

## SUPPORTING INFORMATION

### **Identification of potent, selective and orally bioavailable small molecule GSPT1/2 degraders from a focused library of Cereblon modulators**

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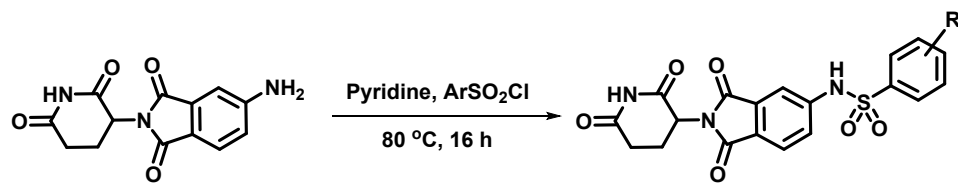
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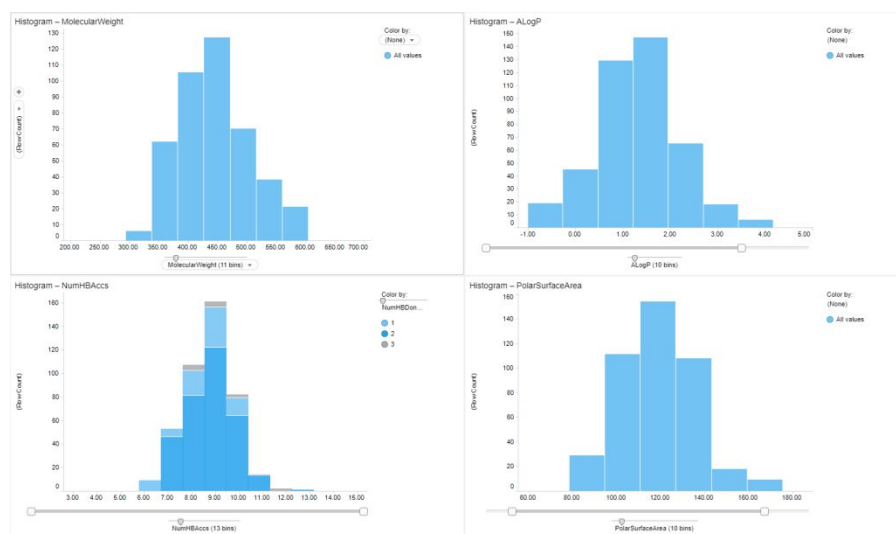
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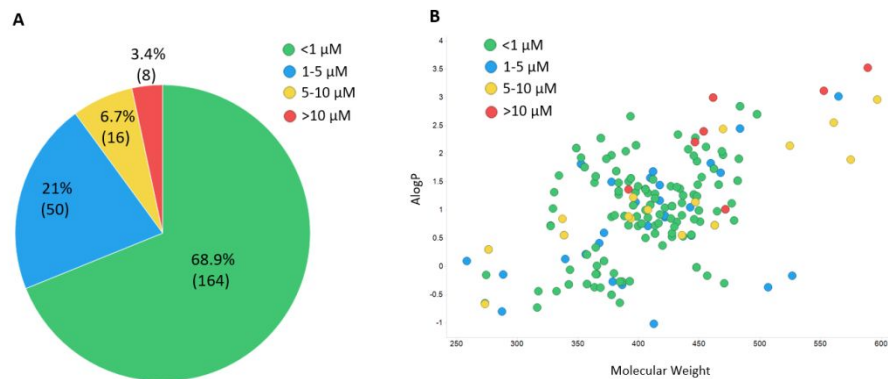
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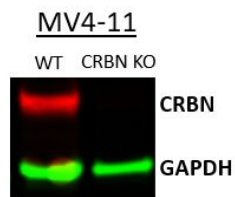
**Scheme S1.** Synthesis of compounds **6-15**.



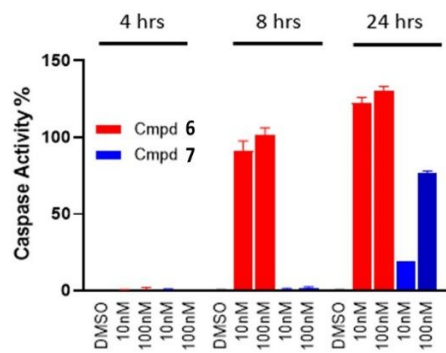
**Figure S1.** Histograms of Physicochemical Properties for 415 compounds (AlogP, MW, PSA, HBD and HBA).



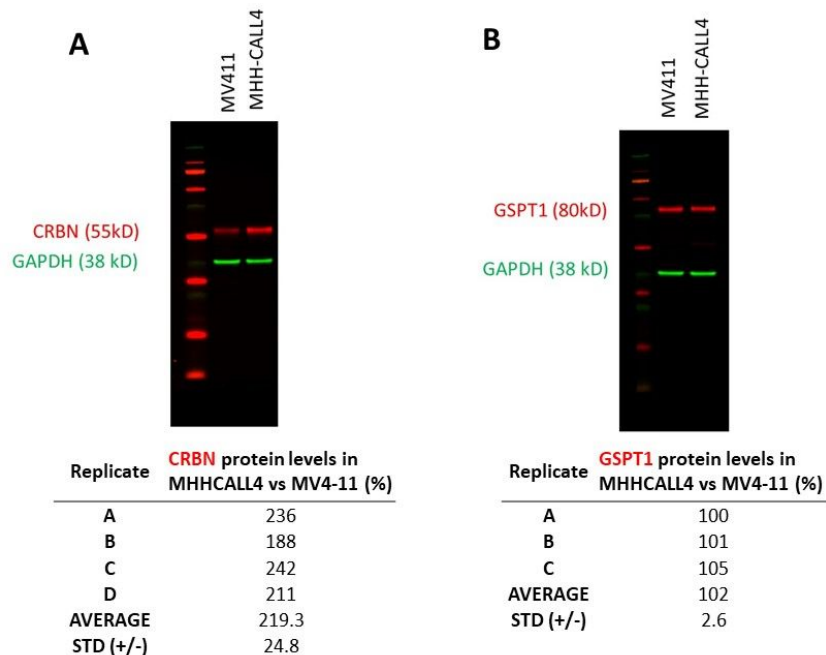
**Figure S2.** (A) Distribution of CRBN Fluorescence Polarization affinity for 238 compounds. (B) AlogP, MW colored by binned CRBN FP affinity.



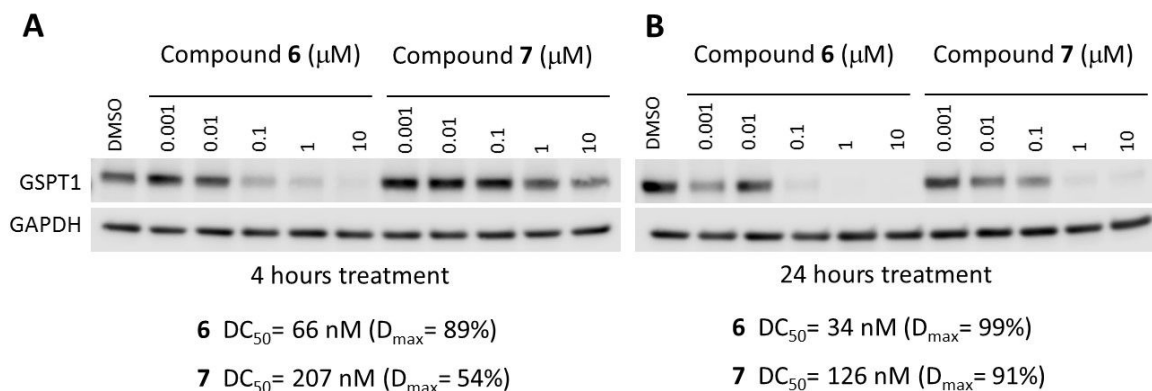
**Figure S3.** Immunoblot of wild-type and Cereblon-deficient MV4-11 cell lines (clone 4B12).



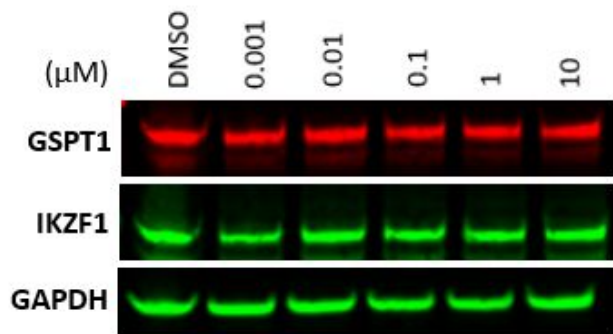
**Figure S4.** Caspase activation at 4, 8 and 24 hours for compounds 6 and 7 at 10 and 100 nM.



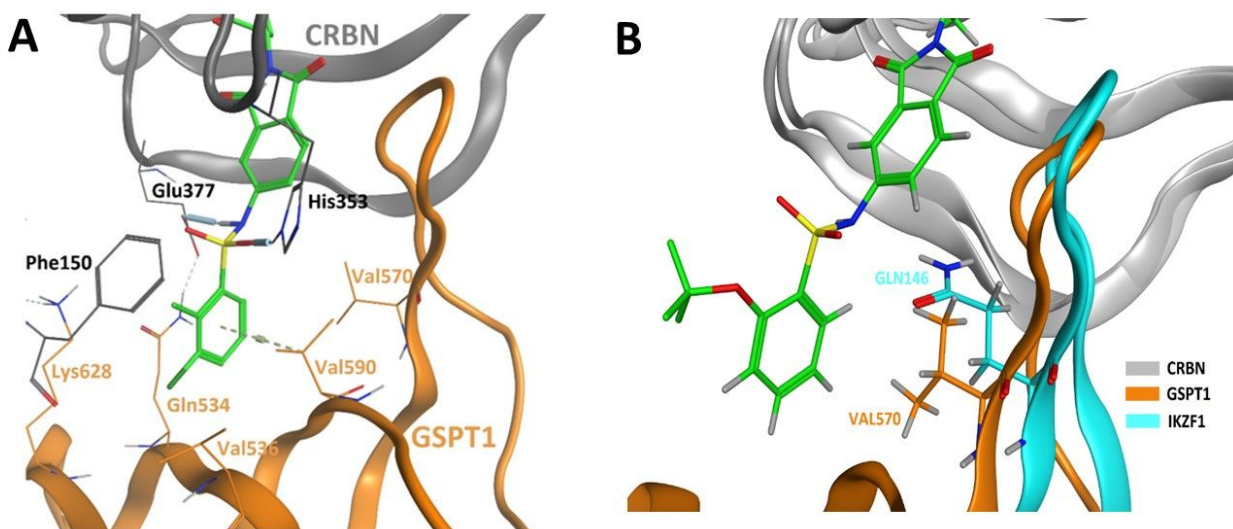
**Figure S5.** Relative expression of CRBN and GSPT1 in MV4-11 and MHH-CALL-4 cells (normalized against GAPDH).



**Figure S6.** Immunoblot for GSPT1 protein after the treatment of MB004 cells with increasing concentrations of compounds **6** and **7** over: (A) 4 hours, and (B) 24 hours. Degradation values were calculated using quantified band intensities from immunoblots and  $DC_{50}$  values calculated based on the average of three independent experiments.

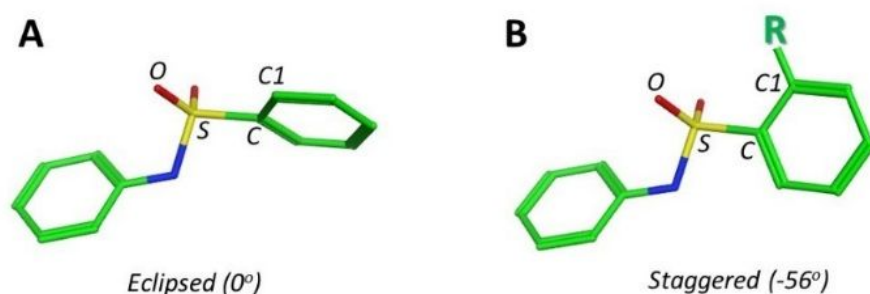


**Figure S7.** Western blot for cell inactive compound **10** (GSPT1, IKZF1, GAPDH) in MV4-11 cell line at 4h.



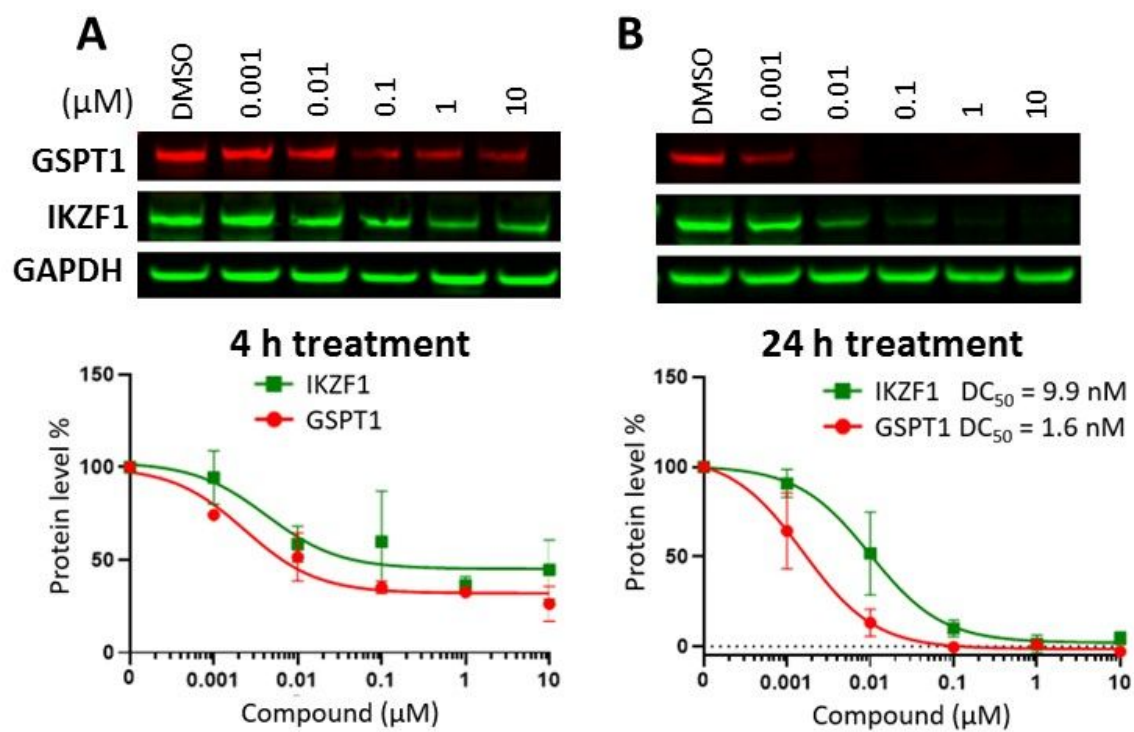
**Figure S8.** Molecular modeling of lead compounds: (A) MDS generated structure of **7** bound to a narrow hydrophobic pocket formed by CRBN Phe150 and GSPT1 residues Val570, Val590, Val536, Gln534 and Lys628; (B) IKZF1-CRBN complex is superimposed on the compound **6**-IKZF1-CRBN ternary complex obtained by docking compound **6** to the IKZF1-CRBN complex. Gln146 of IKZF1

is positioned in the place of Val570 of GSPT1 at a distance of 2.3 Å from the aryl ring of compound **6**, which may account for its selectivity over the IKZF1 degradation.



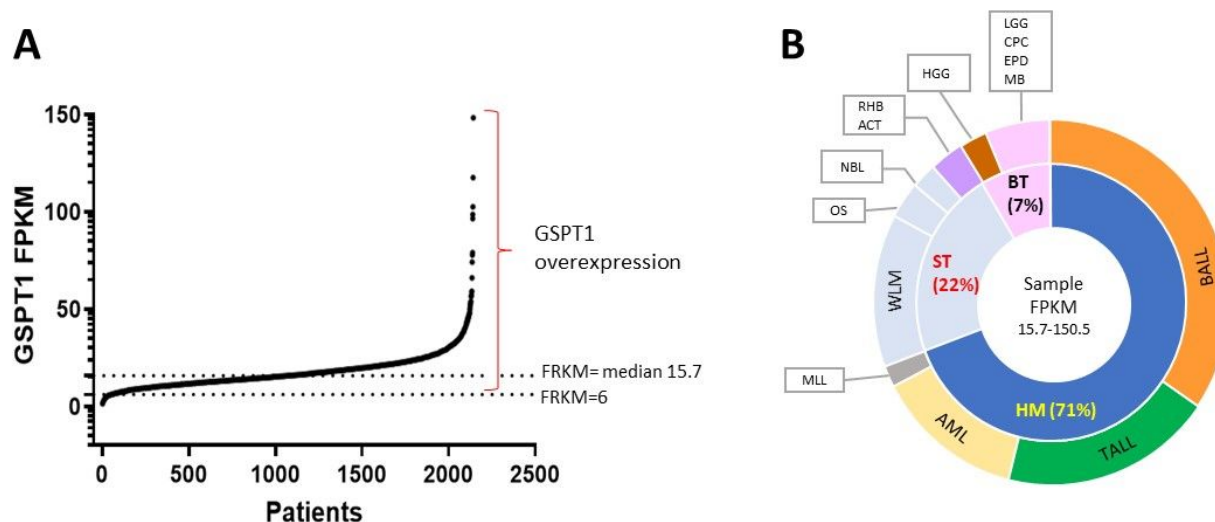
Compound	Dihedral Angle OS-CC1 (degrees)	Potential Energy (Kcal/mol)	Delta Potential Energy (Kcal/mol)
<b>6</b>	-56°	-1.1	-2.1
<b>6</b>	0°	1.0	
<b>7</b>	-56°	-6.1	-6.1
<b>7</b>	0°	0	
<b>8</b>	-56°	-8.1	+3.1
<b>8</b>	0°	-11.2	

**Figure S9.** Force field (MMFF94X<sup>1</sup> implemented in MOE<sup>2</sup>) calculated potential energy values of compounds **6**, **7** and unsubstituted analogue **8** for their: (A) eclipsed; and (B) staggered conformations. Dihedral angle (O=S-phenyl ring plane) of -56 degrees was based on the stable poses obtained following MD simulations.



**Figure S10.** Immunoblot for GSPT1 and IKZF1 proteins after the treatment of MV4-11 cells with increasing concentrations of compound **5** (CC-90009; MedChemExpress, HY-130800, Lot 64001) over: (A) 4 hours, and (B) 24 hours.





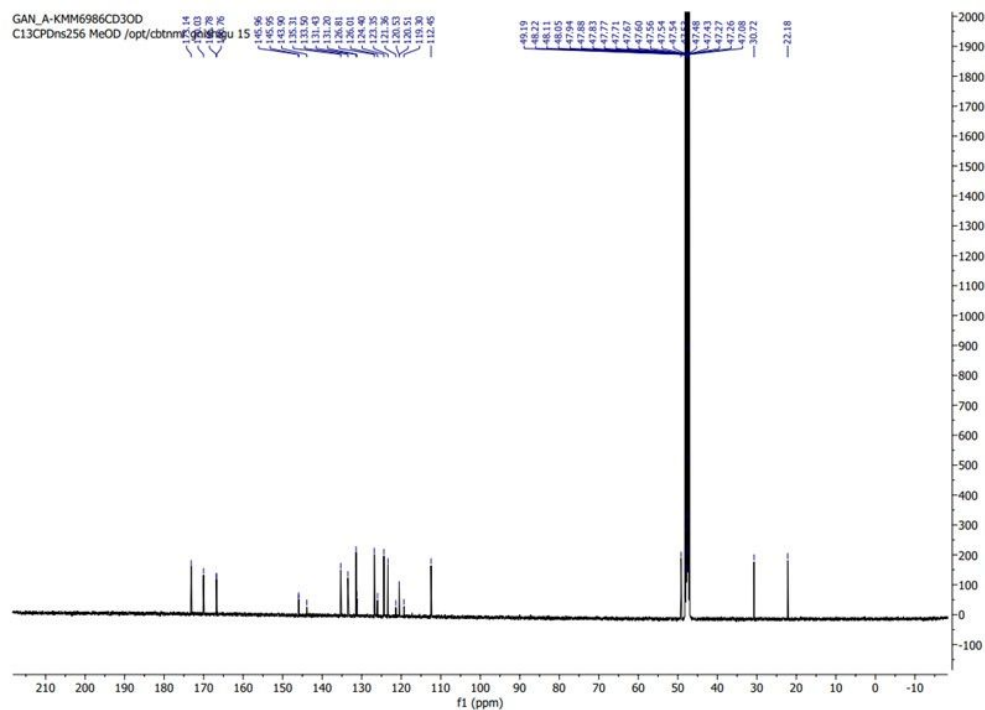
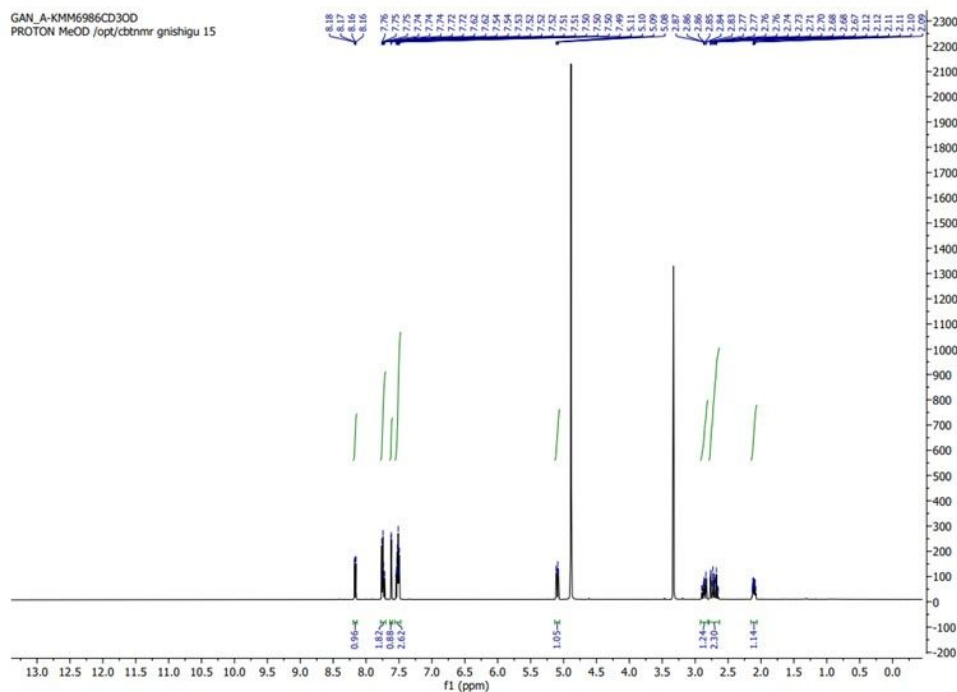
**Figure S11.** GSPT1 expression in pediatric cancer patients collected from St. Jude’s Cloud PeCAN Data Portal<sup>3</sup>. (A) GSPT1 RNA-seq gene expression from pediatric cancer patients. GSPT1 overexpression determined by FRKM > 6. Median FRKM = 15.7; (B) Pie chart representing cancer type distribution of GSPT1 overexpressed pediatric cancers above median FRKM=15.7. Cancer type abbreviation: BALL: B-Cell Acute Lymphoblastic Leukemia, TALL: T-cell Acute Lymphoblastic Leukemia, AML: Acute Myelocytic Leukemia, WLM: Wilms’ Tumor, OS: Osteosarcoma, NBL: Neuroblastoma, RHB: Rhabdosarcoma, ACT: Adrenocortical Carcinoma, HGG: High Grade Glioma, LGG: Low Grade Glioma, CPC: Choroid plexus carcinoma, EPD: Ependymoma, MB: Medulloblastoma

**Table S1.** Cytotoxicity of compounds 4 – 7 in MV4-11 and MHHCALL4 compared to PBMC and BJ cells, to establish *in vitro* therapeutic index.

Cmpd	MV4-11		MHH-CALL-4		PBMC		BJ	
	EC <sub>50</sub> (nM)	±SD (nM)	EC <sub>50</sub> (nM)	±SD (nM)	EC <sub>50</sub> (nM)	±SD (nM)	EC <sub>50</sub> (nM)	±SD (nM)
CC-885	0.0260	0.0050	0.0019	0.0009	0.0156	0.0070	0.15	0.01
CC-90009	62.0000	6.3540	4.1292	0.7079	27.2583	6.6348	4426.07	1128.88
SJ6986	1.5000	0.5310	0.0425	0.0054	0.9021	0.3641	8732.08	3207.36
SJ7023	52.0000	5.9380	4.4465	0.6327	61.0702	6.0011	37648.60	7979.60

All values are the mean of 3 independent experiments.

# Analytical spectrums for compound 6 (H-NMR, C-NMR, UPLC/MS)



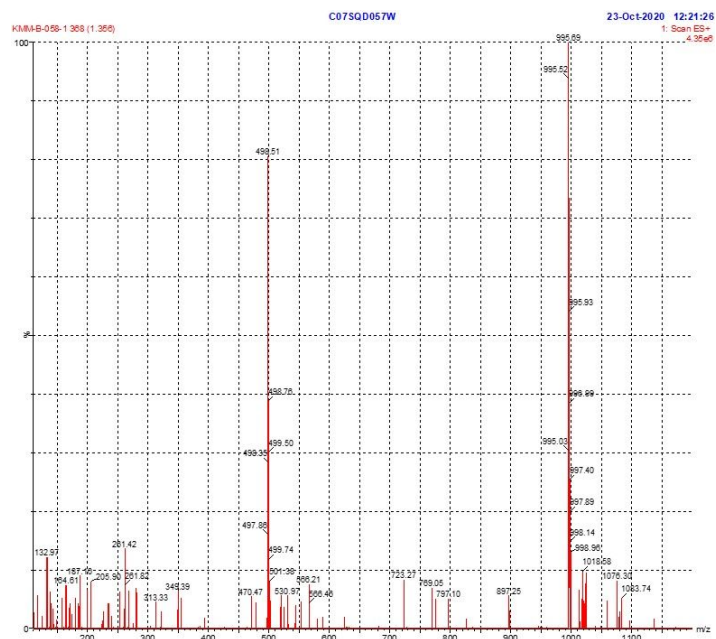
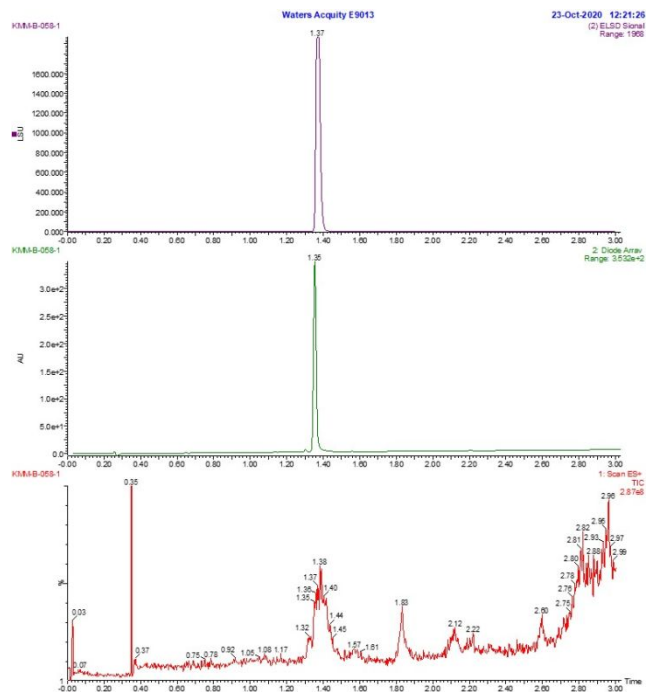
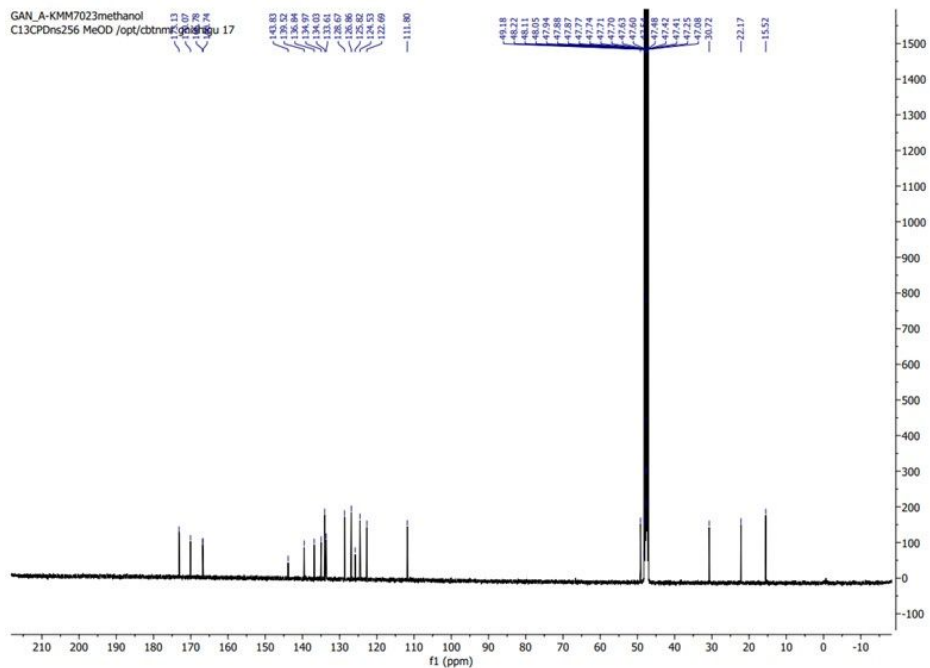
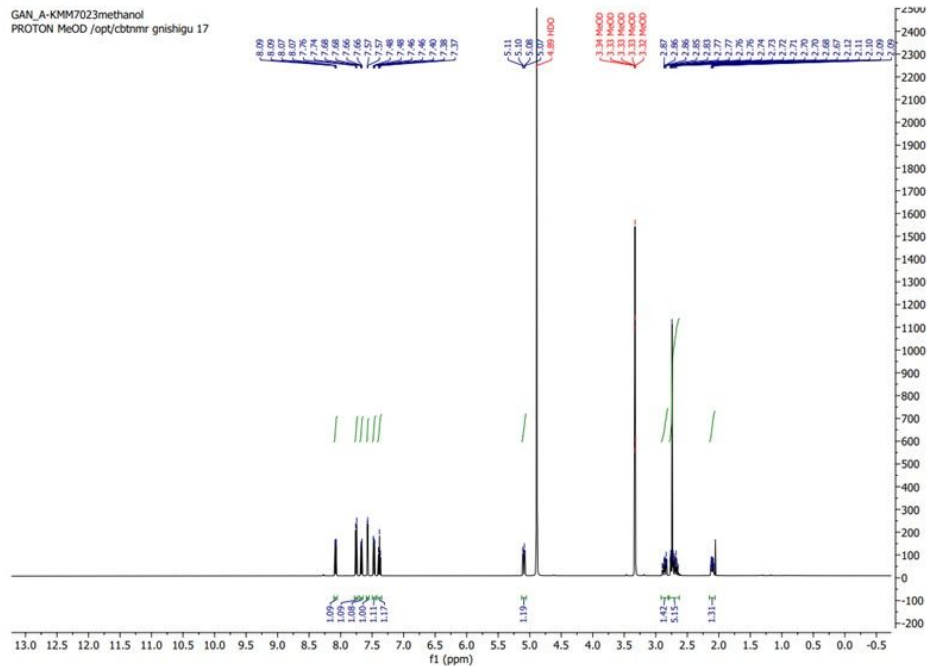


Figure S12. HNMR, CNMR and UPLC/MS for compound 6

# Analytical spectrums for compound 7 (H-NMR, C-NMR, UPLC/MS)



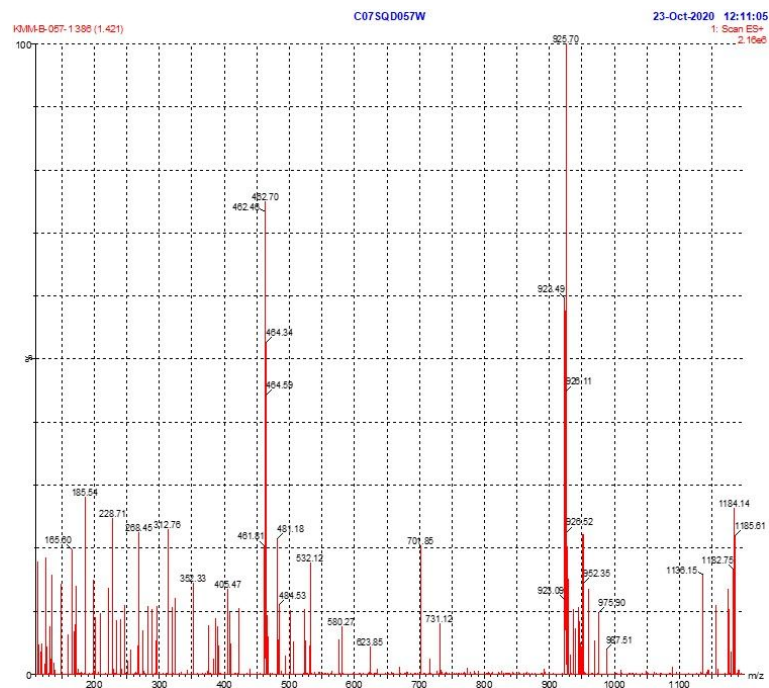
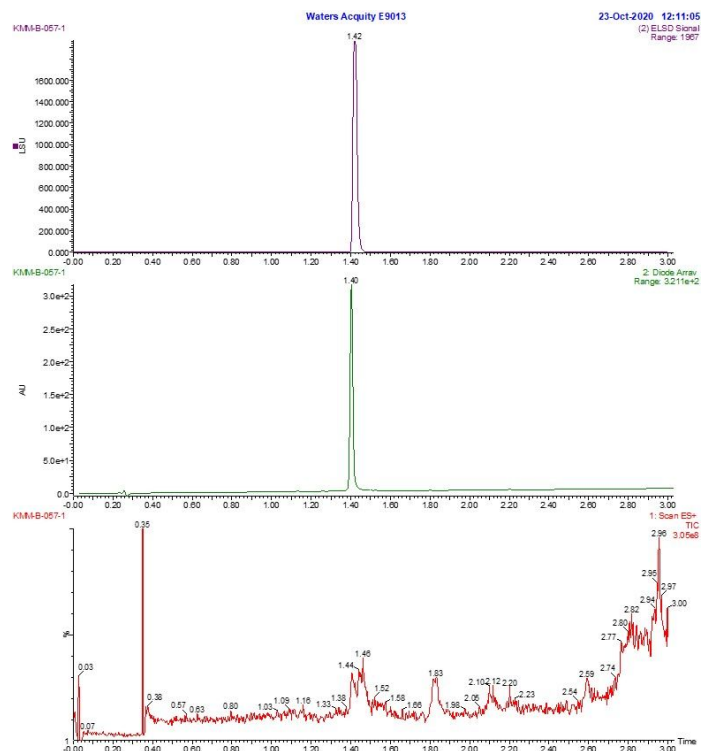


Figure S13. HNMR, CNMR and UPLC/MS for compound 7

**Cell Culture and Materials:** MV-4-11 cell line was purchased from the American Type Culture Collection (ATCC, Manassas, VA) and maintained in Iscove's Modified Dulbecco's medium (IMDM; (ATCC) supplemented with 10% FBS. HD-MB03 cell line was obtained from Drs. Milde, Witt and Deubzer.<sup>4</sup> MB002 and MB004 cells were obtained from Dr Yoon-Jae Cho.<sup>5</sup> HD-MB03 and MB004 cells were grown in neurobasal medium supplemented with glutamine, streptomycin, penicillin, B27, EGF, bFGF and heparin as previously described.<sup>6</sup> MB002 cells were cultured in 80% neurobasal medium supplemented with glutamine, streptomycin, penicillin, B27 and 20% conditioned media from previous passages; EGF, bFGF and heparin were also added to the medium. MHH-CALL4 cells were obtained from German Collection of Microorganisms and Cell Cultures GmbH (DSMZ, Germany) and were cultured in RPMI1640 medium supplemented with 10% FBS (Hyclone), Penicillin/Streptomycin (100 units/mL) and Glutamine (100  $\mu$ M). Cell identity was confirmed by STR profiling using PowerPlex® Fusion System (Promega). Normal human peripheral blood mononuclear cells (PBMC) were isolated from apheresis rings by Ficoll-Paque density gradient centrifugation. Apheresis rings were obtained from anonymous healthy blood donors at St Jude Children's Research Hospital. The donors provided Informed Consent for an IRB-approved study involving the research use of leftover diagnostic and therapeutic specimens. BJ (skin fibroblast) cells were obtained from the American Type Culture Collection ( ATCC® CRL-2522™) and maintained in DMEM supplemented with 10% FBS (Hyclone), Penicillin/Streptomycin (100 units/mL) and Glutamine (100  $\mu$ M).

**Caspase 3/7 activity assay.** MV4-11 cells were seeded in white 384-well assay plates at density of 1000 cells per well in triplicates for 3 separate timepoint experiments (4,8, 24 hrs). After overnight incubation, cells were treated with compounds in dose-response format using a Pintool

on a Biomek FXP Laboratory Automation Workstation (Beckman Coulter). After 4, 8 and 24 hrs incubation, the caspase 3/7 activity was assessed using Caspase-Glo® 3/7 Assay (Promega) according to the manufacturer's instruction. Luminescence signal was measured using an Envision plate reader (Perkin-Elmer).

**Immunoblot Analysis (MB004 cells):** Cells were seeded in 6-well plates (1 X 10<sup>6</sup> cells per well). After overnight incubation, the cells were treated with indicated concentrations for specific timepoints. The harvested cells were spined down, washed with PBS and lysed with Cell Lysis Buffer 1X (#9803, cell signaling) and the protein lysates were sonicated, spined down again to remove insoluble material and quantified. For each sample, 20 ug of protein was mixed with loading buffer and boiled for 5 min at 95 °C. Prepared samples were loaded on NuPAGE 4-12% Bis-Tris protein gels and transferred to PVDF membrane. After blocking the membrane with TBS 5% non-fat dry milk and incubation in primary antibody overnight, the corresponding protein signals were detected using horseradish peroxidase (HRP) secondary antibodies and enhanced chemiluminescence (ECL) reagents on Odyssey Imaging System. Image Studio Lite Ver 5.2 was used for blot quantification. Antibodies: rabbit anti-human eRF3/GSPT1 pAb (ab126090, abcam, 1/500 to 1/1,000), rabbit anti-human CK1 $\alpha$  pAb (#2655, cell signaling, 1/250 to 1/500), and mouse anti-GAPDH mAb (sc-47724, Santa cruz, 1/1,000) were used as primary antibodies. HRP conjugated donkey anti-rabbit IgG (NA934, GE Healthcare, 1/10,000) and sheep anti-mouse IgG (NA931, GE Healthcare 1/10,000) were used as secondary antibodies for the chemiluminescence detection.

**Plasma protein binding assay.** Stock solutions were prepared at 10 mM in DMSO. Dulbecco's phosphate buffered saline (DPBS; pH 7.4) was obtained from Invitrogen (Carlsbad, CA). Single-Use RED (rapid equilibrium dialysis) device was obtained from Thermo scientific (Rockford, IL).

Human and mouse plasma were obtained from GeneTex (Irvine, CA). Sample preparation for plasma protein binding was modified from Waters' method.<sup>7</sup> The Teflon base plate with the RED inserts was used without any pre-conditioning the membrane inserts. Plasma was thawed and centrifuged at 1000 rpm for 10 min to remove any particulates. Each compound was prepared at 10  $\mu$ M in human or mouse plasma. Spiked plasma solutions (300  $\mu$ L) were placed into the sample chamber (indicated by the red ring) and 500  $\mu$ L of DPBS into the adjacent chamber. The plate was sealed and incubated at 37°C on an orbital shaker (100 rpm) for 4 hours. After incubation, the seal was removed from the RED plate and the volume of the insert confirmed—little to no volume change occurred. Aliquots (50  $\mu$ L) were removed from each side of the insert and dispensed into a 96-well deep plate. An equal volume of blank plasma or DPBS was added to the required wells to create analytically identical sample matrices (matrix matching) followed by quenching 3 fold (v:v) cold acetonitrile containing 40 ng/ml warfarin IS. All of the plates were sealed and mixed well at 600 rpm for 10 min and were centrifuged at 4000 rpm for 20 min. The supernatants were transferred to analytical plates and diluted by Millipore water appropriately for analysis by LC-MS/MS. Conditions for SCIEX Qtrap UHPLC-MS/MS system are described separately. The test compound concentrations were quantified in both buffer and plasma chambers via peak areas relative to the internal standard. The percentage of the test compound bound to plasma was calculated on following equations: %Free= (Concentration buffer chamber/concentration plasma chamber) x 100% and %Bound=100%-%Free.

**UPLC/MS/UV System.** Chromatographic separation was performed on an Acquity UPLC BEH C18 1.7  $\mu$ m, 2.1 x 50 mm column (Waters Corporation, Milford, MA) using an Acquity ultra performance liquid chromatography system. Data were acquired using MassLynx v. 4.1 and analyzed using the QuanLynx software suite. This was coupled to an SQ mass spectrometer. The



total flow rate was 1.0 mL/min for generic method and 0.9 mL/min for medium polar method. The sample injection volume was 10  $\mu$ L. The column temperature was maintained at 55 °C. Samples were analyzed in acidic condition: solvent A was 0.1% formic acid in MilliQ H<sub>2</sub>O and solvent B was 0.1% formic acid in ACN. Samples were eluted under generic or medium polar gradients. For a generic gradient: 0-0.2 min, 10-30% of solvent B; 0.2-1.6 min, 30-95% of solvent B; 1.6-1.95 min, 95% of solvent B; 1.95-2 min, 95-10% of solvent B. For a medium polar gradient: 0-0.2 min, 10% of solvent B; 0.2-1.6 min, 10-95% of solvent B; 1.6-1.95 min, 95% of solvent B; 1.95-2 min, 95-10% of solvent B. The mass spectrometer was operated with electrospray ionization in positive ionization mode. The conditions were as follows: capillary voltage 3.4 kV, cone voltage 30 V, source temperature 130 °C, desolvation temperature 400 °C, desolvation gas 800 L/hr, cone gas 100 L/hr. A full range scan from  $m/z = 100-1000$  in 0.2 s was used to monitor compounds. A single ion recording mass spectrometry for each compound was used to determine the quantification of the samples.

**UHPLC-MS/MS System.** LC-MS chromasolv grade acetonitrile (ACN) was purchased from Fisher Scientific (Loughborough, UK). LC-MS chromasolv grade and formic acid were obtained from Sigma-Aldrich (St. Louis, MO). Milli-Q water as an ultrapure laboratory grade water was used in aqueous mobile phase. Chromatographic separation was performed on an Acquity UPLC BEH C18 1.7  $\mu$ m, 2.1 x 50 mm column (Waters Corporation, Milford, MA) using a Sciex ExionLC™ with 6500+ Qtrap system. Data were acquired using Analyst v 1.7 and analyzed using the OS software suite. The UPLC column was maintained at 55 °C. Mobile phase A was 0.1% formic acid in MilliQ H<sub>2</sub>O and solvent B was 0.1% formic acid in ACN. The flow rate was 0.9 mL/min with a gradient of 0-0.2 min, B% 1-1%; 0.2-0.5min, B% 1-50%; 0.5-1.6 min, B% 50-95%; 1.6-1.95 min, B% 95-95%; 1.95-1.96 min, B% 95-1%; and 1.96-2.2 min, B% 1-1%. The sample injection volume was 2  $\mu$ L.

The mass spectrometer was operated in positive-ion mode with electrospray ionization. The conditions were as follow: ion spray voltage 5 kV, temperature 500 °C, curtain gas with a low collision gas, gas 1 and gas 2 were 60. MRM transition of 498.0>425.0 for compound **6** was automatically optimized using DiscoveryQuant™ Software. The delustering potential, collision energy and collision cell exit potential were 80, 41 and 13 volts respectively.

**Aqueous solubility assay.** Solubility assays were carried out on a Biomek FX lab automation workstation (Beckman Coulter, Inc., Fullerton, CA) using μSOL Evolution software (pION Inc., Woburn, MA). 10 μL of 10 mM compound stock (in DMSO) was added to 190 μL 1-propanol to make a reference stock plate. 5 μL from this reference stock plate were mixed with 70 μL 1-propanol and 75 μL citrate phosphate-buffered saline (PBS; isotonic) to make the reference plate, and the UV spectrum (250-500 nm) of the reference plate was read. 6 μL of 10 mM test compound stock was added to 594 μL buffer in a 96-well storage plate and mixed. The storage plate was sealed and incubated at RT for 18 h. The suspension was then filtered through a 96-well filter plate (pION Inc., Woburn, MA). 75 μL of filtrate was mixed with 75 μL 1-propanol to make the sample plate, and the UV spectrum of the sample plate was read. Calculations were carried out with μSOL Evolution software based on the area under the curve (AUC) of the UV spectrum of the sample and reference plates. All compounds were tested in triplicate.

**MDCKII-MDR1 permeability assay:** High throughput MDCKIIMDR1 permeability was performed in the Transwell® 0.4 μm polycarbonate membrane 96-well system with modified methods.<sup>8,9</sup> MDCKIIMDR1 cells were maintained at 37 °C in a humidified incubator with an atmosphere of 5% CO<sub>2</sub>. The cells were cultured in 75 cm<sup>2</sup> flasks with Dulbecco's Modified Eagle's Medium (DMEM) containing 10% fetal bovine serum (FBS), 1% non-essential amino acids (NEAA), 100 units/ml of penicillin, and 100 μg/ml of streptomycin. The MDCKIIMDR1

cells were seeded onto inserts at a density of  $2 \times 10^4$  and  $1 \times 10^4$  cells/insert separately. The medium in the wells was exchanged each other day, and the trans epithelial electrical resistance (TEER) value was measured using an epithelial volt-ohm meter (Millipore, Billerica, Massachusetts). MDCKII-MDR1 cells were grown for 4 days to reach consistent TEER values (typically 2000 ohms greater than initial value when cells are first seeded into transwells), indicating that the cells had formed a confluent polarized monolayer. For transport experiments, each cultured monolayer on the 96-well plate was washed twice with a transport buffer (HBSS/25 mM HEPES, pH 7.4). The permeability assay was initiated by the addition of each compound solution (10  $\mu$ mol/L) into inserts (apical side, A) or receivers (basolateral side, B). The MDCKII-MDR1 cell monolayers were incubated for 1 hour at 37 °C. Fractions were collected from receivers (if apical to basal permeability) or inserts (if basal to apical permeability), and concentrations were assessed by UPLC/MS (Waters; Milford, MA). All compounds were tested in triplicates. The A $\rightarrow$ B (or B $\rightarrow$ A) apparent permeability coefficients ( $P_{app}$ ) of each compound were calculated using the equation,  $P_{app} = dQ/dt \times 1/AC_0$ , where  $dQ/dt$  equals the flux of a drug across the monolayer, A equals the total insert well surface area, and  $C_0$  is the initial concentration of substrate in the donor compartment. The efflux ratio was determined by dividing the  $P_{app}$  in the B-A direction by the  $P_{app}$  in the A-B direction. An efflux ratio  $>2$  suggested that a given substrate was actively transported across the membrane.

**Liver microsomes stability assay:**<sup>10,11</sup> NADPH regenerating agent solutions A and B and mouse liver microsomes (CD-1) were obtained from BD Gentest (Woburn, MA). Pooled human liver microsomes were purchased from XenoTech (Lenexa, KS). Ninety-six deep well plates were obtained from Midsci (St. Louis, MO). Ninety-six analytical plates were obtained from Corning Incorporated (Acton, MA). Sample preparation for microsomal stability was modified from Di's

publications. A set of incubation times of 0, 15, 30, 60, 120, and 240 min were used. DMSO stock solutions of test compounds and verapamil (system control) were prepared at 10 mM concentration. Concentrated human or mouse liver microsomes (20mg/mL protein concentration) and 0.5 M EDTA were diluted into 0.1 M potassium phosphate buffer (pH 7.4) and mixed well, followed by compounds solutions being spiked. This solution was mixed and 90  $\mu$ L was transferred to 6 time points plates (each in triplicate wells). For the time 0 h plate, 3 fold (v:v) cold acetonitrile with internal standard (40 ng/ml warfarin) was added to each well, followed by addition of NADPH regenerating agent (mixing NADPH solutions A and B in PBS, pH7.4) and no incubation. For the other five time points' plate, NADPH regenerating agent was added to each well to initiate the reaction, the plate was incubated at 37° C for the required time, followed by quenching of the reaction by adding 3-fold volume of cold acetonitrile with internal standard (40 ng/mL warfarin) to each well. The final concentration of each component applied in this reaction was liver microsome protein at 0.5 mg/mL, EDTA at 1 mM, compound at 10  $\mu$ M, NADPH A at 1.3 mM, and NADPH B at 0.4 U/mL. All plates were sealed and mixed well at 600 rpm for 10 min after quenching and were centrifuged at 4000 rpm for 20 min. The supernatants were transferred to analytical plates and diluted by millipore water for analysis by LC-MS/MS. Conditions for SCIEX Qtrap UHPLC-MS/MS system are described separately. The metabolic stability was evaluated via the half-life from least-squares fit of the multiple time points based on first-order kinetics.

## REFERENCES:

- (1) Courcot, B.; Bridgeman, A. J. Modeling the Interactions between Polyoxometalates and Their Environment. *J. Comput. Chem.* **2011**, *32* (15), 3143–3153.  
<https://doi.org/10.1002/jcc.21894>.
- (2) Molecular Operating Environment (MOE), 2019.01; Chemical Computing Group ULC, 1010 Sherbooke St. West, Suite #910, Montr.
- (3) St. Jude's Cloud PeCAN Data Portal: <https://Pecan.Stjude.Cloud/Home>.
- (4) Milde, T.; Lodrini, M.; Savelyeva, L.; Korshunov, A.; Kool, M.; Brueckner, L. M.; Antunes, A. S. L. M.; Oehme, I.; Pekrun, A.; Pfister, S. M.; Kulozik, A. E.; Witt, O.; Deubzer, H. E. HD-MB03 Is a Novel Group 3 Medulloblastoma Model Demonstrating Sensitivity to Histone Deacetylase Inhibitor Treatment. *J Neurooncol* **2012**, *110* (3), 335–348.  
<https://doi.org/10.1007/s11060-012-0978-1>.
- (5) Bandopadhyay, P.; Bergthold, G.; Nguyen, B.; Schubert, S.; Gholamin, S.; Tang, Y.; Bolin, S.; Schumacher, S. E.; Zeid, R.; Masoud, S.; Yu, F.; Vue, N.; Gibson, W. J.; Paoletta, B. R.; Mitra, S. S.; Cheshier, S. H.; Qi, J.; Liu, K.-W.; Wechsler-Reya, R.; Weiss, W. A.; Swartling, F. J.; Kieran, M. W.; Bradner, J. E.; Beroukhi, R.; Cho, Y.-J. BET Bromodomain Inhibition of MYC-Amplified Medulloblastoma. *Clinical Cancer Research* **2014**, *20* (4), 912–925.  
<https://doi.org/10.1158/1078-0432.CCR-13-2281>.
- (6) Shadrick, W. R.; Slavish, P. J.; Chai, S. C.; Waddell, B.; Connelly, M.; Low, J. A.; Tallant, C.; Young, B. M.; Bharatham, N.; Knapp, S.; Boyd, V. A.; Morfouace, M.; Roussel, M. F.; Chen, T.; Lee, R. E.; Kiplin, R.; Shelat, A. A.; Potter, P. M. Exploiting a Water Network to Achieve Enthalpy-Driven, Bromodomain-Selective BET Inhibitors. *Bioorganic & Medicinal Chemistry* **2018**, *26* (1), 25–36. <https://doi.org/10.1016/j.bmc.2017.10.042>.

- (7) Waters, N. J.; Jones, R.; Williams, G.; Sohal, B. Validation of a Rapid Equilibrium Dialysis Approach for the Measurement of Plasma Protein Binding. *Journal of Pharmaceutical Sciences* **2008**, *97* (10), 4586–4595. <https://doi.org/10.1002/jps.21317>.
- (8) Larson, B.; Banks, P.; Sherman, H.; Rothenberg, M. Automation of Cell-Based Drug Absorption Assays in 96-Well Format Using Permeable Support Systems. *J Lab Autom.* **2012**, *17* (3), 222–232. <https://doi.org/10.1177/2211068211428190>.
- (9) Uchida, M.; Fukazawa, T.; Yamazaki, Y.; Hashimoto, H.; Miyamoto, Y. A Modified Fast (4 Day) 96-Well Plate Caco-2 Permeability Assay. *Journal of Pharmacological and Toxicological Methods* **2009**, *59* (1), 39–43. <https://doi.org/10.1016/j.vascn.2008.10.006>.
- (10) Di, L.; Kerns, E. H.; Li, S. Q.; Petusky, S. L. High Throughput Microsomal Stability Assay for Insoluble Compounds. *International Journal of Pharmaceutics* **2006**, *317* (1), 54–60. <https://doi.org/10.1016/j.ijpharm.2006.03.007>.
- (11) Di, L.; Kerns, E.; Ma, X.; Huang, Y.; Carter, G. Applications of High Throughput Microsomal Stability Assay in Drug Discovery. *CCHTS* **2008**, *11* (6), 469–476. <https://doi.org/10.2174/138620708784911429>.

## Coordinates of the in Silico model of GSPT1-6-CRBN/DDB1 complex

```

HEADER      LIGASE
REMARK      99
REMARK      99 MOE v2020.09 (Chemical Computing Group ULC) Tue Apr 20 12:11:48
2021
SEQRES      1 X  607  GLY SER  GLY PRO  ILE ARG LEU PRO  ILE VAL ASP LYS TYR
SEQRES      2 X  607  LYS ASP MET  GLY THR VAL VAL LEU GLY LYS LEU GLU SER
SEQRES      3 X  607  GLY SER  ILE CYS LYS GLY GLN GLN LEU VAL MET MET PRO
SEQRES      4 X  607  ASN LYS  HIE ASN VAL GLU VAL LEU GLY ILE LEU SER ASP
SEQRES      5 X  607  ASP VAL GLU  THR ASP THR VAL ALA PRO GLY GLU ASN LEU
SEQRES      6 X  607  LYS ILE ARG  LEU LYS GLY ILE GLU GLU GLU ILE LEU
SEQRES      7 X  607  PRO GLY PHE  ILE LEU CYX ASP PRO ASN ASN LEU CYX HIE
SEQRES      8 X  607  SER GLY ARG  THR PHE ASP ALA GLN ILE VAL ILE ILE GLU
SEQRES      9 X  607  HIE LYS SER  ILE ILE CYS PRO GLY TYR ASN ALA VAL LEU
SEQRES     10 X  607  HIE ILE HIE  THR CYS ILE GLU GLU VAL GLU ILE THR ALA
SEQRES     11 X  607  LEU ILE CYS  LEU VAL ASP LYS LYS SER GLY GLU LYS SER
SEQRES     12 X  607  LYS THR ARG  PRO ARG PHE VAL LYS GLN ASP GLN VAL CYS
SEQRES     13 X  607  ILE ALA ARG  LEU ARG THR ALA GLY THR ILE CYS LEU GLU
SEQRES     14 X  607  THR PHE LYS  ASP PHE PRO GLN MET GLY ARG PHE THR LEU
SEQRES     15 X  607  ARG ASP GLU  GLY LYS THR ILE ALA ILE GLY LYS VAL LEU
SEQRES     16 X  607  LYS LEU VAL  PRO GLY SER MET GLU ALA LYS LYS PRO ASN
SEQRES     17 X  607  ILE ILE ASN  PHE ASP THR SER LEU PRO THR SER HIE THR
SEQRES     18 X  607  TYR LEU GLY  ALA ASP MET GLU GLU PHE HIE GLY ARG THR
SEQRES     19 X  607  LEU HIP ASP  ASP ASP SER CYS GLN VAL ILE PRO VAL LEU
SEQRES     20 X  607  PRO GLN VAL  MET MET ILE LEU ILE PRO GLY GLN THR LEU
SEQRES     21 X  607  PRO LEU GLN  LEU PHE HIE PRO GLN GLU VAL SER MET VAL
SEQRES     22 X  607  ARG ASN LEU  ILE GLN LYS ASP ARG THR PHE ALA VAL LEU
SEQRES     23 X  607  ALA TYR SER  ASN VAL GLN GLU ARG GLU ALA GLN PHE GLY
SEQRES     24 X  607  THR THR ALA  GLU ILE TYR ALA TYR ARG GLU GLU GLN ASP
SEQRES     25 X  607  PHE GLY ILE  GLU ILE VAL LYS VAL LYS ALA ILE GLY ARG
SEQRES     26 X  607  GLN ARG PHE  LYS VAL LEU GLU LEU ARG THR GLN SER ASP
SEQRES     27 X  607  GLY ILE GLN  GLN ALA LYS VAL GLN ILE LEU PRO GLU CYS
SEQRES     28 X  607  VAL LEU PRO  SER THR MET SER ALA VAL GLN LEU GLU SER
SEQRES     29 X  607  LEU ASN LYS  CYS GLN ILE PHE PRO SER LYS PRO VAL SER
SEQRES     30 X  607  ARG GLU ASP  GLN CYS SER TYR LYS TRP TRP GLN LYS TYR
SEQRES     31 X  607  GLN LYS ARG  LYS PHE HID CYS ALA ASN LEU THR SER TRP
SEQRES     32 X  607  PRO ARG TRP  LEU TYR SER LEU TYR ASP ALA GLU THR LEU
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SEQRES     34 X  607  ASN LEU LYS  ASP ASP SER LEU PRO SER ASN PRO ILE ASP
SEQRES     35 X  607  PHE SER TYR  ARG VAL ALA ALA CYS LEU PRO ILE ASP ASP
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SEQRES     37 X  607  GLN ARG LEU  ARG CYX GLU LEU ASP ILE MET ASN LYS CYS
SEQRES     38 X  607  THR SER LEU  CYS CYM LYS GLN CYM GLN GLU THR GLU ILE
SEQRES     39 X  607  THR THR LYS  ASN GLU ILE PHE SER LEU SER LEU CYS GLY
SEQRES     40 X  607  PRO MET ALA  ALA TYR VAL ASN PRO HIP GLY TYR VAL HIP
SEQRES     41 X  607  GLU THR LEU  THR VAL TYR LYS ALA CYS ASN LEU ASN LEU
SEQRES     42 X  607  ILE GLY ARG  PRO SER THR GLU HIP SER TRP PHE PRO GLY
SEQRES     43 X  607  TYR ALA TRP  THR VAL ALA GLN CYM LYS ILE CYM ALA SER
SEQRES     44 X  607  HIE ILE GLY  TRP LYS PHE THR ALA THR LYS LYS ASP MET
SEQRES     45 X  607  SER PRO GLN  LYS PHE TRP GLY LEU THR ARG SER ALA LEU
SEQRES     46 X  607  LEU PRO THR  ILE PRO ASP THR GLU ASP GLU ILE SER PRO
SEQRES     47 X  607  ASP LYS VAL  ILE LEU CYX LEU  ZN 85C

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SEQRES	1	594	ACE	ILE	ARG	LEU	PRO	ILE	VAL	ASP	LYS	TYR	LYS	ASP	MET
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SEQRES	3	594	CYS	LYS	GLY	GLN	GLN	LEU	VAL	MET	MET	PRO	ASN	LYS	HIE
SEQRES	4	594	ASN	VAL	GLU	VAL	LEU	GLY	ILE	LEU	SER	ASP	ASP	VAL	GLU
SEQRES	5	594	THR	ASP	THR	VAL	ALA	PRO	GLY	GLU	ASN	LEU	LYS	ILE	ARG
SEQRES	6	594	LEU	LYS	GLY	ILE	GLU	GLU	GLU	GLU	ILE	LEU	PRO	GLY	PHE
SEQRES	7	594	ILE	LEU	CYX	ASP	PRO	ASN	ASN	LEU	CYX	HIE	SER	GLY	ARG
SEQRES	8	594	THR	PHE	ASP	ALA	GLN	ILE	VAL	ILE	ILE	GLU	HIE	LYS	SER
SEQRES	9	594	ILE	ILE	CYS	PRO	GLY	TYR	ASN	ALA	VAL	LEU	HIE	ILE	HIE
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SEQRES	12	594	PRO	ARG	PHE	VAL	LYS	GLN	ASP	GLN	VAL	CYS	ILE	ALA	ARG
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SEQRES	18	594	LEU	HIP	ASP	ASP	ASP	SER	CYS	GLN	VAL	ILE	PRO	VAL	LEU
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SEQRES	23	594	THR	THR	ALA	GLU	ILE	TYR	ALA	TYR	ARG	GLU	GLU	GLN	ASP
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SEQRES	37	594	THR	SER	LEU	CYS	CYM	LYS	GLN	CYM	GLN	GLU	THR	GLU	ILE
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SEQRES	39	594	PRO	MET	ALA	ALA	TYR	VAL	ASN	PRO	HIE	GLY	TYR	VAL	HIP
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SEQRES	41	594	ILE	GLY	ARG	PRO	SER	THR	GLU	HIP	SER	TRP	PHE	PRO	GLY
SEQRES	42	594	TYR	ALA	TRP	THR	VAL	ALA	GLN	CYM	LYS	ILE	CYM	ALA	SER
SEQRES	43	594	HIE	ILE	GLY	TRP	LYS	PHE	THR	ALA	THR	LYS	LYS	ASP	MET
SEQRES	44	594	SER	PRO	GLN	LYS	PHE	TRP	GLY	LEU	THR	ARG	SER	ALA	LEU
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SEQRES	46	594	ASP	LYS	VAL	ILE	LEU	CYX	LEU	ZN	85C				
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3															
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12															
HELIX	4	4	ASN	X	127	GLN	X	129	5						Generated by MOE
3															



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HELIX 10	6	6	LYS X	222	LYS X	231	1	Generated by MOE
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HELIX 4	8	8	ARG X	242	TYR X	245	1	Generated by MOE
HELIX 3	9	9	SER X	246	TYR X	248	5	Generated by MOE
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HELIX 3	21	21	ARG	365	ASP	367	5	Generated by MOE
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HELIX 4	23	23	HID	383	ASN	386	1	Generated by MOE
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SHEET	20		ILE X 154		ILE X 160			Generated by MOE
SHEET	21		GLY X 161		GLY X 161			Generated by MOE
SHEET	22		ARG X 162		ARG X 171			Generated by MOE
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SHEET	24		SER X 320		CYM X 323			Generated by MOE
SHEET	25		GLU X 330		THR X 333			Generated by MOE
SHEET	26		MET X 346		VAL X 350			Generated by MOE
SHEET	27		VAL X 356		VAL X 362			Generated by MOE
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SHEET	30		HIE X 397		ALA X 404			Generated by MOE

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SHEET	84	LEU 471	CYM 473	Generated by MOE

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SHEET	90		HIE	547	ALA	554				Generated by MOE		
SHEET	91		LYS	563	THR	568				Generated by MOE		
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2.06												
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1.97												
LINK		SG	CYX		81		SG	CYX		87	1555	1555
2.05												
LINK		SG	CYX		460		SG	CYX		591	1555	1555
2.03												
LINK		SG	CYX		81		SG	CYX		87	1555	1555
2.05												
LINK		SG	CYX		460		SG	CYX		591	1555	1555
2.03												
ATOM	1	N	GLY	X	436	39.709-125.519	22.250	1.00	0.00			
N1+												
ATOM	2	CA	GLY	X	436	39.617-126.856	22.880	1.00	0.00			
C												
ATOM	3	C	GLY	X	436	38.333-127.496	22.364	1.00	0.00			
C												
ATOM	4	O	GLY	X	436	38.340-127.874	21.201	1.00	0.00			
O												
ATOM	5	N	SER	X	437	37.200-127.268	23.038	1.00	0.00			
N												
ATOM	6	CA	SER	X	437	35.953-126.973	22.324	1.00	0.00			
C												
ATOM	7	C	SER	X	437	36.092-125.664	21.510	1.00	0.00			
C												
ATOM	8	O	SER	X	437	37.026-124.883	21.745	1.00	0.00			
O												
ATOM	9	CB	SER	X	437	34.801-126.876	23.333	1.00	0.00			
C												
ATOM	10	OG	SER	X	437	33.565-126.710	22.669	1.00	0.00			
O												
ATOM	11	N	GLY	X	438	35.170-125.435	20.576	1.00	0.00			
N												
ATOM	12	CA	GLY	X	438	35.022-124.223	19.769	1.00	0.00			
C												
ATOM	13	C	GLY	X	438	33.529-124.037	19.394	1.00	0.00			
C												
ATOM	14	O	GLY	X	438	32.753-124.963	19.618	1.00	0.00			
O												
ATOM	15	N	PRO	X	439	33.106-122.870	18.866	1.00	0.00			
N												
ATOM	16	CD	PRO	X	439	33.492-121.590	19.449	1.00	0.00			
C												
ATOM	17	CG	PRO	X	439	32.176-120.858	19.758	1.00	0.00			
C												

ATOM C	18	CB	PRO X 439	31.065-121.811	19.293	1.00	0.00
ATOM C	19	CA	PRO X 439	31.772-122.708	18.277	1.00	0.00
ATOM C	20	C	PRO X 439	31.783-122.047	16.880	1.00	0.00
ATOM O	21	O	PRO X 439	32.416-121.008	16.684	1.00	0.00
ATOM N	22	N	ILE X 440	30.967-122.539	15.937	1.00	115.77
ATOM C	23	CA	ILE X 440	30.718-121.794	14.632	1.00	110.65
ATOM C	24	C	ILE X 440	29.330-121.935	14.070	1.00	102.20
ATOM O	25	O	ILE X 440	28.525-122.818	14.401	1.00	93.68
ATOM C	26	CB	ILE X 440	31.648-122.202	13.454	1.00	112.32
ATOM C	27	CG1	ILE X 440	31.609-123.714	13.250	1.00	114.13
ATOM C	28	CG2	ILE X 440	33.064-121.675	13.636	1.00	113.04
ATOM C	29	CD1	ILE X 440	31.155-124.113	11.883	1.00	112.87
ATOM N	30	N	ARG X 441	29.062-121.013	13.184	1.00	102.23
ATOM C	31	CA	ARG X 441	27.757-120.773	12.720	1.00	114.05
ATOM C	32	C	ARG X 441	27.844-119.825	11.491	1.00	118.27
ATOM O	33	O	ARG X 441	28.265-118.674	11.622	1.00	126.60
ATOM C	34	CB	ARG X 441	26.952-120.110	13.855	1.00	113.53
ATOM C	35	CG	ARG X 441	25.480-120.407	13.828	1.00	111.92
ATOM C	36	CD	ARG X 441	25.062-121.122	15.072	1.00	110.50
ATOM N	37	NE	ARG X 441	25.841-122.316	15.270	1.00	110.12
ATOM C	38	CZ	ARG X 441	25.564-123.204	16.203	1.00	120.16
ATOM N	39	NH1	ARG X 441	24.496-123.036	16.981	1.00	120.31
ATOM N1+	40	NH2	ARG X 441	26.320-124.285	16.330	1.00	128.96
ATOM N	41	N	LEU X 442	27.402-120.314	10.328	1.00	109.89
ATOM C	42	CA	LEU X 442	27.387-119.546	9.118	1.00	100.11
ATOM C	43	C	LEU X 442	26.049-119.743	8.444	1.00	90.29
ATOM O	44	O	LEU X 442	25.820-120.788	7.882	1.00	81.50

ATOM C	45	CB	LEU X 442	28.498-120.058	8.229	1.00109.36
ATOM C	46	CG	LEU X 442	28.524-119.566	6.778	1.00123.48
ATOM C	47	CD1	LEU X 442	28.123-118.103	6.608	1.00122.73
ATOM C	48	CD2	LEU X 442	29.923-119.794	6.211	1.00132.62
ATOM N	49	N	PRO X 443	25.137-118.755	8.556	1.00 91.82
ATOM C	50	CA	PRO X 443	23.935-118.816	7.761	1.00 92.96
ATOM C	51	C	PRO X 443	24.197-118.642	6.302	1.00 92.60
ATOM O	52	O	PRO X 443	24.722-117.578	5.863	1.00 88.42
ATOM C	53	CB	PRO X 443	23.081-117.662	8.297	1.00 93.91
ATOM C	54	CG	PRO X 443	23.455-117.566	9.704	1.00 94.65
ATOM C	55	CD	PRO X 443	24.952-117.837	9.692	1.00 97.82
ATOM N	56	N	ILE X 444	23.836-119.718	5.583	1.00 88.71
ATOM C	57	CA	ILE X 444	24.102-119.904	4.181	1.00 83.25
ATOM C	58	C	ILE X 444	23.094-119.099	3.436	1.00 78.60
ATOM O	59	O	ILE X 444	21.894-119.333	3.614	1.00 75.29
ATOM C	60	CB	ILE X 444	23.908-121.374	3.805	1.00 85.21
ATOM C	61	CG1	ILE X 444	24.994-122.225	4.469	1.00 88.83
ATOM C	62	CG2	ILE X 444	23.940-121.546	2.289	1.00 85.56
ATOM C	63	CD1	ILE X 444	24.785-123.733	4.340	1.00 93.23
ATOM N	64	N	VAL X 445	23.568-118.240	2.526	1.00 77.46
ATOM C	65	CA	VAL X 445	22.670-117.433	1.714	1.00 79.28
ATOM C	66	C	VAL X 445	22.300-118.109	0.461	1.00 85.99
ATOM O	67	O	VAL X 445	21.151-118.093	0.079	1.00 86.88
ATOM C	68	CB	VAL X 445	23.250-116.132	1.246	1.00 77.33
ATOM C	69	CG1	VAL X 445	22.097-115.252	0.770	1.00 75.73
ATOM C	70	CG2	VAL X 445	24.018-115.460	2.359	1.00 80.47
ATOM N	71	N	ASP X 446	23.298-118.580	-0.270	1.00 99.22

ATOM C	72	CA	ASP	X	446	23.028-119.412	-1.444	1.00112.77
ATOM C	73	C	ASP	X	446	24.169-120.440	-1.784	1.00117.16
ATOM O	74	O	ASP	X	446	25.364-120.280	-1.418	1.00112.32
ATOM C	75	CB	ASP	X	446	22.669-118.511	-2.665	1.00119.28
ATOM C	76	CG	ASP	X	446	21.501-119.061	-3.510	1.00123.79
ATOM O	77	OD1	ASP	X	446	20.643-119.758	-2.923	1.00120.61
ATOM O1-	78	OD2	ASP	X	446	21.455-118.784	-4.752	1.00125.70
ATOM N	79	N	LYS	X	447	23.751-121.477	-2.503	1.00114.73
ATOM C	80	CA	LYS	X	447	24.620-122.523	-3.005	1.00111.17
ATOM C	81	C	LYS	X	447	24.708-122.371	-4.528	1.00106.53
ATOM O	82	O	LYS	X	447	23.661-122.323	-5.216	1.00103.79
ATOM C	83	CB	LYS	X	447	24.032-123.886	-2.624	1.00116.92
ATOM C	84	CG	LYS	X	447	22.673-124.236	-3.271	1.00121.52
ATOM C	85	CD	LYS	X	447	21.482-123.486	-2.664	1.00117.36
ATOM C	86	CE	LYS	X	447	20.286-123.489	-3.594	1.00114.70
ATOM N1+	87	NZ	LYS	X	447	19.849-124.882	-3.891	1.00113.73
ATOM N	88	N	TYR	X	448	25.917-122.155	-5.048	1.00101.90
ATOM C	89	CA	TYR	X	448	26.070-121.981	-6.493	1.00105.86
ATOM C	90	C	TYR	X	448	26.869-123.103	-7.015	1.00108.88
ATOM O	91	O	TYR	X	448	28.074-123.004	-7.107	1.00108.33
ATOM C	92	CB	TYR	X	448	26.664-120.620	-6.887	1.00108.00
ATOM C	93	CG	TYR	X	448	28.151-120.427	-6.672	1.00113.43
ATOM C	94	CD1	TYR	X	448	28.674-120.268	-5.389	1.00117.22
ATOM C	95	CD2	TYR	X	448	28.998-120.183	-7.750	1.00119.67
ATOM C	96	CE1	TYR	X	448	30.017-119.928	-5.187	1.00123.52
ATOM C	97	CE2	TYR	X	448	30.360-119.892	-7.567	1.00123.34
ATOM C	98	CZ	TYR	X	448	30.872-119.745	-6.287	1.00126.85

ATOM	99	OH	TYR X 448	32.222-119.417	-6.099	1.00129.71
O						
ATOM	100	N	LYS X 449	26.202-124.207	-7.301	1.00115.71
N						
ATOM	101	CA	LYS X 449	26.945-125.373	-7.648	1.00123.34
C						
ATOM	102	C	LYS X 449	27.918-124.908	-8.669	1.00127.13
C						
ATOM	103	O	LYS X 449	27.556-124.389	-9.708	1.00134.23
O						
ATOM	104	CB	LYS X 449	26.003-126.410	-8.234	1.00132.90
C						
ATOM	105	CG	LYS X 449	26.607-127.789	-8.384	1.00144.54
C						
ATOM	106	CD	LYS X 449	25.775-128.678	-9.307	1.00149.44
C						
ATOM	107	CE	LYS X 449	24.960-129.730	-8.565	1.00147.66
C						
ATOM	108	NZ	LYS X 449	23.563-129.318	-8.258	1.00155.19
N1+						
ATOM	109	N	ASP X 450	29.178-125.111	-8.341	1.00126.96
N						
ATOM	110	CA	ASP X 450	30.300-124.744	-9.169	1.00134.03
C						
ATOM	111	C	ASP X 450	31.335-125.614	-8.564	1.00151.03
C						
ATOM	112	O	ASP X 450	31.149-126.067	-7.449	1.00164.42
O						
ATOM	113	CB	ASP X 450	30.682-123.297	-8.949	1.00126.59
C						
ATOM	114	CG	ASP X 450	32.093-122.993	-9.397	1.00125.40
C						
ATOM	115	OD1	ASP X 450	33.063-123.580	-8.870	1.00129.34
O						
ATOM	116	OD2	ASP X 450	32.239-122.134	-10.279	1.00127.93
O1-						
ATOM	117	N	MET X 451	32.424-125.887	-9.279	1.00156.17
N						
ATOM	118	CA	MET X 451	33.508-126.738	-8.776	1.00165.11
C						
ATOM	119	C	MET X 451	32.810-128.001	-8.316	1.00172.89
C						
ATOM	120	O	MET X 451	31.851-128.422	-8.969	1.00176.65
O						
ATOM	121	CB	MET X 451	34.372-126.059	-7.686	1.00 0.00
C						
ATOM	122	CG	MET X 451	35.458-125.137	-8.253	1.00 0.00
C						
ATOM	123	SD	MET X 451	36.746-125.986	-9.217	1.00 0.00
S						
ATOM	124	CE	MET X 451	37.950-126.366	-7.916	1.00 0.00
C						
ATOM	125	N	GLY X 452	33.215-128.560	-7.182	1.00182.37
N						



ATOM	126	CA	GLY	X	452	32.469-129.689	-6.675	1.00176.65
C								
ATOM	127	C	GLY	X	452	31.141-129.083	-6.237	1.00168.62
C								
ATOM	128	O	GLY	X	452	30.063-129.557	-6.581	1.00159.05
O								
ATOM	129	N	THR	X	453	31.249-127.994	-5.477	1.00155.71
N								
ATOM	130	CA	THR	X	453	30.108-127.242	-4.969	1.00144.97
C								
ATOM	131	C	THR	X	453	30.603-125.981	-4.288	1.00138.49
C								
ATOM	132	O	THR	X	453	31.787-125.865	-3.995	1.00147.38
O								
ATOM	133	CB	THR	X	453	29.307-128.047	-3.941	1.00142.23
C								
ATOM	134	OG1	THR	X	453	28.718-129.179	-4.579	1.00147.93
O								
ATOM	135	CG2	THR	X	453	28.207-127.204	-3.354	1.00135.83
C								
ATOM	136	N	VAL	X	454	29.706-125.047	-4.004	1.00128.99
N								
ATOM	137	CA	VAL	X	454	30.132-123.837	-3.260	1.00117.61
C								
ATOM	138	C	VAL	X	454	28.913-123.112	-2.723	1.00109.09
C								
ATOM	139	O	VAL	X	454	27.803-123.169	-3.309	1.00100.27
O								
ATOM	140	CB	VAL	X	454	31.002-122.838	-4.118	1.00115.23
C								
ATOM	141	CG1	VAL	X	454	31.919-121.956	-3.262	1.00107.25
C								
ATOM	142	CG2	VAL	X	454	31.876-123.597	-5.085	1.00127.79
C								
ATOM	143	N	VAL	X	455	29.189-122.361	-1.654	1.00102.23
N								
ATOM	144	CA	VAL	X	455	28.211-121.841	-0.763	1.00 92.29
C								
ATOM	145	C	VAL	X	455	28.635-120.465	-0.262	1.00 86.21
C								
ATOM	146	O	VAL	X	455	29.794-120.221	0.055	1.00 80.14
O								
ATOM	147	CB	VAL	X	455	28.028-122.837	0.382	1.00 94.14
C								
ATOM	148	CG1	VAL	X	455	28.004-122.161	1.737	1.00 96.17
C								
ATOM	149	CG2	VAL	X	455	26.759-123.645	0.159	1.00 97.29
C								
ATOM	150	N	LEU	X	456	27.643-119.614	-0.087	1.00 86.89
N								
ATOM	151	CA	LEU	X	456	27.835-118.217	0.312	1.00 91.63
C								
ATOM	152	C	LEU	X	456	27.322-117.849	1.720	1.00 91.85
C								

ATOM O	153	O	LEU X 456	26.238-118.267	2.120	1.00	88.44
ATOM C	154	CB	LEU X 456	27.045-117.375	-0.655	1.00	92.91
ATOM C	155	CG	LEU X 456	27.806-117.003	-1.893	1.00	94.27
ATOM C	156	CD1	LEU X 456	27.089-117.543	-3.125	1.00	90.55
ATOM C	157	CD2	LEU X 456	27.962-115.472	-1.888	1.00	96.13
ATOM N	158	N	GLY X 457	27.938-116.867	2.344	1.00	95.66
ATOM C	159	CA	GLY X 457	27.279-116.256	3.465	1.00	106.67
ATOM C	160	C	GLY X 457	28.054-115.172	4.134	1.00	123.67
ATOM O	161	O	GLY X 457	29.053-114.698	3.597	1.00	127.90
ATOM N	162	N	LYS X 458	27.494-114.686	5.246	1.00	146.49
ATOM C	163	CA	LYS X 458	28.273-114.048	6.310	1.00	148.62
ATOM C	164	C	LYS X 458	28.438-114.994	7.454	1.00	141.55
ATOM O	165	O	LYS X 458	27.469-115.627	7.889	1.00	129.74
ATOM C	166	CB	LYS X 458	27.586-112.796	6.847	1.00	156.80
ATOM C	167	CG	LYS X 458	28.391-112.115	7.951	1.00	156.30
ATOM C	168	CD	LYS X 458	28.052-110.635	8.091	1.00	171.29
ATOM C	169	CE	LYS X 458	28.587-109.805	6.916	1.00	179.28
ATOM N1+	170	NZ	LYS X 458	28.444-108.323	7.081	1.00	185.31
ATOM N	171	N	LEU X 459	29.625-114.935	8.049	1.00	139.88
ATOM C	172	CA	LEU X 459	30.100-115.936	9.000	1.00	133.83
ATOM C	173	C	LEU X 459	29.948-115.419	10.429	1.00	117.69
ATOM O	174	O	LEU X 459	30.750-114.588	10.871	1.00	106.26
ATOM C	175	CB	LEU X 459	31.575-116.230	8.690	1.00	136.86
ATOM C	176	CG	LEU X 459	32.338-117.379	9.367	1.00	140.01
ATOM C	177	CD1	LEU X 459	33.435-116.841	10.272	1.00	141.68
ATOM C	178	CD2	LEU X 459	31.437-118.343	10.117	1.00	142.93
ATOM N	179	N	GLU X 460	28.914-115.894	11.130	1.00	110.26

ATOM	180	CA	GLU	X	460	28.430-115.216	12.355	1.00122.97
C								
ATOM	181	C	GLU	X	460	28.911-115.846	13.706	1.00123.03
C								
ATOM	182	O	GLU	X	460	29.132-115.126	14.665	1.00116.54
O								
ATOM	183	CB	GLU	X	460	26.890-115.037	12.363	1.00123.54
C								
ATOM	184	CG	GLU	X	460	26.238-114.708	10.998	1.00126.05
C								
ATOM	185	CD	GLU	X	460	25.993-113.205	10.698	1.00133.14
C								
ATOM	186	OE1	GLU	X	460	26.020-112.340	11.617	1.00132.84
O								
ATOM	187	OE2	GLU	X	460	25.686-112.893	9.520	1.00133.43
O1-								
ATOM	188	N	SER	X	461	29.139-117.154	13.760	1.00122.00
N								
ATOM	189	CA	SER	X	461	29.863-117.733	14.902	1.00127.35
C								
ATOM	190	C	SER	X	461	31.226-118.268	14.465	1.00128.44
C								
ATOM	191	O	SER	X	461	31.311-119.244	13.729	1.00124.89
O								
ATOM	192	CB	SER	X	461	29.069-118.851	15.598	1.00139.76
C								
ATOM	193	OG	SER	X	461	29.766-119.392	16.739	1.00172.41
O								
ATOM	194	N	GLY	X	462	32.290-117.643	14.957	1.00135.06
N								
ATOM	195	CA	GLY	X	462	33.586-118.320	15.118	1.00135.78
C								
ATOM	196	C	GLY	X	462	34.506-118.270	13.906	1.00129.68
C								
ATOM	197	O	GLY	X	462	34.286-117.505	12.974	1.00113.01
O								
ATOM	198	N	SER	X	463	35.600-119.025	13.993	1.00134.56
N								
ATOM	199	CA	SER	X	463	36.640-119.022	12.979	1.00134.32
C								
ATOM	200	C	SER	X	463	36.602-120.348	12.248	1.00131.05
C								
ATOM	201	O	SER	X	463	36.167-121.366	12.785	1.00112.49
O								
ATOM	202	CB	SER	X	463	38.029-118.790	13.609	1.00139.08
C								
ATOM	203	OG	SER	X	463	38.972-118.359	12.644	1.00139.89
O								
ATOM	204	N	ILE	X	464	37.064-120.324	11.013	1.00144.70
N								
ATOM	205	CA	ILE	X	464	36.833-121.435	10.115	1.00156.54
C								
ATOM	206	C	ILE	X	464	38.095-121.831	9.325	1.00164.84
C								

ATOM O	207	O	ILE X 464	38.563-121.102	8.435	1.00137.71
ATOM C	208	CB	ILE X 464	35.626-121.157	9.206	1.00150.40
ATOM C	209	CG1	ILE X 464	35.310-122.385	8.350	1.00144.69
ATOM C	210	CG2	ILE X 464	35.843-119.893	8.387	1.00148.98
ATOM C	211	CD1	ILE X 464	33.826-122.646	8.264	1.00142.70
ATOM N	212	N	CYS X 465	38.671-122.968	9.732	1.00184.98
ATOM C	213	CA	CYS X 465	39.991-123.399	9.280	1.00186.61
ATOM C	214	C	CYS X 465	39.774-124.171	7.986	1.00169.73
ATOM O	215	O	CYS X 465	38.679-124.725	7.794	1.00151.72
ATOM C	216	CB	CYS X 465	40.675-124.305	10.339	1.00204.35
ATOM S	217	SG	CYS X 465	40.805-123.662	12.061	1.00208.64
ATOM N	218	N	LYS X 466	40.764-124.108	7.069	1.00162.08
ATOM C	219	CA	LYS X 466	40.693-124.790	5.738	1.00149.77
ATOM C	220	C	LYS X 466	40.611-126.299	5.947	1.00157.70
ATOM O	221	O	LYS X 466	41.257-126.832	6.854	1.00171.52
ATOM C	222	CB	LYS X 466	41.946-124.458	4.874	1.00 0.00
ATOM C	223	CG	LYS X 466	41.881-125.015	3.444	1.00 0.00
ATOM C	224	CD	LYS X 466	43.089-124.555	2.617	1.00 0.00
ATOM C	225	CE	LYS X 466	43.016-125.116	1.195	1.00 0.00
ATOM N1+	226	NZ	LYS X 466	44.168-124.684	0.387	1.00 0.00
ATOM N	227	N	GLY X 467	39.729-126.959	5.194	1.00157.71
ATOM C	228	CA	GLY X 467	39.440-128.399	5.374	1.00158.56
ATOM C	229	C	GLY X 467	38.815-128.902	6.693	1.00162.89
ATOM O	230	O	GLY X 467	38.783-130.121	6.921	1.00175.32
ATOM N	231	N	GLN X 468	38.265-127.992	7.523	1.00156.06
ATOM C	232	CA	GLN X 468	37.798-128.308	8.915	1.00142.87
ATOM C	233	C	GLN X 468	36.434-129.008	8.930	1.00141.24

ATOM O	234	O	GLN X 468	35.428-128.336	8.859	1.00149.43
ATOM C	235	CB	GLN X 468	37.744-126.996	9.721	1.00 0.00
ATOM C	236	CG	GLN X 468	37.492-127.236	11.220	1.00 0.00
ATOM C	237	CD	GLN X 468	37.141-125.946	11.968	1.00 0.00
ATOM O	238	OE1	GLN X 468	36.284-125.182	11.527	1.00 0.00
ATOM N	239	NE2	GLN X 468	37.772-125.714	13.122	1.00 0.00
ATOM N	240	N	GLN X 469	36.386-130.339	9.069	1.00140.87
ATOM C	241	CA	GLN X 469	35.097-131.079	8.972	1.00138.58
ATOM C	242	C	GLN X 469	33.990-130.350	9.704	1.00127.70
ATOM O	243	O	GLN X 469	34.237-129.813	10.779	1.00132.85
ATOM C	244	CB	GLN X 469	35.226-132.472	9.576	1.00148.16
ATOM C	245	CG	GLN X 469	35.814-133.511	8.627	1.00158.50
ATOM C	246	CD	GLN X 469	34.750-134.309	7.898	1.00164.51
ATOM O	247	OE1	GLN X 469	34.799-134.457	6.662	1.00154.66
ATOM N	248	NE2	GLN X 469	33.773-134.835	8.657	1.00168.14
ATOM N	249	N	LEU X 470	32.786-130.327	9.113	1.00118.22
ATOM C	250	CA	LEU X 470	31.633-129.580	9.661	1.00115.10
ATOM C	251	C	LEU X 470	30.353-130.297	9.380	1.00116.71
ATOM O	252	O	LEU X 470	30.342-131.354	8.735	1.00123.90
ATOM C	253	CB	LEU X 470	31.516-128.180	9.047	1.00113.80
ATOM C	254	CG	LEU X 470	32.671-127.212	9.270	1.00121.47
ATOM C	255	CD1	LEU X 470	32.394-125.899	8.559	1.00116.65
ATOM C	256	CD2	LEU X 470	32.987-126.962	10.754	1.00127.98
ATOM N	257	N	VAL X 471	29.258-129.692	9.818	1.00117.86
ATOM C	258	CA	VAL X 471	27.935-130.216	9.526	1.00129.28
ATOM C	259	C	VAL X 471	27.040-129.075	9.136	1.00143.57
ATOM O	260	O	VAL X 471	27.377-127.906	9.354	1.00149.72

ATOM C	261	CB	VAL X 471	27.330-130.936	10.741	1.00130.13
ATOM C	262	CG1	VAL X 471	25.891-131.393	10.483	1.00121.98
ATOM C	263	CG2	VAL X 471	28.205-132.126	11.121	1.00139.40
ATOM N	264	N	MET X 472	25.915-129.423	8.517	1.00155.12
ATOM C	265	CA	MET X 472	25.013-128.444	7.956	1.00149.25
ATOM C	266	C	MET X 472	23.562-128.879	8.069	1.00138.24
ATOM O	267	O	MET X 472	23.171-129.974	7.626	1.00134.74
ATOM C	268	CB	MET X 472	25.369-128.237	6.508	1.00146.72
ATOM C	269	CG	MET X 472	24.769-126.990	5.917	1.00140.85
ATOM S	270	SD	MET X 472	24.717-127.197	4.168	1.00130.30
ATOM C	271	CE	MET X 472	23.517-128.548	4.065	1.00124.57
ATOM N	272	N	MET X 473	22.760-127.999	8.644	1.00119.73
ATOM C	273	CA	MET X 473	21.743-128.442	9.506	1.00116.02
ATOM C	274	C	MET X 473	20.483-128.664	8.710	1.00102.33
ATOM O	275	O	MET X 473	20.532-128.775	7.516	1.00 91.19
ATOM C	276	CB	MET X 473	21.576-127.461	10.669	1.00130.74
ATOM C	277	CG	MET X 473	21.410-128.134	12.039	1.00148.41
ATOM S	278	SD	MET X 473	21.995-129.861	12.200	1.00164.57
ATOM C	279	CE	MET X 473	20.711-130.534	13.264	1.00160.06
ATOM N	280	N	PRO X 474	19.343-128.601	9.370	1.00104.20
ATOM C	281	CA	PRO X 474	18.426-129.670	9.799	1.00111.47
ATOM C	282	C	PRO X 474	18.786-131.121	9.393	1.00126.79
ATOM O	283	O	PRO X 474	18.294-132.087	10.020	1.00127.86
ATOM C	284	CB	PRO X 474	17.105-129.248	9.172	1.00109.31
ATOM C	285	CG	PRO X 474	17.158-127.773	9.188	1.00107.00
ATOM C	286	CD	PRO X 474	18.605-127.401	8.962	1.00104.53
ATOM N	287	N	ASN X 475	19.642-131.278	8.383	1.00136.21

ATOM C	288	CA	ASN X 475	19.844-132.575	7.740	1.00147.83
ATOM C	289	C	ASN X 475	21.075-133.350	8.250	1.00140.16
ATOM O	290	O	ASN X 475	21.387-134.448	7.770	1.00137.83
ATOM C	291	CB	ASN X 475	19.957-132.357	6.237	1.00164.09
ATOM C	292	CG	ASN X 475	18.796-131.548	5.682	1.00175.02
ATOM O	293	OD1	ASN X 475	17.753-131.415	6.324	1.00171.21
ATOM N	294	ND2	ASN X 475	18.976-130.996	4.488	1.00193.85
ATOM N	295	N	LYS X 476	21.784-132.749	9.199	1.00130.11
ATOM C	296	CA	LYS X 476	22.932-133.364	9.822	1.00123.41
ATOM C	297	C	LYS X 476	23.903-133.809	8.767	1.00121.97
ATOM O	298	O	LYS X 476	24.449-134.874	8.904	1.00137.46
ATOM C	299	CB	LYS X 476	22.528-134.622	10.632	1.00126.75
ATOM C	300	CG	LYS X 476	22.194-134.414	12.095	1.00130.82
ATOM C	301	CD	LYS X 476	21.098-133.389	12.280	1.00140.17
ATOM C	302	CE	LYS X 476	19.878-133.581	11.369	1.00145.47
ATOM N1+	303	NZ	LYS X 476	19.008-134.747	11.670	1.00154.45
ATOM N	304	N	HIE X 477	24.057-133.091	7.663	1.00121.90
ATOM C	305	CA	HIE X 477	25.040-133.541	6.673	1.00127.82
ATOM C	306	C	HIE X 477	26.451-133.133	7.065	1.00130.04
ATOM O	307	O	HIE X 477	26.748-131.940	7.215	1.00122.89
ATOM C	308	CB	HIE X 477	24.720-133.066	5.257	1.00129.71
ATOM C	309	CG	HIE X 477	24.020-134.093	4.445	1.00131.50
ATOM N	310	ND1	HIE X 477	24.700-135.060	3.743	1.00138.49
ATOM C	311	CD2	HIE X 477	22.702-134.391	4.328	1.00133.69
ATOM C	312	CE1	HIE X 477	23.829-135.886	3.188	1.00150.40
ATOM N	313	NE2	HIE X 477	22.609-135.491	3.514	1.00146.73
ATOM N	314	N	ASN X 478	27.309-134.141	7.240	1.00130.74

ATOM	315	CA	ASN X 478	28.751-133.940	7.263	1.00126.80
C						
ATOM	316	C	ASN X 478	29.195-133.215	6.035	1.00121.94
C						
ATOM	317	O	ASN X 478	28.532-133.277	4.991	1.00122.49
O						
ATOM	318	CB	ASN X 478	29.498-135.269	7.324	1.00129.31
C						
ATOM	319	CG	ASN X 478	29.707-135.746	8.717	1.00133.59
C						
ATOM	320	OD1	ASN X 478	29.206-135.156	9.693	1.00134.82
O						
ATOM	321	ND2	ASN X 478	30.448-136.830	8.835	1.00137.77
N						
ATOM	322	N	VAL X 479	30.372-132.622	6.133	1.00115.79
N						
ATOM	323	CA	VAL X 479	30.946-131.912	5.031	1.00114.40
C						
ATOM	324	C	VAL X 479	32.299-131.410	5.452	1.00113.03
C						
ATOM	325	O	VAL X 479	32.455-130.961	6.575	1.00122.67
O						
ATOM	326	CB	VAL X 479	30.055-130.724	4.638	1.00119.63
C						
ATOM	327	CG1	VAL X 479	30.051-129.644	5.705	1.00122.57
C						
ATOM	328	CG2	VAL X 479	30.504-130.153	3.320	1.00130.78
C						
ATOM	329	N	GLU X 480	33.300-131.534	4.596	1.00114.21
N						
ATOM	330	CA	GLU X 480	34.612-130.935	4.902	1.00120.07
C						
ATOM	331	C	GLU X 480	34.724-129.678	4.068	1.00121.46
C						
ATOM	332	O	GLU X 480	34.264-129.643	2.907	1.00112.58
O						
ATOM	333	CB	GLU X 480	35.783-131.926	4.563	1.00 0.00
C						
ATOM	334	CG	GLU X 480	37.118-131.601	5.239	1.00 0.00
C						
ATOM	335	CD	GLU X 480	38.061-132.799	5.111	1.00 0.00
C						
ATOM	336	OE1	GLU X 480	38.322-133.341	4.040	1.00 0.00
O						
ATOM	337	OE2	GLU X 480	38.561-133.236	6.304	1.00 0.00
O1-						
ATOM	338	N	VAL X 481	35.256-128.619	4.678	1.00129.99
N						
ATOM	339	CA	VAL X 481	35.724-127.477	3.902	1.00142.91
C						
ATOM	340	C	VAL X 481	36.767-128.002	2.964	1.00149.71
C						
ATOM	341	O	VAL X 481	37.681-128.725	3.395	1.00148.51
O						



ATOM	342	CB	VAL	X	481	36.417-126.384	4.743	1.00146.02
C								
ATOM	343	CG1	VAL	X	481	37.049-125.336	3.824	1.00144.57
C								
ATOM	344	CG2	VAL	X	481	35.439-125.718	5.697	1.00149.40
C								
ATOM	345	N	LEU	X	482	36.589-127.701	1.677	1.00146.43
N								
ATOM	346	CA	LEU	X	482	37.705-127.661	0.750	1.00142.94
C								
ATOM	347	C	LEU	X	482	38.258-126.228	0.698	1.00144.82
C								
ATOM	348	O	LEU	X	482	39.367-125.963	1.183	1.00152.59
O								
ATOM	349	CB	LEU	X	482	37.282-128.136	-0.649	1.00139.29
C								
ATOM	350	CG	LEU	X	482	36.285-129.293	-0.801	1.00133.46
C								
ATOM	351	CD1	LEU	X	482	36.358-129.818	-2.232	1.00130.70
C								
ATOM	352	CD2	LEU	X	482	36.525-130.413	0.195	1.00131.77
C								
ATOM	353	N	GLY	X	483	37.434-125.296	0.213	1.00139.90
N								
ATOM	354	CA	GLY	X	483	37.931-124.049	-0.375	1.00132.05
C								
ATOM	355	C	GLY	X	483	37.236-122.805	0.147	1.00120.37
C								
ATOM	356	O	GLY	X	483	36.009-122.671	0.057	1.00110.80
O								
ATOM	357	N	ILE	X	484	38.042-121.846	0.573	1.00111.72
N								
ATOM	358	CA	ILE	X	484	37.536-120.684	1.225	1.00110.15
C								
ATOM	359	C	ILE	X	484	37.987-119.451	0.502	1.00112.85
C								
ATOM	360	O	ILE	X	484	39.095-118.957	0.725	1.00108.86
O								
ATOM	361	CB	ILE	X	484	38.012-120.649	2.659	1.00111.31
C								
ATOM	362	CG1	ILE	X	484	37.532-121.928	3.346	1.00111.35
C								
ATOM	363	CG2	ILE	X	484	37.515-119.373	3.341	1.00110.28
C								
ATOM	364	CD1	ILE	X	484	37.790-121.970	4.829	1.00118.09
C								
ATOM	365	N	LEU	X	485	37.109-118.969	-0.379	1.00126.14
N								
ATOM	366	CA	LEU	X	485	37.428-117.887	-1.343	1.00136.92
C								
ATOM	367	C	LEU	X	485	36.967-116.526	-0.764	1.00130.22
C								
ATOM	368	O	LEU	X	485	36.569-115.646	-1.541	1.00118.28
O								

ATOM C	369	CB	LEU X 485	36.741-118.110	-2.777	1.00142.48
ATOM C	370	CG	LEU X 485	36.691-119.402	-3.719	1.00140.58
ATOM C	371	CD1	LEU X 485	36.053-120.655	-3.095	1.00135.63
ATOM C	372	CD2	LEU X 485	35.987-119.135	-5.066	1.00131.25
ATOM N	373	N	SER X 486	37.144-116.362	0.538	1.00125.79
ATOM C	374	CA	SER X 486	36.655-115.201	1.235	1.00123.86
ATOM C	375	C	SER X 486	36.968-113.950	0.489	1.00136.04
ATOM O	376	O	SER X 486	38.091-113.684	0.090	1.00134.71
ATOM C	377	CB	SER X 486	37.318-115.118	2.609	1.00115.08
ATOM O	378	OG	SER X 486	37.286-113.807	3.151	1.00107.25
ATOM N	379	N	ASP X 487	35.890-113.210	0.277	1.00146.63
ATOM C	380	CA	ASP X 487	35.922-111.951	-0.404	1.00147.13
ATOM C	381	C	ASP X 487	36.474-112.266	-1.765	1.00153.58
ATOM O	382	O	ASP X 487	36.316-113.376	-2.257	1.00141.52
ATOM C	383	CB	ASP X 487	36.837-111.008	0.344	1.00150.30
ATOM C	384	CG	ASP X 487	36.393-109.583	0.239	1.00156.61
ATOM O	385	OD1	ASP X 487	36.411-109.046	-0.887	1.00153.01
ATOM O1-	386	OD2	ASP X 487	36.008-109.007	1.276	1.00159.09
ATOM N	387	N	ASP X 488	37.159-111.309	-2.366	1.00167.89
ATOM C	388	CA	ASP X 488	37.768-111.581	-3.633	1.00175.89
ATOM C	389	C	ASP X 488	38.871-112.589	-3.334	1.00161.82
ATOM O	390	O	ASP X 488	39.098-113.529	-4.083	1.00140.28
ATOM C	391	CB	ASP X 488	38.371-110.302	-4.283	1.00 0.00
ATOM C	392	CG	ASP X 488	37.292-109.259	-4.573	1.00 0.00
ATOM O	393	OD1	ASP X 488	37.152-108.226	-3.919	1.00 0.00
ATOM O1-	394	OD2	ASP X 488	36.488-109.577	-5.630	1.00 0.00
ATOM N	395	N	VAL X 489	39.554-112.378	-2.215	1.00157.52

ATOM	396	CA	VAL	X	489	40.703-113.229	-1.823	1.00162.55
C								
ATOM	397	C	VAL	X	489	40.274-114.643	-1.370	1.00167.52
C								
ATOM	398	O	VAL	X	489	39.111-114.870	-1.045	1.00188.08
O								
ATOM	399	CB	VAL	X	489	41.521-112.526	-0.699	1.00158.70
C								
ATOM	400	CG1	VAL	X	489	40.691-112.347	0.569	1.00153.88
C								
ATOM	401	CG2	VAL	X	489	42.813-113.266	-0.393	1.00158.45
C								
ATOM	402	N	GLU	X	490	41.198-115.602	-1.412	1.00154.17
N								
ATOM	403	CA	GLU	X	490	41.087-116.803	-0.589	1.00147.62
C								
ATOM	404	C	GLU	X	490	41.986-116.578	0.624	1.00155.54
C								
ATOM	405	O	GLU	X	490	42.957-115.837	0.529	1.00163.62
O								
ATOM	406	CB	GLU	X	490	41.485-118.052	-1.403	1.00141.05
C								
ATOM	407	CG	GLU	X	490	42.763-118.761	-0.972	1.00146.16
C								
ATOM	408	CD	GLU	X	490	42.510-120.072	-0.231	1.00150.83
C								
ATOM	409	OE1	GLU	X	490	43.181-121.075	-0.559	1.00154.33
O								
ATOM	410	OE2	GLU	X	490	41.664-120.101	0.693	1.00154.94
O1-								
ATOM	411	N	THR	X	491	41.608-117.125	1.781	1.00161.96
N								
ATOM	412	CA	THR	X	491	42.560-117.343	2.884	1.00163.44
C								
ATOM	413	C	THR	X	491	42.374-118.763	3.459	1.00160.04
C								
ATOM	414	O	THR	X	491	41.436-119.471	3.088	1.00141.25
O								
ATOM	415	CB	THR	X	491	42.404-116.290	4.013	1.00161.22
C								
ATOM	416	OG1	THR	X	491	41.150-116.477	4.677	1.00162.20
O								
ATOM	417	CG2	THR	X	491	42.488-114.853	3.456	1.00153.17
C								
ATOM	418	N	ASP	X	492	43.317-119.196	4.294	1.00170.14
N								
ATOM	419	CA	ASP	X	492	43.300-120.561	4.860	1.00174.66
C								
ATOM	420	C	ASP	X	492	42.309-120.675	6.011	1.00172.92
C								
ATOM	421	O	ASP	X	492	41.587-121.664	6.118	1.00181.51
O								
ATOM	422	CB	ASP	X	492	44.698-120.981	5.350	1.00172.74
C								

ATOM C	423	CG	ASP X 492	45.334-122.017	4.465	1.00171.98
ATOM O	424	OD1	ASP X 492	45.437-121.754	3.245	1.00173.89
ATOM O1-	425	OD2	ASP X 492	45.722-123.090	4.986	1.00163.23
ATOM N	426	N	THR X 493	42.347-119.703	6.915	1.00163.59
ATOM C	427	CA	THR X 493	41.353-119.594	7.969	1.00157.75
ATOM C	428	C	THR X 493	40.856-118.172	7.994	1.00143.72
ATOM O	429	O	THR X 493	41.549-117.263	7.559	1.00137.14
ATOM C	430	CB	THR X 493	41.938-119.945	9.359	1.00179.70
ATOM O	431	OG1	THR X 493	42.648-118.817	9.892	1.00195.33
ATOM C	432	CG2	THR X 493	42.885-121.153	9.285	1.00185.09
ATOM N	433	N	VAL X 494	39.667-117.969	8.532	1.00133.99
ATOM C	434	CA	VAL X 494	39.077-116.642	8.540	1.00133.59
ATOM C	435	C	VAL X 494	38.065-116.560	9.662	1.00132.70
ATOM O	436	O	VAL X 494	37.402-117.549	9.973	1.00130.33
ATOM C	437	CB	VAL X 494	38.411-116.320	7.181	1.00131.79
ATOM C	438	CG1	VAL X 494	37.197-117.206	6.959	1.00130.34
ATOM C	439	CG2	VAL X 494	38.050-114.846	7.076	1.00129.33
ATOM N	440	N	ALA X 495	37.967-115.377	10.270	1.00131.47
ATOM C	441	CA	ALA X 495	37.234-115.181	11.525	1.00127.02
ATOM C	442	C	ALA X 495	35.875-114.529	11.222	1.00124.94
ATOM O	443	O	ALA X 495	35.645-114.111	10.091	1.00129.84
ATOM C	444	CB	ALA X 495	38.068-114.312	12.457	1.00129.65
ATOM N	445	N	PRO X 496	34.967-114.450	12.224	1.00126.11
ATOM C	446	CA	PRO X 496	33.627-113.881	12.003	1.00122.49
ATOM C	447	C	PRO X 496	33.659-112.570	11.273	1.00122.22
ATOM O	448	O	PRO X 496	34.669-111.867	11.289	1.00121.05
ATOM C	449	CB	PRO X 496	33.083-113.647	13.425	1.00124.73

ATOM C	450	CG	PRO X 496	33.903-114.501	14.299	1.00132.36
ATOM C	451	CD	PRO X 496	35.263-114.559	13.660	1.00136.09
ATOM N	452	N	GLY X 497	32.519-112.192	10.722	1.00125.63
ATOM C	453	CA	GLY X 497	32.389-110.898	10.055	1.00138.05
ATOM C	454	C	GLY X 497	32.518-111.049	8.562	1.00137.03
ATOM O	455	O	GLY X 497	31.602-110.714	7.811	1.00143.64
ATOM N	456	N	GLU X 498	33.611-111.657	8.136	1.00129.65
ATOM C	457	CA	GLU X 498	33.915-111.721	6.741	1.00127.57
ATOM C	458	C	GLU X 498	32.806-112.419	5.926	1.00120.01
ATOM O	459	O	GLU X 498	31.799-112.930	6.462	1.00109.62
ATOM C	460	CB	GLU X 498	35.292-112.352	6.520	1.00145.07
ATOM C	461	CG	GLU X 498	36.446-111.449	6.996	1.00163.35
ATOM C	462	CD	GLU X 498	37.791-111.738	6.325	1.00173.24
ATOM O	463	OE1	GLU X 498	38.801-111.852	7.071	1.00178.59
ATOM O1-	464	OE2	GLU X 498	37.850-111.798	5.064	1.00161.45
ATOM N	465	N	ASN X 499	32.966-112.323	4.614	1.00117.75
ATOM C	466	CA	ASN X 499	31.974-112.743	3.649	1.00110.82
ATOM C	467	C	ASN X 499	32.539-113.884	2.822	1.00103.83
ATOM O	468	O	ASN X 499	33.115-113.664	1.759	1.00104.94
ATOM C	469	CB	ASN X 499	31.624-111.564	2.731	1.00113.23
ATOM C	470	CG	ASN X 499	30.518-110.702	3.295	1.00116.04
ATOM O	471	OD1	ASN X 499	29.490-111.219	3.733	1.00116.91
ATOM N	472	ND2	ASN X 499	30.688-109.378	3.227	1.00121.89
ATOM N	473	N	LEU X 500	32.271-115.103	3.256	1.00 97.37
ATOM C	474	CA	LEU X 500	32.887-116.249	2.666	1.00 99.48
ATOM C	475	C	LEU X 500	32.027-116.829	1.566	1.00 97.25
ATOM O	476	O	LEU X 500	30.823-117.056	1.747	1.00 93.06

ATOM	477	CB	LEU	X	500	33.052-117.313	3.705	1.00109.22
C								
ATOM	478	CG	LEU	X	500	33.894-116.988	4.919	1.00123.59
C								
ATOM	479	CD1	LEU	X	500	34.016-115.497	5.219	1.00127.67
C								
ATOM	480	CD2	LEU	X	500	33.312-117.728	6.114	1.00131.22
C								
ATOM	481	N	LYS	X	501	32.665-117.168	0.460	1.00 94.98
N								
ATOM	482	CA	LYS	X	501	32.260-118.334	-0.289	1.00 95.34
C								
ATOM	483	C	LYS	X	501	33.125-119.535	0.159	1.00 93.53
C								
ATOM	484	O	LYS	X	501	34.332-119.393	0.466	1.00 90.82
O								
ATOM	485	CB	LYS	X	501	32.403-118.092	-1.800	1.00102.55
C								
ATOM	486	CG	LYS	X	501	31.631-116.900	-2.365	1.00104.51
C								
ATOM	487	CD	LYS	X	501	31.913-116.668	-3.873	1.00109.03
C								
ATOM	488	CE	LYS	X	501	31.284-115.363	-4.381	1.00111.67
C								
ATOM	489	NZ	LYS	X	501	31.378-115.157	-5.851	1.00112.06
N1+								
ATOM	490	N	ILE	X	502	32.494-120.703	0.236	1.00 91.07
N								
ATOM	491	CA	ILE	X	502	33.139-121.899	0.765	1.00 93.21
C								
ATOM	492	C	ILE	X	502	32.789-123.063	-0.120	1.00 93.06
C								
ATOM	493	O	ILE	X	502	31.609-123.423	-0.232	1.00 83.92
O								
ATOM	494	CB	ILE	X	502	32.617-122.264	2.184	1.00 97.44
C								
ATOM	495	CG1	ILE	X	502	32.626-121.049	3.149	1.00 96.29
C								
ATOM	496	CG2	ILE	X	502	33.406-123.439	2.772	1.00 99.47
C								
ATOM	497	CD1	ILE	X	502	33.896-120.858	3.961	1.00 92.96
C								
ATOM	498	N	ARG	X	503	33.803-123.678	-0.723	1.00 99.56
N								
ATOM	499	CA	ARG	X	503	33.588-124.958	-1.387	1.00108.84
C								
ATOM	500	C	ARG	X	503	33.479-126.096	-0.383	1.00109.85
C								
ATOM	501	O	ARG	X	503	34.355-126.299	0.455	1.00 98.84
O								
ATOM	502	CB	ARG	X	503	34.660-125.267	-2.449	1.00119.22
C								
ATOM	503	CG	ARG	X	503	34.195-126.258	-3.544	1.00124.48
C								

ATOM C	504	CD	ARG X 503	34.837-126.023	-4.913	1.00133.66
ATOM N	505	NE	ARG X 503	35.044-124.603	-5.231	1.00146.24
ATOM C	506	CZ	ARG X 503	36.160-123.906	-4.992	1.00163.09
ATOM N	507	NH1	ARG X 503	37.215-124.479	-4.412	1.00176.11
ATOM N1+	508	NH2	ARG X 503	36.212-122.614	-5.312	1.00168.72
ATOM N	509	N	LEU X 504	32.391-126.848	-0.525	1.00123.87
ATOM C	510	CA	LEU X 504	32.012-127.935	0.379	1.00140.47
ATOM C	511	C	LEU X 504	32.126-129.271	-0.346	1.00142.59
ATOM O	512	O	LEU X 504	31.792-129.338	-1.530	1.00169.43
ATOM C	513	CB	LEU X 504	30.542-127.756	0.801	1.00152.44
ATOM C	514	CG	LEU X 504	30.247-126.929	2.057	1.00169.24
ATOM C	515	CD1	LEU X 504	30.868-125.539	1.957	1.00172.59
ATOM C	516	CD2	LEU X 504	28.737-126.864	2.304	1.00170.39
ATOM N	517	N	LYS X 505	32.554-130.337	0.352	1.00132.97
ATOM C	518	CA	LYS X 505	32.416-131.717	-0.174	1.00127.74
ATOM C	519	C	LYS X 505	31.606-132.579	0.734	1.00125.38
ATOM O	520	O	LYS X 505	32.024-132.808	1.851	1.00132.67
ATOM C	521	CB	LYS X 505	33.772-132.374	-0.310	1.00125.21
ATOM C	522	CG	LYS X 505	33.703-133.876	-0.556	1.00128.19
ATOM C	523	CD	LYS X 505	34.227-134.679	0.627	1.00128.91
ATOM C	524	CE	LYS X 505	35.633-134.250	1.040	1.00130.48
ATOM N1+	525	NZ	LYS X 505	36.652-135.318	0.790	1.00134.50
ATOM N	526	N	GLY X 506	30.525-133.167	0.228	1.00123.20
ATOM C	527	CA	GLY X 506	29.592-133.887	1.101	1.00130.82
ATOM C	528	C	GLY X 506	28.620-134.727	0.319	1.00145.39
ATOM O	529	O	GLY X 506	28.663-134.724	-0.907	1.00153.75
ATOM N	530	N	ILE X 507	27.787-135.505	1.016	1.00164.77

ATOM	531	CA	ILE	X	507	26.746-136.310	0.339	1.00183.94
C								
ATOM	532	C	ILE	X	507	25.641-135.343	-0.143	1.00187.09
C								
ATOM	533	O	ILE	X	507	24.908-135.665	-1.077	1.00193.34
O								
ATOM	534	CB	ILE	X	507	26.179-137.498	1.237	1.00188.66
C								
ATOM	535	CG1	ILE	X	507	27.237-138.633	1.441	1.00182.52
C								
ATOM	536	CG2	ILE	X	507	24.867-138.068	0.670	1.00185.18
C								
ATOM	537	CD1	ILE	X	507	27.063-139.885	0.590	1.00176.35
C								
ATOM	538	N	GLU	X	508	25.607-134.121	0.409	1.00183.95
N								
ATOM	539	CA	GLU	X	508	24.574-133.129	0.031	1.00187.00
C								
ATOM	540	C	GLU	X	508	25.151-131.819	-0.556	1.00171.46
C								
ATOM	541	O	GLU	X	508	25.692-130.975	0.204	1.00166.71
O								
ATOM	542	CB	GLU	X	508	23.676-132.822	1.238	1.00197.01
C								
ATOM	543	CG	GLU	X	508	22.235-132.461	0.870	1.00194.77
C								
ATOM	544	CD	GLU	X	508	21.307-133.664	0.730	1.00192.02
C								
ATOM	545	OE1	GLU	X	508	20.856-134.195	1.775	1.00204.28
O								
ATOM	546	OE2	GLU	X	508	20.982-134.040	-0.421	1.00169.17
O1-								
ATOM	547	N	GLU	X	509	24.953-131.625	-1.884	1.00143.79
N								
ATOM	548	CA	GLU	X	509	25.841-130.767	-2.726	1.00124.42
C								
ATOM	549	C	GLU	X	509	25.156-129.809	-3.755	1.00114.37
C								
ATOM	550	O	GLU	X	509	25.757-128.896	-4.277	1.00108.66
O								
ATOM	551	CB	GLU	X	509	26.887-131.638	-3.388	1.00123.55
C								
ATOM	552	CG	GLU	X	509	27.654-132.500	-2.387	1.00133.66
C								
ATOM	553	CD	GLU	X	509	28.137-131.740	-1.124	1.00139.27
C								
ATOM	554	OE1	GLU	X	509	29.035-130.884	-1.240	1.00142.54
O								
ATOM	555	OE2	GLU	X	509	27.652-132.029	0.005	1.00140.39
O1-								
ATOM	556	N	GLU	X	510	23.887-130.011	-3.999	1.00112.15
N								
ATOM	557	CA	GLU	X	510	22.903-128.942	-4.019	1.00109.95
C								



ATOM	558	C	GLU	X	510	21.790-129.872	-3.445	1.00112.91
C								
ATOM	559	O	GLU	X	510	22.134-130.963	-3.014	1.00110.06
O								
ATOM	560	CB	GLU	X	510	22.746-128.394	-5.445	1.00112.99
C								
ATOM	561	CG	GLU	X	510	21.636-129.008	-6.326	1.00125.17
C								
ATOM	562	CD	GLU	X	510	21.784-130.533	-6.720	1.00127.01
C								
ATOM	563	OE1	GLU	X	510	21.015-131.378	-6.165	1.00127.11
O								
ATOM	564	OE2	GLU	X	510	22.499-130.868	-7.718	1.00116.65
O1-								
ATOM	565	N	GLU	X	511	20.601-129.349	-3.276	1.00119.45
N								
ATOM	566	CA	GLU	X	511	19.613-130.011	-2.477	1.00129.93
C								
ATOM	567	C	GLU	X	511	19.831-129.467	-1.022	1.00113.23
C								
ATOM	568	O	GLU	X	511	19.349-130.035	-0.055	1.00104.04
O								
ATOM	569	CB	GLU	X	511	19.756-131.520	-2.504	1.00145.93
C								
ATOM	570	CG	GLU	X	511	18.824-132.236	-1.526	1.00151.74
C								
ATOM	571	CD	GLU	X	511	17.493-131.523	-1.324	1.00143.87
C								
ATOM	572	OE1	GLU	X	511	17.005-130.899	-2.283	1.00145.17
O								
ATOM	573	OE2	GLU	X	511	16.955-131.564	-0.199	1.00124.74
O1-								
ATOM	574	N	ILE	X	512	20.586-128.371	-0.891	1.00103.65
N								
ATOM	575	CA	ILE	X	512	20.846-127.664	0.354	1.00 95.33
C								
ATOM	576	C	ILE	X	512	20.208-126.315	0.085	1.00 95.78
C								
ATOM	577	O	ILE	X	512	20.432-125.761	-0.970	1.00 96.52
O								
ATOM	578	CB	ILE	X	512	22.349-127.541	0.635	1.00 90.55
C								
ATOM	579	CG1	ILE	X	512	23.022-126.403	-0.127	1.00 87.34
C								
ATOM	580	CG2	ILE	X	512	23.029-128.825	0.240	1.00 91.38
C								
ATOM	581	CD1	ILE	X	512	24.498-126.315	0.126	1.00 87.83
C								
ATOM	582	N	LEU	X	513	19.437-125.774	1.007	1.00100.10
N								
ATOM	583	CA	LEU	X	513	18.757-124.519	0.744	1.00103.27
C								
ATOM	584	C	LEU	X	513	19.093-123.413	1.691	1.00104.82
C								

ATOM O	585	O	LEU X 513	19.557-123.651	2.782	1.00100.89
ATOM C	586	CB	LEU X 513	17.261-124.735	0.858	1.00105.40
ATOM C	587	CG	LEU X 513	16.571-125.675	-0.107	1.00112.52
ATOM C	588	CD1	LEU X 513	17.354-126.959	-0.279	1.00113.29
ATOM C	589	CD2	LEU X 513	15.177-125.957	0.414	1.00113.29
ATOM N	590	N	PRO X 514	18.854-122.182	1.282	1.00105.88
ATOM C	591	CA	PRO X 514	19.126-121.083	2.223	1.00 99.21
ATOM C	592	C	PRO X 514	18.221-120.985	3.472	1.00 95.52
ATOM O	593	O	PRO X 514	16.969-121.170	3.429	1.00 88.47
ATOM C	594	CB	PRO X 514	19.030-119.840	1.334	1.00 98.74
ATOM C	595	CG	PRO X 514	19.466-120.334	-0.035	1.00 98.92
ATOM C	596	CD	PRO X 514	18.896-121.718	-0.135	1.00102.34
ATOM N	597	N	GLY X 515	18.886-120.636	4.573	1.00 95.86
ATOM C	598	CA	GLY X 515	18.310-120.749	5.900	1.00 94.68
ATOM C	599	C	GLY X 515	18.412-122.149	6.388	1.00 92.73
ATOM O	600	O	GLY X 515	17.495-122.650	7.042	1.00 86.47
ATOM N	601	N	PHE X 516	19.402-122.844	5.838	1.00 95.30
ATOM C	602	CA	PHE X 516	20.303-123.625	6.644	1.00 95.73
ATOM C	603	C	PHE X 516	21.507-122.749	6.938	1.00 92.85
ATOM O	604	O	PHE X 516	21.653-121.629	6.400	1.00 81.10
ATOM C	605	CB	PHE X 516	20.779-124.933	5.946	1.00 97.35
ATOM C	606	CG	PHE X 516	19.666-125.855	5.493	1.00101.11
ATOM C	607	CD1	PHE X 516	18.338-125.674	5.907	1.00102.41
ATOM C	608	CD2	PHE X 516	19.943-126.894	4.594	1.00102.08
ATOM C	609	CE1	PHE X 516	17.309-126.492	5.413	1.00103.38
ATOM C	610	CE2	PHE X 516	18.919-127.721	4.113	1.00103.73
ATOM C	611	CZ	PHE X 516	17.600-127.526	4.532	1.00102.97

ATOM	612	N	ILE	X	517	22.421-123.386	7.673	1.00	98.22
N									
ATOM	613	CA	ILE	X	517	23.584-122.791	8.341	1.00	98.22
C									
ATOM	614	C	ILE	X	517	24.633-123.922	8.405	1.00	97.93
C									
ATOM	615	O	ILE	X	517	24.287-125.092	8.356	1.00	96.34
O									
ATOM	616	CB	ILE	X	517	23.244-122.378	9.796	1.00	97.23
C									
ATOM	617	CG1	ILE	X	517	22.063-123.202	10.313	1.00	102.95
C									
ATOM	618	CG2	ILE	X	517	22.880-120.911	9.883	1.00	95.14
C									
ATOM	619	CD1	ILE	X	517	21.751-123.009	11.780	1.00	112.14
C									
ATOM	620	N	LEU	X	518	25.903-123.596	8.479	1.00	101.09
N									
ATOM	621	CA	LEU	X	518	26.860-124.601	8.863	1.00	114.00
C									
ATOM	622	C	LEU	X	518	26.861-124.645	10.375	1.00	137.46
C									
ATOM	623	O	LEU	X	518	26.411-123.696	11.018	1.00	175.40
O									
ATOM	624	CB	LEU	X	518	28.222-124.243	8.345	1.00	120.89
C									
ATOM	625	CG	LEU	X	518	28.292-124.359	6.840	1.00	140.02
C									
ATOM	626	CD1	LEU	X	518	29.545-123.674	6.310	1.00	155.35
C									
ATOM	627	CD2	LEU	X	518	28.239-125.813	6.401	1.00	146.90
C									
ATOM	628	N	CYX	X	519	27.297-125.753	10.962	1.00	144.96
N									
ATOM	629	CA	CYX	X	519	27.473-125.797	12.412	1.00	139.63
C									
ATOM	630	C	CYX	X	519	28.641-126.673	12.756	1.00	129.00
C									
ATOM	631	O	CYX	X	519	28.776-127.785	12.243	1.00	113.84
O									
ATOM	632	CB	CYX	X	519	26.218-126.307	13.151	1.00	165.56
C									
ATOM	633	SG	CYX	X	519	24.598-125.576	12.690	1.00	217.53
S									
ATOM	634	N	ASP	X	520	29.491-126.146	13.628	1.00	136.24
N									
ATOM	635	CA	ASP	X	520	30.404-126.952	14.466	1.00	146.93
C									
ATOM	636	C	ASP	X	520	29.703-128.222	15.008	1.00	147.63
C									
ATOM	637	O	ASP	X	520	28.625-128.137	15.604	1.00	149.64
O									
ATOM	638	CB	ASP	X	520	30.927-126.096	15.646	1.00	146.05
C									

ATOM C	639	CG	ASP	X	520	31.391-126.939	16.841	1.00148.02
ATOM O	640	OD1	ASP	X	520	32.474-127.549	16.742	1.00148.46
ATOM O1-	641	OD2	ASP	X	520	30.684-126.977	17.886	1.00147.62
ATOM N	642	N	PRO	X	521	30.338-129.392	14.839	1.00139.71
ATOM C	643	CA	PRO	X	521	29.643-130.647	15.161	1.00141.48
ATOM C	644	C	PRO	X	521	29.448-130.940	16.679	1.00151.60
ATOM O	645	O	PRO	X	521	28.575-131.737	17.049	1.00148.84
ATOM C	646	CB	PRO	X	521	30.507-131.720	14.469	1.00139.61
ATOM C	647	CG	PRO	X	521	31.819-131.071	14.181	1.00137.16
ATOM C	648	CD	PRO	X	521	31.562-129.609	14.044	1.00135.04
ATOM N	649	N	ASN	X	522	30.196-130.262	17.545	1.00160.29
ATOM C	650	CA	ASN	X	522	30.123-130.540	18.985	1.00166.83
ATOM C	651	C	ASN	X	522	28.881-129.912	19.617	1.00171.91
ATOM O	652	O	ASN	X	522	27.876-130.596	19.809	1.00177.15
ATOM C	653	CB	ASN	X	522	31.397-130.080	19.687	1.00168.01
ATOM C	654	CG	ASN	X	522	32.636-130.500	18.942	1.00171.94
ATOM O	655	OD1	ASN	X	522	32.554-131.214	17.937	1.00164.02
ATOM N	656	ND2	ASN	X	522	33.787-130.001	19.378	1.00179.97
ATOM N	657	N	ASN	X	523	28.938-128.617	19.927	1.00171.22
ATOM C	658	CA	ASN	X	523	27.722-127.842	20.116	1.00163.52
ATOM C	659	C	ASN	X	523	27.284-127.328	18.762	1.00163.98
ATOM O	660	O	ASN	X	523	27.916-126.441	18.194	1.00148.35
ATOM C	661	CB	ASN	X	523	27.931-126.698	21.116	1.00158.27
ATOM C	662	CG	ASN	X	523	27.332-127.005	22.490	1.00159.83
ATOM N	663	ND2	ASN	X	523	27.852-127.835	23.267	1.00152.43
ATOM O	664	OD1	ASN	X	523	26.228-126.342	22.794	1.00158.67
ATOM N	665	N	LEU	X	524	26.340-128.051	18.165	1.00130.36

ATOM	666	CA	LEU	X	524	25.733-127.666	16.891	1.00136.19
C								
ATOM	667	C	LEU	X	524	24.389-126.968	17.151	1.00133.86
C								
ATOM	668	O	LEU	X	524	24.061-126.665	18.295	1.00138.79
O								
ATOM	669	CB	LEU	X	524	25.573-128.892	15.961	1.00134.93
C								
ATOM	670	CG	LEU	X	524	24.768-130.121	16.409	1.00136.72
C								
ATOM	671	CD1	LEU	X	524	23.327-129.775	16.758	1.00142.32
C								
ATOM	672	CD2	LEU	X	524	24.802-131.185	15.322	1.00128.29
C								
ATOM	673	N	CYX	X	525	23.627-126.703	16.092	1.00142.15
N								
ATOM	674	CA	CYX	X	525	22.542-125.732	16.146	1.00131.14
C								
ATOM	675	C	CYX	X	525	21.229-126.402	16.516	1.00123.92
C								
ATOM	676	O	CYX	X	525	20.997-127.565	16.167	1.00119.97
O								
ATOM	677	CB	CYX	X	525	22.430-125.010	14.805	1.00135.19
C								
ATOM	678	SG	CYX	X	525	24.023-124.350	14.242	1.00176.88
S								
ATOM	679	N	HIE	X	526	20.434-125.705	17.332	1.00179.25
N								
ATOM	680	CA	HIE	X	526	19.102-126.181	17.715	1.00165.40
C								
ATOM	681	C	HIE	X	526	18.235-125.906	16.528	1.00145.93
C								
ATOM	682	O	HIE	X	526	18.576-125.049	15.714	1.00147.88
O								
ATOM	683	CB	HIE	X	526	18.538-125.418	18.935	1.00169.06
C								
ATOM	684	CG	HIE	X	526	19.415-125.455	20.146	1.00172.17
C								
ATOM	685	ND1	HIE	X	526	19.896-126.634	20.678	1.00174.29
N								
ATOM	686	CD2	HIE	X	526	19.853-124.465	20.964	1.00164.37
C								
ATOM	687	CE1	HIE	X	526	20.637-126.364	21.738	1.00181.99
C								
ATOM	688	NE2	HIE	X	526	20.637-125.054	21.924	1.00181.59
N								
ATOM	689	N	SER	X	527	17.109-126.608	16.434	1.00126.26
N								
ATOM	690	CA	SER	X	527	16.176-126.401	15.329	1.00114.69
C								
ATOM	691	C	SER	X	527	14.813-127.059	15.606	1.00108.67
C								
ATOM	692	O	SER	X	527	14.406-127.173	16.771	1.00118.24
O								

ATOM C	693	CB	SER X 527	16.788-126.913	14.030	1.00109.84
ATOM O	694	OG	SER X 527	16.309-128.184	13.737	1.00107.01
ATOM N	695	N	GLY X 528	14.113-127.473	14.552	1.00 97.52
ATOM C	696	CA	GLY X 528	12.698-127.837	14.659	1.00 94.56
ATOM C	697	C	GLY X 528	11.903-126.614	14.303	1.00 91.69
ATOM O	698	O	GLY X 528	12.486-125.667	13.833	1.00 88.49
ATOM N	699	N	ARG X 529	10.592-126.611	14.574	1.00 94.29
ATOM C	700	CA	ARG X 529	9.613-125.777	13.812	1.00 97.26
ATOM C	701	C	ARG X 529	8.543-125.003	14.617	1.00 89.70
ATOM O	702	O	ARG X 529	7.777-124.238	14.048	1.00 80.91
ATOM C	703	CB	ARG X 529	8.947-126.597	12.666	1.00110.88
ATOM C	704	CG	ARG X 529	7.759-127.532	12.996	1.00125.59
ATOM C	705	CD	ARG X 529	8.199-128.711	13.883	1.00149.85
ATOM N	706	NE	ARG X 529	7.712-128.579	15.283	1.00179.42
ATOM C	707	CZ	ARG X 529	8.454-128.728	16.402	1.00190.13
ATOM N	708	NH1	ARG X 529	9.756-129.016	16.352	1.00202.11
ATOM N1+	709	NH2	ARG X 529	7.885-128.570	17.597	1.00179.73
ATOM N	710	N	THR X 530	8.468-125.245	15.927	1.00 90.33
ATOM C	711	CA	THR X 530	7.719-124.370	16.833	1.00 88.64
ATOM C	712	C	THR X 530	8.740-123.638	17.625	1.00 86.90
ATOM O	713	O	THR X 530	9.816-124.171	17.874	1.00 86.08
ATOM C	714	CB	THR X 530	6.766-125.098	17.856	1.00 90.23
ATOM O	715	OG1	THR X 530	6.028-126.179	17.251	1.00 93.50
ATOM C	716	CG2	THR X 530	5.750-124.111	18.405	1.00 89.79
ATOM N	717	N	PHE X 531	8.380-122.426	18.058	1.00 87.90
ATOM C	718	CA	PHE X 531	9.163-121.632	19.061	1.00 87.66
ATOM C	719	C	PHE X 531	8.376-120.423	19.655	1.00 88.73

ATOM O	720	O	PHE X 531	7.415-119.905	19.059	1.00	84.76
ATOM C	721	CB	PHE X 531	10.537-121.150	18.493	1.00	82.94
ATOM C	722	CG	PHE X 531	10.412-120.136	17.403	1.00	78.61
ATOM C	723	CD1	PHE X 531	10.157-120.539	16.115	1.00	77.12
ATOM C	724	CD2	PHE X 531	10.434-118.799	17.681	1.00	75.79
ATOM C	725	CE1	PHE X 531	9.993-119.622	15.122	1.00	75.24
ATOM C	726	CE2	PHE X 531	10.268-117.871	16.676	1.00	74.77
ATOM C	727	CZ	PHE X 531	10.046-118.278	15.401	1.00	73.98
ATOM N	728	N	ASP X 532	8.857-119.985	20.824	1.00	92.27
ATOM C	729	CA	ASP X 532	8.301-118.877	21.581	1.00	91.83
ATOM C	730	C	ASP X 532	9.140-117.635	21.355	1.00	83.71
ATOM O	731	O	ASP X 532	10.378-117.704	21.316	1.00	81.23
ATOM C	732	CB	ASP X 532	8.350-119.226	23.067	1.00	104.10
ATOM C	733	CG	ASP X 532	7.516-120.465	23.423	1.00	121.08
ATOM O	734	OD1	ASP X 532	6.381-120.592	22.893	1.00	136.24
ATOM O1-	735	OD2	ASP X 532	7.953-121.251	24.321	1.00	142.89
ATOM N	736	N	ALA X 533	8.506-116.483	21.280	1.00	77.23
ATOM C	737	CA	ALA X 533	9.226-115.263	20.967	1.00	75.48
ATOM C	738	C	ALA X 533	8.527-114.032	21.518	1.00	76.09
ATOM O	739	O	ALA X 533	7.302-113.930	21.542	1.00	73.77
ATOM C	740	CB	ALA X 533	9.438-115.158	19.456	1.00	74.32
ATOM N	741	N	GLN X 534	9.342-113.079	21.946	1.00	79.46
ATOM C	742	CA	GLN X 534	8.920-111.748	22.343	1.00	85.51
ATOM C	743	C	GLN X 534	8.778-110.939	21.060	1.00	86.08
ATOM O	744	O	GLN X 534	9.738-110.886	20.300	1.00	87.88
ATOM C	745	CB	GLN X 534	9.993-111.203	23.289	1.00	92.12
ATOM C	746	CG	GLN X 534	9.505-110.108	24.239	1.00	100.26

ATOM C	747	CD	GLN	X	534	10.495-109.947	25.388	1.00116.75
ATOM O	748	OE1	GLN	X	534	11.685-110.220	25.272	1.00117.00
ATOM N	749	NE2	GLN	X	534	10.050-109.526	26.549	1.00133.14
ATOM N	750	N	ILE	X	535	7.582-110.431	20.768	1.00 85.94
ATOM C	751	CA	ILE	X	535	7.190-109.913	19.448	1.00 85.75
ATOM C	752	C	ILE	X	535	6.589-108.512	19.637	1.00 81.61
ATOM O	753	O	ILE	X	535	5.465-108.353	20.115	1.00 84.17
ATOM C	754	CB	ILE	X	535	6.268-110.967	18.760	1.00 93.22
ATOM C	755	CG1	ILE	X	535	7.064-111.847	17.756	1.00100.80
ATOM C	756	CG2	ILE	X	535	5.030-110.441	18.018	1.00 96.93
ATOM C	757	CD1	ILE	X	535	6.262-113.021	17.141	1.00106.53
ATOM N	758	N	VAL	X	536	7.351-107.463	19.313	1.00 75.66
ATOM C	759	CA	VAL	X	536	6.823-106.087	19.318	1.00 73.87
ATOM C	760	C	VAL	X	536	6.174-105.790	17.969	1.00 71.49
ATOM O	761	O	VAL	X	536	6.825-105.791	16.924	1.00 71.14
ATOM C	762	CB	VAL	X	536	7.804-105.007	19.840	1.00 75.94
ATOM C	763	CG1	VAL	X	536	9.266-105.438	19.938	1.00 79.43
ATOM C	764	CG2	VAL	X	536	7.707-103.648	19.136	1.00 76.10
ATOM N	765	N	ILE	X	537	4.873-105.515	18.025	1.00 70.04
ATOM C	766	CA	ILE	X	537	4.018-105.130	16.898	1.00 68.61
ATOM C	767	C	ILE	X	537	4.279-103.676	16.614	1.00 70.91
ATOM O	768	O	ILE	X	537	4.029-102.803	17.472	1.00 69.64
ATOM C	769	CB	ILE	X	537	2.561-105.277	17.318	1.00 67.51
ATOM C	770	CG1	ILE	X	537	2.229-106.754	17.440	1.00 67.35
ATOM C	771	CG2	ILE	X	537	1.661-104.594	16.358	1.00 67.08
ATOM C	772	CD1	ILE	X	537	3.056-107.673	16.561	1.00 66.95
ATOM N	773	N	ILE	X	538	4.823-103.409	15.435	1.00 74.39



ATOM	774	CA	ILE	X	538	5.138-102.053	15.032	1.00	75.57
C									
ATOM	775	C	ILE	X	538	4.158-101.423	14.078	1.00	76.15
C									
ATOM	776	O	ILE	X	538	3.892-100.236	14.154	1.00	75.68
O									
ATOM	777	CB	ILE	X	538	6.550-101.967	14.456	1.00	76.23
C									
ATOM	778	CG1	ILE	X	538	6.538-102.574	13.037	1.00	78.69
C									
ATOM	779	CG2	ILE	X	538	7.589-102.575	15.420	1.00	75.27
C									
ATOM	780	CD1	ILE	X	538	7.915-102.444	12.401	1.00	83.32
C									
ATOM	781	N	GLU	X	539	3.649-102.213	13.154	1.00	78.34
N									
ATOM	782	CA	GLU	X	539	2.716-101.674	12.202	1.00	81.80
C									
ATOM	783	C	GLU	X	539	1.529-102.528	11.985	1.00	73.08
C									
ATOM	784	O	GLU	X	539	1.671-103.656	11.585	1.00	68.43
O									
ATOM	785	CB	GLU	X	539	3.429-101.559	10.877	1.00	90.43
C									
ATOM	786	CG	GLU	X	539	2.792-100.640	9.862	1.00	95.52
C									
ATOM	787	CD	GLU	X	539	3.765-100.277	8.758	1.00	106.32
C									
ATOM	788	OE1	GLU	X	539	3.339 -99.661	7.769	1.00	119.53
O									
ATOM	789	OE2	GLU	X	539	4.962-100.609	8.868	1.00	111.12
O1-									
ATOM	790	N	HIE	X	540	0.354-102.004	12.251	1.00	69.39
N									
ATOM	791	CA	HIE	X	540	-0.834-102.751	11.941	1.00	69.09
C									
ATOM	792	C	HIE	X	540	-2.088-101.938	11.999	1.00	69.78
C									
ATOM	793	O	HIE	X	540	-2.286-101.167	12.902	1.00	68.81
O									
ATOM	794	CB	HIE	X	540	-0.942-103.995	12.744	1.00	68.96
C									
ATOM	795	CG	HIE	X	540	-2.135-104.793	12.391	1.00	71.25
C									
ATOM	796	CD2	HIE	X	540	-3.408-104.275	12.460	1.00	72.67
C									
ATOM	797	ND1	HIE	X	540	-2.260-106.060	11.947	1.00	72.24
N									
ATOM	798	NE2	HIE	X	540	-4.270-105.202	12.091	1.00	74.33
N									
ATOM	799	CE1	HIE	X	540	-3.598-106.293	11.771	1.00	73.74
C									
ATOM	800	N	LYS	X	541	-2.939-102.124	11.021	1.00	71.46
N									

ATOM	801	CA	LYS	X	541	-4.180	-101.393	10.940	1.00	72.74
C										
ATOM	802	C	LYS	X	541	-5.238	-101.749	11.943	1.00	73.19
C										
ATOM	803	O	LYS	X	541	-6.046	-100.926	12.318	1.00	72.88
O										
ATOM	804	CB	LYS	X	541	-4.790	-101.591	9.505	1.00	0.00
C										
ATOM	805	CG	LYS	X	541	-5.154	-103.056	9.195	1.00	0.00
C										
ATOM	806	CD	LYS	X	541	-5.606	-103.246	7.744	1.00	0.00
C										
ATOM	807	CE	LYS	X	541	-5.924	-104.725	7.497	1.00	0.00
C										
ATOM	808	NZ	LYS	X	541	-6.272	-104.982	6.091	1.00	0.00
N1+										
ATOM	809	N	SER	X	542	-5.276	-103.001	12.335	1.00	73.93
N										
ATOM	810	CA	SER	X	542	-6.341	-103.444	13.211	1.00	76.20
C										
ATOM	811	C	SER	X	542	-5.693	-104.278	14.311	1.00	76.71
C										
ATOM	812	O	SER	X	542	-4.848	-103.734	15.035	1.00	79.57
O										
ATOM	813	CB	SER	X	542	-7.368	-104.249	12.428	1.00	78.09
C										
ATOM	814	OG	SER	X	542	-6.824	-105.474	11.933	1.00	78.59
O1-										
ATOM	815	N	ILE	X	543	-5.933	-105.604	14.329	1.00	76.29
N										
ATOM	816	CA	ILE	X	543	-5.742	-106.428	15.543	1.00	76.23
C										
ATOM	817	C	ILE	X	543	-5.237	-107.829	15.305	1.00	74.18
C										
ATOM	818	O	ILE	X	543	-5.982	-108.784	15.625	1.00	73.45
O										
ATOM	819	CB	ILE	X	543	-7.081	-106.706	16.305	1.00	79.64
C										
ATOM	820	CG1	ILE	X	543	-8.277	-106.107	15.589	1.00	83.25
C										
ATOM	821	CG2	ILE	X	543	-7.019	-106.220	17.761	1.00	80.23
C										
ATOM	822	CD1	ILE	X	543	-9.529	-106.955	15.736	1.00	85.90
C										
ATOM	823	N	ILE	X	544	-3.924	-107.972	15.141	1.00	72.53
N										
ATOM	824	CA	ILE	X	544	-3.326	-109.348	15.011	1.00	73.00
C										
ATOM	825	C	ILE	X	544	-3.539	-110.299	16.221	1.00	72.80
C										
ATOM	826	O	ILE	X	544	-3.328	-109.916	17.357	1.00	72.02
O										
ATOM	827	CB	ILE	X	544	-1.806	-109.380	14.761	1.00	72.38
C										

ATOM	828	CG1	ILE	X	544	-1.077	-109.758	16.034	1.00	72.26
C										
ATOM	829	CG2	ILE	X	544	-1.296	-108.072	14.222	1.00	71.96
C										
ATOM	830	CD1	ILE	X	544	0.374	-109.492	15.904	1.00	72.90
C										
ATOM	831	N	CYS	X	545	-3.728	-111.588	15.930	1.00	73.41
N										
ATOM	832	CA	CYS	X	545	-4.574	-112.444	16.747	1.00	74.30
C										
ATOM	833	C	CYS	X	545	-4.581	-113.956	16.256	1.00	76.25
C										
ATOM	834	O	CYS	X	545	-4.620	-114.228	15.066	1.00	75.81
O										
ATOM	835	CB	CYS	X	545	-5.939	-111.742	16.826	1.00	74.42
C										
ATOM	836	SG	CYS	X	545	-7.379	-112.757	16.775	1.00	76.36
S										
ATOM	837	N	PRO	X	546	-4.448	-114.923	17.201	1.00	80.34
N										
ATOM	838	CA	PRO	X	546	-3.664	-116.171	17.096	1.00	80.77
C										
ATOM	839	C	PRO	X	546	-4.145	-117.003	15.990	1.00	81.18
C										
ATOM	840	O	PRO	X	546	-5.342	-117.185	15.847	1.00	81.79
O										
ATOM	841	CB	PRO	X	546	-3.989	-116.895	18.415	1.00	83.78
C										
ATOM	842	CG	PRO	X	546	-5.385	-116.464	18.747	1.00	85.17
C										
ATOM	843	CD	PRO	X	546	-5.443	-115.017	18.303	1.00	84.22
C										
ATOM	844	N	GLY	X	547	-3.242	-117.572	15.244	1.00	83.00
N										
ATOM	845	CA	GLY	X	547	-3.607	-118.030	13.914	1.00	89.17
C										
ATOM	846	C	GLY	X	547	-3.630	-116.921	12.851	1.00	91.24
C										
ATOM	847	O	GLY	X	547	-4.169	-117.109	11.745	1.00	88.00
O										
ATOM	848	N	TYR	X	548	-3.033	-115.775	13.199	1.00	95.27
N										
ATOM	849	CA	TYR	X	548	-2.503	-114.815	12.224	1.00	97.26
C										
ATOM	850	C	TYR	X	548	-1.421	-115.497	11.446	1.00	94.25
C										
ATOM	851	O	TYR	X	548	-0.425	-116.025	12.013	1.00	84.69
O										
ATOM	852	CB	TYR	X	548	-1.925	-113.549	12.914	1.00	99.80
C										
ATOM	853	CG	TYR	X	548	-1.366	-112.462	12.012	1.00	100.11
C										
ATOM	854	CD1	TYR	X	548	-2.236	-111.731	11.183	1.00	106.63
C										

ATOM	855	CD2	TYR	X	548	0.008-112.077	12.069	1.00	94.83
C									
ATOM	856	CE1	TYR	X	548	-1.769-110.697	10.370	1.00	108.10
C									
ATOM	857	CE2	TYR	X	548	0.495-111.032	11.271	1.00	96.77
C									
ATOM	858	CZ	TYR	X	548	-0.403-110.334	10.416	1.00	104.23
C									
ATOM	859	OH	TYR	X	548	-0.003-109.314	9.546	1.00	93.78
O									
ATOM	860	N	ASN	X	549	-1.595-115.411	10.136	1.00	94.67
N									
ATOM	861	CA	ASN	X	549	-0.591-115.845	9.252	1.00	93.31
C									
ATOM	862	C	ASN	X	549	0.300-114.740	8.741	1.00	89.22
C									
ATOM	863	O	ASN	X	549	-0.176-113.626	8.479	1.00	89.07
O									
ATOM	864	CB	ASN	X	549	-1.227-116.612	8.146	1.00	96.04
C									
ATOM	865	CG	ASN	X	549	-1.057-118.075	8.348	1.00	101.07
C									
ATOM	866	OD1	ASN	X	549	-1.960-118.716	8.876	1.00	114.23
O									
ATOM	867	ND2	ASN	X	549	0.197-118.538	8.249	1.00	98.35
N									
ATOM	868	N	ALA	X	550	1.606-115.029	8.667	1.00	83.55
N									
ATOM	869	CA	ALA	X	550	2.591-114.077	8.120	1.00	81.08
C									
ATOM	870	C	ALA	X	550	3.877-114.770	7.730	1.00	79.47
C									
ATOM	871	O	ALA	X	550	4.078-115.917	8.050	1.00	78.69
O									
ATOM	872	CB	ALA	X	550	2.883-112.961	9.121	1.00	80.55
C									
ATOM	873	N	VAL	X	551	4.746-114.041	7.047	1.00	80.35
N									
ATOM	874	CA	VAL	X	551	6.072-114.540	6.664	1.00	83.08
C									
ATOM	875	C	VAL	X	551	7.024-114.205	7.772	1.00	79.37
C									
ATOM	876	O	VAL	X	551	6.850-113.208	8.446	1.00	77.55
O									
ATOM	877	CB	VAL	X	551	6.676-113.818	5.413	1.00	89.75
C									
ATOM	878	CG1	VAL	X	551	7.878-114.595	4.871	1.00	91.53
C									
ATOM	879	CG2	VAL	X	551	5.640-113.552	4.298	1.00	90.91
C									
ATOM	880	N	LEU	X	552	8.110-114.944	7.846	1.00	76.40
N									
ATOM	881	CA	LEU	X	552	8.977-114.862	8.971	1.00	75.44
C									

ATOM C	882	C	LEU X 552	10.379-114.851	8.495	1.00	75.25
ATOM O	883	O	LEU X 552	10.900-115.862	8.090	1.00	78.07
ATOM C	884	CB	LEU X 552	8.744-116.068	9.902	1.00	75.63
ATOM C	885	CG	LEU X 552	9.957-116.628	10.665	1.00	75.97
ATOM C	886	CD1	LEU X 552	10.676-115.504	11.385	1.00	76.78
ATOM C	887	CD2	LEU X 552	9.510-117.680	11.651	1.00	75.86
ATOM N	888	N	HIE X 553	11.040-113.728	8.587	1.00	75.53
ATOM C	889	CA	HIE X 553	12.412-113.683	8.096	1.00	76.40
ATOM C	890	C	HIE X 553	13.388-113.852	9.198	1.00	75.37
ATOM O	891	O	HIE X 553	13.698-112.889	9.870	1.00	73.57
ATOM C	892	CB	HIE X 553	12.678-112.368	7.384	1.00	78.65
ATOM C	893	CG	HIE X 553	11.818-112.151	6.198	1.00	78.92
ATOM N	894	ND1	HIE X 553	12.336-111.823	4.967	1.00	78.93
ATOM C	895	CD2	HIE X 553	10.471-112.226	6.049	1.00	79.14
ATOM C	896	CE1	HIE X 553	11.343-111.725	4.101	1.00	81.69
ATOM N	897	NE2	HIE X 553	10.206-111.995	4.726	1.00	81.29
ATOM N	898	N	ILE X 554	13.983-115.014	9.294	1.00	77.67
ATOM C	899	CA	ILE X 554	15.019-115.188	10.259	1.00	84.16
ATOM C	900	C	ILE X 554	16.273-115.419	9.477	1.00	86.29
ATOM O	901	O	ILE X 554	16.342-116.342	8.694	1.00	89.40
ATOM C	902	CB	ILE X 554	14.774-116.432	11.064	1.00	90.51
ATOM C	903	CG1	ILE X 554	13.359-116.387	11.592	1.00	99.78
ATOM C	904	CG2	ILE X 554	15.784-116.528	12.179	1.00	90.62
ATOM C	905	CD1	ILE X 554	13.110-117.388	12.679	1.00	114.38
ATOM N	906	N	HIE X 555	17.255-114.560	9.657	1.00	89.39
ATOM C	907	CA	HIE X 555	18.532-114.698	8.980	1.00	92.87
ATOM C	908	C	HIE X 555	18.369-115.015	7.512	1.00	93.97

ATOM O	909	O	HIE	X	555	17.567-114.397	6.840	1.00101.30
ATOM C	910	CB	HIE	X	555	19.526-115.603	9.704	1.00 95.15
ATOM C	911	CG	HIE	X	555	19.047-116.992	9.952	1.00 97.46
ATOM C	912	CD2	HIE	X	555	19.799-118.094	9.625	1.00100.97
ATOM N	913	ND1	HIE	X	555	17.936-117.463	10.556	1.00 98.40
ATOM N	914	NE2	HIE	X	555	19.152-119.187	9.978	1.00104.00
ATOM C	915	CE1	HIE	X	555	18.015-118.831	10.541	1.00101.44
ATOM N	916	N	THR	X	556	19.100-116.002	7.022	1.00 92.24
ATOM C	917	CA	THR	X	556	18.980-116.355	5.633	1.00 88.37
ATOM C	918	C	THR	X	556	17.599-116.865	5.358	1.00 85.58
ATOM O	919	O	THR	X	556	17.019-116.547	4.352	1.00 90.88
ATOM C	920	CB	THR	X	556	19.950-117.453	5.217	1.00 91.28
ATOM O	921	OG1	THR	X	556	19.532-118.698	5.777	1.00 90.41
ATOM C	922	CG2	THR	X	556	21.341-117.132	5.657	1.00 91.94
ATOM N	923	N	CYS	X	557	17.058-117.653	6.260	1.00 82.04
ATOM C	924	CA	CYS	X	557	15.762-118.255	6.029	1.00 82.59
ATOM C	925	C	CYS	X	557	14.598-117.320	5.907	1.00 80.00
ATOM O	926	O	CYS	X	557	14.623-116.235	6.416	1.00 84.86
ATOM C	927	CB	CYS	X	557	15.455-119.259	7.108	1.00 84.04
ATOM S	928	SG	CYS	X	557	13.779-119.883	7.011	1.00 88.08
ATOM N	929	N	ILE	X	558	13.572-117.790	5.210	1.00 76.31
ATOM C	930	CA	ILE	X	558	12.377-117.037	5.005	1.00 75.03
ATOM C	931	C	ILE	X	558	11.184-117.976	4.884	1.00 75.21
ATOM O	932	O	ILE	X	558	10.823-118.388	3.780	1.00 75.03
ATOM C	933	CB	ILE	X	558	12.529-116.094	3.750	1.00 75.22
ATOM C	934	CG1	ILE	X	558	12.736-114.602	4.155	1.00 76.97
ATOM C	935	CG2	ILE	X	558	11.280-116.129	2.912	1.00 75.03

ATOM C	936	CD1	ILE	X	558	14.163-114.048	4.064	1.00	78.45
ATOM N	937	N	GLU	X	559	10.638-118.410	6.010	1.00	76.62
ATOM C	938	CA	GLU	X	559	9.539-119.357	5.957	1.00	81.40
ATOM C	939	C	GLU	X	559	8.263-118.795	6.470	1.00	81.63
ATOM O	940	O	GLU	X	559	8.250-117.957	7.313	1.00	77.82
ATOM C	941	CB	GLU	X	559	9.855-120.666	6.676	1.00	87.38
ATOM C	942	CG	GLU	X	559	8.863-121.789	6.341	1.00	96.64
ATOM C	943	CD	GLU	X	559	9.504-123.208	6.225	1.00	110.10
ATOM O	944	OE1	GLU	X	559	10.427-123.416	5.364	1.00	122.65
ATOM O1-	945	OE2	GLU	X	559	9.021-124.138	6.934	1.00	105.97
ATOM N	946	N	GLU	X	560	7.172-119.235	5.883	1.00	88.06
ATOM C	947	CA	GLU	X	560	5.877-118.749	6.249	1.00	94.05
ATOM C	948	C	GLU	X	560	5.607-119.304	7.609	1.00	90.18
ATOM O	949	O	GLU	X	560	6.208-120.304	7.984	1.00	91.72
ATOM C	950	CB	GLU	X	560	4.840-119.226	5.240	1.00	105.26
ATOM C	951	CG	GLU	X	560	3.419-118.873	5.606	1.00	121.21
ATOM C	952	CD	GLU	X	560	2.611-120.100	5.970	1.00	140.51
ATOM O	953	OE1	GLU	X	560	2.378-120.926	5.052	1.00	169.28
ATOM O1-	954	OE2	GLU	X	560	2.197-120.232	7.156	1.00	141.42
ATOM N	955	N	VAL	X	561	4.800-118.588	8.388	1.00	88.14
ATOM C	956	CA	VAL	X	561	4.611-118.873	9.827	1.00	85.37
ATOM C	957	C	VAL	X	561	3.216-118.427	10.325	1.00	88.33
ATOM O	958	O	VAL	X	561	2.497-117.636	9.664	1.00	87.04
ATOM C	959	CB	VAL	X	561	5.735-118.217	10.694	1.00	79.83
ATOM C	960	CG1	VAL	X	561	5.676-116.701	10.647	1.00	77.23
ATOM C	961	CG2	VAL	X	561	5.660-118.695	12.118	1.00	78.27
ATOM N	962	N	GLU	X	562	2.833-118.995	11.463	1.00	91.50

ATOM	963	CA	GLU	X	562	1.574	-118.688	12.136	1.00	95.36
C										
ATOM	964	C	GLU	X	562	1.878	-118.483	13.604	1.00	92.25
C										
ATOM	965	O	GLU	X	562	2.748	-119.149	14.163	1.00	92.21
O										
ATOM	966	CB	GLU	X	562	0.630	-119.876	11.970	1.00	104.12
C										
ATOM	967	CG	GLU	X	562	-0.650	-119.831	12.769	1.00	115.56
C										
ATOM	968	CD	GLU	X	562	-1.464	-121.128	12.615	1.00	131.20
C										
ATOM	969	OE1	GLU	X	562	-1.307	-121.826	11.573	1.00	125.28
O										
ATOM	970	OE2	GLU	X	562	-2.262	-121.455	13.545	1.00	161.29
O1-										
ATOM	971	N	ILE	X	563	1.234	-117.522	14.232	1.00	88.92
N										
ATOM	972	CA	ILE	X	563	1.416	-117.389	15.653	1.00	84.99
C										
ATOM	973	C	ILE	X	563	0.220	-118.054	16.267	1.00	85.70
C										
ATOM	974	O	ILE	X	563	-0.923	-117.680	16.028	1.00	81.09
O										
ATOM	975	CB	ILE	X	563	1.591	-115.948	16.098	1.00	83.46
C										
ATOM	976	CG1	ILE	X	563	0.252	-115.254	16.223	1.00	84.85
C										
ATOM	977	CG2	ILE	X	563	2.474	-115.184	15.126	1.00	82.75
C										
ATOM	978	CD1	ILE	X	563	0.379	-113.754	16.460	1.00	84.97
C										
ATOM	979	N	THR	X	564	0.520	-119.144	16.946	1.00	90.81
N										
ATOM	980	CA	THR	X	564	-0.387	-120.259	17.085	1.00	96.60
C										
ATOM	981	C	THR	X	564	-1.274	-120.093	18.271	1.00	100.43
C										
ATOM	982	O	THR	X	564	-2.471	-120.377	18.169	1.00	116.23
O										
ATOM	983	CB	THR	X	564	0.371	-121.581	17.288	1.00	100.42
C										
ATOM	984	OG1	THR	X	564	1.419	-121.418	18.251	1.00	96.80
O										
ATOM	985	CG2	THR	X	564	0.964	-122.018	15.992	1.00	106.91
C										
ATOM	986	N	ALA	X	565	-0.666	-119.846	19.444	1.00	96.09
N										
ATOM	987	CA	ALA	X	565	-1.099	-118.728	20.290	1.00	91.40
C										
ATOM	988	C	ALA	X	565	0.043	-117.807	20.686	1.00	88.41
C										
ATOM	989	O	ALA	X	565	1.248	-118.095	20.494	1.00	82.10
O										



ATOM	990	CB	ALA	X	565	-1.933	-119.162	21.520	1.00	89.89
C										
ATOM	991	N	LEU	X	566	-0.407	-116.592	20.966	1.00	89.27
N										
ATOM	992	CA	LEU	X	566	0.252	-115.658	21.846	1.00	86.41
C										
ATOM	993	C	LEU	X	566	-0.170	-115.878	23.332	1.00	85.89
C										
ATOM	994	O	LEU	X	566	-1.268	-116.434	23.630	1.00	81.74
O										
ATOM	995	CB	LEU	X	566	-0.030	-114.225	21.376	1.00	83.05
C										
ATOM	996	CG	LEU	X	566	-1.470	-113.909	20.956	1.00	83.22
C										
ATOM	997	CD1	LEU	X	566	-2.531	-114.341	21.972	1.00	85.37
C										
ATOM	998	CD2	LEU	X	566	-1.581	-112.437	20.736	1.00	82.15
C										
ATOM	999	N	ILE	X	567	0.714	-115.375	24.215	1.00	87.47
N										
ATOM	1000	CA	ILE	X	567	1.022	-115.948	25.561	1.00	89.81
C										
ATOM	1001	C	ILE	X	567	0.726	-114.919	26.652	1.00	91.07
C										
ATOM	1002	O	ILE	X	567	-0.249	-115.018	27.375	1.00	90.36
O										
ATOM	1003	CB	ILE	X	567	2.542	-116.270	25.784	1.00	86.88
C										
ATOM	1004	CG1	ILE	X	567	3.128	-117.162	24.694	1.00	84.15
C										
ATOM	1005	CG2	ILE	X	567	2.704	-116.883	27.161	1.00	89.32
C										
ATOM	1006	CD1	ILE	X	567	3.415	-118.596	25.124	1.00	84.97
C										
ATOM	1007	N	CYS	X	568	1.622	-113.958	26.765	1.00	91.18
N										
ATOM	1008	CA	CYS	X	568	1.554	-112.999	27.773	1.00	93.95
C										
ATOM	1009	C	CYS	X	568	1.887	-111.707	27.165	1.00	89.40
C										
ATOM	1010	O	CYS	X	568	3.003	-111.493	26.746	1.00	89.91
O										
ATOM	1011	CB	CYS	X	568	2.566	-113.297	28.831	1.00	101.92
C										
ATOM	1012	SG	CYS	X	568	1.937	-112.872	30.450	1.00	141.60
S										
ATOM	1013	N	LEU	X	569	0.950	-110.793	27.226	1.00	86.35
N										
ATOM	1014	CA	LEU	X	569	1.223	-109.394	26.950	1.00	84.93
C										
ATOM	1015	C	LEU	X	569	2.434	-108.898	27.787	1.00	81.67
C										
ATOM	1016	O	LEU	X	569	2.727	-109.457	28.847	1.00	87.92
O										

ATOM	1017	CB	LEU	X	569	-0.004-108.608	27.346	1.00	85.35
C									
ATOM	1018	CG	LEU	X	569	-0.265-107.514	26.347	1.00	88.21
C									
ATOM	1019	CD1	LEU	X	569	-0.972-108.046	25.074	1.00	86.80
C									
ATOM	1020	CD2	LEU	X	569	-1.000-106.390	27.086	1.00	88.97
C									
ATOM	1021	N	VAL	X	570	3.087-107.806	27.391	1.00	76.95
N									
ATOM	1022	CA	VAL	X	570	4.053-107.123	28.271	1.00	75.37
C									
ATOM	1023	C	VAL	X	570	4.009-105.610	28.067	1.00	78.47
C									
ATOM	1024	O	VAL	X	570	3.998-105.120	26.936	1.00	79.90
O									
ATOM	1025	CB	VAL	X	570	5.476-107.747	28.221	1.00	72.94
C									
ATOM	1026	CG1	VAL	X	570	5.812-108.508	26.928	1.00	71.30
C									
ATOM	1027	CG2	VAL	X	570	6.619-106.760	28.500	1.00	71.69
C									
ATOM	1028	N	ASP	X	571	3.971-104.867	29.173	1.00	82.45
N									
ATOM	1029	CA	ASP	X	571	4.013-103.408	29.166	1.00	86.41
C									
ATOM	1030	C	ASP	X	571	5.403-102.903	28.746	1.00	85.06
C									
ATOM	1031	O	ASP	X	571	6.452-103.307	29.259	1.00	79.42
O									
ATOM	1032	CB	ASP	X	571	3.555-102.846	30.523	1.00	93.59
C									
ATOM	1033	CG	ASP	X	571	3.858-101.351	30.684	1.00	104.33
C									
ATOM	1034	OD1	ASP	X	571	3.778-100.613	29.672	1.00	108.65
O									
ATOM	1035	OD2	ASP	X	571	4.311-100.960	31.783	1.00	115.26
O1-									
ATOM	1036	N	LYS	X	572	5.398-101.944	27.818	1.00	85.84
N									
ATOM	1037	CA	LYS	X	572	6.602-101.275	27.333	1.00	85.42
C									
ATOM	1038	C	LYS	X	572	7.262-100.428	28.412	1.00	83.37
C									
ATOM	1039	O	LYS	X	572	8.480-100.286	28.375	1.00	81.12
O									
ATOM	1040	CB	LYS	X	572	6.259-100.397	26.123	1.00	85.68
C									
ATOM	1041	CG	LYS	X	572	5.967-101.242	24.883	1.00	85.85
C									
ATOM	1042	CD	LYS	X	572	5.850-100.376	23.625	1.00	91.04
C									
ATOM	1043	CE	LYS	X	572	5.848-101.267	22.378	1.00	95.95
C									

ATOM N1+	1044	NZ	LYS	X	572	5.745-100.455	21.147	1.00	99.37
ATOM N	1045	N	LYS	X	573	6.503 -99.813	29.318	1.00	83.47
ATOM C	1046	CA	LYS	X	573	7.024 -98.833	30.279	1.00	86.06
ATOM C	1047	C	LYS	X	573	7.906 -99.463	31.354	1.00	82.54
ATOM O	1048	O	LYS	X	573	8.922 -98.879	31.745	1.00	80.90
ATOM C	1049	CB	LYS	X	573	5.832 -98.101	30.920	1.00	93.19
ATOM C	1050	CG	LYS	X	573	5.941 -96.614	30.623	1.00	101.84
ATOM C	1051	CD	LYS	X	573	4.883 -95.812	31.380	1.00	113.45
ATOM C	1052	CE	LYS	X	573	5.354 -94.369	31.313	1.00	122.27
ATOM N1+	1053	NZ	LYS	X	573	5.716 -93.874	32.691	1.00	127.89
ATOM N	1054	N	SER	X	574	7.490-100.627	31.830	1.00	79.70
ATOM C	1055	CA	SER	X	574	8.046-101.307	32.997	1.00	77.70
ATOM C	1056	C	SER	X	574	8.879-102.542	32.639	1.00	77.57
ATOM O	1057	O	SER	X	574	9.948-102.737	33.209	1.00	76.94
ATOM C	1058	CB	SER	X	574	6.875-101.693	33.906	1.00	76.97
ATOM O	1059	OG	SER	X	574	5.964-102.450	33.143	1.00	74.89
ATOM N	1060	N	GLY	X	575	8.429-103.372	31.695	1.00	77.50
ATOM C	1061	CA	GLY	X	575	8.859-104.775	31.600	1.00	76.99
ATOM C	1062	C	GLY	X	575	7.956-105.720	32.391	1.00	77.09
ATOM O	1063	O	GLY	X	575	8.254-106.911	32.510	1.00	73.60
ATOM N	1064	N	GLU	X	576	6.826-105.211	32.885	1.00	79.57
ATOM C	1065	CA	GLU	X	576	5.759-106.003	33.472	1.00	85.60
ATOM C	1066	C	GLU	X	576	5.220-106.960	32.412	1.00	86.07
ATOM O	1067	O	GLU	X	576	4.600-106.566	31.422	1.00	86.76
ATOM C	1068	CB	GLU	X	576	4.683-105.079	34.068	1.00	91.44
ATOM C	1069	CG	GLU	X	576	3.471-105.831	34.632	1.00	96.83
ATOM C	1070	CD	GLU	X	576	2.657-105.048	35.655	1.00	105.09

ATOM	1071	OE1	GLU	X	576	1.543-105.535	35.956	1.00108.78
O								
ATOM	1072	OE2	GLU	X	576	3.111-103.970	36.158	1.00116.28
O1-								
ATOM	1073	N	LYS	X	577	5.472-108.250	32.645	1.00 88.13
N								
ATOM	1074	CA	LYS	X	577	4.661-109.316	32.065	1.00 90.73
C								
ATOM	1075	C	LYS	X	577	3.200-109.148	32.483	1.00 89.17
C								
ATOM	1076	O	LYS	X	577	2.871-108.359	33.339	1.00 86.72
O								
ATOM	1077	CB	LYS	X	577	5.175-110.683	32.515	1.00 97.93
C								
ATOM	1078	CG	LYS	X	577	5.937-111.440	31.427	1.00103.29
C								
ATOM	1079	CD	LYS	X	577	7.350-110.886	31.190	1.00109.15
C								
ATOM	1080	CE	LYS	X	577	8.065-111.630	30.052	1.00113.69
C								
ATOM	1081	NZ	LYS	X	577	8.125-113.099	30.280	1.00111.84
N1+								
ATOM	1082	N	SER	X	578	2.322-109.868	31.827	1.00 90.26
N								
ATOM	1083	CA	SER	X	578	0.950-109.580	31.993	1.00 97.35
C								
ATOM	1084	C	SER	X	578	0.288-110.628	32.774	1.00102.11
C								
ATOM	1085	O	SER	X	578	0.762-111.744	32.880	1.00102.87
O								
ATOM	1086	CB	SER	X	578	0.249-109.485	30.677	1.00105.37
C								
ATOM	1087	OG	SER	X	578	-1.105-109.182	30.927	1.00122.65
O								
ATOM	1088	N	LYS	X	579	-0.920-110.320	33.181	1.00113.62
N								
ATOM	1089	CA	LYS	X	579	-1.535-111.007	34.289	1.00124.64
C								
ATOM	1090	C	LYS	X	579	-2.283-112.127	33.712	1.00114.47
C								
ATOM	1091	O	LYS	X	579	-1.900-113.286	33.830	1.00109.22
O								
ATOM	1092	CB	LYS	X	579	-2.481-110.044	35.000	1.00144.46
C								
ATOM	1093	CG	LYS	X	579	-1.809-108.711	35.376	1.00159.54
C								
ATOM	1094	CD	LYS	X	579	-1.713-107.730	34.211	1.00153.01
C								
ATOM	1095	CE	LYS	X	579	-2.098-106.339	34.663	1.00163.77
C								
ATOM	1096	NZ	LYS	X	579	-3.557-106.125	34.432	1.00177.32
N1+								
ATOM	1097	N	THR	X	580	-3.194-111.728	32.856	1.00114.54
N								

ATOM	1098	CA	THR	X	580	-3.903-112.640	32.027	1.00116.59
C								
ATOM	1099	C	THR	X	580	-3.123-112.938	30.713	1.00110.31
C								
ATOM	1100	O	THR	X	580	-2.069-112.350	30.426	1.00100.69
O								
ATOM	1101	CB	THR	X	580	-5.332-112.084	31.741	1.00115.97
C								
ATOM	1102	OG1	THR	X	580	-5.385-110.677	32.062	1.00107.71
O								
ATOM	1103	CG2	THR	X	580	-6.412-112.880	32.586	1.00113.43
C								
ATOM	1104	N	ARG	X	581	-3.619-113.949	29.998	1.00110.46
N								
ATOM	1105	CA	ARG	X	581	-3.384-114.142	28.553	1.00101.57
C								
ATOM	1106	C	ARG	X	581	-4.009-113.013	27.865	1.00 95.09
C								
ATOM	1107	O	ARG	X	581	-5.015-112.504	28.348	1.00 88.53
O								
ATOM	1108	CB	ARG	X	581	-4.118-115.402	28.045	1.00101.58
C								
ATOM	1109	CG	ARG	X	581	-3.270-116.466	27.372	1.00101.94
C								
ATOM	1110	CD	ARG	X	581	-4.043-117.795	27.222	1.00105.93
C								
ATOM	1111	NE	ARG	X	581	-3.183-118.955	27.374	1.00114.10
N								
ATOM	1112	CZ	ARG	X	581	-1.948-119.063	26.857	1.00128.84
C								
ATOM	1113	NH1	ARG	X	581	-1.441-118.126	26.054	1.00131.29
N								
ATOM	1114	NH2	ARG	X	581	-1.214-120.148	27.105	1.00144.90
N1+								
ATOM	1115	N	PRO	X	582	-3.529-112.725	26.656	1.00 94.63
N								
ATOM	1116	CA	PRO	X	582	-4.239-111.733	25.892	1.00 93.03
C								
ATOM	1117	C	PRO	X	582	-4.833-112.370	24.679	1.00 86.79
C								
ATOM	1118	O	PRO	X	582	-4.197-113.221	24.062	1.00 84.21
O								
ATOM	1119	CB	PRO	X	582	-3.143-110.745	25.506	1.00 97.79
C								
ATOM	1120	CG	PRO	X	582	-1.831-111.496	25.695	1.00101.74
C								
ATOM	1121	CD	PRO	X	582	-2.152-112.886	26.154	1.00 97.69
C								
ATOM	1122	N	ARG	X	583	-6.078-112.014	24.386	1.00 83.93
N								
ATOM	1123	CA	ARG	X	583	-6.791-112.530	23.204	1.00 82.07
C								
ATOM	1124	C	ARG	X	583	-6.128-112.095	21.805	1.00 78.34
C								

ATOM	1125	O	ARG	X	583	-6.431-112.688	20.749	1.00	76.41
O									
ATOM	1126	CB	ARG	X	583	-8.268-112.089	23.284	1.00	0.00
C									
ATOM	1127	CG	ARG	X	583	-8.974-112.419	24.611	1.00	0.00
C									
ATOM	1128	CD	ARG	X	583	-8.927-113.911	24.975	1.00	0.00
C									
ATOM	1129	NE	ARG	X	583	-9.605-114.178	26.252	1.00	0.00
N									
ATOM	1130	CZ	ARG	X	583	-9.079-113.991	27.478	1.00	0.00
C									
ATOM	1131	NH1	ARG	X	583	-7.833-113.520	27.646	1.00	0.00
N									
ATOM	1132	NH2	ARG	X	583	-9.817-114.281	28.559	1.00	0.00
N1+									
ATOM	1133	N	PHE	X	584	-5.171-111.147	21.850	1.00	74.41
N									
ATOM	1134	CA	PHE	X	584	-4.603-110.527	20.655	1.00	71.41
C									
ATOM	1135	C	PHE	X	584	-3.732-109.309	20.942	1.00	70.29
C									
ATOM	1136	O	PHE	X	584	-3.867-108.665	21.944	1.00	71.90
O									
ATOM	1137	CB	PHE	X	584	-5.712-110.034	19.804	1.00	71.04
C									
ATOM	1138	CG	PHE	X	584	-6.575-109.075	20.485	1.00	70.36
C									
ATOM	1139	CD1	PHE	X	584	-6.190-107.749	20.602	1.00	69.38
C									
ATOM	1140	CD2	PHE	X	584	-7.778-109.471	20.983	1.00	71.27
C									
ATOM	1141	CE1	PHE	X	584	-7.013-106.827	21.181	1.00	70.08
C									
ATOM	1142	CE2	PHE	X	584	-8.613-108.544	21.556	1.00	72.45
C									
ATOM	1143	CZ	PHE	X	584	-8.224-107.216	21.666	1.00	71.43
C									
ATOM	1144	N	VAL	X	585	-2.954-108.893	19.990	1.00	68.64
N									
ATOM	1145	CA	VAL	X	585	-2.083-107.808	20.244	1.00	69.44
C									
ATOM	1146	C	VAL	X	585	-2.337-106.825	19.147	1.00	72.06
C									
ATOM	1147	O	VAL	X	585	-2.132-107.207	17.993	1.00	74.54
O									
ATOM	1148	CB	VAL	X	585	-0.612-108.283	20.124	1.00	68.48
C									
ATOM	1149	CG1	VAL	X	585	-0.356-109.721	19.905	1.00	68.35
C									
ATOM	1150	CG2	VAL	X	585	0.453-107.292	19.801	1.00	68.24
C									
ATOM	1151	N	LYS	X	586	-2.597-105.537	19.474	1.00	74.69
N									

ATOM	1152	CA	LYS	X	586	-2.608	-104.404	18.459	1.00	76.43
C										
ATOM	1153	C	LYS	X	586	-1.218	-103.742	18.190	1.00	73.93
C										
ATOM	1154	O	LYS	X	586	-0.160	-104.291	18.484	1.00	70.24
O										
ATOM	1155	CB	LYS	X	586	-3.577	-103.302	18.876	1.00	81.59
C										
ATOM	1156	CG	LYS	X	586	-4.882	-103.781	19.488	1.00	89.56
C										
ATOM	1157	CD	LYS	X	586	-5.315	-102.915	20.706	1.00	101.48
C										
ATOM	1158	CE	LYS	X	586	-6.231	-101.729	20.341	1.00	110.24
C										
ATOM	1159	NZ	LYS	X	586	-7.586	-102.152	19.838	1.00	118.13
N1+										
ATOM	1160	N	GLN	X	587	-1.225	-102.556	17.610	1.00	74.42
N										
ATOM	1161	CA	GLN	X	587	0.048	-101.979	17.151	1.00	74.60
C										
ATOM	1162	C	GLN	X	587	0.882	-101.677	18.344	1.00	77.05
C										
ATOM	1163	O	GLN	X	587	0.410	-101.756	19.455	1.00	74.24
O										
ATOM	1164	CB	GLN	X	587	-0.183	-100.705	16.281	1.00	73.79
C										
ATOM	1165	CG	GLN	X	587	0.933	-100.311	15.279	1.00	71.09
C										
ATOM	1166	CD	GLN	X	587	0.395	-99.366	14.178	1.00	69.89
C										
ATOM	1167	OE1	GLN	X	587	-0.291	-99.793	13.246	1.00	68.35
O										
ATOM	1168	NE2	GLN	X	587	0.633	-98.090	14.342	1.00	69.44
N										
ATOM	1169	N	ASP	X	588	2.077	-101.179	18.113	1.00	84.86
N										
ATOM	1170	CA	ASP	X	588	2.678	-100.228	19.069	1.00	95.40
C										
ATOM	1171	C	ASP	X	588	2.733	-100.802	20.491	1.00	88.61
C										
ATOM	1172	O	ASP	X	588	2.862	-100.004	21.456	1.00	83.56
O										
ATOM	1173	CB	ASP	X	588	1.844	-98.907	19.122	1.00	113.99
C										
ATOM	1174	CG	ASP	X	588	2.560	-97.700	18.459	1.00	135.12
C										
ATOM	1175	OD1	ASP	X	588	3.710	-97.414	18.893	1.00	143.71
O										
ATOM	1176	OD2	ASP	X	588	1.929	-96.992	17.580	1.00	151.78
O1-										
ATOM	1177	N	GLN	X	589	2.809	-102.164	20.565	1.00	82.57
N										
ATOM	1178	CA	GLN	X	589	2.436	-103.043	21.739	1.00	77.34
C										

ATOM	1179	C	GLN	X	589	3.387-104.258	21.713	1.00	74.15
C									
ATOM	1180	O	GLN	X	589	4.104-104.472	20.731	1.00	72.78
O									
ATOM	1181	CB	GLN	X	589	0.982-103.438	21.622	1.00	77.47
C									
ATOM	1182	CG	GLN	X	589	0.394-104.289	22.741	1.00	78.96
C									
ATOM	1183	CD	GLN	X	589	-1.119-104.468	22.543	1.00	82.47
C									
ATOM	1184	OE1	GLN	X	589	-1.639-104.118	21.499	1.00	91.27
O									
ATOM	1185	NE2	GLN	X	589	-1.805-105.035	23.499	1.00	82.52
N									
ATOM	1186	N	VAL	X	590	3.502-104.998	22.820	1.00	73.85
N									
ATOM	1187	CA	VAL	X	590	4.391-106.168	22.926	1.00	74.77
C									
ATOM	1188	C	VAL	X	590	3.623-107.363	23.468	1.00	77.97
C									
ATOM	1189	O	VAL	X	590	2.819-107.238	24.395	1.00	82.58
O									
ATOM	1190	CB	VAL	X	590	5.630-105.918	23.814	1.00	73.51
C									
ATOM	1191	CG1	VAL	X	590	6.766-106.899	23.487	1.00	72.69
C									
ATOM	1192	CG2	VAL	X	590	6.188-104.502	23.684	1.00	73.61
C									
ATOM	1193	N	CYS	X	591	3.927-108.539	22.934	1.00	80.20
N									
ATOM	1194	CA	CYS	X	591	3.470-109.808	23.473	1.00	81.78
C									
ATOM	1195	C	CYS	X	591	4.584-110.837	23.509	1.00	81.54
C									
ATOM	1196	O	CYS	X	591	5.699-110.589	23.037	1.00	79.28
O									
ATOM	1197	CB	CYS	X	591	2.303-110.312	22.630	1.00	85.09
C									
ATOM	1198	SG	CYS	X	591	2.793-110.701	20.872	1.00	90.44
S									
ATOM	1199	N	ILE	X	592	4.242-112.019	24.022	1.00	84.43
N									
ATOM	1200	CA	ILE	X	592	5.136-113.190	23.873	1.00	88.90
C									
ATOM	1201	C	ILE	X	592	4.280-114.267	23.318	1.00	88.17
C									
ATOM	1202	O	ILE	X	592	3.088-114.288	23.590	1.00	95.60
O									
ATOM	1203	CB	ILE	X	592	5.778-113.680	25.201	1.00	89.79
C									
ATOM	1204	CG1	ILE	X	592	5.165-112.982	26.400	1.00	95.24
C									
ATOM	1205	CG2	ILE	X	592	7.293-113.476	25.113	1.00	88.75
C									



ATOM	1206	CD1	ILE	X	592	5.878-113.183	27.725	1.00101.07
C								
ATOM	1207	N	ALA	X	593	4.810-115.001	22.357	1.00 82.48
N								
ATOM	1208	CA	ALA	X	593	3.967-115.814	21.589	1.00 78.26
C								
ATOM	1209	C	ALA	X	593	4.738-116.912	21.010	1.00 77.82
C								
ATOM	1210	O	ALA	X	593	5.971-116.820	20.918	1.00 73.84
O								
ATOM	1211	CB	ALA	X	593	3.314-114.990	20.535	1.00 76.36
C								
ATOM	1212	N	ARG	X	594	4.018-118.008	20.759	1.00 80.99
N								
ATOM	1213	CA	ARG	X	594	4.582-119.203	20.185	1.00 87.95
C								
ATOM	1214	C	ARG	X	594	4.161-119.348	18.733	1.00 89.01
C								
ATOM	1215	O	ARG	X	594	3.077-118.913	18.338	1.00 88.97
O								
ATOM	1216	CB	ARG	X	594	4.149-120.434	20.966	1.00 97.43
C								
ATOM	1217	CG	ARG	X	594	4.899-121.721	20.569	1.00108.42
C								
ATOM	1218	CD	ARG	X	594	4.477-123.001	21.343	1.00118.55
C								
ATOM	1219	NE	ARG	X	594	3.484-122.763	22.401	1.00125.50
N								
ATOM	1220	CZ	ARG	X	594	3.710-122.876	23.708	1.00130.52
C								
ATOM	1221	NH1	ARG	X	594	4.889-123.308	24.149	1.00135.24
N								
ATOM	1222	NH2	ARG	X	594	2.736-122.585	24.581	1.00131.51
N1+								
ATOM	1223	N	LEU	X	595	5.028-119.977	17.942	1.00 89.94
N								
ATOM	1224	CA	LEU	X	595	5.086-119.752	16.502	1.00 90.65
C								
ATOM	1225	C	LEU	X	595	5.464-121.079	15.792	1.00 99.50
C								
ATOM	1226	O	LEU	X	595	6.494-121.668	16.126	1.00106.88
O								
ATOM	1227	CB	LEU	X	595	6.160-118.695	16.204	1.00 84.60
C								
ATOM	1228	CG	LEU	X	595	5.710-117.268	15.911	1.00 81.45
C								
ATOM	1229	CD1	LEU	X	595	5.303-116.578	17.161	1.00 80.87
C								
ATOM	1230	CD2	LEU	X	595	6.824-116.456	15.271	1.00 80.00
C								
ATOM	1231	N	ARG	X	596	4.634-121.546	14.834	1.00106.33
N								
ATOM	1232	CA	ARG	X	596	4.963-122.733	13.967	1.00106.23
C								

ATOM	1233	C	ARG	X	596	5.233-122.348	12.511	1.00	99.46
C									
ATOM	1234	O	ARG	X	596	4.361-121.860	11.795	1.00	95.68
O									
ATOM	1235	CB	ARG	X	596	3.864-123.826	14.022	1.00	116.26
C									
ATOM	1236	CG	ARG	X	596	3.744-124.521	15.392	1.00	132.16
C									
ATOM	1237	CD	ARG	X	596	3.485-126.033	15.342	1.00	139.66
C									
ATOM	1238	NE	ARG	X	596	2.632-126.441	14.218	1.00	141.89
N									
ATOM	1239	CZ	ARG	X	596	1.335-126.151	14.094	1.00	141.99
C									
ATOM	1240	NH1	ARG	X	596	0.691-125.450	15.026	1.00	138.07
N									
ATOM	1241	NH2	ARG	X	596	0.670-126.589	13.034	1.00	150.20
N1+									
ATOM	1242	N	THR	X	597	6.437-122.645	12.074	1.00	96.28
N									
ATOM	1243	CA	THR	X	597	6.825-122.474	10.689	1.00	97.24
C									
ATOM	1244	C	THR	X	597	6.318-123.659	9.869	1.00	105.53
C									
ATOM	1245	O	THR	X	597	6.764-124.789	10.069	1.00	113.02
O									
ATOM	1246	CB	THR	X	597	8.367-122.434	10.554	1.00	93.82
C									
ATOM	1247	OG1	THR	X	597	8.907-123.770	10.534	1.00	90.53
O									
ATOM	1248	CG2	THR	X	597	8.978-121.668	11.690	1.00	92.97
C									
ATOM	1249	N	ALA	X	598	5.471-123.405	8.879	1.00	112.32
N									
ATOM	1250	CA	ALA	X	598	4.806-124.510	8.159	1.00	120.00
C									
ATOM	1251	C	ALA	X	598	5.779-125.481	7.460	1.00	120.06
C									
ATOM	1252	O	ALA	X	598	5.333-126.368	6.700	1.00	122.80
O									
ATOM	1253	CB	ALA	X	598	3.780-123.977	7.155	1.00	121.93
C									
ATOM	1254	N	GLY	X	599	7.084-125.316	7.707	1.00	114.20
N									
ATOM	1255	CA	GLY	X	599	8.047-126.399	7.511	1.00	119.36
C									
ATOM	1256	C	GLY	X	599	8.948-126.637	8.714	1.00	126.06
C									
ATOM	1257	O	GLY	X	599	8.523-127.260	9.710	1.00	137.50
O									
ATOM	1258	N	THR	X	600	10.217-126.230	8.575	1.00	118.67
N									
ATOM	1259	CA	THR	X	600	11.252-126.486	9.583	1.00	107.35
C									

ATOM	1260	C	THR	X	600	12.341-125.482	9.431	1.00100.64
C								
ATOM	1261	O	THR	X	600	12.693-125.086	8.319	1.00102.77
O								
ATOM	1262	CB	THR	X	600	11.858-127.906	9.449	1.00108.25
C								
ATOM	1263	OG1	THR	X	600	11.680-128.598	10.681	1.00110.62
O								
ATOM	1264	CG2	THR	X	600	13.371-127.892	9.078	1.00105.78
C								
ATOM	1265	N	ILE	X	601	12.926-125.119	10.541	1.00 94.73
N								
ATOM	1266	CA	ILE	X	601	13.813-124.003	10.564	1.00 95.09
C								
ATOM	1267	C	ILE	X	601	15.137-124.502	11.103	1.00 95.79
C								
ATOM	1268	O	ILE	X	601	15.301-125.701	11.285	1.00 93.00
O								
ATOM	1269	CB	ILE	X	601	13.183-122.897	11.437	1.00 98.59
C								
ATOM	1270	CG1	ILE	X	601	12.045-122.209	10.707	1.00 99.59
C								
ATOM	1271	CG2	ILE	X	601	14.173-121.825	11.814	1.00101.91
C								
ATOM	1272	CD1	ILE	X	601	12.435-121.695	9.335	1.00106.62
C								
ATOM	1273	N	CYS	X	602	16.114-123.613	11.267	1.00101.36
N								
ATOM	1274	CA	CYS	X	602	17.107-123.764	12.352	1.00115.27
C								
ATOM	1275	C	CYS	X	602	17.317-122.503	13.267	1.00117.58
C								
ATOM	1276	O	CYS	X	602	18.150-121.611	12.982	1.00113.02
O								
ATOM	1277	CB	CYS	X	602	18.426-124.280	11.796	1.00120.85
C								
ATOM	1278	SG	CYS	X	602	18.479-124.161	9.999	1.00147.23
S								
ATOM	1279	N	LEU	X	603	16.603-122.517	14.408	1.00116.91
N								
ATOM	1280	CA	LEU	X	603	16.599-121.436	15.383	1.00114.84
C								
ATOM	1281	C	LEU	X	603	17.819-121.425	16.268	1.00114.37
C								
ATOM	1282	O	LEU	X	603	18.456-122.456	16.457	1.00110.70
O								
ATOM	1283	CB	LEU	X	603	15.397-121.598	16.287	1.00118.83
C								
ATOM	1284	CG	LEU	X	603	14.083-121.327	15.583	1.00125.10
C								
ATOM	1285	CD1	LEU	X	603	13.060-122.385	15.991	1.00130.46
C								
ATOM	1286	CD2	LEU	X	603	13.603-119.896	15.869	1.00127.40
C								

ATOM	1287	N	GLU	X	604	18.100-120.248	16.839	1.00113.51
N								
ATOM	1288	CA	GLU	X	604	18.685-120.118	18.178	1.00113.33
C								
ATOM	1289	C	GLU	X	604	17.854-119.168	19.020	1.00108.09
C								
ATOM	1290	O	GLU	X	604	17.144-118.331	18.497	1.00107.95
O								
ATOM	1291	CB	GLU	X	604	20.115-119.586	18.099	1.00121.11
C								
ATOM	1292	CG	GLU	X	604	21.088-120.492	17.350	1.00134.31
C								
ATOM	1293	CD	GLU	X	604	21.440-121.784	18.083	1.00136.25
C								
ATOM	1294	OE1	GLU	X	604	21.432-121.796	19.352	1.00126.79
O								
ATOM	1295	OE2	GLU	X	604	21.730-122.782	17.349	1.00135.21
O1-								
ATOM	1296	N	THR	X	605	17.991-119.258	20.335	1.00110.47
N								
ATOM	1297	CA	THR	X	605	17.361-118.280	21.236	1.00108.87
C								
ATOM	1298	C	THR	X	605	18.218-117.046	21.275	1.00102.44
C								
ATOM	1299	O	THR	X	605	19.426-117.134	21.198	1.00103.33
O								
ATOM	1300	CB	THR	X	605	17.182-118.830	22.668	1.00112.98
C								
ATOM	1301	OG1	THR	X	605	18.441-118.867	23.336	1.00113.32
O								
ATOM	1302	CG2	THR	X	605	16.598-120.252	22.634	1.00118.01
C								
ATOM	1303	N	PHE	X	606	17.566-115.918	21.400	1.00 98.50
N								
ATOM	1304	CA	PHE	X	606	18.243-114.646	21.443	1.00100.16
C								
ATOM	1305	C	PHE	X	606	18.964-114.966	22.706	1.00105.64
C								
ATOM	1306	O	PHE	X	606	18.638-115.945	23.348	1.00 99.13
O								
ATOM	1307	CB	PHE	X	606	17.375-113.418	21.585	1.00 96.21
C								
ATOM	1308	CG	PHE	X	606	18.107-112.079	21.395	1.00 91.06
C								
ATOM	1309	CD1	PHE	X	606	19.473-111.868	21.112	1.00 89.19
C								
ATOM	1310	CD2	PHE	X	606	17.315-110.955	21.497	1.00 91.01
C								
ATOM	1311	CE1	PHE	X	606	19.956-110.562	20.882	1.00 89.61
C								
ATOM	1312	CE2	PHE	X	606	17.756-109.657	21.200	1.00 91.02
C								
ATOM	1313	CZ	PHE	X	606	19.094-109.464	20.872	1.00 91.88
C								

ATOM N	1314	N	LYS X 607	19.966-114.177	23.048	1.00111.98
ATOM C	1315	CA	LYS X 607	20.706-114.402	24.274	1.00116.00
ATOM C	1316	C	LYS X 607	21.576-115.586	24.024	1.00114.29
ATOM O	1317	O	LYS X 607	22.784-115.494	24.133	1.00111.17
ATOM C	1318	CB	LYS X 607	19.742-114.672	25.490	1.00 0.00
ATOM C	1319	CG	LYS X 607	20.374-114.410	26.872	1.00 0.00
ATOM C	1320	CD	LYS X 607	20.774-112.947	27.152	1.00 0.00
ATOM C	1321	CE	LYS X 607	19.600-111.961	27.052	1.00 0.00
ATOM N1+	1322	NZ	LYS X 607	20.023-110.580	27.330	1.00 0.00
ATOM N	1323	N	ASP X 608	20.976-116.706	23.660	1.00118.32
ATOM C	1324	CA	ASP X 608	21.777-117.877	23.369	1.00129.53
ATOM C	1325	C	ASP X 608	22.619-117.486	22.179	1.00130.69
ATOM O	1326	O	ASP X 608	23.796-117.787	22.101	1.00138.83
ATOM C	1327	CB	ASP X 608	20.901-119.065	23.026	1.00136.01
ATOM C	1328	CG	ASP X 608	21.654-120.362	23.084	1.00144.15
ATOM O	1329	OD1	ASP X 608	22.896-120.324	23.140	1.00144.04
ATOM O1-	1330	OD2	ASP X 608	21.007-121.423	23.079	1.00152.67
ATOM N	1331	N	PHE X 609	21.975-116.788	21.259	1.00130.19
ATOM C	1332	CA	PHE X 609	22.591-116.267	20.056	1.00131.42
ATOM C	1333	C	PHE X 609	21.757-115.079	19.707	1.00128.48
ATOM O	1334	O	PHE X 609	20.632-114.995	20.180	1.00134.16
ATOM C	1335	CB	PHE X 609	22.549-117.262	18.922	1.00127.37
ATOM C	1336	CG	PHE X 609	23.872-117.833	18.612	1.00128.49
ATOM C	1337	CD1	PHE X 609	24.912-117.004	18.280	1.00139.79
ATOM C	1338	CD2	PHE X 609	24.088-119.184	18.677	1.00127.22
ATOM C	1339	CE1	PHE X 609	26.155-117.514	18.004	1.00152.19
ATOM C	1340	CE2	PHE X 609	25.328-119.709	18.399	1.00139.97

ATOM	1341	CZ	PHE	X	609	26.365-118.871	18.062	1.00153.78
C								
ATOM	1342	N	PRO	X	610	22.333-114.127	18.886	1.00119.07
N								
ATOM	1343	CA	PRO	X	610	21.470-112.998	18.597	1.00113.35
C								
ATOM	1344	C	PRO	X	610	21.084-112.872	17.143	1.00106.42
C								
ATOM	1345	O	PRO	X	610	19.913-112.814	16.818	1.00105.73
O								
ATOM	1346	CB	PRO	X	610	22.365-111.833	18.954	1.00114.87
C								
ATOM	1347	CG	PRO	X	610	23.709-112.270	18.481	1.00120.01
C								
ATOM	1348	CD	PRO	X	610	23.673-113.758	18.278	1.00121.27
C								
ATOM	1349	N	GLN	X	611	22.064-112.863	16.263	1.00101.17
N								
ATOM	1350	CA	GLN	X	611	21.795-112.659	14.852	1.00102.79
C								
ATOM	1351	C	GLN	X	611	20.912-113.707	14.233	1.00 96.03
C								
ATOM	1352	O	GLN	X	611	20.278-113.481	13.221	1.00 85.07
O								
ATOM	1353	CB	GLN	X	611	23.093-112.555	14.070	1.00112.81
C								
ATOM	1354	CG	GLN	X	611	24.279-113.232	14.719	1.00118.29
C								
ATOM	1355	CD	GLN	X	611	25.203-112.244	15.382	1.00121.32
C								
ATOM	1356	OE1	GLN	X	611	25.019-111.040	15.268	1.00110.50
O								
ATOM	1357	NE2	GLN	X	611	26.207-112.747	16.072	1.00134.65
N								
ATOM	1358	N	MET	X	612	20.896-114.868	14.836	1.00 95.54
N								
ATOM	1359	CA	MET	X	612	20.134-115.978	14.325	1.00100.94
C								
ATOM	1360	C	MET	X	612	18.866-116.220	15.102	1.00101.50
C								
ATOM	1361	O	MET	X	612	18.093-117.126	14.777	1.00103.12
O								
ATOM	1362	CB	MET	X	612	20.966-117.217	14.365	1.00110.20
C								
ATOM	1363	CG	MET	X	612	22.460-116.930	14.329	1.00121.62
C								
ATOM	1364	SD	MET	X	612	23.432-118.351	13.814	1.00137.07
S								
ATOM	1365	CE	MET	X	612	22.225-119.706	13.850	1.00127.87
C								
ATOM	1366	N	GLY	X	613	18.622-115.379	16.098	1.00101.62
N								
ATOM	1367	CA	GLY	X	613	17.343-115.387	16.816	1.00101.93
C								

ATOM	1368	C	GLY	X	613	16.646-114.031	16.960	1.00	99.37
C									
ATOM	1369	O	GLY	X	613	15.633-113.926	17.652	1.00	100.67
O									
ATOM	1370	N	ARG	X	614	17.192-112.954	16.388	1.00	97.17
N									
ATOM	1371	CA	ARG	X	614	16.354-111.820	16.010	1.00	93.74
C									
ATOM	1372	C	ARG	X	614	15.698-112.157	14.685	1.00	82.90
C									
ATOM	1373	O	ARG	X	614	16.220-112.907	13.860	1.00	77.54
O									
ATOM	1374	CB	ARG	X	614	17.060-110.455	16.036	1.00	106.44
C									
ATOM	1375	CG	ARG	X	614	17.841-110.076	14.762	1.00	122.15
C									
ATOM	1376	CD	ARG	X	614	19.336-109.996	15.018	1.00	134.83
C									
ATOM	1377	NE	ARG	X	614	19.737-108.756	15.690	1.00	139.55
N									
ATOM	1378	CZ	ARG	X	614	20.988-108.455	15.961	1.00	149.55
C									
ATOM	1379	NH1	ARG	X	614	21.268-107.298	16.571	1.00	151.42
N									
ATOM	1380	NH2	ARG	X	614	21.982-109.292	15.637	1.00	147.82
N1+									
ATOM	1381	N	PHE	X	615	14.529-111.614	14.475	1.00	77.56
N									
ATOM	1382	CA	PHE	X	615	13.816-111.886	13.253	1.00	75.64
C									
ATOM	1383	C	PHE	X	615	12.719-110.880	13.110	1.00	73.46
C									
ATOM	1384	O	PHE	X	615	12.354-110.163	14.046	1.00	78.25
O									
ATOM	1385	CB	PHE	X	615	13.280-113.316	13.320	1.00	75.52
C									
ATOM	1386	CG	PHE	X	615	12.080-113.496	14.189	1.00	74.68
C									
ATOM	1387	CD1	PHE	X	615	10.829-113.164	13.664	1.00	73.49
C									
ATOM	1388	CD2	PHE	X	615	12.219-113.984	15.500	1.00	76.20
C									
ATOM	1389	CE1	PHE	X	615	9.702-113.360	14.460	1.00	75.20
C									
ATOM	1390	CE2	PHE	X	615	11.080-114.174	16.293	1.00	76.24
C									
ATOM	1391	CZ	PHE	X	615	9.813-113.874	15.766	1.00	75.61
C									
ATOM	1392	N	THR	X	616	12.138-110.883	11.931	1.00	69.02
N									
ATOM	1393	CA	THR	X	616	11.117-109.916	11.625	1.00	66.36
C									
ATOM	1394	C	THR	X	616	10.020-110.695	11.008	1.00	65.84
C									

ATOM	1395	O	THR	X	616	10.191-111.252	9.959	1.00	65.77
O									
ATOM	1396	CB	THR	X	616	11.660-108.888	10.658	1.00	65.45
C									
ATOM	1397	OG1	THR	X	616	10.589-108.341	9.918	1.00	64.53
O									
ATOM	1398	CG2	THR	X	616	12.706-109.487	9.713	1.00	64.91
C									
ATOM	1399	N	LEU	X	617	8.864-110.736	11.641	1.00	66.15
N									
ATOM	1400	CA	LEU	X	617	7.646-111.040	10.885	1.00	67.73
C									
ATOM	1401	C	LEU	X	617	7.479-110.009	9.832	1.00	70.71
C									
ATOM	1402	O	LEU	X	617	7.924-108.895	10.034	1.00	72.09
O									
ATOM	1403	CB	LEU	X	617	6.409-110.999	11.746	1.00	66.99
C									
ATOM	1404	CG	LEU	X	617	5.974-112.365	12.248	1.00	66.45
C									
ATOM	1405	CD1	LEU	X	617	7.107-113.005	12.971	1.00	65.99
C									
ATOM	1406	CD2	LEU	X	617	4.764-112.300	13.161	1.00	66.75
C									
ATOM	1407	N	ARG	X	618	6.810-110.366	8.731	1.00	74.32
N									
ATOM	1408	CA	ARG	X	618	6.718-109.508	7.532	1.00	77.36
C									
ATOM	1409	C	ARG	X	618	5.504-109.970	6.728	1.00	79.60
C									
ATOM	1410	O	ARG	X	618	5.249-111.147	6.640	1.00	78.36
O									
ATOM	1411	CB	ARG	X	618	7.991-109.630	6.708	1.00	79.19
C									
ATOM	1412	CG	ARG	X	618	8.412-108.343	6.042	1.00	85.21
C									
ATOM	1413	CD	ARG	X	618	9.651-107.773	6.678	1.00	94.93
C									
ATOM	1414	NE	ARG	X	618	10.860-108.567	6.384	1.00	107.11
N									
ATOM	1415	CZ	ARG	X	618	11.776-108.252	5.454	1.00	124.56
C									
ATOM	1416	NH1	ARG	X	618	11.608-107.183	4.662	1.00	134.53
N									
ATOM	1417	NH2	ARG	X	618	12.863-109.021	5.293	1.00	125.90
N1+									
ATOM	1418	N	ASP	X	619	4.638-109.059	6.327	1.00	85.89
N									
ATOM	1419	CA	ASP	X	619	3.395-109.458	5.632	1.00	94.58
C									
ATOM	1420	C	ASP	X	619	3.060-108.372	4.630	1.00	106.52
C									
ATOM	1421	O	ASP	X	619	3.270-107.176	4.918	1.00	126.63
O									



ATOM C	1422	CB	ASP	X	619	2.224-109.684	6.633	1.00	94.80
ATOM C	1423	CG	ASP	X	619	0.903-110.141	5.937	1.00	97.34
ATOM O	1424	OD1	ASP	X	619	0.788-111.315	5.487	1.00	100.29
ATOM O1-	1425	OD2	ASP	X	619	-0.051-109.343	5.909	1.00	96.99
ATOM N	1426	N	GLU	X	620	2.595-108.767	3.440	1.00	110.34
ATOM C	1427	CA	GLU	X	620	2.479-107.818	2.330	1.00	113.40
ATOM C	1428	C	GLU	X	620	3.787-106.997	2.249	1.00	110.06
ATOM O	1429	O	GLU	X	620	3.737-105.772	2.118	1.00	117.61
ATOM C	1430	CB	GLU	X	620	1.329-106.826	2.587	1.00	122.78
ATOM C	1431	CG	GLU	X	620	-0.079-107.408	2.650	1.00	128.44
ATOM C	1432	CD	GLU	X	620	-1.086-106.483	3.365	1.00	132.76
ATOM O	1433	OE1	GLU	X	620	-2.282-106.558	3.034	1.00	146.79
ATOM O1-	1434	OE2	GLU	X	620	-0.689-105.658	4.230	1.00	123.54
ATOM N	1435	N	GLY	X	621	4.932-107.621	2.533	1.00	100.84
ATOM C	1436	CA	GLY	X	621	6.228-106.973	2.298	1.00	95.86
ATOM C	1437	C	GLY	X	621	6.575-105.837	3.259	1.00	95.59
ATOM O	1438	O	GLY	X	621	7.766-105.523	3.437	1.00	94.55
ATOM N	1439	N	LYS	X	622	5.564-105.321	3.976	1.00	94.74
ATOM C	1440	CA	LYS	X	622	5.804-104.524	5.196	1.00	93.07
ATOM C	1441	C	LYS	X	622	6.471-105.315	6.270	1.00	86.13
ATOM O	1442	O	LYS	X	622	6.237-106.507	6.424	1.00	80.59
ATOM C	1443	CB	LYS	X	622	4.514-104.023	5.808	1.00	97.76
ATOM C	1444	CG	LYS	X	622	4.002-102.758	5.198	1.00	106.74
ATOM C	1445	CD	LYS	X	622	2.799-103.060	4.319	1.00	118.34
ATOM C	1446	CE	LYS	X	622	1.694-102.024	4.501	1.00	126.03
ATOM N1+	1447	NZ	LYS	X	622	2.213-100.620	4.473	1.00	129.85
ATOM N	1448	N	THR	X	623	7.111-104.582	7.154	1.00	84.93

ATOM	1449	CA	THR	X	623	7.497-105.118	8.461	1.00	83.10
C									
ATOM	1450	C	THR	X	623	6.410-104.885	9.489	1.00	77.46
C									
ATOM	1451	O	THR	X	623	6.055-103.759	9.797	1.00	74.07
O									
ATOM	1452	CB	THR	X	623	8.834-104.507	8.937	1.00	84.89
C									
ATOM	1453	OG1	THR	X	623	9.798-104.604	7.864	1.00	93.66
O									
ATOM	1454	CG2	THR	X	623	9.377-105.225	10.135	1.00	81.54
C									
ATOM	1455	N	ILE	X	624	5.944-105.975	10.049	1.00	75.52
N									
ATOM	1456	CA	ILE	X	624	4.759-105.975	10.831	1.00	77.11
C									
ATOM	1457	C	ILE	X	624	5.000-106.350	12.331	1.00	79.04
C									
ATOM	1458	O	ILE	X	624	4.088-106.197	13.166	1.00	79.86
O									
ATOM	1459	CB	ILE	X	624	3.782-106.935	10.205	1.00	77.65
C									
ATOM	1460	CG1	ILE	X	624	2.357-106.529	10.549	1.00	80.70
C									
ATOM	1461	CG2	ILE	X	624	4.088-108.368	10.645	1.00	76.29
C									
ATOM	1462	CD1	ILE	X	624	1.328-107.445	9.912	1.00	82.30
C									
ATOM	1463	N	ALA	X	625	6.217-106.838	12.654	1.00	79.33
N									
ATOM	1464	CA	ALA	X	625	6.698-107.063	14.002	1.00	77.84
C									
ATOM	1465	C	ALA	X	625	8.179-107.408	13.930	1.00	79.33
C									
ATOM	1466	O	ALA	X	625	8.622-108.075	12.989	1.00	77.04
O									
ATOM	1467	CB	ALA	X	625	5.958-108.218	14.695	1.00	76.11
C									
ATOM	1468	N	ILE	X	626	8.894-107.096	14.999	1.00	84.70
N									
ATOM	1469	CA	ILE	X	626	10.239-107.611	15.226	1.00	88.47
C									
ATOM	1470	C	ILE	X	626	10.299-108.377	16.533	1.00	97.20
C									
ATOM	1471	O	ILE	X	626	9.568-108.081	17.481	1.00	110.11
O									
ATOM	1472	CB	ILE	X	626	11.336-106.545	15.039	1.00	84.08
C									
ATOM	1473	CG1	ILE	X	626	10.947-105.069	15.270	1.00	83.28
C									
ATOM	1474	CG2	ILE	X	626	11.804-106.665	13.586	1.00	82.18
C									
ATOM	1475	CD1	ILE	X	626	10.445-104.743	16.674	1.00	83.87
C									

ATOM	1476	N	GLY X 627	11.049-109.474	16.477	1.00102.05
N						
ATOM	1477	CA	GLY X 627	10.923-110.587	17.393	1.00108.63
C						
ATOM	1478	C	GLY X 627	12.267-111.125	17.860	1.00111.37
C						
ATOM	1479	O	GLY X 627	13.202-111.276	17.075	1.00123.51
O						
ATOM	1480	N	LYS X 628	12.336-111.459	19.147	1.00101.85
N						
ATOM	1481	CA	LYS X 628	13.433-112.209	19.769	1.00 92.98
C						
ATOM	1482	C	LYS X 628	12.918-113.608	20.082	1.00 89.13
C						
ATOM	1483	O	LYS X 628	11.957-113.724	20.843	1.00 83.47
O						
ATOM	1484	CB	LYS X 628	13.871-111.522	21.071	1.00 96.63
C						
ATOM	1485	CG	LYS X 628	14.406-110.082	20.909	1.00100.96
C						
ATOM	1486	CD	LYS X 628	14.516-109.323	22.263	1.00105.26
C						
ATOM	1487	CE	LYS X 628	15.026-110.058	23.521	1.00109.21
C						
ATOM	1488	NZ	LYS X 628	14.388-109.576	24.771	1.00105.21
N1+						
ATOM	1489	N	VAL X 629	13.555-114.660	19.572	1.00 86.79
N						
ATOM	1490	CA	VAL X 629	13.239-116.037	19.998	1.00 84.08
C						
ATOM	1491	C	VAL X 629	13.699-116.282	21.422	1.00 88.44
C						
ATOM	1492	O	VAL X 629	14.736-115.772	21.851	1.00 90.27
O						
ATOM	1493	CB	VAL X 629	13.678-117.155	19.024	1.00 82.52
C						
ATOM	1494	CG1	VAL X 629	14.646-116.701	17.948	1.00 81.63
C						
ATOM	1495	CG2	VAL X 629	14.182-118.415	19.709	1.00 84.34
C						
ATOM	1496	N	LEU X 630	12.920-117.095	22.134	1.00 92.84
N						
ATOM	1497	CA	LEU X 630	13.108-117.323	23.553	1.00 96.89
C						
ATOM	1498	C	LEU X 630	13.416-118.779	23.824	1.00 99.31
C						
ATOM	1499	O	LEU X 630	14.503-119.100	24.255	1.00 93.11
O						
ATOM	1500	CB	LEU X 630	11.847-116.906	24.300	1.00 98.45
C						
ATOM	1501	CG	LEU X 630	11.526-115.409	24.148	1.00 98.57
C						
ATOM	1502	CD1	LEU X 630	10.097-115.165	24.609	1.00 97.37
C						

ATOM	1503	CD2	LEU	X	630	12.469-114.516	24.958	1.00103.72
C								
ATOM	1504	N	LYS	X	631	12.425-119.646	23.589	1.00109.53
N								
ATOM	1505	CA	LYS	X	631	12.569-121.093	23.779	1.00122.66
C								
ATOM	1506	C	LYS	X	631	12.563-121.750	22.417	1.00126.47
C								
ATOM	1507	O	LYS	X	631	12.696-121.087	21.388	1.00135.07
O								
ATOM	1508	CB	LYS	X	631	11.425-121.668	24.645	1.00132.96
C								
ATOM	1509	CG	LYS	X	631	11.877-122.737	25.657	1.00143.81
C								
ATOM	1510	CD	LYS	X	631	10.710-123.577	26.202	1.00151.74
C								
ATOM	1511	CE	LYS	X	631	10.984-124.116	27.608	1.00151.44
C								
ATOM	1512	NZ	LYS	X	631	10.998-123.014	28.609	1.00155.44
N1+								
ATOM	1513	N	LEU	X	632	12.460-123.064	22.413	1.00127.75
N								
ATOM	1514	CA	LEU	X	632	12.219-123.808	21.202	1.00127.02
C								
ATOM	1515	C	LEU	X	632	11.306-124.974	21.618	1.00126.84
C								
ATOM	1516	O	LEU	X	632	11.597-125.685	22.557	1.00139.32
O								
ATOM	1517	CB	LEU	X	632	13.571-124.304	20.609	1.00126.28
C								
ATOM	1518	CG	LEU	X	632	14.813-123.357	20.509	1.00121.83
C								
ATOM	1519	CD1	LEU	X	632	15.837-123.522	21.656	1.00114.98
C								
ATOM	1520	CD2	LEU	X	632	15.495-123.565	19.161	1.00119.28
C								
ATOM	1521	N	VAL	X	633	10.153-125.106	20.997	1.00126.82
N								
ATOM	1522	CA	VAL	X	633	9.101-125.934	21.569	1.00133.19
C								
ATOM	1523	C	VAL	X	633	8.962-127.235	20.753	1.00148.69
C								
ATOM	1524	O	VAL	X	633	9.218-127.224	19.524	1.00150.88
O								
ATOM	1525	CB	VAL	X	633	7.816-125.098	21.672	1.00130.17
C								
ATOM	1526	CG1	VAL	X	633	6.647-125.900	22.231	1.00134.04
C								
ATOM	1527	CG2	VAL	X	633	8.095-123.888	22.547	1.00126.36
C								
ATOM	1528	N	PRO	X	634	8.610-128.371	21.438	1.00160.34
N								
ATOM	1529	CA	PRO	X	634	9.475-129.547	21.402	1.00161.28
C								

ATOM	1530	C	PRO	X	634	10.814-129.337	20.708	1.00156.32
C								
ATOM	1531	OXT	PRO	X	634	10.911-129.461	19.462	1.00156.32
O1-								
ATOM	1532	O	PRO	X	634	11.798-129.045	21.382	1.00146.40
O								
ATOM	1533	CB	PRO	X	634	8.608-130.580	20.660	1.00163.08
C								
ATOM	1534	CG	PRO	X	634	7.211-130.261	21.124	1.00164.23
C								
ATOM	1535	CD	PRO	X	634	7.207-128.811	21.620	1.00162.02
C								
ATOM	1536	N	ASN	X	48	31.902-105.502	46.430	1.00125.37
N								
ATOM	1537	CA	ASN	X	48	31.264-104.360	45.710	1.00128.31
C								
ATOM	1538	C	ASN	X	48	31.560-104.384	44.199	1.00140.73
C								
ATOM	1539	O	ASN	X	48	32.097-105.389	43.679	1.00162.58
O								
ATOM	1540	CB	ASN	X	48	31.649-103.024	46.387	1.00117.37
C								
ATOM	1541	CG	ASN	X	48	30.840-102.762	47.685	1.00130.57
C								
ATOM	1542	OD1	ASN	X	48	29.671-102.362	47.639	1.00122.71
O								
ATOM	1543	ND2	ASN	X	48	31.455-103.016	48.839	1.00126.08
N								
ATOM	1544	N	PHE	X	49	31.027-103.383	43.488	1.00173.09
N								
ATOM	1545	CA	PHE	X	49	30.893-103.413	42.018	1.00184.71
C								
ATOM	1546	C	PHE	X	49	31.352-102.068	41.422	1.00181.62
C								
ATOM	1547	O	PHE	X	49	31.503-101.087	42.162	1.00204.46
O								
ATOM	1548	CB	PHE	X	49	29.433-103.767	41.601	1.00180.79
C								
ATOM	1549	CG	PHE	X	49	28.639-102.613	40.991	1.00176.33
C								
ATOM	1550	CD1	PHE	X	49	28.499-101.402	41.661	1.00179.92
C								
ATOM	1551	CD2	PHE	X	49	27.923-102.794	39.802	1.00149.85
C								
ATOM	1552	CE1	PHE	X	49	27.751-100.367	41.111	1.00148.94
C								
ATOM	1553	CE2	PHE	X	49	27.160-101.766	39.261	1.00129.73
C								
ATOM	1554	CZ	PHE	X	49	27.068-100.555	39.923	1.00128.99
C								
ATOM	1555	N	ASP	X	50	31.639-102.056	40.115	1.00151.38
N								
ATOM	1556	CA	ASP	X	50	32.306-100.909	39.486	1.00159.51
C								

ATOM	1557	C	ASP	X	50	31.339	-99.742	39.231	1.00156.54
C									
ATOM	1558	O	ASP	X	50	30.506	-99.772	38.310	1.00197.58
O									
ATOM	1559	CB	ASP	X	50	33.015	-101.297	38.196	1.00182.79
C									
ATOM	1560	CG	ASP	X	50	33.917	-100.185	37.675	1.00202.99
C									
ATOM	1561	OD1	ASP	X	50	34.587	-99.511	38.499	1.00189.89
O									
ATOM	1562	OD2	ASP	X	50	33.933	-99.964	36.447	1.00233.82
O1-									
ATOM	1563	N	THR	X	51	31.488	-98.701	40.046	1.00156.62
N									
ATOM	1564	CA	THR	X	51	30.524	-97.570	40.055	1.00160.70
C									
ATOM	1565	C	THR	X	51	30.542	-96.676	38.797	1.00172.96
C									
ATOM	1566	O	THR	X	51	29.669	-95.835	38.619	1.00154.74
O									
ATOM	1567	CB	THR	X	51	30.695	-96.654	41.308	1.00158.81
C									
ATOM	1568	OG1	THR	X	51	31.175	-95.363	40.911	1.00142.27
O									
ATOM	1569	CG2	THR	X	51	31.648	-97.263	42.360	1.00156.32
C									
ATOM	1570	N	SER	X	52	31.544	-96.858	37.936	1.00195.53
N									
ATOM	1571	CA	SER	X	52	31.633	-96.110	36.669	1.00177.55
C									
ATOM	1572	C	SER	X	52	30.819	-96.765	35.539	1.00159.98
C									
ATOM	1573	O	SER	X	52	30.526	-96.122	34.537	1.00167.99
O									
ATOM	1574	CB	SER	X	52	33.096	-95.988	36.226	1.00154.17
C									
ATOM	1575	OG	SER	X	52	33.802	-97.197	36.454	1.00134.16
O									
ATOM	1576	N	LEU	X	53	30.432	-98.019	35.757	1.00155.04
N									
ATOM	1577	CA	LEU	X	53	29.725	-98.805	34.737	1.00152.54
C									
ATOM	1578	C	LEU	X	53	28.297	-98.280	34.419	1.00145.38
C									
ATOM	1579	O	LEU	X	53	27.902	-98.192	33.245	1.00170.24
O									
ATOM	1580	CB	LEU	X	53	29.622	-100.290	35.141	1.00 0.00
C									
ATOM	1581	CG	LEU	X	53	30.917	-101.126	35.070	1.00 0.00
C									
ATOM	1582	CD1	LEU	X	53	30.560	-102.600	35.337	1.00 0.00
C									
ATOM	1583	CD2	LEU	X	53	31.637	-101.030	33.713	1.00 0.00
C									

ATOM	1584	N	PRO	X	54	27.519	-97.940	35.458	1.00125.77
N									
ATOM	1585	CA	PRO	X	54	26.115	-97.563	35.180	1.00130.40
C									
ATOM	1586	C	PRO	X	54	26.006	-96.218	34.460	1.00124.43
C									
ATOM	1587	O	PRO	X	54	25.100	-96.040	33.663	1.00123.93
O									
ATOM	1588	CB	PRO	X	54	25.490	-97.466	36.574	1.00119.53
C									
ATOM	1589	CG	PRO	X	54	26.376	-98.277	37.453	1.00120.80
C									
ATOM	1590	CD	PRO	X	54	27.761	-98.119	36.896	1.00120.38
C									
ATOM	1591	N	THR	X	55	26.932	-95.294	34.725	1.00128.90
N									
ATOM	1592	CA	THR	X	55	26.905	-93.964	34.125	1.00140.15
C									
ATOM	1593	C	THR	X	55	27.344	-93.934	32.639	1.00159.94
C									
ATOM	1594	O	THR	X	55	27.079	-92.961	31.917	1.00189.44
O									
ATOM	1595	CB	THR	X	55	27.807	-92.998	34.928	1.00140.66
C									
ATOM	1596	OG1	THR	X	55	27.664	-91.672	34.420	1.00166.79
O									
ATOM	1597	CG2	THR	X	55	29.286	-93.410	34.852	1.00132.93
C									
ATOM	1598	N	SER	X	56	28.019	-94.995	32.207	1.00143.79
N									
ATOM	1599	CA	SER	X	56	28.468	-95.137	30.818	1.00130.29
C									
ATOM	1600	C	SER	X	56	27.468	-95.894	29.930	1.00119.11
C									
ATOM	1601	O	SER	X	56	27.749	-96.142	28.756	1.00179.85
O									
ATOM	1602	CB	SER	X	56	29.858	-95.791	30.762	1.00124.69
C									
ATOM	1603	OG	SER	X	56	29.970	-96.856	31.682	1.00125.22
O									
ATOM	1604	N	HIE	X	57	26.328	-96.288	30.503	1.00111.08
N									
ATOM	1605	CA	HIE	X	57	25.189	-96.865	29.772	1.00112.92
C									
ATOM	1606	C	HIE	X	57	25.553	-97.949	28.795	1.00123.68
C									
ATOM	1607	O	HIE	X	57	25.123	-97.943	27.631	1.00116.65
O									
ATOM	1608	CB	HIE	X	57	24.407	-95.788	29.070	1.00101.12
C									
ATOM	1609	CG	HIE	X	57	23.854	-94.772	29.995	1.00 95.45
C									
ATOM	1610	ND1	HIE	X	57	22.541	-94.781	30.401	1.00 91.88
N									

ATOM	1611	CD2	HIE	X	57	24.445	-93.743	30.643	1.00109.12
C									
ATOM	1612	CE1	HIE	X	57	22.336	-93.775	31.229	1.00115.62
C									
ATOM	1613	NE2	HIE	X	57	23.476	-93.130	31.394	1.00125.04
N									
ATOM	1614	N	THR	X	58	26.318	-98.916	29.291	1.00131.84
N									
ATOM	1615	CA	THR	X	58	26.866	-99.965	28.441	1.00124.55
C									
ATOM	1616	C	THR	X	58	25.758	-100.837	27.831	1.00115.80
C									
ATOM	1617	O	THR	X	58	25.973	-101.467	26.795	1.00168.59
O									
ATOM	1618	CB	THR	X	58	27.883	-100.861	29.186	1.00133.15
C									
ATOM	1619	OG1	THR	X	58	27.833	-100.593	30.590	1.00162.70
O									
ATOM	1620	CG2	THR	X	58	29.305	-100.603	28.683	1.00133.77
C									
ATOM	1621	N	TYR	X	59	24.584	-100.844	28.465	1.00 94.03
N									
ATOM	1622	CA	TYR	X	59	23.395	-101.581	28.055	1.00 97.82
C									
ATOM	1623	C	TYR	X	59	22.781	-101.040	26.745	1.00 91.11
C									
ATOM	1624	O	TYR	X	59	21.733	-101.534	26.299	1.00104.88
O									
ATOM	1625	CB	TYR	X	59	22.415	-101.540	29.240	1.00107.61
C									
ATOM	1626	CG	TYR	X	59	21.839	-100.158	29.492	1.00107.66
C									
ATOM	1627	CD1	TYR	X	59	22.434	-99.258	30.397	1.00 90.25
C									
ATOM	1628	CD2	TYR	X	59	20.717	-99.759	28.756	1.00106.21
C									
ATOM	1629	CE1	TYR	X	59	21.920	-97.952	30.522	1.00 81.56
C									
ATOM	1630	CE2	TYR	X	59	20.206	-98.459	28.866	1.00 92.55
C									
ATOM	1631	CZ	TYR	X	59	20.812	-97.542	29.743	1.00 89.84
C									
ATOM	1632	OH	TYR	X	59	20.333	-96.273	29.803	1.00108.93
O									
ATOM	1633	N	LEU	X	60	23.403	-100.010	26.137	1.00132.73
N									
ATOM	1634	CA	LEU	X	60	22.908	-99.377	24.948	1.00120.89
C									
ATOM	1635	C	LEU	X	60	23.611	-99.900	23.708	1.00128.92
C									
ATOM	1636	O	LEU	X	60	23.220	-99.634	22.594	1.00137.67
O									
ATOM	1637	CB	LEU	X	60	23.128	-97.886	25.074	1.00112.89
C									



ATOM	1638	CG	LEU	X	60	21.919	-97.067	25.461	1.00111.52
C									
ATOM	1639	CD1	LEU	X	60	22.286	-95.585	25.352	1.00110.74
C									
ATOM	1640	CD2	LEU	X	60	20.715	-97.379	24.571	1.00112.54
C									
ATOM	1641	N	GLY	X	61	24.708	-100.587	23.913	1.00133.64
N									
ATOM	1642	CA	GLY	X	61	25.537	-100.979	22.798	1.00136.36
C									
ATOM	1643	C	GLY	X	61	26.982	-100.586	22.940	1.00141.73
C									
ATOM	1644	O	GLY	X	61	27.356	-99.671	23.652	1.00124.34
O									
ATOM	1645	N	ALA	X	62	27.838	-101.313	22.239	1.00162.30
N									
ATOM	1646	CA	ALA	X	62	29.209	-101.454	22.675	1.00174.18
C									
ATOM	1647	C	ALA	X	62	30.045	-100.200	22.442	1.00177.39
C									
ATOM	1648	O	ALA	X	62	30.736	-99.692	23.334	1.00156.92
O									
ATOM	1649	CB	ALA	X	62	29.846	-102.643	21.948	1.00177.46
C									
ATOM	1650	N	ASP	X	63	29.992	-99.718	21.207	1.00179.31
N									
ATOM	1651	CA	ASP	X	63	30.569	-98.437	20.853	1.00174.71
C									
ATOM	1652	C	ASP	X	63	29.583	-97.525	20.075	1.00168.20
C									
ATOM	1653	O	ASP	X	63	28.865	-97.970	19.184	1.00156.53
O									
ATOM	1654	CB	ASP	X	63	31.838	-98.647	19.976	1.00 0.00
C									
ATOM	1655	CG	ASP	X	63	32.531	-97.340	19.581	1.00 0.00
C									
ATOM	1656	OD1	ASP	X	63	32.358	-96.780	18.500	1.00 0.00
O									
ATOM	1657	OD2	ASP	X	63	33.360	-96.843	20.545	1.00 0.00
O1-									
ATOM	1658	N	MET	X	64	29.546	-96.256	20.467	1.00159.28
N									
ATOM	1659	CA	MET	X	64	28.889	-95.258	19.692	1.00146.23
C									
ATOM	1660	C	MET	X	64	29.945	-94.261	19.287	1.00135.45
C									
ATOM	1661	O	MET	X	64	30.932	-94.107	19.984	1.00133.54
O									
ATOM	1662	CB	MET	X	64	27.866	-94.525	20.547	1.00143.90
C									
ATOM	1663	CG	MET	X	64	27.332	-95.344	21.707	1.00144.71
C									
ATOM	1664	SD	MET	X	64	25.637	-94.916	22.157	1.00139.32
S									

ATOM	1665	CE	MET	X	64	25.436	-96.219	23.373	1.00145.87
C									
ATOM	1666	N	GLU	X	65	29.737	-93.568	18.176	1.00125.49
N									
ATOM	1667	CA	GLU	X	65	30.602	-92.435	17.784	1.00123.38
C									
ATOM	1668	C	GLU	X	65	30.534	-91.355	18.865	1.00122.91
C									
ATOM	1669	O	GLU	X	65	29.478	-90.967	19.311	1.00120.34
O									
ATOM	1670	CB	GLU	X	65	30.142	-91.845	16.363	1.00 0.00
C									
ATOM	1671	CG	GLU	X	65	31.086	-90.741	15.855	1.00 0.00
C									
ATOM	1672	CD	GLU	X	65	32.531	-91.229	15.723	1.00 0.00
C									
ATOM	1673	OE1	GLU	X	65	32.916	-91.980	14.829	1.00 0.00
O									
ATOM	1674	OE2	GLU	X	65	33.360	-90.760	16.701	1.00 0.00
O1-									
ATOM	1675	N	GLU	X	66	31.697	-90.866	19.289	1.00127.28
N									
ATOM	1676	CA	GLU	X	66	31.777	-89.919	20.408	1.00125.18
C									
ATOM	1677	C	GLU	X	66	32.131	-88.527	19.894	1.00124.46
C									
ATOM	1678	O	GLU	X	66	32.838	-88.353	18.873	1.00122.38
O									
ATOM	1679	CB	GLU	X	66	32.745	-90.421	21.492	1.00131.38
C									
ATOM	1680	CG	GLU	X	66	32.591	-91.918	21.845	1.00138.14
C									
ATOM	1681	CD	GLU	X	66	33.448	-92.873	20.972	1.00151.23
C									
ATOM	1682	OE1	GLU	X	66	34.510	-92.433	20.461	1.00184.41
O									
ATOM	1683	OE2	GLU	X	66	33.079	-94.074	20.802	1.00134.30
O1-									
ATOM	1684	N	PHE	X	67	31.648	-87.518	20.605	1.00132.74
N									
ATOM	1685	CA	PHE	X	67	31.820	-86.127	20.183	1.00136.86
C									
ATOM	1686	C	PHE	X	67	32.402	-85.352	21.348	1.00139.92
C									
ATOM	1687	O	PHE	X	67	31.759	-85.212	22.389	1.00133.94
O									
ATOM	1688	CB	PHE	X	67	30.479	-85.529	19.776	1.00127.84
C									
ATOM	1689	CG	PHE	X	67	29.882	-86.193	18.599	1.00109.06
C									
ATOM	1690	CD1	PHE	X	67	29.447	-87.487	18.704	1.00 98.88
C									
ATOM	1691	CD2	PHE	X	67	29.922	-85.576	17.355	1.00103.41
C									

ATOM	1692	CE1	PHE	X	67	28.977	-88.123	17.629	1.00101.35
C									
ATOM	1693	CE2	PHE	X	67	29.438	-86.201	16.259	1.00100.33
C									
ATOM	1694	CZ	PHE	X	67	28.979	-87.485	16.393	1.00105.48
C									
ATOM	1695	N	HIE	X	68	33.639	-84.865	21.153	1.00142.90
N									
ATOM	1696	CA	HIE	X	68	34.324	-84.038	22.136	1.00150.93
C									
ATOM	1697	C	HIE	X	68	33.673	-82.628	22.157	1.00164.35
C									
ATOM	1698	O	HIE	X	68	33.981	-81.749	21.322	1.00182.33
O									
ATOM	1699	CB	HIE	X	68	35.834	-83.958	21.820	1.00 0.00
C									
ATOM	1700	CG	HIE	X	68	36.598	-83.073	22.774	1.00 0.00
C									
ATOM	1701	ND1	HIE	X	68	36.815	-83.311	24.112	1.00 0.00
N									
ATOM	1702	CE1	HIE	X	68	37.488	-82.258	24.609	1.00 0.00
C									
ATOM	1703	NE2	HIE	X	68	37.725	-81.343	23.654	1.00 0.00
N									
ATOM	1704	CD2	HIE	X	68	37.158	-81.858	22.485	1.00 0.00
C									
ATOM	1705	N	GLY	X	69	32.788	-82.442	23.123	1.00170.83
N									
ATOM	1706	CA	GLY	X	69	32.422	-81.101	23.562	1.00167.37
C									
ATOM	1707	C	GLY	X	69	31.451	-80.341	22.670	1.00148.83
C									
ATOM	1708	O	GLY	X	69	30.291	-80.737	22.502	1.00159.69
O									
ATOM	1709	N	ARG	X	70	31.940	-79.314	21.974	1.00135.38
N									
ATOM	1710	CA	ARG	X	70	32.360	-77.993	22.535	1.00136.83
C									
ATOM	1711	C	ARG	X	70	31.450	-76.749	22.561	1.00128.31
C									
ATOM	1712	O	ARG	X	70	31.943	-75.633	22.729	1.00123.66
O									
ATOM	1713	CB	ARG	X	70	33.548	-77.556	21.689	1.00154.01
C									
ATOM	1714	CG	ARG	X	70	33.325	-77.768	20.171	1.00166.12
C									
ATOM	1715	CD	ARG	X	70	31.846	-77.858	19.697	1.00155.49
C									
ATOM	1716	NE	ARG	X	70	31.765	-77.639	18.266	1.00152.02
N									
ATOM	1717	CZ	ARG	X	70	31.909	-76.448	17.690	1.00161.92
C									
ATOM	1718	NH1	ARG	X	70	31.929	-76.358	16.365	1.00163.93
N									

ATOM	1719	NH2	ARG	X	70	32.029	-75.340	18.435	1.00161.46
N1+									
ATOM	1720	N	THR	X	71	30.176	-76.923	22.293	1.00132.43
N									
ATOM	1721	CA	THR	X	71	29.336	-75.798	21.858	1.00148.49
C									
ATOM	1722	C	THR	X	71	28.552	-75.230	23.042	1.00145.95
C									
ATOM	1723	O	THR	X	71	27.629	-75.888	23.535	1.00148.63
O									
ATOM	1724	CB	THR	X	71	28.350	-76.206	20.704	1.00159.70
C									
ATOM	1725	OG1	THR	X	71	27.044	-75.668	20.964	1.00166.09
O									
ATOM	1726	CG2	THR	X	71	28.225	-77.754	20.534	1.00160.16
C									
ATOM	1727	N	LEU	X	72	28.941	-74.034	23.523	1.00137.19
N									
ATOM	1728	CA	LEU	X	72	28.078	-73.240	24.409	1.00124.14
C									
ATOM	1729	C	LEU	X	72	27.769	-71.894	23.788	1.00116.96
C									
ATOM	1730	O	LEU	X	72	28.610	-71.307	23.148	1.00117.47
O									
ATOM	1731	CB	LEU	X	72	28.681	-73.126	25.832	1.00121.83
C									
ATOM	1732	CG	LEU	X	72	28.516	-74.407	26.715	1.00124.70
C									
ATOM	1733	CD1	LEU	X	72	29.579	-75.469	26.385	1.00128.51
C									
ATOM	1734	CD2	LEU	X	72	28.475	-74.138	28.238	1.00116.59
C									
ATOM	1735	N	HIP	X	73	26.510	-71.448	23.929	1.00114.38
N									
ATOM	1736	CA	HIP	X	73	26.016	-70.214	23.334	1.00119.36
C									
ATOM	1737	C	HIP	X	73	26.037	-69.140	24.413	1.00119.98
C									
ATOM	1738	O	HIP	X	73	25.599	-69.389	25.553	1.00121.28
O									
ATOM	1739	CB	HIP	X	73	24.508	-70.281	22.956	1.00120.95
C									
ATOM	1740	CG	HIP	X	73	24.118	-71.386	22.028	1.00119.01
C									
ATOM	1741	ND1	HIP	X	73	24.733	-71.583	20.808	1.00123.26
N1+									
ATOM	1742	CD2	HIP	X	73	23.009	-72.168	22.020	1.00112.94
C									
ATOM	1743	CE1	HIP	X	73	24.099	-72.543	20.151	1.00122.12
C									
ATOM	1744	NE2	HIP	X	73	23.047	-72.912	20.863	1.00118.56
N									
ATOM	1745	N	ASP	X	74	26.519	-67.966	24.055	1.00122.81
N									

ATOM	1746	CA	ASP	X	74	26.784	-66.937	25.066	1.00131.62
C									
ATOM	1747	C	ASP	X	74	25.475	-66.296	25.600	1.00120.33
C									
ATOM	1748	O	ASP	X	74	24.414	-66.340	24.939	1.00106.46
O									
ATOM	1749	CB	ASP	X	74	27.783	-65.876	24.549	1.00142.10
C									
ATOM	1750	CG	ASP	X	74	29.249	-66.167	24.972	1.00138.65
C									
ATOM	1751	OD1	ASP	X	74	29.623	-65.874	26.136	1.00130.70
O									
ATOM	1752	OD2	ASP	X	74	30.023	-66.648	24.119	1.00136.77
O1-									
ATOM	1753	N	ASP	X	75	25.561	-65.757	26.813	1.00119.49
N									
ATOM	1754	CA	ASP	X	75	24.373	-65.596	27.638	1.00124.93
C									
ATOM	1755	C	ASP	X	75	23.421	-64.492	27.115	1.00125.48
C									
ATOM	1756	O	ASP	X	75	23.802	-63.523	26.415	1.00137.62
O									
ATOM	1757	CB	ASP	X	75	24.782	-65.413	29.091	1.00143.69
C									
ATOM	1758	CG	ASP	X	75	26.074	-66.180	29.443	1.00156.34
C									
ATOM	1759	OD1	ASP	X	75	26.943	-66.338	28.548	1.00156.17
O									
ATOM	1760	OD2	ASP	X	75	26.246	-66.561	30.623	1.00168.40
O1-									
ATOM	1761	N	ASP	X	76	22.157	-64.700	27.426	1.00124.04
N									
ATOM	1762	CA	ASP	X	76	21.015	-63.818	27.062	1.00126.30
C									
ATOM	1763	C	ASP	X	76	20.658	-63.846	25.574	1.00120.80
C									
ATOM	1764	O	ASP	X	76	19.674	-63.235	25.164	1.00117.30
O									
ATOM	1765	CB	ASP	X	76	21.183	-62.376	27.614	1.00136.87
C									
ATOM	1766	CG	ASP	X	76	20.928	-62.268	29.177	1.00144.65
C									
ATOM	1767	OD1	ASP	X	76	20.681	-63.307	29.817	1.00142.06
O									
ATOM	1768	OD2	ASP	X	76	21.059	-61.152	29.771	1.00147.40
O1-									
ATOM	1769	N	SER	X	77	21.404	-64.641	24.793	1.00119.02
N									
ATOM	1770	CA	SER	X	77	21.196	-64.754	23.358	1.00115.72
C									
ATOM	1771	C	SER	X	77	19.804	-65.321	23.000	1.00123.00
C									
ATOM	1772	O	SER	X	77	19.069	-65.845	23.860	1.00113.43
O									

ATOM	1773	CB	SER	X	77	22.302	-65.626	22.726	1.00106.68
C									
ATOM	1774	OG	SER	X	77	22.257	-66.959	23.171	1.00 95.99
O									
ATOM	1775	N	CYS	X	78	19.412	-65.138	21.727	1.00128.92
N									
ATOM	1776	CA	CYS	X	78	18.204	-65.762	21.213	1.00120.61
C									
ATOM	1777	C	CYS	X	78	18.542	-66.799	20.181	1.00110.60
C									
ATOM	1778	O	CYS	X	78	19.086	-66.500	19.123	1.00112.34
O									
ATOM	1779	CB	CYS	X	78	17.191	-64.755	20.703	1.00125.61
C									
ATOM	1780	SG	CYS	X	78	16.404	-63.912	22.092	1.00158.01
S									
ATOM	1781	N	GLN	X	79	18.206	-68.039	20.514	1.00106.01
N									
ATOM	1782	CA	GLN	X	79	18.520	-69.189	19.688	1.00104.24
C									
ATOM	1783	C	GLN	X	79	17.229	-69.912	19.276	1.00106.86
C									
ATOM	1784	O	GLN	X	79	16.213	-69.876	19.974	1.00 99.13
O									
ATOM	1785	CB	GLN	X	79	19.408	-70.146	20.467	1.00103.37
C									
ATOM	1786	CG	GLN	X	79	20.555	-69.506	21.203	1.00100.86
C									
ATOM	1787	CD	GLN	X	79	21.673	-69.208	20.272	1.00101.84
C									
ATOM	1788	OE1	GLN	X	79	22.765	-69.761	20.394	1.00104.14
O									
ATOM	1789	NE2	GLN	X	79	21.364	-68.485	19.231	1.00101.69
N									
ATOM	1790	N	VAL	X	80	17.321	-70.627	18.174	1.00106.66
N									
ATOM	1791	CA	VAL	X	80	16.306	-71.597	17.827	1.00106.87
C									
ATOM	1792	C	VAL	X	80	16.866	-73.009	18.007	1.00 95.98
C									
ATOM	1793	O	VAL	X	80	17.925	-73.358	17.478	1.00 98.67
O									
ATOM	1794	CB	VAL	X	80	15.659	-71.260	16.480	1.00119.18
C									
ATOM	1795	CG1	VAL	X	80	15.653	-72.444	15.512	1.00122.82
C									
ATOM	1796	CG2	VAL	X	80	14.251	-70.696	16.729	1.00127.32
C									
ATOM	1797	N	ILE	X	81	16.219	-73.773	18.862	1.00 87.88
N									
ATOM	1798	CA	ILE	X	81	16.589	-75.183	19.069	1.00 91.45
C									
ATOM	1799	C	ILE	X	81	15.414	-76.139	18.783	1.00 93.27
C									

ATOM	1800	O	ILE	X	81	14.298	-75.872	19.167	1.00	85.87
O										
ATOM	1801	CB	ILE	X	81	17.062	-75.348	20.490	1.00	96.57
C										
ATOM	1802	CG1	ILE	X	81	17.967	-74.187	20.864	1.00	102.75
C										
ATOM	1803	CG2	ILE	X	81	17.841	-76.634	20.666	1.00	99.32
C										
ATOM	1804	CD1	ILE	X	81	18.411	-74.217	22.318	1.00	108.24
C										
ATOM	1805	N	PRO	X	82	15.665	-77.234	18.035	1.00	92.30
N										
ATOM	1806	CA	PRO	X	82	14.685	-78.322	17.949	1.00	87.38
C										
ATOM	1807	C	PRO	X	82	14.322	-78.932	19.284	1.00	84.39
C										
ATOM	1808	O	PRO	X	82	15.181	-79.065	20.114	1.00	84.08
O										
ATOM	1809	CB	PRO	X	82	15.429	-79.362	17.172	1.00	91.38
C										
ATOM	1810	CG	PRO	X	82	16.853	-79.150	17.569	1.00	91.46
C										
ATOM	1811	CD	PRO	X	82	16.996	-77.665	17.568	1.00	92.15
C										
ATOM	1812	N	VAL	X	83	13.071	-79.301	19.482	1.00	84.76
N										
ATOM	1813	CA	VAL	X	83	12.655	-80.067	20.668	1.00	86.18
C										
ATOM	1814	C	VAL	X	83	12.079	-81.352	20.248	1.00	79.62
C										
ATOM	1815	O	VAL	X	83	11.044	-81.298	19.584	1.00	78.16
O										
ATOM	1816	CB	VAL	X	83	11.500	-79.347	21.405	1.00	99.07
C										
ATOM	1817	CG1	VAL	X	83	11.099	-80.130	22.654	1.00	113.55
C										
ATOM	1818	CG2	VAL	X	83	11.862	-77.910	21.774	1.00	103.30
C										
ATOM	1819	N	LEU	X	84	12.651	-82.492	20.692	1.00	74.19
N										
ATOM	1820	CA	LEU	X	84	12.031	-83.817	20.332	1.00	70.75
C										
ATOM	1821	C	LEU	X	84	10.782	-84.123	21.081	1.00	73.78
C										
ATOM	1822	O	LEU	X	84	10.772	-84.050	22.281	1.00	74.58
O										
ATOM	1823	CB	LEU	X	84	12.896	-85.056	20.594	1.00	68.32
C										
ATOM	1824	CG	LEU	X	84	14.409	-85.004	20.737	1.00	69.73
C										
ATOM	1825	CD1	LEU	X	84	14.983	-86.337	21.226	1.00	69.15
C										
ATOM	1826	CD2	LEU	X	84	15.073	-84.628	19.428	1.00	71.37
C										

ATOM	1827	N	PRO	X	85	9.817	-84.631	20.392	1.00	82.46
N										
ATOM	1828	CA	PRO	X	85	8.525	-84.923	20.918	1.00	88.96
C										
ATOM	1829	C	PRO	X	85	8.523	-86.217	21.808	1.00	88.40
C										
ATOM	1830	O	PRO	X	85	9.377	-87.174	21.677	1.00	83.93
O										
ATOM	1831	CB	PRO	X	85	7.705	-85.126	19.653	1.00	100.25
C										
ATOM	1832	CG	PRO	X	85	8.716	-85.628	18.609	1.00	103.17
C										
ATOM	1833	CD	PRO	X	85	10.106	-85.436	19.208	1.00	93.72
C										
ATOM	1834	N	GLN	X	86	7.646	-86.218	22.768	1.00	90.15
N										
ATOM	1835	CA	GLN	X	86	7.549	-87.395	23.664	1.00	102.63
C										
ATOM	1836	C	GLN	X	86	8.593	-87.396	24.734	1.00	110.76
C										
ATOM	1837	O	GLN	X	86	8.550	-88.299	25.581	1.00	108.57
O										
ATOM	1838	CB	GLN	X	86	7.834	-88.733	22.950	1.00	102.33
C										
ATOM	1839	CG	GLN	X	86	7.183	-89.040	21.626	1.00	105.44
C										
ATOM	1840	CD	GLN	X	86	7.146	-90.547	21.353	1.00	111.32
C										
ATOM	1841	NE2	GLN	X	86	7.628	-91.026	20.318	1.00	103.87
N										
ATOM	1842	OE1	GLN	X	86	6.597	-91.308	22.309	1.00	122.17
O										
ATOM	1843	N	VAL	X	87	9.622	-86.560	24.663	1.00	114.59
N										
ATOM	1844	CA	VAL	X	87	10.576	-86.601	25.740	1.00	107.06
C										
ATOM	1845	C	VAL	X	87	10.046	-85.657	26.752	1.00	102.03
C										
ATOM	1846	O	VAL	X	87	9.826	-84.510	26.438	1.00	94.48
O										
ATOM	1847	CB	VAL	X	87	12.007	-86.196	25.319	1.00	105.87
C										
ATOM	1848	CG1	VAL	X	87	13.005	-86.706	26.337	1.00	100.90
C										
ATOM	1849	CG2	VAL	X	87	12.339	-86.768	23.957	1.00	115.61
C										
ATOM	1850	N	MET	X	88	9.739	-86.142	27.931	1.00	102.78
N										
ATOM	1851	CA	MET	X	88	9.218	-85.281	28.963	1.00	106.51
C										
ATOM	1852	C	MET	X	88	9.984	-85.559	30.193	1.00	98.49
C										
ATOM	1853	O	MET	X	88	9.913	-86.626	30.724	1.00	89.18
O										



ATOM	1854	CB	MET	X	88	7.708	-85.516	29.235	1.00119.09
C									
ATOM	1855	CG	MET	X	88	6.835	-84.283	29.005	1.00134.99
C									
ATOM	1856	SD	MET	X	88	5.590	-84.332	27.667	1.00185.91
S									
ATOM	1857	CE	MET	X	88	6.404	-85.144	26.282	1.00163.40
C									
ATOM	1858	N	MET	X	89	10.782	-84.594	30.610	1.00 97.21
N									
ATOM	1859	CA	MET	X	89	11.696	-84.768	31.694	1.00101.50
C									
ATOM	1860	C	MET	X	89	12.267	-83.381	31.889	1.00110.34
C									
ATOM	1861	O	MET	X	89	12.317	-82.583	30.929	1.00143.95
O									
ATOM	1862	CB	MET	X	89	12.811	-85.787	31.357	1.00 98.19
C									
ATOM	1863	CG	MET	X	89	14.250	-85.258	31.484	1.00 95.77
C									
ATOM	1864	SD	MET	X	89	15.477	-86.563	31.761	1.00 95.58
S									
ATOM	1865	CE	MET	X	89	16.200	-85.994	33.286	1.00104.56
C									
ATOM	1866	N	ILE	X	90	12.568	-83.013	33.122	1.00108.22
N									
ATOM	1867	CA	ILE	X	90	13.073	-81.689	33.338	1.00 96.25
C									
ATOM	1868	C	ILE	X	90	14.542	-81.865	33.530	1.00 91.03
C									
ATOM	1869	O	ILE	X	90	14.956	-82.580	34.443	1.00 91.91
O									
ATOM	1870	CB	ILE	X	90	12.342	-80.992	34.471	1.00 94.49
C									
ATOM	1871	CG1	ILE	X	90	10.814	-80.948	34.165	1.00 97.23
C									
ATOM	1872	CG2	ILE	X	90	12.850	-79.591	34.571	1.00 92.70
C									
ATOM	1873	CD1	ILE	X	90	9.997	-82.179	34.616	1.00 97.91
C									
ATOM	1874	N	LEU	X	91	15.329	-81.361	32.595	1.00 89.04
N									
ATOM	1875	CA	LEU	X	91	16.700	-81.838	32.440	1.00 89.80
C									
ATOM	1876	C	LEU	X	91	17.671	-80.819	33.045	1.00 86.66
C									
ATOM	1877	O	LEU	X	91	17.441	-79.597	32.930	1.00 90.31
O									
ATOM	1878	CB	LEU	X	91	16.982	-82.033	30.964	1.00 91.12
C									
ATOM	1879	CG	LEU	X	91	18.139	-82.923	30.522	1.00 95.52
C									
ATOM	1880	CD1	LEU	X	91	19.107	-82.088	29.680	1.00 94.56
C									

ATOM	1881	CD2	LEU	X	91	18.856	-83.646	31.676	1.00	97.67
C										
ATOM	1882	N	ILE	X	92	18.695	-81.294	33.741	1.00	82.63
N										
ATOM	1883	CA	ILE	X	92	19.543	-80.405	34.512	1.00	81.68
C										
ATOM	1884	C	ILE	X	92	20.929	-80.370	33.912	1.00	78.29
C										
ATOM	1885	O	ILE	X	92	21.470	-81.407	33.540	1.00	79.28
O										
ATOM	1886	CB	ILE	X	92	19.718	-80.876	35.933	1.00	86.37
C										
ATOM	1887	CG1	ILE	X	92	18.364	-81.088	36.615	1.00	85.52
C										
ATOM	1888	CG2	ILE	X	92	20.565	-79.864	36.697	1.00	91.25
C										
ATOM	1889	CD1	ILE	X	92	18.389	-82.238	37.615	1.00	85.49
C										
ATOM	1890	N	PRO	X	93	21.499	-79.167	33.795	1.00	75.48
N										
ATOM	1891	CA	PRO	X	93	22.886	-79.016	33.414	1.00	77.55
C										
ATOM	1892	C	PRO	X	93	23.796	-80.036	34.068	1.00	80.89
C										
ATOM	1893	O	PRO	X	93	23.754	-80.221	35.301	1.00	80.54
O										
ATOM	1894	CB	PRO	X	93	23.199	-77.617	33.842	1.00	78.72
C										
ATOM	1895	CG	PRO	X	93	21.922	-76.889	33.536	1.00	77.23
C										
ATOM	1896	CD	PRO	X	93	20.807	-77.881	33.795	1.00	75.37
C										
ATOM	1897	N	GLY	X	94	24.573	-80.742	33.245	1.00	85.40
N										
ATOM	1898	CA	GLY	X	94	25.521	-81.737	33.741	1.00	87.26
C										
ATOM	1899	C	GLY	X	94	24.950	-83.125	33.849	1.00	87.87
C										
ATOM	1900	O	GLY	X	94	25.707	-84.096	33.908	1.00	87.09
O										
ATOM	1901	N	GLN	X	95	23.613	-83.230	33.901	1.00	93.25
N										
ATOM	1902	CA	GLN	X	95	22.942	-84.516	34.010	1.00	102.46
C										
ATOM	1903	C	GLN	X	95	23.099	-85.254	32.711	1.00	102.45
C										
ATOM	1904	O	GLN	X	95	23.094	-84.650	31.666	1.00	103.73
O										
ATOM	1905	CB	GLN	X	95	21.452	-84.346	34.262	1.00	97.64
C										
ATOM	1906	CG	GLN	X	95	20.758	-85.676	34.269	1.00	94.22
C										
ATOM	1907	CD	GLN	X	95	19.459	-85.629	34.985	1.00	92.20
C										

ATOM	1908	NE2	GLN	X	95	19.129	-86.553	35.774	1.00	90.43
N										
ATOM	1909	OE1	GLN	X	95	18.677	-84.574	34.714	1.00	86.07
O										
ATOM	1910	N	THR	X	96	23.189	-86.570	32.764	1.00	95.87
N										
ATOM	1911	CA	THR	X	96	23.246	-87.304	31.552	1.00	89.50
C										
ATOM	1912	C	THR	X	96	21.858	-87.830	31.162	1.00	86.78
C										
ATOM	1913	O	THR	X	96	21.058	-88.175	32.007	1.00	81.66
O										
ATOM	1914	CB	THR	X	96	24.298	-88.384	31.588	1.00	93.07
C										
ATOM	1915	OG1	THR	X	96	24.905	-88.471	30.297	1.00	95.10
O										
ATOM	1916	CG2	THR	X	96	23.667	-89.741	31.974	1.00	96.38
C										
ATOM	1917	N	LEU	X	97	21.571	-87.836	29.860	1.00	88.86
N										
ATOM	1918	CA	LEU	X	97	20.271	-88.263	29.337	1.00	89.91
C										
ATOM	1919	C	LEU	X	97	20.471	-89.288	28.205	1.00	85.98
C										
ATOM	1920	O	LEU	X	97	20.958	-88.932	27.145	1.00	80.18
O										
ATOM	1921	CB	LEU	X	97	19.459	-87.078	28.772	1.00	90.55
C										
ATOM	1922	CG	LEU	X	97	18.241	-87.431	27.874	1.00	87.07
C										
ATOM	1923	CD1	LEU	X	97	17.144	-88.181	28.644	1.00	86.26
C										
ATOM	1924	CD2	LEU	X	97	17.666	-86.188	27.210	1.00	82.33
C										
ATOM	1925	N	PRO	X	98	20.016	-90.541	28.414	1.00	83.41
N										
ATOM	1926	CA	PRO	X	98	20.073	-91.495	27.359	1.00	81.39
C										
ATOM	1927	C	PRO	X	98	18.701	-91.553	26.621	1.00	78.79
C										
ATOM	1928	O	PRO	X	98	17.624	-91.301	27.234	1.00	75.86
O										
ATOM	1929	CB	PRO	X	98	20.404	-92.768	28.105	1.00	82.29
C										
ATOM	1930	CG	PRO	X	98	19.534	-92.676	29.283	1.00	82.99
C										
ATOM	1931	CD	PRO	X	98	19.489	-91.183	29.621	1.00	85.42
C										
ATOM	1932	N	LEU	X	99	18.753	-91.815	25.310	1.00	74.98
N										
ATOM	1933	CA	LEU	X	99	17.571	-91.814	24.503	1.00	73.13
C										
ATOM	1934	C	LEU	X	99	17.517	-92.978	23.510	1.00	74.64
C										

ATOM	1935	O	LEU	X	99	18.558	-93.551	23.153	1.00	77.05
O										
ATOM	1936	CB	LEU	X	99	17.529	-90.498	23.819	1.00	70.67
C										
ATOM	1937	CG	LEU	X	99	16.670	-89.595	24.660	1.00	70.96
C										
ATOM	1938	CD1	LEU	X	99	16.884	-88.125	24.299	1.00	69.18
C										
ATOM	1939	CD2	LEU	X	99	15.198	-90.068	24.488	1.00	73.19
C										
ATOM	1940	N	GLN	X	100	16.306	-93.384	23.130	1.00	74.09
N										
ATOM	1941	CA	GLN	X	100	16.130	-94.320	22.042	1.00	76.11
C										
ATOM	1942	C	GLN	X	100	14.976	-93.912	21.193	1.00	75.68
C										
ATOM	1943	O	GLN	X	100	13.838	-93.713	21.662	1.00	77.03
O										
ATOM	1944	CB	GLN	X	100	16.052	-95.771	22.463	1.00	79.68
C										
ATOM	1945	CG	GLN	X	100	17.417	-96.412	22.672	1.00	81.48
C										
ATOM	1946	CD	GLN	X	100	17.304	-97.922	22.865	1.00	85.14
C										
ATOM	1947	OE1	GLN	X	100	17.662	-98.728	22.023	1.00	92.27
O										
ATOM	1948	NE2	GLN	X	100	16.900	-98.404	24.021	1.00	83.44
N										
ATOM	1949	N	LEU	X	101	15.306	-93.669	19.927	1.00	74.26
N										
ATOM	1950	CA	LEU	X	101	14.352	-93.035	19.007	1.00	71.79
C										
ATOM	1951	C	LEU	X	101	13.894	-93.999	17.921	1.00	72.03
C										
ATOM	1952	O	LEU	X	101	14.678	-94.783	17.369	1.00	69.86
O										
ATOM	1953	CB	LEU	X	101	14.951	-91.753	18.466	1.00	69.72
C										
ATOM	1954	CG	LEU	X	101	15.351	-90.859	19.644	1.00	68.60
C										
ATOM	1955	CD1	LEU	X	101	16.191	-89.683	19.225	1.00	67.75
C										
ATOM	1956	CD2	LEU	X	101	14.094	-90.361	20.343	1.00	69.50
C										
ATOM	1957	N	PHE	X	102	12.582	-94.017	17.689	1.00	74.51
N										
ATOM	1958	CA	PHE	X	102	11.972	-95.058	16.850	1.00	79.11
C										
ATOM	1959	C	PHE	X	102	11.265	-94.455	15.617	1.00	80.36
C										
ATOM	1960	O	PHE	X	102	11.401	-94.973	14.481	1.00	79.51
O										
ATOM	1961	CB	PHE	X	102	10.944	-95.792	17.664	1.00	82.94
C										

ATOM	1962	CG	PHE	X	102	11.531	-96.714	18.687	1.00	88.10
C										
ATOM	1963	CD1	PHE	X	102	12.539	-96.237	19.541	1.00	87.92
C										
ATOM	1964	CD2	PHE	X	102	11.035	-98.027	18.806	1.00	97.83
C										
ATOM	1965	CE1	PHE	X	102	12.932	-97.047	20.615	1.00	92.78
C										
ATOM	1966	CE2	PHE	X	102	11.532	-98.872	19.809	1.00	102.25
C										
ATOM	1967	CZ	PHE	X	102	12.468	-98.366	20.722	1.00	102.42
C										
ATOM	1968	N	HIE	X	103	10.604	-93.326	15.836	1.00	81.49
N										
ATOM	1969	CA	HIE	X	103	9.880	-92.691	14.752	1.00	85.53
C										
ATOM	1970	C	HIE	X	103	10.821	-91.964	13.844	1.00	85.08
C										
ATOM	1971	O	HIE	X	103	11.775	-91.315	14.297	1.00	85.24
O										
ATOM	1972	CB	HIE	X	103	8.790	-91.809	15.285	1.00	87.73
C										
ATOM	1973	CG	HIE	X	103	7.879	-92.548	16.185	1.00	88.78
C										
ATOM	1974	CD2	HIE	X	103	8.156	-92.670	17.526	1.00	90.20
C										
ATOM	1975	ND1	HIE	X	103	6.960	-93.493	15.906	1.00	91.25
N										
ATOM	1976	NE2	HIE	X	103	7.326	-93.538	18.067	1.00	92.71
N										
ATOM	1977	CE1	HIE	X	103	6.587	-94.053	17.102	1.00	95.14
C										
ATOM	1978	N	PRO	X	104	10.607	-92.136	12.521	1.00	86.06
N										
ATOM	1979	CA	PRO	X	104	11.515	-91.541	11.574	1.00	87.97
C										
ATOM	1980	C	PRO	X	104	11.478	-90.035	11.701	1.00	85.61
C										
ATOM	1981	O	PRO	X	104	12.521	-89.433	11.411	1.00	82.74
O										
ATOM	1982	CB	PRO	X	104	11.011	-92.055	10.247	1.00	92.29
C										
ATOM	1983	CG	PRO	X	104	9.544	-92.158	10.468	1.00	92.19
C										
ATOM	1984	CD	PRO	X	104	9.393	-92.636	11.875	1.00	88.31
C										
ATOM	1985	N	GLN	X	105	10.354	-89.444	12.201	1.00	83.99
N										
ATOM	1986	CA	GLN	X	105	10.351	-88.016	12.560	1.00	88.44
C										
ATOM	1987	C	GLN	X	105	11.542	-87.654	13.409	1.00	91.48
C										
ATOM	1988	O	GLN	X	105	12.380	-86.854	12.980	1.00	89.92
O										

ATOM	1989	CB	GLN	X	105	9.116	-87.452	13.299	1.00	90.43
C										
ATOM	1990	CG	GLN	X	105	8.161	-88.432	13.819	1.00	94.62
C										
ATOM	1991	CD	GLN	X	105	7.536	-89.133	12.669	1.00	106.39
C										
ATOM	1992	OE1	GLN	X	105	7.628	-90.347	12.552	1.00	110.11
O										
ATOM	1993	NE2	GLN	X	105	6.977	-88.354	11.733	1.00	120.54
N										
ATOM	1994	N	GLU	X	106	11.608	-88.249	14.612	1.00	93.79
N										
ATOM	1995	CA	GLU	X	106	12.718	-88.043	15.544	1.00	94.87
C										
ATOM	1996	C	GLU	X	106	14.057	-88.422	14.883	1.00	99.78
C										
ATOM	1997	O	GLU	X	106	14.985	-87.635	14.883	1.00	106.73
O										
ATOM	1998	CB	GLU	X	106	12.471	-88.834	16.838	1.00	100.85
C										
ATOM	1999	CG	GLU	X	106	11.086	-88.596	17.516	1.00	107.83
C										
ATOM	2000	CD	GLU	X	106	10.585	-89.759	18.437	1.00	110.20
C										
ATOM	2001	OE1	GLU	X	106	11.170	-90.887	18.452	1.00	100.92
O										
ATOM	2002	OE2	GLU	X	106	9.584	-89.525	19.162	1.00	109.18
O1-										
ATOM	2003	N	VAL	X	107	14.106	-89.611	14.292	1.00	102.75
N										
ATOM	2004	CA	VAL	X	107	15.314	-90.181	13.712	1.00	111.61
C										
ATOM	2005	C	VAL	X	107	15.947	-89.292	12.618	1.00	122.07
C										
ATOM	2006	O	VAL	X	107	17.185	-89.276	12.425	1.00	130.28
O										
ATOM	2007	CB	VAL	X	107	14.892	-91.497	13.102	1.00	118.59
C										
ATOM	2008	CG1	VAL	X	107	15.916	-92.018	12.109	1.00	133.48
C										
ATOM	2009	CG2	VAL	X	107	14.616	-92.482	14.208	1.00	116.19
C										
ATOM	2010	N	SER	X	108	15.101	-88.527	11.927	1.00	120.24
N										
ATOM	2011	CA	SER	X	108	15.574	-87.507	10.985	1.00	117.99
C										
ATOM	2012	C	SER	X	108	16.205	-86.345	11.697	1.00	110.24
C										
ATOM	2013	O	SER	X	108	17.353	-85.935	11.386	1.00	114.20
O										
ATOM	2014	CB	SER	X	108	14.374	-86.967	10.148	1.00	120.61
C										
ATOM	2015	OG	SER	X	108	14.755	-86.053	9.107	1.00	117.66
O										

ATOM	2016	N	MET	X	109	15.458	-85.799	12.646	1.00102.02
N									
ATOM	2017	CA	MET	X	109	15.821	-84.638	13.371	1.00103.99
C									
ATOM	2018	C	MET	X	109	17.249	-84.743	13.976	1.00 99.89
C									
ATOM	2019	O	MET	X	109	18.008	-83.800	13.951	1.00106.99
O									
ATOM	2020	CB	MET	X	109	14.677	-84.467	14.389	1.00110.98
C									
ATOM	2021	CG	MET	X	109	15.033	-84.554	15.844	1.00117.89
C									
ATOM	2022	SD	MET	X	109	15.477	-82.933	16.468	1.00130.30
S									
ATOM	2023	CE	MET	X	109	15.407	-81.858	14.996	1.00137.13
C									
ATOM	2024	N	VAL	X	110	17.586	-85.916	14.480	1.00 91.70
N									
ATOM	2025	CA	VAL	X	110	18.840	-86.224	15.108	1.00 94.31
C									
ATOM	2026	C	VAL	X	110	19.972	-86.423	14.095	1.00 95.96
C									
ATOM	2027	O	VAL	X	110	21.063	-85.832	14.213	1.00 97.81
O									
ATOM	2028	CB	VAL	X	110	18.686	-87.593	15.781	1.00 94.32
C									
ATOM	2029	CG1	VAL	X	110	20.025	-88.076	16.331	1.00 96.01
C									
ATOM	2030	CG2	VAL	X	110	17.617	-87.545	16.855	1.00 90.62
C									
ATOM	2031	N	ARG	X	111	19.701	-87.277	13.106	1.00 96.75
N									
ATOM	2032	CA	ARG	X	111	20.679	-87.605	12.072	1.00106.01
C									
ATOM	2033	C	ARG	X	111	21.274	-86.314	11.488	1.00108.48
C									
ATOM	2034	O	ARG	X	111	22.509	-86.211	11.319	1.00106.29
O									
ATOM	2035	CB	ARG	X	111	20.080	-88.525	10.975	1.00115.71
C									
ATOM	2036	CG	ARG	X	111	21.017	-89.656	10.452	1.00122.83
C									
ATOM	2037	CD	ARG	X	111	20.250	-90.853	9.843	1.00127.05
C									
ATOM	2038	NE	ARG	X	111	20.426	-92.119	10.588	1.00125.74
N									
ATOM	2039	CZ	ARG	X	111	19.753	-93.249	10.329	1.00124.20
C									
ATOM	2040	NH1	ARG	X	111	18.846	-93.291	9.348	1.00120.66
N									
ATOM	2041	NH2	ARG	X	111	19.993	-94.351	11.043	1.00121.62
N									
ATOM	2042	N	ASN	X	112	20.413	-85.328	11.244	1.00112.20
N									

ATOM	2043	CA	ASN	X	112	20.850	-84.009	10.792	1.00112.76
C									
ATOM	2044	C	ASN	X	112	21.393	-83.095	11.890	1.00101.50
C									
ATOM	2045	O	ASN	X	112	22.238	-82.247	11.642	1.00 96.20
O									
ATOM	2046	CB	ASN	X	112	19.712	-83.330	10.096	1.00132.67
C									
ATOM	2047	CG	ASN	X	112	19.258	-84.114	8.868	1.00159.06
C									
ATOM	2048	OD1	ASN	X	112	18.505	-85.085	8.987	1.00163.62
O									
ATOM	2049	ND2	ASN	X	112	19.803	-83.762	7.692	1.00171.94
N									
ATOM	2050	N	LEU	X	113	20.882	-83.266	13.100	1.00 98.71
N									
ATOM	2051	CA	LEU	X	113	21.371	-82.522	14.259	1.00101.32
C									
ATOM	2052	C	LEU	X	113	22.849	-82.792	14.479	1.00 98.91
C									
ATOM	2053	O	LEU	X	113	23.599	-81.878	14.816	1.00123.86
O									
ATOM	2054	CB	LEU	X	113	20.638	-82.890	15.506	1.00101.75
C									
ATOM	2055	CG	LEU	X	113	20.504	-81.612	16.309	1.00110.91
C									
ATOM	2056	CD1	LEU	X	113	19.656	-80.565	15.590	1.00111.91
C									
ATOM	2057	CD2	LEU	X	113	19.902	-81.958	17.645	1.00124.31
C									
ATOM	2058	N	ILE	X	114	23.263	-84.032	14.252	1.00 87.33
N									
ATOM	2059	CA	ILE	X	114	24.651	-84.385	14.409	1.00 86.10
C									
ATOM	2060	C	ILE	X	114	25.580	-83.566	13.530	1.00 92.19
C									
ATOM	2061	O	ILE	X	114	26.680	-83.225	13.943	1.00 87.61
O									
ATOM	2062	CB	ILE	X	114	24.906	-85.803	14.209	1.00 86.76
C									
ATOM	2063	CG1	ILE	X	114	24.005	-86.600	15.125	1.00 86.36
C									
ATOM	2064	CG2	ILE	X	114	26.373	-86.047	14.550	1.00 88.66
C									
ATOM	2065	CD1	ILE	X	114	24.597	-86.754	16.496	1.00 89.16
C									
ATOM	2066	N	GLN	X	115	25.152	-83.297	12.321	1.00104.60
N									
ATOM	2067	CA	GLN	X	115	26.008	-82.578	11.430	1.00111.06
C									
ATOM	2068	C	GLN	X	115	26.317	-81.207	11.917	1.00115.09
C									
ATOM	2069	O	GLN	X	115	27.454	-80.777	11.842	1.00130.14
O									



ATOM	2070	CB	GLN	X	115	25.372	-82.528	10.061	1.00114.69
C									
ATOM	2071	CG	GLN	X	115	24.783	-83.867	9.666	1.00122.04
C									
ATOM	2072	CD	GLN	X	115	25.706	-85.014	9.995	1.00125.56
C									
ATOM	2073	NE2	GLN	X	115	25.261	-86.119	10.276	1.00123.54
N									
ATOM	2074	OE1	GLN	X	115	27.000	-84.742	9.996	1.00126.74
O									
ATOM	2075	N	LYS	X	116	25.321	-80.517	12.438	1.00110.05
N									
ATOM	2076	CA	LYS	X	116	25.564	-79.168	12.896	1.00120.92
C									
ATOM	2077	C	LYS	X	116	25.830	-79.060	14.390	1.00128.31
C									
ATOM	2078	O	LYS	X	116	26.860	-79.498	14.873	1.00160.00
O									
ATOM	2079	CB	LYS	X	116	24.325	-78.261	12.539	1.00 0.00
C									
ATOM	2080	CG	LYS	X	116	24.134	-78.119	11.015	1.00 0.00
C									
ATOM	2081	CD	LYS	X	116	22.794	-77.471	10.640	1.00 0.00
C									
ATOM	2082	CE	LYS	X	116	21.609	-78.411	10.909	1.00 0.00
C									
ATOM	2083	NZ	LYS	X	116	20.347	-77.837	10.424	1.00 0.00
N1+									
ATOM	2084	N	ASP	X	117	24.889	-78.472	15.106	1.00124.54
N									
ATOM	2085	CA	ASP	X	117	24.968	-78.214	16.530	1.00129.52
C									
ATOM	2086	C	ASP	X	117	25.068	-79.377	17.476	1.00121.19
C									
ATOM	2087	O	ASP	X	117	25.684	-79.288	18.522	1.00106.18
O									
ATOM	2088	CB	ASP	X	117	23.723	-77.443	16.945	1.00133.39
C									
ATOM	2089	CG	ASP	X	117	23.923	-75.960	16.912	1.00142.41
C									
ATOM	2090	OD1	ASP	X	117	25.049	-75.513	17.192	1.00136.88
O									
ATOM	2091	OD2	ASP	X	117	22.951	-75.239	16.620	1.00150.41
O1-									
ATOM	2092	N	ARG	X	118	24.404	-80.456	17.151	1.00116.46
N									
ATOM	2093	CA	ARG	X	118	24.311	-81.562	18.120	1.00104.89
C									
ATOM	2094	C	ARG	X	118	23.471	-81.319	19.382	1.00 97.39
C									
ATOM	2095	O	ARG	X	118	23.345	-82.201	20.228	1.00 91.51
O									
ATOM	2096	CB	ARG	X	118	25.685	-82.054	18.639	1.00 98.77
C									

ATOM	2097	CG	ARG	X	118	26.704	-82.455	17.621	1.00	101.00
C										
ATOM	2098	CD	ARG	X	118	27.787	-83.290	18.262	1.00	104.59
C										
ATOM	2099	NE	ARG	X	118	28.434	-82.600	19.369	1.00	118.35
N										
ATOM	2100	CZ	ARG	X	118	29.597	-81.935	19.298	1.00	142.88
C										
ATOM	2101	NH1	ARG	X	118	30.273	-81.821	18.151	1.00	150.66
N										
ATOM	2102	NH2	ARG	X	118	30.093	-81.367	20.390	1.00	153.24
N1+										
ATOM	2103	N	THR	X	119	22.918	-80.115	19.523	1.00	90.76
N										
ATOM	2104	CA	THR	X	119	22.120	-79.746	20.693	1.00	88.89
C										
ATOM	2105	C	THR	X	119	20.696	-79.525	20.310	1.00	84.12
C										
ATOM	2106	O	THR	X	119	20.389	-78.852	19.288	1.00	87.89
O										
ATOM	2107	CB	THR	X	119	22.541	-78.423	21.452	1.00	91.20
C										
ATOM	2108	OG1	THR	X	119	22.785	-77.360	20.538	1.00	100.43
O										
ATOM	2109	CG2	THR	X	119	23.755	-78.606	22.320	1.00	90.27
C										
ATOM	2110	N	PHE	X	120	19.835	-80.093	21.143	1.00	77.66
N										
ATOM	2111	CA	PHE	X	120	18.399	-79.967	21.011	1.00	78.80
C										
ATOM	2112	C	PHE	X	120	17.862	-79.507	22.350	1.00	81.74
C										
ATOM	2113	O	PHE	X	120	18.611	-79.458	23.314	1.00	80.97
O										
ATOM	2114	CB	PHE	X	120	17.760	-81.283	20.676	1.00	75.23
C										
ATOM	2115	CG	PHE	X	120	18.038	-82.330	21.658	1.00	72.73
C										
ATOM	2116	CD1	PHE	X	120	19.335	-82.773	21.852	1.00	71.99
C										
ATOM	2117	CD2	PHE	X	120	17.012	-82.934	22.320	1.00	72.23
C										
ATOM	2118	CE1	PHE	X	120	19.578	-83.873	22.606	1.00	72.43
C										
ATOM	2119	CE2	PHE	X	120	17.250	-84.017	23.109	1.00	73.66
C										
ATOM	2120	CZ	PHE	X	120	18.531	-84.504	23.233	1.00	73.53
C										
ATOM	2121	N	ALA	X	121	16.572	-79.221	22.392	1.00	85.57
N										
ATOM	2122	CA	ALA	X	121	15.968	-78.507	23.495	1.00	84.79
C										
ATOM	2123	C	ALA	X	121	15.009	-79.437	24.290	1.00	83.23
C										

ATOM	2124	O	ALA	X	121	14.195	-80.185	23.709	1.00	76.28
O										
ATOM	2125	CB	ALA	X	121	15.214	-77.340	22.921	1.00	84.33
C										
ATOM	2126	N	VAL	X	122	15.134	-79.393	25.613	1.00	82.98
N										
ATOM	2127	CA	VAL	X	122	14.287	-80.180	26.461	1.00	84.79
C										
ATOM	2128	C	VAL	X	122	13.485	-79.245	27.325	1.00	87.32
C										
ATOM	2129	O	VAL	X	122	14.049	-78.303	27.906	1.00	97.07
O										
ATOM	2130	CB	VAL	X	122	15.183	-81.016	27.299	1.00	88.22
C										
ATOM	2131	CG1	VAL	X	122	14.351	-81.848	28.239	1.00	95.39
C										
ATOM	2132	CG2	VAL	X	122	16.076	-81.850	26.384	1.00	87.59
C										
ATOM	2133	N	LEU	X	123	12.180	-79.512	27.467	1.00	88.58
N										
ATOM	2134	CA	LEU	X	123	11.278	-78.552	28.094	1.00	87.76
C										
ATOM	2135	C	LEU	X	123	10.796	-79.004	29.481	1.00	85.48
C										
ATOM	2136	O	LEU	X	123	10.423	-80.125	29.671	1.00	85.68
O										
ATOM	2137	CB	LEU	X	123	10.117	-78.173	27.146	1.00	87.12
C										
ATOM	2138	CG	LEU	X	123	10.539	-77.616	25.745	1.00	86.33
C										
ATOM	2139	CD1	LEU	X	123	9.347	-77.177	24.916	1.00	86.46
C										
ATOM	2140	CD2	LEU	X	123	11.523	-76.461	25.779	1.00	84.25
C										
ATOM	2141	N	ALA	X	124	10.761	-78.055	30.397	1.00	86.69
N										
ATOM	2142	CA	ALA	X	124	10.027	-78.173	31.624	1.00	95.89
C										
ATOM	2143	C	ALA	X	124	8.536	-77.839	31.318	1.00	100.13
C										
ATOM	2144	O	ALA	X	124	8.190	-76.799	30.715	1.00	97.88
O										
ATOM	2145	CB	ALA	X	124	10.599	-77.236	32.645	1.00	99.69
C										
ATOM	2146	N	TYR	X	125	7.697	-78.804	31.590	1.00	108.29
N										
ATOM	2147	CA	TYR	X	125	6.270	-78.579	31.629	1.00	117.79
C										
ATOM	2148	C	TYR	X	125	5.840	-78.811	33.101	1.00	120.50
C										
ATOM	2149	O	TYR	X	125	6.010	-79.934	33.608	1.00	126.88
O										
ATOM	2150	CB	TYR	X	125	5.599	-79.611	30.705	1.00	129.87
C										

ATOM	2151	CG	TYR	X	125	5.646	-79.327	29.210	1.00133.82
C									
ATOM	2152	CD1	TYR	X	125	6.697	-79.793	28.409	1.00132.65
C									
ATOM	2153	CD2	TYR	X	125	4.531	-78.772	28.579	1.00145.30
C									
ATOM	2154	CE1	TYR	X	125	6.676	-79.602	27.040	1.00140.68
C									
ATOM	2155	CE2	TYR	X	125	4.500	-78.574	27.221	1.00147.48
C									
ATOM	2156	CZ	TYR	X	125	5.574	-78.972	26.460	1.00150.69
C									
ATOM	2157	OH	TYR	X	125	5.539	-78.708	25.122	1.00157.65
O									
ATOM	2158	N	SER	X	126	5.167	-77.833	33.748	1.00121.11
N									
ATOM	2159	CA	SER	X	126	4.132	-78.172	34.778	1.00123.88
C									
ATOM	2160	C	SER	X	126	3.011	-78.921	33.989	1.00131.03
C									
ATOM	2161	O	SER	X	126	2.569	-78.404	32.981	1.00160.28
O									
ATOM	2162	CB	SER	X	126	3.576	-76.919	35.494	1.00114.15
C									
ATOM	2163	OG	SER	X	126	2.244	-77.156	35.993	1.00109.41
O									
ATOM	2164	N	ASN	X	127	2.519	-80.057	34.442	1.00125.50
N									
ATOM	2165	CA	ASN	X	127	1.534	-80.763	33.636	1.00116.61
C									
ATOM	2166	C	ASN	X	127	0.392	-79.845	33.337	1.00120.62
C									
ATOM	2167	O	ASN	X	127	-0.296	-79.987	32.346	1.00108.98
O									
ATOM	2168	CB	ASN	X	127	1.030	-82.014	34.379	1.00 0.00
C									
ATOM	2169	CG	ASN	X	127	2.144	-83.018	34.696	1.00 0.00
C									
ATOM	2170	ND2	ASN	X	127	2.644	-83.063	35.818	1.00 0.00
N									
ATOM	2171	OD1	ASN	X	127	2.544	-83.815	33.701	1.00 0.00
O									
ATOM	2172	N	VAL	X	128	0.188	-78.887	34.207	1.00132.88
N									
ATOM	2173	CA	VAL	X	128	-0.881	-77.940	34.010	1.00138.55
C									
ATOM	2174	C	VAL	X	128	-0.674	-77.124	32.741	1.00140.37
C									
ATOM	2175	O	VAL	X	128	-1.624	-76.605	32.169	1.00136.21
O									
ATOM	2176	CB	VAL	X	128	-1.002	-77.031	35.257	1.00 0.00
C									
ATOM	2177	CG1	VAL	X	128	-2.134	-76.003	35.093	1.00 0.00
C									

ATOM	2178	CG2	VAL	X	128	-1.269	-77.850	36.534	1.00	0.00
C										
ATOM	2179	N	GLN	X	129	0.565	-77.003	32.294	1.00	139.80
N										
ATOM	2180	CA	GLN	X	129	0.849	-76.153	31.149	1.00	132.64
C										
ATOM	2181	C	GLN	X	129	0.094	-76.510	29.893	1.00	142.64
C										
ATOM	2182	O	GLN	X	129	-0.372	-75.616	29.193	1.00	156.92
O										
ATOM	2183	CB	GLN	X	129	2.370	-76.148	30.901	1.00	0.00
C										
ATOM	2184	CG	GLN	X	129	3.190	-75.556	32.066	1.00	0.00
C										
ATOM	2185	CD	GLN	X	129	3.346	-74.033	32.014	1.00	0.00
C										
ATOM	2186	NE2	GLN	X	129	4.466	-73.527	32.042	1.00	0.00
N										
ATOM	2187	OE1	GLN	X	129	2.244	-73.280	31.966	1.00	0.00
O										
ATOM	2188	N	GLU	X	130	-0.044	-77.790	29.593	1.00	144.40
N										
ATOM	2189	CA	GLU	X	130	-0.775	-78.162	28.393	1.00	139.07
C										
ATOM	2190	C	GLU	X	130	-0.191	-77.431	27.199	1.00	148.07
C										
ATOM	2191	O	GLU	X	130	-0.917	-76.835	26.410	1.00	145.49
O										
ATOM	2192	CB	GLU	X	130	-2.303	-77.808	28.537	1.00	0.00
C										
ATOM	2193	CG	GLU	X	130	-2.995	-78.630	29.638	1.00	0.00
C										
ATOM	2194	CD	GLU	X	130	-3.050	-80.124	29.314	1.00	0.00
C										
ATOM	2195	OE1	GLU	X	130	-3.935	-80.638	28.633	1.00	0.00
O										
ATOM	2196	OE2	GLU	X	130	-2.022	-80.845	29.851	1.00	0.00
O1-										
ATOM	2197	N	ARG	X	131	1.132	-77.475	27.106	1.00	149.81
N										
ATOM	2198	CA	ARG	X	131	1.911	-76.890	26.014	1.00	150.02
C										
ATOM	2199	C	ARG	X	131	2.479	-75.492	26.138	1.00	136.08
C										
ATOM	2200	O	ARG	X	131	3.264	-75.098	25.285	1.00	141.48
O										
ATOM	2201	CB	ARG	X	131	1.056	-77.063	24.737	1.00	0.00
C										
ATOM	2202	CG	ARG	X	131	1.910	-77.196	23.462	1.00	0.00
C										
ATOM	2203	CD	ARG	X	131	1.073	-77.559	22.227	1.00	0.00
C										
ATOM	2204	NE	ARG	X	131	0.212	-76.446	21.793	1.00	0.00
N										

ATOM	2205	CZ	ARG	X	131	-1.061	-76.541	21.364	1.00	0.00
C										
ATOM	2206	NH1	ARG	X	131	-1.704	-77.716	21.289	1.00	0.00
N										
ATOM	2207	NH2	ARG	X	131	-1.703	-75.423	20.999	1.00	0.00
N1+										
ATOM	2208	N	GLU	X	132	2.124	-74.747	27.171	1.00	126.47
N										
ATOM	2209	CA	GLU	X	132	2.706	-73.432	27.318	1.00	119.66
C										
ATOM	2210	C	GLU	X	132	4.000	-73.709	28.036	1.00	124.77
C										
ATOM	2211	O	GLU	X	132	4.139	-73.401	29.202	1.00	132.55
O										
ATOM	2212	CB	GLU	X	132	1.754	-72.441	28.147	1.00	0.00
C										
ATOM	2213	CG	GLU	X	132	2.344	-71.025	28.266	1.00	0.00
C										
ATOM	2214	CD	GLU	X	132	2.614	-70.394	26.898	1.00	0.00
C										
ATOM	2215	OE1	GLU	X	132	1.728	-69.970	26.158	1.00	0.00
O										
ATOM	2216	OE2	GLU	X	132	3.937	-70.350	26.565	1.00	0.00
O1-										
ATOM	2217	N	ALA	X	133	4.953	-74.318	27.352	1.00	120.47
N										
ATOM	2218	CA	ALA	X	133	6.251	-74.619	28.011	1.00	120.48
C										
ATOM	2219	C	ALA	X	133	7.013	-73.310	28.101	1.00	118.96
C										
ATOM	2220	O	ALA	X	133	6.974	-72.516	27.142	1.00	122.40
O										
ATOM	2221	CB	ALA	X	133	7.062	-75.611	27.215	1.00	121.85
C										
ATOM	2222	N	GLN	X	134	7.632	-73.040	29.254	1.00	115.37
N										
ATOM	2223	CA	GLN	X	134	8.096	-71.660	29.546	1.00	116.82
C										
ATOM	2224	C	GLN	X	134	9.568	-71.600	29.900	1.00	111.47
C										
ATOM	2225	O	GLN	X	134	10.250	-70.641	29.532	1.00	102.24
O										
ATOM	2226	CB	GLN	X	134	7.168	-70.932	30.577	1.00	121.12
C										
ATOM	2227	CG	GLN	X	134	5.771	-70.543	30.006	1.00	121.58
C										
ATOM	2228	CD	GLN	X	134	5.160	-69.216	30.525	1.00	120.21
C										
ATOM	2229	OE1	GLN	X	134	4.259	-68.656	29.889	1.00	113.24
O										
ATOM	2230	NE2	GLN	X	134	5.604	-68.755	31.699	1.00	119.64
N										
ATOM	2231	N	PHE	X	135	10.111	-72.709	30.385	1.00	111.45
N										

ATOM	2232	CA	PHE	X	135	11.574	-72.853	30.611	1.00	117.46
C										
ATOM	2233	C	PHE	X	135	12.034	-74.250	30.175	1.00	99.19
C										
ATOM	2234	O	PHE	X	135	11.224	-75.157	29.939	1.00	91.18
O										
ATOM	2235	CB	PHE	X	135	11.982	-72.606	32.114	1.00	142.32
C										
ATOM	2236	CG	PHE	X	135	11.324	-71.376	32.762	1.00	178.57
C										
ATOM	2237	CD1	PHE	X	135	9.984	-71.403	33.190	1.00	191.54
C										
ATOM	2238	CD2	PHE	X	135	12.061	-70.220	33.015	1.00	195.42
C										
ATOM	2239	CE1	PHE	X	135	9.384	-70.277	33.772	1.00	182.14
C										
ATOM	2240	CE2	PHE	X	135	11.465	-69.102	33.616	1.00	193.52
C										
ATOM	2241	CZ	PHE	X	135	10.126	-69.130	33.983	1.00	181.05
C										
ATOM	2242	N	GLY	X	136	13.347	-74.414	30.078	1.00	87.91
N										
ATOM	2243	CA	GLY	X	136	13.952	-75.705	29.695	1.00	82.78
C										
ATOM	2244	C	GLY	X	136	15.457	-75.739	29.731	1.00	82.16
C										
ATOM	2245	O	GLY	X	136	16.077	-74.819	30.229	1.00	79.08
O										
ATOM	2246	N	THR	X	137	16.040	-76.690	29.035	1.00	88.66
N										
ATOM	2247	CA	THR	X	137	17.492	-76.963	29.150	1.00	90.08
C										
ATOM	2248	C	THR	X	137	18.045	-77.524	27.817	1.00	85.59
C										
ATOM	2249	O	THR	X	137	17.451	-78.414	27.204	1.00	78.58
O										
ATOM	2250	CB	THR	X	137	17.645	-77.977	30.267	1.00	93.88
C										
ATOM	2251	OG1	THR	X	137	16.656	-77.685	31.292	1.00	88.34
O										
ATOM	2252	CG2	THR	X	137	19.065	-77.954	30.803	1.00	97.93
C										
ATOM	2253	N	THR	X	138	19.177	-76.980	27.364	1.00	87.63
N										
ATOM	2254	CA	THR	X	138	19.848	-77.513	26.192	1.00	92.82
C										
ATOM	2255	C	THR	X	138	20.497	-78.830	26.577	1.00	94.08
C										
ATOM	2256	O	THR	X	138	21.088	-78.954	27.652	1.00	92.04
O										
ATOM	2257	CB	THR	X	138	20.889	-76.524	25.579	1.00	95.80
C										
ATOM	2258	OG1	THR	X	138	21.961	-76.251	26.497	1.00	99.71
O										

ATOM	2259	CG2	THR	X	138	20.210	-75.220	25.198	1.00	97.25
C										
ATOM	2260	N	ALA	X	139	20.350	-79.832	25.713	1.00	91.41
N										
ATOM	2261	CA	ALA	X	139	21.094	-81.048	25.845	1.00	86.20
C										
ATOM	2262	C	ALA	X	139	21.888	-81.259	24.585	1.00	83.72
C										
ATOM	2263	O	ALA	X	139	21.388	-81.093	23.477	1.00	86.47
O										
ATOM	2264	CB	ALA	X	139	20.143	-82.186	26.041	1.00	87.65
C										
ATOM	2265	N	GLU	X	140	23.131	-81.641	24.753	1.00	81.55
N										
ATOM	2266	CA	GLU	X	140	24.139	-81.730	23.694	1.00	90.65
C										
ATOM	2267	C	GLU	X	140	24.497	-83.173	23.512	1.00	88.24
C										
ATOM	2268	O	GLU	X	140	24.840	-83.824	24.500	1.00	81.56
O										
ATOM	2269	CB	GLU	X	140	25.382	-81.016	24.196	1.00	102.78
C										
ATOM	2270	CG	GLU	X	140	26.576	-80.922	23.271	1.00	112.76
C										
ATOM	2271	CD	GLU	X	140	27.610	-80.018	23.888	1.00	129.97
C										
ATOM	2272	OE1	GLU	X	140	27.611	-78.797	23.571	1.00	153.13
O										
ATOM	2273	OE2	GLU	X	140	28.248	-80.481	24.856	1.00	134.09
O1-										
ATOM	2274	N	ILE	X	141	24.432	-83.691	22.275	1.00	91.39
N										
ATOM	2275	CA	ILE	X	141	24.750	-85.082	22.079	1.00	90.61
C										
ATOM	2276	C	ILE	X	141	26.255	-85.332	22.076	1.00	90.47
C										
ATOM	2277	O	ILE	X	141	27.011	-84.722	21.326	1.00	90.85
O										
ATOM	2278	CB	ILE	X	141	24.037	-85.716	20.917	1.00	94.17
C										
ATOM	2279	CG1	ILE	X	141	22.576	-85.240	20.896	1.00	97.27
C										
ATOM	2280	CG2	ILE	X	141	24.083	-87.241	21.088	1.00	95.30
C										
ATOM	2281	CD1	ILE	X	141	22.033	-84.977	19.511	1.00	98.71
C										
ATOM	2282	N	TYR	X	142	26.688	-86.231	22.961	1.00	89.63
N										
ATOM	2283	CA	TYR	X	142	28.106	-86.612	23.060	1.00	94.00
C										
ATOM	2284	C	TYR	X	142	28.408	-88.019	22.566	1.00	103.23
C										
ATOM	2285	O	TYR	X	142	29.576	-88.420	22.506	1.00	111.20
O										



ATOM	2286	CB	TYR	X	142	28.598	-86.513	24.503	1.00	92.01
C										
ATOM	2287	CG	TYR	X	142	28.001	-87.513	25.510	1.00	86.94
C										
ATOM	2288	CD1	TYR	X	142	28.583	-88.748	25.716	1.00	86.80
C										
ATOM	2289	CD2	TYR	X	142	27.026	-87.109	26.407	1.00	86.13
C										
ATOM	2290	CE1	TYR	X	142	28.108	-89.619	26.675	1.00	87.21
C										
ATOM	2291	CE2	TYR	X	142	26.560	-87.948	27.392	1.00	86.53
C										
ATOM	2292	CZ	TYR	X	142	27.101	-89.211	27.525	1.00	89.26
C										
ATOM	2293	OH	TYR	X	142	26.592	-90.079	28.489	1.00	95.96
O										
ATOM	2294	N	ALA	X	143	27.365	-88.783	22.298	1.00	108.57
N										
ATOM	2295	CA	ALA	X	143	27.535	-90.135	21.815	1.00	116.73
C										
ATOM	2296	C	ALA	X	143	26.347	-90.441	20.953	1.00	113.83
C										
ATOM	2297	O	ALA	X	143	25.271	-89.929	21.203	1.00	119.75
O										
ATOM	2298	CB	ALA	X	143	27.611	-91.098	22.968	1.00	118.34
C										
ATOM	2299	N	TYR	X	144	26.528	-91.261	19.931	1.00	103.65
N										
ATOM	2300	CA	TYR	X	144	25.417	-91.581	19.069	1.00	97.51
C										
ATOM	2301	C	TYR	X	144	25.661	-92.854	18.307	1.00	96.60
C										
ATOM	2302	O	TYR	X	144	26.792	-93.170	17.985	1.00	95.33
O										
ATOM	2303	CB	TYR	X	144	25.230	-90.401	18.142	1.00	97.25
C										
ATOM	2304	CG	TYR	X	144	24.493	-90.645	16.863	1.00	101.71
C										
ATOM	2305	CD1	TYR	X	144	23.397	-91.468	16.810	1.00	107.14
C										
ATOM	2306	CD2	TYR	X	144	24.863	-89.986	15.715	1.00	100.39
C										
ATOM	2307	CE1	TYR	X	144	22.712	-91.659	15.633	1.00	109.24
C										
ATOM	2308	CE2	TYR	X	144	24.189	-90.170	14.538	1.00	106.87
C										
ATOM	2309	CZ	TYR	X	144	23.114	-91.008	14.504	1.00	110.85
C										
ATOM	2310	OH	TYR	X	144	22.449	-91.194	13.320	1.00	121.58
O										
ATOM	2311	N	ARG	X	145	24.598	-93.589	18.025	1.00	96.47
N										
ATOM	2312	CA	ARG	X	145	24.706	-94.810	17.263	1.00	101.00
C										

ATOM	2313	C	ARG	X	145	23.415	-94.963	16.521	1.00100.62
C									
ATOM	2314	O	ARG	X	145	22.372	-94.662	17.061	1.00 93.74
O									
ATOM	2315	CB	ARG	X	145	24.915	-95.986	18.178	1.00110.60
C									
ATOM	2316	CG	ARG	X	145	25.969	-96.936	17.676	1.00127.82
C									
ATOM	2317	CD	ARG	X	145	25.341	-98.155	17.055	1.00138.87
C									
ATOM	2318	NE	ARG	X	145	24.946	-99.103	18.081	1.00150.28
N									
ATOM	2319	CZ	ARG	X	145	25.802	-99.688	18.903	1.00145.62
C									
ATOM	2320	NH1	ARG	X	145	25.366	-100.545	19.811	1.00135.85
N									
ATOM	2321	NH2	ARG	X	145	27.095	-99.406	18.821	1.00143.91
N1+									
ATOM	2322	N	GLU	X	146	23.478	-95.447	15.290	1.00103.08
N									
ATOM	2323	CA	GLU	X	146	22.284	-95.618	14.459	1.00 96.29
C									
ATOM	2324	C	GLU	X	146	22.232	-97.050	13.951	1.00 97.08
C									
ATOM	2325	O	GLU	X	146	22.837	-97.342	12.958	1.00106.90
O									
ATOM	2326	CB	GLU	X	146	22.299	-94.637	13.240	1.00 0.00
C									
ATOM	2327	CG	GLU	X	146	22.049	-93.177	13.637	1.00 0.00
C									
ATOM	2328	CD	GLU	X	146	21.811	-92.292	12.411	1.00 0.00
C									
ATOM	2329	OE1	GLU	X	146	22.604	-92.194	11.476	1.00 0.00
O									
ATOM	2330	OE2	GLU	X	146	20.626	-91.616	12.443	1.00 0.00
O1-									
ATOM	2331	N	GLU	X	147	21.469	-97.909	14.619	1.00100.87
N									
ATOM	2332	CA	GLU	X	147	21.327	-99.265	14.181	1.00115.15
C									
ATOM	2333	C	GLU	X	147	20.046	-99.509	13.412	1.00122.28
C									
ATOM	2334	O	GLU	X	147	18.925	-99.082	13.778	1.00143.83
O									
ATOM	2335	CB	GLU	X	147	21.618	-100.276	15.285	1.00129.01
C									
ATOM	2336	CG	GLU	X	147	20.550	-100.559	16.327	1.00134.03
C									
ATOM	2337	CD	GLU	X	147	20.988	-101.677	17.286	1.00137.60
C									
ATOM	2338	OE1	GLU	X	147	21.905	-101.402	18.134	1.00121.40
O									
ATOM	2339	OE2	GLU	X	147	20.514	-102.846	17.095	1.00131.36
O1-									

ATOM	2340	N	GLN	X	148	20.214-100.231	12.317	1.00121.49
N								
ATOM	2341	CA	GLN	X	148	19.051-100.897	11.664	1.00129.53
C								
ATOM	2342	C	GLN	X	148	19.228-102.408	11.584	1.00126.55
C								
ATOM	2343	O	GLN	X	148	18.966-103.014	10.553	1.00128.62
O								
ATOM	2344	CB	GLN	X	148	18.715-100.279	10.289	1.00141.98
C								
ATOM	2345	CG	GLN	X	148	19.901 -99.910	9.386	1.00147.17
C								
ATOM	2346	CD	GLN	X	148	19.707 -98.571	8.681	1.00149.90
C								
ATOM	2347	NE2	GLN	X	148	18.781 -98.412	7.900	1.00151.82
N								
ATOM	2348	OE1	GLN	X	148	20.565 -97.596	8.985	1.00156.36
O								
ATOM	2349	N	ASP	X	149	19.495-103.027	12.719	1.00128.19
N								
ATOM	2350	CA	ASP	X	149	19.769-104.460	12.767	1.00143.54
C								
ATOM	2351	C	ASP	X	149	18.511-105.307	12.835	1.00147.05
C								
ATOM	2352	O	ASP	X	149	18.176-106.034	11.901	1.00147.05
O								
ATOM	2353	CB	ASP	X	149	20.665-104.780	13.955	1.00148.69
C								
ATOM	2354	CG	ASP	X	149	22.035-104.236	13.780	1.00147.42
C								
ATOM	2355	OD1	ASP	X	149	22.164-103.193	13.057	1.00141.58
O								
ATOM	2356	OD2	ASP	X	149	22.976-104.882	14.312	1.00142.79
O1-								
ATOM	2357	N	PHE	X	150	17.745-105.134	13.916	1.00149.29
N								
ATOM	2358	CA	PHE	X	150	16.429-105.753	14.065	1.00135.22
C								
ATOM	2359	C	PHE	X	150	15.527-105.451	12.865	1.00121.59
C								
ATOM	2360	O	PHE	X	150	14.666-106.264	12.546	1.00122.85
O								
ATOM	2361	CB	PHE	X	150	15.782-105.257	15.365	1.00133.92
C								
ATOM	2362	CG	PHE	X	150	16.611-105.562	16.595	1.00143.38
C								
ATOM	2363	CD1	PHE	X	150	16.535-106.833	17.194	1.00144.94
C								
ATOM	2364	CD2	PHE	X	150	17.501-104.598	17.108	1.00148.37
C								
ATOM	2365	CE1	PHE	X	150	17.350-107.145	18.297	1.00147.92
C								
ATOM	2366	CE2	PHE	X	150	18.310-104.908	18.212	1.00149.58
C								

ATOM C	2367	CZ	PHE X 150	18.237-106.179	18.806	1.00148.12
ATOM N	2368	N	GLY X 151	15.777-104.334	12.169	1.00111.62
ATOM C	2369	CA	GLY X 151	15.028-103.959	10.984	1.00115.85
ATOM C	2370	C	GLY X 151	13.780-103.123	11.327	1.00116.92
ATOM O	2371	O	GLY X 151	12.707-103.196	10.752	1.00115.00
ATOM N	2372	N	ILE X 152	13.918-102.254	12.294	1.00119.88
ATOM C	2373	CA	ILE X 152	13.446-100.880	12.173	1.00117.40
ATOM C	2374	C	ILE X 152	14.726-100.114	12.536	1.00106.02
ATOM O	2375	O	ILE X 152	15.589-100.619	13.264	1.00103.47
ATOM C	2376	CB	ILE X 152	12.257-100.564	13.109	1.00124.44
ATOM C	2377	CG1	ILE X 152	12.302 -99.061	13.456	1.00128.29
ATOM C	2378	CG2	ILE X 152	12.222-101.441	14.382	1.00125.36
ATOM C	2379	CD1	ILE X 152	11.078 -98.584	14.244	1.00131.55
ATOM N	2380	N	GLU X 153	14.890 -98.923	11.981	1.00 99.32
ATOM C	2381	CA	GLU X 153	16.074 -98.077	12.292	1.00 97.85
ATOM C	2382	C	GLU X 153	15.831 -97.479	13.645	1.00 94.43
ATOM O	2383	O	GLU X 153	14.667 -97.190	14.009	1.00 89.94
ATOM C	2384	CB	GLU X 153	16.360 -96.968	11.262	1.00103.61
ATOM C	2385	CG	GLU X 153	15.147 -96.278	10.612	1.00108.82
ATOM C	2386	CD	GLU X 153	15.526 -95.121	9.666	1.00108.20
ATOM O	2387	OE1	GLU X 153	14.678 -94.188	9.504	1.00105.30
ATOM O1-	2388	OE2	GLU X 153	16.647 -95.162	9.062	1.00102.47
ATOM N	2389	N	ILE X 154	16.860 -97.521	14.453	1.00 95.88
ATOM C	2390	CA	ILE X 154	16.741 -97.148	15.876	1.00 96.16
ATOM C	2391	C	ILE X 154	17.928 -96.233	16.101	1.00 95.00
ATOM O	2392	O	ILE X 154	19.004 -96.500	15.577	1.00 90.80
ATOM C	2393	CB	ILE X 154	16.838 -98.460	16.703	1.00 99.33

ATOM	2394	CG1	ILE	X	154	15.448	-99.082	16.933	1.00102.62
C									
ATOM	2395	CG2	ILE	X	154	17.626	-98.284	17.984	1.00103.06
C									
ATOM	2396	CD1	ILE	X	154	14.551	-98.333	17.926	1.00103.68
C									
ATOM	2397	N	VAL	X	155	17.728	-95.129	16.825	1.00 95.82
N									
ATOM	2398	CA	VAL	X	155	18.810	-94.250	17.149	1.00 94.26
C									
ATOM	2399	C	VAL	X	155	18.910	-94.119	18.664	1.00 95.18
C									
ATOM	2400	O	VAL	X	155	17.945	-93.729	19.340	1.00102.73
O									
ATOM	2401	CB	VAL	X	155	18.653	-92.864	16.512	1.00 95.33
C									
ATOM	2402	CG1	VAL	X	155	19.899	-92.075	16.754	1.00 98.17
C									
ATOM	2403	CG2	VAL	X	155	18.414	-92.947	15.018	1.00 97.62
C									
ATOM	2404	N	LYS	X	156	20.077	-94.504	19.192	1.00 91.35
N									
ATOM	2405	CA	LYS	X	156	20.359	-94.369	20.600	1.00 88.34
C									
ATOM	2406	C	LYS	X	156	21.395	-93.251	20.771	1.00 86.95
C									
ATOM	2407	O	LYS	X	156	22.405	-93.213	20.073	1.00 90.57
O									
ATOM	2408	CB	LYS	X	156	20.884	-95.648	21.228	1.00 85.42
C									
ATOM	2409	CG	LYS	X	156	20.435	-96.916	20.593	1.00 85.48
C									
ATOM	2410	CD	LYS	X	156	21.478	-97.982	20.839	1.00 89.45
C									
ATOM	2411	CE	LYS	X	156	20.917	-99.391	20.642	1.00 96.00
C									
ATOM	2412	NZ	LYS	X	156	20.326	-99.978	21.884	1.00101.80
N1+									
ATOM	2413	N	VAL	X	157	21.097	-92.315	21.661	1.00 83.78
N									
ATOM	2414	CA	VAL	X	157	22.004	-91.240	21.946	1.00 84.22
C									
ATOM	2415	C	VAL	X	157	22.187	-91.013	23.444	1.00 86.01
C									
ATOM	2416	O	VAL	X	157	21.347	-91.371	24.264	1.00 79.97
O									
ATOM	2417	CB	VAL	X	157	21.674	-89.955	21.145	1.00 82.99
C									
ATOM	2418	CG1	VAL	X	157	21.287	-90.304	19.751	1.00 80.29
C									
ATOM	2419	CG2	VAL	X	157	20.537	-89.171	21.756	1.00 86.18
C									
ATOM	2420	N	LYS	X	158	23.341	-90.459	23.781	1.00 91.64
N									

ATOM	2421	CA	LYS	X	158	23.626	-89.985	25.123	1.00	97.96
C										
ATOM	2422	C	LYS	X	158	23.858	-88.486	25.077	1.00	95.51
C										
ATOM	2423	O	LYS	X	158	24.862	-88.057	24.569	1.00	94.40
O										
ATOM	2424	CB	LYS	X	158	24.877	-90.677	25.643	1.00	101.70
C										
ATOM	2425	CG	LYS	X	158	24.810	-92.170	25.619	1.00	99.15
C										
ATOM	2426	CD	LYS	X	158	26.084	-92.745	26.174	1.00	101.25
C										
ATOM	2427	CE	LYS	X	158	26.030	-94.240	25.992	1.00	112.54
C										
ATOM	2428	NZ	LYS	X	158	27.052	-94.975	26.758	1.00	128.86
N1+										
ATOM	2429	N	ALA	X	159	22.919	-87.714	25.613	1.00	89.45
N										
ATOM	2430	CA	ALA	X	159	23.079	-86.274	25.726	1.00	90.16
C										
ATOM	2431	C	ALA	X	159	23.387	-85.833	27.144	1.00	93.60
C										
ATOM	2432	O	ALA	X	159	23.151	-86.560	28.078	1.00	92.93
O										
ATOM	2433	CB	ALA	X	159	21.837	-85.586	25.243	1.00	90.70
C										
ATOM	2434	N	ILE	X	160	23.911	-84.626	27.288	1.00	94.93
N										
ATOM	2435	CA	ILE	X	160	24.209	-84.048	28.586	1.00	97.32
C										
ATOM	2436	C	ILE	X	160	23.634	-82.637	28.643	1.00	98.05
C										
ATOM	2437	O	ILE	X	160	23.826	-81.857	27.727	1.00	101.81
O										
ATOM	2438	CB	ILE	X	160	25.735	-84.027	28.797	1.00	101.95
C										
ATOM	2439	CG1	ILE	X	160	26.094	-83.663	30.227	1.00	117.15
C										
ATOM	2440	CG2	ILE	X	160	26.412	-83.071	27.846	1.00	101.06
C										
ATOM	2441	CD1	ILE	X	160	27.271	-84.473	30.764	1.00	131.74
C										
ATOM	2442	N	GLY	X	161	22.877	-82.335	29.690	1.00	99.22
N										
ATOM	2443	CA	GLY	X	161	22.290	-81.005	29.847	1.00	103.84
C										
ATOM	2444	C	GLY	X	161	23.334	-79.894	29.944	1.00	101.55
C										
ATOM	2445	O	GLY	X	161	24.318	-80.006	30.708	1.00	119.09
O										
ATOM	2446	N	ARG	X	162	23.118	-78.818	29.183	1.00	90.84
N										
ATOM	2447	CA	ARG	X	162	24.097	-77.751	29.097	1.00	92.74
C										

ATOM	2448	C	ARG	X	162	23.618	-76.420	29.666	1.00	97.85
C										
ATOM	2449	O	ARG	X	162	24.200	-75.914	30.611	1.00	121.77
O										
ATOM	2450	CB	ARG	X	162	24.580	-77.500	27.676	1.00	94.08
C										
ATOM	2451	CG	ARG	X	162	25.517	-78.557	27.109	1.00	98.03
C										
ATOM	2452	CD	ARG	X	162	26.960	-78.463	27.578	1.00	104.34
C										
ATOM	2453	NE	ARG	X	162	27.305	-79.569	28.494	1.00	112.76
N										
ATOM	2454	CZ	ARG	X	162	28.407	-80.331	28.419	1.00	117.59
C										
ATOM	2455	NH1	ARG	X	162	29.318	-80.148	27.459	1.00	119.51
N										
ATOM	2456	NH2	ARG	X	162	28.602	-81.283	29.328	1.00	113.84
N1+										
ATOM	2457	N	GLN	X	163	22.599	-75.828	29.074	1.00	97.99
N										
ATOM	2458	CA	GLN	X	163	22.182	-74.471	29.484	1.00	98.10
C										
ATOM	2459	C	GLN	X	163	20.704	-74.342	29.776	1.00	89.82
C										
ATOM	2460	O	GLN	X	163	19.858	-74.987	29.165	1.00	82.86
O										
ATOM	2461	CB	GLN	X	163	22.579	-73.483	28.434	1.00	103.44
C										
ATOM	2462	CG	GLN	X	163	23.934	-73.800	27.868	1.00	106.34
C										
ATOM	2463	CD	GLN	X	163	24.459	-72.641	27.117	1.00	110.22
C										
ATOM	2464	OE1	GLN	X	163	23.748	-72.082	26.305	1.00	117.32
O										
ATOM	2465	NE2	GLN	X	163	25.658	-72.191	27.457	1.00	112.10
N										
ATOM	2466	N	ARG	X	164	20.378	-73.433	30.661	1.00	88.96
N										
ATOM	2467	CA	ARG	X	164	18.985	-73.105	30.923	1.00	87.51
C										
ATOM	2468	C	ARG	X	164	18.521	-71.982	30.009	1.00	83.33
C										
ATOM	2469	O	ARG	X	164	19.227	-71.005	29.799	1.00	89.49
O										
ATOM	2470	CB	ARG	X	164	18.799	-72.734	32.377	1.00	93.15
C										
ATOM	2471	CG	ARG	X	164	19.282	-73.795	33.356	1.00	93.72
C										
ATOM	2472	CD	ARG	X	164	19.085	-73.329	34.790	1.00	96.38
C										
ATOM	2473	NE	ARG	X	164	20.152	-72.439	35.220	1.00	95.17
N										
ATOM	2474	CZ	ARG	X	164	20.131	-71.109	35.129	1.00	93.23
C										

ATOM	2475	NH1	ARG	X	164	19.111	-70.446	34.618	1.00	89.67
N										
ATOM	2476	NH2	ARG	X	164	21.169	-70.437	35.547	1.00	98.60
N1+										
ATOM	2477	N	PHE	X	165	17.293	-72.106	29.544	1.00	81.47
N										
ATOM	2478	CA	PHE	X	165	16.691	-71.063	28.757	1.00	89.13
C										
ATOM	2479	C	PHE	X	165	15.261	-70.730	29.139	1.00	88.92
C										
ATOM	2480	O	PHE	X	165	14.570	-71.540	29.754	1.00	87.31
O										
ATOM	2481	CB	PHE	X	165	16.752	-71.379	27.255	1.00	100.46
C										
ATOM	2482	CG	PHE	X	165	16.147	-72.749	26.866	1.00	107.10
C										
ATOM	2483	CD1	PHE	X	165	14.762	-72.918	26.708	1.00	104.07
C										
ATOM	2484	CD2	PHE	X	165	16.980	-73.849	26.593	1.00	106.17
C										
ATOM	2485	CE1	PHE	X	165	14.242	-74.150	26.368	1.00	96.22
C										
ATOM	2486	CE2	PHE	X	165	16.449	-75.084	26.274	1.00	95.24
C										
ATOM	2487	CZ	PHE	X	165	15.084	-75.239	26.210	1.00	93.89
C										
ATOM	2488	N	LYS	X	166	14.827	-69.567	28.661	1.00	90.40
N										
ATOM	2489	CA	LYS	X	166	13.449	-69.118	28.721	1.00	95.97
C										
ATOM	2490	C	LYS	X	166	12.841	-69.291	27.344	1.00	95.72
C										
ATOM	2491	O	LYS	X	166	13.437	-68.940	26.325	1.00	91.23
O										
ATOM	2492	CB	LYS	X	166	13.415	-67.645	29.073	1.00	113.30
C										
ATOM	2493	CG	LYS	X	166	12.232	-67.177	29.942	1.00	131.85
C										
ATOM	2494	CD	LYS	X	166	12.541	-65.821	30.634	1.00	143.69
C										
ATOM	2495	CE	LYS	X	166	11.392	-65.308	31.505	1.00	141.96
C										
ATOM	2496	NZ	LYS	X	166	10.114	-65.179	30.725	1.00	138.07
N1+										
ATOM	2497	N	VAL	X	167	11.634	-69.838	27.316	1.00	103.71
N										
ATOM	2498	CA	VAL	X	167	10.865	-69.963	26.075	1.00	114.05
C										
ATOM	2499	C	VAL	X	167	10.274	-68.614	25.708	1.00	116.12
C										
ATOM	2500	O	VAL	X	167	9.653	-67.957	26.511	1.00	132.95
O										
ATOM	2501	CB	VAL	X	167	9.732	-70.969	26.214	1.00	119.92
C										



ATOM	2502	CG1	VAL	X	167	8.740	-70.823	25.058	1.00116.24
C									
ATOM	2503	CG2	VAL	X	167	10.329	-72.373	26.309	1.00126.07
C									
ATOM	2504	N	LEU	X	168	10.472	-68.222	24.472	1.00106.55
N									
ATOM	2505	CA	LEU	X	168	9.824	-67.034	23.920	1.00103.95
C									
ATOM	2506	C	LEU	X	168	8.619	-67.450	23.072	1.00108.79
C									
ATOM	2507	O	LEU	X	168	7.457	-67.261	23.465	1.00110.08
O									
ATOM	2508	CB	LEU	X	168	10.857	-66.365	23.073	1.00101.54
C									
ATOM	2509	CG	LEU	X	168	12.096	-66.243	23.954	1.00101.83
C									
ATOM	2510	CD1	LEU	X	168	13.396	-66.219	23.181	1.00101.37
C									
ATOM	2511	CD2	LEU	X	168	11.959	-64.991	24.787	1.00107.34
C									
ATOM	2512	N	GLU	X	169	8.902	-68.136	21.951	1.00111.57
N									
ATOM	2513	CA	GLU	X	169	7.887	-68.732	21.093	1.00116.25
C									
ATOM	2514	C	GLU	X	169	8.133	-70.225	20.795	1.00114.16
C									
ATOM	2515	O	GLU	X	169	9.272	-70.672	20.721	1.00108.13
O									
ATOM	2516	CB	GLU	X	169	7.926	-68.042	19.761	1.00122.15
C									
ATOM	2517	CG	GLU	X	169	6.732	-67.210	19.467	1.00132.40
C									
ATOM	2518	CD	GLU	X	169	6.815	-66.677	18.086	1.00143.59
C									
ATOM	2519	OE1	GLU	X	169	7.843	-66.966	17.411	1.00146.71
O									
ATOM	2520	OE2	GLU	X	169	5.875	-65.955	17.700	1.00156.64
O1-									
ATOM	2521	N	LEU	X	170	7.066	-70.903	20.418	1.00116.90
N									
ATOM	2522	CA	LEU	X	170	7.124	-72.276	19.911	1.00127.55
C									
ATOM	2523	C	LEU	X	170	6.449	-72.414	18.543	1.00147.01
C									
ATOM	2524	O	LEU	X	170	5.204	-72.360	18.434	1.00163.32
O									
ATOM	2525	CB	LEU	X	170	6.387	-73.172	20.883	1.00127.25
C									
ATOM	2526	CG	LEU	X	170	7.183	-73.697	22.051	1.00125.03
C									
ATOM	2527	CD1	LEU	X	170	6.236	-74.293	23.081	1.00125.56
C									
ATOM	2528	CD2	LEU	X	170	8.177	-74.738	21.573	1.00125.82
C									

ATOM	2529	N	ARG	X	171	7.261	-72.673	17.520	1.00147.17
N									
ATOM	2530	CA	ARG	X	171	6.749	-72.956	16.144	1.00143.18
C									
ATOM	2531	C	ARG	X	171	6.807	-74.467	15.806	1.00125.65
C									
ATOM	2532	O	ARG	X	171	7.688	-75.131	16.257	1.00118.50
O									
ATOM	2533	CB	ARG	X	171	7.635	-72.197	15.132	1.00158.23
C									
ATOM	2534	CG	ARG	X	171	8.097	-70.813	15.593	1.00169.50
C									
ATOM	2535	CD	ARG	X	171	9.580	-70.778	15.956	1.00178.34
C									
ATOM	2536	NE	ARG	X	171	10.424	-70.437	14.805	1.00187.43
N									
ATOM	2537	CZ	ARG	X	171	10.515	-69.218	14.256	1.00189.79
C									
ATOM	2538	NH1	ARG	X	171	11.329	-69.016	13.230	1.00185.64
N									
ATOM	2539	NH2	ARG	X	171	9.807	-68.196	14.727	1.00189.87
N1+									
ATOM	2540	N	THR	X	172	5.812	-74.978	15.081	1.00112.72
N									
ATOM	2541	CA	THR	X	172	5.605	-76.432	14.936	1.00109.98
C									
ATOM	2542	C	THR	X	172	5.840	-76.980	13.496	1.00103.38
C									
ATOM	2543	O	THR	X	172	4.886	-77.337	12.771	1.00107.11
O									
ATOM	2544	CB	THR	X	172	4.200	-76.826	15.488	1.00118.38
C									
ATOM	2545	OG1	THR	X	172	3.299	-75.688	15.454	1.00113.22
O									
ATOM	2546	CG2	THR	X	172	4.310	-77.360	16.945	1.00118.84
C									
ATOM	2547	N	GLN	X	173	7.118	-77.107	13.120	1.00 97.44
N									
ATOM	2548	CA	GLN	X	173	7.466	-77.871	11.912	1.00 99.91
C									
ATOM	2549	C	GLN	X	173	6.396	-79.007	11.840	1.00108.55
C									
ATOM	2550	O	GLN	X	173	6.046	-79.610	12.891	1.00112.94
O									
ATOM	2551	CB	GLN	X	173	8.898	-78.450	11.985	1.00 0.00
C									
ATOM	2552	CG	GLN	X	173	9.804	-77.925	10.857	1.00 0.00
C									
ATOM	2553	CD	GLN	X	173	9.368	-78.344	9.447	1.00 0.00
C									
ATOM	2554	OE1	GLN	X	173	8.675	-79.343	9.259	1.00 0.00
O									
ATOM	2555	NE2	GLN	X	173	9.802	-77.585	8.437	1.00 0.00
N									

ATOM	2556	N	SER	X	174	5.733	-79.172	10.682	1.00107.86
N									
ATOM	2557	CA	SER	X	174	4.590	-80.105	10.612	1.00107.38
C									
ATOM	2558	C	SER	X	174	5.045	-81.534	10.683	1.00103.27
C									
ATOM	2559	O	SER	X	174	4.252	-82.427	10.497	1.00 95.44
O									
ATOM	2560	CB	SER	X	174	3.791	-79.910	9.333	1.00111.60
C									
ATOM	2561	OG	SER	X	174	4.577	-80.214	8.208	1.00114.66
O									
ATOM	2562	N	ASP	X	175	6.364	-81.709	10.767	1.00116.11
N									
ATOM	2563	CA	ASP	X	175	7.035	-83.015	11.030	1.00132.37
C									
ATOM	2564	C	ASP	X	175	6.977	-83.500	12.530	1.00137.67
C									
ATOM	2565	O	ASP	X	175	7.793	-84.357	12.979	1.00127.87
O									
ATOM	2566	CB	ASP	X	175	8.512	-83.007	10.462	1.00133.02
C									
ATOM	2567	CG	ASP	X	175	9.475	-82.075	11.243	1.00123.00
C									
ATOM	2568	OD1	ASP	X	175	9.921	-82.494	12.305	1.00111.27
O									
ATOM	2569	OD2	ASP	X	175	9.842	-80.976	10.762	1.00123.72
O1-									
ATOM	2570	N	GLY	X	176	5.948	-83.042	13.253	1.00134.28
N									
ATOM	2571	CA	GLY	X	176	5.702	-83.506	14.593	1.00133.51
C									
ATOM	2572	C	GLY	X	176	6.769	-82.975	15.537	1.00120.89
C									
ATOM	2573	O	GLY	X	176	6.769	-83.312	16.718	1.00123.01
O									
ATOM	2574	N	ILE	X	177	7.686	-82.164	15.012	1.00102.09
N									
ATOM	2575	CA	ILE	X	177	8.767	-81.606	15.802	1.00 91.04
C									
ATOM	2576	C	ILE	X	177	8.521	-80.132	16.019	1.00101.89
C									
ATOM	2577	O	ILE	X	177	8.130	-79.405	15.109	1.00112.76
O									
ATOM	2578	CB	ILE	X	177	10.091	-81.782	15.087	1.00 80.77
C									
ATOM	2579	CG1	ILE	X	177	10.562	-83.236	15.233	1.00 79.48
C									
ATOM	2580	CG2	ILE	X	177	11.109	-80.786	15.552	1.00 76.51
C									
ATOM	2581	CD1	ILE	X	177	11.916	-83.466	15.884	1.00 76.13
C									
ATOM	2582	N	GLN	X	178	8.852	-79.668	17.233	1.00107.97
N									

ATOM	2583	CA	GLN	X	178	8.954	-78.229	17.519	1.00	99.28
C										
ATOM	2584	C	GLN	X	178	10.320	-77.691	17.264	1.00	90.54
C										
ATOM	2585	O	GLN	X	178	11.263	-78.345	17.486	1.00	88.85
O										
ATOM	2586	CB	GLN	X	178	8.684	-77.956	18.967	1.00	102.95
C										
ATOM	2587	CG	GLN	X	178	7.232	-77.778	19.271	1.00	112.29
C										
ATOM	2588	CD	GLN	X	178	6.825	-78.616	20.433	1.00	122.56
C										
ATOM	2589	OE1	GLN	X	178	7.674	-79.003	21.261	1.00	118.15
O										
ATOM	2590	NE2	GLN	X	178	5.545	-79.011	20.456	1.00	132.16
N										
ATOM	2591	N	GLN	X	179	10.375	-76.437	16.831	1.00	89.44
N										
ATOM	2592	CA	GLN	X	179	11.600	-75.641	16.937	1.00	99.52
C										
ATOM	2593	C	GLN	X	179	11.253	-74.395	17.792	1.00	102.30
C										
ATOM	2594	O	GLN	X	179	10.209	-73.751	17.621	1.00	98.57
O										
ATOM	2595	CB	GLN	X	179	12.196	-75.256	15.546	1.00	107.91
C										
ATOM	2596	CG	GLN	X	179	11.292	-75.401	14.318	1.00	116.75
C										
ATOM	2597	CD	GLN	X	179	11.706	-76.570	13.402	1.00	134.51
C										
ATOM	2598	NE2	GLN	X	179	12.874	-76.988	13.414	1.00	163.61
N										
ATOM	2599	OE1	GLN	X	179	10.753	-77.095	12.592	1.00	123.98
O										
ATOM	2600	N	ALA	X	180	12.048	-74.215	18.839	1.00	101.15
N										
ATOM	2601	CA	ALA	X	180	11.738	-73.343	19.967	1.00	101.17
C										
ATOM	2602	C	ALA	X	180	12.616	-72.069	19.974	1.00	105.02
C										
ATOM	2603	O	ALA	X	180	13.852	-72.192	19.989	1.00	100.41
O										
ATOM	2604	CB	ALA	X	180	11.983	-74.114	21.253	1.00	97.61
C										
ATOM	2605	N	LYS	X	181	11.957	-70.892	19.946	1.00	107.73
N										
ATOM	2606	CA	LYS	X	181	12.610	-69.639	20.074	1.00	107.46
C										
ATOM	2607	C	LYS	X	181	12.942	-69.383	21.553	1.00	101.40
C										
ATOM	2608	O	LYS	X	181	12.074	-69.424	22.435	1.00	88.12
O										
ATOM	2609	CB	LYS	X	181	11.812	-68.517	19.454	1.00	129.13
C										

ATOM	2610	CG	LYS	X	181	12.669	-67.419	18.814	1.00151.81
C									
ATOM	2611	CD	LYS	X	181	11.812	-66.425	17.987	1.00169.49
C									
ATOM	2612	CE	LYS	X	181	12.063	-64.944	18.322	1.00177.12
C									
ATOM	2613	NZ	LYS	X	181	13.425	-64.472	17.922	1.00188.27
N1+									
ATOM	2614	N	VAL	X	182	14.230	-69.186	21.821	1.00102.29
N									
ATOM	2615	CA	VAL	X	182	14.782	-69.563	23.135	1.00101.45
C									
ATOM	2616	C	VAL	X	182	15.858	-68.565	23.549	1.00 99.33
C									
ATOM	2617	O	VAL	X	182	16.797	-68.316	22.789	1.00102.47
O									
ATOM	2618	CB	VAL	X	182	15.294	-71.026	23.108	1.00 99.16
C									
ATOM	2619	CG1	VAL	X	182	16.811	-71.101	23.087	1.00 97.05
C									
ATOM	2620	CG2	VAL	X	182	14.723	-71.808	24.280	1.00 93.94
C									
ATOM	2621	N	GLN	X	183	15.671	-67.941	24.719	1.00 95.89
N									
ATOM	2622	CA	GLN	X	183	16.655	-67.001	25.242	1.00 98.05
C									
ATOM	2623	C	GLN	X	183	17.455	-67.640	26.393	1.00 94.17
C									
ATOM	2624	O	GLN	X	183	16.897	-68.040	27.420	1.00 88.47
O									
ATOM	2625	CB	GLN	X	183	15.970	-65.704	25.631	1.00103.86
C									
ATOM	2626	CG	GLN	X	183	16.829	-64.681	26.326	1.00108.17
C									
ATOM	2627	CD	GLN	X	183	16.101	-64.066	27.531	1.00115.21
C									
ATOM	2628	OE1	GLN	X	183	14.873	-63.919	27.536	1.00113.56
O									
ATOM	2629	NE2	GLN	X	183	16.860	-63.724	28.561	1.00120.39
N									
ATOM	2630	N	ILE	X	184	18.772	-67.737	26.202	1.00 91.85
N									
ATOM	2631	CA	ILE	X	184	19.636	-68.339	27.196	1.00 93.11
C									
ATOM	2632	C	ILE	X	184	19.584	-67.582	28.509	1.00 94.52
C									
ATOM	2633	O	ILE	X	184	19.722	-66.345	28.529	1.00 92.20
O									
ATOM	2634	CB	ILE	X	184	21.081	-68.364	26.775	1.00 98.36
C									
ATOM	2635	CG1	ILE	X	184	21.175	-68.769	25.316	1.00105.32
C									
ATOM	2636	CG2	ILE	X	184	21.872	-69.305	27.690	1.00 97.03
C									

ATOM C	2637	CD1	ILE	X	184	20.425	-70.039	25.003	1.00110.25
ATOM N	2638	N	LEU	X	185	19.414	-68.309	29.604	1.00 99.02
ATOM C	2639	CA	LEU	X	185	19.516	-67.721	30.932	1.00104.37
ATOM C	2640	C	LEU	X	185	20.946	-67.801	31.407	1.00105.30
ATOM O	2641	O	LEU	X	185	21.505	-68.864	31.490	1.00 97.83
ATOM C	2642	CB	LEU	X	185	18.611	-68.452	31.917	1.00104.94
ATOM C	2643	CG	LEU	X	185	17.122	-68.431	31.529	1.00107.57
ATOM C	2644	CD1	LEU	X	185	16.337	-69.273	32.512	1.00110.67
ATOM C	2645	CD2	LEU	X	185	16.537	-67.015	31.473	1.00110.17
ATOM N	2646	N	PRO	X	186	21.523	-66.632	31.813	1.00110.75
ATOM C	2647	CA	PRO	X	186	22.869	-66.569	32.404	1.00118.94
ATOM C	2648	C	PRO	X	186	22.822	-67.119	33.818	1.00139.27
ATOM O	2649	O	PRO	X	186	21.827	-66.890	34.515	1.00139.79
ATOM C	2650	CB	PRO	X	186	23.129	-65.085	32.450	1.00117.36
ATOM C	2651	CG	PRO	X	186	21.759	-64.482	32.681	1.00114.99
ATOM C	2652	CD	PRO	X	186	20.730	-65.442	32.179	1.00108.75
ATOM N	2653	N	GLU	X	187	23.865	-67.836	34.264	1.00115.72
ATOM C	2654	CA	GLU	X	187	23.986	-68.167	35.691	1.00150.79
ATOM C	2655	C	GLU	X	187	24.498	-66.927	36.413	1.00162.60
ATOM O	2656	O	GLU	X	187	25.617	-66.435	36.169	1.00204.89
ATOM C	2657	CB	GLU	X	187	24.907	-69.377	35.926	1.00166.02
ATOM C	2658	CG	GLU	X	187	25.290	-69.624	37.394	1.00177.96
ATOM C	2659	CD	GLU	X	187	24.290	-70.475	38.181	1.00162.14
ATOM O	2660	OE1	GLU	X	187	23.929	-71.578	37.715	1.00148.05
ATOM O1-	2661	OE2	GLU	X	187	23.904	-70.060	39.301	1.00158.82
ATOM N	2662	N	CYS	X	188	23.638	-66.442	37.322	1.00154.37
ATOM C	2663	CA	CYS	X	188	23.831	-65.137	37.909	1.00149.26

ATOM	2664	C	CYS	X	188	24.761	-65.269	39.137	1.00134.50
C									
ATOM	2665	O	CYS	X	188	24.462	-65.946	40.136	1.00116.20
O									
ATOM	2666	CB	CYS	X	188	22.487	-64.447	38.214	1.00133.88
C									
ATOM	2667	SG	CYS	X	188	21.587	-65.049	39.653	1.00156.93
S									
ATOM	2668	N	VAL	X	189	25.950	-64.681	38.980	1.00116.25
N									
ATOM	2669	CA	VAL	X	189	27.040	-64.850	39.932	1.00117.79
C									
ATOM	2670	C	VAL	X	189	27.296	-63.588	40.733	1.00145.71
C									
ATOM	2671	O	VAL	X	189	27.469	-62.476	40.199	1.00164.13
O									
ATOM	2672	CB	VAL	X	189	28.374	-65.257	39.287	1.00 98.97
C									
ATOM	2673	CG1	VAL	X	189	28.501	-66.772	39.252	1.00 90.47
C									
ATOM	2674	CG2	VAL	X	189	28.544	-64.615	37.915	1.00104.27
C									
ATOM	2675	N	LEU	X	190	27.388	-63.845	42.049	1.00157.61
N									
ATOM	2676	CA	LEU	X	190	27.595	-62.837	43.110	1.00117.92
C									
ATOM	2677	C	LEU	X	190	29.016	-62.967	43.671	1.00100.24
C									
ATOM	2678	O	LEU	X	190	29.525	-64.092	43.791	1.00122.41
O									
ATOM	2679	CB	LEU	X	190	26.645	-63.081	44.304	1.00108.41
C									
ATOM	2680	CG	LEU	X	190	25.123	-63.239	44.167	1.00112.60
C									
ATOM	2681	CD1	LEU	X	190	24.441	-62.580	45.352	1.00104.55
C									
ATOM	2682	CD2	LEU	X	190	24.559	-62.667	42.876	1.00125.50
C									
ATOM	2683	N	PRO	X	191	29.636	-61.831	44.030	1.00 88.50
N									
ATOM	2684	CA	PRO	X	191	30.911	-61.870	44.745	1.00106.66
C									
ATOM	2685	C	PRO	X	191	30.690	-62.446	46.138	1.00116.19
C									
ATOM	2686	O	PRO	X	191	29.611	-62.981	46.404	1.00140.60
O									
ATOM	2687	CB	PRO	X	191	31.327	-60.405	44.795	1.00112.32
C									
ATOM	2688	CG	PRO	X	191	30.056	-59.631	44.683	1.00111.42
C									
ATOM	2689	CD	PRO	X	191	28.983	-60.522	44.136	1.00 89.46
C									
ATOM	2690	N	SER	X	192	31.684	-62.368	47.023	1.00125.78
N									

ATOM	2691	CA	SER	X	192	31.472	-62.788	48.410	1.00120.42
C									
ATOM	2692	C	SER	X	192	30.535	-61.790	49.093	1.00115.25
C									
ATOM	2693	O	SER	X	192	30.387	-60.657	48.629	1.00127.42
O									
ATOM	2694	CB	SER	X	192	32.797	-62.874	49.178	1.00118.35
C									
ATOM	2695	OG	SER	X	192	32.577	-62.862	50.578	1.00115.93
O									
ATOM	2696	N	THR	X	193	29.941	-62.188	50.206	1.00100.75
N									
ATOM	2697	CA	THR	X	193	29.129	-61.281	50.986	1.00 88.71
C									
ATOM	2698	C	THR	X	193	29.947	-60.099	51.541	1.00 88.69
C									
ATOM	2699	O	THR	X	193	29.390	-59.031	51.849	1.00120.72
O									
ATOM	2700	CB	THR	X	193	28.443	-62.078	52.101	1.00 96.99
C									
ATOM	2701	OG1	THR	X	193	29.005	-63.405	52.147	1.00109.50
O									
ATOM	2702	CG2	THR	X	193	26.947	-62.198	51.841	1.00 80.41
C									
ATOM	2703	N	MET	X	194	31.265	-60.275	51.627	1.00 85.10
N									
ATOM	2704	CA	MET	X	194	32.123	-59.307	52.292	1.00102.24
C									
ATOM	2705	C	MET	X	194	32.786	-58.315	51.334	1.00105.29
C									
ATOM	2706	O	MET	X	194	33.160	-57.233	51.724	1.00116.62
O									
ATOM	2707	CB	MET	X	194	33.197	-60.033	53.094	1.00110.75
C									
ATOM	2708	CG	MET	X	194	32.643	-60.783	54.295	1.00126.09
C									
ATOM	2709	SD	MET	X	194	31.546	-59.768	55.313	1.00119.00
S									
ATOM	2710	CE	MET	X	194	30.521	-61.027	56.080	1.00 93.80
C									
ATOM	2711	N	SER	X	195	32.962	-58.707	50.090	1.00116.78
N									
ATOM	2712	CA	SER	X	195	33.517	-57.861	49.047	1.00119.43
C									
ATOM	2713	C	SER	X	195	32.929	-56.455	48.940	1.00104.83
C									
ATOM	2714	O	SER	X	195	33.446	-55.643	48.190	1.00141.86
O									
ATOM	2715	CB	SER	X	195	33.364	-58.567	47.703	1.00133.13
C									
ATOM	2716	OG	SER	X	195	33.847	-59.898	47.785	1.00154.52
O									
ATOM	2717	N	ALA	X	196	31.854	-56.173	49.670	1.00 95.03
N									



ATOM	2718	CA	ALA	X	196	31.165	-54.872	49.594	1.00120.88
C									
ATOM	2719	C	ALA	X	196	31.628	-53.973	50.759	1.00122.83
C									
ATOM	2720	O	ALA	X	196	31.735	-52.765	50.661	1.00108.09
O									
ATOM	2721	CB	ALA	X	196	29.645	-55.086	49.672	1.00115.59
C									
ATOM	2722	N	VAL	X	197	31.864	-54.626	51.868	1.00139.78
N									
ATOM	2723	CA	VAL	X	197	31.973	-54.005	53.160	1.00112.85
C									
ATOM	2724	C	VAL	X	197	33.421	-54.153	53.697	1.00119.14
C									
ATOM	2725	O	VAL	X	197	33.747	-53.615	54.771	1.00 88.08
O									
ATOM	2726	CB	VAL	X	197	30.955	-54.741	54.053	1.00103.38
C									
ATOM	2727	CG1	VAL	X	197	31.611	-55.801	54.946	1.00 91.04
C									
ATOM	2728	CG2	VAL	X	197	30.090	-53.760	54.799	1.00105.24
C									
ATOM	2729	N	GLN	X	198	34.264	-54.838	52.920	1.00155.95
N									
ATOM	2730	CA	GLN	X	198	35.580	-55.289	53.391	1.00147.41
C									
ATOM	2731	C	GLN	X	198	36.543	-54.128	53.553	1.00126.08
C									
ATOM	2732	O	GLN	X	198	36.801	-53.381	52.622	1.00137.81
O									
ATOM	2733	CB	GLN	X	198	36.156	-56.299	52.386	1.00164.61
C									
ATOM	2734	CG	GLN	X	198	37.460	-56.962	52.801	1.00166.86
C									
ATOM	2735	CD	GLN	X	198	37.252	-58.172	53.696	1.00150.81
C									
ATOM	2736	NE2	GLN	X	198	36.545	-59.109	53.337	1.00135.09
N									
ATOM	2737	OE1	GLN	X	198	37.898	-58.168	54.852	1.00147.02
O									
ATOM	2738	N	LEU	X	199	37.098	-54.016	54.743	1.00121.26
N									
ATOM	2739	CA	LEU	X	199	38.202	-53.109	55.002	1.00148.55
C									
ATOM	2740	C	LEU	X	199	39.339	-53.422	54.054	1.00170.44
C									
ATOM	2741	O	LEU	X	199	39.651	-54.585	53.869	1.00173.78
O									
ATOM	2742	CB	LEU	X	199	38.695	-53.298	56.453	1.00157.55
C									
ATOM	2743	CG	LEU	X	199	37.646	-53.084	57.548	1.00142.77
C									
ATOM	2744	CD1	LEU	X	199	38.204	-53.200	58.976	1.00113.46
C									

ATOM	2745	CD2	LEU	X	199	36.910	-51.759	57.323	1.00142.62
C									
ATOM	2746	N	GLU	X	200	39.923	-52.392	53.439	1.00175.51
N									
ATOM	2747	CA	GLU	X	200	40.970	-52.605	52.439	1.00173.98
C									
ATOM	2748	C	GLU	X	200	42.242	-53.176	53.047	1.00162.59
C									
ATOM	2749	O	GLU	X	200	42.922	-53.980	52.411	1.00173.12
O									
ATOM	2750	CB	GLU	X	200	41.262	-51.328	51.646	1.00172.32
C									
ATOM	2751	CG	GLU	X	200	40.264	-51.064	50.515	1.00194.36
C									
ATOM	2752	CD	GLU	X	200	40.185	-52.199	49.490	1.00199.27
C									
ATOM	2753	OE1	GLU	X	200	41.073	-52.282	48.611	1.00194.94
O									
ATOM	2754	OE2	GLU	X	200	39.207	-52.983	49.534	1.00165.71
O1-									
ATOM	2755	N	SER	X	201	42.555	-52.776	54.277	1.00163.73
N									
ATOM	2756	CA	SER	X	201	43.769	-53.262	54.949	1.00174.53
C									
ATOM	2757	C	SER	X	201	43.762	-54.787	55.163	1.00183.12
C									
ATOM	2758	O	SER	X	201	44.827	-55.413	55.190	1.00190.61
O									
ATOM	2759	CB	SER	X	201	43.989	-52.546	56.288	1.00169.09
C									
ATOM	2760	OG	SER	X	201	43.090	-53.005	57.285	1.00146.88
O									
ATOM	2761	N	LEU	X	202	42.566	-55.369	55.304	1.00157.79
N									
ATOM	2762	CA	LEU	X	202	42.405	-56.792	55.586	1.00157.48
C									
ATOM	2763	C	LEU	X	202	42.234	-57.626	54.307	1.00152.97
C									
ATOM	2764	O	LEU	X	202	42.224	-58.856	54.367	1.00179.36
O									
ATOM	2765	CB	LEU	X	202	41.223	-56.994	56.533	1.00184.89
C									
ATOM	2766	CG	LEU	X	202	41.271	-56.137	57.808	1.00208.98
C									
ATOM	2767	CD1	LEU	X	202	40.164	-56.527	58.781	1.00244.96
C									
ATOM	2768	CD2	LEU	X	202	42.633	-56.239	58.481	1.00206.69
C									
ATOM	2769	N	ASN	X	203	42.161	-56.956	53.162	1.00153.56
N									
ATOM	2770	CA	ASN	X	203	42.196	-57.660	51.881	1.00167.26
C									
ATOM	2771	C	ASN	X	203	43.361	-58.650	51.812	1.00176.75
C									

ATOM	2772	O	ASN	X	203	43.202	-59.787	51.353	1.00207.43
O									
ATOM	2773	CB	ASN	X	203	42.360	-56.675	50.712	1.00163.81
C									
ATOM	2774	CG	ASN	X	203	41.040	-56.175	50.161	1.00153.29
C									
ATOM	2775	ND2	ASN	X	203	40.902	-54.993	49.837	1.00 94.23
N									
ATOM	2776	OD1	ASN	X	203	40.083	-57.082	49.989	1.00171.49
O									
ATOM	2777	N	LYS	X	204	44.523	-58.211	52.290	1.00162.85
N									
ATOM	2778	CA	LYS	X	204	45.760	-58.988	52.224	1.00155.14
C									
ATOM	2779	C	LYS	X	204	45.670	-60.332	52.953	1.00151.12
C									
ATOM	2780	O	LYS	X	204	46.509	-61.201	52.740	1.00129.29
O									
ATOM	2781	CB	LYS	X	204	46.936	-58.131	52.700	1.00163.71
C									
ATOM	2782	CG	LYS	X	204	47.219	-56.965	51.748	1.00167.40
C									
ATOM	2783	CD	LYS	X	204	48.045	-55.851	52.379	1.00173.11
C									
ATOM	2784	CE	LYS	X	204	47.225	-54.940	53.281	1.00170.21
C									
ATOM	2785	NZ	LYS	X	204	47.572	-55.126	54.719	1.00163.87
N1+									
ATOM	2786	N	CYS	X	205	44.635	-60.525	53.766	1.00176.48
N									
ATOM	2787	CA	CYS	X	205	44.525	-61.736	54.567	1.00172.86
C									
ATOM	2788	C	CYS	X	205	43.464	-62.694	54.035	1.00170.67
C									
ATOM	2789	O	CYS	X	205	43.258	-63.771	54.599	1.00159.45
O									
ATOM	2790	CB	CYS	X	205	44.212	-61.373	56.014	1.00171.09
C									
ATOM	2791	SG	CYS	X	205	45.198	-59.984	56.626	1.00156.86
S									
ATOM	2792	N	GLN	X	206	42.786	-62.272	52.979	1.00170.25
N									
ATOM	2793	CA	GLN	X	206	41.552	-62.941	52.549	1.00190.12
C									
ATOM	2794	C	GLN	X	206	41.840	-64.270	51.861	1.00227.25
C									
ATOM	2795	O	GLN	X	206	41.003	-65.175	51.898	1.00257.43
O									
ATOM	2796	CB	GLN	X	206	40.710	-62.034	51.626	1.00177.02
C									
ATOM	2797	CG	GLN	X	206	39.398	-61.538	52.239	1.00192.33
C									
ATOM	2798	CD	GLN	X	206	38.237	-62.531	52.086	1.00205.38
C									

ATOM	2799	OE1	GLN	X	206	38.344	-63.695	52.483	1.00197.63
O									
ATOM	2800	NE2	GLN	X	206	37.102	-62.054	51.567	1.00193.08
N									
ATOM	2801	N	ILE	X	207	43.029	-64.399	51.266	1.00234.15
N									
ATOM	2802	CA	ILE	X	207	43.498	-65.701	50.799	1.00211.47
C									
ATOM	2803	C	ILE	X	207	44.171	-66.442	51.964	1.00204.62
C									
ATOM	2804	O	ILE	X	207	44.996	-65.882	52.693	1.00192.00
O									
ATOM	2805	CB	ILE	X	207	44.475	-65.606	49.599	1.00178.18
C									
ATOM	2806	CG1	ILE	X	207	44.075	-64.454	48.663	1.00160.26
C									
ATOM	2807	CG2	ILE	X	207	44.500	-66.937	48.846	1.00170.60
C									
ATOM	2808	CD1	ILE	X	207	44.707	-64.514	47.284	1.00158.66
C									
ATOM	2809	N	PHE	X	208	43.788	-67.706	52.127	1.00188.80
N									
ATOM	2810	CA	PHE	X	208	44.438	-68.613	53.079	1.00179.66
C									
ATOM	2811	C	PHE	X	208	45.271	-69.690	52.365	1.00179.40
C									
ATOM	2812	O	PHE	X	208	45.013	-70.010	51.192	1.00175.68
O									
ATOM	2813	CB	PHE	X	208	43.391	-69.324	53.924	1.00187.50
C									
ATOM	2814	CG	PHE	X	208	42.231	-68.469	54.267	1.00185.86
C									
ATOM	2815	CD1	PHE	X	208	42.428	-67.244	54.897	1.00215.33
C									
ATOM	2816	CD2	PHE	X	208	40.948	-68.857	53.937	1.00141.08
C									
ATOM	2817	CE1	PHE	X	208	41.364	-66.430	55.209	1.00203.80
C									
ATOM	2818	CE2	PHE	X	208	39.877	-68.049	54.248	1.00164.94
C									
ATOM	2819	CZ	PHE	X	208	40.084	-66.832	54.884	1.00192.05
C									
ATOM	2820	N	PRO	X	209	46.236	-70.301	53.089	1.00169.86
N									
ATOM	2821	CA	PRO	X	209	46.787	-71.579	52.644	1.00174.31
C									
ATOM	2822	C	PRO	X	209	45.693	-72.642	52.576	1.00195.13
C									
ATOM	2823	O	PRO	X	209	44.849	-72.733	53.464	1.00200.52
O									
ATOM	2824	CB	PRO	X	209	47.845	-71.885	53.697	1.00147.89
C									
ATOM	2825	CG	PRO	X	209	48.361	-70.534	54.067	1.00155.59
C									

ATOM	2826	CD	PRO	X	209	47.188	-69.581	53.954	1.00155.16
C									
ATOM	2827	N	SER	X	210	45.713	-73.441	51.518	1.00196.05
N									
ATOM	2828	CA	SER	X	210	44.608	-74.357	51.227	1.00168.67
C									
ATOM	2829	C	SER	X	210	44.517	-75.531	52.233	1.00168.65
C									
ATOM	2830	O	SER	X	210	45.507	-75.913	52.884	1.00157.24
O									
ATOM	2831	CB	SER	X	210	44.701	-74.883	49.799	1.00168.45
C									
ATOM	2832	OG	SER	X	210	43.469	-74.702	49.130	1.00155.17
O									
ATOM	2833	N	LYS	X	211	43.304	-76.056	52.349	1.00172.19
N									
ATOM	2834	CA	LYS	X	211	42.930	-77.000	53.398	1.00196.16
C									
ATOM	2835	C	LYS	X	211	43.615	-78.358	53.223	1.00188.92
C									
ATOM	2836	O	LYS	X	211	43.583	-78.937	52.148	1.00154.06
O									
ATOM	2837	CB	LYS	X	211	41.393	-77.187	53.432	1.00203.98
C									
ATOM	2838	CG	LYS	X	211	40.841	-78.312	52.554	1.00180.20
C									
ATOM	2839	CD	LYS	X	211	39.333	-78.220	52.408	1.00154.33
C									
ATOM	2840	CE	LYS	X	211	38.972	-77.170	51.373	1.00154.23
C									
ATOM	2841	NZ	LYS	X	211	37.508	-76.992	51.260	1.00162.43
N1+									
ATOM	2842	N	PRO	X	212	44.184	-78.903	54.313	1.00205.28
N									
ATOM	2843	CA	PRO	X	212	44.498	-80.348	54.398	1.00223.66
C									
ATOM	2844	C	PRO	X	212	43.275	-81.244	54.153	1.00240.23
C									
ATOM	2845	O	PRO	X	212	42.164	-80.845	54.494	1.00269.65
O									
ATOM	2846	CB	PRO	X	212	44.990	-80.524	55.854	1.00200.33
C									
ATOM	2847	CG	PRO	X	212	44.634	-79.263	56.571	1.00172.43
C									
ATOM	2848	CD	PRO	X	212	44.625	-78.187	55.527	1.00182.50
C									
ATOM	2849	N	VAL	X	213	43.488	-82.421	53.568	1.00234.81
N									
ATOM	2850	CA	VAL	X	213	42.368	-83.238	53.060	1.00215.66
C									
ATOM	2851	C	VAL	X	213	41.665	-84.046	54.171	1.00206.90
C									
ATOM	2852	O	VAL	X	213	42.197	-83.626	55.210	1.00206.62
O									

ATOM	2853	CB	VAL	X	213	42.788	-84.141	51.861	1.00195.78
C									
ATOM	2854	CG1	VAL	X	213	43.484	-83.313	50.785	1.00173.99
C									
ATOM	2855	CG2	VAL	X	213	43.674	-85.301	52.302	1.00190.68
C									
ATOM	2856	N	SER	X	214	40.683	-84.935	54.016	1.00 0.00
N									
ATOM	2857	CA	SER	X	214	39.967	-85.560	55.134	1.00 0.00
C									
ATOM	2858	C	SER	X	214	40.820	-86.572	55.942	1.00 0.00
C									
ATOM	2859	O	SER	X	214	40.450	-87.733	56.106	1.00 0.00
O									
ATOM	2860	CB	SER	X	214	38.694	-86.240	54.603	1.00 0.00
C									
ATOM	2861	OG	SER	X	214	38.992	-87.267	53.677	1.00 0.00
O									
ATOM	2862	N	ARG	X	215	41.992	-86.146	56.420	1.00 0.00
N									
ATOM	2863	CA	ARG	X	215	42.926	-86.966	57.184	1.00 0.00
C									
ATOM	2864	C	ARG	X	215	42.587	-86.991	58.686	1.00 0.00
C									
ATOM	2865	O	ARG	X	215	42.262	-85.965	59.285	1.00 0.00
O									
ATOM	2866	CB	ARG	X	215	44.343	-86.433	56.894	1.00 0.00
C									
ATOM	2867	CG	ARG	X	215	45.488	-87.233	57.534	1.00 0.00
C									
ATOM	2868	CD	ARG	X	215	45.497	-88.709	57.111	1.00 0.00
C									
ATOM	2869	NE	ARG	X	215	46.758	-89.375	57.474	1.00 0.00
N									
ATOM	2870	CZ	ARG	X	215	47.108	-89.810	58.700	1.00 0.00
C									
ATOM	2871	NH1	ARG	X	215	48.300	-90.398	58.866	1.00 0.00
N									
ATOM	2872	NH2	ARG	X	215	46.299	-89.670	59.761	1.00 0.00
N1+									
ATOM	2873	N	GLU	X	216	42.799	-88.144	59.328	1.00 0.00
N									
ATOM	2874	CA	GLU	X	216	42.452	-88.396	60.733	1.00 0.00
C									
ATOM	2875	C	GLU	X	216	43.297	-87.630	61.780	1.00 0.00
C									
ATOM	2876	O	GLU	X	216	43.034	-87.742	62.975	1.00 0.00
O									
ATOM	2877	CB	GLU	X	216	42.593	-89.921	61.036	1.00 0.00
C									
ATOM	2878	CG	GLU	X	216	41.575	-90.788	60.276	1.00 0.00
C									
ATOM	2879	CD	GLU	X	216	41.848	-90.879	58.772	1.00 0.00
C									

ATOM	2880	OE1	GLU	X	216	42.857	-91.398	58.294	1.00	0.00
O										
ATOM	2881	OE2	GLU	X	216	40.870	-90.322	57.998	1.00	0.00
O1-										
ATOM	2882	N	ASP	X	217	44.285	-86.832	61.364	1.00	0.00
N										
ATOM	2883	CA	ASP	X	217	45.204	-86.089	62.233	1.00	0.00
C										
ATOM	2884	C	ASP	X	217	44.578	-84.820	62.867	1.00	0.00
C										
ATOM	2885	O	ASP	X	217	45.193	-83.756	62.869	1.00	0.00
O										
ATOM	2886	CB	ASP	X	217	46.479	-85.665	61.410	1.00	0.00
C										
ATOM	2887	CG	ASP	X	217	47.676	-85.149	62.218	1.00	0.00
C										
ATOM	2888	OD1	ASP	X	217	48.368	-84.196	61.865	1.00	0.00
O										
ATOM	2889	OD2	ASP	X	217	47.932	-85.855	63.359	1.00	0.00
O1-										
ATOM	2890	N	GLN	X	218	43.323	-84.911	63.329	1.00	0.00
N										
ATOM	2891	CA	GLN	X	218	42.530	-83.816	63.910	1.00	0.00
C										
ATOM	2892	C	GLN	X	218	42.496	-82.520	63.061	1.00	0.00
C										
ATOM	2893	O	GLN	X	218	42.397	-81.414	63.605	1.00	0.00
O										
ATOM	2894	CB	GLN	X	218	43.062	-83.501	65.319	1.00	0.00
C										
ATOM	2895	CG	GLN	X	218	43.043	-84.700	66.283	1.00	0.00
C										
ATOM	2896	CD	GLN	X	218	41.640	-85.273	66.487	1.00	0.00
C										
ATOM	2897	OE1	GLN	X	218	41.302	-86.309	65.916	1.00	0.00
O										
ATOM	2898	NE2	GLN	X	218	40.817	-84.594	67.290	1.00	0.00
N										
ATOM	2899	N	CYS	X	219	42.616	-82.653	61.731	1.00	0.00
N										
ATOM	2900	CA	CYS	X	219	42.995	-81.556	60.842	1.00	0.00
C										
ATOM	2901	C	CYS	X	219	42.042	-80.340	60.901	1.00	0.00
C										
ATOM	2902	O	CYS	X	219	42.520	-79.227	61.101	1.00	0.00
O										
ATOM	2903	CB	CYS	X	219	43.037	-82.051	59.375	1.00	0.00
C										
ATOM	2904	SG	CYS	X	219	43.740	-83.718	59.227	1.00	0.00
S										
ATOM	2905	N	SER	X	220	40.730	-80.433	61.118	1.00	151.94
N										
ATOM	2906	CA	SER	X	220	40.029	-80.950	59.936	1.00	160.83
C										

ATOM	2907	C	SER	X	220	38.627	-80.331	59.854	1.00172.66
C									
ATOM	2908	O	SER	X	220	37.943	-80.399	58.822	1.00171.88
O									
ATOM	2909	CB	SER	X	220	39.939	-82.489	59.980	1.00149.17
C									
ATOM	2910	OG	SER	X	220	39.411	-82.955	61.212	1.00113.74
O									
ATOM	2911	N	TYR	X	221	38.215	-79.723	60.972	1.00182.04
N									
ATOM	2912	CA	TYR	X	221	36.985	-78.936	61.057	1.00178.31
C									
ATOM	2913	C	TYR	X	221	37.243	-77.698	61.923	1.00157.28
C									
ATOM	2914	O	TYR	X	221	36.452	-76.749	61.867	1.00160.66
O									
ATOM	2915	CB	TYR	X	221	35.788	-79.807	61.509	1.00186.39
C									
ATOM	2916	CG	TYR	X	221	35.305	-79.613	62.921	1.00182.15
C									
ATOM	2917	CD1	TYR	X	221	34.570	-78.490	63.270	1.00165.97
C									
ATOM	2918	CD2	TYR	X	221	35.441	-80.629	63.866	1.00181.10
C									
ATOM	2919	CE1	TYR	X	221	34.095	-78.321	64.551	1.00162.08
C									
ATOM	2920	CE2	TYR	X	221	34.952	-80.476	65.149	1.00171.30
C									
ATOM	2921	CZ	TYR	X	221	34.287	-79.315	65.484	1.00163.70
C									
ATOM	2922	OH	TYR	X	221	33.816	-79.141	66.753	1.00159.77
O									
ATOM	2923	N	LYS	X	222	38.388	-77.651	62.628	1.00141.89
N									
ATOM	2924	CA	LYS	X	222	38.937	-76.395	63.154	1.00150.42
C									
ATOM	2925	C	LYS	X	222	39.272	-75.465	61.988	1.00152.01
C									
ATOM	2926	O	LYS	X	222	39.156	-74.232	62.099	1.00187.54
O									
ATOM	2927	CB	LYS	X	222	40.176	-76.638	64.026	1.00162.49
C									
ATOM	2928	CG	LYS	X	222	41.513	-76.663	63.288	1.00168.88
C									
ATOM	2929	CD	LYS	X	222	42.694	-76.623	64.256	1.00173.40
C									
ATOM	2930	CE	LYS	X	222	42.472	-77.495	65.488	1.00172.98
C									
ATOM	2931	NZ	LYS	X	222	43.716	-77.662	66.287	1.00171.90
N1+									
ATOM	2932	N	TRP	X	223	39.665	-76.080	60.867	1.00134.76
N									
ATOM	2933	CA	TRP	X	223	39.920	-75.351	59.634	1.00129.70
C									



ATOM	2934	C	TRP	X	223	38.704	-74.552	59.193	1.00141.84
C									
ATOM	2935	O	TRP	X	223	38.851	-73.452	58.676	1.00168.59
O									
ATOM	2936	CB	TRP	X	223	40.349	-76.279	58.515	1.00112.71
C									
ATOM	2937	CG	TRP	X	223	40.809	-75.493	57.351	1.00133.08
C									
ATOM	2938	CD1	TRP	X	223	42.012	-74.857	57.224	1.00157.56
C									
ATOM	2939	CD2	TRP	X	223	40.017	-75.076	56.228	1.00138.46
C									
ATOM	2940	NE1	TRP	X	223	42.049	-74.136	56.051	1.00170.38
N									
ATOM	2941	CE2	TRP	X	223	40.835	-74.251	55.423	1.00147.27
C									
ATOM	2942	CE3	TRP	X	223	38.709	-75.353	55.803	1.00134.25
C									
ATOM	2943	CZ2	TRP	X	223	40.393	-73.709	54.217	1.00137.51
C									
ATOM	2944	CZ3	TRP	X	223	38.269	-74.807	54.607	1.00127.74
C									
ATOM	2945	CH2	TRP	X	223	39.111	-73.995	53.828	1.00135.34
C									
ATOM	2946	N	TRP	X	224	37.509	-75.091	59.406	1.00138.70
N									
ATOM	2947	CA	TRP	X	224	36.284	-74.380	59.061	1.00135.45
C									
ATOM	2948	C	TRP	X	224	35.915	-73.334	60.079	1.00141.79
C									
ATOM	2949	O	TRP	X	224	35.304	-72.328	59.736	1.00146.49
O									
ATOM	2950	CB	TRP	X	224	35.125	-75.357	58.822	1.00148.10
C									
ATOM	2951	CG	TRP	X	224	35.283	-76.100	57.554	1.00128.41
C									
ATOM	2952	CD1	TRP	X	224	35.897	-77.296	57.390	1.00130.93
C									
ATOM	2953	CD2	TRP	X	224	34.962	-75.629	56.245	1.00115.37
C									
ATOM	2954	NE1	TRP	X	224	35.950	-77.622	56.062	1.00140.56
N									
ATOM	2955	CE2	TRP	X	224	35.385	-76.610	55.336	1.00114.95
C									
ATOM	2956	CE3	TRP	X	224	34.356	-74.470	55.753	1.00127.38
C									
ATOM	2957	CZ2	TRP	X	224	35.203	-76.485	53.967	1.00122.21
C									
ATOM	2958	CZ3	TRP	X	224	34.177	-74.343	54.388	1.00131.89
C									
ATOM	2959	CH2	TRP	X	224	34.595	-75.348	53.510	1.00128.88
C									
ATOM	2960	N	GLN	X	225	36.296	-73.553	61.332	1.00163.28
N									

ATOM	2961	CA	GLN	X	225	36.133	-72.513	62.332	1.00144.05
C									
ATOM	2962	C	GLN	X	225	37.117	-71.394	62.052	1.00115.19
C									
ATOM	2963	O	GLN	X	225	36.769	-70.213	62.184	1.00112.87
O									
ATOM	2964	CB	GLN	X	225	36.273	-73.057	63.756	1.00149.87
C									
ATOM	2965	CG	GLN	X	225	34.957	-73.594	64.329	1.00168.16
C									
ATOM	2966	CD	GLN	X	225	35.070	-75.012	64.875	1.00188.61
C									
ATOM	2967	NE2	GLN	X	225	34.613	-75.308	65.976	1.00187.11
N									
ATOM	2968	OE1	GLN	X	225	35.674	-75.895	64.098	1.00193.19
O									
ATOM	2969	N	LYS	X	226	38.325	-71.780	61.641	1.00111.30
N									
ATOM	2970	CA	LYS	X	226	39.335	-70.831	61.186	1.00121.24
C									
ATOM	2971	C	LYS	X	226	38.845	-70.038	59.950	1.00118.46
C									
ATOM	2972	O	LYS	X	226	38.766	-68.805	59.980	1.00121.37
O									
ATOM	2973	CB	LYS	X	226	40.661	-71.578	60.817	1.00 0.00
C									
ATOM	2974	CG	LYS	X	226	41.421	-71.984	62.091	1.00 0.00
C									
ATOM	2975	CD	LYS	X	226	42.642	-72.878	61.807	1.00 0.00
C									
ATOM	2976	CE	LYS	X	226	43.658	-72.306	60.807	1.00 0.00
C									
ATOM	2977	NZ	LYS	X	226	44.201	-71.005	61.239	1.00 0.00
N1+									
ATOM	2978	N	TYR	X	227	38.500	-70.773	58.892	1.00122.58
N									
ATOM	2979	CA	TYR	X	227	37.871	-70.232	57.676	1.00134.29
C									
ATOM	2980	C	TYR	X	227	36.805	-69.182	57.990	1.00124.17
C									
ATOM	2981	O	TYR	X	227	36.862	-68.050	57.494	1.00136.55
O									
ATOM	2982	CB	TYR	X	227	37.219	-71.396	56.870	1.00131.21
C									
ATOM	2983	CG	TYR	X	227	36.654	-71.005	55.502	1.00114.84
C									
ATOM	2984	CD1	TYR	X	227	37.496	-70.594	54.469	1.00113.64
C									
ATOM	2985	CD2	TYR	X	227	35.290	-71.065	55.242	1.00 97.46
C									
ATOM	2986	CE1	TYR	X	227	36.989	-70.193	53.245	1.00105.85
C									
ATOM	2987	CE2	TYR	X	227	34.780	-70.668	54.020	1.00 94.46
C									

ATOM	2988	CZ	TYR	X	227	35.634	-70.229	53.026	1.00	97.15
C										
ATOM	2989	OH	TYR	X	227	35.145	-69.812	51.811	1.00	103.23
O										
ATOM	2990	N	GLN	X	228	35.834	-69.569	58.814	1.00	116.60
N										
ATOM	2991	CA	GLN	X	228	34.741	-68.670	59.190	1.00	123.80
C										
ATOM	2992	C	GLN	X	228	35.235	-67.406	59.882	1.00	106.43
C										
ATOM	2993	O	GLN	X	228	34.715	-66.320	59.618	1.00	100.67
O										
ATOM	2994	CB	GLN	X	228	33.720	-69.353	60.090	1.00	117.27
C										
ATOM	2995	CG	GLN	X	228	32.621	-68.411	60.570	1.00	91.41
C										
ATOM	2996	CD	GLN	X	228	31.577	-69.128	61.372	1.00	88.61
C										
ATOM	2997	OE1	GLN	X	228	30.463	-69.314	60.918	1.00	80.62
O										
ATOM	2998	NE2	GLN	X	228	31.960	-69.613	62.542	1.00	114.00
N										
ATOM	2999	N	LYS	X	229	36.220	-67.551	60.774	1.00	103.48
N										
ATOM	3000	CA	LYS	X	229	36.720	-66.415	61.554	1.00	102.83
C										
ATOM	3001	C	LYS	X	229	37.470	-65.416	60.685	1.00	91.40
C										
ATOM	3002	O	LYS	X	229	37.373	-64.215	60.926	1.00	123.01
O										
ATOM	3003	CB	LYS	X	229	37.675	-66.914	62.682	1.00	0.00
C										
ATOM	3004	CG	LYS	X	229	38.301	-65.836	63.583	1.00	0.00
C										
ATOM	3005	CD	LYS	X	229	37.273	-64.983	64.342	1.00	0.00
C										
ATOM	3006	CE	LYS	X	229	37.996	-64.004	65.273	1.00	0.00
C										
ATOM	3007	NZ	LYS	X	229	37.049	-63.087	65.928	1.00	0.00
N1+										
ATOM	3008	N	ARG	X	230	38.196	-65.907	59.676	1.00	82.98
N										
ATOM	3009	CA	ARG	X	230	39.046	-65.051	58.835	1.00	90.25
C										
ATOM	3010	C	ARG	X	230	38.308	-64.476	57.626	1.00	98.86
C										
ATOM	3011	O	ARG	X	230	38.520	-63.324	57.269	1.00	115.63
O										
ATOM	3012	CB	ARG	X	230	40.276	-65.853	58.375	1.00	0.00
C										
ATOM	3013	CG	ARG	X	230	41.195	-66.262	59.539	1.00	0.00
C										
ATOM	3014	CD	ARG	X	230	42.419	-67.046	59.049	1.00	0.00
C										

ATOM	3015	NE	ARG	X	230	42.042	-68.349	58.480	1.00	0.00
N										
ATOM	3016	CZ	ARG	X	230	42.885	-69.223	57.901	1.00	0.00
C										
ATOM	3017	NH1	ARG	X	230	42.394	-70.368	57.407	1.00	0.00
N										
ATOM	3018	NH2	ARG	X	230	44.201	-68.977	57.807	1.00	0.00
N1+										
ATOM	3019	N	LYS	X	231	37.446	-65.275	56.997	1.00	109.74
N										
ATOM	3020	CA	LYS	X	231	36.696	-64.821	55.826	1.00	112.19
C										
ATOM	3021	C	LYS	X	231	35.628	-63.778	56.161	1.00	93.82
C										
ATOM	3022	O	LYS	X	231	35.470	-62.782	55.456	1.00	88.97
O										
ATOM	3023	CB	LYS	X	231	36.006	-65.999	55.131	1.00	128.65
C										
ATOM	3024	CG	LYS	X	231	35.425	-65.651	53.760	1.00	145.37
C										
ATOM	3025	CD	LYS	X	231	35.226	-66.887	52.886	1.00	136.47
C										
ATOM	3026	CE	LYS	X	231	34.789	-66.521	51.475	1.00	137.78
C										
ATOM	3027	NZ	LYS	X	231	34.363	-67.719	50.697	1.00	139.18
N1+										
ATOM	3028	N	PHE	X	232	34.895	-64.018	57.231	1.00	89.80
N										
ATOM	3029	CA	PHE	X	232	33.782	-63.153	57.603	1.00	102.44
C										
ATOM	3030	C	PHE	X	232	34.133	-62.244	58.746	1.00	126.59
C										
ATOM	3031	O	PHE	X	232	33.256	-61.846	59.524	1.00	111.34
O										
ATOM	3032	CB	PHE	X	232	32.596	-63.983	57.976	1.00	111.33
C										
ATOM	3033	CG	PHE	X	232	32.100	-64.810	56.869	1.00	92.88
C										
ATOM	3034	CD1	PHE	X	232	31.763	-64.226	55.683	1.00	74.74
C										
ATOM	3035	CD2	PHE	X	232	31.981	-66.182	57.016	1.00	90.06
C										
ATOM	3036	CE1	PHE	X	232	31.278	-64.983	54.664	1.00	81.30
C										
ATOM	3037	CE2	PHE	X	232	31.483	-66.948	56.010	1.00	70.02
C										
ATOM	3038	CZ	PHE	X	232	31.142	-66.347	54.826	1.00	87.80
C										
ATOM	3039	N	HID	X	233	35.402	-61.868	58.830	1.00	141.50
N										
ATOM	3040	CA	HID	X	233	35.856	-61.012	59.910	1.00	120.01
C										
ATOM	3041	C	HID	X	233	35.085	-59.707	59.966	1.00	104.06
C										

ATOM	3042	O	HID	X	233	34.614	-59.279	61.032	1.00135.27
O									
ATOM	3043	CB	HID	X	233	37.341	-60.705	59.756	1.00119.07
C									
ATOM	3044	CG	HID	X	233	37.859	-59.750	60.780	1.00132.43
C									
ATOM	3045	ND1	HID	X	233	37.743	-58.382	60.646	1.00154.13
N									
ATOM	3046	CD2	HID	X	233	38.441	-59.963	61.984	1.00140.53
C									
ATOM	3047	CE1	HID	X	233	38.254	-57.793	61.711	1.00168.58
C									
ATOM	3048	NE2	HID	X	233	38.691	-58.729	62.536	1.00173.90
N									
ATOM	3049	N	CYS	X	234	34.931	-59.089	58.805	1.00 96.64
N									
ATOM	3050	CA	CYS	X	234	34.322	-57.755	58.718	1.00103.76
C									
ATOM	3051	C	CYS	X	234	32.802	-57.738	58.892	1.00 81.77
C									
ATOM	3052	O	CYS	X	234	32.155	-56.731	58.575	1.00 76.71
O									
ATOM	3053	CB	CYS	X	234	34.711	-57.088	57.396	1.00125.43
C									
ATOM	3054	SG	CYS	X	234	36.446	-56.596	57.340	1.00143.94
S									
ATOM	3055	N	ALA	X	235	32.228	-58.842	59.368	1.00 71.83
N									
ATOM	3056	CA	ALA	X	235	30.829	-58.873	59.765	1.00 82.80
C									
ATOM	3057	C	ALA	X	235	30.563	-57.799	60.791	1.00 82.66
C									
ATOM	3058	O	ALA	X	235	29.464	-57.238	60.853	1.00 78.22
O									
ATOM	3059	CB	ALA	X	235	30.485	-60.233	60.353	1.00 83.41
C									
ATOM	3060	N	ASN	X	236	31.590	-57.495	61.590	1.00 89.20
N									
ATOM	3061	CA	ASN	X	236	31.440	-56.525	62.654	1.00 90.18
C									
ATOM	3062	C	ASN	X	236	31.089	-55.138	62.151	1.00 76.62
C									
ATOM	3063	O	ASN	X	236	30.605	-54.312	62.927	1.00 79.90
O									
ATOM	3064	CB	ASN	X	236	32.651	-56.501	63.613	1.00100.74
C									
ATOM	3065	CG	ASN	X	236	33.994	-56.685	62.908	1.00104.32
C									
ATOM	3066	OD1	ASN	X	236	34.466	-55.808	62.186	1.00113.30
O									
ATOM	3067	ND2	ASN	X	236	34.672	-57.772	63.229	1.00130.26
N									
ATOM	3068	N	LEU	X	237	31.299	-54.917	60.847	1.00 64.87
N									

ATOM	3069	CA	LEU	X	237	30.972	-53.661	60.166	1.00	63.15
C										
ATOM	3070	C	LEU	X	237	29.523	-53.665	59.707	1.00	65.01
C										
ATOM	3071	O	LEU	X	237	28.968	-52.630	59.325	1.00	59.04
O										
ATOM	3072	CB	LEU	X	237	31.859	-53.463	58.964	1.00	58.36
C										
ATOM	3073	CG	LEU	X	237	33.362	-53.452	59.130	1.00	61.16
C										
ATOM	3074	CD1	LEU	X	237	33.865	-52.151	58.542	1.00	73.42
C										
ATOM	3075	CD2	LEU	X	237	33.804	-53.573	60.571	1.00	68.09
C										
ATOM	3076	N	THR	X	238	28.918	-54.850	59.740	1.00	65.28
N										
ATOM	3077	CA	THR	X	238	27.562	-55.047	59.274	1.00	77.89
C										
ATOM	3078	C	THR	X	238	26.678	-55.343	60.450	1.00	73.23
C										
ATOM	3079	O	THR	X	238	27.094	-55.282	61.570	1.00	92.07
O										
ATOM	3080	CB	THR	X	238	27.415	-56.264	58.343	1.00	109.75
C										
ATOM	3081	OG1	THR	X	238	26.809	-57.348	59.065	1.00	144.77
O										
ATOM	3082	CG2	THR	X	238	28.742	-56.706	57.773	1.00	112.02
C										
ATOM	3083	N	SER	X	239	25.443	-55.710	60.171	1.00	75.32
N										
ATOM	3084	CA	SER	X	239	24.476	-55.982	61.222	1.00	75.55
C										
ATOM	3085	C	SER	X	239	24.163	-57.478	61.352	1.00	72.63
C										
ATOM	3086	O	SER	X	239	23.040	-57.859	61.738	1.00	83.64
O										
ATOM	3087	CB	SER	X	239	23.175	-55.193	60.968	1.00	81.40
C										
ATOM	3088	OG	SER	X	239	22.819	-55.163	59.593	1.00	83.39
O										
ATOM	3089	N	TRP	X	240	25.097	-58.342	60.983	1.00	75.46
N										
ATOM	3090	CA	TRP	X	240	24.956	-59.779	61.275	1.00	78.76
C										
ATOM	3091	C	TRP	X	240	26.220	-60.497	61.732	1.00	77.92
C										
ATOM	3092	O	TRP	X	240	27.325	-59.996	61.569	1.00	75.40
O										
ATOM	3093	CB	TRP	X	240	24.329	-60.477	60.080	1.00	75.95
C										
ATOM	3094	CG	TRP	X	240	22.887	-60.457	60.161	1.00	76.00
C										
ATOM	3095	CD1	TRP	X	240	22.109	-60.999	61.144	1.00	88.18
C										

ATOM	3096	CD2	TRP	X	240	22.017	-59.788	59.290	1.00	77.19
C										
ATOM	3097	NE1	TRP	X	240	20.790	-60.743	60.904	1.00	86.70
N										
ATOM	3098	CE2	TRP	X	240	20.703	-59.989	59.772	1.00	82.02
C										
ATOM	3099	CE3	TRP	X	240	22.203	-59.070	58.119	1.00	84.58
C										
ATOM	3100	CZ2	TRP	X	240	19.603	-59.503	59.131	1.00	89.61
C										
ATOM	3101	CZ3	TRP	X	240	21.117	-58.601	57.477	1.00	103.34
C										
ATOM	3102	CH2	TRP	X	240	19.814	-58.826	57.979	1.00	105.62
C										
ATOM	3103	N	PRO	X	241	26.061	-61.712	62.293	1.00	75.68
N										
ATOM	3104	CA	PRO	X	241	27.212	-62.490	62.741	1.00	76.19
C										
ATOM	3105	C	PRO	X	241	27.930	-63.253	61.630	1.00	73.33
C										
ATOM	3106	O	PRO	X	241	27.361	-63.482	60.585	1.00	84.30
O										
ATOM	3107	CB	PRO	X	241	26.598	-63.484	63.726	1.00	83.22
C										
ATOM	3108	CG	PRO	X	241	25.185	-63.635	63.306	1.00	76.64
C										
ATOM	3109	CD	PRO	X	241	24.785	-62.308	62.736	1.00	76.09
C										
ATOM	3110	N	ARG	X	242	29.158	-63.669	61.916	1.00	84.46
N										
ATOM	3111	CA	ARG	X	242	29.958	-64.553	61.032	1.00	86.24
C										
ATOM	3112	C	ARG	X	242	29.189	-65.794	60.608	1.00	63.52
C										
ATOM	3113	O	ARG	X	242	29.169	-66.136	59.430	1.00	69.22
O										
ATOM	3114	CB	ARG	X	242	31.275	-64.933	61.725	1.00	101.02
C										
ATOM	3115	CG	ARG	X	242	32.109	-63.702	62.079	1.00	113.81
C										
ATOM	3116	CD	ARG	X	242	33.541	-64.014	62.454	1.00	121.71
C										
ATOM	3117	NE	ARG	X	242	33.727	-63.929	63.899	1.00	141.69
N										
ATOM	3118	CZ	ARG	X	242	33.484	-64.920	64.756	1.00	157.88
C										
ATOM	3119	NH1	ARG	X	242	33.081	-66.110	64.324	1.00	146.30
N										
ATOM	3120	NH2	ARG	X	242	33.661	-64.720	66.057	1.00	179.80
N1+										
ATOM	3121	N	TRP	X	243	28.533	-66.441	61.570	1.00	75.25
N										
ATOM	3122	CA	TRP	X	243	27.831	-67.717	61.335	1.00	89.10
C										

ATOM	3123	C	TRP	X	243	26.614	-67.585	60.450	1.00	82.55
C										
ATOM	3124	O	TRP	X	243	26.120	-68.600	59.933	1.00	96.98
O										
ATOM	3125	CB	TRP	X	243	27.405	-68.411	62.656	1.00	97.53
C										
ATOM	3126	CG	TRP	X	243	26.466	-67.600	63.515	1.00	72.06
C										
ATOM	3127	CD1	TRP	X	243	26.811	-66.816	64.541	1.00	69.43
C										
ATOM	3128	CD2	TRP	X	243	25.049	-67.497	63.395	1.00	61.69
C										
ATOM	3129	NE1	TRP	X	243	25.723	-66.164	65.026	1.00	69.64
N										
ATOM	3130	CE2	TRP	X	243	24.620	-66.579	64.345	1.00	61.81
C										
ATOM	3131	CE3	TRP	X	243	24.112	-68.072	62.559	1.00	76.24
C										
ATOM	3132	CZ2	TRP	X	243	23.282	-66.253	64.524	1.00	70.84
C										
ATOM	3133	CZ3	TRP	X	243	22.778	-67.724	62.720	1.00	80.65
C										
ATOM	3134	CH2	TRP	X	243	22.378	-66.854	63.716	1.00	72.09
C										
ATOM	3135	N	LEU	X	244	26.126	-66.357	60.260	1.00	71.75
N										
ATOM	3136	CA	LEU	X	244	25.025	-66.166	59.318	1.00	75.71
C										
ATOM	3137	C	LEU	X	244	25.546	-66.038	57.913	1.00	84.39
C										
ATOM	3138	O	LEU	X	244	25.148	-66.776	57.026	1.00	111.92
O										
ATOM	3139	CB	LEU	X	244	24.142	-65.021	59.664	1.00	78.92
C										
ATOM	3140	CG	LEU	X	244	22.951	-65.117	58.722	1.00	73.17
C										
ATOM	3141	CD1	LEU	X	244	21.654	-65.291	59.500	1.00	70.48
C										
ATOM	3142	CD2	LEU	X	244	22.944	-63.893	57.819	1.00	73.98
C										
ATOM	3143	N	TYR	X	245	26.455	-65.099	57.716	1.00	83.66
N										
ATOM	3144	CA	TYR	X	245	27.107	-64.937	56.440	1.00	81.12
C										
ATOM	3145	C	TYR	X	245	27.663	-66.296	55.972	1.00	75.67
C										
ATOM	3146	O	TYR	X	245	27.825	-66.543	54.773	1.00	91.65
O										
ATOM	3147	CB	TYR	X	245	28.210	-63.891	56.536	1.00	73.15
C										
ATOM	3148	CG	TYR	X	245	27.680	-62.490	56.579	1.00	74.75
C										
ATOM	3149	CD1	TYR	X	245	27.304	-61.843	55.427	1.00	90.46
C										



ATOM	3150	CD2	TYR	X	245	27.499	-61.834	57.767	1.00	93.56
C										
ATOM	3151	CE1	TYR	X	245	26.813	-60.544	55.447	1.00	93.54
C										
ATOM	3152	CE2	TYR	X	245	26.990	-60.538	57.808	1.00	108.23
C										
ATOM	3153	CZ	TYR	X	245	26.647	-59.895	56.641	1.00	91.81
C										
ATOM	3154	OH	TYR	X	245	26.137	-58.605	56.671	1.00	88.76
O										
ATOM	3155	N	SER	X	246	27.910	-67.181	56.928	1.00	77.53
N										
ATOM	3156	CA	SER	X	246	28.413	-68.498	56.609	1.00	76.59
C										
ATOM	3157	C	SER	X	246	27.353	-69.348	55.955	1.00	83.93
C										
ATOM	3158	O	SER	X	246	27.670	-70.139	55.094	1.00	88.44
O										
ATOM	3159	CB	SER	X	246	29.084	-69.225	57.772	1.00	94.79
C										
ATOM	3160	OG	SER	X	246	30.259	-69.904	57.315	1.00	79.89
O										
ATOM	3161	N	LEU	X	247	26.092	-69.137	56.302	1.00	94.26
N										
ATOM	3162	CA	LEU	X	247	24.952	-69.840	55.679	1.00	91.33
C										
ATOM	3163	C	LEU	X	247	24.629	-69.400	54.242	1.00	82.19
C										
ATOM	3164	O	LEU	X	247	23.636	-69.822	53.679	1.00	78.33
O										
ATOM	3165	CB	LEU	X	247	23.674	-69.561	56.462	1.00	89.73
C										
ATOM	3166	CG	LEU	X	247	23.627	-69.831	57.942	1.00	98.11
C										
ATOM	3167	CD1	LEU	X	247	22.163	-69.950	58.332	1.00	97.82
C										
ATOM	3168	CD2	LEU	X	247	24.411	-71.092	58.302	1.00	104.27
C										
ATOM	3169	N	TYR	X	248	25.374	-68.437	53.711	1.00	75.52
N										
ATOM	3170	CA	TYR	X	248	25.248	-68.029	52.291	1.00	67.80
C										
ATOM	3171	C	TYR	X	248	26.589	-68.117	51.543	1.00	79.47
C										
ATOM	3172	O	TYR	X	248	26.804	-67.491	50.501	1.00	96.84
O										
ATOM	3173	CB	TYR	X	248	24.628	-66.637	52.212	1.00	63.42
C										
ATOM	3174	CG	TYR	X	248	23.191	-66.545	52.741	1.00	64.96
C										
ATOM	3175	CD1	TYR	X	248	22.904	-66.694	54.083	1.00	78.13
C										
ATOM	3176	CD2	TYR	X	248	22.168	-66.140	51.926	1.00	80.23
C										

ATOM	3177	CE1	TYR	X	248	21.616	-66.503	54.584	1.00	84.68
C										
ATOM	3178	CE2	TYR	X	248	20.873	-65.953	52.410	1.00	97.82
C										
ATOM	3179	CZ	TYR	X	248	20.595	-66.124	53.747	1.00	85.49
C										
ATOM	3180	OH	TYR	X	248	19.280	-65.961	54.228	1.00	68.08
O										
ATOM	3181	N	ASP	X	249	27.518	-68.882	52.111	1.00	73.03
N										
ATOM	3182	CA	ASP	X	249	28.872	-69.034	51.589	1.00	88.71
C										
ATOM	3183	C	ASP	X	249	28.928	-70.308	50.781	1.00	101.02
C										
ATOM	3184	O	ASP	X	249	28.912	-71.392	51.348	1.00	89.16
O										
ATOM	3185	CB	ASP	X	249	29.889	-69.140	52.709	1.00	93.82
C										
ATOM	3186	CG	ASP	X	249	31.336	-69.147	52.193	1.00	87.40
C										
ATOM	3187	OD1	ASP	X	249	31.659	-68.383	51.245	1.00	76.77
O										
ATOM	3188	OD2	ASP	X	249	32.159	-69.873	52.788	1.00	88.37
O1-										
ATOM	3189	N	ALA	X	250	29.043	-70.160	49.465	1.00	108.06
N										
ATOM	3190	CA	ALA	X	250	29.113	-71.279	48.534	1.00	96.76
C										
ATOM	3191	C	ALA	X	250	30.036	-72.395	49.030	1.00	94.94
C										
ATOM	3192	O	ALA	X	250	29.657	-73.557	49.083	1.00	102.31
O										
ATOM	3193	CB	ALA	X	250	29.584	-70.766	47.188	1.00	94.42
C										
ATOM	3194	N	GLU	X	251	31.235	-72.012	49.427	1.00	96.04
N										
ATOM	3195	CA	GLU	X	251	32.244	-72.977	49.833	1.00	104.72
C										
ATOM	3196	C	GLU	X	251	31.737	-73.806	51.036	1.00	95.74
C										
ATOM	3197	O	GLU	X	251	31.863	-75.046	51.065	1.00	92.64
O										
ATOM	3198	CB	GLU	X	251	33.545	-72.251	50.202	1.00	112.93
C										
ATOM	3199	CG	GLU	X	251	34.046	-71.264	49.149	1.00	118.85
C										
ATOM	3200	CD	GLU	X	251	34.599	-71.948	47.912	1.00	145.03
C										
ATOM	3201	OE1	GLU	X	251	34.829	-71.247	46.904	1.00	162.64
O										
ATOM	3202	OE2	GLU	X	251	34.822	-73.179	47.944	1.00	162.59
O1-										
ATOM	3203	N	THR	X	252	31.110	-73.132	51.996	1.00	92.53
N										

ATOM	3204	CA	THR	X	252	30.608	-73.814	53.191	1.00	97.05
C										
ATOM	3205	C	THR	X	252	29.466	-74.769	52.867	1.00	103.93
C										
ATOM	3206	O	THR	X	252	29.522	-75.942	53.200	1.00	105.01
O										
ATOM	3207	CB	THR	X	252	30.176	-72.797	54.258	1.00	117.49
C										
ATOM	3208	OG1	THR	X	252	31.284	-71.937	54.575	1.00	82.36
O										
ATOM	3209	CG2	THR	X	252	29.678	-73.512	55.529	1.00	130.29
C										
ATOM	3210	N	LEU	X	253	28.438	-74.247	52.209	1.00	108.90
N										
ATOM	3211	CA	LEU	X	253	27.256	-75.006	51.831	1.00	95.95
C										
ATOM	3212	C	LEU	X	253	27.639	-76.270	51.097	1.00	101.79
C										
ATOM	3213	O	LEU	X	253	27.156	-77.344	51.431	1.00	118.30
O										
ATOM	3214	CB	LEU	X	253	26.411	-74.165	50.884	1.00	75.02
C										
ATOM	3215	CG	LEU	X	253	25.805	-72.888	51.431	1.00	77.78
C										
ATOM	3216	CD1	LEU	X	253	25.157	-72.082	50.323	1.00	72.37
C										
ATOM	3217	CD2	LEU	X	253	24.788	-73.248	52.494	1.00	95.75
C										
ATOM	3218	N	MET	X	254	28.513	-76.135	50.103	1.00	96.46
N										
ATOM	3219	CA	MET	X	254	29.003	-77.268	49.308	1.00	90.39
C										
ATOM	3220	C	MET	X	254	29.581	-78.359	50.217	1.00	76.12
C										
ATOM	3221	O	MET	X	254	29.318	-79.555	50.015	1.00	94.49
O										
ATOM	3222	CB	MET	X	254	30.022	-76.808	48.270	1.00	105.48
C										
ATOM	3223	CG	MET	X	254	29.346	-76.163	47.060	1.00	110.71
C										
ATOM	3224	SD	MET	X	254	30.424	-75.389	45.850	1.00	118.10
S										
ATOM	3225	CE	MET	X	254	31.537	-76.742	45.440	1.00	140.27
C										
ATOM	3226	N	ASP	X	255	30.335	-77.927	51.226	1.00	72.23
N										
ATOM	3227	CA	ASP	X	255	30.881	-78.845	52.218	1.00	78.69
C										
ATOM	3228	C	ASP	X	255	29.804	-79.522	53.069	1.00	76.21
C										
ATOM	3229	O	ASP	X	255	29.863	-80.710	53.300	1.00	89.01
O										
ATOM	3230	CB	ASP	X	255	31.977	-78.238	53.056	1.00	89.19
C										

ATOM	3231	CG	ASP	X	255	33.289	-78.930	52.838	1.00	90.62
C										
ATOM	3232	OD1	ASP	X	255	33.888	-78.684	51.776	1.00	122.02
O										
ATOM	3233	OD2	ASP	X	255	33.673	-79.789	53.665	1.00	77.58
O1-										
ATOM	3234	N	ARG	X	256	28.814	-78.767	53.513	1.00	79.55
N										
ATOM	3235	CA	ARG	X	256	27.684	-79.327	54.274	1.00	95.99
C										
ATOM	3236	C	ARG	X	256	26.914	-80.339	53.435	1.00	91.70
C										
ATOM	3237	O	ARG	X	256	26.450	-81.347	53.951	1.00	114.97
O										
ATOM	3238	CB	ARG	X	256	26.738	-78.218	54.754	1.00	110.12
C										
ATOM	3239	CG	ARG	X	256	27.206	-77.465	55.998	1.00	103.73
C										
ATOM	3240	CD	ARG	X	256	26.430	-76.170	56.176	1.00	77.21
C										
ATOM	3241	NE	ARG	X	256	24.989	-76.417	56.335	1.00	67.21
N										
ATOM	3242	CZ	ARG	X	256	24.061	-75.466	56.262	1.00	68.80
C										
ATOM	3243	NH1	ARG	X	256	24.442	-74.208	56.045	1.00	94.41
N										
ATOM	3244	NH2	ARG	X	256	22.761	-75.753	56.414	1.00	49.94
N1+										
ATOM	3245	N	ILE	X	257	26.792	-80.067	52.140	1.00	92.67
N										
ATOM	3246	CA	ILE	X	257	26.167	-80.994	51.197	1.00	101.67
C										
ATOM	3247	C	ILE	X	257	27.064	-82.222	50.985	1.00	103.31
C										
ATOM	3248	O	ILE	X	257	26.571	-83.345	50.964	1.00	116.98
O										
ATOM	3249	CB	ILE	X	257	25.890	-80.312	49.852	1.00	97.07
C										
ATOM	3250	CG1	ILE	X	257	24.727	-79.342	50.000	1.00	101.10
C										
ATOM	3251	CG2	ILE	X	257	25.525	-81.353	48.822	1.00	103.61
C										
ATOM	3252	CD1	ILE	X	257	24.580	-78.347	48.874	1.00	99.09
C										
ATOM	3253	N	LYS	X	258	28.372	-82.007	50.845	1.00	90.83
N										
ATOM	3254	CA	LYS	X	258	29.310	-83.124	50.706	1.00	82.15
C										
ATOM	3255	C	LYS	X	258	29.084	-84.206	51.756	1.00	82.39
C										
ATOM	3256	O	LYS	X	258	28.949	-85.371	51.420	1.00	107.29
O										
ATOM	3257	CB	LYS	X	258	30.760	-82.665	50.709	1.00	86.16
C										

ATOM	3258	CG	LYS	X	258	31.321	-82.484	49.304	1.00	86.98
C										
ATOM	3259	CD	LYS	X	258	32.812	-82.171	49.315	1.00	95.64
C										
ATOM	3260	CE	LYS	X	258	33.252	-81.504	48.018	1.00	95.70
C										
ATOM	3261	NZ	LYS	X	258	33.237	-80.009	48.076	1.00	99.08
N1+										
ATOM	3262	N	LYS	X	259	29.016	-83.817	53.013	1.00	89.25
N										
ATOM	3263	CA	LYS	X	259	28.834	-84.761	54.127	1.00	104.88
C										
ATOM	3264	C	LYS	X	259	27.611	-85.673	53.980	1.00	105.16
C										
ATOM	3265	O	LYS	X	259	27.684	-86.862	54.274	1.00	126.37
O										
ATOM	3266	CB	LYS	X	259	28.705	-83.978	55.442	1.00	127.79
C										
ATOM	3267	CG	LYS	X	259	29.996	-83.323	55.928	1.00	136.17
C										
ATOM	3268	CD	LYS	X	259	29.745	-82.302	57.042	1.00	133.52
C										
ATOM	3269	CE	LYS	X	259	30.750	-82.435	58.183	1.00	132.97
C										
ATOM	3270	NZ	LYS	X	259	31.223	-81.115	58.678	1.00	142.76
N1+										
ATOM	3271	N	GLN	X	260	26.499	-85.126	53.501	1.00	117.04
N										
ATOM	3272	CA	GLN	X	260	25.307	-85.950	53.219	1.00	129.49
C										
ATOM	3273	C	GLN	X	260	25.596	-86.906	52.075	1.00	138.35
C										
ATOM	3274	O	GLN	X	260	25.305	-88.082	52.165	1.00	181.55
O										
ATOM	3275	CB	GLN	X	260	24.075	-85.113	52.811	1.00	126.46
C										
ATOM	3276	CG	GLN	X	260	23.796	-83.870	53.642	1.00	162.89
C										
ATOM	3277	CD	GLN	X	260	22.905	-84.142	54.836	1.00	168.17
C										
ATOM	3278	NE2	GLN	X	260	21.904	-83.448	55.050	1.00	137.59
N										
ATOM	3279	OE1	GLN	X	260	23.290	-85.120	55.651	1.00	179.19
O										
ATOM	3280	N	LEU	X	261	26.179	-86.386	50.997	1.00	127.72
N										
ATOM	3281	CA	LEU	X	261	26.542	-87.188	49.809	1.00	109.11
C										
ATOM	3282	C	LEU	X	261	27.543	-88.289	50.145	1.00	104.20
C										
ATOM	3283	O	LEU	X	261	27.677	-89.259	49.401	1.00	127.10
O										
ATOM	3284	CB	LEU	X	261	27.245	-86.324	48.754	1.00	95.63
C										

ATOM	3285	CG	LEU	X	261	26.503	-85.361	47.841	1.00	98.46
C										
ATOM	3286	CD1	LEU	X	261	27.414	-84.963	46.674	1.00	84.43
C										
ATOM	3287	CD2	LEU	X	261	25.195	-85.971	47.355	1.00	112.01
C										
ATOM	3288	N	ARG	X	262	28.280	-88.095	51.238	1.00	99.64
N										
ATOM	3289	CA	ARG	X	262	29.298	-89.033	51.695	1.00	108.57
C										
ATOM	3290	C	ARG	X	262	28.649	-90.270	52.295	1.00	107.76
C										
ATOM	3291	O	ARG	X	262	29.244	-91.350	52.299	1.00	132.56
O										
ATOM	3292	CB	ARG	X	262	30.274	-88.412	52.699	1.00	144.50
C										
ATOM	3293	CG	ARG	X	262	31.440	-89.342	53.070	1.00	168.74
C										
ATOM	3294	CD	ARG	X	262	32.464	-88.688	53.997	1.00	175.11
C										
ATOM	3295	NE	ARG	X	262	32.713	-87.292	53.642	1.00	191.86
N										
ATOM	3296	CZ	ARG	X	262	33.352	-86.889	52.542	1.00	177.98
C										
ATOM	3297	NH1	ARG	X	262	33.851	-87.776	51.685	1.00	176.20
N										
ATOM	3298	NH2	ARG	X	262	33.486	-85.588	52.292	1.00	146.87
N1+										
ATOM	3299	N	GLU	X	263	27.497	-90.010	52.897	1.00	107.57
N										
ATOM	3300	CA	GLU	X	263	26.679	-91.004	53.552	1.00	123.56
C										
ATOM	3301	C	GLU	X	263	26.228	-91.927	52.473	1.00	133.50
C										
ATOM	3302	O	GLU	X	263	26.152	-93.128	52.659	1.00	144.03
O										
ATOM	3303	CB	GLU	X	263	25.511	-90.360	54.273	1.00	130.56
C										
ATOM	3304	CG	GLU	X	263	25.964	-89.510	55.447	1.00	139.25
C										
ATOM	3305	CD	GLU	X	263	24.814	-89.045	56.301	1.00	156.31
C										
ATOM	3306	OE1	GLU	X	263	25.009	-88.128	57.124	1.00	148.07
O										
ATOM	3307	OE2	GLU	X	263	23.712	-89.602	56.142	1.00	171.08
O1-										
ATOM	3308	N	TRP	X	264	25.938	-91.359	51.317	1.00	143.71
N										
ATOM	3309	CA	TRP	X	264	25.576	-92.190	50.190	1.00	143.56
C										
ATOM	3310	C	TRP	X	264	26.795	-93.072	49.925	1.00	146.17
C										
ATOM	3311	O	TRP	X	264	26.676	-94.190	49.454	1.00	127.07
O										

ATOM	3312	CB	TRP	X	264	25.041	-91.364	49.049	1.00150.41
C									
ATOM	3313	CG	TRP	X	264	23.655	-90.950	49.422	1.00139.66
C									
ATOM	3314	CD1	TRP	X	264	22.767	-91.686	50.137	1.00136.98
C									
ATOM	3315	CD2	TRP	X	264	23.003	-89.720	49.124	1.00111.31
C									
ATOM	3316	NE1	TRP	X	264	21.605	-90.998	50.295	1.00124.10
N									
ATOM	3317	CE2	TRP	X	264	21.726	-89.784	49.681	1.00101.17
C									
ATOM	3318	CE3	TRP	X	264	23.372	-88.575	48.433	1.00104.23
C									
ATOM	3319	CZ2	TRP	X	264	20.822	-88.754	49.570	1.00 92.43
C									
ATOM	3320	CZ3	TRP	X	264	22.474	-87.560	48.324	1.00 83.87
C									
ATOM	3321	CH2	TRP	X	264	21.216	-87.652	48.886	1.00 88.99
C									
ATOM	3322	N	ASP	X	265	27.969	-92.543	50.264	1.00160.58
N									
ATOM	3323	CA	ASP	X	265	29.235	-93.252	50.321	1.00161.07
C									
ATOM	3324	C	ASP	X	265	30.297	-93.354	49.266	1.00150.21
C									
ATOM	3325	O	ASP	X	265	30.082	-93.298	48.066	1.00182.24
O									
ATOM	3326	CB	ASP	X	265	28.969	-94.685	50.801	1.00156.01
C									
ATOM	3327	CG	ASP	X	265	30.187	-95.338	51.386	1.00157.02
C									
ATOM	3328	OD1	ASP	X	265	31.266	-94.708	51.384	1.00197.83
O									
ATOM	3329	OD2	ASP	X	265	30.056	-96.485	51.859	1.00146.63
O1-									
ATOM	3330	N	GLU	X	266	31.479	-93.492	49.848	1.00139.40
N									
ATOM	3331	CA	GLU	X	266	32.752	-93.755	49.227	1.00154.05
C									
ATOM	3332	C	GLU	X	266	33.279	-92.743	48.263	1.00149.75
C									
ATOM	3333	O	GLU	X	266	34.203	-93.038	47.521	1.00152.48
O									
ATOM	3334	CB	GLU	X	266	32.785	-95.150	48.624	1.00148.31
C									
ATOM	3335	CG	GLU	X	266	32.649	-96.255	49.656	1.00167.29
C									
ATOM	3336	CD	GLU	X	266	33.667	-96.164	50.783	1.00185.43
C									
ATOM	3337	OE1	GLU	X	266	33.969	-95.047	51.253	1.00182.21
O									
ATOM	3338	OE2	GLU	X	266	34.159	-97.227	51.216	1.00168.27
O1-									

ATOM	3339	N	ASN	X	267	32.753	-91.536	48.262	1.00	131.42
N										
ATOM	3340	CA	ASN	X	267	33.359	-90.627	47.289	1.00	105.37
C										
ATOM	3341	C	ASN	X	267	34.896	-90.599	47.377	1.00	88.52
C										
ATOM	3342	O	ASN	X	267	35.462	-90.840	48.453	1.00	89.78
O										
ATOM	3343	CB	ASN	X	267	32.797	-89.208	47.484	1.00	0.00
C										
ATOM	3344	CG	ASN	X	267	31.297	-89.065	47.195	1.00	0.00
C										
ATOM	3345	OD1	ASN	X	267	30.657	-89.954	46.635	1.00	0.00
O										
ATOM	3346	ND2	ASN	X	267	30.736	-87.909	47.563	1.00	0.00
N										
ATOM	3347	N	LEU	X	268	35.596	-90.152	46.331	1.00	0.00
N										
ATOM	3348	CA	LEU	X	268	37.030	-89.889	46.454	1.00	0.00
C										
ATOM	3349	C	LEU	X	268	37.333	-88.768	47.485	1.00	0.00
C										
ATOM	3350	O	LEU	X	268	36.495	-87.916	47.793	1.00	0.00
O										
ATOM	3351	CB	LEU	X	268	37.596	-89.525	45.067	1.00	0.00
C										
ATOM	3352	CG	LEU	X	268	37.758	-90.736	44.124	1.00	0.00
C										
ATOM	3353	CD1	LEU	X	268	38.023	-90.262	42.687	1.00	0.00
C										
ATOM	3354	CD2	LEU	X	268	38.917	-91.645	44.572	1.00	0.00
C										
ATOM	3355	N	LYS	X	269	38.549	-88.785	48.040	1.00	0.00
N										
ATOM	3356	CA	LYS	X	269	39.005	-87.854	49.083	1.00	0.00
C										
ATOM	3357	C	LYS	X	269	39.989	-86.776	48.568	1.00	0.00
C										
ATOM	3358	O	LYS	X	269	40.683	-86.143	49.364	1.00	0.00
O										
ATOM	3359	CB	LYS	X	269	39.706	-88.644	50.231	1.00	0.00
C										
ATOM	3360	CG	LYS	X	269	38.899	-89.844	50.758	1.00	0.00
C										
ATOM	3361	CD	LYS	X	269	37.474	-89.491	51.210	1.00	0.00
C										
ATOM	3362	CE	LYS	X	269	36.785	-90.726	51.796	1.00	0.00
C										
ATOM	3363	NZ	LYS	X	269	35.425	-90.410	52.263	1.00	0.00
N1+										
ATOM	3364	N	ASP	X	270	40.089	-86.613	47.244	1.00	0.00
N										
ATOM	3365	CA	ASP	X	270	41.033	-85.722	46.564	1.00	0.00
C										



ATOM	3366	C	ASP	X	270	40.378	-85.106	45.306	1.00	0.00
C										
ATOM	3367	O	ASP	X	270	39.373	-84.406	45.420	1.00	0.00
O										
ATOM	3368	CB	ASP	X	270	42.315	-86.494	46.138	1.00	0.00
C										
ATOM	3369	CG	ASP	X	270	43.029	-87.104	47.345	1.00	0.00
C										
ATOM	3370	OD1	ASP	X	270	43.022	-88.307	47.601	1.00	0.00
O										
ATOM	3371	OD2	ASP	X	270	43.679	-86.188	48.121	1.00	0.00
O1-										
ATOM	3372	N	ASP	X	271	40.893	-85.393	44.102	1.00	0.00
N										
ATOM	3373	CA	ASP	X	271	40.185	-85.119	42.850	1.00	0.00
C										
ATOM	3374	C	ASP	X	271	38.851	-85.894	42.823	1.00	0.00
C										
ATOM	3375	O	ASP	X	271	38.827	-87.071	43.186	1.00	0.00
O										
ATOM	3376	CB	ASP	X	271	41.043	-85.541	41.620	1.00	0.00
C										
ATOM	3377	CG	ASP	X	271	41.527	-86.995	41.659	1.00	0.00
C										
ATOM	3378	OD1	ASP	X	271	42.553	-87.353	42.233	1.00	0.00
O										
ATOM	3379	OD2	ASP	X	271	40.717	-87.869	40.989	1.00	0.00
O1-										
ATOM	3380	N	SER	X	272	37.756	-85.194	42.493	1.00	118.92
N										
ATOM	3381	CA	SER	X	272	36.500	-85.760	43.011	1.00	136.18
C										
ATOM	3382	C	SER	X	272	35.269	-85.360	42.151	1.00	133.93
C										
ATOM	3383	O	SER	X	272	34.831	-86.147	41.299	1.00	104.63
O										
ATOM	3384	CB	SER	X	272	36.312	-85.374	44.497	1.00	134.97
C										
ATOM	3385	OG	SER	X	272	36.746	-86.410	45.374	1.00	115.99
O										
ATOM	3386	N	LEU	X	273	34.734	-84.152	42.385	1.00	144.48
N										
ATOM	3387	CA	LEU	X	273	33.584	-83.595	41.639	1.00	127.23
C										
ATOM	3388	C	LEU	X	273	33.809	-82.072	41.483	1.00	131.63
C										
ATOM	3389	O	LEU	X	273	34.944	-81.609	41.661	1.00	149.88
O										
ATOM	3390	CB	LEU	X	273	32.260	-83.958	42.341	1.00	112.27
C										
ATOM	3391	CG	LEU	X	273	32.190	-83.802	43.864	1.00	101.34
C										
ATOM	3392	CD1	LEU	X	273	32.675	-82.429	44.299	1.00	104.14
C										

ATOM	3393	CD2	LEU	X	273	30.784	-84.062	44.398	1.00	84.89
C										
ATOM	3394	N	PRO	X	274	32.787	-81.309	41.006	1.00	128.70
N										
ATOM	3395	CA	PRO	X	274	33.164	-79.948	40.591	1.00	130.24
C										
ATOM	3396	C	PRO	X	274	33.604	-79.068	41.763	1.00	151.81
C										
ATOM	3397	O	PRO	X	274	33.231	-79.313	42.914	1.00	154.99
O										
ATOM	3398	CB	PRO	X	274	31.885	-79.405	39.956	1.00	108.10
C										
ATOM	3399	CG	PRO	X	274	30.790	-80.117	40.667	1.00	105.65
C										
ATOM	3400	CD	PRO	X	274	31.319	-81.479	41.038	1.00	113.38
C										
ATOM	3401	N	SER	X	275	34.420	-78.057	41.450	1.00	147.31
N										
ATOM	3402	CA	SER	X	275	34.892	-77.062	42.428	1.00	145.16
C										
ATOM	3403	C	SER	X	275	34.016	-75.804	42.337	1.00	130.52
C										
ATOM	3404	O	SER	X	275	33.818	-75.093	43.321	1.00	166.16
O										
ATOM	3405	CB	SER	X	275	36.358	-76.641	42.134	1.00	139.04
C										
ATOM	3406	OG	SER	X	275	37.160	-77.699	41.620	1.00	108.70
O										
ATOM	3407	N	ASN	X	276	33.545	-75.554	41.126	1.00	117.87
N										
ATOM	3408	CA	ASN	X	276	32.631	-74.476	40.847	1.00	134.20
C										
ATOM	3409	C	ASN	X	276	31.270	-74.785	41.464	1.00	115.34
C										
ATOM	3410	O	ASN	X	276	30.655	-75.824	41.166	1.00	144.93
O										
ATOM	3411	CB	ASN	X	276	32.531	-74.269	39.330	1.00	169.59
C										
ATOM	3412	CG	ASN	X	276	31.380	-73.363	38.915	1.00	179.02
C										
ATOM	3413	OD1	ASN	X	276	30.742	-72.697	39.735	1.00	163.26
O										
ATOM	3414	ND2	ASN	X	276	31.124	-73.328	37.614	1.00	211.93
N										
ATOM	3415	N	PRO	X	277	30.778	-73.861	42.306	1.00	114.30
N										
ATOM	3416	CA	PRO	X	277	29.452	-73.959	42.927	1.00	111.56
C										
ATOM	3417	C	PRO	X	277	28.301	-74.159	41.932	1.00	106.62
C										
ATOM	3418	O	PRO	X	277	27.400	-74.915	42.224	1.00	91.32
O										
ATOM	3419	CB	PRO	X	277	29.311	-72.622	43.668	1.00	120.45
C										

ATOM	3420	CG	PRO	X	277	30.222	-71.687	42.946	1.00122.74
C									
ATOM	3421	CD	PRO	X	277	31.394	-72.544	42.566	1.00126.87
C									
ATOM	3422	N	ILE	X	278	28.334	-73.500	40.783	1.00111.18
N									
ATOM	3423	CA	ILE	X	278	27.346	-73.694	39.728	1.00111.66
C									
ATOM	3424	C	ILE	X	278	27.185	-75.195	39.394	1.00117.68
C									
ATOM	3425	O	ILE	X	278	26.077	-75.760	39.427	1.00134.85
O									
ATOM	3426	CB	ILE	X	278	27.797	-72.947	38.468	1.00118.90
C									
ATOM	3427	CG1	ILE	X	278	27.989	-71.459	38.790	1.00124.93
C									
ATOM	3428	CG2	ILE	X	278	26.800	-73.143	37.344	1.00139.37
C									
ATOM	3429	CD1	ILE	X	278	28.823	-70.697	37.785	1.00134.37
C									
ATOM	3430	N	ASP	X	279	28.300	-75.837	39.096	1.00129.03
N									
ATOM	3431	CA	ASP	X	279	28.254	-77.232	38.709	1.00128.02
C									
ATOM	3432	C	ASP	X	279	27.803	-78.113	39.864	1.00111.12
C									
ATOM	3433	O	ASP	X	279	26.914	-78.934	39.709	1.00114.22
O									
ATOM	3434	CB	ASP	X	279	29.551	-77.652	38.037	1.00150.79
C									
ATOM	3435	CG	ASP	X	279	29.662	-77.090	36.612	1.00163.54
C									
ATOM	3436	OD1	ASP	X	279	29.817	-75.859	36.457	1.00120.64
O									
ATOM	3437	OD2	ASP	X	279	29.477	-77.864	35.650	1.00220.93
O1-									
ATOM	3438	N	PHE	X	280	28.399	-77.905	41.022	1.00113.20
N									
ATOM	3439	CA	PHE	X	280	28.075	-78.676	42.197	1.00109.51
C									
ATOM	3440	C	PHE	X	280	26.582	-78.641	42.436	1.00105.61
C									
ATOM	3441	O	PHE	X	280	25.973	-79.665	42.597	1.00134.32
O									
ATOM	3442	CB	PHE	X	280	28.809	-78.131	43.424	1.00106.72
C									
ATOM	3443	CG	PHE	X	280	28.751	-79.045	44.603	1.00 90.10
C									
ATOM	3444	CD1	PHE	X	280	27.553	-79.271	45.252	1.00 88.94
C									
ATOM	3445	CD2	PHE	X	280	29.864	-79.760	44.996	1.00 94.40
C									
ATOM	3446	CE1	PHE	X	280	27.477	-80.150	46.306	1.00103.37
C									

ATOM	3447	CE2	PHE	X	280	29.788	-80.664	46.039	1.00112.94
C									
ATOM	3448	CZ	PHE	X	280	28.593	-80.857	46.698	1.00113.26
C									
ATOM	3449	N	SER	X	281	26.006	-77.446	42.413	1.00 88.74
N									
ATOM	3450	CA	SER	X	281	24.581	-77.219	42.695	1.00100.92
C									
ATOM	3451	C	SER	X	281	23.675	-77.944	41.716	1.00126.16
C									
ATOM	3452	O	SER	X	281	22.610	-78.420	42.092	1.00129.67
O									
ATOM	3453	CB	SER	X	281	24.255	-75.722	42.602	1.00100.88
C									
ATOM	3454	OG	SER	X	281	24.260	-75.260	41.259	1.00 82.60
O									
ATOM	3455	N	TYR	X	282	24.111	-78.019	40.458	1.00136.70
N									
ATOM	3456	CA	TYR	X	282	23.399	-78.791	39.417	1.00 97.27
C									
ATOM	3457	C	TYR	X	282	23.590	-80.326	39.499	1.00 90.42
C									
ATOM	3458	O	TYR	X	282	22.708	-81.091	39.124	1.00 99.68
O									
ATOM	3459	CB	TYR	X	282	23.845	-78.372	38.035	1.00 80.31
C									
ATOM	3460	CG	TYR	X	282	23.419	-77.008	37.586	1.00 61.87
C									
ATOM	3461	CD1	TYR	X	282	22.067	-76.658	37.486	1.00 52.68
C									
ATOM	3462	CD2	TYR	X	282	24.356	-76.146	37.052	1.00 63.01
C									
ATOM	3463	CE1	TYR	X	282	21.683	-75.433	36.958	1.00 53.56
C									
ATOM	3464	CE2	TYR	X	282	23.987	-74.933	36.526	1.00 73.85
C									
ATOM	3465	CZ	TYR	X	282	22.659	-74.576	36.483	1.00 63.69
C									
ATOM	3466	OH	TYR	X	282	22.371	-73.355	35.934	1.00 82.68
O									
ATOM	3467	N	ARG	X	283	24.764	-80.750	39.947	1.00 93.41
N									
ATOM	3468	CA	ARG	X	283	25.072	-82.158	40.165	1.00 97.75
C									
ATOM	3469	C	ARG	X	283	24.224	-82.763	41.304	1.00 89.84
C									
ATOM	3470	O	ARG	X	283	23.719	-83.866	41.183	1.00113.58
O									
ATOM	3471	CB	ARG	X	283	26.585	-82.287	40.436	1.00 99.40
C									
ATOM	3472	CG	ARG	X	283	27.023	-83.525	41.180	1.00112.26
C									
ATOM	3473	CD	ARG	X	283	26.788	-84.791	40.382	1.00119.69
C									

ATOM	3474	NE	ARG	X	283	27.272	-85.944	41.123	1.00132.76
N									
ATOM	3475	CZ	ARG	X	283	28.558	-86.266	41.251	1.00140.74
C									
ATOM	3476	NH1	ARG	X	283	28.900	-87.307	42.000	1.00133.38
N									
ATOM	3477	NH2	ARG	X	283	29.506	-85.551	40.639	1.00128.75
N1+									
ATOM	3478	N	VAL	X	284	24.076	-82.050	42.406	1.00 92.65
N									
ATOM	3479	CA	VAL	X	284	23.256	-82.555	43.508	1.00105.35
C									
ATOM	3480	C	VAL	X	284	21.785	-82.349	43.244	1.00 97.35
C									
ATOM	3481	O	VAL	X	284	20.952	-83.063	43.781	1.00100.23
O									
ATOM	3482	CB	VAL	X	284	23.641	-81.925	44.843	1.00125.40
C									
ATOM	3483	CG1	VAL	X	284	25.129	-82.111	45.089	1.00145.29
C									
ATOM	3484	CG2	VAL	X	284	23.271	-80.459	44.869	1.00120.89
C									
ATOM	3485	N	ALA	X	285	21.462	-81.383	42.403	1.00 97.21
N									
ATOM	3486	CA	ALA	X	285	20.092	-81.179	41.948	1.00103.98
C									
ATOM	3487	C	ALA	X	285	19.546	-82.452	41.305	1.00 94.69
C									
ATOM	3488	O	ALA	X	285	18.410	-82.858	41.569	1.00 80.75
O									
ATOM	3489	CB	ALA	X	285	20.035	-80.028	40.959	1.00 93.15
C									
ATOM	3490	N	ALA	X	286	20.359	-83.085	40.469	1.00 88.64
N									
ATOM	3491	CA	ALA	X	286	19.957	-84.322	39.782	1.00 89.76
C									
ATOM	3492	C	ALA	X	286	19.935	-85.558	40.685	1.00 94.69
C									
ATOM	3493	O	ALA	X	286	19.275	-86.537	40.373	1.00130.19
O									
ATOM	3494	CB	ALA	X	286	20.873	-84.574	38.608	1.00 89.31
C									
ATOM	3495	N	CYS	X	287	20.666	-85.519	41.793	1.00 85.04
N									
ATOM	3496	CA	CYS	X	287	20.649	-86.601	42.805	1.00 92.31
C									
ATOM	3497	C	CYS	X	287	19.365	-86.604	43.631	1.00 89.60
C									
ATOM	3498	O	CYS	X	287	18.883	-87.624	44.083	1.00 80.22
O									
ATOM	3499	CB	CYS	X	287	21.831	-86.427	43.778	1.00100.62
C									
ATOM	3500	SG	CYS	X	287	23.489	-86.452	43.037	1.00131.78
S									

ATOM	3501	N	LEU	X	288	18.816	-85.422	43.864	1.00108.43
N									
ATOM	3502	CA	LEU	X	288	17.594	-85.230	44.588	1.00 96.83
C									
ATOM	3503	C	LEU	X	288	16.385	-85.870	43.956	1.00 68.93
C									
ATOM	3504	O	LEU	X	288	15.930	-85.374	42.966	1.00 63.92
O									
ATOM	3505	CB	LEU	X	288	17.241	-83.747	44.624	1.00123.19
C									
ATOM	3506	CG	LEU	X	288	17.976	-82.840	45.585	1.00130.12
C									
ATOM	3507	CD1	LEU	X	288	17.265	-81.495	45.574	1.00139.08
C									
ATOM	3508	CD2	LEU	X	288	18.010	-83.442	46.979	1.00120.42
C									
ATOM	3509	N	PRO	X	289	15.804	-86.887	44.606	1.00 83.43
N									
ATOM	3510	CA	PRO	X	289	14.508	-87.426	44.201	1.00 95.77
C									
ATOM	3511	C	PRO	X	289	13.376	-86.491	44.594	1.00 90.80
C									
ATOM	3512	O	PRO	X	289	12.907	-86.542	45.739	1.00132.92
O									
ATOM	3513	CB	PRO	X	289	14.419	-88.692	45.029	1.00110.37
C									
ATOM	3514	CG	PRO	X	289	15.128	-88.325	46.321	1.00124.45
C									
ATOM	3515	CD	PRO	X	289	16.099	-87.211	46.011	1.00104.70
C									
ATOM	3516	N	ILE	X	290	12.997	-85.599	43.695	1.00 70.17
N									
ATOM	3517	CA	ILE	X	290	11.925	-84.651	43.963	1.00 84.69
C									
ATOM	3518	C	ILE	X	290	10.898	-84.707	42.842	1.00 84.78
C									
ATOM	3519	O	ILE	X	290	11.034	-85.515	41.930	1.00109.92
O									
ATOM	3520	CB	ILE	X	290	12.440	-83.200	44.121	1.00102.22
C									
ATOM	3521	CG1	ILE	X	290	13.646	-82.925	43.215	1.00110.75
C									
ATOM	3522	CG2	ILE	X	290	12.799	-82.928	45.564	1.00 98.35
C									
ATOM	3523	CD1	ILE	X	290	13.911	-81.446	43.000	1.00 97.63
C									
ATOM	3524	N	ASP	X	291	9.842	-83.902	42.944	1.00 82.93
N									
ATOM	3525	CA	ASP	X	291	8.739	-84.008	41.992	1.00103.31
C									
ATOM	3526	C	ASP	X	291	8.776	-82.912	40.907	1.00103.98
C									
ATOM	3527	O	ASP	X	291	9.267	-81.810	41.137	1.00 96.95
O									

ATOM	3528	CB	ASP	X	291	7.374	-84.187	42.726	1.00116.06
C									
ATOM	3529	CG	ASP	X	291	6.622	-82.880	42.965	1.00133.73
C									
ATOM	3530	OD1	ASP	X	291	5.973	-82.364	42.019	1.00112.38
O									
ATOM	3531	OD2	ASP	X	291	6.537	-82.464	44.141	1.00154.94
O1-									
ATOM	3532	N	ASP	X	292	8.343	-83.284	39.698	1.00132.50
N									
ATOM	3533	CA	ASP	X	292	8.536	-82.454	38.516	1.00132.34
C									
ATOM	3534	C	ASP	X	292	8.216	-80.954	38.753	1.00120.50
C									
ATOM	3535	O	ASP	X	292	8.826	-80.093	38.119	1.00130.29
O									
ATOM	3536	CB	ASP	X	292	7.632	-82.965	37.353	1.00 0.00
C									
ATOM	3537	CG	ASP	X	292	6.141	-83.037	37.701	1.00 0.00
C									
ATOM	3538	OD1	ASP	X	292	5.620	-84.005	38.251	1.00 0.00
O									
ATOM	3539	OD2	ASP	X	292	5.431	-81.927	37.338	1.00 0.00
O1-									
ATOM	3540	N	VAL	X	293	7.305	-80.638	39.676	1.00106.23
N									
ATOM	3541	CA	VAL	X	293	6.975	-79.238	39.938	1.00115.59
C									
ATOM	3542	C	VAL	X	293	8.005	-78.522	40.820	1.00105.74
C									
ATOM	3543	O	VAL	X	293	8.283	-77.351	40.616	1.00113.83
O									
ATOM	3544	CB	VAL	X	293	5.526	-79.047	40.476	1.00124.21
C									
ATOM	3545	CG1	VAL	X	293	5.478	-79.052	42.000	1.00128.10
C									
ATOM	3546	CG2	VAL	X	293	4.920	-77.757	39.918	1.00114.92
C									
ATOM	3547	N	LEU	X	294	8.572	-79.230	41.785	1.00100.93
N									
ATOM	3548	CA	LEU	X	294	9.698	-78.745	42.593	1.00100.86
C									
ATOM	3549	C	LEU	X	294	11.011	-78.679	41.806	1.00104.48
C									
ATOM	3550	O	LEU	X	294	11.834	-77.792	42.036	1.00118.45
O									
ATOM	3551	CB	LEU	X	294	9.967	-79.771	43.699	1.00103.77
C									
ATOM	3552	CG	LEU	X	294	9.649	-79.498	45.155	1.00 94.36
C									
ATOM	3553	CD1	LEU	X	294	10.975	-79.438	45.905	1.00 97.28
C									
ATOM	3554	CD2	LEU	X	294	8.798	-78.244	45.348	1.00 96.64
C									

ATOM	3555	N	ARG	X	295	11.230	-79.652	40.925	1.00109.19
N									
ATOM	3556	CA	ARG	X	295	12.446	-79.689	40.100	1.00 99.86
C									
ATOM	3557	C	ARG	X	295	12.521	-78.462	39.180	1.00 94.97
C									
ATOM	3558	O	ARG	X	295	13.624	-77.929	38.926	1.00 94.05
O									
ATOM	3559	CB	ARG	X	295	12.437	-81.002	39.304	1.00 96.60
C									
ATOM	3560	CG	ARG	X	295	13.591	-81.244	38.344	1.00 88.42
C									
ATOM	3561	CD	ARG	X	295	14.906	-81.593	39.035	1.00 94.19
C									
ATOM	3562	NE	ARG	X	295	15.055	-83.000	39.448	1.00 96.15
N									
ATOM	3563	CZ	ARG	X	295	15.070	-84.058	38.631	1.00 88.46
C									
ATOM	3564	NH1	ARG	X	295	14.805	-83.939	37.337	1.00 82.51
N									
ATOM	3565	NH2	ARG	X	295	15.274	-85.266	39.138	1.00 94.47
N1+									
ATOM	3566	N	ILE	X	296	11.355	-77.992	38.706	1.00 95.91
N									
ATOM	3567	CA	ILE	X	296	11.338	-76.787	37.866	1.00108.20
C									
ATOM	3568	C	ILE	X	296	11.707	-75.541	38.649	1.00120.03
C									
ATOM	3569	O	ILE	X	296	12.243	-74.579	38.089	1.00158.35
O									
ATOM	3570	CB	ILE	X	296	9.986	-76.312	37.257	1.00116.60
C									
ATOM	3571	CG1	ILE	X	296	8.734	-77.096	37.666	1.00160.77
C									
ATOM	3572	CG2	ILE	X	296	10.151	-75.637	35.893	1.00104.72
C									
ATOM	3573	CD1	ILE	X	296	7.454	-76.567	37.027	1.00180.38
C									
ATOM	3574	N	GLN	X	297	11.417	-75.553	39.947	1.00118.35
N									
ATOM	3575	CA	GLN	X	297	11.751	-74.446	40.854	1.00101.40
C									
ATOM	3576	C	GLN	X	297	13.239	-74.206	40.986	1.00 96.61
C									
ATOM	3577	O	GLN	X	297	13.679	-73.097	40.768	1.00125.81
O									
ATOM	3578	CB	GLN	X	297	11.126	-74.670	42.235	1.00111.77
C									
ATOM	3579	CG	GLN	X	297	10.225	-73.535	42.716	1.00121.31
C									
ATOM	3580	CD	GLN	X	297	9.699	-73.770	44.129	1.00141.13
C									
ATOM	3581	OE1	GLN	X	297	10.447	-73.674	45.102	1.00146.24
O									



ATOM	3582	NE2	GLN	X	297	8.416	-74.121	44.244	1.00149.61
N									
ATOM	3583	N	LEU	X	298	14.010	-75.240	41.348	1.00 95.25
N									
ATOM	3584	CA	LEU	X	298	15.472	-75.175	41.461	1.00100.04
C									
ATOM	3585	C	LEU	X	298	16.086	-74.693	40.160	1.00116.04
C									
ATOM	3586	O	LEU	X	298	17.014	-73.859	40.113	1.00132.78
O									
ATOM	3587	CB	LEU	X	298	16.020	-76.588	41.611	1.00 91.91
C									
ATOM	3588	CG	LEU	X	298	16.309	-77.199	42.964	1.00 87.60
C									
ATOM	3589	CD1	LEU	X	298	15.476	-78.462	43.139	1.00106.32
C									
ATOM	3590	CD2	LEU	X	298	17.784	-77.535	43.054	1.00 82.31
C									
ATOM	3591	N	LEU	X	299	15.599	-75.325	39.098	1.00107.27
N									
ATOM	3592	CA	LEU	X	299	16.019	-75.013	37.754	1.00116.55
C									
ATOM	3593	C	LEU	X	299	15.790	-73.521	37.461	1.00115.60
C									
ATOM	3594	O	LEU	X	299	16.680	-72.843	36.886	1.00102.84
O									
ATOM	3595	CB	LEU	X	299	15.223	-75.891	36.751	1.00147.38
C									
ATOM	3596	CG	LEU	X	299	15.715	-76.286	35.332	1.00150.20
C									
ATOM	3597	CD1	LEU	X	299	15.482	-75.212	34.243	1.00116.85
C									
ATOM	3598	CD2	LEU	X	299	17.159	-76.771	35.376	1.00151.82
C									
ATOM	3599	N	LYS	X	300	14.635	-73.005	37.889	1.00108.42
N									
ATOM	3600	CA	LYS	X	300	14.363	-71.579	37.747	1.00105.15
C									
ATOM	3601	C	LYS	X	300	15.291	-70.706	38.599	1.00102.40
C									
ATOM	3602	O	LYS	X	300	15.469	-69.534	38.282	1.00134.99
O									
ATOM	3603	CB	LYS	X	300	12.879	-71.246	37.935	1.00123.45
C									
ATOM	3604	CG	LYS	X	300	12.098	-71.263	36.614	1.00124.53
C									
ATOM	3605	CD	LYS	X	300	10.656	-70.803	36.776	1.00131.12
C									
ATOM	3606	CE	LYS	X	300	9.808	-71.832	37.510	1.00149.04
C									
ATOM	3607	NZ	LYS	X	300	8.953	-71.208	38.560	1.00166.96
N1+									
ATOM	3608	N	ILE	X	301	15.899	-71.277	39.646	1.00117.43
N									

ATOM	3609	CA	ILE	X	301	16.745	-70.518	40.568	1.00110.68
C									
ATOM	3610	C	ILE	X	301	18.106	-70.155	39.945	1.00118.06
C									
ATOM	3611	O	ILE	X	301	18.805	-71.015	39.348	1.00154.14
O									
ATOM	3612	CB	ILE	X	301	16.882	-71.260	41.896	1.00115.60
C									
ATOM	3613	CG1	ILE	X	301	15.768	-70.782	42.840	1.00120.65
C									
ATOM	3614	CG2	ILE	X	301	18.281	-71.080	42.472	1.00131.67
C									
ATOM	3615	CD1	ILE	X	301	15.656	-71.559	44.138	1.00122.74
C									
ATOM	3616	N	GLY	X	302	18.464	-68.873	40.055	1.00 91.49
N									
ATOM	3617	CA	GLY	X	302	19.535	-68.316	39.237	1.00 95.64
C									
ATOM	3618	C	GLY	X	302	20.862	-68.179	39.939	1.00115.60
C									
ATOM	3619	O	GLY	X	302	21.900	-68.051	39.291	1.00123.75
O									
ATOM	3620	N	SER	X	303	20.838	-68.302	41.273	1.00140.87
N									
ATOM	3621	CA	SER	X	303	22.056	-68.337	42.034	1.00121.37
C									
ATOM	3622	C	SER	X	303	22.456	-69.749	42.453	1.00 97.07
C									
ATOM	3623	O	SER	X	303	21.639	-70.529	42.967	1.00 83.83
O									
ATOM	3624	CB	SER	X	303	21.954	-67.462	43.274	1.00106.76
C									
ATOM	3625	OG	SER	X	303	23.175	-67.487	43.986	1.00109.71
O									
ATOM	3626	N	ALA	X	304	23.753	-70.028	42.309	1.00 93.22
N									
ATOM	3627	CA	ALA	X	304	24.355	-71.217	42.867	1.00 91.70
C									
ATOM	3628	C	ALA	X	304	24.096	-71.280	44.359	1.00 89.48
C									
ATOM	3629	O	ALA	X	304	23.702	-72.320	44.842	1.00 77.41
O									
ATOM	3630	CB	ALA	X	304	25.847	-71.216	42.592	1.00115.44
C									
ATOM	3631	N	ILE	X	305	24.294	-70.165	45.074	1.00110.09
N									
ATOM	3632	CA	ILE	X	305	24.151	-70.120	46.532	1.00 92.95
C									
ATOM	3633	C	ILE	X	305	22.749	-70.515	46.967	1.00 92.20
C									
ATOM	3634	O	ILE	X	305	22.584	-71.368	47.830	1.00 96.46
O									
ATOM	3635	CB	ILE	X	305	24.461	-68.725	47.083	1.00 96.83
C									

ATOM	3636	CG1	ILE	X	305	25.753	-68.131	46.465	1.00106.50
C									
ATOM	3637	CG2	ILE	X	305	24.554	-68.797	48.588	1.00107.62
C									
ATOM	3638	CD1	ILE	X	305	27.043	-68.548	47.145	1.00102.27
C									
ATOM	3639	N	GLN	X	306	21.744	-69.882	46.358	1.00 92.36
N									
ATOM	3640	CA	GLN	X	306	20.330	-70.177	46.631	1.00 86.12
C									
ATOM	3641	C	GLN	X	306	19.955	-71.596	46.211	1.00 86.99
C									
ATOM	3642	O	GLN	X	306	19.011	-72.194	46.752	1.00 84.35
O									
ATOM	3643	CB	GLN	X	306	19.420	-69.309	45.761	1.00 77.57
C									
ATOM	3644	CG	GLN	X	306	19.449	-67.823	45.967	1.00 84.64
C									
ATOM	3645	CD	GLN	X	306	18.546	-67.122	44.965	1.00115.24
C									
ATOM	3646	OE1	GLN	X	306	18.715	-67.263	43.742	1.00140.72
O									
ATOM	3647	NE2	GLN	X	306	17.525	-66.433	45.471	1.00146.97
N									
ATOM	3648	N	ARG	X	307	20.666	-72.105	45.199	1.00103.69
N									
ATOM	3649	CA	ARG	X	307	20.462	-73.473	44.762	1.00 98.66
C									
ATOM	3650	C	ARG	X	307	20.976	-74.452	45.815	1.00 75.41
C									
ATOM	3651	O	ARG	X	307	20.244	-75.318	46.261	1.00 90.42
O									
ATOM	3652	CB	ARG	X	307	21.068	-73.755	43.377	1.00105.89
C									
ATOM	3653	CG	ARG	X	307	20.130	-74.593	42.510	1.00101.47
C									
ATOM	3654	CD	ARG	X	307	20.734	-74.980	41.188	1.00 86.72
C									
ATOM	3655	NE	ARG	X	307	20.490	-73.946	40.193	1.00 92.91
N									
ATOM	3656	CZ	ARG	X	307	21.406	-73.088	39.757	1.00 98.99
C									
ATOM	3657	NH1	ARG	X	307	22.659	-73.144	40.200	1.00 96.20
N									
ATOM	3658	NH2	ARG	X	307	21.069	-72.174	38.857	1.00104.66
N1+									
ATOM	3659	N	LEU	X	308	22.220	-74.280	46.236	1.00 64.23
N									
ATOM	3660	CA	LEU	X	308	22.836	-75.100	47.288	1.00 65.48
C									
ATOM	3661	C	LEU	X	308	22.064	-75.048	48.596	1.00 86.50
C									
ATOM	3662	O	LEU	X	308	21.847	-76.081	49.211	1.00100.27
O									

ATOM	3663	CB	LEU	X	308	24.245	-74.598	47.528	1.00	60.96
C										
ATOM	3664	CG	LEU	X	308	25.272	-74.798	46.429	1.00	53.98
C										
ATOM	3665	CD1	LEU	X	308	26.283	-73.654	46.331	1.00	52.36
C										
ATOM	3666	CD2	LEU	X	308	25.980	-76.102	46.705	1.00	60.89
C										
ATOM	3667	N	ARG	X	309	21.679	-73.845	49.030	1.00	98.96
N										
ATOM	3668	CA	ARG	X	309	20.891	-73.661	50.249	1.00	95.01
C										
ATOM	3669	C	ARG	X	309	19.584	-74.449	50.173	1.00	89.40
C										
ATOM	3670	O	ARG	X	309	19.368	-75.395	50.934	1.00	79.85
O										
ATOM	3671	CB	ARG	X	309	20.616	-72.159	50.518	1.00	87.35
C										
ATOM	3672	CG	ARG	X	309	21.437	-71.577	51.677	1.00	89.23
C										
ATOM	3673	CD	ARG	X	309	21.362	-70.054	51.790	1.00	87.13
C										
ATOM	3674	NE	ARG	X	309	19.986	-69.545	51.792	1.00	96.18
N										
ATOM	3675	CZ	ARG	X	309	19.192	-69.476	52.863	1.00	101.88
C										
ATOM	3676	NH1	ARG	X	309	17.962	-68.975	52.749	1.00	97.29
N										
ATOM	3677	NH2	ARG	X	309	19.615	-69.921	54.038	1.00	104.73
N1+										
ATOM	3678	N	CYX	X	310	18.727	-74.064	49.240	1.00	99.87
N										
ATOM	3679	CA	CYX	X	310	17.468	-74.754	49.039	1.00	109.57
C										
ATOM	3680	C	CYX	X	310	17.639	-76.280	48.945	1.00	89.82
C										
ATOM	3681	O	CYX	X	310	16.818	-77.043	49.466	1.00	109.00
O										
ATOM	3682	CB	CYX	X	310	16.781	-74.204	47.791	1.00	116.91
C										
ATOM	3683	SG	CYX	X	310	16.019	-75.453	46.771	1.00	138.64
S										
ATOM	3684	N	GLU	X	311	18.708	-76.706	48.288	1.00	77.35
N										
ATOM	3685	CA	GLU	X	311	19.086	-78.125	48.202	1.00	89.61
C										
ATOM	3686	C	GLU	X	311	19.421	-78.793	49.537	1.00	101.35
C										
ATOM	3687	O	GLU	X	311	19.129	-79.954	49.735	1.00	84.60
O										
ATOM	3688	CB	GLU	X	311	20.368	-78.256	47.357	1.00	104.80
C										
ATOM	3689	CG	GLU	X	311	20.166	-78.784	45.948	1.00	119.93
C										

ATOM C	3690	CD	GLU	X	311	21.172	-78.224	44.945	1.00116.27
ATOM O	3691	OE1	GLU	X	311	20.824	-78.114	43.751	1.00111.94
ATOM O1-	3692	OE2	GLU	X	311	22.312	-77.913	45.340	1.00115.89
ATOM N	3693	N	LEU	X	312	20.094	-78.073	50.424	1.00116.32
ATOM C	3694	CA	LEU	X	312	20.346	-78.599	51.764	1.00 86.56
ATOM C	3695	C	LEU	X	312	19.062	-78.753	52.525	1.00 76.86
ATOM O	3696	O	LEU	X	312	18.904	-79.707	53.279	1.00 83.54
ATOM C	3697	CB	LEU	X	312	21.298	-77.720	52.524	1.00 76.99
ATOM C	3698	CG	LEU	X	312	22.719	-78.190	52.340	1.00 73.19
ATOM C	3699	CD1	LEU	X	312	23.671	-77.027	52.565	1.00 72.88
ATOM C	3700	CD2	LEU	X	312	23.012	-79.356	53.273	1.00 76.20
ATOM N	3701	N	ASP	X	313	18.137	-77.814	52.320	1.00 79.27
ATOM C	3702	CA	ASP	X	313	16.840	-77.870	52.980	1.00 88.42
ATOM C	3703	C	ASP	X	313	16.138	-79.194	52.687	1.00 89.00
ATOM O	3704	O	ASP	X	313	15.777	-79.931	53.604	1.00 94.08
ATOM C	3705	CB	ASP	X	313	15.925	-76.688	52.605	1.00105.42
ATOM C	3706	CG	ASP	X	313	14.406	-77.054	52.661	1.00130.12
ATOM O	3707	OD1	ASP	X	313	13.993	-77.951	53.450	1.00108.92
ATOM O1-	3708	OD2	ASP	X	313	13.627	-76.437	51.900	1.00141.53
ATOM N	3709	N	ILE	X	314	15.970	-79.498	51.408	1.00109.96
ATOM C	3710	CA	ILE	X	314	15.312	-80.720	50.970	1.00 97.34
ATOM C	3711	C	ILE	X	314	15.954	-81.976	51.565	1.00 86.02
ATOM O	3712	O	ILE	X	314	15.250	-82.879	52.011	1.00 89.23
ATOM C	3713	CB	ILE	X	314	15.316	-80.751	49.439	1.00 91.15
ATOM C	3714	CG1	ILE	X	314	14.309	-79.731	48.913	1.00102.07
ATOM C	3715	CG2	ILE	X	314	14.973	-82.116	48.926	1.00 96.79
ATOM C	3716	CD1	ILE	X	314	14.909	-78.717	47.971	1.00118.46

ATOM	3717	N	MET	X	315	17.288	-82.011	51.591	1.00	74.78
N										
ATOM	3718	CA	MET	X	315	18.035	-83.175	52.093	1.00	79.68
C										
ATOM	3719	C	MET	X	315	17.812	-83.437	53.583	1.00	85.45
C										
ATOM	3720	O	MET	X	315	17.816	-84.577	54.019	1.00	85.47
O										
ATOM	3721	CB	MET	X	315	19.529	-82.961	51.913	1.00	81.27
C										
ATOM	3722	CG	MET	X	315	20.054	-83.184	50.535	1.00	81.51
C										
ATOM	3723	SD	MET	X	315	21.829	-82.906	50.534	1.00	119.46
S										
ATOM	3724	CE	MET	X	315	22.027	-82.150	48.925	1.00	133.30
C										
ATOM	3725	N	ASN	X	316	17.647	-82.374	54.358	1.00	95.10
N										
ATOM	3726	CA	ASN	X	316	17.265	-82.513	55.752	1.00	83.77
C										
ATOM	3727	C	ASN	X	316	15.770	-82.755	55.911	1.00	78.79
C										
ATOM	3728	O	ASN	X	316	15.370	-83.687	56.599	1.00	99.45
O										
ATOM	3729	CB	ASN	X	316	17.780	-81.315	56.548	1.00	93.28
C										
ATOM	3730	CG	ASN	X	316	19.315	-81.261	56.581	1.00	105.84
C										
ATOM	3731	OD1	ASN	X	316	19.977	-81.226	55.539	1.00	85.55
O										
ATOM	3732	ND2	ASN	X	316	19.882	-81.322	57.779	1.00	136.56
N										
ATOM	3733	N	LYS	X	317	14.950	-81.955	55.228	1.00	83.25
N										
ATOM	3734	CA	LYS	X	317	13.492	-81.937	55.431	1.00	89.29
C										
ATOM	3735	C	LYS	X	317	12.728	-83.124	54.804	1.00	106.60
C										
ATOM	3736	O	LYS	X	317	11.593	-83.424	55.195	1.00	106.39
O										
ATOM	3737	CB	LYS	X	317	12.902	-80.623	54.837	1.00	0.00
C										
ATOM	3738	CG	LYS	X	317	11.418	-80.402	55.166	1.00	0.00
C										
ATOM	3739	CD	LYS	X	317	10.934	-79.040	54.649	1.00	0.00
C										
ATOM	3740	CE	LYS	X	317	9.455	-78.830	54.981	1.00	0.00
C										
ATOM	3741	NZ	LYS	X	317	8.976	-77.527	54.493	1.00	0.00
N1+										
ATOM	3742	N	CYS	X	318	13.345	-83.849	53.863	1.00	128.17
N										
ATOM	3743	CA	CYS	X	318	12.671	-84.944	53.159	1.00	130.40
C										

ATOM	3744	C	CYS	X	318	13.299	-86.335	53.439	1.00127.68
C									
ATOM	3745	O	CYS	X	318	13.923	-86.962	52.556	1.00163.20
O									
ATOM	3746	CB	CYS	X	318	12.738	-84.710	51.629	1.00116.39
C									
ATOM	3747	SG	CYS	X	318	11.279	-83.972	50.860	1.00119.94
S									
ATOM	3748	N	THR	X	319	12.943	-86.888	54.587	1.00163.41
N									
ATOM	3749	CA	THR	X	319	13.410	-88.217	54.982	1.00153.04
C									
ATOM	3750	C	THR	X	319	12.695	-89.390	54.271	1.00159.17
C									
ATOM	3751	O	THR	X	319	13.332	-90.423	54.023	1.00157.33
O									
ATOM	3752	CB	THR	X	319	13.262	-88.378	56.480	1.00155.25
C									
ATOM	3753	OG1	THR	X	319	12.093	-87.670	56.898	1.00163.99
O									
ATOM	3754	CG2	THR	X	319	14.471	-87.816	57.200	1.00161.55
C									
ATOM	3755	N	SER	X	320	11.410	-89.264	53.982	1.00157.78
N									
ATOM	3756	CA	SER	X	320	10.603	-90.409	53.487	1.00147.74
C									
ATOM	3757	C	SER	X	320	10.226	-90.300	52.025	1.00152.24
C									
ATOM	3758	O	SER	X	320	10.054	-89.210	51.527	1.00170.53
O									
ATOM	3759	CB	SER	X	320	9.265	-90.448	54.209	1.00144.77
C									
ATOM	3760	OG	SER	X	320	8.218	-90.047	53.321	1.00132.77
O									
ATOM	3761	N	LEU	X	321	9.993	-91.449	51.389	1.00150.66
N									
ATOM	3762	CA	LEU	X	321	9.631	-91.536	49.954	1.00135.01
C									
ATOM	3763	C	LEU	X	321	8.439	-92.473	49.790	1.00120.06
C									
ATOM	3764	O	LEU	X	321	8.489	-93.642	50.134	1.00121.96
O									
ATOM	3765	CB	LEU	X	321	10.777	-92.118	49.122	1.00126.63
C									
ATOM	3766	CG	LEU	X	321	12.000	-91.239	48.920	1.00122.84
C									
ATOM	3767	CD1	LEU	X	321	13.256	-92.069	48.679	1.00113.66
C									
ATOM	3768	CD2	LEU	X	321	11.724	-90.274	47.770	1.00126.50
C									
ATOM	3769	N	CYS	X	322	7.384	-91.945	49.233	1.00108.37
N									
ATOM	3770	CA	CYS	X	322	6.059	-92.593	49.293	1.00107.67
C									

ATOM	3771	C	CYS	X	322	5.565	-92.898	47.886	1.00103.63
C									
ATOM	3772	O	CYS	X	322	6.086	-92.379	46.890	1.00113.26
O									
ATOM	3773	CB	CYS	X	322	5.110	-91.681	50.100	1.00115.58
C									
ATOM	3774	SG	CYS	X	322	5.906	-90.763	51.547	1.00119.28
S									
ATOM	3775	N	CYM	X	323	4.604	-93.804	47.798	1.00101.28
N									
ATOM	3776	CA	CYM	X	323	3.884	-94.116	46.570	1.00107.56
C									
ATOM	3777	C	CYM	X	323	3.182	-92.850	46.093	1.00118.03
C									
ATOM	3778	O	CYM	X	323	2.415	-92.283	46.854	1.00121.04
O									
ATOM	3779	CB	CYM	X	323	2.852	-95.197	46.951	1.00104.71
C									
ATOM	3780	SG	CYM	X	323	1.663	-95.728	45.708	1.00 95.21
S1-									
ATOM	3781	N	LYS	X	324	3.500	-92.355	44.890	1.00119.98
N									
ATOM	3782	CA	LYS	X	324	3.014	-91.044	44.512	1.00121.78
C									
ATOM	3783	C	LYS	X	324	1.496	-91.093	44.298	1.00127.66
C									
ATOM	3784	O	LYS	X	324	0.782	-90.140	44.641	1.00141.82
O									
ATOM	3785	CB	LYS	X	324	3.729	-90.508	43.285	1.00122.97
C									
ATOM	3786	CG	LYS	X	324	2.948	-89.407	42.566	1.00131.22
C									
ATOM	3787	CD	LYS	X	324	3.683	-88.850	41.359	1.00134.41
C									
ATOM	3788	CE	LYS	X	324	3.879	-87.338	41.491	1.00145.83
C									
ATOM	3789	NZ	LYS	X	324	4.833	-86.931	42.580	1.00148.07
N1+									
ATOM	3790	N	GLN	X	325	1.020	-92.223	43.765	1.00121.19
N									
ATOM	3791	CA	GLN	X	325	-0.373	-92.422	43.404	1.00119.65
C									
ATOM	3792	C	GLN	X	325	-1.314	-92.449	44.641	1.00128.57
C									
ATOM	3793	O	GLN	X	325	-2.214	-91.614	44.745	1.00141.95
O									
ATOM	3794	CB	GLN	X	325	-0.459	-93.717	42.589	1.00115.76
C									
ATOM	3795	CG	GLN	X	325	-1.696	-94.544	42.815	1.00118.88
C									
ATOM	3796	CD	GLN	X	325	-2.935	-93.757	42.532	1.00118.05
C									
ATOM	3797	OE1	GLN	X	325	-3.822	-93.630	43.390	1.00122.72
O									



ATOM	3798	NE2	GLN	X	325	-3.024	-93.229	41.322	1.00117.93
N									
ATOM	3799	N	CYM	X	326	-1.113	-93.393	45.563	1.00128.49
N									
ATOM	3800	CA	CYM	X	326	-1.990	-93.515	46.722	1.00132.28
C									
ATOM	3801	C	CYM	X	326	-1.448	-92.692	47.905	1.00126.42
C									
ATOM	3802	O	CYM	X	326	-2.018	-92.678	49.007	1.00122.55
O									
ATOM	3803	CB	CYM	X	326	-2.150	-94.981	47.076	1.00144.55
C									
ATOM	3804	SG	CYM	X	326	-0.635	-95.697	47.760	1.00183.10
S1-									
ATOM	3805	N	GLN	X	327	-0.324	-92.037	47.647	1.00124.50
N									
ATOM	3806	CA	GLN	X	327	0.187	-90.919	48.456	1.00130.08
C									
ATOM	3807	C	GLN	X	327	0.701	-91.262	49.858	1.00130.88
C									
ATOM	3808	O	GLN	X	327	1.881	-91.058	50.176	1.00125.79
O									
ATOM	3809	CB	GLN	X	327	-0.883	-89.829	48.546	1.00129.94
C									
ATOM	3810	CG	GLN	X	327	-0.336	-88.415	48.397	1.00135.56
C									
ATOM	3811	CD	GLN	X	327	-1.376	-87.439	47.861	1.00133.34
C									
ATOM	3812	NE2	GLN	X	327	-2.141	-87.782	46.961	1.00135.31
N									
ATOM	3813	OE1	GLN	X	327	-1.432	-86.228	48.439	1.00129.89
O									
ATOM	3814	N	GLU	X	328	-0.179	-91.787	50.702	1.00140.15
N									
ATOM	3815	CA	GLU	X	328	0.174	-91.996	52.135	1.00144.93
C									
ATOM	3816	C	GLU	X	328	0.714	-93.413	52.408	1.00130.66
C									
ATOM	3817	O	GLU	X	328	0.496	-93.991	53.473	1.00144.46
O									
ATOM	3818	CB	GLU	X	328	-0.994	-91.621	53.100	1.00153.80
C									
ATOM	3819	CG	GLU	X	328	-1.250	-90.104	53.285	1.00157.86
C									
ATOM	3820	CD	GLU	X	328	-0.557	-89.477	54.504	1.00157.46
C									
ATOM	3821	OE1	GLU	X	328	-0.805	-88.275	54.797	1.00153.90
O									
ATOM	3822	OE2	GLU	X	328	0.225	-90.179	55.172	1.00154.79
O1-									
ATOM	3823	N	THR	X	329	1.500	-93.947	51.484	1.00114.20
N									
ATOM	3824	CA	THR	X	329	2.241	-95.210	51.671	1.00108.54
C									

ATOM	3825	C	THR	X	329	3.785	-94.978	51.570	1.00111.61
C									
ATOM	3826	O	THR	X	329	4.278	-94.663	50.516	1.00113.57
O									
ATOM	3827	CB	THR	X	329	1.846	-96.269	50.542	1.00103.02
C									
ATOM	3828	OG1	THR	X	329	0.444	-96.598	50.580	1.00 94.96
O									
ATOM	3829	CG2	THR	X	329	2.679	-97.571	50.649	1.00 99.92
C									
ATOM	3830	N	GLU	X	330	4.515	-95.368	52.623	1.00116.73
N									
ATOM	3831	CA	GLU	X	330	5.991	-95.322	52.609	1.00118.88
C									
ATOM	3832	C	GLU	X	330	6.618	-96.496	51.802	1.00105.96
C									
ATOM	3833	O	GLU	X	330	6.343	-97.711	51.998	1.00101.85
O									
ATOM	3834	CB	GLU	X	330	6.656	-95.157	54.019	1.00132.80
C									
ATOM	3835	CG	GLU	X	330	8.207	-95.295	53.995	1.00140.20
C									
ATOM	3836	CD	GLU	X	330	8.971	-94.536	55.105	1.00143.06
C									
ATOM	3837	OE1	GLU	X	330	10.180	-94.295	54.915	1.00133.01
O									
ATOM	3838	OE2	GLU	X	330	8.399	-94.226	56.179	1.00152.33
O1-									
ATOM	3839	N	ILE	X	331	7.469	-96.128	50.881	1.00 98.13
N									
ATOM	3840	CA	ILE	X	331	8.237	-97.136	50.130	1.00101.52
C									
ATOM	3841	C	ILE	X	331	9.620	-97.313	50.766	1.00 93.27
C									
ATOM	3842	O	ILE	X	331	10.061	-98.438	51.035	1.00 89.65
O									
ATOM	3843	CB	ILE	X	331	8.319	-96.724	48.644	1.00114.80
C									
ATOM	3844	CG1	ILE	X	331	6.889	-96.654	48.007	1.00123.94
C									
ATOM	3845	CG2	ILE	X	331	9.237	-97.650	47.839	1.00118.54
C									
ATOM	3846	CD1	ILE	X	331	6.001	-97.892	48.164	1.00123.74
C									
ATOM	3847	N	THR	X	332	10.288	-96.198	51.003	1.00 92.22
N									
ATOM	3848	CA	THR	X	332	11.704	-96.206	51.372	1.00101.24
C									
ATOM	3849	C	THR	X	332	12.078	-94.877	52.117	1.00102.17
C									
ATOM	3850	O	THR	X	332	11.251	-93.965	52.284	1.00 97.04
O									
ATOM	3851	CB	THR	X	332	12.617	-96.562	50.120	1.00103.23
C									

ATOM	3852	OG1	THR	X	332	13.659	-97.495	50.480	1.00111.02
O									
ATOM	3853	CG2	THR	X	332	13.246	-95.334	49.502	1.00102.89
C									
ATOM	3854	N	THR	X	333	13.297	-94.815	52.629	1.00102.69
N									
ATOM	3855	CA	THR	X	333	13.771	-93.669	53.397	1.00 99.47
C									
ATOM	3856	C	THR	X	333	15.077	-93.115	52.855	1.00 98.18
C									
ATOM	3857	O	THR	X	333	15.704	-93.745	51.997	1.00103.67
O									
ATOM	3858	CB	THR	X	333	14.153	-94.134	54.774	1.00101.26
C									
ATOM	3859	OG1	THR	X	333	15.565	-94.315	54.773	1.00101.65
O									
ATOM	3860	CG2	THR	X	333	13.432	-95.491	55.156	1.00 99.93
C									
ATOM	3861	N	LYS	X	334	15.491	-91.956	53.378	1.00 96.71
N									
ATOM	3862	CA	LYS	X	334	16.781	-91.370	53.021	1.00101.40
C									
ATOM	3863	C	LYS	X	334	17.856	-92.326	53.416	1.00107.05
C									
ATOM	3864	O	LYS	X	334	18.713	-92.605	52.613	1.00106.25
O									
ATOM	3865	CB	LYS	X	334	17.037	-89.973	53.597	1.00107.16
C									
ATOM	3866	CG	LYS	X	334	18.421	-89.379	53.216	1.00114.81
C									
ATOM	3867	CD	LYS	X	334	19.137	-88.647	54.409	1.00127.96
C									
ATOM	3868	CE	LYS	X	334	20.689	-88.642	54.322	1.00131.58
C									
ATOM	3869	NZ	LYS	X	334	21.366	-87.297	54.273	1.00130.68
N1+									
ATOM	3870	N	ASN	X	335	17.785	-92.868	54.632	1.00125.12
N									
ATOM	3871	CA	ASN	X	335	18.746	-93.865	55.131	1.00140.96
C									
ATOM	3872	C	ASN	X	335	19.189	-94.872	54.056	1.00135.10
C									
ATOM	3873	O	ASN	X	335	20.354	-95.253	54.002	1.00122.64
O									
ATOM	3874	CB	ASN	X	335	18.173	-94.642	56.370	1.00160.15
C									
ATOM	3875	CG	ASN	X	335	17.368	-93.751	57.353	1.00176.10
C									
ATOM	3876	OD1	ASN	X	335	16.187	-94.036	57.651	1.00184.58
O									
ATOM	3877	ND2	ASN	X	335	18.018	-92.715	57.903	1.00181.77
N									
ATOM	3878	N	GLU	X	336	18.246	-95.299	53.218	1.00135.00
N									

ATOM	3879	CA	GLU	X	336	18.470	-96.423	52.313	1.00130.36
C									
ATOM	3880	C	GLU	X	336	19.046	-96.025	50.943	1.00111.76
C									
ATOM	3881	O	GLU	X	336	19.567	-96.876	50.225	1.00124.32
O									
ATOM	3882	CB	GLU	X	336	17.198	-97.286	52.196	1.00139.12
C									
ATOM	3883	CG	GLU	X	336	16.494	-97.617	53.558	1.00157.58
C									
ATOM	3884	CD	GLU	X	336	17.160	-98.712	54.467	1.00165.64
C									
ATOM	3885	OE1	GLU	X	336	16.503	-99.770	54.702	1.00148.85
O									
ATOM	3886	OE2	GLU	X	336	18.246	-98.465	55.091	1.00176.50
O1-									
ATOM	3887	N	ILE	X	337	18.995	-94.766	50.606	1.00 99.77
N									
ATOM	3888	CA	ILE	X	337	19.556	-94.262	49.371	1.00 99.01
C									
ATOM	3889	C	ILE	X	337	21.067	-94.426	49.350	1.00100.03
C									
ATOM	3890	O	ILE	X	337	21.749	-94.034	50.279	1.00103.34
O									
ATOM	3891	CB	ILE	X	337	19.260	-92.782	49.320	1.00103.90
C									
ATOM	3892	CG1	ILE	X	337	17.778	-92.551	48.994	1.00101.66
C									
ATOM	3893	CG2	ILE	X	337	20.187	-92.082	48.354	1.00109.72
C									
ATOM	3894	CD1	ILE	X	337	17.388	-91.079	48.991	1.00 98.60
C									
ATOM	3895	N	PHE	X	338	21.588	-94.988	48.280	1.00102.53
N									
ATOM	3896	CA	PHE	X	338	23.039	-94.931	48.022	1.00111.21
C									
ATOM	3897	C	PHE	X	338	23.367	-94.892	46.551	1.00112.20
C									
ATOM	3898	O	PHE	X	338	22.549	-95.297	45.723	1.00110.84
O									
ATOM	3899	CB	PHE	X	338	23.705	-96.144	48.585	1.00118.02
C									
ATOM	3900	CG	PHE	X	338	23.295	-97.413	47.895	1.00118.87
C									
ATOM	3901	CD1	PHE	X	338	22.091	-98.025	48.218	1.00117.15
C									
ATOM	3902	CD2	PHE	X	338	24.040	-97.919	46.851	1.00116.29
C									
ATOM	3903	CE1	PHE	X	338	21.707	-99.179	47.605	1.00112.76
C									
ATOM	3904	CE2	PHE	X	338	23.650	-99.065	46.221	1.00114.24
C									
ATOM	3905	CZ	PHE	X	338	22.488	-99.699	46.602	1.00115.65
C									

ATOM	3906	N	SER X 339	24.584	-94.439	46.287	1.00116.97
N							
ATOM	3907	CA	SER X 339	25.052	-94.117	44.928	1.00126.88
C							
ATOM	3908	C	SER X 339	25.705	-95.313	44.312	1.00128.67
C							
ATOM	3909	O	SER X 339	26.889	-95.506	44.499	1.00132.23
O							
ATOM	3910	CB	SER X 339	26.081	-92.954	44.982	1.00130.11
C							
ATOM	3911	OG	SER X 339	25.488	-91.674	44.784	1.00125.48
O							
ATOM	3912	N	LEU X 340	24.939	-96.148	43.620	1.00121.02
N							
ATOM	3913	CA	LEU X 340	25.531	-97.187	42.828	1.00117.69
C							
ATOM	3914	C	LEU X 340	26.239	-96.564	41.671	1.00118.99
C							
ATOM	3915	O	LEU X 340	27.295	-97.010	41.278	1.00121.70
O							
ATOM	3916	CB	LEU X 340	24.480	-98.130	42.299	1.00113.59
C							
ATOM	3917	CG	LEU X 340	24.292	-99.431	43.042	1.00113.09
C							
ATOM	3918	CD1	LEU X 340	23.726	-100.475	42.100	1.00115.67
C							
ATOM	3919	CD2	LEU X 340	25.605	-99.925	43.607	1.00113.98
C							
ATOM	3920	N	SER X 341	25.612	-95.571	41.084	1.00121.29
N							
ATOM	3921	CA	SER X 341	26.204	-94.865	39.976	1.00134.53
C							
ATOM	3922	C	SER X 341	27.114	-93.828	40.538	1.00135.01
C							
ATOM	3923	O	SER X 341	26.855	-93.265	41.577	1.00143.88
O							
ATOM	3924	CB	SER X 341	25.144	-94.166	39.087	1.00143.48
C							
ATOM	3925	OG	SER X 341	25.746	-93.398	38.025	1.00148.40
O							
ATOM	3926	N	LEU X 342	28.167	-93.513	39.798	1.00131.15
N							
ATOM	3927	CA	LEU X 342	29.053	-92.474	40.216	1.00131.73
C							
ATOM	3928	C	LEU X 342	28.218	-91.208	40.314	1.00125.65
C							
ATOM	3929	O	LEU X 342	28.339	-90.442	41.244	1.00125.10
O							
ATOM	3930	CB	LEU X 342	30.230	-92.243	39.251	1.00134.32
C							
ATOM	3931	CG	LEU X 342	31.077	-90.989	39.646	1.00136.74
C							
ATOM	3932	CD1	LEU X 342	32.583	-91.280	39.729	1.00134.40
C							

ATOM	3933	CD2	LEU	X	342	30.775	-89.777	38.742	1.00135.66
C									
ATOM	3934	N	CYS	X	343	27.333	-91.028	39.364	1.00128.03
N									
ATOM	3935	CA	CYS	X	343	26.631	-89.797	39.293	1.00133.64
C									
ATOM	3936	C	CYS	X	343	25.693	-89.519	40.402	1.00127.85
C									
ATOM	3937	O	CYS	X	343	25.507	-88.349	40.713	1.00131.45
O									
ATOM	3938	CB	CYS	X	343	26.064	-89.553	37.938	1.00144.26
C									
ATOM	3939	SG	CYS	X	343	27.426	-88.849	37.000	1.00171.06
S									
ATOM	3940	N	GLY	X	344	25.110	-90.521	41.030	1.00123.99
N									
ATOM	3941	CA	GLY	X	344	24.340	-90.248	42.209	1.00122.33
C									
ATOM	3942	C	GLY	X	344	23.598	-91.429	42.681	1.00122.08
C									
ATOM	3943	O	GLY	X	344	23.670	-92.499	42.090	1.00118.26
O									
ATOM	3944	N	PRO	X	345	22.743	-91.213	43.659	1.00127.01
N									
ATOM	3945	CA	PRO	X	345	21.681	-92.198	43.908	1.00130.18
C									
ATOM	3946	C	PRO	X	345	20.592	-92.194	42.839	1.00128.82
C									
ATOM	3947	O	PRO	X	345	19.705	-93.019	42.858	1.00153.85
O									
ATOM	3948	CB	PRO	X	345	21.119	-91.752	45.252	1.00125.90
C									
ATOM	3949	CG	PRO	X	345	21.334	-90.268	45.274	1.00124.96
C									
ATOM	3950	CD	PRO	X	345	22.608	-90.014	44.506	1.00127.27
C									
ATOM	3951	N	MET	X	346	20.652	-91.203	41.951	1.00110.49
N									
ATOM	3952	CA	MET	X	346	19.774	-91.110	40.804	1.00 96.37
C									
ATOM	3953	C	MET	X	346	20.504	-90.685	39.547	1.00 97.61
C									
ATOM	3954	O	MET	X	346	21.327	-89.760	39.557	1.00 96.29
O									
ATOM	3955	CB	MET	X	346	18.725	-90.096	41.029	1.00 91.02
C									
ATOM	3956	CG	MET	X	346	17.416	-90.528	40.476	1.00 90.08
C									
ATOM	3957	SD	MET	X	346	16.107	-89.597	41.299	1.00 92.45
S									
ATOM	3958	CE	MET	X	346	15.962	-88.135	40.282	1.00 89.55
C									
ATOM	3959	N	ALA	X	347	20.145	-91.379	38.452	1.00100.45
N									

ATOM	3960	CA	ALA	X	347	20.518	-90.994	37.093	1.00	98.87
C										
ATOM	3961	C	ALA	X	347	19.301	-91.256	36.213	1.00	95.87
C										
ATOM	3962	O	ALA	X	347	18.355	-91.899	36.626	1.00	88.47
O										
ATOM	3963	CB	ALA	X	347	21.705	-91.825	36.608	1.00	99.60
C										
ATOM	3964	N	ALA	X	348	19.394	-90.855	34.950	1.00	96.56
N										
ATOM	3965	CA	ALA	X	348	18.423	-91.268	33.936	1.00	93.33
C										
ATOM	3966	C	ALA	X	348	18.923	-92.535	33.190	1.00	91.44
C										
ATOM	3967	O	ALA	X	348	20.110	-92.715	32.903	1.00	90.31
O										
ATOM	3968	CB	ALA	X	348	18.204	-90.100	32.954	1.00	91.88
C										
ATOM	3969	N	TYR	X	349	17.982	-93.453	32.962	1.00	90.45
N										
ATOM	3970	CA	TYR	X	349	18.234	-94.636	32.115	1.00	92.16
C										
ATOM	3971	C	TYR	X	349	17.113	-94.896	31.088	1.00	93.77
C										
ATOM	3972	O	TYR	X	349	15.945	-94.703	31.416	1.00	104.28
O										
ATOM	3973	CB	TYR	X	349	18.468	-95.851	33.006	1.00	90.11
C										
ATOM	3974	CG	TYR	X	349	19.539	-95.694	34.072	1.00	92.71
C										
ATOM	3975	CD1	TYR	X	349	20.896	-95.870	33.756	1.00	93.66
C										
ATOM	3976	CD2	TYR	X	349	19.173	-95.391	35.394	1.00	98.47
C										
ATOM	3977	CE1	TYR	X	349	21.871	-95.766	34.765	1.00	96.80
C										
ATOM	3978	CE2	TYR	X	349	20.136	-95.385	36.421	1.00	100.48
C										
ATOM	3979	CZ	TYR	X	349	21.495	-95.550	36.105	1.00	100.20
C										
ATOM	3980	OH	TYR	X	349	22.441	-95.447	37.079	1.00	101.31
O										
ATOM	3981	N	VAL	X	350	17.418	-95.355	29.860	1.00	88.60
N										
ATOM	3982	CA	VAL	X	350	16.386	-95.739	28.862	1.00	84.84
C										
ATOM	3983	C	VAL	X	350	16.102	-97.233	28.894	1.00	78.08
C										
ATOM	3984	O	VAL	X	350	16.991	-98.085	28.782	1.00	73.29
O										
ATOM	3985	CB	VAL	X	350	16.643	-95.353	27.385	1.00	89.09
C										
ATOM	3986	CG1	VAL	X	350	16.008	-94.022	26.950	1.00	93.15
C										

ATOM	3987	CG2	VAL	X	350	18.114	-95.458	27.000	1.00	90.45
C										
ATOM	3988	N	ASN	X	351	14.823	-97.569	28.846	1.00	75.39
N										
ATOM	3989	CA	ASN	X	351	14.387	-98.940	28.650	1.00	76.29
C										
ATOM	3990	C	ASN	X	351	14.376	-99.349	27.153	1.00	81.51
C										
ATOM	3991	O	ASN	X	351	14.820	-98.563	26.308	1.00	89.72
O										
ATOM	3992	CB	ASN	X	351	13.099	-99.114	29.441	1.00	73.78
C										
ATOM	3993	CG	ASN	X	351	11.829	-98.792	28.703	1.00	71.35
C										
ATOM	3994	OD1	ASN	X	351	11.797	-98.298	27.586	1.00	71.02
O										
ATOM	3995	ND2	ASN	X	351	10.745	-99.172	29.315	1.00	69.39
N										
ATOM	3996	N	PRO	X	352	14.026	-100.600	26.779	1.00	82.83
N										
ATOM	3997	CA	PRO	X	352	14.182	-101.057	25.397	1.00	82.89
C										
ATOM	3998	C	PRO	X	352	13.198	-100.382	24.450	1.00	82.95
C										
ATOM	3999	O	PRO	X	352	13.446	-100.351	23.256	1.00	91.50
O										
ATOM	4000	CB	PRO	X	352	13.957	-102.572	25.382	1.00	84.17
C										
ATOM	4001	CG	PRO	X	352	13.828	-102.974	26.843	1.00	84.93
C										
ATOM	4002	CD	PRO	X	352	13.490	-101.682	27.585	1.00	83.19
C										
ATOM	4003	N	HIP	X	353	12.091	-99.844	24.973	1.00	81.77
N										
ATOM	4004	CA	HIP	X	353	11.041	-99.170	24.207	1.00	86.93
C										
ATOM	4005	C	HIP	X	353	11.167	-97.649	24.214	1.00	88.96
C										
ATOM	4006	O	HIP	X	353	10.220	-96.972	23.835	1.00	96.19
O										
ATOM	4007	CB	HIP	X	353	9.677	-99.668	24.689	1.00	88.39
C										
ATOM	4008	CG	HIP	X	353	9.498	-101.125	24.363	1.00	91.33
C										
ATOM	4009	ND1	HIP	X	353	9.407	-101.652	23.087	1.00	100.84
N1+										
ATOM	4010	CD2	HIP	X	353	9.583	-102.162	25.248	1.00	91.96
C										
ATOM	4011	CE1	HIP	X	353	9.421	-102.995	23.197	1.00	103.45
C										
ATOM	4012	NE2	HIP	X	353	9.516	-103.320	24.501	1.00	95.61
N										
ATOM	4013	N	GLY	X	354	12.325	-97.136	24.625	1.00	87.40
N										



ATOM	4014	CA	GLY	X	354	12.671	-95.728	24.489	1.00	89.69
C										
ATOM	4015	C	GLY	X	354	12.134	-94.779	25.562	1.00	87.24
C										
ATOM	4016	O	GLY	X	354	12.309	-93.568	25.481	1.00	82.91
O										
ATOM	4017	N	TYR	X	355	11.579	-95.387	26.623	1.00	87.19
N										
ATOM	4018	CA	TYR	X	355	11.105	-94.727	27.832	1.00	85.84
C										
ATOM	4019	C	TYR	X	355	12.240	-94.395	28.794	1.00	80.53
C										
ATOM	4020	O	TYR	X	355	13.059	-95.265	29.107	1.00	75.67
O										
ATOM	4021	CB	TYR	X	355	10.060	-95.593	28.567	1.00	88.45
C										
ATOM	4022	CG	TYR	X	355	8.698	-95.622	27.922	1.00	93.59
C										
ATOM	4023	CD1	TYR	X	355	7.999	-94.418	27.913	1.00	101.68
C										
ATOM	4024	CD2	TYR	X	355	8.126	-96.775	27.336	1.00	94.05
C										
ATOM	4025	CE1	TYR	X	355	6.773	-94.343	27.264	1.00	106.05
C										
ATOM	4026	CE2	TYR	X	355	6.841	-96.700	26.739	1.00	99.87
C										
ATOM	4027	CZ	TYR	X	355	6.166	-95.457	26.691	1.00	103.70
C										
ATOM	4028	OH	TYR	X	355	4.939	-95.256	26.139	1.00	99.78
O										
ATOM	4029	N	VAL	X	356	12.202	-93.192	29.377	1.00	81.25
N										
ATOM	4030	CA	VAL	X	356	13.280	-92.714	30.264	1.00	86.66
C										
ATOM	4031	C	VAL	X	356	12.883	-92.923	31.735	1.00	85.25
C										
ATOM	4032	O	VAL	X	356	11.795	-92.554	32.185	1.00	88.11
O										
ATOM	4033	CB	VAL	X	356	13.645	-91.238	30.122	1.00	92.44
C										
ATOM	4034	CG1	VAL	X	356	15.148	-91.079	30.312	1.00	93.27
C										
ATOM	4035	CG2	VAL	X	356	13.169	-90.647	28.798	1.00	96.97
C										
ATOM	4036	N	HIP	X	357	13.802	-93.433	32.541	1.00	82.77
N										
ATOM	4037	CA	HIP	X	357	13.599	-93.683	33.960	1.00	83.80
C										
ATOM	4038	C	HIP	X	357	14.726	-93.082	34.777	1.00	87.50
C										
ATOM	4039	O	HIP	X	357	15.835	-93.605	34.796	1.00	96.78
O										
ATOM	4040	CB	HIP	X	357	13.472	-95.188	34.174	1.00	84.35
C										

ATOM	4041	CG	HIP	X	357	12.150	-95.707	33.677	1.00	84.22
C										
ATOM	4042	ND1	HIP	X	357	10.948	-95.576	34.345	1.00	85.46
N1+										
ATOM	4043	CD2	HIP	X	357	11.937	-96.457	32.553	1.00	83.48
C										
ATOM	4044	CE1	HIP	X	357	10.024	-96.293	33.668	1.00	84.06
C										
ATOM	4045	NE2	HIP	X	357	10.604	-96.835	32.573	1.00	83.16
N										
ATOM	4046	N	GLU	X	358	14.369	-92.068	35.560	1.00	87.20
N										
ATOM	4047	CA	GLU	X	358	15.285	-91.564	36.557	1.00	86.70
C										
ATOM	4048	C	GLU	X	358	15.116	-92.492	37.791	1.00	87.27
C										
ATOM	4049	O	GLU	X	358	14.170	-92.355	38.585	1.00	91.65
O										
ATOM	4050	CB	GLU	X	358	15.012	-90.088	36.882	1.00	85.88
C										
ATOM	4051	CG	GLU	X	358	14.365	-89.265	35.769	1.00	86.63
C										
ATOM	4052	CD	GLU	X	358	14.709	-87.778	35.840	1.00	86.91
C										
ATOM	4053	OE1	GLU	X	358	15.913	-87.442	36.093	1.00	82.15
O										
ATOM	4054	OE2	GLU	X	358	13.754	-86.958	35.618	1.00	88.25
O1-										
ATOM	4055	N	THR	X	359	15.997	-93.469	37.912	1.00	87.90
N										
ATOM	4056	CA	THR	X	359	15.804	-94.489	38.920	1.00	94.43
C										
ATOM	4057	C	THR	X	359	16.766	-94.271	40.067	1.00	97.94
C										
ATOM	4058	O	THR	X	359	17.922	-93.908	39.881	1.00	104.19
O										
ATOM	4059	CB	THR	X	359	15.720	-95.922	38.374	1.00	96.84
C										
ATOM	4060	OG1	THR	X	359	15.411	-96.816	39.406	1.00	105.98
O										
ATOM	4061	CG2	THR	X	359	16.961	-96.469	37.690	1.00	95.47
C										
ATOM	4062	N	LEU	X	360	16.231	-94.518	41.265	1.00	96.77
N										
ATOM	4063	CA	LEU	X	360	16.907	-94.288	42.528	1.00	96.75
C										
ATOM	4064	C	LEU	X	360	17.305	-95.610	43.171	1.00	92.11
C										
ATOM	4065	O	LEU	X	360	16.465	-96.454	43.405	1.00	84.18
O										
ATOM	4066	CB	LEU	X	360	15.917	-93.588	43.424	1.00	101.51
C										
ATOM	4067	CG	LEU	X	360	16.385	-93.032	44.752	1.00	104.30
C										

ATOM	4068	CD1	LEU	X	360	17.350	-91.875	44.565	1.00102.20
C									
ATOM	4069	CD2	LEU	X	360	15.141	-92.572	45.498	1.00109.39
C									
ATOM	4070	N	THR	X	361	18.581	-95.762	43.455	1.00 94.66
N									
ATOM	4071	CA	THR	X	361	19.129	-97.004	43.987	1.00 95.16
C									
ATOM	4072	C	THR	X	361	19.036	-97.001	45.534	1.00 91.17
C									
ATOM	4073	O	THR	X	361	19.611	-96.143	46.150	1.00 86.52
O									
ATOM	4074	CB	THR	X	361	20.619	-97.062	43.458	1.00 94.42
C									
ATOM	4075	OG1	THR	X	361	21.006	-95.795	42.861	1.00 88.62
O									
ATOM	4076	CG2	THR	X	361	20.691	-98.038	42.386	1.00 96.63
C									
ATOM	4077	N	VAL	X	362	18.280	-97.924	46.106	1.00 88.27
N									
ATOM	4078	CA	VAL	X	362	18.042	-97.961	47.521	1.00 89.86
C									
ATOM	4079	C	VAL	X	362	18.238	-99.388	48.066	1.00 95.61
C									
ATOM	4080	O	VAL	X	362	18.089	-100.328	47.299	1.00100.47
O									
ATOM	4081	CB	VAL	X	362	16.631	-97.384	47.842	1.00 88.09
C									
ATOM	4082	CG1	VAL	X	362	16.575	-95.913	47.493	1.00 87.66
C									
ATOM	4083	CG2	VAL	X	362	15.516	-98.098	47.115	1.00 85.61
C									
ATOM	4084	N	TYR	X	363	18.714	-99.515	49.317	1.00103.12
N									
ATOM	4085	CA	TYR	X	363	19.179	-100.799	49.841	1.00106.09
C									
ATOM	4086	C	TYR	X	363	18.050	-101.696	50.292	1.00104.77
C									
ATOM	4087	O	TYR	X	363	17.997	-102.820	49.884	1.00113.30
O									
ATOM	4088	CB	TYR	X	363	20.061	-100.585	50.999	1.00114.07
C									
ATOM	4089	CG	TYR	X	363	21.497	-100.569	50.648	1.00132.44
C									
ATOM	4090	CD1	TYR	X	363	22.098	-101.673	50.049	1.00139.59
C									
ATOM	4091	CD2	TYR	X	363	22.317	-99.506	51.067	1.00151.42
C									
ATOM	4092	CE1	TYR	X	363	23.470	-101.701	49.827	1.00155.22
C									
ATOM	4093	CE2	TYR	X	363	23.689	-99.519	50.851	1.00161.72
C									
ATOM	4094	CZ	TYR	X	363	24.266	-100.612	50.226	1.00163.82
C									

ATOM	4095	OH	TYR X 363	25.632-100.637	50.039	1.00172.11
O						
ATOM	4096	N	LYS X 364	17.131-101.243	51.133	1.00101.28
N						
ATOM	4097	CA	LYS X 364	15.828-101.962	51.242	1.00100.53
C						
ATOM	4098	C	LYS X 364	14.668-101.116	50.713	1.00 97.49
C						
ATOM	4099	O	LYS X 364	14.841 -99.997	50.150	1.00 90.85
O						
ATOM	4100	CB	LYS X 364	15.539-102.338	52.732	1.00 0.00
C						
ATOM	4101	CG	LYS X 364	16.659-103.160	53.400	1.00 0.00
C						
ATOM	4102	CD	LYS X 364	16.957-104.493	52.691	1.00 0.00
C						
ATOM	4103	CE	LYS X 364	18.014-105.321	53.434	1.00 0.00
C						
ATOM	4104	NZ	LYS X 364	19.337-104.670	53.428	1.00 0.00
N1+						
ATOM	4105	N	ALA X 365	13.458-101.649	50.891	1.00 99.44
N						
ATOM	4106	CA	ALA X 365	12.220-100.874	50.642	1.00102.30
C						
ATOM	4107	C	ALA X 365	10.942-101.725	50.818	1.00105.63
C						
ATOM	4108	O	ALA X 365	10.918-102.960	50.560	1.00102.91
O						
ATOM	4109	CB	ALA X 365	12.247-100.280	49.245	1.00105.59
C						
ATOM	4110	N	CYS X 366	9.904-101.063	51.292	1.00109.13
N						
ATOM	4111	CA	CYS X 366	8.790-101.764	51.884	1.00115.95
C						
ATOM	4112	C	CYS X 366	7.559-101.735	50.967	1.00109.39
C						
ATOM	4113	O	CYS X 366	7.487-100.952	50.019	1.00 97.96
O						
ATOM	4114	CB	CYS X 366	8.451-101.160	53.283	1.00124.19
C						
ATOM	4115	SG	CYS X 366	9.797-100.680	54.440	1.00126.68
S						
ATOM	4116	N	ASN X 367	6.583-102.576	51.309	1.00118.25
N						
ATOM	4117	CA	ASN X 367	5.238-102.541	50.702	1.00126.57
C						
ATOM	4118	C	ASN X 367	5.244-102.652	49.207	1.00122.36
C						
ATOM	4119	O	ASN X 367	4.496-101.952	48.537	1.00124.90
O						
ATOM	4120	CB	ASN X 367	4.532-101.235	51.061	1.00133.42
C						
ATOM	4121	CG	ASN X 367	4.436-101.034	52.536	1.00138.47
C						

ATOM	4122	OD1	ASN	X	367	5.277-100.382	53.105	1.00152.24
O								
ATOM	4123	ND2	ASN	X	367	3.467-101.682	53.179	1.00144.52
N								
ATOM	4124	N	LEU	X	368	6.056-103.553	48.656	1.00120.81
N								
ATOM	4125	CA	LEU	X	368	6.018-103.851	47.218	1.00110.34
C								
ATOM	4126	C	LEU	X	368	5.707-105.329	46.980	1.00110.82
C								
ATOM	4127	O	LEU	X	368	6.035-106.221	47.776	1.00128.18
O								
ATOM	4128	CB	LEU	X	368	7.345-103.525	46.505	1.00102.82
C								
ATOM	4129	CG	LEU	X	368	7.757-102.049	46.452	1.00101.38
C								
ATOM	4130	CD1	LEU	X	368	9.222-101.864	46.033	1.00 96.75
C								
ATOM	4131	CD2	LEU	X	368	6.796-101.273	45.560	1.00 99.20
C								
ATOM	4132	N	ASN	X	369	5.157-105.588	45.807	1.00106.47
N								
ATOM	4133	CA	ASN	X	369	5.108-106.950	45.257	1.00107.81
C								
ATOM	4134	C	ASN	X	369	6.099-107.049	44.109	1.00103.12
C								
ATOM	4135	O	ASN	X	369	6.301-106.087	43.345	1.00122.45
O								
ATOM	4136	CB	ASN	X	369	3.757-107.295	44.652	1.00110.66
C								
ATOM	4137	CG	ASN	X	369	2.660-107.358	45.662	1.00114.06
C								
ATOM	4138	OD1	ASN	X	369	2.851-107.038	46.819	1.00114.94
O								
ATOM	4139	ND2	ASN	X	369	1.486-107.741	45.216	1.00118.79
N								
ATOM	4140	N	LEU	X	370	6.601-108.258	43.919	1.00 93.78
N								
ATOM	4141	CA	LEU	X	370	7.337-108.612	42.741	1.00 93.82
C								
ATOM	4142	C	LEU	X	370	6.487-109.572	41.880	1.00103.92
C								
ATOM	4143	O	LEU	X	370	5.650-110.335	42.380	1.00123.45
O								
ATOM	4144	CB	LEU	X	370	8.610-109.268	43.121	1.00 90.25
C								
ATOM	4145	CG	LEU	X	370	9.289-108.600	44.276	1.00 90.19
C								
ATOM	4146	CD1	LEU	X	370	9.516-109.611	45.443	1.00 93.99
C								
ATOM	4147	CD2	LEU	X	370	10.567-107.955	43.755	1.00 88.11
C								
ATOM	4148	N	ILE	X	371	6.577-109.359	40.580	1.00102.06
N								

ATOM	4149	CA	ILE	X	371	5.900-110.188	39.606	1.00	99.38
C									
ATOM	4150	C	ILE	X	371	6.922-110.689	38.618	1.00	97.23
C									
ATOM	4151	O	ILE	X	371	7.799-109.922	38.184	1.00	100.70
O									
ATOM	4152	CB	ILE	X	371	4.772-109.417	38.921	1.00	102.77
C									
ATOM	4153	CG1	ILE	X	371	5.239-108.049	38.432	1.00	105.20
C									
ATOM	4154	CG2	ILE	X	371	3.596-109.239	39.858	1.00	102.76
C									
ATOM	4155	CD1	ILE	X	371	5.329-107.984	36.916	1.00	112.63
C									
ATOM	4156	N	GLY	X	372	6.812-111.964	38.258	1.00	95.35
N									
ATOM	4157	CA	GLY	X	372	7.765-112.563	37.308	1.00	97.44
C									
ATOM	4158	C	GLY	X	372	9.082-112.909	37.995	1.00	99.28
C									
ATOM	4159	O	GLY	X	372	9.191-112.840	39.234	1.00	98.34
O									
ATOM	4160	N	ARG	X	373	10.086-113.254	37.190	1.00	102.69
N									
ATOM	4161	CA	ARG	X	373	11.355-113.720	37.693	1.00	110.21
C									
ATOM	4162	C	ARG	X	373	12.507-112.816	37.232	1.00	105.12
C									
ATOM	4163	O	ARG	X	373	12.411-112.084	36.232	1.00	100.67
O									
ATOM	4164	CB	ARG	X	373	11.559-115.204	37.314	1.00	129.58
C									
ATOM	4165	CG	ARG	X	373	11.203-116.207	38.442	1.00	142.29
C									
ATOM	4166	CD	ARG	X	373	10.185-117.293	38.024	1.00	150.99
C									
ATOM	4167	NE	ARG	X	373	10.658-118.165	36.934	1.00	152.12
N									
ATOM	4168	CZ	ARG	X	373	11.653-119.054	37.041	1.00	146.33
C									
ATOM	4169	NH1	ARG	X	373	12.043-119.742	35.982	1.00	149.17
N									
ATOM	4170	NH2	ARG	X	373	12.278-119.241	38.192	1.00	140.75
N1+									
ATOM	4171	N	PRO	X	374	13.576-112.827	38.004	1.00	111.52
N									
ATOM	4172	CA	PRO	X	374	14.704-111.931	37.739	1.00	117.13
C									
ATOM	4173	C	PRO	X	374	15.234-112.117	36.317	1.00	111.39
C									
ATOM	4174	O	PRO	X	374	15.441-113.236	35.874	1.00	114.94
O									
ATOM	4175	CB	PRO	X	374	15.753-112.379	38.754	1.00	128.21
C									

ATOM	4176	CG	PRO	X	374	15.261-113.679	39.327	1.00132.53
C								
ATOM	4177	CD	PRO	X	374	14.057-114.094	38.558	1.00122.40
C								
ATOM	4178	N	SER	X	375	15.403-111.009	35.601	1.00104.80
N								
ATOM	4179	CA	SER	X	375	15.885-110.979	34.229	1.00102.05
C								
ATOM	4180	C	SER	X	375	16.980-109.939	34.054	1.00104.87
C								
ATOM	4181	O	SER	X	375	16.908-108.813	34.529	1.00107.82
O								
ATOM	4182	CB	SER	X	375	14.709-110.655	33.302	1.00 99.95
C								
ATOM	4183	OG	SER	X	375	15.152-110.380	31.983	1.00100.99
O								
ATOM	4184	N	THR	X	376	18.015-110.314	33.316	1.00111.05
N								
ATOM	4185	CA	THR	X	376	19.151-109.450	32.966	1.00114.21
C								
ATOM	4186	C	THR	X	376	18.863-108.659	31.680	1.00110.92
C								
ATOM	4187	O	THR	X	376	19.725-107.929	31.183	1.00108.12
O								
ATOM	4188	CB	THR	X	376	20.446-110.294	32.898	1.00117.69
C								
ATOM	4189	OG1	THR	X	376	21.477-109.545	32.244	1.00121.25
O								
ATOM	4190	CG2	THR	X	376	20.216-111.555	32.130	1.00117.15
C								
ATOM	4191	N	GLU	X	377	17.688-108.831	31.066	1.00103.98
N								
ATOM	4192	CA	GLU	X	377	17.373-108.229	29.776	1.00102.67
C								
ATOM	4193	C	GLU	X	377	17.513-106.704	29.822	1.00102.05
C								
ATOM	4194	O	GLU	X	377	16.686-106.020	30.419	1.00100.88
O								
ATOM	4195	CB	GLU	X	377	15.961-108.624	29.327	1.00102.29
C								
ATOM	4196	CG	GLU	X	377	15.771-108.221	27.860	1.00104.36
C								
ATOM	4197	CD	GLU	X	377	14.321-107.975	27.455	1.00103.37
C								
ATOM	4198	OE1	GLU	X	377	13.371-108.427	28.121	1.00 99.63
O								
ATOM	4199	OE2	GLU	X	377	14.164-107.393	26.361	1.00102.89
O1-								
ATOM	4200	N	HIP	X	378	18.530-106.167	29.132	1.00100.40
N								
ATOM	4201	CA	HIP	X	378	18.724-104.720	28.993	1.00 92.60
C								
ATOM	4202	C	HIP	X	378	18.834-104.006	30.364	1.00 89.79
C								

ATOM	4203	O	HIP	X	378	18.431-102.854	30.514	1.00	89.39
O									
ATOM	4204	CB	HIP	X	378	17.614-104.235	28.040	1.00	88.80
C									
ATOM	4205	CG	HIP	X	378	17.673-102.809	27.586	1.00	85.35
C									
ATOM	4206	CD2	HIP	X	378	16.713-101.889	27.855	1.00	82.71
C									
ATOM	4207	ND1	HIP	X	378	18.658-102.183	26.854	1.00	86.19
N1+									
ATOM	4208	NE2	HIP	X	378	17.099-100.697	27.281	1.00	83.58
N									
ATOM	4209	CE1	HIP	X	378	18.274-100.905	26.660	1.00	86.09
C									
ATOM	4210	N	SER	X	379	19.379-104.716	31.361	1.00	87.50
N									
ATOM	4211	CA	SER	X	379	19.617-104.212	32.718	1.00	86.06
C									
ATOM	4212	C	SER	X	379	20.568-103.014	32.709	1.00	85.26
C									
ATOM	4213	O	SER	X	379	21.606-103.055	32.049	1.00	84.47
O									
ATOM	4214	CB	SER	X	379	20.199-105.322	33.598	1.00	87.67
C									
ATOM	4215	OG	SER	X	379	20.327-104.890	34.936	1.00	87.52
O									
ATOM	4216	N	TRP	X	380	20.238-101.965	33.462	1.00	84.44
N									
ATOM	4217	CA	TRP	X	380	21.062-100.753	33.579	1.00	85.06
C									
ATOM	4218	C	TRP	X	380	22.289-100.936	34.479	1.00	86.26
C									
ATOM	4219	O	TRP	X	380	23.227-100.141	34.432	1.00	85.21
O									
ATOM	4220	CB	TRP	X	380	20.179 -99.611	34.087	1.00	84.80
C									
ATOM	4221	CG	TRP	X	380	18.964 -99.330	33.257	1.00	83.11
C									
ATOM	4222	CD1	TRP	X	380	18.908 -99.369	31.908	1.00	83.46
C									
ATOM	4223	CD2	TRP	X	380	17.618 -98.984	33.697	1.00	83.19
C									
ATOM	4224	NE1	TRP	X	380	17.650 -99.009	31.477	1.00	84.70
N									
ATOM	4225	CE2	TRP	X	380	16.808 -98.772	32.541	1.00	83.07
C									
ATOM	4226	CE3	TRP	X	380	16.998 -98.842	34.956	1.00	84.88
C									
ATOM	4227	CZ2	TRP	X	380	15.452 -98.437	32.628	1.00	83.44
C									
ATOM	4228	CZ3	TRP	X	380	15.630 -98.527	35.056	1.00	83.62
C									
ATOM	4229	CH2	TRP	X	380	14.859 -98.334	33.896	1.00	82.64
C									



ATOM	4230	N	PHE	X	381	22.301-102.012	35.265	1.00	89.69
N									
ATOM	4231	CA	PHE	X	381	23.379-102.367	36.176	1.00	98.94
C									
ATOM	4232	C	PHE	X	381	23.985-103.685	35.693	1.00	111.09
C									
ATOM	4233	O	PHE	X	381	23.392-104.744	35.931	1.00	119.86
O									
ATOM	4234	CB	PHE	X	381	22.825-102.435	37.604	1.00	99.99
C									
ATOM	4235	CG	PHE	X	381	22.155-101.142	38.000	1.00	94.75
C									
ATOM	4236	CD1	PHE	X	381	22.936-100.001	38.213	1.00	93.89
C									
ATOM	4237	CD2	PHE	X	381	20.754-101.039	37.998	1.00	91.15
C									
ATOM	4238	CE1	PHE	X	381	22.313 -98.762	38.399	1.00	90.96
C									
ATOM	4239	CE2	PHE	X	381	20.127 -99.805	38.234	1.00	90.77
C									
ATOM	4240	CZ	PHE	X	381	20.911 -98.655	38.425	1.00	91.21
C									
ATOM	4241	N	PRO	X	382	25.139-103.659	34.996	1.00	118.05
N									
ATOM	4242	CA	PRO	X	382	25.749-104.914	34.547	1.00	123.82
C									
ATOM	4243	C	PRO	X	382	26.114-105.681	35.828	1.00	128.93
C									
ATOM	4244	O	PRO	X	382	26.736-105.120	36.756	1.00	127.22
O									
ATOM	4245	CB	PRO	X	382	26.980-104.476	33.758	1.00	123.41
C									
ATOM	4246	CG	PRO	X	382	27.340-103.129	34.346	1.00	122.27
C									
ATOM	4247	CD	PRO	X	382	26.099-102.542	34.958	1.00	116.47
C									
ATOM	4248	N	GLY	X	383	25.657-106.926	35.898	1.00	127.49
N									
ATOM	4249	CA	GLY	X	383	25.856-107.752	37.073	1.00	122.80
C									
ATOM	4250	C	GLY	X	383	24.545-108.106	37.734	1.00	115.01
C									
ATOM	4251	O	GLY	X	383	24.471-109.113	38.447	1.00	125.98
O									
ATOM	4252	N	TYR	X	384	23.525-107.277	37.494	1.00	102.04
N									
ATOM	4253	CA	TYR	X	384	22.229-107.441	38.130	1.00	98.24
C									
ATOM	4254	C	TYR	X	384	21.127-107.816	37.153	1.00	95.03
C									
ATOM	4255	O	TYR	X	384	21.089-107.339	36.015	1.00	96.99
O									
ATOM	4256	CB	TYR	X	384	21.833-106.167	38.882	1.00	99.37
C									

ATOM	4257	CG	TYR	X	384	22.722-105.900	40.067	1.00103.27
C								
ATOM	4258	CD1	TYR	X	384	23.974-105.336	39.911	1.00104.96
C								
ATOM	4259	CD2	TYR	X	384	22.375-106.417	41.328	1.00101.96
C								
ATOM	4260	CE1	TYR	X	384	24.832-105.226	40.977	1.00105.96
C								
ATOM	4261	CE2	TYR	X	384	23.240-106.332	42.389	1.00100.64
C								
ATOM	4262	CZ	TYR	X	384	24.464-105.738	42.199	1.00103.62
C								
ATOM	4263	OH	TYR	X	384	25.320-105.561	43.230	1.00110.69
O								
ATOM	4264	N	ALA	X	385	20.141-108.540	37.672	1.00 92.43
N								
ATOM	4265	CA	ALA	X	385	18.865-108.747	37.020	1.00 93.05
C								
ATOM	4266	C	ALA	X	385	17.787-107.913	37.702	1.00 86.22
C								
ATOM	4267	O	ALA	X	385	17.811-107.760	38.920	1.00 80.82
O								
ATOM	4268	CB	ALA	X	385	18.567-110.233	37.074	1.00101.24
C								
ATOM	4269	N	TRP	X	386	16.839-107.394	36.932	1.00 86.40
N								
ATOM	4270	CA	TRP	X	386	15.663-106.689	37.423	1.00 87.18
C								
ATOM	4271	C	TRP	X	386	14.485-107.655	37.573	1.00 87.17
C								
ATOM	4272	O	TRP	X	386	14.342-108.617	36.823	1.00101.57
O								
ATOM	4273	CB	TRP	X	386	15.328-105.537	36.467	1.00 88.49
C								
ATOM	4274	CG	TRP	X	386	15.072-105.940	35.045	1.00 87.62
C								
ATOM	4275	CD1	TRP	X	386	15.994-105.921	34.057	1.00 86.91
C								
ATOM	4276	CD2	TRP	X	386	13.839-106.438	34.429	1.00 87.01
C								
ATOM	4277	NE1	TRP	X	386	15.428-106.388	32.888	1.00 88.36
N								
ATOM	4278	CE2	TRP	X	386	14.111-106.747	33.062	1.00 88.12
C								
ATOM	4279	CE3	TRP	X	386	12.516-106.649	34.876	1.00 88.28
C								
ATOM	4280	CZ2	TRP	X	386	13.131-107.242	32.187	1.00 90.14
C								
ATOM	4281	CZ3	TRP	X	386	11.517-107.126	34.003	1.00 89.44
C								
ATOM	4282	CH2	TRP	X	386	11.821-107.420	32.663	1.00 89.64
C								
ATOM	4283	N	THR	X	387	13.584-107.329	38.491	1.00 81.47
N								

ATOM	4284	CA	THR	X	387	12.251-107.931	38.619	1.00	80.87
C									
ATOM	4285	C	THR	X	387	11.267-106.790	38.853	1.00	78.19
C									
ATOM	4286	O	THR	X	387	11.571-105.912	39.664	1.00	77.72
O									
ATOM	4287	CB	THR	X	387	12.181-108.934	39.787	1.00	83.47
C									
ATOM	4288	OG1	THR	X	387	13.439-109.485	40.119	1.00	87.11
O									
ATOM	4289	CG2	THR	X	387	11.266-110.100	39.442	1.00	84.13
C									
ATOM	4290	N	VAL	X	388	10.146-106.716	38.124	1.00	78.44
N									
ATOM	4291	CA	VAL	X	388	9.197-105.596	38.290	1.00	80.00
C									
ATOM	4292	C	VAL	X	388	8.637-105.588	39.700	1.00	81.96
C									
ATOM	4293	O	VAL	X	388	8.116-106.598	40.165	1.00	85.99
O									
ATOM	4294	CB	VAL	X	388	8.041-105.606	37.268	1.00	80.34
C									
ATOM	4295	CG1	VAL	X	388	6.766-104.906	37.788	1.00	80.21
C									
ATOM	4296	CG2	VAL	X	388	8.501-104.894	35.994	1.00	80.57
C									
ATOM	4297	N	ALA	X	389	8.630-104.394	40.282	1.00	79.83
N									
ATOM	4298	CA	ALA	X	389	8.104-104.059	41.591	1.00	78.65
C									
ATOM	4299	C	ALA	X	389	6.865-103.242	41.481	1.00	79.15
C									
ATOM	4300	O	ALA	X	389	6.957-102.278	40.812	1.00	74.51
O									
ATOM	4301	CB	ALA	X	389	9.189-103.209	42.219	1.00	77.38
C									
ATOM	4302	N	GLN	X	390	5.766-103.567	42.175	1.00	87.86
N									
ATOM	4303	CA	GLN	X	390	4.663-102.607	42.267	1.00	97.52
C									
ATOM	4304	C	GLN	X	390	3.997-102.453	43.624	1.00	105.98
C									
ATOM	4305	O	GLN	X	390	4.012-103.356	44.426	1.00	116.13
O									
ATOM	4306	CB	GLN	X	390	3.595-102.875	41.226	1.00	97.70
C									
ATOM	4307	CG	GLN	X	390	2.779-104.123	41.510	1.00	97.84
C									
ATOM	4308	CD	GLN	X	390	2.800-105.044	40.328	1.00	101.36
C									
ATOM	4309	OE1	GLN	X	390	3.760-105.791	40.145	1.00	99.35
O									
ATOM	4310	NE2	GLN	X	390	1.873-104.824	39.392	1.00	106.07
N									

ATOM	4311	N	CYM X 391	3.396-101.300	43.867	1.00108.10
N						
ATOM	4312	CA	CYM X 391	2.773-100.926	45.152	1.00114.78
C						
ATOM	4313	C	CYM X 391	1.783-101.992	45.580	1.00117.17
C						
ATOM	4314	O	CYM X 391	0.731-102.195	44.917	1.00114.58
O						
ATOM	4315	CB	CYM X 391	2.028 -99.564	45.043	1.00117.22
C						
ATOM	4316	SG	CYM X 391	1.525 -98.736	46.612	1.00121.67
S1-						
ATOM	4317	N	LYS X 392	2.120-102.650	46.657	1.00116.41
N						
ATOM	4318	CA	LYS X 392	1.221-103.541	47.375	1.00113.64
C						
ATOM	4319	C	LYS X 392	-0.255-103.068	47.389	1.00119.18
C						
ATOM	4320	O	LYS X 392	-1.165-103.865	47.198	1.00133.28
O						
ATOM	4321	CB	LYS X 392	1.705-103.694	48.857	1.00 0.00
C						
ATOM	4322	CG	LYS X 392	0.910-104.724	49.681	1.00 0.00
C						
ATOM	4323	CD	LYS X 392	1.563-105.073	51.026	1.00 0.00
C						
ATOM	4324	CE	LYS X 392	2.803-105.961	50.860	1.00 0.00
C						
ATOM	4325	NZ	LYS X 392	3.355-106.357	52.166	1.00 0.00
N1+						
ATOM	4326	N	ILE X 393	-0.477-101.777	47.605	1.00117.95
N						
ATOM	4327	CA	ILE X 393	-1.827-101.223	47.761	1.00112.90
C						
ATOM	4328	C	ILE X 393	-2.480-100.982	46.370	1.00107.36
C						
ATOM	4329	O	ILE X 393	-3.485-101.605	45.977	1.00 99.20
O						
ATOM	4330	CB	ILE X 393	-1.827 -99.823	48.503	1.00111.20
C						
ATOM	4331	CG1	ILE X 393	-0.597 -99.583	49.437	1.00107.54
C						
ATOM	4332	CG2	ILE X 393	-3.145 -99.626	49.235	1.00115.50
C						
ATOM	4333	CD1	ILE X 393	-0.670-100.227	50.822	1.00109.80
C						
ATOM	4334	N	CYM X 394	-1.857-100.073	45.632	1.00101.75
N						
ATOM	4335	CA	CYM X 394	-2.451 -99.500	44.428	1.00 99.02
C						
ATOM	4336	C	CYM X 394	-2.036-100.183	43.117	1.00101.61
C						
ATOM	4337	O	CYM X 394	-2.647 -99.919	42.057	1.00 93.31
O						

ATOM	4338	CB	CYM	X	394	-2.155	-98.017	44.376	1.00	92.75
C										
ATOM	4339	SG	CYM	X	394	-0.403	-97.739	44.253	1.00	86.17
S1-										
ATOM	4340	N	ALA	X	395	-1.036	-101.068	43.178	1.00	104.97
N										
ATOM	4341	CA	ALA	X	395	-0.606	-101.871	42.022	1.00	102.08
C										
ATOM	4342	C	ALA	X	395	0.207	-101.048	41.058	1.00	99.60
C										
ATOM	4343	O	ALA	X	395	0.717	-101.566	40.046	1.00	101.62
O										
ATOM	4344	CB	ALA	X	395	-1.803	-102.491	41.315	1.00	100.31
C										
ATOM	4345	N	SER	X	396	0.298	-99.747	41.334	1.00	99.62
N										
ATOM	4346	CA	SER	X	396	0.991	-98.833	40.433	1.00	102.44
C										
ATOM	4347	C	SER	X	396	2.484	-99.134	40.427	1.00	98.06
C										
ATOM	4348	O	SER	X	396	3.124	-99.205	41.480	1.00	96.22
O										
ATOM	4349	CB	SER	X	396	0.704	-97.329	40.758	1.00	106.51
C										
ATOM	4350	OG	SER	X	396	1.476	-96.827	41.845	1.00	105.75
O										
ATOM	4351	N	HIE	X	397	3.023	-99.356	39.234	1.00	93.90
N										
ATOM	4352	CA	HIE	X	397	4.417	-99.805	39.065	1.00	87.18
C										
ATOM	4353	C	HIE	X	397	5.447	-98.774	39.619	1.00	81.56
C										
ATOM	4354	O	HIE	X	397	5.677	-97.703	39.052	1.00	80.34
O										
ATOM	4355	CB	HIE	X	397	4.742	-100.261	37.568	1.00	84.78
C										
ATOM	4356	CG	HIE	X	397	6.197	-100.113	37.167	1.00	80.64
C										
ATOM	4357	ND1	HIE	X	397	6.770	-99.153	36.318	1.00	78.02
N										
ATOM	4358	CD2	HIE	X	397	7.187	-100.927	37.627	1.00	79.51
C										
ATOM	4359	CE1	HIE	X	397	8.085	-99.427	36.298	1.00	76.44
C										
ATOM	4360	NE2	HIE	X	397	8.359	-100.496	37.060	1.00	76.75
N										
ATOM	4361	N	ILE	X	398	6.080	-99.160	40.703	1.00	78.72
N										
ATOM	4362	CA	ILE	X	398	6.967	-98.264	41.463	1.00	82.80
C										
ATOM	4363	C	ILE	X	398	8.434	-98.316	41.013	1.00	79.36
C										
ATOM	4364	O	ILE	X	398	9.184	-97.416	41.285	1.00	76.57
O										

ATOM	4365	CB	ILE	X	398	6.974	-98.627	42.969	1.00	92.69
C										
ATOM	4366	CG1	ILE	X	398	5.562	-98.568	43.520	1.00	100.53
C										
ATOM	4367	CG2	ILE	X	398	7.901	-97.698	43.815	1.00	92.07
C										
ATOM	4368	CD1	ILE	X	398	5.082	-97.149	43.783	1.00	103.36
C										
ATOM	4369	N	GLY	X	399	8.835	-99.412	40.395	1.00	76.86
N										
ATOM	4370	CA	GLY	X	399	10.213	-99.584	39.929	1.00	76.55
C										
ATOM	4371	C	GLY	X	399	10.584	-101.042	39.702	1.00	76.55
C										
ATOM	4372	O	GLY	X	399	9.801	-101.815	39.150	1.00	75.44
O										
ATOM	4373	N	TRP	X	400	11.775	-101.434	40.152	1.00	78.15
N										
ATOM	4374	CA	TRP	X	400	12.252	-102.812	40.064	1.00	80.47
C										
ATOM	4375	C	TRP	X	400	13.092	-103.184	41.279	1.00	81.08
C										
ATOM	4376	O	TRP	X	400	13.730	-102.342	41.913	1.00	84.61
O										
ATOM	4377	CB	TRP	X	400	13.059	-103.041	38.779	1.00	82.76
C										
ATOM	4378	CG	TRP	X	400	12.407	-102.576	37.522	1.00	83.96
C										
ATOM	4379	CD1	TRP	X	400	11.714	-103.338	36.649	1.00	84.38
C										
ATOM	4380	CD2	TRP	X	400	12.337	-101.212	37.011	1.00	83.59
C										
ATOM	4381	NE1	TRP	X	400	11.211	-102.537	35.646	1.00	84.40
N										
ATOM	4382	CE2	TRP	X	400	11.574	-101.223	35.810	1.00	84.28
C										
ATOM	4383	CE3	TRP	X	400	12.822	-99.965	37.462	1.00	84.78
C										
ATOM	4384	CZ2	TRP	X	400	11.332	-100.064	35.066	1.00	87.12
C										
ATOM	4385	CZ3	TRP	X	400	12.533	-98.783	36.760	1.00	84.56
C										
ATOM	4386	CH2	TRP	X	400	11.801	-98.840	35.564	1.00	85.66
C										
ATOM	4387	N	LYS	X	401	13.148	-104.483	41.549	1.00	80.31
N										
ATOM	4388	CA	LYS	X	401	14.065	-105.090	42.508	1.00	81.95
C										
ATOM	4389	C	LYS	X	401	15.209	-105.735	41.740	1.00	80.60
C										
ATOM	4390	O	LYS	X	401	14.964	-106.529	40.833	1.00	82.42
O										
ATOM	4391	CB	LYS	X	401	13.291	-106.103	43.354	1.00	87.16
C										

ATOM	4392	CG	LYS	X	401	13.594-105.997	44.829	1.00	94.67
C									
ATOM	4393	CD	LYS	X	401	13.472-107.338	45.521	1.00	103.59
C									
ATOM	4394	CE	LYS	X	401	14.836-107.921	45.874	1.00	114.64
C									
ATOM	4395	NZ	LYS	X	401	14.749-109.391	46.090	1.00	124.56
N1+									
ATOM	4396	N	PHE	X	402	16.437-105.413	42.110	1.00	79.55
N									
ATOM	4397	CA	PHE	X	402	17.645-105.845	41.426	1.00	80.94
C									
ATOM	4398	C	PHE	X	402	18.360-106.929	42.227	1.00	86.92
C									
ATOM	4399	O	PHE	X	402	18.580-106.737	43.396	1.00	98.06
O									
ATOM	4400	CB	PHE	X	402	18.552-104.648	41.152	1.00	77.27
C									
ATOM	4401	CG	PHE	X	402	17.979-103.687	40.132	1.00	73.70
C									
ATOM	4402	CD1	PHE	X	402	16.985-102.766	40.508	1.00	72.26
C									
ATOM	4403	CD2	PHE	X	402	18.409-103.740	38.795	1.00	72.58
C									
ATOM	4404	CE1	PHE	X	402	16.419-101.907	39.552	1.00	71.11
C									
ATOM	4405	CE2	PHE	X	402	17.855-102.864	37.846	1.00	71.91
C									
ATOM	4406	CZ	PHE	X	402	16.861-101.948	38.221	1.00	70.96
C									
ATOM	4407	N	THR	X	403	18.814-107.929	41.558	1.00	91.13
N									
ATOM	4408	CA	THR	X	403	19.274-109.130	42.170	1.00	95.39
C									
ATOM	4409	C	THR	X	403	20.608-109.509	41.487	1.00	102.54
C									
ATOM	4410	O	THR	X	403	20.794-109.243	40.310	1.00	102.03
O									
ATOM	4411	CB	THR	X	403	18.101-110.091	41.977	1.00	93.20
C									
ATOM	4412	OG1	THR	X	403	17.514-109.840	40.692	1.00	90.72
O									
ATOM	4413	CG2	THR	X	403	17.009-109.772	43.012	1.00	90.89
C									
ATOM	4414	N	ALA	X	404	21.583-110.004	42.266	1.00	108.68
N									
ATOM	4415	CA	ALA	X	404	22.862-110.381	41.696	1.00	116.04
C									
ATOM	4416	C	ALA	X	404	22.780-111.689	40.933	1.00	118.61
C									
ATOM	4417	O	ALA	X	404	21.895-112.505	41.178	1.00	118.83
O									
ATOM	4418	CB	ALA	X	404	23.928-110.452	42.755	1.00	125.14
C									

ATOM	4419	N	THR	X	405	23.652-111.844	39.944	1.00128.07
N								
ATOM	4420	CA	THR	X	405	23.798-113.106	39.173	1.00141.82
C								
ATOM	4421	C	THR	X	405	25.062-113.871	39.584	1.00150.82
C								
ATOM	4422	O	THR	X	405	25.172-115.088	39.415	1.00151.99
O								
ATOM	4423	CB	THR	X	405	23.908-112.817	37.648	1.00141.04
C								
ATOM	4424	OG1	THR	X	405	25.226-112.349	37.330	1.00141.87
O								
ATOM	4425	CG2	THR	X	405	22.879-111.764	37.203	1.00137.80
C								
ATOM	4426	N	LYS	X	406	25.982-113.134	40.195	1.00162.00
N								
ATOM	4427	CA	LYS	X	406	27.182-113.718	40.810	1.00171.48
C								
ATOM	4428	C	LYS	X	406	27.079-113.542	42.330	1.00171.15
C								
ATOM	4429	O	LYS	X	406	26.601-112.505	42.815	1.00169.95
O								
ATOM	4430	CB	LYS	X	406	28.447-113.004	40.308	1.00169.30
C								
ATOM	4431	CG	LYS	X	406	28.715-113.114	38.810	1.00159.94
C								
ATOM	4432	CD	LYS	X	406	30.125-112.634	38.476	1.00158.62
C								
ATOM	4433	CE	LYS	X	406	30.141-111.174	38.059	1.00159.24
C								
ATOM	4434	NZ	LYS	X	406	30.012-111.027	36.580	1.00167.30
N1+								
ATOM	4435	N	LYS	X	407	27.549-114.540	43.069	1.00171.16
N								
ATOM	4436	CA	LYS	X	407	27.414-114.536	44.529	1.00174.88
C								
ATOM	4437	C	LYS	X	407	28.589-113.819	45.215	1.00176.66
C								
ATOM	4438	O	LYS	X	407	28.695-113.839	46.446	1.00170.80
O								
ATOM	4439	CB	LYS	X	407	27.246-115.966	45.052	1.00177.97
C								
ATOM	4440	CG	LYS	X	407	26.885-117.002	43.977	1.00191.79
C								
ATOM	4441	CD	LYS	X	407	25.718-116.593	43.072	1.00195.57
C								
ATOM	4442	CE	LYS	X	407	24.435-117.297	43.465	1.00204.47
C								
ATOM	4443	NZ	LYS	X	407	24.105-117.013	44.891	1.00212.67
N1+								
ATOM	4444	N	ASP	X	408	29.408-113.130	44.417	1.00178.69
N								
ATOM	4445	CA	ASP	X	408	30.588-112.442	44.929	1.00184.34
C								



ATOM	4446	C	ASP	X	408	30.485-110.943	44.687	1.00185.42
C								
ATOM	4447	O	ASP	X	408	31.354-110.174	45.124	1.00200.63
O								
ATOM	4448	CB	ASP	X	408	31.859-113.018	44.291	1.00181.52
C								
ATOM	4449	CG	ASP	X	408	32.055-112.547	42.883	1.00180.48
C								
ATOM	4450	OD1	ASP	X	408	31.087-112.636	42.101	1.00190.40
O								
ATOM	4451	OD2	ASP	X	408	33.143-112.025	42.572	1.00179.35
O1-								
ATOM	4452	N	MET	X	409	29.344-110.491	44.135	1.00179.27
N								
ATOM	4453	CA	MET	X	409	29.012-109.070	44.041	1.00172.26
C								
ATOM	4454	C	MET	X	409	28.432-108.532	45.344	1.00155.90
C								
ATOM	4455	O	MET	X	409	27.631-109.203	46.004	1.00144.85
O								
ATOM	4456	CB	MET	X	409	28.000-108.810	42.936	1.00174.60
C								
ATOM	4457	CG	MET	X	409	28.643-108.512	41.618	1.00180.85
C								
ATOM	4458	SD	MET	X	409	27.682-109.159	40.264	1.00190.71
S								
ATOM	4459	CE	MET	X	409	28.564-108.381	38.908	1.00194.57
C								
ATOM	4460	N	SER	X	410	28.797-107.292	45.672	1.00140.81
N								
ATOM	4461	CA	SER	X	410	28.135-106.585	46.766	1.00139.23
C								
ATOM	4462	C	SER	X	410	26.997-105.669	46.265	1.00130.73
C								
ATOM	4463	O	SER	X	410	27.019-105.197	45.134	1.00134.72
O								
ATOM	4464	CB	SER	X	410	29.119-105.780	47.573	1.00151.28
C								
ATOM	4465	OG	SER	X	410	28.576-105.411	48.825	1.00167.72
O								
ATOM	4466	N	PRO	X	411	26.076-105.285	47.165	1.00122.00
N								
ATOM	4467	CA	PRO	X	411	24.656-105.570	47.102	1.00115.82
C								
ATOM	4468	C	PRO	X	411	24.283-106.832	46.336	1.00113.25
C								
ATOM	4469	O	PRO	X	411	24.443-106.909	45.122	1.00122.43
O								
ATOM	4470	CB	PRO	X	411	24.071-104.338	46.423	1.00113.74
C								
ATOM	4471	CG	PRO	X	411	25.067-103.249	46.684	1.00117.24
C								
ATOM	4472	CD	PRO	X	411	26.253-103.850	47.410	1.00120.09
C								

ATOM	4473	N	GLN	X	412	23.815-107.827	47.055	1.00109.27
N								
ATOM	4474	CA	GLN	X	412	23.225-109.031	46.448	1.00110.34
C								
ATOM	4475	C	GLN	X	412	21.814-108.734	45.939	1.00110.07
C								
ATOM	4476	O	GLN	X	412	21.308-109.377	45.023	1.00120.22
O								
ATOM	4477	CB	GLN	X	412	23.131-110.136	47.490	1.00112.90
C								
ATOM	4478	CG	GLN	X	412	24.274-111.086	47.440	1.00114.07
C								
ATOM	4479	CD	GLN	X	412	24.283-111.837	46.154	1.00110.34
C								
ATOM	4480	OE1	GLN	X	412	23.270-112.423	45.776	1.00104.82
O								
ATOM	4481	NE2	GLN	X	412	25.424-111.813	45.452	1.00110.96
N								
ATOM	4482	N	LYS	X	413	21.175-107.775	46.610	1.00100.99
N								
ATOM	4483	CA	LYS	X	413	19.889-107.215	46.194	1.00 92.36
C								
ATOM	4484	C	LYS	X	413	19.807-105.757	46.549	1.00 88.84
C								
ATOM	4485	O	LYS	X	413	20.544-105.258	47.373	1.00 89.64
O								
ATOM	4486	CB	LYS	X	413	18.708-107.987	46.883	1.00 0.00
C								
ATOM	4487	CG	LYS	X	413	18.749-107.916	48.422	1.00 0.00
C								
ATOM	4488	CD	LYS	X	413	17.676-108.796	49.072	1.00 0.00
C								
ATOM	4489	CE	LYS	X	413	17.792-108.701	50.598	1.00 0.00
C								
ATOM	4490	NZ	LYS	X	413	16.847-109.603	51.274	1.00 0.00
N1+								
ATOM	4491	N	PHE	X	414	18.887-105.087	45.890	1.00 88.50
N								
ATOM	4492	CA	PHE	X	414	18.649-103.647	46.113	1.00 90.57
C								
ATOM	4493	C	PHE	X	414	17.486-103.248	45.261	1.00 86.61
C								
ATOM	4494	O	PHE	X	414	17.259-103.884	44.243	1.00 92.23
O								
ATOM	4495	CB	PHE	X	414	19.896-102.802	45.741	1.00 95.08
C								
ATOM	4496	CG	PHE	X	414	20.097-102.583	44.271	1.00 95.91
C								
ATOM	4497	CD1	PHE	X	414	19.377-101.625	43.608	1.00 94.99
C								
ATOM	4498	CD2	PHE	X	414	21.146-103.225	43.605	1.00103.11
C								
ATOM	4499	CE1	PHE	X	414	19.588-101.409	42.263	1.00103.69
C								

ATOM	4500	CE2	PHE	X	414	21.359-103.030	42.246	1.00108.25
C								
ATOM	4501	CZ	PHE	X	414	20.572-102.108	41.555	1.00107.49
C								
ATOM	4502	N	TRP	X	415	16.814-102.152	45.605	1.00 83.21
N								
ATOM	4503	CA	TRP	X	415	15.751-101.666	44.771	1.00 83.60
C								
ATOM	4504	C	TRP	X	415	16.158-100.483	43.935	1.00 81.77
C								
ATOM	4505	O	TRP	X	415	16.942 -99.627	44.344	1.00 82.53
O								
ATOM	4506	CB	TRP	X	415	14.547-101.359	45.572	1.00 86.15
C								
ATOM	4507	CG	TRP	X	415	13.715-102.508	45.859	1.00 90.63
C								
ATOM	4508	CD1	TRP	X	415	12.485-102.790	45.319	1.00 92.99
C								
ATOM	4509	CD2	TRP	X	415	13.899-103.398	46.901	1.00 97.57
C								
ATOM	4510	NE1	TRP	X	415	11.919-103.848	45.947	1.00 94.24
N								
ATOM	4511	CE2	TRP	X	415	12.746-104.223	46.960	1.00100.71
C								
ATOM	4512	CE3	TRP	X	415	14.860-103.520	47.879	1.00110.61
C								
ATOM	4513	CZ2	TRP	X	415	12.568-105.204	47.930	1.00116.76
C								
ATOM	4514	CZ3	TRP	X	415	14.671-104.487	48.887	1.00132.60
C								
ATOM	4515	CH2	TRP	X	415	13.532-105.324	48.891	1.00131.32
C								
ATOM	4516	N	GLY	X	416	15.690-100.432	42.690	1.00 82.15
N								
ATOM	4517	CA	GLY	X	416	15.845 -99.275	41.810	1.00 82.91
C								
ATOM	4518	C	GLY	X	416	14.464 -98.712	41.529	1.00 84.54
C								
ATOM	4519	O	GLY	X	416	13.660 -99.373	40.866	1.00 82.41
O								
ATOM	4520	N	LEU	X	417	14.169 -97.526	42.059	1.00 85.66
N								
ATOM	4521	CA	LEU	X	417	12.834 -96.989	42.084	1.00 82.93
C								
ATOM	4522	C	LEU	X	417	12.722 -95.788	41.190	1.00 77.99
C								
ATOM	4523	O	LEU	X	417	13.485 -94.838	41.317	1.00 77.32
O								
ATOM	4524	CB	LEU	X	417	12.389 -96.605	43.509	1.00 85.98
C								
ATOM	4525	CG	LEU	X	417	12.512 -97.709	44.567	1.00 89.43
C								
ATOM	4526	CD1	LEU	X	417	12.417 -97.123	45.969	1.00 89.35
C								

ATOM	4527	CD2	LEU	X	417	11.485	-98.828	44.372	1.00	89.73
C										
ATOM	4528	N	THR	X	418	11.755	-95.816	40.306	1.00	74.47
N										
ATOM	4529	CA	THR	X	418	11.551	-94.697	39.394	1.00	75.19
C										
ATOM	4530	C	THR	X	418	10.955	-93.497	40.133	1.00	73.11
C										
ATOM	4531	O	THR	X	418	9.979	-93.598	40.822	1.00	69.98
O										
ATOM	4532	CB	THR	X	418	10.674	-95.104	38.167	1.00	76.65
C										
ATOM	4533	OG1	THR	X	418	10.838	-94.152	37.066	1.00	76.46
O										
ATOM	4534	CG2	THR	X	418	9.184	-95.271	38.590	1.00	76.52
C										
ATOM	4535	N	ARG	X	419	11.563	-92.344	39.899	1.00	73.06
N										
ATOM	4536	CA	ARG	X	419	11.115	-91.045	40.398	1.00	75.08
C										
ATOM	4537	C	ARG	X	419	9.690	-90.655	40.003	1.00	75.55
C										
ATOM	4538	O	ARG	X	419	9.035	-90.013	40.752	1.00	75.15
O										
ATOM	4539	CB	ARG	X	419	12.148	-89.898	40.042	1.00	78.52
C										
ATOM	4540	CG	ARG	X	419	11.728	-88.425	40.309	1.00	81.26
C										
ATOM	4541	CD	ARG	X	419	12.633	-87.334	39.688	1.00	83.96
C										
ATOM	4542	NE	ARG	X	419	11.969	-86.657	38.546	1.00	92.43
N										
ATOM	4543	CZ	ARG	X	419	11.681	-85.342	38.433	1.00	99.27
C										
ATOM	4544	NH1	ARG	X	419	11.044	-84.879	37.324	1.00	105.15
N										
ATOM	4545	NH2	ARG	X	419	12.014	-84.483	39.386	1.00	97.36
N1+										
ATOM	4546	N	SER	X	420	9.202	-91.065	38.859	1.00	82.62
N										
ATOM	4547	CA	SER	X	420	7.832	-90.805	38.431	1.00	89.53
C										
ATOM	4548	C	SER	X	420	6.786	-91.464	39.367	1.00	83.82
C										
ATOM	4549	O	SER	X	420	5.631	-91.032	39.458	1.00	79.93
O										
ATOM	4550	CB	SER	X	420	7.617	-91.305	36.942	1.00	101.97
C										
ATOM	4551	OG	SER	X	420	8.334	-92.511	36.563	1.00	109.17
O										
ATOM	4552	N	ALA	X	421	7.223	-92.519	40.027	1.00	81.23
N										
ATOM	4553	CA	ALA	X	421	6.365	-93.290	40.883	1.00	85.56
C										

ATOM	4554	C	ALA	X	421	6.364	-92.776	42.361	1.00	88.30
C										
ATOM	4555	O	ALA	X	421	5.611	-93.292	43.204	1.00	85.90
O										
ATOM	4556	CB	ALA	X	421	6.733	-94.754	40.754	1.00	85.89
C										
ATOM	4557	N	LEU	X	422	7.176	-91.781	42.659	1.00	91.13
N										
ATOM	4558	CA	LEU	X	422	7.447	-91.394	44.063	1.00	93.45
C										
ATOM	4559	C	LEU	X	422	6.925	-90.005	44.447	1.00	96.38
C										
ATOM	4560	O	LEU	X	422	6.844	-89.122	43.613	1.00	94.93
O										
ATOM	4561	CB	LEU	X	422	8.940	-91.405	44.356	1.00	96.66
C										
ATOM	4562	CG	LEU	X	422	9.655	-92.716	44.045	1.00	96.50
C										
ATOM	4563	CD1	LEU	X	422	11.093	-92.655	44.580	1.00	93.62
C										
ATOM	4564	CD2	LEU	X	422	8.864	-93.943	44.542	1.00	95.16
C										
ATOM	4565	N	LEU	X	423	6.726	-89.812	45.743	1.00	104.22
N										
ATOM	4566	CA	LEU	X	423	6.384	-88.520	46.342	1.00	105.95
C										
ATOM	4567	C	LEU	X	423	7.220	-88.342	47.621	1.00	105.81
C										
ATOM	4568	O	LEU	X	423	6.981	-89.010	48.600	1.00	111.62
O										
ATOM	4569	CB	LEU	X	423	4.876	-88.534	46.657	1.00	104.50
C										
ATOM	4570	CG	LEU	X	423	4.265	-87.261	47.214	1.00	105.71
C										
ATOM	4571	CD1	LEU	X	423	4.254	-87.234	48.736	1.00	106.46
C										
ATOM	4572	CD2	LEU	X	423	5.000	-86.049	46.644	1.00	108.83
C										
ATOM	4573	N	PRO	X	424	8.245	-87.472	47.599	1.00	110.55
N										
ATOM	4574	CA	PRO	X	424	8.984	-87.152	48.804	1.00	119.12
C										
ATOM	4575	C	PRO	X	424	8.083	-86.552	49.889	1.00	131.47
C										
ATOM	4576	O	PRO	X	424	7.229	-85.702	49.594	1.00	141.87
O										
ATOM	4577	CB	PRO	X	424	10.042	-86.155	48.313	1.00	115.32
C										
ATOM	4578	CG	PRO	X	424	10.308	-86.557	46.930	1.00	118.93
C										
ATOM	4579	CD	PRO	X	424	9.114	-87.361	46.421	1.00	122.08
C										
ATOM	4580	N	THR	X	425	8.229	-87.038	51.136	1.00	126.75
N										

ATOM	4581	CA	THR	X	425	7.521	-86.431	52.228	1.00124.50
C									
ATOM	4582	C	THR	X	425	8.465	-85.943	53.313	1.00124.66
C									
ATOM	4583	O	THR	X	425	9.625	-86.445	53.475	1.00114.71
O									
ATOM	4584	CB	THR	X	425	6.323	-87.271	52.789	1.00127.50
C									
ATOM	4585	OG1	THR	X	425	5.540	-87.781	51.708	1.00116.98
O									
ATOM	4586	CG2	THR	X	425	5.369	-86.386	53.711	1.00129.47
C									
ATOM	4587	N	ILE	X	426	8.044	-84.793	53.836	1.00131.55
N									
ATOM	4588	CA	ILE	X	426	8.333	-84.337	55.165	1.00148.09
C									
ATOM	4589	C	ILE	X	426	7.393	-85.033	56.192	1.00160.40
C									
ATOM	4590	O	ILE	X	426	6.174	-84.710	56.295	1.00177.97
O									
ATOM	4591	CB	ILE	X	426	8.127	-82.803	55.161	1.00145.06
C									
ATOM	4592	CG1	ILE	X	426	8.373	-82.222	56.562	1.00152.59
C									
ATOM	4593	CG2	ILE	X	426	6.754	-82.434	54.541	1.00137.64
C									
ATOM	4594	CD1	ILE	X	426	9.628	-82.740	57.246	1.00156.85
C									
ATOM	4595	N	PRO	X	427	7.974	-85.974	56.990	1.00148.04
N									
ATOM	4596	CA	PRO	X	427	7.299	-86.704	58.079	1.00148.68
C									
ATOM	4597	C	PRO	X	427	6.577	-85.861	59.117	1.00159.21
C									
ATOM	4598	O	PRO	X	427	6.915	-84.710	59.245	1.00173.17
O									
ATOM	4599	CB	PRO	X	427	8.456	-87.416	58.792	1.00141.11
C									
ATOM	4600	CG	PRO	X	427	9.693	-86.789	58.279	1.00137.67
C									
ATOM	4601	CD	PRO	X	427	9.374	-86.411	56.881	1.00138.57
C									
ATOM	4602	N	ASP	X	428	5.539	-86.418	59.747	1.00170.35
N									
ATOM	4603	CA	ASP	X	428	4.543	-85.671	60.573	1.00181.27
C									
ATOM	4604	C	ASP	X	428	3.305	-85.048	59.838	1.00206.56
C									
ATOM	4605	O	ASP	X	428	3.207	-85.005	58.569	1.00195.44
O									
ATOM	4606	CB	ASP	X	428	5.182	-84.567	61.458	1.00164.85
C									
ATOM	4607	CG	ASP	X	428	6.235	-85.089	62.396	1.00152.59
C									

ATOM	4608	OD1	ASP	X	428	7.058	-85.925	61.957	1.00143.00
O									
ATOM	4609	OD2	ASP	X	428	6.297	-84.581	63.540	1.00139.45
O1-									
ATOM	4610	N	THR	X	429	2.351	-84.648	60.701	1.00216.23
N									
ATOM	4611	CA	THR	X	429	1.354	-83.583	60.459	1.00199.66
C									
ATOM	4612	C	THR	X	429	1.682	-82.297	61.297	1.00190.71
C									
ATOM	4613	O	THR	X	429	0.765	-81.616	61.749	1.00190.34
O									
ATOM	4614	CB	THR	X	429	-0.132	-84.097	60.733	1.00184.07
C									
ATOM	4615	OG1	THR	X	429	-0.713	-83.448	61.875	1.00162.19
O									
ATOM	4616	CG2	THR	X	429	-0.215	-85.655	60.940	1.00171.40
C									
ATOM	4617	N	GLU	X	430	2.977	-81.924	61.393	1.00181.69
N									
ATOM	4618	CA	GLU	X	430	3.465	-80.848	62.331	1.00178.46
C									
ATOM	4619	C	GLU	X	430	4.015	-79.516	61.671	1.00185.57
C									
ATOM	4620	O	GLU	X	430	4.210	-78.513	62.398	1.00157.01
O									
ATOM	4621	CB	GLU	X	430	4.533	-81.415	63.288	1.00171.53
C									
ATOM	4622	CG	GLU	X	430	3.988	-82.266	64.439	1.00174.27
C									
ATOM	4623	CD	GLU	X	430	3.675	-81.467	65.718	1.00170.85
C									
ATOM	4624	OE1	GLU	X	430	3.021	-80.401	65.608	1.00167.14
O									
ATOM	4625	OE2	GLU	X	430	4.034	-81.938	66.839	1.00152.17
O1-									
ATOM	4626	N	ASP	X	431	4.456	-79.589	60.388	1.00203.83
N									
ATOM	4627	CA	ASP	X	431	4.142	-78.561	59.300	1.00184.39
C									
ATOM	4628	C	ASP	X	431	3.845	-79.165	57.876	1.00162.13
C									
ATOM	4629	O	ASP	X	431	4.044	-78.484	56.863	1.00138.30
O									
ATOM	4630	CB	ASP	X	431	5.216	-77.414	59.150	1.00176.40
C									
ATOM	4631	CG	ASP	X	431	6.560	-77.720	59.822	1.00178.44
C									
ATOM	4632	OD1	ASP	X	431	6.583	-77.882	61.068	1.00182.53
O									
ATOM	4633	OD2	ASP	X	431	7.608	-77.621	59.123	1.00162.42
O1-									
ATOM	4634	N	GLU	X	432	3.287	-80.383	57.819	1.00151.42
N									

ATOM	4635	CA	GLU	X	432	3.211	-81.152	56.564	1.00149.41
C									
ATOM	4636	C	GLU	X	432	2.283	-80.471	55.514	1.00143.53
C									
ATOM	4637	O	GLU	X	432	2.032	-80.681	54.318	1.00118.98
O									
ATOM	4638	CB	GLU	X	432	2.676	-82.597	56.848	1.00 0.00
C									
ATOM	4639	CG	GLU	X	432	2.494	-83.438	55.571	1.00 0.00
C									
ATOM	4640	CD	GLU	X	432	1.986	-84.856	55.838	1.00 0.00
C									
ATOM	4641	OE1	GLU	X	432	2.538	-85.860	55.396	1.00 0.00
O									
ATOM	4642	OE2	GLU	X	432	0.850	-84.914	56.592	1.00 0.00
O1-									
ATOM	4643	N	ILE	X	433	1.410	-79.629	56.093	1.00 0.00
N									
ATOM	4644	CA	ILE	X	433	-0.039	-79.814	55.965	1.00 0.00
C									
ATOM	4645	C	ILE	X	433	-0.822	-78.620	55.396	1.00 0.00
C									
ATOM	4646	O	ILE	X	433	-2.025	-78.746	55.181	1.00 0.00
O									
ATOM	4647	CB	ILE	X	433	-0.562	-80.398	57.305	1.00 0.00
C									
ATOM	4648	CG2	ILE	X	433	-0.442	-79.424	58.496	1.00 0.00
C									
ATOM	4649	CG1	ILE	X	433	-1.998	-80.950	57.150	1.00 0.00
C									
ATOM	4650	CD1	ILE	X	433	-2.328	-82.073	58.141	1.00 0.00
C									
ATOM	4651	N	SER	X	434	-0.195	-77.462	55.159	1.00 0.00
N									
ATOM	4652	CA	SER	X	434	-0.951	-76.270	54.748	1.00 0.00
C									
ATOM	4653	C	SER	X	434	-1.516	-76.364	53.308	1.00 0.00
C									
ATOM	4654	O	SER	X	434	-2.715	-76.139	53.145	1.00 0.00
O									
ATOM	4655	CB	SER	X	434	-0.052	-75.027	54.840	1.00 0.00
C									
ATOM	4656	OG	SER	X	434	0.100	-74.616	56.180	1.00 0.00
O									
ATOM	4657	N	PRO	X	435	-0.776	-76.886	52.305	1.00 0.00
N									
ATOM	4658	CD	PRO	X	435	0.667	-76.850	52.150	1.00 0.00
C									
ATOM	4659	CG	PRO	X	435	0.857	-76.306	50.738	1.00 0.00
C									
ATOM	4660	CB	PRO	X	435	-0.317	-76.914	49.956	1.00 0.00
C									
ATOM	4661	CA	PRO	X	435	-1.336	-77.343	51.031	1.00 0.00
C									



ATOM	4662	C	PRO	X	435	-1.648	-78.856	51.089	1.00	0.00
C										
ATOM	4663	O	PRO	X	435	-1.347	-79.597	50.157	1.00	0.00
O										
ATOM	4664	N	ASP	X	436A	-2.145	-79.332	52.240	1.00	0.00
N										
ATOM	4665	CA	ASP	X	436A	-2.331	-80.731	52.661	1.00	0.00
C										
ATOM	4666	C	ASP	X	436A	-1.068	-81.620	52.727	1.00	0.00
C										
ATOM	4667	O	ASP	X	436A	-0.942	-82.386	53.676	1.00	0.00
O										
ATOM	4668	CB	ASP	X	436A	-3.356	-81.418	51.680	1.00	0.00
C										
ATOM	4669	CG	ASP	X	436A	-3.944	-82.760	52.134	1.00	0.00
C										
ATOM	4670	OD1	ASP	X	436A	-4.118	-83.711	51.375	1.00	0.00
O										
ATOM	4671	OD2	ASP	X	436A	-4.288	-82.806	53.455	1.00	0.00
O1-										
ATOM	4672	N	LYS	X	437A	-0.149	-81.535	51.760	1.00	0.00
N										
ATOM	4673	CA	LYS	X	437A	0.974	-82.472	51.610	1.00	0.00
C										
ATOM	4674	C	LYS	X	437A	2.235	-81.837	50.971	1.00	0.00
C										
ATOM	4675	O	LYS	X	437A	2.928	-82.494	50.198	1.00	0.00
O										
ATOM	4676	CB	LYS	X	437A	0.532	-83.690	50.728	1.00	0.00
C										
ATOM	4677	CG	LYS	X	437A	-0.428	-84.663	51.437	1.00	0.00
C										
ATOM	4678	CD	LYS	X	437A	0.145	-85.359	52.689	1.00	0.00
C										
ATOM	4679	CE	LYS	X	437A	1.474	-86.101	52.473	1.00	0.00
C										
ATOM	4680	NZ	LYS	X	437A	1.363	-87.158	51.454	1.00	0.00
N1+										
ATOM	4681	N	VAL	X	438A	2.432	-80.526	51.173	1.00	126.10
N										
ATOM	4682	CA	VAL	X	438A	3.190	-79.914	50.061	1.00	122.52
C										
ATOM	4683	C	VAL	X	438A	4.357	-79.090	50.625	1.00	121.56
C										
ATOM	4684	O	VAL	X	438A	4.197	-77.913	50.981	1.00	119.35
O										
ATOM	4685	CB	VAL	X	438A	2.225	-79.084	49.179	1.00	0.00
C										
ATOM	4686	CG1	VAL	X	438A	2.953	-78.168	48.180	1.00	0.00
C										
ATOM	4687	CG2	VAL	X	438A	1.281	-80.011	48.391	1.00	0.00
C										
ATOM	4688	N	ILE	X	439A	5.543	-79.736	50.700	1.00	114.70
N										

ATOM	4689	CA	ILE X 439A	6.875	-79.088	50.843	1.00109.68
C							
ATOM	4690	C	ILE X 439A	7.009	-77.796	49.949	1.00115.60
C							
ATOM	4691	O	ILE X 439A	6.391	-77.713	48.889	1.00124.98
O							
ATOM	4692	CB	ILE X 439A	8.016	-80.105	50.557	1.00 0.00
C							
ATOM	4693	CG2	ILE X 439A	8.077	-80.541	49.080	1.00 0.00
C							
ATOM	4694	CG1	ILE X 439A	9.366	-79.532	51.048	1.00 0.00
C							
ATOM	4695	CD1	ILE X 439A	10.530	-80.527	50.999	1.00 0.00
C							
ATOM	4696	N	LEU X 440A	7.722	-76.759	50.419	1.00116.83
N							
ATOM	4697	CA	LEU X 440A	8.193	-75.661	49.539	1.00109.60
C							
ATOM	4698	C	LEU X 440A	9.731	-75.588	49.671	1.00119.05
C							
ATOM	4699	O	LEU X 440A	10.241	-75.602	50.775	1.00144.06
O							
ATOM	4700	CB	LEU X 440A	7.491	-74.336	49.909	1.00 0.00
C							
ATOM	4701	CG	LEU X 440A	7.881	-73.138	49.013	1.00 0.00
C							
ATOM	4702	CD1	LEU X 440A	7.483	-73.347	47.542	1.00 0.00
C							
ATOM	4703	CD2	LEU X 440A	7.220	-71.854	49.540	1.00 0.00
C							
ATOM	4704	N	CYX X 441A	10.477	-75.582	48.563	1.00124.19
N							
ATOM	4705	CA	CYX X 441A	11.980	-75.541	48.619	1.00120.87
C							
ATOM	4706	C	CYX X 441A	12.435	-74.224	49.343	1.00125.45
C							
ATOM	4707	O	CYX X 441A	11.752	-73.197	49.233	1.00130.19
O							
ATOM	4708	CB	CYX X 441A	12.595	-75.591	47.170	1.00 0.00
C							
ATOM	4709	SG	CYX X 441A	14.282	-76.263	47.217	1.00 0.00
S							
ATOM	4710	N	LEU X 442A	13.537	-74.257	50.111	1.00121.00
N							
ATOM	4711	CA	LEU X 442A	13.970	-73.062	50.913	1.00114.82
C							
ATOM	4712	C	LEU X 442A	15.294	-72.407	50.399	1.00107.78
C							
ATOM	4713	OXT	LEU X 442A	16.351	-72.781	50.964	1.00107.78
O1-							
ATOM	4714	O	LEU X 442A	15.296	-71.540	49.494	1.00 97.58
O							
ATOM	4715	CB	LEU X 442A	14.173	-73.474	52.411	1.00 0.00
C							

ATOM	4716	CG	LEU X 442A	14.527	-72.321	53.379	1.00	0.00
C								
ATOM	4717	CD1	LEU X 442A	13.421	-71.254	53.455	1.00	0.00
C								
ATOM	4718	CD2	LEU X 442A	14.791	-72.880	54.786	1.00	0.00
C								
HETATM	4719	ZN	ZN X 443A	0.241	-97.057	45.945	1.00	191.76
ZN2+								
HETATM	4720	C1	85C X 444A	9.892	-104.066	28.442	1.00	74.72
C								
HETATM	4721	C2	85C X 444A	10.699	-105.211	28.433	1.00	92.33
C								
HETATM	4722	C3	85C X 444A	11.862	-105.245	29.208	1.00	91.86
C								
HETATM	4723	C4	85C X 444A	10.226	-102.979	29.245	1.00	70.69
C								
HETATM	4724	C5	85C X 444A	11.366	-103.045	30.044	1.00	85.14
C								
HETATM	4725	C6	85C X 444A	12.183	-104.153	30.003	1.00	85.29
C								
HETATM	4726	N1	85C X 444A	13.048	-102.629	31.502	1.00	95.36
N								
HETATM	4727	N2	85C X 444A	16.443	-101.845	32.525	1.00	91.63
N								
HETATM	4728	N3	85C X 444A	11.320	-106.617	26.648	1.00	132.79
N								
HETATM	4729	O1	85C X 444A	11.462	-100.997	31.329	1.00	76.58
O								
HETATM	4730	C7	85C X 444A	13.348	-103.984	30.949	1.00	94.04
C								
HETATM	4731	C8	85C X 444A	11.889	-102.107	31.004	1.00	90.57
C								
HETATM	4732	C9	85C X 444A	13.926	-101.918	32.451	1.00	92.73
C								
HETATM	4733	C10	85C X 444A	14.112	-102.846	33.667	1.00	108.48
C								
HETATM	4734	C11	85C X 444A	15.112	-102.150	34.609	1.00	109.24
C								
HETATM	4735	C12	85C X 444A	16.432	-102.087	33.865	1.00	94.39
C								
HETATM	4736	C13	85C X 444A	15.301	-101.679	31.802	1.00	88.11
C								
HETATM	4737	C14	85C X 444A	10.284	-106.435	27.645	1.00	115.09
C								
HETATM	4738	C15	85C X 444A	11.185	-106.259	25.362	1.00	133.93
C								
HETATM	4739	O2	85C X 444A	15.443	-101.340	30.645	1.00	116.95
O								
HETATM	4740	C17	85C X 444A	11.780	-106.974	22.483	1.00	160.22
C								
HETATM	4741	C18	85C X 444A	12.114	-107.064	21.134	1.00	185.44
C								
HETATM	4742	CL1	85C X 444A	11.222	-108.164	20.146	1.00	235.51
CL								

HETATM	4743	C19	85C	X	444A	13.185-106.324	20.606	1.00210.86
C								
HETATM	4744	C22	85C	X	444A	13.557-106.415	19.137	1.00211.92
C								
HETATM	4745	C20	85C	X	444A	13.939-105.521	21.463	1.00178.84
C								
HETATM	4746	C21	85C	X	444A	13.645-105.464	22.821	1.00149.64
C								
HETATM	4747	C16	85C	X	444A	12.572-106.199	23.322	1.00144.90
C								
HETATM	4748	N4	85C	X	444A	12.367-106.214	24.709	1.00131.01
N								
HETATM	4749	O4	85C	X	444A	10.110-105.952	24.851	1.00130.08
O								
HETATM	4750	O3	85C	X	444A	17.500-102.256	34.402	1.00 91.61
O								
TER	4751		85C	X	444			
ATOM	4752	CH3	ACE		1	31.016-122.895	16.165	1.00 0.00
C								
ATOM	4753	C	ACE		1	31.213-122.158	14.873	1.00 0.00
C								
ATOM	4754	O	ACE		1	30.772-120.984	14.745	1.00 0.00
O								
ATOM	4755	N	ILE		2	31.745-122.843	13.860	1.00 0.00
N								
ATOM	4756	CA	ILE		2	31.661-122.316	12.445	1.00 0.00
C								
ATOM	4757	CB	ILE		2	32.567-123.105	11.442	1.00 0.00
C								
ATOM	4758	CG2	ILE		2	32.261-122.539	10.039	1.00 0.00
C								
ATOM	4759	CG1	ILE		2	34.084-122.883	11.755	1.00 0.00
C								
ATOM	4760	CD1	ILE		2	34.843-124.232	11.594	1.00 0.00
C								
ATOM	4761	C	ILE		2	30.223-122.403	11.993	1.00 0.00
C								
ATOM	4762	O	ILE		2	29.613-123.496	12.045	1.00 0.00
O								
ATOM	4763	N	ARG		3	29.661-121.306	11.396	1.00 0.00
N								
ATOM	4764	CA	ARG		3	28.466-121.418	10.523	1.00 0.00
C								
ATOM	4765	CB	ARG		3	27.254-120.888	11.301	1.00 0.00
C								
ATOM	4766	CG	ARG		3	26.676-121.726	12.437	1.00 0.00
C								
ATOM	4767	CD	ARG		3	27.261-121.449	13.840	1.00 0.00
C								
ATOM	4768	NE	ARG		3	26.816-122.383	14.924	1.00 0.00
N								
ATOM	4769	CZ	ARG		3	27.393-123.529	15.184	1.00 0.00
C								

ATOM	4770	NH1	ARG	3	28.343-124.005	14.431	1.00	0.00
N								
ATOM	4771	NH2	ARG	3	26.917-124.204	16.167	1.00	0.00
N1+								
ATOM	4772	C	ARG	3	28.534-120.608	9.190	1.00	0.00
C								
ATOM	4773	O	ARG	3	29.015-119.507	9.208	1.00	0.00
O								
ATOM	4774	N	LEU	4	28.085-121.176	8.076	1.00	0.00
N								
ATOM	4775	CA	LEU	4	27.688-120.441	6.824	1.00	0.00
C								
ATOM	4776	CB	LEU	4	28.762-120.523	5.675	1.00	0.00
C								
ATOM	4777	CG	LEU	4	28.398-119.916	4.285	1.00	0.00
C								
ATOM	4778	CD1	LEU	4	29.644-119.230	3.702	1.00	0.00
C								
ATOM	4779	CD2	LEU	4	27.906-120.917	3.191	1.00	0.00
C								
ATOM	4780	C	LEU	4	26.311-120.918	6.266	1.00	0.00
C								
ATOM	4781	O	LEU	4	26.251-122.045	5.736	1.00	0.00
O								
ATOM	4782	N	PRO	5	25.248-120.141	6.454	1.00	0.00
N								
ATOM	4783	CD	PRO	5	25.082-119.008	7.354	1.00	0.00
C								
ATOM	4784	CG	PRO	5	23.736-119.238	8.000	1.00	0.00
C								
ATOM	4785	CB	PRO	5	22.906-119.608	6.783	1.00	0.00
C								
ATOM	4786	CA	PRO	5	23.901-120.429	5.989	1.00	0.00
C								
ATOM	4787	C	PRO	5	23.798-120.342	4.440	1.00	0.00
C								
ATOM	4788	O	PRO	5	24.383-119.485	3.837	1.00	0.00
O								
ATOM	4789	N	ILE	6	23.200-121.297	3.744	1.00	0.00
N								
ATOM	4790	CA	ILE	6	22.953-121.318	2.326	1.00	0.00
C								
ATOM	4791	CB	ILE	6	22.866-122.757	1.814	1.00	0.00
C								
ATOM	4792	CG2	ILE	6	22.476-122.850	0.297	1.00	0.00
C								
ATOM	4793	CG1	ILE	6	24.315-123.427	1.988	1.00	0.00
C								
ATOM	4794	CD1	ILE	6	24.181-124.960	1.995	1.00	0.00
C								
ATOM	4795	C	ILE	6	21.748-120.452	1.971	1.00	0.00
C								
ATOM	4796	O	ILE	6	20.814-120.321	2.803	1.00	0.00
O								

ATOM	4797	N	VAL	7	21.740-119.786	0.822	1.00	0.00
N								
ATOM	4798	CA	VAL	7	20.521-119.086	0.339	1.00	0.00
C								
ATOM	4799	CB	VAL	7	20.749-117.607	0.700	1.00	0.00
C								
ATOM	4800	CG1	VAL	7	21.829-116.851	-0.069	1.00	0.00
C								
ATOM	4801	CG2	VAL	7	19.429-116.808	0.515	1.00	0.00
C								
ATOM	4802	C	VAL	7	20.314-119.279	-1.147	1.00	0.00
C								
ATOM	4803	O	VAL	7	19.240-118.913	-1.605	1.00	0.00
O								
ATOM	4804	N	ASP	8	21.217-119.843	-1.943	1.00	0.00
N								
ATOM	4805	CA	ASP	8	20.957-120.322	-3.305	1.00	0.00
C								
ATOM	4806	CB	ASP	8	20.898-119.186	-4.314	1.00	0.00
C								
ATOM	4807	CG	ASP	8	20.134-119.616	-5.573	1.00	0.00
C								
ATOM	4808	OD1	ASP	8	19.523-120.702	-5.680	1.00	0.00
O								
ATOM	4809	OD2	ASP	8	20.301-118.984	-6.654	1.00	0.00
O1-								
ATOM	4810	C	ASP	8	22.078-121.424	-3.652	1.00	0.00
C								
ATOM	4811	O	ASP	8	23.204-121.381	-3.156	1.00	0.00
O								
ATOM	4812	N	LYS	9	21.713-122.404	-4.418	1.00	0.00
N								
ATOM	4813	CA	LYS	9	22.594-123.511	-4.815	1.00	0.00
C								
ATOM	4814	CB	LYS	9	22.259-124.655	-3.857	1.00	0.00
C								
ATOM	4815	CG	LYS	9	20.919-125.406	-4.148	1.00	0.00
C								
ATOM	4816	CD	LYS	9	19.671-124.533	-4.467	1.00	0.00
C								
ATOM	4817	CE	LYS	9	18.302-125.225	-4.641	1.00	0.00
C								
ATOM	4818	NZ	LYS	9	17.211-124.345	-5.041	1.00	0.00
N1+								
ATOM	4819	C	LYS	9	22.517-123.856	-6.360	1.00	0.00
C								
ATOM	4820	O	LYS	9	21.653-123.463	-7.116	1.00	0.00
O								
ATOM	4821	N	TYR	10	23.663-124.407	-6.754	1.00	0.00
N								
ATOM	4822	CA	TYR	10	23.972-124.825	-8.129	1.00	0.00
C								
ATOM	4823	CB	TYR	10	24.787-123.712	-8.831	1.00	0.00
C								

ATOM	4824	CG	TYR	10	24.503-122.276	-8.335	1.00	0.00
C								
ATOM	4825	CD1	TYR	10	23.567-121.465	-9.080	1.00	0.00
C								
ATOM	4826	CE1	TYR	10	23.375-120.126	-8.646	1.00	0.00
C								
ATOM	4827	CZ	TYR	10	23.972-119.566	-7.513	1.00	0.00
C								
ATOM	4828	OH	TYR	10	23.583-118.270	-7.176	1.00	0.00
O								
ATOM	4829	CE2	TYR	10	24.985-120.263	-6.861	1.00	0.00
C								
ATOM	4830	CD2	TYR	10	25.228-121.625	-7.266	1.00	0.00
C								
ATOM	4831	C	TYR	10	24.701-126.173	-8.149	1.00	0.00
C								
ATOM	4832	O	TYR	10	25.467-126.551	-7.260	1.00	0.00
O								
ATOM	4833	N	LYS	11	24.568-126.922	-9.285	1.00	0.00
N								
ATOM	4834	CA	LYS	11	25.324-128.132	-9.647	1.00	0.00
C								
ATOM	4835	CB	LYS	11	24.479-129.391	-9.193	1.00	0.00
C								
ATOM	4836	CG	LYS	11	24.488-129.617	-7.694	1.00	0.00
C								
ATOM	4837	CD	LYS	11	23.763-130.954	-7.336	1.00	0.00
C								
ATOM	4838	CE	LYS	11	23.608-131.043	-5.796	1.00	0.00
C								
ATOM	4839	NZ	LYS	11	22.654-132.164	-5.485	1.00	0.00
N1+								
ATOM	4840	C	LYS	11	25.646-128.297	-11.153	1.00	0.00
C								
ATOM	4841	O	LYS	11	26.363-129.204	-11.537	1.00	0.00
O								
ATOM	4842	N	ASP	12	25.053-127.485	-11.936	1.00	0.00
N								
ATOM	4843	CA	ASP	12	25.395-127.386	-13.349	1.00	0.00
C								
ATOM	4844	CB	ASP	12	24.727-126.163	-13.986	1.00	0.00
C								
ATOM	4845	CG	ASP	12	23.217-126.376	-14.139	1.00	0.00
C								
ATOM	4846	OD1	ASP	12	22.428-125.389	-14.060	1.00	0.00
O								
ATOM	4847	OD2	ASP	12	22.718-127.519	-14.133	1.00	0.00
O1-								
ATOM	4848	C	ASP	12	26.920-127.255	-13.411	1.00	0.00
C								
ATOM	4849	O	ASP	12	27.479-126.250	-13.010	1.00	0.00
O								
ATOM	4850	N	MET	13	27.561-128.291	-14.020	1.00	0.00
N								

ATOM	4851	CA	MET	13	28.977-128.431	-14.147	1.00	0.00
C								
ATOM	4852	CB	MET	13	29.456-127.558	-15.254	1.00	0.00
C								
ATOM	4853	CG	MET	13	30.847-127.927	-15.783	1.00	0.00
C								
ATOM	4854	SD	MET	13	31.066-129.679	-16.332	1.00	0.00
S								
ATOM	4855	CE	MET	13	29.707-129.951	-17.520	1.00	0.00
C								
ATOM	4856	C	MET	13	29.800-128.365	-12.911	1.00	0.00
C								
ATOM	4857	O	MET	13	30.945-127.880	-12.962	1.00	0.00
O								
ATOM	4858	N	GLY	14	29.366-128.930	-11.783	1.00	0.00
N								
ATOM	4859	CA	GLY	14	30.013-129.086	-10.551	1.00	0.00
C								
ATOM	4860	C	GLY	14	29.364-128.291	-9.429	1.00	0.00
C								
ATOM	4861	O	GLY	14	28.671-127.301	-9.685	1.00	0.00
O								
ATOM	4862	N	THR	15	29.413-128.720	-8.167	1.00	0.00
N								
ATOM	4863	CA	THR	15	28.729-128.044	-7.061	1.00	0.00
C								
ATOM	4864	CB	THR	15	28.797-128.865	-5.846	1.00	0.00
C								
ATOM	4865	CG2	THR	15	27.721-128.366	-4.796	1.00	0.00
C								
ATOM	4866	OG1	THR	15	28.444-130.173	-6.022	1.00	0.00
O								
ATOM	4867	C	THR	15	29.308-126.681	-6.700	1.00	0.00
C								
ATOM	4868	O	THR	15	30.521-126.512	-6.609	1.00	0.00
O								
ATOM	4869	N	VAL	16	28.386-125.808	-6.512	1.00	0.00
N								
ATOM	4870	CA	VAL	16	28.552-124.409	-6.041	1.00	0.00
C								
ATOM	4871	CB	VAL	16	28.636-123.344	-7.158	1.00	0.00
C								
ATOM	4872	CG1	VAL	16	29.112-122.077	-6.433	1.00	0.00
C								
ATOM	4873	CG2	VAL	16	29.726-123.536	-8.212	1.00	0.00
C								
ATOM	4874	C	VAL	16	27.433-124.109	-5.054	1.00	0.00
C								
ATOM	4875	O	VAL	16	26.296-124.446	-5.301	1.00	0.00
O								
ATOM	4876	N	VAL	17	27.655-123.256	-4.068	1.00	0.00
N								
ATOM	4877	CA	VAL	17	26.502-122.671	-3.264	1.00	0.00
C								



ATOM	4878	CB	VAL	17	26.193-123.491	-2.048	1.00	0.00
C								
ATOM	4879	CG1	VAL	17	25.996-124.964	-2.356	1.00	0.00
C								
ATOM	4880	CG2	VAL	17	27.315-123.523	-1.020	1.00	0.00
C								
ATOM	4881	C	VAL	17	26.771-121.189	-2.948	1.00	0.00
C								
ATOM	4882	O	VAL	17	27.874-120.742	-2.928	1.00	0.00
O								
ATOM	4883	N	LEU	18	25.734-120.365	-2.708	1.00	0.00
N								
ATOM	4884	CA	LEU	18	25.773-118.932	-2.300	1.00	0.00
C								
ATOM	4885	CB	LEU	18	24.781-118.221	-3.169	1.00	0.00
C								
ATOM	4886	CG	LEU	18	24.529-116.712	-2.919	1.00	0.00
C								
ATOM	4887	CD1	LEU	18	25.777-115.797	-2.933	1.00	0.00
C								
ATOM	4888	CD2	LEU	18	23.639-116.275	-4.125	1.00	0.00
C								
ATOM	4889	C	LEU	18	25.352-118.717	-0.887	1.00	0.00
C								
ATOM	4890	O	LEU	18	24.451-119.388	-0.376	1.00	0.00
O								
ATOM	4891	N	GLY	19	26.071-117.813	-0.244	1.00	0.00
N								
ATOM	4892	CA	GLY	19	25.817-117.677	1.198	1.00	0.00
C								
ATOM	4893	C	GLY	19	26.956-116.864	1.896	1.00	0.00
C								
ATOM	4894	O	GLY	19	28.027-116.605	1.366	1.00	0.00
O								
ATOM	4895	N	LYS	20	26.615-116.278	3.053	1.00	0.00
N								
ATOM	4896	CA	LYS	20	27.476-115.443	3.907	1.00	0.00
C								
ATOM	4897	CB	LYS	20	26.596-114.357	4.427	1.00	0.00
C								
ATOM	4898	CG	LYS	20	27.379-113.141	4.951	1.00	0.00
C								
ATOM	4899	CD	LYS	20	26.542-112.259	5.863	1.00	0.00
C								
ATOM	4900	CE	LYS	20	26.413-113.046	7.184	1.00	0.00
C								
ATOM	4901	NZ	LYS	20	25.540-112.417	8.231	1.00	0.00
N1+								
ATOM	4902	C	LYS	20	28.031-116.248	5.081	1.00	0.00
C								
ATOM	4903	O	LYS	20	27.253-116.877	5.733	1.00	0.00
O								
ATOM	4904	N	LEU	21	29.308-116.100	5.381	1.00	0.00
N								

ATOM	4905	CA	LEU	21	30.016-116.688	6.540	1.00	0.00
C								
ATOM	4906	CB	LEU	21	31.496-116.603	6.274	1.00	0.00
C								
ATOM	4907	CG	LEU	21	32.466-116.857	7.460	1.00	0.00
C								
ATOM	4908	CD1	LEU	21	32.343-118.323	8.039	1.00	0.00
C								
ATOM	4909	CD2	LEU	21	33.932-116.595	7.099	1.00	0.00
C								
ATOM	4910	C	LEU	21	29.524-115.964	7.818	1.00	0.00
C								
ATOM	4911	O	LEU	21	29.468-114.712	7.792	1.00	0.00
O								
ATOM	4912	N	GLU	22	29.285-116.679	8.929	1.00	0.00
N								
ATOM	4913	CA	GLU	22	28.683-116.097	10.161	1.00	0.00
C								
ATOM	4914	CB	GLU	22	27.333-116.718	10.489	1.00	0.00
C								
ATOM	4915	CG	GLU	22	26.230-116.281	9.461	1.00	0.00
C								
ATOM	4916	CD	GLU	22	25.529-114.949	9.783	1.00	0.00
C								
ATOM	4917	OE1	GLU	22	26.202-114.109	10.260	1.00	0.00
O								
ATOM	4918	OE2	GLU	22	24.381-114.765	9.312	1.00	0.00
O1-								
ATOM	4919	C	GLU	22	29.672-116.213	11.309	1.00	0.00
C								
ATOM	4920	O	GLU	22	29.656-115.411	12.248	1.00	0.00
O								
ATOM	4921	N	SER	23	30.474-117.246	11.440	1.00	0.00
N								
ATOM	4922	CA	SER	23	31.429-117.360	12.550	1.00	0.00
C								
ATOM	4923	CB	SER	23	30.665-117.730	13.793	1.00	0.00
C								
ATOM	4924	OG	SER	23	31.446-118.358	14.690	1.00	0.00
O								
ATOM	4925	C	SER	23	32.578-118.387	12.202	1.00	0.00
C								
ATOM	4926	O	SER	23	32.325-119.151	11.229	1.00	0.00
O								
ATOM	4927	N	GLY	24	33.810-118.406	12.787	1.00	0.00
N								
ATOM	4928	CA	GLY	24	34.847-119.311	12.279	1.00	0.00
C								
ATOM	4929	C	GLY	24	35.484-118.867	10.969	1.00	0.00
C								
ATOM	4930	O	GLY	24	35.723-117.688	10.738	1.00	0.00
O								
ATOM	4931	N	SER	25	35.708-119.865	10.134	1.00	0.00
N								

ATOM	4932	CA	SER	25	36.292-119.746	8.821	1.00	0.00
C								
ATOM	4933	CB	SER	25	37.809-119.470	8.924	1.00	0.00
C								
ATOM	4934	OG	SER	25	38.470-120.635	9.460	1.00	0.00
O								
ATOM	4935	C	SER	25	36.099-120.963	7.909	1.00	0.00
C								
ATOM	4936	O	SER	25	35.836-122.079	8.422	1.00	0.00
O								
ATOM	4937	N	ILE	26	36.154-120.752	6.626	1.00	0.00
N								
ATOM	4938	CA	ILE	26	35.782-121.731	5.581	1.00	0.00
C								
ATOM	4939	CB	ILE	26	34.316-121.656	5.076	1.00	0.00
C								
ATOM	4940	CG2	ILE	26	34.050-122.637	3.890	1.00	0.00
C								
ATOM	4941	CG1	ILE	26	33.465-122.068	6.315	1.00	0.00
C								
ATOM	4942	CD1	ILE	26	31.937-122.033	5.962	1.00	0.00
C								
ATOM	4943	C	ILE	26	36.841-121.600	4.417	1.00	0.00
C								
ATOM	4944	O	ILE	26	36.786-120.613	3.712	1.00	0.00
O								
ATOM	4945	N	CYS	27	37.642-122.623	4.238	1.00	0.00
N								
ATOM	4946	CA	CYS	27	38.817-122.666	3.324	1.00	0.00
C								
ATOM	4947	CB	CYS	27	40.071-122.517	4.187	1.00	0.00
C								
ATOM	4948	SG	CYS	27	41.650-122.373	3.283	1.00	0.00
S								
ATOM	4949	C	CYS	27	38.899-123.860	2.313	1.00	0.00
C								
ATOM	4950	O	CYS	27	38.301-124.880	2.667	1.00	0.00
O								
ATOM	4951	N	LYS	28	39.664-123.640	1.153	1.00	0.00
N								
ATOM	4952	CA	LYS	28	39.908-124.793	0.322	1.00	0.00
C								
ATOM	4953	CB	LYS	28	40.950-124.342	-0.751	1.00	0.00
C								
ATOM	4954	CG	LYS	28	40.322-123.413	-1.808	1.00	0.00
C								
ATOM	4955	CD	LYS	28	41.006-123.371	-3.179	1.00	0.00
C								
ATOM	4956	CE	LYS	28	41.407-124.746	-3.829	1.00	0.00
C								
ATOM	4957	NZ	LYS	28	41.833-124.651	-5.261	1.00	0.00
N1+								
ATOM	4958	C	LYS	28	40.528-125.983	1.086	1.00	0.00
C								

ATOM	4959	O	LYS	28	41.465-125.841	1.933	1.00	0.00
O								
ATOM	4960	N	GLY	29	39.953-127.163	0.820	1.00	0.00
N								
ATOM	4961	CA	GLY	29	40.293-128.419	1.494	1.00	0.00
C								
ATOM	4962	C	GLY	29	39.659-128.689	2.807	1.00	0.00
C								
ATOM	4963	O	GLY	29	39.803-129.802	3.347	1.00	0.00
O								
ATOM	4964	N	GLN	30	38.993-127.717	3.390	1.00	0.00
N								
ATOM	4965	CA	GLN	30	38.380-127.926	4.724	1.00	0.00
C								
ATOM	4966	CB	GLN	30	38.061-126.579	5.365	1.00	0.00
C								
ATOM	4967	CG	GLN	30	37.550-126.652	6.788	1.00	0.00
C								
ATOM	4968	CD	GLN	30	37.258-125.214	7.203	1.00	0.00
C								
ATOM	4969	OE1	GLN	30	37.860-124.251	6.760	1.00	0.00
O								
ATOM	4970	NE2	GLN	30	36.400-124.935	8.085	1.00	0.00
N								
ATOM	4971	C	GLN	30	37.074-128.732	4.557	1.00	0.00
C								
ATOM	4972	O	GLN	30	36.367-128.580	3.532	1.00	0.00
O								
ATOM	4973	N	GLN	31	36.809-129.726	5.400	1.00	0.00
N								
ATOM	4974	CA	GLN	31	35.553-130.539	5.457	1.00	0.00
C								
ATOM	4975	CB	GLN	31	35.987-131.928	5.896	1.00	0.00
C								
ATOM	4976	CG	GLN	31	36.833-132.449	4.681	1.00	0.00
C								
ATOM	4977	CD	GLN	31	36.667-133.928	4.607	1.00	0.00
C								
ATOM	4978	OE1	GLN	31	36.494-134.581	5.617	1.00	0.00
O								
ATOM	4979	NE2	GLN	31	36.849-134.574	3.469	1.00	0.00
N								
ATOM	4980	C	GLN	31	34.674-129.886	6.562	1.00	0.00
C								
ATOM	4981	O	GLN	31	35.127-129.462	7.644	1.00	0.00
O								
ATOM	4982	N	LEU	32	33.428-129.973	6.243	1.00	0.00
N								
ATOM	4983	CA	LEU	32	32.326-129.330	6.920	1.00	0.00
C								
ATOM	4984	CB	LEU	32	32.029-127.942	6.344	1.00	0.00
C								
ATOM	4985	CG	LEU	32	33.196-126.966	6.327	1.00	0.00
C								

ATOM	4986	CD1	LEU	32	33.518-126.443	4.921	1.00	0.00
C								
ATOM	4987	CD2	LEU	32	32.965-125.732	7.289	1.00	0.00
C								
ATOM	4988	C	LEU	32	31.050-130.311	6.844	1.00	0.00
C								
ATOM	4989	O	LEU	32	30.896-131.049	5.899	1.00	0.00
O								
ATOM	4990	N	VAL	33	30.145-130.237	7.846	1.00	0.00
N								
ATOM	4991	CA	VAL	33	28.846-131.013	8.007	1.00	0.00
C								
ATOM	4992	CB	VAL	33	28.788-131.671	9.368	1.00	0.00
C								
ATOM	4993	CG1	VAL	33	27.256-132.067	9.644	1.00	0.00
C								
ATOM	4994	CG2	VAL	33	29.744-132.886	9.451	1.00	0.00
C								
ATOM	4995	C	VAL	33	27.702-129.989	7.805	1.00	0.00
C								
ATOM	4996	O	VAL	33	27.530-129.054	8.586	1.00	0.00
O								
ATOM	4997	N	MET	34	27.019-130.185	6.665	1.00	0.00
N								
ATOM	4998	CA	MET	34	25.738-129.534	6.330	1.00	0.00
C								
ATOM	4999	CB	MET	34	25.468-129.684	4.842	1.00	0.00
C								
ATOM	5000	CG	MET	34	24.401-128.879	4.308	1.00	0.00
C								
ATOM	5001	SD	MET	34	24.263-128.908	2.493	1.00	0.00
S								
ATOM	5002	CE	MET	34	24.161-130.640	2.159	1.00	0.00
C								
ATOM	5003	C	MET	34	24.546-130.083	7.169	1.00	0.00
C								
ATOM	5004	O	MET	34	24.191-131.247	7.201	1.00	0.00
O								
ATOM	5005	N	MET	35	23.955-129.094	7.878	1.00	0.00
N								
ATOM	5006	CA	MET	35	22.751-129.256	8.637	1.00	0.00
C								
ATOM	5007	CB	MET	35	22.887-128.506	9.983	1.00	0.00
C								
ATOM	5008	CG	MET	35	24.036-129.197	10.788	1.00	0.00
C								
ATOM	5009	SD	MET	35	23.725-130.916	11.147	1.00	0.00
S								
ATOM	5010	CE	MET	35	22.372-130.910	12.404	1.00	0.00
C								
ATOM	5011	C	MET	35	21.583-128.658	7.851	1.00	0.00
C								
ATOM	5012	O	MET	35	21.765-127.715	7.081	1.00	0.00
O								

ATOM	5013	N	PRO	36	20.323-129.161	8.062	1.00	0.00
N								
ATOM	5014	CD	PRO	36	19.133-128.690	7.367	1.00	0.00
C								
ATOM	5015	CG	PRO	36	17.911-129.419	7.834	1.00	0.00
C								
ATOM	5016	CB	PRO	36	18.355-129.921	9.189	1.00	0.00
C								
ATOM	5017	CA	PRO	36	19.875-130.007	9.141	1.00	0.00
C								
ATOM	5018	C	PRO	36	20.327-131.532	8.886	1.00	0.00
C								
ATOM	5019	O	PRO	36	20.572-132.304	9.873	1.00	0.00
O								
ATOM	5020	N	ASN	37	20.519-131.986	7.669	1.00	0.00
N								
ATOM	5021	CA	ASN	37	20.694-133.408	7.414	1.00	0.00
C								
ATOM	5022	CB	ASN	37	20.184-133.809	5.992	1.00	0.00
C								
ATOM	5023	CG	ASN	37	18.799-133.281	5.646	1.00	0.00
C								
ATOM	5024	OD1	ASN	37	17.903-133.148	6.492	1.00	0.00
O								
ATOM	5025	ND2	ASN	37	18.509-132.976	4.457	1.00	0.00
N								
ATOM	5026	C	ASN	37	22.050-134.142	7.794	1.00	0.00
C								
ATOM	5027	O	ASN	37	22.294-135.293	7.391	1.00	0.00
O								
ATOM	5028	N	LYS	38	22.898-133.487	8.558	1.00	0.00
N								
ATOM	5029	CA	LYS	38	24.134-134.039	9.137	1.00	0.00
C								
ATOM	5030	CB	LYS	38	23.725-134.832	10.371	1.00	0.00
C								
ATOM	5031	CG	LYS	38	24.940-135.182	11.251	1.00	0.00
C								
ATOM	5032	CD	LYS	38	24.521-135.707	12.629	1.00	0.00
C								
ATOM	5033	CE	LYS	38	23.526-136.884	12.558	1.00	0.00
C								
ATOM	5034	NZ	LYS	38	22.977-137.221	13.923	1.00	0.00
N1+								
ATOM	5035	C	LYS	38	25.052-134.708	8.038	1.00	0.00
C								
ATOM	5036	O	LYS	38	25.611-135.858	8.184	1.00	0.00
O								
ATOM	5037	N	HIE	39	25.212-134.021	6.896	1.00	0.00
N								
ATOM	5038	CA	HIE	39	25.991-134.474	5.718	1.00	0.00
C								
ATOM	5039	CB	HIE	39	25.227-134.495	4.405	1.00	0.00
C								

ATOM	5040	CG	HIE	39	25.985-134.881	3.149	1.00	0.00
C								
ATOM	5041	ND1	HIE	39	26.395-136.170	2.840	1.00	0.00
N								
ATOM	5042	CE1	HIE	39	26.973-136.183	1.667	1.00	0.00
C								
ATOM	5043	NE2	HIE	39	26.891-134.970	1.056	1.00	0.00
N								
ATOM	5044	CD2	HIE	39	26.353-134.114	2.035	1.00	0.00
C								
ATOM	5045	C	HIE	39	27.354-133.801	5.473	1.00	0.00
C								
ATOM	5046	O	HIE	39	27.502-132.596	5.291	1.00	0.00
O								
ATOM	5047	N	ASN	40	28.443-134.575	5.222	1.00	0.00
N								
ATOM	5048	CA	ASN	40	29.784-134.055	4.933	1.00	0.00
C								
ATOM	5049	CB	ASN	40	30.724-135.198	5.258	1.00	0.00
C								
ATOM	5050	CG	ASN	40	31.112-135.214	6.739	1.00	0.00
C								
ATOM	5051	OD1	ASN	40	32.100-134.663	7.200	1.00	0.00
O								
ATOM	5052	ND2	ASN	40	30.298-135.845	7.522	1.00	0.00
N								
ATOM	5053	C	ASN	40	30.053-133.619	3.494	1.00	0.00
C								
ATOM	5054	O	ASN	40	29.915-134.326	2.495	1.00	0.00
O								
ATOM	5055	N	VAL	41	30.599-132.415	3.362	1.00	0.00
N								
ATOM	5056	CA	VAL	41	31.162-131.857	2.134	1.00	0.00
C								
ATOM	5057	CB	VAL	41	30.150-130.823	1.533	1.00	0.00
C								
ATOM	5058	CG1	VAL	41	28.758-131.419	1.191	1.00	0.00
C								
ATOM	5059	CG2	VAL	41	29.803-129.677	2.534	1.00	0.00
C								
ATOM	5060	C	VAL	41	32.503-131.130	2.330	1.00	0.00
C								
ATOM	5061	O	VAL	41	32.972-131.021	3.442	1.00	0.00
O								
ATOM	5062	N	GLU	42	33.091-130.627	1.273	1.00	0.00
N								
ATOM	5063	CA	GLU	42	34.518-130.214	1.149	1.00	0.00
C								
ATOM	5064	CB	GLU	42	35.380-131.530	1.009	1.00	0.00
C								
ATOM	5065	CG	GLU	42	36.912-131.221	1.108	1.00	0.00
C								
ATOM	5066	CD	GLU	42	37.805-132.459	0.981	1.00	0.00
C								

ATOM	5067	OE1	GLU	42	37.319-133.624	0.995	1.00	0.00
O								
ATOM	5068	OE2	GLU	42	39.049-132.267	0.913	1.00	0.00
O1-								
ATOM	5069	C	GLU	42	34.676-129.167	0.018	1.00	0.00
C								
ATOM	5070	O	GLU	42	34.062-129.307	-1.015	1.00	0.00
O								
ATOM	5071	N	VAL	43	35.438-128.178	0.345	1.00	0.00
N								
ATOM	5072	CA	VAL	43	35.381-126.927	-0.371	1.00	0.00
C								
ATOM	5073	CB	VAL	43	35.487-125.680	0.523	1.00	0.00
C								
ATOM	5074	CG1	VAL	43	35.927-124.351	-0.144	1.00	0.00
C								
ATOM	5075	CG2	VAL	43	34.139-125.406	1.191	1.00	0.00
C								
ATOM	5076	C	VAL	43	36.591-126.891	-1.360	1.00	0.00
C								
ATOM	5077	O	VAL	43	37.719-127.235	-1.055	1.00	0.00
O								
ATOM	5078	N	LEU	44	36.255-126.503	-2.582	1.00	0.00
N								
ATOM	5079	CA	LEU	44	37.181-126.528	-3.700	1.00	0.00
C								
ATOM	5080	CB	LEU	44	36.393-127.286	-4.815	1.00	0.00
C								
ATOM	5081	CG	LEU	44	37.133-127.301	-6.147	1.00	0.00
C								
ATOM	5082	CD1	LEU	44	38.528-127.966	-6.144	1.00	0.00
C								
ATOM	5083	CD2	LEU	44	36.234-128.038	-7.169	1.00	0.00
C								
ATOM	5084	C	LEU	44	37.645-125.103	-4.086	1.00	0.00
C								
ATOM	5085	O	LEU	44	38.678-124.990	-4.716	1.00	0.00
O								
ATOM	5086	N	GLY	45	36.922-124.040	-3.743	1.00	0.00
N								
ATOM	5087	CA	GLY	45	37.187-122.662	-4.274	1.00	0.00
C								
ATOM	5088	C	GLY	45	36.050-121.650	-4.093	1.00	0.00
C								
ATOM	5089	O	GLY	45	34.999-122.008	-3.548	1.00	0.00
O								
ATOM	5090	N	ILE	46	36.181-120.428	-4.570	1.00	0.00
N								
ATOM	5091	CA	ILE	46	35.106-119.360	-4.586	1.00	0.00
C								
ATOM	5092	CB	ILE	46	35.469-118.353	-3.489	1.00	0.00
C								
ATOM	5093	CG2	ILE	46	34.523-117.136	-3.490	1.00	0.00
C								



ATOM	5094	CG1	ILE	46	35.365-118.911	-2.047	1.00	0.00
C								
ATOM	5095	CD1	ILE	46	36.741-119.089	-1.458	1.00	0.00
C								
ATOM	5096	C	ILE	46	35.110-118.684	-5.954	1.00	0.00
C								
ATOM	5097	O	ILE	46	36.165-118.615	-6.577	1.00	0.00
O								
ATOM	5098	N	LEU	47	33.941-118.305	-6.536	1.00	0.00
N								
ATOM	5099	CA	LEU	47	33.776-117.466	-7.751	1.00	0.00
C								
ATOM	5100	CB	LEU	47	32.309-117.442	-8.208	1.00	0.00
C								
ATOM	5101	CG	LEU	47	31.896-118.656	-9.069	1.00	0.00
C								
ATOM	5102	CD1	LEU	47	32.049-119.967	-8.314	1.00	0.00
C								
ATOM	5103	CD2	LEU	47	30.439-118.505	-9.453	1.00	0.00
C								
ATOM	5104	C	LEU	47	34.327-116.069	-7.438	1.00	0.00
C								
ATOM	5105	O	LEU	47	34.053-115.411	-6.381	1.00	0.00
O								
ATOM	5106	N	SER	48	35.186-115.610	-8.383	1.00	0.00
N								
ATOM	5107	CA	SER	48	35.891-114.421	-8.273	1.00	0.00
C								
ATOM	5108	CB	SER	48	37.132-114.240	-9.183	1.00	0.00
C								
ATOM	5109	OG	SER	48	37.999-113.283	-8.669	1.00	0.00
O								
ATOM	5110	C	SER	48	34.959-113.191	-8.439	1.00	0.00
C								
ATOM	5111	O	SER	48	34.307-113.000	-9.505	1.00	0.00
O								
ATOM	5112	N	ASP	49	34.919-112.341	-7.455	1.00	0.00
N								
ATOM	5113	CA	ASP	49	34.191-111.005	-7.466	1.00	0.00
C								
ATOM	5114	CB	ASP	49	33.683-110.665	-6.049	1.00	0.00
C								
ATOM	5115	CG	ASP	49	32.506-111.586	-5.759	1.00	0.00
C								
ATOM	5116	OD1	ASP	49	32.601-112.836	-5.894	1.00	0.00
O								
ATOM	5117	OD2	ASP	49	31.462-111.072	-5.328	1.00	0.00
O1-								
ATOM	5118	C	ASP	49	35.079-109.825	-7.834	1.00	0.00
C								
ATOM	5119	O	ASP	49	34.569-108.742	-8.110	1.00	0.00
O								
ATOM	5120	N	ASP	50	36.385-109.964	-7.870	1.00	0.00
N								

ATOM	5121	CA	ASP	50	37.467-108.946	-7.769	1.00	0.00
C								
ATOM	5122	CB	ASP	50	37.427-108.208	-6.395	1.00	0.00
C								
ATOM	5123	CG	ASP	50	38.365-107.046	-6.281	1.00	0.00
C								
ATOM	5124	OD1	ASP	50	38.982-106.965	-5.183	1.00	0.00
O								
ATOM	5125	OD2	ASP	50	38.347-106.144	-7.168	1.00	0.00
O1-								
ATOM	5126	C	ASP	50	38.840-109.644	-8.010	1.00	0.00
C								
ATOM	5127	O	ASP	50	39.572-109.109	-8.875	1.00	0.00
O								
ATOM	5128	N	VAL	51	39.264-110.613	-7.165	1.00	0.00
N								
ATOM	5129	CA	VAL	51	40.603-111.234	-7.138	1.00	0.00
C								
ATOM	5130	CB	VAL	51	41.707-110.367	-6.529	1.00	0.00
C								
ATOM	5131	CG1	VAL	51	41.567-110.117	-5.072	1.00	0.00
C								
ATOM	5132	CG2	VAL	51	43.101-110.873	-6.812	1.00	0.00
C								
ATOM	5133	C	VAL	51	40.432-112.563	-6.379	1.00	0.00
C								
ATOM	5134	O	VAL	51	39.437-112.891	-5.694	1.00	0.00
O								
ATOM	5135	N	GLU	52	41.440-113.445	-6.502	1.00	0.00
N								
ATOM	5136	CA	GLU	52	41.360-114.955	-6.209	1.00	0.00
C								
ATOM	5137	CB	GLU	52	42.320-115.829	-7.019	1.00	0.00
C								
ATOM	5138	CG	GLU	52	42.434-115.376	-8.521	1.00	0.00
C								
ATOM	5139	CD	GLU	52	41.179-115.413	-9.359	1.00	0.00
C								
ATOM	5140	OE1	GLU	52	40.456-114.434	-9.340	1.00	0.00
O								
ATOM	5141	OE2	GLU	52	40.982-116.246	-10.286	1.00	0.00
O1-								
ATOM	5142	C	GLU	52	41.431-115.188	-4.776	1.00	0.00
C								
ATOM	5143	O	GLU	52	42.256-114.605	-4.077	1.00	0.00
O								
ATOM	5144	N	THR	53	40.629-116.065	-4.305	1.00	0.00
N								
ATOM	5145	CA	THR	53	40.567-116.366	-2.896	1.00	0.00
C								
ATOM	5146	CB	THR	53	39.405-115.648	-2.098	1.00	0.00
C								
ATOM	5147	CG2	THR	53	39.693-114.139	-2.216	1.00	0.00
C								

ATOM	5148	OG1	THR	53	38.136-115.916	-2.616	1.00	0.00
O								
ATOM	5149	C	THR	53	40.520-117.879	-2.720	1.00	0.00
C								
ATOM	5150	O	THR	53	39.910-118.627	-3.413	1.00	0.00
O								
ATOM	5151	N	ASP	54	41.131-118.337	-1.589	1.00	0.00
N								
ATOM	5152	CA	ASP	54	41.133-119.747	-1.136	1.00	0.00
C								
ATOM	5153	CB	ASP	54	42.545-120.354	-1.101	1.00	0.00
C								
ATOM	5154	CG	ASP	54	43.502-119.726	-0.010	1.00	0.00
C								
ATOM	5155	OD1	ASP	54	43.109-118.868	0.780	1.00	0.00
O								
ATOM	5156	OD2	ASP	54	44.647-120.281	0.002	1.00	0.00
O1-								
ATOM	5157	C	ASP	54	40.360-119.892	0.242	1.00	0.00
C								
ATOM	5158	O	ASP	54	40.258-120.996	0.783	1.00	0.00
O								
ATOM	5159	N	THR	55	39.890-118.814	0.732	1.00	0.00
N								
ATOM	5160	CA	THR	55	39.389-118.700	2.077	1.00	0.00
C								
ATOM	5161	CB	THR	55	40.398-118.325	3.196	1.00	0.00
C								
ATOM	5162	CG2	THR	55	39.941-118.487	4.693	1.00	0.00
C								
ATOM	5163	OG1	THR	55	41.656-118.975	3.113	1.00	0.00
O								
ATOM	5164	C	THR	55	38.296-117.683	1.999	1.00	0.00
C								
ATOM	5165	O	THR	55	38.489-116.593	1.436	1.00	0.00
O								
ATOM	5166	N	VAL	56	37.099-118.057	2.582	1.00	0.00
N								
ATOM	5167	CA	VAL	56	35.929-117.138	2.539	1.00	0.00
C								
ATOM	5168	CB	VAL	56	34.524-117.837	2.862	1.00	0.00
C								
ATOM	5169	CG1	VAL	56	33.411-116.742	2.835	1.00	0.00
C								
ATOM	5170	CG2	VAL	56	34.124-119.014	2.049	1.00	0.00
C								
ATOM	5171	C	VAL	56	36.121-115.880	3.322	1.00	0.00
C								
ATOM	5172	O	VAL	56	36.393-116.046	4.518	1.00	0.00
O								
ATOM	5173	N	ALA	57	36.029-114.687	2.789	1.00	0.00
N								
ATOM	5174	CA	ALA	57	36.011-113.394	3.582	1.00	0.00
C								

ATOM	5175	CB	ALA	57	36.401-112.171	2.697	1.00	0.00
C								
ATOM	5176	C	ALA	57	34.640-112.998	4.288	1.00	0.00
C								
ATOM	5177	O	ALA	57	33.639-113.156	3.561	1.00	0.00
O								
ATOM	5178	N	PRO	58	34.536-112.653	5.611	1.00	0.00
N								
ATOM	5179	CD	PRO	58	35.660-112.611	6.563	1.00	0.00
C								
ATOM	5180	CG	PRO	58	35.178-112.058	7.832	1.00	0.00
C								
ATOM	5181	CB	PRO	58	33.663-112.161	7.648	1.00	0.00
C								
ATOM	5182	CA	PRO	58	33.248-112.295	6.152	1.00	0.00
C								
ATOM	5183	C	PRO	58	32.538-111.021	5.554	1.00	0.00
C								
ATOM	5184	O	PRO	58	33.106-110.053	5.038	1.00	0.00
O								
ATOM	5185	N	GLY	59	31.270-110.955	5.808	1.00	0.00
N								
ATOM	5186	CA	GLY	59	30.431-109.787	5.351	1.00	0.00
C								
ATOM	5187	C	GLY	59	29.950-109.776	3.940	1.00	0.00
C								
ATOM	5188	O	GLY	59	29.462-108.745	3.489	1.00	0.00
O								
ATOM	5189	N	GLU	60	30.027-110.867	3.213	1.00	0.00
N								
ATOM	5190	CA	GLU	60	29.713-110.870	1.774	1.00	0.00
C								
ATOM	5191	CB	GLU	60	30.987-110.735	0.890	1.00	0.00
C								
ATOM	5192	CG	GLU	60	31.701-109.350	0.814	1.00	0.00
C								
ATOM	5193	CD	GLU	60	30.671-108.190	0.490	1.00	0.00
C								
ATOM	5194	OE1	GLU	60	30.954-107.030	0.976	1.00	0.00
O								
ATOM	5195	OE2	GLU	60	29.734-108.439	-0.293	1.00	0.00
O1-								
ATOM	5196	C	GLU	60	29.079-112.200	1.384	1.00	0.00
C								
ATOM	5197	O	GLU	60	29.510-113.246	1.842	1.00	0.00
O								
ATOM	5198	N	ASN	61	28.011-112.170	0.606	1.00	0.00
N								
ATOM	5199	CA	ASN	61	27.309-113.378	0.207	1.00	0.00
C								
ATOM	5200	CB	ASN	61	25.888-113.061	-0.160	1.00	0.00
C								
ATOM	5201	CG	ASN	61	24.964-113.075	0.996	1.00	0.00
C								

ATOM	5202	OD1	ASN	61	24.458-114.091	1.383	1.00	0.00
O								
ATOM	5203	ND2	ASN	61	24.777-111.981	1.581	1.00	0.00
N								
ATOM	5204	C	ASN	61	28.146-113.809	-1.019	1.00	0.00
C								
ATOM	5205	O	ASN	61	28.080-113.191	-2.040	1.00	0.00
O								
ATOM	5206	N	LEU	62	28.889-114.884	-0.808	1.00	0.00
N								
ATOM	5207	CA	LEU	62	30.011-115.485	-1.698	1.00	0.00
C								
ATOM	5208	CB	LEU	62	31.402-115.476	-0.900	1.00	0.00
C								
ATOM	5209	CG	LEU	62	31.884-114.041	-0.749	1.00	0.00
C								
ATOM	5210	CD1	LEU	62	33.139-114.111	0.128	1.00	0.00
C								
ATOM	5211	CD2	LEU	62	32.312-113.425	-2.094	1.00	0.00
C								
ATOM	5212	C	LEU	62	29.565-116.887	-2.182	1.00	0.00
C								
ATOM	5213	O	LEU	62	28.755-117.543	-1.551	1.00	0.00
O								
ATOM	5214	N	LYS	63	30.092-117.300	-3.386	1.00	0.00
N								
ATOM	5215	CA	LYS	63	29.690-118.458	-4.204	1.00	0.00
C								
ATOM	5216	CB	LYS	63	29.361-117.980	-5.661	1.00	0.00
C								
ATOM	5217	CG	LYS	63	28.111-117.160	-5.659	1.00	0.00
C								
ATOM	5218	CD	LYS	63	27.702-116.427	-6.974	1.00	0.00
C								
ATOM	5219	CE	LYS	63	28.708-115.452	-7.582	1.00	0.00
C								
ATOM	5220	NZ	LYS	63	28.271-114.071	-7.242	1.00	0.00
N1+								
ATOM	5221	C	LYS	63	30.663-119.642	-4.121	1.00	0.00
C								
ATOM	5222	O	LYS	63	31.619-119.559	-4.937	1.00	0.00
O								
ATOM	5223	N	ILE	64	30.607-120.562	-3.184	1.00	0.00
N								
ATOM	5224	CA	ILE	64	31.766-121.467	-2.767	1.00	0.00
C								
ATOM	5225	CB	ILE	64	31.579-121.706	-1.243	1.00	0.00
C								
ATOM	5226	CG2	ILE	64	32.676-122.599	-0.691	1.00	0.00
C								
ATOM	5227	CG1	ILE	64	31.736-120.315	-0.518	1.00	0.00
C								
ATOM	5228	CD1	ILE	64	30.398-119.829	0.082	1.00	0.00
C								

ATOM	5229	C	ILE	64	31.593-122.731	-3.595	1.00	0.00
C								
ATOM	5230	O	ILE	64	30.548-123.351	-3.465	1.00	0.00
O								
ATOM	5231	N	ARG	65	32.618-123.033	-4.363	1.00	0.00
N								
ATOM	5232	CA	ARG	65	32.743-124.319	-5.034	1.00	0.00
C								
ATOM	5233	CB	ARG	65	33.909-124.381	-6.095	1.00	0.00
C								
ATOM	5234	CG	ARG	65	33.751-123.460	-7.289	1.00	0.00
C								
ATOM	5235	CD	ARG	65	34.807-123.824	-8.402	1.00	0.00
C								
ATOM	5236	NE	ARG	65	34.604-123.101	-9.711	1.00	0.00
N								
ATOM	5237	CZ	ARG	65	33.646-123.150	-10.624	1.00	0.00
C								
ATOM	5238	NH1	ARG	65	32.686-124.012	-10.536	1.00	0.00
N								
ATOM	5239	NH2	ARG	65	33.656-122.427	-11.757	1.00	0.00
N1+								
ATOM	5240	C	ARG	65	32.841-125.505	-4.069	1.00	0.00
C								
ATOM	5241	O	ARG	65	33.666-125.378	-3.149	1.00	0.00
O								
ATOM	5242	N	LEU	66	32.097-126.624	-4.244	1.00	0.00
N								
ATOM	5243	CA	LEU	66	32.179-127.834	-3.353	1.00	0.00
C								
ATOM	5244	CB	LEU	66	30.756-128.206	-2.730	1.00	0.00
C								
ATOM	5245	CG	LEU	66	30.197-127.137	-1.805	1.00	0.00
C								
ATOM	5246	CD1	LEU	66	28.828-127.448	-1.259	1.00	0.00
C								
ATOM	5247	CD2	LEU	66	31.099-126.989	-0.593	1.00	0.00
C								
ATOM	5248	C	LEU	66	32.751-129.063	-4.230	1.00	0.00
C								
ATOM	5249	O	LEU	66	32.463-129.134	-5.436	1.00	0.00
O								
ATOM	5250	N	LYS	67	33.498-130.033	-3.627	1.00	0.00
N								
ATOM	5251	CA	LYS	67	34.182-131.063	-4.458	1.00	0.00
C								
ATOM	5252	CB	LYS	67	35.148-131.875	-3.469	1.00	0.00
C								
ATOM	5253	CG	LYS	67	36.328-130.976	-3.406	1.00	0.00
C								
ATOM	5254	CD	LYS	67	37.444-131.750	-2.574	1.00	0.00
C								
ATOM	5255	CE	LYS	67	38.749-130.945	-2.546	1.00	0.00
C								

ATOM	5256	NZ	LYS	67	39.744-131.506	-1.650	1.00	0.00
N1+								
ATOM	5257	C	LYS	67	33.144-131.981	-5.262	1.00	0.00
C								
ATOM	5258	O	LYS	67	32.264-132.664	-4.660	1.00	0.00
O								
ATOM	5259	N	GLY	68	33.432-132.142	-6.541	1.00	0.00
N								
ATOM	5260	CA	GLY	68	32.506-132.867	-7.407	1.00	0.00
C								
ATOM	5261	C	GLY	68	31.045-132.300	-7.436	1.00	0.00
C								
ATOM	5262	O	GLY	68	30.623-131.326	-6.799	1.00	0.00
O								
ATOM	5263	N	ILE	69	30.207-132.943	-8.178	1.00	0.00
N								
ATOM	5264	CA	ILE	69	28.739-132.808	-8.147	1.00	0.00
C								
ATOM	5265	CB	ILE	69	27.989-133.261	-9.430	1.00	0.00
C								
ATOM	5266	CG2	ILE	69	26.518-132.966	-9.444	1.00	0.00
C								
ATOM	5267	CG1	ILE	69	28.618-132.548	-10.672	1.00	0.00
C								
ATOM	5268	CD1	ILE	69	28.428-133.230	-12.002	1.00	0.00
C								
ATOM	5269	C	ILE	69	28.199-133.684	-6.923	1.00	0.00
C								
ATOM	5270	O	ILE	69	28.383-134.896	-6.909	1.00	0.00
O								
ATOM	5271	N	GLU	70	27.596-133.027	-5.915	1.00	0.00
N								
ATOM	5272	CA	GLU	70	26.921-133.764	-4.779	1.00	0.00
C								
ATOM	5273	CB	GLU	70	26.575-132.817	-3.582	1.00	0.00
C								
ATOM	5274	CG	GLU	70	27.847-132.468	-2.841	1.00	0.00
C								
ATOM	5275	CD	GLU	70	28.528-133.582	-2.146	1.00	0.00
C								
ATOM	5276	OE1	GLU	70	27.900-134.526	-1.661	1.00	0.00
O								
ATOM	5277	OE2	GLU	70	29.760-133.719	-2.144	1.00	0.00
O1-								
ATOM	5278	C	GLU	70	25.614-134.496	-5.256	1.00	0.00
C								
ATOM	5279	O	GLU	70	24.777-133.959	-6.032	1.00	0.00
O								
ATOM	5280	N	GLU	71	25.528-135.745	-4.813	1.00	0.00
N								
ATOM	5281	CA	GLU	71	24.312-136.533	-4.893	1.00	0.00
C								
ATOM	5282	CB	GLU	71	24.666-138.051	-4.819	1.00	0.00
C								

ATOM	5283	CG	GLU	71	23.586-139.105	-4.980	1.00	0.00
C								
ATOM	5284	CD	GLU	71	22.692-138.973	-6.244	1.00	0.00
C								
ATOM	5285	OE1	GLU	71	21.535-139.400	-6.199	1.00	0.00
O								
ATOM	5286	OE2	GLU	71	23.130-138.517	-7.331	1.00	0.00
O1-								
ATOM	5287	C	GLU	71	23.296-136.167	-3.887	1.00	0.00
C								
ATOM	5288	O	GLU	71	22.123-136.354	-4.191	1.00	0.00
O								
ATOM	5289	N	GLU	72	23.755-135.654	-2.805	1.00	0.00
N								
ATOM	5290	CA	GLU	72	22.939-135.183	-1.688	1.00	0.00
C								
ATOM	5291	CB	GLU	72	23.758-134.938	-0.395	1.00	0.00
C								
ATOM	5292	CG	GLU	72	22.933-134.354	0.813	1.00	0.00
C								
ATOM	5293	CD	GLU	72	21.879-135.374	1.280	1.00	0.00
C								
ATOM	5294	OE1	GLU	72	22.120-136.506	1.819	1.00	0.00
O								
ATOM	5295	OE2	GLU	72	20.689-135.031	1.108	1.00	0.00
O1-								
ATOM	5296	C	GLU	72	22.090-133.921	-2.151	1.00	0.00
C								
ATOM	5297	O	GLU	72	22.509-133.170	-3.046	1.00	0.00
O								
ATOM	5298	N	GLU	73	20.970-133.666	-1.495	1.00	0.00
N								
ATOM	5299	CA	GLU	73	20.135-132.524	-1.734	1.00	0.00
C								
ATOM	5300	CB	GLU	73	18.689-132.925	-1.286	1.00	0.00
C								
ATOM	5301	CG	GLU	73	17.575-131.873	-1.381	1.00	0.00
C								
ATOM	5302	CD	GLU	73	17.315-131.366	-2.754	1.00	0.00
C								
ATOM	5303	OE1	GLU	73	18.305-131.391	-3.553	1.00	0.00
O								
ATOM	5304	OE2	GLU	73	16.151-131.131	-3.097	1.00	0.00
O1-								
ATOM	5305	C	GLU	73	20.626-131.236	-1.032	1.00	0.00
C								
ATOM	5306	O	GLU	73	21.213-131.279	0.066	1.00	0.00
O								
ATOM	5307	N	ILE	74	20.428-130.128	-1.721	1.00	0.00
N								
ATOM	5308	CA	ILE	74	20.799-128.776	-1.209	1.00	0.00
C								
ATOM	5309	CB	ILE	74	22.186-128.323	-1.682	1.00	0.00
C								



ATOM	5310	CG2	ILE	74	22.655-127.079	-0.867	1.00	0.00
C								
ATOM	5311	CG1	ILE	74	23.312-129.350	-1.651	1.00	0.00
C								
ATOM	5312	CD1	ILE	74	24.516-128.979	-2.582	1.00	0.00
C								
ATOM	5313	C	ILE	74	19.749-127.729	-1.407	1.00	0.00
C								
ATOM	5314	O	ILE	74	19.079-127.810	-2.440	1.00	0.00
O								
ATOM	5315	N	LEU	75	19.531-126.847	-0.455	1.00	0.00
N								
ATOM	5316	CA	LEU	75	18.513-125.901	-0.376	1.00	0.00
C								
ATOM	5317	CB	LEU	75	17.176-126.478	0.180	1.00	0.00
C								
ATOM	5318	CG	LEU	75	16.315-127.230	-0.841	1.00	0.00
C								
ATOM	5319	CD1	LEU	75	15.193-128.071	-0.121	1.00	0.00
C								
ATOM	5320	CD2	LEU	75	15.541-126.351	-1.850	1.00	0.00
C								
ATOM	5321	C	LEU	75	18.788-124.643	0.436	1.00	0.00
C								
ATOM	5322	O	LEU	75	19.757-124.656	1.208	1.00	0.00
O								
ATOM	5323	N	PRO	76	17.949-123.568	0.267	1.00	0.00
N								
ATOM	5324	CD	PRO	76	17.210-123.247	-0.971	1.00	0.00
C								
ATOM	5325	CG	PRO	76	17.222-121.697	-1.075	1.00	0.00
C								
ATOM	5326	CB	PRO	76	17.079-121.296	0.328	1.00	0.00
C								
ATOM	5327	CA	PRO	76	17.965-122.372	1.054	1.00	0.00
C								
ATOM	5328	C	PRO	76	17.670-122.668	2.555	1.00	0.00
C								
ATOM	5329	O	PRO	76	16.840-123.583	2.893	1.00	0.00
O								
ATOM	5330	N	GLY	77	18.375-122.058	3.502	1.00	0.00
N								
ATOM	5331	CA	GLY	77	18.169-122.237	4.950	1.00	0.00
C								
ATOM	5332	C	GLY	77	18.859-123.501	5.526	1.00	0.00
C								
ATOM	5333	O	GLY	77	18.904-123.609	6.764	1.00	0.00
O								
ATOM	5334	N	PHE	78	19.316-124.475	4.728	1.00	0.00
N								
ATOM	5335	CA	PHE	78	20.367-125.297	5.174	1.00	0.00
C								
ATOM	5336	CB	PHE	78	20.740-126.409	4.143	1.00	0.00
C								

ATOM	5337	CG	PHE	78	19.545-127.326	3.731	1.00	0.00
C								
ATOM	5338	CD1	PHE	78	18.334-127.355	4.406	1.00	0.00
C								
ATOM	5339	CE1	PHE	78	17.358-128.260	3.969	1.00	0.00
C								
ATOM	5340	CZ	PHE	78	17.539-129.080	2.860	1.00	0.00
C								
ATOM	5341	CE2	PHE	78	18.801-129.111	2.184	1.00	0.00
C								
ATOM	5342	CD2	PHE	78	19.819-128.246	2.697	1.00	0.00
C								
ATOM	5343	C	PHE	78	21.673-124.513	5.452	1.00	0.00
C								
ATOM	5344	O	PHE	78	21.869-123.473	4.851	1.00	0.00
O								
ATOM	5345	N	ILE	79	22.521-124.992	6.433	1.00	0.00
N								
ATOM	5346	CA	ILE	79	23.767-124.445	6.969	1.00	0.00
C								
ATOM	5347	CB	ILE	79	23.564-123.998	8.478	1.00	0.00
C								
ATOM	5348	CG2	ILE	79	24.666-123.027	8.927	1.00	0.00
C								
ATOM	5349	CG1	ILE	79	22.148-123.449	8.731	1.00	0.00
C								
ATOM	5350	CD1	ILE	79	21.812-122.737	9.997	1.00	0.00
C								
ATOM	5351	C	ILE	79	25.013-125.347	6.867	1.00	0.00
C								
ATOM	5352	O	ILE	79	24.910-126.496	7.325	1.00	0.00
O								
ATOM	5353	N	LEU	80	26.162-124.791	6.466	1.00	0.00
N								
ATOM	5354	CA	LEU	80	27.476-125.488	6.578	1.00	0.00
C								
ATOM	5355	CB	LEU	80	28.461-125.148	5.478	1.00	0.00
C								
ATOM	5356	CG	LEU	80	27.967-125.270	3.992	1.00	0.00
C								
ATOM	5357	CD1	LEU	80	29.002-124.858	2.966	1.00	0.00
C								
ATOM	5358	CD2	LEU	80	27.516-126.704	3.563	1.00	0.00
C								
ATOM	5359	C	LEU	80	27.971-125.192	8.016	1.00	0.00
C								
ATOM	5360	O	LEU	80	28.205-124.039	8.380	1.00	0.00
O								
ATOM	5361	N	CYX	81	28.020-126.194	8.878	1.00	0.00
N								
ATOM	5362	CA	CYX	81	28.514-126.081	10.221	1.00	0.00
C								
ATOM	5363	CB	CYX	81	27.501-126.698	11.213	1.00	0.00
C								

ATOM	5364	SG	CYX	81	25.754-126.179	10.935	1.00	0.00
S								
ATOM	5365	C	CYX	81	29.956-126.702	10.348	1.00	0.00
C								
ATOM	5366	O	CYX	81	30.337-127.512	9.537	1.00	0.00
O								
ATOM	5367	N	ASP	82	30.635-126.506	11.497	1.00	0.00
N								
ATOM	5368	CA	ASP	82	31.737-127.305	12.059	1.00	0.00
C								
ATOM	5369	CB	ASP	82	32.294-126.569	13.346	1.00	0.00
C								
ATOM	5370	CG	ASP	82	33.540-127.125	14.042	1.00	0.00
C								
ATOM	5371	OD1	ASP	82	33.991-126.568	15.046	1.00	0.00
O								
ATOM	5372	OD2	ASP	82	34.108-128.063	13.560	1.00	0.00
O1-								
ATOM	5373	C	ASP	82	31.213-128.706	12.481	1.00	0.00
C								
ATOM	5374	O	ASP	82	30.338-128.811	13.406	1.00	0.00
O								
ATOM	5375	N	PRO	83	31.883-129.795	11.982	1.00	0.00
N								
ATOM	5376	CD	PRO	83	32.800-129.753	10.808	1.00	0.00
C								
ATOM	5377	CG	PRO	83	32.862-131.091	10.302	1.00	0.00
C								
ATOM	5378	CB	PRO	83	32.555-131.984	11.482	1.00	0.00
C								
ATOM	5379	CA	PRO	83	31.579-131.201	12.265	1.00	0.00
C								
ATOM	5380	C	PRO	83	31.681-131.449	13.800	1.00	0.00
C								
ATOM	5381	O	PRO	83	31.042-132.303	14.411	1.00	0.00
O								
ATOM	5382	N	ASN	84	32.425-130.596	14.497	1.00	0.00
N								
ATOM	5383	CA	ASN	84	32.806-130.696	15.891	1.00	0.00
C								
ATOM	5384	CB	ASN	84	34.301-130.285	16.091	1.00	0.00
C								
ATOM	5385	CG	ASN	84	35.248-131.120	15.232	1.00	0.00
C								
ATOM	5386	OD1	ASN	84	35.752-132.212	15.624	1.00	0.00
O								
ATOM	5387	ND2	ASN	84	35.548-130.605	14.011	1.00	0.00
N								
ATOM	5388	C	ASN	84	31.943-129.879	16.900	1.00	0.00
C								
ATOM	5389	O	ASN	84	32.101-130.032	18.138	1.00	0.00
O								
ATOM	5390	N	ASN	85	31.061-129.114	16.396	1.00	0.00
N								

ATOM	5391	CA	ASN	85	30.188-128.066	16.987	1.00	0.00
C								
ATOM	5392	CB	ASN	85	31.061-126.787	17.338	1.00	0.00
C								
ATOM	5393	CG	ASN	85	30.311-125.827	18.234	1.00	0.00
C								
ATOM	5394	OD1	ASN	85	29.382-125.140	17.802	1.00	0.00
O								
ATOM	5395	ND2	ASN	85	30.660-125.793	19.479	1.00	0.00
N								
ATOM	5396	C	ASN	85	28.913-127.822	16.129	1.00	0.00
C								
ATOM	5397	O	ASN	85	28.737-126.700	15.622	1.00	0.00
O								
ATOM	5398	N	LEU	86	28.142-128.859	15.790	1.00	0.00
N								
ATOM	5399	CA	LEU	86	26.932-128.817	14.948	1.00	0.00
C								
ATOM	5400	CB	LEU	86	26.138-130.148	14.965	1.00	0.00
C								
ATOM	5401	CG	LEU	86	27.001-131.432	14.740	1.00	0.00
C								
ATOM	5402	CD1	LEU	86	26.017-132.629	14.577	1.00	0.00
C								
ATOM	5403	CD2	LEU	86	27.833-131.254	13.426	1.00	0.00
C								
ATOM	5404	C	LEU	86	26.013-127.657	15.281	1.00	0.00
C								
ATOM	5405	O	LEU	86	26.025-127.111	16.393	1.00	0.00
O								
ATOM	5406	N	CYX	87	25.256-127.309	14.268	1.00	0.00
N								
ATOM	5407	CA	CYX	87	24.115-126.494	14.417	1.00	0.00
C								
ATOM	5408	CB	CYX	87	23.754-125.835	13.080	1.00	0.00
C								
ATOM	5409	SG	CYX	87	25.229-124.977	12.512	1.00	0.00
S								
ATOM	5410	C	CYX	87	22.906-127.280	14.969	1.00	0.00
C								
ATOM	5411	O	CYX	87	22.653-128.409	14.536	1.00	0.00
O								
ATOM	5412	N	HIE	88	22.138-126.651	15.844	1.00	0.00
N								
ATOM	5413	CA	HIE	88	20.995-127.352	16.385	1.00	0.00
C								
ATOM	5414	CB	HIE	88	20.424-126.693	17.613	1.00	0.00
C								
ATOM	5415	CG	HIE	88	21.433-126.294	18.571	1.00	0.00
C								
ATOM	5416	ND1	HIE	88	21.924-127.116	19.524	1.00	0.00
N								
ATOM	5417	CE1	HIE	88	22.843-126.395	20.194	1.00	0.00
C								

ATOM	5418	NE2	HIE	88	22.979-125.207	19.645	1.00	0.00
N								
ATOM	5419	CD2	HIE	88	22.041-125.109	18.681	1.00	0.00
C								
ATOM	5420	C	HIE	88	19.919-127.674	15.332	1.00	0.00
C								
ATOM	5421	O	HIE	88	20.005-127.148	14.258	1.00	0.00
O								
ATOM	5422	N	SER	89	18.905-128.477	15.568	1.00	0.00
N								
ATOM	5423	CA	SER	89	17.718-128.625	14.731	1.00	0.00
C								
ATOM	5424	CB	SER	89	18.106-129.739	13.680	1.00	0.00
C								
ATOM	5425	OG	SER	89	17.077-130.085	12.778	1.00	0.00
O								
ATOM	5426	C	SER	89	16.414-129.040	15.455	1.00	0.00
C								
ATOM	5427	O	SER	89	16.437-129.637	16.548	1.00	0.00
O								
ATOM	5428	N	GLY	90	15.350-128.749	14.772	1.00	0.00
N								
ATOM	5429	CA	GLY	90	14.021-129.291	15.189	1.00	0.00
C								
ATOM	5430	C	GLY	90	12.883-128.523	14.663	1.00	0.00
C								
ATOM	5431	O	GLY	90	12.964-127.870	13.584	1.00	0.00
O								
ATOM	5432	N	ARG	91	11.750-128.611	15.439	1.00	0.00
N								
ATOM	5433	CA	ARG	91	10.463-128.118	14.989	1.00	0.00
C								
ATOM	5434	CB	ARG	91	9.644-129.186	14.262	1.00	0.00
C								
ATOM	5435	CG	ARG	91	9.329-130.336	15.122	1.00	0.00
C								
ATOM	5436	CD	ARG	91	8.395-131.319	14.397	1.00	0.00
C								
ATOM	5437	NE	ARG	91	6.992-130.793	14.552	1.00	0.00
N								
ATOM	5438	CZ	ARG	91	6.167-131.026	15.555	1.00	0.00
C								
ATOM	5439	NH1	ARG	91	6.468-131.764	16.599	1.00	0.00
N								
ATOM	5440	NH2	ARG	91	5.015-130.422	15.517	1.00	0.00
N1+								
ATOM	5441	C	ARG	91	9.635-127.252	15.902	1.00	0.00
C								
ATOM	5442	O	ARG	91	8.529-126.808	15.495	1.00	0.00
O								
ATOM	5443	N	THR	92	10.079-126.969	17.093	1.00	0.00
N								
ATOM	5444	CA	THR	92	9.375-126.144	18.058	1.00	0.00
C								

ATOM	5445	CB	THR	92	8.503-127.005	19.008	1.00	0.00
C								
ATOM	5446	CG2	THR	92	7.135-127.604	18.484	1.00	0.00
C								
ATOM	5447	OG1	THR	92	9.117-128.217	19.455	1.00	0.00
O								
ATOM	5448	C	THR	92	10.332-125.282	18.851	1.00	0.00
C								
ATOM	5449	O	THR	92	11.350-125.813	19.326	1.00	0.00
O								
ATOM	5450	N	PHE	93	10.059-124.029	19.073	1.00	0.00
N								
ATOM	5451	CA	PHE	93	10.917-123.187	19.893	1.00	0.00
C								
ATOM	5452	CB	PHE	93	12.052-122.543	19.108	1.00	0.00
C								
ATOM	5453	CG	PHE	93	11.603-121.842	17.820	1.00	0.00
C								
ATOM	5454	CD1	PHE	93	11.291-120.455	17.825	1.00	0.00
C								
ATOM	5455	CE1	PHE	93	11.045-119.841	16.561	1.00	0.00
C								
ATOM	5456	CZ	PHE	93	11.106-120.631	15.328	1.00	0.00
C								
ATOM	5457	CE2	PHE	93	11.332-122.009	15.455	1.00	0.00
C								
ATOM	5458	CD2	PHE	93	11.531-122.666	16.652	1.00	0.00
C								
ATOM	5459	C	PHE	93	10.144-122.152	20.752	1.00	0.00
C								
ATOM	5460	O	PHE	93	8.997-121.822	20.471	1.00	0.00
O								
ATOM	5461	N	ASP	94	10.911-121.560	21.665	1.00	0.00
N								
ATOM	5462	CA	ASP	94	10.447-120.464	22.594	1.00	0.00
C								
ATOM	5463	CB	ASP	94	10.864-120.766	24.044	1.00	0.00
C								
ATOM	5464	CG	ASP	94	9.861-121.679	24.736	1.00	0.00
C								
ATOM	5465	OD1	ASP	94	10.171-122.411	25.740	1.00	0.00
O								
ATOM	5466	OD2	ASP	94	8.663-121.543	24.513	1.00	0.00
O1-								
ATOM	5467	C	ASP	94	11.045-119.145	22.186	1.00	0.00
C								
ATOM	5468	O	ASP	94	12.229-119.091	21.824	1.00	0.00
O								
ATOM	5469	N	ALA	95	10.246-118.046	22.335	1.00	0.00
N								
ATOM	5470	CA	ALA	95	10.764-116.777	21.819	1.00	0.00
C								
ATOM	5471	CB	ALA	95	10.445-116.679	20.342	1.00	0.00
C								

ATOM	5472	C	ALA	95	10.186-115.502	22.548	1.00	0.00
C								
ATOM	5473	O	ALA	95	9.063-115.538	23.058	1.00	0.00
O								
ATOM	5474	N	GLN	96	10.894-114.370	22.455	1.00	0.00
N								
ATOM	5475	CA	GLN	96	10.312-113.067	22.517	1.00	0.00
C								
ATOM	5476	CB	GLN	96	11.390-112.139	23.069	1.00	0.00
C								
ATOM	5477	CG	GLN	96	11.914-112.599	24.467	1.00	0.00
C								
ATOM	5478	CD	GLN	96	12.317-111.336	25.180	1.00	0.00
C								
ATOM	5479	OE1	GLN	96	13.059-110.545	24.645	1.00	0.00
O								
ATOM	5480	NE2	GLN	96	11.889-111.071	26.409	1.00	0.00
N								
ATOM	5481	C	GLN	96	9.881-112.573	21.106	1.00	0.00
C								
ATOM	5482	O	GLN	96	10.628-112.811	20.119	1.00	0.00
O								
ATOM	5483	N	ILE	97	8.721-111.942	20.976	1.00	0.00
N								
ATOM	5484	CA	ILE	97	8.266-111.274	19.784	1.00	0.00
C								
ATOM	5485	CB	ILE	97	7.036-111.934	19.030	1.00	0.00
C								
ATOM	5486	CG2	ILE	97	7.474-113.323	18.392	1.00	0.00
C								
ATOM	5487	CG1	ILE	97	5.773-111.879	19.818	1.00	0.00
C								
ATOM	5488	CD1	ILE	97	4.536-112.544	19.255	1.00	0.00
C								
ATOM	5489	C	ILE	97	7.948-109.743	20.084	1.00	0.00
C								
ATOM	5490	O	ILE	97	7.636-109.311	21.214	1.00	0.00
O								
ATOM	5491	N	VAL	98	8.176-108.983	19.030	1.00	0.00
N								
ATOM	5492	CA	VAL	98	7.735-107.570	18.902	1.00	0.00
C								
ATOM	5493	CB	VAL	98	8.869-106.606	18.808	1.00	0.00
C								
ATOM	5494	CG1	VAL	98	9.854-106.988	17.643	1.00	0.00
C								
ATOM	5495	CG2	VAL	98	8.332-105.142	18.733	1.00	0.00
C								
ATOM	5496	C	VAL	98	6.824-107.408	17.691	1.00	0.00
C								
ATOM	5497	O	VAL	98	7.087-107.847	16.570	1.00	0.00
O								
ATOM	5498	N	ILE	99	5.636-106.837	18.063	1.00	0.00
N								

ATOM	5499	CA	ILE	99	4.467-106.829	17.124	1.00	0.00
C								
ATOM	5500	CB	ILE	99	3.110-106.781	17.842	1.00	0.00
C								
ATOM	5501	CG2	ILE	99	1.979-106.798	16.882	1.00	0.00
C								
ATOM	5502	CG1	ILE	99	3.036-107.888	18.850	1.00	0.00
C								
ATOM	5503	CD1	ILE	99	3.395-109.288	18.507	1.00	0.00
C								
ATOM	5504	C	ILE	99	4.642-105.613	16.227	1.00	0.00
C								
ATOM	5505	O	ILE	99	5.167-104.578	16.588	1.00	0.00
O								
ATOM	5506	N	ILE	100	4.374-105.824	14.942	1.00	0.00
N								
ATOM	5507	CA	ILE	100	4.418-104.778	13.917	1.00	0.00
C								
ATOM	5508	CB	ILE	100	5.514-105.140	12.868	1.00	0.00
C								
ATOM	5509	CG2	ILE	100	5.486-104.266	11.685	1.00	0.00
C								
ATOM	5510	CG1	ILE	100	6.945-105.087	13.590	1.00	0.00
C								
ATOM	5511	CD1	ILE	100	8.252-105.401	12.791	1.00	0.00
C								
ATOM	5512	C	ILE	100	3.057-104.501	13.322	1.00	0.00
C								
ATOM	5513	O	ILE	100	2.253-105.435	13.122	1.00	0.00
O								
ATOM	5514	N	GLU	101	2.678-103.273	12.973	1.00	0.00
N								
ATOM	5515	CA	GLU	101	1.325-103.020	12.463	1.00	0.00
C								
ATOM	5516	CB	GLU	101	1.165-101.519	12.272	1.00	0.00
C								
ATOM	5517	CG	GLU	101	-0.078-100.924	11.668	1.00	0.00
C								
ATOM	5518	CD	GLU	101	-1.423-101.179	12.336	1.00	0.00
C								
ATOM	5519	OE1	GLU	101	-2.398-100.397	12.202	1.00	0.00
O								
ATOM	5520	OE2	GLU	101	-1.519-102.165	13.091	1.00	0.00
O1-								
ATOM	5521	C	GLU	101	1.033-103.642	11.094	1.00	0.00
C								
ATOM	5522	O	GLU	101	1.846-103.671	10.174	1.00	0.00
O								
ATOM	5523	N	HIE	102	-0.179-104.138	10.839	1.00	0.00
N								
ATOM	5524	CA	HIE	102	-0.459-105.000	9.660	1.00	0.00
C								
ATOM	5525	CB	HIE	102	0.078-106.363	9.903	1.00	0.00
C								



ATOM	5526	CG	HIE	102	-0.017-107.347	8.734	1.00	0.00
C								
ATOM	5527	ND1	HIE	102	-0.882-108.430	8.602	1.00	0.00
N								
ATOM	5528	CE1	HIE	102	-0.385-109.176	7.558	1.00	0.00
C								
ATOM	5529	NE2	HIE	102	0.613-108.489	6.973	1.00	0.00
N								
ATOM	5530	CD2	HIE	102	0.910-107.384	7.750	1.00	0.00
C								
ATOM	5531	C	HIE	102	-1.923-104.929	9.262	1.00	0.00
C								
ATOM	5532	O	HIE	102	-2.755-104.450	10.076	1.00	0.00
O								
ATOM	5533	N	LYS	103	-2.311-105.517	8.186	1.00	0.00
N								
ATOM	5534	CA	LYS	103	-3.719-105.568	7.805	1.00	0.00
C								
ATOM	5535	CB	LYS	103	-3.847-106.111	6.365	1.00	0.00
C								
ATOM	5536	CG	LYS	103	-3.167-107.517	6.128	1.00	0.00
C								
ATOM	5537	CD	LYS	103	-3.391-107.782	4.630	1.00	0.00
C								
ATOM	5538	CE	LYS	103	-4.861-107.613	4.089	1.00	0.00
C								
ATOM	5539	NZ	LYS	103	-5.698-108.656	4.624	1.00	0.00
N1+								
ATOM	5540	C	LYS	103	-4.498-106.479	8.785	1.00	0.00
C								
ATOM	5541	O	LYS	103	-5.668-106.329	8.966	1.00	0.00
O								
ATOM	5542	N	SER	104	-3.801-107.545	9.246	1.00	0.00
N								
ATOM	5543	CA	SER	104	-4.377-108.641	10.063	1.00	0.00
C								
ATOM	5544	CB	SER	104	-3.633-110.003	9.729	1.00	0.00
C								
ATOM	5545	OG	SER	104	-4.172-111.206	10.201	1.00	0.00
O								
ATOM	5546	C	SER	104	-4.357-108.331	11.523	1.00	0.00
C								
ATOM	5547	O	SER	104	-4.296-107.188	11.928	1.00	0.00
O								
ATOM	5548	N	ILE	105	-4.451-109.340	12.447	1.00	0.00
N								
ATOM	5549	CA	ILE	105	-4.142-109.268	13.904	1.00	0.00
C								
ATOM	5550	CB	ILE	105	-5.297-108.614	14.714	1.00	0.00
C								
ATOM	5551	CG2	ILE	105	-6.659-109.187	14.387	1.00	0.00
C								
ATOM	5552	CG1	ILE	105	-4.831-108.439	16.155	1.00	0.00
C								

ATOM	5553	CD1	ILE	105	-5.741-107.464	16.941	1.00	0.00
C								
ATOM	5554	C	ILE	105	-3.704-110.547	14.503	1.00	0.00
C								
ATOM	5555	O	ILE	105	-4.400-111.552	14.220	1.00	0.00
O								
ATOM	5556	N	ILE	106	-2.567-110.605	15.187	1.00	0.00
N								
ATOM	5557	CA	ILE	106	-2.036-111.872	15.773	1.00	0.00
C								
ATOM	5558	CB	ILE	106	-0.522-111.767	16.080	1.00	0.00
C								
ATOM	5559	CG2	ILE	106	-0.034-112.970	16.950	1.00	0.00
C								
ATOM	5560	CG1	ILE	106	0.266-111.864	14.736	1.00	0.00
C								
ATOM	5561	CD1	ILE	106	1.633-111.202	14.754	1.00	0.00
C								
ATOM	5562	C	ILE	106	-2.900-112.226	16.968	1.00	0.00
C								
ATOM	5563	O	ILE	106	-3.483-111.393	17.650	1.00	0.00
O								
ATOM	5564	N	CYS	107	-2.959-113.578	17.244	1.00	0.00
N								
ATOM	5565	CA	CYS	107	-3.673-114.300	18.271	1.00	0.00
C								
ATOM	5566	CB	CYS	107	-5.159-114.322	17.939	1.00	0.00
C								
ATOM	5567	SG	CYS	107	-5.519-115.329	16.484	1.00	0.00
S								
ATOM	5568	C	CYS	107	-2.967-115.617	18.594	1.00	0.00
C								
ATOM	5569	O	CYS	107	-1.964-115.905	17.967	1.00	0.00
O								
ATOM	5570	N	PRO	108	-3.477-116.572	19.404	1.00	0.00
N								
ATOM	5571	CD	PRO	108	-4.430-116.257	20.519	1.00	0.00
C								
ATOM	5572	CG	PRO	108	-3.903-117.054	21.703	1.00	0.00
C								
ATOM	5573	CB	PRO	108	-3.456-118.330	21.059	1.00	0.00
C								
ATOM	5574	CA	PRO	108	-2.889-117.855	19.678	1.00	0.00
C								
ATOM	5575	C	PRO	108	-3.119-118.959	18.636	1.00	0.00
C								
ATOM	5576	O	PRO	108	-4.279-119.136	18.212	1.00	0.00
O								
ATOM	5577	N	GLY	109	-2.100-119.735	18.269	1.00	0.00
N								
ATOM	5578	CA	GLY	109	-2.179-120.646	17.132	1.00	0.00
C								
ATOM	5579	C	GLY	109	-2.102-120.067	15.783	1.00	0.00
C								

ATOM	5580	O	GLY	109	-2.463-120.716	14.807	1.00	0.00
O								
ATOM	5581	N	TYR	110	-1.678-118.853	15.586	1.00	0.00
N								
ATOM	5582	CA	TYR	110	-1.807-118.244	14.245	1.00	0.00
C								
ATOM	5583	CB	TYR	110	-1.836-116.738	14.511	1.00	0.00
C								
ATOM	5584	CG	TYR	110	-2.018-115.861	13.305	1.00	0.00
C								
ATOM	5585	CD1	TYR	110	-1.032-115.767	12.324	1.00	0.00
C								
ATOM	5586	CE1	TYR	110	-1.215-114.978	11.138	1.00	0.00
C								
ATOM	5587	CZ	TYR	110	-2.279-114.075	11.152	1.00	0.00
C								
ATOM	5588	OH	TYR	110	-2.536-113.365	10.012	1.00	0.00
O								
ATOM	5589	CE2	TYR	110	-3.267-114.098	12.176	1.00	0.00
C								
ATOM	5590	CD2	TYR	110	-3.139-115.026	13.189	1.00	0.00
C								
ATOM	5591	C	TYR	110	-0.839-118.761	13.201	1.00	0.00
C								
ATOM	5592	O	TYR	110	0.300-118.878	13.519	1.00	0.00
O								
ATOM	5593	N	ASN	111	-1.248-119.162	11.986	1.00	0.00
N								
ATOM	5594	CA	ASN	111	-0.424-119.522	10.871	1.00	0.00
C								
ATOM	5595	CB	ASN	111	-1.139-120.587	10.050	1.00	0.00
C								
ATOM	5596	CG	ASN	111	-0.246-121.378	9.125	1.00	0.00
C								
ATOM	5597	OD1	ASN	111	0.179-120.871	8.079	1.00	0.00
O								
ATOM	5598	ND2	ASN	111	0.056-122.710	9.383	1.00	0.00
N								
ATOM	5599	C	ASN	111	0.202-118.437	9.928	1.00	0.00
C								
ATOM	5600	O	ASN	111	-0.532-117.709	9.244	1.00	0.00
O								
ATOM	5601	N	ALA	112	1.539-118.412	9.816	1.00	0.00
N								
ATOM	5602	CA	ALA	112	2.274-117.441	9.044	1.00	0.00
C								
ATOM	5603	CB	ALA	112	2.698-116.331	10.100	1.00	0.00
C								
ATOM	5604	C	ALA	112	3.541-118.038	8.446	1.00	0.00
C								
ATOM	5605	O	ALA	112	3.757-119.245	8.465	1.00	0.00
O								
ATOM	5606	N	VAL	113	4.332-117.209	7.819	1.00	0.00
N								

ATOM	5607	CA	VAL	113	5.674-117.452	7.243	1.00	0.00
C								
ATOM	5608	CB	VAL	113	5.826-116.571	5.971	1.00	0.00
C								
ATOM	5609	CG1	VAL	113	7.066-116.819	5.130	1.00	0.00
C								
ATOM	5610	CG2	VAL	113	4.614-116.571	5.047	1.00	0.00
C								
ATOM	5611	C	VAL	113	6.753-117.014	8.274	1.00	0.00
C								
ATOM	5612	O	VAL	113	6.768-115.856	8.667	1.00	0.00
O								
ATOM	5613	N	LEU	114	7.607-117.919	8.678	1.00	0.00
N								
ATOM	5614	CA	LEU	114	8.887-117.671	9.339	1.00	0.00
C								
ATOM	5615	CB	LEU	114	9.328-119.020	10.017	1.00	0.00
C								
ATOM	5616	CG	LEU	114	10.644-119.012	10.892	1.00	0.00
C								
ATOM	5617	CD1	LEU	114	10.421-118.128	12.072	1.00	0.00
C								
ATOM	5618	CD2	LEU	114	11.070-120.399	11.384	1.00	0.00
C								
ATOM	5619	C	LEU	114	9.943-117.266	8.347	1.00	0.00
C								
ATOM	5620	O	LEU	114	10.023-117.821	7.238	1.00	0.00
O								
ATOM	5621	N	HIE	115	10.819-116.343	8.682	1.00	0.00
N								
ATOM	5622	CA	HIE	115	12.114-116.037	8.001	1.00	0.00
C								
ATOM	5623	CB	HIE	115	11.918-114.801	7.086	1.00	0.00
C								
ATOM	5624	CG	HIE	115	13.060-114.614	6.079	1.00	0.00
C								
ATOM	5625	ND1	HIE	115	12.739-114.330	4.711	1.00	0.00
N								
ATOM	5626	CE1	HIE	115	13.879-114.162	4.072	1.00	0.00
C								
ATOM	5627	NE2	HIE	115	14.890-114.470	4.864	1.00	0.00
N								
ATOM	5628	CD2	HIE	115	14.429-114.709	6.149	1.00	0.00
C								
ATOM	5629	C	HIE	115	13.182-115.929	9.077	1.00	0.00
C								
ATOM	5630	O	HIE	115	13.353-114.863	9.658	1.00	0.00
O								
ATOM	5631	N	ILE	116	13.895-117.025	9.356	1.00	0.00
N								
ATOM	5632	CA	ILE	116	14.942-117.145	10.413	1.00	0.00
C								
ATOM	5633	CB	ILE	116	14.710-118.359	11.241	1.00	0.00
C								

ATOM	5634	CG2	ILE	116	14.751-119.701	10.599	1.00	0.00
C								
ATOM	5635	CG1	ILE	116	15.652-118.417	12.472	1.00	0.00
C								
ATOM	5636	CD1	ILE	116	14.921-118.863	13.802	1.00	0.00
C								
ATOM	5637	C	ILE	116	16.262-117.185	9.666	1.00	0.00
C								
ATOM	5638	O	ILE	116	16.368-118.105	8.808	1.00	0.00
O								
ATOM	5639	N	HIE	117	17.227-116.364	10.021	1.00	0.00
N								
ATOM	5640	CA	HIE	117	18.568-116.355	9.364	1.00	0.00
C								
ATOM	5641	CB	HIE	117	19.543-117.407	9.966	1.00	0.00
C								
ATOM	5642	CG	HIE	117	19.153-118.887	10.054	1.00	0.00
C								
ATOM	5643	ND1	HIE	117	19.095-119.785	8.982	1.00	0.00
N								
ATOM	5644	CE1	HIE	117	18.830-120.981	9.532	1.00	0.00
C								
ATOM	5645	NE2	HIE	117	18.662-120.903	10.849	1.00	0.00
N								
ATOM	5646	CD2	HIE	117	18.994-119.651	11.264	1.00	0.00
C								
ATOM	5647	C	HIE	117	18.423-116.233	7.896	1.00	0.00
C								
ATOM	5648	O	HIE	117	17.974-115.189	7.422	1.00	0.00
O								
ATOM	5649	N	THR	118	18.700-117.347	7.129	1.00	0.00
N								
ATOM	5650	CA	THR	118	18.249-117.569	5.697	1.00	0.00
C								
ATOM	5651	CB	THR	118	19.478-117.821	4.821	1.00	0.00
C								
ATOM	5652	CG2	THR	118	20.623-116.801	5.093	1.00	0.00
C								
ATOM	5653	OG1	THR	118	19.969-119.143	5.155	1.00	0.00
O								
ATOM	5654	C	THR	118	17.116-118.567	5.318	1.00	0.00
C								
ATOM	5655	O	THR	118	16.710-118.625	4.156	1.00	0.00
O								
ATOM	5656	N	CYS	119	16.626-119.272	6.326	1.00	0.00
N								
ATOM	5657	CA	CYS	119	15.569-120.280	6.157	1.00	0.00
C								
ATOM	5658	CB	CYS	119	15.803-121.220	7.325	1.00	0.00
C								
ATOM	5659	SG	CYS	119	14.504-122.408	7.616	1.00	0.00
S								
ATOM	5660	C	CYS	119	14.186-119.608	6.015	1.00	0.00
C								

ATOM	5661	O	CYS	119	13.975-118.648	6.734	1.00	0.00
O								
ATOM	5662	N	ILE	120	13.314-120.145	5.159	1.00	0.00
N								
ATOM	5663	CA	ILE	120	11.892-119.909	5.182	1.00	0.00
C								
ATOM	5664	CB	ILE	120	11.379-119.080	3.915	1.00	0.00
C								
ATOM	5665	CG2	ILE	120	9.832-118.886	3.887	1.00	0.00
C								
ATOM	5666	CG1	ILE	120	12.222-117.908	3.549	1.00	0.00
C								
ATOM	5667	CD1	ILE	120	12.011-117.199	2.199	1.00	0.00
C								
ATOM	5668	C	ILE	120	11.091-121.260	5.505	1.00	0.00
C								
ATOM	5669	O	ILE	120	11.286-122.268	4.824	1.00	0.00
O								
ATOM	5670	N	GLU	121	10.076-121.132	6.346	1.00	0.00
N								
ATOM	5671	CA	GLU	121	9.053-122.147	6.643	1.00	0.00
C								
ATOM	5672	CB	GLU	121	9.754-123.117	7.557	1.00	0.00
C								
ATOM	5673	CG	GLU	121	9.032-124.446	7.975	1.00	0.00
C								
ATOM	5674	CD	GLU	121	8.719-125.302	6.763	1.00	0.00
C								
ATOM	5675	OE1	GLU	121	7.766-124.942	6.022	1.00	0.00
O								
ATOM	5676	OE2	GLU	121	9.210-126.462	6.603	1.00	0.00
O1-								
ATOM	5677	C	GLU	121	7.677-121.629	7.250	1.00	0.00
C								
ATOM	5678	O	GLU	121	7.519-120.457	7.648	1.00	0.00
O								
ATOM	5679	N	GLU	122	6.647-122.486	7.091	1.00	0.00
N								
ATOM	5680	CA	GLU	122	5.325-122.263	7.674	1.00	0.00
C								
ATOM	5681	CB	GLU	122	4.323-123.014	6.858	1.00	0.00
C								
ATOM	5682	CG	GLU	122	2.920-123.007	7.471	1.00	0.00
C								
ATOM	5683	CD	GLU	122	2.003-124.042	6.739	1.00	0.00
C								
ATOM	5684	OE1	GLU	122	1.142-124.537	7.492	1.00	0.00
O								
ATOM	5685	OE2	GLU	122	2.120-124.393	5.542	1.00	0.00
O1-								
ATOM	5686	C	GLU	122	5.402-122.533	9.186	1.00	0.00
C								
ATOM	5687	O	GLU	122	5.765-123.643	9.614	1.00	0.00
O								

ATOM	5688	N	VAL	123	4.986-121.546	10.027	1.00	0.00
N								
ATOM	5689	CA	VAL	123	5.019-121.592	11.451	1.00	0.00
C								
ATOM	5690	CB	VAL	123	6.139-120.738	12.075	1.00	0.00
C								
ATOM	5691	CG1	VAL	123	5.833-119.242	12.103	1.00	0.00
C								
ATOM	5692	CG2	VAL	123	6.496-121.204	13.515	1.00	0.00
C								
ATOM	5693	C	VAL	123	3.605-121.269	12.045	1.00	0.00
C								
ATOM	5694	O	VAL	123	2.926-120.373	11.531	1.00	0.00
O								
ATOM	5695	N	GLU	124	3.278-122.054	13.001	1.00	0.00
N								
ATOM	5696	CA	GLU	124	2.176-121.833	13.899	1.00	0.00
C								
ATOM	5697	CB	GLU	124	1.487-123.164	14.282	1.00	0.00
C								
ATOM	5698	CG	GLU	124	0.288-123.012	15.229	1.00	0.00
C								
ATOM	5699	CD	GLU	124	-0.026-124.324	15.910	1.00	0.00
C								
ATOM	5700	OE1	GLU	124	-0.523-124.310	17.076	1.00	0.00
O								
ATOM	5701	OE2	GLU	124	0.202-125.448	15.347	1.00	0.00
O1-								
ATOM	5702	C	GLU	124	2.799-121.064	15.105	1.00	0.00
C								
ATOM	5703	O	GLU	124	3.751-121.508	15.790	1.00	0.00
O								
ATOM	5704	N	ILE	125	2.207-119.916	15.372	1.00	0.00
N								
ATOM	5705	CA	ILE	125	2.396-119.120	16.544	1.00	0.00
C								
ATOM	5706	CB	ILE	125	2.061-117.633	16.232	1.00	0.00
C								
ATOM	5707	CG2	ILE	125	2.412-116.769	17.448	1.00	0.00
C								
ATOM	5708	CG1	ILE	125	2.916-117.070	15.108	1.00	0.00
C								
ATOM	5709	CD1	ILE	125	2.223-115.975	14.259	1.00	0.00
C								
ATOM	5710	C	ILE	125	1.678-119.734	17.663	1.00	0.00
C								
ATOM	5711	O	ILE	125	0.620-119.190	18.136	1.00	0.00
O								
ATOM	5712	N	THR	126	2.106-120.915	18.148	1.00	0.00
N								
ATOM	5713	CA	THR	126	1.267-121.877	18.863	1.00	0.00
C								
ATOM	5714	CB	THR	126	2.016-123.257	18.794	1.00	0.00
C								

ATOM	5715	CG2	THR	126	3.389-123.366	19.380	1.00	0.00
C								
ATOM	5716	OG1	THR	126	1.301-124.291	19.273	1.00	0.00
O								
ATOM	5717	C	THR	126	0.786-121.509	20.192	1.00	0.00
C								
ATOM	5718	O	THR	126	-0.211-122.143	20.683	1.00	0.00
O								
ATOM	5719	N	ALA	127	1.346-120.510	20.917	1.00	0.00
N								
ATOM	5720	CA	ALA	127	0.981-119.972	22.227	1.00	0.00
C								
ATOM	5721	CB	ALA	127	1.492-120.873	23.369	1.00	0.00
C								
ATOM	5722	C	ALA	127	1.468-118.517	22.354	1.00	0.00
C								
ATOM	5723	O	ALA	127	2.487-118.126	21.779	1.00	0.00
O								
ATOM	5724	N	LEU	128	0.632-117.641	22.935	1.00	0.00
N								
ATOM	5725	CA	LEU	128	1.195-116.364	23.430	1.00	0.00
C								
ATOM	5726	CB	LEU	128	0.394-115.133	22.931	1.00	0.00
C								
ATOM	5727	CG	LEU	128	0.141-114.994	21.482	1.00	0.00
C								
ATOM	5728	CD1	LEU	128	-0.819-113.878	21.094	1.00	0.00
C								
ATOM	5729	CD2	LEU	128	1.402-115.098	20.563	1.00	0.00
C								
ATOM	5730	C	LEU	128	1.080-116.478	24.992	1.00	0.00
C								
ATOM	5731	O	LEU	128	-0.032-116.551	25.537	1.00	0.00
O								
ATOM	5732	N	ILE	129	2.146-116.385	25.791	1.00	0.00
N								
ATOM	5733	CA	ILE	129	2.026-116.616	27.303	1.00	0.00
C								
ATOM	5734	CB	ILE	129	3.325-117.386	27.897	1.00	0.00
C								
ATOM	5735	CG2	ILE	129	3.274-117.526	29.475	1.00	0.00
C								
ATOM	5736	CG1	ILE	129	3.747-118.629	27.146	1.00	0.00
C								
ATOM	5737	CD1	ILE	129	2.600-119.693	27.326	1.00	0.00
C								
ATOM	5738	C	ILE	129	1.652-115.324	28.027	1.00	0.00
C								
ATOM	5739	O	ILE	129	0.964-115.473	29.075	1.00	0.00
O								
ATOM	5740	N	CYS	130	2.152-114.162	27.599	1.00	0.00
N								
ATOM	5741	CA	CYS	130	1.979-112.918	28.296	1.00	0.00
C								



ATOM	5742	CB	CYS	130	2.703-112.887	29.688	1.00	0.00
C								
ATOM	5743	SG	CYS	130	4.519-112.776	29.409	1.00	0.00
S								
ATOM	5744	C	CYS	130	2.412-111.650	27.470	1.00	0.00
C								
ATOM	5745	O	CYS	130	3.463-111.540	26.856	1.00	0.00
O								
ATOM	5746	N	LEU	131	1.540-110.600	27.537	1.00	0.00
N								
ATOM	5747	CA	LEU	131	1.877-109.162	27.127	1.00	0.00
C								
ATOM	5748	CB	LEU	131	0.592-108.347	26.877	1.00	0.00
C								
ATOM	5749	CG	LEU	131	0.255-108.203	25.415	1.00	0.00
C								
ATOM	5750	CD1	LEU	131	-1.154-107.638	25.084	1.00	0.00
C								
ATOM	5751	CD2	LEU	131	1.281-107.224	24.785	1.00	0.00
C								
ATOM	5752	C	LEU	131	2.798-108.679	28.197	1.00	0.00
C								
ATOM	5753	O	LEU	131	2.693-109.061	29.340	1.00	0.00
O								
ATOM	5754	N	VAL	132	3.713-107.809	27.789	1.00	0.00
N								
ATOM	5755	CA	VAL	132	4.679-106.979	28.591	1.00	0.00
C								
ATOM	5756	CB	VAL	132	6.067-107.454	28.313	1.00	0.00
C								
ATOM	5757	CG1	VAL	132	7.134-106.858	29.375	1.00	0.00
C								
ATOM	5758	CG2	VAL	132	6.176-108.998	28.257	1.00	0.00
C								
ATOM	5759	C	VAL	132	4.473-105.495	28.422	1.00	0.00
C								
ATOM	5760	O	VAL	132	4.104-105.045	27.326	1.00	0.00
O								
ATOM	5761	N	ASP	133	4.857-104.718	29.504	1.00	0.00
N								
ATOM	5762	CA	ASP	133	4.526-103.288	29.621	1.00	0.00
C								
ATOM	5763	CB	ASP	133	4.319-102.904	31.122	1.00	0.00
C								
ATOM	5764	CG	ASP	133	3.847-101.437	31.345	1.00	0.00
C								
ATOM	5765	OD1	ASP	133	3.563-101.071	32.537	1.00	0.00
O								
ATOM	5766	OD2	ASP	133	3.684-100.659	30.400	1.00	0.00
O1-								
ATOM	5767	C	ASP	133	5.611-102.486	28.928	1.00	0.00
C								
ATOM	5768	O	ASP	133	6.784-102.515	29.489	1.00	0.00
O								

ATOM	5769	N	LYS	134	5.449-101.821	27.781	1.00	0.00
N								
ATOM	5770	CA	LYS	134	6.511-100.912	27.279	1.00	0.00
C								
ATOM	5771	CB	LYS	134	6.089-100.318	25.881	1.00	0.00
C								
ATOM	5772	CG	LYS	134	5.907-101.455	24.882	1.00	0.00
C								
ATOM	5773	CD	LYS	134	5.582-101.080	23.481	1.00	0.00
C								
ATOM	5774	CE	LYS	134	4.429-100.036	23.481	1.00	0.00
C								
ATOM	5775	NZ	LYS	134	4.214 -99.501	22.088	1.00	0.00
N1+								
ATOM	5776	C	LYS	134	6.973 -99.803	28.275	1.00	0.00
C								
ATOM	5777	O	LYS	134	8.136 -99.485	28.283	1.00	0.00
O								
ATOM	5778	N	LYS	135	6.010 -99.454	29.142	1.00	0.00
N								
ATOM	5779	CA	LYS	135	6.348 -98.467	30.221	1.00	0.00
C								
ATOM	5780	CB	LYS	135	5.142 -97.607	30.351	1.00	0.00
C								
ATOM	5781	CG	LYS	135	4.673 -96.933	29.077	1.00	0.00
C								
ATOM	5782	CD	LYS	135	3.565 -95.888	29.201	1.00	0.00
C								
ATOM	5783	CE	LYS	135	3.500 -94.833	28.159	1.00	0.00
C								
ATOM	5784	NZ	LYS	135	2.483 -93.761	28.585	1.00	0.00
N1+								
ATOM	5785	C	LYS	135	6.919 -98.976	31.524	1.00	0.00
C								
ATOM	5786	O	LYS	135	7.431 -98.173	32.395	1.00	0.00
O								
ATOM	5787	N	SER	136	6.983-100.295	31.848	1.00	0.00
N								
ATOM	5788	CA	SER	136	7.550-100.830	33.083	1.00	0.00
C								
ATOM	5789	CB	SER	136	6.561-100.816	34.298	1.00	0.00
C								
ATOM	5790	OG	SER	136	5.546-101.819	34.118	1.00	0.00
O								
ATOM	5791	C	SER	136	8.327-102.117	32.994	1.00	0.00
C								
ATOM	5792	O	SER	136	9.120-102.464	33.893	1.00	0.00
O								
ATOM	5793	N	GLY	137	8.107-102.931	31.923	1.00	0.00
N								
ATOM	5794	CA	GLY	137	8.543-104.255	31.859	1.00	0.00
C								
ATOM	5795	C	GLY	137	7.718-105.279	32.654	1.00	0.00
C								

ATOM	5796	O	GLY	137	8.104-106.433	32.714	1.00	0.00
O								
ATOM	5797	N	GLU	138	6.570-104.924	33.217	1.00	0.00
N								
ATOM	5798	CA	GLU	138	5.593-105.793	33.893	1.00	0.00
C								
ATOM	5799	CB	GLU	138	4.558-104.820	34.526	1.00	0.00
C								
ATOM	5800	CG	GLU	138	3.484-105.549	35.373	1.00	0.00
C								
ATOM	5801	CD	GLU	138	2.081-105.139	35.128	1.00	0.00
C								
ATOM	5802	OE1	GLU	138	1.391-105.867	34.400	1.00	0.00
O								
ATOM	5803	OE2	GLU	138	1.664-104.010	35.430	1.00	0.00
O1-								
ATOM	5804	C	GLU	138	4.935-106.771	32.920	1.00	0.00
C								
ATOM	5805	O	GLU	138	4.229-106.325	31.957	1.00	0.00
O								
ATOM	5806	N	LYS	139	5.013-108.066	33.177	1.00	0.00
N								
ATOM	5807	CA	LYS	139	4.358-109.119	32.374	1.00	0.00
C								
ATOM	5808	CB	LYS	139	5.234-110.445	32.459	1.00	0.00
C								
ATOM	5809	CG	LYS	139	6.683-110.341	31.966	1.00	0.00
C								
ATOM	5810	CD	LYS	139	7.451-111.673	31.768	1.00	0.00
C								
ATOM	5811	CE	LYS	139	8.789-111.506	30.966	1.00	0.00
C								
ATOM	5812	NZ	LYS	139	9.466-112.813	30.815	1.00	0.00
N1+								
ATOM	5813	C	LYS	139	2.916-109.392	32.825	1.00	0.00
C								
ATOM	5814	O	LYS	139	2.764-109.358	34.058	1.00	0.00
O								
ATOM	5815	N	SER	140	1.970-109.544	31.976	1.00	0.00
N								
ATOM	5816	CA	SER	140	0.516-109.787	32.281	1.00	0.00
C								
ATOM	5817	CB	SER	140	-0.309-109.906	30.994	1.00	0.00
C								
ATOM	5818	OG	SER	140	-0.008-110.909	30.040	1.00	0.00
O								
ATOM	5819	C	SER	140	0.312-111.053	33.157	1.00	0.00
C								
ATOM	5820	O	SER	140	0.937-112.078	33.033	1.00	0.00
O								
ATOM	5821	N	LYS	141	-0.726-111.084	33.975	1.00	0.00
N								
ATOM	5822	CA	LYS	141	-1.324-112.255	34.639	1.00	0.00
C								

ATOM	5823	CB	LYS	141	-2.436	-111.828	35.685	1.00	0.00
C									
ATOM	5824	CG	LYS	141	-2.657	-112.694	37.002	1.00	0.00
C									
ATOM	5825	CD	LYS	141	-3.988	-112.395	37.737	1.00	0.00
C									
ATOM	5826	CE	LYS	141	-4.294	-113.257	38.952	1.00	0.00
C									
ATOM	5827	NZ	LYS	141	-5.610	-112.974	39.531	1.00	0.00
N1+									
ATOM	5828	C	LYS	141	-1.837	-113.396	33.726	1.00	0.00
C									
ATOM	5829	O	LYS	141	-1.793	-114.558	34.217	1.00	0.00
O									
ATOM	5830	N	THR	142	-2.282	-113.033	32.500	1.00	0.00
N									
ATOM	5831	CA	THR	142	-3.089	-113.912	31.618	1.00	0.00
C									
ATOM	5832	CB	THR	142	-4.593	-113.796	31.848	1.00	0.00
C									
ATOM	5833	CG2	THR	142	-5.134	-112.500	31.307	1.00	0.00
C									
ATOM	5834	OG1	THR	142	-5.221	-114.931	31.360	1.00	0.00
O									
ATOM	5835	C	THR	142	-2.721	-113.826	30.145	1.00	0.00
C									
ATOM	5836	O	THR	142	-2.077	-112.820	29.813	1.00	0.00
O									
ATOM	5837	N	ARG	143	-3.003	-114.873	29.334	1.00	0.00
N									
ATOM	5838	CA	ARG	143	-2.708	-114.961	27.910	1.00	0.00
C									
ATOM	5839	CB	ARG	143	-2.935	-116.431	27.369	1.00	0.00
C									
ATOM	5840	CG	ARG	143	-1.977	-117.420	28.086	1.00	0.00
C									
ATOM	5841	CD	ARG	143	-2.266	-118.963	27.978	1.00	0.00
C									
ATOM	5842	NE	ARG	143	-3.696	-119.192	28.364	1.00	0.00
N									
ATOM	5843	CZ	ARG	143	-4.308	-120.329	28.443	1.00	0.00
C									
ATOM	5844	NH1	ARG	143	-3.787	-121.512	28.270	1.00	0.00
N									
ATOM	5845	NH2	ARG	143	-5.596	-120.341	28.774	1.00	0.00
N1+									
ATOM	5846	C	ARG	143	-3.589	-113.971	27.098	1.00	0.00
C									
ATOM	5847	O	ARG	143	-4.783	-113.849	27.482	1.00	0.00
O									
ATOM	5848	N	PRO	144	-3.089	-113.195	26.162	1.00	0.00
N									
ATOM	5849	CD	PRO	144	-1.702	-112.868	25.976	1.00	0.00
C									

ATOM	5850	CG	PRO	144	-1.651-111.431	25.345	1.00	0.00
C								
ATOM	5851	CB	PRO	144	-2.938-111.403	24.559	1.00	0.00
C								
ATOM	5852	CA	PRO	144	-3.936-112.308	25.344	1.00	0.00
C								
ATOM	5853	C	PRO	144	-4.841-113.098	24.419	1.00	0.00
C								
ATOM	5854	O	PRO	144	-4.614-114.306	24.121	1.00	0.00
O								
ATOM	5855	N	ARG	145	-5.860-112.337	23.958	1.00	0.00
N								
ATOM	5856	CA	ARG	145	-6.750-112.757	22.850	1.00	0.00
C								
ATOM	5857	CB	ARG	145	-8.210-112.354	23.020	1.00	0.00
C								
ATOM	5858	CG	ARG	145	-8.866-112.979	24.238	1.00	0.00
C								
ATOM	5859	CD	ARG	145	-10.342-112.744	24.176	1.00	0.00
C								
ATOM	5860	NE	ARG	145	-10.652-111.305	24.356	1.00	0.00
N								
ATOM	5861	CZ	ARG	145	-11.214-110.526	23.461	1.00	0.00
C								
ATOM	5862	NH1	ARG	145	-11.448-110.908	22.192	1.00	0.00
N								
ATOM	5863	NH2	ARG	145	-11.487-109.300	23.784	1.00	0.00
N1+								
ATOM	5864	C	ARG	145	-6.170-112.245	21.544	1.00	0.00
C								
ATOM	5865	O	ARG	145	-6.241-112.971	20.565	1.00	0.00
O								
ATOM	5866	N	PHE	146	-5.604-111.010	21.553	1.00	0.00
N								
ATOM	5867	CA	PHE	146	-5.005-110.437	20.404	1.00	0.00
C								
ATOM	5868	CB	PHE	146	-6.059-109.516	19.704	1.00	0.00
C								
ATOM	5869	CG	PHE	146	-7.320-110.191	19.035	1.00	0.00
C								
ATOM	5870	CD1	PHE	146	-8.619-109.884	19.440	1.00	0.00
C								
ATOM	5871	CE1	PHE	146	-9.704-110.464	18.689	1.00	0.00
C								
ATOM	5872	CZ	PHE	146	-9.441-111.351	17.636	1.00	0.00
C								
ATOM	5873	CE2	PHE	146	-8.142-111.651	17.198	1.00	0.00
C								
ATOM	5874	CD2	PHE	146	-7.072-111.054	17.904	1.00	0.00
C								
ATOM	5875	C	PHE	146	-3.818-109.607	20.822	1.00	0.00
C								
ATOM	5876	O	PHE	146	-3.658-109.260	21.979	1.00	0.00
O								

ATOM	5877	N	VAL	147	-2.934	-109.461	19.821	1.00	0.00
N									
ATOM	5878	CA	VAL	147	-1.642	-108.678	19.925	1.00	0.00
C									
ATOM	5879	CB	VAL	147	-0.443	-109.533	20.399	1.00	0.00
C									
ATOM	5880	CG1	VAL	147	-0.510	-109.966	21.901	1.00	0.00
C									
ATOM	5881	CG2	VAL	147	-0.008	-110.628	19.453	1.00	0.00
C									
ATOM	5882	C	VAL	147	-1.388	-107.936	18.633	1.00	0.00
C									
ATOM	5883	O	VAL	147	-1.388	-108.560	17.575	1.00	0.00
O									
ATOM	5884	N	LYS	148	-1.171	-106.618	18.757	1.00	0.00
N									
ATOM	5885	CA	LYS	148	-1.441	-105.602	17.749	1.00	0.00
C									
ATOM	5886	CB	LYS	148	-2.894	-105.083	18.125	1.00	0.00
C									
ATOM	5887	CG	LYS	148	-3.498	-103.912	17.388	1.00	0.00
C									
ATOM	5888	CD	LYS	148	-3.635	-104.070	15.929	1.00	0.00
C									
ATOM	5889	CE	LYS	148	-4.175	-102.747	15.352	1.00	0.00
C									
ATOM	5890	NZ	LYS	148	-4.065	-102.505	13.903	1.00	0.00
N1+									
ATOM	5891	C	LYS	148	-0.384	-104.475	17.770	1.00	0.00
C									
ATOM	5892	O	LYS	148	0.159	-104.228	18.818	1.00	0.00
O									
ATOM	5893	N	GLN	149	-0.138	-103.823	16.615	1.00	0.00
N									
ATOM	5894	CA	GLN	149	0.295	-102.462	16.450	1.00	0.00
C									
ATOM	5895	CB	GLN	149	-0.539	-101.436	17.173	1.00	0.00
C									
ATOM	5896	CG	GLN	149	-0.070	-100.049	16.741	1.00	0.00
C									
ATOM	5897	CD	GLN	149	-1.169	-99.026	16.716	1.00	0.00
C									
ATOM	5898	OE1	GLN	149	-2.096	-99.152	17.476	1.00	0.00
O									
ATOM	5899	NE2	GLN	149	-1.067	-98.065	15.848	1.00	0.00
N									
ATOM	5900	C	GLN	149	1.826	-102.295	16.542	1.00	0.00
C									
ATOM	5901	O	GLN	149	2.535	-102.112	15.584	1.00	0.00
O									
ATOM	5902	N	ASP	150	2.318	-102.473	17.772	1.00	0.00
N									
ATOM	5903	CA	ASP	150	3.684	-102.152	18.148	1.00	0.00
C									

ATOM	5904	CB	ASP	150	3.751-100.613	18.221	1.00	0.00
C								
ATOM	5905	CG	ASP	150	3.099 -99.844	19.423	1.00	0.00
C								
ATOM	5906	OD1	ASP	150	3.210 -98.623	19.421	1.00	0.00
O								
ATOM	5907	OD2	ASP	150	2.463-100.420	20.259	1.00	0.00
O1-								
ATOM	5908	C	ASP	150	4.144-102.848	19.528	1.00	0.00
C								
ATOM	5909	O	ASP	150	5.201-102.548	20.096	1.00	0.00
O								
ATOM	5910	N	GLN	151	3.265-103.687	20.086	1.00	0.00
N								
ATOM	5911	CA	GLN	151	3.485-104.397	21.391	1.00	0.00
C								
ATOM	5912	CB	GLN	151	2.152-105.187	21.583	1.00	0.00
C								
ATOM	5913	CG	GLN	151	0.991-104.249	22.065	1.00	0.00
C								
ATOM	5914	CD	GLN	151	-0.391-104.876	21.980	1.00	0.00
C								
ATOM	5915	OE1	GLN	151	-0.644-105.909	21.414	1.00	0.00
O								
ATOM	5916	NE2	GLN	151	-1.343-104.251	22.694	1.00	0.00
N								
ATOM	5917	C	GLN	151	4.697-105.271	21.592	1.00	0.00
C								
ATOM	5918	O	GLN	151	5.202-105.821	20.669	1.00	0.00
O								
ATOM	5919	N	VAL	152	5.022-105.557	22.843	1.00	0.00
N								
ATOM	5920	CA	VAL	152	6.063-106.556	23.224	1.00	0.00
C								
ATOM	5921	CB	VAL	152	7.166-105.936	24.001	1.00	0.00
C								
ATOM	5922	CG1	VAL	152	8.080-105.225	22.920	1.00	0.00
C								
ATOM	5923	CG2	VAL	152	6.720-104.918	25.002	1.00	0.00
C								
ATOM	5924	C	VAL	152	5.444-107.768	23.927	1.00	0.00
C								
ATOM	5925	O	VAL	152	4.656-107.645	24.849	1.00	0.00
O								
ATOM	5926	N	CYS	153	5.730-108.987	23.586	1.00	0.00
N								
ATOM	5927	CA	CYS	153	5.089-110.173	24.068	1.00	0.00
C								
ATOM	5928	CB	CYS	153	3.834-110.367	23.278	1.00	0.00
C								
ATOM	5929	SG	CYS	153	2.783-111.678	23.985	1.00	0.00
S								
ATOM	5930	C	CYS	153	6.045-111.405	24.010	1.00	0.00
C								

ATOM	5931	O	CYS	153	6.799-111.545	23.036	1.00	0.00
O								
ATOM	5932	N	ILE	154	5.845-112.415	24.880	1.00	0.00
N								
ATOM	5933	CA	ILE	154	6.527-113.738	24.956	1.00	0.00
C								
ATOM	5934	CB	ILE	154	6.676-114.069	26.441	1.00	0.00
C								
ATOM	5935	CG2	ILE	154	7.231-115.507	26.561	1.00	0.00
C								
ATOM	5936	CG1	ILE	154	7.498-113.018	27.192	1.00	0.00
C								
ATOM	5937	CD1	ILE	154	8.807-112.706	26.456	1.00	0.00
C								
ATOM	5938	C	ILE	154	5.673-114.729	24.161	1.00	0.00
C								
ATOM	5939	O	ILE	154	4.531-114.971	24.534	1.00	0.00
O								
ATOM	5940	N	ALA	155	6.226-115.333	23.105	1.00	0.00
N								
ATOM	5941	CA	ALA	155	5.552-116.332	22.279	1.00	0.00
C								
ATOM	5942	CB	ALA	155	5.504-115.641	20.883	1.00	0.00
C								
ATOM	5943	C	ALA	155	6.226-117.816	22.258	1.00	0.00
C								
ATOM	5944	O	ALA	155	7.432-117.954	22.498	1.00	0.00
O								
ATOM	5945	N	ARG	156	5.400-118.774	21.815	1.00	0.00
N								
ATOM	5946	CA	ARG	156	5.867-120.097	21.323	1.00	0.00
C								
ATOM	5947	CB	ARG	156	5.254-121.171	22.194	1.00	0.00
C								
ATOM	5948	CG	ARG	156	5.874-122.621	22.090	1.00	0.00
C								
ATOM	5949	CD	ARG	156	5.598-123.464	23.365	1.00	0.00
C								
ATOM	5950	NE	ARG	156	6.541-123.105	24.412	1.00	0.00
N								
ATOM	5951	CZ	ARG	156	6.701-123.904	25.469	1.00	0.00
C								
ATOM	5952	NH1	ARG	156	5.864-124.771	25.883	1.00	0.00
N								
ATOM	5953	NH2	ARG	156	7.760-123.718	26.204	1.00	0.00
N1+								
ATOM	5954	C	ARG	156	5.610-120.265	19.849	1.00	0.00
C								
ATOM	5955	O	ARG	156	4.655-119.754	19.220	1.00	0.00
O								
ATOM	5956	N	LEU	157	6.559-121.064	19.212	1.00	0.00
N								
ATOM	5957	CA	LEU	157	6.618-121.296	17.785	1.00	0.00
C								



ATOM	5958	CB	LEU	157	7.766-120.436	17.187	1.00	0.00
C								
ATOM	5959	CG	LEU	157	7.677-118.893	17.058	1.00	0.00
C								
ATOM	5960	CD1	LEU	157	6.472-118.385	16.307	1.00	0.00
C								
ATOM	5961	CD2	LEU	157	7.896-118.112	18.406	1.00	0.00
C								
ATOM	5962	C	LEU	157	6.736-122.796	17.394	1.00	0.00
C								
ATOM	5963	O	LEU	157	7.334-123.539	18.158	1.00	0.00
O								
ATOM	5964	N	ARG	158	6.139-123.201	16.272	1.00	0.00
N								
ATOM	5965	CA	ARG	158	6.065-124.607	15.802	1.00	0.00
C								
ATOM	5966	CB	ARG	158	4.822-125.110	16.529	1.00	0.00
C								
ATOM	5967	CG	ARG	158	4.365-126.501	15.936	1.00	0.00
C								
ATOM	5968	CD	ARG	158	3.564-127.299	17.028	1.00	0.00
C								
ATOM	5969	NE	ARG	158	2.161-126.910	17.062	1.00	0.00
N								
ATOM	5970	CZ	ARG	158	1.293-127.310	17.991	1.00	0.00
C								
ATOM	5971	NH1	ARG	158	1.693-128.036	18.971	1.00	0.00
N								
ATOM	5972	NH2	ARG	158	0.075-126.990	17.878	1.00	0.00
N1+								
ATOM	5973	C	ARG	158	5.924-124.633	14.277	1.00	0.00
C								
ATOM	5974	O	ARG	158	4.939-124.221	13.722	1.00	0.00
O								
ATOM	5975	N	THR	159	6.979-125.167	13.590	1.00	0.00
N								
ATOM	5976	CA	THR	159	7.027-125.229	12.138	1.00	0.00
C								
ATOM	5977	CB	THR	159	8.466-125.059	11.554	1.00	0.00
C								
ATOM	5978	CG2	THR	159	8.834-123.546	11.637	1.00	0.00
C								
ATOM	5979	OG1	THR	159	9.372-125.881	12.315	1.00	0.00
O								
ATOM	5980	C	THR	159	6.189-126.364	11.614	1.00	0.00
C								
ATOM	5981	O	THR	159	5.741-127.322	12.309	1.00	0.00
O								
ATOM	5982	N	ALA	160	5.968-126.344	10.260	1.00	0.00
N								
ATOM	5983	CA	ALA	160	5.374-127.403	9.527	1.00	0.00
C								
ATOM	5984	CB	ALA	160	4.940-126.879	8.219	1.00	0.00
C								

ATOM	5985	C	ALA	160	6.282-128.624	9.481	1.00	0.00
C								
ATOM	5986	O	ALA	160	5.751-129.746	9.282	1.00	0.00
O								
ATOM	5987	N	GLY	161	7.624-128.425	9.613	1.00	0.00
N								
ATOM	5988	CA	GLY	161	8.785-129.341	9.262	1.00	0.00
C								
ATOM	5989	C	GLY	161	10.065-128.865	9.942	1.00	0.00
C								
ATOM	5990	O	GLY	161	10.099-127.858	10.639	1.00	0.00
O								
ATOM	5991	N	THR	162	11.068-129.687	9.755	1.00	0.00
N								
ATOM	5992	CA	THR	162	12.352-129.644	10.516	1.00	0.00
C								
ATOM	5993	CB	THR	162	12.908-131.022	10.674	1.00	0.00
C								
ATOM	5994	CG2	THR	162	14.131-131.011	11.602	1.00	0.00
C								
ATOM	5995	OG1	THR	162	11.947-131.762	11.353	1.00	0.00
O								
ATOM	5996	C	THR	162	13.342-128.627	9.833	1.00	0.00
C								
ATOM	5997	O	THR	162	13.437-128.640	8.580	1.00	0.00
O								
ATOM	5998	N	ILE	163	13.928-127.804	10.669	1.00	0.00
N								
ATOM	5999	CA	ILE	163	14.822-126.702	10.302	1.00	0.00
C								
ATOM	6000	CB	ILE	163	14.073-125.462	10.159	1.00	0.00
C								
ATOM	6001	CG2	ILE	163	13.095-125.485	8.913	1.00	0.00
C								
ATOM	6002	CG1	ILE	163	13.292-125.141	11.494	1.00	0.00
C								
ATOM	6003	CD1	ILE	163	12.774-123.678	11.592	1.00	0.00
C								
ATOM	6004	C	ILE	163	16.052-126.573	11.224	1.00	0.00
C								
ATOM	6005	O	ILE	163	16.004-126.985	12.360	1.00	0.00
O								
ATOM	6006	N	CYS	164	17.167-126.169	10.680	1.00	0.00
N								
ATOM	6007	CA	CYS	164	18.449-125.848	11.405	1.00	0.00
C								
ATOM	6008	CB	CYS	164	19.674-126.087	10.486	1.00	0.00
C								
ATOM	6009	SG	CYS	164	21.177-126.039	11.461	1.00	0.00
S								
ATOM	6010	C	CYS	164	18.394-124.430	12.071	1.00	0.00
C								
ATOM	6011	O	CYS	164	17.908-123.433	11.517	1.00	0.00
O								

ATOM	6012	N	LEU	165	18.796-124.342	13.359	1.00	0.00
N								
ATOM	6013	CA	LEU	165	18.506-123.182	14.177	1.00	0.00
C								
ATOM	6014	CB	LEU	165	17.340-123.489	15.105	1.00	0.00
C								
ATOM	6015	CG	LEU	165	15.969-123.754	14.501	1.00	0.00
C								
ATOM	6016	CD1	LEU	165	15.177-124.772	15.315	1.00	0.00
C								
ATOM	6017	CD2	LEU	165	15.191-122.469	14.194	1.00	0.00
C								
ATOM	6018	C	LEU	165	19.700-122.955	15.144	1.00	0.00
C								
ATOM	6019	O	LEU	165	20.505-123.864	15.531	1.00	0.00
O								
ATOM	6020	N	GLU	166	19.659-121.715	15.689	1.00	0.00
N								
ATOM	6021	CA	GLU	166	20.598-121.187	16.684	1.00	0.00
C								
ATOM	6022	CB	GLU	166	21.860-120.487	16.006	1.00	0.00
C								
ATOM	6023	CG	GLU	166	23.062-121.316	15.555	1.00	0.00
C								
ATOM	6024	CD	GLU	166	23.649-122.205	16.635	1.00	0.00
C								
ATOM	6025	OE1	GLU	166	24.424-123.122	16.251	1.00	0.00
O								
ATOM	6026	OE2	GLU	166	23.541-121.922	17.813	1.00	0.00
O1-								
ATOM	6027	C	GLU	166	19.866-120.126	17.595	1.00	0.00
C								
ATOM	6028	O	GLU	166	19.069-119.341	17.015	1.00	0.00
O								
ATOM	6029	N	THR	167	20.153-119.996	18.877	1.00	0.00
N								
ATOM	6030	CA	THR	167	19.590-119.050	19.827	1.00	0.00
C								
ATOM	6031	CB	THR	167	19.391-119.751	21.221	1.00	0.00
C								
ATOM	6032	CG2	THR	167	18.673-121.109	20.878	1.00	0.00
C								
ATOM	6033	OG1	THR	167	20.621-119.930	21.812	1.00	0.00
O								
ATOM	6034	C	THR	167	20.356-117.680	19.962	1.00	0.00
C								
ATOM	6035	O	THR	167	21.560-117.529	19.697	1.00	0.00
O								
ATOM	6036	N	PHE	168	19.651-116.628	20.373	1.00	0.00
N								
ATOM	6037	CA	PHE	168	20.084-115.205	20.440	1.00	0.00
C								
ATOM	6038	CB	PHE	168	18.828-114.299	20.666	1.00	0.00
C								

ATOM	6039	CG	PHE	168	19.074-112.801	20.570	1.00	0.00
C								
ATOM	6040	CD1	PHE	168	19.351-111.986	21.705	1.00	0.00
C								
ATOM	6041	CE1	PHE	168	19.495-110.612	21.603	1.00	0.00
C								
ATOM	6042	CZ	PHE	168	19.319-109.971	20.407	1.00	0.00
C								
ATOM	6043	CE2	PHE	168	19.097-110.746	19.256	1.00	0.00
C								
ATOM	6044	CD2	PHE	168	18.962-112.168	19.295	1.00	0.00
C								
ATOM	6045	C	PHE	168	21.293-114.836	21.241	1.00	0.00
C								
ATOM	6046	O	PHE	168	22.018-113.870	20.983	1.00	0.00
O								
ATOM	6047	N	LYS	169	21.603-115.609	22.295	1.00	0.00
N								
ATOM	6048	CA	LYS	169	22.745-115.498	23.162	1.00	0.00
C								
ATOM	6049	CB	LYS	169	22.393-116.067	24.504	1.00	0.00
C								
ATOM	6050	CG	LYS	169	23.569-115.933	25.460	1.00	0.00
C								
ATOM	6051	CD	LYS	169	24.039-114.588	25.900	1.00	0.00
C								
ATOM	6052	CE	LYS	169	25.285-114.727	26.748	1.00	0.00
C								
ATOM	6053	NZ	LYS	169	25.829-113.391	27.200	1.00	0.00
N1+								
ATOM	6054	C	LYS	169	23.975-116.204	22.526	1.00	0.00
C								
ATOM	6055	O	LYS	169	24.998-115.564	22.461	1.00	0.00
O								
ATOM	6056	N	ASP	170	23.921-117.415	21.984	1.00	0.00
N								
ATOM	6057	CA	ASP	170	25.077-117.975	21.259	1.00	0.00
C								
ATOM	6058	CB	ASP	170	24.780-119.445	20.924	1.00	0.00
C								
ATOM	6059	CG	ASP	170	24.552-120.401	22.107	1.00	0.00
C								
ATOM	6060	OD1	ASP	170	23.595-121.190	22.122	1.00	0.00
O								
ATOM	6061	OD2	ASP	170	25.360-120.315	23.083	1.00	0.00
O1-								
ATOM	6062	C	ASP	170	25.330-117.177	19.888	1.00	0.00
C								
ATOM	6063	O	ASP	170	26.476-116.918	19.505	1.00	0.00
O								
ATOM	6064	N	PHE	171	24.326-116.661	19.158	1.00	0.00
N								
ATOM	6065	CA	PHE	171	24.546-115.943	17.881	1.00	0.00
C								

ATOM	6066	CB	PHE	171	24.648-116.975	16.719	1.00	0.00
C								
ATOM	6067	CG	PHE	171	25.873-117.975	16.782	1.00	0.00
C								
ATOM	6068	CD1	PHE	171	27.127-117.454	16.568	1.00	0.00
C								
ATOM	6069	CE1	PHE	171	28.261-118.358	16.762	1.00	0.00
C								
ATOM	6070	CZ	PHE	171	28.041-119.706	17.074	1.00	0.00
C								
ATOM	6071	CE2	PHE	171	26.702-120.201	17.257	1.00	0.00
C								
ATOM	6072	CD2	PHE	171	25.628-119.325	17.106	1.00	0.00
C								
ATOM	6073	C	PHE	171	23.429-114.928	17.610	1.00	0.00
C								
ATOM	6074	O	PHE	171	22.449-115.358	16.982	1.00	0.00
O								
ATOM	6075	N	PRO	172	23.415-113.656	18.052	1.00	0.00
N								
ATOM	6076	CD	PRO	172	24.499-112.935	18.684	1.00	0.00
C								
ATOM	6077	CG	PRO	172	24.067-111.440	18.569	1.00	0.00
C								
ATOM	6078	CB	PRO	172	22.635-111.438	18.621	1.00	0.00
C								
ATOM	6079	CA	PRO	172	22.238-112.747	17.886	1.00	0.00
C								
ATOM	6080	C	PRO	172	21.783-112.615	16.407	1.00	0.00
C								
ATOM	6081	O	PRO	172	20.627-112.417	16.130	1.00	0.00
O								
ATOM	6082	N	GLN	173	22.644-112.776	15.380	1.00	0.00
N								
ATOM	6083	CA	GLN	173	22.249-112.659	13.945	1.00	0.00
C								
ATOM	6084	CB	GLN	173	23.464-112.170	13.134	1.00	0.00
C								
ATOM	6085	CG	GLN	173	24.458-113.149	12.578	1.00	0.00
C								
ATOM	6086	CD	GLN	173	25.472-113.660	13.569	1.00	0.00
C								
ATOM	6087	OE1	GLN	173	25.178-113.718	14.748	1.00	0.00
O								
ATOM	6088	NE2	GLN	173	26.515-114.203	13.087	1.00	0.00
N								
ATOM	6089	C	GLN	173	21.596-113.905	13.275	1.00	0.00
C								
ATOM	6090	O	GLN	173	21.117-113.806	12.160	1.00	0.00
O								
ATOM	6091	N	MET	174	21.510-114.994	14.028	1.00	0.00
N								
ATOM	6092	CA	MET	174	20.811-116.229	13.698	1.00	0.00
C								

ATOM	6093	CB	MET	174	21.719-117.496	13.724	1.00	0.00
C								
ATOM	6094	CG	MET	174	22.632-117.485	12.527	1.00	0.00
C								
ATOM	6095	SD	MET	174	23.840-118.787	12.678	1.00	0.00
S								
ATOM	6096	CE	MET	174	23.048-120.099	11.729	1.00	0.00
C								
ATOM	6097	C	MET	174	19.640-116.508	14.660	1.00	0.00
C								
ATOM	6098	O	MET	174	18.656-117.177	14.308	1.00	0.00
O								
ATOM	6099	N	GLY	175	19.771-116.065	15.897	1.00	0.00
N								
ATOM	6100	CA	GLY	175	18.673-116.130	16.855	1.00	0.00
C								
ATOM	6101	C	GLY	175	17.624-115.074	16.600	1.00	0.00
C								
ATOM	6102	O	GLY	175	16.495-115.381	17.005	1.00	0.00
O								
ATOM	6103	N	ARG	176	17.879-113.964	15.892	1.00	0.00
N								
ATOM	6104	CA	ARG	176	16.809-113.127	15.373	1.00	0.00
C								
ATOM	6105	CB	ARG	176	17.317-111.842	14.782	1.00	0.00
C								
ATOM	6106	CG	ARG	176	18.348-112.001	13.639	1.00	0.00
C								
ATOM	6107	CD	ARG	176	19.187-110.759	13.354	1.00	0.00
C								
ATOM	6108	NE	ARG	176	18.294-109.619	12.903	1.00	0.00
N								
ATOM	6109	CZ	ARG	176	18.769-108.366	12.663	1.00	0.00
C								
ATOM	6110	NH1	ARG	176	18.062-107.458	12.040	1.00	0.00
N								
ATOM	6111	NH2	ARG	176	19.954-108.045	12.909	1.00	0.00
N1+								
ATOM	6112	C	ARG	176	16.013-113.820	14.217	1.00	0.00
C								
ATOM	6113	O	ARG	176	16.546-114.572	13.373	1.00	0.00
O								
ATOM	6114	N	PHE	177	14.702-113.593	14.142	1.00	0.00
N								
ATOM	6115	CA	PHE	177	13.918-113.968	12.959	1.00	0.00
C								
ATOM	6116	CB	PHE	177	13.361-115.338	13.286	1.00	0.00
C								
ATOM	6117	CG	PHE	177	12.428-115.448	14.528	1.00	0.00
C								
ATOM	6118	CD1	PHE	177	11.066-115.282	14.327	1.00	0.00
C								
ATOM	6119	CE1	PHE	177	10.194-115.424	15.395	1.00	0.00
C								

ATOM	6120	CZ	PHE	177	10.694-115.758	16.654	1.00	0.00
C								
ATOM	6121	CE2	PHE	177	12.055-115.852	16.854	1.00	0.00
C								
ATOM	6122	CD2	PHE	177	12.956-115.672	15.803	1.00	0.00
C								
ATOM	6123	C	PHE	177	12.831-112.919	12.666	1.00	0.00
C								
ATOM	6124	O	PHE	177	12.715-111.951	13.437	1.00	0.00
O								
ATOM	6125	N	THR	178	12.113-113.084	11.562	1.00	0.00
N								
ATOM	6126	CA	THR	178	11.038-112.183	11.143	1.00	0.00
C								
ATOM	6127	CB	THR	178	11.330-111.286	9.900	1.00	0.00
C								
ATOM	6128	CG2	THR	178	10.206-110.279	9.726	1.00	0.00
C								
ATOM	6129	OG1	THR	178	12.462-110.476	10.127	1.00	0.00
O								
ATOM	6130	C	THR	178	9.843-113.092	10.889	1.00	0.00
C								
ATOM	6131	O	THR	178	10.031-114.213	10.386	1.00	0.00
O								
ATOM	6132	N	LEU	179	8.562-112.622	11.196	1.00	0.00
N								
ATOM	6133	CA	LEU	179	7.255-113.267	10.923	1.00	0.00
C								
ATOM	6134	CB	LEU	179	6.501-113.514	12.266	1.00	0.00
C								
ATOM	6135	CG	LEU	179	7.121-114.494	13.323	1.00	0.00
C								
ATOM	6136	CD1	LEU	179	6.421-114.362	14.713	1.00	0.00
C								
ATOM	6137	CD2	LEU	179	7.138-115.977	12.880	1.00	0.00
C								
ATOM	6138	C	LEU	179	6.557-112.429	9.871	1.00	0.00
C								
ATOM	6139	O	LEU	179	6.595-111.206	9.949	1.00	0.00
O								
ATOM	6140	N	ARG	180	5.976-113.108	8.861	1.00	0.00
N								
ATOM	6141	CA	ARG	180	5.395-112.489	7.703	1.00	0.00
C								
ATOM	6142	CB	ARG	180	6.471-112.515	6.540	1.00	0.00
C								
ATOM	6143	CG	ARG	180	5.898-112.435	5.087	1.00	0.00
C								
ATOM	6144	CD	ARG	180	7.018-111.911	4.224	1.00	0.00
C								
ATOM	6145	NE	ARG	180	7.945-112.973	4.103	1.00	0.00
N								
ATOM	6146	CZ	ARG	180	9.223-113.091	4.420	1.00	0.00
C								

ATOM	6147	NH1	ARG	180	9.786-112.263	5.269	1.00	0.00
N								
ATOM	6148	NH2	ARG	180	9.868-114.213	3.983	1.00	0.00
N1+								
ATOM	6149	C	ARG	180	4.090-113.117	7.324	1.00	0.00
C								
ATOM	6150	O	ARG	180	3.896-114.328	7.490	1.00	0.00
O								
ATOM	6151	N	ASP	181	3.055-112.337	6.897	1.00	0.00
N								
ATOM	6152	CA	ASP	181	1.838-112.856	6.338	1.00	0.00
C								
ATOM	6153	CB	ASP	181	0.880-113.279	7.495	1.00	0.00
C								
ATOM	6154	CG	ASP	181	-0.391-113.952	7.040	1.00	0.00
C								
ATOM	6155	OD1	ASP	181	-1.423-113.911	7.744	1.00	0.00
O								
ATOM	6156	OD2	ASP	181	-0.369-114.538	5.939	1.00	0.00
O1-								
ATOM	6157	C	ASP	181	1.227-111.830	5.378	1.00	0.00
C								
ATOM	6158	O	ASP	181	1.533-110.596	5.422	1.00	0.00
O								
ATOM	6159	N	GLU	182	0.463-112.327	4.451	1.00	0.00
N								
ATOM	6160	CA	GLU	182	-0.070-111.546	3.366	1.00	0.00
C								
ATOM	6161	CB	GLU	182	-1.284-110.692	3.824	1.00	0.00
C								
ATOM	6162	CG	GLU	182	-2.336-111.592	4.628	1.00	0.00
C								
ATOM	6163	CD	GLU	182	-3.771-111.164	4.440	1.00	0.00
C								
ATOM	6164	OE1	GLU	182	-4.512-110.959	5.445	1.00	0.00
O								
ATOM	6165	OE2	GLU	182	-4.223-111.008	3.263	1.00	0.00
O1-								
ATOM	6166	C	GLU	182	0.931-110.869	2.504	1.00	0.00
C								
ATOM	6167	O	GLU	182	0.633-109.829	1.959	1.00	0.00
O								
ATOM	6168	N	GLY	183	2.166-111.425	2.360	1.00	0.00
N								
ATOM	6169	CA	GLY	183	3.214-110.759	1.589	1.00	0.00
C								
ATOM	6170	C	GLY	183	4.072-109.691	2.337	1.00	0.00
C								
ATOM	6171	O	GLY	183	4.897-109.057	1.786	1.00	0.00
O								
ATOM	6172	N	LYS	184	3.721-109.442	3.582	1.00	0.00
N								
ATOM	6173	CA	LYS	184	4.320-108.347	4.414	1.00	0.00
C								



ATOM	6174	CB	LYS	184	3.284-107.142	4.420	1.00	0.00
C								
ATOM	6175	CG	LYS	184	3.151-106.395	3.092	1.00	0.00
C								
ATOM	6176	CD	LYS	184	4.346-105.478	2.742	1.00	0.00
C								
ATOM	6177	CE	LYS	184	3.946-105.046	1.368	1.00	0.00
C								
ATOM	6178	NZ	LYS	184	4.898-104.049	0.864	1.00	0.00
N1+								
ATOM	6179	C	LYS	184	4.731-108.728	5.831	1.00	0.00
C								
ATOM	6180	O	LYS	184	4.175-109.665	6.390	1.00	0.00
O								
ATOM	6181	N	THR	185	5.733-108.051	6.424	1.00	0.00
N								
ATOM	6182	CA	THR	185	6.126-108.294	7.789	1.00	0.00
C								
ATOM	6183	CB	THR	185	7.294-107.463	8.286	1.00	0.00
C								
ATOM	6184	CG2	THR	185	7.878-107.940	9.625	1.00	0.00
C								
ATOM	6185	OG1	THR	185	8.300-107.543	7.315	1.00	0.00
O								
ATOM	6186	C	THR	185	4.963-107.899	8.744	1.00	0.00
C								
ATOM	6187	O	THR	185	4.448-106.808	8.714	1.00	0.00
O								
ATOM	6188	N	ILE	186	4.654-108.795	9.687	1.00	0.00
N								
ATOM	6189	CA	ILE	186	3.645-108.682	10.775	1.00	0.00
C								
ATOM	6190	CB	ILE	186	2.439-109.675	10.584	1.00	0.00
C								
ATOM	6191	CG2	ILE	186	2.965-111.096	10.591	1.00	0.00
C								
ATOM	6192	CG1	ILE	186	1.223-109.468	11.552	1.00	0.00
C								
ATOM	6193	CD1	ILE	186	-0.018-110.329	11.205	1.00	0.00
C								
ATOM	6194	C	ILE	186	4.289-108.812	12.190	1.00	0.00
C								
ATOM	6195	O	ILE	186	3.633-108.383	13.209	1.00	0.00
O								
ATOM	6196	N	ALA	187	5.438-109.392	12.367	1.00	0.00
N								
ATOM	6197	CA	ALA	187	6.241-109.330	13.617	1.00	0.00
C								
ATOM	6198	CB	ALA	187	5.655-110.243	14.788	1.00	0.00
C								
ATOM	6199	C	ALA	187	7.781-109.502	13.393	1.00	0.00
C								
ATOM	6200	O	ALA	187	8.215-109.988	12.373	1.00	0.00
O								

ATOM	6201	N	ILE	188	8.575-109.238	14.427	1.00	0.00
N								
ATOM	6202	CA	ILE	188	9.989-109.736	14.518	1.00	0.00
C								
ATOM	6203	CB	ILE	188	10.948-108.522	14.440	1.00	0.00
C								
ATOM	6204	CG2	ILE	188	12.371-108.673	15.034	1.00	0.00
C								
ATOM	6205	CG1	ILE	188	11.014-108.159	12.938	1.00	0.00
C								
ATOM	6206	CD1	ILE	188	11.591-106.811	12.598	1.00	0.00
C								
ATOM	6207	C	ILE	188	10.112-110.622	15.749	1.00	0.00
C								
ATOM	6208	O	ILE	188	9.306-110.450	16.611	1.00	0.00
O								
ATOM	6209	N	GLY	189	11.179-111.403	15.924	1.00	0.00
N								
ATOM	6210	CA	GLY	189	11.619-111.743	17.277	1.00	0.00
C								
ATOM	6211	C	GLY	189	13.119-112.248	17.437	1.00	0.00
C								
ATOM	6212	O	GLY	189	13.893-112.077	16.515	1.00	0.00
O								
ATOM	6213	N	LYS	190	13.310-112.932	18.570	1.00	0.00
N								
ATOM	6214	CA	LYS	190	14.549-113.590	18.973	1.00	0.00
C								
ATOM	6215	CB	LYS	190	15.540-112.692	19.626	1.00	0.00
C								
ATOM	6216	CG	LYS	190	15.007-111.612	20.543	1.00	0.00
C								
ATOM	6217	CD	LYS	190	16.038-110.977	21.415	1.00	0.00
C								
ATOM	6218	CE	LYS	190	15.211-109.998	22.287	1.00	0.00
C								
ATOM	6219	NZ	LYS	190	16.083-109.298	23.325	1.00	0.00
N1+								
ATOM	6220	C	LYS	190	14.272-114.877	19.768	1.00	0.00
C								
ATOM	6221	O	LYS	190	13.546-114.869	20.791	1.00	0.00
O								
ATOM	6222	N	VAL	191	14.901-115.967	19.288	1.00	0.00
N								
ATOM	6223	CA	VAL	191	14.777-117.329	19.845	1.00	0.00
C								
ATOM	6224	CB	VAL	191	15.198-118.477	18.889	1.00	0.00
C								
ATOM	6225	CG1	VAL	191	15.164-119.899	19.476	1.00	0.00
C								
ATOM	6226	CG2	VAL	191	14.380-118.546	17.611	1.00	0.00
C								
ATOM	6227	C	VAL	191	15.447-117.472	21.167	1.00	0.00
C								

ATOM	6228	O	VAL	191	16.624-117.315	21.293	1.00	0.00
O								
ATOM	6229	N	LEU	192	14.644-117.819	22.175	1.00	0.00
N								
ATOM	6230	CA	LEU	192	15.006-118.084	23.578	1.00	0.00
C								
ATOM	6231	CB	LEU	192	13.741-117.994	24.493	1.00	0.00
C								
ATOM	6232	CG	LEU	192	13.231-116.621	24.824	1.00	0.00
C								
ATOM	6233	CD1	LEU	192	11.940-116.745	25.629	1.00	0.00
C								
ATOM	6234	CD2	LEU	192	14.174-115.711	25.661	1.00	0.00
C								
ATOM	6235	C	LEU	192	15.688-119.432	23.723	1.00	0.00
C								
ATOM	6236	O	LEU	192	16.796-119.381	24.260	1.00	0.00
O								
ATOM	6237	N	LYS	193	14.987-120.496	23.307	1.00	0.00
N								
ATOM	6238	CA	LYS	193	15.407-121.859	23.444	1.00	0.00
C								
ATOM	6239	CB	LYS	193	15.371-122.448	24.902	1.00	0.00
C								
ATOM	6240	CG	LYS	193	14.078-122.703	25.507	1.00	0.00
C								
ATOM	6241	CD	LYS	193	14.334-123.328	26.889	1.00	0.00
C								
ATOM	6242	CE	LYS	193	14.616-124.806	27.013	1.00	0.00
C								
ATOM	6243	NZ	LYS	193	13.544-125.648	26.329	1.00	0.00
N1+								
ATOM	6244	C	LYS	193	14.538-122.753	22.548	1.00	0.00
C								
ATOM	6245	O	LYS	193	13.458-122.367	22.162	1.00	0.00
O								
ATOM	6246	N	LEU	194	14.964-123.986	22.230	1.00	0.00
N								
ATOM	6247	CA	LEU	194	14.165-125.018	21.545	1.00	0.00
C								
ATOM	6248	CB	LEU	194	15.100-125.879	20.669	1.00	0.00
C								
ATOM	6249	CG	LEU	194	15.746-125.252	19.399	1.00	0.00
C								
ATOM	6250	CD1	LEU	194	16.499-123.903	19.682	1.00	0.00
C								
ATOM	6251	CD2	LEU	194	16.656-126.187	18.624	1.00	0.00
C								
ATOM	6252	C	LEU	194	13.336-125.866	22.501	1.00	0.00
C								
ATOM	6253	O	LEU	194	13.646-125.958	23.663	1.00	0.00
O								
ATOM	6254	N	VAL	195	12.244-126.419	22.009	1.00	0.00
N								

ATOM	6255	CA	VAL	195	11.339-127.265	22.734	1.00	0.00
C								
ATOM	6256	CB	VAL	195	9.947-126.626	22.584	1.00	0.00
C								
ATOM	6257	CG1	VAL	195	8.781-127.484	23.115	1.00	0.00
C								
ATOM	6258	CG2	VAL	195	9.787-125.318	23.289	1.00	0.00
C								
ATOM	6259	C	VAL	195	11.387-128.640	22.222	1.00	0.00
C								
ATOM	6260	O	VAL	195	11.166-128.940	21.050	1.00	0.00
O								
ATOM	6261	N	PRO	196	11.511-129.635	23.089	1.00	0.00
N								
ATOM	6262	CD	PRO	196	10.980-130.986	22.763	1.00	0.00
C								
ATOM	6263	CG	PRO	196	10.707-131.561	24.149	1.00	0.00
C								
ATOM	6264	CB	PRO	196	11.801-130.971	25.080	1.00	0.00
C								
ATOM	6265	CA	PRO	196	11.876-129.605	24.515	1.00	0.00
C								
ATOM	6266	C	PRO	196	13.261-129.036	24.872	1.00	0.00
C								
ATOM	6267	O	PRO	196	14.180-129.181	23.978	1.00	0.00
O								
ATOM	6268	OXT	PRO	196	13.522-128.601	26.044	1.00	0.00
O1-								
ATOM	6269	CH3	ACE	197	29.888-111.250	43.384	1.00	0.00
C								
ATOM	6270	C	ACE	197	29.312-109.969	42.816	1.00	0.00
C								
ATOM	6271	O	ACE	197	28.675-109.993	41.748	1.00	0.00
O								
ATOM	6272	N	ASN	198	29.616-108.851	43.495	1.00	0.00
N								
ATOM	6273	CA	ASN	198	29.329-107.459	43.015	1.00	0.00
C								
ATOM	6274	CB	ASN	198	29.394-106.453	44.189	1.00	0.00
C								
ATOM	6275	CG	ASN	198	28.306-106.714	45.162	1.00	0.00
C								
ATOM	6276	OD1	ASN	198	28.481-107.089	46.321	1.00	0.00
O								
ATOM	6277	ND2	ASN	198	27.065-106.369	44.784	1.00	0.00
N								
ATOM	6278	C	ASN	198	30.188-107.151	41.786	1.00	0.00
C								
ATOM	6279	O	ASN	198	31.256-107.663	41.626	1.00	0.00
O								
ATOM	6280	N	PHE	199	29.732-106.206	40.913	1.00	0.00
N								
ATOM	6281	CA	PHE	199	30.484-105.733	39.795	1.00	0.00
C								

ATOM	6282	CB	PHE	199	29.737-105.872	38.442	1.00	0.00
C								
ATOM	6283	CG	PHE	199	29.229-107.252	37.944	1.00	0.00
C								
ATOM	6284	CD1	PHE	199	28.157-107.927	38.502	1.00	0.00
C								
ATOM	6285	CE1	PHE	199	27.799-109.214	38.120	1.00	0.00
C								
ATOM	6286	CZ	PHE	199	28.460-109.832	37.090	1.00	0.00
C								
ATOM	6287	CE2	PHE	199	29.535-109.175	36.491	1.00	0.00
C								
ATOM	6288	CD2	PHE	199	29.963-107.906	36.919	1.00	0.00
C								
ATOM	6289	C	PHE	199	30.825-104.246	39.969	1.00	0.00
C								
ATOM	6290	O	PHE	199	30.252-103.641	40.844	1.00	0.00
O								
ATOM	6291	N	ASP	200	31.753-103.623	39.227	1.00	0.00
N								
ATOM	6292	CA	ASP	200	32.157-102.223	39.401	1.00	0.00
C								
ATOM	6293	CB	ASP	200	33.237-101.998	38.272	1.00	0.00
C								
ATOM	6294	CG	ASP	200	33.802-100.564	38.334	1.00	0.00
C								
ATOM	6295	OD1	ASP	200	34.335-100.040	37.336	1.00	0.00
O								
ATOM	6296	OD2	ASP	200	33.739-100.040	39.435	1.00	0.00
O1-								
ATOM	6297	C	ASP	200	30.970-101.244	39.405	1.00	0.00
C								
ATOM	6298	O	ASP	200	30.187-101.208	38.470	1.00	0.00
O								
ATOM	6299	N	THR	201	30.948-100.376	40.377	1.00	0.00
N								
ATOM	6300	CA	THR	201	29.956 -99.233	40.496	1.00	0.00
C								
ATOM	6301	CB	THR	201	30.170 -98.545	41.791	1.00	0.00
C								
ATOM	6302	CG2	THR	201	29.948 -99.537	42.943	1.00	0.00
C								
ATOM	6303	OG1	THR	201	31.470 -98.056	41.957	1.00	0.00
O								
ATOM	6304	C	THR	201	30.054 -98.101	39.463	1.00	0.00
C								
ATOM	6305	O	THR	201	29.100 -97.236	39.298	1.00	0.00
O								
ATOM	6306	N	SER	202	31.108 -98.061	38.644	1.00	0.00
N								
ATOM	6307	CA	SER	202	31.285 -97.105	37.473	1.00	0.00
C								
ATOM	6308	CB	SER	202	32.795 -97.028	37.078	1.00	0.00
C								

ATOM	6309	OG	SER	202	33.134	-98.068	36.243	1.00	0.00
O									
ATOM	6310	C	SER	202	30.371	-97.591	36.324	1.00	0.00
C									
ATOM	6311	O	SER	202	30.021	-96.840	35.424	1.00	0.00
O									
ATOM	6312	N	LEU	203	29.893	-98.839	36.355	1.00	0.00
N									
ATOM	6313	CA	LEU	203	29.046	-99.395	35.251	1.00	0.00
C									
ATOM	6314	CB	LEU	203	28.957	-100.964	35.404	1.00	0.00
C									
ATOM	6315	CG	LEU	203	30.328	-101.712	35.450	1.00	0.00
C									
ATOM	6316	CD1	LEU	203	30.015	-103.203	35.414	1.00	0.00
C									
ATOM	6317	CD2	LEU	203	31.078	-101.495	34.136	1.00	0.00
C									
ATOM	6318	C	LEU	203	27.681	-98.709	35.147	1.00	0.00
C									
ATOM	6319	O	LEU	203	27.434	-98.280	34.026	1.00	0.00
O									
ATOM	6320	N	PRO	204	26.788	-98.555	36.171	1.00	0.00
N									
ATOM	6321	CD	PRO	204	26.902	-99.103	37.489	1.00	0.00
C									
ATOM	6322	CG	PRO	204	25.472	-99.290	37.918	1.00	0.00
C									
ATOM	6323	CB	PRO	204	24.741	-98.115	37.266	1.00	0.00
C									
ATOM	6324	CA	PRO	204	25.565	-97.801	36.013	1.00	0.00
C									
ATOM	6325	C	PRO	204	25.810	-96.277	35.886	1.00	0.00
C									
ATOM	6326	O	PRO	204	24.956	-95.666	35.256	1.00	0.00
O									
ATOM	6327	N	THR	205	26.996	-95.689	36.190	1.00	0.00
N									
ATOM	6328	CA	THR	205	27.276	-94.228	35.889	1.00	0.00
C									
ATOM	6329	CB	THR	205	28.399	-93.586	36.750	1.00	0.00
C									
ATOM	6330	CG2	THR	205	28.778	-92.119	36.447	1.00	0.00
C									
ATOM	6331	OG1	THR	205	27.959	-93.569	38.139	1.00	0.00
O									
ATOM	6332	C	THR	205	27.593	-94.045	34.425	1.00	0.00
C									
ATOM	6333	O	THR	205	27.245	-92.999	33.878	1.00	0.00
O									
ATOM	6334	N	SER	206	28.432	-94.963	33.849	1.00	0.00
N									
ATOM	6335	CA	SER	206	28.775	-94.982	32.429	1.00	0.00
C									

ATOM	6336	CB	SER	206	30.065	-95.857	32.194	1.00	0.00
C									
ATOM	6337	OG	SER	206	29.840	-97.165	32.698	1.00	0.00
O									
ATOM	6338	C	SER	206	27.607	-95.484	31.502	1.00	0.00
C									
ATOM	6339	O	SER	206	27.763	-95.569	30.264	1.00	0.00
O									
ATOM	6340	N	HIE	207	26.458	-95.924	32.089	1.00	0.00
N									
ATOM	6341	CA	HIE	207	25.359	-96.621	31.368	1.00	0.00
C									
ATOM	6342	CB	HIE	207	24.466	-95.588	30.684	1.00	0.00
C									
ATOM	6343	CG	HIE	207	23.887	-94.602	31.555	1.00	0.00
C									
ATOM	6344	ND1	HIE	207	23.087	-94.847	32.724	1.00	0.00
N									
ATOM	6345	CE1	HIE	207	22.917	-93.649	33.296	1.00	0.00
C									
ATOM	6346	NE2	HIE	207	23.565	-92.672	32.598	1.00	0.00
N									
ATOM	6347	CD2	HIE	207	24.150	-93.273	31.508	1.00	0.00
C									
ATOM	6348	C	HIE	207	25.760	-97.840	30.640	1.00	0.00
C									
ATOM	6349	O	HIE	207	25.324	-97.936	29.474	1.00	0.00
O									
ATOM	6350	N	THR	208	26.621	-98.714	31.284	1.00	0.00
N									
ATOM	6351	CA	THR	208	27.169	-99.948	30.689	1.00	0.00
C									
ATOM	6352	CB	THR	208	28.383	-100.447	31.539	1.00	0.00
C									
ATOM	6353	CG2	THR	208	28.907	-101.829	31.000	1.00	0.00
C									
ATOM	6354	OG1	THR	208	29.363	-99.475	31.274	1.00	0.00
O									
ATOM	6355	C	THR	208	26.088	-100.955	30.456	1.00	0.00
C									
ATOM	6356	O	THR	208	26.202	-101.850	29.568	1.00	0.00
O									
ATOM	6357	N	TYR	209	24.881	-100.785	30.954	1.00	0.00
N									
ATOM	6358	CA	TYR	209	23.762	-101.569	30.503	1.00	0.00
C									
ATOM	6359	CB	TYR	209	22.537	-101.295	31.406	1.00	0.00
C									
ATOM	6360	CG	TYR	209	22.094	-99.851	31.440	1.00	0.00
C									
ATOM	6361	CD1	TYR	209	22.465	-99.034	32.515	1.00	0.00
C									
ATOM	6362	CE1	TYR	209	21.899	-97.724	32.609	1.00	0.00
C									

ATOM	6363	CZ	TYR	209	20.923	-97.254	31.717	1.00	0.00
C									
ATOM	6364	OH	TYR	209	20.365	-96.063	31.802	1.00	0.00
O									
ATOM	6365	CE2	TYR	209	20.587	-98.085	30.634	1.00	0.00
C									
ATOM	6366	CD2	TYR	209	21.165	-99.406	30.496	1.00	0.00
C									
ATOM	6367	C	TYR	209	23.399	-101.356	29.007	1.00	0.00
C									
ATOM	6368	O	TYR	209	22.775	-102.249	28.401	1.00	0.00
O									
ATOM	6369	N	LEU	210	23.695	-100.202	28.340	1.00	0.00
N									
ATOM	6370	CA	LEU	210	23.498	-100.059	26.883	1.00	0.00
C									
ATOM	6371	CB	LEU	210	23.302	-98.556	26.512	1.00	0.00
C									
ATOM	6372	CG	LEU	210	22.413	-97.710	27.422	1.00	0.00
C									
ATOM	6373	CD1	LEU	210	22.623	-96.208	27.246	1.00	0.00
C									
ATOM	6374	CD2	LEU	210	20.921	-97.934	27.179	1.00	0.00
C									
ATOM	6375	C	LEU	210	24.628	-100.592	26.026	1.00	0.00
C									
ATOM	6376	O	LEU	210	24.521	-100.585	24.790	1.00	0.00
O									
ATOM	6377	N	GLY	211	25.601	-101.284	26.667	1.00	0.00
N									
ATOM	6378	CA	GLY	211	26.969	-101.457	26.279	1.00	0.00
C									
ATOM	6379	C	GLY	211	27.888	-100.163	26.386	1.00	0.00
C									
ATOM	6380	O	GLY	211	27.437	-99.056	26.670	1.00	0.00
O									
ATOM	6381	N	ALA	212	29.206	-100.374	25.970	1.00	0.00
N									
ATOM	6382	CA	ALA	212	30.210	-99.382	26.081	1.00	0.00
C									
ATOM	6383	CB	ALA	212	31.005	-99.714	27.352	1.00	0.00
C									
ATOM	6384	C	ALA	212	31.026	-99.166	24.777	1.00	0.00
C									
ATOM	6385	O	ALA	212	31.514	-98.084	24.547	1.00	0.00
O									
ATOM	6386	N	ASP	213	31.166	-100.091	23.858	1.00	0.00
N									
ATOM	6387	CA	ASP	213	31.812	-99.857	22.523	1.00	0.00
C									
ATOM	6388	CB	ASP	213	32.189	-101.309	22.059	1.00	0.00
C									
ATOM	6389	CG	ASP	213	32.651	-101.379	20.643	1.00	0.00
C									



ATOM	6390	OD1	ASP	213	32.622	-102.514	20.132	1.00	0.00
O									
ATOM	6391	OD2	ASP	213	33.344	-100.465	20.176	1.00	0.00
O1-									
ATOM	6392	C	ASP	213	30.808	-99.281	21.478	1.00	0.00
C									
ATOM	6393	O	ASP	213	30.064	-100.033	20.774	1.00	0.00
O									
ATOM	6394	N	MET	214	30.659	-97.909	21.526	1.00	0.00
N									
ATOM	6395	CA	MET	214	29.914	-97.178	20.520	1.00	0.00
C									
ATOM	6396	CB	MET	214	28.850	-96.331	21.367	1.00	0.00
C									
ATOM	6397	CG	MET	214	27.991	-97.073	22.371	1.00	0.00
C									
ATOM	6398	SD	MET	214	26.443	-96.193	22.809	1.00	0.00
S									
ATOM	6399	CE	MET	214	25.358	-97.605	23.249	1.00	0.00
C									
ATOM	6400	C	MET	214	30.794	-96.212	19.699	1.00	0.00
C									
ATOM	6401	O	MET	214	31.978	-96.053	19.962	1.00	0.00
O									
ATOM	6402	N	GLU	215	30.219	-95.526	18.748	1.00	0.00
N									
ATOM	6403	CA	GLU	215	30.838	-94.401	18.056	1.00	0.00
C									
ATOM	6404	CB	GLU	215	29.805	-94.043	16.900	1.00	0.00
C									
ATOM	6405	CG	GLU	215	29.243	-95.090	15.976	1.00	0.00
C									
ATOM	6406	CD	GLU	215	30.272	-95.625	15.020	1.00	0.00
C									
ATOM	6407	OE1	GLU	215	30.586	-96.837	15.177	1.00	0.00
O									
ATOM	6408	OE2	GLU	215	30.721	-94.950	14.053	1.00	0.00
O1-									
ATOM	6409	C	GLU	215	30.957	-93.231	19.057	1.00	0.00
C									
ATOM	6410	O	GLU	215	29.912	-92.536	19.308	1.00	0.00
O									
ATOM	6411	N	GLU	216	32.063	-93.066	19.772	1.00	0.00
N									
ATOM	6412	CA	GLU	216	32.272	-91.966	20.835	1.00	0.00
C									
ATOM	6413	CB	GLU	216	33.463	-92.463	21.672	1.00	0.00
C									
ATOM	6414	CG	GLU	216	33.676	-91.717	22.980	1.00	0.00
C									
ATOM	6415	CD	GLU	216	34.981	-92.105	23.746	1.00	0.00
C									
ATOM	6416	OE1	GLU	216	36.089	-91.911	23.161	1.00	0.00
O									

ATOM	6417	OE2	GLU	216	34.959	-92.251	24.988	1.00	0.00
O1-									
ATOM	6418	C	GLU	216	32.628	-90.707	20.135	1.00	0.00
C									
ATOM	6419	O	GLU	216	33.164	-90.702	19.021	1.00	0.00
O									
ATOM	6420	N	PHE	217	32.370	-89.581	20.763	1.00	0.00
N									
ATOM	6421	CA	PHE	217	32.694	-88.184	20.328	1.00	0.00
C									
ATOM	6422	CB	PHE	217	31.527	-87.592	19.529	1.00	0.00
C									
ATOM	6423	CG	PHE	217	31.002	-88.393	18.375	1.00	0.00
C									
ATOM	6424	CD1	PHE	217	31.729	-88.538	17.169	1.00	0.00
C									
ATOM	6425	CE1	PHE	217	31.128	-89.169	16.016	1.00	0.00
C									
ATOM	6426	CZ	PHE	217	29.826	-89.586	16.158	1.00	0.00
C									
ATOM	6427	CE2	PHE	217	29.142	-89.546	17.400	1.00	0.00
C									
ATOM	6428	CD2	PHE	217	29.707	-88.991	18.525	1.00	0.00
C									
ATOM	6429	C	PHE	217	33.043	-87.185	21.443	1.00	0.00
C									
ATOM	6430	O	PHE	217	32.363	-87.054	22.476	1.00	0.00
O									
ATOM	6431	N	HIE	218	34.175	-86.454	21.222	1.00	0.00
N									
ATOM	6432	CA	HIE	218	34.696	-85.432	22.153	1.00	0.00
C									
ATOM	6433	CB	HIE	218	36.214	-85.617	22.301	1.00	0.00
C									
ATOM	6434	CG	HIE	218	37.085	-85.474	21.117	1.00	0.00
C									
ATOM	6435	ND1	HIE	218	37.160	-84.374	20.303	1.00	0.00
N									
ATOM	6436	CE1	HIE	218	38.050	-84.604	19.326	1.00	0.00
C									
ATOM	6437	NE2	HIE	218	38.556	-85.870	19.593	1.00	0.00
N									
ATOM	6438	CD2	HIE	218	38.005	-86.382	20.726	1.00	0.00
C									
ATOM	6439	C	HIE	218	34.205	-84.019	21.823	1.00	0.00
C									
ATOM	6440	O	HIE	218	33.932	-83.737	20.643	1.00	0.00
O									
ATOM	6441	N	GLY	219	34.103	-83.163	22.834	1.00	0.00
N									
ATOM	6442	CA	GLY	219	33.623	-81.781	22.672	1.00	0.00
C									
ATOM	6443	C	GLY	219	32.174	-81.753	22.076	1.00	0.00
C									

ATOM	6444	O	GLY	219	31.415	-82.711	22.204	1.00	0.00
O									
ATOM	6445	N	ARG	220	31.710	-80.606	21.580	1.00	0.00
N									
ATOM	6446	CA	ARG	220	32.425	-79.357	21.190	1.00	0.00
C									
ATOM	6447	CB	ARG	220	32.902	-79.651	19.770	1.00	0.00
C									
ATOM	6448	CG	ARG	220	34.029	-78.824	19.172	1.00	0.00
C									
ATOM	6449	CD	ARG	220	35.160	-78.216	20.123	1.00	0.00
C									
ATOM	6450	NE	ARG	220	36.169	-77.476	19.323	1.00	0.00
N									
ATOM	6451	CZ	ARG	220	37.012	-76.568	19.853	1.00	0.00
C									
ATOM	6452	NH1	ARG	220	38.126	-76.187	19.207	1.00	0.00
N									
ATOM	6453	NH2	ARG	220	36.740	-75.960	20.983	1.00	0.00
N1+									
ATOM	6454	C	ARG	220	31.625	-78.049	21.044	1.00	0.00
C									
ATOM	6455	O	ARG	220	32.122	-76.899	21.092	1.00	0.00
O									
ATOM	6456	N	THR	221	30.336	-78.178	20.814	1.00	0.00
N									
ATOM	6457	CA	THR	221	29.390	-77.014	20.484	1.00	0.00
C									
ATOM	6458	CB	THR	221	28.038	-77.544	20.029	1.00	0.00
C									
ATOM	6459	CG2	THR	221	27.235	-76.490	19.323	1.00	0.00
C									
ATOM	6460	OG1	THR	221	28.267	-78.522	19.062	1.00	0.00
O									
ATOM	6461	C	THR	221	29.119	-76.088	21.609	1.00	0.00
C									
ATOM	6462	O	THR	221	28.768	-76.660	22.677	1.00	0.00
O									
ATOM	6463	N	LEU	222	29.336	-74.875	21.561	1.00	0.00
N									
ATOM	6464	CA	LEU	222	28.964	-73.905	22.607	1.00	0.00
C									
ATOM	6465	CB	LEU	222	30.043	-73.625	23.649	1.00	0.00
C									
ATOM	6466	CG	LEU	222	30.239	-74.794	24.659	1.00	0.00
C									
ATOM	6467	CD1	LEU	222	31.330	-74.385	25.671	1.00	0.00
C									
ATOM	6468	CD2	LEU	222	28.983	-75.227	25.467	1.00	0.00
C									
ATOM	6469	C	LEU	222	28.477	-72.561	21.938	1.00	0.00
C									
ATOM	6470	O	LEU	222	28.899	-72.283	20.816	1.00	0.00
O									

ATOM	6471	N	HIP	223	27.647	-71.827	22.667	1.00	0.00
N									
ATOM	6472	CA	HIP	223	27.170	-70.530	22.191	1.00	0.00
C									
ATOM	6473	CB	HIP	223	25.717	-70.679	21.564	1.00	0.00
C									
ATOM	6474	CG	HIP	223	25.590	-71.818	20.610	1.00	0.00
C									
ATOM	6475	ND1	HIP	223	26.333	-71.944	19.398	1.00	0.00
N1+									
ATOM	6476	CE1	HIP	223	25.816	-72.946	18.660	1.00	0.00
C									
ATOM	6477	NE2	HIP	223	24.866	-73.561	19.434	1.00	0.00
N									
ATOM	6478	CD2	HIP	223	24.732	-72.863	20.663	1.00	0.00
C									
ATOM	6479	C	HIP	223	27.299	-69.414	23.262	1.00	0.00
C									
ATOM	6480	O	HIP	223	27.164	-69.672	24.443	1.00	0.00
O									
ATOM	6481	N	ASP	224	27.444	-68.137	22.740	1.00	0.00
N									
ATOM	6482	CA	ASP	224	27.512	-66.980	23.662	1.00	0.00
C									
ATOM	6483	CB	ASP	224	28.040	-65.732	22.912	1.00	0.00
C									
ATOM	6484	CG	ASP	224	29.401	-65.731	22.281	1.00	0.00
C									
ATOM	6485	OD1	ASP	224	29.594	-64.755	21.558	1.00	0.00
O									
ATOM	6486	OD2	ASP	224	30.301	-66.590	22.615	1.00	0.00
O1-									
ATOM	6487	C	ASP	224	26.363	-66.610	24.529	1.00	0.00
C									
ATOM	6488	O	ASP	224	25.218	-66.793	24.077	1.00	0.00
O									
ATOM	6489	N	ASP	225	26.590	-66.170	25.774	1.00	0.00
N									
ATOM	6490	CA	ASP	225	25.508	-65.829	26.695	1.00	0.00
C									
ATOM	6491	CB	ASP	225	26.121	-65.512	28.147	1.00	0.00
C									
ATOM	6492	CG	ASP	225	26.662	-66.688	28.942	1.00	0.00
C									
ATOM	6493	OD1	ASP	225	27.072	-66.389	30.098	1.00	0.00
O									
ATOM	6494	OD2	ASP	225	26.583	-67.895	28.559	1.00	0.00
O1-									
ATOM	6495	C	ASP	225	24.719	-64.659	26.096	1.00	0.00
C									
ATOM	6496	O	ASP	225	25.312	-63.787	25.464	1.00	0.00
O									
ATOM	6497	N	ASP	226	23.381	-64.689	26.232	1.00	0.00
N									

ATOM	6498	CA	ASP	226	22.469	-63.816	25.513	1.00	0.00
C									
ATOM	6499	CB	ASP	226	22.594	-62.503	26.229	1.00	0.00
C									
ATOM	6500	CG	ASP	226	21.397	-61.590	26.183	1.00	0.00
C									
ATOM	6501	OD1	ASP	226	20.262	-61.990	26.428	1.00	0.00
O									
ATOM	6502	OD2	ASP	226	21.474	-60.352	25.883	1.00	0.00
O1-									
ATOM	6503	C	ASP	226	22.381	-63.847	23.965	1.00	0.00
C									
ATOM	6504	O	ASP	226	21.478	-63.230	23.352	1.00	0.00
O									
ATOM	6505	N	SER	227	23.184	-64.682	23.257	1.00	0.00
N									
ATOM	6506	CA	SER	227	22.911	-64.984	21.860	1.00	0.00
C									
ATOM	6507	CB	SER	227	23.952	-65.908	21.171	1.00	0.00
C									
ATOM	6508	OG	SER	227	23.915	-67.207	21.626	1.00	0.00
O									
ATOM	6509	C	SER	227	21.491	-65.482	21.518	1.00	0.00
C									
ATOM	6510	O	SER	227	20.876	-66.215	22.353	1.00	0.00
O									
ATOM	6511	N	CYS	228	20.979	-65.172	20.355	1.00	0.00
N									
ATOM	6512	CA	CYS	228	19.864	-65.797	19.696	1.00	0.00
C									
ATOM	6513	CB	CYS	228	19.096	-64.681	18.937	1.00	0.00
C									
ATOM	6514	SG	CYS	228	17.673	-65.046	18.065	1.00	0.00
S									
ATOM	6515	C	CYS	228	20.286	-67.071	18.948	1.00	0.00
C									
ATOM	6516	O	CYS	228	21.262	-67.105	18.214	1.00	0.00
O									
ATOM	6517	N	GLN	229	19.551	-68.153	19.145	1.00	0.00
N									
ATOM	6518	CA	GLN	229	19.833	-69.511	18.604	1.00	0.00
C									
ATOM	6519	CB	GLN	229	20.583	-70.416	19.649	1.00	0.00
C									
ATOM	6520	CG	GLN	229	21.924	-69.877	20.099	1.00	0.00
C									
ATOM	6521	CD	GLN	229	22.920	-69.782	18.973	1.00	0.00
C									
ATOM	6522	OE1	GLN	229	22.908	-70.595	18.122	1.00	0.00
O									
ATOM	6523	NE2	GLN	229	23.749	-68.688	18.904	1.00	0.00
N									
ATOM	6524	C	GLN	229	18.493	-70.142	18.136	1.00	0.00
C									

ATOM	6525	O	GLN	229	17.386	-69.779	18.590	1.00	0.00
O									
ATOM	6526	N	VAL	230	18.543	-71.161	17.237	1.00	0.00
N									
ATOM	6527	CA	VAL	230	17.429	-72.047	16.946	1.00	0.00
C									
ATOM	6528	CB	VAL	230	16.855	-71.782	15.562	1.00	0.00
C									
ATOM	6529	CG1	VAL	230	15.633	-72.671	15.333	1.00	0.00
C									
ATOM	6530	CG2	VAL	230	16.260	-70.355	15.368	1.00	0.00
C									
ATOM	6531	C	VAL	230	17.870	-73.457	17.114	1.00	0.00
C									
ATOM	6532	O	VAL	230	18.956	-73.656	16.602	1.00	0.00
O									
ATOM	6533	N	ILE	231	17.248	-74.381	17.882	1.00	0.00
N									
ATOM	6534	CA	ILE	231	17.825	-75.800	18.197	1.00	0.00
C									
ATOM	6535	CB	ILE	231	18.333	-75.923	19.681	1.00	0.00
C									
ATOM	6536	CG2	ILE	231	19.180	-77.252	19.934	1.00	0.00
C									
ATOM	6537	CG1	ILE	231	19.262	-74.724	20.165	1.00	0.00
C									
ATOM	6538	CD1	ILE	231	20.643	-74.704	19.510	1.00	0.00
C									
ATOM	6539	C	ILE	231	16.759	-76.874	18.049	1.00	0.00
C									
ATOM	6540	O	ILE	231	15.618	-76.518	18.318	1.00	0.00
O									
ATOM	6541	N	PRO	232	17.089	-78.066	17.569	1.00	0.00
N									
ATOM	6542	CD	PRO	232	18.212	-78.396	16.748	1.00	0.00
C									
ATOM	6543	CG	PRO	232	17.985	-79.924	16.481	1.00	0.00
C									
ATOM	6544	CB	PRO	232	16.497	-80.219	16.586	1.00	0.00
C									
ATOM	6545	CA	PRO	232	16.051	-79.145	17.570	1.00	0.00
C									
ATOM	6546	C	PRO	232	15.729	-79.731	18.982	1.00	0.00
C									
ATOM	6547	O	PRO	232	16.613	-80.142	19.734	1.00	0.00
O									
ATOM	6548	N	VAL	233	14.458	-80.031	19.141	1.00	0.00
N									
ATOM	6549	CA	VAL	233	13.951	-80.305	20.480	1.00	0.00
C									
ATOM	6550	CB	VAL	233	12.643	-79.501	20.566	1.00	0.00
C									
ATOM	6551	CG1	VAL	233	11.967	-79.729	21.947	1.00	0.00
C									

ATOM	6552	CG2	VAL	233	12.834	-77.978	20.444	1.00	0.00
C									
ATOM	6553	C	VAL	233	13.659	-81.765	20.587	1.00	0.00
C									
ATOM	6554	O	VAL	233	13.025	-82.316	19.704	1.00	0.00
O									
ATOM	6555	N	LEU	234	14.268	-82.427	21.597	1.00	0.00
N									
ATOM	6556	CA	LEU	234	14.315	-83.987	21.707	1.00	0.00
C									
ATOM	6557	CB	LEU	234	15.245	-84.313	22.922	1.00	0.00
C									
ATOM	6558	CG	LEU	234	15.696	-85.757	22.776	1.00	0.00
C									
ATOM	6559	CD1	LEU	234	16.748	-86.096	21.747	1.00	0.00
C									
ATOM	6560	CD2	LEU	234	16.157	-86.166	24.226	1.00	0.00
C									
ATOM	6561	C	LEU	234	12.901	-84.656	21.871	1.00	0.00
C									
ATOM	6562	O	LEU	234	12.134	-84.245	22.726	1.00	0.00
O									
ATOM	6563	N	PRO	235	12.485	-85.584	20.990	1.00	0.00
N									
ATOM	6564	CD	PRO	235	13.288	-86.205	19.931	1.00	0.00
C									
ATOM	6565	CG	PRO	235	12.711	-87.536	19.638	1.00	0.00
C									
ATOM	6566	CB	PRO	235	11.222	-87.243	19.867	1.00	0.00
C									
ATOM	6567	CA	PRO	235	11.193	-86.253	21.089	1.00	0.00
C									
ATOM	6568	C	PRO	235	11.083	-86.975	22.439	1.00	0.00
C									
ATOM	6569	O	PRO	235	12.145	-87.428	22.952	1.00	0.00
O									
ATOM	6570	N	GLN	236	9.861	-87.197	22.952	1.00	0.00
N									
ATOM	6571	CA	GLN	236	9.466	-88.091	24.031	1.00	0.00
C									
ATOM	6572	CB	GLN	236	10.012	-89.529	23.797	1.00	0.00
C									
ATOM	6573	CG	GLN	236	9.293	-90.628	24.559	1.00	0.00
C									
ATOM	6574	CD	GLN	236	9.907	-91.977	24.303	1.00	0.00
C									
ATOM	6575	OE1	GLN	236	10.875	-92.099	23.594	1.00	0.00
O									
ATOM	6576	NE2	GLN	236	9.341	-93.069	24.753	1.00	0.00
N									
ATOM	6577	C	GLN	236	9.916	-87.618	25.389	1.00	0.00
C									
ATOM	6578	O	GLN	236	9.166	-87.818	26.331	1.00	0.00
O									

ATOM	6579	N	VAL	237	11.154	-87.029	25.553	1.00	0.00
N									
ATOM	6580	CA	VAL	237	11.561	-86.457	26.852	1.00	0.00
C									
ATOM	6581	CB	VAL	237	12.964	-85.796	26.678	1.00	0.00
C									
ATOM	6582	CG1	VAL	237	12.751	-84.434	26.119	1.00	0.00
C									
ATOM	6583	CG2	VAL	237	13.624	-85.783	27.993	1.00	0.00
C									
ATOM	6584	C	VAL	237	10.481	-85.610	27.529	1.00	0.00
C									
ATOM	6585	O	VAL	237	9.710	-84.953	26.794	1.00	0.00
O									
ATOM	6586	N	MET	238	10.443	-85.665	28.840	1.00	0.00
N									
ATOM	6587	CA	MET	238	9.486	-84.945	29.653	1.00	0.00
C									
ATOM	6588	CB	MET	238	8.285	-85.897	29.793	1.00	0.00
C									
ATOM	6589	CG	MET	238	7.112	-85.160	30.421	1.00	0.00
C									
ATOM	6590	SD	MET	238	5.736	-86.131	30.923	1.00	0.00
S									
ATOM	6591	CE	MET	238	4.485	-84.961	31.346	1.00	0.00
C									
ATOM	6592	C	MET	238	10.103	-84.413	30.991	1.00	0.00
C									
ATOM	6593	O	MET	238	9.730	-83.327	31.459	1.00	0.00
O									
ATOM	6594	N	MET	239	11.055	-85.075	31.673	1.00	0.00
N									
ATOM	6595	CA	MET	239	11.977	-84.461	32.683	1.00	0.00
C									
ATOM	6596	CB	MET	239	13.075	-85.378	33.049	1.00	0.00
C									
ATOM	6597	CG	MET	239	14.027	-85.609	31.931	1.00	0.00
C									
ATOM	6598	SD	MET	239	15.420	-86.746	32.505	1.00	0.00
S									
ATOM	6599	CE	MET	239	16.526	-85.625	33.456	1.00	0.00
C									
ATOM	6600	C	MET	239	12.558	-83.060	32.250	1.00	0.00
C									
ATOM	6601	O	MET	239	12.782	-82.819	31.059	1.00	0.00
O									
ATOM	6602	N	ILE	240	12.823	-82.245	33.206	1.00	0.00
N									
ATOM	6603	CA	ILE	240	13.645	-81.037	33.041	1.00	0.00
C									
ATOM	6604	CB	ILE	240	13.259	-79.956	34.105	1.00	0.00
C									
ATOM	6605	CG2	ILE	240	14.255	-78.731	34.157	1.00	0.00
C									



ATOM	6606	CG1	ILE	240	11.850	-79.449	33.842	1.00	0.00
C									
ATOM	6607	CD1	ILE	240	11.284	-78.576	34.950	1.00	0.00
C									
ATOM	6608	C	ILE	240	15.107	-81.421	33.240	1.00	0.00
C									
ATOM	6609	O	ILE	240	15.486	-82.054	34.197	1.00	0.00
O									
ATOM	6610	N	LEU	241	15.955	-80.945	32.308	1.00	0.00
N									
ATOM	6611	CA	LEU	241	17.447	-81.228	32.268	1.00	0.00
C									
ATOM	6612	CB	LEU	241	17.773	-81.477	30.784	1.00	0.00
C									
ATOM	6613	CG	LEU	241	19.202	-82.113	30.610	1.00	0.00
C									
ATOM	6614	CD1	LEU	241	19.232	-83.550	31.051	1.00	0.00
C									
ATOM	6615	CD2	LEU	241	19.491	-82.032	29.087	1.00	0.00
C									
ATOM	6616	C	LEU	241	18.379	-80.109	32.835	1.00	0.00
C									
ATOM	6617	O	LEU	241	18.029	-78.931	32.715	1.00	0.00
O									
ATOM	6618	N	ILE	242	19.487	-80.555	33.525	1.00	0.00
N									
ATOM	6619	CA	ILE	242	20.420	-79.730	34.321	1.00	0.00
C									
ATOM	6620	CB	ILE	242	20.493	-80.173	35.761	1.00	0.00
C									
ATOM	6621	CG2	ILE	242	21.567	-79.499	36.622	1.00	0.00
C									
ATOM	6622	CG1	ILE	242	19.167	-80.247	36.556	1.00	0.00
C									
ATOM	6623	CD1	ILE	242	18.547	-78.921	36.970	1.00	0.00
C									
ATOM	6624	C	ILE	242	21.793	-79.710	33.539	1.00	0.00
C									
ATOM	6625	O	ILE	242	22.244	-80.719	33.052	1.00	0.00
O									
ATOM	6626	N	PRO	243	22.430	-78.538	33.330	1.00	0.00
N									
ATOM	6627	CD	PRO	243	21.947	-77.194	33.721	1.00	0.00
C									
ATOM	6628	CG	PRO	243	22.876	-76.190	33.159	1.00	0.00
C									
ATOM	6629	CB	PRO	243	24.175	-76.950	33.055	1.00	0.00
C									
ATOM	6630	CA	PRO	243	23.823	-78.496	32.805	1.00	0.00
C									
ATOM	6631	C	PRO	243	24.840	-79.404	33.488	1.00	0.00
C									
ATOM	6632	O	PRO	243	24.739	-79.590	34.703	1.00	0.00
O									

ATOM	6633	N	GLY	244	25.765	-80.037	32.732	1.00	0.00
N									
ATOM	6634	CA	GLY	244	26.618	-81.073	33.267	1.00	0.00
C									
ATOM	6635	C	GLY	244	25.965	-82.488	33.568	1.00	0.00
C									
ATOM	6636	O	GLY	244	26.688	-83.507	33.742	1.00	0.00
O									
ATOM	6637	N	GLN	245	24.632	-82.650	33.558	1.00	0.00
N									
ATOM	6638	CA	GLN	245	23.884	-83.922	33.810	1.00	0.00
C									
ATOM	6639	CB	GLN	245	22.379	-83.588	33.944	1.00	0.00
C									
ATOM	6640	CG	GLN	245	21.611	-84.754	34.495	1.00	0.00
C									
ATOM	6641	CD	GLN	245	20.256	-84.459	35.058	1.00	0.00
C									
ATOM	6642	OE1	GLN	245	19.578	-83.569	34.542	1.00	0.00
O									
ATOM	6643	NE2	GLN	245	19.863	-85.102	36.107	1.00	0.00
N									
ATOM	6644	C	GLN	245	24.122	-84.885	32.596	1.00	0.00
C									
ATOM	6645	O	GLN	245	23.909	-84.408	31.459	1.00	0.00
O									
ATOM	6646	N	THR	246	24.466	-86.168	32.835	1.00	0.00
N									
ATOM	6647	CA	THR	246	24.458	-87.294	31.913	1.00	0.00
C									
ATOM	6648	CB	THR	246	25.359	-88.460	32.371	1.00	0.00
C									
ATOM	6649	CG2	THR	246	25.331	-89.700	31.497	1.00	0.00
C									
ATOM	6650	OG1	THR	246	26.725	-88.096	32.288	1.00	0.00
O									
ATOM	6651	C	THR	246	23.052	-87.769	31.569	1.00	0.00
C									
ATOM	6652	O	THR	246	22.176	-87.819	32.515	1.00	0.00
O									
ATOM	6653	N	LEU	247	22.773	-88.194	30.358	1.00	0.00
N									
ATOM	6654	CA	LEU	247	21.435	-88.466	29.854	1.00	0.00
C									
ATOM	6655	CB	LEU	247	20.885	-87.137	29.180	1.00	0.00
C									
ATOM	6656	CG	LEU	247	19.423	-87.237	28.597	1.00	0.00
C									
ATOM	6657	CD1	LEU	247	18.339	-87.665	29.571	1.00	0.00
C									
ATOM	6658	CD2	LEU	247	19.068	-85.940	27.901	1.00	0.00
C									
ATOM	6659	C	LEU	247	21.563	-89.667	28.904	1.00	0.00
C									

ATOM	6660	O	LEU	247	21.985	-89.529	27.781	1.00	0.00
O									
ATOM	6661	N	PRO	248	21.220	-90.916	29.336	1.00	0.00
N									
ATOM	6662	CD	PRO	248	20.834	-91.166	30.680	1.00	0.00
C									
ATOM	6663	CG	PRO	248	20.723	-92.643	30.780	1.00	0.00
C									
ATOM	6664	CB	PRO	248	21.154	-93.191	29.395	1.00	0.00
C									
ATOM	6665	CA	PRO	248	21.117	-92.005	28.429	1.00	0.00
C									
ATOM	6666	C	PRO	248	19.815	-91.993	27.610	1.00	0.00
C									
ATOM	6667	O	PRO	248	18.733	-91.655	28.180	1.00	0.00
O									
ATOM	6668	N	LEU	249	19.862	-92.327	26.288	1.00	0.00
N									
ATOM	6669	CA	LEU	249	18.754	-92.133	25.364	1.00	0.00
C									
ATOM	6670	CB	LEU	249	18.853	-90.757	24.575	1.00	0.00
C									
ATOM	6671	CG	LEU	249	18.584	-89.563	25.416	1.00	0.00
C									
ATOM	6672	CD1	LEU	249	18.871	-88.291	24.582	1.00	0.00
C									
ATOM	6673	CD2	LEU	249	17.207	-89.391	25.970	1.00	0.00
C									
ATOM	6674	C	LEU	249	18.767	-93.304	24.358	1.00	0.00
C									
ATOM	6675	O	LEU	249	19.771	-93.887	23.938	1.00	0.00
O									
ATOM	6676	N	GLN	250	17.510	-93.640	24.008	1.00	0.00
N									
ATOM	6677	CA	GLN	250	17.138	-94.819	23.288	1.00	0.00
C									
ATOM	6678	CB	GLN	250	17.112	-96.133	24.107	1.00	0.00
C									
ATOM	6679	CG	GLN	250	16.688	-97.375	23.300	1.00	0.00
C									
ATOM	6680	CD	GLN	250	17.109	-98.660	24.038	1.00	0.00
C									
ATOM	6681	OE1	GLN	250	18.125	-98.791	24.653	1.00	0.00
O									
ATOM	6682	NE2	GLN	250	16.457	-99.718	23.658	1.00	0.00
N									
ATOM	6683	C	GLN	250	15.919	-94.553	22.345	1.00	0.00
C									
ATOM	6684	O	GLN	250	14.872	-94.031	22.855	1.00	0.00
O									
ATOM	6685	N	LEU	251	16.015	-94.957	21.078	1.00	0.00
N									
ATOM	6686	CA	LEU	251	15.099	-94.536	19.984	1.00	0.00
C									

ATOM	6687	CB	LEU	251	15.658	-93.284	19.324	1.00	0.00
C									
ATOM	6688	CG	LEU	251	16.026	-92.015	20.144	1.00	0.00
C									
ATOM	6689	CD1	LEU	251	17.526	-92.004	20.345	1.00	0.00
C									
ATOM	6690	CD2	LEU	251	15.780	-90.718	19.359	1.00	0.00
C									
ATOM	6691	C	LEU	251	14.801	-95.747	19.074	1.00	0.00
C									
ATOM	6692	O	LEU	251	15.740	-96.403	18.665	1.00	0.00
O									
ATOM	6693	N	PHE	252	13.571	-95.898	18.551	1.00	0.00
N									
ATOM	6694	CA	PHE	252	13.094	-96.957	17.649	1.00	0.00
C									
ATOM	6695	CB	PHE	252	12.413	-98.004	18.547	1.00	0.00
C									
ATOM	6696	CG	PHE	252	12.138	-99.419	17.831	1.00	0.00
C									
ATOM	6697	CD1	PHE	252	13.039	-99.882	16.833	1.00	0.00
C									
ATOM	6698	CE1	PHE	252	12.840	-101.204	16.258	1.00	0.00
C									
ATOM	6699	CZ	PHE	252	11.615	-101.859	16.530	1.00	0.00
C									
ATOM	6700	CE2	PHE	252	10.631	-101.294	17.417	1.00	0.00
C									
ATOM	6701	CD2	PHE	252	10.927	-100.070	18.035	1.00	0.00
C									
ATOM	6702	C	PHE	252	12.293	-96.424	16.423	1.00	0.00
C									
ATOM	6703	O	PHE	252	12.400	-96.999	15.389	1.00	0.00
O									
ATOM	6704	N	HIE	253	11.540	-95.323	16.509	1.00	0.00
N									
ATOM	6705	CA	HIE	253	10.685	-94.789	15.432	1.00	0.00
C									
ATOM	6706	CB	HIE	253	9.735	-93.703	15.986	1.00	0.00
C									
ATOM	6707	CG	HIE	253	8.750	-93.255	14.916	1.00	0.00
C									
ATOM	6708	ND1	HIE	253	9.011	-92.400	13.935	1.00	0.00
N									
ATOM	6709	CE1	HIE	253	7.925	-92.405	13.113	1.00	0.00
C									
ATOM	6710	NE2	HIE	253	7.111	-93.395	13.542	1.00	0.00
N									
ATOM	6711	CD2	HIE	253	7.557	-93.927	14.679	1.00	0.00
C									
ATOM	6712	C	HIE	253	11.572	-94.301	14.257	1.00	0.00
C									
ATOM	6713	O	HIE	253	12.476	-93.486	14.480	1.00	0.00
O									

ATOM	6714	N	PRO	254	11.415	-94.742	13.024	1.00	0.00
N									
ATOM	6715	CD	PRO	254	10.211	-95.334	12.454	1.00	0.00
C									
ATOM	6716	CG	PRO	254	10.286	-95.055	10.940	1.00	0.00
C									
ATOM	6717	CB	PRO	254	11.736	-95.045	10.638	1.00	0.00
C									
ATOM	6718	CA	PRO	254	12.259	-94.329	11.902	1.00	0.00
C									
ATOM	6719	C	PRO	254	12.502	-92.838	11.629	1.00	0.00
C									
ATOM	6720	O	PRO	254	13.600	-92.426	11.297	1.00	0.00
O									
ATOM	6721	N	GLN	255	11.536	-91.988	11.899	1.00	0.00
N									
ATOM	6722	CA	GLN	255	11.653	-90.601	11.808	1.00	0.00
C									
ATOM	6723	CB	GLN	255	10.301	-89.910	11.904	1.00	0.00
C									
ATOM	6724	CG	GLN	255	10.285	-88.487	11.346	1.00	0.00
C									
ATOM	6725	CD	GLN	255	10.800	-88.451	9.836	1.00	0.00
C									
ATOM	6726	OE1	GLN	255	10.188	-88.949	8.942	1.00	0.00
O									
ATOM	6727	NE2	GLN	255	12.008	-88.001	9.639	1.00	0.00
N									
ATOM	6728	C	GLN	255	12.566	-89.997	12.914	1.00	0.00
C									
ATOM	6729	O	GLN	255	13.317	-89.053	12.704	1.00	0.00
O									
ATOM	6730	N	GLU	256	12.439	-90.587	14.103	1.00	0.00
N									
ATOM	6731	CA	GLU	256	13.135	-90.143	15.306	1.00	0.00
C									
ATOM	6732	CB	GLU	256	12.380	-90.638	16.609	1.00	0.00
C									
ATOM	6733	CG	GLU	256	11.123	-89.754	16.825	1.00	0.00
C									
ATOM	6734	CD	GLU	256	10.361	-90.215	18.093	1.00	0.00
C									
ATOM	6735	OE1	GLU	256	9.204	-89.764	18.353	1.00	0.00
O									
ATOM	6736	OE2	GLU	256	10.800	-91.085	18.899	1.00	0.00
O1-									
ATOM	6737	C	GLU	256	14.547	-90.688	15.167	1.00	0.00
C									
ATOM	6738	O	GLU	256	15.426	-89.840	15.341	1.00	0.00
O									
ATOM	6739	N	VAL	257	14.779	-91.872	14.546	1.00	0.00
N									
ATOM	6740	CA	VAL	257	16.078	-92.454	14.116	1.00	0.00
C									

ATOM	6741	CB	VAL	257	15.820	-93.896	13.575	1.00	0.00
C									
ATOM	6742	CG1	VAL	257	17.045	-94.423	12.808	1.00	0.00
C									
ATOM	6743	CG2	VAL	257	15.547	-94.899	14.755	1.00	0.00
C									
ATOM	6744	C	VAL	257	16.729	-91.534	13.128	1.00	0.00
C									
ATOM	6745	O	VAL	257	17.882	-91.239	13.266	1.00	0.00
O									
ATOM	6746	N	SER	258	15.963	-90.944	12.194	1.00	0.00
N									
ATOM	6747	CA	SER	258	16.620	-90.035	11.227	1.00	0.00
C									
ATOM	6748	CB	SER	258	15.730	-89.781	9.966	1.00	0.00
C									
ATOM	6749	OG	SER	258	15.333	-91.011	9.344	1.00	0.00
O									
ATOM	6750	C	SER	258	16.927	-88.663	11.722	1.00	0.00
C									
ATOM	6751	O	SER	258	17.726	-87.874	11.232	1.00	0.00
O									
ATOM	6752	N	MET	259	16.374	-88.242	12.834	1.00	0.00
N									
ATOM	6753	CA	MET	259	16.692	-86.975	13.599	1.00	0.00
C									
ATOM	6754	CB	MET	259	15.453	-86.712	14.471	1.00	0.00
C									
ATOM	6755	CG	MET	259	15.655	-85.457	15.298	1.00	0.00
C									
ATOM	6756	SD	MET	259	16.311	-85.664	16.979	1.00	0.00
S									
ATOM	6757	CE	MET	259	16.034	-84.005	17.687	1.00	0.00
C									
ATOM	6758	C	MET	259	17.954	-87.155	14.411	1.00	0.00
C									
ATOM	6759	O	MET	259	18.849	-86.330	14.187	1.00	0.00
O									
ATOM	6760	N	VAL	260	18.079	-88.161	15.234	1.00	0.00
N									
ATOM	6761	CA	VAL	260	19.336	-88.403	15.975	1.00	0.00
C									
ATOM	6762	CB	VAL	260	19.388	-89.516	17.026	1.00	0.00
C									
ATOM	6763	CG1	VAL	260	18.587	-89.073	18.217	1.00	0.00
C									
ATOM	6764	CG2	VAL	260	18.874	-90.908	16.463	1.00	0.00
C									
ATOM	6765	C	VAL	260	20.513	-88.644	15.017	1.00	0.00
C									
ATOM	6766	O	VAL	260	21.594	-88.147	15.365	1.00	0.00
O									
ATOM	6767	N	ARG	261	20.337	-89.315	13.847	1.00	0.00
N									

ATOM	6768	CA	ARG	261	21.390	-89.321	12.701	1.00	0.00
C									
ATOM	6769	CB	ARG	261	20.911	-90.268	11.594	1.00	0.00
C									
ATOM	6770	CG	ARG	261	21.334	-91.736	11.868	1.00	0.00
C									
ATOM	6771	CD	ARG	261	20.590	-92.570	10.828	1.00	0.00
C									
ATOM	6772	NE	ARG	261	20.889	-94.017	10.949	1.00	0.00
N									
ATOM	6773	CZ	ARG	261	20.295	-94.966	10.236	1.00	0.00
C									
ATOM	6774	NH1	ARG	261	19.594	-94.692	9.217	1.00	0.00
N									
ATOM	6775	NH2	ARG	261	20.503	-96.204	10.595	1.00	0.00
N1+									
ATOM	6776	C	ARG	261	21.714	-87.953	12.141	1.00	0.00
C									
ATOM	6777	O	ARG	261	22.913	-87.740	11.913	1.00	0.00
O									
ATOM	6778	N	ASN	262	20.713	-87.045	11.978	1.00	0.00
N									
ATOM	6779	CA	ASN	262	20.949	-85.704	11.383	1.00	0.00
C									
ATOM	6780	CB	ASN	262	19.545	-85.202	10.875	1.00	0.00
C									
ATOM	6781	CG	ASN	262	19.585	-83.845	10.263	1.00	0.00
C									
ATOM	6782	OD1	ASN	262	19.141	-82.884	10.866	1.00	0.00
O									
ATOM	6783	ND2	ASN	262	20.174	-83.725	9.145	1.00	0.00
N									
ATOM	6784	C	ASN	262	21.650	-84.668	12.338	1.00	0.00
C									
ATOM	6785	O	ASN	262	22.494	-83.875	11.995	1.00	0.00
O									
ATOM	6786	N	LEU	263	21.382	-84.831	13.663	1.00	0.00
N									
ATOM	6787	CA	LEU	263	22.121	-84.172	14.775	1.00	0.00
C									
ATOM	6788	CB	LEU	263	21.722	-84.725	16.101	1.00	0.00
C									
ATOM	6789	CG	LEU	263	20.264	-84.456	16.586	1.00	0.00
C									
ATOM	6790	CD1	LEU	263	19.989	-85.175	17.971	1.00	0.00
C									
ATOM	6791	CD2	LEU	263	20.086	-82.928	16.889	1.00	0.00
C									
ATOM	6792	C	LEU	263	23.666	-84.374	14.565	1.00	0.00
C									
ATOM	6793	O	LEU	263	24.444	-83.449	14.397	1.00	0.00
O									
ATOM	6794	N	ILE	264	24.143	-85.617	14.376	1.00	0.00
N									

ATOM	6795	CA	ILE	264	25.537	-85.958	14.035	1.00	0.00
C									
ATOM	6796	CB	ILE	264	25.778	-87.460	14.161	1.00	0.00
C									
ATOM	6797	CG2	ILE	264	27.214	-87.843	13.875	1.00	0.00
C									
ATOM	6798	CG1	ILE	264	25.377	-87.895	15.587	1.00	0.00
C									
ATOM	6799	CD1	ILE	264	25.345	-89.509	15.836	1.00	0.00
C									
ATOM	6800	C	ILE	264	26.038	-85.290	12.726	1.00	0.00
C									
ATOM	6801	O	ILE	264	27.234	-85.024	12.650	1.00	0.00
O									
ATOM	6802	N	GLN	265	25.105	-85.124	11.726	1.00	0.00
N									
ATOM	6803	CA	GLN	265	25.552	-84.537	10.405	1.00	0.00
C									
ATOM	6804	CB	GLN	265	24.681	-84.934	9.187	1.00	0.00
C									
ATOM	6805	CG	GLN	265	24.618	-86.462	8.987	1.00	0.00
C									
ATOM	6806	CD	GLN	265	23.346	-86.926	8.142	1.00	0.00
C									
ATOM	6807	OE1	GLN	265	22.170	-86.867	8.508	1.00	0.00
O									
ATOM	6808	NE2	GLN	265	23.663	-87.290	6.906	1.00	0.00
N									
ATOM	6809	C	GLN	265	25.686	-83.037	10.427	1.00	0.00
C									
ATOM	6810	O	GLN	265	26.117	-82.482	9.383	1.00	0.00
O									
ATOM	6811	N	LYS	266	25.356	-82.377	11.545	1.00	0.00
N									
ATOM	6812	CA	LYS	266	25.405	-80.891	11.691	1.00	0.00
C									
ATOM	6813	CB	LYS	266	23.985	-80.339	11.912	1.00	0.00
C									
ATOM	6814	CG	LYS	266	22.964	-80.704	10.808	1.00	0.00
C									
ATOM	6815	CD	LYS	266	21.506	-80.475	11.094	1.00	0.00
C									
ATOM	6816	CE	LYS	266	20.982	-80.845	12.506	1.00	0.00
C									
ATOM	6817	NZ	LYS	266	19.531	-80.725	12.645	1.00	0.00
N1+									
ATOM	6818	C	LYS	266	26.332	-80.589	12.868	1.00	0.00
C									
ATOM	6819	O	LYS	266	27.543	-80.372	12.625	1.00	0.00
O									
ATOM	6820	N	ASP	267	25.897	-80.770	14.162	1.00	0.00
N									
ATOM	6821	CA	ASP	267	26.731	-80.394	15.300	1.00	0.00
C									



ATOM	6822	CB	ASP	267	26.557	-78.874	15.503	1.00	0.00
C									
ATOM	6823	CG	ASP	267	25.128	-78.391	15.842	1.00	0.00
C									
ATOM	6824	OD1	ASP	267	24.247	-79.180	16.267	1.00	0.00
O									
ATOM	6825	OD2	ASP	267	24.952	-77.145	15.702	1.00	0.00
O1-									
ATOM	6826	C	ASP	267	26.470	-81.146	16.600	1.00	0.00
C									
ATOM	6827	O	ASP	267	26.802	-80.622	17.688	1.00	0.00
O									
ATOM	6828	N	ARG	268	25.758	-82.302	16.542	1.00	0.00
N									
ATOM	6829	CA	ARG	268	25.430	-83.188	17.738	1.00	0.00
C									
ATOM	6830	CB	ARG	268	26.670	-83.866	18.440	1.00	0.00
C									
ATOM	6831	CG	ARG	268	27.460	-84.755	17.457	1.00	0.00
C									
ATOM	6832	CD	ARG	268	28.585	-85.520	18.191	1.00	0.00
C									
ATOM	6833	NE	ARG	268	29.722	-84.625	18.268	1.00	0.00
N									
ATOM	6834	CZ	ARG	268	30.504	-84.214	19.196	1.00	0.00
C									
ATOM	6835	NH1	ARG	268	30.170	-84.488	20.438	1.00	0.00
N									
ATOM	6836	NH2	ARG	268	31.606	-83.573	18.988	1.00	0.00
N1+									
ATOM	6837	C	ARG	268	24.519	-82.575	18.856	1.00	0.00
C									
ATOM	6838	O	ARG	268	24.188	-83.295	19.800	1.00	0.00
O									
ATOM	6839	N	THR	269	24.191	-81.294	18.820	1.00	0.00
N									
ATOM	6840	CA	THR	269	23.572	-80.543	19.881	1.00	0.00
C									
ATOM	6841	CB	THR	269	24.170	-79.108	19.903	1.00	0.00
C									
ATOM	6842	CG2	THR	269	23.347	-78.179	20.887	1.00	0.00
C									
ATOM	6843	OG1	THR	269	25.536	-79.253	20.236	1.00	0.00
O									
ATOM	6844	C	THR	269	22.017	-80.479	19.635	1.00	0.00
C									
ATOM	6845	O	THR	269	21.516	-80.278	18.537	1.00	0.00
O									
ATOM	6846	N	PHE	270	21.215	-80.654	20.738	1.00	0.00
N									
ATOM	6847	CA	PHE	270	19.741	-80.533	20.747	1.00	0.00
C									
ATOM	6848	CB	PHE	270	19.267	-81.986	20.678	1.00	0.00
C									

ATOM	6849	CG	PHE	270	19.758	-82.834	21.826	1.00	0.00
C									
ATOM	6850	CD1	PHE	270	20.935	-83.676	21.584	1.00	0.00
C									
ATOM	6851	CE1	PHE	270	21.370	-84.533	22.567	1.00	0.00
C									
ATOM	6852	CZ	PHE	270	20.633	-84.668	23.814	1.00	0.00
C									
ATOM	6853	CE2	PHE	270	19.536	-83.909	24.023	1.00	0.00
C									
ATOM	6854	CD2	PHE	270	19.104	-83.048	23.017	1.00	0.00
C									
ATOM	6855	C	PHE	270	19.238	-79.835	22.028	1.00	0.00
C									
ATOM	6856	O	PHE	270	20.068	-79.328	22.798	1.00	0.00
O									
ATOM	6857	N	ALA	271	17.911	-79.767	22.232	1.00	0.00
N									
ATOM	6858	CA	ALA	271	17.286	-79.193	23.446	1.00	0.00
C									
ATOM	6859	CB	ALA	271	16.672	-77.776	23.212	1.00	0.00
C									
ATOM	6860	C	ALA	271	16.212	-80.048	24.131	1.00	0.00
C									
ATOM	6861	O	ALA	271	15.472	-80.789	23.522	1.00	0.00
O									
ATOM	6862	N	VAL	272	16.231	-79.895	25.464	1.00	0.00
N									
ATOM	6863	CA	VAL	272	15.157	-80.267	26.356	1.00	0.00
C									
ATOM	6864	CB	VAL	272	15.684	-81.253	27.437	1.00	0.00
C									
ATOM	6865	CG1	VAL	272	14.515	-81.718	28.251	1.00	0.00
C									
ATOM	6866	CG2	VAL	272	16.362	-82.466	26.827	1.00	0.00
C									
ATOM	6867	C	VAL	272	14.470	-78.997	26.945	1.00	0.00
C									
ATOM	6868	O	VAL	272	15.153	-78.155	27.501	1.00	0.00
O									
ATOM	6869	N	LEU	273	13.214	-78.826	26.662	1.00	0.00
N									
ATOM	6870	CA	LEU	273	12.300	-77.725	27.174	1.00	0.00
C									
ATOM	6871	CB	LEU	273	10.965	-77.707	26.345	1.00	0.00
C									
ATOM	6872	CG	LEU	273	11.316	-77.295	24.867	1.00	0.00
C									
ATOM	6873	CD1	LEU	273	10.002	-77.117	24.025	1.00	0.00
C									
ATOM	6874	CD2	LEU	273	11.964	-75.934	24.827	1.00	0.00
C									
ATOM	6875	C	LEU	273	12.069	-77.838	28.728	1.00	0.00
C									

ATOM	6876	O	LEU	273	12.512	-78.778	29.383	1.00	0.00
O									
ATOM	6877	N	ALA	274	11.275	-76.972	29.344	1.00	0.00
N									
ATOM	6878	CA	ALA	274	10.905	-76.923	30.772	1.00	0.00
C									
ATOM	6879	CB	ALA	274	11.971	-76.131	31.593	1.00	0.00
C									
ATOM	6880	C	ALA	274	9.554	-76.308	30.910	1.00	0.00
C									
ATOM	6881	O	ALA	274	9.277	-75.263	30.433	1.00	0.00
O									
ATOM	6882	N	TYR	275	8.705	-77.012	31.651	1.00	0.00
N									
ATOM	6883	CA	TYR	275	7.315	-76.669	31.934	1.00	0.00
C									
ATOM	6884	CB	TYR	275	6.474	-77.980	32.103	1.00	0.00
C									
ATOM	6885	CG	TYR	275	6.412	-78.952	30.933	1.00	0.00
C									
ATOM	6886	CD1	TYR	275	6.618	-78.594	29.591	1.00	0.00
C									
ATOM	6887	CE1	TYR	275	6.866	-79.588	28.654	1.00	0.00
C									
ATOM	6888	CZ	TYR	275	6.782	-80.942	29.026	1.00	0.00
C									
ATOM	6889	OH	TYR	275	7.232	-81.785	28.045	1.00	0.00
O									
ATOM	6890	CE2	TYR	275	6.274	-81.287	30.252	1.00	0.00
C									
ATOM	6891	CD2	TYR	275	6.142	-80.336	31.256	1.00	0.00
C									
ATOM	6892	C	TYR	275	7.257	-75.701	33.115	1.00	0.00
C									
ATOM	6893	O	TYR	275	7.906	-75.996	34.093	1.00	0.00
O									
ATOM	6894	N	SER	276	6.408	-74.690	33.128	1.00	0.00
N									
ATOM	6895	CA	SER	276	6.161	-73.717	34.200	1.00	0.00
C									
ATOM	6896	CB	SER	276	5.222	-72.603	33.617	1.00	0.00
C									
ATOM	6897	OG	SER	276	5.189	-71.475	34.493	1.00	0.00
O									
ATOM	6898	C	SER	276	5.558	-74.336	35.423	1.00	0.00
C									
ATOM	6899	O	SER	276	4.916	-75.420	35.439	1.00	0.00
O									
ATOM	6900	N	ASN	277	5.784	-73.712	36.563	1.00	0.00
N									
ATOM	6901	CA	ASN	277	5.307	-74.271	37.887	1.00	0.00
C									
ATOM	6902	CB	ASN	277	6.015	-73.500	39.028	1.00	0.00
C									

ATOM	6903	CG	ASN	277	5.994	-71.928	38.836	1.00	0.00
C									
ATOM	6904	OD1	ASN	277	6.755	-71.379	38.021	1.00	0.00
O									
ATOM	6905	ND2	ASN	277	5.052	-71.223	39.361	1.00	0.00
N									
ATOM	6906	C	ASN	277	3.812	-74.154	38.038	1.00	0.00
C									
ATOM	6907	O	ASN	277	3.141	-75.042	38.565	1.00	0.00
O									
ATOM	6908	N	VAL	278	3.202	-73.090	37.521	1.00	0.00
N									
ATOM	6909	CA	VAL	278	1.744	-72.938	37.566	1.00	0.00
C									
ATOM	6910	CB	VAL	278	1.261	-71.541	37.130	1.00	0.00
C									
ATOM	6911	CG1	VAL	278	1.702	-70.435	38.078	1.00	0.00
C									
ATOM	6912	CG2	VAL	278	1.651	-71.088	35.701	1.00	0.00
C									
ATOM	6913	C	VAL	278	1.068	-73.987	36.681	1.00	0.00
C									
ATOM	6914	O	VAL	278	1.626	-74.520	35.748	1.00	0.00
O									
ATOM	6915	N	GLN	279	-0.236	-74.249	36.856	1.00	0.00
N									
ATOM	6916	CA	GLN	279	-0.983	-75.381	36.255	1.00	0.00
C									
ATOM	6917	CB	GLN	279	-2.411	-75.577	36.881	1.00	0.00
C									
ATOM	6918	CG	GLN	279	-3.312	-74.456	36.457	1.00	0.00
C									
ATOM	6919	CD	GLN	279	-4.280	-74.956	35.369	1.00	0.00
C									
ATOM	6920	OE1	GLN	279	-4.753	-76.098	35.327	1.00	0.00
O									
ATOM	6921	NE2	GLN	279	-4.698	-74.071	34.525	1.00	0.00
N									
ATOM	6922	C	GLN	279	-1.066	-75.291	34.710	1.00	0.00
C									
ATOM	6923	O	GLN	279	-1.399	-76.249	34.028	1.00	0.00
O									
ATOM	6924	N	GLU	280	-0.754	-74.130	34.139	1.00	0.00
N									
ATOM	6925	CA	GLU	280	-0.648	-73.904	32.603	1.00	0.00
C									
ATOM	6926	CB	GLU	280	-0.516	-72.390	32.345	1.00	0.00
C									
ATOM	6927	CG	GLU	280	-1.515	-71.469	33.080	1.00	0.00
C									
ATOM	6928	CD	GLU	280	-2.992	-71.841	33.058	1.00	0.00
C									
ATOM	6929	OE1	GLU	280	-3.622	-71.536	34.075	1.00	0.00
O									

ATOM	6930	OE2	GLU	280	-3.481	-72.281	31.964	1.00	0.00
O1-									
ATOM	6931	C	GLU	280	0.462	-74.746	31.977	1.00	0.00
C									
ATOM	6932	O	GLU	280	0.538	-74.768	30.737	1.00	0.00
O									
ATOM	6933	N	ARG	281	1.365	-75.293	32.809	1.00	0.00
N									
ATOM	6934	CA	ARG	281	2.642	-76.041	32.541	1.00	0.00
C									
ATOM	6935	CB	ARG	281	2.282	-77.603	32.649	1.00	0.00
C									
ATOM	6936	CG	ARG	281	1.827	-78.034	34.072	1.00	0.00
C									
ATOM	6937	CD	ARG	281	2.731	-77.667	35.257	1.00	0.00
C									
ATOM	6938	NE	ARG	281	4.114	-78.197	35.296	1.00	0.00
N									
ATOM	6939	CZ	ARG	281	4.510	-79.520	35.227	1.00	0.00
C									
ATOM	6940	NH1	ARG	281	3.598	-80.453	35.241	1.00	0.00
N									
ATOM	6941	NH2	ARG	281	5.750	-79.893	35.224	1.00	0.00
N1+									
ATOM	6942	C	ARG	281	3.332	-75.627	31.219	1.00	0.00
C									
ATOM	6943	O	ARG	281	3.833	-76.449	30.564	1.00	0.00
O									
ATOM	6944	N	GLU	282	3.385	-74.340	30.992	1.00	0.00
N									
ATOM	6945	CA	GLU	282	3.782	-73.827	29.710	1.00	0.00
C									
ATOM	6946	CB	GLU	282	3.169	-72.488	29.384	1.00	0.00
C									
ATOM	6947	CG	GLU	282	3.744	-71.496	30.360	1.00	0.00
C									
ATOM	6948	CD	GLU	282	3.137	-70.154	30.059	1.00	0.00
C									
ATOM	6949	OE1	GLU	282	2.782	-69.469	31.042	1.00	0.00
O									
ATOM	6950	OE2	GLU	282	2.952	-69.792	28.892	1.00	0.00
O1-									
ATOM	6951	C	GLU	282	5.308	-73.916	29.381	1.00	0.00
C									
ATOM	6952	O	GLU	282	6.055	-73.954	30.367	1.00	0.00
O									
ATOM	6953	N	ALA	283	5.630	-74.025	28.074	1.00	0.00
N									
ATOM	6954	CA	ALA	283	7.042	-74.279	27.621	1.00	0.00
C									
ATOM	6955	CB	ALA	283	7.082	-75.346	26.587	1.00	0.00
C									
ATOM	6956	C	ALA	283	7.682	-72.932	27.174	1.00	0.00
C									

ATOM	6957	O	ALA	283	7.549	-72.401	26.029	1.00	0.00
O									
ATOM	6958	N	GLN	284	8.383	-72.326	28.131	1.00	0.00
N									
ATOM	6959	CA	GLN	284	8.906	-70.952	28.134	1.00	0.00
C									
ATOM	6960	CB	GLN	284	8.043	-70.078	29.089	1.00	0.00
C									
ATOM	6961	CG	GLN	284	6.656	-69.926	28.682	1.00	0.00
C									
ATOM	6962	CD	GLN	284	6.496	-68.919	27.583	1.00	0.00
C									
ATOM	6963	OE1	GLN	284	7.449	-68.337	27.045	1.00	0.00
O									
ATOM	6964	NE2	GLN	284	5.355	-68.776	27.023	1.00	0.00
N									
ATOM	6965	C	GLN	284	10.413	-70.849	28.462	1.00	0.00
C									
ATOM	6966	O	GLN	284	11.001	-69.846	28.108	1.00	0.00
O									
ATOM	6967	N	PHE	285	11.074	-71.951	29.009	1.00	0.00
N									
ATOM	6968	CA	PHE	285	12.524	-72.069	29.220	1.00	0.00
C									
ATOM	6969	CB	PHE	285	12.799	-71.756	30.682	1.00	0.00
C									
ATOM	6970	CG	PHE	285	12.179	-70.420	31.035	1.00	0.00
C									
ATOM	6971	CD1	PHE	285	12.972	-69.258	30.802	1.00	0.00
C									
ATOM	6972	CE1	PHE	285	12.397	-67.988	31.025	1.00	0.00
C									
ATOM	6973	CZ	PHE	285	11.083	-67.884	31.538	1.00	0.00
C									
ATOM	6974	CE2	PHE	285	10.278	-68.984	31.765	1.00	0.00
C									
ATOM	6975	CD2	PHE	285	10.831	-70.246	31.527	1.00	0.00
C									
ATOM	6976	C	PHE	285	13.048	-73.457	28.846	1.00	0.00
C									
ATOM	6977	O	PHE	285	12.255	-74.356	28.568	1.00	0.00
O									
ATOM	6978	N	GLY	286	14.342	-73.695	28.954	1.00	0.00
N									
ATOM	6979	CA	GLY	286	14.926	-75.045	28.789	1.00	0.00
C									
ATOM	6980	C	GLY	286	16.452	-75.143	28.833	1.00	0.00
C									
ATOM	6981	O	GLY	286	17.101	-74.128	29.136	1.00	0.00
O									
ATOM	6982	N	THR	287	16.983	-76.281	28.366	1.00	0.00
N									
ATOM	6983	CA	THR	287	18.435	-76.587	28.503	1.00	0.00
C									

ATOM	6984	CB	THR	287	18.682	-77.411	29.840	1.00	0.00
C									
ATOM	6985	CG2	THR	287	20.170	-78.010	29.925	1.00	0.00
C									
ATOM	6986	OG1	THR	287	18.700	-76.535	30.980	1.00	0.00
O									
ATOM	6987	C	THR	287	18.843	-77.349	27.229	1.00	0.00
C									
ATOM	6988	O	THR	287	18.120	-78.223	26.804	1.00	0.00
O									
ATOM	6989	N	THR	288	20.017	-77.066	26.655	1.00	0.00
N									
ATOM	6990	CA	THR	288	20.760	-77.798	25.573	1.00	0.00
C									
ATOM	6991	CB	THR	288	21.563	-76.769	24.695	1.00	0.00
C									
ATOM	6992	CG2	THR	288	20.712	-75.609	24.151	1.00	0.00
C									
ATOM	6993	OG1	THR	288	22.722	-76.175	25.376	1.00	0.00
O									
ATOM	6994	C	THR	288	21.568	-78.996	26.023	1.00	0.00
C									
ATOM	6995	O	THR	288	22.103	-79.033	27.112	1.00	0.00
O									
ATOM	6996	N	ALA	289	21.760	-79.950	25.141	1.00	0.00
N									
ATOM	6997	CA	ALA	289	22.504	-81.184	25.314	1.00	0.00
C									
ATOM	6998	CB	ALA	289	21.569	-82.278	25.813	1.00	0.00
C									
ATOM	6999	C	ALA	289	23.198	-81.659	24.050	1.00	0.00
C									
ATOM	7000	O	ALA	289	22.855	-81.364	22.932	1.00	0.00
O									
ATOM	7001	N	GLU	290	24.331	-82.383	24.162	1.00	0.00
N									
ATOM	7002	CA	GLU	290	25.142	-82.812	23.005	1.00	0.00
C									
ATOM	7003	CB	GLU	290	26.389	-81.864	22.988	1.00	0.00
C									
ATOM	7004	CG	GLU	290	27.399	-82.146	21.884	1.00	0.00
C									
ATOM	7005	CD	GLU	290	28.476	-81.014	21.795	1.00	0.00
C									
ATOM	7006	OE1	GLU	290	29.006	-80.699	22.920	1.00	0.00
O									
ATOM	7007	OE2	GLU	290	28.956	-80.621	20.692	1.00	0.00
O1-									
ATOM	7008	C	GLU	290	25.533	-84.267	23.176	1.00	0.00
C									
ATOM	7009	O	GLU	290	25.696	-84.662	24.320	1.00	0.00
O									
ATOM	7010	N	ILE	291	25.692	-85.039	22.090	1.00	0.00
N									

ATOM	7011	CA	ILE	291	26.022	-86.492	22.105	1.00	0.00
C									
ATOM	7012	CB	ILE	291	25.500	-87.137	20.738	1.00	0.00
C									
ATOM	7013	CG2	ILE	291	25.818	-88.658	20.685	1.00	0.00
C									
ATOM	7014	CG1	ILE	291	23.971	-86.798	20.561	1.00	0.00
C									
ATOM	7015	CD1	ILE	291	23.357	-87.536	19.355	1.00	0.00
C									
ATOM	7016	C	ILE	291	27.466	-86.766	22.347	1.00	0.00
C									
ATOM	7017	O	ILE	291	28.309	-86.129	21.697	1.00	0.00
O									
ATOM	7018	N	TYR	292	27.871	-87.777	23.148	1.00	0.00
N									
ATOM	7019	CA	TYR	292	29.230	-88.309	23.217	1.00	0.00
C									
ATOM	7020	CB	TYR	292	29.781	-87.923	24.571	1.00	0.00
C									
ATOM	7021	CG	TYR	292	29.247	-88.684	25.756	1.00	0.00
C									
ATOM	7022	CD1	TYR	292	28.398	-88.086	26.748	1.00	0.00
C									
ATOM	7023	CE1	TYR	292	27.977	-88.813	27.916	1.00	0.00
C									
ATOM	7024	CZ	TYR	292	28.414	-90.131	28.040	1.00	0.00
C									
ATOM	7025	OH	TYR	292	28.108	-90.760	29.173	1.00	0.00
O									
ATOM	7026	CE2	TYR	292	29.188	-90.748	27.061	1.00	0.00
C									
ATOM	7027	CD2	TYR	292	29.713	-90.018	25.967	1.00	0.00
C									
ATOM	7028	C	TYR	292	29.243	-89.787	22.812	1.00	0.00
C									
ATOM	7029	O	TYR	292	30.311	-90.304	22.514	1.00	0.00
O									
ATOM	7030	N	ALA	293	28.096	-90.494	22.682	1.00	0.00
N									
ATOM	7031	CA	ALA	293	28.074	-91.862	22.172	1.00	0.00
C									
ATOM	7032	CB	ALA	293	28.223	-92.821	23.321	1.00	0.00
C									
ATOM	7033	C	ALA	293	26.852	-92.303	21.336	1.00	0.00
C									
ATOM	7034	O	ALA	293	25.699	-91.811	21.598	1.00	0.00
O									
ATOM	7035	N	TYR	294	26.962	-93.086	20.299	1.00	0.00
N									
ATOM	7036	CA	TYR	294	25.881	-93.572	19.434	1.00	0.00
C									
ATOM	7037	CB	TYR	294	25.633	-92.583	18.273	1.00	0.00
C									



ATOM	7038	CG	TYR	294	24.630	-93.044	17.210	1.00	0.00
C									
ATOM	7039	CD1	TYR	294	23.480	-92.254	17.021	1.00	0.00
C									
ATOM	7040	CE1	TYR	294	22.498	-92.520	16.057	1.00	0.00
C									
ATOM	7041	CZ	TYR	294	22.676	-93.708	15.300	1.00	0.00
C									
ATOM	7042	OH	TYR	294	21.767	-94.117	14.370	1.00	0.00
O									
ATOM	7043	CE2	TYR	294	23.850	-94.490	15.427	1.00	0.00
C									
ATOM	7044	CD2	TYR	294	24.867	-94.156	16.320	1.00	0.00
C									
ATOM	7045	C	TYR	294	26.172	-94.973	18.890	1.00	0.00
C									
ATOM	7046	O	TYR	294	27.367	-95.229	18.450	1.00	0.00
O									
ATOM	7047	N	ARG	295	25.166	-95.947	18.906	1.00	0.00
N									
ATOM	7048	CA	ARG	295	25.236	-97.278	18.306	1.00	0.00
C									
ATOM	7049	CB	ARG	295	25.936	-98.196	19.285	1.00	0.00
C									
ATOM	7050	CG	ARG	295	26.108	-99.593	18.665	1.00	0.00
C									
ATOM	7051	CD	ARG	295	27.330	-100.290	19.282	1.00	0.00
C									
ATOM	7052	NE	ARG	295	27.378	-101.745	19.098	1.00	0.00
N									
ATOM	7053	CZ	ARG	295	28.425	-102.500	18.773	1.00	0.00
C									
ATOM	7054	NH1	ARG	295	28.226	-103.734	18.453	1.00	0.00
N									
ATOM	7055	NH2	ARG	295	29.643	-102.123	18.752	1.00	0.00
N1+									
ATOM	7056	C	ARG	295	23.808	-97.751	18.020	1.00	0.00
C									
ATOM	7057	O	ARG	295	23.031	-97.834	18.963	1.00	0.00
O									
ATOM	7058	N	GLU	296	23.606	-98.131	16.832	1.00	0.00
N									
ATOM	7059	CA	GLU	296	22.410	-98.789	16.328	1.00	0.00
C									
ATOM	7060	CB	GLU	296	21.892	-98.169	15.063	1.00	0.00
C									
ATOM	7061	CG	GLU	296	22.735	-98.324	13.882	1.00	0.00
C									
ATOM	7062	CD	GLU	296	22.425	-97.438	12.733	1.00	0.00
C									
ATOM	7063	OE1	GLU	296	22.163	-96.217	12.897	1.00	0.00
O									
ATOM	7064	OE2	GLU	296	22.494	-97.930	11.580	1.00	0.00
O1-									

ATOM	7065	C	GLU	296	22.594-100.268	16.335	1.00	0.00
C								
ATOM	7066	O	GLU	296	23.587-100.735	15.717	1.00	0.00
O								
ATOM	7067	N	GLU	297	21.795-101.088	17.065	1.00	0.00
N								
ATOM	7068	CA	GLU	297	22.212-102.353	17.605	1.00	0.00
C								
ATOM	7069	CB	GLU	297	22.642-102.011	19.067	1.00	0.00
C								
ATOM	7070	CG	GLU	297	22.988-103.267	19.878	1.00	0.00
C								
ATOM	7071	CD	GLU	297	24.177-104.146	19.423	1.00	0.00
C								
ATOM	7072	OE1	GLU	297	24.171-105.362	19.659	1.00	0.00
O								
ATOM	7073	OE2	GLU	297	25.109-103.632	18.754	1.00	0.00
O1-								
ATOM	7074	C	GLU	297	21.075-103.314	17.672	1.00	0.00
C								
ATOM	7075	O	GLU	297	20.000-103.007	18.080	1.00	0.00
O								
ATOM	7076	N	GLN	298	21.279-104.552	17.203	1.00	0.00
N								
ATOM	7077	CA	GLN	298	20.312-105.490	16.928	1.00	0.00
C								
ATOM	7078	CB	GLN	298	20.846-106.694	16.092	1.00	0.00
C								
ATOM	7079	CG	GLN	298	21.782-107.680	16.873	1.00	0.00
C								
ATOM	7080	CD	GLN	298	22.617-108.508	15.934	1.00	0.00
C								
ATOM	7081	OE1	GLN	298	22.153-108.997	14.950	1.00	0.00
O								
ATOM	7082	NE2	GLN	298	23.839-108.755	16.222	1.00	0.00
N								
ATOM	7083	C	GLN	298	19.495-105.956	18.153	1.00	0.00
C								
ATOM	7084	O	GLN	298	18.985-107.080	18.095	1.00	0.00
O								
ATOM	7085	N	ASP	299	19.381-105.276	19.293	1.00	0.00
N								
ATOM	7086	CA	ASP	299	18.989-105.774	20.633	1.00	0.00
C								
ATOM	7087	CB	ASP	299	18.866-104.506	21.529	1.00	0.00
C								
ATOM	7088	CG	ASP	299	18.615-104.882	23.003	1.00	0.00
C								
ATOM	7089	OD1	ASP	299	18.287-103.999	23.784	1.00	0.00
O								
ATOM	7090	OD2	ASP	299	18.739-106.064	23.455	1.00	0.00
O1-								
ATOM	7091	C	ASP	299	17.606-106.512	20.661	1.00	0.00
C								

ATOM	7092	O	ASP	299	17.369-107.520	21.331	1.00	0.00
O								
ATOM	7093	N	PHE	300	16.621-106.102	19.875	1.00	0.00
N								
ATOM	7094	CA	PHE	300	15.252-106.696	19.728	1.00	0.00
C								
ATOM	7095	CB	PHE	300	14.253-105.587	19.436	1.00	0.00
C								
ATOM	7096	CG	PHE	300	13.841-104.525	20.468	1.00	0.00
C								
ATOM	7097	CD1	PHE	300	12.727-103.760	20.240	1.00	0.00
C								
ATOM	7098	CE1	PHE	300	12.390-102.793	21.137	1.00	0.00
C								
ATOM	7099	CZ	PHE	300	13.076-102.607	22.393	1.00	0.00
C								
ATOM	7100	CE2	PHE	300	14.145-103.474	22.671	1.00	0.00
C								
ATOM	7101	CD2	PHE	300	14.568-104.376	21.653	1.00	0.00
C								
ATOM	7102	C	PHE	300	15.233-107.876	18.753	1.00	0.00
C								
ATOM	7103	O	PHE	300	14.229-108.581	18.728	1.00	0.00
O								
ATOM	7104	N	GLY	301	16.300-108.230	18.018	1.00	0.00
N								
ATOM	7105	CA	GLY	301	16.104-108.846	16.725	1.00	0.00
C								
ATOM	7106	C	GLY	301	16.037-107.974	15.491	1.00	0.00
C								
ATOM	7107	O	GLY	301	15.775-108.498	14.410	1.00	0.00
O								
ATOM	7108	N	ILE	302	16.341-106.679	15.656	1.00	0.00
N								
ATOM	7109	CA	ILE	302	16.231-105.484	14.775	1.00	0.00
C								
ATOM	7110	CB	ILE	302	14.722-105.108	14.461	1.00	0.00
C								
ATOM	7111	CG2	ILE	302	13.970-104.818	15.778	1.00	0.00
C								
ATOM	7112	CG1	ILE	302	14.493-104.096	13.383	1.00	0.00
C								
ATOM	7113	CD1	ILE	302	14.950-104.566	11.955	1.00	0.00
C								
ATOM	7114	C	ILE	302	16.989-104.398	15.430	1.00	0.00
C								
ATOM	7115	O	ILE	302	17.112-104.354	16.695	1.00	0.00
O								
ATOM	7116	N	GLU	303	17.663-103.478	14.729	1.00	0.00
N								
ATOM	7117	CA	GLU	303	18.559-102.491	15.225	1.00	0.00
C								
ATOM	7118	CB	GLU	303	19.433-102.017	13.979	1.00	0.00
C								

ATOM	7119	CG	GLU	303	20.286-103.116	13.434	1.00	0.00
C								
ATOM	7120	CD	GLU	303	19.571-104.186	12.667	1.00	0.00
C								
ATOM	7121	OE1	GLU	303	20.200-105.279	12.503	1.00	0.00
O								
ATOM	7122	OE2	GLU	303	18.458-104.106	12.198	1.00	0.00
O1-								
ATOM	7123	C	GLU	303	17.854-101.323	15.904	1.00	0.00
C								
ATOM	7124	O	GLU	303	17.182-100.472	15.253	1.00	0.00
O								
ATOM	7125	N	ILE	304	18.006-101.224	17.216	1.00	0.00
N								
ATOM	7126	CA	ILE	304	17.479-100.090	17.962	1.00	0.00
C								
ATOM	7127	CB	ILE	304	16.864-100.555	19.280	1.00	0.00
C								
ATOM	7128	CG2	ILE	304	17.818-100.910	20.426	1.00	0.00
C								
ATOM	7129	CG1	ILE	304	15.943 -99.450	19.871	1.00	0.00
C								
ATOM	7130	CD1	ILE	304	14.758 -99.974	20.720	1.00	0.00
C								
ATOM	7131	C	ILE	304	18.614 -98.985	18.141	1.00	0.00
C								
ATOM	7132	O	ILE	304	19.740 -99.423	18.393	1.00	0.00
O								
ATOM	7133	N	VAL	305	18.323 -97.696	18.072	1.00	0.00
N								
ATOM	7134	CA	VAL	305	19.353 -96.647	18.300	1.00	0.00
C								
ATOM	7135	CB	VAL	305	19.187 -95.350	17.367	1.00	0.00
C								
ATOM	7136	CG1	VAL	305	20.394 -94.483	17.590	1.00	0.00
C								
ATOM	7137	CG2	VAL	305	19.086 -95.657	15.906	1.00	0.00
C								
ATOM	7138	C	VAL	305	19.542 -96.302	19.786	1.00	0.00
C								
ATOM	7139	O	VAL	305	18.717 -95.666	20.356	1.00	0.00
O								
ATOM	7140	N	LYS	306	20.667 -96.649	20.398	1.00	0.00
N								
ATOM	7141	CA	LYS	306	21.103 -96.281	21.685	1.00	0.00
C								
ATOM	7142	CB	LYS	306	21.581 -97.497	22.409	1.00	0.00
C								
ATOM	7143	CG	LYS	306	20.693 -98.730	22.235	1.00	0.00
C								
ATOM	7144	CD	LYS	306	21.271 -99.916	23.092	1.00	0.00
C								
ATOM	7145	CE	LYS	306	20.164-100.982	23.147	1.00	0.00
C								

ATOM	7146	NZ	LYS	306	20.411	-102.017	24.068	1.00	0.00
N1+									
ATOM	7147	C	LYS	306	22.103	-95.141	21.632	1.00	0.00
C									
ATOM	7148	O	LYS	306	23.058	-95.235	20.858	1.00	0.00
O									
ATOM	7149	N	VAL	307	21.997	-94.077	22.423	1.00	0.00
N									
ATOM	7150	CA	VAL	307	22.811	-92.830	22.476	1.00	0.00
C									
ATOM	7151	CB	VAL	307	22.018	-91.603	21.854	1.00	0.00
C									
ATOM	7152	CG1	VAL	307	22.663	-90.273	21.891	1.00	0.00
C									
ATOM	7153	CG2	VAL	307	21.632	-91.774	20.364	1.00	0.00
C									
ATOM	7154	C	VAL	307	23.192	-92.593	23.953	1.00	0.00
C									
ATOM	7155	O	VAL	307	22.472	-92.928	24.890	1.00	0.00
O									
ATOM	7156	N	LYS	308	24.305	-91.901	24.196	1.00	0.00
N									
ATOM	7157	CA	LYS	308	24.589	-91.168	25.437	1.00	0.00
C									
ATOM	7158	CB	LYS	308	25.765	-91.889	26.099	1.00	0.00
C									
ATOM	7159	CG	LYS	308	25.619	-93.364	26.441	1.00	0.00
C									
ATOM	7160	CD	LYS	308	26.757	-94.073	27.230	1.00	0.00
C									
ATOM	7161	CE	LYS	308	26.405	-95.541	27.394	1.00	0.00
C									
ATOM	7162	NZ	LYS	308	27.651	-96.378	27.603	1.00	0.00
N1+									
ATOM	7163	C	LYS	308	24.890	-89.665	25.144	1.00	0.00
C									
ATOM	7164	O	LYS	308	25.479	-89.356	24.142	1.00	0.00
O									
ATOM	7165	N	ALA	309	24.337	-88.714	25.930	1.00	0.00
N									
ATOM	7166	CA	ALA	309	24.614	-87.271	25.763	1.00	0.00
C									
ATOM	7167	CB	ALA	309	23.333	-86.638	25.132	1.00	0.00
C									
ATOM	7168	C	ALA	309	24.856	-86.677	27.161	1.00	0.00
C									
ATOM	7169	O	ALA	309	24.837	-87.362	28.187	1.00	0.00
O									
ATOM	7170	N	ILE	310	25.165	-85.417	27.133	1.00	0.00
N									
ATOM	7171	CA	ILE	310	25.474	-84.666	28.380	1.00	0.00
C									
ATOM	7172	CB	ILE	310	27.007	-84.698	28.783	1.00	0.00
C									

ATOM	7173	CG2	ILE	310	27.909	-83.883	27.890	1.00	0.00
C									
ATOM	7174	CG1	ILE	310	27.160	-84.261	30.232	1.00	0.00
C									
ATOM	7175	CD1	ILE	310	28.525	-84.650	30.771	1.00	0.00
C									
ATOM	7176	C	ILE	310	24.869	-83.244	28.249	1.00	0.00
C									
ATOM	7177	O	ILE	310	24.737	-82.772	27.088	1.00	0.00
O									
ATOM	7178	N	GLY	311	24.533	-82.612	29.344	1.00	0.00
N									
ATOM	7179	CA	GLY	311	23.887	-81.367	29.240	1.00	0.00
C									
ATOM	7180	C	GLY	311	24.853	-80.213	29.083	1.00	0.00
C									
ATOM	7181	O	GLY	311	25.978	-80.268	29.727	1.00	0.00
O									
ATOM	7182	N	ARG	312	24.563	-79.131	28.343	1.00	0.00
N									
ATOM	7183	CA	ARG	312	25.436	-77.971	28.004	1.00	0.00
C									
ATOM	7184	CB	ARG	312	25.617	-77.932	26.458	1.00	0.00
C									
ATOM	7185	CG	ARG	312	26.463	-79.111	25.823	1.00	0.00
C									
ATOM	7186	CD	ARG	312	27.829	-79.313	26.435	1.00	0.00
C									
ATOM	7187	NE	ARG	312	28.513	-80.395	25.708	1.00	0.00
N									
ATOM	7188	CZ	ARG	312	29.524	-81.102	26.142	1.00	0.00
C									
ATOM	7189	NH1	ARG	312	29.927	-81.273	27.346	1.00	0.00
N									
ATOM	7190	NH2	ARG	312	30.282	-81.601	25.189	1.00	0.00
N1+									
ATOM	7191	C	ARG	312	25.009	-76.609	28.605	1.00	0.00
C									
ATOM	7192	O	ARG	312	25.570	-76.366	29.714	1.00	0.00
O									
ATOM	7193	N	GLN	313	23.966	-75.904	28.115	1.00	0.00
N									
ATOM	7194	CA	GLN	313	23.550	-74.519	28.533	1.00	0.00
C									
ATOM	7195	CB	GLN	313	24.129	-73.458	27.494	1.00	0.00
C									
ATOM	7196	CG	GLN	313	25.480	-73.796	26.768	1.00	0.00
C									
ATOM	7197	CD	GLN	313	26.075	-72.835	25.798	1.00	0.00
C									
ATOM	7198	OE1	GLN	313	26.068	-73.187	24.620	1.00	0.00
O									
ATOM	7199	NE2	GLN	313	26.513	-71.693	26.269	1.00	0.00
N									

ATOM	7200	C	GLN	313	22.049	-74.335	28.726	1.00	0.00
C									
ATOM	7201	O	GLN	313	21.218	-75.064	28.259	1.00	0.00
O									
ATOM	7202	N	ARG	314	21.717	-73.253	29.485	1.00	0.00
N									
ATOM	7203	CA	ARG	314	20.319	-72.790	29.705	1.00	0.00
C									
ATOM	7204	CB	ARG	314	20.174	-72.192	31.105	1.00	0.00
C									
ATOM	7205	CG	ARG	314	20.448	-73.160	32.247	1.00	0.00
C									
ATOM	7206	CD	ARG	314	20.306	-72.422	33.576	1.00	0.00
C									
ATOM	7207	NE	ARG	314	21.249	-71.258	33.658	1.00	0.00
N									
ATOM	7208	CZ	ARG	314	20.895	-69.974	33.762	1.00	0.00
C									
ATOM	7209	NH1	ARG	314	19.687	-69.543	33.875	1.00	0.00
N									
ATOM	7210	NH2	ARG	314	21.773	-69.051	33.827	1.00	0.00
N1+									
ATOM	7211	C	ARG	314	19.725	-71.871	28.648	1.00	0.00
C									
ATOM	7212	O	ARG	314	20.504	-71.121	28.016	1.00	0.00
O									
ATOM	7213	N	PHE	315	18.396	-71.770	28.552	1.00	0.00
N									
ATOM	7214	CA	PHE	315	17.814	-70.750	27.712	1.00	0.00
C									
ATOM	7215	CB	PHE	315	17.874	-71.161	26.253	1.00	0.00
C									
ATOM	7216	CG	PHE	315	17.170	-72.470	25.929	1.00	0.00
C									
ATOM	7217	CD1	PHE	315	15.809	-72.550	25.887	1.00	0.00
C									
ATOM	7218	CE1	PHE	315	15.202	-73.790	25.588	1.00	0.00
C									
ATOM	7219	CZ	PHE	315	16.003	-74.921	25.440	1.00	0.00
C									
ATOM	7220	CE2	PHE	315	17.353	-74.843	25.558	1.00	0.00
C									
ATOM	7221	CD2	PHE	315	17.940	-73.617	25.828	1.00	0.00
C									
ATOM	7222	C	PHE	315	16.368	-70.289	28.141	1.00	0.00
C									
ATOM	7223	O	PHE	315	15.600	-70.944	28.860	1.00	0.00
O									
ATOM	7224	N	LYS	316	15.991	-69.180	27.468	1.00	0.00
N									
ATOM	7225	CA	LYS	316	14.633	-68.692	27.406	1.00	0.00
C									
ATOM	7226	CB	LYS	316	14.535	-67.190	27.952	1.00	0.00
C									

ATOM	7227	CG	LYS	316	15.376	-66.192	27.263	1.00	0.00
C									
ATOM	7228	CD	LYS	316	15.216	-64.807	28.011	1.00	0.00
C									
ATOM	7229	CE	LYS	316	15.865	-63.675	27.157	1.00	0.00
C									
ATOM	7230	NZ	LYS	316	15.675	-62.394	27.697	1.00	0.00
N1+									
ATOM	7231	C	LYS	316	14.123	-68.892	25.955	1.00	0.00
C									
ATOM	7232	O	LYS	316	14.932	-68.863	25.055	1.00	0.00
O									
ATOM	7233	N	VAL	317	12.892	-69.323	25.792	1.00	0.00
N									
ATOM	7234	CA	VAL	317	12.348	-69.708	24.492	1.00	0.00
C									
ATOM	7235	CB	VAL	317	11.328	-70.799	24.667	1.00	0.00
C									
ATOM	7236	CG1	VAL	317	10.571	-71.149	23.332	1.00	0.00
C									
ATOM	7237	CG2	VAL	317	11.983	-72.185	25.076	1.00	0.00
C									
ATOM	7238	C	VAL	317	11.685	-68.440	23.856	1.00	0.00
C									
ATOM	7239	O	VAL	317	11.067	-67.656	24.576	1.00	0.00
O									
ATOM	7240	N	LEU	318	11.623	-68.339	22.535	1.00	0.00
N									
ATOM	7241	CA	LEU	318	11.073	-67.222	21.792	1.00	0.00
C									
ATOM	7242	CB	LEU	318	12.216	-66.608	21.054	1.00	0.00
C									
ATOM	7243	CG	LEU	318	13.180	-65.844	21.869	1.00	0.00
C									
ATOM	7244	CD1	LEU	318	14.373	-65.503	20.999	1.00	0.00
C									
ATOM	7245	CD2	LEU	318	12.695	-64.441	22.315	1.00	0.00
C									
ATOM	7246	C	LEU	318	10.006	-67.738	20.734	1.00	0.00
C									
ATOM	7247	O	LEU	318	8.880	-67.218	20.678	1.00	0.00
O									
ATOM	7248	N	GLU	319	10.302	-68.798	19.894	1.00	0.00
N									
ATOM	7249	CA	GLU	319	9.301	-69.368	18.972	1.00	0.00
C									
ATOM	7250	CB	GLU	319	9.385	-68.793	17.573	1.00	0.00
C									
ATOM	7251	CG	GLU	319	9.032	-67.354	17.582	1.00	0.00
C									
ATOM	7252	CD	GLU	319	8.905	-66.824	16.098	1.00	0.00
C									
ATOM	7253	OE1	GLU	319	7.785	-66.421	15.741	1.00	0.00
O									



ATOM	7254	OE2	GLU	319	9.840	-66.960	15.305	1.00	0.00
O1-									
ATOM	7255	C	GLU	319	9.518	-70.910	18.859	1.00	0.00
C									
ATOM	7256	O	GLU	319	10.504	-71.417	18.354	1.00	0.00
O									
ATOM	7257	N	LEU	320	8.509	-71.702	19.215	1.00	0.00
N									
ATOM	7258	CA	LEU	320	8.525	-73.083	18.909	1.00	0.00
C									
ATOM	7259	CB	LEU	320	7.695	-73.930	19.992	1.00	0.00
C									
ATOM	7260	CG	LEU	320	8.016	-73.645	21.436	1.00	0.00
C									
ATOM	7261	CD1	LEU	320	6.907	-74.030	22.402	1.00	0.00
C									
ATOM	7262	CD2	LEU	320	9.254	-74.414	21.653	1.00	0.00
C									
ATOM	7263	C	LEU	320	7.935	-73.246	17.490	1.00	0.00
C									
ATOM	7264	O	LEU	320	7.090	-72.411	17.081	1.00	0.00
O									
ATOM	7265	N	ARG	321	8.568	-74.071	16.604	1.00	0.00
N									
ATOM	7266	CA	ARG	321	8.255	-74.223	15.228	1.00	0.00
C									
ATOM	7267	CB	ARG	321	9.300	-73.616	14.384	1.00	0.00
C									
ATOM	7268	CG	ARG	321	9.362	-72.061	14.484	1.00	0.00
C									
ATOM	7269	CD	ARG	321	10.442	-71.559	13.582	1.00	0.00
C									
ATOM	7270	NE	ARG	321	10.743	-70.155	13.901	1.00	0.00
N									
ATOM	7271	CZ	ARG	321	11.689	-69.360	13.421	1.00	0.00
C									
ATOM	7272	NH1	ARG	321	11.635	-68.091	13.683	1.00	0.00
N									
ATOM	7273	NH2	ARG	321	12.733	-69.842	12.795	1.00	0.00
N1+									
ATOM	7274	C	ARG	321	8.031	-75.681	14.862	1.00	0.00
C									
ATOM	7275	O	ARG	321	8.851	-76.579	15.200	1.00	0.00
O									
ATOM	7276	N	THR	322	6.892	-76.068	14.344	1.00	0.00
N									
ATOM	7277	CA	THR	322	6.539	-77.410	13.840	1.00	0.00
C									
ATOM	7278	CB	THR	322	4.991	-77.588	13.780	1.00	0.00
C									
ATOM	7279	CG2	THR	322	4.559	-78.863	13.092	1.00	0.00
C									
ATOM	7280	OG1	THR	322	4.424	-77.643	15.114	1.00	0.00
O									

ATOM	7281	C	THR	322	7.279	-77.569	12.480	1.00	0.00
C									
ATOM	7282	O	THR	322	7.487	-76.595	11.794	1.00	0.00
O									
ATOM	7283	N	GLN	323	7.701	-78.767	12.209	1.00	0.00
N									
ATOM	7284	CA	GLN	323	8.681	-79.038	11.100	1.00	0.00
C									
ATOM	7285	CB	GLN	323	10.178	-78.817	11.659	1.00	0.00
C									
ATOM	7286	CG	GLN	323	11.399	-79.362	10.897	1.00	0.00
C									
ATOM	7287	CD	GLN	323	12.601	-78.405	10.725	1.00	0.00
C									
ATOM	7288	OE1	GLN	323	12.626	-77.252	10.962	1.00	0.00
O									
ATOM	7289	NE2	GLN	323	13.640	-78.896	10.149	1.00	0.00
N									
ATOM	7290	C	GLN	323	8.512	-80.461	10.619	1.00	0.00
C									
ATOM	7291	O	GLN	323	8.265	-81.362	11.376	1.00	0.00
O									
ATOM	7292	N	SER	324	8.616	-80.749	9.285	1.00	0.00
N									
ATOM	7293	CA	SER	324	8.389	-82.091	8.649	1.00	0.00
C									
ATOM	7294	CB	SER	324	8.161	-81.991	7.179	1.00	0.00
C									
ATOM	7295	OG	SER	324	7.133	-81.036	6.998	1.00	0.00
O									
ATOM	7296	C	SER	324	9.359	-83.224	8.919	1.00	0.00
C									
ATOM	7297	O	SER	324	9.089	-84.420	8.587	1.00	0.00
O									
ATOM	7298	N	ASP	325	10.408	-82.849	9.690	1.00	0.00
N									
ATOM	7299	CA	ASP	325	11.364	-83.901	10.212	1.00	0.00
C									
ATOM	7300	CB	ASP	325	12.655	-83.221	10.637	1.00	0.00
C									
ATOM	7301	CG	ASP	325	13.418	-82.584	9.493	1.00	0.00
C									
ATOM	7302	OD1	ASP	325	14.021	-81.511	9.606	1.00	0.00
O									
ATOM	7303	OD2	ASP	325	13.501	-83.204	8.418	1.00	0.00
O1-									
ATOM	7304	C	ASP	325	10.674	-84.701	11.401	1.00	0.00
C									
ATOM	7305	O	ASP	325	11.318	-85.521	12.036	1.00	0.00
O									
ATOM	7306	N	GLY	326	9.377	-84.471	11.621	1.00	0.00
N									
ATOM	7307	CA	GLY	326	8.520	-85.091	12.643	1.00	0.00
C									

ATOM	7308	C	GLY	326	8.738	-84.247	13.887	1.00	0.00
C									
ATOM	7309	O	GLY	326	7.755	-83.934	14.556	1.00	0.00
O									
ATOM	7310	N	ILE	327	9.994	-84.018	14.161	1.00	0.00
N									
ATOM	7311	CA	ILE	327	10.431	-83.230	15.302	1.00	0.00
C									
ATOM	7312	CB	ILE	327	11.995	-83.513	15.459	1.00	0.00
C									
ATOM	7313	CG2	ILE	327	12.949	-82.435	16.099	1.00	0.00
C									
ATOM	7314	CG1	ILE	327	12.066	-84.817	16.321	1.00	0.00
C									
ATOM	7315	CD1	ILE	327	12.049	-86.123	15.570	1.00	0.00
C									
ATOM	7316	C	ILE	327	10.163	-81.676	15.258	1.00	0.00
C									
ATOM	7317	O	ILE	327	10.160	-81.005	14.195	1.00	0.00
O									
ATOM	7318	N	GLN	328	9.901	-81.133	16.422	1.00	0.00
N									
ATOM	7319	CA	GLN	328	9.882	-79.682	16.585	1.00	0.00
C									
ATOM	7320	CB	GLN	328	9.068	-79.400	17.841	1.00	0.00
C									
ATOM	7321	CG	GLN	328	7.570	-79.302	17.570	1.00	0.00
C									
ATOM	7322	CD	GLN	328	6.765	-78.890	18.766	1.00	0.00
C									
ATOM	7323	OE1	GLN	328	7.222	-79.076	19.922	1.00	0.00
O									
ATOM	7324	NE2	GLN	328	5.642	-78.224	18.650	1.00	0.00
N									
ATOM	7325	C	GLN	328	11.199	-78.994	16.741	1.00	0.00
C									
ATOM	7326	O	GLN	328	12.193	-79.623	17.131	1.00	0.00
O									
ATOM	7327	N	GLN	329	11.177	-77.783	16.401	1.00	0.00
N									
ATOM	7328	CA	GLN	329	12.252	-76.839	16.734	1.00	0.00
C									
ATOM	7329	CB	GLN	329	12.589	-76.106	15.423	1.00	0.00
C									
ATOM	7330	CG	GLN	329	12.875	-76.958	14.136	1.00	0.00
C									
ATOM	7331	CD	GLN	329	13.963	-77.959	14.362	1.00	0.00
C									
ATOM	7332	OE1	GLN	329	15.064	-77.614	14.765	1.00	0.00
O									
ATOM	7333	NE2	GLN	329	13.625	-79.218	14.399	1.00	0.00
N									
ATOM	7334	C	GLN	329	11.845	-75.814	17.855	1.00	0.00
C									

ATOM	7335	O	GLN	329	10.698	-75.555	18.146	1.00	0.00
O									
ATOM	7336	N	ALA	330	12.841	-75.154	18.388	1.00	0.00
N									
ATOM	7337	CA	ALA	330	12.624	-73.997	19.239	1.00	0.00
C									
ATOM	7338	CB	ALA	330	12.816	-74.484	20.709	1.00	0.00
C									
ATOM	7339	C	ALA	330	13.687	-72.925	18.910	1.00	0.00
C									
ATOM	7340	O	ALA	330	14.925	-73.169	18.981	1.00	0.00
O									
ATOM	7341	N	LYS	331	13.203	-71.729	18.652	1.00	0.00
N									
ATOM	7342	CA	LYS	331	13.917	-70.427	18.686	1.00	0.00
C									
ATOM	7343	CB	LYS	331	13.283	-69.282	17.868	1.00	0.00
C									
ATOM	7344	CG	LYS	331	14.215	-68.090	17.682	1.00	0.00
C									
ATOM	7345	CD	LYS	331	13.620	-67.160	16.601	1.00	0.00
C									
ATOM	7346	CE	LYS	331	14.672	-66.084	16.419	1.00	0.00
C									
ATOM	7347	NZ	LYS	331	14.391	-65.042	15.450	1.00	0.00
N1+									
ATOM	7348	C	LYS	331	14.241	-69.967	20.150	1.00	0.00
C									
ATOM	7349	O	LYS	331	13.352	-69.849	20.943	1.00	0.00
O									
ATOM	7350	N	VAL	332	15.500	-69.927	20.537	1.00	0.00
N									
ATOM	7351	CA	VAL	332	15.901	-69.670	21.959	1.00	0.00
C									
ATOM	7352	CB	VAL	332	16.496	-71.032	22.531	1.00	0.00
C									
ATOM	7353	CG1	VAL	332	15.613	-72.260	22.218	1.00	0.00
C									
ATOM	7354	CG2	VAL	332	17.909	-71.418	22.311	1.00	0.00
C									
ATOM	7355	C	VAL	332	16.907	-68.492	22.157	1.00	0.00
C									
ATOM	7356	O	VAL	332	17.662	-68.155	21.253	1.00	0.00
O									
ATOM	7357	N	GLN	333	16.953	-67.936	23.354	1.00	0.00
N									
ATOM	7358	CA	GLN	333	18.074	-67.058	23.696	1.00	0.00
C									
ATOM	7359	CB	GLN	333	17.408	-65.732	23.926	1.00	0.00
C									
ATOM	7360	CG	GLN	333	18.400	-64.570	24.060	1.00	0.00
C									
ATOM	7361	CD	GLN	333	17.662	-63.152	24.011	1.00	0.00
C									

ATOM	7362	OE1	GLN	333	16.634	-63.009	23.395	1.00	0.00
O									
ATOM	7363	NE2	GLN	333	18.231	-62.076	24.448	1.00	0.00
N									
ATOM	7364	C	GLN	333	18.757	-67.540	24.976	1.00	0.00
C									
ATOM	7365	O	GLN	333	18.124	-67.879	25.981	1.00	0.00
O									
ATOM	7366	N	ILE	334	20.102	-67.628	24.968	1.00	0.00
N									
ATOM	7367	CA	ILE	334	20.899	-68.318	26.053	1.00	0.00
C									
ATOM	7368	CB	ILE	334	22.334	-68.637	25.563	1.00	0.00
C									
ATOM	7369	CG2	ILE	334	23.051	-69.375	26.696	1.00	0.00
C									
ATOM	7370	CG1	ILE	334	22.553	-69.552	24.245	1.00	0.00
C									
ATOM	7371	CD1	ILE	334	21.702	-70.868	24.161	1.00	0.00
C									
ATOM	7372	C	ILE	334	20.833	-67.568	27.422	1.00	0.00
C									
ATOM	7373	O	ILE	334	21.003	-66.371	27.415	1.00	0.00
O									
ATOM	7374	N	LEU	335	20.596	-68.228	28.590	1.00	0.00
N									
ATOM	7375	CA	LEU	335	20.524	-67.603	29.909	1.00	0.00
C									
ATOM	7376	CB	LEU	335	19.620	-68.468	30.791	1.00	0.00
C									
ATOM	7377	CG	LEU	335	18.120	-68.189	30.460	1.00	0.00
C									
ATOM	7378	CD1	LEU	335	17.278	-68.833	31.567	1.00	0.00
C									
ATOM	7379	CD2	LEU	335	17.690	-66.699	30.411	1.00	0.00
C									
ATOM	7380	C	LEU	335	21.909	-67.387	30.639	1.00	0.00
C									
ATOM	7381	O	LEU	335	22.641	-68.343	31.020	1.00	0.00
O									
ATOM	7382	N	PRO	336	22.319	-66.106	30.910	1.00	0.00
N									
ATOM	7383	CD	PRO	336	21.810	-64.857	30.435	1.00	0.00
C									
ATOM	7384	CG	PRO	336	22.949	-63.971	30.293	1.00	0.00
C									
ATOM	7385	CB	PRO	336	23.891	-64.324	31.429	1.00	0.00
C									
ATOM	7386	CA	PRO	336	23.609	-65.835	31.593	1.00	0.00
C									
ATOM	7387	C	PRO	336	23.335	-66.159	33.084	1.00	0.00
C									
ATOM	7388	O	PRO	336	22.230	-66.132	33.638	1.00	0.00
O									

ATOM	7389	N	GLU	337	24.399	-66.324	33.886	1.00	0.00
N									
ATOM	7390	CA	GLU	337	24.435	-66.153	35.384	1.00	0.00
C									
ATOM	7391	CB	GLU	337	25.573	-66.881	36.034	1.00	0.00
C									
ATOM	7392	CG	GLU	337	25.750	-68.366	35.571	1.00	0.00
C									
ATOM	7393	CD	GLU	337	24.509	-69.334	35.716	1.00	0.00
C									
ATOM	7394	OE1	GLU	337	24.062	-69.567	36.877	1.00	0.00
O									
ATOM	7395	OE2	GLU	337	24.148	-70.034	34.735	1.00	0.00
O1-									
ATOM	7396	C	GLU	337	24.391	-64.586	35.748	1.00	0.00
C									
ATOM	7397	O	GLU	337	25.201	-63.771	35.242	1.00	0.00
O									
ATOM	7398	N	CYS	338	23.740	-64.278	36.873	1.00	0.00
N									
ATOM	7399	CA	CYS	338	23.930	-63.046	37.633	1.00	0.00
C									
ATOM	7400	CB	CYS	338	22.781	-62.785	38.587	1.00	0.00
C									
ATOM	7401	SG	CYS	338	21.213	-63.189	37.757	1.00	0.00
S									
ATOM	7402	C	CYS	338	25.208	-63.100	38.465	1.00	0.00
C									
ATOM	7403	O	CYS	338	25.642	-64.158	38.899	1.00	0.00
O									
ATOM	7404	N	VAL	339	25.768	-61.914	38.824	1.00	0.00
N									
ATOM	7405	CA	VAL	339	26.650	-61.641	39.944	1.00	0.00
C									
ATOM	7406	CB	VAL	339	26.798	-60.058	40.142	1.00	0.00
C									
ATOM	7407	CG1	VAL	339	25.475	-59.398	40.468	1.00	0.00
C									
ATOM	7408	CG2	VAL	339	27.907	-59.560	41.083	1.00	0.00
C									
ATOM	7409	C	VAL	339	26.178	-62.314	41.238	1.00	0.00
C									
ATOM	7410	O	VAL	339	24.975	-62.427	41.486	1.00	0.00
O									
ATOM	7411	N	LEU	340	27.142	-62.877	41.964	1.00	0.00
N									
ATOM	7412	CA	LEU	340	26.891	-63.608	43.197	1.00	0.00
C									
ATOM	7413	CB	LEU	340	27.906	-64.775	43.375	1.00	0.00
C									
ATOM	7414	CG	LEU	340	27.735	-65.878	42.313	1.00	0.00
C									
ATOM	7415	CD1	LEU	340	28.495	-67.163	42.593	1.00	0.00
C									

ATOM	7416	CD2	LEU	340	26.299	-66.275	41.819	1.00	0.00
C									
ATOM	7417	C	LEU	340	27.041	-62.716	44.445	1.00	0.00
C									
ATOM	7418	O	LEU	340	28.139	-62.350	44.851	1.00	0.00
O									
ATOM	7419	N	PRO	341	26.028	-62.500	45.289	1.00	0.00
N									
ATOM	7420	CD	PRO	341	24.603	-62.733	44.911	1.00	0.00
C									
ATOM	7421	CG	PRO	341	23.796	-62.042	45.967	1.00	0.00
C									
ATOM	7422	CB	PRO	341	24.734	-61.680	47.175	1.00	0.00
C									
ATOM	7423	CA	PRO	341	26.176	-61.854	46.575	1.00	0.00
C									
ATOM	7424	C	PRO	341	27.133	-62.576	47.521	1.00	0.00
C									
ATOM	7425	O	PRO	341	27.140	-63.838	47.585	1.00	0.00
O									
ATOM	7426	N	SER	342	28.014	-61.856	48.120	1.00	0.00
N									
ATOM	7427	CA	SER	342	29.169	-62.325	48.932	1.00	0.00
C									
ATOM	7428	CB	SER	342	30.389	-62.495	48.005	1.00	0.00
C									
ATOM	7429	OG	SER	342	30.174	-63.289	46.870	1.00	0.00
O									
ATOM	7430	C	SER	342	29.355	-61.407	50.137	1.00	0.00
C									
ATOM	7431	O	SER	342	30.431	-60.987	50.510	1.00	0.00
O									
ATOM	7432	N	THR	343	28.233	-61.002	50.772	1.00	0.00
N									
ATOM	7433	CA	THR	343	28.043	-59.765	51.474	1.00	0.00
C									
ATOM	7434	CB	THR	343	26.533	-59.401	51.533	1.00	0.00
C									
ATOM	7435	CG2	THR	343	25.841	-59.524	50.192	1.00	0.00
C									
ATOM	7436	OG1	THR	343	25.788	-60.207	52.455	1.00	0.00
O									
ATOM	7437	C	THR	343	28.716	-59.663	52.864	1.00	0.00
C									
ATOM	7438	O	THR	343	28.983	-58.578	53.316	1.00	0.00
O									
ATOM	7439	N	MET	344	29.055	-60.842	53.528	1.00	0.00
N									
ATOM	7440	CA	MET	344	29.744	-60.923	54.865	1.00	0.00
C									
ATOM	7441	CB	MET	344	30.014	-62.407	55.278	1.00	0.00
C									
ATOM	7442	CG	MET	344	28.866	-63.379	55.576	1.00	0.00
C									

ATOM	7443	SD	MET	344	27.822	-63.766	54.179	1.00	0.00
S									
ATOM	7444	CE	MET	344	28.910	-64.357	52.869	1.00	0.00
C									
ATOM	7445	C	MET	344	31.086	-60.099	54.940	1.00	0.00
C									
ATOM	7446	O	MET	344	31.701	-59.826	55.986	1.00	0.00
O									
ATOM	7447	N	SER	345	31.682	-59.731	53.800	1.00	0.00
N									
ATOM	7448	CA	SER	345	32.881	-58.895	53.725	1.00	0.00
C									
ATOM	7449	CB	SER	345	33.802	-59.394	52.601	1.00	0.00
C									
ATOM	7450	OG	SER	345	33.042	-59.491	51.436	1.00	0.00
O									
ATOM	7451	C	SER	345	32.488	-57.470	53.499	1.00	0.00
C									
ATOM	7452	O	SER	345	33.179	-56.544	54.021	1.00	0.00
O									
ATOM	7453	N	ALA	346	31.567	-57.128	52.589	1.00	0.00
N									
ATOM	7454	CA	ALA	346	31.233	-55.831	52.284	1.00	0.00
C									
ATOM	7455	CB	ALA	346	30.386	-55.609	50.987	1.00	0.00
C									
ATOM	7456	C	ALA	346	30.457	-55.081	53.361	1.00	0.00
C									
ATOM	7457	O	ALA	346	30.626	-53.897	53.430	1.00	0.00
O									
ATOM	7458	N	VAL	347	29.645	-55.704	54.222	1.00	0.00
N									
ATOM	7459	CA	VAL	347	28.744	-55.093	55.263	1.00	0.00
C									
ATOM	7460	CB	VAL	347	28.034	-56.242	56.075	1.00	0.00
C									
ATOM	7461	CG1	VAL	347	26.910	-56.812	55.264	1.00	0.00
C									
ATOM	7462	CG2	VAL	347	28.954	-57.477	56.588	1.00	0.00
C									
ATOM	7463	C	VAL	347	29.399	-54.264	56.349	1.00	0.00
C									
ATOM	7464	O	VAL	347	28.623	-53.498	56.897	1.00	0.00
O									
ATOM	7465	N	GLN	348	30.731	-54.399	56.660	1.00	0.00
N									
ATOM	7466	CA	GLN	348	31.529	-53.728	57.748	1.00	0.00
C									
ATOM	7467	CB	GLN	348	31.527	-54.444	59.114	1.00	0.00
C									
ATOM	7468	CG	GLN	348	30.155	-54.439	59.881	1.00	0.00
C									
ATOM	7469	CD	GLN	348	29.609	-53.088	60.348	1.00	0.00
C									



ATOM	7470	OE1	GLN	348	30.088	-52.506	61.289	1.00	0.00
O									
ATOM	7471	NE2	GLN	348	28.665	-52.498	59.622	1.00	0.00
N									
ATOM	7472	C	GLN	348	32.964	-53.627	57.209	1.00	0.00
C									
ATOM	7473	O	GLN	348	33.388	-54.457	56.421	1.00	0.00
O									
ATOM	7474	N	LEU	349	33.696	-52.627	57.648	1.00	0.00
N									
ATOM	7475	CA	LEU	349	35.185	-52.394	57.292	1.00	0.00
C									
ATOM	7476	CB	LEU	349	35.658	-51.121	58.031	1.00	0.00
C									
ATOM	7477	CG	LEU	349	35.262	-49.876	57.225	1.00	0.00
C									
ATOM	7478	CD1	LEU	349	35.148	-48.671	58.067	1.00	0.00
C									
ATOM	7479	CD2	LEU	349	36.216	-49.572	56.114	1.00	0.00
C									
ATOM	7480	C	LEU	349	35.989	-53.633	57.853	1.00	0.00
C									
ATOM	7481	O	LEU	349	35.895	-54.006	59.009	1.00	0.00
O									
ATOM	7482	N	GLU	350	36.862	-54.163	57.021	1.00	0.00
N									
ATOM	7483	CA	GLU	350	37.813	-55.253	57.344	1.00	0.00
C									
ATOM	7484	CB	GLU	350	38.644	-55.607	56.064	1.00	0.00
C									
ATOM	7485	CG	GLU	350	39.750	-56.734	56.169	1.00	0.00
C									
ATOM	7486	CD	GLU	350	39.220	-58.131	56.288	1.00	0.00
C									
ATOM	7487	OE1	GLU	350	40.035	-59.080	56.525	1.00	0.00
O									
ATOM	7488	OE2	GLU	350	38.030	-58.498	56.029	1.00	0.00
O1-									
ATOM	7489	C	GLU	350	38.705	-55.091	58.604	1.00	0.00
C									
ATOM	7490	O	GLU	350	38.870	-56.020	59.348	1.00	0.00
O									
ATOM	7491	N	SER	351	39.054	-53.878	58.827	1.00	0.00
N									
ATOM	7492	CA	SER	351	39.808	-53.384	60.005	1.00	0.00
C									
ATOM	7493	CB	SER	351	40.300	-52.026	59.613	1.00	0.00
C									
ATOM	7494	OG	SER	351	39.312	-51.096	59.201	1.00	0.00
O									
ATOM	7495	C	SER	351	38.965	-53.278	61.258	1.00	0.00
C									
ATOM	7496	O	SER	351	39.517	-52.941	62.299	1.00	0.00
O									

ATOM	7497	N	LEU	352	37.692	-53.717	61.330	1.00	0.00
N									
ATOM	7498	CA	LEU	352	37.048	-53.866	62.626	1.00	0.00
C									
ATOM	7499	CB	LEU	352	35.559	-53.363	62.476	1.00	0.00
C									
ATOM	7500	CG	LEU	352	35.297	-51.879	62.109	1.00	0.00
C									
ATOM	7501	CD1	LEU	352	33.767	-51.726	62.168	1.00	0.00
C									
ATOM	7502	CD2	LEU	352	36.017	-51.007	63.074	1.00	0.00
C									
ATOM	7503	C	LEU	352	37.033	-55.289	63.171	1.00	0.00
C									
ATOM	7504	O	LEU	352	36.487	-55.502	64.275	1.00	0.00
O									
ATOM	7505	N	ASN	353	37.535	-56.284	62.408	1.00	0.00
N									
ATOM	7506	CA	ASN	353	37.406	-57.683	62.714	1.00	0.00
C									
ATOM	7507	CB	ASN	353	37.589	-58.447	61.370	1.00	0.00
C									
ATOM	7508	CG	ASN	353	37.463	-59.982	61.498	1.00	0.00
C									
ATOM	7509	OD1	ASN	353	37.835	-60.679	62.438	1.00	0.00
O									
ATOM	7510	ND2	ASN	353	36.982	-60.631	60.443	1.00	0.00
N									
ATOM	7511	C	ASN	353	38.547	-58.026	63.690	1.00	0.00
C									
ATOM	7512	O	ASN	353	39.705	-57.723	63.394	1.00	0.00
O									
ATOM	7513	N	LYS	354	38.272	-58.688	64.790	1.00	0.00
N									
ATOM	7514	CA	LYS	354	39.295	-58.983	65.857	1.00	0.00
C									
ATOM	7515	CB	LYS	354	38.821	-58.454	67.248	1.00	0.00
C									
ATOM	7516	CG	LYS	354	38.477	-56.914	67.263	1.00	0.00
C									
ATOM	7517	CD	LYS	354	39.727	-56.046	67.216	1.00	0.00
C									
ATOM	7518	CE	LYS	354	39.449	-54.565	67.409	1.00	0.00
C									
ATOM	7519	NZ	LYS	354	40.563	-53.869	68.103	1.00	0.00
N1+									
ATOM	7520	C	LYS	354	39.882	-60.390	65.912	1.00	0.00
C									
ATOM	7521	O	LYS	354	40.839	-60.525	66.686	1.00	0.00
O									
ATOM	7522	N	CYS	355	39.367	-61.361	65.230	1.00	0.00
N									
ATOM	7523	CA	CYS	355	39.820	-62.751	65.092	1.00	0.00
C									

ATOM	7524	CB	CYS	355	38.656	-63.546	64.555	1.00	0.00
C									
ATOM	7525	SG	CYS	355	37.122	-63.395	65.484	1.00	0.00
S									
ATOM	7526	C	CYS	355	41.009	-63.009	64.155	1.00	0.00
C									
ATOM	7527	O	CYS	355	41.120	-62.267	63.152	1.00	0.00
O									
ATOM	7528	N	GLN	356	41.894	-63.982	64.436	1.00	0.00
N									
ATOM	7529	CA	GLN	356	42.977	-64.342	63.479	1.00	0.00
C									
ATOM	7530	CB	GLN	356	44.059	-65.112	64.237	1.00	0.00
C									
ATOM	7531	CG	GLN	356	45.229	-65.727	63.432	1.00	0.00
C									
ATOM	7532	CD	GLN	356	46.036	-64.683	62.696	1.00	0.00
C									
ATOM	7533	OE1	GLN	356	46.169	-63.625	63.236	1.00	0.00
O									
ATOM	7534	NE2	GLN	356	46.558	-65.052	61.525	1.00	0.00
N									
ATOM	7535	C	GLN	356	42.600	-65.069	62.139	1.00	0.00
C									
ATOM	7536	O	GLN	356	41.709	-66.002	62.149	1.00	0.00
O									
ATOM	7537	N	ILE	357	43.164	-64.675	60.977	1.00	0.00
N									
ATOM	7538	CA	ILE	357	42.974	-65.344	59.640	1.00	0.00
C									
ATOM	7539	CB	ILE	357	43.625	-64.473	58.550	1.00	0.00
C									
ATOM	7540	CG2	ILE	357	43.728	-65.346	57.256	1.00	0.00
C									
ATOM	7541	CG1	ILE	357	42.807	-63.175	58.350	1.00	0.00
C									
ATOM	7542	CD1	ILE	357	43.407	-62.122	57.441	1.00	0.00
C									
ATOM	7543	C	ILE	357	43.581	-66.727	59.694	1.00	0.00
C									
ATOM	7544	O	ILE	357	44.763	-66.984	60.049	1.00	0.00
O									
ATOM	7545	N	PHE	358	42.842	-67.790	59.245	1.00	0.00
N									
ATOM	7546	CA	PHE	358	43.273	-69.186	59.140	1.00	0.00
C									
ATOM	7547	CB	PHE	358	42.651	-69.890	60.366	1.00	0.00
C									
ATOM	7548	CG	PHE	358	43.514	-69.707	61.626	1.00	0.00
C									
ATOM	7549	CD1	PHE	358	44.539	-70.582	61.852	1.00	0.00
C									
ATOM	7550	CE1	PHE	358	45.404	-70.462	62.949	1.00	0.00
C									

ATOM	7551	CZ	PHE	358	45.054	-69.533	63.973	1.00	0.00
C									
ATOM	7552	CE2	PHE	358	43.935	-68.770	63.820	1.00	0.00
C									
ATOM	7553	CD2	PHE	358	43.201	-68.827	62.634	1.00	0.00
C									
ATOM	7554	C	PHE	358	42.787	-69.687	57.768	1.00	0.00
C									
ATOM	7555	O	PHE	358	41.877	-69.106	57.188	1.00	0.00
O									
ATOM	7556	N	PRO	359	43.269	-70.846	57.276	1.00	0.00
N									
ATOM	7557	CD	PRO	359	44.522	-71.471	57.689	1.00	0.00
C									
ATOM	7558	CG	PRO	359	44.501	-72.856	56.912	1.00	0.00
C									
ATOM	7559	CB	PRO	359	43.894	-72.470	55.599	1.00	0.00
C									
ATOM	7560	CA	PRO	359	42.751	-71.570	56.068	1.00	0.00
C									
ATOM	7561	C	PRO	359	41.379	-72.189	56.351	1.00	0.00
C									
ATOM	7562	O	PRO	359	41.120	-72.668	57.491	1.00	0.00
O									
ATOM	7563	N	SER	360	40.606	-72.408	55.284	1.00	0.00
N									
ATOM	7564	CA	SER	360	39.517	-73.380	55.153	1.00	0.00
C									
ATOM	7565	CB	SER	360	38.449	-72.714	54.351	1.00	0.00
C									
ATOM	7566	OG	SER	360	37.376	-73.534	53.994	1.00	0.00
O									
ATOM	7567	C	SER	360	39.885	-74.712	54.496	1.00	0.00
C									
ATOM	7568	O	SER	360	40.746	-74.859	53.645	1.00	0.00
O									
ATOM	7569	N	LYS	361	39.171	-75.800	54.914	1.00	0.00
N									
ATOM	7570	CA	LYS	361	39.406	-77.184	54.475	1.00	0.00
C									
ATOM	7571	CB	LYS	361	38.517	-78.149	55.173	1.00	0.00
C									
ATOM	7572	CG	LYS	361	36.966	-77.918	54.861	1.00	0.00
C									
ATOM	7573	CD	LYS	361	36.035	-78.313	56.028	1.00	0.00
C									
ATOM	7574	CE	LYS	361	34.607	-77.936	55.632	1.00	0.00
C									
ATOM	7575	NZ	LYS	361	33.556	-78.531	56.523	1.00	0.00
N1+									
ATOM	7576	C	LYS	361	39.271	-77.420	52.948	1.00	0.00
C									
ATOM	7577	O	LYS	361	38.321	-76.926	52.373	1.00	0.00
O									

ATOM	7578	N	PRO	362	40.192	-78.134	52.269	1.00	0.00
N									
ATOM	7579	CD	PRO	362	41.319	-78.643	52.948	1.00	0.00
C									
ATOM	7580	CG	PRO	362	42.266	-79.189	51.874	1.00	0.00
C									
ATOM	7581	CB	PRO	362	41.293	-79.540	50.718	1.00	0.00
C									
ATOM	7582	CA	PRO	362	40.118	-78.546	50.857	1.00	0.00
C									
ATOM	7583	C	PRO	362	38.745	-79.217	50.515	1.00	0.00
C									
ATOM	7584	O	PRO	362	38.077	-79.620	51.476	1.00	0.00
O									
ATOM	7585	N	VAL	363	38.374	-79.246	49.206	1.00	0.00
N									
ATOM	7586	CA	VAL	363	37.044	-79.772	48.735	1.00	0.00
C									
ATOM	7587	CB	VAL	363	36.530	-79.233	47.365	1.00	0.00
C									
ATOM	7588	CG1	VAL	363	36.515	-77.691	47.389	1.00	0.00
C									
ATOM	7589	CG2	VAL	363	37.375	-79.709	46.214	1.00	0.00
C									
ATOM	7590	C	VAL	363	36.947	-81.298	48.794	1.00	0.00
C									
ATOM	7591	O	VAL	363	35.812	-81.805	48.725	1.00	0.00
O									
ATOM	7592	N	SER	364	38.077	-82.019	48.847	1.00	0.00
N									
ATOM	7593	CA	SER	364	38.220	-83.469	48.937	1.00	0.00
C									
ATOM	7594	CB	SER	364	39.726	-83.793	49.005	1.00	0.00
C									
ATOM	7595	OG	SER	364	39.966	-85.206	48.923	1.00	0.00
O									
ATOM	7596	C	SER	364	37.623	-84.020	50.174	1.00	0.00
C									
ATOM	7597	O	SER	364	37.735	-83.429	51.274	1.00	0.00
O									
ATOM	7598	N	ARG	365	36.978	-85.196	50.071	1.00	0.00
N									
ATOM	7599	CA	ARG	365	36.364	-85.943	51.185	1.00	0.00
C									
ATOM	7600	CB	ARG	365	35.741	-87.256	50.688	1.00	0.00
C									
ATOM	7601	CG	ARG	365	36.565	-88.157	49.786	1.00	0.00
C									
ATOM	7602	CD	ARG	365	35.673	-89.194	49.055	1.00	0.00
C									
ATOM	7603	NE	ARG	365	35.253	-90.332	49.875	1.00	0.00
N									
ATOM	7604	CZ	ARG	365	34.064	-90.697	50.222	1.00	0.00
C									

ATOM	7605	NH1	ARG	365	33.976	-91.643	51.101	1.00	0.00
N									
ATOM	7606	NH2	ARG	365	33.020	-90.149	49.760	1.00	0.00
N1+									
ATOM	7607	C	ARG	365	37.415	-86.315	52.178	1.00	0.00
C									
ATOM	7608	O	ARG	365	37.048	-86.571	53.303	1.00	0.00
O									
ATOM	7609	N	GLU	366	38.682	-86.300	51.817	1.00	0.00
N									
ATOM	7610	CA	GLU	366	39.721	-86.866	52.678	1.00	0.00
C									
ATOM	7611	CB	GLU	366	40.933	-87.362	51.874	1.00	0.00
C									
ATOM	7612	CG	GLU	366	42.208	-88.063	52.513	1.00	0.00
C									
ATOM	7613	CD	GLU	366	41.938	-88.955	53.746	1.00	0.00
C									
ATOM	7614	OE1	GLU	366	40.870	-89.615	53.836	1.00	0.00
O									
ATOM	7615	OE2	GLU	366	42.788	-89.130	54.682	1.00	0.00
O1-									
ATOM	7616	C	GLU	366	40.183	-85.769	53.696	1.00	0.00
C									
ATOM	7617	O	GLU	366	40.783	-86.102	54.730	1.00	0.00
O									
ATOM	7618	N	ASP	367	39.854	-84.446	53.470	1.00	0.00
N									
ATOM	7619	CA	ASP	367	40.151	-83.397	54.385	1.00	0.00
C									
ATOM	7620	CB	ASP	367	41.011	-82.321	53.687	1.00	0.00
C									
ATOM	7621	CG	ASP	367	42.190	-82.905	52.832	1.00	0.00
C									
ATOM	7622	OD1	ASP	367	42.029	-83.016	51.605	1.00	0.00
O									
ATOM	7623	OD2	ASP	367	43.307	-82.960	53.372	1.00	0.00
O1-									
ATOM	7624	C	ASP	367	38.851	-82.817	55.062	1.00	0.00
C									
ATOM	7625	O	ASP	367	39.007	-81.759	55.673	1.00	0.00
O									
ATOM	7626	N	GLN	368	37.664	-83.349	54.794	1.00	0.00
N									
ATOM	7627	CA	GLN	368	36.412	-82.756	55.279	1.00	0.00
C									
ATOM	7628	CB	GLN	368	35.335	-83.568	54.676	1.00	0.00
C									
ATOM	7629	CG	GLN	368	33.809	-83.318	54.865	1.00	0.00
C									
ATOM	7630	CD	GLN	368	33.390	-81.854	54.884	1.00	0.00
C									
ATOM	7631	OE1	GLN	368	32.876	-81.342	55.835	1.00	0.00
O									

ATOM	7632	NE2	GLN	368	33.774	-81.082	53.979	1.00	0.00
N									
ATOM	7633	C	GLN	368	36.246	-82.779	56.811	1.00	0.00
C									
ATOM	7634	O	GLN	368	35.692	-81.842	57.338	1.00	0.00
O									
ATOM	7635	N	CYS	369	36.658	-83.864	57.479	1.00	0.00
N									
ATOM	7636	CA	CYS	369	36.873	-83.933	58.982	1.00	0.00
C									
ATOM	7637	CB	CYS	369	37.246	-85.286	59.442	1.00	0.00
C									
ATOM	7638	SG	CYS	369	36.205	-86.510	58.533	1.00	0.00
S									
ATOM	7639	C	CYS	369	37.924	-82.918	59.495	1.00	0.00
C									
ATOM	7640	O	CYS	369	38.136	-82.846	60.705	1.00	0.00
O									
ATOM	7641	N	SER	370	38.587	-82.065	58.644	1.00	0.00
N									
ATOM	7642	CA	SER	370	39.461	-80.959	59.173	1.00	0.00
C									
ATOM	7643	CB	SER	370	40.306	-80.587	57.955	1.00	0.00
C									
ATOM	7644	OG	SER	370	41.411	-79.746	58.392	1.00	0.00
O									
ATOM	7645	C	SER	370	38.740	-79.799	59.788	1.00	0.00
C									
ATOM	7646	O	SER	370	38.152	-78.936	59.091	1.00	0.00
O									
ATOM	7647	N	TYR	371	38.623	-79.831	61.144	1.00	0.00
N									
ATOM	7648	CA	TYR	371	37.913	-78.785	61.914	1.00	0.00
C									
ATOM	7649	CB	TYR	371	37.175	-79.400	63.070	1.00	0.00
C									
ATOM	7650	CG	TYR	371	36.416	-78.477	63.987	1.00	0.00
C									
ATOM	7651	CD1	TYR	371	35.088	-78.287	63.723	1.00	0.00
C									
ATOM	7652	CE1	TYR	371	34.407	-77.467	64.632	1.00	0.00
C									
ATOM	7653	CZ	TYR	371	34.993	-76.854	65.781	1.00	0.00
C									
ATOM	7654	OH	TYR	371	34.193	-76.128	66.626	1.00	0.00
O									
ATOM	7655	CE2	TYR	371	36.352	-77.170	66.000	1.00	0.00
C									
ATOM	7656	CD2	TYR	371	37.071	-78.008	65.126	1.00	0.00
C									
ATOM	7657	C	TYR	371	38.804	-77.721	62.531	1.00	0.00
C									
ATOM	7658	O	TYR	371	38.407	-76.528	62.731	1.00	0.00
O									

ATOM	7659	N	LYS	372	40.063	-78.055	62.803	1.00	0.00
N									
ATOM	7660	CA	LYS	372	41.015	-77.356	63.673	1.00	0.00
C									
ATOM	7661	CB	LYS	372	42.344	-78.116	63.826	1.00	0.00
C									
ATOM	7662	CG	LYS	372	43.079	-78.479	62.534	1.00	0.00
C									
ATOM	7663	CD	LYS	372	44.493	-78.964	62.807	1.00	0.00
C									
ATOM	7664	CE	LYS	372	44.487	-80.216	63.776	1.00	0.00
C									
ATOM	7665	NZ	LYS	372	45.907	-80.614	64.137	1.00	0.00
N1+									
ATOM	7666	C	LYS	372	41.236	-75.899	63.287	1.00	0.00
C									
ATOM	7667	O	LYS	372	41.166	-74.997	64.105	1.00	0.00
O									
ATOM	7668	N	TRP	373	41.279	-75.600	62.020	1.00	0.00
N									
ATOM	7669	CA	TRP	373	41.488	-74.325	61.425	1.00	0.00
C									
ATOM	7670	CB	TRP	373	42.639	-74.300	60.500	1.00	0.00
C									
ATOM	7671	CG	TRP	373	43.969	-74.544	61.187	1.00	0.00
C									
ATOM	7672	CD1	TRP	373	44.455	-73.790	62.186	1.00	0.00
C									
ATOM	7673	NE1	TRP	373	45.677	-74.336	62.582	1.00	0.00
N									
ATOM	7674	CE2	TRP	373	46.004	-75.490	61.894	1.00	0.00
C									
ATOM	7675	CZ2	TRP	373	46.996	-76.512	61.942	1.00	0.00
C									
ATOM	7676	CH2	TRP	373	46.998	-77.530	60.980	1.00	0.00
C									
ATOM	7677	CZ3	TRP	373	46.114	-77.593	59.945	1.00	0.00
C									
ATOM	7678	CE3	TRP	373	45.094	-76.620	59.946	1.00	0.00
C									
ATOM	7679	CD2	TRP	373	45.007	-75.537	60.872	1.00	0.00
C									
ATOM	7680	C	TRP	373	40.171	-73.863	60.705	1.00	0.00
C									
ATOM	7681	O	TRP	373	39.814	-72.703	60.603	1.00	0.00
O									
ATOM	7682	N	TRP	374	39.341	-74.834	60.159	1.00	0.00
N									
ATOM	7683	CA	TRP	374	38.021	-74.528	59.612	1.00	0.00
C									
ATOM	7684	CB	TRP	374	37.402	-75.881	59.323	1.00	0.00
C									
ATOM	7685	CG	TRP	374	35.906	-75.870	59.087	1.00	0.00
C									



ATOM	7686	CD1	TRP	374	34.934	-76.338	59.933	1.00	0.00
C									
ATOM	7687	NE1	TRP	374	33.687	-76.032	59.425	1.00	0.00
N									
ATOM	7688	CE2	TRP	374	33.783	-75.229	58.326	1.00	0.00
C									
ATOM	7689	CZ2	TRP	374	32.773	-74.772	57.527	1.00	0.00
C									
ATOM	7690	CH2	TRP	374	33.140	-74.234	56.314	1.00	0.00
C									
ATOM	7691	CZ3	TRP	374	34.487	-74.032	55.972	1.00	0.00
C									
ATOM	7692	CE3	TRP	374	35.512	-74.457	56.830	1.00	0.00
C									
ATOM	7693	CD2	TRP	374	35.142	-75.120	58.022	1.00	0.00
C									
ATOM	7694	C	TRP	374	37.115	-73.707	60.536	1.00	0.00
C									
ATOM	7695	O	TRP	374	36.546	-72.778	60.114	1.00	0.00
O									
ATOM	7696	N	GLN	375	37.085	-74.052	61.835	1.00	0.00
N									
ATOM	7697	CA	GLN	375	36.413	-73.336	62.937	1.00	0.00
C									
ATOM	7698	CB	GLN	375	36.680	-74.104	64.220	1.00	0.00
C									
ATOM	7699	CG	GLN	375	36.175	-73.428	65.519	1.00	0.00
C									
ATOM	7700	CD	GLN	375	34.672	-73.272	65.576	1.00	0.00
C									
ATOM	7701	OE1	GLN	375	33.913	-73.818	64.755	1.00	0.00
O									
ATOM	7702	NE2	GLN	375	34.141	-72.697	66.637	1.00	0.00
N									
ATOM	7703	C	GLN	375	36.981	-71.941	63.107	1.00	0.00
C									
ATOM	7704	O	GLN	375	36.278	-71.020	63.489	1.00	0.00
O									
ATOM	7705	N	LYS	376	38.290	-71.699	62.876	1.00	0.00
N									
ATOM	7706	CA	LYS	376	39.017	-70.477	63.192	1.00	0.00
C									
ATOM	7707	CB	LYS	376	40.493	-70.748	63.368	1.00	0.00
C									
ATOM	7708	CG	LYS	376	40.754	-71.598	64.572	1.00	0.00
C									
ATOM	7709	CD	LYS	376	42.231	-71.738	64.992	1.00	0.00
C									
ATOM	7710	CE	LYS	376	42.253	-72.208	66.348	1.00	0.00
C									
ATOM	7711	NZ	LYS	376	42.112	-73.633	66.324	1.00	0.00
N1+									
ATOM	7712	C	LYS	376	38.761	-69.600	61.959	1.00	0.00
C									

ATOM	7713	O	LYS	376	38.398	-68.413	62.150	1.00	0.00
O									
ATOM	7714	N	TYR	377	38.834	-70.083	60.719	1.00	0.00
N									
ATOM	7715	CA	TYR	377	38.305	-69.460	59.501	1.00	0.00
C									
ATOM	7716	CB	TYR	377	38.646	-70.477	58.316	1.00	0.00
C									
ATOM	7717	CG	TYR	377	37.997	-70.177	56.969	1.00	0.00
C									
ATOM	7718	CD1	TYR	377	38.745	-69.521	56.001	1.00	0.00
C									
ATOM	7719	CE1	TYR	377	38.077	-69.131	54.847	1.00	0.00
C									
ATOM	7720	CZ	TYR	377	36.781	-69.470	54.566	1.00	0.00
C									
ATOM	7721	OH	TYR	377	36.332	-69.093	53.302	1.00	0.00
O									
ATOM	7722	CE2	TYR	377	36.010	-70.128	55.526	1.00	0.00
C									
ATOM	7723	CD2	TYR	377	36.606	-70.495	56.781	1.00	0.00
C									
ATOM	7724	C	TYR	377	36.825	-69.063	59.599	1.00	0.00
C									
ATOM	7725	O	TYR	377	36.470	-67.906	59.325	1.00	0.00
O									
ATOM	7726	N	GLN	378	36.006	-69.911	60.298	1.00	0.00
N									
ATOM	7727	CA	GLN	378	34.606	-69.525	60.448	1.00	0.00
C									
ATOM	7728	CB	GLN	378	33.792	-70.798	60.644	1.00	0.00
C									
ATOM	7729	CG	GLN	378	33.572	-71.603	59.386	1.00	0.00
C									
ATOM	7730	CD	GLN	378	32.605	-70.962	58.456	1.00	0.00
C									
ATOM	7731	OE1	GLN	378	32.907	-70.015	57.661	1.00	0.00
O									
ATOM	7732	NE2	GLN	378	31.424	-71.502	58.474	1.00	0.00
N									
ATOM	7733	C	GLN	378	34.294	-68.570	61.556	1.00	0.00
C									
ATOM	7734	O	GLN	378	33.477	-67.707	61.381	1.00	0.00
O									
ATOM	7735	N	LYS	379	34.998	-68.601	62.644	1.00	0.00
N									
ATOM	7736	CA	LYS	379	35.079	-67.522	63.691	1.00	0.00
C									
ATOM	7737	CB	LYS	379	36.046	-67.920	64.866	1.00	0.00
C									
ATOM	7738	CG	LYS	379	36.173	-66.785	65.913	1.00	0.00
C									
ATOM	7739	CD	LYS	379	35.001	-66.586	66.833	1.00	0.00
C									

ATOM	7740	CE	LYS	379	35.438	-65.719	67.982	1.00	0.00
C									
ATOM	7741	NZ	LYS	379	34.343	-65.423	68.895	1.00	0.00
N1+									
ATOM	7742	C	LYS	379	35.551	-66.165	63.070	1.00	0.00
C									
ATOM	7743	O	LYS	379	35.050	-65.143	63.525	1.00	0.00
O									
ATOM	7744	N	ARG	380	36.543	-66.091	62.147	1.00	0.00
N									
ATOM	7745	CA	ARG	380	36.931	-64.917	61.397	1.00	0.00
C									
ATOM	7746	CB	ARG	380	38.173	-65.280	60.567	1.00	0.00
C									
ATOM	7747	CG	ARG	380	38.801	-64.041	59.766	1.00	0.00
C									
ATOM	7748	CD	ARG	380	39.545	-63.013	60.498	1.00	0.00
C									
ATOM	7749	NE	ARG	380	39.966	-61.851	59.595	1.00	0.00
N									
ATOM	7750	CZ	ARG	380	40.826	-60.868	59.863	1.00	0.00
C									
ATOM	7751	NH1	ARG	380	41.016	-59.857	59.078	1.00	0.00
N									
ATOM	7752	NH2	ARG	380	41.548	-60.910	60.903	1.00	0.00
N1+									
ATOM	7753	C	ARG	380	35.872	-64.416	60.433	1.00	0.00
C									
ATOM	7754	O	ARG	380	35.569	-63.245	60.420	1.00	0.00
O									
ATOM	7755	N	LYS	381	35.259	-65.322	59.588	1.00	0.00
N									
ATOM	7756	CA	LYS	381	34.189	-64.974	58.605	1.00	0.00
C									
ATOM	7757	CB	LYS	381	33.721	-66.198	57.883	1.00	0.00
C									
ATOM	7758	CG	LYS	381	32.909	-65.987	56.611	1.00	0.00
C									
ATOM	7759	CD	LYS	381	32.429	-67.320	55.954	1.00	0.00
C									
ATOM	7760	CE	LYS	381	33.506	-67.916	55.104	1.00	0.00
C									
ATOM	7761	NZ	LYS	381	32.906	-68.769	54.081	1.00	0.00
N1+									
ATOM	7762	C	LYS	381	33.056	-64.101	59.318	1.00	0.00
C									
ATOM	7763	O	LYS	381	32.656	-63.064	58.800	1.00	0.00
O									
ATOM	7764	N	PHE	382	32.555	-64.660	60.380	1.00	0.00
N									
ATOM	7765	CA	PHE	382	31.336	-64.316	61.074	1.00	0.00
C									
ATOM	7766	CB	PHE	382	30.615	-65.522	61.630	1.00	0.00
C									

ATOM	7767	CG	PHE	382	30.005	-66.445	60.556	1.00	0.00
C									
ATOM	7768	CD1	PHE	382	30.292	-67.808	60.556	1.00	0.00
C									
ATOM	7769	CE1	PHE	382	29.876	-68.667	59.532	1.00	0.00
C									
ATOM	7770	CZ	PHE	382	28.902	-68.179	58.633	1.00	0.00
C									
ATOM	7771	CE2	PHE	382	28.416	-66.833	58.678	1.00	0.00
C									
ATOM	7772	CD2	PHE	382	28.989	-65.968	59.670	1.00	0.00
C									
ATOM	7773	C	PHE	382	31.336	-63.042	61.997	1.00	0.00
C									
ATOM	7774	O	PHE	382	30.325	-62.578	62.601	1.00	0.00
O									
ATOM	7775	N	HID	383	32.514	-62.274	61.973	1.00	0.00
N									
ATOM	7776	CA	HID	383	32.658	-61.049	62.682	1.00	0.00
C									
ATOM	7777	CB	HID	383	34.083	-60.459	62.370	1.00	0.00
C									
ATOM	7778	CG	HID	383	34.482	-59.722	63.564	1.00	0.00
C									
ATOM	7779	ND1	HID	383	34.080	-58.510	64.052	1.00	0.00
N									
ATOM	7780	CE1	HID	383	34.746	-58.319	65.172	1.00	0.00
C									
ATOM	7781	NE2	HID	383	35.503	-59.335	65.528	1.00	0.00
N									
ATOM	7782	CD2	HID	383	35.400	-60.203	64.435	1.00	0.00
C									
ATOM	7783	C	HID	383	31.592	-59.945	62.311	1.00	0.00
C									
ATOM	7784	O	HID	383	31.324	-59.044	63.129	1.00	0.00
O									
ATOM	7785	N	CYS	384	30.903	-60.070	61.161	1.00	0.00
N									
ATOM	7786	CA	CYS	384	29.678	-59.299	60.854	1.00	0.00
C									
ATOM	7787	CB	CYS	384	29.204	-59.570	59.407	1.00	0.00
C									
ATOM	7788	SG	CYS	384	29.048	-61.378	59.120	1.00	0.00
S									
ATOM	7789	C	CYS	384	28.418	-59.544	61.780	1.00	0.00
C									
ATOM	7790	O	CYS	384	27.747	-58.526	62.123	1.00	0.00
O									
ATOM	7791	N	ALA	385	28.194	-60.758	62.235	1.00	0.00
N									
ATOM	7792	CA	ALA	385	27.225	-61.055	63.293	1.00	0.00
C									
ATOM	7793	CB	ALA	385	27.036	-62.612	63.234	1.00	0.00
C									

ATOM	7794	C	ALA	385	27.599	-60.578	64.697	1.00	0.00
C									
ATOM	7795	O	ALA	385	26.725	-60.577	65.505	1.00	0.00
O									
ATOM	7796	N	ASN	386	28.835	-60.142	64.918	1.00	0.00
N									
ATOM	7797	CA	ASN	386	29.161	-59.515	66.184	1.00	0.00
C									
ATOM	7798	CB	ASN	386	30.636	-59.809	66.564	1.00	0.00
C									
ATOM	7799	CG	ASN	386	30.974	-61.259	66.861	1.00	0.00
C									
ATOM	7800	OD1	ASN	386	30.585	-62.251	66.225	1.00	0.00
O									
ATOM	7801	ND2	ASN	386	31.807	-61.477	67.814	1.00	0.00
N									
ATOM	7802	C	ASN	386	28.883	-58.056	66.140	1.00	0.00
C									
ATOM	7803	O	ASN	386	28.442	-57.483	67.151	1.00	0.00
O									
ATOM	7804	N	LEU	387	28.983	-57.454	64.987	1.00	0.00
N									
ATOM	7805	CA	LEU	387	28.996	-56.008	64.707	1.00	0.00
C									
ATOM	7806	CB	LEU	387	30.441	-55.586	64.172	1.00	0.00
C									
ATOM	7807	CG	LEU	387	31.658	-55.701	65.080	1.00	0.00
C									
ATOM	7808	CD1	LEU	387	32.895	-55.075	64.499	1.00	0.00
C									
ATOM	7809	CD2	LEU	387	31.308	-54.942	66.437	1.00	0.00
C									
ATOM	7810	C	LEU	387	27.837	-55.427	63.828	1.00	0.00
C									
ATOM	7811	O	LEU	387	27.939	-54.318	63.364	1.00	0.00
O									
ATOM	7812	N	THR	388	26.759	-56.190	63.664	1.00	0.00
N									
ATOM	7813	CA	THR	388	25.504	-55.755	63.008	1.00	0.00
C									
ATOM	7814	CB	THR	388	25.577	-55.886	61.470	1.00	0.00
C									
ATOM	7815	CG2	THR	388	26.667	-55.021	60.715	1.00	0.00
C									
ATOM	7816	OG1	THR	388	25.723	-57.253	61.044	1.00	0.00
O									
ATOM	7817	C	THR	388	24.316	-56.563	63.573	1.00	0.00
C									
ATOM	7818	O	THR	388	24.578	-57.584	64.128	1.00	0.00
O									
ATOM	7819	N	SER	389	23.056	-56.132	63.360	1.00	0.00
N									
ATOM	7820	CA	SER	389	21.807	-56.763	63.922	1.00	0.00
C									

ATOM	7821	CB	SER	389	20.597	-55.793	63.720	1.00	0.00
C									
ATOM	7822	OG	SER	389	20.217	-55.664	62.336	1.00	0.00
O									
ATOM	7823	C	SER	389	21.502	-58.166	63.321	1.00	0.00
C									
ATOM	7824	O	SER	389	20.688	-58.930	63.902	1.00	0.00
O									
ATOM	7825	N	TRP	390	22.025	-58.572	62.137	1.00	0.00
N									
ATOM	7826	CA	TRP	390	21.804	-59.986	61.744	1.00	0.00
C									
ATOM	7827	CB	TRP	390	21.969	-60.293	60.258	1.00	0.00
C									
ATOM	7828	CG	TRP	390	20.900	-59.876	59.271	1.00	0.00
C									
ATOM	7829	CD1	TRP	390	19.796	-59.211	59.551	1.00	0.00
C									
ATOM	7830	NE1	TRP	390	19.057	-59.072	58.361	1.00	0.00
N									
ATOM	7831	CE2	TRP	390	19.665	-59.758	57.274	1.00	0.00
C									
ATOM	7832	CZ2	TRP	390	19.418	-59.928	55.896	1.00	0.00
C									
ATOM	7833	CH2	TRP	390	20.336	-60.597	55.098	1.00	0.00
C									
ATOM	7834	CZ3	TRP	390	21.589	-61.076	55.631	1.00	0.00
C									
ATOM	7835	CE3	TRP	390	21.761	-60.943	57.010	1.00	0.00
C									
ATOM	7836	CD2	TRP	390	20.920	-60.240	57.856	1.00	0.00
C									
ATOM	7837	C	TRP	390	22.600	-61.009	62.548	1.00	0.00
C									
ATOM	7838	O	TRP	390	23.749	-60.609	62.942	1.00	0.00
O									
ATOM	7839	N	PRO	391	22.089	-62.203	62.900	1.00	0.00
N									
ATOM	7840	CD	PRO	391	20.710	-62.652	62.593	1.00	0.00
C									
ATOM	7841	CG	PRO	391	20.438	-64.062	63.068	1.00	0.00
C									
ATOM	7842	CB	PRO	391	21.567	-64.103	64.096	1.00	0.00
C									
ATOM	7843	CA	PRO	391	22.741	-63.255	63.620	1.00	0.00
C									
ATOM	7844	C	PRO	391	23.623	-64.111	62.704	1.00	0.00
C									
ATOM	7845	O	PRO	391	23.466	-64.111	61.474	1.00	0.00
O									
ATOM	7846	N	ARG	392	24.598	-64.821	63.325	1.00	0.00
N									
ATOM	7847	CA	ARG	392	25.390	-65.832	62.645	1.00	0.00
C									

ATOM	7848	CB	ARG	392	26.325	-66.535	63.697	1.00	0.00
C									
ATOM	7849	CG	ARG	392	27.200	-67.608	63.092	1.00	0.00
C									
ATOM	7850	CD	ARG	392	28.498	-68.010	63.858	1.00	0.00
C									
ATOM	7851	NE	ARG	392	28.954	-69.310	63.429	1.00	0.00
N									
ATOM	7852	CZ	ARG	392	30.150	-69.802	63.523	1.00	0.00
C									
ATOM	7853	NH1	ARG	392	31.049	-69.176	64.155	1.00	0.00
N									
ATOM	7854	NH2	ARG	392	30.418	-70.930	62.969	1.00	0.00
N1+									
ATOM	7855	C	ARG	392	24.535	-66.866	61.854	1.00	0.00
C									
ATOM	7856	O	ARG	392	24.960	-67.127	60.764	1.00	0.00
O									
ATOM	7857	N	TRP	393	23.396	-67.416	62.365	1.00	0.00
N									
ATOM	7858	CA	TRP	393	22.549	-68.372	61.667	1.00	0.00
C									
ATOM	7859	CB	TRP	393	21.399	-68.840	62.527	1.00	0.00
C									
ATOM	7860	CG	TRP	393	20.207	-67.983	62.832	1.00	0.00
C									
ATOM	7861	CD1	TRP	393	19.916	-67.455	64.025	1.00	0.00
C									
ATOM	7862	NE1	TRP	393	18.830	-66.679	63.872	1.00	0.00
N									
ATOM	7863	CE2	TRP	393	18.256	-66.778	62.621	1.00	0.00
C									
ATOM	7864	CZ2	TRP	393	17.113	-66.232	61.975	1.00	0.00
C									
ATOM	7865	CH2	TRP	393	16.762	-66.585	60.683	1.00	0.00
C									
ATOM	7866	CZ3	TRP	393	17.477	-67.496	59.941	1.00	0.00
C									
ATOM	7867	CE3	TRP	393	18.644	-68.025	60.585	1.00	0.00
C									
ATOM	7868	CD2	TRP	393	19.098	-67.644	61.907	1.00	0.00
C									
ATOM	7869	C	TRP	393	22.024	-67.745	60.397	1.00	0.00
C									
ATOM	7870	O	TRP	393	22.039	-68.487	59.349	1.00	0.00
O									
ATOM	7871	N	LEU	394	21.689	-66.448	60.329	1.00	0.00
N									
ATOM	7872	CA	LEU	394	21.110	-65.939	59.115	1.00	0.00
C									
ATOM	7873	CB	LEU	394	20.327	-64.640	59.487	1.00	0.00
C									
ATOM	7874	CG	LEU	394	19.730	-63.825	58.316	1.00	0.00
C									

ATOM	7875	CD1	LEU	394	18.894	-64.642	57.333	1.00	0.00
C									
ATOM	7876	CD2	LEU	394	18.825	-62.751	58.867	1.00	0.00
C									
ATOM	7877	C	LEU	394	22.226	-65.710	58.131	1.00	0.00
C									
ATOM	7878	O	LEU	394	22.038	-66.034	56.947	1.00	0.00
O									
ATOM	7879	N	TYR	395	23.452	-65.158	58.463	1.00	0.00
N									
ATOM	7880	CA	TYR	395	24.543	-65.026	57.519	1.00	0.00
C									
ATOM	7881	CB	TYR	395	25.727	-64.330	58.173	1.00	0.00
C									
ATOM	7882	CG	TYR	395	25.560	-62.765	58.351	1.00	0.00
C									
ATOM	7883	CD1	TYR	395	25.719	-61.941	57.190	1.00	0.00
C									
ATOM	7884	CE1	TYR	395	25.628	-60.575	57.290	1.00	0.00
C									
ATOM	7885	CZ	TYR	395	25.384	-59.970	58.587	1.00	0.00
C									
ATOM	7886	OH	TYR	395	25.241	-58.578	58.673	1.00	0.00
O									
ATOM	7887	CE2	TYR	395	25.260	-60.776	59.724	1.00	0.00
C									
ATOM	7888	CD2	TYR	395	25.306	-62.162	59.610	1.00	0.00
C									
ATOM	7889	C	TYR	395	24.968	-66.450	56.942	1.00	0.00
C									
ATOM	7890	O	TYR	395	25.334	-66.497	55.782	1.00	0.00
O									
ATOM	7891	N	SER	396	24.861	-67.557	57.737	1.00	0.00
N									
ATOM	7892	CA	SER	396	25.224	-68.918	57.312	1.00	0.00
C									
ATOM	7893	CB	SER	396	25.207	-69.768	58.577	1.00	0.00
C									
ATOM	7894	OG	SER	396	26.099	-69.306	59.571	1.00	0.00
O									
ATOM	7895	C	SER	396	24.262	-69.515	56.323	1.00	0.00
C									
ATOM	7896	O	SER	396	24.633	-70.497	55.714	1.00	0.00
O									
ATOM	7897	N	LEU	397	23.121	-68.892	56.071	1.00	0.00
N									
ATOM	7898	CA	LEU	397	22.360	-69.161	54.860	1.00	0.00
C									
ATOM	7899	CB	LEU	397	20.845	-69.378	55.385	1.00	0.00
C									
ATOM	7900	CG	LEU	397	20.628	-70.550	56.325	1.00	0.00
C									
ATOM	7901	CD1	LEU	397	19.414	-70.259	57.229	1.00	0.00
C									



ATOM	7902	CD2	LEU	397	20.470	-71.901	55.510	1.00	0.00
C									
ATOM	7903	C	LEU	397	22.553	-68.103	53.722	1.00	0.00
C									
ATOM	7904	O	LEU	397	21.694	-68.093	52.843	1.00	0.00
O									
ATOM	7905	N	TYR	398	23.613	-67.220	53.665	1.00	0.00
N									
ATOM	7906	CA	TYR	398	23.823	-66.303	52.590	1.00	0.00
C									
ATOM	7907	CB	TYR	398	23.369	-64.902	53.064	1.00	0.00
C									
ATOM	7908	CG	TYR	398	21.836	-64.567	52.927	1.00	0.00
C									
ATOM	7909	CD1	TYR	398	21.286	-64.605	51.621	1.00	0.00
C									
ATOM	7910	CE1	TYR	398	19.986	-64.243	51.404	1.00	0.00
C									
ATOM	7911	CZ	TYR	398	19.144	-63.917	52.483	1.00	0.00
C									
ATOM	7912	OH	TYR	398	17.827	-63.607	52.260	1.00	0.00
O									
ATOM	7913	CE2	TYR	398	19.648	-63.793	53.800	1.00	0.00
C									
ATOM	7914	CD2	TYR	398	21.007	-64.173	54.034	1.00	0.00
C									
ATOM	7915	C	TYR	398	25.396	-66.300	52.202	1.00	0.00
C									
ATOM	7916	O	TYR	398	25.747	-65.684	51.234	1.00	0.00
O									
ATOM	7917	N	ASP	399	26.250	-67.052	52.938	1.00	0.00
N									
ATOM	7918	CA	ASP	399	27.509	-67.616	52.505	1.00	0.00
C									
ATOM	7919	CB	ASP	399	28.329	-67.778	53.817	1.00	0.00
C									
ATOM	7920	CG	ASP	399	29.729	-68.398	53.594	1.00	0.00
C									
ATOM	7921	OD1	ASP	399	30.012	-69.403	54.220	1.00	0.00
O									
ATOM	7922	OD2	ASP	399	30.507	-67.822	52.791	1.00	0.00
O1-									
ATOM	7923	C	ASP	399	27.296	-68.947	51.814	1.00	0.00
C									
ATOM	7924	O	ASP	399	26.910	-69.923	52.392	1.00	0.00
O									
ATOM	7925	N	ALA	400	27.703	-69.035	50.574	1.00	0.00
N									
ATOM	7926	CA	ALA	400	27.570	-70.233	49.749	1.00	0.00
C									
ATOM	7927	CB	ALA	400	28.012	-69.841	48.297	1.00	0.00
C									
ATOM	7928	C	ALA	400	28.478	-71.306	50.304	1.00	0.00
C									

ATOM	7929	O	ALA	400	28.131	-72.468	50.206	1.00	0.00
O									
ATOM	7930	N	GLU	401	29.622	-70.980	50.921	1.00	0.00
N									
ATOM	7931	CA	GLU	401	30.461	-71.948	51.620	1.00	0.00
C									
ATOM	7932	CB	GLU	401	31.831	-71.335	51.850	1.00	0.00
C									
ATOM	7933	CG	GLU	401	32.874	-72.360	52.198	1.00	0.00
C									
ATOM	7934	CD	GLU	401	34.305	-71.783	52.414	1.00	0.00
C									
ATOM	7935	OE1	GLU	401	34.434	-70.549	52.293	1.00	0.00
O									
ATOM	7936	OE2	GLU	401	35.316	-72.569	52.626	1.00	0.00
O1-									
ATOM	7937	C	GLU	401	29.800	-72.615	52.886	1.00	0.00
C									
ATOM	7938	O	GLU	401	29.955	-73.880	52.960	1.00	0.00
O									
ATOM	7939	N	THR	402	29.110	-71.951	53.784	1.00	0.00
N									
ATOM	7940	CA	THR	402	28.369	-72.524	54.876	1.00	0.00
C									
ATOM	7941	CB	THR	402	28.208	-71.525	56.026	1.00	0.00
C									
ATOM	7942	CG2	THR	402	27.857	-72.210	57.335	1.00	0.00
C									
ATOM	7943	OG1	THR	402	29.392	-70.768	56.266	1.00	0.00
O									
ATOM	7944	C	THR	402	27.056	-73.204	54.448	1.00	0.00
C									
ATOM	7945	O	THR	402	26.585	-74.101	55.165	1.00	0.00
O									
ATOM	7946	N	LEU	403	26.445	-72.813	53.302	1.00	0.00
N									
ATOM	7947	CA	LEU	403	25.279	-73.548	52.715	1.00	0.00
C									
ATOM	7948	CB	LEU	403	24.611	-72.704	51.539	1.00	0.00
C									
ATOM	7949	CG	LEU	403	23.839	-71.594	52.101	1.00	0.00
C									
ATOM	7950	CD1	LEU	403	23.646	-70.477	51.042	1.00	0.00
C									
ATOM	7951	CD2	LEU	403	22.351	-72.161	52.441	1.00	0.00
C									
ATOM	7952	C	LEU	403	25.808	-74.800	52.048	1.00	0.00
C									
ATOM	7953	O	LEU	403	25.245	-75.867	52.249	1.00	0.00
O									
ATOM	7954	N	MET	404	26.950	-74.737	51.321	1.00	0.00
N									
ATOM	7955	CA	MET	404	27.477	-75.992	50.698	1.00	0.00
C									

ATOM	7956	CB	MET	404	28.644	-75.588	49.741	1.00	0.00
C									
ATOM	7957	CG	MET	404	28.149	-75.089	48.385	1.00	0.00
C									
ATOM	7958	SD	MET	404	29.451	-74.866	47.058	1.00	0.00
S									
ATOM	7959	CE	MET	404	30.129	-73.369	47.838	1.00	0.00
C									
ATOM	7960	C	MET	404	27.882	-76.938	51.785	1.00	0.00
C									
ATOM	7961	O	MET	404	27.673	-78.135	51.582	1.00	0.00
O									
ATOM	7962	N	ASP	405	28.350	-76.418	52.937	1.00	0.00
N									
ATOM	7963	CA	ASP	405	28.698	-77.273	54.049	1.00	0.00
C									
ATOM	7964	CB	ASP	405	29.344	-76.379	55.084	1.00	0.00
C									
ATOM	7965	CG	ASP	405	30.105	-77.289	56.153	1.00	0.00
C									
ATOM	7966	OD1	ASP	405	29.762	-77.144	57.308	1.00	0.00
O									
ATOM	7967	OD2	ASP	405	30.948	-78.126	55.856	1.00	0.00
O1-									
ATOM	7968	C	ASP	405	27.529	-78.066	54.599	1.00	0.00
C									
ATOM	7969	O	ASP	405	27.777	-79.176	54.996	1.00	0.00
O									
ATOM	7970	N	ARG	406	26.372	-77.455	54.752	1.00	0.00
N									
ATOM	7971	CA	ARG	406	25.132	-78.077	55.260	1.00	0.00
C									
ATOM	7972	CB	ARG	406	24.083	-76.995	55.649	1.00	0.00
C									
ATOM	7973	CG	ARG	406	23.102	-77.540	56.729	1.00	0.00
C									
ATOM	7974	CD	ARG	406	23.602	-77.691	58.137	1.00	0.00
C									
ATOM	7975	NE	ARG	406	22.564	-78.244	58.977	1.00	0.00
N									
ATOM	7976	CZ	ARG	406	21.560	-77.661	59.617	1.00	0.00
C									
ATOM	7977	NH1	ARG	406	21.279	-76.401	59.572	1.00	0.00
N									
ATOM	7978	NH2	ARG	406	20.650	-78.489	60.146	1.00	0.00
N1+									
ATOM	7979	C	ARG	406	24.637	-79.049	54.230	1.00	0.00
C									
ATOM	7980	O	ARG	406	24.228	-80.151	54.596	1.00	0.00
O									
ATOM	7981	N	ILE	407	24.570	-78.668	52.964	1.00	0.00
N									
ATOM	7982	CA	ILE	407	24.357	-79.559	51.795	1.00	0.00
C									

ATOM	7983	CB	ILE	407	24.603	-78.848	50.409	1.00	0.00
C									
ATOM	7984	CG2	ILE	407	24.723	-79.754	49.203	1.00	0.00
C									
ATOM	7985	CG1	ILE	407	23.475	-77.797	50.334	1.00	0.00
C									
ATOM	7986	CD1	ILE	407	23.650	-76.771	49.191	1.00	0.00
C									
ATOM	7987	C	ILE	407	25.259	-80.809	51.814	1.00	0.00
C									
ATOM	7988	O	ILE	407	24.731	-81.895	51.995	1.00	0.00
O									
ATOM	7989	N	LYS	408	26.554	-80.670	51.822	1.00	0.00
N									
ATOM	7990	CA	LYS	408	27.530	-81.752	52.004	1.00	0.00
C									
ATOM	7991	CB	LYS	408	28.962	-81.168	52.197	1.00	0.00
C									
ATOM	7992	CG	LYS	408	29.598	-80.794	50.796	1.00	0.00
C									
ATOM	7993	CD	LYS	408	30.860	-79.919	51.086	1.00	0.00
C									
ATOM	7994	CE	LYS	408	31.505	-79.540	49.776	1.00	0.00
C									
ATOM	7995	NZ	LYS	408	32.616	-80.380	49.390	1.00	0.00
N1+									
ATOM	7996	C	LYS	408	27.171	-82.599	53.235	1.00	0.00
C									
ATOM	7997	O	LYS	408	27.262	-83.804	53.133	1.00	0.00
O									
ATOM	7998	N	LYS	409	26.765	-82.002	54.317	1.00	0.00
N									
ATOM	7999	CA	LYS	409	26.274	-82.787	55.475	1.00	0.00
C									
ATOM	8000	CB	LYS	409	26.108	-81.836	56.702	1.00	0.00
C									
ATOM	8001	CG	LYS	409	25.989	-82.598	58.021	1.00	0.00
C									
ATOM	8002	CD	LYS	409	26.141	-81.690	59.234	1.00	0.00
C									
ATOM	8003	CE	LYS	409	25.741	-82.338	60.554	1.00	0.00
C									
ATOM	8004	NZ	LYS	409	26.123	-81.534	61.728	1.00	0.00
N1+									
ATOM	8005	C	LYS	409	25.055	-83.703	55.334	1.00	0.00
C									
ATOM	8006	O	LYS	409	25.089	-84.813	55.824	1.00	0.00
O									
ATOM	8007	N	GLN	410	24.021	-83.235	54.700	1.00	0.00
N									
ATOM	8008	CA	GLN	410	22.847	-84.029	54.209	1.00	0.00
C									
ATOM	8009	CB	GLN	410	21.709	-83.098	53.709	1.00	0.00
C									

ATOM	8010	CG	GLN	410	21.229	-82.050	54.756	1.00	0.00
C									
ATOM	8011	CD	GLN	410	19.979	-82.512	55.556	1.00	0.00
C									
ATOM	8012	OE1	GLN	410	19.551	-83.634	55.532	1.00	0.00
O									
ATOM	8013	NE2	GLN	410	19.293	-81.631	56.273	1.00	0.00
N									
ATOM	8014	C	GLN	410	23.253	-85.033	53.142	1.00	0.00
C									
ATOM	8015	O	GLN	410	22.759	-86.123	53.016	1.00	0.00
O									
ATOM	8016	N	LEU	411	24.238	-84.692	52.295	1.00	0.00
N									
ATOM	8017	CA	LEU	411	24.760	-85.690	51.311	1.00	0.00
C									
ATOM	8018	CB	LEU	411	25.637	-84.954	50.266	1.00	0.00
C									
ATOM	8019	CG	LEU	411	24.850	-83.989	49.345	1.00	0.00
C									
ATOM	8020	CD1	LEU	411	25.809	-82.976	48.777	1.00	0.00
C									
ATOM	8021	CD2	LEU	411	24.272	-84.907	48.326	1.00	0.00
C									
ATOM	8022	C	LEU	411	25.616	-86.809	51.880	1.00	0.00
C									
ATOM	8023	O	LEU	411	25.638	-87.877	51.321	1.00	0.00
O									
ATOM	8024	N	ARG	412	26.339	-86.613	52.980	1.00	0.00
N									
ATOM	8025	CA	ARG	412	26.925	-87.652	53.863	1.00	0.00
C									
ATOM	8026	CB	ARG	412	28.014	-87.033	54.767	1.00	0.00
C									
ATOM	8027	CG	ARG	412	29.314	-86.764	54.066	1.00	0.00
C									
ATOM	8028	CD	ARG	412	30.540	-86.502	55.067	1.00	0.00
C									
ATOM	8029	NE	ARG	412	30.174	-85.611	56.175	1.00	0.00
N									
ATOM	8030	CZ	ARG	412	29.914	-84.331	56.160	1.00	0.00
C									
ATOM	8031	NH1	ARG	412	30.148	-83.596	55.124	1.00	0.00
N									
ATOM	8032	NH2	ARG	412	29.424	-83.676	57.173	1.00	0.00
N1+									
ATOM	8033	C	ARG	412	25.906	-88.439	54.742	1.00	0.00
C									
ATOM	8034	O	ARG	412	26.215	-89.505	55.203	1.00	0.00
O									
ATOM	8035	N	GLU	413	24.663	-87.891	54.923	1.00	0.00
N									
ATOM	8036	CA	GLU	413	23.606	-88.780	55.478	1.00	0.00
C									

ATOM	8037	CB	GLU	413	22.352	-87.977	55.684	1.00	0.00
C									
ATOM	8038	CG	GLU	413	21.402	-88.601	56.721	1.00	0.00
C									
ATOM	8039	CD	GLU	413	22.039	-88.831	58.068	1.00	0.00
C									
ATOM	8040	OE1	GLU	413	21.627	-89.702	58.817	1.00	0.00
O									
ATOM	8041	OE2	GLU	413	22.708	-87.864	58.552	1.00	0.00
O1-									
ATOM	8042	C	GLU	413	23.222	-89.884	54.395	1.00	0.00
C									
ATOM	8043	O	GLU	413	22.980	-91.019	54.720	1.00	0.00
O									
ATOM	8044	N	TRP	414	23.310	-89.569	53.065	1.00	0.00
N									
ATOM	8045	CA	TRP	414	23.144	-90.627	52.101	1.00	0.00
C									
ATOM	8046	CB	TRP	414	22.810	-90.036	50.756	1.00	0.00
C									
ATOM	8047	CG	TRP	414	21.774	-88.926	50.667	1.00	0.00
C									
ATOM	8048	CD1	TRP	414	20.786	-88.777	51.560	1.00	0.00
C									
ATOM	8049	NE1	TRP	414	20.110	-87.609	51.284	1.00	0.00
N									
ATOM	8050	CE2	TRP	414	20.431	-87.165	50.002	1.00	0.00
C									
ATOM	8051	CZ2	TRP	414	19.897	-86.164	49.223	1.00	0.00
C									
ATOM	8052	CH2	TRP	414	20.513	-85.856	48.007	1.00	0.00
C									
ATOM	8053	CZ3	TRP	414	21.647	-86.610	47.564	1.00	0.00
C									
ATOM	8054	CE3	TRP	414	22.129	-87.648	48.383	1.00	0.00
C									
ATOM	8055	CD2	TRP	414	21.509	-88.045	49.612	1.00	0.00
C									
ATOM	8056	C	TRP	414	24.459	-91.416	52.054	1.00	0.00
C									
ATOM	8057	O	TRP	414	25.555	-90.893	52.185	1.00	0.00
O									
ATOM	8058	N	ASP	415	24.341	-92.713	51.804	1.00	0.00
N									
ATOM	8059	CA	ASP	415	25.378	-93.644	51.972	1.00	0.00
C									
ATOM	8060	CB	ASP	415	24.888	-95.045	52.447	1.00	0.00
C									
ATOM	8061	CG	ASP	415	25.929	-95.946	53.130	1.00	0.00
C									
ATOM	8062	OD1	ASP	415	26.966	-95.495	53.666	1.00	0.00
O									
ATOM	8063	OD2	ASP	415	25.645	-97.133	53.231	1.00	0.00
O1-									

ATOM	8064	C	ASP	415	26.182	-93.816	50.631	1.00	0.00
C									
ATOM	8065	O	ASP	415	25.662	-93.434	49.555	1.00	0.00
O									
ATOM	8066	N	GLU	416	27.441	-94.287	50.801	1.00	0.00
N									
ATOM	8067	CA	GLU	416	28.365	-94.614	49.699	1.00	0.00
C									
ATOM	8068	CB	GLU	416	28.122	-95.975	49.062	1.00	0.00
C									
ATOM	8069	CG	GLU	416	27.778	-97.144	50.039	1.00	0.00
C									
ATOM	8070	CD	GLU	416	29.107	-97.646	50.731	1.00	0.00
C									
ATOM	8071	OE1	GLU	416	29.229	-98.838	51.025	1.00	0.00
O									
ATOM	8072	OE2	GLU	416	30.034	-96.846	51.025	1.00	0.00
O1-									
ATOM	8073	C	GLU	416	28.634	-93.418	48.726	1.00	0.00
C									
ATOM	8074	O	GLU	416	29.072	-93.506	47.559	1.00	0.00
O									
ATOM	8075	N	ASN	417	28.283	-92.250	49.267	1.00	0.00
N									
ATOM	8076	CA	ASN	417	28.185	-90.979	48.470	1.00	0.00
C									
ATOM	8077	CB	ASN	417	27.104	-90.122	49.145	1.00	0.00
C									
ATOM	8078	CG	ASN	417	26.507	-89.075	48.208	1.00	0.00
C									
ATOM	8079	OD1	ASN	417	26.745	-89.030	46.976	1.00	0.00
O									
ATOM	8080	ND2	ASN	417	25.768	-88.135	48.735	1.00	0.00
N									
ATOM	8081	C	ASN	417	29.520	-90.345	48.233	1.00	0.00
C									
ATOM	8082	O	ASN	417	30.488	-90.704	48.947	1.00	0.00
O									
ATOM	8083	N	LEU	418	29.587	-89.414	47.248	1.00	0.00
N									
ATOM	8084	CA	LEU	418	30.640	-88.519	46.967	1.00	0.00
C									
ATOM	8085	CB	LEU	418	30.649	-87.516	48.119	1.00	0.00
C									
ATOM	8086	CG	LEU	418	29.339	-86.834	48.485	1.00	0.00
C									
ATOM	8087	CD1	LEU	418	29.645	-85.826	49.532	1.00	0.00
C									
ATOM	8088	CD2	LEU	418	28.537	-86.215	47.366	1.00	0.00
C									
ATOM	8089	C	LEU	418	32.027	-89.120	46.668	1.00	0.00
C									
ATOM	8090	O	LEU	418	33.014	-88.418	46.791	1.00	0.00
O									

ATOM	8091	N	LYS	419	32.165	-90.461	46.447	1.00	0.00
N									
ATOM	8092	CA	LYS	419	33.416	-91.160	46.107	1.00	0.00
C									
ATOM	8093	CB	LYS	419	33.308	-92.677	46.379	1.00	0.00
C									
ATOM	8094	CG	LYS	419	32.809	-93.043	47.793	1.00	0.00
C									
ATOM	8095	CD	LYS	419	32.930	-94.581	48.045	1.00	0.00
C									
ATOM	8096	CE	LYS	419	32.134	-95.006	49.304	1.00	0.00
C									
ATOM	8097	NZ	LYS	419	32.249	-96.444	49.627	1.00	0.00
N1+									
ATOM	8098	C	LYS	419	33.958	-90.825	44.682	1.00	0.00
C									
ATOM	8099	O	LYS	419	35.141	-91.015	44.440	1.00	0.00
O									
ATOM	8100	N	ASP	420	33.158	-90.256	43.811	1.00	0.00
N									
ATOM	8101	CA	ASP	420	33.604	-89.430	42.673	1.00	0.00
C									
ATOM	8102	CB	ASP	420	32.466	-89.266	41.622	1.00	0.00
C									
ATOM	8103	CG	ASP	420	32.825	-88.669	40.325	1.00	0.00
C									
ATOM	8104	OD1	ASP	420	31.857	-88.568	39.523	1.00	0.00
O									
ATOM	8105	OD2	ASP	420	34.046	-88.434	40.054	1.00	0.00
O1-									
ATOM	8106	C	ASP	420	34.303	-88.091	42.986	1.00	0.00
C									
ATOM	8107	O	ASP	420	33.874	-86.972	42.652	1.00	0.00
O									
ATOM	8108	N	ASP	421	35.368	-88.189	43.799	1.00	0.00
N									
ATOM	8109	CA	ASP	421	35.991	-86.997	44.428	1.00	0.00
C									
ATOM	8110	CB	ASP	421	36.682	-87.443	45.740	1.00	0.00
C									
ATOM	8111	CG	ASP	421	37.039	-86.249	46.650	1.00	0.00
C									
ATOM	8112	OD1	ASP	421	38.201	-85.999	47.016	1.00	0.00
O									
ATOM	8113	OD2	ASP	421	36.135	-85.516	47.061	1.00	0.00
O1-									
ATOM	8114	C	ASP	421	36.993	-86.449	43.459	1.00	0.00
C									
ATOM	8115	O	ASP	421	37.604	-87.259	42.708	1.00	0.00
O									
ATOM	8116	N	SER	422	37.228	-85.170	43.439	1.00	0.00
N									
ATOM	8117	CA	SER	422	36.366	-84.110	44.090	1.00	0.00
C									



ATOM	8118	CB	SER	422	37.154	-82.822	44.137	1.00	0.00
C									
ATOM	8119	OG	SER	422	37.348	-82.252	42.815	1.00	0.00
O									
ATOM	8120	C	SER	422	35.069	-83.812	43.380	1.00	0.00
C									
ATOM	8121	O	SER	422	34.808	-84.131	42.210	1.00	0.00
O									
ATOM	8122	N	LEU	423	34.148	-83.263	44.215	1.00	0.00
N									
ATOM	8123	CA	LEU	423	33.175	-82.303	43.717	1.00	0.00
C									
ATOM	8124	CB	LEU	423	31.926	-82.325	44.663	1.00	0.00
C									
ATOM	8125	CG	LEU	423	31.199	-83.639	44.379	1.00	0.00
C									
ATOM	8126	CD1	LEU	423	31.471	-84.656	45.442	1.00	0.00
C									
ATOM	8127	CD2	LEU	423	29.749	-83.396	44.335	1.00	0.00
C									
ATOM	8128	C	LEU	423	33.738	-80.883	43.442	1.00	0.00
C									
ATOM	8129	O	LEU	423	34.751	-80.561	44.058	1.00	0.00
O									
ATOM	8130	N	PRO	424	33.154	-80.015	42.599	1.00	0.00
N									
ATOM	8131	CD	PRO	424	31.928	-80.215	41.875	1.00	0.00
C									
ATOM	8132	CG	PRO	424	31.951	-79.308	40.615	1.00	0.00
C									
ATOM	8133	CB	PRO	424	32.750	-78.132	41.167	1.00	0.00
C									
ATOM	8134	CA	PRO	424	33.732	-78.769	42.175	1.00	0.00
C									
ATOM	8135	C	PRO	424	34.068	-77.729	43.245	1.00	0.00
C									
ATOM	8136	O	PRO	424	33.311	-77.501	44.223	1.00	0.00
O									
ATOM	8137	N	SER	425	35.162	-76.948	43.064	1.00	0.00
N									
ATOM	8138	CA	SER	425	35.436	-75.806	43.973	1.00	0.00
C									
ATOM	8139	CB	SER	425	36.870	-75.374	43.647	1.00	0.00
C									
ATOM	8140	OG	SER	425	37.230	-74.413	44.637	1.00	0.00
O									
ATOM	8141	C	SER	425	34.477	-74.636	43.845	1.00	0.00
C									
ATOM	8142	O	SER	425	34.102	-73.965	44.809	1.00	0.00
O									
ATOM	8143	N	ASN	426	34.091	-74.273	42.638	1.00	0.00
N									
ATOM	8144	CA	ASN	426	33.060	-73.230	42.317	1.00	0.00
C									

ATOM	8145	CB	ASN	426	33.084	-73.010	40.786	1.00	0.00
C									
ATOM	8146	CG	ASN	426	32.127	-72.012	40.244	1.00	0.00
C									
ATOM	8147	OD1	ASN	426	31.114	-72.381	39.646	1.00	0.00
O									
ATOM	8148	ND2	ASN	426	32.484	-70.762	40.326	1.00	0.00
N									
ATOM	8149	C	ASN	426	31.665	-73.626	42.700	1.00	0.00
C									
ATOM	8150	O	ASN	426	31.265	-74.763	42.403	1.00	0.00
O									
ATOM	8151	N	PRO	427	30.897	-72.673	43.275	1.00	0.00
N									
ATOM	8152	CD	PRO	427	31.329	-71.449	43.882	1.00	0.00
C									
ATOM	8153	CG	PRO	427	30.071	-70.743	44.390	1.00	0.00
C									
ATOM	8154	CB	PRO	427	29.199	-71.925	44.737	1.00	0.00
C									
ATOM	8155	CA	PRO	427	29.525	-73.027	43.717	1.00	0.00
C									
ATOM	8156	C	PRO	427	28.438	-73.199	42.615	1.00	0.00
C									
ATOM	8157	O	PRO	427	27.457	-73.866	42.964	1.00	0.00
O									
ATOM	8158	N	ILE	428	28.601	-72.717	41.410	1.00	0.00
N									
ATOM	8159	CA	ILE	428	27.739	-72.798	40.251	1.00	0.00
C									
ATOM	8160	CB	ILE	428	28.120	-71.671	39.191	1.00	0.00
C									
ATOM	8161	CG2	ILE	428	27.037	-71.821	38.098	1.00	0.00
C									
ATOM	8162	CG1	ILE	428	28.227	-70.288	39.856	1.00	0.00
C									
ATOM	8163	CD1	ILE	428	28.790	-69.156	38.959	1.00	0.00
C									
ATOM	8164	C	ILE	428	27.795	-74.290	39.767	1.00	0.00
C									
ATOM	8165	O	ILE	428	26.844	-75.069	39.720	1.00	0.00
O									
ATOM	8166	N	ASP	429	29.001	-74.697	39.333	1.00	0.00
N									
ATOM	8167	CA	ASP	429	29.390	-76.059	38.997	1.00	0.00
C									
ATOM	8168	CB	ASP	429	30.916	-76.049	38.733	1.00	0.00
C									
ATOM	8169	CG	ASP	429	31.352	-75.219	37.481	1.00	0.00
C									
ATOM	8170	OD1	ASP	429	30.469	-74.798	36.701	1.00	0.00
O									
ATOM	8171	OD2	ASP	429	32.571	-75.155	37.232	1.00	0.00
O1-									

ATOM	8172	C	ASP	429	29.004	-77.068	40.046	1.00	0.00
C									
ATOM	8173	O	ASP	429	28.490	-78.105	39.748	1.00	0.00
O									
ATOM	8174	N	PHE	430	29.389	-76.758	41.294	1.00	0.00
N									
ATOM	8175	CA	PHE	430	28.943	-77.551	42.432	1.00	0.00
C									
ATOM	8176	CB	PHE	430	29.438	-77.020	43.796	1.00	0.00
C									
ATOM	8177	CG	PHE	430	29.174	-77.921	44.971	1.00	0.00
C									
ATOM	8178	CD1	PHE	430	29.864	-79.123	45.141	1.00	0.00
C									
ATOM	8179	CE1	PHE	430	29.516	-80.046	46.153	1.00	0.00
C									
ATOM	8180	CZ	PHE	430	28.445	-79.660	47.039	1.00	0.00
C									
ATOM	8181	CE2	PHE	430	27.757	-78.432	46.910	1.00	0.00
C									
ATOM	8182	CD2	PHE	430	28.043	-77.637	45.778	1.00	0.00
C									
ATOM	8183	C	PHE	430	27.431	-77.683	42.508	1.00	0.00
C									
ATOM	8184	O	PHE	430	26.947	-78.849	42.590	1.00	0.00
O									
ATOM	8185	N	SER	431	26.659	-76.583	42.525	1.00	0.00
N									
ATOM	8186	CA	SER	431	25.215	-76.582	42.535	1.00	0.00
C									
ATOM	8187	CB	SER	431	24.659	-75.133	42.532	1.00	0.00
C									
ATOM	8188	OG	SER	431	23.300	-75.125	41.922	1.00	0.00
O									
ATOM	8189	C	SER	431	24.612	-77.425	41.378	1.00	0.00
C									
ATOM	8190	O	SER	431	23.778	-78.334	41.661	1.00	0.00
O									
ATOM	8191	N	TYR	432	24.968	-77.138	40.126	1.00	0.00
N									
ATOM	8192	CA	TYR	432	24.540	-77.966	39.000	1.00	0.00
C									
ATOM	8193	CB	TYR	432	24.981	-77.323	37.716	1.00	0.00
C									
ATOM	8194	CG	TYR	432	24.277	-75.978	37.298	1.00	0.00
C									
ATOM	8195	CD1	TYR	432	22.883	-75.711	37.376	1.00	0.00
C									
ATOM	8196	CE1	TYR	432	22.413	-74.479	36.912	1.00	0.00
C									
ATOM	8197	CZ	TYR	432	23.217	-73.594	36.109	1.00	0.00
C									
ATOM	8198	OH	TYR	432	22.740	-72.371	35.737	1.00	0.00
O									

ATOM	8199	CE2	TYR	432	24.557	-73.853	36.016	1.00	0.00
C									
ATOM	8200	CD2	TYR	432	25.057	-75.019	36.630	1.00	0.00
C									
ATOM	8201	C	TYR	432	24.911	-79.489	39.044	1.00	0.00
C									
ATOM	8202	O	TYR	432	23.982	-80.265	38.752	1.00	0.00
O									
ATOM	8203	N	ARG	433	26.091	-79.867	39.553	1.00	0.00
N									
ATOM	8204	CA	ARG	433	26.416	-81.250	39.794	1.00	0.00
C									
ATOM	8205	CB	ARG	433	27.873	-81.488	40.281	1.00	0.00
C									
ATOM	8206	CG	ARG	433	28.141	-82.965	40.444	1.00	0.00
C									
ATOM	8207	CD	ARG	433	29.544	-83.346	40.013	1.00	0.00
C									
ATOM	8208	NE	ARG	433	29.982	-84.585	40.707	1.00	0.00
N									
ATOM	8209	CZ	ARG	433	31.244	-85.021	40.815	1.00	0.00
C									
ATOM	8210	NH1	ARG	433	31.455	-86.097	41.484	1.00	0.00
N									
ATOM	8211	NH2	ARG	433	32.262	-84.297	40.325	1.00	0.00
N1+									
ATOM	8212	C	ARG	433	25.539	-81.934	40.859	1.00	0.00
C									
ATOM	8213	O	ARG	433	24.965	-82.967	40.561	1.00	0.00
O									
ATOM	8214	N	VAL	434	25.426	-81.353	42.033	1.00	0.00
N									
ATOM	8215	CA	VAL	434	24.511	-81.697	43.101	1.00	0.00
C									
ATOM	8216	CB	VAL	434	24.807	-80.850	44.307	1.00	0.00
C									
ATOM	8217	CG1	VAL	434	23.631	-81.102	45.308	1.00	0.00
C									
ATOM	8218	CG2	VAL	434	26.107	-81.264	45.056	1.00	0.00
C									
ATOM	8219	C	VAL	434	22.999	-81.745	42.655	1.00	0.00
C									
ATOM	8220	O	VAL	434	22.287	-82.695	42.919	1.00	0.00
O									
ATOM	8221	N	ALA	435	22.573	-80.799	41.830	1.00	0.00
N									
ATOM	8222	CA	ALA	435	21.223	-80.775	41.276	1.00	0.00
C									
ATOM	8223	CB	ALA	435	21.021	-79.435	40.455	1.00	0.00
C									
ATOM	8224	C	ALA	435	20.816	-82.038	40.441	1.00	0.00
C									
ATOM	8225	O	ALA	435	19.685	-82.608	40.523	1.00	0.00
O									

ATOM	8226	N	ALA	436	21.766	-82.573	39.658	1.00	0.00
N									
ATOM	8227	CA	ALA	436	21.680	-83.798	38.778	1.00	0.00
C									
ATOM	8228	CB	ALA	436	22.987	-83.761	37.901	1.00	0.00
C									
ATOM	8229	C	ALA	436	21.605	-85.045	39.697	1.00	0.00
C									
ATOM	8230	O	ALA	436	21.332	-86.168	39.175	1.00	0.00
O									
ATOM	8231	N	CYS	437	21.872	-84.902	40.989	1.00	0.00
N									
ATOM	8232	CA	CYS	437	21.721	-85.991	41.964	1.00	0.00
C									
ATOM	8233	CB	CYS	437	23.120	-86.479	42.394	1.00	0.00
C									
ATOM	8234	SG	CYS	437	23.320	-87.858	43.643	1.00	0.00
S									
ATOM	8235	C	CYS	437	20.665	-85.660	43.128	1.00	0.00
C									
ATOM	8236	O	CYS	437	20.680	-86.279	44.176	1.00	0.00
O									
ATOM	8237	N	LEU	438	19.784	-84.647	42.929	1.00	0.00
N									
ATOM	8238	CA	LEU	438	18.801	-84.190	43.937	1.00	0.00
C									
ATOM	8239	CB	LEU	438	18.726	-82.620	43.954	1.00	0.00
C									
ATOM	8240	CG	LEU	438	17.696	-81.901	44.855	1.00	0.00
C									
ATOM	8241	CD1	LEU	438	18.092	-82.142	46.332	1.00	0.00
C									
ATOM	8242	CD2	LEU	438	17.880	-80.417	44.637	1.00	0.00
C									
ATOM	8243	C	LEU	438	17.383	-84.732	43.551	1.00	0.00
C									
ATOM	8244	O	LEU	438	16.940	-84.557	42.442	1.00	0.00
O									
ATOM	8245	N	PRO	439	16.670	-85.550	44.447	1.00	0.00
N									
ATOM	8246	CD	PRO	439	17.323	-86.069	45.645	1.00	0.00
C									
ATOM	8247	CG	PRO	439	16.519	-87.306	45.986	1.00	0.00
C									
ATOM	8248	CB	PRO	439	15.100	-86.827	45.636	1.00	0.00
C									
ATOM	8249	CA	PRO	439	15.276	-86.055	44.312	1.00	0.00
C									
ATOM	8250	C	PRO	439	14.175	-84.933	44.210	1.00	0.00
C									
ATOM	8251	O	PRO	439	13.054	-85.150	44.711	1.00	0.00
O									
ATOM	8252	N	ILE	440	14.423	-83.804	43.472	1.00	0.00
N									

ATOM	8253	CA	ILE	440	13.493	-82.547	43.394	1.00	0.00
C									
ATOM	8254	CB	ILE	440	14.301	-81.483	42.689	1.00	0.00
C									
ATOM	8255	CG2	ILE	440	14.453	-81.691	41.157	1.00	0.00
C									
ATOM	8256	CG1	ILE	440	13.651	-80.078	42.960	1.00	0.00
C									
ATOM	8257	CD1	ILE	440	14.235	-78.786	42.384	1.00	0.00
C									
ATOM	8258	C	ILE	440	12.170	-82.934	42.782	1.00	0.00
C									
ATOM	8259	O	ILE	440	12.154	-83.838	41.971	1.00	0.00
O									
ATOM	8260	N	ASP	441	11.069	-82.183	42.967	1.00	0.00
N									
ATOM	8261	CA	ASP	441	10.022	-82.039	41.890	1.00	0.00
C									
ATOM	8262	CB	ASP	441	8.766	-81.425	42.546	1.00	0.00
C									
ATOM	8263	CG	ASP	441	7.469	-81.534	41.779	1.00	0.00
C									
ATOM	8264	OD1	ASP	441	7.456	-81.853	40.571	1.00	0.00
O									
ATOM	8265	OD2	ASP	441	6.434	-81.325	42.382	1.00	0.00
O1-									
ATOM	8266	C	ASP	441	10.424	-81.075	40.732	1.00	0.00
C									
ATOM	8267	O	ASP	441	10.824	-79.919	40.960	1.00	0.00
O									
ATOM	8268	N	ASP	442	10.169	-81.510	39.456	1.00	0.00
N									
ATOM	8269	CA	ASP	442	10.253	-80.556	38.287	1.00	0.00
C									
ATOM	8270	CB	ASP	442	10.001	-81.256	36.942	1.00	0.00
C									
ATOM	8271	CG	ASP	442	11.204	-82.086	36.464	1.00	0.00
C									
ATOM	8272	OD1	ASP	442	11.108	-82.737	35.420	1.00	0.00
O									
ATOM	8273	OD2	ASP	442	12.213	-82.191	37.233	1.00	0.00
O1-									
ATOM	8274	C	ASP	442	9.437	-79.261	38.424	1.00	0.00
C									
ATOM	8275	O	ASP	442	9.837	-78.216	37.946	1.00	0.00
O									
ATOM	8276	N	VAL	443	8.274	-79.262	39.177	1.00	0.00
N									
ATOM	8277	CA	VAL	443	7.486	-78.001	39.490	1.00	0.00
C									
ATOM	8278	CB	VAL	443	6.107	-78.526	40.035	1.00	0.00
C									
ATOM	8279	CG1	VAL	443	5.265	-77.307	40.312	1.00	0.00
C									

ATOM	8280	CG2	VAL	443	5.350	-79.298	38.965	1.00	0.00
C									
ATOM	8281	C	VAL	443	8.271	-77.012	40.386	1.00	0.00
C									
ATOM	8282	O	VAL	443	7.999	-75.793	40.315	1.00	0.00
O									
ATOM	8283	N	LEU	444	9.223	-77.553	41.124	1.00	0.00
N									
ATOM	8284	CA	LEU	444	10.218	-76.732	41.734	1.00	0.00
C									
ATOM	8285	CB	LEU	444	10.380	-77.146	43.218	1.00	0.00
C									
ATOM	8286	CG	LEU	444	11.311	-76.261	43.975	1.00	0.00
C									
ATOM	8287	CD1	LEU	444	11.007	-74.787	44.063	1.00	0.00
C									
ATOM	8288	CD2	LEU	444	11.346	-76.763	45.375	1.00	0.00
C									
ATOM	8289	C	LEU	444	11.414	-76.457	40.811	1.00	0.00
C									
ATOM	8290	O	LEU	444	11.780	-75.297	40.779	1.00	0.00
O									
ATOM	8291	N	ARG	445	11.941	-77.469	40.038	1.00	0.00
N									
ATOM	8292	CA	ARG	445	13.216	-77.354	39.241	1.00	0.00
C									
ATOM	8293	CB	ARG	445	13.444	-78.749	38.560	1.00	0.00
C									
ATOM	8294	CG	ARG	445	14.913	-78.868	37.962	1.00	0.00
C									
ATOM	8295	CD	ARG	445	15.124	-80.259	37.366	1.00	0.00
C									
ATOM	8296	NE	ARG	445	16.039	-81.075	38.151	1.00	0.00
N									
ATOM	8297	CZ	ARG	445	16.460	-82.252	37.960	1.00	0.00
C									
ATOM	8298	NH1	ARG	445	16.426	-82.837	36.813	1.00	0.00
N									
ATOM	8299	NH2	ARG	445	16.964	-82.931	38.971	1.00	0.00
N1+									
ATOM	8300	C	ARG	445	13.163	-76.225	38.169	1.00	0.00
C									
ATOM	8301	O	ARG	445	14.207	-75.569	37.945	1.00	0.00
O									
ATOM	8302	N	ILE	446	12.008	-75.984	37.584	1.00	0.00
N									
ATOM	8303	CA	ILE	446	11.740	-74.839	36.710	1.00	0.00
C									
ATOM	8304	CB	ILE	446	10.214	-74.803	36.305	1.00	0.00
C									
ATOM	8305	CG2	ILE	446	9.381	-74.616	37.614	1.00	0.00
C									
ATOM	8306	CG1	ILE	446	9.739	-73.668	35.371	1.00	0.00
C									

ATOM	8307	CD1	ILE	446	10.448	-73.844	33.934	1.00	0.00
C									
ATOM	8308	C	ILE	446	12.205	-73.493	37.208	1.00	0.00
C									
ATOM	8309	O	ILE	446	12.785	-72.706	36.509	1.00	0.00
O									
ATOM	8310	N	GLN	447	11.940	-73.151	38.455	1.00	0.00
N									
ATOM	8311	CA	GLN	447	12.180	-71.857	39.089	1.00	0.00
C									
ATOM	8312	CB	GLN	447	11.606	-71.916	40.535	1.00	0.00
C									
ATOM	8313	CG	GLN	447	10.109	-72.393	40.517	1.00	0.00
C									
ATOM	8314	CD	GLN	447	9.517	-72.621	41.903	1.00	0.00
C									
ATOM	8315	OE1	GLN	447	9.782	-71.881	42.861	1.00	0.00
O									
ATOM	8316	NE2	GLN	447	8.668	-73.613	42.112	1.00	0.00
N									
ATOM	8317	C	GLN	447	13.691	-71.550	39.100	1.00	0.00
C									
ATOM	8318	O	GLN	447	14.102	-70.461	38.731	1.00	0.00
O									
ATOM	8319	N	LEU	448	14.484	-72.570	39.544	1.00	0.00
N									
ATOM	8320	CA	LEU	448	15.990	-72.603	39.608	1.00	0.00
C									
ATOM	8321	CB	LEU	448	16.357	-73.845	40.502	1.00	0.00
C									
ATOM	8322	CG	LEU	448	15.613	-73.969	41.873	1.00	0.00
C									
ATOM	8323	CD1	LEU	448	16.052	-75.197	42.720	1.00	0.00
C									
ATOM	8324	CD2	LEU	448	15.756	-72.697	42.756	1.00	0.00
C									
ATOM	8325	C	LEU	448	16.735	-72.494	38.255	1.00	0.00
C									
ATOM	8326	O	LEU	448	17.890	-71.974	38.220	1.00	0.00
O									
ATOM	8327	N	LEU	449	16.053	-72.830	37.147	1.00	0.00
N									
ATOM	8328	CA	LEU	449	16.638	-72.703	35.850	1.00	0.00
C									
ATOM	8329	CB	LEU	449	15.888	-73.775	34.978	1.00	0.00
C									
ATOM	8330	CG	LEU	449	16.284	-73.911	33.501	1.00	0.00
C									
ATOM	8331	CD1	LEU	449	15.960	-75.290	32.875	1.00	0.00
C									
ATOM	8332	CD2	LEU	449	15.596	-72.887	32.593	1.00	0.00
C									
ATOM	8333	C	LEU	449	16.550	-71.311	35.299	1.00	0.00
C									



ATOM	8334	O	LEU	449	17.545	-70.908	34.686	1.00	0.00
O									
ATOM	8335	N	LYS	450	15.457	-70.617	35.608	1.00	0.00
N									
ATOM	8336	CA	LYS	450	15.143	-69.254	35.257	1.00	0.00
C									
ATOM	8337	CB	LYS	450	13.634	-68.999	35.575	1.00	0.00
C									
ATOM	8338	CG	LYS	450	12.645	-69.761	34.691	1.00	0.00
C									
ATOM	8339	CD	LYS	450	11.240	-69.783	35.233	1.00	0.00
C									
ATOM	8340	CE	LYS	450	10.536	-68.397	35.152	1.00	0.00
C									
ATOM	8341	NZ	LYS	450	9.480	-68.327	36.205	1.00	0.00
N1+									
ATOM	8342	C	LYS	450	15.978	-68.214	35.944	1.00	0.00
C									
ATOM	8343	O	LYS	450	16.216	-67.154	35.365	1.00	0.00
O									
ATOM	8344	N	ILE	451	16.351	-68.516	37.196	1.00	0.00
N									
ATOM	8345	CA	ILE	451	17.273	-67.793	38.157	1.00	0.00
C									
ATOM	8346	CB	ILE	451	17.189	-68.555	39.479	1.00	0.00
C									
ATOM	8347	CG2	ILE	451	18.423	-68.525	40.374	1.00	0.00
C									
ATOM	8348	CG1	ILE	451	16.025	-68.091	40.312	1.00	0.00
C									
ATOM	8349	CD1	ILE	451	15.525	-68.999	41.416	1.00	0.00
C									
ATOM	8350	C	ILE	451	18.711	-67.787	37.607	1.00	0.00
C									
ATOM	8351	O	ILE	451	19.142	-68.694	36.939	1.00	0.00
O									
ATOM	8352	N	GLY	452	19.449	-66.683	37.739	1.00	0.00
N									
ATOM	8353	CA	GLY	452	20.837	-66.581	37.343	1.00	0.00
C									
ATOM	8354	C	GLY	452	21.836	-66.603	38.487	1.00	0.00
C									
ATOM	8355	O	GLY	452	23.017	-66.732	38.243	1.00	0.00
O									
ATOM	8356	N	SER	453	21.368	-66.493	39.694	1.00	0.00
N									
ATOM	8357	CA	SER	453	22.217	-66.421	40.908	1.00	0.00
C									
ATOM	8358	CB	SER	453	21.800	-65.338	41.869	1.00	0.00
C									
ATOM	8359	OG	SER	453	22.292	-65.518	43.174	1.00	0.00
O									
ATOM	8360	C	SER	453	22.301	-67.767	41.573	1.00	0.00
C									

ATOM	8361	O	SER	453	21.206	-68.294	41.958	1.00	0.00
O									
ATOM	8362	N	ALA	454	23.469	-68.382	41.595	1.00	0.00
N									
ATOM	8363	CA	ALA	454	23.732	-69.640	42.371	1.00	0.00
C									
ATOM	8364	CB	ALA	454	25.112	-70.144	42.038	1.00	0.00
C									
ATOM	8365	C	ALA	454	23.499	-69.479	43.883	1.00	0.00
C									
ATOM	8366	O	ALA	454	23.214	-70.495	44.482	1.00	0.00
O									
ATOM	8367	N	ILE	455	23.485	-68.295	44.490	1.00	0.00
N									
ATOM	8368	CA	ILE	455	23.191	-68.214	45.914	1.00	0.00
C									
ATOM	8369	CB	ILE	455	23.420	-66.758	46.510	1.00	0.00
C									
ATOM	8370	CG2	ILE	455	23.152	-66.626	48.012	1.00	0.00
C									
ATOM	8371	CG1	ILE	455	24.854	-66.262	46.236	1.00	0.00
C									
ATOM	8372	CD1	ILE	455	25.985	-67.245	46.531	1.00	0.00
C									
ATOM	8373	C	ILE	455	21.705	-68.667	46.154	1.00	0.00
C									
ATOM	8374	O	ILE	455	21.428	-69.387	47.147	1.00	0.00
O									
ATOM	8375	N	GLN	456	20.799	-68.209	45.251	1.00	0.00
N									
ATOM	8376	CA	GLN	456	19.384	-68.465	45.356	1.00	0.00
C									
ATOM	8377	CB	GLN	456	18.604	-67.741	44.276	1.00	0.00
C									
ATOM	8378	CG	GLN	456	18.455	-66.233	44.653	1.00	0.00
C									
ATOM	8379	CD	GLN	456	17.569	-65.546	43.638	1.00	0.00
C									
ATOM	8380	OE1	GLN	456	16.473	-65.967	43.358	1.00	0.00
O									
ATOM	8381	NE2	GLN	456	17.897	-64.298	43.235	1.00	0.00
N									
ATOM	8382	C	GLN	456	19.222	-69.971	45.139	1.00	0.00
C									
ATOM	8383	O	GLN	456	18.412	-70.579	45.766	1.00	0.00
O									
ATOM	8384	N	ARG	457	19.928	-70.636	44.144	1.00	0.00
N									
ATOM	8385	CA	ARG	457	19.880	-72.143	44.002	1.00	0.00
C									
ATOM	8386	CB	ARG	457	20.765	-72.582	42.746	1.00	0.00
C									
ATOM	8387	CG	ARG	457	20.198	-72.024	41.529	1.00	0.00
C									

ATOM	8388	CD	ARG	457	21.021	-72.481	40.398	1.00	0.00
C									
ATOM	8389	NE	ARG	457	20.771	-71.678	39.211	1.00	0.00
N									
ATOM	8390	CZ	ARG	457	21.695	-71.011	38.552	1.00	0.00
C									
ATOM	8391	NH1	ARG	457	22.971	-71.170	38.807	1.00	0.00
N									
ATOM	8392	NH2	ARG	457	21.437	-70.228	37.584	1.00	0.00
N1+									
ATOM	8393	C	ARG	457	20.304	-72.785	45.277	1.00	0.00
C									
ATOM	8394	O	ARG	457	19.456	-73.428	45.906	1.00	0.00
O									
ATOM	8395	N	LEU	458	21.490	-72.521	45.861	1.00	0.00
N									
ATOM	8396	CA	LEU	458	22.043	-73.289	46.997	1.00	0.00
C									
ATOM	8397	CB	LEU	458	23.463	-72.758	47.381	1.00	0.00
C									
ATOM	8398	CG	LEU	458	24.455	-73.171	46.266	1.00	0.00
C									
ATOM	8399	CD1	LEU	458	25.728	-72.269	46.427	1.00	0.00
C									
ATOM	8400	CD2	LEU	458	24.985	-74.592	46.484	1.00	0.00
C									
ATOM	8401	C	LEU	458	21.138	-73.274	48.218	1.00	0.00
C									
ATOM	8402	O	LEU	458	20.986	-74.257	48.909	1.00	0.00
O									
ATOM	8403	N	ARG	459	20.512	-72.115	48.451	1.00	0.00
N									
ATOM	8404	CA	ARG	459	19.422	-72.005	49.488	1.00	0.00
C									
ATOM	8405	CB	ARG	459	18.897	-70.509	49.596	1.00	0.00
C									
ATOM	8406	CG	ARG	459	19.879	-69.689	50.305	1.00	0.00
C									
ATOM	8407	CD	ARG	459	19.604	-68.189	50.286	1.00	0.00
C									
ATOM	8408	NE	ARG	459	18.338	-67.680	50.827	1.00	0.00
N									
ATOM	8409	CZ	ARG	459	18.026	-67.309	52.070	1.00	0.00
C									
ATOM	8410	NH1	ARG	459	16.855	-66.877	52.411	1.00	0.00
N									
ATOM	8411	NH2	ARG	459	18.944	-67.378	52.979	1.00	0.00
N1+									
ATOM	8412	C	ARG	459	18.223	-72.921	49.367	1.00	0.00
C									
ATOM	8413	O	ARG	459	17.880	-73.504	50.337	1.00	0.00
O									
ATOM	8414	N	CYX	460	17.667	-72.968	48.182	1.00	0.00
N									

ATOM	8415	CA	CYX	460	16.501	-73.774	47.905	1.00	0.00
C									
ATOM	8416	CB	CYX	460	15.739	-73.165	46.766	1.00	0.00
C									
ATOM	8417	SG	CYX	460	14.068	-73.825	46.350	1.00	0.00
S									
ATOM	8418	C	CYX	460	16.855	-75.269	47.795	1.00	0.00
C									
ATOM	8419	O	CYX	460	16.103	-76.126	48.285	1.00	0.00
O									
ATOM	8420	N	GLU	461	17.980	-75.509	47.145	1.00	0.00
N									
ATOM	8421	CA	GLU	461	18.572	-76.907	47.021	1.00	0.00
C									
ATOM	8422	CB	GLU	461	19.707	-76.750	45.984	1.00	0.00
C									
ATOM	8423	CG	GLU	461	19.183	-76.453	44.564	1.00	0.00
C									
ATOM	8424	CD	GLU	461	20.247	-76.470	43.472	1.00	0.00
C									
ATOM	8425	OE1	GLU	461	21.380	-76.027	43.623	1.00	0.00
O									
ATOM	8426	OE2	GLU	461	19.983	-76.768	42.271	1.00	0.00
O1-									
ATOM	8427	C	GLU	461	18.950	-77.498	48.393	1.00	0.00
C									
ATOM	8428	O	GLU	461	18.755	-78.687	48.614	1.00	0.00
O									
ATOM	8429	N	LEU	462	19.336	-76.682	49.377	1.00	0.00
N									
ATOM	8430	CA	LEU	462	19.371	-77.176	50.800	1.00	0.00
C									
ATOM	8431	CB	LEU	462	19.996	-76.115	51.670	1.00	0.00
C									
ATOM	8432	CG	LEU	462	20.024	-76.390	53.221	1.00	0.00
C									
ATOM	8433	CD1	LEU	462	20.596	-77.716	53.682	1.00	0.00
C									
ATOM	8434	CD2	LEU	462	20.761	-75.323	54.016	1.00	0.00
C									
ATOM	8435	C	LEU	462	17.978	-77.440	51.356	1.00	0.00
C									
ATOM	8436	O	LEU	462	17.790	-78.462	52.041	1.00	0.00
O									
ATOM	8437	N	ASP	463	17.014	-76.630	51.036	1.00	0.00
N									
ATOM	8438	CA	ASP	463	15.645	-76.842	51.520	1.00	0.00
C									
ATOM	8439	CB	ASP	463	14.681	-75.655	51.250	1.00	0.00
C									
ATOM	8440	CG	ASP	463	13.405	-75.695	52.022	1.00	0.00
C									
ATOM	8441	OD1	ASP	463	12.412	-75.333	51.410	1.00	0.00
O									

ATOM	8442	OD2	ASP	463	13.348	-76.193	53.184	1.00	0.00
O1-									
ATOM	8443	C	ASP	463	15.211	-78.261	51.041	1.00	0.00
C									
ATOM	8444	O	ASP	463	14.711	-79.086	51.793	1.00	0.00
O									
ATOM	8445	N	ILE	464	15.300	-78.610	49.793	1.00	0.00
N									
ATOM	8446	CA	ILE	464	14.912	-79.856	49.130	1.00	0.00
C									
ATOM	8447	CB	ILE	464	15.187	-79.683	47.619	1.00	0.00
C									
ATOM	8448	CG2	ILE	464	14.813	-80.990	46.914	1.00	0.00
C									
ATOM	8449	CG1	ILE	464	14.330	-78.544	47.062	1.00	0.00
C									
ATOM	8450	CD1	ILE	464	14.821	-77.985	45.721	1.00	0.00
C									
ATOM	8451	C	ILE	464	15.737	-81.037	49.821	1.00	0.00
C									
ATOM	8452	O	ILE	464	15.254	-82.167	49.817	1.00	0.00
O									
ATOM	8453	N	MET	465	17.024	-80.832	50.227	1.00	0.00
N									
ATOM	8454	CA	MET	465	17.685	-81.792	51.036	1.00	0.00
C									
ATOM	8455	CB	MET	465	19.175	-81.524	51.175	1.00	0.00
C									
ATOM	8456	CG	MET	465	19.869	-81.801	49.824	1.00	0.00
C									
ATOM	8457	SD	MET	465	21.579	-82.408	49.707	1.00	0.00
S									
ATOM	8458	CE	MET	465	21.955	-81.746	48.125	1.00	0.00
C									
ATOM	8459	C	MET	465	17.085	-82.035	52.421	1.00	0.00
C									
ATOM	8460	O	MET	465	17.430	-83.022	53.073	1.00	0.00
O									
ATOM	8461	N	ASN	466	16.208	-81.104	52.860	1.00	0.00
N									
ATOM	8462	CA	ASN	466	15.597	-81.366	54.123	1.00	0.00
C									
ATOM	8463	CB	ASN	466	15.208	-80.057	54.927	1.00	0.00
C									
ATOM	8464	CG	ASN	466	16.367	-79.371	55.611	1.00	0.00
C									
ATOM	8465	OD1	ASN	466	16.567	-79.485	56.783	1.00	0.00
O									
ATOM	8466	ND2	ASN	466	17.152	-78.590	54.874	1.00	0.00
N									
ATOM	8467	C	ASN	466	14.304	-82.103	53.792	1.00	0.00
C									
ATOM	8468	O	ASN	466	13.972	-83.027	54.541	1.00	0.00
O									

ATOM	8469	N	LYS	467	13.549	-81.764	52.736	1.00	0.00
N									
ATOM	8470	CA	LYS	467	12.328	-82.410	52.306	1.00	0.00
C									
ATOM	8471	CB	LYS	467	11.449	-81.606	51.252	1.00	0.00
C									
ATOM	8472	CG	LYS	467	10.961	-80.257	51.752	1.00	0.00
C									
ATOM	8473	CD	LYS	467	9.746	-79.670	51.078	1.00	0.00
C									
ATOM	8474	CE	LYS	467	9.333	-78.325	51.714	1.00	0.00
C									
ATOM	8475	NZ	LYS	467	10.430	-77.302	51.772	1.00	0.00
N1+									
ATOM	8476	C	LYS	467	12.556	-83.871	51.770	1.00	0.00
C									
ATOM	8477	O	LYS	467	11.724	-84.778	51.919	1.00	0.00
O									
ATOM	8478	N	CYS	468	13.846	-84.216	51.462	1.00	0.00
N									
ATOM	8479	CA	CYS	468	14.266	-85.571	51.110	1.00	0.00
C									
ATOM	8480	CB	CYS	468	15.694	-85.558	50.616	1.00	0.00
C									
ATOM	8481	SG	CYS	468	15.835	-85.087	48.901	1.00	0.00
S									
ATOM	8482	C	CYS	468	14.149	-86.507	52.365	1.00	0.00
C									
ATOM	8483	O	CYS	468	13.928	-87.670	52.185	1.00	0.00
O									
ATOM	8484	N	THR	469	14.124	-85.984	53.622	1.00	0.00
N									
ATOM	8485	CA	THR	469	13.775	-86.797	54.804	1.00	0.00
C									
ATOM	8486	CB	THR	469	13.881	-85.880	56.041	1.00	0.00
C									
ATOM	8487	CG2	THR	469	13.664	-86.539	57.436	1.00	0.00
C									
ATOM	8488	OG1	THR	469	15.167	-85.400	56.006	1.00	0.00
O									
ATOM	8489	C	THR	469	12.279	-87.334	54.753	1.00	0.00
C									
ATOM	8490	O	THR	469	11.942	-88.266	55.480	1.00	0.00
O									
ATOM	8491	N	SER	470	11.377	-86.799	53.854	1.00	0.00
N									
ATOM	8492	CA	SER	470	9.985	-87.216	53.696	1.00	0.00
C									
ATOM	8493	CB	SER	470	8.918	-86.457	54.510	1.00	0.00
C									
ATOM	8494	OG	SER	470	9.411	-86.156	55.851	1.00	0.00
O									
ATOM	8495	C	SER	470	9.615	-87.230	52.194	1.00	0.00
C									

ATOM	8496	O	SER	470	8.967	-86.298	51.675	1.00	0.00
O									
ATOM	8497	N	LEU	471	10.086	-88.221	51.421	1.00	0.00
N									
ATOM	8498	CA	LEU	471	9.823	-88.460	50.023	1.00	0.00
C									
ATOM	8499	CB	LEU	471	11.066	-89.112	49.379	1.00	0.00
C									
ATOM	8500	CG	LEU	471	12.150	-88.067	49.224	1.00	0.00
C									
ATOM	8501	CD1	LEU	471	13.574	-88.688	49.109	1.00	0.00
C									
ATOM	8502	CD2	LEU	471	11.871	-87.222	48.024	1.00	0.00
C									
ATOM	8503	C	LEU	471	8.653	-89.399	49.769	1.00	0.00
C									
ATOM	8504	O	LEU	471	8.747	-90.532	50.175	1.00	0.00
O									
ATOM	8505	N	CYS	472	7.591	-88.905	49.127	1.00	0.00
N									
ATOM	8506	CA	CYS	472	6.308	-89.609	49.026	1.00	0.00
C									
ATOM	8507	CB	CYS	472	5.206	-88.517	49.250	1.00	0.00
C									
ATOM	8508	SG	CYS	472	5.190	-87.921	50.950	1.00	0.00
S									
ATOM	8509	C	CYS	472	6.050	-90.177	47.629	1.00	0.00
C									
ATOM	8510	O	CYS	472	6.878	-90.019	46.725	1.00	0.00
O									
ATOM	8511	N	CYM	473	4.844	-90.754	47.496	1.00	0.00
N									
ATOM	8512	CA	CYM	473	4.236	-90.845	46.194	1.00	0.00
C									
ATOM	8513	CB	CYM	473	3.108	-91.997	46.367	1.00	0.00
C									
ATOM	8514	SG	CYM	473	2.056	-91.987	44.955	1.00	0.00
S									
ATOM	8515	C	CYM	473	3.573	-89.450	45.686	1.00	0.00
C									
ATOM	8516	O	CYM	473	2.920	-88.777	46.544	1.00	0.00
O									
ATOM	8517	N	LYS	474	3.717	-89.101	44.406	1.00	0.00
N									
ATOM	8518	CA	LYS	474	3.238	-87.795	43.896	1.00	0.00
C									
ATOM	8519	CB	LYS	474	3.990	-87.430	42.599	1.00	0.00
C									
ATOM	8520	CG	LYS	474	3.753	-85.970	42.129	1.00	0.00
C									
ATOM	8521	CD	LYS	474	4.630	-85.469	40.974	1.00	0.00
C									
ATOM	8522	CE	LYS	474	4.170	-84.166	40.356	1.00	0.00
C									

ATOM	8523	NZ	LYS	474	4.239	-82.930	41.129	1.00	0.00
N1+									
ATOM	8524	C	LYS	474	1.733	-87.638	43.815	1.00	0.00
C									
ATOM	8525	O	LYS	474	1.188	-86.549	44.029	1.00	0.00
O									
ATOM	8526	N	GLN	475	1.096	-88.797	43.516	1.00	0.00
N									
ATOM	8527	CA	GLN	475	-0.362	-88.957	43.399	1.00	0.00
C									
ATOM	8528	CB	GLN	475	-0.631	-90.324	42.815	1.00	0.00
C									
ATOM	8529	CG	GLN	475	-2.022	-90.657	42.391	1.00	0.00
C									
ATOM	8530	CD	GLN	475	-2.485	-90.027	41.101	1.00	0.00
C									
ATOM	8531	OE1	GLN	475	-2.028	-89.060	40.523	1.00	0.00
O									
ATOM	8532	NE2	GLN	475	-3.624	-90.546	40.507	1.00	0.00
N									
ATOM	8533	C	GLN	475	-1.037	-88.879	44.823	1.00	0.00
C									
ATOM	8534	O	GLN	475	-2.044	-88.223	44.935	1.00	0.00
O									
ATOM	8535	N	CYM	476	-0.333	-89.411	45.866	1.00	0.00
N									
ATOM	8536	CA	CYM	476	-0.815	-89.449	47.230	1.00	0.00
C									
ATOM	8537	CB	CYM	476	-0.443	-90.781	47.935	1.00	0.00
C									
ATOM	8538	SG	CYM	476	-0.974	-92.180	46.884	1.00	0.00
S									
ATOM	8539	C	CYM	476	-0.516	-88.169	48.084	1.00	0.00
C									
ATOM	8540	O	CYM	476	-1.406	-87.631	48.649	1.00	0.00
O									
ATOM	8541	N	GLN	477	0.748	-87.871	48.196	1.00	0.00
N									
ATOM	8542	CA	GLN	477	1.350	-86.895	49.143	1.00	0.00
C									
ATOM	8543	CB	GLN	477	0.889	-85.456	48.973	1.00	0.00
C									
ATOM	8544	CG	GLN	477	1.090	-84.904	47.595	1.00	0.00
C									
ATOM	8545	CD	GLN	477	-0.177	-84.592	46.874	1.00	0.00
C									
ATOM	8546	OE1	GLN	477	-1.149	-84.081	47.442	1.00	0.00
O									
ATOM	8547	NE2	GLN	477	-0.334	-84.785	45.570	1.00	0.00
N									
ATOM	8548	C	GLN	477	1.305	-87.241	50.685	1.00	0.00
C									
ATOM	8549	O	GLN	477	1.948	-86.554	51.457	1.00	0.00
O									



ATOM	8550	N	GLU	478	0.457	-88.234	51.099	1.00	0.00
N									
ATOM	8551	CA	GLU	478	0.015	-88.327	52.540	1.00	0.00
C									
ATOM	8552	CB	GLU	478	-1.496	-88.712	52.514	1.00	0.00
C									
ATOM	8553	CG	GLU	478	-1.924	-90.119	51.993	1.00	0.00
C									
ATOM	8554	CD	GLU	478	-3.434	-90.240	52.080	1.00	0.00
C									
ATOM	8555	OE1	GLU	478	-4.149	-89.928	51.084	1.00	0.00
O									
ATOM	8556	OE2	GLU	478	-3.867	-90.710	53.146	1.00	0.00
O1-									
ATOM	8557	C	GLU	478	0.850	-89.170	53.446	1.00	0.00
C									
ATOM	8558	O	GLU	478	0.595	-89.094	54.597	1.00	0.00
O									
ATOM	8559	N	THR	479	1.874	-89.899	52.984	1.00	0.00
N									
ATOM	8560	CA	THR	479	2.852	-90.685	53.812	1.00	0.00
C									
ATOM	8561	CB	THR	479	2.388	-92.069	54.202	1.00	0.00
C									
ATOM	8562	CG2	THR	479	2.610	-93.271	53.178	1.00	0.00
C									
ATOM	8563	OG1	THR	479	3.199	-92.500	55.259	1.00	0.00
O									
ATOM	8564	C	THR	479	4.203	-90.896	53.146	1.00	0.00
C									
ATOM	8565	O	THR	479	4.289	-90.840	51.886	1.00	0.00
O									
ATOM	8566	N	GLU	480	5.278	-91.030	53.939	1.00	0.00
N									
ATOM	8567	CA	GLU	480	6.642	-91.091	53.387	1.00	0.00
C									
ATOM	8568	CB	GLU	480	7.663	-90.512	54.390	1.00	0.00
C									
ATOM	8569	CG	GLU	480	7.980	-91.275	55.697	1.00	0.00
C									
ATOM	8570	CD	GLU	480	6.768	-91.264	56.717	1.00	0.00
C									
ATOM	8571	OE1	GLU	480	6.044	-90.243	56.850	1.00	0.00
O									
ATOM	8572	OE2	GLU	480	6.594	-92.270	57.438	1.00	0.00
O1-									
ATOM	8573	C	GLU	480	7.037	-92.466	52.858	1.00	0.00
C									
ATOM	8574	O	GLU	480	7.047	-93.458	53.535	1.00	0.00
O									
ATOM	8575	N	ILE	481	7.358	-92.520	51.539	1.00	0.00
N									
ATOM	8576	CA	ILE	481	7.845	-93.677	50.757	1.00	0.00
C									

ATOM	8577	CB	ILE	481	7.647	-93.552	49.239	1.00	0.00
C									
ATOM	8578	CG2	ILE	481	8.118	-94.921	48.666	1.00	0.00
C									
ATOM	8579	CG1	ILE	481	6.169	-93.283	48.764	1.00	0.00
C									
ATOM	8580	CD1	ILE	481	5.062	-94.266	49.076	1.00	0.00
C									
ATOM	8581	C	ILE	481	9.252	-94.040	51.184	1.00	0.00
C									
ATOM	8582	O	ILE	481	9.560	-95.166	51.541	1.00	0.00
O									
ATOM	8583	N	THR	482	10.194	-93.070	51.257	1.00	0.00
N									
ATOM	8584	CA	THR	482	11.516	-93.346	51.849	1.00	0.00
C									
ATOM	8585	CB	THR	482	12.470	-93.922	50.729	1.00	0.00
C									
ATOM	8586	CG2	THR	482	12.564	-92.836	49.605	1.00	0.00
C									
ATOM	8587	OG1	THR	482	13.720	-94.238	51.198	1.00	0.00
O									
ATOM	8588	C	THR	482	12.047	-91.991	52.460	1.00	0.00
C									
ATOM	8589	O	THR	482	11.334	-90.950	52.458	1.00	0.00
O									
ATOM	8590	N	THR	483	13.253	-92.115	53.022	1.00	0.00
N									
ATOM	8591	CA	THR	483	13.963	-91.074	53.737	1.00	0.00
C									
ATOM	8592	CB	THR	483	13.559	-91.095	55.223	1.00	0.00
C									
ATOM	8593	CG2	THR	483	14.108	-92.355	56.013	1.00	0.00
C									
ATOM	8594	OG1	THR	483	13.908	-89.854	55.861	1.00	0.00
O									
ATOM	8595	C	THR	483	15.449	-91.133	53.603	1.00	0.00
C									
ATOM	8596	O	THR	483	16.023	-92.129	53.307	1.00	0.00
O									
ATOM	8597	N	LYS	484	16.103	-90.004	53.927	1.00	0.00
N									
ATOM	8598	CA	LYS	484	17.531	-89.785	53.629	1.00	0.00
C									
ATOM	8599	CB	LYS	484	17.765	-88.316	54.016	1.00	0.00
C									
ATOM	8600	CG	LYS	484	17.798	-88.052	55.519	1.00	0.00
C									
ATOM	8601	CD	LYS	484	18.181	-86.605	55.809	1.00	0.00
C									
ATOM	8602	CE	LYS	484	17.887	-86.330	57.224	1.00	0.00
C									
ATOM	8603	NZ	LYS	484	18.436	-85.021	57.597	1.00	0.00
N1+									

ATOM	8604	C	LYS	484	18.481	-90.788	54.333	1.00	0.00
C									
ATOM	8605	O	LYS	484	19.491	-91.108	53.734	1.00	0.00
O									
ATOM	8606	N	ASN	485	18.091	-91.374	55.482	1.00	0.00
N									
ATOM	8607	CA	ASN	485	18.652	-92.492	56.187	1.00	0.00
C									
ATOM	8608	CB	ASN	485	17.829	-92.708	57.506	1.00	0.00
C									
ATOM	8609	CG	ASN	485	17.880	-91.347	58.252	1.00	0.00
C									
ATOM	8610	OD1	ASN	485	17.153	-90.418	57.987	1.00	0.00
O									
ATOM	8611	ND2	ASN	485	18.738	-91.315	59.212	1.00	0.00
N									
ATOM	8612	C	ASN	485	18.701	-93.775	55.307	1.00	0.00
C									
ATOM	8613	O	ASN	485	19.547	-94.636	55.502	1.00	0.00
O									
ATOM	8614	N	GLU	486	17.903	-93.947	54.238	1.00	0.00
N									
ATOM	8615	CA	GLU	486	17.840	-95.126	53.368	1.00	0.00
C									
ATOM	8616	CB	GLU	486	16.453	-95.493	53.150	1.00	0.00
C									
ATOM	8617	CG	GLU	486	15.713	-95.663	54.469	1.00	0.00
C									
ATOM	8618	CD	GLU	486	16.390	-96.669	55.452	1.00	0.00
C									
ATOM	8619	OE1	GLU	486	16.886	-97.735	54.914	1.00	0.00
O									
ATOM	8620	OE2	GLU	486	16.320	-96.413	56.688	1.00	0.00
O1-									
ATOM	8621	C	GLU	486	18.528	-95.041	52.017	1.00	0.00
C									
ATOM	8622	O	GLU	486	18.681	-96.039	51.271	1.00	0.00
O									
ATOM	8623	N	ILE	487	18.842	-93.784	51.620	1.00	0.00
N									
ATOM	8624	CA	ILE	487	19.484	-93.422	50.370	1.00	0.00
C									
ATOM	8625	CB	ILE	487	19.386	-91.929	50.126	1.00	0.00
C									
ATOM	8626	CG2	ILE	487	19.923	-91.644	48.710	1.00	0.00
C									
ATOM	8627	CG1	ILE	487	17.824	-91.540	50.337	1.00	0.00
C									
ATOM	8628	CD1	ILE	487	17.468	-90.119	49.842	1.00	0.00
C									
ATOM	8629	C	ILE	487	20.920	-93.921	50.287	1.00	0.00
C									
ATOM	8630	O	ILE	487	21.624	-93.526	51.176	1.00	0.00
O									

ATOM	8631	N	PHE	488	21.315	-94.550	49.186	1.00	0.00
N									
ATOM	8632	CA	PHE	488	22.680	-95.044	48.954	1.00	0.00
C									
ATOM	8633	CB	PHE	488	22.787	-96.440	49.624	1.00	0.00
C									
ATOM	8634	CG	PHE	488	22.455	-97.658	48.751	1.00	0.00
C									
ATOM	8635	CD1	PHE	488	21.129	-97.975	48.317	1.00	0.00
C									
ATOM	8636	CE1	PHE	488	20.886	-99.088	47.486	1.00	0.00
C									
ATOM	8637	CZ	PHE	488	21.868	-99.890	47.024	1.00	0.00
C									
ATOM	8638	CE2	PHE	488	23.216	-99.612	47.476	1.00	0.00
C									
ATOM	8639	CD2	PHE	488	23.529	-98.462	48.325	1.00	0.00
C									
ATOM	8640	C	PHE	488	23.052	-94.998	47.513	1.00	0.00
C									
ATOM	8641	O	PHE	488	22.209	-95.004	46.607	1.00	0.00
O									
ATOM	8642	N	SER	489	24.332	-94.959	47.289	1.00	0.00
N									
ATOM	8643	CA	SER	489	25.116	-94.943	46.058	1.00	0.00
C									
ATOM	8644	CB	SER	489	26.317	-93.956	46.258	1.00	0.00
C									
ATOM	8645	OG	SER	489	26.039	-92.758	46.944	1.00	0.00
O									
ATOM	8646	C	SER	489	25.575	-96.348	45.603	1.00	0.00
C									
ATOM	8647	O	SER	489	26.675	-96.739	45.826	1.00	0.00
O									
ATOM	8648	N	LEU	490	24.751	-97.062	44.802	1.00	0.00
N									
ATOM	8649	CA	LEU	490	25.239	-98.250	44.000	1.00	0.00
C									
ATOM	8650	CB	LEU	490	24.030	-99.114	43.791	1.00	0.00
C									
ATOM	8651	CG	LEU	490	24.439	-100.528	43.318	1.00	0.00
C									
ATOM	8652	CD1	LEU	490	25.525	-101.210	44.145	1.00	0.00
C									
ATOM	8653	CD2	LEU	490	23.129	-101.343	43.500	1.00	0.00
C									
ATOM	8654	C	LEU	490	25.881	-97.914	42.593	1.00	0.00
C									
ATOM	8655	O	LEU	490	26.431	-98.734	41.949	1.00	0.00
O									
ATOM	8656	N	SER	491	25.750	-96.614	42.155	1.00	0.00
N									
ATOM	8657	CA	SER	491	26.383	-95.971	40.952	1.00	0.00
C									

ATOM	8658	CB	SER	491	25.308	-95.215	40.260	1.00	0.00
C									
ATOM	8659	OG	SER	491	25.834	-94.739	39.063	1.00	0.00
O									
ATOM	8660	C	SER	491	27.433	-94.961	41.429	1.00	0.00
C									
ATOM	8661	O	SER	491	27.146	-94.235	42.397	1.00	0.00
O									
ATOM	8662	N	LEU	492	28.616	-94.903	40.824	1.00	0.00
N									
ATOM	8663	CA	LEU	492	29.727	-94.000	41.104	1.00	0.00
C									
ATOM	8664	CB	LEU	492	30.858	-94.414	40.144	1.00	0.00
C									
ATOM	8665	CG	LEU	492	32.119	-93.502	40.118	1.00	0.00
C									
ATOM	8666	CD1	LEU	492	32.963	-93.579	41.414	1.00	0.00
C									
ATOM	8667	CD2	LEU	492	33.033	-93.790	38.941	1.00	0.00
C									
ATOM	8668	C	LEU	492	29.451	-92.522	41.150	1.00	0.00
C									
ATOM	8669	O	LEU	492	30.099	-91.644	41.714	1.00	0.00
O									
ATOM	8670	N	CYS	493	28.296	-92.126	40.589	1.00	0.00
N									
ATOM	8671	CA	CYS	493	27.846	-90.744	40.627	1.00	0.00
C									
ATOM	8672	CB	CYS	493	26.675	-90.607	39.662	1.00	0.00
C									
ATOM	8673	SG	CYS	493	25.269	-91.769	39.801	1.00	0.00
S									
ATOM	8674	C	CYS	493	27.280	-90.317	42.002	1.00	0.00
C									
ATOM	8675	O	CYS	493	27.168	-89.117	42.290	1.00	0.00
O									
ATOM	8676	N	GLY	494	26.736	-91.260	42.784	1.00	0.00
N									
ATOM	8677	CA	GLY	494	25.897	-91.053	43.895	1.00	0.00
C									
ATOM	8678	C	GLY	494	24.574	-91.715	43.816	1.00	0.00
C									
ATOM	8679	O	GLY	494	24.419	-92.578	42.948	1.00	0.00
O									
ATOM	8680	N	PRO	495	23.657	-91.257	44.724	1.00	0.00
N									
ATOM	8681	CD	PRO	495	23.899	-90.563	46.010	1.00	0.00
C									
ATOM	8682	CG	PRO	495	22.844	-91.202	46.937	1.00	0.00
C									
ATOM	8683	CB	PRO	495	21.667	-91.570	45.998	1.00	0.00
C									
ATOM	8684	CA	PRO	495	22.369	-92.001	44.729	1.00	0.00
C									

ATOM	8685	C	PRO	495	21.474	-91.839	43.563	1.00	0.00
C									
ATOM	8686	O	PRO	495	20.494	-92.555	43.454	1.00	0.00
O									
ATOM	8687	N	MET	496	21.740	-90.796	42.749	1.00	0.00
N									
ATOM	8688	CA	MET	496	20.791	-90.465	41.676	1.00	0.00
C									
ATOM	8689	CB	MET	496	19.841	-89.466	42.356	1.00	0.00
C									
ATOM	8690	CG	MET	496	18.498	-89.483	41.606	1.00	0.00
C									
ATOM	8691	SD	MET	496	17.575	-87.951	41.888	1.00	0.00
S									
ATOM	8692	CE	MET	496	18.153	-86.807	40.558	1.00	0.00
C									
ATOM	8693	C	MET	496	21.326	-89.954	40.343	1.00	0.00
C									
ATOM	8694	O	MET	496	22.198	-89.119	40.344	1.00	0.00
O									
ATOM	8695	N	ALA	497	20.769	-90.396	39.230	1.00	0.00
N									
ATOM	8696	CA	ALA	497	21.149	-90.021	37.927	1.00	0.00
C									
ATOM	8697	CB	ALA	497	22.330	-90.881	37.480	1.00	0.00
C									
ATOM	8698	C	ALA	497	19.996	-90.318	36.936	1.00	0.00
C									
ATOM	8699	O	ALA	497	18.937	-90.891	37.303	1.00	0.00
O									
ATOM	8700	N	ALA	498	20.049	-89.876	35.707	1.00	0.00
N									
ATOM	8701	CA	ALA	498	19.061	-90.213	34.638	1.00	0.00
C									
ATOM	8702	CB	ALA	498	19.158	-89.218	33.436	1.00	0.00
C									
ATOM	8703	C	ALA	498	19.283	-91.665	34.232	1.00	0.00
C									
ATOM	8704	O	ALA	498	20.449	-92.158	34.140	1.00	0.00
O									
ATOM	8705	N	TYR	499	18.207	-92.363	33.924	1.00	0.00
N									
ATOM	8706	CA	TYR	499	18.201	-93.782	33.406	1.00	0.00
C									
ATOM	8707	CB	TYR	499	17.988	-94.745	34.622	1.00	0.00
C									
ATOM	8708	CG	TYR	499	19.148	-94.963	35.624	1.00	0.00
C									
ATOM	8709	CD1	TYR	499	19.963	-96.108	35.633	1.00	0.00
C									
ATOM	8710	CE1	TYR	499	20.878	-96.286	36.650	1.00	0.00
C									
ATOM	8711	CZ	TYR	499	20.981	-95.354	37.700	1.00	0.00
C									

ATOM	8712	OH	TYR	499	21.858	-95.637	38.743	1.00	0.00
O									
ATOM	8713	CE2	TYR	499	20.198	-94.195	37.724	1.00	0.00
C									
ATOM	8714	CD2	TYR	499	19.261	-94.041	36.713	1.00	0.00
C									
ATOM	8715	C	TYR	499	17.087	-94.085	32.378	1.00	0.00
C									
ATOM	8716	O	TYR	499	16.023	-93.600	32.527	1.00	0.00
O									
ATOM	8717	N	VAL	500	17.343	-94.967	31.409	1.00	0.00
N									
ATOM	8718	CA	VAL	500	16.432	-95.134	30.233	1.00	0.00
C									
ATOM	8719	CB	VAL	500	17.073	-94.739	28.867	1.00	0.00
C									
ATOM	8720	CG1	VAL	500	18.182	-95.701	28.459	1.00	0.00
C									
ATOM	8721	CG2	VAL	500	16.049	-94.439	27.804	1.00	0.00
C									
ATOM	8722	C	VAL	500	15.965	-96.641	30.044	1.00	0.00
C									
ATOM	8723	O	VAL	500	16.683	-97.503	30.522	1.00	0.00
O									
ATOM	8724	N	ASN	501	14.760	-96.893	29.589	1.00	0.00
N									
ATOM	8725	CA	ASN	501	14.272	-98.208	29.407	1.00	0.00
C									
ATOM	8726	CB	ASN	501	12.916	-98.234	30.191	1.00	0.00
C									
ATOM	8727	CG	ASN	501	11.638	-98.157	29.366	1.00	0.00
C									
ATOM	8728	OD1	ASN	501	11.582	-97.532	28.340	1.00	0.00
O									
ATOM	8729	ND2	ASN	501	10.668	-98.867	29.785	1.00	0.00
N									
ATOM	8730	C	ASN	501	14.283	-98.524	27.894	1.00	0.00
C									
ATOM	8731	O	ASN	501	14.493	-97.623	27.133	1.00	0.00
O									
ATOM	8732	N	PRO	502	14.019	-99.770	27.391	1.00	0.00
N									
ATOM	8733	CD	PRO	502	13.729	-100.896	28.252	1.00	0.00
C									
ATOM	8734	CG	PRO	502	14.131	-102.075	27.383	1.00	0.00
C									
ATOM	8735	CB	PRO	502	13.692	-101.551	26.030	1.00	0.00
C									
ATOM	8736	CA	PRO	502	14.145	-100.142	26.000	1.00	0.00
C									
ATOM	8737	C	PRO	502	13.246	-99.342	25.008	1.00	0.00
C									
ATOM	8738	O	PRO	502	13.597	-99.254	23.851	1.00	0.00
O									

ATOM	8739	N	HIE	503	12.155	-98.822	25.493	1.00	0.00
N									
ATOM	8740	CA	HIE	503	11.285	-97.922	24.680	1.00	0.00
C									
ATOM	8741	CB	HIE	503	9.843	-98.267	24.887	1.00	0.00
C									
ATOM	8742	CG	HIE	503	9.543	-99.677	24.394	1.00	0.00
C									
ATOM	8743	ND1	HIE	503	9.290	-100.062	23.101	1.00	0.00
N									
ATOM	8744	CE1	HIE	503	9.469	-101.402	23.074	1.00	0.00
C									
ATOM	8745	NE2	HIE	503	9.726	-101.865	24.337	1.00	0.00
N									
ATOM	8746	CD2	HIE	503	9.773	-100.753	25.171	1.00	0.00
C									
ATOM	8747	C	HIE	503	11.478	-96.385	24.786	1.00	0.00
C									
ATOM	8748	O	HIE	503	10.698	-95.589	24.279	1.00	0.00
O									
ATOM	8749	N	GLY	504	12.535	-95.979	25.423	1.00	0.00
N									
ATOM	8750	CA	GLY	504	13.167	-94.656	25.329	1.00	0.00
C									
ATOM	8751	C	GLY	504	12.592	-93.674	26.369	1.00	0.00
C									
ATOM	8752	O	GLY	504	13.115	-92.581	26.430	1.00	0.00
O									
ATOM	8753	N	TYR	505	11.609	-94.093	27.142	1.00	0.00
N									
ATOM	8754	CA	TYR	505	11.240	-93.362	28.412	1.00	0.00
C									
ATOM	8755	CB	TYR	505	10.127	-94.147	29.076	1.00	0.00
C									
ATOM	8756	CG	TYR	505	8.891	-94.326	28.186	1.00	0.00
C									
ATOM	8757	CD1	TYR	505	8.744	-95.458	27.427	1.00	0.00
C									
ATOM	8758	CE1	TYR	505	7.697	-95.522	26.497	1.00	0.00
C									
ATOM	8759	CZ	TYR	505	6.768	-94.435	26.335	1.00	0.00
C									
ATOM	8760	OH	TYR	505	5.620	-94.446	25.511	1.00	0.00
O									
ATOM	8761	CE2	TYR	505	6.936	-93.312	27.134	1.00	0.00
C									
ATOM	8762	CD2	TYR	505	8.011	-93.256	28.062	1.00	0.00
C									
ATOM	8763	C	TYR	505	12.433	-93.214	29.424	1.00	0.00
C									
ATOM	8764	O	TYR	505	12.962	-94.233	29.814	1.00	0.00
O									
ATOM	8765	N	VAL	506	12.807	-92.035	29.716	1.00	0.00
N									



ATOM	8766	CA	VAL	506	13.819	-91.635	30.720	1.00	0.00
C									
ATOM	8767	CB	VAL	506	14.957	-90.952	29.980	1.00	0.00
C									
ATOM	8768	CG1	VAL	506	14.722	-89.568	29.223	1.00	0.00
C									
ATOM	8769	CG2	VAL	506	16.153	-90.626	30.886	1.00	0.00
C									
ATOM	8770	C	VAL	506	13.288	-90.766	31.825	1.00	0.00
C									
ATOM	8771	O	VAL	506	12.350	-90.056	31.573	1.00	0.00
O									
ATOM	8772	N	HIP	507	13.820	-90.911	33.005	1.00	0.00
N									
ATOM	8773	CA	HIP	507	13.678	-90.056	34.182	1.00	0.00
C									
ATOM	8774	CB	HIP	507	12.494	-90.640	34.900	1.00	0.00
C									
ATOM	8775	CG	HIP	507	11.304	-91.089	34.179	1.00	0.00
C									
ATOM	8776	ND1	HIP	507	10.302	-90.287	33.625	1.00	0.00
N1+									
ATOM	8777	CE1	HIP	507	9.276	-91.061	33.239	1.00	0.00
C									
ATOM	8778	NE2	HIP	507	9.570	-92.283	33.583	1.00	0.00
N									
ATOM	8779	CD2	HIP	507	10.826	-92.340	34.091	1.00	0.00
C									
ATOM	8780	C	HIP	507	14.944	-90.175	35.003	1.00	0.00
C									
ATOM	8781	O	HIP	507	15.825	-90.989	34.708	1.00	0.00
O									
ATOM	8782	N	GLU	508	15.020	-89.520	36.091	1.00	0.00
N									
ATOM	8783	CA	GLU	508	15.950	-89.949	37.157	1.00	0.00
C									
ATOM	8784	CB	GLU	508	16.550	-88.739	37.811	1.00	0.00
C									
ATOM	8785	CG	GLU	508	17.444	-87.831	36.915	1.00	0.00
C									
ATOM	8786	CD	GLU	508	16.750	-86.413	36.841	1.00	0.00
C									
ATOM	8787	OE1	GLU	508	17.243	-85.382	37.244	1.00	0.00
O									
ATOM	8788	OE2	GLU	508	15.509	-86.455	36.571	1.00	0.00
O1-									
ATOM	8789	C	GLU	508	15.408	-91.070	38.084	1.00	0.00
C									
ATOM	8790	O	GLU	508	14.311	-90.954	38.588	1.00	0.00
O									
ATOM	8791	N	THR	509	16.286	-92.101	38.229	1.00	0.00
N									
ATOM	8792	CA	THR	509	16.103	-93.096	39.358	1.00	0.00
C									

ATOM	8793	CB	THR	509	16.595	-94.451	38.897	1.00	0.00
C									
ATOM	8794	CG2	THR	509	16.483	-95.650	39.796	1.00	0.00
C									
ATOM	8795	OG1	THR	509	16.005	-94.821	37.729	1.00	0.00
O									
ATOM	8796	C	THR	509	16.971	-92.844	40.600	1.00	0.00
C									
ATOM	8797	O	THR	509	18.147	-92.474	40.478	1.00	0.00
O									
ATOM	8798	N	LEU	510	16.456	-93.059	41.809	1.00	0.00
N									
ATOM	8799	CA	LEU	510	17.123	-92.965	43.153	1.00	0.00
C									
ATOM	8800	CB	LEU	510	16.198	-92.125	44.028	1.00	0.00
C									
ATOM	8801	CG	LEU	510	16.762	-91.879	45.445	1.00	0.00
C									
ATOM	8802	CD1	LEU	510	17.981	-91.015	45.336	1.00	0.00
C									
ATOM	8803	CD2	LEU	510	15.778	-91.192	46.370	1.00	0.00
C									
ATOM	8804	C	LEU	510	17.303	-94.368	43.701	1.00	0.00
C									
ATOM	8805	O	LEU	510	16.321	-95.119	43.764	1.00	0.00
O									
ATOM	8806	N	THR	511	18.492	-94.788	44.090	1.00	0.00
N									
ATOM	8807	CA	THR	511	18.690	-96.058	44.738	1.00	0.00
C									
ATOM	8808	CB	THR	511	20.110	-96.548	44.497	1.00	0.00
C									
ATOM	8809	CG2	THR	511	20.314	-97.286	43.191	1.00	0.00
C									
ATOM	8810	OG1	THR	511	20.976	-95.507	44.338	1.00	0.00
O									
ATOM	8811	C	THR	511	18.479	-95.891	46.278	1.00	0.00
C									
ATOM	8812	O	THR	511	19.040	-94.973	46.915	1.00	0.00
O									
ATOM	8813	N	VAL	512	17.759	-96.866	46.861	1.00	0.00
N									
ATOM	8814	CA	VAL	512	17.529	-96.865	48.307	1.00	0.00
C									
ATOM	8815	CB	VAL	512	16.282	-96.066	48.750	1.00	0.00
C									
ATOM	8816	CG1	VAL	512	16.285	-94.675	48.170	1.00	0.00
C									
ATOM	8817	CG2	VAL	512	14.960	-96.704	48.389	1.00	0.00
C									
ATOM	8818	C	VAL	512	17.436	-98.268	48.868	1.00	0.00
C									
ATOM	8819	O	VAL	512	17.056	-99.190	48.236	1.00	0.00
O									

ATOM	8820	N	TYR	513	17.866	-98.405	50.086	1.00	0.00
N									
ATOM	8821	CA	TYR	513	18.045	-99.620	50.949	1.00	0.00
C									
ATOM	8822	CB	TYR	513	18.983	-99.267	52.204	1.00	0.00
C									
ATOM	8823	CG	TYR	513	20.450	-99.172	51.913	1.00	0.00
C									
ATOM	8824	CD1	TYR	513	21.196	-99.947	50.989	1.00	0.00
C									
ATOM	8825	CE1	TYR	513	22.592	-99.911	50.915	1.00	0.00
C									
ATOM	8826	CZ	TYR	513	23.299	-99.028	51.799	1.00	0.00
C									
ATOM	8827	OH	TYR	513	24.637	-98.900	51.762	1.00	0.00
O									
ATOM	8828	CE2	TYR	513	22.581	-98.250	52.630	1.00	0.00
C									
ATOM	8829	CD2	TYR	513	21.137	-98.246	52.669	1.00	0.00
C									
ATOM	8830	C	TYR	513	16.693	-100.114	51.484	1.00	0.00
C									
ATOM	8831	O	TYR	513	16.373	-101.304	51.313	1.00	0.00
O									
ATOM	8832	N	LYS	514	15.910	-99.243	52.120	1.00	0.00
N									
ATOM	8833	CA	LYS	514	14.454	-99.508	52.394	1.00	0.00
C									
ATOM	8834	CB	LYS	514	14.240	-99.833	53.910	1.00	0.00
C									
ATOM	8835	CG	LYS	514	15.093	-100.898	54.459	1.00	0.00
C									
ATOM	8836	CD	LYS	514	14.668	-101.271	55.923	1.00	0.00
C									
ATOM	8837	CE	LYS	514	14.852	-100.124	56.953	1.00	0.00
C									
ATOM	8838	NZ	LYS	514	16.134	-99.367	56.869	1.00	0.00
N1+									
ATOM	8839	C	LYS	514	13.462	-98.411	51.897	1.00	0.00
C									
ATOM	8840	O	LYS	514	13.789	-97.242	51.790	1.00	0.00
O									
ATOM	8841	N	ALA	515	12.294	-98.963	51.578	1.00	0.00
N									
ATOM	8842	CA	ALA	515	11.168	-98.240	51.232	1.00	0.00
C									
ATOM	8843	CB	ALA	515	11.075	-98.129	49.655	1.00	0.00
C									
ATOM	8844	C	ALA	515	9.930	-98.927	51.830	1.00	0.00
C									
ATOM	8845	O	ALA	515	9.946	-100.106	52.287	1.00	0.00
O									
ATOM	8846	N	CYS	516	8.836	-98.114	52.019	1.00	0.00
N									

ATOM	8847	CA	CYS	516	7.590	-98.482	52.730	1.00	0.00
C									
ATOM	8848	CB	CYS	516	7.635	-98.115	54.203	1.00	0.00
C									
ATOM	8849	SG	CYS	516	6.197	-98.874	55.160	1.00	0.00
S									
ATOM	8850	C	CYS	516	6.352	-97.864	52.034	1.00	0.00
C									
ATOM	8851	O	CYS	516	6.430	-96.863	51.312	1.00	0.00
O									
ATOM	8852	N	ASN	517	5.262	-98.496	52.366	1.00	0.00
N									
ATOM	8853	CA	ASN	517	3.927	-98.339	51.787	1.00	0.00
C									
ATOM	8854	CB	ASN	517	3.556	-96.880	52.175	1.00	0.00
C									
ATOM	8855	CG	ASN	517	3.855	-96.478	53.595	1.00	0.00
C									
ATOM	8856	OD1	ASN	517	3.134	-96.860	54.503	1.00	0.00
O									
ATOM	8857	ND2	ASN	517	4.876	-95.678	53.761	1.00	0.00
N									
ATOM	8858	C	ASN	517	3.705	-98.714	50.302	1.00	0.00
C									
ATOM	8859	O	ASN	517	3.008	-98.046	49.567	1.00	0.00
O									
ATOM	8860	N	LEU	518	4.443	-99.719	49.874	1.00	0.00
N									
ATOM	8861	CA	LEU	518	4.489	-100.186	48.463	1.00	0.00
C									
ATOM	8862	CB	LEU	518	5.942	-100.397	48.055	1.00	0.00
C									
ATOM	8863	CG	LEU	518	6.789	-99.066	48.146	1.00	0.00
C									
ATOM	8864	CD1	LEU	518	8.182	-99.406	47.651	1.00	0.00
C									
ATOM	8865	CD2	LEU	518	6.203	-97.980	47.159	1.00	0.00
C									
ATOM	8866	C	LEU	518	3.860	-101.574	48.293	1.00	0.00
C									
ATOM	8867	O	LEU	518	3.626	-102.255	49.293	1.00	0.00
O									
ATOM	8868	N	ASN	519	3.529	-101.961	47.049	1.00	0.00
N									
ATOM	8869	CA	ASN	519	3.385	-103.269	46.526	1.00	0.00
C									
ATOM	8870	CB	ASN	519	1.899	-103.551	46.132	1.00	0.00
C									
ATOM	8871	CG	ASN	519	0.941	-103.366	47.296	1.00	0.00
C									
ATOM	8872	OD1	ASN	519	1.224	-103.782	48.434	1.00	0.00
O									
ATOM	8873	ND2	ASN	519	-0.225	-102.752	47.124	1.00	0.00
N									

ATOM	8874	C	ASN	519	4.315-103.550	45.361	1.00	0.00
C								
ATOM	8875	O	ASN	519	4.883-102.658	44.706	1.00	0.00
O								
ATOM	8876	N	LEU	520	4.488-104.856	45.001	1.00	0.00
N								
ATOM	8877	CA	LEU	520	5.111-105.341	43.710	1.00	0.00
C								
ATOM	8878	CB	LEU	520	6.057-106.533	43.894	1.00	0.00
C								
ATOM	8879	CG	LEU	520	7.194-106.195	44.895	1.00	0.00
C								
ATOM	8880	CD1	LEU	520	8.338-107.258	44.999	1.00	0.00
C								
ATOM	8881	CD2	LEU	520	7.961-104.909	44.586	1.00	0.00
C								
ATOM	8882	C	LEU	520	4.062-105.639	42.707	1.00	0.00
C								
ATOM	8883	O	LEU	520	2.886-105.594	43.105	1.00	0.00
O								
ATOM	8884	N	ILE	521	4.526-105.978	41.509	1.00	0.00
N								
ATOM	8885	CA	ILE	521	3.685-106.490	40.435	1.00	0.00
C								
ATOM	8886	CB	ILE	521	2.641-105.430	40.002	1.00	0.00
C								
ATOM	8887	CG2	ILE	521	3.287-104.187	39.368	1.00	0.00
C								
ATOM	8888	CG1	ILE	521	1.581-105.966	38.992	1.00	0.00
C								
ATOM	8889	CD1	ILE	521	0.317-105.019	38.940	1.00	0.00
C								
ATOM	8890	C	ILE	521	4.477-107.195	39.285	1.00	0.00
C								
ATOM	8891	O	ILE	521	5.596-106.813	38.822	1.00	0.00
O								
ATOM	8892	N	GLY	522	3.776-108.248	38.815	1.00	0.00
N								
ATOM	8893	CA	GLY	522	4.220-109.116	37.750	1.00	0.00
C								
ATOM	8894	C	GLY	522	5.458-109.942	38.104	1.00	0.00
C								
ATOM	8895	O	GLY	522	6.157-109.673	39.113	1.00	0.00
O								
ATOM	8896	N	ARG	523	5.731-111.011	37.363	1.00	0.00
N								
ATOM	8897	CA	ARG	523	6.797-111.962	37.627	1.00	0.00
C								
ATOM	8898	CB	ARG	523	6.746-113.223	36.700	1.00	0.00
C								
ATOM	8899	CG	ARG	523	7.236-113.068	35.251	1.00	0.00
C								
ATOM	8900	CD	ARG	523	6.994-114.452	34.486	1.00	0.00
C								

ATOM	8901	NE	ARG	523	7.741-115.585	35.095	1.00	0.00
N								
ATOM	8902	CZ	ARG	523	7.708-116.847	34.757	1.00	0.00
C								
ATOM	8903	NH1	ARG	523	8.560-117.771	35.231	1.00	0.00
N								
ATOM	8904	NH2	ARG	523	6.743-117.222	33.968	1.00	0.00
N1+								
ATOM	8905	C	ARG	523	8.199-111.272	37.601	1.00	0.00
C								
ATOM	8906	O	ARG	523	8.313-110.204	36.945	1.00	0.00
O								
ATOM	8907	N	PRO	524	9.243-111.807	38.262	1.00	0.00
N								
ATOM	8908	CD	PRO	524	9.228-112.761	39.381	1.00	0.00
C								
ATOM	8909	CG	PRO	524	10.317-112.246	40.310	1.00	0.00
C								
ATOM	8910	CB	PRO	524	11.369-111.882	39.276	1.00	0.00
C								
ATOM	8911	CA	PRO	524	10.608-111.240	38.192	1.00	0.00
C								
ATOM	8912	C	PRO	524	11.252-111.539	36.809	1.00	0.00
C								
ATOM	8913	O	PRO	524	10.992-112.633	36.239	1.00	0.00
O								
ATOM	8914	N	SER	525	11.975-110.576	36.261	1.00	0.00
N								
ATOM	8915	CA	SER	525	12.773-110.736	35.030	1.00	0.00
C								
ATOM	8916	CB	SER	525	12.290-109.776	33.950	1.00	0.00
C								
ATOM	8917	OG	SER	525	10.941-109.923	33.738	1.00	0.00
O								
ATOM	8918	C	SER	525	14.275-110.516	35.266	1.00	0.00
C								
ATOM	8919	O	SER	525	14.638-109.856	36.227	1.00	0.00
O								
ATOM	8920	N	THR	526	15.137-110.959	34.340	1.00	0.00
N								
ATOM	8921	CA	THR	526	16.603-110.705	34.326	1.00	0.00
C								
ATOM	8922	CB	THR	526	17.333-112.053	34.301	1.00	0.00
C								
ATOM	8923	CG2	THR	526	18.825-111.958	34.144	1.00	0.00
C								
ATOM	8924	OG1	THR	526	17.099-112.620	35.499	1.00	0.00
O								
ATOM	8925	C	THR	526	17.034-109.809	33.113	1.00	0.00
C								
ATOM	8926	O	THR	526	18.067-109.163	33.190	1.00	0.00
O								
ATOM	8927	N	GLU	527	16.290-109.826	31.987	1.00	0.00
N								

ATOM	8928	CA	GLU	527	16.561-108.934	30.829	1.00	0.00
C								
ATOM	8929	CB	GLU	527	15.429-109.064	29.731	1.00	0.00
C								
ATOM	8930	CG	GLU	527	14.069-108.376	29.934	1.00	0.00
C								
ATOM	8931	CD	GLU	527	13.269-108.254	28.594	1.00	0.00
C								
ATOM	8932	OE1	GLU	527	12.449-109.103	28.367	1.00	0.00
O								
ATOM	8933	OE2	GLU	527	13.465-107.221	27.971	1.00	0.00
O1-								
ATOM	8934	C	GLU	527	16.773-107.392	31.180	1.00	0.00
C								
ATOM	8935	O	GLU	527	15.949-106.782	31.869	1.00	0.00
O								
ATOM	8936	N	HIP	528	17.777-106.716	30.508	1.00	0.00
N								
ATOM	8937	CA	HIP	528	17.849-105.247	30.389	1.00	0.00
C								
ATOM	8938	CB	HIP	528	16.627-104.753	29.505	1.00	0.00
C								
ATOM	8939	CG	HIP	528	16.736-105.091	28.102	1.00	0.00
C								
ATOM	8940	ND1	HIP	528	15.749-105.681	27.329	1.00	0.00
N1+								
ATOM	8941	CE1	HIP	528	16.149-105.625	26.053	1.00	0.00
C								
ATOM	8942	NE2	HIP	528	17.387-105.234	26.026	1.00	0.00
N								
ATOM	8943	CD2	HIP	528	17.760-104.682	27.247	1.00	0.00
C								
ATOM	8944	C	HIP	528	18.009-104.503	31.784	1.00	0.00
C								
ATOM	8945	O	HIP	528	17.690-103.309	31.864	1.00	0.00
O								
ATOM	8946	N	SER	529	18.438-105.082	32.949	1.00	0.00
N								
ATOM	8947	CA	SER	529	18.655-104.387	34.223	1.00	0.00
C								
ATOM	8948	CB	SER	529	19.091-105.364	35.346	1.00	0.00
C								
ATOM	8949	OG	SER	529	19.179-104.698	36.554	1.00	0.00
O								
ATOM	8950	C	SER	529	19.754-103.334	34.098	1.00	0.00
C								
ATOM	8951	O	SER	529	20.678-103.439	33.322	1.00	0.00
O								
ATOM	8952	N	TRP	530	19.575-102.215	34.777	1.00	0.00
N								
ATOM	8953	CA	TRP	530	20.521-101.109	34.965	1.00	0.00
C								
ATOM	8954	CB	TRP	530	19.774-100.012	35.694	1.00	0.00
C								

ATOM	8955	CG	TRP	530	18.766	-99.280	34.844	1.00	0.00
C									
ATOM	8956	CD1	TRP	530	18.790	-99.168	33.493	1.00	0.00
C									
ATOM	8957	NE1	TRP	530	17.675	-98.404	33.047	1.00	0.00
N									
ATOM	8958	CE2	TRP	530	16.864	-98.070	34.042	1.00	0.00
C									
ATOM	8959	CZ2	TRP	530	15.648	-97.437	34.094	1.00	0.00
C									
ATOM	8960	CH2	TRP	530	15.017	-97.316	35.347	1.00	0.00
C									
ATOM	8961	CZ3	TRP	530	15.623	-97.794	36.529	1.00	0.00
C									
ATOM	8962	CE3	TRP	530	16.828	-98.487	36.420	1.00	0.00
C									
ATOM	8963	CD2	TRP	530	17.530	-98.610	35.181	1.00	0.00
C									
ATOM	8964	C	TRP	530	21.704	-101.571	35.811	1.00	0.00
C									
ATOM	8965	O	TRP	530	22.803	-101.149	35.462	1.00	0.00
O									
ATOM	8966	N	PHE	531	21.493	-102.396	36.817	1.00	0.00
N									
ATOM	8967	CA	PHE	531	22.587	-102.890	37.639	1.00	0.00
C									
ATOM	8968	CB	PHE	531	22.279	-102.751	39.105	1.00	0.00
C									
ATOM	8969	CG	PHE	531	21.987	-101.302	39.424	1.00	0.00
C									
ATOM	8970	CD1	PHE	531	22.921	-100.383	39.845	1.00	0.00
C									
ATOM	8971	CE1	PHE	531	22.560	-99.069	40.200	1.00	0.00
C									
ATOM	8972	CZ	PHE	531	21.238	-98.721	40.170	1.00	0.00
C									
ATOM	8973	CE2	PHE	531	20.222	-99.604	39.796	1.00	0.00
C									
ATOM	8974	CD2	PHE	531	20.644	-100.874	39.329	1.00	0.00
C									
ATOM	8975	C	PHE	531	22.819	-104.371	37.208	1.00	0.00
C									
ATOM	8976	O	PHE	531	21.925	-105.162	37.382	1.00	0.00
O									
ATOM	8977	N	PRO	532	24.029	-104.683	36.682	1.00	0.00
N									
ATOM	8978	CD	PRO	532	25.124	-103.794	36.382	1.00	0.00
C									
ATOM	8979	CG	PRO	532	26.283	-104.729	36.007	1.00	0.00
C									
ATOM	8980	CB	PRO	532	25.611	-106.014	35.525	1.00	0.00
C									
ATOM	8981	CA	PRO	532	24.297	-106.095	36.217	1.00	0.00
C									



ATOM	8982	C	PRO	532	24.374-107.111	37.363	1.00	0.00
C								
ATOM	8983	O	PRO	532	24.883-106.792	38.443	1.00	0.00
O								
ATOM	8984	N	GLY	533	23.912-108.327	37.077	1.00	0.00
N								
ATOM	8985	CA	GLY	533	23.929-109.390	38.075	1.00	0.00
C								
ATOM	8986	C	GLY	533	22.783-109.359	39.041	1.00	0.00
C								
ATOM	8987	O	GLY	533	22.534-110.336	39.804	1.00	0.00
O								
ATOM	8988	N	TYR	534	22.048-108.220	39.052	1.00	0.00
N								
ATOM	8989	CA	TYR	534	20.791-108.149	39.735	1.00	0.00
C								
ATOM	8990	CB	TYR	534	20.734-106.672	40.356	1.00	0.00
C								
ATOM	8991	CG	TYR	534	21.509-106.582	41.628	1.00	0.00
C								
ATOM	8992	CD1	TYR	534	22.825-106.137	41.578	1.00	0.00
C								
ATOM	8993	CE1	TYR	534	23.564-105.932	42.750	1.00	0.00
C								
ATOM	8994	CZ	TYR	534	22.993-106.363	43.949	1.00	0.00
C								
ATOM	8995	OH	TYR	534	23.667-106.273	45.101	1.00	0.00
O								
ATOM	8996	CE2	TYR	534	21.706-106.877	43.991	1.00	0.00
C								
ATOM	8997	CD2	TYR	534	20.922-107.026	42.843	1.00	0.00
C								
ATOM	8998	C	TYR	534	19.657-108.416	38.793	1.00	0.00
C								
ATOM	8999	O	TYR	534	19.603-107.745	37.798	1.00	0.00
O								
ATOM	9000	N	ALA	535	18.785-109.409	39.063	1.00	0.00
N								
ATOM	9001	CA	ALA	535	17.459-109.476	38.443	1.00	0.00
C								
ATOM	9002	CB	ALA	535	16.785-110.812	38.763	1.00	0.00
C								
ATOM	9003	C	ALA	535	16.477-108.420	39.083	1.00	0.00
C								
ATOM	9004	O	ALA	535	16.671-107.809	40.176	1.00	0.00
O								
ATOM	9005	N	TRP	536	15.380-108.112	38.405	1.00	0.00
N								
ATOM	9006	CA	TRP	536	14.370-107.105	38.854	1.00	0.00
C								
ATOM	9007	CB	TRP	536	14.456-105.810	37.999	1.00	0.00
C								
ATOM	9008	CG	TRP	536	14.359-105.920	36.481	1.00	0.00
C								

ATOM	9009	CD1	TRP	536	15.428-106.034	35.705	1.00	0.00
C								
ATOM	9010	NE1	TRP	536	15.060-106.211	34.367	1.00	0.00
N								
ATOM	9011	CE2	TRP	536	13.726-106.141	34.218	1.00	0.00
C								
ATOM	9012	CZ2	TRP	536	12.890-106.093	33.073	1.00	0.00
C								
ATOM	9013	CH2	TRP	536	11.498-106.082	33.242	1.00	0.00
C								
ATOM	9014	CZ3	TRP	536	10.957-106.079	34.554	1.00	0.00
C								
ATOM	9015	CE3	TRP	536	11.822-105.940	35.645	1.00	0.00
C								
ATOM	9016	CD2	TRP	536	13.212-106.002	35.558	1.00	0.00
C								
ATOM	9017	C	TRP	536	12.939-107.594	38.914	1.00	0.00
C								
ATOM	9018	O	TRP	536	12.573-108.676	38.458	1.00	0.00
O								
ATOM	9019	N	THR	537	12.092-106.753	39.591	1.00	0.00
N								
ATOM	9020	CA	THR	537	10.646-106.828	39.629	1.00	0.00
C								
ATOM	9021	CB	THR	537	10.200-107.617	40.834	1.00	0.00
C								
ATOM	9022	CG2	THR	537	8.770-108.060	40.667	1.00	0.00
C								
ATOM	9023	OG1	THR	537	10.688-108.901	40.787	1.00	0.00
O								
ATOM	9024	C	THR	537	10.013-105.372	39.657	1.00	0.00
C								
ATOM	9025	O	THR	537	10.483-104.521	40.375	1.00	0.00
O								
ATOM	9026	N	VAL	538	8.904-105.052	39.038	1.00	0.00
N								
ATOM	9027	CA	VAL	538	8.187-103.708	39.089	1.00	0.00
C								
ATOM	9028	CB	VAL	538	7.229-103.561	37.891	1.00	0.00
C								
ATOM	9029	CG1	VAL	538	6.603-102.101	37.876	1.00	0.00
C								
ATOM	9030	CG2	VAL	538	8.005-103.878	36.566	1.00	0.00
C								
ATOM	9031	C	VAL	538	7.426-103.411	40.365	1.00	0.00
C								
ATOM	9032	O	VAL	538	6.807-104.300	40.964	1.00	0.00
O								
ATOM	9033	N	ALA	539	7.483-102.174	40.838	1.00	0.00
N								
ATOM	9034	CA	ALA	539	6.902-101.685	42.125	1.00	0.00
C								
ATOM	9035	CB	ALA	539	7.948-101.319	43.170	1.00	0.00
C								

ATOM	9036	C	ALA	539	6.014	-100.439	41.981	1.00	0.00
C									
ATOM	9037	O	ALA	539	6.433	-99.544	41.257	1.00	0.00
O									
ATOM	9038	N	GLN	540	4.969	-100.428	42.823	1.00	0.00
N									
ATOM	9039	CA	GLN	540	3.852	-99.413	42.771	1.00	0.00
C									
ATOM	9040	CB	GLN	540	2.756	-99.890	41.807	1.00	0.00
C									
ATOM	9041	CG	GLN	540	2.265	-101.313	42.125	1.00	0.00
C									
ATOM	9042	CD	GLN	540	0.912	-101.713	41.490	1.00	0.00
C									
ATOM	9043	OE1	GLN	540	-0.003	-102.145	42.080	1.00	0.00
O									
ATOM	9044	NE2	GLN	540	0.738	-101.535	40.233	1.00	0.00
N									
ATOM	9045	C	GLN	540	3.345	-99.011	44.129	1.00	0.00
C									
ATOM	9046	O	GLN	540	3.436	-99.901	44.988	1.00	0.00
O									
ATOM	9047	N	CYM	541	2.676	-97.871	44.194	1.00	0.00
N									
ATOM	9048	CA	CYM	541	2.124	-97.412	45.451	1.00	0.00
C									
ATOM	9049	CB	CYM	541	1.602	-96.005	45.045	1.00	0.00
C									
ATOM	9050	SG	CYM	541	1.077	-95.169	46.581	1.00	0.00
S									
ATOM	9051	C	CYM	541	1.082	-98.390	46.009	1.00	0.00
C									
ATOM	9052	O	CYM	541	0.460	-99.197	45.243	1.00	0.00
O									
ATOM	9053	N	LYS	542	0.953	-98.431	47.381	1.00	0.00
N									
ATOM	9054	CA	LYS	542	-0.128	-99.223	48.001	1.00	0.00
C									
ATOM	9055	CB	LYS	542	0.351	-99.708	49.363	1.00	0.00
C									
ATOM	9056	CG	LYS	542	-0.726	-100.521	50.165	1.00	0.00
C									
ATOM	9057	CD	LYS	542	-0.152	-101.212	51.379	1.00	0.00
C									
ATOM	9058	CE	LYS	542	0.801	-102.418	51.171	1.00	0.00
C									
ATOM	9059	NZ	LYS	542	0.133	-103.683	51.060	1.00	0.00
N1+									
ATOM	9060	C	LYS	542	-1.393	-98.346	48.186	1.00	0.00
C									
ATOM	9061	O	LYS	542	-2.487	-98.864	48.023	1.00	0.00
O									
ATOM	9062	N	ILE	543	-1.296	-96.970	48.375	1.00	0.00
N									

ATOM	9063	CA	ILE	543	-2.372	-95.956	48.479	1.00	0.00
C									
ATOM	9064	CB	ILE	543	-1.860	-94.793	49.395	1.00	0.00
C									
ATOM	9065	CG2	ILE	543	-2.818	-93.618	49.548	1.00	0.00
C									
ATOM	9066	CG1	ILE	543	-1.521	-95.303	50.882	1.00	0.00
C									
ATOM	9067	CD1	ILE	543	-0.648	-94.353	51.738	1.00	0.00
C									
ATOM	9068	C	ILE	543	-3.030	-95.499	47.089	1.00	0.00
C									
ATOM	9069	O	ILE	543	-4.187	-95.164	47.089	1.00	0.00
O									
ATOM	9070	N	CYM	544	-2.295	-95.717	45.953	1.00	0.00
N									
ATOM	9071	CA	CYM	544	-2.851	-95.385	44.628	1.00	0.00
C									
ATOM	9072	CB	CYM	544	-2.348	-94.039	44.109	1.00	0.00
C									
ATOM	9073	SG	CYM	544	-0.635	-94.148	43.673	1.00	0.00
S									
ATOM	9074	C	CYM	544	-2.662	-96.479	43.520	1.00	0.00
C									
ATOM	9075	O	CYM	544	-3.333	-96.305	42.517	1.00	0.00
O									
ATOM	9076	N	ALA	545	-1.731	-97.430	43.674	1.00	0.00
N									
ATOM	9077	CA	ALA	545	-1.282	-98.336	42.622	1.00	0.00
C									
ATOM	9078	CB	ALA	545	-2.398	-99.330	42.265	1.00	0.00
C									
ATOM	9079	C	ALA	545	-0.581	-97.680	41.449	1.00	0.00
C									
ATOM	9080	O	ALA	545	-0.351	-98.318	40.398	1.00	0.00
O									
ATOM	9081	N	SER	546	-0.212	-96.382	41.547	1.00	0.00
N									
ATOM	9082	CA	SER	546	0.566	-95.762	40.465	1.00	0.00
C									
ATOM	9083	CB	SER	546	0.557	-94.256	40.530	1.00	0.00
C									
ATOM	9084	OG	SER	546	-0.664	-93.634	40.948	1.00	0.00
O									
ATOM	9085	C	SER	546	2.027	-96.212	40.464	1.00	0.00
C									
ATOM	9086	O	SER	546	2.604	-96.488	41.516	1.00	0.00
O									
ATOM	9087	N	HIE	547	2.681	-96.404	39.294	1.00	0.00
N									
ATOM	9088	CA	HIE	547	4.036	-97.022	39.183	1.00	0.00
C									
ATOM	9089	CB	HIE	547	4.349	-97.169	37.686	1.00	0.00
C									

ATOM	9090	CG	HIE	547	5.797	-97.550	37.357	1.00	0.00
C									
ATOM	9091	ND1	HIE	547	6.814	-96.646	37.035	1.00	0.00
N									
ATOM	9092	CE1	HIE	547	7.967	-97.401	36.868	1.00	0.00
C									
ATOM	9093	NE2	HIE	547	7.729	-98.675	37.252	1.00	0.00
N									
ATOM	9094	CD2	HIE	547	6.346	-98.795	37.493	1.00	0.00
C									
ATOM	9095	C	HIE	547	5.071	-96.105	39.878	1.00	0.00
C									
ATOM	9096	O	HIE	547	5.007	-94.923	39.602	1.00	0.00
O									
ATOM	9097	N	ILE	548	5.975	-96.617	40.672	1.00	0.00
N									
ATOM	9098	CA	ILE	548	6.961	-95.896	41.425	1.00	0.00
C									
ATOM	9099	CB	ILE	548	6.653	-96.045	42.968	1.00	0.00
C									
ATOM	9100	CG2	ILE	548	7.554	-96.958	43.766	1.00	0.00
C									
ATOM	9101	CG1	ILE	548	6.399	-94.617	43.648	1.00	0.00
C									
ATOM	9102	CD1	ILE	548	5.885	-94.616	45.085	1.00	0.00
C									
ATOM	9103	C	ILE	548	8.373	-96.177	41.098	1.00	0.00
C									
ATOM	9104	O	ILE	548	9.305	-95.403	41.389	1.00	0.00
O									
ATOM	9105	N	GLY	549	8.602	-97.317	40.466	1.00	0.00
N									
ATOM	9106	CA	GLY	549	9.928	-97.855	40.170	1.00	0.00
C									
ATOM	9107	C	GLY	549	9.990	-99.368	40.093	1.00	0.00
C									
ATOM	9108	O	GLY	549	9.054	-100.039	39.614	1.00	0.00
O									
ATOM	9109	N	TRP	550	11.076	-99.910	40.529	1.00	0.00
N									
ATOM	9110	CA	TRP	550	11.413	-101.335	40.576	1.00	0.00
C									
ATOM	9111	CB	TRP	550	12.203	-101.643	39.289	1.00	0.00
C									
ATOM	9112	CG	TRP	550	11.687	-101.071	38.031	1.00	0.00
C									
ATOM	9113	CD1	TRP	550	11.015	-101.829	37.117	1.00	0.00
C									
ATOM	9114	NE1	TRP	550	10.597	-101.055	36.005	1.00	0.00
N									
ATOM	9115	CE2	TRP	550	10.914	-99.699	36.221	1.00	0.00
C									
ATOM	9116	CZ2	TRP	550	10.783	-98.552	35.408	1.00	0.00
C									

ATOM	9117	CH2	TRP	550	11.379	-97.379	35.819	1.00	0.00
C									
ATOM	9118	CZ3	TRP	550	12.119	-97.421	36.984	1.00	0.00
C									
ATOM	9119	CE3	TRP	550	12.211	-98.526	37.835	1.00	0.00
C									
ATOM	9120	CD2	TRP	550	11.587	-99.713	37.518	1.00	0.00
C									
ATOM	9121	C	TRP	550	12.057	-101.715	41.906	1.00	0.00
C									
ATOM	9122	O	TRP	550	12.569	-100.835	42.611	1.00	0.00
O									
ATOM	9123	N	LYS	551	11.858	-102.958	42.343	1.00	0.00
N									
ATOM	9124	CA	LYS	551	12.659	-103.570	43.374	1.00	0.00
C									
ATOM	9125	CB	LYS	551	11.810	-104.393	44.386	1.00	0.00
C									
ATOM	9126	CG	LYS	551	12.508	-104.842	45.671	1.00	0.00
C									
ATOM	9127	CD	LYS	551	11.704	-105.803	46.474	1.00	0.00
C									
ATOM	9128	CE	LYS	551	12.589	-106.283	47.655	1.00	0.00
C									
ATOM	9129	NZ	LYS	551	12.002	-107.417	48.330	1.00	0.00
N1+									
ATOM	9130	C	LYS	551	13.644	-104.494	42.629	1.00	0.00
C									
ATOM	9131	O	LYS	551	13.367	-105.075	41.551	1.00	0.00
O									
ATOM	9132	N	PHE	552	14.848	-104.619	43.197	1.00	0.00
N									
ATOM	9133	CA	PHE	552	15.865	-105.553	42.610	1.00	0.00
C									
ATOM	9134	CB	PHE	552	17.060	-104.624	42.337	1.00	0.00
C									
ATOM	9135	CG	PHE	552	16.828	-103.631	41.241	1.00	0.00
C									
ATOM	9136	CD1	PHE	552	16.197	-102.410	41.447	1.00	0.00
C									
ATOM	9137	CE1	PHE	552	16.125	-101.496	40.403	1.00	0.00
C									
ATOM	9138	CZ	PHE	552	16.627	-101.766	39.140	1.00	0.00
C									
ATOM	9139	CE2	PHE	552	17.050	-103.098	38.892	1.00	0.00
C									
ATOM	9140	CD2	PHE	552	17.223	-103.995	39.902	1.00	0.00
C									
ATOM	9141	C	PHE	552	16.292	-106.664	43.623	1.00	0.00
C									
ATOM	9142	O	PHE	552	16.088	-106.536	44.823	1.00	0.00
O									
ATOM	9143	N	THR	553	16.748	-107.729	43.059	1.00	0.00
N									

ATOM	9144	CA	THR	553	17.150-108.987	43.823	1.00	0.00
C								
ATOM	9145	CB	THR	553	15.938-109.865	43.993	1.00	0.00
C								
ATOM	9146	CG2	THR	553	16.141-111.270	44.558	1.00	0.00
C								
ATOM	9147	OG1	THR	553	14.963-109.266	44.893	1.00	0.00
O								
ATOM	9148	C	THR	553	18.398-109.682	43.180	1.00	0.00
C								
ATOM	9149	O	THR	553	18.522-109.844	41.968	1.00	0.00
O								
ATOM	9150	N	ALA	554	19.319-110.183	44.012	1.00	0.00
N								
ATOM	9151	CA	ALA	554	20.563-110.770	43.567	1.00	0.00
C								
ATOM	9152	CB	ALA	554	21.487-111.066	44.807	1.00	0.00
C								
ATOM	9153	C	ALA	554	20.430-112.137	42.777	1.00	0.00
C								
ATOM	9154	O	ALA	554	19.660-113.018	43.130	1.00	0.00
O								
ATOM	9155	N	THR	555	21.259-112.289	41.706	1.00	0.00
N								
ATOM	9156	CA	THR	555	21.388-113.580	40.977	1.00	0.00
C								
ATOM	9157	CB	THR	555	21.822-113.536	39.503	1.00	0.00
C								
ATOM	9158	CG2	THR	555	20.722-112.838	38.737	1.00	0.00
C								
ATOM	9159	OG1	THR	555	23.036-112.767	39.279	1.00	0.00
O								
ATOM	9160	C	THR	555	22.297-114.619	41.628	1.00	0.00
C								
ATOM	9161	O	THR	555	22.184-115.830	41.382	1.00	0.00
O								
ATOM	9162	N	LYS	556	23.220-114.188	42.489	1.00	0.00
N								
ATOM	9163	CA	LYS	556	24.182-115.120	43.239	1.00	0.00
C								
ATOM	9164	CB	LYS	556	25.462-115.274	42.487	1.00	0.00
C								
ATOM	9165	CG	LYS	556	26.414-114.095	42.261	1.00	0.00
C								
ATOM	9166	CD	LYS	556	27.632-114.571	41.355	1.00	0.00
C								
ATOM	9167	CE	LYS	556	28.608-113.489	41.070	1.00	0.00
C								
ATOM	9168	NZ	LYS	556	27.981-112.319	40.435	1.00	0.00
N1+								
ATOM	9169	C	LYS	556	24.528-114.593	44.657	1.00	0.00
C								
ATOM	9170	O	LYS	556	24.498-113.401	44.975	1.00	0.00
O								

ATOM	9171	N	LYS	557	25.009-115.436	45.558	1.00	0.00
N								
ATOM	9172	CA	LYS	557	24.883-115.315	47.001	1.00	0.00
C								
ATOM	9173	CB	LYS	557	25.294-116.678	47.591	1.00	0.00
C								
ATOM	9174	CG	LYS	557	24.270-117.797	47.351	1.00	0.00
C								
ATOM	9175	CD	LYS	557	24.795-119.217	47.649	1.00	0.00
C								
ATOM	9176	CE	LYS	557	25.068-119.492	49.131	1.00	0.00
C								
ATOM	9177	NZ	LYS	557	23.921-119.229	49.987	1.00	0.00
N1+								
ATOM	9178	C	LYS	557	25.890-114.244	47.488	1.00	0.00
C								
ATOM	9179	O	LYS	557	25.601-113.669	48.492	1.00	0.00
O								
ATOM	9180	N	ASP	558	27.004-114.001	46.870	1.00	0.00
N								
ATOM	9181	CA	ASP	558	28.090-113.089	47.294	1.00	0.00
C								
ATOM	9182	CB	ASP	558	29.346-113.626	46.752	1.00	0.00
C								
ATOM	9183	CG	ASP	558	29.700-115.054	47.186	1.00	0.00
C								
ATOM	9184	OD1	ASP	558	30.047-115.934	46.390	1.00	0.00
O								
ATOM	9185	OD2	ASP	558	29.864-115.234	48.430	1.00	0.00
O1-								
ATOM	9186	C	ASP	558	27.920-111.594	46.959	1.00	0.00
C								
ATOM	9187	O	ASP	558	28.696-110.733	47.304	1.00	0.00
O								
ATOM	9188	N	MET	559	26.751-111.285	46.307	1.00	0.00
N								
ATOM	9189	CA	MET	559	26.306-109.939	45.990	1.00	0.00
C								
ATOM	9190	CB	MET	559	25.252-109.983	44.859	1.00	0.00
C								
ATOM	9191	CG	MET	559	25.736-110.683	43.560	1.00	0.00
C								
ATOM	9192	SD	MET	559	24.862-110.240	41.986	1.00	0.00
S								
ATOM	9193	CE	MET	559	25.554-108.568	41.602	1.00	0.00
C								
ATOM	9194	C	MET	559	25.661-109.241	47.250	1.00	0.00
C								
ATOM	9195	O	MET	559	24.698-109.771	47.832	1.00	0.00
O								
ATOM	9196	N	SER	560	26.124-108.025	47.635	1.00	0.00
N								
ATOM	9197	CA	SER	560	25.471-107.174	48.626	1.00	0.00
C								



ATOM	9198	CB	SER	560	26.344-107.007	49.787	1.00	0.00
C								
ATOM	9199	OG	SER	560	25.839-106.218	50.808	1.00	0.00
O								
ATOM	9200	C	SER	560	25.135-105.771	48.003	1.00	0.00
C								
ATOM	9201	O	SER	560	25.945-105.210	47.240	1.00	0.00
O								
ATOM	9202	N	PRO	561	24.012-105.162	48.442	1.00	0.00
N								
ATOM	9203	CD	PRO	561	23.780-103.831	47.917	1.00	0.00
C								
ATOM	9204	CG	PRO	561	22.364-103.468	48.473	1.00	0.00
C								
ATOM	9205	CB	PRO	561	22.117-104.516	49.576	1.00	0.00
C								
ATOM	9206	CA	PRO	561	22.914-105.725	49.167	1.00	0.00
C								
ATOM	9207	C	PRO	561	22.063-106.624	48.341	1.00	0.00
C								
ATOM	9208	O	PRO	561	21.929-106.436	47.137	1.00	0.00
O								
ATOM	9209	N	GLN	562	21.450-107.624	48.974	1.00	0.00
N								
ATOM	9210	CA	GLN	562	20.714-108.693	48.285	1.00	0.00
C								
ATOM	9211	CB	GLN	562	20.419-109.902	49.171	1.00	0.00
C								
ATOM	9212	CG	GLN	562	21.675-110.755	49.505	1.00	0.00
C								
ATOM	9213	CD	GLN	562	21.880-111.889	48.550	1.00	0.00
C								
ATOM	9214	OE1	GLN	562	21.006-112.737	48.402	1.00	0.00
O								
ATOM	9215	NE2	GLN	562	22.975-111.955	47.866	1.00	0.00
N								
ATOM	9216	C	GLN	562	19.387-108.290	47.640	1.00	0.00
C								
ATOM	9217	O	GLN	562	19.067-108.735	46.554	1.00	0.00
O								
ATOM	9218	N	LYS	563	18.736-107.346	48.359	1.00	0.00
N								
ATOM	9219	CA	LYS	563	17.634-106.520	47.804	1.00	0.00
C								
ATOM	9220	CB	LYS	563	16.284-107.097	48.282	1.00	0.00
C								
ATOM	9221	CG	LYS	563	15.801-108.454	47.689	1.00	0.00
C								
ATOM	9222	CD	LYS	563	16.202-109.683	48.608	1.00	0.00
C								
ATOM	9223	CE	LYS	563	15.630-111.067	48.107	1.00	0.00
C								
ATOM	9224	NZ	LYS	563	15.596-112.137	49.125	1.00	0.00
N1+								

ATOM	9225	C	LYS	563	17.703-105.057	48.156	1.00	0.00
C								
ATOM	9226	O	LYS	563	18.105-104.647	49.257	1.00	0.00
O								
ATOM	9227	N	PHE	564	17.175-104.234	47.267	1.00	0.00
N								
ATOM	9228	CA	PHE	564	17.090-102.809	47.407	1.00	0.00
C								
ATOM	9229	CB	PHE	564	18.475-102.180	47.150	1.00	0.00
C								
ATOM	9230	CG	PHE	564	19.002-102.213	45.680	1.00	0.00
C								
ATOM	9231	CD1	PHE	564	18.810-101.166	44.785	1.00	0.00
C								
ATOM	9232	CE1	PHE	564	19.276-101.275	43.442	1.00	0.00
C								
ATOM	9233	CZ	PHE	564	19.916-102.448	42.985	1.00	0.00
C								
ATOM	9234	CE2	PHE	564	20.110-103.521	43.885	1.00	0.00
C								
ATOM	9235	CD2	PHE	564	19.641-103.384	45.204	1.00	0.00
C								
ATOM	9236	C	PHE	564	16.077-102.328	46.360	1.00	0.00
C								
ATOM	9237	O	PHE	564	15.712-103.020	45.399	1.00	0.00
O								
ATOM	9238	N	TRP	565	15.768-101.023	46.460	1.00	0.00
N								
ATOM	9239	CA	TRP	565	14.823-100.323	45.594	1.00	0.00
C								
ATOM	9240	CB	TRP	565	13.631 -99.739	46.366	1.00	0.00
C								
ATOM	9241	CG	TRP	565	12.772-100.771	46.967	1.00	0.00
C								
ATOM	9242	CD1	TRP	565	11.528-101.045	46.491	1.00	0.00
C								
ATOM	9243	NE1	TRP	565	10.941-101.999	47.278	1.00	0.00
N								
ATOM	9244	CE2	TRP	565	11.720-102.397	48.315	1.00	0.00
C								
ATOM	9245	CZ2	TRP	565	11.506-103.252	49.386	1.00	0.00
C								
ATOM	9246	CH2	TRP	565	12.615-103.500	50.297	1.00	0.00
C								
ATOM	9247	CZ3	TRP	565	13.720-102.660	50.256	1.00	0.00
C								
ATOM	9248	CE3	TRP	565	13.817-101.749	49.219	1.00	0.00
C								
ATOM	9249	CD2	TRP	565	12.875-101.643	48.158	1.00	0.00
C								
ATOM	9250	C	TRP	565	15.528 -99.363	44.702	1.00	0.00
C								
ATOM	9251	O	TRP	565	16.572 -98.748	45.016	1.00	0.00
O								

ATOM	9252	N	GLY	566	15.014	-99.244	43.488	1.00	0.00
N									
ATOM	9253	CA	GLY	566	15.282	-98.155	42.572	1.00	0.00
C									
ATOM	9254	C	GLY	566	13.966	-97.406	42.270	1.00	0.00
C									
ATOM	9255	O	GLY	566	13.078	-97.917	41.587	1.00	0.00
O									
ATOM	9256	N	LEU	567	13.876	-96.187	42.861	1.00	0.00
N									
ATOM	9257	CA	LEU	567	12.646	-95.416	42.733	1.00	0.00
C									
ATOM	9258	CB	LEU	567	12.417	-94.927	44.187	1.00	0.00
C									
ATOM	9259	CG	LEU	567	12.399	-95.914	45.259	1.00	0.00
C									
ATOM	9260	CD1	LEU	567	12.239	-95.072	46.608	1.00	0.00
C									
ATOM	9261	CD2	LEU	567	11.346	-97.018	45.122	1.00	0.00
C									
ATOM	9262	C	LEU	567	12.754	-94.251	41.686	1.00	0.00
C									
ATOM	9263	O	LEU	567	13.889	-93.801	41.503	1.00	0.00
O									
ATOM	9264	N	THR	568	11.682	-93.797	40.959	1.00	0.00
N									
ATOM	9265	CA	THR	568	11.853	-92.737	39.853	1.00	0.00
C									
ATOM	9266	CB	THR	568	11.156	-93.011	38.506	1.00	0.00
C									
ATOM	9267	CG2	THR	568	9.569	-93.128	38.503	1.00	0.00
C									
ATOM	9268	OG1	THR	568	11.473	-91.843	37.709	1.00	0.00
O									
ATOM	9269	C	THR	568	11.463	-91.399	40.445	1.00	0.00
C									
ATOM	9270	O	THR	568	10.360	-91.220	40.952	1.00	0.00
O									
ATOM	9271	N	ARG	569	12.192	-90.339	40.091	1.00	0.00
N									
ATOM	9272	CA	ARG	569	11.947	-88.930	40.408	1.00	0.00
C									
ATOM	9273	CB	ARG	569	13.159	-88.124	39.997	1.00	0.00
C									
ATOM	9274	CG	ARG	569	13.485	-86.958	40.889	1.00	0.00
C									
ATOM	9275	CD	ARG	569	14.627	-86.038	40.461	1.00	0.00
C									
ATOM	9276	NE	ARG	569	14.531	-85.605	39.042	1.00	0.00
N									
ATOM	9277	CZ	ARG	569	13.723	-84.693	38.515	1.00	0.00
C									
ATOM	9278	NH1	ARG	569	13.933	-84.330	37.288	1.00	0.00
N									

ATOM	9279	NH2	ARG	569	12.698	-84.124	39.154	1.00	0.00
N1+									
ATOM	9280	C	ARG	569	10.647	-88.398	39.737	1.00	0.00
C									
ATOM	9281	O	ARG	569	9.996	-87.418	40.173	1.00	0.00
O									
ATOM	9282	N	SER	570	10.214	-89.041	38.710	1.00	0.00
N									
ATOM	9283	CA	SER	570	8.904	-88.835	38.095	1.00	0.00
C									
ATOM	9284	CB	SER	570	8.891	-89.603	36.725	1.00	0.00
C									
ATOM	9285	OG	SER	570	7.577	-89.556	36.184	1.00	0.00
O									
ATOM	9286	C	SER	570	7.729	-89.121	39.115	1.00	0.00
C									
ATOM	9287	O	SER	570	6.665	-88.503	38.945	1.00	0.00
O									
ATOM	9288	N	ALA	571	7.900	-90.018	40.077	1.00	0.00
N									
ATOM	9289	CA	ALA	571	6.778	-90.574	40.851	1.00	0.00
C									
ATOM	9290	CB	ALA	571	6.762	-92.088	40.591	1.00	0.00
C									
ATOM	9291	C	ALA	571	6.913	-90.332	42.313	1.00	0.00
C									
ATOM	9292	O	ALA	571	5.907	-90.077	42.975	1.00	0.00
O									
ATOM	9293	N	LEU	572	8.149	-90.285	42.843	1.00	0.00
N									
ATOM	9294	CA	LEU	572	8.413	-89.766	44.217	1.00	0.00
C									
ATOM	9295	CB	LEU	572	9.923	-89.855	44.517	1.00	0.00
C									
ATOM	9296	CG	LEU	572	10.370	-91.276	44.773	1.00	0.00
C									
ATOM	9297	CD1	LEU	572	11.939	-91.310	44.986	1.00	0.00
C									
ATOM	9298	CD2	LEU	572	9.555	-91.871	45.953	1.00	0.00
C									
ATOM	9299	C	LEU	572	8.007	-88.241	44.387	1.00	0.00
C									
ATOM	9300	O	LEU	572	7.945	-87.478	43.426	1.00	0.00
O									
ATOM	9301	N	LEU	573	7.866	-87.706	45.637	1.00	0.00
N									
ATOM	9302	CA	LEU	573	7.669	-86.270	45.925	1.00	0.00
C									
ATOM	9303	CB	LEU	573	6.136	-86.043	45.796	1.00	0.00
C									
ATOM	9304	CG	LEU	573	5.698	-84.625	46.169	1.00	0.00
C									
ATOM	9305	CD1	LEU	573	5.955	-83.598	45.086	1.00	0.00
C									

ATOM	9306	CD2	LEU	573	4.203	-84.531	46.342	1.00	0.00
C									
ATOM	9307	C	LEU	573	8.259	-85.821	47.273	1.00	0.00
C									
ATOM	9308	O	LEU	573	7.753	-86.257	48.349	1.00	0.00
O									
ATOM	9309	N	PRO	574	9.219	-84.803	47.346	1.00	0.00
N									
ATOM	9310	CD	PRO	574	9.998	-84.371	46.170	1.00	0.00
C									
ATOM	9311	CG	PRO	574	11.198	-83.743	46.740	1.00	0.00
C									
ATOM	9312	CB	PRO	574	10.780	-83.242	48.103	1.00	0.00
C									
ATOM	9313	CA	PRO	574	9.652	-84.226	48.590	1.00	0.00
C									
ATOM	9314	C	PRO	574	8.518	-83.471	49.303	1.00	0.00
C									
ATOM	9315	O	PRO	574	7.832	-82.581	48.709	1.00	0.00
O									
ATOM	9316	N	THR	575	8.277	-83.768	50.595	1.00	0.00
N									
ATOM	9317	CA	THR	575	7.222	-82.978	51.408	1.00	0.00
C									
ATOM	9318	CB	THR	575	6.100	-84.017	51.823	1.00	0.00
C									
ATOM	9319	CG2	THR	575	5.159	-84.530	50.762	1.00	0.00
C									
ATOM	9320	OG1	THR	575	6.660	-85.153	52.510	1.00	0.00
O									
ATOM	9321	C	THR	575	7.712	-82.283	52.684	1.00	0.00
C									
ATOM	9322	O	THR	575	8.878	-82.513	53.102	1.00	0.00
O									
ATOM	9323	N	ILE	576	6.863	-81.529	53.381	1.00	0.00
N									
ATOM	9324	CA	ILE	576	7.280	-80.805	54.626	1.00	0.00
C									
ATOM	9325	CB	ILE	576	6.162	-79.801	54.973	1.00	0.00
C									
ATOM	9326	CG2	ILE	576	6.244	-79.219	56.291	1.00	0.00
C									
ATOM	9327	CG1	ILE	576	6.277	-78.622	53.996	1.00	0.00
C									
ATOM	9328	CD1	ILE	576	5.413	-77.341	54.198	1.00	0.00
C									
ATOM	9329	C	ILE	576	7.629	-81.844	55.663	1.00	0.00
C									
ATOM	9330	O	ILE	576	6.646	-82.566	56.098	1.00	0.00
O									
ATOM	9331	N	PRO	577	8.817	-81.868	56.241	1.00	0.00
N									
ATOM	9332	CD	PRO	577	10.079	-81.287	55.848	1.00	0.00
C									

ATOM	9333	CG	PRO	577	11.105	-81.564	56.964	1.00	0.00
C									
ATOM	9334	CB	PRO	577	10.635	-82.865	57.508	1.00	0.00
C									
ATOM	9335	CA	PRO	577	9.097	-82.862	57.338	1.00	0.00
C									
ATOM	9336	C	PRO	577	8.288	-82.689	58.632	1.00	0.00
C									
ATOM	9337	O	PRO	577	8.152	-81.535	59.093	1.00	0.00
O									
ATOM	9338	N	ASP	578	7.970	-83.845	59.260	1.00	0.00
N									
ATOM	9339	CA	ASP	578	7.507	-83.947	60.657	1.00	0.00
C									
ATOM	9340	CB	ASP	578	6.690	-85.283	60.781	1.00	0.00
C									
ATOM	9341	CG	ASP	578	5.251	-85.081	60.240	1.00	0.00
C									
ATOM	9342	OD1	ASP	578	5.006	-85.424	59.064	1.00	0.00
O									
ATOM	9343	OD2	ASP	578	4.389	-84.344	60.848	1.00	0.00
O1-									
ATOM	9344	C	ASP	578	8.648	-84.009	61.642	1.00	0.00
C									
ATOM	9345	O	ASP	578	8.523	-83.521	62.806	1.00	0.00
O									
ATOM	9346	N	THR	579	9.728	-84.558	61.146	1.00	0.00
N									
ATOM	9347	CA	THR	579	10.983	-84.614	61.956	1.00	0.00
C									
ATOM	9348	CB	THR	579	12.056	-85.261	61.067	1.00	0.00
C									
ATOM	9349	CG2	THR	579	13.434	-85.392	61.709	1.00	0.00
C									
ATOM	9350	OG1	THR	579	11.648	-86.617	60.695	1.00	0.00
O									
ATOM	9351	C	THR	579	11.546	-83.243	62.397	1.00	0.00
C									
ATOM	9352	O	THR	579	11.877	-82.409	61.560	1.00	0.00
O									
ATOM	9353	N	GLU	580	11.697	-83.020	63.646	1.00	0.00
N									
ATOM	9354	CA	GLU	580	12.080	-81.708	64.295	1.00	0.00
C									
ATOM	9355	CB	GLU	580	12.111	-81.861	65.785	1.00	0.00
C									
ATOM	9356	CG	GLU	580	12.538	-80.694	66.684	1.00	0.00
C									
ATOM	9357	CD	GLU	580	11.806	-79.336	66.344	1.00	0.00
C									
ATOM	9358	OE1	GLU	580	10.641	-79.250	65.850	1.00	0.00
O									
ATOM	9359	OE2	GLU	580	12.458	-78.224	66.451	1.00	0.00
O1-									

ATOM	9360	C	GLU	580	13.362	-80.980	63.803	1.00	0.00
C									
ATOM	9361	O	GLU	580	13.296	-79.791	63.409	1.00	0.00
O									
ATOM	9362	N	ASP	581	14.519	-81.658	63.777	1.00	0.00
N									
ATOM	9363	CA	ASP	581	15.766	-81.030	63.310	1.00	0.00
C									
ATOM	9364	CB	ASP	581	17.028	-81.807	63.746	1.00	0.00
C									
ATOM	9365	CG	ASP	581	17.167	-81.972	65.310	1.00	0.00
C									
ATOM	9366	OD1	ASP	581	18.339	-82.238	65.716	1.00	0.00
O									
ATOM	9367	OD2	ASP	581	16.224	-81.844	66.131	1.00	0.00
O1-									
ATOM	9368	C	ASP	581	15.905	-80.569	61.882	1.00	0.00
C									
ATOM	9369	O	ASP	581	16.951	-80.048	61.504	1.00	0.00
O									
ATOM	9370	N	GLU	582	14.836	-80.782	61.091	1.00	0.00
N									
ATOM	9371	CA	GLU	582	14.844	-80.543	59.602	1.00	0.00
C									
ATOM	9372	CB	GLU	582	14.164	-81.693	58.923	1.00	0.00
C									
ATOM	9373	CG	GLU	582	14.754	-83.048	59.204	1.00	0.00
C									
ATOM	9374	CD	GLU	582	16.342	-83.125	59.072	1.00	0.00
C									
ATOM	9375	OE1	GLU	582	16.938	-82.570	58.142	1.00	0.00
O									
ATOM	9376	OE2	GLU	582	16.901	-83.994	59.789	1.00	0.00
O1-									
ATOM	9377	C	GLU	582	14.110	-79.169	59.407	1.00	0.00
C									
ATOM	9378	O	GLU	582	13.297	-78.810	60.297	1.00	0.00
O									
ATOM	9379	N	ILE	583	14.420	-78.465	58.343	1.00	0.00
N									
ATOM	9380	CA	ILE	583	13.851	-77.096	58.038	1.00	0.00
C									
ATOM	9381	CB	ILE	583	14.736	-76.186	57.198	1.00	0.00
C									
ATOM	9382	CG2	ILE	583	13.943	-74.915	56.876	1.00	0.00
C									
ATOM	9383	CG1	ILE	583	15.956	-75.905	58.033	1.00	0.00
C									
ATOM	9384	CD1	ILE	583	17.203	-75.311	57.313	1.00	0.00
C									
ATOM	9385	C	ILE	583	12.407	-77.294	57.475	1.00	0.00
C									
ATOM	9386	O	ILE	583	12.239	-78.107	56.590	1.00	0.00
O									

ATOM	9387	N	SER	584	11.526	-76.422	57.858	1.00	0.00
N									
ATOM	9388	CA	SER	584	10.153	-76.253	57.363	1.00	0.00
C									
ATOM	9389	CB	SER	584	9.149	-77.087	58.171	1.00	0.00
C									
ATOM	9390	OG	SER	584	9.103	-76.597	59.589	1.00	0.00
O									
ATOM	9391	C	SER	584	9.759	-74.761	57.376	1.00	0.00
C									
ATOM	9392	O	SER	584	10.454	-74.037	58.078	1.00	0.00
O									
ATOM	9393	N	PRO	585	8.671	-74.297	56.712	1.00	0.00
N									
ATOM	9394	CD	PRO	585	7.721	-75.030	55.869	1.00	0.00
C									
ATOM	9395	CG	PRO	585	6.886	-73.937	55.195	1.00	0.00
C									
ATOM	9396	CB	PRO	585	7.905	-72.809	55.017	1.00	0.00
C									
ATOM	9397	CA	PRO	585	8.708	-72.918	56.294	1.00	0.00
C									
ATOM	9398	C	PRO	585	8.184	-72.024	57.463	1.00	0.00
C									
ATOM	9399	O	PRO	585	8.535	-70.810	57.527	1.00	0.00
O									
ATOM	9400	N	ASP	586	7.371	-72.553	58.376	1.00	0.00
N									
ATOM	9401	CA	ASP	586	7.127	-71.946	59.705	1.00	0.00
C									
ATOM	9402	CB	ASP	586	6.010	-72.760	60.325	1.00	0.00
C									
ATOM	9403	CG	ASP	586	6.429	-74.139	60.789	1.00	0.00
C									
ATOM	9404	OD1	ASP	586	7.071	-74.886	59.947	1.00	0.00
O									
ATOM	9405	OD2	ASP	586	5.874	-74.614	61.829	1.00	0.00
O1-									
ATOM	9406	C	ASP	586	8.316	-71.731	60.615	1.00	0.00
C									
ATOM	9407	O	ASP	586	8.128	-71.297	61.733	1.00	0.00
O									
ATOM	9408	N	LYS	587	9.509	-72.218	60.242	1.00	0.00
N									
ATOM	9409	CA	LYS	587	10.702	-71.936	61.025	1.00	0.00
C									
ATOM	9410	CB	LYS	587	11.427	-73.321	61.310	1.00	0.00
C									
ATOM	9411	CG	LYS	587	10.621	-74.335	62.097	1.00	0.00
C									
ATOM	9412	CD	LYS	587	11.363	-75.751	62.175	1.00	0.00
C									
ATOM	9413	CE	LYS	587	10.646	-76.582	63.241	1.00	0.00
C									



ATOM	9414	NZ	LYS	587	11.268	-77.929	63.407	1.00	0.00
N1+									
ATOM	9415	C	LYS	587	11.636	-71.026	60.136	1.00	0.00
C									
ATOM	9416	O	LYS	587	11.945	-69.950	60.560	1.00	0.00
O									
ATOM	9417	N	VAL	588	12.140	-71.489	58.930	1.00	0.00
N									
ATOM	9418	CA	VAL	588	12.732	-70.531	57.945	1.00	0.00
C									
ATOM	9419	CB	VAL	588	14.249	-70.357	58.056	1.00	0.00
C									
ATOM	9420	CG1	VAL	588	14.924	-71.736	57.873	1.00	0.00
C									
ATOM	9421	CG2	VAL	588	14.924	-69.409	57.079	1.00	0.00
C									
ATOM	9422	C	VAL	588	12.273	-70.896	56.523	1.00	0.00
C									
ATOM	9423	O	VAL	588	12.219	-72.111	56.188	1.00	0.00
O									
ATOM	9424	N	ILE	589	12.117	-69.947	55.593	1.00	0.00
N									
ATOM	9425	CA	ILE	589	11.921	-70.152	54.105	1.00	0.00
C									
ATOM	9426	CB	ILE	589	10.787	-69.251	53.595	1.00	0.00
C									
ATOM	9427	CG2	ILE	589	10.660	-69.278	52.055	1.00	0.00
C									
ATOM	9428	CG1	ILE	589	9.431	-69.607	54.217	1.00	0.00
C									
ATOM	9429	CD1	ILE	589	8.384	-68.520	54.313	1.00	0.00
C									
ATOM	9430	C	ILE	589	13.198	-69.902	53.343	1.00	0.00
C									
ATOM	9431	O	ILE	589	13.947	-68.971	53.655	1.00	0.00
O									
ATOM	9432	N	LEU	590	13.511	-70.787	52.351	1.00	0.00
N									
ATOM	9433	CA	LEU	590	14.748	-70.678	51.509	1.00	0.00
C									
ATOM	9434	CB	LEU	590	15.729	-71.768	51.943	1.00	0.00
C									
ATOM	9435	CG	LEU	590	15.952	-72.066	53.398	1.00	0.00
C									
ATOM	9436	CD1	LEU	590	16.711	-73.283	53.535	1.00	0.00
C									
ATOM	9437	CD2	LEU	590	16.784	-70.951	54.082	1.00	0.00
C									
ATOM	9438	C	LEU	590	14.595	-70.531	50.024	1.00	0.00
C									
ATOM	9439	O	LEU	590	15.556	-70.252	49.245	1.00	0.00
O									
ATOM	9440	N	CYX	591	13.405	-70.876	49.491	1.00	0.00
N									

ATOM	9441	CA	CYX	591	13.047	-70.783	48.079	1.00	0.00
C									
ATOM	9442	CB	CYX	591	12.191	-72.036	47.679	1.00	0.00
C									
ATOM	9443	SG	CYX	591	12.889	-73.644	47.991	1.00	0.00
S									
ATOM	9444	C	CYX	591	12.126	-69.585	47.672	1.00	0.00
C									
ATOM	9445	O	CYX	591	11.309	-69.246	48.496	1.00	0.00
O									
ATOM	9446	N	LEU	592	12.343	-69.028	46.512	1.00	0.00
N									
ATOM	9447	CA	LEU	592	12.065	-67.665	46.084	1.00	0.00
C									
ATOM	9448	CB	LEU	592	13.231	-66.842	46.577	1.00	0.00
C									
ATOM	9449	CG	LEU	592	13.274	-65.290	46.354	1.00	0.00
C									
ATOM	9450	CD1	LEU	592	12.278	-64.670	47.298	1.00	0.00
C									
ATOM	9451	CD2	LEU	592	14.715	-64.734	46.563	1.00	0.00
C									
ATOM	9452	C	LEU	592	11.897	-67.556	44.538	1.00	0.00
C									
ATOM	9453	O	LEU	592	10.794	-67.163	44.112	1.00	0.00
O									
ATOM	9454	OXT	LEU	592	12.794	-68.037	43.752	1.00	0.00
O1-									
HETATM	9455	ZN	ZN	593	0.347	-93.341	45.479	1.00	0.00
ZN2+									
HETATM	9456	C1	85C	594	10.319	-103.503	28.543	1.00	0.00
C									
HETATM	9457	C2	85C	594	11.355	-104.462	28.503	1.00	0.00
C									
HETATM	9458	C3	85C	594	12.390	-104.440	29.440	1.00	0.00
C									
HETATM	9459	C4	85C	594	10.356	-102.445	29.498	1.00	0.00
C									
HETATM	9460	C5	85C	594	11.360	-102.416	30.444	1.00	0.00
C									
HETATM	9461	C6	85C	594	12.386	-103.349	30.343	1.00	0.00
C									
HETATM	9462	N1	85C	594	12.802	-102.084	32.267	1.00	0.00
N									
HETATM	9463	N2	85C	594	16.025	-101.208	33.940	1.00	0.00
N									
HETATM	9464	S3	85C	594	11.524	-105.291	25.866	1.00	0.00
S2+									
HETATM	9465	O31	85C	594	10.703	-104.144	25.495	1.00	0.00
O1-									
HETATM	9466	O32	85C	594	13.004	-105.265	25.634	1.00	0.00
O1-									
HETATM	9467	O1	85C	594	11.066	-100.675	32.100	1.00	0.00
O									

HETATM	9468	C7	85C	594	13.337-103.049	31.456	1.00	0.00
C								
HETATM	9469	C8	85C	594	11.662-101.611	31.679	1.00	0.00
C								
HETATM	9470	C9	85C	594	13.566-101.498	33.404	1.00	0.00
C								
HETATM	9471	C10	85C	594	13.577-102.410	34.697	1.00	0.00
C								
HETATM	9472	C11	85C	594	14.474-101.723	35.745	1.00	0.00
C								
HETATM	9473	C12	85C	594	15.912-101.657	35.205	1.00	0.00
C								
HETATM	9474	C13	85C	594	15.013-100.945	33.127	1.00	0.00
C								
HETATM	9475	N14	85C	594	11.381-105.450	27.575	1.00	0.00
N								
HETATM	9476	O2	85C	594	15.181-100.232	32.157	1.00	0.00
O								
HETATM	9477	O3	85C	594	16.811-102.007	35.879	1.00	0.00
O								
HETATM	9478	C	85C	594	9.674-109.034	24.032	1.00	0.00
C								
HETATM	9479	C14	85C	594	10.442-108.162	23.205	1.00	0.00
C								
HETATM	9480	CL	85C	594	10.797-108.687	21.548	1.00	0.00
CL								
HETATM	9481	C15	85C	594	11.016-107.047	23.746	1.00	0.00
C								
HETATM	9482	C16	85C	594	11.771-106.058	22.883	1.00	0.00
C								
HETATM	9483	C17	85C	594	10.833-106.759	25.099	1.00	0.00
C								
HETATM	9484	C18	85C	594	10.056-107.613	25.897	1.00	0.00
C								
HETATM	9485	C19	85C	594	9.495-108.753	25.349	1.00	0.00
C								
HETATM	9486	O	85C	594	14.449-103.506	31.576	1.00	0.00
O								
TER	9487		85C	594				
ATOM	9488	CH3	ACE	1	31.016-122.895	16.165	1.00	0.00
C								
ATOM	9489	C	ACE	1	31.213-122.158	14.873	1.00	0.00
C								
ATOM	9490	O	ACE	1	30.772-120.984	14.745	1.00	0.00
O								
ATOM	9491	N	ILE	2	31.745-122.843	13.860	1.00	0.00
N								
ATOM	9492	CA	ILE	2	31.661-122.316	12.445	1.00	0.00
C								
ATOM	9493	CB	ILE	2	32.567-123.105	11.442	1.00	0.00
C								
ATOM	9494	CG2	ILE	2	32.261-122.539	10.039	1.00	0.00
C								

ATOM	9495	CG1	ILE	2	34.084-122.883	11.755	1.00	0.00
C								
ATOM	9496	CD1	ILE	2	34.843-124.232	11.594	1.00	0.00
C								
ATOM	9497	C	ILE	2	30.223-122.403	11.993	1.00	0.00
C								
ATOM	9498	O	ILE	2	29.613-123.496	12.045	1.00	0.00
O								
ATOM	9499	N	ARG	3	29.661-121.306	11.396	1.00	0.00
N								
ATOM	9500	CA	ARG	3	28.466-121.418	10.523	1.00	0.00
C								
ATOM	9501	CB	ARG	3	27.254-120.888	11.301	1.00	0.00
C								
ATOM	9502	CG	ARG	3	26.676-121.726	12.437	1.00	0.00
C								
ATOM	9503	CD	ARG	3	27.261-121.449	13.840	1.00	0.00
C								
ATOM	9504	NE	ARG	3	26.816-122.383	14.924	1.00	0.00
N								
ATOM	9505	CZ	ARG	3	27.393-123.529	15.184	1.00	0.00
C								
ATOM	9506	NH1	ARG	3	28.343-124.005	14.431	1.00	0.00
N								
ATOM	9507	NH2	ARG	3	26.917-124.204	16.167	1.00	0.00
N1+								
ATOM	9508	C	ARG	3	28.534-120.608	9.190	1.00	0.00
C								
ATOM	9509	O	ARG	3	29.015-119.507	9.208	1.00	0.00
O								
ATOM	9510	N	LEU	4	28.085-121.176	8.076	1.00	0.00
N								
ATOM	9511	CA	LEU	4	27.688-120.441	6.824	1.00	0.00
C								
ATOM	9512	CB	LEU	4	28.762-120.523	5.675	1.00	0.00
C								
ATOM	9513	CG	LEU	4	28.398-119.916	4.285	1.00	0.00
C								
ATOM	9514	CD1	LEU	4	29.644-119.230	3.702	1.00	0.00
C								
ATOM	9515	CD2	LEU	4	27.906-120.917	3.191	1.00	0.00
C								
ATOM	9516	C	LEU	4	26.311-120.918	6.266	1.00	0.00
C								
ATOM	9517	O	LEU	4	26.251-122.045	5.736	1.00	0.00
O								
ATOM	9518	N	PRO	5	25.248-120.141	6.454	1.00	0.00
N								
ATOM	9519	CD	PRO	5	25.082-119.008	7.354	1.00	0.00
C								
ATOM	9520	CG	PRO	5	23.736-119.238	8.000	1.00	0.00
C								
ATOM	9521	CB	PRO	5	22.906-119.608	6.783	1.00	0.00
C								

ATOM	9522	CA	PRO	5	23.901-120.429	5.989	1.00	0.00
C								
ATOM	9523	C	PRO	5	23.798-120.342	4.440	1.00	0.00
C								
ATOM	9524	O	PRO	5	24.383-119.485	3.837	1.00	0.00
O								
ATOM	9525	N	ILE	6	23.200-121.297	3.744	1.00	0.00
N								
ATOM	9526	CA	ILE	6	22.953-121.318	2.326	1.00	0.00
C								
ATOM	9527	CB	ILE	6	22.866-122.757	1.814	1.00	0.00
C								
ATOM	9528	CG2	ILE	6	22.476-122.850	0.297	1.00	0.00
C								
ATOM	9529	CG1	ILE	6	24.315-123.427	1.988	1.00	0.00
C								
ATOM	9530	CD1	ILE	6	24.181-124.960	1.995	1.00	0.00
C								
ATOM	9531	C	ILE	6	21.748-120.452	1.971	1.00	0.00
C								
ATOM	9532	O	ILE	6	20.814-120.321	2.803	1.00	0.00
O								
ATOM	9533	N	VAL	7	21.740-119.786	0.822	1.00	0.00
N								
ATOM	9534	CA	VAL	7	20.521-119.086	0.339	1.00	0.00
C								
ATOM	9535	CB	VAL	7	20.749-117.607	0.700	1.00	0.00
C								
ATOM	9536	CG1	VAL	7	21.829-116.851	-0.069	1.00	0.00
C								
ATOM	9537	CG2	VAL	7	19.429-116.808	0.515	1.00	0.00
C								
ATOM	9538	C	VAL	7	20.314-119.279	-1.147	1.00	0.00
C								
ATOM	9539	O	VAL	7	19.240-118.913	-1.605	1.00	0.00
O								
ATOM	9540	N	ASP	8	21.217-119.843	-1.943	1.00	0.00
N								
ATOM	9541	CA	ASP	8	20.957-120.322	-3.305	1.00	0.00
C								
ATOM	9542	CB	ASP	8	20.898-119.186	-4.314	1.00	0.00
C								
ATOM	9543	CG	ASP	8	20.134-119.616	-5.573	1.00	0.00
C								
ATOM	9544	OD1	ASP	8	19.523-120.702	-5.680	1.00	0.00
O								
ATOM	9545	OD2	ASP	8	20.301-118.984	-6.654	1.00	0.00
O1-								
ATOM	9546	C	ASP	8	22.078-121.424	-3.652	1.00	0.00
C								
ATOM	9547	O	ASP	8	23.204-121.381	-3.156	1.00	0.00
O								
ATOM	9548	N	LYS	9	21.713-122.404	-4.418	1.00	0.00
N								

ATOM	9549	CA	LYS	9	22.594-123.511	-4.815	1.00	0.00
C								
ATOM	9550	CB	LYS	9	22.259-124.655	-3.857	1.00	0.00
C								
ATOM	9551	CG	LYS	9	20.919-125.406	-4.148	1.00	0.00
C								
ATOM	9552	CD	LYS	9	19.671-124.533	-4.467	1.00	0.00
C								
ATOM	9553	CE	LYS	9	18.302-125.225	-4.641	1.00	0.00
C								
ATOM	9554	NZ	LYS	9	17.211-124.345	-5.041	1.00	0.00
N1+								
ATOM	9555	C	LYS	9	22.517-123.856	-6.360	1.00	0.00
C								
ATOM	9556	O	LYS	9	21.653-123.463	-7.116	1.00	0.00
O								
ATOM	9557	N	TYR	10	23.663-124.407	-6.754	1.00	0.00
N								
ATOM	9558	CA	TYR	10	23.972-124.825	-8.129	1.00	0.00
C								
ATOM	9559	CB	TYR	10	24.787-123.712	-8.831	1.00	0.00
C								
ATOM	9560	CG	TYR	10	24.503-122.276	-8.335	1.00	0.00
C								
ATOM	9561	CD1	TYR	10	23.567-121.465	-9.080	1.00	0.00
C								
ATOM	9562	CE1	TYR	10	23.375-120.126	-8.646	1.00	0.00
C								
ATOM	9563	CZ	TYR	10	23.972-119.566	-7.513	1.00	0.00
C								
ATOM	9564	OH	TYR	10	23.583-118.270	-7.176	1.00	0.00
O								
ATOM	9565	CE2	TYR	10	24.985-120.263	-6.861	1.00	0.00
C								
ATOM	9566	CD2	TYR	10	25.228-121.625	-7.266	1.00	0.00
C								
ATOM	9567	C	TYR	10	24.701-126.173	-8.149	1.00	0.00
C								
ATOM	9568	O	TYR	10	25.467-126.551	-7.260	1.00	0.00
O								
ATOM	9569	N	LYS	11	24.568-126.922	-9.285	1.00	0.00
N								
ATOM	9570	CA	LYS	11	25.324-128.132	-9.647	1.00	0.00
C								
ATOM	9571	CB	LYS	11	24.479-129.391	-9.193	1.00	0.00
C								
ATOM	9572	CG	LYS	11	24.488-129.617	-7.694	1.00	0.00
C								
ATOM	9573	CD	LYS	11	23.763-130.954	-7.336	1.00	0.00
C								
ATOM	9574	CE	LYS	11	23.608-131.043	-5.796	1.00	0.00
C								
ATOM	9575	NZ	LYS	11	22.654-132.164	-5.485	1.00	0.00
N1+								

ATOM	9576	C	LYS	11	25.646	-128.297	-11.153	1.00	0.00
C									
ATOM	9577	O	LYS	11	26.363	-129.204	-11.537	1.00	0.00
O									
ATOM	9578	N	ASP	12	25.053	-127.485	-11.936	1.00	0.00
N									
ATOM	9579	CA	ASP	12	25.395	-127.386	-13.349	1.00	0.00
C									
ATOM	9580	CB	ASP	12	24.727	-126.163	-13.986	1.00	0.00
C									
ATOM	9581	CG	ASP	12	23.217	-126.376	-14.139	1.00	0.00
C									
ATOM	9582	OD1	ASP	12	22.428	-125.389	-14.060	1.00	0.00
O									
ATOM	9583	OD2	ASP	12	22.718	-127.519	-14.133	1.00	0.00
O1-									
ATOM	9584	C	ASP	12	26.920	-127.255	-13.411	1.00	0.00
C									
ATOM	9585	O	ASP	12	27.479	-126.250	-13.010	1.00	0.00
O									
ATOM	9586	N	MET	13	27.561	-128.291	-14.020	1.00	0.00
N									
ATOM	9587	CA	MET	13	28.977	-128.431	-14.147	1.00	0.00
C									
ATOM	9588	CB	MET	13	29.456	-127.558	-15.254	1.00	0.00
C									
ATOM	9589	CG	MET	13	30.847	-127.927	-15.783	1.00	0.00
C									
ATOM	9590	SD	MET	13	31.066	-129.679	-16.332	1.00	0.00
S									
ATOM	9591	CE	MET	13	29.707	-129.951	-17.520	1.00	0.00
C									
ATOM	9592	C	MET	13	29.800	-128.365	-12.911	1.00	0.00
C									
ATOM	9593	O	MET	13	30.945	-127.880	-12.962	1.00	0.00
O									
ATOM	9594	N	GLY	14	29.366	-128.930	-11.783	1.00	0.00
N									
ATOM	9595	CA	GLY	14	30.013	-129.086	-10.551	1.00	0.00
C									
ATOM	9596	C	GLY	14	29.364	-128.291	-9.429	1.00	0.00
C									
ATOM	9597	O	GLY	14	28.671	-127.301	-9.685	1.00	0.00
O									
ATOM	9598	N	THR	15	29.413	-128.720	-8.167	1.00	0.00
N									
ATOM	9599	CA	THR	15	28.729	-128.044	-7.061	1.00	0.00
C									
ATOM	9600	CB	THR	15	28.797	-128.865	-5.846	1.00	0.00
C									
ATOM	9601	CG2	THR	15	27.721	-128.366	-4.796	1.00	0.00
C									
ATOM	9602	OG1	THR	15	28.444	-130.173	-6.022	1.00	0.00
O									

ATOM	9603	C	THR	15	29.308-126.681	-6.700	1.00	0.00
C								
ATOM	9604	O	THR	15	30.521-126.512	-6.609	1.00	0.00
O								
ATOM	9605	N	VAL	16	28.386-125.808	-6.512	1.00	0.00
N								
ATOM	9606	CA	VAL	16	28.552-124.409	-6.041	1.00	0.00
C								
ATOM	9607	CB	VAL	16	28.636-123.344	-7.158	1.00	0.00
C								
ATOM	9608	CG1	VAL	16	29.112-122.077	-6.433	1.00	0.00
C								
ATOM	9609	CG2	VAL	16	29.726-123.536	-8.212	1.00	0.00
C								
ATOM	9610	C	VAL	16	27.433-124.109	-5.054	1.00	0.00
C								
ATOM	9611	O	VAL	16	26.296-124.446	-5.301	1.00	0.00
O								
ATOM	9612	N	VAL	17	27.655-123.256	-4.068	1.00	0.00
N								
ATOM	9613	CA	VAL	17	26.502-122.671	-3.264	1.00	0.00
C								
ATOM	9614	CB	VAL	17	26.193-123.491	-2.048	1.00	0.00
C								
ATOM	9615	CG1	VAL	17	25.996-124.964	-2.356	1.00	0.00
C								
ATOM	9616	CG2	VAL	17	27.315-123.523	-1.020	1.00	0.00
C								
ATOM	9617	C	VAL	17	26.771-121.189	-2.948	1.00	0.00
C								
ATOM	9618	O	VAL	17	27.874-120.742	-2.928	1.00	0.00
O								
ATOM	9619	N	LEU	18	25.734-120.365	-2.708	1.00	0.00
N								
ATOM	9620	CA	LEU	18	25.773-118.932	-2.300	1.00	0.00
C								
ATOM	9621	CB	LEU	18	24.781-118.221	-3.169	1.00	0.00
C								
ATOM	9622	CG	LEU	18	24.529-116.712	-2.919	1.00	0.00
C								
ATOM	9623	CD1	LEU	18	25.777-115.797	-2.933	1.00	0.00
C								
ATOM	9624	CD2	LEU	18	23.639-116.275	-4.125	1.00	0.00
C								
ATOM	9625	C	LEU	18	25.352-118.717	-0.887	1.00	0.00
C								
ATOM	9626	O	LEU	18	24.451-119.388	-0.376	1.00	0.00
O								
ATOM	9627	N	GLY	19	26.071-117.813	-0.244	1.00	0.00
N								
ATOM	9628	CA	GLY	19	25.817-117.677	1.198	1.00	0.00
C								
ATOM	9629	C	GLY	19	26.956-116.864	1.896	1.00	0.00
C								



ATOM	9630	O	GLY	19	28.027-116.605	1.366	1.00	0.00
O								
ATOM	9631	N	LYS	20	26.615-116.278	3.053	1.00	0.00
N								
ATOM	9632	CA	LYS	20	27.476-115.443	3.907	1.00	0.00
C								
ATOM	9633	CB	LYS	20	26.596-114.357	4.427	1.00	0.00
C								
ATOM	9634	CG	LYS	20	27.379-113.141	4.951	1.00	0.00
C								
ATOM	9635	CD	LYS	20	26.542-112.259	5.863	1.00	0.00
C								
ATOM	9636	CE	LYS	20	26.413-113.046	7.184	1.00	0.00
C								
ATOM	9637	NZ	LYS	20	25.540-112.417	8.231	1.00	0.00
N1+								
ATOM	9638	C	LYS	20	28.031-116.248	5.081	1.00	0.00
C								
ATOM	9639	O	LYS	20	27.253-116.877	5.733	1.00	0.00
O								
ATOM	9640	N	LEU	21	29.308-116.100	5.381	1.00	0.00
N								
ATOM	9641	CA	LEU	21	30.016-116.688	6.540	1.00	0.00
C								
ATOM	9642	CB	LEU	21	31.496-116.603	6.274	1.00	0.00
C								
ATOM	9643	CG	LEU	21	32.466-116.857	7.460	1.00	0.00
C								
ATOM	9644	CD1	LEU	21	32.343-118.323	8.039	1.00	0.00
C								
ATOM	9645	CD2	LEU	21	33.932-116.595	7.099	1.00	0.00
C								
ATOM	9646	C	LEU	21	29.524-115.964	7.818	1.00	0.00
C								
ATOM	9647	O	LEU	21	29.468-114.712	7.792	1.00	0.00
O								
ATOM	9648	N	GLU	22	29.285-116.679	8.929	1.00	0.00
N								
ATOM	9649	CA	GLU	22	28.683-116.097	10.161	1.00	0.00
C								
ATOM	9650	CB	GLU	22	27.333-116.718	10.489	1.00	0.00
C								
ATOM	9651	CG	GLU	22	26.230-116.281	9.461	1.00	0.00
C								
ATOM	9652	CD	GLU	22	25.529-114.949	9.783	1.00	0.00
C								
ATOM	9653	OE1	GLU	22	26.202-114.109	10.260	1.00	0.00
O								
ATOM	9654	OE2	GLU	22	24.381-114.765	9.312	1.00	0.00
O1-								
ATOM	9655	C	GLU	22	29.672-116.213	11.309	1.00	0.00
C								
ATOM	9656	O	GLU	22	29.656-115.411	12.248	1.00	0.00
O								

ATOM	9657	N	SER	23	30.474-117.246	11.440	1.00	0.00
N								
ATOM	9658	CA	SER	23	31.429-117.360	12.550	1.00	0.00
C								
ATOM	9659	CB	SER	23	30.665-117.730	13.793	1.00	0.00
C								
ATOM	9660	OG	SER	23	31.446-118.358	14.690	1.00	0.00
O								
ATOM	9661	C	SER	23	32.578-118.387	12.202	1.00	0.00
C								
ATOM	9662	O	SER	23	32.325-119.151	11.229	1.00	0.00
O								
ATOM	9663	N	GLY	24	33.810-118.406	12.787	1.00	0.00
N								
ATOM	9664	CA	GLY	24	34.847-119.311	12.279	1.00	0.00
C								
ATOM	9665	C	GLY	24	35.484-118.867	10.969	1.00	0.00
C								
ATOM	9666	O	GLY	24	35.723-117.688	10.738	1.00	0.00
O								
ATOM	9667	N	SER	25	35.708-119.865	10.134	1.00	0.00
N								
ATOM	9668	CA	SER	25	36.292-119.746	8.821	1.00	0.00
C								
ATOM	9669	CB	SER	25	37.809-119.470	8.924	1.00	0.00
C								
ATOM	9670	OG	SER	25	38.470-120.635	9.460	1.00	0.00
O								
ATOM	9671	C	SER	25	36.099-120.963	7.909	1.00	0.00
C								
ATOM	9672	O	SER	25	35.836-122.079	8.422	1.00	0.00
O								
ATOM	9673	N	ILE	26	36.154-120.752	6.626	1.00	0.00
N								
ATOM	9674	CA	ILE	26	35.782-121.731	5.581	1.00	0.00
C								
ATOM	9675	CB	ILE	26	34.316-121.656	5.076	1.00	0.00
C								
ATOM	9676	CG2	ILE	26	34.050-122.637	3.890	1.00	0.00
C								
ATOM	9677	CG1	ILE	26	33.465-122.068	6.315	1.00	0.00
C								
ATOM	9678	CD1	ILE	26	31.937-122.033	5.962	1.00	0.00
C								
ATOM	9679	C	ILE	26	36.841-121.600	4.417	1.00	0.00
C								
ATOM	9680	O	ILE	26	36.786-120.613	3.712	1.00	0.00
O								
ATOM	9681	N	CYS	27	37.642-122.623	4.238	1.00	0.00
N								
ATOM	9682	CA	CYS	27	38.817-122.666	3.324	1.00	0.00
C								
ATOM	9683	CB	CYS	27	40.071-122.517	4.187	1.00	0.00
C								

ATOM	9684	SG	CYS	27	41.650-122.373	3.283	1.00	0.00
S								
ATOM	9685	C	CYS	27	38.899-123.860	2.313	1.00	0.00
C								
ATOM	9686	O	CYS	27	38.301-124.880	2.667	1.00	0.00
O								
ATOM	9687	N	LYS	28	39.664-123.640	1.153	1.00	0.00
N								
ATOM	9688	CA	LYS	28	39.908-124.793	0.322	1.00	0.00
C								
ATOM	9689	CB	LYS	28	40.950-124.342	-0.751	1.00	0.00
C								
ATOM	9690	CG	LYS	28	40.322-123.413	-1.808	1.00	0.00
C								
ATOM	9691	CD	LYS	28	41.006-123.371	-3.179	1.00	0.00
C								
ATOM	9692	CE	LYS	28	41.407-124.746	-3.829	1.00	0.00
C								
ATOM	9693	NZ	LYS	28	41.833-124.651	-5.261	1.00	0.00
N1+								
ATOM	9694	C	LYS	28	40.528-125.983	1.086	1.00	0.00
C								
ATOM	9695	O	LYS	28	41.465-125.841	1.933	1.00	0.00
O								
ATOM	9696	N	GLY	29	39.953-127.163	0.820	1.00	0.00
N								
ATOM	9697	CA	GLY	29	40.293-128.419	1.494	1.00	0.00
C								
ATOM	9698	C	GLY	29	39.659-128.689	2.807	1.00	0.00
C								
ATOM	9699	O	GLY	29	39.803-129.802	3.347	1.00	0.00
O								
ATOM	9700	N	GLN	30	38.993-127.717	3.390	1.00	0.00
N								
ATOM	9701	CA	GLN	30	38.380-127.926	4.724	1.00	0.00
C								
ATOM	9702	CB	GLN	30	38.061-126.579	5.365	1.00	0.00
C								
ATOM	9703	CG	GLN	30	37.550-126.652	6.788	1.00	0.00
C								
ATOM	9704	CD	GLN	30	37.258-125.214	7.203	1.00	0.00
C								
ATOM	9705	OE1	GLN	30	37.860-124.251	6.760	1.00	0.00
O								
ATOM	9706	NE2	GLN	30	36.400-124.935	8.085	1.00	0.00
N								
ATOM	9707	C	GLN	30	37.074-128.732	4.557	1.00	0.00
C								
ATOM	9708	O	GLN	30	36.367-128.580	3.532	1.00	0.00
O								
ATOM	9709	N	GLN	31	36.809-129.726	5.400	1.00	0.00
N								
ATOM	9710	CA	GLN	31	35.553-130.539	5.457	1.00	0.00
C								

ATOM	9711	CB	GLN	31	35.987-131.928	5.896	1.00	0.00
C								
ATOM	9712	CG	GLN	31	36.833-132.449	4.681	1.00	0.00
C								
ATOM	9713	CD	GLN	31	36.667-133.928	4.607	1.00	0.00
C								
ATOM	9714	OE1	GLN	31	36.494-134.581	5.617	1.00	0.00
O								
ATOM	9715	NE2	GLN	31	36.849-134.574	3.469	1.00	0.00
N								
ATOM	9716	C	GLN	31	34.674-129.886	6.562	1.00	0.00
C								
ATOM	9717	O	GLN	31	35.127-129.462	7.644	1.00	0.00
O								
ATOM	9718	N	LEU	32	33.428-129.973	6.243	1.00	0.00
N								
ATOM	9719	CA	LEU	32	32.326-129.330	6.920	1.00	0.00
C								
ATOM	9720	CB	LEU	32	32.029-127.942	6.344	1.00	0.00
C								
ATOM	9721	CG	LEU	32	33.196-126.966	6.327	1.00	0.00
C								
ATOM	9722	CD1	LEU	32	33.518-126.443	4.921	1.00	0.00
C								
ATOM	9723	CD2	LEU	32	32.965-125.732	7.289	1.00	0.00
C								
ATOM	9724	C	LEU	32	31.050-130.311	6.844	1.00	0.00
C								
ATOM	9725	O	LEU	32	30.896-131.049	5.899	1.00	0.00
O								
ATOM	9726	N	VAL	33	30.145-130.237	7.846	1.00	0.00
N								
ATOM	9727	CA	VAL	33	28.846-131.013	8.007	1.00	0.00
C								
ATOM	9728	CB	VAL	33	28.788-131.671	9.368	1.00	0.00
C								
ATOM	9729	CG1	VAL	33	27.256-132.067	9.644	1.00	0.00
C								
ATOM	9730	CG2	VAL	33	29.744-132.886	9.451	1.00	0.00
C								
ATOM	9731	C	VAL	33	27.702-129.989	7.805	1.00	0.00
C								
ATOM	9732	O	VAL	33	27.530-129.054	8.586	1.00	0.00
O								
ATOM	9733	N	MET	34	27.019-130.185	6.665	1.00	0.00
N								
ATOM	9734	CA	MET	34	25.738-129.534	6.330	1.00	0.00
C								
ATOM	9735	CB	MET	34	25.468-129.684	4.842	1.00	0.00
C								
ATOM	9736	CG	MET	34	24.401-128.879	4.308	1.00	0.00
C								
ATOM	9737	SD	MET	34	24.263-128.908	2.493	1.00	0.00
S								

ATOM	9738	CE	MET	34	24.161-130.640	2.159	1.00	0.00
C								
ATOM	9739	C	MET	34	24.546-130.083	7.169	1.00	0.00
C								
ATOM	9740	O	MET	34	24.191-131.247	7.201	1.00	0.00
O								
ATOM	9741	N	MET	35	23.955-129.094	7.878	1.00	0.00
N								
ATOM	9742	CA	MET	35	22.751-129.256	8.637	1.00	0.00
C								
ATOM	9743	CB	MET	35	22.887-128.506	9.983	1.00	0.00
C								
ATOM	9744	CG	MET	35	24.036-129.197	10.788	1.00	0.00
C								
ATOM	9745	SD	MET	35	23.725-130.916	11.147	1.00	0.00
S								
ATOM	9746	CE	MET	35	22.372-130.910	12.404	1.00	0.00
C								
ATOM	9747	C	MET	35	21.583-128.658	7.851	1.00	0.00
C								
ATOM	9748	O	MET	35	21.765-127.715	7.081	1.00	0.00
O								
ATOM	9749	N	PRO	36	20.323-129.161	8.062	1.00	0.00
N								
ATOM	9750	CD	PRO	36	19.133-128.690	7.367	1.00	0.00
C								
ATOM	9751	CG	PRO	36	17.911-129.419	7.834	1.00	0.00
C								
ATOM	9752	CB	PRO	36	18.355-129.921	9.189	1.00	0.00
C								
ATOM	9753	CA	PRO	36	19.875-130.007	9.141	1.00	0.00
C								
ATOM	9754	C	PRO	36	20.327-131.532	8.886	1.00	0.00
C								
ATOM	9755	O	PRO	36	20.572-132.304	9.873	1.00	0.00
O								
ATOM	9756	N	ASN	37	20.519-131.986	7.669	1.00	0.00
N								
ATOM	9757	CA	ASN	37	20.694-133.408	7.414	1.00	0.00
C								
ATOM	9758	CB	ASN	37	20.184-133.809	5.992	1.00	0.00
C								
ATOM	9759	CG	ASN	37	18.799-133.281	5.646	1.00	0.00
C								
ATOM	9760	OD1	ASN	37	17.903-133.148	6.492	1.00	0.00
O								
ATOM	9761	ND2	ASN	37	18.509-132.976	4.457	1.00	0.00
N								
ATOM	9762	C	ASN	37	22.050-134.142	7.794	1.00	0.00
C								
ATOM	9763	O	ASN	37	22.294-135.293	7.391	1.00	0.00
O								
ATOM	9764	N	LYS	38	22.898-133.487	8.558	1.00	0.00
N								

ATOM	9765	CA	LYS	38	24.134-134.039	9.137	1.00	0.00
C								
ATOM	9766	CB	LYS	38	23.725-134.832	10.371	1.00	0.00
C								
ATOM	9767	CG	LYS	38	24.940-135.182	11.251	1.00	0.00
C								
ATOM	9768	CD	LYS	38	24.521-135.707	12.629	1.00	0.00
C								
ATOM	9769	CE	LYS	38	23.526-136.884	12.558	1.00	0.00
C								
ATOM	9770	NZ	LYS	38	22.977-137.221	13.923	1.00	0.00
N1+								
ATOM	9771	C	LYS	38	25.052-134.708	8.038	1.00	0.00
C								
ATOM	9772	O	LYS	38	25.611-135.858	8.184	1.00	0.00
O								
ATOM	9773	N	HIE	39	25.212-134.021	6.896	1.00	0.00
N								
ATOM	9774	CA	HIE	39	25.991-134.474	5.718	1.00	0.00
C								
ATOM	9775	CB	HIE	39	25.227-134.495	4.405	1.00	0.00
C								
ATOM	9776	CG	HIE	39	25.985-134.881	3.149	1.00	0.00
C								
ATOM	9777	ND1	HIE	39	26.395-136.170	2.840	1.00	0.00
N								
ATOM	9778	CE1	HIE	39	26.973-136.183	1.667	1.00	0.00
C								
ATOM	9779	NE2	HIE	39	26.891-134.970	1.056	1.00	0.00
N								
ATOM	9780	CD2	HIE	39	26.353-134.114	2.035	1.00	0.00
C								
ATOM	9781	C	HIE	39	27.354-133.801	5.473	1.00	0.00
C								
ATOM	9782	O	HIE	39	27.502-132.596	5.291	1.00	0.00
O								
ATOM	9783	N	ASN	40	28.443-134.575	5.222	1.00	0.00
N								
ATOM	9784	CA	ASN	40	29.784-134.055	4.933	1.00	0.00
C								
ATOM	9785	CB	ASN	40	30.724-135.198	5.258	1.00	0.00
C								
ATOM	9786	CG	ASN	40	31.112-135.214	6.739	1.00	0.00
C								
ATOM	9787	OD1	ASN	40	32.100-134.663	7.200	1.00	0.00
O								
ATOM	9788	ND2	ASN	40	30.298-135.845	7.522	1.00	0.00
N								
ATOM	9789	C	ASN	40	30.053-133.619	3.494	1.00	0.00
C								
ATOM	9790	O	ASN	40	29.915-134.326	2.495	1.00	0.00
O								
ATOM	9791	N	VAL	41	30.599-132.415	3.362	1.00	0.00
N								

ATOM	9792	CA	VAL	41	31.162-131.857	2.134	1.00	0.00
C								
ATOM	9793	CB	VAL	41	30.150-130.823	1.533	1.00	0.00
C								
ATOM	9794	CG1	VAL	41	28.758-131.419	1.191	1.00	0.00
C								
ATOM	9795	CG2	VAL	41	29.803-129.677	2.534	1.00	0.00
C								
ATOM	9796	C	VAL	41	32.503-131.130	2.330	1.00	0.00
C								
ATOM	9797	O	VAL	41	32.972-131.021	3.442	1.00	0.00
O								
ATOM	9798	N	GLU	42	33.091-130.627	1.273	1.00	0.00
N								
ATOM	9799	CA	GLU	42	34.518-130.214	1.149	1.00	0.00
C								
ATOM	9800	CB	GLU	42	35.380-131.530	1.009	1.00	0.00
C								
ATOM	9801	CG	GLU	42	36.912-131.221	1.108	1.00	0.00
C								
ATOM	9802	CD	GLU	42	37.805-132.459	0.981	1.00	0.00
C								
ATOM	9803	OE1	GLU	42	37.319-133.624	0.995	1.00	0.00
O								
ATOM	9804	OE2	GLU	42	39.049-132.267	0.913	1.00	0.00
O1-								
ATOM	9805	C	GLU	42	34.676-129.167	0.018	1.00	0.00
C								
ATOM	9806	O	GLU	42	34.062-129.307	-1.015	1.00	0.00
O								
ATOM	9807	N	VAL	43	35.438-128.178	0.345	1.00	0.00
N								
ATOM	9808	CA	VAL	43	35.381-126.927	-0.371	1.00	0.00
C								
ATOM	9809	CB	VAL	43	35.487-125.680	0.523	1.00	0.00
C								
ATOM	9810	CG1	VAL	43	35.927-124.351	-0.144	1.00	0.00
C								
ATOM	9811	CG2	VAL	43	34.139-125.406	1.191	1.00	0.00
C								
ATOM	9812	C	VAL	43	36.591-126.891	-1.360	1.00	0.00
C								
ATOM	9813	O	VAL	43	37.719-127.235	-1.055	1.00	0.00
O								
ATOM	9814	N	LEU	44	36.255-126.503	-2.582	1.00	0.00
N								
ATOM	9815	CA	LEU	44	37.181-126.528	-3.700	1.00	0.00
C								
ATOM	9816	CB	LEU	44	36.393-127.286	-4.815	1.00	0.00
C								
ATOM	9817	CG	LEU	44	37.133-127.301	-6.147	1.00	0.00
C								
ATOM	9818	CD1	LEU	44	38.528-127.966	-6.144	1.00	0.00
C								

ATOM	9819	CD2	LEU	44	36.234-128.038	-7.169	1.00	0.00
C								
ATOM	9820	C	LEU	44	37.645-125.103	-4.086	1.00	0.00
C								
ATOM	9821	O	LEU	44	38.678-124.990	-4.716	1.00	0.00
O								
ATOM	9822	N	GLY	45	36.922-124.040	-3.743	1.00	0.00
N								
ATOM	9823	CA	GLY	45	37.187-122.662	-4.274	1.00	0.00
C								
ATOM	9824	C	GLY	45	36.050-121.650	-4.093	1.00	0.00
C								
ATOM	9825	O	GLY	45	34.999-122.008	-3.548	1.00	0.00
O								
ATOM	9826	N	ILE	46	36.181-120.428	-4.570	1.00	0.00
N								
ATOM	9827	CA	ILE	46	35.106-119.360	-4.586	1.00	0.00
C								
ATOM	9828	CB	ILE	46	35.469-118.353	-3.489	1.00	0.00
C								
ATOM	9829	CG2	ILE	46	34.523-117.136	-3.490	1.00	0.00
C								
ATOM	9830	CG1	ILE	46	35.365-118.911	-2.047	1.00	0.00
C								
ATOM	9831	CD1	ILE	46	36.741-119.089	-1.458	1.00	0.00
C								
ATOM	9832	C	ILE	46	35.110-118.684	-5.954	1.00	0.00
C								
ATOM	9833	O	ILE	46	36.165-118.615	-6.577	1.00	0.00
O								
ATOM	9834	N	LEU	47	33.941-118.305	-6.536	1.00	0.00
N								
ATOM	9835	CA	LEU	47	33.776-117.466	-7.751	1.00	0.00
C								
ATOM	9836	CB	LEU	47	32.309-117.442	-8.208	1.00	0.00
C								
ATOM	9837	CG	LEU	47	31.896-118.656	-9.069	1.00	0.00
C								
ATOM	9838	CD1	LEU	47	32.049-119.967	-8.314	1.00	0.00
C								
ATOM	9839	CD2	LEU	47	30.439-118.505	-9.453	1.00	0.00
C								
ATOM	9840	C	LEU	47	34.327-116.069	-7.438	1.00	0.00
C								
ATOM	9841	O	LEU	47	34.053-115.411	-6.381	1.00	0.00
O								
ATOM	9842	N	SER	48	35.186-115.610	-8.383	1.00	0.00
N								
ATOM	9843	CA	SER	48	35.891-114.421	-8.273	1.00	0.00
C								
ATOM	9844	CB	SER	48	37.132-114.240	-9.183	1.00	0.00
C								
ATOM	9845	OG	SER	48	37.999-113.283	-8.669	1.00	0.00
O								



ATOM	9846	C	SER	48	34.959-113.191	-8.439	1.00	0.00
C								
ATOM	9847	O	SER	48	34.307-113.000	-9.505	1.00	0.00
O								
ATOM	9848	N	ASP	49	34.919-112.341	-7.455	1.00	0.00
N								
ATOM	9849	CA	ASP	49	34.191-111.005	-7.466	1.00	0.00
C								
ATOM	9850	CB	ASP	49	33.683-110.665	-6.049	1.00	0.00
C								
ATOM	9851	CG	ASP	49	32.506-111.586	-5.759	1.00	0.00
C								
ATOM	9852	OD1	ASP	49	32.601-112.836	-5.894	1.00	0.00
O								
ATOM	9853	OD2	ASP	49	31.462-111.072	-5.328	1.00	0.00
O1-								
ATOM	9854	C	ASP	49	35.079-109.825	-7.834	1.00	0.00
C								
ATOM	9855	O	ASP	49	34.569-108.742	-8.110	1.00	0.00
O								
ATOM	9856	N	ASP	50	36.385-109.964	-7.870	1.00	0.00
N								
ATOM	9857	CA	ASP	50	37.467-108.946	-7.769	1.00	0.00
C								
ATOM	9858	CB	ASP	50	37.427-108.208	-6.395	1.00	0.00
C								
ATOM	9859	CG	ASP	50	38.365-107.046	-6.281	1.00	0.00
C								
ATOM	9860	OD1	ASP	50	38.982-106.965	-5.183	1.00	0.00
O								
ATOM	9861	OD2	ASP	50	38.347-106.144	-7.168	1.00	0.00
O1-								
ATOM	9862	C	ASP	50	38.840-109.644	-8.010	1.00	0.00
C								
ATOM	9863	O	ASP	50	39.572-109.109	-8.875	1.00	0.00
O								
ATOM	9864	N	VAL	51	39.264-110.613	-7.165	1.00	0.00
N								
ATOM	9865	CA	VAL	51	40.603-111.234	-7.138	1.00	0.00
C								
ATOM	9866	CB	VAL	51	41.707-110.367	-6.529	1.00	0.00
C								
ATOM	9867	CG1	VAL	51	41.567-110.117	-5.072	1.00	0.00
C								
ATOM	9868	CG2	VAL	51	43.101-110.873	-6.812	1.00	0.00
C								
ATOM	9869	C	VAL	51	40.432-112.563	-6.379	1.00	0.00
C								
ATOM	9870	O	VAL	51	39.437-112.891	-5.694	1.00	0.00
O								
ATOM	9871	N	GLU	52	41.440-113.445	-6.502	1.00	0.00
N								
ATOM	9872	CA	GLU	52	41.360-114.955	-6.209	1.00	0.00
C								

ATOM	9873	CB	GLU	52	42.320-115.829	-7.019	1.00	0.00
C								
ATOM	9874	CG	GLU	52	42.434-115.376	-8.521	1.00	0.00
C								
ATOM	9875	CD	GLU	52	41.179-115.413	-9.359	1.00	0.00
C								
ATOM	9876	OE1	GLU	52	40.456-114.434	-9.340	1.00	0.00
O								
ATOM	9877	OE2	GLU	52	40.982-116.246	-10.286	1.00	0.00
O1-								
ATOM	9878	C	GLU	52	41.431-115.188	-4.776	1.00	0.00
C								
ATOM	9879	O	GLU	52	42.256-114.605	-4.077	1.00	0.00
O								
ATOM	9880	N	THR	53	40.629-116.065	-4.305	1.00	0.00
N								
ATOM	9881	CA	THR	53	40.567-116.366	-2.896	1.00	0.00
C								
ATOM	9882	CB	THR	53	39.405-115.648	-2.098	1.00	0.00
C								
ATOM	9883	CG2	THR	53	39.693-114.139	-2.216	1.00	0.00
C								
ATOM	9884	OG1	THR	53	38.136-115.916	-2.616	1.00	0.00
O								
ATOM	9885	C	THR	53	40.520-117.879	-2.720	1.00	0.00
C								
ATOM	9886	O	THR	53	39.910-118.627	-3.413	1.00	0.00
O								
ATOM	9887	N	ASP	54	41.131-118.337	-1.589	1.00	0.00
N								
ATOM	9888	CA	ASP	54	41.133-119.747	-1.136	1.00	0.00
C								
ATOM	9889	CB	ASP	54	42.545-120.354	-1.101	1.00	0.00
C								
ATOM	9890	CG	ASP	54	43.502-119.726	-0.010	1.00	0.00
C								
ATOM	9891	OD1	ASP	54	43.109-118.868	0.780	1.00	0.00
O								
ATOM	9892	OD2	ASP	54	44.647-120.281	0.002	1.00	0.00
O1-								
ATOM	9893	C	ASP	54	40.360-119.892	0.242	1.00	0.00
C								
ATOM	9894	O	ASP	54	40.258-120.996	0.783	1.00	0.00
O								
ATOM	9895	N	THR	55	39.890-118.814	0.732	1.00	0.00
N								
ATOM	9896	CA	THR	55	39.389-118.700	2.077	1.00	0.00
C								
ATOM	9897	CB	THR	55	40.398-118.325	3.196	1.00	0.00
C								
ATOM	9898	CG2	THR	55	39.941-118.487	4.693	1.00	0.00
C								
ATOM	9899	OG1	THR	55	41.656-118.975	3.113	1.00	0.00
O								

ATOM	9900	C	THR	55	38.296-117.683	1.999	1.00	0.00
C								
ATOM	9901	O	THR	55	38.489-116.593	1.436	1.00	0.00
O								
ATOM	9902	N	VAL	56	37.099-118.057	2.582	1.00	0.00
N								
ATOM	9903	CA	VAL	56	35.929-117.138	2.539	1.00	0.00
C								
ATOM	9904	CB	VAL	56	34.524-117.837	2.862	1.00	0.00
C								
ATOM	9905	CG1	VAL	56	33.411-116.742	2.835	1.00	0.00
C								
ATOM	9906	CG2	VAL	56	34.124-119.014	2.049	1.00	0.00
C								
ATOM	9907	C	VAL	56	36.121-115.880	3.322	1.00	0.00
C								
ATOM	9908	O	VAL	56	36.393-116.046	4.518	1.00	0.00
O								
ATOM	9909	N	ALA	57	36.029-114.687	2.789	1.00	0.00
N								
ATOM	9910	CA	ALA	57	36.011-113.394	3.582	1.00	0.00
C								
ATOM	9911	CB	ALA	57	36.401-112.171	2.697	1.00	0.00
C								
ATOM	9912	C	ALA	57	34.640-112.998	4.288	1.00	0.00
C								
ATOM	9913	O	ALA	57	33.639-113.156	3.561	1.00	0.00
O								
ATOM	9914	N	PRO	58	34.536-112.653	5.611	1.00	0.00
N								
ATOM	9915	CD	PRO	58	35.660-112.611	6.563	1.00	0.00
C								
ATOM	9916	CG	PRO	58	35.178-112.058	7.832	1.00	0.00
C								
ATOM	9917	CB	PRO	58	33.663-112.161	7.648	1.00	0.00
C								
ATOM	9918	CA	PRO	58	33.248-112.295	6.152	1.00	0.00
C								
ATOM	9919	C	PRO	58	32.538-111.021	5.554	1.00	0.00
C								
ATOM	9920	O	PRO	58	33.106-110.053	5.038	1.00	0.00
O								
ATOM	9921	N	GLY	59	31.270-110.955	5.808	1.00	0.00
N								
ATOM	9922	CA	GLY	59	30.431-109.787	5.351	1.00	0.00
C								
ATOM	9923	C	GLY	59	29.950-109.776	3.940	1.00	0.00
C								
ATOM	9924	O	GLY	59	29.462-108.745	3.489	1.00	0.00
O								
ATOM	9925	N	GLU	60	30.027-110.867	3.213	1.00	0.00
N								
ATOM	9926	CA	GLU	60	29.713-110.870	1.774	1.00	0.00
C								

ATOM	9927	CB	GLU	60	30.987-110.735	0.890	1.00	0.00
C								
ATOM	9928	CG	GLU	60	31.701-109.350	0.814	1.00	0.00
C								
ATOM	9929	CD	GLU	60	30.671-108.190	0.490	1.00	0.00
C								
ATOM	9930	OE1	GLU	60	30.954-107.030	0.976	1.00	0.00
O								
ATOM	9931	OE2	GLU	60	29.734-108.439	-0.293	1.00	0.00
O1-								
ATOM	9932	C	GLU	60	29.079-112.200	1.384	1.00	0.00
C								
ATOM	9933	O	GLU	60	29.510-113.246	1.842	1.00	0.00
O								
ATOM	9934	N	ASN	61	28.011-112.170	0.606	1.00	0.00
N								
ATOM	9935	CA	ASN	61	27.309-113.378	0.207	1.00	0.00
C								
ATOM	9936	CB	ASN	61	25.888-113.061	-0.160	1.00	0.00
C								
ATOM	9937	CG	ASN	61	24.964-113.075	0.996	1.00	0.00
C								
ATOM	9938	OD1	ASN	61	24.458-114.091	1.383	1.00	0.00
O								
ATOM	9939	ND2	ASN	61	24.777-111.981	1.581	1.00	0.00
N								
ATOM	9940	C	ASN	61	28.146-113.809	-1.019	1.00	0.00
C								
ATOM	9941	O	ASN	61	28.080-113.191	-2.040	1.00	0.00
O								
ATOM	9942	N	LEU	62	28.889-114.884	-0.808	1.00	0.00
N								
ATOM	9943	CA	LEU	62	30.011-115.485	-1.698	1.00	0.00
C								
ATOM	9944	CB	LEU	62	31.402-115.476	-0.900	1.00	0.00
C								
ATOM	9945	CG	LEU	62	31.884-114.041	-0.749	1.00	0.00
C								
ATOM	9946	CD1	LEU	62	33.139-114.111	0.128	1.00	0.00
C								
ATOM	9947	CD2	LEU	62	32.312-113.425	-2.094	1.00	0.00
C								
ATOM	9948	C	LEU	62	29.565-116.887	-2.182	1.00	0.00
C								
ATOM	9949	O	LEU	62	28.755-117.543	-1.551	1.00	0.00
O								
ATOM	9950	N	LYS	63	30.092-117.300	-3.386	1.00	0.00
N								
ATOM	9951	CA	LYS	63	29.690-118.458	-4.204	1.00	0.00
C								
ATOM	9952	CB	LYS	63	29.361-117.980	-5.661	1.00	0.00
C								
ATOM	9953	CG	LYS	63	28.111-117.160	-5.659	1.00	0.00
C								

ATOM	9954	CD	LYS	63	27.702-116.427	-6.974	1.00	0.00
C								
ATOM	9955	CE	LYS	63	28.708-115.452	-7.582	1.00	0.00
C								
ATOM	9956	NZ	LYS	63	28.271-114.071	-7.242	1.00	0.00
N1+								
ATOM	9957	C	LYS	63	30.663-119.642	-4.121	1.00	0.00
C								
ATOM	9958	O	LYS	63	31.619-119.559	-4.937	1.00	0.00
O								
ATOM	9959	N	ILE	64	30.607-120.562	-3.184	1.00	0.00
N								
ATOM	9960	CA	ILE	64	31.766-121.467	-2.767	1.00	0.00
C								
ATOM	9961	CB	ILE	64	31.579-121.706	-1.243	1.00	0.00
C								
ATOM	9962	CG2	ILE	64	32.676-122.599	-0.691	1.00	0.00
C								
ATOM	9963	CG1	ILE	64	31.736-120.315	-0.518	1.00	0.00
C								
ATOM	9964	CD1	ILE	64	30.398-119.829	0.082	1.00	0.00
C								
ATOM	9965	C	ILE	64	31.593-122.731	-3.595	1.00	0.00
C								
ATOM	9966	O	ILE	64	30.548-123.351	-3.465	1.00	0.00
O								
ATOM	9967	N	ARG	65	32.618-123.033	-4.363	1.00	0.00
N								
ATOM	9968	CA	ARG	65	32.743-124.319	-5.034	1.00	0.00
C								
ATOM	9969	CB	ARG	65	33.909-124.381	-6.095	1.00	0.00
C								
ATOM	9970	CG	ARG	65	33.751-123.460	-7.289	1.00	0.00
C								
ATOM	9971	CD	ARG	65	34.807-123.824	-8.402	1.00	0.00
C								
ATOM	9972	NE	ARG	65	34.604-123.101	-9.711	1.00	0.00
N								
ATOM	9973	CZ	ARG	65	33.646-123.150	-10.624	1.00	0.00
C								
ATOM	9974	NH1	ARG	65	32.686-124.012	-10.536	1.00	0.00
N								
ATOM	9975	NH2	ARG	65	33.656-122.427	-11.757	1.00	0.00
N1+								
ATOM	9976	C	ARG	65	32.841-125.505	-4.069	1.00	0.00
C								
ATOM	9977	O	ARG	65	33.666-125.378	-3.149	1.00	0.00
O								
ATOM	9978	N	LEU	66	32.097-126.624	-4.244	1.00	0.00
N								
ATOM	9979	CA	LEU	66	32.179-127.834	-3.353	1.00	0.00
C								
ATOM	9980	CB	LEU	66	30.756-128.206	-2.730	1.00	0.00
C								

ATOM	9981	CG	LEU	66	30.197-127.137	-1.805	1.00	0.00
C								
ATOM	9982	CD1	LEU	66	28.828-127.448	-1.259	1.00	0.00
C								
ATOM	9983	CD2	LEU	66	31.099-126.989	-0.593	1.00	0.00
C								
ATOM	9984	C	LEU	66	32.751-129.063	-4.230	1.00	0.00
C								
ATOM	9985	O	LEU	66	32.463-129.134	-5.436	1.00	0.00
O								
ATOM	9986	N	LYS	67	33.498-130.033	-3.627	1.00	0.00
N								
ATOM	9987	CA	LYS	67	34.182-131.063	-4.458	1.00	0.00
C								
ATOM	9988	CB	LYS	67	35.148-131.875	-3.469	1.00	0.00
C								
ATOM	9989	CG	LYS	67	36.328-130.976	-3.406	1.00	0.00
C								
ATOM	9990	CD	LYS	67	37.444-131.750	-2.574	1.00	0.00
C								
ATOM	9991	CE	LYS	67	38.749-130.945	-2.546	1.00	0.00
C								
ATOM	9992	NZ	LYS	67	39.744-131.506	-1.650	1.00	0.00
N1+								
ATOM	9993	C	LYS	67	33.144-131.981	-5.262	1.00	0.00
C								
ATOM	9994	O	LYS	67	32.264-132.664	-4.660	1.00	0.00
O								
ATOM	9995	N	GLY	68	33.432-132.142	-6.541	1.00	0.00
N								
ATOM	9996	CA	GLY	68	32.506-132.867	-7.407	1.00	0.00
C								
ATOM	9997	C	GLY	68	31.045-132.300	-7.436	1.00	0.00
C								
ATOM	9998	O	GLY	68	30.623-131.326	-6.799	1.00	0.00
O								
ATOM	9999	N	ILE	69	30.207-132.943	-8.178	1.00	0.00
N								
ATOM	10000	CA	ILE	69	28.739-132.808	-8.147	1.00	0.00
C								
ATOM	10001	CB	ILE	69	27.989-133.261	-9.430	1.00	0.00
C								
ATOM	10002	CG2	ILE	69	26.518-132.966	-9.444	1.00	0.00
C								
ATOM	10003	CG1	ILE	69	28.618-132.548	-10.672	1.00	0.00
C								
ATOM	10004	CD1	ILE	69	28.428-133.230	-12.002	1.00	0.00
C								
ATOM	10005	C	ILE	69	28.199-133.684	-6.923	1.00	0.00
C								
ATOM	10006	O	ILE	69	28.383-134.896	-6.909	1.00	0.00
O								
ATOM	10007	N	GLU	70	27.596-133.027	-5.915	1.00	0.00
N								

ATOM	10008	CA	GLU	70	26.921-133.764	-4.779	1.00	0.00
C								
ATOM	10009	CB	GLU	70	26.575-132.817	-3.582	1.00	0.00
C								
ATOM	10010	CG	GLU	70	27.847-132.468	-2.841	1.00	0.00
C								
ATOM	10011	CD	GLU	70	28.528-133.582	-2.146	1.00	0.00
C								
ATOM	10012	OE1	GLU	70	27.900-134.526	-1.661	1.00	0.00
O								
ATOM	10013	OE2	GLU	70	29.760-133.719	-2.144	1.00	0.00
O1-								
ATOM	10014	C	GLU	70	25.614-134.496	-5.256	1.00	0.00
C								
ATOM	10015	O	GLU	70	24.777-133.959	-6.032	1.00	0.00
O								
ATOM	10016	N	GLU	71	25.528-135.745	-4.813	1.00	0.00
N								
ATOM	10017	CA	GLU	71	24.312-136.533	-4.893	1.00	0.00
C								
ATOM	10018	CB	GLU	71	24.666-138.051	-4.819	1.00	0.00
C								
ATOM	10019	CG	GLU	71	23.586-139.105	-4.980	1.00	0.00
C								
ATOM	10020	CD	GLU	71	22.692-138.973	-6.244	1.00	0.00
C								
ATOM	10021	OE1	GLU	71	21.535-139.400	-6.199	1.00	0.00
O								
ATOM	10022	OE2	GLU	71	23.130-138.517	-7.331	1.00	0.00
O1-								
ATOM	10023	C	GLU	71	23.296-136.167	-3.887	1.00	0.00
C								
ATOM	10024	O	GLU	71	22.123-136.354	-4.191	1.00	0.00
O								
ATOM	10025	N	GLU	72	23.755-135.654	-2.805	1.00	0.00
N								
ATOM	10026	CA	GLU	72	22.939-135.183	-1.688	1.00	0.00
C								
ATOM	10027	CB	GLU	72	23.758-134.938	-0.395	1.00	0.00
C								
ATOM	10028	CG	GLU	72	22.933-134.354	0.813	1.00	0.00
C								
ATOM	10029	CD	GLU	72	21.879-135.374	1.280	1.00	0.00
C								
ATOM	10030	OE1	GLU	72	22.120-136.506	1.819	1.00	0.00
O								
ATOM	10031	OE2	GLU	72	20.689-135.031	1.108	1.00	0.00
O1-								
ATOM	10032	C	GLU	72	22.090-133.921	-2.151	1.00	0.00
C								
ATOM	10033	O	GLU	72	22.509-133.170	-3.046	1.00	0.00
O								
ATOM	10034	N	GLU	73	20.970-133.666	-1.495	1.00	0.00
N								

ATOM	10035	CA	GLU	73	20.135-132.524	-1.734	1.00	0.00
C								
ATOM	10036	CB	GLU	73	18.689-132.925	-1.286	1.00	0.00
C								
ATOM	10037	CG	GLU	73	17.575-131.873	-1.381	1.00	0.00
C								
ATOM	10038	CD	GLU	73	17.315-131.366	-2.754	1.00	0.00
C								
ATOM	10039	OE1	GLU	73	18.305-131.391	-3.553	1.00	0.00
O								
ATOM	10040	OE2	GLU	73	16.151-131.131	-3.097	1.00	0.00
O1-								
ATOM	10041	C	GLU	73	20.626-131.236	-1.032	1.00	0.00
C								
ATOM	10042	O	GLU	73	21.213-131.279	0.066	1.00	0.00
O								
ATOM	10043	N	ILE	74	20.428-130.128	-1.721	1.00	0.00
N								
ATOM	10044	CA	ILE	74	20.799-128.776	-1.209	1.00	0.00
C								
ATOM	10045	CB	ILE	74	22.186-128.323	-1.682	1.00	0.00
C								
ATOM	10046	CG2	ILE	74	22.655-127.079	-0.867	1.00	0.00
C								
ATOM	10047	CG1	ILE	74	23.312-129.350	-1.651	1.00	0.00
C								
ATOM	10048	CD1	ILE	74	24.516-128.979	-2.582	1.00	0.00
C								
ATOM	10049	C	ILE	74	19.749-127.729	-1.407	1.00	0.00
C								
ATOM	10050	O	ILE	74	19.079-127.810	-2.440	1.00	0.00
O								
ATOM	10051	N	LEU	75	19.531-126.847	-0.455	1.00	0.00
N								
ATOM	10052	CA	LEU	75	18.513-125.901	-0.376	1.00	0.00
C								
ATOM	10053	CB	LEU	75	17.176-126.478	0.180	1.00	0.00
C								
ATOM	10054	CG	LEU	75	16.315-127.230	-0.841	1.00	0.00
C								
ATOM	10055	CD1	LEU	75	15.193-128.071	-0.121	1.00	0.00
C								
ATOM	10056	CD2	LEU	75	15.541-126.351	-1.850	1.00	0.00
C								
ATOM	10057	C	LEU	75	18.788-124.643	0.436	1.00	0.00
C								
ATOM	10058	O	LEU	75	19.757-124.656	1.208	1.00	0.00
O								
ATOM	10059	N	PRO	76	17.949-123.568	0.267	1.00	0.00
N								
ATOM	10060	CD	PRO	76	17.210-123.247	-0.971	1.00	0.00
C								
ATOM	10061	CG	PRO	76	17.222-121.697	-1.075	1.00	0.00
C								



ATOM	10062	CB	PRO	76	17.079-121.296	0.328	1.00	0.00
C								
ATOM	10063	CA	PRO	76	17.965-122.372	1.054	1.00	0.00
C								
ATOM	10064	C	PRO	76	17.670-122.668	2.555	1.00	0.00
C								
ATOM	10065	O	PRO	76	16.840-123.583	2.893	1.00	0.00
O								
ATOM	10066	N	GLY	77	18.375-122.058	3.502	1.00	0.00
N								
ATOM	10067	CA	GLY	77	18.169-122.237	4.950	1.00	0.00
C								
ATOM	10068	C	GLY	77	18.859-123.501	5.526	1.00	0.00
C								
ATOM	10069	O	GLY	77	18.904-123.609	6.764	1.00	0.00
O								
ATOM	10070	N	PHE	78	19.316-124.475	4.728	1.00	0.00
N								
ATOM	10071	CA	PHE	78	20.367-125.297	5.174	1.00	0.00
C								
ATOM	10072	CB	PHE	78	20.740-126.409	4.143	1.00	0.00
C								
ATOM	10073	CG	PHE	78	19.545-127.326	3.731	1.00	0.00
C								
ATOM	10074	CD1	PHE	78	18.334-127.355	4.406	1.00	0.00
C								
ATOM	10075	CE1	PHE	78	17.358-128.260	3.969	1.00	0.00
C								
ATOM	10076	CZ	PHE	78	17.539-129.080	2.860	1.00	0.00
C								
ATOM	10077	CE2	PHE	78	18.801-129.111	2.184	1.00	0.00
C								
ATOM	10078	CD2	PHE	78	19.819-128.246	2.697	1.00	0.00
C								
ATOM	10079	C	PHE	78	21.673-124.513	5.452	1.00	0.00
C								
ATOM	10080	O	PHE	78	21.869-123.473	4.851	1.00	0.00
O								
ATOM	10081	N	ILE	79	22.521-124.992	6.433	1.00	0.00
N								
ATOM	10082	CA	ILE	79	23.767-124.445	6.969	1.00	0.00
C								
ATOM	10083	CB	ILE	79	23.564-123.998	8.478	1.00	0.00
C								
ATOM	10084	CG2	ILE	79	24.666-123.027	8.927	1.00	0.00
C								
ATOM	10085	CG1	ILE	79	22.148-123.449	8.731	1.00	0.00
C								
ATOM	10086	CD1	ILE	79	21.812-122.737	9.997	1.00	0.00
C								
ATOM	10087	C	ILE	79	25.013-125.347	6.867	1.00	0.00
C								
ATOM	10088	O	ILE	79	24.910-126.496	7.325	1.00	0.00
O								

ATOM	10089	N	LEU	80	26.162-124.791	6.466	1.00	0.00
N								
ATOM	10090	CA	LEU	80	27.476-125.488	6.578	1.00	0.00
C								
ATOM	10091	CB	LEU	80	28.461-125.148	5.478	1.00	0.00
C								
ATOM	10092	CG	LEU	80	27.967-125.270	3.992	1.00	0.00
C								
ATOM	10093	CD1	LEU	80	29.002-124.858	2.966	1.00	0.00
C								
ATOM	10094	CD2	LEU	80	27.516-126.704	3.563	1.00	0.00
C								
ATOM	10095	C	LEU	80	27.971-125.192	8.016	1.00	0.00
C								
ATOM	10096	O	LEU	80	28.205-124.039	8.380	1.00	0.00
O								
ATOM	10097	N	CYX	81	28.020-126.194	8.878	1.00	0.00
N								
ATOM	10098	CA	CYX	81	28.514-126.081	10.221	1.00	0.00
C								
ATOM	10099	CB	CYX	81	27.501-126.698	11.213	1.00	0.00
C								
ATOM	10100	SG	CYX	81	25.754-126.179	10.935	1.00	0.00
S								
ATOM	10101	C	CYX	81	29.956-126.702	10.348	1.00	0.00
C								
ATOM	10102	O	CYX	81	30.337-127.512	9.537	1.00	0.00
O								
ATOM	10103	N	ASP	82	30.635-126.506	11.497	1.00	0.00
N								
ATOM	10104	CA	ASP	82	31.737-127.305	12.059	1.00	0.00
C								
ATOM	10105	CB	ASP	82	32.294-126.569	13.346	1.00	0.00
C								
ATOM	10106	CG	ASP	82	33.540-127.125	14.042	1.00	0.00
C								
ATOM	10107	OD1	ASP	82	33.991-126.568	15.046	1.00	0.00
O								
ATOM	10108	OD2	ASP	82	34.108-128.063	13.560	1.00	0.00
O1-								
ATOM	10109	C	ASP	82	31.213-128.706	12.481	1.00	0.00
C								
ATOM	10110	O	ASP	82	30.338-128.811	13.406	1.00	0.00
O								
ATOM	10111	N	PRO	83	31.883-129.795	11.982	1.00	0.00
N								
ATOM	10112	CD	PRO	83	32.800-129.753	10.808	1.00	0.00
C								
ATOM	10113	CG	PRO	83	32.862-131.091	10.302	1.00	0.00
C								
ATOM	10114	CB	PRO	83	32.555-131.984	11.482	1.00	0.00
C								
ATOM	10115	CA	PRO	83	31.579-131.201	12.265	1.00	0.00
C								

ATOM	10116	C	PRO	83	31.681-131.449	13.800	1.00	0.00
C								
ATOM	10117	O	PRO	83	31.042-132.303	14.411	1.00	0.00
O								
ATOM	10118	N	ASN	84	32.425-130.596	14.497	1.00	0.00
N								
ATOM	10119	CA	ASN	84	32.806-130.696	15.891	1.00	0.00
C								
ATOM	10120	CB	ASN	84	34.301-130.285	16.091	1.00	0.00
C								
ATOM	10121	CG	ASN	84	35.248-131.120	15.232	1.00	0.00
C								
ATOM	10122	OD1	ASN	84	35.752-132.212	15.624	1.00	0.00
O								
ATOM	10123	ND2	ASN	84	35.548-130.605	14.011	1.00	0.00
N								
ATOM	10124	C	ASN	84	31.943-129.879	16.900	1.00	0.00
C								
ATOM	10125	O	ASN	84	32.101-130.032	18.138	1.00	0.00
O								
ATOM	10126	N	ASN	85	31.061-129.114	16.396	1.00	0.00
N								
ATOM	10127	CA	ASN	85	30.188-128.066	16.987	1.00	0.00
C								
ATOM	10128	CB	ASN	85	31.061-126.787	17.338	1.00	0.00
C								
ATOM	10129	CG	ASN	85	30.311-125.827	18.234	1.00	0.00
C								
ATOM	10130	OD1	ASN	85	29.382-125.140	17.802	1.00	0.00
O								
ATOM	10131	ND2	ASN	85	30.660-125.793	19.479	1.00	0.00
N								
ATOM	10132	C	ASN	85	28.913-127.822	16.129	1.00	0.00
C								
ATOM	10133	O	ASN	85	28.737-126.700	15.622	1.00	0.00
O								
ATOM	10134	N	LEU	86	28.142-128.859	15.790	1.00	0.00
N								
ATOM	10135	CA	LEU	86	26.932-128.817	14.948	1.00	0.00
C								
ATOM	10136	CB	LEU	86	26.138-130.148	14.965	1.00	0.00
C								
ATOM	10137	CG	LEU	86	27.001-131.432	14.740	1.00	0.00
C								
ATOM	10138	CD1	LEU	86	26.017-132.629	14.577	1.00	0.00
C								
ATOM	10139	CD2	LEU	86	27.833-131.254	13.426	1.00	0.00
C								
ATOM	10140	C	LEU	86	26.013-127.657	15.281	1.00	0.00
C								
ATOM	10141	O	LEU	86	26.025-127.111	16.393	1.00	0.00
O								
ATOM	10142	N	CYX	87	25.256-127.309	14.268	1.00	0.00
N								

ATOM	10143	CA	CYX	87	24.115-126.494	14.417	1.00	0.00
C								
ATOM	10144	CB	CYX	87	23.754-125.835	13.080	1.00	0.00
C								
ATOM	10145	SG	CYX	87	25.229-124.977	12.512	1.00	0.00
S								
ATOM	10146	C	CYX	87	22.906-127.280	14.969	1.00	0.00
C								
ATOM	10147	O	CYX	87	22.653-128.409	14.536	1.00	0.00
O								
ATOM	10148	N	HIE	88	22.138-126.651	15.844	1.00	0.00
N								
ATOM	10149	CA	HIE	88	20.995-127.352	16.385	1.00	0.00
C								
ATOM	10150	CB	HIE	88	20.424-126.693	17.613	1.00	0.00
C								
ATOM	10151	CG	HIE	88	21.433-126.294	18.571	1.00	0.00
C								
ATOM	10152	ND1	HIE	88	21.924-127.116	19.524	1.00	0.00
N								
ATOM	10153	CE1	HIE	88	22.843-126.395	20.194	1.00	0.00
C								
ATOM	10154	NE2	HIE	88	22.979-125.207	19.645	1.00	0.00
N								
ATOM	10155	CD2	HIE	88	22.041-125.109	18.681	1.00	0.00
C								
ATOM	10156	C	HIE	88	19.919-127.674	15.332	1.00	0.00
C								
ATOM	10157	O	HIE	88	20.005-127.148	14.258	1.00	0.00
O								
ATOM	10158	N	SER	89	18.905-128.477	15.568	1.00	0.00
N								
ATOM	10159	CA	SER	89	17.718-128.625	14.731	1.00	0.00
C								
ATOM	10160	CB	SER	89	18.106-129.739	13.680	1.00	0.00
C								
ATOM	10161	OG	SER	89	17.077-130.085	12.778	1.00	0.00
O								
ATOM	10162	C	SER	89	16.414-129.040	15.455	1.00	0.00
C								
ATOM	10163	O	SER	89	16.437-129.637	16.548	1.00	0.00
O								
ATOM	10164	N	GLY	90	15.350-128.749	14.772	1.00	0.00
N								
ATOM	10165	CA	GLY	90	14.021-129.291	15.189	1.00	0.00
C								
ATOM	10166	C	GLY	90	12.883-128.523	14.663	1.00	0.00
C								
ATOM	10167	O	GLY	90	12.964-127.870	13.584	1.00	0.00
O								
ATOM	10168	N	ARG	91	11.750-128.611	15.439	1.00	0.00
N								
ATOM	10169	CA	ARG	91	10.463-128.118	14.989	1.00	0.00
C								

ATOM	10170	CB	ARG	91	9.644-129.186	14.262	1.00	0.00
C								
ATOM	10171	CG	ARG	91	9.329-130.336	15.122	1.00	0.00
C								
ATOM	10172	CD	ARG	91	8.395-131.319	14.397	1.00	0.00
C								
ATOM	10173	NE	ARG	91	6.992-130.793	14.552	1.00	0.00
N								
ATOM	10174	CZ	ARG	91	6.167-131.026	15.555	1.00	0.00
C								
ATOM	10175	NH1	ARG	91	6.468-131.764	16.599	1.00	0.00
N								
ATOM	10176	NH2	ARG	91	5.015-130.422	15.517	1.00	0.00
N1+								
ATOM	10177	C	ARG	91	9.635-127.252	15.902	1.00	0.00
C								
ATOM	10178	O	ARG	91	8.529-126.808	15.495	1.00	0.00
O								
ATOM	10179	N	THR	92	10.079-126.969	17.093	1.00	0.00
N								
ATOM	10180	CA	THR	92	9.375-126.144	18.058	1.00	0.00
C								
ATOM	10181	CB	THR	92	8.503-127.005	19.008	1.00	0.00
C								
ATOM	10182	CG2	THR	92	7.135-127.604	18.484	1.00	0.00
C								
ATOM	10183	OG1	THR	92	9.117-128.217	19.455	1.00	0.00
O								
ATOM	10184	C	THR	92	10.332-125.282	18.851	1.00	0.00
C								
ATOM	10185	O	THR	92	11.350-125.813	19.326	1.00	0.00
O								
ATOM	10186	N	PHE	93	10.059-124.029	19.073	1.00	0.00
N								
ATOM	10187	CA	PHE	93	10.917-123.187	19.893	1.00	0.00
C								
ATOM	10188	CB	PHE	93	12.052-122.543	19.108	1.00	0.00
C								
ATOM	10189	CG	PHE	93	11.603-121.842	17.820	1.00	0.00
C								
ATOM	10190	CD1	PHE	93	11.291-120.455	17.825	1.00	0.00
C								
ATOM	10191	CE1	PHE	93	11.045-119.841	16.561	1.00	0.00
C								
ATOM	10192	CZ	PHE	93	11.106-120.631	15.328	1.00	0.00
C								
ATOM	10193	CE2	PHE	93	11.332-122.009	15.455	1.00	0.00
C								
ATOM	10194	CD2	PHE	93	11.531-122.666	16.652	1.00	0.00
C								
ATOM	10195	C	PHE	93	10.144-122.152	20.752	1.00	0.00
C								
ATOM	10196	O	PHE	93	8.997-121.822	20.471	1.00	0.00
O								

ATOM	10197	N	ASP	94	10.911-121.560	21.665	1.00	0.00
N								
ATOM	10198	CA	ASP	94	10.447-120.464	22.594	1.00	0.00
C								
ATOM	10199	CB	ASP	94	10.864-120.766	24.044	1.00	0.00
C								
ATOM	10200	CG	ASP	94	9.861-121.679	24.736	1.00	0.00
C								
ATOM	10201	OD1	ASP	94	10.171-122.411	25.740	1.00	0.00
O								
ATOM	10202	OD2	ASP	94	8.663-121.543	24.513	1.00	0.00
O1-								
ATOM	10203	C	ASP	94	11.045-119.145	22.186	1.00	0.00
C								
ATOM	10204	O	ASP	94	12.229-119.091	21.824	1.00	0.00
O								
ATOM	10205	N	ALA	95	10.246-118.046	22.335	1.00	0.00
N								
ATOM	10206	CA	ALA	95	10.764-116.777	21.819	1.00	0.00
C								
ATOM	10207	CB	ALA	95	10.444-116.672	20.331	1.00	0.00
C								
ATOM	10208	C	ALA	95	10.186-115.502	22.548	1.00	0.00
C								
ATOM	10209	O	ALA	95	9.063-115.538	23.058	1.00	0.00
O								
ATOM	10210	N	GLN	96	10.894-114.370	22.455	1.00	0.00
N								
ATOM	10211	CA	GLN	96	10.312-113.067	22.517	1.00	0.00
C								
ATOM	10212	CB	GLN	96	11.321-112.050	23.070	1.00	0.00
C								
ATOM	10213	CG	GLN	96	11.833-112.412	24.463	1.00	0.00
C								
ATOM	10214	CD	GLN	96	12.298-111.188	25.221	1.00	0.00
C								
ATOM	10215	OE1	GLN	96	12.930-110.272	24.708	1.00	0.00
O								
ATOM	10216	NE2	GLN	96	11.972-111.199	26.548	1.00	0.00
N								
ATOM	10217	C	GLN	96	9.881-112.573	21.106	1.00	0.00
C								
ATOM	10218	O	GLN	96	10.628-112.811	20.119	1.00	0.00
O								
ATOM	10219	N	ILE	97	8.721-111.942	20.976	1.00	0.00
N								
ATOM	10220	CA	ILE	97	8.266-111.274	19.784	1.00	0.00
C								
ATOM	10221	CB	ILE	97	7.095-111.960	19.044	1.00	0.00
C								
ATOM	10222	CG2	ILE	97	7.530-113.328	18.509	1.00	0.00
C								
ATOM	10223	CG1	ILE	97	5.823-112.040	19.905	1.00	0.00
C								

ATOM	10224	CD1	ILE	97	4.610-112.569	19.152	1.00	0.00
C								
ATOM	10225	C	ILE	97	7.948-109.743	20.084	1.00	0.00
C								
ATOM	10226	O	ILE	97	7.636-109.311	21.214	1.00	0.00
O								
ATOM	10227	N	VAL	98	8.176-108.983	19.030	1.00	0.00
N								
ATOM	10228	CA	VAL	98	7.735-107.570	18.902	1.00	0.00
C								
ATOM	10229	CB	VAL	98	8.944-106.604	18.883	1.00	0.00
C								
ATOM	10230	CG1	VAL	98	9.929-106.872	17.742	1.00	0.00
C								
ATOM	10231	CG2	VAL	98	8.491-105.140	18.838	1.00	0.00
C								
ATOM	10232	C	VAL	98	6.824-107.408	17.691	1.00	0.00
C								
ATOM	10233	O	VAL	98	7.087-107.847	16.570	1.00	0.00
O								
ATOM	10234	N	ILE	99	5.636-106.837	18.063	1.00	0.00
N								
ATOM	10235	CA	ILE	99	4.467-106.829	17.124	1.00	0.00
C								
ATOM	10236	CB	ILE	99	3.126-106.794	17.877	1.00	0.00
C								
ATOM	10237	CG2	ILE	99	1.944-106.836	16.901	1.00	0.00
C								
ATOM	10238	CG1	ILE	99	2.986-107.905	18.941	1.00	0.00
C								
ATOM	10239	CD1	ILE	99	3.224-109.320	18.441	1.00	0.00
C								
ATOM	10240	C	ILE	99	4.642-105.613	16.227	1.00	0.00
C								
ATOM	10241	O	ILE	99	5.167-104.578	16.588	1.00	0.00
O								
ATOM	10242	N	ILE	100	4.374-105.824	14.942	1.00	0.00
N								
ATOM	10243	CA	ILE	100	4.418-104.778	13.917	1.00	0.00
C								
ATOM	10244	CB	ILE	100	5.514-105.140	12.868	1.00	0.00
C								
ATOM	10245	CG2	ILE	100	5.486-104.266	11.685	1.00	0.00
C								
ATOM	10246	CG1	ILE	100	6.945-105.087	13.590	1.00	0.00
C								
ATOM	10247	CD1	ILE	100	8.252-105.401	12.791	1.00	0.00
C								
ATOM	10248	C	ILE	100	3.057-104.501	13.322	1.00	0.00
C								
ATOM	10249	O	ILE	100	2.253-105.435	13.122	1.00	0.00
O								
ATOM	10250	N	GLU	101	2.678-103.273	12.973	1.00	0.00
N								

ATOM	10251	CA	GLU	101	1.325-103.020	12.463	1.00	0.00
C								
ATOM	10252	CB	GLU	101	1.165-101.519	12.272	1.00	0.00
C								
ATOM	10253	CG	GLU	101	-0.078-100.924	11.668	1.00	0.00
C								
ATOM	10254	CD	GLU	101	-1.423-101.179	12.336	1.00	0.00
C								
ATOM	10255	OE1	GLU	101	-2.398-100.397	12.202	1.00	0.00
O								
ATOM	10256	OE2	GLU	101	-1.519-102.165	13.091	1.00	0.00
O1-								
ATOM	10257	C	GLU	101	1.033-103.642	11.094	1.00	0.00
C								
ATOM	10258	O	GLU	101	1.846-103.671	10.174	1.00	0.00
O								
ATOM	10259	N	HIE	102	-0.179-104.138	10.839	1.00	0.00
N								
ATOM	10260	CA	HIE	102	-0.459-105.000	9.660	1.00	0.00
C								
ATOM	10261	CB	HIE	102	0.078-106.363	9.903	1.00	0.00
C								
ATOM	10262	CG	HIE	102	-0.017-107.347	8.734	1.00	0.00
C								
ATOM	10263	ND1	HIE	102	-0.882-108.430	8.602	1.00	0.00
N								
ATOM	10264	CE1	HIE	102	-0.385-109.176	7.558	1.00	0.00
C								
ATOM	10265	NE2	HIE	102	0.613-108.489	6.973	1.00	0.00
N								
ATOM	10266	CD2	HIE	102	0.910-107.384	7.750	1.00	0.00
C								
ATOM	10267	C	HIE	102	-1.923-104.929	9.262	1.00	0.00
C								
ATOM	10268	O	HIE	102	-2.755-104.450	10.076	1.00	0.00
O								
ATOM	10269	N	LYS	103	-2.311-105.517	8.186	1.00	0.00
N								
ATOM	10270	CA	LYS	103	-3.719-105.568	7.805	1.00	0.00
C								
ATOM	10271	CB	LYS	103	-3.847-106.111	6.365	1.00	0.00
C								
ATOM	10272	CG	LYS	103	-3.167-107.517	6.128	1.00	0.00
C								
ATOM	10273	CD	LYS	103	-3.391-107.782	4.630	1.00	0.00
C								
ATOM	10274	CE	LYS	103	-4.861-107.613	4.089	1.00	0.00
C								
ATOM	10275	NZ	LYS	103	-5.698-108.656	4.624	1.00	0.00
N1+								
ATOM	10276	C	LYS	103	-4.498-106.479	8.785	1.00	0.00
C								
ATOM	10277	O	LYS	103	-5.668-106.329	8.966	1.00	0.00
O								



ATOM	10278	N	SER	104	-3.801-107.545	9.246	1.00	0.00
N								
ATOM	10279	CA	SER	104	-4.377-108.641	10.063	1.00	0.00
C								
ATOM	10280	CB	SER	104	-3.633-110.003	9.729	1.00	0.00
C								
ATOM	10281	OG	SER	104	-4.172-111.206	10.201	1.00	0.00
O								
ATOM	10282	C	SER	104	-4.357-108.331	11.523	1.00	0.00
C								
ATOM	10283	O	SER	104	-4.296-107.188	11.928	1.00	0.00
O								
ATOM	10284	N	ILE	105	-4.451-109.340	12.447	1.00	0.00
N								
ATOM	10285	CA	ILE	105	-4.142-109.268	13.904	1.00	0.00
C								
ATOM	10286	CB	ILE	105	-5.297-108.614	14.714	1.00	0.00
C								
ATOM	10287	CG2	ILE	105	-6.659-109.187	14.387	1.00	0.00
C								
ATOM	10288	CG1	ILE	105	-4.831-108.439	16.155	1.00	0.00
C								
ATOM	10289	CD1	ILE	105	-5.741-107.464	16.941	1.00	0.00
C								
ATOM	10290	C	ILE	105	-3.704-110.547	14.503	1.00	0.00
C								
ATOM	10291	O	ILE	105	-4.400-111.552	14.220	1.00	0.00
O								
ATOM	10292	N	ILE	106	-2.567-110.605	15.187	1.00	0.00
N								
ATOM	10293	CA	ILE	106	-2.036-111.872	15.773	1.00	0.00
C								
ATOM	10294	CB	ILE	106	-0.522-111.767	16.080	1.00	0.00
C								
ATOM	10295	CG2	ILE	106	-0.034-112.970	16.950	1.00	0.00
C								
ATOM	10296	CG1	ILE	106	0.266-111.864	14.736	1.00	0.00
C								
ATOM	10297	CD1	ILE	106	1.633-111.202	14.754	1.00	0.00
C								
ATOM	10298	C	ILE	106	-2.900-112.226	16.968	1.00	0.00
C								
ATOM	10299	O	ILE	106	-3.483-111.393	17.650	1.00	0.00
O								
ATOM	10300	N	CYS	107	-2.959-113.578	17.244	1.00	0.00
N								
ATOM	10301	CA	CYS	107	-3.673-114.300	18.271	1.00	0.00
C								
ATOM	10302	CB	CYS	107	-5.159-114.322	17.939	1.00	0.00
C								
ATOM	10303	SG	CYS	107	-5.519-115.329	16.484	1.00	0.00
S								
ATOM	10304	C	CYS	107	-2.967-115.617	18.594	1.00	0.00
C								

ATOM	10305	O	CYS	107	-1.964	-115.905	17.967	1.00	0.00
O									
ATOM	10306	N	PRO	108	-3.477	-116.572	19.404	1.00	0.00
N									
ATOM	10307	CD	PRO	108	-4.430	-116.257	20.519	1.00	0.00
C									
ATOM	10308	CG	PRO	108	-3.903	-117.054	21.703	1.00	0.00
C									
ATOM	10309	CB	PRO	108	-3.456	-118.330	21.059	1.00	0.00
C									
ATOM	10310	CA	PRO	108	-2.889	-117.855	19.678	1.00	0.00
C									
ATOM	10311	C	PRO	108	-3.119	-118.959	18.636	1.00	0.00
C									
ATOM	10312	O	PRO	108	-4.279	-119.136	18.212	1.00	0.00
O									
ATOM	10313	N	GLY	109	-2.100	-119.735	18.269	1.00	0.00
N									
ATOM	10314	CA	GLY	109	-2.179	-120.646	17.132	1.00	0.00
C									
ATOM	10315	C	GLY	109	-2.102	-120.067	15.783	1.00	0.00
C									
ATOM	10316	O	GLY	109	-2.463	-120.716	14.807	1.00	0.00
O									
ATOM	10317	N	TYR	110	-1.678	-118.853	15.586	1.00	0.00
N									
ATOM	10318	CA	TYR	110	-1.807	-118.244	14.245	1.00	0.00
C									
ATOM	10319	CB	TYR	110	-1.836	-116.738	14.511	1.00	0.00
C									
ATOM	10320	CG	TYR	110	-2.018	-115.861	13.305	1.00	0.00
C									
ATOM	10321	CD1	TYR	110	-1.032	-115.767	12.324	1.00	0.00
C									
ATOM	10322	CE1	TYR	110	-1.215	-114.978	11.138	1.00	0.00
C									
ATOM	10323	CZ	TYR	110	-2.279	-114.075	11.152	1.00	0.00
C									
ATOM	10324	OH	TYR	110	-2.536	-113.365	10.012	1.00	0.00
O									
ATOM	10325	CE2	TYR	110	-3.267	-114.098	12.176	1.00	0.00
C									
ATOM	10326	CD2	TYR	110	-3.139	-115.026	13.189	1.00	0.00
C									
ATOM	10327	C	TYR	110	-0.839	-118.761	13.201	1.00	0.00
C									
ATOM	10328	O	TYR	110	0.300	-118.878	13.519	1.00	0.00
O									
ATOM	10329	N	ASN	111	-1.248	-119.162	11.986	1.00	0.00
N									
ATOM	10330	CA	ASN	111	-0.424	-119.522	10.871	1.00	0.00
C									
ATOM	10331	CB	ASN	111	-1.139	-120.587	10.050	1.00	0.00
C									

ATOM	10332	CG	ASN	111	-0.246-121.378	9.125	1.00	0.00
C								
ATOM	10333	OD1	ASN	111	0.179-120.871	8.079	1.00	0.00
O								
ATOM	10334	ND2	ASN	111	0.056-122.710	9.383	1.00	0.00
N								
ATOM	10335	C	ASN	111	0.202-118.437	9.928	1.00	0.00
C								
ATOM	10336	O	ASN	111	-0.532-117.709	9.244	1.00	0.00
O								
ATOM	10337	N	ALA	112	1.539-118.412	9.816	1.00	0.00
N								
ATOM	10338	CA	ALA	112	2.274-117.441	9.044	1.00	0.00
C								
ATOM	10339	CB	ALA	112	2.698-116.331	10.100	1.00	0.00
C								
ATOM	10340	C	ALA	112	3.541-118.038	8.446	1.00	0.00
C								
ATOM	10341	O	ALA	112	3.757-119.245	8.465	1.00	0.00
O								
ATOM	10342	N	VAL	113	4.332-117.209	7.819	1.00	0.00
N								
ATOM	10343	CA	VAL	113	5.674-117.452	7.243	1.00	0.00
C								
ATOM	10344	CB	VAL	113	5.826-116.571	5.971	1.00	0.00
C								
ATOM	10345	CG1	VAL	113	7.066-116.819	5.130	1.00	0.00
C								
ATOM	10346	CG2	VAL	113	4.614-116.571	5.047	1.00	0.00
C								
ATOM	10347	C	VAL	113	6.753-117.014	8.274	1.00	0.00
C								
ATOM	10348	O	VAL	113	6.768-115.856	8.667	1.00	0.00
O								
ATOM	10349	N	LEU	114	7.607-117.919	8.678	1.00	0.00
N								
ATOM	10350	CA	LEU	114	8.887-117.671	9.339	1.00	0.00
C								
ATOM	10351	CB	LEU	114	9.328-119.020	10.017	1.00	0.00
C								
ATOM	10352	CG	LEU	114	10.644-119.012	10.892	1.00	0.00
C								
ATOM	10353	CD1	LEU	114	10.421-118.128	12.072	1.00	0.00
C								
ATOM	10354	CD2	LEU	114	11.070-120.399	11.384	1.00	0.00
C								
ATOM	10355	C	LEU	114	9.943-117.266	8.347	1.00	0.00
C								
ATOM	10356	O	LEU	114	10.023-117.821	7.238	1.00	0.00
O								
ATOM	10357	N	HIE	115	10.819-116.343	8.682	1.00	0.00
N								
ATOM	10358	CA	HIE	115	12.114-116.037	8.001	1.00	0.00
C								

ATOM	10359	CB	HIE	115	11.918-114.801	7.086	1.00	0.00
C								
ATOM	10360	CG	HIE	115	13.060-114.614	6.079	1.00	0.00
C								
ATOM	10361	ND1	HIE	115	12.739-114.330	4.711	1.00	0.00
N								
ATOM	10362	CE1	HIE	115	13.879-114.162	4.072	1.00	0.00
C								
ATOM	10363	NE2	HIE	115	14.890-114.470	4.864	1.00	0.00
N								
ATOM	10364	CD2	HIE	115	14.429-114.709	6.149	1.00	0.00
C								
ATOM	10365	C	HIE	115	13.182-115.929	9.077	1.00	0.00
C								
ATOM	10366	O	HIE	115	13.353-114.863	9.658	1.00	0.00
O								
ATOM	10367	N	ILE	116	13.895-117.025	9.356	1.00	0.00
N								
ATOM	10368	CA	ILE	116	14.942-117.145	10.413	1.00	0.00
C								
ATOM	10369	CB	ILE	116	14.710-118.359	11.241	1.00	0.00
C								
ATOM	10370	CG2	ILE	116	14.751-119.701	10.599	1.00	0.00
C								
ATOM	10371	CG1	ILE	116	15.652-118.417	12.472	1.00	0.00
C								
ATOM	10372	CD1	ILE	116	14.921-118.863	13.802	1.00	0.00
C								
ATOM	10373	C	ILE	116	16.262-117.185	9.666	1.00	0.00
C								
ATOM	10374	O	ILE	116	16.368-118.105	8.808	1.00	0.00
O								
ATOM	10375	N	HIE	117	17.227-116.364	10.021	1.00	0.00
N								
ATOM	10376	CA	HIE	117	18.568-116.355	9.364	1.00	0.00
C								
ATOM	10377	CB	HIE	117	19.543-117.407	9.966	1.00	0.00
C								
ATOM	10378	CG	HIE	117	19.153-118.887	10.054	1.00	0.00
C								
ATOM	10379	ND1	HIE	117	19.095-119.785	8.982	1.00	0.00
N								
ATOM	10380	CE1	HIE	117	18.830-120.981	9.532	1.00	0.00
C								
ATOM	10381	NE2	HIE	117	18.662-120.903	10.849	1.00	0.00
N								
ATOM	10382	CD2	HIE	117	18.994-119.651	11.264	1.00	0.00
C								
ATOM	10383	C	HIE	117	18.423-116.233	7.896	1.00	0.00
C								
ATOM	10384	O	HIE	117	17.974-115.189	7.422	1.00	0.00
O								
ATOM	10385	N	THR	118	18.700-117.347	7.129	1.00	0.00
N								

ATOM	10386	CA	THR	118	18.249-117.569	5.697	1.00	0.00
C								
ATOM	10387	CB	THR	118	19.478-117.821	4.821	1.00	0.00
C								
ATOM	10388	CG2	THR	118	20.623-116.801	5.093	1.00	0.00
C								
ATOM	10389	OG1	THR	118	19.969-119.143	5.155	1.00	0.00
O								
ATOM	10390	C	THR	118	17.116-118.567	5.318	1.00	0.00
C								
ATOM	10391	O	THR	118	16.710-118.625	4.156	1.00	0.00
O								
ATOM	10392	N	CYS	119	16.626-119.272	6.326	1.00	0.00
N								
ATOM	10393	CA	CYS	119	15.569-120.280	6.157	1.00	0.00
C								
ATOM	10394	CB	CYS	119	15.803-121.220	7.325	1.00	0.00
C								
ATOM	10395	SG	CYS	119	14.504-122.408	7.616	1.00	0.00
S								
ATOM	10396	C	CYS	119	14.186-119.608	6.015	1.00	0.00
C								
ATOM	10397	O	CYS	119	13.975-118.648	6.734	1.00	0.00
O								
ATOM	10398	N	ILE	120	13.314-120.145	5.159	1.00	0.00
N								
ATOM	10399	CA	ILE	120	11.892-119.909	5.182	1.00	0.00
C								
ATOM	10400	CB	ILE	120	11.379-119.080	3.915	1.00	0.00
C								
ATOM	10401	CG2	ILE	120	9.832-118.886	3.887	1.00	0.00
C								
ATOM	10402	CG1	ILE	120	12.222-117.908	3.549	1.00	0.00
C								
ATOM	10403	CD1	ILE	120	12.011-117.199	2.199	1.00	0.00
C								
ATOM	10404	C	ILE	120	11.091-121.260	5.505	1.00	0.00
C								
ATOM	10405	O	ILE	120	11.286-122.268	4.824	1.00	0.00
O								
ATOM	10406	N	GLU	121	10.076-121.132	6.346	1.00	0.00
N								
ATOM	10407	CA	GLU	121	9.053-122.147	6.643	1.00	0.00
C								
ATOM	10408	CB	GLU	121	9.754-123.117	7.557	1.00	0.00
C								
ATOM	10409	CG	GLU	121	9.032-124.446	7.975	1.00	0.00
C								
ATOM	10410	CD	GLU	121	8.719-125.302	6.763	1.00	0.00
C								
ATOM	10411	OE1	GLU	121	7.766-124.942	6.022	1.00	0.00
O								
ATOM	10412	OE2	GLU	121	9.210-126.462	6.603	1.00	0.00
O1-								

ATOM	10413	C	GLU	121	7.677-121.629	7.250	1.00	0.00
C								
ATOM	10414	O	GLU	121	7.519-120.457	7.648	1.00	0.00
O								
ATOM	10415	N	GLU	122	6.647-122.486	7.091	1.00	0.00
N								
ATOM	10416	CA	GLU	122	5.325-122.263	7.674	1.00	0.00
C								
ATOM	10417	CB	GLU	122	4.323-123.014	6.858	1.00	0.00
C								
ATOM	10418	CG	GLU	122	2.920-123.007	7.471	1.00	0.00
C								
ATOM	10419	CD	GLU	122	2.003-124.042	6.739	1.00	0.00
C								
ATOM	10420	OE1	GLU	122	1.142-124.537	7.492	1.00	0.00
O								
ATOM	10421	OE2	GLU	122	2.120-124.393	5.542	1.00	0.00
O1-								
ATOM	10422	C	GLU	122	5.402-122.533	9.186	1.00	0.00
C								
ATOM	10423	O	GLU	122	5.765-123.643	9.614	1.00	0.00
O								
ATOM	10424	N	VAL	123	4.986-121.546	10.027	1.00	0.00
N								
ATOM	10425	CA	VAL	123	5.019-121.592	11.451	1.00	0.00
C								
ATOM	10426	CB	VAL	123	6.139-120.738	12.075	1.00	0.00
C								
ATOM	10427	CG1	VAL	123	5.833-119.242	12.103	1.00	0.00
C								
ATOM	10428	CG2	VAL	123	6.496-121.204	13.515	1.00	0.00
C								
ATOM	10429	C	VAL	123	3.605-121.269	12.045	1.00	0.00
C								
ATOM	10430	O	VAL	123	2.926-120.373	11.531	1.00	0.00
O								
ATOM	10431	N	GLU	124	3.278-122.054	13.001	1.00	0.00
N								
ATOM	10432	CA	GLU	124	2.176-121.833	13.899	1.00	0.00
C								
ATOM	10433	CB	GLU	124	1.487-123.164	14.282	1.00	0.00
C								
ATOM	10434	CG	GLU	124	0.288-123.012	15.229	1.00	0.00
C								
ATOM	10435	CD	GLU	124	-0.026-124.324	15.910	1.00	0.00
C								
ATOM	10436	OE1	GLU	124	-0.523-124.310	17.076	1.00	0.00
O								
ATOM	10437	OE2	GLU	124	0.202-125.448	15.347	1.00	0.00
O1-								
ATOM	10438	C	GLU	124	2.799-121.064	15.105	1.00	0.00
C								
ATOM	10439	O	GLU	124	3.751-121.508	15.790	1.00	0.00
O								

ATOM	10440	N	ILE	125	2.207-119.916	15.372	1.00	0.00
N								
ATOM	10441	CA	ILE	125	2.396-119.120	16.544	1.00	0.00
C								
ATOM	10442	CB	ILE	125	2.061-117.633	16.232	1.00	0.00
C								
ATOM	10443	CG2	ILE	125	2.412-116.769	17.448	1.00	0.00
C								
ATOM	10444	CG1	ILE	125	2.916-117.070	15.108	1.00	0.00
C								
ATOM	10445	CD1	ILE	125	2.223-115.975	14.259	1.00	0.00
C								
ATOM	10446	C	ILE	125	1.678-119.734	17.663	1.00	0.00
C								
ATOM	10447	O	ILE	125	0.620-119.190	18.136	1.00	0.00
O								
ATOM	10448	N	THR	126	2.106-120.915	18.148	1.00	0.00
N								
ATOM	10449	CA	THR	126	1.267-121.877	18.863	1.00	0.00
C								
ATOM	10450	CB	THR	126	2.016-123.257	18.794	1.00	0.00
C								
ATOM	10451	CG2	THR	126	3.389-123.366	19.380	1.00	0.00
C								
ATOM	10452	OG1	THR	126	1.301-124.291	19.273	1.00	0.00
O								
ATOM	10453	C	THR	126	0.786-121.509	20.192	1.00	0.00
C								
ATOM	10454	O	THR	126	-0.211-122.143	20.683	1.00	0.00
O								
ATOM	10455	N	ALA	127	1.346-120.510	20.917	1.00	0.00
N								
ATOM	10456	CA	ALA	127	0.981-119.972	22.227	1.00	0.00
C								
ATOM	10457	CB	ALA	127	1.492-120.873	23.369	1.00	0.00
C								
ATOM	10458	C	ALA	127	1.468-118.517	22.354	1.00	0.00
C								
ATOM	10459	O	ALA	127	2.487-118.126	21.779	1.00	0.00
O								
ATOM	10460	N	LEU	128	0.632-117.641	22.935	1.00	0.00
N								
ATOM	10461	CA	LEU	128	1.195-116.364	23.430	1.00	0.00
C								
ATOM	10462	CB	LEU	128	0.394-115.133	22.931	1.00	0.00
C								
ATOM	10463	CG	LEU	128	0.141-114.994	21.482	1.00	0.00
C								
ATOM	10464	CD1	LEU	128	-0.819-113.878	21.094	1.00	0.00
C								
ATOM	10465	CD2	LEU	128	1.402-115.098	20.563	1.00	0.00
C								
ATOM	10466	C	LEU	128	1.080-116.478	24.992	1.00	0.00
C								

ATOM	10467	O	LEU	128	-0.032-116.551	25.537	1.00	0.00
O								
ATOM	10468	N	ILE	129	2.146-116.385	25.791	1.00	0.00
N								
ATOM	10469	CA	ILE	129	2.026-116.616	27.303	1.00	0.00
C								
ATOM	10470	CB	ILE	129	3.325-117.386	27.897	1.00	0.00
C								
ATOM	10471	CG2	ILE	129	3.274-117.526	29.475	1.00	0.00
C								
ATOM	10472	CG1	ILE	129	3.747-118.629	27.146	1.00	0.00
C								
ATOM	10473	CD1	ILE	129	2.600-119.693	27.326	1.00	0.00
C								
ATOM	10474	C	ILE	129	1.652-115.324	28.027	1.00	0.00
C								
ATOM	10475	O	ILE	129	0.964-115.473	29.075	1.00	0.00
O								
ATOM	10476	N	CYS	130	2.152-114.162	27.599	1.00	0.00
N								
ATOM	10477	CA	CYS	130	1.979-112.918	28.296	1.00	0.00
C								
ATOM	10478	CB	CYS	130	2.688-112.905	29.655	1.00	0.00
C								
ATOM	10479	SG	CYS	130	4.494-113.100	29.539	1.00	0.00
S								
ATOM	10480	C	CYS	130	2.412-111.650	27.470	1.00	0.00
C								
ATOM	10481	O	CYS	130	3.463-111.540	26.856	1.00	0.00
O								
ATOM	10482	N	LEU	131	1.540-110.600	27.537	1.00	0.00
N								
ATOM	10483	CA	LEU	131	1.877-109.162	27.127	1.00	0.00
C								
ATOM	10484	CB	LEU	131	0.623-108.301	26.943	1.00	0.00
C								
ATOM	10485	CG	LEU	131	0.188-108.227	25.462	1.00	0.00
C								
ATOM	10486	CD1	LEU	131	-1.232-107.680	25.329	1.00	0.00
C								
ATOM	10487	CD2	LEU	131	1.139-107.347	24.651	1.00	0.00
C								
ATOM	10488	C	LEU	131	2.798-108.679	28.197	1.00	0.00
C								
ATOM	10489	O	LEU	131	2.693-109.061	29.340	1.00	0.00
O								
ATOM	10490	N	VAL	132	3.713-107.809	27.789	1.00	0.00
N								
ATOM	10491	CA	VAL	132	4.679-106.979	28.591	1.00	0.00
C								
ATOM	10492	CB	VAL	132	6.130-107.453	28.294	1.00	0.00
C								
ATOM	10493	CG1	VAL	132	7.128-106.927	29.328	1.00	0.00
C								



ATOM	10494	CG2	VAL	132	6.225-108.986	28.234	1.00	0.00
C								
ATOM	10495	C	VAL	132	4.473-105.495	28.422	1.00	0.00
C								
ATOM	10496	O	VAL	132	4.104-105.045	27.326	1.00	0.00
O								
ATOM	10497	N	ASP	133	4.857-104.718	29.504	1.00	0.00
N								
ATOM	10498	CA	ASP	133	4.526-103.288	29.621	1.00	0.00
C								
ATOM	10499	CB	ASP	133	4.276-102.834	31.047	1.00	0.00
C								
ATOM	10500	CG	ASP	133	3.741-101.400	31.167	1.00	0.00
C								
ATOM	10501	OD1	ASP	133	3.640-100.977	32.352	1.00	0.00
O								
ATOM	10502	OD2	ASP	133	3.489-100.791	30.091	1.00	0.00
O1-								
ATOM	10503	C	ASP	133	5.611-102.486	28.928	1.00	0.00
C								
ATOM	10504	O	ASP	133	6.784-102.515	29.489	1.00	0.00
O								
ATOM	10505	N	LYS	134	5.449-101.821	27.781	1.00	0.00
N								
ATOM	10506	CA	LYS	134	6.511-100.912	27.279	1.00	0.00
C								
ATOM	10507	CB	LYS	134	6.066-100.280	25.957	1.00	0.00
C								
ATOM	10508	CG	LYS	134	5.848-101.355	24.886	1.00	0.00
C								
ATOM	10509	CD	LYS	134	5.568-100.820	23.489	1.00	0.00
C								
ATOM	10510	CE	LYS	134	4.408 -99.843	23.456	1.00	0.00
C								
ATOM	10511	NZ	LYS	134	4.179 -99.432	22.062	1.00	0.00
N1+								
ATOM	10512	C	LYS	134	6.973 -99.803	28.275	1.00	0.00
C								
ATOM	10513	O	LYS	134	8.136 -99.485	28.283	1.00	0.00
O								
ATOM	10514	N	LYS	135	6.010 -99.454	29.142	1.00	0.00
N								
ATOM	10515	CA	LYS	135	6.348 -98.467	30.221	1.00	0.00
C								
ATOM	10516	CB	LYS	135	5.120 -97.575	30.474	1.00	0.00
C								
ATOM	10517	CG	LYS	135	4.727 -96.795	29.209	1.00	0.00
C								
ATOM	10518	CD	LYS	135	3.562 -95.840	29.459	1.00	0.00
C								
ATOM	10519	CE	LYS	135	3.454 -94.801	28.353	1.00	0.00
C								
ATOM	10520	NZ	LYS	135	2.343 -93.871	28.660	1.00	0.00
N1+								

ATOM	10521	C	LYS	135	6.919	-98.976	31.524	1.00	0.00
C									
ATOM	10522	O	LYS	135	7.431	-98.173	32.395	1.00	0.00
O									
ATOM	10523	N	SER	136	6.983	-100.295	31.848	1.00	0.00
N									
ATOM	10524	CA	SER	136	7.550	-100.830	33.083	1.00	0.00
C									
ATOM	10525	CB	SER	136	6.552	-100.862	34.236	1.00	0.00
C									
ATOM	10526	OG	SER	136	5.635	-101.932	34.088	1.00	0.00
O									
ATOM	10527	C	SER	136	8.327	-102.117	32.994	1.00	0.00
C									
ATOM	10528	O	SER	136	9.120	-102.464	33.893	1.00	0.00
O									
ATOM	10529	N	GLY	137	8.107	-102.931	31.923	1.00	0.00
N									
ATOM	10530	CA	GLY	137	8.543	-104.255	31.859	1.00	0.00
C									
ATOM	10531	C	GLY	137	7.718	-105.279	32.654	1.00	0.00
C									
ATOM	10532	O	GLY	137	8.104	-106.433	32.714	1.00	0.00
O									
ATOM	10533	N	GLU	138	6.570	-104.924	33.217	1.00	0.00
N									
ATOM	10534	CA	GLU	138	5.593	-105.793	33.893	1.00	0.00
C									
ATOM	10535	CB	GLU	138	4.500	-104.942	34.569	1.00	0.00
C									
ATOM	10536	CG	GLU	138	3.537	-105.741	35.448	1.00	0.00
C									
ATOM	10537	CD	GLU	138	2.108	-105.247	35.216	1.00	0.00
C									
ATOM	10538	OE1	GLU	138	1.364	-106.043	34.577	1.00	0.00
O									
ATOM	10539	OE2	GLU	138	1.846	-104.110	35.701	1.00	0.00
O1-									
ATOM	10540	C	GLU	138	4.935	-106.771	32.920	1.00	0.00
C									
ATOM	10541	O	GLU	138	4.229	-106.325	31.957	1.00	0.00
O									
ATOM	10542	N	LYS	139	5.013	-108.066	33.177	1.00	0.00
N									
ATOM	10543	CA	LYS	139	4.358	-109.119	32.374	1.00	0.00
C									
ATOM	10544	CB	LYS	139	5.181	-110.417	32.455	1.00	0.00
C									
ATOM	10545	CG	LYS	139	6.616	-110.235	31.937	1.00	0.00
C									
ATOM	10546	CD	LYS	139	7.383	-111.555	31.843	1.00	0.00
C									
ATOM	10547	CE	LYS	139	8.704	-111.360	31.107	1.00	0.00
C									

ATOM	10548	NZ	LYS	139	9.410-112.658	31.004	1.00	0.00
N1+								
ATOM	10549	C	LYS	139	2.916-109.392	32.825	1.00	0.00
C								
ATOM	10550	O	LYS	139	2.764-109.358	34.058	1.00	0.00
O								
ATOM	10551	N	SER	140	1.970-109.544	31.976	1.00	0.00
N								
ATOM	10552	CA	SER	140	0.516-109.787	32.281	1.00	0.00
C								
ATOM	10553	CB	SER	140	-0.309-109.906	30.994	1.00	0.00
C								
ATOM	10554	OG	SER	140	-0.008-110.909	30.040	1.00	0.00
O								
ATOM	10555	C	SER	140	0.312-111.053	33.157	1.00	0.00
C								
ATOM	10556	O	SER	140	0.937-112.078	33.033	1.00	0.00
O								
ATOM	10557	N	LYS	141	-0.726-111.084	33.975	1.00	0.00
N								
ATOM	10558	CA	LYS	141	-1.324-112.255	34.639	1.00	0.00
C								
ATOM	10559	CB	LYS	141	-2.436-111.828	35.685	1.00	0.00
C								
ATOM	10560	CG	LYS	141	-2.657-112.694	37.002	1.00	0.00
C								
ATOM	10561	CD	LYS	141	-3.988-112.395	37.737	1.00	0.00
C								
ATOM	10562	CE	LYS	141	-4.294-113.257	38.952	1.00	0.00
C								
ATOM	10563	NZ	LYS	141	-5.610-112.974	39.531	1.00	0.00
N1+								
ATOM	10564	C	LYS	141	-1.837-113.396	33.726	1.00	0.00
C								
ATOM	10565	O	LYS	141	-1.793-114.558	34.217	1.00	0.00
O								
ATOM	10566	N	THR	142	-2.282-113.033	32.500	1.00	0.00
N								
ATOM	10567	CA	THR	142	-3.089-113.912	31.618	1.00	0.00
C								
ATOM	10568	CB	THR	142	-4.593-113.796	31.848	1.00	0.00
C								
ATOM	10569	CG2	THR	142	-5.134-112.500	31.307	1.00	0.00
C								
ATOM	10570	OG1	THR	142	-5.221-114.931	31.360	1.00	0.00
O								
ATOM	10571	C	THR	142	-2.721-113.826	30.145	1.00	0.00
C								
ATOM	10572	O	THR	142	-2.077-112.820	29.813	1.00	0.00
O								
ATOM	10573	N	ARG	143	-3.003-114.873	29.334	1.00	0.00
N								
ATOM	10574	CA	ARG	143	-2.708-114.961	27.910	1.00	0.00
C								

ATOM	10575	CB	ARG	143	-2.935	-116.431	27.369	1.00	0.00
C									
ATOM	10576	CG	ARG	143	-1.977	-117.420	28.086	1.00	0.00
C									
ATOM	10577	CD	ARG	143	-2.266	-118.963	27.978	1.00	0.00
C									
ATOM	10578	NE	ARG	143	-3.696	-119.192	28.364	1.00	0.00
N									
ATOM	10579	CZ	ARG	143	-4.308	-120.329	28.443	1.00	0.00
C									
ATOM	10580	NH1	ARG	143	-3.787	-121.512	28.270	1.00	0.00
N									
ATOM	10581	NH2	ARG	143	-5.596	-120.341	28.774	1.00	0.00
N1+									
ATOM	10582	C	ARG	143	-3.589	-113.971	27.098	1.00	0.00
C									
ATOM	10583	O	ARG	143	-4.783	-113.849	27.482	1.00	0.00
O									
ATOM	10584	N	PRO	144	-3.089	-113.195	26.162	1.00	0.00
N									
ATOM	10585	CD	PRO	144	-1.702	-112.868	25.976	1.00	0.00
C									
ATOM	10586	CG	PRO	144	-1.651	-111.431	25.345	1.00	0.00
C									
ATOM	10587	CB	PRO	144	-2.938	-111.403	24.559	1.00	0.00
C									
ATOM	10588	CA	PRO	144	-3.936	-112.308	25.344	1.00	0.00
C									
ATOM	10589	C	PRO	144	-4.841	-113.098	24.419	1.00	0.00
C									
ATOM	10590	O	PRO	144	-4.614	-114.306	24.121	1.00	0.00
O									
ATOM	10591	N	ARG	145	-5.860	-112.337	23.958	1.00	0.00
N									
ATOM	10592	CA	ARG	145	-6.750	-112.757	22.850	1.00	0.00
C									
ATOM	10593	CB	ARG	145	-8.210	-112.354	23.020	1.00	0.00
C									
ATOM	10594	CG	ARG	145	-8.866	-112.979	24.238	1.00	0.00
C									
ATOM	10595	CD	ARG	145	-10.342	-112.744	24.176	1.00	0.00
C									
ATOM	10596	NE	ARG	145	-10.652	-111.305	24.356	1.00	0.00
N									
ATOM	10597	CZ	ARG	145	-11.214	-110.526	23.461	1.00	0.00
C									
ATOM	10598	NH1	ARG	145	-11.448	-110.908	22.192	1.00	0.00
N									
ATOM	10599	NH2	ARG	145	-11.487	-109.300	23.784	1.00	0.00
N1+									
ATOM	10600	C	ARG	145	-6.170	-112.245	21.544	1.00	0.00
C									
ATOM	10601	O	ARG	145	-6.241	-112.971	20.565	1.00	0.00
O									

ATOM	10602	N	PHE	146	-5.604	-111.010	21.553	1.00	0.00
N									
ATOM	10603	CA	PHE	146	-5.005	-110.437	20.404	1.00	0.00
C									
ATOM	10604	CB	PHE	146	-6.059	-109.516	19.704	1.00	0.00
C									
ATOM	10605	CG	PHE	146	-7.320	-110.191	19.035	1.00	0.00
C									
ATOM	10606	CD1	PHE	146	-8.619	-109.884	19.440	1.00	0.00
C									
ATOM	10607	CE1	PHE	146	-9.704	-110.464	18.689	1.00	0.00
C									
ATOM	10608	CZ	PHE	146	-9.441	-111.351	17.636	1.00	0.00
C									
ATOM	10609	CE2	PHE	146	-8.142	-111.651	17.198	1.00	0.00
C									
ATOM	10610	CD2	PHE	146	-7.072	-111.054	17.904	1.00	0.00
C									
ATOM	10611	C	PHE	146	-3.818	-109.607	20.822	1.00	0.00
C									
ATOM	10612	O	PHE	146	-3.658	-109.260	21.979	1.00	0.00
O									
ATOM	10613	N	VAL	147	-2.934	-109.461	19.821	1.00	0.00
N									
ATOM	10614	CA	VAL	147	-1.642	-108.678	19.925	1.00	0.00
C									
ATOM	10615	CB	VAL	147	-0.443	-109.533	20.399	1.00	0.00
C									
ATOM	10616	CG1	VAL	147	-0.510	-109.966	21.901	1.00	0.00
C									
ATOM	10617	CG2	VAL	147	-0.008	-110.628	19.453	1.00	0.00
C									
ATOM	10618	C	VAL	147	-1.388	-107.936	18.633	1.00	0.00
C									
ATOM	10619	O	VAL	147	-1.388	-108.560	17.575	1.00	0.00
O									
ATOM	10620	N	LYS	148	-1.171	-106.618	18.757	1.00	0.00
N									
ATOM	10621	CA	LYS	148	-1.441	-105.602	17.749	1.00	0.00
C									
ATOM	10622	CB	LYS	148	-2.894	-105.083	18.125	1.00	0.00
C									
ATOM	10623	CG	LYS	148	-3.498	-103.912	17.388	1.00	0.00
C									
ATOM	10624	CD	LYS	148	-3.635	-104.070	15.929	1.00	0.00
C									
ATOM	10625	CE	LYS	148	-4.175	-102.747	15.352	1.00	0.00
C									
ATOM	10626	NZ	LYS	148	-4.065	-102.505	13.903	1.00	0.00
N1+									
ATOM	10627	C	LYS	148	-0.384	-104.475	17.770	1.00	0.00
C									
ATOM	10628	O	LYS	148	0.159	-104.228	18.818	1.00	0.00
O									

ATOM	10629	N	GLN	149	-0.138	-103.823	16.615	1.00	0.00
N									
ATOM	10630	CA	GLN	149	0.295	-102.462	16.450	1.00	0.00
C									
ATOM	10631	CB	GLN	149	-0.539	-101.436	17.173	1.00	0.00
C									
ATOM	10632	CG	GLN	149	-0.070	-100.049	16.741	1.00	0.00
C									
ATOM	10633	CD	GLN	149	-1.169	-99.026	16.716	1.00	0.00
C									
ATOM	10634	OE1	GLN	149	-2.096	-99.152	17.476	1.00	0.00
O									
ATOM	10635	NE2	GLN	149	-1.067	-98.065	15.848	1.00	0.00
N									
ATOM	10636	C	GLN	149	1.826	-102.295	16.542	1.00	0.00
C									
ATOM	10637	O	GLN	149	2.535	-102.112	15.584	1.00	0.00
O									
ATOM	10638	N	ASP	150	2.318	-102.473	17.772	1.00	0.00
N									
ATOM	10639	CA	ASP	150	3.684	-102.152	18.148	1.00	0.00
C									
ATOM	10640	CB	ASP	150	3.863	-100.635	18.185	1.00	0.00
C									
ATOM	10641	CG	ASP	150	3.076	-99.842	19.227	1.00	0.00
C									
ATOM	10642	OD1	ASP	150	3.294	-98.597	19.218	1.00	0.00
O									
ATOM	10643	OD2	ASP	150	2.347	-100.505	20.016	1.00	0.00
O1-									
ATOM	10644	C	ASP	150	4.144	-102.848	19.528	1.00	0.00
C									
ATOM	10645	O	ASP	150	5.201	-102.548	20.096	1.00	0.00
O									
ATOM	10646	N	GLN	151	3.265	-103.687	20.086	1.00	0.00
N									
ATOM	10647	CA	GLN	151	3.485	-104.397	21.391	1.00	0.00
C									
ATOM	10648	CB	GLN	151	2.205	-105.200	21.703	1.00	0.00
C									
ATOM	10649	CG	GLN	151	1.051	-104.293	22.146	1.00	0.00
C									
ATOM	10650	CD	GLN	151	-0.288	-105.004	22.136	1.00	0.00
C									
ATOM	10651	OE1	GLN	151	-0.493	-106.072	21.567	1.00	0.00
O									
ATOM	10652	NE2	GLN	151	-1.269	-104.311	22.805	1.00	0.00
N									
ATOM	10653	C	GLN	151	4.697	-105.271	21.592	1.00	0.00
C									
ATOM	10654	O	GLN	151	5.202	-105.821	20.669	1.00	0.00
O									
ATOM	10655	N	VAL	152	5.022	-105.557	22.843	1.00	0.00
N									

ATOM	10656	CA	VAL	152	6.063-106.556	23.224	1.00	0.00
C								
ATOM	10657	CB	VAL	152	7.230-105.905	23.973	1.00	0.00
C								
ATOM	10658	CG1	VAL	152	8.114-105.130	22.989	1.00	0.00
C								
ATOM	10659	CG2	VAL	152	6.791-104.990	25.110	1.00	0.00
C								
ATOM	10660	C	VAL	152	5.444-107.768	23.927	1.00	0.00
C								
ATOM	10661	O	VAL	152	4.656-107.645	24.849	1.00	0.00
O								
ATOM	10662	N	CYS	153	5.730-108.987	23.586	1.00	0.00
N								
ATOM	10663	CA	CYS	153	5.089-110.173	24.068	1.00	0.00
C								
ATOM	10664	CB	CYS	153	3.851-110.429	23.178	1.00	0.00
C								
ATOM	10665	SG	CYS	153	2.721-111.738	23.733	1.00	0.00
S								
ATOM	10666	C	CYS	153	6.045-111.405	24.010	1.00	0.00
C								
ATOM	10667	O	CYS	153	6.799-111.545	23.036	1.00	0.00
O								
ATOM	10668	N	ILE	154	5.845-112.415	24.880	1.00	0.00
N								
ATOM	10669	CA	ILE	154	6.527-113.738	24.956	1.00	0.00
C								
ATOM	10670	CB	ILE	154	6.702-114.184	26.422	1.00	0.00
C								
ATOM	10671	CG2	ILE	154	7.378-115.557	26.513	1.00	0.00
C								
ATOM	10672	CG1	ILE	154	7.465-113.145	27.271	1.00	0.00
C								
ATOM	10673	CD1	ILE	154	8.813-112.737	26.702	1.00	0.00
C								
ATOM	10674	C	ILE	154	5.673-114.729	24.161	1.00	0.00
C								
ATOM	10675	O	ILE	154	4.531-114.971	24.534	1.00	0.00
O								
ATOM	10676	N	ALA	155	6.226-115.333	23.105	1.00	0.00
N								
ATOM	10677	CA	ALA	155	5.552-116.332	22.279	1.00	0.00
C								
ATOM	10678	CB	ALA	155	5.443-115.824	20.853	1.00	0.00
C								
ATOM	10679	C	ALA	155	6.226-117.816	22.258	1.00	0.00
C								
ATOM	10680	O	ALA	155	7.432-117.954	22.498	1.00	0.00
O								
ATOM	10681	N	ARG	156	5.400-118.774	21.815	1.00	0.00
N								
ATOM	10682	CA	ARG	156	5.867-120.097	21.323	1.00	0.00
C								

ATOM	10683	CB	ARG	156	5.254-121.171	22.194	1.00	0.00
C								
ATOM	10684	CG	ARG	156	5.874-122.621	22.090	1.00	0.00
C								
ATOM	10685	CD	ARG	156	5.598-123.464	23.365	1.00	0.00
C								
ATOM	10686	NE	ARG	156	6.541-123.105	24.412	1.00	0.00
N								
ATOM	10687	CZ	ARG	156	6.701-123.904	25.469	1.00	0.00
C								
ATOM	10688	NH1	ARG	156	5.864-124.771	25.883	1.00	0.00
N								
ATOM	10689	NH2	ARG	156	7.760-123.718	26.204	1.00	0.00
N1+								
ATOM	10690	C	ARG	156	5.610-120.265	19.849	1.00	0.00
C								
ATOM	10691	O	ARG	156	4.655-119.754	19.220	1.00	0.00
O								
ATOM	10692	N	LEU	157	6.559-121.064	19.212	1.00	0.00
N								
ATOM	10693	CA	LEU	157	6.618-121.296	17.785	1.00	0.00
C								
ATOM	10694	CB	LEU	157	7.766-120.436	17.187	1.00	0.00
C								
ATOM	10695	CG	LEU	157	7.677-118.893	17.058	1.00	0.00
C								
ATOM	10696	CD1	LEU	157	6.472-118.385	16.307	1.00	0.00
C								
ATOM	10697	CD2	LEU	157	7.896-118.112	18.406	1.00	0.00
C								
ATOM	10698	C	LEU	157	6.736-122.796	17.394	1.00	0.00
C								
ATOM	10699	O	LEU	157	7.334-123.539	18.158	1.00	0.00
O								
ATOM	10700	N	ARG	158	6.139-123.201	16.272	1.00	0.00
N								
ATOM	10701	CA	ARG	158	6.065-124.607	15.802	1.00	0.00
C								
ATOM	10702	CB	ARG	158	4.822-125.110	16.529	1.00	0.00
C								
ATOM	10703	CG	ARG	158	4.365-126.501	15.936	1.00	0.00
C								
ATOM	10704	CD	ARG	158	3.564-127.299	17.028	1.00	0.00
C								
ATOM	10705	NE	ARG	158	2.161-126.910	17.062	1.00	0.00
N								
ATOM	10706	CZ	ARG	158	1.293-127.310	17.991	1.00	0.00
C								
ATOM	10707	NH1	ARG	158	1.693-128.036	18.971	1.00	0.00
N								
ATOM	10708	NH2	ARG	158	0.075-126.990	17.878	1.00	0.00
N1+								
ATOM	10709	C	ARG	158	5.924-124.633	14.277	1.00	0.00
C								



ATOM	10710	O	ARG	158	4.939-124.221	13.722	1.00	0.00
O								
ATOM	10711	N	THR	159	6.979-125.167	13.590	1.00	0.00
N								
ATOM	10712	CA	THR	159	7.027-125.229	12.138	1.00	0.00
C								
ATOM	10713	CB	THR	159	8.466-125.059	11.554	1.00	0.00
C								
ATOM	10714	CG2	THR	159	8.834-123.546	11.637	1.00	0.00
C								
ATOM	10715	OG1	THR	159	9.372-125.881	12.315	1.00	0.00
O								
ATOM	10716	C	THR	159	6.189-126.364	11.614	1.00	0.00
C								
ATOM	10717	O	THR	159	5.741-127.322	12.309	1.00	0.00
O								
ATOM	10718	N	ALA	160	5.968-126.344	10.260	1.00	0.00
N								
ATOM	10719	CA	ALA	160	5.374-127.403	9.527	1.00	0.00
C								
ATOM	10720	CB	ALA	160	4.940-126.879	8.219	1.00	0.00
C								
ATOM	10721	C	ALA	160	6.282-128.624	9.481	1.00	0.00
C								
ATOM	10722	O	ALA	160	5.751-129.746	9.282	1.00	0.00
O								
ATOM	10723	N	GLY	161	7.624-128.425	9.613	1.00	0.00
N								
ATOM	10724	CA	GLY	161	8.785-129.341	9.262	1.00	0.00
C								
ATOM	10725	C	GLY	161	10.065-128.865	9.942	1.00	0.00
C								
ATOM	10726	O	GLY	161	10.099-127.858	10.639	1.00	0.00
O								
ATOM	10727	N	THR	162	11.068-129.687	9.755	1.00	0.00
N								
ATOM	10728	CA	THR	162	12.352-129.644	10.516	1.00	0.00
C								
ATOM	10729	CB	THR	162	12.908-131.022	10.674	1.00	0.00
C								
ATOM	10730	CG2	THR	162	14.131-131.011	11.602	1.00	0.00
C								
ATOM	10731	OG1	THR	162	11.947-131.762	11.353	1.00	0.00
O								
ATOM	10732	C	THR	162	13.342-128.627	9.833	1.00	0.00
C								
ATOM	10733	O	THR	162	13.437-128.640	8.580	1.00	0.00
O								
ATOM	10734	N	ILE	163	13.928-127.804	10.669	1.00	0.00
N								
ATOM	10735	CA	ILE	163	14.822-126.702	10.302	1.00	0.00
C								
ATOM	10736	CB	ILE	163	14.073-125.462	10.159	1.00	0.00
C								

ATOM	10737	CG2	ILE	163	13.095-125.485	8.913	1.00	0.00
C								
ATOM	10738	CG1	ILE	163	13.292-125.141	11.494	1.00	0.00
C								
ATOM	10739	CD1	ILE	163	12.774-123.678	11.592	1.00	0.00
C								
ATOM	10740	C	ILE	163	16.052-126.573	11.224	1.00	0.00
C								
ATOM	10741	O	ILE	163	16.004-126.985	12.360	1.00	0.00
O								
ATOM	10742	N	CYS	164	17.167-126.169	10.680	1.00	0.00
N								
ATOM	10743	CA	CYS	164	18.449-125.848	11.405	1.00	0.00
C								
ATOM	10744	CB	CYS	164	19.674-126.087	10.486	1.00	0.00
C								
ATOM	10745	SG	CYS	164	21.177-126.039	11.461	1.00	0.00
S								
ATOM	10746	C	CYS	164	18.394-124.430	12.071	1.00	0.00
C								
ATOM	10747	O	CYS	164	17.908-123.433	11.517	1.00	0.00
O								
ATOM	10748	N	LEU	165	18.796-124.342	13.359	1.00	0.00
N								
ATOM	10749	CA	LEU	165	18.506-123.182	14.177	1.00	0.00
C								
ATOM	10750	CB	LEU	165	17.340-123.489	15.105	1.00	0.00
C								
ATOM	10751	CG	LEU	165	15.969-123.754	14.501	1.00	0.00
C								
ATOM	10752	CD1	LEU	165	15.177-124.772	15.315	1.00	0.00
C								
ATOM	10753	CD2	LEU	165	15.191-122.469	14.194	1.00	0.00
C								
ATOM	10754	C	LEU	165	19.700-122.955	15.144	1.00	0.00
C								
ATOM	10755	O	LEU	165	20.505-123.864	15.531	1.00	0.00
O								
ATOM	10756	N	GLU	166	19.659-121.715	15.689	1.00	0.00
N								
ATOM	10757	CA	GLU	166	20.598-121.187	16.684	1.00	0.00
C								
ATOM	10758	CB	GLU	166	21.860-120.487	16.006	1.00	0.00
C								
ATOM	10759	CG	GLU	166	23.062-121.316	15.555	1.00	0.00
C								
ATOM	10760	CD	GLU	166	23.649-122.205	16.635	1.00	0.00
C								
ATOM	10761	OE1	GLU	166	24.424-123.122	16.251	1.00	0.00
O								
ATOM	10762	OE2	GLU	166	23.541-121.922	17.813	1.00	0.00
O1-								
ATOM	10763	C	GLU	166	19.866-120.126	17.595	1.00	0.00
C								

ATOM	10764	O	GLU	166	19.069-119.341	17.015	1.00	0.00
O								
ATOM	10765	N	THR	167	20.153-119.996	18.877	1.00	0.00
N								
ATOM	10766	CA	THR	167	19.590-119.050	19.827	1.00	0.00
C								
ATOM	10767	CB	THR	167	19.391-119.751	21.221	1.00	0.00
C								
ATOM	10768	CG2	THR	167	18.673-121.109	20.878	1.00	0.00
C								
ATOM	10769	OG1	THR	167	20.621-119.930	21.812	1.00	0.00
O								
ATOM	10770	C	THR	167	20.356-117.680	19.962	1.00	0.00
C								
ATOM	10771	O	THR	167	21.560-117.529	19.697	1.00	0.00
O								
ATOM	10772	N	PHE	168	19.651-116.628	20.373	1.00	0.00
N								
ATOM	10773	CA	PHE	168	20.084-115.205	20.440	1.00	0.00
C								
ATOM	10774	CB	PHE	168	18.891-114.319	20.837	1.00	0.00
C								
ATOM	10775	CG	PHE	168	19.129-112.834	20.663	1.00	0.00
C								
ATOM	10776	CD1	PHE	168	19.426-112.024	21.770	1.00	0.00
C								
ATOM	10777	CE1	PHE	168	19.643-110.654	21.608	1.00	0.00
C								
ATOM	10778	CZ	PHE	168	19.562-110.080	20.341	1.00	0.00
C								
ATOM	10779	CE2	PHE	168	19.272-110.874	19.234	1.00	0.00
C								
ATOM	10780	CD2	PHE	168	19.066-112.246	19.392	1.00	0.00
C								
ATOM	10781	C	PHE	168	21.293-114.836	21.241	1.00	0.00
C								
ATOM	10782	O	PHE	168	22.018-113.870	20.983	1.00	0.00
O								
ATOM	10783	N	LYS	169	21.603-115.609	22.295	1.00	0.00
N								
ATOM	10784	CA	LYS	169	22.745-115.498	23.162	1.00	0.00
C								
ATOM	10785	CB	LYS	169	22.393-116.067	24.504	1.00	0.00
C								
ATOM	10786	CG	LYS	169	23.569-115.933	25.460	1.00	0.00
C								
ATOM	10787	CD	LYS	169	24.039-114.588	25.900	1.00	0.00
C								
ATOM	10788	CE	LYS	169	25.285-114.727	26.748	1.00	0.00
C								
ATOM	10789	NZ	LYS	169	25.829-113.391	27.200	1.00	0.00
N1+								
ATOM	10790	C	LYS	169	23.975-116.204	22.526	1.00	0.00
C								

ATOM	10791	O	LYS	169	24.998-115.564	22.461	1.00	0.00
O								
ATOM	10792	N	ASP	170	23.921-117.415	21.984	1.00	0.00
N								
ATOM	10793	CA	ASP	170	25.077-117.975	21.259	1.00	0.00
C								
ATOM	10794	CB	ASP	170	24.780-119.445	20.924	1.00	0.00
C								
ATOM	10795	CG	ASP	170	24.552-120.401	22.107	1.00	0.00
C								
ATOM	10796	OD1	ASP	170	23.595-121.190	22.122	1.00	0.00
O								
ATOM	10797	OD2	ASP	170	25.360-120.315	23.083	1.00	0.00
O1-								
ATOM	10798	C	ASP	170	25.330-117.177	19.888	1.00	0.00
C								
ATOM	10799	O	ASP	170	26.476-116.918	19.505	1.00	0.00
O								
ATOM	10800	N	PHE	171	24.326-116.661	19.158	1.00	0.00
N								
ATOM	10801	CA	PHE	171	24.546-115.943	17.881	1.00	0.00
C								
ATOM	10802	CB	PHE	171	24.648-116.975	16.719	1.00	0.00
C								
ATOM	10803	CG	PHE	171	25.873-117.975	16.782	1.00	0.00
C								
ATOM	10804	CD1	PHE	171	27.127-117.454	16.568	1.00	0.00
C								
ATOM	10805	CE1	PHE	171	28.261-118.358	16.762	1.00	0.00
C								
ATOM	10806	CZ	PHE	171	28.041-119.706	17.074	1.00	0.00
C								
ATOM	10807	CE2	PHE	171	26.702-120.201	17.257	1.00	0.00
C								
ATOM	10808	CD2	PHE	171	25.628-119.325	17.106	1.00	0.00
C								
ATOM	10809	C	PHE	171	23.429-114.928	17.610	1.00	0.00
C								
ATOM	10810	O	PHE	171	22.449-115.358	16.982	1.00	0.00
O								
ATOM	10811	N	PRO	172	23.415-113.656	18.052	1.00	0.00
N								
ATOM	10812	CD	PRO	172	24.499-112.935	18.684	1.00	0.00
C								
ATOM	10813	CG	PRO	172	24.067-111.440	18.569	1.00	0.00
C								
ATOM	10814	CB	PRO	172	22.635-111.438	18.621	1.00	0.00
C								
ATOM	10815	CA	PRO	172	22.238-112.747	17.886	1.00	0.00
C								
ATOM	10816	C	PRO	172	21.783-112.615	16.407	1.00	0.00
C								
ATOM	10817	O	PRO	172	20.627-112.417	16.130	1.00	0.00
O								

ATOM	10818	N	GLN	173	22.644-112.776	15.380	1.00	0.00
N								
ATOM	10819	CA	GLN	173	22.249-112.659	13.945	1.00	0.00
C								
ATOM	10820	CB	GLN	173	23.464-112.170	13.134	1.00	0.00
C								
ATOM	10821	CG	GLN	173	24.458-113.149	12.578	1.00	0.00
C								
ATOM	10822	CD	GLN	173	25.472-113.660	13.569	1.00	0.00
C								
ATOM	10823	OE1	GLN	173	25.178-113.718	14.748	1.00	0.00
O								
ATOM	10824	NE2	GLN	173	26.515-114.203	13.087	1.00	0.00
N								
ATOM	10825	C	GLN	173	21.596-113.905	13.275	1.00	0.00
C								
ATOM	10826	O	GLN	173	21.117-113.806	12.160	1.00	0.00
O								
ATOM	10827	N	MET	174	21.510-114.994	14.028	1.00	0.00
N								
ATOM	10828	CA	MET	174	20.811-116.229	13.698	1.00	0.00
C								
ATOM	10829	CB	MET	174	21.719-117.496	13.724	1.00	0.00
C								
ATOM	10830	CG	MET	174	22.632-117.485	12.527	1.00	0.00
C								
ATOM	10831	SD	MET	174	23.840-118.787	12.678	1.00	0.00
S								
ATOM	10832	CE	MET	174	23.048-120.099	11.729	1.00	0.00
C								
ATOM	10833	C	MET	174	19.640-116.508	14.660	1.00	0.00
C								
ATOM	10834	O	MET	174	18.656-117.177	14.308	1.00	0.00
O								
ATOM	10835	N	GLY	175	19.771-116.065	15.897	1.00	0.00
N								
ATOM	10836	CA	GLY	175	18.673-116.130	16.855	1.00	0.00
C								
ATOM	10837	C	GLY	175	17.624-115.074	16.600	1.00	0.00
C								
ATOM	10838	O	GLY	175	16.495-115.381	17.005	1.00	0.00
O								
ATOM	10839	N	ARG	176	17.879-113.964	15.892	1.00	0.00
N								
ATOM	10840	CA	ARG	176	16.809-113.127	15.373	1.00	0.00
C								
ATOM	10841	CB	ARG	176	17.317-111.842	14.782	1.00	0.00
C								
ATOM	10842	CG	ARG	176	18.348-112.001	13.639	1.00	0.00
C								
ATOM	10843	CD	ARG	176	19.187-110.759	13.354	1.00	0.00
C								
ATOM	10844	NE	ARG	176	18.294-109.619	12.903	1.00	0.00
N								

ATOM	10845	CZ	ARG	176	18.769-108.366	12.663	1.00	0.00
C								
ATOM	10846	NH1	ARG	176	18.062-107.458	12.040	1.00	0.00
N								
ATOM	10847	NH2	ARG	176	19.954-108.045	12.909	1.00	0.00
N1+								
ATOM	10848	C	ARG	176	16.013-113.820	14.217	1.00	0.00
C								
ATOM	10849	O	ARG	176	16.546-114.572	13.373	1.00	0.00
O								
ATOM	10850	N	PHE	177	14.702-113.593	14.142	1.00	0.00
N								
ATOM	10851	CA	PHE	177	13.918-113.968	12.959	1.00	0.00
C								
ATOM	10852	CB	PHE	177	13.361-115.338	13.286	1.00	0.00
C								
ATOM	10853	CG	PHE	177	12.428-115.448	14.528	1.00	0.00
C								
ATOM	10854	CD1	PHE	177	11.066-115.282	14.327	1.00	0.00
C								
ATOM	10855	CE1	PHE	177	10.194-115.424	15.395	1.00	0.00
C								
ATOM	10856	CZ	PHE	177	10.694-115.758	16.654	1.00	0.00
C								
ATOM	10857	CE2	PHE	177	12.055-115.852	16.854	1.00	0.00
C								
ATOM	10858	CD2	PHE	177	12.956-115.672	15.803	1.00	0.00
C								
ATOM	10859	C	PHE	177	12.831-112.919	12.666	1.00	0.00
C								
ATOM	10860	O	PHE	177	12.715-111.951	13.437	1.00	0.00
O								
ATOM	10861	N	THR	178	12.113-113.084	11.562	1.00	0.00
N								
ATOM	10862	CA	THR	178	11.038-112.183	11.143	1.00	0.00
C								
ATOM	10863	CB	THR	178	11.330-111.286	9.900	1.00	0.00
C								
ATOM	10864	CG2	THR	178	10.206-110.279	9.726	1.00	0.00
C								
ATOM	10865	OG1	THR	178	12.462-110.476	10.127	1.00	0.00
O								
ATOM	10866	C	THR	178	9.843-113.092	10.889	1.00	0.00
C								
ATOM	10867	O	THR	178	10.031-114.213	10.386	1.00	0.00
O								
ATOM	10868	N	LEU	179	8.562-112.622	11.196	1.00	0.00
N								
ATOM	10869	CA	LEU	179	7.255-113.267	10.923	1.00	0.00
C								
ATOM	10870	CB	LEU	179	6.501-113.514	12.266	1.00	0.00
C								
ATOM	10871	CG	LEU	179	7.121-114.494	13.323	1.00	0.00
C								

ATOM	10872	CD1	LEU	179	6.421-114.362	14.713	1.00	0.00
C								
ATOM	10873	CD2	LEU	179	7.138-115.977	12.880	1.00	0.00
C								
ATOM	10874	C	LEU	179	6.557-112.429	9.871	1.00	0.00
C								
ATOM	10875	O	LEU	179	6.595-111.206	9.949	1.00	0.00
O								
ATOM	10876	N	ARG	180	5.976-113.108	8.861	1.00	0.00
N								
ATOM	10877	CA	ARG	180	5.395-112.489	7.703	1.00	0.00
C								
ATOM	10878	CB	ARG	180	6.471-112.515	6.540	1.00	0.00
C								
ATOM	10879	CG	ARG	180	5.898-112.435	5.087	1.00	0.00
C								
ATOM	10880	CD	ARG	180	7.018-111.911	4.224	1.00	0.00
C								
ATOM	10881	NE	ARG	180	7.945-112.973	4.103	1.00	0.00
N								
ATOM	10882	CZ	ARG	180	9.223-113.091	4.420	1.00	0.00
C								
ATOM	10883	NH1	ARG	180	9.786-112.263	5.269	1.00	0.00
N								
ATOM	10884	NH2	ARG	180	9.868-114.213	3.983	1.00	0.00
N1+								
ATOM	10885	C	ARG	180	4.090-113.117	7.324	1.00	0.00
C								
ATOM	10886	O	ARG	180	3.896-114.328	7.490	1.00	0.00
O								
ATOM	10887	N	ASP	181	3.055-112.337	6.897	1.00	0.00
N								
ATOM	10888	CA	ASP	181	1.838-112.856	6.338	1.00	0.00
C								
ATOM	10889	CB	ASP	181	0.880-113.279	7.495	1.00	0.00
C								
ATOM	10890	CG	ASP	181	-0.391-113.952	7.040	1.00	0.00
C								
ATOM	10891	OD1	ASP	181	-1.423-113.911	7.744	1.00	0.00
O								
ATOM	10892	OD2	ASP	181	-0.369-114.538	5.939	1.00	0.00
O1-								
ATOM	10893	C	ASP	181	1.227-111.830	5.378	1.00	0.00
C								
ATOM	10894	O	ASP	181	1.533-110.596	5.422	1.00	0.00
O								
ATOM	10895	N	GLU	182	0.463-112.327	4.451	1.00	0.00
N								
ATOM	10896	CA	GLU	182	-0.070-111.546	3.366	1.00	0.00
C								
ATOM	10897	CB	GLU	182	-1.284-110.692	3.824	1.00	0.00
C								
ATOM	10898	CG	GLU	182	-2.336-111.592	4.628	1.00	0.00
C								

ATOM	10899	CD	GLU	182	-3.771-111.164	4.440	1.00	0.00
C								
ATOM	10900	OE1	GLU	182	-4.512-110.959	5.445	1.00	0.00
O								
ATOM	10901	OE2	GLU	182	-4.223-111.008	3.263	1.00	0.00
O1-								
ATOM	10902	C	GLU	182	0.931-110.869	2.504	1.00	0.00
C								
ATOM	10903	O	GLU	182	0.633-109.829	1.959	1.00	0.00
O								
ATOM	10904	N	GLY	183	2.166-111.425	2.360	1.00	0.00
N								
ATOM	10905	CA	GLY	183	3.214-110.759	1.589	1.00	0.00
C								
ATOM	10906	C	GLY	183	4.072-109.691	2.337	1.00	0.00
C								
ATOM	10907	O	GLY	183	4.897-109.057	1.786	1.00	0.00
O								
ATOM	10908	N	LYS	184	3.721-109.442	3.582	1.00	0.00
N								
ATOM	10909	CA	LYS	184	4.320-108.347	4.414	1.00	0.00
C								
ATOM	10910	CB	LYS	184	3.284-107.142	4.420	1.00	0.00
C								
ATOM	10911	CG	LYS	184	3.151-106.395	3.092	1.00	0.00
C								
ATOM	10912	CD	LYS	184	4.346-105.478	2.742	1.00	0.00
C								
ATOM	10913	CE	LYS	184	3.946-105.046	1.368	1.00	0.00
C								
ATOM	10914	NZ	LYS	184	4.898-104.049	0.864	1.00	0.00
N1+								
ATOM	10915	C	LYS	184	4.731-108.728	5.831	1.00	0.00
C								
ATOM	10916	O	LYS	184	4.175-109.665	6.390	1.00	0.00
O								
ATOM	10917	N	THR	185	5.733-108.051	6.424	1.00	0.00
N								
ATOM	10918	CA	THR	185	6.126-108.294	7.789	1.00	0.00
C								
ATOM	10919	CB	THR	185	7.294-107.463	8.286	1.00	0.00
C								
ATOM	10920	CG2	THR	185	7.878-107.940	9.625	1.00	0.00
C								
ATOM	10921	OG1	THR	185	8.300-107.543	7.315	1.00	0.00
O								
ATOM	10922	C	THR	185	4.963-107.899	8.744	1.00	0.00
C								
ATOM	10923	O	THR	185	4.448-106.808	8.714	1.00	0.00
O								
ATOM	10924	N	ILE	186	4.654-108.795	9.687	1.00	0.00
N								
ATOM	10925	CA	ILE	186	3.645-108.682	10.775	1.00	0.00
C								



ATOM	10926	CB	ILE	186	2.439-109.675	10.584	1.00	0.00
C								
ATOM	10927	CG2	ILE	186	2.965-111.096	10.591	1.00	0.00
C								
ATOM	10928	CG1	ILE	186	1.223-109.468	11.552	1.00	0.00
C								
ATOM	10929	CD1	ILE	186	-0.018-110.329	11.205	1.00	0.00
C								
ATOM	10930	C	ILE	186	4.289-108.812	12.190	1.00	0.00
C								
ATOM	10931	O	ILE	186	3.633-108.383	13.209	1.00	0.00
O								
ATOM	10932	N	ALA	187	5.438-109.392	12.367	1.00	0.00
N								
ATOM	10933	CA	ALA	187	6.241-109.330	13.617	1.00	0.00
C								
ATOM	10934	CB	ALA	187	5.655-110.243	14.788	1.00	0.00
C								
ATOM	10935	C	ALA	187	7.781-109.502	13.393	1.00	0.00
C								
ATOM	10936	O	ALA	187	8.215-109.988	12.373	1.00	0.00
O								
ATOM	10937	N	ILE	188	8.575-109.238	14.427	1.00	0.00
N								
ATOM	10938	CA	ILE	188	9.989-109.736	14.518	1.00	0.00
C								
ATOM	10939	CB	ILE	188	10.932-108.514	14.387	1.00	0.00
C								
ATOM	10940	CG2	ILE	188	12.345-108.755	14.920	1.00	0.00
C								
ATOM	10941	CG1	ILE	188	10.945-108.066	12.901	1.00	0.00
C								
ATOM	10942	CD1	ILE	188	11.605-106.721	12.645	1.00	0.00
C								
ATOM	10943	C	ILE	188	10.112-110.622	15.749	1.00	0.00
C								
ATOM	10944	O	ILE	188	9.306-110.450	16.611	1.00	0.00
O								
ATOM	10945	N	GLY	189	11.179-111.403	15.924	1.00	0.00
N								
ATOM	10946	CA	GLY	189	11.619-111.743	17.277	1.00	0.00
C								
ATOM	10947	C	GLY	189	13.119-112.248	17.437	1.00	0.00
C								
ATOM	10948	O	GLY	189	13.893-112.077	16.515	1.00	0.00
O								
ATOM	10949	N	LYS	190	13.310-112.932	18.570	1.00	0.00
N								
ATOM	10950	CA	LYS	190	14.549-113.590	18.973	1.00	0.00
C								
ATOM	10951	CB	LYS	190	15.520-112.653	19.683	1.00	0.00
C								
ATOM	10952	CG	LYS	190	14.860-111.695	20.669	1.00	0.00
C								

ATOM	10953	CD	LYS	190	15.900-110.904	21.457	1.00	0.00
C								
ATOM	10954	CE	LYS	190	15.203-109.931	22.384	1.00	0.00
C								
ATOM	10955	NZ	LYS	190	16.182-109.267	23.264	1.00	0.00
N1+								
ATOM	10956	C	LYS	190	14.272-114.877	19.768	1.00	0.00
C								
ATOM	10957	O	LYS	190	13.546-114.869	20.791	1.00	0.00
O								
ATOM	10958	N	VAL	191	14.901-115.967	19.288	1.00	0.00
N								
ATOM	10959	CA	VAL	191	14.777-117.329	19.845	1.00	0.00
C								
ATOM	10960	CB	VAL	191	15.198-118.477	18.889	1.00	0.00
C								
ATOM	10961	CG1	VAL	191	15.164-119.899	19.476	1.00	0.00
C								
ATOM	10962	CG2	VAL	191	14.380-118.546	17.611	1.00	0.00
C								
ATOM	10963	C	VAL	191	15.447-117.472	21.167	1.00	0.00
C								
ATOM	10964	O	VAL	191	16.624-117.315	21.293	1.00	0.00
O								
ATOM	10965	N	LEU	192	14.644-117.819	22.175	1.00	0.00
N								
ATOM	10966	CA	LEU	192	15.006-118.084	23.578	1.00	0.00
C								
ATOM	10967	CB	LEU	192	13.799-118.039	24.526	1.00	0.00
C								
ATOM	10968	CG	LEU	192	13.242-116.628	24.809	1.00	0.00
C								
ATOM	10969	CD1	LEU	192	11.928-116.741	25.588	1.00	0.00
C								
ATOM	10970	CD2	LEU	192	14.223-115.763	25.607	1.00	0.00
C								
ATOM	10971	C	LEU	192	15.688-119.432	23.723	1.00	0.00
C								
ATOM	10972	O	LEU	192	16.796-119.381	24.260	1.00	0.00
O								
ATOM	10973	N	LYS	193	14.987-120.496	23.307	1.00	0.00
N								
ATOM	10974	CA	LYS	193	15.407-121.859	23.444	1.00	0.00
C								
ATOM	10975	CB	LYS	193	15.371-122.448	24.902	1.00	0.00
C								
ATOM	10976	CG	LYS	193	14.078-122.703	25.507	1.00	0.00
C								
ATOM	10977	CD	LYS	193	14.334-123.328	26.889	1.00	0.00
C								
ATOM	10978	CE	LYS	193	14.616-124.806	27.013	1.00	0.00
C								
ATOM	10979	NZ	LYS	193	13.544-125.648	26.329	1.00	0.00
N1+								

ATOM	10980	C	LYS	193	14.538-122.753	22.548	1.00	0.00
C								
ATOM	10981	O	LYS	193	13.458-122.367	22.162	1.00	0.00
O								
ATOM	10982	N	LEU	194	14.964-123.986	22.230	1.00	0.00
N								
ATOM	10983	CA	LEU	194	14.165-125.018	21.545	1.00	0.00
C								
ATOM	10984	CB	LEU	194	15.100-125.879	20.669	1.00	0.00
C								
ATOM	10985	CG	LEU	194	15.746-125.252	19.399	1.00	0.00
C								
ATOM	10986	CD1	LEU	194	16.499-123.903	19.682	1.00	0.00
C								
ATOM	10987	CD2	LEU	194	16.656-126.187	18.624	1.00	0.00
C								
ATOM	10988	C	LEU	194	13.336-125.866	22.501	1.00	0.00
C								
ATOM	10989	O	LEU	194	13.646-125.958	23.663	1.00	0.00
O								
ATOM	10990	N	VAL	195	12.244-126.419	22.009	1.00	0.00
N								
ATOM	10991	CA	VAL	195	11.339-127.265	22.734	1.00	0.00
C								
ATOM	10992	CB	VAL	195	9.947-126.626	22.584	1.00	0.00
C								
ATOM	10993	CG1	VAL	195	8.781-127.484	23.115	1.00	0.00
C								
ATOM	10994	CG2	VAL	195	9.787-125.318	23.289	1.00	0.00
C								
ATOM	10995	C	VAL	195	11.387-128.640	22.222	1.00	0.00
C								
ATOM	10996	O	VAL	195	11.166-128.940	21.050	1.00	0.00
O								
ATOM	10997	N	PRO	196	11.511-129.635	23.089	1.00	0.00
N								
ATOM	10998	CD	PRO	196	10.980-130.986	22.763	1.00	0.00
C								
ATOM	10999	CG	PRO	196	10.707-131.561	24.149	1.00	0.00
C								
ATOM	11000	CB	PRO	196	11.801-130.971	25.080	1.00	0.00
C								
ATOM	11001	CA	PRO	196	11.876-129.605	24.515	1.00	0.00
C								
ATOM	11002	C	PRO	196	13.261-129.036	24.872	1.00	0.00
C								
ATOM	11003	O	PRO	196	14.180-129.181	23.978	1.00	0.00
O								
ATOM	11004	OXT	PRO	196	13.522-128.601	26.044	1.00	0.00
O1-								
ATOM	11005	CH3	ACE	197	29.888-111.250	43.384	1.00	0.00
C								
ATOM	11006	C	ACE	197	29.312-109.969	42.816	1.00	0.00
C								

ATOM	11007	O	ACE	197	28.675-109.993	41.748	1.00	0.00
O								
ATOM	11008	N	ASN	198	29.616-108.851	43.495	1.00	0.00
N								
ATOM	11009	CA	ASN	198	29.329-107.459	43.015	1.00	0.00
C								
ATOM	11010	CB	ASN	198	29.394-106.453	44.189	1.00	0.00
C								
ATOM	11011	CG	ASN	198	28.306-106.714	45.162	1.00	0.00
C								
ATOM	11012	OD1	ASN	198	28.481-107.089	46.321	1.00	0.00
O								
ATOM	11013	ND2	ASN	198	27.065-106.369	44.784	1.00	0.00
N								
ATOM	11014	C	ASN	198	30.188-107.151	41.786	1.00	0.00
C								
ATOM	11015	O	ASN	198	31.256-107.663	41.626	1.00	0.00
O								
ATOM	11016	N	PHE	199	29.732-106.206	40.913	1.00	0.00
N								
ATOM	11017	CA	PHE	199	30.484-105.733	39.795	1.00	0.00
C								
ATOM	11018	CB	PHE	199	29.737-105.872	38.442	1.00	0.00
C								
ATOM	11019	CG	PHE	199	29.229-107.252	37.944	1.00	0.00
C								
ATOM	11020	CD1	PHE	199	28.157-107.927	38.502	1.00	0.00
C								
ATOM	11021	CE1	PHE	199	27.799-109.214	38.120	1.00	0.00
C								
ATOM	11022	CZ	PHE	199	28.460-109.832	37.090	1.00	0.00
C								
ATOM	11023	CE2	PHE	199	29.535-109.175	36.491	1.00	0.00
C								
ATOM	11024	CD2	PHE	199	29.963-107.906	36.919	1.00	0.00
C								
ATOM	11025	C	PHE	199	30.825-104.246	39.969	1.00	0.00
C								
ATOM	11026	O	PHE	199	30.252-103.641	40.844	1.00	0.00
O								
ATOM	11027	N	ASP	200	31.753-103.623	39.227	1.00	0.00
N								
ATOM	11028	CA	ASP	200	32.157-102.223	39.401	1.00	0.00
C								
ATOM	11029	CB	ASP	200	33.237-101.998	38.272	1.00	0.00
C								
ATOM	11030	CG	ASP	200	33.802-100.564	38.334	1.00	0.00
C								
ATOM	11031	OD1	ASP	200	34.335-100.040	37.336	1.00	0.00
O								
ATOM	11032	OD2	ASP	200	33.739-100.040	39.435	1.00	0.00
O1-								
ATOM	11033	C	ASP	200	30.970-101.244	39.405	1.00	0.00
C								

ATOM	11034	O	ASP	200	30.187-101.208	38.470	1.00	0.00
O								
ATOM	11035	N	THR	201	30.948-100.376	40.377	1.00	0.00
N								
ATOM	11036	CA	THR	201	29.956 -99.233	40.496	1.00	0.00
C								
ATOM	11037	CB	THR	201	30.170 -98.545	41.791	1.00	0.00
C								
ATOM	11038	CG2	THR	201	29.948 -99.537	42.943	1.00	0.00
C								
ATOM	11039	OG1	THR	201	31.470 -98.056	41.957	1.00	0.00
O								
ATOM	11040	C	THR	201	30.054 -98.101	39.463	1.00	0.00
C								
ATOM	11041	O	THR	201	29.100 -97.236	39.298	1.00	0.00
O								
ATOM	11042	N	SER	202	31.108 -98.061	38.644	1.00	0.00
N								
ATOM	11043	CA	SER	202	31.285 -97.105	37.473	1.00	0.00
C								
ATOM	11044	CB	SER	202	32.795 -97.028	37.078	1.00	0.00
C								
ATOM	11045	OG	SER	202	33.134 -98.068	36.243	1.00	0.00
O								
ATOM	11046	C	SER	202	30.371 -97.591	36.324	1.00	0.00
C								
ATOM	11047	O	SER	202	30.021 -96.840	35.424	1.00	0.00
O								
ATOM	11048	N	LEU	203	29.893 -98.839	36.355	1.00	0.00
N								
ATOM	11049	CA	LEU	203	29.046 -99.395	35.251	1.00	0.00
C								
ATOM	11050	CB	LEU	203	28.957-100.964	35.404	1.00	0.00
C								
ATOM	11051	CG	LEU	203	30.328-101.712	35.450	1.00	0.00
C								
ATOM	11052	CD1	LEU	203	30.015-103.203	35.414	1.00	0.00
C								
ATOM	11053	CD2	LEU	203	31.078-101.495	34.136	1.00	0.00
C								
ATOM	11054	C	LEU	203	27.681 -98.709	35.147	1.00	0.00
C								
ATOM	11055	O	LEU	203	27.434 -98.280	34.026	1.00	0.00
O								
ATOM	11056	N	PRO	204	26.788 -98.555	36.171	1.00	0.00
N								
ATOM	11057	CD	PRO	204	26.902 -99.103	37.489	1.00	0.00
C								
ATOM	11058	CG	PRO	204	25.472 -99.290	37.918	1.00	0.00
C								
ATOM	11059	CB	PRO	204	24.741 -98.115	37.266	1.00	0.00
C								
ATOM	11060	CA	PRO	204	25.565 -97.801	36.013	1.00	0.00
C								

ATOM	11061	C	PRO	204	25.810	-96.277	35.886	1.00	0.00
C									
ATOM	11062	O	PRO	204	24.956	-95.666	35.256	1.00	0.00
O									
ATOM	11063	N	THR	205	26.996	-95.689	36.190	1.00	0.00
N									
ATOM	11064	CA	THR	205	27.276	-94.228	35.889	1.00	0.00
C									
ATOM	11065	CB	THR	205	28.399	-93.586	36.750	1.00	0.00
C									
ATOM	11066	CG2	THR	205	28.778	-92.119	36.447	1.00	0.00
C									
ATOM	11067	OG1	THR	205	27.959	-93.569	38.139	1.00	0.00
O									
ATOM	11068	C	THR	205	27.593	-94.045	34.425	1.00	0.00
C									
ATOM	11069	O	THR	205	27.245	-92.999	33.878	1.00	0.00
O									
ATOM	11070	N	SER	206	28.432	-94.963	33.849	1.00	0.00
N									
ATOM	11071	CA	SER	206	28.775	-94.982	32.429	1.00	0.00
C									
ATOM	11072	CB	SER	206	30.065	-95.857	32.194	1.00	0.00
C									
ATOM	11073	OG	SER	206	29.840	-97.165	32.698	1.00	0.00
O									
ATOM	11074	C	SER	206	27.607	-95.484	31.502	1.00	0.00
C									
ATOM	11075	O	SER	206	27.763	-95.569	30.264	1.00	0.00
O									
ATOM	11076	N	HIE	207	26.458	-95.924	32.089	1.00	0.00
N									
ATOM	11077	CA	HIE	207	25.359	-96.621	31.368	1.00	0.00
C									
ATOM	11078	CB	HIE	207	24.466	-95.588	30.684	1.00	0.00
C									
ATOM	11079	CG	HIE	207	23.887	-94.602	31.555	1.00	0.00
C									
ATOM	11080	ND1	HIE	207	23.087	-94.847	32.724	1.00	0.00
N									
ATOM	11081	CE1	HIE	207	22.917	-93.649	33.296	1.00	0.00
C									
ATOM	11082	NE2	HIE	207	23.565	-92.672	32.598	1.00	0.00
N									
ATOM	11083	CD2	HIE	207	24.150	-93.273	31.508	1.00	0.00
C									
ATOM	11084	C	HIE	207	25.760	-97.840	30.640	1.00	0.00
C									
ATOM	11085	O	HIE	207	25.324	-97.936	29.474	1.00	0.00
O									
ATOM	11086	N	THR	208	26.621	-98.714	31.284	1.00	0.00
N									
ATOM	11087	CA	THR	208	27.169	-99.948	30.689	1.00	0.00
C									

ATOM	11088	CB	THR	208	28.383-100.447	31.539	1.00	0.00
C								
ATOM	11089	CG2	THR	208	28.907-101.829	31.000	1.00	0.00
C								
ATOM	11090	OG1	THR	208	29.363 -99.475	31.274	1.00	0.00
O								
ATOM	11091	C	THR	208	26.088-100.955	30.456	1.00	0.00
C								
ATOM	11092	O	THR	208	26.202-101.850	29.568	1.00	0.00
O								
ATOM	11093	N	TYR	209	24.881-100.785	30.954	1.00	0.00
N								
ATOM	11094	CA	TYR	209	23.762-101.569	30.503	1.00	0.00
C								
ATOM	11095	CB	TYR	209	22.510-101.303	31.355	1.00	0.00
C								
ATOM	11096	CG	TYR	209	22.049 -99.859	31.379	1.00	0.00
C								
ATOM	11097	CD1	TYR	209	22.490 -98.988	32.388	1.00	0.00
C								
ATOM	11098	CE1	TYR	209	22.022 -97.675	32.451	1.00	0.00
C								
ATOM	11099	CZ	TYR	209	21.107 -97.228	31.502	1.00	0.00
C								
ATOM	11100	OH	TYR	209	20.587 -95.967	31.569	1.00	0.00
O								
ATOM	11101	CE2	TYR	209	20.681 -98.067	30.476	1.00	0.00
C								
ATOM	11102	CD2	TYR	209	21.155 -99.379	30.412	1.00	0.00
C								
ATOM	11103	C	TYR	209	23.399-101.356	29.007	1.00	0.00
C								
ATOM	11104	O	TYR	209	22.775-102.249	28.401	1.00	0.00
O								
ATOM	11105	N	LEU	210	23.695-100.202	28.340	1.00	0.00
N								
ATOM	11106	CA	LEU	210	23.498-100.059	26.883	1.00	0.00
C								
ATOM	11107	CB	LEU	210	23.302 -98.556	26.512	1.00	0.00
C								
ATOM	11108	CG	LEU	210	22.413 -97.710	27.422	1.00	0.00
C								
ATOM	11109	CD1	LEU	210	22.623 -96.208	27.246	1.00	0.00
C								
ATOM	11110	CD2	LEU	210	20.921 -97.934	27.179	1.00	0.00
C								
ATOM	11111	C	LEU	210	24.628-100.592	26.026	1.00	0.00
C								
ATOM	11112	O	LEU	210	24.521-100.585	24.790	1.00	0.00
O								
ATOM	11113	N	GLY	211	25.601-101.284	26.667	1.00	0.00
N								
ATOM	11114	CA	GLY	211	26.969-101.457	26.279	1.00	0.00
C								

ATOM	11115	C	GLY	211	27.888	-100.163	26.386	1.00	0.00
C									
ATOM	11116	O	GLY	211	27.437	-99.056	26.670	1.00	0.00
O									
ATOM	11117	N	ALA	212	29.206	-100.374	25.970	1.00	0.00
N									
ATOM	11118	CA	ALA	212	30.210	-99.382	26.081	1.00	0.00
C									
ATOM	11119	CB	ALA	212	31.005	-99.714	27.352	1.00	0.00
C									
ATOM	11120	C	ALA	212	31.026	-99.166	24.777	1.00	0.00
C									
ATOM	11121	O	ALA	212	31.514	-98.084	24.547	1.00	0.00
O									
ATOM	11122	N	ASP	213	31.166	-100.091	23.858	1.00	0.00
N									
ATOM	11123	CA	ASP	213	31.812	-99.857	22.523	1.00	0.00
C									
ATOM	11124	CB	ASP	213	32.189	-101.309	22.059	1.00	0.00
C									
ATOM	11125	CG	ASP	213	32.651	-101.379	20.643	1.00	0.00
C									
ATOM	11126	OD1	ASP	213	32.622	-102.514	20.132	1.00	0.00
O									
ATOM	11127	OD2	ASP	213	33.344	-100.465	20.176	1.00	0.00
O1-									
ATOM	11128	C	ASP	213	30.808	-99.281	21.478	1.00	0.00
C									
ATOM	11129	O	ASP	213	30.064	-100.033	20.774	1.00	0.00
O									
ATOM	11130	N	MET	214	30.659	-97.909	21.526	1.00	0.00
N									
ATOM	11131	CA	MET	214	29.914	-97.178	20.520	1.00	0.00
C									
ATOM	11132	CB	MET	214	28.850	-96.331	21.367	1.00	0.00
C									
ATOM	11133	CG	MET	214	27.991	-97.073	22.371	1.00	0.00
C									
ATOM	11134	SD	MET	214	26.443	-96.193	22.809	1.00	0.00
S									
ATOM	11135	CE	MET	214	25.358	-97.605	23.249	1.00	0.00
C									
ATOM	11136	C	MET	214	30.794	-96.212	19.699	1.00	0.00
C									
ATOM	11137	O	MET	214	31.978	-96.053	19.962	1.00	0.00
O									
ATOM	11138	N	GLU	215	30.219	-95.526	18.748	1.00	0.00
N									
ATOM	11139	CA	GLU	215	30.838	-94.401	18.056	1.00	0.00
C									
ATOM	11140	CB	GLU	215	29.805	-94.043	16.900	1.00	0.00
C									
ATOM	11141	CG	GLU	215	29.243	-95.090	15.976	1.00	0.00
C									



ATOM	11142	CD	GLU	215	30.272	-95.625	15.020	1.00	0.00
C									
ATOM	11143	OE1	GLU	215	30.586	-96.837	15.177	1.00	0.00
O									
ATOM	11144	OE2	GLU	215	30.721	-94.950	14.053	1.00	0.00
O1-									
ATOM	11145	C	GLU	215	30.957	-93.231	19.057	1.00	0.00
C									
ATOM	11146	O	GLU	215	29.912	-92.536	19.308	1.00	0.00
O									
ATOM	11147	N	GLU	216	32.063	-93.066	19.772	1.00	0.00
N									
ATOM	11148	CA	GLU	216	32.272	-91.966	20.835	1.00	0.00
C									
ATOM	11149	CB	GLU	216	33.463	-92.463	21.672	1.00	0.00
C									
ATOM	11150	CG	GLU	216	33.676	-91.717	22.980	1.00	0.00
C									
ATOM	11151	CD	GLU	216	34.981	-92.105	23.746	1.00	0.00
C									
ATOM	11152	OE1	GLU	216	36.089	-91.911	23.161	1.00	0.00
O									
ATOM	11153	OE2	GLU	216	34.959	-92.251	24.988	1.00	0.00
O1-									
ATOM	11154	C	GLU	216	32.628	-90.707	20.135	1.00	0.00
C									
ATOM	11155	O	GLU	216	33.164	-90.702	19.021	1.00	0.00
O									
ATOM	11156	N	PHE	217	32.370	-89.581	20.763	1.00	0.00
N									
ATOM	11157	CA	PHE	217	32.694	-88.184	20.328	1.00	0.00
C									
ATOM	11158	CB	PHE	217	31.527	-87.592	19.529	1.00	0.00
C									
ATOM	11159	CG	PHE	217	31.002	-88.393	18.375	1.00	0.00
C									
ATOM	11160	CD1	PHE	217	31.729	-88.538	17.169	1.00	0.00
C									
ATOM	11161	CE1	PHE	217	31.128	-89.169	16.016	1.00	0.00
C									
ATOM	11162	CZ	PHE	217	29.826	-89.586	16.158	1.00	0.00
C									
ATOM	11163	CE2	PHE	217	29.142	-89.546	17.400	1.00	0.00
C									
ATOM	11164	CD2	PHE	217	29.707	-88.991	18.525	1.00	0.00
C									
ATOM	11165	C	PHE	217	33.043	-87.185	21.443	1.00	0.00
C									
ATOM	11166	O	PHE	217	32.363	-87.054	22.476	1.00	0.00
O									
ATOM	11167	N	HIE	218	34.175	-86.454	21.222	1.00	0.00
N									
ATOM	11168	CA	HIE	218	34.696	-85.432	22.153	1.00	0.00
C									

ATOM	11169	CB	HIE	218	36.214	-85.617	22.301	1.00	0.00
C									
ATOM	11170	CG	HIE	218	37.085	-85.474	21.117	1.00	0.00
C									
ATOM	11171	ND1	HIE	218	37.160	-84.374	20.303	1.00	0.00
N									
ATOM	11172	CE1	HIE	218	38.050	-84.604	19.326	1.00	0.00
C									
ATOM	11173	NE2	HIE	218	38.556	-85.870	19.593	1.00	0.00
N									
ATOM	11174	CD2	HIE	218	38.005	-86.382	20.726	1.00	0.00
C									
ATOM	11175	C	HIE	218	34.205	-84.019	21.823	1.00	0.00
C									
ATOM	11176	O	HIE	218	33.932	-83.737	20.643	1.00	0.00
O									
ATOM	11177	N	GLY	219	34.103	-83.163	22.834	1.00	0.00
N									
ATOM	11178	CA	GLY	219	33.623	-81.781	22.672	1.00	0.00
C									
ATOM	11179	C	GLY	219	32.174	-81.753	22.076	1.00	0.00
C									
ATOM	11180	O	GLY	219	31.415	-82.711	22.204	1.00	0.00
O									
ATOM	11181	N	ARG	220	31.710	-80.606	21.580	1.00	0.00
N									
ATOM	11182	CA	ARG	220	32.425	-79.357	21.190	1.00	0.00
C									
ATOM	11183	CB	ARG	220	32.902	-79.651	19.770	1.00	0.00
C									
ATOM	11184	CG	ARG	220	34.029	-78.824	19.172	1.00	0.00
C									
ATOM	11185	CD	ARG	220	35.160	-78.216	20.123	1.00	0.00
C									
ATOM	11186	NE	ARG	220	36.169	-77.476	19.323	1.00	0.00
N									
ATOM	11187	CZ	ARG	220	37.012	-76.568	19.853	1.00	0.00
C									
ATOM	11188	NH1	ARG	220	38.126	-76.187	19.207	1.00	0.00
N									
ATOM	11189	NH2	ARG	220	36.740	-75.960	20.983	1.00	0.00
N1+									
ATOM	11190	C	ARG	220	31.625	-78.049	21.044	1.00	0.00
C									
ATOM	11191	O	ARG	220	32.122	-76.899	21.092	1.00	0.00
O									
ATOM	11192	N	THR	221	30.336	-78.178	20.814	1.00	0.00
N									
ATOM	11193	CA	THR	221	29.390	-77.014	20.484	1.00	0.00
C									
ATOM	11194	CB	THR	221	28.038	-77.544	20.029	1.00	0.00
C									
ATOM	11195	CG2	THR	221	27.235	-76.490	19.323	1.00	0.00
C									

ATOM	11196	OG1	THR	221	28.267	-78.522	19.062	1.00	0.00
O									
ATOM	11197	C	THR	221	29.119	-76.088	21.609	1.00	0.00
C									
ATOM	11198	O	THR	221	28.768	-76.660	22.677	1.00	0.00
O									
ATOM	11199	N	LEU	222	29.336	-74.875	21.561	1.00	0.00
N									
ATOM	11200	CA	LEU	222	28.964	-73.905	22.607	1.00	0.00
C									
ATOM	11201	CB	LEU	222	30.043	-73.625	23.649	1.00	0.00
C									
ATOM	11202	CG	LEU	222	30.239	-74.794	24.659	1.00	0.00
C									
ATOM	11203	CD1	LEU	222	31.330	-74.385	25.671	1.00	0.00
C									
ATOM	11204	CD2	LEU	222	28.983	-75.227	25.467	1.00	0.00
C									
ATOM	11205	C	LEU	222	28.477	-72.561	21.938	1.00	0.00
C									
ATOM	11206	O	LEU	222	28.899	-72.283	20.816	1.00	0.00
O									
ATOM	11207	N	HIP	223	27.647	-71.827	22.667	1.00	0.00
N									
ATOM	11208	CA	HIP	223	27.170	-70.530	22.191	1.00	0.00
C									
ATOM	11209	CB	HIP	223	25.717	-70.679	21.564	1.00	0.00
C									
ATOM	11210	CG	HIP	223	25.590	-71.818	20.610	1.00	0.00
C									
ATOM	11211	ND1	HIP	223	26.333	-71.944	19.398	1.00	0.00
N1+									
ATOM	11212	CE1	HIP	223	25.816	-72.946	18.660	1.00	0.00
C									
ATOM	11213	NE2	HIP	223	24.866	-73.561	19.434	1.00	0.00
N									
ATOM	11214	CD2	HIP	223	24.732	-72.863	20.663	1.00	0.00
C									
ATOM	11215	C	HIP	223	27.299	-69.414	23.262	1.00	0.00
C									
ATOM	11216	O	HIP	223	27.164	-69.672	24.443	1.00	0.00
O									
ATOM	11217	N	ASP	224	27.444	-68.137	22.740	1.00	0.00
N									
ATOM	11218	CA	ASP	224	27.512	-66.980	23.662	1.00	0.00
C									
ATOM	11219	CB	ASP	224	28.040	-65.732	22.912	1.00	0.00
C									
ATOM	11220	CG	ASP	224	29.401	-65.731	22.281	1.00	0.00
C									
ATOM	11221	OD1	ASP	224	29.594	-64.755	21.558	1.00	0.00
O									
ATOM	11222	OD2	ASP	224	30.301	-66.590	22.615	1.00	0.00
O1-									

ATOM	11223	C	ASP	224	26.363	-66.610	24.529	1.00	0.00
C									
ATOM	11224	O	ASP	224	25.218	-66.793	24.077	1.00	0.00
O									
ATOM	11225	N	ASP	225	26.590	-66.170	25.774	1.00	0.00
N									
ATOM	11226	CA	ASP	225	25.508	-65.829	26.695	1.00	0.00
C									
ATOM	11227	CB	ASP	225	26.121	-65.512	28.147	1.00	0.00
C									
ATOM	11228	CG	ASP	225	26.662	-66.688	28.942	1.00	0.00
C									
ATOM	11229	OD1	ASP	225	27.072	-66.389	30.098	1.00	0.00
O									
ATOM	11230	OD2	ASP	225	26.583	-67.895	28.559	1.00	0.00
O1-									
ATOM	11231	C	ASP	225	24.719	-64.659	26.096	1.00	0.00
C									
ATOM	11232	O	ASP	225	25.312	-63.787	25.464	1.00	0.00
O									
ATOM	11233	N	ASP	226	23.381	-64.689	26.232	1.00	0.00
N									
ATOM	11234	CA	ASP	226	22.469	-63.816	25.513	1.00	0.00
C									
ATOM	11235	CB	ASP	226	22.594	-62.503	26.229	1.00	0.00
C									
ATOM	11236	CG	ASP	226	21.397	-61.590	26.183	1.00	0.00
C									
ATOM	11237	OD1	ASP	226	20.262	-61.990	26.428	1.00	0.00
O									
ATOM	11238	OD2	ASP	226	21.474	-60.352	25.883	1.00	0.00
O1-									
ATOM	11239	C	ASP	226	22.381	-63.847	23.965	1.00	0.00
C									
ATOM	11240	O	ASP	226	21.478	-63.230	23.352	1.00	0.00
O									
ATOM	11241	N	SER	227	23.184	-64.682	23.257	1.00	0.00
N									
ATOM	11242	CA	SER	227	22.911	-64.984	21.860	1.00	0.00
C									
ATOM	11243	CB	SER	227	23.952	-65.908	21.171	1.00	0.00
C									
ATOM	11244	OG	SER	227	23.915	-67.207	21.626	1.00	0.00
O									
ATOM	11245	C	SER	227	21.491	-65.482	21.518	1.00	0.00
C									
ATOM	11246	O	SER	227	20.876	-66.215	22.353	1.00	0.00
O									
ATOM	11247	N	CYS	228	20.979	-65.172	20.355	1.00	0.00
N									
ATOM	11248	CA	CYS	228	19.864	-65.797	19.696	1.00	0.00
C									
ATOM	11249	CB	CYS	228	19.096	-64.681	18.937	1.00	0.00
C									

ATOM	11250	SG	CYS	228	17.673	-65.046	18.065	1.00	0.00
S									
ATOM	11251	C	CYS	228	20.286	-67.071	18.948	1.00	0.00
C									
ATOM	11252	O	CYS	228	21.262	-67.105	18.214	1.00	0.00
O									
ATOM	11253	N	GLN	229	19.551	-68.153	19.145	1.00	0.00
N									
ATOM	11254	CA	GLN	229	19.833	-69.511	18.604	1.00	0.00
C									
ATOM	11255	CB	GLN	229	20.583	-70.416	19.649	1.00	0.00
C									
ATOM	11256	CG	GLN	229	21.924	-69.877	20.099	1.00	0.00
C									
ATOM	11257	CD	GLN	229	22.920	-69.782	18.973	1.00	0.00
C									
ATOM	11258	OE1	GLN	229	22.908	-70.595	18.122	1.00	0.00
O									
ATOM	11259	NE2	GLN	229	23.749	-68.688	18.904	1.00	0.00
N									
ATOM	11260	C	GLN	229	18.493	-70.142	18.136	1.00	0.00
C									
ATOM	11261	O	GLN	229	17.386	-69.779	18.590	1.00	0.00
O									
ATOM	11262	N	VAL	230	18.543	-71.161	17.237	1.00	0.00
N									
ATOM	11263	CA	VAL	230	17.429	-72.047	16.946	1.00	0.00
C									
ATOM	11264	CB	VAL	230	16.855	-71.782	15.562	1.00	0.00
C									
ATOM	11265	CG1	VAL	230	15.633	-72.671	15.333	1.00	0.00
C									
ATOM	11266	CG2	VAL	230	16.260	-70.355	15.368	1.00	0.00
C									
ATOM	11267	C	VAL	230	17.870	-73.457	17.114	1.00	0.00
C									
ATOM	11268	O	VAL	230	18.956	-73.656	16.602	1.00	0.00
O									
ATOM	11269	N	ILE	231	17.248	-74.381	17.882	1.00	0.00
N									
ATOM	11270	CA	ILE	231	17.825	-75.800	18.197	1.00	0.00
C									
ATOM	11271	CB	ILE	231	18.333	-75.923	19.681	1.00	0.00
C									
ATOM	11272	CG2	ILE	231	19.180	-77.252	19.934	1.00	0.00
C									
ATOM	11273	CG1	ILE	231	19.262	-74.724	20.165	1.00	0.00
C									
ATOM	11274	CD1	ILE	231	20.643	-74.704	19.510	1.00	0.00
C									
ATOM	11275	C	ILE	231	16.759	-76.874	18.049	1.00	0.00
C									
ATOM	11276	O	ILE	231	15.618	-76.518	18.318	1.00	0.00
O									

ATOM	11277	N	PRO	232	17.089	-78.066	17.569	1.00	0.00
N									
ATOM	11278	CD	PRO	232	18.212	-78.396	16.748	1.00	0.00
C									
ATOM	11279	CG	PRO	232	17.985	-79.924	16.481	1.00	0.00
C									
ATOM	11280	CB	PRO	232	16.497	-80.219	16.586	1.00	0.00
C									
ATOM	11281	CA	PRO	232	16.051	-79.145	17.570	1.00	0.00
C									
ATOM	11282	C	PRO	232	15.729	-79.731	18.982	1.00	0.00
C									
ATOM	11283	O	PRO	232	16.613	-80.142	19.734	1.00	0.00
O									
ATOM	11284	N	VAL	233	14.458	-80.031	19.141	1.00	0.00
N									
ATOM	11285	CA	VAL	233	13.951	-80.305	20.480	1.00	0.00
C									
ATOM	11286	CB	VAL	233	12.643	-79.501	20.566	1.00	0.00
C									
ATOM	11287	CG1	VAL	233	11.967	-79.729	21.947	1.00	0.00
C									
ATOM	11288	CG2	VAL	233	12.834	-77.978	20.444	1.00	0.00
C									
ATOM	11289	C	VAL	233	13.659	-81.765	20.587	1.00	0.00
C									
ATOM	11290	O	VAL	233	13.025	-82.316	19.704	1.00	0.00
O									
ATOM	11291	N	LEU	234	14.268	-82.427	21.597	1.00	0.00
N									
ATOM	11292	CA	LEU	234	14.315	-83.987	21.707	1.00	0.00
C									
ATOM	11293	CB	LEU	234	15.245	-84.313	22.922	1.00	0.00
C									
ATOM	11294	CG	LEU	234	15.696	-85.757	22.776	1.00	0.00
C									
ATOM	11295	CD1	LEU	234	16.748	-86.096	21.747	1.00	0.00
C									
ATOM	11296	CD2	LEU	234	16.157	-86.166	24.226	1.00	0.00
C									
ATOM	11297	C	LEU	234	12.901	-84.656	21.871	1.00	0.00
C									
ATOM	11298	O	LEU	234	12.134	-84.245	22.726	1.00	0.00
O									
ATOM	11299	N	PRO	235	12.485	-85.584	20.990	1.00	0.00
N									
ATOM	11300	CD	PRO	235	13.288	-86.205	19.931	1.00	0.00
C									
ATOM	11301	CG	PRO	235	12.711	-87.536	19.638	1.00	0.00
C									
ATOM	11302	CB	PRO	235	11.222	-87.243	19.867	1.00	0.00
C									
ATOM	11303	CA	PRO	235	11.193	-86.253	21.089	1.00	0.00
C									

ATOM	11304	C	PRO	235	11.083	-86.975	22.439	1.00	0.00
C									
ATOM	11305	O	PRO	235	12.145	-87.428	22.952	1.00	0.00
O									
ATOM	11306	N	GLN	236	9.861	-87.197	22.952	1.00	0.00
N									
ATOM	11307	CA	GLN	236	9.466	-88.091	24.031	1.00	0.00
C									
ATOM	11308	CB	GLN	236	10.012	-89.529	23.797	1.00	0.00
C									
ATOM	11309	CG	GLN	236	9.293	-90.628	24.559	1.00	0.00
C									
ATOM	11310	CD	GLN	236	9.907	-91.977	24.303	1.00	0.00
C									
ATOM	11311	OE1	GLN	236	10.875	-92.099	23.594	1.00	0.00
O									
ATOM	11312	NE2	GLN	236	9.341	-93.069	24.753	1.00	0.00
N									
ATOM	11313	C	GLN	236	9.916	-87.618	25.389	1.00	0.00
C									
ATOM	11314	O	GLN	236	9.166	-87.818	26.331	1.00	0.00
O									
ATOM	11315	N	VAL	237	11.154	-87.029	25.553	1.00	0.00
N									
ATOM	11316	CA	VAL	237	11.561	-86.457	26.852	1.00	0.00
C									
ATOM	11317	CB	VAL	237	12.964	-85.796	26.678	1.00	0.00
C									
ATOM	11318	CG1	VAL	237	12.751	-84.434	26.119	1.00	0.00
C									
ATOM	11319	CG2	VAL	237	13.624	-85.783	27.993	1.00	0.00
C									
ATOM	11320	C	VAL	237	10.481	-85.610	27.529	1.00	0.00
C									
ATOM	11321	O	VAL	237	9.710	-84.953	26.794	1.00	0.00
O									
ATOM	11322	N	MET	238	10.443	-85.665	28.840	1.00	0.00
N									
ATOM	11323	CA	MET	238	9.486	-84.945	29.653	1.00	0.00
C									
ATOM	11324	CB	MET	238	8.285	-85.897	29.793	1.00	0.00
C									
ATOM	11325	CG	MET	238	7.112	-85.160	30.421	1.00	0.00
C									
ATOM	11326	SD	MET	238	5.736	-86.131	30.923	1.00	0.00
S									
ATOM	11327	CE	MET	238	4.485	-84.961	31.346	1.00	0.00
C									
ATOM	11328	C	MET	238	10.103	-84.413	30.991	1.00	0.00
C									
ATOM	11329	O	MET	238	9.730	-83.327	31.459	1.00	0.00
O									
ATOM	11330	N	MET	239	11.055	-85.075	31.673	1.00	0.00
N									

ATOM	11331	CA	MET	239	11.977	-84.461	32.683	1.00	0.00
C									
ATOM	11332	CB	MET	239	13.075	-85.378	33.049	1.00	0.00
C									
ATOM	11333	CG	MET	239	14.027	-85.609	31.931	1.00	0.00
C									
ATOM	11334	SD	MET	239	15.420	-86.746	32.505	1.00	0.00
S									
ATOM	11335	CE	MET	239	16.526	-85.625	33.456	1.00	0.00
C									
ATOM	11336	C	MET	239	12.558	-83.060	32.250	1.00	0.00
C									
ATOM	11337	O	MET	239	12.782	-82.819	31.059	1.00	0.00
O									
ATOM	11338	N	ILE	240	12.823	-82.245	33.206	1.00	0.00
N									
ATOM	11339	CA	ILE	240	13.645	-81.037	33.041	1.00	0.00
C									
ATOM	11340	CB	ILE	240	13.259	-79.956	34.105	1.00	0.00
C									
ATOM	11341	CG2	ILE	240	14.255	-78.731	34.157	1.00	0.00
C									
ATOM	11342	CG1	ILE	240	11.850	-79.449	33.842	1.00	0.00
C									
ATOM	11343	CD1	ILE	240	11.284	-78.576	34.950	1.00	0.00
C									
ATOM	11344	C	ILE	240	15.107	-81.421	33.240	1.00	0.00
C									
ATOM	11345	O	ILE	240	15.486	-82.054	34.197	1.00	0.00
O									
ATOM	11346	N	LEU	241	15.955	-80.945	32.308	1.00	0.00
N									
ATOM	11347	CA	LEU	241	17.447	-81.228	32.268	1.00	0.00
C									
ATOM	11348	CB	LEU	241	17.773	-81.477	30.784	1.00	0.00
C									
ATOM	11349	CG	LEU	241	19.202	-82.113	30.610	1.00	0.00
C									
ATOM	11350	CD1	LEU	241	19.232	-83.550	31.051	1.00	0.00
C									
ATOM	11351	CD2	LEU	241	19.491	-82.032	29.087	1.00	0.00
C									
ATOM	11352	C	LEU	241	18.379	-80.109	32.835	1.00	0.00
C									
ATOM	11353	O	LEU	241	18.029	-78.931	32.715	1.00	0.00
O									
ATOM	11354	N	ILE	242	19.487	-80.555	33.525	1.00	0.00
N									
ATOM	11355	CA	ILE	242	20.420	-79.730	34.321	1.00	0.00
C									
ATOM	11356	CB	ILE	242	20.493	-80.173	35.761	1.00	0.00
C									
ATOM	11357	CG2	ILE	242	21.567	-79.499	36.622	1.00	0.00
C									



ATOM	11358	CG1	ILE	242	19.167	-80.247	36.556	1.00	0.00
C									
ATOM	11359	CD1	ILE	242	18.547	-78.921	36.970	1.00	0.00
C									
ATOM	11360	C	ILE	242	21.793	-79.710	33.539	1.00	0.00
C									
ATOM	11361	O	ILE	242	22.244	-80.719	33.052	1.00	0.00
O									
ATOM	11362	N	PRO	243	22.430	-78.538	33.330	1.00	0.00
N									
ATOM	11363	CD	PRO	243	21.947	-77.194	33.721	1.00	0.00
C									
ATOM	11364	CG	PRO	243	22.876	-76.190	33.159	1.00	0.00
C									
ATOM	11365	CB	PRO	243	24.175	-76.950	33.055	1.00	0.00
C									
ATOM	11366	CA	PRO	243	23.823	-78.496	32.805	1.00	0.00
C									
ATOM	11367	C	PRO	243	24.840	-79.404	33.488	1.00	0.00
C									
ATOM	11368	O	PRO	243	24.739	-79.590	34.703	1.00	0.00
O									
ATOM	11369	N	GLY	244	25.765	-80.037	32.732	1.00	0.00
N									
ATOM	11370	CA	GLY	244	26.618	-81.073	33.267	1.00	0.00
C									
ATOM	11371	C	GLY	244	25.965	-82.488	33.568	1.00	0.00
C									
ATOM	11372	O	GLY	244	26.688	-83.507	33.742	1.00	0.00
O									
ATOM	11373	N	GLN	245	24.632	-82.650	33.558	1.00	0.00
N									
ATOM	11374	CA	GLN	245	23.884	-83.922	33.810	1.00	0.00
C									
ATOM	11375	CB	GLN	245	22.379	-83.588	33.944	1.00	0.00
C									
ATOM	11376	CG	GLN	245	21.611	-84.754	34.495	1.00	0.00
C									
ATOM	11377	CD	GLN	245	20.256	-84.459	35.058	1.00	0.00
C									
ATOM	11378	OE1	GLN	245	19.578	-83.569	34.542	1.00	0.00
O									
ATOM	11379	NE2	GLN	245	19.863	-85.102	36.107	1.00	0.00
N									
ATOM	11380	C	GLN	245	24.122	-84.885	32.596	1.00	0.00
C									
ATOM	11381	O	GLN	245	23.909	-84.408	31.459	1.00	0.00
O									
ATOM	11382	N	THR	246	24.466	-86.168	32.835	1.00	0.00
N									
ATOM	11383	CA	THR	246	24.458	-87.294	31.913	1.00	0.00
C									
ATOM	11384	CB	THR	246	25.359	-88.460	32.371	1.00	0.00
C									

ATOM	11385	CG2	THR	246	25.331	-89.700	31.497	1.00	0.00
C									
ATOM	11386	OG1	THR	246	26.725	-88.096	32.288	1.00	0.00
O									
ATOM	11387	C	THR	246	23.052	-87.769	31.569	1.00	0.00
C									
ATOM	11388	O	THR	246	22.176	-87.819	32.515	1.00	0.00
O									
ATOM	11389	N	LEU	247	22.773	-88.194	30.358	1.00	0.00
N									
ATOM	11390	CA	LEU	247	21.435	-88.466	29.854	1.00	0.00
C									
ATOM	11391	CB	LEU	247	20.885	-87.137	29.180	1.00	0.00
C									
ATOM	11392	CG	LEU	247	19.423	-87.237	28.597	1.00	0.00
C									
ATOM	11393	CD1	LEU	247	18.339	-87.665	29.571	1.00	0.00
C									
ATOM	11394	CD2	LEU	247	19.068	-85.940	27.901	1.00	0.00
C									
ATOM	11395	C	LEU	247	21.563	-89.667	28.904	1.00	0.00
C									
ATOM	11396	O	LEU	247	21.985	-89.529	27.781	1.00	0.00
O									
ATOM	11397	N	PRO	248	21.220	-90.916	29.336	1.00	0.00
N									
ATOM	11398	CD	PRO	248	20.834	-91.166	30.680	1.00	0.00
C									
ATOM	11399	CG	PRO	248	20.723	-92.643	30.780	1.00	0.00
C									
ATOM	11400	CB	PRO	248	21.154	-93.191	29.395	1.00	0.00
C									
ATOM	11401	CA	PRO	248	21.117	-92.005	28.429	1.00	0.00
C									
ATOM	11402	C	PRO	248	19.815	-91.993	27.610	1.00	0.00
C									
ATOM	11403	O	PRO	248	18.733	-91.655	28.180	1.00	0.00
O									
ATOM	11404	N	LEU	249	19.862	-92.327	26.288	1.00	0.00
N									
ATOM	11405	CA	LEU	249	18.754	-92.133	25.364	1.00	0.00
C									
ATOM	11406	CB	LEU	249	18.853	-90.757	24.575	1.00	0.00
C									
ATOM	11407	CG	LEU	249	18.584	-89.563	25.416	1.00	0.00
C									
ATOM	11408	CD1	LEU	249	18.871	-88.291	24.582	1.00	0.00
C									
ATOM	11409	CD2	LEU	249	17.207	-89.391	25.970	1.00	0.00
C									
ATOM	11410	C	LEU	249	18.767	-93.304	24.358	1.00	0.00
C									
ATOM	11411	O	LEU	249	19.771	-93.887	23.938	1.00	0.00
O									

ATOM	11412	N	GLN	250	17.510	-93.640	24.008	1.00	0.00
N									
ATOM	11413	CA	GLN	250	17.138	-94.819	23.288	1.00	0.00
C									
ATOM	11414	CB	GLN	250	16.971	-96.029	24.206	1.00	0.00
C									
ATOM	11415	CG	GLN	250	16.722	-97.318	23.419	1.00	0.00
C									
ATOM	11416	CD	GLN	250	17.235	-98.563	24.116	1.00	0.00
C									
ATOM	11417	OE1	GLN	250	18.154	-98.574	24.930	1.00	0.00
O									
ATOM	11418	NE2	GLN	250	16.617	-99.709	23.685	1.00	0.00
N									
ATOM	11419	C	GLN	250	15.919	-94.553	22.345	1.00	0.00
C									
ATOM	11420	O	GLN	250	14.872	-94.031	22.855	1.00	0.00
O									
ATOM	11421	N	LEU	251	16.015	-94.957	21.078	1.00	0.00
N									
ATOM	11422	CA	LEU	251	15.099	-94.536	19.984	1.00	0.00
C									
ATOM	11423	CB	LEU	251	15.658	-93.284	19.324	1.00	0.00
C									
ATOM	11424	CG	LEU	251	16.026	-92.015	20.144	1.00	0.00
C									
ATOM	11425	CD1	LEU	251	17.526	-92.004	20.345	1.00	0.00
C									
ATOM	11426	CD2	LEU	251	15.780	-90.718	19.359	1.00	0.00
C									
ATOM	11427	C	LEU	251	14.801	-95.747	19.074	1.00	0.00
C									
ATOM	11428	O	LEU	251	15.740	-96.403	18.665	1.00	0.00
O									
ATOM	11429	N	PHE	252	13.571	-95.898	18.551	1.00	0.00
N									
ATOM	11430	CA	PHE	252	13.094	-96.957	17.649	1.00	0.00
C									
ATOM	11431	CB	PHE	252	12.280	-97.986	18.447	1.00	0.00
C									
ATOM	11432	CG	PHE	252	12.000	-99.310	17.763	1.00	0.00
C									
ATOM	11433	CD1	PHE	252	12.943	-99.947	16.944	1.00	0.00
C									
ATOM	11434	CE1	PHE	252	12.663	-101.184	16.357	1.00	0.00
C									
ATOM	11435	CZ	PHE	252	11.445	-101.812	16.599	1.00	0.00
C									
ATOM	11436	CE2	PHE	252	10.510	-101.209	17.435	1.00	0.00
C									
ATOM	11437	CD2	PHE	252	10.787	-99.969	18.017	1.00	0.00
C									
ATOM	11438	C	PHE	252	12.293	-96.424	16.423	1.00	0.00
C									

ATOM	11439	O	PHE	252	12.400	-96.999	15.389	1.00	0.00
O									
ATOM	11440	N	HIE	253	11.540	-95.323	16.509	1.00	0.00
N									
ATOM	11441	CA	HIE	253	10.685	-94.789	15.432	1.00	0.00
C									
ATOM	11442	CB	HIE	253	9.735	-93.703	15.986	1.00	0.00
C									
ATOM	11443	CG	HIE	253	8.750	-93.255	14.916	1.00	0.00
C									
ATOM	11444	ND1	HIE	253	9.011	-92.400	13.935	1.00	0.00
N									
ATOM	11445	CE1	HIE	253	7.925	-92.405	13.113	1.00	0.00
C									
ATOM	11446	NE2	HIE	253	7.111	-93.395	13.542	1.00	0.00
N									
ATOM	11447	CD2	HIE	253	7.557	-93.927	14.679	1.00	0.00
C									
ATOM	11448	C	HIE	253	11.572	-94.301	14.257	1.00	0.00
C									
ATOM	11449	O	HIE	253	12.476	-93.486	14.480	1.00	0.00
O									
ATOM	11450	N	PRO	254	11.415	-94.742	13.024	1.00	0.00
N									
ATOM	11451	CD	PRO	254	10.211	-95.334	12.454	1.00	0.00
C									
ATOM	11452	CG	PRO	254	10.286	-95.055	10.940	1.00	0.00
C									
ATOM	11453	CB	PRO	254	11.736	-95.045	10.638	1.00	0.00
C									
ATOM	11454	CA	PRO	254	12.259	-94.329	11.902	1.00	0.00
C									
ATOM	11455	C	PRO	254	12.502	-92.838	11.629	1.00	0.00
C									
ATOM	11456	O	PRO	254	13.600	-92.426	11.297	1.00	0.00
O									
ATOM	11457	N	GLN	255	11.536	-91.988	11.899	1.00	0.00
N									
ATOM	11458	CA	GLN	255	11.653	-90.601	11.808	1.00	0.00
C									
ATOM	11459	CB	GLN	255	10.301	-89.910	11.904	1.00	0.00
C									
ATOM	11460	CG	GLN	255	10.285	-88.487	11.346	1.00	0.00
C									
ATOM	11461	CD	GLN	255	10.800	-88.451	9.836	1.00	0.00
C									
ATOM	11462	OE1	GLN	255	10.188	-88.949	8.942	1.00	0.00
O									
ATOM	11463	NE2	GLN	255	12.008	-88.001	9.639	1.00	0.00
N									
ATOM	11464	C	GLN	255	12.566	-89.997	12.914	1.00	0.00
C									
ATOM	11465	O	GLN	255	13.317	-89.053	12.704	1.00	0.00
O									

ATOM	11466	N	GLU	256	12.439	-90.587	14.103	1.00	0.00
N									
ATOM	11467	CA	GLU	256	13.135	-90.143	15.306	1.00	0.00
C									
ATOM	11468	CB	GLU	256	12.380	-90.638	16.609	1.00	0.00
C									
ATOM	11469	CG	GLU	256	11.123	-89.754	16.825	1.00	0.00
C									
ATOM	11470	CD	GLU	256	10.361	-90.215	18.093	1.00	0.00
C									
ATOM	11471	OE1	GLU	256	9.204	-89.764	18.353	1.00	0.00
O									
ATOM	11472	OE2	GLU	256	10.800	-91.085	18.899	1.00	0.00
O1-									
ATOM	11473	C	GLU	256	14.547	-90.688	15.167	1.00	0.00
C									
ATOM	11474	O	GLU	256	15.426	-89.840	15.341	1.00	0.00
O									
ATOM	11475	N	VAL	257	14.779	-91.872	14.546	1.00	0.00
N									
ATOM	11476	CA	VAL	257	16.078	-92.454	14.116	1.00	0.00
C									
ATOM	11477	CB	VAL	257	15.820	-93.896	13.575	1.00	0.00
C									
ATOM	11478	CG1	VAL	257	17.045	-94.423	12.808	1.00	0.00
C									
ATOM	11479	CG2	VAL	257	15.547	-94.899	14.755	1.00	0.00
C									
ATOM	11480	C	VAL	257	16.729	-91.534	13.128	1.00	0.00
C									
ATOM	11481	O	VAL	257	17.882	-91.239	13.266	1.00	0.00
O									
ATOM	11482	N	SER	258	15.963	-90.944	12.194	1.00	0.00
N									
ATOM	11483	CA	SER	258	16.620	-90.035	11.227	1.00	0.00
C									
ATOM	11484	CB	SER	258	15.730	-89.781	9.966	1.00	0.00
C									
ATOM	11485	OG	SER	258	15.333	-91.011	9.344	1.00	0.00
O									
ATOM	11486	C	SER	258	16.927	-88.663	11.722	1.00	0.00
C									
ATOM	11487	O	SER	258	17.726	-87.874	11.232	1.00	0.00
O									
ATOM	11488	N	MET	259	16.374	-88.242	12.834	1.00	0.00
N									
ATOM	11489	CA	MET	259	16.692	-86.975	13.599	1.00	0.00
C									
ATOM	11490	CB	MET	259	15.453	-86.712	14.471	1.00	0.00
C									
ATOM	11491	CG	MET	259	15.655	-85.457	15.298	1.00	0.00
C									
ATOM	11492	SD	MET	259	16.311	-85.664	16.979	1.00	0.00
S									

ATOM	11493	CE	MET	259	16.034	-84.005	17.687	1.00	0.00
C									
ATOM	11494	C	MET	259	17.954	-87.155	14.411	1.00	0.00
C									
ATOM	11495	O	MET	259	18.849	-86.330	14.187	1.00	0.00
O									
ATOM	11496	N	VAL	260	18.079	-88.161	15.234	1.00	0.00
N									
ATOM	11497	CA	VAL	260	19.336	-88.403	15.975	1.00	0.00
C									
ATOM	11498	CB	VAL	260	19.388	-89.516	17.026	1.00	0.00
C									
ATOM	11499	CG1	VAL	260	18.587	-89.073	18.217	1.00	0.00
C									
ATOM	11500	CG2	VAL	260	18.874	-90.908	16.463	1.00	0.00
C									
ATOM	11501	C	VAL	260	20.513	-88.644	15.017	1.00	0.00
C									
ATOM	11502	O	VAL	260	21.594	-88.147	15.365	1.00	0.00
O									
ATOM	11503	N	ARG	261	20.337	-89.315	13.847	1.00	0.00
N									
ATOM	11504	CA	ARG	261	21.390	-89.321	12.701	1.00	0.00
C									
ATOM	11505	CB	ARG	261	20.911	-90.268	11.594	1.00	0.00
C									
ATOM	11506	CG	ARG	261	21.334	-91.736	11.868	1.00	0.00
C									
ATOM	11507	CD	ARG	261	20.590	-92.570	10.828	1.00	0.00
C									
ATOM	11508	NE	ARG	261	20.889	-94.017	10.949	1.00	0.00
N									
ATOM	11509	CZ	ARG	261	20.295	-94.966	10.236	1.00	0.00
C									
ATOM	11510	NH1	ARG	261	19.594	-94.692	9.217	1.00	0.00
N									
ATOM	11511	NH2	ARG	261	20.503	-96.204	10.595	1.00	0.00
N1+									
ATOM	11512	C	ARG	261	21.714	-87.953	12.141	1.00	0.00
C									
ATOM	11513	O	ARG	261	22.913	-87.740	11.913	1.00	0.00
O									
ATOM	11514	N	ASN	262	20.713	-87.045	11.978	1.00	0.00
N									
ATOM	11515	CA	ASN	262	20.949	-85.704	11.383	1.00	0.00
C									
ATOM	11516	CB	ASN	262	19.545	-85.202	10.875	1.00	0.00
C									
ATOM	11517	CG	ASN	262	19.585	-83.845	10.263	1.00	0.00
C									
ATOM	11518	OD1	ASN	262	19.141	-82.884	10.866	1.00	0.00
O									
ATOM	11519	ND2	ASN	262	20.174	-83.725	9.145	1.00	0.00
N									

ATOM	11520	C	ASN	262	21.650	-84.668	12.338	1.00	0.00
C									
ATOM	11521	O	ASN	262	22.494	-83.875	11.995	1.00	0.00
O									
ATOM	11522	N	LEU	263	21.382	-84.831	13.663	1.00	0.00
N									
ATOM	11523	CA	LEU	263	22.121	-84.172	14.775	1.00	0.00
C									
ATOM	11524	CB	LEU	263	21.722	-84.725	16.101	1.00	0.00
C									
ATOM	11525	CG	LEU	263	20.264	-84.456	16.586	1.00	0.00
C									
ATOM	11526	CD1	LEU	263	19.989	-85.175	17.971	1.00	0.00
C									
ATOM	11527	CD2	LEU	263	20.086	-82.928	16.889	1.00	0.00
C									
ATOM	11528	C	LEU	263	23.666	-84.374	14.565	1.00	0.00
C									
ATOM	11529	O	LEU	263	24.444	-83.449	14.397	1.00	0.00
O									
ATOM	11530	N	ILE	264	24.143	-85.617	14.376	1.00	0.00
N									
ATOM	11531	CA	ILE	264	25.537	-85.958	14.035	1.00	0.00
C									
ATOM	11532	CB	ILE	264	25.778	-87.460	14.161	1.00	0.00
C									
ATOM	11533	CG2	ILE	264	27.214	-87.843	13.875	1.00	0.00
C									
ATOM	11534	CG1	ILE	264	25.377	-87.895	15.587	1.00	0.00
C									
ATOM	11535	CD1	ILE	264	25.345	-89.509	15.836	1.00	0.00
C									
ATOM	11536	C	ILE	264	26.038	-85.290	12.726	1.00	0.00
C									
ATOM	11537	O	ILE	264	27.234	-85.024	12.650	1.00	0.00
O									
ATOM	11538	N	GLN	265	25.105	-85.124	11.726	1.00	0.00
N									
ATOM	11539	CA	GLN	265	25.552	-84.537	10.405	1.00	0.00
C									
ATOM	11540	CB	GLN	265	24.681	-84.934	9.187	1.00	0.00
C									
ATOM	11541	CG	GLN	265	24.618	-86.462	8.987	1.00	0.00
C									
ATOM	11542	CD	GLN	265	23.346	-86.926	8.142	1.00	0.00
C									
ATOM	11543	OE1	GLN	265	22.170	-86.867	8.508	1.00	0.00
O									
ATOM	11544	NE2	GLN	265	23.663	-87.290	6.906	1.00	0.00
N									
ATOM	11545	C	GLN	265	25.686	-83.037	10.427	1.00	0.00
C									
ATOM	11546	O	GLN	265	26.117	-82.482	9.383	1.00	0.00
O									

ATOM	11547	N	LYS	266	25.356	-82.377	11.545	1.00	0.00
N									
ATOM	11548	CA	LYS	266	25.405	-80.891	11.691	1.00	0.00
C									
ATOM	11549	CB	LYS	266	23.985	-80.339	11.912	1.00	0.00
C									
ATOM	11550	CG	LYS	266	22.964	-80.704	10.808	1.00	0.00
C									
ATOM	11551	CD	LYS	266	21.506	-80.475	11.094	1.00	0.00
C									
ATOM	11552	CE	LYS	266	20.982	-80.845	12.506	1.00	0.00
C									
ATOM	11553	NZ	LYS	266	19.531	-80.725	12.645	1.00	0.00
N1+									
ATOM	11554	C	LYS	266	26.332	-80.589	12.868	1.00	0.00
C									
ATOM	11555	O	LYS	266	27.543	-80.372	12.625	1.00	0.00
O									
ATOM	11556	N	ASP	267	25.897	-80.770	14.162	1.00	0.00
N									
ATOM	11557	CA	ASP	267	26.731	-80.394	15.300	1.00	0.00
C									
ATOM	11558	CB	ASP	267	26.557	-78.874	15.503	1.00	0.00
C									
ATOM	11559	CG	ASP	267	25.128	-78.391	15.842	1.00	0.00
C									
ATOM	11560	OD1	ASP	267	24.247	-79.180	16.267	1.00	0.00
O									
ATOM	11561	OD2	ASP	267	24.952	-77.145	15.702	1.00	0.00
O1-									
ATOM	11562	C	ASP	267	26.470	-81.146	16.600	1.00	0.00
C									
ATOM	11563	O	ASP	267	26.802	-80.622	17.688	1.00	0.00
O									
ATOM	11564	N	ARG	268	25.758	-82.302	16.542	1.00	0.00
N									
ATOM	11565	CA	ARG	268	25.430	-83.188	17.738	1.00	0.00
C									
ATOM	11566	CB	ARG	268	26.670	-83.866	18.440	1.00	0.00
C									
ATOM	11567	CG	ARG	268	27.460	-84.755	17.457	1.00	0.00
C									
ATOM	11568	CD	ARG	268	28.585	-85.520	18.191	1.00	0.00
C									
ATOM	11569	NE	ARG	268	29.722	-84.625	18.268	1.00	0.00
N									
ATOM	11570	CZ	ARG	268	30.504	-84.214	19.196	1.00	0.00
C									
ATOM	11571	NH1	ARG	268	30.170	-84.488	20.438	1.00	0.00
N									
ATOM	11572	NH2	ARG	268	31.606	-83.573	18.988	1.00	0.00
N1+									
ATOM	11573	C	ARG	268	24.519	-82.575	18.856	1.00	0.00
C									



ATOM	11574	O	ARG	268	24.188	-83.295	19.800	1.00	0.00
O									
ATOM	11575	N	THR	269	24.191	-81.294	18.820	1.00	0.00
N									
ATOM	11576	CA	THR	269	23.572	-80.543	19.881	1.00	0.00
C									
ATOM	11577	CB	THR	269	24.170	-79.108	19.903	1.00	0.00
C									
ATOM	11578	CG2	THR	269	23.347	-78.179	20.887	1.00	0.00
C									
ATOM	11579	OG1	THR	269	25.536	-79.253	20.236	1.00	0.00
O									
ATOM	11580	C	THR	269	22.017	-80.479	19.635	1.00	0.00
C									
ATOM	11581	O	THR	269	21.516	-80.278	18.537	1.00	0.00
O									
ATOM	11582	N	PHE	270	21.215	-80.654	20.738	1.00	0.00
N									
ATOM	11583	CA	PHE	270	19.741	-80.533	20.747	1.00	0.00
C									
ATOM	11584	CB	PHE	270	19.267	-81.986	20.678	1.00	0.00
C									
ATOM	11585	CG	PHE	270	19.758	-82.834	21.826	1.00	0.00
C									
ATOM	11586	CD1	PHE	270	20.935	-83.676	21.584	1.00	0.00
C									
ATOM	11587	CE1	PHE	270	21.370	-84.533	22.567	1.00	0.00
C									
ATOM	11588	CZ	PHE	270	20.633	-84.668	23.814	1.00	0.00
C									
ATOM	11589	CE2	PHE	270	19.536	-83.909	24.023	1.00	0.00
C									
ATOM	11590	CD2	PHE	270	19.104	-83.048	23.017	1.00	0.00
C									
ATOM	11591	C	PHE	270	19.238	-79.835	22.028	1.00	0.00
C									
ATOM	11592	O	PHE	270	20.068	-79.328	22.798	1.00	0.00
O									
ATOM	11593	N	ALA	271	17.911	-79.767	22.232	1.00	0.00
N									
ATOM	11594	CA	ALA	271	17.286	-79.193	23.446	1.00	0.00
C									
ATOM	11595	CB	ALA	271	16.672	-77.776	23.212	1.00	0.00
C									
ATOM	11596	C	ALA	271	16.212	-80.048	24.131	1.00	0.00
C									
ATOM	11597	O	ALA	271	15.472	-80.789	23.522	1.00	0.00
O									
ATOM	11598	N	VAL	272	16.231	-79.895	25.464	1.00	0.00
N									
ATOM	11599	CA	VAL	272	15.157	-80.267	26.356	1.00	0.00
C									
ATOM	11600	CB	VAL	272	15.684	-81.253	27.437	1.00	0.00
C									

ATOM	11601	CG1	VAL	272	14.515	-81.718	28.251	1.00	0.00
C									
ATOM	11602	CG2	VAL	272	16.362	-82.466	26.827	1.00	0.00
C									
ATOM	11603	C	VAL	272	14.470	-78.997	26.945	1.00	0.00
C									
ATOM	11604	O	VAL	272	15.153	-78.155	27.501	1.00	0.00
O									
ATOM	11605	N	LEU	273	13.214	-78.826	26.662	1.00	0.00
N									
ATOM	11606	CA	LEU	273	12.300	-77.725	27.174	1.00	0.00
C									
ATOM	11607	CB	LEU	273	10.965	-77.707	26.345	1.00	0.00
C									
ATOM	11608	CG	LEU	273	11.316	-77.295	24.867	1.00	0.00
C									
ATOM	11609	CD1	LEU	273	10.002	-77.117	24.025	1.00	0.00
C									
ATOM	11610	CD2	LEU	273	11.964	-75.934	24.827	1.00	0.00
C									
ATOM	11611	C	LEU	273	12.069	-77.838	28.728	1.00	0.00
C									
ATOM	11612	O	LEU	273	12.512	-78.778	29.383	1.00	0.00
O									
ATOM	11613	N	ALA	274	11.275	-76.972	29.344	1.00	0.00
N									
ATOM	11614	CA	ALA	274	10.905	-76.923	30.772	1.00	0.00
C									
ATOM	11615	CB	ALA	274	11.971	-76.131	31.593	1.00	0.00
C									
ATOM	11616	C	ALA	274	9.554	-76.308	30.910	1.00	0.00
C									
ATOM	11617	O	ALA	274	9.277	-75.263	30.433	1.00	0.00
O									
ATOM	11618	N	TYR	275	8.705	-77.012	31.651	1.00	0.00
N									
ATOM	11619	CA	TYR	275	7.315	-76.669	31.934	1.00	0.00
C									
ATOM	11620	CB	TYR	275	6.474	-77.980	32.103	1.00	0.00
C									
ATOM	11621	CG	TYR	275	6.412	-78.952	30.933	1.00	0.00
C									
ATOM	11622	CD1	TYR	275	6.618	-78.594	29.591	1.00	0.00
C									
ATOM	11623	CE1	TYR	275	6.866	-79.588	28.654	1.00	0.00
C									
ATOM	11624	CZ	TYR	275	6.782	-80.942	29.026	1.00	0.00
C									
ATOM	11625	OH	TYR	275	7.232	-81.785	28.045	1.00	0.00
O									
ATOM	11626	CE2	TYR	275	6.274	-81.287	30.252	1.00	0.00
C									
ATOM	11627	CD2	TYR	275	6.142	-80.336	31.256	1.00	0.00
C									

ATOM	11628	C	TYR	275	7.257	-75.701	33.115	1.00	0.00
C									
ATOM	11629	O	TYR	275	7.906	-75.996	34.093	1.00	0.00
O									
ATOM	11630	N	SER	276	6.408	-74.690	33.128	1.00	0.00
N									
ATOM	11631	CA	SER	276	6.161	-73.717	34.200	1.00	0.00
C									
ATOM	11632	CB	SER	276	5.222	-72.603	33.617	1.00	0.00
C									
ATOM	11633	OG	SER	276	5.189	-71.475	34.493	1.00	0.00
O									
ATOM	11634	C	SER	276	5.558	-74.336	35.423	1.00	0.00
C									
ATOM	11635	O	SER	276	4.916	-75.420	35.439	1.00	0.00
O									
ATOM	11636	N	ASN	277	5.784	-73.712	36.563	1.00	0.00
N									
ATOM	11637	CA	ASN	277	5.307	-74.271	37.887	1.00	0.00
C									
ATOM	11638	CB	ASN	277	6.015	-73.500	39.028	1.00	0.00
C									
ATOM	11639	CG	ASN	277	5.994	-71.928	38.836	1.00	0.00
C									
ATOM	11640	OD1	ASN	277	6.755	-71.379	38.021	1.00	0.00
O									
ATOM	11641	ND2	ASN	277	5.052	-71.223	39.361	1.00	0.00
N									
ATOM	11642	C	ASN	277	3.812	-74.154	38.038	1.00	0.00
C									
ATOM	11643	O	ASN	277	3.141	-75.042	38.565	1.00	0.00
O									
ATOM	11644	N	VAL	278	3.202	-73.090	37.521	1.00	0.00
N									
ATOM	11645	CA	VAL	278	1.744	-72.938	37.566	1.00	0.00
C									
ATOM	11646	CB	VAL	278	1.261	-71.541	37.130	1.00	0.00
C									
ATOM	11647	CG1	VAL	278	1.702	-70.435	38.078	1.00	0.00
C									
ATOM	11648	CG2	VAL	278	1.651	-71.088	35.701	1.00	0.00
C									
ATOM	11649	C	VAL	278	1.068	-73.987	36.681	1.00	0.00
C									
ATOM	11650	O	VAL	278	1.626	-74.520	35.748	1.00	0.00
O									
ATOM	11651	N	GLN	279	-0.236	-74.249	36.856	1.00	0.00
N									
ATOM	11652	CA	GLN	279	-0.983	-75.381	36.255	1.00	0.00
C									
ATOM	11653	CB	GLN	279	-2.411	-75.577	36.881	1.00	0.00
C									
ATOM	11654	CG	GLN	279	-3.312	-74.456	36.457	1.00	0.00
C									

ATOM	11655	CD	GLN	279	-4.280	-74.956	35.369	1.00	0.00
C									
ATOM	11656	OE1	GLN	279	-4.753	-76.098	35.327	1.00	0.00
O									
ATOM	11657	NE2	GLN	279	-4.698	-74.071	34.525	1.00	0.00
N									
ATOM	11658	C	GLN	279	-1.066	-75.291	34.710	1.00	0.00
C									
ATOM	11659	O	GLN	279	-1.399	-76.249	34.028	1.00	0.00
O									
ATOM	11660	N	GLU	280	-0.754	-74.130	34.139	1.00	0.00
N									
ATOM	11661	CA	GLU	280	-0.648	-73.904	32.603	1.00	0.00
C									
ATOM	11662	CB	GLU	280	-0.516	-72.390	32.345	1.00	0.00
C									
ATOM	11663	CG	GLU	280	-1.515	-71.469	33.080	1.00	0.00
C									
ATOM	11664	CD	GLU	280	-2.992	-71.841	33.058	1.00	0.00
C									
ATOM	11665	OE1	GLU	280	-3.622	-71.536	34.075	1.00	0.00
O									
ATOM	11666	OE2	GLU	280	-3.481	-72.281	31.964	1.00	0.00
O1-									
ATOM	11667	C	GLU	280	0.462	-74.746	31.977	1.00	0.00
C									
ATOM	11668	O	GLU	280	0.538	-74.768	30.737	1.00	0.00
O									
ATOM	11669	N	ARG	281	1.365	-75.293	32.809	1.00	0.00
N									
ATOM	11670	CA	ARG	281	2.642	-76.041	32.541	1.00	0.00
C									
ATOM	11671	CB	ARG	281	2.282	-77.603	32.649	1.00	0.00
C									
ATOM	11672	CG	ARG	281	1.827	-78.034	34.072	1.00	0.00
C									
ATOM	11673	CD	ARG	281	2.731	-77.667	35.257	1.00	0.00
C									
ATOM	11674	NE	ARG	281	4.114	-78.197	35.296	1.00	0.00
N									
ATOM	11675	CZ	ARG	281	4.510	-79.520	35.227	1.00	0.00
C									
ATOM	11676	NH1	ARG	281	3.598	-80.453	35.241	1.00	0.00
N									
ATOM	11677	NH2	ARG	281	5.750	-79.893	35.224	1.00	0.00
N1+									
ATOM	11678	C	ARG	281	3.332	-75.627	31.219	1.00	0.00
C									
ATOM	11679	O	ARG	281	3.833	-76.449	30.564	1.00	0.00
O									
ATOM	11680	N	GLU	282	3.385	-74.340	30.992	1.00	0.00
N									
ATOM	11681	CA	GLU	282	3.782	-73.827	29.710	1.00	0.00
C									

ATOM	11682	CB	GLU	282	3.169	-72.488	29.384	1.00	0.00
C									
ATOM	11683	CG	GLU	282	3.744	-71.496	30.360	1.00	0.00
C									
ATOM	11684	CD	GLU	282	3.137	-70.154	30.059	1.00	0.00
C									
ATOM	11685	OE1	GLU	282	2.782	-69.469	31.042	1.00	0.00
O									
ATOM	11686	OE2	GLU	282	2.952	-69.792	28.892	1.00	0.00
O1-									
ATOM	11687	C	GLU	282	5.308	-73.916	29.381	1.00	0.00
C									
ATOM	11688	O	GLU	282	6.055	-73.954	30.367	1.00	0.00
O									
ATOM	11689	N	ALA	283	5.630	-74.025	28.074	1.00	0.00
N									
ATOM	11690	CA	ALA	283	7.042	-74.279	27.621	1.00	0.00
C									
ATOM	11691	CB	ALA	283	7.082	-75.346	26.587	1.00	0.00
C									
ATOM	11692	C	ALA	283	7.682	-72.932	27.174	1.00	0.00
C									
ATOM	11693	O	ALA	283	7.549	-72.401	26.029	1.00	0.00
O									
ATOM	11694	N	GLN	284	8.383	-72.326	28.131	1.00	0.00
N									
ATOM	11695	CA	GLN	284	8.906	-70.952	28.134	1.00	0.00
C									
ATOM	11696	CB	GLN	284	8.043	-70.078	29.089	1.00	0.00
C									
ATOM	11697	CG	GLN	284	6.656	-69.926	28.682	1.00	0.00
C									
ATOM	11698	CD	GLN	284	6.496	-68.919	27.583	1.00	0.00
C									
ATOM	11699	OE1	GLN	284	7.449	-68.337	27.045	1.00	0.00
O									
ATOM	11700	NE2	GLN	284	5.355	-68.776	27.023	1.00	0.00
N									
ATOM	11701	C	GLN	284	10.413	-70.849	28.462	1.00	0.00
C									
ATOM	11702	O	GLN	284	11.001	-69.846	28.108	1.00	0.00
O									
ATOM	11703	N	PHE	285	11.074	-71.951	29.009	1.00	0.00
N									
ATOM	11704	CA	PHE	285	12.524	-72.069	29.220	1.00	0.00
C									
ATOM	11705	CB	PHE	285	12.799	-71.756	30.682	1.00	0.00
C									
ATOM	11706	CG	PHE	285	12.179	-70.420	31.035	1.00	0.00
C									
ATOM	11707	CD1	PHE	285	12.972	-69.258	30.802	1.00	0.00
C									
ATOM	11708	CE1	PHE	285	12.397	-67.988	31.025	1.00	0.00
C									

ATOM	11709	CZ	PHE	285	11.083	-67.884	31.538	1.00	0.00
C									
ATOM	11710	CE2	PHE	285	10.278	-68.984	31.765	1.00	0.00
C									
ATOM	11711	CD2	PHE	285	10.831	-70.246	31.527	1.00	0.00
C									
ATOM	11712	C	PHE	285	13.048	-73.457	28.846	1.00	0.00
C									
ATOM	11713	O	PHE	285	12.255	-74.356	28.568	1.00	0.00
O									
ATOM	11714	N	GLY	286	14.342	-73.695	28.954	1.00	0.00
N									
ATOM	11715	CA	GLY	286	14.926	-75.045	28.789	1.00	0.00
C									
ATOM	11716	C	GLY	286	16.452	-75.143	28.833	1.00	0.00
C									
ATOM	11717	O	GLY	286	17.101	-74.128	29.136	1.00	0.00
O									
ATOM	11718	N	THR	287	16.983	-76.281	28.366	1.00	0.00
N									
ATOM	11719	CA	THR	287	18.435	-76.587	28.503	1.00	0.00
C									
ATOM	11720	CB	THR	287	18.682	-77.411	29.840	1.00	0.00
C									
ATOM	11721	CG2	THR	287	20.170	-78.010	29.925	1.00	0.00
C									
ATOM	11722	OG1	THR	287	18.700	-76.535	30.980	1.00	0.00
O									
ATOM	11723	C	THR	287	18.843	-77.349	27.229	1.00	0.00
C									
ATOM	11724	O	THR	287	18.120	-78.223	26.804	1.00	0.00
O									
ATOM	11725	N	THR	288	20.017	-77.066	26.655	1.00	0.00
N									
ATOM	11726	CA	THR	288	20.760	-77.798	25.573	1.00	0.00
C									
ATOM	11727	CB	THR	288	21.563	-76.769	24.695	1.00	0.00
C									
ATOM	11728	CG2	THR	288	20.712	-75.609	24.151	1.00	0.00
C									
ATOM	11729	OG1	THR	288	22.722	-76.175	25.376	1.00	0.00
O									
ATOM	11730	C	THR	288	21.568	-78.996	26.023	1.00	0.00
C									
ATOM	11731	O	THR	288	22.103	-79.033	27.112	1.00	0.00
O									
ATOM	11732	N	ALA	289	21.760	-79.950	25.141	1.00	0.00
N									
ATOM	11733	CA	ALA	289	22.504	-81.184	25.314	1.00	0.00
C									
ATOM	11734	CB	ALA	289	21.569	-82.278	25.813	1.00	0.00
C									
ATOM	11735	C	ALA	289	23.198	-81.659	24.050	1.00	0.00
C									

ATOM	11736	O	ALA	289	22.855	-81.364	22.932	1.00	0.00
O									
ATOM	11737	N	GLU	290	24.331	-82.383	24.162	1.00	0.00
N									
ATOM	11738	CA	GLU	290	25.142	-82.812	23.005	1.00	0.00
C									
ATOM	11739	CB	GLU	290	26.389	-81.864	22.988	1.00	0.00
C									
ATOM	11740	CG	GLU	290	27.399	-82.146	21.884	1.00	0.00
C									
ATOM	11741	CD	GLU	290	28.476	-81.014	21.795	1.00	0.00
C									
ATOM	11742	OE1	GLU	290	29.006	-80.699	22.920	1.00	0.00
O									
ATOM	11743	OE2	GLU	290	28.956	-80.621	20.692	1.00	0.00
O1-									
ATOM	11744	C	GLU	290	25.533	-84.267	23.176	1.00	0.00
C									
ATOM	11745	O	GLU	290	25.696	-84.662	24.320	1.00	0.00
O									
ATOM	11746	N	ILE	291	25.692	-85.039	22.090	1.00	0.00
N									
ATOM	11747	CA	ILE	291	26.022	-86.492	22.105	1.00	0.00
C									
ATOM	11748	CB	ILE	291	25.500	-87.137	20.738	1.00	0.00
C									
ATOM	11749	CG2	ILE	291	25.818	-88.658	20.685	1.00	0.00
C									
ATOM	11750	CG1	ILE	291	23.971	-86.798	20.561	1.00	0.00
C									
ATOM	11751	CD1	ILE	291	23.357	-87.536	19.355	1.00	0.00
C									
ATOM	11752	C	ILE	291	27.466	-86.766	22.347	1.00	0.00
C									
ATOM	11753	O	ILE	291	28.309	-86.129	21.697	1.00	0.00
O									
ATOM	11754	N	TYR	292	27.871	-87.777	23.148	1.00	0.00
N									
ATOM	11755	CA	TYR	292	29.230	-88.309	23.217	1.00	0.00
C									
ATOM	11756	CB	TYR	292	29.781	-87.923	24.571	1.00	0.00
C									
ATOM	11757	CG	TYR	292	29.247	-88.684	25.756	1.00	0.00
C									
ATOM	11758	CD1	TYR	292	28.398	-88.086	26.748	1.00	0.00
C									
ATOM	11759	CE1	TYR	292	27.977	-88.813	27.916	1.00	0.00
C									
ATOM	11760	CZ	TYR	292	28.414	-90.131	28.040	1.00	0.00
C									
ATOM	11761	OH	TYR	292	28.108	-90.760	29.173	1.00	0.00
O									
ATOM	11762	CE2	TYR	292	29.188	-90.748	27.061	1.00	0.00
C									

ATOM	11763	CD2	TYR	292	29.713	-90.018	25.967	1.00	0.00
C									
ATOM	11764	C	TYR	292	29.243	-89.787	22.812	1.00	0.00
C									
ATOM	11765	O	TYR	292	30.311	-90.304	22.514	1.00	0.00
O									
ATOM	11766	N	ALA	293	28.096	-90.494	22.682	1.00	0.00
N									
ATOM	11767	CA	ALA	293	28.074	-91.862	22.172	1.00	0.00
C									
ATOM	11768	CB	ALA	293	28.223	-92.821	23.321	1.00	0.00
C									
ATOM	11769	C	ALA	293	26.852	-92.303	21.336	1.00	0.00
C									
ATOM	11770	O	ALA	293	25.699	-91.811	21.598	1.00	0.00
O									
ATOM	11771	N	TYR	294	26.962	-93.086	20.299	1.00	0.00
N									
ATOM	11772	CA	TYR	294	25.881	-93.572	19.434	1.00	0.00
C									
ATOM	11773	CB	TYR	294	25.633	-92.583	18.273	1.00	0.00
C									
ATOM	11774	CG	TYR	294	24.630	-93.044	17.210	1.00	0.00
C									
ATOM	11775	CD1	TYR	294	23.480	-92.254	17.021	1.00	0.00
C									
ATOM	11776	CE1	TYR	294	22.498	-92.520	16.057	1.00	0.00
C									
ATOM	11777	CZ	TYR	294	22.676	-93.708	15.300	1.00	0.00
C									
ATOM	11778	OH	TYR	294	21.767	-94.117	14.370	1.00	0.00
O									
ATOM	11779	CE2	TYR	294	23.850	-94.490	15.427	1.00	0.00
C									
ATOM	11780	CD2	TYR	294	24.867	-94.156	16.320	1.00	0.00
C									
ATOM	11781	C	TYR	294	26.172	-94.973	18.890	1.00	0.00
C									
ATOM	11782	O	TYR	294	27.367	-95.229	18.450	1.00	0.00
O									
ATOM	11783	N	ARG	295	25.166	-95.947	18.906	1.00	0.00
N									
ATOM	11784	CA	ARG	295	25.236	-97.278	18.306	1.00	0.00
C									
ATOM	11785	CB	ARG	295	25.936	-98.196	19.285	1.00	0.00
C									
ATOM	11786	CG	ARG	295	26.108	-99.593	18.665	1.00	0.00
C									
ATOM	11787	CD	ARG	295	27.330	-100.290	19.282	1.00	0.00
C									
ATOM	11788	NE	ARG	295	27.378	-101.745	19.098	1.00	0.00
N									
ATOM	11789	CZ	ARG	295	28.425	-102.500	18.773	1.00	0.00
C									



ATOM	11790	NH1	ARG	295	28.226	-103.734	18.453	1.00	0.00
N									
ATOM	11791	NH2	ARG	295	29.643	-102.123	18.752	1.00	0.00
N1+									
ATOM	11792	C	ARG	295	23.808	-97.751	18.020	1.00	0.00
C									
ATOM	11793	O	ARG	295	23.031	-97.834	18.963	1.00	0.00
O									
ATOM	11794	N	GLU	296	23.606	-98.131	16.832	1.00	0.00
N									
ATOM	11795	CA	GLU	296	22.410	-98.789	16.328	1.00	0.00
C									
ATOM	11796	CB	GLU	296	21.892	-98.169	15.063	1.00	0.00
C									
ATOM	11797	CG	GLU	296	22.735	-98.324	13.882	1.00	0.00
C									
ATOM	11798	CD	GLU	296	22.425	-97.438	12.733	1.00	0.00
C									
ATOM	11799	OE1	GLU	296	22.163	-96.217	12.897	1.00	0.00
O									
ATOM	11800	OE2	GLU	296	22.494	-97.930	11.580	1.00	0.00
O1-									
ATOM	11801	C	GLU	296	22.594	-100.268	16.335	1.00	0.00
C									
ATOM	11802	O	GLU	296	23.587	-100.735	15.717	1.00	0.00
O									
ATOM	11803	N	GLU	297	21.795	-101.088	17.065	1.00	0.00
N									
ATOM	11804	CA	GLU	297	22.212	-102.353	17.605	1.00	0.00
C									
ATOM	11805	CB	GLU	297	22.642	-102.011	19.067	1.00	0.00
C									
ATOM	11806	CG	GLU	297	22.988	-103.267	19.878	1.00	0.00
C									
ATOM	11807	CD	GLU	297	24.177	-104.146	19.423	1.00	0.00
C									
ATOM	11808	OE1	GLU	297	24.171	-105.362	19.659	1.00	0.00
O									
ATOM	11809	OE2	GLU	297	25.109	-103.632	18.754	1.00	0.00
O1-									
ATOM	11810	C	GLU	297	21.075	-103.314	17.672	1.00	0.00
C									
ATOM	11811	O	GLU	297	20.000	-103.007	18.080	1.00	0.00
O									
ATOM	11812	N	GLN	298	21.279	-104.552	17.203	1.00	0.00
N									
ATOM	11813	CA	GLN	298	20.312	-105.490	16.928	1.00	0.00
C									
ATOM	11814	CB	GLN	298	20.846	-106.694	16.092	1.00	0.00
C									
ATOM	11815	CG	GLN	298	21.782	-107.680	16.873	1.00	0.00
C									
ATOM	11816	CD	GLN	298	22.617	-108.508	15.934	1.00	0.00
C									

ATOM	11817	OE1	GLN	298	22.153-108.997	14.950	1.00	0.00
O								
ATOM	11818	NE2	GLN	298	23.839-108.755	16.222	1.00	0.00
N								
ATOM	11819	C	GLN	298	19.495-105.956	18.153	1.00	0.00
C								
ATOM	11820	O	GLN	298	18.985-107.080	18.095	1.00	0.00
O								
ATOM	11821	N	ASP	299	19.381-105.276	19.293	1.00	0.00
N								
ATOM	11822	CA	ASP	299	18.989-105.774	20.633	1.00	0.00
C								
ATOM	11823	CB	ASP	299	18.909-104.561	21.560	1.00	0.00
C								
ATOM	11824	CG	ASP	299	18.706-104.843	23.039	1.00	0.00
C								
ATOM	11825	OD1	ASP	299	18.477-103.812	23.736	1.00	0.00
O								
ATOM	11826	OD2	ASP	299	18.791-106.037	23.428	1.00	0.00
O1-								
ATOM	11827	C	ASP	299	17.606-106.512	20.661	1.00	0.00
C								
ATOM	11828	O	ASP	299	17.369-107.520	21.331	1.00	0.00
O								
ATOM	11829	N	PHE	300	16.621-106.102	19.875	1.00	0.00
N								
ATOM	11830	CA	PHE	300	15.252-106.696	19.728	1.00	0.00
C								
ATOM	11831	CB	PHE	300	14.245-105.613	19.304	1.00	0.00
C								
ATOM	11832	CG	PHE	300	13.851-104.568	20.330	1.00	0.00
C								
ATOM	11833	CD1	PHE	300	12.709-103.789	20.079	1.00	0.00
C								
ATOM	11834	CE1	PHE	300	12.282-102.821	20.991	1.00	0.00
C								
ATOM	11835	CZ	PHE	300	12.994-102.610	22.168	1.00	0.00
C								
ATOM	11836	CE2	PHE	300	14.138-103.359	22.422	1.00	0.00
C								
ATOM	11837	CD2	PHE	300	14.567-104.322	21.507	1.00	0.00
C								
ATOM	11838	C	PHE	300	15.233-107.876	18.753	1.00	0.00
C								
ATOM	11839	O	PHE	300	14.229-108.581	18.728	1.00	0.00
O								
ATOM	11840	N	GLY	301	16.300-108.230	18.018	1.00	0.00
N								
ATOM	11841	CA	GLY	301	16.104-108.846	16.725	1.00	0.00
C								
ATOM	11842	C	GLY	301	16.037-107.974	15.491	1.00	0.00
C								
ATOM	11843	O	GLY	301	15.775-108.498	14.410	1.00	0.00
O								

ATOM	11844	N	ILE	302	16.341-106.679	15.656	1.00	0.00
N								
ATOM	11845	CA	ILE	302	16.231-105.484	14.775	1.00	0.00
C								
ATOM	11846	CB	ILE	302	14.766-105.142	14.440	1.00	0.00
C								
ATOM	11847	CG2	ILE	302	13.927-104.845	15.686	1.00	0.00
C								
ATOM	11848	CG1	ILE	302	14.628-103.992	13.423	1.00	0.00
C								
ATOM	11849	CD1	ILE	302	15.089-104.378	12.024	1.00	0.00
C								
ATOM	11850	C	ILE	302	16.989-104.398	15.430	1.00	0.00
C								
ATOM	11851	O	ILE	302	17.112-104.354	16.695	1.00	0.00
O								
ATOM	11852	N	GLU	303	17.663-103.478	14.729	1.00	0.00
N								
ATOM	11853	CA	GLU	303	18.559-102.491	15.225	1.00	0.00
C								
ATOM	11854	CB	GLU	303	19.433-102.017	13.979	1.00	0.00
C								
ATOM	11855	CG	GLU	303	20.286-103.116	13.434	1.00	0.00
C								
ATOM	11856	CD	GLU	303	19.571-104.186	12.667	1.00	0.00
C								
ATOM	11857	OE1	GLU	303	20.200-105.279	12.503	1.00	0.00
O								
ATOM	11858	OE2	GLU	303	18.458-104.106	12.198	1.00	0.00
O1-								
ATOM	11859	C	GLU	303	17.854-101.323	15.904	1.00	0.00
C								
ATOM	11860	O	GLU	303	17.182-100.472	15.253	1.00	0.00
O								
ATOM	11861	N	ILE	304	18.006-101.224	17.216	1.00	0.00
N								
ATOM	11862	CA	ILE	304	17.479-100.090	17.962	1.00	0.00
C								
ATOM	11863	CB	ILE	304	16.789-100.520	19.265	1.00	0.00
C								
ATOM	11864	CG2	ILE	304	17.765-101.050	20.322	1.00	0.00
C								
ATOM	11865	CG1	ILE	304	15.937 -99.371	19.837	1.00	0.00
C								
ATOM	11866	CD1	ILE	304	14.761 -99.899	20.644	1.00	0.00
C								
ATOM	11867	C	ILE	304	18.614 -98.985	18.141	1.00	0.00
C								
ATOM	11868	O	ILE	304	19.740 -99.423	18.393	1.00	0.00
O								
ATOM	11869	N	VAL	305	18.323 -97.696	18.072	1.00	0.00
N								
ATOM	11870	CA	VAL	305	19.353 -96.647	18.300	1.00	0.00
C								

ATOM	11871	CB	VAL	305	19.187	-95.350	17.367	1.00	0.00
C									
ATOM	11872	CG1	VAL	305	20.394	-94.483	17.590	1.00	0.00
C									
ATOM	11873	CG2	VAL	305	19.086	-95.657	15.906	1.00	0.00
C									
ATOM	11874	C	VAL	305	19.542	-96.302	19.786	1.00	0.00
C									
ATOM	11875	O	VAL	305	18.717	-95.666	20.356	1.00	0.00
O									
ATOM	11876	N	LYS	306	20.667	-96.649	20.398	1.00	0.00
N									
ATOM	11877	CA	LYS	306	21.103	-96.281	21.685	1.00	0.00
C									
ATOM	11878	CB	LYS	306	21.702	-97.486	22.428	1.00	0.00
C									
ATOM	11879	CG	LYS	306	20.765	-98.701	22.408	1.00	0.00
C									
ATOM	11880	CD	LYS	306	21.261	-99.843	23.291	1.00	0.00
C									
ATOM	11881	CE	LYS	306	20.271	-100.996	23.253	1.00	0.00
C									
ATOM	11882	NZ	LYS	306	20.673	-102.028	24.231	1.00	0.00
N1+									
ATOM	11883	C	LYS	306	22.103	-95.141	21.632	1.00	0.00
C									
ATOM	11884	O	LYS	306	23.058	-95.235	20.858	1.00	0.00
O									
ATOM	11885	N	VAL	307	21.997	-94.077	22.423	1.00	0.00
N									
ATOM	11886	CA	VAL	307	22.811	-92.830	22.476	1.00	0.00
C									
ATOM	11887	CB	VAL	307	22.018	-91.603	21.854	1.00	0.00
C									
ATOM	11888	CG1	VAL	307	22.663	-90.273	21.891	1.00	0.00
C									
ATOM	11889	CG2	VAL	307	21.632	-91.774	20.364	1.00	0.00
C									
ATOM	11890	C	VAL	307	23.192	-92.593	23.953	1.00	0.00
C									
ATOM	11891	O	VAL	307	22.472	-92.928	24.890	1.00	0.00
O									
ATOM	11892	N	LYS	308	24.305	-91.901	24.196	1.00	0.00
N									
ATOM	11893	CA	LYS	308	24.589	-91.168	25.437	1.00	0.00
C									
ATOM	11894	CB	LYS	308	25.765	-91.889	26.099	1.00	0.00
C									
ATOM	11895	CG	LYS	308	25.619	-93.364	26.441	1.00	0.00
C									
ATOM	11896	CD	LYS	308	26.757	-94.073	27.230	1.00	0.00
C									
ATOM	11897	CE	LYS	308	26.405	-95.541	27.394	1.00	0.00
C									

ATOM	11898	NZ	LYS	308	27.651	-96.378	27.603	1.00	0.00
N1+									
ATOM	11899	C	LYS	308	24.890	-89.665	25.144	1.00	0.00
C									
ATOM	11900	O	LYS	308	25.479	-89.356	24.142	1.00	0.00
O									
ATOM	11901	N	ALA	309	24.337	-88.714	25.930	1.00	0.00
N									
ATOM	11902	CA	ALA	309	24.614	-87.271	25.763	1.00	0.00
C									
ATOM	11903	CB	ALA	309	23.333	-86.638	25.132	1.00	0.00
C									
ATOM	11904	C	ALA	309	24.856	-86.677	27.161	1.00	0.00
C									
ATOM	11905	O	ALA	309	24.837	-87.362	28.187	1.00	0.00
O									
ATOM	11906	N	ILE	310	25.165	-85.417	27.133	1.00	0.00
N									
ATOM	11907	CA	ILE	310	25.474	-84.666	28.380	1.00	0.00
C									
ATOM	11908	CB	ILE	310	27.007	-84.698	28.783	1.00	0.00
C									
ATOM	11909	CG2	ILE	310	27.909	-83.883	27.890	1.00	0.00
C									
ATOM	11910	CG1	ILE	310	27.160	-84.261	30.232	1.00	0.00
C									
ATOM	11911	CD1	ILE	310	28.525	-84.650	30.771	1.00	0.00
C									
ATOM	11912	C	ILE	310	24.869	-83.244	28.249	1.00	0.00
C									
ATOM	11913	O	ILE	310	24.737	-82.772	27.088	1.00	0.00
O									
ATOM	11914	N	GLY	311	24.533	-82.612	29.344	1.00	0.00
N									
ATOM	11915	CA	GLY	311	23.887	-81.367	29.240	1.00	0.00
C									
ATOM	11916	C	GLY	311	24.853	-80.213	29.083	1.00	0.00
C									
ATOM	11917	O	GLY	311	25.978	-80.268	29.727	1.00	0.00
O									
ATOM	11918	N	ARG	312	24.563	-79.131	28.343	1.00	0.00
N									
ATOM	11919	CA	ARG	312	25.436	-77.971	28.004	1.00	0.00
C									
ATOM	11920	CB	ARG	312	25.617	-77.932	26.458	1.00	0.00
C									
ATOM	11921	CG	ARG	312	26.463	-79.111	25.823	1.00	0.00
C									
ATOM	11922	CD	ARG	312	27.829	-79.313	26.435	1.00	0.00
C									
ATOM	11923	NE	ARG	312	28.513	-80.395	25.708	1.00	0.00
N									
ATOM	11924	CZ	ARG	312	29.524	-81.102	26.142	1.00	0.00
C									

ATOM	11925	NH1	ARG	312	29.927	-81.273	27.346	1.00	0.00
N									
ATOM	11926	NH2	ARG	312	30.282	-81.601	25.189	1.00	0.00
N1+									
ATOM	11927	C	ARG	312	25.009	-76.609	28.605	1.00	0.00
C									
ATOM	11928	O	ARG	312	25.570	-76.366	29.714	1.00	0.00
O									
ATOM	11929	N	GLN	313	23.966	-75.904	28.115	1.00	0.00
N									
ATOM	11930	CA	GLN	313	23.550	-74.519	28.533	1.00	0.00
C									
ATOM	11931	CB	GLN	313	24.129	-73.458	27.494	1.00	0.00
C									
ATOM	11932	CG	GLN	313	25.480	-73.796	26.768	1.00	0.00
C									
ATOM	11933	CD	GLN	313	26.075	-72.835	25.798	1.00	0.00
C									
ATOM	11934	OE1	GLN	313	26.068	-73.187	24.620	1.00	0.00
O									
ATOM	11935	NE2	GLN	313	26.513	-71.693	26.269	1.00	0.00
N									
ATOM	11936	C	GLN	313	22.049	-74.335	28.726	1.00	0.00
C									
ATOM	11937	O	GLN	313	21.218	-75.064	28.259	1.00	0.00
O									
ATOM	11938	N	ARG	314	21.717	-73.253	29.485	1.00	0.00
N									
ATOM	11939	CA	ARG	314	20.319	-72.790	29.705	1.00	0.00
C									
ATOM	11940	CB	ARG	314	20.174	-72.192	31.105	1.00	0.00
C									
ATOM	11941	CG	ARG	314	20.448	-73.160	32.247	1.00	0.00
C									
ATOM	11942	CD	ARG	314	20.306	-72.422	33.576	1.00	0.00
C									
ATOM	11943	NE	ARG	314	21.249	-71.258	33.658	1.00	0.00
N									
ATOM	11944	CZ	ARG	314	20.895	-69.974	33.762	1.00	0.00
C									
ATOM	11945	NH1	ARG	314	19.687	-69.543	33.875	1.00	0.00
N									
ATOM	11946	NH2	ARG	314	21.773	-69.051	33.827	1.00	0.00
N1+									
ATOM	11947	C	ARG	314	19.725	-71.871	28.648	1.00	0.00
C									
ATOM	11948	O	ARG	314	20.504	-71.121	28.016	1.00	0.00
O									
ATOM	11949	N	PHE	315	18.396	-71.770	28.552	1.00	0.00
N									
ATOM	11950	CA	PHE	315	17.814	-70.750	27.712	1.00	0.00
C									
ATOM	11951	CB	PHE	315	17.874	-71.161	26.253	1.00	0.00
C									

ATOM	11952	CG	PHE	315	17.170	-72.470	25.929	1.00	0.00
C									
ATOM	11953	CD1	PHE	315	15.809	-72.550	25.887	1.00	0.00
C									
ATOM	11954	CE1	PHE	315	15.202	-73.790	25.588	1.00	0.00
C									
ATOM	11955	CZ	PHE	315	16.003	-74.921	25.440	1.00	0.00
C									
ATOM	11956	CE2	PHE	315	17.353	-74.843	25.558	1.00	0.00
C									
ATOM	11957	CD2	PHE	315	17.940	-73.617	25.828	1.00	0.00
C									
ATOM	11958	C	PHE	315	16.368	-70.289	28.141	1.00	0.00
C									
ATOM	11959	O	PHE	315	15.600	-70.944	28.860	1.00	0.00
O									
ATOM	11960	N	LYS	316	15.991	-69.180	27.468	1.00	0.00
N									
ATOM	11961	CA	LYS	316	14.633	-68.692	27.406	1.00	0.00
C									
ATOM	11962	CB	LYS	316	14.535	-67.190	27.952	1.00	0.00
C									
ATOM	11963	CG	LYS	316	15.376	-66.192	27.263	1.00	0.00
C									
ATOM	11964	CD	LYS	316	15.216	-64.807	28.011	1.00	0.00
C									
ATOM	11965	CE	LYS	316	15.865	-63.675	27.157	1.00	0.00
C									
ATOM	11966	NZ	LYS	316	15.675	-62.394	27.697	1.00	0.00
N1+									
ATOM	11967	C	LYS	316	14.123	-68.892	25.955	1.00	0.00
C									
ATOM	11968	O	LYS	316	14.932	-68.863	25.055	1.00	0.00
O									
ATOM	11969	N	VAL	317	12.892	-69.323	25.792	1.00	0.00
N									
ATOM	11970	CA	VAL	317	12.348	-69.708	24.492	1.00	0.00
C									
ATOM	11971	CB	VAL	317	11.328	-70.799	24.667	1.00	0.00
C									
ATOM	11972	CG1	VAL	317	10.571	-71.149	23.332	1.00	0.00
C									
ATOM	11973	CG2	VAL	317	11.983	-72.185	25.076	1.00	0.00
C									
ATOM	11974	C	VAL	317	11.685	-68.440	23.856	1.00	0.00
C									
ATOM	11975	O	VAL	317	11.067	-67.656	24.576	1.00	0.00
O									
ATOM	11976	N	LEU	318	11.623	-68.339	22.535	1.00	0.00
N									
ATOM	11977	CA	LEU	318	11.073	-67.222	21.792	1.00	0.00
C									
ATOM	11978	CB	LEU	318	12.216	-66.608	21.054	1.00	0.00
C									

ATOM	11979	CG	LEU	318	13.180	-65.844	21.869	1.00	0.00
C									
ATOM	11980	CD1	LEU	318	14.373	-65.503	20.999	1.00	0.00
C									
ATOM	11981	CD2	LEU	318	12.695	-64.441	22.315	1.00	0.00
C									
ATOM	11982	C	LEU	318	10.006	-67.738	20.734	1.00	0.00
C									
ATOM	11983	O	LEU	318	8.880	-67.218	20.678	1.00	0.00
O									
ATOM	11984	N	GLU	319	10.302	-68.798	19.894	1.00	0.00
N									
ATOM	11985	CA	GLU	319	9.301	-69.368	18.972	1.00	0.00
C									
ATOM	11986	CB	GLU	319	9.385	-68.793	17.573	1.00	0.00
C									
ATOM	11987	CG	GLU	319	9.032	-67.354	17.582	1.00	0.00
C									
ATOM	11988	CD	GLU	319	8.905	-66.824	16.098	1.00	0.00
C									
ATOM	11989	OE1	GLU	319	7.785	-66.421	15.741	1.00	0.00
O									
ATOM	11990	OE2	GLU	319	9.840	-66.960	15.305	1.00	0.00
O1-									
ATOM	11991	C	GLU	319	9.518	-70.910	18.859	1.00	0.00
C									
ATOM	11992	O	GLU	319	10.504	-71.417	18.354	1.00	0.00
O									
ATOM	11993	N	LEU	320	8.509	-71.702	19.215	1.00	0.00
N									
ATOM	11994	CA	LEU	320	8.525	-73.083	18.909	1.00	0.00
C									
ATOM	11995	CB	LEU	320	7.695	-73.930	19.992	1.00	0.00
C									
ATOM	11996	CG	LEU	320	8.016	-73.645	21.436	1.00	0.00
C									
ATOM	11997	CD1	LEU	320	6.907	-74.030	22.402	1.00	0.00
C									
ATOM	11998	CD2	LEU	320	9.254	-74.414	21.653	1.00	0.00
C									
ATOM	11999	C	LEU	320	7.935	-73.246	17.490	1.00	0.00
C									
ATOM	12000	O	LEU	320	7.090	-72.411	17.081	1.00	0.00
O									
ATOM	12001	N	ARG	321	8.568	-74.071	16.604	1.00	0.00
N									
ATOM	12002	CA	ARG	321	8.255	-74.223	15.228	1.00	0.00
C									
ATOM	12003	CB	ARG	321	9.300	-73.616	14.384	1.00	0.00
C									
ATOM	12004	CG	ARG	321	9.362	-72.061	14.484	1.00	0.00
C									
ATOM	12005	CD	ARG	321	10.442	-71.559	13.582	1.00	0.00
C									



ATOM	12006	NE	ARG	321	10.743	-70.155	13.901	1.00	0.00
N									
ATOM	12007	CZ	ARG	321	11.689	-69.360	13.421	1.00	0.00
C									
ATOM	12008	NH1	ARG	321	11.635	-68.091	13.683	1.00	0.00
N									
ATOM	12009	NH2	ARG	321	12.733	-69.842	12.795	1.00	0.00
N1+									
ATOM	12010	C	ARG	321	8.031	-75.681	14.862	1.00	0.00
C									
ATOM	12011	O	ARG	321	8.851	-76.579	15.200	1.00	0.00
O									
ATOM	12012	N	THR	322	6.892	-76.068	14.344	1.00	0.00
N									
ATOM	12013	CA	THR	322	6.539	-77.410	13.840	1.00	0.00
C									
ATOM	12014	CB	THR	322	4.991	-77.588	13.780	1.00	0.00
C									
ATOM	12015	CG2	THR	322	4.559	-78.863	13.092	1.00	0.00
C									
ATOM	12016	OG1	THR	322	4.424	-77.643	15.114	1.00	0.00
O									
ATOM	12017	C	THR	322	7.279	-77.569	12.480	1.00	0.00
C									
ATOM	12018	O	THR	322	7.487	-76.595	11.794	1.00	0.00
O									
ATOM	12019	N	GLN	323	7.701	-78.767	12.209	1.00	0.00
N									
ATOM	12020	CA	GLN	323	8.681	-79.038	11.100	1.00	0.00
C									
ATOM	12021	CB	GLN	323	10.178	-78.817	11.659	1.00	0.00
C									
ATOM	12022	CG	GLN	323	11.399	-79.362	10.897	1.00	0.00
C									
ATOM	12023	CD	GLN	323	12.601	-78.405	10.725	1.00	0.00
C									
ATOM	12024	OE1	GLN	323	12.626	-77.252	10.962	1.00	0.00
O									
ATOM	12025	NE2	GLN	323	13.640	-78.896	10.149	1.00	0.00
N									
ATOM	12026	C	GLN	323	8.512	-80.461	10.619	1.00	0.00
C									
ATOM	12027	O	GLN	323	8.265	-81.362	11.376	1.00	0.00
O									
ATOM	12028	N	SER	324	8.616	-80.749	9.285	1.00	0.00
N									
ATOM	12029	CA	SER	324	8.389	-82.091	8.649	1.00	0.00
C									
ATOM	12030	CB	SER	324	8.161	-81.991	7.179	1.00	0.00
C									
ATOM	12031	OG	SER	324	7.133	-81.036	6.998	1.00	0.00
O									
ATOM	12032	C	SER	324	9.359	-83.224	8.919	1.00	0.00
C									

ATOM	12033	O	SER	324	9.089	-84.420	8.587	1.00	0.00
O									
ATOM	12034	N	ASP	325	10.408	-82.849	9.690	1.00	0.00
N									
ATOM	12035	CA	ASP	325	11.364	-83.901	10.212	1.00	0.00
C									
ATOM	12036	CB	ASP	325	12.655	-83.221	10.637	1.00	0.00
C									
ATOM	12037	CG	ASP	325	13.418	-82.584	9.493	1.00	0.00
C									
ATOM	12038	OD1	ASP	325	14.021	-81.511	9.606	1.00	0.00
O									
ATOM	12039	OD2	ASP	325	13.501	-83.204	8.418	1.00	0.00
O1-									
ATOM	12040	C	ASP	325	10.674	-84.701	11.401	1.00	0.00
C									
ATOM	12041	O	ASP	325	11.318	-85.521	12.036	1.00	0.00
O									
ATOM	12042	N	GLY	326	9.377	-84.471	11.621	1.00	0.00
N									
ATOM	12043	CA	GLY	326	8.520	-85.091	12.643	1.00	0.00
C									
ATOM	12044	C	GLY	326	8.738	-84.247	13.887	1.00	0.00
C									
ATOM	12045	O	GLY	326	7.755	-83.934	14.556	1.00	0.00
O									
ATOM	12046	N	ILE	327	9.994	-84.018	14.161	1.00	0.00
N									
ATOM	12047	CA	ILE	327	10.431	-83.230	15.302	1.00	0.00
C									
ATOM	12048	CB	ILE	327	11.995	-83.513	15.459	1.00	0.00
C									
ATOM	12049	CG2	ILE	327	12.949	-82.435	16.099	1.00	0.00
C									
ATOM	12050	CG1	ILE	327	12.066	-84.817	16.321	1.00	0.00
C									
ATOM	12051	CD1	ILE	327	12.049	-86.123	15.570	1.00	0.00
C									
ATOM	12052	C	ILE	327	10.163	-81.676	15.258	1.00	0.00
C									
ATOM	12053	O	ILE	327	10.160	-81.005	14.195	1.00	0.00
O									
ATOM	12054	N	GLN	328	9.901	-81.133	16.422	1.00	0.00
N									
ATOM	12055	CA	GLN	328	9.882	-79.682	16.585	1.00	0.00
C									
ATOM	12056	CB	GLN	328	9.068	-79.400	17.841	1.00	0.00
C									
ATOM	12057	CG	GLN	328	7.570	-79.302	17.570	1.00	0.00
C									
ATOM	12058	CD	GLN	328	6.765	-78.890	18.766	1.00	0.00
C									
ATOM	12059	OE1	GLN	328	7.222	-79.076	19.922	1.00	0.00
O									

ATOM	12060	NE2	GLN	328	5.642	-78.224	18.650	1.00	0.00
N									
ATOM	12061	C	GLN	328	11.199	-78.994	16.741	1.00	0.00
C									
ATOM	12062	O	GLN	328	12.193	-79.623	17.131	1.00	0.00
O									
ATOM	12063	N	GLN	329	11.177	-77.783	16.401	1.00	0.00
N									
ATOM	12064	CA	GLN	329	12.252	-76.839	16.734	1.00	0.00
C									
ATOM	12065	CB	GLN	329	12.589	-76.106	15.423	1.00	0.00
C									
ATOM	12066	CG	GLN	329	12.875	-76.958	14.136	1.00	0.00
C									
ATOM	12067	CD	GLN	329	13.963	-77.959	14.362	1.00	0.00
C									
ATOM	12068	OE1	GLN	329	15.064	-77.614	14.765	1.00	0.00
O									
ATOM	12069	NE2	GLN	329	13.625	-79.218	14.399	1.00	0.00
N									
ATOM	12070	C	GLN	329	11.845	-75.814	17.855	1.00	0.00
C									
ATOM	12071	O	GLN	329	10.698	-75.555	18.146	1.00	0.00
O									
ATOM	12072	N	ALA	330	12.841	-75.154	18.388	1.00	0.00
N									
ATOM	12073	CA	ALA	330	12.624	-73.997	19.239	1.00	0.00
C									
ATOM	12074	CB	ALA	330	12.816	-74.484	20.709	1.00	0.00
C									
ATOM	12075	C	ALA	330	13.687	-72.925	18.910	1.00	0.00
C									
ATOM	12076	O	ALA	330	14.925	-73.169	18.981	1.00	0.00
O									
ATOM	12077	N	LYS	331	13.203	-71.729	18.652	1.00	0.00
N									
ATOM	12078	CA	LYS	331	13.917	-70.427	18.686	1.00	0.00
C									
ATOM	12079	CB	LYS	331	13.283	-69.282	17.868	1.00	0.00
C									
ATOM	12080	CG	LYS	331	14.215	-68.090	17.682	1.00	0.00
C									
ATOM	12081	CD	LYS	331	13.620	-67.160	16.601	1.00	0.00
C									
ATOM	12082	CE	LYS	331	14.672	-66.084	16.419	1.00	0.00
C									
ATOM	12083	NZ	LYS	331	14.391	-65.042	15.450	1.00	0.00
N1+									
ATOM	12084	C	LYS	331	14.241	-69.967	20.150	1.00	0.00
C									
ATOM	12085	O	LYS	331	13.352	-69.849	20.943	1.00	0.00
O									
ATOM	12086	N	VAL	332	15.500	-69.927	20.537	1.00	0.00
N									

ATOM	12087	CA	VAL	332	15.901	-69.670	21.959	1.00	0.00
C									
ATOM	12088	CB	VAL	332	16.496	-71.032	22.531	1.00	0.00
C									
ATOM	12089	CG1	VAL	332	15.613	-72.260	22.218	1.00	0.00
C									
ATOM	12090	CG2	VAL	332	17.909	-71.418	22.311	1.00	0.00
C									
ATOM	12091	C	VAL	332	16.907	-68.492	22.157	1.00	0.00
C									
ATOM	12092	O	VAL	332	17.662	-68.155	21.253	1.00	0.00
O									
ATOM	12093	N	GLN	333	16.953	-67.936	23.354	1.00	0.00
N									
ATOM	12094	CA	GLN	333	18.074	-67.058	23.696	1.00	0.00
C									
ATOM	12095	CB	GLN	333	17.408	-65.732	23.926	1.00	0.00
C									
ATOM	12096	CG	GLN	333	18.400	-64.570	24.060	1.00	0.00
C									
ATOM	12097	CD	GLN	333	17.662	-63.152	24.011	1.00	0.00
C									
ATOM	12098	OE1	GLN	333	16.634	-63.009	23.395	1.00	0.00
O									
ATOM	12099	NE2	GLN	333	18.231	-62.076	24.448	1.00	0.00
N									
ATOM	12100	C	GLN	333	18.757	-67.540	24.976	1.00	0.00
C									
ATOM	12101	O	GLN	333	18.124	-67.879	25.981	1.00	0.00
O									
ATOM	12102	N	ILE	334	20.102	-67.628	24.968	1.00	0.00
N									
ATOM	12103	CA	ILE	334	20.899	-68.318	26.053	1.00	0.00
C									
ATOM	12104	CB	ILE	334	22.334	-68.637	25.563	1.00	0.00
C									
ATOM	12105	CG2	ILE	334	23.051	-69.375	26.696	1.00	0.00
C									
ATOM	12106	CG1	ILE	334	22.553	-69.552	24.245	1.00	0.00
C									
ATOM	12107	CD1	ILE	334	21.702	-70.868	24.161	1.00	0.00
C									
ATOM	12108	C	ILE	334	20.833	-67.568	27.422	1.00	0.00
C									
ATOM	12109	O	ILE	334	21.003	-66.371	27.415	1.00	0.00
O									
ATOM	12110	N	LEU	335	20.596	-68.228	28.590	1.00	0.00
N									
ATOM	12111	CA	LEU	335	20.524	-67.603	29.909	1.00	0.00
C									
ATOM	12112	CB	LEU	335	19.620	-68.468	30.791	1.00	0.00
C									
ATOM	12113	CG	LEU	335	18.120	-68.189	30.460	1.00	0.00
C									

ATOM	12114	CD1	LEU	335	17.278	-68.833	31.567	1.00	0.00
C									
ATOM	12115	CD2	LEU	335	17.690	-66.699	30.411	1.00	0.00
C									
ATOM	12116	C	LEU	335	21.909	-67.387	30.639	1.00	0.00
C									
ATOM	12117	O	LEU	335	22.641	-68.343	31.020	1.00	0.00
O									
ATOM	12118	N	PRO	336	22.319	-66.106	30.910	1.00	0.00
N									
ATOM	12119	CD	PRO	336	21.810	-64.857	30.435	1.00	0.00
C									
ATOM	12120	CG	PRO	336	22.949	-63.971	30.293	1.00	0.00
C									
ATOM	12121	CB	PRO	336	23.891	-64.324	31.429	1.00	0.00
C									
ATOM	12122	CA	PRO	336	23.609	-65.835	31.593	1.00	0.00
C									
ATOM	12123	C	PRO	336	23.335	-66.159	33.084	1.00	0.00
C									
ATOM	12124	O	PRO	336	22.230	-66.132	33.638	1.00	0.00
O									
ATOM	12125	N	GLU	337	24.399	-66.324	33.886	1.00	0.00
N									
ATOM	12126	CA	GLU	337	24.435	-66.153	35.384	1.00	0.00
C									
ATOM	12127	CB	GLU	337	25.573	-66.881	36.034	1.00	0.00
C									
ATOM	12128	CG	GLU	337	25.750	-68.366	35.571	1.00	0.00
C									
ATOM	12129	CD	GLU	337	24.509	-69.334	35.716	1.00	0.00
C									
ATOM	12130	OE1	GLU	337	24.062	-69.567	36.877	1.00	0.00
O									
ATOM	12131	OE2	GLU	337	24.148	-70.034	34.735	1.00	0.00
O1-									
ATOM	12132	C	GLU	337	24.391	-64.586	35.748	1.00	0.00
C									
ATOM	12133	O	GLU	337	25.201	-63.771	35.242	1.00	0.00
O									
ATOM	12134	N	CYS	338	23.740	-64.278	36.873	1.00	0.00
N									
ATOM	12135	CA	CYS	338	23.930	-63.046	37.633	1.00	0.00
C									
ATOM	12136	CB	CYS	338	22.781	-62.785	38.587	1.00	0.00
C									
ATOM	12137	SG	CYS	338	21.213	-63.189	37.757	1.00	0.00
S									
ATOM	12138	C	CYS	338	25.208	-63.100	38.465	1.00	0.00
C									
ATOM	12139	O	CYS	338	25.642	-64.158	38.899	1.00	0.00
O									
ATOM	12140	N	VAL	339	25.768	-61.914	38.824	1.00	0.00
N									

ATOM	12141	CA	VAL	339	26.650	-61.641	39.944	1.00	0.00
C									
ATOM	12142	CB	VAL	339	26.798	-60.058	40.142	1.00	0.00
C									
ATOM	12143	CG1	VAL	339	25.475	-59.398	40.468	1.00	0.00
C									
ATOM	12144	CG2	VAL	339	27.907	-59.560	41.083	1.00	0.00
C									
ATOM	12145	C	VAL	339	26.178	-62.314	41.238	1.00	0.00
C									
ATOM	12146	O	VAL	339	24.975	-62.427	41.486	1.00	0.00
O									
ATOM	12147	N	LEU	340	27.142	-62.877	41.964	1.00	0.00
N									
ATOM	12148	CA	LEU	340	26.891	-63.608	43.197	1.00	0.00
C									
ATOM	12149	CB	LEU	340	27.906	-64.775	43.375	1.00	0.00
C									
ATOM	12150	CG	LEU	340	27.735	-65.878	42.313	1.00	0.00
C									
ATOM	12151	CD1	LEU	340	28.495	-67.163	42.593	1.00	0.00
C									
ATOM	12152	CD2	LEU	340	26.299	-66.275	41.819	1.00	0.00
C									
ATOM	12153	C	LEU	340	27.041	-62.716	44.445	1.00	0.00
C									
ATOM	12154	O	LEU	340	28.139	-62.350	44.851	1.00	0.00
O									
ATOM	12155	N	PRO	341	26.028	-62.500	45.289	1.00	0.00
N									
ATOM	12156	CD	PRO	341	24.603	-62.733	44.911	1.00	0.00
C									
ATOM	12157	CG	PRO	341	23.796	-62.042	45.967	1.00	0.00
C									
ATOM	12158	CB	PRO	341	24.734	-61.680	47.175	1.00	0.00
C									
ATOM	12159	CA	PRO	341	26.176	-61.854	46.575	1.00	0.00
C									
ATOM	12160	C	PRO	341	27.133	-62.576	47.521	1.00	0.00
C									
ATOM	12161	O	PRO	341	27.140	-63.838	47.585	1.00	0.00
O									
ATOM	12162	N	SER	342	28.014	-61.856	48.120	1.00	0.00
N									
ATOM	12163	CA	SER	342	29.169	-62.325	48.932	1.00	0.00
C									
ATOM	12164	CB	SER	342	30.389	-62.495	48.005	1.00	0.00
C									
ATOM	12165	OG	SER	342	30.174	-63.289	46.870	1.00	0.00
O									
ATOM	12166	C	SER	342	29.355	-61.407	50.137	1.00	0.00
C									
ATOM	12167	O	SER	342	30.431	-60.987	50.510	1.00	0.00
O									

ATOM	12168	N	THR	343	28.233	-61.002	50.772	1.00	0.00
N									
ATOM	12169	CA	THR	343	28.043	-59.765	51.474	1.00	0.00
C									
ATOM	12170	CB	THR	343	26.533	-59.401	51.533	1.00	0.00
C									
ATOM	12171	CG2	THR	343	25.841	-59.524	50.192	1.00	0.00
C									
ATOM	12172	OG1	THR	343	25.788	-60.207	52.455	1.00	0.00
O									
ATOM	12173	C	THR	343	28.716	-59.663	52.864	1.00	0.00
C									
ATOM	12174	O	THR	343	28.983	-58.578	53.316	1.00	0.00
O									
ATOM	12175	N	MET	344	29.055	-60.842	53.528	1.00	0.00
N									
ATOM	12176	CA	MET	344	29.744	-60.923	54.865	1.00	0.00
C									
ATOM	12177	CB	MET	344	30.014	-62.407	55.278	1.00	0.00
C									
ATOM	12178	CG	MET	344	28.866	-63.379	55.576	1.00	0.00
C									
ATOM	12179	SD	MET	344	27.822	-63.766	54.179	1.00	0.00
S									
ATOM	12180	CE	MET	344	28.910	-64.357	52.869	1.00	0.00
C									
ATOM	12181	C	MET	344	31.086	-60.099	54.940	1.00	0.00
C									
ATOM	12182	O	MET	344	31.701	-59.826	55.986	1.00	0.00
O									
ATOM	12183	N	SER	345	31.682	-59.731	53.800	1.00	0.00
N									
ATOM	12184	CA	SER	345	32.881	-58.895	53.725	1.00	0.00
C									
ATOM	12185	CB	SER	345	33.802	-59.394	52.601	1.00	0.00
C									
ATOM	12186	OG	SER	345	33.042	-59.491	51.436	1.00	0.00
O									
ATOM	12187	C	SER	345	32.488	-57.470	53.499	1.00	0.00
C									
ATOM	12188	O	SER	345	33.179	-56.544	54.021	1.00	0.00
O									
ATOM	12189	N	ALA	346	31.567	-57.128	52.589	1.00	0.00
N									
ATOM	12190	CA	ALA	346	31.233	-55.831	52.284	1.00	0.00
C									
ATOM	12191	CB	ALA	346	30.386	-55.609	50.987	1.00	0.00
C									
ATOM	12192	C	ALA	346	30.457	-55.081	53.361	1.00	0.00
C									
ATOM	12193	O	ALA	346	30.626	-53.897	53.430	1.00	0.00
O									
ATOM	12194	N	VAL	347	29.645	-55.704	54.222	1.00	0.00
N									

ATOM	12195	CA	VAL	347	28.744	-55.093	55.263	1.00	0.00
C									
ATOM	12196	CB	VAL	347	28.034	-56.242	56.075	1.00	0.00
C									
ATOM	12197	CG1	VAL	347	26.910	-56.812	55.264	1.00	0.00
C									
ATOM	12198	CG2	VAL	347	28.954	-57.477	56.588	1.00	0.00
C									
ATOM	12199	C	VAL	347	29.399	-54.264	56.349	1.00	0.00
C									
ATOM	12200	O	VAL	347	28.623	-53.498	56.897	1.00	0.00
O									
ATOM	12201	N	GLN	348	30.731	-54.399	56.660	1.00	0.00
N									
ATOM	12202	CA	GLN	348	31.529	-53.728	57.748	1.00	0.00
C									
ATOM	12203	CB	GLN	348	31.527	-54.444	59.114	1.00	0.00
C									
ATOM	12204	CG	GLN	348	30.155	-54.439	59.881	1.00	0.00
C									
ATOM	12205	CD	GLN	348	29.609	-53.088	60.348	1.00	0.00
C									
ATOM	12206	OE1	GLN	348	30.088	-52.506	61.289	1.00	0.00
O									
ATOM	12207	NE2	GLN	348	28.665	-52.498	59.622	1.00	0.00
N									
ATOM	12208	C	GLN	348	32.964	-53.627	57.209	1.00	0.00
C									
ATOM	12209	O	GLN	348	33.388	-54.457	56.421	1.00	0.00
O									
ATOM	12210	N	LEU	349	33.696	-52.627	57.648	1.00	0.00
N									
ATOM	12211	CA	LEU	349	35.185	-52.394	57.292	1.00	0.00
C									
ATOM	12212	CB	LEU	349	35.658	-51.121	58.031	1.00	0.00
C									
ATOM	12213	CG	LEU	349	35.262	-49.876	57.225	1.00	0.00
C									
ATOM	12214	CD1	LEU	349	35.148	-48.671	58.067	1.00	0.00
C									
ATOM	12215	CD2	LEU	349	36.216	-49.572	56.114	1.00	0.00
C									
ATOM	12216	C	LEU	349	35.989	-53.633	57.853	1.00	0.00
C									
ATOM	12217	O	LEU	349	35.895	-54.006	59.009	1.00	0.00
O									
ATOM	12218	N	GLU	350	36.862	-54.163	57.021	1.00	0.00
N									
ATOM	12219	CA	GLU	350	37.813	-55.253	57.344	1.00	0.00
C									
ATOM	12220	CB	GLU	350	38.644	-55.607	56.064	1.00	0.00
C									
ATOM	12221	CG	GLU	350	39.750	-56.734	56.169	1.00	0.00
C									



ATOM	12222	CD	GLU	350	39.220	-58.131	56.288	1.00	0.00
C									
ATOM	12223	OE1	GLU	350	40.035	-59.080	56.525	1.00	0.00
O									
ATOM	12224	OE2	GLU	350	38.030	-58.498	56.029	1.00	0.00
O1-									
ATOM	12225	C	GLU	350	38.705	-55.091	58.604	1.00	0.00
C									
ATOM	12226	O	GLU	350	38.870	-56.020	59.348	1.00	0.00
O									
ATOM	12227	N	SER	351	39.054	-53.878	58.827	1.00	0.00
N									
ATOM	12228	CA	SER	351	39.808	-53.384	60.005	1.00	0.00
C									
ATOM	12229	CB	SER	351	40.300	-52.026	59.613	1.00	0.00
C									
ATOM	12230	OG	SER	351	39.312	-51.096	59.201	1.00	0.00
O									
ATOM	12231	C	SER	351	38.965	-53.278	61.258	1.00	0.00
C									
ATOM	12232	O	SER	351	39.517	-52.941	62.299	1.00	0.00
O									
ATOM	12233	N	LEU	352	37.692	-53.717	61.330	1.00	0.00
N									
ATOM	12234	CA	LEU	352	37.048	-53.866	62.626	1.00	0.00
C									
ATOM	12235	CB	LEU	352	35.559	-53.363	62.476	1.00	0.00
C									
ATOM	12236	CG	LEU	352	35.297	-51.879	62.109	1.00	0.00
C									
ATOM	12237	CD1	LEU	352	33.767	-51.726	62.168	1.00	0.00
C									
ATOM	12238	CD2	LEU	352	36.017	-51.007	63.074	1.00	0.00
C									
ATOM	12239	C	LEU	352	37.033	-55.289	63.171	1.00	0.00
C									
ATOM	12240	O	LEU	352	36.487	-55.502	64.275	1.00	0.00
O									
ATOM	12241	N	ASN	353	37.535	-56.284	62.408	1.00	0.00
N									
ATOM	12242	CA	ASN	353	37.406	-57.683	62.714	1.00	0.00
C									
ATOM	12243	CB	ASN	353	37.589	-58.447	61.370	1.00	0.00
C									
ATOM	12244	CG	ASN	353	37.463	-59.982	61.498	1.00	0.00
C									
ATOM	12245	OD1	ASN	353	37.835	-60.679	62.438	1.00	0.00
O									
ATOM	12246	ND2	ASN	353	36.982	-60.631	60.443	1.00	0.00
N									
ATOM	12247	C	ASN	353	38.547	-58.026	63.690	1.00	0.00
C									
ATOM	12248	O	ASN	353	39.705	-57.723	63.394	1.00	0.00
O									

ATOM	12249	N	LYS	354	38.272	-58.688	64.790	1.00	0.00
N									
ATOM	12250	CA	LYS	354	39.295	-58.983	65.857	1.00	0.00
C									
ATOM	12251	CB	LYS	354	38.821	-58.454	67.248	1.00	0.00
C									
ATOM	12252	CG	LYS	354	38.477	-56.914	67.263	1.00	0.00
C									
ATOM	12253	CD	LYS	354	39.727	-56.046	67.216	1.00	0.00
C									
ATOM	12254	CE	LYS	354	39.449	-54.565	67.409	1.00	0.00
C									
ATOM	12255	NZ	LYS	354	40.563	-53.869	68.103	1.00	0.00
N1+									
ATOM	12256	C	LYS	354	39.882	-60.390	65.912	1.00	0.00
C									
ATOM	12257	O	LYS	354	40.839	-60.525	66.686	1.00	0.00
O									
ATOM	12258	N	CYS	355	39.367	-61.361	65.230	1.00	0.00
N									
ATOM	12259	CA	CYS	355	39.820	-62.751	65.092	1.00	0.00
C									
ATOM	12260	CB	CYS	355	38.656	-63.546	64.555	1.00	0.00
C									
ATOM	12261	SG	CYS	355	37.122	-63.395	65.484	1.00	0.00
S									
ATOM	12262	C	CYS	355	41.009	-63.009	64.155	1.00	0.00
C									
ATOM	12263	O	CYS	355	41.120	-62.267	63.152	1.00	0.00
O									
ATOM	12264	N	GLN	356	41.894	-63.982	64.436	1.00	0.00
N									
ATOM	12265	CA	GLN	356	42.977	-64.342	63.479	1.00	0.00
C									
ATOM	12266	CB	GLN	356	44.059	-65.112	64.237	1.00	0.00
C									
ATOM	12267	CG	GLN	356	45.229	-65.727	63.432	1.00	0.00
C									
ATOM	12268	CD	GLN	356	46.036	-64.683	62.696	1.00	0.00
C									
ATOM	12269	OE1	GLN	356	46.169	-63.625	63.236	1.00	0.00
O									
ATOM	12270	NE2	GLN	356	46.558	-65.052	61.525	1.00	0.00
N									
ATOM	12271	C	GLN	356	42.600	-65.069	62.139	1.00	0.00
C									
ATOM	12272	O	GLN	356	41.709	-66.002	62.149	1.00	0.00
O									
ATOM	12273	N	ILE	357	43.164	-64.675	60.977	1.00	0.00
N									
ATOM	12274	CA	ILE	357	42.974	-65.344	59.640	1.00	0.00
C									
ATOM	12275	CB	ILE	357	43.625	-64.473	58.550	1.00	0.00
C									

ATOM	12276	CG2	ILE	357	43.728	-65.346	57.256	1.00	0.00
C									
ATOM	12277	CG1	ILE	357	42.807	-63.175	58.350	1.00	0.00
C									
ATOM	12278	CD1	ILE	357	43.407	-62.122	57.441	1.00	0.00
C									
ATOM	12279	C	ILE	357	43.581	-66.727	59.694	1.00	0.00
C									
ATOM	12280	O	ILE	357	44.763	-66.984	60.049	1.00	0.00
O									
ATOM	12281	N	PHE	358	42.842	-67.790	59.245	1.00	0.00
N									
ATOM	12282	CA	PHE	358	43.273	-69.186	59.140	1.00	0.00
C									
ATOM	12283	CB	PHE	358	42.651	-69.890	60.366	1.00	0.00
C									
ATOM	12284	CG	PHE	358	43.514	-69.707	61.626	1.00	0.00
C									
ATOM	12285	CD1	PHE	358	44.539	-70.582	61.852	1.00	0.00
C									
ATOM	12286	CE1	PHE	358	45.404	-70.462	62.949	1.00	0.00
C									
ATOM	12287	CZ	PHE	358	45.054	-69.533	63.973	1.00	0.00
C									
ATOM	12288	CE2	PHE	358	43.935	-68.770	63.820	1.00	0.00
C									
ATOM	12289	CD2	PHE	358	43.201	-68.827	62.634	1.00	0.00
C									
ATOM	12290	C	PHE	358	42.787	-69.687	57.768	1.00	0.00
C									
ATOM	12291	O	PHE	358	41.877	-69.106	57.188	1.00	0.00
O									
ATOM	12292	N	PRO	359	43.269	-70.846	57.276	1.00	0.00
N									
ATOM	12293	CD	PRO	359	44.522	-71.471	57.689	1.00	0.00
C									
ATOM	12294	CG	PRO	359	44.501	-72.856	56.912	1.00	0.00
C									
ATOM	12295	CB	PRO	359	43.894	-72.470	55.599	1.00	0.00
C									
ATOM	12296	CA	PRO	359	42.751	-71.570	56.068	1.00	0.00
C									
ATOM	12297	C	PRO	359	41.379	-72.189	56.351	1.00	0.00
C									
ATOM	12298	O	PRO	359	41.120	-72.668	57.491	1.00	0.00
O									
ATOM	12299	N	SER	360	40.606	-72.408	55.284	1.00	0.00
N									
ATOM	12300	CA	SER	360	39.517	-73.380	55.153	1.00	0.00
C									
ATOM	12301	CB	SER	360	38.449	-72.714	54.351	1.00	0.00
C									
ATOM	12302	OG	SER	360	37.376	-73.534	53.994	1.00	0.00
O									

ATOM	12303	C	SER	360	39.885	-74.712	54.496	1.00	0.00
C									
ATOM	12304	O	SER	360	40.746	-74.859	53.645	1.00	0.00
O									
ATOM	12305	N	LYS	361	39.171	-75.800	54.914	1.00	0.00
N									
ATOM	12306	CA	LYS	361	39.406	-77.184	54.475	1.00	0.00
C									
ATOM	12307	CB	LYS	361	38.517	-78.149	55.173	1.00	0.00
C									
ATOM	12308	CG	LYS	361	36.966	-77.918	54.861	1.00	0.00
C									
ATOM	12309	CD	LYS	361	36.035	-78.313	56.028	1.00	0.00
C									
ATOM	12310	CE	LYS	361	34.607	-77.936	55.632	1.00	0.00
C									
ATOM	12311	NZ	LYS	361	33.556	-78.531	56.523	1.00	0.00
N1+									
ATOM	12312	C	LYS	361	39.271	-77.420	52.948	1.00	0.00
C									
ATOM	12313	O	LYS	361	38.321	-76.926	52.373	1.00	0.00
O									
ATOM	12314	N	PRO	362	40.192	-78.134	52.269	1.00	0.00
N									
ATOM	12315	CD	PRO	362	41.319	-78.643	52.948	1.00	0.00
C									
ATOM	12316	CG	PRO	362	42.266	-79.189	51.874	1.00	0.00
C									
ATOM	12317	CB	PRO	362	41.293	-79.540	50.718	1.00	0.00
C									
ATOM	12318	CA	PRO	362	40.118	-78.546	50.857	1.00	0.00
C									
ATOM	12319	C	PRO	362	38.745	-79.217	50.515	1.00	0.00
C									
ATOM	12320	O	PRO	362	38.077	-79.620	51.476	1.00	0.00
O									
ATOM	12321	N	VAL	363	38.374	-79.246	49.206	1.00	0.00
N									
ATOM	12322	CA	VAL	363	37.044	-79.772	48.735	1.00	0.00
C									
ATOM	12323	CB	VAL	363	36.530	-79.233	47.365	1.00	0.00
C									
ATOM	12324	CG1	VAL	363	36.515	-77.691	47.389	1.00	0.00
C									
ATOM	12325	CG2	VAL	363	37.375	-79.709	46.214	1.00	0.00
C									
ATOM	12326	C	VAL	363	36.947	-81.298	48.794	1.00	0.00
C									
ATOM	12327	O	VAL	363	35.812	-81.805	48.725	1.00	0.00
O									
ATOM	12328	N	SER	364	38.077	-82.019	48.847	1.00	0.00
N									
ATOM	12329	CA	SER	364	38.220	-83.469	48.937	1.00	0.00
C									

ATOM	12330	CB	SER	364	39.726	-83.793	49.005	1.00	0.00
C									
ATOM	12331	OG	SER	364	39.966	-85.206	48.923	1.00	0.00
O									
ATOM	12332	C	SER	364	37.623	-84.020	50.174	1.00	0.00
C									
ATOM	12333	O	SER	364	37.735	-83.429	51.274	1.00	0.00
O									
ATOM	12334	N	ARG	365	36.978	-85.196	50.071	1.00	0.00
N									
ATOM	12335	CA	ARG	365	36.364	-85.943	51.185	1.00	0.00
C									
ATOM	12336	CB	ARG	365	35.741	-87.256	50.688	1.00	0.00
C									
ATOM	12337	CG	ARG	365	36.565	-88.157	49.786	1.00	0.00
C									
ATOM	12338	CD	ARG	365	35.673	-89.194	49.055	1.00	0.00
C									
ATOM	12339	NE	ARG	365	35.253	-90.332	49.875	1.00	0.00
N									
ATOM	12340	CZ	ARG	365	34.064	-90.697	50.222	1.00	0.00
C									
ATOM	12341	NH1	ARG	365	33.976	-91.643	51.101	1.00	0.00
N									
ATOM	12342	NH2	ARG	365	33.020	-90.149	49.760	1.00	0.00
N1+									
ATOM	12343	C	ARG	365	37.415	-86.315	52.178	1.00	0.00
C									
ATOM	12344	O	ARG	365	37.048	-86.571	53.303	1.00	0.00
O									
ATOM	12345	N	GLU	366	38.682	-86.300	51.817	1.00	0.00
N									
ATOM	12346	CA	GLU	366	39.721	-86.866	52.678	1.00	0.00
C									
ATOM	12347	CB	GLU	366	40.933	-87.362	51.874	1.00	0.00
C									
ATOM	12348	CG	GLU	366	42.208	-88.063	52.513	1.00	0.00
C									
ATOM	12349	CD	GLU	366	41.938	-88.955	53.746	1.00	0.00
C									
ATOM	12350	OE1	GLU	366	40.870	-89.615	53.836	1.00	0.00
O									
ATOM	12351	OE2	GLU	366	42.788	-89.130	54.682	1.00	0.00
O1-									
ATOM	12352	C	GLU	366	40.183	-85.769	53.696	1.00	0.00
C									
ATOM	12353	O	GLU	366	40.783	-86.102	54.730	1.00	0.00
O									
ATOM	12354	N	ASP	367	39.854	-84.446	53.470	1.00	0.00
N									
ATOM	12355	CA	ASP	367	40.151	-83.397	54.385	1.00	0.00
C									
ATOM	12356	CB	ASP	367	41.011	-82.321	53.687	1.00	0.00
C									

ATOM	12357	CG	ASP	367	42.190	-82.905	52.832	1.00	0.00
C									
ATOM	12358	OD1	ASP	367	42.029	-83.016	51.605	1.00	0.00
O									
ATOM	12359	OD2	ASP	367	43.307	-82.960	53.372	1.00	0.00
O1-									
ATOM	12360	C	ASP	367	38.851	-82.817	55.062	1.00	0.00
C									
ATOM	12361	O	ASP	367	39.007	-81.759	55.673	1.00	0.00
O									
ATOM	12362	N	GLN	368	37.664	-83.349	54.794	1.00	0.00
N									
ATOM	12363	CA	GLN	368	36.412	-82.756	55.279	1.00	0.00
C									
ATOM	12364	CB	GLN	368	35.335	-83.568	54.676	1.00	0.00
C									
ATOM	12365	CG	GLN	368	33.809	-83.318	54.865	1.00	0.00
C									
ATOM	12366	CD	GLN	368	33.390	-81.854	54.884	1.00	0.00
C									
ATOM	12367	OE1	GLN	368	32.876	-81.342	55.835	1.00	0.00
O									
ATOM	12368	NE2	GLN	368	33.774	-81.082	53.979	1.00	0.00
N									
ATOM	12369	C	GLN	368	36.246	-82.779	56.811	1.00	0.00
C									
ATOM	12370	O	GLN	368	35.692	-81.842	57.338	1.00	0.00
O									
ATOM	12371	N	CYS	369	36.658	-83.864	57.479	1.00	0.00
N									
ATOM	12372	CA	CYS	369	36.873	-83.933	58.982	1.00	0.00
C									
ATOM	12373	CB	CYS	369	37.246	-85.286	59.442	1.00	0.00
C									
ATOM	12374	SG	CYS	369	36.205	-86.510	58.533	1.00	0.00
S									
ATOM	12375	C	CYS	369	37.924	-82.918	59.495	1.00	0.00
C									
ATOM	12376	O	CYS	369	38.136	-82.846	60.705	1.00	0.00
O									
ATOM	12377	N	SER	370	38.587	-82.065	58.644	1.00	0.00
N									
ATOM	12378	CA	SER	370	39.461	-80.959	59.173	1.00	0.00
C									
ATOM	12379	CB	SER	370	40.306	-80.587	57.955	1.00	0.00
C									
ATOM	12380	OG	SER	370	41.411	-79.746	58.392	1.00	0.00
O									
ATOM	12381	C	SER	370	38.740	-79.799	59.788	1.00	0.00
C									
ATOM	12382	O	SER	370	38.152	-78.936	59.091	1.00	0.00
O									
ATOM	12383	N	TYR	371	38.623	-79.831	61.144	1.00	0.00
N									

ATOM	12384	CA	TYR	371	37.913	-78.785	61.914	1.00	0.00
C									
ATOM	12385	CB	TYR	371	37.175	-79.400	63.070	1.00	0.00
C									
ATOM	12386	CG	TYR	371	36.416	-78.477	63.987	1.00	0.00
C									
ATOM	12387	CD1	TYR	371	35.088	-78.287	63.723	1.00	0.00
C									
ATOM	12388	CE1	TYR	371	34.407	-77.467	64.632	1.00	0.00
C									
ATOM	12389	CZ	TYR	371	34.993	-76.854	65.781	1.00	0.00
C									
ATOM	12390	OH	TYR	371	34.193	-76.128	66.626	1.00	0.00
O									
ATOM	12391	CE2	TYR	371	36.352	-77.170	66.000	1.00	0.00
C									
ATOM	12392	CD2	TYR	371	37.071	-78.008	65.126	1.00	0.00
C									
ATOM	12393	C	TYR	371	38.804	-77.721	62.531	1.00	0.00
C									
ATOM	12394	O	TYR	371	38.407	-76.528	62.731	1.00	0.00
O									
ATOM	12395	N	LYS	372	40.063	-78.055	62.803	1.00	0.00
N									
ATOM	12396	CA	LYS	372	41.015	-77.356	63.673	1.00	0.00
C									
ATOM	12397	CB	LYS	372	42.344	-78.116	63.826	1.00	0.00
C									
ATOM	12398	CG	LYS	372	43.079	-78.479	62.534	1.00	0.00
C									
ATOM	12399	CD	LYS	372	44.493	-78.964	62.807	1.00	0.00
C									
ATOM	12400	CE	LYS	372	44.487	-80.216	63.776	1.00	0.00
C									
ATOM	12401	NZ	LYS	372	45.907	-80.614	64.137	1.00	0.00
N1+									
ATOM	12402	C	LYS	372	41.236	-75.899	63.287	1.00	0.00
C									
ATOM	12403	O	LYS	372	41.166	-74.997	64.105	1.00	0.00
O									
ATOM	12404	N	TRP	373	41.279	-75.600	62.020	1.00	0.00
N									
ATOM	12405	CA	TRP	373	41.488	-74.325	61.425	1.00	0.00
C									
ATOM	12406	CB	TRP	373	42.639	-74.300	60.500	1.00	0.00
C									
ATOM	12407	CG	TRP	373	43.969	-74.544	61.187	1.00	0.00
C									
ATOM	12408	CD1	TRP	373	44.455	-73.790	62.186	1.00	0.00
C									
ATOM	12409	NE1	TRP	373	45.677	-74.336	62.582	1.00	0.00
N									
ATOM	12410	CE2	TRP	373	46.004	-75.490	61.894	1.00	0.00
C									

ATOM	12411	CZ2	TRP	373	46.996	-76.512	61.942	1.00	0.00
C									
ATOM	12412	CH2	TRP	373	46.998	-77.530	60.980	1.00	0.00
C									
ATOM	12413	CZ3	TRP	373	46.114	-77.593	59.945	1.00	0.00
C									
ATOM	12414	CE3	TRP	373	45.094	-76.620	59.946	1.00	0.00
C									
ATOM	12415	CD2	TRP	373	45.007	-75.537	60.872	1.00	0.00
C									
ATOM	12416	C	TRP	373	40.171	-73.863	60.705	1.00	0.00
C									
ATOM	12417	O	TRP	373	39.814	-72.703	60.603	1.00	0.00
O									
ATOM	12418	N	TRP	374	39.341	-74.834	60.159	1.00	0.00
N									
ATOM	12419	CA	TRP	374	38.021	-74.528	59.612	1.00	0.00
C									
ATOM	12420	CB	TRP	374	37.402	-75.881	59.323	1.00	0.00
C									
ATOM	12421	CG	TRP	374	35.906	-75.870	59.087	1.00	0.00
C									
ATOM	12422	CD1	TRP	374	34.934	-76.338	59.933	1.00	0.00
C									
ATOM	12423	NE1	TRP	374	33.687	-76.032	59.425	1.00	0.00
N									
ATOM	12424	CE2	TRP	374	33.783	-75.229	58.326	1.00	0.00
C									
ATOM	12425	CZ2	TRP	374	32.773	-74.772	57.527	1.00	0.00
C									
ATOM	12426	CH2	TRP	374	33.140	-74.234	56.314	1.00	0.00
C									
ATOM	12427	CZ3	TRP	374	34.487	-74.032	55.972	1.00	0.00
C									
ATOM	12428	CE3	TRP	374	35.512	-74.457	56.830	1.00	0.00
C									
ATOM	12429	CD2	TRP	374	35.142	-75.120	58.022	1.00	0.00
C									
ATOM	12430	C	TRP	374	37.115	-73.707	60.536	1.00	0.00
C									
ATOM	12431	O	TRP	374	36.546	-72.778	60.114	1.00	0.00
O									
ATOM	12432	N	GLN	375	37.085	-74.052	61.835	1.00	0.00
N									
ATOM	12433	CA	GLN	375	36.413	-73.336	62.937	1.00	0.00
C									
ATOM	12434	CB	GLN	375	36.680	-74.104	64.220	1.00	0.00
C									
ATOM	12435	CG	GLN	375	36.175	-73.428	65.519	1.00	0.00
C									
ATOM	12436	CD	GLN	375	34.672	-73.272	65.576	1.00	0.00
C									
ATOM	12437	OE1	GLN	375	33.913	-73.818	64.755	1.00	0.00
O									



ATOM	12438	NE2	GLN	375	34.141	-72.697	66.637	1.00	0.00
N									
ATOM	12439	C	GLN	375	36.981	-71.941	63.107	1.00	0.00
C									
ATOM	12440	O	GLN	375	36.278	-71.020	63.489	1.00	0.00
O									
ATOM	12441	N	LYS	376	38.290	-71.699	62.876	1.00	0.00
N									
ATOM	12442	CA	LYS	376	39.017	-70.477	63.192	1.00	0.00
C									
ATOM	12443	CB	LYS	376	40.493	-70.748	63.368	1.00	0.00
C									
ATOM	12444	CG	LYS	376	40.754	-71.598	64.572	1.00	0.00
C									
ATOM	12445	CD	LYS	376	42.231	-71.738	64.992	1.00	0.00
C									
ATOM	12446	CE	LYS	376	42.253	-72.208	66.348	1.00	0.00
C									
ATOM	12447	NZ	LYS	376	42.112	-73.633	66.324	1.00	0.00
N1+									
ATOM	12448	C	LYS	376	38.761	-69.600	61.959	1.00	0.00
C									
ATOM	12449	O	LYS	376	38.398	-68.413	62.150	1.00	0.00
O									
ATOM	12450	N	TYR	377	38.834	-70.083	60.719	1.00	0.00
N									
ATOM	12451	CA	TYR	377	38.305	-69.460	59.501	1.00	0.00
C									
ATOM	12452	CB	TYR	377	38.646	-70.477	58.316	1.00	0.00
C									
ATOM	12453	CG	TYR	377	37.997	-70.177	56.969	1.00	0.00
C									
ATOM	12454	CD1	TYR	377	38.745	-69.521	56.001	1.00	0.00
C									
ATOM	12455	CE1	TYR	377	38.077	-69.131	54.847	1.00	0.00
C									
ATOM	12456	CZ	TYR	377	36.781	-69.470	54.566	1.00	0.00
C									
ATOM	12457	OH	TYR	377	36.332	-69.093	53.302	1.00	0.00
O									
ATOM	12458	CE2	TYR	377	36.010	-70.128	55.526	1.00	0.00
C									
ATOM	12459	CD2	TYR	377	36.606	-70.495	56.781	1.00	0.00
C									
ATOM	12460	C	TYR	377	36.825	-69.063	59.599	1.00	0.00
C									
ATOM	12461	O	TYR	377	36.470	-67.906	59.325	1.00	0.00
O									
ATOM	12462	N	GLN	378	36.006	-69.911	60.298	1.00	0.00
N									
ATOM	12463	CA	GLN	378	34.606	-69.525	60.448	1.00	0.00
C									
ATOM	12464	CB	GLN	378	33.792	-70.798	60.644	1.00	0.00
C									

ATOM	12465	CG	GLN	378	33.572	-71.603	59.386	1.00	0.00
C									
ATOM	12466	CD	GLN	378	32.605	-70.962	58.456	1.00	0.00
C									
ATOM	12467	OE1	GLN	378	32.907	-70.015	57.661	1.00	0.00
O									
ATOM	12468	NE2	GLN	378	31.424	-71.502	58.474	1.00	0.00
N									
ATOM	12469	C	GLN	378	34.294	-68.570	61.556	1.00	0.00
C									
ATOM	12470	O	GLN	378	33.477	-67.707	61.381	1.00	0.00
O									
ATOM	12471	N	LYS	379	34.998	-68.601	62.644	1.00	0.00
N									
ATOM	12472	CA	LYS	379	35.079	-67.522	63.691	1.00	0.00
C									
ATOM	12473	CB	LYS	379	36.046	-67.920	64.866	1.00	0.00
C									
ATOM	12474	CG	LYS	379	36.173	-66.785	65.913	1.00	0.00
C									
ATOM	12475	CD	LYS	379	35.001	-66.586	66.833	1.00	0.00
C									
ATOM	12476	CE	LYS	379	35.438	-65.719	67.982	1.00	0.00
C									
ATOM	12477	NZ	LYS	379	34.343	-65.423	68.895	1.00	0.00
N1+									
ATOM	12478	C	LYS	379	35.551	-66.165	63.070	1.00	0.00
C									
ATOM	12479	O	LYS	379	35.050	-65.143	63.525	1.00	0.00
O									
ATOM	12480	N	ARG	380	36.543	-66.091	62.147	1.00	0.00
N									
ATOM	12481	CA	ARG	380	36.931	-64.917	61.397	1.00	0.00
C									
ATOM	12482	CB	ARG	380	38.173	-65.280	60.567	1.00	0.00
C									
ATOM	12483	CG	ARG	380	38.801	-64.041	59.766	1.00	0.00
C									
ATOM	12484	CD	ARG	380	39.545	-63.013	60.498	1.00	0.00
C									
ATOM	12485	NE	ARG	380	39.966	-61.851	59.595	1.00	0.00
N									
ATOM	12486	CZ	ARG	380	40.826	-60.868	59.863	1.00	0.00
C									
ATOM	12487	NH1	ARG	380	41.016	-59.857	59.078	1.00	0.00
N									
ATOM	12488	NH2	ARG	380	41.548	-60.910	60.903	1.00	0.00
N1+									
ATOM	12489	C	ARG	380	35.872	-64.416	60.433	1.00	0.00
C									
ATOM	12490	O	ARG	380	35.569	-63.245	60.420	1.00	0.00
O									
ATOM	12491	N	LYS	381	35.259	-65.322	59.588	1.00	0.00
N									

ATOM	12492	CA	LYS	381	34.189	-64.974	58.605	1.00	0.00
C									
ATOM	12493	CB	LYS	381	33.721	-66.198	57.883	1.00	0.00
C									
ATOM	12494	CG	LYS	381	32.909	-65.987	56.611	1.00	0.00
C									
ATOM	12495	CD	LYS	381	32.429	-67.320	55.954	1.00	0.00
C									
ATOM	12496	CE	LYS	381	33.506	-67.916	55.104	1.00	0.00
C									
ATOM	12497	NZ	LYS	381	32.906	-68.769	54.081	1.00	0.00
N1+									
ATOM	12498	C	LYS	381	33.056	-64.101	59.318	1.00	0.00
C									
ATOM	12499	O	LYS	381	32.656	-63.064	58.800	1.00	0.00
O									
ATOM	12500	N	PHE	382	32.555	-64.660	60.380	1.00	0.00
N									
ATOM	12501	CA	PHE	382	31.336	-64.316	61.074	1.00	0.00
C									
ATOM	12502	CB	PHE	382	30.615	-65.522	61.630	1.00	0.00
C									
ATOM	12503	CG	PHE	382	30.005	-66.445	60.556	1.00	0.00
C									
ATOM	12504	CD1	PHE	382	30.292	-67.808	60.556	1.00	0.00
C									
ATOM	12505	CE1	PHE	382	29.876	-68.667	59.532	1.00	0.00
C									
ATOM	12506	CZ	PHE	382	28.902	-68.179	58.633	1.00	0.00
C									
ATOM	12507	CE2	PHE	382	28.416	-66.833	58.678	1.00	0.00
C									
ATOM	12508	CD2	PHE	382	28.989	-65.968	59.670	1.00	0.00
C									
ATOM	12509	C	PHE	382	31.336	-63.042	61.997	1.00	0.00
C									
ATOM	12510	O	PHE	382	30.325	-62.578	62.601	1.00	0.00
O									
ATOM	12511	N	HID	383	32.514	-62.274	61.973	1.00	0.00
N									
ATOM	12512	CA	HID	383	32.658	-61.049	62.682	1.00	0.00
C									
ATOM	12513	CB	HID	383	34.083	-60.459	62.370	1.00	0.00
C									
ATOM	12514	CG	HID	383	34.482	-59.722	63.564	1.00	0.00
C									
ATOM	12515	ND1	HID	383	34.080	-58.510	64.052	1.00	0.00
N									
ATOM	12516	CE1	HID	383	34.746	-58.319	65.172	1.00	0.00
C									
ATOM	12517	NE2	HID	383	35.503	-59.335	65.528	1.00	0.00
N									
ATOM	12518	CD2	HID	383	35.400	-60.203	64.435	1.00	0.00
C									

ATOM	12519	C	HID	383	31.592	-59.945	62.311	1.00	0.00
C									
ATOM	12520	O	HID	383	31.324	-59.044	63.129	1.00	0.00
O									
ATOM	12521	N	CYS	384	30.903	-60.070	61.161	1.00	0.00
N									
ATOM	12522	CA	CYS	384	29.678	-59.299	60.854	1.00	0.00
C									
ATOM	12523	CB	CYS	384	29.204	-59.570	59.407	1.00	0.00
C									
ATOM	12524	SG	CYS	384	29.048	-61.378	59.120	1.00	0.00
S									
ATOM	12525	C	CYS	384	28.418	-59.544	61.780	1.00	0.00
C									
ATOM	12526	O	CYS	384	27.747	-58.526	62.123	1.00	0.00
O									
ATOM	12527	N	ALA	385	28.194	-60.758	62.235	1.00	0.00
N									
ATOM	12528	CA	ALA	385	27.225	-61.055	63.293	1.00	0.00
C									
ATOM	12529	CB	ALA	385	27.036	-62.612	63.234	1.00	0.00
C									
ATOM	12530	C	ALA	385	27.599	-60.578	64.697	1.00	0.00
C									
ATOM	12531	O	ALA	385	26.725	-60.577	65.505	1.00	0.00
O									
ATOM	12532	N	ASN	386	28.835	-60.142	64.918	1.00	0.00
N									
ATOM	12533	CA	ASN	386	29.161	-59.515	66.184	1.00	0.00
C									
ATOM	12534	CB	ASN	386	30.636	-59.809	66.564	1.00	0.00
C									
ATOM	12535	CG	ASN	386	30.974	-61.259	66.861	1.00	0.00
C									
ATOM	12536	OD1	ASN	386	30.585	-62.251	66.225	1.00	0.00
O									
ATOM	12537	ND2	ASN	386	31.807	-61.477	67.814	1.00	0.00
N									
ATOM	12538	C	ASN	386	28.883	-58.056	66.140	1.00	0.00
C									
ATOM	12539	O	ASN	386	28.442	-57.483	67.151	1.00	0.00
O									
ATOM	12540	N	LEU	387	28.983	-57.454	64.987	1.00	0.00
N									
ATOM	12541	CA	LEU	387	28.996	-56.008	64.707	1.00	0.00
C									
ATOM	12542	CB	LEU	387	30.441	-55.586	64.172	1.00	0.00
C									
ATOM	12543	CG	LEU	387	31.658	-55.701	65.080	1.00	0.00
C									
ATOM	12544	CD1	LEU	387	32.895	-55.075	64.499	1.00	0.00
C									
ATOM	12545	CD2	LEU	387	31.308	-54.942	66.437	1.00	0.00
C									

ATOM	12546	C	LEU	387	27.837	-55.427	63.828	1.00	0.00
C									
ATOM	12547	O	LEU	387	27.939	-54.318	63.364	1.00	0.00
O									
ATOM	12548	N	THR	388	26.759	-56.190	63.664	1.00	0.00
N									
ATOM	12549	CA	THR	388	25.504	-55.755	63.008	1.00	0.00
C									
ATOM	12550	CB	THR	388	25.577	-55.886	61.470	1.00	0.00
C									
ATOM	12551	CG2	THR	388	26.667	-55.021	60.715	1.00	0.00
C									
ATOM	12552	OG1	THR	388	25.723	-57.253	61.044	1.00	0.00
O									
ATOM	12553	C	THR	388	24.316	-56.563	63.573	1.00	0.00
C									
ATOM	12554	O	THR	388	24.578	-57.584	64.128	1.00	0.00
O									
ATOM	12555	N	SER	389	23.056	-56.132	63.360	1.00	0.00
N									
ATOM	12556	CA	SER	389	21.807	-56.763	63.922	1.00	0.00
C									
ATOM	12557	CB	SER	389	20.597	-55.793	63.720	1.00	0.00
C									
ATOM	12558	OG	SER	389	20.217	-55.664	62.336	1.00	0.00
O									
ATOM	12559	C	SER	389	21.502	-58.166	63.321	1.00	0.00
C									
ATOM	12560	O	SER	389	20.688	-58.930	63.902	1.00	0.00
O									
ATOM	12561	N	TRP	390	22.025	-58.572	62.137	1.00	0.00
N									
ATOM	12562	CA	TRP	390	21.804	-59.986	61.744	1.00	0.00
C									
ATOM	12563	CB	TRP	390	21.969	-60.293	60.258	1.00	0.00
C									
ATOM	12564	CG	TRP	390	20.900	-59.876	59.271	1.00	0.00
C									
ATOM	12565	CD1	TRP	390	19.796	-59.211	59.551	1.00	0.00
C									
ATOM	12566	NE1	TRP	390	19.057	-59.072	58.361	1.00	0.00
N									
ATOM	12567	CE2	TRP	390	19.665	-59.758	57.274	1.00	0.00
C									
ATOM	12568	CZ2	TRP	390	19.418	-59.928	55.896	1.00	0.00
C									
ATOM	12569	CH2	TRP	390	20.336	-60.597	55.098	1.00	0.00
C									
ATOM	12570	CZ3	TRP	390	21.589	-61.076	55.631	1.00	0.00
C									
ATOM	12571	CE3	TRP	390	21.761	-60.943	57.010	1.00	0.00
C									
ATOM	12572	CD2	TRP	390	20.920	-60.240	57.856	1.00	0.00
C									

ATOM	12573	C	TRP	390	22.600	-61.009	62.548	1.00	0.00
C									
ATOM	12574	O	TRP	390	23.749	-60.609	62.942	1.00	0.00
O									
ATOM	12575	N	PRO	391	22.089	-62.203	62.900	1.00	0.00
N									
ATOM	12576	CD	PRO	391	20.710	-62.652	62.593	1.00	0.00
C									
ATOM	12577	CG	PRO	391	20.438	-64.062	63.068	1.00	0.00
C									
ATOM	12578	CB	PRO	391	21.567	-64.103	64.096	1.00	0.00
C									
ATOM	12579	CA	PRO	391	22.741	-63.255	63.620	1.00	0.00
C									
ATOM	12580	C	PRO	391	23.623	-64.111	62.704	1.00	0.00
C									
ATOM	12581	O	PRO	391	23.466	-64.111	61.474	1.00	0.00
O									
ATOM	12582	N	ARG	392	24.598	-64.821	63.325	1.00	0.00
N									
ATOM	12583	CA	ARG	392	25.390	-65.832	62.645	1.00	0.00
C									
ATOM	12584	CB	ARG	392	26.325	-66.535	63.697	1.00	0.00
C									
ATOM	12585	CG	ARG	392	27.200	-67.608	63.092	1.00	0.00
C									
ATOM	12586	CD	ARG	392	28.498	-68.010	63.858	1.00	0.00
C									
ATOM	12587	NE	ARG	392	28.954	-69.310	63.429	1.00	0.00
N									
ATOM	12588	CZ	ARG	392	30.150	-69.802	63.523	1.00	0.00
C									
ATOM	12589	NH1	ARG	392	31.049	-69.176	64.155	1.00	0.00
N									
ATOM	12590	NH2	ARG	392	30.418	-70.930	62.969	1.00	0.00
N1+									
ATOM	12591	C	ARG	392	24.535	-66.866	61.854	1.00	0.00
C									
ATOM	12592	O	ARG	392	24.960	-67.127	60.764	1.00	0.00
O									
ATOM	12593	N	TRP	393	23.396	-67.416	62.365	1.00	0.00
N									
ATOM	12594	CA	TRP	393	22.549	-68.372	61.667	1.00	0.00
C									
ATOM	12595	CB	TRP	393	21.399	-68.840	62.527	1.00	0.00
C									
ATOM	12596	CG	TRP	393	20.207	-67.983	62.832	1.00	0.00
C									
ATOM	12597	CD1	TRP	393	19.916	-67.455	64.025	1.00	0.00
C									
ATOM	12598	NE1	TRP	393	18.830	-66.679	63.872	1.00	0.00
N									
ATOM	12599	CE2	TRP	393	18.256	-66.778	62.621	1.00	0.00
C									

ATOM	12600	CZ2	TRP	393	17.113	-66.232	61.975	1.00	0.00
C									
ATOM	12601	CH2	TRP	393	16.762	-66.585	60.683	1.00	0.00
C									
ATOM	12602	CZ3	TRP	393	17.477	-67.496	59.941	1.00	0.00
C									
ATOM	12603	CE3	TRP	393	18.644	-68.025	60.585	1.00	0.00
C									
ATOM	12604	CD2	TRP	393	19.098	-67.644	61.907	1.00	0.00
C									
ATOM	12605	C	TRP	393	22.024	-67.745	60.397	1.00	0.00
C									
ATOM	12606	O	TRP	393	22.039	-68.487	59.349	1.00	0.00
O									
ATOM	12607	N	LEU	394	21.689	-66.448	60.329	1.00	0.00
N									
ATOM	12608	CA	LEU	394	21.110	-65.939	59.115	1.00	0.00
C									
ATOM	12609	CB	LEU	394	20.327	-64.640	59.487	1.00	0.00
C									
ATOM	12610	CG	LEU	394	19.730	-63.825	58.316	1.00	0.00
C									
ATOM	12611	CD1	LEU	394	18.894	-64.642	57.333	1.00	0.00
C									
ATOM	12612	CD2	LEU	394	18.825	-62.751	58.867	1.00	0.00
C									
ATOM	12613	C	LEU	394	22.226	-65.710	58.131	1.00	0.00
C									
ATOM	12614	O	LEU	394	22.038	-66.034	56.947	1.00	0.00
O									
ATOM	12615	N	TYR	395	23.452	-65.158	58.463	1.00	0.00
N									
ATOM	12616	CA	TYR	395	24.543	-65.026	57.519	1.00	0.00
C									
ATOM	12617	CB	TYR	395	25.727	-64.330	58.173	1.00	0.00
C									
ATOM	12618	CG	TYR	395	25.560	-62.765	58.351	1.00	0.00
C									
ATOM	12619	CD1	TYR	395	25.719	-61.941	57.190	1.00	0.00
C									
ATOM	12620	CE1	TYR	395	25.628	-60.575	57.290	1.00	0.00
C									
ATOM	12621	CZ	TYR	395	25.384	-59.970	58.587	1.00	0.00
C									
ATOM	12622	OH	TYR	395	25.241	-58.578	58.673	1.00	0.00
O									
ATOM	12623	CE2	TYR	395	25.260	-60.776	59.724	1.00	0.00
C									
ATOM	12624	CD2	TYR	395	25.306	-62.162	59.610	1.00	0.00
C									
ATOM	12625	C	TYR	395	24.968	-66.450	56.942	1.00	0.00
C									
ATOM	12626	O	TYR	395	25.334	-66.497	55.782	1.00	0.00
O									

ATOM	12627	N	SER	396	24.861	-67.557	57.737	1.00	0.00
N									
ATOM	12628	CA	SER	396	25.224	-68.918	57.312	1.00	0.00
C									
ATOM	12629	CB	SER	396	25.207	-69.768	58.577	1.00	0.00
C									
ATOM	12630	OG	SER	396	26.099	-69.306	59.571	1.00	0.00
O									
ATOM	12631	C	SER	396	24.262	-69.515	56.323	1.00	0.00
C									
ATOM	12632	O	SER	396	24.633	-70.497	55.714	1.00	0.00
O									
ATOM	12633	N	LEU	397	23.121	-68.892	56.071	1.00	0.00
N									
ATOM	12634	CA	LEU	397	22.360	-69.161	54.860	1.00	0.00
C									
ATOM	12635	CB	LEU	397	20.845	-69.378	55.385	1.00	0.00
C									
ATOM	12636	CG	LEU	397	20.628	-70.550	56.325	1.00	0.00
C									
ATOM	12637	CD1	LEU	397	19.414	-70.259	57.229	1.00	0.00
C									
ATOM	12638	CD2	LEU	397	20.470	-71.901	55.510	1.00	0.00
C									
ATOM	12639	C	LEU	397	22.553	-68.103	53.722	1.00	0.00
C									
ATOM	12640	O	LEU	397	21.694	-68.093	52.843	1.00	0.00
O									
ATOM	12641	N	TYR	398	23.613	-67.220	53.665	1.00	0.00
N									
ATOM	12642	CA	TYR	398	23.823	-66.303	52.590	1.00	0.00
C									
ATOM	12643	CB	TYR	398	23.369	-64.902	53.064	1.00	0.00
C									
ATOM	12644	CG	TYR	398	21.836	-64.567	52.927	1.00	0.00
C									
ATOM	12645	CD1	TYR	398	21.286	-64.605	51.621	1.00	0.00
C									
ATOM	12646	CE1	TYR	398	19.986	-64.243	51.404	1.00	0.00
C									
ATOM	12647	CZ	TYR	398	19.144	-63.917	52.483	1.00	0.00
C									
ATOM	12648	OH	TYR	398	17.827	-63.607	52.260	1.00	0.00
O									
ATOM	12649	CE2	TYR	398	19.648	-63.793	53.800	1.00	0.00
C									
ATOM	12650	CD2	TYR	398	21.007	-64.173	54.034	1.00	0.00
C									
ATOM	12651	C	TYR	398	25.396	-66.300	52.202	1.00	0.00
C									
ATOM	12652	O	TYR	398	25.747	-65.684	51.234	1.00	0.00
O									
ATOM	12653	N	ASP	399	26.250	-67.052	52.938	1.00	0.00
N									



ATOM	12654	CA	ASP	399	27.509	-67.616	52.505	1.00	0.00
C									
ATOM	12655	CB	ASP	399	28.329	-67.778	53.817	1.00	0.00
C									
ATOM	12656	CG	ASP	399	29.729	-68.398	53.594	1.00	0.00
C									
ATOM	12657	OD1	ASP	399	30.012	-69.403	54.220	1.00	0.00
O									
ATOM	12658	OD2	ASP	399	30.507	-67.822	52.791	1.00	0.00
O1-									
ATOM	12659	C	ASP	399	27.296	-68.947	51.814	1.00	0.00
C									
ATOM	12660	O	ASP	399	26.910	-69.923	52.392	1.00	0.00
O									
ATOM	12661	N	ALA	400	27.703	-69.035	50.574	1.00	0.00
N									
ATOM	12662	CA	ALA	400	27.570	-70.233	49.749	1.00	0.00
C									
ATOM	12663	CB	ALA	400	28.012	-69.841	48.297	1.00	0.00
C									
ATOM	12664	C	ALA	400	28.478	-71.306	50.304	1.00	0.00
C									
ATOM	12665	O	ALA	400	28.131	-72.468	50.206	1.00	0.00
O									
ATOM	12666	N	GLU	401	29.622	-70.980	50.921	1.00	0.00
N									
ATOM	12667	CA	GLU	401	30.461	-71.948	51.620	1.00	0.00
C									
ATOM	12668	CB	GLU	401	31.831	-71.335	51.850	1.00	0.00
C									
ATOM	12669	CG	GLU	401	32.874	-72.360	52.198	1.00	0.00
C									
ATOM	12670	CD	GLU	401	34.305	-71.783	52.414	1.00	0.00
C									
ATOM	12671	OE1	GLU	401	34.434	-70.549	52.293	1.00	0.00
O									
ATOM	12672	OE2	GLU	401	35.316	-72.569	52.626	1.00	0.00
O1-									
ATOM	12673	C	GLU	401	29.800	-72.615	52.886	1.00	0.00
C									
ATOM	12674	O	GLU	401	29.955	-73.880	52.960	1.00	0.00
O									
ATOM	12675	N	THR	402	29.110	-71.951	53.784	1.00	0.00
N									
ATOM	12676	CA	THR	402	28.369	-72.524	54.876	1.00	0.00
C									
ATOM	12677	CB	THR	402	28.208	-71.525	56.026	1.00	0.00
C									
ATOM	12678	CG2	THR	402	27.857	-72.210	57.335	1.00	0.00
C									
ATOM	12679	OG1	THR	402	29.392	-70.768	56.266	1.00	0.00
O									
ATOM	12680	C	THR	402	27.056	-73.204	54.448	1.00	0.00
C									

ATOM	12681	O	THR	402	26.585	-74.101	55.165	1.00	0.00
O									
ATOM	12682	N	LEU	403	26.445	-72.813	53.302	1.00	0.00
N									
ATOM	12683	CA	LEU	403	25.279	-73.548	52.715	1.00	0.00
C									
ATOM	12684	CB	LEU	403	24.611	-72.704	51.539	1.00	0.00
C									
ATOM	12685	CG	LEU	403	23.839	-71.594	52.101	1.00	0.00
C									
ATOM	12686	CD1	LEU	403	23.646	-70.477	51.042	1.00	0.00
C									
ATOM	12687	CD2	LEU	403	22.351	-72.161	52.441	1.00	0.00
C									
ATOM	12688	C	LEU	403	25.808	-74.800	52.048	1.00	0.00
C									
ATOM	12689	O	LEU	403	25.245	-75.867	52.249	1.00	0.00
O									
ATOM	12690	N	MET	404	26.950	-74.737	51.321	1.00	0.00
N									
ATOM	12691	CA	MET	404	27.477	-75.992	50.698	1.00	0.00
C									
ATOM	12692	CB	MET	404	28.644	-75.588	49.741	1.00	0.00
C									
ATOM	12693	CG	MET	404	28.149	-75.089	48.385	1.00	0.00
C									
ATOM	12694	SD	MET	404	29.451	-74.866	47.058	1.00	0.00
S									
ATOM	12695	CE	MET	404	30.129	-73.369	47.838	1.00	0.00
C									
ATOM	12696	C	MET	404	27.882	-76.938	51.785	1.00	0.00
C									
ATOM	12697	O	MET	404	27.673	-78.135	51.582	1.00	0.00
O									
ATOM	12698	N	ASP	405	28.350	-76.418	52.937	1.00	0.00
N									
ATOM	12699	CA	ASP	405	28.698	-77.273	54.049	1.00	0.00
C									
ATOM	12700	CB	ASP	405	29.344	-76.379	55.084	1.00	0.00
C									
ATOM	12701	CG	ASP	405	30.105	-77.289	56.153	1.00	0.00
C									
ATOM	12702	OD1	ASP	405	29.762	-77.144	57.308	1.00	0.00
O									
ATOM	12703	OD2	ASP	405	30.948	-78.126	55.856	1.00	0.00
O1-									
ATOM	12704	C	ASP	405	27.529	-78.066	54.599	1.00	0.00
C									
ATOM	12705	O	ASP	405	27.777	-79.176	54.996	1.00	0.00
O									
ATOM	12706	N	ARG	406	26.372	-77.455	54.752	1.00	0.00
N									
ATOM	12707	CA	ARG	406	25.132	-78.077	55.260	1.00	0.00
C									

ATOM	12708	CB	ARG	406	24.083	-76.995	55.649	1.00	0.00
C									
ATOM	12709	CG	ARG	406	23.102	-77.540	56.729	1.00	0.00
C									
ATOM	12710	CD	ARG	406	23.602	-77.691	58.137	1.00	0.00
C									
ATOM	12711	NE	ARG	406	22.564	-78.244	58.977	1.00	0.00
N									
ATOM	12712	CZ	ARG	406	21.560	-77.661	59.617	1.00	0.00
C									
ATOM	12713	NH1	ARG	406	21.279	-76.401	59.572	1.00	0.00
N									
ATOM	12714	NH2	ARG	406	20.650	-78.489	60.146	1.00	0.00
N1+									
ATOM	12715	C	ARG	406	24.637	-79.049	54.230	1.00	0.00
C									
ATOM	12716	O	ARG	406	24.228	-80.151	54.596	1.00	0.00
O									
ATOM	12717	N	ILE	407	24.570	-78.668	52.964	1.00	0.00
N									
ATOM	12718	CA	ILE	407	24.357	-79.559	51.795	1.00	0.00
C									
ATOM	12719	CB	ILE	407	24.603	-78.848	50.409	1.00	0.00
C									
ATOM	12720	CG2	ILE	407	24.723	-79.754	49.203	1.00	0.00
C									
ATOM	12721	CG1	ILE	407	23.475	-77.797	50.334	1.00	0.00
C									
ATOM	12722	CD1	ILE	407	23.650	-76.771	49.191	1.00	0.00
C									
ATOM	12723	C	ILE	407	25.259	-80.809	51.814	1.00	0.00
C									
ATOM	12724	O	ILE	407	24.731	-81.895	51.995	1.00	0.00
O									
ATOM	12725	N	LYS	408	26.554	-80.670	51.822	1.00	0.00
N									
ATOM	12726	CA	LYS	408	27.530	-81.752	52.004	1.00	0.00
C									
ATOM	12727	CB	LYS	408	28.962	-81.168	52.197	1.00	0.00
C									
ATOM	12728	CG	LYS	408	29.598	-80.794	50.796	1.00	0.00
C									
ATOM	12729	CD	LYS	408	30.860	-79.919	51.086	1.00	0.00
C									
ATOM	12730	CE	LYS	408	31.505	-79.540	49.776	1.00	0.00
C									
ATOM	12731	NZ	LYS	408	32.616	-80.380	49.390	1.00	0.00
N1+									
ATOM	12732	C	LYS	408	27.171	-82.599	53.235	1.00	0.00
C									
ATOM	12733	O	LYS	408	27.262	-83.804	53.133	1.00	0.00
O									
ATOM	12734	N	LYS	409	26.765	-82.002	54.317	1.00	0.00
N									

ATOM	12735	CA	LYS	409	26.274	-82.787	55.475	1.00	0.00
C									
ATOM	12736	CB	LYS	409	26.108	-81.836	56.702	1.00	0.00
C									
ATOM	12737	CG	LYS	409	25.989	-82.598	58.021	1.00	0.00
C									
ATOM	12738	CD	LYS	409	26.141	-81.690	59.234	1.00	0.00
C									
ATOM	12739	CE	LYS	409	25.741	-82.338	60.554	1.00	0.00
C									
ATOM	12740	NZ	LYS	409	26.123	-81.534	61.728	1.00	0.00
N1+									
ATOM	12741	C	LYS	409	25.055	-83.703	55.334	1.00	0.00
C									
ATOM	12742	O	LYS	409	25.089	-84.813	55.824	1.00	0.00
O									
ATOM	12743	N	GLN	410	24.021	-83.235	54.700	1.00	0.00
N									
ATOM	12744	CA	GLN	410	22.847	-84.029	54.209	1.00	0.00
C									
ATOM	12745	CB	GLN	410	21.709	-83.098	53.709	1.00	0.00
C									
ATOM	12746	CG	GLN	410	21.229	-82.050	54.756	1.00	0.00
C									
ATOM	12747	CD	GLN	410	19.979	-82.512	55.556	1.00	0.00
C									
ATOM	12748	OE1	GLN	410	19.551	-83.634	55.532	1.00	0.00
O									
ATOM	12749	NE2	GLN	410	19.293	-81.631	56.273	1.00	0.00
N									
ATOM	12750	C	GLN	410	23.253	-85.033	53.142	1.00	0.00
C									
ATOM	12751	O	GLN	410	22.759	-86.123	53.016	1.00	0.00
O									
ATOM	12752	N	LEU	411	24.238	-84.692	52.295	1.00	0.00
N									
ATOM	12753	CA	LEU	411	24.760	-85.690	51.311	1.00	0.00
C									
ATOM	12754	CB	LEU	411	25.637	-84.954	50.266	1.00	0.00
C									
ATOM	12755	CG	LEU	411	24.850	-83.989	49.345	1.00	0.00
C									
ATOM	12756	CD1	LEU	411	25.809	-82.976	48.777	1.00	0.00
C									
ATOM	12757	CD2	LEU	411	24.272	-84.907	48.326	1.00	0.00
C									
ATOM	12758	C	LEU	411	25.616	-86.809	51.880	1.00	0.00
C									
ATOM	12759	O	LEU	411	25.638	-87.877	51.321	1.00	0.00
O									
ATOM	12760	N	ARG	412	26.339	-86.613	52.980	1.00	0.00
N									
ATOM	12761	CA	ARG	412	26.925	-87.652	53.863	1.00	0.00
C									

ATOM	12762	CB	ARG	412	28.014	-87.033	54.767	1.00	0.00
C									
ATOM	12763	CG	ARG	412	29.314	-86.764	54.066	1.00	0.00
C									
ATOM	12764	CD	ARG	412	30.540	-86.502	55.067	1.00	0.00
C									
ATOM	12765	NE	ARG	412	30.174	-85.611	56.175	1.00	0.00
N									
ATOM	12766	CZ	ARG	412	29.914	-84.331	56.160	1.00	0.00
C									
ATOM	12767	NH1	ARG	412	30.148	-83.596	55.124	1.00	0.00
N									
ATOM	12768	NH2	ARG	412	29.424	-83.676	57.173	1.00	0.00
N1+									
ATOM	12769	C	ARG	412	25.906	-88.439	54.742	1.00	0.00
C									
ATOM	12770	O	ARG	412	26.215	-89.505	55.203	1.00	0.00
O									
ATOM	12771	N	GLU	413	24.663	-87.891	54.923	1.00	0.00
N									
ATOM	12772	CA	GLU	413	23.606	-88.780	55.478	1.00	0.00
C									
ATOM	12773	CB	GLU	413	22.352	-87.977	55.684	1.00	0.00
C									
ATOM	12774	CG	GLU	413	21.402	-88.601	56.721	1.00	0.00
C									
ATOM	12775	CD	GLU	413	22.039	-88.831	58.068	1.00	0.00
C									
ATOM	12776	OE1	GLU	413	21.627	-89.702	58.817	1.00	0.00
O									
ATOM	12777	OE2	GLU	413	22.708	-87.864	58.552	1.00	0.00
O1-									
ATOM	12778	C	GLU	413	23.222	-89.884	54.395	1.00	0.00
C									
ATOM	12779	O	GLU	413	22.980	-91.019	54.720	1.00	0.00
O									
ATOM	12780	N	TRP	414	23.310	-89.569	53.065	1.00	0.00
N									
ATOM	12781	CA	TRP	414	23.144	-90.627	52.101	1.00	0.00
C									
ATOM	12782	CB	TRP	414	22.810	-90.036	50.756	1.00	0.00
C									
ATOM	12783	CG	TRP	414	21.774	-88.926	50.667	1.00	0.00
C									
ATOM	12784	CD1	TRP	414	20.786	-88.777	51.560	1.00	0.00
C									
ATOM	12785	NE1	TRP	414	20.110	-87.609	51.284	1.00	0.00
N									
ATOM	12786	CE2	TRP	414	20.431	-87.165	50.002	1.00	0.00
C									
ATOM	12787	CZ2	TRP	414	19.897	-86.164	49.223	1.00	0.00
C									
ATOM	12788	CH2	TRP	414	20.513	-85.856	48.007	1.00	0.00
C									

ATOM	12789	CZ3	TRP	414	21.647	-86.610	47.564	1.00	0.00
C									
ATOM	12790	CE3	TRP	414	22.129	-87.648	48.383	1.00	0.00
C									
ATOM	12791	CD2	TRP	414	21.509	-88.045	49.612	1.00	0.00
C									
ATOM	12792	C	TRP	414	24.459	-91.416	52.054	1.00	0.00
C									
ATOM	12793	O	TRP	414	25.555	-90.893	52.185	1.00	0.00
O									
ATOM	12794	N	ASP	415	24.341	-92.713	51.804	1.00	0.00
N									
ATOM	12795	CA	ASP	415	25.378	-93.644	51.972	1.00	0.00
C									
ATOM	12796	CB	ASP	415	24.888	-95.045	52.447	1.00	0.00
C									
ATOM	12797	CG	ASP	415	25.929	-95.946	53.130	1.00	0.00
C									
ATOM	12798	OD1	ASP	415	26.966	-95.495	53.666	1.00	0.00
O									
ATOM	12799	OD2	ASP	415	25.645	-97.133	53.231	1.00	0.00
O1-									
ATOM	12800	C	ASP	415	26.182	-93.816	50.631	1.00	0.00
C									
ATOM	12801	O	ASP	415	25.662	-93.434	49.555	1.00	0.00
O									
ATOM	12802	N	GLU	416	27.441	-94.287	50.801	1.00	0.00
N									
ATOM	12803	CA	GLU	416	28.365	-94.614	49.699	1.00	0.00
C									
ATOM	12804	CB	GLU	416	28.122	-95.975	49.062	1.00	0.00
C									
ATOM	12805	CG	GLU	416	27.778	-97.144	50.039	1.00	0.00
C									
ATOM	12806	CD	GLU	416	29.107	-97.646	50.731	1.00	0.00
C									
ATOM	12807	OE1	GLU	416	29.229	-98.838	51.025	1.00	0.00
O									
ATOM	12808	OE2	GLU	416	30.034	-96.846	51.025	1.00	0.00
O1-									
ATOM	12809	C	GLU	416	28.634	-93.418	48.726	1.00	0.00
C									
ATOM	12810	O	GLU	416	29.072	-93.506	47.559	1.00	0.00
O									
ATOM	12811	N	ASN	417	28.283	-92.250	49.267	1.00	0.00
N									
ATOM	12812	CA	ASN	417	28.185	-90.979	48.470	1.00	0.00
C									
ATOM	12813	CB	ASN	417	27.104	-90.122	49.145	1.00	0.00
C									
ATOM	12814	CG	ASN	417	26.507	-89.075	48.208	1.00	0.00
C									
ATOM	12815	OD1	ASN	417	26.745	-89.030	46.976	1.00	0.00
O									

ATOM	12816	ND2	ASN	417	25.768	-88.135	48.735	1.00	0.00
N									
ATOM	12817	C	ASN	417	29.520	-90.345	48.233	1.00	0.00
C									
ATOM	12818	O	ASN	417	30.488	-90.704	48.947	1.00	0.00
O									
ATOM	12819	N	LEU	418	29.587	-89.414	47.248	1.00	0.00
N									
ATOM	12820	CA	LEU	418	30.640	-88.519	46.967	1.00	0.00
C									
ATOM	12821	CB	LEU	418	30.649	-87.516	48.119	1.00	0.00
C									
ATOM	12822	CG	LEU	418	29.339	-86.834	48.485	1.00	0.00
C									
ATOM	12823	CD1	LEU	418	29.645	-85.826	49.532	1.00	0.00
C									
ATOM	12824	CD2	LEU	418	28.537	-86.215	47.366	1.00	0.00
C									
ATOM	12825	C	LEU	418	32.027	-89.120	46.668	1.00	0.00
C									
ATOM	12826	O	LEU	418	33.014	-88.418	46.791	1.00	0.00
O									
ATOM	12827	N	LYS	419	32.165	-90.461	46.447	1.00	0.00
N									
ATOM	12828	CA	LYS	419	33.416	-91.160	46.107	1.00	0.00
C									
ATOM	12829	CB	LYS	419	33.308	-92.677	46.379	1.00	0.00
C									
ATOM	12830	CG	LYS	419	32.809	-93.043	47.793	1.00	0.00
C									
ATOM	12831	CD	LYS	419	32.930	-94.581	48.045	1.00	0.00
C									
ATOM	12832	CE	LYS	419	32.134	-95.006	49.304	1.00	0.00
C									
ATOM	12833	NZ	LYS	419	32.249	-96.444	49.627	1.00	0.00
N1+									
ATOM	12834	C	LYS	419	33.958	-90.825	44.682	1.00	0.00
C									
ATOM	12835	O	LYS	419	35.141	-91.015	44.440	1.00	0.00
O									
ATOM	12836	N	ASP	420	33.158	-90.256	43.811	1.00	0.00
N									
ATOM	12837	CA	ASP	420	33.604	-89.430	42.673	1.00	0.00
C									
ATOM	12838	CB	ASP	420	32.466	-89.266	41.622	1.00	0.00
C									
ATOM	12839	CG	ASP	420	32.825	-88.669	40.325	1.00	0.00
C									
ATOM	12840	OD1	ASP	420	31.857	-88.568	39.523	1.00	0.00
O									
ATOM	12841	OD2	ASP	420	34.046	-88.434	40.054	1.00	0.00
O1-									
ATOM	12842	C	ASP	420	34.303	-88.091	42.986	1.00	0.00
C									

ATOM	12843	O	ASP	420	33.874	-86.972	42.652	1.00	0.00
O									
ATOM	12844	N	ASP	421	35.368	-88.189	43.799	1.00	0.00
N									
ATOM	12845	CA	ASP	421	35.991	-86.997	44.428	1.00	0.00
C									
ATOM	12846	CB	ASP	421	36.682	-87.443	45.740	1.00	0.00
C									
ATOM	12847	CG	ASP	421	37.039	-86.249	46.650	1.00	0.00
C									
ATOM	12848	OD1	ASP	421	38.201	-85.999	47.016	1.00	0.00
O									
ATOM	12849	OD2	ASP	421	36.135	-85.516	47.061	1.00	0.00
O1-									
ATOM	12850	C	ASP	421	36.993	-86.449	43.459	1.00	0.00
C									
ATOM	12851	O	ASP	421	37.604	-87.259	42.708	1.00	0.00
O									
ATOM	12852	N	SER	422	37.228	-85.170	43.439	1.00	0.00
N									
ATOM	12853	CA	SER	422	36.366	-84.110	44.090	1.00	0.00
C									
ATOM	12854	CB	SER	422	37.154	-82.822	44.137	1.00	0.00
C									
ATOM	12855	OG	SER	422	37.348	-82.252	42.815	1.00	0.00
O									
ATOM	12856	C	SER	422	35.069	-83.812	43.380	1.00	0.00
C									
ATOM	12857	O	SER	422	34.808	-84.131	42.210	1.00	0.00
O									
ATOM	12858	N	LEU	423	34.148	-83.263	44.215	1.00	0.00
N									
ATOM	12859	CA	LEU	423	33.175	-82.303	43.717	1.00	0.00
C									
ATOM	12860	CB	LEU	423	31.926	-82.325	44.663	1.00	0.00
C									
ATOM	12861	CG	LEU	423	31.199	-83.639	44.379	1.00	0.00
C									
ATOM	12862	CD1	LEU	423	31.471	-84.656	45.442	1.00	0.00
C									
ATOM	12863	CD2	LEU	423	29.749	-83.396	44.335	1.00	0.00
C									
ATOM	12864	C	LEU	423	33.738	-80.883	43.442	1.00	0.00
C									
ATOM	12865	O	LEU	423	34.751	-80.561	44.058	1.00	0.00
O									
ATOM	12866	N	PRO	424	33.154	-80.015	42.599	1.00	0.00
N									
ATOM	12867	CD	PRO	424	31.928	-80.215	41.875	1.00	0.00
C									
ATOM	12868	CG	PRO	424	31.951	-79.308	40.615	1.00	0.00
C									
ATOM	12869	CB	PRO	424	32.750	-78.132	41.167	1.00	0.00
C									



ATOM	12870	CA	PRO	424	33.732	-78.769	42.175	1.00	0.00
C									
ATOM	12871	C	PRO	424	34.068	-77.729	43.245	1.00	0.00
C									
ATOM	12872	O	PRO	424	33.311	-77.501	44.223	1.00	0.00
O									
ATOM	12873	N	SER	425	35.162	-76.948	43.064	1.00	0.00
N									
ATOM	12874	CA	SER	425	35.436	-75.806	43.973	1.00	0.00
C									
ATOM	12875	CB	SER	425	36.870	-75.374	43.647	1.00	0.00
C									
ATOM	12876	OG	SER	425	37.230	-74.413	44.637	1.00	0.00
O									
ATOM	12877	C	SER	425	34.477	-74.636	43.845	1.00	0.00
C									
ATOM	12878	O	SER	425	34.102	-73.965	44.809	1.00	0.00
O									
ATOM	12879	N	ASN	426	34.091	-74.273	42.638	1.00	0.00
N									
ATOM	12880	CA	ASN	426	33.060	-73.230	42.317	1.00	0.00
C									
ATOM	12881	CB	ASN	426	33.084	-73.010	40.786	1.00	0.00
C									
ATOM	12882	CG	ASN	426	32.127	-72.012	40.244	1.00	0.00
C									
ATOM	12883	OD1	ASN	426	31.114	-72.381	39.646	1.00	0.00
O									
ATOM	12884	ND2	ASN	426	32.484	-70.762	40.326	1.00	0.00
N									
ATOM	12885	C	ASN	426	31.665	-73.626	42.700	1.00	0.00
C									
ATOM	12886	O	ASN	426	31.265	-74.763	42.403	1.00	0.00
O									
ATOM	12887	N	PRO	427	30.897	-72.673	43.275	1.00	0.00
N									
ATOM	12888	CD	PRO	427	31.329	-71.449	43.882	1.00	0.00
C									
ATOM	12889	CG	PRO	427	30.071	-70.743	44.390	1.00	0.00
C									
ATOM	12890	CB	PRO	427	29.199	-71.925	44.737	1.00	0.00
C									
ATOM	12891	CA	PRO	427	29.525	-73.027	43.717	1.00	0.00
C									
ATOM	12892	C	PRO	427	28.438	-73.199	42.615	1.00	0.00
C									
ATOM	12893	O	PRO	427	27.457	-73.866	42.964	1.00	0.00
O									
ATOM	12894	N	ILE	428	28.601	-72.717	41.410	1.00	0.00
N									
ATOM	12895	CA	ILE	428	27.739	-72.798	40.251	1.00	0.00
C									
ATOM	12896	CB	ILE	428	28.120	-71.671	39.191	1.00	0.00
C									

ATOM	12897	CG2	ILE	428	27.037	-71.821	38.098	1.00	0.00
C									
ATOM	12898	CG1	ILE	428	28.227	-70.288	39.856	1.00	0.00
C									
ATOM	12899	CD1	ILE	428	28.790	-69.156	38.959	1.00	0.00
C									
ATOM	12900	C	ILE	428	27.795	-74.290	39.767	1.00	0.00
C									
ATOM	12901	O	ILE	428	26.844	-75.069	39.720	1.00	0.00
O									
ATOM	12902	N	ASP	429	29.001	-74.697	39.333	1.00	0.00
N									
ATOM	12903	CA	ASP	429	29.390	-76.059	38.997	1.00	0.00
C									
ATOM	12904	CB	ASP	429	30.916	-76.049	38.733	1.00	0.00
C									
ATOM	12905	CG	ASP	429	31.352	-75.219	37.481	1.00	0.00
C									
ATOM	12906	OD1	ASP	429	30.469	-74.798	36.701	1.00	0.00
O									
ATOM	12907	OD2	ASP	429	32.571	-75.155	37.232	1.00	0.00
O1-									
ATOM	12908	C	ASP	429	29.004	-77.068	40.046	1.00	0.00
C									
ATOM	12909	O	ASP	429	28.490	-78.105	39.748	1.00	0.00
O									
ATOM	12910	N	PHE	430	29.389	-76.758	41.294	1.00	0.00
N									
ATOM	12911	CA	PHE	430	28.943	-77.551	42.432	1.00	0.00
C									
ATOM	12912	CB	PHE	430	29.438	-77.020	43.796	1.00	0.00
C									
ATOM	12913	CG	PHE	430	29.174	-77.921	44.971	1.00	0.00
C									
ATOM	12914	CD1	PHE	430	29.864	-79.123	45.141	1.00	0.00
C									
ATOM	12915	CE1	PHE	430	29.516	-80.046	46.153	1.00	0.00
C									
ATOM	12916	CZ	PHE	430	28.445	-79.660	47.039	1.00	0.00
C									
ATOM	12917	CE2	PHE	430	27.757	-78.432	46.910	1.00	0.00
C									
ATOM	12918	CD2	PHE	430	28.043	-77.637	45.778	1.00	0.00
C									
ATOM	12919	C	PHE	430	27.431	-77.683	42.508	1.00	0.00
C									
ATOM	12920	O	PHE	430	26.947	-78.849	42.590	1.00	0.00
O									
ATOM	12921	N	SER	431	26.659	-76.583	42.525	1.00	0.00
N									
ATOM	12922	CA	SER	431	25.215	-76.582	42.535	1.00	0.00
C									
ATOM	12923	CB	SER	431	24.659	-75.133	42.532	1.00	0.00
C									

ATOM	12924	OG	SER	431	23.300	-75.125	41.922	1.00	0.00
O									
ATOM	12925	C	SER	431	24.612	-77.425	41.378	1.00	0.00
C									
ATOM	12926	O	SER	431	23.778	-78.334	41.661	1.00	0.00
O									
ATOM	12927	N	TYR	432	24.968	-77.138	40.126	1.00	0.00
N									
ATOM	12928	CA	TYR	432	24.540	-77.966	39.000	1.00	0.00
C									
ATOM	12929	CB	TYR	432	24.981	-77.323	37.716	1.00	0.00
C									
ATOM	12930	CG	TYR	432	24.277	-75.978	37.298	1.00	0.00
C									
ATOM	12931	CD1	TYR	432	22.883	-75.711	37.376	1.00	0.00
C									
ATOM	12932	CE1	TYR	432	22.413	-74.479	36.912	1.00	0.00
C									
ATOM	12933	CZ	TYR	432	23.217	-73.594	36.109	1.00	0.00
C									
ATOM	12934	OH	TYR	432	22.740	-72.371	35.737	1.00	0.00
O									
ATOM	12935	CE2	TYR	432	24.557	-73.853	36.016	1.00	0.00
C									
ATOM	12936	CD2	TYR	432	25.057	-75.019	36.630	1.00	0.00
C									
ATOM	12937	C	TYR	432	24.911	-79.489	39.044	1.00	0.00
C									
ATOM	12938	O	TYR	432	23.982	-80.265	38.752	1.00	0.00
O									
ATOM	12939	N	ARG	433	26.091	-79.867	39.553	1.00	0.00
N									
ATOM	12940	CA	ARG	433	26.416	-81.250	39.794	1.00	0.00
C									
ATOM	12941	CB	ARG	433	27.873	-81.488	40.281	1.00	0.00
C									
ATOM	12942	CG	ARG	433	28.141	-82.965	40.444	1.00	0.00
C									
ATOM	12943	CD	ARG	433	29.544	-83.346	40.013	1.00	0.00
C									
ATOM	12944	NE	ARG	433	29.982	-84.585	40.707	1.00	0.00
N									
ATOM	12945	CZ	ARG	433	31.244	-85.021	40.815	1.00	0.00
C									
ATOM	12946	NH1	ARG	433	31.455	-86.097	41.484	1.00	0.00
N									
ATOM	12947	NH2	ARG	433	32.262	-84.297	40.325	1.00	0.00
N1+									
ATOM	12948	C	ARG	433	25.539	-81.934	40.859	1.00	0.00
C									
ATOM	12949	O	ARG	433	24.965	-82.967	40.561	1.00	0.00
O									
ATOM	12950	N	VAL	434	25.426	-81.353	42.033	1.00	0.00
N									

ATOM	12951	CA	VAL	434	24.511	-81.697	43.101	1.00	0.00
C									
ATOM	12952	CB	VAL	434	24.807	-80.850	44.307	1.00	0.00
C									
ATOM	12953	CG1	VAL	434	23.631	-81.102	45.308	1.00	0.00
C									
ATOM	12954	CG2	VAL	434	26.107	-81.264	45.056	1.00	0.00
C									
ATOM	12955	C	VAL	434	22.999	-81.745	42.655	1.00	0.00
C									
ATOM	12956	O	VAL	434	22.287	-82.695	42.919	1.00	0.00
O									
ATOM	12957	N	ALA	435	22.573	-80.799	41.830	1.00	0.00
N									
ATOM	12958	CA	ALA	435	21.223	-80.775	41.276	1.00	0.00
C									
ATOM	12959	CB	ALA	435	21.021	-79.435	40.455	1.00	0.00
C									
ATOM	12960	C	ALA	435	20.816	-82.038	40.441	1.00	0.00
C									
ATOM	12961	O	ALA	435	19.685	-82.608	40.523	1.00	0.00
O									
ATOM	12962	N	ALA	436	21.766	-82.573	39.658	1.00	0.00
N									
ATOM	12963	CA	ALA	436	21.680	-83.798	38.778	1.00	0.00
C									
ATOM	12964	CB	ALA	436	22.987	-83.761	37.901	1.00	0.00
C									
ATOM	12965	C	ALA	436	21.605	-85.045	39.697	1.00	0.00
C									
ATOM	12966	O	ALA	436	21.332	-86.168	39.175	1.00	0.00
O									
ATOM	12967	N	CYS	437	21.872	-84.902	40.989	1.00	0.00
N									
ATOM	12968	CA	CYS	437	21.721	-85.991	41.964	1.00	0.00
C									
ATOM	12969	CB	CYS	437	23.120	-86.479	42.394	1.00	0.00
C									
ATOM	12970	SG	CYS	437	23.320	-87.858	43.643	1.00	0.00
S									
ATOM	12971	C	CYS	437	20.665	-85.660	43.128	1.00	0.00
C									
ATOM	12972	O	CYS	437	20.680	-86.279	44.176	1.00	0.00
O									
ATOM	12973	N	LEU	438	19.784	-84.647	42.929	1.00	0.00
N									
ATOM	12974	CA	LEU	438	18.801	-84.190	43.937	1.00	0.00
C									
ATOM	12975	CB	LEU	438	18.726	-82.620	43.954	1.00	0.00
C									
ATOM	12976	CG	LEU	438	17.696	-81.901	44.855	1.00	0.00
C									
ATOM	12977	CD1	LEU	438	18.092	-82.142	46.332	1.00	0.00
C									

ATOM	12978	CD2	LEU	438	17.880	-80.417	44.637	1.00	0.00
C									
ATOM	12979	C	LEU	438	17.383	-84.732	43.551	1.00	0.00
C									
ATOM	12980	O	LEU	438	16.940	-84.557	42.442	1.00	0.00
O									
ATOM	12981	N	PRO	439	16.670	-85.550	44.447	1.00	0.00
N									
ATOM	12982	CD	PRO	439	17.323	-86.069	45.645	1.00	0.00
C									
ATOM	12983	CG	PRO	439	16.519	-87.306	45.986	1.00	0.00
C									
ATOM	12984	CB	PRO	439	15.100	-86.827	45.636	1.00	0.00
C									
ATOM	12985	CA	PRO	439	15.276	-86.055	44.312	1.00	0.00
C									
ATOM	12986	C	PRO	439	14.175	-84.933	44.210	1.00	0.00
C									
ATOM	12987	O	PRO	439	13.054	-85.150	44.711	1.00	0.00
O									
ATOM	12988	N	ILE	440	14.423	-83.804	43.472	1.00	0.00
N									
ATOM	12989	CA	ILE	440	13.493	-82.547	43.394	1.00	0.00
C									
ATOM	12990	CB	ILE	440	14.301	-81.483	42.689	1.00	0.00
C									
ATOM	12991	CG2	ILE	440	14.453	-81.691	41.157	1.00	0.00
C									
ATOM	12992	CG1	ILE	440	13.651	-80.078	42.960	1.00	0.00
C									
ATOM	12993	CD1	ILE	440	14.235	-78.786	42.384	1.00	0.00
C									
ATOM	12994	C	ILE	440	12.170	-82.934	42.782	1.00	0.00
C									
ATOM	12995	O	ILE	440	12.154	-83.838	41.971	1.00	0.00
O									
ATOM	12996	N	ASP	441	11.069	-82.183	42.967	1.00	0.00
N									
ATOM	12997	CA	ASP	441	10.022	-82.039	41.890	1.00	0.00
C									
ATOM	12998	CB	ASP	441	8.766	-81.425	42.546	1.00	0.00
C									
ATOM	12999	CG	ASP	441	7.469	-81.534	41.779	1.00	0.00
C									
ATOM	13000	OD1	ASP	441	7.456	-81.853	40.571	1.00	0.00
O									
ATOM	13001	OD2	ASP	441	6.434	-81.325	42.382	1.00	0.00
O1-									
ATOM	13002	C	ASP	441	10.424	-81.075	40.732	1.00	0.00
C									
ATOM	13003	O	ASP	441	10.824	-79.919	40.960	1.00	0.00
O									
ATOM	13004	N	ASP	442	10.169	-81.510	39.456	1.00	0.00
N									

ATOM	13005	CA	ASP	442	10.253	-80.556	38.287	1.00	0.00
C									
ATOM	13006	CB	ASP	442	10.001	-81.256	36.942	1.00	0.00
C									
ATOM	13007	CG	ASP	442	11.204	-82.086	36.464	1.00	0.00
C									
ATOM	13008	OD1	ASP	442	11.108	-82.737	35.420	1.00	0.00
O									
ATOM	13009	OD2	ASP	442	12.213	-82.191	37.233	1.00	0.00
O1-									
ATOM	13010	C	ASP	442	9.437	-79.261	38.424	1.00	0.00
C									
ATOM	13011	O	ASP	442	9.837	-78.216	37.946	1.00	0.00
O									
ATOM	13012	N	VAL	443	8.274	-79.262	39.177	1.00	0.00
N									
ATOM	13013	CA	VAL	443	7.486	-78.001	39.490	1.00	0.00
C									
ATOM	13014	CB	VAL	443	6.107	-78.526	40.035	1.00	0.00
C									
ATOM	13015	CG1	VAL	443	5.265	-77.307	40.312	1.00	0.00
C									
ATOM	13016	CG2	VAL	443	5.350	-79.298	38.965	1.00	0.00
C									
ATOM	13017	C	VAL	443	8.271	-77.012	40.386	1.00	0.00
C									
ATOM	13018	O	VAL	443	7.999	-75.793	40.315	1.00	0.00
O									
ATOM	13019	N	LEU	444	9.223	-77.553	41.124	1.00	0.00
N									
ATOM	13020	CA	LEU	444	10.218	-76.732	41.734	1.00	0.00
C									
ATOM	13021	CB	LEU	444	10.380	-77.146	43.218	1.00	0.00
C									
ATOM	13022	CG	LEU	444	11.311	-76.261	43.975	1.00	0.00
C									
ATOM	13023	CD1	LEU	444	11.007	-74.787	44.063	1.00	0.00
C									
ATOM	13024	CD2	LEU	444	11.346	-76.763	45.375	1.00	0.00
C									
ATOM	13025	C	LEU	444	11.414	-76.457	40.811	1.00	0.00
C									
ATOM	13026	O	LEU	444	11.780	-75.297	40.779	1.00	0.00
O									
ATOM	13027	N	ARG	445	11.941	-77.469	40.038	1.00	0.00
N									
ATOM	13028	CA	ARG	445	13.216	-77.354	39.241	1.00	0.00
C									
ATOM	13029	CB	ARG	445	13.444	-78.749	38.560	1.00	0.00
C									
ATOM	13030	CG	ARG	445	14.913	-78.868	37.962	1.00	0.00
C									
ATOM	13031	CD	ARG	445	15.124	-80.259	37.366	1.00	0.00
C									

ATOM	13032	NE	ARG	445	16.039	-81.075	38.151	1.00	0.00
N									
ATOM	13033	CZ	ARG	445	16.460	-82.252	37.960	1.00	0.00
C									
ATOM	13034	NH1	ARG	445	16.426	-82.837	36.813	1.00	0.00
N									
ATOM	13035	NH2	ARG	445	16.964	-82.931	38.971	1.00	0.00
N1+									
ATOM	13036	C	ARG	445	13.163	-76.225	38.169	1.00	0.00
C									
ATOM	13037	O	ARG	445	14.207	-75.569	37.945	1.00	0.00
O									
ATOM	13038	N	ILE	446	12.008	-75.984	37.584	1.00	0.00
N									
ATOM	13039	CA	ILE	446	11.740	-74.839	36.710	1.00	0.00
C									
ATOM	13040	CB	ILE	446	10.214	-74.803	36.305	1.00	0.00
C									
ATOM	13041	CG2	ILE	446	9.381	-74.616	37.614	1.00	0.00
C									
ATOM	13042	CG1	ILE	446	9.739	-73.668	35.371	1.00	0.00
C									
ATOM	13043	CD1	ILE	446	10.448	-73.844	33.934	1.00	0.00
C									
ATOM	13044	C	ILE	446	12.205	-73.493	37.208	1.00	0.00
C									
ATOM	13045	O	ILE	446	12.785	-72.706	36.509	1.00	0.00
O									
ATOM	13046	N	GLN	447	11.940	-73.151	38.455	1.00	0.00
N									
ATOM	13047	CA	GLN	447	12.180	-71.857	39.089	1.00	0.00
C									
ATOM	13048	CB	GLN	447	11.606	-71.916	40.535	1.00	0.00
C									
ATOM	13049	CG	GLN	447	10.109	-72.393	40.517	1.00	0.00
C									
ATOM	13050	CD	GLN	447	9.517	-72.621	41.903	1.00	0.00
C									
ATOM	13051	OE1	GLN	447	9.782	-71.881	42.861	1.00	0.00
O									
ATOM	13052	NE2	GLN	447	8.668	-73.613	42.112	1.00	0.00
N									
ATOM	13053	C	GLN	447	13.691	-71.550	39.100	1.00	0.00
C									
ATOM	13054	O	GLN	447	14.102	-70.461	38.731	1.00	0.00
O									
ATOM	13055	N	LEU	448	14.484	-72.570	39.544	1.00	0.00
N									
ATOM	13056	CA	LEU	448	15.990	-72.603	39.608	1.00	0.00
C									
ATOM	13057	CB	LEU	448	16.357	-73.845	40.502	1.00	0.00
C									
ATOM	13058	CG	LEU	448	15.613	-73.969	41.873	1.00	0.00
C									

ATOM	13059	CD1	LEU	448	16.052	-75.197	42.720	1.00	0.00
C									
ATOM	13060	CD2	LEU	448	15.756	-72.697	42.756	1.00	0.00
C									
ATOM	13061	C	LEU	448	16.735	-72.494	38.255	1.00	0.00
C									
ATOM	13062	O	LEU	448	17.890	-71.974	38.220	1.00	0.00
O									
ATOM	13063	N	LEU	449	16.053	-72.830	37.147	1.00	0.00
N									
ATOM	13064	CA	LEU	449	16.638	-72.703	35.850	1.00	0.00
C									
ATOM	13065	CB	LEU	449	15.888	-73.775	34.978	1.00	0.00
C									
ATOM	13066	CG	LEU	449	16.284	-73.911	33.501	1.00	0.00
C									
ATOM	13067	CD1	LEU	449	15.960	-75.290	32.875	1.00	0.00
C									
ATOM	13068	CD2	LEU	449	15.596	-72.887	32.593	1.00	0.00
C									
ATOM	13069	C	LEU	449	16.550	-71.311	35.299	1.00	0.00
C									
ATOM	13070	O	LEU	449	17.545	-70.908	34.686	1.00	0.00
O									
ATOM	13071	N	LYS	450	15.457	-70.617	35.608	1.00	0.00
N									
ATOM	13072	CA	LYS	450	15.143	-69.254	35.257	1.00	0.00
C									
ATOM	13073	CB	LYS	450	13.634	-68.999	35.575	1.00	0.00
C									
ATOM	13074	CG	LYS	450	12.645	-69.761	34.691	1.00	0.00
C									
ATOM	13075	CD	LYS	450	11.240	-69.783	35.233	1.00	0.00
C									
ATOM	13076	CE	LYS	450	10.536	-68.397	35.152	1.00	0.00
C									
ATOM	13077	NZ	LYS	450	9.480	-68.327	36.205	1.00	0.00
N1+									
ATOM	13078	C	LYS	450	15.978	-68.214	35.944	1.00	0.00
C									
ATOM	13079	O	LYS	450	16.216	-67.154	35.365	1.00	0.00
O									
ATOM	13080	N	ILE	451	16.351	-68.516	37.196	1.00	0.00
N									
ATOM	13081	CA	ILE	451	17.273	-67.793	38.157	1.00	0.00
C									
ATOM	13082	CB	ILE	451	17.189	-68.555	39.479	1.00	0.00
C									
ATOM	13083	CG2	ILE	451	18.423	-68.525	40.374	1.00	0.00
C									
ATOM	13084	CG1	ILE	451	16.025	-68.091	40.312	1.00	0.00
C									
ATOM	13085	CD1	ILE	451	15.525	-68.999	41.416	1.00	0.00
C									



ATOM	13086	C	ILE	451	18.711	-67.787	37.607	1.00	0.00
C									
ATOM	13087	O	ILE	451	19.142	-68.694	36.939	1.00	0.00
O									
ATOM	13088	N	GLY	452	19.449	-66.683	37.739	1.00	0.00
N									
ATOM	13089	CA	GLY	452	20.837	-66.581	37.343	1.00	0.00
C									
ATOM	13090	C	GLY	452	21.836	-66.603	38.487	1.00	0.00
C									
ATOM	13091	O	GLY	452	23.017	-66.732	38.243	1.00	0.00
O									
ATOM	13092	N	SER	453	21.368	-66.493	39.694	1.00	0.00
N									
ATOM	13093	CA	SER	453	22.217	-66.421	40.908	1.00	0.00
C									
ATOM	13094	CB	SER	453	21.800	-65.338	41.869	1.00	0.00
C									
ATOM	13095	OG	SER	453	22.292	-65.518	43.174	1.00	0.00
O									
ATOM	13096	C	SER	453	22.301	-67.767	41.573	1.00	0.00
C									
ATOM	13097	O	SER	453	21.206	-68.294	41.958	1.00	0.00
O									
ATOM	13098	N	ALA	454	23.469	-68.382	41.595	1.00	0.00
N									
ATOM	13099	CA	ALA	454	23.732	-69.640	42.371	1.00	0.00
C									
ATOM	13100	CB	ALA	454	25.112	-70.144	42.038	1.00	0.00
C									
ATOM	13101	C	ALA	454	23.499	-69.479	43.883	1.00	0.00
C									
ATOM	13102	O	ALA	454	23.214	-70.495	44.482	1.00	0.00
O									
ATOM	13103	N	ILE	455	23.485	-68.295	44.490	1.00	0.00
N									
ATOM	13104	CA	ILE	455	23.191	-68.214	45.914	1.00	0.00
C									
ATOM	13105	CB	ILE	455	23.420	-66.758	46.510	1.00	0.00
C									
ATOM	13106	CG2	ILE	455	23.152	-66.626	48.012	1.00	0.00
C									
ATOM	13107	CG1	ILE	455	24.854	-66.262	46.236	1.00	0.00
C									
ATOM	13108	CD1	ILE	455	25.985	-67.245	46.531	1.00	0.00
C									
ATOM	13109	C	ILE	455	21.705	-68.667	46.154	1.00	0.00
C									
ATOM	13110	O	ILE	455	21.428	-69.387	47.147	1.00	0.00
O									
ATOM	13111	N	GLN	456	20.799	-68.209	45.251	1.00	0.00
N									
ATOM	13112	CA	GLN	456	19.384	-68.465	45.356	1.00	0.00
C									

ATOM	13113	CB	GLN	456	18.604	-67.741	44.276	1.00	0.00
C									
ATOM	13114	CG	GLN	456	18.455	-66.233	44.653	1.00	0.00
C									
ATOM	13115	CD	GLN	456	17.569	-65.546	43.638	1.00	0.00
C									
ATOM	13116	OE1	GLN	456	16.473	-65.967	43.358	1.00	0.00
O									
ATOM	13117	NE2	GLN	456	17.897	-64.298	43.235	1.00	0.00
N									
ATOM	13118	C	GLN	456	19.222	-69.971	45.139	1.00	0.00
C									
ATOM	13119	O	GLN	456	18.412	-70.579	45.766	1.00	0.00
O									
ATOM	13120	N	ARG	457	19.928	-70.636	44.144	1.00	0.00
N									
ATOM	13121	CA	ARG	457	19.880	-72.143	44.002	1.00	0.00
C									
ATOM	13122	CB	ARG	457	20.765	-72.582	42.746	1.00	0.00
C									
ATOM	13123	CG	ARG	457	20.198	-72.024	41.529	1.00	0.00
C									
ATOM	13124	CD	ARG	457	21.021	-72.481	40.398	1.00	0.00
C									
ATOM	13125	NE	ARG	457	20.771	-71.678	39.211	1.00	0.00
N									
ATOM	13126	CZ	ARG	457	21.695	-71.011	38.552	1.00	0.00
C									
ATOM	13127	NH1	ARG	457	22.971	-71.170	38.807	1.00	0.00
N									
ATOM	13128	NH2	ARG	457	21.437	-70.228	37.584	1.00	0.00
N1+									
ATOM	13129	C	ARG	457	20.304	-72.785	45.277	1.00	0.00
C									
ATOM	13130	O	ARG	457	19.456	-73.428	45.906	1.00	0.00
O									
ATOM	13131	N	LEU	458	21.490	-72.521	45.861	1.00	0.00
N									
ATOM	13132	CA	LEU	458	22.043	-73.289	46.997	1.00	0.00
C									
ATOM	13133	CB	LEU	458	23.463	-72.758	47.381	1.00	0.00
C									
ATOM	13134	CG	LEU	458	24.455	-73.171	46.266	1.00	0.00
C									
ATOM	13135	CD1	LEU	458	25.728	-72.269	46.427	1.00	0.00
C									
ATOM	13136	CD2	LEU	458	24.985	-74.592	46.484	1.00	0.00
C									
ATOM	13137	C	LEU	458	21.138	-73.274	48.218	1.00	0.00
C									
ATOM	13138	O	LEU	458	20.986	-74.257	48.909	1.00	0.00
O									
ATOM	13139	N	ARG	459	20.512	-72.115	48.451	1.00	0.00
N									

ATOM	13140	CA	ARG	459	19.422	-72.005	49.488	1.00	0.00
C									
ATOM	13141	CB	ARG	459	18.897	-70.509	49.596	1.00	0.00
C									
ATOM	13142	CG	ARG	459	19.879	-69.689	50.305	1.00	0.00
C									
ATOM	13143	CD	ARG	459	19.604	-68.189	50.286	1.00	0.00
C									
ATOM	13144	NE	ARG	459	18.338	-67.680	50.827	1.00	0.00
N									
ATOM	13145	CZ	ARG	459	18.026	-67.309	52.070	1.00	0.00
C									
ATOM	13146	NH1	ARG	459	16.855	-66.877	52.411	1.00	0.00
N									
ATOM	13147	NH2	ARG	459	18.944	-67.378	52.979	1.00	0.00
N1+									
ATOM	13148	C	ARG	459	18.223	-72.921	49.367	1.00	0.00
C									
ATOM	13149	O	ARG	459	17.880	-73.504	50.337	1.00	0.00
O									
ATOM	13150	N	CYX	460	17.667	-72.968	48.182	1.00	0.00
N									
ATOM	13151	CA	CYX	460	16.501	-73.774	47.905	1.00	0.00
C									
ATOM	13152	CB	CYX	460	15.739	-73.165	46.766	1.00	0.00
C									
ATOM	13153	SG	CYX	460	14.068	-73.825	46.350	1.00	0.00
S									
ATOM	13154	C	CYX	460	16.855	-75.269	47.795	1.00	0.00
C									
ATOM	13155	O	CYX	460	16.103	-76.126	48.285	1.00	0.00
O									
ATOM	13156	N	GLU	461	17.980	-75.509	47.145	1.00	0.00
N									
ATOM	13157	CA	GLU	461	18.572	-76.907	47.021	1.00	0.00
C									
ATOM	13158	CB	GLU	461	19.707	-76.750	45.984	1.00	0.00
C									
ATOM	13159	CG	GLU	461	19.183	-76.453	44.564	1.00	0.00
C									
ATOM	13160	CD	GLU	461	20.247	-76.470	43.472	1.00	0.00
C									
ATOM	13161	OE1	GLU	461	21.380	-76.027	43.623	1.00	0.00
O									
ATOM	13162	OE2	GLU	461	19.983	-76.768	42.271	1.00	0.00
O1-									
ATOM	13163	C	GLU	461	18.950	-77.498	48.393	1.00	0.00
C									
ATOM	13164	O	GLU	461	18.755	-78.687	48.614	1.00	0.00
O									
ATOM	13165	N	LEU	462	19.336	-76.682	49.377	1.00	0.00
N									
ATOM	13166	CA	LEU	462	19.371	-77.176	50.800	1.00	0.00
C									

ATOM	13167	CB	LEU	462	19.996	-76.115	51.670	1.00	0.00
C									
ATOM	13168	CG	LEU	462	20.024	-76.390	53.221	1.00	0.00
C									
ATOM	13169	CD1	LEU	462	20.596	-77.716	53.682	1.00	0.00
C									
ATOM	13170	CD2	LEU	462	20.761	-75.323	54.016	1.00	0.00
C									
ATOM	13171	C	LEU	462	17.978	-77.440	51.356	1.00	0.00
C									
ATOM	13172	O	LEU	462	17.790	-78.462	52.041	1.00	0.00
O									
ATOM	13173	N	ASP	463	17.014	-76.630	51.036	1.00	0.00
N									
ATOM	13174	CA	ASP	463	15.645	-76.842	51.520	1.00	0.00
C									
ATOM	13175	CB	ASP	463	14.681	-75.655	51.250	1.00	0.00
C									
ATOM	13176	CG	ASP	463	13.405	-75.695	52.022	1.00	0.00
C									
ATOM	13177	OD1	ASP	463	12.412	-75.333	51.410	1.00	0.00
O									
ATOM	13178	OD2	ASP	463	13.348	-76.193	53.184	1.00	0.00
O1-									
ATOM	13179	C	ASP	463	15.211	-78.261	51.041	1.00	0.00
C									
ATOM	13180	O	ASP	463	14.711	-79.086	51.793	1.00	0.00
O									
ATOM	13181	N	ILE	464	15.300	-78.610	49.793	1.00	0.00
N									
ATOM	13182	CA	ILE	464	14.912	-79.856	49.130	1.00	0.00
C									
ATOM	13183	CB	ILE	464	15.187	-79.683	47.619	1.00	0.00
C									
ATOM	13184	CG2	ILE	464	14.813	-80.990	46.914	1.00	0.00
C									
ATOM	13185	CG1	ILE	464	14.330	-78.544	47.062	1.00	0.00
C									
ATOM	13186	CD1	ILE	464	14.821	-77.985	45.721	1.00	0.00
C									
ATOM	13187	C	ILE	464	15.737	-81.037	49.821	1.00	0.00
C									
ATOM	13188	O	ILE	464	15.254	-82.167	49.817	1.00	0.00
O									
ATOM	13189	N	MET	465	17.024	-80.832	50.227	1.00	0.00
N									
ATOM	13190	CA	MET	465	17.685	-81.792	51.036	1.00	0.00
C									
ATOM	13191	CB	MET	465	19.175	-81.524	51.175	1.00	0.00
C									
ATOM	13192	CG	MET	465	19.869	-81.801	49.824	1.00	0.00
C									
ATOM	13193	SD	MET	465	21.579	-82.408	49.707	1.00	0.00
S									

ATOM	13194	CE	MET	465	21.955	-81.746	48.125	1.00	0.00
C									
ATOM	13195	C	MET	465	17.085	-82.035	52.421	1.00	0.00
C									
ATOM	13196	O	MET	465	17.430	-83.022	53.073	1.00	0.00
O									
ATOM	13197	N	ASN	466	16.208	-81.104	52.860	1.00	0.00
N									
ATOM	13198	CA	ASN	466	15.597	-81.366	54.123	1.00	0.00
C									
ATOM	13199	CB	ASN	466	15.208	-80.057	54.927	1.00	0.00
C									
ATOM	13200	CG	ASN	466	16.367	-79.371	55.611	1.00	0.00
C									
ATOM	13201	OD1	ASN	466	16.567	-79.485	56.783	1.00	0.00
O									
ATOM	13202	ND2	ASN	466	17.152	-78.590	54.874	1.00	0.00
N									
ATOM	13203	C	ASN	466	14.304	-82.103	53.792	1.00	0.00
C									
ATOM	13204	O	ASN	466	13.972	-83.027	54.541	1.00	0.00
O									
ATOM	13205	N	LYS	467	13.549	-81.764	52.736	1.00	0.00
N									
ATOM	13206	CA	LYS	467	12.328	-82.410	52.306	1.00	0.00
C									
ATOM	13207	CB	LYS	467	11.449	-81.606	51.252	1.00	0.00
C									
ATOM	13208	CG	LYS	467	10.961	-80.257	51.752	1.00	0.00
C									
ATOM	13209	CD	LYS	467	9.746	-79.670	51.078	1.00	0.00
C									
ATOM	13210	CE	LYS	467	9.333	-78.325	51.714	1.00	0.00
C									
ATOM	13211	NZ	LYS	467	10.430	-77.302	51.772	1.00	0.00
N1+									
ATOM	13212	C	LYS	467	12.556	-83.871	51.770	1.00	0.00
C									
ATOM	13213	O	LYS	467	11.724	-84.778	51.919	1.00	0.00
O									
ATOM	13214	N	CYS	468	13.846	-84.216	51.462	1.00	0.00
N									
ATOM	13215	CA	CYS	468	14.266	-85.571	51.110	1.00	0.00
C									
ATOM	13216	CB	CYS	468	15.694	-85.558	50.616	1.00	0.00
C									
ATOM	13217	SG	CYS	468	15.835	-85.087	48.901	1.00	0.00
S									
ATOM	13218	C	CYS	468	14.149	-86.507	52.365	1.00	0.00
C									
ATOM	13219	O	CYS	468	13.928	-87.670	52.185	1.00	0.00
O									
ATOM	13220	N	THR	469	14.124	-85.984	53.622	1.00	0.00
N									

ATOM	13221	CA	THR	469	13.775	-86.797	54.804	1.00	0.00
C									
ATOM	13222	CB	THR	469	13.881	-85.880	56.041	1.00	0.00
C									
ATOM	13223	CG2	THR	469	13.664	-86.539	57.436	1.00	0.00
C									
ATOM	13224	OG1	THR	469	15.167	-85.400	56.006	1.00	0.00
O									
ATOM	13225	C	THR	469	12.279	-87.334	54.753	1.00	0.00
C									
ATOM	13226	O	THR	469	11.942	-88.266	55.480	1.00	0.00
O									
ATOM	13227	N	SER	470	11.377	-86.799	53.854	1.00	0.00
N									
ATOM	13228	CA	SER	470	9.985	-87.216	53.696	1.00	0.00
C									
ATOM	13229	CB	SER	470	8.918	-86.457	54.510	1.00	0.00
C									
ATOM	13230	OG	SER	470	9.411	-86.156	55.851	1.00	0.00
O									
ATOM	13231	C	SER	470	9.615	-87.230	52.194	1.00	0.00
C									
ATOM	13232	O	SER	470	8.967	-86.298	51.675	1.00	0.00
O									
ATOM	13233	N	LEU	471	10.086	-88.221	51.421	1.00	0.00
N									
ATOM	13234	CA	LEU	471	9.823	-88.460	50.023	1.00	0.00
C									
ATOM	13235	CB	LEU	471	11.066	-89.112	49.379	1.00	0.00
C									
ATOM	13236	CG	LEU	471	12.150	-88.067	49.224	1.00	0.00
C									
ATOM	13237	CD1	LEU	471	13.574	-88.688	49.109	1.00	0.00
C									
ATOM	13238	CD2	LEU	471	11.871	-87.222	48.024	1.00	0.00
C									
ATOM	13239	C	LEU	471	8.653	-89.399	49.769	1.00	0.00
C									
ATOM	13240	O	LEU	471	8.747	-90.532	50.175	1.00	0.00
O									
ATOM	13241	N	CYS	472	7.591	-88.905	49.127	1.00	0.00
N									
ATOM	13242	CA	CYS	472	6.308	-89.609	49.026	1.00	0.00
C									
ATOM	13243	CB	CYS	472	5.206	-88.517	49.250	1.00	0.00
C									
ATOM	13244	SG	CYS	472	5.190	-87.921	50.950	1.00	0.00
S									
ATOM	13245	C	CYS	472	6.050	-90.177	47.629	1.00	0.00
C									
ATOM	13246	O	CYS	472	6.878	-90.019	46.725	1.00	0.00
O									
ATOM	13247	N	CYM	473	4.844	-90.754	47.496	1.00	0.00
N									

ATOM	13248	CA	CYM	473	4.236	-90.845	46.194	1.00	0.00
C									
ATOM	13249	CB	CYM	473	3.108	-91.997	46.367	1.00	0.00
C									
ATOM	13250	SG	CYM	473	2.056	-91.987	44.955	1.00	0.00
S									
ATOM	13251	C	CYM	473	3.573	-89.450	45.686	1.00	0.00
C									
ATOM	13252	O	CYM	473	2.920	-88.777	46.544	1.00	0.00
O									
ATOM	13253	N	LYS	474	3.717	-89.101	44.406	1.00	0.00
N									
ATOM	13254	CA	LYS	474	3.238	-87.795	43.896	1.00	0.00
C									
ATOM	13255	CB	LYS	474	3.990	-87.430	42.599	1.00	0.00
C									
ATOM	13256	CG	LYS	474	3.753	-85.970	42.129	1.00	0.00
C									
ATOM	13257	CD	LYS	474	4.630	-85.469	40.974	1.00	0.00
C									
ATOM	13258	CE	LYS	474	4.170	-84.166	40.356	1.00	0.00
C									
ATOM	13259	NZ	LYS	474	4.239	-82.930	41.129	1.00	0.00
N1+									
ATOM	13260	C	LYS	474	1.733	-87.638	43.815	1.00	0.00
C									
ATOM	13261	O	LYS	474	1.188	-86.549	44.029	1.00	0.00
O									
ATOM	13262	N	GLN	475	1.096	-88.797	43.516	1.00	0.00
N									
ATOM	13263	CA	GLN	475	-0.362	-88.957	43.399	1.00	0.00
C									
ATOM	13264	CB	GLN	475	-0.631	-90.324	42.815	1.00	0.00
C									
ATOM	13265	CG	GLN	475	-2.022	-90.657	42.391	1.00	0.00
C									
ATOM	13266	CD	GLN	475	-2.485	-90.027	41.101	1.00	0.00
C									
ATOM	13267	OE1	GLN	475	-2.028	-89.060	40.523	1.00	0.00
O									
ATOM	13268	NE2	GLN	475	-3.624	-90.546	40.507	1.00	0.00
N									
ATOM	13269	C	GLN	475	-1.037	-88.879	44.823	1.00	0.00
C									
ATOM	13270	O	GLN	475	-2.044	-88.223	44.935	1.00	0.00
O									
ATOM	13271	N	CYM	476	-0.333	-89.411	45.866	1.00	0.00
N									
ATOM	13272	CA	CYM	476	-0.815	-89.449	47.230	1.00	0.00
C									
ATOM	13273	CB	CYM	476	-0.443	-90.781	47.935	1.00	0.00
C									
ATOM	13274	SG	CYM	476	-0.974	-92.180	46.884	1.00	0.00
S									

ATOM	13275	C	CYM	476	-0.516	-88.169	48.084	1.00	0.00
C									
ATOM	13276	O	CYM	476	-1.406	-87.631	48.649	1.00	0.00
O									
ATOM	13277	N	GLN	477	0.748	-87.871	48.196	1.00	0.00
N									
ATOM	13278	CA	GLN	477	1.350	-86.895	49.143	1.00	0.00
C									
ATOM	13279	CB	GLN	477	0.889	-85.456	48.973	1.00	0.00
C									
ATOM	13280	CG	GLN	477	1.090	-84.904	47.595	1.00	0.00
C									
ATOM	13281	CD	GLN	477	-0.177	-84.592	46.874	1.00	0.00
C									
ATOM	13282	OE1	GLN	477	-1.149	-84.081	47.442	1.00	0.00
O									
ATOM	13283	NE2	GLN	477	-0.334	-84.785	45.570	1.00	0.00
N									
ATOM	13284	C	GLN	477	1.305	-87.241	50.685	1.00	0.00
C									
ATOM	13285	O	GLN	477	1.948	-86.554	51.457	1.00	0.00
O									
ATOM	13286	N	GLU	478	0.457	-88.234	51.099	1.00	0.00
N									
ATOM	13287	CA	GLU	478	0.015	-88.327	52.540	1.00	0.00
C									
ATOM	13288	CB	GLU	478	-1.496	-88.712	52.514	1.00	0.00
C									
ATOM	13289	CG	GLU	478	-1.924	-90.119	51.993	1.00	0.00
C									
ATOM	13290	CD	GLU	478	-3.434	-90.240	52.080	1.00	0.00
C									
ATOM	13291	OE1	GLU	478	-4.149	-89.928	51.084	1.00	0.00
O									
ATOM	13292	OE2	GLU	478	-3.867	-90.710	53.146	1.00	0.00
O1-									
ATOM	13293	C	GLU	478	0.850	-89.170	53.446	1.00	0.00
C									
ATOM	13294	O	GLU	478	0.595	-89.094	54.597	1.00	0.00
O									
ATOM	13295	N	THR	479	1.874	-89.899	52.984	1.00	0.00
N									
ATOM	13296	CA	THR	479	2.852	-90.685	53.812	1.00	0.00
C									
ATOM	13297	CB	THR	479	2.388	-92.069	54.202	1.00	0.00
C									
ATOM	13298	CG2	THR	479	2.610	-93.271	53.178	1.00	0.00
C									
ATOM	13299	OG1	THR	479	3.199	-92.500	55.259	1.00	0.00
O									
ATOM	13300	C	THR	479	4.203	-90.896	53.146	1.00	0.00
C									
ATOM	13301	O	THR	479	4.289	-90.840	51.886	1.00	0.00
O									



ATOM	13302	N	GLU	480	5.278	-91.030	53.939	1.00	0.00
N									
ATOM	13303	CA	GLU	480	6.642	-91.091	53.387	1.00	0.00
C									
ATOM	13304	CB	GLU	480	7.663	-90.512	54.390	1.00	0.00
C									
ATOM	13305	CG	GLU	480	7.980	-91.275	55.697	1.00	0.00
C									
ATOM	13306	CD	GLU	480	6.768	-91.264	56.717	1.00	0.00
C									
ATOM	13307	OE1	GLU	480	6.044	-90.243	56.850	1.00	0.00
O									
ATOM	13308	OE2	GLU	480	6.594	-92.270	57.438	1.00	0.00
O1-									
ATOM	13309	C	GLU	480	7.037	-92.466	52.858	1.00	0.00
C									
ATOM	13310	O	GLU	480	7.047	-93.458	53.535	1.00	0.00
O									
ATOM	13311	N	ILE	481	7.358	-92.520	51.539	1.00	0.00
N									
ATOM	13312	CA	ILE	481	7.845	-93.677	50.757	1.00	0.00
C									
ATOM	13313	CB	ILE	481	7.647	-93.552	49.239	1.00	0.00
C									
ATOM	13314	CG2	ILE	481	8.118	-94.921	48.666	1.00	0.00
C									
ATOM	13315	CG1	ILE	481	6.169	-93.283	48.764	1.00	0.00
C									
ATOM	13316	CD1	ILE	481	5.062	-94.266	49.076	1.00	0.00
C									
ATOM	13317	C	ILE	481	9.252	-94.040	51.184	1.00	0.00
C									
ATOM	13318	O	ILE	481	9.560	-95.166	51.541	1.00	0.00
O									
ATOM	13319	N	THR	482	10.194	-93.070	51.257	1.00	0.00
N									
ATOM	13320	CA	THR	482	11.516	-93.346	51.849	1.00	0.00
C									
ATOM	13321	CB	THR	482	12.470	-93.922	50.729	1.00	0.00
C									
ATOM	13322	CG2	THR	482	12.564	-92.836	49.605	1.00	0.00
C									
ATOM	13323	OG1	THR	482	13.720	-94.238	51.198	1.00	0.00
O									
ATOM	13324	C	THR	482	12.047	-91.991	52.460	1.00	0.00
C									
ATOM	13325	O	THR	482	11.334	-90.950	52.458	1.00	0.00
O									
ATOM	13326	N	THR	483	13.253	-92.115	53.022	1.00	0.00
N									
ATOM	13327	CA	THR	483	13.963	-91.074	53.737	1.00	0.00
C									
ATOM	13328	CB	THR	483	13.559	-91.095	55.223	1.00	0.00
C									

ATOM	13329	CG2	THR	483	14.108	-92.355	56.013	1.00	0.00
C									
ATOM	13330	OG1	THR	483	13.908	-89.854	55.861	1.00	0.00
O									
ATOM	13331	C	THR	483	15.449	-91.133	53.603	1.00	0.00
C									
ATOM	13332	O	THR	483	16.023	-92.129	53.307	1.00	0.00
O									
ATOM	13333	N	LYS	484	16.103	-90.004	53.927	1.00	0.00
N									
ATOM	13334	CA	LYS	484	17.531	-89.785	53.629	1.00	0.00
C									
ATOM	13335	CB	LYS	484	17.765	-88.316	54.016	1.00	0.00
C									
ATOM	13336	CG	LYS	484	17.798	-88.052	55.519	1.00	0.00
C									
ATOM	13337	CD	LYS	484	18.181	-86.605	55.809	1.00	0.00
C									
ATOM	13338	CE	LYS	484	17.887	-86.330	57.224	1.00	0.00
C									
ATOM	13339	NZ	LYS	484	18.436	-85.021	57.597	1.00	0.00
N1+									
ATOM	13340	C	LYS	484	18.481	-90.788	54.333	1.00	0.00
C									
ATOM	13341	O	LYS	484	19.491	-91.108	53.734	1.00	0.00
O									
ATOM	13342	N	ASN	485	18.091	-91.374	55.482	1.00	0.00
N									
ATOM	13343	CA	ASN	485	18.652	-92.492	56.187	1.00	0.00
C									
ATOM	13344	CB	ASN	485	17.829	-92.708	57.506	1.00	0.00
C									
ATOM	13345	CG	ASN	485	17.880	-91.347	58.252	1.00	0.00
C									
ATOM	13346	OD1	ASN	485	17.153	-90.418	57.987	1.00	0.00
O									
ATOM	13347	ND2	ASN	485	18.738	-91.315	59.212	1.00	0.00
N									
ATOM	13348	C	ASN	485	18.701	-93.775	55.307	1.00	0.00
C									
ATOM	13349	O	ASN	485	19.547	-94.636	55.502	1.00	0.00
O									
ATOM	13350	N	GLU	486	17.903	-93.947	54.238	1.00	0.00
N									
ATOM	13351	CA	GLU	486	17.840	-95.126	53.368	1.00	0.00
C									
ATOM	13352	CB	GLU	486	16.453	-95.493	53.150	1.00	0.00
C									
ATOM	13353	CG	GLU	486	15.713	-95.663	54.469	1.00	0.00
C									
ATOM	13354	CD	GLU	486	16.390	-96.669	55.452	1.00	0.00
C									
ATOM	13355	OE1	GLU	486	16.886	-97.735	54.914	1.00	0.00
O									

ATOM	13356	OE2	GLU	486	16.320	-96.413	56.688	1.00	0.00
O1-									
ATOM	13357	C	GLU	486	18.528	-95.041	52.017	1.00	0.00
C									
ATOM	13358	O	GLU	486	18.681	-96.039	51.271	1.00	0.00
O									
ATOM	13359	N	ILE	487	18.842	-93.784	51.620	1.00	0.00
N									
ATOM	13360	CA	ILE	487	19.484	-93.422	50.370	1.00	0.00
C									
ATOM	13361	CB	ILE	487	19.386	-91.929	50.126	1.00	0.00
C									
ATOM	13362	CG2	ILE	487	19.923	-91.644	48.710	1.00	0.00
C									
ATOM	13363	CG1	ILE	487	17.824	-91.540	50.337	1.00	0.00
C									
ATOM	13364	CD1	ILE	487	17.468	-90.119	49.842	1.00	0.00
C									
ATOM	13365	C	ILE	487	20.920	-93.921	50.287	1.00	0.00
C									
ATOM	13366	O	ILE	487	21.624	-93.526	51.176	1.00	0.00
O									
ATOM	13367	N	PHE	488	21.315	-94.550	49.186	1.00	0.00
N									
ATOM	13368	CA	PHE	488	22.680	-95.044	48.954	1.00	0.00
C									
ATOM	13369	CB	PHE	488	22.787	-96.440	49.624	1.00	0.00
C									
ATOM	13370	CG	PHE	488	22.455	-97.658	48.751	1.00	0.00
C									
ATOM	13371	CD1	PHE	488	21.129	-97.975	48.317	1.00	0.00
C									
ATOM	13372	CE1	PHE	488	20.886	-99.088	47.486	1.00	0.00
C									
ATOM	13373	CZ	PHE	488	21.868	-99.890	47.024	1.00	0.00
C									
ATOM	13374	CE2	PHE	488	23.216	-99.612	47.476	1.00	0.00
C									
ATOM	13375	CD2	PHE	488	23.529	-98.462	48.325	1.00	0.00
C									
ATOM	13376	C	PHE	488	23.052	-94.998	47.513	1.00	0.00
C									
ATOM	13377	O	PHE	488	22.209	-95.004	46.607	1.00	0.00
O									
ATOM	13378	N	SER	489	24.332	-94.959	47.289	1.00	0.00
N									
ATOM	13379	CA	SER	489	25.116	-94.943	46.058	1.00	0.00
C									
ATOM	13380	CB	SER	489	26.317	-93.956	46.258	1.00	0.00
C									
ATOM	13381	OG	SER	489	26.039	-92.758	46.944	1.00	0.00
O									
ATOM	13382	C	SER	489	25.575	-96.348	45.603	1.00	0.00
C									

ATOM	13383	O	SER	489	26.675	-96.739	45.826	1.00	0.00
O									
ATOM	13384	N	LEU	490	24.751	-97.062	44.802	1.00	0.00
N									
ATOM	13385	CA	LEU	490	25.239	-98.250	44.000	1.00	0.00
C									
ATOM	13386	CB	LEU	490	24.030	-99.114	43.791	1.00	0.00
C									
ATOM	13387	CG	LEU	490	24.439	-100.528	43.318	1.00	0.00
C									
ATOM	13388	CD1	LEU	490	25.525	-101.210	44.145	1.00	0.00
C									
ATOM	13389	CD2	LEU	490	23.129	-101.343	43.500	1.00	0.00
C									
ATOM	13390	C	LEU	490	25.881	-97.914	42.593	1.00	0.00
C									
ATOM	13391	O	LEU	490	26.431	-98.734	41.949	1.00	0.00
O									
ATOM	13392	N	SER	491	25.750	-96.614	42.155	1.00	0.00
N									
ATOM	13393	CA	SER	491	26.383	-95.971	40.952	1.00	0.00
C									
ATOM	13394	CB	SER	491	25.308	-95.215	40.260	1.00	0.00
C									
ATOM	13395	OG	SER	491	25.834	-94.739	39.063	1.00	0.00
O									
ATOM	13396	C	SER	491	27.433	-94.961	41.429	1.00	0.00
C									
ATOM	13397	O	SER	491	27.146	-94.235	42.397	1.00	0.00
O									
ATOM	13398	N	LEU	492	28.616	-94.903	40.824	1.00	0.00
N									
ATOM	13399	CA	LEU	492	29.727	-94.000	41.104	1.00	0.00
C									
ATOM	13400	CB	LEU	492	30.858	-94.414	40.144	1.00	0.00
C									
ATOM	13401	CG	LEU	492	32.119	-93.502	40.118	1.00	0.00
C									
ATOM	13402	CD1	LEU	492	32.963	-93.579	41.414	1.00	0.00
C									
ATOM	13403	CD2	LEU	492	33.033	-93.790	38.941	1.00	0.00
C									
ATOM	13404	C	LEU	492	29.451	-92.522	41.150	1.00	0.00
C									
ATOM	13405	O	LEU	492	30.099	-91.644	41.714	1.00	0.00
O									
ATOM	13406	N	CYS	493	28.296	-92.126	40.589	1.00	0.00
N									
ATOM	13407	CA	CYS	493	27.846	-90.744	40.627	1.00	0.00
C									
ATOM	13408	CB	CYS	493	26.675	-90.607	39.662	1.00	0.00
C									
ATOM	13409	SG	CYS	493	25.269	-91.769	39.801	1.00	0.00
S									

ATOM	13410	C	CYS	493	27.280	-90.317	42.002	1.00	0.00
C									
ATOM	13411	O	CYS	493	27.168	-89.117	42.290	1.00	0.00
O									
ATOM	13412	N	GLY	494	26.736	-91.260	42.784	1.00	0.00
N									
ATOM	13413	CA	GLY	494	25.897	-91.053	43.895	1.00	0.00
C									
ATOM	13414	C	GLY	494	24.574	-91.715	43.816	1.00	0.00
C									
ATOM	13415	O	GLY	494	24.419	-92.578	42.948	1.00	0.00
O									
ATOM	13416	N	PRO	495	23.657	-91.257	44.724	1.00	0.00
N									
ATOM	13417	CD	PRO	495	23.899	-90.563	46.010	1.00	0.00
C									
ATOM	13418	CG	PRO	495	22.844	-91.202	46.937	1.00	0.00
C									
ATOM	13419	CB	PRO	495	21.667	-91.570	45.998	1.00	0.00
C									
ATOM	13420	CA	PRO	495	22.369	-92.001	44.729	1.00	0.00
C									
ATOM	13421	C	PRO	495	21.474	-91.839	43.563	1.00	0.00
C									
ATOM	13422	O	PRO	495	20.494	-92.555	43.454	1.00	0.00
O									
ATOM	13423	N	MET	496	21.740	-90.796	42.749	1.00	0.00
N									
ATOM	13424	CA	MET	496	20.791	-90.465	41.676	1.00	0.00
C									
ATOM	13425	CB	MET	496	19.841	-89.466	42.356	1.00	0.00
C									
ATOM	13426	CG	MET	496	18.498	-89.483	41.606	1.00	0.00
C									
ATOM	13427	SD	MET	496	17.575	-87.951	41.888	1.00	0.00
S									
ATOM	13428	CE	MET	496	18.153	-86.807	40.558	1.00	0.00
C									
ATOM	13429	C	MET	496	21.326	-89.954	40.343	1.00	0.00
C									
ATOM	13430	O	MET	496	22.198	-89.119	40.344	1.00	0.00
O									
ATOM	13431	N	ALA	497	20.769	-90.396	39.230	1.00	0.00
N									
ATOM	13432	CA	ALA	497	21.149	-90.021	37.927	1.00	0.00
C									
ATOM	13433	CB	ALA	497	22.330	-90.881	37.480	1.00	0.00
C									
ATOM	13434	C	ALA	497	19.996	-90.318	36.936	1.00	0.00
C									
ATOM	13435	O	ALA	497	18.937	-90.891	37.303	1.00	0.00
O									
ATOM	13436	N	ALA	498	20.049	-89.876	35.707	1.00	0.00
N									

ATOM	13437	CA	ALA	498	19.061	-90.213	34.638	1.00	0.00
C									
ATOM	13438	CB	ALA	498	19.158	-89.218	33.436	1.00	0.00
C									
ATOM	13439	C	ALA	498	19.283	-91.665	34.232	1.00	0.00
C									
ATOM	13440	O	ALA	498	20.449	-92.158	34.140	1.00	0.00
O									
ATOM	13441	N	TYR	499	18.207	-92.363	33.924	1.00	0.00
N									
ATOM	13442	CA	TYR	499	18.201	-93.782	33.406	1.00	0.00
C									
ATOM	13443	CB	TYR	499	18.052	-94.762	34.573	1.00	0.00
C									
ATOM	13444	CG	TYR	499	19.204	-94.861	35.547	1.00	0.00
C									
ATOM	13445	CD1	TYR	499	20.086	-95.947	35.490	1.00	0.00
C									
ATOM	13446	CE1	TYR	499	21.038	-96.148	36.492	1.00	0.00
C									
ATOM	13447	CZ	TYR	499	21.118	-95.255	37.553	1.00	0.00
C									
ATOM	13448	OH	TYR	499	21.998	-95.525	38.562	1.00	0.00
O									
ATOM	13449	CE2	TYR	499	20.303	-94.129	37.591	1.00	0.00
C									
ATOM	13450	CD2	TYR	499	19.354	-93.932	36.583	1.00	0.00
C									
ATOM	13451	C	TYR	499	17.087	-94.085	32.378	1.00	0.00
C									
ATOM	13452	O	TYR	499	16.023	-93.600	32.527	1.00	0.00
O									
ATOM	13453	N	VAL	500	17.343	-94.967	31.409	1.00	0.00
N									
ATOM	13454	CA	VAL	500	16.432	-95.134	30.233	1.00	0.00
C									
ATOM	13455	CB	VAL	500	17.099	-94.563	28.959	1.00	0.00
C									
ATOM	13456	CG1	VAL	500	18.229	-95.447	28.424	1.00	0.00
C									
ATOM	13457	CG2	VAL	500	16.079	-94.298	27.851	1.00	0.00
C									
ATOM	13458	C	VAL	500	15.965	-96.641	30.044	1.00	0.00
C									
ATOM	13459	O	VAL	500	16.683	-97.503	30.522	1.00	0.00
O									
ATOM	13460	N	ASN	501	14.760	-96.893	29.589	1.00	0.00
N									
ATOM	13461	CA	ASN	501	14.272	-98.208	29.407	1.00	0.00
C									
ATOM	13462	CB	ASN	501	12.920	-98.359	30.103	1.00	0.00
C									
ATOM	13463	CG	ASN	501	11.699	-98.027	29.270	1.00	0.00
C									

ATOM	13464	OD1	ASN	501	11.707	-97.300	28.284	1.00	0.00
O									
ATOM	13465	ND2	ASN	501	10.556	-98.611	29.758	1.00	0.00
N									
ATOM	13466	C	ASN	501	14.283	-98.524	27.894	1.00	0.00
C									
ATOM	13467	O	ASN	501	14.493	-97.623	27.133	1.00	0.00
O									
ATOM	13468	N	PRO	502	14.019	-99.770	27.391	1.00	0.00
N									
ATOM	13469	CD	PRO	502	13.677	-100.929	28.201	1.00	0.00
C									
ATOM	13470	CG	PRO	502	14.098	-102.112	27.353	1.00	0.00
C									
ATOM	13471	CB	PRO	502	13.793	-101.628	25.948	1.00	0.00
C									
ATOM	13472	CA	PRO	502	14.145	-100.142	26.000	1.00	0.00
C									
ATOM	13473	C	PRO	502	13.246	-99.342	25.008	1.00	0.00
C									
ATOM	13474	O	PRO	502	13.597	-99.254	23.851	1.00	0.00
O									
ATOM	13475	N	HIE	503	12.155	-98.822	25.493	1.00	0.00
N									
ATOM	13476	CA	HIE	503	11.285	-97.922	24.680	1.00	0.00
C									
ATOM	13477	CB	HIE	503	9.814	-98.319	24.894	1.00	0.00
C									
ATOM	13478	CG	HIE	503	9.593	-99.734	24.481	1.00	0.00
C									
ATOM	13479	ND1	HIE	503	9.300	-100.057	23.177	1.00	0.00
N									
ATOM	13480	CE1	HIE	503	9.322	-101.371	23.139	1.00	0.00
C									
ATOM	13481	NE2	HIE	503	9.602	-101.907	24.363	1.00	0.00
N									
ATOM	13482	CD2	HIE	503	9.747	-100.874	25.241	1.00	0.00
C									
ATOM	13483	C	HIE	503	11.478	-96.385	24.786	1.00	0.00
C									
ATOM	13484	O	HIE	503	10.698	-95.589	24.279	1.00	0.00
O									
ATOM	13485	N	GLY	504	12.535	-95.979	25.423	1.00	0.00
N									
ATOM	13486	CA	GLY	504	13.167	-94.656	25.329	1.00	0.00
C									
ATOM	13487	C	GLY	504	12.592	-93.674	26.369	1.00	0.00
C									
ATOM	13488	O	GLY	504	13.115	-92.581	26.430	1.00	0.00
O									
ATOM	13489	N	TYR	505	11.609	-94.093	27.142	1.00	0.00
N									
ATOM	13490	CA	TYR	505	11.240	-93.362	28.412	1.00	0.00
C									

ATOM	13491	CB	TYR	505	10.058	-94.055	29.112	1.00	0.00
C									
ATOM	13492	CG	TYR	505	8.841	-94.188	28.223	1.00	0.00
C									
ATOM	13493	CD1	TYR	505	8.586	-95.389	27.541	1.00	0.00
C									
ATOM	13494	CE1	TYR	505	7.517	-95.488	26.652	1.00	0.00
C									
ATOM	13495	CZ	TYR	505	6.683	-94.393	26.463	1.00	0.00
C									
ATOM	13496	OH	TYR	505	5.630	-94.523	25.602	1.00	0.00
O									
ATOM	13497	CE2	TYR	505	6.907	-93.199	27.145	1.00	0.00
C									
ATOM	13498	CD2	TYR	505	7.989	-93.095	28.020	1.00	0.00
C									
ATOM	13499	C	TYR	505	12.433	-93.214	29.424	1.00	0.00
C									
ATOM	13500	O	TYR	505	12.962	-94.233	29.814	1.00	0.00
O									
ATOM	13501	N	VAL	506	12.807	-92.035	29.716	1.00	0.00
N									
ATOM	13502	CA	VAL	506	13.819	-91.635	30.720	1.00	0.00
C									
ATOM	13503	CB	VAL	506	14.957	-90.952	29.980	1.00	0.00
C									
ATOM	13504	CG1	VAL	506	14.722	-89.568	29.223	1.00	0.00
C									
ATOM	13505	CG2	VAL	506	16.153	-90.626	30.886	1.00	0.00
C									
ATOM	13506	C	VAL	506	13.288	-90.766	31.825	1.00	0.00
C									
ATOM	13507	O	VAL	506	12.350	-90.056	31.573	1.00	0.00
O									
ATOM	13508	N	HIP	507	13.820	-90.911	33.005	1.00	0.00
N									
ATOM	13509	CA	HIP	507	13.678	-90.056	34.182	1.00	0.00
C									
ATOM	13510	CB	HIP	507	12.494	-90.640	34.900	1.00	0.00
C									
ATOM	13511	CG	HIP	507	11.304	-91.089	34.179	1.00	0.00
C									
ATOM	13512	ND1	HIP	507	10.302	-90.287	33.625	1.00	0.00
N1+									
ATOM	13513	CE1	HIP	507	9.276	-91.061	33.239	1.00	0.00
C									
ATOM	13514	NE2	HIP	507	9.570	-92.283	33.583	1.00	0.00
N									
ATOM	13515	CD2	HIP	507	10.826	-92.340	34.091	1.00	0.00
C									
ATOM	13516	C	HIP	507	14.944	-90.175	35.003	1.00	0.00
C									
ATOM	13517	O	HIP	507	15.825	-90.989	34.708	1.00	0.00
O									



ATOM	13518	N	GLU	508	15.020	-89.520	36.091	1.00	0.00
N									
ATOM	13519	CA	GLU	508	15.950	-89.949	37.157	1.00	0.00
C									
ATOM	13520	CB	GLU	508	16.550	-88.739	37.811	1.00	0.00
C									
ATOM	13521	CG	GLU	508	17.444	-87.831	36.915	1.00	0.00
C									
ATOM	13522	CD	GLU	508	16.750	-86.413	36.841	1.00	0.00
C									
ATOM	13523	OE1	GLU	508	17.243	-85.382	37.244	1.00	0.00
O									
ATOM	13524	OE2	GLU	508	15.509	-86.455	36.571	1.00	0.00
O1-									
ATOM	13525	C	GLU	508	15.408	-91.070	38.084	1.00	0.00
C									
ATOM	13526	O	GLU	508	14.311	-90.954	38.588	1.00	0.00
O									
ATOM	13527	N	THR	509	16.286	-92.101	38.229	1.00	0.00
N									
ATOM	13528	CA	THR	509	16.103	-93.096	39.358	1.00	0.00
C									
ATOM	13529	CB	THR	509	16.508	-94.486	38.832	1.00	0.00
C									
ATOM	13530	CG2	THR	509	16.294	-95.628	39.818	1.00	0.00
C									
ATOM	13531	OG1	THR	509	15.765	-94.785	37.654	1.00	0.00
O									
ATOM	13532	C	THR	509	16.971	-92.844	40.600	1.00	0.00
C									
ATOM	13533	O	THR	509	18.147	-92.474	40.478	1.00	0.00
O									
ATOM	13534	N	LEU	510	16.456	-93.059	41.809	1.00	0.00
N									
ATOM	13535	CA	LEU	510	17.123	-92.965	43.153	1.00	0.00
C									
ATOM	13536	CB	LEU	510	16.198	-92.125	44.028	1.00	0.00
C									
ATOM	13537	CG	LEU	510	16.762	-91.879	45.445	1.00	0.00
C									
ATOM	13538	CD1	LEU	510	17.981	-91.015	45.336	1.00	0.00
C									
ATOM	13539	CD2	LEU	510	15.778	-91.192	46.370	1.00	0.00
C									
ATOM	13540	C	LEU	510	17.303	-94.368	43.701	1.00	0.00
C									
ATOM	13541	O	LEU	510	16.321	-95.119	43.764	1.00	0.00
O									
ATOM	13542	N	THR	511	18.492	-94.788	44.090	1.00	0.00
N									
ATOM	13543	CA	THR	511	18.690	-96.058	44.738	1.00	0.00
C									
ATOM	13544	CB	THR	511	20.110	-96.548	44.497	1.00	0.00
C									

ATOM	13545	CG2	THR	511	20.314	-97.286	43.191	1.00	0.00
C									
ATOM	13546	OG1	THR	511	20.976	-95.507	44.338	1.00	0.00
O									
ATOM	13547	C	THR	511	18.479	-95.891	46.278	1.00	0.00
C									
ATOM	13548	O	THR	511	19.040	-94.973	46.915	1.00	0.00
O									
ATOM	13549	N	VAL	512	17.759	-96.866	46.861	1.00	0.00
N									
ATOM	13550	CA	VAL	512	17.529	-96.865	48.307	1.00	0.00
C									
ATOM	13551	CB	VAL	512	16.282	-96.066	48.750	1.00	0.00
C									
ATOM	13552	CG1	VAL	512	16.285	-94.675	48.170	1.00	0.00
C									
ATOM	13553	CG2	VAL	512	14.960	-96.704	48.389	1.00	0.00
C									
ATOM	13554	C	VAL	512	17.436	-98.268	48.868	1.00	0.00
C									
ATOM	13555	O	VAL	512	17.056	-99.190	48.236	1.00	0.00
O									
ATOM	13556	N	TYR	513	17.866	-98.405	50.086	1.00	0.00
N									
ATOM	13557	CA	TYR	513	18.045	-99.620	50.949	1.00	0.00
C									
ATOM	13558	CB	TYR	513	18.983	-99.267	52.204	1.00	0.00
C									
ATOM	13559	CG	TYR	513	20.450	-99.172	51.913	1.00	0.00
C									
ATOM	13560	CD1	TYR	513	21.196	-99.947	50.989	1.00	0.00
C									
ATOM	13561	CE1	TYR	513	22.592	-99.911	50.915	1.00	0.00
C									
ATOM	13562	CZ	TYR	513	23.299	-99.028	51.799	1.00	0.00
C									
ATOM	13563	OH	TYR	513	24.637	-98.900	51.762	1.00	0.00
O									
ATOM	13564	CE2	TYR	513	22.581	-98.250	52.630	1.00	0.00
C									
ATOM	13565	CD2	TYR	513	21.137	-98.246	52.669	1.00	0.00
C									
ATOM	13566	C	TYR	513	16.693	-100.114	51.484	1.00	0.00
C									
ATOM	13567	O	TYR	513	16.373	-101.304	51.313	1.00	0.00
O									
ATOM	13568	N	LYS	514	15.910	-99.243	52.120	1.00	0.00
N									
ATOM	13569	CA	LYS	514	14.454	-99.508	52.394	1.00	0.00
C									
ATOM	13570	CB	LYS	514	14.240	-99.833	53.910	1.00	0.00
C									
ATOM	13571	CG	LYS	514	15.093	-100.898	54.459	1.00	0.00
C									

ATOM	13572	CD	LYS	514	14.668	-101.271	55.923	1.00	0.00
C									
ATOM	13573	CE	LYS	514	14.852	-100.124	56.953	1.00	0.00
C									
ATOM	13574	NZ	LYS	514	16.134	-99.367	56.869	1.00	0.00
N1+									
ATOM	13575	C	LYS	514	13.462	-98.411	51.897	1.00	0.00
C									
ATOM	13576	O	LYS	514	13.789	-97.242	51.790	1.00	0.00
O									
ATOM	13577	N	ALA	515	12.294	-98.963	51.578	1.00	0.00
N									
ATOM	13578	CA	ALA	515	11.168	-98.240	51.232	1.00	0.00
C									
ATOM	13579	CB	ALA	515	11.075	-98.129	49.655	1.00	0.00
C									
ATOM	13580	C	ALA	515	9.930	-98.927	51.830	1.00	0.00
C									
ATOM	13581	O	ALA	515	9.946	-100.106	52.287	1.00	0.00
O									
ATOM	13582	N	CYS	516	8.836	-98.114	52.019	1.00	0.00
N									
ATOM	13583	CA	CYS	516	7.590	-98.482	52.730	1.00	0.00
C									
ATOM	13584	CB	CYS	516	7.635	-98.115	54.203	1.00	0.00
C									
ATOM	13585	SG	CYS	516	6.197	-98.874	55.160	1.00	0.00
S									
ATOM	13586	C	CYS	516	6.352	-97.864	52.034	1.00	0.00
C									
ATOM	13587	O	CYS	516	6.430	-96.863	51.312	1.00	0.00
O									
ATOM	13588	N	ASN	517	5.262	-98.496	52.366	1.00	0.00
N									
ATOM	13589	CA	ASN	517	3.927	-98.339	51.787	1.00	0.00
C									
ATOM	13590	CB	ASN	517	3.556	-96.880	52.175	1.00	0.00
C									
ATOM	13591	CG	ASN	517	3.855	-96.478	53.595	1.00	0.00
C									
ATOM	13592	OD1	ASN	517	3.134	-96.860	54.503	1.00	0.00
O									
ATOM	13593	ND2	ASN	517	4.876	-95.678	53.761	1.00	0.00
N									
ATOM	13594	C	ASN	517	3.705	-98.714	50.302	1.00	0.00
C									
ATOM	13595	O	ASN	517	3.008	-98.046	49.567	1.00	0.00
O									
ATOM	13596	N	LEU	518	4.443	-99.719	49.874	1.00	0.00
N									
ATOM	13597	CA	LEU	518	4.489	-100.186	48.463	1.00	0.00
C									
ATOM	13598	CB	LEU	518	5.942	-100.397	48.055	1.00	0.00
C									

ATOM	13599	CG	LEU	518	6.789	-99.066	48.146	1.00	0.00
C									
ATOM	13600	CD1	LEU	518	8.182	-99.406	47.651	1.00	0.00
C									
ATOM	13601	CD2	LEU	518	6.203	-97.980	47.159	1.00	0.00
C									
ATOM	13602	C	LEU	518	3.860	-101.574	48.293	1.00	0.00
C									
ATOM	13603	O	LEU	518	3.626	-102.255	49.293	1.00	0.00
O									
ATOM	13604	N	ASN	519	3.529	-101.961	47.049	1.00	0.00
N									
ATOM	13605	CA	ASN	519	3.385	-103.269	46.526	1.00	0.00
C									
ATOM	13606	CB	ASN	519	1.899	-103.551	46.132	1.00	0.00
C									
ATOM	13607	CG	ASN	519	0.941	-103.366	47.296	1.00	0.00
C									
ATOM	13608	OD1	ASN	519	1.224	-103.782	48.434	1.00	0.00
O									
ATOM	13609	ND2	ASN	519	-0.225	-102.752	47.124	1.00	0.00
N									
ATOM	13610	C	ASN	519	4.315	-103.550	45.361	1.00	0.00
C									
ATOM	13611	O	ASN	519	4.883	-102.658	44.706	1.00	0.00
O									
ATOM	13612	N	LEU	520	4.488	-104.856	45.001	1.00	0.00
N									
ATOM	13613	CA	LEU	520	5.111	-105.341	43.710	1.00	0.00
C									
ATOM	13614	CB	LEU	520	6.057	-106.533	43.894	1.00	0.00
C									
ATOM	13615	CG	LEU	520	7.194	-106.195	44.895	1.00	0.00
C									
ATOM	13616	CD1	LEU	520	8.338	-107.258	44.999	1.00	0.00
C									
ATOM	13617	CD2	LEU	520	7.961	-104.909	44.586	1.00	0.00
C									
ATOM	13618	C	LEU	520	4.062	-105.639	42.707	1.00	0.00
C									
ATOM	13619	O	LEU	520	2.886	-105.594	43.105	1.00	0.00
O									
ATOM	13620	N	ILE	521	4.526	-105.978	41.509	1.00	0.00
N									
ATOM	13621	CA	ILE	521	3.685	-106.490	40.435	1.00	0.00
C									
ATOM	13622	CB	ILE	521	2.641	-105.430	40.002	1.00	0.00
C									
ATOM	13623	CG2	ILE	521	3.287	-104.187	39.368	1.00	0.00
C									
ATOM	13624	CG1	ILE	521	1.581	-105.966	38.992	1.00	0.00
C									
ATOM	13625	CD1	ILE	521	0.317	-105.019	38.940	1.00	0.00
C									

ATOM	13626	C	ILE	521	4.477-107.195	39.285	1.00	0.00
C								
ATOM	13627	O	ILE	521	5.596-106.813	38.822	1.00	0.00
O								
ATOM	13628	N	GLY	522	3.776-108.248	38.815	1.00	0.00
N								
ATOM	13629	CA	GLY	522	4.220-109.116	37.750	1.00	0.00
C								
ATOM	13630	C	GLY	522	5.458-109.942	38.104	1.00	0.00
C								
ATOM	13631	O	GLY	522	6.157-109.673	39.113	1.00	0.00
O								
ATOM	13632	N	ARG	523	5.731-111.011	37.363	1.00	0.00
N								
ATOM	13633	CA	ARG	523	6.797-111.962	37.627	1.00	0.00
C								
ATOM	13634	CB	ARG	523	6.746-113.223	36.700	1.00	0.00
C								
ATOM	13635	CG	ARG	523	7.236-113.068	35.251	1.00	0.00
C								
ATOM	13636	CD	ARG	523	6.994-114.452	34.486	1.00	0.00
C								
ATOM	13637	NE	ARG	523	7.741-115.585	35.095	1.00	0.00
N								
ATOM	13638	CZ	ARG	523	7.708-116.847	34.757	1.00	0.00
C								
ATOM	13639	NH1	ARG	523	8.560-117.771	35.231	1.00	0.00
N								
ATOM	13640	NH2	ARG	523	6.743-117.222	33.968	1.00	0.00
N1+								
ATOM	13641	C	ARG	523	8.199-111.272	37.601	1.00	0.00
C								
ATOM	13642	O	ARG	523	8.313-110.204	36.945	1.00	0.00
O								
ATOM	13643	N	PRO	524	9.243-111.807	38.262	1.00	0.00
N								
ATOM	13644	CD	PRO	524	9.228-112.761	39.381	1.00	0.00
C								
ATOM	13645	CG	PRO	524	10.317-112.246	40.310	1.00	0.00
C								
ATOM	13646	CB	PRO	524	11.369-111.882	39.276	1.00	0.00
C								
ATOM	13647	CA	PRO	524	10.608-111.240	38.192	1.00	0.00
C								
ATOM	13648	C	PRO	524	11.252-111.539	36.809	1.00	0.00
C								
ATOM	13649	O	PRO	524	10.992-112.633	36.239	1.00	0.00
O								
ATOM	13650	N	SER	525	11.975-110.576	36.261	1.00	0.00
N								
ATOM	13651	CA	SER	525	12.773-110.736	35.030	1.00	0.00
C								
ATOM	13652	CB	SER	525	12.285-109.769	33.957	1.00	0.00
C								

ATOM	13653	OG	SER	525	10.925-110.011	33.623	1.00	0.00
O								
ATOM	13654	C	SER	525	14.275-110.516	35.266	1.00	0.00
C								
ATOM	13655	O	SER	525	14.638-109.856	36.227	1.00	0.00
O								
ATOM	13656	N	THR	526	15.137-110.959	34.340	1.00	0.00
N								
ATOM	13657	CA	THR	526	16.603-110.705	34.326	1.00	0.00
C								
ATOM	13658	CB	THR	526	17.335-112.061	34.300	1.00	0.00
C								
ATOM	13659	CG2	THR	526	18.853-111.946	34.238	1.00	0.00
C								
ATOM	13660	OG1	THR	526	17.032-112.784	35.496	1.00	0.00
O								
ATOM	13661	C	THR	526	17.034-109.809	33.113	1.00	0.00
C								
ATOM	13662	O	THR	526	18.067-109.163	33.190	1.00	0.00
O								
ATOM	13663	N	GLU	527	16.290-109.826	31.987	1.00	0.00
N								
ATOM	13664	CA	GLU	527	16.561-108.934	30.829	1.00	0.00
C								
ATOM	13665	CB	GLU	527	15.515-109.086	29.711	1.00	0.00
C								
ATOM	13666	CG	GLU	527	14.121-108.562	30.057	1.00	0.00
C								
ATOM	13667	CD	GLU	527	13.284-108.451	28.789	1.00	0.00
C								
ATOM	13668	OE1	GLU	527	12.321-109.261	28.701	1.00	0.00
O								
ATOM	13669	OE2	GLU	527	13.632-107.536	27.992	1.00	0.00
O1-								
ATOM	13670	C	GLU	527	16.773-107.392	31.180	1.00	0.00
C								
ATOM	13671	O	GLU	527	15.949-106.782	31.869	1.00	0.00
O								
ATOM	13672	N	HIP	528	17.777-106.716	30.508	1.00	0.00
N								
ATOM	13673	CA	HIP	528	17.849-105.247	30.389	1.00	0.00
C								
ATOM	13674	CB	HIP	528	16.673-104.672	29.586	1.00	0.00
C								
ATOM	13675	CG	HIP	528	16.744-105.004	28.150	1.00	0.00
C								
ATOM	13676	ND1	HIP	528	15.726-105.654	27.471	1.00	0.00
N1+								
ATOM	13677	CE1	HIP	528	16.035-105.785	26.179	1.00	0.00
C								
ATOM	13678	NE2	HIP	528	17.253-105.267	26.019	1.00	0.00
N								
ATOM	13679	CD2	HIP	528	17.706-104.755	27.202	1.00	0.00
C								

ATOM	13680	C	HIP	528	18.009-104.503	31.784	1.00	0.00
C								
ATOM	13681	O	HIP	528	17.690-103.309	31.864	1.00	0.00
O								
ATOM	13682	N	SER	529	18.438-105.082	32.949	1.00	0.00
N								
ATOM	13683	CA	SER	529	18.655-104.387	34.223	1.00	0.00
C								
ATOM	13684	CB	SER	529	19.161-105.380	35.278	1.00	0.00
C								
ATOM	13685	OG	SER	529	19.067-104.802	36.574	1.00	0.00
O								
ATOM	13686	C	SER	529	19.754-103.334	34.098	1.00	0.00
C								
ATOM	13687	O	SER	529	20.678-103.439	33.322	1.00	0.00
O								
ATOM	13688	N	TRP	530	19.575-102.215	34.777	1.00	0.00
N								
ATOM	13689	CA	TRP	530	20.521-101.109	34.965	1.00	0.00
C								
ATOM	13690	CB	TRP	530	19.832 -99.905	35.610	1.00	0.00
C								
ATOM	13691	CG	TRP	530	18.772 -99.302	34.739	1.00	0.00
C								
ATOM	13692	CD1	TRP	530	18.763 -99.269	33.360	1.00	0.00
C								
ATOM	13693	NE1	TRP	530	17.642 -98.624	32.939	1.00	0.00
N								
ATOM	13694	CE2	TRP	530	16.878 -98.258	34.015	1.00	0.00
C								
ATOM	13695	CZ2	TRP	530	15.653 -97.595	34.047	1.00	0.00
C								
ATOM	13696	CH2	TRP	530	15.101 -97.349	35.300	1.00	0.00
C								
ATOM	13697	CZ3	TRP	530	15.732 -97.782	36.465	1.00	0.00
C								
ATOM	13698	CE3	TRP	530	16.967 -98.429	36.416	1.00	0.00
C								
ATOM	13699	CD2	TRP	530	17.559 -98.673	35.162	1.00	0.00
C								
ATOM	13700	C	TRP	530	21.704-101.571	35.811	1.00	0.00
C								
ATOM	13701	O	TRP	530	22.803-101.149	35.462	1.00	0.00
O								
ATOM	13702	N	PHE	531	21.493-102.396	36.817	1.00	0.00
N								
ATOM	13703	CA	PHE	531	22.587-102.890	37.639	1.00	0.00
C								
ATOM	13704	CB	PHE	531	22.253-102.793	39.132	1.00	0.00
C								
ATOM	13705	CG	PHE	531	21.952-101.375	39.556	1.00	0.00
C								
ATOM	13706	CD1	PHE	531	22.985-100.493	39.899	1.00	0.00
C								

ATOM	13707	CE1	PHE	531	22.698	-99.171	40.242	1.00	0.00
C									
ATOM	13708	CZ	PHE	531	21.380	-98.716	40.243	1.00	0.00
C									
ATOM	13709	CE2	PHE	531	20.345	-99.582	39.897	1.00	0.00
C									
ATOM	13710	CD2	PHE	531	20.631	-100.903	39.555	1.00	0.00
C									
ATOM	13711	C	PHE	531	22.819	-104.371	37.208	1.00	0.00
C									
ATOM	13712	O	PHE	531	21.925	-105.162	37.382	1.00	0.00
O									
ATOM	13713	N	PRO	532	24.029	-104.683	36.682	1.00	0.00
N									
ATOM	13714	CD	PRO	532	25.124	-103.794	36.382	1.00	0.00
C									
ATOM	13715	CG	PRO	532	26.283	-104.729	36.007	1.00	0.00
C									
ATOM	13716	CB	PRO	532	25.611	-106.014	35.525	1.00	0.00
C									
ATOM	13717	CA	PRO	532	24.297	-106.095	36.217	1.00	0.00
C									
ATOM	13718	C	PRO	532	24.374	-107.111	37.363	1.00	0.00
C									
ATOM	13719	O	PRO	532	24.883	-106.792	38.443	1.00	0.00
O									
ATOM	13720	N	GLY	533	23.912	-108.327	37.077	1.00	0.00
N									
ATOM	13721	CA	GLY	533	23.929	-109.390	38.075	1.00	0.00
C									
ATOM	13722	C	GLY	533	22.783	-109.359	39.041	1.00	0.00
C									
ATOM	13723	O	GLY	533	22.534	-110.336	39.804	1.00	0.00
O									
ATOM	13724	N	TYR	534	22.048	-108.220	39.052	1.00	0.00
N									
ATOM	13725	CA	TYR	534	20.791	-108.149	39.735	1.00	0.00
C									
ATOM	13726	CB	TYR	534	20.734	-106.672	40.356	1.00	0.00
C									
ATOM	13727	CG	TYR	534	21.509	-106.582	41.628	1.00	0.00
C									
ATOM	13728	CD1	TYR	534	22.825	-106.137	41.578	1.00	0.00
C									
ATOM	13729	CE1	TYR	534	23.564	-105.932	42.750	1.00	0.00
C									
ATOM	13730	CZ	TYR	534	22.993	-106.363	43.949	1.00	0.00
C									
ATOM	13731	OH	TYR	534	23.667	-106.273	45.101	1.00	0.00
O									
ATOM	13732	CE2	TYR	534	21.706	-106.877	43.991	1.00	0.00
C									
ATOM	13733	CD2	TYR	534	20.922	-107.026	42.843	1.00	0.00
C									



ATOM	13734	C	TYR	534	19.657-108.416	38.793	1.00	0.00
C								
ATOM	13735	O	TYR	534	19.603-107.745	37.798	1.00	0.00
O								
ATOM	13736	N	ALA	535	18.785-109.409	39.063	1.00	0.00
N								
ATOM	13737	CA	ALA	535	17.459-109.476	38.443	1.00	0.00
C								
ATOM	13738	CB	ALA	535	16.785-110.812	38.763	1.00	0.00
C								
ATOM	13739	C	ALA	535	16.477-108.420	39.083	1.00	0.00
C								
ATOM	13740	O	ALA	535	16.671-107.809	40.176	1.00	0.00
O								
ATOM	13741	N	TRP	536	15.380-108.112	38.405	1.00	0.00
N								
ATOM	13742	CA	TRP	536	14.370-107.105	38.854	1.00	0.00
C								
ATOM	13743	CB	TRP	536	14.450-105.799	38.044	1.00	0.00
C								
ATOM	13744	CG	TRP	536	14.377-105.975	36.562	1.00	0.00
C								
ATOM	13745	CD1	TRP	536	15.484-106.131	35.756	1.00	0.00
C								
ATOM	13746	NE1	TRP	536	15.071-106.247	34.467	1.00	0.00
N								
ATOM	13747	CE2	TRP	536	13.703-106.177	34.399	1.00	0.00
C								
ATOM	13748	CZ2	TRP	536	12.865-106.239	33.282	1.00	0.00
C								
ATOM	13749	CH2	TRP	536	11.494-106.128	33.493	1.00	0.00
C								
ATOM	13750	CZ3	TRP	536	10.984-105.952	34.776	1.00	0.00
C								
ATOM	13751	CE3	TRP	536	11.838-105.879	35.886	1.00	0.00
C								
ATOM	13752	CD2	TRP	536	13.231-105.999	35.701	1.00	0.00
C								
ATOM	13753	C	TRP	536	12.939-107.594	38.914	1.00	0.00
C								
ATOM	13754	O	TRP	536	12.573-108.676	38.458	1.00	0.00
O								
ATOM	13755	N	THR	537	12.092-106.753	39.591	1.00	0.00
N								
ATOM	13756	CA	THR	537	10.646-106.828	39.629	1.00	0.00
C								
ATOM	13757	CB	THR	537	10.147-107.637	40.844	1.00	0.00
C								
ATOM	13758	CG2	THR	537	8.645-107.899	40.799	1.00	0.00
C								
ATOM	13759	OG1	THR	537	10.765-108.926	40.886	1.00	0.00
O								
ATOM	13760	C	THR	537	10.013-105.372	39.657	1.00	0.00
C								

ATOM	13761	O	THR	537	10.483-104.521	40.375	1.00	0.00
O								
ATOM	13762	N	VAL	538	8.904-105.052	39.038	1.00	0.00
N								
ATOM	13763	CA	VAL	538	8.187-103.708	39.089	1.00	0.00
C								
ATOM	13764	CB	VAL	538	7.186-103.640	37.905	1.00	0.00
C								
ATOM	13765	CG1	VAL	538	6.519-102.271	37.832	1.00	0.00
C								
ATOM	13766	CG2	VAL	538	7.859-103.929	36.562	1.00	0.00
C								
ATOM	13767	C	VAL	538	7.426-103.411	40.365	1.00	0.00
C								
ATOM	13768	O	VAL	538	6.807-104.300	40.964	1.00	0.00
O								
ATOM	13769	N	ALA	539	7.483-102.174	40.838	1.00	0.00
N								
ATOM	13770	CA	ALA	539	6.902-101.685	42.125	1.00	0.00
C								
ATOM	13771	CB	ALA	539	7.948-101.319	43.170	1.00	0.00
C								
ATOM	13772	C	ALA	539	6.014-100.439	41.981	1.00	0.00
C								
ATOM	13773	O	ALA	539	6.433 -99.544	41.257	1.00	0.00
O								
ATOM	13774	N	GLN	540	4.969-100.428	42.823	1.00	0.00
N								
ATOM	13775	CA	GLN	540	3.852 -99.413	42.771	1.00	0.00
C								
ATOM	13776	CB	GLN	540	2.756 -99.890	41.807	1.00	0.00
C								
ATOM	13777	CG	GLN	540	2.265-101.313	42.125	1.00	0.00
C								
ATOM	13778	CD	GLN	540	0.912-101.713	41.490	1.00	0.00
C								
ATOM	13779	OE1	GLN	540	-0.003-102.145	42.080	1.00	0.00
O								
ATOM	13780	NE2	GLN	540	0.738-101.535	40.233	1.00	0.00
N								
ATOM	13781	C	GLN	540	3.345 -99.011	44.129	1.00	0.00
C								
ATOM	13782	O	GLN	540	3.436 -99.901	44.988	1.00	0.00
O								
ATOM	13783	N	CYM	541	2.676 -97.871	44.194	1.00	0.00
N								
ATOM	13784	CA	CYM	541	2.124 -97.412	45.451	1.00	0.00
C								
ATOM	13785	CB	CYM	541	1.602 -96.005	45.045	1.00	0.00
C								
ATOM	13786	SG	CYM	541	1.077 -95.169	46.581	1.00	0.00
S								
ATOM	13787	C	CYM	541	1.082 -98.390	46.009	1.00	0.00
C								

ATOM	13788	O	CYM	541	0.460	-99.197	45.243	1.00	0.00
O									
ATOM	13789	N	LYS	542	0.953	-98.431	47.381	1.00	0.00
N									
ATOM	13790	CA	LYS	542	-0.128	-99.223	48.001	1.00	0.00
C									
ATOM	13791	CB	LYS	542	0.351	-99.708	49.363	1.00	0.00
C									
ATOM	13792	CG	LYS	542	-0.726	-100.521	50.165	1.00	0.00
C									
ATOM	13793	CD	LYS	542	-0.152	-101.212	51.379	1.00	0.00
C									
ATOM	13794	CE	LYS	542	0.801	-102.418	51.171	1.00	0.00
C									
ATOM	13795	NZ	LYS	542	0.133	-103.683	51.060	1.00	0.00
N1+									
ATOM	13796	C	LYS	542	-1.393	-98.346	48.186	1.00	0.00
C									
ATOM	13797	O	LYS	542	-2.487	-98.864	48.023	1.00	0.00
O									
ATOM	13798	N	ILE	543	-1.296	-96.970	48.375	1.00	0.00
N									
ATOM	13799	CA	ILE	543	-2.372	-95.956	48.479	1.00	0.00
C									
ATOM	13800	CB	ILE	543	-1.860	-94.793	49.395	1.00	0.00
C									
ATOM	13801	CG2	ILE	543	-2.818	-93.618	49.548	1.00	0.00
C									
ATOM	13802	CG1	ILE	543	-1.521	-95.303	50.882	1.00	0.00
C									
ATOM	13803	CD1	ILE	543	-0.648	-94.353	51.738	1.00	0.00
C									
ATOM	13804	C	ILE	543	-3.030	-95.499	47.089	1.00	0.00
C									
ATOM	13805	O	ILE	543	-4.187	-95.164	47.089	1.00	0.00
O									
ATOM	13806	N	CYM	544	-2.295	-95.717	45.953	1.00	0.00
N									
ATOM	13807	CA	CYM	544	-2.851	-95.385	44.628	1.00	0.00
C									
ATOM	13808	CB	CYM	544	-2.348	-94.039	44.109	1.00	0.00
C									
ATOM	13809	SG	CYM	544	-0.635	-94.148	43.673	1.00	0.00
S									
ATOM	13810	C	CYM	544	-2.662	-96.479	43.520	1.00	0.00
C									
ATOM	13811	O	CYM	544	-3.333	-96.305	42.517	1.00	0.00
O									
ATOM	13812	N	ALA	545	-1.731	-97.430	43.674	1.00	0.00
N									
ATOM	13813	CA	ALA	545	-1.282	-98.336	42.622	1.00	0.00
C									
ATOM	13814	CB	ALA	545	-2.398	-99.330	42.265	1.00	0.00
C									

ATOM	13815	C	ALA	545	-0.581	-97.680	41.449	1.00	0.00
C									
ATOM	13816	O	ALA	545	-0.351	-98.318	40.398	1.00	0.00
O									
ATOM	13817	N	SER	546	-0.212	-96.382	41.547	1.00	0.00
N									
ATOM	13818	CA	SER	546	0.566	-95.762	40.465	1.00	0.00
C									
ATOM	13819	CB	SER	546	0.557	-94.256	40.530	1.00	0.00
C									
ATOM	13820	OG	SER	546	-0.664	-93.634	40.948	1.00	0.00
O									
ATOM	13821	C	SER	546	2.027	-96.212	40.464	1.00	0.00
C									
ATOM	13822	O	SER	546	2.604	-96.488	41.516	1.00	0.00
O									
ATOM	13823	N	HIE	547	2.681	-96.404	39.294	1.00	0.00
N									
ATOM	13824	CA	HIE	547	4.036	-97.022	39.183	1.00	0.00
C									
ATOM	13825	CB	HIE	547	4.368	-97.131	37.685	1.00	0.00
C									
ATOM	13826	CG	HIE	547	5.771	-97.526	37.420	1.00	0.00
C									
ATOM	13827	ND1	HIE	547	6.682	-96.618	36.938	1.00	0.00
N									
ATOM	13828	CE1	HIE	547	7.813	-97.279	36.860	1.00	0.00
C									
ATOM	13829	NE2	HIE	547	7.672	-98.572	37.273	1.00	0.00
N									
ATOM	13830	CD2	HIE	547	6.367	-98.746	37.627	1.00	0.00
C									
ATOM	13831	C	HIE	547	5.071	-96.105	39.878	1.00	0.00
C									
ATOM	13832	O	HIE	547	5.007	-94.923	39.602	1.00	0.00
O									
ATOM	13833	N	ILE	548	5.975	-96.617	40.672	1.00	0.00
N									
ATOM	13834	CA	ILE	548	6.961	-95.896	41.425	1.00	0.00
C									
ATOM	13835	CB	ILE	548	6.653	-96.045	42.968	1.00	0.00
C									
ATOM	13836	CG2	ILE	548	7.554	-96.958	43.766	1.00	0.00
C									
ATOM	13837	CG1	ILE	548	6.399	-94.617	43.648	1.00	0.00
C									
ATOM	13838	CD1	ILE	548	5.885	-94.616	45.085	1.00	0.00
C									
ATOM	13839	C	ILE	548	8.373	-96.177	41.098	1.00	0.00
C									
ATOM	13840	O	ILE	548	9.305	-95.403	41.389	1.00	0.00
O									
ATOM	13841	N	GLY	549	8.602	-97.317	40.466	1.00	0.00
N									

ATOM	13842	CA	GLY	549	9.928	-97.855	40.170	1.00	0.00
C									
ATOM	13843	C	GLY	549	9.990	-99.368	40.093	1.00	0.00
C									
ATOM	13844	O	GLY	549	9.054	-100.039	39.614	1.00	0.00
O									
ATOM	13845	N	TRP	550	11.076	-99.910	40.529	1.00	0.00
N									
ATOM	13846	CA	TRP	550	11.413	-101.335	40.576	1.00	0.00
C									
ATOM	13847	CB	TRP	550	12.350	-101.661	39.390	1.00	0.00
C									
ATOM	13848	CG	TRP	550	11.799	-101.224	38.055	1.00	0.00
C									
ATOM	13849	CD1	TRP	550	11.109	-102.021	37.168	1.00	0.00
C									
ATOM	13850	NE1	TRP	550	10.693	-101.253	36.115	1.00	0.00
N									
ATOM	13851	CE2	TRP	550	11.110	-99.954	36.272	1.00	0.00
C									
ATOM	13852	CZ2	TRP	550	10.900	-98.832	35.459	1.00	0.00
C									
ATOM	13853	CH2	TRP	550	11.439	-97.617	35.883	1.00	0.00
C									
ATOM	13854	CZ3	TRP	550	12.166	-97.535	37.067	1.00	0.00
C									
ATOM	13855	CE3	TRP	550	12.397	-98.672	37.848	1.00	0.00
C									
ATOM	13856	CD2	TRP	550	11.838	-99.909	37.464	1.00	0.00
C									
ATOM	13857	C	TRP	550	12.057	-101.715	41.906	1.00	0.00
C									
ATOM	13858	O	TRP	550	12.569	-100.835	42.611	1.00	0.00
O									
ATOM	13859	N	LYS	551	11.858	-102.958	42.343	1.00	0.00
N									
ATOM	13860	CA	LYS	551	12.659	-103.570	43.374	1.00	0.00
C									
ATOM	13861	CB	LYS	551	11.793	-104.402	44.332	1.00	0.00
C									
ATOM	13862	CG	LYS	551	12.559	-104.834	45.588	1.00	0.00
C									
ATOM	13863	CD	LYS	551	11.764	-105.821	46.444	1.00	0.00
C									
ATOM	13864	CE	LYS	551	12.575	-106.242	47.663	1.00	0.00
C									
ATOM	13865	NZ	LYS	551	11.870	-107.332	48.377	1.00	0.00
N1+									
ATOM	13866	C	LYS	551	13.644	-104.494	42.629	1.00	0.00
C									
ATOM	13867	O	LYS	551	13.367	-105.075	41.551	1.00	0.00
O									
ATOM	13868	N	PHE	552	14.848	-104.619	43.197	1.00	0.00
N									

ATOM	13869	CA	PHE	552	15.865-105.553	42.610	1.00	0.00
C								
ATOM	13870	CB	PHE	552	17.141-104.753	42.283	1.00	0.00
C								
ATOM	13871	CG	PHE	552	16.956-103.707	41.212	1.00	0.00
C								
ATOM	13872	CD1	PHE	552	16.438-102.438	41.520	1.00	0.00
C								
ATOM	13873	CE1	PHE	552	16.262-101.479	40.522	1.00	0.00
C								
ATOM	13874	CZ	PHE	552	16.599-101.778	39.207	1.00	0.00
C								
ATOM	13875	CE2	PHE	552	17.117-103.032	38.892	1.00	0.00
C								
ATOM	13876	CD2	PHE	552	17.296-103.992	39.887	1.00	0.00
C								
ATOM	13877	C	PHE	552	16.292-106.664	43.623	1.00	0.00
C								
ATOM	13878	O	PHE	552	16.088-106.536	44.823	1.00	0.00
O								
ATOM	13879	N	THR	553	16.748-107.729	43.059	1.00	0.00
N								
ATOM	13880	CA	THR	553	17.150-108.987	43.823	1.00	0.00
C								
ATOM	13881	CB	THR	553	15.938-109.865	43.993	1.00	0.00
C								
ATOM	13882	CG2	THR	553	16.141-111.270	44.558	1.00	0.00
C								
ATOM	13883	OG1	THR	553	14.963-109.266	44.893	1.00	0.00
O								
ATOM	13884	C	THR	553	18.398-109.682	43.180	1.00	0.00
C								
ATOM	13885	O	THR	553	18.522-109.844	41.968	1.00	0.00
O								
ATOM	13886	N	ALA	554	19.319-110.183	44.012	1.00	0.00
N								
ATOM	13887	CA	ALA	554	20.563-110.770	43.567	1.00	0.00
C								
ATOM	13888	CB	ALA	554	21.487-111.066	44.807	1.00	0.00
C								
ATOM	13889	C	ALA	554	20.430-112.137	42.777	1.00	0.00
C								
ATOM	13890	O	ALA	554	19.660-113.018	43.130	1.00	0.00
O								
ATOM	13891	N	THR	555	21.259-112.289	41.706	1.00	0.00
N								
ATOM	13892	CA	THR	555	21.388-113.580	40.977	1.00	0.00
C								
ATOM	13893	CB	THR	555	21.822-113.536	39.503	1.00	0.00
C								
ATOM	13894	CG2	THR	555	20.722-112.838	38.737	1.00	0.00
C								
ATOM	13895	OG1	THR	555	23.036-112.767	39.279	1.00	0.00
O								

ATOM	13896	C	THR	555	22.297-114.619	41.628	1.00	0.00
C								
ATOM	13897	O	THR	555	22.184-115.830	41.382	1.00	0.00
O								
ATOM	13898	N	LYS	556	23.220-114.188	42.489	1.00	0.00
N								
ATOM	13899	CA	LYS	556	24.182-115.120	43.239	1.00	0.00
C								
ATOM	13900	CB	LYS	556	25.462-115.274	42.487	1.00	0.00
C								
ATOM	13901	CG	LYS	556	26.414-114.095	42.261	1.00	0.00
C								
ATOM	13902	CD	LYS	556	27.632-114.571	41.355	1.00	0.00
C								
ATOM	13903	CE	LYS	556	28.608-113.489	41.070	1.00	0.00
C								
ATOM	13904	NZ	LYS	556	27.981-112.319	40.435	1.00	0.00
N1+								
ATOM	13905	C	LYS	556	24.528-114.593	44.657	1.00	0.00
C								
ATOM	13906	O	LYS	556	24.498-113.401	44.975	1.00	0.00
O								
ATOM	13907	N	LYS	557	25.009-115.436	45.558	1.00	0.00
N								
ATOM	13908	CA	LYS	557	24.883-115.315	47.001	1.00	0.00
C								
ATOM	13909	CB	LYS	557	25.294-116.678	47.591	1.00	0.00
C								
ATOM	13910	CG	LYS	557	24.270-117.797	47.351	1.00	0.00
C								
ATOM	13911	CD	LYS	557	24.795-119.217	47.649	1.00	0.00
C								
ATOM	13912	CE	LYS	557	25.068-119.492	49.131	1.00	0.00
C								
ATOM	13913	NZ	LYS	557	23.921-119.229	49.987	1.00	0.00
N1+								
ATOM	13914	C	LYS	557	25.890-114.244	47.488	1.00	0.00
C								
ATOM	13915	O	LYS	557	25.601-113.669	48.492	1.00	0.00
O								
ATOM	13916	N	ASP	558	27.004-114.001	46.870	1.00	0.00
N								
ATOM	13917	CA	ASP	558	28.090-113.089	47.294	1.00	0.00
C								
ATOM	13918	CB	ASP	558	29.346-113.626	46.752	1.00	0.00
C								
ATOM	13919	CG	ASP	558	29.700-115.054	47.186	1.00	0.00
C								
ATOM	13920	OD1	ASP	558	30.047-115.934	46.390	1.00	0.00
O								
ATOM	13921	OD2	ASP	558	29.864-115.234	48.430	1.00	0.00
O1-								
ATOM	13922	C	ASP	558	27.920-111.594	46.959	1.00	0.00
C								

ATOM	13923	O	ASP	558	28.696-110.733	47.304	1.00	0.00
O								
ATOM	13924	N	MET	559	26.751-111.285	46.307	1.00	0.00
N								
ATOM	13925	CA	MET	559	26.306-109.939	45.990	1.00	0.00
C								
ATOM	13926	CB	MET	559	25.252-109.983	44.859	1.00	0.00
C								
ATOM	13927	CG	MET	559	25.736-110.683	43.560	1.00	0.00
C								
ATOM	13928	SD	MET	559	24.862-110.240	41.986	1.00	0.00
S								
ATOM	13929	CE	MET	559	25.554-108.568	41.602	1.00	0.00
C								
ATOM	13930	C	MET	559	25.661-109.241	47.250	1.00	0.00
C								
ATOM	13931	O	MET	559	24.698-109.771	47.832	1.00	0.00
O								
ATOM	13932	N	SER	560	26.124-108.025	47.635	1.00	0.00
N								
ATOM	13933	CA	SER	560	25.471-107.174	48.626	1.00	0.00
C								
ATOM	13934	CB	SER	560	26.344-107.007	49.787	1.00	0.00
C								
ATOM	13935	OG	SER	560	25.839-106.218	50.808	1.00	0.00
O								
ATOM	13936	C	SER	560	25.135-105.771	48.003	1.00	0.00
C								
ATOM	13937	O	SER	560	25.945-105.210	47.240	1.00	0.00
O								
ATOM	13938	N	PRO	561	24.012-105.162	48.442	1.00	0.00
N								
ATOM	13939	CD	PRO	561	23.780-103.831	47.917	1.00	0.00
C								
ATOM	13940	CG	PRO	561	22.364-103.468	48.473	1.00	0.00
C								
ATOM	13941	CB	PRO	561	22.117-104.516	49.576	1.00	0.00
C								
ATOM	13942	CA	PRO	561	22.914-105.725	49.167	1.00	0.00
C								
ATOM	13943	C	PRO	561	22.063-106.624	48.341	1.00	0.00
C								
ATOM	13944	O	PRO	561	21.929-106.436	47.137	1.00	0.00
O								
ATOM	13945	N	GLN	562	21.450-107.624	48.974	1.00	0.00
N								
ATOM	13946	CA	GLN	562	20.714-108.693	48.285	1.00	0.00
C								
ATOM	13947	CB	GLN	562	20.419-109.902	49.171	1.00	0.00
C								
ATOM	13948	CG	GLN	562	21.675-110.755	49.505	1.00	0.00
C								
ATOM	13949	CD	GLN	562	21.880-111.889	48.550	1.00	0.00
C								



ATOM	13950	OE1	GLN	562	21.006-112.737	48.402	1.00	0.00
O								
ATOM	13951	NE2	GLN	562	22.975-111.955	47.866	1.00	0.00
N								
ATOM	13952	C	GLN	562	19.387-108.290	47.640	1.00	0.00
C								
ATOM	13953	O	GLN	562	19.067-108.735	46.554	1.00	0.00
O								
ATOM	13954	N	LYS	563	18.736-107.346	48.359	1.00	0.00
N								
ATOM	13955	CA	LYS	563	17.634-106.520	47.804	1.00	0.00
C								
ATOM	13956	CB	LYS	563	16.284-107.097	48.282	1.00	0.00
C								
ATOM	13957	CG	LYS	563	15.801-108.454	47.689	1.00	0.00
C								
ATOM	13958	CD	LYS	563	16.202-109.683	48.608	1.00	0.00
C								
ATOM	13959	CE	LYS	563	15.630-111.067	48.107	1.00	0.00
C								
ATOM	13960	NZ	LYS	563	15.596-112.137	49.125	1.00	0.00
N1+								
ATOM	13961	C	LYS	563	17.703-105.057	48.156	1.00	0.00
C								
ATOM	13962	O	LYS	563	18.105-104.647	49.257	1.00	0.00
O								
ATOM	13963	N	PHE	564	17.175-104.234	47.267	1.00	0.00
N								
ATOM	13964	CA	PHE	564	17.090-102.809	47.407	1.00	0.00
C								
ATOM	13965	CB	PHE	564	18.475-102.180	47.150	1.00	0.00
C								
ATOM	13966	CG	PHE	564	19.002-102.213	45.680	1.00	0.00
C								
ATOM	13967	CD1	PHE	564	18.810-101.166	44.785	1.00	0.00
C								
ATOM	13968	CE1	PHE	564	19.276-101.275	43.442	1.00	0.00
C								
ATOM	13969	CZ	PHE	564	19.916-102.448	42.985	1.00	0.00
C								
ATOM	13970	CE2	PHE	564	20.110-103.521	43.885	1.00	0.00
C								
ATOM	13971	CD2	PHE	564	19.641-103.384	45.204	1.00	0.00
C								
ATOM	13972	C	PHE	564	16.077-102.328	46.360	1.00	0.00
C								
ATOM	13973	O	PHE	564	15.712-103.020	45.399	1.00	0.00
O								
ATOM	13974	N	TRP	565	15.768-101.023	46.460	1.00	0.00
N								
ATOM	13975	CA	TRP	565	14.823-100.323	45.594	1.00	0.00
C								
ATOM	13976	CB	TRP	565	13.631 -99.739	46.366	1.00	0.00
C								

ATOM	13977	CG	TRP	565	12.772-100.771	46.967	1.00	0.00
C								
ATOM	13978	CD1	TRP	565	11.528-101.045	46.491	1.00	0.00
C								
ATOM	13979	NE1	TRP	565	10.941-101.999	47.278	1.00	0.00
N								
ATOM	13980	CE2	TRP	565	11.720-102.397	48.315	1.00	0.00
C								
ATOM	13981	CZ2	TRP	565	11.506-103.252	49.386	1.00	0.00
C								
ATOM	13982	CH2	TRP	565	12.615-103.500	50.297	1.00	0.00
C								
ATOM	13983	CZ3	TRP	565	13.720-102.660	50.256	1.00	0.00
C								
ATOM	13984	CE3	TRP	565	13.817-101.749	49.219	1.00	0.00
C								
ATOM	13985	CD2	TRP	565	12.875-101.643	48.158	1.00	0.00
C								
ATOM	13986	C	TRP	565	15.528 -99.363	44.702	1.00	0.00
C								
ATOM	13987	O	TRP	565	16.572 -98.748	45.016	1.00	0.00
O								
ATOM	13988	N	GLY	566	15.014 -99.244	43.488	1.00	0.00
N								
ATOM	13989	CA	GLY	566	15.282 -98.155	42.572	1.00	0.00
C								
ATOM	13990	C	GLY	566	13.966 -97.406	42.270	1.00	0.00
C								
ATOM	13991	O	GLY	566	13.078 -97.917	41.587	1.00	0.00
O								
ATOM	13992	N	LEU	567	13.876 -96.187	42.861	1.00	0.00
N								
ATOM	13993	CA	LEU	567	12.646 -95.416	42.733	1.00	0.00
C								
ATOM	13994	CB	LEU	567	12.417 -94.927	44.187	1.00	0.00
C								
ATOM	13995	CG	LEU	567	12.399 -95.914	45.259	1.00	0.00
C								
ATOM	13996	CD1	LEU	567	12.239 -95.072	46.608	1.00	0.00
C								
ATOM	13997	CD2	LEU	567	11.346 -97.018	45.122	1.00	0.00
C								
ATOM	13998	C	LEU	567	12.754 -94.251	41.686	1.00	0.00
C								
ATOM	13999	O	LEU	567	13.889 -93.801	41.503	1.00	0.00
O								
ATOM	14000	N	THR	568	11.682 -93.797	40.959	1.00	0.00
N								
ATOM	14001	CA	THR	568	11.853 -92.737	39.853	1.00	0.00
C								
ATOM	14002	CB	THR	568	11.156 -93.011	38.506	1.00	0.00
C								
ATOM	14003	CG2	THR	568	9.569 -93.128	38.503	1.00	0.00
C								

ATOM	14004	OG1	THR	568	11.473	-91.843	37.709	1.00	0.00
O									
ATOM	14005	C	THR	568	11.463	-91.399	40.445	1.00	0.00
C									
ATOM	14006	O	THR	568	10.360	-91.220	40.952	1.00	0.00
O									
ATOM	14007	N	ARG	569	12.192	-90.339	40.091	1.00	0.00
N									
ATOM	14008	CA	ARG	569	11.947	-88.930	40.408	1.00	0.00
C									
ATOM	14009	CB	ARG	569	13.159	-88.124	39.997	1.00	0.00
C									
ATOM	14010	CG	ARG	569	13.485	-86.958	40.889	1.00	0.00
C									
ATOM	14011	CD	ARG	569	14.627	-86.038	40.461	1.00	0.00
C									
ATOM	14012	NE	ARG	569	14.531	-85.605	39.042	1.00	0.00
N									
ATOM	14013	CZ	ARG	569	13.723	-84.693	38.515	1.00	0.00
C									
ATOM	14014	NH1	ARG	569	13.933	-84.330	37.288	1.00	0.00
N									
ATOM	14015	NH2	ARG	569	12.698	-84.124	39.154	1.00	0.00
N1+									
ATOM	14016	C	ARG	569	10.647	-88.398	39.737	1.00	0.00
C									
ATOM	14017	O	ARG	569	9.996	-87.418	40.173	1.00	0.00
O									
ATOM	14018	N	SER	570	10.214	-89.041	38.710	1.00	0.00
N									
ATOM	14019	CA	SER	570	8.904	-88.835	38.095	1.00	0.00
C									
ATOM	14020	CB	SER	570	8.891	-89.603	36.725	1.00	0.00
C									
ATOM	14021	OG	SER	570	7.577	-89.556	36.184	1.00	0.00
O									
ATOM	14022	C	SER	570	7.729	-89.121	39.115	1.00	0.00
C									
ATOM	14023	O	SER	570	6.665	-88.503	38.945	1.00	0.00
O									
ATOM	14024	N	ALA	571	7.900	-90.018	40.077	1.00	0.00
N									
ATOM	14025	CA	ALA	571	6.778	-90.574	40.851	1.00	0.00
C									
ATOM	14026	CB	ALA	571	6.762	-92.088	40.591	1.00	0.00
C									
ATOM	14027	C	ALA	571	6.913	-90.332	42.313	1.00	0.00
C									
ATOM	14028	O	ALA	571	5.907	-90.077	42.975	1.00	0.00
O									
ATOM	14029	N	LEU	572	8.149	-90.285	42.843	1.00	0.00
N									
ATOM	14030	CA	LEU	572	8.413	-89.766	44.217	1.00	0.00
C									

ATOM	14031	CB	LEU	572	9.923	-89.855	44.517	1.00	0.00
C									
ATOM	14032	CG	LEU	572	10.370	-91.276	44.773	1.00	0.00
C									
ATOM	14033	CD1	LEU	572	11.939	-91.310	44.986	1.00	0.00
C									
ATOM	14034	CD2	LEU	572	9.555	-91.871	45.953	1.00	0.00
C									
ATOM	14035	C	LEU	572	8.007	-88.241	44.387	1.00	0.00
C									
ATOM	14036	O	LEU	572	7.945	-87.478	43.426	1.00	0.00
O									
ATOM	14037	N	LEU	573	7.866	-87.706	45.637	1.00	0.00
N									
ATOM	14038	CA	LEU	573	7.669	-86.270	45.925	1.00	0.00
C									
ATOM	14039	CB	LEU	573	6.136	-86.043	45.796	1.00	0.00
C									
ATOM	14040	CG	LEU	573	5.698	-84.625	46.169	1.00	0.00
C									
ATOM	14041	CD1	LEU	573	5.955	-83.598	45.086	1.00	0.00
C									
ATOM	14042	CD2	LEU	573	4.203	-84.531	46.342	1.00	0.00
C									
ATOM	14043	C	LEU	573	8.259	-85.821	47.273	1.00	0.00
C									
ATOM	14044	O	LEU	573	7.753	-86.257	48.349	1.00	0.00
O									
ATOM	14045	N	PRO	574	9.219	-84.803	47.346	1.00	0.00
N									
ATOM	14046	CD	PRO	574	9.998	-84.371	46.170	1.00	0.00
C									
ATOM	14047	CG	PRO	574	11.198	-83.743	46.740	1.00	0.00
C									
ATOM	14048	CB	PRO	574	10.780	-83.242	48.103	1.00	0.00
C									
ATOM	14049	CA	PRO	574	9.652	-84.226	48.590	1.00	0.00
C									
ATOM	14050	C	PRO	574	8.518	-83.471	49.303	1.00	0.00
C									
ATOM	14051	O	PRO	574	7.832	-82.581	48.709	1.00	0.00
O									
ATOM	14052	N	THR	575	8.277	-83.768	50.595	1.00	0.00
N									
ATOM	14053	CA	THR	575	7.222	-82.978	51.408	1.00	0.00
C									
ATOM	14054	CB	THR	575	6.100	-84.017	51.823	1.00	0.00
C									
ATOM	14055	CG2	THR	575	5.159	-84.530	50.762	1.00	0.00
C									
ATOM	14056	OG1	THR	575	6.660	-85.153	52.510	1.00	0.00
O									
ATOM	14057	C	THR	575	7.712	-82.283	52.684	1.00	0.00
C									

ATOM	14058	O	THR	575	8.878	-82.513	53.102	1.00	0.00
O									
ATOM	14059	N	ILE	576	6.863	-81.529	53.381	1.00	0.00
N									
ATOM	14060	CA	ILE	576	7.280	-80.805	54.626	1.00	0.00
C									
ATOM	14061	CB	ILE	576	6.162	-79.801	54.973	1.00	0.00
C									
ATOM	14062	CG2	ILE	576	6.244	-79.219	56.291	1.00	0.00
C									
ATOM	14063	CG1	ILE	576	6.277	-78.622	53.996	1.00	0.00
C									
ATOM	14064	CD1	ILE	576	5.413	-77.341	54.198	1.00	0.00
C									
ATOM	14065	C	ILE	576	7.629	-81.844	55.663	1.00	0.00
C									
ATOM	14066	O	ILE	576	6.646	-82.566	56.098	1.00	0.00
O									
ATOM	14067	N	PRO	577	8.817	-81.868	56.241	1.00	0.00
N									
ATOM	14068	CD	PRO	577	10.079	-81.287	55.848	1.00	0.00
C									
ATOM	14069	CG	PRO	577	11.105	-81.564	56.964	1.00	0.00
C									
ATOM	14070	CB	PRO	577	10.635	-82.865	57.508	1.00	0.00
C									
ATOM	14071	CA	PRO	577	9.097	-82.862	57.338	1.00	0.00
C									
ATOM	14072	C	PRO	577	8.288	-82.689	58.632	1.00	0.00
C									
ATOM	14073	O	PRO	577	8.152	-81.535	59.093	1.00	0.00
O									
ATOM	14074	N	ASP	578	7.970	-83.845	59.260	1.00	0.00
N									
ATOM	14075	CA	ASP	578	7.507	-83.947	60.657	1.00	0.00
C									
ATOM	14076	CB	ASP	578	6.690	-85.283	60.781	1.00	0.00
C									
ATOM	14077	CG	ASP	578	5.251	-85.081	60.240	1.00	0.00
C									
ATOM	14078	OD1	ASP	578	5.006	-85.424	59.064	1.00	0.00
O									
ATOM	14079	OD2	ASP	578	4.389	-84.344	60.848	1.00	0.00
O1-									
ATOM	14080	C	ASP	578	8.648	-84.009	61.642	1.00	0.00
C									
ATOM	14081	O	ASP	578	8.523	-83.521	62.806	1.00	0.00
O									
ATOM	14082	N	THR	579	9.728	-84.558	61.146	1.00	0.00
N									
ATOM	14083	CA	THR	579	10.983	-84.614	61.956	1.00	0.00
C									
ATOM	14084	CB	THR	579	12.056	-85.261	61.067	1.00	0.00
C									

ATOM	14085	CG2	THR	579	13.434	-85.392	61.709	1.00	0.00
C									
ATOM	14086	OG1	THR	579	11.648	-86.617	60.695	1.00	0.00
O									
ATOM	14087	C	THR	579	11.546	-83.243	62.397	1.00	0.00
C									
ATOM	14088	O	THR	579	11.877	-82.409	61.560	1.00	0.00
O									
ATOM	14089	N	GLU	580	11.697	-83.020	63.646	1.00	0.00
N									
ATOM	14090	CA	GLU	580	12.080	-81.708	64.295	1.00	0.00
C									
ATOM	14091	CB	GLU	580	12.111	-81.861	65.785	1.00	0.00
C									
ATOM	14092	CG	GLU	580	12.538	-80.694	66.684	1.00	0.00
C									
ATOM	14093	CD	GLU	580	11.806	-79.336	66.344	1.00	0.00
C									
ATOM	14094	OE1	GLU	580	10.641	-79.250	65.850	1.00	0.00
O									
ATOM	14095	OE2	GLU	580	12.458	-78.224	66.451	1.00	0.00
O1-									
ATOM	14096	C	GLU	580	13.362	-80.980	63.803	1.00	0.00
C									
ATOM	14097	O	GLU	580	13.296	-79.791	63.409	1.00	0.00
O									
ATOM	14098	N	ASP	581	14.519	-81.658	63.777	1.00	0.00
N									
ATOM	14099	CA	ASP	581	15.766	-81.030	63.310	1.00	0.00
C									
ATOM	14100	CB	ASP	581	17.028	-81.807	63.746	1.00	0.00
C									
ATOM	14101	CG	ASP	581	17.167	-81.972	65.310	1.00	0.00
C									
ATOM	14102	OD1	ASP	581	18.339	-82.238	65.716	1.00	0.00
O									
ATOM	14103	OD2	ASP	581	16.224	-81.844	66.131	1.00	0.00
O1-									
ATOM	14104	C	ASP	581	15.905	-80.569	61.882	1.00	0.00
C									
ATOM	14105	O	ASP	581	16.951	-80.048	61.504	1.00	0.00
O									
ATOM	14106	N	GLU	582	14.836	-80.782	61.091	1.00	0.00
N									
ATOM	14107	CA	GLU	582	14.844	-80.543	59.602	1.00	0.00
C									
ATOM	14108	CB	GLU	582	14.164	-81.693	58.923	1.00	0.00
C									
ATOM	14109	CG	GLU	582	14.754	-83.048	59.204	1.00	0.00
C									
ATOM	14110	CD	GLU	582	16.342	-83.125	59.072	1.00	0.00
C									
ATOM	14111	OE1	GLU	582	16.938	-82.570	58.142	1.00	0.00
O									

ATOM	14112	OE2	GLU	582	16.901	-83.994	59.789	1.00	0.00
O1-									
ATOM	14113	C	GLU	582	14.110	-79.169	59.407	1.00	0.00
C									
ATOM	14114	O	GLU	582	13.297	-78.810	60.297	1.00	0.00
O									
ATOM	14115	N	ILE	583	14.420	-78.465	58.343	1.00	0.00
N									
ATOM	14116	CA	ILE	583	13.851	-77.096	58.038	1.00	0.00
C									
ATOM	14117	CB	ILE	583	14.736	-76.186	57.198	1.00	0.00
C									
ATOM	14118	CG2	ILE	583	13.943	-74.915	56.876	1.00	0.00
C									
ATOM	14119	CG1	ILE	583	15.956	-75.905	58.033	1.00	0.00
C									
ATOM	14120	CD1	ILE	583	17.203	-75.311	57.313	1.00	0.00
C									
ATOM	14121	C	ILE	583	12.407	-77.294	57.475	1.00	0.00
C									
ATOM	14122	O	ILE	583	12.239	-78.107	56.590	1.00	0.00
O									
ATOM	14123	N	SER	584	11.526	-76.422	57.858	1.00	0.00
N									
ATOM	14124	CA	SER	584	10.153	-76.253	57.363	1.00	0.00
C									
ATOM	14125	CB	SER	584	9.149	-77.087	58.171	1.00	0.00
C									
ATOM	14126	OG	SER	584	9.103	-76.597	59.589	1.00	0.00
O									
ATOM	14127	C	SER	584	9.759	-74.761	57.376	1.00	0.00
C									
ATOM	14128	O	SER	584	10.454	-74.037	58.078	1.00	0.00
O									
ATOM	14129	N	PRO	585	8.671	-74.297	56.712	1.00	0.00
N									
ATOM	14130	CD	PRO	585	7.721	-75.030	55.869	1.00	0.00
C									
ATOM	14131	CG	PRO	585	6.886	-73.937	55.195	1.00	0.00
C									
ATOM	14132	CB	PRO	585	7.905	-72.809	55.017	1.00	0.00
C									
ATOM	14133	CA	PRO	585	8.708	-72.918	56.294	1.00	0.00
C									
ATOM	14134	C	PRO	585	8.184	-72.024	57.463	1.00	0.00
C									
ATOM	14135	O	PRO	585	8.535	-70.810	57.527	1.00	0.00
O									
ATOM	14136	N	ASP	586	7.371	-72.553	58.376	1.00	0.00
N									
ATOM	14137	CA	ASP	586	7.127	-71.946	59.705	1.00	0.00
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ATOM	14138	CB	ASP	586	6.010	-72.760	60.325	1.00	0.00
C									

ATOM	14139	CG	ASP	586	6.429	-74.139	60.789	1.00	0.00
C									
ATOM	14140	OD1	ASP	586	7.071	-74.886	59.947	1.00	0.00
O									
ATOM	14141	OD2	ASP	586	5.874	-74.614	61.829	1.00	0.00
O1-									
ATOM	14142	C	ASP	586	8.316	-71.731	60.615	1.00	0.00
C									
ATOM	14143	O	ASP	586	8.128	-71.297	61.733	1.00	0.00
O									
ATOM	14144	N	LYS	587	9.509	-72.218	60.242	1.00	0.00
N									
ATOM	14145	CA	LYS	587	10.702	-71.936	61.025	1.00	0.00
C									
ATOM	14146	CB	LYS	587	11.427	-73.321	61.310	1.00	0.00
C									
ATOM	14147	CG	LYS	587	10.621	-74.335	62.097	1.00	0.00
C									
ATOM	14148	CD	LYS	587	11.363	-75.751	62.175	1.00	0.00
C									
ATOM	14149	CE	LYS	587	10.646	-76.582	63.241	1.00	0.00
C									
ATOM	14150	NZ	LYS	587	11.268	-77.929	63.407	1.00	0.00
N1+									
ATOM	14151	C	LYS	587	11.636	-71.026	60.136	1.00	0.00
C									
ATOM	14152	O	LYS	587	11.945	-69.950	60.560	1.00	0.00
O									
ATOM	14153	N	VAL	588	12.140	-71.489	58.930	1.00	0.00
N									
ATOM	14154	CA	VAL	588	12.732	-70.531	57.945	1.00	0.00
C									
ATOM	14155	CB	VAL	588	14.249	-70.357	58.056	1.00	0.00
C									
ATOM	14156	CG1	VAL	588	14.924	-71.736	57.873	1.00	0.00
C									
ATOM	14157	CG2	VAL	588	14.924	-69.409	57.079	1.00	0.00
C									
ATOM	14158	C	VAL	588	12.273	-70.896	56.523	1.00	0.00
C									
ATOM	14159	O	VAL	588	12.219	-72.111	56.188	1.00	0.00
O									
ATOM	14160	N	ILE	589	12.117	-69.947	55.593	1.00	0.00
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ATOM	14161	CA	ILE	589	11.921	-70.152	54.105	1.00	0.00
C									
ATOM	14162	CB	ILE	589	10.787	-69.251	53.595	1.00	0.00
C									
ATOM	14163	CG2	ILE	589	10.660	-69.278	52.055	1.00	0.00
C									
ATOM	14164	CG1	ILE	589	9.431	-69.607	54.217	1.00	0.00
C									
ATOM	14165	CD1	ILE	589	8.384	-68.520	54.313	1.00	0.00
C									



ATOM	14166	C	ILE	589	13.198	-69.902	53.343	1.00	0.00
C									
ATOM	14167	O	ILE	589	13.947	-68.971	53.655	1.00	0.00
O									
ATOM	14168	N	LEU	590	13.511	-70.787	52.351	1.00	0.00
N									
ATOM	14169	CA	LEU	590	14.748	-70.678	51.509	1.00	0.00
C									
ATOM	14170	CB	LEU	590	15.729	-71.768	51.943	1.00	0.00
C									
ATOM	14171	CG	LEU	590	15.952	-72.066	53.398	1.00	0.00
C									
ATOM	14172	CD1	LEU	590	16.711	-73.283	53.535	1.00	0.00
C									
ATOM	14173	CD2	LEU	590	16.784	-70.951	54.082	1.00	0.00
C									
ATOM	14174	C	LEU	590	14.595	-70.531	50.024	1.00	0.00
C									
ATOM	14175	O	LEU	590	15.556	-70.252	49.245	1.00	0.00
O									
ATOM	14176	N	CYX	591	13.405	-70.876	49.491	1.00	0.00
N									
ATOM	14177	CA	CYX	591	13.047	-70.783	48.079	1.00	0.00
C									
ATOM	14178	CB	CYX	591	12.191	-72.036	47.679	1.00	0.00
C									
ATOM	14179	SG	CYX	591	12.889	-73.644	47.991	1.00	0.00
S									
ATOM	14180	C	CYX	591	12.126	-69.585	47.672	1.00	0.00
C									
ATOM	14181	O	CYX	591	11.309	-69.246	48.496	1.00	0.00
O									
ATOM	14182	N	LEU	592	12.343	-69.028	46.512	1.00	0.00
N									
ATOM	14183	CA	LEU	592	12.065	-67.665	46.084	1.00	0.00
C									
ATOM	14184	CB	LEU	592	13.231	-66.842	46.577	1.00	0.00
C									
ATOM	14185	CG	LEU	592	13.274	-65.290	46.354	1.00	0.00
C									
ATOM	14186	CD1	LEU	592	12.278	-64.670	47.298	1.00	0.00
C									
ATOM	14187	CD2	LEU	592	14.715	-64.734	46.563	1.00	0.00
C									
ATOM	14188	C	LEU	592	11.897	-67.556	44.538	1.00	0.00
C									
ATOM	14189	O	LEU	592	10.794	-67.163	44.112	1.00	0.00
O									
ATOM	14190	OXT	LEU	592	12.794	-68.037	43.752	1.00	0.00
O1-									
HETATM14191		ZN	ZN	593	0.347	-93.341	45.479	1.00	0.00
ZN2+									
HETATM14192		C1	85C	594	10.248	-103.571	28.671	1.00	0.00
C									

HETATM14193	C2	85C	594	11.162-104.648	28.721	1.00	0.00
C							
HETATM14194	C3	85C	594	12.225-104.642	29.625	1.00	0.00
C							
HETATM14195	C4	85C	594	10.359-102.493	29.558	1.00	0.00
C							
HETATM14196	C5	85C	594	11.388-102.536	30.477	1.00	0.00
C							
HETATM14197	C6	85C	594	12.307-103.569	30.482	1.00	0.00
C							
HETATM14198	N1	85C	594	12.878-102.140	32.138	1.00	0.00
N							
HETATM14199	N2	85C	594	15.996-101.407	33.733	1.00	0.00
N							
HETATM14200	S3	85C	594	11.208-105.578	26.198	1.00	0.00
S2+							
HETATM14201	O31	85C	594	10.360-104.499	25.736	1.00	0.00
O1-							
HETATM14202	O32	85C	594	12.631-105.582	25.918	1.00	0.00
O1-							
HETATM14203	O1	85C	594	11.072-100.658	31.889	1.00	0.00
O							
HETATM14204	C7	85C	594	13.290-103.294	31.515	1.00	0.00
C							
HETATM14205	C8	85C	594	11.730-101.631	31.577	1.00	0.00
C							
HETATM14206	C9	85C	594	13.586-101.551	33.270	1.00	0.00
C							
HETATM14207	C10	85C	594	13.609-102.495	34.464	1.00	0.00
C							
HETATM14208	C11	85C	594	14.459-101.901	35.565	1.00	0.00
C							
HETATM14209	C12	85C	594	15.869-101.745	35.071	1.00	0.00
C							
HETATM14210	C13	85C	594	14.993-101.208	32.797	1.00	0.00
C							
HETATM14211	N14	85C	594	10.994-105.800	27.883	1.00	0.00
N							
HETATM14212	O2	85C	594	15.223-100.756	31.676	1.00	0.00
O							
HETATM14213	O3	85C	594	16.834-101.848	35.824	1.00	0.00
O							
HETATM14214	C	85C	594	9.227-109.262	24.394	1.00	0.00
C							
HETATM14215	C14	85C	594	10.017-108.435	23.599	1.00	0.00
C							
HETATM14216	C15	85C	594	10.710-107.363	24.168	1.00	0.00
C							
HETATM14217	O16	85C	594	11.512-106.548	23.425	1.00	0.00
O							
HETATM14218	C17	85C	594	10.517-107.068	25.520	1.00	0.00
C							
HETATM14219	C18	85C	594	9.728-107.902	26.318	1.00	0.00
C							

HETATM14220	C19	85C	594	9.098-109.008	25.754	1.00	0.00
C							
HETATM14221	C20	85C	594	12.397-107.206	22.527	1.00	0.00
C							
HETATM14222	F131	85C	594	12.025-106.948	21.256	1.00	0.00
F							
HETATM14223	F132	85C	594	12.460-108.544	22.691	1.00	0.00
F							
HETATM14224	F133	85C	594	13.644-106.724	22.723	1.00	0.00
F							
HETATM14225	O	85C	594	14.285-103.969	31.699	1.00	0.00
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