

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 November 2007 (22.11.2007)

PCT

(10) International Publication Number
WO 2007/134262 A2

(51) International Patent Classification: Not classified

(21) International Application Number:
PCT/US2007/068822

(22) International Filing Date: 11 May 2007 (11.05.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/799,839 11 May 2006 (11.05.2006) US

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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES,
FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN,
IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR,
LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX,
MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,
PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv))

Published:

— without international search report and to be republished
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: CRYSTAL STRUCTURE OF PROSTASIN AND USES THEREOF

(57) Abstract: The invention provides a crystallized prostaticin molecule. The three-dimensional coordinates of the crystal struc-
ture of prostaticin are obtained by X-ray diffraction. The coordinates can be used for studying the prostaticin structure and designing,
screening and developing compounds that modulate prostaticin activity.



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CRYSTAL STRUCTURE OF PROSTASIN AND USES THEREOF

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of priority to U.S. Provisional Patent Application Number 60/799,839 filed 11 May 2006. The full disclosure of this application is incorporated herein by reference in its entirety and for all purposes

BACKGROUND OF THE INVENTION

Field of the Invention

[0002] The invention provides a crystallized prostaticin molecule. The three-dimensional coordinates of the crystal structure of prostaticin are obtained by X-ray diffraction. The coordinates can be used for studying the prostaticin structure and designing, screening and developing compounds that modulate prostaticin activity.

Background

[0003] Prostaticin or human channel activating protein (h-CAP) is a type-1 membrane associated serine protease initially found in semen and subsequently in kidneys and the lining of the lung. In the epithelial cell lung lining Prostaticin has been implicated in the activation of ENaC (endothelial cell Sodium channel). Inhibition of prostaticin activity provides a potential mechanism of selectively inhibiting ENaC activation in the lung, thereby decreasing sodium hyper-absorption and mucociliary clearance in cystic fibrosis (CF) and possibly other lung disorders such as chronic obstructive pulmonary disease (COPD) and asthma.

[0004] The prostaticin three dimensional coordinates of the invention can be used to design, screen and develop compounds that associate with and inhibit the activity of prostaticin.

Summary of the Invention

[0005] The present invention provides the three-dimensional structure of prostaticin thereby enabling identification and design of ligands or low molecular weight molecules that specifically bind to and modulate (inhibit) the activity of prostaticin.

[0006] The present invention relates to:

- [0007] (i) a crystal of the prostatic polypeptide comprising the catalytic site with or without a ligand or low molecular weight compound;
- [0008] (ii) a method of crystallizing the prostatic polypeptide; and
- [0009] (iii) methods of using the three dimensional coordinates derived from said prostatic polypeptide crystal to identify/design small molecules capable of modulating prostatic activity.

BRIEF DESCRIPTION OF FIGURES

- [0010] FIG. 1: A ribbon diagram of prostatic detailing the overall fold of the molecule, colored from green to red dependant on the position of carbon alpha atoms within the molecule. A ball and stick representation of an inhibitor (DFFK-chloromethylketone) is displayed to indicate the binding site.
- [0011] FIG. 2: A representation of the electrostatic surface of the prostatic substrate binding site. Surface is colored red, blue and white to indicate electronegative, electropositive and charge neutral areas, respectively.
- [0012] FIG. 3: A structure alignment of prostatic with thrombin, trypsin and hepsin.

DETAILED DESCRIPTION OF THE INVENTION

Definitions

- [0013] The term “binding partner” according to the invention refers to a ligand or low molecular weight molecule that associates with prostatic and either enhances the ability of prostatic to crystallize or modulates the activity of prostatic.
- [0014] The term “space group” according to the invention refers to the arrangement of symmetry elements of the crystal.
- [0015] The term “structure coordinates” or “three-dimensional coordinates” refers to mathematical coordinates derived from the placement of a polypeptide chain (and the individual atoms thereof) in an electron density map. The electron density map is derived from mathematical equations related to the pattern obtained on diffraction of a monochromatic beam of X-rays by the atoms of a crystal of the invention.

[0016] The term “unit cell” according to the invention, refers to the basic shape block. The entire volume of a crystal can be constructed by regular assembly of such blocks. Each unit cell comprises a complete representation of the unit cell pattern, the repetition of which builds the crystal.

Embodiments

[0017] The present invention relates to a prostatic polypeptide, a method of crystallizing a prostatic polypeptide and a prostatic polypeptide crystal. The invention further relates to the X-ray coordinates (also referred to as three dimensional or structural coordinates) of the structure of a prostatic polypeptide elucidated from a prostatic polypeptide crystal. Still further, the present invention relates to using the coordinates of a prostatic polypeptide to design and developing compounds that modulate the activity of said prostatic polypeptide.

[0018] The full length sequence of human prostatic is known and is set forth in Genbank Accession Number gi:2833277 and SwissProt Accession Number Q16651, which are incorporated herein by reference. As used herein, the prostatic polypeptide refers to that of SEQ. ID. No.: 1. The sequence has two truncations: the light chain (the first 44 residues) at the N-terminus; and 38 residues at the C-terminus. In addition, there are three point mutations: Cysteine 154 to Serine; Asparagine 159 to Glutamine; and Cysteine 203 to Serine.

[0019] SEQ. ID. No.: 1:

>gi2833277|sp|Q16651|PRSS8_HUMAN Prostatic:

ITGGSSAVAGQWPWQVSITYEGVHVC GGSLVSEQWVLSAAHCFPSEHHKEAYEV
KLG AHQLDSYSEDAKVSTLKDII PHPSYLQEGSQGDIALQLSRPITFSRYIRPISLP
AAQASFPNGLHCTVTGWGHVAPSVLLTPKPLQQLEVPLISRETSNCLYNIDAKP
E EPHFVQEDMVCAGYVEGGKDACQGDSGGPLSCPVEGLWYLTGIVSWG DACGA
RNRPGVYTLASSYASW IQSKVTELQPRVVPQTQESQPDSNL

[0020] According to the invention, cDNA encoding prostatic (i.e., amino acid residues detailed in SEQ. ID No: 1) is inserted into a suitable expression vector and expressed in a suitable cell line. The cDNA also can include other regions that facilitate expression or achieve other objects, such as flanking regions, that otherwise do not depart from the essence of the invention. The cDNAs encoding the prostatic polypeptide, or

functional portions thereof, can be altered by addition, substitution, deletion, or insertion. Such alterations can be made, for example, to prevent glycosylation, prevent formation of incorrect or undesired disulfide bridges, and to enhance expression, purification and/or crystallization.

[0021] Recombinant expression vectors containing the nucleotide sequence encoding prostaticin, or a portion thereof, can be prepared using methods known to those of skill in the art. Suitable host cells for expression of prostaticin polypeptides include prokaryotic, yeast, and higher eukaryotic cells. Further examples of suitable expression systems that can be employed to express recombinant prostaticin according to the present invention including mammalian or insect host cell culture expression systems, including baculovirus systems in insect cells and mammalian cell lines.

[0022] In one aspect of the invention, there is provided a composition comprising a polypeptide in crystalline form, wherein the polypeptide is a prostaticin polypeptide.

[0023] In a further embodiment, the prostaticin polypeptide is the expression product of a polynucleotide encoded by the amino acid residues of SEQ. ID No.: 1, or fragments and/or homologs thereof.

[0024] In a further embodiment of the invention, the composition above further comprises an optional binding partner suitable for co-crystallization with prostaticin.

[0025] In a further embodiment, the binding partner is a small molecule or polypeptide binding partner.

[0026] In a further embodiment, the binding partner is a small molecule.

[0027] One aspect of the invention relates to a method of crystallizing a prostaticin polypeptide with or without a binding partner. Crystals can be grown or formed by any suitable crystallization method such as vapor diffusion, sitting drop and the like (see Ducruix and Giegé "Crystallization of Nucleic Acids and Proteins: A Practical Approach", Oxford University Press, 1992) and can be set up manually or automatically (using robotics) known in the art. The crystallization buffer can optionally comprise a number of elements that include, without limitation, buffers, salts, organics, additives, precipitating agents, etc. The pH can range, for example from about 4.0 to about 9.0. The claimed invention can encompass any and all methods of crystallization. One skilled

in the art can choose any such methods and vary the parameters such that the chosen method results in the desired crystals. Crystals of the invention are screened for their ability to diffract X-rays to a resolution of 3.0 Å or better and a complete data set can be collected from one or more crystals.

[0028] In a further aspect of the invention, is provided a method for crystallizing a prostatic polypeptide, comprising mixing a solution comprising a prostatic polypeptide, a binding partner and a crystallization buffer, or soaking an existing binding partner into the preformed prostatic crystals.

[0029] In a further embodiment, the method of crystallization is by sitting drop, the crystallization precipitant can be PEG-6000, PEG-4000 or PEG-ME 5000 at concentration between 16 and 26% with no buffer or in a MES, CITRATE or HEPES buffer between pH 5.0 and pH 7.0 with or without additional salts such as 0.2M Ammonium Sulphate, Potassium hydrogen phosphate. The prostatic polypeptide is at a final concentration of 20 mg/mL and the crystals are prepared in a temperature ranging from 4 to 20 °C. A detailed description of the crystallization of the prostatic polypeptide of the invention is described in Example 1, *infra*.

[0030] In a further aspect, the above prostatic crystal diffracts X-rays to a resolution of at least 3.0 Å, is of space group $P2_12_12_1$ with unit cell dimensions: $a=52.9 \pm 5 \text{ Å}$, $b=54.8 \pm 5 \text{ Å}$, $c=83.0 \pm 5 \text{ Å}$, $\alpha=90$ degrees, $\beta=90$ degrees and $\gamma=90$ degrees. Depending on the particular conditions for crystallization, the parameters characterizing the unit cell can vary with a limited range, for example, a, b, and c each vary by up to 10 Å and α , β and γ vary by up to 10 degrees.

[0031] Another aspect of the invention relates to the atomic structure of prostatic. The structure of prostatic can be determined utilizing a crystal comprising a prostatic polypeptide as described above. According to the present invention, the structure of prostatic is determined using X-ray crystallography. Any suitable X-ray diffraction method for obtaining three-dimensional structural coordinates of a polypeptide can be used (see, for example, International Tables for Crystallography: Volume F: Crystallography of biological macromolecules, editor M. G. Rossmann. For the present invention, see Example 2 (*infra*) for a detailed description of the structure determination of prostatic.

[0032] In a further embodiment of the invention, the crystalline prostatic polypeptide has a three-dimensional structure characterized by the atomic structure coordinates given in Table 1, *infra*.

[0033] In another aspect of the invention is provided a computer-readable medium (such as, for example, a floppy disc, a hard disc, computer tape, RAM, ROM, CD, DVD, a magnetic disk, an optical disk, and the like) having recorded thereon structural coordinate data for prostatic polypeptide (such as set forth in Table 1), or a portion thereof.

[0034] In one embodiment, the computer-readable medium has recorded thereon machine-readable data, wherein the computer-readable medium, when used in conjunction with a machine programmed with instructions for using the data, is capable of generating image signals for depicting a graphical, three-dimensional representation of the prostatic polypeptide, or portion thereof.

[0035] In a further embodiment of the invention, there is provided a system for studying a prostatic polypeptide, said system comprising (a) a memory capable of storing information representing at least a portion of the prostatic polypeptide, wherein said memory comprises at least one first-type storage region, including a set of spatial coordinates specifying a location in a three dimensional space, and at least one second-type storage region comprising information representing a characteristic of one of a plurality of amino acids, said second-type storage regions being logically associated with said first-type storage regions in said memory to represent a geometric arrangement of at least one characteristic of said prostatic peptide in said three dimensional space; (b) a processor coupled to said memory to access said first-type storage regions and said second-type storage regions, wherein the processor generates image signals for depicting a visual image representing three dimensional image of said prostatic polypeptide in said three dimensional space based on data from said memory; and (c) a display coupled to said processor to receive said image signals, wherein the display depicts a visual three dimensional image of said prostatic polypeptide in said three dimensional space based on said image signals.

[0036] The use of X-ray structure determination, molecular design and selection and synthesis of compounds that associate with other polypeptides is known in the art. This

invention, however, for the first time allows the use of structural coordinates from the prostatic polypeptide of SEQ. ID. No.: 1 for molecular design, and selection and synthesis of compounds that associate with prostatic.

[0037] In one aspect of the invention, the structure coordinates of the invention can be displayed as, or converted to, a graphical representation, including three-dimensional shape representations. This can be accomplished using commercially available computer programs capable of generating graphical representations of molecules, or parts thereof, from a set of structural coordinates. Examples of computer programs capable of generating graphical representations of molecules, or parts thereof, from a set of structural coordinates are O (Alwyn Jones), Xfit, PyMOL, RasMol, and the like.

[0038] In another aspect of the invention, the structure of prostatic can be compared to, or superimposed over, other similar molecules, such as prostatic-like molecules. Comparison of prostatic and other molecules for which a graphical structure or three-dimensional structural coordinates are available can be carried out with the aid of available software applications, such as the Molecular Similarity application of QUANTA (Molecular Simulations, Inc., Waltham, Mass.).

[0039] Compounds that associate with prostatic can also be computationally evaluated and designed by screening and selecting chemical entities or fragments for their ability to associate with prostatic. Several methods can be used to accomplish this aspect of the invention.

[0040] In one embodiment, one may visually inspect a computer-generated model of prostatic based on the structure coordinates described herein. Computer generated models of chemical entities or specific chemical moieties can then be positioned in or around the catalytic domain and evaluated based on energy minimization and molecular dynamics, using, for example, available programs such as CHARMM or AMBER. Positioning of the chemical entity or fragment can be accomplished, for example, with docking software such as Quanta and Sybyl. Additionally, known and commercially available computer programs can be used in selecting chemical entities or fragments. Once suitable chemical entities or fragments are selected, they can be assembled into a single compound, such as an inhibitor, mediator, or other regulatory compound. Known and commercially available model building software may assist in assembly.

[0041] In one aspect of the invention, compounds that associate with prostasin can be designed as a whole, rather than by assembly of specific chemical moieties or chemical entities. This embodiment can be carried out using computer programs such as LUDI (Biosym Technologies, San Diego, Calif.), LEGEND (Molecular Simulations, Burlington, Mass.), and Leap Frog (Tripos Associates, St. Louis, Mo.).

[0042] In one embodiment, a candidate compound is chosen based upon the desired sites of interaction with prostasin and the candidate compound in light of the sites of interaction identified previously. Once the specific candidate compound-prostasin interactions are determined, docking studies, using commercially available docking software, are performed to provide preliminary "modeled" complexes of selected candidate compound with prostasin.

[0043] Constrained conformational analysis is performed using, for example, molecular dynamics (MD) to check the integrity of the modeled prostasin-inhibitor complex. Once the complex reaches its most favorable conformational state, the structure as proposed by the MD study is analyzed visually to ensure that the modeled complex complies with known experimental SAR/QSAR (structure-activity relationship/quantitative structure-activity relationship) based on measured binding affinities.

[0044] Other modeling techniques can also be used in accordance with the invention. Examples of these techniques are disclosed in Cohen et al., "Molecular Modeling Software and Methods for Medicinal Chemistry," J. Med. Chem., 33:883-894 (1990) and Navia et al., "The Use of Structural Information in Drug Design," Current Opinions in Structural Biology, 2:202-210 (1992), "Structure Based Drug Design", editor Verapandian herein incorporated by reference in the entirety.

[0045] Compounds developed or designed to associate with prostasin can be optimized or the efficiency of association can be tested using a number of methods known in the art. For example, the deformation energy and electrostatic interactions can be determined and optimized. Known and commercially available software and hardware systems can be used. Structure-based analoging for optimization of the inhibitor potency, selectivity and physical drug-like properties in an iterative manner can also be performed by one skilled in the art of drug design.

[0046] Substitutions can also be made to selected or designed compounds. These substitutions can be made to improve or modify the association properties of the compound.

Such substitutions can be made, for example, in side groups or particular atoms of the compounds. Generally, one should begin with conservative substitutions that have approximately the same size, shape, charge and other characteristics of the original group or atom. Substituted compounds can be further analyzed and optimized as described above.

[0047] In a further aspect of the invention, the potential inhibitory, mediatory, regulatory, or other binding effect of a compound can be analyzed and evaluated, using, for example, commercially available computer software, prior to actual synthesis and testing of such compound. In this way, one can evaluate the probability of synthesizing and testing of inoperative compounds.

[0048] In a further aspect of the invention, there is provided a method of identifying a compound that associates with prostasin, comprising: (a) designing an associating compound for said polypeptide that forms a bond with a site on the prostasin molecule based on all or part of the coordinates of a prostasin polypeptide crystal (Table 1); (b) synthesizing said compound; and (c) determining the capability of said compound to modulate the activity of said prostasin polypeptide.

[0049] In one embodiment, the identified compound interacts with a site on prostasin defined by at least one of the amino acids listed in Table 2.

[0050] As used herein, "associate" means that the compounds may bind to or interact with prostasin ionically, covalently, via hydrogen bonding, Van der Waals interactions, salt bridges, steric interactions, hydrophilic interactions and/or hydrophobic interactions. Moreover, the term "associate" encompasses associations with any portion of prostasin. For example, compounds that associate with prostasin can be compounds that act as competitive inhibitors, un-competitive inhibitors, and non-competitive inhibitors. Compounds that associate with prostasin can also be compounds that act as mediators or other regulatory compounds. Compounds that associate with prostasin can also be compounds that isomerize to short-lived reaction intermediates in the chemical reaction of a substrate with prostasin. In particular, compounds designed to associate with prostasin can be used therapeutically as modulators of prostasin activity, such as inhibitors, mediators and other regulatory compounds.

[0051] In vitro procedures for measuring the effect of compounds have on modulating the activity of prostasin generally are known in the art.

Description of Prostasin Structure

[0052] The three dimensional prostasin molecule of the invention can be described, with reference to the Figures.

[0053] FIG. 1 is a ribbon diagram of prostasin: Ribbon diagram of prostasin molecule detailing the overall fold of the molecule, colored from green to red dependant on the position of carbon alpha atoms within the molecule. A ball and stick representation of an inhibitor (DFFK-chloromethylketone) is displayed to indicate the binding site. Figure produced with BobScript and Raster3D [Esnouf, 1997 #319; Kraulis, 1991 #329; Merritt, 1994 #332]

[0054] FIG. 2 is a surface representation: Electrostatic surface representation of prostasin substrate binding site. Surface is colored red, blue and white to indicate electronegativity, electropositivity and neutrality respectively. Figure produced with PYMOL and APBS [Baker, 2000 #2280]

[0055] FIG. 3 is a structure alignment: Structure alignment of the superposition of the structure of prostasin with related serine proteases, thrombin, trypsin and hepsin. Figure produced by STAMP and ALSCRIPT [Russell, 1992 #984; Barton, 1993 #992]

[0056] In designing and developing compounds that modulate prostasin activity, such as inhibitors, mediators and other compounds having activities with biological significance, that associate with prostasin, it is desirable to select compounds with a view toward the particular surface contour, charge, shape, and other physical characteristics of prostasin. Generally, the compounds should be capable of physically and structurally associating with prostasin.

[0057] The prostasin crystal structure of the invention demonstrates several structural peculiarities regarding surface contour, charge and shape, which facilitates the design of potent selective modulators of prostasin activity, particularly modulators that associate with the residues described in Table 2.

Examples:

[0058] The following examples serve to illustrate the present invention but should not be construed as a limitation thereof.

Example 1

Expression and Crystallization of Prostasin

[0059] The DNA sequence encoding prostasin residues 45 to 305 is amplified from a full length construct in a mammalian expression vector by PCR. The 3' primer incorporates a stop codon and an overhanging PacI site. The PCR product is digested with PacI before ligating into the MHBa plasmid which has been prepared by digestion with PmlI and PacI. Cloning into the MH4Ba plasmid adds the sequence MKFLVNVALVFMVVYISYIYA to the N-terminus of the translated construct (which comprises the first 21 N-terminal residues of honeybee melittin and serves as a secretion signal), and HHHHHH to the C-terminus.

[0060] The resultant plasmid is transfected into DH10Bac, plated on LB plates with 7µg/ml gentamycin, 50µg/ml kanamycin, 10µg/ml tetracycline, 100µg/ml blue-gal, and 40µg/ml IPTG. Bacmid- positive colonies are transfected into SF9 cells using standard Cellfectin protocol, and amplified to $\geq 1 \times 10^8$ virus/ml.

[0061] The resultant prostasin construct is expressed in 2x10L of Sf9 cells in Wave Bioreactors (Wave) infected at a cell density of 0.8×10^6 cells/ml and an MOI of 0.1. Cells are then incubated at 27°C.

[0062] Cells are removed by centrifugation for 10 minutes at 1500 x g, and the pH of the supernatant is adjusted to 7.5 by adding 10N NaOH. The pH-adjusted supernatant is placed at 4-10°C for 2-16 hours, then centrifuged again at 4200xg for 10-15 minutes to clarify. Further clarification is achieved by pumping the pH adjusted supernatant through a Sartoban P Sterile Capsule 0.45+0.2 µm (Sartorius). The final clarified supernatant is then concentrated to about 1L by ultrafiltration using a Slice ultrafiltration unit (Sartorius) loaded with Slice Crossflow 10K MWCO Membrane. The 1L of concentrate is then diafiltered at constant volume against approximately 20 volumes of 50 mM potassium phosphate pH 7.5, 200 mM NaCl until the diafiltrate is clear (without color). The buffer exchanged concentrate is further concentrated to 500 ml and harvested from the unit to a final volume of approximately 2L once the system is washed with buffer to recover all possible protein.

[0063] The diafiltered concentrate is loaded onto a 10 ml Sepharose Fast Flow column (Amersham) previously charged with NiCl₂ and equilibrated with 50 mM potassium phosphate pH 7.5, 300 mM NaCl, 5%v glycerol. The column is washed with

the above buffer until no additional protein flowed through as judged by online OD(280) absorbance. The column is then eluted with imidazole spiked in the above buffer in three steps, 10 mM, 25 mM, and 150 mM.

[0064] The prostaticin eluted in the 150 mM step fraction- appropriate fractions as judged by SDS-PAGE gel are pooled. The pooled fractions are dialyzed against 20 mM TrisCl pH 7.9 (adjusted at RT), 50 mM NaCl, 5% glycerol, then loaded onto a 6 ml Resource Q column (Amersham). The column is eluted with a 30 CV gradient from the above buffer to the above buffer containing 1M NaCl.

[0065] Appropriate fractions as judged by SDS-PAGE gel are pooled and dialyzed against a 20mM Tris buffer with 150mM NaCL at pH 7.0 , concentrated to 20mg/ml (as assayed by Bradford against BSA std) using 10,000 MWCO spin concentrators

[0066] Sitting drop vapour diffusion crystallization plates are set up in low profile Greiner 96 well crystallization plates. A reservoir of 50µl of crystallization solution is added to the well reservoir whilst equal volumes of protein and crystallization solution (200nl) are added to the crystallization shelf. Crystals formed within 3 weeks in a variety of conditions all involving 16-26% w/v PEG-4000 and a pH of less than 7.0

Example 2

Structure Determination of Prostaticin

[0067] Data for the prostaticin structure is collected at a synchrotron X-ray source or on a rotating anode system. Data are processed with standard data reduction packages such as Mosflm or HKL2000 and diffract in excess of 2.0Å resolution. The initial structure is solved by the molecular replacement technique using the coordinates of a homologous protein (human Beta Tryptase PDB code 1AOL) and refined until convergence with the crystallographic refinement program Refmac5.

[0068] The structure coordinates obtained from prostaticin crystal of the invention are detailed in Table 1, *infra*.

Table 1a

Structure Coordinates for APO (open version of Prostaticin)

```
REMARK      3  REFINEMENT.
REMARK      3    PROGRAM      :  REFMAC 5.2.0005
REMARK      3    AUTHORS      :  MURSHUDOV, VAGIN, DODSON
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REMARK 3
REMARK 3 REFINEMENT TARGET : MAXIMUM LIKELIHOOD
REMARK 3
REMARK 3 DATA USED IN REFINEMENT.
REMARK 3 RESOLUTION RANGE HIGH (ANGSTROMS) : 1.60
REMARK 3 RESOLUTION RANGE LOW (ANGSTROMS) : 45.18
REMARK 3 DATA CUTOFF (SIGMA(F)) : NONE
REMARK 3 COMPLETENESS FOR RANGE (%) : 90.34
REMARK 3 NUMBER OF REFLECTIONS : 27807
REMARK 3
REMARK 3 FIT TO DATA USED IN REFINEMENT.
REMARK 3 CROSS-VALIDATION METHOD : THROUGHOUT
REMARK 3 FREE R VALUE TEST SET SELECTION : RANDOM
REMARK 3 R VALUE (WORKING + TEST SET) : 0.17827
REMARK 3 R VALUE (WORKING SET) : 0.17590
REMARK 3 FREE R VALUE : 0.22424
REMARK 3 FREE R VALUE TEST SET SIZE (%) : 5.0
REMARK 3 FREE R VALUE TEST SET COUNT : 1459
REMARK 3
REMARK 3 FIT IN THE HIGHEST RESOLUTION BIN.
REMARK 3 TOTAL NUMBER OF BINS USED : 20
REMARK 3 BIN RESOLUTION RANGE HIGH : 1.600
REMARK 3 BIN RESOLUTION RANGE LOW : 1.642
REMARK 3 REFLECTION IN BIN (WORKING SET) : 1160
REMARK 3 BIN COMPLETENESS (WORKING+TEST) (%) : 51.41
REMARK 3 BIN R VALUE (WORKING SET) : 0.376
REMARK 3 BIN FREE R VALUE SET COUNT : 58
REMARK 3 BIN FREE R VALUE : 0.533
REMARK 3
REMARK 3 NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK 3 ALL ATOMS : 2121
REMARK 3
REMARK 3 B VALUES.
REMARK 3 FROM WILSON PLOT (A**2) : NULL
REMARK 3 MEAN B VALUE (OVERALL, A**2) : 17.076
REMARK 3 OVERALL ANISOTROPIC B VALUE.
REMARK 3 B11 (A**2) : 0.39
REMARK 3 B22 (A**2) : 0.88
REMARK 3 B33 (A**2) : -1.27
REMARK 3 B12 (A**2) : 0.00
REMARK 3 B13 (A**2) : 0.00
REMARK 3 B23 (A**2) : 0.00
REMARK 3
REMARK 3 ESTIMATED OVERALL COORDINATE ERROR.
REMARK 3 ESU BASED ON R VALUE (A) :
0.098
REMARK 3 ESU BASED ON FREE R VALUE (A) :
0.104
REMARK 3 ESU BASED ON MAXIMUM LIKELIHOOD (A) :
0.075
REMARK 3 ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2) :
2.219
REMARK 3
REMARK 3 CORRELATION COEFFICIENTS.
REMARK 3 CORRELATION COEFFICIENT FO-FC : 0.965
REMARK 3 CORRELATION COEFFICIENT FO-FC FREE : 0.945
REMARK 3
REMARK 3 RMS DEVIATIONS FROM IDEAL VALUES COUNT RMS
WEIGHT
REMARK 3 BOND LENGTHS REFINED ATOMS (A) : 1952 ; 0.014; 0.021

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REMARK 3 BOND LENGTHS OTHERS (A): 1707 ; 0.001 ;
0.020
REMARK 3 BOND ANGLES REFINED ATOMS (DEGREES): 2665 ; 1.523 ;
1.955
REMARK 3 BOND ANGLES OTHERS (DEGREES): 3996 ; 0.768 ;
3.000
REMARK 3 TORSION ANGLES, PERIOD 1 (DEGREES): 246 ; 5.809 ;
5.000
REMARK 3 TORSION ANGLES, PERIOD 2 (DEGREES): 79 ; 32.463
; 24.430
REMARK 3 TORSION ANGLES, PERIOD 3 (DEGREES): 290 ; 12.483
; 15.000
REMARK 3 TORSION ANGLES, PERIOD 4 (DEGREES): 7 ; 22.991
; 15.000
REMARK 3 CHIRAL-CENTER RESTRAINTS (A**3): 288 ; 0.084 ;
0.200
REMARK 3 GENERAL PLANES REFINED ATOMS (A): 2175 ; 0.007 ;
0.020
REMARK 3 GENERAL PLANES OTHERS (A): 369 ; 0.001 ;
0.020
REMARK 3 NON-BONDED CONTACTS REFINED ATOMS (A): 440 ; 0.202 ;
0.200
REMARK 3 NON-BONDED CONTACTS OTHERS (A): 1888 ; 0.183 ;
0.200
REMARK 3 NON-BONDED TORSION REFINED ATOMS (A): 979 ; 0.187 ;
0.200
REMARK 3 NON-BONDED TORSION OTHERS (A): 1181 ; 0.091 ;
0.200
REMARK 3 H-BOND (X...Y) REFINED ATOMS (A): 182 ; 0.159 ;
0.200
REMARK 3 SYMMETRY VDW REFINED ATOMS (A): 19 ; 0.170 ;
0.200
REMARK 3 SYMMETRY VDW OTHERS (A): 82 ; 0.191 ;
0.200
REMARK 3 SYMMETRY H-BOND REFINED ATOMS (A): 20 ; 0.165 ;
0.200
REMARK 3
REMARK 3 ISOTROPIC THERMAL FACTOR RESTRAINTS. COUNT RMS
WEIGHT
REMARK 3 MAIN-CHAIN BOND REFINED ATOMS (A**2): 1536 ; 1.713 ;
2.000
REMARK 3 MAIN-CHAIN BOND OTHER ATOMS (A**2): 501 ; 0.350 ;
2.000
REMARK 3 MAIN-CHAIN ANGLE REFINED ATOMS (A**2): 1981 ; 2.049 ;
3.000
REMARK 3 SIDE-CHAIN BOND REFINED ATOMS (A**2): 851 ; 3.850 ;
5.000
REMARK 3 SIDE-CHAIN ANGLE REFINED ATOMS (A**2): 684 ; 5.422 ;
8.000
REMARK 3
REMARK 3 NCS RESTRAINTS STATISTICS
REMARK 3 NUMBER OF NCS GROUPS : NULL
REMARK 3
REMARK 3
REMARK 3 TLS DETAILS
REMARK 3 NUMBER OF TLS GROUPS : NULL
REMARK 3
REMARK 3
REMARK 3 BULK SOLVENT MODELLING.
REMARK 3 METHOD USED : BABINET MODEL WITH MASK
REMARK 3 PARAMETERS FOR MASK CALCULATION

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REMARK 3 VDW PROBE RADIUS : 1.20
REMARK 3 ION PROBE RADIUS : 0.80
REMARK 3 SHRINKAGE RADIUS : 0.80
REMARK 3
REMARK 3 OTHER REFINEMENT REMARKS:
REMARK 3 HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS
REMARK 3
SSBOND 1 CYS B 70 CYS B 86
SSBOND 2 CYS B 168 CYS B 244
SSBOND 3 CYS B 201 CYS B 223
SSBOND 4 CYS B 234 CYS B 262
CISPEP 1 THR B 184 PRO B 185 0.00
CRYST1 53.556 54.071 82.678 90.00 90.00 90.00 P 21 21 21
SCALE1 0.018672 0.000000 0.000000 0.000000
SCALE2 0.000000 0.018494 0.000000 0.000000
SCALE3 0.000000 0.000000 0.012095 0.000000
ATOM 1 N ILE B 45 3.904 32.536 4.482 1.00 13.68
ATOM 2 CA ILE B 45 3.480 32.154 3.109 1.00 13.87
ATOM 4 CB ILE B 45 2.947 30.703 3.051 1.00 13.84
ATOM 6 CG1 ILE B 45 3.987 29.742 3.592 1.00 13.87
ATOM 9 CD1 ILE B 45 5.160 29.460 2.666 1.00 17.37
ATOM 13 CG2 ILE B 45 2.445 30.353 1.654 1.00 14.25
ATOM 17 C ILE B 45 2.322 33.041 2.726 1.00 15.74
ATOM 18 O ILE B 45 1.268 33.036 3.397 1.00 15.32
ATOM 22 N THR B 46 2.494 33.786 1.647 1.00 14.74
ATOM 23 CA THR B 46 1.381 34.600 1.153 1.00 15.84
ATOM 25 CB THR B 46 1.798 36.021 0.803 1.00 17.30
ATOM 27 OG1 THR B 46 0.610 36.803 0.646 1.00 19.67
ATOM 29 CG2 THR B 46 2.575 36.059 -0.469 1.00 21.00
ATOM 33 C THR B 46 0.754 33.944 -0.052 1.00 16.36
ATOM 34 O THR B 46 1.460 33.428 -0.936 1.00 14.86
ATOM 36 N GLY B 47 -0.574 33.958 -0.086 1.00 18.36
ATOM 37 CA GLY B 47 -1.324 33.430 -1.215 1.00 18.42
ATOM 40 C GLY B 47 -1.443 31.917 -1.269 1.00 19.12
ATOM 41 O GLY B 47 -1.728 31.347 -2.321 1.00 20.33
ATOM 43 N GLY B 48 -1.239 31.261 -0.138 1.00 19.17
ATOM 44 CA GLY B 48 -1.260 29.810 -0.076 1.00 18.78
ATOM 47 C GLY B 48 -2.533 29.368 0.590 1.00 19.54
ATOM 48 O GLY B 48 -3.543 30.063 0.508 1.00 20.69
ATOM 50 N SER B 49 -2.479 28.239 1.269 1.00 17.74
ATOM 51 CA SER B 49 -3.598 27.714 2.024 1.00 19.69
ATOM 53 CB SER B 49 -4.358 26.686 1.202 1.00 19.42
ATOM 56 OG SER B 49 -3.475 25.663 0.806 1.00 22.01
ATOM 58 C SER B 49 -3.103 27.024 3.284 1.00 19.62
ATOM 59 O SER B 49 -1.925 26.701 3.392 1.00 20.24
ATOM 61 N SER B 50 -4.009 26.760 4.210 1.00 18.74
ATOM 62 CA SER B 50 -3.668 26.040 5.409 1.00 19.38
ATOM 64 CB SER B 50 -4.777 26.156 6.449 1.00 19.22
ATOM 67 OG SER B 50 -4.880 27.489 6.913 1.00 19.24
ATOM 69 C SER B 50 -3.455 24.573 5.075 1.00 19.83
ATOM 70 O SER B 50 -4.297 23.948 4.423 1.00 18.35
ATOM 72 N ALA B 51 -2.321 24.024 5.512 1.00 19.20
ATOM 73 CA ALA B 51 -2.066 22.608 5.431 1.00 19.72
ATOM 75 CB ALA B 51 -0.578 22.314 5.670 1.00 18.79
ATOM 79 C ALA B 51 -2.922 21.954 6.496 1.00 20.09
ATOM 80 O ALA B 51 -3.487 22.643 7.340 1.00 21.34
ATOM 82 N VAL B 52 -3.040 20.637 6.466 1.00 19.56
ATOM 83 CA VAL B 52 -3.711 19.950 7.555 1.00 21.40
ATOM 85 CB VAL B 52 -4.794 18.940 7.033 1.00 22.27
ATOM 87 CG1 VAL B 52 -5.789 19.635 6.141 1.00 27.78
ATOM 91 CG2 VAL B 52 -4.199 17.825 6.311 1.00 26.21

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ATOM	95	C	VAL	B	52	-2.638	19.274	8.427	1.00	20.36
ATOM	96	O	VAL	B	52	-1.553	18.997	7.961	1.00	20.34
ATOM	98	N	ALA	B	53	-2.943	19.016	9.694	1.00	18.80
ATOM	99	CA	ALA	B	53	-2.040	18.330	10.583	1.00	18.70
ATOM	101	CB	ALA	B	53	-2.726	18.032	11.898	1.00	19.09
ATOM	105	C	ALA	B	53	-1.537	17.050	9.958	1.00	18.90
ATOM	106	O	ALA	B	53	-2.309	16.310	9.347	1.00	18.31
ATOM	108	N	GLY	B	54	-0.233	16.801	10.085	1.00	18.95
ATOM	109	CA	GLY	B	54	0.382	15.582	9.524	1.00	18.91
ATOM	112	C	GLY	B	54	0.788	15.645	8.051	1.00	17.68
ATOM	113	O	GLY	B	54	1.477	14.744	7.564	1.00	16.91
ATOM	115	N	GLN	B	55	0.376	16.690	7.338	1.00	17.57
ATOM	116	CA	GLN	B	55	0.587	16.753	5.915	1.00	15.66
ATOM	118	CB	GLN	B	55	-0.253	17.897	5.319	1.00	15.52
ATOM	121	CG	GLN	B	55	-0.258	17.856	3.834	1.00	15.96
ATOM	124	CD	GLN	B	55	-1.242	18.815	3.199	1.00	18.22
ATOM	125	OE1	GLN	B	55	-1.292	18.945	1.967	1.00	24.22
ATOM	126	NE2	GLN	B	55	-2.036	19.455	4.016	1.00	16.26
ATOM	129	C	GLN	B	55	2.063	16.908	5.525	1.00	15.74
ATOM	130	O	GLN	B	55	2.515	16.332	4.538	1.00	16.82
ATOM	132	N	TRP	B	56	2.789	17.721	6.287	1.00	14.98
ATOM	133	CA	TRP	B	56	4.204	18.044	5.973	1.00	13.66
ATOM	135	CB	TRP	B	56	4.353	19.519	5.565	1.00	11.95
ATOM	138	CG	TRP	B	56	3.502	19.833	4.383	1.00	11.65
ATOM	139	CD1	TRP	B	56	2.354	20.524	4.395	1.00	11.45
ATOM	141	NE1	TRP	B	56	1.823	20.599	3.130	1.00	13.41
ATOM	143	CE2	TRP	B	56	2.658	19.954	2.264	1.00	12.26
ATOM	144	CD2	TRP	B	56	3.742	19.464	3.030	1.00	12.90
ATOM	145	CE3	TRP	B	56	4.757	18.776	2.383	1.00	13.48
ATOM	147	CZ3	TRP	B	56	4.649	18.562	1.011	1.00	13.29
ATOM	149	CH2	TRP	B	56	3.565	19.065	0.286	1.00	14.33
ATOM	151	CZ2	TRP	B	56	2.563	19.759	0.888	1.00	14.78
ATOM	153	C	TRP	B	56	4.995	17.743	7.226	1.00	13.94
ATOM	154	O	TRP	B	56	5.500	18.659	7.878	1.00	11.61
ATOM	156	N	PRO	B	57	5.077	16.442	7.583	1.00	13.85
ATOM	157	CA	PRO	B	57	5.567	16.071	8.917	1.00	12.72
ATOM	159	CB	PRO	B	57	5.217	14.587	9.027	1.00	14.27
ATOM	162	CG	PRO	B	57	5.251	14.094	7.619	1.00	14.85
ATOM	165	CD	PRO	B	57	4.627	15.247	6.831	1.00	14.50
ATOM	168	C	PRO	B	57	7.042	16.337	9.179	1.00	11.86
ATOM	169	O	PRO	B	57	7.482	16.161	10.310	1.00	10.54
ATOM	170	N	TRP	B	58	7.768	16.788	8.152	1.00	10.50
ATOM	171	CA	TRP	B	58	9.175	17.150	8.292	1.00	9.58
ATOM	173	CB	TRP	B	58	9.942	16.861	7.011	1.00	11.45
ATOM	176	CG	TRP	B	58	9.223	17.168	5.766	1.00	9.66
ATOM	177	CD1	TRP	B	58	9.198	18.341	5.080	1.00	12.64
ATOM	179	NE1	TRP	B	58	8.442	18.214	3.942	1.00	12.64
ATOM	181	CE2	TRP	B	58	7.928	16.944	3.901	1.00	12.53
ATOM	182	CD2	TRP	B	58	8.391	16.267	5.040	1.00	9.11
ATOM	183	CE3	TRP	B	58	8.063	14.920	5.203	1.00	12.58
ATOM	185	CZ3	TRP	B	58	7.284	14.326	4.283	1.00	13.84
ATOM	187	CH2	TRP	B	58	6.807	15.020	3.170	1.00	13.97
ATOM	189	CZ2	TRP	B	58	7.127	16.323	2.951	1.00	17.12
ATOM	191	C	TRP	B	58	9.316	18.619	8.635	1.00	10.22
ATOM	192	O	TRP	B	58	10.388	19.088	9.025	1.00	10.51
ATOM	194	N	GLN	B	59	8.229	19.374	8.510	1.00	10.22
ATOM	195	CA	GLN	B	59	8.351	20.804	8.782	1.00	10.99
ATOM	197	CB	GLN	B	59	7.086	21.523	8.314	1.00	11.13
ATOM	200	CG	GLN	B	59	6.986	22.997	8.700	1.00	12.75
ATOM	203	CD	GLN	B	59	7.735	23.964	7.791	1.00	10.44
ATOM	204	OE1	GLN	B	59	7.546	23.966	6.559	1.00	10.59

ATOM	205	NE2	GLN	B	59	8.566	24.847	8.404	1.00	11.71
ATOM	208	C	GLN	B	59	8.507	21.035	10.280	1.00	11.27
ATOM	209	O	GLN	B	59	7.716	20.527	11.090	1.00	11.23
ATOM	211	N	VAL	B	60	9.474	21.880	10.607	1.00	10.58
ATOM	212	CA	VAL	B	60	9.693	22.264	11.981	1.00	11.91
ATOM	214	CB	VAL	B	60	10.993	21.672	12.580	1.00	13.07
ATOM	216	CG1	VAL	B	60	11.067	20.165	12.357	1.00	13.38
ATOM	220	CG2	VAL	B	60	12.193	22.357	12.034	1.00	14.48
ATOM	224	C	VAL	B	60	9.678	23.770	12.079	1.00	11.28
ATOM	225	O	VAL	B	60	9.878	24.512	11.104	1.00	11.61
ATOM	227	N	SER	B	61	9.390	24.210	13.291	1.00	11.15
ATOM	228	CA	SER	B	61	9.546	25.622	13.663	1.00	11.82
ATOM	230	CB	SER	B	61	8.279	26.089	14.398	1.00	12.58
ATOM	233	OG	SER	B	61	8.511	27.265	15.174	1.00	11.41
ATOM	235	C	SER	B	61	10.766	25.834	14.513	1.00	12.08
ATOM	236	O	SER	B	61	10.989	25.140	15.494	1.00	11.81
ATOM	238	N	ILE	B	62	11.539	26.851	14.152	1.00	12.24
ATOM	239	CA	ILE	B	62	12.722	27.212	14.887	1.00	13.39
ATOM	241	CB	ILE	B	62	13.888	27.358	13.927	1.00	15.19
ATOM	243	CG1	ILE	B	62	14.148	25.983	13.306	1.00	17.39
ATOM	246	CD1	ILE	B	62	15.196	25.980	12.289	1.00	19.67
ATOM	250	CG2	ILE	B	62	15.112	27.882	14.668	1.00	14.69
ATOM	254	C	ILE	B	62	12.412	28.504	15.614	1.00	13.34
ATOM	255	O	ILE	B	62	12.022	29.465	14.986	1.00	11.83
ATOM	257	N	THR	B	63	12.581	28.498	16.928	1.00	13.00
ATOM	258	CA	THR	B	63	12.343	29.686	17.754	1.00	12.22
ATOM	260	CB	THR	B	63	11.321	29.408	18.838	1.00	12.27
ATOM	262	OG1	THR	B	63	11.872	28.494	19.787	1.00	11.51
ATOM	264	CG2	THR	B	63	10.050	28.794	18.235	1.00	14.63
ATOM	268	C	THR	B	63	13.662	30.169	18.381	1.00	13.72
ATOM	269	O	THR	B	63	14.596	29.393	18.593	1.00	13.40
ATOM	271	N	TYR	B	64	13.739	31.467	18.603	1.00	13.79
ATOM	272	CA	TYR	B	64	14.830	32.052	19.331	1.00	13.61
ATOM	274	CB	TYR	B	64	15.674	32.949	18.447	1.00	14.77
ATOM	277	CG	TYR	B	64	16.848	33.462	19.196	1.00	13.86
ATOM	278	CD1	TYR	B	64	17.900	32.628	19.473	1.00	12.31
ATOM	280	CE1	TYR	B	64	18.987	33.059	20.185	1.00	18.48
ATOM	282	CZ	TYR	B	64	19.023	34.358	20.624	1.00	18.07
ATOM	283	OH	TYR	B	64	20.124	34.781	21.326	1.00	21.37
ATOM	285	CE2	TYR	B	64	17.988	35.233	20.364	1.00	17.14
ATOM	287	CD2	TYR	B	64	16.894	34.780	19.645	1.00	22.57
ATOM	289	C	TYR	B	64	14.213	32.856	20.458	1.00	15.40
ATOM	290	O	TYR	B	64	13.365	33.717	20.214	1.00	14.46
ATOM	292	N	GLU	B	65	14.608	32.527	21.688	1.00	15.10
ATOM	293	CA	GLU	B	65	14.024	33.180	22.867	1.00	15.20
ATOM	295	CB	GLU	B	65	14.585	34.599	22.995	1.00	14.27
ATOM	298	CG	GLU	B	65	15.999	34.547	23.384	1.00	14.89
ATOM	301	CD	GLU	B	65	16.557	35.912	23.716	1.00	19.66
ATOM	302	OE1	GLU	B	65	15.999	36.920	23.280	1.00	24.81
ATOM	303	OE2	GLU	B	65	17.559	35.930	24.424	1.00	21.81
ATOM	304	C	GLU	B	65	12.502	33.120	22.807	1.00	15.76
ATOM	305	O	GLU	B	65	11.784	34.076	23.130	1.00	17.03
ATOM	307	N	GLY	B	66	12.002	31.962	22.396	1.00	16.22
ATOM	308	CA	GLY	B	66	10.573	31.673	22.392	1.00	15.56
ATOM	311	C	GLY	B	66	9.763	32.151	21.207	1.00	15.75
ATOM	312	O	GLY	B	66	8.597	31.833	21.112	1.00	17.74
ATOM	314	N	VAL	B	67	10.396	32.887	20.292	1.00	16.38
ATOM	315	CA	VAL	B	67	9.716	33.493	19.154	1.00	15.58
ATOM	317	CB	VAL	B	67	10.098	34.956	19.000	1.00	16.85
ATOM	319	CG1	VAL	B	67	9.225	35.597	17.922	1.00	19.17
ATOM	323	CG2	VAL	B	67	9.912	35.696	20.306	1.00	19.38

ATOM	327	C	VAL	B	67	10.108	32.741	17.873	1.00	15.22
ATOM	328	O	VAL	B	67	11.278	32.486	17.641	1.00	15.16
ATOM	330	N	HIS	B	68	9.114	32.341	17.092	1.00	15.63
ATOM	331	CA	HIS	B	68	9.362	31.684	15.812	1.00	14.99
ATOM	333	CB	HIS	B	68	8.042	31.367	15.127	1.00	14.35
ATOM	336	CG	HIS	B	68	8.207	30.775	13.778	1.00	15.11
ATOM	337	ND1	HIS	B	68	8.280	31.525	12.624	1.00	19.44
ATOM	339	CE1	HIS	B	68	8.489	30.715	11.595	1.00	12.40
ATOM	341	NE2	HIS	B	68	8.571	29.479	12.049	1.00	15.78
ATOM	343	CD2	HIS	B	68	8.429	29.496	13.410	1.00	8.54
ATOM	345	C	HIS	B	68	10.140	32.621	14.938	1.00	14.88
ATOM	346	O	HIS	B	68	9.657	33.742	14.683	1.00	14.79
ATOM	348	N	VAL	B	69	11.288	32.155	14.437	1.00	13.21
ATOM	349	CA	VAL	B	69	12.118	32.946	13.539	1.00	14.07
ATOM	351	CB	VAL	B	69	13.495	33.255	14.131	1.00	14.39
ATOM	353	CG1	VAL	B	69	13.350	34.177	15.341	1.00	15.80
ATOM	357	CG2	VAL	B	69	14.278	32.015	14.495	1.00	14.78
ATOM	361	C	VAL	B	69	12.310	32.353	12.137	1.00	14.00
ATOM	362	O	VAL	B	69	12.520	33.072	11.173	1.00	16.03
ATOM	364	N	CYS	B	70	12.238	31.030	12.053	1.00	13.61
ATOM	365	CA	CYS	B	70	12.530	30.325	10.819	1.00	13.21
ATOM	367	CB	CYS	B	70	14.018	30.082	10.675	1.00	14.05
ATOM	370	SG	CYS	B	70	14.965	31.549	10.216	1.00	18.51
ATOM	372	C	CYS	B	70	11.852	28.965	10.816	1.00	12.52
ATOM	373	O	CYS	B	70	11.479	28.445	11.861	1.00	13.60
ATOM	375	N	GLY	B	71	11.703	28.421	9.616	1.00	11.80
ATOM	376	CA	GLY	B	71	11.399	27.022	9.411	1.00	11.78
ATOM	379	C	GLY	B	71	12.648	26.164	9.320	1.00	12.46
ATOM	380	O	GLY	B	71	13.780	26.648	9.280	1.00	11.03
ATOM	382	N	GLY	B	72	12.414	24.860	9.272	1.00	10.53
ATOM	383	CA	GLY	B	72	13.479	23.851	9.094	1.00	9.73
ATOM	386	C	GLY	B	72	12.838	22.568	8.617	1.00	10.24
ATOM	387	O	GLY	B	72	11.611	22.462	8.581	1.00	10.60
ATOM	389	N	SER	B	73	13.668	21.575	8.313	1.00	11.06
ATOM	390	CA	SER	B	73	13.161	20.290	7.807	1.00	10.07
ATOM	392	CB	SER	B	73	13.425	20.153	6.322	1.00	10.58
ATOM	395	OG	SER	B	73	12.799	21.210	5.629	1.00	9.62
ATOM	397	C	SER	B	73	13.886	19.188	8.561	1.00	10.26
ATOM	398	O	SER	B	73	15.119	19.174	8.595	1.00	10.16
ATOM	400	N	LEU	B	74	13.123	18.304	9.175	1.00	12.41
ATOM	401	CA	LEU	B	74	13.666	17.143	9.824	1.00	10.24
ATOM	403	CB	LEU	B	74	12.564	16.431	10.630	1.00	9.66
ATOM	406	CG	LEU	B	74	13.017	15.334	11.559	1.00	11.59
ATOM	408	CD1	LEU	B	74	13.932	15.834	12.633	1.00	9.91
ATOM	412	CD2	LEU	B	74	11.762	14.671	12.112	1.00	11.60
ATOM	416	C	LEU	B	74	14.216	16.172	8.786	1.00	10.13
ATOM	417	O	LEU	B	74	13.541	15.791	7.845	1.00	11.64
ATOM	419	N	VAL	B	75	15.448	15.752	8.986	1.00	11.41
ATOM	420	CA	VAL	B	75	16.062	14.841	8.035	1.00	12.66
ATOM	422	CB	VAL	B	75	17.226	15.534	7.260	1.00	12.93
ATOM	424	CG1	VAL	B	75	16.665	16.726	6.471	1.00	13.24
ATOM	428	CG2	VAL	B	75	18.347	15.979	8.174	1.00	12.08
ATOM	432	C	VAL	B	75	16.509	13.537	8.650	1.00	14.24
ATOM	433	O	VAL	B	75	16.813	12.595	7.928	1.00	15.20
ATOM	435	N	SER	B	76	16.521	13.440	9.963	1.00	13.72
ATOM	436	CA	SER	B	76	16.798	12.162	10.621	1.00	13.22
ATOM	438	CB	SER	B	76	18.299	11.858	10.625	1.00	14.96
ATOM	441	OG	SER	B	76	18.985	12.743	11.472	1.00	16.39
ATOM	443	C	SER	B	76	16.236	12.284	12.053	1.00	14.85
ATOM	444	O	SER	B	76	15.585	13.253	12.360	1.00	14.99
ATOM	446	N	GLU	B	77	16.486	11.295	12.910	1.00	14.63

ATOM	447	CA	GLU	B	77	15.982	11.291	14.268	1.00	15.63
ATOM	449	CB	GLU	B	77	16.339	9.958	14.967	1.00	16.48
ATOM	452	CG	GLU	B	77	15.591	8.755	14.434	1.00	22.14
ATOM	455	CD	GLU	B	77	16.290	8.051	13.264	1.00	29.77
ATOM	456	OE1	GLU	B	77	17.182	8.661	12.644	1.00	26.89
ATOM	457	OE2	GLU	B	77	15.918	6.883	12.952	1.00	36.29
ATOM	458	C	GLU	B	77	16.567	12.455	15.085	1.00	15.42
ATOM	459	O	GLU	B	77	15.973	12.896	16.077	1.00	16.94
ATOM	461	N	GLN	B	78	17.729	12.961	14.696	1.00	14.58
ATOM	462	CA	GLN	B	78	18.351	14.007	15.507	1.00	14.85
ATOM	464	CB	GLN	B	78	19.496	13.396	16.351	1.00	16.24
ATOM	467	CG	GLN	B	78	19.813	14.176	17.633	1.00	15.57
ATOM	470	CD	GLN	B	78	20.570	13.383	18.675	1.00	17.71
ATOM	471	OE1	GLN	B	78	20.721	12.169	18.543	1.00	20.80
ATOM	472	NE2	GLN	B	78	21.072	14.077	19.708	1.00	18.10
ATOM	475	C	GLN	B	78	18.871	15.180	14.727	1.00	12.49
ATOM	476	O	GLN	B	78	19.544	16.017	15.312	1.00	12.88
ATOM	478	N	TRP	B	79	18.542	15.296	13.427	1.00	12.04
ATOM	479	CA	TRP	B	79	19.081	16.363	12.605	1.00	12.35
ATOM	481	CB	TRP	B	79	20.163	15.867	11.650	1.00	13.14
ATOM	484	CG	TRP	B	79	21.357	15.398	12.381	1.00	12.80
ATOM	485	CD1	TRP	B	79	21.534	14.155	12.925	1.00	17.13
ATOM	487	NE1	TRP	B	79	22.759	14.074	13.536	1.00	17.28
ATOM	489	CE2	TRP	B	79	23.411	15.275	13.408	1.00	13.53
ATOM	490	CD2	TRP	B	79	22.559	16.138	12.670	1.00	13.45
ATOM	491	CE3	TRP	B	79	23.003	17.426	12.387	1.00	14.38
ATOM	493	CZ3	TRP	B	79	24.264	17.815	12.836	1.00	15.49
ATOM	495	CH2	TRP	B	79	25.095	16.929	13.532	1.00	16.53
ATOM	497	CZ2	TRP	B	79	24.677	15.662	13.833	1.00	16.28
ATOM	499	C	TRP	B	79	18.007	17.050	11.790	1.00	11.55
ATOM	500	O	TRP	B	79	17.055	16.410	11.301	1.00	11.55
ATOM	502	N	VAL	B	80	18.144	18.372	11.761	1.00	11.14
ATOM	503	CA	VAL	B	80	17.312	19.248	11.011	1.00	10.88
ATOM	505	CB	VAL	B	80	16.563	20.174	11.970	1.00	12.42
ATOM	507	CG1	VAL	B	80	15.888	21.379	11.245	1.00	12.70
ATOM	511	CG2	VAL	B	80	15.565	19.343	12.823	1.00	13.53
ATOM	515	C	VAL	B	80	18.166	20.114	10.099	1.00	10.76
ATOM	516	O	VAL	B	80	19.252	20.580	10.487	1.00	11.01
ATOM	518	N	LEU	B	81	17.637	20.374	8.919	1.00	10.45
ATOM	519	CA	LEU	B	81	18.236	21.355	8.003	1.00	10.05
ATOM	521	CB	LEU	B	81	18.277	20.817	6.577	1.00	11.11
ATOM	524	CG	LEU	B	81	19.393	19.873	6.163	1.00	15.98
ATOM	526	CD1	LEU	B	81	19.128	19.325	4.755	1.00	16.63
ATOM	530	CD2	LEU	B	81	20.702	20.598	6.171	1.00	15.02
ATOM	534	C	LEU	B	81	17.449	22.640	7.973	1.00	10.31
ATOM	535	O	LEU	B	81	16.247	22.641	7.849	1.00	9.22
ATOM	537	N	SER	B	82	18.154	23.753	8.023	1.00	9.60
ATOM	538	CA	SER	B	82	17.525	25.059	7.960	1.00	10.03
ATOM	540	CB	SER	B	82	17.178	25.565	9.347	1.00	10.19
ATOM	543	OG	SER	B	82	16.492	26.819	9.302	1.00	9.82
ATOM	545	C	SER	B	82	18.516	25.932	7.207	1.00	9.54
ATOM	546	O	SER	B	82	19.388	25.402	6.485	1.00	10.65
ATOM	548	N	ALA	B	83	18.335	27.253	7.297	1.00	10.56
ATOM	549	CA	ALA	B	83	19.167	28.199	6.552	1.00	10.87
ATOM	551	CB	ALA	B	83	18.293	29.326	6.002	1.00	10.78
ATOM	555	C	ALA	B	83	20.181	28.785	7.480	1.00	11.64
ATOM	556	O	ALA	B	83	19.848	29.083	8.635	1.00	11.48
ATOM	558	N	ALA	B	84	21.392	29.023	6.972	1.00	12.52
ATOM	559	CA	ALA	B	84	22.447	29.566	7.831	1.00	13.38
ATOM	561	CB	ALA	B	84	23.781	29.603	7.127	1.00	14.52
ATOM	565	C	ALA	B	84	22.096	30.940	8.360	1.00	14.29

ATOM	566	O	ALA	B	84	22.435	31.289	9.483	1.00	13.69
ATOM	568	N	HIS	B	85	21.406	31.707	7.552	1.00	14.30
ATOM	569	CA	HIS	B	85	21.101	33.068	7.922	1.00	14.30
ATOM	571	CB	HIS	B	85	20.510	33.829	6.725	1.00	15.08
ATOM	574	CG	HIS	B	85	19.066	33.525	6.449	1.00	14.51
ATOM	575	ND1	HIS	B	85	18.655	32.838	5.325	1.00	15.07
ATOM	577	CE1	HIS	B	85	17.341	32.737	5.331	1.00	16.57
ATOM	579	NE2	HIS	B	85	16.874	33.388	6.387	1.00	15.91
ATOM	581	CD2	HIS	B	85	17.936	33.909	7.089	1.00	19.55
ATOM	583	C	HIS	B	85	20.214	33.133	9.167	1.00	14.98
ATOM	584	O	HIS	B	85	20.138	34.164	9.787	1.00	16.49
ATOM	586	N	CYS	B	86	19.531	32.040	9.510	1.00	13.37
ATOM	587	CA	CYS	B	86	18.686	32.005	10.698	1.00	14.38
ATOM	589	CB	CYS	B	86	17.748	30.802	10.643	1.00	13.49
ATOM	592	SG	CYS	B	86	16.626	30.811	9.280	1.00	17.45
ATOM	594	C	CYS	B	86	19.478	31.905	11.997	1.00	15.97
ATOM	595	O	CYS	B	86	18.883	31.952	13.074	1.00	15.90
ATOM	597	N	PHE	B	87	20.802	31.723	11.892	1.00	14.36
ATOM	598	CA	PHE	B	87	21.667	31.469	13.045	1.00	15.57
ATOM	600	CB	PHE	B	87	22.115	30.022	13.029	1.00	15.92
ATOM	603	CG	PHE	B	87	20.974	29.088	13.006	1.00	14.08
ATOM	604	CD1	PHE	B	87	20.297	28.788	14.171	1.00	19.43
ATOM	606	CE1	PHE	B	87	19.150	27.956	14.130	1.00	15.15
ATOM	608	CZ	PHE	B	87	18.715	27.487	12.918	1.00	14.87
ATOM	610	CE2	PHE	B	87	19.371	27.802	11.766	1.00	15.79
ATOM	612	CD2	PHE	B	87	20.484	28.610	11.803	1.00	15.60
ATOM	614	C	PHE	B	87	22.850	32.418	13.084	1.00	16.94
ATOM	615	O	PHE	B	87	24.003	31.999	12.962	1.00	16.68
ATOM	617	N	PRO	B	88	22.562	33.680	13.332	1.00	19.59
ATOM	618	CA	PRO	B	88	23.665	34.619	13.427	1.00	22.47
ATOM	620	CB	PRO	B	88	22.966	35.969	13.625	1.00	22.55
ATOM	623	CG	PRO	B	88	21.594	35.647	14.088	1.00	22.80
ATOM	626	CD	PRO	B	88	21.254	34.316	13.527	1.00	20.65
ATOM	629	C	PRO	B	88	24.564	34.265	14.604	1.00	24.07
ATOM	630	O	PRO	B	88	24.108	33.695	15.599	1.00	23.07
ATOM	631	N	SER	B	89	25.844	34.599	14.471	1.00	25.46
ATOM	632	CA	SER	B	89	26.855	34.328	15.489	1.00	26.84
ATOM	634	CB	SER	B	89	28.192	34.891	15.009	1.00	28.26
ATOM	637	OG	SER	B	89	27.991	36.266	14.711	1.00	34.33
ATOM	639	C	SER	B	89	26.513	34.962	16.844	1.00	26.59
ATOM	640	O	SER	B	89	26.892	34.436	17.874	1.00	27.84
ATOM	642	N	GLU	B	90	25.803	36.087	16.839	1.00	27.26
ATOM	643	CA	GLU	B	90	25.467	36.794	18.086	1.00	28.06
ATOM	645	CB	GLU	B	90	24.787	38.136	17.805	1.00	29.51
ATOM	648	CG	GLU	B	90	25.701	39.194	17.167	1.00	36.68
ATOM	651	CD	GLU	B	90	25.641	39.197	15.637	1.00	47.20
ATOM	652	OE1	GLU	B	90	24.962	38.306	15.055	1.00	47.90
ATOM	653	OE2	GLU	B	90	26.288	40.095	15.030	1.00	53.11
ATOM	654	C	GLU	B	90	24.525	36.009	18.984	1.00	27.96
ATOM	655	O	GLU	B	90	24.485	36.224	20.195	1.00	27.60
ATOM	657	N	HIS	B	91	23.721	35.145	18.376	1.00	25.93
ATOM	658	CA	HIS	B	91	22.724	34.400	19.103	1.00	24.44
ATOM	660	CB	HIS	B	91	21.687	33.840	18.124	1.00	23.39
ATOM	663	CG	HIS	B	91	20.685	34.855	17.662	1.00	22.96
ATOM	664	ND1	HIS	B	91	19.604	34.532	16.870	1.00	24.02
ATOM	666	CE1	HIS	B	91	18.885	35.616	16.646	1.00	24.06
ATOM	668	NE2	HIS	B	91	19.453	36.626	17.276	1.00	24.34
ATOM	670	CD2	HIS	B	91	20.586	36.178	17.907	1.00	24.09
ATOM	672	C	HIS	B	91	23.336	33.282	19.910	1.00	23.07
ATOM	673	O	HIS	B	91	24.355	32.699	19.539	1.00	22.86
ATOM	675	N	HIS	B	92	22.663	32.951	21.007	1.00	23.86

ATOM	676	CA	HIS	B	92	23.134	31.934	21.944	1.00	23.21
ATOM	678	CB	HIS	B	92	22.839	32.417	23.370	1.00	25.14
ATOM	681	CG	HIS	B	92	23.188	33.861	23.593	1.00	29.78
ATOM	682	ND1	HIS	B	92	22.310	34.768	24.143	1.00	34.80
ATOM	684	CE1	HIS	B	92	22.883	35.958	24.199	1.00	36.78
ATOM	686	NE2	HIS	B	92	24.100	35.858	23.694	1.00	33.65
ATOM	688	CD2	HIS	B	92	24.313	34.561	23.300	1.00	33.02
ATOM	690	C	HIS	B	92	22.435	30.613	21.626	1.00	21.68
ATOM	691	O	HIS	B	92	21.232	30.589	21.505	1.00	21.87
ATOM	693	N	LYS	B	93	23.198	29.533	21.480	1.00	20.19
ATOM	694	CA	LYS	B	93	22.664	28.251	21.075	1.00	19.90
ATOM	696	CB	LYS	B	93	23.749	27.150	21.119	1.00	18.57
ATOM	699	CG	LYS	B	93	23.296	25.828	20.531	1.00	21.28
ATOM	702	CD	LYS	B	93	24.439	24.870	20.274	1.00	24.19
ATOM	705	CE	LYS	B	93	25.050	24.341	21.553	1.00	29.78
ATOM	708	NZ	LYS	B	93	26.338	23.713	21.209	1.00	30.97
ATOM	712	C	LYS	B	93	21.515	27.809	21.982	1.00	17.42
ATOM	713	O	LYS	B	93	20.517	27.290	21.518	1.00	16.42
ATOM	715	N	GLU	B	94	21.692	28.039	23.283	1.00	18.36
ATOM	716	CA	GLU	B	94	20.765	27.574	24.319	1.00	17.74
ATOM	718	CB	GLU	B	94	21.342	27.896	25.695	1.00	16.56
ATOM	721	CG	GLU	B	94	22.549	27.161	26.051	1.00	22.05
ATOM	724	CD	GLU	B	94	23.447	27.942	27.023	1.00	24.03
ATOM	725	OE1	GLU	B	94	23.608	29.216	26.832	1.00	29.87
ATOM	726	OE2	GLU	B	94	24.034	27.237	27.913	1.00	32.33
ATOM	727	C	GLU	B	94	19.403	28.271	24.270	1.00	16.08
ATOM	728	O	GLU	B	94	18.481	27.899	25.002	1.00	15.32
ATOM	730	N	ALA	B	95	19.310	29.332	23.483	1.00	13.84
ATOM	731	CA	ALA	B	95	18.097	30.096	23.368	1.00	14.36
ATOM	733	CB	ALA	B	95	18.405	31.554	23.233	1.00	14.36
ATOM	737	C	ALA	B	95	17.245	29.632	22.207	1.00	13.95
ATOM	738	O	ALA	B	95	16.155	30.128	22.042	1.00	12.05
ATOM	740	N	TYR	B	96	17.719	28.665	21.427	1.00	12.50
ATOM	741	CA	TYR	B	96	16.911	28.151	20.313	1.00	12.62
ATOM	743	CB	TYR	B	96	17.792	27.656	19.172	1.00	12.61
ATOM	746	CG	TYR	B	96	18.396	28.745	18.350	1.00	13.46
ATOM	747	CD1	TYR	B	96	17.702	29.328	17.303	1.00	15.12
ATOM	749	CE1	TYR	B	96	18.283	30.367	16.547	1.00	15.69
ATOM	751	CZ	TYR	B	96	19.544	30.793	16.881	1.00	17.20
ATOM	752	OH	TYR	B	96	20.160	31.818	16.169	1.00	18.56
ATOM	754	CE2	TYR	B	96	20.225	30.216	17.920	1.00	14.98
ATOM	756	CD2	TYR	B	96	19.657	29.224	18.656	1.00	14.22
ATOM	758	C	TYR	B	96	16.065	26.975	20.757	1.00	11.83
ATOM	759	O	TYR	B	96	16.465	26.225	21.618	1.00	11.45
ATOM	761	N	GLU	B	97	14.940	26.769	20.081	1.00	12.65
ATOM	762	CA	GLU	B	97	14.219	25.517	20.187	1.00	12.64
ATOM	764	CB	GLU	B	97	13.035	25.594	21.146	1.00	13.79
ATOM	767	CG	GLU	B	97	13.433	25.816	22.577	1.00	15.70
ATOM	770	CD	GLU	B	97	12.268	25.709	23.531	1.00	12.82
ATOM	771	OE1	GLU	B	97	11.187	26.286	23.259	1.00	13.88
ATOM	772	OE2	GLU	B	97	12.462	25.030	24.547	1.00	15.06
ATOM	773	C	GLU	B	97	13.727	25.163	18.818	1.00	13.85
ATOM	774	O	GLU	B	97	13.618	26.023	17.930	1.00	10.65
ATOM	776	N	VAL	B	98	13.415	23.893	18.677	1.00	12.57
ATOM	777	CA	VAL	B	98	12.833	23.355	17.465	1.00	11.68
ATOM	779	CB	VAL	B	98	13.738	22.315	16.821	1.00	11.16
ATOM	781	CG1	VAL	B	98	13.077	21.737	15.592	1.00	14.42
ATOM	785	CG2	VAL	B	98	15.077	22.970	16.417	1.00	17.77
ATOM	789	C	VAL	B	98	11.545	22.673	17.883	1.00	11.47
ATOM	790	O	VAL	B	98	11.518	21.872	18.821	1.00	10.91
ATOM	792	N	LYS	B	99	10.472	23.002	17.191	1.00	12.35

ATOM	793	CA	LYS	B	99	9.183	22.395	17.484	1.00	13.24
ATOM	795	CB	LYS	B	99	8.092	23.443	17.697	1.00	13.51
ATOM	798	CG	LYS	B	99	6.740	22.847	18.127	1.00	17.91
ATOM	801	CD	LYS	B	99	5.918	23.903	18.891	1.00	19.52
ATOM	804	CE	LYS	B	99	4.460	23.554	19.068	1.00	27.86
ATOM	807	NZ	LYS	B	99	3.711	24.662	19.765	1.00	25.59
ATOM	811	C	LYS	B	99	8.792	21.551	16.306	1.00	13.15
ATOM	812	O	LYS	B	99	8.711	22.035	15.179	1.00	11.31
ATOM	814	N	LEU	B	100	8.517	20.302	16.609	1.00	13.52
ATOM	815	CA	LEU	B	100	8.266	19.305	15.607	1.00	13.24
ATOM	817	CB	LEU	B	100	9.266	18.159	15.793	1.00	14.31
ATOM	820	CG	LEU	B	100	10.744	18.535	15.697	1.00	15.23
ATOM	822	CD1	LEU	B	100	11.453	17.516	14.841	1.00	17.06
ATOM	826	CD2	LEU	B	100	11.407	18.612	17.082	1.00	18.24
ATOM	830	C	LEU	B	100	6.860	18.773	15.850	1.00	13.25
ATOM	831	O	LEU	B	100	6.415	18.732	16.993	1.00	12.09
ATOM	833	N	GLY	B	101	6.205	18.321	14.792	1.00	14.83
ATOM	834	CA	GLY	B	101	4.916	17.687	14.934	1.00	15.82
ATOM	837	C	GLY	B	101	3.815	18.695	15.173	1.00	17.22
ATOM	838	O	GLY	B	101	2.715	18.320	15.537	1.00	17.58
ATOM	840	N	ALA	B	102	4.111	19.964	14.922	1.00	18.39
ATOM	841	CA	ALA	B	102	3.167	21.062	15.125	1.00	19.30
ATOM	843	CB	ALA	B	102	3.910	22.301	15.534	1.00	20.18
ATOM	847	C	ALA	B	102	2.425	21.358	13.856	1.00	20.45
ATOM	848	O	ALA	B	102	3.011	21.356	12.761	1.00	21.60
ATOM	850	N	HIS	B	103	1.134	21.628	13.990	1.00	20.05
ATOM	851	CA	HIS	B	103	0.346	22.108	12.870	1.00	19.22
ATOM	853	CB	HIS	B	103	-0.907	21.232	12.698	1.00	21.23
ATOM	856	CG	HIS	B	103	-1.936	21.832	11.800	1.00	21.61
ATOM	857	ND1	HIS	B	103	-1.633	22.297	10.539	1.00	28.87
ATOM	859	CE1	HIS	B	103	-2.721	22.797	9.987	1.00	27.54
ATOM	861	NE2	HIS	B	103	-3.721	22.653	10.835	1.00	25.40
ATOM	863	CD2	HIS	B	103	-3.258	22.055	11.979	1.00	26.34
ATOM	865	C	HIS	B	103	0.024	23.584	13.133	1.00	19.05
ATOM	866	O	HIS	B	103	0.379	24.449	12.340	1.00	15.69
ATOM	868	N	GLN	B	104	-0.612	23.842	14.274	1.00	17.57
ATOM	869	CA	GLN	B	104	-0.941	25.189	14.727	1.00	20.64
ATOM	871	CB	GLN	B	104	-2.381	25.214	15.261	1.00	19.70
ATOM	874	CG	GLN	B	104	-3.397	25.286	14.163	1.00	22.95
ATOM	877	CD	GLN	B	104	-4.819	25.050	14.615	1.00	25.15
ATOM	878	OE1	GLN	B	104	-5.111	24.915	15.807	1.00	28.63
ATOM	879	NE2	GLN	B	104	-5.722	25.014	13.648	1.00	29.11
ATOM	882	C	GLN	B	104	0.055	25.544	15.821	1.00	21.07
ATOM	883	O	GLN	B	104	0.058	24.916	16.894	1.00	18.68
ATOM	885	N	LEU	B	105	0.921	26.530	15.562	1.00	20.58
ATOM	886	CA	LEU	B	105	1.972	26.883	16.518	1.00	22.40
ATOM	888	CB	LEU	B	105	2.831	28.028	15.987	1.00	22.55
ATOM	891	CG	LEU	B	105	3.862	27.700	14.926	1.00	20.77
ATOM	893	CD1	LEU	B	105	4.786	28.864	14.739	1.00	22.00
ATOM	897	CD2	LEU	B	105	4.644	26.431	15.281	1.00	18.30
ATOM	901	C	LEU	B	105	1.447	27.304	17.882	1.00	24.77
ATOM	902	O	LEU	B	105	2.061	26.994	18.906	1.00	26.42
ATOM	904	N	ASP	B	106	0.332	28.030	17.888	1.00	25.44
ATOM	905	CA	ASP	B	106	-0.232	28.548	19.139	1.00	27.80
ATOM	907	CB	ASP	B	106	-1.053	29.805	18.862	1.00	27.88
ATOM	910	CG	ASP	B	106	-0.195	30.996	18.496	1.00	29.06
ATOM	911	OD1	ASP	B	106	1.039	30.938	18.699	1.00	34.21
ATOM	912	OD2	ASP	B	106	-0.752	31.989	17.982	1.00	33.63
ATOM	913	C	ASP	B	106	-1.096	27.540	19.886	1.00	30.14
ATOM	914	O	ASP	B	106	-1.533	27.832	21.009	1.00	31.23
ATOM	916	N	SER	B	107	-1.356	26.379	19.285	1.00	30.76

ATOM	917	CA	SER B 107	-2.231	25.367	19.889	1.00	31.86
ATOM	919	CB	SER B 107	-3.048	24.655	18.823	1.00	31.52
ATOM	922	OG	SER B 107	-3.908	25.580	18.190	1.00	33.53
ATOM	924	C	SER B 107	-1.431	24.340	20.669	1.00	33.68
ATOM	925	O	SER B 107	-0.278	24.052	20.332	1.00	33.43
ATOM	927	N	TYR B 108	-2.031	23.789	21.722	1.00	35.40
ATOM	928	CA	TYR B 108	-1.403	22.669	22.382	1.00	35.11
ATOM	930	CB	TYR B 108	-1.887	22.425	23.804	1.00	38.47
ATOM	933	CG	TYR B 108	-1.164	21.220	24.387	1.00	40.20
ATOM	934	CD1	TYR B 108	0.226	21.252	24.597	1.00	44.32
ATOM	936	CE1	TYR B 108	0.909	20.137	25.099	1.00	45.46
ATOM	938	CZ	TYR B 108	0.195	18.968	25.379	1.00	45.94
ATOM	939	OH	TYR B 108	0.854	17.859	25.878	1.00	46.04
ATOM	941	CE2	TYR B 108	-1.185	18.912	25.159	1.00	44.79
ATOM	943	CD2	TYR B 108	-1.852	20.027	24.658	1.00	44.96
ATOM	945	C	TYR B 108	-1.673	21.437	21.567	1.00	34.20
ATOM	946	O	TYR B 108	-2.778	21.237	21.055	1.00	34.52
ATOM	948	N	SER B 109	-0.647	20.615	21.436	1.00	32.33
ATOM	949	CA	SER B 109	-0.792	19.351	20.802	1.00	31.48
ATOM	951	CB	SER B 109	-0.222	19.380	19.392	1.00	31.07
ATOM	954	OG	SER B 109	-0.205	18.059	18.888	1.00	31.23
ATOM	956	C	SER B 109	-0.018	18.347	21.596	1.00	30.60
ATOM	957	O	SER B 109	1.123	18.604	21.973	1.00	31.30
ATOM	959	N	GLU B 110	-0.619	17.181	21.803	1.00	29.95
ATOM	960	CA	GLU B 110	0.101	16.075	22.390	1.00	29.51
ATOM	962	CB	GLU B 110	-0.862	15.103	23.072	1.00	30.55
ATOM	965	CG	GLU B 110	-1.390	15.679	24.403	1.00	35.53
ATOM	968	CD	GLU B 110	-2.115	14.657	25.287	1.00	37.10
ATOM	969	OE1	GLU B 110	-1.609	13.507	25.447	1.00	48.31
ATOM	970	OE2	GLU B 110	-3.186	15.027	25.836	1.00	47.79
ATOM	971	C	GLU B 110	0.994	15.359	21.374	1.00	26.45
ATOM	972	O	GLU B 110	1.787	14.531	21.762	1.00	26.39
ATOM	974	N	ASP B 111	0.900	15.710	20.093	1.00	24.81
ATOM	975	CA	ASP B 111	1.786	15.144	19.067	1.00	24.03
ATOM	977	CB	ASP B 111	1.033	15.004	17.756	1.00	25.30
ATOM	980	CG	ASP B 111	-0.229	14.188	17.924	1.00	23.78
ATOM	981	OD1	ASP B 111	-0.113	13.026	18.369	1.00	23.20
ATOM	982	OD2	ASP B 111	-1.305	14.740	17.668	1.00	28.81
ATOM	983	C	ASP B 111	3.076	15.939	18.825	1.00	22.74
ATOM	984	O	ASP B 111	4.031	15.399	18.287	1.00	21.48
ATOM	986	N	ALA B 112	3.091	17.196	19.239	1.00	19.17
ATOM	987	CA	ALA B 112	4.235	18.067	19.014	1.00	18.65
ATOM	989	CB	ALA B 112	3.841	19.529	19.114	1.00	18.83
ATOM	993	C	ALA B 112	5.285	17.721	20.024	1.00	18.10
ATOM	994	O	ALA B 112	4.978	17.216	21.123	1.00	18.74
ATOM	996	N	LYS B 113	6.540	17.920	19.636	1.00	17.10
ATOM	997	CA	LYS B 113	7.659	17.768	20.539	1.00	15.34
ATOM	999	CB	LYS B 113	8.484	16.523	20.216	1.00	14.89
ATOM	1002	CG	LYS B 113	7.663	15.193	20.253	1.00	21.31
ATOM	1005	CD	LYS B 113	7.268	14.863	21.705	1.00	31.01
ATOM	1008	CE	LYS B 113	6.203	13.738	21.845	1.00	32.53
ATOM	1011	NZ	LYS B 113	4.826	14.248	21.520	1.00	34.46
ATOM	1015	C	LYS B 113	8.521	19.009	20.360	1.00	13.46
ATOM	1016	O	LYS B 113	8.693	19.482	19.257	1.00	13.37
ATOM	1018	N	VAL B 114	9.069	19.495	21.449	1.00	13.86
ATOM	1019	CA	VAL B 114	9.975	20.619	21.416	1.00	14.14
ATOM	1021	CB	VAL B 114	9.412	21.833	22.203	1.00	14.58
ATOM	1023	CG1	VAL B 114	10.330	23.037	22.058	1.00	14.49
ATOM	1027	CG2	VAL B 114	8.013	22.175	21.695	1.00	15.66
ATOM	1031	C	VAL B 114	11.341	20.192	21.956	1.00	13.17
ATOM	1032	O	VAL B 114	11.471	19.385	22.894	1.00	10.97

ATOM	1034	N	SER B 115	12.376	20.697	21.299	1.00	13.55
ATOM	1035	CA	SER B 115	13.738	20.294	21.587	1.00	14.47
ATOM	1037	CB	SER B 115	14.221	19.261	20.571	1.00	17.27
ATOM	1040	OG	SER B 115	15.532	18.884	20.920	1.00	20.04
ATOM	1042	C	SER B 115	14.681	21.467	21.555	1.00	14.87
ATOM	1043	O	SER B 115	14.461	22.400	20.785	1.00	14.52
ATOM	1045	N	THR B 116	15.696	21.427	22.414	1.00	13.16
ATOM	1046	CA	THR B 116	16.830	22.319	22.267	1.00	13.76
ATOM	1048	CB	THR B 116	17.504	22.553	23.634	1.00	13.66
ATOM	1050	OG1	THR B 116	17.691	21.282	24.256	1.00	15.33
ATOM	1052	CG2	THR B 116	16.605	23.413	24.496	1.00	16.88
ATOM	1056	C	THR B 116	17.828	21.726	21.269	1.00	13.45
ATOM	1057	O	THR B 116	17.622	20.603	20.766	1.00	12.13
ATOM	1059	N	LEU B 117	18.886	22.481	20.981	1.00	12.70
ATOM	1060	CA	LEU B 117	19.919	22.076	20.029	1.00	15.15
ATOM	1062	CB	LEU B 117	20.148	23.211	19.059	1.00	16.02
ATOM	1065	CG	LEU B 117	18.929	23.552	18.203	1.00	15.53
ATOM	1067	CD1	LEU B 117	19.282	24.657	17.247	1.00	19.24
ATOM	1071	CD2	LEU B 117	18.448	22.294	17.447	1.00	14.14
ATOM	1075	C	LEU B 117	21.254	21.761	20.733	1.00	16.36
ATOM	1076	O	LEU B 117	21.703	22.542	21.544	1.00	17.68
ATOM	1078	N	LYS B 118	21.877	20.649	20.365	1.00	17.31
ATOM	1079	CA	LYS B 118	23.221	20.269	20.782	1.00	17.49
ATOM	1081	CB	LYS B 118	23.339	18.749	20.659	1.00	17.77
ATOM	1084	CG	LYS B 118	24.694	18.161	20.823	1.00	22.11
ATOM	1087	CD	LYS B 118	24.558	16.659	21.083	1.00	21.73
ATOM	1090	CE	LYS B 118	25.898	16.002	21.136	1.00	29.98
ATOM	1093	NZ	LYS B 118	26.612	16.141	19.830	1.00	36.58
ATOM	1097	C	LYS B 118	24.258	20.952	19.909	1.00	17.44
ATOM	1098	O	LYS B 118	25.344	21.270	20.367	1.00	16.87
ATOM	1100	N	ASP B 119	23.931	21.181	18.639	1.00	16.84
ATOM	1101	CA	ASP B 119	24.903	21.759	17.731	1.00	16.68
ATOM	1103	CB	ASP B 119	25.780	20.644	17.161	1.00	17.43
ATOM	1106	CG	ASP B 119	27.153	21.145	16.663	1.00	18.38
ATOM	1107	OD1	ASP B 119	27.443	22.351	16.764	1.00	23.21
ATOM	1108	OD2	ASP B 119	27.929	20.295	16.197	1.00	23.45
ATOM	1109	C	ASP B 119	24.205	22.504	16.604	1.00	17.06
ATOM	1110	O	ASP B 119	23.096	22.183	16.227	1.00	14.50
ATOM	1112	N	ILE B 120	24.864	23.540	16.121	1.00	17.11
ATOM	1113	CA	ILE B 120	24.349	24.339	15.021	1.00	16.65
ATOM	1115	CB	ILE B 120	23.934	25.754	15.463	1.00	17.15
ATOM	1117	CG1	ILE B 120	22.701	25.708	16.379	1.00	18.55
ATOM	1120	CD1	ILE B 120	22.406	27.028	17.102	1.00	18.52
ATOM	1124	CG2	ILE B 120	23.662	26.624	14.247	1.00	17.42
ATOM	1128	C	ILE B 120	25.516	24.463	14.089	1.00	15.94
ATOM	1129	O	ILE B 120	26.537	25.009	14.481	1.00	15.55
ATOM	1131	N	ILE B 121	25.380	23.969	12.862	1.00	13.98
ATOM	1132	CA	ILE B 121	26.483	23.946	11.934	1.00	14.94
ATOM	1134	CB	ILE B 121	26.898	22.512	11.638	1.00	13.61
ATOM	1136	CG1	ILE B 121	27.050	21.744	12.962	1.00	15.71
ATOM	1139	CD1	ILE B 121	27.437	20.252	12.809	1.00	17.78
ATOM	1143	CG2	ILE B 121	28.182	22.517	10.760	1.00	14.03
ATOM	1147	C	ILE B 121	26.150	24.653	10.628	1.00	14.25
ATOM	1148	O	ILE B 121	25.595	24.035	9.727	1.00	15.76
ATOM	1150	N	PRO B 122	26.438	25.964	10.539	1.00	17.30
ATOM	1151	CA	PRO B 122	26.232	26.645	9.278	1.00	17.38
ATOM	1153	CB	PRO B 122	26.516	28.114	9.602	1.00	18.66
ATOM	1156	CG	PRO B 122	27.453	28.056	10.751	1.00	22.55
ATOM	1159	CD	PRO B 122	27.014	26.857	11.554	1.00	17.50
ATOM	1162	C	PRO B 122	27.260	26.156	8.285	1.00	18.02
ATOM	1163	O	PRO B 122	28.374	25.861	8.660	1.00	16.83

ATOM	1164	N	HIS	B	123	26.925	26.077	7.012	1.00	17.41
ATOM	1165	CA	HIS	B	123	27.930	25.698	6.048	1.00	16.43
ATOM	1167	CB	HIS	B	123	27.365	25.633	4.649	1.00	16.95
ATOM	1170	CG	HIS	B	123	28.283	24.949	3.693	1.00	16.68
ATOM	1171	ND1	HIS	B	123	29.287	25.613	3.032	1.00	17.59
ATOM	1173	CE1	HIS	B	123	29.954	24.757	2.278	1.00	18.08
ATOM	1175	NE2	HIS	B	123	29.412	23.560	2.427	1.00	20.44
ATOM	1177	CD2	HIS	B	123	28.364	23.656	3.305	1.00	18.93
ATOM	1179	C	HIS	B	123	29.036	26.759	6.082	1.00	16.72
ATOM	1180	O	HIS	B	123	28.720	27.905	6.196	1.00	15.76
ATOM	1182	N	PRO	B	124	30.312	26.356	6.038	1.00	18.35
ATOM	1183	CA	PRO	B	124	31.375	27.379	6.203	1.00	19.04
ATOM	1185	CB	PRO	B	124	32.669	26.568	6.289	1.00	20.46
ATOM	1188	CG	PRO	B	124	32.347	25.216	5.916	1.00	21.57
ATOM	1191	CD	PRO	B	124	30.862	25.003	5.926	1.00	19.11
ATOM	1194	C	PRO	B	124	31.467	28.443	5.106	1.00	20.13
ATOM	1195	O	PRO	B	124	32.120	29.466	5.322	1.00	21.29
ATOM	1196	N	SER	B	125	30.836	28.224	3.953	1.00	19.34
ATOM	1197	CA	SER	B	125	30.887	29.221	2.866	1.00	19.69
ATOM	1199	CB	SER	B	125	30.636	28.572	1.536	1.00	18.79
ATOM	1202	OG	SER	B	125	29.348	27.998	1.502	1.00	21.46
ATOM	1204	C	SER	B	125	29.902	30.340	3.061	1.00	19.72
ATOM	1205	O	SER	B	125	29.923	31.334	2.322	1.00	20.61
ATOM	1207	N	TYR	B	126	29.013	30.209	4.039	1.00	18.97
ATOM	1208	CA	TYR	B	126	28.049	31.262	4.258	1.00	21.37
ATOM	1210	CB	TYR	B	126	26.860	30.803	5.095	1.00	19.88
ATOM	1213	CG	TYR	B	126	25.794	31.877	5.090	1.00	18.37
ATOM	1214	CD1	TYR	B	126	25.105	32.163	3.938	1.00	17.08
ATOM	1216	CE1	TYR	B	126	24.149	33.182	3.896	1.00	19.51
ATOM	1218	CZ	TYR	B	126	23.894	33.916	5.033	1.00	21.18
ATOM	1219	OH	TYR	B	126	22.941	34.895	4.979	1.00	22.95
ATOM	1221	CE2	TYR	B	126	24.562	33.632	6.192	1.00	19.82
ATOM	1223	CD2	TYR	B	126	25.512	32.627	6.216	1.00	19.85
ATOM	1225	C	TYR	B	126	28.692	32.447	4.968	1.00	23.37
ATOM	1226	O	TYR	B	126	28.927	32.375	6.164	1.00	23.13
ATOM	1228	N	LEU	B	127	28.936	33.530	4.240	1.00	25.56
ATOM	1229	CA	LEU	B	127	29.693	34.655	4.809	1.00	28.47
ATOM	1231	CB	LEU	B	127	30.821	35.085	3.863	1.00	29.66
ATOM	1234	CG	LEU	B	127	31.885	33.995	3.675	1.00	33.19
ATOM	1236	CD1	LEU	B	127	32.993	34.440	2.707	1.00	38.39
ATOM	1240	CD2	LEU	B	127	32.469	33.548	5.034	1.00	36.16
ATOM	1244	C	LEU	B	127	28.827	35.841	5.174	1.00	30.44
ATOM	1245	O	LEU	B	127	29.172	36.584	6.110	1.00	33.04
ATOM	1247	N	GLN	B	128	27.716	36.022	4.472	1.00	30.50
ATOM	1248	CA	GLN	B	128	26.896	37.215	4.634	1.00	32.99
ATOM	1250	CB	GLN	B	128	27.674	38.477	4.189	1.00	33.84
ATOM	1253	CG	GLN	B	128	28.278	38.383	2.802	1.00	34.86
ATOM	1256	CD	GLN	B	128	28.845	39.708	2.287	1.00	34.06
ATOM	1257	OE1	GLN	B	128	28.373	40.806	2.631	1.00	39.52
ATOM	1258	NE2	GLN	B	128	29.845	39.603	1.446	1.00	28.17
ATOM	1261	C	GLN	B	128	25.574	37.094	3.873	1.00	34.23
ATOM	1262	O	GLN	B	128	25.369	36.142	3.129	1.00	35.73
ATOM	1264	N	GLU	B	129	24.674	38.050	4.081	1.00	35.15
ATOM	1265	CA	GLU	B	129	23.344	38.026	3.455	1.00	35.52
ATOM	1267	CB	GLU	B	129	22.533	39.265	3.844	1.00	36.24
ATOM	1270	CG	GLU	B	129	21.102	39.257	3.308	1.00	37.21
ATOM	1273	CD	GLU	B	129	20.219	40.356	3.906	1.00	40.46
ATOM	1274	OE1	GLU	B	129	20.664	41.035	4.869	1.00	50.34
ATOM	1275	OE2	GLU	B	129	19.074	40.538	3.412	1.00	44.85
ATOM	1276	C	GLU	B	129	23.474	37.944	1.941	1.00	34.84
ATOM	1277	O	GLU	B	129	24.342	38.603	1.357	1.00	34.77

ATOM	1279	N	GLY B 130	22.619	37.122	1.327	1.00	33.61
ATOM	1280	CA	GLY B 130	22.726	36.775	-0.095	1.00	32.16
ATOM	1283	C	GLY B 130	23.777	35.717	-0.472	1.00	30.55
ATOM	1284	O	GLY B 130	23.776	35.225	-1.620	1.00	30.75
ATOM	1286	N	SER B 131	24.669	35.364	0.459	1.00	27.92
ATOM	1287	CA	SER B 131	25.817	34.479	0.153	1.00	26.77
ATOM	1289	CB	SER B 131	26.733	34.330	1.376	1.00	25.67
ATOM	1292	OG	SER B 131	27.802	33.419	1.178	1.00	25.10
ATOM	1294	C	SER B 131	25.352	33.097	-0.256	1.00	25.34
ATOM	1295	O	SER B 131	24.223	32.682	0.064	1.00	25.50
ATOM	1297	N	GLN B 132	26.233	32.375	-0.936	1.00	24.09
ATOM	1298	CA	GLN B 132	26.003	30.961	-1.174	1.00	23.72
ATOM	1300	CB	GLN B 132	26.877	30.409	-2.315	1.00	23.59
ATOM	1303	CG	GLN B 132	28.325	30.222	-2.004	1.00	28.47
ATOM	1306	CD	GLN B 132	29.103	29.643	-3.204	1.00	32.02
ATOM	1307	OE1	GLN B 132	28.519	29.328	-4.259	1.00	41.33
ATOM	1308	NE2	GLN B 132	30.429	29.500	-3.037	1.00	43.61
ATOM	1311	C	GLN B 132	26.248	30.241	0.148	1.00	20.53
ATOM	1312	O	GLN B 132	26.751	30.849	1.096	1.00	19.31
ATOM	1314	N	GLY B 133	25.887	28.957	0.207	1.00	17.56
ATOM	1315	CA	GLY B 133	26.038	28.164	1.414	1.00	15.82
ATOM	1318	C	GLY B 133	25.031	28.494	2.506	1.00	13.74
ATOM	1319	O	GLY B 133	25.309	28.272	3.677	1.00	14.45
ATOM	1321	N	ASP B 134	23.872	29.015	2.129	1.00	12.11
ATOM	1322	CA	ASP B 134	22.865	29.393	3.090	1.00	12.34
ATOM	1324	CB	ASP B 134	21.932	30.472	2.571	1.00	12.14
ATOM	1327	CG	ASP B 134	21.046	31.027	3.650	1.00	11.90
ATOM	1328	OD1	ASP B 134	21.311	30.795	4.873	1.00	11.10
ATOM	1329	OD2	ASP B 134	20.074	31.720	3.295	1.00	16.52
ATOM	1330	C	ASP B 134	22.092	28.155	3.545	1.00	12.75
ATOM	1331	O	ASP B 134	20.931	27.952	3.199	1.00	13.36
ATOM	1333	N	ILE B 135	22.770	27.347	4.353	1.00	12.23
ATOM	1334	CA	ILE B 135	22.253	26.096	4.827	1.00	11.91
ATOM	1336	CB	ILE B 135	22.485	24.968	3.772	1.00	12.89
ATOM	1338	CG1	ILE B 135	21.729	23.711	4.172	1.00	15.51
ATOM	1341	CD1	ILE B 135	21.742	22.642	3.138	1.00	13.78
ATOM	1345	CG2	ILE B 135	23.965	24.700	3.552	1.00	15.78
ATOM	1349	C	ILE B 135	22.941	25.799	6.156	1.00	11.65
ATOM	1350	O	ILE B 135	24.093	26.207	6.393	1.00	11.92
ATOM	1352	N	ALA B 136	22.223	25.163	7.067	1.00	11.73
ATOM	1353	CA	ALA B 136	22.801	24.799	8.350	1.00	11.68
ATOM	1355	CB	ALA B 136	22.479	25.830	9.409	1.00	11.95
ATOM	1359	C	ALA B 136	22.226	23.468	8.786	1.00	12.50
ATOM	1360	O	ALA B 136	21.025	23.240	8.644	1.00	12.48
ATOM	1362	N	LEU B 137	23.078	22.636	9.354	1.00	12.73
ATOM	1363	CA	LEU B 137	22.640	21.426	10.022	1.00	12.13
ATOM	1365	CB	LEU B 137	23.690	20.313	9.906	1.00	12.47
ATOM	1368	CG	LEU B 137	23.623	19.471	8.674	1.00	14.12
ATOM	1370	CD1	LEU B 137	24.996	18.802	8.464	1.00	14.97
ATOM	1374	CD2	LEU B 137	22.471	18.477	8.769	1.00	16.51
ATOM	1378	C	LEU B 137	22.474	21.728	11.486	1.00	12.60
ATOM	1379	O	LEU B 137	23.362	22.323	12.093	1.00	13.51
ATOM	1381	N	LEU B 138	21.345	21.322	12.066	1.00	12.90
ATOM	1382	CA	LEU B 138	21.138	21.496	13.494	1.00	11.80
ATOM	1384	CB	LEU B 138	19.849	22.282	13.724	1.00	12.59
ATOM	1387	CG	LEU B 138	19.642	23.496	12.836	1.00	13.87
ATOM	1389	CD1	LEU B 138	18.305	24.188	13.127	1.00	20.52
ATOM	1393	CD2	LEU B 138	20.815	24.421	13.030	1.00	11.03
ATOM	1397	C	LEU B 138	20.990	20.121	14.101	1.00	12.82
ATOM	1398	O	LEU B 138	20.236	19.319	13.583	1.00	13.72
ATOM	1400	N	GLN B 139	21.708	19.845	15.182	1.00	12.35

ATOM	1401	CA	GLN	B	139	21.584	18.560	15.837	1.00	13.32
ATOM	1403	CB	GLN	B	139	22.942	17.996	16.242	1.00	13.60
ATOM	1406	CG	GLN	B	139	22.882	16.591	16.809	1.00	14.97
ATOM	1409	CD	GLN	B	139	24.224	16.098	17.324	1.00	15.13
ATOM	1410	OE1	GLN	B	139	25.078	16.889	17.716	1.00	17.74
ATOM	1411	NE2	GLN	B	139	24.405	14.789	17.324	1.00	18.80
ATOM	1414	C	GLN	B	139	20.751	18.817	17.067	1.00	12.27
ATOM	1415	O	GLN	B	139	21.108	19.642	17.913	1.00	12.32
ATOM	1417	N	LEU	B	140	19.647	18.106	17.188	1.00	12.50
ATOM	1418	CA	LEU	B	140	18.807	18.242	18.357	1.00	12.47
ATOM	1420	CB	LEU	B	140	17.501	17.434	18.217	1.00	12.74
ATOM	1423	CG	LEU	B	140	16.677	17.694	16.933	1.00	15.12
ATOM	1425	CD1	LEU	B	140	15.418	16.844	16.956	1.00	18.19
ATOM	1429	CD2	LEU	B	140	16.406	19.153	16.766	1.00	17.85
ATOM	1433	C	LEU	B	140	19.550	17.752	19.592	1.00	13.90
ATOM	1434	O	LEU	B	140	20.460	16.904	19.486	1.00	12.92
ATOM	1436	N	SER	B	141	19.167	18.270	20.756	1.00	13.74
ATOM	1437	CA	SER	B	141	19.788	17.832	22.006	1.00	15.01
ATOM	1439	CB	SER	B	141	19.192	18.604	23.182	1.00	15.77
ATOM	1442	OG	SER	B	141	19.684	19.907	23.106	1.00	17.67
ATOM	1444	C	SER	B	141	19.641	16.332	22.224	1.00	15.05
ATOM	1445	O	SER	B	141	20.552	15.668	22.721	1.00	16.04
ATOM	1447	N	ARG	B	142	18.502	15.793	21.845	1.00	16.90
ATOM	1448	CA	ARG	B	142	18.271	14.385	21.965	1.00	17.04
ATOM	1450	CB	ARG	B	142	17.415	14.105	23.206	1.00	17.51
ATOM	1453	CG	ARG	B	142	18.130	14.379	24.513	1.00	19.58
ATOM	1456	CD	ARG	B	142	19.193	13.352	24.775	1.00	14.12
ATOM	1459	NE	ARG	B	142	19.788	13.554	26.090	1.00	17.88
ATOM	1461	CZ	ARG	B	142	21.074	13.411	26.404	1.00	18.70
ATOM	1462	NH1	ARG	B	142	21.976	13.095	25.493	1.00	23.10
ATOM	1465	NH2	ARG	B	142	21.470	13.641	27.655	1.00	22.74
ATOM	1468	C	ARG	B	142	17.538	13.942	20.722	1.00	17.98
ATOM	1469	O	ARG	B	142	16.844	14.748	20.116	1.00	17.87
ATOM	1471	N	PRO	B	143	17.653	12.659	20.365	1.00	19.10
ATOM	1472	CA	PRO	B	143	16.943	12.143	19.202	1.00	19.02
ATOM	1474	CB	PRO	B	143	17.477	10.719	19.051	1.00	19.90
ATOM	1477	CG	PRO	B	143	17.953	10.329	20.393	1.00	22.44
ATOM	1480	CD	PRO	B	143	18.442	11.619	21.035	1.00	18.80
ATOM	1483	C	PRO	B	143	15.483	12.125	19.475	1.00	19.35
ATOM	1484	O	PRO	B	143	15.100	11.950	20.634	1.00	21.42
ATOM	1485	N	ILE	B	144	14.658	12.315	18.456	1.00	19.11
ATOM	1486	CA	ILE	B	144	13.232	12.175	18.658	1.00	19.22
ATOM	1488	CB	ILE	B	144	12.409	13.410	18.133	1.00	20.18
ATOM	1490	CG1	ILE	B	144	12.734	13.760	16.692	1.00	18.87
ATOM	1493	CD1	ILE	B	144	12.503	12.674	15.705	1.00	20.13
ATOM	1497	CG2	ILE	B	144	12.676	14.649	18.999	1.00	25.70
ATOM	1501	C	ILE	B	144	12.766	10.848	18.070	1.00	18.39
ATOM	1502	O	ILE	B	144	13.510	10.175	17.320	1.00	21.15
ATOM	1504	N	THR	B	145	11.564	10.452	18.457	1.00	18.66
ATOM	1505	CA	THR	B	145	10.906	9.325	17.869	1.00	18.27
ATOM	1507	CB	THR	B	145	10.117	8.549	18.955	1.00	18.25
ATOM	1509	OG1	THR	B	145	11.016	8.181	20.006	1.00	23.30
ATOM	1511	CG2	THR	B	145	9.518	7.292	18.330	1.00	19.50
ATOM	1515	C	THR	B	145	9.941	9.749	16.785	1.00	18.10
ATOM	1516	O	THR	B	145	9.099	10.619	17.008	1.00	18.67
ATOM	1518	N	PHE	B	146	10.053	9.141	15.613	1.00	17.74
ATOM	1519	CA	PHE	B	146	9.150	9.442	14.503	1.00	18.16
ATOM	1521	CB	PHE	B	146	9.590	8.734	13.231	1.00	17.89
ATOM	1524	CG	PHE	B	146	10.942	9.140	12.744	1.00	18.40
ATOM	1525	CD1	PHE	B	146	11.445	10.410	12.993	1.00	17.11
ATOM	1527	CE1	PHE	B	146	12.713	10.785	12.517	1.00	16.01

ATOM	1529	CZ	PHE	B	146	13.446	9.897	11.772	1.00	16.76
ATOM	1531	CE2	PHE	B	146	12.954	8.642	11.526	1.00	18.34
ATOM	1533	CD2	PHE	B	146	11.698	8.266	11.996	1.00	17.85
ATOM	1535	C	PHE	B	146	7.753	8.973	14.843	1.00	19.52
ATOM	1536	O	PHE	B	146	7.569	8.029	15.628	1.00	20.81
ATOM	1538	N	SER	B	147	6.773	9.627	14.252	1.00	16.73
ATOM	1539	CA	SER	B	147	5.388	9.347	14.551	1.00	18.94
ATOM	1541	CB	SER	B	147	4.947	10.245	15.709	1.00	18.45
ATOM	1544	OG	SER	B	147	4.806	11.606	15.300	1.00	18.27
ATOM	1546	C	SER	B	147	4.593	9.708	13.312	1.00	17.89
ATOM	1547	O	SER	B	147	5.165	10.038	12.284	1.00	18.61
ATOM	1549	N	ARG	B	148	3.276	9.704	13.417	1.00	19.02
ATOM	1550	CA	ARG	B	148	2.438	10.125	12.314	1.00	20.54
ATOM	1552	CB	ARG	B	148	0.964	9.861	12.643	1.00	21.29
ATOM	1555	CG	ARG	B	148	0.632	8.381	12.734	1.00	26.76
ATOM	1558	CD	ARG	B	148	-0.859	8.123	12.964	1.00	31.58
ATOM	1561	NE	ARG	B	148	-1.395	8.748	14.175	1.00	39.90
ATOM	1563	CZ	ARG	B	148	-2.487	9.529	14.241	1.00	48.12
ATOM	1564	NH1	ARG	B	148	-2.876	10.014	15.428	1.00	48.44
ATOM	1567	NH2	ARG	B	148	-3.208	9.839	13.155	1.00	48.64
ATOM	1570	C	ARG	B	148	2.608	11.601	11.984	1.00	19.34
ATOM	1571	O	ARG	B	148	2.270	12.018	10.885	1.00	19.74
ATOM	1573	N	TYR	B	149	3.080	12.397	12.941	1.00	16.68
ATOM	1574	CA	TYR	B	149	3.179	13.834	12.766	1.00	16.52
ATOM	1576	CB	TYR	B	149	2.467	14.549	13.924	1.00	16.96
ATOM	1579	CG	TYR	B	149	1.015	14.223	13.927	1.00	17.20
ATOM	1580	CD1	TYR	B	149	0.151	14.812	13.015	1.00	18.57
ATOM	1582	CE1	TYR	B	149	-1.190	14.438	12.963	1.00	15.48
ATOM	1584	CZ	TYR	B	149	-1.661	13.507	13.836	1.00	22.52
ATOM	1585	OH	TYR	B	149	-2.983	13.129	13.802	1.00	23.20
ATOM	1587	CE2	TYR	B	149	-0.809	12.897	14.731	1.00	22.30
ATOM	1589	CD2	TYR	B	149	0.509	13.248	14.768	1.00	23.24
ATOM	1591	C	TYR	B	149	4.632	14.321	12.657	1.00	14.10
ATOM	1592	O	TYR	B	149	4.850	15.486	12.433	1.00	15.29
ATOM	1594	N	ILE	B	150	5.599	13.417	12.821	1.00	14.16
ATOM	1595	CA	ILE	B	150	7.011	13.753	12.847	1.00	13.66
ATOM	1597	CB	ILE	B	150	7.574	13.733	14.282	1.00	13.12
ATOM	1599	CG1	ILE	B	150	6.793	14.724	15.176	1.00	11.37
ATOM	1602	CD1	ILE	B	150	7.239	14.723	16.600	1.00	15.60
ATOM	1606	CG2	ILE	B	150	9.046	14.073	14.255	1.00	14.82
ATOM	1610	C	ILE	B	150	7.771	12.736	12.018	1.00	12.93
ATOM	1611	O	ILE	B	150	7.920	11.580	12.414	1.00	14.96
ATOM	1613	N	ARG	B	151	8.229	13.164	10.847	1.00	13.18
ATOM	1614	CA	ARG	B	151	8.846	12.244	9.911	1.00	13.91
ATOM	1616	CB	ARG	B	151	7.793	11.628	8.974	1.00	14.18
ATOM	1619	CG	ARG	B	151	6.849	10.676	9.702	1.00	18.91
ATOM	1622	CD	ARG	B	151	5.765	10.160	8.819	1.00	24.72
ATOM	1625	NE	ARG	B	151	6.246	9.153	7.879	1.00	40.91
ATOM	1627	CZ	ARG	B	151	5.451	8.373	7.141	1.00	45.70
ATOM	1628	NH1	ARG	B	151	4.123	8.475	7.256	1.00	49.14
ATOM	1631	NH2	ARG	B	151	5.978	7.480	6.291	1.00	46.49
ATOM	1634	C	ARG	B	151	9.874	12.981	9.096	1.00	12.01
ATOM	1635	O	ARG	B	151	9.718	14.170	8.810	1.00	12.99
ATOM	1637	N	PRO	B	152	10.961	12.292	8.750	1.00	11.63
ATOM	1638	CA	PRO	B	152	11.994	13.000	8.022	1.00	11.16
ATOM	1640	CB	PRO	B	152	13.231	12.108	8.232	1.00	10.87
ATOM	1643	CG	PRO	B	152	12.649	10.733	8.292	1.00	13.69
ATOM	1646	CD	PRO	B	152	11.321	10.881	8.964	1.00	13.42
ATOM	1649	C	PRO	B	152	11.658	13.076	6.557	1.00	12.44
ATOM	1650	O	PRO	B	152	10.920	12.239	6.050	1.00	13.24
ATOM	1651	N	ILE	B	153	12.241	14.050	5.867	1.00	11.49

ATOM	1652	CA	ILE	B	153	12.132	14.143	4.412	1.00	11.69
ATOM	1654	CB	ILE	B	153	11.837	15.605	3.958	1.00	10.82
ATOM	1656	CG1	ILE	B	153	11.597	15.669	2.445	1.00	12.07
ATOM	1659	CD1	ILE	B	153	11.030	16.948	1.939	1.00	12.20
ATOM	1663	CG2	ILE	B	153	12.956	16.539	4.381	1.00	11.21
ATOM	1667	C	ILE	B	153	13.412	13.645	3.753	1.00	11.68
ATOM	1668	O	ILE	B	153	14.512	13.847	4.251	1.00	12.50
ATOM	1670	N	SER	B	154	13.248	12.930	2.655	1.00	13.96
ATOM	1671	CA	SER	B	154	14.336	12.343	1.951	1.00	12.80
ATOM	1673	CB	SER	B	154	13.831	11.409	0.851	1.00	13.34
ATOM	1676	OG	SER	B	154	13.222	10.270	1.460	1.00	17.01
ATOM	1678	C	SER	B	154	15.161	13.439	1.327	1.00	11.74
ATOM	1679	O	SER	B	154	14.597	14.399	0.769	1.00	9.98
ATOM	1681	N	LEU	B	155	16.475	13.292	1.411	1.00	13.51
ATOM	1682	CA	LEU	B	155	17.386	14.241	0.780	1.00	13.12
ATOM	1684	CB	LEU	B	155	18.623	14.432	1.629	1.00	13.59
ATOM	1687	CG	LEU	B	155	18.433	15.135	2.969	1.00	15.48
ATOM	1689	CD1	LEU	B	155	19.714	15.037	3.769	1.00	15.88
ATOM	1693	CD2	LEU	B	155	18.053	16.587	2.737	1.00	18.20
ATOM	1697	C	LEU	B	155	17.775	13.802	-0.649	1.00	13.75
ATOM	1698	O	LEU	B	155	18.000	12.628	-0.899	1.00	14.10
ATOM	1700	N	PRO	B	156	17.882	14.760	-1.582	1.00	13.32
ATOM	1701	CA	PRO	B	156	18.279	14.390	-2.940	1.00	14.19
ATOM	1703	CB	PRO	B	156	17.910	15.636	-3.773	1.00	15.39
ATOM	1706	CG	PRO	B	156	17.963	16.746	-2.822	1.00	14.86
ATOM	1709	CD	PRO	B	156	17.662	16.214	-1.446	1.00	12.45
ATOM	1712	C	PRO	B	156	19.760	14.127	-3.032	1.00	15.21
ATOM	1713	O	PRO	B	156	20.566	14.674	-2.236	1.00	14.86
ATOM	1714	N	ALA	B	157	20.132	13.362	-4.042	1.00	17.24
ATOM	1715	CA	ALA	B	157	21.525	13.129	-4.328	1.00	19.04
ATOM	1717	CB	ALA	B	157	21.660	12.014	-5.317	1.00	20.95
ATOM	1721	C	ALA	B	157	22.141	14.396	-4.909	1.00	18.33
ATOM	1722	O	ALA	B	157	21.431	15.273	-5.417	1.00	17.97
ATOM	1724	N	ALA	B	158	23.464	14.459	-4.880	1.00	19.38
ATOM	1725	CA	ALA	B	158	24.210	15.619	-5.357	1.00	19.82
ATOM	1727	CB	ALA	B	158	25.684	15.369	-5.266	1.00	21.72
ATOM	1731	C	ALA	B	158	23.823	16.011	-6.783	1.00	21.39
ATOM	1732	O	ALA	B	158	23.768	17.194	-7.115	1.00	21.52
ATOM	1734	N	GLN	B	159	23.535	15.031	-7.632	1.00	20.37
ATOM	1735	CA	GLN	B	159	23.186	15.339	-9.028	1.00	21.86
ATOM	1737	CB	GLN	B	159	24.113	14.562	-9.978	1.00	22.37
ATOM	1740	CG	GLN	B	159	25.570	14.893	-9.779	1.00	22.60
ATOM	1743	CD	GLN	B	159	25.840	16.381	-9.775	1.00	27.40
ATOM	1744	OE1	GLN	B	159	25.163	17.144	-10.461	1.00	30.22
ATOM	1745	NE2	GLN	B	159	26.817	16.801	-9.004	1.00	22.41
ATOM	1748	C	GLN	B	159	21.710	15.110	-9.392	1.00	21.70
ATOM	1749	O	GLN	B	159	21.365	14.947	-10.560	1.00	23.96
ATOM	1751	N	ALA	B	160	20.835	15.118	-8.396	1.00	20.18
ATOM	1752	CA	ALA	B	160	19.426	15.029	-8.645	1.00	20.95
ATOM	1754	CB	ALA	B	160	18.670	14.884	-7.337	1.00	19.71
ATOM	1758	C	ALA	B	160	19.042	16.317	-9.345	1.00	20.69
ATOM	1759	O	ALA	B	160	19.483	17.387	-8.961	1.00	19.23
ATOM	1761	N	SER	B	161	18.245	16.214	-10.390	1.00	21.96
ATOM	1762	CA	SER	B	161	17.793	17.419	-11.089	1.00	23.44
ATOM	1764	CB	SER	B	161	18.190	17.433	-12.573	1.00	25.74
ATOM	1767	OG	SER	B	161	19.515	17.940	-12.722	1.00	30.81
ATOM	1769	C	SER	B	161	16.307	17.429	-10.908	1.00	22.84
ATOM	1770	O	SER	B	161	15.639	16.387	-10.983	1.00	25.44
ATOM	1772	N	PHE	B	162	15.797	18.592	-10.545	1.00	18.07
ATOM	1773	CA	PHE	B	162	14.406	18.765	-10.397	1.00	16.59
ATOM	1775	CB	PHE	B	162	14.093	19.308	-9.014	1.00	15.63

ATOM	1778	CG	PHE	B	162	14.366	18.313	-7.916	1.00	14.67
ATOM	1779	CD1	PHE	B	162	13.394	17.409	-7.518	1.00	12.99
ATOM	1781	CE1	PHE	B	162	13.654	16.476	-6.532	1.00	15.26
ATOM	1783	CZ	PHE	B	162	14.854	16.491	-5.902	1.00	13.77
ATOM	1785	CE2	PHE	B	162	15.828	17.388	-6.271	1.00	14.82
ATOM	1787	CD2	PHE	B	162	15.603	18.265	-7.303	1.00	11.70
ATOM	1789	C	PHE	B	162	14.108	19.755	-11.512	1.00	15.48
ATOM	1790	O	PHE	B	162	14.678	20.845	-11.544	1.00	15.78
ATOM	1792	N	PRO	B	163	13.273	19.347	-12.454	1.00	14.34
ATOM	1793	CA	PRO	B	163	13.215	20.129	-13.670	1.00	13.51
ATOM	1795	CB	PRO	B	163	12.421	19.250	-14.611	1.00	14.71
ATOM	1798	CG	PRO	B	163	11.609	18.401	-13.726	1.00	17.10
ATOM	1801	CD	PRO	B	163	12.391	18.162	-12.507	1.00	15.68
ATOM	1804	C	PRO	B	163	12.470	21.454	-13.517	1.00	12.76
ATOM	1805	O	PRO	B	163	11.561	21.559	-12.673	1.00	11.19
ATOM	1806	N	ASN	B	164	12.831	22.420	-14.354	1.00	11.43
ATOM	1807	CA	ASN	B	164	12.063	23.637	-14.470	1.00	12.06
ATOM	1809	CB	ASN	B	164	12.516	24.411	-15.716	1.00	11.54
ATOM	1812	CG	ASN	B	164	13.952	24.894	-15.602	1.00	14.46
ATOM	1813	OD1	ASN	B	164	14.502	24.968	-14.498	1.00	17.61
ATOM	1814	ND2	ASN	B	164	14.566	25.211	-16.733	1.00	11.37
ATOM	1817	C	ASN	B	164	10.606	23.343	-14.595	1.00	12.14
ATOM	1818	O	ASN	B	164	10.208	22.453	-15.353	1.00	12.00
ATOM	1820	N	GLY	B	165	9.808	24.090	-13.841	1.00	12.03
ATOM	1821	CA	GLY	B	165	8.376	23.963	-13.908	1.00	12.53
ATOM	1824	C	GLY	B	165	7.783	22.905	-13.009	1.00	11.55
ATOM	1825	O	GLY	B	165	6.570	22.825	-12.899	1.00	12.74
ATOM	1827	N	LEU	B	166	8.592	22.072	-12.361	1.00	12.11
ATOM	1828	CA	LEU	B	166	8.039	21.096	-11.429	1.00	10.72
ATOM	1830	CB	LEU	B	166	9.152	20.248	-10.849	1.00	10.33
ATOM	1833	CG	LEU	B	166	8.688	19.126	-9.906	1.00	11.87
ATOM	1835	CD1	LEU	B	166	7.810	18.095	-10.624	1.00	16.26
ATOM	1839	CD2	LEU	B	166	9.914	18.481	-9.225	1.00	12.58
ATOM	1843	C	LEU	B	166	7.299	21.799	-10.300	1.00	10.11
ATOM	1844	O	LEU	B	166	7.771	22.816	-9.773	1.00	10.90
ATOM	1846	N	HIS	B	167	6.094	21.323	-10.023	1.00	11.34
ATOM	1847	CA	HIS	B	167	5.274	21.902	-8.959	1.00	10.02
ATOM	1849	CB	HIS	B	167	3.793	21.663	-9.203	1.00	10.20
ATOM	1852	CG	HIS	B	167	3.243	22.498	-10.298	1.00	9.76
ATOM	1853	ND1	HIS	B	167	2.030	23.147	-10.222	1.00	14.82
ATOM	1855	CE1	HIS	B	167	1.832	23.827	-11.337	1.00	15.51
ATOM	1857	NE2	HIS	B	167	2.877	23.665	-12.124	1.00	16.85
ATOM	1859	CD2	HIS	B	167	3.796	22.867	-11.476	1.00	11.38
ATOM	1861	C	HIS	B	167	5.647	21.364	-7.611	1.00	11.92
ATOM	1862	O	HIS	B	167	5.192	20.243	-7.225	1.00	12.42
ATOM	1864	N	CYS	B	168	6.466	22.138	-6.906	1.00	9.91
ATOM	1865	CA	CYS	B	168	6.829	21.811	-5.542	1.00	9.21
ATOM	1867	CB	CYS	B	168	8.315	22.034	-5.369	1.00	11.09
ATOM	1870	SG	CYS	B	168	9.219	21.150	-6.678	1.00	12.12
ATOM	1872	C	CYS	B	168	5.986	22.608	-4.560	1.00	10.69
ATOM	1873	O	CYS	B	168	5.168	23.426	-4.976	1.00	11.61
ATOM	1875	N	THR	B	169	6.159	22.347	-3.273	1.00	10.76
ATOM	1876	CA	THR	B	169	5.405	23.067	-2.258	1.00	10.20
ATOM	1878	CB	THR	B	169	4.351	22.170	-1.609	1.00	11.68
ATOM	1880	OG1	THR	B	169	3.423	21.739	-2.623	1.00	11.88
ATOM	1882	CG2	THR	B	169	3.603	22.894	-0.531	1.00	11.93
ATOM	1886	C	THR	B	169	6.343	23.657	-1.230	1.00	11.59
ATOM	1887	O	THR	B	169	7.258	22.987	-0.757	1.00	9.71
ATOM	1889	N	VAL	B	170	6.119	24.920	-0.920	1.00	12.26
ATOM	1890	CA	VAL	B	170	6.836	25.548	0.165	1.00	12.18
ATOM	1892	CB	VAL	B	170	7.512	26.871	-0.239	1.00	11.17

ATOM	1894	CG1	VAL	B	170	6.514	27.879	-0.734	1.00	9.18
ATOM	1898	CG2	VAL	B	170	8.302	27.420	0.902	1.00	11.70
ATOM	1902	C	VAL	B	170	5.833	25.730	1.300	1.00	11.28
ATOM	1903	O	VAL	B	170	4.656	26.036	1.079	1.00	13.61
ATOM	1905	N	THR	B	171	6.301	25.483	2.516	1.00	12.75
ATOM	1906	CA	THR	B	171	5.462	25.534	3.705	1.00	12.00
ATOM	1908	CB	THR	B	171	5.233	24.125	4.248	1.00	12.72
ATOM	1910	OG1	THR	B	171	6.486	23.393	4.298	1.00	11.61
ATOM	1912	CG2	THR	B	171	4.247	23.391	3.370	1.00	13.48
ATOM	1916	C	THR	B	171	6.095	26.412	4.776	1.00	13.15
ATOM	1917	O	THR	B	171	7.313	26.613	4.803	1.00	10.31
ATOM	1919	N	GLY	B	172	5.272	26.936	5.686	1.00	12.86
ATOM	1920	CA	GLY	B	172	5.828	27.705	6.766	1.00	11.74
ATOM	1923	C	GLY	B	172	4.805	28.506	7.510	1.00	12.36
ATOM	1924	O	GLY	B	172	3.633	28.552	7.102	1.00	12.64
ATOM	1926	N	TRP	B	173	5.279	29.125	8.597	1.00	12.67
ATOM	1927	CA	TRP	B	173	4.416	29.902	9.490	1.00	13.43
ATOM	1929	CB	TRP	B	173	4.560	29.412	10.952	1.00	13.09
ATOM	1932	CG	TRP	B	173	3.956	28.072	11.236	1.00	12.17
ATOM	1933	CD1	TRP	B	173	2.644	27.803	11.494	1.00	13.02
ATOM	1935	NE1	TRP	B	173	2.461	26.455	11.756	1.00	14.83
ATOM	1937	CE2	TRP	B	173	3.688	25.838	11.733	1.00	13.00
ATOM	1938	CD2	TRP	B	173	4.663	26.831	11.426	1.00	12.62
ATOM	1939	CE3	TRP	B	173	5.997	26.447	11.288	1.00	12.53
ATOM	1941	CZ3	TRP	B	173	6.328	25.116	11.525	1.00	10.72
ATOM	1943	CH2	TRP	B	173	5.321	24.154	11.819	1.00	11.37
ATOM	1945	CZ2	TRP	B	173	4.010	24.513	11.928	1.00	12.67
ATOM	1947	C	TRP	B	173	4.781	31.367	9.440	1.00	13.54
ATOM	1948	O	TRP	B	173	4.490	32.113	10.380	1.00	14.69
ATOM	1950	N	GLY	B	174	5.408	31.780	8.348	1.00	13.68
ATOM	1951	CA	GLY	B	174	5.853	33.157	8.168	1.00	14.16
ATOM	1954	C	GLY	B	174	4.671	34.031	7.842	1.00	13.55
ATOM	1955	O	GLY	B	174	3.498	33.587	7.814	1.00	13.18
ATOM	1957	N	HIS	B	175	4.951	35.284	7.571	1.00	15.79
ATOM	1958	CA	HIS	B	175	3.879	36.257	7.353	1.00	16.69
ATOM	1960	CB	HIS	B	175	4.478	37.631	7.078	1.00	17.61
ATOM	1963	CG	HIS	B	175	5.117	38.248	8.277	1.00	19.39
ATOM	1964	ND1	HIS	B	175	5.912	39.374	8.196	1.00	21.45
ATOM	1966	CE1	HIS	B	175	6.346	39.681	9.405	1.00	23.89
ATOM	1968	NE2	HIS	B	175	5.882	38.788	10.260	1.00	24.02
ATOM	1970	CD2	HIS	B	175	5.104	37.881	9.581	1.00	21.70
ATOM	1972	C	HIS	B	175	3.023	35.856	6.193	1.00	17.79
ATOM	1973	O	HIS	B	175	3.504	35.193	5.250	1.00	16.87
ATOM	1975	N	VAL	B	176	1.751	36.254	6.250	1.00	19.47
ATOM	1976	CA	VAL	B	176	0.780	35.929	5.190	1.00	18.97
ATOM	1978	CB	VAL	B	176	-0.589	35.464	5.746	1.00	20.34
ATOM	1980	CG1	VAL	B	176	-0.456	34.128	6.419	1.00	20.86
ATOM	1984	CG2	VAL	B	176	-1.169	36.486	6.727	1.00	20.58
ATOM	1988	C	VAL	B	176	0.597	37.073	4.160	1.00	19.33
ATOM	1989	O	VAL	B	176	-0.148	36.919	3.219	1.00	17.27
ATOM	1991	N	ALA	B	177	1.286	38.199	4.386	1.00	19.35
ATOM	1992	CA	ALA	B	177	1.371	39.355	3.481	1.00	20.82
ATOM	1994	CB	ALA	B	177	0.091	40.126	3.481	1.00	21.04
ATOM	1998	C	ALA	B	177	2.504	40.218	4.030	1.00	21.63
ATOM	1999	O	ALA	B	177	3.015	39.949	5.131	1.00	21.69
ATOM	2001	N	PRO	B	178	2.981	41.199	3.254	1.00	21.51
ATOM	2002	CA	PRO	B	178	4.073	42.003	3.803	1.00	23.79
ATOM	2004	CB	PRO	B	178	4.352	43.030	2.694	1.00	23.64
ATOM	2007	CG	PRO	B	178	3.878	42.350	1.450	1.00	24.29
ATOM	2010	CD	PRO	B	178	2.702	41.523	1.852	1.00	23.51
ATOM	2013	C	PRO	B	178	3.756	42.636	5.160	1.00	25.43

ATOM	2014	O	PRO B 178	2.725	43.272	5.321	1.00	26.67
ATOM	2015	N	SER B 179	4.621	42.368	6.140	1.00	26.65
ATOM	2016	CA	SER B 179	4.439	42.792	7.541	1.00	26.98
ATOM	2018	CB	SER B 179	4.680	44.310	7.683	1.00	27.70
ATOM	2021	OG	SER B 179	6.004	44.662	7.282	1.00	32.47
ATOM	2023	C	SER B 179	3.098	42.416	8.170	1.00	27.20
ATOM	2024	O	SER B 179	2.672	43.058	9.128	1.00	28.53
ATOM	2026	N	VAL B 180	2.448	41.371	7.659	1.00	25.80
ATOM	2027	CA	VAL B 180	1.242	40.850	8.266	1.00	25.81
ATOM	2029	CB	VAL B 180	0.089	40.849	7.304	1.00	25.52
ATOM	2031	CG1	VAL B 180	-1.146	40.201	7.939	1.00	25.20
ATOM	2035	CG2	VAL B 180	-0.177	42.280	6.869	1.00	27.16
ATOM	2039	C	VAL B 180	1.471	39.434	8.749	1.00	26.05
ATOM	2040	O	VAL B 180	1.576	38.494	7.948	1.00	24.28
ATOM	2042	N	SER B 181	1.552	39.310	10.071	1.00	25.49
ATOM	2043	CA	SER B 181	1.671	38.033	10.741	1.00	24.75
ATOM	2045	CB	SER B 181	1.779	38.249	12.253	1.00	25.36
ATOM	2048	OG	SER B 181	3.141	38.395	12.587	1.00	33.88
ATOM	2050	C	SER B 181	0.534	37.056	10.468	1.00	22.94
ATOM	2051	O	SER B 181	-0.634	37.435	10.398	1.00	21.90
ATOM	2053	N	LEU B 182	0.902	35.778	10.350	1.00	21.07
ATOM	2054	CA	LEU B 182	-0.055	34.673	10.336	1.00	20.80
ATOM	2056	CB	LEU B 182	0.693	33.338	10.215	1.00	19.66
ATOM	2059	CG	LEU B 182	-0.142	32.059	10.300	1.00	19.83
ATOM	2061	CD1	LEU B 182	-1.085	31.975	9.116	1.00	16.83
ATOM	2065	CD2	LEU B 182	0.779	30.853	10.366	1.00	19.17
ATOM	2069	C	LEU B 182	-0.863	34.706	11.635	1.00	20.63
ATOM	2070	O	LEU B 182	-0.304	34.704	12.726	1.00	19.07
ATOM	2072	N	LEU B 183	-2.178	34.766	11.488	1.00	22.11
ATOM	2073	CA	LEU B 183	-3.062	34.933	12.623	1.00	23.02
ATOM	2075	CB	LEU B 183	-4.439	35.351	12.134	1.00	24.33
ATOM	2078	CG	LEU B 183	-5.436	35.914	13.144	1.00	25.22
ATOM	2080	CD1	LEU B 183	-5.112	37.359	13.429	1.00	32.82
ATOM	2084	CD2	LEU B 183	-6.862	35.773	12.614	1.00	25.69
ATOM	2088	C	LEU B 183	-3.121	33.656	13.463	1.00	23.38
ATOM	2089	O	LEU B 183	-3.151	32.534	12.940	1.00	21.80
ATOM	2091	N	THR B 184	-3.120	33.851	14.775	1.00	23.20
ATOM	2092	CA	THR B 184	-3.303	32.767	15.714	1.00	22.62
ATOM	2094	CB	THR B 184	-3.401	33.307	17.161	1.00	24.37
ATOM	2096	OG1	THR B 184	-3.417	32.223	18.099	1.00	24.99
ATOM	2098	CG2	THR B 184	-4.643	34.178	17.335	1.00	27.21
ATOM	2102	C	THR B 184	-4.559	31.981	15.345	1.00	21.60
ATOM	2103	O	THR B 184	-5.554	32.557	14.879	1.00	22.52
ATOM	2105	N	PRO B 185	-4.538	30.659	15.537	1.00	19.24
ATOM	2106	CA	PRO B 185	-3.569	29.754	16.157	1.00	18.60
ATOM	2108	CB	PRO B 185	-4.419	28.538	16.486	1.00	17.50
ATOM	2111	CG	PRO B 185	-5.405	28.502	15.439	1.00	20.57
ATOM	2114	CD	PRO B 185	-5.719	29.915	15.064	1.00	19.69
ATOM	2117	C	PRO B 185	-2.396	29.334	15.258	1.00	17.49
ATOM	2118	O	PRO B 185	-1.613	28.436	15.628	1.00	16.97
ATOM	2119	N	LYS B 186	-2.264	29.978	14.107	1.00	18.77
ATOM	2120	CA	LYS B 186	-1.084	29.782	13.257	1.00	18.26
ATOM	2122	CB	LYS B 186	0.197	30.180	13.989	1.00	18.26
ATOM	2125	CG	LYS B 186	0.313	31.686	14.216	1.00	21.30
ATOM	2128	CD	LYS B 186	1.433	32.051	15.137	1.00	22.48
ATOM	2131	CE	LYS B 186	1.543	33.599	15.232	1.00	24.07
ATOM	2134	NZ	LYS B 186	2.024	34.257	13.948	1.00	26.36
ATOM	2138	C	LYS B 186	-0.978	28.383	12.668	1.00	17.05
ATOM	2139	O	LYS B 186	0.014	27.692	12.867	1.00	17.52
ATOM	2141	N	PRO B 187	-1.979	27.988	11.869	1.00	16.77
ATOM	2142	CA	PRO B 187	-1.921	26.741	11.125	1.00	16.05

ATOM	2144	CB	PRO B 187	-3.306	26.649	10.498	1.00	16.67
ATOM	2147	CG	PRO B 187	-3.690	28.074	10.325	1.00	16.64
ATOM	2150	CD	PRO B 187	-3.189	28.755	11.523	1.00	16.15
ATOM	2153	C	PRO B 187	-0.855	26.854	10.030	1.00	15.94
ATOM	2154	O	PRO B 187	-0.711	27.903	9.376	1.00	15.57
ATOM	2155	N	LEU B 188	-0.072	25.801	9.878	1.00	13.41
ATOM	2156	CA	LEU B 188	0.952	25.790	8.841	1.00	12.99
ATOM	2158	CB	LEU B 188	1.579	24.405	8.736	1.00	13.52
ATOM	2161	CG	LEU B 188	2.760	24.215	7.765	1.00	10.49
ATOM	2163	CD1	LEU B 188	3.919	25.065	8.169	1.00	12.02
ATOM	2167	CD2	LEU B 188	3.110	22.725	7.715	1.00	12.24
ATOM	2171	C	LEU B 188	0.352	26.119	7.495	1.00	13.61
ATOM	2172	O	LEU B 188	-0.645	25.519	7.086	1.00	12.09
ATOM	2174	N	GLN B 189	0.992	27.034	6.789	1.00	12.92
ATOM	2175	CA	GLN B 189	0.594	27.354	5.415	1.00	12.94
ATOM	2177	CB	GLN B 189	0.771	28.830	5.192	1.00	15.30
ATOM	2180	CG	GLN B 189	-0.064	29.665	6.124	1.00	14.52
ATOM	2183	CD	GLN B 189	-1.530	29.424	5.862	1.00	19.33
ATOM	2184	OE1	GLN B 189	-2.034	29.830	4.816	1.00	18.44
ATOM	2185	NE2	GLN B 189	-2.210	28.716	6.784	1.00	13.44
ATOM	2188	C	GLN B 189	1.437	26.608	4.389	1.00	13.76
ATOM	2189	O	GLN B 189	2.596	26.305	4.629	1.00	11.73
ATOM	2191	N	GLN B 190	0.854	26.399	3.229	1.00	14.47
ATOM	2192	CA	GLN B 190	1.495	25.674	2.130	1.00	14.99
ATOM	2194	CB	GLN B 190	0.936	24.261	2.024	1.00	16.06
ATOM	2197	CG	GLN B 190	-0.570	24.236	1.871	1.00	16.60
ATOM	2200	CD	GLN B 190	-1.185	22.883	1.707	1.00	18.22
ATOM	2201	OE1	GLN B 190	-0.529	21.843	1.787	1.00	16.16
ATOM	2202	NE2	GLN B 190	-2.503	22.886	1.539	1.00	20.40
ATOM	2205	C	GLN B 190	1.181	26.441	0.863	1.00	15.54
ATOM	2206	O	GLN B 190	0.125	27.088	0.767	1.00	14.54
ATOM	2208	N	LEU B 191	2.090	26.377	-0.108	1.00	14.02
ATOM	2209	CA	LEU B 191	1.913	27.025	-1.389	1.00	14.37
ATOM	2211	CB	LEU B 191	2.469	28.436	-1.389	1.00	15.32
ATOM	2214	CG	LEU B 191	2.497	29.149	-2.751	1.00	15.21
ATOM	2216	CD1	LEU B 191	1.126	29.491	-3.214	1.00	19.35
ATOM	2220	CD2	LEU B 191	3.318	30.363	-2.664	1.00	14.64
ATOM	2224	C	LEU B 191	2.607	26.191	-2.448	1.00	15.62
ATOM	2225	O	LEU B 191	3.795	25.882	-2.316	1.00	13.48
ATOM	2227	N	GLU B 192	1.865	25.870	-3.508	1.00	14.48
ATOM	2228	CA	GLU B 192	2.408	25.123	-4.637	1.00	14.43
ATOM	2230	CB	GLU B 192	1.284	24.421	-5.383	1.00	14.38
ATOM	2233	CG	GLU B 192	1.731	23.577	-6.519	1.00	16.09
ATOM	2236	CD	GLU B 192	0.666	22.595	-6.968	1.00	22.00
ATOM	2237	OE1	GLU B 192	0.116	21.847	-6.103	1.00	35.68
ATOM	2238	OE2	GLU B 192	0.417	22.543	-8.177	1.00	21.46
ATOM	2239	C	GLU B 192	3.072	26.159	-5.516	1.00	13.51
ATOM	2240	O	GLU B 192	2.465	27.199	-5.810	1.00	15.29
ATOM	2242	N	VAL B 193	4.311	25.871	-5.904	1.00	12.42
ATOM	2243	CA	VAL B 193	5.147	26.754	-6.663	1.00	12.66
ATOM	2245	CB	VAL B 193	6.092	27.530	-5.763	1.00	13.79
ATOM	2247	CG1	VAL B 193	5.326	28.543	-4.973	1.00	15.94
ATOM	2251	CG2	VAL B 193	6.960	26.608	-4.844	1.00	13.03
ATOM	2255	C	VAL B 193	5.950	25.980	-7.696	1.00	12.12
ATOM	2256	O	VAL B 193	6.635	24.984	-7.348	1.00	12.57
ATOM	2258	N	PRO B 194	5.853	26.406	-8.961	1.00	11.01
ATOM	2259	CA	PRO B 194	6.709	25.824	-9.964	1.00	11.56
ATOM	2261	CB	PRO B 194	6.113	26.322	-11.278	1.00	12.34
ATOM	2264	CG	PRO B 194	5.421	27.534	-10.956	1.00	16.80
ATOM	2267	CD	PRO B 194	4.995	27.478	-9.527	1.00	12.35
ATOM	2270	C	PRO B 194	8.175	26.256	-9.846	1.00	10.03

ATOM	2271	O	PRO	B	194	8.487	27.435	-9.538	1.00	10.89
ATOM	2272	N	LEU	B	195	9.081	25.319	-10.057	1.00	11.35
ATOM	2273	CA	LEU	B	195	10.470	25.664	-10.072	1.00	10.37
ATOM	2275	CB	LEU	B	195	11.337	24.419	-10.210	1.00	9.68
ATOM	2278	CG	LEU	B	195	11.190	23.424	-9.031	1.00	10.94
ATOM	2280	CD1	LEU	B	195	12.165	22.280	-9.243	1.00	12.20
ATOM	2284	CD2	LEU	B	195	11.433	24.121	-7.676	1.00	11.31
ATOM	2288	C	LEU	B	195	10.787	26.602	-11.213	1.00	9.94
ATOM	2289	O	LEU	B	195	10.345	26.388	-12.345	1.00	11.99
ATOM	2291	N	ILE	B	196	11.684	27.534	-10.917	1.00	12.95
ATOM	2292	CA	ILE	B	196	12.154	28.533	-11.874	1.00	12.38
ATOM	2294	CB	ILE	B	196	11.603	29.948	-11.505	1.00	14.30
ATOM	2296	CG1	ILE	B	196	10.106	29.984	-11.594	1.00	13.78
ATOM	2299	CD1	ILE	B	196	9.482	31.345	-11.156	1.00	13.93
ATOM	2303	CG2	ILE	B	196	12.191	31.020	-12.397	1.00	14.17
ATOM	2307	C	ILE	B	196	13.669	28.534	-11.808	1.00	12.56
ATOM	2308	O	ILE	B	196	14.253	28.650	-10.710	1.00	11.51
ATOM	2310	N	SER	B	197	14.311	28.403	-12.972	1.00	12.48
ATOM	2311	CA	SER	B	197	15.760	28.220	-13.050	1.00	13.52
ATOM	2313	CB	SER	B	197	16.234	28.048	-14.481	1.00	13.35
ATOM	2316	OG	SER	B	197	16.207	29.284	-15.155	1.00	14.07
ATOM	2318	C	SER	B	197	16.421	29.449	-12.472	1.00	11.97
ATOM	2319	O	SER	B	197	15.829	30.525	-12.453	1.00	13.29
ATOM	2321	N	ARG	B	198	17.632	29.289	-11.976	1.00	13.57
ATOM	2322	CA	ARG	B	198	18.318	30.441	-11.416	1.00	14.37
ATOM	2324	CB	ARG	B	198	19.635	30.071	-10.748	1.00	14.61
ATOM	2327	CG	ARG	B	198	20.593	29.318	-11.602	1.00	18.66
ATOM	2330	CD	ARG	B	198	21.844	29.029	-10.815	1.00	17.77
ATOM	2333	NE	ARG	B	198	22.600	30.252	-10.491	1.00	26.26
ATOM	2335	CZ	ARG	B	198	23.398	30.907	-11.335	1.00	26.68
ATOM	2336	NH1	ARG	B	198	23.516	30.535	-12.611	1.00	31.53
ATOM	2339	NH2	ARG	B	198	24.058	31.977	-10.920	1.00	26.51
ATOM	2342	C	ARG	B	198	18.528	31.509	-12.477	1.00	14.36
ATOM	2343	O	ARG	B	198	18.508	32.700	-12.155	1.00	15.99
ATOM	2345	N	GLU	B	199	18.655	31.081	-13.736	1.00	14.18
ATOM	2346	CA	GLU	B	199	18.907	32.032	-14.829	1.00	14.23
ATOM	2348	CB	GLU	B	199	19.323	31.319	-16.093	1.00	13.14
ATOM	2351	CG	GLU	B	199	20.703	30.648	-15.969	1.00	13.26
ATOM	2354	CD	GLU	B	199	20.683	29.300	-15.267	1.00	27.52
ATOM	2355	OE1	GLU	B	199	19.585	28.754	-14.959	1.00	22.35
ATOM	2356	OE2	GLU	B	199	21.799	28.794	-15.004	1.00	33.10
ATOM	2357	C	GLU	B	199	17.689	32.908	-15.077	1.00	13.70
ATOM	2358	O	GLU	B	199	17.805	34.137	-15.195	1.00	15.24
ATOM	2360	N	THR	B	200	16.515	32.274	-15.177	1.00	13.48
ATOM	2361	CA	THR	B	200	15.295	33.048	-15.303	1.00	13.84
ATOM	2363	CB	THR	B	200	14.054	32.164	-15.450	1.00	14.24
ATOM	2365	OG1	THR	B	200	14.068	31.539	-16.742	1.00	16.11
ATOM	2367	CG2	THR	B	200	12.814	32.997	-15.350	1.00	13.86
ATOM	2371	C	THR	B	200	15.129	33.946	-14.093	1.00	14.20
ATOM	2372	O	THR	B	200	14.812	35.119	-14.195	1.00	15.47
ATOM	2374	N	CYS	B	201	15.341	33.379	-12.918	1.00	14.11
ATOM	2375	CA	CYS	B	201	15.140	34.079	-11.678	1.00	13.94
ATOM	2377	CB	CYS	B	201	15.443	33.135	-10.542	1.00	14.48
ATOM	2380	SG	CYS	B	201	14.813	33.688	-9.042	1.00	15.71
ATOM	2382	C	CYS	B	201	16.016	35.337	-11.595	1.00	14.37
ATOM	2383	O	CYS	B	201	15.543	36.409	-11.217	1.00	17.18
ATOM	2385	N	ASN	B	202	17.263	35.208	-11.988	1.00	16.21
ATOM	2386	CA	ASN	B	202	18.173	36.362	-12.027	1.00	16.99
ATOM	2388	CB	ASN	B	202	19.581	35.931	-12.427	1.00	18.29
ATOM	2391	CG	ASN	B	202	20.356	35.350	-11.282	1.00	16.05
ATOM	2392	OD1	ASN	B	202	21.069	34.345	-11.446	1.00	20.23

ATOM	2393	ND2	ASN	B	202	20.216	35.957	-10.113	1.00	13.58
ATOM	2396	C	ASN	B	202	17.662	37.447	-12.975	1.00	18.49
ATOM	2397	O	ASN	B	202	17.718	38.622	-12.647	1.00	19.88
ATOM	2399	N	SER	B	203	17.131	37.059	-14.133	1.00	18.72
ATOM	2400	CA	SER	B	203	16.531	38.049	-15.025	1.00	19.06
ATOM	2402	CB	SER	B	203	16.162	37.419	-16.350	1.00	21.84
ATOM	2405	OG	SER	B	203	17.350	37.114	-17.046	1.00	29.25
ATOM	2407	C	SER	B	203	15.346	38.761	-14.419	1.00	18.88
ATOM	2408	O	SER	B	203	15.187	39.961	-14.587	1.00	20.07
ATOM	2410	N	LEU	B	204	14.509	38.022	-13.706	1.00	17.36
ATOM	2411	CA	LEU	B	204	13.373	38.601	-13.022	1.00	17.55
ATOM	2413	CB	LEU	B	204	12.497	37.518	-12.407	1.00	16.25
ATOM	2416	CG	LEU	B	204	11.807	36.598	-13.413	1.00	15.96
ATOM	2418	CD1	LEU	B	204	11.023	35.515	-12.682	1.00	18.64
ATOM	2422	CD2	LEU	B	204	10.905	37.417	-14.375	1.00	17.85
ATOM	2426	C	LEU	B	204	13.821	39.568	-11.958	1.00	17.15
ATOM	2427	O	LEU	B	204	13.285	40.686	-11.868	1.00	17.17
ATOM	2429	N	TYR	B	205	14.806	39.159	-11.160	1.00	17.68
ATOM	2430	CA	TYR	B	205	15.260	39.995	-10.067	1.00	19.03
ATOM	2432	CB	TYR	B	205	16.218	39.253	-9.111	1.00	18.73
ATOM	2435	CG	TYR	B	205	15.471	38.590	-7.978	1.00	19.32
ATOM	2436	CD1	TYR	B	205	15.180	39.283	-6.800	1.00	17.55
ATOM	2438	CE1	TYR	B	205	14.460	38.700	-5.766	1.00	19.73
ATOM	2440	CZ	TYR	B	205	14.000	37.398	-5.910	1.00	21.40
ATOM	2441	OH	TYR	B	205	13.284	36.823	-4.898	1.00	19.29
ATOM	2443	CE2	TYR	B	205	14.253	36.702	-7.077	1.00	20.14
ATOM	2445	CD2	TYR	B	205	14.977	37.297	-8.106	1.00	19.56
ATOM	2447	C	TYR	B	205	15.876	41.290	-10.569	1.00	19.65
ATOM	2448	O	TYR	B	205	15.885	42.255	-9.840	1.00	20.24
ATOM	2450	N	ASN	B	206	16.386	41.284	-11.796	1.00	21.25
ATOM	2451	CA	ASN	B	206	16.920	42.488	-12.457	1.00	22.38
ATOM	2453	CB	ASN	B	206	17.731	42.100	-13.691	1.00	22.69
ATOM	2456	CG	ASN	B	206	19.013	41.387	-13.346	1.00	24.98
ATOM	2457	OD1	ASN	B	206	19.466	41.422	-12.210	1.00	25.48
ATOM	2458	ND2	ASN	B	206	19.603	40.728	-14.327	1.00	25.70
ATOM	2461	C	ASN	B	206	15.855	43.518	-12.844	1.00	24.43
ATOM	2462	O	ASN	B	206	16.177	44.687	-13.062	1.00	26.60
ATOM	2464	N	ILE	B	207	14.599	43.100	-12.923	1.00	23.03
ATOM	2465	CA	ILE	B	207	13.509	43.996	-13.297	1.00	23.67
ATOM	2467	CB	ILE	B	207	12.261	43.198	-13.677	1.00	23.22
ATOM	2469	CG1	ILE	B	207	12.574	42.302	-14.882	1.00	20.94
ATOM	2472	CD1	ILE	B	207	11.439	41.341	-15.267	1.00	21.80
ATOM	2476	CG2	ILE	B	207	11.079	44.142	-13.921	1.00	21.60
ATOM	2480	C	ILE	B	207	13.209	44.985	-12.167	1.00	24.97
ATOM	2481	O	ILE	B	207	12.921	44.586	-11.040	1.00	22.22
ATOM	2483	N	ASP	B	208	13.303	46.283	-12.470	1.00	26.74
ATOM	2484	CA	ASP	B	208	13.114	47.344	-11.470	1.00	28.41
ATOM	2486	CB	ASP	B	208	11.652	47.469	-11.032	1.00	29.52
ATOM	2489	CG	ASP	B	208	10.709	47.638	-12.185	1.00	35.24
ATOM	2490	OD1	ASP	B	208	11.073	48.384	-13.121	1.00	41.20
ATOM	2491	OD2	ASP	B	208	9.607	47.029	-12.154	1.00	40.30
ATOM	2492	C	ASP	B	208	13.971	47.101	-10.247	1.00	29.16
ATOM	2493	O	ASP	B	208	13.547	47.344	-9.121	1.00	30.88
ATOM	2495	N	ALA	B	209	15.180	46.603	-10.467	1.00	30.23
ATOM	2496	CA	ALA	B	209	16.073	46.285	-9.370	1.00	31.48
ATOM	2498	CB	ALA	B	209	17.171	45.386	-9.831	1.00	31.35
ATOM	2502	C	ALA	B	209	16.665	47.566	-8.794	1.00	32.38
ATOM	2503	O	ALA	B	209	16.940	48.521	-9.533	1.00	31.05
ATOM	2505	N	LYS	B	210	16.837	47.574	-7.478	1.00	33.34
ATOM	2506	CA	LYS	B	210	17.561	48.641	-6.820	1.00	35.54
ATOM	2508	CB	LYS	B	210	17.202	48.709	-5.345	1.00	36.08

ATOM	2511	CG	LYS	B	210	15.818	49.290	-5.091	1.00	39.29
ATOM	2514	CD	LYS	B	210	15.190	48.706	-3.802	1.00	39.88
ATOM	2517	CE	LYS	B	210	13.696	49.071	-3.677	1.00	45.99
ATOM	2520	NZ	LYS	B	210	13.446	50.546	-3.830	1.00	48.72
ATOM	2524	C	LYS	B	210	19.035	48.313	-6.998	1.00	35.23
ATOM	2525	O	LYS	B	210	19.467	47.254	-6.561	1.00	34.03
ATOM	2527	N	PRO	B	211	19.804	49.227	-7.630	1.00	37.05
ATOM	2528	CA	PRO	B	211	21.216	49.038	-7.951	1.00	37.81
ATOM	2530	CB	PRO	B	211	21.677	50.445	-8.316	1.00	38.70
ATOM	2533	CG	PRO	B	211	20.460	51.108	-8.822	1.00	39.43
ATOM	2536	CD	PRO	B	211	19.333	50.559	-8.043	1.00	37.21
ATOM	2539	C	PRO	B	211	22.009	48.564	-6.761	1.00	38.65
ATOM	2540	O	PRO	B	211	22.831	47.666	-6.873	1.00	38.44
ATOM	2541	N	GLU	B	212	21.727	49.156	-5.616	1.00	40.18
ATOM	2542	CA	GLU	B	212	22.490	48.900	-4.417	1.00	42.45
ATOM	2544	CB	GLU	B	212	22.222	49.994	-3.374	1.00	43.19
ATOM	2547	CG	GLU	B	212	20.797	50.031	-2.814	1.00	44.39
ATOM	2550	CD	GLU	B	212	19.856	50.945	-3.593	1.00	47.82
ATOM	2551	OE1	GLU	B	212	20.113	51.280	-4.776	1.00	45.09
ATOM	2552	OE2	GLU	B	212	18.831	51.333	-3.003	1.00	53.15
ATOM	2553	C	GLU	B	212	22.173	47.574	-3.791	1.00	43.72
ATOM	2554	O	GLU	B	212	22.950	47.064	-2.984	1.00	44.60
ATOM	2556	N	GLU	B	213	21.019	47.032	-4.143	1.00	45.95
ATOM	2557	CA	GLU	B	213	20.383	45.989	-3.356	1.00	46.23
ATOM	2559	CB	GLU	B	213	19.017	46.481	-2.912	1.00	46.61
ATOM	2562	CG	GLU	B	213	18.327	45.578	-1.938	1.00	48.11
ATOM	2565	CD	GLU	B	213	16.844	45.821	-1.940	1.00	50.11
ATOM	2566	OE1	GLU	B	213	16.434	46.972	-1.652	1.00	56.66
ATOM	2567	OE2	GLU	B	213	16.095	44.869	-2.251	1.00	58.24
ATOM	2568	C	GLU	B	213	20.277	44.720	-4.194	1.00	45.77
ATOM	2569	O	GLU	B	213	19.202	44.394	-4.734	1.00	46.49
ATOM	2571	N	PRO	B	214	21.399	43.988	-4.296	1.00	44.34
ATOM	2572	CA	PRO	B	214	21.474	42.930	-5.265	1.00	43.05
ATOM	2574	CB	PRO	B	214	22.958	42.592	-5.293	1.00	42.97
ATOM	2577	CG	PRO	B	214	23.379	42.810	-3.896	1.00	44.23
ATOM	2580	CD	PRO	B	214	22.628	44.054	-3.484	1.00	44.55
ATOM	2583	C	PRO	B	214	20.695	41.717	-4.811	1.00	40.17
ATOM	2584	O	PRO	B	214	20.429	41.521	-3.615	1.00	38.88
ATOM	2585	N	HIS	B	215	20.374	40.911	-5.800	1.00	37.22
ATOM	2586	CA	HIS	B	215	19.560	39.748	-5.633	1.00	34.57
ATOM	2588	CB	HIS	B	215	18.077	40.083	-5.870	1.00	36.07
ATOM	2591	CG	HIS	B	215	17.369	40.661	-4.678	1.00	38.54
ATOM	2592	ND1	HIS	B	215	17.389	40.063	-3.434	1.00	44.99
ATOM	2594	CE1	HIS	B	215	16.675	40.790	-2.588	1.00	43.28
ATOM	2596	NE2	HIS	B	215	16.184	41.831	-3.238	1.00	40.35
ATOM	2598	CD2	HIS	B	215	16.589	41.766	-4.549	1.00	42.29
ATOM	2600	C	HIS	B	215	20.108	38.809	-6.694	1.00	32.87
ATOM	2601	O	HIS	B	215	19.484	38.598	-7.744	1.00	33.98
ATOM	2603	N	PHE	B	216	21.300	38.279	-6.423	1.00	28.82
ATOM	2604	CA	PHE	B	216	21.943	37.324	-7.310	1.00	27.22
ATOM	2606	CB	PHE	B	216	23.434	37.550	-7.405	1.00	26.86
ATOM	2609	CG	PHE	B	216	24.119	36.590	-8.337	1.00	28.23
ATOM	2610	CD1	PHE	B	216	23.860	36.623	-9.698	1.00	24.77
ATOM	2612	CE1	PHE	B	216	24.465	35.745	-10.558	1.00	25.16
ATOM	2614	CZ	PHE	B	216	25.341	34.815	-10.072	1.00	25.89
ATOM	2616	CE2	PHE	B	216	25.616	34.763	-8.713	1.00	26.42
ATOM	2618	CD2	PHE	B	216	25.006	35.635	-7.853	1.00	29.60
ATOM	2620	C	PHE	B	216	21.699	35.904	-6.840	1.00	24.47
ATOM	2621	O	PHE	B	216	22.075	35.522	-5.727	1.00	24.55
ATOM	2623	N	VAL	B	217	21.066	35.119	-7.697	1.00	21.46
ATOM	2624	CA	VAL	B	217	20.770	33.735	-7.402	1.00	19.68

ATOM	2626	CB	VAL	B	217	19.534	33.268	-8.154	1.00	18.04
ATOM	2628	CG1	VAL	B	217	19.182	31.844	-7.774	1.00	16.17
ATOM	2632	CG2	VAL	B	217	18.349	34.215	-7.861	1.00	18.71
ATOM	2636	C	VAL	B	217	21.984	32.915	-7.775	1.00	18.11
ATOM	2637	O	VAL	B	217	22.341	32.735	-8.945	1.00	16.71
ATOM	2639	N	GLN	B	218	22.626	32.412	-6.736	1.00	19.42
ATOM	2640	CA	GLN	B	218	23.909	31.728	-6.832	1.00	19.73
ATOM	2642	CB	GLN	B	218	24.439	31.547	-5.417	1.00	21.21
ATOM	2645	CG	GLN	B	218	24.534	32.830	-4.571	1.00	24.90
ATOM	2648	CD	GLN	B	218	25.826	33.603	-4.780	1.00	20.74
ATOM	2649	OE1	GLN	B	218	26.710	33.187	-5.525	1.00	23.63
ATOM	2650	NE2	GLN	B	218	25.945	34.738	-4.072	1.00	25.91
ATOM	2653	C	GLN	B	218	23.765	30.373	-7.478	1.00	20.33
ATOM	2654	O	GLN	B	218	22.639	29.884	-7.636	1.00	17.83
ATOM	2656	N	GLU	B	219	24.889	29.716	-7.797	1.00	18.49
ATOM	2657	CA	GLU	B	219	24.854	28.403	-8.451	1.00	20.45
ATOM	2659	CB	GLU	B	219	26.240	28.026	-8.951	1.00	21.21
ATOM	2662	CG	GLU	B	219	26.691	28.892	-10.151	1.00	28.49
ATOM	2665	CD	GLU	B	219	28.094	28.522	-10.694	1.00	28.41
ATOM	2666	OE1	GLU	B	219	28.557	27.367	-10.455	1.00	40.13
ATOM	2667	OE2	GLU	B	219	28.701	29.408	-11.372	1.00	42.77
ATOM	2668	C	GLU	B	219	24.303	27.254	-7.590	1.00	17.57
ATOM	2669	O	GLU	B	219	23.879	26.229	-8.128	1.00	16.79
ATOM	2671	N	ASP	B	220	24.313	27.438	-6.268	1.00	16.95
ATOM	2672	CA	ASP	B	220	23.710	26.472	-5.328	1.00	16.31
ATOM	2674	CB	ASP	B	220	24.539	26.408	-4.036	1.00	16.66
ATOM	2677	CG	ASP	B	220	24.494	27.716	-3.215	1.00	14.15
ATOM	2678	OD1	ASP	B	220	24.212	28.790	-3.754	1.00	17.34
ATOM	2679	OD2	ASP	B	220	24.756	27.674	-1.987	1.00	13.87
ATOM	2680	C	ASP	B	220	22.253	26.828	-4.981	1.00	15.67
ATOM	2681	O	ASP	B	220	21.758	26.428	-3.935	1.00	15.61
ATOM	2683	N	MET	B	221	21.604	27.641	-5.806	1.00	13.13
ATOM	2684	CA	MET	B	221	20.250	28.061	-5.543	1.00	14.54
ATOM	2686	CB	MET	B	221	20.210	29.552	-5.216	1.00	16.59
ATOM	2689	CG	MET	B	221	20.936	29.929	-3.943	1.00	17.42
ATOM	2692	SD	MET	B	221	21.042	31.745	-3.797	1.00	19.24
ATOM	2693	CE	MET	B	221	21.725	31.893	-2.137	1.00	24.64
ATOM	2697	C	MET	B	221	19.322	27.771	-6.737	1.00	14.56
ATOM	2698	O	MET	B	221	19.761	27.645	-7.899	1.00	12.57
ATOM	2700	N	VAL	B	222	18.028	27.717	-6.436	1.00	11.95
ATOM	2701	CA	VAL	B	222	16.982	27.663	-7.426	1.00	12.43
ATOM	2703	CB	VAL	B	222	16.473	26.240	-7.611	1.00	13.45
ATOM	2705	CG1	VAL	B	222	15.750	25.754	-6.337	1.00	14.24
ATOM	2709	CG2	VAL	B	222	15.587	26.117	-8.838	1.00	13.71
ATOM	2713	C	VAL	B	222	15.865	28.588	-6.940	1.00	13.54
ATOM	2714	O	VAL	B	222	15.852	28.961	-5.781	1.00	13.08
ATOM	2716	N	CYS	B	223	14.987	28.998	-7.839	1.00	10.82
ATOM	2717	CA	CYS	B	223	13.832	29.738	-7.429	1.00	11.19
ATOM	2719	CB	CYS	B	223	13.724	30.997	-8.237	1.00	13.23
ATOM	2722	SG	CYS	B	223	15.136	32.052	-7.853	1.00	14.77
ATOM	2724	C	CYS	B	223	12.581	28.914	-7.616	1.00	12.21
ATOM	2725	O	CYS	B	223	12.592	27.900	-8.279	1.00	10.85
ATOM	2727	N	ALA	B	224	11.485	29.438	-7.096	1.00	11.10
ATOM	2728	CA	ALA	B	224	10.155	28.847	-7.328	1.00	12.32
ATOM	2730	CB	ALA	B	224	9.924	27.713	-6.444	1.00	13.11
ATOM	2734	C	ALA	B	224	9.129	29.917	-7.082	1.00	13.20
ATOM	2735	O	ALA	B	224	9.285	30.719	-6.176	1.00	14.47
ATOM	2737	N	GLY	B	225	8.086	29.930	-7.892	1.00	14.02
ATOM	2738	CA	GLY	B	225	6.984	30.873	-7.637	1.00	15.32
ATOM	2741	C	GLY	B	225	6.434	31.330	-8.957	1.00	15.87
ATOM	2742	O	GLY	B	225	6.379	30.545	-9.898	1.00	16.42

ATOM	2744	N	TYR	B	226	6.055	32.605	-8.997	1.00	16.33
ATOM	2745	CA	TYR	B	226	5.251	33.170	-10.053	1.00	18.58
ATOM	2747	CB	TYR	B	226	3.813	33.265	-9.595	1.00	19.24
ATOM	2750	CG	TYR	B	226	3.239	31.913	-9.213	1.00	16.36
ATOM	2751	CD1	TYR	B	226	2.648	31.098	-10.145	1.00	17.85
ATOM	2753	CE1	TYR	B	226	2.126	29.824	-9.774	1.00	19.00
ATOM	2755	CZ	TYR	B	226	2.237	29.378	-8.465	1.00	18.79
ATOM	2756	OH	TYR	B	226	1.720	28.137	-8.141	1.00	21.93
ATOM	2758	CE2	TYR	B	226	2.835	30.173	-7.515	1.00	19.13
ATOM	2760	CD2	TYR	B	226	3.338	31.446	-7.889	1.00	18.22
ATOM	2762	C	TYR	B	226	5.782	34.531	-10.427	1.00	18.80
ATOM	2763	O	TYR	B	226	6.055	35.388	-9.570	1.00	19.25
ATOM	2765	N	VAL	B	227	5.940	34.730	-11.722	1.00	19.56
ATOM	2766	CA	VAL	B	227	6.372	35.996	-12.265	1.00	21.14
ATOM	2768	CB	VAL	B	227	6.403	35.890	-13.799	1.00	21.14
ATOM	2770	CG1	VAL	B	227	6.436	37.249	-14.451	1.00	23.47
ATOM	2774	CG2	VAL	B	227	7.623	35.041	-14.228	1.00	24.10
ATOM	2778	C	VAL	B	227	5.469	37.146	-11.812	1.00	20.98
ATOM	2779	O	VAL	B	227	5.949	38.250	-11.512	1.00	18.60
ATOM	2781	N	GLU	B	228	4.167	36.877	-11.741	1.00	21.56
ATOM	2782	CA	GLU	B	228	3.182	37.907	-11.497	1.00	24.83
ATOM	2784	CB	GLU	B	228	1.849	37.564	-12.192	1.00	26.06
ATOM	2787	CG	GLU	B	228	1.926	37.375	-13.730	1.00	30.14
ATOM	2790	CD	GLU	B	228	2.158	38.676	-14.545	1.00	38.40
ATOM	2791	OE1	GLU	B	228	2.320	39.771	-13.950	1.00	41.88
ATOM	2792	OE2	GLU	B	228	2.186	38.587	-15.807	1.00	36.33
ATOM	2793	C	GLU	B	228	2.931	38.146	-10.013	1.00	26.06
ATOM	2794	O	GLU	B	228	2.128	39.007	-9.652	1.00	28.35
ATOM	2796	N	GLY	B	229	3.605	37.427	-9.128	1.00	25.50
ATOM	2797	CA	GLY	B	229	3.515	37.820	-7.720	1.00	26.04
ATOM	2800	C	GLY	B	229	2.222	37.394	-7.034	1.00	25.56
ATOM	2801	O	GLY	B	229	1.426	36.659	-7.606	1.00	26.26
ATOM	2803	N	GLY	B	230	2.057	37.844	-5.791	1.00	24.96
ATOM	2804	CA	GLY	B	230	0.932	37.465	-4.935	1.00	24.12
ATOM	2807	C	GLY	B	230	1.051	36.117	-4.224	1.00	23.62
ATOM	2808	O	GLY	B	230	0.211	35.780	-3.383	1.00	22.79
ATOM	2810	N	LYS	B	231	2.070	35.334	-4.568	1.00	21.42
ATOM	2811	CA	LYS	B	231	2.170	33.975	-4.062	1.00	21.79
ATOM	2813	CB	LYS	B	231	1.546	32.996	-5.050	1.00	23.14
ATOM	2816	CG	LYS	B	231	0.027	33.051	-5.152	1.00	20.51
ATOM	2819	CD	LYS	B	231	-0.462	31.946	-6.127	1.00	27.34
ATOM	2822	CE	LYS	B	231	-1.575	32.420	-7.088	1.00	36.03
ATOM	2825	NZ	LYS	B	231	-1.041	33.191	-8.285	1.00	39.12
ATOM	2829	C	LYS	B	231	3.631	33.606	-3.828	1.00	21.43
ATOM	2830	O	LYS	B	231	4.355	33.284	-4.765	1.00	19.60
ATOM	2832	N	ASP	B	232	4.053	33.674	-2.574	1.00	18.94
ATOM	2833	CA	ASP	B	232	5.416	33.357	-2.209	1.00	18.03
ATOM	2835	CB	ASP	B	232	6.428	34.366	-2.777	1.00	15.91
ATOM	2838	CG	ASP	B	232	7.654	33.650	-3.356	1.00	18.36
ATOM	2839	OD1	ASP	B	232	8.431	33.088	-2.560	1.00	19.25
ATOM	2840	OD2	ASP	B	232	7.820	33.578	-4.596	1.00	20.56
ATOM	2841	C	ASP	B	232	5.599	33.225	-0.705	1.00	17.55
ATOM	2842	O	ASP	B	232	4.658	33.344	0.061	1.00	16.54
ATOM	2844	N	ALA	B	233	6.819	32.885	-0.321	1.00	18.74
ATOM	2845	CA	ALA	B	233	7.204	32.809	1.063	1.00	18.36
ATOM	2847	CB	ALA	B	233	8.508	32.033	1.166	1.00	18.60
ATOM	2851	C	ALA	B	233	7.396	34.244	1.605	1.00	18.88
ATOM	2852	O	ALA	B	233	7.761	35.156	0.854	1.00	17.95
ATOM	2854	N	CYS	B	234	7.195	34.425	2.908	1.00	18.82
ATOM	2855	CA	CYS	B	234	7.424	35.707	3.560	1.00	19.78
ATOM	2857	CB	CYS	B	234	6.120	36.370	3.959	1.00	21.28

ATOM	2860	SG	CYS	B	234	4.895	36.464	2.639	1.00	24.01
ATOM	2862	C	CYS	B	234	8.284	35.531	4.799	1.00	20.48
ATOM	2863	O	CYS	B	234	8.699	34.416	5.137	1.00	22.11
ATOM	2865	N	GLN	B	235	8.590	36.649	5.452	1.00	20.28
ATOM	2866	CA	GLN	B	235	9.398	36.636	6.657	1.00	20.22
ATOM	2868	CB	GLN	B	235	9.374	38.019	7.317	1.00	21.46
ATOM	2871	CG	GLN	B	235	10.212	38.134	8.598	1.00	23.77
ATOM	2874	CD	GLN	B	235	9.763	39.308	9.455	1.00	26.54
ATOM	2875	OE1	GLN	B	235	9.411	40.370	8.929	1.00	38.80
ATOM	2876	NE2	GLN	B	235	9.758	39.121	10.777	1.00	37.39
ATOM	2879	C	GLN	B	235	8.901	35.578	7.643	1.00	18.76
ATOM	2880	O	GLN	B	235	7.730	35.535	7.999	1.00	18.89
ATOM	2882	N	GLY	B	236	9.814	34.719	8.079	1.00	17.75
ATOM	2883	CA	GLY	B	236	9.445	33.671	8.991	1.00	15.72
ATOM	2886	C	GLY	B	236	9.384	32.311	8.309	1.00	15.47
ATOM	2887	O	GLY	B	236	9.372	31.287	8.998	1.00	14.46
ATOM	2889	N	ASP	B	237	9.347	32.291	6.979	1.00	11.47
ATOM	2890	CA	ASP	B	237	9.349	31.019	6.225	1.00	13.25
ATOM	2892	CB	ASP	B	237	8.613	31.180	4.916	1.00	12.34
ATOM	2895	CG	ASP	B	237	7.099	31.374	5.110	1.00	10.46
ATOM	2896	OD1	ASP	B	237	6.542	30.752	6.064	1.00	14.60
ATOM	2897	OD2	ASP	B	237	6.478	32.138	4.332	1.00	15.78
ATOM	2898	C	ASP	B	237	10.751	30.528	5.926	1.00	11.43
ATOM	2899	O	ASP	B	237	10.954	29.366	5.560	1.00	14.32
ATOM	2901	N	SER	B	238	11.728	31.433	5.981	1.00	13.43
ATOM	2902	CA	SER	B	238	13.044	31.062	5.581	1.00	12.33
ATOM	2904	CB	SER	B	238	13.989	32.281	5.552	1.00	14.49
ATOM	2907	OG	SER	B	238	14.174	32.753	6.833	1.00	17.18
ATOM	2909	C	SER	B	238	13.559	29.915	6.442	1.00	11.82
ATOM	2910	O	SER	B	238	13.103	29.697	7.573	1.00	12.85
ATOM	2912	N	GLY	B	239	14.446	29.143	5.848	1.00	10.18
ATOM	2913	CA	GLY	B	239	14.965	27.914	6.438	1.00	10.76
ATOM	2916	C	GLY	B	239	14.057	26.722	6.216	1.00	11.65
ATOM	2917	O	GLY	B	239	14.455	25.579	6.405	1.00	12.97
ATOM	2919	N	GLY	B	240	12.821	26.962	5.839	1.00	11.00
ATOM	2920	CA	GLY	B	240	11.885	25.866	5.673	1.00	10.59
ATOM	2923	C	GLY	B	240	12.012	25.147	4.331	1.00	11.00
ATOM	2924	O	GLY	B	240	12.776	25.584	3.453	1.00	12.39
ATOM	2926	N	PRO	B	241	11.232	24.057	4.164	1.00	10.43
ATOM	2927	CA	PRO	B	241	11.359	23.193	2.989	1.00	11.05
ATOM	2929	CB	PRO	B	241	10.683	21.915	3.441	1.00	10.17
ATOM	2932	CG	PRO	B	241	9.551	22.496	4.357	1.00	9.32
ATOM	2935	CD	PRO	B	241	10.254	23.511	5.135	1.00	11.28
ATOM	2938	C	PRO	B	241	10.647	23.625	1.722	1.00	11.08
ATOM	2939	O	PRO	B	241	9.521	24.188	1.754	1.00	10.73
ATOM	2940	N	LEU	B	242	11.309	23.315	0.610	1.00	9.78
ATOM	2941	CA	LEU	B	242	10.699	23.276	-0.678	1.00	11.19
ATOM	2943	CB	LEU	B	242	11.515	24.055	-1.691	1.00	9.97
ATOM	2946	CG	LEU	B	242	11.025	23.971	-3.144	1.00	11.81
ATOM	2948	CD1	LEU	B	242	9.707	24.698	-3.275	1.00	8.80
ATOM	2952	CD2	LEU	B	242	12.042	24.537	-4.102	1.00	13.38
ATOM	2956	C	LEU	B	242	10.652	21.799	-0.996	1.00	11.27
ATOM	2957	O	LEU	B	242	11.697	21.142	-1.228	1.00	9.93
ATOM	2959	N	SER	B	243	9.459	21.234	-0.931	1.00	11.20
ATOM	2960	CA	SER	B	243	9.302	19.795	-1.043	1.00	10.09
ATOM	2962	CB	SER	B	243	8.290	19.299	0.006	1.00	10.79
ATOM	2965	OG	SER	B	243	8.581	19.687	1.360	1.00	9.54
ATOM	2967	C	SER	B	243	8.795	19.511	-2.450	1.00	10.16
ATOM	2968	O	SER	B	243	7.746	20.037	-2.847	1.00	9.57
ATOM	2970	N	CYS	B	244	9.539	18.693	-3.201	1.00	10.54
ATOM	2971	CA	CYS	B	244	9.186	18.374	-4.596	1.00	11.64

ATOM	2973	CB	CYS	B	244	10.366	18.644	-5.524	1.00	12.71
ATOM	2976	SG	CYS	B	244	10.831	20.376	-5.695	1.00	11.93
ATOM	2978	C	CYS	B	244	8.821	16.912	-4.763	1.00	11.91
ATOM	2979	O	CYS	B	244	9.481	16.035	-4.193	1.00	11.68
ATOM	2981	N	PRO	B	245	7.797	16.638	-5.577	1.00	11.87
ATOM	2982	CA	PRO	B	245	7.317	15.284	-5.768	1.00	13.60
ATOM	2984	CB	PRO	B	245	5.906	15.493	-6.278	1.00	13.76
ATOM	2987	CG	PRO	B	245	5.962	16.809	-7.006	1.00	13.73
ATOM	2990	CD	PRO	B	245	6.945	17.636	-6.244	1.00	11.29
ATOM	2993	C	PRO	B	245	8.143	14.586	-6.842	1.00	13.61
ATOM	2994	O	PRO	B	245	8.285	15.118	-7.948	1.00	15.79
ATOM	2995	N	VAL	B	246	8.657	13.419	-6.538	1.00	15.19
ATOM	2996	CA	VAL	B	246	9.376	12.653	-7.552	1.00	16.58
ATOM	2998	CB	VAL	B	246	10.888	12.862	-7.489	1.00	19.49
ATOM	3000	CG1	VAL	B	246	11.590	12.030	-8.598	1.00	23.50
ATOM	3004	CG2	VAL	B	246	11.239	14.334	-7.635	1.00	22.84
ATOM	3008	C	VAL	B	246	9.104	11.173	-7.299	1.00	15.61
ATOM	3009	O	VAL	B	246	9.285	10.702	-6.214	1.00	14.50
ATOM	3011	N	GLU	B	247	8.592	10.484	-8.302	1.00	16.00
ATOM	3012	CA	GLU	B	247	8.433	9.035	-8.214	1.00	17.08
ATOM	3014	CB	GLU	B	247	9.793	8.355	-8.080	1.00	19.50
ATOM	3017	CG	GLU	B	247	10.738	8.637	-9.210	1.00	27.71
ATOM	3020	CD	GLU	B	247	10.557	7.663	-10.323	1.00	36.77
ATOM	3021	OE1	GLU	B	247	9.724	7.933	-11.230	1.00	43.82
ATOM	3022	OE2	GLU	B	247	11.224	6.609	-10.250	1.00	45.14
ATOM	3023	C	GLU	B	247	7.578	8.645	-7.042	1.00	14.95
ATOM	3024	O	GLU	B	247	7.868	7.664	-6.376	1.00	17.13
ATOM	3026	N	GLY	B	248	6.527	9.425	-6.786	1.00	13.54
ATOM	3027	CA	GLY	B	248	5.595	9.133	-5.703	1.00	14.02
ATOM	3030	C	GLY	B	248	6.045	9.537	-4.333	1.00	14.32
ATOM	3031	O	GLY	B	248	5.296	9.399	-3.356	1.00	13.63
ATOM	3033	N	LEU	B	249	7.266	10.068	-4.244	1.00	12.70
ATOM	3034	CA	LEU	B	249	7.851	10.455	-2.964	1.00	12.93
ATOM	3036	CB	LEU	B	249	9.252	9.847	-2.783	1.00	15.81
ATOM	3039	CG	LEU	B	249	9.326	8.333	-2.867	1.00	19.26
ATOM	3041	CD1	LEU	B	249	10.766	7.908	-2.681	1.00	23.24
ATOM	3045	CD2	LEU	B	249	8.435	7.675	-1.861	1.00	21.54
ATOM	3049	C	LEU	B	249	7.967	11.986	-2.955	1.00	12.10
ATOM	3050	O	LEU	B	249	7.578	12.634	-3.913	1.00	11.23
ATOM	3052	N	TRP	B	250	8.404	12.532	-1.821	1.00	10.74
ATOM	3053	CA	TRP	B	250	8.752	13.953	-1.687	1.00	13.07
ATOM	3055	CB	TRP	B	250	7.866	14.628	-0.619	1.00	13.71
ATOM	3058	CG	TRP	B	250	6.442	14.569	-1.008	1.00	13.23
ATOM	3059	CD1	TRP	B	250	5.586	13.536	-0.806	1.00	14.22
ATOM	3061	NE1	TRP	B	250	4.360	13.827	-1.356	1.00	13.56
ATOM	3063	CE2	TRP	B	250	4.421	15.059	-1.955	1.00	12.47
ATOM	3064	CD2	TRP	B	250	5.739	15.537	-1.784	1.00	10.89
ATOM	3065	CE3	TRP	B	250	6.076	16.788	-2.311	1.00	13.92
ATOM	3067	CZ3	TRP	B	250	5.085	17.518	-3.007	1.00	12.09
ATOM	3069	CH2	TRP	B	250	3.802	16.980	-3.196	1.00	12.33
ATOM	3071	CZ2	TRP	B	250	3.450	15.770	-2.664	1.00	13.19
ATOM	3073	C	TRP	B	250	10.213	14.048	-1.309	1.00	11.36
ATOM	3074	O	TRP	B	250	10.691	13.301	-0.453	1.00	10.92
ATOM	3076	N	TYR	B	251	10.915	14.988	-1.937	1.00	11.85
ATOM	3077	CA	TYR	B	251	12.312	15.255	-1.640	1.00	12.11
ATOM	3079	CB	TYR	B	251	13.166	15.016	-2.871	1.00	14.35
ATOM	3082	CG	TYR	B	251	13.349	13.568	-3.135	1.00	18.44
ATOM	3083	CD1	TYR	B	251	14.427	12.892	-2.637	1.00	18.96
ATOM	3085	CE1	TYR	B	251	14.572	11.521	-2.865	1.00	21.28
ATOM	3087	CZ	TYR	B	251	13.617	10.855	-3.604	1.00	22.50
ATOM	3088	OH	TYR	B	251	13.771	9.520	-3.859	1.00	29.42

ATOM	3090	CE2	TYR	B	251	12.530	11.510	-4.126	1.00	24.59
ATOM	3092	CD2	TYR	B	251	12.390	12.862	-3.887	1.00	22.49
ATOM	3094	C	TYR	B	251	12.495	16.684	-1.233	1.00	10.80
ATOM	3095	O	TYR	B	251	11.773	17.572	-1.684	1.00	11.86
ATOM	3097	N	LEU	B	252	13.467	16.914	-0.374	1.00	9.05
ATOM	3098	CA	LEU	B	252	13.831	18.269	-0.006	1.00	8.91
ATOM	3100	CB	LEU	B	252	14.579	18.275	1.303	1.00	8.94
ATOM	3103	CG	LEU	B	252	14.863	19.635	1.904	1.00	8.47
ATOM	3105	CD1	LEU	B	252	13.567	20.378	2.313	1.00	10.20
ATOM	3109	CD2	LEU	B	252	15.785	19.506	3.084	1.00	12.33
ATOM	3113	C	LEU	B	252	14.683	18.880	-1.101	1.00	10.33
ATOM	3114	O	LEU	B	252	15.904	18.664	-1.170	1.00	11.55
ATOM	3116	N	THR	B	253	14.025	19.589	-2.006	1.00	9.25
ATOM	3117	CA	THR	B	253	14.728	20.168	-3.104	1.00	10.92
ATOM	3119	CB	THR	B	253	13.790	20.497	-4.219	1.00	10.76
ATOM	3121	OG1	THR	B	253	13.229	19.292	-4.729	1.00	13.35
ATOM	3123	CG2	THR	B	253	14.529	21.218	-5.332	1.00	12.09
ATOM	3127	C	THR	B	253	15.458	21.403	-2.650	1.00	10.13
ATOM	3128	O	THR	B	253	16.539	21.704	-3.119	1.00	9.38
ATOM	3130	N	GLY	B	254	14.787	22.170	-1.783	1.00	10.14
ATOM	3131	CA	GLY	B	254	15.280	23.499	-1.427	1.00	10.62
ATOM	3134	C	GLY	B	254	15.017	23.866	0.013	1.00	8.96
ATOM	3135	O	GLY	B	254	14.184	23.269	0.691	1.00	10.03
ATOM	3137	N	ILE	B	255	15.835	24.786	0.493	1.00	11.65
ATOM	3138	CA	ILE	B	255	15.707	25.386	1.813	1.00	11.56
ATOM	3140	CB	ILE	B	255	17.006	25.175	2.602	1.00	12.51
ATOM	3142	CG1	ILE	B	255	17.148	23.682	2.902	1.00	13.03
ATOM	3145	CD1	ILE	B	255	18.442	23.247	3.340	1.00	16.52
ATOM	3149	CG2	ILE	B	255	17.012	26.003	3.890	1.00	14.65
ATOM	3153	C	ILE	B	255	15.505	26.878	1.557	1.00	11.27
ATOM	3154	O	ILE	B	255	16.318	27.487	0.862	1.00	10.34
ATOM	3156	N	VAL	B	256	14.435	27.449	2.080	1.00	10.98
ATOM	3157	CA	VAL	B	256	14.108	28.853	1.755	1.00	11.62
ATOM	3159	CB	VAL	B	256	12.779	29.347	2.425	1.00	12.55
ATOM	3161	CG1	VAL	B	256	12.512	30.792	2.091	1.00	11.51
ATOM	3165	CG2	VAL	B	256	11.555	28.471	2.043	1.00	13.15
ATOM	3169	C	VAL	B	256	15.276	29.708	2.182	1.00	12.86
ATOM	3170	O	VAL	B	256	15.665	29.664	3.345	1.00	13.03
ATOM	3172	N	SER	B	257	15.827	30.479	1.253	1.00	13.02
ATOM	3173	CA	SER	B	257	16.979	31.330	1.519	1.00	15.31
ATOM	3175	CB	SER	B	257	18.097	31.114	0.514	1.00	15.29
ATOM	3178	OG	SER	B	257	19.218	31.944	0.829	1.00	15.78
ATOM	3180	C	SER	B	257	16.599	32.795	1.510	1.00	18.64
ATOM	3181	O	SER	B	257	16.858	33.502	2.476	1.00	19.08
ATOM	3183	N	TRP	B	258	16.012	33.266	0.411	1.00	20.11
ATOM	3184	CA	TRP	B	258	15.442	34.635	0.402	1.00	22.29
ATOM	3186	CB	TRP	B	258	15.872	35.508	-0.769	1.00	24.59
ATOM	3189	CG	TRP	B	258	17.302	35.335	-1.231	1.00	29.56
ATOM	3190	CD1	TRP	B	258	18.342	34.721	-0.575	1.00	31.59
ATOM	3192	NE1	TRP	B	258	19.480	34.771	-1.344	1.00	32.67
ATOM	3194	CE2	TRP	B	258	19.190	35.442	-2.503	1.00	26.77
ATOM	3195	CD2	TRP	B	258	17.834	35.816	-2.454	1.00	30.89
ATOM	3196	CE3	TRP	B	258	17.286	36.514	-3.526	1.00	32.59
ATOM	3198	CZ3	TRP	B	258	18.073	36.817	-4.573	1.00	30.93
ATOM	3200	CH2	TRP	B	258	19.411	36.422	-4.606	1.00	30.92
ATOM	3202	CZ2	TRP	B	258	19.991	35.743	-3.572	1.00	29.25
ATOM	3204	C	TRP	B	258	13.947	34.436	0.398	1.00	24.25
ATOM	3205	O	TRP	B	258	13.326	34.074	-0.624	1.00	23.46
ATOM	3207	N	GLY	B	259	13.398	34.648	1.584	1.00	25.14
ATOM	3208	CA	GLY	B	259	12.036	34.269	1.890	1.00	26.85
ATOM	3211	C	GLY	B	259	11.231	35.473	2.325	1.00	27.51

ATOM	3212	O	GLY	B	259	10.272	35.314	3.073	1.00	24.96
ATOM	3214	N	ASP	B	260	11.637	36.663	1.876	1.00	27.92
ATOM	3215	CA	ASP	B	260	10.942	37.906	2.205	1.00	30.36
ATOM	3217	CB	ASP	B	260	11.907	38.880	2.891	1.00	31.15
ATOM	3220	CG	ASP	B	260	12.448	38.333	4.199	1.00	37.45
ATOM	3221	OD1	ASP	B	260	11.914	37.307	4.687	1.00	44.38
ATOM	3222	OD2	ASP	B	260	13.420	38.904	4.736	1.00	45.72
ATOM	3223	C	ASP	B	260	10.344	38.556	0.963	1.00	31.16
ATOM	3224	O	ASP	B	260	9.924	39.699	1.014	1.00	31.80
ATOM	3226	N	ALA	B	261	10.276	37.825	-0.146	1.00	30.41
ATOM	3227	CA	ALA	B	261	9.742	38.416	-1.380	1.00	29.80
ATOM	3229	CB	ALA	B	261	9.854	37.424	-2.529	1.00	29.37
ATOM	3233	C	ALA	B	261	8.287	38.793	-1.121	1.00	28.47
ATOM	3234	O	ALA	B	261	7.802	39.882	-1.485	1.00	28.56
ATOM	3236	N	CYS	B	262	7.599	37.843	-0.496	1.00	26.76
ATOM	3237	CA	CYS	B	262	6.252	38.016	-0.004	1.00	25.77
ATOM	3239	CB	CYS	B	262	6.238	38.853	1.264	1.00	24.47
ATOM	3242	SG	CYS	B	262	4.784	38.469	2.232	1.00	24.85
ATOM	3244	C	CYS	B	262	5.305	38.570	-1.034	1.00	23.74
ATOM	3245	O	CYS	B	262	4.516	39.465	-0.755	1.00	25.38
ATOM	3247	N	GLY	B	263	5.366	37.989	-2.220	1.00	21.74
ATOM	3248	CA	GLY	B	263	4.349	38.210	-3.232	1.00	22.02
ATOM	3251	C	GLY	B	263	4.609	39.337	-4.193	1.00	21.38
ATOM	3252	O	GLY	B	263	3.782	39.594	-5.049	1.00	23.81
ATOM	3254	N	ALA	B	264	5.752	39.991	-4.069	1.00	21.15
ATOM	3255	CA	ALA	B	264	6.155	41.008	-5.031	1.00	21.98
ATOM	3257	CB	ALA	B	264	7.464	41.635	-4.591	1.00	21.67
ATOM	3261	C	ALA	B	264	6.314	40.365	-6.404	1.00	21.98
ATOM	3262	O	ALA	B	264	6.840	39.238	-6.523	1.00	21.20
ATOM	3264	N	ARG	B	265	5.880	41.072	-7.448	1.00	20.59
ATOM	3265	CA	ARG	B	265	6.090	40.601	-8.825	1.00	22.48
ATOM	3267	CB	ARG	B	265	5.482	41.585	-9.831	1.00	23.31
ATOM	3270	CG	ARG	B	265	4.005	41.762	-9.710	1.00	31.61
ATOM	3273	CD	ARG	B	265	3.381	42.422	-10.961	1.00	34.00
ATOM	3276	NE	ARG	B	265	2.247	41.600	-11.422	1.00	48.13
ATOM	3278	CZ	ARG	B	265	1.058	41.511	-10.812	1.00	48.34
ATOM	3279	NH1	ARG	B	265	0.118	40.721	-11.324	1.00	48.23
ATOM	3282	NH2	ARG	B	265	0.797	42.198	-9.698	1.00	51.80
ATOM	3285	C	ARG	B	265	7.554	40.536	-9.142	1.00	19.37
ATOM	3286	O	ARG	B	265	8.347	41.328	-8.634	1.00	17.55
ATOM	3288	N	ASN	B	266	7.926	39.625	-10.042	1.00	17.12
ATOM	3289	CA	ASN	B	266	9.322	39.491	-10.436	1.00	17.82
ATOM	3291	CB	ASN	B	266	9.788	40.738	-11.189	1.00	17.86
ATOM	3294	CG	ASN	B	266	8.924	41.012	-12.375	1.00	13.31
ATOM	3295	OD1	ASN	B	266	8.471	40.062	-13.034	1.00	15.81
ATOM	3296	ND2	ASN	B	266	8.657	42.295	-12.661	1.00	19.00
ATOM	3299	C	ASN	B	266	10.309	39.182	-9.317	1.00	17.38
ATOM	3300	O	ASN	B	266	11.481	39.470	-9.435	1.00	18.89
ATOM	3302	N	ARG	B	267	9.818	38.596	-8.241	1.00	17.37
ATOM	3303	CA	ARG	B	267	10.637	38.298	-7.093	1.00	17.87
ATOM	3305	CB	ARG	B	267	10.436	39.377	-6.040	1.00	18.59
ATOM	3308	CG	ARG	B	267	10.756	40.780	-6.507	1.00	21.66
ATOM	3311	CD	ARG	B	267	12.247	40.977	-6.647	1.00	22.39
ATOM	3314	NE	ARG	B	267	12.581	42.378	-6.922	1.00	24.16
ATOM	3316	CZ	ARG	B	267	12.702	42.916	-8.130	1.00	24.15
ATOM	3317	NH1	ARG	B	267	12.513	42.202	-9.231	1.00	18.43
ATOM	3320	NH2	ARG	B	267	13.020	44.200	-8.234	1.00	27.17
ATOM	3323	C	ARG	B	267	10.242	36.915	-6.523	1.00	16.91
ATOM	3324	O	ARG	B	267	9.783	36.810	-5.399	1.00	17.82
ATOM	3326	N	PRO	B	268	10.464	35.846	-7.297	1.00	16.90
ATOM	3327	CA	PRO	B	268	10.115	34.523	-6.794	1.00	16.59

ATOM	3329	CB	PRO	B	268	10.311	33.616	-8.001	1.00	16.43
ATOM	3332	CG	PRO	B	268	11.094	34.372	-8.973	1.00	16.78
ATOM	3335	CD	PRO	B	268	11.034	35.800	-8.644	1.00	16.90
ATOM	3338	C	PRO	B	268	11.044	34.116	-5.647	1.00	15.02
ATOM	3339	O	PRO	B	268	12.196	34.577	-5.571	1.00	14.61
ATOM	3340	N	GLY	B	269	10.541	33.261	-4.767	1.00	14.17
ATOM	3341	CA	GLY	B	269	11.356	32.787	-3.667	1.00	14.89
ATOM	3344	C	GLY	B	269	12.640	32.161	-4.170	1.00	13.81
ATOM	3345	O	GLY	B	269	12.666	31.575	-5.251	1.00	12.49
ATOM	3347	N	VAL	B	270	13.699	32.305	-3.389	1.00	13.71
ATOM	3348	CA	VAL	B	270	15.028	31.757	-3.694	1.00	12.65
ATOM	3350	CB	VAL	B	270	16.152	32.830	-3.686	1.00	13.89
ATOM	3352	CG1	VAL	B	270	17.511	32.236	-4.081	1.00	16.01
ATOM	3356	CG2	VAL	B	270	15.758	33.982	-4.646	1.00	16.79
ATOM	3360	C	VAL	B	270	15.377	30.748	-2.630	1.00	12.87
ATOM	3361	O	VAL	B	270	15.227	31.014	-1.449	1.00	12.90
ATOM	3363	N	TYR	B	271	15.901	29.624	-3.076	1.00	11.34
ATOM	3364	CA	TYR	B	271	16.105	28.487	-2.229	1.00	10.95
ATOM	3366	CB	TYR	B	271	15.129	27.372	-2.620	1.00	10.64
ATOM	3369	CG	TYR	B	271	13.680	27.744	-2.473	1.00	9.27
ATOM	3370	CD1	TYR	B	271	12.959	27.337	-1.356	1.00	11.46
ATOM	3372	CE1	TYR	B	271	11.651	27.656	-1.210	1.00	10.39
ATOM	3374	CZ	TYR	B	271	11.030	28.421	-2.173	1.00	9.60
ATOM	3375	OH	TYR	B	271	9.715	28.765	-2.048	1.00	12.11
ATOM	3377	CE2	TYR	B	271	11.706	28.825	-3.302	1.00	11.94
ATOM	3379	CD2	TYR	B	271	13.031	28.484	-3.442	1.00	10.22
ATOM	3381	C	TYR	B	271	17.488	27.948	-2.425	1.00	10.67
ATOM	3382	O	TYR	B	271	17.968	27.870	-3.556	1.00	11.19
ATOM	3384	N	THR	B	272	18.110	27.551	-1.322	1.00	8.96
ATOM	3385	CA	THR	B	272	19.317	26.766	-1.391	1.00	9.89
ATOM	3387	CB	THR	B	272	20.038	26.754	-0.059	1.00	12.04
ATOM	3389	OG1	THR	B	272	20.374	28.101	0.289	1.00	11.19
ATOM	3391	CG2	THR	B	272	21.305	25.900	-0.143	1.00	12.42
ATOM	3395	C	THR	B	272	18.976	25.355	-1.820	1.00	9.96
ATOM	3396	O	THR	B	272	18.102	24.744	-1.239	1.00	10.14
ATOM	3398	N	LEU	B	273	19.696	24.854	-2.819	1.00	11.54
ATOM	3399	CA	LEU	B	273	19.515	23.500	-3.301	1.00	10.32
ATOM	3401	CB	LEU	B	273	20.184	23.349	-4.663	1.00	11.25
ATOM	3404	CG	LEU	B	273	19.405	23.893	-5.857	1.00	11.89
ATOM	3406	CD1	LEU	B	273	20.311	24.000	-7.052	1.00	13.23
ATOM	3410	CD2	LEU	B	273	18.230	22.984	-6.188	1.00	14.78
ATOM	3414	C	LEU	B	273	20.132	22.527	-2.337	1.00	10.52
ATOM	3415	O	LEU	B	273	21.300	22.595	-2.042	1.00	11.31
ATOM	3417	N	ALA	B	274	19.329	21.611	-1.828	1.00	10.88
ATOM	3418	CA	ALA	B	274	19.869	20.582	-0.945	1.00	10.77
ATOM	3420	CB	ALA	B	274	18.737	19.737	-0.324	1.00	10.39
ATOM	3424	C	ALA	B	274	20.847	19.674	-1.674	1.00	11.20
ATOM	3425	O	ALA	B	274	21.799	19.164	-1.067	1.00	11.41
ATOM	3427	N	SER	B	275	20.625	19.477	-2.978	1.00	10.37
ATOM	3428	CA	SER	B	275	21.530	18.644	-3.781	1.00	10.13
ATOM	3430	CB	SER	B	275	21.067	18.566	-5.219	1.00	10.88
ATOM	3433	OG	SER	B	275	20.899	19.878	-5.763	1.00	11.99
ATOM	3435	C	SER	B	275	22.949	19.189	-3.723	1.00	9.78
ATOM	3436	O	SER	B	275	23.913	18.402	-3.712	1.00	13.12
ATOM	3438	N	SER	B	276	23.086	20.516	-3.739	1.00	10.29
ATOM	3439	CA	SER	B	276	24.404	21.167	-3.662	1.00	10.41
ATOM	3441	CB	SER	B	276	24.267	22.659	-3.780	1.00	12.56
ATOM	3444	OG	SER	B	276	23.921	23.012	-5.110	1.00	13.44
ATOM	3446	C	SER	B	276	25.172	20.846	-2.391	1.00	12.06
ATOM	3447	O	SER	B	276	26.407	20.959	-2.371	1.00	14.04
ATOM	3449	N	TYR	B	277	24.455	20.417	-1.360	1.00	11.18

ATOM	3450	CA	TYR	B	277	25.044	20.084	-0.048	1.00	11.74
ATOM	3452	CB	TYR	B	277	24.496	21.069	1.014	1.00	13.20
ATOM	3455	CG	TYR	B	277	24.885	22.436	0.600	1.00	11.93
ATOM	3456	CD1	TYR	B	277	26.167	22.911	0.872	1.00	17.47
ATOM	3458	CE1	TYR	B	277	26.599	24.109	0.394	1.00	15.85
ATOM	3460	CZ	TYR	B	277	25.747	24.891	-0.358	1.00	17.05
ATOM	3461	OH	TYR	B	277	26.167	26.111	-0.853	1.00	14.91
ATOM	3463	CE2	TYR	B	277	24.487	24.446	-0.660	1.00	12.48
ATOM	3465	CD2	TYR	B	277	24.054	23.218	-0.195	1.00	13.36
ATOM	3467	C	TYR	B	277	24.864	18.624	0.371	1.00	12.78
ATOM	3468	O	TYR	B	277	25.171	18.300	1.522	1.00	12.12
ATOM	3470	N	ALA	B	278	24.366	17.762	-0.523	1.00	13.19
ATOM	3471	CA	ALA	B	278	24.174	16.345	-0.217	1.00	14.10
ATOM	3473	CB	ALA	B	278	23.759	15.591	-1.484	1.00	14.69
ATOM	3477	C	ALA	B	278	25.468	15.752	0.355	1.00	14.44
ATOM	3478	O	ALA	B	278	25.507	15.107	1.412	1.00	14.17
ATOM	3480	N	SER	B	279	26.555	16.023	-0.333	1.00	14.21
ATOM	3481	CA	SER	B	279	27.838	15.406	0.041	1.00	14.27
ATOM	3483	CB	SER	B	279	28.886	15.741	-1.005	1.00	15.73
ATOM	3486	OG	SER	B	279	30.160	15.365	-0.548	1.00	14.15
ATOM	3488	C	SER	B	279	28.304	15.873	1.419	1.00	13.60
ATOM	3489	O	SER	B	279	28.705	15.047	2.242	1.00	14.89
ATOM	3491	N	TRP	B	280	28.176	17.182	1.661	1.00	12.76
ATOM	3492	CA	TRP	B	280	28.574	17.828	2.922	1.00	13.42
ATOM	3494	CB	TRP	B	280	28.439	19.324	2.813	1.00	14.80
ATOM	3497	CG	TRP	B	280	28.763	20.096	4.045	1.00	14.43
ATOM	3498	CD1	TRP	B	280	30.002	20.383	4.524	1.00	16.77
ATOM	3500	NE1	TRP	B	280	29.901	21.117	5.688	1.00	19.00
ATOM	3502	CE2	TRP	B	280	28.576	21.354	5.946	1.00	17.40
ATOM	3503	CD2	TRP	B	280	27.831	20.717	4.933	1.00	15.90
ATOM	3504	CE3	TRP	B	280	26.433	20.835	4.950	1.00	17.15
ATOM	3506	CZ3	TRP	B	280	25.832	21.568	5.983	1.00	18.34
ATOM	3508	CH2	TRP	B	280	26.597	22.179	6.969	1.00	16.67
ATOM	3510	CZ2	TRP	B	280	27.973	22.081	6.971	1.00	20.30
ATOM	3512	C	TRP	B	280	27.702	17.331	4.059	1.00	12.73
ATOM	3513	O	TRP	B	280	28.195	16.951	5.131	1.00	11.39
ATOM	3515	N	ILE	B	281	26.388	17.306	3.825	1.00	13.86
ATOM	3516	CA	ILE	B	281	25.469	16.843	4.852	1.00	12.62
ATOM	3518	CB	ILE	B	281	24.004	16.911	4.379	1.00	14.90
ATOM	3520	CG1	ILE	B	281	23.569	18.362	4.233	1.00	11.62
ATOM	3523	CD1	ILE	B	281	22.371	18.504	3.411	1.00	11.94
ATOM	3527	CG2	ILE	B	281	23.081	16.208	5.347	1.00	13.68
ATOM	3531	C	ILE	B	281	25.798	15.406	5.198	1.00	12.37
ATOM	3532	O	ILE	B	281	25.870	15.055	6.383	1.00	13.16
ATOM	3534	N	GLN	B	282	25.980	14.569	4.177	1.00	12.71
ATOM	3535	CA	GLN	B	282	26.339	13.152	4.440	1.00	13.36
ATOM	3537	CB	GLN	B	282	26.411	12.310	3.175	1.00	12.66
ATOM	3540	CG	GLN	B	282	26.547	10.805	3.503	1.00	15.08
ATOM	3543	CD	GLN	B	282	26.540	9.923	2.270	1.00	18.26
ATOM	3544	OE1	GLN	B	282	26.974	8.757	2.311	1.00	19.88
ATOM	3545	NE2	GLN	B	282	26.074	10.470	1.163	1.00	17.77
ATOM	3548	C	GLN	B	282	27.645	13.038	5.200	1.00	11.92
ATOM	3549	O	GLN	B	282	27.763	12.264	6.126	1.00	11.30
ATOM	3551	N	SER	B	283	28.624	13.853	4.837	1.00	12.19
ATOM	3552	CA	SER	B	283	29.915	13.766	5.498	1.00	12.14
ATOM	3554	CB	SER	B	283	30.936	14.663	4.803	1.00	11.71
ATOM	3557	OG	SER	B	283	32.089	14.716	5.608	1.00	12.50
ATOM	3559	C	SER	B	283	29.797	14.163	6.965	1.00	12.46
ATOM	3560	O	SER	B	283	30.278	13.481	7.855	1.00	13.32
ATOM	3562	N	LYS	B	284	29.119	15.276	7.227	1.00	11.58
ATOM	3563	CA	LYS	B	284	29.038	15.808	8.607	1.00	12.43

ATOM	3565	CB	LYS	B	284	28.386	17.187	8.608	1.00	12.92
ATOM	3568	CG	LYS	B	284	29.130	18.271	7.885	1.00	13.38
ATOM	3571	CD	LYS	B	284	30.478	18.646	8.577	1.00	17.96
ATOM	3574	CE	LYS	B	284	30.326	19.105	9.990	1.00	18.19
ATOM	3577	NZ	LYS	B	284	31.664	19.661	10.477	1.00	20.19
ATOM	3581	C	LYS	B	284	28.240	14.885	9.504	1.00	12.97
ATOM	3582	O	LYS	B	284	28.667	14.581	10.640	1.00	13.94
ATOM	3584	N	VAL	B	285	27.103	14.413	9.006	1.00	12.70
ATOM	3585	CA	VAL	B	285	26.257	13.531	9.846	1.00	13.90
ATOM	3587	CB	VAL	B	285	24.848	13.390	9.299	1.00	16.02
ATOM	3589	CG1	VAL	B	285	24.015	12.484	10.207	1.00	16.77
ATOM	3593	CG2	VAL	B	285	24.187	14.794	9.227	1.00	15.42
ATOM	3597	C	VAL	B	285	26.910	12.168	10.054	1.00	14.53
ATOM	3598	O	VAL	B	285	26.903	11.630	11.159	1.00	14.87
ATOM	3600	N	THR	B	286	27.584	11.652	9.031	1.00	13.93
ATOM	3601	CA	THR	B	286	28.237	10.352	9.162	1.00	12.69
ATOM	3603	CB	THR	B	286	28.741	9.847	7.819	1.00	11.94
ATOM	3605	OG1	THR	B	286	27.619	9.702	6.928	1.00	10.00
ATOM	3607	CG2	THR	B	286	29.399	8.457	7.938	1.00	14.36
ATOM	3611	C	THR	B	286	29.376	10.418	10.169	1.00	13.11
ATOM	3612	O	THR	B	286	29.568	9.514	10.985	1.00	15.63
ATOM	3614	N	GLU	B	287	30.149	11.487	10.094	1.00	14.25
ATOM	3615	CA	GLU	B	287	31.265	11.638	10.982	1.00	14.86
ATOM	3617	CB	GLU	B	287	32.110	12.836	10.600	1.00	14.97
ATOM	3620	CG	GLU	B	287	33.312	12.859	11.457	1.00	15.91
ATOM	3623	CD	GLU	B	287	34.269	13.964	11.123	1.00	18.50
ATOM	3624	OE1	GLU	B	287	33.902	14.898	10.370	1.00	22.20
ATOM	3625	OE2	GLU	B	287	35.396	13.903	11.661	1.00	24.37
ATOM	3626	C	GLU	B	287	30.798	11.862	12.388	1.00	15.90
ATOM	3627	O	GLU	B	287	31.320	11.283	13.329	1.00	15.71
ATOM	3629	N	LEU	B	288	29.824	12.746	12.542	1.00	14.46
ATOM	3630	CA	LEU	B	288	29.403	13.191	13.889	1.00	15.36
ATOM	3632	CB	LEU	B	288	28.789	14.564	13.822	1.00	14.18
ATOM	3635	CG	LEU	B	288	29.789	15.627	13.426	1.00	17.42
ATOM	3637	CD1	LEU	B	288	29.099	16.981	13.292	1.00	18.04
ATOM	3641	CD2	LEU	B	288	30.911	15.699	14.446	1.00	21.15
ATOM	3645	C	LEU	B	288	28.413	12.278	14.563	1.00	16.28
ATOM	3646	O	LEU	B	288	28.344	12.225	15.807	1.00	17.94
ATOM	3648	N	GLN	B	289	27.611	11.579	13.785	1.00	17.82
ATOM	3649	CA	GLN	B	289	26.644	10.692	14.392	1.00	19.25
ATOM	3651	CB	GLN	B	289	25.394	11.472	14.805	1.00	19.34
ATOM	3654	CG	GLN	B	289	24.468	10.599	15.656	1.00	19.71
ATOM	3657	CD	GLN	B	289	23.340	11.365	16.331	1.00	22.77
ATOM	3658	OE1	GLN	B	289	23.007	12.496	15.963	1.00	24.96
ATOM	3659	NE2	GLN	B	289	22.744	10.736	17.339	1.00	30.39
ATOM	3662	C	GLN	B	289	26.312	9.552	13.453	1.00	19.52
ATOM	3663	O	GLN	B	289	25.221	9.500	12.920	1.00	17.23
ATOM	3665	N	PRO	B	290	27.266	8.617	13.245	1.00	19.84
ATOM	3666	CA	PRO	B	290	26.998	7.531	12.312	1.00	22.37
ATOM	3668	CB	PRO	B	290	28.305	6.716	12.306	1.00	22.87
ATOM	3671	CG	PRO	B	290	28.951	7.039	13.604	1.00	21.30
ATOM	3674	CD	PRO	B	290	28.594	8.494	13.867	1.00	21.45
ATOM	3677	C	PRO	B	290	25.890	6.643	12.818	1.00	23.80
ATOM	3678	O	PRO	B	290	25.694	6.567	14.035	1.00	22.71
ATOM	3679	N	ARG	B	291	25.217	5.956	11.895	1.00	26.70
ATOM	3680	CA	ARG	B	291	24.232	4.936	12.246	1.00	29.62
ATOM	3682	CB	ARG	B	291	23.251	4.676	11.090	1.00	31.94
ATOM	3685	CG	ARG	B	291	22.769	5.952	10.383	1.00	35.69
ATOM	3688	CD	ARG	B	291	21.640	5.725	9.365	1.00	37.61
ATOM	3691	NE	ARG	B	291	21.430	6.935	8.543	1.00	44.92
ATOM	3693	CZ	ARG	B	291	20.379	7.160	7.744	1.00	50.44

ATOM	3694	NH1	ARG	B	291	19.400	6.255	7.637	1.00	53.11
ATOM	3697	NH2	ARG	B	291	20.297	8.303	7.049	1.00	50.82
ATOM	3700	C	ARG	B	291	24.987	3.661	12.591	1.00	30.19
ATOM	3701	O	ARG	B	291	24.805	3.123	13.680	1.00	33.30
ATOM	3703	O3	GOL	G	1	30.683	13.201	-2.123	1.00	24.51
ATOM	3705	C3	GOL	G	1	30.388	11.863	-1.690	1.00	26.57
ATOM	3708	C2	GOL	G	1	28.950	11.449	-1.893	1.00	32.36
ATOM	3710	O2	GOL	G	1	28.313	12.306	-2.809	1.00	35.74
ATOM	3712	C1	GOL	G	1	28.097	11.429	-0.653	1.00	34.06
ATOM	3715	O1	GOL	G	1	27.133	10.428	-0.900	1.00	36.17
ATOM	3717	O3	GOL	G	2	37.879	17.496	-2.730	1.00	39.09
ATOM	3719	C3	GOL	G	2	36.779	16.771	-3.232	1.00	38.69
ATOM	3722	C2	GOL	G	2	36.306	15.781	-2.191	1.00	31.70
ATOM	3724	O2	GOL	G	2	37.391	14.975	-1.775	1.00	16.33
ATOM	3726	C1	GOL	G	2	35.830	16.610	-1.005	1.00	31.37
ATOM	3729	O1	GOL	G	2	34.697	15.967	-0.509	1.00	24.03
ATOM	3731	O3	GOL	G	3	-0.974	26.733	-3.325	1.00	27.14
ATOM	3733	C3	GOL	G	3	-1.069	25.441	-2.841	1.00	34.20
ATOM	3736	C2	GOL	G	3	-2.488	25.306	-2.399	1.00	42.72
ATOM	3738	O2	GOL	G	3	-2.652	26.257	-1.370	1.00	44.44
ATOM	3740	C1	GOL	G	3	-2.709	23.860	-1.976	1.00	46.95
ATOM	3743	O1	GOL	G	3	-1.461	23.300	-1.622	1.00	51.05
ATOM	3745	OH2	HOH	W	1	9.166	27.500	6.690	1.00	10.78
ATOM	3748	OH2	HOH	W	2	18.680	19.705	-7.287	1.00	13.95
ATOM	3751	OH2	HOH	W	3	7.274	22.028	1.976	1.00	12.47
ATOM	3754	OH2	HOH	W	4	31.650	7.863	11.593	1.00	13.87
ATOM	3757	OH2	HOH	W	5	8.132	28.762	8.929	1.00	10.96
ATOM	3760	OH2	HOH	W	6	13.331	29.483	21.888	1.00	12.76
ATOM	3763	OH2	HOH	W	7	18.168	19.803	-4.456	1.00	12.14
ATOM	3766	OH2	HOH	W	8	15.218	21.840	-15.773	1.00	17.70
ATOM	3769	OH2	HOH	W	9	2.724	31.251	6.677	1.00	11.96
ATOM	3772	OH2	HOH	W	10	14.629	23.032	5.497	1.00	13.77
ATOM	3775	OH2	HOH	W	11	14.315	25.893	26.129	1.00	14.05
ATOM	3778	OH2	HOH	W	12	22.736	29.104	-0.538	1.00	14.77
ATOM	3781	OH2	HOH	W	13	28.133	19.179	-0.667	1.00	15.24
ATOM	3784	OH2	HOH	W	14	18.885	25.102	22.043	1.00	15.95
ATOM	3787	OH2	HOH	W	15	32.444	15.439	8.321	1.00	14.30
ATOM	3790	OH2	HOH	W	16	3.860	20.181	-4.681	1.00	12.50
ATOM	3793	OH2	HOH	W	17	3.648	34.945	10.762	1.00	21.32
ATOM	3796	OH2	HOH	W	18	7.263	27.211	17.549	1.00	18.46
ATOM	3799	OH2	HOH	W	19	20.958	16.481	-0.013	1.00	21.56
ATOM	3802	OH2	HOH	W	20	8.618	30.542	-3.563	1.00	16.53
ATOM	3805	OH2	HOH	W	21	18.140	27.899	-17.057	1.00	16.87
ATOM	3808	OH2	HOH	W	22	28.025	7.911	4.889	1.00	14.07
ATOM	3811	OH2	HOH	W	23	22.965	21.183	-6.891	1.00	18.28
ATOM	3814	OH2	HOH	W	24	19.069	35.307	-17.330	1.00	16.53
ATOM	3817	OH2	HOH	W	25	26.608	17.639	-2.849	1.00	13.86
ATOM	3820	OH2	HOH	W	26	10.049	27.793	21.444	1.00	18.31
ATOM	3823	OH2	HOH	W	27	24.660	12.553	-7.179	1.00	18.24
ATOM	3826	OH2	HOH	W	28	7.606	18.082	12.372	1.00	13.59
ATOM	3829	OH2	HOH	W	29	18.398	26.494	-12.059	1.00	15.54
ATOM	3832	OH2	HOH	W	30	4.355	13.029	17.494	1.00	19.92
ATOM	3835	OH2	HOH	W	31	-0.900	31.488	2.829	1.00	18.30
ATOM	3838	OH2	HOH	W	32	11.654	34.502	5.468	1.00	25.42
ATOM	3841	OH2	HOH	W	33	7.194	37.243	-4.445	1.00	19.56
ATOM	3844	OH2	HOH	W	34	6.377	34.130	-6.695	1.00	18.47
ATOM	3847	OH2	HOH	W	35	6.504	21.372	13.690	1.00	20.31
ATOM	3850	OH2	HOH	W	36	23.108	46.257	-9.094	1.00	25.60
ATOM	3853	OH2	HOH	W	37	17.773	33.636	14.905	1.00	22.15
ATOM	3856	OH2	HOH	W	38	8.610	20.297	-15.054	1.00	19.26
ATOM	3859	OH2	HOH	W	39	5.372	22.059	-15.064	1.00	27.58

ATOM	3862	OH2	HOH	W	40	16.365	12.317	5.212	1.00	16.25
ATOM	3865	OH2	HOH	W	41	20.124	25.959	-9.827	1.00	20.48
ATOM	3868	OH2	HOH	W	42	-0.785	20.507	-9.217	1.00	21.47
ATOM	3871	OH2	HOH	W	43	15.288	16.319	21.447	1.00	28.05
ATOM	3874	OH2	HOH	W	44	12.480	33.606	8.456	1.00	19.45
ATOM	3877	OH2	HOH	W	45	7.289	37.001	-7.936	1.00	18.91
ATOM	3880	OH2	HOH	W	46	2.028	12.237	8.190	1.00	22.39
ATOM	3883	OH2	HOH	W	47	3.209	17.409	11.484	1.00	25.83
ATOM	3886	OH2	HOH	W	48	5.465	30.279	-12.380	1.00	22.85
ATOM	3889	OH2	HOH	W	49	22.982	31.407	16.105	1.00	22.99
ATOM	3892	OH2	HOH	W	50	24.742	45.646	-1.834	1.00	27.69
ATOM	3895	OH2	HOH	W	51	2.855	34.508	-12.669	1.00	29.18
ATOM	3898	OH2	HOH	W	52	27.130	31.410	-7.401	1.00	21.83
ATOM	3901	OH2	HOH	W	53	6.533	33.029	17.866	1.00	23.08
ATOM	3904	OH2	HOH	W	54	7.168	43.849	-14.726	1.00	24.30
ATOM	3907	OH2	HOH	W	55	9.653	9.952	6.151	1.00	29.92
ATOM	3910	OH2	HOH	W	56	17.527	26.562	26.826	1.00	25.29
ATOM	3913	OH2	HOH	W	57	31.108	20.934	12.859	1.00	23.94
ATOM	3916	OH2	HOH	W	58	25.097	19.426	-6.903	1.00	25.73
ATOM	3919	OH2	HOH	W	59	4.055	37.151	-17.075	1.00	22.24
ATOM	3922	OH2	HOH	W	60	30.811	21.627	0.903	1.00	28.34
ATOM	3925	OH2	HOH	W	61	8.041	13.655	24.435	1.00	33.26
ATOM	3928	OH2	HOH	W	62	10.203	34.664	-0.919	1.00	32.67
ATOM	3931	OH2	HOH	W	63	0.787	21.818	-2.474	1.00	22.36
ATOM	3934	OH2	HOH	W	64	8.278	26.115	19.878	1.00	25.79
ATOM	3937	OH2	HOH	W	65	8.084	39.231	4.138	1.00	30.02
ATOM	3940	OH2	HOH	W	66	21.688	12.649	-0.060	1.00	34.13
ATOM	3943	OH2	HOH	W	67	17.732	20.720	-9.545	1.00	24.08
ATOM	3946	OH2	HOH	W	68	15.758	18.751	23.791	1.00	30.14
ATOM	3949	OH2	HOH	W	69	19.842	53.713	-3.904	1.00	36.48
ATOM	3952	OH2	HOH	W	70	21.818	33.539	0.594	1.00	30.68
ATOM	3955	OH2	HOH	W	71	22.875	13.810	2.166	1.00	26.21
ATOM	3958	OH2	HOH	W	72	31.677	17.137	0.649	1.00	25.94
ATOM	3961	OH2	HOH	W	73	17.702	11.343	3.065	1.00	17.06
ATOM	3964	OH2	HOH	W	74	0.778	41.731	11.827	1.00	35.02
ATOM	3967	OH2	HOH	W	75	-0.698	20.410	-0.675	1.00	23.31
ATOM	3970	OH2	HOH	W	76	19.556	38.814	-10.469	1.00	26.20
ATOM	3973	OH2	HOH	W	77	4.450	32.708	13.071	1.00	24.43
ATOM	3976	OH2	HOH	W	78	1.052	18.358	12.276	1.00	34.72
ATOM	3979	OH2	HOH	W	79	11.832	6.851	15.414	1.00	30.11
ATOM	3982	OH2	HOH	W	80	4.586	32.608	-13.395	1.00	33.70
ATOM	3985	OH2	HOH	W	81	22.062	34.132	-14.209	1.00	21.98
ATOM	3988	OH2	HOH	W	82	20.146	10.905	13.559	1.00	33.56
ATOM	3991	OH2	HOH	W	83	27.558	17.467	16.706	1.00	26.60
ATOM	3994	OH2	HOH	W	84	16.395	45.178	-6.175	1.00	30.76
ATOM	3997	OH2	HOH	W	85	28.889	26.973	-1.045	1.00	30.80
ATOM	4000	OH2	HOH	W	86	6.740	40.727	6.077	1.00	25.10
ATOM	4003	OH2	HOH	W	87	4.651	20.004	11.014	1.00	28.93
ATOM	4006	OH2	HOH	W	88	19.925	26.259	-14.193	1.00	28.49
ATOM	4009	OH2	HOH	W	89	32.933	17.501	11.128	1.00	29.39
ATOM	4012	OH2	HOH	W	90	22.117	19.486	24.116	1.00	29.72
ATOM	4015	OH2	HOH	W	91	16.563	42.717	-7.537	1.00	38.33
ATOM	4018	OH2	HOH	W	92	10.585	11.488	20.926	1.00	28.39
ATOM	4021	OH2	HOH	W	93	32.153	21.984	7.770	1.00	37.67
ATOM	4024	OH2	HOH	W	94	19.838	24.340	26.802	1.00	32.22
ATOM	4027	OH2	HOH	W	95	21.135	23.974	24.266	1.00	32.86
ATOM	4030	OH2	HOH	W	96	17.957	11.867	-5.395	1.00	30.06
ATOM	4033	OH2	HOH	W	97	0.953	20.261	8.008	1.00	41.09
ATOM	4036	OH2	HOH	W	98	32.062	37.265	6.823	1.00	30.65
ATOM	4039	OH2	HOH	W	99	14.742	23.673	-11.816	1.00	23.19
ATOM	4042	OH2	HOH	W	100	-5.742	19.592	10.594	1.00	29.15

ATOM	4045	OH2	HOH	W	101	17.866	9.888	24.166	1.00	32.36
ATOM	4048	OH2	HOH	W	102	-5.043	15.461	9.612	1.00	32.25
ATOM	4051	OH2	HOH	W	103	1.455	9.372	16.114	1.00	29.97
ATOM	4054	OH2	HOH	W	104	16.690	22.823	-10.497	1.00	38.29
ATOM	4057	OH2	HOH	W	105	15.984	27.047	24.287	1.00	27.58
ATOM	4060	OH2	HOH	W	106	29.067	30.034	7.947	1.00	30.09
ATOM	4063	OH2	HOH	W	107	26.873	13.684	18.289	1.00	30.30
ATOM	4066	OH2	HOH	W	108	26.611	35.649	11.995	1.00	30.43
ATOM	4069	OH2	HOH	W	109	17.645	25.226	-16.842	1.00	30.04
ATOM	4072	OH2	HOH	W	110	21.298	10.927	23.220	1.00	39.36
ATOM	4075	OH2	HOH	W	111	-3.755	20.234	1.273	1.00	35.21
ATOM	4078	OH2	HOH	W	112	16.849	35.173	12.810	1.00	40.15
ATOM	4081	OH2	HOH	W	113	32.680	8.857	13.943	1.00	32.58
ATOM	4084	OH2	HOH	W	114	13.401	38.319	-2.260	1.00	37.10
ATOM	4087	OH2	HOH	W	115	25.947	38.794	-0.457	1.00	33.15
ATOM	4090	OH2	HOH	W	116	3.045	36.679	15.657	1.00	38.38
ATOM	4093	OH2	HOH	W	117	28.634	17.418	-4.461	1.00	27.64
ATOM	4096	OH2	HOH	W	118	13.195	17.931	24.435	1.00	31.39
ATOM	4099	OH2	HOH	W	119	24.218	30.053	18.129	1.00	35.53
ATOM	4102	OH2	HOH	W	120	30.332	20.582	15.574	1.00	35.53
ATOM	4105	OH2	HOH	W	121	9.403	44.536	-10.706	1.00	35.40
ATOM	4108	OH2	HOH	W	122	30.488	25.100	9.901	1.00	33.98
ATOM	4111	OH2	HOH	W	123	15.784	12.389	-6.525	1.00	43.55
ATOM	4114	OH2	HOH	W	124	7.688	11.687	19.060	1.00	36.87
ATOM	4117	OH2	HOH	W	125	-3.912	32.863	0.241	1.00	30.58
ATOM	4120	OH2	HOH	W	126	14.714	9.545	5.346	1.00	30.45
ATOM	4123	OH2	HOH	W	127	17.279	23.551	-14.954	1.00	35.71
ATOM	4126	OH2	HOH	W	128	-2.467	36.346	15.921	1.00	42.28
ATOM	4129	OH2	HOH	W	129	-3.300	17.162	20.997	1.00	40.02
ATOM	4132	OH2	HOH	W	130	14.917	7.632	18.357	1.00	38.85
ATOM	4135	OH2	HOH	W	131	13.916	47.035	-14.990	1.00	42.89
ATOM	4138	OH2	HOH	W	132	6.831	25.776	22.177	1.00	27.21
ATOM	4141	OH2	HOH	W	133	4.483	6.781	12.443	1.00	39.57
ATOM	4144	OH2	HOH	W	134	27.504	19.574	-6.046	1.00	31.34
ATOM	4147	OH2	HOH	W	135	27.222	37.371	-3.488	1.00	36.87
ATOM	4150	OH2	HOH	W	136	26.328	23.713	-6.285	1.00	30.37
ATOM	4153	OH2	HOH	W	137	9.900	5.416	-5.773	1.00	42.95
ATOM	4156	OH2	HOH	W	138	19.302	42.237	-8.390	1.00	47.29
ATOM	4159	OH2	HOH	W	139	27.974	24.430	-4.232	1.00	37.77
ATOM	4162	OH2	HOH	W	140	-0.411	22.132	16.514	1.00	36.68
ATOM	4165	OH2	HOH	W	141	28.981	15.448	17.768	1.00	39.88
ATOM	4168	OH2	HOH	W	142	7.596	35.277	11.339	1.00	34.57
ATOM	4171	OH2	HOH	W	143	10.487	13.988	22.355	1.00	42.95
ATOM	4174	OH2	HOH	W	144	21.560	34.054	-17.435	1.00	29.46
ATOM	4177	OH2	HOH	W	145	13.715	14.679	-10.482	1.00	43.27
ATOM	4180	OH2	HOH	W	146	1.935	11.547	18.248	1.00	40.18
ATOM	4183	OH2	HOH	W	147	3.393	17.712	23.189	1.00	33.07
ATOM	4186	OH2	HOH	W	148	-3.496	36.740	-0.124	1.00	47.29
ATOM	4189	OH2	HOH	W	149	22.254	22.228	-9.526	1.00	38.26
ATOM	4192	OH2	HOH	W	150	3.195	7.573	9.719	1.00	40.89
ATOM	4195	OH2	HOH	W	151	-7.121	16.750	10.286	1.00	42.26
ATOM	4198	OH2	HOH	W	152	16.161	8.774	9.578	1.00	41.94
ATOM	4201	OH2	HOH	W	153	16.092	35.277	10.412	1.00	42.26
ATOM	4204	OH2	HOH	W	154	26.133	30.721	14.238	1.00	45.33
ATOM	4207	OH2	HOH	W	155	24.524	0.768	13.585	1.00	38.75
ATOM	4210	OH2	HOH	W	156	31.083	31.795	0.067	1.00	36.20
ATOM	4213	OH2	HOH	W	157	3.167	21.515	22.429	1.00	36.00
ATOM	4216	OH2	HOH	W	158	24.801	33.964	9.921	1.00	45.48
ATOM	4219	OH2	HOH	W	159	-3.493	32.134	-4.498	1.00	42.32
ATOM	4222	OH2	HOH	W	160	12.768	14.064	-13.158	1.00	46.22
ATOM	4225	OH2	HOH	W	161	12.666	38.337	-17.657	1.00	36.30

ATOM	4228	OH2	HOH	W	162	15.370	13.648	-8.783	1.00	45.53
ATOM	4231	OH2	HOH	W	163	36.549	11.808	12.902	1.00	35.47
ATOM	4234	OH2	HOH	W	164	24.222	24.289	27.671	1.00	31.43
ATOM	4237	OH2	HOH	W	165	12.153	35.795	11.204	1.00	41.20
ATOM	4240	OH2	HOH	W	166	9.700	36.766	11.913	1.00	39.29
ATOM	4243	OH2	HOH	W	167	11.543	16.643	21.740	1.00	43.82
ATOM	4246	OH2	HOH	W	168	23.124	4.374	6.956	1.00	45.07
ATOM	4249	OH2	HOH	W	169	4.770	26.940	19.244	1.00	43.32
ATOM	4252	OH2	HOH	W	171	29.445	23.775	15.949	1.00	41.74
ATOM	4255	OH2	HOH	W	172	33.619	20.957	9.469	1.00	35.28
ATOM	4258	OH2	HOH	W	173	4.589	35.695	-6.166	1.00	43.92
ATOM	4261	OH2	HOH	W	174	22.229	12.974	22.170	1.00	29.78
ATOM	4264	OH2	HOH	W	175	22.749	36.545	7.072	1.00	32.48
ATOM	4267	OH2	HOH	W	176	22.768	12.143	4.126	1.00	34.54
ATOM	4270	OH2	HOH	W	177	20.396	11.626	6.932	1.00	40.14
ATOM	4273	OH2	HOH	W	178	19.949	37.352	6.938	1.00	43.05
ATOM	4276	OH2	HOH	W	179	0.318	34.055	-10.167	1.00	37.51
ATOM	4279	OH2	HOH	W	180	27.777	26.561	-5.580	1.00	38.70
ATOM	4282	OH2	HOH	W	181	-7.821	33.694	15.658	1.00	43.77
ATOM	4285	OH2	HOH	W	182	-1.174	17.500	15.475	1.00	44.52
ATOM	4288	OH2	HOH	W	183	21.613	18.685	-8.904	1.00	37.57
ATOM	4291	OH2	HOH	W	184	18.530	10.217	-2.679	1.00	43.00
ATOM	4294	OH2	HOH	W	185	-2.070	39.118	11.910	1.00	44.15
ATOM	4297	OH2	HOH	W	186	-5.845	26.909	19.878	1.00	48.94
ATOM	4300	OH2	HOH	W	187	-4.797	27.850	-3.050	1.00	49.09
ATOM	4303	OH2	HOH	W	188	21.283	35.111	2.806	1.00	28.83
ATOM	4306	OH2	HOH	W	189	18.741	35.515	3.236	1.00	36.23
ATOM	4309	OH2	HOH	W	190	-2.385	36.331	-3.442	1.00	42.61
ATOM	4312	OH2	HOH	W	191	12.897	13.429	23.065	1.00	47.11
ATOM	4315	OH2	HOH	W	192	11.734	51.930	-2.413	1.00	48.51
ATOM	4318	OH2	HOH	W	193	27.495	4.321	15.536	1.00	37.55
ATOM	4321	OH2	HOH	W	194	1.360	22.823	18.157	1.00	44.43
ATOM	4324	OH2	HOH	W	195	30.702	35.970	17.204	1.00	56.42
ATOM	4327	OH2	HOH	W	196	15.854	8.709	1.293	1.00	41.56
ATOM	4330	OH2	HOH	W	197	7.603	41.670	3.075	1.00	51.02
ATOM	4333	OH2	HOH	W	198	20.289	10.918	2.624	1.00	39.89
ATOM	4336	OH2	HOH	W	199	24.813	12.186	-4.391	1.00	31.75
ATOM	4339	OH2	HOH	W	200	25.698	12.916	-2.334	1.00	34.86
ATOM	4342	OH2	HOH	W	201	10.148	15.062	-10.418	1.00	42.93
ATOM	4345	OH2	HOH	W	202	2.551	18.776	8.755	1.00	38.89
ATOM	4348	OH2	HOH	W	203	5.727	31.066	18.521	1.00	40.86
ATOM	4351	OH2	HOH	W	205	22.290	25.210	-10.050	1.00	36.35
ATOM	4354	OH2	HOH	W	206	27.494	25.373	18.119	1.00	43.80
ATOM	4357	OH2	HOH	W	207	19.704	38.102	-16.736	1.00	42.96
ATOM	4360	OH2	HOH	W	208	31.448	37.858	2.208	1.00	49.68
ATOM	4363	OH2	HOH	W	209	22.129	49.138	-11.083	1.00	52.80
ATOM	4366	OH2	HOH	W	211	17.218	13.335	-10.543	1.00	49.10
ATOM	4369	OH2	HOH	W	212	23.140	27.375	-13.205	1.00	45.56
ATOM	4372	OH2	HOH	W	213	22.259	35.803	9.828	1.00	37.67
ATOM	4375	OH2	HOH	W	214	5.278	33.991	14.876	1.00	51.67
ATOM	4378	OH2	HOH	W	215	27.663	36.926	-0.953	1.00	41.76
ATOM	4381	OH2	HOH	W	217	14.502	35.566	4.101	1.00	45.42
ATOM	4384	OH2	HOH	W	218	26.326	29.701	21.539	1.00	38.49
ATOM	4387	OH2	HOH	W	219	8.476	5.105	15.999	1.00	43.06
ATOM	4390	OH2	HOH	W	220	27.189	34.442	24.885	1.00	36.98
ATOM	4393	OH2	HOH	W	221	20.649	45.763	-8.645	1.00	43.89
ATOM	4396	OH2	HOH	W	223	7.448	35.230	14.873	1.00	35.81
ATOM	4399	OH2	HOH	W	224	-7.954	27.430	6.637	1.00	51.06
ATOM	4402	OH2	HOH	W	226	2.926	32.535	18.042	1.00	49.53
ATOM	4405	OH2	HOH	W	227	23.072	40.040	-1.900	1.00	48.81
ATOM	4408	OH2	HOH	W	229	5.317	35.724	12.637	1.00	50.79

ATOM	4411	OH2 HOH W 231	15.097	37.872	20.843	1.00	49.88
ATOM	4414	OH2 HOH W 232	-3.341	12.532	17.990	1.00	45.83

Table 1b**Coordinates of DFFK-chloromethyl ketone inhibited Prostatic**

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HEADER      ----                      XX-XXX-XX      xxxx
COMPND      ---
REMARK      3
REMARK      3 REFINEMENT.
REMARK      3   PROGRAM      : REFMAC 5.2.0005
REMARK      3   AUTHORS      : MURSHUDOV,VAGIN,DODSON
REMARK      3
REMARK      3   REFINEMENT TARGET : MAXIMUM LIKELIHOOD
REMARK      3
REMARK      3 DATA USED IN REFINEMENT.
REMARK      3 RESOLUTION RANGE HIGH (ANGSTROMS) : 1.70
REMARK      3 RESOLUTION RANGE LOW  (ANGSTROMS) : 34.10
REMARK      3 DATA CUTOFF          (SIGMA(F)) : NONE
REMARK      3 COMPLETENESS FOR RANGE          (%) : 98.29
REMARK      3 NUMBER OF REFLECTIONS              : 24009
REMARK      3
REMARK      3 FIT TO DATA USED IN REFINEMENT.
REMARK      3 CROSS-VALIDATION METHOD              : THROUGHOUT
REMARK      3 FREE R VALUE TEST SET SELECTION      : RANDOM
REMARK      3 R VALUE          (WORKING + TEST SET) : 0.15694
REMARK      3 R VALUE          (WORKING SET)         : 0.15521
REMARK      3 FREE R VALUE                          : 0.19000
REMARK      3 FREE R VALUE TEST SET SIZE          (%) : 5.0
REMARK      3 FREE R VALUE TEST SET COUNT          : 1256
REMARK      3
REMARK      3 FIT IN THE HIGHEST RESOLUTION BIN.
REMARK      3 TOTAL NUMBER OF BINS USED              : 20
REMARK      3 BIN RESOLUTION RANGE HIGH              : 1.700
REMARK      3 BIN RESOLUTION RANGE LOW               : 1.744
REMARK      3 REFLECTION IN BIN          (WORKING SET) : 1549
REMARK      3 BIN COMPLETENESS (WORKING+TEST) (%)     : 87.93
REMARK      3 BIN R VALUE                  (WORKING SET) : 0.210
REMARK      3 BIN FREE R VALUE SET COUNT              : 76
REMARK      3 BIN FREE R VALUE                  : 0.314
REMARK      3
REMARK      3 NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK      3 ALL ATOMS                          : 2243
REMARK      3
REMARK      3 B VALUES.
REMARK      3 FROM WILSON PLOT          (A**2) : NULL
REMARK      3 MEAN B VALUE          (OVERALL, A**2) : 13.238
REMARK      3 OVERALL ANISOTROPIC B VALUE.
REMARK      3 B11 (A**2) : -0.14
REMARK      3 B22 (A**2) : 0.08
REMARK      3 B33 (A**2) : 0.05
REMARK      3 B12 (A**2) : 0.00
REMARK      3 B13 (A**2) : 0.00
REMARK      3 B23 (A**2) : 0.00
REMARK      3
REMARK      3 ESTIMATED OVERALL COORDINATE ERROR.
REMARK      3 ESU BASED ON R VALUE                      (A) :
0.104

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REMARK 3 ESU BASED ON FREE R VALUE (A):
0.101
REMARK 3 ESU BASED ON MAXIMUM LIKELIHOOD (A):
0.064
REMARK 3 ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2):
1.903
REMARK 3
REMARK 3 CORRELATION COEFFICIENTS.
REMARK 3 CORRELATION COEFFICIENT FO-FC : 0.963
REMARK 3 CORRELATION COEFFICIENT FO-FC FREE : 0.943
REMARK 3
REMARK 3 RMS DEVIATIONS FROM IDEAL VALUES COUNT RMS
WEIGHT
REMARK 3 BOND LENGTHS REFINED ATOMS (A): 2044 ; 0.012 ;
0.021
REMARK 3 BOND LENGTHS OTHERS (A): 1785 ; 0.001 ;
0.020
REMARK 3 BOND ANGLES REFINED ATOMS (DEGREES): 2797 ; 1.427 ;
1.963
REMARK 3 BOND ANGLES OTHERS (DEGREES): 4181 ; 0.797 ;
3.000
REMARK 3 TORSION ANGLES, PERIOD 1 (DEGREES): 260 ; 5.706 ;
5.000
REMARK 3 TORSION ANGLES, PERIOD 2 (DEGREES): 82 ; 34.094
;24.512
REMARK 3 TORSION ANGLES, PERIOD 3 (DEGREES): 299 ; 11.716
;15.000
REMARK 3 TORSION ANGLES, PERIOD 4 (DEGREES): 7 ; 12.785
;15.000
REMARK 3 CHIRAL-CENTER RESTRAINTS (A**3): 301 ; 0.087 ;
0.200
REMARK 3 GENERAL PLANES REFINED ATOMS (A): 2277 ; 0.006 ;
0.020
REMARK 3 GENERAL PLANES OTHERS (A): 392 ; 0.001 ;
0.020
REMARK 3 NON-BONDED CONTACTS REFINED ATOMS (A): 445 ; 0.238 ;
0.200
REMARK 3 NON-BONDED CONTACTS OTHERS (A): 1991 ; 0.189 ;
0.200
REMARK 3 NON-BONDED TORSION REFINED ATOMS (A): 1022 ; 0.184 ;
0.200
REMARK 3 NON-BONDED TORSION OTHERS (A): 1228 ; 0.089 ;
0.200
REMARK 3 H-BOND (X...Y) REFINED ATOMS (A): 200 ; 0.134 ;
0.200
REMARK 3 SYMMETRY VDW REFINED ATOMS (A): 24 ; 0.257 ;
0.200
REMARK 3 SYMMETRY VDW OTHERS (A): 71 ; 0.202 ;
0.200
REMARK 3 SYMMETRY H-BOND REFINED ATOMS (A): 33 ; 0.176 ;
0.200
REMARK 3
REMARK 3 ISOTROPIC THERMAL FACTOR RESTRAINTS. COUNT RMS
WEIGHT
REMARK 3 MAIN-CHAIN BOND REFINED ATOMS (A**2): 1606 ; 1.454 ;
2.000
REMARK 3 MAIN-CHAIN BOND OTHER ATOMS (A**2): 520 ; 0.293 ;
2.000
REMARK 3 MAIN-CHAIN ANGLE REFINED ATOMS (A**2): 2065 ; 1.900 ;
3.000

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REMARK 3 SIDE-CHAIN BOND REFINED ATOMS (A**2): 902 ; 3.772 ;
5.000
REMARK 3 SIDE-CHAIN ANGLE REFINED ATOMS (A**2): 728 ; 5.332 ;
8.000
REMARK 3
REMARK 3 NCS RESTRAINTS STATISTICS
REMARK 3 NUMBER OF NCS GROUPS : NULL
REMARK 3
REMARK 3
REMARK 3 TLS DETAILS
REMARK 3 NUMBER OF TLS GROUPS : NULL
REMARK 3
REMARK 3
REMARK 3 BULK SOLVENT MODELLING.
REMARK 3 METHOD USED : BABINET MODEL WITH MASK
REMARK 3 PARAMETERS FOR MASK CALCULATION
REMARK 3 VDW PROBE RADIUS : 1.20
REMARK 3 ION PROBE RADIUS : 0.80
REMARK 3 SHRINKAGE RADIUS : 0.80
REMARK 3
REMARK 3 OTHER REFINEMENT REMARKS:
REMARK 3 HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS
REMARK 3
LINK SG ACYS B 70 2.031 SG CYS B 86
SS
SSBOND 1 CYS B 168 CYS B 244
SSBOND 2 CYS B 201 CYS B 223
SSBOND 3 CYS B 234 CYS B 262
CISPEP 1 THR B 184 PRO B 185 0.00
CRYST1 37.677 75.880 79.179 90.00 90.00 90.00 P 21 21 21
SCALE1 0.026541 0.000000 0.000000 0.000000
SCALE2 0.000000 0.013179 0.000000 0.000000
SCALE3 0.000000 0.000000 0.012630 0.000000
ATOM 1 N ILE B 45 32.479 -5.195 23.924 1.00 9.17
ATOM 2 CA ILE B 45 33.132 -5.340 22.601 1.00 9.29
ATOM 4 CB ILE B 45 34.625 -5.035 22.693 1.00 9.55
ATOM 6 CG1 ILE B 45 34.867 -3.645 23.300 1.00 9.89
ATOM 9 CD1 ILE B 45 34.555 -2.503 22.388 1.00 8.38
ATOM 13 CG2 ILE B 45 35.292 -5.199 21.320 1.00 10.21
ATOM 17 C ILE B 45 32.963 -6.782 22.124 1.00 9.78
ATOM 18 O ILE B 45 33.283 -7.697 22.854 1.00 9.53
ATOM 22 N THR B 46 32.457 -6.965 20.906 1.00 10.46
ATOM 23 CA THR B 46 32.315 -8.299 20.347 1.00 10.82
ATOM 25 CB THR B 46 30.855 -8.647 19.940 1.00 11.76
ATOM 27 OG1 THR B 46 30.791 -10.010 19.497 1.00 12.56
ATOM 29 CG2 THR B 46 30.328 -7.725 18.849 1.00 11.19
ATOM 33 C THR B 46 33.277 -8.388 19.170 1.00 10.97
ATOM 34 O THR B 46 33.442 -7.442 18.421 1.00 9.92
ATOM 36 N GLY B 47 33.928 -9.535 19.035 1.00 11.26
ATOM 37 CA GLY B 47 34.768 -9.769 17.893 1.00 11.78
ATOM 40 C GLY B 47 36.179 -9.270 18.035 1.00 11.94
ATOM 41 O GLY B 47 36.955 -9.311 17.065 1.00 13.39
ATOM 43 N GLY B 48 36.520 -8.808 19.236 1.00 11.14
ATOM 44 CA GLY B 48 37.821 -8.262 19.475 1.00 11.73
ATOM 47 C GLY B 48 38.717 -9.204 20.238 1.00 13.16
ATOM 48 O GLY B 48 38.516 -10.420 20.232 1.00 14.99
ATOM 50 N SER B 49 39.709 -8.632 20.903 1.00 12.87
ATOM 51 CA SER B 49 40.656 -9.417 21.692 1.00 12.60
ATOM 53 CB SER B 49 41.957 -9.592 20.925 1.00 13.49
ATOM 56 OG SER B 49 42.593 -8.338 20.673 1.00 13.97
ATOM 58 C SER B 49 40.924 -8.722 23.000 1.00 12.95

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ATOM	59	O	SER B	49	40.588	-7.542	23.166	1.00	11.06
ATOM	61	N	SER B	50	41.603	-9.423	23.903	1.00	12.13
ATOM	62	CA	SER B	50	42.010	-8.823	25.164	1.00	11.45
ATOM	64	CB	SER B	50	42.311	-9.887	26.223	1.00	12.37
ATOM	67	OG	SER B	50	41.116	-10.552	26.572	1.00	13.76
ATOM	69	C	SER B	50	43.225	-7.963	24.958	1.00	11.63
ATOM	70	O	SER B	50	44.252	-8.414	24.427	1.00	10.93
ATOM	72	N	ALA B	51	43.107	-6.712	25.369	1.00	10.73
ATOM	73	CA	ALA B	51	44.255	-5.821	25.425	1.00	11.39
ATOM	75	CB	ALA B	51	43.800	-4.430	25.754	1.00	12.04
ATOM	79	C	ALA B	51	45.289	-6.304	26.449	1.00	13.55
ATOM	80	O	ALA B	51	44.968	-7.029	27.380	1.00	13.28
ATOM	82	N	VAL B	52	46.534	-5.919	26.249	1.00	15.71
ATOM	83	CA	VAL B	52	47.563	-6.103	27.268	1.00	16.99
ATOM	85	CB	VAL B	52	48.976	-6.234	26.636	1.00	18.95
ATOM	87	CG1	VAL B	52	48.967	-7.228	25.483	1.00	21.60
ATOM	91	CG2	VAL B	52	49.489	-4.913	26.162	1.00	22.01
ATOM	95	C	VAL B	52	47.517	-4.918	28.232	1.00	18.20
ATOM	96	O	VAL B	52	47.108	-3.823	27.856	1.00	17.03
ATOM	98	N	ALA B	53	47.931	-5.124	29.484	1.00	18.54
ATOM	99	CA	ALA B	53	47.899	-4.048	30.478	1.00	18.91
ATOM	101	CB	ALA B	53	48.369	-4.542	31.856	1.00	19.66
ATOM	105	C	ALA B	53	48.770	-2.892	29.997	1.00	19.25
ATOM	106	O	ALA B	53	49.836	-3.106	29.416	1.00	20.00
ATOM	108	N	GLY B	54	48.286	-1.670	30.186	1.00	19.50
ATOM	109	CA	GLY B	54	49.036	-0.487	29.770	1.00	18.55
ATOM	112	C	GLY B	54	48.804	-0.093	28.327	1.00	17.21
ATOM	113	O	GLY B	54	49.225	0.985	27.911	1.00	16.53
ATOM	115	N	GLN B	55	48.115	-0.945	27.559	1.00	17.42
ATOM	116	CA	GLN B	55	47.915	-0.677	26.137	1.00	16.31
ATOM	118	CB	GLN B	55	47.368	-1.918	25.429	1.00	17.19
ATOM	121	CG	GLN B	55	47.572	-1.870	23.956	1.00	18.92
ATOM	124	CD	GLN B	55	47.344	-3.193	23.219	1.00	19.86
ATOM	125	OE1	GLN B	55	47.518	-3.233	22.006	1.00	31.16
ATOM	126	NE2	GLN B	55	46.925	-4.244	23.915	1.00	11.50
ATOM	129	C	GLN B	55	47.050	0.557	25.827	1.00	16.65
ATOM	130	O	GLN B	55	47.363	1.310	24.911	1.00	18.78
ATOM	132	N	TRP B	56	45.978	0.761	26.572	1.00	13.82
ATOM	133	CA	TRP B	56	45.029	1.863	26.285	1.00	12.36
ATOM	135	CB	TRP B	56	43.721	1.300	25.746	1.00	12.22
ATOM	138	CG	TRP B	56	43.922	0.411	24.581	1.00	10.21
ATOM	139	CD1	TRP B	56	43.906	-0.943	24.573	1.00	10.51
ATOM	141	NE1	TRP B	56	44.143	-1.412	23.313	1.00	12.67
ATOM	143	CE2	TRP B	56	44.334	-0.351	22.478	1.00	9.43
ATOM	144	CD2	TRP B	56	44.212	0.817	23.255	1.00	8.35
ATOM	145	CE3	TRP B	56	44.324	2.052	22.627	1.00	10.75
ATOM	147	CZ3	TRP B	56	44.599	2.085	21.280	1.00	11.94
ATOM	149	CH2	TRP B	56	44.732	0.912	20.543	1.00	9.85
ATOM	151	CZ2	TRP B	56	44.587	-0.311	21.115	1.00	10.27
ATOM	153	C	TRP B	56	44.821	2.610	27.597	1.00	10.47
ATOM	154	O	TRP B	56	43.774	2.501	28.239	1.00	8.57
ATOM	156	N	PRO B	57	45.863	3.328	28.036	1.00	10.15
ATOM	157	CA	PRO B	57	45.894	3.845	29.394	1.00	10.34
ATOM	159	CB	PRO B	57	47.343	4.295	29.563	1.00	11.49
ATOM	162	CG	PRO B	57	47.796	4.627	28.174	1.00	10.27
ATOM	165	CD	PRO B	57	47.080	3.662	27.270	1.00	10.75
ATOM	168	C	PRO B	57	44.900	4.979	29.677	1.00	8.95
ATOM	169	O	PRO B	57	44.784	5.441	30.821	1.00	10.15
ATOM	170	N	TRP B	58	44.232	5.455	28.633	1.00	9.52
ATOM	171	CA	TRP B	58	43.203	6.463	28.764	1.00	8.97
ATOM	173	CB	TRP B	58	43.143	7.383	27.548	1.00	9.77

ATOM	176	CG	TRP	B	58	43.314	6.679	26.240	1.00	6.25
ATOM	177	CD1	TRP	B	58	42.336	6.108	25.460	1.00	7.31
ATOM	179	NE1	TRP	B	58	42.901	5.582	24.331	1.00	9.26
ATOM	181	CE2	TRP	B	58	44.248	5.798	24.347	1.00	6.32
ATOM	182	CD2	TRP	B	58	44.547	6.481	25.542	1.00	6.70
ATOM	183	CE3	TRP	B	58	45.861	6.859	25.786	1.00	8.15
ATOM	185	CZ3	TRP	B	58	46.843	6.517	24.867	1.00	11.45
ATOM	187	CH2	TRP	B	58	46.514	5.819	23.700	1.00	9.47
ATOM	189	CZ2	TRP	B	58	45.235	5.465	23.415	1.00	9.66
ATOM	191	C	TRP	B	58	41.846	5.827	28.977	1.00	9.07
ATOM	192	O	TRP	B	58	40.912	6.529	29.331	1.00	7.83
ATOM	194	N	GLN	B	59	41.729	4.504	28.803	1.00	8.10
ATOM	195	CA	GLN	B	59	40.431	3.855	29.014	1.00	8.57
ATOM	197	CB	GLN	B	59	40.473	2.400	28.541	1.00	8.43
ATOM	200	CG	GLN	B	59	39.190	1.579	28.883	1.00	8.42
ATOM	203	CD	GLN	B	59	38.037	1.874	27.957	1.00	7.28
ATOM	204	OE1	GLN	B	59	38.165	1.748	26.753	1.00	10.12
ATOM	205	NE2	GLN	B	59	36.891	2.243	28.513	1.00	6.24
ATOM	208	C	GLN	B	59	40.097	3.809	30.480	1.00	8.44
ATOM	209	O	GLN	B	59	40.921	3.315	31.276	1.00	9.52
ATOM	211	N	VAL	B	60	38.891	4.274	30.839	1.00	7.50
ATOM	212	CA	VAL	B	60	38.410	4.203	32.215	1.00	8.18
ATOM	214	CB	VAL	B	60	38.331	5.599	32.900	1.00	8.76
ATOM	216	CG1	VAL	B	60	39.666	6.344	32.785	1.00	8.93
ATOM	220	CG2	VAL	B	60	37.223	6.416	32.345	1.00	8.10
ATOM	224	C	VAL	B	60	37.062	3.505	32.270	1.00	8.21
ATOM	225	O	VAL	B	60	36.366	3.388	31.263	1.00	7.57
ATOM	227	N	SER	B	61	36.716	3.037	33.454	1.00	7.37
ATOM	228	CA	SER	B	61	35.449	2.378	33.708	1.00	8.91
ATOM	230	CB	SER	B	61	35.664	1.021	34.385	1.00	10.09
ATOM	233	OG	SER	B	61	34.485	0.598	35.069	1.00	12.50
ATOM	235	C	SER	B	61	34.636	3.286	34.608	1.00	8.47
ATOM	236	O	SER	B	61	35.174	3.845	35.546	1.00	9.55
ATOM	238	N	ILE	B	62	33.353	3.448	34.282	1.00	10.10
ATOM	239	CA	ILE	B	62	32.450	4.274	35.052	1.00	10.71
ATOM	241	CB	ILE	B	62	31.650	5.223	34.171	1.00	11.81
ATOM	243	CG1	ILE	B	62	32.555	5.982	33.169	1.00	17.41
ATOM	246	CD1	ILE	B	62	33.432	6.947	33.753	1.00	17.75
ATOM	250	CG2	ILE	B	62	30.816	6.164	35.026	1.00	14.08
ATOM	254	C	ILE	B	62	31.459	3.322	35.688	1.00	10.01
ATOM	255	O	ILE	B	62	30.827	2.526	34.985	1.00	9.85
ATOM	257	N	THR	B	63	31.338	3.408	37.007	1.00	9.99
ATOM	258	CA	THR	B	63	30.339	2.638	37.711	1.00	10.14
ATOM	260	CB	THR	B	63	30.951	1.844	38.876	1.00	11.87
ATOM	262	OG1	THR	B	63	31.561	2.771	39.791	1.00	10.61
ATOM	264	CG2	THR	B	63	31.973	0.821	38.383	1.00	11.83
ATOM	268	C	THR	B	63	29.269	3.558	38.270	1.00	10.15
ATOM	269	O	THR	B	63	29.526	4.736	38.578	1.00	9.94
ATOM	271	N	TYR	B	64	28.060	3.018	38.408	1.00	10.29
ATOM	272	CA	TYR	B	64	26.971	3.716	39.079	1.00	11.32
ATOM	274	CB	TYR	B	64	25.840	4.104	38.124	1.00	13.72
ATOM	277	CG	TYR	B	64	24.827	4.977	38.821	1.00	14.21
ATOM	278	CD1	TYR	B	64	25.140	6.281	39.150	1.00	19.62
ATOM	280	CE1	TYR	B	64	24.247	7.083	39.824	1.00	20.24
ATOM	282	CZ	TYR	B	64	23.026	6.595	40.186	1.00	21.27
ATOM	283	OH	TYR	B	64	22.171	7.450	40.861	1.00	23.48
ATOM	285	CE2	TYR	B	64	22.681	5.284	39.875	1.00	21.08
ATOM	287	CD2	TYR	B	64	23.589	4.486	39.202	1.00	20.15
ATOM	289	C	TYR	B	64	26.464	2.787	40.155	1.00	11.98
ATOM	290	O	TYR	B	64	26.115	1.640	39.874	1.00	10.44
ATOM	292	N	GLU	B	65	26.465	3.290	41.385	1.00	12.11

ATOM	293	CA	GLU	B	65	26.220	2.466	42.581	1.00	12.71
ATOM	295	CB	GLU	B	65	24.721	2.272	42.788	1.00	14.23
ATOM	298	CG	GLU	B	65	24.002	3.568	43.096	1.00	18.18
ATOM	301	CD	GLU	B	65	24.183	4.085	44.544	1.00	23.84
ATOM	302	OE1	GLU	B	65	24.901	3.491	45.399	1.00	22.83
ATOM	303	OE2	GLU	B	65	23.564	5.124	44.822	1.00	30.44
ATOM	304	C	GLU	B	65	27.004	1.145	42.552	1.00	12.51
ATOM	305	O	GLU	B	65	26.492	0.095	42.895	1.00	13.46
ATOM	307	N	GLY	B	66	28.272	1.219	42.133	1.00	10.24
ATOM	308	CA	GLY	B	66	29.179	0.070	42.120	1.00	10.92
ATOM	311	C	GLY	B	66	29.145	-0.812	40.897	1.00	10.69
ATOM	312	O	GLY	B	66	29.970	-1.728	40.776	1.00	12.90
ATOM	314	N	VAL	B	67	28.182	-0.565	40.009	1.00	10.81
ATOM	315	CA	VAL	B	67	27.983	-1.397	38.810	1.00	11.66
ATOM	317	CB	VAL	B	67	26.492	-1.662	38.531	1.00	12.62
ATOM	319	CG1	VAL	B	67	26.335	-2.541	37.295	1.00	14.89
ATOM	323	CG2	VAL	B	67	25.835	-2.326	39.739	1.00	14.97
ATOM	327	C	VAL	B	67	28.594	-0.710	37.594	1.00	10.83
ATOM	328	O	VAL	B	67	28.317	0.453	37.360	1.00	10.50
ATOM	330	N	HIS	B	68	29.415	-1.433	36.829	1.00	12.71
ATOM	331	CA	HIS	B	68	30.009	-0.870	35.633	1.00	11.69
ATOM	333	CB	HIS	B	68	30.988	-1.819	34.944	1.00	12.00
ATOM	336	CG	HIS	B	68	31.452	-1.325	33.603	1.00	13.35
ATOM	337	ND1	HIS	B	68	30.873	-1.727	32.418	1.00	17.97
ATOM	339	CE1	HIS	B	68	31.473	-1.116	31.409	1.00	11.85
ATOM	341	NE2	HIS	B	68	32.411	-0.328	31.899	1.00	16.47
ATOM	343	CD2	HIS	B	68	32.415	-0.437	33.267	1.00	9.69
ATOM	345	C	HIS	B	68	28.884	-0.602	34.679	1.00	11.96
ATOM	346	O	HIS	B	68	28.068	-1.494	34.391	1.00	12.69
ATOM	348	N	VAL	B	69	28.815	0.623	34.200	1.00	10.66
ATOM	349	CA	VAL	B	69	27.785	1.005	33.254	1.00	10.31
ATOM	351	CB	VAL	B	69	26.799	2.021	33.852	1.00	10.94
ATOM	353	CG1	VAL	B	69	26.064	1.421	35.038	1.00	13.01
ATOM	357	CG2	VAL	B	69	27.475	3.328	34.251	1.00	11.61
ATOM	361	C	VAL	B	69	28.305	1.536	31.935	1.00	10.93
ATOM	362	O	VAL	B	69	27.610	1.476	30.913	1.00	9.35
ATOM	364	N	CYS	B	70	29.486	2.117	31.935	1.00	9.71
ATOM	365	CA	ACYS	B	70	30.005	2.751	30.731	0.50	8.82
ATOM	366	CA	BCYS	B	70	30.019	2.662	30.700	0.50	9.67
ATOM	369	CB	ACYS	B	70	29.369	4.152	30.560	0.50	8.59
ATOM	370	CB	BCYS	B	70	29.326	3.988	30.384	0.50	10.29
ATOM	375	SG	ACYS	B	70	27.685	4.105	29.896	0.50	8.19
ATOM	376	SG	BCYS	B	70	29.651	5.234	31.583	0.50	17.28
ATOM	379	C	CYS	B	70	31.519	2.862	30.791	1.00	9.18
ATOM	380	O	CYS	B	70	32.139	2.630	31.848	1.00	9.99
ATOM	382	N	GLY	B	71	32.105	3.241	29.670	1.00	8.46
ATOM	383	CA	GLY	B	71	33.509	3.564	29.627	1.00	8.24
ATOM	386	C	GLY	B	71	33.655	5.073	29.599	1.00	8.42
ATOM	387	O	GLY	B	71	32.663	5.849	29.587	1.00	7.41
ATOM	389	N	GLY	B	72	34.915	5.495	29.559	1.00	7.48
ATOM	390	CA	GLY	B	72	35.245	6.891	29.343	1.00	7.59
ATOM	393	C	GLY	B	72	36.672	6.951	28.896	1.00	6.58
ATOM	394	O	GLY	B	72	37.384	5.917	28.930	1.00	5.30
ATOM	396	N	SER	B	73	37.111	8.145	28.539	1.00	8.28
ATOM	397	CA	SER	B	73	38.482	8.370	28.111	1.00	8.49
ATOM	399	CB	SER	B	73	38.525	8.742	26.625	1.00	10.54
ATOM	402	OG	SER	B	73	37.889	7.755	25.862	1.00	15.90
ATOM	404	C	SER	B	73	39.067	9.484	28.935	1.00	8.02
ATOM	405	O	SER	B	73	38.474	10.571	28.978	1.00	9.10
ATOM	407	N	LEU	B	74	40.184	9.209	29.588	1.00	10.03
ATOM	408	CA	LEU	B	74	40.919	10.224	30.330	1.00	9.58

ATOM	410	CB	LEU	B	74	42.036	9.594	31.136	1.00	10.17
ATOM	413	CG	LEU	B	74	42.768	10.486	32.107	1.00	12.06
ATOM	415	CD1	LEU	B	74	41.814	10.945	33.229	1.00	10.87
ATOM	419	CD2	LEU	B	74	43.983	9.754	32.646	1.00	11.94
ATOM	423	C	LEU	B	74	41.484	11.201	29.327	1.00	9.06
ATOM	424	O	LEU	B	74	42.176	10.802	28.402	1.00	8.19
ATOM	426	N	VAL	B	75	41.208	12.481	29.519	1.00	9.02
ATOM	427	CA	VAL	B	75	41.738	13.496	28.609	1.00	10.15
ATOM	429	CB	VAL	B	75	40.613	14.165	27.810	1.00	9.49
ATOM	431	CG1	VAL	B	75	39.960	13.139	26.897	1.00	9.97
ATOM	435	CG2	VAL	B	75	39.560	14.791	28.720	1.00	10.50
ATOM	439	C	VAL	B	75	42.634	14.521	29.293	1.00	11.27
ATOM	440	O	VAL	B	75	43.228	15.369	28.611	1.00	11.11
ATOM	442	N	SER	B	76	42.735	14.457	30.612	1.00	11.31
ATOM	443	CA	SER	B	76	43.695	15.255	31.347	1.00	12.22
ATOM	445	CB	SER	B	76	43.210	16.701	31.469	1.00	11.14
ATOM	448	OG	SER	B	76	42.112	16.833	32.365	1.00	11.80
ATOM	450	C	SER	B	76	43.858	14.625	32.723	1.00	12.93
ATOM	451	O	SER	B	76	43.263	13.593	33.001	1.00	12.80
ATOM	453	N	GLU	B	77	44.631	15.254	33.601	1.00	13.77
ATOM	454	CA	GLU	B	77	44.768	14.729	34.966	1.00	14.29
ATOM	456	CB	GLU	B	77	45.811	15.525	35.773	1.00	15.67
ATOM	459	CG	GLU	B	77	45.590	17.027	35.772	1.00	20.84
ATOM	462	CD	GLU	B	77	46.377	17.763	34.675	1.00	32.43
ATOM	463	OE1	GLU	B	77	46.260	17.427	33.459	1.00	33.73
ATOM	464	OE2	GLU	B	77	47.121	18.710	35.039	1.00	40.84
ATOM	465	C	GLU	B	77	43.449	14.739	35.735	1.00	13.25
ATOM	466	O	GLU	B	77	43.344	14.056	36.733	1.00	14.00
ATOM	468	N	GLN	B	78	42.455	15.510	35.312	1.00	12.75
ATOM	469	CA	GLN	B	78	41.192	15.563	36.066	1.00	13.45
ATOM	471	CB	GLN	B	78	41.166	16.807	36.951	1.00	13.87
ATOM	474	CG	GLN	B	78	40.400	16.611	38.242	1.00	15.92
ATOM	477	CD	GLN	B	78	40.392	17.881	39.056	1.00	19.08
ATOM	478	OE1	GLN	B	78	41.026	18.888	38.646	1.00	24.44
ATOM	479	NE2	GLN	B	78	39.676	17.870	40.203	1.00	18.62
ATOM	482	C	GLN	B	78	39.898	15.485	35.288	1.00	11.76
ATOM	483	O	GLN	B	78	38.827	15.580	35.881	1.00	12.05
ATOM	485	N	TRP	B	79	39.977	15.322	33.975	1.00	10.49
ATOM	486	CA	TRP	B	79	38.784	15.263	33.162	1.00	10.79
ATOM	488	CB	TRP	B	79	38.638	16.472	32.256	1.00	11.62
ATOM	491	CG	TRP	B	79	38.348	17.730	33.018	1.00	12.37
ATOM	492	CD1	TRP	B	79	39.255	18.566	33.570	1.00	13.69
ATOM	494	NE1	TRP	B	79	38.612	19.625	34.211	1.00	12.86
ATOM	496	CE2	TRP	B	79	37.260	19.463	34.062	1.00	11.15
ATOM	497	CD2	TRP	B	79	37.058	18.272	33.314	1.00	10.97
ATOM	498	CE3	TRP	B	79	35.747	17.875	33.023	1.00	12.61
ATOM	500	CZ3	TRP	B	79	34.707	18.659	33.463	1.00	12.77
ATOM	502	CH2	TRP	B	79	34.940	19.835	34.184	1.00	12.20
ATOM	504	CZ2	TRP	B	79	36.201	20.246	34.501	1.00	14.82
ATOM	506	C	TRP	B	79	38.757	14.002	32.326	1.00	10.38
ATOM	507	O	TRP	B	79	39.787	13.516	31.831	1.00	8.55
ATOM	509	N	VAL	B	80	37.536	13.510	32.179	1.00	10.09
ATOM	510	CA	VAL	B	80	37.235	12.314	31.427	1.00	9.31
ATOM	512	CB	VAL	B	80	36.779	11.194	32.375	1.00	9.66
ATOM	514	CG1	VAL	B	80	36.160	10.047	31.589	1.00	10.05
ATOM	518	CG2	VAL	B	80	37.941	10.713	33.211	1.00	10.10
ATOM	522	C	VAL	B	80	36.092	12.690	30.485	1.00	9.15
ATOM	523	O	VAL	B	80	35.165	13.412	30.884	1.00	9.58
ATOM	525	N	LEU	B	81	36.142	12.196	29.246	1.00	8.45
ATOM	526	CA	LEU	B	81	35.051	12.366	28.291	1.00	8.66
ATOM	528	CB	LEU	B	81	35.605	12.780	26.922	1.00	9.29

ATOM	531	CG	LEU	B	81	34.715	13.573	25.973	1.00	14.28
ATOM	533	CD1	LEU	B	81	34.233	14.836	26.588	1.00	12.95
ATOM	537	CD2	LEU	B	81	35.515	13.870	24.713	1.00	14.40
ATOM	541	C	LEU	B	81	34.333	11.042	28.190	1.00	7.89
ATOM	542	O	LEU	B	81	34.970	9.974	28.102	1.00	9.57
ATOM	544	N	SER	B	82	33.008	11.099	28.249	1.00	8.40
ATOM	545	CA	SER	B	82	32.182	9.909	28.160	1.00	8.70
ATOM	547	CB	SER	B	82	31.880	9.387	29.563	1.00	8.93
ATOM	550	OG	SER	B	82	31.235	8.151	29.510	1.00	9.40
ATOM	552	C	SER	B	82	30.928	10.261	27.364	1.00	8.06
ATOM	553	O	SER	B	82	30.901	11.287	26.690	1.00	9.36
ATOM	555	N	ALA	B	83	29.919	9.397	27.400	1.00	8.24
ATOM	556	CA	ALA	B	83	28.696	9.605	26.646	1.00	7.75
ATOM	558	CB	ALA	B	83	28.223	8.309	26.031	1.00	7.21
ATOM	562	C	ALA	B	83	27.633	10.114	27.592	1.00	8.53
ATOM	563	O	ALA	B	83	27.450	9.571	28.668	1.00	9.74
ATOM	565	N	ALA	B	84	26.893	11.122	27.161	1.00	8.67
ATOM	566	CA	ALA	B	84	25.837	11.697	27.989	1.00	8.06
ATOM	568	CB	ALA	B	84	25.203	12.888	27.279	1.00	8.74
ATOM	572	C	ALA	B	84	24.760	10.697	28.374	1.00	8.44
ATOM	573	O	ALA	B	84	24.151	10.810	29.438	1.00	7.14
ATOM	575	N	HIS	B	85	24.505	9.701	27.530	1.00	8.21
ATOM	576	CA	HIS	B	85	23.388	8.819	27.828	1.00	8.40
ATOM	578	CB	HIS	B	85	22.964	8.027	26.601	1.00	8.89
ATOM	581	CG	HIS	B	85	23.825	6.850	26.314	1.00	6.98
ATOM	582	ND1	HIS	B	85	24.745	6.859	25.297	1.00	9.21
ATOM	584	CE1	HIS	B	85	25.355	5.692	25.249	1.00	10.84
ATOM	586	NE2	HIS	B	85	24.848	4.918	26.195	1.00	8.56
ATOM	588	CD2	HIS	B	85	23.892	5.625	26.880	1.00	8.25
ATOM	590	C	HIS	B	85	23.687	7.917	29.024	1.00	8.70
ATOM	591	O	HIS	B	85	22.774	7.291	29.565	1.00	10.05
ATOM	593	N	CYS	B	86	24.942	7.884	29.454	1.00	9.80
ATOM	594	CA	CYS	B	86	25.358	7.163	30.653	1.00	10.13
ATOM	596	CB	CYS	B	86	26.843	6.881	30.609	1.00	10.99
ATOM	599	SG	CYS	B	86	27.366	5.985	29.139	1.00	14.49
ATOM	601	C	CYS	B	86	25.095	7.932	31.933	1.00	10.66
ATOM	602	O	CYS	B	86	25.268	7.366	32.992	1.00	9.11
ATOM	604	N	PHE	B	87	24.679	9.192	31.819	1.00	11.29
ATOM	605	CA	PHE	B	87	24.511	10.086	32.964	1.00	12.13
ATOM	607	CB	PHE	B	87	25.617	11.141	32.958	1.00	11.98
ATOM	610	CG	PHE	B	87	26.974	10.533	32.973	1.00	10.13
ATOM	611	CD1	PHE	B	87	27.546	10.131	34.144	1.00	11.34
ATOM	613	CE1	PHE	B	87	28.772	9.509	34.144	1.00	11.37
ATOM	615	CZ	PHE	B	87	29.395	9.245	32.960	1.00	11.68
ATOM	617	CE2	PHE	B	87	28.818	9.617	31.786	1.00	12.39
ATOM	619	CD2	PHE	B	87	27.610	10.236	31.791	1.00	8.75
ATOM	621	C	PHE	B	87	23.130	10.717	32.918	1.00	13.46
ATOM	622	O	PHE	B	87	23.010	11.924	32.776	1.00	15.81
ATOM	624	N	PRO	B	88	22.092	9.894	33.054	1.00	15.12
ATOM	625	CA	PRO	B	88	20.745	10.443	33.051	1.00	16.94
ATOM	627	CB	PRO	B	88	19.859	9.211	33.199	1.00	16.07
ATOM	630	CG	PRO	B	88	20.711	8.150	33.757	1.00	17.81
ATOM	633	CD	PRO	B	88	22.090	8.438	33.239	1.00	15.85
ATOM	636	C	PRO	B	88	20.549	11.404	34.223	1.00	17.79
ATOM	637	O	PRO	B	88	21.177	11.253	35.277	1.00	17.93
ATOM	638	N	SER	B	89	19.690	12.391	34.018	1.00	19.34
ATOM	639	CA	SER	B	89	19.523	13.478	34.981	1.00	21.43
ATOM	641	CB	SER	B	89	18.439	14.454	34.488	1.00	22.60
ATOM	644	OG	SER	B	89	18.895	15.122	33.319	1.00	30.68
ATOM	646	C	SER	B	89	19.157	12.974	36.374	1.00	21.74
ATOM	647	O	SER	B	89	19.546	13.569	37.373	1.00	23.67

ATOM	649	N	GLU	B	90	18.403	11.884	36.435	1.00	21.52
ATOM	650	CA	GLU	B	90	17.929	11.357	37.714	1.00	21.61
ATOM	652	CB	GLU	B	90	16.789	10.345	37.524	1.00	23.11
ATOM	655	CG	GLU	B	90	17.118	9.143	36.644	1.00	25.91
ATOM	658	CD	GLU	B	90	16.814	9.376	35.173	1.00	27.88
ATOM	659	OE1	GLU	B	90	16.644	10.549	34.748	1.00	25.73
ATOM	660	OE2	GLU	B	90	16.763	8.368	34.437	1.00	31.58
ATOM	661	C	GLU	B	90	19.016	10.715	38.545	1.00	20.90
ATOM	662	O	GLU	B	90	18.834	10.501	39.746	1.00	20.34
ATOM	664	N	HIS	B	91	20.150	10.387	37.925	1.00	19.75
ATOM	665	CA	HIS	B	91	21.222	9.753	38.675	1.00	19.91
ATOM	667	CB	HIS	B	91	22.176	9.002	37.750	1.00	19.22
ATOM	670	CG	HIS	B	91	21.647	7.679	37.308	1.00	21.40
ATOM	671	ND1	HIS	B	91	22.386	6.794	36.550	1.00	21.88
ATOM	673	CE1	HIS	B	91	21.662	5.709	36.324	1.00	22.81
ATOM	675	NE2	HIS	B	91	20.485	5.859	36.909	1.00	23.94
ATOM	677	CD2	HIS	B	91	20.455	7.077	37.540	1.00	22.99
ATOM	679	C	HIS	B	91	21.962	10.771	39.519	1.00	20.04
ATOM	680	O	HIS	B	91	21.993	11.956	39.187	1.00	21.75
ATOM	682	N	HIS	B	92	22.506	10.307	40.632	1.00	19.58
ATOM	683	CA	HIS	B	92	23.211	11.178	41.540	1.00	19.93
ATOM	685	CB	HIS	B	92	23.066	10.700	42.978	1.00	22.06
ATOM	688	CG	HIS	B	92	21.651	10.459	43.394	1.00	25.78
ATOM	689	ND1	HIS	B	92	21.259	9.314	44.050	1.00	33.54
ATOM	691	CE1	HIS	B	92	19.961	9.376	44.292	1.00	34.36
ATOM	693	NE2	HIS	B	92	19.500	10.517	43.811	1.00	32.08
ATOM	695	CD2	HIS	B	92	20.539	11.212	43.242	1.00	28.89
ATOM	697	C	HIS	B	92	24.688	11.177	41.168	1.00	18.29
ATOM	698	O	HIS	B	92	25.319	10.128	41.091	1.00	18.83
ATOM	700	N	LYS	B	93	25.235	12.360	40.963	1.00	17.69
ATOM	701	CA	LYS	B	93	26.656	12.508	40.686	1.00	17.05
ATOM	703	CB	LYS	B	93	27.039	13.979	40.762	1.00	17.84
ATOM	706	CG	LYS	B	93	28.508	14.253	40.737	1.00	17.38
ATOM	709	CD	LYS	B	93	28.766	15.768	40.770	1.00	20.05
ATOM	712	CE	LYS	B	93	28.550	16.360	42.145	1.00	23.13
ATOM	715	NZ	LYS	B	93	29.110	17.737	42.275	1.00	22.40
ATOM	719	C	LYS	B	93	27.500	11.722	41.680	1.00	14.97
ATOM	720	O	LYS	B	93	28.462	11.089	41.297	1.00	12.90
ATOM	722	N	GLU	B	94	27.128	11.766	42.961	1.00	14.27
ATOM	723	CA	GLU	B	94	27.913	11.112	44.028	1.00	13.94
ATOM	725	CB	GLU	B	94	27.447	11.601	45.409	1.00	15.16
ATOM	728	CG	GLU	B	94	27.629	13.093	45.625	1.00	20.36
ATOM	731	CD	GLU	B	94	26.600	13.940	44.875	1.00	27.45
ATOM	732	OE1	GLU	B	94	25.566	13.391	44.385	1.00	28.28
ATOM	733	OE2	GLU	B	94	26.830	15.164	44.757	1.00	35.53
ATOM	734	C	GLU	B	94	27.848	9.587	44.005	1.00	13.15
ATOM	735	O	GLU	B	94	28.586	8.929	44.747	1.00	14.05
ATOM	737	N	ALA	B	95	26.992	9.023	43.154	1.00	12.26
ATOM	738	CA	ALA	B	95	26.923	7.564	43.058	1.00	12.50
ATOM	740	CB	ALA	B	95	25.506	7.103	42.878	1.00	12.59
ATOM	744	C	ALA	B	95	27.818	7.002	41.964	1.00	12.02
ATOM	745	O	ALA	B	95	27.876	5.801	41.803	1.00	12.03
ATOM	747	N	TYR	B	96	28.540	7.869	41.252	1.00	10.01
ATOM	748	CA	TYR	B	96	29.444	7.404	40.199	1.00	10.56
ATOM	750	CB	TYR	B	96	29.464	8.414	39.078	1.00	10.99
ATOM	753	CG	TYR	B	96	28.223	8.428	38.265	1.00	9.89
ATOM	754	CD1	TYR	B	96	28.039	7.506	37.231	1.00	11.57
ATOM	756	CE1	TYR	B	96	26.885	7.537	36.441	1.00	9.09
ATOM	758	CZ	TYR	B	96	25.891	8.460	36.702	1.00	12.15
ATOM	759	OH	TYR	B	96	24.763	8.459	35.902	1.00	13.52
ATOM	761	CE2	TYR	B	96	26.055	9.387	37.724	1.00	10.30

ATOM	763	CD2	TYR	B	96	27.212	9.358	38.505	1.00	12.13
ATOM	765	C	TYR	B	96	30.861	7.232	40.718	1.00	11.63
ATOM	766	O	TYR	B	96	31.316	8.001	41.577	1.00	12.00
ATOM	768	N	GLU	B	97	31.582	6.241	40.194	1.00	11.76
ATOM	769	CA	GLU	B	97	33.009	6.142	40.430	1.00	12.52
ATOM	771	CB	GLU	B	97	33.377	4.992	41.335	1.00	13.64
ATOM	774	CG	GLU	B	97	33.098	5.175	42.778	1.00	20.40
ATOM	777	CD	GLU	B	97	33.942	4.210	43.626	1.00	18.99
ATOM	778	OE1	GLU	B	97	33.615	3.018	43.677	1.00	26.71
ATOM	779	OE2	GLU	B	97	34.951	4.662	44.230	1.00	32.19
ATOM	780	C	GLU	B	97	33.677	5.906	39.092	1.00	12.38
ATOM	781	O	GLU	B	97	33.058	5.380	38.188	1.00	12.99
ATOM	783	N	VAL	B	98	34.930	6.312	38.983	1.00	11.10
ATOM	784	CA	VAL	B	98	35.740	6.082	37.790	1.00	10.88
ATOM	786	CB	VAL	B	98	36.285	7.400	37.210	1.00	11.82
ATOM	788	CG1	VAL	B	98	37.130	7.131	35.983	1.00	11.78
ATOM	792	CG2	VAL	B	98	35.138	8.310	36.872	1.00	10.44
ATOM	796	C	VAL	B	98	36.907	5.234	38.212	1.00	11.52
ATOM	797	O	VAL	B	98	37.586	5.580	39.191	1.00	11.29
ATOM	799	N	LYS	B	99	37.125	4.114	37.512	1.00	10.42
ATOM	800	CA	LYS	B	99	38.310	3.307	37.756	1.00	9.94
ATOM	802	CB	LYS	B	99	38.012	1.833	38.060	1.00	9.41
ATOM	805	CG	LYS	B	99	39.311	1.052	38.310	1.00	11.45
ATOM	808	CD	LYS	B	99	39.115	-0.170	39.155	1.00	11.29
ATOM	811	CE	LYS	B	99	38.333	-1.261	38.409	1.00	13.27
ATOM	814	NZ	LYS	B	99	38.176	-2.537	39.259	1.00	10.84
ATOM	818	C	LYS	B	99	39.264	3.455	36.577	1.00	9.07
ATOM	819	O	LYS	B	99	38.881	3.246	35.430	1.00	9.85
ATOM	821	N	LEU	B	100	40.506	3.819	36.901	1.00	9.76
ATOM	822	CA	LEU	B	100	41.583	4.063	35.942	1.00	9.92
ATOM	824	CB	LEU	B	100	42.125	5.495	36.115	1.00	10.43
ATOM	827	CG	LEU	B	100	41.103	6.651	36.189	1.00	10.72
ATOM	829	CD1	LEU	B	100	40.733	7.035	37.618	1.00	10.35
ATOM	833	CD2	LEU	B	100	41.654	7.841	35.458	1.00	10.99
ATOM	837	C	LEU	B	100	42.711	3.084	36.220	1.00	11.05
ATOM	838	O	LEU	B	100	42.873	2.607	37.352	1.00	9.80
ATOM	840	N	GLY	B	101	43.483	2.777	35.188	1.00	10.90
ATOM	841	CA	GLY	B	101	44.666	1.942	35.320	1.00	11.62
ATOM	844	C	GLY	B	101	44.408	0.456	35.453	1.00	12.72
ATOM	845	O	GLY	B	101	45.353	-0.295	35.700	1.00	14.57
ATOM	847	N	ALA	B	102	43.157	0.013	35.294	1.00	12.50
ATOM	848	CA	ALA	B	102	42.852	-1.401	35.442	1.00	15.01
ATOM	850	CB	ALA	B	102	41.652	-1.599	36.341	1.00	17.11
ATOM	854	C	ALA	B	102	42.587	-1.996	34.070	1.00	16.52
ATOM	855	O	ALA	B	102	41.900	-1.384	33.253	1.00	18.21
ATOM	857	N	HIS	B	103	43.182	-3.153	33.793	1.00	16.64
ATOM	858	CA	HIS	B	103	42.861	-3.903	32.581	1.00	17.25
ATOM	860	CB	HIS	B	103	44.118	-4.515	31.946	1.00	20.06
ATOM	863	CG	HIS	B	103	44.812	-5.508	32.809	1.00	25.87
ATOM	864	ND1	HIS	B	103	45.404	-5.172	34.011	1.00	32.25
ATOM	866	CE1	HIS	B	103	45.940	-6.255	34.548	1.00	36.34
ATOM	868	NE2	HIS	B	103	45.735	-7.274	33.729	1.00	33.95
ATOM	870	CD2	HIS	B	103	45.037	-6.833	32.632	1.00	30.18
ATOM	872	C	HIS	B	103	41.793	-4.964	32.858	1.00	16.67
ATOM	873	O	HIS	B	103	40.886	-5.157	32.046	1.00	15.43
ATOM	875	N	GLN	B	104	41.882	-5.641	34.009	1.00	15.55
ATOM	876	CA	GLN	B	104	40.845	-6.595	34.398	1.00	16.28
ATOM	878	CB	GLN	B	104	41.439	-7.873	34.978	1.00	16.05
ATOM	881	CG	GLN	B	104	41.798	-8.858	33.887	1.00	19.68
ATOM	884	CD	GLN	B	104	42.644	-10.010	34.346	1.00	20.01
ATOM	885	OE1	GLN	B	104	42.726	-10.329	35.538	1.00	18.63

ATOM	886	NE2	GLN	B	104	43.296	-10.646	33.392	1.00	23.76
ATOM	889	C	GLN	B	104	39.943	-5.918	35.394	1.00	14.77
ATOM	890	O	GLN	B	104	40.360	-5.595	36.501	1.00	14.21
ATOM	892	N	LEU	B	105	38.702	-5.681	35.011	1.00	13.86
ATOM	893	CA	LEU	B	105	37.799	-4.935	35.883	1.00	15.37
ATOM	895	CB	LEU	B	105	36.437	-4.682	35.227	1.00	16.28
ATOM	898	CG	LEU	B	105	36.189	-3.393	34.492	1.00	19.71
ATOM	900	CD1	LEU	B	105	34.687	-3.214	34.318	1.00	17.96
ATOM	904	CD2	LEU	B	105	36.821	-2.180	35.142	1.00	16.61
ATOM	908	C	LEU	B	105	37.540	-5.635	37.193	1.00	14.43
ATOM	909	O	LEU	B	105	37.280	-4.969	38.180	1.00	14.94
ATOM	911	N	ASP	B	106	37.574	-6.968	37.199	1.00	13.24
ATOM	912	CA	ASP	B	106	37.254	-7.745	38.390	1.00	14.46
ATOM	914	CB	ASP	B	106	36.281	-8.878	38.054	1.00	14.78
ATOM	917	CG	ASP	B	106	34.911	-8.387	37.654	1.00	18.62
ATOM	918	OD1	ASP	B	106	34.609	-7.190	37.852	1.00	21.82
ATOM	919	OD2	ASP	B	106	34.119	-9.224	37.137	1.00	21.94
ATOM	920	C	ASP	B	106	38.490	-8.315	39.082	1.00	14.27
ATOM	921	O	ASP	B	106	38.385	-9.269	39.849	1.00	14.03
ATOM	923	N	SER	B	107	39.652	-7.722	38.830	1.00	13.64
ATOM	924	CA	SER	B	107	40.885	-8.095	39.520	1.00	14.39
ATOM	926	CB	SER	B	107	41.936	-8.661	38.573	1.00	15.87
ATOM	929	OG	SER	B	107	41.455	-9.764	37.826	1.00	19.18
ATOM	931	C	SER	B	107	41.471	-6.871	40.190	1.00	13.29
ATOM	932	O	SER	B	107	41.605	-5.781	39.583	1.00	13.05
ATOM	934	N	TYR	B	108	41.844	-7.046	41.454	1.00	12.38
ATOM	935	CA	TYR	B	108	42.542	-6.020	42.155	1.00	13.19
ATOM	937	CB	TYR	B	108	42.876	-6.458	43.576	1.00	14.45
ATOM	940	CG	TYR	B	108	43.810	-5.497	44.246	1.00	15.21
ATOM	941	CD1	TYR	B	108	43.329	-4.351	44.849	1.00	16.14
ATOM	943	CE1	TYR	B	108	44.190	-3.436	45.443	1.00	16.91
ATOM	945	CZ	TYR	B	108	45.552	-3.682	45.421	1.00	15.28
ATOM	946	OH	TYR	B	108	46.403	-2.796	46.022	1.00	14.96
ATOM	948	CE2	TYR	B	108	46.045	-4.806	44.832	1.00	15.77
ATOM	950	CD2	TYR	B	108	45.184	-5.714	44.241	1.00	18.78
ATOM	952	C	TYR	B	108	43.836	-5.714	41.408	1.00	13.94
ATOM	953	O	TYR	B	108	44.497	-6.615	40.901	1.00	14.12
ATOM	955	N	SER	B	109	44.171	-4.434	41.325	1.00	13.27
ATOM	956	CA	SER	B	109	45.442	-4.018	40.786	1.00	13.92
ATOM	958	CB	SER	B	109	45.325	-3.623	39.311	1.00	14.22
ATOM	961	OG	SER	B	109	46.559	-3.089	38.896	1.00	15.21
ATOM	963	C	SER	B	109	46.002	-2.871	41.572	1.00	14.30
ATOM	964	O	SER	B	109	45.312	-1.888	41.845	1.00	12.76
ATOM	966	N	GLU	B	110	47.272	-2.997	41.957	1.00	16.45
ATOM	967	CA	GLU	B	110	47.933	-1.914	42.632	1.00	18.35
ATOM	969	CB	GLU	B	110	49.289	-2.357	43.157	1.00	19.79
ATOM	972	CG	GLU	B	110	49.798	-1.409	44.215	1.00	23.06
ATOM	975	CD	GLU	B	110	51.002	-1.946	44.934	1.00	24.18
ATOM	976	OE1	GLU	B	110	51.646	-2.880	44.400	1.00	33.47
ATOM	977	OE2	GLU	B	110	51.295	-1.410	46.028	1.00	36.07
ATOM	978	C	GLU	B	110	48.112	-0.703	41.720	1.00	17.47
ATOM	979	O	GLU	B	110	48.364	0.393	42.193	1.00	18.68
ATOM	981	N	ASP	B	111	47.999	-0.903	40.410	1.00	16.58
ATOM	982	CA	ASP	B	111	48.122	0.197	39.472	1.00	15.44
ATOM	984	CB	ASP	B	111	48.610	-0.318	38.145	1.00	15.22
ATOM	987	CG	ASP	B	111	49.935	-1.032	38.255	1.00	18.57
ATOM	988	OD1	ASP	B	111	50.806	-0.500	38.955	1.00	19.89
ATOM	989	OD2	ASP	B	111	50.095	-2.105	37.652	1.00	23.10
ATOM	990	C	ASP	B	111	46.803	0.956	39.238	1.00	15.13
ATOM	991	O	ASP	B	111	46.798	2.040	38.643	1.00	14.89
ATOM	993	N	ALA	B	112	45.709	0.383	39.723	1.00	14.20

ATOM	994	CA	ALA	B	112	44.384	0.949	39.526	1.00	14.25
ATOM	996	CB	ALA	B	112	43.318	-0.113	39.751	1.00	14.44
ATOM	1000	C	ALA	B	112	44.170	2.110	40.471	1.00	14.12
ATOM	1001	O	ALA	B	112	44.659	2.087	41.605	1.00	13.92
ATOM	1003	N	LYS	B	113	43.441	3.116	40.004	1.00	13.92
ATOM	1004	CA	LYS	B	113	42.999	4.216	40.844	1.00	14.81
ATOM	1006	CB	LYS	B	113	43.719	5.497	40.472	1.00	14.81
ATOM	1009	CG	LYS	B	113	45.240	5.402	40.640	1.00	18.60
ATOM	1012	CD	LYS	B	113	45.950	6.684	40.223	1.00	20.37
ATOM	1015	CE	LYS	B	113	47.421	6.673	40.660	1.00	27.12
ATOM	1018	NZ	LYS	B	113	48.315	7.305	39.663	1.00	30.63
ATOM	1022	C	LYS	B	113	41.507	4.400	40.663	1.00	14.81
ATOM	1023	O	LYS	B	113	40.959	4.232	39.557	1.00	14.13
ATOM	1025	N	VAL	B	114	40.836	4.734	41.750	1.00	14.23
ATOM	1026	CA	VAL	B	114	39.402	4.933	41.686	1.00	14.59
ATOM	1028	CB	VAL	B	114	38.668	3.836	42.474	1.00	14.49
ATOM	1030	CG1	VAL	B	114	37.184	4.031	42.382	1.00	19.63
ATOM	1034	CG2	VAL	B	114	39.074	2.464	41.950	1.00	16.75
ATOM	1038	C	VAL	B	114	39.127	6.333	42.187	1.00	15.19
ATOM	1039	O	VAL	B	114	39.705	6.776	43.195	1.00	17.79
ATOM	1041	N	SER	B	115	38.265	7.047	41.474	1.00	13.47
ATOM	1042	CA	ASER	B	115	37.986	8.442	41.760	0.50	13.60
ATOM	1043	CA	BSER	B	115	37.969	8.430	41.801	0.50	13.66
ATOM	1046	CB	ASER	B	115	38.644	9.333	40.701	0.50	13.95
ATOM	1047	CB	BSER	B	115	38.657	9.378	40.825	0.50	13.99
ATOM	1052	OG	ASER	B	115	40.045	9.089	40.579	0.50	12.26
ATOM	1053	OG	BSER	B	115	38.290	10.725	41.088	0.50	12.89
ATOM	1056	C	SER	B	115	36.482	8.668	41.747	1.00	13.17
ATOM	1057	O	SER	B	115	35.767	7.997	41.023	1.00	14.11
ATOM	1059	N	THR	B	116	36.028	9.631	42.540	1.00	11.86
ATOM	1060	CA	THR	B	116	34.670	10.106	42.488	1.00	12.36
ATOM	1062	CB	THR	B	116	34.159	10.537	43.853	1.00	14.30
ATOM	1064	OG1	THR	B	116	35.078	11.458	44.454	1.00	15.52
ATOM	1066	CG2	THR	B	116	33.984	9.342	44.713	1.00	14.85
ATOM	1070	C	THR	B	116	34.634	11.279	41.541	1.00	12.14
ATOM	1071	O	THR	B	116	35.679	11.681	41.063	1.00	11.25
ATOM	1073	N	LEU	B	117	33.434	11.811	41.277	1.00	11.97
ATOM	1074	CA	LEU	B	117	33.239	12.897	40.328	1.00	12.43
ATOM	1076	CB	LEU	B	117	32.134	12.532	39.355	1.00	13.23
ATOM	1079	CG	LEU	B	117	32.410	11.360	38.417	1.00	13.07
ATOM	1081	CD1	LEU	B	117	31.251	11.205	37.424	1.00	14.18
ATOM	1085	CD2	LEU	B	117	33.731	11.609	37.706	1.00	11.89
ATOM	1089	C	LEU	B	117	32.817	14.170	41.037	1.00	13.87
ATOM	1090	O	LEU	B	117	31.949	14.136	41.922	1.00	14.30
ATOM	1092	N	LYS	B	118	33.377	15.295	40.618	1.00	14.86
ATOM	1093	CA	LYS	B	118	32.917	16.573	41.143	1.00	15.25
ATOM	1095	CB	LYS	B	118	34.068	17.427	41.634	1.00	16.97
ATOM	1098	CG	LYS	B	118	35.028	17.864	40.607	1.00	17.32
ATOM	1101	CD	LYS	B	118	36.068	18.807	41.201	1.00	19.66
ATOM	1104	CE	LYS	B	118	35.441	20.152	41.574	1.00	24.45
ATOM	1107	NZ	LYS	B	118	36.431	21.174	41.987	1.00	26.82
ATOM	1111	C	LYS	B	118	32.038	17.353	40.184	1.00	15.72
ATOM	1112	O	LYS	B	118	31.366	18.289	40.599	1.00	14.32
ATOM	1114	N	ASP	B	119	31.985	16.947	38.921	1.00	14.58
ATOM	1115	CA	ASP	B	119	31.111	17.598	37.973	1.00	14.81
ATOM	1117	CB	ASP	B	119	31.822	18.825	37.391	1.00	15.71
ATOM	1120	CG	ASP	B	119	30.857	19.920	36.947	1.00	19.90
ATOM	1121	OD1	ASP	B	119	29.612	19.784	37.087	1.00	22.87
ATOM	1122	OD2	ASP	B	119	31.366	20.945	36.470	1.00	26.95
ATOM	1123	C	ASP	B	119	30.805	16.619	36.845	1.00	13.37
ATOM	1124	O	ASP	B	119	31.659	15.816	36.462	1.00	13.20

ATOM	1126	N	ILE	B	120	29.592	16.696	36.328	1.00	13.84
ATOM	1127	CA	ILE	B	120	29.205	15.994	35.104	1.00	12.46
ATOM	1129	CB	ILE	B	120	28.177	14.888	35.413	1.00	13.40
ATOM	1131	CG1	ILE	B	120	28.754	13.872	36.394	1.00	12.05
ATOM	1134	CD1	ILE	B	120	27.725	12.850	36.896	1.00	12.28
ATOM	1138	CG2	ILE	B	120	27.676	14.220	34.133	1.00	13.45
ATOM	1142	C	ILE	B	120	28.562	17.030	34.214	1.00	12.55
ATOM	1143	O	ILE	B	120	27.644	17.704	34.636	1.00	12.65
ATOM	1145	N	ILE	B	121	29.061	17.199	33.006	1.00	11.88
ATOM	1146	CA	ILE	B	121	28.569	18.237	32.132	1.00	12.10
ATOM	1148	CB	ILE	B	121	29.624	19.307	31.871	1.00	12.62
ATOM	1150	CG1	ILE	B	121	30.249	19.784	33.189	1.00	14.19
ATOM	1153	CD1	ILE	B	121	31.274	20.856	33.033	1.00	14.41
ATOM	1157	CG2	ILE	B	121	28.996	20.438	31.088	1.00	14.25
ATOM	1161	C	ILE	B	121	28.186	17.573	30.825	1.00	11.55
ATOM	1162	O	ILE	B	121	29.067	17.346	29.963	1.00	10.67
ATOM	1164	N	PRO	B	122	26.903	17.230	30.676	1.00	11.79
ATOM	1165	CA	PRO	B	122	26.482	16.686	29.382	1.00	11.87
ATOM	1167	CB	PRO	B	122	25.110	16.109	29.678	1.00	13.55
ATOM	1170	CG	PRO	B	122	24.575	16.978	30.754	1.00	16.06
ATOM	1173	CD	PRO	B	122	25.768	17.309	31.617	1.00	12.06
ATOM	1176	C	PRO	B	122	26.372	17.809	28.384	1.00	13.87
ATOM	1177	O	PRO	B	122	26.135	18.972	28.783	1.00	13.02
ATOM	1178	N	HIS	B	123	26.485	17.480	27.102	1.00	12.29
ATOM	1179	CA	HIS	B	123	26.230	18.476	26.096	1.00	14.15
ATOM	1181	CB	HIS	B	123	26.555	17.989	24.691	1.00	13.72
ATOM	1184	CG	HIS	B	123	26.669	19.119	23.731	1.00	13.39
ATOM	1185	ND1	HIS	B	123	25.577	19.637	23.070	1.00	16.48
ATOM	1187	CE1	HIS	B	123	25.965	20.673	22.346	1.00	17.76
ATOM	1189	NE2	HIS	B	123	27.256	20.863	22.543	1.00	16.96
ATOM	1191	CD2	HIS	B	123	27.713	19.917	23.426	1.00	16.10
ATOM	1193	C	HIS	B	123	24.781	18.942	26.197	1.00	13.70
ATOM	1194	O	HIS	B	123	23.877	18.133	26.413	1.00	12.78
ATOM	1196	N	PRO	B	124	24.565	20.262	26.119	1.00	15.92
ATOM	1197	CA	PRO	B	124	23.198	20.763	26.293	1.00	17.01
ATOM	1199	CB	PRO	B	124	23.375	22.285	26.247	1.00	18.56
ATOM	1202	CG	PRO	B	124	24.663	22.507	25.576	1.00	20.06
ATOM	1205	CD	PRO	B	124	25.528	21.358	25.967	1.00	16.05
ATOM	1208	C	PRO	B	124	22.206	20.284	25.224	1.00	17.86
ATOM	1209	O	PRO	B	124	21.011	20.202	25.511	1.00	18.46
ATOM	1210	N	SER	B	125	22.699	19.934	24.033	1.00	16.16
ATOM	1211	CA	SER	B	125	21.848	19.408	22.986	1.00	16.55
ATOM	1213	CB	SER	B	125	22.586	19.407	21.648	1.00	16.26
ATOM	1216	OG	SER	B	125	23.590	18.410	21.636	1.00	14.15
ATOM	1218	C	SER	B	125	21.320	18.005	23.303	1.00	17.81
ATOM	1219	O	SER	B	125	20.392	17.504	22.638	1.00	18.52
ATOM	1221	N	TYR	B	126	21.899	17.354	24.309	1.00	17.71
ATOM	1222	CA	TYR	B	126	21.519	15.975	24.589	1.00	18.37
ATOM	1224	CB	TYR	B	126	22.508	15.314	25.537	1.00	17.27
ATOM	1227	CG	TYR	B	126	22.099	13.890	25.776	1.00	17.59
ATOM	1228	CD1	TYR	B	126	22.161	12.962	24.747	1.00	17.78
ATOM	1230	CE1	TYR	B	126	21.744	11.658	24.935	1.00	18.27
ATOM	1232	CZ	TYR	B	126	21.247	11.276	26.160	1.00	19.90
ATOM	1233	OH	TYR	B	126	20.814	9.985	26.344	1.00	23.31
ATOM	1235	CE2	TYR	B	126	21.149	12.184	27.194	1.00	19.29
ATOM	1237	CD2	TYR	B	126	21.569	13.490	26.995	1.00	19.13
ATOM	1239	C	TYR	B	126	20.106	15.808	25.178	1.00	20.44
ATOM	1240	O	TYR	B	126	19.789	16.401	26.199	1.00	21.22
ATOM	1242	N	LEU	B	127	19.301	14.966	24.538	1.00	21.28
ATOM	1243	CA	LEU	B	127	18.005	14.552	25.060	1.00	23.66
ATOM	1245	CB	LEU	B	127	16.896	14.995	24.121	1.00	25.75

ATOM	1248	CG	LEU	B	127	16.769	16.493	23.803	1.00	30.62
ATOM	1250	CD1	LEU	B	127	17.244	17.439	24.948	1.00	33.76
ATOM	1254	CD2	LEU	B	127	17.503	16.811	22.518	1.00	33.53
ATOM	1258	C	LEU	B	127	17.983	13.026	25.204	1.00	24.23
ATOM	1259	O	LEU	B	127	18.363	12.312	24.285	1.00	21.78
ATOM	1261	N	GLN	B	128	17.522	12.536	26.351	1.00	24.83
ATOM	1262	CA	GLN	B	128	17.488	11.092	26.605	1.00	25.07
ATOM	1264	CB	GLN	B	128	16.902	10.795	27.991	1.00	25.99
ATOM	1267	CG	GLN	B	128	17.334	9.464	28.588	1.00	27.48
ATOM	1270	CD	GLN	B	128	18.820	9.391	28.964	1.00	32.13
ATOM	1271	OE1	GLN	B	128	19.481	8.387	28.709	1.00	37.47
ATOM	1272	NE2	GLN	B	128	19.333	10.439	29.584	1.00	32.36
ATOM	1275	C	GLN	B	128	16.681	10.361	25.516	1.00	24.91
ATOM	1276	O	GLN	B	128	15.607	10.816	25.129	1.00	25.90
ATOM	1278	N	GLU	B	129	17.225	9.239	25.042	1.00	24.79
ATOM	1279	CA	GLU	B	129	16.650	8.417	23.954	1.00	25.09
ATOM	1281	CB	GLU	B	129	15.180	8.061	24.230	1.00	26.51
ATOM	1284	CG	GLU	B	129	14.940	7.447	25.594	1.00	30.92
ATOM	1287	CD	GLU	B	129	15.923	6.340	25.910	1.00	38.17
ATOM	1288	OE1	GLU	B	129	16.149	5.476	25.035	1.00	43.50
ATOM	1289	OE2	GLU	B	129	16.479	6.342	27.034	1.00	45.82
ATOM	1290	C	GLU	B	129	16.809	9.014	22.542	1.00	23.83
ATOM	1291	O	GLU	B	129	16.335	8.442	21.554	1.00	21.76
ATOM	1293	N	GLY	B	130	17.497	10.146	22.458	1.00	22.12
ATOM	1294	CA	GLY	B	130	17.806	10.793	21.190	1.00	21.77
ATOM	1297	C	GLY	B	130	19.289	10.611	20.908	1.00	21.57
ATOM	1298	O	GLY	B	130	20.083	10.339	21.835	1.00	19.94
ATOM	1300	N	SER	B	131	19.672	10.756	19.634	1.00	19.01
ATOM	1301	CA	SER	B	131	21.041	10.516	19.217	1.00	17.52
ATOM	1303	CB	SER	B	131	21.066	9.996	17.767	1.00	15.77
ATOM	1306	OG	SER	B	131	20.521	10.964	16.898	1.00	15.45
ATOM	1308	C	SER	B	131	21.955	11.742	19.384	1.00	15.88
ATOM	1309	O	SER	B	131	23.099	11.589	19.731	1.00	15.14
ATOM	1311	N	GLN	B	132	21.437	12.939	19.156	1.00	16.27
ATOM	1312	CA	GLN	B	132	22.243	14.160	19.154	1.00	15.80
ATOM	1314	CB	GLN	B	132	21.335	15.353	18.855	1.00	18.55
ATOM	1317	CG	GLN	B	132	22.058	16.643	18.608	1.00	21.23
ATOM	1320	CD	GLN	B	132	22.675	16.714	17.227	1.00	29.67
ATOM	1321	OE1	GLN	B	132	21.969	16.877	16.211	1.00	40.28
ATOM	1322	NE2	GLN	B	132	23.991	16.607	17.170	1.00	36.72
ATOM	1325	C	GLN	B	132	22.968	14.449	20.472	1.00	13.65
ATOM	1326	O	GLN	B	132	22.394	14.302	21.532	1.00	13.79
ATOM	1328	N	GLY	B	133	24.220	14.874	20.387	1.00	12.91
ATOM	1329	CA	GLY	B	133	24.948	15.390	21.541	1.00	12.30
ATOM	1332	C	GLY	B	133	25.318	14.383	22.619	1.00	10.22
ATOM	1333	O	GLY	B	133	25.378	14.739	23.796	1.00	9.21
ATOM	1335	N	ASP	B	134	25.600	13.136	22.229	1.00	9.93
ATOM	1336	CA	ASP	B	134	25.841	12.074	23.215	1.00	9.92
ATOM	1338	CB	ASP	B	134	25.549	10.697	22.640	1.00	9.71
ATOM	1341	CG	ASP	B	134	25.414	9.651	23.716	1.00	8.48
ATOM	1342	OD1	ASP	B	134	25.431	10.055	24.900	1.00	8.87
ATOM	1343	OD2	ASP	B	134	25.279	8.438	23.376	1.00	8.92
ATOM	1344	C	ASP	B	134	27.275	12.141	23.724	1.00	9.89
ATOM	1345	O	ASP	B	134	28.130	11.350	23.362	1.00	8.03
ATOM	1347	N	ILE	B	135	27.530	13.118	24.581	1.00	8.97
ATOM	1348	CA	ILE	B	135	28.869	13.404	25.040	1.00	9.12
ATOM	1350	CB	ILE	B	135	29.673	14.219	23.978	1.00	10.25
ATOM	1352	CG1	ILE	B	135	31.099	14.470	24.446	1.00	10.06
ATOM	1355	CD1	ILE	B	135	31.953	15.031	23.334	1.00	9.26
ATOM	1359	CG2	ILE	B	135	28.957	15.524	23.611	1.00	12.55
ATOM	1363	C	ILE	B	135	28.748	14.181	26.328	1.00	7.64

ATOM	1364	O	ILE B 135	27.822	14.973	26.489	1.00	9.41
ATOM	1366	N	ALA B 136	29.643	13.881	27.253	1.00	7.95
ATOM	1367	CA	ALA B 136	29.646	14.480	28.562	1.00	8.58
ATOM	1369	CB	ALA B 136	28.837	13.657	29.511	1.00	9.36
ATOM	1373	C	ALA B 136	31.057	14.591	29.072	1.00	9.01
ATOM	1374	O	ALA B 136	31.861	13.682	28.888	1.00	10.16
ATOM	1376	N	LEU B 137	31.341	15.718	29.702	1.00	8.26
ATOM	1377	CA	LEU B 137	32.604	15.932	30.419	1.00	9.17
ATOM	1379	CB	LEU B 137	33.044	17.398	30.323	1.00	9.97
ATOM	1382	CG	LEU B 137	33.625	17.804	28.961	1.00	11.87
ATOM	1384	CD1	LEU B 137	33.508	19.300	28.765	1.00	13.80
ATOM	1388	CD2	LEU B 137	35.065	17.328	28.848	1.00	14.21
ATOM	1392	C	LEU B 137	32.429	15.589	31.881	1.00	9.32
ATOM	1393	O	LEU B 137	31.437	16.004	32.500	1.00	9.54
ATOM	1395	N	LEU B 138	33.377	14.833	32.421	1.00	8.56
ATOM	1396	CA	LEU B 138	33.352	14.404	33.813	1.00	9.09
ATOM	1398	CB	LEU B 138	33.374	12.893	33.917	1.00	8.73
ATOM	1401	CG	LEU B 138	32.395	12.134	33.018	1.00	10.72
ATOM	1403	CD1	LEU B 138	32.589	10.641	33.307	1.00	10.61
ATOM	1407	CD2	LEU B 138	30.964	12.539	33.270	1.00	11.82
ATOM	1411	C	LEU B 138	34.609	14.927	34.467	1.00	10.74
ATOM	1412	O	LEU B 138	35.711	14.683	33.998	1.00	11.43
ATOM	1414	N	GLN B 139	34.444	15.607	35.588	1.00	11.08
ATOM	1415	CA	GLN B 139	35.584	16.092	36.338	1.00	11.20
ATOM	1417	CB	GLN B 139	35.332	17.499	36.819	1.00	11.73
ATOM	1420	CG	GLN B 139	36.558	18.122	37.450	1.00	13.63
ATOM	1423	CD	GLN B 139	36.314	19.564	37.853	1.00	13.61
ATOM	1424	OE1	GLN B 139	35.185	19.969	38.167	1.00	19.71
ATOM	1425	NE2	GLN B 139	37.388	20.336	37.886	1.00	21.72
ATOM	1428	C	GLN B 139	35.758	15.212	37.550	1.00	10.67
ATOM	1429	O	GLN B 139	34.822	15.034	38.314	1.00	11.00
ATOM	1431	N	LEU B 140	36.943	14.654	37.703	1.00	10.62
ATOM	1432	CA	LEU B 140	37.263	13.805	38.843	1.00	10.82
ATOM	1434	CB	LEU B 140	38.605	13.116	38.602	1.00	11.42
ATOM	1437	CG	LEU B 140	38.743	12.303	37.316	1.00	12.16
ATOM	1439	CD1	LEU B 140	40.116	11.683	37.218	1.00	13.20
ATOM	1443	CD2	LEU B 140	37.619	11.289	37.288	1.00	13.09
ATOM	1447	C	LEU B 140	37.379	14.706	40.078	1.00	11.54
ATOM	1448	O	LEU B 140	37.780	15.871	39.970	1.00	11.60
ATOM	1450	N	SER B 141	37.043	14.170	41.240	1.00	12.53
ATOM	1451	CA	SER B 141	37.064	14.972	42.478	1.00	13.86
ATOM	1453	CB	SER B 141	36.572	14.131	43.646	1.00	13.63
ATOM	1456	OG	SER B 141	35.193	13.895	43.458	1.00	13.43
ATOM	1458	C	SER B 141	38.433	15.567	42.784	1.00	16.14
ATOM	1459	O	SER B 141	38.527	16.679	43.349	1.00	17.73
ATOM	1461	N	ARG B 142	39.465	14.832	42.394	1.00	16.96
ATOM	1462	CA	ARG B 142	40.850	15.226	42.524	1.00	18.36
ATOM	1464	CB	ARG B 142	41.461	14.545	43.745	1.00	19.78
ATOM	1467	CG	ARG B 142	40.905	15.013	45.094	1.00	24.03
ATOM	1470	CD	ARG B 142	41.301	16.440	45.391	1.00	30.64
ATOM	1473	NE	ARG B 142	42.756	16.608	45.337	1.00	34.64
ATOM	1475	CZ	ARG B 142	43.390	17.748	45.059	1.00	35.07
ATOM	1476	NH1	ARG B 142	42.716	18.868	44.787	1.00	33.97
ATOM	1479	NH2	ARG B 142	44.717	17.757	45.023	1.00	32.05
ATOM	1482	C	ARG B 142	41.629	14.783	41.305	1.00	18.24
ATOM	1483	O	ARG B 142	41.335	13.735	40.716	1.00	17.15
ATOM	1485	N	PRO B 143	42.666	15.545	40.941	1.00	19.11
ATOM	1486	CA	PRO B 143	43.498	15.110	39.826	1.00	19.49
ATOM	1488	CB	PRO B 143	44.514	16.240	39.672	1.00	20.83
ATOM	1491	CG	PRO B 143	44.549	16.890	40.992	1.00	23.14
ATOM	1494	CD	PRO B 143	43.146	16.813	41.516	1.00	18.99

ATOM	1497	C	PRO	B	143	44.197	13.800	40.130	1.00	19.74
ATOM	1498	O	PRO	B	143	44.508	13.506	41.294	1.00	20.73
ATOM	1499	N	ILE	B	144	44.438	13.008	39.102	1.00	20.05
ATOM	1500	CA	ILE	B	144	45.147	11.748	39.298	1.00	20.75
ATOM	1502	CB	ILE	B	144	44.398	10.539	38.683	1.00	22.78
ATOM	1504	CG1	ILE	B	144	44.079	10.741	37.209	1.00	23.97
ATOM	1507	CD1	ILE	B	144	45.279	10.853	36.272	1.00	26.71
ATOM	1511	CG2	ILE	B	144	43.080	10.311	39.436	1.00	24.77
ATOM	1515	C	ILE	B	144	46.587	11.882	38.794	1.00	21.65
ATOM	1516	O	ILE	B	144	46.892	12.780	38.009	1.00	23.63
ATOM	1518	N	THR	B	145	47.474	11.027	39.294	1.00	20.58
ATOM	1519	CA	THR	B	145	48.850	10.999	38.835	1.00	19.82
ATOM	1521	CB	THR	B	145	49.802	10.556	39.969	1.00	20.46
ATOM	1523	OG1	THR	B	145	49.720	11.500	41.037	1.00	24.98
ATOM	1525	CG2	THR	B	145	51.232	10.485	39.490	1.00	22.44
ATOM	1529	C	THR	B	145	48.940	10.007	37.693	1.00	18.43
ATOM	1530	O	THR	B	145	48.432	8.890	37.795	1.00	19.16
ATOM	1532	N	PHE	B	146	49.574	10.413	36.605	1.00	17.17
ATOM	1533	CA	PHE	B	146	49.754	9.526	35.490	1.00	15.91
ATOM	1535	CB	PHE	B	146	50.187	10.287	34.248	1.00	15.69
ATOM	1538	CG	PHE	B	146	49.220	11.355	33.792	1.00	14.82
ATOM	1539	CD1	PHE	B	146	47.843	11.206	33.927	1.00	15.38
ATOM	1541	CE1	PHE	B	146	46.980	12.188	33.494	1.00	18.07
ATOM	1543	CZ	PHE	B	146	47.480	13.323	32.906	1.00	16.40
ATOM	1545	CE2	PHE	B	146	48.836	13.473	32.763	1.00	16.96
ATOM	1547	CD2	PHE	B	146	49.693	12.500	33.194	1.00	16.92
ATOM	1549	C	PHE	B	146	50.765	8.421	35.804	1.00	16.77
ATOM	1550	O	PHE	B	146	51.577	8.532	36.730	1.00	17.42
ATOM	1552	N	SER	B	147	50.687	7.347	35.031	1.00	15.03
ATOM	1553	CA	SER	B	147	51.576	6.199	35.147	1.00	14.30
ATOM	1555	CB	SER	B	147	51.072	5.222	36.217	1.00	13.94
ATOM	1558	OG	SER	B	147	49.884	4.591	35.789	1.00	13.21
ATOM	1560	C	SER	B	147	51.607	5.497	33.799	1.00	14.58
ATOM	1561	O	SER	B	147	50.937	5.929	32.867	1.00	13.28
ATOM	1563	N	ARG	B	148	52.349	4.402	33.713	1.00	16.00
ATOM	1564	CA	ARG	B	148	52.316	3.543	32.538	1.00	16.09
ATOM	1566	CB	ARG	B	148	53.164	2.287	32.783	1.00	18.00
ATOM	1569	CG	ARG	B	148	53.078	1.268	31.703	1.00	19.95
ATOM	1572	CD	ARG	B	148	54.039	0.086	31.943	1.00	22.76
ATOM	1575	NE	ARG	B	148	53.843	-0.925	30.899	1.00	31.48
ATOM	1577	CZ	ARG	B	148	54.444	-2.114	30.846	1.00	37.32
ATOM	1578	NH1	ARG	B	148	55.319	-2.490	31.781	1.00	40.68
ATOM	1581	NH2	ARG	B	148	54.162	-2.939	29.841	1.00	37.41
ATOM	1584	C	ARG	B	148	50.874	3.133	32.222	1.00	14.93
ATOM	1585	O	ARG	B	148	50.510	2.914	31.069	1.00	15.11
ATOM	1587	N	TYR	B	149	50.053	3.030	33.260	1.00	11.46
ATOM	1588	CA	TYR	B	149	48.709	2.502	33.119	1.00	11.21
ATOM	1590	CB	TYR	B	149	48.441	1.545	34.268	1.00	11.96
ATOM	1593	CG	TYR	B	149	49.516	0.501	34.325	1.00	13.50
ATOM	1594	CD1	TYR	B	149	49.556	-0.514	33.384	1.00	15.09
ATOM	1596	CE1	TYR	B	149	50.549	-1.465	33.392	1.00	17.49
ATOM	1598	CZ	TYR	B	149	51.548	-1.379	34.337	1.00	18.79
ATOM	1599	OH	TYR	B	149	52.537	-2.341	34.334	1.00	21.30
ATOM	1601	CE2	TYR	B	149	51.550	-0.352	35.269	1.00	15.82
ATOM	1603	CD2	TYR	B	149	50.544	0.586	35.247	1.00	15.57
ATOM	1605	C	TYR	B	149	47.622	3.554	33.041	1.00	10.41
ATOM	1606	O	TYR	B	149	46.468	3.215	32.777	1.00	10.68
ATOM	1608	N	ILE	B	150	47.991	4.811	33.291	1.00	9.40
ATOM	1609	CA	ILE	B	150	47.024	5.898	33.346	1.00	10.51
ATOM	1611	CB	ILE	B	150	46.712	6.268	34.783	1.00	10.20
ATOM	1613	CG1	ILE	B	150	46.207	5.049	35.573	1.00	11.82

ATOM	1616	CD1	ILE	B	150	45.963	5.322	37.035	1.00	11.20
ATOM	1620	CG2	ILE	B	150	45.714	7.443	34.820	1.00	11.11
ATOM	1624	C	ILE	B	150	47.595	7.120	32.644	1.00	11.63
ATOM	1625	O	ILE	B	150	48.485	7.780	33.166	1.00	11.75
ATOM	1627	N	ARG	B	151	47.075	7.413	31.456	1.00	10.15
ATOM	1628	CA	ARG	B	151	47.581	8.500	30.627	1.00	10.85
ATOM	1630	CB	ARG	B	151	48.629	7.971	29.655	1.00	11.44
ATOM	1633	CG	ARG	B	151	49.911	7.536	30.287	1.00	18.68
ATOM	1636	CD	ARG	B	151	50.760	8.728	30.586	1.00	32.30
ATOM	1639	NE	ARG	B	151	52.049	8.365	31.147	1.00	36.84
ATOM	1641	CZ	ARG	B	151	52.932	9.249	31.589	1.00	39.39
ATOM	1642	NH1	ARG	B	151	52.683	10.555	31.514	1.00	41.55
ATOM	1645	NH2	ARG	B	151	54.081	8.828	32.088	1.00	42.34
ATOM	1648	C	ARG	B	151	46.464	9.026	29.796	1.00	10.59
ATOM	1649	O	ARG	B	151	45.625	8.270	29.354	1.00	10.23
ATOM	1651	N	PRO	B	152	46.461	10.323	29.544	1.00	8.50
ATOM	1652	CA	PRO	B	152	45.390	10.930	28.758	1.00	9.15
ATOM	1654	CB	PRO	B	152	45.499	12.404	29.117	1.00	10.31
ATOM	1657	CG	PRO	B	152	46.950	12.606	29.444	1.00	12.16
ATOM	1660	CD	PRO	B	152	47.444	11.313	30.024	1.00	9.91
ATOM	1663	C	PRO	B	152	45.537	10.695	27.236	1.00	10.67
ATOM	1664	O	PRO	B	152	46.645	10.482	26.729	1.00	10.34
ATOM	1665	N	ILE	B	153	44.415	10.697	26.536	1.00	10.23
ATOM	1666	CA	ILE	B	153	44.430	10.723	25.080	1.00	9.94
ATOM	1668	CB	ILE	B	153	43.395	9.743	24.490	1.00	10.33
ATOM	1670	CG1	ILE	B	153	43.538	9.647	22.958	1.00	7.53
ATOM	1673	CD1	ILE	B	153	42.764	8.528	22.336	1.00	9.85
ATOM	1677	CG2	ILE	B	153	41.988	10.133	24.877	1.00	9.80
ATOM	1681	C	ILE	B	153	44.207	12.145	24.574	1.00	9.50
ATOM	1682	O	ILE	B	153	43.450	12.909	25.163	1.00	8.46
ATOM	1684	N	SER	B	154	44.849	12.462	23.444	1.00	8.64
ATOM	1685	CA	SER	B	154	44.709	13.749	22.808	1.00	9.73
ATOM	1687	CB	SER	B	154	45.737	13.901	21.677	1.00	11.28
ATOM	1690	OG	SER	B	154	47.059	13.893	22.195	1.00	12.24
ATOM	1692	C	SER	B	154	43.314	13.891	22.234	1.00	9.81
ATOM	1693	O	SER	B	154	42.779	12.956	21.623	1.00	10.18
ATOM	1695	N	LEU	B	155	42.721	15.052	22.481	1.00	10.33
ATOM	1696	CA	LEU	B	155	41.483	15.447	21.831	1.00	10.35
ATOM	1698	CB	LEU	B	155	40.753	16.482	22.690	1.00	9.86
ATOM	1701	CG	LEU	B	155	40.200	15.912	23.984	1.00	14.12
ATOM	1703	CD1	LEU	B	155	39.812	17.033	24.913	1.00	17.05
ATOM	1707	CD2	LEU	B	155	39.003	14.996	23.699	1.00	17.88
ATOM	1711	C	LEU	B	155	41.776	16.056	20.469	1.00	11.00
ATOM	1712	O	LEU	B	155	42.697	16.883	20.330	1.00	12.01
ATOM	1714	N	PRO	B	156	40.981	15.693	19.461	1.00	11.05
ATOM	1715	CA	PRO	B	156	41.172	16.301	18.140	1.00	10.99
ATOM	1717	CB	PRO	B	156	40.476	15.331	17.207	1.00	11.17
ATOM	1720	CG	PRO	B	156	39.392	14.711	18.051	1.00	11.29
ATOM	1723	CD	PRO	B	156	39.854	14.740	19.481	1.00	11.82
ATOM	1726	C	PRO	B	156	40.556	17.701	18.100	1.00	12.21
ATOM	1727	O	PRO	B	156	39.452	17.926	18.598	1.00	10.60
ATOM	1728	N	ALA	B	157	41.295	18.633	17.507	1.00	12.76
ATOM	1729	CA	ALA	B	157	40.834	20.002	17.322	1.00	12.80
ATOM	1731	CB	ALA	B	157	41.979	20.878	16.840	1.00	15.24
ATOM	1735	C	ALA	B	157	39.682	20.023	16.321	1.00	13.06
ATOM	1736	O	ALA	B	157	39.487	19.083	15.566	1.00	12.46
ATOM	1738	N	ALA	B	158	38.941	21.121	16.329	1.00	13.87
ATOM	1739	CA	ALA	B	158	37.727	21.271	15.557	1.00	15.04
ATOM	1741	CB	ALA	B	158	37.211	22.722	15.701	1.00	16.79
ATOM	1745	C	ALA	B	158	37.863	20.905	14.077	1.00	16.72
ATOM	1746	O	ALA	B	158	36.933	20.341	13.488	1.00	19.13

ATOM	1748	N	GLN	B	159	38.999	21.218	13.469	1.00	15.55
ATOM	1749	CA	GLN	B	159	39.158	20.971	12.025	1.00	16.82
ATOM	1751	CB	GLN	B	159	39.954	22.114	11.399	1.00	16.65
ATOM	1754	CG	GLN	B	159	39.224	23.420	11.429	1.00	17.44
ATOM	1757	CD	GLN	B	159	39.924	24.476	10.607	1.00	16.16
ATOM	1758	OE1	GLN	B	159	41.104	24.810	10.864	1.00	19.56
ATOM	1759	NE2	GLN	B	159	39.227	24.979	9.574	1.00	15.93
ATOM	1762	C	GLN	B	159	39.835	19.644	11.689	1.00	17.13
ATOM	1763	O	GLN	B	159	40.224	19.398	10.537	1.00	16.33
ATOM	1765	N	ALA	B	160	39.998	18.784	12.679	1.00	16.43
ATOM	1766	CA	ALA	B	160	40.693	17.518	12.453	1.00	16.99
ATOM	1768	CB	ALA	B	160	40.912	16.790	13.781	1.00	16.73
ATOM	1772	C	ALA	B	160	39.900	16.641	11.490	1.00	17.20
ATOM	1773	O	ALA	B	160	38.690	16.564	11.566	1.00	19.24
ATOM	1775	N	SER	B	161	40.579	15.988	10.563	1.00	18.19
ATOM	1776	CA	SER	B	161	39.912	15.031	9.700	1.00	17.70
ATOM	1778	CB	SER	B	161	39.867	15.526	8.259	1.00	19.58
ATOM	1781	OG	SER	B	161	41.181	15.729	7.775	1.00	28.06
ATOM	1783	C	SER	B	161	40.690	13.739	9.795	1.00	17.08
ATOM	1784	O	SER	B	161	41.926	13.741	9.818	1.00	18.59
ATOM	1786	N	PHE	B	162	39.964	12.638	9.909	1.00	13.53
ATOM	1787	CA	PHE	B	162	40.567	11.316	9.933	1.00	12.84
ATOM	1789	CB	PHE	B	162	40.166	10.571	11.189	1.00	11.57
ATOM	1792	CG	PHE	B	162	40.651	11.238	12.433	1.00	8.48
ATOM	1793	CD1	PHE	B	162	41.873	10.902	12.965	1.00	9.43
ATOM	1795	CE1	PHE	B	162	42.347	11.500	14.083	1.00	11.22
ATOM	1797	CZ	PHE	B	162	41.588	12.471	14.695	1.00	9.58
ATOM	1799	CE2	PHE	B	162	40.345	12.845	14.157	1.00	9.57
ATOM	1801	CD2	PHE	B	162	39.892	12.210	13.033	1.00	8.24
ATOM	1803	C	PHE	B	162	40.058	10.627	8.693	1.00	12.89
ATOM	1804	O	PHE	B	162	38.848	10.663	8.422	1.00	13.39
ATOM	1806	N	PRO	B	163	40.974	10.070	7.897	1.00	13.02
ATOM	1807	CA	PRO	B	163	40.578	9.554	6.600	1.00	13.33
ATOM	1809	CB	PRO	B	163	41.912	9.141	5.964	1.00	14.46
ATOM	1812	CG	PRO	B	163	42.849	9.018	7.027	1.00	16.82
ATOM	1815	CD	PRO	B	163	42.420	9.938	8.131	1.00	13.65
ATOM	1818	C	PRO	B	163	39.633	8.372	6.686	1.00	13.19
ATOM	1819	O	PRO	B	163	39.788	7.485	7.548	1.00	12.33
ATOM	1820	N	ASN	B	164	38.656	8.332	5.778	1.00	13.26
ATOM	1821	CA	ASN	B	164	37.850	7.137	5.687	1.00	12.47
ATOM	1823	CB	ASN	B	164	36.853	7.252	4.542	1.00	13.60
ATOM	1826	CG	ASN	B	164	35.867	8.399	4.742	1.00	14.75
ATOM	1827	OD1	ASN	B	164	35.518	8.755	5.874	1.00	18.30
ATOM	1828	ND2	ASN	B	164	35.450	9.010	3.645	1.00	20.50
ATOM	1831	C	ASN	B	164	38.751	5.911	5.516	1.00	12.68
ATOM	1832	O	ASN	B	164	39.754	5.967	4.811	1.00	12.61
ATOM	1834	N	GLY	B	165	38.380	4.809	6.157	1.00	12.20
ATOM	1835	CA	GLY	B	165	39.130	3.564	6.071	1.00	11.46
ATOM	1838	C	GLY	B	165	40.258	3.399	7.085	1.00	10.79
ATOM	1839	O	GLY	B	165	40.799	2.305	7.214	1.00	11.94
ATOM	1841	N	LEU	B	166	40.626	4.474	7.786	1.00	9.44
ATOM	1842	CA	LEU	B	166	41.621	4.375	8.843	1.00	10.45
ATOM	1844	CB	LEU	B	166	41.810	5.736	9.514	1.00	9.95
ATOM	1847	CG	LEU	B	166	42.797	5.818	10.681	1.00	9.00
ATOM	1849	CD1	LEU	B	166	44.188	5.345	10.285	1.00	9.15
ATOM	1853	CD2	LEU	B	166	42.853	7.185	11.255	1.00	10.25
ATOM	1857	C	LEU	B	166	41.156	3.366	9.879	1.00	10.16
ATOM	1858	O	LEU	B	166	40.031	3.450	10.358	1.00	11.04
ATOM	1860	N	HIS	B	167	42.040	2.455	10.252	1.00	10.47
ATOM	1861	CA	HIS	B	167	41.754	1.508	11.289	1.00	10.83
ATOM	1863	CB	HIS	B	167	42.557	0.247	11.070	1.00	12.49

ATOM	1866	CG	HIS	B	167	42.104	-0.533	9.882	1.00	16.99
ATOM	1867	ND1	HIS	B	167	42.343	-1.883	9.746	1.00	21.32
ATOM	1869	CE1	HIS	B	167	41.838	-2.298	8.595	1.00	25.04
ATOM	1871	NE2	HIS	B	167	41.279	-1.268	7.987	1.00	24.02
ATOM	1873	CD2	HIS	B	167	41.421	-0.158	8.779	1.00	22.55
ATOM	1875	C	HIS	B	167	42.051	2.125	12.649	1.00	11.62
ATOM	1876	O	HIS	B	167	43.215	2.374	13.019	1.00	11.78
ATOM	1878	N	CYS	B	168	40.966	2.384	13.368	1.00	8.66
ATOM	1879	CA	CYS	B	168	41.006	2.902	14.711	1.00	9.01
ATOM	1881	CB	CYS	B	168	40.022	4.059	14.843	1.00	7.36
ATOM	1884	SG	CYS	B	168	40.397	5.322	13.638	1.00	8.94
ATOM	1886	C	CYS	B	168	40.655	1.758	15.646	1.00	9.91
ATOM	1887	O	CYS	B	168	40.294	0.664	15.188	1.00	9.53
ATOM	1889	N	THR	B	169	40.800	1.973	16.949	1.00	8.83
ATOM	1890	CA	THR	B	169	40.516	0.916	17.887	1.00	7.59
ATOM	1892	CB	THR	B	169	41.768	0.429	18.636	1.00	7.30
ATOM	1894	OG1	THR	B	169	42.759	-0.017	17.695	1.00	9.66
ATOM	1896	CG2	THR	B	169	41.448	-0.726	19.533	1.00	7.02
ATOM	1900	C	THR	B	169	39.469	1.360	18.877	1.00	7.54
ATOM	1901	O	THR	B	169	39.585	2.430	19.465	1.00	9.35
ATOM	1903	N	VAL	B	170	38.465	0.531	19.053	1.00	7.00
ATOM	1904	CA	VAL	B	170	37.488	0.743	20.124	1.00	6.76
ATOM	1906	CB	VAL	B	170	36.058	0.667	19.564	1.00	6.21
ATOM	1908	CG1	VAL	B	170	35.734	-0.719	18.960	1.00	8.21
ATOM	1912	CG2	VAL	B	170	35.047	1.085	20.629	1.00	7.83
ATOM	1916	C	VAL	B	170	37.732	-0.236	21.267	1.00	7.32
ATOM	1917	O	VAL	B	170	38.068	-1.391	21.047	1.00	6.76
ATOM	1919	N	THR	B	171	37.608	0.244	22.494	1.00	6.62
ATOM	1920	CA	THR	B	171	37.910	-0.569	23.655	1.00	7.19
ATOM	1922	CB	THR	B	171	39.242	-0.124	24.268	1.00	7.38
ATOM	1924	OG1	THR	B	171	39.274	1.301	24.405	1.00	6.74
ATOM	1926	CG2	THR	B	171	40.420	-0.515	23.370	1.00	9.75
ATOM	1930	C	THR	B	171	36.783	-0.480	24.676	1.00	6.93
ATOM	1931	O	THR	B	171	36.061	0.498	24.734	1.00	7.21
ATOM	1933	N	GLY	B	172	36.656	-1.507	25.513	1.00	8.36
ATOM	1934	CA	GLY	B	172	35.711	-1.473	26.599	1.00	7.32
ATOM	1937	C	GLY	B	172	35.474	-2.827	27.242	1.00	7.42
ATOM	1938	O	GLY	B	172	36.002	-3.864	26.802	1.00	6.79
ATOM	1940	N	TRP	B	173	34.684	-2.780	28.308	1.00	7.29
ATOM	1941	CA	TRP	B	173	34.309	-3.959	29.077	1.00	8.13
ATOM	1943	CB	TRP	B	173	34.574	-3.684	30.549	1.00	7.40
ATOM	1946	CG	TRP	B	173	36.001	-3.556	30.913	1.00	8.44
ATOM	1947	CD1	TRP	B	173	36.868	-4.571	31.147	1.00	9.65
ATOM	1949	NE1	TRP	B	173	38.090	-4.081	31.491	1.00	8.86
ATOM	1951	CE2	TRP	B	173	38.028	-2.709	31.510	1.00	7.44
ATOM	1952	CD2	TRP	B	173	36.728	-2.345	31.130	1.00	8.12
ATOM	1953	CE3	TRP	B	173	36.394	-0.989	31.073	1.00	7.56
ATOM	1955	CZ3	TRP	B	173	37.365	-0.068	31.349	1.00	9.62
ATOM	1957	CH2	TRP	B	173	38.650	-0.463	31.704	1.00	8.35
ATOM	1959	CZ2	TRP	B	173	39.001	-1.784	31.778	1.00	10.25
ATOM	1961	C	TRP	B	173	32.842	-4.363	28.894	1.00	8.54
ATOM	1962	O	TRP	B	173	32.273	-5.105	29.724	1.00	8.20
ATOM	1964	N	GLY	B	174	32.234	-3.878	27.822	1.00	8.23
ATOM	1965	CA	GLY	B	174	30.828	-4.125	27.538	1.00	8.13
ATOM	1968	C	GLY	B	174	30.602	-5.516	26.977	1.00	8.40
ATOM	1969	O	GLY	B	174	31.518	-6.351	26.955	1.00	8.16
ATOM	1971	N	HIS	B	175	29.371	-5.746	26.521	1.00	8.77
ATOM	1972	CA	HIS	B	175	28.936	-7.085	26.127	1.00	9.57
ATOM	1974	CB	HIS	B	175	27.466	-7.082	25.733	1.00	9.91
ATOM	1977	CG	HIS	B	175	26.554	-6.764	26.870	1.00	10.13
ATOM	1978	ND1	HIS	B	175	25.188	-6.654	26.726	1.00	11.24

ATOM	1980	CE1	HIS	B	175	24.651	-6.372	27.903	1.00	12.01
ATOM	1982	NE2	HIS	B	175	25.618	-6.295	28.802	1.00	13.22
ATOM	1984	CD2	HIS	B	175	26.821	-6.532	28.179	1.00	13.44
ATOM	1986	C	HIS	B	175	29.794	-7.661	24.997	1.00	9.98
ATOM	1987	O	HIS	B	175	30.285	-6.930	24.144	1.00	9.15
ATOM	1989	N	VAL	B	176	29.917	-8.981	24.987	1.00	9.79
ATOM	1990	CA	VAL	B	176	30.720	-9.697	24.002	1.00	10.77
ATOM	1992	CB	VAL	B	176	31.684	-10.710	24.680	1.00	10.50
ATOM	1994	CG1	VAL	B	176	32.691	-9.989	25.543	1.00	12.00
ATOM	1998	CG2	VAL	B	176	30.910	-11.787	25.461	1.00	14.17
ATOM	2002	C	VAL	B	176	29.821	-10.435	22.973	1.00	12.03
ATOM	2003	O	VAL	B	176	30.296	-10.964	21.982	1.00	13.32
ATOM	2005	N	ALA	B	177	28.532	-10.423	23.221	1.00	11.04
ATOM	2006	CA	ALA	B	177	27.539	-10.931	22.301	1.00	12.53
ATOM	2008	CB	ALA	B	177	27.516	-12.461	22.340	1.00	14.20
ATOM	2012	C	ALA	B	177	26.214	-10.329	22.743	1.00	13.90
ATOM	2013	O	ALA	B	177	26.106	-9.790	23.854	1.00	14.23
ATOM	2015	N	PRO	B	178	25.195	-10.380	21.892	1.00	14.34
ATOM	2016	CA	PRO	B	178	23.934	-9.775	22.305	1.00	14.49
ATOM	2018	CB	PRO	B	178	22.983	-10.122	21.151	1.00	15.28
ATOM	2021	CG	PRO	B	178	23.851	-10.275	19.995	1.00	12.71
ATOM	2024	CD	PRO	B	178	25.125	-10.927	20.528	1.00	15.07
ATOM	2027	C	PRO	B	178	23.422	-10.283	23.645	1.00	15.67
ATOM	2028	O	PRO	B	178	23.237	-11.497	23.839	1.00	15.76
ATOM	2029	N	SER	B	179	23.285	-9.346	24.574	1.00	16.35
ATOM	2030	CA	SER	B	179	22.877	-9.586	25.946	1.00	16.42
ATOM	2032	CB	SER	B	179	21.440	-10.096	25.995	1.00	18.32
ATOM	2035	OG	SER	B	179	20.607	-9.356	25.106	1.00	24.76
ATOM	2037	C	SER	B	179	23.781	-10.543	26.703	1.00	17.36
ATOM	2038	O	SER	B	179	23.346	-11.123	27.692	1.00	18.95
ATOM	2040	N	VAL	B	180	25.030	-10.707	26.271	1.00	16.62
ATOM	2041	CA	VAL	B	180	25.994	-11.531	27.002	1.00	14.94
ATOM	2043	CB	VAL	B	180	26.572	-12.622	26.115	1.00	14.31
ATOM	2045	CG1	VAL	B	180	27.610	-13.451	26.849	1.00	17.29
ATOM	2049	CG2	VAL	B	180	25.442	-13.500	25.586	1.00	16.90
ATOM	2053	C	VAL	B	180	27.135	-10.664	27.533	1.00	15.07
ATOM	2054	O	VAL	B	180	27.856	-10.039	26.753	1.00	13.04
ATOM	2056	N	SER	B	181	27.301	-10.660	28.853	1.00	14.15
ATOM	2057	CA	SER	B	181	28.326	-9.827	29.479	1.00	14.29
ATOM	2059	CB	SER	B	181	27.998	-9.587	30.964	1.00	16.00
ATOM	2062	OG	SER	B	181	26.850	-8.752	31.081	1.00	20.62
ATOM	2064	C	SER	B	181	29.698	-10.448	29.337	1.00	13.93
ATOM	2065	O	SER	B	181	29.844	-11.674	29.276	1.00	11.87
ATOM	2067	N	LEU	B	182	30.713	-9.588	29.313	1.00	11.41
ATOM	2068	CA	LEU	B	182	32.082	-10.038	29.461	1.00	13.24
ATOM	2070	CB	LEU	B	182	33.025	-8.840	29.385	1.00	12.57
ATOM	2073	CG	LEU	B	182	34.513	-9.074	29.465	1.00	11.00
ATOM	2075	CD1	LEU	B	182	35.015	-9.761	28.225	1.00	11.77
ATOM	2079	CD2	LEU	B	182	35.211	-7.701	29.593	1.00	12.57
ATOM	2083	C	LEU	B	182	32.212	-10.709	30.814	1.00	13.53
ATOM	2084	O	LEU	B	182	31.717	-10.197	31.823	1.00	13.62
ATOM	2086	N	LEU	B	183	32.858	-11.864	30.827	1.00	15.00
ATOM	2087	CA	LEU	B	183	32.989	-12.650	32.062	1.00	16.37
ATOM	2089	CB	LEU	B	183	33.220	-14.134	31.741	1.00	17.97
ATOM	2092	CG	LEU	B	183	31.994	-15.038	31.829	1.00	23.03
ATOM	2094	CD1	LEU	B	183	30.736	-14.357	31.282	1.00	29.44
ATOM	2098	CD2	LEU	B	183	32.282	-16.364	31.124	1.00	21.71
ATOM	2102	C	LEU	B	183	34.143	-12.171	32.897	1.00	15.51
ATOM	2103	O	LEU	B	183	35.168	-11.751	32.380	1.00	14.65
ATOM	2105	N	THR	B	184	33.978	-12.272	34.211	1.00	15.11
ATOM	2106	CA	THR	B	184	35.078	-12.087	35.119	1.00	16.24

ATOM	2108	CB	THR	B	184	34.679	-12.497	36.547	1.00	17.65
ATOM	2110	OG1	THR	B	184	35.759	-12.204	37.431	1.00	18.56
ATOM	2112	CG2	THR	B	184	34.342	-13.990	36.607	1.00	20.05
ATOM	2116	C	THR	B	184	36.270	-12.930	34.626	1.00	15.33
ATOM	2117	O	THR	B	184	36.090	-14.044	34.128	1.00	16.51
ATOM	2119	N	PRO	B	185	37.493	-12.406	34.749	1.00	14.91
ATOM	2120	CA	PRO	B	185	37.890	-11.183	35.418	1.00	14.27
ATOM	2122	CB	PRO	B	185	39.358	-11.436	35.722	1.00	14.36
ATOM	2125	CG	PRO	B	185	39.817	-12.237	34.589	1.00	15.35
ATOM	2128	CD	PRO	B	185	38.662	-13.128	34.226	1.00	16.33
ATOM	2131	C	PRO	B	185	37.743	-9.905	34.593	1.00	12.64
ATOM	2132	O	PRO	B	185	38.281	-8.884	34.984	1.00	14.48
ATOM	2133	N	LYS	B	186	37.001	-9.982	33.481	1.00	12.42
ATOM	2134	CA	LYS	B	186	36.686	-8.831	32.653	1.00	12.58
ATOM	2136	CB	LYS	B	186	35.761	-7.865	33.395	1.00	11.61
ATOM	2139	CG	LYS	B	186	34.357	-8.374	33.488	1.00	14.10
ATOM	2142	CD	LYS	B	186	33.471	-7.409	34.243	1.00	16.50
ATOM	2145	CE	LYS	B	186	32.091	-7.955	34.512	1.00	22.42
ATOM	2148	NZ	LYS	B	186	31.256	-7.989	33.301	1.00	23.69
ATOM	2152	C	LYS	B	186	37.925	-8.146	32.108	1.00	11.05
ATOM	2153	O	LYS	B	186	38.213	-6.969	32.431	1.00	9.87
ATOM	2155	N	PRO	B	187	38.662	-8.868	31.239	1.00	11.12
ATOM	2156	CA	PRO	B	187	39.786	-8.276	30.556	1.00	10.78
ATOM	2158	CB	PRO	B	187	40.432	-9.476	29.857	1.00	11.09
ATOM	2161	CG	PRO	B	187	39.339	-10.370	29.602	1.00	12.28
ATOM	2164	CD	PRO	B	187	38.428	-10.251	30.794	1.00	12.13
ATOM	2167	C	PRO	B	187	39.312	-7.221	29.554	1.00	9.44
ATOM	2168	O	PRO	B	187	38.384	-7.465	28.765	1.00	10.17
ATOM	2169	N	LEU	B	188	39.952	-6.053	29.574	1.00	9.28
ATOM	2170	CA	LEU	B	188	39.590	-5.003	28.627	1.00	8.57
ATOM	2172	CB	LEU	B	188	40.514	-3.807	28.754	1.00	7.38
ATOM	2175	CG	LEU	B	188	40.204	-2.657	27.813	1.00	8.73
ATOM	2177	CD1	LEU	B	188	38.838	-2.015	28.113	1.00	9.68
ATOM	2181	CD2	LEU	B	188	41.280	-1.622	27.932	1.00	8.55
ATOM	2185	C	LEU	B	188	39.684	-5.563	27.222	1.00	8.24
ATOM	2186	O	LEU	B	188	40.682	-6.194	26.855	1.00	8.25
ATOM	2188	N	GLN	B	189	38.652	-5.326	26.435	1.00	8.76
ATOM	2189	CA	GLN	B	189	38.619	-5.759	25.040	1.00	8.21
ATOM	2191	CB	GLN	B	189	37.246	-6.325	24.670	1.00	6.62
ATOM	2194	CG	GLN	B	189	36.803	-7.544	25.515	1.00	9.30
ATOM	2197	CD	GLN	B	189	37.696	-8.718	25.288	1.00	9.28
ATOM	2198	OE1	GLN	B	189	37.715	-9.282	24.185	1.00	9.97
ATOM	2199	NE2	GLN	B	189	38.537	-9.037	26.283	1.00	9.21
ATOM	2202	C	GLN	B	189	38.944	-4.620	24.087	1.00	8.81
ATOM	2203	O	GLN	B	189	38.664	-3.471	24.364	1.00	7.72
ATOM	2205	N	GLN	B	190	39.572	-4.973	22.985	1.00	8.79
ATOM	2206	CA	GLN	B	190	39.959	-4.029	21.949	1.00	9.58
ATOM	2208	CB	GLN	B	190	41.468	-3.823	21.968	1.00	10.09
ATOM	2211	CG	GLN	B	190	42.249	-5.045	21.463	1.00	10.42
ATOM	2214	CD	GLN	B	190	43.718	-5.007	21.763	1.00	14.49
ATOM	2215	OE1	GLN	B	190	44.292	-3.964	22.052	1.00	15.92
ATOM	2216	NE2	GLN	B	190	44.337	-6.184	21.747	1.00	21.33
ATOM	2219	C	GLN	B	190	39.518	-4.572	20.610	1.00	9.42
ATOM	2220	O	GLN	B	190	39.494	-5.790	20.385	1.00	9.33
ATOM	2222	N	LEU	B	191	39.149	-3.665	19.720	1.00	8.23
ATOM	2223	CA	LEU	B	191	38.736	-4.065	18.386	1.00	9.61
ATOM	2225	CB	LEU	B	191	37.243	-4.301	18.352	1.00	8.15
ATOM	2228	CG	LEU	B	191	36.639	-4.504	16.961	1.00	7.94
ATOM	2230	CD1	LEU	B	191	36.927	-5.865	16.411	1.00	11.76
ATOM	2234	CD2	LEU	B	191	35.178	-4.270	16.998	1.00	12.51
ATOM	2238	C	LEU	B	191	39.116	-2.997	17.391	1.00	9.54

ATOM	2239	O	LEU B 191	38.791	-1.816	17.576	1.00	8.53
ATOM	2241	N	GLU B 192	39.788	-3.427	16.329	1.00	10.64
ATOM	2242	CA	GLU B 192	40.140	-2.565	15.225	1.00	10.70
ATOM	2244	CB	GLU B 192	41.318	-3.191	14.476	1.00	12.14
ATOM	2247	CG	GLU B 192	41.815	-2.463	13.283	1.00	15.00
ATOM	2250	CD	GLU B 192	43.248	-2.866	12.909	1.00	18.99
ATOM	2251	OE1	GLU B 192	43.987	-3.373	13.785	1.00	30.10
ATOM	2252	OE2	GLU B 192	43.635	-2.670	11.737	1.00	33.96
ATOM	2253	C	GLU B 192	38.940	-2.436	14.313	1.00	10.01
ATOM	2254	O	GLU B 192	38.351	-3.442	13.898	1.00	8.08
ATOM	2256	N	VAL B 193	38.551	-1.203	14.051	1.00	9.46
ATOM	2257	CA	VAL B 193	37.399	-0.897	13.198	1.00	9.75
ATOM	2259	CB	VAL B 193	36.153	-0.434	14.033	1.00	10.14
ATOM	2261	CG1	VAL B 193	35.578	-1.602	14.798	1.00	8.07
ATOM	2265	CG2	VAL B 193	36.501	0.714	14.996	1.00	11.21
ATOM	2269	C	VAL B 193	37.798	0.223	12.227	1.00	9.86
ATOM	2270	O	VAL B 193	38.434	1.190	12.622	1.00	10.31
ATOM	2272	N	PRO B 194	37.418	0.093	10.953	1.00	9.69
ATOM	2273	CA	PRO B 194	37.702	1.165	10.014	1.00	10.06
ATOM	2275	CB	PRO B 194	37.628	0.468	8.666	1.00	8.84
ATOM	2278	CG	PRO B 194	36.631	-0.621	8.881	1.00	11.55
ATOM	2281	CD	PRO B 194	36.768	-1.059	10.299	1.00	10.02
ATOM	2284	C	PRO B 194	36.687	2.275	10.087	1.00	9.77
ATOM	2285	O	PRO B 194	35.480	2.003	10.245	1.00	9.99
ATOM	2286	N	LEU B 195	37.151	3.523	9.961	1.00	8.56
ATOM	2287	CA	LEU B 195	36.236	4.649	9.865	1.00	9.33
ATOM	2289	CB	LEU B 195	36.966	5.973	9.913	1.00	7.86
ATOM	2292	CG	LEU B 195	37.816	6.221	11.143	1.00	9.37
ATOM	2294	CD1	LEU B 195	38.418	7.608	11.006	1.00	9.09
ATOM	2298	CD2	LEU B 195	36.976	6.053	12.414	1.00	8.36
ATOM	2302	C	LEU B 195	35.465	4.570	8.555	1.00	10.06
ATOM	2303	O	LEU B 195	36.050	4.293	7.505	1.00	10.18
ATOM	2305	N	ILE B 196	34.166	4.814	8.631	1.00	10.59
ATOM	2306	CA	ILE B 196	33.301	4.773	7.440	1.00	11.10
ATOM	2308	CB	ILE B 196	32.118	3.818	7.668	1.00	10.04
ATOM	2310	CG1	ILE B 196	32.649	2.414	7.918	1.00	10.68
ATOM	2313	CD1	ILE B 196	31.618	1.448	8.335	1.00	12.41
ATOM	2317	CG2	ILE B 196	31.120	3.839	6.498	1.00	12.71
ATOM	2321	C	ILE B 196	32.850	6.164	7.074	1.00	11.60
ATOM	2322	O	ILE B 196	32.623	7.007	7.934	1.00	11.39
ATOM	2324	N	SER B 197	32.722	6.406	5.773	1.00	11.35
ATOM	2325	CA	SER B 197	32.359	7.719	5.282	1.00	12.32
ATOM	2327	CB	SER B 197	32.334	7.717	3.765	1.00	14.00
ATOM	2330	OG	SER B 197	31.170	7.088	3.316	1.00	15.49
ATOM	2332	C	SER B 197	30.982	8.149	5.800	1.00	13.09
ATOM	2333	O	SER B 197	30.110	7.323	6.003	1.00	13.07
ATOM	2335	N	ARG B 198	30.793	9.446	6.000	1.00	14.98
ATOM	2336	CA	ARG B 198	29.518	9.939	6.494	1.00	16.30
ATOM	2338	CB	ARG B 198	29.600	11.422	6.891	1.00	19.06
ATOM	2341	CG	ARG B 198	29.857	12.392	5.782	1.00	21.11
ATOM	2344	CD	ARG B 198	30.468	13.697	6.342	1.00	22.47
ATOM	2347	NE	ARG B 198	30.471	14.740	5.320	1.00	31.08
ATOM	2349	CZ	ARG B 198	31.441	14.963	4.430	1.00	37.47
ATOM	2350	NH1	ARG B 198	32.560	14.235	4.408	1.00	41.00
ATOM	2353	NH2	ARG B 198	31.288	15.941	3.542	1.00	38.86
ATOM	2356	C	ARG B 198	28.399	9.645	5.498	1.00	15.27
ATOM	2357	O	ARG B 198	27.281	9.338	5.899	1.00	14.21
ATOM	2359	N	GLU B 199	28.714	9.674	4.206	1.00	15.71
ATOM	2360	CA	GLU B 199	27.728	9.319	3.168	1.00	15.16
ATOM	2362	CB	GLU B 199	28.346	9.515	1.786	1.00	17.32
ATOM	2365	CG	GLU B 199	28.726	10.989	1.438	1.00	26.08

ATOM	2368	CD	GLU	B	199	30.015	11.516	2.092	1.00	34.18
ATOM	2369	OE1	GLU	B	199	30.830	10.712	2.604	1.00	29.64
ATOM	2370	OE2	GLU	B	199	30.200	12.762	2.094	1.00	40.43
ATOM	2371	C	GLU	B	199	27.239	7.882	3.338	1.00	13.57
ATOM	2372	O	GLU	B	199	26.028	7.585	3.264	1.00	13.22
ATOM	2374	N	THR	B	200	28.174	6.980	3.608	1.00	12.05
ATOM	2375	CA	THR	B	200	27.849	5.576	3.759	1.00	11.49
ATOM	2377	CB	THR	B	200	29.112	4.737	3.694	1.00	12.08
ATOM	2379	OG1	THR	B	200	29.687	4.929	2.398	1.00	11.41
ATOM	2381	CG2	THR	B	200	28.805	3.305	3.895	1.00	10.04
ATOM	2385	C	THR	B	200	27.057	5.331	5.046	1.00	11.71
ATOM	2386	O	THR	B	200	26.063	4.614	5.042	1.00	10.20
ATOM	2388	N	CYS	B	201	27.503	5.936	6.145	1.00	10.78
ATOM	2389	CA	CYS	B	201	26.794	5.797	7.411	1.00	11.79
ATOM	2391	CB	CYS	B	201	27.551	6.536	8.500	1.00	12.78
ATOM	2394	SG	CYS	B	201	29.196	5.890	8.794	1.00	15.82
ATOM	2396	C	CYS	B	201	25.376	6.354	7.303	1.00	12.08
ATOM	2397	O	CYS	B	201	24.453	5.792	7.874	1.00	11.89
ATOM	2399	N	ASN	B	202	25.214	7.448	6.568	1.00	10.65
ATOM	2400	CA	ASN	B	202	23.898	8.044	6.333	1.00	12.18
ATOM	2402	CB	ASN	B	202	24.038	9.310	5.496	1.00	11.38
ATOM	2405	CG	ASN	B	202	22.706	9.855	5.048	1.00	15.12
ATOM	2406	OD1	ASN	B	202	22.341	9.753	3.867	1.00	25.47
ATOM	2407	ND2	ASN	B	202	21.968	10.433	5.977	1.00	18.92
ATOM	2410	C	ASN	B	202	22.991	7.036	5.625	1.00	11.80
ATOM	2411	O	ASN	B	202	21.831	6.829	5.993	1.00	12.04
ATOM	2413	N	SER	B	203	23.532	6.385	4.604	1.00	11.86
ATOM	2414	CA	ASER	B	203	22.789	5.343	3.893	0.50	11.78
ATOM	2415	CA	BSER	B	203	22.767	5.360	3.903	0.50	12.37
ATOM	2418	CB	ASER	B	203	23.612	4.783	2.725	0.50	12.30
ATOM	2419	CB	BSER	B	203	23.524	4.835	2.682	0.50	12.99
ATOM	2424	OG	ASER	B	203	22.932	3.737	2.041	0.50	9.69
ATOM	2425	OG	BSER	B	203	23.582	5.823	1.667	0.50	16.98
ATOM	2428	C	SER	B	203	22.394	4.218	4.822	1.00	12.09
ATOM	2429	O	SER	B	203	21.227	3.840	4.884	1.00	12.95
ATOM	2431	N	LEU	B	204	23.373	3.684	5.554	1.00	10.27
ATOM	2432	CA	LEU	B	204	23.149	2.504	6.373	1.00	10.48
ATOM	2434	CB	LEU	B	204	24.458	2.056	7.012	1.00	10.44
ATOM	2437	CG	LEU	B	204	25.417	1.391	6.009	1.00	11.18
ATOM	2439	CD1	LEU	B	204	26.761	1.309	6.637	1.00	11.36
ATOM	2443	CD2	LEU	B	204	24.945	0.023	5.564	1.00	13.58
ATOM	2447	C	LEU	B	204	22.085	2.712	7.445	1.00	10.81
ATOM	2448	O	LEU	B	204	21.307	1.793	7.739	1.00	12.04
ATOM	2450	N	TYR	B	205	22.077	3.909	8.024	1.00	10.99
ATOM	2451	CA	TYR	B	205	21.210	4.198	9.175	1.00	10.89
ATOM	2453	CB	TYR	B	205	21.993	4.899	10.262	1.00	11.59
ATOM	2456	CG	TYR	B	205	22.811	3.955	11.081	1.00	9.10
ATOM	2457	CD1	TYR	B	205	22.196	3.102	11.987	1.00	13.59
ATOM	2459	CE1	TYR	B	205	22.920	2.232	12.751	1.00	13.22
ATOM	2461	CZ	TYR	B	205	24.275	2.167	12.617	1.00	11.63
ATOM	2462	OH	TYR	B	205	24.948	1.260	13.402	1.00	13.15
ATOM	2464	CE2	TYR	B	205	24.946	2.982	11.707	1.00	13.34
ATOM	2466	CD2	TYR	B	205	24.216	3.876	10.939	1.00	11.67
ATOM	2468	C	TYR	B	205	19.996	5.042	8.836	1.00	12.58
ATOM	2469	O	TYR	B	205	18.905	4.765	9.351	1.00	15.96
ATOM	2471	N	ASN	B	206	20.158	6.070	8.023	1.00	11.33
ATOM	2472	CA	ASN	B	206	19.042	6.965	7.772	1.00	11.14
ATOM	2474	CB	ASN	B	206	19.486	8.424	7.626	1.00	10.13
ATOM	2477	CG	ASN	B	206	20.147	8.956	8.882	1.00	10.67
ATOM	2478	OD1	ASN	B	206	19.895	8.448	9.995	1.00	10.73
ATOM	2479	ND2	ASN	B	206	21.013	9.945	8.711	1.00	12.29

ATOM	2482	C	ASN B 206	18.173	6.559	6.600	1.00	12.75
ATOM	2483	O	ASN B 206	16.986	6.905	6.571	1.00	14.47
ATOM	2485	N	ILE B 207	18.741	5.859	5.629	1.00	11.35
ATOM	2486	CA	ILE B 207	17.974	5.481	4.443	1.00	12.12
ATOM	2488	CB	ILE B 207	18.778	5.704	3.173	1.00	12.28
ATOM	2490	CG1	ILE B 207	19.271	7.153	3.106	1.00	14.43
ATOM	2493	CD1	ILE B 207	18.219	8.171	3.320	1.00	19.11
ATOM	2497	CG2	ILE B 207	17.940	5.341	1.933	1.00	13.39
ATOM	2501	C	ILE B 207	17.552	4.026	4.491	1.00	11.76
ATOM	2502	O	ILE B 207	16.386	3.717	4.256	1.00	13.53
ATOM	2504	N	ASP B 208	18.490	3.140	4.802	1.00	12.10
ATOM	2505	CA	ASP B 208	18.258	1.700	4.793	1.00	13.21
ATOM	2507	CB	ASP B 208	19.486	0.977	4.208	1.00	15.25
ATOM	2510	CG	ASP B 208	19.765	1.345	2.776	1.00	17.33
ATOM	2511	OD1	ASP B 208	18.914	1.952	2.122	1.00	18.75
ATOM	2512	OD2	ASP B 208	20.862	1.019	2.295	1.00	27.26
ATOM	2513	C	ASP B 208	17.950	1.110	6.171	1.00	15.72
ATOM	2514	O	ASP B 208	18.345	-0.024	6.485	1.00	19.34
ATOM	2516	N	ALA B 209	17.273	1.858	7.024	1.00	14.66
ATOM	2517	CA	ALA B 209	16.890	1.347	8.332	1.00	13.53
ATOM	2519	CB	ALA B 209	17.810	1.875	9.443	1.00	15.04
ATOM	2523	C	ALA B 209	15.464	1.797	8.579	1.00	12.85
ATOM	2524	O	ALA B 209	14.992	2.724	7.933	1.00	13.52
ATOM	2526	N	LYS B 210	14.783	1.130	9.494	1.00	10.69
ATOM	2527	CA	LYS B 210	13.401	1.506	9.808	1.00	11.36
ATOM	2529	CB	LYS B 210	12.763	0.468	10.729	1.00	13.90
ATOM	2532	CG	LYS B 210	12.712	-0.941	10.174	1.00	20.42
ATOM	2535	CD	LYS B 210	11.936	-1.056	8.895	1.00	27.23
ATOM	2538	CE	LYS B 210	11.712	-2.536	8.512	1.00	29.16
ATOM	2541	NZ	LYS B 210	10.636	-2.675	7.488	1.00	33.48
ATOM	2545	C	LYS B 210	13.327	2.868	10.503	1.00	11.24
ATOM	2546	O	LYS B 210	14.325	3.325	11.096	1.00	10.14
ATOM	2548	N	PRO B 211	12.144	3.517	10.458	1.00	9.84
ATOM	2549	CA	PRO B 211	11.977	4.827	11.131	1.00	10.21
ATOM	2551	CB	PRO B 211	10.483	5.102	10.996	1.00	11.11
ATOM	2554	CG	PRO B 211	10.060	4.337	9.788	1.00	12.33
ATOM	2557	CD	PRO B 211	10.926	3.121	9.727	1.00	11.48
ATOM	2560	C	PRO B 211	12.382	4.899	12.602	1.00	9.75
ATOM	2561	O	PRO B 211	12.803	5.967	13.067	1.00	10.38
ATOM	2562	N	GLU B 212	12.271	3.811	13.341	1.00	10.81
ATOM	2563	CA	GLU B 212	12.628	3.872	14.752	1.00	13.60
ATOM	2565	CB	GLU B 212	11.971	2.745	15.488	1.00	14.72
ATOM	2568	CG	GLU B 212	12.574	1.419	15.279	1.00	15.97
ATOM	2571	CD	GLU B 212	11.646	0.371	15.818	1.00	21.23
ATOM	2572	OE1	GLU B 212	11.838	-0.026	16.994	1.00	31.46
ATOM	2573	OE2	GLU B 212	10.698	0.013	15.071	1.00	37.07
ATOM	2574	C	GLU B 212	14.139	3.846	15.001	1.00	12.11
ATOM	2575	O	GLU B 212	14.583	4.029	16.118	1.00	11.66
ATOM	2577	N	GLU B 213	14.924	3.657	13.949	1.00	10.98
ATOM	2578	CA	GLU B 213	16.367	3.684	14.091	1.00	10.52
ATOM	2580	CB	GLU B 213	17.021	3.329	12.782	1.00	9.66
ATOM	2583	CG	GLU B 213	18.504	3.039	12.888	1.00	9.17
ATOM	2586	CD	GLU B 213	18.806	1.718	13.573	1.00	11.26
ATOM	2587	OE1	GLU B 213	17.926	0.810	13.602	1.00	13.96
ATOM	2588	OE2	GLU B 213	19.960	1.575	14.037	1.00	10.19
ATOM	2589	C	GLU B 213	16.816	5.093	14.506	1.00	9.21
ATOM	2590	O	GLU B 213	16.350	6.075	13.940	1.00	9.32
ATOM	2592	N	PRO B 214	17.728	5.197	15.489	1.00	9.16
ATOM	2593	CA	PRO B 214	18.253	6.529	15.781	1.00	9.21
ATOM	2595	CB	PRO B 214	19.336	6.265	16.829	1.00	9.15
ATOM	2598	CG	PRO B 214	18.844	5.058	17.525	1.00	9.35

ATOM	2601	CD	PRO	B	214	18.281	4.200	16.415	1.00	9.71
ATOM	2604	C	PRO	B	214	18.833	7.230	14.580	1.00	7.92
ATOM	2605	O	PRO	B	214	19.300	6.590	13.636	1.00	10.63
ATOM	2606	N	HIS	B	215	18.777	8.547	14.616	1.00	9.28
ATOM	2607	CA	HIS	B	215	19.161	9.352	13.494	1.00	9.27
ATOM	2609	CB	HIS	B	215	18.470	10.696	13.523	1.00	10.70
ATOM	2612	CG	HIS	B	215	18.700	11.476	12.281	1.00	11.85
ATOM	2613	ND1	HIS	B	215	19.323	12.702	12.266	1.00	20.21
ATOM	2615	CE1	HIS	B	215	19.399	13.135	11.019	1.00	11.04
ATOM	2617	NE2	HIS	B	215	18.858	12.229	10.231	1.00	18.51
ATOM	2619	CD2	HIS	B	215	18.411	11.186	10.999	1.00	10.92
ATOM	2621	C	HIS	B	215	20.655	9.580	13.484	1.00	9.89
ATOM	2622	O	HIS	B	215	21.224	10.025	14.484	1.00	10.21
ATOM	2624	N	PHE	B	216	21.281	9.311	12.341	1.00	8.20
ATOM	2625	CA	PHE	B	216	22.714	9.515	12.183	1.00	9.75
ATOM	2627	CB	PHE	B	216	23.324	8.478	11.222	1.00	9.69
ATOM	2630	CG	PHE	B	216	24.786	8.685	10.983	1.00	7.80
ATOM	2631	CD1	PHE	B	216	25.739	8.154	11.863	1.00	8.67
ATOM	2633	CE1	PHE	B	216	27.087	8.374	11.654	1.00	9.05
ATOM	2635	CZ	PHE	B	216	27.503	9.111	10.573	1.00	11.67
ATOM	2637	CE2	PHE	B	216	26.579	9.637	9.693	1.00	10.95
ATOM	2639	CD2	PHE	B	216	25.224	9.427	9.903	1.00	10.94
ATOM	2641	C	PHE	B	216	22.906	10.941	11.688	1.00	9.55
ATOM	2642	O	PHE	B	216	22.335	11.347	10.666	1.00	10.84
ATOM	2644	N	VAL	B	217	23.670	11.722	12.439	1.00	10.23
ATOM	2645	CA	VAL	B	217	23.899	13.116	12.137	1.00	11.87
ATOM	2647	CB	VAL	B	217	23.737	13.995	13.381	1.00	12.02
ATOM	2649	CG1	VAL	B	217	24.074	15.417	13.067	1.00	13.11
ATOM	2653	CG2	VAL	B	217	22.320	13.887	13.937	1.00	15.38
ATOM	2657	C	VAL	B	217	25.319	13.219	11.604	1.00	12.15
ATOM	2658	O	VAL	B	217	26.281	13.088	12.373	1.00	11.76
ATOM	2660	N	GLN	B	218	25.441	13.470	10.300	1.00	12.68
ATOM	2661	CA	GLN	B	218	26.737	13.388	9.598	1.00	14.79
ATOM	2663	CB	GLN	B	218	26.555	13.579	8.077	1.00	15.34
ATOM	2666	CG	GLN	B	218	25.656	12.533	7.410	1.00	17.98
ATOM	2669	CD	GLN	B	218	25.323	12.861	5.968	1.00	21.72
ATOM	2670	OE1	GLN	B	218	24.164	13.127	5.627	1.00	32.15
ATOM	2671	NE2	GLN	B	218	26.336	12.862	5.123	1.00	22.78
ATOM	2674	C	GLN	B	218	27.795	14.368	10.135	1.00	14.76
ATOM	2675	O	GLN	B	218	28.999	14.103	10.069	1.00	16.50
ATOM	2677	N	GLU	B	219	27.335	15.479	10.697	1.00	13.49
ATOM	2678	CA	GLU	B	219	28.227	16.531	11.126	1.00	14.91
ATOM	2680	CB	GLU	B	219	27.454	17.831	11.307	1.00	15.30
ATOM	2683	CG	GLU	B	219	26.782	18.374	10.009	1.00	22.98
ATOM	2686	CD	GLU	B	219	25.800	17.391	9.306	1.00	30.08
ATOM	2687	OE1	GLU	B	219	24.912	16.783	9.972	1.00	21.65
ATOM	2688	OE2	GLU	B	219	25.915	17.251	8.056	1.00	38.54
ATOM	2689	C	GLU	B	219	28.906	16.189	12.437	1.00	14.02
ATOM	2690	O	GLU	B	219	30.019	16.670	12.692	1.00	15.23
ATOM	2692	N	ASP	B	220	28.258	15.364	13.260	1.00	12.26
ATOM	2693	CA	AASP	B	220	28.626	15.169	14.662	0.50	12.02
ATOM	2694	CA	BASP	B	220	28.794	15.148	14.610	0.50	11.82
ATOM	2697	CB	AASP	B	220	27.550	15.822	15.531	0.50	12.63
ATOM	2698	CB	BASP	B	220	28.151	16.119	15.614	0.50	12.64
ATOM	2703	CG	AASP	B	220	27.320	17.282	15.175	0.50	14.92
ATOM	2704	CG	BASP	B	220	26.646	15.965	15.720	0.50	12.08
ATOM	2705	OD1AASP	B	220	28.285	17.960	14.769	0.50	19.05	
ATOM	2706	OD1BASP	B	220	26.142	14.850	15.551	0.50	13.75	
ATOM	2707	OD2AASP	B	220	26.170	17.747	15.303	0.50	17.84	
ATOM	2708	OD2BASP	B	220	25.962	16.980	15.998	0.50	17.77	
ATOM	2709	C	ASP	B	220	28.771	13.708	15.096	1.00	11.10

ATOM	2710	O	ASP	B	220	28.948	13.426	16.287	1.00	9.60
ATOM	2712	N	MET	B	221	28.637	12.792	14.154	1.00	9.83
ATOM	2713	CA	MET	B	221	28.786	11.378	14.430	1.00	10.05
ATOM	2715	CB	MET	B	221	27.412	10.699	14.434	1.00	9.47
ATOM	2718	CG	MET	B	221	26.502	11.234	15.514	1.00	11.02
ATOM	2721	SD	MET	B	221	24.847	10.546	15.392	1.00	9.01
ATOM	2722	CE	MET	B	221	23.944	11.682	16.448	1.00	12.63
ATOM	2726	C	MET	B	221	29.666	10.734	13.383	1.00	9.80
ATOM	2727	O	MET	B	221	29.838	11.260	12.267	1.00	9.83
ATOM	2729	N	VAL	B	222	30.276	9.628	13.760	1.00	9.33
ATOM	2730	CA	VAL	B	222	30.993	8.795	12.797	1.00	9.80
ATOM	2732	CB	VAL	B	222	32.526	8.993	12.905	1.00	11.39
ATOM	2734	CG1	VAL	B	222	33.046	8.728	14.352	1.00	9.78
ATOM	2738	CG2	VAL	B	222	33.248	8.106	11.883	1.00	12.07
ATOM	2742	C	VAL	B	222	30.614	7.362	13.044	1.00	11.18
ATOM	2743	O	VAL	B	222	30.466	6.950	14.186	1.00	9.57
ATOM	2745	N	CYS	B	223	30.415	6.600	11.980	1.00	10.19
ATOM	2746	CA	CYS	B	223	30.248	5.166	12.144	1.00	10.86
ATOM	2748	CB	CYS	B	223	28.934	4.623	11.513	1.00	12.96
ATOM	2751	SG	CYS	B	223	28.932	4.146	9.789	1.00	14.96
ATOM	2753	C	CYS	B	223	31.524	4.483	11.717	1.00	11.17
ATOM	2754	O	CYS	B	223	32.290	4.986	10.905	1.00	10.26
ATOM	2756	N	ALA	B	224	31.792	3.359	12.355	1.00	10.19
ATOM	2757	CA	ALA	B	224	33.046	2.696	12.219	1.00	10.87
ATOM	2759	CB	ALA	B	224	34.056	3.296	13.143	1.00	11.58
ATOM	2763	C	ALA	B	224	32.802	1.263	12.559	1.00	9.90
ATOM	2764	O	ALA	B	224	32.106	0.958	13.521	1.00	10.90
ATOM	2766	N	GLY	B	225	33.358	0.378	11.750	1.00	11.16
ATOM	2767	CA	GLY	B	225	33.136	-1.033	11.933	1.00	11.64
ATOM	2770	C	GLY	B	225	32.858	-1.724	10.627	1.00	12.16
ATOM	2771	O	GLY	B	225	33.484	-1.430	9.586	1.00	11.69
ATOM	2773	N	TYR	B	226	31.898	-2.631	10.679	1.00	13.09
ATOM	2774	CA	TYR	B	226	31.746	-3.647	9.647	1.00	14.53
ATOM	2776	CB	TYR	B	226	32.382	-4.948	10.126	1.00	15.03
ATOM	2779	CG	TYR	B	226	33.848	-4.799	10.412	1.00	15.36
ATOM	2780	CD1	TYR	B	226	34.782	-4.859	9.387	1.00	20.72
ATOM	2782	CE1	TYR	B	226	36.127	-4.688	9.650	1.00	17.30
ATOM	2784	CZ	TYR	B	226	36.525	-4.459	10.937	1.00	12.42
ATOM	2785	OH	TYR	B	226	37.856	-4.267	11.211	1.00	17.80
ATOM	2787	CE2	TYR	B	226	35.619	-4.372	11.951	1.00	15.90
ATOM	2789	CD2	TYR	B	226	34.299	-4.524	11.695	1.00	14.07
ATOM	2791	C	TYR	B	226	30.271	-3.835	9.385	1.00	15.82
ATOM	2792	O	TYR	B	226	29.442	-3.625	10.284	1.00	17.00
ATOM	2794	N	VAL	B	227	29.915	-4.155	8.147	1.00	12.95
ATOM	2795	CA	VAL	B	227	28.544	-4.560	7.889	1.00	14.30
ATOM	2797	CB	VAL	B	227	28.088	-4.155	6.481	1.00	14.07
ATOM	2799	CG1	VAL	B	227	28.261	-2.643	6.279	1.00	13.30
ATOM	2803	CG2	VAL	B	227	28.809	-4.957	5.443	1.00	16.94
ATOM	2807	C	VAL	B	227	28.360	-6.072	8.114	1.00	13.93
ATOM	2808	O	VAL	B	227	27.239	-6.535	8.308	1.00	15.60
ATOM	2810	N	GLU	B	228	29.464	-6.812	8.105	1.00	13.79
ATOM	2811	CA	GLU	B	228	29.474	-8.299	8.198	1.00	17.25
ATOM	2813	CB	GLU	B	228	30.867	-8.881	7.988	1.00	18.80
ATOM	2816	CG	GLU	B	228	31.465	-8.657	6.654	1.00	24.72
ATOM	2819	CD	GLU	B	228	32.464	-7.546	6.685	1.00	26.77
ATOM	2820	OE1	GLU	B	228	32.104	-6.461	7.179	1.00	20.08
ATOM	2821	OE2	GLU	B	228	33.590	-7.749	6.172	1.00	32.03
ATOM	2822	C	GLU	B	228	28.996	-8.908	9.490	1.00	18.74
ATOM	2823	O	GLU	B	228	28.743	-10.119	9.539	1.00	22.23
ATOM	2825	N	GLY	B	229	28.931	-8.136	10.557	1.00	17.91
ATOM	2826	CA	GLY	B	229	28.496	-8.719	11.807	1.00	16.67

ATOM	2829	C	GLY	B	229	29.592	-9.264	12.696	1.00	16.60
ATOM	2830	O	GLY	B	229	30.651	-9.708	12.234	1.00	14.72
ATOM	2832	N	GLY	B	230	29.327	-9.194	13.994	1.00	14.01
ATOM	2833	CA	GLY	B	230	30.179	-9.822	14.987	1.00	13.10
ATOM	2836	C	GLY	B	230	31.377	-9.006	15.423	1.00	12.59
ATOM	2837	O	GLY	B	230	32.159	-9.484	16.222	1.00	12.32
ATOM	2839	N	LYS	B	231	31.526	-7.783	14.923	1.00	10.75
ATOM	2840	CA	LYS	B	231	32.648	-6.937	15.296	1.00	11.37
ATOM	2842	CB	LYS	B	231	33.717	-6.937	14.205	1.00	12.81
ATOM	2845	CG	LYS	B	231	34.449	-8.263	14.058	1.00	13.33
ATOM	2848	CD	LYS	B	231	35.547	-8.188	13.007	1.00	14.38
ATOM	2851	CE	LYS	B	231	36.396	-9.464	13.001	1.00	17.82
ATOM	2854	NZ	LYS	B	231	37.511	-9.457	11.998	1.00	17.77
ATOM	2858	C	LYS	B	231	32.150	-5.501	15.572	1.00	11.36
ATOM	2859	O	LYS	B	231	31.914	-4.737	14.655	1.00	10.08
ATOM	2861	N	ASP	B	232	32.000	-5.153	16.838	1.00	10.59
ATOM	2862	CA	ASP	B	232	31.400	-3.858	17.183	1.00	10.47
ATOM	2864	CB	ASP	B	232	29.894	-3.957	16.893	1.00	12.56
ATOM	2867	CG	ASP	B	232	29.184	-2.602	16.742	1.00	11.70
ATOM	2868	OD1	ASP	B	232	29.773	-1.495	16.851	1.00	11.32
ATOM	2869	OD2	ASP	B	232	27.975	-2.673	16.500	1.00	19.04
ATOM	2870	C	ASP	B	232	31.610	-3.595	18.673	1.00	10.87
ATOM	2871	O	ASP	B	232	31.934	-4.517	19.443	1.00	9.40
ATOM	2873	N	ALA	B	233	31.342	-2.358	19.077	1.00	9.33
ATOM	2874	CA	ALA	B	233	31.094	-2.052	20.474	1.00	9.37
ATOM	2876	CB	ALA	B	233	31.238	-0.561	20.730	1.00	9.32
ATOM	2880	C	ALA	B	233	29.677	-2.506	20.804	1.00	9.65
ATOM	2881	O	ALA	B	233	28.841	-2.687	19.910	1.00	8.33
ATOM	2883	N	CYS	B	234	29.390	-2.651	22.091	1.00	8.80
ATOM	2884	CA	CYS	B	234	28.096	-3.107	22.537	1.00	9.04
ATOM	2886	CB	CYS	B	234	28.166	-4.607	22.801	1.00	9.35
ATOM	2889	SG	CYS	B	234	28.772	-5.463	21.333	1.00	13.12
ATOM	2891	C	CYS	B	234	27.653	-2.365	23.799	1.00	8.41
ATOM	2892	O	CYS	B	234	28.342	-1.442	24.286	1.00	7.89
ATOM	2894	N	GLN	B	235	26.513	-2.785	24.341	1.00	9.91
ATOM	2895	CA	GLN	B	235	26.083	-2.238	25.614	1.00	10.56
ATOM	2897	CB	GLN	B	235	24.836	-2.922	26.147	1.00	11.23
ATOM	2900	CG	GLN	B	235	23.565	-2.443	25.490	1.00	17.12
ATOM	2903	CD	GLN	B	235	23.238	-1.009	25.829	1.00	22.92
ATOM	2904	OE1	GLN	B	235	23.731	-0.460	26.831	1.00	27.54
ATOM	2905	NE2	GLN	B	235	22.419	-0.384	24.998	1.00	24.90
ATOM	2908	C	GLN	B	235	27.197	-2.346	26.639	1.00	8.89
ATOM	2909	O	GLN	B	235	27.894	-3.335	26.695	1.00	10.22
ATOM	2911	N	GLY	B	236	27.377	-1.298	27.439	1.00	8.28
ATOM	2912	CA	GLY	B	236	28.459	-1.247	28.394	1.00	7.77
ATOM	2915	C	GLY	B	236	29.748	-0.641	27.889	1.00	8.25
ATOM	2916	O	GLY	B	236	30.646	-0.330	28.675	1.00	8.53
ATOM	2918	N	ASP	B	237	29.834	-0.423	26.585	1.00	7.21
ATOM	2919	CA	ASP	B	237	30.990	0.242	25.991	1.00	6.71
ATOM	2921	CB	ASP	B	237	31.350	-0.427	24.668	1.00	6.01
ATOM	2924	CG	ASP	B	237	31.863	-1.835	24.841	1.00	7.46
ATOM	2925	OD1	ASP	B	237	32.605	-2.094	25.797	1.00	6.98
ATOM	2926	OD2	ASP	B	237	31.509	-2.697	24.017	1.00	8.87
ATOM	2927	C	ASP	B	237	30.862	1.745	25.775	1.00	5.25
ATOM	2928	O	ASP	B	237	31.848	2.401	25.518	1.00	6.39
ATOM	2930	N	SER	B	238	29.652	2.269	25.865	1.00	6.34
ATOM	2931	CA	SER	B	238	29.394	3.688	25.617	1.00	6.25
ATOM	2933	CB	SER	B	238	28.009	4.072	26.055	1.00	6.51
ATOM	2936	OG	SER	B	238	27.036	3.403	25.252	1.00	9.78
ATOM	2938	C	SER	B	238	30.334	4.538	26.382	1.00	6.03
ATOM	2939	O	SER	B	238	30.687	4.226	27.519	1.00	7.65

ATOM	2941	N	GLY	B	239	30.708	5.651	25.786	1.00	6.68
ATOM	2942	CA	GLY	B	239	31.582	6.591	26.443	1.00	7.19
ATOM	2945	C	GLY	B	239	33.040	6.221	26.319	1.00	5.65
ATOM	2946	O	GLY	B	239	33.910	7.044	26.569	1.00	9.60
ATOM	2948	N	GLY	B	240	33.334	4.985	25.927	1.00	5.84
ATOM	2949	CA	GLY	B	240	34.680	4.571	25.678	1.00	7.25
ATOM	2952	C	GLY	B	240	35.229	5.127	24.367	1.00	7.46
ATOM	2953	O	GLY	B	240	34.466	5.630	23.506	1.00	6.69
ATOM	2955	N	PRO	B	241	36.555	5.072	24.223	1.00	7.08
ATOM	2956	CA	PRO	B	241	37.223	5.665	23.072	1.00	7.22
ATOM	2958	CB	PRO	B	241	38.680	5.737	23.525	1.00	7.26
ATOM	2961	CG	PRO	B	241	38.859	4.553	24.418	1.00	6.54
ATOM	2964	CD	PRO	B	241	37.531	4.512	25.182	1.00	7.47
ATOM	2967	C	PRO	B	241	37.181	4.874	21.781	1.00	8.16
ATOM	2968	O	PRO	B	241	37.300	3.657	21.779	1.00	8.29
ATOM	2969	N	LEU	B	242	37.009	5.627	20.703	1.00	8.03
ATOM	2970	CA	LEU	B	242	37.417	5.227	19.395	1.00	7.93
ATOM	2972	CB	LEU	B	242	36.392	5.690	18.383	1.00	9.33
ATOM	2975	CG	LEU	B	242	36.766	5.338	16.952	1.00	7.83
ATOM	2977	CD1	LEU	B	242	36.890	3.835	16.749	1.00	9.94
ATOM	2981	CD2	LEU	B	242	35.728	5.911	15.993	1.00	8.69
ATOM	2985	C	LEU	B	242	38.740	5.956	19.214	1.00	8.00
ATOM	2986	O	LEU	B	242	38.774	7.173	18.968	1.00	6.98
ATOM	2988	N	SER	B	243	39.837	5.223	19.386	1.00	7.59
ATOM	2989	CA	SER	B	243	41.174	5.793	19.385	1.00	7.68
ATOM	2991	CB	SER	B	243	42.040	5.055	20.394	1.00	8.80
ATOM	2994	OG	SER	B	243	41.452	5.037	21.684	1.00	8.45
ATOM	2996	C	SER	B	243	41.756	5.615	17.994	1.00	7.99
ATOM	2997	O	SER	B	243	41.864	4.476	17.534	1.00	8.02
ATOM	2999	N	CYS	B	244	42.072	6.715	17.322	1.00	7.20
ATOM	3000	CA	CYS	B	244	42.626	6.651	15.955	1.00	8.20
ATOM	3002	CB	CYS	B	244	41.857	7.559	15.003	1.00	8.81
ATOM	3005	SG	CYS	B	244	40.176	7.078	14.657	1.00	9.71
ATOM	3007	C	CYS	B	244	44.073	7.113	15.951	1.00	8.83
ATOM	3008	O	CYS	B	244	44.399	8.129	16.537	1.00	8.60
ATOM	3010	N	PRO	B	245	44.936	6.374	15.253	1.00	8.97
ATOM	3011	CA	PRO	B	245	46.339	6.712	15.145	1.00	8.16
ATOM	3013	CB	PRO	B	245	46.982	5.361	14.943	1.00	7.84
ATOM	3016	CG	PRO	B	245	45.994	4.594	14.190	1.00	7.21
ATOM	3019	CD	PRO	B	245	44.644	5.097	14.579	1.00	8.78
ATOM	3022	C	PRO	B	245	46.627	7.598	13.938	1.00	9.87
ATOM	3023	O	PRO	B	245	46.207	7.300	12.831	1.00	10.73
ATOM	3024	N	VAL	B	246	47.371	8.667	14.174	1.00	8.95
ATOM	3025	CA	VAL	B	246	47.887	9.509	13.105	1.00	9.69
ATOM	3027	CB	VAL	B	246	47.056	10.807	12.942	1.00	10.43
ATOM	3029	CG1	VAL	B	246	47.679	11.697	11.902	1.00	11.30
ATOM	3033	CG2	VAL	B	246	45.585	10.466	12.581	1.00	10.95
ATOM	3037	C	VAL	B	246	49.334	9.828	13.437	1.00	10.25
ATOM	3038	O	VAL	B	246	49.619	10.433	14.471	1.00	9.44
ATOM	3040	N	GLU	B	247	50.249	9.413	12.557	1.00	11.38
ATOM	3041	CA	GLU	B	247	51.668	9.689	12.735	1.00	11.30
ATOM	3043	CB	GLU	B	247	52.006	11.160	12.470	1.00	12.35
ATOM	3046	CG	GLU	B	247	51.745	11.591	11.048	1.00	12.09
ATOM	3049	CD	GLU	B	247	52.363	12.937	10.724	1.00	15.31
ATOM	3050	OE1	GLU	B	247	52.886	13.609	11.655	1.00	24.15
ATOM	3051	OE2	GLU	B	247	52.278	13.313	9.552	1.00	26.18
ATOM	3052	C	GLU	B	247	52.123	9.260	14.131	1.00	11.97
ATOM	3053	O	GLU	B	247	52.862	9.960	14.796	1.00	12.53
ATOM	3055	N	GLY	B	248	51.645	8.106	14.578	1.00	9.83
ATOM	3056	CA	GLY	B	248	52.111	7.551	15.819	1.00	10.74
ATOM	3059	C	GLY	B	248	51.468	8.068	17.095	1.00	10.59

ATOM	3060	O	GLY B 248	51.786	7.582	18.179	1.00	12.66
ATOM	3062	N	LEU B 249	50.590	9.049	16.969	1.00	9.34
ATOM	3063	CA	LEU B 249	49.849	9.596	18.101	1.00	9.74
ATOM	3065	CB	LEU B 249	49.896	11.122	18.108	1.00	9.42
ATOM	3068	CG	LEU B 249	51.258	11.783	18.343	1.00	12.99
ATOM	3070	CD1	LEU B 249	51.057	13.280	18.529	1.00	18.22
ATOM	3074	CD2	LEU B 249	52.050	11.175	19.535	1.00	15.14
ATOM	3078	C	LEU B 249	48.415	9.138	18.007	1.00	9.01
ATOM	3079	O	LEU B 249	47.867	9.040	16.925	1.00	10.08
ATOM	3081	N	TRP B 250	47.788	8.957	19.168	1.00	9.86
ATOM	3082	CA	TRP B 250	46.401	8.482	19.269	1.00	10.02
ATOM	3084	CB	TRP B 250	46.270	7.376	20.301	1.00	9.50
ATOM	3087	CG	TRP B 250	47.005	6.173	19.899	1.00	10.88
ATOM	3088	CD1	TRP B 250	48.314	5.900	20.142	1.00	11.70
ATOM	3090	NE1	TRP B 250	48.660	4.698	19.578	1.00	12.07
ATOM	3092	CE2	TRP B 250	47.569	4.181	18.938	1.00	9.91
ATOM	3093	CD2	TRP B 250	46.505	5.100	19.114	1.00	9.96
ATOM	3094	CE3	TRP B 250	45.265	4.805	18.555	1.00	9.01
ATOM	3096	CZ3	TRP B 250	45.127	3.623	17.861	1.00	10.10
ATOM	3098	CH2	TRP B 250	46.203	2.738	17.709	1.00	10.76
ATOM	3100	CZ2	TRP B 250	47.419	3.003	18.243	1.00	10.45
ATOM	3102	C	TRP B 250	45.516	9.663	19.603	1.00	9.61
ATOM	3103	O	TRP B 250	45.848	10.466	20.477	1.00	9.27
ATOM	3105	N	TYR B 251	44.399	9.759	18.884	1.00	8.47
ATOM	3106	CA	TYR B 251	43.409	10.818	19.067	1.00	8.78
ATOM	3108	CB	TYR B 251	43.276	11.675	17.818	1.00	10.59
ATOM	3111	CG	TYR B 251	44.558	12.392	17.492	1.00	9.10
ATOM	3112	CD1	TYR B 251	44.829	13.645	18.013	1.00	14.68
ATOM	3114	CE1	TYR B 251	46.023	14.278	17.755	1.00	11.47
ATOM	3116	CZ	TYR B 251	46.965	13.672	16.969	1.00	14.51
ATOM	3117	OH	TYR B 251	48.148	14.313	16.695	1.00	13.62
ATOM	3119	CE2	TYR B 251	46.718	12.427	16.433	1.00	9.74
ATOM	3121	CD2	TYR B 251	45.531	11.787	16.718	1.00	12.00
ATOM	3123	C	TYR B 251	42.066	10.192	19.384	1.00	7.79
ATOM	3124	O	TYR B 251	41.712	9.139	18.855	1.00	6.71
ATOM	3126	N	LEU B 252	41.338	10.855	20.255	1.00	7.26
ATOM	3127	CA	LEU B 252	39.982	10.476	20.570	1.00	7.66
ATOM	3129	CB	LEU B 252	39.569	11.122	21.873	1.00	8.63
ATOM	3132	CG	LEU B 252	38.252	10.639	22.481	1.00	7.56
ATOM	3134	CD1	LEU B 252	38.277	9.145	22.684	1.00	10.74
ATOM	3138	CD2	LEU B 252	38.026	11.384	23.794	1.00	10.95
ATOM	3142	C	LEU B 252	39.073	10.952	19.456	1.00	8.62
ATOM	3143	O	LEU B 252	38.409	11.972	19.577	1.00	8.84
ATOM	3145	N	THR B 253	39.018	10.176	18.389	1.00	7.99
ATOM	3146	CA	THR B 253	38.217	10.535	17.253	1.00	7.46
ATOM	3148	CB	THR B 253	38.552	9.623	16.098	1.00	8.21
ATOM	3150	OG1	THR B 253	39.940	9.831	15.786	1.00	8.30
ATOM	3152	CG2	THR B 253	37.701	9.952	14.905	1.00	9.45
ATOM	3156	C	THR B 253	36.740	10.464	17.598	1.00	7.79
ATOM	3157	O	THR B 253	35.956	11.292	17.160	1.00	7.91
ATOM	3159	N	GLY B 254	36.373	9.481	18.400	1.00	8.07
ATOM	3160	CA	GLY B 254	34.967	9.270	18.725	1.00	7.68
ATOM	3163	C	GLY B 254	34.809	8.655	20.088	1.00	7.39
ATOM	3164	O	GLY B 254	35.769	8.199	20.704	1.00	7.61
ATOM	3166	N	ILE B 255	33.564	8.687	20.527	1.00	8.26
ATOM	3167	CA	ILE B 255	33.104	8.195	21.805	1.00	8.90
ATOM	3169	CB	ILE B 255	32.557	9.375	22.641	1.00	9.86
ATOM	3171	CG1	ILE B 255	33.693	10.387	22.863	1.00	13.52
ATOM	3174	CD1	ILE B 255	33.247	11.640	23.530	1.00	13.14
ATOM	3178	CG2	ILE B 255	31.964	8.897	23.916	1.00	12.86
ATOM	3182	C	ILE B 255	31.973	7.239	21.454	1.00	7.55

ATOM	3183	O	ILE	B	255	31.025	7.624	20.756	1.00	6.31
ATOM	3185	N	VAL	B	256	32.037	6.020	21.979	1.00	6.73
ATOM	3186	CA	VAL	B	256	31.017	5.009	21.715	1.00	7.20
ATOM	3188	CB	VAL	B	256	31.264	3.737	22.517	1.00	6.82
ATOM	3190	CG1	VAL	B	256	30.094	2.743	22.353	1.00	8.07
ATOM	3194	CG2	VAL	B	256	32.622	3.096	22.144	1.00	6.86
ATOM	3198	C	VAL	B	256	29.655	5.558	22.106	1.00	6.83
ATOM	3199	O	VAL	B	256	29.450	5.967	23.260	1.00	7.73
ATOM	3201	N	SER	B	257	28.706	5.569	21.179	1.00	6.20
ATOM	3202	CA	SER	B	257	27.391	6.125	21.487	1.00	7.48
ATOM	3204	CB	SER	B	257	27.170	7.386	20.679	1.00	7.88
ATOM	3207	OG	SER	B	257	25.901	7.933	20.910	1.00	8.49
ATOM	3209	C	SER	B	257	26.243	5.144	21.287	1.00	8.25
ATOM	3210	O	SER	B	257	25.469	4.895	22.216	1.00	7.57
ATOM	3212	N	TRP	B	258	26.123	4.559	20.094	1.00	7.20
ATOM	3213	CA	TRP	B	258	24.969	3.713	19.797	1.00	7.63
ATOM	3215	CB	TRP	B	258	23.682	4.534	19.595	1.00	8.81
ATOM	3218	CG	TRP	B	258	23.660	5.489	18.464	1.00	8.83
ATOM	3219	CD1	TRP	B	258	24.129	6.771	18.472	1.00	9.62
ATOM	3221	NE1	TRP	B	258	23.889	7.377	17.289	1.00	9.19
ATOM	3223	CE2	TRP	B	258	23.268	6.486	16.454	1.00	6.85
ATOM	3224	CD2	TRP	B	258	23.089	5.288	17.169	1.00	9.17
ATOM	3225	CE3	TRP	B	258	22.456	4.203	16.543	1.00	10.80
ATOM	3227	CZ3	TRP	B	258	22.026	4.349	15.249	1.00	8.88
ATOM	3229	CH2	TRP	B	258	22.217	5.562	14.560	1.00	6.87
ATOM	3231	CZ2	TRP	B	258	22.834	6.642	15.138	1.00	9.36
ATOM	3233	C	TRP	B	258	25.197	2.808	18.598	1.00	7.57
ATOM	3234	O	TRP	B	258	26.188	2.934	17.891	1.00	7.23
ATOM	3236	N	GLY	B	259	24.280	1.873	18.413	1.00	7.94
ATOM	3237	CA	GLY	B	259	24.280	0.999	17.261	1.00	8.30
ATOM	3240	C	GLY	B	259	23.078	0.116	17.426	1.00	9.50
ATOM	3241	O	GLY	B	259	22.144	0.469	18.163	1.00	9.25
ATOM	3243	N	ASP	B	260	23.084	-1.045	16.811	1.00	10.67
ATOM	3244	CA	ASP	B	260	21.982	-1.966	17.049	1.00	11.84
ATOM	3246	CB	ASP	B	260	21.503	-2.540	15.712	1.00	11.71
ATOM	3249	CG	ASP	B	260	20.726	-1.546	14.920	1.00	15.67
ATOM	3250	OD1	ASP	B	260	20.660	-0.369	15.324	1.00	13.30
ATOM	3251	OD2	ASP	B	260	20.117	-1.955	13.918	1.00	19.15
ATOM	3252	C	ASP	B	260	22.396	-3.020	18.078	1.00	12.66
ATOM	3253	O	ASP	B	260	23.195	-2.729	18.988	1.00	12.59
ATOM	3255	N	ALA	B	261	21.872	-4.233	17.988	1.00	12.97
ATOM	3256	CA	ALA	B	261	22.319	-5.274	18.882	1.00	13.53
ATOM	3258	CB	ALA	B	261	21.537	-6.564	18.655	1.00	15.01
ATOM	3262	C	ALA	B	261	23.807	-5.512	18.710	1.00	14.71
ATOM	3263	O	ALA	B	261	24.394	-5.191	17.673	1.00	15.29
ATOM	3265	N	CYS	B	262	24.422	-6.029	19.761	1.00	14.10
ATOM	3266	CA	CYS	B	262	25.852	-6.249	19.800	1.00	14.30
ATOM	3268	CB	CYS	B	262	26.189	-6.981	21.114	1.00	14.15
ATOM	3271	SG	CYS	B	262	27.866	-7.309	21.460	1.00	14.94
ATOM	3273	C	CYS	B	262	26.292	-7.060	18.589	1.00	15.38
ATOM	3274	O	CYS	B	262	25.994	-8.250	18.501	1.00	16.88
ATOM	3276	N	GLY	B	263	26.977	-6.394	17.663	1.00	16.89
ATOM	3277	CA	GLY	B	263	27.560	-7.031	16.493	1.00	17.06
ATOM	3280	C	GLY	B	263	26.579	-7.259	15.357	1.00	18.62
ATOM	3281	O	GLY	B	263	26.842	-8.084	14.466	1.00	18.33
ATOM	3283	N	ALA	B	264	25.448	-6.541	15.385	1.00	18.16
ATOM	3284	CA	ALA	B	264	24.419	-6.679	14.357	1.00	17.24
ATOM	3286	CB	ALA	B	264	23.263	-5.669	14.595	1.00	17.38
ATOM	3290	C	ALA	B	264	25.011	-6.459	12.975	1.00	16.85
ATOM	3291	O	ALA	B	264	25.960	-5.684	12.781	1.00	18.24
ATOM	3293	N	ARG	B	265	24.408	-7.124	12.007	1.00	16.78

ATOM	3294	CA	ARG	B	265	24.773	-6.958	10.622	1.00	17.09
ATOM	3296	CB	ARG	B	265	24.229	-8.142	9.826	1.00	16.94
ATOM	3299	CG	ARG	B	265	24.859	-9.424	10.290	1.00	19.59
ATOM	3302	CD	ARG	B	265	24.602	-10.574	9.384	1.00	21.77
ATOM	3305	NE	ARG	B	265	25.011	-10.347	7.992	1.00	24.34
ATOM	3307	CZ	ARG	B	265	25.145	-11.329	7.106	1.00	24.26
ATOM	3308	NH1	ARG	B	265	25.477	-11.060	5.855	1.00	20.98
ATOM	3311	NH2	ARG	B	265	24.941	-12.591	7.467	1.00	26.33
ATOM	3314	C	ARG	B	265	24.279	-5.619	10.048	1.00	15.56
ATOM	3315	O	ARG	B	265	23.263	-5.046	10.488	1.00	15.10
ATOM	3317	N	ASN	B	266	25.071	-5.082	9.123	1.00	16.08
ATOM	3318	CA	ASN	B	266	24.715	-3.901	8.353	1.00	16.56
ATOM	3320	CB	ASN	B	266	23.436	-4.155	7.553	1.00	17.98
ATOM	3323	CG	ASN	B	266	23.502	-5.443	6.759	1.00	21.90
ATOM	3324	OD1	ASN	B	266	24.428	-5.640	5.991	1.00	26.50
ATOM	3325	ND2	ASN	B	266	22.515	-6.312	6.940	1.00	25.69
ATOM	3328	C	ASN	B	266	24.570	-2.647	9.181	1.00	15.83
ATOM	3329	O	ASN	B	266	24.013	-1.658	8.723	1.00	17.17
ATOM	3331	N	ARG	B	267	25.115	-2.658	10.389	1.00	13.95
ATOM	3332	CA	ARG	B	267	24.942	-1.522	11.280	1.00	14.44
ATOM	3334	CB	ARG	B	267	23.778	-1.784	12.234	1.00	15.27
ATOM	3337	CG	ARG	B	267	22.438	-1.981	11.543	1.00	16.64
ATOM	3340	CD	ARG	B	267	21.803	-0.665	11.086	1.00	15.87
ATOM	3343	NE	ARG	B	267	20.803	-0.885	10.038	1.00	18.43
ATOM	3345	CZ	ARG	B	267	19.560	-1.292	10.244	1.00	15.80
ATOM	3346	NH1	ARG	B	267	19.092	-1.494	11.457	1.00	18.97
ATOM	3349	NH2	ARG	B	267	18.747	-1.456	9.203	1.00	18.16
ATOM	3352	C	ARG	B	267	26.237	-1.308	12.040	1.00	12.81
ATOM	3353	O	ARG	B	267	26.339	-1.666	13.241	1.00	12.28
ATOM	3355	N	PRO	B	268	27.217	-0.674	11.377	1.00	11.57
ATOM	3356	CA	PRO	B	268	28.502	-0.445	12.058	1.00	11.14
ATOM	3358	CB	PRO	B	268	29.361	0.222	10.985	1.00	11.08
ATOM	3361	CG	PRO	B	268	28.660	-0.019	9.698	1.00	14.78
ATOM	3364	CD	PRO	B	268	27.211	-0.102	10.021	1.00	12.24
ATOM	3367	C	PRO	B	268	28.308	0.504	13.229	1.00	10.60
ATOM	3368	O	PRO	B	268	27.506	1.419	13.144	1.00	12.68
ATOM	3369	N	GLY	B	269	29.042	0.321	14.315	1.00	10.62
ATOM	3370	CA	GLY	B	269	28.794	1.147	15.488	1.00	9.01
ATOM	3373	C	GLY	B	269	28.850	2.634	15.215	1.00	9.33
ATOM	3374	O	GLY	B	269	29.637	3.118	14.369	1.00	9.43
ATOM	3376	N	VAL	B	270	28.048	3.383	15.965	1.00	9.10
ATOM	3377	CA	VAL	B	270	28.017	4.823	15.854	1.00	7.47
ATOM	3379	CB	VAL	B	270	26.615	5.382	15.647	1.00	8.79
ATOM	3381	CG1	VAL	B	270	26.662	6.904	15.397	1.00	8.14
ATOM	3385	CG2	VAL	B	270	25.931	4.681	14.482	1.00	8.84
ATOM	3389	C	VAL	B	270	28.669	5.466	17.090	1.00	8.51
ATOM	3390	O	VAL	B	270	28.466	5.016	18.241	1.00	6.24
ATOM	3392	N	TYR	B	271	29.446	6.500	16.794	1.00	6.89
ATOM	3393	CA	TYR	B	271	30.292	7.212	17.767	1.00	7.40
ATOM	3395	CB	TYR	B	271	31.775	6.947	17.452	1.00	8.53
ATOM	3398	CG	TYR	B	271	32.144	5.495	17.502	1.00	5.52
ATOM	3399	CD1	TYR	B	271	32.839	4.979	18.601	1.00	7.20
ATOM	3401	CE1	TYR	B	271	33.200	3.674	18.666	1.00	8.75
ATOM	3403	CZ	TYR	B	271	32.837	2.809	17.633	1.00	9.28
ATOM	3404	OH	TYR	B	271	33.140	1.440	17.706	1.00	10.29
ATOM	3406	CE2	TYR	B	271	32.138	3.301	16.535	1.00	8.03
ATOM	3408	CD2	TYR	B	271	31.806	4.622	16.474	1.00	5.89
ATOM	3410	C	TYR	B	271	30.051	8.697	17.684	1.00	8.22
ATOM	3411	O	TYR	B	271	29.853	9.211	16.606	1.00	7.44
ATOM	3413	N	THR	B	272	30.070	9.394	18.813	1.00	7.77
ATOM	3414	CA	THR	B	272	30.065	10.842	18.789	1.00	8.13

ATOM	3416	CB	THR	B	272	29.852	11.389	20.167	1.00	8.95
ATOM	3418	OG1	THR	B	272	28.658	10.796	20.696	1.00	8.25
ATOM	3420	CG2	THR	B	272	29.760	12.880	20.153	1.00	12.45
ATOM	3424	C	THR	B	272	31.403	11.311	18.252	1.00	8.12
ATOM	3425	O	THR	B	272	32.458	10.852	18.717	1.00	9.44
ATOM	3427	N	LEU	B	273	31.363	12.203	17.276	1.00	8.26
ATOM	3428	CA	LEU	B	273	32.577	12.692	16.630	1.00	8.19
ATOM	3430	CB	LEU	B	273	32.266	13.245	15.245	1.00	7.90
ATOM	3433	CG	LEU	B	273	33.488	13.597	14.419	1.00	8.60
ATOM	3435	CD1	LEU	B	273	34.327	12.357	14.089	1.00	10.12
ATOM	3439	CD2	LEU	B	273	33.057	14.295	13.129	1.00	12.87
ATOM	3443	C	LEU	B	273	33.184	13.769	17.472	1.00	8.73
ATOM	3444	O	LEU	B	273	32.690	14.894	17.486	1.00	9.38
ATOM	3446	N	ALA	B	274	34.270	13.457	18.153	1.00	8.53
ATOM	3447	CA	ALA	B	274	34.849	14.407	19.119	1.00	8.93
ATOM	3449	CB	ALA	B	274	36.013	13.756	19.842	1.00	8.81
ATOM	3453	C	ALA	B	274	35.274	15.762	18.537	1.00	9.60
ATOM	3454	O	ALA	B	274	35.127	16.800	19.209	1.00	9.55
ATOM	3456	N	SER	B	275	35.802	15.776	17.318	1.00	8.97
ATOM	3457	CA	SER	B	275	36.198	17.051	16.711	1.00	8.79
ATOM	3459	CB	SER	B	275	36.754	16.859	15.314	1.00	8.21
ATOM	3462	OG	SER	B	275	35.810	16.273	14.432	1.00	12.14
ATOM	3464	C	SER	B	275	35.039	18.036	16.681	1.00	8.83
ATOM	3465	O	SER	B	275	35.251	19.241	16.867	1.00	11.07
ATOM	3467	N	SER	B	276	33.816	17.544	16.469	1.00	10.33
ATOM	3468	CA	SER	B	276	32.643	18.420	16.397	1.00	11.32
ATOM	3470	CB	SER	B	276	31.418	17.646	15.947	1.00	12.43
ATOM	3473	OG	SER	B	276	31.668	17.078	14.683	1.00	16.30
ATOM	3475	C	SER	B	276	32.307	19.103	17.717	1.00	11.51
ATOM	3476	O	SER	B	276	31.521	20.074	17.746	1.00	12.20
ATOM	3478	N	TYR	B	277	32.863	18.588	18.806	1.00	10.77
ATOM	3479	CA	TYR	B	277	32.629	19.124	20.137	1.00	9.72
ATOM	3481	CB	TYR	B	277	32.107	18.018	21.063	1.00	9.67
ATOM	3484	CG	TYR	B	277	30.752	17.571	20.615	1.00	6.11
ATOM	3485	CD1	TYR	B	277	29.614	18.221	21.060	1.00	8.86
ATOM	3487	CE1	TYR	B	277	28.368	17.869	20.607	1.00	10.94
ATOM	3489	CZ	TYR	B	277	28.237	16.859	19.680	1.00	11.04
ATOM	3490	OH	TYR	B	277	26.970	16.496	19.248	1.00	12.13
ATOM	3492	CE2	TYR	B	277	29.359	16.194	19.212	1.00	9.30
ATOM	3494	CD2	TYR	B	277	30.608	16.561	19.675	1.00	6.76
ATOM	3496	C	TYR	B	277	33.866	19.775	20.738	1.00	8.60
ATOM	3497	O	TYR	B	277	33.863	20.223	21.888	1.00	8.77
ATOM	3499	N	ALA	B	278	34.948	19.826	19.966	1.00	10.02
ATOM	3500	CA	ALA	B	278	36.193	20.377	20.478	1.00	10.71
ATOM	3502	CB	ALA	B	278	37.248	20.363	19.419	1.00	11.08
ATOM	3506	C	ALA	B	278	36.022	21.795	20.984	1.00	11.60
ATOM	3507	O	ALA	B	278	36.542	22.131	22.050	1.00	11.79
ATOM	3509	N	SER	B	279	35.331	22.644	20.222	1.00	11.75
ATOM	3510	CA	SER	B	279	35.160	24.044	20.645	1.00	13.81
ATOM	3512	CB	SER	B	279	34.516	24.897	19.540	1.00	14.55
ATOM	3515	OG	SER	B	279	33.155	24.577	19.416	1.00	23.33
ATOM	3517	C	SER	B	279	34.351	24.119	21.929	1.00	13.41
ATOM	3518	O	SER	B	279	34.694	24.893	22.845	1.00	12.62
ATOM	3520	N	TRP	B	280	33.325	23.278	22.023	1.00	13.19
ATOM	3521	CA	TRP	B	280	32.526	23.191	23.233	1.00	13.35
ATOM	3523	CB	TRP	B	280	31.343	22.237	23.047	1.00	14.42
ATOM	3526	CG	TRP	B	280	30.573	22.046	24.302	1.00	13.18
ATOM	3527	CD1	TRP	B	280	29.755	22.953	24.900	1.00	19.13
ATOM	3529	NE1	TRP	B	280	29.217	22.416	26.047	1.00	19.05
ATOM	3531	CE2	TRP	B	280	29.691	21.144	26.209	1.00	15.84
ATOM	3532	CD2	TRP	B	280	30.550	20.877	25.122	1.00	15.57

ATOM	3533	CE3	TRP	B	280	31.164	19.619	25.037	1.00	14.66
ATOM	3535	CZ3	TRP	B	280	30.911	18.694	26.027	1.00	15.91
ATOM	3537	CH2	TRP	B	280	30.039	18.990	27.082	1.00	16.57
ATOM	3539	CZ2	TRP	B	280	29.429	20.205	27.193	1.00	18.87
ATOM	3541	C	TRP	B	280	33.373	22.735	24.411	1.00	12.13
ATOM	3542	O	TRP	B	280	33.332	23.339	25.491	1.00	12.11
ATOM	3544	N	ILE	B	281	34.164	21.684	24.205	1.00	11.84
ATOM	3545	CA	ILE	B	281	34.953	21.124	25.288	1.00	12.71
ATOM	3547	CB	ILE	B	281	35.714	19.899	24.846	1.00	11.79
ATOM	3549	CG1	ILE	B	281	34.745	18.756	24.545	1.00	12.35
ATOM	3552	CD1	ILE	B	281	35.377	17.614	23.801	1.00	12.73
ATOM	3556	CG2	ILE	B	281	36.730	19.483	25.927	1.00	11.51
ATOM	3560	C	ILE	B	281	35.932	22.177	25.815	1.00	13.16
ATOM	3561	O	ILE	B	281	35.990	22.450	27.008	1.00	13.02
ATOM	3563	N	GLN	B	282	36.682	22.791	24.910	1.00	13.64
ATOM	3564	CA	GLN	B	282	37.660	23.789	25.312	1.00	15.46
ATOM	3566	CB	GLN	B	282	38.518	24.169	24.118	1.00	15.51
ATOM	3569	CG	GLN	B	282	39.657	25.078	24.484	1.00	16.46
ATOM	3572	CD	GLN	B	282	40.673	25.138	23.391	1.00	17.98
ATOM	3573	OE1	GLN	B	282	40.386	24.758	22.218	1.00	15.21
ATOM	3574	NE2	GLN	B	282	41.869	25.608	23.740	1.00	18.77
ATOM	3577	C	GLN	B	282	37.012	25.025	25.934	1.00	17.16
ATOM	3578	O	GLN	B	282	37.604	25.642	26.839	1.00	17.63
ATOM	3580	N	SER	B	283	35.822	25.395	25.466	1.00	17.65
ATOM	3581	CA	SER	B	283	35.097	26.525	26.045	1.00	19.81
ATOM	3583	CB	SER	B	283	33.862	26.884	25.224	1.00	21.63
ATOM	3586	OG	SER	B	283	32.853	25.894	25.336	1.00	29.41
ATOM	3588	C	SER	B	283	34.701	26.232	27.489	1.00	21.07
ATOM	3589	O	SER	B	283	34.819	27.101	28.353	1.00	20.32
ATOM	3591	N	LYS	B	284	34.271	24.999	27.761	1.00	19.26
ATOM	3592	CA	LYS	B	284	33.835	24.614	29.122	1.00	20.16
ATOM	3594	CB	LYS	B	284	33.016	23.307	29.120	1.00	19.03
ATOM	3597	CG	LYS	B	284	31.762	23.320	28.267	1.00	24.73
ATOM	3600	CD	LYS	B	284	30.773	24.394	28.679	1.00	26.60
ATOM	3603	CE	LYS	B	284	30.245	24.185	30.065	1.00	27.49
ATOM	3606	NZ	LYS	B	284	29.063	25.072	30.248	1.00	32.11
ATOM	3610	C	LYS	B	284	34.997	24.407	30.065	1.00	18.56
ATOM	3611	O	LYS	B	284	34.895	24.695	31.258	1.00	19.28
ATOM	3613	N	VAL	B	285	36.078	23.849	29.541	1.00	18.93
ATOM	3614	CA	VAL	B	285	37.204	23.432	30.343	1.00	20.31
ATOM	3616	CB	VAL	B	285	37.310	21.885	30.471	1.00	19.35
ATOM	3618	CG1	VAL	B	285	38.390	21.512	31.451	1.00	18.99
ATOM	3622	CG2	VAL	B	285	35.977	21.263	30.920	1.00	20.68
ATOM	3626	C	VAL	B	285	38.472	24.002	29.713	1.00	20.72
ATOM	3627	O	VAL	B	285	39.007	23.463	28.765	1.00	18.59
ATOM	3629	N	THR	B	286	38.942	25.106	30.272	1.00	23.67
ATOM	3630	CA	THR	B	286	40.113	25.798	29.735	1.00	24.56
ATOM	3632	CB	THR	B	286	40.352	27.109	30.505	1.00	25.28
ATOM	3634	OG1	THR	B	286	40.182	26.887	31.922	1.00	30.93
ATOM	3636	CG2	THR	B	286	39.355	28.123	30.042	1.00	20.56
ATOM	3640	C	THR	B	286	41.372	24.917	29.707	1.00	25.62
ATOM	3641	O	THR	B	286	42.154	25.019	28.760	1.00	27.26
ATOM	3643	N	GLU	B	287	41.516	24.040	30.706	1.00	25.37
ATOM	3644	CA	GLU	B	287	42.610	23.037	30.822	1.00	25.08
ATOM	3646	CB	GLU	B	287	42.471	22.282	32.179	1.00	26.08
ATOM	3649	CG	GLU	B	287	43.050	20.797	32.325	1.00	27.75
ATOM	3652	CD	GLU	B	287	42.558	20.054	33.617	1.00	29.31
ATOM	3653	OE1	GLU	B	287	41.906	20.709	34.472	1.00	42.03
ATOM	3654	OE2	GLU	B	287	42.817	18.826	33.814	1.00	27.08
ATOM	3655	C	GLU	B	287	42.681	22.037	29.654	1.00	24.53
ATOM	3656	O	GLU	B	287	43.726	21.422	29.414	1.00	24.92

ATOM	3658	N	LEU	B	288	41.566	21.848	28.952	1.00	21.88
ATOM	3659	CA	LEU	B	288	41.503	20.895	27.860	1.00	21.03
ATOM	3661	CB	LEU	B	288	40.134	20.217	27.808	1.00	19.84
ATOM	3664	CG	LEU	B	288	39.888	19.320	29.019	1.00	19.18
ATOM	3666	CD1	LEU	B	288	38.528	18.650	28.939	1.00	16.50
ATOM	3670	CD2	LEU	B	288	40.992	18.285	29.161	1.00	20.43
ATOM	3674	C	LEU	B	288	41.799	21.620	26.563	1.00	20.10
ATOM	3675	O	LEU	B	288	41.044	22.489	26.153	1.00	21.86
ATOM	3677	N	GLN	B	289	42.911	21.251	25.941	1.00	19.25
ATOM	3678	CA	GLN	B	289	43.375	21.874	24.715	1.00	19.69
ATOM	3680	CB	GLN	B	289	44.758	22.484	24.913	1.00	19.62
ATOM	3683	CG	GLN	B	289	44.702	23.792	25.708	1.00	22.41
ATOM	3686	CD	GLN	B	289	46.018	24.561	25.708	1.00	21.76
ATOM	3687	OE1	GLN	B	289	46.866	24.390	24.830	1.00	31.99
ATOM	3688	NE2	GLN	B	289	46.174	25.432	26.680	1.00	28.73
ATOM	3691	C	GLN	B	289	43.427	20.822	23.626	1.00	18.12
ATOM	3692	O	GLN	B	289	44.339	20.005	23.597	1.00	19.27
ATOM	3694	N	PRO	B	290	42.411	20.803	22.760	1.00	18.32
ATOM	3695	CA	PRO	B	290	42.440	19.902	21.625	1.00	18.01
ATOM	3697	CB	PRO	B	290	41.162	20.257	20.866	1.00	18.20
ATOM	3700	CG	PRO	B	290	40.256	20.811	21.894	1.00	18.45
ATOM	3703	CD	PRO	B	290	41.160	21.568	22.816	1.00	17.57
ATOM	3706	C	PRO	B	290	43.673	20.127	20.757	1.00	19.21
ATOM	3707	O	PRO	B	290	44.170	21.253	20.669	1.00	18.91
ATOM	3708	N	ARG	B	291	44.176	19.058	20.163	1.00	17.91
ATOM	3709	CA	ARG	B	291	45.406	19.108	19.409	1.00	18.64
ATOM	3711	CB	ARG	B	291	46.302	17.936	19.780	1.00	20.55
ATOM	3714	CG	ARG	B	291	46.556	17.797	21.274	1.00	26.33
ATOM	3717	CD	ARG	B	291	47.275	19.016	21.831	1.00	36.16
ATOM	3720	NE	ARG	B	291	47.289	19.039	23.293	1.00	37.96
ATOM	3722	CZ	ARG	B	291	47.719	20.062	24.028	1.00	42.27
ATOM	3723	NH1	ARG	B	291	48.182	21.171	23.448	1.00	45.77
ATOM	3726	NH2	ARG	B	291	47.689	19.977	25.355	1.00	44.51
ATOM	3729	C	ARG	B	291	45.098	19.076	17.933	1.00	18.56
ATOM	3730	O	ARG	B	291	44.181	18.390	17.489	1.00	17.58
ATOM	3732	N	VAL	B	292	45.862	19.836	17.170	1.00	18.20
ATOM	3733	CA	VAL	B	292	45.701	19.836	15.731	1.00	18.70
ATOM	3735	CB	VAL	B	292	46.460	20.991	15.078	1.00	20.18
ATOM	3737	CG1	VAL	B	292	46.436	20.828	13.575	1.00	21.86
ATOM	3741	CG2	VAL	B	292	45.790	22.313	15.477	1.00	20.58
ATOM	3745	C	VAL	B	292	46.206	18.499	15.212	1.00	18.65
ATOM	3746	O	VAL	B	292	47.276	18.035	15.601	1.00	20.39
ATOM	3748	N	VAL	B	293	45.411	17.872	14.360	1.00	18.41
ATOM	3749	CA	VAL	B	293	45.735	16.561	13.838	1.00	18.99
ATOM	3751	CB	VAL	B	293	44.461	15.746	13.642	1.00	16.99
ATOM	3753	CG1	VAL	B	293	44.780	14.440	12.933	1.00	19.46
ATOM	3757	CG2	VAL	B	293	43.789	15.522	14.968	1.00	19.42
ATOM	3761	C	VAL	B	293	46.374	16.752	12.472	1.00	20.05
ATOM	3762	O	VAL	B	293	45.763	17.396	11.596	1.00	19.03
ATOM	3764	N	PRO	B	294	47.579	16.189	12.270	1.00	22.24
ATOM	3765	CA	PRO	B	294	48.266	16.356	10.994	1.00	24.80
ATOM	3767	CB	PRO	B	294	49.457	15.394	11.099	1.00	25.34
ATOM	3770	CG	PRO	B	294	49.688	15.200	12.531	1.00	23.89
ATOM	3773	CD	PRO	B	294	48.367	15.390	13.226	1.00	22.33
ATOM	3776	C	PRO	B	294	47.392	15.990	9.795	1.00	26.87
ATOM	3777	O	PRO	B	294	46.602	15.038	9.880	1.00	27.14
ATOM	3778	N	GLN	B	295	47.527	16.767	8.715	1.00	30.76
ATOM	3779	CA	GLN	B	295	46.846	16.541	7.419	1.00	32.87
ATOM	3781	CB	GLN	B	295	47.816	16.789	6.253	1.00	34.09
ATOM	3784	CG	GLN	B	295	48.314	18.221	6.063	1.00	38.55
ATOM	3787	CD	GLN	B	295	49.316	18.319	4.916	1.00	37.41

ATOM	3788	OE1	GLN	B	295	49.373	17.435	4.056	1.00	44.86
ATOM	3789	NE2	GLN	B	295	50.122	19.387	4.907	1.00	45.39
ATOM	3792	C	GLN	B	295	46.269	15.138	7.248	1.00	34.48
ATOM	3793	O	GLN	B	295	46.914	14.255	6.657	1.00	37.03
ATOM	3795	N	PHE	I	1	20.655	-0.013	20.455	1.00	11.14
ATOM	3796	CA	PHE	I	1	20.279	1.325	20.966	1.00	10.35
ATOM	3798	CB	PHE	I	1	19.819	2.202	19.838	1.00	11.18
ATOM	3801	CG	PHE	I	1	18.665	1.647	19.067	1.00	13.20
ATOM	3802	CD1	PHE	I	1	18.857	1.068	17.823	1.00	13.90
ATOM	3804	CE1	PHE	I	1	17.775	0.570	17.092	1.00	14.04
ATOM	3806	CZ	PHE	I	1	16.512	0.615	17.638	1.00	16.00
ATOM	3808	CE2	PHE	I	1	16.311	1.162	18.881	1.00	17.34
ATOM	3810	CD2	PHE	I	1	17.387	1.677	19.601	1.00	17.33
ATOM	3812	C	PHE	I	1	21.495	2.006	21.573	1.00	10.63
ATOM	3813	O	PHE	I	1	22.615	1.792	21.134	1.00	9.20
ATOM	3817	N	PHE	I	2	21.254	2.860	22.549	1.00	9.84
ATOM	3818	CA	PHE	I	2	22.326	3.641	23.155	1.00	9.56
ATOM	3820	CB	PHE	I	2	21.742	4.904	23.777	1.00	10.61
ATOM	3823	CG	PHE	I	2	21.233	5.826	22.729	1.00	11.00
ATOM	3824	CD1	PHE	I	2	22.091	6.701	22.110	1.00	15.32
ATOM	3826	CE1	PHE	I	2	21.661	7.496	21.088	1.00	20.99
ATOM	3828	CZ	PHE	I	2	20.373	7.385	20.619	1.00	15.77
ATOM	3830	CE2	PHE	I	2	19.513	6.512	21.200	1.00	15.77
ATOM	3832	CD2	PHE	I	2	19.945	5.707	22.253	1.00	15.79
ATOM	3834	C	PHE	I	2	23.126	2.800	24.109	1.00	10.12
ATOM	3835	O	PHE	I	2	22.574	2.188	25.013	1.00	12.17
ATOM	3837	N	ARM	I	3	24.436	2.840	23.950	1.00	9.15
ATOM	3838	CA	ARM	I	3	25.327	1.855	24.573	1.00	9.03
ATOM	3840	CB	ARM	I	3	26.368	1.532	23.509	1.00	9.35
ATOM	3843	CG	ARM	I	3	25.738	0.562	22.514	1.00	9.48
ATOM	3846	CD	ARM	I	3	26.607	0.417	21.280	1.00	9.57
ATOM	3849	NE	ARM	I	3	26.103	-0.617	20.394	1.00	10.29
ATOM	3851	CZ	ARM	I	3	26.587	-0.872	19.180	1.00	12.36
ATOM	3852	NH2	ARM	I	3	26.022	-1.877	18.519	1.00	11.37
ATOM	3855	NH1	ARM	I	3	27.531	-0.203	18.650	1.00	8.18
ATOM	3857	C	ARM	I	3	25.868	2.199	25.948	1.00	10.23
ATOM	3858	O	ARM	I	3	26.742	1.508	26.492	1.00	9.27
ATOM	3859	CM	ARM	I	3	25.173	3.230	26.799	1.00	10.14
ATOM	3864	O3	GOL	G	1	49.795	9.871	21.026	1.00	30.74
ATOM	3866	C3	GOL	G	1	49.221	8.963	21.888	1.00	12.88
ATOM	3869	C2	GOL	G	1	49.197	9.627	23.248	1.00	21.97
ATOM	3871	O2	GOL	G	1	49.492	8.610	24.180	1.00	32.85
ATOM	3873	C1	GOL	G	1	47.815	10.160	23.562	1.00	19.02
ATOM	3876	O1	GOL	G	1	47.314	10.994	22.558	1.00	13.88
ATOM	3878	O3	GOL	G	2	17.889	2.035	35.657	1.00	62.85
ATOM	3880	C3	GOL	G	2	16.789	2.675	36.274	1.00	60.26
ATOM	3883	C2	GOL	G	2	17.034	4.173	36.399	1.00	57.61
ATOM	3885	O2	GOL	G	2	17.677	4.432	37.621	1.00	57.83
ATOM	3887	C1	GOL	G	2	17.858	4.701	35.226	1.00	56.15
ATOM	3890	O1	GOL	G	2	17.658	6.092	35.097	1.00	53.68
ATOM	3892	O3	GOL	G	3	49.776	3.628	23.813	1.00	45.33
ATOM	3894	C3	GOL	G	3	48.804	3.177	22.880	1.00	43.20
ATOM	3897	C2	GOL	G	3	49.136	1.781	22.343	1.00	39.85
ATOM	3899	O2	GOL	G	3	49.470	0.897	23.392	1.00	39.89
ATOM	3901	C1	GOL	G	3	47.961	1.201	21.572	1.00	34.98
ATOM	3904	O1	GOL	G	3	48.348	-0.023	20.967	1.00	32.78
ATOM	3906	S	SO4	S	1	23.683	-5.627	23.443	1.00	12.85
ATOM	3907	O1	SO4	S	1	24.259	-6.740	24.226	1.00	12.93
ATOM	3908	O2	SO4	S	1	23.106	-6.191	22.215	1.00	13.99
ATOM	3909	O3	SO4	S	1	22.614	-4.989	24.191	1.00	12.25
ATOM	3910	O4	SO4	S	1	24.741	-4.656	23.103	1.00	12.07

ATOM	3911	S	SO4	S	2	33.380	24.826	15.496	1.00	40.66
ATOM	3912	O1	SO4	S	2	33.459	23.461	16.010	1.00	42.94
ATOM	3913	O2	SO4	S	2	34.537	25.066	14.625	1.00	38.04
ATOM	3914	O3	SO4	S	2	32.157	24.925	14.694	1.00	42.83
ATOM	3915	O4	SO4	S	2	33.303	25.795	16.584	1.00	38.74
ATOM	3916	OH2	HOH	W	1	40.429	2.683	22.075	1.00	8.70
ATOM	3919	OH2	HOH	W	2	33.471	-0.110	28.787	1.00	7.42
ATOM	3922	OH2	HOH	W	3	30.071	-6.792	29.754	1.00	12.19
ATOM	3925	OH2	HOH	W	4	34.086	-5.943	26.084	1.00	7.43
ATOM	3928	OH2	HOH	W	5	14.619	2.539	2.560	1.00	12.84
ATOM	3931	OH2	HOH	W	6	24.170	-2.589	21.354	1.00	11.35
ATOM	3934	OH2	HOH	W	7	36.950	13.527	15.987	1.00	9.04
ATOM	3937	OH2	HOH	W	8	30.658	-2.674	13.482	1.00	13.48
ATOM	3940	OH2	HOH	W	9	29.744	3.633	41.636	1.00	10.51
ATOM	3943	OH2	HOH	W	10	20.255	-5.644	15.978	1.00	17.64
ATOM	3946	OH2	HOH	W	11	31.111	10.582	42.353	1.00	12.07
ATOM	3949	OH2	HOH	W	12	35.816	-8.963	22.132	1.00	12.38
ATOM	3952	OH2	HOH	W	13	34.310	1.513	26.674	1.00	7.88
ATOM	3955	OH2	HOH	W	14	37.254	14.470	13.092	1.00	13.01
ATOM	3958	OH2	HOH	W	15	40.651	1.208	34.309	1.00	17.17
ATOM	3961	OH2	HOH	W	16	43.143	4.211	32.778	1.00	11.56
ATOM	3964	OH2	HOH	W	17	40.941	-3.147	39.576	1.00	12.64
ATOM	3967	OH2	HOH	W	18	32.219	-0.261	16.034	1.00	11.08
ATOM	3970	OH2	HOH	W	19	22.016	-1.428	22.526	1.00	14.75
ATOM	3973	OH2	HOH	W	20	49.188	8.464	9.992	1.00	16.72
ATOM	3976	OH2	HOH	W	21	34.997	-0.016	37.489	1.00	18.07
ATOM	3979	OH2	HOH	W	22	43.874	1.321	15.460	1.00	12.64
ATOM	3982	OH2	HOH	W	23	29.320	2.295	18.884	1.00	10.10
ATOM	3985	OH2	HOH	W	24	49.867	13.111	15.074	1.00	12.82
ATOM	3988	OH2	HOH	W	25	40.737	-6.239	16.293	1.00	14.96
ATOM	3991	OH2	HOH	W	26	37.589	17.205	20.676	1.00	14.47
ATOM	3994	OH2	HOH	W	27	43.681	15.408	26.036	1.00	18.83
ATOM	3997	OH2	HOH	W	28	25.048	9.775	19.131	1.00	16.14
ATOM	4000	OH2	HOH	W	29	36.927	13.018	10.809	1.00	15.78
ATOM	4003	OH2	HOH	W	30	35.662	8.788	25.484	1.00	16.83
ATOM	4006	OH2	HOH	W	31	32.219	3.919	2.722	1.00	19.51
ATOM	4009	OH2	HOH	W	32	51.533	7.519	20.876	1.00	15.04
ATOM	4012	OH2	HOH	W	33	26.355	12.023	19.580	1.00	13.13
ATOM	4015	OH2	HOH	W	34	45.635	2.261	11.636	1.00	14.44
ATOM	4018	OH2	HOH	W	35	16.637	9.113	10.509	1.00	14.21
ATOM	4021	OH2	HOH	W	36	21.713	-0.787	7.302	1.00	16.96
ATOM	4024	OH2	HOH	W	37	39.449	23.082	18.254	1.00	21.68
ATOM	4027	OH2	HOH	W	38	10.334	1.631	12.918	1.00	15.28
ATOM	4030	OH2	HOH	W	39	34.338	21.820	17.605	1.00	15.08
ATOM	4033	OH2	HOH	W	40	48.880	3.553	37.949	1.00	16.79
ATOM	4036	OH2	HOH	W	41	28.158	-3.885	14.003	1.00	21.02
ATOM	4039	OH2	HOH	W	42	44.753	2.054	8.955	1.00	12.60
ATOM	4042	OH2	HOH	W	43	19.882	13.475	22.195	1.00	20.92
ATOM	4045	OH2	HOH	W	44	46.521	8.188	10.075	1.00	13.11
ATOM	4048	OH2	HOH	W	45	32.028	22.414	19.582	1.00	14.04
ATOM	4051	OH2	HOH	W	46	30.760	8.620	9.415	1.00	16.52
ATOM	4054	OH2	HOH	W	47	54.979	9.815	16.844	1.00	15.66
ATOM	4057	OH2	HOH	W	48	17.017	8.094	18.906	1.00	17.97
ATOM	4060	OH2	HOH	W	49	25.089	-2.272	15.499	1.00	21.68
ATOM	4063	OH2	HOH	W	50	13.771	3.669	18.670	1.00	20.19
ATOM	4066	OH2	HOH	W	51	24.084	-1.295	42.931	1.00	17.90
ATOM	4069	OH2	HOH	W	52	18.516	2.572	23.645	1.00	24.03
ATOM	4072	OH2	HOH	W	53	38.340	-11.979	23.925	1.00	23.13
ATOM	4075	OH2	HOH	W	54	19.660	-4.455	13.535	1.00	17.16
ATOM	4078	OH2	HOH	W	55	33.880	-1.775	6.981	1.00	14.82
ATOM	4081	OH2	HOH	W	56	26.414	14.108	18.077	1.00	19.50

ATOM	4084	OH2	HOH	W	57	44.144	17.127	23.890	1.00	14.23
ATOM	4087	OH2	HOH	W	58	18.899	-2.022	19.473	1.00	17.55
ATOM	4090	OH2	HOH	W	59	33.035	11.341	3.678	1.00	31.44
ATOM	4093	OH2	HOH	W	60	17.741	6.630	11.196	1.00	17.74
ATOM	4096	OH2	HOH	W	61	32.448	-1.306	41.804	1.00	20.33
ATOM	4099	OH2	HOH	W	62	17.314	-1.793	14.717	1.00	23.41
ATOM	4102	OH2	HOH	W	63	35.826	2.704	5.379	1.00	18.07
ATOM	4105	OH2	HOH	W	64	15.233	6.483	11.472	1.00	18.83
ATOM	4108	OH2	HOH	W	65	23.830	11.367	35.848	1.00	21.97
ATOM	4111	OH2	HOH	W	66	25.909	1.055	28.903	1.00	18.03
ATOM	4114	OH2	HOH	W	67	50.873	13.073	36.691	1.00	20.54
ATOM	4117	OH2	HOH	W	68	30.965	-14.003	28.100	1.00	33.26
ATOM	4120	OH2	HOH	W	70	23.930	8.534	1.780	1.00	23.25
ATOM	4123	OH2	HOH	W	71	44.812	-1.772	17.877	1.00	21.69
ATOM	4126	OH2	HOH	W	72	20.394	8.625	24.041	1.00	21.71
ATOM	4129	OH2	HOH	W	73	43.055	-5.084	36.754	1.00	22.08
ATOM	4132	OH2	HOH	W	74	31.392	-4.914	32.341	1.00	19.97
ATOM	4135	OH2	HOH	W	75	42.472	-0.043	43.630	1.00	29.16
ATOM	4138	OH2	HOH	W	76	28.310	-6.343	32.049	1.00	37.28
ATOM	4141	OH2	HOH	W	77	34.196	0.391	5.082	1.00	18.05
ATOM	4144	OH2	HOH	W	78	20.526	3.352	45.656	1.00	22.41
ATOM	4147	OH2	HOH	W	79	24.932	-5.887	31.342	1.00	29.19
ATOM	4150	OH2	HOH	W	80	48.842	-3.689	46.618	1.00	22.67
ATOM	4153	OH2	HOH	W	81	32.798	1.305	41.731	1.00	24.45
ATOM	4156	OH2	HOH	W	82	25.679	-12.283	30.502	1.00	25.36
ATOM	4159	OH2	HOH	W	83	34.168	17.898	13.136	1.00	22.54
ATOM	4162	OH2	HOH	W	84	42.368	0.928	31.609	1.00	21.97
ATOM	4165	OH2	HOH	W	85	30.036	-6.047	13.044	1.00	20.97
ATOM	4168	OH2	HOH	W	86	39.106	-8.653	15.862	1.00	20.71
ATOM	4171	OH2	HOH	W	87	38.117	10.497	44.844	1.00	34.92
ATOM	4174	OH2	HOH	W	89	24.415	5.577	34.955	1.00	20.65
ATOM	4177	OH2	HOH	W	90	15.886	-2.109	10.278	1.00	34.16
ATOM	4180	OH2	HOH	W	91	21.881	-6.185	26.501	1.00	22.56
ATOM	4183	OH2	HOH	W	92	46.086	-1.633	32.263	1.00	27.58
ATOM	4186	OH2	HOH	W	93	28.435	-4.071	30.794	1.00	25.14
ATOM	4189	OH2	HOH	W	94	23.314	14.343	34.051	1.00	39.12
ATOM	4192	OH2	HOH	W	95	40.893	23.442	14.767	1.00	28.02
ATOM	4195	OH2	HOH	W	96	24.925	18.300	19.070	1.00	29.56
ATOM	4198	OH2	HOH	W	97	28.107	23.315	21.470	1.00	32.69
ATOM	4201	OH2	HOH	W	98	39.459	-7.784	13.446	1.00	31.67
ATOM	4204	OH2	HOH	W	99	42.721	-6.952	28.832	1.00	20.74
ATOM	4207	OH2	HOH	W	100	45.693	0.909	31.701	1.00	20.90
ATOM	4210	OH2	HOH	W	101	28.318	20.337	17.569	1.00	35.65
ATOM	4213	OH2	HOH	W	102	44.870	-6.798	37.684	1.00	35.75
ATOM	4216	OH2	HOH	W	103	36.631	24.105	9.200	1.00	27.95
ATOM	4219	OH2	HOH	W	104	38.594	10.468	3.779	1.00	29.62
ATOM	4222	OH2	HOH	W	105	48.692	-5.365	41.462	1.00	20.52
ATOM	4225	OH2	HOH	W	106	46.803	9.686	42.202	1.00	32.68
ATOM	4228	OH2	HOH	W	107	37.356	26.629	32.061	1.00	26.42
ATOM	4231	OH2	HOH	W	108	41.585	-9.630	42.606	1.00	24.05
ATOM	4234	OH2	HOH	W	109	48.620	-7.911	30.300	1.00	30.16
ATOM	4237	OH2	HOH	W	110	21.202	-8.436	15.346	1.00	38.22
ATOM	4240	OH2	HOH	W	111	31.311	-12.756	35.171	1.00	29.21
ATOM	4243	OH2	HOH	W	112	20.841	-7.544	22.388	1.00	22.99
ATOM	4246	OH2	HOH	W	113	21.827	17.765	28.116	1.00	24.50
ATOM	4249	OH2	HOH	W	114	34.131	4.778	3.926	1.00	27.22
ATOM	4252	OH2	HOH	W	115	30.983	8.008	45.609	1.00	27.92
ATOM	4255	OH2	HOH	W	116	41.063	-12.762	31.331	1.00	30.65
ATOM	4258	OH2	HOH	W	117	25.579	-13.288	4.560	1.00	23.77
ATOM	4261	OH2	HOH	W	118	36.980	-12.282	19.061	1.00	26.96
ATOM	4264	OH2	HOH	W	119	8.693	6.920	7.742	1.00	23.25

ATOM	4267	OH2	HOH	W	120	51.503	4.811	21.172	1.00	25.64
ATOM	4270	OH2	HOH	W	121	9.702	-0.981	18.710	1.00	28.87
ATOM	4273	OH2	HOH	W	122	33.912	15.657	44.910	1.00	28.39
ATOM	4276	OH2	HOH	W	123	30.958	11.709	10.094	1.00	31.92
ATOM	4279	OH2	HOH	W	124	25.888	-2.726	30.636	1.00	40.39
ATOM	4282	OH2	HOH	W	125	42.225	4.617	44.313	1.00	27.07
ATOM	4285	OH2	HOH	W	126	14.501	5.318	8.423	1.00	35.09
ATOM	4288	OH2	HOH	W	127	27.588	18.209	37.875	1.00	29.55
ATOM	4291	OH2	HOH	W	128	42.469	26.708	26.523	1.00	26.56
ATOM	4294	OH2	HOH	W	130	46.474	-2.421	34.585	1.00	31.20
ATOM	4297	OH2	HOH	W	132	37.155	11.962	6.651	1.00	30.89
ATOM	4300	OH2	HOH	W	133	43.886	26.075	22.007	1.00	26.99
ATOM	4303	OH2	HOH	W	134	45.530	10.524	8.974	1.00	24.22
ATOM	4306	OH2	HOH	W	135	21.364	15.279	30.157	1.00	28.09
ATOM	4309	OH2	HOH	W	136	52.668	7.123	38.901	1.00	34.79
ATOM	4312	OH2	HOH	W	137	43.272	19.443	13.436	1.00	36.67
ATOM	4315	OH2	HOH	W	138	37.297	-15.593	32.245	1.00	36.19
ATOM	4318	OH2	HOH	W	139	23.898	0.626	38.613	1.00	30.34
ATOM	4321	OH2	HOH	W	140	35.600	-6.182	5.810	1.00	25.84
ATOM	4324	OH2	HOH	W	141	43.430	16.492	10.228	1.00	26.98
ATOM	4327	OH2	HOH	W	142	23.587	-13.662	22.306	1.00	28.96
ATOM	4330	OH2	HOH	W	143	15.798	8.988	7.894	1.00	29.16
ATOM	4333	OH2	HOH	W	144	20.874	-5.677	11.626	1.00	24.63
ATOM	4336	OH2	HOH	W	146	12.785	1.065	19.048	1.00	25.71
ATOM	4339	OH2	HOH	W	147	48.173	21.190	18.689	1.00	27.98
ATOM	4342	OH2	HOH	W	149	22.147	-8.790	12.743	1.00	27.98
ATOM	4345	OH2	HOH	W	150	21.392	1.835	-0.204	1.00	30.34
ATOM	4348	OH2	HOH	W	151	33.140	-11.955	20.985	1.00	35.26
ATOM	4351	OH2	HOH	W	152	23.216	13.325	30.483	1.00	26.09
ATOM	4354	OH2	HOH	W	153	23.019	13.675	8.814	1.00	31.26
ATOM	4357	OH2	HOH	W	154	29.903	-11.002	33.711	1.00	29.50
ATOM	4360	OH2	HOH	W	155	48.657	-3.446	35.875	1.00	34.78
ATOM	4363	OH2	HOH	W	156	34.272	20.557	13.875	1.00	39.13
ATOM	4366	OH2	HOH	W	157	35.610	27.346	22.236	1.00	32.38
ATOM	4369	OH2	HOH	W	158	44.436	12.873	9.547	1.00	26.33
ATOM	4372	OH2	HOH	W	159	19.510	6.375	26.223	1.00	34.99
ATOM	4375	OH2	HOH	W	160	28.671	-16.182	29.382	1.00	33.07
ATOM	4378	OH2	HOH	W	161	42.907	11.323	45.296	1.00	94.32
ATOM	4381	OH2	HOH	W	162	50.943	12.053	29.029	1.00	42.12
ATOM	4384	OH2	HOH	W	163	45.673	-0.608	46.421	1.00	35.90
ATOM	4387	OH2	HOH	W	164	18.597	12.343	31.250	1.00	36.62
ATOM	4390	OH2	HOH	W	165	52.715	13.715	14.875	1.00	27.96
ATOM	4393	OH2	HOH	W	166	44.921	19.407	27.113	1.00	34.63
ATOM	4396	OH2	HOH	W	167	17.185	12.317	16.599	1.00	35.44
ATOM	4399	OH2	HOH	W	168	45.095	-9.080	41.561	1.00	35.67
ATOM	4402	OH2	HOH	W	169	8.307	-0.285	15.228	1.00	33.94
ATOM	4405	OH2	HOH	W	170	42.444	5.590	4.733	1.00	32.08
ATOM	4408	OH2	HOH	W	171	23.494	14.575	41.051	1.00	28.20
ATOM	4411	OH2	HOH	W	172	20.465	-3.740	23.271	1.00	24.71
ATOM	4414	OH2	HOH	W	173	40.097	-14.145	27.725	1.00	35.09
ATOM	4417	OH2	HOH	W	174	19.548	-8.864	20.620	1.00	34.58
ATOM	4420	OH2	HOH	W	175	18.208	-2.725	17.019	1.00	27.06
ATOM	4423	OH2	HOH	W	176	30.433	-4.149	37.702	1.00	29.21
ATOM	4426	OH2	HOH	W	177	46.993	-6.378	22.279	1.00	39.77
ATOM	4429	OH2	HOH	W	178	27.724	-12.337	8.931	1.00	52.43
ATOM	4432	OH2	HOH	W	179	34.819	8.698	8.660	1.00	37.08
ATOM	4435	OH2	HOH	W	180	35.053	-4.356	39.736	1.00	44.29
ATOM	4438	OH2	HOH	W	181	21.147	15.729	10.288	1.00	36.37
ATOM	4441	OH2	HOH	W	182	28.710	-8.578	34.412	1.00	41.32
ATOM	4444	OH2	HOH	W	183	41.665	24.133	19.804	1.00	27.04
ATOM	4447	OH2	HOH	W	184	21.237	-0.651	0.292	1.00	29.88

ATOM	4450	OH2	HOH	W	185	15.319	12.631	35.088	1.00	40.82
ATOM	4453	OH2	HOH	W	186	17.568	-6.667	20.090	1.00	46.76
ATOM	4456	OH2	HOH	W	187	21.510	16.031	32.785	1.00	30.30
ATOM	4459	OH2	HOH	W	188	37.891	-12.650	21.487	1.00	38.20
ATOM	4462	OH2	HOH	W	189	28.443	-10.580	18.183	1.00	33.07
ATOM	4465	OH2	HOH	W	190	25.615	-2.319	33.501	1.00	33.45
ATOM	4468	OH2	HOH	W	191	44.793	19.567	10.584	1.00	41.68
ATOM	4471	OH2	HOH	W	192	19.440	13.913	15.925	1.00	49.68
ATOM	4474	OH2	HOH	W	193	39.679	-0.357	5.804	1.00	43.67
ATOM	4477	OH2	HOH	W	194	35.494	-12.230	25.437	1.00	32.24
ATOM	4480	OH2	HOH	W	195	51.056	2.331	38.823	1.00	30.10
ATOM	4483	OH2	HOH	W	196	23.911	-9.355	30.117	1.00	47.56
ATOM	4486	OH2	HOH	W	197	37.238	25.444	13.165	1.00	36.20
ATOM	4489	OH2	HOH	W	199	40.947	17.855	48.948	1.00	36.08
ATOM	4492	OH2	HOH	W	200	49.428	9.790	26.722	1.00	34.67
ATOM	4495	OH2	HOH	W	201	8.178	-0.105	7.840	1.00	46.40
ATOM	4498	OH2	HOH	W	202	28.872	22.561	36.006	1.00	66.03
ATOM	4501	OH2	HOH	W	203	32.872	29.774	27.679	1.00	47.71
ATOM	4504	OH2	HOH	W	204	20.245	-5.283	8.777	1.00	36.89
ATOM	4507	OH2	HOH	W	205	25.001	20.665	30.456	1.00	26.78
ATOM	4510	OH2	HOH	W	207	18.981	6.379	40.516	1.00	44.49
ATOM	4513	OH2	HOH	W	208	18.135	-5.417	17.243	1.00	31.79
ATOM	4516	OH2	HOH	W	209	20.375	-2.587	5.981	1.00	41.07
ATOM	4519	OH2	HOH	W	210	32.416	-5.946	37.424	1.00	38.09
ATOM	4522	OH2	HOH	W	211	31.032	21.871	15.661	1.00	30.27
ATOM	4525	OH2	HOH	W	213	48.383	14.254	40.587	1.00	48.37
ATOM	4528	OH2	HOH	W	214	27.589	23.396	33.454	1.00	42.67
ATOM	4531	OH2	HOH	W	215	36.735	18.290	11.455	1.00	33.50
ATOM	4534	OH2	HOH	W	216	45.328	17.450	28.588	1.00	32.63
ATOM	4537	OH2	HOH	W	217	28.589	5.848	0.331	1.00	30.88
ATOM	4540	OH2	HOH	W	218	45.036	7.204	3.933	1.00	44.32
ATOM	4543	OH2	HOH	W	219	36.198	15.391	9.570	1.00	40.50
ATOM	4546	OH2	HOH	W	220	51.473	2.532	28.741	1.00	33.07
ATOM	4549	OH2	HOH	W	221	16.773	11.375	41.364	1.00	40.40
ATOM	4552	OH2	HOH	W	222	18.084	6.955	46.182	1.00	46.26
ATOM	4555	OH2	HOH	W	223	22.390	-0.677	40.898	1.00	31.29
ATOM	4558	OH2	HOH	W	225	53.950	5.803	29.838	1.00	43.53
ATOM	4561	OH2	HOH	W	226	45.166	-0.070	43.645	1.00	35.50
ATOM	4564	OH2	HOH	W	227	39.005	-3.963	7.418	1.00	45.59
ATOM	4567	OH2	HOH	W	228	36.810	22.964	39.380	1.00	38.67
ATOM	4570	OH2	HOH	W	230	31.222	17.540	44.140	1.00	43.16
ATOM	4573	OH2	HOH	W	231	46.056	-9.966	27.003	1.00	37.60
ATOM	4576	OH2	HOH	W	232	47.040	15.108	26.216	1.00	31.07
ATOM	4579	OH2	HOH	W	233	39.996	19.542	42.453	1.00	40.16
ATOM	4582	OH2	HOH	W	234	14.945	14.841	32.915	1.00	52.31
ATOM	4585	OH2	HOH	W	235	29.815	16.087	45.664	1.00	42.63
ATOM	4588	OH2	HOH	W	236	42.550	-12.008	28.799	1.00	36.44
ATOM	4591	OH2	HOH	W	237	53.418	13.214	31.220	1.00	53.16
ATOM	4594	OH2	HOH	W	238	42.505	-7.172	18.060	1.00	45.33
ATOM	4597	OH2	HOH	W	239	27.692	8.818	-1.470	1.00	36.21
ATOM	4600	OH2	HOH	W	240	47.095	16.188	29.949	1.00	35.50
ATOM	4603	OH2	HOH	W	241	33.024	-2.871	38.053	1.00	36.93
ATOM	4606	OH2	HOH	W	242	23.529	3.676	30.017	1.00	30.79
ATOM	4609	OH2	HOH	W	243	46.769	21.726	28.201	1.00	40.20
ATOM	4612	OH2	HOH	W	245	25.267	16.974	37.153	1.00	50.89
ATOM	4615	OH2	HOH	W	246	32.167	-10.939	40.270	1.00	52.37
ATOM	4618	OH2	HOH	W	248	16.375	4.307	22.549	1.00	40.20
ATOM	4621	OH2	HOH	W	249	36.270	10.573	9.646	1.00	41.27
ATOM	4624	OH2	HOH	W	250	21.460	2.455	41.834	1.00	38.85
ATOM	4627	OH2	HOH	W	251	52.329	-3.463	41.873	1.00	46.75
ATOM	4630	OH2	HOH	W	252	25.502	-3.198	4.280	1.00	27.04

ATOM	4633	OH2	HOH	W	253	17.878	13.800	19.727	1.00	36.40
ATOM	4636	OH2	HOH	W	257	17.028	-4.713	13.089	1.00	45.26
ATOM	4639	OH2	HOH	W	261	31.732	7.477	0.668	1.00	49.60
ATOM	4642	OH2	HOH	W	262	40.671	-12.328	38.892	1.00	49.86
ATOM	4645	OH2	HOH	W	265	14.635	13.902	22.559	1.00	41.46
ATOM	4648	OH2	HOH	W	266	22.873	4.243	33.141	1.00	48.32
ATOM	4651	OH2	HOH	W	267	44.728	25.864	28.836	1.00	42.76
ATOM	4654	OH2	HOH	W	270	43.589	-8.613	30.481	1.00	36.17
ATOM	4657	OH2	HOH	W	272	16.443	14.420	37.349	1.00	43.99
ATOM	4660	OH2	HOH	W	273	49.283	16.801	17.329	1.00	40.11
ATOM	4663	OH2	HOH	W	274	19.543	-4.316	20.151	1.00	42.35
ATOM	4666	OH2	HOH	W	275	30.267	27.516	30.458	1.00	41.78
ATOM	4669	OH2	HOH	W	277	23.015	-4.799	39.381	1.00	48.64
ATOM	4672	OH2	HOH	W	281	56.542	0.326	33.909	1.00	58.04
ATOM	4675	OH2	HOH	W	282	27.842	19.105	40.231	1.00	46.37
ATOM	4678	OH2	HOH	W	283	26.158	22.853	30.042	1.00	48.09
ATOM	4681	OH2	HOH	W	284	40.855	11.861	3.284	1.00	41.76
ATOM	4684	OH2	HOH	W	285	34.296	23.929	34.984	1.00	46.88
ATOM	4687	OH2	HOH	W	290	33.870	21.842	37.051	1.00	37.55

[0069] The amino acid residues that are of particular interest to the invention for designing compounds that modulate prostasin activity are detailed in Table 2, *infra*.

Table 2

Residue Name	Residues Number	Pocket Assignment
Val	69	P1'
Val	70	P1'
Gly	71	P1'
His	85	Catalytic His
Cys	86	P1'
Tyr	126	P2
Leu	127	P2
Gln	128	P2
Glu	129	P2
Gly	130	P2
Asp	134	Catalytic Asp
Gly	174	P4
His	175	P4
Val	176	P4
Ala	177	P4
Pro	178	P4

Ser	179	P4
Val	180	P4
Ala	209	P3
Lys	210	P3
Pro	211	P3
Glu	212	P3
Glu	213	P3
Pro	214	P3
His	215	P3
Phe	216	P3
Ala	233	P1
Cys	234	P1
Gln	235	P1
Gly	236	P1
Asp	237	P1
Ser	238	Catalytic Ser
Val	256	P1
Ser	257	P1
Trp	258	P2
Gly	259	P2
Asp	260	P1
Ala	261	P1
Cys	262	P1
Gly	269	P1
Val	270	P1

We Claim:

1. A composition comprising a polypeptide in crystalline form, wherein the polypeptide is a prostatic polypeptide.
2. The composition according to claim 1, wherein the prostatic polypeptide is the expression product of a polynucleotide encoded by the amino acid residues of SEQ. ID 1.
3. The composition according to claim 1, further comprising a binding partner suitable for co-crystallization with the prostatic polypeptide.
4. The composition according to claim 1, wherein the prostatic crystal diffracts to 1.5 Angstroms.
5. The composition according to claim 4, wherein the crystal space group is $P2_12_12_1$.
6. The composition according to claim 5, wherein the unit cell of the crystal comprises 1 crystallographically independent prostatic molecules.
7. The composition according to claim 6, wherein the prostatic crystal has unit cell dimensions of $a=53.74\text{\AA}$ $b=54.58\text{\AA}$, $c=83.694\text{\AA}$ and $\alpha=\beta=\gamma=90.0$ degrees.
8. The composition according to claim 1, wherein the polypeptide is characterized by the structure coordinates according to Table 1, or a substantial part thereof.
9. A method for crystallizing a prostatic polypeptide, comprising: (A) mixing a solution comprising a prostatic polypeptide and an optional binding partner with a crystallization buffer; and (B) crystallizing the mixture of step (A) by drop vapor diffusion to form a crystalline precipitate.
10. The method of claim 9, wherein said crystallization buffer comprises 20% w/v PEG 4000 buffered with 0.1M MES, pH.< 7.0

11. The method of claim 9, wherein crystallization occurs at a temperature ranging from 4 to 20 degrees Celsius.

12. The method of claim 9, wherein the prostatic polypeptide is at a final concentration of about 20g/mL.

13. A method of identifying a compound that associates with prostatic, comprising (A) designing a compound that associates with at least one of the residues of Table 2, (B) synthesizing said compound, and (C) determining in vitro whether said compound modulates the activity of prostatic.

Figure 1



Figure 2

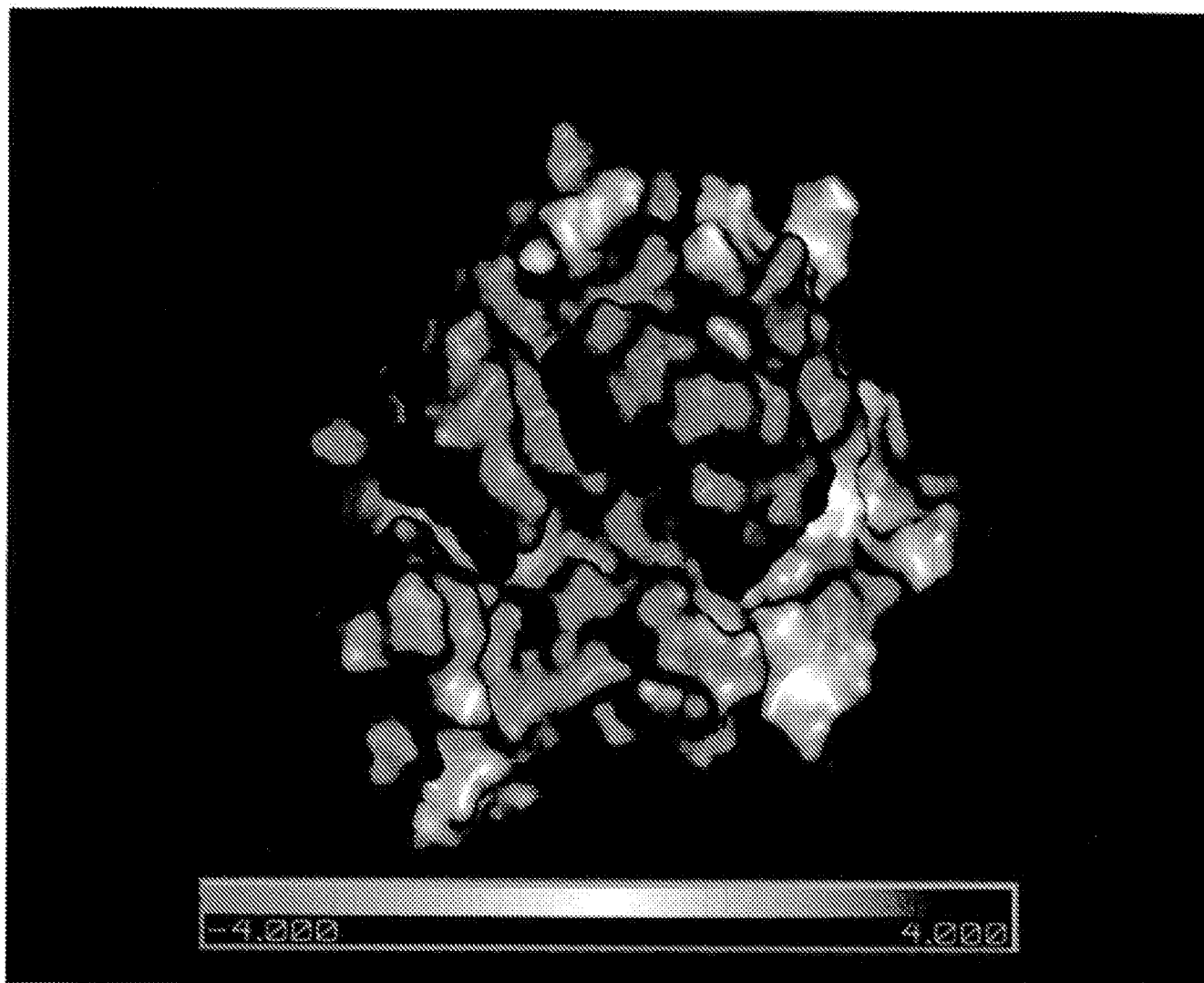


Figure 3

