATOM	9473	CZ	TYR	C	241	131.949	18.663	24.320	1.00	75.07	C
ATOM	9474	OH	TYR	C	241	132.779	19.165	23.351	1.00	76.29	O
ATOM	9475	CE2	TYR	C	241	132.066	17.345	24.719	1.00	74.17	C
ATOM	9476	CD2	TYR	C	241	131.217	16.855	25.697	1.00	74.61	C
ATOM	9477	C	TYR	C	241	128.377	17.492	29.628	1.00	76.60	C
ATOM	9478	O	TYR	C	241	127.514	18.300	29.969	1.00	76.74	O
ATOM	9479	N	LEU	C	242	128.428	16.240	30.069	1.00	76.74	N
ATOM	9480	CA	LEU	C	242	127.439	15.709	30.994	1.00	77.01	C
ATOM	9481	CB	LEU	C	242	127.641	14.203	31.191	1.00	77.14	C
ATOM	9482	CG	LEU	C	242	127.270	13.332	29.985	1.00	78.25	C
ATOM	9483	CD1	LEU	C	242	128.151	12.090	29.914	1.00	78.98	C
ATOM	9484	CD2	LEU	C	242	125.781	12.952	29.999	1.00	79.03	C
ATOM	9485	C	LEU	C	242	127.465	16.436	32.338	1.00	76.93	C
ATOM	9486	O	LEU	C	242	126.417	16.743	32.904	1.00	76.93	O
ATOM	9487	N	ALA	C	243	128.661	16.729	32.832	1.00	76.80	N
ATOM	9488	CA	ALA	C	243	128.804	17.356	34.133	1.00	76.80	C
ATOM	9489	CB	ALA	C	243	130.269	17.582	34.442	1.00	76.91	C
ATOM	9490	C	ALA	C	243	128.021	18.666	34.248	1.00	76.88	C
ATOM	9491	O	ALA	C	243	127.441	18.961	35.301	1.00	76.84	O
ATOM	9492	N	VAL	C	244	127.995	19.434	33.164	1.00	76.92	N
ATOM	9493	CA	VAL	C	244	127.392	20.768	33.173	1.00	77.23	C
ATOM	9494	CB	VAL	C	244	128.264	21.791	32.406	1.00	77.12	C
ATOM	9495	CG1	VAL	C	244	129.692	21.739	32.900	1.00	77.42	C
ATOM	9496	CG2	VAL	C	244	128.223	21.536	30.905	1.00	77.07	C
ATOM	9497	C	VAL	C	244	125.960	20.822	32.628	1.00	77.56	C
ATOM	9498	O	VAL	C	244	125.353	21.891	32.608	1.00	77.61	O
ATOM	9499	N	ARG	C	245	125.422	19.672	32.218	1.00	77.84	N
ATOM	9500	CA	ARG	C	245	124.161	19.604	31.457	1.00	78.43	C
ATOM	9501	CB	ARG	C	245	123.863	18.155	31.042	1.00	78.52	C
ATOM	9502	CG	ARG	C	245	123.127	17.384	32.137	1.00	79.90	C
ATOM	9503	CD	ARG	C	245	123.314	15.905	32.063	1.00	80.97	C
ATOM	9504	NE	ARG	C	245	123.404	15.376	33.419	1.00	82.31	N
ATOM	9505	CZ	ARG	C	245	123.142	14.117	33.746	1.00	83.57	C
ATOM	9506	NH1	ARG	C	245	123.253	13.730	35.009	1.00	82.89	N
ATOM	9507	NH2	ARG	C	245	122.765	13.248	32.807	1.00	84.39	N
ATOM	9508	C	ARG	C	245	122.924	20.189	32.164	1.00	78.51	C
ATOM	9509	O	ARG	C	245	121.884	20.395	31.524	1.00	78.96	O
ATOM	9510	N	HIS	C	246	123.017	20.421	33.472	1.00	78.31	N
ATOM	9511	CA	HIS	C	246	121.886	20.960	34.227	1.00	78.10	C
ATOM	9512	CB	HIS	C	246	121.649	20.176	35.525	1.00	78.44	C
ATOM	9513	CG	HIS	C	246	121.066	18.812	35.314	1.00	79.87	C
ATOM	9514	ND1	HIS	C	246	121.616	17.675	35.867	1.00	80.96	N
ATOM	9515	CE1	HIS	C	246	120.895	16.624	35.515	1.00	81.82	C
ATOM	9516	NE2	HIS	C	246	119.899	17.037	34.749	1.00	81.97	N

ATOM	9517	CD2	HIS	C	246	119.981	18.402	34.611	1.00	81.68	C
ATOM	9518	C	HIS	C	246	122.040	22.440	34.539	1.00	77.58	C
ATOM	9519	O	HIS	C	246	121.115	23.062	35.052	1.00	77.46	O
ATOM	9520	N	LEU	C	247	123.199	23.004	34.222	1.00	77.20	N
ATOM	9521	CA	LEU	C	247	123.471	24.402	34.535	1.00	76.97	C
ATOM	9522	CB	LEU	C	247	124.974	24.688	34.534	1.00	77.02	C
ATOM	9523	CG	LEU	C	247	125.848	23.821	35.445	1.00	76.66	C
ATOM	9524	CD1	LEU	C	247	127.239	24.417	35.455	1.00	76.67	C
ATOM	9525	CD2	LEU	C	247	125.293	23.678	36.873	1.00	75.53	C
ATOM	9526	C	LEU	C	247	122.716	25.310	33.578	1.00	76.81	C
ATOM	9527	O	LEU	C	247	123.278	26.078	32.809	1.00	77.30	O
ATOM	9528	N	VAL	C	248	121.409	25.218	33.676	1.00	76.57	N
ATOM	9529	CA	VAL	C	248	120.480	25.850	32.777	1.00	76.18	C
ATOM	9530	CB	VAL	C	248	119.073	25.269	33.086	1.00	76.38	C
ATOM	9531	CG1	VAL	C	248	117.964	26.287	32.896	1.00	77.33	C
ATOM	9532	CG2	VAL	C	248	118.841	23.986	32.270	1.00	75.84	C
ATOM	9533	C	VAL	C	248	120.525	27.385	32.813	1.00	75.77	C
ATOM	9534	O	VAL	C	248	119.999	28.034	31.912	1.00	75.77	O
ATOM	9535	N	TYR	C	249	121.171	27.958	33.828	1.00	75.49	N
ATOM	9536	CA	TYR	C	249	121.222	29.419	33.982	1.00	75.53	C
ATOM	9537	CB	TYR	C	249	120.612	29.845	35.308	1.00	75.57	C
ATOM	9538	CG	TYR	C	249	119.112	29.799	35.315	1.00	76.18	C
ATOM	9539	CD1	TYR	C	249	118.358	30.940	35.040	1.00	76.07	C
ATOM	9540	CE1	TYR	C	249	116.971	30.897	35.054	1.00	75.79	C
ATOM	9541	CZ	TYR	C	249	116.328	29.701	35.338	1.00	75.94	C
ATOM	9542	OH	TYR	C	249	114.953	29.641	35.349	1.00	76.98	O
ATOM	9543	CE2	TYR	C	249	117.053	28.555	35.604	1.00	75.78	C
ATOM	9544	CD2	TYR	C	249	118.433	28.606	35.593	1.00	76.45	C
ATOM	9545	C	TYR	C	249	122.616	30.026	33.843	1.00	75.47	C
ATOM	9546	O	TYR	C	249	122.781	31.250	33.934	1.00	75.16	O
ATOM	9547	N	LEU	C	250	123.602	29.162	33.616	1.00	75.52	N
ATOM	9548	CA	LEU	C	250	124.985	29.560	33.402	1.00	75.74	C
ATOM	9549	CB	LEU	C	250	125.795	28.345	32.947	1.00	75.57	C
ATOM	9550	CG	LEU	C	250	127.302	28.347	33.227	1.00	76.25	C
ATOM	9551	CD1	LEU	C	250	127.589	28.189	34.702	1.00	76.27	C
ATOM	9552	CD2	LEU	C	250	127.974	27.235	32.458	1.00	76.05	C
ATOM	9553	C	LEU	C	250	125.074	30.676	32.366	1.00	75.80	C
ATOM	9554	O	LEU	C	250	124.491	30.579	31.296	1.00	76.08	O
ATOM	9555	N	ARG	C	251	125.776	31.752	32.701	1.00	76.00	N
ATOM	9556	CA	ARG	C	251	125.958	32.862	31.769	1.00	76.02	C
ATOM	9557	CB	ARG	C	251	125.574	34.196	32.412	1.00	76.17	C
ATOM	9558	CG	ARG	C	251	124.079	34.365	32.611	1.00	77.35	C
ATOM	9559	CD	ARG	C	251	123.691	35.812	32.867	1.00	79.82	C
ATOM	9560	NE	ARG	C	251	124.237	36.316	34.122	1.00	82.60	N
ATOM	9561	CZ	ARG	C	251	123.625	36.244	35.307	1.00	84.35	C
ATOM	9562	NH1	ARG	C	251	122.424	35.678	35.429	1.00	84.44	N
ATOM	9563	NH2	ARG	C	251	124.224	36.738	36.386	1.00	84.85	N
ATOM	9564	C	ARG	C	251	127.390	32.918	31.278	1.00	75.84	C
ATOM	9565	O	ARG	C	251	127.655	33.420	30.191	1.00	75.90	O
ATOM	9566	N	PHE	C	252	128.308	32.387	32.080	1.00	75.71	N
ATOM	9567	CA	PHE	C	252	129.735	32.528	31.827	1.00	75.34	C
ATOM	9568	CB	PHE	C	252	130.301	33.622	32.729	1.00	75.19	C
ATOM	9569	CG	PHE	C	252	131.788	33.828	32.603	1.00	76.53	C
ATOM	9570	CD1	PHE	C	252	132.309	34.716	31.652	1.00	77.29	C
ATOM	9571	CE1	PHE	C	252	133.697	34.929	31.547	1.00	76.89	C
ATOM	9572	CZ	PHE	C	252	134.576	34.253	32.411	1.00	76.60	C

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ATOM   9573  CE2 PHE C 252     134.067  33.366  33.368  1.00 76.91           C
ATOM   9574  CD2 PHE C 252     132.680  33.165  33.465  1.00 77.19           C
ATOM   9575  C   PHE C 252     130.435  31.201  32.061  1.00 74.99           C
ATOM   9576  O   PHE C 252     130.324  30.611  33.131  1.00 74.94           O
ATOM   9577  N   LEU C 253     131.145  30.737  31.041  1.00 74.82           N
ATOM   9578  CA  LEU C 253     131.937  29.522  31.131  1.00 74.71           C
ATOM   9579  CB  LEU C 253     131.338  28.441  30.242  1.00 74.74           C
ATOM   9580  CG  LEU C 253     131.981  27.057  30.185  1.00 74.65           C
ATOM   9581  CD1 LEU C 253     131.862  26.330  31.530  1.00 74.33           C
ATOM   9582  CD2 LEU C 253     131.322  26.253  29.071  1.00 74.18           C
ATOM   9583  C   LEU C 253     133.379  29.798  30.718  1.00 75.10           C
ATOM   9584  O   LEU C 253     133.643  30.320  29.629  1.00 75.53           O
ATOM   9585  N   ASN C 254     134.311  29.459  31.601  1.00 74.97           N
ATOM   9586  CA  ASN C 254     135.723  29.602  31.313  1.00 74.79           C
ATOM   9587  CB  ASN C 254     136.352  30.660  32.221  1.00 74.74           C
ATOM   9588  CG  ASN C 254     137.756  31.039  31.801  1.00 75.51           C
ATOM   9589  OD1 ASN C 254     138.320  32.031  32.284  1.00 77.17           O
ATOM   9590  ND2 ASN C 254     138.339  30.256  30.902  1.00 76.39           N
ATOM   9591  C   ASN C 254     136.384  28.248  31.500  1.00 74.77           C
ATOM   9592  O   ASN C 254     136.321  27.668  32.589  1.00 75.00           O
ATOM   9593  N   LEU C 255     136.993  27.739  30.426  1.00 74.41           N
ATOM   9594  CA  LEU C 255     137.721  26.477  30.469  1.00 73.82           C
ATOM   9595  CB  LEU C 255     136.980  25.421  29.659  1.00 73.84           C
ATOM   9596  CG  LEU C 255     135.653  24.897  30.218  1.00 73.92           C
ATOM   9597  CD1 LEU C 255     134.931  24.059  29.180  1.00 71.92           C
ATOM   9598  CD2 LEU C 255     135.886  24.099  31.486  1.00 73.79           C
ATOM   9599  C   LEU C 255     139.160  26.614  29.968  1.00 73.80           C
ATOM   9600  O   LEU C 255     139.779  25.618  29.577  1.00 73.89           O
ATOM   9601  N   SER C 256     139.689  27.840  30.007  1.00 73.33           N
ATOM   9602  CA  SER C 256     141.015  28.164  29.475  1.00 73.17           C
ATOM   9603  CB  SER C 256     141.326  29.644  29.689  1.00 72.96           C
ATOM   9604  OG  SER C 256     140.346  30.478  29.129  1.00 72.50           O
ATOM   9605  C   SER C 256     142.147  27.340  30.093  1.00 73.38           C
ATOM   9606  O   SER C 256     142.097  26.994  31.271  1.00 73.69           O
ATOM   9607  N   TYR C 257     143.173  27.056  29.293  1.00 73.33           N
ATOM   9608  CA  TYR C 257     144.372  26.333  29.741  1.00 73.41           C
ATOM   9609  CB  TYR C 257     145.180  27.156  30.750  1.00 73.58           C
ATOM   9610  CG  TYR C 257     145.410  28.582  30.316  1.00 73.60           C
ATOM   9611  CD1 TYR C 257     146.413  28.907  29.408  1.00 72.90           C
ATOM   9612  CE1 TYR C 257     146.614  30.220  29.010  1.00 73.49           C
ATOM   9613  CZ  TYR C 257     145.796  31.223  29.522  1.00 73.89           C
ATOM   9614  OH  TYR C 257     145.971  32.536  29.152  1.00 74.80           O
ATOM   9615  CE2 TYR C 257     144.799  30.924  30.415  1.00 73.56           C
ATOM   9616  CD2 TYR C 257     144.616  29.608  30.813  1.00 73.94           C
ATOM   9617  C   TYR C 257     144.091  24.920  30.259  1.00 73.44           C
ATOM   9618  O   TYR C 257     144.596  24.508  31.296  1.00 73.51           O
ATOM   9619  N   ASN C 258     143.256  24.197  29.526  1.00 73.58           N
ATOM   9620  CA  ASN C 258     143.146  22.759  29.655  1.00 73.72           C
ATOM   9621  CB  ASN C 258     141.707  22.356  29.957  1.00 74.14           C
ATOM   9622  CG  ASN C 258     141.284  22.709  31.354  1.00 74.77           C
ATOM   9623  OD1 ASN C 258     141.596  21.994  32.300  1.00 76.30           O
ATOM   9624  ND2 ASN C 258     140.552  23.809  31.493  1.00 74.78           N
ATOM   9625  C   ASN C 258     143.532  22.178  28.309  1.00 73.53           C
ATOM   9626  O   ASN C 258     143.239  22.791  27.275  1.00 73.60           O
ATOM   9627  N   PRO C 259     144.174  20.996  28.303  1.00 73.21           N
ATOM   9628  CA  PRO C 259     144.520  20.329  27.047  1.00 72.94           C
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ATOM   9629  CB  PRO C 259     145.502  19.247  27.495  1.00 72.95           C
ATOM   9630  CG  PRO C 259     145.103  18.940  28.883  1.00 73.04           C
ATOM   9631  CD  PRO C 259     144.631  20.228  29.477  1.00 73.13           C
ATOM   9632  C   PRO C 259     143.298  19.727  26.330  1.00 72.71           C
ATOM   9633  O   PRO C 259     143.245  18.523  26.066  1.00 72.82           O
ATOM   9634  N   ILE C 260     142.328  20.577  26.020  1.00 72.39           N
ATOM   9635  CA  ILE C 260     141.118  20.177  25.321  1.00 72.31           C
ATOM   9636  CB  ILE C 260     139.928  21.047  25.772  1.00 72.10           C
ATOM   9637  CG1 ILE C 260     139.552  20.732  27.226  1.00 71.14           C
ATOM   9638  CD1 ILE C 260     138.629  21.751  27.871  1.00 69.36           C
ATOM   9639  CG2 ILE C 260     138.746  20.896  24.813  1.00 72.54           C
ATOM   9640  C   ILE C 260     141.368  20.392  23.838  1.00 72.69           C
ATOM   9641  O   ILE C 260     141.727  21.496  23.424  1.00 73.26           O
ATOM   9642  N   SER C 261     141.173  19.356  23.031  1.00 72.75           N
ATOM   9643  CA  SER C 261     141.543  19.437  21.615  1.00 72.81           C
ATOM   9644  CB  SER C 261     142.273  18.168  21.208  1.00 72.82           C
ATOM   9645  OG  SER C 261     141.384  17.076  21.288  1.00 74.24           O
ATOM   9646  C   SER C 261     140.374  19.694  20.661  1.00 72.60           C
ATOM   9647  O   SER C 261     140.572  19.943  19.475  1.00 72.19           O
ATOM   9648  N   THR C 262     139.157  19.623  21.184  1.00 72.82           N
ATOM   9649  CA  THR C 262     137.964  19.684  20.351  1.00 73.07           C
ATOM   9650  CB  THR C 262     137.679  18.332  19.612  1.00 73.31           C
ATOM   9651  OG1 THR C 262     136.295  18.266  19.263  1.00 74.13           O
ATOM   9652  CG2 THR C 262     138.013  17.107  20.480  1.00 73.50           C
ATOM   9653  C   THR C 262     136.741  20.075  21.149  1.00 73.03           C
ATOM   9654  O   THR C 262     136.636  19.755  22.327  1.00 72.88           O
ATOM   9655  N   ILE C 263     135.830  20.792  20.502  1.00 73.41           N
ATOM   9656  CA  ILE C 263     134.489  20.995  21.035  1.00 73.83           C
ATOM   9657  CB  ILE C 263     134.118  22.482  21.162  1.00 73.66           C
ATOM   9658  CG1 ILE C 263     135.105  23.191  22.092  1.00 73.76           C
ATOM   9659  CD1 ILE C 263     134.913  24.693  22.166  1.00 74.81           C
ATOM   9660  CG2 ILE C 263     132.697  22.637  21.696  1.00 73.02           C
ATOM   9661  C   ILE C 263     133.536  20.275  20.097  1.00 74.40           C
ATOM   9662  O   ILE C 263     133.622  20.403  18.874  1.00 74.67           O
ATOM   9663  N   GLU C 264     132.638  19.497  20.668  1.00 75.01           N
ATOM   9664  CA  GLU C 264     131.783  18.650  19.863  1.00 75.95           C
ATOM   9665  CB  GLU C 264     131.677  17.262  20.500  1.00 76.18           C
ATOM   9666  CG  GLU C 264     132.906  16.409  20.258  1.00 78.69           C
ATOM   9667  CD  GLU C 264     133.023  15.253  21.233  1.00 82.61           C
ATOM   9668  OE1 GLU C 264     133.208  15.515  22.441  1.00 84.90           O
ATOM   9669  OE2 GLU C 264     132.945  14.082  20.799  1.00 83.73           O
ATOM   9670  C   GLU C 264     130.406  19.263  19.608  1.00 75.78           C
ATOM   9671  O   GLU C 264     129.894  20.053  20.419  1.00 76.14           O
ATOM   9672  N   GLY C 265     129.811  18.875  18.483  1.00 75.49           N
ATOM   9673  CA  GLY C 265     128.495  19.350  18.102  1.00 75.11           C
ATOM   9674  C   GLY C 265     127.354  18.819  18.946  1.00 75.16           C
ATOM   9675  O   GLY C 265     127.350  17.648  19.352  1.00 74.86           O
ATOM   9676  N   SER C 266     126.397  19.709  19.209  1.00 75.43           N
ATOM   9677  CA  SER C 266     125.126  19.394  19.854  1.00 75.99           C
ATOM   9678  CB  SER C 266     124.276  18.495  18.940  1.00 75.91           C
ATOM   9679  OG  SER C 266     124.260  18.977  17.605  1.00 76.15           O
ATOM   9680  C   SER C 266     125.275  18.764  21.240  1.00 76.48           C
ATOM   9681  O   SER C 266     124.642  17.753  21.529  1.00 77.24           O
ATOM   9682  N   MET C 267     126.100  19.360  22.094  1.00 76.97           N
ATOM   9683  CA  MET C 267     126.381  18.801  23.419  1.00 77.40           C
ATOM   9684  CB  MET C 267     127.805  18.238  23.471  1.00 77.92           C
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ATOM	9685	CG	MET	C	267	128.113	17.095	22.521	1.00	78.73	C
ATOM	9686	SD	MET	C	267	127.472	15.519	23.103	1.00	80.64	S
ATOM	9687	CE	MET	C	267	127.203	14.673	21.533	1.00	81.13	C
ATOM	9688	C	MET	C	267	126.236	19.837	24.528	1.00	77.54	C
ATOM	9689	O	MET	C	267	126.459	19.532	25.688	1.00	77.83	O
ATOM	9690	N	LEU	C	268	125.892	21.067	24.171	1.00	77.91	N
ATOM	9691	CA	LEU	C	268	125.764	22.146	25.141	1.00	78.19	C
ATOM	9692	CB	LEU	C	268	126.901	23.152	24.975	1.00	77.86	C
ATOM	9693	CG	LEU	C	268	128.352	22.719	25.198	1.00	77.69	C
ATOM	9694	CD1	LEU	C	268	129.315	23.705	24.551	1.00	76.42	C
ATOM	9695	CD2	LEU	C	268	128.644	22.598	26.672	1.00	77.66	C
ATOM	9696	C	LEU	C	268	124.422	22.857	25.011	1.00	78.97	C
ATOM	9697	O	LEU	C	268	124.218	23.912	25.596	1.00	79.30	O
ATOM	9698	N	HIS	C	269	123.499	22.264	24.261	1.00	79.97	N
ATOM	9699	CA	HIS	C	269	122.234	22.920	23.919	1.00	81.19	C
ATOM	9700	CB	HIS	C	269	121.493	22.112	22.851	1.00	81.64	C
ATOM	9701	CG	HIS	C	269	121.197	20.710	23.268	1.00	84.46	C
ATOM	9702	ND1	HIS	C	269	122.153	19.716	23.254	1.00	87.09	N
ATOM	9703	CE1	HIS	C	269	121.617	18.589	23.694	1.00	88.59	C
ATOM	9704	NE2	HIS	C	269	120.349	18.818	23.996	1.00	88.36	N
ATOM	9705	CD2	HIS	C	269	120.064	20.140	23.745	1.00	87.15	C
ATOM	9706	C	HIS	C	269	121.334	23.149	25.135	1.00	81.13	C
ATOM	9707	O	HIS	C	269	120.388	23.938	25.079	1.00	81.10	O
ATOM	9708	N	GLU	C	270	121.642	22.460	26.226	1.00	81.29	N
ATOM	9709	CA	GLU	C	270	120.890	22.581	27.470	1.00	81.53	C
ATOM	9710	CB	GLU	C	270	121.256	21.433	28.410	1.00	81.90	C
ATOM	9711	CG	GLU	C	270	120.665	20.106	27.994	1.00	83.96	C
ATOM	9712	CD	GLU	C	270	119.144	20.102	28.086	1.00	88.10	C
ATOM	9713	OE1	GLU	C	270	118.593	20.814	28.966	1.00	90.20	O
ATOM	9714	OE2	GLU	C	270	118.493	19.387	27.285	1.00	89.36	O
ATOM	9715	C	GLU	C	270	121.141	23.918	28.156	1.00	80.93	C
ATOM	9716	O	GLU	C	270	120.264	24.449	28.838	1.00	80.95	O
ATOM	9717	N	LEU	C	271	122.342	24.451	27.956	1.00	80.26	N
ATOM	9718	CA	LEU	C	271	122.769	25.709	28.552	1.00	79.69	C
ATOM	9719	CB	LEU	C	271	124.295	25.734	28.664	1.00	79.65	C
ATOM	9720	CG	LEU	C	271	125.014	24.497	29.213	1.00	79.49	C
ATOM	9721	CD1	LEU	C	271	126.504	24.669	29.109	1.00	80.56	C
ATOM	9722	CD2	LEU	C	271	124.652	24.217	30.650	1.00	79.53	C
ATOM	9723	C	LEU	C	271	122.278	26.891	27.719	1.00	79.32	C
ATOM	9724	O	LEU	C	271	123.068	27.549	27.037	1.00	79.26	O
ATOM	9725	N	LEU	C	272	120.974	27.151	27.794	1.00	78.81	N
ATOM	9726	CA	LEU	C	272	120.297	28.150	26.960	1.00	78.65	C
ATOM	9727	CB	LEU	C	272	118.796	28.140	27.239	1.00	78.78	C
ATOM	9728	CG	LEU	C	272	118.080	26.795	27.304	1.00	79.94	C
ATOM	9729	CD1	LEU	C	272	117.032	26.815	28.407	1.00	79.87	C
ATOM	9730	CD2	LEU	C	272	117.473	26.395	25.942	1.00	81.48	C
ATOM	9731	C	LEU	C	272	120.789	29.583	27.148	1.00	78.32	C
ATOM	9732	O	LEU	C	272	120.701	30.394	26.225	1.00	78.30	O
ATOM	9733	N	ARG	C	273	121.289	29.894	28.339	1.00	77.89	N
ATOM	9734	CA	ARG	C	273	121.504	31.282	28.732	1.00	77.50	C
ATOM	9735	CB	ARG	C	273	120.927	31.526	30.119	1.00	77.41	C
ATOM	9736	CG	ARG	C	273	119.418	31.412	30.148	1.00	77.63	C
ATOM	9737	CD	ARG	C	273	118.856	31.712	31.514	1.00	77.80	C
ATOM	9738	NE	ARG	C	273	117.397	31.780	31.503	1.00	78.26	N
ATOM	9739	CZ	ARG	C	273	116.584	30.728	31.585	1.00	78.46	C
ATOM	9740	NH1	ARG	C	273	117.077	29.496	31.679	1.00	78.50	N

ATOM	9741	NH2	ARG	C	273	115.270	30.909	31.568	1.00	77.66	N
ATOM	9742	C	ARG	C	273	122.954	31.733	28.672	1.00	77.34	C
ATOM	9743	O	ARG	C	273	123.252	32.896	28.932	1.00	77.84	O
ATOM	9744	N	LEU	C	274	123.840	30.811	28.311	1.00	76.82	N
ATOM	9745	CA	LEU	C	274	125.272	31.054	28.203	1.00	76.01	C
ATOM	9746	CB	LEU	C	274	125.935	29.775	27.709	1.00	75.83	C
ATOM	9747	CG	LEU	C	274	127.383	29.456	28.030	1.00	75.34	C
ATOM	9748	CD1	LEU	C	274	127.692	29.716	29.507	1.00	75.82	C
ATOM	9749	CD2	LEU	C	274	127.621	28.007	27.669	1.00	74.07	C
ATOM	9750	C	LEU	C	274	125.570	32.192	27.243	1.00	75.95	C
ATOM	9751	O	LEU	C	274	125.147	32.155	26.095	1.00	75.99	O
ATOM	9752	N	GLN	C	275	126.309	33.192	27.716	1.00	75.93	N
ATOM	9753	CA	GLN	C	275	126.566	34.418	26.957	1.00	75.83	C
ATOM	9754	CB	GLN	C	275	126.103	35.631	27.758	1.00	75.73	C
ATOM	9755	CG	GLN	C	275	124.605	35.761	27.840	1.00	76.72	C
ATOM	9756	CD	GLN	C	275	124.144	36.751	28.894	1.00	77.49	C
ATOM	9757	OE1	GLN	C	275	124.801	37.760	29.153	1.00	77.78	O
ATOM	9758	NE2	GLN	C	275	122.997	36.465	29.508	1.00	77.08	N
ATOM	9759	C	GLN	C	275	128.031	34.610	26.573	1.00	75.76	C
ATOM	9760	O	GLN	C	275	128.345	35.350	25.631	1.00	76.06	O
ATOM	9761	N	GLU	C	276	128.923	33.953	27.305	1.00	75.32	N
ATOM	9762	CA	GLU	C	276	130.344	34.174	27.141	1.00	75.22	C
ATOM	9763	CB	GLU	C	276	130.801	35.262	28.100	1.00	75.32	C
ATOM	9764	CG	GLU	C	276	132.299	35.469	28.119	1.00	78.37	C
ATOM	9765	CD	GLU	C	276	132.726	36.781	28.783	1.00	82.12	C
ATOM	9766	OE1	GLU	C	276	131.845	37.596	29.160	1.00	84.06	O
ATOM	9767	OE2	GLU	C	276	133.955	36.997	28.919	1.00	82.59	O
ATOM	9768	C	GLU	C	276	131.099	32.889	27.407	1.00	74.73	C
ATOM	9769	O	GLU	C	276	130.945	32.288	28.467	1.00	75.09	O
ATOM	9770	N	ILE	C	277	131.901	32.460	26.438	1.00	74.17	N
ATOM	9771	CA	ILE	C	277	132.709	31.261	26.586	1.00	73.72	C
ATOM	9772	CB	ILE	C	277	132.293	30.159	25.599	1.00	73.56	C
ATOM	9773	CG1	ILE	C	277	130.873	29.684	25.894	1.00	73.20	C
ATOM	9774	CD1	ILE	C	277	130.373	28.631	24.947	1.00	72.29	C
ATOM	9775	CG2	ILE	C	277	133.251	28.977	25.679	1.00	73.64	C
ATOM	9776	C	ILE	C	277	134.179	31.596	26.379	1.00	73.99	C
ATOM	9777	O	ILE	C	277	134.576	32.041	25.297	1.00	74.23	O
ATOM	9778	N	GLN	C	278	134.978	31.382	27.422	1.00	73.91	N
ATOM	9779	CA	GLN	C	278	136.422	31.551	27.337	1.00	73.72	C
ATOM	9780	CB	GLN	C	278	136.954	32.360	28.518	1.00	73.82	C
ATOM	9781	CG	GLN	C	278	136.311	33.743	28.698	1.00	74.52	C
ATOM	9782	CD	GLN	C	278	136.925	34.818	27.819	1.00	75.62	C
ATOM	9783	OE1	GLN	C	278	138.096	34.749	27.436	1.00	76.23	O
ATOM	9784	NE2	GLN	C	278	136.136	35.834	27.509	1.00	76.29	N
ATOM	9785	C	GLN	C	278	137.091	30.182	27.290	1.00	73.68	C
ATOM	9786	O	GLN	C	278	136.791	29.281	28.088	1.00	73.32	O
ATOM	9787	N	LEU	C	279	137.981	30.028	26.319	1.00	73.70	N
ATOM	9788	CA	LEU	C	279	138.753	28.810	26.167	1.00	73.59	C
ATOM	9789	CB	LEU	C	279	137.956	27.755	25.395	1.00	73.74	C
ATOM	9790	CG	LEU	C	279	138.153	26.323	25.900	1.00	73.94	C
ATOM	9791	CD1	LEU	C	279	137.196	25.433	25.175	1.00	74.19	C
ATOM	9792	CD2	LEU	C	279	139.596	25.807	25.745	1.00	73.59	C
ATOM	9793	C	LEU	C	279	140.059	29.130	25.458	1.00	73.46	C
ATOM	9794	O	LEU	C	279	140.282	28.697	24.325	1.00	73.48	O
ATOM	9795	N	VAL	C	280	140.916	29.896	26.133	1.00	73.15	N
ATOM	9796	CA	VAL	C	280	142.192	30.293	25.561	1.00	72.95	C

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ATOM   9797  CB  VAL C 280     142.539  31.802  25.842  1.00 72.88           C
ATOM   9798  CG1 VAL C 280     141.277  32.626  26.038  1.00 72.11           C
ATOM   9799  CG2 VAL C 280     143.447  31.962  27.033  1.00 72.66           C
ATOM   9800  C   VAL C 280     143.303  29.341  26.015  1.00 73.14           C
ATOM   9801  O   VAL C 280     143.205  28.711  27.074  1.00 73.24           O
ATOM   9802  N   GLY C 281     144.340  29.212  25.197  1.00 73.02           N
ATOM   9803  CA  GLY C 281     145.501  28.421  25.569  1.00 73.35           C
ATOM   9804  C   GLY C 281     145.236  26.940  25.728  1.00 73.79           C
ATOM   9805  O   GLY C 281     146.004  26.234  26.380  1.00 73.82           O
ATOM   9806  N   GLY C 282     144.146  26.462  25.138  1.00 74.27           N
ATOM   9807  CA  GLY C 282     143.868  25.029  25.113  1.00 74.91           C
ATOM   9808  C   GLY C 282     144.636  24.362  23.987  1.00 75.24           C
ATOM   9809  O   GLY C 282     145.670  24.863  23.541  1.00 75.53           O
ATOM   9810  N   GLN C 283     144.130  23.232  23.518  1.00 75.40           N
ATOM   9811  CA  GLN C 283     144.713  22.586  22.362  1.00 75.66           C
ATOM   9812  CB  GLN C 283     145.350  21.269  22.770  1.00 76.01           C
ATOM   9813  CG  GLN C 283     146.770  21.454  23.268  1.00 80.20           C
ATOM   9814  CD  GLN C 283     147.269  20.268  24.085  1.00 85.52           C
ATOM   9815  OE1 GLN C 283     147.156  19.109  23.661  1.00 87.62           O
ATOM   9816  NE2 GLN C 283     147.830  20.554  25.266  1.00 86.74           N
ATOM   9817  C   GLN C 283     143.698  22.399  21.244  1.00 75.06           C
ATOM   9818  O   GLN C 283     143.827  21.487  20.435  1.00 75.17           O
ATOM   9819  N   LEU C 284     142.696  23.273  21.190  1.00 74.50           N
ATOM   9820  CA  LEU C 284     141.626  23.133  20.210  1.00 74.18           C
ATOM   9821  CB  LEU C 284     140.621  24.285  20.308  1.00 73.87           C
ATOM   9822  CG  LEU C 284     139.720  24.387  21.534  1.00 73.63           C
ATOM   9823  CD1 LEU C 284     138.734  25.510  21.345  1.00 72.60           C
ATOM   9824  CD2 LEU C 284     138.991  23.089  21.807  1.00 72.93           C
ATOM   9825  C   LEU C 284     142.173  23.042  18.788  1.00 74.07           C
ATOM   9826  O   LEU C 284     142.955  23.889  18.369  1.00 74.28           O
ATOM   9827  N   ALA C 285     141.774  22.002  18.066  1.00 73.68           N
ATOM   9828  CA  ALA C 285     142.083  21.884  16.657  1.00 73.65           C
ATOM   9829  CB  ALA C 285     142.753  20.571  16.379  1.00 73.42           C
ATOM   9830  C   ALA C 285     140.796  22.012  15.847  1.00 73.98           C
ATOM   9831  O   ALA C 285     140.830  22.384  14.674  1.00 74.15           O
ATOM   9832  N   VAL C 286     139.665  21.696  16.481  1.00 74.15           N
ATOM   9833  CA  VAL C 286     138.346  21.754  15.837  1.00 74.26           C
ATOM   9834  CB  VAL C 286     137.834  20.364  15.348  1.00 74.18           C
ATOM   9835  CG1 VAL C 286     136.890  20.539  14.175  1.00 73.96           C
ATOM   9836  CG2 VAL C 286     138.956  19.459  14.969  1.00 74.01           C
ATOM   9837  C   VAL C 286     137.288  22.217  16.814  1.00 74.40           C
ATOM   9838  O   VAL C 286     137.181  21.690  17.923  1.00 74.51           O
ATOM   9839  N   VAL C 287     136.493  23.187  16.392  1.00 74.51           N
ATOM   9840  CA  VAL C 287     135.207  23.429  17.022  1.00 74.67           C
ATOM   9841  CB  VAL C 287     134.988  24.918  17.318  1.00 74.50           C
ATOM   9842  CG1 VAL C 287     133.633  25.138  17.946  1.00 74.30           C
ATOM   9843  CG2 VAL C 287     136.090  25.428  18.236  1.00 74.32           C
ATOM   9844  C   VAL C 287     134.217  22.915  15.996  1.00 75.16           C
ATOM   9845  O   VAL C 287     134.131  23.450  14.893  1.00 75.53           O
ATOM   9846  N   GLU C 288     133.500  21.849  16.323  1.00 75.73           N
ATOM   9847  CA  GLU C 288     132.638  21.216  15.328  1.00 76.23           C
ATOM   9848  CB  GLU C 288     132.354  19.764  15.703  1.00 76.44           C
ATOM   9849  CG  GLU C 288     133.170  18.829  14.814  1.00 80.40           C
ATOM   9850  CD  GLU C 288     133.481  17.454  15.415  1.00 85.12           C
ATOM   9851  OE1 GLU C 288     133.358  17.258  16.653  1.00 86.79           O
ATOM   9852  OE2 GLU C 288     133.875  16.565  14.619  1.00 87.26           O
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ATOM   9853  C   GLU C 288     131.366  22.011  15.000  1.00 75.73           C
ATOM   9854  O   GLU C 288     130.847  22.724  15.850  1.00 75.93           O
ATOM   9855  N   PRO C 289     130.875  21.916  13.750  1.00 75.53           N
ATOM   9856  CA  PRO C 289     129.569  22.503  13.443  1.00 75.28           C
ATOM   9857  CB  PRO C 289     129.204  21.844  12.116  1.00 74.96           C
ATOM   9858  CG  PRO C 289     130.506  21.588  11.464  1.00 74.92           C
ATOM   9859  CD  PRO C 289     131.484  21.282  12.563  1.00 75.34           C
ATOM   9860  C   PRO C 289     128.550  22.106  14.500  1.00 75.26           C
ATOM   9861  O   PRO C 289     128.583  20.968  14.982  1.00 75.39           O
ATOM   9862  N   TYR C 290     127.665  23.035  14.863  1.00 75.04           N
ATOM   9863  CA  TYR C 290     126.621  22.799  15.881  1.00 74.51           C
ATOM   9864  CB  TYR C 290     125.749  21.599  15.516  1.00 74.28           C
ATOM   9865  CG  TYR C 290     124.579  21.899  14.605  1.00 75.05           C
ATOM   9866  CD1 TYR C 290     124.611  22.960  13.693  1.00 75.79           C
ATOM   9867  CE1 TYR C 290     123.520  23.215  12.842  1.00 75.97           C
ATOM   9868  CZ  TYR C 290     122.403  22.393  12.904  1.00 75.19           C
ATOM   9869  OH  TYR C 290     121.324  22.614  12.078  1.00 75.01           O
ATOM   9870  CE2 TYR C 290     122.360  21.329  13.791  1.00 75.12           C
ATOM   9871  CD2 TYR C 290     123.439  21.086  14.629  1.00 75.23           C
ATOM   9872  C   TYR C 290     127.174  22.646  17.305  1.00 74.30           C
ATOM   9873  O   TYR C 290     126.482  22.168  18.203  1.00 74.30           O
ATOM   9874  N   ALA C 291     128.416  23.069  17.513  1.00 73.85           N
ATOM   9875  CA  ALA C 291     128.996  23.068  18.838  1.00 73.52           C
ATOM   9876  CB  ALA C 291     130.410  23.580  18.788  1.00 73.58           C
ATOM   9877  C   ALA C 291     128.154  23.929  19.762  1.00 73.38           C
ATOM   9878  O   ALA C 291     127.981  23.596  20.935  1.00 73.15           O
ATOM   9879  N   PHE C 292     127.622  25.025  19.221  1.00 73.31           N
ATOM   9880  CA  PHE C 292     126.888  25.995  20.022  1.00 73.45           C
ATOM   9881  CB  PHE C 292     127.564  27.368  19.992  1.00 73.21           C
ATOM   9882  CG  PHE C 292     129.013  27.343  20.430  1.00 72.69           C
ATOM   9883  CD1 PHE C 292     129.394  26.686  21.591  1.00 71.88           C
ATOM   9884  CE1 PHE C 292     130.715  26.645  21.989  1.00 72.25           C
ATOM   9885  CZ  PHE C 292     131.680  27.283  21.240  1.00 72.88           C
ATOM   9886  CE2 PHE C 292     131.319  27.958  20.083  1.00 73.27           C
ATOM   9887  CD2 PHE C 292     129.987  27.981  19.683  1.00 72.96           C
ATOM   9888  C   PHE C 292     125.431  26.096  19.623  1.00 74.13           C
ATOM   9889  O   PHE C 292     124.790  27.114  19.868  1.00 74.39           O
ATOM   9890  N   ARG C 293     124.914  25.027  19.019  1.00 74.76           N
ATOM   9891  CA  ARG C 293     123.480  24.862  18.802  1.00 75.51           C
ATOM   9892  CB  ARG C 293     123.181  23.475  18.222  1.00 75.70           C
ATOM   9893  CG  ARG C 293     121.857  23.372  17.486  1.00 78.20           C
ATOM   9894  CD  ARG C 293     121.901  24.205  16.178  1.00 83.63           C
ATOM   9895  NE  ARG C 293     120.665  24.115  15.383  1.00 87.07           N
ATOM   9896  CZ  ARG C 293     120.350  24.949  14.388  1.00 88.80           C
ATOM   9897  NH1 ARG C 293     121.178  25.953  14.067  1.00 88.49           N
ATOM   9898  NH2 ARG C 293     119.203  24.789  13.718  1.00 88.29           N
ATOM   9899  C   ARG C 293     122.726  25.033  20.121  1.00 75.44           C
ATOM   9900  O   ARG C 293     123.150  24.506  21.153  1.00 75.47           O
ATOM   9901  N   GLY C 294     121.614  25.767  20.081  1.00 75.43           N
ATOM   9902  CA  GLY C 294     120.785  25.984  21.265  1.00 75.20           C
ATOM   9903  C   GLY C 294     121.206  27.188  22.082  1.00 75.17           C
ATOM   9904  O   GLY C 294     120.473  27.635  22.971  1.00 75.25           O
ATOM   9905  N   LEU C 295     122.386  27.715  21.774  1.00 75.03           N
ATOM   9906  CA  LEU C 295     122.936  28.859  22.486  1.00 75.13           C
ATOM   9907  CB  LEU C 295     124.446  28.696  22.685  1.00 75.05           C
ATOM   9908  CG  LEU C 295     124.936  27.846  23.862  1.00 74.69           C
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ATOM	9909	CD1	LEU	C	295	124.225	26.517	23.972	1.00	74.06	C
ATOM	9910	CD2	LEU	C	295	126.431	27.633	23.762	1.00	74.58	C
ATOM	9911	C	LEU	C	295	122.600	30.153	21.744	1.00	75.47	C
ATOM	9912	O	LEU	C	295	123.449	30.755	21.082	1.00	75.59	O
ATOM	9913	N	ASN	C	296	121.345	30.567	21.872	1.00	75.78	N
ATOM	9914	CA	ASN	C	296	120.827	31.746	21.196	1.00	76.17	C
ATOM	9915	CB	ASN	C	296	119.297	31.805	21.344	1.00	76.50	C
ATOM	9916	CG	ASN	C	296	118.574	30.680	20.579	1.00	77.44	C
ATOM	9917	OD1	ASN	C	296	119.122	29.598	20.346	1.00	78.77	O
ATOM	9918	ND2	ASN	C	296	117.329	30.938	20.202	1.00	78.12	N
ATOM	9919	C	ASN	C	296	121.439	33.072	21.643	1.00	76.15	C
ATOM	9920	O	ASN	C	296	121.372	34.054	20.905	1.00	75.99	O
ATOM	9921	N	TYR	C	297	122.039	33.103	22.833	1.00	76.37	N
ATOM	9922	CA	TYR	C	297	122.450	34.372	23.442	1.00	76.60	C
ATOM	9923	CB	TYR	C	297	121.688	34.615	24.753	1.00	77.00	C
ATOM	9924	CG	TYR	C	297	120.186	34.576	24.552	1.00	78.27	C
ATOM	9925	CD1	TYR	C	297	119.537	35.535	23.765	1.00	78.71	C
ATOM	9926	CE1	TYR	C	297	118.158	35.483	23.555	1.00	79.43	C
ATOM	9927	CZ	TYR	C	297	117.406	34.462	24.140	1.00	79.38	C
ATOM	9928	OH	TYR	C	297	116.035	34.398	23.940	1.00	79.43	O
ATOM	9929	CE2	TYR	C	297	118.027	33.498	24.918	1.00	79.16	C
ATOM	9930	CD2	TYR	C	297	119.414	33.556	25.116	1.00	79.37	C
ATOM	9931	C	TYR	C	297	123.957	34.552	23.613	1.00	76.42	C
ATOM	9932	O	TYR	C	297	124.404	35.466	24.314	1.00	76.70	O
ATOM	9933	N	LEU	C	298	124.727	33.703	22.938	1.00	75.90	N
ATOM	9934	CA	LEU	C	298	126.183	33.728	23.001	1.00	75.69	C
ATOM	9935	CB	LEU	C	298	126.750	32.490	22.306	1.00	75.49	C
ATOM	9936	CG	LEU	C	298	128.253	32.210	22.339	1.00	75.57	C
ATOM	9937	CD1	LEU	C	298	128.768	32.116	23.772	1.00	75.84	C
ATOM	9938	CD2	LEU	C	298	128.592	30.941	21.566	1.00	74.84	C
ATOM	9939	C	LEU	C	298	126.743	35.008	22.381	1.00	76.17	C
ATOM	9940	O	LEU	C	298	126.607	35.235	21.178	1.00	76.26	O
ATOM	9941	N	ARG	C	299	127.358	35.844	23.217	1.00	76.48	N
ATOM	9942	CA	ARG	C	299	127.869	37.151	22.789	1.00	77.05	C
ATOM	9943	CB	ARG	C	299	127.580	38.223	23.838	1.00	76.88	C
ATOM	9944	CG	ARG	C	299	126.133	38.649	23.973	1.00	78.67	C
ATOM	9945	CD	ARG	C	299	126.013	39.903	24.861	1.00	79.21	C
ATOM	9946	NE	ARG	C	299	127.169	40.064	25.754	1.00	84.19	N
ATOM	9947	CZ	ARG	C	299	127.223	39.643	27.019	1.00	85.85	C
ATOM	9948	NH1	ARG	C	299	126.181	39.035	27.575	1.00	87.35	N
ATOM	9949	NH2	ARG	C	299	128.325	39.836	27.735	1.00	86.03	N
ATOM	9950	C	ARG	C	299	129.368	37.143	22.557	1.00	76.23	C
ATOM	9951	O	ARG	C	299	129.865	37.803	21.646	1.00	76.38	O
ATOM	9952	N	VAL	C	300	130.085	36.418	23.408	1.00	75.47	N
ATOM	9953	CA	VAL	C	300	131.532	36.513	23.455	1.00	74.64	C
ATOM	9954	CB	VAL	C	300	132.007	37.219	24.755	1.00	74.57	C
ATOM	9955	CG1	VAL	C	300	133.508	37.385	24.769	1.00	74.79	C
ATOM	9956	CG2	VAL	C	300	131.350	38.578	24.909	1.00	74.65	C
ATOM	9957	C	VAL	C	300	132.121	35.121	23.391	1.00	74.12	C
ATOM	9958	O	VAL	C	300	131.759	34.255	24.172	1.00	74.11	O
ATOM	9959	N	LEU	C	301	133.018	34.909	22.438	1.00	73.62	N
ATOM	9960	CA	LEU	C	301	133.808	33.691	22.394	1.00	72.97	C
ATOM	9961	CB	LEU	C	301	133.367	32.804	21.237	1.00	72.58	C
ATOM	9962	CG	LEU	C	301	134.177	31.528	21.036	1.00	72.01	C
ATOM	9963	CD1	LEU	C	301	133.955	30.545	22.178	1.00	71.71	C
ATOM	9964	CD2	LEU	C	301	133.815	30.906	19.710	1.00	72.26	C

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ATOM   9965  C   LEU C 301     135.285  34.025  22.265  1.00 72.93           C
ATOM   9966  O   LEU C 301     135.688  34.729  21.342  1.00 73.04           O
ATOM   9967  N   ASN C 302     136.087  33.523  23.201  1.00 72.84           N
ATOM   9968  CA  ASN C 302     137.538  33.682  23.146  1.00 72.57           C
ATOM   9969  CB  ASN C 302     138.048  34.437  24.381  1.00 72.27           C
ATOM   9970  CG  ASN C 302     139.479  34.948  24.214  1.00 73.03           C
ATOM   9971  OD1 ASN C 302     139.996  35.712  25.049  1.00 73.29           O
ATOM   9972  ND2 ASN C 302     140.129  34.527  23.137  1.00 72.66           N
ATOM   9973  C   ASN C 302     138.240  32.328  22.994  1.00 72.48           C
ATOM   9974  O   ASN C 302     138.224  31.509  23.919  1.00 72.23           O
ATOM   9975  N   VAL C 303     138.837  32.102  21.820  1.00 72.39           N
ATOM   9976  CA  VAL C 303     139.588  30.870  21.535  1.00 72.24           C
ATOM   9977  CB  VAL C 303     138.905  29.957  20.472  1.00 72.07           C
ATOM   9978  CG1 VAL C 303     137.806  29.139  21.114  1.00 71.82           C
ATOM   9979  CG2 VAL C 303     138.381  30.755  19.282  1.00 71.21           C
ATOM   9980  C   VAL C 303     141.033  31.151  21.152  1.00 72.64           C
ATOM   9981  O   VAL C 303     141.671  30.376  20.434  1.00 73.07           O
ATOM   9982  N   SER C 304     141.546  32.262  21.662  1.00 72.89           N
ATOM   9983  CA  SER C 304     142.927  32.678  21.468  1.00 72.73           C
ATOM   9984  CB  SER C 304     143.144  33.967  22.240  1.00 72.78           C
ATOM   9985  OG  SER C 304     144.399  34.530  21.951  1.00 74.61           O
ATOM   9986  C   SER C 304     143.924  31.634  21.952  1.00 72.67           C
ATOM   9987  O   SER C 304     143.725  31.010  22.985  1.00 72.28           O
ATOM   9988  N   GLY C 305     144.999  31.444  21.196  1.00 73.12           N
ATOM   9989  CA  GLY C 305     146.093  30.577  21.627  1.00 73.63           C
ATOM   9990  C   GLY C 305     145.817  29.089  21.535  1.00 74.13           C
ATOM   9991  O   GLY C 305     146.248  28.314  22.382  1.00 74.21           O
ATOM   9992  N   ASN C 306     145.104  28.687  20.492  1.00 74.87           N
ATOM   9993  CA  ASN C 306     144.827  27.283  20.239  1.00 75.27           C
ATOM   9994  CB  ASN C 306     143.325  27.060  20.201  1.00 75.28           C
ATOM   9995  CG  ASN C 306     142.717  27.029  21.573  1.00 75.62           C
ATOM   9996  OD1 ASN C 306     142.804  26.022  22.277  1.00 76.21           O
ATOM   9997  ND2 ASN C 306     142.085  28.128  21.963  1.00 75.25           N
ATOM   9998  C   ASN C 306     145.479  26.831  18.941  1.00 75.59           C
ATOM   9999  O   ASN C 306     146.473  27.423  18.516  1.00 75.71           O
ATOM  10000  N   GLN C 307     144.922  25.793  18.317  1.00 75.98           N
ATOM  10001  CA  GLN C 307     145.445  25.266  17.063  1.00 76.53           C
ATOM  10002  CB  GLN C 307     146.054  23.893  17.284  1.00 77.01           C
ATOM  10003  CG  GLN C 307     147.424  23.940  17.921  1.00 81.74           C
ATOM  10004  CD  GLN C 307     147.969  22.547  18.250  1.00 88.19           C
ATOM  10005  OE1 GLN C 307     147.228  21.543  18.230  1.00 89.72           O
ATOM  10006  NE2 GLN C 307     149.276  22.478  18.558  1.00 89.79           N
ATOM  10007  C   GLN C 307     144.397  25.206  15.958  1.00 75.89           C
ATOM  10008  O   GLN C 307     144.516  24.417  15.025  1.00 76.11           O
ATOM  10009  N   LEU C 308     143.377  26.049  16.059  1.00 75.33           N
ATOM  10010  CA  LEU C 308     142.309  26.082  15.067  1.00 74.80           C
ATOM  10011  CB  LEU C 308     141.203  27.035  15.511  1.00 74.45           C
ATOM  10012  CG  LEU C 308     140.577  26.677  16.856  1.00 73.73           C
ATOM  10013  CD1 LEU C 308     139.677  27.784  17.330  1.00 72.02           C
ATOM  10014  CD2 LEU C 308     139.826  25.362  16.755  1.00 73.31           C
ATOM  10015  C   LEU C 308     142.840  26.514  13.722  1.00 74.77           C
ATOM  10016  O   LEU C 308     143.642  27.433  13.649  1.00 75.19           O
ATOM  10017  N   THR C 309     142.403  25.845  12.660  1.00 74.80           N
ATOM  10018  CA  THR C 309     142.729  26.274  11.294  1.00 74.71           C
ATOM  10019  CB  THR C 309     143.192  25.106  10.387  1.00 74.61           C
ATOM  10020  OG1 THR C 309     142.134  24.150  10.255  1.00 74.79           O
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ATOM  10021  CG2 THR C 309     144.436  24.428  10.956  1.00 74.29           C
ATOM  10022  C   THR C 309     141.541  26.969  10.641  1.00 74.61           C
ATOM  10023  O   THR C 309     141.689  27.623   9.620  1.00 74.75           O
ATOM  10024  N   THR C 310     140.366  26.811  11.236  1.00 74.61           N
ATOM  10025  CA  THR C 310     139.154  27.450  10.752  1.00 74.91           C
ATOM  10026  CB  THR C 310     138.482  26.645   9.609  1.00 75.04           C
ATOM  10027  OG1 THR C 310     137.415  27.421   9.058  1.00 76.49           O
ATOM  10028  CG2 THR C 310     137.911  25.301  10.098  1.00 73.80           C
ATOM  10029  C   THR C 310     138.151  27.613  11.880  1.00 75.12           C
ATOM  10030  O   THR C 310     138.287  26.985  12.933  1.00 75.37           O
ATOM  10031  N   LEU C 311     137.152  28.464  11.657  1.00 75.31           N
ATOM  10032  CA  LEU C 311     135.968  28.511  12.509  1.00 75.49           C
ATOM  10033  CB  LEU C 311     136.062  29.615  13.556  1.00 75.11           C
ATOM  10034  CG  LEU C 311     135.000  29.496  14.654  1.00 74.83           C
ATOM  10035  CD1 LEU C 311     135.390  28.445  15.685  1.00 73.58           C
ATOM  10036  CD2 LEU C 311     134.767  30.834  15.320  1.00 75.23           C
ATOM  10037  C   LEU C 311     134.719  28.687  11.650  1.00 76.21           C
ATOM  10038  O   LEU C 311     134.356  29.813  11.269  1.00 76.61           O
ATOM  10039  N   GLU C 312     134.068  27.562  11.357  1.00 76.50           N
ATOM  10040  CA  GLU C 312     132.905  27.533  10.483  1.00 77.15           C
ATOM  10041  CB  GLU C 312     132.584  26.100  10.064  1.00 77.24           C
ATOM  10042  CG  GLU C 312     133.676  25.528   9.188  1.00 79.83           C
ATOM  10043  CD  GLU C 312     133.297  24.231   8.515  1.00 83.70           C
ATOM  10044  OE1 GLU C 312     133.019  24.255   7.284  1.00 84.97           O
ATOM  10045  OE2 GLU C 312     133.297  23.189   9.213  1.00 85.53           O
ATOM  10046  C   GLU C 312     131.701  28.209  11.116  1.00 77.11           C
ATOM  10047  O   GLU C 312     131.491  28.116  12.318  1.00 77.15           O
ATOM  10048  N   GLU C 313     130.918  28.889  10.286  1.00 77.25           N
ATOM  10049  CA  GLU C 313     129.804  29.693  10.751  1.00 77.41           C
ATOM  10050  CB  GLU C 313     129.215  30.468   9.584  1.00 77.32           C
ATOM  10051  CG  GLU C 313     128.186  31.479   9.985  1.00 78.86           C
ATOM  10052  CD  GLU C 313     127.828  32.417   8.862  1.00 82.14           C
ATOM  10053  OE1 GLU C 313     128.244  32.151   7.706  1.00 82.90           O
ATOM  10054  OE2 GLU C 313     127.130  33.425   9.140  1.00 83.13           O
ATOM  10055  C   GLU C 313     128.724  28.858  11.438  1.00 77.38           C
ATOM  10056  O   GLU C 313     128.061  29.323  12.373  1.00 77.68           O
ATOM  10057  N   SER C 314     128.565  27.620  10.977  1.00 77.03           N
ATOM  10058  CA  SER C 314     127.547  26.730  11.489  1.00 76.12           C
ATOM  10059  CB  SER C 314     127.474  25.488  10.622  1.00 76.08           C
ATOM  10060  OG  SER C 314     128.624  24.692  10.801  1.00 76.33           O
ATOM  10061  C   SER C 314     127.794  26.309  12.924  1.00 76.12           C
ATOM  10062  O   SER C 314     126.946  25.644  13.514  1.00 76.65           O
ATOM  10063  N   VAL C 315     128.938  26.670  13.499  1.00 75.71           N
ATOM  10064  CA  VAL C 315     129.174  26.281  14.884  1.00 75.37           C
ATOM  10065  CB  VAL C 315     130.671  26.363  15.364  1.00 75.30           C
ATOM  10066  CG1 VAL C 315     131.608  25.651  14.399  1.00 74.48           C
ATOM  10067  CG2 VAL C 315     131.112  27.771  15.608  1.00 74.68           C
ATOM  10068  C   VAL C 315     128.259  27.067  15.798  1.00 75.36           C
ATOM  10069  O   VAL C 315     127.933  26.606  16.881  1.00 75.93           O
ATOM  10070  N   PHE C 316     127.824  28.236  15.341  1.00 75.14           N
ATOM  10071  CA  PHE C 316     127.012  29.129  16.150  1.00 75.10           C
ATOM  10072  CB  PHE C 316     127.418  30.576  15.918  1.00 74.34           C
ATOM  10073  CG  PHE C 316     128.821  30.871  16.319  1.00 72.95           C
ATOM  10074  CD1 PHE C 316     129.139  31.095  17.643  1.00 71.73           C
ATOM  10075  CE1 PHE C 316     130.444  31.356  18.020  1.00 72.96           C
ATOM  10076  CZ  PHE C 316     131.453  31.398  17.059  1.00 72.78           C
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ATOM	10077	CE2	PHE	C	316	131.143	31.173	15.735	1.00	72.22	C
ATOM	10078	CD2	PHE	C	316	129.830	30.911	15.370	1.00	72.21	C
ATOM	10079	C	PHE	C	316	125.556	28.982	15.836	1.00	76.08	C
ATOM	10080	O	PHE	C	316	125.194	28.616	14.724	1.00	76.37	O
ATOM	10081	N	HIS	C	317	124.715	29.271	16.823	1.00	77.43	N
ATOM	10082	CA	HIS	C	317	123.286	29.280	16.595	1.00	78.70	C
ATOM	10083	CB	HIS	C	317	122.498	29.081	17.885	1.00	78.75	C
ATOM	10084	CG	HIS	C	317	121.049	28.808	17.647	1.00	79.82	C
ATOM	10085	ND1	HIS	C	317	120.135	29.812	17.395	1.00	80.88	N
ATOM	10086	CE1	HIS	C	317	118.944	29.277	17.192	1.00	81.79	C
ATOM	10087	NE2	HIS	C	317	119.054	27.963	17.291	1.00	82.18	N
ATOM	10088	CD2	HIS	C	317	120.362	27.643	17.572	1.00	80.41	C
ATOM	10089	C	HIS	C	317	122.878	30.580	15.926	1.00	79.58	C
ATOM	10090	O	HIS	C	317	122.281	30.572	14.842	1.00	79.95	O
ATOM	10091	N	SER	C	318	123.192	31.694	16.580	1.00	80.49	N
ATOM	10092	CA	SER	C	318	122.897	33.008	16.026	1.00	81.26	C
ATOM	10093	CB	SER	C	318	121.749	33.707	16.790	1.00	81.59	C
ATOM	10094	OG	SER	C	318	122.156	34.177	18.071	1.00	82.50	O
ATOM	10095	C	SER	C	318	124.157	33.858	15.949	1.00	81.27	C
ATOM	10096	O	SER	C	318	124.605	34.449	16.934	1.00	81.08	O
ATOM	10097	N	VAL	C	319	124.719	33.883	14.747	1.00	81.75	N
ATOM	10098	CA	VAL	C	319	125.827	34.754	14.368	1.00	81.98	C
ATOM	10099	CB	VAL	C	319	126.175	34.553	12.888	1.00	82.05	C
ATOM	10100	CG1	VAL	C	319	127.648	34.762	12.663	1.00	82.29	C
ATOM	10101	CG2	VAL	C	319	125.756	33.152	12.412	1.00	82.92	C
ATOM	10102	C	VAL	C	319	125.443	36.223	14.549	1.00	82.05	C
ATOM	10103	O	VAL	C	319	126.302	37.088	14.730	1.00	82.29	O
ATOM	10104	N	GLY	C	320	124.145	36.501	14.491	1.00	81.98	N
ATOM	10105	CA	GLY	C	320	123.644	37.845	14.710	1.00	81.85	C
ATOM	10106	C	GLY	C	320	124.004	38.396	16.076	1.00	81.73	C
ATOM	10107	O	GLY	C	320	124.226	39.599	16.221	1.00	82.00	O
ATOM	10108	N	ASN	C	321	124.072	37.519	17.075	1.00	81.25	N
ATOM	10109	CA	ASN	C	321	124.277	37.962	18.453	1.00	80.98	C
ATOM	10110	CB	ASN	C	321	123.451	37.129	19.423	1.00	81.14	C
ATOM	10111	CG	ASN	C	321	121.975	37.418	19.314	1.00	81.94	C
ATOM	10112	OD1	ASN	C	321	121.550	38.315	18.576	1.00	81.96	O
ATOM	10113	ND2	ASN	C	321	121.175	36.656	20.051	1.00	83.35	N
ATOM	10114	C	ASN	C	321	125.721	38.001	18.900	1.00	80.29	C
ATOM	10115	O	ASN	C	321	126.028	38.493	19.984	1.00	80.53	O
ATOM	10116	N	LEU	C	322	126.602	37.491	18.056	1.00	79.41	N
ATOM	10117	CA	LEU	C	322	128.010	37.494	18.359	1.00	78.59	C
ATOM	10118	CB	LEU	C	322	128.764	36.690	17.315	1.00	78.21	C
ATOM	10119	CG	LEU	C	322	129.942	35.861	17.810	1.00	77.89	C
ATOM	10120	CD1	LEU	C	322	129.718	35.283	19.205	1.00	75.90	C
ATOM	10121	CD2	LEU	C	322	130.221	34.760	16.799	1.00	77.70	C
ATOM	10122	C	LEU	C	322	128.493	38.929	18.401	1.00	78.43	C
ATOM	10123	O	LEU	C	322	128.203	39.725	17.510	1.00	78.53	O
ATOM	10124	N	GLU	C	323	129.209	39.258	19.463	1.00	78.23	N
ATOM	10125	CA	GLU	C	323	129.723	40.598	19.656	1.00	78.41	C
ATOM	10126	CB	GLU	C	323	129.206	41.168	20.976	1.00	78.46	C
ATOM	10127	CG	GLU	C	323	127.805	41.771	20.918	1.00	79.69	C
ATOM	10128	CD	GLU	C	323	127.245	42.111	22.307	1.00	80.14	C
ATOM	10129	OE1	GLU	C	323	127.957	41.911	23.329	1.00	82.68	O
ATOM	10130	OE2	GLU	C	323	126.083	42.578	22.375	1.00	81.86	O
ATOM	10131	C	GLU	C	323	131.242	40.604	19.676	1.00	77.57	C
ATOM	10132	O	GLU	C	323	131.872	41.595	19.301	1.00	77.78	O

ATOM	10133	N	THR	C	324	131.823	39.498	20.132	1.00	76.71	N
ATOM	10134	CA	THR	C	324	133.255	39.423	20.378	1.00	76.01	C
ATOM	10135	CB	THR	C	324	133.595	39.763	21.848	1.00	76.06	C
ATOM	10136	OG1	THR	C	324	133.146	41.093	22.141	1.00	76.97	O
ATOM	10137	CG2	THR	C	324	135.099	39.673	22.105	1.00	75.68	C
ATOM	10138	C	THR	C	324	133.787	38.048	20.025	1.00	75.31	C
ATOM	10139	O	THR	C	324	133.520	37.062	20.717	1.00	75.42	O
ATOM	10140	N	LEU	C	325	134.540	37.999	18.939	1.00	74.32	N
ATOM	10141	CA	LEU	C	325	135.192	36.788	18.521	1.00	73.52	C
ATOM	10142	CB	LEU	C	325	134.767	36.433	17.099	1.00	73.21	C
ATOM	10143	CG	LEU	C	325	135.138	35.054	16.569	1.00	71.73	C
ATOM	10144	CD1	LEU	C	325	134.619	33.966	17.491	1.00	70.23	C
ATOM	10145	CD2	LEU	C	325	134.587	34.898	15.179	1.00	70.16	C
ATOM	10146	C	LEU	C	325	136.685	37.012	18.588	1.00	73.65	C
ATOM	10147	O	LEU	C	325	137.223	37.869	17.897	1.00	73.93	O
ATOM	10148	N	ILE	C	326	137.357	36.259	19.442	1.00	73.75	N
ATOM	10149	CA	ILE	C	326	138.797	36.358	19.536	1.00	73.81	C
ATOM	10150	CB	ILE	C	326	139.277	36.640	20.984	1.00	73.69	C
ATOM	10151	CG1	ILE	C	326	138.634	37.916	21.548	1.00	73.17	C
ATOM	10152	CD1	ILE	C	326	138.837	39.191	20.702	1.00	71.02	C
ATOM	10153	CG2	ILE	C	326	140.787	36.773	21.031	1.00	73.78	C
ATOM	10154	C	ILE	C	326	139.419	35.093	18.964	1.00	74.31	C
ATOM	10155	O	ILE	C	326	139.264	33.998	19.510	1.00	74.05	O
ATOM	10156	N	LEU	C	327	140.130	35.270	17.853	1.00	75.15	N
ATOM	10157	CA	LEU	C	327	140.729	34.161	17.118	1.00	75.57	C
ATOM	10158	CB	LEU	C	327	140.157	34.109	15.705	1.00	75.66	C
ATOM	10159	CG	LEU	C	327	138.760	33.543	15.530	1.00	75.88	C
ATOM	10160	CD1	LEU	C	327	138.339	33.786	14.095	1.00	75.50	C
ATOM	10161	CD2	LEU	C	327	138.772	32.056	15.859	1.00	76.51	C
ATOM	10162	C	LEU	C	327	142.248	34.180	17.003	1.00	75.85	C
ATOM	10163	O	LEU	C	327	142.803	33.277	16.388	1.00	76.35	O
ATOM	10164	N	ASP	C	328	142.918	35.184	17.570	1.00	75.99	N
ATOM	10165	CA	ASP	C	328	144.364	35.346	17.372	1.00	76.48	C
ATOM	10166	CB	ASP	C	328	144.843	36.672	17.962	1.00	76.86	C
ATOM	10167	CG	ASP	C	328	144.853	36.662	19.478	1.00	79.10	C
ATOM	10168	OD1	ASP	C	328	143.814	36.277	20.069	1.00	81.92	O
ATOM	10169	OD2	ASP	C	328	145.891	37.035	20.080	1.00	80.30	O
ATOM	10170	C	ASP	C	328	145.202	34.190	17.947	1.00	76.31	C
ATOM	10171	O	ASP	C	328	144.744	33.459	18.833	1.00	76.28	O
ATOM	10172	N	SER	C	329	146.431	34.048	17.441	1.00	75.99	N
ATOM	10173	CA	SER	C	329	147.345	32.966	17.830	1.00	75.78	C
ATOM	10174	CB	SER	C	329	147.688	33.047	19.316	1.00	75.85	C
ATOM	10175	OG	SER	C	329	148.070	34.365	19.656	1.00	77.11	O
ATOM	10176	C	SER	C	329	146.794	31.584	17.479	1.00	75.44	C
ATOM	10177	O	SER	C	329	146.993	30.606	18.205	1.00	75.60	O
ATOM	10178	N	ASN	C	330	146.088	31.529	16.360	1.00	74.80	N
ATOM	10179	CA	ASN	C	330	145.609	30.295	15.803	1.00	74.23	C
ATOM	10180	CB	ASN	C	330	144.087	30.279	15.796	1.00	74.14	C
ATOM	10181	CG	ASN	C	330	143.500	29.821	17.108	1.00	74.12	C
ATOM	10182	OD1	ASN	C	330	143.518	28.632	17.424	1.00	74.08	O
ATOM	10183	ND2	ASN	C	330	142.948	30.758	17.870	1.00	73.39	N
ATOM	10184	C	ASN	C	330	146.125	30.248	14.384	1.00	74.08	C
ATOM	10185	O	ASN	C	330	146.131	31.281	13.702	1.00	74.28	O
ATOM	10186	N	PRO	C	331	146.574	29.062	13.933	1.00	73.61	N
ATOM	10187	CA	PRO	C	331	147.072	28.860	12.573	1.00	73.33	C
ATOM	10188	CB	PRO	C	331	147.714	27.473	12.653	1.00	73.27	C

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ATOM  10189  CG  PRO C 331     146.959  26.777  13.725  1.00 73.15           C
ATOM  10190  CD  PRO C 331     146.657  27.829  14.735  1.00 73.25           C
ATOM  10191  C   PRO C 331     145.966  28.879  11.512  1.00 73.27           C
ATOM  10192  O   PRO C 331     145.789  27.898  10.795  1.00 72.88           O
ATOM  10193  N   LEU C 332     145.246  29.991  11.396  1.00 73.53           N
ATOM  10194  CA  LEU C 332     144.072  30.040  10.518  1.00 74.19           C
ATOM  10195  CB  LEU C 332     143.284  31.336  10.700  1.00 73.75           C
ATOM  10196  CG  LEU C 332     142.809  31.697  12.106  1.00 73.46           C
ATOM  10197  CD1 LEU C 332     142.127  33.037  12.072  1.00 71.78           C
ATOM  10198  CD2 LEU C 332     141.891  30.639  12.693  1.00 73.40           C
ATOM  10199  C   LEU C 332     144.389  29.851   9.043  1.00 74.84           C
ATOM  10200  O   LEU C 332     145.334  30.441   8.517  1.00 74.94           O
ATOM  10201  N   ALA C 333     143.588  29.016   8.390  1.00 75.77           N
ATOM  10202  CA  ALA C 333     143.598  28.891   6.934  1.00 76.60           C
ATOM  10203  CB  ALA C 333     143.177  27.479   6.511  1.00 76.12           C
ATOM  10204  C   ALA C 333     142.639  29.942   6.372  1.00 77.17           C
ATOM  10205  O   ALA C 333     141.438  29.928   6.664  1.00 77.51           O
ATOM  10206  N   CYS C 334     143.167  30.870   5.585  1.00 77.87           N
ATOM  10207  CA  CYS C 334     142.344  31.974   5.104  1.00 78.80           C
ATOM  10208  CB  CYS C 334     143.138  33.288   5.069  1.00 78.89           C
ATOM  10209  SG  CYS C 334     143.397  33.814   6.804  1.00 82.21           S
ATOM  10210  C   CYS C 334     141.642  31.623   3.803  1.00 78.75           C
ATOM  10211  O   CYS C 334     141.996  32.100   2.718  1.00 79.08           O
ATOM  10212  N   ASP C 335     140.646  30.751   3.941  1.00 78.43           N
ATOM  10213  CA  ASP C 335     139.797  30.371   2.835  1.00 78.31           C
ATOM  10214  CB  ASP C 335     139.877  28.862   2.564  1.00 78.61           C
ATOM  10215  CG  ASP C 335     139.551  28.020   3.775  1.00 80.21           C
ATOM  10216  OD1 ASP C 335     138.551  28.296   4.469  1.00 82.69           O
ATOM  10217  OD2 ASP C 335     140.288  27.048   4.025  1.00 82.61           O
ATOM  10218  C   ASP C 335     138.370  30.847   3.097  1.00 77.98           C
ATOM  10219  O   ASP C 335     138.128  31.589   4.056  1.00 77.56           O
ATOM  10220  N   CYS C 336     137.436  30.416   2.251  1.00 77.68           N
ATOM  10221  CA  CYS C 336     136.068  30.924   2.287  1.00 77.95           C
ATOM  10222  CB  CYS C 336     135.286  30.487   1.039  1.00 78.26           C
ATOM  10223  SG  CYS C 336     134.822  28.718   0.934  1.00 81.87           S
ATOM  10224  C   CYS C 336     135.313  30.589   3.579  1.00 77.26           C
ATOM  10225  O   CYS C 336     134.338  31.265   3.920  1.00 77.59           O
ATOM  10226  N   ARG C 337     135.777  29.573   4.306  1.00 76.22           N
ATOM  10227  CA  ARG C 337     135.159  29.189   5.577  1.00 75.23           C
ATOM  10228  CB  ARG C 337     135.745  27.876   6.089  1.00 75.23           C
ATOM  10229  CG  ARG C 337     135.474  26.701   5.187  1.00 75.12           C
ATOM  10230  CD  ARG C 337     136.186  25.460   5.666  1.00 76.24           C
ATOM  10231  NE  ARG C 337     137.634  25.619   5.574  1.00 77.59           N
ATOM  10232  CZ  ARG C 337     138.520  24.769   6.081  1.00 77.80           C
ATOM  10233  NH1 ARG C 337     138.110  23.678   6.722  1.00 76.75           N
ATOM  10234  NH2 ARG C 337     139.819  25.017   5.947  1.00 77.35           N
ATOM  10235  C   ARG C 337     135.294  30.265   6.652  1.00 74.68           C
ATOM  10236  O   ARG C 337     134.639  30.195   7.695  1.00 74.67           O
ATOM  10237  N   LEU C 338     136.147  31.252   6.389  1.00 73.95           N
ATOM  10238  CA  LEU C 338     136.356  32.374   7.294  1.00 73.12           C
ATOM  10239  CB  LEU C 338     137.831  32.477   7.694  1.00 73.05           C
ATOM  10240  CG  LEU C 338     138.363  31.480   8.727  1.00 73.09           C
ATOM  10241  CD1 LEU C 338     139.810  31.779   9.045  1.00 73.19           C
ATOM  10242  CD2 LEU C 338     137.538  31.504  10.007  1.00 72.80           C
ATOM  10243  C   LEU C 338     135.883  33.690   6.689  1.00 72.67           C
ATOM  10244  O   LEU C 338     136.029  34.753   7.296  1.00 72.72           O
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ATOM  10245  N   LEU C 339     135.305  33.620   5.498  1.00 71.93           N
ATOM  10246  CA  LEU C 339     134.853  34.814   4.814  1.00 71.40           C
ATOM  10247  CB  LEU C 339     134.286  34.437   3.452  1.00 71.16           C
ATOM  10248  CG  LEU C 339     133.803  35.496   2.466  1.00 70.70           C
ATOM  10249  CD1 LEU C 339     134.756  36.694   2.357  1.00 68.87           C
ATOM  10250  CD2 LEU C 339     133.612  34.807   1.125  1.00 69.81           C
ATOM  10251  C   LEU C 339     133.843  35.600   5.653  1.00 71.50           C
ATOM  10252  O   LEU C 339     133.836  36.826   5.639  1.00 71.09           O
ATOM  10253  N   TRP C 340     133.009  34.886   6.403  1.00 71.90           N
ATOM  10254  CA  TRP C 340     132.030  35.522   7.270  1.00 72.17           C
ATOM  10255  CB  TRP C 340     131.071  34.485   7.813  1.00 71.99           C
ATOM  10256  CG  TRP C 340     131.664  33.587   8.831  1.00 71.80           C
ATOM  10257  CD1 TRP C 340     132.400  32.462   8.603  1.00 72.47           C
ATOM  10258  NE1 TRP C 340     132.759  31.876   9.793  1.00 72.08           N
ATOM  10259  CE2 TRP C 340     132.251  32.627  10.818  1.00 72.13           C
ATOM  10260  CD2 TRP C 340     131.557  33.716  10.245  1.00 71.25           C
ATOM  10261  CE3 TRP C 340     130.941  34.646  11.087  1.00 71.36           C
ATOM  10262  CZ3 TRP C 340     131.041  34.466  12.463  1.00 72.05           C
ATOM  10263  CH2 TRP C 340     131.746  33.375  13.006  1.00 72.04           C
ATOM  10264  CZ2 TRP C 340     132.350  32.444  12.202  1.00 72.45           C
ATOM  10265  C   TRP C 340     132.640  36.323   8.430  1.00 72.69           C
ATOM  10266  O   TRP C 340     132.003  37.252   8.941  1.00 73.05           O
ATOM  10267  N   VAL C 341     133.849  35.952   8.854  1.00 72.84           N
ATOM  10268  CA  VAL C 341     134.567  36.678   9.905  1.00 73.11           C
ATOM  10269  CB  VAL C 341     135.612  35.786  10.620  1.00 73.07           C
ATOM  10270  CG1 VAL C 341     136.410  36.585  11.628  1.00 72.94           C
ATOM  10271  CG2 VAL C 341     134.947  34.638  11.310  1.00 73.30           C
ATOM  10272  C   VAL C 341     135.279  37.867   9.270  1.00 73.44           C
ATOM  10273  O   VAL C 341     135.284  38.972   9.811  1.00 73.42           O
ATOM  10274  N   PHE C 342     135.883  37.631   8.109  1.00 73.79           N
ATOM  10275  CA  PHE C 342     136.531  38.702   7.395  1.00 74.08           C
ATOM  10276  CB  PHE C 342     137.146  38.240   6.078  1.00 74.21           C
ATOM  10277  CG  PHE C 342     137.766  39.352   5.290  1.00 74.89           C
ATOM  10278  CD1 PHE C 342     138.825  40.099   5.822  1.00 75.56           C
ATOM  10279  CE1 PHE C 342     139.400  41.146   5.098  1.00 75.43           C
ATOM  10280  CZ  PHE C 342     138.923  41.457   3.816  1.00 75.61           C
ATOM  10281  CE2 PHE C 342     137.870  40.713   3.268  1.00 76.44           C
ATOM  10282  CD2 PHE C 342     137.292  39.668   4.017  1.00 75.85           C
ATOM  10283  C   PHE C 342     135.552  39.837   7.166  1.00 74.20           C
ATOM  10284  O   PHE C 342     135.889  40.976   7.433  1.00 74.86           O
ATOM  10285  N   ARG C 343     134.336  39.537   6.719  1.00 74.13           N
ATOM  10286  CA  ARG C 343     133.345  40.595   6.466  1.00 74.19           C
ATOM  10287  CB  ARG C 343     132.148  40.060   5.684  1.00 74.39           C
ATOM  10288  CG  ARG C 343     132.487  39.517   4.295  1.00 75.18           C
ATOM  10289  CD  ARG C 343     132.931  40.596   3.329  1.00 75.92           C
ATOM  10290  NE  ARG C 343     132.890  40.088   1.964  1.00 77.81           N
ATOM  10291  CZ  ARG C 343     133.107  40.824   0.877  1.00 79.25           C
ATOM  10292  NH1 ARG C 343     133.036  40.259  -0.321  1.00 79.70           N
ATOM  10293  NH2 ARG C 343     133.396  42.120   0.981  1.00 78.99           N
ATOM  10294  C   ARG C 343     132.877  41.304   7.734  1.00 73.96           C
ATOM  10295  O   ARG C 343     132.289  42.371   7.675  1.00 73.73           O
ATOM  10296  N   ARG C 344     133.164  40.710   8.882  1.00 74.18           N
ATOM  10297  CA  ARG C 344     132.773  41.288  10.163  1.00 74.34           C
ATOM  10298  CB  ARG C 344     132.037  40.235  11.004  1.00 74.04           C
ATOM  10299  CG  ARG C 344     130.598  40.033  10.587  1.00 74.02           C
ATOM  10300  CD  ARG C 344     129.989  38.781  11.206  1.00 73.64           C
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ATOM	10301	NE	ARG	C	344	128.578	38.629	10.839	1.00	73.33	N
ATOM	10302	CZ	ARG	C	344	128.134	38.058	9.719	1.00	71.53	C
ATOM	10303	NH1	ARG	C	344	128.984	37.570	8.823	1.00	70.31	N
ATOM	10304	NH2	ARG	C	344	126.829	37.978	9.500	1.00	70.27	N
ATOM	10305	C	ARG	C	344	133.984	41.826	10.918	1.00	74.24	C
ATOM	10306	O	ARG	C	344	133.917	42.068	12.123	1.00	73.91	O
ATOM	10307	N	ARG	C	345	135.089	42.011	10.202	1.00	74.49	N
ATOM	10308	CA	ARG	C	345	136.388	42.204	10.835	1.00	74.74	C
ATOM	10309	CB	ARG	C	345	137.499	42.221	9.783	1.00	74.59	C
ATOM	10310	CG	ARG	C	345	137.376	43.348	8.770	1.00	73.97	C
ATOM	10311	CD	ARG	C	345	138.590	43.403	7.856	1.00	73.06	C
ATOM	10312	NE	ARG	C	345	138.334	44.193	6.655	1.00	73.30	N
ATOM	10313	CZ	ARG	C	345	139.282	44.622	5.828	1.00	73.42	C
ATOM	10314	NH1	ARG	C	345	138.958	45.335	4.758	1.00	73.58	N
ATOM	10315	NH2	ARG	C	345	140.554	44.339	6.070	1.00	73.62	N
ATOM	10316	C	ARG	C	345	136.418	43.492	11.650	1.00	75.08	C
ATOM	10317	O	ARG	C	345	137.309	43.696	12.475	1.00	75.36	O
ATOM	10318	N	TRP	C	346	135.438	44.359	11.414	1.00	75.60	N
ATOM	10319	CA	TRP	C	346	135.405	45.669	12.053	1.00	76.08	C
ATOM	10320	CB	TRP	C	346	135.094	46.759	11.024	1.00	76.29	C
ATOM	10321	CG	TRP	C	346	136.088	46.828	9.905	1.00	76.54	C
ATOM	10322	CD1	TRP	C	346	135.825	46.750	8.569	1.00	76.47	C
ATOM	10323	NE1	TRP	C	346	136.991	46.853	7.850	1.00	76.38	N
ATOM	10324	CE2	TRP	C	346	138.038	47.002	8.721	1.00	76.69	C
ATOM	10325	CD2	TRP	C	346	137.507	46.991	10.026	1.00	76.90	C
ATOM	10326	CE3	TRP	C	346	138.378	47.129	11.111	1.00	76.85	C
ATOM	10327	CZ3	TRP	C	346	139.732	47.271	10.861	1.00	76.77	C
ATOM	10328	CH2	TRP	C	346	140.230	47.278	9.552	1.00	76.81	C
ATOM	10329	CZ2	TRP	C	346	139.401	47.145	8.472	1.00	76.74	C
ATOM	10330	C	TRP	C	346	134.380	45.707	13.181	1.00	76.37	C
ATOM	10331	O	TRP	C	346	134.199	46.735	13.834	1.00	76.55	O
ATOM	10332	O	ARG	C	347	131.417	43.233	15.843	1.00	78.43	O
ATOM	10333	N	ARG	C	347	133.712	44.580	13.405	1.00	20.00	N
ATOM	10334	CA	ARG	C	347	132.452	44.569	14.138	1.00	20.00	C
ATOM	10335	C	ARG	C	347	132.432	43.460	15.185	1.00	20.00	C
ATOM	10336	CB	ARG	C	347	131.274	44.404	13.176	1.00	20.00	C
ATOM	10337	CG	ARG	C	347	130.890	45.678	12.441	1.00	20.00	C
ATOM	10338	CD	ARG	C	347	130.273	45.369	11.087	1.00	20.00	C
ATOM	10339	NE	ARG	C	347	128.976	44.711	11.214	1.00	20.00	N
ATOM	10340	CZ	ARG	C	347	128.519	43.792	10.370	1.00	20.00	C
ATOM	10341	NH1	ARG	C	347	129.254	43.419	9.331	1.00	20.00	N
ATOM	10342	NH2	ARG	C	347	127.326	43.245	10.563	1.00	20.00	N
ATOM	10343	N	LEU	C	348	133.561	42.774	15.334	1.00	77.91	N
ATOM	10344	CA	LEU	C	348	133.648	41.629	16.233	1.00	77.97	C
ATOM	10345	CB	LEU	C	348	134.083	40.378	15.467	1.00	77.92	C
ATOM	10346	CG	LEU	C	348	132.983	39.628	14.713	1.00	77.78	C
ATOM	10347	CD1	LEU	C	348	133.568	38.468	13.922	1.00	77.22	C
ATOM	10348	CD2	LEU	C	348	131.910	39.139	15.675	1.00	77.43	C
ATOM	10349	C	LEU	C	348	134.613	41.902	17.382	1.00	78.45	C
ATOM	10350	O	LEU	C	348	135.025	40.984	18.091	1.00	78.31	O
ATOM	10351	N	ASN	C	349	134.970	43.170	17.559	1.00	79.09	N
ATOM	10352	CA	ASN	C	349	135.671	43.607	18.760	1.00	79.79	C
ATOM	10353	CB	ASN	C	349	134.834	43.314	20.007	1.00	80.01	C
ATOM	10354	CG	ASN	C	349	134.107	44.540	20.522	1.00	80.55	C
ATOM	10355	OD1	ASN	C	349	133.144	45.006	19.914	1.00	81.92	O
ATOM	10356	ND2	ASN	C	349	134.566	45.069	21.650	1.00	81.54	N

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ATOM  10357  C   ASN C 349     137.048  42.963  18.890  1.00 80.05           C
ATOM  10358  O   ASN C 349     137.505  42.671  19.994  1.00 80.02           O
ATOM  10359  N   PHE C 350     137.703  42.746  17.754  1.00 80.67           N
ATOM  10360  CA  PHE C 350     139.061  42.204  17.742  1.00 81.27           C
ATOM  10361  CB  PHE C 350     139.607  42.102  16.314  1.00 80.77           C
ATOM  10362  CG  PHE C 350     138.862  41.155  15.414  1.00 79.95           C
ATOM  10363  CD1 PHE C 350     138.178  40.059  15.916  1.00 79.93           C
ATOM  10364  CE1 PHE C 350     137.507  39.187  15.059  1.00 78.88           C
ATOM  10365  CZ  PHE C 350     137.551  39.399  13.686  1.00 79.30           C
ATOM  10366  CE2 PHE C 350     138.245  40.476  13.176  1.00 78.15           C
ATOM  10367  CD2 PHE C 350     138.896  41.342  14.036  1.00 79.15           C
ATOM  10368  C   PHE C 350     140.006  43.108  18.538  1.00 82.38           C
ATOM  10369  O   PHE C 350     140.660  42.664  19.495  1.00 82.48           O
ATOM  10370  N   ASN C 351     140.063  44.378  18.129  1.00 83.41           N
ATOM  10371  CA  ASN C 351     141.010  45.352  18.679  1.00 84.57           C
ATOM  10372  CB  ASN C 351     140.803  45.555  20.192  1.00 84.86           C
ATOM  10373  CG  ASN C 351     139.476  46.213  20.519  1.00 85.85           C
ATOM  10374  OD1 ASN C 351     139.118  47.247  19.945  1.00 87.49           O
ATOM  10375  ND2 ASN C 351     138.739  45.617  21.448  1.00 86.17           N
ATOM  10376  C   ASN C 351     142.450  44.952  18.374  1.00 84.92           C
ATOM  10377  O   ASN C 351     142.827  44.800  17.203  1.00 85.04           O
ATOM  10378  N   ARG C 352     143.240  44.769  19.431  1.00 85.27           N
ATOM  10379  CA  ARG C 352     144.636  44.366  19.300  1.00 85.48           C
ATOM  10380  CB  ARG C 352     145.428  44.751  20.557  1.00 86.18           C
ATOM  10381  CG  ARG C 352     146.006  46.180  20.507  1.00 88.12           C
ATOM  10382  CD  ARG C 352     146.242  46.759  21.907  1.00 91.59           C
ATOM  10383  NE  ARG C 352     146.668  48.164  21.845  1.00 94.52           N
ATOM  10384  CZ  ARG C 352     146.825  48.966  22.902  1.00 95.56           C
ATOM  10385  NH1 ARG C 352     146.594  48.522  24.137  1.00 96.04           N
ATOM  10386  NH2 ARG C 352     147.216  50.224  22.722  1.00 95.71           N
ATOM  10387  C   ARG C 352     144.786  42.878  18.972  1.00 84.74           C
ATOM  10388  O   ARG C 352     145.763  42.476  18.339  1.00 84.88           O
ATOM  10389  N   GLN C 353     143.802  42.077  19.369  1.00 83.70           N
ATOM  10390  CA  GLN C 353     143.832  40.647  19.106  1.00 82.82           C
ATOM  10391  CB  GLN C 353     143.030  39.891  20.167  1.00 82.98           C
ATOM  10392  CG  GLN C 353     143.748  39.745  21.505  1.00 83.95           C
ATOM  10393  CD  GLN C 353     144.065  41.084  22.138  1.00 86.25           C
ATOM  10394  OE1 GLN C 353     143.164  41.873  22.421  1.00 88.22           O
ATOM  10395  NE2 GLN C 353     145.348  41.356  22.350  1.00 86.19           N
ATOM  10396  C   GLN C 353     143.322  40.315  17.711  1.00 81.97           C
ATOM  10397  O   GLN C 353     142.322  39.629  17.565  1.00 82.10           O
ATOM  10398  N   GLN C 354     144.011  40.803  16.686  1.00 81.06           N
ATOM  10399  CA  GLN C 354     143.657  40.491  15.300  1.00 80.29           C
ATOM  10400  CB  GLN C 354     144.471  41.360  14.331  1.00 80.16           C
ATOM  10401  CG  GLN C 354     144.032  42.818  14.237  1.00 79.22           C
ATOM  10402  CD  GLN C 354     142.716  43.001  13.492  1.00 78.49           C
ATOM  10403  OE1 GLN C 354     142.534  42.515  12.368  1.00 77.79           O
ATOM  10404  NE2 GLN C 354     141.790  43.708  14.120  1.00 78.23           N
ATOM  10405  C   GLN C 354     143.902  39.015  14.985  1.00 79.86           C
ATOM  10406  O   GLN C 354     144.898  38.457  15.428  1.00 80.26           O
ATOM  10407  N   PRO C 355     142.992  38.369  14.234  1.00 79.42           N
ATOM  10408  CA  PRO C 355     143.312  37.024  13.755  1.00 79.12           C
ATOM  10409  CB  PRO C 355     141.967  36.501  13.223  1.00 78.87           C
ATOM  10410  CG  PRO C 355     141.146  37.688  12.948  1.00 78.76           C
ATOM  10411  CD  PRO C 355     141.646  38.810  13.814  1.00 79.46           C
ATOM  10412  C   PRO C 355     144.351  37.067  12.629  1.00 78.99           C
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ATOM  10413  O   PRO C 355     144.239  37.908  11.734  1.00 78.89           O
ATOM  10414  N   SER C 356     145.343  36.174  12.683  1.00 78.80           N
ATOM  10415  CA  SER C 356     146.373  36.077  11.638  1.00 78.77           C
ATOM  10416  CB  SER C 356     147.783  36.096  12.239  1.00 78.73           C
ATOM  10417  OG  SER C 356     147.820  36.833  13.445  1.00 79.49           O
ATOM  10418  C   SER C 356     146.223  34.813  10.813  1.00 78.41           C
ATOM  10419  O   SER C 356     145.978  33.746  11.357  1.00 78.39           O
ATOM  10420  N   CYS C 357     146.396  34.945   9.503  1.00 78.28           N
ATOM  10421  CA  CYS C 357     146.441  33.806   8.596  1.00 78.54           C
ATOM  10422  CB  CYS C 357     146.337  34.279   7.152  1.00 79.02           C
ATOM  10423  SG  CYS C 357     144.866  35.210   6.757  1.00 82.12           S
ATOM  10424  C   CYS C 357     147.755  33.071   8.716  1.00 77.97           C
ATOM  10425  O   CYS C 357     148.813  33.692   8.706  1.00 77.98           O
ATOM  10426  N   ALA C 358     147.701  31.748   8.800  1.00 77.49           N
ATOM  10427  CA  ALA C 358     148.918  30.951   8.669  1.00 77.07           C
ATOM  10428  CB  ALA C 358     148.886  29.757   9.587  1.00 76.75           C
ATOM  10429  C   ALA C 358     149.091  30.517   7.215  1.00 77.01           C
ATOM  10430  O   ALA C 358     150.205  30.419   6.721  1.00 77.23           O
ATOM  10431  N   THR C 359     147.976  30.269   6.538  1.00 76.91           N
ATOM  10432  CA  THR C 359     147.968  29.844   5.148  1.00 76.99           C
ATOM  10433  CB  THR C 359     147.827  28.296   5.006  1.00 77.16           C
ATOM  10434  OG1 THR C 359     146.592  27.856   5.597  1.00 77.92           O
ATOM  10435  CG2 THR C 359     149.006  27.563   5.636  1.00 76.50           C
ATOM  10436  C   THR C 359     146.793  30.511   4.427  1.00 77.09           C
ATOM  10437  O   THR C 359     145.863  30.993   5.081  1.00 77.10           O
ATOM  10438  N   PRO C 360     146.817  30.539   3.078  1.00 77.25           N
ATOM  10439  CA  PRO C 360     147.873  30.027   2.183  1.00 77.35           C
ATOM  10440  CB  PRO C 360     147.263  30.181   0.789  1.00 77.14           C
ATOM  10441  CG  PRO C 360     146.202  31.210   0.939  1.00 77.17           C
ATOM  10442  CD  PRO C 360     145.680  31.106   2.328  1.00 77.13           C
ATOM  10443  C   PRO C 360     149.192  30.801   2.306  1.00 77.56           C
ATOM  10444  O   PRO C 360     149.218  31.897   2.868  1.00 77.59           O
ATOM  10445  N   GLU C 361     150.275  30.225   1.793  1.00 77.87           N
ATOM  10446  CA  GLU C 361     151.610  30.813   1.951  1.00 78.32           C
ATOM  10447  CB  GLU C 361     152.656  30.010   1.173  1.00 78.93           C
ATOM  10448  CG  GLU C 361     153.089  28.707   1.863  1.00 81.68           C
ATOM  10449  CD  GLU C 361     154.490  28.238   1.433  1.00 85.41           C
ATOM  10450  OE1 GLU C 361     154.837  28.349   0.223  1.00 86.36           O
ATOM  10451  OE2 GLU C 361     155.243  27.757   2.319  1.00 86.51           O
ATOM  10452  C   GLU C 361     151.734  32.305   1.604  1.00 77.66           C
ATOM  10453  O   GLU C 361     152.440  33.035   2.297  1.00 77.75           O
ATOM  10454  N   PHE C 362     151.051  32.757   0.553  1.00 76.92           N
ATOM  10455  CA  PHE C 362     151.190  34.147   0.084  1.00 76.19           C
ATOM  10456  CB  PHE C 362     150.737  34.296  -1.384  1.00 76.05           C
ATOM  10457  CG  PHE C 362     149.296  33.941  -1.618  1.00 76.00           C
ATOM  10458  CD1 PHE C 362     148.935  32.648  -1.979  1.00 76.07           C
ATOM  10459  CE1 PHE C 362     147.598  32.313  -2.192  1.00 75.52           C
ATOM  10460  CZ  PHE C 362     146.609  33.281  -2.044  1.00 75.24           C
ATOM  10461  CE2 PHE C 362     146.959  34.575  -1.693  1.00 74.81           C
ATOM  10462  CD2 PHE C 362     148.298  34.900  -1.484  1.00 75.36           C
ATOM  10463  C   PHE C 362     150.553  35.224   0.990  1.00 75.62           C
ATOM  10464  O   PHE C 362     150.802  36.415   0.804  1.00 75.39           O
ATOM  10465  N   VAL C 363     149.739  34.809   1.958  1.00 75.14           N
ATOM  10466  CA  VAL C 363     149.176  35.744   2.941  1.00 74.95           C
ATOM  10467  CB  VAL C 363     147.611  35.773   2.950  1.00 75.06           C
ATOM  10468  CG1 VAL C 363     147.061  36.254   1.621  1.00 74.79           C
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ATOM	10469	CG2	VAL	C	363	147.017	34.415	3.333	1.00	74.61	C
ATOM	10470	C	VAL	C	363	149.666	35.439	4.349	1.00	74.93	C
ATOM	10471	O	VAL	C	363	149.195	36.030	5.322	1.00	75.05	O
ATOM	10472	N	GLN	C	364	150.608	34.510	4.453	1.00	74.82	N
ATOM	10473	CA	GLN	C	364	151.112	34.063	5.744	1.00	74.92	C
ATOM	10474	CB	GLN	C	364	152.217	33.031	5.550	1.00	74.80	C
ATOM	10475	CG	GLN	C	364	152.711	32.425	6.842	1.00	75.08	C
ATOM	10476	CD	GLN	C	364	154.102	31.879	6.723	1.00	75.74	C
ATOM	10477	OE1	GLN	C	364	154.542	31.488	5.644	1.00	77.20	O
ATOM	10478	NE2	GLN	C	364	154.814	31.851	7.834	1.00	76.45	N
ATOM	10479	C	GLN	C	364	151.613	35.214	6.618	1.00	74.81	C
ATOM	10480	O	GLN	C	364	152.442	36.006	6.190	1.00	75.02	O
ATOM	10481	N	GLY	C	365	151.092	35.296	7.837	1.00	74.76	N
ATOM	10482	CA	GLY	C	365	151.456	36.344	8.775	1.00	74.85	C
ATOM	10483	C	GLY	C	365	150.555	37.566	8.754	1.00	75.22	C
ATOM	10484	O	GLY	C	365	150.617	38.393	9.667	1.00	75.22	O
ATOM	10485	N	LYS	C	366	149.722	37.694	7.721	1.00	75.57	N
ATOM	10486	CA	LYS	C	366	148.880	38.881	7.567	1.00	76.22	C
ATOM	10487	CB	LYS	C	366	148.401	39.049	6.129	1.00	75.96	C
ATOM	10488	CG	LYS	C	366	149.433	39.655	5.224	1.00	77.15	C
ATOM	10489	CD	LYS	C	366	148.800	40.239	3.978	1.00	79.74	C
ATOM	10490	CE	LYS	C	366	149.807	41.069	3.172	1.00	79.93	C
ATOM	10491	NZ	LYS	C	366	149.459	41.048	1.712	1.00	80.55	N
ATOM	10492	C	LYS	C	366	147.694	38.879	8.505	1.00	76.78	C
ATOM	10493	O	LYS	C	366	147.004	37.866	8.655	1.00	77.08	O
ATOM	10494	N	GLU	C	367	147.463	40.023	9.137	1.00	77.40	N
ATOM	10495	CA	GLU	C	367	146.288	40.209	9.982	1.00	78.18	C
ATOM	10496	CB	GLU	C	367	146.580	41.207	11.096	1.00	77.95	C
ATOM	10497	CG	GLU	C	367	147.465	40.626	12.194	1.00	78.97	C
ATOM	10498	CD	GLU	C	367	147.967	41.678	13.181	1.00	79.61	C
ATOM	10499	OE1	GLU	C	367	148.223	42.833	12.754	1.00	82.07	O
ATOM	10500	OE2	GLU	C	367	148.121	41.344	14.382	1.00	80.94	O
ATOM	10501	C	GLU	C	367	145.087	40.646	9.144	1.00	78.19	C
ATOM	10502	O	GLU	C	367	145.239	41.136	8.019	1.00	78.46	O
ATOM	10503	N	PHE	C	368	143.894	40.454	9.688	1.00	78.18	N
ATOM	10504	CA	PHE	C	368	142.671	40.741	8.958	1.00	78.20	C
ATOM	10505	CB	PHE	C	368	141.467	40.252	9.760	1.00	78.23	C
ATOM	10506	CG	PHE	C	368	141.148	38.790	9.546	1.00	78.37	C
ATOM	10507	CD1	PHE	C	368	142.162	37.856	9.332	1.00	78.19	C
ATOM	10508	CE1	PHE	C	368	141.865	36.512	9.126	1.00	77.69	C
ATOM	10509	CZ	PHE	C	368	140.539	36.082	9.152	1.00	78.01	C
ATOM	10510	CE2	PHE	C	368	139.521	36.996	9.371	1.00	77.89	C
ATOM	10511	CD2	PHE	C	368	139.829	38.344	9.570	1.00	78.51	C
ATOM	10512	C	PHE	C	368	142.540	42.214	8.573	1.00	78.23	C
ATOM	10513	O	PHE	C	368	142.153	42.528	7.457	1.00	77.90	O
ATOM	10514	N	LYS	C	369	142.898	43.108	9.487	1.00	78.77	N
ATOM	10515	CA	LYS	C	369	142.883	44.551	9.220	1.00	79.47	C
ATOM	10516	CB	LYS	C	369	143.262	45.335	10.482	1.00	79.59	C
ATOM	10517	CG	LYS	C	369	144.670	45.084	10.980	1.00	80.49	C
ATOM	10518	CD	LYS	C	369	145.067	46.077	12.055	1.00	82.06	C
ATOM	10519	CE	LYS	C	369	146.580	46.284	12.048	1.00	83.48	C
ATOM	10520	NZ	LYS	C	369	146.982	47.514	12.796	1.00	85.04	N
ATOM	10521	C	LYS	C	369	143.780	44.993	8.056	1.00	79.77	C
ATOM	10522	O	LYS	C	369	143.603	46.081	7.516	1.00	80.04	O
ATOM	10523	N	ASP	C	370	144.734	44.150	7.671	1.00	80.11	N
ATOM	10524	CA	ASP	C	370	145.731	44.516	6.669	1.00	80.27	C

ATOM	10525	CB	ASP	C	370	146.968	43.623	6.800	1.00	80.59	C
ATOM	10526	CG	ASP	C	370	147.724	43.835	8.118	1.00	81.82	C
ATOM	10527	OD1	ASP	C	370	147.653	44.947	8.709	1.00	82.90	O
ATOM	10528	OD2	ASP	C	370	148.411	42.878	8.550	1.00	82.77	O
ATOM	10529	C	ASP	C	370	145.210	44.472	5.238	1.00	80.13	C
ATOM	10530	O	ASP	C	370	145.751	45.138	4.355	1.00	80.22	O
ATOM	10531	N	PHE	C	371	144.163	43.683	5.015	1.00	80.10	N
ATOM	10532	CA	PHE	C	371	143.630	43.457	3.676	1.00	79.77	C
ATOM	10533	CB	PHE	C	371	142.758	42.206	3.673	1.00	79.38	C
ATOM	10534	CG	PHE	C	371	143.481	40.944	4.047	1.00	79.21	C
ATOM	10535	CD1	PHE	C	371	144.315	40.303	3.140	1.00	79.69	C
ATOM	10536	CE1	PHE	C	371	144.970	39.119	3.488	1.00	79.22	C
ATOM	10537	CZ	PHE	C	371	144.775	38.559	4.741	1.00	78.08	C
ATOM	10538	CE2	PHE	C	371	143.940	39.180	5.643	1.00	78.08	C
ATOM	10539	CD2	PHE	C	371	143.291	40.365	5.293	1.00	78.99	C
ATOM	10540	C	PHE	C	371	142.793	44.633	3.177	1.00	79.95	C
ATOM	10541	O	PHE	C	371	142.207	45.355	3.979	1.00	79.81	O
ATOM	10542	N	PRO	C	372	142.729	44.829	1.844	1.00	80.30	N
ATOM	10543	CA	PRO	C	372	141.735	45.756	1.311	1.00	80.73	C
ATOM	10544	CB	PRO	C	372	142.178	45.945	-0.145	1.00	80.57	C
ATOM	10545	CG	PRO	C	372	142.880	44.703	-0.489	1.00	80.08	C
ATOM	10546	CD	PRO	C	372	143.554	44.240	0.772	1.00	80.34	C
ATOM	10547	C	PRO	C	372	140.318	45.162	1.370	1.00	81.17	C
ATOM	10548	O	PRO	C	372	140.158	43.945	1.537	1.00	81.22	O
ATOM	10549	N	ASP	C	373	139.310	46.020	1.220	1.00	81.56	N
ATOM	10550	CA	ASP	C	373	137.908	45.606	1.281	1.00	81.86	C
ATOM	10551	CB	ASP	C	373	136.988	46.823	1.344	1.00	82.22	C
ATOM	10552	CG	ASP	C	373	137.134	47.601	2.632	1.00	83.88	C
ATOM	10553	OD1	ASP	C	373	136.900	47.024	3.725	1.00	86.01	O
ATOM	10554	OD2	ASP	C	373	137.474	48.800	2.546	1.00	85.45	O
ATOM	10555	C	ASP	C	373	137.490	44.737	0.109	1.00	81.63	C
ATOM	10556	O	ASP	C	373	136.500	44.022	0.202	1.00	81.93	O
ATOM	10557	N	VAL	C	374	138.224	44.812	-0.997	1.00	81.47	N
ATOM	10558	CA	VAL	C	374	137.917	43.995	-2.175	1.00	81.09	C
ATOM	10559	CB	VAL	C	374	138.606	44.539	-3.442	1.00	80.94	C
ATOM	10560	CG1	VAL	C	374	137.773	44.234	-4.669	1.00	80.16	C
ATOM	10561	CG2	VAL	C	374	138.837	46.042	-3.314	1.00	81.37	C
ATOM	10562	C	VAL	C	374	138.396	42.571	-1.936	1.00	80.96	C
ATOM	10563	O	VAL	C	374	139.439	42.361	-1.304	1.00	80.98	O
ATOM	10564	N	LEU	C	375	137.635	41.594	-2.420	1.00	80.70	N
ATOM	10565	CA	LEU	C	375	138.124	40.216	-2.426	1.00	80.60	C
ATOM	10566	CB	LEU	C	375	136.991	39.190	-2.617	1.00	80.79	C
ATOM	10567	CG	LEU	C	375	135.990	39.031	-1.460	1.00	81.12	C
ATOM	10568	CD1	LEU	C	375	134.971	37.920	-1.727	1.00	80.95	C
ATOM	10569	CD2	LEU	C	375	136.715	38.794	-0.130	1.00	81.55	C
ATOM	10570	C	LEU	C	375	139.183	40.079	-3.509	1.00	80.21	C
ATOM	10571	O	LEU	C	375	138.901	40.314	-4.694	1.00	80.25	O
ATOM	10572	N	LEU	C	376	140.401	39.736	-3.082	1.00	79.67	N
ATOM	10573	CA	LEU	C	376	141.537	39.540	-3.981	1.00	79.08	C
ATOM	10574	CB	LEU	C	376	142.817	40.071	-3.348	1.00	78.73	C
ATOM	10575	CG	LEU	C	376	142.842	41.533	-2.906	1.00	78.05	C
ATOM	10576	CD1	LEU	C	376	144.261	41.933	-2.540	1.00	77.68	C
ATOM	10577	CD2	LEU	C	376	142.286	42.468	-3.968	1.00	77.49	C
ATOM	10578	C	LEU	C	376	141.685	38.068	-4.365	1.00	79.16	C
ATOM	10579	O	LEU	C	376	141.299	37.190	-3.598	1.00	79.13	O
ATOM	10580	N	PRO	C	377	142.222	37.792	-5.567	1.00	79.33	N

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ATOM  10581  CA  PRO C 377     142.243  36.427  -6.120  1.00 79.75           C
ATOM  10582  CB  PRO C 377     143.081  36.587  -7.391  1.00 79.71           C
ATOM  10583  CG  PRO C 377     142.918  38.010  -7.767  1.00 78.98           C
ATOM  10584  CD  PRO C 377     142.828  38.765  -6.493  1.00 79.01           C
ATOM  10585  C   PRO C 377     142.862  35.378  -5.190  1.00 80.28           C
ATOM  10586  O   PRO C 377     143.990  35.541  -4.730  1.00 80.72           O
ATOM  10587  N   ASN C 378     142.117  34.317  -4.910  1.00 80.80           N
ATOM  10588  CA  ASN C 378     142.567  33.250  -4.001  1.00 81.37           C
ATOM  10589  CB  ASN C 378     143.790  32.508  -4.559  1.00 81.51           C
ATOM  10590  CG  ASN C 378     143.570  31.991  -5.976  1.00 82.13           C
ATOM  10591  OD1 ASN C 378     142.595  31.295  -6.257  1.00 81.91           O
ATOM  10592  ND2 ASN C 378     144.487  32.330  -6.876  1.00 83.56           N
ATOM  10593  C   ASN C 378     142.789  33.665  -2.540  1.00 81.64           C
ATOM  10594  O   ASN C 378     143.331  32.891  -1.743  1.00 81.89           O
ATOM  10595  N   TYR C 379     142.369  34.884  -2.199  1.00 81.83           N
ATOM  10596  CA  TYR C 379     142.246  35.315  -0.800  1.00 82.02           C
ATOM  10597  CB  TYR C 379     142.384  36.838  -0.676  1.00 82.45           C
ATOM  10598  CG  TYR C 379     143.768  37.404  -0.907  1.00 83.18           C
ATOM  10599  CD1 TYR C 379     144.389  38.177   0.073  1.00 82.92           C
ATOM  10600  CE1 TYR C 379     145.656  38.713  -0.138  1.00 83.28           C
ATOM  10601  CZ  TYR C 379     146.319  38.475  -1.340  1.00 83.14           C
ATOM  10602  OH  TYR C 379     147.577  38.997  -1.547  1.00 82.81           O
ATOM  10603  CE2 TYR C 379     145.718  37.720  -2.336  1.00 83.49           C
ATOM  10604  CD2 TYR C 379     144.447  37.190  -2.116  1.00 83.79           C
ATOM  10605  C   TYR C 379     140.854  34.933  -0.311  1.00 81.84           C
ATOM  10606  O   TYR C 379     139.853  35.339  -0.925  1.00 82.08           O
ATOM  10607  N   PHE C 380     140.774  34.183   0.790  1.00 81.28           N
ATOM  10608  CA  PHE C 380     139.476  33.812   1.372  1.00 80.59           C
ATOM  10609  CB  PHE C 380     138.764  35.038   1.946  1.00 80.28           C
ATOM  10610  CG  PHE C 380     139.401  35.595   3.179  1.00 80.09           C
ATOM  10611  CD1 PHE C 380     139.395  34.876   4.371  1.00 79.85           C
ATOM  10612  CE1 PHE C 380     139.980  35.397   5.530  1.00 80.12           C
ATOM  10613  CZ  PHE C 380     140.564  36.662   5.506  1.00 79.88           C
ATOM  10614  CE2 PHE C 380     140.565  37.392   4.323  1.00 80.39           C
ATOM  10615  CD2 PHE C 380     139.980  36.857   3.164  1.00 80.09           C
ATOM  10616  C   PHE C 380     138.564  33.129   0.353  1.00 80.47           C
ATOM  10617  O   PHE C 380     137.367  33.390   0.301  1.00 80.53           O
ATOM  10618  N   THR C 381     139.138  32.268  -0.471  1.00 80.44           N
ATOM  10619  CA  THR C 381     138.370  31.568  -1.482  1.00 80.49           C
ATOM  10620  CB  THR C 381     138.905  31.838  -2.916  1.00 80.66           C
ATOM  10621  OG1 THR C 381     140.178  31.188  -3.092  1.00 80.48           O
ATOM  10622  CG2 THR C 381     138.999  33.350  -3.220  1.00 79.46           C
ATOM  10623  C   THR C 381     138.470  30.083  -1.226  1.00 80.61           C
ATOM  10624  O   THR C 381     139.333  29.640  -0.494  1.00 80.45           O
ATOM  10625  N   CYS C 382     137.582  29.317  -1.841  1.00 81.17           N
ATOM  10626  CA  CYS C 382     137.721  27.867  -1.890  1.00 81.87           C
ATOM  10627  CB  CYS C 382     136.620  27.194  -1.057  1.00 82.19           C
ATOM  10628  SG  CYS C 382     136.578  27.654   0.729  1.00 85.21           S
ATOM  10629  C   CYS C 382     137.598  27.464  -3.356  1.00 81.37           C
ATOM  10630  O   CYS C 382     136.964  28.171  -4.130  1.00 81.76           O
ATOM  10631  N   ARG C 383     138.205  26.354  -3.755  1.00 80.95           N
ATOM  10632  CA  ARG C 383     137.904  25.803  -5.065  1.00 80.61           C
ATOM  10633  CB  ARG C 383     139.086  25.036  -5.651  1.00 80.56           C
ATOM  10634  CG  ARG C 383     140.327  25.878  -5.909  1.00 80.47           C
ATOM  10635  CD  ARG C 383     141.332  25.138  -6.783  1.00 80.52           C
ATOM  10636  NE  ARG C 383     141.245  23.679  -6.643  1.00 80.16           N
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ATOM  10637  CZ  ARG C 383     142.057  22.929  -5.897  1.00 79.82           C
ATOM  10638  NH1 ARG C 383     143.048  23.474  -5.195  1.00 79.01           N
ATOM  10639  NH2 ARG C 383     141.870  21.615  -5.860  1.00 79.60           N
ATOM  10640  C   ARG C 383     136.700  24.898  -4.902  1.00 80.44           C
ATOM  10641  O   ARG C 383     136.761  23.912  -4.173  1.00 80.32           O
ATOM  10642  N   ARG C 384     135.598  25.260  -5.557  1.00 80.55           N
ATOM  10643  CA  ARG C 384     134.339  24.511  -5.461  1.00 80.70           C
ATOM  10644  CB  ARG C 384     133.256  25.153  -6.336  1.00 81.06           C
ATOM  10645  CG  ARG C 384     132.809  26.570  -5.927  1.00 82.12           C
ATOM  10646  CD  ARG C 384     132.231  27.314  -7.132  1.00 82.23           C
ATOM  10647  NE  ARG C 384     131.456  26.391  -7.956  1.00 83.02           N
ATOM  10648  CZ  ARG C 384     131.084  26.607  -9.213  1.00 83.03           C
ATOM  10649  NH1 ARG C 384     131.409  27.740  -9.834  1.00 82.47           N
ATOM  10650  NH2 ARG C 384     130.383  25.672  -9.848  1.00 82.33           N
ATOM  10651  C   ARG C 384     134.544  23.078  -5.912  1.00 80.32           C
ATOM  10652  O   ARG C 384     135.336  22.818  -6.808  1.00 80.28           O
ATOM  10653  N   ALA C 385     133.825  22.149  -5.295  1.00 80.23           N
ATOM  10654  CA  ALA C 385     133.934  20.747  -5.665  1.00 80.16           C
ATOM  10655  CB  ALA C 385     133.098  19.890  -4.744  1.00 79.77           C
ATOM  10656  C   ALA C 385     133.498  20.572  -7.113  1.00 80.49           C
ATOM  10657  O   ALA C 385     132.486  21.127  -7.532  1.00 80.44           O
ATOM  10658  N   ARG C 386     134.289  19.830  -7.880  1.00 80.97           N
ATOM  10659  CA  ARG C 386     133.946  19.499  -9.253  1.00 81.73           C
ATOM  10660  CB  ARG C 386     134.629  20.458 -10.225  1.00 81.80           C
ATOM  10661  CG  ARG C 386     134.008  21.844 -10.243  1.00 83.07           C
ATOM  10662  CD  ARG C 386     134.827  22.814 -11.067  1.00 85.19           C
ATOM  10663  NE  ARG C 386     134.408  24.201 -10.858  1.00 86.50           N
ATOM  10664  CZ  ARG C 386     134.837  25.238 -11.578  1.00 87.35           C
ATOM  10665  NH1 ARG C 386     135.707  25.064 -12.571  1.00 87.09           N
ATOM  10666  NH2 ARG C 386     134.390  26.458 -11.304  1.00 87.99           N
ATOM  10667  C   ARG C 386     134.321  18.052  -9.567  1.00 82.21           C
ATOM  10668  O   ARG C 386     135.468  17.641  -9.363  1.00 82.28           O
ATOM  10669  N   ILE C 387     133.338  17.287 -10.046  1.00 82.72           N
ATOM  10670  CA  ILE C 387     133.540  15.894 -10.459  1.00 83.22           C
ATOM  10671  CB  ILE C 387     132.194  15.177 -10.811  1.00 83.23           C
ATOM  10672  CG1 ILE C 387     131.056  15.575  -9.848  1.00 82.96           C
ATOM  10673  CD1 ILE C 387     131.031  14.842  -8.544  1.00 81.28           C
ATOM  10674  CG2 ILE C 387     132.395  13.653 -10.924  1.00 83.37           C
ATOM  10675  C   ILE C 387     134.469  15.822 -11.677  1.00 83.48           C
ATOM  10676  O   ILE C 387     134.195  16.424 -12.716  1.00 83.44           O
ATOM  10677  N   ARG C 388     135.557  15.073 -11.539  1.00 83.88           N
ATOM  10678  CA  ARG C 388     136.574  14.966 -12.582  1.00 84.51           C
ATOM  10679  CB  ARG C 388     137.752  14.120 -12.089  1.00 84.75           C
ATOM  10680  CG  ARG C 388     138.541  14.780 -10.978  1.00 85.69           C
ATOM  10681  CD  ARG C 388     139.706  13.925 -10.534  1.00 87.53           C
ATOM  10682  NE  ARG C 388     140.350  14.509  -9.361  1.00 89.04           N
ATOM  10683  CZ  ARG C 388     141.364  13.961  -8.699  1.00 89.72           C
ATOM  10684  NH1 ARG C 388     141.868  14.584  -7.642  1.00 89.59           N
ATOM  10685  NH2 ARG C 388     141.872  12.793  -9.086  1.00 90.11           N
ATOM  10686  C   ARG C 388     136.058  14.433 -13.928  1.00 84.59           C
ATOM  10687  O   ARG C 388     136.494  14.893 -14.987  1.00 84.62           O
ATOM  10688  N   ASP C 389     135.134  13.473 -13.881  1.00 84.65           N
ATOM  10689  CA  ASP C 389     134.581  12.870 -15.094  1.00 84.56           C
ATOM  10690  CB  ASP C 389     134.626  11.345 -15.002  1.00 84.47           C
ATOM  10691  CG  ASP C 389     134.253  10.670 -16.304  1.00 84.26           C
ATOM  10692  OD1 ASP C 389     133.944  11.376 -17.287  1.00 83.89           O
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ATOM  10693  OD2 ASP C 389     134.267   9.424 -16.343  1.00 84.46           O
ATOM  10694  C   ASP C 389     133.159  13.358 -15.399  1.00 84.61           C
ATOM  10695  O   ASP C 389     132.214  13.064 -14.661  1.00 84.66           O
ATOM  10696  N   ARG C 390     133.027  14.072 -16.514  1.00 84.60           N
ATOM  10697  CA  ARG C 390     131.787  14.765 -16.884  1.00 84.66           C
ATOM  10698  CB  ARG C 390     132.106  16.102 -17.581  1.00 84.85           C
ATOM  10699  CG  ARG C 390     133.313  16.870 -17.029  1.00 85.54           C
ATOM  10700  CD  ARG C 390     133.172  17.158 -15.543  1.00 87.14           C
ATOM  10701  NE  ARG C 390     132.153  18.167 -15.263  1.00 88.77           N
ATOM  10702  CZ  ARG C 390     131.436  18.230 -14.142  1.00 89.67           C
ATOM  10703  NH1 ARG C 390     130.539  19.196 -13.987  1.00 90.08           N
ATOM  10704  NH2 ARG C 390     131.600  17.327 -13.179  1.00 89.59           N
ATOM  10705  C   ARG C 390     130.870  13.925 -17.780  1.00 84.37           C
ATOM  10706  O   ARG C 390     129.723  14.302 -18.034  1.00 84.37           O
ATOM  10707  N   LYS C 391     131.386  12.802 -18.268  1.00 84.05           N
ATOM  10708  CA  LYS C 391     130.618  11.898 -19.117  1.00 83.85           C
ATOM  10709  CB  LYS C 391     131.554  11.171 -20.086  1.00 83.90           C
ATOM  10710  CG  LYS C 391     130.880  10.550 -21.300  1.00 84.37           C
ATOM  10711  CD  LYS C 391     131.920  10.115 -22.332  1.00 84.72           C
ATOM  10712  CE  LYS C 391     131.281   9.478 -23.560  1.00 84.96           C
ATOM  10713  NZ  LYS C 391     130.671  10.479 -24.480  1.00 85.07           N
ATOM  10714  C   LYS C 391     129.861  10.902 -18.234  1.00 83.61           C
ATOM  10715  O   LYS C 391     130.443  10.288 -17.330  1.00 83.55           O
ATOM  10716  N   ALA C 392     128.563  10.754 -18.495  1.00 83.22           N
ATOM  10717  CA  ALA C 392     127.684   9.922 -17.666  1.00 82.70           C
ATOM  10718  CB  ALA C 392     126.243  10.007 -18.164  1.00 82.82           C
ATOM  10719  C   ALA C 392     128.148   8.469 -17.599  1.00 82.31           C
ATOM  10720  O   ALA C 392     128.273   7.794 -18.621  1.00 82.40           O
ATOM  10721  N   GLN C 393     128.402   8.003 -16.382  1.00 81.81           N
ATOM  10722  CA  GLN C 393     128.882   6.645 -16.140  1.00 81.26           C
ATOM  10723  CB  GLN C 393     129.324   6.521 -14.681  1.00 81.34           C
ATOM  10724  CG  GLN C 393     130.496   5.581 -14.451  1.00 81.05           C
ATOM  10725  CD  GLN C 393     131.182   5.832 -13.123  1.00 80.55           C
ATOM  10726  OE1 GLN C 393     130.630   6.487 -12.239  1.00 80.52           O
ATOM  10727  NE2 GLN C 393     132.395   5.314 -12.978  1.00 80.24           N
ATOM  10728  C   GLN C 393     127.829   5.581 -16.480  1.00 80.84           C
ATOM  10729  O   GLN C 393     126.674   5.673 -16.057  1.00 80.52           O
ATOM  10730  N   GLN C 394     128.243   4.577 -17.249  1.00 80.64           N
ATOM  10731  CA  GLN C 394     127.341   3.521 -17.723  1.00 80.43           C
ATOM  10732  CB  GLN C 394     127.153   3.608 -19.246  1.00 80.56           C
ATOM  10733  CG  GLN C 394     126.554   4.919 -19.764  1.00 80.86           C
ATOM  10734  CD  GLN C 394     125.032   4.947 -19.729  1.00 81.23           C
ATOM  10735  OE1 GLN C 394     124.387   4.115 -19.085  1.00 81.22           O
ATOM  10736  NE2 GLN C 394     124.451   5.915 -20.427  1.00 81.28           N
ATOM  10737  C   GLN C 394     127.865   2.138 -17.357  1.00 80.16           C
ATOM  10738  O   GLN C 394     128.864   1.680 -17.915  1.00 80.06           O
ATOM  10739  N   VAL C 395     127.191   1.478 -16.418  1.00 79.95           N
ATOM  10740  CA  VAL C 395     127.592   0.131 -15.993  1.00 79.82           C
ATOM  10741  CB  VAL C 395     128.087   0.086 -14.510  1.00 79.77           C
ATOM  10742  CG1 VAL C 395     128.423  -1.338 -14.094  1.00 79.45           C
ATOM  10743  CG2 VAL C 395     129.304   0.988 -14.311  1.00 79.54           C
ATOM  10744  C   VAL C 395     126.483  -0.902 -16.234  1.00 79.77           C
ATOM  10745  O   VAL C 395     125.365  -0.774 -15.722  1.00 79.82           O
ATOM  10746  N   PHE C 396     126.809  -1.918 -17.027  1.00 79.61           N
ATOM  10747  CA  PHE C 396     125.896  -3.023 -17.282  1.00 79.51           C
ATOM  10748  CB  PHE C 396     125.849  -3.346 -18.777  1.00 79.52           C
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ATOM  10749  CG  PHE C 396     125.133  -2.307 -19.597  1.00 79.51           C
ATOM  10750  CD1 PHE C 396     123.819  -2.514 -20.007  1.00 79.63           C
ATOM  10751  CE1 PHE C 396     123.149  -1.556 -20.764  1.00 79.70           C
ATOM  10752  CZ  PHE C 396     123.795  -0.372 -21.115  1.00 79.42           C
ATOM  10753  CE2 PHE C 396     125.107  -0.153 -20.709  1.00 79.07           C
ATOM  10754  CD2 PHE C 396     125.768  -1.118 -19.955  1.00 79.19           C
ATOM  10755  C   PHE C 396     126.322  -4.236 -16.464  1.00 79.45           C
ATOM  10756  O   PHE C 396     127.492  -4.627 -16.483  1.00 79.43           O
ATOM  10757  N   VAL C 397     125.371  -4.816 -15.735  1.00 79.33           N
ATOM  10758  CA  VAL C 397     125.666  -5.911 -14.816  1.00 79.26           C
ATOM  10759  CB  VAL C 397     125.784  -5.409 -13.339  1.00 79.19           C
ATOM  10760  CG1 VAL C 397     124.479  -4.798 -12.853  1.00 78.89           C
ATOM  10761  CG2 VAL C 397     126.226  -6.530 -12.406  1.00 79.13           C
ATOM  10762  C   VAL C 397     124.646  -7.045 -14.923  1.00 79.39           C
ATOM  10763  O   VAL C 397     123.437  -6.809 -14.915  1.00 79.44           O
ATOM  10764  N   ASP C 398     125.152  -8.270 -15.041  1.00 79.51           N
ATOM  10765  CA  ASP C 398     124.333  -9.463 -14.884  1.00 79.60           C
ATOM  10766  CB  ASP C 398     125.085 -10.703 -15.379  1.00 79.65           C
ATOM  10767  CG  ASP C 398     125.075 -10.836 -16.897  1.00 79.85           C
ATOM  10768  OD1 ASP C 398     124.862  -9.817 -17.595  1.00 80.05           O
ATOM  10769  OD2 ASP C 398     125.284 -11.969 -17.389  1.00 79.36           O
ATOM  10770  C   ASP C 398     123.976  -9.616 -13.408  1.00 79.65           C
ATOM  10771  O   ASP C 398     124.857  -9.786 -12.566  1.00 79.80           O
ATOM  10772  N   GLU C 399     122.684  -9.538 -13.106  1.00 79.61           N
ATOM  10773  CA  GLU C 399     122.155  -9.662 -11.741  1.00 79.63           C
ATOM  10774  CB  GLU C 399     120.649  -9.914 -11.813  1.00 79.77           C
ATOM  10775  CG  GLU C 399     119.972 -10.346 -10.531  1.00 80.23           C
ATOM  10776  CD  GLU C 399     118.541 -10.764 -10.785  1.00 80.85           C
ATOM  10777  OE1 GLU C 399     118.336 -11.787 -11.485  1.00 80.66           O
ATOM  10778  OE2 GLU C 399     117.628 -10.058 -10.299  1.00 80.91           O
ATOM  10779  C   GLU C 399     122.838 -10.735 -10.887  1.00 79.49           C
ATOM  10780  O   GLU C 399     123.051 -11.863 -11.339  1.00 79.38           O
ATOM  10781  N   GLY C 400     123.170 -10.371  -9.650  1.00 79.34           N
ATOM  10782  CA  GLY C 400     123.884 -11.265  -8.744  1.00 79.21           C
ATOM  10783  C   GLY C 400     125.394 -11.136  -8.858  1.00 79.06           C
ATOM  10784  O   GLY C 400     126.139 -11.835  -8.170  1.00 78.96           O
ATOM  10785  N   HIS C 401     125.849 -10.251  -9.740  1.00 78.88           N
ATOM  10786  CA  HIS C 401     127.268  -9.952  -9.852  1.00 78.75           C
ATOM  10787  CB  HIS C 401     127.702  -9.827 -11.316  1.00 78.61           C
ATOM  10788  CG  HIS C 401     128.095 -11.128 -11.946  1.00 78.14           C
ATOM  10789  ND1 HIS C 401     127.179 -11.995 -12.501  1.00 77.52           N
ATOM  10790  CE1 HIS C 401     127.811 -13.053 -12.978  1.00 77.27           C
ATOM  10791  NE2 HIS C 401     129.104 -12.902 -12.754  1.00 77.32           N
ATOM  10792  CD2 HIS C 401     129.309 -11.707 -12.109  1.00 77.76           C
ATOM  10793  C   HIS C 401     127.566  -8.673  -9.092  1.00 78.84           C
ATOM  10794  O   HIS C 401     126.667  -7.861  -8.858  1.00 78.85           O
ATOM  10795  N   THR C 402     128.830  -8.512  -8.702  1.00 78.94           N
ATOM  10796  CA  THR C 402     129.291  -7.341  -7.951  1.00 78.91           C
ATOM  10797  CB  THR C 402     130.366  -7.727  -6.880  1.00 78.93           C
ATOM  10798  OG1 THR C 402     130.819  -6.551  -6.193  1.00 78.48           O
ATOM  10799  CG2 THR C 402     131.561  -8.498  -7.499  1.00 78.89           C
ATOM  10800  C   THR C 402     129.774  -6.223  -8.884  1.00 78.91           C
ATOM  10801  O   THR C 402     130.442  -6.486  -9.884  1.00 79.04           O
ATOM  10802  N   VAL C 403     129.426  -4.983  -8.553  1.00 78.87           N
ATOM  10803  CA  VAL C 403     129.675  -3.836  -9.438  1.00 78.96           C
ATOM  10804  CB  VAL C 403     128.566  -3.749 -10.541  1.00 79.02           C
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ATOM  10805  CG1 VAL C 403     127.968  -2.342 -10.672  1.00 79.09           C
ATOM  10806  CG2 VAL C 403     129.097  -4.280 -11.876  1.00 78.93           C
ATOM  10807  C   VAL C 403     129.844  -2.515  -8.667  1.00 78.95           C
ATOM  10808  O   VAL C 403     129.206  -2.306  -7.633  1.00 78.77           O
ATOM  10809  N   GLN C 404     130.711  -1.635  -9.168  1.00 79.12           N
ATOM  10810  CA  GLN C 404     130.983  -0.352  -8.502  1.00 79.46           C
ATOM  10811  CB  GLN C 404     132.254  -0.441  -7.646  1.00 79.46           C
ATOM  10812  CG  GLN C 404     133.466  -1.049  -8.355  1.00 79.88           C
ATOM  10813  CD  GLN C 404     134.787  -0.650  -7.715  1.00 80.44           C
ATOM  10814  OE1 GLN C 404     134.917  -0.618  -6.489  1.00 81.04           O
ATOM  10815  NE2 GLN C 404     135.777  -0.339  -8.548  1.00 79.93           N
ATOM  10816  C   GLN C 404     131.060   0.863  -9.435  1.00 79.54           C
ATOM  10817  O   GLN C 404     131.650   0.790 -10.510  1.00 79.49           O
ATOM  10818  N   PHE C 405     130.446   1.969  -9.014  1.00 79.86           N
ATOM  10819  CA  PHE C 405     130.622   3.274  -9.668  1.00 80.25           C
ATOM  10820  CB  PHE C 405     129.349   4.113  -9.585  1.00 80.30           C
ATOM  10821  CG  PHE C 405     128.197   3.577 -10.380  1.00 80.61           C
ATOM  10822  CD1 PHE C 405     128.243   3.541 -11.768  1.00 80.77           C
ATOM  10823  CE1 PHE C 405     127.162   3.068 -12.504  1.00 81.01           C
ATOM  10824  CZ  PHE C 405     126.013   2.635 -11.852  1.00 81.17           C
ATOM  10825  CE2 PHE C 405     125.948   2.681 -10.463  1.00 81.32           C
ATOM  10826  CD2 PHE C 405     127.036   3.159  -9.736  1.00 81.18           C
ATOM  10827  C   PHE C 405     131.742   4.072  -8.996  1.00 80.43           C
ATOM  10828  O   PHE C 405     131.905   4.018  -7.780  1.00 80.44           O
ATOM  10829  N   VAL C 406     132.492   4.830  -9.789  1.00 80.72           N
ATOM  10830  CA  VAL C 406     133.575   5.668  -9.271  1.00 80.98           C
ATOM  10831  CB  VAL C 406     134.880   5.460 -10.083  1.00 81.05           C
ATOM  10832  CG1 VAL C 406     135.936   6.508  -9.728  1.00 81.29           C
ATOM  10833  CG2 VAL C 406     135.427   4.042  -9.868  1.00 80.89           C
ATOM  10834  C   VAL C 406     133.158   7.137  -9.292  1.00 81.12           C
ATOM  10835  O   VAL C 406     132.462   7.583 -10.209  1.00 81.01           O
ATOM  10836  N   CYS C 407     133.562   7.879  -8.267  1.00 81.41           N
ATOM  10837  CA  CYS C 407     133.297   9.317  -8.209  1.00 81.52           C
ATOM  10838  CB  CYS C 407     131.923   9.604  -7.587  1.00 81.55           C
ATOM  10839  SG  CYS C 407     131.489  11.348  -7.341  1.00 81.81           S
ATOM  10840  C   CYS C 407     134.438  10.017  -7.474  1.00 81.57           C
ATOM  10841  O   CYS C 407     134.694   9.773  -6.286  1.00 81.55           O
ATOM  10842  N   ARG C 408     135.138  10.867  -8.223  1.00 81.52           N
ATOM  10843  CA  ARG C 408     136.362  11.521  -7.772  1.00 81.16           C
ATOM  10844  CB  ARG C 408     137.559  10.953  -8.538  1.00 81.26           C
ATOM  10845  CG  ARG C 408     138.838  10.823  -7.730  1.00 81.89           C
ATOM  10846  CD  ARG C 408     139.879  10.021  -8.505  1.00 83.63           C
ATOM  10847  NE  ARG C 408     139.326   8.768  -9.029  1.00 84.49           N
ATOM  10848  CZ  ARG C 408     139.987   7.898  -9.794  1.00 84.71           C
ATOM  10849  NH1 ARG C 408     141.252   8.123 -10.142  1.00 83.95           N
ATOM  10850  NH2 ARG C 408     139.378   6.792 -10.212  1.00 84.41           N
ATOM  10851  C   ARG C 408     136.232  13.013  -8.038  1.00 80.61           C
ATOM  10852  O   ARG C 408     135.917  13.429  -9.158  1.00 80.41           O
ATOM  10853  N   ALA C 409     136.466  13.815  -7.007  1.00 80.01           N
ATOM  10854  CA  ALA C 409     136.247  15.246  -7.118  1.00 79.60           C
ATOM  10855  CB  ALA C 409     135.089  15.656  -6.275  1.00 79.53           C
ATOM  10856  C   ALA C 409     137.461  16.073  -6.754  1.00 79.45           C
ATOM  10857  O   ALA C 409     138.165  15.788  -5.782  1.00 79.34           O
ATOM  10858  N   ASP C 410     137.690  17.109  -7.552  1.00 79.27           N
ATOM  10859  CA  ASP C 410     138.670  18.121  -7.226  1.00 79.08           C
ATOM  10860  CB  ASP C 410     139.279  18.711  -8.495  1.00 79.30           C
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ATOM  10861  CG  ASP C 410     140.503  17.942  -8.956  1.00 80.78           C
ATOM  10862  OD1 ASP C 410     141.321  17.560  -8.086  1.00 82.29           O
ATOM  10863  OD2 ASP C 410     140.651  17.714 -10.179  1.00 82.26           O
ATOM  10864  C   ASP C 410     138.024  19.198  -6.379  1.00 78.55           C
ATOM  10865  O   ASP C 410     136.802  19.331  -6.356  1.00 78.20           O
ATOM  10866  N   GLY C 411     138.854  19.951  -5.672  1.00 78.31           N
ATOM  10867  CA  GLY C 411     138.384  21.053  -4.859  1.00 78.01           C
ATOM  10868  C   GLY C 411     139.176  21.163  -3.584  1.00 78.06           C
ATOM  10869  O   GLY C 411     139.713  20.177  -3.085  1.00 78.03           O
ATOM  10870  N   ASP C 412     139.260  22.377  -3.064  1.00 78.19           N
ATOM  10871  CA  ASP C 412     139.861  22.597  -1.770  1.00 78.46           C
ATOM  10872  CB  ASP C 412     141.246  23.207  -1.903  1.00 78.90           C
ATOM  10873  CG  ASP C 412     141.909  23.421  -0.559  1.00 80.19           C
ATOM  10874  OD1 ASP C 412     142.698  22.539  -0.131  1.00 81.40           O
ATOM  10875  OD2 ASP C 412     141.616  24.461   0.078  1.00 81.89           O
ATOM  10876  C   ASP C 412     138.969  23.495  -0.938  1.00 78.26           C
ATOM  10877  O   ASP C 412     138.577  24.559  -1.398  1.00 78.37           O
ATOM  10878  N   PRO C 413     138.643  23.069   0.296  1.00 78.27           N
ATOM  10879  CA  PRO C 413     139.050  21.805   0.947  1.00 77.95           C
ATOM  10880  CB  PRO C 413     138.375  21.887   2.320  1.00 78.07           C
ATOM  10881  CG  PRO C 413     138.112  23.359   2.524  1.00 78.44           C
ATOM  10882  CD  PRO C 413     137.783  23.885   1.173  1.00 78.08           C
ATOM  10883  C   PRO C 413     138.563  20.561   0.189  1.00 77.55           C
ATOM  10884  O   PRO C 413     137.570  20.644  -0.543  1.00 77.28           O
ATOM  10885  N   PRO C 414     139.257  19.415   0.360  1.00 77.30           N
ATOM  10886  CA  PRO C 414     138.933  18.188  -0.382  1.00 77.15           C
ATOM  10887  CB  PRO C 414     139.883  17.144   0.211  1.00 76.99           C
ATOM  10888  CG  PRO C 414     140.340  17.731   1.513  1.00 77.42           C
ATOM  10889  CD  PRO C 414     140.386  19.203   1.279  1.00 77.37           C
ATOM  10890  C   PRO C 414     137.476  17.769  -0.187  1.00 76.97           C
ATOM  10891  O   PRO C 414     137.022  17.629   0.949  1.00 77.24           O
ATOM  10892  N   PRO C 415     136.745  17.559  -1.293  1.00 76.62           N
ATOM  10893  CA  PRO C 415     135.302  17.425  -1.210  1.00 76.27           C
ATOM  10894  CB  PRO C 415     134.861  17.422  -2.675  1.00 76.14           C
ATOM  10895  CG  PRO C 415     136.052  17.783  -3.468  1.00 76.22           C
ATOM  10896  CD  PRO C 415     137.226  17.387  -2.672  1.00 76.59           C
ATOM  10897  C   PRO C 415     134.898  16.114  -0.567  1.00 76.16           C
ATOM  10898  O   PRO C 415     135.647  15.136  -0.628  1.00 76.19           O
ATOM  10899  N   ALA C 416     133.727  16.110   0.063  1.00 75.96           N
ATOM  10900  CA  ALA C 416     133.105  14.878   0.520  1.00 75.32           C
ATOM  10901  CB  ALA C 416     132.312  15.115   1.778  1.00 75.12           C
ATOM  10902  C   ALA C 416     132.209  14.379  -0.610  1.00 75.06           C
ATOM  10903  O   ALA C 416     131.565  15.173  -1.319  1.00 75.01           O
ATOM  10904  N   ILE C 417     132.196  13.064  -0.781  1.00 74.46           N
ATOM  10905  CA  ILE C 417     131.453  12.426  -1.850  1.00 74.01           C
ATOM  10906  CB  ILE C 417     132.345  11.422  -2.615  1.00 74.21           C
ATOM  10907  CG1 ILE C 417     133.606  12.116  -3.153  1.00 74.00           C
ATOM  10908  CD1 ILE C 417     133.334  13.292  -4.063  1.00 73.92           C
ATOM  10909  CG2 ILE C 417     131.571  10.728  -3.733  1.00 74.08           C
ATOM  10910  C   ILE C 417     130.262  11.703  -1.261  1.00 73.70           C
ATOM  10911  O   ILE C 417     130.408  10.922  -0.324  1.00 74.22           O
ATOM  10912  N   LEU C 418     129.085  11.973  -1.810  1.00 73.10           N
ATOM  10913  CA  LEU C 418     127.847  11.357  -1.355  1.00 72.65           C
ATOM  10914  CB  LEU C 418     126.917  12.402  -0.751  1.00 72.93           C
ATOM  10915  CG  LEU C 418     127.446  13.312   0.351  1.00 74.31           C
ATOM  10916  CD1 LEU C 418     126.467  14.501   0.540  1.00 75.16           C
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ATOM  10917  CD2 LEU C 418     127.687  12.518   1.656  1.00 73.97           C
ATOM  10918  C   LEU C 418     127.138  10.748  -2.536  1.00 71.96           C
ATOM  10919  O   LEU C 418     127.277  11.230  -3.657  1.00 71.97           O
ATOM  10920  N   TRP C 419     126.351   9.711  -2.280  1.00 70.99           N
ATOM  10921  CA  TRP C 419     125.565   9.099  -3.330  1.00 70.15           C
ATOM  10922  CB  TRP C 419     126.062   7.689  -3.613  1.00 69.15           C
ATOM  10923  CG  TRP C 419     127.316   7.651  -4.431  1.00 67.90           C
ATOM  10924  CD1 TRP C 419     128.597   7.692  -3.969  1.00 66.31           C
ATOM  10925  NE1 TRP C 419     129.478   7.611  -5.016  1.00 65.94           N
ATOM  10926  CE2 TRP C 419     128.773   7.519  -6.186  1.00 66.01           C
ATOM  10927  CD2 TRP C 419     127.406   7.540  -5.856  1.00 66.34           C
ATOM  10928  CE3 TRP C 419     126.463   7.448  -6.883  1.00 66.12           C
ATOM  10929  CZ3 TRP C 419     126.912   7.345  -8.196  1.00 66.61           C
ATOM  10930  CH2 TRP C 419     128.277   7.336  -8.493  1.00 66.79           C
ATOM  10931  CZ2 TRP C 419     129.222   7.416  -7.505  1.00 66.88           C
ATOM  10932  C   TRP C 419     124.074   9.087  -3.041  1.00 70.40           C
ATOM  10933  O   TRP C 419     123.642   8.696  -1.956  1.00 70.38           O
ATOM  10934  N   LEU C 420     123.298   9.523  -4.028  1.00 70.70           N
ATOM  10935  CA  LEU C 420     121.863   9.328  -4.021  1.00 71.29           C
ATOM  10936  CB  LEU C 420     121.162  10.517  -4.648  1.00 71.35           C
ATOM  10937  CG  LEU C 420     120.364  11.377  -3.685  1.00 71.95           C
ATOM  10938  CD1 LEU C 420     121.270  12.403  -3.076  1.00 72.38           C
ATOM  10939  CD2 LEU C 420     119.221  12.048  -4.426  1.00 72.42           C
ATOM  10940  C   LEU C 420     121.478   8.071  -4.777  1.00 71.63           C
ATOM  10941  O   LEU C 420     121.913   7.869  -5.902  1.00 71.79           O
ATOM  10942  N   SER C 421     120.660   7.230  -4.153  1.00 72.34           N
ATOM  10943  CA  SER C 421     120.097   6.048  -4.804  1.00 72.95           C
ATOM  10944  CB  SER C 421     119.482   5.114  -3.759  1.00 72.74           C
ATOM  10945  OG  SER C 421     118.231   5.594  -3.298  1.00 72.52           O
ATOM  10946  C   SER C 421     119.040   6.469  -5.835  1.00 73.68           C
ATOM  10947  O   SER C 421     118.639   7.642  -5.863  1.00 73.85           O
ATOM  10948  N   PRO C 422     118.593   5.526  -6.692  1.00 74.26           N
ATOM  10949  CA  PRO C 422     117.524   5.802  -7.658  1.00 74.86           C
ATOM  10950  CB  PRO C 422     117.332   4.455  -8.366  1.00 74.93           C
ATOM  10951  CG  PRO C 422     117.949   3.445  -7.461  1.00 74.66           C
ATOM  10952  CD  PRO C 422     119.084   4.144  -6.817  1.00 74.24           C
ATOM  10953  C   PRO C 422     116.209   6.266  -7.024  1.00 75.49           C
ATOM  10954  O   PRO C 422     115.417   6.928  -7.688  1.00 75.43           O
ATOM  10955  N   ARG C 423     115.992   5.921  -5.755  1.00 76.36           N
ATOM  10956  CA  ARG C 423     114.821   6.382  -4.994  1.00 77.22           C
ATOM  10957  CB  ARG C 423     114.517   5.406  -3.856  1.00 77.42           C
ATOM  10958  CG  ARG C 423     114.085   4.024  -4.307  1.00 79.13           C
ATOM  10959  CD  ARG C 423     114.552   2.971  -3.322  1.00 81.68           C
ATOM  10960  NE  ARG C 423     115.985   3.102  -3.056  1.00 83.85           N
ATOM  10961  CZ  ARG C 423     116.708   2.221  -2.369  1.00 85.23           C
ATOM  10962  NH1 ARG C 423     116.136   1.124  -1.869  1.00 85.59           N
ATOM  10963  NH2 ARG C 423     118.009   2.436  -2.183  1.00 85.28           N
ATOM  10964  C   ARG C 423     114.987   7.803  -4.419  1.00 77.36           C
ATOM  10965  O   ARG C 423     114.058   8.349  -3.820  1.00 77.33           O
ATOM  10966  N   LYS C 424     116.170   8.388  -4.610  1.00 77.64           N
ATOM  10967  CA  LYS C 424     116.530   9.706  -4.068  1.00 77.99           C
ATOM  10968  CB  LYS C 424     115.547  10.808  -4.514  1.00 77.96           C
ATOM  10969  CG  LYS C 424     115.355  10.974  -6.026  1.00 78.12           C
ATOM  10970  CD  LYS C 424     114.222  11.983  -6.295  1.00 78.47           C
ATOM  10971  CE  LYS C 424     113.735  11.992  -7.753  1.00 78.85           C
ATOM  10972  NZ  LYS C 424     112.756  10.905  -8.060  1.00 79.00           N
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ATOM  10973  C   LYS C 424     116.716   9.711  -2.536  1.00 77.98           C
ATOM  10974  O   LYS C 424     116.156  10.557  -1.831  1.00 77.96           O
ATOM  10975  N   HIS C 425     117.503   8.755  -2.038  1.00 77.95           N
ATOM  10976  CA  HIS C 425     117.961   8.742  -0.647  1.00 78.01           C
ATOM  10977  CB  HIS C 425     117.492   7.482   0.070  1.00 77.96           C
ATOM  10978  CG  HIS C 425     116.006   7.351   0.163  1.00 78.73           C
ATOM  10979  ND1 HIS C 425     115.310   6.340  -0.466  1.00 79.22           N
ATOM  10980  CE1 HIS C 425     114.022   6.464  -0.200  1.00 79.23           C
ATOM  10981  NE2 HIS C 425     113.857   7.519   0.580  1.00 79.32           N
ATOM  10982  CD2 HIS C 425     115.083   8.091   0.824  1.00 79.05           C
ATOM  10983  C   HIS C 425     119.487   8.769  -0.623  1.00 78.03           C
ATOM  10984  O   HIS C 425     120.126   8.428  -1.615  1.00 78.27           O
ATOM  10985  N   LEU C 426     120.075   9.160   0.507  1.00 77.88           N
ATOM  10986  CA  LEU C 426     121.516   9.016   0.697  1.00 77.63           C
ATOM  10987  CB  LEU C 426     121.989   9.824   1.903  1.00 77.44           C
ATOM  10988  CG  LEU C 426     122.798  11.090   1.601  1.00 77.39           C
ATOM  10989  CD1 LEU C 426     122.367  11.762   0.311  1.00 77.34           C
ATOM  10990  CD2 LEU C 426     122.746  12.076   2.765  1.00 77.09           C
ATOM  10991  C   LEU C 426     121.879   7.548   0.855  1.00 77.78           C
ATOM  10992  O   LEU C 426     120.999   6.688   0.895  1.00 77.72           O
ATOM  10993  N   VAL C 427     123.174   7.258   0.925  1.00 78.08           N
ATOM  10994  CA  VAL C 427     123.628   5.885   1.124  1.00 78.22           C
ATOM  10995  CB  VAL C 427     124.385   5.330  -0.111  1.00 78.34           C
ATOM  10996  CG1 VAL C 427     124.881   3.919   0.169  1.00 78.79           C
ATOM  10997  CG2 VAL C 427     123.490   5.321  -1.353  1.00 78.11           C
ATOM  10998  C   VAL C 427     124.492   5.777   2.380  1.00 78.33           C
ATOM  10999  O   VAL C 427     124.108   5.119   3.352  1.00 78.48           O
ATOM  11000  N   ASN C 432     126.318  -0.897   6.020  1.00 91.14           N
ATOM  11001  CA  ASN C 432     125.078  -1.663   6.152  1.00 91.04           C
ATOM  11002  CB  ASN C 432     124.097  -0.974   7.124  1.00 91.09           C
ATOM  11003  CG  ASN C 432     123.780   0.484   6.737  1.00 91.34           C
ATOM  11004  OD1 ASN C 432     124.271   1.012   5.731  1.00 90.81           O
ATOM  11005  ND2 ASN C 432     122.952   1.136   7.553  1.00 91.25           N
ATOM  11006  C   ASN C 432     124.400  -1.962   4.808  1.00 90.93           C
ATOM  11007  O   ASN C 432     124.642  -1.274   3.804  1.00 90.85           O
ATOM  11008  N   GLY C 433     123.563  -3.000   4.802  1.00 90.70           N
ATOM  11009  CA  GLY C 433     122.802  -3.384   3.613  1.00 90.28           C
ATOM  11010  C   GLY C 433     123.626  -4.114   2.568  1.00 89.89           C
ATOM  11011  O   GLY C 433     124.173  -5.183   2.834  1.00 89.96           O
ATOM  11012  N   ARG C 434     123.715  -3.521   1.381  1.00 89.45           N
ATOM  11013  CA  ARG C 434     124.363  -4.143   0.227  1.00 88.95           C
ATOM  11014  CB  ARG C 434     123.314  -4.910  -0.580  1.00 88.93           C
ATOM  11015  CG  ARG C 434     123.875  -5.989  -1.482  1.00 89.01           C
ATOM  11016  CD  ARG C 434     122.815  -7.009  -1.870  1.00 88.90           C
ATOM  11017  NE  ARG C 434     121.513  -6.409  -2.173  1.00 88.99           N
ATOM  11018  CZ  ARG C 434     121.196  -5.805  -3.317  1.00 88.69           C
ATOM  11019  NH1 ARG C 434     122.092  -5.691  -4.293  1.00 88.60           N
ATOM  11020  NH2 ARG C 434     119.976  -5.308  -3.483  1.00 88.11           N
ATOM  11021  C   ARG C 434     125.071  -3.086  -0.643  1.00 88.61           C
ATOM  11022  O   ARG C 434     125.961  -3.403  -1.442  1.00 88.39           O
ATOM  11023  N   LEU C 435     124.649  -1.833  -0.477  1.00 88.08           N
ATOM  11024  CA  LEU C 435     125.307  -0.680  -1.072  1.00 87.60           C
ATOM  11025  CB  LEU C 435     124.274   0.377  -1.473  1.00 87.62           C
ATOM  11026  CG  LEU C 435     123.328   0.136  -2.648  1.00 88.02           C
ATOM  11027  CD1 LEU C 435     122.109   1.057  -2.560  1.00 88.41           C
ATOM  11028  CD2 LEU C 435     124.046   0.332  -3.965  1.00 88.09           C
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ATOM  11029  C   LEU C 435     126.256  -0.065  -0.054  1.00 87.18           C
ATOM  11030  O   LEU C 435     125.868   0.194   1.088  1.00 87.19           O
ATOM  11031  N   THR C 436     127.500   0.163  -0.459  1.00 86.64           N
ATOM  11032  CA  THR C 436     128.437   0.885   0.391  1.00 86.45           C
ATOM  11033  CB  THR C 436     129.473  -0.044   1.096  1.00 86.66           C
ATOM  11034  OG1 THR C 436     130.441  -0.497   0.142  1.00 87.44           O
ATOM  11035  CG2 THR C 436     128.806  -1.260   1.795  1.00 86.67           C
ATOM  11036  C   THR C 436     129.182   1.945  -0.415  1.00 86.06           C
ATOM  11037  O   THR C 436     129.745   1.650  -1.470  1.00 85.89           O
ATOM  11038  N   VAL C 437     129.160   3.179   0.082  1.00 85.67           N
ATOM  11039  CA  VAL C 437     130.019   4.236  -0.451  1.00 85.54           C
ATOM  11040  CB  VAL C 437     129.320   5.638  -0.525  1.00 85.51           C
ATOM  11041  CG1 VAL C 437     128.577   5.975   0.765  1.00 86.01           C
ATOM  11042  CG2 VAL C 437     130.334   6.726  -0.854  1.00 85.65           C
ATOM  11043  C   VAL C 437     131.328   4.288   0.343  1.00 85.26           C
ATOM  11044  O   VAL C 437     131.349   4.641   1.527  1.00 85.38           O
ATOM  11045  N   PHE C 438     132.412   3.915  -0.327  1.00 84.77           N
ATOM  11046  CA  PHE C 438     133.740   3.903   0.263  1.00 84.06           C
ATOM  11047  CB  PHE C 438     134.666   3.037  -0.591  1.00 84.13           C
ATOM  11048  CG  PHE C 438     134.331   1.569  -0.560  1.00 84.15           C
ATOM  11049  CD1 PHE C 438     134.480   0.828   0.613  1.00 84.25           C
ATOM  11050  CE1 PHE C 438     134.180  -0.534   0.645  1.00 84.08           C
ATOM  11051  CZ  PHE C 438     133.736  -1.171  -0.508  1.00 84.02           C
ATOM  11052  CE2 PHE C 438     133.593  -0.444  -1.689  1.00 84.24           C
ATOM  11053  CD2 PHE C 438     133.893   0.919  -1.710  1.00 84.11           C
ATOM  11054  C   PHE C 438     134.305   5.323   0.376  1.00 83.62           C
ATOM  11055  O   PHE C 438     133.886   6.209  -0.382  1.00 83.49           O
ATOM  11056  N   PRO C 439     135.250   5.543   1.327  1.00 83.18           N
ATOM  11057  CA  PRO C 439     135.996   6.811   1.482  1.00 82.77           C
ATOM  11058  CB  PRO C 439     137.000   6.501   2.601  1.00 82.86           C
ATOM  11059  CG  PRO C 439     137.013   4.999   2.736  1.00 82.97           C
ATOM  11060  CD  PRO C 439     135.640   4.564   2.361  1.00 83.17           C
ATOM  11061  C   PRO C 439     136.722   7.269   0.205  1.00 82.36           C
ATOM  11062  O   PRO C 439     137.073   8.441   0.080  1.00 82.24           O
ATOM  11063  N   ASP C 440     136.946   6.327  -0.710  1.00 81.95           N
ATOM  11064  CA  ASP C 440     137.324   6.583  -2.101  1.00 81.53           C
ATOM  11065  CB  ASP C 440     137.244   5.261  -2.867  1.00 81.76           C
ATOM  11066  CG  ASP C 440     138.593   4.706  -3.225  1.00 82.59           C
ATOM  11067  OD1 ASP C 440     139.562   5.493  -3.293  1.00 83.93           O
ATOM  11068  OD2 ASP C 440     138.679   3.480  -3.460  1.00 83.59           O
ATOM  11069  C   ASP C 440     136.418   7.577  -2.837  1.00 81.00           C
ATOM  11070  O   ASP C 440     136.895   8.432  -3.584  1.00 80.95           O
ATOM  11071  N   GLY C 441     135.109   7.439  -2.632  1.00 80.24           N
ATOM  11072  CA  GLY C 441     134.114   8.079  -3.482  1.00 79.30           C
ATOM  11073  C   GLY C 441     133.435   7.068  -4.398  1.00 78.61           C
ATOM  11074  O   GLY C 441     132.482   7.393  -5.112  1.00 78.33           O
ATOM  11075  N   THR C 442     133.931   5.835  -4.382  1.00 77.95           N
ATOM  11076  CA  THR C 442     133.327   4.768  -5.163  1.00 77.23           C
ATOM  11077  CB  THR C 442     134.311   3.614  -5.457  1.00 77.35           C
ATOM  11078  OG1 THR C 442     134.569   2.882  -4.254  1.00 77.98           O
ATOM  11079  CG2 THR C 442     135.628   4.144  -6.039  1.00 77.37           C
ATOM  11080  C   THR C 442     132.098   4.223  -4.448  1.00 76.53           C
ATOM  11081  O   THR C 442     132.063   4.144  -3.218  1.00 76.42           O
ATOM  11082  N   LEU C 443     131.087   3.872  -5.235  1.00 75.73           N
ATOM  11083  CA  LEU C 443     129.887   3.233  -4.730  1.00 74.77           C
ATOM  11084  CB  LEU C 443     128.643   3.987  -5.208  1.00 74.82           C
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ATOM	11085	CG	LEU	C	443	127.276	3.340	-4.960	1.00	74.44	C
ATOM	11086	CD1	LEU	C	443	127.007	3.151	-3.475	1.00	74.45	C
ATOM	11087	CD2	LEU	C	443	126.184	4.163	-5.592	1.00	74.07	C
ATOM	11088	C	LEU	C	443	129.850	1.796	-5.219	1.00	74.45	C
ATOM	11089	O	LEU	C	443	129.826	1.547	-6.419	1.00	74.28	O
ATOM	11090	N	GLU	C	444	129.840	0.859	-4.280	1.00	74.18	N
ATOM	11091	CA	GLU	C	444	129.809	-0.562	-4.594	1.00	73.88	C
ATOM	11092	CB	GLU	C	444	130.813	-1.294	-3.711	1.00	73.79	C
ATOM	11093	CG	GLU	C	444	131.058	-2.744	-4.075	1.00	73.70	C
ATOM	11094	CD	GLU	C	444	131.442	-3.586	-2.865	1.00	73.86	C
ATOM	11095	OE1	GLU	C	444	130.729	-3.514	-1.836	1.00	73.38	O
ATOM	11096	OE2	GLU	C	444	132.450	-4.327	-2.943	1.00	74.01	O
ATOM	11097	C	GLU	C	444	128.409	-1.140	-4.390	1.00	73.86	C
ATOM	11098	O	GLU	C	444	127.797	-0.943	-3.343	1.00	73.78	O
ATOM	11099	N	VAL	C	445	127.906	-1.838	-5.406	1.00	74.03	N
ATOM	11100	CA	VAL	C	445	126.667	-2.615	-5.303	1.00	74.28	C
ATOM	11101	CB	VAL	C	445	125.748	-2.414	-6.526	1.00	74.09	C
ATOM	11102	CG1	VAL	C	445	124.389	-3.029	-6.267	1.00	74.12	C
ATOM	11103	CG2	VAL	C	445	125.598	-0.944	-6.858	1.00	74.52	C
ATOM	11104	C	VAL	C	445	127.034	-4.103	-5.185	1.00	74.53	C
ATOM	11105	O	VAL	C	445	127.352	-4.760	-6.186	1.00	74.33	O
ATOM	11106	N	ARG	C	446	126.985	-4.625	-3.962	1.00	74.87	N
ATOM	11107	CA	ARG	C	446	127.550	-5.944	-3.670	1.00	75.29	C
ATOM	11108	CB	ARG	C	446	127.379	-6.316	-2.196	1.00	75.40	C
ATOM	11109	CG	ARG	C	446	128.464	-5.810	-1.273	1.00	75.69	C
ATOM	11110	CD	ARG	C	446	128.448	-6.606	0.017	1.00	76.95	C
ATOM	11111	NE	ARG	C	446	129.109	-5.906	1.114	1.00	77.91	N
ATOM	11112	CZ	ARG	C	446	129.442	-6.467	2.277	1.00	78.73	C
ATOM	11113	NH1	ARG	C	446	130.039	-5.736	3.212	1.00	78.58	N
ATOM	11114	NH2	ARG	C	446	129.187	-7.755	2.508	1.00	78.60	N
ATOM	11115	C	ARG	C	446	127.014	-7.065	-4.555	1.00	75.35	C
ATOM	11116	O	ARG	C	446	127.793	-7.781	-5.185	1.00	75.67	O
ATOM	11117	N	TYR	C	447	125.699	-7.240	-4.586	1.00	75.16	N
ATOM	11118	CA	TYR	C	447	125.118	-8.329	-5.364	1.00	75.25	C
ATOM	11119	CB	TYR	C	447	124.758	-9.523	-4.472	1.00	75.02	C
ATOM	11120	CG	TYR	C	447	125.940	-10.233	-3.839	1.00	74.53	C
ATOM	11121	CD1	TYR	C	447	126.505	-11.353	-4.448	1.00	74.93	C
ATOM	11122	CE1	TYR	C	447	127.585	-12.027	-3.872	1.00	74.49	C
ATOM	11123	CZ	TYR	C	447	128.109	-11.575	-2.674	1.00	74.66	C
ATOM	11124	OH	TYR	C	447	129.174	-12.248	-2.115	1.00	74.32	O
ATOM	11125	CE2	TYR	C	447	127.562	-10.457	-2.042	1.00	74.26	C
ATOM	11126	CD2	TYR	C	447	126.478	-9.802	-2.623	1.00	73.86	C
ATOM	11127	C	TYR	C	447	123.904	-7.790	-6.093	1.00	75.49	C
ATOM	11128	O	TYR	C	447	122.758	-8.036	-5.702	1.00	75.43	O
ATOM	11129	N	ALA	C	448	124.194	-7.041	-7.156	1.00	75.73	N
ATOM	11130	CA	ALA	C	448	123.213	-6.281	-7.919	1.00	75.86	C
ATOM	11131	CB	ALA	C	448	123.834	-5.773	-9.208	1.00	75.82	C
ATOM	11132	C	ALA	C	448	121.945	-7.069	-8.210	1.00	76.17	C
ATOM	11133	O	ALA	C	448	121.996	-8.212	-8.684	1.00	76.39	O
ATOM	11134	N	GLN	C	449	120.813	-6.447	-7.897	1.00	76.31	N
ATOM	11135	CA	GLN	C	449	119.500	-7.034	-8.114	1.00	76.44	C
ATOM	11136	CB	GLN	C	449	118.829	-7.339	-6.769	1.00	76.52	C
ATOM	11137	CG	GLN	C	449	119.389	-8.586	-6.073	1.00	76.69	C
ATOM	11138	CD	GLN	C	449	118.873	-8.771	-4.648	1.00	76.77	C
ATOM	11139	OE1	GLN	C	449	119.637	-8.662	-3.682	1.00	77.06	O
ATOM	11140	NE2	GLN	C	449	117.577	-9.058	-4.511	1.00	76.61	N

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ATOM  11141  C   GLN C 449     118.659  -6.076  -8.947  1.00 76.34           C
ATOM  11142  O   GLN C 449     119.115  -4.979  -9.275  1.00 76.30           O
ATOM  11143  N   VAL C 450     117.445  -6.498  -9.298  1.00 76.33           N
ATOM  11144  CA  VAL C 450     116.511  -5.652 -10.048  1.00 76.17           C
ATOM  11145  CB  VAL C 450     115.273  -6.457 -10.542  1.00 76.23           C
ATOM  11146  CG1 VAL C 450     114.175  -5.537 -11.116  1.00 76.40           C
ATOM  11147  CG2 VAL C 450     115.696  -7.493 -11.579  1.00 76.16           C
ATOM  11148  C   VAL C 450     116.110  -4.416  -9.229  1.00 76.07           C
ATOM  11149  O   VAL C 450     115.992  -3.319  -9.779  1.00 76.12           O
ATOM  11150  N   GLN C 451     115.946  -4.589  -7.917  1.00 75.86           N
ATOM  11151  CA  GLN C 451     115.581  -3.477  -7.025  1.00 75.76           C
ATOM  11152  CB  GLN C 451     115.062  -4.009  -5.681  1.00 75.74           C
ATOM  11153  CG  GLN C 451     116.023  -4.936  -4.935  1.00 75.26           C
ATOM  11154  CD  GLN C 451     115.774  -4.948  -3.435  1.00 74.39           C
ATOM  11155  OE1 GLN C 451     115.415  -5.981  -2.864  1.00 73.37           O
ATOM  11156  NE2 GLN C 451     115.955  -3.793  -2.791  1.00 73.24           N
ATOM  11157  C   GLN C 451     116.706  -2.443  -6.803  1.00 75.82           C
ATOM  11158  O   GLN C 451     116.688  -1.693  -5.820  1.00 75.77           O
ATOM  11159  N   ASP C 452     117.670  -2.411  -7.723  1.00 75.77           N
ATOM  11160  CA  ASP C 452     118.807  -1.495  -7.656  1.00 75.77           C
ATOM  11161  CB  ASP C 452     120.083  -2.246  -7.272  1.00 75.93           C
ATOM  11162  CG  ASP C 452     120.006  -2.865  -5.894  1.00 76.65           C
ATOM  11163  OD1 ASP C 452     119.591  -2.166  -4.941  1.00 77.38           O
ATOM  11164  OD2 ASP C 452     120.365  -4.055  -5.766  1.00 77.29           O
ATOM  11165  C   ASP C 452     119.022  -0.795  -8.988  1.00 75.63           C
ATOM  11166  O   ASP C 452     119.887   0.078  -9.100  1.00 75.53           O
ATOM  11167  N   ASN C 453     118.246  -1.195  -9.996  1.00 75.52           N
ATOM  11168  CA  ASN C 453     118.283  -0.563 -11.311  1.00 75.39           C
ATOM  11169  CB  ASN C 453     117.284  -1.230 -12.265  1.00 75.52           C
ATOM  11170  CG  ASN C 453     117.545  -0.882 -13.725  1.00 76.02           C
ATOM  11171  OD1 ASN C 453     117.011   0.101 -14.261  1.00 78.12           O
ATOM  11172  ND2 ASN C 453     118.387  -1.677 -14.369  1.00 75.90           N
ATOM  11173  C   ASN C 453     117.963   0.921 -11.204  1.00 75.14           C
ATOM  11174  O   ASN C 453     117.215   1.341 -10.317  1.00 75.04           O
ATOM  11175  N   GLY C 454     118.544   1.710 -12.101  1.00 74.90           N
ATOM  11176  CA  GLY C 454     118.195   3.113 -12.209  1.00 74.77           C
ATOM  11177  C   GLY C 454     119.347   4.084 -12.083  1.00 74.63           C
ATOM  11178  O   GLY C 454     120.518   3.696 -12.120  1.00 74.68           O
ATOM  11179  N   THR C 455     118.986   5.356 -11.933  1.00 74.42           N
ATOM  11180  CA  THR C 455     119.929   6.460 -11.881  1.00 74.19           C
ATOM  11181  CB  THR C 455     119.293   7.750 -12.448  1.00 74.40           C
ATOM  11182  OG1 THR C 455     118.957   7.553 -13.830  1.00 74.55           O
ATOM  11183  CG2 THR C 455     120.249   8.943 -12.314  1.00 74.66           C
ATOM  11184  C   THR C 455     120.408   6.723 -10.459  1.00 73.87           C
ATOM  11185  O   THR C 455     119.612   6.836  -9.526  1.00 73.94           O
ATOM  11186  N   TYR C 456     121.722   6.819 -10.314  1.00 73.32           N
ATOM  11187  CA  TYR C 456     122.345   7.192  -9.064  1.00 72.86           C
ATOM  11188  CB  TYR C 456     123.434   6.178  -8.713  1.00 72.25           C
ATOM  11189  CG  TYR C 456     122.905   4.834  -8.256  1.00 71.59           C
ATOM  11190  CD1 TYR C 456     122.974   4.461  -6.918  1.00 70.82           C
ATOM  11191  CE1 TYR C 456     122.498   3.234  -6.488  1.00 70.25           C
ATOM  11192  CZ  TYR C 456     121.934   2.366  -7.398  1.00 70.39           C
ATOM  11193  OH  TYR C 456     121.451   1.163  -6.960  1.00 70.91           O
ATOM  11194  CE2 TYR C 456     121.842   2.706  -8.733  1.00 70.58           C
ATOM  11195  CD2 TYR C 456     122.330   3.936  -9.158  1.00 71.26           C
ATOM  11196  C   TYR C 456     122.951   8.574  -9.247  1.00 73.16           C
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ATOM  11197  O   TYR C 456     123.387   8.921 -10.341  1.00 73.55           O
ATOM  11198  N   LEU C 457     122.959   9.381  -8.198  1.00 73.39           N
ATOM  11199  CA  LEU C 457     123.700  10.633  -8.246  1.00 73.63           C
ATOM  11200  CB  LEU C 457     122.846  11.814  -7.785  1.00 73.23           C
ATOM  11201  CG  LEU C 457     122.113  12.737  -8.755  1.00 72.64           C
ATOM  11202  CD1 LEU C 457     121.788  14.026  -8.035  1.00 71.11           C
ATOM  11203  CD2 LEU C 457     122.919  13.032  -9.993  1.00 72.06           C
ATOM  11204  C   LEU C 457     124.880  10.527  -7.323  1.00 74.22           C
ATOM  11205  O   LEU C 457     124.713  10.140  -6.165  1.00 74.12           O
ATOM  11206  N   CYS C 458     126.073  10.853  -7.813  1.00 74.98           N
ATOM  11207  CA  CYS C 458     127.135  11.181  -6.873  1.00 76.07           C
ATOM  11208  CB  CYS C 458     128.505  10.574  -7.207  1.00 76.49           C
ATOM  11209  SG  CYS C 458     129.618  11.583  -8.164  1.00 81.04           S
ATOM  11210  C   CYS C 458     127.180  12.677  -6.749  1.00 75.44           C
ATOM  11211  O   CYS C 458     126.973  13.397  -7.720  1.00 75.16           O
ATOM  11212  N   ILE C 459     127.420  13.124  -5.523  1.00 75.26           N
ATOM  11213  CA  ILE C 459     127.391  14.529  -5.175  1.00 75.02           C
ATOM  11214  CB  ILE C 459     126.232  14.808  -4.209  1.00 75.21           C
ATOM  11215  CG1 ILE C 459     124.926  14.284  -4.813  1.00 75.42           C
ATOM  11216  CD1 ILE C 459     123.950  13.787  -3.807  1.00 75.30           C
ATOM  11217  CG2 ILE C 459     126.129  16.308  -3.899  1.00 75.48           C
ATOM  11218  C   ILE C 459     128.698  14.880  -4.507  1.00 74.52           C
ATOM  11219  O   ILE C 459     129.016  14.334  -3.457  1.00 74.98           O
ATOM  11220  N   ALA C 460     129.473  15.766  -5.116  1.00 73.85           N
ATOM  11221  CA  ALA C 460     130.718  16.193  -4.493  1.00 73.43           C
ATOM  11222  CB  ALA C 460     131.795  16.355  -5.512  1.00 73.25           C
ATOM  11223  C   ALA C 460     130.452  17.507  -3.803  1.00 73.37           C
ATOM  11224  O   ALA C 460     129.905  18.430  -4.416  1.00 73.30           O
ATOM  11225  N   ALA C 461     130.836  17.598  -2.534  1.00 73.12           N
ATOM  11226  CA  ALA C 461     130.510  18.781  -1.749  1.00 73.04           C
ATOM  11227  CB  ALA C 461     129.297  18.506  -0.889  1.00 73.05           C
ATOM  11228  C   ALA C 461     131.659  19.277  -0.889  1.00 73.08           C
ATOM  11229  O   ALA C 461     132.326  18.486  -0.215  1.00 72.86           O
ATOM  11230  N   ASN C 462     131.890  20.589  -0.932  1.00 73.12           N
ATOM  11231  CA  ASN C 462     132.764  21.250   0.037  1.00 73.43           C
ATOM  11232  CB  ASN C 462     134.234  21.284  -0.427  1.00 73.38           C
ATOM  11233  CG  ASN C 462     134.481  22.235  -1.579  1.00 72.67           C
ATOM  11234  OD1 ASN C 462     133.579  22.920  -2.051  1.00 73.18           O
ATOM  11235  ND2 ASN C 462     135.719  22.278  -2.038  1.00 71.79           N
ATOM  11236  C   ASN C 462     132.263  22.632   0.454  1.00 73.90           C
ATOM  11237  O   ASN C 462     131.290  23.151  -0.100  1.00 74.02           O
ATOM  11238  N   ALA C 463     132.933  23.222   1.434  1.00 74.28           N
ATOM  11239  CA  ALA C 463     132.537  24.513   1.966  1.00 75.02           C
ATOM  11240  CB  ALA C 463     133.611  25.037   2.866  1.00 75.13           C
ATOM  11241  C   ALA C 463     132.188  25.557   0.902  1.00 75.74           C
ATOM  11242  O   ALA C 463     131.277  26.349   1.109  1.00 76.32           O
ATOM  11243  N   GLY C 464     132.904  25.564  -0.224  1.00 76.08           N
ATOM  11244  CA  GLY C 464     132.705  26.582  -1.255  1.00 76.38           C
ATOM  11245  C   GLY C 464     131.555  26.349  -2.226  1.00 76.74           C
ATOM  11246  O   GLY C 464     131.084  27.291  -2.876  1.00 77.18           O
ATOM  11247  N   GLY C 465     131.107  25.101  -2.343  1.00 76.56           N
ATOM  11248  CA  GLY C 465     130.059  24.743  -3.296  1.00 76.44           C
ATOM  11249  C   GLY C 465     129.957  23.244  -3.505  1.00 76.49           C
ATOM  11250  O   GLY C 465     130.642  22.462  -2.835  1.00 76.53           O
ATOM  11251  N   ASN C 466     129.099  22.835  -4.433  1.00 76.54           N
ATOM  11252  CA  ASN C 466     128.934  21.414  -4.731  1.00 76.76           C
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ATOM  11253  CB  ASN C 466     127.865  20.771  -3.843  1.00 76.81           C
ATOM  11254  CG  ASN C 466     126.512  21.425  -3.988  1.00 77.49           C
ATOM  11255  OD1 ASN C 466     125.827  21.247  -4.994  1.00 77.99           O
ATOM  11256  ND2 ASN C 466     126.111  22.185  -2.971  1.00 78.87           N
ATOM  11257  C   ASN C 466     128.678  21.108  -6.202  1.00 76.83           C
ATOM  11258  O   ASN C 466     128.575  22.018  -7.025  1.00 76.71           O
ATOM  11259  N   ASP C 467     128.593  19.816  -6.508  1.00 76.83           N
ATOM  11260  CA  ASP C 467     128.494  19.327  -7.871  1.00 77.11           C
ATOM  11261  CB  ASP C 467     129.885  19.271  -8.499  1.00 77.07           C
ATOM  11262  CG  ASP C 467     129.850  19.303 -10.017  1.00 78.72           C
ATOM  11263  OD1 ASP C 467     128.838  19.764 -10.602  1.00 80.20           O
ATOM  11264  OD2 ASP C 467     130.853  18.874 -10.635  1.00 80.03           O
ATOM  11265  C   ASP C 467     127.859  17.933  -7.876  1.00 77.20           C
ATOM  11266  O   ASP C 467     127.874  17.222  -6.864  1.00 77.47           O
ATOM  11267  N   SER C 468     127.301  17.540  -9.016  1.00 77.09           N
ATOM  11268  CA  SER C 468     126.681  16.227  -9.138  1.00 76.79           C
ATOM  11269  CB  SER C 468     125.213  16.268  -8.697  1.00 76.76           C
ATOM  11270  OG  SER C 468     124.585  17.480  -9.088  1.00 76.95           O
ATOM  11271  C   SER C 468     126.815  15.655 -10.539  1.00 76.56           C
ATOM  11272  O   SER C 468     126.928  16.394 -11.509  1.00 76.68           O
ATOM  11273  N   MET C 469     126.841  14.329 -10.611  1.00 76.58           N
ATOM  11274  CA  MET C 469     126.833  13.579 -11.862  1.00 76.53           C
ATOM  11275  CB  MET C 469     128.234  13.072 -12.222  1.00 76.48           C
ATOM  11276  CG  MET C 469     129.057  14.068 -13.009  1.00 77.12           C
ATOM  11277  SD  MET C 469     128.428  14.329 -14.684  1.00 78.54           S
ATOM  11278  CE  MET C 469     128.692  16.101 -14.900  1.00 77.01           C
ATOM  11279  C   MET C 469     125.892  12.394 -11.728  1.00 76.44           C
ATOM  11280  O   MET C 469     125.858  11.751 -10.676  1.00 76.46           O
ATOM  11281  N   PRO C 470     125.091  12.127 -12.775  1.00 76.41           N
ATOM  11282  CA  PRO C 470     124.334  10.881 -12.837  1.00 76.26           C
ATOM  11283  CB  PRO C 470     123.340  11.122 -13.985  1.00 76.37           C
ATOM  11284  CG  PRO C 470     123.413  12.606 -14.290  1.00 76.29           C
ATOM  11285  CD  PRO C 470     124.805  12.997 -13.930  1.00 76.35           C
ATOM  11286  C   PRO C 470     125.224   9.679 -13.149  1.00 76.23           C
ATOM  11287  O   PRO C 470     126.221   9.797 -13.870  1.00 76.07           O
ATOM  11288  N   ALA C 471     124.864   8.541 -12.567  1.00 76.36           N
ATOM  11289  CA  ALA C 471     125.436   7.243 -12.907  1.00 76.44           C
ATOM  11290  CB  ALA C 471     126.284   6.705 -11.768  1.00 76.36           C
ATOM  11291  C   ALA C 471     124.273   6.305 -13.207  1.00 76.51           C
ATOM  11292  O   ALA C 471     123.253   6.335 -12.512  1.00 76.41           O
ATOM  11293  N   HIS C 472     124.416   5.489 -14.248  1.00 76.65           N
ATOM  11294  CA  HIS C 472     123.307   4.657 -14.708  1.00 76.85           C
ATOM  11295  CB  HIS C 472     122.956   5.003 -16.153  1.00 76.75           C
ATOM  11296  CG  HIS C 472     122.715   6.463 -16.371  1.00 77.08           C
ATOM  11297  ND1 HIS C 472     121.567   7.099 -15.948  1.00 77.51           N
ATOM  11298  CE1 HIS C 472     121.633   8.381 -16.265  1.00 77.00           C
ATOM  11299  NE2 HIS C 472     122.785   8.601 -16.872  1.00 76.96           N
ATOM  11300  CD2 HIS C 472     123.482   7.418 -16.949  1.00 77.13           C
ATOM  11301  C   HIS C 472     123.569   3.159 -14.533  1.00 77.00           C
ATOM  11302  O   HIS C 472     124.444   2.588 -15.195  1.00 77.19           O
ATOM  11303  N   LEU C 473     122.812   2.532 -13.632  1.00 76.92           N
ATOM  11304  CA  LEU C 473     122.937   1.100 -13.406  1.00 76.97           C
ATOM  11305  CB  LEU C 473     122.888   0.759 -11.916  1.00 76.75           C
ATOM  11306  CG  LEU C 473     123.118  -0.726 -11.600  1.00 76.18           C
ATOM  11307  CD1 LEU C 473     124.419  -1.238 -12.214  1.00 75.61           C
ATOM  11308  CD2 LEU C 473     123.102  -0.966 -10.105  1.00 75.59           C
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ATOM  11309  C   LEU C 473     121.880   0.300 -14.163  1.00 77.32           C
ATOM  11310  O   LEU C 473     120.709   0.261 -13.760  1.00 77.64           O
ATOM  11311  N   HIS C 474     122.306  -0.342 -15.252  1.00 77.33           N
ATOM  11312  CA  HIS C 474     121.444  -1.230 -16.021  1.00 77.23           C
ATOM  11313  CB  HIS C 474     121.711  -1.103 -17.526  1.00 77.17           C
ATOM  11314  CG  HIS C 474     121.829   0.308 -18.013  1.00 77.30           C
ATOM  11315  ND1 HIS C 474     120.857   0.914 -18.780  1.00 77.31           N
ATOM  11316  CE1 HIS C 474     121.233   2.148 -19.068  1.00 77.09           C
ATOM  11317  NE2 HIS C 474     122.413   2.365 -18.515  1.00 77.05           N
ATOM  11318  CD2 HIS C 474     122.811   1.228 -17.854  1.00 77.17           C
ATOM  11319  C   HIS C 474     121.724  -2.655 -15.576  1.00 77.25           C
ATOM  11320  O   HIS C 474     122.769  -3.220 -15.916  1.00 77.32           O
ATOM  11321  N   VAL C 475     120.805  -3.226 -14.801  1.00 77.24           N
ATOM  11322  CA  VAL C 475     120.920  -4.623 -14.369  1.00 77.29           C
ATOM  11323  CB  VAL C 475     120.553  -4.811 -12.858  1.00 77.26           C
ATOM  11324  CG1 VAL C 475     119.058  -4.630 -12.615  1.00 77.77           C
ATOM  11325  CG2 VAL C 475     121.005  -6.162 -12.357  1.00 76.90           C
ATOM  11326  C   VAL C 475     120.120  -5.557 -15.290  1.00 77.22           C
ATOM  11327  O   VAL C 475     118.965  -5.283 -15.626  1.00 77.21           O
ATOM  11328  N   ARG C 476     120.760  -6.643 -15.711  1.00 77.23           N
ATOM  11329  CA  ARG C 476     120.139  -7.629 -16.595  1.00 77.24           C
ATOM  11330  CB  ARG C 476     121.126  -8.062 -17.687  1.00 77.27           C
ATOM  11331  CG  ARG C 476     121.869  -6.897 -18.352  1.00 77.51           C
ATOM  11332  CD  ARG C 476     122.659  -7.339 -19.575  1.00 77.54           C
ATOM  11333  NE  ARG C 476     123.273  -6.201 -20.264  1.00 77.93           N
ATOM  11334  CZ  ARG C 476     123.621  -6.189 -21.551  1.00 77.72           C
ATOM  11335  NH1 ARG C 476     123.415  -7.255 -22.317  1.00 77.38           N
ATOM  11336  NH2 ARG C 476     124.173  -5.102 -22.076  1.00 77.58           N
ATOM  11337  C   ARG C 476     119.679  -8.828 -15.770  1.00 77.07           C
ATOM  11338  O   ARG C 476     120.164  -9.032 -14.658  1.00 77.14           O
ATOM  11339  N   SER C 477     118.747  -9.611 -16.308  1.00 76.88           N
ATOM  11340  CA  SER C 477     118.181 -10.751 -15.582  1.00 76.65           C
ATOM  11341  CB  SER C 477     116.687 -10.875 -15.873  1.00 76.70           C
ATOM  11342  OG  SER C 477     115.997  -9.733 -15.394  1.00 76.66           O
ATOM  11343  C   SER C 477     118.889 -12.067 -15.878  1.00 76.44           C
ATOM  11344  O   SER C 477     118.966 -12.939 -15.011  1.00 76.16           O
ATOM  11345  N   CYS D   3      73.800  56.717  91.957  1.00 94.46           N
ATOM  11346  CA  CYS D   3      74.831  55.644  92.053  1.00 94.42           C
ATOM  11347  CB  CYS D   3      76.235  56.251  92.023  1.00 94.37           C
ATOM  11348  SG  CYS D   3      77.545  55.063  92.355  1.00 94.51           S
ATOM  11349  C   CYS D   3      74.645  54.787  93.311  1.00 94.41           C
ATOM  11350  O   CYS D   3      74.606  55.326  94.421  1.00 94.49           O
ATOM  11351  N   PRO D   4      74.523  53.453  93.135  1.00 94.37           N
ATOM  11352  CA  PRO D   4      74.349  52.442  94.188  1.00 94.36           C
ATOM  11353  CB  PRO D   4      74.802  51.156  93.503  1.00 94.38           C
ATOM  11354  CG  PRO D   4      74.439  51.359  92.081  1.00 94.40           C
ATOM  11355  CD  PRO D   4      74.538  52.835  91.796  1.00 94.37           C
ATOM  11356  C   PRO D   4      75.196  52.697  95.442  1.00 94.40           C
ATOM  11357  O   PRO D   4      76.397  52.951  95.325  1.00 94.35           O
ATOM  11358  N   PRO D   5      74.569  52.616  96.635  1.00 94.47           N
ATOM  11359  CA  PRO D   5      75.145  53.108  97.893  1.00 94.50           C
ATOM  11360  CB  PRO D   5      73.974  53.005  98.889  1.00 94.49           C
ATOM  11361  CG  PRO D   5      72.748  52.767  98.051  1.00 94.45           C
ATOM  11362  CD  PRO D   5      73.238  52.024  96.853  1.00 94.48           C
ATOM  11363  C   PRO D   5      76.355  52.316  98.389  1.00 94.56           C
ATOM  11364  O   PRO D   5      77.465  52.852  98.415  1.00 94.55           O
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ATOM  11365  N   ARG D   6      76.144  51.059  98.777  1.00 94.63           N
ATOM  11366  CA  ARG D   6      77.228  50.232  99.301  1.00 94.72           C
ATOM  11367  CB  ARG D   6      76.682  49.046 100.108  1.00 94.70           C
ATOM  11368  CG  ARG D   6      77.767  48.284 100.857  1.00 94.81           C
ATOM  11369  CD  ARG D   6      77.226  47.326 101.897  1.00 94.84           C
ATOM  11370  NE  ARG D   6      78.318  46.566 102.505  1.00 95.11           N
ATOM  11371  CZ  ARG D   6      78.338  46.139 103.766  1.00 95.24           C
ATOM  11372  NH1 ARG D   6      77.323  46.398 104.583  1.00 95.17           N
ATOM  11373  NH2 ARG D   6      79.383  45.459 104.216  1.00 95.16           N
ATOM  11374  C   ARG D   6      78.177  49.755  98.197  1.00 94.71           C
ATOM  11375  O   ARG D   6      79.370  49.562  98.439  1.00 94.73           O
ATOM  11376  N   CYS D   7      77.646  49.585  96.990  1.00 94.73           N
ATOM  11377  CA  CYS D   7      78.434  49.092  95.858  1.00 94.84           C
ATOM  11378  CB  CYS D   7      77.520  48.450  94.809  1.00 94.91           C
ATOM  11379  SG  CYS D   7      76.198  47.393  95.493  1.00 95.20           S
ATOM  11380  C   CYS D   7      79.286  50.198  95.227  1.00 94.78           C
ATOM  11381  O   CYS D   7      78.977  51.382  95.366  1.00 94.77           O
ATOM  11382  N   GLU D   8      80.356  49.804  94.537  1.00 94.78           N
ATOM  11383  CA  GLU D   8      81.278  50.760  93.917  1.00 94.76           C
ATOM  11384  CB  GLU D   8      82.741  50.330  94.127  1.00 94.75           C
ATOM  11385  CG  GLU D   8      83.797  51.299  93.562  1.00 94.92           C
ATOM  11386  CD  GLU D   8      83.878  52.646  94.300  1.00 95.42           C
ATOM  11387  OE1 GLU D   8      82.956  52.998  95.072  1.00 95.33           O
ATOM  11388  OE2 GLU D   8      84.880  53.365  94.096  1.00 95.55           O
ATOM  11389  C   GLU D   8      80.979  50.980  92.434  1.00 94.70           C
ATOM  11390  O   GLU D   8      81.154  50.074  91.612  1.00 94.61           O
ATOM  11391  N   CYS D   9      80.534  52.193  92.104  1.00 94.64           N
ATOM  11392  CA  CYS D   9      80.185  52.536  90.727  1.00 94.62           C
ATOM  11393  CB  CYS D   9      78.689  52.851  90.612  1.00 94.49           C
ATOM  11394  SG  CYS D   9      78.272  54.603  90.511  1.00 94.78           S
ATOM  11395  C   CYS D   9      81.036  53.676  90.155  1.00 94.60           C
ATOM  11396  O   CYS D   9      81.410  54.606  90.876  1.00 94.59           O
ATOM  11397  N   SER D  10      81.336  53.588  88.859  1.00 94.62           N
ATOM  11398  CA  SER D  10      82.104  54.616  88.147  1.00 94.60           C
ATOM  11399  CB  SER D  10      83.241  53.980  87.342  1.00 94.59           C
ATOM  11400  OG  SER D  10      83.977  54.965  86.637  1.00 94.50           O
ATOM  11401  C   SER D  10      81.212  55.465  87.235  1.00 94.67           C
ATOM  11402  O   SER D  10      80.158  55.009  86.785  1.00 94.64           O
ATOM  11403  N   ALA D  11      81.649  56.697  86.970  1.00 94.72           N
ATOM  11404  CA  ALA D  11      80.878  57.664  86.180  1.00 94.68           C
ATOM  11405  CB  ALA D  11      81.194  59.091  86.632  1.00 94.65           C
ATOM  11406  C   ALA D  11      81.088  57.515  84.670  1.00 94.69           C
ATOM  11407  O   ALA D  11      80.119  57.463  83.909  1.00 94.56           O
ATOM  11408  N   GLN D  12      82.354  57.453  84.251  1.00 94.81           N
ATOM  11409  CA  GLN D  12      82.734  57.306  82.841  1.00 95.00           C
ATOM  11410  CB  GLN D  12      84.229  56.944  82.729  1.00 95.01           C
ATOM  11411  CG  GLN D  12      84.659  56.132  81.488  1.00 94.99           C
ATOM  11412  CD  GLN D  12      84.656  56.931  80.190  1.00 94.90           C
ATOM  11413  OE1 GLN D  12      84.698  58.163  80.198  1.00 95.11           O
ATOM  11414  NE2 GLN D  12      84.616  56.224  79.066  1.00 94.47           N
ATOM  11415  C   GLN D  12      81.842  56.308  82.090  1.00 95.18           C
ATOM  11416  O   GLN D  12      81.267  56.643  81.052  1.00 95.31           O
ATOM  11417  N   ASP D  13      81.725  55.095  82.632  1.00 95.26           N
ATOM  11418  CA  ASP D  13      80.855  54.059  82.073  1.00 95.21           C
ATOM  11419  CB  ASP D  13      81.693  52.919  81.510  1.00 95.04           C
ATOM  11420  CG  ASP D  13      82.454  53.324  80.275  1.00 94.95           C
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ATOM  11421  OD1 ASP D  13      81.805  53.642  79.256  1.00 94.79           O
ATOM  11422  OD2 ASP D  13      83.701  53.325  80.323  1.00 94.94           O
ATOM  11423  C   ASP D  13      79.894  53.529  83.128  1.00 95.30           C
ATOM  11424  O   ASP D  13      80.091  53.763  84.323  1.00 95.46           O
ATOM  11425  N   ARG D  14      78.850  52.826  82.689  1.00 95.25           N
ATOM  11426  CA  ARG D  14      77.932  52.163  83.613  1.00 95.13           C
ATOM  11427  CB  ARG D  14      76.670  51.687  82.891  1.00 95.01           C
ATOM  11428  CG  ARG D  14      75.766  52.785  82.396  1.00 94.58           C
ATOM  11429  CD  ARG D  14      74.510  52.198  81.792  1.00 94.18           C
ATOM  11430  NE  ARG D  14      73.515  53.228  81.504  1.00 93.99           N
ATOM  11431  CZ  ARG D  14      73.438  53.900  80.359  1.00 93.73           C
ATOM  11432  NH1 ARG D  14      72.497  54.818  80.193  1.00 93.04           N
ATOM  11433  NH2 ARG D  14      74.301  53.654  79.380  1.00 93.98           N
ATOM  11434  C   ARG D  14      78.645  50.979  84.268  1.00 95.21           C
ATOM  11435  O   ARG D  14      78.287  49.825  84.038  1.00 95.30           O
ATOM  11436  N   ALA D  15      79.663  51.282  85.071  1.00 95.18           N
ATOM  11437  CA  ALA D  15      80.455  50.268  85.756  1.00 95.11           C
ATOM  11438  CB  ALA D  15      81.932  50.631  85.713  1.00 95.10           C
ATOM  11439  C   ALA D  15      79.984  50.099  87.195  1.00 95.10           C
ATOM  11440  O   ALA D  15      79.831  51.077  87.926  1.00 95.14           O
ATOM  11441  N   VAL D  16      79.733  48.853  87.583  1.00 95.07           N
ATOM  11442  CA  VAL D  16      79.350  48.520  88.951  1.00 95.02           C
ATOM  11443  CB  VAL D  16      77.844  48.150  89.062  1.00 94.95           C
ATOM  11444  CG1 VAL D  16      77.505  47.636  90.458  1.00 94.94           C
ATOM  11445  CG2 VAL D  16      76.961  49.345  88.709  1.00 94.83           C
ATOM  11446  C   VAL D  16      80.228  47.371  89.441  1.00 95.09           C
ATOM  11447  O   VAL D  16      80.337  46.330  88.786  1.00 95.20           O
ATOM  11448  N   LEU D  17      80.874  47.584  90.582  1.00 95.12           N
ATOM  11449  CA  LEU D  17      81.689  46.561  91.222  1.00 95.14           C
ATOM  11450  CB  LEU D  17      83.155  47.000  91.282  1.00 95.12           C
ATOM  11451  CG  LEU D  17      83.866  47.231  89.945  1.00 95.21           C
ATOM  11452  CD1 LEU D  17      84.792  48.439  90.035  1.00 95.27           C
ATOM  11453  CD2 LEU D  17      84.619  45.978  89.473  1.00 95.14           C
ATOM  11454  C   LEU D  17      81.124  46.310  92.616  1.00 95.16           C
ATOM  11455  O   LEU D  17      81.686  46.747  93.625  1.00 95.26           O
ATOM  11456  N   CYS D  18      79.991  45.614  92.652  1.00 95.10           N
ATOM  11457  CA  CYS D  18      79.263  45.357  93.887  1.00 94.95           C
ATOM  11458  CB  CYS D  18      77.763  45.514  93.642  1.00 94.90           C
ATOM  11459  SG  CYS D  18      76.782  45.464  95.138  1.00 95.32           S
ATOM  11460  C   CYS D  18      79.605  43.978  94.470  1.00 94.89           C
ATOM  11461  O   CYS D  18      78.788  43.052  94.453  1.00 94.78           O
ATOM  11462  N   HIS D  19      80.827  43.875  94.995  1.00 94.87           N
ATOM  11463  CA  HIS D  19      81.409  42.618  95.476  1.00 94.76           C
ATOM  11464  CB  HIS D  19      82.912  42.630  95.237  1.00 94.79           C
ATOM  11465  CG  HIS D  19      83.324  41.937  93.984  1.00 95.38           C
ATOM  11466  ND1 HIS D  19      82.928  42.361  92.735  1.00 95.86           N
ATOM  11467  CE1 HIS D  19      83.446  41.563  91.819  1.00 96.35           C
ATOM  11468  NE2 HIS D  19      84.162  40.635  92.429  1.00 96.27           N
ATOM  11469  CD2 HIS D  19      84.104  40.848  93.784  1.00 95.90           C
ATOM  11470  C   HIS D  19      81.163  42.310  96.947  1.00 94.61           C
ATOM  11471  O   HIS D  19      80.954  43.217  97.756  1.00 94.53           O
ATOM  11472  N   ARG D  20      81.230  41.017  97.273  1.00 94.39           N
ATOM  11473  CA  ARG D  20      81.040  40.490  98.633  1.00 94.16           C
ATOM  11474  CB  ARG D  20      82.396  40.132  99.284  1.00 94.20           C
ATOM  11475  CG  ARG D  20      82.322  39.408 100.647  1.00 94.34           C
ATOM  11476  CD  ARG D  20      81.500  38.114 100.604  1.00 94.67           C
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ATOM  11477  NE  ARG D  20      80.958  37.762 101.919  1.00 94.90           N
ATOM  11478  CZ  ARG D  20      79.926  36.944 102.125  1.00 94.90           C
ATOM  11479  NH1 ARG D  20      79.295  36.377 101.099  1.00 94.66           N
ATOM  11480  NH2 ARG D  20      79.518  36.698 103.364  1.00 94.53           N
ATOM  11481  C   ARG D  20      80.174  41.380  99.531  1.00 93.86           C
ATOM  11482  O   ARG D  20      80.674  42.053 100.437  1.00 93.85           O
ATOM  11483  N   LYS D  21      78.874  41.393  99.243  1.00 93.56           N
ATOM  11484  CA  LYS D  21      77.899  42.154 100.031  1.00 93.26           C
ATOM  11485  CB  LYS D  21      77.544  43.476  99.341  1.00 93.23           C
ATOM  11486  CG  LYS D  21      78.611  44.555  99.495  1.00 93.21           C
ATOM  11487  CD  LYS D  21      78.498  45.619  98.414  1.00 93.06           C
ATOM  11488  CE  LYS D  21      79.848  46.260  98.104  1.00 92.95           C
ATOM  11489  NZ  LYS D  21      80.438  46.994  99.259  1.00 92.73           N
ATOM  11490  C   LYS D  21      76.647  41.333 100.356  1.00 93.08           C
ATOM  11491  O   LYS D  21      75.632  41.878 100.786  1.00 92.99           O
ATOM  11492  N   ARG D  22      76.732  40.023 100.119  1.00 92.99           N
ATOM  11493  CA  ARG D  22      75.812  39.026 100.686  1.00 92.88           C
ATOM  11494  CB  ARG D  22      75.941  39.040 102.217  1.00 92.94           C
ATOM  11495  CG  ARG D  22      75.773  37.703 102.916  1.00 93.32           C
ATOM  11496  CD  ARG D  22      76.479  37.755 104.265  1.00 94.05           C
ATOM  11497  NE  ARG D  22      75.937  36.817 105.246  1.00 94.46           N
ATOM  11498  CZ  ARG D  22      76.356  35.565 105.415  1.00 94.79           C
ATOM  11499  NH1 ARG D  22      77.329  35.064 104.657  1.00 94.66           N
ATOM  11500  NH2 ARG D  22      75.791  34.807 106.347  1.00 94.69           N
ATOM  11501  C   ARG D  22      74.336  39.139 100.251  1.00 92.69           C
ATOM  11502  O   ARG D  22      73.433  39.135 101.092  1.00 92.55           O
ATOM  11503  N   PHE D  23      74.096  39.220  98.941  1.00 92.54           N
ATOM  11504  CA  PHE D  23      72.726  39.246  98.405  1.00 92.32           C
ATOM  11505  CB  PHE D  23      72.630  40.108  97.141  1.00 92.25           C
ATOM  11506  CG  PHE D  23      73.038  41.536  97.337  1.00 92.31           C
ATOM  11507  CD1 PHE D  23      72.196  42.440  97.986  1.00 92.40           C
ATOM  11508  CE1 PHE D  23      72.578  43.768  98.163  1.00 92.26           C
ATOM  11509  CZ  PHE D  23      73.811  44.204  97.678  1.00 92.25           C
ATOM  11510  CE2 PHE D  23      74.653  43.308  97.021  1.00 92.20           C
ATOM  11511  CD2 PHE D  23      74.261  41.986  96.852  1.00 92.08           C
ATOM  11512  C   PHE D  23      72.223  37.850  98.070  1.00 92.14           C
ATOM  11513  O   PHE D  23      72.871  37.117  97.326  1.00 92.27           O
ATOM  11514  N   VAL D  24      71.062  37.495  98.613  1.00 91.90           N
ATOM  11515  CA  VAL D  24      70.376  36.254  98.258  1.00 91.71           C
ATOM  11516  CB  VAL D  24      69.201  35.952  99.235  1.00 91.80           C
ATOM  11517  CG1 VAL D  24      68.640  34.545  99.013  1.00 91.67           C
ATOM  11518  CG2 VAL D  24      69.640  36.125 100.697  1.00 91.87           C
ATOM  11519  C   VAL D  24      69.840  36.380  96.827  1.00 91.61           C
ATOM  11520  O   VAL D  24      69.706  35.385  96.102  1.00 91.61           O
ATOM  11521  N   ALA D  25      69.545  37.618  96.428  1.00 91.40           N
ATOM  11522  CA  ALA D  25      68.962  37.907  95.119  1.00 91.20           C
ATOM  11523  CB  ALA D  25      67.426  37.966  95.228  1.00 91.19           C
ATOM  11524  C   ALA D  25      69.513  39.202  94.508  1.00 91.04           C
ATOM  11525  O   ALA D  25      70.525  39.741  94.964  1.00 90.89           O
ATOM  11526  N   VAL D  26      68.827  39.685  93.472  1.00 91.00           N
ATOM  11527  CA  VAL D  26      69.169  40.922  92.765  1.00 90.90           C
ATOM  11528  CB  VAL D  26      68.323  41.046  91.451  1.00 91.00           C
ATOM  11529  CG1 VAL D  26      67.853  42.480  91.183  1.00 91.03           C
ATOM  11530  CG2 VAL D  26      69.095  40.478  90.259  1.00 90.72           C
ATOM  11531  C   VAL D  26      69.015  42.151  93.675  1.00 90.78           C
ATOM  11532  O   VAL D  26      68.006  42.276  94.377  1.00 90.89           O
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ATOM	11533	N	PRO	D	27	70.015	43.061	93.663	1.00	90.59	N
ATOM	11534	CA	PRO	D	27	70.061	44.223	94.571	1.00	90.48	C
ATOM	11535	CB	PRO	D	27	71.503	44.716	94.423	1.00	90.50	C
ATOM	11536	CG	PRO	D	27	71.887	44.317	93.035	1.00	90.40	C
ATOM	11537	CD	PRO	D	27	71.178	43.027	92.756	1.00	90.38	C
ATOM	11538	C	PRO	D	27	69.079	45.357	94.231	1.00	90.35	C
ATOM	11539	O	PRO	D	27	68.493	45.370	93.146	1.00	90.36	O
ATOM	11540	N	GLU	D	28	68.911	46.293	95.166	1.00	90.25	N
ATOM	11541	CA	GLU	D	28	68.094	47.494	94.953	1.00	90.05	C
ATOM	11542	CB	GLU	D	28	67.140	47.729	96.133	1.00	90.00	C
ATOM	11543	CG	GLU	D	28	67.816	48.133	97.449	1.00	89.98	C
ATOM	11544	CD	GLU	D	28	66.853	48.775	98.451	1.00	90.14	C
ATOM	11545	OE1	GLU	D	28	65.718	49.137	98.067	1.00	90.17	O
ATOM	11546	OE2	GLU	D	28	67.235	48.926	99.632	1.00	90.15	O
ATOM	11547	C	GLU	D	28	68.970	48.730	94.712	1.00	89.95	C
ATOM	11548	O	GLU	D	28	70.154	48.741	95.064	1.00	90.04	O
ATOM	11549	N	GLY	D	29	68.381	49.763	94.109	1.00	89.73	N
ATOM	11550	CA	GLY	D	29	69.092	51.011	93.813	1.00	89.46	C
ATOM	11551	C	GLY	D	29	70.157	50.905	92.730	1.00	89.33	C
ATOM	11552	O	GLY	D	29	71.234	51.499	92.852	1.00	89.25	O
ATOM	11553	N	ILE	D	30	69.849	50.149	91.674	1.00	89.14	N
ATOM	11554	CA	ILE	D	30	70.745	49.949	90.529	1.00	88.96	C
ATOM	11555	CB	ILE	D	30	71.040	48.422	90.287	1.00	89.17	C
ATOM	11556	CG1	ILE	D	30	71.231	47.656	91.612	1.00	89.55	C
ATOM	11557	CD1	ILE	D	30	72.412	48.104	92.489	1.00	90.09	C
ATOM	11558	CG2	ILE	D	30	72.211	48.201	89.298	1.00	88.73	C
ATOM	11559	C	ILE	D	30	70.121	50.561	89.263	1.00	88.72	C
ATOM	11560	O	ILE	D	30	68.953	50.292	88.963	1.00	88.56	O
ATOM	11561	N	PRO	D	31	70.893	51.389	88.519	1.00	88.55	N
ATOM	11562	CA	PRO	D	31	70.394	52.018	87.287	1.00	88.46	C
ATOM	11563	CB	PRO	D	31	71.595	52.838	86.792	1.00	88.41	C
ATOM	11564	CG	PRO	D	31	72.471	53.011	87.972	1.00	88.34	C
ATOM	11565	CD	PRO	D	31	72.285	51.785	88.806	1.00	88.51	C
ATOM	11566	C	PRO	D	31	69.977	51.002	86.218	1.00	88.49	C
ATOM	11567	O	PRO	D	31	70.712	50.046	85.943	1.00	88.46	O
ATOM	11568	N	ARG	D	35	76.287	49.092	80.973	1.00	88.44	N
ATOM	11569	CA	ARG	D	35	77.516	48.746	80.255	1.00	88.40	C
ATOM	11570	CB	ARG	D	35	78.282	50.004	79.834	1.00	88.45	C
ATOM	11571	CG	ARG	D	35	77.663	50.731	78.656	1.00	88.85	C
ATOM	11572	CD	ARG	D	35	78.609	51.773	78.081	1.00	89.34	C
ATOM	11573	NE	ARG	D	35	78.008	52.456	76.937	1.00	89.58	N
ATOM	11574	CZ	ARG	D	35	78.175	52.094	75.668	1.00	89.54	C
ATOM	11575	NH1	ARG	D	35	78.940	51.051	75.360	1.00	89.66	N
ATOM	11576	NH2	ARG	D	35	77.577	52.784	74.703	1.00	89.12	N
ATOM	11577	C	ARG	D	35	78.441	47.804	81.028	1.00	88.27	C
ATOM	11578	O	ARG	D	35	79.368	47.232	80.449	1.00	88.42	O
ATOM	11579	N	LEU	D	36	78.198	47.651	82.329	1.00	88.00	N
ATOM	11580	CA	LEU	D	36	78.960	46.715	83.154	1.00	87.76	C
ATOM	11581	CB	LEU	D	36	80.356	47.270	83.477	1.00	87.73	C
ATOM	11582	CG	LEU	D	36	81.575	46.340	83.369	1.00	88.12	C
ATOM	11583	CD1	LEU	D	36	82.853	47.102	83.708	1.00	88.34	C
ATOM	11584	CD2	LEU	D	36	81.460	45.088	84.239	1.00	88.42	C
ATOM	11585	C	LEU	D	36	78.220	46.401	84.446	1.00	87.51	C
ATOM	11586	O	LEU	D	36	77.757	47.299	85.143	1.00	87.59	O
ATOM	11587	N	LEU	D	37	78.100	45.117	84.753	1.00	87.28	N
ATOM	11588	CA	LEU	D	37	77.600	44.700	86.050	1.00	87.08	C

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ATOM  11589  CB  LEU D  37      76.145  44.231  85.960  1.00 86.98           C
ATOM  11590  CG  LEU D  37      75.339  44.362  87.259  1.00 87.07           C
ATOM  11591  CD1 LEU D  37      75.213  45.818  87.690  1.00 86.90           C
ATOM  11592  CD2 LEU D  37      73.960  43.735  87.131  1.00 87.12           C
ATOM  11593  C   LEU D  37      78.487  43.611  86.640  1.00 87.01           C
ATOM  11594  O   LEU D  37      78.981  42.735  85.923  1.00 86.95           O
ATOM  11595  N   ASP D  38      78.705  43.690  87.948  1.00 86.90           N
ATOM  11596  CA  ASP D  38      79.407  42.642  88.670  1.00 86.74           C
ATOM  11597  CB  ASP D  38      80.892  42.972  88.824  1.00 86.76           C
ATOM  11598  CG  ASP D  38      81.733  41.739  89.104  1.00 87.06           C
ATOM  11599  OD1 ASP D  38      81.251  40.836  89.824  1.00 87.29           O
ATOM  11600  OD2 ASP D  38      82.878  41.669  88.605  1.00 87.11           O
ATOM  11601  C   ASP D  38      78.768  42.386  90.029  1.00 86.60           C
ATOM  11602  O   ASP D  38      78.728  43.267  90.886  1.00 86.69           O
ATOM  11603  N   LEU D  39      78.255  41.173  90.202  1.00 86.47           N
ATOM  11604  CA  LEU D  39      77.685  40.732  91.468  1.00 86.36           C
ATOM  11605  CB  LEU D  39      76.203  40.382  91.300  1.00 86.31           C
ATOM  11606  CG  LEU D  39      75.116  41.437  91.534  1.00 86.09           C
ATOM  11607  CD1 LEU D  39      75.241  42.641  90.608  1.00 85.83           C
ATOM  11608  CD2 LEU D  39      73.752  40.792  91.372  1.00 86.08           C
ATOM  11609  C   LEU D  39      78.466  39.525  91.969  1.00 86.50           C
ATOM  11610  O   LEU D  39      77.888  38.546  92.457  1.00 86.45           O
ATOM  11611  N   GLY D  40      79.789  39.609  91.840  1.00 86.62           N
ATOM  11612  CA  GLY D  40      80.681  38.537  92.254  1.00 86.85           C
ATOM  11613  C   GLY D  40      80.748  38.353  93.757  1.00 87.07           C
ATOM  11614  O   GLY D  40      80.463  39.280  94.526  1.00 87.04           O
ATOM  11615  N   LYS D  41      81.125  37.140  94.161  1.00 87.26           N
ATOM  11616  CA  LYS D  41      81.329  36.769  95.568  1.00 87.35           C
ATOM  11617  CB  LYS D  41      82.607  37.414  96.135  1.00 87.37           C
ATOM  11618  CG  LYS D  41      83.900  37.015  95.427  1.00 87.36           C
ATOM  11619  CD  LYS D  41      85.121  37.490  96.206  1.00 87.55           C
ATOM  11620  CE  LYS D  41      86.388  37.419  95.366  1.00 87.81           C
ATOM  11621  NZ  LYS D  41      86.447  38.525  94.373  1.00 87.86           N
ATOM  11622  C   LYS D  41      80.129  37.072  96.466  1.00 87.26           C
ATOM  11623  O   LYS D  41      80.296  37.536  97.589  1.00 87.44           O
ATOM  11624  N   ASN D  42      78.925  36.805  95.971  1.00 87.21           N
ATOM  11625  CA  ASN D  42      77.709  37.068  96.742  1.00 87.26           C
ATOM  11626  CB  ASN D  42      76.724  37.915  95.928  1.00 87.29           C
ATOM  11627  CG  ASN D  42      77.001  39.399  96.050  1.00 87.40           C
ATOM  11628  OD1 ASN D  42      76.667  40.018  97.058  1.00 87.73           O
ATOM  11629  ND2 ASN D  42      77.613  39.978  95.024  1.00 87.30           N
ATOM  11630  C   ASN D  42      77.051  35.805  97.299  1.00 87.26           C
ATOM  11631  O   ASN D  42      77.747  34.858  97.676  1.00 87.20           O
ATOM  11632  N   ARG D  43      75.721  35.794  97.363  1.00 87.27           N
ATOM  11633  CA  ARG D  43      74.993  34.658  97.925  1.00 87.40           C
ATOM  11634  CB  ARG D  43      74.585  34.953  99.375  1.00 87.57           C
ATOM  11635  CG  ARG D  43      75.619  34.584 100.427  1.00 88.50           C
ATOM  11636  CD  ARG D  43      75.831  33.077 100.507  1.00 90.08           C
ATOM  11637  NE  ARG D  43      76.129  32.645 101.870  1.00 91.25           N
ATOM  11638  CZ  ARG D  43      76.739  31.505 102.187  1.00 91.74           C
ATOM  11639  NH1 ARG D  43      77.138  30.664 101.234  1.00 91.23           N
ATOM  11640  NH2 ARG D  43      76.958  31.214 103.466  1.00 91.72           N
ATOM  11641  C   ARG D  43      73.758  34.248  97.122  1.00 87.20           C
ATOM  11642  O   ARG D  43      72.858  33.596  97.665  1.00 87.32           O
ATOM  11643  N   ILE D  44      73.712  34.616  95.841  1.00 86.94           N
ATOM  11644  CA  ILE D  44      72.521  34.354  95.027  1.00 86.67           C
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ATOM	11645	CB	ILE	D	44	72.548	35.089	93.666	1.00	86.66	C
ATOM	11646	CG1	ILE	D	44	72.612	36.612	93.900	1.00	86.33	C
ATOM	11647	CD1	ILE	D	44	73.126	37.423	92.724	1.00	86.76	C
ATOM	11648	CG2	ILE	D	44	71.281	34.757	92.869	1.00	86.43	C
ATOM	11649	C	ILE	D	44	72.259	32.854	94.866	1.00	86.69	C
ATOM	11650	O	ILE	D	44	73.056	32.124	94.273	1.00	86.71	O
ATOM	11651	N	LYS	D	45	71.128	32.421	95.416	1.00	86.61	N
ATOM	11652	CA	LYS	D	45	70.770	31.006	95.485	1.00	86.61	C
ATOM	11653	CB	LYS	D	45	69.782	30.750	96.633	1.00	86.63	C
ATOM	11654	CG	LYS	D	45	70.327	31.097	98.015	1.00	86.75	C
ATOM	11655	CD	LYS	D	45	69.538	30.421	99.124	1.00	86.95	C
ATOM	11656	CE	LYS	D	45	70.041	30.837	100.508	1.00	87.24	C
ATOM	11657	NZ	LYS	D	45	71.439	30.384	100.788	1.00	87.11	N
ATOM	11658	C	LYS	D	45	70.204	30.481	94.170	1.00	86.59	C
ATOM	11659	O	LYS	D	45	70.569	29.398	93.732	1.00	86.64	O
ATOM	11660	N	THR	D	46	69.301	31.238	93.553	1.00	86.55	N
ATOM	11661	CA	THR	D	46	68.732	30.852	92.265	1.00	86.51	C
ATOM	11662	CB	THR	D	46	67.274	30.295	92.374	1.00	86.53	C
ATOM	11663	OG1	THR	D	46	66.401	31.288	92.926	1.00	86.43	O
ATOM	11664	CG2	THR	D	46	67.212	29.026	93.222	1.00	86.51	C
ATOM	11665	C	THR	D	46	68.739	32.021	91.290	1.00	86.54	C
ATOM	11666	O	THR	D	46	68.528	33.174	91.683	1.00	86.43	O
ATOM	11667	N	LEU	D	47	68.996	31.711	90.019	1.00	86.50	N
ATOM	11668	CA	LEU	D	47	68.838	32.680	88.942	1.00	86.36	C
ATOM	11669	CB	LEU	D	47	69.993	32.604	87.945	1.00	86.40	C
ATOM	11670	CG	LEU	D	47	71.301	33.277	88.371	1.00	86.53	C
ATOM	11671	CD1	LEU	D	47	72.407	32.931	87.390	1.00	86.33	C
ATOM	11672	CD2	LEU	D	47	71.139	34.793	88.498	1.00	86.51	C
ATOM	11673	C	LEU	D	47	67.496	32.465	88.259	1.00	86.26	C
ATOM	11674	O	LEU	D	47	67.358	31.606	87.380	1.00	86.41	O
ATOM	11675	N	ASN	D	48	66.521	33.274	88.672	1.00	85.94	N
ATOM	11676	CA	ASN	D	48	65.105	33.072	88.363	1.00	85.60	C
ATOM	11677	CB	ASN	D	48	64.273	33.536	89.562	1.00	85.71	C
ATOM	11678	CG	ASN	D	48	63.245	32.517	89.988	1.00	85.78	C
ATOM	11679	OD1	ASN	D	48	62.780	31.706	89.184	1.00	85.95	O
ATOM	11680	ND2	ASN	D	48	62.886	32.549	91.267	1.00	85.66	N
ATOM	11681	C	ASN	D	48	64.628	33.792	87.101	1.00	85.31	C
ATOM	11682	O	ASN	D	48	65.300	34.701	86.610	1.00	85.22	O
ATOM	11683	N	GLN	D	49	63.461	33.385	86.593	1.00	84.99	N
ATOM	11684	CA	GLN	D	49	62.835	34.025	85.427	1.00	84.86	C
ATOM	11685	CB	GLN	D	49	61.383	33.554	85.233	1.00	84.94	C
ATOM	11686	CG	GLN	D	49	61.137	32.056	85.043	1.00	84.88	C
ATOM	11687	CD	GLN	D	49	59.656	31.685	85.222	1.00	84.78	C
ATOM	11688	OE1	GLN	D	49	58.755	32.427	84.819	1.00	84.00	O
ATOM	11689	NE2	GLN	D	49	59.407	30.533	85.834	1.00	84.76	N
ATOM	11690	C	GLN	D	49	62.824	35.558	85.542	1.00	84.69	C
ATOM	11691	O	GLN	D	49	62.337	36.113	86.538	1.00	84.74	O
ATOM	11692	N	ASP	D	50	63.363	36.222	84.518	1.00	84.35	N
ATOM	11693	CA	ASP	D	50	63.298	37.687	84.360	1.00	83.93	C
ATOM	11694	CB	ASP	D	50	61.836	38.173	84.280	1.00	83.88	C
ATOM	11695	CG	ASP	D	50	61.080	37.602	83.084	1.00	83.64	C
ATOM	11696	OD1	ASP	D	50	61.691	36.896	82.251	1.00	83.70	O
ATOM	11697	OD2	ASP	D	50	59.864	37.865	82.979	1.00	82.84	O
ATOM	11698	C	ASP	D	50	64.066	38.504	85.407	1.00	83.68	C
ATOM	11699	O	ASP	D	50	63.868	39.713	85.506	1.00	83.56	O
ATOM	11700	N	GLU	D	51	64.960	37.858	86.155	1.00	83.46	N

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ATOM  11701  CA  GLU D  51      65.658  38.515  87.268  1.00 83.36           C
ATOM  11702  CB  GLU D  51      66.588  37.528  87.992  1.00 83.37           C
ATOM  11703  CG  GLU D  51      66.690  37.785  89.503  1.00 83.57           C
ATOM  11704  CD  GLU D  51      67.610  36.814  90.234  1.00 83.34           C
ATOM  11705  OE1 GLU D  51      67.609  35.608  89.909  1.00 83.32           O
ATOM  11706  OE2 GLU D  51      68.328  37.262  91.153  1.00 82.89           O
ATOM  11707  C   GLU D  51      66.421  39.784  86.858  1.00 83.19           C
ATOM  11708  O   GLU D  51      66.707  40.645  87.697  1.00 83.17           O
ATOM  11709  N   PHE D  52      66.724  39.898  85.567  1.00 82.93           N
ATOM  11710  CA  PHE D  52      67.440  41.052  85.029  1.00 82.69           C
ATOM  11711  CB  PHE D  52      68.803  40.622  84.460  1.00 82.72           C
ATOM  11712  CG  PHE D  52      69.636  39.816  85.417  1.00 82.61           C
ATOM  11713  CD1 PHE D  52      70.467  40.446  86.339  1.00 82.67           C
ATOM  11714  CE1 PHE D  52      71.237  39.704  87.232  1.00 82.51           C
ATOM  11715  CZ  PHE D  52      71.180  38.312  87.204  1.00 82.70           C
ATOM  11716  CE2 PHE D  52      70.354  37.671  86.283  1.00 82.65           C
ATOM  11717  CD2 PHE D  52      69.590  38.424  85.396  1.00 82.57           C
ATOM  11718  C   PHE D  52      66.627  41.772  83.951  1.00 82.52           C
ATOM  11719  O   PHE D  52      67.181  42.537  83.158  1.00 82.43           O
ATOM  11720  N   ALA D  53      65.318  41.525  83.924  1.00 82.33           N
ATOM  11721  CA  ALA D  53      64.448  42.084  82.886  1.00 82.27           C
ATOM  11722  CB  ALA D  53      62.997  41.667  83.106  1.00 82.25           C
ATOM  11723  C   ALA D  53      64.579  43.605  82.803  1.00 82.29           C
ATOM  11724  O   ALA D  53      65.082  44.134  81.806  1.00 82.28           O
ATOM  11725  N   SER D  54      64.153  44.299  83.858  1.00 82.34           N
ATOM  11726  CA  SER D  54      64.330  45.751  83.952  1.00 82.29           C
ATOM  11727  CB  SER D  54      63.295  46.392  84.894  1.00 82.30           C
ATOM  11728  OG  SER D  54      63.145  45.659  86.098  1.00 82.52           O
ATOM  11729  C   SER D  54      65.776  46.109  84.326  1.00 82.16           C
ATOM  11730  O   SER D  54      66.046  47.140  84.945  1.00 81.99           O
ATOM  11731  N   PHE D  55      66.697  45.233  83.930  1.00 82.17           N
ATOM  11732  CA  PHE D  55      68.122  45.521  83.951  1.00 82.17           C
ATOM  11733  CB  PHE D  55      68.858  44.548  84.880  1.00 82.17           C
ATOM  11734  CG  PHE D  55      68.651  44.830  86.341  1.00 82.40           C
ATOM  11735  CD1 PHE D  55      69.676  45.387  87.103  1.00 82.61           C
ATOM  11736  CE1 PHE D  55      69.496  45.657  88.460  1.00 82.65           C
ATOM  11737  CZ  PHE D  55      68.269  45.376  89.065  1.00 82.93           C
ATOM  11738  CE2 PHE D  55      67.234  44.821  88.313  1.00 82.87           C
ATOM  11739  CD2 PHE D  55      67.431  44.549  86.958  1.00 82.70           C
ATOM  11740  C   PHE D  55      68.631  45.408  82.517  1.00 82.06           C
ATOM  11741  O   PHE D  55      69.423  44.518  82.211  1.00 82.29           O
ATOM  11742  N   PRO D  56      68.166  46.307  81.623  1.00 81.99           N
ATOM  11743  CA  PRO D  56      68.518  46.198  80.215  1.00 81.95           C
ATOM  11744  CB  PRO D  56      67.259  46.725  79.511  1.00 81.99           C
ATOM  11745  CG  PRO D  56      66.510  47.544  80.564  1.00 81.86           C
ATOM  11746  CD  PRO D  56      67.286  47.467  81.847  1.00 81.98           C
ATOM  11747  C   PRO D  56      69.742  47.038  79.824  1.00 81.93           C
ATOM  11748  O   PRO D  56      70.217  47.862  80.618  1.00 81.83           O
ATOM  11749  N   HIS D  57      70.231  46.817  78.602  1.00 81.80           N
ATOM  11750  CA  HIS D  57      71.375  47.543  78.036  1.00 81.79           C
ATOM  11751  CB  HIS D  57      71.064  49.032  77.848  1.00 81.76           C
ATOM  11752  CG  HIS D  57      69.701  49.294  77.296  1.00 81.91           C
ATOM  11753  ND1 HIS D  57      69.280  48.788  76.085  1.00 82.16           N
ATOM  11754  CE1 HIS D  57      68.037  49.176  75.858  1.00 82.10           C
ATOM  11755  NE2 HIS D  57      67.637  49.913  76.879  1.00 81.71           N
ATOM  11756  CD2 HIS D  57      68.659  50.001  77.793  1.00 81.61           C
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ATOM  11757  C   HIS D  57      72.643  47.351  78.857  1.00 81.79           C
ATOM  11758  O   HIS D  57      73.045  48.228  79.628  1.00 82.01           O
ATOM  11759  N   LEU D  58      73.256  46.187  78.688  1.00 81.64           N
ATOM  11760  CA  LEU D  58      74.507  45.859  79.349  1.00 81.49           C
ATOM  11761  CB  LEU D  58      74.286  44.791  80.424  1.00 81.51           C
ATOM  11762  CG  LEU D  58      73.506  45.207  81.674  1.00 81.70           C
ATOM  11763  CD1 LEU D  58      72.927  43.997  82.392  1.00 81.69           C
ATOM  11764  CD2 LEU D  58      74.377  46.037  82.614  1.00 82.21           C
ATOM  11765  C   LEU D  58      75.505  45.369  78.313  1.00 81.38           C
ATOM  11766  O   LEU D  58      75.124  44.895  77.246  1.00 81.50           O
ATOM  11767  N   GLU D  59      76.785  45.498  78.631  1.00 81.09           N
ATOM  11768  CA  GLU D  59      77.845  45.079  77.738  1.00 80.94           C
ATOM  11769  CB  GLU D  59      78.804  46.256  77.506  1.00 81.15           C
ATOM  11770  CG  GLU D  59      79.892  46.042  76.444  1.00 82.12           C
ATOM  11771  CD  GLU D  59      79.344  45.979  75.023  1.00 83.12           C
ATOM  11772  OE1 GLU D  59      78.290  46.605  74.750  1.00 82.68           O
ATOM  11773  OE2 GLU D  59      79.980  45.301  74.180  1.00 83.50           O
ATOM  11774  C   GLU D  59      78.566  43.872  78.351  1.00 80.59           C
ATOM  11775  O   GLU D  59      79.334  43.175  77.676  1.00 80.54           O
ATOM  11776  N   GLU D  60      78.283  43.626  79.630  1.00 80.04           N
ATOM  11777  CA  GLU D  60      78.987  42.626  80.426  1.00 79.47           C
ATOM  11778  CB  GLU D  60      80.395  43.134  80.754  1.00 79.49           C
ATOM  11779  CG  GLU D  60      81.294  42.143  81.476  1.00 79.48           C
ATOM  11780  CD  GLU D  60      82.752  42.580  81.513  1.00 79.38           C
ATOM  11781  OE1 GLU D  60      83.022  43.801  81.465  1.00 79.56           O
ATOM  11782  OE2 GLU D  60      83.632  41.698  81.596  1.00 78.84           O
ATOM  11783  C   GLU D  60      78.217  42.355  81.712  1.00 79.09           C
ATOM  11784  O   GLU D  60      77.727  43.279  82.349  1.00 79.28           O
ATOM  11785  N   LEU D  61      78.106  41.085  82.082  1.00 78.69           N
ATOM  11786  CA  LEU D  61      77.475  40.689  83.336  1.00 78.43           C
ATOM  11787  CB  LEU D  61      76.053  40.172  83.092  1.00 78.47           C
ATOM  11788  CG  LEU D  61      75.225  39.623  84.266  1.00 78.54           C
ATOM  11789  CD1 LEU D  61      74.971  40.684  85.342  1.00 78.56           C
ATOM  11790  CD2 LEU D  61      73.901  39.041  83.774  1.00 78.21           C
ATOM  11791  C   LEU D  61      78.315  39.619  84.008  1.00 78.45           C
ATOM  11792  O   LEU D  61      78.573  38.568  83.422  1.00 78.77           O
ATOM  11793  N   GLU D  62      78.753  39.892  85.232  1.00 78.28           N
ATOM  11794  CA  GLU D  62      79.580  38.948  85.974  1.00 78.20           C
ATOM  11795  CB  GLU D  62      80.934  39.569  86.326  1.00 78.21           C
ATOM  11796  CG  GLU D  62      81.747  40.064  85.121  1.00 78.67           C
ATOM  11797  CD  GLU D  62      82.291  38.937  84.231  1.00 79.86           C
ATOM  11798  OE1 GLU D  62      82.177  37.744  84.597  1.00 80.20           O
ATOM  11799  OE2 GLU D  62      82.847  39.249  83.154  1.00 80.18           O
ATOM  11800  C   GLU D  62      78.852  38.502  87.226  1.00 78.11           C
ATOM  11801  O   GLU D  62      78.324  39.327  87.962  1.00 78.26           O
ATOM  11802  N   LEU D  63      78.807  37.195  87.457  1.00 78.05           N
ATOM  11803  CA  LEU D  63      78.079  36.644  88.598  1.00 78.05           C
ATOM  11804  CB  LEU D  63      76.667  36.203  88.187  1.00 78.12           C
ATOM  11805  CG  LEU D  63      75.702  37.181  87.499  1.00 78.34           C
ATOM  11806  CD1 LEU D  63      74.493  36.443  86.935  1.00 78.58           C
ATOM  11807  CD2 LEU D  63      75.246  38.295  88.431  1.00 78.44           C
ATOM  11808  C   LEU D  63      78.847  35.481  89.218  1.00 78.10           C
ATOM  11809  O   LEU D  63      78.252  34.527  89.754  1.00 77.79           O
ATOM  11810  N   ASN D  64      80.176  35.586  89.159  1.00 78.43           N
ATOM  11811  CA  ASN D  64      81.054  34.519  89.620  1.00 78.93           C
ATOM  11812  CB  ASN D  64      82.452  34.680  89.015  1.00 79.07           C
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ATOM  11813  CG  ASN D  64      82.414  35.121  87.562  1.00 79.30           C
ATOM  11814  OD1 ASN D  64      82.267  36.305  87.269  1.00 80.17           O
ATOM  11815  ND2 ASN D  64      82.549  34.172  86.648  1.00 79.53           N
ATOM  11816  C   ASN D  64      81.141  34.403  91.143  1.00 79.25           C
ATOM  11817  O   ASN D  64      80.756  35.322  91.872  1.00 79.33           O
ATOM  11818  N   GLU D  65      81.648  33.258  91.604  1.00 79.62           N
ATOM  11819  CA  GLU D  65      81.815  32.942  93.035  1.00 79.97           C
ATOM  11820  CB  GLU D  65      82.880  33.830  93.702  1.00 80.08           C
ATOM  11821  CG  GLU D  65      84.323  33.500  93.354  1.00 81.00           C
ATOM  11822  CD  GLU D  65      84.938  34.493  92.377  1.00 82.48           C
ATOM  11823  OE1 GLU D  65      84.563  35.688  92.413  1.00 82.82           O
ATOM  11824  OE2 GLU D  65      85.809  34.077  91.578  1.00 83.45           O
ATOM  11825  C   GLU D  65      80.525  32.967  93.868  1.00 79.90           C
ATOM  11826  O   GLU D  65      80.581  33.081  95.091  1.00 79.98           O
ATOM  11827  N   ASN D  66      79.372  32.857  93.218  1.00 79.89           N
ATOM  11828  CA  ASN D  66      78.107  32.793  93.948  1.00 79.96           C
ATOM  11829  CB  ASN D  66      76.970  33.438  93.147  1.00 79.82           C
ATOM  11830  CG  ASN D  66      76.989  34.954  93.212  1.00 79.32           C
ATOM  11831  OD1 ASN D  66      75.979  35.567  93.635  1.00 78.72           O
ATOM  11832  ND2 ASN D  66      78.130  35.568  92.786  1.00 79.17           N
ATOM  11833  C   ASN D  66      77.758  31.358  94.340  1.00 80.22           C
ATOM  11834  O   ASN D  66      78.610  30.463  94.278  1.00 80.16           O
ATOM  11835  N   ILE D  67      76.508  31.152  94.748  1.00 80.51           N
ATOM  11836  CA  ILE D  67      76.015  29.839  95.154  1.00 80.98           C
ATOM  11837  CB  ILE D  67      75.831  29.762  96.720  1.00 81.11           C
ATOM  11838  CG1 ILE D  67      75.740  28.305  97.213  1.00 81.34           C
ATOM  11839  CD1 ILE D  67      75.773  28.141  98.741  1.00 81.03           C
ATOM  11840  CG2 ILE D  67      74.659  30.666  97.215  1.00 81.05           C
ATOM  11841  C   ILE D  67      74.732  29.513  94.371  1.00 81.20           C
ATOM  11842  O   ILE D  67      73.744  29.026  94.934  1.00 81.28           O
ATOM  11843  N   VAL D  68      74.755  29.793  93.066  1.00 81.50           N
ATOM  11844  CA  VAL D  68      73.575  29.597  92.214  1.00 81.85           C
ATOM  11845  CB  VAL D  68      73.692  30.301  90.829  1.00 81.71           C
ATOM  11846  CG1 VAL D  68      72.449  30.039  89.989  1.00 81.42           C
ATOM  11847  CG2 VAL D  68      73.885  31.804  91.003  1.00 81.40           C
ATOM  11848  C   VAL D  68      73.228  28.109  92.075  1.00 82.29           C
ATOM  11849  O   VAL D  68      73.893  27.357  91.358  1.00 82.49           O
ATOM  11850  N   SER D  69      72.173  27.719  92.787  1.00 82.75           N
ATOM  11851  CA  SER D  69      71.710  26.337  92.910  1.00 83.13           C
ATOM  11852  CB  SER D  69      70.759  26.227  94.121  1.00 83.29           C
ATOM  11853  OG  SER D  69      70.862  24.984  94.802  1.00 83.61           O
ATOM  11854  C   SER D  69      70.992  25.888  91.638  1.00 83.22           C
ATOM  11855  O   SER D  69      71.217  24.783  91.146  1.00 83.22           O
ATOM  11856  N   ALA D  70      70.129  26.757  91.115  1.00 83.37           N
ATOM  11857  CA  ALA D  70      69.295  26.435  89.963  1.00 83.53           C
ATOM  11858  CB  ALA D  70      67.976  25.811  90.418  1.00 83.43           C
ATOM  11859  C   ALA D  70      69.028  27.672  89.120  1.00 83.72           C
ATOM  11860  O   ALA D  70      68.883  28.777  89.650  1.00 83.59           O
ATOM  11861  N   VAL D  71      68.969  27.479  87.806  1.00 84.01           N
ATOM  11862  CA  VAL D  71      68.610  28.558  86.893  1.00 84.32           C
ATOM  11863  CB  VAL D  71      69.807  29.015  86.010  1.00 84.35           C
ATOM  11864  CG1 VAL D  71      70.398  27.849  85.227  1.00 84.55           C
ATOM  11865  CG2 VAL D  71      69.401  30.175  85.086  1.00 84.36           C
ATOM  11866  C   VAL D  71      67.385  28.173  86.067  1.00 84.55           C
ATOM  11867  O   VAL D  71      67.341  27.102  85.462  1.00 84.62           O
ATOM  11868  N   GLU D  72      66.390  29.058  86.076  1.00 84.89           N
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ATOM  11869  CA  GLU D  72      65.102  28.827  85.429  1.00 85.15           C
ATOM  11870  CB  GLU D  72      63.976  29.461  86.251  1.00 85.40           C
ATOM  11871  CG  GLU D  72      64.066  29.218  87.757  1.00 86.38           C
ATOM  11872  CD  GLU D  72      63.447  27.902  88.186  1.00 87.42           C
ATOM  11873  OE1 GLU D  72      62.206  27.856  88.344  1.00 87.47           O
ATOM  11874  OE2 GLU D  72      64.205  26.923  88.380  1.00 87.77           O
ATOM  11875  C   GLU D  72      65.109  29.436  84.034  1.00 85.08           C
ATOM  11876  O   GLU D  72      65.793  30.441  83.809  1.00 85.16           O
ATOM  11877  N   PRO D  73      64.344  28.837  83.095  1.00 85.00           N
ATOM  11878  CA  PRO D  73      64.251  29.346  81.717  1.00 84.85           C
ATOM  11879  CB  PRO D  73      63.208  28.424  81.066  1.00 84.86           C
ATOM  11880  CG  PRO D  73      63.202  27.190  81.902  1.00 84.82           C
ATOM  11881  CD  PRO D  73      63.512  27.632  83.294  1.00 84.92           C
ATOM  11882  C   PRO D  73      63.787  30.811  81.653  1.00 84.67           C
ATOM  11883  O   PRO D  73      62.881  31.217  82.407  1.00 84.75           O
ATOM  11884  N   GLY D  74      64.419  31.589  80.771  1.00 84.19           N
ATOM  11885  CA  GLY D  74      64.080  33.003  80.582  1.00 83.55           C
ATOM  11886  C   GLY D  74      64.458  33.920  81.737  1.00 83.05           C
ATOM  11887  O   GLY D  74      63.598  34.588  82.315  1.00 83.00           O
ATOM  11888  N   ALA D  75      65.747  33.946  82.068  1.00 82.55           N
ATOM  11889  CA  ALA D  75      66.293  34.870  83.060  1.00 81.88           C
ATOM  11890  CB  ALA D  75      67.367  34.176  83.902  1.00 81.80           C
ATOM  11891  C   ALA D  75      66.861  36.121  82.378  1.00 81.52           C
ATOM  11892  O   ALA D  75      66.535  37.251  82.764  1.00 81.17           O
ATOM  11893  N   PHE D  76      67.679  35.900  81.343  1.00 81.09           N
ATOM  11894  CA  PHE D  76      68.432  36.967  80.670  1.00 80.65           C
ATOM  11895  CB  PHE D  76      69.779  36.436  80.183  1.00 80.42           C
ATOM  11896  CG  PHE D  76      70.532  35.647  81.217  1.00 80.14           C
ATOM  11897  CD1 PHE D  76      71.261  36.293  82.213  1.00 79.71           C
ATOM  11898  CE1 PHE D  76      71.959  35.563  83.172  1.00 79.36           C
ATOM  11899  CZ  PHE D  76      71.934  34.171  83.138  1.00 79.51           C
ATOM  11900  CE2 PHE D  76      71.213  33.515  82.146  1.00 79.43           C
ATOM  11901  CD2 PHE D  76      70.519  34.255  81.192  1.00 79.73           C
ATOM  11902  C   PHE D  76      67.688  37.661  79.521  1.00 80.60           C
ATOM  11903  O   PHE D  76      68.304  38.085  78.542  1.00 80.41           O
ATOM  11904  N   ASN D  77      66.369  37.789  79.666  1.00 80.63           N
ATOM  11905  CA  ASN D  77      65.513  38.466  78.691  1.00 80.62           C
ATOM  11906  CB  ASN D  77      64.035  38.237  79.032  1.00 80.66           C
ATOM  11907  CG  ASN D  77      63.592  36.800  78.804  1.00 80.71           C
ATOM  11908  OD1 ASN D  77      64.414  35.886  78.697  1.00 80.53           O
ATOM  11909  ND2 ASN D  77      62.282  36.595  78.731  1.00 80.47           N
ATOM  11910  C   ASN D  77      65.770  39.967  78.590  1.00 80.59           C
ATOM  11911  O   ASN D  77      65.990  40.632  79.602  1.00 80.71           O
ATOM  11912  N   ASN D  78      65.719  40.484  77.361  1.00 80.45           N
ATOM  11913  CA  ASN D  78      65.863  41.917  77.058  1.00 80.16           C
ATOM  11914  CB  ASN D  78      64.838  42.757  77.838  1.00 80.16           C
ATOM  11915  CG  ASN D  78      64.508  44.068  77.150  1.00 80.26           C
ATOM  11916  OD1 ASN D  78      64.854  45.144  77.640  1.00 80.12           O
ATOM  11917  ND2 ASN D  78      63.837  43.985  76.005  1.00 80.47           N
ATOM  11918  C   ASN D  78      67.293  42.451  77.235  1.00 79.94           C
ATOM  11919  O   ASN D  78      67.506  43.589  77.664  1.00 79.91           O
ATOM  11920  N   LEU D  79      68.268  41.615  76.891  1.00 79.73           N
ATOM  11921  CA  LEU D  79      69.678  42.004  76.927  1.00 79.52           C
ATOM  11922  CB  LEU D  79      70.427  41.231  78.018  1.00 79.54           C
ATOM  11923  CG  LEU D  79      70.279  41.693  79.469  1.00 79.76           C
ATOM  11924  CD1 LEU D  79      69.053  41.095  80.130  1.00 79.93           C
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ATOM  11925  CD2 LEU D  79      71.509  41.293  80.242  1.00 80.38           C
ATOM  11926  C   LEU D  79      70.338  41.796  75.565  1.00 79.19           C
ATOM  11927  O   LEU D  79      71.352  41.118  75.456  1.00 79.13           O
ATOM  11928  N   PHE D  80      69.751  42.402  74.536  1.00 79.03           N
ATOM  11929  CA  PHE D  80      70.222  42.280  73.154  1.00 78.71           C
ATOM  11930  CB  PHE D  80      69.233  42.937  72.180  1.00 78.94           C
ATOM  11931  CG  PHE D  80      67.870  42.299  72.160  1.00 79.19           C
ATOM  11932  CD1 PHE D  80      67.630  41.158  71.391  1.00 79.58           C
ATOM  11933  CE1 PHE D  80      66.363  40.569  71.363  1.00 79.52           C
ATOM  11934  CZ  PHE D  80      65.325  41.126  72.108  1.00 79.19           C
ATOM  11935  CE2 PHE D  80      65.555  42.267  72.875  1.00 78.96           C
ATOM  11936  CD2 PHE D  80      66.820  42.848  72.894  1.00 78.87           C
ATOM  11937  C   PHE D  80      71.604  42.888  72.943  1.00 78.37           C
ATOM  11938  O   PHE D  80      72.253  42.613  71.932  1.00 78.54           O
ATOM  11939  N   ASN D  81      72.042  43.718  73.887  1.00 77.82           N
ATOM  11940  CA  ASN D  81      73.357  44.356  73.814  1.00 77.40           C
ATOM  11941  CB  ASN D  81      73.319  45.724  74.500  1.00 77.43           C
ATOM  11942  CG  ASN D  81      72.515  46.745  73.719  1.00 77.86           C
ATOM  11943  OD1 ASN D  81      72.509  46.731  72.487  1.00 78.31           O
ATOM  11944  ND2 ASN D  81      71.833  47.642  74.431  1.00 78.05           N
ATOM  11945  C   ASN D  81      74.488  43.505  74.396  1.00 76.97           C
ATOM  11946  O   ASN D  81      75.662  43.732  74.092  1.00 76.87           O
ATOM  11947  N   LEU D  82      74.118  42.522  75.216  1.00 76.46           N
ATOM  11948  CA  LEU D  82      75.071  41.750  76.004  1.00 76.05           C
ATOM  11949  CB  LEU D  82      74.338  40.809  76.964  1.00 75.90           C
ATOM  11950  CG  LEU D  82      75.168  40.208  78.103  1.00 75.82           C
ATOM  11951  CD1 LEU D  82      75.712  41.295  79.026  1.00 75.68           C
ATOM  11952  CD2 LEU D  82      74.364  39.190  78.891  1.00 75.73           C
ATOM  11953  C   LEU D  82      76.050  40.969  75.140  1.00 76.19           C
ATOM  11954  O   LEU D  82      75.686  40.439  74.089  1.00 76.27           O
ATOM  11955  N   ARG D  83      77.300  40.914  75.592  1.00 76.08           N
ATOM  11956  CA  ARG D  83      78.342  40.190  74.883  1.00 75.94           C
ATOM  11957  CB  ARG D  83      79.127  41.137  73.972  1.00 76.04           C
ATOM  11958  CG  ARG D  83      78.391  41.430  72.679  1.00 76.91           C
ATOM  11959  CD  ARG D  83      79.129  42.384  71.763  1.00 78.30           C
ATOM  11960  NE  ARG D  83      78.269  42.771  70.642  1.00 78.88           N
ATOM  11961  CZ  ARG D  83      78.400  42.326  69.394  1.00 78.40           C
ATOM  11962  NH1 ARG D  83      79.376  41.486  69.077  1.00 77.59           N
ATOM  11963  NH2 ARG D  83      77.555  42.738  68.456  1.00 78.10           N
ATOM  11964  C   ARG D  83      79.269  39.406  75.809  1.00 75.71           C
ATOM  11965  O   ARG D  83      80.239  38.799  75.350  1.00 76.00           O
ATOM  11966  N   THR D  84      78.961  39.407  77.106  1.00 75.35           N
ATOM  11967  CA  THR D  84      79.732  38.646  78.095  1.00 75.02           C
ATOM  11968  CB  THR D  84      80.942  39.459  78.624  1.00 75.15           C
ATOM  11969  OG1 THR D  84      82.037  39.331  77.706  1.00 75.80           O
ATOM  11970  CG2 THR D  84      81.398  38.946  79.982  1.00 75.56           C
ATOM  11971  C   THR D  84      78.869  38.156  79.257  1.00 74.49           C
ATOM  11972  O   THR D  84      78.003  38.874  79.741  1.00 74.59           O
ATOM  11973  N   LEU D  85      79.108  36.925  79.692  1.00 73.90           N
ATOM  11974  CA  LEU D  85      78.418  36.380  80.852  1.00 73.55           C
ATOM  11975  CB  LEU D  85      77.181  35.578  80.425  1.00 73.51           C
ATOM  11976  CG  LEU D  85      76.337  34.838  81.475  1.00 73.54           C
ATOM  11977  CD1 LEU D  85      75.862  35.764  82.586  1.00 72.93           C
ATOM  11978  CD2 LEU D  85      75.151  34.150  80.813  1.00 73.23           C
ATOM  11979  C   LEU D  85      79.363  35.531  81.697  1.00 73.44           C
ATOM  11980  O   LEU D  85      80.047  34.644  81.182  1.00 73.28           O
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ATOM  11981  N   GLY D  86      79.397  35.823  82.996  1.00 73.28           N
ATOM  11982  CA  GLY D  86      80.209  35.075  83.944  1.00 73.19           C
ATOM  11983  C   GLY D  86      79.339  34.327  84.926  1.00 73.19           C
ATOM  11984  O   GLY D  86      78.543  34.927  85.633  1.00 73.26           O
ATOM  11985  N   LEU D  87      79.482  33.009  84.955  1.00 73.43           N
ATOM  11986  CA  LEU D  87      78.735  32.159  85.882  1.00 73.75           C
ATOM  11987  CB  LEU D  87      77.544  31.496  85.175  1.00 73.66           C
ATOM  11988  CG  LEU D  87      76.447  32.402  84.605  1.00 73.53           C
ATOM  11989  CD1 LEU D  87      75.488  31.626  83.716  1.00 72.71           C
ATOM  11990  CD2 LEU D  87      75.697  33.108  85.726  1.00 73.42           C
ATOM  11991  C   LEU D  87      79.660  31.109  86.498  1.00 74.08           C
ATOM  11992  O   LEU D  87      79.215  30.033  86.922  1.00 73.91           O
ATOM  11993  N   ARG D  88      80.947  31.450  86.546  1.00 74.62           N
ATOM  11994  CA  ARG D  88      81.992  30.591  87.092  1.00 75.25           C
ATOM  11995  CB  ARG D  88      83.379  31.157  86.743  1.00 75.36           C
ATOM  11996  CG  ARG D  88      84.516  30.771  87.690  1.00 76.37           C
ATOM  11997  CD  ARG D  88      85.830  30.625  86.938  1.00 78.67           C
ATOM  11998  NE  ARG D  88      86.733  31.771  87.070  1.00 80.49           N
ATOM  11999  CZ  ARG D  88      87.800  31.986  86.292  1.00 81.43           C
ATOM  12000  NH1 ARG D  88      88.103  31.142  85.297  1.00 81.05           N
ATOM  12001  NH2 ARG D  88      88.566  33.056  86.503  1.00 81.21           N
ATOM  12002  C   ARG D  88      81.842  30.378  88.597  1.00 75.48           C
ATOM  12003  O   ARG D  88      81.566  31.316  89.349  1.00 75.42           O
ATOM  12004  N   SER D  89      82.020  29.125  89.008  1.00 75.90           N
ATOM  12005  CA  SER D  89      82.049  28.717  90.417  1.00 76.33           C
ATOM  12006  CB  SER D  89      83.249  29.326  91.152  1.00 76.30           C
ATOM  12007  OG  SER D  89      83.500  28.607  92.344  1.00 76.75           O
ATOM  12008  C   SER D  89      80.741  28.933  91.186  1.00 76.48           C
ATOM  12009  O   SER D  89      80.715  29.585  92.232  1.00 76.61           O
ATOM  12010  N   ASN D  90      79.660  28.377  90.651  1.00 76.69           N
ATOM  12011  CA  ASN D  90      78.376  28.350  91.339  1.00 76.95           C
ATOM  12012  CB  ASN D  90      77.297  29.057  90.513  1.00 76.83           C
ATOM  12013  CG  ASN D  90      77.613  30.522  90.268  1.00 76.44           C
ATOM  12014  OD1 ASN D  90      76.959  31.403  90.810  1.00 76.14           O
ATOM  12015  ND2 ASN D  90      78.620  30.786  89.452  1.00 76.33           N
ATOM  12016  C   ASN D  90      78.006  26.895  91.628  1.00 77.35           C
ATOM  12017  O   ASN D  90      78.892  26.036  91.679  1.00 77.37           O
ATOM  12018  N   ARG D  91      76.716  26.614  91.811  1.00 77.75           N
ATOM  12019  CA  ARG D  91      76.274  25.254  92.128  1.00 78.25           C
ATOM  12020  CB  ARG D  91      75.601  25.218  93.497  1.00 78.33           C
ATOM  12021  CG  ARG D  91      76.560  25.252  94.662  1.00 78.93           C
ATOM  12022  CD  ARG D  91      76.060  24.319  95.746  1.00 80.44           C
ATOM  12023  NE  ARG D  91      76.638  24.600  97.057  1.00 81.62           N
ATOM  12024  CZ  ARG D  91      77.879  24.285  97.425  1.00 81.85           C
ATOM  12025  NH1 ARG D  91      78.707  23.681  96.573  1.00 81.05           N
ATOM  12026  NH2 ARG D  91      78.292  24.586  98.652  1.00 81.54           N
ATOM  12027  C   ARG D  91      75.357  24.621  91.074  1.00 78.47           C
ATOM  12028  O   ARG D  91      74.545  23.750  91.395  1.00 78.65           O
ATOM  12029  N   LEU D  92      75.500  25.052  89.823  1.00 78.69           N
ATOM  12030  CA  LEU D  92      74.679  24.549  88.720  1.00 78.96           C
ATOM  12031  CB  LEU D  92      74.887  25.414  87.470  1.00 78.83           C
ATOM  12032  CG  LEU D  92      74.532  26.900  87.523  1.00 78.74           C
ATOM  12033  CD1 LEU D  92      74.969  27.580  86.238  1.00 78.00           C
ATOM  12034  CD2 LEU D  92      73.036  27.101  87.757  1.00 79.39           C
ATOM  12035  C   LEU D  92      74.970  23.083  88.377  1.00 79.23           C
ATOM  12036  O   LEU D  92      76.084  22.754  87.957  1.00 79.29           O
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ATOM	12037	N	LYS	D	93	73.970	22.215	88.554	1.00	79.41	N
ATOM	12038	CA	LYS	D	93	74.065	20.808	88.140	1.00	79.63	C
ATOM	12039	CB	LYS	D	93	73.103	19.935	88.941	1.00	79.48	C
ATOM	12040	CG	LYS	D	93	73.420	19.813	90.406	1.00	79.77	C
ATOM	12041	CD	LYS	D	93	72.201	19.333	91.180	1.00	80.06	C
ATOM	12042	CE	LYS	D	93	72.465	19.344	92.681	1.00	80.05	C
ATOM	12043	NZ	LYS	D	93	71.276	18.860	93.429	1.00	80.18	N
ATOM	12044	C	LYS	D	93	73.712	20.663	86.668	1.00	79.93	C
ATOM	12045	O	LYS	D	93	74.136	19.715	85.995	1.00	79.94	O
ATOM	12046	N	LEU	D	94	72.939	21.620	86.171	1.00	80.29	N
ATOM	12047	CA	LEU	D	94	72.238	21.457	84.917	1.00	80.76	C
ATOM	12048	CB	LEU	D	94	71.077	20.466	85.123	1.00	80.74	C
ATOM	12049	CG	LEU	D	94	69.771	20.516	84.329	1.00	80.77	C
ATOM	12050	CD1	LEU	D	94	69.983	20.114	82.869	1.00	81.26	C
ATOM	12051	CD2	LEU	D	94	68.744	19.616	84.992	1.00	80.67	C
ATOM	12052	C	LEU	D	94	71.708	22.795	84.441	1.00	81.12	C
ATOM	12053	O	LEU	D	94	70.908	23.430	85.132	1.00	81.30	O
ATOM	12054	N	ILE	D	95	72.155	23.219	83.264	1.00	81.50	N
ATOM	12055	CA	ILE	D	95	71.529	24.347	82.590	1.00	81.93	C
ATOM	12056	CB	ILE	D	95	72.528	25.118	81.718	1.00	81.84	C
ATOM	12057	CG1	ILE	D	95	73.692	25.612	82.579	1.00	81.85	C
ATOM	12058	CD1	ILE	D	95	74.834	26.217	81.798	1.00	82.48	C
ATOM	12059	CG2	ILE	D	95	71.829	26.282	81.012	1.00	81.73	C
ATOM	12060	C	ILE	D	95	70.361	23.815	81.752	1.00	82.38	C
ATOM	12061	O	ILE	D	95	70.584	23.106	80.769	1.00	82.55	O
ATOM	12062	N	PRO	D	96	69.114	24.131	82.157	1.00	82.72	N
ATOM	12063	CA	PRO	D	96	67.937	23.607	81.464	1.00	83.03	C
ATOM	12064	CB	PRO	D	96	66.794	23.806	82.486	1.00	83.01	C
ATOM	12065	CG	PRO	D	96	67.434	24.371	83.732	1.00	82.82	C
ATOM	12066	CD	PRO	D	96	68.726	24.986	83.292	1.00	82.81	C
ATOM	12067	C	PRO	D	96	67.643	24.385	80.188	1.00	83.34	C
ATOM	12068	O	PRO	D	96	68.257	25.427	79.949	1.00	83.46	O
ATOM	12069	N	LEU	D	97	66.706	23.878	79.388	1.00	83.68	N
ATOM	12070	CA	LEU	D	97	66.308	24.517	78.133	1.00	84.01	C
ATOM	12071	CB	LEU	D	97	65.349	23.609	77.356	1.00	84.04	C
ATOM	12072	CG	LEU	D	97	65.217	23.810	75.842	1.00	83.94	C
ATOM	12073	CD1	LEU	D	97	66.554	23.651	75.119	1.00	83.81	C
ATOM	12074	CD2	LEU	D	97	64.201	22.836	75.288	1.00	84.09	C
ATOM	12075	C	LEU	D	97	65.662	25.877	78.373	1.00	84.17	C
ATOM	12076	O	LEU	D	97	65.042	26.099	79.410	1.00	84.35	O
ATOM	12077	N	GLY	D	98	65.816	26.782	77.411	1.00	84.38	N
ATOM	12078	CA	GLY	D	98	65.261	28.127	77.521	1.00	84.59	C
ATOM	12079	C	GLY	D	98	66.305	29.158	77.903	1.00	84.73	C
ATOM	12080	O	GLY	D	98	66.378	30.227	77.294	1.00	84.85	O
ATOM	12081	N	VAL	D	99	67.117	28.820	78.906	1.00	84.69	N
ATOM	12082	CA	VAL	D	99	68.147	29.707	79.471	1.00	84.63	C
ATOM	12083	CB	VAL	D	99	69.095	28.915	80.421	1.00	84.63	C
ATOM	12084	CG1	VAL	D	99	70.183	29.815	81.000	1.00	84.45	C
ATOM	12085	CG2	VAL	D	99	68.299	28.254	81.547	1.00	84.48	C
ATOM	12086	C	VAL	D	99	68.964	30.518	78.440	1.00	84.69	C
ATOM	12087	O	VAL	D	99	69.172	31.721	78.623	1.00	84.53	O
ATOM	12088	N	PHE	D	100	69.403	29.873	77.358	1.00	84.90	N
ATOM	12089	CA	PHE	D	100	70.310	30.524	76.398	1.00	84.97	C
ATOM	12090	CB	PHE	D	100	71.318	29.527	75.826	1.00	84.96	C
ATOM	12091	CG	PHE	D	100	72.304	29.021	76.842	1.00	85.19	C
ATOM	12092	CD1	PHE	D	100	72.921	29.902	77.733	1.00	85.17	C

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ATOM  12093  CE1 PHE D 100      73.830  29.436  78.677  1.00 85.33           C
ATOM  12094  CZ  PHE D 100      74.140  28.074  78.730  1.00 85.22           C
ATOM  12095  CE2 PHE D 100      73.535  27.188  77.844  1.00 84.92           C
ATOM  12096  CD2 PHE D 100      72.624  27.665  76.907  1.00 85.15           C
ATOM  12097  C   PHE D 100      69.671  31.371  75.285  1.00 84.99           C
ATOM  12098  O   PHE D 100      70.317  32.282  74.754  1.00 85.08           O
ATOM  12099  N   THR D 101      68.420  31.068  74.937  1.00 84.88           N
ATOM  12100  CA  THR D 101      67.662  31.861  73.963  1.00 84.75           C
ATOM  12101  CB  THR D 101      66.204  31.358  73.819  1.00 84.90           C
ATOM  12102  OG1 THR D 101      65.796  30.701  75.027  1.00 84.98           O
ATOM  12103  CG2 THR D 101      66.077  30.381  72.662  1.00 85.09           C
ATOM  12104  C   THR D 101      67.648  33.351  74.328  1.00 84.53           C
ATOM  12105  O   THR D 101      67.704  33.712  75.511  1.00 84.46           O
ATOM  12106  N   GLY D 102      67.579  34.208  73.308  1.00 84.18           N
ATOM  12107  CA  GLY D 102      67.641  35.663  73.499  1.00 83.45           C
ATOM  12108  C   GLY D 102      69.068  36.196  73.494  1.00 82.94           C
ATOM  12109  O   GLY D 102      69.311  37.337  73.093  1.00 82.93           O
ATOM  12110  N   LEU D 103      70.006  35.355  73.931  1.00 82.17           N
ATOM  12111  CA  LEU D 103      71.416  35.713  74.042  1.00 81.43           C
ATOM  12112  CB  LEU D 103      72.030  35.046  75.272  1.00 81.57           C
ATOM  12113  CG  LEU D 103      71.581  35.500  76.658  1.00 81.38           C
ATOM  12114  CD1 LEU D 103      72.082  34.511  77.698  1.00 81.31           C
ATOM  12115  CD2 LEU D 103      72.077  36.914  76.949  1.00 81.02           C
ATOM  12116  C   LEU D 103      72.203  35.293  72.811  1.00 80.92           C
ATOM  12117  O   LEU D 103      73.340  34.831  72.916  1.00 80.64           O
ATOM  12118  N   SER D 104      71.593  35.461  71.644  1.00 80.35           N
ATOM  12119  CA  SER D 104      72.212  35.074  70.390  1.00 79.64           C
ATOM  12120  CB  SER D 104      71.177  35.023  69.267  1.00 79.70           C
ATOM  12121  OG  SER D 104      70.902  36.318  68.758  1.00 79.79           O
ATOM  12122  C   SER D 104      73.339  36.023  70.017  1.00 79.23           C
ATOM  12123  O   SER D 104      74.165  35.687  69.172  1.00 79.60           O
ATOM  12124  N   ASN D 105      73.372  37.200  70.639  1.00 78.42           N
ATOM  12125  CA  ASN D 105      74.451  38.160  70.402  1.00 77.78           C
ATOM  12126  CB  ASN D 105      73.914  39.597  70.428  1.00 78.04           C
ATOM  12127  CG  ASN D 105      72.916  39.870  69.304  1.00 78.66           C
ATOM  12128  OD1 ASN D 105      73.138  39.480  68.154  1.00 79.14           O
ATOM  12129  ND2 ASN D 105      71.810  40.548  69.635  1.00 78.38           N
ATOM  12130  C   ASN D 105      75.642  37.992  71.358  1.00 77.19           C
ATOM  12131  O   ASN D 105      76.632  38.719  71.249  1.00 77.07           O
ATOM  12132  N   LEU D 106      75.548  37.019  72.269  1.00 76.47           N
ATOM  12133  CA  LEU D 106      76.593  36.757  73.267  1.00 75.75           C
ATOM  12134  CB  LEU D 106      76.107  35.748  74.316  1.00 75.65           C
ATOM  12135  CG  LEU D 106      76.846  35.665  75.658  1.00 75.01           C
ATOM  12136  CD1 LEU D 106      76.626  36.917  76.491  1.00 74.81           C
ATOM  12137  CD2 LEU D 106      76.410  34.442  76.437  1.00 75.10           C
ATOM  12138  C   LEU D 106      77.894  36.272  72.635  1.00 75.76           C
ATOM  12139  O   LEU D 106      77.880  35.448  71.723  1.00 75.80           O
ATOM  12140  N   THR D 107      79.012  36.790  73.141  1.00 75.66           N
ATOM  12141  CA  THR D 107      80.344  36.510  72.604  1.00 75.48           C
ATOM  12142  CB  THR D 107      81.139  37.828  72.401  1.00 75.41           C
ATOM  12143  OG1 THR D 107      80.494  38.626  71.408  1.00 75.13           O
ATOM  12144  CG2 THR D 107      82.578  37.563  71.959  1.00 75.79           C
ATOM  12145  C   THR D 107      81.140  35.567  73.509  1.00 75.53           C
ATOM  12146  O   THR D 107      81.816  34.651  73.028  1.00 75.65           O
ATOM  12147  N   LYS D 108      81.055  35.793  74.816  1.00 75.46           N
ATOM  12148  CA  LYS D 108      81.922  35.117  75.767  1.00 75.62           C
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ATOM  12149  CB  LYS D 108      82.996  36.092  76.256  1.00 75.60           C
ATOM  12150  CG  LYS D 108      84.131  35.476  77.061  1.00 75.83           C
ATOM  12151  CD  LYS D 108      85.004  36.586  77.654  1.00 76.28           C
ATOM  12152  CE  LYS D 108      86.289  36.050  78.286  1.00 77.32           C
ATOM  12153  NZ  LYS D 108      87.027  37.151  78.982  1.00 76.81           N
ATOM  12154  C   LYS D 108      81.109  34.596  76.933  1.00 75.48           C
ATOM  12155  O   LYS D 108      80.302  35.322  77.504  1.00 75.44           O
ATOM  12156  N   LEU D 109      81.335  33.337  77.287  1.00 75.65           N
ATOM  12157  CA  LEU D 109      80.608  32.695  78.377  1.00 75.73           C
ATOM  12158  CB  LEU D 109      79.534  31.766  77.801  1.00 75.40           C
ATOM  12159  CG  LEU D 109      78.753  30.852  78.745  1.00 74.73           C
ATOM  12160  CD1 LEU D 109      77.771  31.635  79.593  1.00 74.40           C
ATOM  12161  CD2 LEU D 109      78.022  29.805  77.958  1.00 74.00           C
ATOM  12162  C   LEU D 109      81.539  31.908  79.301  1.00 76.10           C
ATOM  12163  O   LEU D 109      82.360  31.120  78.829  1.00 76.39           O
ATOM  12164  N   ASP D 110      81.414  32.125  80.610  1.00 76.45           N
ATOM  12165  CA  ASP D 110      82.093  31.277  81.588  1.00 76.93           C
ATOM  12166  CB  ASP D 110      82.983  32.086  82.526  1.00 77.45           C
ATOM  12167  CG  ASP D 110      84.055  31.224  83.206  1.00 79.23           C
ATOM  12168  OD1 ASP D 110      84.035  29.975  83.050  1.00 80.11           O
ATOM  12169  OD2 ASP D 110      84.927  31.802  83.899  1.00 81.56           O
ATOM  12170  C   ASP D 110      81.110  30.445  82.398  1.00 76.75           C
ATOM  12171  O   ASP D 110      80.113  30.955  82.895  1.00 76.77           O
ATOM  12172  N   ILE D 111      81.432  29.166  82.547  1.00 76.70           N
ATOM  12173  CA  ILE D 111      80.502  28.149  83.030  1.00 76.71           C
ATOM  12174  CB  ILE D 111      79.748  27.504  81.797  1.00 77.10           C
ATOM  12175  CG1 ILE D 111      78.556  28.371  81.370  1.00 77.20           C
ATOM  12176  CD1 ILE D 111      77.632  28.779  82.491  1.00 77.08           C
ATOM  12177  CG2 ILE D 111      79.310  26.049  82.019  1.00 77.42           C
ATOM  12178  C   ILE D 111      81.287  27.131  83.856  1.00 76.40           C
ATOM  12179  O   ILE D 111      80.757  26.122  84.319  1.00 76.06           O
ATOM  12180  N   SER D 112      82.564  27.432  84.057  1.00 76.41           N
ATOM  12181  CA  SER D 112      83.483  26.501  84.695  1.00 76.53           C
ATOM  12182  CB  SER D 112      84.925  26.863  84.354  1.00 76.45           C
ATOM  12183  OG  SER D 112      85.210  28.184  84.765  1.00 76.66           O
ATOM  12184  C   SER D 112      83.302  26.409  86.207  1.00 76.55           C
ATOM  12185  O   SER D 112      82.668  27.266  86.827  1.00 76.41           O
ATOM  12186  N   GLU D 113      83.889  25.358  86.776  1.00 76.70           N
ATOM  12187  CA  GLU D 113      83.801  25.024  88.205  1.00 77.03           C
ATOM  12188  CB  GLU D 113      84.899  25.711  89.048  1.00 77.02           C
ATOM  12189  CG  GLU D 113      85.167  27.193  88.757  1.00 77.80           C
ATOM  12190  CD  GLU D 113      86.631  27.591  88.993  1.00 78.06           C
ATOM  12191  OE1 GLU D 113      87.079  27.604  90.163  1.00 79.62           O
ATOM  12192  OE2 GLU D 113      87.334  27.897  88.003  1.00 78.87           O
ATOM  12193  C   GLU D 113      82.413  25.174  88.825  1.00 76.61           C
ATOM  12194  O   GLU D 113      82.258  25.815  89.855  1.00 76.61           O
ATOM  12195  N   ASN D 114      81.415  24.576  88.180  1.00 76.37           N
ATOM  12196  CA  ASN D 114      80.084  24.446  88.764  1.00 76.20           C
ATOM  12197  CB  ASN D 114      78.999  24.888  87.776  1.00 76.08           C
ATOM  12198  CG  ASN D 114      78.829  26.400  87.734  1.00 75.82           C
ATOM  12199  OD1 ASN D 114      77.826  26.931  88.196  1.00 75.41           O
ATOM  12200  ND2 ASN D 114      79.813  27.095  87.183  1.00 76.01           N
ATOM  12201  C   ASN D 114      79.854  23.021  89.267  1.00 76.21           C
ATOM  12202  O   ASN D 114      80.767  22.413  89.831  1.00 76.20           O
ATOM  12203  N   LYS D 115      78.648  22.492  89.075  1.00 76.17           N
ATOM  12204  CA  LYS D 115      78.322  21.142  89.540  1.00 76.19           C
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ATOM  12205  CB  LYS D 115      77.259  21.187  90.649  1.00 76.39           C
ATOM  12206  CG  LYS D 115      77.743  21.726  91.999  1.00 77.37           C
ATOM  12207  CD  LYS D 115      78.851  20.865  92.605  1.00 78.69           C
ATOM  12208  CE  LYS D 115      79.311  21.398  93.955  1.00 79.50           C
ATOM  12209  NZ  LYS D 115      80.759  21.097  94.174  1.00 80.19           N
ATOM  12210  C   LYS D 115      77.863  20.231  88.401  1.00 75.88           C
ATOM  12211  O   LYS D 115      77.337  19.142  88.640  1.00 75.81           O
ATOM  12212  N   ILE D 116      78.075  20.686  87.167  1.00 75.54           N
ATOM  12213  CA  ILE D 116      77.681  19.948  85.968  1.00 75.19           C
ATOM  12214  CB  ILE D 116      77.963  20.771  84.700  1.00 75.23           C
ATOM  12215  CG1 ILE D 116      77.230  22.114  84.776  1.00 75.16           C
ATOM  12216  CD1 ILE D 116      77.757  23.163  83.824  1.00 74.96           C
ATOM  12217  CG2 ILE D 116      77.540  19.998  83.455  1.00 75.32           C
ATOM  12218  C   ILE D 116      78.392  18.599  85.889  1.00 75.00           C
ATOM  12219  O   ILE D 116      79.600  18.518  86.055  1.00 74.90           O
ATOM  12220  N   VAL D 117      77.624  17.544  85.639  1.00 74.97           N
ATOM  12221  CA  VAL D 117      78.137  16.173  85.663  1.00 74.82           C
ATOM  12222  CB  VAL D 117      77.112  15.205  86.332  1.00 74.97           C
ATOM  12223  CG1 VAL D 117      77.767  13.872  86.700  1.00 75.25           C
ATOM  12224  CG2 VAL D 117      76.498  15.839  87.575  1.00 75.02           C
ATOM  12225  C   VAL D 117      78.451  15.683  84.252  1.00 74.50           C
ATOM  12226  O   VAL D 117      79.433  14.973  84.026  1.00 74.46           O
ATOM  12227  N   ILE D 118      77.600  16.079  83.314  1.00 74.17           N
ATOM  12228  CA  ILE D 118      77.641  15.607  81.941  1.00 73.93           C
ATOM  12229  CB  ILE D 118      76.637  14.436  81.711  1.00 73.97           C
ATOM  12230  CG1 ILE D 118      75.225  14.831  82.151  1.00 73.66           C
ATOM  12231  CD1 ILE D 118      74.184  13.783  81.878  1.00 74.00           C
ATOM  12232  CG2 ILE D 118      77.075  13.168  82.446  1.00 73.99           C
ATOM  12233  C   ILE D 118      77.253  16.764  81.034  1.00 73.83           C
ATOM  12234  O   ILE D 118      76.435  17.600  81.419  1.00 74.02           O
ATOM  12235  N   LEU D 119      77.839  16.824  79.842  1.00 73.51           N
ATOM  12236  CA  LEU D 119      77.387  17.769  78.824  1.00 73.21           C
ATOM  12237  CB  LEU D 119      78.534  18.618  78.271  1.00 73.16           C
ATOM  12238  CG  LEU D 119      79.434  19.421  79.205  1.00 73.22           C
ATOM  12239  CD1 LEU D 119      80.544  20.043  78.389  1.00 72.89           C
ATOM  12240  CD2 LEU D 119      78.650  20.486  79.949  1.00 73.33           C
ATOM  12241  C   LEU D 119      76.803  16.956  77.705  1.00 72.94           C
ATOM  12242  O   LEU D 119      77.534  16.265  77.005  1.00 73.01           O
ATOM  12243  N   LEU D 120      75.488  17.033  77.544  1.00 72.84           N
ATOM  12244  CA  LEU D 120      74.800  16.277  76.501  1.00 72.75           C
ATOM  12245  CB  LEU D 120      73.425  15.806  76.982  1.00 72.67           C
ATOM  12246  CG  LEU D 120      73.410  14.833  78.164  1.00 72.41           C
ATOM  12247  CD1 LEU D 120      71.991  14.566  78.587  1.00 71.84           C
ATOM  12248  CD2 LEU D 120      74.123  13.524  77.844  1.00 72.35           C
ATOM  12249  C   LEU D 120      74.683  17.055  75.195  1.00 72.74           C
ATOM  12250  O   LEU D 120      75.065  18.225  75.116  1.00 72.70           O
ATOM  12251  N   ASP D 121      74.152  16.390  74.175  1.00 72.72           N
ATOM  12252  CA  ASP D 121      74.094  16.937  72.826  1.00 72.83           C
ATOM  12253  CB  ASP D 121      73.438  15.916  71.899  1.00 72.95           C
ATOM  12254  CG  ASP D 121      74.334  14.721  71.597  1.00 73.83           C
ATOM  12255  OD1 ASP D 121      75.559  14.761  71.862  1.00 73.82           O
ATOM  12256  OD2 ASP D 121      73.798  13.731  71.063  1.00 75.36           O
ATOM  12257  C   ASP D 121      73.350  18.268  72.720  1.00 72.65           C
ATOM  12258  O   ASP D 121      72.296  18.443  73.326  1.00 72.75           O
ATOM  12259  N   TYR D 122      73.904  19.196  71.941  1.00 72.46           N
ATOM  12260  CA  TYR D 122      73.210  20.441  71.546  1.00 72.45           C
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ATOM  12261  CB  TYR D 122      71.858  20.150  70.850  1.00 71.50           C
ATOM  12262  CG  TYR D 122      71.825  18.930  69.959  1.00 70.01           C
ATOM  12263  CD1 TYR D 122      72.640  18.838  68.838  1.00 68.96           C
ATOM  12264  CE1 TYR D 122      72.608  17.718  68.021  1.00 68.34           C
ATOM  12265  CZ  TYR D 122      71.745  16.681  68.314  1.00 68.89           C
ATOM  12266  OH  TYR D 122      71.713  15.579  67.500  1.00 69.16           O
ATOM  12267  CE2 TYR D 122      70.915  16.752  69.413  1.00 68.32           C
ATOM  12268  CD2 TYR D 122      70.958  17.876  70.227  1.00 68.92           C
ATOM  12269  C   TYR D 122      72.984  21.483  72.659  1.00 73.21           C
ATOM  12270  O   TYR D 122      72.234  22.442  72.457  1.00 73.26           O
ATOM  12271  N   MET D 123      73.628  21.303  73.813  1.00 73.82           N
ATOM  12272  CA  MET D 123      73.550  22.254  74.929  1.00 74.72           C
ATOM  12273  CB  MET D 123      74.697  22.006  75.897  1.00 74.65           C
ATOM  12274  CG  MET D 123      74.426  21.038  77.009  1.00 76.09           C
ATOM  12275  SD  MET D 123      75.689  21.323  78.260  1.00 77.04           S
ATOM  12276  CE  MET D 123      74.804  22.444  79.355  1.00 77.88           C
ATOM  12277  C   MET D 123      73.624  23.729  74.538  1.00 74.40           C
ATOM  12278  O   MET D 123      72.842  24.539  75.021  1.00 74.36           O
ATOM  12279  N   PHE D 124      74.580  24.073  73.679  1.00 74.57           N
ATOM  12280  CA  PHE D 124      74.937  25.470  73.445  1.00 74.71           C
ATOM  12281  CB  PHE D 124      76.455  25.646  73.538  1.00 74.46           C
ATOM  12282  CG  PHE D 124      77.048  25.154  74.826  1.00 73.86           C
ATOM  12283  CD1 PHE D 124      77.014  25.943  75.970  1.00 72.79           C
ATOM  12284  CE1 PHE D 124      77.560  25.488  77.163  1.00 72.67           C
ATOM  12285  CZ  PHE D 124      78.153  24.239  77.221  1.00 72.96           C
ATOM  12286  CE2 PHE D 124      78.202  23.447  76.085  1.00 73.47           C
ATOM  12287  CD2 PHE D 124      77.654  23.907  74.892  1.00 73.11           C
ATOM  12288  C   PHE D 124      74.443  26.015  72.112  1.00 75.15           C
ATOM  12289  O   PHE D 124      74.895  27.072  71.663  1.00 75.25           O
ATOM  12290  N   GLN D 125      73.494  25.307  71.507  1.00 75.63           N
ATOM  12291  CA  GLN D 125      73.028  25.592  70.151  1.00 76.18           C
ATOM  12292  CB  GLN D 125      71.986  24.557  69.736  1.00 76.63           C
ATOM  12293  CG  GLN D 125      71.938  24.308  68.227  1.00 78.04           C
ATOM  12294  CD  GLN D 125      70.643  23.663  67.788  1.00 79.04           C
ATOM  12295  OE1 GLN D 125      69.914  23.081  68.602  1.00 80.37           O
ATOM  12296  NE2 GLN D 125      70.342  23.766  66.495  1.00 78.90           N
ATOM  12297  C   GLN D 125      72.457  26.995  69.928  1.00 76.11           C
ATOM  12298  O   GLN D 125      72.484  27.506  68.801  1.00 75.98           O
ATOM  12299  N   ASP D 126      71.932  27.600  70.994  1.00 76.17           N
ATOM  12300  CA  ASP D 126      71.335  28.933  70.920  1.00 76.02           C
ATOM  12301  CB  ASP D 126      70.427  29.162  72.115  1.00 76.36           C
ATOM  12302  CG  ASP D 126      69.089  28.470  71.963  1.00 78.46           C
ATOM  12303  OD1 ASP D 126      68.283  28.890  71.089  1.00 79.55           O
ATOM  12304  OD2 ASP D 126      68.844  27.504  72.723  1.00 80.55           O
ATOM  12305  C   ASP D 126      72.357  30.057  70.821  1.00 75.39           C
ATOM  12306  O   ASP D 126      72.028  31.163  70.394  1.00 75.34           O
ATOM  12307  N   LEU D 127      73.591  29.762  71.220  1.00 74.79           N
ATOM  12308  CA  LEU D 127      74.669  30.742  71.224  1.00 74.32           C
ATOM  12309  CB  LEU D 127      75.562  30.542  72.450  1.00 74.21           C
ATOM  12310  CG  LEU D 127      74.852  30.527  73.809  1.00 74.07           C
ATOM  12311  CD1 LEU D 127      75.704  29.846  74.869  1.00 73.46           C
ATOM  12312  CD2 LEU D 127      74.437  31.925  74.249  1.00 73.84           C
ATOM  12313  C   LEU D 127      75.477  30.617  69.945  1.00 74.15           C
ATOM  12314  O   LEU D 127      76.648  30.224  69.968  1.00 74.18           O
ATOM  12315  N   TYR D 128      74.841  30.945  68.824  1.00 73.77           N
ATOM  12316  CA  TYR D 128      75.465  30.754  67.519  1.00 73.30           C
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ATOM  12317  CB  TYR D 128      74.433  30.602  66.391  1.00 72.94           C
ATOM  12318  CG  TYR D 128      73.258  31.558  66.391  1.00 72.57           C
ATOM  12319  CD1 TYR D 128      72.028  31.179  66.936  1.00 71.98           C
ATOM  12320  CE1 TYR D 128      70.931  32.035  66.911  1.00 71.76           C
ATOM  12321  CZ  TYR D 128      71.048  33.286  66.326  1.00 72.23           C
ATOM  12322  OH  TYR D 128      69.958  34.130  66.303  1.00 72.51           O
ATOM  12323  CE2 TYR D 128      72.252  33.689  65.770  1.00 72.28           C
ATOM  12324  CD2 TYR D 128      73.353  32.815  65.796  1.00 72.59           C
ATOM  12325  C   TYR D 128      76.513  31.807  67.182  1.00 73.32           C
ATOM  12326  O   TYR D 128      77.309  31.623  66.254  1.00 73.39           O
ATOM  12327  N   ASN D 129      76.521  32.896  67.947  1.00 73.08           N
ATOM  12328  CA  ASN D 129      77.506  33.952  67.758  1.00 72.78           C
ATOM  12329  CB  ASN D 129      76.824  35.320  67.750  1.00 72.87           C
ATOM  12330  CG  ASN D 129      76.196  35.648  66.408  1.00 73.32           C
ATOM  12331  OD1 ASN D 129      76.821  35.475  65.360  1.00 74.65           O
ATOM  12332  ND2 ASN D 129      74.961  36.132  66.432  1.00 73.21           N
ATOM  12333  C   ASN D 129      78.642  33.917  68.769  1.00 72.39           C
ATOM  12334  O   ASN D 129      79.561  34.725  68.682  1.00 72.15           O
ATOM  12335  N   LEU D 130      78.576  32.972  69.709  1.00 72.28           N
ATOM  12336  CA  LEU D 130      79.580  32.824  70.765  1.00 72.14           C
ATOM  12337  CB  LEU D 130      79.233  31.661  71.700  1.00 71.93           C
ATOM  12338  CG  LEU D 130      79.811  31.742  73.120  1.00 71.65           C
ATOM  12339  CD1 LEU D 130      79.044  32.764  73.949  1.00 71.73           C
ATOM  12340  CD2 LEU D 130      79.810  30.403  73.829  1.00 71.43           C
ATOM  12341  C   LEU D 130      80.963  32.613  70.177  1.00 72.65           C
ATOM  12342  O   LEU D 130      81.130  31.821  69.254  1.00 72.97           O
ATOM  12343  N   LYS D 131      81.950  33.331  70.707  1.00 73.08           N
ATOM  12344  CA  LYS D 131      83.318  33.232  70.210  1.00 73.35           C
ATOM  12345  CB  LYS D 131      83.862  34.602  69.826  1.00 73.49           C
ATOM  12346  CG  LYS D 131      83.362  35.081  68.468  1.00 74.27           C
ATOM  12347  CD  LYS D 131      84.266  36.157  67.884  1.00 75.98           C
ATOM  12348  CE  LYS D 131      83.901  37.539  68.416  1.00 77.04           C
ATOM  12349  NZ  LYS D 131      84.891  38.573  68.005  1.00 77.67           N
ATOM  12350  C   LYS D 131      84.263  32.521  71.166  1.00 73.38           C
ATOM  12351  O   LYS D 131      85.183  31.847  70.720  1.00 73.43           O
ATOM  12352  N   SER D 132      84.048  32.667  72.472  1.00 73.46           N
ATOM  12353  CA  SER D 132      84.818  31.877  73.443  1.00 73.50           C
ATOM  12354  CB  SER D 132      86.032  32.648  73.991  1.00 73.55           C
ATOM  12355  OG  SER D 132      85.653  33.711  74.838  1.00 73.69           O
ATOM  12356  C   SER D 132      83.971  31.292  74.568  1.00 73.42           C
ATOM  12357  O   SER D 132      82.947  31.857  74.951  1.00 73.85           O
ATOM  12358  N   LEU D 133      84.418  30.155  75.087  1.00 73.25           N
ATOM  12359  CA  LEU D 133      83.679  29.409  76.084  1.00 73.33           C
ATOM  12360  CB  LEU D 133      82.784  28.380  75.392  1.00 73.19           C
ATOM  12361  CG  LEU D 133      82.133  27.284  76.237  1.00 72.96           C
ATOM  12362  CD1 LEU D 133      80.919  27.808  76.948  1.00 71.65           C
ATOM  12363  CD2 LEU D 133      81.755  26.107  75.360  1.00 73.08           C
ATOM  12364  C   LEU D 133      84.630  28.690  77.023  1.00 73.60           C
ATOM  12365  O   LEU D 133      85.451  27.892  76.585  1.00 73.71           O
ATOM  12366  N   GLU D 134      84.529  28.976  78.314  1.00 73.79           N
ATOM  12367  CA  GLU D 134      85.200  28.144  79.307  1.00 74.31           C
ATOM  12368  CB  GLU D 134      86.133  28.940  80.237  1.00 74.19           C
ATOM  12369  CG  GLU D 134      86.005  30.466  80.178  1.00 75.34           C
ATOM  12370  CD  GLU D 134      86.960  31.183  81.150  1.00 76.24           C
ATOM  12371  OE1 GLU D 134      88.087  30.666  81.380  1.00 78.07           O
ATOM  12372  OE2 GLU D 134      86.582  32.267  81.684  1.00 77.61           O
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ATOM  12373  C   GLU D 134      84.176  27.339  80.085  1.00 73.70           C
ATOM  12374  O   GLU D 134      83.114  27.839  80.446  1.00 73.70           O
ATOM  12375  N   VAL D 135      84.507  26.080  80.328  1.00 73.39           N
ATOM  12376  CA  VAL D 135      83.584  25.132  80.925  1.00 72.99           C
ATOM  12377  CB  VAL D 135      82.630  24.521  79.842  1.00 72.83           C
ATOM  12378  CG1 VAL D 135      83.410  24.014  78.622  1.00 72.05           C
ATOM  12379  CG2 VAL D 135      81.731  23.438  80.427  1.00 72.29           C
ATOM  12380  C   VAL D 135      84.400  24.062  81.630  1.00 73.15           C
ATOM  12381  O   VAL D 135      85.569  23.864  81.308  1.00 73.49           O
ATOM  12382  N   GLY D 136      83.797  23.386  82.599  1.00 73.27           N
ATOM  12383  CA  GLY D 136      84.448  22.271  83.265  1.00 73.53           C
ATOM  12384  C   GLY D 136      84.552  22.441  84.762  1.00 73.87           C
ATOM  12385  O   GLY D 136      84.862  23.527  85.258  1.00 73.78           O
ATOM  12386  N   ASP D 137      84.300  21.346  85.472  1.00 74.22           N
ATOM  12387  CA  ASP D 137      84.341  21.297  86.929  1.00 74.56           C
ATOM  12388  CB  ASP D 137      82.988  21.702  87.506  1.00 74.86           C
ATOM  12389  CG  ASP D 137      81.830  20.985  86.836  1.00 75.68           C
ATOM  12390  OD1 ASP D 137      81.842  19.734  86.794  1.00 76.42           O
ATOM  12391  OD2 ASP D 137      80.907  21.673  86.349  1.00 76.95           O
ATOM  12392  C   ASP D 137      84.678  19.876  87.356  1.00 74.55           C
ATOM  12393  O   ASP D 137      84.742  18.977  86.519  1.00 74.69           O
ATOM  12394  N   ASN D 138      84.868  19.669  88.653  1.00 74.71           N
ATOM  12395  CA  ASN D 138      85.324  18.376  89.160  1.00 74.91           C
ATOM  12396  CB  ASN D 138      85.782  18.519  90.606  1.00 75.11           C
ATOM  12397  CG  ASN D 138      86.949  19.474  90.747  1.00 75.90           C
ATOM  12398  OD1 ASN D 138      86.981  20.294  91.660  1.00 77.69           O
ATOM  12399  ND2 ASN D 138      87.913  19.379  89.833  1.00 75.77           N
ATOM  12400  C   ASN D 138      84.313  17.248  89.019  1.00 74.82           C
ATOM  12401  O   ASN D 138      84.688  16.078  88.911  1.00 74.70           O
ATOM  12402  N   ASP D 139      83.034  17.616  89.011  1.00 74.77           N
ATOM  12403  CA  ASP D 139      81.943  16.674  88.793  1.00 74.68           C
ATOM  12404  CB  ASP D 139      80.614  17.299  89.213  1.00 74.83           C
ATOM  12405  CG  ASP D 139      80.544  17.590  90.698  1.00 75.35           C
ATOM  12406  OD1 ASP D 139      81.534  17.331  91.420  1.00 76.11           O
ATOM  12407  OD2 ASP D 139      79.488  18.084  91.145  1.00 75.60           O
ATOM  12408  C   ASP D 139      81.827  16.198  87.346  1.00 74.47           C
ATOM  12409  O   ASP D 139      81.307  15.106  87.098  1.00 74.61           O
ATOM  12410  N   LEU D 140      82.283  17.011  86.394  1.00 74.06           N
ATOM  12411  CA  LEU D 140      82.108  16.672  84.985  1.00 73.76           C
ATOM  12412  CB  LEU D 140      82.519  17.817  84.058  1.00 73.58           C
ATOM  12413  CG  LEU D 140      82.267  17.556  82.568  1.00 72.73           C
ATOM  12414  CD1 LEU D 140      80.792  17.584  82.276  1.00 73.42           C
ATOM  12415  CD2 LEU D 140      82.967  18.566  81.704  1.00 71.94           C
ATOM  12416  C   LEU D 140      82.858  15.395  84.651  1.00 73.90           C
ATOM  12417  O   LEU D 140      84.078  15.319  84.783  1.00 74.12           O
ATOM  12418  N   VAL D 141      82.104  14.395  84.218  1.00 73.99           N
ATOM  12419  CA  VAL D 141      82.627  13.050  84.047  1.00 74.08           C
ATOM  12420  CB  VAL D 141      81.869  12.050  84.989  1.00 74.29           C
ATOM  12421  CG1 VAL D 141      80.510  11.651  84.410  1.00 73.84           C
ATOM  12422  CG2 VAL D 141      82.727  10.822  85.331  1.00 74.34           C
ATOM  12423  C   VAL D 141      82.571  12.618  82.578  1.00 74.01           C
ATOM  12424  O   VAL D 141      83.363  11.781  82.137  1.00 74.12           O
ATOM  12425  N   TYR D 142      81.647  13.215  81.824  1.00 73.87           N
ATOM  12426  CA  TYR D 142      81.392  12.811  80.446  1.00 73.57           C
ATOM  12427  CB  TYR D 142      80.345  11.691  80.422  1.00 73.98           C
ATOM  12428  CG  TYR D 142      80.065  11.129  79.049  1.00 74.43           C
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ATOM  12429  CD1 TYR D 142      81.034  10.395  78.367  1.00 74.96           C
ATOM  12430  CE1 TYR D 142      80.787   9.882  77.103  1.00 75.75           C
ATOM  12431  CZ  TYR D 142      79.549  10.092  76.507  1.00 75.76           C
ATOM  12432  OH  TYR D 142      79.306   9.574  75.254  1.00 75.94           O
ATOM  12433  CE2 TYR D 142      78.566  10.817  77.167  1.00 75.48           C
ATOM  12434  CD2 TYR D 142      78.830  11.328  78.434  1.00 74.91           C
ATOM  12435  C   TYR D 142      80.940  13.959  79.541  1.00 73.07           C
ATOM  12436  O   TYR D 142      80.062  14.744  79.904  1.00 73.10           O
ATOM  12437  N   ILE D 143      81.543  14.031  78.358  1.00 72.26           N
ATOM  12438  CA  ILE D 143      81.108  14.943  77.303  1.00 71.64           C
ATOM  12439  CB  ILE D 143      82.262  15.880  76.883  1.00 71.52           C
ATOM  12440  CG1 ILE D 143      82.685  16.764  78.058  1.00 71.25           C
ATOM  12441  CD1 ILE D 143      84.041  17.409  77.889  1.00 70.60           C
ATOM  12442  CG2 ILE D 143      81.854  16.740  75.720  1.00 71.70           C
ATOM  12443  C   ILE D 143      80.621  14.126  76.098  1.00 71.31           C
ATOM  12444  O   ILE D 143      81.359  13.293  75.570  1.00 71.10           O
ATOM  12445  N   SER D 144      79.379  14.350  75.673  1.00 71.00           N
ATOM  12446  CA  SER D 144      78.828  13.625  74.515  1.00 70.84           C
ATOM  12447  CB  SER D 144      77.299  13.599  74.550  1.00 70.89           C
ATOM  12448  OG  SER D 144      76.767  14.848  74.139  1.00 71.46           O
ATOM  12449  C   SER D 144      79.328  14.225  73.197  1.00 70.53           C
ATOM  12450  O   SER D 144      79.834  15.347  73.178  1.00 70.31           O
ATOM  12451  N   HIS D 145      79.177  13.482  72.102  1.00 70.30           N
ATOM  12452  CA  HIS D 145      79.778  13.863  70.819  1.00 70.21           C
ATOM  12453  CB  HIS D 145      79.617  12.752  69.790  1.00 70.21           C
ATOM  12454  CG  HIS D 145      80.196  11.445  70.231  1.00 71.98           C
ATOM  12455  ND1 HIS D 145      81.339  11.359  71.004  1.00 72.71           N
ATOM  12456  CE1 HIS D 145      81.612  10.089  71.243  1.00 73.02           C
ATOM  12457  NE2 HIS D 145      80.692   9.347  70.648  1.00 73.51           N
ATOM  12458  CD2 HIS D 145      79.795  10.170  70.009  1.00 72.57           C
ATOM  12459  C   HIS D 145      79.290  15.191  70.255  1.00 69.98           C
ATOM  12460  O   HIS D 145      80.080  15.964  69.703  1.00 69.92           O
ATOM  12461  N   ARG D 146      78.002  15.469  70.413  1.00 69.78           N
ATOM  12462  CA  ARG D 146      77.430  16.689  69.856  1.00 69.85           C
ATOM  12463  CB  ARG D 146      76.150  16.364  69.086  1.00 69.68           C
ATOM  12464  CG  ARG D 146      76.410  15.522  67.864  1.00 69.63           C
ATOM  12465  CD  ARG D 146      75.132  15.084  67.221  1.00 70.11           C
ATOM  12466  NE  ARG D 146      75.381  14.144  66.133  1.00 70.13           N
ATOM  12467  CZ  ARG D 146      74.423  13.537  65.443  1.00 69.46           C
ATOM  12468  NH1 ARG D 146      73.150  13.785  65.715  1.00 69.07           N
ATOM  12469  NH2 ARG D 146      74.737  12.688  64.475  1.00 68.65           N
ATOM  12470  C   ARG D 146      77.203  17.771  70.908  1.00 69.89           C
ATOM  12471  O   ARG D 146      76.392  18.675  70.719  1.00 70.01           O
ATOM  12472  N   ALA D 147      77.947  17.682  72.006  1.00 70.15           N
ATOM  12473  CA  ALA D 147      77.778  18.580  73.147  1.00 70.23           C
ATOM  12474  CB  ALA D 147      78.576  18.085  74.329  1.00 70.08           C
ATOM  12475  C   ALA D 147      78.161  20.017  72.817  1.00 70.39           C
ATOM  12476  O   ALA D 147      77.636  20.948  73.429  1.00 70.71           O
ATOM  12477  N   PHE D 148      79.071  20.186  71.858  1.00 70.33           N
ATOM  12478  CA  PHE D 148      79.496  21.509  71.400  1.00 70.33           C
ATOM  12479  CB  PHE D 148      81.019  21.590  71.310  1.00 70.19           C
ATOM  12480  CG  PHE D 148      81.714  21.415  72.620  1.00 69.61           C
ATOM  12481  CD1 PHE D 148      81.479  22.294  73.670  1.00 68.46           C
ATOM  12482  CE1 PHE D 148      82.123  22.129  74.892  1.00 67.96           C
ATOM  12483  CZ  PHE D 148      83.022  21.084  75.063  1.00 68.74           C
ATOM  12484  CE2 PHE D 148      83.275  20.204  74.015  1.00 68.52           C
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ATOM	12485	CD2	PHE	D	148	82.624	20.374	72.801	1.00	69.31	C
ATOM	12486	C	PHE	D	148	78.895	21.883	70.047	1.00	70.54	C
ATOM	12487	O	PHE	D	148	79.191	22.947	69.500	1.00	70.56	O
ATOM	12488	N	SER	D	149	78.056	21.000	69.515	1.00	70.88	N
ATOM	12489	CA	SER	D	149	77.393	21.215	68.236	1.00	71.08	C
ATOM	12490	CB	SER	D	149	76.567	19.985	67.860	1.00	71.16	C
ATOM	12491	OG	SER	D	149	75.676	20.255	66.791	1.00	71.90	O
ATOM	12492	C	SER	D	149	76.500	22.438	68.301	1.00	70.98	C
ATOM	12493	O	SER	D	149	75.673	22.561	69.198	1.00	71.28	O
ATOM	12494	N	GLY	D	150	76.686	23.347	67.352	1.00	71.05	N
ATOM	12495	CA	GLY	D	150	75.873	24.553	67.280	1.00	71.06	C
ATOM	12496	C	GLY	D	150	76.671	25.823	67.508	1.00	71.09	C
ATOM	12497	O	GLY	D	150	76.225	26.908	67.145	1.00	71.17	O
ATOM	12498	N	LEU	D	151	77.849	25.701	68.113	1.00	71.03	N
ATOM	12499	CA	LEU	D	151	78.692	26.865	68.351	1.00	71.05	C
ATOM	12500	CB	LEU	D	151	79.672	26.604	69.495	1.00	70.77	C
ATOM	12501	CG	LEU	D	151	79.067	26.355	70.878	1.00	69.84	C
ATOM	12502	CD1	LEU	D	151	79.959	25.473	71.723	1.00	68.99	C
ATOM	12503	CD2	LEU	D	151	78.795	27.651	71.585	1.00	69.13	C
ATOM	12504	C	LEU	D	151	79.411	27.197	67.050	1.00	71.51	C
ATOM	12505	O	LEU	D	151	80.626	27.064	66.930	1.00	71.58	O
ATOM	12506	N	ASN	D	152	78.626	27.627	66.070	1.00	72.04	N
ATOM	12507	CA	ASN	D	152	79.111	27.915	64.728	1.00	72.47	C
ATOM	12508	CB	ASN	D	152	77.945	28.336	63.827	1.00	72.35	C
ATOM	12509	CG	ASN	D	152	76.925	27.224	63.628	1.00	72.53	C
ATOM	12510	OD1	ASN	D	152	77.137	26.087	64.044	1.00	73.55	O
ATOM	12511	ND2	ASN	D	152	75.815	27.549	62.981	1.00	72.33	N
ATOM	12512	C	ASN	D	152	80.216	28.962	64.670	1.00	72.87	C
ATOM	12513	O	ASN	D	152	80.960	29.010	63.698	1.00	73.25	O
ATOM	12514	N	SER	D	153	80.331	29.787	65.709	1.00	73.23	N
ATOM	12515	CA	SER	D	153	81.275	30.901	65.690	1.00	73.36	C
ATOM	12516	CB	SER	D	153	80.538	32.211	65.916	1.00	73.33	C
ATOM	12517	OG	SER	D	153	79.708	32.499	64.812	1.00	74.17	O
ATOM	12518	C	SER	D	153	82.426	30.791	66.677	1.00	73.48	C
ATOM	12519	O	SER	D	153	83.277	31.686	66.728	1.00	73.64	O
ATOM	12520	N	LEU	D	154	82.459	29.705	67.449	1.00	73.40	N
ATOM	12521	CA	LEU	D	154	83.460	29.538	68.494	1.00	73.49	C
ATOM	12522	CB	LEU	D	154	83.278	28.197	69.210	1.00	73.46	C
ATOM	12523	CG	LEU	D	154	83.841	28.061	70.633	1.00	73.09	C
ATOM	12524	CD1	LEU	D	154	83.033	28.870	71.624	1.00	72.36	C
ATOM	12525	CD2	LEU	D	154	83.847	26.614	71.052	1.00	73.11	C
ATOM	12526	C	LEU	D	154	84.871	29.651	67.922	1.00	74.11	C
ATOM	12527	O	LEU	D	154	85.161	29.106	66.858	1.00	74.39	O
ATOM	12528	N	GLU	D	155	85.731	30.384	68.627	1.00	74.58	N
ATOM	12529	CA	GLU	D	155	87.129	30.554	68.247	1.00	75.07	C
ATOM	12530	CB	GLU	D	155	87.417	31.996	67.824	1.00	74.73	C
ATOM	12531	CG	GLU	D	155	86.858	32.362	66.449	1.00	75.56	C
ATOM	12532	CD	GLU	D	155	86.986	33.854	66.110	1.00	76.33	C
ATOM	12533	OE1	GLU	D	155	87.905	34.527	66.638	1.00	77.92	O
ATOM	12534	OE2	GLU	D	155	86.159	34.361	65.310	1.00	78.41	O
ATOM	12535	C	GLU	D	155	88.041	30.140	69.392	1.00	75.11	C
ATOM	12536	O	GLU	D	155	89.200	29.774	69.171	1.00	75.37	O
ATOM	12537	N	GLN	D	156	87.518	30.186	70.614	1.00	75.31	N
ATOM	12538	CA	GLN	D	156	88.278	29.744	71.781	1.00	75.79	C
ATOM	12539	CB	GLN	D	156	88.764	30.934	72.617	1.00	76.23	C
ATOM	12540	CG	GLN	D	156	89.489	32.026	71.825	1.00	78.71	C

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ATOM  12541  CD  GLN D 156      90.547  32.768  72.640  1.00 82.12           C
ATOM  12542  OE1 GLN D 156      90.865  33.927  72.348  1.00 83.40           O
ATOM  12543  NE2 GLN D 156      91.104  32.100  73.659  1.00 82.42           N
ATOM  12544  C   GLN D 156      87.454  28.822  72.657  1.00 75.30           C
ATOM  12545  O   GLN D 156      86.307  29.117  72.964  1.00 75.32           O
ATOM  12546  N   LEU D 157      88.035  27.696  73.043  1.00 74.88           N
ATOM  12547  CA  LEU D 157      87.425  26.850  74.051  1.00 74.80           C
ATOM  12548  CB  LEU D 157      86.955  25.516  73.462  1.00 74.51           C
ATOM  12549  CG  LEU D 157      86.516  24.423  74.446  1.00 73.65           C
ATOM  12550  CD1 LEU D 157      85.230  24.760  75.163  1.00 73.41           C
ATOM  12551  CD2 LEU D 157      86.343  23.147  73.725  1.00 73.64           C
ATOM  12552  C   LEU D 157      88.416  26.610  75.170  1.00 75.27           C
ATOM  12553  O   LEU D 157      89.614  26.473  74.931  1.00 75.18           O
ATOM  12554  N   THR D 158      87.906  26.574  76.394  1.00 76.04           N
ATOM  12555  CA  THR D 158      88.704  26.206  77.545  1.00 76.77           C
ATOM  12556  CB  THR D 158      88.942  27.407  78.468  1.00 76.84           C
ATOM  12557  OG1 THR D 158      89.267  28.555  77.678  1.00 77.07           O
ATOM  12558  CG2 THR D 158      90.078  27.123  79.447  1.00 76.58           C
ATOM  12559  C   THR D 158      87.999  25.098  78.307  1.00 77.41           C
ATOM  12560  O   THR D 158      86.922  25.298  78.870  1.00 77.48           O
ATOM  12561  N   LEU D 159      88.597  23.916  78.286  1.00 78.32           N
ATOM  12562  CA  LEU D 159      88.152  22.828  79.126  1.00 79.37           C
ATOM  12563  CB  LEU D 159      88.237  21.515  78.376  1.00 79.37           C
ATOM  12564  CG  LEU D 159      86.929  20.944  77.864  1.00 80.01           C
ATOM  12565  CD1 LEU D 159      87.264  19.889  76.834  1.00 80.61           C
ATOM  12566  CD2 LEU D 159      86.117  20.362  79.024  1.00 79.97           C
ATOM  12567  C   LEU D 159      89.079  22.771  80.302  1.00 80.09           C
ATOM  12568  O   LEU D 159      90.274  22.566  80.131  1.00 80.60           O
ATOM  12569  N   GLU D 160      88.543  22.951  81.499  1.00 80.93           N
ATOM  12570  CA  GLU D 160      89.381  22.943  82.679  1.00 81.80           C
ATOM  12571  CB  GLU D 160      89.729  24.372  83.091  1.00 81.67           C
ATOM  12572  CG  GLU D 160      88.531  25.283  83.331  1.00 82.27           C
ATOM  12573  CD  GLU D 160      88.908  26.760  83.383  1.00 82.77           C
ATOM  12574  OE1 GLU D 160      90.103  27.071  83.599  1.00 84.71           O
ATOM  12575  OE2 GLU D 160      88.010  27.617  83.205  1.00 83.73           O
ATOM  12576  C   GLU D 160      88.765  22.186  83.840  1.00 82.19           C
ATOM  12577  O   GLU D 160      87.557  22.218  84.036  1.00 82.28           O
ATOM  12578  N   LYS D 161      89.621  21.480  84.578  1.00 82.94           N
ATOM  12579  CA  LYS D 161      89.312  20.946  85.915  1.00 83.49           C
ATOM  12580  CB  LYS D 161      88.796  22.068  86.834  1.00 83.34           C
ATOM  12581  CG  LYS D 161      89.764  23.237  86.990  1.00 83.73           C
ATOM  12582  CD  LYS D 161      89.043  24.512  87.404  1.00 84.47           C
ATOM  12583  CE  LYS D 161      89.951  25.736  87.307  1.00 84.50           C
ATOM  12584  NZ  LYS D 161      90.962  25.774  88.403  1.00 84.86           N
ATOM  12585  C   LYS D 161      88.387  19.727  85.972  1.00 83.90           C
ATOM  12586  O   LYS D 161      87.717  19.517  86.978  1.00 84.04           O
ATOM  12587  N   CYS D 162      88.389  18.905  84.922  1.00 84.55           N
ATOM  12588  CA  CYS D 162      87.501  17.733  84.840  1.00 85.22           C
ATOM  12589  CB  CYS D 162      86.928  17.596  83.434  1.00 85.38           C
ATOM  12590  SG  CYS D 162      86.347  19.119  82.712  1.00 86.77           S
ATOM  12591  C   CYS D 162      88.184  16.417  85.186  1.00 85.36           C
ATOM  12592  O   CYS D 162      89.403  16.293  85.082  1.00 85.47           O
ATOM  12593  N   ASN D 163      87.375  15.431  85.569  1.00 85.68           N
ATOM  12594  CA  ASN D 163      87.840  14.059  85.776  1.00 86.08           C
ATOM  12595  CB  ASN D 163      87.166  13.431  87.016  1.00 86.27           C
ATOM  12596  CG  ASN D 163      87.843  13.824  88.335  1.00 86.98           C
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ATOM  12597  OD1 ASN D 163      88.496  14.867  88.439  1.00 87.77           O
ATOM  12598  ND2 ASN D 163      87.677  12.983  89.353  1.00 87.21           N
ATOM  12599  C   ASN D 163      87.607  13.188  84.527  1.00 86.02           C
ATOM  12600  O   ASN D 163      87.008  12.108  84.611  1.00 86.24           O
ATOM  12601  N   LEU D 164      88.067  13.676  83.374  1.00 85.83           N
ATOM  12602  CA  LEU D 164      88.021  12.920  82.121  1.00 85.59           C
ATOM  12603  CB  LEU D 164      87.865  13.856  80.926  1.00 85.63           C
ATOM  12604  CG  LEU D 164      86.657  14.788  80.807  1.00 85.64           C
ATOM  12605  CD1 LEU D 164      87.012  15.979  79.932  1.00 85.52           C
ATOM  12606  CD2 LEU D 164      85.448  14.057  80.258  1.00 85.30           C
ATOM  12607  C   LEU D 164      89.311  12.137  81.965  1.00 85.61           C
ATOM  12608  O   LEU D 164      90.399  12.676  82.183  1.00 85.69           O
ATOM  12609  N   THR D 165      89.188  10.871  81.572  1.00 85.55           N
ATOM  12610  CA  THR D 165      90.336   9.958  81.483  1.00 85.47           C
ATOM  12611  CB  THR D 165      89.899   8.487  81.559  1.00 85.75           C
ATOM  12612  OG1 THR D 165      89.219   8.137  80.345  1.00 86.62           O
ATOM  12613  CG2 THR D 165      88.978   8.239  82.756  1.00 85.87           C
ATOM  12614  C   THR D 165      91.127  10.113  80.185  1.00 84.99           C
ATOM  12615  O   THR D 165      92.257   9.625  80.091  1.00 85.12           O
ATOM  12616  N   SER D 166      90.519  10.762  79.189  1.00 84.30           N
ATOM  12617  CA  SER D 166      91.153  11.020  77.884  1.00 83.49           C
ATOM  12618  CB  SER D 166      91.084   9.777  76.973  1.00 83.65           C
ATOM  12619  OG  SER D 166      89.745   9.399  76.685  1.00 83.38           O
ATOM  12620  C   SER D 166      90.530  12.231  77.188  1.00 82.78           C
ATOM  12621  O   SER D 166      89.477  12.718  77.606  1.00 82.58           O
ATOM  12622  N   ILE D 167      91.189  12.705  76.130  1.00 82.11           N
ATOM  12623  CA  ILE D 167      90.743  13.868  75.356  1.00 81.47           C
ATOM  12624  CB  ILE D 167      91.835  14.316  74.361  1.00 81.55           C
ATOM  12625  CG1 ILE D 167      93.071  14.803  75.121  1.00 81.89           C
ATOM  12626  CD1 ILE D 167      94.274  15.086  74.229  1.00 81.61           C
ATOM  12627  CG2 ILE D 167      91.321  15.399  73.409  1.00 81.28           C
ATOM  12628  C   ILE D 167      89.443  13.569  74.601  1.00 81.03           C
ATOM  12629  O   ILE D 167      89.354  12.551  73.906  1.00 80.76           O
ATOM  12630  N   PRO D 168      88.430  14.453  74.738  1.00 80.58           N
ATOM  12631  CA  PRO D 168      87.159  14.242  74.053  1.00 80.37           C
ATOM  12632  CB  PRO D 168      86.211  15.200  74.784  1.00 80.24           C
ATOM  12633  CG  PRO D 168      87.085  16.310  75.248  1.00 79.93           C
ATOM  12634  CD  PRO D 168      88.428  15.697  75.534  1.00 80.33           C
ATOM  12635  C   PRO D 168      87.288  14.587  72.557  1.00 80.37           C
ATOM  12636  O   PRO D 168      86.853  15.657  72.111  1.00 80.13           O
ATOM  12637  N   THR D 169      87.887  13.671  71.797  1.00 80.27           N
ATOM  12638  CA  THR D 169      88.232  13.930  70.402  1.00 80.14           C
ATOM  12639  CB  THR D 169      89.143  12.838  69.800  1.00 80.17           C
ATOM  12640  OG1 THR D 169      90.354  12.749  70.558  1.00 80.47           O
ATOM  12641  CG2 THR D 169      89.505  13.187  68.364  1.00 80.52           C
ATOM  12642  C   THR D 169      87.003  14.137  69.529  1.00 79.93           C
ATOM  12643  O   THR D 169      86.889  15.167  68.863  1.00 79.94           O
ATOM  12644  N   GLU D 170      86.085  13.175  69.536  1.00 79.60           N
ATOM  12645  CA  GLU D 170      84.913  13.283  68.679  1.00 79.88           C
ATOM  12646  CB  GLU D 170      84.088  11.986  68.613  1.00 79.60           C
ATOM  12647  CG  GLU D 170      83.293  11.850  67.285  1.00 81.14           C
ATOM  12648  CD  GLU D 170      82.334  10.640  67.227  1.00 81.97           C
ATOM  12649  OE1 GLU D 170      82.745   9.504  67.594  1.00 84.69           O
ATOM  12650  OE2 GLU D 170      81.164  10.825  66.791  1.00 84.02           O
ATOM  12651  C   GLU D 170      84.056  14.476  69.080  1.00 79.08           C
ATOM  12652  O   GLU D 170      83.410  15.083  68.229  1.00 79.55           O
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ATOM	12653	N	ALA	D	171	84.069	14.828	70.361	1.00	78.40	N
ATOM	12654	CA	ALA	D	171	83.346	16.004	70.821	1.00	77.90	C
ATOM	12655	CB	ALA	D	171	83.338	16.069	72.324	1.00	77.98	C
ATOM	12656	C	ALA	D	171	83.933	17.283	70.234	1.00	77.61	C
ATOM	12657	O	ALA	D	171	83.206	18.099	69.685	1.00	77.74	O
ATOM	12658	N	LEU	D	172	85.247	17.444	70.340	1.00	77.20	N
ATOM	12659	CA	LEU	D	172	85.916	18.651	69.873	1.00	76.90	C
ATOM	12660	CB	LEU	D	172	87.362	18.692	70.370	1.00	77.05	C
ATOM	12661	CG	LEU	D	172	87.718	18.674	71.861	1.00	77.13	C
ATOM	12662	CD1	LEU	D	172	89.220	18.496	72.027	1.00	75.86	C
ATOM	12663	CD2	LEU	D	172	87.248	19.918	72.584	1.00	76.89	C
ATOM	12664	C	LEU	D	172	85.917	18.791	68.348	1.00	76.68	C
ATOM	12665	O	LEU	D	172	86.100	19.893	67.825	1.00	77.02	O
ATOM	12666	N	SER	D	173	85.711	17.690	67.634	1.00	75.90	N
ATOM	12667	CA	SER	D	173	85.804	17.713	66.179	1.00	75.29	C
ATOM	12668	CB	SER	D	173	85.878	16.299	65.602	1.00	75.11	C
ATOM	12669	OG	SER	D	173	84.654	15.613	65.774	1.00	74.70	O
ATOM	12670	C	SER	D	173	84.674	18.490	65.517	1.00	75.23	C
ATOM	12671	O	SER	D	173	84.732	18.755	64.316	1.00	75.87	O
ATOM	12672	N	HIS	D	174	83.646	18.851	66.280	1.00	74.73	N
ATOM	12673	CA	HIS	D	174	82.546	19.624	65.718	1.00	74.23	C
ATOM	12674	CB	HIS	D	174	81.267	19.408	66.526	1.00	74.15	C
ATOM	12675	CG	HIS	D	174	80.683	18.034	66.373	1.00	74.81	C
ATOM	12676	ND1	HIS	D	174	79.643	17.755	65.510	1.00	75.15	N
ATOM	12677	CE1	HIS	D	174	79.336	16.472	65.590	1.00	74.49	C
ATOM	12678	NE2	HIS	D	174	80.144	15.905	66.468	1.00	74.62	N
ATOM	12679	CD2	HIS	D	174	80.997	16.859	66.971	1.00	74.76	C
ATOM	12680	C	HIS	D	174	82.890	21.113	65.581	1.00	74.00	C
ATOM	12681	O	HIS	D	174	82.202	21.853	64.881	1.00	74.11	O
ATOM	12682	N	LEU	D	175	83.975	21.539	66.226	1.00	73.75	N
ATOM	12683	CA	LEU	D	175	84.371	22.946	66.246	1.00	73.27	C
ATOM	12684	CB	LEU	D	175	84.964	23.308	67.602	1.00	72.85	C
ATOM	12685	CG	LEU	D	175	84.096	22.952	68.800	1.00	72.58	C
ATOM	12686	CD1	LEU	D	175	84.847	23.181	70.096	1.00	72.30	C
ATOM	12687	CD2	LEU	D	175	82.782	23.729	68.763	1.00	71.78	C
ATOM	12688	C	LEU	D	175	85.369	23.252	65.146	1.00	73.45	C
ATOM	12689	O	LEU	D	175	86.519	23.614	65.421	1.00	73.56	O
ATOM	12690	N	HIS	D	176	84.914	23.127	63.898	1.00	73.48	N
ATOM	12691	CA	HIS	D	176	85.783	23.248	62.726	1.00	73.25	C
ATOM	12692	CB	HIS	D	176	85.011	22.936	61.445	1.00	73.35	C
ATOM	12693	CG	HIS	D	176	84.341	21.602	61.460	1.00	74.68	C
ATOM	12694	ND1	HIS	D	176	83.000	21.449	61.732	1.00	76.85	N
ATOM	12695	CE1	HIS	D	176	82.686	20.166	61.684	1.00	77.02	C
ATOM	12696	NE2	HIS	D	176	83.779	19.482	61.398	1.00	76.57	N
ATOM	12697	CD2	HIS	D	176	84.829	20.357	61.261	1.00	75.94	C
ATOM	12698	C	HIS	D	176	86.450	24.607	62.602	1.00	72.88	C
ATOM	12699	O	HIS	D	176	87.371	24.767	61.809	1.00	73.41	O
ATOM	12700	N	GLY	D	177	85.993	25.580	63.382	1.00	72.49	N
ATOM	12701	CA	GLY	D	177	86.524	26.941	63.307	1.00	72.10	C
ATOM	12702	C	GLY	D	177	87.387	27.364	64.480	1.00	71.75	C
ATOM	12703	O	GLY	D	177	87.891	28.482	64.502	1.00	71.73	O
ATOM	12704	N	LEU	D	178	87.565	26.465	65.445	1.00	71.53	N
ATOM	12705	CA	LEU	D	178	88.340	26.749	66.648	1.00	71.30	C
ATOM	12706	CB	LEU	D	178	88.420	25.504	67.532	1.00	71.23	C
ATOM	12707	CG	LEU	D	178	88.567	25.753	69.035	1.00	71.08	C
ATOM	12708	CD1	LEU	D	178	87.444	26.658	69.541	1.00	70.72	C

ATOM	12709	CD2	LEU	D	178	88.589	24.434	69.806	1.00	70.52	C
ATOM	12710	C	LEU	D	178	89.738	27.229	66.293	1.00	71.43	C
ATOM	12711	O	LEU	D	178	90.350	26.708	65.370	1.00	71.86	O
ATOM	12712	N	ILE	D	179	90.230	28.233	67.008	1.00	71.31	N
ATOM	12713	CA	ILE	D	179	91.575	28.741	66.774	1.00	71.18	C
ATOM	12714	CB	ILE	D	179	91.566	30.234	66.420	1.00	70.94	C
ATOM	12715	CG1	ILE	D	179	90.716	30.467	65.170	1.00	70.37	C
ATOM	12716	CD1	ILE	D	179	90.365	31.916	64.915	1.00	69.66	C
ATOM	12717	CG2	ILE	D	179	92.985	30.750	66.217	1.00	70.06	C
ATOM	12718	C	ILE	D	179	92.444	28.492	68.003	1.00	71.77	C
ATOM	12719	O	ILE	D	179	93.609	28.118	67.881	1.00	72.09	O
ATOM	12720	N	VAL	D	180	91.862	28.684	69.183	1.00	71.87	N
ATOM	12721	CA	VAL	D	180	92.579	28.526	70.437	1.00	71.65	C
ATOM	12722	CB	VAL	D	180	92.549	29.841	71.232	1.00	71.47	C
ATOM	12723	CG1	VAL	D	180	93.372	29.724	72.501	1.00	71.14	C
ATOM	12724	CG2	VAL	D	180	93.046	30.991	70.361	1.00	71.20	C
ATOM	12725	C	VAL	D	180	91.938	27.417	71.256	1.00	71.85	C
ATOM	12726	O	VAL	D	180	90.738	27.460	71.513	1.00	72.23	O
ATOM	12727	N	LEU	D	181	92.727	26.425	71.658	1.00	72.11	N
ATOM	12728	CA	LEU	D	181	92.229	25.349	72.524	1.00	72.35	C
ATOM	12729	CB	LEU	D	181	92.212	24.011	71.791	1.00	72.08	C
ATOM	12730	CG	LEU	D	181	91.819	22.799	72.636	1.00	72.10	C
ATOM	12731	CD1	LEU	D	181	90.424	22.962	73.220	1.00	73.08	C
ATOM	12732	CD2	LEU	D	181	91.909	21.517	71.838	1.00	71.91	C
ATOM	12733	C	LEU	D	181	93.073	25.217	73.769	1.00	73.02	C
ATOM	12734	O	LEU	D	181	94.265	24.915	73.669	1.00	73.62	O
ATOM	12735	N	ARG	D	182	92.455	25.426	74.933	1.00	73.39	N
ATOM	12736	CA	ARG	D	182	93.159	25.364	76.227	1.00	73.78	C
ATOM	12737	CB	ARG	D	182	93.044	26.687	76.982	1.00	73.43	C
ATOM	12738	CG	ARG	D	182	93.358	27.911	76.165	1.00	74.60	C
ATOM	12739	CD	ARG	D	182	93.570	29.123	77.071	1.00	76.70	C
ATOM	12740	NE	ARG	D	182	93.768	30.368	76.324	1.00	79.00	N
ATOM	12741	CZ	ARG	D	182	94.918	30.766	75.760	1.00	80.44	C
ATOM	12742	NH1	ARG	D	182	96.025	30.024	75.825	1.00	79.62	N
ATOM	12743	NH2	ARG	D	182	94.959	31.924	75.108	1.00	81.42	N
ATOM	12744	C	ARG	D	182	92.644	24.224	77.118	1.00	74.06	C
ATOM	12745	O	ARG	D	182	91.491	24.238	77.557	1.00	74.38	O
ATOM	12746	N	LEU	D	183	93.498	23.244	77.390	1.00	74.11	N
ATOM	12747	CA	LEU	D	183	93.099	22.102	78.198	1.00	74.37	C
ATOM	12748	CB	LEU	D	183	93.346	20.815	77.423	1.00	74.17	C
ATOM	12749	CG	LEU	D	183	92.683	20.705	76.054	1.00	74.09	C
ATOM	12750	CD1	LEU	D	183	93.239	19.496	75.328	1.00	75.04	C
ATOM	12751	CD2	LEU	D	183	91.175	20.588	76.184	1.00	73.47	C
ATOM	12752	C	LEU	D	183	93.833	22.088	79.539	1.00	74.72	C
ATOM	12753	O	LEU	D	183	94.985	21.646	79.622	1.00	74.79	O
ATOM	12754	N	ARG	D	184	93.163	22.569	80.582	1.00	74.89	N
ATOM	12755	CA	ARG	D	184	93.820	22.842	81.859	1.00	75.44	C
ATOM	12756	CB	ARG	D	184	93.642	24.304	82.241	1.00	75.60	C
ATOM	12757	CG	ARG	D	184	94.121	25.288	81.211	1.00	76.53	C
ATOM	12758	CD	ARG	D	184	93.701	26.682	81.621	1.00	79.29	C
ATOM	12759	NE	ARG	D	184	94.415	27.700	80.861	1.00	82.21	N
ATOM	12760	CZ	ARG	D	184	94.088	28.988	80.833	1.00	84.39	C
ATOM	12761	NH1	ARG	D	184	93.041	29.436	81.522	1.00	84.56	N
ATOM	12762	NH2	ARG	D	184	94.815	29.833	80.108	1.00	86.12	N
ATOM	12763	C	ARG	D	184	93.334	21.978	83.011	1.00	75.65	C
ATOM	12764	O	ARG	D	184	92.146	21.662	83.094	1.00	75.91	O

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ATOM  12765  N   HIS D 185      94.261  21.621  83.904  1.00 75.74           N
ATOM  12766  CA  HIS D 185      93.970  20.810  85.103  1.00 75.78           C
ATOM  12767  CB  HIS D 185      93.243  21.640  86.172  1.00 75.56           C
ATOM  12768  CG  HIS D 185      94.049  22.789  86.696  1.00 74.85           C
ATOM  12769  ND1 HIS D 185      95.030  22.635  87.654  1.00 74.14           N
ATOM  12770  CE1 HIS D 185      95.571  23.811  87.918  1.00 73.94           C
ATOM  12771  NE2 HIS D 185      94.981  24.721  87.163  1.00 73.82           N
ATOM  12772  CD2 HIS D 185      94.022  24.109  86.393  1.00 73.65           C
ATOM  12773  C   HIS D 185      93.201  19.525  84.802  1.00 76.03           C
ATOM  12774  O   HIS D 185      92.053  19.374  85.218  1.00 75.98           O
ATOM  12775  N   LEU D 186      93.836  18.613  84.067  1.00 76.36           N
ATOM  12776  CA  LEU D 186      93.225  17.324  83.730  1.00 76.72           C
ATOM  12777  CB  LEU D 186      92.985  17.216  82.227  1.00 76.72           C
ATOM  12778  CG  LEU D 186      92.139  18.326  81.589  1.00 77.58           C
ATOM  12779  CD1 LEU D 186      91.940  18.076  80.100  1.00 77.28           C
ATOM  12780  CD2 LEU D 186      90.785  18.486  82.293  1.00 79.04           C
ATOM  12781  C   LEU D 186      94.025  16.123  84.240  1.00 76.93           C
ATOM  12782  O   LEU D 186      95.226  16.216  84.491  1.00 77.02           O
ATOM  12783  N   ASN D 187      93.341  14.998  84.398  1.00 77.35           N
ATOM  12784  CA  ASN D 187      93.950  13.794  84.955  1.00 77.86           C
ATOM  12785  CB  ASN D 187      92.932  13.004  85.785  1.00 77.98           C
ATOM  12786  CG  ASN D 187      92.500  13.733  87.038  1.00 78.37           C
ATOM  12787  OD1 ASN D 187      93.109  14.730  87.441  1.00 78.67           O
ATOM  12788  ND2 ASN D 187      91.438  13.232  87.671  1.00 78.63           N
ATOM  12789  C   ASN D 187      94.530  12.871  83.899  1.00 78.00           C
ATOM  12790  O   ASN D 187      95.035  11.791  84.232  1.00 78.30           O
ATOM  12791  N   ILE D 188      94.437  13.288  82.639  1.00 77.86           N
ATOM  12792  CA  ILE D 188      94.886  12.491  81.508  1.00 78.14           C
ATOM  12793  CB  ILE D 188      94.535  13.203  80.190  1.00 78.45           C
ATOM  12794  CG1 ILE D 188      93.010  13.340  80.054  1.00 78.76           C
ATOM  12795  CD1 ILE D 188      92.567  14.533  79.199  1.00 79.78           C
ATOM  12796  CG2 ILE D 188      95.142  12.468  78.982  1.00 78.78           C
ATOM  12797  C   ILE D 188      96.389  12.261  81.598  1.00 78.17           C
ATOM  12798  O   ILE D 188      97.139  13.174  81.940  1.00 78.57           O
ATOM  12799  N   ASN D 189      96.832  11.043  81.303  1.00 78.07           N
ATOM  12800  CA  ASN D 189      98.259  10.720  81.402  1.00 78.03           C
ATOM  12801  CB  ASN D 189      98.470   9.536  82.344  1.00 77.95           C
ATOM  12802  CG  ASN D 189      97.726   8.304  81.899  1.00 78.09           C
ATOM  12803  OD1 ASN D 189      97.044   8.305  80.871  1.00 77.44           O
ATOM  12804  ND2 ASN D 189      97.843   7.238  82.678  1.00 79.55           N
ATOM  12805  C   ASN D 189      98.975  10.463  80.069  1.00 78.00           C
ATOM  12806  O   ASN D 189     100.182  10.187  80.050  1.00 78.12           O
ATOM  12807  N   ALA D 190      98.239  10.542  78.963  1.00 77.83           N
ATOM  12808  CA  ALA D 190      98.818  10.297  77.645  1.00 77.84           C
ATOM  12809  CB  ALA D 190      98.959   8.798  77.382  1.00 77.87           C
ATOM  12810  C   ALA D 190      97.984  10.928  76.556  1.00 77.85           C
ATOM  12811  O   ALA D 190      96.761  10.801  76.559  1.00 78.05           O
ATOM  12812  N   ILE D 191      98.650  11.615  75.634  1.00 77.74           N
ATOM  12813  CA  ILE D 191      98.026  12.022  74.388  1.00 77.77           C
ATOM  12814  CB  ILE D 191      98.451  13.422  73.956  1.00 77.69           C
ATOM  12815  CG1 ILE D 191      98.293  14.420  75.107  1.00 77.58           C
ATOM  12816  CD1 ILE D 191      99.087  15.707  74.924  1.00 77.10           C
ATOM  12817  CG2 ILE D 191      97.653  13.858  72.738  1.00 77.75           C
ATOM  12818  C   ILE D 191      98.472  11.012  73.344  1.00 78.12           C
ATOM  12819  O   ILE D 191      99.652  10.952  72.987  1.00 78.35           O
ATOM  12820  N   ARG D 192      97.528  10.199  72.885  1.00 78.31           N
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ATOM  12821  CA  ARG D 192      97.815   9.141  71.934  1.00 78.49           C
ATOM  12822  CB  ARG D 192      96.969   7.916  72.252  1.00 78.75           C
ATOM  12823  CG  ARG D 192      96.925   7.590  73.729  1.00 79.61           C
ATOM  12824  CD  ARG D 192      96.768   6.095  74.004  1.00 80.95           C
ATOM  12825  NE  ARG D 192      97.453   5.765  75.251  1.00 82.41           N
ATOM  12826  CZ  ARG D 192      98.764   5.544  75.350  1.00 83.36           C
ATOM  12827  NH1 ARG D 192      99.539   5.579  74.270  1.00 83.81           N
ATOM  12828  NH2 ARG D 192      99.305   5.280  76.532  1.00 83.81           N
ATOM  12829  C   ARG D 192      97.586   9.625  70.500  1.00 78.52           C
ATOM  12830  O   ARG D 192      97.290  10.803  70.277  1.00 78.51           O
ATOM  12831  N   ASP D 193      97.742   8.723  69.535  1.00 78.45           N
ATOM  12832  CA  ASP D 193      97.688   9.088  68.125  1.00 78.71           C
ATOM  12833  CB  ASP D 193      98.069   7.906  67.233  1.00 78.95           C
ATOM  12834  CG  ASP D 193      99.538   7.516  67.352  1.00 79.67           C
ATOM  12835  OD1 ASP D 193     100.403   8.412  67.555  1.00 78.64           O
ATOM  12836  OD2 ASP D 193      99.818   6.295  67.221  1.00 79.73           O
ATOM  12837  C   ASP D 193      96.324   9.606  67.711  1.00 78.75           C
ATOM  12838  O   ASP D 193      95.300   9.042  68.084  1.00 78.47           O
ATOM  12839  N   TYR D 194      96.342  10.687  66.933  1.00 79.19           N
ATOM  12840  CA  TYR D 194      95.150  11.292  66.319  1.00 79.59           C
ATOM  12841  CB  TYR D 194      94.491  10.328  65.308  1.00 79.20           C
ATOM  12842  CG  TYR D 194      95.499   9.590  64.461  1.00 79.07           C
ATOM  12843  CD1 TYR D 194      96.316  10.275  63.556  1.00 79.16           C
ATOM  12844  CE1 TYR D 194      97.264   9.598  62.778  1.00 79.10           C
ATOM  12845  CZ  TYR D 194      97.399   8.224  62.910  1.00 78.72           C
ATOM  12846  OH  TYR D 194      98.336   7.554  62.154  1.00 78.57           O
ATOM  12847  CE2 TYR D 194      96.602   7.526  63.808  1.00 78.46           C
ATOM  12848  CD2 TYR D 194      95.658   8.210  64.578  1.00 78.28           C
ATOM  12849  C   TYR D 194      94.147  11.826  67.342  1.00 79.90           C
ATOM  12850  O   TYR D 194      92.937  11.635  67.213  1.00 80.26           O
ATOM  12851  N   SER D 195      94.659  12.515  68.350  1.00 80.31           N
ATOM  12852  CA  SER D 195      93.813  13.062  69.408  1.00 80.73           C
ATOM  12853  CB  SER D 195      94.649  13.365  70.648  1.00 80.56           C
ATOM  12854  OG  SER D 195      94.999  12.155  71.286  1.00 81.16           O
ATOM  12855  C   SER D 195      93.045  14.304  68.982  1.00 80.76           C
ATOM  12856  O   SER D 195      92.068  14.680  69.622  1.00 80.80           O
ATOM  12857  N   PHE D 196      93.492  14.943  67.908  1.00 81.03           N
ATOM  12858  CA  PHE D 196      92.819  16.137  67.413  1.00 81.40           C
ATOM  12859  CB  PHE D 196      93.678  17.378  67.653  1.00 81.53           C
ATOM  12860  CG  PHE D 196      94.181  17.481  69.059  1.00 82.08           C
ATOM  12861  CD1 PHE D 196      93.372  17.996  70.063  1.00 82.65           C
ATOM  12862  CE1 PHE D 196      93.830  18.082  71.378  1.00 82.60           C
ATOM  12863  CZ  PHE D 196      95.101  17.625  71.697  1.00 82.39           C
ATOM  12864  CE2 PHE D 196      95.914  17.087  70.703  1.00 82.55           C
ATOM  12865  CD2 PHE D 196      95.449  17.017  69.392  1.00 82.76           C
ATOM  12866  C   PHE D 196      92.378  15.987  65.959  1.00 81.42           C
ATOM  12867  O   PHE D 196      93.137  16.202  65.012  1.00 81.63           O
ATOM  12868  N   LYS D 197      91.128  15.591  65.805  1.00 81.52           N
ATOM  12869  CA  LYS D 197      90.546  15.396  64.502  1.00 81.64           C
ATOM  12870  CB  LYS D 197      89.701  14.122  64.491  1.00 81.68           C
ATOM  12871  CG  LYS D 197      90.511  12.852  64.575  1.00 81.88           C
ATOM  12872  CD  LYS D 197      89.664  11.657  64.236  1.00 83.38           C
ATOM  12873  CE  LYS D 197      90.492  10.583  63.548  1.00 84.88           C
ATOM  12874  NZ  LYS D 197      89.626   9.515  62.971  1.00 86.49           N
ATOM  12875  C   LYS D 197      89.700  16.597  64.112  1.00 81.72           C
ATOM  12876  O   LYS D 197      88.943  17.126  64.929  1.00 81.68           O
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ATOM	12877	N	ARG	D	198	89.866	17.022	62.861	1.00	81.95	N
ATOM	12878	CA	ARG	D	198	89.034	18.041	62.200	1.00	82.27	C
ATOM	12879	CB	ARG	D	198	87.563	17.612	62.152	1.00	82.43	C
ATOM	12880	CG	ARG	D	198	87.272	16.460	61.224	1.00	83.72	C
ATOM	12881	CD	ARG	D	198	85.980	15.814	61.644	1.00	87.42	C
ATOM	12882	NE	ARG	D	198	85.484	14.845	60.676	1.00	91.11	N
ATOM	12883	CZ	ARG	D	198	84.551	13.931	60.944	1.00	93.52	C
ATOM	12884	NH1	ARG	D	198	84.148	13.084	59.992	1.00	93.43	N
ATOM	12885	NH2	ARG	D	198	84.021	13.857	62.168	1.00	94.42	N
ATOM	12886	C	ARG	D	198	89.150	19.467	62.739	1.00	82.14	C
ATOM	12887	O	ARG	D	198	88.324	20.318	62.414	1.00	82.35	O
ATOM	12888	N	LEU	D	199	90.174	19.745	63.538	1.00	82.10	N
ATOM	12889	CA	LEU	D	199	90.359	21.100	64.043	1.00	81.92	C
ATOM	12890	CB	LEU	D	199	90.974	21.088	65.449	1.00	81.44	C
ATOM	12891	CG	LEU	D	199	90.171	20.461	66.593	1.00	79.45	C
ATOM	12892	CD1	LEU	D	199	91.024	20.333	67.811	1.00	78.05	C
ATOM	12893	CD2	LEU	D	199	88.959	21.270	66.914	1.00	78.34	C
ATOM	12894	C	LEU	D	199	91.229	21.863	63.055	1.00	82.53	C
ATOM	12895	O	LEU	D	199	92.347	22.264	63.380	1.00	82.99	O
ATOM	12896	N	TYR	D	200	90.705	22.072	61.846	1.00	82.93	N
ATOM	12897	CA	TYR	D	200	91.519	22.541	60.721	1.00	82.90	C
ATOM	12898	CB	TYR	D	200	90.746	22.508	59.401	1.00	83.60	C
ATOM	12899	CG	TYR	D	200	89.726	21.394	59.196	1.00	84.42	C
ATOM	12900	CD1	TYR	D	200	90.094	20.162	58.621	1.00	84.29	C
ATOM	12901	CE1	TYR	D	200	89.147	19.152	58.407	1.00	84.74	C
ATOM	12902	CZ	TYR	D	200	87.809	19.390	58.749	1.00	85.38	C
ATOM	12903	OH	TYR	D	200	86.848	18.422	58.555	1.00	85.77	O
ATOM	12904	CE2	TYR	D	200	87.420	20.606	59.294	1.00	84.92	C
ATOM	12905	CD2	TYR	D	200	88.376	21.602	59.510	1.00	84.87	C
ATOM	12906	C	TYR	D	200	92.084	23.945	60.901	1.00	82.60	C
ATOM	12907	O	TYR	D	200	93.080	24.276	60.283	1.00	82.82	O
ATOM	12908	N	ARG	D	201	91.448	24.763	61.737	1.00	82.27	N
ATOM	12909	CA	ARG	D	201	91.833	26.173	61.902	1.00	81.62	C
ATOM	12910	CB	ARG	D	201	90.586	27.073	61.905	1.00	82.12	C
ATOM	12911	CG	ARG	D	201	89.712	26.984	60.670	1.00	83.81	C
ATOM	12912	CD	ARG	D	201	90.216	27.881	59.570	1.00	87.59	C
ATOM	12913	NE	ARG	D	201	89.279	27.908	58.450	1.00	91.37	N
ATOM	12914	CZ	ARG	D	201	89.499	28.535	57.293	1.00	93.36	C
ATOM	12915	NH1	ARG	D	201	90.633	29.201	57.092	1.00	94.55	N
ATOM	12916	NH2	ARG	D	201	88.584	28.495	56.330	1.00	93.43	N
ATOM	12917	C	ARG	D	201	92.644	26.443	63.172	1.00	80.49	C
ATOM	12918	O	ARG	D	201	93.002	27.595	63.449	1.00	79.99	O
ATOM	12919	N	LEU	D	202	92.923	25.391	63.939	1.00	79.40	N
ATOM	12920	CA	LEU	D	202	93.582	25.542	65.235	1.00	78.69	C
ATOM	12921	CB	LEU	D	202	93.573	24.223	66.007	1.00	78.27	C
ATOM	12922	CG	LEU	D	202	93.889	24.325	67.502	1.00	78.05	C
ATOM	12923	CD1	LEU	D	202	92.726	24.899	68.263	1.00	78.72	C
ATOM	12924	CD2	LEU	D	202	94.227	22.973	68.069	1.00	77.56	C
ATOM	12925	C	LEU	D	202	95.006	26.068	65.083	1.00	78.52	C
ATOM	12926	O	LEU	D	202	95.795	25.532	64.298	1.00	78.76	O
ATOM	12927	N	LYS	D	203	95.323	27.124	65.824	1.00	78.08	N
ATOM	12928	CA	LYS	D	203	96.654	27.719	65.789	1.00	77.91	C
ATOM	12929	CB	LYS	D	203	96.604	29.139	65.231	1.00	78.05	C
ATOM	12930	CG	LYS	D	203	96.061	29.265	63.805	1.00	78.70	C
ATOM	12931	CD	LYS	D	203	96.761	28.335	62.821	1.00	79.22	C
ATOM	12932	CE	LYS	D	203	96.645	28.854	61.407	1.00	80.44	C

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ATOM  12933  NZ  LYS D 203      97.141  27.878  60.399  1.00 81.45           N
ATOM  12934  C   LYS D 203      97.360  27.715  67.148  1.00 77.92           C
ATOM  12935  O   LYS D 203.     98.571  27.500  67.214  1.00 78.41           O
ATOM  12936  N   VAL D 204      96.618  27.954  68.226  1.00 77.36           N
ATOM  12937  CA  VAL D 204      97.189  27.905  69.563  1.00 77.03           C
ATOM  12938  CB  VAL D 204      96.829  29.167  70.374  1.00 76.92           C
ATOM  12939  CG1 VAL D 204      97.325  29.048  71.811  1.00 75.97           C
ATOM  12940  CG2 VAL D 204      97.378  30.421  69.703  1.00 76.21           C
ATOM  12941  C   VAL D 204      96.659  26.677  70.297  1.00 77.57           C
ATOM  12942  O   VAL D 204      95.446  26.506  70.410  1.00 78.04           O
ATOM  12943  N   LEU D 205      97.554  25.819  70.785  1.00 77.75           N
ATOM  12944  CA  LEU D 205      97.153  24.721  71.661  1.00 77.83           C
ATOM  12945  CB  LEU D 205      97.454  23.362  71.035  1.00 77.63           C
ATOM  12946  CG  LEU D 205      97.269  22.142  71.944  1.00 77.58           C
ATOM  12947  CD1 LEU D 205      95.823  22.043  72.376  1.00 78.74           C
ATOM  12948  CD2 LEU D 205      97.695  20.843  71.274  1.00 77.74           C
ATOM  12949  C   LEU D 205      97.892  24.858  72.970  1.00 78.45           C
ATOM  12950  O   LEU D 205      99.117  24.889  72.983  1.00 78.80           O
ATOM  12951  N   GLU D 206      97.146  24.962  74.066  1.00 79.07           N
ATOM  12952  CA  GLU D 206      97.738  25.032  75.407  1.00 79.82           C
ATOM  12953  CB  GLU D 206      97.398  26.346  76.131  1.00 79.42           C
ATOM  12954  CG  GLU D 206      97.608  26.291  77.660  1.00 80.67           C
ATOM  12955  CD  GLU D 206      97.277  27.617  78.381  1.00 82.10           C
ATOM  12956  OE1 GLU D 206      97.086  28.652  77.692  1.00 85.53           O
ATOM  12957  OE2 GLU D 206      97.217  27.632  79.642  1.00 83.70           O
ATOM  12958  C   GLU D 206      97.281  23.848  76.230  1.00 79.21           C
ATOM  12959  O   GLU D 206      96.089  23.606  76.387  1.00 79.58           O
ATOM  12960  N   ILE D 207      98.247  23.103  76.736  1.00 78.86           N
ATOM  12961  CA  ILE D 207      97.991  22.017  77.650  1.00 78.43           C
ATOM  12962  CB  ILE D 207      98.510  20.691  77.101  1.00 78.19           C
ATOM  12963  CG1 ILE D 207      97.577  20.195  76.003  1.00 77.97           C
ATOM  12964  CD1 ILE D 207      98.261  19.294  75.004  1.00 79.36           C
ATOM  12965  CG2 ILE D 207      98.658  19.666  78.211  1.00 77.37           C
ATOM  12966  C   ILE D 207      98.739  22.418  78.887  1.00 78.67           C
ATOM  12967  O   ILE D 207      99.945  22.655  78.840  1.00 78.84           O
ATOM  12968  N   SER D 208      98.020  22.503  79.997  1.00 78.80           N
ATOM  12969  CA  SER D 208      98.553  23.119  81.185  1.00 78.84           C
ATOM  12970  CB  SER D 208      98.126  24.577  81.193  1.00 78.88           C
ATOM  12971  OG  SER D 208      98.919  25.315  82.090  1.00 81.23           O
ATOM  12972  C   SER D 208      98.036  22.398  82.418  1.00 78.65           C
ATOM  12973  O   SER D 208      96.842  22.135  82.519  1.00 79.10           O
ATOM  12974  N   HIS D 209      98.938  22.074  83.346  1.00 78.24           N
ATOM  12975  CA  HIS D 209      98.600  21.354  84.584  1.00 77.75           C
ATOM  12976  CB  HIS D 209      97.719  22.213  85.500  1.00 77.49           C
ATOM  12977  CG  HIS D 209      98.383  23.463  85.987  1.00 76.74           C
ATOM  12978  ND1 HIS D 209      99.172  23.495  87.117  1.00 75.09           N
ATOM  12979  CE1 HIS D 209      99.621  24.722  87.303  1.00 75.10           C
ATOM  12980  NE2 HIS D 209      99.146  25.490  86.339  1.00 75.51           N
ATOM  12981  CD2 HIS D 209      98.369  24.727  85.502  1.00 75.91           C
ATOM  12982  C   HIS D 209      97.938  19.991  84.378  1.00 77.92           C
ATOM  12983  O   HIS D 209      96.810  19.785  84.808  1.00 77.98           O
ATOM  12984  N   TRP D 210      98.630  19.071  83.710  1.00 78.10           N
ATOM  12985  CA  TRP D 210      98.228  17.657  83.689  1.00 78.23           C
ATOM  12986  CB  TRP D 210      98.157  17.111  82.264  1.00 78.18           C
ATOM  12987  CG  TRP D 210      97.193  17.779  81.329  1.00 78.19           C
ATOM  12988  CD1 TRP D 210      96.635  19.028  81.449  1.00 78.09           C
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ATOM  12989  NE1 TRP D 210      95.820  19.288  80.371  1.00 77.44           N
ATOM  12990  CE2 TRP D 210      95.852  18.214  79.522  1.00 77.61           C
ATOM  12991  CD2 TRP D 210      96.716  17.247  80.091  1.00 77.91           C
ATOM  12992  CE3 TRP D 210      96.921  16.039  79.412  1.00 77.92           C
ATOM  12993  CZ3 TRP D 210      96.268  15.834  78.198  1.00 78.25           C
ATOM  12994  CH2 TRP D 210      95.415  16.817  77.658  1.00 78.32           C
ATOM  12995  CZ2 TRP D 210      95.196  18.009  78.305  1.00 78.24           C
ATOM  12996  C   TRP D 210      99.292  16.886  84.464  1.00 78.31           C
ATOM  12997  O   TRP D 210     100.247  16.374  83.876  1.00 78.41           O
ATOM  12998  N   PRO D 211      99.140  16.804  85.794  1.00 78.36           N
ATOM  12999  CA  PRO D 211     100.224  16.328  86.654  1.00 78.33           C
ATOM  13000  CB  PRO D 211      99.607  16.389  88.053  1.00 78.19           C
ATOM  13001  CG  PRO D 211      98.137  16.343  87.822  1.00 78.15           C
ATOM  13002  CD  PRO D 211      97.931  17.124  86.571  1.00 78.40           C
ATOM  13003  C   PRO D 211     100.663  14.904  86.336  1.00 78.39           C
ATOM  13004  O   PRO D 211     101.731  14.477  86.776  1.00 78.41           O
ATOM  13005  N   TYR D 212      99.848  14.185  85.574  1.00 78.57           N
ATOM  13006  CA  TYR D 212     100.141  12.799  85.250  1.00 78.89           C
ATOM  13007  CB  TYR D 212      98.914  11.903  85.487  1.00 79.09           C
ATOM  13008  CG  TYR D 212      98.263  12.058  86.853  1.00 79.43           C
ATOM  13009  CD1 TYR D 212      98.982  11.816  88.021  1.00 79.67           C
ATOM  13010  CE1 TYR D 212      98.395  11.957  89.272  1.00 79.81           C
ATOM  13011  CZ  TYR D 212      97.068  12.338  89.367  1.00 79.74           C
ATOM  13012  OH  TYR D 212      96.497  12.474  90.614  1.00 79.81           O
ATOM  13013  CE2 TYR D 212      96.323  12.579  88.221  1.00 79.64           C
ATOM  13014  CD2 TYR D 212      96.923  12.435  86.973  1.00 79.68           C
ATOM  13015  C   TYR D 212     100.652  12.632  83.824  1.00 78.90           C
ATOM  13016  O   TYR D 212     101.215  11.590  83.495  1.00 78.83           O
ATOM  13017  N   LEU D 213     100.462  13.650  82.986  1.00 79.13           N
ATOM  13018  CA  LEU D 213     100.897  13.580  81.589  1.00 79.52           C
ATOM  13019  CB  LEU D 213     100.632  14.879  80.823  1.00 79.39           C
ATOM  13020  CG  LEU D 213     100.912  14.805  79.313  1.00 78.02           C
ATOM  13021  CD1 LEU D 213     100.160  13.654  78.651  1.00 75.82           C
ATOM  13022  CD2 LEU D 213     100.583  16.120  78.650  1.00 75.90           C
ATOM  13023  C   LEU D 213     102.363  13.179  81.473  1.00 80.20           C
ATOM  13024  O   LEU D 213     103.257  13.831  81.993  1.00 80.09           O
ATOM  13025  N   ASP D 214     102.579  12.114  80.726  1.00 81.26           N
ATOM  13026  CA  ASP D 214     103.774  11.306  80.815  1.00 82.05           C
ATOM  13027  CB  ASP D 214     103.361   9.962  81.420  1.00 82.01           C
ATOM  13028  CG  ASP D 214     104.503   9.236  82.054  1.00 83.39           C
ATOM  13029  OD1 ASP D 214     105.640   9.746  81.964  1.00 85.22           O
ATOM  13030  OD2 ASP D 214     104.265   8.156  82.647  1.00 84.87           O
ATOM  13031  C   ASP D 214     104.285  11.058  79.411  1.00 82.23           C
ATOM  13032  O   ASP D 214     105.486  10.971  79.170  1.00 82.20           O
ATOM  13033  N   THR D 215     103.328  10.978  78.491  1.00 82.57           N
ATOM  13034  CA  THR D 215     103.495  10.321  77.217  1.00 82.74           C
ATOM  13035  CB  THR D 215     102.881   8.907  77.291  1.00 82.55           C
ATOM  13036  OG1 THR D 215     103.637   8.125  78.220  1.00 82.51           O
ATOM  13037  CG2 THR D 215     102.890   8.225  75.938  1.00 82.48           C
ATOM  13038  C   THR D 215     102.835  11.106  76.092  1.00 82.95           C
ATOM  13039  O   THR D 215     101.667  11.492  76.187  1.00 83.01           O
ATOM  13040  N   MET D 216     103.600  11.334  75.031  1.00 83.13           N
ATOM  13041  CA  MET D 216     103.069  11.865  73.788  1.00 83.47           C
ATOM  13042  CB  MET D 216     103.523  13.298  73.603  1.00 82.71           C
ATOM  13043  CG  MET D 216     102.942  14.228  74.629  1.00 83.06           C
ATOM  13044  SD  MET D 216     103.357  15.955  74.285  1.00 85.46           S
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ATOM	13045	CE	MET	D	216	102.464	16.243	72.739	1.00	84.45	C
ATOM	13046	C	MET	D	216	103.531	10.995	72.624	1.00	83.21	C
ATOM	13047	O	MET	D	216	104.703	11.039	72.246	1.00	83.32	O
ATOM	13048	N	THR	D	217	102.617	10.196	72.070	1.00	83.06	N
ATOM	13049	CA	THR	D	217	102.947	9.333	70.926	1.00	83.00	C
ATOM	13050	CB	THR	D	217	101.831	8.314	70.612	1.00	83.02	C
ATOM	13051	OG1	THR	D	217	100.605	9.003	70.346	1.00	83.29	O
ATOM	13052	CG2	THR	D	217	101.641	7.337	71.765	1.00	82.76	C
ATOM	13053	C	THR	D	217	103.281	10.166	69.679	1.00	83.00	C
ATOM	13054	O	THR	D	217	102.868	11.327	69.590	1.00	83.02	O
ATOM	13055	N	PRO	D	218	104.048	9.586	68.727	1.00	82.84	N
ATOM	13056	CA	PRO	D	218	104.573	10.316	67.562	1.00	82.63	C
ATOM	13057	CB	PRO	D	218	105.225	9.205	66.728	1.00	82.67	C
ATOM	13058	CG	PRO	D	218	105.630	8.198	67.726	1.00	82.48	C
ATOM	13059	CD	PRO	D	218	104.490	8.179	68.706	1.00	82.86	C
ATOM	13060	C	PRO	D	218	103.527	11.068	66.734	1.00	82.23	C
ATOM	13061	O	PRO	D	218	103.746	12.224	66.382	1.00	82.42	O
ATOM	13062	N	ASN	D	219	102.404	10.423	66.437	1.00	81.87	N
ATOM	13063	CA	ASN	D	219	101.337	11.062	65.667	1.00	81.40	C
ATOM	13064	CB	ASN	D	219	100.711	10.052	64.702	1.00	81.35	C
ATOM	13065	CG	ASN	D	219	101.673	9.581	63.651	1.00	80.57	C
ATOM	13066	OD1	ASN	D	219	102.865	9.824	63.739	1.00	80.01	O
ATOM	13067	ND2	ASN	D	219	101.157	8.896	62.642	1.00	81.12	N
ATOM	13068	C	ASN	D	219	100.237	11.709	66.520	1.00	81.23	C
ATOM	13069	O	ASN	D	219	99.124	11.944	66.044	1.00	81.32	O
ATOM	13070	N	CYS	D	220	100.537	12.011	67.776	1.00	80.89	N
ATOM	13071	CA	CYS	D	220	99.506	12.554	68.652	1.00	80.76	C
ATOM	13072	CB	CYS	D	220	99.945	12.514	70.118	1.00	80.81	C
ATOM	13073	SG	CYS	D	220	101.080	13.801	70.602	1.00	80.80	S
ATOM	13074	C	CYS	D	220	99.020	13.954	68.248	1.00	80.42	C
ATOM	13075	O	CYS	D	220	97.946	14.373	68.652	1.00	80.70	O
ATOM	13076	N	LEU	D	221	99.789	14.678	67.448	1.00	79.96	N
ATOM	13077	CA	LEU	D	221	99.307	15.978	66.986	1.00	79.73	C
ATOM	13078	CB	LEU	D	221	100.236	17.124	67.411	1.00	79.30	C
ATOM	13079	CG	LEU	D	221	100.698	17.145	68.871	1.00	79.50	C
ATOM	13080	CD1	LEU	D	221	101.806	18.158	69.045	1.00	80.31	C
ATOM	13081	CD2	LEU	D	221	99.555	17.425	69.838	1.00	78.82	C
ATOM	13082	C	LEU	D	221	99.099	15.983	65.485	1.00	79.61	C
ATOM	13083	O	LEU	D	221	99.073	17.042	64.873	1.00	79.85	O
ATOM	13084	N	TYR	D	222	98.935	14.803	64.893	1.00	79.55	N
ATOM	13085	CA	TYR	D	222	98.694	14.710	63.456	1.00	79.72	C
ATOM	13086	CB	TYR	D	222	98.348	13.280	63.046	1.00	79.95	C
ATOM	13087	CG	TYR	D	222	98.283	13.065	61.539	1.00	80.88	C
ATOM	13088	CD1	TYR	D	222	99.453	12.982	60.768	1.00	80.91	C
ATOM	13089	CE1	TYR	D	222	99.394	12.784	59.382	1.00	81.10	C
ATOM	13090	CZ	TYR	D	222	98.151	12.665	58.758	1.00	81.29	C
ATOM	13091	OH	TYR	D	222	98.078	12.461	57.387	1.00	81.53	O
ATOM	13092	CE2	TYR	D	222	96.978	12.743	59.505	1.00	80.69	C
ATOM	13093	CD2	TYR	D	222	97.048	12.940	60.883	1.00	80.85	C
ATOM	13094	C	TYR	D	222	97.582	15.661	63.040	1.00	79.46	C
ATOM	13095	O	TYR	D	222	96.617	15.860	63.776	1.00	79.89	O
ATOM	13096	N	GLY	D	223	97.736	16.278	61.877	1.00	79.13	N
ATOM	13097	CA	GLY	D	223	96.715	17.185	61.356	1.00	78.76	C
ATOM	13098	C	GLY	D	223	96.801	18.640	61.804	1.00	78.36	C
ATOM	13099	O	GLY	D	223	96.269	19.518	61.134	1.00	78.81	O
ATOM	13100	N	LEU	D	224	97.469	18.909	62.918	1.00	77.63	N

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ATOM  13101  CA  LEU D 224      97.519  20.265  63.454  1.00 77.45           C
ATOM  13102  CB  LEU D 224      97.691  20.247  64.983  1.00 77.19           C
ATOM  13103  CG  LEU D 224      96.635  19.507  65.821  1.00 76.86           C
ATOM  13104  CD1 LEU D 224      96.913  19.657  67.302  1.00 76.17           C
ATOM  13105  CD2 LEU D 224      95.208  19.975  65.506  1.00 76.30           C
ATOM  13106  C   LEU D 224      98.601  21.126  62.798  1.00 77.63           C
ATOM  13107  O   LEU D 224      99.738  20.681  62.605  1.00 77.85           O
ATOM  13108  N   ASN D 225      98.230  22.356  62.451  1.00 77.56           N
ATOM  13109  CA  ASN D 225      99.159  23.354  61.934  1.00 77.16           C
ATOM  13110  CB  ASN D 225      98.748  23.801  60.528  1.00 77.01           C
ATOM  13111  CG  ASN D 225      99.750  24.754  59.896  1.00 77.32           C
ATOM  13112  OD1 ASN D 225      99.391  25.591  59.066  1.00 78.39           O
ATOM  13113  ND2 ASN D 225     101.013  24.631  60.284  1.00 77.61           N
ATOM  13114  C   ASN D 225      99.208  24.548  62.880  1.00 77.20           C
ATOM  13115  O   ASN D 225      98.711  25.625  62.554  1.00 77.28           O
ATOM  13116  N   LEU D 226      99.829  24.343  64.043  1.00 77.22           N
ATOM  13117  CA  LEU D 226      99.935  25.354  65.113  1.00 77.31           C
ATOM  13118  CB  LEU D 226     100.294  24.661  66.425  1.00 77.20           C
ATOM  13119  CG  LEU D 226      99.352  23.572  66.933  1.00 77.23           C
ATOM  13120  CD1 LEU D 226      99.880  23.036  68.239  1.00 76.28           C
ATOM  13121  CD2 LEU D 226      97.920  24.091  67.091  1.00 76.57           C
ATOM  13122  C   LEU D 226     100.948  26.475  64.889  1.00 77.21           C
ATOM  13123  O   LEU D 226     101.926  26.306  64.185  1.00 77.64           O
ATOM  13124  N   THR D 227     100.723  27.620  65.508  1.00 77.23           N
ATOM  13125  CA  THR D 227     101.761  28.637  65.562  1.00 77.48           C
ATOM  13126  CB  THR D 227     101.306  29.985  64.985  1.00 77.54           C
ATOM  13127  OG1 THR D 227     100.134  30.441  65.672  1.00 77.88           O
ATOM  13128  CG2 THR D 227     101.022  29.863  63.490  1.00 77.01           C
ATOM  13129  C   THR D 227     102.239  28.812  67.000  1.00 77.94           C
ATOM  13130  O   THR D 227     103.345  29.307  67.246  1.00 78.34           O
ATOM  13131  N   SER D 228     101.400  28.389  67.945  1.00 77.97           N
ATOM  13132  CA  SER D 228     101.750  28.356  69.361  1.00 77.70           C
ATOM  13133  CB  SER D 228     100.979  29.426  70.123  1.00 77.69           C
ATOM  13134  OG  SER D 228     101.809  30.520  70.427  1.00 77.94           O
ATOM  13135  C   SER D 228     101.453  26.991  69.968  1.00 77.50           C
ATOM  13136  O   SER D 228     100.468  26.349  69.605  1.00 77.50           O
ATOM  13137  N   LEU D 229     102.308  26.563  70.896  1.00 77.24           N
ATOM  13138  CA  LEU D 229     102.159  25.275  71.576  1.00 76.89           C
ATOM  13139  CB  LEU D 229     102.838  24.150  70.791  1.00 76.39           C
ATOM  13140  CG  LEU D 229     102.920  22.828  71.569  1.00 76.40           C
ATOM  13141  CD1 LEU D 229     101.524  22.269  71.874  1.00 76.04           C
ATOM  13142  CD2 LEU D 229     103.768  21.787  70.854  1.00 76.46           C
ATOM  13143  C   LEU D 229     102.743  25.320  72.982  1.00 77.04           C
ATOM  13144  O   LEU D 229     103.946  25.498  73.153  1.00 77.85           O
ATOM  13145  N   SER D 230     101.900  25.142  73.988  1.00 76.71           N
ATOM  13146  CA  SER D 230     102.375  25.111  75.359  1.00 76.34           C
ATOM  13147  CB  SER D 230     101.760  26.242  76.169  1.00 76.24           C
ATOM  13148  OG  SER D 230     102.035  27.483  75.562  1.00 77.27           O
ATOM  13149  C   SER D 230     101.985  23.799  75.979  1.00 76.12           C
ATOM  13150  O   SER D 230     100.816  23.442  75.972  1.00 76.33           O
ATOM  13151  N   ILE D 231     102.963  23.068  76.489  1.00 75.75           N
ATOM  13152  CA  ILE D 231     102.679  21.961  77.380  1.00 75.20           C
ATOM  13153  CB  ILE D 231     103.082  20.609  76.788  1.00 75.11           C
ATOM  13154  CG1 ILE D 231     102.522  20.463  75.359  1.00 75.46           C
ATOM  13155  CD1 ILE D 231     103.121  19.304  74.524  1.00 74.57           C
ATOM  13156  CG2 ILE D 231     102.609  19.481  77.700  1.00 74.32           C
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ATOM  13157  C   ILE D 231     103.441  22.256  78.655  1.00 75.52           C
ATOM  13158  O   ILE D 231     104.644  22.034  78.727  1.00 75.96           O
ATOM  13159  N   THR D 232     102.737  22.782  79.650  1.00 75.41           N
ATOM  13160  CA  THR D 232     103.361  23.290  80.868  1.00 75.48           C
ATOM  13161  CB  THR D 232     103.145  24.791  80.981  1.00 75.51           C
ATOM  13162  OG1 THR D 232     101.748  25.069  80.841  1.00 76.44           O
ATOM  13163  CG2 THR D 232     103.893  25.518  79.888  1.00 75.50           C
ATOM  13164  C   THR D 232     102.787  22.630  82.121  1.00 75.53           C
ATOM  13165  O   THR D 232     101.709  22.045  82.081  1.00 75.51           O
ATOM  13166  N   HIS D 233     103.511  22.754  83.232  1.00 75.56           N
ATOM  13167  CA  HIS D 233     103.213  22.060  84.492  1.00 75.54           C
ATOM  13168  CB  HIS D 233     102.216  22.855  85.340  1.00 75.55           C
ATOM  13169  CG  HIS D 233     102.727  24.188  85.776  1.00 75.40           C
ATOM  13170  ND1 HIS D 233     103.459  24.361  86.929  1.00 75.82           N
ATOM  13171  CE1 HIS D 233     103.778  25.638  87.058  1.00 76.11           C
ATOM  13172  NE2 HIS D 233     103.289  26.296  86.022  1.00 76.18           N
ATOM  13173  CD2 HIS D 233     102.629  25.411  85.204  1.00 75.97           C
ATOM  13174  C   HIS D 233     102.737  20.626  84.297  1.00 75.65           C
ATOM  13175  O   HIS D 233     101.744  20.209  84.882  1.00 75.79           O
ATOM  13176  N   CYS D 234     103.449  19.877  83.463  1.00 75.87           N
ATOM  13177  CA  CYS D 234     103.147  18.468  83.239  1.00 76.03           C
ATOM  13178  CB  CYS D 234     102.877  18.218  81.765  1.00 76.21           C
ATOM  13179  SG  CYS D 234     101.396  19.037  81.163  1.00 76.64           S
ATOM  13180  C   CYS D 234     104.308  17.615  83.724  1.00 76.03           C
ATOM  13181  O   CYS D 234     105.197  18.124  84.411  1.00 76.50           O
ATOM  13182  N   ASN D 235     104.306  16.330  83.374  1.00 75.65           N
ATOM  13183  CA  ASN D 235     105.339  15.407  83.847  1.00 75.37           C
ATOM  13184  CB  ASN D 235     104.715  14.334  84.754  1.00 75.39           C
ATOM  13185  CG  ASN D 235     105.641  13.874  85.863  1.00 75.80           C
ATOM  13186  OD1 ASN D 235     105.589  12.715  86.282  1.00 77.41           O
ATOM  13187  ND2 ASN D 235     106.469  14.782  86.368  1.00 75.93           N
ATOM  13188  C   ASN D 235     106.107  14.771  82.680  1.00 75.23           C
ATOM  13189  O   ASN D 235     106.362  13.552  82.677  1.00 75.34           O
ATOM  13190  N   LEU D 236     106.457  15.599  81.691  1.00 74.64           N
ATOM  13191  CA  LEU D 236     107.251  15.160  80.534  1.00 74.48           C
ATOM  13192  CB  LEU D 236     107.012  16.080  79.327  1.00 74.36           C
ATOM  13193  CG  LEU D 236     105.626  16.200  78.685  1.00 73.84           C
ATOM  13194  CD1 LEU D 236     105.702  17.178  77.537  1.00 73.70           C
ATOM  13195  CD2 LEU D 236     105.089  14.851  78.214  1.00 73.64           C
ATOM  13196  C   LEU D 236     108.742  15.152  80.866  1.00 74.47           C
ATOM  13197  O   LEU D 236     109.270  16.148  81.364  1.00 74.76           O
ATOM  13198  N   THR D 237     109.423  14.043  80.589  1.00 74.15           N
ATOM  13199  CA  THR D 237     110.836  13.938  80.937  1.00 74.19           C
ATOM  13200  CB  THR D 237     111.233  12.522  81.383  1.00 74.17           C
ATOM  13201  OG1 THR D 237     111.660  11.776  80.240  1.00 74.82           O
ATOM  13202  CG2 THR D 237     110.086  11.805  82.078  1.00 73.72           C
ATOM  13203  C   THR D 237     111.742  14.353  79.777  1.00 74.39           C
ATOM  13204  O   THR D 237     112.919  14.651  79.968  1.00 74.52           O
ATOM  13205  N   ALA D 238     111.195  14.354  78.571  1.00 74.62           N
ATOM  13206  CA  ALA D 238     111.946  14.760  77.398  1.00 74.91           C
ATOM  13207  CB  ALA D 238     112.326  13.524  76.568  1.00 74.79           C
ATOM  13208  C   ALA D 238     111.124  15.737  76.567  1.00 75.20           C
ATOM  13209  O   ALA D 238     109.929  15.916  76.812  1.00 75.36           O
ATOM  13210  N   LEU D 239     111.756  16.381  75.591  1.00 75.40           N
ATOM  13211  CA  LEU D 239     110.989  17.049  74.562  1.00 75.64           C
ATOM  13212  CB  LEU D 239     111.876  17.847  73.651  1.00 75.44           C
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ATOM	13213	CG	LEU	D	239	111.896	19.276	74.110	1.00	75.32	C
ATOM	13214	CD1	LEU	D	239	112.987	19.454	75.137	1.00	74.71	C
ATOM	13215	CD2	LEU	D	239	112.096	20.160	72.899	1.00	75.75	C
ATOM	13216	C	LEU	D	239	110.279	16.021	73.718	1.00	76.14	C
ATOM	13217	O	LEU	D	239	110.834	14.946	73.459	1.00	76.30	O
ATOM	13218	N	PRO	D	240	109.044	16.335	73.294	1.00	76.49	N
ATOM	13219	CA	PRO	D	240	108.408	15.479	72.307	1.00	76.61	C
ATOM	13220	CB	PRO	D	240	106.921	15.776	72.501	1.00	76.73	C
ATOM	13221	CG	PRO	D	240	106.885	17.210	73.015	1.00	76.56	C
ATOM	13222	CD	PRO	D	240	108.186	17.467	73.710	1.00	76.20	C
ATOM	13223	C	PRO	D	240	108.893	15.866	70.901	1.00	77.00	C
ATOM	13224	O	PRO	D	240	108.116	16.395	70.093	1.00	77.34	O
ATOM	13225	N	TYR	D	241	110.175	15.615	70.624	1.00	77.05	N
ATOM	13226	CA	TYR	D	241	110.781	15.964	69.334	1.00	76.90	C
ATOM	13227	CB	TYR	D	241	112.207	15.420	69.206	1.00	76.85	C
ATOM	13228	CG	TYR	D	241	113.144	15.840	70.310	1.00	77.19	C
ATOM	13229	CD1	TYR	D	241	113.563	17.172	70.429	1.00	77.47	C
ATOM	13230	CE1	TYR	D	241	114.419	17.567	71.435	1.00	76.47	C
ATOM	13231	CZ	TYR	D	241	114.869	16.629	72.338	1.00	76.70	C
ATOM	13232	OH	TYR	D	241	115.718	17.024	73.330	1.00	78.48	O
ATOM	13233	CE2	TYR	D	241	114.485	15.301	72.249	1.00	76.82	C
ATOM	13234	CD2	TYR	D	241	113.624	14.911	71.234	1.00	76.97	C
ATOM	13235	C	TYR	D	241	109.943	15.457	68.174	1.00	77.12	C
ATOM	13236	O	TYR	D	241	109.610	16.238	67.285	1.00	77.39	O
ATOM	13237	N	LEU	D	242	109.598	14.162	68.195	1.00	76.96	N
ATOM	13238	CA	LEU	D	242	108.847	13.535	67.109	1.00	76.95	C
ATOM	13239	CB	LEU	D	242	108.805	12.017	67.279	1.00	76.98	C
ATOM	13240	CG	LEU	D	242	110.054	11.220	66.918	1.00	76.84	C
ATOM	13241	CD1	LEU	D	242	109.979	9.843	67.544	1.00	77.64	C
ATOM	13242	CD2	LEU	D	242	110.217	11.122	65.412	1.00	76.80	C
ATOM	13243	C	LEU	D	242	107.426	14.060	67.002	1.00	77.25	C
ATOM	13244	O	LEU	D	242	106.928	14.324	65.905	1.00	77.41	O
ATOM	13245	N	ALA	D	243	106.767	14.202	68.143	1.00	77.53	N
ATOM	13246	CA	ALA	D	243	105.386	14.659	68.162	1.00	77.87	C
ATOM	13247	CB	ALA	D	243	104.841	14.629	69.580	1.00	78.02	C
ATOM	13248	C	ALA	D	243	105.226	16.049	67.549	1.00	78.12	C
ATOM	13249	O	ALA	D	243	104.179	16.361	66.992	1.00	78.45	O
ATOM	13250	N	VAL	D	244	106.261	16.877	67.638	1.00	78.28	N
ATOM	13251	CA	VAL	D	244	106.176	18.240	67.102	1.00	78.58	C
ATOM	13252	CB	VAL	D	244	106.770	19.322	68.080	1.00	78.26	C
ATOM	13253	CG1	VAL	D	244	106.133	19.216	69.445	1.00	78.01	C
ATOM	13254	CG2	VAL	D	244	108.283	19.205	68.209	1.00	77.57	C
ATOM	13255	C	VAL	D	244	106.783	18.372	65.697	1.00	78.95	C
ATOM	13256	O	VAL	D	244	106.838	19.479	65.151	1.00	79.05	O
ATOM	13257	N	ARG	D	245	107.198	17.251	65.106	1.00	78.97	N
ATOM	13258	CA	ARG	D	245	108.008	17.294	63.878	1.00	79.71	C
ATOM	13259	CB	ARG	D	245	108.546	15.906	63.506	1.00	79.80	C
ATOM	13260	CG	ARG	D	245	107.565	15.045	62.734	1.00	80.92	C
ATOM	13261	CD	ARG	D	245	107.932	13.584	62.837	1.00	82.87	C
ATOM	13262	NE	ARG	D	245	106.803	12.847	63.388	1.00	85.25	N
ATOM	13263	CZ	ARG	D	245	106.032	12.016	62.699	1.00	86.46	C
ATOM	13264	NH1	ARG	D	245	105.024	11.414	63.309	1.00	87.41	N
ATOM	13265	NH2	ARG	D	245	106.265	11.779	61.413	1.00	86.68	N
ATOM	13266	C	ARG	D	245	107.327	17.940	62.665	1.00	79.86	C
ATOM	13267	O	ARG	D	245	108.008	18.404	61.746	1.00	80.16	O
ATOM	13268	N	HIS	D	246	105.996	17.952	62.655	1.00	79.88	N

ATOM	13269	CA	HIS	D	246	105.246	18.501	61.529	1.00	79.60	C
ATOM	13270	CB	HIS	D	246	104.050	17.617	61.196	1.00	79.62	C
ATOM	13271	CG	HIS	D	246	104.418	16.326	60.542	1.00	81.20	C
ATOM	13272	ND1	HIS	D	246	103.914	15.113	60.961	1.00	82.19	N
ATOM	13273	CE1	HIS	D	246	104.394	14.151	60.191	1.00	83.14	C
ATOM	13274	NE2	HIS	D	246	105.198	14.695	59.293	1.00	83.45	N
ATOM	13275	CD2	HIS	D	246	105.230	16.055	59.491	1.00	82.96	C
ATOM	13276	C	HIS	D	246	104.771	19.929	61.749	1.00	79.13	C
ATOM	13277	O	HIS	D	246	104.179	20.516	60.849	1.00	78.97	O
ATOM	13278	N	LEU	D	247	105.031	20.479	62.936	1.00	78.67	N
ATOM	13279	CA	LEU	D	247	104.587	21.838	63.301	1.00	78.29	C
ATOM	13280	CB	LEU	D	247	104.488	21.988	64.829	1.00	78.28	C
ATOM	13281	CG	LEU	D	247	103.665	20.884	65.509	1.00	78.34	C
ATOM	13282	CD1	LEU	D	247	103.504	21.116	67.015	1.00	77.85	C
ATOM	13283	CD2	LEU	D	247	102.303	20.721	64.820	1.00	77.58	C
ATOM	13284	C	LEU	D	247	105.489	22.904	62.668	1.00	77.88	C
ATOM	13285	O	LEU	D	247	106.091	23.747	63.326	1.00	77.92	O
ATOM	13286	N	VAL	D	248	105.530	22.860	61.353	1.00	77.36	N
ATOM	13287	CA	VAL	D	248	106.511	23.553	60.556	1.00	76.76	C
ATOM	13288	CB	VAL	D	248	106.495	22.920	59.150	1.00	76.68	C
ATOM	13289	CG1	VAL	D	248	106.528	23.946	58.027	1.00	77.17	C
ATOM	13290	CG2	VAL	D	248	107.595	21.866	59.046	1.00	76.59	C
ATOM	13291	C	VAL	D	248	106.328	25.069	60.547	1.00	76.57	C
ATOM	13292	O	VAL	D	248	107.186	25.791	60.052	1.00	76.83	O
ATOM	13293	N	TYR	D	249	105.219	25.549	61.105	1.00	76.39	N
ATOM	13294	CA	TYR	D	249	104.941	26.986	61.158	1.00	75.97	C
ATOM	13295	CB	TYR	D	249	103.617	27.319	60.463	1.00	76.07	C
ATOM	13296	CG	TYR	D	249	103.704	27.318	58.957	1.00	76.36	C
ATOM	13297	CD1	TYR	D	249	104.051	28.478	58.259	1.00	76.39	C
ATOM	13298	CE1	TYR	D	249	104.147	28.484	56.873	1.00	76.12	C
ATOM	13299	CZ	TYR	D	249	103.887	27.323	56.166	1.00	76.42	C
ATOM	13300	OH	TYR	D	249	103.975	27.323	54.789	1.00	76.45	O
ATOM	13301	CE2	TYR	D	249	103.541	26.156	56.835	1.00	76.91	C
ATOM	13302	CD2	TYR	D	249	103.450	26.159	58.226	1.00	76.68	C
ATOM	13303	C	TYR	D	249	104.929	27.490	62.593	1.00	75.75	C
ATOM	13304	O	TYR	D	249	104.647	28.662	62.840	1.00	75.78	O
ATOM	13305	N	LEU	D	250	105.257	26.601	63.527	1.00	75.31	N
ATOM	13306	CA	LEU	D	250	105.322	26.931	64.941	1.00	75.30	C
ATOM	13307	CB	LEU	D	250	105.805	25.718	65.734	1.00	75.02	C
ATOM	13308	CG	LEU	D	250	105.657	25.789	67.255	1.00	76.08	C
ATOM	13309	CD1	LEU	D	250	104.190	25.951	67.677	1.00	75.43	C
ATOM	13310	CD2	LEU	D	250	106.305	24.576	67.937	1.00	75.60	C
ATOM	13311	C	LEU	D	250	106.255	28.100	65.173	1.00	75.19	C
ATOM	13312	O	LEU	D	250	107.372	28.093	64.680	1.00	75.63	O
ATOM	13313	N	ARG	D	251	105.794	29.104	65.914	1.00	75.29	N
ATOM	13314	CA	ARG	D	251	106.601	30.302	66.204	1.00	75.17	C
ATOM	13315	CB	ARG	D	251	105.891	31.561	65.718	1.00	75.16	C
ATOM	13316	CG	ARG	D	251	105.641	31.621	64.227	1.00	76.46	C
ATOM	13317	CD	ARG	D	251	105.368	33.059	63.751	1.00	79.10	C
ATOM	13318	NE	ARG	D	251	104.141	33.617	64.323	1.00	81.77	N
ATOM	13319	CZ	ARG	D	251	102.917	33.466	63.808	1.00	82.85	C
ATOM	13320	NH1	ARG	D	251	102.733	32.776	62.689	1.00	83.72	N
ATOM	13321	NH2	ARG	D	251	101.866	34.009	64.411	1.00	82.99	N
ATOM	13322	C	ARG	D	251	106.913	30.431	67.701	1.00	74.92	C
ATOM	13323	O	ARG	D	251	107.928	31.012	68.092	1.00	74.53	O
ATOM	13324	N	PHE	D	252	106.034	29.870	68.526	1.00	74.86	N

ATOM	13325	CA	PHE	D	252	106.168	29.909	69.975	1.00	74.86	C
ATOM	13326	CB	PHE	D	252	105.091	30.829	70.554	1.00	74.95	C
ATOM	13327	CG	PHE	D	252	105.067	30.891	72.062	1.00	76.57	C
ATOM	13328	CD1	PHE	D	252	105.730	31.914	72.747	1.00	78.36	C
ATOM	13329	CE1	PHE	D	252	105.693	31.990	74.156	1.00	77.67	C
ATOM	13330	CZ	PHE	D	252	104.985	31.044	74.877	1.00	76.83	C
ATOM	13331	CE2	PHE	D	252	104.312	30.023	74.210	1.00	78.14	C
ATOM	13332	CD2	PHE	D	252	104.346	29.954	72.808	1.00	78.38	C
ATOM	13333	C	PHE	D	252	106.049	28.493	70.554	1.00	74.52	C
ATOM	13334	O	PHE	D	252	105.128	27.752	70.224	1.00	74.44	O
ATOM	13335	N	LEU	D	253	106.983	28.139	71.427	1.00	74.23	N
ATOM	13336	CA	LEU	D	253	106.970	26.864	72.119	1.00	73.75	C
ATOM	13337	CB	LEU	D	253	108.006	25.923	71.505	1.00	73.81	C
ATOM	13338	CG	LEU	D	253	108.168	24.570	72.206	1.00	73.39	C
ATOM	13339	CD1	LEU	D	253	106.855	23.831	72.171	1.00	72.95	C
ATOM	13340	CD2	LEU	D	253	109.275	23.740	71.568	1.00	73.21	C
ATOM	13341	C	LEU	D	253	107.276	27.044	73.597	1.00	74.04	C
ATOM	13342	O	LEU	D	253	108.360	27.509	73.955	1.00	74.47	O
ATOM	13343	N	ASN	D	254	106.343	26.647	74.458	1.00	73.95	N
ATOM	13344	CA	ASN	D	254	106.569	26.685	75.902	1.00	73.76	C
ATOM	13345	CB	ASN	D	254	105.543	27.599	76.558	1.00	73.53	C
ATOM	13346	CG	ASN	D	254	105.921	27.998	77.958	1.00	74.11	C
ATOM	13347	OD1	ASN	D	254	105.302	28.895	78.548	1.00	76.74	O
ATOM	13348	ND2	ASN	D	254	106.941	27.351	78.508	1.00	74.01	N
ATOM	13349	C	ASN	D	254	106.502	25.286	76.521	1.00	73.78	C
ATOM	13350	O	ASN	D	254	105.451	24.660	76.510	1.00	74.25	O
ATOM	13351	N	LEU	D	255	107.611	24.795	77.067	1.00	73.62	N
ATOM	13352	CA	LEU	D	255	107.584	23.539	77.832	1.00	73.55	C
ATOM	13353	CB	LEU	D	255	108.481	22.489	77.183	1.00	73.44	C
ATOM	13354	CG	LEU	D	255	108.117	22.165	75.739	1.00	74.10	C
ATOM	13355	CD1	LEU	D	255	109.233	21.413	75.061	1.00	73.12	C
ATOM	13356	CD2	LEU	D	255	106.802	21.384	75.666	1.00	75.01	C
ATOM	13357	C	LEU	D	255	107.951	23.722	79.307	1.00	73.53	C
ATOM	13358	O	LEU	D	255	108.445	22.801	79.955	1.00	73.49	O
ATOM	13359	N	SER	D	256	107.689	24.908	79.840	1.00	73.60	N
ATOM	13360	CA	SER	D	256	108.086	25.232	81.193	1.00	74.04	C
ATOM	13361	CB	SER	D	256	107.695	26.660	81.514	1.00	74.16	C
ATOM	13362	OG	SER	D	256	108.590	27.559	80.903	1.00	75.79	O
ATOM	13363	C	SER	D	256	107.483	24.294	82.224	1.00	74.13	C
ATOM	13364	O	SER	D	256	106.412	23.737	82.008	1.00	74.15	O
ATOM	13365	N	TYR	D	257	108.193	24.138	83.340	1.00	74.28	N
ATOM	13366	CA	TYR	D	257	107.804	23.279	84.461	1.00	74.50	C
ATOM	13367	CB	TYR	D	257	106.709	23.941	85.301	1.00	74.43	C
ATOM	13368	CG	TYR	D	257	106.986	25.402	85.552	1.00	74.42	C
ATOM	13369	CD1	TYR	D	257	107.734	25.816	86.651	1.00	73.87	C
ATOM	13370	CE1	TYR	D	257	107.989	27.167	86.873	1.00	74.19	C
ATOM	13371	CZ	TYR	D	257	107.497	28.110	85.975	1.00	74.77	C
ATOM	13372	OH	TYR	D	257	107.733	29.454	86.153	1.00	75.52	O
ATOM	13373	CE2	TYR	D	257	106.762	27.717	84.880	1.00	74.63	C
ATOM	13374	CD2	TYR	D	257	106.509	26.372	84.677	1.00	74.81	C
ATOM	13375	C	TYR	D	257	107.461	21.843	84.061	1.00	74.90	C
ATOM	13376	O	TYR	D	257	106.421	21.298	84.432	1.00	75.08	O
ATOM	13377	N	ASN	D	258	108.362	21.246	83.291	1.00	75.33	N
ATOM	13378	CA	ASN	D	258	108.395	19.806	83.070	1.00	75.85	C
ATOM	13379	CB	ASN	D	258	108.227	19.493	81.590	1.00	76.23	C
ATOM	13380	CG	ASN	D	258	106.852	19.807	81.093	1.00	76.98	C

ATOM	13381	OD1	ASN	D	258	105.920	19.018	81.262	1.00	78.30	O
ATOM	13382	ND2	ASN	D	258	106.706	20.967	80.479	1.00	77.84	N
ATOM	13383	C	ASN	D	258	109.733	19.258	83.542	1.00	75.85	C
ATOM	13384	O	ASN	D	258	110.757	19.922	83.382	1.00	75.98	O
ATOM	13385	N	PRO	D	259	109.741	18.044	84.117	1.00	75.94	N
ATOM	13386	CA	PRO	D	259	110.996	17.426	84.549	1.00	75.94	C
ATOM	13387	CB	PRO	D	259	110.516	16.224	85.359	1.00	75.73	C
ATOM	13388	CG	PRO	D	259	109.219	15.873	84.752	1.00	75.56	C
ATOM	13389	CD	PRO	D	259	108.584	17.180	84.408	1.00	75.94	C
ATOM	13390	C	PRO	D	259	111.854	16.973	83.356	1.00	76.09	C
ATOM	13391	O	PRO	D	259	112.223	15.796	83.253	1.00	76.36	O
ATOM	13392	N	ILE	D	260	112.164	17.907	82.466	1.00	75.98	N
ATOM	13393	CA	ILE	D	260	112.968	17.620	81.292	1.00	76.25	C
ATOM	13394	CB	ILE	D	260	112.480	18.440	80.063	1.00	76.26	C
ATOM	13395	CG1	ILE	D	260	111.108	17.940	79.594	1.00	75.69	C
ATOM	13396	CD1	ILE	D	260	110.389	18.880	78.639	1.00	76.34	C
ATOM	13397	CG2	ILE	D	260	113.497	18.381	78.923	1.00	76.50	C
ATOM	13398	C	ILE	D	260	114.432	17.917	81.608	1.00	76.53	C
ATOM	13399	O	ILE	D	260	114.763	19.024	82.044	1.00	77.05	O
ATOM	13400	N	SER	D	261	115.303	16.935	81.382	1.00	76.49	N
ATOM	13401	CA	SER	D	261	116.714	17.064	81.742	1.00	76.54	C
ATOM	13402	CB	SER	D	261	117.287	15.719	82.140	1.00	76.35	C
ATOM	13403	OG	SER	D	261	116.491	15.148	83.149	1.00	77.97	O
ATOM	13404	C	SER	D	261	117.589	17.658	80.657	1.00	76.49	C
ATOM	13405	O	SER	D	261	118.505	18.419	80.963	1.00	76.81	O
ATOM	13406	N	THR	D	262	117.339	17.295	79.400	1.00	76.22	N
ATOM	13407	CA	THR	D	262	118.218	17.726	78.310	1.00	75.97	C
ATOM	13408	CB	THR	D	262	119.235	16.628	77.914	1.00	75.74	C
ATOM	13409	OG1	THR	D	262	118.595	15.656	77.093	1.00	75.20	O
ATOM	13410	CG2	THR	D	262	119.805	15.931	79.138	1.00	75.94	C
ATOM	13411	C	THR	D	262	117.474	18.162	77.054	1.00	76.09	C
ATOM	13412	O	THR	D	262	116.318	17.791	76.828	1.00	76.18	O
ATOM	13413	N	ILE	D	263	118.141	18.964	76.239	1.00	76.17	N
ATOM	13414	CA	ILE	D	263	117.687	19.184	74.872	1.00	76.15	C
ATOM	13415	CB	ILE	D	263	117.377	20.650	74.572	1.00	75.82	C
ATOM	13416	CG1	ILE	D	263	116.446	21.215	75.651	1.00	75.48	C
ATOM	13417	CD1	ILE	D	263	116.137	22.697	75.516	1.00	76.15	C
ATOM	13418	CG2	ILE	D	263	116.749	20.757	73.199	1.00	75.01	C
ATOM	13419	C	ILE	D	263	118.766	18.643	73.954	1.00	76.51	C
ATOM	13420	O	ILE	D	263	119.891	19.149	73.935	1.00	76.51	O
ATOM	13421	N	GLU	D	264	118.421	17.588	73.228	1.00	76.92	N
ATOM	13422	CA	GLU	D	264	119.367	16.896	72.367	1.00	78.09	C
ATOM	13423	CB	GLU	D	264	118.804	15.542	71.959	1.00	78.00	C
ATOM	13424	CG	GLU	D	264	118.236	14.722	73.114	1.00	79.55	C
ATOM	13425	CD	GLU	D	264	117.832	13.302	72.694	1.00	80.37	C
ATOM	13426	OE1	GLU	D	264	117.471	13.081	71.502	1.00	82.97	O
ATOM	13427	OE2	GLU	D	264	117.883	12.399	73.564	1.00	83.24	O
ATOM	13428	C	GLU	D	264	119.718	17.724	71.128	1.00	77.66	C
ATOM	13429	O	GLU	D	264	119.035	18.696	70.807	1.00	78.05	O
ATOM	13430	N	GLY	D	265	120.793	17.355	70.442	1.00	77.53	N
ATOM	13431	CA	GLY	D	265	121.188	18.084	69.245	1.00	77.22	C
ATOM	13432	C	GLY	D	265	120.501	17.561	68.002	1.00	77.32	C
ATOM	13433	O	GLY	D	265	120.273	16.358	67.872	1.00	77.43	O
ATOM	13434	N	SER	D	266	120.168	18.474	67.093	1.00	77.42	N
ATOM	13435	CA	SER	D	266	119.651	18.134	65.766	1.00	77.91	C
ATOM	13436	CB	SER	D	266	120.686	17.331	64.973	1.00	77.80	C

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ATOM  13437  OG  SER D 266     121.917  18.024  64.911  1.00 77.96           O
ATOM  13438  C   SER D 266     118.298  17.410  65.764  1.00 78.45           C
ATOM  13439  O   SER D 266     117.993  16.668  64.831  1.00 78.92           O
ATOM  13440  N   MET D 267     117.488  17.641  66.793  1.00 78.95           N
ATOM  13441  CA  MET D 267     116.176  17.015  66.915  1.00 79.16           C
ATOM  13442  CB  MET D 267     116.008  16.421  68.311  1.00 79.23           C
ATOM  13443  CG  MET D 267     116.911  15.262  68.628  1.00 80.19           C
ATOM  13444  SD  MET D 267     116.652  13.899  67.492  1.00 82.71           S
ATOM  13445  CE  MET D 267     115.123  13.180  68.097  1.00 83.35           C
ATOM  13446  C   MET D 267     115.010  17.971  66.646  1.00 79.49           C
ATOM  13447  O   MET D 267     113.858  17.542  66.644  1.00 80.03           O
ATOM  13448  N   LEU D 268     115.288  19.256  66.435  1.00 79.59           N
ATOM  13449  CA  LEU D 268     114.222  20.230  66.233  1.00 79.53           C
ATOM  13450  CB  LEU D 268     114.233  21.263  67.352  1.00 79.22           C
ATOM  13451  CG  LEU D 268     113.981  20.801  68.784  1.00 79.17           C
ATOM  13452  CD1 LEU D 268     114.108  21.991  69.712  1.00 78.36           C
ATOM  13453  CD2 LEU D 268     112.613  20.157  68.922  1.00 78.23           C
ATOM  13454  C   LEU D 268     114.320  20.940  64.893  1.00 80.17           C
ATOM  13455  O   LEU D 268     113.577  21.888  64.637  1.00 80.31           O
ATOM  13456  N   HIS D 269     115.214  20.472  64.027  1.00 80.87           N
ATOM  13457  CA  HIS D 269     115.617  21.254  62.859  1.00 81.76           C
ATOM  13458  CB  HIS D 269     116.846  20.645  62.182  1.00 82.16           C
ATOM  13459  CG  HIS D 269     116.566  19.364  61.474  1.00 85.43           C
ATOM  13460  ND1 HIS D 269     116.093  18.243  62.126  1.00 88.36           N
ATOM  13461  CE1 HIS D 269     115.929  17.266  61.250  1.00 89.69           C
ATOM  13462  NE2 HIS D 269     116.284  17.711  60.056  1.00 89.87           N
ATOM  13463  CD2 HIS D 269     116.682  19.023  60.168  1.00 88.14           C
ATOM  13464  C   HIS D 269     114.499  21.474  61.856  1.00 81.54           C
ATOM  13465  O   HIS D 269     114.646  22.250  60.919  1.00 81.68           O
ATOM  13466  N   GLU D 270     113.379  20.796  62.065  1.00 81.53           N
ATOM  13467  CA  GLU D 270     112.259  20.901  61.150  1.00 81.62           C
ATOM  13468  CB  GLU D 270     111.415  19.636  61.209  1.00 81.96           C
ATOM  13469  CG  GLU D 270     111.951  18.513  60.321  1.00 84.56           C
ATOM  13470  CD  GLU D 270     111.708  18.747  58.811  1.00 88.25           C
ATOM  13471  OE1 GLU D 270     110.669  19.369  58.437  1.00 87.84           O
ATOM  13472  OE2 GLU D 270     112.567  18.292  58.001  1.00 89.32           O
ATOM  13473  C   GLU D 270     111.412  22.134  61.423  1.00 81.09           C
ATOM  13474  O   GLU D 270     110.663  22.579  60.561  1.00 81.08           O
ATOM  13475  N   LEU D 271     111.557  22.695  62.616  1.00 80.61           N
ATOM  13476  CA  LEU D 271     110.752  23.826  63.037  1.00 80.25           C
ATOM  13477  CB  LEU D 271     110.519  23.774  64.552  1.00 80.40           C
ATOM  13478  CG  LEU D 271     109.997  22.460  65.153  1.00 80.19           C
ATOM  13479  CD1 LEU D 271     110.121  22.432  66.659  1.00 80.46           C
ATOM  13480  CD2 LEU D 271     108.571  22.240  64.767  1.00 80.73           C
ATOM  13481  C   LEU D 271     111.422  25.127  62.623  1.00 80.03           C
ATOM  13482  O   LEU D 271     111.803  25.934  63.462  1.00 79.96           O
ATOM  13483  N   LEU D 272     111.545  25.320  61.313  1.00 79.98           N
ATOM  13484  CA  LEU D 272     112.261  26.458  60.723  1.00 79.96           C
ATOM  13485  CB  LEU D 272     111.971  26.577  59.222  1.00 80.30           C
ATOM  13486  CG  LEU D 272     112.059  25.439  58.219  1.00 81.16           C
ATOM  13487  CD1 LEU D 272     110.716  24.718  58.102  1.00 81.82           C
ATOM  13488  CD2 LEU D 272     112.442  26.059  56.895  1.00 81.78           C
ATOM  13489  C   LEU D 272     111.900  27.806  61.311  1.00 79.54           C
ATOM  13490  O   LEU D 272     112.723  28.720  61.299  1.00 80.10           O
ATOM  13491  N   ARG D 273     110.667  27.943  61.790  1.00 78.89           N
ATOM  13492  CA  ARG D 273     110.094  29.268  62.021  1.00 78.19           C
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ATOM  13493  CB  ARG D 273     108.736  29.374  61.328  1.00 78.23           C
ATOM  13494  CG  ARG D 273     108.782  29.005  59.862  1.00 77.95           C
ATOM  13495  CD  ARG D 273     107.501  29.375  59.174  1.00 77.94           C
ATOM  13496  NE  ARG D 273     107.682  29.532  57.734  1.00 78.13           N
ATOM  13497  CZ  ARG D 273     107.592  28.545  56.844  1.00 78.50           C
ATOM  13498  NH1 ARG D 273     107.331  27.299  57.222  1.00 78.18           N
ATOM  13499  NH2 ARG D 273     107.770  28.809  55.561  1.00 79.16           N
ATOM  13500  C   ARG D 273     109.989  29.657  63.493  1.00 77.67           C
ATOM  13501  O   ARG D 273     109.540  30.761  63.821  1.00 77.70           O
ATOM  13502  N   LEU D 274     110.417  28.747  64.360  1.00 76.72           N
ATOM  13503  CA  LEU D 274     110.384  28.936  65.794  1.00 76.23           C
ATOM  13504  CB  LEU D 274     111.047  27.738  66.440  1.00 76.15           C
ATOM  13505  CG  LEU D 274     110.698  27.340  67.866  1.00 76.45           C
ATOM  13506  CD1 LEU D 274     109.290  27.752  68.236  1.00 75.29           C
ATOM  13507  CD2 LEU D 274     110.886  25.815  67.972  1.00 76.61           C
ATOM  13508  C   LEU D 274     111.124  30.206  66.185  1.00 75.98           C
ATOM  13509  O   LEU D 274     112.240  30.414  65.746  1.00 76.50           O
ATOM  13510  N   GLN D 275     110.507  31.059  66.997  1.00 75.55           N
ATOM  13511  CA  GLN D 275     111.114  32.350  67.337  1.00 75.04           C
ATOM  13512  CB  GLN D 275     110.251  33.509  66.854  1.00 74.97           C
ATOM  13513  CG  GLN D 275     110.150  33.613  65.365  1.00 75.31           C
ATOM  13514  CD  GLN D 275     109.328  34.792  64.929  1.00 75.48           C
ATOM  13515  OE1 GLN D 275     109.478  35.896  65.454  1.00 76.28           O
ATOM  13516  NE2 GLN D 275     108.457  34.572  63.957  1.00 74.76           N
ATOM  13517  C   GLN D 275     111.351  32.524  68.814  1.00 74.78           C
ATOM  13518  O   GLN D 275     112.096  33.418  69.224  1.00 74.47           O
ATOM  13519  N   GLU D 276     110.705  31.678  69.609  1.00 74.52           N
ATOM  13520  CA  GLU D 276     110.714  31.832  71.054  1.00 75.01           C
ATOM  13521  CB  GLU D 276     109.589  32.787  71.487  1.00 74.76           C
ATOM  13522  CG  GLU D 276     109.438  32.997  72.998  1.00 76.67           C
ATOM  13523  CD  GLU D 276     108.792  34.349  73.360  1.00 78.32           C
ATOM  13524  OE1 GLU D 276     108.520  35.171  72.438  1.00 82.69           O
ATOM  13525  OE2 GLU D 276     108.571  34.603  74.578  1.00 82.44           O
ATOM  13526  C   GLU D 276     110.540  30.473  71.685  1.00 73.62           C
ATOM  13527  O   GLU D 276     109.598  29.771  71.371  1.00 73.66           O
ATOM  13528  N   ILE D 277     111.464  30.103  72.560  1.00 72.93           N
ATOM  13529  CA  ILE D 277     111.355  28.865  73.317  1.00 72.25           C
ATOM  13530  CB  ILE D 277     112.424  27.830  72.916  1.00 71.91           C
ATOM  13531  CG1 ILE D 277     112.201  27.373  71.478  1.00 71.36           C
ATOM  13532  CD1 ILE D 277     113.423  26.779  70.857  1.00 70.75           C
ATOM  13533  CG2 ILE D 277     112.407  26.630  73.862  1.00 70.96           C
ATOM  13534  C   ILE D 277     111.494  29.190  74.782  1.00 72.36           C
ATOM  13535  O   ILE D 277     112.519  29.696  75.210  1.00 72.65           O
ATOM  13536  N   GLN D 278     110.443  28.920  75.542  1.00 72.60           N
ATOM  13537  CA  GLN D 278     110.490  29.022  76.994  1.00 72.66           C
ATOM  13538  CB  GLN D 278     109.240  29.704  77.527  1.00 72.84           C
ATOM  13539  CG  GLN D 278     108.880  31.006  76.839  1.00 73.27           C
ATOM  13540  CD  GLN D 278     109.544  32.180  77.484  1.00 73.86           C
ATOM  13541  OE1 GLN D 278     109.952  32.117  78.647  1.00 74.27           O
ATOM  13542  NE2 GLN D 278     109.655  33.275  76.742  1.00 74.58           N
ATOM  13543  C   GLN D 278     110.557  27.610  77.559  1.00 72.66           C
ATOM  13544  O   GLN D 278     109.755  26.739  77.202  1.00 72.62           O
ATOM  13545  N   LEU D 279     111.532  27.385  78.426  1.00 72.38           N
ATOM  13546  CA  LEU D 279     111.614  26.152  79.163  1.00 72.01           C
ATOM  13547  CB  LEU D 279     112.488  25.144  78.426  1.00 72.09           C
ATOM  13548  CG  LEU D 279     112.128  23.682  78.689  1.00 72.34           C
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ATOM	13549	CD1	LEU	D	279	113.022	22.781	77.887	1.00	73.31	C
ATOM	13550	CD2	LEU	D	279	112.184	23.301	80.178	1.00	72.61	C
ATOM	13551	C	LEU	D	279	112.173	26.475	80.531	1.00	71.93	C
ATOM	13552	O	LEU	D	279	113.338	26.222	80.821	1.00	71.88	O
ATOM	13553	N	VAL	D	280	111.335	27.051	81.377	1.00	71.95	N
ATOM	13554	CA	VAL	D	280	111.819	27.526	82.657	1.00	72.50	C
ATOM	13555	CB	VAL	D	280	111.449	29.010	82.893	1.00	72.63	C
ATOM	13556	CG1	VAL	D	280	111.295	29.718	81.566	1.00	73.04	C
ATOM	13557	CG2	VAL	D	280	110.185	29.155	83.716	1.00	72.95	C
ATOM	13558	C	VAL	D	280	111.348	26.640	83.791	1.00	72.52	C
ATOM	13559	O	VAL	D	280	110.374	25.906	83.646	1.00	72.69	O
ATOM	13560	N	GLY	D	281	112.058	26.683	84.907	1.00	72.69	N
ATOM	13561	CA	GLY	D	281	111.701	25.866	86.062	1.00	73.40	C
ATOM	13562	C	GLY	D	281	111.596	24.368	85.800	1.00	73.76	C
ATOM	13563	O	GLY	D	281	110.873	23.668	86.502	1.00	73.85	O
ATOM	13564	N	GLY	D	282	112.299	23.882	84.780	1.00	74.09	N
ATOM	13565	CA	GLY	D	282	112.430	22.447	84.550	1.00	74.57	C
ATOM	13566	C	GLY	D	282	113.724	21.957	85.170	1.00	75.05	C
ATOM	13567	O	GLY	D	282	114.227	22.564	86.130	1.00	75.31	O
ATOM	13568	N	GLN	D	283	114.285	20.884	84.617	1.00	75.09	N
ATOM	13569	CA	GLN	D	283	115.479	20.275	85.200	1.00	75.49	C
ATOM	13570	CB	GLN	D	283	115.174	18.860	85.679	1.00	75.32	C
ATOM	13571	CG	GLN	D	283	114.169	18.756	86.802	1.00	76.45	C
ATOM	13572	CD	GLN	D	283	113.847	17.302	87.146	1.00	76.98	C
ATOM	13573	OE1	GLN	D	283	114.655	16.398	86.896	1.00	78.56	O
ATOM	13574	NE2	GLN	D	283	112.665	17.071	87.727	1.00	78.43	N
ATOM	13575	C	GLN	D	283	116.655	20.221	84.233	1.00	75.22	C
ATOM	13576	O	GLN	D	283	117.518	19.345	84.354	1.00	75.46	O
ATOM	13577	N	LEU	D	284	116.691	21.148	83.277	1.00	74.98	N
ATOM	13578	CA	LEU	D	284	117.725	21.140	82.245	1.00	74.44	C
ATOM	13579	CB	LEU	D	284	117.568	22.323	81.287	1.00	74.24	C
ATOM	13580	CG	LEU	D	284	116.425	22.213	80.281	1.00	73.89	C
ATOM	13581	CD1	LEU	D	284	116.425	23.389	79.344	1.00	72.31	C
ATOM	13582	CD2	LEU	D	284	116.504	20.895	79.496	1.00	74.05	C
ATOM	13583	C	LEU	D	284	119.129	21.095	82.835	1.00	74.50	C
ATOM	13584	O	LEU	D	284	119.570	22.043	83.489	1.00	74.65	O
ATOM	13585	N	ALA	D	285	119.809	19.971	82.617	1.00	74.34	N
ATOM	13586	CA	ALA	D	285	121.193	19.801	83.040	1.00	74.12	C
ATOM	13587	CB	ALA	D	285	121.433	18.397	83.517	1.00	74.02	C
ATOM	13588	C	ALA	D	285	122.126	20.121	81.895	1.00	74.27	C
ATOM	13589	O	ALA	D	285	123.295	20.406	82.118	1.00	74.63	O
ATOM	13590	N	VAL	D	286	121.611	20.057	80.669	1.00	74.25	N
ATOM	13591	CA	VAL	D	286	122.398	20.383	79.483	1.00	74.14	C
ATOM	13592	CB	VAL	D	286	123.415	19.271	79.140	1.00	74.18	C
ATOM	13593	CG1	VAL	D	286	122.701	17.974	78.846	1.00	73.95	C
ATOM	13594	CG2	VAL	D	286	124.285	19.683	77.959	1.00	73.97	C
ATOM	13595	C	VAL	D	286	121.516	20.640	78.274	1.00	74.16	C
ATOM	13596	O	VAL	D	286	120.557	19.914	78.032	1.00	73.98	O
ATOM	13597	N	VAL	D	287	121.847	21.699	77.541	1.00	74.37	N
ATOM	13598	CA	VAL	D	287	121.297	21.955	76.223	1.00	74.57	C
ATOM	13599	CB	VAL	D	287	120.923	23.425	76.038	1.00	74.27	C
ATOM	13600	CG1	VAL	D	287	120.461	23.666	74.619	1.00	74.30	C
ATOM	13601	CG2	VAL	D	287	119.849	23.828	77.017	1.00	74.19	C
ATOM	13602	C	VAL	D	287	122.429	21.639	75.274	1.00	75.16	C
ATOM	13603	O	VAL	D	287	123.407	22.377	75.209	1.00	75.35	O
ATOM	13604	N	GLU	D	288	122.318	20.532	74.551	1.00	75.53	N

ATOM	13605	CA	GLU	D	288	123.453	20.047	73.777	1.00	76.19	C
ATOM	13606	CB	GLU	D	288	123.245	18.588	73.393	1.00	76.69	C
ATOM	13607	CG	GLU	D	288	123.489	17.679	74.580	1.00	80.69	C
ATOM	13608	CD	GLU	D	288	123.369	16.202	74.254	1.00	85.65	C
ATOM	13609	OE1	GLU	D	288	122.942	15.850	73.111	1.00	87.74	O
ATOM	13610	OE2	GLU	D	288	123.706	15.400	75.163	1.00	86.73	O
ATOM	13611	C	GLU	D	288	123.782	20.905	72.560	1.00	75.49	C
ATOM	13612	O	GLU	D	288	122.898	21.550	72.003	1.00	75.85	O
ATOM	13613	N	PRO	D	289	125.065	20.929	72.153	1.00	74.74	N
ATOM	13614	CA	PRO	D	289	125.432	21.625	70.918	1.00	74.09	C
ATOM	13615	CB	PRO	D	289	126.841	21.112	70.626	1.00	74.18	C
ATOM	13616	CG	PRO	D	289	127.373	20.631	71.928	1.00	74.22	C
ATOM	13617	CD	PRO	D	289	126.227	20.330	72.837	1.00	74.62	C
ATOM	13618	C	PRO	D	289	124.503	21.242	69.771	1.00	73.64	C
ATOM	13619	O	PRO	D	289	124.061	20.093	69.688	1.00	73.59	O
ATOM	13620	N	TYR	D	290	124.207	22.207	68.904	1.00	72.90	N
ATOM	13621	CA	TYR	D	290	123.367	21.988	67.725	1.00	72.04	C
ATOM	13622	CB	TYR	D	290	123.976	20.911	66.815	1.00	71.52	C
ATOM	13623	CG	TYR	D	290	124.864	21.453	65.698	1.00	70.66	C
ATOM	13624	CD1	TYR	D	290	125.772	22.493	65.918	1.00	69.63	C
ATOM	13625	CE1	TYR	D	290	126.571	22.979	64.890	1.00	69.23	C
ATOM	13626	CZ	TYR	D	290	126.467	22.416	63.629	1.00	70.24	C
ATOM	13627	OH	TYR	D	290	127.235	22.862	62.583	1.00	70.52	O
ATOM	13628	CE2	TYR	D	290	125.586	21.386	63.395	1.00	69.70	C
ATOM	13629	CD2	TYR	D	290	124.794	20.913	64.422	1.00	69.43	C
ATOM	13630	C	TYR	D	290	121.883	21.732	68.048	1.00	72.28	C
ATOM	13631	O	TYR	D	290	121.078	21.454	67.153	1.00	72.10	O
ATOM	13632	N	ALA	D	291	121.521	21.864	69.325	1.00	72.50	N
ATOM	13633	CA	ALA	D	291	120.125	21.729	69.767	1.00	72.68	C
ATOM	13634	CB	ALA	D	291	119.982	22.125	71.226	1.00	72.48	C
ATOM	13635	C	ALA	D	291	119.126	22.516	68.914	1.00	72.81	C
ATOM	13636	O	ALA	D	291	118.014	22.044	68.660	1.00	73.18	O
ATOM	13637	N	PHE	D	292	119.512	23.714	68.486	1.00	72.58	N
ATOM	13638	CA	PHE	D	292	118.611	24.550	67.716	1.00	72.40	C
ATOM	13639	CB	PHE	D	292	118.332	25.855	68.470	1.00	72.34	C
ATOM	13640	CG	PHE	D	292	117.892	25.653	69.912	1.00	73.07	C
ATOM	13641	CD1	PHE	D	292	116.900	24.741	70.242	1.00	73.16	C
ATOM	13642	CE1	PHE	D	292	116.501	24.556	71.574	1.00	73.52	C
ATOM	13643	CZ	PHE	D	292	117.075	25.301	72.583	1.00	72.81	C
ATOM	13644	CE2	PHE	D	292	118.055	26.227	72.272	1.00	74.12	C
ATOM	13645	CD2	PHE	D	292	118.460	26.400	70.939	1.00	74.47	C
ATOM	13646	C	PHE	D	292	119.124	24.786	66.285	1.00	72.56	C
ATOM	13647	O	PHE	D	292	118.740	25.759	65.613	1.00	72.80	O
ATOM	13648	N	ARG	D	293	119.996	23.891	65.820	1.00	72.17	N
ATOM	13649	CA	ARG	D	293	120.419	23.894	64.429	1.00	71.87	C
ATOM	13650	CB	ARG	D	293	121.352	22.719	64.140	1.00	71.46	C
ATOM	13651	CG	ARG	D	293	122.098	22.822	62.824	1.00	70.67	C
ATOM	13652	CD	ARG	D	293	123.235	23.816	62.919	1.00	69.65	C
ATOM	13653	NE	ARG	D	293	123.988	23.962	61.674	1.00	68.88	N
ATOM	13654	CZ	ARG	D	293	124.887	24.921	61.464	1.00	69.15	C
ATOM	13655	NH1	ARG	D	293	125.136	25.810	62.416	1.00	68.86	N
ATOM	13656	NH2	ARG	D	293	125.534	25.009	60.304	1.00	70.27	N
ATOM	13657	C	ARG	D	293	119.173	23.807	63.559	1.00	72.14	C
ATOM	13658	O	ARG	D	293	118.268	23.037	63.842	1.00	72.05	O
ATOM	13659	N	GLY	D	294	119.119	24.629	62.521	1.00	72.62	N
ATOM	13660	CA	GLY	D	294	117.949	24.702	61.664	1.00	73.17	C

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ATOM  13661  C   GLY D 294     117.042  25.858  62.033  1.00 73.71           C
ATOM  13662  O   GLY D 294     116.270  26.324  61.198  1.00 73.86           O
ATOM  13663  N   LEU D 295     117.142  26.319  63.281  1.00 74.13           N
ATOM  13664  CA  LEU D 295     116.295  27.394  63.800  1.00 74.51           C
ATOM  13665  CB  LEU D 295     116.000  27.175  65.280  1.00 74.39           C
ATOM  13666  CG  LEU D 295     114.800  26.294  65.608  1.00 75.25           C
ATOM  13667  CD1 LEU D 295     114.965  24.887  65.062  1.00 76.91           C
ATOM  13668  CD2 LEU D 295     114.568  26.248  67.100  1.00 75.67           C
ATOM  13669  C   LEU D 295     116.911  28.773  63.565  1.00 74.71           C
ATOM  13670  O   LEU D 295     117.329  29.465  64.491  1.00 74.82           O
ATOM  13671  N   ASN D 296     116.926  29.167  62.305  1.00 74.98           N
ATOM  13672  CA  ASN D 296     117.548  30.397  61.871  1.00 75.49           C
ATOM  13673  CB  ASN D 296     117.473  30.458  60.347  1.00 75.45           C
ATOM  13674  CG  ASN D 296     118.447  31.435  59.761  1.00 76.13           C
ATOM  13675  OD1 ASN D 296     118.050  32.376  59.075  1.00 78.22           O
ATOM  13676  ND2 ASN D 296     119.732  31.236  60.032  1.00 76.81           N
ATOM  13677  C   ASN D 296     116.978  31.685  62.484  1.00 75.62           C
ATOM  13678  O   ASN D 296     117.635  32.723  62.476  1.00 75.86           O
ATOM  13679  N   TYR D 297     115.768  31.609  63.026  1.00 76.01           N
ATOM  13680  CA  TYR D 297     115.037  32.802  63.454  1.00 75.96           C
ATOM  13681  CB  TYR D 297     113.763  32.959  62.617  1.00 76.65           C
ATOM  13682  CG  TYR D 297     114.053  33.181  61.152  1.00 77.39           C
ATOM  13683  CD1 TYR D 297     114.705  34.341  60.725  1.00 77.08           C
ATOM  13684  CE1 TYR D 297     114.993  34.553  59.388  1.00 77.51           C
ATOM  13685  CZ  TYR D 297     114.625  33.601  58.448  1.00 77.93           C
ATOM  13686  OH  TYR D 297     114.914  33.830  57.117  1.00 78.65           O
ATOM  13687  CE2 TYR D 297     113.972  32.433  58.840  1.00 78.14           C
ATOM  13688  CD2 TYR D 297     113.690  32.227  60.193  1.00 77.71           C
ATOM  13689  C   TYR D 297     114.697  32.835  64.938  1.00 75.43           C
ATOM  13690  O   TYR D 297     113.917  33.680  65.377  1.00 75.22           O
ATOM  13691  N   LEU D 298     115.280  31.912  65.700  1.00 74.88           N
ATOM  13692  CA  LEU D 298     115.131  31.905  67.144  1.00 74.42           C
ATOM  13693  CB  LEU D 298     115.908  30.750  67.747  1.00 74.05           C
ATOM  13694  CG  LEU D 298     115.791  30.533  69.251  1.00 74.37           C
ATOM  13695  CD1 LEU D 298     114.335  30.416  69.667  1.00 74.57           C
ATOM  13696  CD2 LEU D 298     116.554  29.281  69.660  1.00 74.15           C
ATOM  13697  C   LEU D 298     115.604  33.240  67.720  1.00 74.68           C
ATOM  13698  O   LEU D 298     116.780  33.621  67.577  1.00 74.94           O
ATOM  13699  N   ARG D 299     114.678  33.968  68.338  1.00 74.45           N
ATOM  13700  CA  ARG D 299     115.016  35.251  68.931  1.00 74.41           C
ATOM  13701  CB  ARG D 299     113.983  36.313  68.575  1.00 74.57           C
ATOM  13702  CG  ARG D 299     113.950  36.723  67.113  1.00 76.57           C
ATOM  13703  CD  ARG D 299     112.841  37.732  66.886  1.00 79.82           C
ATOM  13704  NE  ARG D 299     111.616  37.310  67.567  1.00 82.97           N
ATOM  13705  CZ  ARG D 299     110.756  38.128  68.168  1.00 84.49           C
ATOM  13706  NH1 ARG D 299     110.967  39.446  68.188  1.00 85.41           N
ATOM  13707  NH2 ARG D 299     109.681  37.619  68.756  1.00 84.27           N
ATOM  13708  C   ARG D 299     115.143  35.166  70.447  1.00 73.87           C
ATOM  13709  O   ARG D 299     115.900  35.935  71.049  1.00 74.02           O
ATOM  13710  N   VAL D 300     114.400  34.247  71.060  1.00 72.79           N
ATOM  13711  CA  VAL D 300     114.252  34.249  72.508  1.00 72.06           C
ATOM  13712  CB  VAL D 300     112.868  34.789  72.935  1.00 71.82           C
ATOM  13713  CG1 VAL D 300     112.804  34.954  74.436  1.00 71.61           C
ATOM  13714  CG2 VAL D 300     112.571  36.104  72.267  1.00 72.04           C
ATOM  13715  C   VAL D 300     114.418  32.857  73.081  1.00 71.88           C
ATOM  13716  O   VAL D 300     113.692  31.940  72.705  1.00 71.94           O
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ATOM	13717	N	LEU	D	301	115.367	32.700	73.996	1.00	71.52	N
ATOM	13718	CA	LEU	D	301	115.478	31.460	74.751	1.00	71.34	C
ATOM	13719	CB	LEU	D	301	116.760	30.708	74.393	1.00	71.02	C
ATOM	13720	CG	LEU	D	301	117.042	29.446	75.218	1.00	71.50	C
ATOM	13721	CD1	LEU	D	301	116.047	28.331	74.914	1.00	70.72	C
ATOM	13722	CD2	LEU	D	301	118.465	28.950	75.013	1.00	71.10	C
ATOM	13723	C	LEU	D	301	115.436	31.773	76.237	1.00	71.46	C
ATOM	13724	O	LEU	D	301	116.288	32.521	76.738	1.00	71.80	O
ATOM	13725	N	ASN	D	302	114.440	31.230	76.936	1.00	71.18	N
ATOM	13726	CA	ASN	D	302	114.358	31.395	78.386	1.00	71.23	C
ATOM	13727	CB	ASN	D	302	113.059	32.089	78.810	1.00	70.98	C
ATOM	13728	CG	ASN	D	302	113.029	32.434	80.303	1.00	70.94	C
ATOM	13729	OD1	ASN	D	302	112.060	33.003	80.804	1.00	71.61	O
ATOM	13730	ND2	ASN	D	302	114.090	32.090	81.012	1.00	71.13	N
ATOM	13731	C	ASN	D	302	114.513	30.075	79.116	1.00	71.41	C
ATOM	13732	O	ASN	D	302	113.590	29.271	79.139	1.00	71.58	O
ATOM	13733	N	VAL	D	303	115.681	29.870	79.725	1.00	71.56	N
ATOM	13734	CA	VAL	D	303	115.968	28.642	80.472	1.00	71.30	C
ATOM	13735	CB	VAL	D	303	117.107	27.824	79.826	1.00	71.29	C
ATOM	13736	CG1	VAL	D	303	116.594	27.107	78.586	1.00	71.14	C
ATOM	13737	CG2	VAL	D	303	118.275	28.711	79.481	1.00	70.46	C
ATOM	13738	C	VAL	D	303	116.233	28.901	81.954	1.00	71.49	C
ATOM	13739	O	VAL	D	303	116.985	28.175	82.610	1.00	71.54	O
ATOM	13740	N	SER	D	304	115.577	29.935	82.469	1.00	71.65	N
ATOM	13741	CA	SER	D	304	115.629	30.306	83.871	1.00	71.76	C
ATOM	13742	CB	SER	D	304	114.788	31.561	84.094	1.00	71.79	C
ATOM	13743	OG	SER	D	304	114.803	31.962	85.453	1.00	72.01	O
ATOM	13744	C	SER	D	304	115.128	29.199	84.796	1.00	71.99	C
ATOM	13745	O	SER	D	304	114.134	28.535	84.510	1.00	71.42	O
ATOM	13746	N	GLY	D	305	115.833	29.019	85.912	1.00	72.55	N
ATOM	13747	CA	GLY	D	305	115.406	28.111	86.972	1.00	73.34	C
ATOM	13748	C	GLY	D	305	115.578	26.634	86.677	1.00	73.84	C
ATOM	13749	O	GLY	D	305	114.820	25.801	87.183	1.00	74.06	O
ATOM	13750	N	ASN	D	306	116.569	26.304	85.859	1.00	74.18	N
ATOM	13751	CA	ASN	D	306	116.913	24.916	85.619	1.00	74.68	C
ATOM	13752	CB	ASN	D	306	117.109	24.664	84.131	1.00	74.76	C
ATOM	13753	CG	ASN	D	306	115.822	24.766	83.359	1.00	74.81	C
ATOM	13754	OD1	ASN	D	306	114.985	23.875	83.425	1.00	74.70	O
ATOM	13755	ND2	ASN	D	306	115.655	25.858	82.617	1.00	74.43	N
ATOM	13756	C	ASN	D	306	118.166	24.600	86.399	1.00	74.97	C
ATOM	13757	O	ASN	D	306	118.323	25.074	87.520	1.00	75.11	O
ATOM	13758	N	GLN	D	307	119.064	23.820	85.814	1.00	75.50	N
ATOM	13759	CA	GLN	D	307	120.314	23.495	86.482	1.00	76.22	C
ATOM	13760	CB	GLN	D	307	120.167	22.214	87.308	1.00	76.50	C
ATOM	13761	CG	GLN	D	307	119.746	20.987	86.518	1.00	77.81	C
ATOM	13762	CD	GLN	D	307	120.021	19.701	87.267	1.00	80.26	C
ATOM	13763	OE1	GLN	D	307	121.140	19.466	87.734	1.00	80.70	O
ATOM	13764	NE2	GLN	D	307	119.000	18.853	87.385	1.00	81.40	N
ATOM	13765	C	GLN	D	307	121.478	23.397	85.502	1.00	76.36	C
ATOM	13766	O	GLN	D	307	122.321	22.505	85.597	1.00	76.71	O
ATOM	13767	N	LEU	D	308	121.516	24.332	84.561	1.00	76.43	N
ATOM	13768	CA	LEU	D	308	122.573	24.385	83.569	1.00	76.43	C
ATOM	13769	CB	LEU	D	308	122.141	25.264	82.399	1.00	76.32	C
ATOM	13770	CG	LEU	D	308	120.860	24.917	81.643	1.00	76.24	C
ATOM	13771	CD1	LEU	D	308	120.436	26.120	80.834	1.00	76.65	C
ATOM	13772	CD2	LEU	D	308	121.057	23.712	80.737	1.00	76.18	C

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ATOM  13773  C   LEU D 308     123.841  24.959  84.177  1.00 76.73           C
ATOM  13774  O   LEU D 308     123.790  25.937  84.926  1.00 76.93           O
ATOM  13775  N   THR D 309     124.981  24.358  83.851  1.00 76.98           N
ATOM  13776  CA  THR D 309     126.275  24.912  84.253  1.00 77.01           C
ATOM  13777  CB  THR D 309     127.251  23.817  84.707  1.00 76.96           C
ATOM  13778  OG1 THR D 309     127.557  22.971  83.595  1.00 77.81           O
ATOM  13779  CG2 THR D 309     126.660  22.985  85.840  1.00 76.79           C
ATOM  13780  C   THR D 309     126.922  25.693  83.111  1.00 76.97           C
ATOM  13781  O   THR D 309     127.814  26.509  83.333  1.00 77.08           O
ATOM  13782  N   THR D 310     126.474  25.435  81.890  1.00 77.01           N
ATOM  13783  CA  THR D 310     127.079  26.050  80.709  1.00 77.37           C
ATOM  13784  CB  THR D 310     128.351  25.268  80.235  1.00 77.34           C
ATOM  13785  OG1 THR D 310     129.011  26.018  79.213  1.00 77.24           O
ATOM  13786  CG2 THR D 310     127.996  23.873  79.691  1.00 77.05           C
ATOM  13787  C   THR D 310     126.099  26.180  79.541  1.00 77.44           C
ATOM  13788  O   THR D 310     124.984  25.662  79.598  1.00 77.53           O
ATOM  13789  N   LEU D 311     126.529  26.865  78.485  1.00 77.34           N
ATOM  13790  CA  LEU D 311     125.779  26.913  77.244  1.00 77.51           C
ATOM  13791  CB  LEU D 311     124.682  27.977  77.325  1.00 77.42           C
ATOM  13792  CG  LEU D 311     123.556  28.019  76.289  1.00 77.31           C
ATOM  13793  CD1 LEU D 311     122.609  26.837  76.407  1.00 76.31           C
ATOM  13794  CD2 LEU D 311     122.790  29.309  76.455  1.00 77.73           C
ATOM  13795  C   LEU D 311     126.735  27.195  76.095  1.00 77.76           C
ATOM  13796  O   LEU D 311     127.194  28.326  75.913  1.00 77.93           O
ATOM  13797  N   GLU D 312     127.045  26.155  75.330  1.00 78.00           N
ATOM  13798  CA  GLU D 312     127.939  26.275  74.178  1.00 78.28           C
ATOM  13799  CB  GLU D 312     128.268  24.885  73.610  1.00 78.78           C
ATOM  13800  CG  GLU D 312     128.825  23.875  74.626  1.00 81.09           C
ATOM  13801  CD  GLU D 312     130.341  23.980  74.853  1.00 84.74           C
ATOM  13802  OE1 GLU D 312     130.982  24.984  74.436  1.00 85.16           O
ATOM  13803  OE2 GLU D 312     130.900  23.039  75.463  1.00 86.64           O
ATOM  13804  C   GLU D 312     127.299  27.133  73.093  1.00 77.88           C
ATOM  13805  O   GLU D 312     126.093  27.057  72.871  1.00 77.97           O
ATOM  13806  N   GLU D 313     128.104  27.940  72.412  1.00 77.59           N
ATOM  13807  CA  GLU D 313     127.596  28.806  71.348  1.00 77.23           C
ATOM  13808  CB  GLU D 313     128.716  29.686  70.790  1.00 77.08           C
ATOM  13809  CG  GLU D 313     128.235  30.768  69.837  1.00 76.93           C
ATOM  13810  CD  GLU D 313     129.263  31.862  69.578  1.00 77.00           C
ATOM  13811  OE1 GLU D 313     130.453  31.691  69.926  1.00 76.56           O
ATOM  13812  OE2 GLU D 313     128.871  32.905  69.016  1.00 76.24           O
ATOM  13813  C   GLU D 313     126.904  28.021  70.224  1.00 77.42           C
ATOM  13814  O   GLU D 313     125.877  28.458  69.696  1.00 77.49           O
ATOM  13815  N   SER D 314     127.458  26.858  69.882  1.00 77.46           N
ATOM  13816  CA  SER D 314     126.950  26.015  68.790  1.00 77.36           C
ATOM  13817  CB  SER D 314     127.883  24.834  68.577  1.00 77.57           C
ATOM  13818  OG  SER D 314     128.106  24.163  69.808  1.00 78.74           O
ATOM  13819  C   SER D 314     125.549  25.480  69.045  1.00 77.14           C
ATOM  13820  O   SER D 314     124.974  24.795  68.200  1.00 77.34           O
ATOM  13821  N   VAL D 315     125.014  25.776  70.223  1.00 76.90           N
ATOM  13822  CA  VAL D 315     123.638  25.454  70.557  1.00 76.53           C
ATOM  13823  CB  VAL D 315     123.325  25.850  72.028  1.00 76.57           C
ATOM  13824  CG1 VAL D 315     121.884  26.347  72.210  1.00 76.76           C
ATOM  13825  CG2 VAL D 315     123.628  24.696  72.948  1.00 75.78           C
ATOM  13826  C   VAL D 315     122.729  26.163  69.569  1.00 76.37           C
ATOM  13827  O   VAL D 315     121.732  25.606  69.116  1.00 76.60           O
ATOM  13828  N   PHE D 316     123.104  27.385  69.216  1.00 76.26           N
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ATOM  13829  CA  PHE D 316     122.321  28.202  68.304  1.00 76.16           C
ATOM  13830  CB  PHE D 316     122.403  29.679  68.718  1.00 75.91           C
ATOM  13831  CG  PHE D 316     121.917  29.929  70.123  1.00 75.85           C
ATOM  13832  CD1 PHE D 316     120.571  30.151  70.378  1.00 75.20           C
ATOM  13833  CE1 PHE D 316     120.119  30.344  71.678  1.00 74.50           C
ATOM  13834  CZ  PHE D 316     121.015  30.315  72.731  1.00 74.68           C
ATOM  13835  CE2 PHE D 316     122.352  30.080  72.497  1.00 74.40           C
ATOM  13836  CD2 PHE D 316     122.800  29.883  71.198  1.00 75.58           C
ATOM  13837  C   PHE D 316     122.741  27.997  66.857  1.00 76.20           C
ATOM  13838  O   PHE D 316     123.892  27.723  66.553  1.00 76.13           O
ATOM  13839  N   HIS D 317     121.783  28.094  65.958  1.00 76.63           N
ATOM  13840  CA  HIS D 317     122.116  28.091  64.557  1.00 76.82           C
ATOM  13841  CB  HIS D 317     120.891  27.737  63.729  1.00 76.56           C
ATOM  13842  CG  HIS D 317     121.149  27.729  62.260  1.00 76.02           C
ATOM  13843  ND1 HIS D 317     121.334  26.567  61.545  1.00 75.37           N
ATOM  13844  CE1 HIS D 317     121.549  26.865  60.277  1.00 75.37           C
ATOM  13845  NE2 HIS D 317     121.518  28.178  60.146  1.00 75.08           N
ATOM  13846  CD2 HIS D 317     121.273  28.743  61.372  1.00 75.24           C
ATOM  13847  C   HIS D 317     122.607  29.485  64.197  1.00 77.35           C
ATOM  13848  O   HIS D 317     123.591  29.643  63.460  1.00 77.56           O
ATOM  13849  N   SER D 318     121.929  30.488  64.757  1.00 77.77           N
ATOM  13850  CA  SER D 318     122.060  31.874  64.316  1.00 77.99           C
ATOM  13851  CB  SER D 318     120.864  32.223  63.424  1.00 77.97           C
ATOM  13852  OG  SER D 318     121.052  33.467  62.782  1.00 79.15           O
ATOM  13853  C   SER D 318     122.186  32.868  65.480  1.00 77.73           C
ATOM  13854  O   SER D 318     121.226  33.546  65.836  1.00 77.87           O
ATOM  13855  N   VAL D 319     123.382  32.955  66.054  1.00 77.55           N
ATOM  13856  CA  VAL D 319     123.645  33.827  67.201  1.00 77.41           C
ATOM  13857  CB  VAL D 319     125.102  33.703  67.682  1.00 77.59           C
ATOM  13858  CG1 VAL D 319     125.271  34.385  69.031  1.00 77.88           C
ATOM  13859  CG2 VAL D 319     125.513  32.232  67.778  1.00 78.22           C
ATOM  13860  C   VAL D 319     123.347  35.304  66.916  1.00 77.09           C
ATOM  13861  O   VAL D 319     122.880  36.030  67.794  1.00 77.25           O
ATOM  13862  N   GLY D 320     123.616  35.747  65.693  1.00 76.48           N
ATOM  13863  CA  GLY D 320     123.325  37.122  65.302  1.00 75.74           C
ATOM  13864  C   GLY D 320     121.844  37.476  65.317  1.00 75.33           C
ATOM  13865  O   GLY D 320     121.485  38.652  65.215  1.00 75.46           O
ATOM  13866  N   ASN D 321     120.987  36.463  65.436  1.00 74.49           N
ATOM  13867  CA  ASN D 321     119.542  36.665  65.441  1.00 74.02           C
ATOM  13868  CB  ASN D 321     118.869  35.687  64.486  1.00 73.74           C
ATOM  13869  CG  ASN D 321     118.674  36.262  63.108  1.00 73.60           C
ATOM  13870  OD1 ASN D 321     119.190  37.341  62.772  1.00 73.17           O
ATOM  13871  ND2 ASN D 321     117.919  35.545  62.290  1.00 73.22           N
ATOM  13872  C   ASN D 321     118.906  36.529  66.815  1.00 73.96           C
ATOM  13873  O   ASN D 321     117.730  36.873  67.000  1.00 74.19           O
ATOM  13874  N   LEU D 322     119.685  36.000  67.759  1.00 73.42           N
ATOM  13875  CA  LEU D 322     119.249  35.796  69.127  1.00 72.56           C
ATOM  13876  CB  LEU D 322     120.192  34.824  69.837  1.00 72.33           C
ATOM  13877  CG  LEU D 322     119.971  34.584  71.329  1.00 72.01           C
ATOM  13878  CD1 LEU D 322     118.650  33.906  71.581  1.00 70.96           C
ATOM  13879  CD2 LEU D 322     121.104  33.773  71.907  1.00 72.16           C
ATOM  13880  C   LEU D 322     119.226  37.145  69.822  1.00 72.35           C
ATOM  13881  O   LEU D 322     120.234  37.831  69.877  1.00 72.57           O
ATOM  13882  N   GLU D 323     118.064  37.524  70.336  1.00 72.19           N
ATOM  13883  CA  GLU D 323     117.882  38.836  70.935  1.00 72.19           C
ATOM  13884  CB  GLU D 323     116.663  39.528  70.327  1.00 72.13           C
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ATOM  13885  CG  GLU D 323     116.893  40.105  68.931  1.00 73.00           C
ATOM  13886  CD  GLU D 323     115.609  40.664  68.292  1.00 73.15           C
ATOM  13887  OE1 GLU D 323     114.612  39.895  68.179  1.00 73.91           O
ATOM  13888  OE2 GLU D 323     115.605  41.864  67.901  1.00 71.73           O
ATOM  13889  C   GLU D 323     117.755  38.788  72.456  1.00 71.64           C
ATOM  13890  O   GLU D 323     118.156  39.719  73.137  1.00 71.58           O
ATOM  13891  N   THR D 324     117.197  37.702  72.979  1.00 71.40           N
ATOM  13892  CA  THR D 324     116.921  37.583  74.409  1.00 71.18           C
ATOM  13893  CB  THR D 324     115.439  37.940  74.739  1.00 71.01           C
ATOM  13894  OG1 THR D 324     115.252  39.352  74.597  1.00 70.46           O
ATOM  13895  CG2 THR D 324     115.075  37.564  76.159  1.00 70.57           C
ATOM  13896  C   THR D 324     117.294  36.199  74.931  1.00 71.37           C
ATOM  13897  O   THR D 324     116.710  35.184  74.535  1.00 71.50           O
ATOM  13898  N   LEU D 325     118.282  36.172  75.818  1.00 71.49           N
ATOM  13899  CA  LEU D 325     118.746  34.938  76.431  1.00 71.65           C
ATOM  13900  CB  LEU D 325     120.162  34.629  75.955  1.00 71.35           C
ATOM  13901  CG  LEU D 325     120.895  33.438  76.563  1.00 71.60           C
ATOM  13902  CD1 LEU D 325     120.195  32.137  76.222  1.00 72.17           C
ATOM  13903  CD2 LEU D 325     122.320  33.406  76.066  1.00 71.69           C
ATOM  13904  C   LEU D 325     118.711  35.098  77.942  1.00 72.00           C
ATOM  13905  O   LEU D 325     119.369  35.974  78.498  1.00 72.38           O
ATOM  13906  N   ILE D 326     117.928  34.264  78.608  1.00 72.40           N
ATOM  13907  CA  ILE D 326     117.794  34.346  80.061  1.00 72.71           C
ATOM  13908  CB  ILE D 326     116.318  34.569  80.485  1.00 72.46           C
ATOM  13909  CG1 ILE D 326     115.648  35.703  79.682  1.00 72.15           C
ATOM  13910  CD1 ILE D 326     116.153  37.167  79.965  1.00 71.73           C
ATOM  13911  CG2 ILE D 326     116.220  34.755  81.986  1.00 72.39           C
ATOM  13912  C   ILE D 326     118.351  33.073  80.717  1.00 73.39           C
ATOM  13913  O   ILE D 326     117.885  31.956  80.445  1.00 73.06           O
ATOM  13914  N   LEU D 327     119.344  33.257  81.583  1.00 74.17           N
ATOM  13915  CA  LEU D 327     120.069  32.132  82.179  1.00 74.88           C
ATOM  13916  CB  LEU D 327     121.517  32.094  81.683  1.00 74.85           C
ATOM  13917  CG  LEU D 327     121.869  31.725  80.247  1.00 75.35           C
ATOM  13918  CD1 LEU D 327     123.360  31.918  80.044  1.00 75.49           C
ATOM  13919  CD2 LEU D 327     121.487  30.299  79.939  1.00 76.38           C
ATOM  13920  C   LEU D 327     120.099  32.158  83.701  1.00 75.26           C
ATOM  13921  O   LEU D 327     120.751  31.307  84.310  1.00 75.50           O
ATOM  13922  N   ASP D 328     119.411  33.123  84.316  1.00 75.56           N
ATOM  13923  CA  ASP D 328     119.402  33.252  85.787  1.00 75.84           C
ATOM  13924  CB  ASP D 328     118.675  34.532  86.232  1.00 75.98           C
ATOM  13925  CG  ASP D 328     117.215  34.561  85.805  1.00 77.70           C
ATOM  13926  OD1 ASP D 328     116.802  33.704  84.995  1.00 80.37           O
ATOM  13927  OD2 ASP D 328     116.469  35.445  86.273  1.00 79.34           O
ATOM  13928  C   ASP D 328     118.831  32.015  86.502  1.00 75.52           C
ATOM  13929  O   ASP D 328     118.079  31.234  85.912  1.00 75.41           O
ATOM  13930  N   SER D 329     119.208  31.847  87.767  1.00 75.19           N
ATOM  13931  CA  SER D 329     118.844  30.673  88.562  1.00 74.97           C
ATOM  13932  CB  SER D 329     117.333  30.593  88.783  1.00 75.02           C
ATOM  13933  OG  SER D 329     116.835  31.816  89.273  1.00 75.34           O
ATOM  13934  C   SER D 329     119.366  29.373  87.961  1.00 74.70           C
ATOM  13935  O   SER D 329     118.722  28.330  88.057  1.00 74.92           O
ATOM  13936  N   ASN D 330     120.531  29.451  87.331  1.00 74.34           N
ATOM  13937  CA  ASN D 330     121.271  28.270  86.930  1.00 74.15           C
ATOM  13938  CB  ASN D 330     121.365  28.181  85.411  1.00 73.98           C
ATOM  13939  CG  ASN D 330     120.037  27.883  84.764  1.00 73.96           C
ATOM  13940  OD1 ASN D 330     119.485  26.801  84.928  1.00 74.06           O
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ATOM	13941	ND2	ASN	D	330	119.520	28.840	84.008	1.00	74.16	N
ATOM	13942	C	ASN	D	330	122.665	28.341	87.536	1.00	74.17	C
ATOM	13943	O	ASN	D	330	123.280	29.413	87.530	1.00	74.13	O
ATOM	13944	N	PRO	D	331	123.171	27.204	88.056	1.00	74.17	N
ATOM	13945	CA	PRO	D	331	124.503	27.140	88.664	1.00	74.09	C
ATOM	13946	CB	PRO	D	331	124.488	25.793	89.391	1.00	73.96	C
ATOM	13947	CG	PRO	D	331	123.551	24.959	88.599	1.00	74.22	C
ATOM	13948	CD	PRO	D	331	122.493	25.895	88.078	1.00	74.16	C
ATOM	13949	C	PRO	D	331	125.617	27.188	87.611	1.00	74.22	C
ATOM	13950	O	PRO	D	331	126.344	26.207	87.413	1.00	74.16	O
ATOM	13951	N	LEU	D	332	125.745	28.341	86.958	1.00	74.42	N
ATOM	13952	CA	LEU	D	332	126.686	28.521	85.862	1.00	74.74	C
ATOM	13953	CB	LEU	D	332	126.423	29.843	85.134	1.00	74.46	C
ATOM	13954	CG	LEU	D	332	125.066	30.104	84.483	1.00	73.96	C
ATOM	13955	CD1	LEU	D	332	125.077	31.490	83.867	1.00	73.15	C
ATOM	13956	CD2	LEU	D	332	124.724	29.054	83.436	1.00	73.74	C
ATOM	13957	C	LEU	D	332	128.148	28.470	86.302	1.00	75.32	C
ATOM	13958	O	LEU	D	332	128.546	29.130	87.272	1.00	75.54	O
ATOM	13959	N	ALA	D	333	128.940	27.683	85.577	1.00	75.67	N
ATOM	13960	CA	ALA	D	333	130.388	27.718	85.704	1.00	75.88	C
ATOM	13961	CB	ALA	D	333	130.990	26.400	85.252	1.00	75.67	C
ATOM	13962	C	ALA	D	333	130.902	28.866	84.847	1.00	76.21	C
ATOM	13963	O	ALA	D	333	130.811	28.823	83.621	1.00	76.42	O
ATOM	13964	N	CYS	D	334	131.423	29.904	85.487	1.00	76.72	N
ATOM	13965	CA	CYS	D	334	131.947	31.051	84.747	1.00	77.36	C
ATOM	13966	CB	CYS	D	334	131.725	32.358	85.521	1.00	77.59	C
ATOM	13967	SG	CYS	D	334	129.938	32.788	85.624	1.00	80.26	S
ATOM	13968	C	CYS	D	334	133.401	30.844	84.306	1.00	77.17	C
ATOM	13969	O	CYS	D	334	134.316	31.520	84.782	1.00	77.27	O
ATOM	13970	N	ASP	D	335	133.579	29.876	83.404	1.00	76.99	N
ATOM	13971	CA	ASP	D	335	134.820	29.649	82.664	1.00	76.97	C
ATOM	13972	CB	ASP	D	335	135.163	28.151	82.624	1.00	77.03	C
ATOM	13973	CG	ASP	D	335	134.052	27.292	81.992	1.00	78.07	C
ATOM	13974	OD1	ASP	D	335	133.429	27.703	80.980	1.00	78.36	O
ATOM	13975	OD2	ASP	D	335	133.809	26.179	82.509	1.00	78.84	O
ATOM	13976	C	ASP	D	335	134.676	30.206	81.244	1.00	76.83	C
ATOM	13977	O	ASP	D	335	133.675	30.849	80.925	1.00	76.74	O
ATOM	13978	N	CYS	D	336	135.653	29.931	80.385	1.00	76.84	N
ATOM	13979	CA	CYS	D	336	135.682	30.497	79.028	1.00	77.14	C
ATOM	13980	CB	CYS	D	336	137.078	30.353	78.404	1.00	77.32	C
ATOM	13981	SG	CYS	D	336	137.566	28.674	77.951	1.00	79.27	S
ATOM	13982	C	CYS	D	336	134.588	30.016	78.056	1.00	76.83	C
ATOM	13983	O	CYS	D	336	134.412	30.594	76.988	1.00	76.79	O
ATOM	13984	N	ARG	D	337	133.849	28.973	78.428	1.00	76.62	N
ATOM	13985	CA	ARG	D	337	132.749	28.474	77.593	1.00	76.22	C
ATOM	13986	CB	ARG	D	337	132.298	27.088	78.053	1.00	76.08	C
ATOM	13987	CG	ARG	D	337	133.230	25.961	77.638	1.00	76.24	C
ATOM	13988	CD	ARG	D	337	132.803	24.648	78.239	1.00	76.46	C
ATOM	13989	NE	ARG	D	337	132.616	24.793	79.678	1.00	78.51	N
ATOM	13990	CZ	ARG	D	337	132.139	23.854	80.487	1.00	78.94	C
ATOM	13991	NH1	ARG	D	337	131.791	22.663	80.011	1.00	79.46	N
ATOM	13992	NH2	ARG	D	337	132.012	24.115	81.780	1.00	78.99	N
ATOM	13993	C	ARG	D	337	131.553	29.421	77.560	1.00	76.03	C
ATOM	13994	O	ARG	D	337	130.680	29.300	76.693	1.00	76.09	O
ATOM	13995	N	LEU	D	338	131.511	30.342	78.521	1.00	75.66	N
ATOM	13996	CA	LEU	D	338	130.453	31.343	78.619	1.00	75.29	C

ATOM	13997	CB	LEU	D	338	129.968	31.446	80.062	1.00	75.43	C
ATOM	13998	CG	LEU	D	338	128.632	30.833	80.480	1.00	75.91	C
ATOM	13999	CD1	LEU	D	338	128.316	29.540	79.745	1.00	76.99	C
ATOM	14000	CD2	LEU	D	338	128.661	30.602	81.975	1.00	76.15	C
ATOM	14001	C	LEU	D	338	130.952	32.702	78.152	1.00	74.86	C
ATOM	14002	O	LEU	D	338	130.202	33.681	78.126	1.00	74.78	O
ATOM	14003	N	LEU	D	339	132.226	32.754	77.785	1.00	74.20	N
ATOM	14004	CA	LEU	D	339	132.842	33.993	77.369	1.00	73.81	C
ATOM	14005	CB	LEU	D	339	134.318	33.769	77.026	1.00	73.68	C
ATOM	14006	CG	LEU	D	339	135.253	34.970	76.934	1.00	73.31	C
ATOM	14007	CD1	LEU	D	339	135.054	35.917	78.097	1.00	73.79	C
ATOM	14008	CD2	LEU	D	339	136.688	34.495	76.881	1.00	73.76	C
ATOM	14009	C	LEU	D	339	132.075	34.619	76.205	1.00	73.71	C
ATOM	14010	O	LEU	D	339	131.858	35.823	76.189	1.00	73.90	O
ATOM	14011	N	TRP	D	340	131.628	33.803	75.256	1.00	73.51	N
ATOM	14012	CA	TRP	D	340	130.841	34.313	74.130	1.00	73.31	C
ATOM	14013	CB	TRP	D	340	130.513	33.202	73.118	1.00	72.82	C
ATOM	14014	CG	TRP	D	340	129.471	32.224	73.579	1.00	71.93	C
ATOM	14015	CD1	TRP	D	340	129.683	31.068	74.265	1.00	71.62	C
ATOM	14016	NE1	TRP	D	340	128.490	30.437	74.516	1.00	71.66	N
ATOM	14017	CE2	TRP	D	340	127.475	31.184	73.983	1.00	71.45	C
ATOM	14018	CD2	TRP	D	340	128.059	32.322	73.384	1.00	71.11	C
ATOM	14019	CE3	TRP	D	340	127.227	33.263	72.764	1.00	70.66	C
ATOM	14020	CZ3	TRP	D	340	125.854	33.043	72.762	1.00	71.25	C
ATOM	14021	CH2	TRP	D	340	125.302	31.898	73.365	1.00	71.60	C
ATOM	14022	CZ2	TRP	D	340	126.095	30.955	73.975	1.00	71.85	C
ATOM	14023	C	TRP	D	340	129.569	35.049	74.576	1.00	73.51	C
ATOM	14024	O	TRP	D	340	129.162	36.010	73.930	1.00	73.68	O
ATOM	14025	N	VAL	D	341	128.955	34.596	75.669	1.00	73.73	N
ATOM	14026	CA	VAL	D	341	127.760	35.241	76.220	1.00	74.21	C
ATOM	14027	CB	VAL	D	341	127.063	34.358	77.279	1.00	74.18	C
ATOM	14028	CG1	VAL	D	341	125.874	35.073	77.882	1.00	74.19	C
ATOM	14029	CG2	VAL	D	341	126.619	33.036	76.686	1.00	74.35	C
ATOM	14030	C	VAL	D	341	128.140	36.562	76.874	1.00	74.88	C
ATOM	14031	O	VAL	D	341	127.493	37.597	76.655	1.00	75.00	O
ATOM	14032	N	PHE	D	342	129.194	36.514	77.685	1.00	75.33	N
ATOM	14033	CA	PHE	D	342	129.688	37.687	78.371	1.00	75.67	C
ATOM	14034	CB	PHE	D	342	130.926	37.339	79.196	1.00	75.61	C
ATOM	14035	CG	PHE	D	342	131.403	38.460	80.062	1.00	75.17	C
ATOM	14036	CD1	PHE	D	342	130.920	38.605	81.353	1.00	74.95	C
ATOM	14037	CE1	PHE	D	342	131.350	39.647	82.155	1.00	74.73	C
ATOM	14038	CZ	PHE	D	342	132.275	40.561	81.665	1.00	75.17	C
ATOM	14039	CE2	PHE	D	342	132.765	40.430	80.379	1.00	74.94	C
ATOM	14040	CD2	PHE	D	342	132.326	39.381	79.584	1.00	75.16	C
ATOM	14041	C	PHE	D	342	130.001	38.804	77.386	1.00	76.22	C
ATOM	14042	O	PHE	D	342	129.688	39.955	77.651	1.00	76.40	O
ATOM	14043	N	ARG	D	343	130.604	38.461	76.250	1.00	77.05	N
ATOM	14044	CA	ARG	D	343	130.980	39.453	75.236	1.00	77.99	C
ATOM	14045	CB	ARG	D	343	131.818	38.815	74.116	1.00	77.85	C
ATOM	14046	CG	ARG	D	343	133.185	38.275	74.530	1.00	77.17	C
ATOM	14047	CD	ARG	D	343	134.068	39.352	75.114	1.00	76.86	C
ATOM	14048	NE	ARG	D	343	135.255	38.791	75.756	1.00	77.27	N
ATOM	14049	CZ	ARG	D	343	135.979	39.414	76.686	1.00	77.52	C
ATOM	14050	NH1	ARG	D	343	137.047	38.819	77.204	1.00	77.01	N
ATOM	14051	NH2	ARG	D	343	135.639	40.629	77.107	1.00	77.41	N
ATOM	14052	C	ARG	D	343	129.758	40.164	74.643	1.00	78.89	C

ATOM	14053	O	ARG	D	343	129.880	41.211	73.997	1.00	78.86	O
ATOM	14054	N	ARG	D	344	128.581	39.594	74.887	1.00	80.05	N
ATOM	14055	CA	ARG	D	344	127.335	40.090	74.306	1.00	81.24	C
ATOM	14056	CB	ARG	D	344	126.693	39.006	73.418	1.00	81.01	C
ATOM	14057	CG	ARG	D	344	127.561	38.541	72.242	1.00	81.48	C
ATOM	14058	CD	ARG	D	344	126.924	37.362	71.518	1.00	81.88	C
ATOM	14059	NE	ARG	D	344	127.753	36.838	70.429	1.00	84.29	N
ATOM	14060	CZ	ARG	D	344	127.748	37.301	69.176	1.00	86.31	C
ATOM	14061	NH1	ARG	D	344	126.968	38.320	68.822	1.00	87.28	N
ATOM	14062	NH2	ARG	D	344	128.534	36.748	68.261	1.00	86.93	N
ATOM	14063	C	ARG	D	344	126.331	40.588	75.357	1.00	81.69	C
ATOM	14064	O	ARG	D	344	125.170	40.838	75.026	1.00	81.95	O
ATOM	14065	N	ARG	D	345	126.778	40.738	76.607	1.00	82.29	N
ATOM	14066	CA	ARG	D	345	125.918	41.183	77.718	1.00	82.95	C
ATOM	14067	CB	ARG	D	345	126.753	41.819	78.825	1.00	82.99	C
ATOM	14068	CG	ARG	D	345	127.535	40.862	79.675	1.00	83.51	C
ATOM	14069	CD	ARG	D	345	128.310	41.616	80.753	1.00	84.80	C
ATOM	14070	NE	ARG	D	345	129.339	42.518	80.222	1.00	84.77	N
ATOM	14071	CZ	ARG	D	345	130.107	43.303	80.975	1.00	85.43	C
ATOM	14072	NH1	ARG	D	345	131.013	44.091	80.408	1.00	86.14	N
ATOM	14073	NH2	ARG	D	345	129.973	43.308	82.300	1.00	85.21	N
ATOM	14074	C	ARG	D	345	124.861	42.204	77.305	1.00	83.39	C
ATOM	14075	O	ARG	D	345	123.674	42.061	77.625	1.00	83.40	O
ATOM	14076	N	TRP	D	346	125.296	43.237	76.592	1.00	83.89	N
ATOM	14077	CA	TRP	D	346	124.455	44.400	76.335	1.00	84.25	C
ATOM	14078	CB	TRP	D	346	125.308	45.665	76.224	1.00	84.54	C
ATOM	14079	CG	TRP	D	346	126.460	45.697	77.180	1.00	85.04	C
ATOM	14080	CD1	TRP	D	346	127.784	45.578	76.873	1.00	85.25	C
ATOM	14081	NE1	TRP	D	346	128.544	45.656	78.015	1.00	85.48	N
ATOM	14082	CE2	TRP	D	346	127.712	45.829	79.091	1.00	85.58	C
ATOM	14083	CD2	TRP	D	346	126.391	45.860	78.602	1.00	85.61	C
ATOM	14084	CE3	TRP	D	346	125.340	46.028	79.510	1.00	85.51	C
ATOM	14085	CZ3	TRP	D	346	125.639	46.158	80.854	1.00	85.21	C
ATOM	14086	CH2	TRP	D	346	126.963	46.124	81.309	1.00	85.00	C
ATOM	14087	CZ2	TRP	D	346	128.011	45.961	80.445	1.00	85.08	C
ATOM	14088	C	TRP	D	346	123.627	44.213	75.067	1.00	84.29	C
ATOM	14089	O	TRP	D	346	122.828	45.075	74.704	1.00	84.34	O
ATOM	14090	O	ARG	D	347	120.691	41.944	73.254	1.00	84.38	O
ATOM	14091	N	ARG	D	347	123.824	43.081	74.400	1.00	20.00	N
ATOM	14092	CA	ARG	D	347	122.972	42.692	73.282	1.00	20.00	C
ATOM	14093	C	ARG	D	347	121.811	41.822	73.751	1.00	20.00	C
ATOM	14094	CB	ARG	D	347	123.787	41.952	72.219	1.00	20.00	C
ATOM	14095	CG	ARG	D	347	124.742	42.841	71.439	1.00	20.00	C
ATOM	14096	CD	ARG	D	347	125.108	42.218	70.102	1.00	20.00	C
ATOM	14097	NE	ARG	D	347	126.468	42.560	69.694	1.00	20.00	N
ATOM	14098	CZ	ARG	D	347	127.455	42.837	70.540	1.00	20.00	C
ATOM	14099	NH1	ARG	D	347	127.236	42.814	71.847	1.00	20.00	N
ATOM	14100	NH2	ARG	D	347	128.661	43.138	70.079	1.00	20.00	N
ATOM	14101	N	LEU	D	348	122.084	40.945	74.711	1.00	84.04	N
ATOM	14102	CA	LEU	D	348	121.272	39.751	74.913	1.00	83.95	C
ATOM	14103	CB	LEU	D	348	122.136	38.595	75.420	1.00	83.80	C
ATOM	14104	CG	LEU	D	348	122.682	37.639	74.356	1.00	83.69	C
ATOM	14105	CD1	LEU	D	348	122.679	38.301	72.987	1.00	83.90	C
ATOM	14106	CD2	LEU	D	348	124.081	37.168	74.725	1.00	83.93	C
ATOM	14107	C	LEU	D	348	120.130	40.018	75.887	1.00	83.97	C
ATOM	14108	O	LEU	D	348	119.372	39.112	76.234	1.00	83.98	O

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ATOM  14109  N   ASN D 349     120.013  41.267  76.325  1.00 83.92           N
ATOM  14110  CA  ASN D 349     118.756  41.777  76.861  1.00 83.88           C
ATOM  14111  CB  ASN D 349     117.658  41.717  75.798  1.00 83.70           C
ATOM  14112  CG  ASN D 349     116.443  42.545  76.169  1.00 83.63           C
ATOM  14113  OD1 ASN D 349     115.305  42.130  75.952  1.00 83.74           O
ATOM  14114  ND2 ASN D 349     116.680  43.724  76.733  1.00 84.10           N
ATOM  14115  C   ASN D 349     118.316  41.024  78.112  1.00 83.87           C
ATOM  14116  O   ASN D 349     117.163  40.610  78.226  1.00 83.82           O
ATOM  14117  N   PHE D 350     119.243  40.850  79.049  1.00 84.08           N
ATOM  14118  CA  PHE D 350     118.937  40.193  80.322  1.00 84.20           C
ATOM  14119  CB  PHE D 350     120.194  39.962  81.162  1.00 84.08           C
ATOM  14120  CG  PHE D 350     121.326  39.325  80.425  1.00 83.95           C
ATOM  14121  CD1 PHE D 350     121.117  38.232  79.595  1.00 83.88           C
ATOM  14122  CE1 PHE D 350     122.173  37.641  78.924  1.00 83.66           C
ATOM  14123  CZ  PHE D 350     123.459  38.127  79.099  1.00 83.88           C
ATOM  14124  CE2 PHE D 350     123.682  39.207  79.941  1.00 83.96           C
ATOM  14125  CD2 PHE D 350     122.618  39.798  80.599  1.00 83.82           C
ATOM  14126  C   PHE D 350     117.994  41.034  81.158  1.00 84.56           C
ATOM  14127  O   PHE D 350     117.097  40.502  81.809  1.00 84.51           O
ATOM  14128  N   ASN D 351     118.221  42.348  81.147  1.00 85.06           N
ATOM  14129  CA  ASN D 351     117.528  43.276  82.038  1.00 85.53           C
ATOM  14130  CB  ASN D 351     116.017  43.324  81.746  1.00 85.57           C
ATOM  14131  CG  ASN D 351     115.691  44.116  80.492  1.00 85.90           C
ATOM  14132  OD1 ASN D 351     116.090  45.275  80.351  1.00 86.67           O
ATOM  14133  ND2 ASN D 351     114.956  43.497  79.578  1.00 86.20           N
ATOM  14134  C   ASN D 351     117.818  42.946  83.503  1.00 85.79           C
ATOM  14135  O   ASN D 351     118.963  43.065  83.952  1.00 85.78           O
ATOM  14136  N   ARG D 352     116.794  42.517  84.237  1.00 86.04           N
ATOM  14137  CA  ARG D 352     116.965  42.165  85.646  1.00 86.30           C
ATOM  14138  CB  ARG D 352     115.708  42.514  86.450  1.00 86.38           C
ATOM  14139  CG  ARG D 352     115.420  44.007  86.518  1.00 86.72           C
ATOM  14140  CD  ARG D 352     114.228  44.312  87.421  1.00 86.66           C
ATOM  14141  NE  ARG D 352     113.821  45.716  87.340  1.00 86.72           N
ATOM  14142  CZ  ARG D 352     114.475  46.727  87.907  1.00 86.84           C
ATOM  14143  NH1 ARG D 352     115.585  46.504  88.601  1.00 86.80           N
ATOM  14144  NH2 ARG D 352     114.023  47.968  87.775  1.00 86.94           N
ATOM  14145  C   ARG D 352     117.352  40.694  85.837  1.00 86.16           C
ATOM  14146  O   ARG D 352     117.860  40.312  86.897  1.00 86.25           O
ATOM  14147  N   GLN D 353     117.127  39.882  84.805  1.00 85.85           N
ATOM  14148  CA  GLN D 353     117.415  38.450  84.862  1.00 85.71           C
ATOM  14149  CB  GLN D 353     116.479  37.661  83.930  1.00 85.93           C
ATOM  14150  CG  GLN D 353     115.094  38.270  83.694  1.00 86.91           C
ATOM  14151  CD  GLN D 353     114.254  38.350  84.953  1.00 87.80           C
ATOM  14152  OE1 GLN D 353     113.822  37.330  85.487  1.00 88.91           O
ATOM  14153  NE2 GLN D 353     114.008  39.568  85.427  1.00 87.24           N
ATOM  14154  C   GLN D 353     118.875  38.185  84.487  1.00 85.30           C
ATOM  14155  O   GLN D 353     119.164  37.502  83.503  1.00 85.45           O
ATOM  14156  N   GLN D 354     119.790  38.728  85.281  1.00 84.79           N
ATOM  14157  CA  GLN D 354     121.221  38.622  85.014  1.00 84.16           C
ATOM  14158  CB  GLN D 354     121.979  39.613  85.900  1.00 83.96           C
ATOM  14159  CG  GLN D 354     123.282  40.125  85.302  1.00 84.08           C
ATOM  14160  CD  GLN D 354     123.086  41.147  84.190  1.00 83.79           C
ATOM  14161  OE1 GLN D 354     122.014  41.736  84.047  1.00 83.66           O
ATOM  14162  NE2 GLN D 354     124.132  41.364  83.397  1.00 83.47           N
ATOM  14163  C   GLN D 354     121.724  37.197  85.257  1.00 83.77           C
ATOM  14164  O   GLN D 354     121.378  36.596  86.280  1.00 83.90           O
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ATOM	14165	N	PRO	D	355	122.530	36.646	84.317	1.00	83.32	N
ATOM	14166	CA	PRO	D	355	123.154	35.336	84.544	1.00	82.97	C
ATOM	14167	CB	PRO	D	355	124.066	35.152	83.324	1.00	82.75	C
ATOM	14168	CG	PRO	D	355	123.539	36.056	82.295	1.00	82.85	C
ATOM	14169	CD	PRO	D	355	122.907	37.212	83.009	1.00	83.27	C
ATOM	14170	C	PRO	D	355	123.994	35.386	85.814	1.00	82.79	C
ATOM	14171	O	PRO	D	355	124.630	36.407	86.090	1.00	82.87	O
ATOM	14172	N	SER	D	356	123.986	34.305	86.586	1.00	82.46	N
ATOM	14173	CA	SER	D	356	124.668	34.296	87.874	1.00	82.09	C
ATOM	14174	CB	SER	D	356	123.646	34.257	89.011	1.00	81.94	C
ATOM	14175	OG	SER	D	356	124.299	34.269	90.260	1.00	82.07	O
ATOM	14176	C	SER	D	356	125.670	33.148	88.000	1.00	81.94	C
ATOM	14177	O	SER	D	356	125.315	31.974	87.864	1.00	82.05	O
ATOM	14178	N	CYS	D	357	126.926	33.501	88.254	1.00	81.71	N
ATOM	14179	CA	CYS	D	357	127.990	32.518	88.447	1.00	81.48	C
ATOM	14180	CB	CYS	D	357	129.345	33.221	88.539	1.00	81.47	C
ATOM	14181	SG	CYS	D	357	129.808	34.196	87.091	1.00	81.53	S
ATOM	14182	C	CYS	D	357	127.767	31.717	89.721	1.00	81.38	C
ATOM	14183	O	CYS	D	357	127.394	32.274	90.753	1.00	81.55	O
ATOM	14184	N	ALA	D	358	127.991	30.411	89.650	1.00	81.20	N
ATOM	14185	CA	ALA	D	358	128.023	29.586	90.854	1.00	81.06	C
ATOM	14186	CB	ALA	D	358	127.093	28.409	90.729	1.00	80.91	C
ATOM	14187	C	ALA	D	358	129.449	29.124	91.138	1.00	81.10	C
ATOM	14188	O	ALA	D	358	129.861	29.037	92.295	1.00	81.30	O
ATOM	14189	N	THR	D	359	130.192	28.825	90.074	1.00	81.00	N
ATOM	14190	CA	THR	D	359	131.606	28.483	90.170	1.00	80.97	C
ATOM	14191	CB	THR	D	359	131.856	26.969	89.959	1.00	80.94	C
ATOM	14192	OG1	THR	D	359	131.528	26.607	88.614	1.00	81.45	O
ATOM	14193	CG2	THR	D	359	131.036	26.122	90.943	1.00	80.58	C
ATOM	14194	C	THR	D	359	132.383	29.306	89.138	1.00	81.03	C
ATOM	14195	O	THR	D	359	131.773	29.894	88.251	1.00	81.01	O
ATOM	14196	N	PRO	D	360	133.725	29.389	89.268	1.00	81.25	N
ATOM	14197	CA	PRO	D	360	134.560	28.864	90.356	1.00	81.42	C
ATOM	14198	CB	PRO	D	360	135.988	29.112	89.855	1.00	81.19	C
ATOM	14199	CG	PRO	D	360	135.866	30.223	88.895	1.00	81.05	C
ATOM	14200	CD	PRO	D	360	134.541	30.052	88.234	1.00	81.22	C
ATOM	14201	C	PRO	D	360	134.308	29.561	91.703	1.00	81.65	C
ATOM	14202	O	PRO	D	360	133.672	30.617	91.749	1.00	81.57	O
ATOM	14203	N	GLU	D	361	134.799	28.955	92.781	1.00	82.03	N
ATOM	14204	CA	GLU	D	361	134.617	29.459	94.143	1.00	82.49	C
ATOM	14205	CB	GLU	D	361	135.672	28.843	95.072	1.00	82.72	C
ATOM	14206	CG	GLU	D	361	135.410	29.042	96.576	1.00	84.09	C
ATOM	14207	CD	GLU	D	361	136.697	29.248	97.393	1.00	86.03	C
ATOM	14208	OE1	GLU	D	361	137.811	29.088	96.836	1.00	86.45	O
ATOM	14209	OE2	GLU	D	361	136.595	29.581	98.600	1.00	86.55	O
ATOM	14210	C	GLU	D	361	134.627	30.992	94.266	1.00	82.39	C
ATOM	14211	O	GLU	D	361	133.704	31.571	94.832	1.00	82.38	O
ATOM	14212	N	PHE	D	362	135.653	31.641	93.719	1.00	82.41	N
ATOM	14213	CA	PHE	D	362	135.898	33.068	93.981	1.00	82.51	C
ATOM	14214	CB	PHE	D	362	137.376	33.414	93.743	1.00	82.81	C
ATOM	14215	CG	PHE	D	362	137.750	33.535	92.296	1.00	83.35	C
ATOM	14216	CD1	PHE	D	362	138.050	32.400	91.540	1.00	84.18	C
ATOM	14217	CE1	PHE	D	362	138.399	32.506	90.191	1.00	84.38	C
ATOM	14218	CZ	PHE	D	362	138.454	33.761	89.590	1.00	84.38	C
ATOM	14219	CE2	PHE	D	362	138.164	34.904	90.340	1.00	84.66	C
ATOM	14220	CD2	PHE	D	362	137.816	34.786	91.685	1.00	83.97	C

ATOM	14221	C	PHE	D	362	134.982	34.087	93.275	1.00	82.37	C
ATOM	14222	O	PHE	D	362	135.089	35.289	93.528	1.00	82.25	O
ATOM	14223	N	VAL	D	363	134.100	33.620	92.393	1.00	82.29	N
ATOM	14224	CA	VAL	D	363	133.123	34.506	91.737	1.00	82.12	C
ATOM	14225	CB	VAL	D	363	133.349	34.637	90.199	1.00	82.09	C
ATOM	14226	CG1	VAL	D	363	134.579	35.460	89.908	1.00	82.10	C
ATOM	14227	CG2	VAL	D	363	133.436	33.275	89.523	1.00	81.88	C
ATOM	14228	C	VAL	D	363	131.687	34.074	92.011	1.00	82.16	C
ATOM	14229	O	VAL	D	363	130.753	34.518	91.333	1.00	82.08	O
ATOM	14230	N	GLN	D	364	131.526	33.210	93.014	1.00	82.21	N
ATOM	14231	CA	GLN	D	364	130.230	32.646	93.379	1.00	82.25	C
ATOM	14232	CB	GLN	D	364	130.381	31.729	94.593	1.00	82.16	C
ATOM	14233	CG	GLN	D	364	129.106	31.011	94.998	1.00	82.79	C
ATOM	14234	CD	GLN	D	364	129.107	30.575	96.451	1.00	83.88	C
ATOM	14235	OE1	GLN	D	364	130.034	30.871	97.210	1.00	84.59	O
ATOM	14236	NE2	GLN	D	364	128.057	29.869	96.850	1.00	84.54	N
ATOM	14237	C	GLN	D	364	129.209	33.745	93.664	1.00	82.18	C
ATOM	14238	O	GLN	D	364	129.479	34.667	94.433	1.00	82.26	O
ATOM	14239	N	GLY	D	365	128.050	33.653	93.020	1.00	82.10	N
ATOM	14240	CA	GLY	D	365	126.971	34.613	93.221	1.00	82.01	C
ATOM	14241	C	GLY	D	365	127.082	35.934	92.473	1.00	82.02	C
ATOM	14242	O	GLY	D	365	126.154	36.739	92.523	1.00	82.14	O
ATOM	14243	N	LYS	D	366	128.199	36.175	91.785	1.00	81.90	N
ATOM	14244	CA	LYS	D	366	128.364	37.416	91.021	1.00	81.91	C
ATOM	14245	CB	LYS	D	366	129.838	37.721	90.751	1.00	81.91	C
ATOM	14246	CG	LYS	D	366	130.585	38.200	91.992	1.00	82.65	C
ATOM	14247	CD	LYS	D	366	131.855	38.976	91.670	1.00	82.68	C
ATOM	14248	CE	LYS	D	366	132.458	39.539	92.956	1.00	82.85	C
ATOM	14249	NZ	LYS	D	366	133.730	40.293	92.743	1.00	82.86	N
ATOM	14250	C	LYS	D	366	127.567	37.404	89.720	1.00	81.98	C
ATOM	14251	O	LYS	D	366	127.572	36.417	88.980	1.00	82.10	O
ATOM	14252	N	GLU	D	367	126.868	38.501	89.457	1.00	81.91	N
ATOM	14253	CA	GLU	D	367	126.079	38.634	88.241	1.00	81.86	C
ATOM	14254	CB	GLU	D	367	124.864	39.527	88.493	1.00	81.88	C
ATOM	14255	CG	GLU	D	367	123.736	38.853	89.290	1.00	82.22	C
ATOM	14256	CD	GLU	D	367	122.511	39.749	89.493	1.00	82.14	C
ATOM	14257	OE1	GLU	D	367	122.684	40.967	89.742	1.00	82.84	O
ATOM	14258	OE2	GLU	D	367	121.373	39.230	89.418	1.00	81.88	O
ATOM	14259	C	GLU	D	367	126.952	39.214	87.141	1.00	81.80	C
ATOM	14260	O	GLU	D	367	127.845	40.012	87.422	1.00	81.75	O
ATOM	14261	N	PHE	D	368	126.694	38.810	85.896	1.00	81.84	N
ATOM	14262	CA	PHE	D	368	127.483	39.254	84.731	1.00	82.02	C
ATOM	14263	CB	PHE	D	368	126.864	38.745	83.422	1.00	81.75	C
ATOM	14264	CG	PHE	D	368	127.276	37.339	83.030	1.00	81.54	C
ATOM	14265	CD1	PHE	D	368	127.697	36.409	83.979	1.00	81.32	C
ATOM	14266	CE1	PHE	D	368	128.052	35.106	83.598	1.00	80.88	C
ATOM	14267	CZ	PHE	D	368	127.972	34.720	82.260	1.00	80.61	C
ATOM	14268	CE2	PHE	D	368	127.538	35.630	81.307	1.00	80.63	C
ATOM	14269	CD2	PHE	D	368	127.190	36.932	81.695	1.00	81.60	C
ATOM	14270	C	PHE	D	368	127.677	40.779	84.658	1.00	82.29	C
ATOM	14271	O	PHE	D	368	128.726	41.260	84.211	1.00	82.33	O
ATOM	14272	N	LYS	D	369	126.671	41.528	85.107	1.00	82.64	N
ATOM	14273	CA	LYS	D	369	126.756	42.993	85.171	1.00	83.01	C
ATOM	14274	CB	LYS	D	369	125.386	43.621	85.475	1.00	83.07	C
ATOM	14275	CG	LYS	D	369	124.748	43.154	86.778	1.00	83.58	C
ATOM	14276	CD	LYS	D	369	123.974	44.269	87.454	1.00	84.43	C

ATOM	14277	CE	LYS	D	369	123.832	43.992	88.944	1.00	84.83	C
ATOM	14278	NZ	LYS	D	369	123.620	45.238	89.734	1.00	85.24	N
ATOM	14279	C	LYS	D	369	127.798	43.497	86.176	1.00	83.07	C
ATOM	14280	O	LYS	D	369	128.225	44.642	86.086	1.00	83.18	O
ATOM	14281	N	ASP	D	370	128.194	42.647	87.124	1.00	83.31	N
ATOM	14282	CA	ASP	D	370	129.161	43.024	88.168	1.00	83.55	C
ATOM	14283	CB	ASP	D	370	129.020	42.124	89.408	1.00	83.70	C
ATOM	14284	CG	ASP	D	370	127.676	42.290	90.119	1.00	84.14	C
ATOM	14285	OD1	ASP	D	370	127.318	43.434	90.484	1.00	84.68	O
ATOM	14286	OD2	ASP	D	370	126.987	41.267	90.332	1.00	84.20	O
ATOM	14287	C	ASP	D	370	130.615	43.007	87.687	1.00	83.54	C
ATOM	14288	O	ASP	D	370	131.467	43.678	88.268	1.00	83.57	O
ATOM	14289	N	PHE	D	371	130.893	42.233	86.640	1.00	83.66	N
ATOM	14290	CA	PHE	D	371	132.239	42.132	86.079	1.00	83.79	C
ATOM	14291	CB	PHE	D	371	132.347	40.921	85.150	1.00	83.86	C
ATOM	14292	CG	PHE	D	371	132.244	39.591	85.844	1.00	83.84	C
ATOM	14293	CD1	PHE	D	371	133.360	39.018	86.453	1.00	83.97	C
ATOM	14294	CE1	PHE	D	371	133.271	37.783	87.082	1.00	83.72	C
ATOM	14295	CZ	PHE	D	371	132.058	37.102	87.095	1.00	83.77	C
ATOM	14296	CE2	PHE	D	371	130.943	37.662	86.484	1.00	83.29	C
ATOM	14297	CD2	PHE	D	371	131.043	38.895	85.857	1.00	83.14	C
ATOM	14298	C	PHE	D	371	132.602	43.383	85.280	1.00	83.93	C
ATOM	14299	O	PHE	D	371	131.756	43.920	84.562	1.00	83.99	O
ATOM	14300	N	PRO	D	372	133.867	43.839	85.377	1.00	84.02	N
ATOM	14301	CA	PRO	D	372	134.323	44.999	84.603	1.00	84.11	C
ATOM	14302	CB	PRO	D	372	135.766	45.198	85.087	1.00	84.13	C
ATOM	14303	CG	PRO	D	372	136.181	43.869	85.614	1.00	84.03	C
ATOM	14304	CD	PRO	D	372	134.944	43.294	86.226	1.00	84.05	C
ATOM	14305	C	PRO	D	372	134.295	44.762	83.086	1.00	84.22	C
ATOM	14306	O	PRO	D	372	133.987	43.658	82.635	1.00	84.15	O
ATOM	14307	N	ASP	D	373	134.607	45.802	82.315	1.00	84.40	N
ATOM	14308	CA	ASP	D	373	134.670	45.700	80.853	1.00	84.38	C
ATOM	14309	CB	ASP	D	373	134.669	47.094	80.209	1.00	84.59	C
ATOM	14310	CG	ASP	D	373	133.269	47.688	80.093	1.00	85.02	C
ATOM	14311	OD1	ASP	D	373	132.285	46.908	79.992	1.00	85.22	O
ATOM	14312	OD2	ASP	D	373	133.161	48.938	80.094	1.00	84.93	O
ATOM	14313	C	ASP	D	373	135.890	44.887	80.415	1.00	84.12	C
ATOM	14314	O	ASP	D	373	135.744	43.768	79.910	1.00	83.88	O
ATOM	14315	N	VAL	D	374	137.082	45.453	80.610	1.00	83.73	N
ATOM	14316	CA	VAL	D	374	138.328	44.710	80.435	1.00	83.41	C
ATOM	14317	CB	VAL	D	374	139.566	45.652	80.411	1.00	83.47	C
ATOM	14318	CG1	VAL	D	374	140.876	44.859	80.483	1.00	83.25	C
ATOM	14319	CG2	VAL	D	374	139.544	46.537	79.168	1.00	83.48	C
ATOM	14320	C	VAL	D	374	138.429	43.696	81.577	1.00	83.20	C
ATOM	14321	O	VAL	D	374	138.424	44.071	82.752	1.00	83.25	O
ATOM	14322	N	LEU	D	375	138.491	42.413	81.229	1.00	82.78	N
ATOM	14323	CA	LEU	D	375	138.543	41.355	82.233	1.00	82.39	C
ATOM	14324	CB	LEU	D	375	137.994	40.043	81.675	1.00	82.27	C
ATOM	14325	CG	LEU	D	375	136.480	39.845	81.715	1.00	81.53	C
ATOM	14326	CD1	LEU	D	375	136.123	38.595	80.950	1.00	81.51	C
ATOM	14327	CD2	LEU	D	375	135.962	39.761	83.141	1.00	80.98	C
ATOM	14328	C	LEU	D	375	139.939	41.125	82.782	1.00	82.35	C
ATOM	14329	O	LEU	D	375	140.929	41.217	82.059	1.00	82.38	O
ATOM	14330	N	LEU	D	376	140.002	40.824	84.074	1.00	82.30	N
ATOM	14331	CA	LEU	D	376	141.248	40.423	84.714	1.00	82.25	C
ATOM	14332	CB	LEU	D	376	141.124	40.544	86.240	1.00	82.21	C

ATOM	14333	CG	LEU	D	376	141.246	41.943	86.853	1.00	82.27	C
ATOM	14334	CD1	LEU	D	376	140.552	42.008	88.210	1.00	82.04	C
ATOM	14335	CD2	LEU	D	376	142.712	42.385	86.963	1.00	82.17	C
ATOM	14336	C	LEU	D	376	141.602	38.986	84.323	1.00	82.24	C
ATOM	14337	O	LEU	D	376	140.760	38.268	83.759	1.00	82.28	O
ATOM	14338	N	PRO	D	377	142.855	38.564	84.597	1.00	82.13	N
ATOM	14339	CA	PRO	D	377	143.175	37.139	84.524	1.00	81.97	C
ATOM	14340	CB	PRO	D	377	144.667	37.096	84.885	1.00	82.03	C
ATOM	14341	CG	PRO	D	377	144.926	38.367	85.623	1.00	81.98	C
ATOM	14342	CD	PRO	D	377	144.034	39.368	84.971	1.00	82.14	C
ATOM	14343	C	PRO	D	377	142.364	36.378	85.566	1.00	81.72	C
ATOM	14344	O	PRO	D	377	141.918	36.980	86.548	1.00	81.83	O
ATOM	14345	N	ASN	D	378	142.181	35.075	85.348	1.00	81.36	N
ATOM	14346	CA	ASN	D	378	141.412	34.192	86.250	1.00	81.04	C
ATOM	14347	CB	ASN	D	378	141.843	34.338	87.721	1.00	81.19	C
ATOM	14348	CG	ASN	D	378	143.361	34.365	87.897	1.00	81.55	C
ATOM	14349	OD1	ASN	D	378	144.088	33.566	87.304	1.00	82.23	O
ATOM	14350	ND2	ASN	D	378	143.840	35.292	88.718	1.00	81.47	N
ATOM	14351	C	ASN	D	378	139.886	34.298	86.123	1.00	80.72	C
ATOM	14352	O	ASN	D	378	139.168	33.400	86.566	1.00	80.80	O
ATOM	14353	N	TYR	D	379	139.389	35.383	85.528	1.00	80.33	N
ATOM	14354	CA	TYR	D	379	137.967	35.473	85.181	1.00	79.91	C
ATOM	14355	CB	TYR	D	379	137.464	36.922	85.145	1.00	80.08	C
ATOM	14356	CG	TYR	D	379	137.457	37.627	86.485	1.00	80.30	C
ATOM	14357	CD1	TYR	D	379	137.012	36.981	87.638	1.00	80.25	C
ATOM	14358	CE1	TYR	D	379	137.009	37.626	88.867	1.00	80.37	C
ATOM	14359	CZ	TYR	D	379	137.440	38.935	88.954	1.00	80.64	C
ATOM	14360	OH	TYR	D	379	137.437	39.574	90.177	1.00	80.63	O
ATOM	14361	CE2	TYR	D	379	137.878	39.603	87.820	1.00	80.73	C
ATOM	14362	CD2	TYR	D	379	137.880	38.948	86.595	1.00	80.47	C
ATOM	14363	C	TYR	D	379	137.714	34.814	83.837	1.00	79.53	C
ATOM	14364	O	TYR	D	379	138.441	35.059	82.874	1.00	79.58	O
ATOM	14365	N	PHE	D	380	136.682	33.974	83.787	1.00	79.07	N
ATOM	14366	CA	PHE	D	380	136.267	33.287	82.561	1.00	78.61	C
ATOM	14367	CB	PHE	D	380	135.544	34.244	81.609	1.00	78.30	C
ATOM	14368	CG	PHE	D	380	134.219	34.704	82.123	1.00	77.93	C
ATOM	14369	CD1	PHE	D	380	133.076	33.964	81.885	1.00	77.21	C
ATOM	14370	CE1	PHE	D	380	131.847	34.384	82.366	1.00	77.43	C
ATOM	14371	CZ	PHE	D	380	131.750	35.549	83.101	1.00	77.45	C
ATOM	14372	CE2	PHE	D	380	132.886	36.295	83.356	1.00	77.97	C
ATOM	14373	CD2	PHE	D	380	134.115	35.871	82.868	1.00	78.08	C
ATOM	14374	C	PHE	D	380	137.423	32.589	81.870	1.00	78.58	C
ATOM	14375	O	PHE	D	380	137.624	32.732	80.668	1.00	78.62	O
ATOM	14376	N	THR	D	381	138.188	31.843	82.654	1.00	78.73	N
ATOM	14377	CA	THR	D	381	139.318	31.093	82.134	1.00	78.91	C
ATOM	14378	CB	THR	D	381	140.589	31.316	82.970	1.00	78.89	C
ATOM	14379	OG1	THR	D	381	140.295	31.096	84.356	1.00	78.82	O
ATOM	14380	CG2	THR	D	381	141.122	32.717	82.771	1.00	79.10	C
ATOM	14381	C	THR	D	381	139.024	29.610	82.156	1.00	78.97	C
ATOM	14382	O	THR	D	381	138.280	29.123	83.008	1.00	79.14	O
ATOM	14383	N	CYS	D	382	139.615	28.901	81.206	1.00	78.94	N
ATOM	14384	CA	CYS	D	382	139.667	27.458	81.255	1.00	79.16	C
ATOM	14385	CB	CYS	D	382	138.980	26.857	80.028	1.00	79.30	C
ATOM	14386	SG	CYS	D	382	137.300	27.531	79.658	1.00	81.84	S
ATOM	14387	C	CYS	D	382	141.146	27.090	81.308	1.00	78.78	C
ATOM	14388	O	CYS	D	382	142.003	27.898	80.940	1.00	78.72	O

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ATOM  14389  N   ARG D 383     141.454  25.896  81.800  1.00 78.43           N
ATOM  14390  CA  ARG D 383     142.828  25.405  81.770  1.00 78.11           C
ATOM  14391  CB  ARG D 383     143.131  24.526  82.986  1.00 78.10           C
ATOM  14392  CG  ARG D 383     144.589  24.098  83.087  1.00 78.69           C
ATOM  14393  CD  ARG D 383     145.002  23.767  84.528  1.00 79.72           C
ATOM  14394  NE  ARG D 383     144.233  22.662  85.118  1.00 80.53           N
ATOM  14395  CZ  ARG D 383     144.390  21.369  84.821  1.00 80.27           C
ATOM  14396  NH1 ARG D 383     145.283  20.978  83.916  1.00 79.85           N
ATOM  14397  NH2 ARG D 383     143.636  20.460  85.427  1.00 79.91           N
ATOM  14398  C   ARG D 383     143.071  24.660  80.458  1.00 77.79           C
ATOM  14399  O   ARG D 383     142.540  23.566  80.240  1.00 77.75           O
ATOM  14400  N   ARG D 384     143.864  25.279  79.586  1.00 77.42           N
ATOM  14401  CA  ARG D 384     144.165  24.759  78.253  1.00 76.95           C
ATOM  14402  CB  ARG D 384     145.208  25.650  77.578  1.00 76.74           C
ATOM  14403  CG  ARG D 384     145.606  25.212  76.176  1.00 76.41           C
ATOM  14404  CD  ARG D 384     146.458  26.267  75.512  1.00 75.92           C
ATOM  14405  NE  ARG D 384     146.734  25.951  74.117  1.00 75.03           N
ATOM  14406  CZ  ARG D 384     147.080  26.851  73.204  1.00 74.82           C
ATOM  14407  NH1 ARG D 384     147.182  28.132  73.526  1.00 74.58           N
ATOM  14408  NH2 ARG D 384     147.314  26.468  71.960  1.00 75.64           N
ATOM  14409  C   ARG D 384     144.654  23.315  78.274  1.00 76.98           C
ATOM  14410  O   ARG D 384     145.428  22.921  79.153  1.00 77.09           O
ATOM  14411  N   ALA D 385     144.188  22.537  77.302  1.00 77.03           N
ATOM  14412  CA  ALA D 385     144.634  21.166  77.107  1.00 77.17           C
ATOM  14413  CB  ALA D 385     143.900  20.540  75.947  1.00 77.03           C
ATOM  14414  C   ALA D 385     146.133  21.142  76.861  1.00 77.50           C
ATOM  14415  O   ALA D 385     146.653  21.928  76.070  1.00 77.36           O
ATOM  14416  N   ARG D 386     146.819  20.248  77.564  1.00 78.09           N
ATOM  14417  CA  ARG D 386     148.263  20.124  77.465  1.00 78.83           C
ATOM  14418  CB  ARG D 386     148.939  20.873  78.621  1.00 78.72           C
ATOM  14419  CG  ARG D 386     150.330  21.426  78.295  1.00 79.39           C
ATOM  14420  CD  ARG D 386     150.878  22.275  79.434  1.00 79.35           C
ATOM  14421  NE  ARG D 386     151.278  21.449  80.576  1.00 80.88           N
ATOM  14422  CZ  ARG D 386     151.204  21.826  81.851  1.00 80.71           C
ATOM  14423  NH1 ARG D 386     150.738  23.025  82.177  1.00 81.40           N
ATOM  14424  NH2 ARG D 386     151.584  20.992  82.807  1.00 80.66           N
ATOM  14425  C   ARG D 386     148.653  18.655  77.486  1.00 79.12           C
ATOM  14426  O   ARG D 386     148.344  17.945  78.441  1.00 79.31           O
ATOM  14427  N   ILE D 387     149.311  18.194  76.425  1.00 79.67           N
ATOM  14428  CA  ILE D 387     149.861  16.840  76.401  1.00 80.28           C
ATOM  14429  CB  ILE D 387     150.100  16.335  74.963  1.00 80.06           C
ATOM  14430  CG1 ILE D 387     148.758  16.161  74.245  1.00 79.52           C
ATOM  14431  CD1 ILE D 387     148.842  16.119  72.731  1.00 78.30           C
ATOM  14432  CG2 ILE D 387     150.851  15.008  74.977  1.00 79.96           C
ATOM  14433  C   ILE D 387     151.136  16.821  77.249  1.00 81.17           C
ATOM  14434  O   ILE D 387     152.092  17.557  76.981  1.00 81.15           O
ATOM  14435  N   ARG D 388     151.129  15.980  78.280  1.00 82.24           N
ATOM  14436  CA  ARG D 388     152.113  16.069  79.361  1.00 83.43           C
ATOM  14437  CB  ARG D 388     151.642  15.301  80.607  1.00 83.60           C
ATOM  14438  CG  ARG D 388     150.212  15.636  81.029  1.00 84.86           C
ATOM  14439  CD  ARG D 388     150.071  15.894  82.529  1.00 87.04           C
ATOM  14440  NE  ARG D 388     150.328  14.720  83.370  1.00 88.78           N
ATOM  14441  CZ  ARG D 388     149.460  13.731  83.592  1.00 89.29           C
ATOM  14442  NH1 ARG D 388     149.802  12.726  84.386  1.00 89.10           N
ATOM  14443  NH2 ARG D 388     148.258  13.733  83.019  1.00 89.61           N
ATOM  14444  C   ARG D 388     153.525  15.649  78.962  1.00 83.87           C
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ATOM  14445  O   ARG D 388     154.491  16.342  79.298  1.00 84.03           O
ATOM  14446  N   ASP D 389     153.644  14.528  78.251  1.00 84.42           N
ATOM  14447  CA  ASP D 389     154.960  14.027  77.831  1.00 84.93           C
ATOM  14448  CB  ASP D 389     155.040  12.507  77.959  1.00 85.04           C
ATOM  14449  CG  ASP D 389     156.351  11.957  77.438  1.00 85.36           C
ATOM  14450  OD1 ASP D 389     157.402  12.293  78.030  1.00 86.11           O
ATOM  14451  OD2 ASP D 389     156.328  11.207  76.436  1.00 85.00           O
ATOM  14452  C   ASP D 389     155.340  14.436  76.405  1.00 85.11           C
ATOM  14453  O   ASP D 389     154.593  14.180  75.455  1.00 85.10           O
ATOM  14454  N   ARG D 390     156.514  15.049  76.263  1.00 85.25           N
ATOM  14455  CA  ARG D 390     156.967  15.535  74.959  1.00 85.44           C
ATOM  14456  CB  ARG D 390     157.359  17.027  75.014  1.00 85.51           C
ATOM  14457  CG  ARG D 390     156.321  17.986  75.631  1.00 86.02           C
ATOM  14458  CD  ARG D 390     154.882  17.684  75.211  1.00 87.15           C
ATOM  14459  NE  ARG D 390     154.620  17.942  73.795  1.00 88.27           N
ATOM  14460  CZ  ARG D 390     153.710  18.802  73.342  1.00 88.32           C
ATOM  14461  NH1 ARG D 390     153.551  18.963  72.037  1.00 88.51           N
ATOM  14462  NH2 ARG D 390     152.954  19.496  74.185  1.00 88.06           N
ATOM  14463  C   ARG D 390     158.104  14.689  74.370  1.00 85.44           C
ATOM  14464  O   ARG D 390     158.873  15.174  73.536  1.00 85.61           O
ATOM  14465  N   LYS D 391     158.211  13.433  74.808  1.00 85.34           N
ATOM  14466  CA  LYS D 391     159.144  12.484  74.189  1.00 85.19           C
ATOM  14467  CB  LYS D 391     159.679  11.458  75.198  1.00 85.29           C
ATOM  14468  CG  LYS D 391     160.291  12.047  76.473  1.00 86.01           C
ATOM  14469  CD  LYS D 391     161.629  12.752  76.239  1.00 86.80           C
ATOM  14470  CE  LYS D 391     162.074  13.503  77.493  1.00 86.66           C
ATOM  14471  NZ  LYS D 391     163.362  14.223  77.300  1.00 86.48           N
ATOM  14472  C   LYS D 391     158.424  11.777  73.050  1.00 84.85           C
ATOM  14473  O   LYS D 391     157.299  11.303  73.222  1.00 84.79           O
ATOM  14474  N   ALA D 392     159.074  11.724  71.889  1.00 84.47           N
ATOM  14475  CA  ALA D 392     158.465  11.166  70.681  1.00 84.05           C
ATOM  14476  CB  ALA D 392     159.246  11.595  69.443  1.00 84.19           C
ATOM  14477  C   ALA D 392     158.363   9.645  70.752  1.00 83.56           C
ATOM  14478  O   ALA D 392     159.323   8.968  71.110  1.00 83.51           O
ATOM  14479  N   GLN D 393     157.190   9.122  70.412  1.00 82.96           N
ATOM  14480  CA  GLN D 393     156.952   7.685  70.421  1.00 82.45           C
ATOM  14481  CB  GLN D 393     155.482   7.386  70.703  1.00 82.45           C
ATOM  14482  CG  GLN D 393     155.065   7.614  72.142  1.00 82.78           C
ATOM  14483  CD  GLN D 393     153.564   7.726  72.292  1.00 83.55           C
ATOM  14484  OE1 GLN D 393     152.896   6.770  72.682  1.00 83.58           O
ATOM  14485  NE2 GLN D 393     153.019   8.894  71.964  1.00 84.00           N
ATOM  14486  C   GLN D 393     157.366   7.052  69.102  1.00 82.05           C
ATOM  14487  O   GLN D 393     156.849   7.400  68.041  1.00 81.99           O
ATOM  14488  N   GLN D 394     158.308   6.120  69.182  1.00 81.59           N
ATOM  14489  CA  GLN D 394     158.758   5.367  68.025  1.00 81.14           C
ATOM  14490  CB  GLN D 394     160.278   5.502  67.854  1.00 81.29           C
ATOM  14491  CG  GLN D 394     160.793   6.917  67.570  1.00 81.27           C
ATOM  14492  CD  GLN D 394     160.733   7.300  66.096  1.00 81.20           C
ATOM  14493  OE1 GLN D 394     160.620   6.443  65.217  1.00 81.27           O
ATOM  14494  NE2 GLN D 394     160.815   8.597  65.823  1.00 80.77           N
ATOM  14495  C   GLN D 394     158.399   3.906  68.251  1.00 80.87           C
ATOM  14496  O   GLN D 394     159.101   3.201  68.984  1.00 80.80           O
ATOM  14497  N   VAL D 395     157.306   3.448  67.641  1.00 80.50           N
ATOM  14498  CA  VAL D 395     156.910   2.039  67.787  1.00 80.25           C
ATOM  14499  CB  VAL D 395     155.488   1.856  68.388  1.00 80.29           C
ATOM  14500  CG1 VAL D 395     155.351   2.628  69.705  1.00 80.41           C
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ATOM  14501  CG2 VAL D 395     154.419   2.274  67.404  1.00 80.46           C
ATOM  14502  C   VAL D 395     157.072   1.212  66.510  1.00 79.93           C
ATOM  14503  O   VAL D 395     156.680   1.627  65.418  1.00 79.81           O
ATOM  14504  N   PHE D 396     157.669   0.038  66.676  1.00 79.69           N
ATOM  14505  CA  PHE D 396     157.883  -0.895  65.584  1.00 79.60           C
ATOM  14506  CB  PHE D 396     159.338  -1.373  65.569  1.00 79.65           C
ATOM  14507  CG  PHE D 396     160.324  -0.315  65.141  1.00 79.75           C
ATOM  14508  CD1 PHE D 396     160.918  -0.373  63.881  1.00 79.84           C
ATOM  14509  CE1 PHE D 396     161.833   0.602  63.476  1.00 79.73           C
ATOM  14510  CZ  PHE D 396     162.161   1.648  64.340  1.00 79.60           C
ATOM  14511  CE2 PHE D 396     161.574   1.714  65.602  1.00 79.40           C
ATOM  14512  CD2 PHE D 396     160.665   0.734  65.997  1.00 79.38           C
ATOM  14513  C   PHE D 396     156.928  -2.076  65.734  1.00 79.51           C
ATOM  14514  O   PHE D 396     156.703  -2.568  66.843  1.00 79.45           O
ATOM  14515  N   VAL D 397     156.363  -2.519  64.615  1.00 79.44           N
ATOM  14516  CA  VAL D 397     155.354  -3.576  64.628  1.00 79.34           C
ATOM  14517  CB  VAL D 397     153.914  -2.982  64.728  1.00 79.20           C
ATOM  14518  CG1 VAL D 397     153.491  -2.320  63.423  1.00 78.90           C
ATOM  14519  CG2 VAL D 397     152.913  -4.043  65.148  1.00 79.13           C
ATOM  14520  C   VAL D 397     155.486  -4.512  63.423  1.00 79.48           C
ATOM  14521  O   VAL D 397     155.791  -4.074  62.312  1.00 79.50           O
ATOM  14522  N   ASP D 398     155.281  -5.805  63.664  1.00 79.56           N
ATOM  14523  CA  ASP D 398     155.190  -6.780  62.588  1.00 79.69           C
ATOM  14524  CB  ASP D 398     155.544  -8.184  63.091  1.00 79.80           C
ATOM  14525  CG  ASP D 398     157.041  -8.469  63.063  1.00 80.02           C
ATOM  14526  OD1 ASP D 398     157.845  -7.532  62.848  1.00 80.36           O
ATOM  14527  OD2 ASP D 398     157.413  -9.646  63.260  1.00 80.15           O
ATOM  14528  C   ASP D 398     153.772  -6.767  62.036  1.00 79.75           C
ATOM  14529  O   ASP D 398     152.804  -6.753  62.804  1.00 79.84           O
ATOM  14530  N   GLU D 399     153.657  -6.763  60.708  1.00 79.70           N
ATOM  14531  CA  GLU D 399     152.361  -6.770  60.029  1.00 79.60           C
ATOM  14532  CB  GLU D 399     152.550  -7.059  58.538  1.00 79.72           C
ATOM  14533  CG  GLU D 399     151.274  -6.951  57.713  1.00 80.62           C
ATOM  14534  CD  GLU D 399     151.544  -6.909  56.220  1.00 81.63           C
ATOM  14535  OE1 GLU D 399     152.030  -7.922  55.663  1.00 81.89           O
ATOM  14536  OE2 GLU D 399     151.256  -5.860  55.604  1.00 82.10           O
ATOM  14537  C   GLU D 399     151.401  -7.782  60.656  1.00 79.31           C
ATOM  14538  O   GLU D 399     151.738  -8.958  60.799  1.00 79.24           O
ATOM  14539  N   GLY D 400     150.224  -7.304  61.051  1.00 79.04           N
ATOM  14540  CA  GLY D 400     149.193  -8.150  61.651  1.00 78.81           C
ATOM  14541  C   GLY D 400     149.176  -8.230  63.172  1.00 78.61           C
ATOM  14542  O   GLY D 400     148.472  -9.063  63.740  1.00 78.55           O
ATOM  14543  N   HIS D 401     149.942  -7.367  63.834  1.00 78.46           N
ATOM  14544  CA  HIS D 401     149.963  -7.326  65.296  1.00 78.27           C
ATOM  14545  CB  HIS D 401     151.391  -7.475  65.818  1.00 78.31           C
ATOM  14546  CG  HIS D 401     151.983  -8.823  65.569  1.00 78.43           C
ATOM  14547  ND1 HIS D 401     152.494  -9.195  64.345  1.00 78.73           N
ATOM  14548  CE1 HIS D 401     152.953 -10.432  64.420  1.00 79.03           C
ATOM  14549  NE2 HIS D 401     152.756 -10.876  65.649  1.00 78.82           N
ATOM  14550  CD2 HIS D 401     152.150  -9.889  66.388  1.00 78.56           C
ATOM  14551  C   HIS D 401     149.326  -6.057  65.864  1.00 78.10           C
ATOM  14552  O   HIS D 401     149.163  -5.059  65.156  1.00 77.81           O
ATOM  14553  N   THR D 402     148.978  -6.115  67.150  1.00 78.06           N
ATOM  14554  CA  THR D 402     148.340  -5.007  67.865  1.00 78.01           C
ATOM  14555  CB  THR D 402     147.365  -5.530  68.955  1.00 78.05           C
ATOM  14556  OG1 THR D 402     146.541  -6.570  68.414  1.00 78.25           O
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ATOM  14557  CG2 THR D 402     146.473  -4.417  69.467  1.00 77.94           C
ATOM  14558  C   THR D 402.    149.381  -4.086  68.506  1.00 77.90           C
ATOM  14559  O   THR D 402     150.330  -4.548  69.142  1.00 77.80           O
ATOM  14560  N   VAL D 403     149.189  -2.782  68.333  1.00 77.89           N
ATOM  14561  CA  VAL D 403     150.103  -1.780  68.872  1.00 77.88           C
ATOM  14562  CB  VAL D 403     151.172  -1.379  67.819  1.00 77.89           C
ATOM  14563  CG1 VAL D 403     151.324   0.138  67.694  1.00 77.92           C
ATOM  14564  CG2 VAL D 403     152.503  -2.048  68.156  1.00 78.01           C
ATOM  14565  C   VAL D 403     149.353  -0.577  69.434  1.00 77.86           C
ATOM  14566  O   VAL D 403     148.260  -0.248  68.972  1.00 77.64           O
ATOM  14567  N   GLN D 404     149.946   0.062  70.443  1.00 78.15           N
ATOM  14568  CA  GLN D 404     149.328   1.208  71.117  1.00 78.50           C
ATOM  14569  CB  GLN D 404     148.855   0.807  72.516  1.00 78.46           C
ATOM  14570  CG  GLN D 404     147.778  -0.268  72.524  1.00 78.71           C
ATOM  14571  CD  GLN D 404     147.224  -0.552  73.908  1.00 78.80           C
ATOM  14572  OE1 GLN D 404     146.330  -1.385  74.067  1.00 79.16           O
ATOM  14573  NE2 GLN D 404     147.749   0.139  74.917  1.00 79.30           N
ATOM  14574  C   GLN D 404     150.235   2.439  71.221  1.00 78.51           C
ATOM  14575  O   GLN D 404     151.432   2.313  71.470  1.00 78.50           O
ATOM  14576  N   PHE D 405     149.649   3.619  71.015  1.00 78.69           N
ATOM  14577  CA  PHE D 405     150.305   4.898  71.304  1.00 78.92           C
ATOM  14578  CB  PHE D 405     150.142   5.883  70.153  1.00 78.90           C
ATOM  14579  CG  PHE D 405     150.843   5.492  68.896  1.00 78.99           C
ATOM  14580  CD1 PHE D 405     152.226   5.597  68.793  1.00 79.24           C
ATOM  14581  CE1 PHE D 405     152.877   5.257  67.614  1.00 79.43           C
ATOM  14582  CZ  PHE D 405     152.141   4.812  66.522  1.00 79.37           C
ATOM  14583  CE2 PHE D 405     150.758   4.712  66.613  1.00 79.37           C
ATOM  14584  CD2 PHE D 405     150.117   5.059  67.795  1.00 78.98           C
ATOM  14585  C   PHE D 405     149.641   5.528  72.513  1.00 79.09           C
ATOM  14586  O   PHE D 405     148.416   5.504  72.626  1.00 79.32           O
ATOM  14587  N   VAL D 406     150.429   6.115  73.405  1.00 79.21           N
ATOM  14588  CA  VAL D 406     149.843   6.823  74.540  1.00 79.40           C
ATOM  14589  CB  VAL D 406     150.588   6.562  75.899  1.00 79.42           C
ATOM  14590  CG1 VAL D 406     150.631   5.063  76.225  1.00 79.21           C
ATOM  14591  CG2 VAL D 406     151.994   7.181  75.918  1.00 79.20           C
ATOM  14592  C   VAL D 406     149.722   8.316  74.244  1.00 79.58           C
ATOM  14593  O   VAL D 406     150.548   8.891  73.527  1.00 79.61           O
ATOM  14594  N   CYS D 407     148.668   8.926  74.779  1.00 79.70           N
ATOM  14595  CA  CYS D 407     148.514  10.372  74.743  1.00 79.73           C
ATOM  14596  CB  CYS D 407     147.717  10.803  73.522  1.00 79.63           C
ATOM  14597  SG  CYS D 407     147.983  12.527  73.099  1.00 79.63           S
ATOM  14598  C   CYS D 407     147.862  10.877  76.031  1.00 79.90           C
ATOM  14599  O   CYS D 407     146.638  11.061  76.108  1.00 79.86           O
ATOM  14600  N   ARG D 408     148.699  11.088  77.043  1.00 80.03           N
ATOM  14601  CA  ARG D 408     148.232  11.493  78.360  1.00 80.25           C
ATOM  14602  CB  ARG D 408     149.163  10.949  79.452  1.00 80.19           C
ATOM  14603  CG  ARG D 408     148.529  10.885  80.829  1.00 80.75           C
ATOM  14604  CD  ARG D 408     149.580  10.766  81.930  1.00 81.82           C
ATOM  14605  NE  ARG D 408     149.828   9.386  82.350  1.00 82.61           N
ATOM  14606  CZ  ARG D 408     150.538   9.035  83.422  1.00 82.49           C
ATOM  14607  NH1 ARG D 408     151.082   9.959  84.204  1.00 82.29           N
ATOM  14608  NH2 ARG D 408     150.704   7.751  83.718  1.00 82.31           N
ATOM  14609  C   ARG D 408     148.114  13.017  78.423  1.00 80.21           C
ATOM  14610  O   ARG D 408     149.115  13.721  78.605  1.00 80.31           O
ATOM  14611  N   ALA D 409     146.887  13.515  78.259  1.00 80.01           N
ATOM  14612  CA  ALA D 409     146.625  14.955  78.267  1.00 79.95           C
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ATOM  14613  CB  ALA D 409     145.885  15.358  77.022  1.00 79.89           C
ATOM  14614  C   ALA D 409     145.861  15.419  79.499  1.00 79.99           C
ATOM  14615  O   ALA D 409     145.043  14.682  80.048  1.00 80.11           O
ATOM  14616  N   ASP D 410     146.130  16.655  79.912  1.00 80.04           N
ATOM  14617  CA  ASP D 410     145.477  17.256  81.067  1.00 80.06           C
ATOM  14618  CB  ASP D 410     146.454  17.324  82.237  1.00 80.21           C
ATOM  14619  CG  ASP D 410     145.767  17.133  83.575  1.00 81.53           C
ATOM  14620  OD1 ASP D 410     145.114  18.087  84.060  1.00 83.05           O
ATOM  14621  OD2 ASP D 410     145.881  16.024  84.147  1.00 82.67           O
ATOM  14622  C   ASP D 410     144.924  18.648  80.740  1.00 79.85           C
ATOM  14623  O   ASP D 410     145.421  19.324  79.840  1.00 79.98           O
ATOM  14624  N   GLY D 411     143.893  19.060  81.475  1.00 79.66           N
ATOM  14625  CA  GLY D 411     143.227  20.354  81.283  1.00 79.11           C
ATOM  14626  C   GLY D 411     141.865  20.380  81.955  1.00 78.85           C
ATOM  14627  O   GLY D 411     141.388  19.354  82.434  1.00 79.02           O
ATOM  14628  N   ASP D 412     141.240  21.553  82.013  1.00 78.61           N
ATOM  14629  CA  ASP D 412     139.866  21.656  82.508  1.00 78.36           C
ATOM  14630  CB  ASP D 412     139.818  21.953  84.009  1.00 78.66           C
ATOM  14631  CG  ASP D 412     138.487  21.544  84.644  1.00 79.68           C
ATOM  14632  OD1 ASP D 412     137.462  22.202  84.362  1.00 81.08           O
ATOM  14633  OD2 ASP D 412     138.463  20.566  85.428  1.00 80.12           O
ATOM  14634  C   ASP D 412     139.066  22.693  81.727  1.00 77.91           C
ATOM  14635  O   ASP D 412     139.503  23.839  81.598  1.00 77.83           O
ATOM  14636  N   PRO D 413     137.891  22.293  81.194  1.00 77.55           N
ATOM  14637  CA  PRO D 413     137.299  20.951  81.258  1.00 77.09           C
ATOM  14638  CB  PRO D 413     135.964  21.121  80.523  1.00 77.16           C
ATOM  14639  CG  PRO D 413     136.146  22.310  79.670  1.00 77.59           C
ATOM  14640  CD  PRO D 413     137.018  23.227  80.462  1.00 77.60           C
ATOM  14641  C   PRO D 413     138.150  19.878  80.573  1.00 76.63           C
ATOM  14642  O   PRO D 413     138.858  20.182  79.607  1.00 76.20           O
ATOM  14643  N   PRO D 414     138.088  18.628  81.082  1.00 76.34           N
ATOM  14644  CA  PRO D 414     138.879  17.504  80.579  1.00 76.13           C
ATOM  14645  CB  PRO D 414     138.111  16.268  81.074  1.00 76.14           C
ATOM  14646  CG  PRO D 414     136.947  16.789  81.879  1.00 76.33           C
ATOM  14647  CD  PRO D 414     137.238  18.212  82.207  1.00 76.28           C
ATOM  14648  C   PRO D 414     138.966  17.499  79.059  1.00 75.94           C
ATOM  14649  O   PRO D 414     137.936  17.533  78.383  1.00 76.00           O
ATOM  14650  N   PRO D 415     140.194  17.459  78.521  1.00 75.71           N
ATOM  14651  CA  PRO D 415     140.374  17.586  77.080  1.00 75.21           C
ATOM  14652  CB  PRO D 415     141.892  17.694  76.926  1.00 75.21           C
ATOM  14653  CG  PRO D 415     142.448  17.018  78.126  1.00 75.41           C
ATOM  14654  CD  PRO D 415     141.474  17.274  79.231  1.00 75.75           C
ATOM  14655  C   PRO D 415     139.845  16.378  76.314  1.00 74.85           C
ATOM  14656  O   PRO D 415     139.758  15.274  76.864  1.00 74.60           O
ATOM  14657  N   ALA D 416     139.477  16.617  75.058  1.00 74.50           N
ATOM  14658  CA  ALA D 416     139.068  15.574  74.125  1.00 74.07           C
ATOM  14659  CB  ALA D 416     137.944  16.079  73.223  1.00 73.88           C
ATOM  14660  C   ALA D 416     140.277  15.171  73.293  1.00 73.75           C
ATOM  14661  O   ALA D 416     141.028  16.029  72.826  1.00 73.94           O
ATOM  14662  N   ILE D 417     140.464  13.868  73.110  1.00 73.24           N
ATOM  14663  CA  ILE D 417     141.605  13.360  72.352  1.00 72.78           C
ATOM  14664  CB  ILE D 417     142.317  12.199  73.091  1.00 72.68           C
ATOM  14665  CG1 ILE D 417     142.533  12.533  74.577  1.00 72.84           C
ATOM  14666  CD1 ILE D 417     143.410  13.743  74.850  1.00 72.69           C
ATOM  14667  CG2 ILE D 417     143.625  11.838  72.403  1.00 72.24           C
ATOM  14668  C   ILE D 417     141.179  12.892  70.975  1.00 72.48           C
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ATOM  14669  O   ILE D 417     140.277  12.077  70.851  1.00 72.53           O
ATOM  14670  N   LEU D 418     141.831  13.419  69.946  1.00 72.35           N
ATOM  14671  CA  LEU D 418     141.599  12.986  68.567  1.00 72.31           C
ATOM  14672  CB  LEU D 418     141.009  14.117  67.712  1.00 72.34           C
ATOM  14673  CG  LEU D 418     139.763  14.882  68.189  1.00 72.90           C
ATOM  14674  CD1 LEU D 418     140.093  15.939  69.268  1.00 74.57           C
ATOM  14675  CD2 LEU D 418     139.072  15.544  67.028  1.00 72.45           C
ATOM  14676  C   LEU D 418     142.930  12.561  67.989  1.00 72.12           C
ATOM  14677  O   LEU D 418     143.969  13.126  68.335  1.00 72.39           O
ATOM  14678  N   TRP D 419     142.906  11.555  67.122  1.00 71.85           N
ATOM  14679  CA  TRP D 419     144.118  11.112  66.440  1.00 71.46           C
ATOM  14680  CB  TRP D 419     144.452   9.663  66.776  1.00 70.71           C
ATOM  14681  CG  TRP D 419     145.036   9.465  68.134  1.00 70.03           C
ATOM  14682  CD1 TRP D 419     144.353   9.312  69.303  1.00 69.29           C
ATOM  14683  NE1 TRP D 419     145.229   9.136  70.345  1.00 69.20           N
ATOM  14684  CE2 TRP D 419     146.510   9.173  69.859  1.00 69.19           C
ATOM  14685  CD2 TRP D 419     146.426   9.376  68.466  1.00 69.25           C
ATOM  14686  CE3 TRP D 419     147.610   9.446  67.722  1.00 69.17           C
ATOM  14687  CZ3 TRP D 419     148.824   9.313  68.386  1.00 69.30           C
ATOM  14688  CH2 TRP D 419     148.874   9.117  69.775  1.00 69.24           C
ATOM  14689  CZ2 TRP D 419     147.733   9.041  70.526  1.00 69.33           C
ATOM  14690  C   TRP D 419     143.967  11.271  64.941  1.00 71.76           C
ATOM  14691  O   TRP D 419     142.947  10.892  64.364  1.00 71.83           O
ATOM  14692  N   LEU D 420     144.988  11.840  64.317  1.00 72.10           N
ATOM  14693  CA  LEU D 420     145.002  11.997  62.883  1.00 72.54           C
ATOM  14694  CB  LEU D 420     145.390  13.427  62.517  1.00 72.61           C
ATOM  14695  CG  LEU D 420     145.456  13.756  61.026  1.00 73.43           C
ATOM  14696  CD1 LEU D 420     144.089  13.615  60.339  1.00 73.49           C
ATOM  14697  CD2 LEU D 420     146.020  15.153  60.848  1.00 74.48           C
ATOM  14698  C   LEU D 420     145.968  10.988  62.275  1.00 72.74           C
ATOM  14699  O   LEU D 420     147.184  11.116  62.425  1.00 72.78           O
ATOM  14700  N   SER D 421     145.408   9.985  61.600  1.00 73.06           N
ATOM  14701  CA  SER D 421     146.179   8.901  60.993  1.00 73.36           C
ATOM  14702  CB  SER D 421     145.239   7.790  60.520  1.00 73.40           C
ATOM  14703  OG  SER D 421     144.560   8.162  59.332  1.00 73.85           O
ATOM  14704  C   SER D 421     147.001   9.406  59.814  1.00 73.62           C
ATOM  14705  O   SER D 421     146.705  10.475  59.278  1.00 73.69           O
ATOM  14706  N   PRO D 422     148.031   8.639  59.397  1.00 73.99           N
ATOM  14707  CA  PRO D 422     148.800   9.020  58.211  1.00 74.34           C
ATOM  14708  CB  PRO D 422     149.984   8.045  58.223  1.00 74.29           C
ATOM  14709  CG  PRO D 422     149.959   7.391  59.563  1.00 74.18           C
ATOM  14710  CD  PRO D 422     148.540   7.389  59.981  1.00 73.91           C
ATOM  14711  C   PRO D 422     147.983   8.844  56.934  1.00 74.68           C
ATOM  14712  O   PRO D 422     148.362   9.357  55.884  1.00 74.69           O
ATOM  14713  N   ARG D 423     146.869   8.122  57.039  1.00 75.19           N
ATOM  14714  CA  ARG D 423     145.927   7.960  55.937  1.00 75.73           C
ATOM  14715  CB  ARG D 423     145.183   6.629  56.075  1.00 75.79           C
ATOM  14716  CG  ARG D 423     145.986   5.417  55.599  1.00 76.65           C
ATOM  14717  CD  ARG D 423     145.604   4.124  56.338  1.00 77.92           C
ATOM  14718  NE  ARG D 423     144.216   3.713  56.110  1.00 78.73           N
ATOM  14719  CZ  ARG D 423     143.802   2.953  55.099  1.00 79.08           C
ATOM  14720  NH1 ARG D 423     144.660   2.508  54.192  1.00 79.27           N
ATOM  14721  NH2 ARG D 423     142.519   2.641  54.992  1.00 79.43           N
ATOM  14722  C   ARG D 423     144.946   9.132  55.893  1.00 75.97           C
ATOM  14723  O   ARG D 423     143.984   9.114  55.122  1.00 75.92           O
ATOM  14724  N   LYS D 424     145.217  10.146  56.721  1.00 76.36           N
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ATOM	14725	CA	LYS	D	424	144.394	11.365	56.862	1.00	76.73	C
ATOM	14726	CB	LYS	D	424	144.334	12.175	55.552	1.00	76.61	C
ATOM	14727	CG	LYS	D	424	145.652	12.803	55.115	1.00	76.51	C
ATOM	14728	CD	LYS	D	424	145.562	13.298	53.664	1.00	76.74	C
ATOM	14729	CE	LYS	D	424	146.946	13.472	53.044	1.00	76.69	C
ATOM	14730	NZ	LYS	D	424	146.900	13.802	51.590	1.00	76.44	N
ATOM	14731	C	LYS	D	424	142.982	11.119	57.423	1.00	77.04	C
ATOM	14732	O	LYS	D	424	142.044	11.853	57.108	1.00	77.15	O
ATOM	14733	N	HIS	D	425	142.839	10.096	58.259	1.00	77.39	N
ATOM	14734	CA	HIS	D	425	141.566	9.828	58.915	1.00	77.95	C
ATOM	14735	CB	HIS	D	425	141.196	8.344	58.812	1.00	78.20	C
ATOM	14736	CG	HIS	D	425	140.632	7.956	57.480	1.00	78.93	C
ATOM	14737	ND1	HIS	D	425	141.352	7.243	56.545	1.00	79.68	N
ATOM	14738	CE1	HIS	D	425	140.608	7.054	55.468	1.00	80.05	C
ATOM	14739	NE2	HIS	D	425	139.432	7.622	55.671	1.00	80.58	N
ATOM	14740	CD2	HIS	D	425	139.422	8.196	56.921	1.00	79.63	C
ATOM	14741	C	HIS	D	425	141.598	10.290	60.367	1.00	78.09	C
ATOM	14742	O	HIS	D	425	142.605	10.129	61.061	1.00	78.09	O
ATOM	14743	N	LEU	D	426	140.495	10.877	60.818	1.00	78.33	N
ATOM	14744	CA	LEU	D	426	140.419	11.416	62.168	1.00	78.71	C
ATOM	14745	CB	LEU	D	426	139.742	12.791	62.159	1.00	78.51	C
ATOM	14746	CG	LEU	D	426	139.891	13.666	63.406	1.00	78.53	C
ATOM	14747	CD1	LEU	D	426	141.352	13.977	63.712	1.00	78.27	C
ATOM	14748	CD2	LEU	D	426	139.097	14.953	63.256	1.00	78.61	C
ATOM	14749	C	LEU	D	426	139.709	10.445	63.109	1.00	79.13	C
ATOM	14750	O	LEU	D	426	138.518	10.174	62.957	1.00	79.39	O
ATOM	14751	N	VAL	D	427	140.459	9.922	64.074	1.00	79.70	N
ATOM	14752	CA	VAL	D	427	139.976	8.888	64.992	1.00	80.26	C
ATOM	14753	CB	VAL	D	427	141.030	7.766	65.168	1.00	80.12	C
ATOM	14754	CG1	VAL	D	427	140.419	6.535	65.806	1.00	80.06	C
ATOM	14755	CG2	VAL	D	427	141.643	7.393	63.826	1.00	80.33	C
ATOM	14756	C	VAL	D	427	139.637	9.498	66.354	1.00	80.80	C
ATOM	14757	O	VAL	D	427	140.392	10.315	66.881	1.00	80.91	O
ATOM	14758	N	SER	D	428	138.496	9.103	66.912	1.00	81.56	N
ATOM	14759	CA	SER	D	428	138.054	9.604	68.217	1.00	82.35	C
ATOM	14760	CB	SER	D	428	137.201	10.875	68.039	1.00	82.42	C
ATOM	14761	OG	SER	D	428	135.912	10.578	67.507	1.00	82.71	O
ATOM	14762	C	SER	D	428	137.298	8.541	69.043	1.00	82.79	C
ATOM	14763	O	SER	D	428	137.337	7.344	68.731	1.00	82.62	O
ATOM	14764	N	ALA	D	429	136.624	8.995	70.100	1.00	83.40	N
ATOM	14765	CA	ALA	D	429	135.752	8.146	70.918	1.00	83.97	C
ATOM	14766	CB	ALA	D	429	135.173	8.957	72.078	1.00	84.02	C
ATOM	14767	C	ALA	D	429	134.618	7.485	70.114	1.00	84.34	C
ATOM	14768	O	ALA	D	429	134.296	6.302	70.323	1.00	84.34	O
ATOM	14769	N	LYS	D	430	134.023	8.259	69.201	1.00	84.64	N
ATOM	14770	CA	LYS	D	430	132.895	7.799	68.373	1.00	84.69	C
ATOM	14771	CB	LYS	D	430	132.247	8.982	67.640	1.00	84.78	C
ATOM	14772	CG	LYS	D	430	132.054	10.247	68.473	1.00	85.48	C
ATOM	14773	CD	LYS	D	430	130.694	10.280	69.175	1.00	86.44	C
ATOM	14774	CE	LYS	D	430	130.422	11.669	69.759	1.00	86.93	C
ATOM	14775	NZ	LYS	D	430	129.134	11.750	70.500	1.00	86.61	N
ATOM	14776	C	LYS	D	430	133.342	6.766	67.344	1.00	84.43	C
ATOM	14777	O	LYS	D	430	132.540	5.954	66.881	1.00	84.46	O
ATOM	14778	N	SER	D	431	134.629	6.806	67.007	1.00	84.18	N
ATOM	14779	CA	SER	D	431	135.192	6.057	65.890	1.00	84.06	C
ATOM	14780	CB	SER	D	431	136.674	6.395	65.739	1.00	83.93	C

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ATOM  14781  OG  SER D 431     137.089   6.257  64.396  1.00 83.69           O
ATOM  14782  C   SER D 431     134.998   4.540  65.978  1.00 84.08           C
ATOM  14783  O   SER D 431     134.977   3.966  67.069  1.00 84.02           O
ATOM  14784  N   ASN D 432     134.857   3.916  64.808  1.00 84.13           N
ATOM  14785  CA  ASN D 432     134.653   2.472  64.671  1.00 84.06           C
ATOM  14786  CB  ASN D 432     133.210   2.179  64.271  1.00 84.10           C
ATOM  14787  CG  ASN D 432     132.260   2.286  65.436  1.00 84.43           C
ATOM  14788  OD1 ASN D 432     132.185   1.384  66.269  1.00 85.08           O
ATOM  14789  ND2 ASN D 432     131.526   3.392  65.507  1.00 84.40           N
ATOM  14790  C   ASN D 432     135.608   1.848  63.661  1.00 83.96           C
ATOM  14791  O   ASN D 432     136.014   2.501  62.697  1.00 84.10           O
ATOM  14792  N   GLY D 433     135.944   0.578  63.882  1.00 83.69           N
ATOM  14793  CA  GLY D 433     136.975  -0.111  63.107  1.00 83.15           C
ATOM  14794  C   GLY D 433     138.181  -0.441  63.973  1.00 82.81           C
ATOM  14795  O   GLY D 433     138.216  -0.110  65.163  1.00 82.89           O
ATOM  14796  N   ARG D 434     139.176  -1.083  63.365  1.00 82.30           N
ATOM  14797  CA  ARG D 434     140.368  -1.570  64.073  1.00 81.73           C
ATOM  14798  CB  ARG D 434     141.210  -2.451  63.144  1.00 81.92           C
ATOM  14799  CG  ARG D 434     141.299  -1.933  61.726  1.00 82.89           C
ATOM  14800  CD  ARG D 434     142.474  -2.526  60.998  1.00 85.02           C
ATOM  14801  NE  ARG D 434     143.090  -1.518  60.142  1.00 87.40           N
ATOM  14802  CZ  ARG D 434     144.240  -1.673  59.494  1.00 88.72           C
ATOM  14803  NH1 ARG D 434     144.918  -2.809  59.591  1.00 89.20           N
ATOM  14804  NH2 ARG D 434     144.715  -0.684  58.746  1.00 89.40           N
ATOM  14805  C   ARG D 434     141.241  -0.489  64.737  1.00 81.03           C
ATOM  14806  O   ARG D 434     142.109  -0.809  65.546  1.00 80.84           O
ATOM  14807  N   LEU D 435     141.007   0.777  64.392  1.00 80.35           N
ATOM  14808  CA  LEU D 435     141.644   1.910  65.074  1.00 79.75           C
ATOM  14809  CB  LEU D 435     141.957   3.039  64.089  1.00 79.87           C
ATOM  14810  CG  LEU D 435     143.037   2.844  63.025  1.00 80.34           C
ATOM  14811  CD1 LEU D 435     142.700   3.649  61.761  1.00 81.14           C
ATOM  14812  CD2 LEU D 435     144.399   3.233  63.570  1.00 80.26           C
ATOM  14813  C   LEU D 435     140.717   2.441  66.158  1.00 79.15           C
ATOM  14814  O   LEU D 435     139.627   2.930  65.864  1.00 79.20           O
ATOM  14815  N   THR D 436     141.143   2.346  67.411  1.00 78.45           N
ATOM  14816  CA  THR D 436     140.288   2.747  68.533  1.00 77.91           C
ATOM  14817  CB  THR D 436     139.722   1.518  69.323  1.00 78.10           C
ATOM  14818  OG1 THR D 436     140.770   0.576  69.593  1.00 78.19           O
ATOM  14819  CG2 THR D 436     138.602   0.813  68.534  1.00 78.06           C
ATOM  14820  C   THR D 436     140.985   3.719  69.479  1.00 77.23           C
ATOM  14821  O   THR D 436     142.197   3.658  69.671  1.00 77.18           O
ATOM  14822  N   VAL D 437     140.208   4.627  70.054  1.00 76.51           N
ATOM  14823  CA  VAL D 437     140.742   5.619  70.976  1.00 75.78           C
ATOM  14824  CB  VAL D 437     140.527   7.049  70.455  1.00 75.65           C
ATOM  14825  CG1 VAL D 437     141.071   8.065  71.441  1.00 75.98           C
ATOM  14826  CG2 VAL D 437     141.201   7.218  69.118  1.00 75.25           C
ATOM  14827  C   VAL D 437     140.105   5.446  72.351  1.00 75.43           C
ATOM  14828  O   VAL D 437     138.882   5.421  72.484  1.00 75.35           O
ATOM  14829  N   PHE D 438     140.953   5.318  73.367  1.00 75.08           N
ATOM  14830  CA  PHE D 438     140.508   5.073  74.738  1.00 74.67           C
ATOM  14831  CB  PHE D 438     141.565   4.252  75.491  1.00 74.37           C
ATOM  14832  CG  PHE D 438     141.612   2.797  75.086  1.00 74.21           C
ATOM  14833  CD1 PHE D 438     141.066   1.813  75.909  1.00 74.11           C
ATOM  14834  CE1 PHE D 438     141.110   0.465  75.543  1.00 73.78           C
ATOM  14835  CZ  PHE D 438     141.703   0.091  74.342  1.00 73.56           C
ATOM  14836  CE2 PHE D 438     142.250   1.062  73.510  1.00 73.57           C
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ATOM  14837  CD2 PHE D 438     142.206   2.407  73.885  1.00 73.82           C
ATOM  14838  C   PHE D 438     140.182   6.381  75.473  1.00 74.57           C
ATOM  14839  O   PHE D 438     140.642   7.454  75.069  1.00 74.43           O
ATOM  14840  N   PRO D 439     139.372   6.300  76.548  1.00 74.59           N
ATOM  14841  CA  PRO D 439     139.032   7.473  77.361  1.00 74.62           C
ATOM  14842  CB  PRO D 439     138.273   6.866  78.553  1.00 74.59           C
ATOM  14843  CG  PRO D 439     138.582   5.408  78.515  1.00 74.44           C
ATOM  14844  CD  PRO D 439     138.713   5.092  77.070  1.00 74.58           C
ATOM  14845  C   PRO D 439     140.248   8.262  77.858  1.00 74.58           C
ATOM  14846  O   PRO D 439     140.160   9.477  78.019  1.00 74.63           O
ATOM  14847  N   ASP D 440     141.363   7.569  78.092  1.00 74.57           N
ATOM  14848  CA  ASP D 440     142.613   8.190  78.547  1.00 74.44           C
ATOM  14849  CB  ASP D 440     143.373   7.246  79.486  1.00 74.56           C
ATOM  14850  CG  ASP D 440     143.590   5.875  78.880  1.00 75.35           C
ATOM  14851  OD1 ASP D 440     142.628   5.066  78.860  1.00 76.56           O
ATOM  14852  OD2 ASP D 440     144.720   5.608  78.421  1.00 75.81           O
ATOM  14853  C   ASP D 440     143.519   8.620  77.388  1.00 74.12           C
ATOM  14854  O   ASP D 440     144.649   9.066  77.607  1.00 74.23           O
ATOM  14855  N   GLY D 441     143.025   8.481  76.160  1.00 73.57           N
ATOM  14856  CA  GLY D 441     143.730   8.999  74.995  1.00 73.04           C
ATOM  14857  C   GLY D 441     144.648   8.031  74.280  1.00 72.70           C
ATOM  14858  O   GLY D 441     145.337   8.413  73.334  1.00 72.69           O
ATOM  14859  N   THR D 442     144.660   6.778  74.727  1.00 72.48           N
ATOM  14860  CA  THR D 442     145.441   5.727  74.072  1.00 72.11           C
ATOM  14861  CB  THR D 442     145.565   4.479  74.972  1.00 71.96           C
ATOM  14862  OG1 THR D 442     146.194   4.849  76.201  1.00 71.89           O
ATOM  14863  CG2 THR D 442     146.396   3.392  74.303  1.00 71.70           C
ATOM  14864  C   THR D 442     144.838   5.347  72.716  1.00 71.98           C
ATOM  14865  O   THR D 442     143.631   5.121  72.604  1.00 72.02           O
ATOM  14866  N   LEU D 443     145.684   5.304  71.690  1.00 71.64           N
ATOM  14867  CA  LEU D 443     145.283   4.803  70.386  1.00 71.38           C
ATOM  14868  CB  LEU D 443     145.851   5.676  69.261  1.00 71.30           C
ATOM  14869  CG  LEU D 443     145.596   5.235  67.813  1.00 70.94           C
ATOM  14870  CD1 LEU D 443     144.142   5.441  67.411  1.00 70.43           C
ATOM  14871  CD2 LEU D 443     146.520   5.965  66.858  1.00 71.02           C
ATOM  14872  C   LEU D 443     145.754   3.366  70.224  1.00 71.49           C
ATOM  14873  O   LEU D 443     146.905   3.052  70.513  1.00 71.25           O
ATOM  14874  N   GLU D 444     144.852   2.501  69.767  1.00 71.76           N
ATOM  14875  CA  GLU D 444     145.191   1.119  69.439  1.00 72.11           C
ATOM  14876  CB  GLU D 444     144.396   0.140  70.304  1.00 71.91           C
ATOM  14877  CG  GLU D 444     144.675  -1.316  69.972  1.00 72.44           C
ATOM  14878  CD  GLU D 444     143.856  -2.295  70.800  1.00 72.98           C
ATOM  14879  OE1 GLU D 444     143.965  -2.263  72.046  1.00 74.38           O
ATOM  14880  OE2 GLU D 444     143.118  -3.117  70.203  1.00 74.21           O
ATOM  14881  C   GLU D 444     144.956   0.828  67.957  1.00 71.99           C
ATOM  14882  O   GLU D 444     143.903   1.160  67.410  1.00 71.91           O
ATOM  14883  N   VAL D 445     145.956   0.226  67.313  1.00 72.09           N
ATOM  14884  CA  VAL D 445     145.821  -0.254  65.941  1.00 72.16           C
ATOM  14885  CB  VAL D 445     146.942   0.268  65.014  1.00 71.99           C
ATOM  14886  CG1 VAL D 445     146.572   0.027  63.565  1.00 72.08           C
ATOM  14887  CG2 VAL D 445     147.187   1.750  65.238  1.00 71.82           C
ATOM  14888  C   VAL D 445     145.823  -1.779  65.998  1.00 72.34           C
ATOM  14889  O   VAL D 445     146.852  -2.393  66.281  1.00 72.27           O
ATOM  14890  N   ARG D 446     144.661  -2.372  65.732  1.00 72.63           N
ATOM  14891  CA  ARG D 446     144.376  -3.763  66.094  1.00 72.97           C
ATOM  14892  CB  ARG D 446     142.865  -4.028  66.029  1.00 73.06           C
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ATOM  14893  CG  ARG D 446     142.418  -5.376  66.578  1.00 73.92           C
ATOM  14894  CD  ARG D 446     142.464  -5.422  68.098  1.00 75.57           C
ATOM  14895  NE  ARG D 446     142.225  -6.774  68.603  1.00 76.68           N
ATOM  14896  CZ  ARG D 446     142.019  -7.084  69.883  1.00 77.21           C
ATOM  14897  NH1 ARG D 446     141.810  -8.351  70.229  1.00 76.92           N
ATOM  14898  NH2 ARG D 446     142.015  -6.136  70.816  1.00 76.99           N
ATOM  14899  C   ARG D 446     145.159  -4.792  65.274  1.00 73.01           C
ATOM  14900  O   ARG D 446     145.841  -5.658  65.834  1.00 73.09           O
ATOM  14901  N   TYR D 447     145.048  -4.709  63.955  1.00 73.02           N
ATOM  14902  CA  TYR D 447     145.828  -5.570  63.078  1.00 73.04           C
ATOM  14903  CB  TYR D 447     144.940  -6.574  62.339  1.00 72.55           C
ATOM  14904  CG  TYR D 447     144.234  -7.549  63.252  1.00 71.65           C
ATOM  14905  CD1 TYR D 447     144.924  -8.617  63.826  1.00 71.15           C
ATOM  14906  CE1 TYR D 447     144.283  -9.521  64.670  1.00 70.94           C
ATOM  14907  CZ  TYR D 447     142.938  -9.356  64.947  1.00 71.08           C
ATOM  14908  OH  TYR D 447     142.306 -10.255  65.774  1.00 70.99           O
ATOM  14909  CE2 TYR D 447     142.227  -8.299  64.388  1.00 70.70           C
ATOM  14910  CD2 TYR D 447     142.877  -7.405  63.545  1.00 70.71           C
ATOM  14911  C   TYR D 447     146.536  -4.651  62.118  1.00 73.53           C
ATOM  14912  O   TYR D 447     145.904  -4.020  61.267  1.00 73.56           O
ATOM  14913  N   ALA D 448     147.850  -4.555  62.285  1.00 74.00           N
ATOM  14914  CA  ALA D 448     148.632  -3.550  61.589  1.00 74.41           C
ATOM  14915  CB  ALA D 448     149.905  -3.243  62.354  1.00 74.44           C
ATOM  14916  C   ALA D 448     148.940  -3.971  60.161  1.00 74.78           C
ATOM  14917  O   ALA D 448     149.336  -5.112  59.903  1.00 74.72           O
ATOM  14918  N   GLN D 449     148.739  -3.033  59.241  1.00 75.24           N
ATOM  14919  CA  GLN D 449     149.031  -3.247  57.829  1.00 75.68           C
ATOM  14920  CB  GLN D 449     147.728  -3.321  57.026  1.00 75.82           C
ATOM  14921  CG  GLN D 449     146.987  -4.660  57.171  1.00 76.24           C
ATOM  14922  CD  GLN D 449     145.471  -4.517  57.127  1.00 76.35           C
ATOM  14923  OE1 GLN D 449     144.941  -3.432  56.876  1.00 76.65           O
ATOM  14924  NE2 GLN D 449     144.767  -5.611  57.386  1.00 75.78           N
ATOM  14925  C   GLN D 449     149.947  -2.145  57.304  1.00 75.72           C
ATOM  14926  O   GLN D 449     150.005  -1.058  57.876  1.00 75.57           O
ATOM  14927  N   VAL D 450     150.663  -2.442  56.220  1.00 75.92           N
ATOM  14928  CA  VAL D 450     151.628  -1.514  55.616  1.00 76.12           C
ATOM  14929  CB  VAL D 450     152.184  -2.078  54.277  1.00 76.07           C
ATOM  14930  CG1 VAL D 450     152.787  -0.978  53.406  1.00 75.92           C
ATOM  14931  CG2 VAL D 450     153.212  -3.180  54.549  1.00 76.18           C
ATOM  14932  C   VAL D 450     151.057  -0.101  55.432  1.00 76.32           C
ATOM  14933  O   VAL D 450     151.741   0.896  55.686  1.00 76.40           O
ATOM  14934  N   GLN D 451     149.798  -0.032  55.016  1.00 76.48           N
ATOM  14935  CA  GLN D 451     149.078   1.229  54.838  1.00 76.79           C
ATOM  14936  CB  GLN D 451     147.641   0.924  54.401  1.00 76.92           C
ATOM  14937  CG  GLN D 451     146.867   0.037  55.399  1.00 77.48           C
ATOM  14938  CD  GLN D 451     145.552  -0.496  54.851  1.00 77.17           C
ATOM  14939  OE1 GLN D 451     145.287  -0.422  53.650  1.00 77.54           O
ATOM  14940  NE2 GLN D 451     144.722  -1.039  55.736  1.00 77.02           N
ATOM  14941  C   GLN D 451     149.079   2.156  56.076  1.00 76.65           C
ATOM  14942  O   GLN D 451     148.851   3.361  55.949  1.00 76.55           O
ATOM  14943  N   ASP D 452     149.335   1.588  57.257  1.00 76.59           N
ATOM  14944  CA  ASP D 452     149.338   2.335  58.524  1.00 76.54           C
ATOM  14945  CB  ASP D 452     148.952   1.417  59.693  1.00 76.57           C
ATOM  14946  CG  ASP D 452     147.469   1.059  59.702  1.00 77.02           C
ATOM  14947  OD1 ASP D 452     146.626   1.953  59.469  1.00 77.70           O
ATOM  14948  OD2 ASP D 452     147.142  -0.121  59.959  1.00 77.39           O
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ATOM  14949  C   ASP D 452     150.659   3.053  58.844  1.00 76.53           C
ATOM  14950  O   ASP D 452     150.731   3.826  59.808  1.00 76.52           O
ATOM  14951  N   ASN D 453     151.691   2.805  58.035  1.00 76.39           N
ATOM  14952  CA  ASN D 453     153.000   3.436  58.213  1.00 76.21           C
ATOM  14953  CB  ASN D 453     153.965   3.009  57.100  1.00 76.13           C
ATOM  14954  CG  ASN D 453     155.430   3.177  57.492  1.00 76.00           C
ATOM  14955  OD1 ASN D 453     156.127   4.078  57.008  1.00 76.29           O
ATOM  14956  ND2 ASN D 453     155.903   2.304  58.376  1.00 75.60           N
ATOM  14957  C   ASN D 453     152.914   4.955  58.241  1.00 76.21           C
ATOM  14958  O   ASN D 453     152.102   5.553  57.535  1.00 76.13           O
ATOM  14959  N   GLY D 454     153.753   5.573  59.063  1.00 76.24           N
ATOM  14960  CA  GLY D 454     153.911   7.017  59.027  1.00 76.34           C
ATOM  14961  C   GLY D 454     153.696   7.700  60.353  1.00 76.42           C
ATOM  14962  O   GLY D 454     153.747   7.069  61.409  1.00 76.40           O
ATOM  14963  N   THR D 455     153.449   9.003  60.281  1.00 76.56           N
ATOM  14964  CA  THR D 455     153.303   9.835  61.459  1.00 76.76           C
ATOM  14965  CB  THR D 455     153.914  11.229  61.226  1.00 76.84           C
ATOM  14966  OG1 THR D 455     155.284  11.089  60.830  1.00 77.02           O
ATOM  14967  CG2 THR D 455     153.835  12.090  62.491  1.00 77.18           C
ATOM  14968  C   THR D 455     151.840   9.984  61.833  1.00 76.86           C
ATOM  14969  O   THR D 455     150.992  10.265  60.982  1.00 76.84           O
ATOM  14970  N   TYR D 456     151.560   9.779  63.115  1.00 76.95           N
ATOM  14971  CA  TYR D 456     150.249  10.047  63.684  1.00 77.04           C
ATOM  14972  CB  TYR D 456     149.829   8.900  64.600  1.00 76.95           C
ATOM  14973  CG  TYR D 456     149.542   7.620  63.857  1.00 76.75           C
ATOM  14974  CD1 TYR D 456     148.233   7.183  63.678  1.00 76.76           C
ATOM  14975  CE1 TYR D 456     147.954   6.005  62.992  1.00 76.77           C
ATOM  14976  CZ  TYR D 456     148.996   5.261  62.471  1.00 76.83           C
ATOM  14977  OH  TYR D 456     148.720   4.103  61.787  1.00 76.83           O
ATOM  14978  CE2 TYR D 456     150.310   5.679  62.632  1.00 76.83           C
ATOM  14979  CD2 TYR D 456     150.575   6.852  63.320  1.00 76.40           C
ATOM  14980  C   TYR D 456     150.320  11.348  64.463  1.00 77.19           C
ATOM  14981  O   TYR D 456     151.397  11.749  64.910  1.00 77.41           O
ATOM  14982  N   LEU D 457     149.187  12.021  64.607  1.00 77.22           N
ATOM  14983  CA  LEU D 457     149.150  13.238  65.395  1.00 77.42           C
ATOM  14984  CB  LEU D 457     148.978  14.473  64.505  1.00 77.29           C
ATOM  14985  CG  LEU D 457     149.305  15.833  65.136  1.00 77.70           C
ATOM  14986  CD1 LEU D 457     150.816  16.075  65.223  1.00 78.16           C
ATOM  14987  CD2 LEU D 457     148.641  16.963  64.369  1.00 77.76           C
ATOM  14988  C   LEU D 457     148.047  13.155  66.437  1.00 77.59           C
ATOM  14989  O   LEU D 457     146.866  13.054  66.108  1.00 77.69           O
ATOM  14990  N   CYS D 458     148.451  13.170  67.701  1.00 77.98           N
ATOM  14991  CA  CYS D 458     147.507  13.235  68.796  1.00 77.66           C
ATOM  14992  CB  CYS D 458     148.107  12.631  70.056  1.00 77.75           C
ATOM  14993  SG  CYS D 458     146.922  12.742  71.391  1.00 79.27           S
ATOM  14994  C   CYS D 458     147.128  14.691  69.063  1.00 77.31           C
ATOM  14995  O   CYS D 458     148.000  15.523  69.323  1.00 77.51           O
ATOM  14996  N   ILE D 459     145.834  14.997  68.997  1.00 76.68           N
ATOM  14997  CA  ILE D 459     145.355  16.351  69.276  1.00 76.00           C
ATOM  14998  CB  ILE D 459     144.589  16.960  68.079  1.00 76.00           C
ATOM  14999  CG1 ILE D 459     145.421  16.870  66.799  1.00 75.86           C
ATOM  15000  CD1 ILE D 459     144.616  17.030  65.535  1.00 75.64           C
ATOM  15001  CG2 ILE D 459     144.226  18.418  68.368  1.00 76.06           C
ATOM  15002  C   ILE D 459     144.465  16.370  70.519  1.00 75.60           C
ATOM  15003  O   ILE D 459     143.382  15.777  70.534  1.00 75.61           O
ATOM  15004  N   ALA D 460     144.932  17.046  71.560  1.00 74.93           N
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ATOM  15005  CA  ALA D 460     144.138  17.229  72.760  1.00 74.62           C
ATOM  15006  CB  ALA D 460     144.991  17.056  73.983  1.00 74.43           C
ATOM  15007  C   ALA D 460     143.541  18.623  72.716  1.00 74.68           C
ATOM  15008  O   ALA D 460     144.269  19.602  72.551  1.00 74.74           O
ATOM  15009  N   ALA D 461     142.219  18.716  72.841  1.00 74.57           N
ATOM  15010  CA  ALA D 461     141.534  20.002  72.734  1.00 74.49           C
ATOM  15011  CB  ALA D 461     140.920  20.164  71.360  1.00 74.34           C
ATOM  15012  C   ALA D 461     140.476  20.193  73.810  1.00 74.68           C
ATOM  15013  O   ALA D 461     139.838  19.242  74.247  1.00 74.65           O
ATOM  15014  N   ASN D 462     140.327  21.437  74.247  1.00 75.02           N
ATOM  15015  CA  ASN D 462     139.210  21.863  75.074  1.00 75.36           C
ATOM  15016  CB  ASN D 462     139.445  21.541  76.560  1.00 75.53           C
ATOM  15017  CG  ASN D 462     140.379  22.527  77.259  1.00 75.93           C
ATOM  15018  OD1 ASN D 462     140.869  23.489  76.664  1.00 77.58           O
ATOM  15019  ND2 ASN D 462     140.624  22.285  78.541  1.00 75.70           N
ATOM  15020  C   ASN D 462     138.923  23.348  74.835  1.00 75.68           C
ATOM  15021  O   ASN D 462     139.593  23.993  74.027  1.00 75.79           O
ATOM  15022  N   ALA D 463     137.942  23.892  75.545  1.00 76.04           N
ATOM  15023  CA  ALA D 463     137.485  25.255  75.301  1.00 76.22           C
ATOM  15024  CB  ALA D 463     136.318  25.580  76.203  1.00 76.45           C
ATOM  15025  C   ALA D 463     138.582  26.295  75.466  1.00 76.38           C
ATOM  15026  O   ALA D 463     138.478  27.389  74.923  1.00 76.77           O
ATOM  15027  N   GLY D 464     139.629  25.950  76.209  1.00 76.40           N
ATOM  15028  CA  GLY D 464     140.706  26.883  76.506  1.00 76.34           C
ATOM  15029  C   GLY D 464     141.920  26.775  75.607  1.00 76.41           C
ATOM  15030  O   GLY D 464     142.923  27.446  75.833  1.00 76.53           O
ATOM  15031  N   GLY D 465     141.838  25.932  74.586  1.00 76.57           N
ATOM  15032  CA  GLY D 465     142.936  25.771  73.638  1.00 76.47           C
ATOM  15033  C   GLY D 465     143.344  24.327  73.455  1.00 76.48           C
ATOM  15034  O   GLY D 465     142.857  23.439  74.160  1.00 76.08           O
ATOM  15035  N   ASN D 466     144.250  24.095  72.510  1.00 76.77           N
ATOM  15036  CA  ASN D 466     144.652  22.736  72.162  1.00 77.13           C
ATOM  15037  CB  ASN D 466     144.029  22.316  70.824  1.00 76.98           C
ATOM  15038  CG  ASN D 466     144.158  23.379  69.755  1.00 76.58           C
ATOM  15039  OD1 ASN D 466     145.135  24.126  69.719  1.00 77.08           O
ATOM  15040  ND2 ASN D 466     143.171  23.448  68.871  1.00 75.63           N
ATOM  15041  C   ASN D 466     146.158  22.477  72.170  1.00 77.58           C
ATOM  15042  O   ASN D 466     146.958  23.390  72.384  1.00 77.51           O
ATOM  15043  N   ASP D 467     146.516  21.210  71.958  1.00 78.29           N
ATOM  15044  CA  ASP D 467     147.904  20.755  71.894  1.00 79.03           C
ATOM  15045  CB  ASP D 467     148.428  20.419  73.294  1.00 79.32           C
ATOM  15046  CG  ASP D 467     149.957  20.456  73.386  1.00 81.36           C
ATOM  15047  OD1 ASP D 467     150.644  20.268  72.351  1.00 83.30           O
ATOM  15048  OD2 ASP D 467     150.482  20.669  74.508  1.00 83.37           O
ATOM  15049  C   ASP D 467     148.026  19.532  70.983  1.00 79.07           C
ATOM  15050  O   ASP D 467     147.142  18.674  70.952  1.00 79.24           O
ATOM  15051  N   SER D 468     149.119  19.470  70.232  1.00 79.32           N
ATOM  15052  CA  SER D 468     149.415  18.318  69.392  1.00 79.59           C
ATOM  15053  CB  SER D 468     149.393  18.694  67.908  1.00 79.65           C
ATOM  15054  OG  SER D 468     150.254  19.790  67.640  1.00 80.03           O
ATOM  15055  C   SER D 468     150.768  17.731  69.759  1.00 79.77           C
ATOM  15056  O   SER D 468     151.662  18.441  70.227  1.00 79.66           O
ATOM  15057  N   MET D 469     150.902  16.427  69.541  1.00 79.86           N
ATOM  15058  CA  MET D 469     152.149  15.717  69.763  1.00 80.27           C
ATOM  15059  CB  MET D 469     152.222  15.227  71.208  1.00 80.21           C
ATOM  15060  CG  MET D 469     153.506  14.490  71.578  1.00 81.36           C
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ATOM	15061	SD	MET	D	469	153.205	13.134	72.756	1.00	82.52	S
ATOM	15062	CE	MET	D	469	151.984	12.127	71.893	1.00	81.85	C
ATOM	15063	C	MET	D	469	152.210	14.549	68.779	1.00	79.60	C
ATOM	15064	O	MET	D	469	151.263	13.762	68.694	1.00	79.64	O
ATOM	15065	N	PRO	D	470	153.314	14.446	68.015	1.00	79.23	N
ATOM	15066	CA	PRO	D	470	153.450	13.408	66.994	1.00	78.94	C
ATOM	15067	CB	PRO	D	470	154.484	14.003	66.036	1.00	78.98	C
ATOM	15068	CG	PRO	D	470	155.316	14.902	66.876	1.00	78.81	C
ATOM	15069	CD	PRO	D	470	154.496	15.327	68.065	1.00	79.14	C
ATOM	15070	C	PRO	D	470	153.938	12.057	67.524	1.00	78.72	C
ATOM	15071	O	PRO	D	470	154.634	11.994	68.535	1.00	78.91	O
ATOM	15072	N	ALA	D	471	153.563	10.989	66.832	1.00	78.44	N
ATOM	15073	CA	ALA	D	471	154.041	9.646	67.137	1.00	78.26	C
ATOM	15074	CB	ALA	D	471	153.034	8.917	67.990	1.00	78.11	C
ATOM	15075	C	ALA	D	471	154.296	8.893	65.828	1.00	78.25	C
ATOM	15076	O	ALA	D	471	153.642	9.162	64.817	1.00	78.36	O
ATOM	15077	N	HIS	D	472	155.241	7.956	65.842	1.00	78.11	N
ATOM	15078	CA	HIS	D	472	155.643	7.273	64.612	1.00	78.09	C
ATOM	15079	CB	HIS	D	472	157.082	7.630	64.246	1.00	78.11	C
ATOM	15080	CG	HIS	D	472	157.299	9.093	64.029	1.00	78.82	C
ATOM	15081	ND1	HIS	D	472	157.539	9.972	65.065	1.00	79.12	N
ATOM	15082	CE1	HIS	D	472	157.694	11.190	64.578	1.00	79.54	C
ATOM	15083	NE2	HIS	D	472	157.562	11.133	63.265	1.00	79.84	N
ATOM	15084	CD2	HIS	D	472	157.313	9.833	62.896	1.00	79.31	C
ATOM	15085	C	HIS	D	472	155.480	5.761	64.662	1.00	77.93	C
ATOM	15086	O	HIS	D	472	155.999	5.097	65.565	1.00	78.06	O
ATOM	15087	N	LEU	D	473	154.762	5.228	63.675	1.00	77.68	N
ATOM	15088	CA	LEU	D	473	154.575	3.791	63.539	1.00	77.47	C
ATOM	15089	CB	LEU	D	473	153.100	3.449	63.321	1.00	77.33	C
ATOM	15090	CG	LEU	D	473	152.720	1.973	63.175	1.00	77.15	C
ATOM	15091	CD1	LEU	D	473	153.080	1.167	64.419	1.00	76.84	C
ATOM	15092	CD2	LEU	D	473	151.238	1.838	62.864	1.00	77.38	C
ATOM	15093	C	LEU	D	473	155.414	3.251	62.392	1.00	77.47	C
ATOM	15094	O	LEU	D	473	155.308	3.723	61.258	1.00	77.54	O
ATOM	15095	N	HIS	D	474	156.242	2.259	62.705	1.00	77.34	N
ATOM	15096	CA	HIS	D	474	157.077	1.598	61.718	1.00	77.35	C
ATOM	15097	CB	HIS	D	474	158.545	1.640	62.149	1.00	77.34	C
ATOM	15098	CG	HIS	D	474	159.056	3.020	62.437	1.00	77.32	C
ATOM	15099	ND1	HIS	D	474	159.833	3.728	61.545	1.00	77.14	N
ATOM	15100	CE1	HIS	D	474	160.136	4.904	62.065	1.00	76.93	C
ATOM	15101	NE2	HIS	D	474	159.584	4.985	63.263	1.00	76.82	N
ATOM	15102	CD2	HIS	D	474	158.904	3.819	63.520	1.00	77.07	C
ATOM	15103	C	HIS	D	474	156.608	0.155	61.572	1.00	77.45	C
ATOM	15104	O	HIS	D	474	156.730	-0.635	62.507	1.00	77.43	O
ATOM	15105	N	VAL	D	475	156.067	-0.184	60.403	1.00	77.58	N
ATOM	15106	CA	VAL	D	475	155.492	-1.519	60.186	1.00	77.87	C
ATOM	15107	CB	VAL	D	475	153.971	-1.460	59.791	1.00	77.92	C
ATOM	15108	CG1	VAL	D	475	153.626	-0.150	59.101	1.00	78.13	C
ATOM	15109	CG2	VAL	D	475	153.545	-2.674	58.947	1.00	78.01	C
ATOM	15110	C	VAL	D	475	156.316	-2.422	59.251	1.00	77.96	C
ATOM	15111	O	VAL	D	475	156.724	-2.012	58.161	1.00	77.92	O
ATOM	15112	N	ARG	D	476	156.551	-3.651	59.709	1.00	78.08	N
ATOM	15113	CA	ARG	D	476	157.366	-4.629	58.996	1.00	78.29	C
ATOM	15114	CB	ARG	D	476	158.459	-5.188	59.917	1.00	78.31	C
ATOM	15115	CG	ARG	D	476	159.155	-4.143	60.797	1.00	78.53	C
ATOM	15116	CD	ARG	D	476	160.293	-4.754	61.615	1.00	78.83	C

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ATOM  15117  NE  ARG D 476     161.123  -3.727  62.252  1.00 80.09           N
ATOM  15118  CZ  ARG D 476     162.416  -3.869  62.548  1.00 80.49           C
ATOM  15119  NH1 ARG D 476     163.054  -5.000  62.266  1.00 80.77           N
ATOM  15120  NH2 ARG D 476     163.080  -2.872  63.124  1.00 80.57           N
ATOM  15121  C   ARG D 476     156.496  -5.768  58.466  1.00 78.10           C
ATOM  15122  O   ARG D 476     156.359  -5.950  57.256  1.00 78.00           O
ATOM  15123  C1  NAG E 501      56.659  23.674  45.131  1.00 76.78           C
ATOM  15124  C2  NAG E 501      56.351  25.150  44.856  1.00 76.45           C
ATOM  15125  N2  NAG E 501      56.940  25.959  45.902  1.00 76.53           N
ATOM  15126  C7  NAG E 501      57.643  27.057  45.649  1.00 76.56           C
ATOM  15127  O7  NAG E 501      58.338  27.201  44.638  1.00 77.36           O
ATOM  15128  C8  NAG E 501      57.542  28.138  46.682  1.00 75.71           C
ATOM  15129  C3  NAG E 501      54.848  25.438  44.782  1.00 76.69           C
ATOM  15130  O3  NAG E 501      54.589  26.759  44.370  1.00 76.12           O
ATOM  15131  C4  NAG E 501      54.117  24.483  43.854  1.00 77.39           C
ATOM  15132  O4  NAG E 501      52.732  24.788  43.933  1.00 79.39           O
ATOM  15133  C5  NAG E 501      54.465  23.067  44.329  1.00 76.78           C
ATOM  15134  C6  NAG E 501      53.816  21.980  43.485  1.00 77.09           C
ATOM  15135  O6  NAG E 501      54.453  21.958  42.227  1.00 77.34           O
ATOM  15136  O5  NAG E 501      55.868  22.868  44.271  1.00 76.63           O
ATOM  15137  C1  NAG E 502      52.075  24.837  42.641  1.00 80.91           C
ATOM  15138  C2  NAG E 502      50.580  24.594  42.826  1.00 81.44           C
ATOM  15139  N2  NAG E 502      50.333  23.325  43.462  1.00 80.49           N
ATOM  15140  C7  NAG E 502      49.640  23.234  44.588  1.00 80.96           C
ATOM  15141  O7  NAG E 502      49.335  22.139  45.049  1.00 81.14           O
ATOM  15142  C8  NAG E 502      49.236  24.502  45.298  1.00 81.03           C
ATOM  15143  C3  NAG E 502      49.796  24.607  41.521  1.00 82.71           C
ATOM  15144  O3  NAG E 502      48.461  24.895  41.870  1.00 82.58           O
ATOM  15145  C4  NAG E 502      50.286  25.628  40.482  1.00 83.63           C
ATOM  15146  O4  NAG E 502      50.118  25.124  39.161  1.00 86.04           O
ATOM  15147  C5  NAG E 502      51.767  26.012  40.615  1.00 82.57           C
ATOM  15148  C6  NAG E 502      51.999  27.380  39.991  1.00 82.14           C
ATOM  15149  O6  NAG E 502      53.355  27.484  39.639  1.00 81.30           O
ATOM  15150  O5  NAG E 502      52.226  26.059  41.954  1.00 81.79           O
ATOM  15151  C1  MAN E 503      48.852  25.377  38.489  1.00 87.42           C
ATOM  15152  C2  MAN E 503      48.028  26.546  39.059  1.00 88.06           C
ATOM  15153  O2  MAN E 503      48.806  27.726  39.053  1.00 88.42           O
ATOM  15154  C3  MAN E 503      46.728  26.746  38.266  1.00 88.40           C
ATOM  15155  O3  MAN E 503      46.055  27.905  38.707  1.00 87.76           O
ATOM  15156  C4  MAN E 503      47.007  26.803  36.755  1.00 88.84           C
ATOM  15157  O4  MAN E 503      45.800  26.900  36.027  1.00 88.81           O
ATOM  15158  C5  MAN E 503      47.814  25.557  36.341  1.00 88.81           C
ATOM  15159  C6  MAN E 503      48.048  25.391  34.826  1.00 88.58           C
ATOM  15160  O6  MAN E 503      48.522  26.566  34.200  1.00 88.53           O
ATOM  15161  O5  MAN E 503      49.035  25.522  37.082  1.00 88.06           O
ATOM  15162  C1  NAG E 505      54.010  27.001  52.006  1.00 66.21           C
ATOM  15163  C2  NAG E 505      53.976  28.421  51.453  1.00 66.11           C
ATOM  15164  N2  NAG E 505      54.954  29.234  52.155  1.00 64.57           N
ATOM  15165  C7  NAG E 505      56.144  29.561  51.645  1.00 62.63           C
ATOM  15166  O7  NAG E 505      56.828  28.779  50.994  1.00 61.24           O
ATOM  15167  C8  NAG E 505      56.626  30.963  51.900  1.00 61.65           C
ATOM  15168  C3  NAG E 505      52.587  28.994  51.640  1.00 67.12           C
ATOM  15169  O3  NAG E 505      52.518  30.189  50.897  1.00 69.07           O
ATOM  15170  C4  NAG E 505      51.490  28.018  51.200  1.00 67.93           C
ATOM  15171  O4  NAG E 505      50.265  28.445  51.744  1.00 70.15           O
ATOM  15172  C5  NAG E 505      51.742  26.605  51.741  1.00 67.75           C
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ATOM	15173	C6	NAG E 505	50.725	25.586	51.236	1.00	67.98	C
ATOM	15174	O6	NAG E 505	50.947	25.310	49.871	1.00	68.72	O
ATOM	15175	O5	NAG E 505	53.046	26.167	51.416	1.00	66.98	O
ATOM	15176	C1	NAG E 506	49.470	29.197	50.815	1.00	72.44	C
ATOM	15177	C2	NAG E 506	48.035	29.063	51.308	1.00	73.61	C
ATOM	15178	N2	NAG E 506	47.577	27.700	51.153	1.00	73.91	N
ATOM	15179	C7	NAG E 506	47.316	26.926	52.205	1.00	74.22	C
ATOM	15180	O7	NAG E 506	47.249	27.344	53.365	1.00	73.96	O
ATOM	15181	C8	NAG E 506	47.097	25.472	51.902	1.00	74.28	C
ATOM	15182	C3	NAG E 506	47.067	30.008	50.613	1.00	74.95	C
ATOM	15183	O3	NAG E 506	45.890	30.072	51.391	1.00	75.36	O
ATOM	15184	C4	NAG E 506	47.635	31.420	50.434	1.00	75.98	C
ATOM	15185	O4	NAG E 506	46.877	32.073	49.437	1.00	77.69	O
ATOM	15186	C5	NAG E 506	49.112	31.419	50.007	1.00	75.08	C
ATOM	15187	C6	NAG E 506	49.711	32.819	50.148	1.00	75.47	C
ATOM	15188	O6	NAG E 506	50.761	33.011	49.225	1.00	75.48	O
ATOM	15189	O5	NAG E 506	49.883	30.547	50.804	1.00	73.06	O
ATOM	15190	C1	MAN E 507	45.907	32.974	49.988	1.00	78.77	C
ATOM	15191	C2	MAN E 507	45.860	34.203	49.080	1.00	79.14	C
ATOM	15192	O2	MAN E 507	45.712	33.785	47.736	1.00	78.84	O
ATOM	15193	C3	MAN E 507	44.735	35.160	49.487	1.00	79.21	C
ATOM	15194	O3	MAN E 507	44.568	36.126	48.475	1.00	78.38	O
ATOM	15195	C4	MAN E 507	43.417	34.422	49.749	1.00	79.94	C
ATOM	15196	O4	MAN E 507	42.499	35.291	50.370	1.00	80.54	O
ATOM	15197	C5	MAN E 507	43.620	33.191	50.638	1.00	80.49	C
ATOM	15198	C6	MAN E 507	42.314	32.409	50.813	1.00	81.12	C
ATOM	15199	O6	MAN E 507	42.588	31.086	51.231	1.00	82.06	O
ATOM	15200	O5	MAN E 507	44.635	32.356	50.095	1.00	79.77	O
ATOM	15201	C1	NAG E 510	62.925	40.151	13.237	1.00	78.64	C
ATOM	15202	C2	NAG E 510	63.202	39.563	11.832	1.00	77.98	C
ATOM	15203	N2	NAG E 510	64.037	38.359	11.881	1.00	78.13	N
ATOM	15204	C7	NAG E 510	65.284	38.254	12.378	1.00	78.25	C
ATOM	15205	O7	NAG E 510	66.021	39.204	12.646	1.00	78.35	O
ATOM	15206	C8	NAG E 510	65.799	36.864	12.613	1.00	77.89	C
ATOM	15207	C3	NAG E 510	63.793	40.550	10.822	1.00	78.10	C
ATOM	15208	O3	NAG E 510	63.562	40.087	9.510	1.00	78.28	O
ATOM	15209	C4	NAG E 510	63.199	41.947	10.964	1.00	78.14	C
ATOM	15210	O4	NAG E 510	63.919	42.851	10.149	1.00	78.02	O
ATOM	15211	C5	NAG E 510	63.216	42.379	12.435	1.00	78.12	C
ATOM	15212	C6	NAG E 510	62.689	43.799	12.649	1.00	78.33	C
ATOM	15213	O6	NAG E 510	61.798	44.187	11.621	1.00	78.28	O
ATOM	15214	O5	NAG E 510	62.434	41.479	13.198	1.00	77.91	O
ATOM	15215	C1	NAG E 515	47.600	7.271	27.361	1.00	88.35	C
ATOM	15216	C2	NAG E 515	46.442	6.405	26.870	1.00	88.33	C
ATOM	15217	N2	NAG E 515	46.403	6.354	25.413	1.00	88.50	N
ATOM	15218	C7	NAG E 515	45.735	7.195	24.624	1.00	88.61	C
ATOM	15219	O7	NAG E 515	45.918	8.411	24.635	1.00	88.79	O
ATOM	15220	C8	NAG E 515	44.729	6.582	23.690	1.00	88.53	C
ATOM	15221	C3	NAG E 515	45.141	6.889	27.515	1.00	88.53	C
ATOM	15222	O3	NAG E 515	44.059	6.080	27.107	1.00	88.49	O
ATOM	15223	C4	NAG E 515	45.293	6.862	29.038	1.00	88.48	C
ATOM	15224	O4	NAG E 515	44.132	7.370	29.660	1.00	88.65	O
ATOM	15225	C5	NAG E 515	46.520	7.676	29.455	1.00	88.27	C
ATOM	15226	C6	NAG E 515	46.760	7.588	30.956	1.00	87.87	C
ATOM	15227	O6	NAG E 515	47.454	8.743	31.363	1.00	87.36	O
ATOM	15228	O5	NAG E 515	47.678	7.216	28.777	1.00	88.32	O

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ATOM  15229  C1  NAG E 520      52.406   3.452  44.193  1.00 83.99           C
ATOM  15230  C2  NAG E 520      50.980   3.613  43.654  1.00 83.51           C
ATOM  15231  N2  NAG E 520      50.677   5.010  43.378  1.00 82.46           N
ATOM  15232  C7  NAG E 520      50.011   5.344  42.273  1.00 81.57           C
ATOM  15233  O7  NAG E 520      50.417   5.084  41.142  1.00 80.35           O
ATOM  15234  C8  NAG E 520      48.704   6.056  42.463  1.00 81.61           C
ATOM  15235  C3  NAG E 520      49.946   3.005  44.602  1.00 83.24           C
ATOM  15236  O3  NAG E 520      49.287   1.964  43.916  1.00 82.97           O
ATOM  15237  C4  NAG E 520      50.612   2.486  45.878  1.00 83.54           C
ATOM  15238  O4  NAG E 520      49.677   2.150  46.892  1.00 84.19           O
ATOM  15239  C5  NAG E 520      51.529   3.589  46.428  1.00 83.86           C
ATOM  15240  C6  NAG E 520      52.210   3.200  47.737  1.00 83.95           C
ATOM  15241  O6  NAG E 520      53.404   2.506  47.463  1.00 84.17           O
ATOM  15242  O5  NAG E 520      52.523   3.998  45.495  1.00 83.80           O
ATOM  15243  C1  NAG E 521      48.843   0.975  46.696  1.00 84.16           C
ATOM  15244  C2  NAG E 521      48.304   0.496  48.049  1.00 84.28           C
ATOM  15245  N2  NAG E 521      48.887   1.212  49.170  1.00 84.56           N
ATOM  15246  C7  NAG E 521      48.247   2.224  49.769  1.00 85.15           C
ATOM  15247  O7  NAG E 521      48.800   3.301  50.020  1.00 84.96           O
ATOM  15248  C8  NAG E 521      46.801   2.010  50.142  1.00 84.87           C
ATOM  15249  C3  NAG E 521      48.486  -1.011  48.206  1.00 84.42           C
ATOM  15250  O3  NAG E 521      47.877  -1.448  49.399  1.00 84.30           O
ATOM  15251  C4  NAG E 521      47.847  -1.690  46.998  1.00 84.39           C
ATOM  15252  O4  NAG E 521      47.873  -3.099  47.125  1.00 84.32           O
ATOM  15253  C5  NAG E 521      48.534  -1.221  45.709  1.00 84.08           C
ATOM  15254  C6  NAG E 521      47.488  -0.869  44.650  1.00 83.98           C
ATOM  15255  O6  NAG E 521      48.030  -1.023  43.360  1.00 83.94           O
ATOM  15256  O5  NAG E 521      49.404  -0.114  45.960  1.00 84.24           O
ATOM  15257  C1  NAG E 530      77.719  24.708  38.351  1.00 71.50           C
ATOM  15258  C2  NAG E 530      79.047  25.129  37.730  1.00 70.99           C
ATOM  15259  N2  NAG E 530      80.011  24.053  37.878  1.00 71.16           N
ATOM  15260  C7  NAG E 530      80.768  23.583  36.881  1.00 71.22           C
ATOM  15261  O7  NAG E 530      80.740  24.014  35.731  1.00 70.90           O
ATOM  15262  C8  NAG E 530      81.704  22.462  37.227  1.00 71.56           C
ATOM  15263  C3  NAG E 530      79.581  26.424  38.348  1.00 71.20           C
ATOM  15264  O3  NAG E 530      80.611  26.933  37.542  1.00 71.94           O
ATOM  15265  C4  NAG E 530      78.507  27.496  38.480  1.00 71.58           C
ATOM  15266  O4  NAG E 530      79.071  28.589  39.170  1.00 74.36           O
ATOM  15267  C5  NAG E 530      77.311  26.881  39.205  1.00 70.63           C
ATOM  15268  C6  NAG E 530      76.180  27.867  39.483  1.00 69.49           C
ATOM  15269  O6  NAG E 530      75.378  28.051  38.343  1.00 68.24           O
ATOM  15270  O5  NAG E 530      76.829  25.808  38.419  1.00 71.10           O
ATOM  15271  C1  NAG E 531      78.668  29.855  38.603  1.00 77.91           C
ATOM  15272  C2  NAG E 531      78.974  30.966  39.600  1.00 79.13           C
ATOM  15273  N2  NAG E 531      78.156  30.783  40.779  1.00 79.27           N
ATOM  15274  C7  NAG E 531      78.648  30.723  42.015  1.00 79.99           C
ATOM  15275  O7  NAG E 531      79.057  29.677  42.523  1.00 79.29           O
ATOM  15276  C8  NAG E 531      78.677  32.010  42.798  1.00 80.74           C
ATOM  15277  C3  NAG E 531      78.664  32.356  39.047  1.00 80.76           C
ATOM  15278  O3  NAG E 531      79.394  33.290  39.802  1.00 81.70           O
ATOM  15279  C4  NAG E 531      78.952  32.590  37.558  1.00 81.97           C
ATOM  15280  O4  NAG E 531      78.062  33.633  37.161  1.00 83.96           O
ATOM  15281  C5  NAG E 531      78.740  31.305  36.726  1.00 81.40           C
ATOM  15282  C6  NAG E 531      79.383  31.400  35.347  1.00 81.52           C
ATOM  15283  O6  NAG E 531      80.732  30.993  35.443  1.00 81.89           O
ATOM  15284  O5  NAG E 531      79.275  30.154  37.364  1.00 79.89           O
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ATOM  15285  C1  MAN E 532      78.575  34.912  36.651  1.00 85.07           C
ATOM  15286  C2  MAN E 532      79.666  35.631  37.492  1.00 85.33           C
ATOM  15287  O2  MAN E 532      80.772  34.802  37.783  1.00 85.05           O
ATOM  15288  C3  MAN E 532      80.170  36.919  36.824  1.00 85.84           C
ATOM  15289  O3  MAN E 532      81.382  37.324  37.425  1.00 85.98           O
ATOM  15290  C4  MAN E 532      80.356  36.764  35.305  1.00 86.08           C
ATOM  15291  O4  MAN E 532      80.703  37.995  34.701  1.00 85.58           O
ATOM  15292  C5  MAN E 532      79.075  36.189  34.686  1.00 86.10           C
ATOM  15293  C6  MAN E 532      79.135  36.107  33.157  1.00 85.93           C
ATOM  15294  O6  MAN E 532      78.865  37.369  32.578  1.00 85.40           O
ATOM  15295  O5  MAN E 532      78.856  34.901  35.249  1.00 85.90           O
ATOM  15296  C1  NAG E 540      85.201  -1.859  92.404  1.00 80.61           C
ATOM  15297  C2  NAG E 540      86.236  -1.269  93.377  1.00 81.60           C
ATOM  15298  N2  NAG E 540      87.394  -2.149  93.453  1.00 82.26           N
ATOM  15299  C7  NAG E 540      88.643  -1.740  93.215  1.00 82.51           C
ATOM  15300  O7  NAG E 540      88.939  -0.948  92.316  1.00 82.55           O
ATOM  15301  C8  NAG E 540      89.708  -2.308  94.114  1.00 82.14           C
ATOM  15302  C3  NAG E 540      85.663  -1.023  94.782  1.00 81.24           C
ATOM  15303  O3  NAG E 540      86.542  -0.236  95.553  1.00 81.37           O
ATOM  15304  C4  NAG E 540      84.312  -0.319  94.725  1.00 81.04           C
ATOM  15305  O4  NAG E 540      83.765  -0.228  96.021  1.00 80.26           O
ATOM  15306  C5  NAG E 540      83.395  -1.093  93.778  1.00 81.39           C
ATOM  15307  C6  NAG E 540      81.995  -0.484  93.717  1.00 81.73           C
ATOM  15308  O6  NAG E 540      81.925   0.527  92.734  1.00 82.28           O
ATOM  15309  O5  NAG E 540      83.985  -1.129  92.483  1.00 81.54           O
ATOM  15310  C1  NAG F 501      90.643  28.292  -2.267  1.00 72.39           C
ATOM  15311  C2  NAG F 501      90.948  29.793  -2.226  1.00 72.60           C
ATOM  15312  N2  NAG F 501      89.986  30.509  -1.407  1.00 72.45           N
ATOM  15313  C7  NAG F 501      90.282  31.405  -0.453  1.00 72.79           C
ATOM  15314  O7  NAG F 501      89.374  32.011   0.112  1.00 72.23           O
ATOM  15315  C8  NAG F 501      91.721  31.678  -0.058  1.00 72.10           C
ATOM  15316  C3  NAG F 501      90.943  30.388  -3.628  1.00 72.82           C
ATOM  15317  O3  NAG F 501      91.270  31.751  -3.555  1.00 73.57           O
ATOM  15318  C4  NAG F 501      91.927  29.676  -4.550  1.00 73.50           C
ATOM  15319  O4  NAG F 501      91.815  30.250  -5.850  1.00 76.38           O
ATOM  15320  C5  NAG F 501      91.602  28.178  -4.526  1.00 72.19           C
ATOM  15321  C6  NAG F 501      92.646  27.356  -5.279  1.00 71.68           C
ATOM  15322  O6  NAG F 501      93.828  27.241  -4.509  1.00 71.46           O
ATOM  15323  O5  NAG F 501      91.524  27.673  -3.195  1.00 72.21           O
ATOM  15324  C1  NAG F 502      93.093  30.592  -6.447  1.00 77.71           C
ATOM  15325  C2  NAG F 502      92.954  30.630  -7.965  1.00 78.09           C
ATOM  15326  N2  NAG F 502      92.650  29.303  -8.450  1.00 77.77           N
ATOM  15327  C7  NAG F 502      91.678  29.036  -9.318  1.00 78.72           C
ATOM  15328  O7  NAG F 502      91.492  27.890  -9.725  1.00 78.53           O
ATOM  15329  C8  NAG F 502      90.793  30.162  -9.794  1.00 79.00           C
ATOM  15330  C3  NAG F 502      94.232  31.068  -8.678  1.00 79.24           C
ATOM  15331  O3  NAG F 502      93.884  31.727  -9.872  1.00 78.96           O
ATOM  15332  C4  NAG F 502      95.211  31.946  -7.891  1.00 80.25           C
ATOM  15333  O4  NAG F 502      96.519  31.484  -8.176  1.00 82.86           O
ATOM  15334  C5  NAG F 502      95.002  31.983  -6.373  1.00 79.83           C
ATOM  15335  C6  NAG F 502      95.487  33.323  -5.827  1.00 79.85           C
ATOM  15336  O6  NAG F 502      95.659  33.234  -4.431  1.00 79.61           O
ATOM  15337  O5  NAG F 502      93.642  31.818  -6.015  1.00 78.76           O
ATOM  15338  C1  MAN F 503      97.387  32.382  -8.939  1.00 85.35           C
ATOM  15339  C2  MAN F 503      96.676  33.445  -9.797  1.00 85.88           C
ATOM  15340  O2  MAN F 503      96.008  34.386  -8.984  1.00 85.97           O
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ATOM  15341  C3  MAN F 503      97.681  34.202 -10.658  1.00 86.11           C
ATOM  15342  O3  MAN F 503      96.984  35.270 -11.261  1.00 85.93           O
ATOM  15343  C4  MAN F 503      98.889  34.688  -9.835  1.00 86.24           C
ATOM  15344  O4  MAN F 503      99.912  35.140 -10.685  1.00 86.18           O
ATOM  15345  C5  MAN F 503      99.458  33.552  -8.973  1.00 86.69           C
ATOM  15346  C6  MAN F 503     100.693  33.922  -8.127  1.00 87.19           C
ATOM  15347  O6  MAN F 503     100.789  35.297  -7.808  1.00 86.86           O
ATOM  15348  O5  MAN F 503      98.418  32.997  -8.168  1.00 86.39           O
ATOM  15349  C1  NAG F 505      83.175  31.292  -4.106  1.00 61.87           C
ATOM  15350  C2  NAG F 505      83.712  32.687  -3.823  1.00 59.30           C
ATOM  15351  N2  NAG F 505      82.954  33.221  -2.717  1.00 57.58           N
ATOM  15352  C7  NAG F 505      83.501  33.657  -1.588  1.00 56.50           C
ATOM  15353  O7  NAG F 505      84.600  33.291  -1.198  1.00 56.31           O
ATOM  15354  C8  NAG F 505      82.708  34.639  -0.772  1.00 55.20           C
ATOM  15355  C3  NAG F 505      83.545  33.602  -5.037  1.00 61.20           C
ATOM  15356  O3  NAG F 505      84.283  34.790  -4.863  1.00 61.05           O
ATOM  15357  C4  NAG F 505      83.945  32.943  -6.360  1.00 62.67           C
ATOM  15358  O4  NAG F 505      83.349  33.649  -7.419  1.00 66.36           O
ATOM  15359  C5  NAG F 505      83.388  31.522  -6.444  1.00 62.30           C
ATOM  15360  C6  NAG F 505      83.887  30.794  -7.681  1.00 61.10           C
ATOM  15361  O6  NAG F 505      85.291  30.766  -7.629  1.00 60.55           O
ATOM  15362  O5  NAG F 505      83.735  30.775  -5.293  1.00 62.76           O
ATOM  15363  C1  NAG F 506      84.271  34.491  -8.133  1.00 69.76           C
ATOM  15364  C2  NAG F 506      83.836  34.518  -9.604  1.00 70.52           C
ATOM  15365  N2  NAG F 506      84.168  33.261 -10.247  1.00 70.01           N
ATOM  15366  C7  NAG F 506      83.280  32.555 -10.934  1.00 69.22           C
ATOM  15367  O7  NAG F 506      82.083  32.846 -10.995  1.00 68.71           O
ATOM  15368  C8  NAG F 506      83.830  31.350 -11.642  1.00 68.91           C
ATOM  15369  C3  NAG F 506      84.447  35.650 -10.426  1.00 71.71           C
ATOM  15370  O3  NAG F 506      83.640  35.823 -11.571  1.00 72.03           O
ATOM  15371  C4  NAG F 506      84.538  36.978  -9.667  1.00 72.98           C
ATOM  15372  O4  NAG F 506      85.437  37.825 -10.355  1.00 74.02           O
ATOM  15373  C5  NAG F 506      85.030  36.774  -8.225  1.00 73.18           C
ATOM  15374  C6  NAG F 506      84.949  38.063  -7.403  1.00 73.92           C
ATOM  15375  O6  NAG F 506      83.693  38.145  -6.759  1.00 74.42           O
ATOM  15376  O5  NAG F 506      84.276  35.779  -7.552  1.00 71.76           O
ATOM  15377  C1  MAN F 507      84.755  38.867 -11.075  1.00 74.65           C
ATOM  15378  C2  MAN F 507      85.515  40.181 -10.846  1.00 75.32           C
ATOM  15379  O2  MAN F 507      86.907  39.946 -10.935  1.00 75.56           O
ATOM  15380  C3  MAN F 507      85.100  41.312 -11.802  1.00 75.35           C
ATOM  15381  O3  MAN F 507      86.104  42.313 -11.815  1.00 75.04           O
ATOM  15382  C4  MAN F 507      84.813  40.828 -13.230  1.00 75.35           C
ATOM  15383  O4  MAN F 507      84.082  41.824 -13.915  1.00 74.55           O
ATOM  15384  C5  MAN F 507      84.042  39.498 -13.260  1.00 75.53           C
ATOM  15385  C6  MAN F 507      83.955  38.916 -14.669  1.00 75.93           C
ATOM  15386  O6  MAN F 507      82.638  39.046 -15.162  1.00 76.35           O
ATOM  15387  O5  MAN F 507      84.669  38.530 -12.445  1.00 74.68           O
ATOM  15388  C1  NAG F 510     118.542  47.092   7.173  1.00 72.14           C
ATOM  15389  C2  NAG F 510     119.426  48.310   7.500  1.00 70.83           C
ATOM  15390  N2  NAG F 510     120.588  47.968   8.316  1.00 70.02           N
ATOM  15391  C7  NAG F 510     121.779  48.590   8.265  1.00 69.54           C
ATOM  15392  O7  NAG F 510     122.587  48.515   9.185  1.00 69.41           O
ATOM  15393  C8  NAG F 510     122.159  49.400   7.054  1.00 69.16           C
ATOM  15394  C3  NAG F 510     118.576  49.431   8.111  1.00 70.91           C
ATOM  15395  O3  NAG F 510     119.380  50.499   8.555  1.00 70.96           O
ATOM  15396  C4  NAG F 510     117.602  49.927   7.045  1.00 70.79           C
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ATOM  15397  O4  NAG F 510     116.560  50.686   7.630  1.00 70.66           O
ATOM  15398  C5  NAG F 510     117.112  48.731   6.202  1.00 70.64           C
ATOM  15399  C6  NAG F 510     115.729  48.935   5.596  1.00 69.90           C
ATOM  15400  O6  NAG F 510     115.914  49.315   4.250  1.00 69.26           O
ATOM  15401  O5  NAG F 510     117.200  47.504   6.922  1.00 70.58           O
ATOM  15402  C1  NAG F 515     110.022  16.693 -13.035  1.00 93.20           C
ATOM  15403  C2  NAG F 515     110.366  15.675 -14.117  1.00 93.72           C
ATOM  15404  N2  NAG F 515     111.807  15.468 -14.236  1.00 94.14           N
ATOM  15405  C7  NAG F 515     112.667  16.233 -14.916  1.00 94.72           C
ATOM  15406  O7  NAG F 515     112.918  17.398 -14.606  1.00 95.14           O
ATOM  15407  C8  NAG F 515     113.357  15.601 -16.095  1.00 94.23           C
ATOM  15408  C3  NAG F 515     109.682  16.087 -15.417  1.00 93.93           C
ATOM  15409  O3  NAG F 515     110.000  15.176 -16.441  1.00 95.07           O
ATOM  15410  C4  NAG F 515     108.176  16.100 -15.191  1.00 93.95           C
ATOM  15411  O4  NAG F 515     107.495  16.443 -16.381  1.00 93.87           O
ATOM  15412  C5  NAG F 515     107.813  17.062 -14.057  1.00 93.85           C
ATOM  15413  C6  NAG F 515     106.345  16.856 -13.687  1.00 93.81           C
ATOM  15414  O6  NAG F 515     105.916  17.860 -12.799  1.00 93.93           O
ATOM  15415  O5  NAG F 515     108.608  16.836 -12.897  1.00 93.68           O
ATOM  15416  C1  NAG F 520      93.415  10.761 -10.206  1.00 75.15           C
ATOM  15417  C2  NAG F 520      94.454  10.388 -11.263  1.00 74.72           C
ATOM  15418  N2  NAG F 520      94.951  11.611 -11.851  1.00 74.15           N
ATOM  15419  C7  NAG F 520      96.257  11.813 -11.952  1.00 74.44           C
ATOM  15420  O7  NAG F 520      97.051  11.435 -11.094  1.00 74.30           O
ATOM  15421  C8  NAG F 520      96.735  12.521 -13.187  1.00 75.17           C
ATOM  15422  C3  NAG F 520      93.905   9.458 -12.357  1.00 74.79           C
ATOM  15423  O3  NAG F 520      94.952   8.931 -13.140  1.00 74.43           O
ATOM  15424  C4  NAG F 520      93.108   8.294 -11.781  1.00 74.94           C
ATOM  15425  O4  NAG F 520      92.483   7.587 -12.839  1.00 74.87           O
ATOM  15426  C5  NAG F 520      92.099   8.831 -10.763  1.00 75.05           C
ATOM  15427  C6  NAG F 520      91.351   7.716 -10.049  1.00 75.16           C
ATOM  15428  O6  NAG F 520      90.435   8.321  -9.162  1.00 75.35           O
ATOM  15429  O5  NAG F 520      92.760   9.590  -9.762  1.00 75.55           O
ATOM  15430  C1  NAG F 525      45.397  -6.807  20.358  1.00 83.74           C
ATOM  15431  C2  NAG F 525      44.452  -6.252  21.432  1.00 84.48           C
ATOM  15432  N2  NAG F 525      44.636  -6.927  22.714  1.00 84.76           N
ATOM  15433  C7  NAG F 525      45.259  -6.355  23.759  1.00 84.95           C
ATOM  15434  O7  NAG F 525      44.651  -5.848  24.704  1.00 84.31           O
ATOM  15435  C8  NAG F 525      46.768  -6.350  23.762  1.00 84.79           C
ATOM  15436  C3  NAG F 525      43.002  -6.314  20.940  1.00 84.22           C
ATOM  15437  O3  NAG F 525      42.154  -5.681  21.862  1.00 84.37           O
ATOM  15438  C4  NAG F 525      42.885  -5.601  19.593  1.00 84.43           C
ATOM  15439  O4  NAG F 525      41.559  -5.640  19.105  1.00 84.34           O
ATOM  15440  C5  NAG F 525      43.871  -6.230  18.601  1.00 84.31           C
ATOM  15441  C6  NAG F 525      43.790  -5.594  17.214  1.00 84.35           C
ATOM  15442  O6  NAG F 525      44.314  -4.283  17.220  1.00 84.66           O
ATOM  15443  O5  NAG F 525      45.193  -6.136  19.119  1.00 84.32           O
ATOM  15444  C1  NAG F 530      96.931  26.251  19.085  1.00 73.88           C
ATOM  15445  C2  NAG F 530      97.416  26.635  20.484  1.00 73.57           C
ATOM  15446  N2  NAG F 530      97.402  25.471  21.345  1.00 75.11           N
ATOM  15447  C7  NAG F 530      98.458  24.683  21.526  1.00 76.04           C
ATOM  15448  O7  NAG F 530      99.483  25.082  22.076  1.00 76.31           O
ATOM  15449  C8  NAG F 530      98.344  23.266  21.023  1.00 76.42           C
ATOM  15450  C3  NAG F 530      96.532  27.703  21.124  1.00 73.39           C
ATOM  15451  O3  NAG F 530      97.128  28.160  22.316  1.00 73.05           O
ATOM  15452  C4  NAG F 530      96.256  28.871  20.183  1.00 73.18           C
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ATOM	15453	O4	NAG F 530	95.351	29.761	20.802	1.00	74.89		O
ATOM	15454	C5	NAG F 530	95.688	28.275	18.900	1.00	72.34		C
ATOM	15455	C6	NAG F 530	95.288	29.328	17.873	1.00	71.88		C
ATOM	15456	O6	NAG F 530	96.433	29.935	17.318	1.00	71.38		O
ATOM	15457	O5	NAG F 530	96.656	27.416	18.332	1.00	72.53		O
ATOM	15458	C1	NAG F 531	95.718	31.144	20.646	1.00	77.00		C
ATOM	15459	C2	NAG F 531	94.509	31.996	21.003	1.00	78.39		C
ATOM	15460	N2	NAG F 531	93.480	31.789	20.006	1.00	79.08		N
ATOM	15461	C7	NAG F 531	92.375	31.102	20.277	1.00	79.13		C
ATOM	15462	O7	NAG F 531	92.249	30.405	21.285	1.00	79.49		O
ATOM	15463	C8	NAG F 531	91.264	31.217	19.276	1.00	78.91		C
ATOM	15464	C3	NAG F 531	94.789	33.498	21.072	1.00	79.49		C
ATOM	15465	O3	NAG F 531	93.798	34.085	21.883	1.00	78.54		O
ATOM	15466	C4	NAG F 531	96.181	33.909	21.577	1.00	80.68		C
ATOM	15467	O4	NAG F 531	96.490	35.127	20.900	1.00	82.51		O
ATOM	15468	C5	NAG F 531	97.258	32.832	21.321	1.00	80.61		C
ATOM	15469	C6	NAG F 531	98.422	32.956	22.297	1.00	81.14		C
ATOM	15470	O6	NAG F 531	98.402	31.829	23.155	1.00	81.80		O
ATOM	15471	O5	NAG F 531	96.786	31.500	21.476	1.00	78.75		O
ATOM	15472	C1	MAN F 532	96.800	36.348	21.657	1.00	83.74		C
ATOM	15473	C2	MAN F 532	95.830	36.753	22.805	1.00	83.95		C
ATOM	15474	O2	MAN F 532	95.504	35.667	23.647	1.00	84.13		O
ATOM	15475	C3	MAN F 532	96.361	37.902	23.678	1.00	84.16		C
ATOM	15476	O3	MAN F 532	95.658	37.945	24.905	1.00	84.34		O
ATOM	15477	C4	MAN F 532	97.866	37.775	23.935	1.00	84.09		C
ATOM	15478	O4	MAN F 532	98.346	38.826	24.753	1.00	83.72		O
ATOM	15479	C5	MAN F 532	98.571	37.706	22.576	1.00	83.95		C
ATOM	15480	C6	MAN F 532	100.105	37.807	22.619	1.00	83.87		C
ATOM	15481	O6	MAN F 532	100.572	38.823	23.486	1.00	83.17		O
ATOM	15482	O5	MAN F 532	98.187	36.466	21.994	1.00	84.15		O
ATOM	15483	C1	NAG G 501	139.458	32.759	32.195	1.00	75.74		C
ATOM	15484	C2	NAG G 501	139.409	34.208	32.674	1.00	75.50		C
ATOM	15485	N2	NAG G 501	138.385	34.918	31.918	1.00	75.18		N
ATOM	15486	C7	NAG G 501	137.797	36.057	32.307	1.00	75.34		C
ATOM	15487	O7	NAG G 501	137.558	36.952	31.500	1.00	74.80		O
ATOM	15488	C8	NAG G 501	137.425	36.243	33.759	1.00	75.54		C
ATOM	15489	C3	NAG G 501	140.805	34.839	32.583	1.00	75.77		C
ATOM	15490	O3	NAG G 501	140.827	36.149	33.115	1.00	75.78		O
ATOM	15491	C4	NAG G 501	141.816	33.986	33.347	1.00	76.38		C
ATOM	15492	O4	NAG G 501	143.115	34.545	33.233	1.00	78.77		O
ATOM	15493	C5	NAG G 501	141.761	32.545	32.833	1.00	75.68		C
ATOM	15494	C6	NAG G 501	142.680	31.615	33.621	1.00	74.97		C
ATOM	15495	O6	NAG G 501	142.166	31.423	34.921	1.00	74.42		O
ATOM	15496	O5	NAG G 501	140.437	32.048	32.928	1.00	75.61		O
ATOM	15497	C1	NAG G 502	143.686	34.764	34.546	1.00	80.06		C
ATOM	15498	C2	NAG G 502	145.210	34.780	34.461	1.00	80.40		C
ATOM	15499	N2	NAG G 502	145.696	33.553	33.881	1.00	79.11		N
ATOM	15500	C7	NAG G 502	146.596	33.531	32.908	1.00	78.78		C
ATOM	15501	O7	NAG G 502	147.167	32.486	32.606	1.00	78.54		O
ATOM	15502	C8	NAG G 502	146.894	34.815	32.175	1.00	78.76		C
ATOM	15503	C3	NAG G 502	145.827	34.953	35.841	1.00	81.77		C
ATOM	15504	O3	NAG G 502	147.223	35.096	35.713	1.00	82.15		O
ATOM	15505	C4	NAG G 502	145.245	36.198	36.501	1.00	82.75		C
ATOM	15506	O4	NAG G 502	145.762	36.324	37.808	1.00	84.14		O
ATOM	15507	C5	NAG G 502	143.712	36.118	36.497	1.00	82.45		C
ATOM	15508	C6	NAG G 502	143.071	37.380	37.064	1.00	83.10		C

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ATOM  15509  O6  NAG G 502     141.825  37.048  37.636  1.00 83.91           O
ATOM  15510  O5  NAG G 502     143.230  35.946  35.175  1.00 81.30           O
ATOM  15511  C1  MAN G 503     146.796  37.324  37.794  1.00 85.66           C
ATOM  15512  C2  MAN G 503     146.677  38.217  39.024  1.00 86.01           C
ATOM  15513  O2  MAN G 503     146.691  37.401  40.173  1.00 86.23           O
ATOM  15514  C3  MAN G 503     147.826  39.228  39.069  1.00 86.28           C
ATOM  15515  O3  MAN G 503     147.813  39.902  40.310  1.00 85.60           O
ATOM  15516  C4  MAN G 503     149.189  38.560  38.835  1.00 86.75           C
ATOM  15517  O4  MAN G 503     150.178  39.553  38.676  1.00 87.46           O
ATOM  15518  C5  MAN G 503     149.169  37.623  37.616  1.00 86.97           C
ATOM  15519  C6  MAN G 503     150.447  36.788  37.481  1.00 87.08           C
ATOM  15520  O6  MAN G 503     151.493  37.529  36.889  1.00 87.46           O
ATOM  15521  O5  MAN G 503     148.076  36.722  37.722  1.00 86.64           O
ATOM  15522  C1  NAG G 505     140.899  36.711  25.200  1.00 69.77           C
ATOM  15523  C2  NAG G 505     140.782  38.116  25.779  1.00 68.09           C
ATOM  15524  N2  NAG G 505     139.628  38.774  25.202  1.00 65.93           N
ATOM  15525  C7  NAG G 505     138.400  38.687  25.712  1.00 63.73           C
ATOM  15526  O7  NAG G 505     137.960  37.683  26.283  1.00 61.73           O
ATOM  15527  C8  NAG G 505     137.545  39.909  25.541  1.00 62.70           C
ATOM  15528  C3  NAG G 505     142.037  38.947  25.520  1.00 69.80           C
ATOM  15529  O3  NAG G 505     142.005  40.116  26.303  1.00 70.39           O
ATOM  15530  C4  NAG G 505     143.329  38.198  25.832  1.00 71.15           C
ATOM  15531  O4  NAG G 505     144.405  38.950  25.307  1.00 74.23           O
ATOM  15532  C5  NAG G 505     143.261  36.815  25.191  1.00 70.59           C
ATOM  15533  C6  NAG G 505     144.504  35.968  25.462  1.00 69.95           C
ATOM  15534  O6  NAG G 505     144.468  35.408  26.756  1.00 68.64           O
ATOM  15535  O5  NAG G 505     142.104  36.145  25.664  1.00 70.50           O
ATOM  15536  C1  NAG G 506     145.413  39.194  26.307  1.00 77.09           C
ATOM  15537  C2  NAG G 506     146.754  39.477  25.622  1.00 77.97           C
ATOM  15538  N2  NAG G 506     147.531  38.253  25.555  1.00 77.65           N
ATOM  15539  C7  NAG G 506     147.783  37.606  24.419  1.00 77.34           C
ATOM  15540  O7  NAG G 506     147.726  38.128  23.302  1.00 77.22           O
ATOM  15541  C8  NAG G 506     148.158  36.160  24.572  1.00 76.90           C
ATOM  15542  C3  NAG G 506     147.571  40.541  26.344  1.00 79.07           C
ATOM  15543  O3  NAG G 506     148.701  40.869  25.563  1.00 79.60           O
ATOM  15544  C4  NAG G 506     146.764  41.811  26.606  1.00 80.21           C
ATOM  15545  O4  NAG G 506     147.412  42.574  27.603  1.00 81.74           O
ATOM  15546  C5  NAG G 506     145.329  41.538  27.082  1.00 79.90           C
ATOM  15547  C6  NAG G 506     144.298  42.223  26.185  1.00 80.21           C
ATOM  15548  O6  NAG G 506     143.678  43.239  26.941  1.00 80.50           O
ATOM  15549  O5  NAG G 506     145.021  40.161  27.277  1.00 78.95           O
ATOM  15550  C1  MAN G 507     147.937  43.807  27.070  1.00 82.42           C
ATOM  15551  C2  MAN G 507     147.681  44.924  28.086  1.00 82.75           C
ATOM  15552  O2  MAN G 507     148.177  44.548  29.353  1.00 83.05           O
ATOM  15553  C3  MAN G 507     148.338  46.234  27.661  1.00 83.07           C
ATOM  15554  O3  MAN G 507     148.271  47.154  28.731  1.00 83.27           O
ATOM  15555  C4  MAN G 507     149.797  46.024  27.250  1.00 83.29           C
ATOM  15556  O4  MAN G 507     150.284  47.209  26.655  1.00 83.40           O
ATOM  15557  C5  MAN G 507     149.977  44.834  26.297  1.00 83.20           C
ATOM  15558  C6  MAN G 507     151.453  44.476  26.158  1.00 83.38           C
ATOM  15559  O6  MAN G 507     151.911  44.791  24.864  1.00 83.64           O
ATOM  15560  O5  MAN G 507     149.314  43.674  26.769  1.00 82.80           O
ATOM  15561  C1  NAG G 510     129.613  45.123  65.702  1.00 78.32           C
ATOM  15562  C2  NAG G 510     128.830  44.788  66.988  1.00 78.06           C
ATOM  15563  N2  NAG G 510     127.522  44.242  66.640  1.00 78.32           N
ATOM  15564  C7  NAG G 510     127.293  43.305  65.714  1.00 78.07           C
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ATOM  15565  O7  NAG G 510     127.367  43.512  64.504  1.00 77.84           O
ATOM  15566  C8  NAG G 510     126.909  41.946  66.214  1.00 78.19           C
ATOM  15567  C3  NAG G 510     128.599  45.956  67.962  1.00 77.88           C
ATOM  15568  O3  NAG G 510     128.615  45.491  69.295  1.00 77.98           O
ATOM  15569  C4  NAG G 510     129.599  47.098  67.813  1.00 77.74           C
ATOM  15570  O4  NAG G 510     129.115  48.234  68.493  1.00 77.80           O
ATOM  15571  C5  NAG G 510     129.783  47.377  66.329  1.00 77.70           C
ATOM  15572  C6  NAG G 510     130.568  48.644  66.031  1.00 77.58           C
ATOM  15573  O6  NAG G 510     130.405  48.958  64.664  1.00 77.56           O
ATOM  15574  O5  NAG G 510     130.450  46.258  65.783  1.00 78.16           O
ATOM  15575  C1  NAG G 515     151.780  18.338  50.357  1.00 89.13           C
ATOM  15576  C2  NAG G 515     152.966  17.402  50.572  1.00 89.12           C
ATOM  15577  N2  NAG G 515     153.413  17.532  51.946  1.00 89.49           N
ATOM  15578  C7  NAG G 515     152.895  16.821  52.950  1.00 89.70           C
ATOM  15579  O7  NAG G 515     151.741  16.980  53.352  1.00 89.43           O
ATOM  15580  C8  NAG G 515     153.798  15.803  53.595  1.00 89.54           C
ATOM  15581  C3  NAG G 515     154.117  17.705  49.602  1.00 89.04           C
ATOM  15582  O3  NAG G 515     155.084  16.678  49.661  1.00 88.85           O
ATOM  15583  C4  NAG G 515     153.617  17.878  48.164  1.00 88.83           C
ATOM  15584  O4  NAG G 515     154.661  18.329  47.327  1.00 88.69           O
ATOM  15585  C5  NAG G 515     152.457  18.872  48.166  1.00 88.65           C
ATOM  15586  C6  NAG G 515     151.941  19.168  46.764  1.00 88.05           C
ATOM  15587  O6  NAG G 515     151.154  20.336  46.828  1.00 87.27           O
ATOM  15588  O5  NAG G 515     151.413  18.376  48.992  1.00 89.20           O
ATOM  15589  C1  NAG G 520     147.901  15.541  33.231  1.00 79.62           C
ATOM  15590  C2  NAG G 520     148.729  14.476  33.943  1.00 79.97           C
ATOM  15591  N2  NAG G 520     149.208  14.943  35.235  1.00 79.92           N
ATOM  15592  C7  NAG G 520     149.989  16.014  35.371  1.00 80.55           C
ATOM  15593  O7  NAG G 520     149.853  17.046  34.710  1.00 81.41           O
ATOM  15594  C8  NAG G 520     151.083  15.911  36.389  1.00 80.87           C
ATOM  15595  C3  NAG G 520     149.846  14.045  32.995  1.00 79.80           C
ATOM  15596  O3  NAG G 520     150.694  13.097  33.601  1.00 79.83           O
ATOM  15597  C4  NAG G 520     149.197  13.422  31.767  1.00 79.78           C
ATOM  15598  O4  NAG G 520     150.195  12.980  30.868  1.00 79.19           O
ATOM  15599  C5  NAG G 520     148.221  14.413  31.112  1.00 80.09           C
ATOM  15600  C6  NAG G 520     147.375  13.734  30.036  1.00 80.49           C
ATOM  15601  O6  NAG G 520     147.350  12.343  30.265  1.00 80.72           O
ATOM  15602  O5  NAG G 520     147.327  15.015  32.049  1.00 80.06           O
ATOM  15603  C1  NAG G 525     116.900   1.134 -15.130  1.00 81.43           C
ATOM  15604  C2  NAG G 525     115.472   1.570 -15.477  1.00 82.49           C
ATOM  15605  N2  NAG G 525     114.460   0.726 -14.856  1.00 83.36           N
ATOM  15606  C7  NAG G 525     113.501   1.234 -14.077  1.00 83.78           C
ATOM  15607  O7  NAG G 525     112.312   1.196 -14.400  1.00 83.75           O
ATOM  15608  C8  NAG G 525     113.926   1.856 -12.769  1.00 83.35           C
ATOM  15609  C3  NAG G 525     115.328   1.648 -16.995  1.00 81.69           C
ATOM  15610  O3  NAG G 525     114.020   2.021 -17.352  1.00 81.47           O
ATOM  15611  C4  NAG G 525     116.296   2.714 -17.490  1.00 81.58           C
ATOM  15612  O4  NAG G 525     116.244   2.800 -18.896  1.00 80.95           O
ATOM  15613  C5  NAG G 525     117.728   2.432 -17.006  1.00 81.89           C
ATOM  15614  C6  NAG G 525     118.625   3.635 -17.298  1.00 82.15           C
ATOM  15615  O6  NAG G 525     118.568   3.963 -18.674  1.00 82.19           O
ATOM  15616  O5  NAG G 525     117.791   2.139 -15.608  1.00 81.90           O
ATOM  15617  C1  NAG G 530     118.685  29.444  39.360  1.00 73.88           C
ATOM  15618  C2  NAG G 530     117.335  29.702  40.015  1.00 73.62           C
ATOM  15619  N2  NAG G 530     116.493  28.522  39.891  1.00 74.41           N
ATOM  15620  C7  NAG G 530     116.092  27.777  40.935  1.00 75.44           C
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ATOM	15621	O7	NAG	G	530	115.674	28.231	42.011	1.00	75.14	O
ATOM	15622	C8	NAG	G	530	116.160	26.289	40.749	1.00	75.38	C
ATOM	15623	C3	NAG	G	530	116.644	30.914	39.394	1.00	73.75	C
ATOM	15624	O3	NAG	G	530	115.534	31.274	40.174	1.00	74.19	O
ATOM	15625	C4	NAG	G	530	117.556	32.128	39.260	1.00	74.17	C
ATOM	15626	O4	NAG	G	530	116.855	33.125	38.538	1.00	76.58	O
ATOM	15627	C5	NAG	G	530	118.820	31.666	38.534	1.00	73.76	C
ATOM	15628	C6	NAG	G	530	119.833	32.775	38.244	1.00	73.44	C
ATOM	15629	O6	NAG	G	530	120.188	33.478	39.418	1.00	73.70	O
ATOM	15630	O5	NAG	G	530	119.438	30.640	39.288	1.00	73.14	O
ATOM	15631	C1	NAG	G	531	116.955	34.434	39.135	1.00	79.45	C
ATOM	15632	C2	NAG	G	531	116.423	35.474	38.146	1.00	80.87	C
ATOM	15633	N2	NAG	G	531	117.244	35.460	36.955	1.00	81.39	N
ATOM	15634	C7	NAG	G	531	116.766	35.158	35.749	1.00	81.97	C
ATOM	15635	O7	NAG	G	531	116.690	34.004	35.328	1.00	81.53	O
ATOM	15636	C8	NAG	G	531	116.326	36.310	34.887	1.00	82.50	C
ATOM	15637	C3	NAG	G	531	116.375	36.887	38.747	1.00	82.62	C
ATOM	15638	O3	NAG	G	531	115.755	37.760	37.832	1.00	82.44	O
ATOM	15639	C4	NAG	G	531	115.628	36.811	40.092	1.00	84.19	C
ATOM	15640	O4	NAG	G	531	115.192	38.017	40.746	1.00	86.82	O
ATOM	15641	C5	NAG	G	531	116.429	35.822	40.970	1.00	83.52	C
ATOM	15642	C6	NAG	G	531	116.024	35.791	42.442	1.00	84.08	C
ATOM	15643	O6	NAG	G	531	114.789	35.123	42.580	1.00	85.25	O
ATOM	15644	O5	NAG	G	531	116.299	34.536	40.384	1.00	81.60	O
ATOM	15645	C1	MAN	G	532	116.004	39.222	40.685	1.00	88.90	C
ATOM	15646	C2	MAN	G	532	115.268	40.354	39.929	1.00	89.46	C
ATOM	15647	O2	MAN	G	532	114.439	39.830	38.910	1.00	90.09	O
ATOM	15648	C3	MAN	G	532	114.419	41.266	40.822	1.00	89.67	C
ATOM	15649	O3	MAN	G	532	113.143	41.466	40.252	1.00	89.30	O
ATOM	15650	C4	MAN	G	532	114.268	40.699	42.229	1.00	90.03	C
ATOM	15651	O4	MAN	G	532	113.529	41.596	43.036	1.00	90.42	O
ATOM	15652	C5	MAN	G	532	115.656	40.435	42.825	1.00	90.10	C
ATOM	15653	C6	MAN	G	532	115.584	39.816	44.227	1.00	90.44	C
ATOM	15654	O6	MAN	G	532	114.888	40.656	45.128	1.00	90.36	O
ATOM	15655	O5	MAN	G	532	116.482	39.627	41.974	1.00	89.95	O
ATOM	15656	C1	NAG	H	501	105.143	29.612	79.691	1.00	77.58	C
ATOM	15657	C2	NAG	H	501	104.681	31.068	79.663	1.00	77.53	C
ATOM	15658	N2	NAG	H	501	105.604	31.858	78.874	1.00	77.89	N
ATOM	15659	C7	NAG	H	501	105.157	32.650	77.904	1.00	78.60	C
ATOM	15660	O7	NAG	H	501	104.069	32.472	77.347	1.00	79.36	O
ATOM	15661	C8	NAG	H	501	106.044	33.795	77.507	1.00	78.33	C
ATOM	15662	C3	NAG	H	501	104.556	31.662	81.065	1.00	77.58	C
ATOM	15663	O3	NAG	H	501	103.992	32.953	80.999	1.00	77.30	O
ATOM	15664	C4	NAG	H	501	103.720	30.766	81.974	1.00	78.22	C
ATOM	15665	O4	NAG	H	501	103.653	31.355	83.267	1.00	79.28	O
ATOM	15666	C5	NAG	H	501	104.371	29.373	81.953	1.00	78.22	C
ATOM	15667	C6	NAG	H	501	103.691	28.336	82.852	1.00	78.45	C
ATOM	15668	O6	NAG	H	501	102.497	27.873	82.257	1.00	78.13	O
ATOM	15669	O5	NAG	H	501	104.369	28.878	80.625	1.00	78.08	O
ATOM	15670	C1	NAG	H	502	102.317	31.293	83.819	1.00	79.86	C
ATOM	15671	C2	NAG	H	502	102.384	31.345	85.340	1.00	80.14	C
ATOM	15672	N2	NAG	H	502	103.109	30.178	85.786	1.00	79.31	N
ATOM	15673	C7	NAG	H	502	103.993	30.145	86.781	1.00	79.23	C
ATOM	15674	O7	NAG	H	502	104.413	29.070	87.202	1.00	78.89	O
ATOM	15675	C8	NAG	H	502	104.481	31.436	87.383	1.00	78.92	C
ATOM	15676	C3	NAG	H	502	100.995	31.307	85.979	1.00	81.39	C

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ATOM  15677  O3  NAG H 502     101.106  31.726  87.324  1.00 81.43           O
ATOM  15678  C4  NAG H 502      99.953  32.168  85.256  1.00 82.15           C
ATOM  15679  O4  NAG H 502      98.677  31.766  85.740  1.00 84.01           O
ATOM  15680  C5  NAG H 502     100.089  32.001  83.732  1.00 81.59           C
ATOM  15681  C6  NAG H 502      99.143  32.893  82.932  1.00 81.39           C
ATOM  15682  O6  NAG H 502      99.707  33.172  81.674  1.00 81.40           O
ATOM  15683  O5  NAG H 502     101.425  32.277  83.344  1.00 80.66           O
ATOM  15684  C1  MAN H 503      97.809  32.806  86.297  1.00 85.02           C
ATOM  15685  C2  MAN H 503      98.294  33.425  87.629  1.00 85.17           C
ATOM  15686  O2  MAN H 503      99.609  33.930  87.511  1.00 85.26           O
ATOM  15687  C3  MAN H 503      97.354  34.539  88.126  1.00 85.18           C
ATOM  15688  O3  MAN H 503      98.010  35.335  89.089  1.00 84.74           O
ATOM  15689  C4  MAN H 503      96.839  35.429  86.990  1.00 85.28           C
ATOM  15690  O4  MAN H 503      95.847  36.307  87.467  1.00 85.22           O
ATOM  15691  C5  MAN H 503      96.288  34.549  85.870  1.00 85.64           C
ATOM  15692  C6  MAN H 503      95.600  35.337  84.754  1.00 86.08           C
ATOM  15693  O6  MAN H 503      94.242  34.945  84.652  1.00 86.52           O
ATOM  15694  O5  MAN H 503      97.379  33.798  85.368  1.00 85.59           O
ATOM  15695  C1  MAN H 504      93.360  36.091  84.716  1.00 86.70           C
ATOM  15696  C2  MAN H 504      91.911  35.597  84.719  1.00 86.61           C
ATOM  15697  O2  MAN H 504      91.741  34.668  85.768  1.00 85.70           O
ATOM  15698  C3  MAN H 504      90.896  36.749  84.814  1.00 86.99           C
ATOM  15699  O3  MAN H 504      90.583  37.043  86.159  1.00 87.07           O
ATOM  15700  C4  MAN H 504      91.396  38.024  84.126  1.00 87.14           C
ATOM  15701  O4  MAN H 504      90.313  38.704  83.521  1.00 87.02           O
ATOM  15702  C5  MAN H 504      92.479  37.699  83.092  1.00 87.10           C
ATOM  15703  C6  MAN H 504      92.925  38.952  82.335  1.00 86.94           C
ATOM  15704  O6  MAN H 504      94.203  38.764  81.764  1.00 86.68           O
ATOM  15705  O5  MAN H 504      93.603  37.063  83.699  1.00 87.17           O
ATOM  15706  C1  NAG H 505     111.878  33.896  81.800  1.00 70.77           C
ATOM  15707  C2  NAG H 505     111.204  35.236  81.523  1.00 70.03           C
ATOM  15708  N2  NAG H 505     111.831  35.845  80.375  1.00 69.86           N
ATOM  15709  C7  NAG H 505     111.181  35.930  79.220  1.00 69.78           C
ATOM  15710  O7  NAG H 505     110.640  34.964  78.685  1.00 68.83           O
ATOM  15711  C8  NAG H 505     111.136  37.292  78.587  1.00 69.97           C
ATOM  15712  C3  NAG H 505     111.296  36.188  82.709  1.00 70.47           C
ATOM  15713  O3  NAG H 505     110.484  37.320  82.482  1.00 71.21           O
ATOM  15714  C4  NAG H 505     110.887  35.518  84.016  1.00 70.46           C
ATOM  15715  O4  NAG H 505     111.274  36.356  85.079  1.00 71.27           O
ATOM  15716  C5  NAG H 505     111.628  34.188  84.139  1.00 70.37           C
ATOM  15717  C6  NAG H 505     111.250  33.424  85.401  1.00 70.34           C
ATOM  15718  O6  NAG H 505     109.961  32.867  85.266  1.00 70.43           O
ATOM  15719  O5  NAG H 505     111.369  33.370  83.010  1.00 70.88           O
ATOM  15720  C1  NAG H 506     110.172  37.029  85.711  1.00 72.15           C
ATOM  15721  C2  NAG H 506     110.461  37.014  87.214  1.00 72.12           C
ATOM  15722  N2  NAG H 506     110.323  35.665  87.724  1.00 71.68           N
ATOM  15723  C7  NAG H 506     111.185  35.120  88.578  1.00 70.81           C
ATOM  15724  O7  NAG H 506     112.379  34.962  88.329  1.00 69.33           O
ATOM  15725  C8  NAG H 506     110.612  34.688  89.896  1.00 71.08           C
ATOM  15726  C3  NAG H 506     109.532  37.931  87.993  1.00 72.54           C
ATOM  15727  O3  NAG H 506     109.981  37.998  89.324  1.00 72.33           O
ATOM  15728  C4  NAG H 506     109.529  39.318  87.363  1.00 73.34           C
ATOM  15729  O4  NAG H 506     108.671  40.174  88.090  1.00 73.46           O
ATOM  15730  C5  NAG H 506     109.109  39.192  85.892  1.00 74.05           C
ATOM  15731  C6  NAG H 506     109.025  40.563  85.212  1.00 74.92           C
ATOM  15732  O6  NAG H 506     108.984  40.426  83.806  1.00 76.27           O
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ATOM	15733	O5	NAG H 506	110.014	38.342	85.192	1.00	72.97		O
ATOM	15734	C1	NAG H 520	105.701	12.111	87.469	1.00	79.35		C
ATOM	15735	C2	NAG H 520	104.846	11.366	88.490	1.00	79.43		C
ATOM	15736	N2	NAG H 520	103.996	12.335	89.143	1.00	79.01		N
ATOM	15737	C7	NAG H 520	102.679	12.169	89.136	1.00	79.38		C
ATOM	15738	O7	NAG H 520	102.119	11.354	88.404	1.00	79.72		O
ATOM	15739	C8	NAG H 520	101.879	13.020	90.076	1.00	79.33		C
ATOM	15740	C3	NAG H 520	105.645	10.573	89.537	1.00	80.10		C
ATOM	15741	O3	NAG H 520	104.813	9.622	90.171	1.00	79.54		O
ATOM	15742	C4	NAG H 520	106.860	9.869	88.933	1.00	80.37		C
ATOM	15743	O4	NAG H 520	107.664	9.319	89.959	1.00	80.53		O
ATOM	15744	C5	NAG H 520	107.620	10.897	88.091	1.00	81.12		C
ATOM	15745	C6	NAG H 520	108.952	10.410	87.521	1.00	81.98		C
ATOM	15746	O6	NAG H 520	108.822	9.087	87.051	1.00	82.88		O
ATOM	15747	O5	NAG H 520	106.772	11.303	87.031	1.00	80.86		O
ATOM	15748	C1	NAG H 525	157.211	4.865	56.853	1.00	77.04		C
ATOM	15749	C2	NAG H 525	158.234	5.565	55.955	1.00	77.41		C
ATOM	15750	N2	NAG H 525	158.423	4.838	54.711	1.00	78.41		N
ATOM	15751	C7	NAG H 525	158.279	5.401	53.501	1.00	79.26		C
ATOM	15752	O7	NAG H 525	157.288	6.062	53.174	1.00	79.41		O
ATOM	15753	C8	NAG H 525	159.399	5.189	52.513	1.00	78.92		C
ATOM	15754	C3	NAG H 525	159.541	5.736	56.733	1.00	77.30		C
ATOM	15755	O3	NAG H 525	160.528	6.376	55.959	1.00	77.54		O
ATOM	15756	C4	NAG H 525	159.283	6.562	57.992	1.00	76.92		C
ATOM	15757	O4	NAG H 525	160.476	6.690	58.745	1.00	76.32		O
ATOM	15758	C5	NAG H 525	158.155	5.928	58.816	1.00	76.62		C
ATOM	15759	C6	NAG H 525	157.731	6.850	59.954	1.00	76.70		C
ATOM	15760	O6	NAG H 525	157.252	6.080	61.032	1.00	76.76		O
ATOM	15761	O5	NAG H 525	157.009	5.660	58.015	1.00	76.75		O
ATOM	15762	C1	NAG H 530	99.812	26.744	58.508	1.00	77.04		C
ATOM	15763	C2	NAG H 530	99.221	26.931	57.111	1.00	76.08		C
ATOM	15764	N2	NAG H 530	99.522	25.791	56.276	1.00	76.19		N
ATOM	15765	C7	NAG H 530	98.577	25.120	55.629	1.00	76.29		C
ATOM	15766	O7	NAG H 530	97.539	25.636	55.218	1.00	75.91		O
ATOM	15767	C8	NAG H 530	98.840	23.660	55.416	1.00	76.80		C
ATOM	15768	C3	NAG H 530	99.791	28.157	56.420	1.00	76.49		C
ATOM	15769	O3	NAG H 530	99.082	28.370	55.222	1.00	76.83		O
ATOM	15770	C4	NAG H 530	99.731	29.393	57.309	1.00	77.28		C
ATOM	15771	O4	NAG H 530	100.394	30.446	56.632	1.00	78.04		O
ATOM	15772	C5	NAG H 530	100.376	29.049	58.663	1.00	77.52		C
ATOM	15773	C6	NAG H 530	100.377	30.218	59.649	1.00	77.91		C
ATOM	15774	O6	NAG H 530	99.062	30.505	60.070	1.00	78.46		O
ATOM	15775	O5	NAG H 530	99.713	27.945	59.253	1.00	76.49		O
ATOM	15776	C1	NAG H 531	99.617	31.658	56.620	1.00	80.10		C
ATOM	15777	C2	NAG H 531	100.537	32.829	56.288	1.00	81.18		C
ATOM	15778	N2	NAG H 531	101.596	32.916	57.277	1.00	82.12		N
ATOM	15779	C7	NAG H 531	102.845	32.512	57.041	1.00	82.73		C
ATOM	15780	O7	NAG H 531	103.149	31.705	56.160	1.00	83.12		O
ATOM	15781	C8	NAG H 531	103.905	33.099	57.924	1.00	82.44		C
ATOM	15782	C3	NAG H 531	99.770	34.152	56.254	1.00	81.65		C
ATOM	15783	O3	NAG H 531	100.561	35.119	55.605	1.00	81.73		O
ATOM	15784	C4	NAG H 531	98.411	34.088	55.546	1.00	81.82		C
ATOM	15785	O4	NAG H 531	97.680	35.232	55.978	1.00	82.21		O
ATOM	15786	C5	NAG H 531	97.669	32.763	55.819	1.00	81.61		C
ATOM	15787	C6	NAG H 531	96.521	32.538	54.838	1.00	81.94		C
ATOM	15788	O6	NAG H 531	97.016	31.929	53.662	1.00	82.12		O

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ATOM  15789  O5  NAG H 531      98.534  31.641  55.714  1.00 80.80           O
ATOM  15790  C1  MAN H 532      97.184  36.097  54.919  1.00 82.33           C
ATOM  15791  C2  MAN H 532      98.278  36.986  54.311  1.00 82.36           C
ATOM  15792  O2  MAN H 532      99.166  36.183  53.567  1.00 82.64           O
ATOM  15793  C3  MAN H 532      97.708  38.071  53.391  1.00 82.61           C
ATOM  15794  O3  MAN H 532      98.390  38.080  52.152  1.00 82.51           O
ATOM  15795  C4  MAN H 532      96.211  37.879  53.143  1.00 82.52           C
ATOM  15796  O4  MAN H 532      95.703  38.948  52.374  1.00 81.53           O
ATOM  15797  C5  MAN H 532      95.461  37.776  54.476  1.00 82.60           C
ATOM  15798  C6  MAN H 532      93.992  37.392  54.273  1.00 82.12           C
ATOM  15799  O6  MAN H 532      93.207  38.555  54.143  1.00 81.25           O
ATOM  15800  O5  MAN H 532      96.106  36.892  55.399  1.00 82.60           O
ATOM  15801  O   HOH W   1     149.760  26.659  66.613  1.00 62.14           O
ATOM  15802  O   HOH W   2      73.919  16.177  31.510  1.00 74.57           O
ATOM  15803  O   HOH W   3      78.805  22.854  65.154  1.00 63.08           O
ATOM  15804  O   HOH W   4     128.572  40.317   0.139  1.00 44.46           O
ATOM  15805  O   HOH W   5      47.473  17.484  10.867  1.00 64.08           O
ATOM  15806  O   HOH W   6     104.653  19.429  13.997  1.00 66.69           O
ATOM  15807  O   HOH W   7      73.942  16.995  18.885  1.00 65.20           O
ATOM  15808  O   HOH W   8      93.132  18.156  62.996  1.00 81.84           O
ATOM  15809  O   HOH W   9     134.315  41.959 -10.713  1.00 53.95           O
ATOM  15810  O   HOH W  10      93.217   9.453   1.796  1.00 63.59           O
ATOM  15811  O   HOH W  11      88.217  10.299  73.741  1.00 97.73           O
ATOM  15812  O   HOH W  12      91.860  11.287   6.137  1.00 67.38           O
ATOM  15813  O   HOH W  13     124.422  21.325  45.493  1.00 81.03           O
ATOM  15814  O   HOH W  14     124.276  22.984  58.696  1.00 63.61           O
ATOM  15815  O   HOH W  15      63.317  25.131   3.100  1.00 65.15           O
ATOM  15816  O   HOH W  16      50.209  43.715  11.108  1.00 69.32           O
ATOM  15817  O   HOH W  17      62.064  10.256  11.833  1.00 84.23           O
ATOM  15818  O   HOH W  18      80.166  24.727  64.838  1.00 78.38           O
ATOM  15819  O   HOH W  19     148.864  28.750  68.503  1.00 71.64           O
ATOM  15820  O   HOH W  20      68.794  -1.784   7.475  1.00 89.96           O
ATOM  15821  O   HOH W  21      46.221  -3.438  25.012  1.00 86.95           O
ATOM  15822  O   HOH W  22      71.904  13.106  15.958  1.00 54.59           O
ATOM  15823  O   HOH W  23      91.066  10.224  -1.257  1.00 78.72           O
ATOM  15824  O   HOH W  24     134.116  51.083  78.008  1.00 75.96           O
ATOM  15825  O   HOH W  25      58.483  21.146  -7.788  1.00 74.57           O
ATOM  15826  O   HOH W  26     114.938  27.488  13.708  1.00 77.05           O
ATOM  15827  O   HOH W  27     130.947  26.321  70.682  1.00 64.28           O
ATOM  15828  O   HOH W  28     125.695  28.396 -10.376  1.00 74.85           O
ATOM  15829  O   HOH W  29     103.018  34.911  75.806  1.00 70.13           O
ATOM  15830  O   HOH W  30      76.882  16.970  30.170  1.00 78.49           O
ATOM  15831  O   HOH W  31     121.335  53.659  -3.830  1.00 59.21           O
ATOM  15832  O   HOH W  32      67.891  32.857  11.388  1.00 89.56           O
ATOM  15833  O   HOH W  33      63.746  10.190  53.380  1.00 71.59           O
ATOM  15834  O   HOH W  34      78.157  23.365  34.526  1.00 81.20           O
ATOM  15835  O   HOH W  35     109.211  12.214   4.307  1.00 82.54           O
ATOM  15836  O   HOH W  36     139.839  48.402  -0.013  1.00 80.83           O
ATOM  15837  O   HOH W  37      62.512  16.799  65.082  1.00 57.21           O
ATOM  15838  O   HOH W  38     161.335  42.727  58.884  1.00 69.34           O
ATOM  15839  O   HOH W  39     123.162  40.803  12.539  1.00 75.38           O
ATOM  15840  O   HOH W  40      28.111  39.835  22.959  1.00 69.69           O
ATOM  15841  O   HOH W  41     137.054  18.499  65.257  1.00 78.11           O
ATOM  15842  O   HOH W  42     126.921  17.011  37.230  1.00 64.54           O
ATOM  15843  O   HOH W  43     118.458  26.282  89.894  1.00 70.03           O
ATOM  15844  O   HOH W  44     118.234  16.964  11.030  1.00 78.16           O
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ATOM	15845	O	HOH	W	45	124.837	20.572	56.477	1.00	90.59	O
ATOM	15846	O	HOH	W	46	100.706	27.978	73.251	1.00	68.06	O
ATOM	15847	O	HOH	W	47	141.997	30.147	-0.714	1.00	66.42	O
ATOM	15848	O	HOH	W	48	117.272	52.758	10.575	1.00	86.30	O
ATOM	15849	O	HOH	W	49	123.856	46.066	8.177	1.00	80.67	O
ATOM	15850	O	HOH	W	50	81.549	24.447	63.004	1.00	69.88	O
ATOM	15851	O	HOH	W	51	62.816	8.335	46.488	1.00	74.75	O
ATOM	15852	O	HOH	W	52	73.095	18.244	-1.285	1.00	74.86	O
ATOM	15853	O	HOH	W	53	46.433	16.472	25.751	1.00	57.98	O
ATOM	15854	O	HOH	W	54	98.606	5.979	69.966	1.00	67.87	O
ATOM	15855	O	HOH	W	55	111.338	24.360	-12.723	1.00	58.27	O
ATOM	15856	O	HOH	W	56	83.286	12.289	-1.933	1.00	60.18	O
ATOM	15857	O	HOH	W	57	122.821	31.159	24.688	1.00	65.29	O
ATOM	15858	O	HOH	W	58	79.386	23.207	57.544	1.00	68.69	O
ATOM	15859	O	HOH	W	59	92.874	8.761	6.481	1.00	73.16	O
ATOM	15860	O	HOH	W	60	95.559	28.428	-8.580	1.00	75.52	O
ATOM	15861	O	HOH	W	61	66.366	8.638	24.449	1.00	71.06	O
ATOM	15862	O	HOH	W	62	70.098	24.194	87.434	1.00	86.04	O
ATOM	15863	O	HOH	W	63	110.271	53.314	-21.750	1.00	66.83	O
ATOM	15864	O	HOH	W	64	139.027	13.236	26.266	1.00	85.39	O
ATOM	15865	O	HOH	W	65	107.394	12.803	70.983	1.00	79.01	O
ATOM	15866	O	HOH	W	66	132.739	6.290	3.142	1.00	82.71	O
ATOM	15867	O	HOH	W	67	92.652	8.985	17.817	1.00	83.43	O
ATOM	15868	O	HOH	W	68	81.471	9.128	37.135	1.00	80.81	O
ATOM	15869	O	HOH	W	69	136.835	16.693	30.917	1.00	60.88	O
ATOM	15870	O	HOH	W	70	55.110	27.720	41.557	1.00	84.52	O
ATOM	15871	O	HOH	W	71	66.197	16.288	19.049	1.00	57.66	O
ATOM	15872	O	HOH	W	72	70.283	22.049	18.125	1.00	51.47	O
ATOM	15873	O	HOH	W	73	71.544	23.112	20.106	1.00	56.91	O
ATOM	15874	O	HOH	W	74	69.331	2.474	36.294	1.00	74.81	O
ATOM	15875	O	HOH	W	75	80.879	9.562	32.255	1.00	96.21	O
ATOM	15876	O	HOH	W	76	75.967	5.550	30.161	1.00	70.89	O
ATOM	15877	O	HOH	W	77	74.642	21.603	41.248	1.00	70.24	O
ATOM	15878	O	HOH	W	78	64.806	5.772	48.283	1.00	74.58	O
ATOM	15879	O	HOH	W	79	68.819	10.020	14.546	1.00	72.27	O
ATOM	15880	O	HOH	W	80	54.019	21.002	78.418	1.00	58.87	O
ATOM	15881	O	HOH	W	81	62.559	15.273	74.993	1.00	65.11	O
ATOM	15882	O	HOH	W	82	36.047	39.537	23.002	1.00	62.49	O
ATOM	15883	O	HOH	W	83	69.366	35.151	13.659	1.00	77.66	O
ATOM	15884	O	HOH	W	84	72.827	11.791	61.742	1.00	61.07	O
ATOM	15885	O	HOH	W	85	78.089	13.221	65.095	1.00	81.15	O
ATOM	15886	O	HOH	W	86	66.124	1.680	20.283	1.00	68.40	O
ATOM	15887	O	HOH	W	87	126.930	18.100	61.468	1.00	77.80	O
ATOM	15888	O	HOH	W	88	138.136	11.063	59.555	1.00	78.62	O
ATOM	15889	O	HOH	W	89	125.465	28.750	57.327	1.00	67.93	O
ATOM	15890	O	HOH	W	90	127.164	27.932	59.061	1.00	58.63	O
ATOM	15891	O	HOH	W	91	148.381	21.441	46.867	1.00	66.44	O
ATOM	15892	O	HOH	W	92	131.510	9.145	40.887	1.00	83.23	O
ATOM	15893	O	HOH	W	93	125.316	28.154	49.217	1.00	57.41	O
ATOM	15894	O	HOH	W	94	145.099	18.515	40.857	1.00	70.21	O
ATOM	15895	O	HOH	W	95	133.177	45.038	9.403	1.00	69.65	O
ATOM	15896	O	HOH	W	96	92.551	19.668	59.911	1.00	76.85	O
ATOM	15897	O	HOH	W	97	129.770	50.307	76.656	1.00	73.88	O
ATOM	15898	O	HOH	W	98	127.771	49.567	78.869	1.00	74.15	O
ATOM	15899	O	HOH	W	99	130.741	27.401	81.286	1.00	68.82	O
ATOM	15900	O	HOH	W	100	131.162	5.056	61.601	1.00	85.39	O

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ATOM  15901  O   HOH W 101     113.692  37.378  33.569  1.00 85.44           O
ATOM  15902  O   HOH W 102      48.054  20.003   9.444  1.00 58.31           O
ATOM  15903  O   HOH W 103      69.345   2.465  20.666  1.00 75.72           O
ATOM  15904  O   HOH W 104      87.936  -8.988  84.621  1.00 69.55           O
ATOM  15905  O   HOH W 106      84.568 -20.175  92.950  1.00 91.46           O
ATOM  15906  O   HOH W 107      90.270 -15.967  93.079  1.00 79.16           O
ATOM  15907  O   HOH W 108     127.003  30.616  -9.398  1.00 71.19           O
ATOM  15908  O   HOH W 109     122.505  16.458   8.655  1.00 80.40           O
ATOM  15909  O   HOH W 110     125.342  18.445   2.985  1.00 61.11           O
ATOM  15910  O   HOH W 111      80.172  22.548  26.413  1.00 85.44           O
ATOM  15911  O   HOH W 112      57.377  -5.407  -0.616  1.00 71.64           O
ATOM  15912  O   HOH W 113      61.779  -9.132   8.680  1.00 82.77           O
ATOM  15913  O   HOH W 114     139.951  11.755  30.912  1.00 82.60           O
ATOM  15914  O   HOH W 115     115.272  40.005  34.595  1.00 84.72           O
ATOM  15915  O   HOH W 116     126.472  15.377  62.149  1.00 71.28           O
ATOM  15916  O   HOH W 117     122.748  12.890  67.423  1.00 88.90           O
ATOM  15917  O   HOH W 118     140.930  23.750  70.933  1.00 77.69           O
ATOM  15918  O   HOH W 119      49.673   4.706  25.843  1.00 85.32           O
ATOM  15919  O   HOH W 120      44.385  14.995   7.871  1.00 82.37           O
ATOM  15920  O   HOH W 121      40.727  15.186   5.443  1.00 86.26           O
ATOM  15921  O   HOH W 122      47.032  17.550   8.115  1.00 69.95           O
ATOM  15922  O   HOH W 123      76.109  12.022  93.103  1.00 59.30           O
ATOM  15923  O   HOH W 124     122.837  16.203 -15.893  1.00 75.84           O
ATOM  15924  O   HOH W 125     125.265  15.797 -17.068  1.00 77.44           O
ATOM  15925  O   HOH W 126     127.021  21.207   2.697  1.00 74.71           O
ATOM  15926  O   HOH W 127     120.554  17.151  13.595  1.00 75.16           O
ATOM  15927  O   HOH W 128      75.603  23.821  63.855  1.00 74.62           O
ATOM  15928  O   HOH W 129      74.991  30.575  62.260  1.00 70.04           O
ATOM  15929  O   HOH W 130      65.647  23.569  71.328  1.00 62.10           O
ATOM  15930  O   HOH W 131      64.017  21.225  70.314  1.00 70.02           O
ATOM  15931  O   HOH W 132     126.338  42.058   6.650  1.00 62.69           O
ATOM  15932  O   HOH W 133     130.616  23.710  70.825  1.00 61.10           O
ATOM  15933  O   HOH W 134      73.450  14.698  20.657  1.00 70.51           O
ATOM  15934  O   HOH W 135      76.383  45.072  69.528  1.00 80.19           O
ATOM  15935  O   HOH W 136      90.956  28.122  92.473  1.00 85.89           O
ATOM  15936  O   HOH W 137      90.915  31.505  92.476  1.00 78.94           O
ATOM  15937  O   HOH W 138     103.161  37.385  76.768  1.00 80.82           O
ATOM  15938  O   HOH W 139      79.124  34.452  63.046  1.00 73.39           O
ATOM  15939  O   HOH W 140      90.787  34.787  81.362  1.00 92.80           O
ATOM  15940  O   HOH W 141      99.503  35.242  75.197  1.00 85.28           O
ATOM  15941  O   HOH W 142     100.386  36.119  69.423  1.00 77.66           O
ATOM  15942  O   HOH W 143      63.646  -2.389   8.200  1.00 77.54           O
ATOM  15943  O   HOH W 144     127.473   3.007   2.467  1.00 69.71           O
ATOM  15944  O   HOH W 146      64.272   5.995  44.652  1.00 66.58           O
ATOM  15945  O   HOH W 147      68.307   8.675  45.648  1.00 71.58           O
ATOM  15946  O   HOH W 148      68.823   7.943  48.565  1.00 72.19           O
ATOM  15947  O   HOH W 149      74.053  22.956  47.159  1.00 71.29           O
ATOM  15948  O   HOH W 150      73.135  25.977  53.037  1.00 61.15           O
ATOM  15949  O   HOH W 151      69.610  14.942  55.684  1.00 62.05           O
ATOM  15950  O   HOH W 152      72.257  16.577  56.123  1.00 64.12           O
ATOM  15951  O   HOH W 153      72.885   8.956  61.806  1.00 72.68           O
ATOM  15952  O   HOH W 154      74.028   8.906  64.771  1.00 78.89           O
ATOM  15953  O   HOH W 155      78.574  10.934  64.049  1.00 82.59           O
ATOM  15954  O   HOH W 156      82.481  16.846  62.665  1.00 91.69           O
ATOM  15955  O   HOH W 157      83.183  27.907  63.125  1.00 79.99           O
ATOM  15956  O   HOH W 158      58.954  42.331  69.323  1.00 74.28           O
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ATOM  15957  O   HOH W 159      56.782  42.335  67.529  1.00 75.03           O
ATOM  15958  O   HOH W 160      64.249  42.374  69.237  1.00 83.11           O
ATOM  15959  O   HOH W 161      60.173  29.132  43.029  1.00 80.76           O
ATOM  15960  O   HOH W 162      58.218  27.566  39.614  1.00 61.37           O
ATOM  15961  O   HOH W 163      58.048  30.239  39.204  1.00 73.59           O
ATOM  15962  O   HOH W 164      56.822  30.823  43.817  1.00 86.40           O
ATOM  15963  O   HOH W 165      65.339  31.964  40.315  1.00 82.75           O
ATOM  15964  O   HOH W 166      50.174  41.898  65.728  1.00 80.76           O
ATOM  15965  O   HOH W 167      50.566  23.374  62.733  1.00 63.37           O
ATOM  15966  O   HOH W 168     124.117  23.386  78.725  1.00 66.79           O
ATOM  15967  O   HOH W 169     117.827  45.077  74.744  1.00 79.31           O
ATOM  15968  O   HOH W 170     126.877  38.750  66.049  1.00 90.51           O
ATOM  15969  O   HOH W 171     124.572  41.865  63.433  1.00 78.98           O
ATOM  15970  O   HOH W 172     125.008  44.207  67.916  1.00 81.28           O
ATOM  15971  O   HOH W 173     120.993  38.747  61.511  1.00 86.75           O
ATOM  15972  O   HOH W 174     133.558  42.190  52.457  1.00 76.38           O
ATOM  15973  O   HOH W 175     137.328  34.435  50.095  1.00 69.93           O
ATOM  15974  O   HOH W 176     134.096  39.802  42.967  1.00 80.62           O
ATOM  15975  O   HOH W 177     130.375  41.838  45.059  1.00 93.01           O
ATOM  15976  O   HOH W 178     130.228  40.980  39.593  1.00 85.20           O
ATOM  15977  O   HOH W 179     135.356  42.716  33.890  1.00 76.39           O
ATOM  15978  O   HOH W 180     137.256  32.932  34.906  1.00 74.25           O
ATOM  15979  O   HOH W 181     138.074  39.652  33.549  1.00 88.75           O
ATOM  15980  O   HOH W 182     150.296  30.522  31.078  1.00 66.57           O
ATOM  15981  O   HOH W 183     146.968  23.650  27.927  1.00 82.69           O
ATOM  15982  O   HOH W 184     153.690  16.338  29.472  1.00 86.44           O
ATOM  15983  O   HOH W 185     149.857  29.833  14.737  1.00 91.02           O
ATOM  15984  O   HOH W 186     149.496  30.814  35.666  1.00 71.34           O
ATOM  15985  O   HOH W 187     119.844  24.266  43.446  1.00 97.96           O
ATOM  15986  O   HOH W 188     135.600  13.001  33.249  1.00 69.88           O
ATOM  15987  O   HOH W 189     133.635  12.095  22.519  1.00 77.37           O
ATOM  15988  O   HOH W 190     130.215  15.887  14.262  1.00 90.74           O
ATOM  15989  O   HOH W 191     115.554  27.652  17.549  1.00 73.58           O
ATOM  15990  O   HOH W 192     113.404  34.466  14.920  1.00101.37           O
ATOM  15991  O   HOH W 193     111.046  35.836  12.245  1.00 74.86           O
ATOM  15992  O   HOH W 194     115.761  38.739  12.848  1.00 76.28           O
ATOM  15993  O   HOH W 195     107.864  45.165  -0.382  1.00 78.11           O
ATOM  15994  O   HOH W 196     106.554  37.917   2.111  1.00 94.79           O
ATOM  15995  O   HOH W 197      96.374  30.588   3.234  1.00 65.85           O
ATOM  15996  O   HOH W 198      95.634  27.362   4.003  1.00 58.07           O
ATOM  15997  O   HOH W 199      99.118  30.601   1.983  1.00 61.65           O
ATOM  15998  O   HOH W 200      94.581  32.598   1.328  1.00 71.65           O
ATOM  15999  O   HOH W 201      97.147  34.560  -1.804  1.00 75.63           O
ATOM  16000  O   HOH W 202      99.813  38.020  -0.030  1.00 69.57           O
ATOM  16001  O   HOH W 203      95.845  35.237   1.506  1.00 78.96           O
ATOM  16002  O   HOH W 204     105.779  34.689 -13.346  1.00 84.31           O
ATOM  16003  O   HOH W 205     102.627  24.189 -14.172  1.00 72.62           O
ATOM  16004  O   HOH W 206      87.322  18.512  -9.773  1.00 61.70           O
ATOM  16005  O   HOH W 207      93.348  20.259 -10.355  1.00 73.46           O
ATOM  16006  O   HOH W 208      87.726  15.765 -11.695  1.00 73.64           O
ATOM  16007  O   HOH W 209      89.814  12.517 -15.733  1.00 78.00           O
ATOM  16008  O   HOH W 210      89.280  31.981   8.301  1.00 82.98           O
ATOM  16009  O   HOH W 211      87.374  34.770  -5.581  1.00 83.47           O
ATOM  16010  O   HOH W 212      74.734  11.750  10.722  1.00 63.53           O
ATOM  16011  O   HOH W 213      72.602  10.472  16.027  1.00 76.91           O
ATOM  16012  O   HOH W 214      67.233  14.192   5.801  1.00 80.34           O
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ATOM  16013  O   HOH W 215      66.833  19.453   6.903  1.00 64.75           O
ATOM  16014  O   HOH W 216      72.257   8.938  10.137  1.00 83.43           O
ATOM  16015  O   HOH W 217      53.569  32.450  -1.055  1.00 75.75           O
ATOM  16016  O   HOH W 218     134.602  53.351   2.448  1.00 69.67           O
ATOM  16017  O   HOH W 219     133.048  51.861   6.382  1.00 89.00           O
ATOM  16018  O   HOH W 220     128.599  49.412   8.838  1.00 75.34           O
ATOM  16019  O   HOH W 221     126.902  49.343  10.998  1.00 78.34           O
ATOM  16020  O   HOH W 222     122.661  41.387  17.055  1.00 96.95           O
ATOM  16021  O   HOH W 223     125.788  41.849  17.347  1.00 92.02           O
ATOM  16022  O   HOH W 224     127.823  45.078  14.685  1.00 82.42           O
ATOM  16023  O   HOH W 225     136.624  44.042  15.180  1.00 68.43           O
ATOM  16024  O   HOH W 226     121.986  41.827  30.179  1.00 88.13           O
ATOM  16025  O   HOH W 227      78.803   8.979   7.617  1.00 85.07           O
ATOM  16026  O   HOH W 228      77.299  10.200   1.374  1.00 79.27           O
ATOM  16027  O   HOH W 229      91.118  12.266   1.082  1.00 74.43           O
ATOM  16028  O   HOH W 230      88.937  10.585   6.526  1.00 72.74           O
ATOM  16029  O   HOH W 231     115.009  15.700   0.069  1.00 77.45           O
ATOM  16030  O   HOH W 232      36.970  -4.171  13.061  1.00 89.09           O
ATOM  16031  O   HOH W 233      64.937  -5.316   9.352  1.00 81.80           O
ATOM  16032  O   HOH W 234      69.724  -4.376   7.098  1.00102.78           O
ATOM  16033  O   HOH W 235      58.304  23.844  -7.211  1.00 70.46           O
ATOM  16034  O   HOH W 236      61.454  21.953   4.339  1.00 75.18           O
ATOM  16035  O   HOH W 237      68.586  12.975   7.745  1.00 82.74           O
ATOM  16036  O   HOH W 238      71.438  18.023   1.325  1.00 81.47           O
ATOM  16037  O   HOH W 239      75.679  23.847 -13.219  1.00 87.88           O
ATOM  16038  O   HOH W 240      78.833  23.613 -12.265  1.00 82.13           O
ATOM  16039  O   HOH W 241      76.141  33.889 -14.011  1.00 95.26           O
ATOM  16040  O   HOH W 242      77.523  36.268 -12.843  1.00 86.52           O
ATOM  16041  O   HOH W 243      74.191  37.652 -10.807  1.00 96.66           O
ATOM  16042  O   HOH W 244      73.610  41.849  -3.985  1.00 93.06           O
ATOM  16043  O   HOH W 245      64.689  43.951   0.905  1.00 80.14           O
ATOM  16044  O   HOH W 246      68.412  44.598  -4.310  1.00 84.73           O
ATOM  16045  O   HOH W 247      58.548  44.514   0.850  1.00 92.24           O
ATOM  16046  O   HOH W 248      60.394  46.068  16.626  1.00 72.44           O
ATOM  16047  O   HOH W 249      45.388   7.835  50.806  1.00 90.73           O
ATOM  16048  O   HOH W 250      75.041  13.218  95.742  1.00 77.01           O
ATOM  16049  O   HOH W 251      83.685 -24.306  93.199  1.00 73.38           O
ATOM  16050  O   HOH W 252      84.356 -27.179  93.227  1.00 79.42           O
ATOM  16051  O   HOH W 253      82.731  -4.781  74.656  1.00 86.11           O
ATOM  16052  O   HOH W 254     104.347  41.890 -18.014  1.00 83.47           O
ATOM  16053  O   HOH W 255     104.334  37.156 -23.697  1.00 76.03           O
ATOM  16054  O   HOH W 256     103.110  42.051   0.446  1.00 85.21           O
ATOM  16055  O   HOH W 257      66.016  43.714  65.397  1.00 90.63           O
ATOM  16056  O   HOH W 258      60.265  38.537  58.734  1.00 77.47           O
ATOM  16057  O   HOH W 259      64.374  37.954  55.648  1.00 82.28           O
ATOM  16058  O   HOH W 260      59.708  38.280  53.493  1.00 88.37           O
ATOM  16059  O   HOH W 261     103.633  42.808   4.413  1.00 77.02           O
ATOM  16060  O   HOH W 262      97.308  37.723   5.713  1.00 89.53           O
ATOM  16061  O   HOH W 263     117.270  26.901  12.171  1.00 95.74           O
ATOM  16062  O   HOH W 264      90.490   9.408 -16.912  1.00 83.68           O
ATOM  16063  O   HOH W 265      59.514  36.825  67.597  1.00 66.73           O
ATOM  16064  O   HOH W 266      60.196  36.931  72.135  1.00 73.64           O
ATOM  16065  O   HOH W 267      75.545  41.483   3.421  1.00 77.26           O
ATOM  16066  O   HOH W 268      73.304  40.177   1.351  1.00 89.76           O
ATOM  16067  O   HOH W 269      77.106  38.587 -16.369  1.00 88.48           O
ATOM  16068  O   HOH W 270     124.509  16.239  27.119  1.00 71.57           O
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ATOM  16069  O   HOH W 271     152.881  20.159  25.825  1.00 93.32           O
ATOM  16070  O   HOH W 272     136.065  28.083  -7.396  1.00 82.04           O
ATOM  16071  O   HOH W 273     136.096  28.350 -10.630  1.00 84.25           O
ATOM  16072  O   HOH W 274     134.516  27.108 -14.445  1.00 85.01           O
ATOM  16073  O   HOH W 275     120.552 -16.507 -15.730  1.00 82.35           O
ATOM  16074  O   HOH W 276     115.575 -16.427 -16.537  1.00 84.43           O
ATOM  16075  O   HOH W 277      99.180  37.901  74.671  1.00 77.79           O
ATOM  16076  O   HOH W 278      91.081  35.237  77.311  1.00 90.57           O
ATOM  16077  O   HOH W 279     105.683  34.423  87.214  1.00 81.46           O
ATOM  16078  O   HOH W 280     140.625  -2.027  58.054  1.00 85.43           O
ATOM  16079  O   HOH W 281     156.998  -1.524  54.607  1.00 75.13           O
ATOM  16080  O   HOH W 282     160.300  -2.840  52.541  1.00 78.19           O
ATOM  16081  O   HOH W 283     144.851  27.867  79.968  1.00 74.04           O
ATOM  16082  O   HOH W 284     137.688  30.637  85.212  1.00 89.51           O
ATOM  16083  O   HOH W 285     130.903  27.720  73.877  1.00 66.53           O
ATOM  16084  O   HOH W 286     127.501  21.529  76.593  1.00 81.90           O
ATOM  16085  O   HOH W 287     132.824  31.312  74.961  1.00 68.92           O
ATOM  16086  O   HOH W 288     151.400  18.620  81.586  1.00 77.71           O
ATOM  16087  O   HOH W 289     108.720  31.006  52.388  1.00 77.17           O
ATOM  16088  O   HOH W 290     105.161  35.085  54.338  1.00 83.24           O
ATOM  16089  O   HOH W 291     103.647  38.971  56.709  1.00 91.51           O
ATOM  16090  O   HOH W 292     104.666  41.611  63.766  1.00 82.29           O
ATOM  16091  O   HOH W 293     119.604  13.561  64.677  1.00 84.97           O
ATOM  16092  O   HOH W 294     108.190  13.998  76.459  1.00 73.60           O
ATOM  16093  O   HOH W 295     106.138   9.255  75.650  1.00 81.35           O
ATOM  16094  O   HOH W 296      79.651  20.549  58.334  1.00 72.85           O
ATOM  16095  O   HOH W 297      79.432  38.186  56.428  1.00 90.71           O
ATOM  16096  O   HOH W 298      89.599  34.581  23.473  1.00 93.03           O
ATOM  16097  O   HOH W 299      91.109  38.916  21.445  1.00 90.75           O
ATOM  16098  O   HOH W 300      80.198  17.671  18.000  1.00 92.14           O
ATOM  16099  O   HOH W 301      79.176   9.461  11.795  1.00 90.31           O
ATOM  16100  O   HOH W 302      69.845   8.867   3.034  1.00 80.17           O
ATOM  16101  O   HOH W 303     146.084  24.060  -1.935  1.00 79.77           O
ATOM  16102  O   HOH W 304     116.983  31.989 -23.591  1.00 85.84           O
ATOM  16103  O   HOH W 305     115.548  27.170 -15.639  1.00 80.32           O
ATOM  16104  O   HOH W 306     114.184  20.474 -16.106  1.00 67.41           O
ATOM  16105  O   HOH W 307      83.005  21.216 -10.950  1.00 66.98           O
ATOM  16106  O   HOH W 308      81.306  17.584 -12.029  1.00 82.73           O
ATOM  16107  O   HOH W 309      84.559  11.299  -5.451  1.00 65.85           O
ATOM  16108  O   HOH W 310      81.558  30.724  45.785  1.00 76.05           O
END
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Other embodiments are in the claims.

WHAT IS CLAIMED IS:

1. A crystallized LINGO-1 polypeptide.

2. The crystallized LINGO-1 polypeptide of claim 1 or 2, wherein the LINGO-1 polypeptide comprises a leucine-rich repeat (LRR) domain.

3. The crystallized LINGO-1 polypeptide of claim 2, wherein the LINGO-1 polypeptide comprises an immunoglobulin-like (Ig-like) domain.

4. The crystallized LINGO-1 polypeptide of claim 1, wherein the LINGO-1 polypeptide consists essentially of a LRR-like domain, an Ig-like domain, and a stalk domain.

5. The crystallized LINGO-1 polypeptide of claim 1, wherein the LINGO-1 polypeptide comprises the amino acid sequence of SEQ ID NO:1.

6. The crystallized LINGO-1 polypeptide of any of claims 1-5, wherein the crystallized LINGO-1 polypeptide has space group $P2_12_12$.

7. The crystallized LINGO-1 polypeptide of claim 6, wherein the crystallized LINGO-1 polypeptide has unit cell dimensions a=201.5 Å, b=149.7 Å, c=157.5 Å, and $\alpha=\beta=\gamma=90°$.

8. The crystallized LINGO-1 polypeptide of any of claims 1-5, wherein the crystallized LINGO-1 polypeptide has space group I222.

9. The crystallized LINGO-1 polypeptide of claim 8, wherein the crystallized LINGO-1 polypeptide has unit cell dimensions a=148.7 Å, b=158.6 Å, c=200.0 Å, and $\alpha=\beta=\gamma=90°$.

10. The crystallized LINGO-1 polypeptide of claim 8, wherein the crystallized LINGO-1 polypeptide has unit cell dimensions a=149.6 Å, b=157.3 Å, c=200.3 Å, and $\alpha=\beta=\gamma=90°$.

11. The crystallized LINGO-1 polypeptide of any of claims 1 or 6-10, wherein the LINGO-1 polypeptide is from a mammalian species.

12. The crystallized LINGO-1 polypeptide of any of claims 1 or 6-10, wherein the LINGO-1 polypeptide is from a nonmammalian species.

13. The crystallized LINGO-1 polypeptide of any of claims 1 or 6-10, wherein the LINGO-1 polypeptide is from a human.

14. The crystallized LINGO-1 polypeptide of claim 1, wherein the crystallized polypeptide is capable of diffracting X-rays to a resolution of at least about 3.7 Å.

15. The crystallized LINGO-1 polypeptide of any of claims 1 or 6-10, wherein the crystallized polypeptide comprises the structural coordinates of Table 2, +/- a root mean square deviation for alpha carbon atoms of not more than 1.5Å.

16. The crystallized LINGO-1 polypeptide of any of claims 1 or 6-10, wherein the crystallized polypeptide comprises structural coordinates of an atom selected from the group consisting of atoms of amino acids Asp13, Arg20, Arg22, Arg43, Glu60, Glu62, Leu94, Leu120, Met123, His176, Tyr142, His145, His185, His209, His233, Ala238, Trp346, Arg347, Asn349, Asn351, Arg352, Gln353, Phe396, Arg408, Leu420, Leu426, Phe438, Asp440, Arg446, Tyr447 and Ile459 of the LINGO-1 polypeptide as set forth in SEQ ID NO:1.

17. A crystallized polypeptide-ligand complex comprising:

a LINGO-1 polypeptide; and

a ligand that is an agonist of the LINGO-1 polypeptide or an antagonist of the LINGO-1 polypeptide.

18. The crystallized polypeptide-ligand complex of claim 17, wherein the LINGO-1 polypeptide comprises a leucine-rich repeat (LRR) domain.

19. The crystallized polypeptide-ligand complex of claim 17 or 18, wherein the LINGO-1 polypeptide comprises an immunoglobulin-like (Ig-like) domain.

20. The crystallized polypeptide-ligand complex of claim 17, wherein the LINGO-1 polypeptide consists essentially of a LRR-like domain, an Ig-like domain, and a stalk domain.

21. The crystallized polypeptide-ligand complex of claim 17, wherein the LINGO-1 polypeptide comprises the amino acid sequence of SEQ ID NO:1.

22. A method comprising:

using a three-dimensional model of a LINGO-1 polypeptide to design an agent that binds the LINGO-1 polypeptide.

23. The method of claim 22, wherein the three-dimensional model comprises an LRR domain of the LINGO-1 polypeptide.

24. The method of claim 22 or 23, wherein the three-dimensional model comprises an Ig-like domain of the LINGO-1 polypeptide.

25. The method of claim 22, wherein the three-dimensional model consists essentially of an LRR domain, an Ig-like domain, and a stalk domain of the LINGO-1 polypeptide.

26. The method of claim 22, wherein the agent inhibits LINGO-1 activity.

27. The method of any of claims 22-26, wherein the three-dimensional model comprises structural coordinates of atoms of the LINGO-1 polypeptide.

28. The method of claim 27, wherein the structural coordinates are experimentally determined coordinates.

29. The method of claim 28, wherein the structural coordinates are according to Table 2, +/- a root mean square deviation for alpha carbon atoms of not more than 1.5 Å.

30. The method of any of claims 22-29, wherein the three-dimensional model comprises structural coordinates of an atom selected from the group consisting of atoms of amino acids Asp13, Arg20, Arg22, Arg43, Glu60, Glu62, Leu94, Leu120, Met123, His176, Tyr142, His145, His185, His209, His233, Ala238, Trp346, Arg347, Asn349, Asn351, Arg352, Gln353, Phe396, Arg408, Leu420, Leu426, Phe438, Asp440, Arg446, Tyr447 and Ile459 of the LINGO-1 polypeptide as set forth in SEQ ID NO:1.

31. The method of any of claims 22-29, further comprising calculating a distance between an atom of the LINGO-1 polypeptide and an atom of the agent.

32. The method of any of claims 22-29, further comprising providing a composition comprising the LINGO-1 polypeptide.

33. The method of claim 32, wherein the composition includes the agent designed to bind the LINGO-1 polypeptide.

34. The method of any of claims 22-29, further comprising experimentally determining the interaction of the agent with the LINGO-1 polypeptide.

35. The method of any of claims 22-29, further comprising comparing the interaction of the agent with the LINGO-1 polypeptide to an interaction of a second agent with the LINGO-1 polypeptide.

36. A method comprising:

using a three-dimensional model of a LINGO-1 polypeptide-ligand complex to design an agent that binds the LINGO-1 polypeptide.

37. The method of claim 36, wherein the three-dimensional model comprises an LRR domain of the LINGO-1 polypeptide.

38. The method of claim 36 or 37, wherein the three-dimensional model comprises an Ig-like domain of the LINGO-1 polypeptide.

39. The method of claim 36, wherein the three-dimensional model consists essentially of an LRR domain, an Ig-like domain, and a stalk domain of the LINGO-1 polypeptide.

40. The method of claim 36, wherein the agent inhibits LINGO-1 activity.

41. The method of any of claims 36-40, further comprising experimentally determining the interaction of the agent with the LINGO-1 polypeptide.

42. A method, comprising:

using a three-dimensional model of a complex comprising a LINGO-1 polypeptide to design an agent that binds the LINGO-1 polypeptide.

43. The method of claim 42, wherein the three-dimensional model comprises an LRR domain of the LINGO-1 polypeptide.

44. The method of claim 42, wherein the three-dimensional model comprises an Ig-like domain of the LINGO-1 polypeptide.

45. The method of claim 42 or 43, wherein the three-dimensional model consists essentially of an LRR domain, an Ig-like domain and a stalk domain of the LINGO-1 polypeptide.

46. The method of claim 42, wherein the agent inhibits LINGO-1 activity.

47. The method of any of claims 42-46, wherein the three-dimensional model comprises structural coordinates of atoms of the LINGO-1 polypeptide.

48. The method of claim 47, wherein the structural coordinates are experimentally determined coordinates.

49. The method of claim 48, wherein the structural coordinates are according to Table 2, +/- a root mean square deviation for alpha carbon atoms of not more than 1.5 Å.

50. The method of any of claims 42-49, wherein the three-dimensional model comprises structural coordinates of an atom selected from the group consisting of atoms of amino acids Asp13, Arg20, Arg22, Arg43, Glu60, Glu62, Leu94, Leu120, Met123, His176, Tyr142, His145, His185, His209, His233, Ala238, Trp346, Arg347, Asn349, Asn351, Arg352, Gln353, Phe396, Arg408, Leu420, Leu426, Phe438, Asp440, Arg446, Tyr447 and Ile459 of the LINGO-1 polypeptide as set forth in SEQ ID NO:1.

51. The method of any of claims 42-49, further comprising calculating a distance between an atom of the LINGO-1 polypeptide and an atom of the agent.

52. The method of any of claims 42-49, further comprising providing a composition comprising the LINGO-1 polypeptide.

53. The method of claim 52, wherein the composition includes the agent designed to bind the LINGO-1 polypeptide.

54. The method of any of claim 42-49, further comprising experimentally determining the interaction of the agent with the LINGO-1 polypeptide.

55. The method of claim 54, further comprising comparing the interaction of the agent with the LINGO-1 polypeptide to an interaction of a second agent with the LINGO-1 polypeptide.

56. A method, comprising:

selecting an agent by performing rational drug design with a three-dimensional structure of a LINGO-1 polypeptide;

contacting the agent with the LINGO-1 polypeptide; and

detecting an ability of the agent to bind the LINGO-1 polypeptide.

57. The method of claim 56, wherein the agent is selected via computer modeling.

58. The method of claim 56 or 57, further comprising synthesizing the agent.

59. The method of claim 58, further comprising detecting an ability of the agent to inhibit LINGO-1 activity.

60. The method of claim 58, further comprising detecting an ability of the agent to increase myelin formation *in vitro* or *in vivo*.

61. The method of any of claims 56-60, further comprising:

obtaining a supplemental crystalline complex comprising the LINGO-1 polypeptide and the agent;

determining the three-dimensional structure of the supplemental crystalline complex;

selecting a second agent by performing rational drug design with the three-dimensional structure of the supplemental crystalline complex;

contacting the second agent with the LINGO-1 polypeptide; and

detecting the ability of the second agent to bind the LINGO-1 polypeptide.

62. The method of claim 61, wherein the second agent is selected via computer modeling.

63. The method of claim 61, further comprising synthesizing the second agent.

64. The method of claim 61, further comprising detecting an ability of the second agent to inhibit LINGO-1 activity.

65. The method of claim 61, further comprising detecting an ability of the second agent to increase myelin levels *in vitro* or *in vivo*.

66. A method, comprising:

selecting an agent by performing rational drug design with a three-dimensional structure of a LINGO-1 polypeptide-ligand complex;

contacting the agent with the LINGO-1 polypeptide; and

detecting an ability of the agent to bind the LINGO-1 polypeptide.

67. The method of claim 66, wherein the agent is selected via computer modeling.

68. The method of any of claim 66-67, further comprising synthesizing the agent.

69. The method of claim 68, further comprising detecting an ability of the agent to inhibit LINGO-1 activity.

70. The method of claim 68, further comprising detecting an ability of the agent to increase myelin formation *in vitro* or *in vivo*.

71. The method of any of claims 66-70, further comprising:

obtaining a supplemental crystalline complex comprising the LINGO-1 polypeptide and the agent;

determining the three-dimensional structure of the supplemental crystalline complex;

selecting a second agent by performing rational drug design with the three-dimensional structure of the supplemental crystalline complex;

contacting the second agent with the LINGO-1 polypeptide; and

detecting the ability of the second agent to bind the LINGO-1 polypeptide.

72. The method of claim 71, wherein the second agent is selected via computer modeling.

73. The method of claim 71, further comprising synthesizing the second agent.

74. The method of claim 71, further comprising detecting an ability of the second agent to inhibit LINGO-1 activity.

75. The method of claim 71, further comprising detecting an ability of the second agent to increase myelin levels *in vitro* or *in vivo*.

76. A method, comprising:

providing a composition comprising a LINGO-1 polypeptide; and

crystallizing the composition to form a crystalline complex comprising the LINGO-1 polypeptide,

wherein the crystalline complex can diffract X-rays to a resolution of at least about 3.7 Å.

77. The method of claim 76, wherein the method includes using hanging drop vapor diffusion.

78. A method, comprising:

providing a composition comprising a LINGO-1 polypeptide-ligand complex; and

crystallizing the composition to form a crystal comprising the LINGO-1 polypeptide-ligand complex,

wherein the crystal can diffract X-rays to a resolution of at least about 3.7 Å.

79. The method of claim 78, wherein the method includes using hanging drop vapor diffusion.

80. A software system, comprising instructions for causing a computer system to:

accept information relating to the structure of a LINGO-1 polypeptide;

accept information relating to a candidate agent; and

determine binding characteristics of the candidate agent to the LINGO-1 polypeptide,

wherein the determination is based on the information relating to the structure of the LINGO-1 polypeptide, and the information relating to the candidate agent.

81. A computer program residing on a computer readable medium having a plurality of instructions stored thereon, which, when executed by one or more processors, cause the one or more processors to:

accept information relating to the structure of a complex comprising a LINGO-1 polypeptide;

accept information relating to a candidate agent; and

determine binding characteristics of the candidate agent to the LINGO-1 polypeptide,

wherein the determination is based on the information relating to the structure of the LINGO-1 polypeptide and the information relating to the candidate agent.

82. A method, comprising:

accepting information relating to the structure of a LINGO-1 polypeptide; and

modeling the binding characteristics of the LINGO-1 polypeptide with a candidate agent,

wherein the method is implemented by a software system.

83. A computer program residing on a computer readable medium having a plurality of instructions stored thereon, which, when executed by one or more processors, cause the one or more processors to:

accept information relating to a structure of a LINGO-1 polypeptide; and

model the binding characteristics of the LINGO-1 polypeptide with a candidate agent.

84. A software system, comprising instructions for causing a computer system to:

accept information relating to a structure of a LINGO-1 polypeptide; and

model the binding characteristics of the LINGO-1 polypeptide with a candidate agent.

85. A method of modulating LINGO-1 activity in a subject, comprising:

using rational drug design to select an agent that is capable of modulating LINGO-1 activity; and

administering a therapeutically effective amount of the agent to the subject.

86. The method of claim 85, wherein the agent is capable of increasing myelin levels *in vivo*.

87. The method of claim 85 or 86, wherein the rational drug design includes using a three-dimensional structure of a crystalline complex that comprises a LINGO-1 polypeptide.

88. The method of claim 87, wherein the crystalline complex further comprises a ligand.

89. A method of treating a subject having a condition associated with LINGO-1 activity, comprising:

using rational drug design to select an agent that is capable of affecting LINGO-1 activity; and

administering a therapeutically effective amount of the agent to a subject in need thereof.

90. The method of claim 89, wherein the agent is capable of inhibiting LINGO-1 activity.

91. The method of claim 89 or 90, wherein the agent is capable of increasing myelin levels *in vivo*.

92. The method of any of claims 89-91, wherein the condition is a demyelinating disease.

93. The method of any of claims 89-91, wherein the condition is multiple sclerosis.

94. A method of prophylactically treating a subject susceptible to a condition associated with LINGO-1 activity, comprising:

determining that the subject is susceptible to the condition associated with LINGO-1 activity;

using rational drug design to select an agent that is capable of effecting LINGO-1 activity; and

administering a therapeutically effective amount of the agent to the subject.

95. The method of claim 94 or 95, wherein the agent is capable of inhibiting LINGO-1 activity.

96. The method of any of claims 94-95, wherein the agent is capable of increasing myelin levels *in vivo*.

97. The method of any of claims 94-96, wherein the condition is a demyelinating disease.

98. The method of any of claims 94-97, wherein the condition is multiple sclerosis.

99. Use of an agent designed or selected according to any of claims 22-75 in the manufacture of a medicament for the prophylaxis or treatment of a condition associated with LINGO-1 activity.

100. The use according to claim 99, wherein the agent is capable of inhibiting LINGO-1 activity.

101. The use according to claim 99 or 100, wherein the condition is a demyelinating disease.

102. The use according to any of claims 99-101, wherein the condition is multiple sclerosis.

103. The use according to any of claims 99-102, wherein the agent binds to LINGO-1 at a ligand binding site.

104. The use according to claim 103, wherein the ligand binding site is located on a concave surface of an LRR domain.

105. The use according to claim 104, wherein the concave surface of the LRR domain comprises one or more of Trp346 and Arg352; His185, His209 and His233; Asp13; Glu60 and Glu62; or Arg20, Arg22 and Arg43.

106. The use according to claim 103, wherein the ligand binding site is located on a convex surface of an LRR domain.

107. The use according to claim 106, wherein the convex surface of the LRR domain comprises one or more of Tyr142 and His145; Leu94, Leu120, and Met123; His176; or Ala238.

108. The use according to claim 103, wherein the ligand binding site is located on an Ig domain.

109. The use according to claim 108, wherein the Ig domain comprises one or more of Arg446 and Tyr447; Arg408, Phe438 and Asp440; Phe396; or Leu420, Leu426 and Ile459.

110. An agent designed or selected according to any of claims 22-75 for use in the prophylaxis or treatment of a condition associated with LINGO-1 activity.

111. The agent according to claim 110, wherein the agent is capable of inhibiting LINGO-1 activity.

112. The agent according to claim 110 or 111, wherein the condition is a demyelinating disease.

113. The agent according to any of claims 110-112, wherein the condition is multiple sclerosis.

114. The agent according to any of claims 110-113, wherein the agent binds to LINGO-1 at a ligand binding site.

115. The use according to claim 114, wherein the ligand binding site is located on a concave surface of an LRR domain.

116. The use according to claim 115, wherein the concave surface of the LRR domain comprises one or more of Trp346 and Arg352; His185, His209 and His233; Asp13; Glu60 and Glu62; or Arg20, Arg22 and Arg43.

117. The use according to claim 114, wherein the ligand binding site is located on a convex surface of an LRR domain.

118. The use according to claim 117, wherein the convex surface of the LRR domain comprises one or more of Tyr142 and His145; Leu94, Leu120, and Met123; His176; or Ala238.

119. The use according to claim 114, wherein the ligand binding site is located on an Ig domain.

120. The use according to claim 119, wherein the Ig domain comprises one or more of Arg446 and Tyr447; Arg408, Phe438 and Asp440; Phe396; or Leu420, Leu426 and Ile459.

```
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61  LELNENIVSA VEPGAFNNLF NLRTLGLRSN RLKLIPLGVF TGLSNLTKLD ISENKIVILL
121 DYMFQDLYNL KSLEVGDNDL VYISHRAFSG LNSLEQLTLE KCNLTSIPTE ALSHLHGLIV
181 LRLRHLNINA IRDYSFKRLY RLKVLEISHW PYLDTMTPNC LYGLNLTSLS ITHCNLTAVP
241 YLAVRHLVYL RFLNLSYNPI STIEGSMLHE LLRLQEIQLV GGQLAVVEPY AFRGLNYLRV
301 LNVSGNQLTT LEESVFHSVG NLETLILDSN PLACDCRLLW VFRRRWRLNF NRQQPTCATP
361 EFVQGKEFKD FPDVLLPNYF TCRRARIRDR KAQQVFVDEG HTVQFVCRAD GDPPPAILWL
421 SPRKHLVSAK SNGRLTVFPD GTLEVRYAQV QDNGTYLCIA ANAGGNDSMP AHLHVRSYSP
481 DWPHQPNKTF AFISNQPGEG EANSTRATVP FPFDIKHHHH HH
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SEQ ID NO:1

FIG. 1

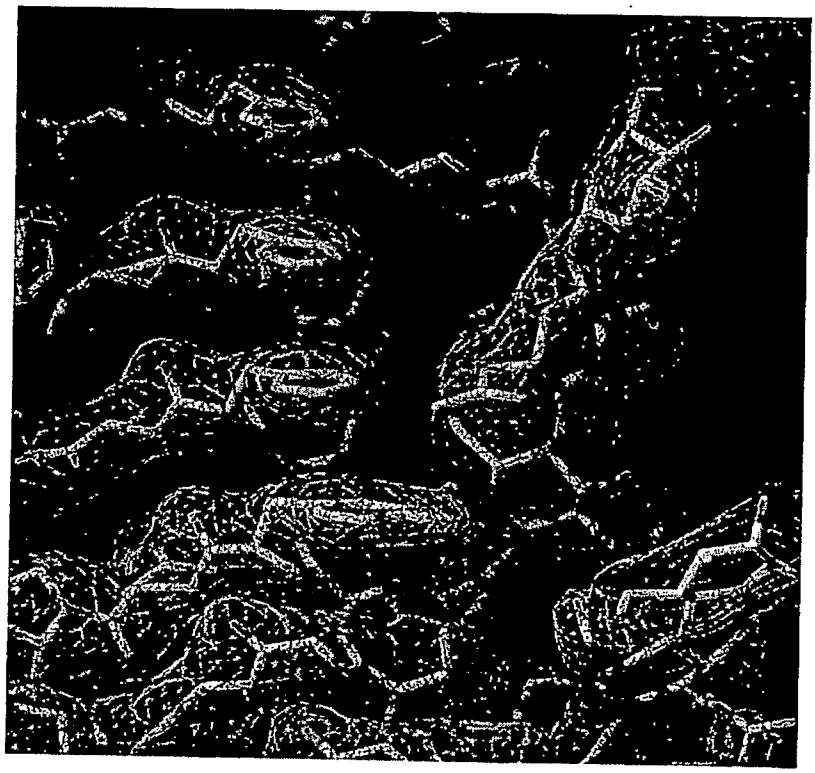


FIG. 2

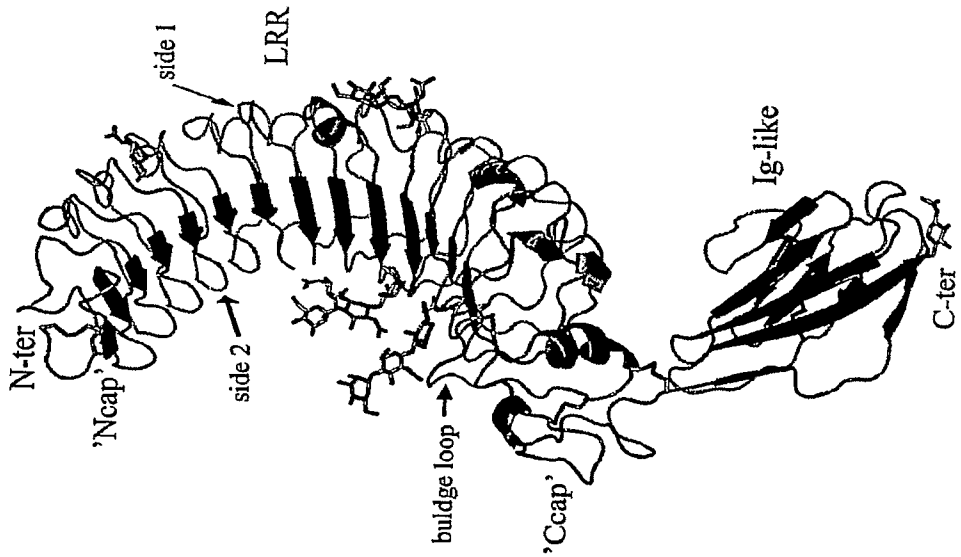


FIG. 3

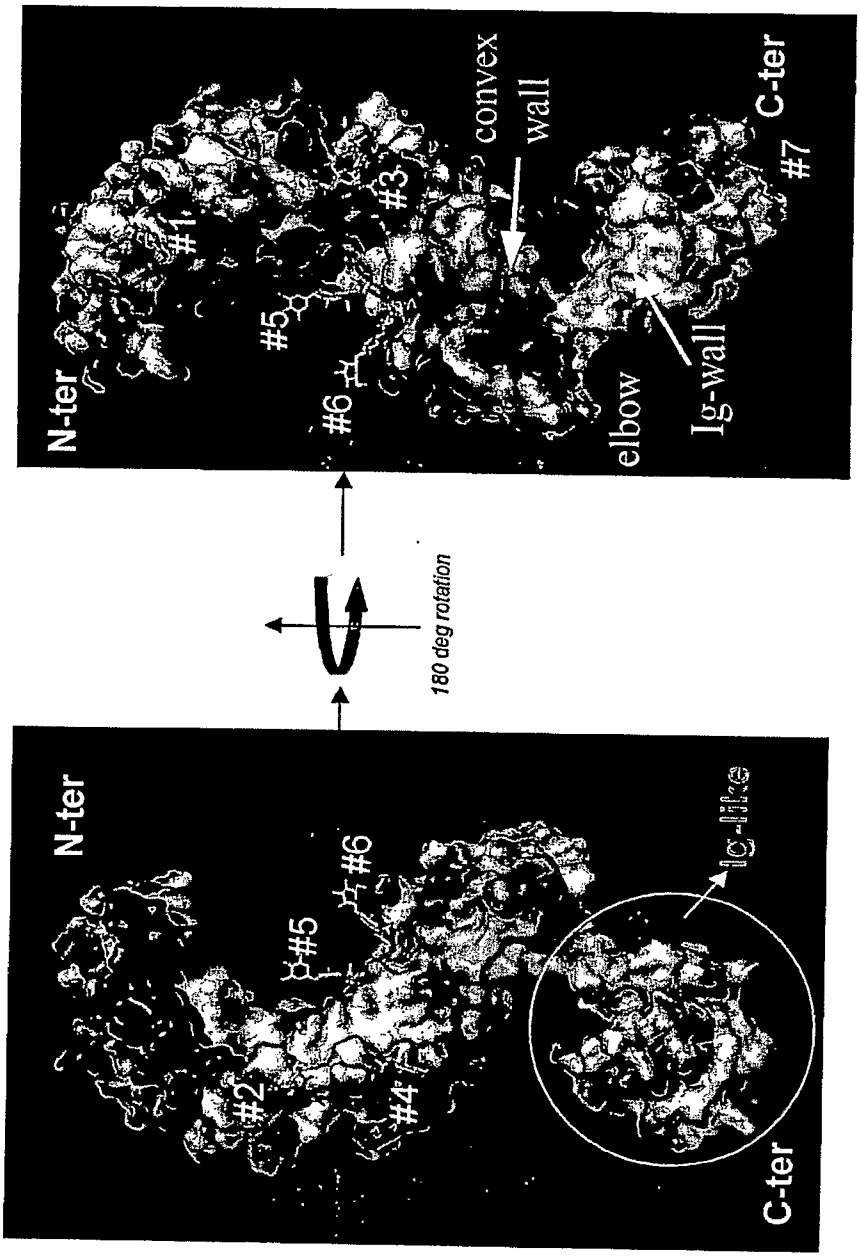

N-ter
#1
#3
#5
#6
convex
wall
C-ter
#7
elbow
Ig-wall
180 deg rotation
N-ter
#6
#5
#2
#4
Ig-like
C-ter

FIG. 4

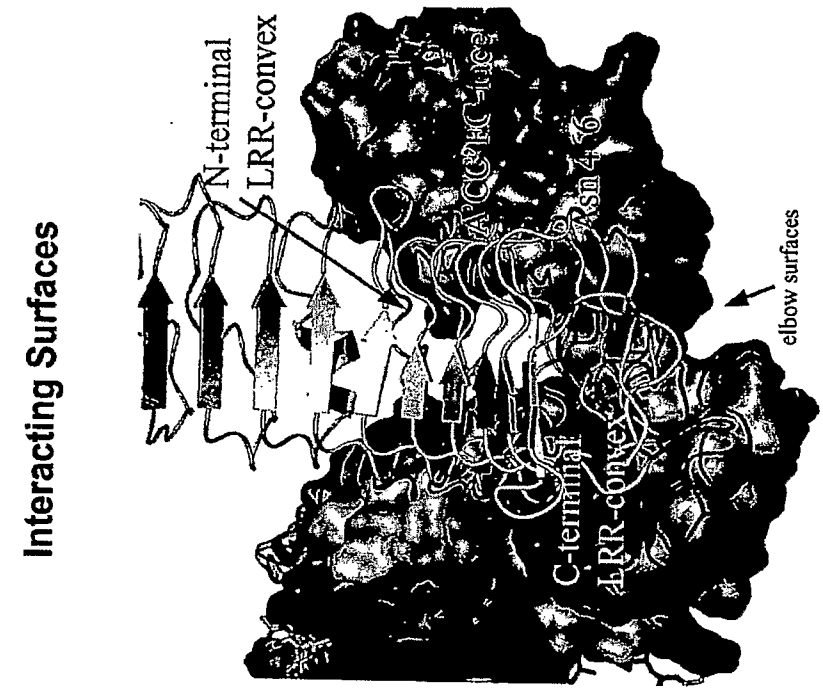

Interacting Surfaces
N-terminal
LRR-convex
C-terminal
LRR-convex
elbow surfaces

FIG. 5B

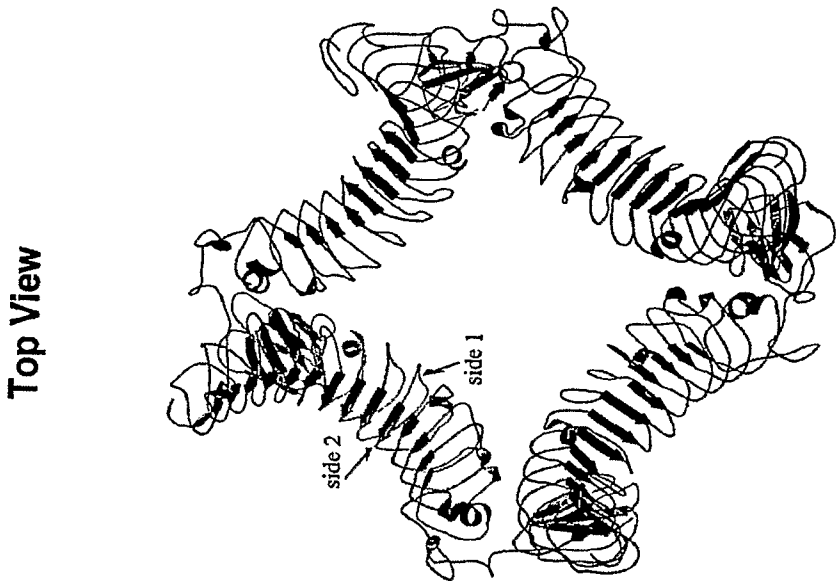

Top View
side 1
side 2

FIG. 5A

Side View

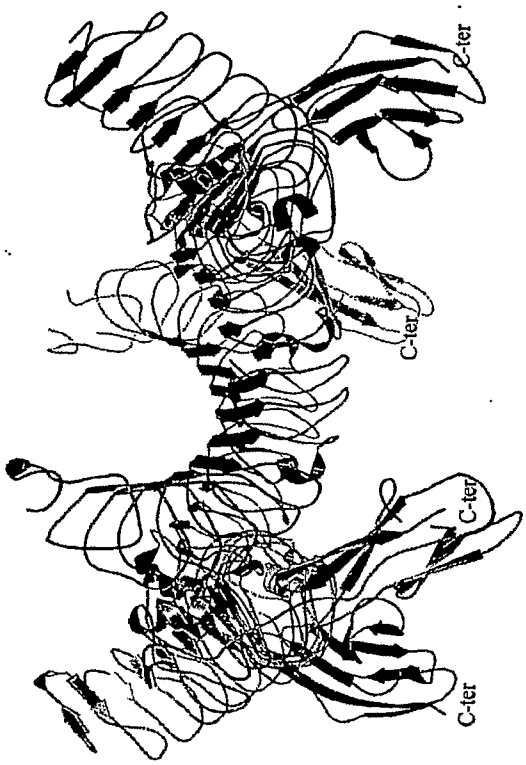


FIG. 5C

FIG. 6

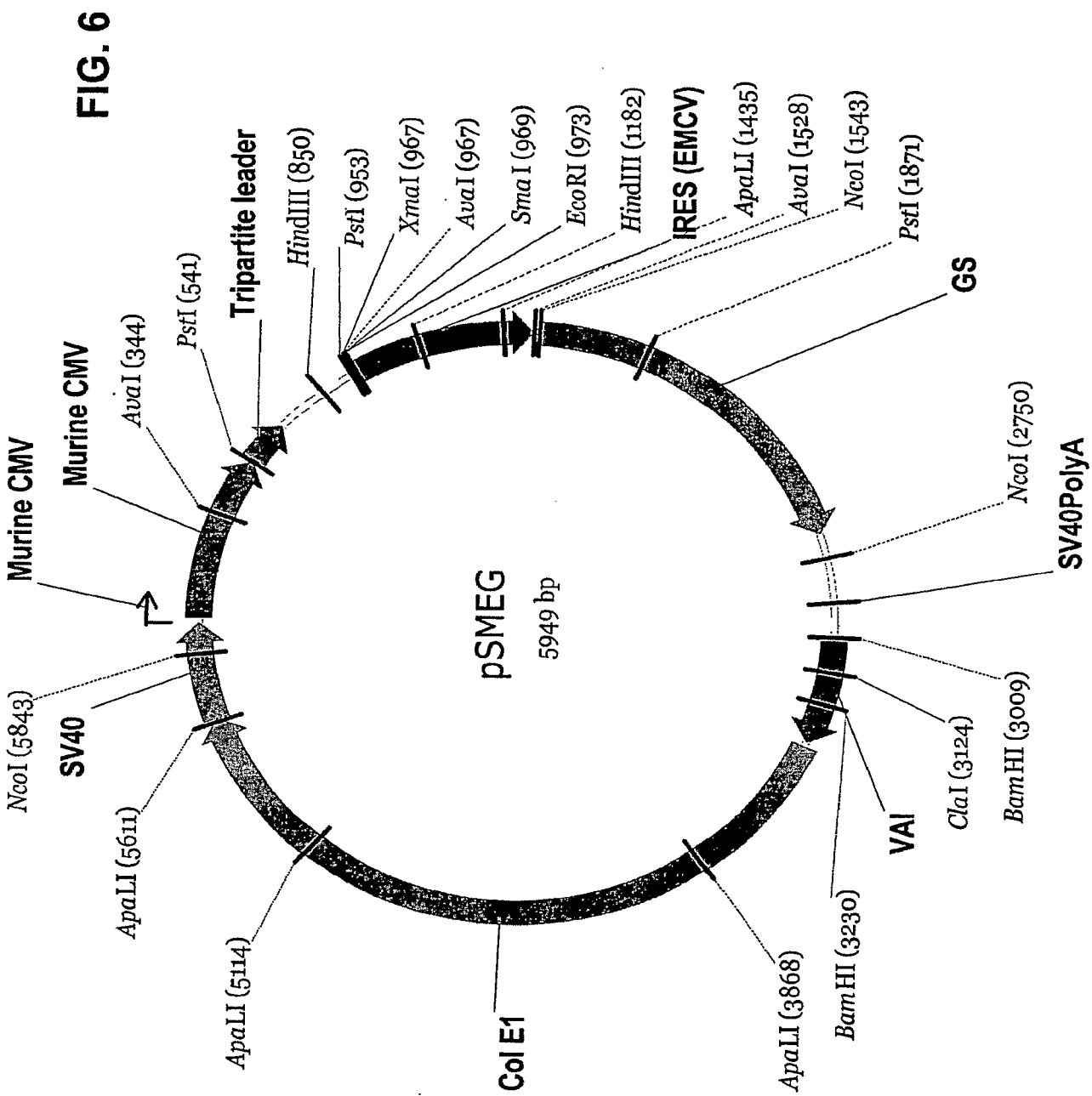

pSMEG
5949 bp
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Murine CMV
SV40
Tripartite leader
IRES (EMCV)
GS
SV40PolyA
VAI
Col E1
NcoI (5843)
ApaLI (5611)
ApaLI (5114)
AvaI (344)
PstI (541)
HindIII (850)
PstI (953)
XmaI (967)
AvaI (967)
SmaI (969)
EcoRI (973)
HindIII (1182)
ApaLI (1435)
AvaI (1528)
NcoI (1543)
PstI (1871)
NcoI (2750)
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ClaI (3124)
BamHI (3230)
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FIG. 7A-1

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                     /label=Murine\CMV
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                     /label=Tripartite\leader
     rep_origin      3378..5621
                     /label=Col\E1
     misc_signal     978..1524
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     polyA_site      2776..3014
                     /label=SV40PolyA
     CDS             1544..2666
                     /label=GS
     misc_RNA        3020..3361
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BASE COUNT     1450 a      1532 c      1510 g      1457 t
ORIGIN
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FIG. 7A-2

```
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FIG. 7A-3

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FIG. 8A

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FIG. 8B

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Lys Asp Phe Pro Asp Val Leu Leu Pro Asn Tyr Phe Thr Cys Arg Arg
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His Thr Val Gln Phe Val Cys Arg Ala Asp Gly Asp Pro Pro Pro Ala
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attgttgccg ggaagctaga gtaagtagtt cgccagttaa tagtttgcgc aacgttgttg 4680
ccattgctac aggcatcgtg gtgtcacgct cgtcgtttgg tatggcttca ttcagctccg 4740

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<210> 3
<211> 620
<212> PRT
<213> Homo sapiens

<400> 3

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Met Gln Val Ser Lys Arg Met Leu Ala Gly Gly Val Arg Ser Met Pro
 1               5                  10                  15
Ser Pro Leu Leu Ala Cys Trp Gln Pro Ile Leu Leu Leu Val Leu Gly
            20                  25                  30
Ser Val Leu Ser Gly Ser Ala Thr Gly Cys Pro Pro Arg Cys Glu Cys
        35                  40                  45
Ser Ala Gln Asp Arg Ala Val Leu Cys His Arg Lys Arg Phe Val Ala
    50                  55                  60
Val Pro Glu Gly Ile Pro Thr Glu Thr Arg Leu Leu Asp Leu Gly Lys
65                  70                  75                  80
Asn Arg Ile Lys Thr Leu Asn Gln Asp Glu Phe Ala Ser Phe Pro His
                85                  90                  95
Leu Glu Glu Leu Glu Leu Asn Glu Asn Ile Val Ser Ala Val Glu Pro
            100                 105                 110
Gly Ala Phe Asn Asn Leu Phe Asn Leu Arg Thr Leu Gly Leu Arg Ser
        115                 120                 125
Asn Arg Leu Lys Leu Ile Pro Leu Gly Val Phe Thr Gly Leu Ser Asn
    130                 135                 140
Leu Thr Lys Leu Asp Ile Ser Glu Asn Lys Ile Val Ile Leu Leu Asp
145                 150                 155                 160
Tyr Met Phe Gln Asp Leu Tyr Asn Leu Lys Ser Leu Glu Val Gly Asp
                165                 170                 175
Asn Asp Leu Val Tyr Ile Ser His Arg Ala Phe Ser Gly Leu Asn Ser
            180                 185                 190
Leu Glu Gln Leu Thr Leu Glu Lys Cys Asn Leu Thr Ser Ile Pro Thr
        195                 200                 205
Glu Ala Leu Ser His Leu His Gly Leu Ile Val Leu Arg Leu Arg His
    210                 215                 220
Leu Asn Ile Asn Ala Ile Arg Asp Tyr Ser Phe Lys Arg Leu Tyr Arg
225                 230                 235                 240
Leu Lys Val Leu Glu Ile Ser His Trp Pro Tyr Leu Asp Thr Met Thr
```

```
                245                 250                 255
Pro Asn Cys Leu Tyr Gly Leu Asn Leu Thr Ser Leu Ser Ile Thr His
            260                 265                 270
Cys Asn Leu Thr Ala Val Pro Tyr Leu Ala Val Arg His Leu Val Tyr
        275                 280                 285
Leu Arg Phe Leu Asn Leu Ser Tyr Asn Pro Ile Ser Thr Ile Glu Gly
    290                 295                 300
Ser Met Leu His Glu Leu Leu Arg Leu Gln Glu Ile Gln Leu Val Gly
305                 310                 315                 320
Gly Gln Leu Ala Val Val Glu Pro Tyr Ala Phe Arg Gly Leu Asn Tyr
                325                 330                 335
Leu Arg Val Leu Asn Val Ser Gly Asn Gln Leu Thr Thr Leu Glu Glu
            340                 345                 350
Ser Val Phe His Ser Val Gly Asn Leu Glu Thr Leu Ile Leu Asp Ser
        355                 360                 365
Asn Pro Leu Ala Cys Asp Cys Arg Leu Leu Trp Val Phe Arg Arg Arg
    370                 375                 380
Trp Arg Leu Asn Phe Asn Arg Gln Gln Pro Thr Cys Ala Thr Pro Glu
385                 390                 395                 400
Phe Val Gln Gly Lys Glu Phe Lys Asp Phe Pro Asp Val Leu Leu Pro
                405                 410                 415
Asn Tyr Phe Thr Cys Arg Arg Ala Arg Ile Arg Asp Arg Lys Ala Gln
            420                 425                 430
Gln Val Phe Val Asp Glu Gly His Thr Val Gln Phe Val Cys Arg Ala
        435                 440                 445
Asp Gly Asp Pro Pro Pro Ala Ile Leu Trp Leu Ser Pro Arg Lys His
    450                 455                 460
Leu Val Ser Ala Lys Ser Asn Gly Arg Leu Thr Val Phe Pro Asp Gly
465                 470                 475                 480
Thr Leu Glu Val Arg Tyr Ala Gln Val Gln Asp Asn Gly Thr Tyr Leu
                485                 490                 495
Cys Ile Ala Ala Asn Ala Gly Gly Asn Asp Ser Met Pro Ala His Leu
            500                 505                 510
His Val Arg Ser Tyr Ser Pro Asp Trp Pro His Gln Pro Asn Lys Thr
        515                 520                 525
Phe Ala Phe Ile Ser Asn Gln Pro Gly Glu Gly Glu Ala Asn Ser Thr
    530                 535                 540
Arg Ala Thr Val Pro Phe Pro Phe Asp Ile Lys Thr Leu Ile Ile Ala
545                 550                 555                 560
Thr Thr Met Gly Phe Ile Ser Phe Leu Gly Val Val Leu Phe Cys Leu
                565                 570                 575
Val Leu Leu Phe Leu Trp Ser Arg Gly Lys Gly Asn Thr Lys His Asn
            580                 585                 590
Ile Glu Ile Glu Tyr Val Pro Arg Lys Ser Asp Ala Gly Ile Ser Ser
        595                 600                 605
Ala Asp Ala Pro Arg Lys Phe Asn Met Lys Met Ile
    610                 615                 620
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<210> 4
<211> 2932
<212> DNA
<213> Homo sapiens

<400> 4
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gcagcccatc ctcctgctgg tgctgggctc agtgctgtca ggctcggcca cgggctgccc 180
gccccgctgc gagtgctccg cccaggaccg cgctgtgctg tgccaccgca agcgctttgt 240
ggcagtcccc gagggcatcc ccaccgagac gcgcctgctg gacctaggca agaaccgcat 300
caaaacgctc aaccaggacg agttcgccag cttcccgcac ctggaggagc tggagctcaa 360

cgagaacatc gtgagcgccg tggagcccgg cgccttcaac aacctcttca acctccggac 420
gctgggtctc cgcagcaacc gcctgaagct catcccgcta ggcgtcttca ctggcctcag 480
caacctgacc aagctggaca tcagcgagaa caagatcgtt atcctactgg actacatgtt 540
tcaggacctg tacaacctca agtcactgga ggttggcgac aatgacctcg tctacatctc 600
tcaccgcgcc ttcagcggcc tcaacagcct ggagcagctg acgctggaga aatgcaacct 660
gacctccatc cccaccgagg cgctgtccca cctgcacggc ctcatcgtcc tgaggctccg 720
gcacctcaac atcaatgcca tccgggacta ctccttcaag aggctgtacc gactcaaggt 780
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cgcccgcatc cgggaccgca aggcccagca ggtgtttgtg gacgagggcc acacggtgca 1380
gtttgtgtgc cgggccgatg gcgacccgcc gcccgccatc ctctggctct caccccgaaa 1440
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ggtgcgctac gcccaggtac aggacaacgg cacgtacctg tgcatcgcgg ccaacgcggg 1560
cggcaacgac tccatgcccg cccacctgca tgtgcgcagc tactcgcccg actggcccca 1620
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cgcaggcatc agctccgccg acgcgccccg caagttcaac atgaagatga tatgaggccg 1920
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acaaatggga acattacccc ctgccctgcc tacctcacag ggctgttgtg aggaattgat 2880
gagatgatgt atgtgaaaca ctttgtaacc tgtaaagcgc tgtgcacacg tg 2932

<210> 5
<211> 477
<212> PRT
<213> Homo sapiens

<400> 5
Thr Gly Cys Pro Pro Arg Cys Glu Cys Ser Ala Gln Asp Arg Ala Val
1 5 10 15
Leu Cys His Arg Lys Arg Phe Val Ala Val Pro Glu Gly Ile Pro Thr
20 25 30
Glu Thr Arg Leu Leu Asp Leu Gly Lys Asn Arg Ile Lys Thr Leu Asn
35 40 45
Gln Asp Glu Phe Ala Ser Phe Pro His Leu Glu Glu Leu Glu Leu Asn
50 55 60
Glu Asn Ile Val Ser Ala Val Glu Pro Gly Ala Phe Asn Asn Leu Phe
65 70 75 80
Asn Leu Arg Thr Leu Gly Leu Arg Ser Asn Arg Leu Lys Leu Ile Pro

```
                85                  90                  95
Leu Gly Val Phe Thr Gly Leu Ser Asn Leu Thr Lys Leu Asp Ile Ser
            100                 105                 110
Glu Asn Lys Ile Val Ile Leu Leu Asp Tyr Met Phe Gln Asp Leu Tyr
        115                 120                 125
Asn Leu Lys Ser Leu Glu Val Gly Asp Asn Asp Leu Val Tyr Ile Ser
    130                 135                 140
His Arg Ala Phe Ser Gly Leu Asn Ser Leu Glu Gln Leu Thr Leu Glu
145                 150                 155                 160
Lys Cys Asn Leu Thr Ser Ile Pro Thr Glu Ala Leu Ser His Leu His
                165                 170                 175
Gly Leu Ile Val Leu Arg Leu Arg His Leu Asn Ile Asn Ala Ile Arg
            180                 185                 190
Asp Tyr Ser Phe Lys Arg Leu Tyr Arg Leu Lys Val Leu Glu Ile Ser
        195                 200                 205
His Trp Pro Tyr Leu Asp Thr Met Thr Pro Asn Cys Leu Tyr Gly Leu
    210                 215                 220
Asn Leu Thr Ser Leu Ser Ile Thr His Cys Asn Leu Thr Ala Val Pro
225                 230                 235                 240
Tyr Leu Ala Val Arg His Leu Val Tyr Leu Arg Phe Leu Asn Leu Ser
                245                 250                 255
Tyr Asn Pro Ile Ser Thr Ile Glu Gly Ser Met Leu His Glu Leu Leu
            260                 265                 270
Arg Leu Gln Glu Ile Gln Leu Val Gly Gly Gln Leu Ala Val Val Glu
        275                 280                 285
Pro Tyr Ala Phe Arg Gly Leu Asn Tyr Leu Arg Val Leu Asn Val Ser
    290                 295                 300
Gly Asn Gln Leu Thr Thr Leu Glu Glu Ser Val Phe His Ser Val Gly
305                 310                 315                 320
Asn Leu Glu Thr Leu Ile Leu Asp Ser Asn Pro Leu Ala Cys Asp Cys
                325                 330                 335
Arg Leu Leu Trp Val Phe Arg Arg Arg Trp Arg Leu Asn Phe Asn Arg
            340                 345                 350
Gln Gln Pro Thr Cys Ala Thr Pro Glu Phe Val Gln Gly Lys Glu Phe
        355                 360                 365
Lys Asp Phe Pro Asp Val Leu Leu Pro Asn Tyr Phe Thr Cys Arg Arg
    370                 375                 380
Ala Arg Ile Arg Asp Arg Lys Ala Gln Gln Val Phe Val Asp Glu Gly
385                 390                 395                 400
His Thr Val Gln Phe Val Cys Arg Ala Asp Gly Asp Pro Pro Pro Ala
                405                 410                 415
Ile Leu Trp Leu Ser Pro Arg Lys His Leu Val Ser Ala Lys Ser Asn
            420                 425                 430
Gly Arg Leu Thr Val Phe Pro Asp Gly Thr Leu Glu Val Arg Tyr Ala
        435                 440                 445
Gln Val Gln Asp Asn Gly Thr Tyr Leu Cys Ile Ala Ala Asn Ala Gly
    450                 455                 460
Gly Asn Asp Ser Met Pro Ala His Leu His Val Arg Ser
465                 470                 475
```

<210> 6
<211> 473
<212> PRT
<213> Homo sapiens

<400> 6

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Cys Pro Pro Arg Cys Glu Cys Ser Ala Gln Asp Arg Ala Val Leu Cys
 1               5                  10                  15
His Arg Lys Arg Phe Val Ala Val Pro Glu Gly Ile Pro Thr Glu Thr
            20                  25                  30
```

```
Arg Leu Leu Asp Leu Gly Lys Asn Arg Ile Lys Thr Leu Asn Gln Asp
        35                  40                  45
Glu Phe Ala Ser Phe Pro His Leu Glu Glu Leu Glu Leu Asn Glu Asn
    50                  55                  60
Ile Val Ser Ala Val Glu Pro Gly Ala Phe Asn Asn Leu Phe Asn Leu
65                  70                  75                  80
Arg Thr Leu Gly Leu Arg Ser Asn Arg Leu Lys Leu Ile Pro Leu Gly
                85                  90                  95
Val Phe Thr Gly Leu Ser Asn Leu Thr Lys Leu Asp Ile Ser Glu Asn
            100                 105                 110
Lys Ile Val Ile Leu Leu Asp Tyr Met Phe Gln Asp Leu Tyr Asn Leu
        115                 120                 125
Lys Ser Leu Glu Val Gly Asp Asn Asp Leu Val Tyr Ile Ser His Arg
    130                 135                 140
Ala Phe Ser Gly Leu Asn Ser Leu Glu Gln Leu Thr Leu Glu Lys Cys
145                 150                 155                 160
Asn Leu Thr Ser Ile Pro Thr Glu Ala Leu Ser His Leu His Gly Leu
                165                 170                 175
Ile Val Leu Arg Leu Arg His Leu Asn Ile Asn Ala Ile Arg Asp Tyr
            180                 185                 190
Ser Phe Lys Arg Leu Tyr Arg Leu Lys Val Leu Glu Ile Ser His Trp
        195                 200                 205
Pro Tyr Leu Asp Thr Met Thr Pro Asn Cys Leu Tyr Gly Leu Asn Leu
    210                 215                 220
Thr Ser Leu Ser Ile Thr His Cys Asn Leu Thr Ala Val Pro Tyr Leu
225                 230                 235                 240
Ala Val Arg His Leu Val Tyr Leu Arg Phe Leu Asn Leu Ser Tyr Asn
                245                 250                 255
Pro Ile Ser Thr Ile Glu Gly Ser Met Leu His Glu Leu Leu Arg Leu
            260                 265                 270
Gln Glu Ile Gln Leu Val Gly Gly Gln Leu Ala Val Val Glu Pro Tyr
        275                 280                 285
Ala Phe Arg Gly Leu Asn Tyr Leu Arg Val Leu Asn Val Ser Gly Asn
    290                 295                 300
Gln Leu Thr Thr Leu Glu Glu Ser Val Phe His Ser Val Gly Asn Leu
305                 310                 315                 320
Glu Thr Leu Ile Leu Asp Ser Asn Pro Leu Ala Cys Asp Cys Arg Leu
                325                 330                 335
Leu Trp Val Phe Arg Arg Arg Trp Arg Leu Asn Phe Asn Arg Gln Gln
            340                 345                 350
Pro Thr Cys Ala Thr Pro Glu Phe Val Gln Gly Lys Glu Phe Lys Asp
        355                 360                 365
Phe Pro Asp Val Leu Leu Pro Asn Tyr Phe Thr Cys Arg Arg Ala Arg
    370                 375                 380
Ile Arg Asp Arg Lys Ala Gln Gln Val Phe Val Asp Glu Gly His Thr
385                 390                 395                 400
Val Gln Phe Val Cys Arg Ala Asp Gly Asp Pro Pro Pro Ala Ile Leu
                405                 410                 415
Trp Leu Ser Pro Arg Lys His Leu Val Ser Ala Lys Ser Asn Gly Arg
            420                 425                 430
Leu Thr Val Phe Pro Asp Gly Thr Leu Glu Val Arg Tyr Ala Gln Val
        435                 440                 445
Gln Asp Asn Gly Thr Tyr Leu Cys Ile Ala Ala Asn Ala Gly Gly Asn
    450                 455                 460
Asp Ser Met Pro Ala His Leu His Val
465                 470
```

<210> 7
<211> 476
<212> PRT

<213> Homo sapiens

<400> 7

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Gly Cys Pro Pro Arg Cys Glu Cys Ser Ala Gln Asp Arg Ala Val Leu
 1               5                  10                  15
Cys His Arg Lys Arg Phe Val Ala Val Pro Glu Gly Ile Pro Thr Glu
            20                  25                  30
Thr Arg Leu Leu Asp Leu Gly Lys Asn Arg Ile Lys Thr Leu Asn Gln
        35                  40                  45
Asp Glu Phe Ala Ser Phe Pro His Leu Glu Glu Leu Glu Leu Asn Glu
    50                  55                  60
Asn Ile Val Ser Ala Val Glu Pro Gly Ala Phe Asn Asn Leu Phe Asn
65                  70                  75                  80
Leu Arg Thr Leu Gly Leu Arg Ser Asn Arg Leu Lys Leu Ile Pro Leu
                85                  90                  95
Gly Val Phe Thr Gly Leu Ser Asn Leu Thr Lys Leu Asp Ile Ser Glu
            100                 105                 110
Asn Lys Ile Val Ile Leu Leu Asp Tyr Met Phe Gln Asp Leu Tyr Asn
        115                 120                 125
Leu Lys Ser Leu Glu Val Gly Asp Asn Asp Leu Val Tyr Ile Ser His
    130                 135                 140
Arg Ala Phe Ser Gly Leu Asn Ser Leu Glu Gln Leu Thr Leu Glu Lys
145                 150                 155                 160
Cys Asn Leu Thr Ser Ile Pro Thr Glu Ala Leu Ser His Leu His Gly
                165                 170                 175
Leu Ile Val Leu Arg Leu Arg His Leu Asn Ile Asn Ala Ile Arg Asp
            180                 185                 190
Tyr Ser Phe Lys Arg Leu Tyr Arg Leu Lys Val Leu Glu Ile Ser His
        195                 200                 205
Trp Pro Tyr Leu Asp Thr Met Thr Pro Asn Cys Leu Tyr Gly Leu Asn
    210                 215                 220
Leu Thr Ser Leu Ser Ile Thr His Cys Asn Leu Thr Ala Val Pro Tyr
225                 230                 235                 240
Leu Ala Val Arg His Leu Val Tyr Leu Arg Phe Leu Asn Leu Ser Tyr
                245                 250                 255
Asn Pro Ile Ser Thr Ile Glu Gly Ser Met Leu His Glu Leu Leu Arg
            260                 265                 270
Leu Gln Glu Ile Gln Leu Val Gly Gly Gln Leu Ala Val Val Glu Pro
        275                 280                 285
Tyr Ala Phe Arg Gly Leu Asn Tyr Leu Arg Val Leu Asn Val Ser Gly
    290                 295                 300
Asn Gln Leu Thr Thr Leu Glu Glu Ser Val Phe His Ser Val Gly Asn
305                 310                 315                 320
Leu Glu Thr Leu Ile Leu Asp Ser Asn Pro Leu Ala Cys Asp Cys Arg
                325                 330                 335
Leu Leu Trp Val Phe Arg Arg Arg Trp Arg Leu Asn Phe Asn Arg Gln
            340                 345                 350
Gln Pro Thr Cys Ala Thr Pro Glu Phe Val Gln Gly Lys Glu Phe Lys
        355                 360                 365
Asp Phe Pro Asp Val Leu Leu Pro Asn Tyr Phe Thr Cys Arg Arg Ala
    370                 375                 380
Arg Ile Arg Asp Arg Lys Ala Gln Gln Val Phe Val Asp Glu Gly His
385                 390                 395                 400
Thr Val Gln Phe Val Cys Arg Ala Asp Gly Asp Pro Pro Pro Ala Ile
                405                 410                 415
Leu Trp Leu Ser Pro Arg Lys His Leu Val Ser Ala Lys Ser Asn Gly
            420                 425                 430
Arg Leu Thr Val Phe Pro Asp Gly Thr Leu Glu Val Arg Tyr Ala Gln
        435                 440                 445
Val Gln Asp Asn Gly Thr Tyr Leu Cys Ile Ala Ala Asn Ala Gly Gly
    450                 455                 460
```

```
Asn Asp Ser Met Pro Ala His Leu His Val Arg Ser
465                 470                 475


<210> 8
<211> 474
<212> PRT
<213> Homo sapiens

<400> 8
Cys Pro Pro Arg Cys Glu Cys Ser Ala Gln Asp Arg Ala Val Leu Cys
 1               5                  10                  15
His Arg Lys Arg Phe Val Ala Val Pro Glu Gly Ile Pro Thr Glu Thr
            20                  25                  30
Arg Leu Leu Asp Leu Gly Lys Asn Arg Ile Lys Thr Leu Asn Gln Asp
        35                  40                  45
Glu Phe Ala Ser Phe Pro His Leu Glu Glu Leu Glu Leu Asn Glu Asn
    50                  55                  60
Ile Val Ser Ala Val Glu Pro Gly Ala Phe Asn Asn Leu Phe Asn Leu
65                  70                  75                  80
Arg Thr Leu Gly Leu Arg Ser Asn Arg Leu Lys Leu Ile Pro Leu Gly
                85                  90                  95
Val Phe Thr Gly Leu Ser Asn Leu Thr Lys Leu Asp Ile Ser Glu Asn
            100                 105                 110
Lys Ile Val Ile Leu Leu Asp Tyr Met Phe Gln Asp Leu Tyr Asn Leu
        115                 120                 125
Lys Ser Leu Glu Val Gly Asp Asn Asp Leu Val Tyr Ile Ser His Arg
    130                 135                 140
Ala Phe Ser Gly Leu Asn Ser Leu Glu Gln Leu Thr Leu Glu Lys Cys
145                 150                 155                 160
Asn Leu Thr Ser Ile Pro Thr Glu Ala Leu Ser His Leu His Gly Leu
                165                 170                 175
Ile Val Leu Arg Leu Arg His Leu Asn Ile Asn Ala Ile Arg Asp Tyr
            180                 185                 190
Ser Phe Lys Arg Leu Tyr Arg Leu Lys Val Leu Glu Ile Ser His Trp
        195                 200                 205
Pro Tyr Leu Asp Thr Met Thr Pro Asn Cys Leu Tyr Gly Leu Asn Leu
    210                 215                 220
Thr Ser Leu Ser Ile Thr His Cys Asn Leu Thr Ala Val Pro Tyr Leu
225                 230                 235                 240
Ala Val Arg His Leu Val Tyr Leu Arg Phe Leu Asn Leu Ser Tyr Asn
                245                 250                 255
Pro Ile Ser Thr Ile Glu Gly Ser Met Leu His Glu Leu Leu Arg Leu
            260                 265                 270
Gln Glu Ile Gln Leu Val Gly Gly Gln Leu Ala Val Val Glu Pro Tyr
        275                 280                 285
Ala Phe Arg Gly Leu Asn Tyr Leu Arg Val Leu Asn Val Ser Gly Asn
    290                 295                 300
Gln Leu Thr Thr Leu Glu Glu Ser Val Phe His Ser Val Gly Asn Leu
305                 310                 315                 320
Glu Thr Leu Ile Leu Asp Ser Asn Pro Leu Ala Cys Asp Cys Arg Leu
                325                 330                 335
Leu Trp Val Phe Arg Arg Arg Trp Arg Leu Asn Phe Asn Arg Gln Gln
            340                 345                 350
Pro Thr Cys Ala Thr Pro Glu Phe Val Gln Gly Lys Glu Phe Lys Asp
        355                 360                 365
Phe Pro Asp Val Leu Leu Pro Asn Tyr Phe Thr Cys Arg Arg Ala Arg
    370                 375                 380
Ile Arg Asp Arg Lys Ala Gln Gln Val Phe Val Asp Glu Gly His Thr
385                 390                 395                 400
Val Gln Phe Val Cys Arg Ala Asp Gly Asp Pro Pro Pro Ala Ile Leu
```

```
                405                 410                 415
Trp Leu Ser Pro Arg Lys His Leu Val Ser Ala Lys Ser Asn Gly Arg
            420                 425                 430
Leu Thr Val Phe Pro Asp Gly Thr Leu Glu Val Arg Tyr Ala Gln Val
        435                 440                 445
Gln Asp Asn Gly Thr Tyr Leu Cys Ile Ala Ala Asn Ala Gly Gly Asn
    450                 455                 460
Asp Ser Met Pro Ala His Leu His Val Arg
465                 470
```

<210> 9
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> Exemplary motif

<220>
<221> VARIANT
<222> 1, 3, 4, 6, 8, 9, 11, 13, 14, 16, 17, 18, 19,21, 22, 24
<223> Xaa = any amino acid

<220>
<221> VARIANT
<222> 2, 5, 7, 12, 15, 23
<223> Xaa = Leu, but also Ile, Val, Met, Phe or Thr

<220>
<221> VARIANT
<222> 10
<223> Xaa = Asn, but also Cys, Asp, Leu or Trp

<220>
<221> VARIANT
<222> 20
<223> Xaa = Phe or Leu

<400> 9

```
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1               5                  10                  15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
            20
```