

HEADER HYDROLASE 02-APR-07 2PE4
 TITLE STRUCTURE OF HUMAN HYALURONIDASE 1, A HYALURONAN HYDROLYZING ENZYME
 TITLE 2 INVOLVED IN TUMOR GROWTH AND ANGIOGENESIS
 COMPND MOL_ID: 1;
 COMPND 2 MOLECULE: HYALURONIDASE-1;
 COMPND 3 CHAIN: A;
 COMPND 4 SYNONYM: HYAL-1, HYALURONOGLUCOSAMINIDASE-1, LUCA-1;
 COMPND 5 EC: 3.2.1.35;
 COMPND 6 ENGINEERED: YES
 SOURCE MOL_ID: 1;
 SOURCE 2 ORGANISM_SCIENTIFIC: HOMO SAPIENS;
 SOURCE 3 ORGANISM_COMMON: HUMAN;
 SOURCE 4 ORGANISM_TAXID: 9606;
 SOURCE 5 GENE: HYAL1, LUCA1;
 SOURCE 6 EXPRESSION_SYSTEM: DROSOPHILA MELANOGASTER;
 SOURCE 7 EXPRESSION_SYSTEM_COMMON: FRUIT FLY;
 SOURCE 8 EXPRESSION_SYSTEM_TAXID: 7227;
 SOURCE 9 EXPRESSION_SYSTEM_STRAIN: SCHNEIDER 2 CELLS;
 SOURCE 10 EXPRESSION_SYSTEM_VECTOR_TYPE: PLASMID;
 SOURCE 11 EXPRESSION_SYSTEM_PLASMID: PMT/BIP/HYAL1ISO1
 KEYWDS HYALURONIDASE, HYALURONAN, EGF-LIKE DOMAIN, HYDROLASE
 EXPDTA X-RAY DIFFRACTION
 AUTHOR K.L.CHAO,O.HERZBERG
 REVDAT 7 30-OCT-24 2PE4 1 REMARK
 REVDAT 6 30-AUG-23 2PE4 1 HETSYN
 REVDAT 5 29-JUL-20 2PE4 1 COMPND REMARK SEQADV HETNAM
 REVDAT 5 2 1 LINK SITE ATOM
 REVDAT 4 18-OCT-17 2PE4 1 REMARK
 REVDAT 3 13-JUL-11 2PE4 1 VERSN
 REVDAT 2 24-FEB-09 2PE4 1 VERSN
 REVDAT 1 12-JUN-07 2PE4 0
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 REMARK 2
 REMARK 2 RESOLUTION. 2.00 ANGSTROMS.
 REMARK 3
 REMARK 3 REFINEMENT.
 REMARK 3 PROGRAM : REFMAC
 REMARK 3 AUTHORS : MURSHUDOV,SKUBAK,LEBEDEV,PANNU,STEINER,
 REMARK 3 : NICHOLLS,WINN, LONG,VAGIN
 REMARK 3
 REMARK 3 DATA USED IN REFINEMENT.
 REMARK 3 RESOLUTION RANGE HIGH (ANGSTROMS) : 2.00
 REMARK 3 RESOLUTION RANGE LOW (ANGSTROMS) : 30.65
 REMARK 3 DATA CUTOFF (SIGMA(F)) : 0.000

REMARK 3 COMPLETENESS FOR RANGE (%) : NULL
 REMARK 3 NUMBER OF REFLECTIONS : 32231
 REMARK 3
 REMARK 3 FIT TO DATA USED IN REFINEMENT.
 REMARK 3 CROSS-VALIDATION METHOD : THROUGHOUT
 REMARK 3 FREE R VALUE TEST SET SELECTION : RANDOM
 REMARK 3 R VALUE (WORKING + TEST SET) : 0.190
 REMARK 3 R VALUE (WORKING SET) : 0.190
 REMARK 3 FREE R VALUE : 0.230
 REMARK 3 FREE R VALUE TEST SET SIZE (%) : NULL
 REMARK 3 FREE R VALUE TEST SET COUNT : NULL
 REMARK 3
 REMARK 3 NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
 REMARK 3 PROTEIN ATOMS : 3284
 REMARK 3 NUCLEIC ACID ATOMS : 0
 REMARK 3 HETEROGEN ATOMS : 134
 REMARK 3 SOLVENT ATOMS : 335
 REMARK 3
 REMARK 3 B VALUES.
 REMARK 3 FROM WILSON PLOT (A**2) : NULL
 REMARK 3 MEAN B VALUE (OVERALL, A**2) : 37.02
 REMARK 3 OVERALL ANISOTROPIC B VALUE.
 REMARK 3 B11 (A**2) : NULL
 REMARK 3 B22 (A**2) : NULL
 REMARK 3 B33 (A**2) : NULL
 REMARK 3 B12 (A**2) : NULL
 REMARK 3 B13 (A**2) : NULL
 REMARK 3 B23 (A**2) : NULL
 REMARK 3
 REMARK 3 ESTIMATED OVERALL COORDINATE ERROR.
 REMARK 3 ESU BASED ON R VALUE (A) : NULL
 REMARK 3 ESU BASED ON FREE R VALUE (A) : NULL
 REMARK 3 ESU BASED ON MAXIMUM LIKELIHOOD (A) : NULL
 REMARK 3 ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2) : NULL
 REMARK 3
 REMARK 3 RMS DEVIATIONS FROM IDEAL VALUES.
 REMARK 3 DISTANCE RESTRAINTS. RMS SIGMA
 REMARK 3 BOND LENGTH (A) : 0.013 ; NULL
 REMARK 3 ANGLE DISTANCE (A) : 1.823 ; NULL
 REMARK 3 INTRAPLANAR 1-4 DISTANCE (A) : NULL ; NULL
 REMARK 3 H-BOND OR METAL COORDINATION (A) : NULL ; NULL
 REMARK 3
 REMARK 3 PLANE RESTRAINT (A) : NULL ; NULL
 REMARK 3 CHIRAL-CENTER RESTRAINT (A**3) : NULL ; NULL
 REMARK 3
 REMARK 3 NON-BONDED CONTACT RESTRAINTS.
 REMARK 3 SINGLE TORSION (A) : NULL ; NULL
 REMARK 3 MULTIPLE TORSION (A) : NULL ; NULL
 REMARK 3 H-BOND (X...Y) (A) : NULL ; NULL
 REMARK 3 H-BOND (X-H...Y) (A) : NULL ; NULL

REMARK 3
 REMARK 3 CONFORMATIONAL TORSION ANGLE RESTRAINTS.
 REMARK 3 SPECIFIED (DEGREES) : NULL ; NULL
 REMARK 3 PLANAR (DEGREES) : NULL ; NULL
 REMARK 3 STAGGERED (DEGREES) : NULL ; NULL
 REMARK 3 TRANSVERSE (DEGREES) : NULL ; NULL
 REMARK 3
 REMARK 3 ISOTROPIC THERMAL FACTOR RESTRAINTS. RMS SIGMA
 REMARK 3 MAIN-CHAIN BOND (A**2) : NULL ; NULL
 REMARK 3 MAIN-CHAIN ANGLE (A**2) : NULL ; NULL
 REMARK 3 SIDE-CHAIN BOND (A**2) : NULL ; NULL
 REMARK 3 SIDE-CHAIN ANGLE (A**2) : NULL ; NULL
 REMARK 3
 REMARK 3 OTHER REFINEMENT REMARKS: TLS REFINEMENT WITH 2 GROUPS
 REMARK 4
 REMARK 4 2PE4 COMPLIES WITH FORMAT V. 3.30, 13-JUL-11
 REMARK 100
 REMARK 100 THIS ENTRY HAS BEEN PROCESSED BY RCSB ON 25-APR-07.
 REMARK 100 THE DEPOSITION ID IS D_1000042275.
 REMARK 200
 REMARK 200 EXPERIMENTAL DETAILS
 REMARK 200 EXPERIMENT TYPE : X-RAY DIFFRACTION
 REMARK 200 DATE OF DATA COLLECTION : 01-APR-06
 REMARK 200 TEMPERATURE (KELVIN) : 100
 REMARK 200 PH : 4.6
 REMARK 200 NUMBER OF CRYSTALS USED : 1
 REMARK 200
 REMARK 200 SYNCHROTRON (Y/N) : Y
 REMARK 200 RADIATION SOURCE : APS
 REMARK 200 BEAMLINE : 22-BM
 REMARK 200 X-RAY GENERATOR MODEL : NULL
 REMARK 200 MONOCHROMATIC OR LAUE (M/L) : M
 REMARK 200 WAVELENGTH OR RANGE (A) : 1.0000
 REMARK 200 MONOCHROMATOR : CRYOGENICALLY COOLED DOUBLE
 REMARK 200 CRYSTAL SI (220)
 REMARK 200 OPTICS : NULL
 REMARK 200
 REMARK 200 DETECTOR TYPE : CCD
 REMARK 200 DETECTOR MANUFACTURER : MARMOSAIC 225 MM CCD
 REMARK 200 INTENSITY-INTEGRATION SOFTWARE : D*TREK
 REMARK 200 DATA SCALING SOFTWARE : D*TREK 8.0SSI
 REMARK 200
 REMARK 200 NUMBER OF UNIQUE REFLECTIONS : 47955
 REMARK 200 RESOLUTION RANGE HIGH (A) : 2.000
 REMARK 200 RESOLUTION RANGE LOW (A) : 30.650
 REMARK 200 REJECTION CRITERIA (SIGMA(I)) : 0.000
 REMARK 200
 REMARK 200 OVERALL.
 REMARK 200 COMPLETENESS FOR RANGE (%) : 99.4
 REMARK 200 DATA REDUNDANCY : 10.48

REMARK 200 R MERGE (I) : 0.06300
 REMARK 200 R SYM (I) : NULL
 REMARK 200 <I/SIGMA(I)> FOR THE DATA SET : 14.0000
 REMARK 200
 REMARK 200 IN THE HIGHEST RESOLUTION SHELL.
 REMARK 200 HIGHEST RESOLUTION SHELL, RANGE HIGH (A) : 2.00
 REMARK 200 HIGHEST RESOLUTION SHELL, RANGE LOW (A) : 2.07
 REMARK 200 COMPLETENESS FOR SHELL (%) : 97.7
 REMARK 200 DATA REDUNDANCY IN SHELL : 8.72
 REMARK 200 R MERGE FOR SHELL (I) : 0.48800
 REMARK 200 R SYM FOR SHELL (I) : NULL
 REMARK 200 <I/SIGMA(I)> FOR SHELL : 3.400
 REMARK 200
 REMARK 200 DIFFRACTION PROTOCOL: SINGLE WAVELENGTH
 REMARK 200 METHOD USED TO DETERMINE THE STRUCTURE: MOLECULAR REPLACEMENT
 REMARK 200 SOFTWARE USED: PHASER
 REMARK 200 STARTING MODEL: PDB ENTRY 1FCU
 REMARK 200
 REMARK 200 REMARK: NULL
 REMARK 280
 REMARK 280 CRYSTAL
 REMARK 280 SOLVENT CONTENT, VS (%): 66.82
 REMARK 280 MATTHEWS COEFFICIENT, VM (ANGSTROMS**3/DA): 3.71
 REMARK 280
 REMARK 280 CRYSTALLIZATION CONDITIONS: 1.5 M SODIUM CHLORIDE, 10% ETHANOL, 3%
 REMARK 280 GALACTOSE, PH 4.6, VAPOR DIFFUSION, HANGING DROP, TEMPERATURE
 REMARK 280 298K
 REMARK 290
 REMARK 290 CRYSTALLOGRAPHIC SYMMETRY
 REMARK 290 SYMMETRY OPERATORS FOR SPACE GROUP: P 32 2 1
 REMARK 290

SYMOP	SYMMETRY
NNNMMM	OPERATOR
1555	X,Y,Z
2555	-Y,X-Y,Z+2/3
3555	-X+Y,-X,Z+1/3
4555	Y,X,-Z
5555	X-Y,-Y,-Z+1/3
6555	-X,-X+Y,-Z+2/3

 REMARK 290 WHERE NNN -> OPERATOR NUMBER
 REMARK 290 MMM -> TRANSLATION VECTOR
 REMARK 290
 REMARK 290 CRYSTALLOGRAPHIC SYMMETRY TRANSFORMATIONS
 REMARK 290 THE FOLLOWING TRANSFORMATIONS OPERATE ON THE ATOM/HETATM
 REMARK 290 RECORDS IN THIS ENTRY TO PRODUCE CRYSTALLOGRAPHICALLY
 REMARK 290 RELATED MOLECULES.

SMTRY1	1	1.000000	0.000000	0.000000	0.000000
SMTRY2	1	0.000000	1.000000	0.000000	0.000000
SMTRY3	1	0.000000	0.000000	1.000000	0.000000

REMARK 290	SMTRY1	2	-0.500000	-0.866025	0.000000	0.000000
REMARK 290	SMTRY2	2	0.866025	-0.500000	0.000000	0.000000
REMARK 290	SMTRY3	2	0.000000	0.000000	1.000000	95.87333
REMARK 290	SMTRY1	3	-0.500000	0.866025	0.000000	0.000000
REMARK 290	SMTRY2	3	-0.866025	-0.500000	0.000000	0.000000
REMARK 290	SMTRY3	3	0.000000	0.000000	1.000000	47.93667
REMARK 290	SMTRY1	4	-0.500000	0.866025	0.000000	0.000000
REMARK 290	SMTRY2	4	0.866025	0.500000	0.000000	0.000000
REMARK 290	SMTRY3	4	0.000000	0.000000	-1.000000	0.000000
REMARK 290	SMTRY1	5	1.000000	0.000000	0.000000	0.000000
REMARK 290	SMTRY2	5	0.000000	-1.000000	0.000000	0.000000
REMARK 290	SMTRY3	5	0.000000	0.000000	-1.000000	47.93667
REMARK 290	SMTRY1	6	-0.500000	-0.866025	0.000000	0.000000
REMARK 290	SMTRY2	6	-0.866025	0.500000	0.000000	0.000000
REMARK 290	SMTRY3	6	0.000000	0.000000	-1.000000	95.87333

REMARK 290

REMARK 290 REMARK: NULL

REMARK 300

REMARK 300 BIOMOLECULE: 1

REMARK 300 SEE REMARK 350 FOR THE AUTHOR PROVIDED AND/OR PROGRAM
 REMARK 300 GENERATED ASSEMBLY INFORMATION FOR THE STRUCTURE IN
 REMARK 300 THIS ENTRY. THE REMARK MAY ALSO PROVIDE INFORMATION ON
 REMARK 300 BURIED SURFACE AREA.

REMARK 350

REMARK 350 COORDINATES FOR A COMPLETE MULTIMER REPRESENTING THE KNOWN
 REMARK 350 BIOLOGICALLY SIGNIFICANT OLIGOMERIZATION STATE OF THE
 REMARK 350 MOLECULE CAN BE GENERATED BY APPLYING BIOMT TRANSFORMATIONS
 REMARK 350 GIVEN BELOW. BOTH NON-CRYSTALLOGRAPHIC AND
 REMARK 350 CRYSTALLOGRAPHIC OPERATIONS ARE GIVEN.

REMARK 350

REMARK 350 BIOMOLECULE: 1

REMARK 350 AUTHOR DETERMINED BIOLOGICAL UNIT: MONOMERIC

REMARK 350 APPLY THE FOLLOWING TO CHAINS: A, B, C

REMARK 350	BIOMT1	1	1.000000	0.000000	0.000000	0.000000
REMARK 350	BIOMT2	1	0.000000	1.000000	0.000000	0.000000
REMARK 350	BIOMT3	1	0.000000	0.000000	1.000000	0.000000

REMARK 465

REMARK 465 MISSING RESIDUES

REMARK 465 THE FOLLOWING RESIDUES WERE NOT LOCATED IN THE
 REMARK 465 EXPERIMENT. (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
 REMARK 465 IDENTIFIER; SSSEQ=SEQUENCE NUMBER; I=INSERTION CODE.)

REMARK 465

REMARK 465 M RES C SSSEQI

REMARK 465	GLY	A	437
REMARK 465	HIS	A	438
REMARK 465	HIS	A	439
REMARK 465	HIS	A	440
REMARK 465	HIS	A	441
REMARK 465	HIS	A	442
REMARK 465	HIS	A	443

REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: CLOSE CONTACTS IN SAME ASYMMETRIC UNIT
REMARK 500
REMARK 500 THE FOLLOWING ATOMS ARE IN CLOSE CONTACT.
REMARK 500

REMARK 500	ATM1	RES C	SSEQI	ATM2	RES C	SSEQI	DISTANCE
REMARK 500	0	HOH A	1070	0	HOH A	1193	1.81
REMARK 500	0	HOH A	1168	0	HOH A	1217	2.10
REMARK 500	0	HOH A	1155	0	HOH A	1232	2.18
REMARK 500	0	HOH A	952	0	HOH A	1219	2.19

REMARK 500
REMARK 500 REMARK: NULL
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: CLOSE CONTACTS
REMARK 500
REMARK 500 THE FOLLOWING ATOMS THAT ARE RELATED BY CRYSTALLOGRAPHIC
REMARK 500 SYMMETRY ARE IN CLOSE CONTACT. AN ATOM LOCATED WITHIN 0.15
REMARK 500 ANGSTROMS OF A SYMMETRY RELATED ATOM IS ASSUMED TO BE ON A
REMARK 500 SPECIAL POSITION AND IS, THEREFORE, LISTED IN REMARK 375
REMARK 500 INSTEAD OF REMARK 500. ATOMS WITH NON-BLANK ALTERNATE
REMARK 500 LOCATION INDICATORS ARE NOT INCLUDED IN THE CALCULATIONS.
REMARK 500
REMARK 500 DISTANCE CUTOFF:
REMARK 500 2.2 ANGSTROMS FOR CONTACTS NOT INVOLVING HYDROGEN ATOMS
REMARK 500 1.6 ANGSTROMS FOR CONTACTS INVOLVING HYDROGEN ATOMS
REMARK 500

REMARK 500	ATM1	RES C	SSEQI	ATM2	RES C	SSEQI	SSYMOP	DISTANCE
REMARK 500	OE1	GLN A	390	CB	PRO A	393	4645	1.47

REMARK 500
REMARK 500 REMARK: NULL
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: COVALENT BOND ANGLES
REMARK 500
REMARK 500 THE STEREOCHEMICAL PARAMETERS OF THE FOLLOWING RESIDUES
REMARK 500 HAVE VALUES WHICH DEVIATE FROM EXPECTED VALUES BY MORE
REMARK 500 THAN 6*RMSD (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 500 IDENTIFIER; SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
REMARK 500
REMARK 500 STANDARD TABLE:
REMARK 500 FORMAT: (10X,I3,1X,A3,1X,A1,I4,A1,3(1X,A4,2X),12X,F5.1)
REMARK 500
REMARK 500 EXPECTED VALUES PROTEIN: ENGH AND HUBER, 1999
REMARK 500 EXPECTED VALUES NUCLEIC ACID: CLOWNEY ET AL 1996
REMARK 500

REMARK 500	M	RES	CSSEQI	ATM1	ATM2	ATM3	
REMARK 500		ARG A	191	NE	- CZ	- NH2	ANGL. DEV. = -4.2 DEGREES
REMARK 500		ASP A	211	CB	- CG	- OD1	ANGL. DEV. = 5.9 DEGREES

REMARK 500 VAL A 318 CG1 - CB - CG2 ANGL. DEV. = 11.8 DEGREES
REMARK 500 ARG A 368 CD - NE - CZ ANGL. DEV. = 11.9 DEGREES
REMARK 500 ARG A 368 NE - CZ - NH1 ANGL. DEV. = 10.1 DEGREES
REMARK 500 ARG A 368 NE - CZ - NH2 ANGL. DEV. = -11.4 DEGREES

REMARK 500

REMARK 500 REMARK: NULL

REMARK 500

REMARK 500 GEOMETRY AND STEREOCHEMISTRY

REMARK 500 SUBTOPIC: TORSION ANGLES

REMARK 500

REMARK 500 TORSION ANGLES OUTSIDE THE EXPECTED RAMACHANDRAN REGIONS:

REMARK 500 (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN IDENTIFIER;

REMARK 500 SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).

REMARK 500

REMARK 500 STANDARD TABLE:

REMARK 500 FORMAT: (10X, I3, 1X, A3, 1X, A1, I4, A1, 4X, F7.2, 3X, F7.2)

REMARK 500

REMARK 500 EXPECTED VALUES: GJ KLEYWEGT AND TA JONES (1996). PHI/PSI-

REMARK 500 CHOLOGY: RAMACHANDRAN REVISITED. STRUCTURE 4, 1395 - 1400

REMARK 500

REMARK 500	M	RES	CSSEQI	PSI	PHI
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REMARK 500	ASN	A	37	71.23	-106.33
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REMARK 500	ALA	A	132	-84.16	-71.40
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REMARK 500	ASP	A	142	-126.04	65.55
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REMARK 500	ASP	A	161	63.32	-104.99
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REMARK 500	ASN	A	209	48.13	-94.21
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REMARK 500	ASP	A	211	47.52	-72.48
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REMARK 500	ASN	A	216	30.90	-86.48
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REMARK 500	SER	A	223	-109.71	10.70
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REMARK 500	ASP	A	301	-63.77	-25.63
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REMARK 500	SER	A	306	-70.35	-123.22
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REMARK 500	THR	A	343	-59.84	-128.68
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REMARK 500	TRP	A	435	54.34	-100.90
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REMARK 500

REMARK 500 REMARK: NULL

REMARK 500

REMARK 500 GEOMETRY AND STEREOCHEMISTRY

REMARK 500 SUBTOPIC: PLANAR GROUPS

REMARK 500

REMARK 500 PLANAR GROUPS IN THE FOLLOWING RESIDUES HAVE A TOTAL

REMARK 500 RMS DISTANCE OF ALL ATOMS FROM THE BEST-FIT PLANE

REMARK 500 BY MORE THAN AN EXPECTED VALUE OF 6*RMSD, WITH AN

REMARK 500 RMSD 0.02 ANGSTROMS, OR AT LEAST ONE ATOM HAS

REMARK 500 AN RMSD GREATER THAN THIS VALUE

REMARK 500 (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN IDENTIFIER;

REMARK 500 SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).

REMARK 500

REMARK 500	M	RES	CSSEQI	RMS	TYPE
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REMARK 500	ARG	A	368	0.07	SIDE CHAIN
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REMARK 500

REMARK 500 REMARK: NULL

DBREF 2PE4 A 22 435 UNP Q12794 HYAL1_HUMAN 22 435

SEQADV 2PE4 ARG A 20 UNP Q12794 CLONING ARTIFACT

SEQADV 2PE4 SER A 21 UNP Q12794 CLONING ARTIFACT

SEQADV 2PE4 THR A 436 UNP Q12794 CLONING ARTIFACT

SEQADV 2PE4 GLY A 437 UNP Q12794 CLONING ARTIFACT

SEQADV 2PE4 HIS A 438 UNP Q12794 EXPRESSION TAG

SEQADV 2PE4 HIS A 439 UNP Q12794 EXPRESSION TAG

SEQADV 2PE4 HIS A 440 UNP Q12794 EXPRESSION TAG

SEQADV 2PE4 HIS A 441 UNP Q12794 EXPRESSION TAG

SEQADV 2PE4 HIS A 442 UNP Q12794 EXPRESSION TAG

SEQADV 2PE4 HIS A 443 UNP Q12794 EXPRESSION TAG

SEQRES 1 A 424 ARG SER PHE ARG GLY PRO LEU LEU PRO ASN ARG PRO PHE

SEQRES 2 A 424 THR THR VAL TRP ASN ALA ASN THR GLN TRP CYS LEU GLU

SEQRES 3 A 424 ARG HIS GLY VAL ASP VAL ASP VAL SER VAL PHE ASP VAL

SEQRES 4 A 424 VAL ALA ASN PRO GLY GLN THR PHE ARG GLY PRO ASP MET

SEQRES 5 A 424 THR ILE PHE TYR SER SER GLN LEU GLY THR TYR PRO TYR

SEQRES 6 A 424 TYR THR PRO THR GLY GLU PRO VAL PHE GLY GLY LEU PRO

SEQRES 7 A 424 GLN ASN ALA SER LEU ILE ALA HIS LEU ALA ARG THR PHE

SEQRES 8 A 424 GLN ASP ILE LEU ALA ALA ILE PRO ALA PRO ASP PHE SER

SEQRES 9 A 424 GLY LEU ALA VAL ILE ASP TRP GLU ALA TRP ARG PRO ARG

SEQRES 10 A 424 TRP ALA PHE ASN TRP ASP THR LYS ASP ILE TYR ARG GLN

SEQRES 11 A 424 ARG SER ARG ALA LEU VAL GLN ALA GLN HIS PRO ASP TRP

SEQRES 12 A 424 PRO ALA PRO GLN VAL GLU ALA VAL ALA GLN ASP GLN PHE

SEQRES 13 A 424 GLN GLY ALA ALA ARG ALA TRP MET ALA GLY THR LEU GLN

SEQRES 14 A 424 LEU GLY ARG ALA LEU ARG PRO ARG GLY LEU TRP GLY PHE

SEQRES 15 A 424 TYR GLY PHE PRO ASP CYS TYR ASN TYR ASP PHE LEU SER

SEQRES 16 A 424 PRO ASN TYR THR GLY GLN CYS PRO SER GLY ILE ARG ALA

SEQRES 17 A 424 GLN ASN ASP GLN LEU GLY TRP LEU TRP GLY GLN SER ARG

SEQRES 18 A 424 ALA LEU TYR PRO SER ILE TYR MET PRO ALA VAL LEU GLU

SEQRES 19 A 424 GLY THR GLY LYS SER GLN MET TYR VAL GLN HIS ARG VAL

SEQRES 20 A 424 ALA GLU ALA PHE ARG VAL ALA VAL ALA ALA GLY ASP PRO

SEQRES 21 A 424 ASN LEU PRO VAL LEU PRO TYR VAL GLN ILE PHE TYR ASP

SEQRES 22 A 424 THR THR ASN HIS PHE LEU PRO LEU ASP GLU LEU GLU HIS

SEQRES 23 A 424 SER LEU GLY GLU SER ALA ALA GLN GLY ALA ALA GLY VAL

SEQRES 24 A 424 VAL LEU TRP VAL SER TRP GLU ASN THR ARG THR LYS GLU

SEQRES 25 A 424 SER CYS GLN ALA ILE LYS GLU TYR MET ASP THR THR LEU

SEQRES 26 A 424 GLY PRO PHE ILE LEU ASN VAL THR SER GLY ALA LEU LEU

SEQRES 27 A 424 CYS SER GLN ALA LEU CYS SER GLY HIS GLY ARG CYS VAL

SEQRES 28 A 424 ARG ARG THR SER HIS PRO LYS ALA LEU LEU LEU LEU ASN

SEQRES 29 A 424 PRO ALA SER PHE SER ILE GLN LEU THR PRO GLY GLY GLY

SEQRES 30 A 424 PRO LEU SER LEU ARG GLY ALA LEU SER LEU GLU ASP GLN

SEQRES 31 A 424 ALA GLN MET ALA VAL GLU PHE LYS CYS ARG CYS TYR PRO

SEQRES 32 A 424 GLY TRP GLN ALA PRO TRP CYS GLU ARG LYS SER MET TRP

SEQRES 33 A 424 THR GLY HIS HIS HIS HIS HIS HIS

MODRES 2PE4 ASN A 99 ASN GLYCOSYLATION SITE

MODRES 2PE4 ASN A 350 ASN GLYCOSYLATION SITE

HET NAG B 1 14

HET NAG B 2 14

HET BMA B 3 11

SHEET	3	A 4	GLY A 317	TRP A 321	1	0	LEU A 320	N	VAL A 35				
SHEET	4	A 4	TYR A 286	VAL A 287	1	N	VAL A 287	O	VAL A 319				
SHEET	1	B 3	MET A 71	PHE A 74	0								
SHEET	2	B 3	LEU A 125	ILE A 128	1	0	VAL A 127	N	PHE A 74				
SHEET	3	B 3	LEU A 198	PHE A 201	1	0	GLY A 200	N	ILE A 128				
SHEET	1	C 2	TYR A 84	TYR A 85	0								
SHEET	2	C 2	PRO A 91	VAL A 92	-1	0	VAL A 92	N	TYR A 84				
SHEET	1	D 2	GLY A 367	ARG A 371	0								
SHEET	2	D 2	PHE A 416	CYS A 420	-1	0	ARG A 419	N	ARG A 368				
SHEET	1	E 2	PHE A 387	LEU A 391	0								
SHEET	2	E 2	LEU A 398	GLY A 402	-1	0	SER A 399	N	GLN A 390				
SSBOND	1	CYS A	43	CYS A	333				1555	1555	2.13		
SSBOND	2	CYS A	207	CYS A	221				1555	1555	2.05		
SSBOND	3	CYS A	358	CYS A	369				1555	1555	2.04		
SSBOND	4	CYS A	363	CYS A	418				1555	1555	2.08		
SSBOND	5	CYS A	420	CYS A	429				1555	1555	2.06		
LINK		ND2	ASN A 99				C1	NAG C	1	1555	1555	1.45	
LINK		ND2	ASN A 350				C1	NAG B	1	1555	1555	1.43	
LINK		04	NAG B 1				C1	NAG B	2	1555	1555	1.43	
LINK		04	NAG B 2				C1	BMA B	3	1555	1555	1.43	
LINK		06	BMA B 3				C1	MAN B	4	1555	1555	1.43	
LINK		03	BMA B 3				C1	MAN B	6	1555	1555	1.44	
LINK		03	MAN B 4				C1	MAN B	5	1555	1555	1.45	
LINK		04	NAG C 1				C1	NAG C	2	1555	1555	1.45	
CISPEP	1	PHE A	204	PRO A	205		0		-9.08				
CISPEP	2	ALA A	426	PRO A	427		0		2.03				
CRYST1	92.050	92.050	143.810	90.00	90.00	120.00	P	32	2	1	6		
ORIGX1	1.000000	0.000000	0.000000			0.000000							
ORIGX2	0.000000	1.000000	0.000000			0.000000							
ORIGX3	0.000000	0.000000	1.000000			0.000000							
SCALE1	0.010864	0.006272	-0.000001			0.000000							
SCALE2	0.000000	0.012544	-0.000001			0.000000							
SCALE3	0.000000	0.000000	0.006954			0.000000							
ATOM	1	N	ARG A 20	24.557	-38.438	-2.219	1.00	48.18					N
ATOM	2	CA	ARG A 20	24.786	-38.383	-3.724	1.00	48.20					C
ATOM	3	C	ARG A 20	26.209	-38.780	-4.233	1.00	46.86					C
ATOM	4	O	ARG A 20	26.312	-39.492	-5.209	1.00	46.96					O
ATOM	5	CB	ARG A 20	24.328	-37.035	-4.295	1.00	48.44					C
ATOM	6	CG	ARG A 20	23.791	-37.076	-5.718	1.00	49.20					C
ATOM	7	CD	ARG A 20	23.543	-35.655	-6.309	1.00	49.60					C
ATOM	8	NE	ARG A 20	22.419	-34.974	-5.669	1.00	54.70					N
ATOM	9	CZ	ARG A 20	22.453	-33.754	-5.107	1.00	55.47					C
ATOM	10	NH1	ARG A 20	23.558	-33.001	-5.109	1.00	52.88					N
ATOM	11	NH2	ARG A 20	21.345	-33.268	-4.550	1.00	55.28					N
ATOM	12	N	SER A 21	27.281	-38.306	-3.583	1.00	45.68					N
ATOM	13	CA	SER A 21	28.663	-38.666	-3.946	1.00	43.64					C
ATOM	14	C	SER A 21	29.113	-39.741	-2.991	1.00	42.98					C
ATOM	15	O	SER A 21	28.807	-39.631	-1.810	1.00	43.65					O
ATOM	16	CB	SER A 21	29.618	-37.466	-3.846	1.00	43.49					C
ATOM	17	OG	SER A 21	29.413	-36.523	-4.890	1.00	41.49					O

ATOM	18	N	PHE	A	22	29.822	-40.764	-3.483	1.00	41.35	N
ATOM	19	CA	PHE	A	22	30.314	-41.886	-2.644	1.00	40.87	C
ATOM	20	C	PHE	A	22	31.844	-42.145	-2.634	1.00	39.14	C
ATOM	21	O	PHE	A	22	32.290	-43.097	-1.991	1.00	39.49	O
ATOM	22	CB	PHE	A	22	29.550	-43.211	-2.938	1.00	41.87	C
ATOM	23	CG	PHE	A	22	28.062	-43.084	-2.760	1.00	44.68	C
ATOM	24	CD1	PHE	A	22	27.255	-42.664	-3.815	1.00	46.93	C
ATOM	25	CD2	PHE	A	22	27.468	-43.322	-1.516	1.00	49.07	C
ATOM	26	CE1	PHE	A	22	25.864	-42.500	-3.642	1.00	50.21	C
ATOM	27	CE2	PHE	A	22	26.069	-43.156	-1.328	1.00	50.25	C
ATOM	28	CZ	PHE	A	22	25.272	-42.759	-2.394	1.00	48.69	C
ATOM	29	N	ARG	A	23	32.643	-41.310	-3.304	1.00	37.42	N
ATOM	30	CA	ARG	A	23	34.124	-41.475	-3.274	1.00	35.41	C
ATOM	31	C	ARG	A	23	34.682	-41.112	-1.904	1.00	33.52	C
ATOM	32	O	ARG	A	23	34.218	-40.149	-1.272	1.00	32.60	O
ATOM	33	CB	ARG	A	23	34.840	-40.602	-4.306	1.00	34.82	C
ATOM	34	CG	ARG	A	23	34.507	-40.868	-5.769	1.00	36.72	C
ATOM	35	CD	ARG	A	23	35.281	-42.023	-6.311	1.00	34.04	C
ATOM	36	NE	ARG	A	23	36.701	-41.752	-6.607	1.00	32.95	N
ATOM	37	CZ	ARG	A	23	37.159	-41.322	-7.785	1.00	31.45	C
ATOM	38	NH1	ARG	A	23	36.320	-41.032	-8.787	1.00	29.40	N
ATOM	39	NH2	ARG	A	23	38.457	-41.184	-7.965	1.00	29.81	N
ATOM	40	N	GLY	A	24	35.675	-41.882	-1.462	1.00	32.45	N
ATOM	41	CA	GLY	A	24	36.457	-41.533	-0.243	1.00	30.59	C
ATOM	42	C	GLY	A	24	37.606	-40.711	-0.785	1.00	29.05	C
ATOM	43	O	GLY	A	24	37.373	-39.795	-1.608	1.00	28.41	O
ATOM	44	N	PRO	A	25	38.847	-41.123	-0.459	1.00	27.29	N
ATOM	45	CA	PRO	A	25	39.988	-40.391	-0.958	1.00	26.77	C
ATOM	46	C	PRO	A	25	40.026	-40.621	-2.472	1.00	27.12	C
ATOM	47	O	PRO	A	25	39.678	-41.717	-2.913	1.00	27.40	O
ATOM	48	CB	PRO	A	25	41.150	-41.027	-0.223	1.00	25.71	C
ATOM	49	CG	PRO	A	25	40.671	-42.497	0.012	1.00	26.93	C
ATOM	50	CD	PRO	A	25	39.215	-42.355	0.262	1.00	25.99	C
ATOM	51	N	LEU	A	26	40.384	-39.606	-3.271	1.00	27.44	N
ATOM	52	CA	LEU	A	26	40.243	-39.739	-4.739	1.00	27.91	C
ATOM	53	C	LEU	A	26	41.261	-40.703	-5.290	1.00	27.85	C
ATOM	54	O	LEU	A	26	40.986	-41.338	-6.288	1.00	28.26	O
ATOM	55	CB	LEU	A	26	40.317	-38.409	-5.473	1.00	28.10	C
ATOM	56	CG	LEU	A	26	39.195	-37.470	-5.059	1.00	29.70	C
ATOM	57	CD1	LEU	A	26	39.399	-36.233	-5.857	1.00	28.47	C
ATOM	58	CD2	LEU	A	26	37.846	-38.185	-5.401	1.00	30.41	C
ATOM	59	N	LEU	A	27	42.404	-40.813	-4.603	1.00	26.97	N
ATOM	60	CA	LEU	A	27	43.457	-41.807	-4.855	1.00	26.97	C
ATOM	61	C	LEU	A	27	43.792	-42.472	-3.512	1.00	28.03	C
ATOM	62	O	LEU	A	27	43.620	-41.849	-2.480	1.00	28.22	O
ATOM	63	CB	LEU	A	27	44.711	-41.127	-5.451	1.00	25.97	C
ATOM	64	CG	LEU	A	27	44.565	-40.636	-6.900	1.00	27.44	C
ATOM	65	CD1	LEU	A	27	45.740	-39.801	-7.176	1.00	28.13	C
ATOM	66	CD2	LEU	A	27	44.537	-41.855	-7.934	1.00	25.49	C
ATOM	67	N	PRO	A	28	44.253	-43.745	-3.518	1.00	28.74	N

ATOM	68	CA	PRO	A	28	44.600	-44.412	-2.270	1.00	28.36	C
ATOM	69	C	PRO	A	28	45.519	-43.601	-1.375	1.00	28.71	C
ATOM	70	O	PRO	A	28	46.501	-43.040	-1.868	1.00	29.38	O
ATOM	71	CB	PRO	A	28	45.322	-45.674	-2.740	1.00	27.57	C
ATOM	72	CG	PRO	A	28	44.648	-45.988	-4.064	1.00	29.32	C
ATOM	73	CD	PRO	A	28	44.417	-44.642	-4.689	1.00	28.85	C
ATOM	74	N	ASN	A	29	45.222	-43.558	-0.067	1.00	28.73	N
ATOM	75	CA	ASN	A	29	46.080	-42.850	0.892	1.00	28.57	C
ATOM	76	C	ASN	A	29	46.230	-41.390	0.548	1.00	27.55	C
ATOM	77	O	ASN	A	29	47.271	-40.780	0.828	1.00	28.63	O
ATOM	78	CB	ASN	A	29	47.464	-43.497	0.951	1.00	28.36	C
ATOM	79	CG	ASN	A	29	47.411	-44.950	1.380	1.00	33.90	C
ATOM	80	OD1	ASN	A	29	46.644	-45.316	2.269	1.00	35.47	O
ATOM	81	ND2	ASN	A	29	48.228	-45.782	0.747	1.00	20.00	N
ATOM	82	N	ARG	A	30	45.210	-40.814	-0.066	1.00	26.79	N
ATOM	83	CA	ARG	A	30	45.295	-39.385	-0.421	1.00	26.77	C
ATOM	84	C	ARG	A	30	44.019	-38.677	-0.094	1.00	25.83	C
ATOM	85	O	ARG	A	30	43.202	-38.432	-0.980	1.00	26.88	O
ATOM	86	CB	ARG	A	30	45.647	-39.204	-1.897	1.00	26.38	C
ATOM	87	CG	ARG	A	30	47.060	-39.646	-2.250	1.00	26.12	C
ATOM	88	CD	ARG	A	30	48.053	-38.606	-1.721	1.00	30.72	C
ATOM	89	NE	ARG	A	30	49.424	-38.967	-2.065	1.00	28.87	N
ATOM	90	CZ	ARG	A	30	50.173	-39.831	-1.375	1.00	33.17	C
ATOM	91	NH1	ARG	A	30	49.713	-40.397	-0.236	1.00	31.06	N
ATOM	92	NH2	ARG	A	30	51.394	-40.124	-1.833	1.00	30.36	N
ATOM	93	N	PRO	A	31	43.848	-38.319	1.184	1.00	25.56	N
ATOM	94	CA	PRO	A	31	42.715	-37.415	1.522	1.00	24.23	C
ATOM	95	C	PRO	A	31	42.847	-36.076	0.778	1.00	24.26	C
ATOM	96	O	PRO	A	31	41.838	-35.487	0.416	1.00	23.95	O
ATOM	97	CB	PRO	A	31	42.837	-37.212	3.054	1.00	22.01	C
ATOM	98	CG	PRO	A	31	44.279	-37.618	3.404	1.00	22.47	C
ATOM	99	CD	PRO	A	31	44.677	-38.670	2.371	1.00	24.86	C
ATOM	100	N	PHE	A	32	44.086	-35.658	0.509	1.00	23.56	N
ATOM	101	CA	PHE	A	32	44.361	-34.418	-0.209	1.00	23.06	C
ATOM	102	C	PHE	A	32	45.276	-34.814	-1.383	1.00	24.02	C
ATOM	103	O	PHE	A	32	46.416	-35.254	-1.187	1.00	23.62	O
ATOM	104	CB	PHE	A	32	45.084	-33.397	0.680	1.00	21.41	C
ATOM	105	CG	PHE	A	32	45.301	-32.024	0.010	1.00	20.64	C
ATOM	106	CD1	PHE	A	32	44.230	-31.173	-0.219	1.00	17.31	C
ATOM	107	CD2	PHE	A	32	46.586	-31.589	-0.347	1.00	18.27	C
ATOM	108	CE1	PHE	A	32	44.420	-29.903	-0.782	1.00	17.56	C
ATOM	109	CE2	PHE	A	32	46.784	-30.326	-0.937	1.00	16.14	C
ATOM	110	CZ	PHE	A	32	45.697	-29.471	-1.127	1.00	17.26	C
ATOM	111	N	THR	A	33	44.732	-34.691	-2.589	1.00	24.39	N
ATOM	112	CA	THR	A	33	45.358	-35.140	-3.830	1.00	25.94	C
ATOM	113	C	THR	A	33	45.951	-33.883	-4.574	1.00	26.33	C
ATOM	114	O	THR	A	33	45.384	-32.757	-4.480	1.00	27.87	O
ATOM	115	CB	THR	A	33	44.257	-35.873	-4.667	1.00	26.05	C
ATOM	116	OG1	THR	A	33	44.205	-37.265	-4.276	1.00	26.99	O
ATOM	117	CG2	THR	A	33	44.608	-35.915	-6.098	1.00	32.24	C

ATOM	118	N	THR	A	34	47.077	-34.005	-5.283	1.00	24.66	N
ATOM	119	CA	THR	A	34	47.493	-32.829	-6.033	1.00	24.49	C
ATOM	120	C	THR	A	34	47.622	-33.128	-7.521	1.00	24.22	C
ATOM	121	O	THR	A	34	48.134	-34.151	-7.905	1.00	25.21	O
ATOM	122	CB	THR	A	34	48.820	-32.244	-5.511	1.00	24.21	C
ATOM	123	OG1	THR	A	34	49.794	-33.298	-5.561	1.00	24.23	O
ATOM	124	CG2	THR	A	34	48.662	-31.729	-4.045	1.00	23.00	C
ATOM	125	N	VAL	A	35	47.154	-32.204	-8.345	1.00	24.68	N
ATOM	126	CA	VAL	A	35	47.255	-32.323	-9.793	1.00	24.61	C
ATOM	127	C	VAL	A	35	48.114	-31.147	-10.285	1.00	24.95	C
ATOM	128	O	VAL	A	35	47.745	-29.960	-10.119	1.00	24.83	O
ATOM	129	CB	VAL	A	35	45.862	-32.259	-10.482	1.00	24.59	C
ATOM	130	CG1	VAL	A	35	45.997	-32.380	-12.030	1.00	22.21	C
ATOM	131	CG2	VAL	A	35	44.905	-33.331	-9.917	1.00	24.01	C
ATOM	132	N	TRP	A	36	49.261	-31.491	-10.867	1.00	24.54	N
ATOM	133	CA	TRP	A	36	50.115	-30.529	-11.527	1.00	24.36	C
ATOM	134	C	TRP	A	36	49.609	-30.352	-12.971	1.00	25.20	C
ATOM	135	O	TRP	A	36	49.858	-31.211	-13.841	1.00	24.00	O
ATOM	136	CB	TRP	A	36	51.529	-31.073	-11.539	1.00	24.81	C
ATOM	137	CG	TRP	A	36	52.619	-30.154	-12.137	1.00	24.77	C
ATOM	138	CD1	TRP	A	36	53.397	-30.432	-13.206	1.00	25.29	C
ATOM	139	CD2	TRP	A	36	53.051	-28.873	-11.645	1.00	25.29	C
ATOM	140	NE1	TRP	A	36	54.287	-29.409	-13.431	1.00	26.26	N
ATOM	141	CE2	TRP	A	36	54.103	-28.439	-12.486	1.00	25.94	C
ATOM	142	CE3	TRP	A	36	52.621	-28.023	-10.592	1.00	24.39	C
ATOM	143	CZ2	TRP	A	36	54.760	-27.196	-12.308	1.00	26.55	C
ATOM	144	CZ3	TRP	A	36	53.258	-26.794	-10.422	1.00	22.83	C
ATOM	145	CH2	TRP	A	36	54.324	-26.396	-11.262	1.00	25.20	C
ATOM	146	N	ASN	A	37	48.928	-29.230	-13.221	1.00	25.43	N
ATOM	147	CA	ASN	A	37	48.305	-28.938	-14.533	1.00	25.97	C
ATOM	148	C	ASN	A	37	49.146	-27.856	-15.247	1.00	25.93	C
ATOM	149	O	ASN	A	37	48.757	-26.690	-15.360	1.00	25.94	O
ATOM	150	CB	ASN	A	37	46.861	-28.487	-14.270	1.00	25.39	C
ATOM	151	CG	ASN	A	37	46.041	-28.314	-15.503	1.00	29.98	C
ATOM	152	OD1	ASN	A	37	45.161	-27.448	-15.501	1.00	31.12	O
ATOM	153	ND2	ASN	A	37	46.276	-29.153	-16.571	1.00	26.61	N
ATOM	154	N	ALA	A	38	50.327	-28.280	-15.682	1.00	25.48	N
ATOM	155	CA	ALA	A	38	51.375	-27.444	-16.195	1.00	26.26	C
ATOM	156	C	ALA	A	38	52.031	-28.104	-17.416	1.00	27.29	C
ATOM	157	O	ALA	A	38	52.160	-29.350	-17.480	1.00	26.94	O
ATOM	158	CB	ALA	A	38	52.420	-27.188	-15.171	1.00	26.17	C
ATOM	159	N	ASN	A	39	52.429	-27.265	-18.375	1.00	25.98	N
ATOM	160	CA	ASN	A	39	53.198	-27.789	-19.520	1.00	27.80	C
ATOM	161	C	ASN	A	39	54.683	-27.753	-19.257	1.00	28.04	C
ATOM	162	O	ASN	A	39	55.454	-27.051	-19.969	1.00	29.08	O
ATOM	163	CB	ASN	A	39	52.863	-27.004	-20.784	1.00	27.05	C
ATOM	164	CG	ASN	A	39	53.139	-27.786	-22.046	1.00	28.18	C
ATOM	165	OD1	ASN	A	39	53.772	-28.857	-22.033	1.00	25.95	O
ATOM	166	ND2	ASN	A	39	52.640	-27.257	-23.154	1.00	25.80	N
ATOM	167	N	THR	A	40	55.094	-28.483	-18.215	1.00	27.95	N

ATOM	168	CA	THR	A	40	56.503	-28.618	-17.906	1.00	27.76	C
ATOM	169	C	THR	A	40	57.219	-29.587	-18.861	1.00	28.62	C
ATOM	170	O	THR	A	40	58.453	-29.557	-18.967	1.00	28.56	O
ATOM	171	CB	THR	A	40	56.772	-28.914	-16.399	1.00	27.96	C
ATOM	172	OG1	THR	A	40	55.817	-29.846	-15.895	1.00	26.86	O
ATOM	173	CG2	THR	A	40	56.731	-27.628	-15.605	1.00	25.28	C
ATOM	174	N	GLN	A	41	56.431	-30.402	-19.568	1.00	28.94	N
ATOM	175	CA	GLN	A	41	56.883	-31.222	-20.684	1.00	31.05	C
ATOM	176	C	GLN	A	41	57.539	-30.369	-21.780	1.00	29.13	C
ATOM	177	O	GLN	A	41	58.549	-30.758	-22.348	1.00	28.35	O
ATOM	178	CB	GLN	A	41	55.689	-31.984	-21.264	1.00	31.14	C
ATOM	179	CG	GLN	A	41	56.001	-33.040	-22.312	1.00	35.82	C
ATOM	180	CD	GLN	A	41	54.701	-33.700	-22.913	1.00	38.61	C
ATOM	181	OE1	GLN	A	41	53.632	-33.836	-22.219	1.00	45.48	O
ATOM	182	NE2	GLN	A	41	54.803	-34.136	-24.194	1.00	41.85	N
ATOM	183	N	TRP	A	42	56.958	-29.199	-22.046	1.00	27.94	N
ATOM	184	CA	TRP	A	42	57.556	-28.210	-22.934	1.00	26.61	C
ATOM	185	C	TRP	A	42	58.907	-27.664	-22.404	1.00	26.76	C
ATOM	186	O	TRP	A	42	59.859	-27.535	-23.172	1.00	26.25	O
ATOM	187	CB	TRP	A	42	56.579	-27.077	-23.185	1.00	25.04	C
ATOM	188	CG	TRP	A	42	57.152	-25.914	-23.963	1.00	27.45	C
ATOM	189	CD1	TRP	A	42	57.604	-24.711	-23.459	1.00	26.57	C
ATOM	190	CD2	TRP	A	42	57.311	-25.823	-25.397	1.00	26.83	C
ATOM	191	NE1	TRP	A	42	58.004	-23.887	-24.485	1.00	25.93	N
ATOM	192	CE2	TRP	A	42	57.837	-24.537	-25.680	1.00	26.19	C
ATOM	193	CE3	TRP	A	42	57.042	-26.690	-26.455	1.00	25.73	C
ATOM	194	CZ2	TRP	A	42	58.090	-24.093	-26.995	1.00	27.82	C
ATOM	195	CZ3	TRP	A	42	57.308	-26.247	-27.779	1.00	26.97	C
ATOM	196	CH2	TRP	A	42	57.822	-24.958	-28.027	1.00	25.96	C
ATOM	197	N	CYS	A	43	58.982	-27.338	-21.111	1.00	26.34	N
ATOM	198	CA	CYS	A	43	60.214	-26.889	-20.494	1.00	27.91	C
ATOM	199	C	CYS	A	43	61.351	-27.852	-20.827	1.00	27.85	C
ATOM	200	O	CYS	A	43	62.497	-27.445	-21.051	1.00	27.32	O
ATOM	201	CB	CYS	A	43	60.052	-26.806	-18.965	1.00	28.02	C
ATOM	202	SG	CYS	A	43	58.975	-25.450	-18.459	1.00	31.50	S
ATOM	203	N	LEU	A	44	61.017	-29.133	-20.831	1.00	28.55	N
ATOM	204	CA	LEU	A	44	62.007	-30.175	-21.025	1.00	29.56	C
ATOM	205	C	LEU	A	44	62.340	-30.348	-22.524	1.00	29.29	C
ATOM	206	O	LEU	A	44	63.497	-30.315	-22.894	1.00	29.16	O
ATOM	207	CB	LEU	A	44	61.564	-31.503	-20.370	1.00	28.63	C
ATOM	208	CG	LEU	A	44	62.579	-32.661	-20.501	1.00	30.41	C
ATOM	209	CD1	LEU	A	44	63.917	-32.328	-19.853	1.00	28.27	C
ATOM	210	CD2	LEU	A	44	62.048	-33.965	-19.925	1.00	30.94	C
ATOM	211	N	GLU	A	45	61.313	-30.509	-23.351	1.00	29.54	N
ATOM	212	CA	GLU	A	45	61.467	-30.789	-24.777	1.00	31.61	C
ATOM	213	C	GLU	A	45	61.999	-29.583	-25.570	1.00	30.61	C
ATOM	214	O	GLU	A	45	62.800	-29.745	-26.478	1.00	30.17	O
ATOM	215	CB	GLU	A	45	60.132	-31.299	-25.374	1.00	31.32	C
ATOM	216	CG	GLU	A	45	59.681	-32.631	-24.768	1.00	33.44	C
ATOM	217	CD	GLU	A	45	58.409	-33.207	-25.400	1.00	35.35	C

ATOM	218	OE1	GLU	A	45	57.720	-32.509	-26.217	1.00	44.91	O
ATOM	219	OE2	GLU	A	45	58.088	-34.382	-25.067	1.00	37.49	O
ATOM	220	N	ARG	A	46	61.560	-28.380	-25.201	1.00	29.99	N
ATOM	221	CA	ARG	A	46	61.988	-27.202	-25.885	1.00	29.15	C
ATOM	222	C	ARG	A	46	63.293	-26.690	-25.348	1.00	29.66	C
ATOM	223	O	ARG	A	46	64.183	-26.383	-26.125	1.00	30.21	O
ATOM	224	CB	ARG	A	46	60.955	-26.104	-25.828	1.00	27.64	C
ATOM	225	CG	ARG	A	46	61.402	-24.869	-26.595	1.00	29.45	C
ATOM	226	CD	ARG	A	46	61.357	-25.078	-28.104	1.00	28.56	C
ATOM	227	NE	ARG	A	46	61.311	-23.808	-28.823	1.00	27.75	N
ATOM	228	CZ	ARG	A	46	61.120	-23.680	-30.133	1.00	27.68	C
ATOM	229	NH1	ARG	A	46	60.921	-24.752	-30.895	1.00	26.61	N
ATOM	230	NH2	ARG	A	46	61.089	-22.469	-30.683	1.00	26.58	N
ATOM	231	N	HIS	A	47	63.397	-26.581	-24.025	1.00	29.43	N
ATOM	232	CA	HIS	A	47	64.506	-25.880	-23.395	1.00	29.32	C
ATOM	233	C	HIS	A	47	65.494	-26.761	-22.631	1.00	29.50	C
ATOM	234	O	HIS	A	47	66.472	-26.239	-22.118	1.00	29.76	O
ATOM	235	CB	HIS	A	47	63.992	-24.779	-22.447	1.00	29.21	C
ATOM	236	CG	HIS	A	47	63.057	-23.789	-23.079	1.00	29.08	C
ATOM	237	ND1	HIS	A	47	63.427	-22.963	-24.123	1.00	30.49	N
ATOM	238	CD2	HIS	A	47	61.777	-23.460	-22.779	1.00	29.10	C
ATOM	239	CE1	HIS	A	47	62.400	-22.205	-24.470	1.00	29.24	C
ATOM	240	NE2	HIS	A	47	61.388	-22.484	-23.670	1.00	31.68	N
ATOM	241	N	GLY	A	48	65.258	-28.069	-22.533	1.00	29.55	N
ATOM	242	CA	GLY	A	48	66.128	-28.955	-21.733	1.00	29.76	C
ATOM	243	C	GLY	A	48	66.074	-28.715	-20.213	1.00	31.51	C
ATOM	244	O	GLY	A	48	66.948	-29.184	-19.448	1.00	31.25	O
ATOM	245	N	VAL	A	49	65.064	-27.981	-19.759	1.00	31.78	N
ATOM	246	CA	VAL	A	49	64.900	-27.731	-18.326	1.00	32.71	C
ATOM	247	C	VAL	A	49	64.003	-28.821	-17.771	1.00	33.38	C
ATOM	248	O	VAL	A	49	62.835	-29.000	-18.196	1.00	33.20	O
ATOM	249	CB	VAL	A	49	64.308	-26.319	-18.013	1.00	33.05	C
ATOM	250	CG1	VAL	A	49	64.324	-26.075	-16.513	1.00	32.32	C
ATOM	251	CG2	VAL	A	49	65.101	-25.195	-18.766	1.00	32.16	C
ATOM	252	N	ASP	A	50	64.543	-29.552	-16.814	1.00	33.30	N
ATOM	253	CA	ASP	A	50	63.833	-30.695	-16.283	1.00	34.31	C
ATOM	254	C	ASP	A	50	63.244	-30.330	-14.925	1.00	32.79	C
ATOM	255	O	ASP	A	50	63.941	-30.378	-13.929	1.00	32.75	O
ATOM	256	CB	ASP	A	50	64.776	-31.907	-16.162	1.00	34.96	C
ATOM	257	CG	ASP	A	50	64.046	-33.179	-15.690	1.00	38.73	C
ATOM	258	OD1	ASP	A	50	62.834	-33.113	-15.350	1.00	40.34	O
ATOM	259	OD2	ASP	A	50	64.687	-34.249	-15.653	1.00	41.88	O
ATOM	260	N	VAL	A	51	61.961	-29.955	-14.898	1.00	32.69	N
ATOM	261	CA	VAL	A	51	61.266	-29.662	-13.637	1.00	30.88	C
ATOM	262	C	VAL	A	51	60.832	-30.995	-12.991	1.00	30.87	C
ATOM	263	O	VAL	A	51	60.195	-31.822	-13.630	1.00	31.04	O
ATOM	264	CB	VAL	A	51	60.073	-28.697	-13.839	1.00	31.29	C
ATOM	265	CG1	VAL	A	51	59.334	-28.397	-12.496	1.00	28.08	C
ATOM	266	CG2	VAL	A	51	60.527	-27.376	-14.554	1.00	29.99	C
ATOM	267	N	ASP	A	52	61.192	-31.202	-11.734	1.00	30.43	N

ATOM	268	CA	ASP	A	52	60.808	-32.417	-10.994	1.00	30.48	C
ATOM	269	C	ASP	A	52	59.326	-32.336	-10.634	1.00	29.96	C
ATOM	270	O	ASP	A	52	58.909	-31.426	-9.936	1.00	30.57	O
ATOM	271	CB	ASP	A	52	61.667	-32.500	-9.725	1.00	30.92	C
ATOM	272	CG	ASP	A	52	61.432	-33.777	-8.882	1.00	32.84	C
ATOM	273	OD1	ASP	A	52	60.840	-34.777	-9.308	1.00	35.63	O
ATOM	274	OD2	ASP	A	52	61.899	-33.786	-7.724	1.00	44.04	O
ATOM	275	N	VAL	A	53	58.538	-33.294	-11.107	1.00	29.31	N
ATOM	276	CA	VAL	A	53	57.107	-33.318	-10.901	1.00	28.46	C
ATOM	277	C	VAL	A	53	56.694	-34.619	-10.165	1.00	28.50	C
ATOM	278	O	VAL	A	53	55.511	-34.991	-10.139	1.00	28.08	O
ATOM	279	CB	VAL	A	53	56.305	-33.148	-12.272	1.00	29.36	C
ATOM	280	CG1	VAL	A	53	56.503	-31.748	-12.876	1.00	28.87	C
ATOM	281	CG2	VAL	A	53	56.649	-34.244	-13.316	1.00	27.80	C
ATOM	282	N	SER	A	54	57.670	-35.324	-9.600	1.00	27.75	N
ATOM	283	CA	SER	A	54	57.416	-36.600	-8.915	1.00	28.03	C
ATOM	284	C	SER	A	54	56.621	-36.420	-7.616	1.00	27.99	C
ATOM	285	O	SER	A	54	56.013	-37.361	-7.120	1.00	29.44	O
ATOM	286	CB	SER	A	54	58.745	-37.311	-8.620	1.00	28.67	C
ATOM	287	OG	SER	A	54	59.596	-36.525	-7.790	1.00	28.43	O
ATOM	288	N	VAL	A	55	56.618	-35.224	-7.043	1.00	27.62	N
ATOM	289	CA	VAL	A	55	55.920	-35.052	-5.780	1.00	27.51	C
ATOM	290	C	VAL	A	55	54.375	-35.069	-5.968	1.00	27.49	C
ATOM	291	O	VAL	A	55	53.627	-35.365	-5.033	1.00	26.61	O
ATOM	292	CB	VAL	A	55	56.390	-33.790	-5.049	1.00	27.71	C
ATOM	293	CG1	VAL	A	55	55.755	-32.538	-5.652	1.00	26.58	C
ATOM	294	CG2	VAL	A	55	56.065	-33.909	-3.592	1.00	27.26	C
ATOM	295	N	PHE	A	56	53.901	-34.796	-7.184	1.00	26.22	N
ATOM	296	CA	PHE	A	56	52.461	-34.707	-7.415	1.00	25.77	C
ATOM	297	C	PHE	A	56	51.799	-36.073	-7.591	1.00	26.07	C
ATOM	298	O	PHE	A	56	52.436	-37.003	-7.997	1.00	26.39	O
ATOM	299	CB	PHE	A	56	52.217	-33.801	-8.613	1.00	25.05	C
ATOM	300	CG	PHE	A	56	52.816	-32.427	-8.435	1.00	26.71	C
ATOM	301	CD1	PHE	A	56	54.041	-32.095	-9.035	1.00	23.08	C
ATOM	302	CD2	PHE	A	56	52.176	-31.470	-7.626	1.00	27.57	C
ATOM	303	CE1	PHE	A	56	54.587	-30.851	-8.875	1.00	21.11	C
ATOM	304	CE2	PHE	A	56	52.739	-30.198	-7.445	1.00	27.07	C
ATOM	305	CZ	PHE	A	56	53.940	-29.891	-8.069	1.00	24.91	C
ATOM	306	N	ASP	A	57	50.499	-36.165	-7.330	1.00	26.90	N
ATOM	307	CA	ASP	A	57	49.786	-37.416	-7.528	1.00	25.92	C
ATOM	308	C	ASP	A	57	49.475	-37.573	-9.023	1.00	25.64	C
ATOM	309	O	ASP	A	57	49.485	-38.663	-9.521	1.00	23.95	O
ATOM	310	CB	ASP	A	57	48.510	-37.447	-6.678	1.00	24.96	C
ATOM	311	CG	ASP	A	57	48.817	-37.367	-5.188	1.00	26.75	C
ATOM	312	OD1	ASP	A	57	49.572	-38.211	-4.667	1.00	31.36	O
ATOM	313	OD2	ASP	A	57	48.339	-36.451	-4.528	1.00	26.73	O
ATOM	314	N	VAL	A	58	49.206	-36.444	-9.700	1.00	25.84	N
ATOM	315	CA	VAL	A	58	48.792	-36.411	-11.100	1.00	25.15	C
ATOM	316	C	VAL	A	58	49.537	-35.272	-11.769	1.00	26.17	C
ATOM	317	O	VAL	A	58	49.671	-34.153	-11.205	1.00	24.79	O

ATOM	318	CB	VAL	A	58	47.215	-36.223	-11.260	1.00	25.69	C
ATOM	319	CG1	VAL	A	58	46.745	-36.248	-12.729	1.00	24.08	C
ATOM	320	CG2	VAL	A	58	46.459	-37.294	-10.465	1.00	24.63	C
ATOM	321	N	VAL	A	59	50.051	-35.571	-12.969	1.00	27.77	N
ATOM	322	CA	VAL	A	59	50.540	-34.553	-13.912	1.00	28.06	C
ATOM	323	C	VAL	A	59	49.593	-34.540	-15.107	1.00	28.92	C
ATOM	324	O	VAL	A	59	49.380	-35.558	-15.743	1.00	28.02	O
ATOM	325	CB	VAL	A	59	51.962	-34.866	-14.420	1.00	28.73	C
ATOM	326	CG1	VAL	A	59	52.380	-33.818	-15.507	1.00	27.80	C
ATOM	327	CG2	VAL	A	59	52.956	-34.886	-13.233	1.00	28.94	C
ATOM	328	N	ALA	A	60	49.017	-33.378	-15.402	1.00	29.19	N
ATOM	329	CA	ALA	A	60	48.095	-33.287	-16.466	1.00	29.87	C
ATOM	330	C	ALA	A	60	48.473	-32.087	-17.302	1.00	30.50	C
ATOM	331	O	ALA	A	60	48.128	-30.958	-16.977	1.00	31.05	O
ATOM	332	CB	ALA	A	60	46.654	-33.172	-15.948	1.00	28.87	C
ATOM	333	N	ASN	A	61	49.121	-32.354	-18.421	1.00	30.97	N
ATOM	334	CA	ASN	A	61	49.475	-31.299	-19.367	1.00	33.09	C
ATOM	335	C	ASN	A	61	48.263	-30.520	-19.898	1.00	32.36	C
ATOM	336	O	ASN	A	61	47.386	-31.125	-20.507	1.00	33.00	O
ATOM	337	CB	ASN	A	61	50.203	-31.920	-20.566	1.00	34.22	C
ATOM	338	CG	ASN	A	61	51.025	-30.922	-21.302	1.00	36.83	C
ATOM	339	OD1	ASN	A	61	50.656	-29.737	-21.390	1.00	39.49	O
ATOM	340	ND2	ASN	A	61	52.154	-31.374	-21.845	1.00	38.27	N
ATOM	341	N	PRO	A	62	48.207	-29.185	-19.683	1.00	31.86	N
ATOM	342	CA	PRO	A	62	47.097	-28.403	-20.228	1.00	32.45	C
ATOM	343	C	PRO	A	62	47.120	-28.348	-21.772	1.00	32.71	C
ATOM	344	O	PRO	A	62	46.102	-27.961	-22.406	1.00	32.58	O
ATOM	345	CB	PRO	A	62	47.323	-26.987	-19.658	1.00	33.19	C
ATOM	346	CG	PRO	A	62	48.475	-27.023	-18.839	1.00	30.43	C
ATOM	347	CD	PRO	A	62	49.173	-28.336	-18.979	1.00	32.44	C
ATOM	348	N	GLY	A	63	48.265	-28.742	-22.345	1.00	32.85	N
ATOM	349	CA	GLY	A	63	48.450	-28.882	-23.782	1.00	34.03	C
ATOM	350	C	GLY	A	63	47.799	-30.132	-24.342	1.00	35.50	C
ATOM	351	O	GLY	A	63	47.670	-30.279	-25.575	1.00	34.99	O
ATOM	352	N	GLN	A	64	47.339	-31.014	-23.439	1.00	36.46	N
ATOM	353	CA	GLN	A	64	46.517	-32.169	-23.799	1.00	37.58	C
ATOM	354	C	GLN	A	64	47.263	-33.067	-24.792	1.00	39.29	C
ATOM	355	O	GLN	A	64	46.873	-33.255	-25.972	1.00	38.96	O
ATOM	356	CB	GLN	A	64	45.137	-31.735	-24.337	1.00	37.31	C
ATOM	357	CG	GLN	A	64	44.229	-31.078	-23.290	1.00	36.51	C
ATOM	358	CD	GLN	A	64	42.999	-30.483	-23.930	1.00	37.50	C
ATOM	359	OE1	GLN	A	64	43.077	-29.848	-25.004	1.00	35.79	O
ATOM	360	NE2	GLN	A	64	41.844	-30.687	-23.292	1.00	34.99	N
ATOM	361	N	THR	A	65	48.368	-33.593	-24.293	1.00	41.20	N
ATOM	362	CA	THR	A	65	49.271	-34.413	-25.077	1.00	44.13	C
ATOM	363	C	THR	A	65	48.860	-35.880	-25.026	1.00	45.67	C
ATOM	364	O	THR	A	65	48.990	-36.581	-26.003	1.00	46.70	O
ATOM	365	CB	THR	A	65	50.687	-34.230	-24.564	1.00	43.91	C
ATOM	366	OG1	THR	A	65	50.691	-34.439	-23.139	1.00	46.98	O
ATOM	367	CG2	THR	A	65	51.123	-32.818	-24.821	1.00	43.20	C

ATOM	368	N	PHE	A	66	48.357	-36.341	-23.877	1.00	48.29	N
ATOM	369	CA	PHE	A	66	47.853	-37.727	-23.740	1.00	49.48	C
ATOM	370	C	PHE	A	66	46.457	-37.697	-23.108	1.00	49.13	C
ATOM	371	O	PHE	A	66	46.114	-36.737	-22.400	1.00	49.02	O
ATOM	372	CB	PHE	A	66	48.793	-38.563	-22.849	1.00	50.87	C
ATOM	373	CG	PHE	A	66	50.254	-38.427	-23.189	1.00	53.77	C
ATOM	374	CD1	PHE	A	66	51.097	-37.625	-22.396	1.00	56.93	C
ATOM	375	CD2	PHE	A	66	50.803	-39.097	-24.306	1.00	56.32	C
ATOM	376	CE1	PHE	A	66	52.488	-37.491	-22.717	1.00	58.29	C
ATOM	377	CE2	PHE	A	66	52.179	-38.972	-24.634	1.00	56.82	C
ATOM	378	CZ	PHE	A	66	53.017	-38.167	-23.844	1.00	55.44	C
ATOM	379	N	ARG	A	67	45.666	-38.743	-23.360	1.00	48.13	N
ATOM	380	CA	ARG	A	67	44.370	-38.924	-22.682	1.00	47.62	C
ATOM	381	C	ARG	A	67	44.409	-39.937	-21.515	1.00	46.01	C
ATOM	382	O	ARG	A	67	44.266	-41.136	-21.754	1.00	47.51	O
ATOM	383	CB	ARG	A	67	43.311	-39.355	-23.684	1.00	47.50	C
ATOM	384	CG	ARG	A	67	42.990	-38.258	-24.689	1.00	50.96	C
ATOM	385	CD	ARG	A	67	41.622	-38.491	-25.283	1.00	54.89	C
ATOM	386	NE	ARG	A	67	41.601	-39.800	-25.902	1.00	54.80	N
ATOM	387	CZ	ARG	A	67	41.641	-39.992	-27.209	1.00	56.94	C
ATOM	388	NH1	ARG	A	67	41.636	-38.939	-28.030	1.00	55.00	N
ATOM	389	NH2	ARG	A	67	41.647	-41.241	-27.686	1.00	58.26	N
ATOM	390	N	GLY	A	68	44.538	-39.461	-20.279	1.00	42.52	N
ATOM	391	CA	GLY	A	68	44.754	-40.343	-19.118	1.00	39.50	C
ATOM	392	C	GLY	A	68	43.560	-40.592	-18.198	1.00	37.48	C
ATOM	393	O	GLY	A	68	42.483	-40.011	-18.394	1.00	36.98	O
ATOM	394	N	PRO	A	69	43.738	-41.472	-17.183	1.00	35.82	N
ATOM	395	CA	PRO	A	69	42.645	-41.882	-16.297	1.00	34.74	C
ATOM	396	C	PRO	A	69	42.260	-40.890	-15.177	1.00	33.56	C
ATOM	397	O	PRO	A	69	41.220	-41.057	-14.515	1.00	32.11	O
ATOM	398	CB	PRO	A	69	43.180	-43.189	-15.678	1.00	35.33	C
ATOM	399	CG	PRO	A	69	44.692	-42.972	-15.604	1.00	35.76	C
ATOM	400	CD	PRO	A	69	45.015	-42.148	-16.848	1.00	35.53	C
ATOM	401	N	ASP	A	70	43.077	-39.866	-14.988	1.00	31.94	N
ATOM	402	CA	ASP	A	70	42.974	-39.019	-13.811	1.00	31.30	C
ATOM	403	C	ASP	A	70	42.395	-37.627	-14.070	1.00	30.59	C
ATOM	404	O	ASP	A	70	41.877	-37.000	-13.136	1.00	30.41	O
ATOM	405	CB	ASP	A	70	44.356	-38.869	-13.173	1.00	31.88	C
ATOM	406	CG	ASP	A	70	44.848	-40.147	-12.539	1.00	33.14	C
ATOM	407	OD1	ASP	A	70	44.074	-40.785	-11.784	1.00	31.94	O
ATOM	408	OD2	ASP	A	70	46.030	-40.490	-12.777	1.00	35.83	O
ATOM	409	N	MET	A	71	42.510	-37.136	-15.311	1.00	29.37	N
ATOM	410	CA	MET	A	71	41.975	-35.822	-15.652	1.00	29.28	C
ATOM	411	C	MET	A	71	41.656	-35.691	-17.138	1.00	29.12	C
ATOM	412	O	MET	A	71	42.490	-36.022	-17.996	1.00	28.82	O
ATOM	413	CB	MET	A	71	42.893	-34.664	-15.165	1.00	28.63	C
ATOM	414	CG	MET	A	71	42.294	-33.245	-15.343	1.00	28.37	C
ATOM	415	SD	MET	A	71	43.403	-31.971	-14.651	1.00	32.30	S
ATOM	416	CE	MET	A	71	42.380	-30.477	-14.776	1.00	27.03	C
ATOM	417	N	THR	A	72	40.437	-35.215	-17.425	1.00	28.87	N

ATOM	418	CA	THR	A	72	40.065	-34.662	-18.734	1.00	28.93	C
ATOM	419	C	THR	A	72	39.580	-33.226	-18.533	1.00	29.60	C
ATOM	420	O	THR	A	72	38.789	-32.933	-17.618	1.00	29.96	O
ATOM	421	CB	THR	A	72	38.892	-35.498	-19.393	1.00	29.09	C
ATOM	422	OG1	THR	A	72	39.292	-36.865	-19.449	1.00	30.70	O
ATOM	423	CG2	THR	A	72	38.604	-35.078	-20.848	1.00	28.41	C
ATOM	424	N	ILE	A	73	39.981	-32.352	-19.438	1.00	29.46	N
ATOM	425	CA	ILE	A	73	39.570	-30.964	-19.430	1.00	29.36	C
ATOM	426	C	ILE	A	73	38.834	-30.722	-20.758	1.00	27.78	C
ATOM	427	O	ILE	A	73	39.309	-31.105	-21.785	1.00	27.09	O
ATOM	428	CB	ILE	A	73	40.848	-30.047	-19.444	1.00	28.57	C
ATOM	429	CG1	ILE	A	73	41.682	-30.222	-18.165	1.00	30.84	C
ATOM	430	CG2	ILE	A	73	40.519	-28.615	-19.674	1.00	31.22	C
ATOM	431	CD1	ILE	A	73	43.213	-29.722	-18.401	1.00	31.26	C
ATOM	432	N	PHE	A	74	37.706	-30.033	-20.717	1.00	27.21	N
ATOM	433	CA	PHE	A	74	37.069	-29.569	-21.910	1.00	27.08	C
ATOM	434	C	PHE	A	74	37.113	-28.067	-21.904	1.00	27.43	C
ATOM	435	O	PHE	A	74	36.392	-27.403	-21.118	1.00	27.17	O
ATOM	436	CB	PHE	A	74	35.616	-30.045	-21.950	1.00	27.07	C
ATOM	437	CG	PHE	A	74	35.470	-31.561	-22.040	1.00	27.92	C
ATOM	438	CD1	PHE	A	74	35.262	-32.325	-20.885	1.00	25.79	C
ATOM	439	CD2	PHE	A	74	35.521	-32.213	-23.294	1.00	25.36	C
ATOM	440	CE1	PHE	A	74	35.114	-33.732	-20.979	1.00	28.76	C
ATOM	441	CE2	PHE	A	74	35.378	-33.620	-23.406	1.00	27.15	C
ATOM	442	CZ	PHE	A	74	35.169	-34.386	-22.247	1.00	25.15	C
ATOM	443	N	TYR	A	75	37.968	-27.532	-22.771	1.00	26.94	N
ATOM	444	CA	TYR	A	75	38.019	-26.108	-23.059	1.00	27.83	C
ATOM	445	C	TYR	A	75	36.786	-25.767	-23.864	1.00	27.69	C
ATOM	446	O	TYR	A	75	36.109	-26.648	-24.373	1.00	26.39	O
ATOM	447	CB	TYR	A	75	39.284	-25.749	-23.839	1.00	29.51	C
ATOM	448	CG	TYR	A	75	40.555	-26.003	-23.070	1.00	28.91	C
ATOM	449	CD1	TYR	A	75	41.435	-27.003	-23.454	1.00	28.68	C
ATOM	450	CD2	TYR	A	75	40.884	-25.214	-21.961	1.00	33.26	C
ATOM	451	CE1	TYR	A	75	42.638	-27.246	-22.726	1.00	32.34	C
ATOM	452	CE2	TYR	A	75	42.069	-25.444	-21.210	1.00	32.78	C
ATOM	453	CZ	TYR	A	75	42.936	-26.451	-21.613	1.00	33.06	C
ATOM	454	OH	TYR	A	75	44.083	-26.648	-20.898	1.00	33.56	O
ATOM	455	N	SER	A	76	36.431	-24.498	-23.919	1.00	29.51	N
ATOM	456	CA	SER	A	76	35.069	-24.167	-24.352	1.00	31.03	C
ATOM	457	C	SER	A	76	34.808	-24.531	-25.835	1.00	33.21	C
ATOM	458	O	SER	A	76	33.633	-24.627	-26.238	1.00	33.85	O
ATOM	459	CB	SER	A	76	34.778	-22.689	-24.129	1.00	31.29	C
ATOM	460	OG	SER	A	76	35.750	-21.860	-24.766	1.00	33.87	O
ATOM	461	N	SER	A	77	35.878	-24.751	-26.625	1.00	33.22	N
ATOM	462	CA	SER	A	77	35.737	-25.087	-28.044	1.00	34.69	C
ATOM	463	C	SER	A	77	35.740	-26.574	-28.256	1.00	35.33	C
ATOM	464	O	SER	A	77	35.649	-27.016	-29.399	1.00	35.59	O
ATOM	465	CB	SER	A	77	36.870	-24.496	-28.867	1.00	34.64	C
ATOM	466	OG	SER	A	77	38.077	-25.185	-28.551	1.00	39.62	O
ATOM	467	N	GLN	A	78	35.821	-27.345	-27.162	1.00	34.53	N

ATOM	468	CA	GLN	A	78	35.903	-28.803	-27.238	1.00	33.44	C
ATOM	469	C	GLN	A	78	34.654	-29.599	-26.828	1.00	33.60	C
ATOM	470	O	GLN	A	78	34.685	-30.814	-26.956	1.00	34.99	O
ATOM	471	CB	GLN	A	78	37.093	-29.313	-26.385	1.00	32.96	C
ATOM	472	CG	GLN	A	78	38.431	-28.668	-26.764	1.00	32.10	C
ATOM	473	CD	GLN	A	78	39.601	-29.112	-25.916	1.00	32.07	C
ATOM	474	OE1	GLN	A	78	39.493	-29.396	-24.709	1.00	32.84	O
ATOM	475	NE2	GLN	A	78	40.744	-29.144	-26.533	1.00	30.16	N
ATOM	476	N	LEU	A	79	33.609	-28.982	-26.255	1.00	32.22	N
ATOM	477	CA	LEU	A	79	32.462	-29.763	-25.762	1.00	30.42	C
ATOM	478	C	LEU	A	79	31.148	-29.201	-26.321	1.00	30.90	C
ATOM	479	O	LEU	A	79	30.661	-28.137	-25.891	1.00	30.01	O
ATOM	480	CB	LEU	A	79	32.440	-29.858	-24.226	1.00	30.59	C
ATOM	481	CG	LEU	A	79	31.399	-30.800	-23.607	1.00	28.93	C
ATOM	482	CD1	LEU	A	79	31.574	-32.239	-24.048	1.00	24.18	C
ATOM	483	CD2	LEU	A	79	31.448	-30.733	-22.117	1.00	28.40	C
ATOM	484	N	GLY	A	80	30.598	-29.926	-27.301	1.00	30.14	N
ATOM	485	CA	GLY	A	80	29.491	-29.446	-28.093	1.00	29.96	C
ATOM	486	C	GLY	A	80	29.753	-28.134	-28.800	1.00	30.42	C
ATOM	487	O	GLY	A	80	30.828	-27.933	-29.395	1.00	30.61	O
ATOM	488	N	THR	A	81	28.784	-27.231	-28.696	1.00	29.38	N
ATOM	489	CA	THR	A	81	28.797	-25.987	-29.443	1.00	30.14	C
ATOM	490	C	THR	A	81	28.519	-24.821	-28.533	1.00	29.97	C
ATOM	491	O	THR	A	81	27.422	-24.272	-28.527	1.00	30.23	O
ATOM	492	CB	THR	A	81	27.715	-25.989	-30.585	1.00	29.43	C
ATOM	493	OG1	THR	A	81	26.408	-26.161	-30.019	1.00	29.17	O
ATOM	494	CG2	THR	A	81	27.979	-27.107	-31.625	1.00	28.96	C
ATOM	495	N	TYR	A	82	29.530	-24.416	-27.796	1.00	30.61	N
ATOM	496	CA	TYR	A	82	29.401	-23.387	-26.783	1.00	30.26	C
ATOM	497	C	TYR	A	82	29.261	-21.991	-27.370	1.00	30.62	C
ATOM	498	O	TYR	A	82	30.138	-21.528	-28.085	1.00	30.93	O
ATOM	499	CB	TYR	A	82	30.632	-23.420	-25.904	1.00	30.37	C
ATOM	500	CG	TYR	A	82	30.614	-22.434	-24.759	1.00	29.75	C
ATOM	501	CD1	TYR	A	82	29.686	-22.558	-23.737	1.00	27.19	C
ATOM	502	CD2	TYR	A	82	31.546	-21.386	-24.694	1.00	30.97	C
ATOM	503	CE1	TYR	A	82	29.682	-21.672	-22.672	1.00	26.62	C
ATOM	504	CE2	TYR	A	82	31.547	-20.478	-23.611	1.00	30.57	C
ATOM	505	CZ	TYR	A	82	30.606	-20.653	-22.606	1.00	28.46	C
ATOM	506	OH	TYR	A	82	30.580	-19.816	-21.521	1.00	28.83	O
ATOM	507	N	PRO	A	83	28.158	-21.301	-27.038	1.00	31.92	N
ATOM	508	CA	PRO	A	83	27.883	-19.982	-27.602	1.00	32.08	C
ATOM	509	C	PRO	A	83	28.524	-18.870	-26.801	1.00	33.81	C
ATOM	510	O	PRO	A	83	28.484	-18.895	-25.561	1.00	33.82	O
ATOM	511	CB	PRO	A	83	26.348	-19.893	-27.527	1.00	32.04	C
ATOM	512	CG	PRO	A	83	25.922	-20.907	-26.486	1.00	31.71	C
ATOM	513	CD	PRO	A	83	27.090	-21.755	-26.118	1.00	30.80	C
ATOM	514	N	TYR	A	84	29.123	-17.915	-27.505	1.00	35.47	N
ATOM	515	CA	TYR	A	84	29.783	-16.778	-26.882	1.00	37.55	C
ATOM	516	C	TYR	A	84	29.977	-15.677	-27.899	1.00	37.99	C
ATOM	517	O	TYR	A	84	29.770	-15.856	-29.104	1.00	38.69	O

ATOM	518	CB	TYR	A	84	31.138	-17.170	-26.230	1.00	38.62	C
ATOM	519	CG	TYR	A	84	32.192	-17.581	-27.224	1.00	39.82	C
ATOM	520	CD1	TYR	A	84	33.133	-16.659	-27.714	1.00	39.82	C
ATOM	521	CD2	TYR	A	84	32.241	-18.883	-27.690	1.00	41.26	C
ATOM	522	CE1	TYR	A	84	34.090	-17.036	-28.649	1.00	40.40	C
ATOM	523	CE2	TYR	A	84	33.195	-19.276	-28.614	1.00	43.23	C
ATOM	524	CZ	TYR	A	84	34.115	-18.357	-29.097	1.00	42.49	C
ATOM	525	OH	TYR	A	84	35.066	-18.799	-30.012	1.00	44.65	O
ATOM	526	N	TYR	A	85	30.314	-14.501	-27.406	1.00	38.93	N
ATOM	527	CA	TYR	A	85	30.687	-13.403	-28.287	1.00	39.40	C
ATOM	528	C	TYR	A	85	32.204	-13.227	-28.264	1.00	40.62	C
ATOM	529	O	TYR	A	85	32.804	-13.243	-27.186	1.00	39.64	O
ATOM	530	CB	TYR	A	85	29.998	-12.117	-27.852	1.00	39.35	C
ATOM	531	CG	TYR	A	85	28.510	-12.151	-28.073	1.00	38.65	C
ATOM	532	CD1	TYR	A	85	27.643	-12.217	-27.004	1.00	35.96	C
ATOM	533	CD2	TYR	A	85	27.983	-12.145	-29.360	1.00	39.49	C
ATOM	534	CE1	TYR	A	85	26.299	-12.259	-27.193	1.00	37.98	C
ATOM	535	CE2	TYR	A	85	26.614	-12.206	-29.575	1.00	38.79	C
ATOM	536	CZ	TYR	A	85	25.782	-12.260	-28.480	1.00	39.13	C
ATOM	537	OH	TYR	A	85	24.425	-12.323	-28.656	1.00	40.48	O
ATOM	538	N	THR	A	86	32.808	-13.077	-29.454	1.00	42.58	N
ATOM	539	CA	THR	A	86	34.229	-12.698	-29.587	1.00	44.76	C
ATOM	540	C	THR	A	86	34.452	-11.342	-28.903	1.00	46.26	C
ATOM	541	O	THR	A	86	33.468	-10.651	-28.577	1.00	46.75	O
ATOM	542	CB	THR	A	86	34.652	-12.589	-31.067	1.00	44.78	C
ATOM	543	OG1	THR	A	86	34.131	-11.384	-31.628	1.00	46.03	O
ATOM	544	CG2	THR	A	86	34.128	-13.773	-31.891	1.00	44.60	C
ATOM	545	N	PRO	A	87	35.728	-10.949	-28.639	1.00	47.86	N
ATOM	546	CA	PRO	A	87	35.895	-9.670	-27.929	1.00	48.48	C
ATOM	547	C	PRO	A	87	35.515	-8.403	-28.722	1.00	48.71	C
ATOM	548	O	PRO	A	87	35.431	-7.333	-28.132	1.00	49.40	O
ATOM	549	CB	PRO	A	87	37.381	-9.676	-27.548	1.00	49.08	C
ATOM	550	CG	PRO	A	87	37.785	-11.135	-27.635	1.00	48.94	C
ATOM	551	CD	PRO	A	87	37.040	-11.584	-28.854	1.00	48.01	C
ATOM	552	N	THR	A	88	35.269	-8.534	-30.021	1.00	48.51	N
ATOM	553	CA	THR	A	88	34.707	-7.455	-30.829	1.00	48.60	C
ATOM	554	C	THR	A	88	33.185	-7.614	-31.048	1.00	47.99	C
ATOM	555	O	THR	A	88	32.590	-6.929	-31.907	1.00	47.48	O
ATOM	556	CB	THR	A	88	35.401	-7.373	-32.210	1.00	49.18	C
ATOM	557	OG1	THR	A	88	34.940	-8.444	-33.047	1.00	50.56	O
ATOM	558	CG2	THR	A	88	36.924	-7.422	-32.067	1.00	49.79	C
ATOM	559	N	GLY	A	89	32.572	-8.554	-30.317	1.00	46.62	N
ATOM	560	CA	GLY	A	89	31.116	-8.680	-30.262	1.00	45.44	C
ATOM	561	C	GLY	A	89	30.422	-9.521	-31.308	1.00	45.10	C
ATOM	562	O	GLY	A	89	29.201	-9.466	-31.431	1.00	44.74	O
ATOM	563	N	GLU	A	90	31.180	-10.307	-32.055	1.00	45.72	N
ATOM	564	CA	GLU	A	90	30.597	-11.221	-33.054	1.00	47.53	C
ATOM	565	C	GLU	A	90	30.174	-12.580	-32.428	1.00	47.00	C
ATOM	566	O	GLU	A	90	30.945	-13.143	-31.624	1.00	47.08	O
ATOM	567	CB	GLU	A	90	31.610	-11.460	-34.178	1.00	48.21	C

ATOM	568	CG	GLU	A	90	30.975	-11.712	-35.530	1.00	53.21	C
ATOM	569	CD	GLU	A	90	30.485	-10.419	-36.226	1.00	58.85	C
ATOM	570	OE1	GLU	A	90	29.773	-10.532	-37.253	1.00	60.00	O
ATOM	571	OE2	GLU	A	90	30.807	-9.301	-35.748	1.00	60.33	O
ATOM	572	N	PRO	A	91	28.968	-13.105	-32.790	1.00	45.92	N
ATOM	573	CA	PRO	A	91	28.449	-14.313	-32.163	1.00	45.02	C
ATOM	574	C	PRO	A	91	29.133	-15.547	-32.695	1.00	44.18	C
ATOM	575	O	PRO	A	91	29.406	-15.627	-33.896	1.00	45.34	O
ATOM	576	CB	PRO	A	91	26.970	-14.333	-32.582	1.00	44.71	C
ATOM	577	CG	PRO	A	91	26.716	-13.053	-33.234	1.00	44.60	C
ATOM	578	CD	PRO	A	91	28.008	-12.604	-33.785	1.00	46.20	C
ATOM	579	N	VAL	A	92	29.419	-16.491	-31.807	1.00	42.27	N
ATOM	580	CA	VAL	A	92	29.838	-17.824	-32.213	1.00	40.76	C
ATOM	581	C	VAL	A	92	28.736	-18.779	-31.729	1.00	40.56	C
ATOM	582	O	VAL	A	92	28.278	-18.667	-30.584	1.00	40.49	O
ATOM	583	CB	VAL	A	92	31.258	-18.176	-31.670	1.00	40.57	C
ATOM	584	CG1	VAL	A	92	31.712	-19.491	-32.207	1.00	38.35	C
ATOM	585	CG2	VAL	A	92	32.265	-17.080	-32.082	1.00	40.37	C
ATOM	586	N	PHE	A	93	28.277	-19.672	-32.609	1.00	39.21	N
ATOM	587	CA	PHE	A	93	27.122	-20.527	-32.322	1.00	38.56	C
ATOM	588	C	PHE	A	93	25.919	-19.785	-31.741	1.00	38.90	C
ATOM	589	O	PHE	A	93	25.162	-20.359	-30.957	1.00	39.84	O
ATOM	590	CB	PHE	A	93	27.487	-21.690	-31.379	1.00	38.32	C
ATOM	591	CG	PHE	A	93	28.512	-22.623	-31.934	1.00	36.61	C
ATOM	592	CD1	PHE	A	93	29.701	-22.820	-31.275	1.00	35.87	C
ATOM	593	CD2	PHE	A	93	28.275	-23.316	-33.110	1.00	38.35	C
ATOM	594	CE1	PHE	A	93	30.658	-23.682	-31.786	1.00	37.20	C
ATOM	595	CE2	PHE	A	93	29.215	-24.180	-33.631	1.00	39.87	C
ATOM	596	CZ	PHE	A	93	30.412	-24.372	-32.971	1.00	37.93	C
ATOM	597	N	GLY	A	94	25.743	-18.519	-32.109	1.00	38.23	N
ATOM	598	CA	GLY	A	94	24.573	-17.754	-31.725	1.00	36.19	C
ATOM	599	C	GLY	A	94	24.792	-16.788	-30.589	1.00	35.77	C
ATOM	600	O	GLY	A	94	23.883	-16.053	-30.235	1.00	36.28	O
ATOM	601	N	GLY	A	95	25.978	-16.803	-29.996	1.00	34.98	N
ATOM	602	CA	GLY	A	95	26.348	-15.874	-28.911	1.00	35.11	C
ATOM	603	C	GLY	A	95	25.803	-16.174	-27.515	1.00	35.21	C
ATOM	604	O	GLY	A	95	26.526	-16.113	-26.509	1.00	34.66	O
ATOM	605	N	LEU	A	96	24.522	-16.536	-27.482	1.00	35.38	N
ATOM	606	CA	LEU	A	96	23.751	-16.663	-26.260	1.00	35.01	C
ATOM	607	C	LEU	A	96	23.090	-18.022	-26.269	1.00	35.02	C
ATOM	608	O	LEU	A	96	22.681	-18.509	-27.338	1.00	35.23	O
ATOM	609	CB	LEU	A	96	22.663	-15.595	-26.220	1.00	35.11	C
ATOM	610	CG	LEU	A	96	22.977	-14.121	-26.003	1.00	34.89	C
ATOM	611	CD1	LEU	A	96	21.809	-13.345	-26.524	1.00	34.95	C
ATOM	612	CD2	LEU	A	96	23.196	-13.837	-24.542	1.00	34.37	C
ATOM	613	N	PRO	A	97	22.974	-18.653	-25.089	1.00	35.27	N
ATOM	614	CA	PRO	A	97	22.335	-19.968	-25.100	1.00	35.37	C
ATOM	615	C	PRO	A	97	20.847	-19.949	-25.616	1.00	35.96	C
ATOM	616	O	PRO	A	97	20.420	-20.916	-26.231	1.00	35.95	O
ATOM	617	CB	PRO	A	97	22.431	-20.422	-23.642	1.00	34.49	C

ATOM	618	CG	PRO	A	97	22.597	-19.173	-22.868	1.00	36.13	C
ATOM	619	CD	PRO	A	97	23.377	-18.234	-23.734	1.00	34.25	C
ATOM	620	N	GLN	A	98	20.082	-18.877	-25.366	1.00	36.39	N
ATOM	621	CA	GLN	A	98	18.700	-18.780	-25.889	1.00	36.68	C
ATOM	622	C	GLN	A	98	18.669	-18.511	-27.400	1.00	37.63	C
ATOM	623	O	GLN	A	98	17.592	-18.561	-28.005	1.00	38.22	O
ATOM	624	CB	GLN	A	98	17.846	-17.731	-25.148	1.00	36.02	C
ATOM	625	CG	GLN	A	98	18.300	-16.272	-25.293	1.00	34.43	C
ATOM	626	CD	GLN	A	98	19.341	-15.883	-24.257	1.00	34.81	C
ATOM	627	OE1	GLN	A	98	20.253	-16.657	-23.966	1.00	36.53	O
ATOM	628	NE2	GLN	A	98	19.212	-14.697	-23.698	1.00	32.20	N
ATOM	629	N	ASN	A	99	19.832	-18.229	-28.001	1.00	37.71	N
ATOM	630	CA	ASN	A	99	19.927	-18.002	-29.453	1.00	37.77	C
ATOM	631	C	ASN	A	99	20.707	-19.106	-30.157	1.00	37.26	C
ATOM	632	O	ASN	A	99	21.188	-18.931	-31.287	1.00	38.61	O
ATOM	633	CB	ASN	A	99	20.601	-16.652	-29.715	1.00	38.25	C
ATOM	634	CG	ASN	A	99	20.410	-16.142	-31.152	1.00	41.18	C
ATOM	635	OD1	ASN	A	99	19.451	-16.500	-31.839	1.00	41.06	O
ATOM	636	ND2	ASN	A	99	21.325	-15.268	-31.583	1.00	46.79	N
ATOM	637	N	ALA	A	100	20.886	-20.226	-29.474	1.00	36.38	N
ATOM	638	CA	ALA	A	100	21.611	-21.358	-30.029	1.00	35.40	C
ATOM	639	C	ALA	A	100	20.713	-22.577	-29.867	1.00	34.65	C
ATOM	640	O	ALA	A	100	19.770	-22.528	-29.086	1.00	34.67	O
ATOM	641	CB	ALA	A	100	22.934	-21.564	-29.298	1.00	34.80	C
ATOM	642	N	SER	A	101	21.021	-23.646	-30.603	1.00	33.43	N
ATOM	643	CA	SER	A	101	20.306	-24.917	-30.568	1.00	33.36	C
ATOM	644	C	SER	A	101	20.908	-25.890	-29.525	1.00	32.31	C
ATOM	645	O	SER	A	101	22.033	-26.373	-29.677	1.00	31.47	O
ATOM	646	CB	SER	A	101	20.363	-25.558	-31.973	1.00	33.19	C
ATOM	647	OG	SER	A	101	20.026	-26.935	-31.916	1.00	35.94	O
ATOM	648	N	LEU	A	102	20.143	-26.184	-28.490	1.00	32.35	N
ATOM	649	CA	LEU	A	102	20.576	-27.075	-27.421	1.00	32.40	C
ATOM	650	C	LEU	A	102	20.674	-28.496	-27.960	1.00	32.16	C
ATOM	651	O	LEU	A	102	21.559	-29.274	-27.597	1.00	33.32	O
ATOM	652	CB	LEU	A	102	19.550	-27.052	-26.288	1.00	32.36	C
ATOM	653	CG	LEU	A	102	20.013	-27.224	-24.818	1.00	35.03	C
ATOM	654	CD1	LEU	A	102	18.971	-27.960	-24.019	1.00	33.95	C
ATOM	655	CD2	LEU	A	102	21.461	-27.767	-24.569	1.00	34.62	C
ATOM	656	N	ILE	A	103	19.743	-28.814	-28.837	1.00	30.29	N
ATOM	657	CA	ILE	A	103	19.638	-30.114	-29.465	1.00	30.17	C
ATOM	658	C	ILE	A	103	20.916	-30.405	-30.278	1.00	28.88	C
ATOM	659	O	ILE	A	103	21.507	-31.480	-30.159	1.00	27.65	O
ATOM	660	CB	ILE	A	103	18.286	-30.137	-30.287	1.00	30.43	C
ATOM	661	CG1	ILE	A	103	18.043	-31.426	-31.044	1.00	31.63	C
ATOM	662	CG2	ILE	A	103	18.211	-28.915	-31.261	1.00	33.27	C
ATOM	663	CD1	ILE	A	103	17.945	-32.550	-30.193	1.00	33.93	C
ATOM	664	N	ALA	A	104	21.387	-29.420	-31.038	1.00	28.32	N
ATOM	665	CA	ALA	A	104	22.628	-29.584	-31.803	1.00	28.21	C
ATOM	666	C	ALA	A	104	23.834	-29.631	-30.869	1.00	28.13	C
ATOM	667	O	ALA	A	104	24.782	-30.381	-31.100	1.00	28.35	O

ATOM	668	CB	ALA	A	104	22.777	-28.484	-32.863	1.00	27.50	C
ATOM	669	N	HIS	A	105	23.785	-28.846	-29.796	1.00	28.49	N
ATOM	670	CA	HIS	A	105	24.841	-28.869	-28.782	1.00	28.49	C
ATOM	671	C	HIS	A	105	24.932	-30.240	-28.139	1.00	28.20	C
ATOM	672	O	HIS	A	105	26.026	-30.779	-27.999	1.00	28.06	O
ATOM	673	CB	HIS	A	105	24.602	-27.862	-27.665	1.00	28.33	C
ATOM	674	CG	HIS	A	105	25.537	-28.057	-26.500	1.00	30.42	C
ATOM	675	ND1	HIS	A	105	26.882	-27.737	-26.556	1.00	25.97	N
ATOM	676	CD2	HIS	A	105	25.321	-28.560	-25.257	1.00	30.57	C
ATOM	677	CE1	HIS	A	105	27.450	-28.035	-25.397	1.00	29.33	C
ATOM	678	NE2	HIS	A	105	26.524	-28.530	-24.590	1.00	28.99	N
ATOM	679	N	LEU	A	106	23.785	-30.805	-27.761	1.00	27.90	N
ATOM	680	CA	LEU	A	106	23.787	-32.105	-27.088	1.00	28.49	C
ATOM	681	C	LEU	A	106	24.251	-33.269	-27.978	1.00	29.04	C
ATOM	682	O	LEU	A	106	24.913	-34.212	-27.481	1.00	29.09	O
ATOM	683	CB	LEU	A	106	22.440	-32.378	-26.444	1.00	29.29	C
ATOM	684	CG	LEU	A	106	21.977	-31.481	-25.268	1.00	29.85	C
ATOM	685	CD1	LEU	A	106	20.534	-31.829	-24.840	1.00	27.60	C
ATOM	686	CD2	LEU	A	106	22.932	-31.475	-24.086	1.00	25.31	C
ATOM	687	N	ALA	A	107	23.954	-33.173	-29.284	1.00	29.25	N
ATOM	688	CA	ALA	A	107	24.381	-34.168	-30.253	1.00	30.12	C
ATOM	689	C	ALA	A	107	25.891	-34.213	-30.354	1.00	30.34	C
ATOM	690	O	ALA	A	107	26.475	-35.280	-30.316	1.00	30.43	O
ATOM	691	CB	ALA	A	107	23.749	-33.902	-31.670	1.00	29.77	C
ATOM	692	N	ARG	A	108	26.500	-33.050	-30.524	1.00	30.83	N
ATOM	693	CA	ARG	A	108	27.951	-32.914	-30.585	1.00	32.17	C
ATOM	694	C	ARG	A	108	28.618	-33.245	-29.234	1.00	31.96	C
ATOM	695	O	ARG	A	108	29.611	-33.974	-29.196	1.00	32.81	O
ATOM	696	CB	ARG	A	108	28.324	-31.511	-31.084	1.00	32.41	C
ATOM	697	CG	ARG	A	108	29.821	-31.303	-31.412	1.00	39.50	C
ATOM	698	CD	ARG	A	108	30.089	-31.330	-32.920	1.00	50.11	C
ATOM	699	NE	ARG	A	108	30.950	-30.205	-33.342	1.00	57.97	N
ATOM	700	CZ	ARG	A	108	30.546	-29.137	-34.051	1.00	60.28	C
ATOM	701	NH1	ARG	A	108	29.284	-29.016	-34.461	1.00	61.55	N
ATOM	702	NH2	ARG	A	108	31.410	-28.174	-34.359	1.00	61.60	N
ATOM	703	N	THR	A	109	28.060	-32.749	-28.129	1.00	31.35	N
ATOM	704	CA	THR	A	109	28.517	-33.116	-26.779	1.00	30.52	C
ATOM	705	C	THR	A	109	28.615	-34.638	-26.593	1.00	31.50	C
ATOM	706	O	THR	A	109	29.626	-35.135	-26.108	1.00	31.16	O
ATOM	707	CB	THR	A	109	27.564	-32.532	-25.717	1.00	29.85	C
ATOM	708	OG1	THR	A	109	27.560	-31.102	-25.833	1.00	28.96	O
ATOM	709	CG2	THR	A	109	27.935	-32.970	-24.295	1.00	26.94	C
ATOM	710	N	PHE	A	110	27.572	-35.371	-26.990	1.00	32.46	N
ATOM	711	CA	PHE	A	110	27.535	-36.842	-26.847	1.00	32.52	C
ATOM	712	C	PHE	A	110	28.743	-37.473	-27.520	1.00	33.20	C
ATOM	713	O	PHE	A	110	29.409	-38.348	-26.941	1.00	32.50	O
ATOM	714	CB	PHE	A	110	26.245	-37.388	-27.481	1.00	32.52	C
ATOM	715	CG	PHE	A	110	25.955	-38.852	-27.187	1.00	31.77	C
ATOM	716	CD1	PHE	A	110	24.952	-39.205	-26.280	1.00	33.65	C
ATOM	717	CD2	PHE	A	110	26.610	-39.867	-27.884	1.00	31.84	C

ATOM	718	CE1	PHE	A	110	24.619	-40.566	-26.043	1.00	31.51	C
ATOM	719	CE2	PHE	A	110	26.319	-41.217	-27.660	1.00	30.82	C
ATOM	720	CZ	PHE	A	110	25.341	-41.572	-26.720	1.00	33.39	C
ATOM	721	N	GLN	A	111	29.028	-36.994	-28.739	1.00	33.48	N
ATOM	722	CA	GLN	A	111	30.124	-37.504	-29.546	1.00	33.82	C
ATOM	723	C	GLN	A	111	31.464	-36.989	-28.987	1.00	33.27	C
ATOM	724	O	GLN	A	111	32.450	-37.714	-28.975	1.00	33.60	O
ATOM	725	CB	GLN	A	111	29.956	-37.115	-31.028	1.00	34.28	C
ATOM	726	CG	GLN	A	111	28.691	-37.671	-31.757	1.00	37.22	C
ATOM	727	CD	GLN	A	111	28.500	-39.187	-31.646	1.00	43.99	C
ATOM	728	OE1	GLN	A	111	29.437	-39.969	-31.860	1.00	46.13	O
ATOM	729	NE2	GLN	A	111	27.264	-39.613	-31.300	1.00	45.08	N
ATOM	730	N	ASP	A	112	31.504	-35.747	-28.510	1.00	32.44	N
ATOM	731	CA	ASP	A	112	32.737	-35.215	-27.921	1.00	32.51	C
ATOM	732	C	ASP	A	112	33.209	-35.995	-26.679	1.00	32.04	C
ATOM	733	O	ASP	A	112	34.410	-36.231	-26.519	1.00	32.49	O
ATOM	734	CB	ASP	A	112	32.593	-33.729	-27.580	1.00	32.69	C
ATOM	735	CG	ASP	A	112	32.618	-32.817	-28.814	1.00	33.45	C
ATOM	736	OD1	ASP	A	112	33.137	-33.158	-29.906	1.00	33.53	O
ATOM	737	OD2	ASP	A	112	32.129	-31.699	-28.676	1.00	34.61	O
ATOM	738	N	ILE	A	113	32.277	-36.350	-25.799	1.00	31.75	N
ATOM	739	CA	ILE	A	113	32.583	-37.077	-24.579	1.00	31.31	C
ATOM	740	C	ILE	A	113	33.149	-38.483	-24.902	1.00	31.97	C
ATOM	741	O	ILE	A	113	34.177	-38.897	-24.338	1.00	33.11	O
ATOM	742	CB	ILE	A	113	31.331	-37.226	-23.693	1.00	31.64	C
ATOM	743	CG1	ILE	A	113	30.858	-35.869	-23.150	1.00	31.30	C
ATOM	744	CG2	ILE	A	113	31.582	-38.307	-22.553	1.00	29.42	C
ATOM	745	CD1	ILE	A	113	29.427	-35.922	-22.643	1.00	26.61	C
ATOM	746	N	LEU	A	114	32.476	-39.219	-25.779	1.00	30.98	N
ATOM	747	CA	LEU	A	114	32.956	-40.537	-26.177	1.00	31.38	C
ATOM	748	C	LEU	A	114	34.356	-40.541	-26.780	1.00	30.93	C
ATOM	749	O	LEU	A	114	35.082	-41.521	-26.604	1.00	31.88	O
ATOM	750	CB	LEU	A	114	32.009	-41.218	-27.172	1.00	30.18	C
ATOM	751	CG	LEU	A	114	30.568	-41.561	-26.772	1.00	31.54	C
ATOM	752	CD1	LEU	A	114	29.875	-42.310	-27.926	1.00	29.83	C
ATOM	753	CD2	LEU	A	114	30.459	-42.328	-25.463	1.00	33.83	C
ATOM	754	N	ALA	A	115	34.708	-39.509	-27.542	1.00	30.47	N
ATOM	755	CA	ALA	A	115	36.043	-39.447	-28.167	1.00	31.14	C
ATOM	756	C	ALA	A	115	37.092	-39.020	-27.125	1.00	31.73	C
ATOM	757	O	ALA	A	115	38.165	-39.570	-27.114	1.00	33.00	O
ATOM	758	CB	ALA	A	115	36.053	-38.494	-29.372	1.00	30.45	C
ATOM	759	N	ALA	A	116	36.763	-38.070	-26.237	1.00	31.47	N
ATOM	760	CA	ALA	A	116	37.696	-37.564	-25.233	1.00	31.65	C
ATOM	761	C	ALA	A	116	37.909	-38.522	-24.091	1.00	31.71	C
ATOM	762	O	ALA	A	116	38.972	-38.532	-23.498	1.00	32.52	O
ATOM	763	CB	ALA	A	116	37.213	-36.214	-24.666	1.00	32.23	C
ATOM	764	N	ILE	A	117	36.885	-39.295	-23.762	1.00	31.47	N
ATOM	765	CA	ILE	A	117	36.915	-40.168	-22.616	1.00	30.51	C
ATOM	766	C	ILE	A	117	36.536	-41.568	-23.093	1.00	31.78	C
ATOM	767	O	ILE	A	117	35.397	-41.979	-22.940	1.00	32.15	O

ATOM	768	CB	ILE	A	117	35.941	-39.687	-21.483	1.00	30.98	C
ATOM	769	CG1	ILE	A	117	36.145	-38.194	-21.123	1.00	27.84	C
ATOM	770	CG2	ILE	A	117	36.028	-40.593	-20.273	1.00	27.56	C
ATOM	771	CD1	ILE	A	117	35.208	-37.741	-20.054	1.00	28.95	C
ATOM	772	N	PRO	A	118	37.486	-42.277	-23.733	1.00	33.03	N
ATOM	773	CA	PRO	A	118	37.213	-43.634	-24.241	1.00	33.65	C
ATOM	774	C	PRO	A	118	36.897	-44.726	-23.207	1.00	33.90	C
ATOM	775	O	PRO	A	118	36.310	-45.725	-23.585	1.00	35.52	O
ATOM	776	CB	PRO	A	118	38.482	-43.991	-25.045	1.00	33.97	C
ATOM	777	CG	PRO	A	118	39.568	-43.061	-24.516	1.00	34.05	C
ATOM	778	CD	PRO	A	118	38.842	-41.801	-24.111	1.00	33.13	C
ATOM	779	N	ALA	A	119	37.257	-44.584	-21.939	1.00	32.93	N
ATOM	780	CA	ALA	A	119	36.916	-45.635	-20.974	1.00	32.50	C
ATOM	781	C	ALA	A	119	35.582	-45.338	-20.281	1.00	32.38	C
ATOM	782	O	ALA	A	119	35.467	-44.327	-19.626	1.00	33.97	O
ATOM	783	CB	ALA	A	119	38.070	-45.850	-19.933	1.00	32.28	C
ATOM	784	N	PRO	A	120	34.554	-46.217	-20.431	1.00	32.45	N
ATOM	785	CA	PRO	A	120	33.255	-45.938	-19.785	1.00	31.37	C
ATOM	786	C	PRO	A	120	33.303	-45.802	-18.251	1.00	30.91	C
ATOM	787	O	PRO	A	120	32.426	-45.204	-17.657	1.00	30.17	O
ATOM	788	CB	PRO	A	120	32.381	-47.137	-20.203	1.00	31.76	C
ATOM	789	CG	PRO	A	120	33.042	-47.662	-21.449	1.00	32.30	C
ATOM	790	CD	PRO	A	120	34.516	-47.481	-21.215	1.00	31.70	C
ATOM	791	N	ASP	A	121	34.331	-46.330	-17.618	1.00	31.03	N
ATOM	792	CA	ASP	A	121	34.392	-46.311	-16.167	1.00	32.25	C
ATOM	793	C	ASP	A	121	35.393	-45.274	-15.666	1.00	30.59	C
ATOM	794	O	ASP	A	121	35.801	-45.324	-14.537	1.00	30.50	O
ATOM	795	CB	ASP	A	121	34.767	-47.703	-15.655	1.00	33.66	C
ATOM	796	CG	ASP	A	121	36.154	-48.174	-16.175	1.00	39.19	C
ATOM	797	OD1	ASP	A	121	36.637	-47.657	-17.230	1.00	43.26	O
ATOM	798	OD2	ASP	A	121	36.749	-49.076	-15.523	1.00	43.90	O
ATOM	799	N	PHE	A	122	35.790	-44.355	-16.556	1.00	30.67	N
ATOM	800	CA	PHE	A	122	36.670	-43.247	-16.263	1.00	28.74	C
ATOM	801	C	PHE	A	122	36.232	-42.608	-14.957	1.00	28.94	C
ATOM	802	O	PHE	A	122	35.040	-42.257	-14.790	1.00	29.33	O
ATOM	803	CB	PHE	A	122	36.568	-42.215	-17.395	1.00	28.71	C
ATOM	804	CG	PHE	A	122	37.233	-40.905	-17.084	1.00	26.89	C
ATOM	805	CD1	PHE	A	122	38.610	-40.760	-17.212	1.00	26.70	C
ATOM	806	CD2	PHE	A	122	36.490	-39.824	-16.627	1.00	27.51	C
ATOM	807	CE1	PHE	A	122	39.225	-39.549	-16.907	1.00	26.96	C
ATOM	808	CE2	PHE	A	122	37.101	-38.594	-16.330	1.00	25.78	C
ATOM	809	CZ	PHE	A	122	38.439	-38.446	-16.480	1.00	25.99	C
ATOM	810	N	SER	A	123	37.163	-42.426	-14.027	1.00	27.52	N
ATOM	811	CA	SER	A	123	36.742	-41.866	-12.741	1.00	27.27	C
ATOM	812	C	SER	A	123	37.597	-40.655	-12.312	1.00	27.95	C
ATOM	813	O	SER	A	123	37.665	-40.326	-11.131	1.00	29.10	O
ATOM	814	CB	SER	A	123	36.752	-42.983	-11.713	1.00	27.35	C
ATOM	815	OG	SER	A	123	38.083	-43.418	-11.536	1.00	29.23	O
ATOM	816	N	GLY	A	124	38.227	-39.973	-13.279	1.00	26.56	N
ATOM	817	CA	GLY	A	124	39.082	-38.871	-12.979	1.00	25.03	C

ATOM	818	C	GLY	A	124	38.268	-37.600	-12.972	1.00	25.00	C
ATOM	819	O	GLY	A	124	37.057	-37.644	-13.114	1.00	24.22	O
ATOM	820	N	LEU	A	125	38.964	-36.482	-12.784	1.00	24.49	N
ATOM	821	CA	LEU	A	125	38.426	-35.143	-12.926	1.00	25.47	C
ATOM	822	C	LEU	A	125	37.917	-34.984	-14.343	1.00	25.27	C
ATOM	823	O	LEU	A	125	38.598	-35.352	-15.297	1.00	26.45	O
ATOM	824	CB	LEU	A	125	39.525	-34.093	-12.657	1.00	24.74	C
ATOM	825	CG	LEU	A	125	39.978	-33.784	-11.186	1.00	28.94	C
ATOM	826	CD1	LEU	A	125	40.416	-34.938	-10.355	1.00	28.47	C
ATOM	827	CD2	LEU	A	125	41.091	-32.836	-11.172	1.00	25.80	C
ATOM	828	N	ALA	A	126	36.734	-34.399	-14.472	1.00	25.21	N
ATOM	829	CA	ALA	A	126	36.192	-34.033	-15.764	1.00	25.00	C
ATOM	830	C	ALA	A	126	35.774	-32.570	-15.628	1.00	25.07	C
ATOM	831	O	ALA	A	126	34.679	-32.232	-15.191	1.00	25.49	O
ATOM	832	CB	ALA	A	126	35.027	-34.960	-16.168	1.00	23.76	C
ATOM	833	N	VAL	A	127	36.700	-31.701	-16.014	1.00	25.29	N
ATOM	834	CA	VAL	A	127	36.566	-30.279	-15.833	1.00	24.60	C
ATOM	835	C	VAL	A	127	36.053	-29.625	-17.126	1.00	25.71	C
ATOM	836	O	VAL	A	127	36.690	-29.714	-18.183	1.00	25.46	O
ATOM	837	CB	VAL	A	127	37.929	-29.617	-15.338	1.00	24.61	C
ATOM	838	CG1	VAL	A	127	37.676	-28.136	-15.029	1.00	23.17	C
ATOM	839	CG2	VAL	A	127	38.463	-30.359	-14.031	1.00	21.75	C
ATOM	840	N	ILE	A	128	34.901	-28.967	-17.033	1.00	25.89	N
ATOM	841	CA	ILE	A	128	34.407	-28.177	-18.166	1.00	26.78	C
ATOM	842	C	ILE	A	128	34.766	-26.710	-17.915	1.00	27.13	C
ATOM	843	O	ILE	A	128	34.483	-26.138	-16.853	1.00	26.65	O
ATOM	844	CB	ILE	A	128	32.894	-28.336	-18.420	1.00	25.87	C
ATOM	845	CG1	ILE	A	128	32.496	-29.829	-18.457	1.00	26.83	C
ATOM	846	CG2	ILE	A	128	32.464	-27.530	-19.744	1.00	26.98	C
ATOM	847	CD1	ILE	A	128	30.998	-30.117	-18.449	1.00	27.33	C
ATOM	848	N	ASP	A	129	35.406	-26.103	-18.899	1.00	27.40	N
ATOM	849	CA	ASP	A	129	35.890	-24.773	-18.724	1.00	28.10	C
ATOM	850	C	ASP	A	129	35.114	-23.772	-19.593	1.00	27.97	C
ATOM	851	O	ASP	A	129	35.508	-23.488	-20.723	1.00	28.41	O
ATOM	852	CB	ASP	A	129	37.370	-24.729	-19.036	1.00	28.62	C
ATOM	853	CG	ASP	A	129	37.951	-23.329	-18.838	1.00	31.56	C
ATOM	854	OD1	ASP	A	129	37.410	-22.577	-17.999	1.00	31.34	O
ATOM	855	OD2	ASP	A	129	38.932	-22.994	-19.519	1.00	36.54	O
ATOM	856	N	TRP	A	130	34.011	-23.279	-19.049	1.00	27.95	N
ATOM	857	CA	TRP	A	130	33.076	-22.364	-19.719	1.00	28.69	C
ATOM	858	C	TRP	A	130	33.156	-21.044	-18.966	1.00	29.50	C
ATOM	859	O	TRP	A	130	32.661	-20.937	-17.853	1.00	29.00	O
ATOM	860	CB	TRP	A	130	31.640	-22.929	-19.644	1.00	28.36	C
ATOM	861	CG	TRP	A	130	31.331	-24.016	-20.690	1.00	27.16	C
ATOM	862	CD1	TRP	A	130	32.217	-24.626	-21.523	1.00	27.77	C
ATOM	863	CD2	TRP	A	130	30.048	-24.562	-21.006	1.00	26.61	C
ATOM	864	NE1	TRP	A	130	31.565	-25.539	-22.341	1.00	28.55	N
ATOM	865	CE2	TRP	A	130	30.233	-25.518	-22.038	1.00	25.82	C
ATOM	866	CE3	TRP	A	130	28.764	-24.352	-20.511	1.00	28.10	C
ATOM	867	CZ2	TRP	A	130	29.187	-26.221	-22.600	1.00	27.04	C

ATOM	868	CZ3	TRP	A	130	27.704	-25.085	-21.063	1.00	28.29	C
ATOM	869	CH2	TRP	A	130	27.929	-25.996	-22.103	1.00	28.72	C
ATOM	870	N	GLU	A	131	33.786	-20.053	-19.574	1.00	31.62	N
ATOM	871	CA	GLU	A	131	34.036	-18.792	-18.909	1.00	33.84	C
ATOM	872	C	GLU	A	131	33.450	-17.549	-19.579	1.00	35.22	C
ATOM	873	O	GLU	A	131	33.647	-16.437	-19.075	1.00	37.41	O
ATOM	874	CB	GLU	A	131	35.546	-18.619	-18.724	1.00	34.16	C
ATOM	875	CG	GLU	A	131	36.153	-19.552	-17.697	1.00	33.15	C
ATOM	876	CD	GLU	A	131	37.664	-19.395	-17.607	1.00	36.46	C
ATOM	877	OE1	GLU	A	131	38.146	-18.271	-17.300	1.00	38.66	O
ATOM	878	OE2	GLU	A	131	38.384	-20.392	-17.805	1.00	37.91	O
ATOM	879	N	ALA	A	132	32.683	-17.699	-20.646	1.00	35.06	N
ATOM	880	CA	ALA	A	132	32.103	-16.534	-21.294	1.00	36.39	C
ATOM	881	C	ALA	A	132	30.971	-15.859	-20.482	1.00	36.95	C
ATOM	882	O	ALA	A	132	31.215	-14.829	-19.824	1.00	39.63	O
ATOM	883	CB	ALA	A	132	31.655	-16.858	-22.744	1.00	36.12	C
ATOM	884	N	TRP	A	133	29.751	-16.367	-20.609	1.00	35.04	N
ATOM	885	CA	TRP	A	133	28.595	-15.930	-19.819	1.00	33.32	C
ATOM	886	C	TRP	A	133	28.459	-16.736	-18.530	1.00	33.21	C
ATOM	887	O	TRP	A	133	28.841	-17.935	-18.444	1.00	33.24	O
ATOM	888	CB	TRP	A	133	27.285	-16.053	-20.640	1.00	32.57	C
ATOM	889	CG	TRP	A	133	27.166	-17.345	-21.494	1.00	30.64	C
ATOM	890	CD1	TRP	A	133	27.602	-17.502	-22.782	1.00	30.08	C
ATOM	891	CD2	TRP	A	133	26.599	-18.609	-21.114	1.00	26.78	C
ATOM	892	NE1	TRP	A	133	27.339	-18.758	-23.231	1.00	28.46	N
ATOM	893	CE2	TRP	A	133	26.750	-19.477	-22.222	1.00	28.90	C
ATOM	894	CE3	TRP	A	133	26.011	-19.105	-19.941	1.00	27.17	C
ATOM	895	CZ2	TRP	A	133	26.309	-20.811	-22.204	1.00	30.29	C
ATOM	896	CZ3	TRP	A	133	25.579	-20.442	-19.910	1.00	28.77	C
ATOM	897	CH2	TRP	A	133	25.743	-21.281	-21.023	1.00	30.03	C
ATOM	898	N	ARG	A	134	27.868	-16.094	-17.538	1.00	32.82	N
ATOM	899	CA	ARG	A	134	27.524	-16.739	-16.298	1.00	33.26	C
ATOM	900	C	ARG	A	134	26.054	-17.083	-16.264	1.00	33.23	C
ATOM	901	O	ARG	A	134	25.242	-16.294	-16.758	1.00	34.17	O
ATOM	902	CB	ARG	A	134	27.803	-15.790	-15.155	1.00	34.40	C
ATOM	903	CG	ARG	A	134	29.021	-16.104	-14.353	1.00	36.86	C
ATOM	904	CD	ARG	A	134	30.227	-15.381	-14.821	1.00	41.36	C
ATOM	905	NE	ARG	A	134	30.320	-14.048	-14.236	1.00	46.74	N
ATOM	906	CZ	ARG	A	134	31.449	-13.449	-13.837	1.00	48.05	C
ATOM	907	NH1	ARG	A	134	32.614	-14.079	-13.908	1.00	50.79	N
ATOM	908	NH2	ARG	A	134	31.411	-12.209	-13.359	1.00	44.56	N
ATOM	909	N	PRO	A	135	25.685	-18.226	-15.643	1.00	32.84	N
ATOM	910	CA	PRO	A	135	24.275	-18.605	-15.581	1.00	33.03	C
ATOM	911	C	PRO	A	135	23.361	-17.673	-14.795	1.00	33.49	C
ATOM	912	O	PRO	A	135	22.147	-17.689	-15.034	1.00	32.26	O
ATOM	913	CB	PRO	A	135	24.290	-19.983	-14.880	1.00	32.11	C
ATOM	914	CG	PRO	A	135	25.578	-20.043	-14.167	1.00	32.14	C
ATOM	915	CD	PRO	A	135	26.547	-19.250	-15.013	1.00	32.26	C
ATOM	916	N	ARG	A	136	23.918	-16.907	-13.853	1.00	34.23	N
ATOM	917	CA	ARG	A	136	23.123	-15.925	-13.096	1.00	35.62	C

ATOM	918	C	ARG	A	136	23.235	-14.577	-13.778	1.00	35.93	C
ATOM	919	O	ARG	A	136	24.334	-14.024	-13.873	1.00	35.26	O
ATOM	920	CB	ARG	A	136	23.580	-15.810	-11.650	1.00	35.33	C
ATOM	921	CG	ARG	A	136	23.261	-17.013	-10.854	1.00	38.13	C
ATOM	922	CD	ARG	A	136	22.035	-16.787	-10.047	1.00	44.26	C
ATOM	923	NE	ARG	A	136	20.870	-17.302	-10.716	1.00	45.16	N
ATOM	924	CZ	ARG	A	136	19.612	-16.911	-10.508	1.00	45.79	C
ATOM	925	NH1	ARG	A	136	19.285	-15.966	-9.626	1.00	43.47	N
ATOM	926	NH2	ARG	A	136	18.667	-17.497	-11.213	1.00	44.41	N
ATOM	927	N	TRP	A	137	22.091	-14.075	-14.260	1.00	36.69	N
ATOM	928	CA	TRP	A	137	21.988	-12.756	-14.938	1.00	37.89	C
ATOM	929	C	TRP	A	137	22.753	-11.651	-14.206	1.00	37.92	C
ATOM	930	O	TRP	A	137	23.557	-10.952	-14.831	1.00	37.97	O
ATOM	931	CB	TRP	A	137	20.510	-12.381	-15.129	1.00	38.71	C
ATOM	932	CG	TRP	A	137	20.191	-11.035	-15.776	1.00	39.13	C
ATOM	933	CD1	TRP	A	137	19.964	-9.836	-15.128	1.00	40.63	C
ATOM	934	CD2	TRP	A	137	20.019	-10.764	-17.181	1.00	39.60	C
ATOM	935	NE1	TRP	A	137	19.665	-8.839	-16.050	1.00	40.20	N
ATOM	936	CE2	TRP	A	137	19.695	-9.382	-17.311	1.00	40.15	C
ATOM	937	CE3	TRP	A	137	20.109	-11.549	-18.341	1.00	40.70	C
ATOM	938	CZ2	TRP	A	137	19.451	-8.778	-18.561	1.00	39.59	C
ATOM	939	CZ3	TRP	A	137	19.852	-10.945	-19.588	1.00	40.29	C
ATOM	940	CH2	TRP	A	137	19.533	-9.567	-19.681	1.00	39.92	C
ATOM	941	N	ALA	A	138	22.500	-11.524	-12.894	1.00	38.35	N
ATOM	942	CA	ALA	A	138	23.239	-10.631	-11.968	1.00	38.52	C
ATOM	943	C	ALA	A	138	24.779	-10.644	-12.044	1.00	38.71	C
ATOM	944	O	ALA	A	138	25.406	-9.647	-11.732	1.00	38.74	O
ATOM	945	CB	ALA	A	138	22.817	-10.917	-10.534	1.00	38.62	C
ATOM	946	N	PHE	A	139	25.383	-11.767	-12.434	1.00	38.33	N
ATOM	947	CA	PHE	A	139	26.849	-11.873	-12.436	1.00	38.20	C
ATOM	948	C	PHE	A	139	27.472	-11.524	-13.789	1.00	38.30	C
ATOM	949	O	PHE	A	139	28.694	-11.507	-13.918	1.00	38.43	O
ATOM	950	CB	PHE	A	139	27.333	-13.273	-11.982	1.00	37.42	C
ATOM	951	CG	PHE	A	139	26.946	-13.664	-10.548	1.00	36.29	C
ATOM	952	CD1	PHE	A	139	26.902	-15.022	-10.189	1.00	34.63	C
ATOM	953	CD2	PHE	A	139	26.649	-12.703	-9.573	1.00	36.68	C
ATOM	954	CE1	PHE	A	139	26.568	-15.437	-8.891	1.00	35.17	C
ATOM	955	CE2	PHE	A	139	26.298	-13.085	-8.259	1.00	35.81	C
ATOM	956	CZ	PHE	A	139	26.276	-14.466	-7.914	1.00	36.36	C
ATOM	957	N	ASN	A	140	26.656	-11.252	-14.802	1.00	38.35	N
ATOM	958	CA	ASN	A	140	27.211	-10.853	-16.113	1.00	39.01	C
ATOM	959	C	ASN	A	140	27.529	-9.352	-16.213	1.00	40.08	C
ATOM	960	O	ASN	A	140	26.928	-8.634	-16.986	1.00	39.16	O
ATOM	961	CB	ASN	A	140	26.329	-11.343	-17.275	1.00	37.81	C
ATOM	962	CG	ASN	A	140	26.250	-12.840	-17.317	1.00	36.97	C
ATOM	963	OD1	ASN	A	140	27.102	-13.495	-17.909	1.00	35.59	O
ATOM	964	ND2	ASN	A	140	25.278	-13.403	-16.621	1.00	35.97	N
ATOM	965	N	TRP	A	141	28.484	-8.904	-15.407	1.00	42.38	N
ATOM	966	CA	TRP	A	141	28.850	-7.487	-15.325	1.00	44.62	C
ATOM	967	C	TRP	A	141	30.203	-7.247	-15.960	1.00	45.86	C

ATOM	968	O	TRP	A	141	30.946	-8.196	-16.255	1.00	46.73	O
ATOM	969	CB	TRP	A	141	28.858	-6.998	-13.859	1.00	44.97	C
ATOM	970	CG	TRP	A	141	29.671	-7.849	-12.954	1.00	45.09	C
ATOM	971	CD1	TRP	A	141	30.965	-8.229	-13.143	1.00	46.69	C
ATOM	972	CD2	TRP	A	141	29.257	-8.439	-11.719	1.00	46.16	C
ATOM	973	NE1	TRP	A	141	31.386	-9.030	-12.114	1.00	48.77	N
ATOM	974	CE2	TRP	A	141	30.358	-9.178	-11.220	1.00	46.60	C
ATOM	975	CE3	TRP	A	141	28.069	-8.414	-10.981	1.00	46.43	C
ATOM	976	CZ2	TRP	A	141	30.308	-9.887	-10.025	1.00	44.96	C
ATOM	977	CZ3	TRP	A	141	28.019	-9.114	-9.778	1.00	46.78	C
ATOM	978	CH2	TRP	A	141	29.133	-9.848	-9.318	1.00	46.77	C
ATOM	979	N	ASP	A	142	30.522	-5.970	-16.143	1.00	47.36	N
ATOM	980	CA	ASP	A	142	31.780	-5.525	-16.752	1.00	48.73	C
ATOM	981	C	ASP	A	142	31.788	-5.981	-18.201	1.00	48.19	C
ATOM	982	O	ASP	A	142	30.833	-5.681	-18.925	1.00	48.07	O
ATOM	983	CB	ASP	A	142	33.020	-5.947	-15.930	1.00	49.31	C
ATOM	984	CG	ASP	A	142	33.006	-5.359	-14.479	1.00	54.14	C
ATOM	985	OD1	ASP	A	142	32.283	-4.353	-14.240	1.00	56.65	O
ATOM	986	OD2	ASP	A	142	33.709	-5.902	-13.572	1.00	56.85	O
ATOM	987	N	THR	A	143	32.834	-6.698	-18.621	1.00	48.07	N
ATOM	988	CA	THR	A	143	32.943	-7.209	-19.999	1.00	47.40	C
ATOM	989	C	THR	A	143	31.889	-8.276	-20.338	1.00	46.61	C
ATOM	990	O	THR	A	143	31.680	-8.583	-21.513	1.00	46.89	O
ATOM	991	CB	THR	A	143	34.334	-7.828	-20.270	1.00	48.10	C
ATOM	992	OG1	THR	A	143	34.704	-8.658	-19.156	1.00	48.48	O
ATOM	993	CG2	THR	A	143	35.388	-6.740	-20.467	1.00	48.30	C
ATOM	994	N	LYS	A	144	31.241	-8.850	-19.321	1.00	44.89	N
ATOM	995	CA	LYS	A	144	30.166	-9.825	-19.547	1.00	43.76	C
ATOM	996	C	LYS	A	144	28.793	-9.167	-19.759	1.00	43.18	C
ATOM	997	O	LYS	A	144	27.836	-9.824	-20.142	1.00	43.04	O
ATOM	998	CB	LYS	A	144	30.127	-10.871	-18.413	1.00	43.51	C
ATOM	999	CG	LYS	A	144	31.431	-11.616	-18.261	1.00	42.45	C
ATOM	1000	CD	LYS	A	144	31.344	-12.830	-17.372	1.00	45.98	C
ATOM	1001	CE	LYS	A	144	32.718	-13.545	-17.358	1.00	47.74	C
ATOM	1002	NZ	LYS	A	144	33.443	-13.459	-18.700	1.00	45.97	N
ATOM	1003	N	ASP	A	145	28.690	-7.868	-19.504	1.00	43.08	N
ATOM	1004	CA	ASP	A	145	27.424	-7.150	-19.731	1.00	43.30	C
ATOM	1005	C	ASP	A	145	26.975	-7.192	-21.196	1.00	42.37	C
ATOM	1006	O	ASP	A	145	25.841	-6.907	-21.479	1.00	42.77	O
ATOM	1007	CB	ASP	A	145	27.459	-5.713	-19.172	1.00	43.72	C
ATOM	1008	CG	ASP	A	145	26.094	-5.011	-19.255	1.00	46.64	C
ATOM	1009	OD1	ASP	A	145	25.093	-5.564	-18.732	1.00	47.38	O
ATOM	1010	OD2	ASP	A	145	26.020	-3.909	-19.869	1.00	47.00	O
ATOM	1011	N	ILE	A	146	27.844	-7.593	-22.120	1.00	42.09	N
ATOM	1012	CA	ILE	A	146	27.412	-7.846	-23.500	1.00	41.40	C
ATOM	1013	C	ILE	A	146	26.323	-8.925	-23.568	1.00	41.36	C
ATOM	1014	O	ILE	A	146	25.432	-8.834	-24.397	1.00	42.06	O
ATOM	1015	CB	ILE	A	146	28.600	-8.208	-24.438	1.00	41.67	C
ATOM	1016	CG1	ILE	A	146	28.116	-8.293	-25.895	1.00	41.30	C
ATOM	1017	CG2	ILE	A	146	29.344	-9.513	-23.963	1.00	41.68	C

ATOM	1018	CD1	ILE	A	146	29.234	-8.329	-26.932	1.00	41.85	C
ATOM	1019	N	TYR	A	147	26.394	-9.943	-22.695	1.00	40.60	N
ATOM	1020	CA	TYR	A	147	25.402	-11.023	-22.668	1.00	39.97	C
ATOM	1021	C	TYR	A	147	24.014	-10.473	-22.263	1.00	40.00	C
ATOM	1022	O	TYR	A	147	22.990	-10.896	-22.788	1.00	40.19	O
ATOM	1023	CB	TYR	A	147	25.899	-12.253	-21.824	1.00	38.64	C
ATOM	1024	CG	TYR	A	147	27.150	-12.848	-22.457	1.00	37.42	C
ATOM	1025	CD1	TYR	A	147	28.423	-12.564	-21.955	1.00	36.28	C
ATOM	1026	CD2	TYR	A	147	27.061	-13.623	-23.613	1.00	35.87	C
ATOM	1027	CE1	TYR	A	147	29.554	-13.036	-22.593	1.00	35.69	C
ATOM	1028	CE2	TYR	A	147	28.184	-14.122	-24.230	1.00	35.71	C
ATOM	1029	CZ	TYR	A	147	29.422	-13.816	-23.729	1.00	35.13	C
ATOM	1030	OH	TYR	A	147	30.524	-14.302	-24.373	1.00	37.34	O
ATOM	1031	N	ARG	A	148	24.001	-9.511	-21.352	1.00	40.16	N
ATOM	1032	CA	ARG	A	148	22.780	-8.813	-20.996	1.00	40.87	C
ATOM	1033	C	ARG	A	148	22.286	-7.901	-22.127	1.00	41.64	C
ATOM	1034	O	ARG	A	148	21.130	-8.027	-22.543	1.00	41.59	O
ATOM	1035	CB	ARG	A	148	22.936	-8.066	-19.672	1.00	40.63	C
ATOM	1036	CG	ARG	A	148	23.226	-9.012	-18.569	1.00	39.52	C
ATOM	1037	CD	ARG	A	148	23.121	-8.428	-17.227	1.00	40.65	C
ATOM	1038	NE	ARG	A	148	24.086	-7.374	-17.007	1.00	42.06	N
ATOM	1039	CZ	ARG	A	148	24.551	-7.028	-15.809	1.00	44.27	C
ATOM	1040	NH1	ARG	A	148	24.154	-7.694	-14.730	1.00	43.81	N
ATOM	1041	NH2	ARG	A	148	25.420	-6.025	-15.695	1.00	43.14	N
ATOM	1042	N	GLN	A	149	23.156	-7.035	-22.644	1.00	42.32	N
ATOM	1043	CA	GLN	A	149	22.802	-6.143	-23.754	1.00	43.44	C
ATOM	1044	C	GLN	A	149	22.217	-6.917	-24.926	1.00	43.72	C
ATOM	1045	O	GLN	A	149	21.150	-6.557	-25.431	1.00	43.89	O
ATOM	1046	CB	GLN	A	149	24.008	-5.343	-24.233	1.00	43.79	C
ATOM	1047	CG	GLN	A	149	24.648	-4.445	-23.188	1.00	46.83	C
ATOM	1048	CD	GLN	A	149	26.112	-4.130	-23.515	1.00	52.22	C
ATOM	1049	OE1	GLN	A	149	26.520	-4.140	-24.688	1.00	54.72	O
ATOM	1050	NE2	GLN	A	149	26.915	-3.861	-22.475	1.00	52.67	N
ATOM	1051	N	ARG	A	150	22.891	-7.999	-25.326	1.00	43.92	N
ATOM	1052	CA	ARG	A	150	22.436	-8.832	-26.440	1.00	43.92	C
ATOM	1053	C	ARG	A	150	21.195	-9.651	-26.149	1.00	44.39	C
ATOM	1054	O	ARG	A	150	20.441	-9.984	-27.080	1.00	44.11	O
ATOM	1055	CB	ARG	A	150	23.532	-9.771	-26.908	1.00	43.99	C
ATOM	1056	CG	ARG	A	150	24.781	-9.069	-27.403	1.00	45.16	C
ATOM	1057	CD	ARG	A	150	24.518	-7.976	-28.449	1.00	47.29	C
ATOM	1058	NE	ARG	A	150	25.814	-7.477	-28.909	1.00	50.46	N
ATOM	1059	CZ	ARG	A	150	26.427	-7.944	-29.985	1.00	50.72	C
ATOM	1060	NH1	ARG	A	150	25.824	-8.859	-30.749	1.00	51.42	N
ATOM	1061	NH2	ARG	A	150	27.617	-7.485	-30.304	1.00	50.46	N
ATOM	1062	N	SER	A	151	20.999	-10.019	-24.879	1.00	44.95	N
ATOM	1063	CA	SER	A	151	19.762	-10.691	-24.465	1.00	45.33	C
ATOM	1064	C	SER	A	151	18.558	-9.770	-24.660	1.00	46.08	C
ATOM	1065	O	SER	A	151	17.530	-10.197	-25.184	1.00	46.14	O
ATOM	1066	CB	SER	A	151	19.845	-11.208	-23.020	1.00	45.19	C
ATOM	1067	OG	SER	A	151	20.628	-12.379	-22.970	1.00	41.45	O

ATOM	1068	N	ARG	A	152	18.713	-8.514	-24.244	1.00	47.27	N
ATOM	1069	CA	ARG	A	152	17.706	-7.465	-24.437	1.00	48.67	C
ATOM	1070	C	ARG	A	152	17.450	-7.229	-25.923	1.00	49.22	C
ATOM	1071	O	ARG	A	152	16.296	-7.238	-26.351	1.00	49.37	O
ATOM	1072	CB	ARG	A	152	18.090	-6.168	-23.710	1.00	48.14	C
ATOM	1073	CG	ARG	A	152	18.156	-6.348	-22.195	1.00	48.05	C
ATOM	1074	CD	ARG	A	152	18.436	-5.056	-21.450	1.00	49.39	C
ATOM	1075	NE	ARG	A	152	19.847	-4.655	-21.367	1.00	52.29	N
ATOM	1076	CZ	ARG	A	152	20.586	-4.681	-20.249	1.00	54.44	C
ATOM	1077	NH1	ARG	A	152	20.083	-5.117	-19.092	1.00	54.31	N
ATOM	1078	NH2	ARG	A	152	21.850	-4.273	-20.281	1.00	55.77	N
ATOM	1079	N	ALA	A	153	18.522	-7.098	-26.705	1.00	50.43	N
ATOM	1080	CA	ALA	A	153	18.423	-6.924	-28.167	1.00	51.73	C
ATOM	1081	C	ALA	A	153	17.579	-7.985	-28.882	1.00	52.79	C
ATOM	1082	O	ALA	A	153	16.865	-7.686	-29.840	1.00	52.95	O
ATOM	1083	CB	ALA	A	153	19.815	-6.854	-28.800	1.00	51.41	C
ATOM	1084	N	LEU	A	154	17.672	-9.226	-28.414	1.00	54.10	N
ATOM	1085	CA	LEU	A	154	17.088	-10.373	-29.106	1.00	55.14	C
ATOM	1086	C	LEU	A	154	15.552	-10.349	-29.025	1.00	55.39	C
ATOM	1087	O	LEU	A	154	14.847	-10.644	-30.017	1.00	54.75	O
ATOM	1088	CB	LEU	A	154	17.691	-11.669	-28.544	1.00	55.32	C
ATOM	1089	CG	LEU	A	154	17.644	-12.985	-29.332	1.00	56.93	C
ATOM	1090	CD1	LEU	A	154	18.510	-12.953	-30.606	1.00	57.27	C
ATOM	1091	CD2	LEU	A	154	18.065	-14.143	-28.417	1.00	55.90	C
ATOM	1092	N	VAL	A	155	15.042	-9.958	-27.854	1.00	56.24	N
ATOM	1093	CA	VAL	A	155	13.595	-9.869	-27.638	1.00	56.84	C
ATOM	1094	C	VAL	A	155	13.027	-8.576	-28.218	1.00	57.50	C
ATOM	1095	O	VAL	A	155	11.901	-8.560	-28.716	1.00	57.28	O
ATOM	1096	CB	VAL	A	155	13.180	-10.063	-26.151	1.00	57.06	C
ATOM	1097	CG1	VAL	A	155	13.854	-11.303	-25.559	1.00	55.46	C
ATOM	1098	CG2	VAL	A	155	13.490	-8.828	-25.324	1.00	57.28	C
ATOM	1099	N	GLN	A	156	13.829	-7.510	-28.162	1.00	58.48	N
ATOM	1100	CA	GLN	A	156	13.514	-6.215	-28.777	1.00	59.26	C
ATOM	1101	C	GLN	A	156	13.370	-6.276	-30.315	1.00	59.84	C
ATOM	1102	O	GLN	A	156	12.528	-5.588	-30.882	1.00	59.88	O
ATOM	1103	CB	GLN	A	156	14.550	-5.168	-28.362	1.00	59.04	C
ATOM	1104	CG	GLN	A	156	14.129	-3.720	-28.598	1.00	59.74	C
ATOM	1105	CD	GLN	A	156	12.910	-3.279	-27.773	1.00	59.98	C
ATOM	1106	OE1	GLN	A	156	11.751	-3.606	-28.100	1.00	58.70	O
ATOM	1107	NE2	GLN	A	156	13.168	-2.496	-26.717	1.00	59.77	N
ATOM	1108	N	ALA	A	157	14.187	-7.098	-30.976	1.00	60.63	N
ATOM	1109	CA	ALA	A	157	14.044	-7.375	-32.418	1.00	61.36	C
ATOM	1110	C	ALA	A	157	12.819	-8.245	-32.777	1.00	61.83	C
ATOM	1111	O	ALA	A	157	12.221	-8.066	-33.841	1.00	62.23	O
ATOM	1112	CB	ALA	A	157	15.326	-8.001	-32.979	1.00	61.39	C
ATOM	1113	N	GLN	A	158	12.466	-9.182	-31.893	1.00	62.15	N
ATOM	1114	CA	GLN	A	158	11.319	-10.081	-32.066	1.00	62.33	C
ATOM	1115	C	GLN	A	158	10.006	-9.387	-31.691	1.00	62.22	C
ATOM	1116	O	GLN	A	158	8.936	-9.730	-32.217	1.00	62.30	O
ATOM	1117	CB	GLN	A	158	11.518	-11.358	-31.233	1.00	62.52	C

ATOM	1118	CG	GLN	A	158	10.383	-12.403	-31.310	1.00	64.52	C
ATOM	1119	CD	GLN	A	158	10.282	-13.142	-32.654	1.00	66.21	C
ATOM	1120	OE1	GLN	A	158	11.273	-13.676	-33.168	1.00	67.21	O
ATOM	1121	NE2	GLN	A	158	9.067	-13.199	-33.208	1.00	66.17	N
ATOM	1122	N	HIS	A	159	10.093	-8.418	-30.778	1.00	61.94	N
ATOM	1123	CA	HIS	A	159	8.943	-7.606	-30.371	1.00	61.65	C
ATOM	1124	C	HIS	A	159	9.376	-6.142	-30.307	1.00	61.45	C
ATOM	1125	O	HIS	A	159	9.786	-5.666	-29.236	1.00	60.88	O
ATOM	1126	CB	HIS	A	159	8.387	-8.062	-29.019	1.00	61.77	C
ATOM	1127	CG	HIS	A	159	8.227	-9.552	-28.885	1.00	63.06	C
ATOM	1128	ND1	HIS	A	159	7.060	-10.213	-29.212	1.00	63.44	N
ATOM	1129	CD2	HIS	A	159	9.087	-10.507	-28.447	1.00	63.20	C
ATOM	1130	CE1	HIS	A	159	7.208	-11.508	-28.986	1.00	64.11	C
ATOM	1131	NE2	HIS	A	159	8.430	-11.713	-28.523	1.00	63.43	N
ATOM	1132	N	PRO	A	160	9.287	-5.424	-31.462	1.00	61.52	N
ATOM	1133	CA	PRO	A	160	9.907	-4.094	-31.631	1.00	61.54	C
ATOM	1134	C	PRO	A	160	9.239	-2.975	-30.824	1.00	61.74	C
ATOM	1135	O	PRO	A	160	9.885	-1.971	-30.490	1.00	61.45	O
ATOM	1136	CB	PRO	A	160	9.800	-3.846	-33.146	1.00	61.36	C
ATOM	1137	CG	PRO	A	160	9.457	-5.209	-33.755	1.00	61.20	C
ATOM	1138	CD	PRO	A	160	8.604	-5.842	-32.703	1.00	61.33	C
ATOM	1139	N	ASP	A	161	7.966	-3.178	-30.497	1.00	62.31	N
ATOM	1140	CA	ASP	A	161	7.164	-2.202	-29.773	1.00	62.94	C
ATOM	1141	C	ASP	A	161	6.991	-2.656	-28.326	1.00	63.09	C
ATOM	1142	O	ASP	A	161	5.878	-2.936	-27.883	1.00	63.05	O
ATOM	1143	CB	ASP	A	161	5.799	-2.006	-30.477	1.00	63.15	C
ATOM	1144	CG	ASP	A	161	5.934	-1.476	-31.921	1.00	63.48	C
ATOM	1145	OD1	ASP	A	161	5.398	-2.131	-32.847	1.00	63.80	O
ATOM	1146	OD2	ASP	A	161	6.570	-0.413	-32.135	1.00	63.45	O
ATOM	1147	N	TRP	A	162	8.112	-2.739	-27.604	1.00	63.81	N
ATOM	1148	CA	TRP	A	162	8.142	-3.231	-26.219	1.00	64.01	C
ATOM	1149	C	TRP	A	162	8.947	-2.294	-25.292	1.00	63.94	C
ATOM	1150	O	TRP	A	162	10.105	-1.988	-25.597	1.00	63.62	O
ATOM	1151	CB	TRP	A	162	8.728	-4.653	-26.181	1.00	64.77	C
ATOM	1152	CG	TRP	A	162	7.733	-5.801	-26.320	1.00	65.21	C
ATOM	1153	CD1	TRP	A	162	6.524	-5.777	-26.959	1.00	66.55	C
ATOM	1154	CD2	TRP	A	162	7.891	-7.144	-25.827	1.00	66.33	C
ATOM	1155	NE1	TRP	A	162	5.916	-7.008	-26.884	1.00	66.54	N
ATOM	1156	CE2	TRP	A	162	6.733	-7.866	-26.194	1.00	66.37	C
ATOM	1157	CE3	TRP	A	162	8.894	-7.805	-25.105	1.00	65.77	C
ATOM	1158	CZ2	TRP	A	162	6.553	-9.221	-25.867	1.00	66.16	C
ATOM	1159	CZ3	TRP	A	162	8.709	-9.150	-24.775	1.00	65.96	C
ATOM	1160	CH2	TRP	A	162	7.552	-9.841	-25.159	1.00	65.75	C
ATOM	1161	N	PRO	A	163	8.341	-1.843	-24.160	1.00	64.02	N
ATOM	1162	CA	PRO	A	163	9.015	-0.963	-23.176	1.00	64.27	C
ATOM	1163	C	PRO	A	163	10.170	-1.650	-22.429	1.00	64.83	C
ATOM	1164	O	PRO	A	163	10.190	-2.886	-22.312	1.00	64.76	O
ATOM	1165	CB	PRO	A	163	7.896	-0.600	-22.188	1.00	64.30	C
ATOM	1166	CG	PRO	A	163	6.893	-1.697	-22.319	1.00	64.11	C
ATOM	1167	CD	PRO	A	163	6.954	-2.152	-23.755	1.00	63.91	C

ATOM	1168	N	ALA	A	164	11.096	-0.844	-21.903	1.00	65.02	N
ATOM	1169	CA	ALA	A	164	12.367	-1.335	-21.347	1.00	64.96	C
ATOM	1170	C	ALA	A	164	12.298	-2.388	-20.208	1.00	65.12	C
ATOM	1171	O	ALA	A	164	12.980	-3.422	-20.304	1.00	65.00	O
ATOM	1172	CB	ALA	A	164	13.296	-0.158	-20.970	1.00	64.84	C
ATOM	1173	N	PRO	A	165	11.498	-2.137	-19.134	1.00	64.96	N
ATOM	1174	CA	PRO	A	165	11.459	-3.114	-18.015	1.00	64.73	C
ATOM	1175	C	PRO	A	165	10.786	-4.455	-18.377	1.00	64.13	C
ATOM	1176	O	PRO	A	165	10.852	-5.426	-17.609	1.00	64.08	O
ATOM	1177	CB	PRO	A	165	10.660	-2.378	-16.926	1.00	64.96	C
ATOM	1178	CG	PRO	A	165	9.823	-1.399	-17.660	1.00	65.13	C
ATOM	1179	CD	PRO	A	165	10.626	-0.975	-18.871	1.00	64.90	C
ATOM	1180	N	GLN	A	166	10.148	-4.476	-19.545	1.00	63.35	N
ATOM	1181	CA	GLN	A	166	9.466	-5.648	-20.097	1.00	62.17	C
ATOM	1182	C	GLN	A	166	10.412	-6.514	-20.961	1.00	61.14	C
ATOM	1183	O	GLN	A	166	10.317	-7.749	-20.949	1.00	60.83	O
ATOM	1184	CB	GLN	A	166	8.216	-5.193	-20.875	1.00	62.10	C
ATOM	1185	CG	GLN	A	166	7.799	-6.061	-22.057	1.00	61.90	C
ATOM	1186	CD	GLN	A	166	6.307	-6.239	-22.124	1.00	62.87	C
ATOM	1187	OE1	GLN	A	166	5.665	-6.509	-21.107	1.00	62.94	O
ATOM	1188	NE2	GLN	A	166	5.738	-6.086	-23.320	1.00	62.25	N
ATOM	1189	N	VAL	A	167	11.312	-5.868	-21.708	1.00	59.90	N
ATOM	1190	CA	VAL	A	167	12.362	-6.600	-22.422	1.00	58.57	C
ATOM	1191	C	VAL	A	167	13.401	-7.145	-21.441	1.00	57.38	C
ATOM	1192	O	VAL	A	167	13.996	-8.175	-21.725	1.00	57.41	O
ATOM	1193	CB	VAL	A	167	13.069	-5.793	-23.579	1.00	58.78	C
ATOM	1194	CG1	VAL	A	167	12.052	-5.226	-24.573	1.00	58.16	C
ATOM	1195	CG2	VAL	A	167	14.071	-4.724	-23.042	1.00	58.31	C
ATOM	1196	N	GLU	A	168	13.606	-6.445	-20.314	1.00	55.87	N
ATOM	1197	CA	GLU	A	168	14.571	-6.823	-19.277	1.00	54.58	C
ATOM	1198	C	GLU	A	168	14.172	-8.138	-18.598	1.00	53.46	C
ATOM	1199	O	GLU	A	168	14.914	-9.120	-18.657	1.00	52.96	O
ATOM	1200	CB	GLU	A	168	14.737	-5.702	-18.243	1.00	54.97	C
ATOM	1201	CG	GLU	A	168	15.450	-6.107	-16.926	1.00	55.78	C
ATOM	1202	CD	GLU	A	168	16.986	-6.031	-16.976	1.00	58.42	C
ATOM	1203	OE1	GLU	A	168	17.558	-5.627	-18.018	1.00	58.54	O
ATOM	1204	OE2	GLU	A	168	17.632	-6.373	-15.949	1.00	59.26	O
ATOM	1205	N	ALA	A	169	12.987	-8.145	-17.989	1.00	51.88	N
ATOM	1206	CA	ALA	A	169	12.402	-9.329	-17.383	1.00	50.08	C
ATOM	1207	C	ALA	A	169	12.255	-10.505	-18.353	1.00	49.00	C
ATOM	1208	O	ALA	A	169	12.453	-11.655	-17.947	1.00	48.56	O
ATOM	1209	CB	ALA	A	169	11.056	-8.984	-16.757	1.00	50.24	C
ATOM	1210	N	VAL	A	170	11.893	-10.249	-19.612	1.00	47.17	N
ATOM	1211	CA	VAL	A	170	11.790	-11.363	-20.570	1.00	46.61	C
ATOM	1212	C	VAL	A	170	13.187	-11.871	-20.986	1.00	46.30	C
ATOM	1213	O	VAL	A	170	13.384	-13.079	-21.177	1.00	45.99	O
ATOM	1214	CB	VAL	A	170	10.904	-11.054	-21.810	1.00	46.70	C
ATOM	1215	CG1	VAL	A	170	11.009	-12.171	-22.862	1.00	45.67	C
ATOM	1216	CG2	VAL	A	170	9.437	-10.872	-21.397	1.00	47.21	C
ATOM	1217	N	ALA	A	171	14.127	-10.932	-21.124	1.00	45.43	N

ATOM	1218	CA	ALA	A	171	15.537	-11.215	-21.407	1.00	44.72	C
ATOM	1219	C	ALA	A	171	16.189	-12.017	-20.267	1.00	43.99	C
ATOM	1220	O	ALA	A	171	16.771	-13.054	-20.528	1.00	43.66	O
ATOM	1221	CB	ALA	A	171	16.298	-9.914	-21.683	1.00	44.30	C
ATOM	1222	N	GLN	A	172	16.037	-11.543	-19.023	1.00	43.62	N
ATOM	1223	CA	GLN	A	172	16.515	-12.215	-17.821	1.00	43.62	C
ATOM	1224	C	GLN	A	172	16.010	-13.645	-17.671	1.00	43.45	C
ATOM	1225	O	GLN	A	172	16.787	-14.536	-17.329	1.00	43.65	O
ATOM	1226	CB	GLN	A	172	16.191	-11.416	-16.563	1.00	43.47	C
ATOM	1227	CG	GLN	A	172	16.692	-12.106	-15.281	1.00	46.90	C
ATOM	1228	CD	GLN	A	172	16.906	-11.155	-14.104	1.00	50.93	C
ATOM	1229	OE1	GLN	A	172	16.767	-9.938	-14.235	1.00	54.22	O
ATOM	1230	NE2	GLN	A	172	17.265	-11.710	-12.951	1.00	51.30	N
ATOM	1231	N	ASP	A	173	14.728	-13.870	-17.940	1.00	42.78	N
ATOM	1232	CA	ASP	A	173	14.163	-15.205	-17.846	1.00	42.14	C
ATOM	1233	C	ASP	A	173	14.599	-16.087	-18.988	1.00	41.39	C
ATOM	1234	O	ASP	A	173	14.803	-17.293	-18.801	1.00	40.64	O
ATOM	1235	CB	ASP	A	173	12.635	-15.179	-17.775	1.00	42.66	C
ATOM	1236	CG	ASP	A	173	12.117	-14.622	-16.461	1.00	44.70	C
ATOM	1237	OD1	ASP	A	173	12.908	-14.406	-15.521	1.00	45.49	O
ATOM	1238	OD2	ASP	A	173	10.892	-14.382	-16.374	1.00	49.88	O
ATOM	1239	N	GLN	A	174	14.735	-15.511	-20.176	1.00	40.43	N
ATOM	1240	CA	GLN	A	174	15.126	-16.326	-21.316	1.00	40.73	C
ATOM	1241	C	GLN	A	174	16.583	-16.776	-21.167	1.00	39.42	C
ATOM	1242	O	GLN	A	174	16.895	-17.932	-21.418	1.00	39.58	O
ATOM	1243	CB	GLN	A	174	14.902	-15.611	-22.661	1.00	40.57	C
ATOM	1244	CG	GLN	A	174	13.570	-15.931	-23.363	1.00	41.24	C
ATOM	1245	CD	GLN	A	174	13.462	-15.287	-24.755	1.00	43.20	C
ATOM	1246	OE1	GLN	A	174	14.470	-15.033	-25.442	1.00	46.83	O
ATOM	1247	NE2	GLN	A	174	12.226	-15.025	-25.181	1.00	45.42	N
ATOM	1248	N	PHE	A	175	17.444	-15.838	-20.776	1.00	37.78	N
ATOM	1249	CA	PHE	A	175	18.847	-16.094	-20.575	1.00	37.32	C
ATOM	1250	C	PHE	A	175	19.086	-17.175	-19.505	1.00	35.97	C
ATOM	1251	O	PHE	A	175	19.713	-18.193	-19.778	1.00	35.75	O
ATOM	1252	CB	PHE	A	175	19.607	-14.815	-20.194	1.00	37.10	C
ATOM	1253	CG	PHE	A	175	21.012	-15.090	-19.810	1.00	37.09	C
ATOM	1254	CD1	PHE	A	175	21.967	-15.342	-20.795	1.00	35.54	C
ATOM	1255	CD2	PHE	A	175	21.374	-15.192	-18.455	1.00	37.06	C
ATOM	1256	CE1	PHE	A	175	23.270	-15.656	-20.450	1.00	36.05	C
ATOM	1257	CE2	PHE	A	175	22.679	-15.512	-18.103	1.00	35.48	C
ATOM	1258	CZ	PHE	A	175	23.626	-15.746	-19.100	1.00	37.13	C
ATOM	1259	N	GLN	A	176	18.554	-16.935	-18.309	1.00	34.47	N
ATOM	1260	CA	GLN	A	176	18.752	-17.787	-17.168	1.00	33.07	C
ATOM	1261	C	GLN	A	176	18.131	-19.152	-17.437	1.00	32.96	C
ATOM	1262	O	GLN	A	176	18.734	-20.188	-17.119	1.00	33.13	O
ATOM	1263	CB	GLN	A	176	18.208	-17.122	-15.896	1.00	32.83	C
ATOM	1264	CG	GLN	A	176	19.073	-15.954	-15.400	1.00	31.29	C
ATOM	1265	CD	GLN	A	176	18.736	-15.517	-13.981	1.00	32.68	C
ATOM	1266	OE1	GLN	A	176	19.585	-15.001	-13.233	1.00	32.20	O
ATOM	1267	NE2	GLN	A	176	17.490	-15.708	-13.605	1.00	29.66	N

ATOM	1268	N	GLY	A	177	16.947	-19.168	-18.046	1.00	31.86	N
ATOM	1269	CA	GLY	A	177	16.340	-20.418	-18.470	1.00	30.63	C
ATOM	1270	C	GLY	A	177	17.232	-21.226	-19.395	1.00	30.31	C
ATOM	1271	O	GLY	A	177	17.532	-22.395	-19.130	1.00	30.06	O
ATOM	1272	N	ALA	A	178	17.621	-20.623	-20.505	1.00	30.06	N
ATOM	1273	CA	ALA	A	178	18.612	-21.219	-21.433	1.00	30.41	C
ATOM	1274	C	ALA	A	178	19.980	-21.616	-20.811	1.00	29.81	C
ATOM	1275	O	ALA	A	178	20.480	-22.708	-21.049	1.00	31.01	O
ATOM	1276	CB	ALA	A	178	18.851	-20.271	-22.576	1.00	29.91	C
ATOM	1277	N	ALA	A	179	20.597	-20.710	-20.061	1.00	30.11	N
ATOM	1278	CA	ALA	A	179	21.911	-20.933	-19.444	1.00	29.65	C
ATOM	1279	C	ALA	A	179	21.846	-22.187	-18.583	1.00	30.19	C
ATOM	1280	O	ALA	A	179	22.782	-23.007	-18.567	1.00	30.41	O
ATOM	1281	CB	ALA	A	179	22.284	-19.743	-18.593	1.00	29.49	C
ATOM	1282	N	ARG	A	180	20.723	-22.352	-17.880	1.00	29.74	N
ATOM	1283	CA	ARG	A	180	20.522	-23.486	-16.998	1.00	29.47	C
ATOM	1284	C	ARG	A	180	20.315	-24.768	-17.793	1.00	30.32	C
ATOM	1285	O	ARG	A	180	20.876	-25.799	-17.456	1.00	30.92	O
ATOM	1286	CB	ARG	A	180	19.308	-23.230	-16.099	1.00	30.10	C
ATOM	1287	CG	ARG	A	180	18.869	-24.407	-15.267	1.00	27.03	C
ATOM	1288	CD	ARG	A	180	17.772	-23.977	-14.308	1.00	27.88	C
ATOM	1289	NE	ARG	A	180	17.253	-25.132	-13.572	1.00	32.12	N
ATOM	1290	CZ	ARG	A	180	16.432	-25.066	-12.516	1.00	32.53	C
ATOM	1291	NH1	ARG	A	180	16.035	-23.874	-12.051	1.00	30.23	N
ATOM	1292	NH2	ARG	A	180	16.019	-26.194	-11.930	1.00	27.47	N
ATOM	1293	N	ALA	A	181	19.503	-24.724	-18.851	1.00	29.87	N
ATOM	1294	CA	ALA	A	181	19.273	-25.933	-19.635	1.00	29.42	C
ATOM	1295	C	ALA	A	181	20.596	-26.439	-20.200	1.00	28.65	C
ATOM	1296	O	ALA	A	181	20.864	-27.636	-20.145	1.00	29.80	O
ATOM	1297	CB	ALA	A	181	18.221	-25.684	-20.777	1.00	29.83	C
ATOM	1298	N	TRP	A	182	21.420	-25.526	-20.709	1.00	27.62	N
ATOM	1299	CA	TRP	A	182	22.689	-25.856	-21.333	1.00	27.62	C
ATOM	1300	C	TRP	A	182	23.708	-26.459	-20.351	1.00	26.50	C
ATOM	1301	O	TRP	A	182	24.342	-27.496	-20.632	1.00	26.11	O
ATOM	1302	CB	TRP	A	182	23.265	-24.587	-21.986	1.00	28.23	C
ATOM	1303	CG	TRP	A	182	22.731	-24.342	-23.373	1.00	29.63	C
ATOM	1304	CD1	TRP	A	182	21.444	-24.004	-23.718	1.00	29.32	C
ATOM	1305	CD2	TRP	A	182	23.474	-24.398	-24.604	1.00	26.69	C
ATOM	1306	NE1	TRP	A	182	21.337	-23.884	-25.076	1.00	28.58	N
ATOM	1307	CE2	TRP	A	182	22.568	-24.097	-25.646	1.00	30.25	C
ATOM	1308	CE3	TRP	A	182	24.804	-24.686	-24.919	1.00	27.56	C
ATOM	1309	CZ2	TRP	A	182	22.953	-24.079	-26.992	1.00	29.37	C
ATOM	1310	CZ3	TRP	A	182	25.197	-24.658	-26.237	1.00	29.65	C
ATOM	1311	CH2	TRP	A	182	24.277	-24.357	-27.266	1.00	29.48	C
ATOM	1312	N	MET	A	183	23.818	-25.856	-19.177	1.00	25.91	N
ATOM	1313	CA	MET	A	183	24.824	-26.278	-18.192	1.00	27.14	C
ATOM	1314	C	MET	A	183	24.404	-27.531	-17.471	1.00	26.87	C
ATOM	1315	O	MET	A	183	25.186	-28.452	-17.354	1.00	26.28	O
ATOM	1316	CB	MET	A	183	25.124	-25.147	-17.198	1.00	25.95	C
ATOM	1317	CG	MET	A	183	25.933	-23.992	-17.815	1.00	26.47	C

ATOM	1318	SD	MET	A	183	26.197	-22.676	-16.608	1.00	30.30	S
ATOM	1319	CE	MET	A	183	27.675	-23.289	-15.763	1.00	29.61	C
ATOM	1320	N	ALA	A	184	23.152	-27.578	-17.014	1.00	27.25	N
ATOM	1321	CA	ALA	A	184	22.586	-28.810	-16.424	1.00	26.22	C
ATOM	1322	C	ALA	A	184	22.557	-29.963	-17.425	1.00	26.03	C
ATOM	1323	O	ALA	A	184	22.948	-31.083	-17.086	1.00	27.18	O
ATOM	1324	CB	ALA	A	184	21.186	-28.538	-15.831	1.00	25.38	C
ATOM	1325	N	GLY	A	185	22.115	-29.709	-18.658	1.00	25.96	N
ATOM	1326	CA	GLY	A	185	22.044	-30.769	-19.688	1.00	25.12	C
ATOM	1327	C	GLY	A	185	23.393	-31.348	-20.104	1.00	25.15	C
ATOM	1328	O	GLY	A	185	23.513	-32.544	-20.360	1.00	25.86	O
ATOM	1329	N	THR	A	186	24.411	-30.499	-20.185	1.00	24.75	N
ATOM	1330	CA	THR	A	186	25.767	-30.924	-20.482	1.00	24.90	C
ATOM	1331	C	THR	A	186	26.368	-31.783	-19.343	1.00	25.33	C
ATOM	1332	O	THR	A	186	26.870	-32.860	-19.577	1.00	25.60	O
ATOM	1333	CB	THR	A	186	26.619	-29.674	-20.771	1.00	24.77	C
ATOM	1334	OG1	THR	A	186	26.081	-29.029	-21.927	1.00	27.14	O
ATOM	1335	CG2	THR	A	186	28.039	-30.037	-21.063	1.00	21.68	C
ATOM	1336	N	LEU	A	187	26.282	-31.301	-18.110	1.00	25.14	N
ATOM	1337	CA	LEU	A	187	26.697	-32.090	-16.931	1.00	25.88	C
ATOM	1338	C	LEU	A	187	25.929	-33.411	-16.815	1.00	25.90	C
ATOM	1339	O	LEU	A	187	26.505	-34.479	-16.532	1.00	26.66	O
ATOM	1340	CB	LEU	A	187	26.454	-31.280	-15.644	1.00	24.04	C
ATOM	1341	CG	LEU	A	187	27.477	-30.220	-15.226	1.00	25.81	C
ATOM	1342	CD1	LEU	A	187	26.983	-29.577	-13.932	1.00	23.87	C
ATOM	1343	CD2	LEU	A	187	28.899	-30.837	-15.014	1.00	22.96	C
ATOM	1344	N	GLN	A	188	24.615	-33.343	-16.998	1.00	25.68	N
ATOM	1345	CA	GLN	A	188	23.808	-34.537	-16.923	1.00	25.46	C
ATOM	1346	C	GLN	A	188	24.180	-35.578	-17.999	1.00	25.60	C
ATOM	1347	O	GLN	A	188	24.335	-36.764	-17.695	1.00	25.92	O
ATOM	1348	CB	GLN	A	188	22.361	-34.173	-17.020	1.00	26.71	C
ATOM	1349	CG	GLN	A	188	21.428	-35.410	-16.880	1.00	31.37	C
ATOM	1350	CD	GLN	A	188	20.003	-34.978	-16.768	1.00	39.00	C
ATOM	1351	OE1	GLN	A	188	19.533	-34.619	-15.677	1.00	44.14	O
ATOM	1352	NE2	GLN	A	188	19.307	-34.950	-17.898	1.00	39.10	N
ATOM	1353	N	LEU	A	189	24.335	-35.141	-19.240	1.00	25.49	N
ATOM	1354	CA	LEU	A	189	24.818	-36.021	-20.315	1.00	25.65	C
ATOM	1355	C	LEU	A	189	26.228	-36.545	-20.038	1.00	25.84	C
ATOM	1356	O	LEU	A	189	26.482	-37.723	-20.218	1.00	26.15	O
ATOM	1357	CB	LEU	A	189	24.760	-35.312	-21.675	1.00	25.01	C
ATOM	1358	CG	LEU	A	189	25.224	-36.081	-22.928	1.00	26.90	C
ATOM	1359	CD1	LEU	A	189	24.573	-37.453	-23.005	1.00	27.65	C
ATOM	1360	CD2	LEU	A	189	24.964	-35.262	-24.206	1.00	25.51	C
ATOM	1361	N	GLY	A	190	27.143	-35.687	-19.559	1.00	26.30	N
ATOM	1362	CA	GLY	A	190	28.459	-36.177	-19.172	1.00	25.82	C
ATOM	1363	C	GLY	A	190	28.374	-37.333	-18.202	1.00	26.86	C
ATOM	1364	O	GLY	A	190	29.022	-38.380	-18.435	1.00	27.56	O
ATOM	1365	N	ARG	A	191	27.596	-37.155	-17.120	1.00	27.11	N
ATOM	1366	CA	ARG	A	191	27.405	-38.204	-16.104	1.00	28.91	C
ATOM	1367	C	ARG	A	191	26.625	-39.447	-16.603	1.00	29.92	C

ATOM	1368	O	ARG	A	191	26.949	-40.572	-16.184	1.00	31.13	O
ATOM	1369	CB	ARG	A	191	26.731	-37.674	-14.848	1.00	27.73	C
ATOM	1370	CG	ARG	A	191	26.686	-38.684	-13.643	1.00	31.18	C
ATOM	1371	CD	ARG	A	191	25.556	-38.313	-12.598	1.00	30.77	C
ATOM	1372	NE	ARG	A	191	25.456	-36.878	-12.720	1.00	40.60	N
ATOM	1373	CZ	ARG	A	191	24.393	-36.158	-13.033	1.00	37.07	C
ATOM	1374	NH1	ARG	A	191	23.194	-36.681	-13.183	1.00	31.11	N
ATOM	1375	NH2	ARG	A	191	24.580	-34.859	-13.125	1.00	35.15	N
ATOM	1376	N	ALA	A	192	25.612	-39.251	-17.451	1.00	28.40	N
ATOM	1377	CA	ALA	A	192	24.904	-40.383	-18.103	1.00	29.52	C
ATOM	1378	C	ALA	A	192	25.895	-41.282	-18.854	1.00	29.15	C
ATOM	1379	O	ALA	A	192	25.855	-42.483	-18.713	1.00	29.51	O
ATOM	1380	CB	ALA	A	192	23.786	-39.852	-19.070	1.00	28.42	C
ATOM	1381	N	LEU	A	193	26.820	-40.676	-19.611	1.00	30.15	N
ATOM	1382	CA	LEU	A	193	27.793	-41.416	-20.430	1.00	29.22	C
ATOM	1383	C	LEU	A	193	28.988	-41.935	-19.638	1.00	29.89	C
ATOM	1384	O	LEU	A	193	29.508	-43.007	-19.937	1.00	30.66	O
ATOM	1385	CB	LEU	A	193	28.324	-40.510	-21.564	1.00	28.91	C
ATOM	1386	CG	LEU	A	193	27.439	-40.241	-22.786	1.00	29.60	C
ATOM	1387	CD1	LEU	A	193	28.186	-39.452	-23.832	1.00	30.57	C
ATOM	1388	CD2	LEU	A	193	26.901	-41.556	-23.381	1.00	26.88	C
ATOM	1389	N	ARG	A	194	29.487	-41.121	-18.702	1.00	29.31	N
ATOM	1390	CA	ARG	A	194	30.627	-41.495	-17.858	1.00	28.76	C
ATOM	1391	C	ARG	A	194	30.268	-41.300	-16.366	1.00	27.86	C
ATOM	1392	O	ARG	A	194	30.590	-40.263	-15.771	1.00	26.43	O
ATOM	1393	CB	ARG	A	194	31.879	-40.717	-18.260	1.00	28.76	C
ATOM	1394	CG	ARG	A	194	32.245	-40.865	-19.755	1.00	28.90	C
ATOM	1395	CD	ARG	A	194	32.740	-42.255	-20.016	1.00	30.60	C
ATOM	1396	NE	ARG	A	194	33.259	-42.489	-21.379	1.00	31.00	N
ATOM	1397	CZ	ARG	A	194	32.636	-43.247	-22.298	1.00	31.70	C
ATOM	1398	NH1	ARG	A	194	31.450	-43.788	-22.022	1.00	27.26	N
ATOM	1399	NH2	ARG	A	194	33.199	-43.474	-23.479	1.00	28.50	N
ATOM	1400	N	PRO	A	195	29.503	-42.268	-15.798	1.00	27.07	N
ATOM	1401	CA	PRO	A	195	28.900	-42.018	-14.474	1.00	27.28	C
ATOM	1402	C	PRO	A	195	29.883	-41.870	-13.315	1.00	27.74	C
ATOM	1403	O	PRO	A	195	29.460	-41.402	-12.255	1.00	27.47	O
ATOM	1404	CB	PRO	A	195	27.980	-43.215	-14.247	1.00	27.48	C
ATOM	1405	CG	PRO	A	195	28.405	-44.270	-15.254	1.00	26.85	C
ATOM	1406	CD	PRO	A	195	29.075	-43.544	-16.392	1.00	26.95	C
ATOM	1407	N	ARG	A	196	31.148	-42.276	-13.527	1.00	27.46	N
ATOM	1408	CA	ARG	A	196	32.196	-42.209	-12.505	1.00	29.02	C
ATOM	1409	C	ARG	A	196	33.078	-40.932	-12.626	1.00	28.45	C
ATOM	1410	O	ARG	A	196	33.925	-40.678	-11.780	1.00	27.65	O
ATOM	1411	CB	ARG	A	196	33.062	-43.462	-12.514	1.00	29.78	C
ATOM	1412	CG	ARG	A	196	32.390	-44.776	-12.056	1.00	32.05	C
ATOM	1413	CD	ARG	A	196	33.467	-45.852	-12.084	1.00	43.08	C
ATOM	1414	NE	ARG	A	196	33.161	-46.969	-11.189	1.00	51.80	N
ATOM	1415	CZ	ARG	A	196	32.738	-48.161	-11.599	1.00	57.07	C
ATOM	1416	NH1	ARG	A	196	32.575	-48.427	-12.903	1.00	61.16	N
ATOM	1417	NH2	ARG	A	196	32.467	-49.099	-10.707	1.00	60.26	N

ATOM	1418	N	GLY	A	197	32.835	-40.120	-13.654	1.00	27.72	N
ATOM	1419	CA	GLY	A	197	33.588	-38.869	-13.851	1.00	26.31	C
ATOM	1420	C	GLY	A	197	33.247	-37.842	-12.812	1.00	26.15	C
ATOM	1421	O	GLY	A	197	32.106	-37.717	-12.362	1.00	26.25	O
ATOM	1422	N	LEU	A	198	34.249	-37.084	-12.403	1.00	26.18	N
ATOM	1423	CA	LEU	A	198	34.022	-36.051	-11.392	1.00	25.95	C
ATOM	1424	C	LEU	A	198	33.725	-34.741	-12.116	1.00	24.75	C
ATOM	1425	O	LEU	A	198	34.559	-33.818	-12.167	1.00	25.92	O
ATOM	1426	CB	LEU	A	198	35.239	-35.924	-10.438	1.00	25.52	C
ATOM	1427	CG	LEU	A	198	35.610	-37.189	-9.632	1.00	27.53	C
ATOM	1428	CD1	LEU	A	198	36.913	-36.983	-8.800	1.00	24.16	C
ATOM	1429	CD2	LEU	A	198	34.477	-37.571	-8.721	1.00	25.19	C
ATOM	1430	N	TRP	A	199	32.527	-34.677	-12.649	1.00	23.60	N
ATOM	1431	CA	TRP	A	199	32.086	-33.644	-13.581	1.00	24.64	C
ATOM	1432	C	TRP	A	199	31.771	-32.378	-12.825	1.00	24.77	C
ATOM	1433	O	TRP	A	199	30.985	-32.409	-11.886	1.00	25.23	O
ATOM	1434	CB	TRP	A	199	30.783	-34.082	-14.275	1.00	23.96	C
ATOM	1435	CG	TRP	A	199	30.975	-35.233	-15.282	1.00	25.18	C
ATOM	1436	CD1	TRP	A	199	30.750	-36.560	-15.072	1.00	26.65	C
ATOM	1437	CD2	TRP	A	199	31.394	-35.102	-16.639	1.00	23.26	C
ATOM	1438	NE1	TRP	A	199	31.037	-37.270	-16.210	1.00	26.88	N
ATOM	1439	CE2	TRP	A	199	31.449	-36.394	-17.186	1.00	26.81	C
ATOM	1440	CE3	TRP	A	199	31.761	-34.003	-17.441	1.00	25.38	C
ATOM	1441	CZ2	TRP	A	199	31.868	-36.641	-18.536	1.00	25.59	C
ATOM	1442	CZ3	TRP	A	199	32.175	-34.236	-18.788	1.00	25.41	C
ATOM	1443	CH2	TRP	A	199	32.223	-35.554	-19.308	1.00	26.09	C
ATOM	1444	N	GLY	A	200	32.318	-31.262	-13.291	1.00	24.38	N
ATOM	1445	CA	GLY	A	200	31.949	-29.962	-12.763	1.00	23.07	C
ATOM	1446	C	GLY	A	200	32.552	-28.871	-13.597	1.00	23.20	C
ATOM	1447	O	GLY	A	200	33.414	-29.097	-14.434	1.00	22.91	O
ATOM	1448	N	PHE	A	201	32.060	-27.660	-13.397	1.00	23.65	N
ATOM	1449	CA	PHE	A	201	32.567	-26.520	-14.150	1.00	23.28	C
ATOM	1450	C	PHE	A	201	33.667	-25.807	-13.418	1.00	23.44	C
ATOM	1451	O	PHE	A	201	33.577	-25.580	-12.193	1.00	22.94	O
ATOM	1452	CB	PHE	A	201	31.409	-25.527	-14.381	1.00	24.42	C
ATOM	1453	CG	PHE	A	201	30.419	-25.983	-15.456	1.00	24.84	C
ATOM	1454	CD1	PHE	A	201	29.232	-26.601	-15.106	1.00	25.56	C
ATOM	1455	CD2	PHE	A	201	30.688	-25.748	-16.799	1.00	24.11	C
ATOM	1456	CE1	PHE	A	201	28.322	-26.984	-16.084	1.00	26.31	C
ATOM	1457	CE2	PHE	A	201	29.793	-26.139	-17.764	1.00	24.86	C
ATOM	1458	CZ	PHE	A	201	28.619	-26.755	-17.406	1.00	26.46	C
ATOM	1459	N	TYR	A	202	34.694	-25.407	-14.156	1.00	23.35	N
ATOM	1460	CA	TYR	A	202	35.770	-24.590	-13.566	1.00	23.78	C
ATOM	1461	C	TYR	A	202	35.232	-23.229	-13.009	1.00	24.16	C
ATOM	1462	O	TYR	A	202	34.441	-22.532	-13.709	1.00	23.29	O
ATOM	1463	CB	TYR	A	202	36.924	-24.337	-14.599	1.00	23.91	C
ATOM	1464	CG	TYR	A	202	37.789	-23.166	-14.151	1.00	25.23	C
ATOM	1465	CD1	TYR	A	202	38.783	-23.353	-13.176	1.00	25.47	C
ATOM	1466	CD2	TYR	A	202	37.560	-21.867	-14.628	1.00	24.12	C
ATOM	1467	CE1	TYR	A	202	39.526	-22.281	-12.689	1.00	26.17	C

ATOM	1468	CE2	TYR	A	202	38.336	-20.761	-14.157	1.00	22.17	C
ATOM	1469	CZ	TYR	A	202	39.285	-20.993	-13.189	1.00	26.80	C
ATOM	1470	OH	TYR	A	202	40.028	-19.969	-12.670	1.00	29.27	O
ATOM	1471	N	GLY	A	203	35.631	-22.841	-11.780	1.00	23.45	N
ATOM	1472	CA	GLY	A	203	35.323	-21.493	-11.309	1.00	23.01	C
ATOM	1473	C	GLY	A	203	33.972	-21.352	-10.641	1.00	24.69	C
ATOM	1474	O	GLY	A	203	33.473	-20.232	-10.476	1.00	25.18	O
ATOM	1475	N	PHE	A	204	33.342	-22.468	-10.271	1.00	24.87	N
ATOM	1476	CA	PHE	A	204	32.039	-22.436	-9.595	1.00	25.97	C
ATOM	1477	C	PHE	A	204	32.131	-23.204	-8.289	1.00	25.80	C
ATOM	1478	O	PHE	A	204	32.714	-24.281	-8.271	1.00	26.68	O
ATOM	1479	CB	PHE	A	204	30.899	-23.059	-10.459	1.00	25.84	C
ATOM	1480	CG	PHE	A	204	30.468	-22.185	-11.625	1.00	26.10	C
ATOM	1481	CD1	PHE	A	204	31.125	-22.260	-12.831	1.00	26.76	C
ATOM	1482	CD2	PHE	A	204	29.402	-21.273	-11.489	1.00	27.47	C
ATOM	1483	CE1	PHE	A	204	30.742	-21.471	-13.924	1.00	28.05	C
ATOM	1484	CE2	PHE	A	204	29.005	-20.459	-12.540	1.00	26.74	C
ATOM	1485	CZ	PHE	A	204	29.682	-20.547	-13.777	1.00	29.49	C
ATOM	1486	N	PRO	A	205	31.518	-22.684	-7.212	1.00	25.78	N
ATOM	1487	CA	PRO	A	205	30.912	-21.325	-7.129	1.00	25.52	C
ATOM	1488	C	PRO	A	205	31.989	-20.228	-7.056	1.00	26.76	C
ATOM	1489	O	PRO	A	205	33.152	-20.514	-6.768	1.00	26.00	O
ATOM	1490	CB	PRO	A	205	30.157	-21.348	-5.789	1.00	24.12	C
ATOM	1491	CG	PRO	A	205	30.932	-22.321	-4.935	1.00	24.76	C
ATOM	1492	CD	PRO	A	205	31.310	-23.444	-5.956	1.00	25.78	C
ATOM	1493	N	ASP	A	206	31.598	-18.974	-7.289	1.00	27.57	N
ATOM	1494	CA	ASP	A	206	32.494	-17.870	-7.054	1.00	28.24	C
ATOM	1495	C	ASP	A	206	31.898	-17.096	-5.898	1.00	29.25	C
ATOM	1496	O	ASP	A	206	30.686	-16.909	-5.793	1.00	30.69	O
ATOM	1497	CB	ASP	A	206	32.598	-17.003	-8.279	1.00	28.03	C
ATOM	1498	CG	ASP	A	206	33.805	-16.073	-8.247	1.00	29.62	C
ATOM	1499	OD1	ASP	A	206	34.256	-15.565	-7.197	1.00	30.89	O
ATOM	1500	OD2	ASP	A	206	34.343	-15.856	-9.327	1.00	33.36	O
ATOM	1501	N	CYS	A	207	32.746	-16.668	-5.005	1.00	31.54	N
ATOM	1502	CA	CYS	A	207	32.321	-15.993	-3.790	1.00	32.00	C
ATOM	1503	C	CYS	A	207	32.344	-14.443	-4.057	1.00	32.25	C
ATOM	1504	O	CYS	A	207	31.695	-13.663	-3.354	1.00	32.53	O
ATOM	1505	CB	CYS	A	207	33.201	-16.536	-2.635	1.00	31.15	C
ATOM	1506	SG	CYS	A	207	33.237	-15.680	-1.065	1.00	37.43	S
ATOM	1507	N	TYR	A	208	33.025	-14.015	-5.128	1.00	31.67	N
ATOM	1508	CA	TYR	A	208	33.114	-12.590	-5.516	1.00	32.11	C
ATOM	1509	C	TYR	A	208	33.592	-11.702	-4.357	1.00	33.16	C
ATOM	1510	O	TYR	A	208	33.146	-10.558	-4.228	1.00	34.03	O
ATOM	1511	CB	TYR	A	208	31.789	-12.053	-6.127	1.00	32.10	C
ATOM	1512	CG	TYR	A	208	31.360	-12.784	-7.376	1.00	31.43	C
ATOM	1513	CD1	TYR	A	208	30.315	-13.702	-7.348	1.00	32.17	C
ATOM	1514	CD2	TYR	A	208	32.060	-12.626	-8.560	1.00	33.20	C
ATOM	1515	CE1	TYR	A	208	29.966	-14.424	-8.480	1.00	32.31	C
ATOM	1516	CE2	TYR	A	208	31.723	-13.331	-9.697	1.00	33.89	C
ATOM	1517	CZ	TYR	A	208	30.676	-14.232	-9.655	1.00	33.53	C

ATOM	1518	OH	TYR	A	208	30.345	-14.924	-10.803	1.00	33.79	O
ATOM	1519	N	ASN	A	209	34.512	-12.215	-3.533	1.00	32.42	N
ATOM	1520	CA	ASN	A	209	35.045	-11.464	-2.395	1.00	31.59	C
ATOM	1521	C	ASN	A	209	36.357	-10.731	-2.775	1.00	32.27	C
ATOM	1522	O	ASN	A	209	37.367	-10.840	-2.084	1.00	30.80	O
ATOM	1523	CB	ASN	A	209	35.268	-12.401	-1.213	1.00	31.25	C
ATOM	1524	CG	ASN	A	209	36.162	-13.623	-1.569	1.00	29.29	C
ATOM	1525	OD1	ASN	A	209	36.343	-13.952	-2.741	1.00	27.96	O
ATOM	1526	ND2	ASN	A	209	36.750	-14.262	-0.543	1.00	28.08	N
ATOM	1527	N	TYR	A	210	36.326	-10.033	-3.914	1.00	33.72	N
ATOM	1528	CA	TYR	A	210	37.471	-9.260	-4.457	1.00	34.34	C
ATOM	1529	C	TYR	A	210	37.537	-7.829	-3.892	1.00	34.30	C
ATOM	1530	O	TYR	A	210	38.313	-7.023	-4.371	1.00	33.80	O
ATOM	1531	CB	TYR	A	210	37.352	-9.162	-5.983	1.00	34.91	C
ATOM	1532	CG	TYR	A	210	37.162	-10.491	-6.650	1.00	37.34	C
ATOM	1533	CD1	TYR	A	210	35.965	-10.799	-7.325	1.00	39.22	C
ATOM	1534	CD2	TYR	A	210	38.175	-11.470	-6.607	1.00	38.60	C
ATOM	1535	CE1	TYR	A	210	35.777	-12.091	-7.922	1.00	41.99	C
ATOM	1536	CE2	TYR	A	210	38.001	-12.752	-7.189	1.00	38.30	C
ATOM	1537	CZ	TYR	A	210	36.808	-13.043	-7.844	1.00	38.50	C
ATOM	1538	OH	TYR	A	210	36.656	-14.254	-8.447	1.00	40.00	O
ATOM	1539	N	ASP	A	211	36.701	-7.511	-2.910	1.00	34.51	N
ATOM	1540	CA	ASP	A	211	36.702	-6.182	-2.279	1.00	35.56	C
ATOM	1541	C	ASP	A	211	37.902	-5.886	-1.354	1.00	35.90	C
ATOM	1542	O	ASP	A	211	37.743	-5.380	-0.250	1.00	35.72	O
ATOM	1543	CB	ASP	A	211	35.350	-5.850	-1.606	1.00	35.44	C
ATOM	1544	CG	ASP	A	211	34.683	-7.054	-0.850	1.00	37.63	C
ATOM	1545	OD1	ASP	A	211	35.080	-8.241	-0.925	1.00	35.00	O
ATOM	1546	OD2	ASP	A	211	33.670	-6.780	-0.169	1.00	40.83	O
ATOM	1547	N	PHE	A	212	39.104	-6.183	-1.843	1.00	37.39	N
ATOM	1548	CA	PHE	A	212	40.339	-6.084	-1.075	1.00	39.14	C
ATOM	1549	C	PHE	A	212	40.601	-4.701	-0.542	1.00	41.91	C
ATOM	1550	O	PHE	A	212	41.119	-4.564	0.563	1.00	42.80	O
ATOM	1551	CB	PHE	A	212	41.523	-6.466	-1.946	1.00	38.10	C
ATOM	1552	CG	PHE	A	212	41.414	-7.809	-2.559	1.00	38.20	C
ATOM	1553	CD1	PHE	A	212	41.543	-7.969	-3.924	1.00	36.33	C
ATOM	1554	CD2	PHE	A	212	41.216	-8.944	-1.758	1.00	36.57	C
ATOM	1555	CE1	PHE	A	212	41.468	-9.223	-4.478	1.00	36.44	C
ATOM	1556	CE2	PHE	A	212	41.110	-10.165	-2.317	1.00	32.80	C
ATOM	1557	CZ	PHE	A	212	41.246	-10.327	-3.656	1.00	33.46	C
ATOM	1558	N	LEU	A	213	40.283	-3.670	-1.334	1.00	44.81	N
ATOM	1559	CA	LEU	A	213	40.425	-2.275	-0.876	1.00	47.59	C
ATOM	1560	C	LEU	A	213	39.085	-1.780	-0.324	1.00	49.07	C
ATOM	1561	O	LEU	A	213	38.183	-1.356	-1.049	1.00	49.68	O
ATOM	1562	CB	LEU	A	213	40.993	-1.338	-1.957	1.00	47.79	C
ATOM	1563	CG	LEU	A	213	41.974	-1.889	-3.019	1.00	49.47	C
ATOM	1564	CD1	LEU	A	213	42.289	-0.777	-4.015	1.00	51.77	C
ATOM	1565	CD2	LEU	A	213	43.277	-2.530	-2.451	1.00	50.08	C
ATOM	1566	N	SER	A	214	38.991	-1.882	0.990	1.00	50.33	N
ATOM	1567	CA	SER	A	214	37.846	-1.544	1.774	1.00	51.50	C

ATOM	1568	C	SER	A	214	38.503	-1.624	3.154	1.00	52.23	C
ATOM	1569	O	SER	A	214	39.342	-2.512	3.392	1.00	52.79	O
ATOM	1570	CB	SER	A	214	36.745	-2.612	1.584	1.00	51.68	C
ATOM	1571	OG	SER	A	214	35.864	-2.710	2.713	1.00	53.39	O
ATOM	1572	N	PRO	A	215	38.200	-0.672	4.051	1.00	52.63	N
ATOM	1573	CA	PRO	A	215	38.702	-0.900	5.422	1.00	52.97	C
ATOM	1574	C	PRO	A	215	38.281	-2.276	6.028	1.00	53.02	C
ATOM	1575	O	PRO	A	215	39.144	-3.040	6.486	1.00	53.98	O
ATOM	1576	CB	PRO	A	215	38.112	0.277	6.226	1.00	53.11	C
ATOM	1577	CG	PRO	A	215	37.760	1.327	5.199	1.00	53.02	C
ATOM	1578	CD	PRO	A	215	37.461	0.600	3.906	1.00	52.39	C
ATOM	1579	N	ASN	A	216	36.987	-2.609	5.978	1.00	52.02	N
ATOM	1580	CA	ASN	A	216	36.426	-3.703	6.788	1.00	50.67	C
ATOM	1581	C	ASN	A	216	36.519	-5.137	6.157	1.00	48.43	C
ATOM	1582	O	ASN	A	216	35.669	-6.008	6.427	1.00	48.16	O
ATOM	1583	CB	ASN	A	216	34.976	-3.339	7.180	1.00	51.24	C
ATOM	1584	CG	ASN	A	216	34.863	-2.747	8.603	1.00	54.97	C
ATOM	1585	OD1	ASN	A	216	34.839	-1.504	8.807	1.00	55.51	O
ATOM	1586	ND2	ASN	A	216	34.778	-3.641	9.597	1.00	57.08	N
ATOM	1587	N	TYR	A	217	37.564	-5.375	5.357	1.00	45.63	N
ATOM	1588	CA	TYR	A	217	37.706	-6.621	4.570	1.00	42.88	C
ATOM	1589	C	TYR	A	217	37.756	-7.876	5.452	1.00	41.60	C
ATOM	1590	O	TYR	A	217	38.688	-8.040	6.224	1.00	41.87	O
ATOM	1591	CB	TYR	A	217	38.925	-6.565	3.629	1.00	41.91	C
ATOM	1592	CG	TYR	A	217	38.932	-7.736	2.662	1.00	40.99	C
ATOM	1593	CD1	TYR	A	217	38.010	-7.801	1.614	1.00	37.99	C
ATOM	1594	CD2	TYR	A	217	39.831	-8.810	2.829	1.00	39.81	C
ATOM	1595	CE1	TYR	A	217	37.993	-8.907	0.732	1.00	40.94	C
ATOM	1596	CE2	TYR	A	217	39.818	-9.912	1.973	1.00	38.85	C
ATOM	1597	CZ	TYR	A	217	38.892	-9.966	0.928	1.00	40.05	C
ATOM	1598	OH	TYR	A	217	38.890	-11.027	0.062	1.00	36.92	O
ATOM	1599	N	THR	A	218	36.713	-8.712	5.381	1.00	39.75	N
ATOM	1600	CA	THR	A	218	36.687	-10.007	6.062	1.00	37.33	C
ATOM	1601	C	THR	A	218	36.897	-11.214	5.114	1.00	36.02	C
ATOM	1602	O	THR	A	218	37.067	-12.341	5.595	1.00	35.07	O
ATOM	1603	CB	THR	A	218	35.380	-10.245	6.822	1.00	37.49	C
ATOM	1604	OG1	THR	A	218	34.283	-10.177	5.908	1.00	36.68	O
ATOM	1605	CG2	THR	A	218	35.188	-9.216	7.994	1.00	37.50	C
ATOM	1606	N	GLY	A	219	36.871	-10.985	3.794	1.00	33.91	N
ATOM	1607	CA	GLY	A	219	36.839	-12.085	2.810	1.00	32.63	C
ATOM	1608	C	GLY	A	219	35.463	-12.706	2.606	1.00	32.32	C
ATOM	1609	O	GLY	A	219	35.298	-13.563	1.737	1.00	30.57	O
ATOM	1610	N	GLN	A	220	34.462	-12.281	3.392	1.00	32.89	N
ATOM	1611	CA	GLN	A	220	33.094	-12.811	3.245	1.00	35.28	C
ATOM	1612	C	GLN	A	220	32.488	-12.546	1.851	1.00	34.57	C
ATOM	1613	O	GLN	A	220	32.663	-11.472	1.259	1.00	33.21	O
ATOM	1614	CB	GLN	A	220	32.150	-12.265	4.309	1.00	34.29	C
ATOM	1615	CG	GLN	A	220	32.369	-12.719	5.722	1.00	38.72	C
ATOM	1616	CD	GLN	A	220	31.381	-12.019	6.739	1.00	41.68	C
ATOM	1617	OE1	GLN	A	220	30.890	-10.896	6.501	1.00	46.93	O

ATOM	1618	NE2	GLN	A	220	31.103	-12.696	7.859	1.00	46.02	N
ATOM	1619	N	CYS	A	221	31.778	-13.536	1.331	1.00	36.13	N
ATOM	1620	CA	CYS	A	221	31.087	-13.381	0.050	1.00	38.25	C
ATOM	1621	C	CYS	A	221	30.056	-12.298	0.280	1.00	39.54	C
ATOM	1622	O	CYS	A	221	29.245	-12.412	1.210	1.00	40.43	O
ATOM	1623	CB	CYS	A	221	30.408	-14.679	-0.397	1.00	38.00	C
ATOM	1624	SG	CYS	A	221	31.442	-16.159	-0.194	1.00	41.60	S
ATOM	1625	N	PRO	A	222	30.105	-11.216	-0.522	1.00	40.17	N
ATOM	1626	CA	PRO	A	222	29.146	-10.150	-0.276	1.00	41.06	C
ATOM	1627	C	PRO	A	222	27.687	-10.597	-0.237	1.00	42.16	C
ATOM	1628	O	PRO	A	222	27.341	-11.737	-0.586	1.00	42.40	O
ATOM	1629	CB	PRO	A	222	29.394	-9.180	-1.437	1.00	41.12	C
ATOM	1630	CG	PRO	A	222	30.822	-9.443	-1.842	1.00	40.33	C
ATOM	1631	CD	PRO	A	222	31.009	-10.904	-1.639	1.00	39.65	C
ATOM	1632	N	SER	A	223	26.875	-9.709	0.333	1.00	43.77	N
ATOM	1633	CA	SER	A	223	25.401	-9.607	0.210	1.00	44.02	C
ATOM	1634	C	SER	A	223	24.549	-10.740	-0.461	1.00	43.97	C
ATOM	1635	O	SER	A	223	24.318	-11.883	0.070	1.00	44.90	O
ATOM	1636	CB	SER	A	223	25.124	-8.257	-0.497	1.00	44.36	C
ATOM	1637	OG	SER	A	223	25.637	-8.271	-1.834	1.00	42.24	O
ATOM	1638	N	GLY	A	224	24.042	-10.395	-1.632	1.00	42.56	N
ATOM	1639	CA	GLY	A	224	23.185	-11.308	-2.344	1.00	41.38	C
ATOM	1640	C	GLY	A	224	23.986	-12.216	-3.233	1.00	39.66	C
ATOM	1641	O	GLY	A	224	23.426	-12.737	-4.203	1.00	39.57	O
ATOM	1642	N	ILE	A	225	25.292	-12.383	-2.923	1.00	38.70	N
ATOM	1643	CA	ILE	A	225	26.140	-13.310	-3.694	1.00	37.21	C
ATOM	1644	C	ILE	A	225	25.740	-14.722	-3.279	1.00	36.41	C
ATOM	1645	O	ILE	A	225	25.361	-15.504	-4.124	1.00	36.39	O
ATOM	1646	CB	ILE	A	225	27.681	-13.118	-3.507	1.00	36.96	C
ATOM	1647	CG1	ILE	A	225	28.171	-11.744	-4.003	1.00	36.24	C
ATOM	1648	CG2	ILE	A	225	28.454	-14.294	-4.161	1.00	36.57	C
ATOM	1649	CD1	ILE	A	225	27.652	-11.316	-5.330	1.00	37.35	C
ATOM	1650	N	ARG	A	226	25.801	-15.010	-1.980	1.00	35.65	N
ATOM	1651	CA	ARG	A	226	25.381	-16.288	-1.454	1.00	36.21	C
ATOM	1652	C	ARG	A	226	23.967	-16.618	-1.875	1.00	35.67	C
ATOM	1653	O	ARG	A	226	23.686	-17.755	-2.248	1.00	35.65	O
ATOM	1654	CB	ARG	A	226	25.564	-16.354	0.052	1.00	36.19	C
ATOM	1655	CG	ARG	A	226	27.063	-16.336	0.454	1.00	38.30	C
ATOM	1656	CD	ARG	A	226	27.331	-16.348	1.958	1.00	38.28	C
ATOM	1657	NE	ARG	A	226	26.332	-15.559	2.699	1.00	50.71	N
ATOM	1658	CZ	ARG	A	226	26.495	-14.316	3.175	1.00	50.65	C
ATOM	1659	NH1	ARG	A	226	27.650	-13.661	3.030	1.00	50.95	N
ATOM	1660	NH2	ARG	A	226	25.487	-13.734	3.817	1.00	51.40	N
ATOM	1661	N	ALA	A	227	23.109	-15.601	-1.908	1.00	35.43	N
ATOM	1662	CA	ALA	A	227	21.722	-15.764	-2.288	1.00	35.18	C
ATOM	1663	C	ALA	A	227	21.590	-16.164	-3.758	1.00	34.52	C
ATOM	1664	O	ALA	A	227	20.776	-17.009	-4.081	1.00	35.32	O
ATOM	1665	CB	ALA	A	227	20.921	-14.448	-1.989	1.00	35.57	C
ATOM	1666	N	GLN	A	228	22.383	-15.556	-4.637	1.00	33.86	N
ATOM	1667	CA	GLN	A	228	22.452	-15.987	-6.044	1.00	34.14	C

ATOM	1668	C	GLN	A	228	22.997	-17.404	-6.200	1.00	32.85	C
ATOM	1669	O	GLN	A	228	22.519	-18.140	-7.034	1.00	31.46	O
ATOM	1670	CB	GLN	A	228	23.320	-15.063	-6.903	1.00	35.13	C
ATOM	1671	CG	GLN	A	228	22.845	-13.614	-7.059	1.00	36.63	C
ATOM	1672	CD	GLN	A	228	21.514	-13.491	-7.777	1.00	39.66	C
ATOM	1673	OE1	GLN	A	228	21.224	-14.187	-8.755	1.00	39.49	O
ATOM	1674	NE2	GLN	A	228	20.699	-12.592	-7.292	1.00	40.72	N
ATOM	1675	N	ASN	A	229	24.016	-17.758	-5.420	1.00	32.63	N
ATOM	1676	CA	ASN	A	229	24.553	-19.150	-5.395	1.00	32.71	C
ATOM	1677	C	ASN	A	229	23.542	-20.216	-4.950	1.00	32.97	C
ATOM	1678	O	ASN	A	229	23.510	-21.319	-5.514	1.00	32.81	O
ATOM	1679	CB	ASN	A	229	25.845	-19.236	-4.585	1.00	31.43	C
ATOM	1680	CG	ASN	A	229	27.024	-18.570	-5.291	1.00	29.84	C
ATOM	1681	OD1	ASN	A	229	27.026	-18.405	-6.502	1.00	30.11	O
ATOM	1682	ND2	ASN	A	229	28.041	-18.226	-4.539	1.00	26.83	N
ATOM	1683	N	ASP	A	230	22.709	-19.887	-3.958	1.00	34.24	N
ATOM	1684	CA	ASP	A	230	21.539	-20.738	-3.597	1.00	35.11	C
ATOM	1685	C	ASP	A	230	20.597	-20.990	-4.794	1.00	34.39	C
ATOM	1686	O	ASP	A	230	20.088	-22.091	-4.944	1.00	35.88	O
ATOM	1687	CB	ASP	A	230	20.739	-20.187	-2.391	1.00	35.92	C
ATOM	1688	CG	ASP	A	230	21.601	-20.025	-1.107	1.00	38.41	C
ATOM	1689	OD1	ASP	A	230	22.653	-20.704	-0.988	1.00	38.05	O
ATOM	1690	OD2	ASP	A	230	21.218	-19.190	-0.225	1.00	40.41	O
ATOM	1691	N	GLN	A	231	20.401	-19.992	-5.641	1.00	34.29	N
ATOM	1692	CA	GLN	A	231	19.636	-20.109	-6.885	1.00	34.69	C
ATOM	1693	C	GLN	A	231	20.322	-20.987	-7.943	1.00	33.78	C
ATOM	1694	O	GLN	A	231	19.743	-21.287	-9.002	1.00	34.82	O
ATOM	1695	CB	GLN	A	231	19.338	-18.721	-7.498	1.00	35.17	C
ATOM	1696	CG	GLN	A	231	18.540	-17.744	-6.644	1.00	38.90	C
ATOM	1697	CD	GLN	A	231	17.192	-18.299	-6.255	1.00	46.63	C
ATOM	1698	OE1	GLN	A	231	16.333	-18.532	-7.116	1.00	49.59	O
ATOM	1699	NE2	GLN	A	231	16.993	-18.533	-4.950	1.00	47.70	N
ATOM	1700	N	LEU	A	232	21.544	-21.407	-7.662	1.00	32.56	N
ATOM	1701	CA	LEU	A	232	22.244	-22.343	-8.506	1.00	30.96	C
ATOM	1702	C	LEU	A	232	22.249	-23.759	-7.922	1.00	31.48	C
ATOM	1703	O	LEU	A	232	23.087	-24.596	-8.302	1.00	31.66	O
ATOM	1704	CB	LEU	A	232	23.664	-21.871	-8.779	1.00	29.74	C
ATOM	1705	CG	LEU	A	232	23.866	-20.616	-9.633	1.00	28.17	C
ATOM	1706	CD1	LEU	A	232	25.333	-20.132	-9.581	1.00	23.55	C
ATOM	1707	CD2	LEU	A	232	23.405	-20.854	-11.085	1.00	24.09	C
ATOM	1708	N	GLY	A	233	21.315	-24.053	-7.026	1.00	31.30	N
ATOM	1709	CA	GLY	A	233	21.206	-25.417	-6.450	1.00	30.80	C
ATOM	1710	C	GLY	A	233	21.109	-26.483	-7.535	1.00	30.53	C
ATOM	1711	O	GLY	A	233	21.716	-27.561	-7.431	1.00	31.70	O
ATOM	1712	N	TRP	A	234	20.394	-26.171	-8.602	1.00	28.77	N
ATOM	1713	CA	TRP	A	234	20.297	-27.060	-9.762	1.00	28.60	C
ATOM	1714	C	TRP	A	234	21.691	-27.430	-10.304	1.00	28.60	C
ATOM	1715	O	TRP	A	234	21.919	-28.578	-10.697	1.00	30.42	O
ATOM	1716	CB	TRP	A	234	19.447	-26.419	-10.875	1.00	26.90	C
ATOM	1717	CG	TRP	A	234	20.018	-25.107	-11.441	1.00	26.79	C

ATOM	1718	CD1	TRP	A	234	19.671	-23.859	-11.072	1.00	26.15	C
ATOM	1719	CD2	TRP	A	234	21.030	-24.948	-12.494	1.00	26.34	C
ATOM	1720	NE1	TRP	A	234	20.372	-22.928	-11.817	1.00	27.37	N
ATOM	1721	CE2	TRP	A	234	21.219	-23.569	-12.680	1.00	22.96	C
ATOM	1722	CE3	TRP	A	234	21.774	-25.852	-13.296	1.00	26.38	C
ATOM	1723	CZ2	TRP	A	234	22.137	-23.045	-13.616	1.00	24.91	C
ATOM	1724	CZ3	TRP	A	234	22.690	-25.339	-14.222	1.00	24.69	C
ATOM	1725	CH2	TRP	A	234	22.857	-23.938	-14.371	1.00	25.74	C
ATOM	1726	N	LEU	A	235	22.599	-26.459	-10.317	1.00	28.30	N
ATOM	1727	CA	LEU	A	235	23.997	-26.630	-10.770	1.00	27.44	C
ATOM	1728	C	LEU	A	235	24.755	-27.536	-9.838	1.00	28.11	C
ATOM	1729	O	LEU	A	235	25.388	-28.477	-10.298	1.00	29.81	O
ATOM	1730	CB	LEU	A	235	24.714	-25.282	-10.877	1.00	26.24	C
ATOM	1731	CG	LEU	A	235	26.135	-25.325	-11.434	1.00	27.20	C
ATOM	1732	CD1	LEU	A	235	26.211	-26.126	-12.769	1.00	26.95	C
ATOM	1733	CD2	LEU	A	235	26.711	-23.894	-11.612	1.00	25.00	C
ATOM	1734	N	TRP	A	236	24.693	-27.263	-8.532	1.00	27.76	N
ATOM	1735	CA	TRP	A	236	25.370	-28.092	-7.538	1.00	28.39	C
ATOM	1736	C	TRP	A	236	24.851	-29.536	-7.557	1.00	28.45	C
ATOM	1737	O	TRP	A	236	25.646	-30.466	-7.434	1.00	29.85	O
ATOM	1738	CB	TRP	A	236	25.331	-27.460	-6.117	1.00	27.35	C
ATOM	1739	CG	TRP	A	236	25.428	-25.969	-6.142	1.00	26.47	C
ATOM	1740	CD1	TRP	A	236	24.593	-25.082	-5.536	1.00	25.53	C
ATOM	1741	CD2	TRP	A	236	26.400	-25.188	-6.864	1.00	25.00	C
ATOM	1742	NE1	TRP	A	236	24.998	-23.780	-5.819	1.00	25.76	N
ATOM	1743	CE2	TRP	A	236	26.107	-23.831	-6.632	1.00	24.35	C
ATOM	1744	CE3	TRP	A	236	27.504	-25.517	-7.672	1.00	26.00	C
ATOM	1745	CZ2	TRP	A	236	26.855	-22.788	-7.203	1.00	24.30	C
ATOM	1746	CZ3	TRP	A	236	28.241	-24.479	-8.241	1.00	25.27	C
ATOM	1747	CH2	TRP	A	236	27.881	-23.125	-8.022	1.00	24.97	C
ATOM	1748	N	GLY	A	237	23.545	-29.713	-7.761	1.00	28.91	N
ATOM	1749	CA	GLY	A	237	22.920	-31.041	-7.854	1.00	27.77	C
ATOM	1750	C	GLY	A	237	23.461	-31.818	-9.050	1.00	28.03	C
ATOM	1751	O	GLY	A	237	23.604	-33.040	-8.972	1.00	28.61	O
ATOM	1752	N	GLN	A	238	23.752	-31.135	-10.160	1.00	27.22	N
ATOM	1753	CA	GLN	A	238	24.204	-31.814	-11.378	1.00	27.13	C
ATOM	1754	C	GLN	A	238	25.735	-32.094	-11.366	1.00	27.71	C
ATOM	1755	O	GLN	A	238	26.221	-32.931	-12.136	1.00	26.54	O
ATOM	1756	CB	GLN	A	238	23.763	-31.021	-12.635	1.00	29.44	C
ATOM	1757	CG	GLN	A	238	22.214	-31.086	-12.977	1.00	27.47	C
ATOM	1758	CD	GLN	A	238	21.751	-32.434	-13.548	1.00	31.11	C
ATOM	1759	OE1	GLN	A	238	22.522	-33.379	-13.707	1.00	31.80	O
ATOM	1760	NE2	GLN	A	238	20.463	-32.508	-13.886	1.00	33.57	N
ATOM	1761	N	SER	A	239	26.457	-31.450	-10.429	1.00	26.65	N
ATOM	1762	CA	SER	A	239	27.918	-31.565	-10.266	1.00	26.14	C
ATOM	1763	C	SER	A	239	28.335	-32.811	-9.482	1.00	26.67	C
ATOM	1764	O	SER	A	239	27.663	-33.214	-8.521	1.00	26.51	O
ATOM	1765	CB	SER	A	239	28.472	-30.327	-9.556	1.00	26.36	C
ATOM	1766	OG	SER	A	239	28.275	-29.157	-10.335	1.00	27.91	O
ATOM	1767	N	ARG	A	240	29.457	-33.399	-9.888	1.00	25.89	N

ATOM	1768	CA	ARG	A	240	30.072	-34.510	-9.141	1.00	26.92	C
ATOM	1769	C	ARG	A	240	31.475	-34.150	-8.554	1.00	26.37	C
ATOM	1770	O	ARG	A	240	32.149	-34.981	-7.931	1.00	26.98	O
ATOM	1771	CB	ARG	A	240	30.096	-35.793	-9.995	1.00	27.06	C
ATOM	1772	CG	ARG	A	240	28.659	-36.417	-10.266	1.00	27.01	C
ATOM	1773	CD	ARG	A	240	27.907	-36.793	-8.961	1.00	27.37	C
ATOM	1774	NE	ARG	A	240	26.501	-37.173	-9.207	1.00	34.02	N
ATOM	1775	CZ	ARG	A	240	25.449	-36.342	-9.342	1.00	32.91	C
ATOM	1776	NH1	ARG	A	240	25.580	-35.033	-9.189	1.00	29.74	N
ATOM	1777	NH2	ARG	A	240	24.236	-36.843	-9.595	1.00	31.76	N
ATOM	1778	N	ALA	A	241	31.917	-32.928	-8.814	1.00	25.26	N
ATOM	1779	CA	ALA	A	241	32.968	-32.287	-8.028	1.00	23.97	C
ATOM	1780	C	ALA	A	241	32.783	-30.797	-8.190	1.00	23.40	C
ATOM	1781	O	ALA	A	241	32.139	-30.390	-9.161	1.00	23.71	O
ATOM	1782	CB	ALA	A	241	34.368	-32.693	-8.519	1.00	23.38	C
ATOM	1783	N	LEU	A	242	33.370	-30.003	-7.285	1.00	23.31	N
ATOM	1784	CA	LEU	A	242	33.372	-28.543	-7.421	1.00	24.42	C
ATOM	1785	C	LEU	A	242	34.809	-28.067	-7.578	1.00	24.43	C
ATOM	1786	O	LEU	A	242	35.713	-28.582	-6.886	1.00	24.89	O
ATOM	1787	CB	LEU	A	242	32.701	-27.820	-6.223	1.00	23.77	C
ATOM	1788	CG	LEU	A	242	31.193	-28.041	-6.043	1.00	25.29	C
ATOM	1789	CD1	LEU	A	242	30.684	-27.383	-4.739	1.00	25.23	C
ATOM	1790	CD2	LEU	A	242	30.299	-27.598	-7.249	1.00	22.10	C
ATOM	1791	N	TYR	A	243	34.998	-27.117	-8.512	1.00	24.28	N
ATOM	1792	CA	TYR	A	243	36.272	-26.573	-8.884	1.00	23.69	C
ATOM	1793	C	TYR	A	243	36.290	-25.044	-8.723	1.00	25.34	C
ATOM	1794	O	TYR	A	243	36.513	-24.341	-9.704	1.00	27.13	O
ATOM	1795	CB	TYR	A	243	36.609	-26.923	-10.346	1.00	23.39	C
ATOM	1796	CG	TYR	A	243	36.606	-28.416	-10.610	1.00	22.39	C
ATOM	1797	CD1	TYR	A	243	35.520	-29.046	-11.226	1.00	20.79	C
ATOM	1798	CD2	TYR	A	243	37.658	-29.223	-10.161	1.00	25.37	C
ATOM	1799	CE1	TYR	A	243	35.526	-30.434	-11.465	1.00	21.27	C
ATOM	1800	CE2	TYR	A	243	37.662	-30.605	-10.355	1.00	19.55	C
ATOM	1801	CZ	TYR	A	243	36.608	-31.200	-11.018	1.00	22.27	C
ATOM	1802	OH	TYR	A	243	36.631	-32.561	-11.195	1.00	22.87	O
ATOM	1803	N	PRO	A	244	36.136	-24.522	-7.474	1.00	25.42	N
ATOM	1804	CA	PRO	A	244	36.222	-23.084	-7.320	1.00	24.13	C
ATOM	1805	C	PRO	A	244	37.634	-22.617	-7.611	1.00	24.81	C
ATOM	1806	O	PRO	A	244	38.561	-23.355	-7.380	1.00	24.46	O
ATOM	1807	CB	PRO	A	244	35.958	-22.850	-5.822	1.00	24.13	C
ATOM	1808	CG	PRO	A	244	36.463	-24.165	-5.122	1.00	22.94	C
ATOM	1809	CD	PRO	A	244	35.965	-25.218	-6.161	1.00	24.50	C
ATOM	1810	N	SER	A	245	37.794	-21.361	-8.052	1.00	24.04	N
ATOM	1811	CA	SER	A	245	39.110	-20.820	-8.294	1.00	24.74	C
ATOM	1812	C	SER	A	245	39.623	-20.021	-7.070	1.00	25.29	C
ATOM	1813	O	SER	A	245	38.895	-19.150	-6.552	1.00	24.99	O
ATOM	1814	CB	SER	A	245	39.028	-19.887	-9.484	1.00	23.30	C
ATOM	1815	OG	SER	A	245	40.307	-19.494	-9.853	1.00	28.64	O
ATOM	1816	N	ILE	A	246	40.874	-20.273	-6.643	1.00	24.82	N
ATOM	1817	CA	ILE	A	246	41.474	-19.419	-5.596	1.00	25.53	C

ATOM	1818	C	ILE	A	246	42.771	-18.803	-6.098	1.00	27.05	C
ATOM	1819	O	ILE	A	246	43.807	-18.749	-5.379	1.00	26.82	O
ATOM	1820	CB	ILE	A	246	41.636	-20.171	-4.229	1.00	24.90	C
ATOM	1821	CG1	ILE	A	246	42.495	-21.415	-4.422	1.00	22.61	C
ATOM	1822	CG2	ILE	A	246	40.198	-20.615	-3.698	1.00	22.77	C
ATOM	1823	CD1	ILE	A	246	42.862	-22.231	-3.158	1.00	25.50	C
ATOM	1824	N	TYR	A	247	42.720	-18.354	-7.357	1.00	27.74	N
ATOM	1825	CA	TYR	A	247	43.790	-17.532	-7.920	1.00	28.29	C
ATOM	1826	C	TYR	A	247	43.836	-16.275	-7.085	1.00	29.18	C
ATOM	1827	O	TYR	A	247	42.783	-15.733	-6.701	1.00	29.22	O
ATOM	1828	CB	TYR	A	247	43.553	-17.197	-9.393	1.00	27.41	C
ATOM	1829	CG	TYR	A	247	43.482	-18.388	-10.293	1.00	28.67	C
ATOM	1830	CD1	TYR	A	247	43.930	-19.641	-9.869	1.00	26.31	C
ATOM	1831	CD2	TYR	A	247	42.971	-18.264	-11.611	1.00	29.33	C
ATOM	1832	CE1	TYR	A	247	43.840	-20.764	-10.694	1.00	26.24	C
ATOM	1833	CE2	TYR	A	247	42.902	-19.363	-12.456	1.00	28.12	C
ATOM	1834	CZ	TYR	A	247	43.325	-20.600	-11.997	1.00	29.12	C
ATOM	1835	OH	TYR	A	247	43.281	-21.673	-12.831	1.00	29.56	O
ATOM	1836	N	MET	A	248	45.044	-15.814	-6.797	1.00	30.58	N
ATOM	1837	CA	MET	A	248	45.211	-14.693	-5.914	1.00	33.62	C
ATOM	1838	C	MET	A	248	45.585	-13.458	-6.739	1.00	34.37	C
ATOM	1839	O	MET	A	248	46.670	-13.407	-7.332	1.00	34.40	O
ATOM	1840	CB	MET	A	248	46.269	-14.997	-4.854	1.00	33.44	C
ATOM	1841	CG	MET	A	248	45.802	-15.985	-3.786	1.00	34.95	C
ATOM	1842	SD	MET	A	248	47.081	-16.712	-2.742	1.00	39.43	S
ATOM	1843	CE	MET	A	248	48.047	-15.284	-2.417	1.00	40.84	C
ATOM	1844	N	PRO	A	249	44.669	-12.482	-6.830	1.00	35.66	N
ATOM	1845	CA	PRO	A	249	45.035	-11.313	-7.621	1.00	37.18	C
ATOM	1846	C	PRO	A	249	46.350	-10.669	-7.216	1.00	38.60	C
ATOM	1847	O	PRO	A	249	46.768	-10.723	-6.048	1.00	37.61	O
ATOM	1848	CB	PRO	A	249	43.845	-10.377	-7.410	1.00	37.24	C
ATOM	1849	CG	PRO	A	249	42.617	-11.410	-7.349	1.00	36.92	C
ATOM	1850	CD	PRO	A	249	43.262	-12.403	-6.361	1.00	36.10	C
ATOM	1851	N	ALA	A	250	46.984	-10.053	-8.216	1.00	40.42	N
ATOM	1852	CA	ALA	A	250	48.221	-9.319	-8.023	1.00	41.64	C
ATOM	1853	C	ALA	A	250	48.212	-8.391	-6.801	1.00	42.05	C
ATOM	1854	O	ALA	A	250	49.191	-8.353	-6.057	1.00	42.70	O
ATOM	1855	CB	ALA	A	250	48.567	-8.568	-9.311	1.00	41.96	C
ATOM	1856	N	VAL	A	251	47.100	-7.664	-6.581	1.00	42.50	N
ATOM	1857	CA	VAL	A	251	46.963	-6.731	-5.434	1.00	41.87	C
ATOM	1858	C	VAL	A	251	47.091	-7.355	-4.073	1.00	42.10	C
ATOM	1859	O	VAL	A	251	47.184	-6.627	-3.076	1.00	42.51	O
ATOM	1860	CB	VAL	A	251	45.570	-6.030	-5.322	1.00	41.98	C
ATOM	1861	CG1	VAL	A	251	45.624	-4.609	-5.766	1.00	43.06	C
ATOM	1862	CG2	VAL	A	251	44.431	-6.827	-5.966	1.00	42.24	C
ATOM	1863	N	LEU	A	252	46.988	-8.682	-3.988	1.00	42.43	N
ATOM	1864	CA	LEU	A	252	47.062	-9.338	-2.690	1.00	42.01	C
ATOM	1865	C	LEU	A	252	48.517	-9.386	-2.251	1.00	42.39	C
ATOM	1866	O	LEU	A	252	48.789	-9.423	-1.055	1.00	41.13	O
ATOM	1867	CB	LEU	A	252	46.463	-10.754	-2.752	1.00	41.96	C

ATOM	1868	CG	LEU	A	252	44.942	-10.915	-2.555	1.00	39.92	C
ATOM	1869	CD1	LEU	A	252	44.525	-12.293	-2.932	1.00	37.16	C
ATOM	1870	CD2	LEU	A	252	44.556	-10.607	-1.108	1.00	40.28	C
ATOM	1871	N	GLU	A	253	49.430	-9.393	-3.238	1.00	43.55	N
ATOM	1872	CA	GLU	A	253	50.873	-9.544	-2.983	1.00	45.01	C
ATOM	1873	C	GLU	A	253	51.292	-8.562	-1.939	1.00	45.06	C
ATOM	1874	O	GLU	A	253	51.106	-7.368	-2.124	1.00	45.89	O
ATOM	1875	CB	GLU	A	253	51.757	-9.336	-4.246	1.00	45.08	C
ATOM	1876	CG	GLU	A	253	53.331	-9.395	-3.964	1.00	44.44	C
ATOM	1877	CD	GLU	A	253	54.153	-9.773	-5.207	1.00	45.67	C
ATOM	1878	OE1	GLU	A	253	53.727	-9.430	-6.345	1.00	46.64	O
ATOM	1879	OE2	GLU	A	253	55.208	-10.432	-5.061	1.00	46.69	O
ATOM	1880	N	GLY	A	254	51.849	-9.075	-0.854	1.00	45.58	N
ATOM	1881	CA	GLY	A	254	52.362	-8.235	0.218	1.00	46.47	C
ATOM	1882	C	GLY	A	254	51.322	-7.598	1.110	1.00	46.53	C
ATOM	1883	O	GLY	A	254	51.616	-6.612	1.785	1.00	47.04	O
ATOM	1884	N	THR	A	255	50.106	-8.127	1.119	1.00	46.24	N
ATOM	1885	CA	THR	A	255	49.159	-7.775	2.205	1.00	46.29	C
ATOM	1886	C	THR	A	255	48.877	-8.948	3.160	1.00	45.11	C
ATOM	1887	O	THR	A	255	49.410	-10.045	2.975	1.00	46.18	O
ATOM	1888	CB	THR	A	255	47.799	-7.216	1.699	1.00	47.04	C
ATOM	1889	OG1	THR	A	255	47.048	-6.790	2.861	1.00	48.58	O
ATOM	1890	CG2	THR	A	255	46.996	-8.332	0.883	1.00	44.93	C
ATOM	1891	N	GLY	A	256	48.044	-8.717	4.176	1.00	43.00	N
ATOM	1892	CA	GLY	A	256	47.595	-9.814	5.037	1.00	40.85	C
ATOM	1893	C	GLY	A	256	46.159	-10.302	4.783	1.00	38.68	C
ATOM	1894	O	GLY	A	256	45.456	-10.679	5.731	1.00	37.87	O
ATOM	1895	N	LYS	A	257	45.718	-10.286	3.518	1.00	36.17	N
ATOM	1896	CA	LYS	A	257	44.298	-10.583	3.202	1.00	34.17	C
ATOM	1897	C	LYS	A	257	44.102	-11.867	2.406	1.00	32.48	C
ATOM	1898	O	LYS	A	257	42.965	-12.266	2.178	1.00	32.00	O
ATOM	1899	CB	LYS	A	257	43.650	-9.416	2.431	1.00	34.61	C
ATOM	1900	CG	LYS	A	257	43.452	-8.111	3.228	1.00	36.25	C
ATOM	1901	CD	LYS	A	257	43.466	-6.894	2.261	1.00	37.22	C
ATOM	1902	CE	LYS	A	257	43.011	-5.569	2.949	1.00	38.03	C
ATOM	1903	NZ	LYS	A	257	43.356	-4.322	2.129	1.00	39.23	N
ATOM	1904	N	SER	A	258	45.190	-12.479	1.948	1.00	31.23	N
ATOM	1905	CA	SER	A	258	45.122	-13.720	1.189	1.00	32.34	C
ATOM	1906	C	SER	A	258	44.355	-14.870	1.883	1.00	31.79	C
ATOM	1907	O	SER	A	258	43.552	-15.568	1.247	1.00	31.79	O
ATOM	1908	CB	SER	A	258	46.524	-14.193	0.795	1.00	32.15	C
ATOM	1909	OG	SER	A	258	47.187	-13.199	0.014	1.00	35.83	O
ATOM	1910	N	GLN	A	259	44.596	-15.067	3.176	1.00	31.27	N
ATOM	1911	CA	GLN	A	259	44.024	-16.226	3.813	1.00	31.86	C
ATOM	1912	C	GLN	A	259	42.486	-16.129	3.966	1.00	30.89	C
ATOM	1913	O	GLN	A	259	41.801	-17.113	3.717	1.00	28.85	O
ATOM	1914	CB	GLN	A	259	44.760	-16.604	5.118	1.00	32.22	C
ATOM	1915	CG	GLN	A	259	44.170	-17.891	5.758	1.00	36.08	C
ATOM	1916	CD	GLN	A	259	45.144	-18.665	6.603	1.00	43.46	C
ATOM	1917	OE1	GLN	A	259	45.726	-18.105	7.524	1.00	43.63	O

ATOM	1918	NE2	GLN	A	259	45.301	-20.004	6.316	1.00	45.80	N
ATOM	1919	N	MET	A	260	41.980	-14.940	4.320	1.00	29.76	N
ATOM	1920	CA	MET	A	260	40.535	-14.666	4.429	1.00	31.84	C
ATOM	1921	C	MET	A	260	39.822	-14.771	3.078	1.00	29.28	C
ATOM	1922	O	MET	A	260	38.710	-15.239	3.008	1.00	29.57	O
ATOM	1923	CB	MET	A	260	40.245	-13.247	4.994	1.00	31.47	C
ATOM	1924	CG	MET	A	260	41.017	-12.822	6.211	1.00	36.63	C
ATOM	1925	SD	MET	A	260	40.877	-11.012	6.536	1.00	38.08	S
ATOM	1926	CE	MET	A	260	39.491	-11.091	7.617	1.00	42.70	C
ATOM	1927	N	TYR	A	261	40.469	-14.273	2.039	1.00	28.98	N
ATOM	1928	CA	TYR	A	261	40.022	-14.397	0.641	1.00	28.19	C
ATOM	1929	C	TYR	A	261	39.844	-15.871	0.268	1.00	26.26	C
ATOM	1930	O	TYR	A	261	38.778	-16.258	-0.126	1.00	26.44	O
ATOM	1931	CB	TYR	A	261	41.031	-13.699	-0.296	1.00	27.37	C
ATOM	1932	CG	TYR	A	261	40.901	-14.044	-1.779	1.00	27.49	C
ATOM	1933	CD1	TYR	A	261	39.906	-13.463	-2.561	1.00	24.48	C
ATOM	1934	CD2	TYR	A	261	41.819	-14.888	-2.403	1.00	26.91	C
ATOM	1935	CE1	TYR	A	261	39.811	-13.719	-3.913	1.00	23.53	C
ATOM	1936	CE2	TYR	A	261	41.718	-15.191	-3.766	1.00	24.57	C
ATOM	1937	CZ	TYR	A	261	40.697	-14.594	-4.503	1.00	27.63	C
ATOM	1938	OH	TYR	A	261	40.568	-14.864	-5.843	1.00	29.11	O
ATOM	1939	N	VAL	A	262	40.893	-16.680	0.431	1.00	25.95	N
ATOM	1940	CA	VAL	A	262	40.838	-18.138	0.145	1.00	24.25	C
ATOM	1941	C	VAL	A	262	39.860	-18.870	1.050	1.00	24.97	C
ATOM	1942	O	VAL	A	262	39.031	-19.661	0.556	1.00	24.26	O
ATOM	1943	CB	VAL	A	262	42.231	-18.855	0.262	1.00	24.22	C
ATOM	1944	CG1	VAL	A	262	42.039	-20.362	0.004	1.00	21.96	C
ATOM	1945	CG2	VAL	A	262	43.254	-18.239	-0.760	1.00	20.81	C
ATOM	1946	N	GLN	A	263	39.911	-18.563	2.364	1.00	24.64	N
ATOM	1947	CA	GLN	A	263	39.114	-19.316	3.313	1.00	24.42	C
ATOM	1948	C	GLN	A	263	37.671	-19.319	2.916	1.00	24.01	C
ATOM	1949	O	GLN	A	263	37.009	-20.348	2.978	1.00	24.48	O
ATOM	1950	CB	GLN	A	263	39.277	-18.749	4.739	1.00	24.56	C
ATOM	1951	CG	GLN	A	263	38.628	-19.571	5.900	1.00	26.12	C
ATOM	1952	CD	GLN	A	263	37.121	-19.380	6.021	1.00	34.04	C
ATOM	1953	OE1	GLN	A	263	36.629	-18.268	5.935	1.00	41.45	O
ATOM	1954	NE2	GLN	A	263	36.393	-20.454	6.263	1.00	35.18	N
ATOM	1955	N	HIS	A	264	37.153	-18.147	2.542	1.00	24.18	N
ATOM	1956	CA	HIS	A	264	35.728	-18.000	2.293	1.00	23.29	C
ATOM	1957	C	HIS	A	264	35.353	-18.564	0.929	1.00	23.66	C
ATOM	1958	O	HIS	A	264	34.195	-18.930	0.717	1.00	23.45	O
ATOM	1959	CB	HIS	A	264	35.333	-16.544	2.390	1.00	23.37	C
ATOM	1960	CG	HIS	A	264	35.280	-16.045	3.790	1.00	26.76	C
ATOM	1961	ND1	HIS	A	264	36.388	-15.546	4.437	1.00	25.25	N
ATOM	1962	CD2	HIS	A	264	34.266	-16.014	4.689	1.00	28.45	C
ATOM	1963	CE1	HIS	A	264	36.053	-15.198	5.669	1.00	28.12	C
ATOM	1964	NE2	HIS	A	264	34.774	-15.469	5.848	1.00	28.27	N
ATOM	1965	N	ARG	A	265	36.326	-18.663	0.021	1.00	22.95	N
ATOM	1966	CA	ARG	A	265	36.034	-19.179	-1.342	1.00	23.51	C
ATOM	1967	C	ARG	A	265	35.895	-20.684	-1.254	1.00	24.93	C

ATOM	1968	O	ARG	A	265	34.985	-21.273	-1.865	1.00	26.15	O
ATOM	1969	CB	ARG	A	265	37.108	-18.756	-2.351	1.00	22.67	C
ATOM	1970	CG	ARG	A	265	37.109	-17.222	-2.568	1.00	20.46	C
ATOM	1971	CD	ARG	A	265	38.304	-16.825	-3.467	1.00	24.27	C
ATOM	1972	NE	ARG	A	265	38.086	-17.110	-4.898	1.00	23.11	N
ATOM	1973	CZ	ARG	A	265	37.376	-16.339	-5.707	1.00	26.36	C
ATOM	1974	NH1	ARG	A	265	36.772	-15.228	-5.233	1.00	24.44	N
ATOM	1975	NH2	ARG	A	265	37.249	-16.687	-6.976	1.00	26.04	N
ATOM	1976	N	VAL	A	266	36.772	-21.304	-0.467	1.00	25.17	N
ATOM	1977	CA	VAL	A	266	36.689	-22.757	-0.231	1.00	24.55	C
ATOM	1978	C	VAL	A	266	35.424	-23.103	0.558	1.00	25.02	C
ATOM	1979	O	VAL	A	266	34.716	-24.011	0.175	1.00	25.95	O
ATOM	1980	CB	VAL	A	266	38.001	-23.315	0.441	1.00	23.71	C
ATOM	1981	CG1	VAL	A	266	37.902	-24.804	0.699	1.00	23.62	C
ATOM	1982	CG2	VAL	A	266	39.218	-23.048	-0.464	1.00	21.35	C
ATOM	1983	N	ALA	A	267	35.165	-22.378	1.664	1.00	24.55	N
ATOM	1984	CA	ALA	A	267	33.973	-22.517	2.476	1.00	23.66	C
ATOM	1985	C	ALA	A	267	32.681	-22.400	1.667	1.00	24.07	C
ATOM	1986	O	ALA	A	267	31.702	-23.126	1.924	1.00	26.34	O
ATOM	1987	CB	ALA	A	267	33.972	-21.476	3.692	1.00	21.97	C
ATOM	1988	N	GLU	A	268	32.643	-21.517	0.693	1.00	23.81	N
ATOM	1989	CA	GLU	A	268	31.429	-21.378	-0.127	1.00	24.57	C
ATOM	1990	C	GLU	A	268	31.170	-22.619	-0.973	1.00	24.57	C
ATOM	1991	O	GLU	A	268	30.011	-22.957	-1.245	1.00	24.52	O
ATOM	1992	CB	GLU	A	268	31.529	-20.135	-1.044	1.00	25.60	C
ATOM	1993	CG	GLU	A	268	30.322	-19.851	-1.932	1.00	25.03	C
ATOM	1994	CD	GLU	A	268	29.031	-19.457	-1.154	1.00	30.55	C
ATOM	1995	OE1	GLU	A	268	29.002	-19.428	0.128	1.00	29.97	O
ATOM	1996	OE2	GLU	A	268	28.028	-19.162	-1.853	1.00	31.16	O
ATOM	1997	N	ALA	A	269	32.244	-23.275	-1.435	1.00	23.49	N
ATOM	1998	CA	ALA	A	269	32.074	-24.513	-2.178	1.00	23.88	C
ATOM	1999	C	ALA	A	269	31.487	-25.584	-1.255	1.00	24.14	C
ATOM	2000	O	ALA	A	269	30.545	-26.263	-1.605	1.00	25.45	O
ATOM	2001	CB	ALA	A	269	33.417	-24.960	-2.756	1.00	23.14	C
ATOM	2002	N	PHE	A	270	32.018	-25.754	-0.056	1.00	24.31	N
ATOM	2003	CA	PHE	A	270	31.329	-26.644	0.877	1.00	25.79	C
ATOM	2004	C	PHE	A	270	29.941	-26.217	1.239	1.00	26.86	C
ATOM	2005	O	PHE	A	270	29.099	-27.079	1.384	1.00	28.49	O
ATOM	2006	CB	PHE	A	270	32.106	-26.925	2.134	1.00	24.18	C
ATOM	2007	CG	PHE	A	270	33.376	-27.668	1.869	1.00	26.50	C
ATOM	2008	CD1	PHE	A	270	34.616	-27.002	1.917	1.00	23.14	C
ATOM	2009	CD2	PHE	A	270	33.343	-29.034	1.582	1.00	21.77	C
ATOM	2010	CE1	PHE	A	270	35.806	-27.712	1.672	1.00	21.34	C
ATOM	2011	CE2	PHE	A	270	34.489	-29.700	1.350	1.00	25.14	C
ATOM	2012	CZ	PHE	A	270	35.739	-29.030	1.388	1.00	24.24	C
ATOM	2013	N	ARG	A	271	29.696	-24.917	1.397	1.00	27.12	N
ATOM	2014	CA	ARG	A	271	28.363	-24.464	1.762	1.00	27.80	C
ATOM	2015	C	ARG	A	271	27.307	-24.868	0.752	1.00	27.71	C
ATOM	2016	O	ARG	A	271	26.278	-25.392	1.129	1.00	27.73	O
ATOM	2017	CB	ARG	A	271	28.324	-22.927	1.993	1.00	28.11	C

ATOM	2018	CG	ARG	A	271	26.961	-22.493	2.594	1.00	28.31	C
ATOM	2019	CD	ARG	A	271	26.830	-20.982	2.609	1.00	25.22	C
ATOM	2020	NE	ARG	A	271	26.696	-20.442	1.275	1.00	27.21	N
ATOM	2021	CZ	ARG	A	271	25.561	-20.411	0.573	1.00	28.89	C
ATOM	2022	NH1	ARG	A	271	24.439	-20.963	1.039	1.00	30.03	N
ATOM	2023	NH2	ARG	A	271	25.551	-19.843	-0.626	1.00	29.88	N
ATOM	2024	N	VAL	A	272	27.554	-24.629	-0.538	1.00	28.51	N
ATOM	2025	CA	VAL	A	272	26.539	-24.981	-1.557	1.00	28.15	C
ATOM	2026	C	VAL	A	272	26.406	-26.505	-1.707	1.00	28.93	C
ATOM	2027	O	VAL	A	272	25.332	-26.998	-2.011	1.00	29.58	O
ATOM	2028	CB	VAL	A	272	26.780	-24.284	-2.931	1.00	28.21	C
ATOM	2029	CG1	VAL	A	272	26.863	-22.751	-2.797	1.00	25.70	C
ATOM	2030	CG2	VAL	A	272	28.065	-24.840	-3.630	1.00	26.82	C
ATOM	2031	N	ALA	A	273	27.494	-27.253	-1.501	1.00	29.91	N
ATOM	2032	CA	ALA	A	273	27.435	-28.720	-1.542	1.00	29.37	C
ATOM	2033	C	ALA	A	273	26.493	-29.215	-0.442	1.00	30.30	C
ATOM	2034	O	ALA	A	273	25.610	-30.016	-0.691	1.00	30.29	O
ATOM	2035	CB	ALA	A	273	28.817	-29.350	-1.392	1.00	28.78	C
ATOM	2036	N	VAL	A	274	26.660	-28.724	0.775	1.00	30.62	N
ATOM	2037	CA	VAL	A	274	25.833	-29.193	1.858	1.00	30.58	C
ATOM	2038	C	VAL	A	274	24.337	-28.830	1.623	1.00	31.80	C
ATOM	2039	O	VAL	A	274	23.446	-29.671	1.830	1.00	33.32	O
ATOM	2040	CB	VAL	A	274	26.355	-28.672	3.226	1.00	30.84	C
ATOM	2041	CG1	VAL	A	274	25.303	-28.939	4.350	1.00	29.66	C
ATOM	2042	CG2	VAL	A	274	27.711	-29.299	3.597	1.00	29.46	C
ATOM	2043	N	ALA	A	275	24.061	-27.605	1.181	1.00	31.17	N
ATOM	2044	CA	ALA	A	275	22.686	-27.164	0.951	1.00	32.56	C
ATOM	2045	C	ALA	A	275	21.999	-27.920	-0.203	1.00	34.27	C
ATOM	2046	O	ALA	A	275	20.761	-27.928	-0.285	1.00	34.67	O
ATOM	2047	CB	ALA	A	275	22.641	-25.648	0.706	1.00	31.15	C
ATOM	2048	N	ALA	A	276	22.793	-28.526	-1.106	1.00	34.63	N
ATOM	2049	CA	ALA	A	276	22.239	-29.192	-2.280	1.00	35.14	C
ATOM	2050	C	ALA	A	276	22.036	-30.648	-1.949	1.00	36.00	C
ATOM	2051	O	ALA	A	276	21.736	-31.435	-2.820	1.00	36.70	O
ATOM	2052	CB	ALA	A	276	23.180	-29.078	-3.478	1.00	34.70	C
ATOM	2053	N	GLY	A	277	22.275	-31.014	-0.698	1.00	36.56	N
ATOM	2054	CA	GLY	A	277	22.074	-32.367	-0.298	1.00	37.01	C
ATOM	2055	C	GLY	A	277	23.217	-33.252	-0.742	1.00	36.63	C
ATOM	2056	O	GLY	A	277	23.003	-34.449	-0.924	1.00	37.52	O
ATOM	2057	N	ASP	A	278	24.432	-32.702	-0.884	1.00	35.11	N
ATOM	2058	CA	ASP	A	278	25.632	-33.567	-1.143	1.00	33.11	C
ATOM	2059	C	ASP	A	278	26.861	-33.118	-0.337	1.00	32.50	C
ATOM	2060	O	ASP	A	278	27.783	-32.539	-0.897	1.00	33.71	O
ATOM	2061	CB	ASP	A	278	25.880	-33.688	-2.666	1.00	32.51	C
ATOM	2062	CG	ASP	A	278	26.900	-34.768	-3.052	1.00	33.93	C
ATOM	2063	OD1	ASP	A	278	27.378	-35.543	-2.195	1.00	31.85	O
ATOM	2064	OD2	ASP	A	278	27.197	-34.893	-4.274	1.00	36.45	O
ATOM	2065	N	PRO	A	279	26.891	-33.420	0.984	1.00	32.24	N
ATOM	2066	CA	PRO	A	279	27.939	-32.982	1.889	1.00	31.75	C
ATOM	2067	C	PRO	A	279	29.267	-33.594	1.521	1.00	31.62	C

ATOM	2068	O	PRO	A	279	30.326	-33.099	1.940	1.00	32.38	O
ATOM	2069	CB	PRO	A	279	27.501	-33.500	3.282	1.00	30.83	C
ATOM	2070	CG	PRO	A	279	26.129	-33.984	3.125	1.00	33.11	C
ATOM	2071	CD	PRO	A	279	25.866	-34.233	1.687	1.00	32.94	C
ATOM	2072	N	ASN	A	280	29.214	-34.619	0.704	1.00	30.76	N
ATOM	2073	CA	ASN	A	280	30.402	-35.350	0.300	1.00	31.24	C
ATOM	2074	C	ASN	A	280	31.001	-35.002	-1.052	1.00	29.93	C
ATOM	2075	O	ASN	A	280	31.981	-35.634	-1.460	1.00	31.46	O
ATOM	2076	CB	ASN	A	280	30.093	-36.834	0.311	1.00	31.55	C
ATOM	2077	CG	ASN	A	280	29.832	-37.362	1.719	1.00	34.41	C
ATOM	2078	OD1	ASN	A	280	30.674	-37.211	2.610	1.00	35.65	O
ATOM	2079	ND2	ASN	A	280	28.670	-37.998	1.910	1.00	33.72	N
ATOM	2080	N	LEU	A	281	30.389	-34.059	-1.752	1.00	28.74	N
ATOM	2081	CA	LEU	A	281	30.855	-33.567	-3.065	1.00	27.75	C
ATOM	2082	C	LEU	A	281	32.352	-33.185	-2.971	1.00	27.65	C
ATOM	2083	O	LEU	A	281	32.726	-32.313	-2.180	1.00	26.86	O
ATOM	2084	CB	LEU	A	281	30.025	-32.327	-3.434	1.00	27.16	C
ATOM	2085	CG	LEU	A	281	29.985	-31.759	-4.877	1.00	28.55	C
ATOM	2086	CD1	LEU	A	281	29.857	-32.857	-5.934	1.00	28.83	C
ATOM	2087	CD2	LEU	A	281	28.810	-30.789	-5.021	1.00	26.46	C
ATOM	2088	N	PRO	A	282	33.215	-33.901	-3.703	1.00	26.29	N
ATOM	2089	CA	PRO	A	282	34.631	-33.507	-3.658	1.00	25.17	C
ATOM	2090	C	PRO	A	282	34.813	-32.046	-4.089	1.00	25.89	C
ATOM	2091	O	PRO	A	282	34.265	-31.611	-5.103	1.00	25.88	O
ATOM	2092	CB	PRO	A	282	35.313	-34.456	-4.680	1.00	23.77	C
ATOM	2093	CG	PRO	A	282	34.339	-35.612	-4.868	1.00	25.65	C
ATOM	2094	CD	PRO	A	282	32.957	-35.082	-4.558	1.00	25.44	C
ATOM	2095	N	VAL	A	283	35.594	-31.301	-3.310	1.00	25.59	N
ATOM	2096	CA	VAL	A	283	35.917	-29.915	-3.629	1.00	24.35	C
ATOM	2097	C	VAL	A	283	37.401	-29.875	-3.977	1.00	23.76	C
ATOM	2098	O	VAL	A	283	38.243	-30.304	-3.196	1.00	23.64	O
ATOM	2099	CB	VAL	A	283	35.567	-28.989	-2.426	1.00	24.44	C
ATOM	2100	CG1	VAL	A	283	36.071	-27.553	-2.629	1.00	24.08	C
ATOM	2101	CG2	VAL	A	283	34.005	-29.043	-2.195	1.00	23.33	C
ATOM	2102	N	LEU	A	284	37.717	-29.396	-5.176	1.00	24.39	N
ATOM	2103	CA	LEU	A	284	39.128	-29.343	-5.611	1.00	23.98	C
ATOM	2104	C	LEU	A	284	39.420	-27.970	-6.168	1.00	22.50	C
ATOM	2105	O	LEU	A	284	39.264	-27.751	-7.375	1.00	22.36	O
ATOM	2106	CB	LEU	A	284	39.382	-30.418	-6.675	1.00	23.57	C
ATOM	2107	CG	LEU	A	284	39.335	-31.903	-6.208	1.00	26.21	C
ATOM	2108	CD1	LEU	A	284	38.166	-32.555	-6.913	1.00	24.27	C
ATOM	2109	CD2	LEU	A	284	40.622	-32.630	-6.666	1.00	26.05	C
ATOM	2110	N	PRO	A	285	39.838	-27.036	-5.306	1.00	23.12	N
ATOM	2111	CA	PRO	A	285	40.098	-25.682	-5.819	1.00	21.64	C
ATOM	2112	C	PRO	A	285	41.224	-25.591	-6.841	1.00	23.02	C
ATOM	2113	O	PRO	A	285	42.173	-26.356	-6.765	1.00	22.38	O
ATOM	2114	CB	PRO	A	285	40.508	-24.897	-4.549	1.00	20.94	C
ATOM	2115	CG	PRO	A	285	39.922	-25.708	-3.369	1.00	20.84	C
ATOM	2116	CD	PRO	A	285	40.128	-27.138	-3.836	1.00	22.04	C
ATOM	2117	N	TYR	A	286	41.134	-24.627	-7.775	1.00	22.56	N

ATOM	2118	CA	TYR	A	286	42.204	-24.340	-8.724	1.00	22.26	C
ATOM	2119	C	TYR	A	286	43.108	-23.292	-8.105	1.00	22.97	C
ATOM	2120	O	TYR	A	286	42.627	-22.245	-7.643	1.00	21.37	O
ATOM	2121	CB	TYR	A	286	41.614	-23.759	-10.026	1.00	22.01	C
ATOM	2122	CG	TYR	A	286	41.427	-24.800	-11.066	1.00	24.59	C
ATOM	2123	CD1	TYR	A	286	40.459	-25.810	-10.908	1.00	26.13	C
ATOM	2124	CD2	TYR	A	286	42.235	-24.824	-12.197	1.00	24.99	C
ATOM	2125	CE1	TYR	A	286	40.300	-26.798	-11.893	1.00	28.10	C
ATOM	2126	CE2	TYR	A	286	42.055	-25.793	-13.203	1.00	23.13	C
ATOM	2127	CZ	TYR	A	286	41.121	-26.774	-13.027	1.00	26.11	C
ATOM	2128	OH	TYR	A	286	40.967	-27.736	-14.013	1.00	27.42	O
ATOM	2129	N	VAL	A	287	44.427	-23.534	-8.151	1.00	22.76	N
ATOM	2130	CA	VAL	A	287	45.366	-22.604	-7.585	1.00	22.03	C
ATOM	2131	C	VAL	A	287	46.473	-22.345	-8.602	1.00	23.37	C
ATOM	2132	O	VAL	A	287	46.735	-23.194	-9.488	1.00	22.40	O
ATOM	2133	CB	VAL	A	287	45.997	-23.252	-6.246	1.00	23.27	C
ATOM	2134	CG1	VAL	A	287	44.886	-23.773	-5.320	1.00	21.27	C
ATOM	2135	CG2	VAL	A	287	46.915	-24.388	-6.577	1.00	20.64	C
ATOM	2136	N	GLN	A	288	47.179	-21.231	-8.419	1.00	23.06	N
ATOM	2137	CA	GLN	A	288	48.435	-20.952	-9.112	1.00	21.98	C
ATOM	2138	C	GLN	A	288	49.596	-20.842	-8.122	1.00	24.05	C
ATOM	2139	O	GLN	A	288	49.386	-20.683	-6.876	1.00	23.46	O
ATOM	2140	CB	GLN	A	288	48.272	-19.662	-9.910	1.00	23.42	C
ATOM	2141	CG	GLN	A	288	47.349	-19.826	-11.141	1.00	22.13	C
ATOM	2142	CD	GLN	A	288	47.343	-18.554	-11.945	1.00	26.25	C
ATOM	2143	OE1	GLN	A	288	48.360	-18.179	-12.558	1.00	23.82	O
ATOM	2144	NE2	GLN	A	288	46.198	-17.845	-11.924	1.00	21.60	N
ATOM	2145	N	ILE	A	289	50.831	-20.980	-8.632	1.00	25.22	N
ATOM	2146	CA	ILE	A	289	52.031	-20.757	-7.792	1.00	26.10	C
ATOM	2147	C	ILE	A	289	52.651	-19.362	-8.020	1.00	26.20	C
ATOM	2148	O	ILE	A	289	53.754	-19.079	-7.528	1.00	26.16	O
ATOM	2149	CB	ILE	A	289	53.101	-21.842	-8.032	1.00	27.08	C
ATOM	2150	CG1	ILE	A	289	53.518	-21.865	-9.525	1.00	26.21	C
ATOM	2151	CG2	ILE	A	289	52.565	-23.206	-7.556	1.00	28.51	C
ATOM	2152	CD1	ILE	A	289	54.763	-22.677	-9.854	1.00	23.68	C
ATOM	2153	N	PHE	A	290	51.933	-18.523	-8.758	1.00	25.30	N
ATOM	2154	CA	PHE	A	290	52.236	-17.106	-8.962	1.00	26.79	C
ATOM	2155	C	PHE	A	290	51.020	-16.258	-8.537	1.00	27.94	C
ATOM	2156	O	PHE	A	290	49.868	-16.738	-8.639	1.00	28.15	O
ATOM	2157	CB	PHE	A	290	52.400	-16.840	-10.482	1.00	27.17	C
ATOM	2158	CG	PHE	A	290	53.521	-17.564	-11.085	1.00	25.71	C
ATOM	2159	CD1	PHE	A	290	53.306	-18.735	-11.764	1.00	23.53	C
ATOM	2160	CD2	PHE	A	290	54.817	-17.082	-10.963	1.00	25.94	C
ATOM	2161	CE1	PHE	A	290	54.399	-19.463	-12.325	1.00	25.48	C
ATOM	2162	CE2	PHE	A	290	55.895	-17.769	-11.552	1.00	27.74	C
ATOM	2163	CZ	PHE	A	290	55.675	-18.972	-12.231	1.00	26.26	C
ATOM	2164	N	TYR	A	291	51.211	-14.989	-8.155	1.00	27.88	N
ATOM	2165	CA	TYR	A	291	50.026	-14.094	-8.206	1.00	29.23	C
ATOM	2166	C	TYR	A	291	49.395	-14.105	-9.620	1.00	29.68	C
ATOM	2167	O	TYR	A	291	50.095	-14.262	-10.601	1.00	29.60	O

ATOM	2168	CB	TYR	A	291	50.325	-12.690	-7.720	1.00	28.93	C
ATOM	2169	CG	TYR	A	291	50.635	-12.699	-6.234	1.00	31.49	C
ATOM	2170	CD1	TYR	A	291	51.952	-12.767	-5.794	1.00	31.03	C
ATOM	2171	CD2	TYR	A	291	49.612	-12.716	-5.281	1.00	31.53	C
ATOM	2172	CE1	TYR	A	291	52.269	-12.797	-4.458	1.00	32.11	C
ATOM	2173	CE2	TYR	A	291	49.910	-12.762	-3.916	1.00	33.07	C
ATOM	2174	CZ	TYR	A	291	51.261	-12.797	-3.518	1.00	33.31	C
ATOM	2175	OH	TYR	A	291	51.623	-12.844	-2.188	1.00	35.00	O
ATOM	2176	N	ASP	A	292	48.080	-13.954	-9.701	1.00	29.79	N
ATOM	2177	CA	ASP	A	292	47.363	-14.138	-10.946	1.00	30.28	C
ATOM	2178	C	ASP	A	292	47.823	-13.049	-11.935	1.00	31.10	C
ATOM	2179	O	ASP	A	292	47.982	-11.864	-11.561	1.00	31.31	O
ATOM	2180	CB	ASP	A	292	45.877	-14.075	-10.648	1.00	29.76	C
ATOM	2181	CG	ASP	A	292	44.994	-14.412	-11.841	1.00	32.03	C
ATOM	2182	OD1	ASP	A	292	43.914	-13.797	-11.873	1.00	31.91	O
ATOM	2183	OD2	ASP	A	292	45.313	-15.274	-12.710	1.00	31.21	O
ATOM	2184	N	THR	A	293	48.077	-13.459	-13.180	1.00	30.61	N
ATOM	2185	CA	THR	A	293	48.563	-12.575	-14.264	1.00	30.51	C
ATOM	2186	C	THR	A	293	50.017	-12.128	-14.169	1.00	30.82	C
ATOM	2187	O	THR	A	293	50.402	-11.293	-14.959	1.00	32.04	O
ATOM	2188	CB	THR	A	293	47.684	-11.287	-14.514	1.00	30.15	C
ATOM	2189	OG1	THR	A	293	47.949	-10.321	-13.487	1.00	33.67	O
ATOM	2190	CG2	THR	A	293	46.199	-11.602	-14.564	1.00	27.62	C
ATOM	2191	N	THR	A	294	50.803	-12.645	-13.215	1.00	30.64	N
ATOM	2192	CA	THR	A	294	52.169	-12.186	-12.965	1.00	30.36	C
ATOM	2193	C	THR	A	294	53.173	-13.322	-13.119	1.00	30.87	C
ATOM	2194	O	THR	A	294	52.776	-14.478	-13.259	1.00	30.76	O
ATOM	2195	CB	THR	A	294	52.367	-11.574	-11.524	1.00	30.37	C
ATOM	2196	OG1	THR	A	294	52.531	-12.626	-10.548	1.00	32.06	O
ATOM	2197	CG2	THR	A	294	51.228	-10.636	-11.116	1.00	27.88	C
ATOM	2198	N	ASN	A	295	54.462	-12.992	-13.080	1.00	31.86	N
ATOM	2199	CA	ASN	A	295	55.519	-13.992	-12.832	1.00	33.66	C
ATOM	2200	C	ASN	A	295	56.074	-13.884	-11.406	1.00	32.77	C
ATOM	2201	O	ASN	A	295	57.235	-14.220	-11.115	1.00	33.78	O
ATOM	2202	CB	ASN	A	295	56.651	-13.908	-13.866	1.00	34.34	C
ATOM	2203	CG	ASN	A	295	57.377	-12.554	-13.854	1.00	39.13	C
ATOM	2204	OD1	ASN	A	295	57.022	-11.627	-13.105	1.00	42.08	O
ATOM	2205	ND2	ASN	A	295	58.395	-12.432	-14.708	1.00	41.46	N
ATOM	2206	N	HIS	A	296	55.251	-13.408	-10.491	1.00	32.67	N
ATOM	2207	CA	HIS	A	296	55.745	-13.269	-9.128	1.00	32.65	C
ATOM	2208	C	HIS	A	296	55.333	-14.527	-8.389	1.00	31.13	C
ATOM	2209	O	HIS	A	296	54.168	-14.691	-8.113	1.00	30.56	O
ATOM	2210	CB	HIS	A	296	55.155	-12.034	-8.462	1.00	33.32	C
ATOM	2211	CG	HIS	A	296	55.577	-10.745	-9.087	1.00	40.38	C
ATOM	2212	ND1	HIS	A	296	55.382	-9.526	-8.468	1.00	47.90	N
ATOM	2213	CD2	HIS	A	296	56.207	-10.474	-10.259	1.00	42.91	C
ATOM	2214	CE1	HIS	A	296	55.863	-8.563	-9.237	1.00	46.70	C
ATOM	2215	NE2	HIS	A	296	56.369	-9.113	-10.327	1.00	45.20	N
ATOM	2216	N	PHE	A	297	56.295	-15.398	-8.091	1.00	29.89	N
ATOM	2217	CA	PHE	A	297	56.077	-16.612	-7.274	1.00	29.37	C

ATOM	2218	C	PHE	A	297	55.431	-16.327	-5.934	1.00	29.39	C
ATOM	2219	O	PHE	A	297	55.755	-15.328	-5.273	1.00	29.57	O
ATOM	2220	CB	PHE	A	297	57.390	-17.393	-7.046	1.00	28.26	C
ATOM	2221	CG	PHE	A	297	57.904	-18.101	-8.286	1.00	27.81	C
ATOM	2222	CD1	PHE	A	297	58.919	-17.519	-9.068	1.00	30.51	C
ATOM	2223	CD2	PHE	A	297	57.370	-19.317	-8.689	1.00	26.20	C
ATOM	2224	CE1	PHE	A	297	59.421	-18.164	-10.251	1.00	30.19	C
ATOM	2225	CE2	PHE	A	297	57.851	-19.982	-9.852	1.00	28.33	C
ATOM	2226	CZ	PHE	A	297	58.871	-19.408	-10.630	1.00	28.66	C
ATOM	2227	N	LEU	A	298	54.546	-17.224	-5.520	1.00	29.39	N
ATOM	2228	CA	LEU	A	298	53.937	-17.119	-4.204	1.00	29.92	C
ATOM	2229	C	LEU	A	298	54.962	-17.481	-3.149	1.00	30.00	C
ATOM	2230	O	LEU	A	298	55.564	-18.564	-3.201	1.00	30.86	O
ATOM	2231	CB	LEU	A	298	52.649	-17.970	-4.021	1.00	29.27	C
ATOM	2232	CG	LEU	A	298	51.419	-17.703	-4.920	1.00	30.66	C
ATOM	2233	CD1	LEU	A	298	50.281	-18.581	-4.457	1.00	31.37	C
ATOM	2234	CD2	LEU	A	298	50.981	-16.273	-4.878	1.00	31.91	C
ATOM	2235	N	PRO	A	299	55.168	-16.564	-2.197	1.00	29.42	N
ATOM	2236	CA	PRO	A	299	55.941	-16.875	-0.992	1.00	29.91	C
ATOM	2237	C	PRO	A	299	55.398	-18.143	-0.292	1.00	30.04	C
ATOM	2238	O	PRO	A	299	54.230	-18.509	-0.472	1.00	30.05	O
ATOM	2239	CB	PRO	A	299	55.760	-15.630	-0.102	1.00	28.94	C
ATOM	2240	CG	PRO	A	299	55.295	-14.542	-0.972	1.00	29.50	C
ATOM	2241	CD	PRO	A	299	54.674	-15.176	-2.237	1.00	28.69	C
ATOM	2242	N	LEU	A	300	56.238	-18.803	0.491	1.00	29.68	N
ATOM	2243	CA	LEU	A	300	55.843	-20.003	1.199	1.00	30.02	C
ATOM	2244	C	LEU	A	300	54.541	-19.810	1.991	1.00	30.58	C
ATOM	2245	O	LEU	A	300	53.629	-20.636	1.967	1.00	30.51	O
ATOM	2246	CB	LEU	A	300	56.966	-20.446	2.117	1.00	28.42	C
ATOM	2247	CG	LEU	A	300	56.546	-21.650	2.957	1.00	29.14	C
ATOM	2248	CD1	LEU	A	300	56.029	-22.775	2.063	1.00	28.21	C
ATOM	2249	CD2	LEU	A	300	57.751	-22.074	3.795	1.00	29.97	C
ATOM	2250	N	ASP	A	301	54.555	-18.732	2.741	1.00	31.38	N
ATOM	2251	CA	ASP	A	301	53.457	-18.026	3.358	1.00	32.80	C
ATOM	2252	C	ASP	A	301	52.097	-18.189	2.664	1.00	31.34	C
ATOM	2253	O	ASP	A	301	51.103	-18.655	3.244	1.00	31.40	O
ATOM	2254	CB	ASP	A	301	53.871	-16.543	3.168	1.00	35.57	C
ATOM	2255	CG	ASP	A	301	53.313	-15.686	4.191	1.00	40.11	C
ATOM	2256	OD1	ASP	A	301	53.000	-16.290	5.209	1.00	48.46	O
ATOM	2257	OD2	ASP	A	301	53.182	-14.451	4.000	1.00	47.55	O
ATOM	2258	N	GLU	A	302	52.076	-17.689	1.437	1.00	28.85	N
ATOM	2259	CA	GLU	A	302	50.918	-17.652	0.573	1.00	29.08	C
ATOM	2260	C	GLU	A	302	50.477	-19.043	0.056	1.00	28.28	C
ATOM	2261	O	GLU	A	302	49.302	-19.248	-0.165	1.00	29.53	O
ATOM	2262	CB	GLU	A	302	51.195	-16.705	-0.600	1.00	28.43	C
ATOM	2263	CG	GLU	A	302	51.372	-15.225	-0.181	1.00	30.59	C
ATOM	2264	CD	GLU	A	302	50.027	-14.538	0.117	1.00	34.64	C
ATOM	2265	OE1	GLU	A	302	49.316	-14.997	1.048	1.00	30.48	O
ATOM	2266	OE2	GLU	A	302	49.675	-13.555	-0.596	1.00	33.68	O
ATOM	2267	N	LEU	A	303	51.420	-19.966	-0.119	1.00	26.83	N

ATOM	2268	CA	LEU	A	303	51.152	-21.396	-0.293	1.00	26.81	C
ATOM	2269	C	LEU	A	303	50.337	-21.984	0.884	1.00	27.32	C
ATOM	2270	O	LEU	A	303	49.316	-22.680	0.691	1.00	28.34	O
ATOM	2271	CB	LEU	A	303	52.486	-22.132	-0.475	1.00	24.69	C
ATOM	2272	CG	LEU	A	303	53.072	-22.535	-1.834	1.00	29.43	C
ATOM	2273	CD1	LEU	A	303	52.370	-21.995	-3.177	1.00	22.16	C
ATOM	2274	CD2	LEU	A	303	54.642	-22.701	-1.886	1.00	25.33	C
ATOM	2275	N	GLU	A	304	50.747	-21.670	2.104	1.00	26.49	N
ATOM	2276	CA	GLU	A	304	50.028	-22.116	3.296	1.00	27.02	C
ATOM	2277	C	GLU	A	304	48.604	-21.562	3.313	1.00	25.68	C
ATOM	2278	O	GLU	A	304	47.666	-22.253	3.701	1.00	26.21	O
ATOM	2279	CB	GLU	A	304	50.769	-21.674	4.606	1.00	25.62	C
ATOM	2280	CG	GLU	A	304	52.198	-22.160	4.735	1.00	26.85	C
ATOM	2281	CD	GLU	A	304	52.950	-21.594	5.989	1.00	29.75	C
ATOM	2282	OE1	GLU	A	304	52.265	-21.169	6.954	1.00	31.31	O
ATOM	2283	OE2	GLU	A	304	54.226	-21.562	5.982	1.00	29.24	O
ATOM	2284	N	HIS	A	305	48.484	-20.300	2.928	1.00	25.77	N
ATOM	2285	CA	HIS	A	305	47.236	-19.552	2.919	1.00	25.70	C
ATOM	2286	C	HIS	A	305	46.351	-19.984	1.792	1.00	25.29	C
ATOM	2287	O	HIS	A	305	45.196	-19.512	1.730	1.00	25.33	O
ATOM	2288	CB	HIS	A	305	47.466	-18.042	2.712	1.00	26.66	C
ATOM	2289	CG	HIS	A	305	48.226	-17.368	3.821	1.00	28.27	C
ATOM	2290	ND1	HIS	A	305	48.948	-16.202	3.618	1.00	30.27	N
ATOM	2291	CD2	HIS	A	305	48.388	-17.695	5.131	1.00	28.88	C
ATOM	2292	CE1	HIS	A	305	49.506	-15.835	4.764	1.00	32.59	C
ATOM	2293	NE2	HIS	A	305	49.199	-16.728	5.694	1.00	28.03	N
ATOM	2294	N	SER	A	306	46.866	-20.828	0.888	1.00	23.72	N
ATOM	2295	CA	SER	A	306	46.056	-21.248	-0.266	1.00	25.26	C
ATOM	2296	C	SER	A	306	45.890	-22.764	-0.387	1.00	25.25	C
ATOM	2297	O	SER	A	306	44.806	-23.290	-0.187	1.00	26.07	O
ATOM	2298	CB	SER	A	306	46.579	-20.604	-1.578	1.00	24.58	C
ATOM	2299	OG	SER	A	306	47.924	-20.910	-1.801	1.00	26.01	O
ATOM	2300	N	LEU	A	307	46.952	-23.470	-0.732	1.00	25.79	N
ATOM	2301	CA	LEU	A	307	46.917	-24.932	-0.720	1.00	26.37	C
ATOM	2302	C	LEU	A	307	46.769	-25.493	0.705	1.00	25.70	C
ATOM	2303	O	LEU	A	307	46.032	-26.429	0.926	1.00	27.09	O
ATOM	2304	CB	LEU	A	307	48.195	-25.493	-1.368	1.00	26.08	C
ATOM	2305	CG	LEU	A	307	48.355	-25.482	-2.909	1.00	29.56	C
ATOM	2306	CD1	LEU	A	307	48.551	-24.086	-3.445	1.00	28.81	C
ATOM	2307	CD2	LEU	A	307	49.542	-26.349	-3.377	1.00	28.74	C
ATOM	2308	N	GLY	A	308	47.462	-24.925	1.678	1.00	25.33	N
ATOM	2309	CA	GLY	A	308	47.308	-25.366	3.050	1.00	24.76	C
ATOM	2310	C	GLY	A	308	45.911	-25.122	3.568	1.00	24.24	C
ATOM	2311	O	GLY	A	308	45.265	-26.018	4.145	1.00	23.70	O
ATOM	2312	N	GLU	A	309	45.433	-23.906	3.351	1.00	23.16	N
ATOM	2313	CA	GLU	A	309	44.070	-23.565	3.703	1.00	22.79	C
ATOM	2314	C	GLU	A	309	43.014	-24.550	3.129	1.00	23.06	C
ATOM	2315	O	GLU	A	309	42.092	-24.935	3.825	1.00	22.79	O
ATOM	2316	CB	GLU	A	309	43.764	-22.151	3.189	1.00	22.20	C
ATOM	2317	CG	GLU	A	309	42.360	-21.740	3.437	1.00	22.75	C

ATOM	2318	CD	GLU	A	309	42.019	-21.535	4.914	1.00	28.41	C
ATOM	2319	OE1	GLU	A	309	42.953	-21.276	5.734	1.00	28.10	O
ATOM	2320	OE2	GLU	A	309	40.803	-21.666	5.245	1.00	29.19	O
ATOM	2321	N	SER	A	310	43.128	-24.907	1.845	1.00	22.73	N
ATOM	2322	CA	SER	A	310	42.205	-25.813	1.214	1.00	22.52	C
ATOM	2323	C	SER	A	310	42.224	-27.167	1.884	1.00	22.77	C
ATOM	2324	O	SER	A	310	41.178	-27.755	2.105	1.00	23.39	O
ATOM	2325	CB	SER	A	310	42.564	-25.984	-0.294	1.00	22.67	C
ATOM	2326	OG	SER	A	310	42.465	-24.711	-0.965	1.00	24.85	O
ATOM	2327	N	ALA	A	311	43.413	-27.713	2.105	1.00	22.48	N
ATOM	2328	CA	ALA	A	311	43.526	-29.017	2.764	1.00	23.57	C
ATOM	2329	C	ALA	A	311	42.880	-29.007	4.153	1.00	24.02	C
ATOM	2330	O	ALA	A	311	42.210	-29.969	4.536	1.00	25.72	O
ATOM	2331	CB	ALA	A	311	44.992	-29.424	2.884	1.00	21.52	C
ATOM	2332	N	ALA	A	312	43.066	-27.918	4.895	1.00	24.10	N
ATOM	2333	CA	ALA	A	312	42.646	-27.867	6.324	1.00	24.33	C
ATOM	2334	C	ALA	A	312	41.121	-27.800	6.409	1.00	25.56	C
ATOM	2335	O	ALA	A	312	40.535	-28.167	7.432	1.00	25.36	O
ATOM	2336	CB	ALA	A	312	43.286	-26.706	6.995	1.00	22.75	C
ATOM	2337	N	GLN	A	313	40.470	-27.359	5.306	1.00	24.81	N
ATOM	2338	CA	GLN	A	313	39.013	-27.419	5.238	1.00	24.55	C
ATOM	2339	C	GLN	A	313	38.516	-28.780	4.696	1.00	23.46	C
ATOM	2340	O	GLN	A	313	37.302	-28.993	4.489	1.00	23.01	O
ATOM	2341	CB	GLN	A	313	38.475	-26.284	4.346	1.00	23.87	C
ATOM	2342	CG	GLN	A	313	38.720	-24.891	4.906	1.00	25.85	C
ATOM	2343	CD	GLN	A	313	37.838	-23.862	4.267	1.00	26.72	C
ATOM	2344	OE1	GLN	A	313	36.664	-24.110	4.001	1.00	29.26	O
ATOM	2345	NE2	GLN	A	313	38.389	-22.688	4.028	1.00	27.68	N
ATOM	2346	N	GLY	A	314	39.428	-29.693	4.426	1.00	22.80	N
ATOM	2347	CA	GLY	A	314	38.979	-30.997	3.892	1.00	22.90	C
ATOM	2348	C	GLY	A	314	38.779	-30.992	2.379	1.00	23.46	C
ATOM	2349	O	GLY	A	314	38.066	-31.843	1.881	1.00	23.86	O
ATOM	2350	N	ALA	A	315	39.428	-30.062	1.634	1.00	23.92	N
ATOM	2351	CA	ALA	A	315	39.425	-30.185	0.170	1.00	23.70	C
ATOM	2352	C	ALA	A	315	39.942	-31.562	-0.227	1.00	22.80	C
ATOM	2353	O	ALA	A	315	40.812	-32.113	0.434	1.00	22.17	O
ATOM	2354	CB	ALA	A	315	40.204	-29.022	-0.543	1.00	22.98	C
ATOM	2355	N	ALA	A	316	39.399	-32.120	-1.321	1.00	22.63	N
ATOM	2356	CA	ALA	A	316	39.799	-33.462	-1.827	1.00	20.58	C
ATOM	2357	C	ALA	A	316	41.132	-33.410	-2.539	1.00	20.69	C
ATOM	2358	O	ALA	A	316	41.786	-34.430	-2.712	1.00	20.47	O
ATOM	2359	CB	ALA	A	316	38.672	-34.076	-2.762	1.00	18.35	C
ATOM	2360	N	GLY	A	317	41.582	-32.199	-2.874	1.00	20.15	N
ATOM	2361	CA	GLY	A	317	42.907	-32.004	-3.458	1.00	19.76	C
ATOM	2362	C	GLY	A	317	42.902	-30.613	-4.067	1.00	20.78	C
ATOM	2363	O	GLY	A	317	41.980	-29.827	-3.854	1.00	19.53	O
ATOM	2364	N	VAL	A	318	43.897	-30.311	-4.878	1.00	21.10	N
ATOM	2365	CA	VAL	A	318	43.922	-28.989	-5.503	1.00	22.14	C
ATOM	2366	C	VAL	A	318	44.421	-29.249	-6.951	1.00	23.23	C
ATOM	2367	O	VAL	A	318	45.166	-30.224	-7.210	1.00	21.39	O

ATOM	2368	CB	VAL	A	318	44.837	-28.149	-4.546	1.00	24.97	C
ATOM	2369	CG1	VAL	A	318	46.303	-28.160	-4.883	1.00	23.38	C
ATOM	2370	CG2	VAL	A	318	44.157	-26.973	-3.786	1.00	23.66	C
ATOM	2371	N	VAL	A	319	43.958	-28.428	-7.895	1.00	22.49	N
ATOM	2372	CA	VAL	A	319	44.542	-28.442	-9.208	1.00	21.96	C
ATOM	2373	C	VAL	A	319	45.517	-27.268	-9.335	1.00	22.95	C
ATOM	2374	O	VAL	A	319	45.112	-26.120	-9.265	1.00	22.76	O
ATOM	2375	CB	VAL	A	319	43.486	-28.368	-10.333	1.00	21.93	C
ATOM	2376	CG1	VAL	A	319	44.219	-28.474	-11.670	1.00	20.08	C
ATOM	2377	CG2	VAL	A	319	42.444	-29.532	-10.213	1.00	17.87	C
ATOM	2378	N	LEU	A	320	46.813	-27.545	-9.507	1.00	23.13	N
ATOM	2379	CA	LEU	A	320	47.756	-26.434	-9.692	1.00	23.59	C
ATOM	2380	C	LEU	A	320	47.919	-26.118	-11.184	1.00	23.93	C
ATOM	2381	O	LEU	A	320	48.632	-26.834	-11.914	1.00	24.75	O
ATOM	2382	CB	LEU	A	320	49.127	-26.761	-9.056	1.00	24.09	C
ATOM	2383	CG	LEU	A	320	49.321	-27.128	-7.590	1.00	26.26	C
ATOM	2384	CD1	LEU	A	320	49.072	-28.628	-7.355	1.00	21.29	C
ATOM	2385	CD2	LEU	A	320	50.735	-26.708	-7.104	1.00	24.24	C
ATOM	2386	N	TRP	A	321	47.254	-25.048	-11.631	1.00	25.29	N
ATOM	2387	CA	TRP	A	321	47.235	-24.656	-13.014	1.00	24.90	C
ATOM	2388	C	TRP	A	321	48.395	-23.696	-13.140	1.00	25.71	C
ATOM	2389	O	TRP	A	321	48.545	-22.800	-12.295	1.00	24.96	O
ATOM	2390	CB	TRP	A	321	45.913	-24.006	-13.406	1.00	24.53	C
ATOM	2391	CG	TRP	A	321	45.969	-23.435	-14.803	1.00	27.44	C
ATOM	2392	CD1	TRP	A	321	45.979	-24.157	-15.977	1.00	28.70	C
ATOM	2393	CD2	TRP	A	321	46.025	-22.043	-15.199	1.00	24.98	C
ATOM	2394	NE1	TRP	A	321	46.069	-23.312	-17.038	1.00	29.38	N
ATOM	2395	CE2	TRP	A	321	46.084	-22.016	-16.602	1.00	25.35	C
ATOM	2396	CE3	TRP	A	321	46.010	-20.821	-14.497	1.00	25.86	C
ATOM	2397	CZ2	TRP	A	321	46.094	-20.813	-17.340	1.00	26.37	C
ATOM	2398	CZ3	TRP	A	321	46.037	-19.642	-15.203	1.00	26.40	C
ATOM	2399	CH2	TRP	A	321	46.107	-19.641	-16.623	1.00	27.03	C
ATOM	2400	N	VAL	A	322	49.266	-23.962	-14.129	1.00	25.11	N
ATOM	2401	CA	VAL	A	322	50.332	-23.056	-14.520	1.00	24.67	C
ATOM	2402	C	VAL	A	322	50.083	-22.563	-15.959	1.00	26.12	C
ATOM	2403	O	VAL	A	322	50.157	-23.337	-16.900	1.00	25.35	O
ATOM	2404	CB	VAL	A	322	51.749	-23.687	-14.436	1.00	25.72	C
ATOM	2405	CG1	VAL	A	322	52.878	-22.607	-14.748	1.00	20.77	C
ATOM	2406	CG2	VAL	A	322	52.020	-24.266	-13.015	1.00	22.81	C
ATOM	2407	N	SER	A	323	49.846	-21.256	-16.106	1.00	26.22	N
ATOM	2408	CA	SER	A	323	49.685	-20.635	-17.411	1.00	27.10	C
ATOM	2409	C	SER	A	323	50.848	-20.928	-18.353	1.00	27.62	C
ATOM	2410	O	SER	A	323	52.018	-21.072	-17.917	1.00	27.68	O
ATOM	2411	CB	SER	A	323	49.639	-19.125	-17.249	1.00	26.39	C
ATOM	2412	OG	SER	A	323	49.275	-18.534	-18.483	1.00	27.57	O
ATOM	2413	N	TRP	A	324	50.516	-20.994	-19.635	1.00	27.19	N
ATOM	2414	CA	TRP	A	324	51.506	-21.112	-20.716	1.00	27.70	C
ATOM	2415	C	TRP	A	324	52.492	-19.950	-20.637	1.00	27.94	C
ATOM	2416	O	TRP	A	324	53.681	-20.099	-20.951	1.00	27.89	O
ATOM	2417	CB	TRP	A	324	50.767	-21.122	-22.073	1.00	27.89	C

ATOM	2418	CG	TRP	A	324	49.939	-19.827	-22.362	1.00	26.30	C
ATOM	2419	CD1	TRP	A	324	48.595	-19.638	-22.156	1.00	28.45	C
ATOM	2420	CD2	TRP	A	324	50.430	-18.595	-22.928	1.00	25.54	C
ATOM	2421	NE1	TRP	A	324	48.231	-18.382	-22.564	1.00	26.44	N
ATOM	2422	CE2	TRP	A	324	49.333	-17.722	-23.036	1.00	25.93	C
ATOM	2423	CE3	TRP	A	324	51.714	-18.138	-23.315	1.00	28.97	C
ATOM	2424	CZ2	TRP	A	324	49.454	-16.405	-23.521	1.00	28.60	C
ATOM	2425	CZ3	TRP	A	324	51.839	-16.824	-23.826	1.00	30.51	C
ATOM	2426	CH2	TRP	A	324	50.694	-15.978	-23.924	1.00	28.39	C
ATOM	2427	N	GLU	A	325	52.013	-18.796	-20.153	1.00	29.19	N
ATOM	2428	CA	GLU	A	325	52.864	-17.590	-20.005	1.00	30.61	C
ATOM	2429	C	GLU	A	325	54.038	-17.843	-19.097	1.00	30.58	C
ATOM	2430	O	GLU	A	325	55.107	-17.221	-19.250	1.00	31.32	O
ATOM	2431	CB	GLU	A	325	52.091	-16.424	-19.422	1.00	31.33	C
ATOM	2432	CG	GLU	A	325	50.933	-16.008	-20.252	1.00	34.69	C
ATOM	2433	CD	GLU	A	325	50.425	-14.614	-19.915	1.00	42.47	C
ATOM	2434	OE1	GLU	A	325	51.235	-13.663	-19.961	1.00	46.28	O
ATOM	2435	OE2	GLU	A	325	49.204	-14.467	-19.625	1.00	44.13	O
ATOM	2436	N	ASN	A	326	53.871	-18.776	-18.163	1.00	29.23	N
ATOM	2437	CA	ASN	A	326	54.915	-18.999	-17.176	1.00	29.13	C
ATOM	2438	C	ASN	A	326	55.870	-20.137	-17.503	1.00	28.59	C
ATOM	2439	O	ASN	A	326	56.905	-20.283	-16.848	1.00	29.53	O
ATOM	2440	CB	ASN	A	326	54.258	-19.205	-15.805	1.00	29.18	C
ATOM	2441	CG	ASN	A	326	53.575	-17.935	-15.297	1.00	31.57	C
ATOM	2442	OD1	ASN	A	326	52.366	-17.872	-15.182	1.00	27.86	O
ATOM	2443	ND2	ASN	A	326	54.370	-16.922	-14.987	1.00	31.47	N
ATOM	2444	N	THR	A	327	55.523	-20.972	-18.472	1.00	28.15	N
ATOM	2445	CA	THR	A	327	56.423	-22.056	-18.907	1.00	28.67	C
ATOM	2446	C	THR	A	327	56.957	-21.825	-20.354	1.00	30.64	C
ATOM	2447	O	THR	A	327	57.450	-22.746	-21.018	1.00	31.36	O
ATOM	2448	CB	THR	A	327	55.727	-23.435	-18.806	1.00	28.19	C
ATOM	2449	OG1	THR	A	327	54.460	-23.373	-19.443	1.00	27.13	O
ATOM	2450	CG2	THR	A	327	55.476	-23.832	-17.356	1.00	26.17	C
ATOM	2451	N	ARG	A	328	56.839	-20.597	-20.854	1.00	31.92	N
ATOM	2452	CA	ARG	A	328	57.189	-20.325	-22.234	1.00	33.16	C
ATOM	2453	C	ARG	A	328	58.690	-20.334	-22.502	1.00	33.79	C
ATOM	2454	O	ARG	A	328	59.158	-20.952	-23.463	1.00	34.68	O
ATOM	2455	CB	ARG	A	328	56.577	-18.997	-22.680	1.00	34.16	C
ATOM	2456	CG	ARG	A	328	57.098	-18.492	-24.013	1.00	35.99	C
ATOM	2457	CD	ARG	A	328	56.387	-17.283	-24.450	1.00	37.06	C
ATOM	2458	NE	ARG	A	328	55.275	-17.743	-25.267	1.00	48.86	N
ATOM	2459	CZ	ARG	A	328	55.359	-18.032	-26.577	1.00	54.82	C
ATOM	2460	NH1	ARG	A	328	56.517	-17.910	-27.285	1.00	54.47	N
ATOM	2461	NH2	ARG	A	328	54.263	-18.436	-27.197	1.00	58.19	N
ATOM	2462	N	THR	A	329	59.447	-19.660	-21.642	1.00	34.34	N
ATOM	2463	CA	THR	A	329	60.870	-19.455	-21.866	1.00	33.94	C
ATOM	2464	C	THR	A	329	61.742	-20.381	-21.016	1.00	34.28	C
ATOM	2465	O	THR	A	329	61.270	-20.998	-20.018	1.00	34.77	O
ATOM	2466	CB	THR	A	329	61.250	-17.977	-21.622	1.00	33.57	C
ATOM	2467	OG1	THR	A	329	60.957	-17.628	-20.274	1.00	35.68	O

ATOM	2468	CG2	THR	A	329	60.475	-17.038	-22.558	1.00	33.05	C
ATOM	2469	N	LYS	A	330	62.998	-20.494	-21.426	1.00	33.13	N
ATOM	2470	CA	LYS	A	330	64.028	-21.186	-20.667	1.00	34.37	C
ATOM	2471	C	LYS	A	330	64.201	-20.556	-19.259	1.00	34.78	C
ATOM	2472	O	LYS	A	330	64.280	-21.262	-18.259	1.00	34.11	O
ATOM	2473	CB	LYS	A	330	65.361	-21.139	-21.463	1.00	34.76	C
ATOM	2474	CG	LYS	A	330	66.553	-21.902	-20.811	1.00	35.99	C
ATOM	2475	CD	LYS	A	330	67.792	-21.848	-21.701	1.00	35.04	C
ATOM	2476	CE	LYS	A	330	68.979	-22.538	-21.064	1.00	40.68	C
ATOM	2477	NZ	LYS	A	330	70.287	-22.140	-21.792	1.00	46.87	N
ATOM	2478	N	GLU	A	331	64.278	-19.228	-19.195	1.00	35.39	N
ATOM	2479	CA	GLU	A	331	64.418	-18.500	-17.926	1.00	36.67	C
ATOM	2480	C	GLU	A	331	63.281	-18.811	-16.941	1.00	35.67	C
ATOM	2481	O	GLU	A	331	63.542	-19.162	-15.789	1.00	36.14	O
ATOM	2482	CB	GLU	A	331	64.438	-17.009	-18.224	1.00	37.46	C
ATOM	2483	CG	GLU	A	331	65.065	-16.100	-17.181	1.00	42.84	C
ATOM	2484	CD	GLU	A	331	65.387	-14.735	-17.798	1.00	50.94	C
ATOM	2485	OE1	GLU	A	331	66.597	-14.459	-17.984	1.00	53.50	O
ATOM	2486	OE2	GLU	A	331	64.431	-13.975	-18.157	1.00	53.23	O
ATOM	2487	N	SER	A	332	62.038	-18.673	-17.414	1.00	35.05	N
ATOM	2488	CA	SER	A	332	60.816	-18.990	-16.666	1.00	34.49	C
ATOM	2489	C	SER	A	332	60.796	-20.413	-16.185	1.00	33.66	C
ATOM	2490	O	SER	A	332	60.392	-20.670	-15.072	1.00	33.58	O
ATOM	2491	CB	SER	A	332	59.591	-18.846	-17.586	1.00	35.58	C
ATOM	2492	OG	SER	A	332	59.275	-17.501	-17.838	1.00	38.93	O
ATOM	2493	N	CYS	A	333	61.157	-21.336	-17.078	1.00	33.60	N
ATOM	2494	CA	CYS	A	333	61.136	-22.762	-16.808	1.00	34.07	C
ATOM	2495	C	CYS	A	333	62.178	-23.127	-15.750	1.00	33.82	C
ATOM	2496	O	CYS	A	333	61.946	-23.972	-14.878	1.00	34.09	O
ATOM	2497	CB	CYS	A	333	61.386	-23.578	-18.098	1.00	33.50	C
ATOM	2498	SG	CYS	A	333	60.011	-23.741	-19.193	1.00	35.72	S
ATOM	2499	N	GLN	A	334	63.333	-22.496	-15.859	1.00	33.03	N
ATOM	2500	CA	GLN	A	334	64.402	-22.689	-14.921	1.00	33.03	C
ATOM	2501	C	GLN	A	334	64.035	-22.091	-13.551	1.00	31.52	C
ATOM	2502	O	GLN	A	334	64.372	-22.668	-12.544	1.00	30.58	O
ATOM	2503	CB	GLN	A	334	65.731	-22.138	-15.499	1.00	33.45	C
ATOM	2504	CG	GLN	A	334	66.960	-22.221	-14.549	1.00	39.15	C
ATOM	2505	CD	GLN	A	334	67.481	-23.662	-14.288	1.00	45.61	C
ATOM	2506	OE1	GLN	A	334	67.534	-24.499	-15.208	1.00	49.18	O
ATOM	2507	NE2	GLN	A	334	67.900	-23.931	-13.044	1.00	42.09	N
ATOM	2508	N	ALA	A	335	63.327	-20.961	-13.512	1.00	30.90	N
ATOM	2509	CA	ALA	A	335	62.890	-20.400	-12.221	1.00	31.12	C
ATOM	2510	C	ALA	A	335	61.825	-21.281	-11.543	1.00	30.95	C
ATOM	2511	O	ALA	A	335	61.766	-21.338	-10.327	1.00	31.07	O
ATOM	2512	CB	ALA	A	335	62.393	-18.962	-12.374	1.00	30.92	C
ATOM	2513	N	ILE	A	336	61.001	-21.967	-12.346	1.00	31.23	N
ATOM	2514	CA	ILE	A	336	60.043	-22.950	-11.832	1.00	30.23	C
ATOM	2515	C	ILE	A	336	60.762	-24.186	-11.276	1.00	31.43	C
ATOM	2516	O	ILE	A	336	60.425	-24.670	-10.166	1.00	31.56	O
ATOM	2517	CB	ILE	A	336	58.989	-23.351	-12.873	1.00	30.85	C

ATOM	2518	CG1	ILE	A	336	58.070	-22.158	-13.192	1.00	31.52	C
ATOM	2519	CG2	ILE	A	336	58.168	-24.603	-12.392	1.00	29.58	C
ATOM	2520	CD1	ILE	A	336	57.115	-22.399	-14.367	1.00	28.33	C
ATOM	2521	N	LYS	A	337	61.751	-24.683	-12.018	1.00	30.91	N
ATOM	2522	CA	LYS	A	337	62.547	-25.813	-11.563	1.00	31.98	C
ATOM	2523	C	LYS	A	337	63.116	-25.599	-10.133	1.00	32.69	C
ATOM	2524	O	LYS	A	337	63.069	-26.507	-9.289	1.00	32.36	O
ATOM	2525	CB	LYS	A	337	63.662	-26.116	-12.579	1.00	31.29	C
ATOM	2526	CG	LYS	A	337	64.679	-27.167	-12.131	1.00	32.09	C
ATOM	2527	CD	LYS	A	337	65.923	-27.155	-13.014	1.00	33.26	C
ATOM	2528	CE	LYS	A	337	67.022	-28.134	-12.528	1.00	35.08	C
ATOM	2529	NZ	LYS	A	337	66.586	-29.571	-12.538	1.00	36.25	N
ATOM	2530	N	GLU	A	338	63.669	-24.401	-9.909	1.00	33.12	N
ATOM	2531	CA	GLU	A	338	64.336	-23.998	-8.683	1.00	33.38	C
ATOM	2532	C	GLU	A	338	63.316	-23.682	-7.590	1.00	32.08	C
ATOM	2533	O	GLU	A	338	63.574	-23.925	-6.427	1.00	31.19	O
ATOM	2534	CB	GLU	A	338	65.205	-22.760	-8.953	1.00	33.45	C
ATOM	2535	CG	GLU	A	338	66.305	-22.964	-10.057	1.00	37.07	C
ATOM	2536	CD	GLU	A	338	67.123	-21.681	-10.379	1.00	38.50	C
ATOM	2537	OE1	GLU	A	338	67.851	-21.624	-11.421	1.00	43.87	O
ATOM	2538	OE2	GLU	A	338	67.044	-20.718	-9.587	1.00	45.08	O
ATOM	2539	N	TYR	A	339	62.164	-23.121	-7.972	1.00	30.98	N
ATOM	2540	CA	TYR	A	339	61.069	-22.944	-7.018	1.00	30.53	C
ATOM	2541	C	TYR	A	339	60.522	-24.284	-6.521	1.00	30.09	C
ATOM	2542	O	TYR	A	339	60.165	-24.425	-5.349	1.00	29.44	O
ATOM	2543	CB	TYR	A	339	59.968	-22.130	-7.661	1.00	29.64	C
ATOM	2544	CG	TYR	A	339	58.796	-21.796	-6.777	1.00	29.72	C
ATOM	2545	CD1	TYR	A	339	58.864	-20.772	-5.811	1.00	29.97	C
ATOM	2546	CD2	TYR	A	339	57.611	-22.481	-6.916	1.00	28.61	C
ATOM	2547	CE1	TYR	A	339	57.735	-20.465	-5.033	1.00	29.24	C
ATOM	2548	CE2	TYR	A	339	56.520	-22.182	-6.174	1.00	28.62	C
ATOM	2549	CZ	TYR	A	339	56.583	-21.182	-5.246	1.00	29.61	C
ATOM	2550	OH	TYR	A	339	55.450	-20.923	-4.564	1.00	30.09	O
ATOM	2551	N	MET	A	340	60.460	-25.254	-7.430	1.00	30.76	N
ATOM	2552	CA	MET	A	340	60.035	-26.603	-7.105	1.00	31.34	C
ATOM	2553	C	MET	A	340	60.968	-27.191	-6.052	1.00	32.44	C
ATOM	2554	O	MET	A	340	60.494	-27.738	-5.056	1.00	32.99	O
ATOM	2555	CB	MET	A	340	59.973	-27.482	-8.373	1.00	31.36	C
ATOM	2556	CG	MET	A	340	59.377	-28.875	-8.159	1.00	30.27	C
ATOM	2557	SD	MET	A	340	57.605	-28.737	-7.814	1.00	31.27	S
ATOM	2558	CE	MET	A	340	57.071	-28.341	-9.515	1.00	31.06	C
ATOM	2559	N	ASP	A	341	62.286	-27.041	-6.248	1.00	32.47	N
ATOM	2560	CA	ASP	A	341	63.255	-27.667	-5.374	1.00	33.45	C
ATOM	2561	C	ASP	A	341	63.339	-26.994	-3.990	1.00	33.06	C
ATOM	2562	O	ASP	A	341	63.431	-27.692	-2.987	1.00	33.70	O
ATOM	2563	CB	ASP	A	341	64.662	-27.766	-6.030	1.00	33.50	C
ATOM	2564	CG	ASP	A	341	64.715	-28.782	-7.203	1.00	37.66	C
ATOM	2565	OD1	ASP	A	341	63.773	-29.606	-7.372	1.00	40.29	O
ATOM	2566	OD2	ASP	A	341	65.704	-28.748	-7.992	1.00	41.19	O
ATOM	2567	N	THR	A	342	63.291	-25.657	-3.954	1.00	32.01	N

ATOM	2568	CA	THR	A	342	63.491	-24.891	-2.720	1.00	32.26	C
ATOM	2569	C	THR	A	342	62.196	-24.735	-1.924	1.00	30.72	C
ATOM	2570	O	THR	A	342	62.242	-24.702	-0.728	1.00	29.76	O
ATOM	2571	CB	THR	A	342	64.050	-23.460	-2.998	1.00	32.45	C
ATOM	2572	OG1	THR	A	342	63.077	-22.706	-3.760	1.00	34.25	O
ATOM	2573	CG2	THR	A	342	65.332	-23.541	-3.825	1.00	32.92	C
ATOM	2574	N	THR	A	343	61.056	-24.617	-2.607	1.00	29.93	N
ATOM	2575	CA	THR	A	343	59.821	-24.135	-1.981	1.00	28.87	C
ATOM	2576	C	THR	A	343	58.615	-25.028	-2.202	1.00	29.19	C
ATOM	2577	O	THR	A	343	58.015	-25.500	-1.234	1.00	28.86	O
ATOM	2578	CB	THR	A	343	59.485	-22.672	-2.459	1.00	28.99	C
ATOM	2579	OG1	THR	A	343	60.632	-21.839	-2.231	1.00	25.35	O
ATOM	2580	CG2	THR	A	343	58.259	-22.088	-1.675	1.00	25.92	C
ATOM	2581	N	LEU	A	344	58.248	-25.232	-3.477	1.00	28.12	N
ATOM	2582	CA	LEU	A	344	57.002	-25.887	-3.791	1.00	26.33	C
ATOM	2583	C	LEU	A	344	56.973	-27.376	-3.504	1.00	26.45	C
ATOM	2584	O	LEU	A	344	55.998	-27.868	-2.916	1.00	26.47	O
ATOM	2585	CB	LEU	A	344	56.539	-25.597	-5.228	1.00	27.51	C
ATOM	2586	CG	LEU	A	344	55.215	-26.229	-5.666	1.00	27.27	C
ATOM	2587	CD1	LEU	A	344	54.008	-25.723	-4.776	1.00	26.93	C
ATOM	2588	CD2	LEU	A	344	54.980	-25.966	-7.189	1.00	23.49	C
ATOM	2589	N	GLY	A	345	58.003	-28.106	-3.906	1.00	24.67	N
ATOM	2590	CA	GLY	A	345	57.935	-29.550	-3.794	1.00	23.88	C
ATOM	2591	C	GLY	A	345	57.917	-29.995	-2.345	1.00	24.77	C
ATOM	2592	O	GLY	A	345	57.087	-30.818	-1.989	1.00	25.35	O
ATOM	2593	N	PRO	A	346	58.843	-29.481	-1.486	1.00	24.59	N
ATOM	2594	CA	PRO	A	346	58.761	-29.853	-0.087	1.00	25.01	C
ATOM	2595	C	PRO	A	346	57.447	-29.503	0.546	1.00	25.65	C
ATOM	2596	O	PRO	A	346	56.956	-30.270	1.372	1.00	26.93	O
ATOM	2597	CB	PRO	A	346	59.939	-29.076	0.573	1.00	25.02	C
ATOM	2598	CG	PRO	A	346	60.936	-28.956	-0.549	1.00	23.94	C
ATOM	2599	CD	PRO	A	346	60.031	-28.655	-1.745	1.00	24.21	C
ATOM	2600	N	PHE	A	347	56.880	-28.364	0.168	1.00	26.92	N
ATOM	2601	CA	PHE	A	347	55.552	-27.970	0.629	1.00	27.80	C
ATOM	2602	C	PHE	A	347	54.459	-28.951	0.241	1.00	28.05	C
ATOM	2603	O	PHE	A	347	53.572	-29.239	1.066	1.00	29.14	O
ATOM	2604	CB	PHE	A	347	55.128	-26.554	0.155	1.00	27.64	C
ATOM	2605	CG	PHE	A	347	53.745	-26.164	0.656	1.00	27.82	C
ATOM	2606	CD1	PHE	A	347	53.569	-25.698	1.951	1.00	29.93	C
ATOM	2607	CD2	PHE	A	347	52.630	-26.355	-0.134	1.00	29.45	C
ATOM	2608	CE1	PHE	A	347	52.291	-25.394	2.426	1.00	32.41	C
ATOM	2609	CE2	PHE	A	347	51.342	-26.035	0.339	1.00	32.75	C
ATOM	2610	CZ	PHE	A	347	51.177	-25.560	1.630	1.00	28.23	C
ATOM	2611	N	ILE	A	348	54.471	-29.416	-1.017	1.00	27.48	N
ATOM	2612	CA	ILE	A	348	53.483	-30.391	-1.462	1.00	26.87	C
ATOM	2613	C	ILE	A	348	53.533	-31.698	-0.645	1.00	26.43	C
ATOM	2614	O	ILE	A	348	52.535	-32.174	-0.144	1.00	27.20	O
ATOM	2615	CB	ILE	A	348	53.616	-30.681	-2.990	1.00	27.03	C
ATOM	2616	CG1	ILE	A	348	53.256	-29.422	-3.839	1.00	27.18	C
ATOM	2617	CG2	ILE	A	348	52.761	-31.842	-3.378	1.00	26.63	C

ATOM	2618	CD1	ILE	A	348	51.807	-28.950	-3.700	1.00	26.41	C
ATOM	2619	N	LEU	A	349	54.702	-32.291	-0.542	1.00	27.02	N
ATOM	2620	CA	LEU	A	349	54.902	-33.454	0.286	1.00	27.85	C
ATOM	2621	C	LEU	A	349	54.467	-33.180	1.766	1.00	26.91	C
ATOM	2622	O	LEU	A	349	53.909	-34.031	2.432	1.00	26.03	O
ATOM	2623	CB	LEU	A	349	56.385	-33.788	0.277	1.00	28.66	C
ATOM	2624	CG	LEU	A	349	56.865	-35.246	0.399	1.00	34.30	C
ATOM	2625	CD1	LEU	A	349	58.226	-35.330	1.088	1.00	31.76	C
ATOM	2626	CD2	LEU	A	349	55.869	-36.235	1.001	1.00	36.92	C
ATOM	2627	N	ASN	A	350	54.749	-31.984	2.246	1.00	25.94	N
ATOM	2628	CA	ASN	A	350	54.458	-31.604	3.617	1.00	27.11	C
ATOM	2629	C	ASN	A	350	52.947	-31.645	3.844	1.00	27.22	C
ATOM	2630	O	ASN	A	350	52.463	-32.401	4.689	1.00	27.81	O
ATOM	2631	CB	ASN	A	350	55.096	-30.216	3.893	1.00	26.28	C
ATOM	2632	CG	ASN	A	350	55.013	-29.776	5.353	1.00	27.24	C
ATOM	2633	OD1	ASN	A	350	54.055	-30.057	6.070	1.00	23.88	O
ATOM	2634	ND2	ASN	A	350	56.055	-29.085	5.786	1.00	26.86	N
ATOM	2635	N	VAL	A	351	52.207	-30.877	3.044	1.00	27.61	N
ATOM	2636	CA	VAL	A	351	50.739	-30.813	3.181	1.00	27.99	C
ATOM	2637	C	VAL	A	351	50.033	-32.141	2.873	1.00	27.91	C
ATOM	2638	O	VAL	A	351	49.044	-32.482	3.512	1.00	29.16	O
ATOM	2639	CB	VAL	A	351	50.105	-29.623	2.399	1.00	26.33	C
ATOM	2640	CG1	VAL	A	351	50.241	-29.803	0.858	1.00	30.29	C
ATOM	2641	CG2	VAL	A	351	48.658	-29.537	2.736	1.00	28.25	C
ATOM	2642	N	THR	A	352	50.550	-32.905	1.919	1.00	27.19	N
ATOM	2643	CA	THR	A	352	49.943	-34.174	1.538	1.00	26.25	C
ATOM	2644	C	THR	A	352	50.091	-35.207	2.652	1.00	26.08	C
ATOM	2645	O	THR	A	352	49.168	-35.949	2.947	1.00	26.73	O
ATOM	2646	CB	THR	A	352	50.624	-34.707	0.226	1.00	25.87	C
ATOM	2647	OG1	THR	A	352	50.335	-33.796	-0.836	1.00	28.05	O
ATOM	2648	CG2	THR	A	352	50.099	-36.038	-0.150	1.00	24.75	C
ATOM	2649	N	SER	A	353	51.285	-35.290	3.205	1.00	26.06	N
ATOM	2650	CA	SER	A	353	51.597	-36.157	4.323	1.00	27.41	C
ATOM	2651	C	SER	A	353	50.902	-35.731	5.599	1.00	27.32	C
ATOM	2652	O	SER	A	353	50.479	-36.599	6.376	1.00	28.20	O
ATOM	2653	CB	SER	A	353	53.117	-36.180	4.557	1.00	27.52	C
ATOM	2654	OG	SER	A	353	53.780	-36.654	3.394	1.00	29.68	O
ATOM	2655	N	GLY	A	354	50.804	-34.419	5.860	1.00	27.13	N
ATOM	2656	CA	GLY	A	354	50.124	-33.946	7.109	1.00	26.36	C
ATOM	2657	C	GLY	A	354	48.670	-34.403	7.073	1.00	26.90	C
ATOM	2658	O	GLY	A	354	48.135	-34.926	8.059	1.00	27.44	O
ATOM	2659	N	ALA	A	355	48.037	-34.239	5.908	1.00	25.95	N
ATOM	2660	CA	ALA	A	355	46.641	-34.615	5.707	1.00	25.61	C
ATOM	2661	C	ALA	A	355	46.460	-36.113	5.866	1.00	25.66	C
ATOM	2662	O	ALA	A	355	45.512	-36.552	6.514	1.00	25.89	O
ATOM	2663	CB	ALA	A	355	46.171	-34.166	4.339	1.00	24.22	C
ATOM	2664	N	LEU	A	356	47.354	-36.891	5.253	1.00	25.41	N
ATOM	2665	CA	LEU	A	356	47.306	-38.344	5.331	1.00	26.13	C
ATOM	2666	C	LEU	A	356	47.533	-38.826	6.765	1.00	26.51	C
ATOM	2667	O	LEU	A	356	46.797	-39.726	7.279	1.00	27.01	O

ATOM	2668	CB	LEU	A	356	48.343	-39.004	4.398	1.00	25.53	C
ATOM	2669	CG	LEU	A	356	48.392	-40.539	4.582	1.00	27.36	C
ATOM	2670	CD1	LEU	A	356	46.984	-41.138	4.333	1.00	24.30	C
ATOM	2671	CD2	LEU	A	356	49.510	-41.332	3.746	1.00	26.35	C
ATOM	2672	N	LEU	A	357	48.572	-38.287	7.414	1.00	27.10	N
ATOM	2673	CA	LEU	A	357	48.906	-38.747	8.763	1.00	27.41	C
ATOM	2674	C	LEU	A	357	47.769	-38.428	9.725	1.00	27.32	C
ATOM	2675	O	LEU	A	357	47.447	-39.215	10.628	1.00	28.79	O
ATOM	2676	CB	LEU	A	357	50.226	-38.141	9.235	1.00	28.12	C
ATOM	2677	CG	LEU	A	357	51.443	-38.699	8.513	1.00	28.88	C
ATOM	2678	CD1	LEU	A	357	52.670	-37.893	8.858	1.00	28.46	C
ATOM	2679	CD2	LEU	A	357	51.678	-40.156	8.905	1.00	33.08	C
ATOM	2680	N	CYS	A	358	47.155	-37.268	9.545	1.00	28.14	N
ATOM	2681	CA	CYS	A	358	46.071	-36.879	10.437	1.00	28.43	C
ATOM	2682	C	CYS	A	358	44.872	-37.843	10.252	1.00	28.11	C
ATOM	2683	O	CYS	A	358	44.308	-38.330	11.234	1.00	28.24	O
ATOM	2684	CB	CYS	A	358	45.663	-35.414	10.195	1.00	28.04	C
ATOM	2685	SG	CYS	A	358	44.427	-34.825	11.426	1.00	31.14	S
ATOM	2686	N	SER	A	359	44.510	-38.097	8.991	1.00	27.26	N
ATOM	2687	CA	SER	A	359	43.474	-39.048	8.619	1.00	26.99	C
ATOM	2688	C	SER	A	359	43.707	-40.390	9.305	1.00	26.85	C
ATOM	2689	O	SER	A	359	42.767	-41.029	9.781	1.00	27.59	O
ATOM	2690	CB	SER	A	359	43.457	-39.222	7.095	1.00	26.77	C
ATOM	2691	OG	SER	A	359	42.525	-40.164	6.690	1.00	25.72	O
ATOM	2692	N	GLN	A	360	44.952	-40.843	9.316	1.00	26.51	N
ATOM	2693	CA	GLN	A	360	45.283	-42.134	9.900	1.00	26.35	C
ATOM	2694	C	GLN	A	360	45.199	-42.089	11.431	1.00	26.63	C
ATOM	2695	O	GLN	A	360	44.681	-43.014	12.037	1.00	26.23	O
ATOM	2696	CB	GLN	A	360	46.645	-42.638	9.422	1.00	25.56	C
ATOM	2697	CG	GLN	A	360	46.673	-42.913	7.888	1.00	26.81	C
ATOM	2698	CD	GLN	A	360	48.038	-43.329	7.409	1.00	27.70	C
ATOM	2699	OE1	GLN	A	360	49.033	-42.918	7.979	1.00	34.74	O
ATOM	2700	NE2	GLN	A	360	48.098	-44.160	6.372	1.00	29.51	N
ATOM	2701	N	ALA	A	361	45.672	-41.003	12.029	1.00	27.45	N
ATOM	2702	CA	ALA	A	361	45.864	-40.933	13.503	1.00	28.62	C
ATOM	2703	C	ALA	A	361	44.561	-40.545	14.173	1.00	28.86	C
ATOM	2704	O	ALA	A	361	44.273	-41.019	15.261	1.00	29.73	O
ATOM	2705	CB	ALA	A	361	46.958	-39.909	13.872	1.00	27.38	C
ATOM	2706	N	LEU	A	362	43.808	-39.671	13.520	1.00	26.97	N
ATOM	2707	CA	LEU	A	362	42.597	-39.136	14.105	1.00	27.84	C
ATOM	2708	C	LEU	A	362	41.307	-39.783	13.590	1.00	27.50	C
ATOM	2709	O	LEU	A	362	40.337	-39.884	14.333	1.00	28.48	O
ATOM	2710	CB	LEU	A	362	42.547	-37.596	13.890	1.00	27.30	C
ATOM	2711	CG	LEU	A	362	41.497	-36.828	14.663	1.00	28.46	C
ATOM	2712	CD1	LEU	A	362	41.775	-36.918	16.211	1.00	27.56	C
ATOM	2713	CD2	LEU	A	362	41.509	-35.418	14.171	1.00	27.39	C
ATOM	2714	N	CYS	A	363	41.283	-40.208	12.324	1.00	27.27	N
ATOM	2715	CA	CYS	A	363	40.019	-40.555	11.649	1.00	26.87	C
ATOM	2716	C	CYS	A	363	40.033	-41.986	11.156	1.00	26.99	C
ATOM	2717	O	CYS	A	363	39.397	-42.301	10.145	1.00	26.86	O

ATOM	2718	CB	CYS	A	363	39.774	-39.599	10.477	1.00	26.16	C
ATOM	2719	SG	CYS	A	363	39.720	-37.861	11.079	1.00	30.20	S
ATOM	2720	N	SER	A	364	40.829	-42.816	11.834	1.00	25.66	N
ATOM	2721	CA	SER	A	364	40.966	-44.252	11.564	1.00	26.35	C
ATOM	2722	C	SER	A	364	41.334	-44.557	10.125	1.00	26.12	C
ATOM	2723	O	SER	A	364	41.091	-45.660	9.699	1.00	27.22	O
ATOM	2724	CB	SER	A	364	39.687	-45.027	11.958	1.00	25.46	C
ATOM	2725	OG	SER	A	364	39.165	-44.503	13.196	1.00	29.01	O
ATOM	2726	N	GLY	A	365	41.906	-43.592	9.384	1.00	24.66	N
ATOM	2727	CA	GLY	A	365	42.171	-43.819	7.951	1.00	23.44	C
ATOM	2728	C	GLY	A	365	40.921	-43.791	7.086	1.00	22.39	C
ATOM	2729	O	GLY	A	365	40.996	-44.083	5.914	1.00	21.98	O
ATOM	2730	N	HIS	A	366	39.773	-43.399	7.652	1.00	23.69	N
ATOM	2731	CA	HIS	A	366	38.470	-43.446	6.939	1.00	22.98	C
ATOM	2732	C	HIS	A	366	37.698	-42.129	6.944	1.00	23.32	C
ATOM	2733	O	HIS	A	366	36.435	-42.135	6.806	1.00	23.17	O
ATOM	2734	CB	HIS	A	366	37.558	-44.480	7.580	1.00	22.51	C
ATOM	2735	CG	HIS	A	366	38.138	-45.856	7.663	1.00	24.54	C
ATOM	2736	ND1	HIS	A	366	38.532	-46.572	6.554	1.00	25.45	N
ATOM	2737	CD2	HIS	A	366	38.306	-46.685	8.721	1.00	25.60	C
ATOM	2738	CE1	HIS	A	366	38.930	-47.775	6.926	1.00	24.52	C
ATOM	2739	NE2	HIS	A	366	38.814	-47.860	8.234	1.00	23.73	N
ATOM	2740	N	GLY	A	367	38.426	-41.017	7.112	1.00	21.53	N
ATOM	2741	CA	GLY	A	367	37.868	-39.708	6.917	1.00	22.18	C
ATOM	2742	C	GLY	A	367	38.975	-38.709	6.756	1.00	23.52	C
ATOM	2743	O	GLY	A	367	40.157	-39.040	6.919	1.00	23.73	O
ATOM	2744	N	ARG	A	368	38.588	-37.486	6.436	1.00	24.29	N
ATOM	2745	CA	ARG	A	368	39.484	-36.335	6.348	1.00	25.77	C
ATOM	2746	C	ARG	A	368	39.457	-35.546	7.636	1.00	27.20	C
ATOM	2747	O	ARG	A	368	38.376	-35.404	8.238	1.00	26.86	O
ATOM	2748	CB	ARG	A	368	39.082	-35.430	5.145	1.00	26.01	C
ATOM	2749	CG	ARG	A	368	39.470	-36.091	3.822	1.00	24.51	C
ATOM	2750	CD	ARG	A	368	39.730	-35.182	2.511	1.00	27.76	C
ATOM	2751	NE	ARG	A	368	38.566	-35.417	1.844	1.00	29.75	N
ATOM	2752	CZ	ARG	A	368	38.200	-36.181	0.840	1.00	28.19	C
ATOM	2753	NH1	ARG	A	368	38.896	-36.636	-0.188	1.00	30.88	N
ATOM	2754	NH2	ARG	A	368	36.923	-36.278	0.837	1.00	24.90	N
ATOM	2755	N	CYS	A	369	40.641	-35.074	8.089	1.00	28.55	N
ATOM	2756	CA	CYS	A	369	40.711	-34.074	9.147	1.00	29.77	C
ATOM	2757	C	CYS	A	369	40.308	-32.737	8.561	1.00	30.27	C
ATOM	2758	O	CYS	A	369	40.708	-32.356	7.439	1.00	30.04	O
ATOM	2759	CB	CYS	A	369	42.103	-33.952	9.796	1.00	29.73	C
ATOM	2760	SG	CYS	A	369	42.673	-35.462	10.613	1.00	31.37	S
ATOM	2761	N	VAL	A	370	39.536	-32.029	9.373	1.00	31.40	N
ATOM	2762	CA	VAL	A	370	38.875	-30.781	9.041	1.00	32.70	C
ATOM	2763	C	VAL	A	370	38.966	-29.917	10.322	1.00	32.86	C
ATOM	2764	O	VAL	A	370	38.755	-30.417	11.437	1.00	30.79	O
ATOM	2765	CB	VAL	A	370	37.387	-31.065	8.633	1.00	33.41	C
ATOM	2766	CG1	VAL	A	370	36.559	-29.829	8.744	1.00	36.98	C
ATOM	2767	CG2	VAL	A	370	37.353	-31.553	7.195	1.00	32.54	C

ATOM	2768	N	ARG	A	371	39.328	-28.645	10.158	1.00	32.57	N
ATOM	2769	CA	ARG	A	371	39.497	-27.713	11.286	1.00	32.84	C
ATOM	2770	C	ARG	A	371	38.375	-27.748	12.233	1.00	31.54	C
ATOM	2771	O	ARG	A	371	37.257	-27.693	11.793	1.00	32.46	O
ATOM	2772	CB	ARG	A	371	39.421	-26.285	10.750	1.00	33.51	C
ATOM	2773	CG	ARG	A	371	40.690	-25.695	10.619	1.00	33.92	C
ATOM	2774	CD	ARG	A	371	40.495	-24.404	9.998	1.00	29.59	C
ATOM	2775	NE	ARG	A	371	41.727	-24.072	9.356	1.00	27.18	N
ATOM	2776	CZ	ARG	A	371	41.782	-23.375	8.245	1.00	25.94	C
ATOM	2777	NH1	ARG	A	371	40.630	-22.996	7.670	1.00	24.17	N
ATOM	2778	NH2	ARG	A	371	42.976	-23.009	7.782	1.00	26.09	N
ATOM	2779	N	ARG	A	372	38.634	-27.734	13.534	1.00	31.37	N
ATOM	2780	CA	ARG	A	372	37.551	-27.372	14.469	1.00	31.39	C
ATOM	2781	C	ARG	A	372	37.383	-25.864	14.381	1.00	31.59	C
ATOM	2782	O	ARG	A	372	38.316	-25.106	14.081	1.00	29.86	O
ATOM	2783	CB	ARG	A	372	37.829	-27.786	15.902	1.00	30.18	C
ATOM	2784	CG	ARG	A	372	37.833	-29.263	16.125	1.00	32.77	C
ATOM	2785	CD	ARG	A	372	38.528	-29.646	17.421	1.00	37.77	C
ATOM	2786	NE	ARG	A	372	38.503	-31.101	17.651	1.00	42.43	N
ATOM	2787	CZ	ARG	A	372	37.416	-31.778	18.017	1.00	46.29	C
ATOM	2788	NH1	ARG	A	372	36.261	-31.144	18.183	1.00	47.32	N
ATOM	2789	NH2	ARG	A	372	37.475	-33.086	18.217	1.00	46.19	N
ATOM	2790	N	THR	A	373	36.169	-25.443	14.657	1.00	33.61	N
ATOM	2791	CA	THR	A	373	35.773	-24.065	14.494	1.00	35.73	C
ATOM	2792	C	THR	A	373	36.438	-23.153	15.578	1.00	35.29	C
ATOM	2793	O	THR	A	373	36.712	-21.983	15.345	1.00	36.08	O
ATOM	2794	CB	THR	A	373	34.232	-24.020	14.434	1.00	36.30	C
ATOM	2795	OG1	THR	A	373	33.809	-22.950	13.555	1.00	42.37	O
ATOM	2796	CG2	THR	A	373	33.638	-23.883	15.772	1.00	36.31	C
ATOM	2797	N	SER	A	374	36.753	-23.747	16.722	1.00	34.26	N
ATOM	2798	CA	SER	A	374	37.588	-23.154	17.769	1.00	33.86	C
ATOM	2799	C	SER	A	374	39.024	-22.895	17.308	1.00	32.91	C
ATOM	2800	O	SER	A	374	39.733	-22.190	17.992	1.00	31.92	O
ATOM	2801	CB	SER	A	374	37.637	-24.106	18.984	1.00	33.33	C
ATOM	2802	OG	SER	A	374	38.371	-25.262	18.599	1.00	35.40	O
ATOM	2803	N	HIS	A	375	39.453	-23.486	16.175	1.00	32.06	N
ATOM	2804	CA	HIS	A	375	40.821	-23.276	15.665	1.00	31.71	C
ATOM	2805	C	HIS	A	375	40.829	-22.841	14.187	1.00	31.78	C
ATOM	2806	O	HIS	A	375	41.320	-23.587	13.330	1.00	31.70	O
ATOM	2807	CB	HIS	A	375	41.687	-24.522	15.910	1.00	31.47	C
ATOM	2808	CG	HIS	A	375	42.019	-24.749	17.355	1.00	32.91	C
ATOM	2809	ND1	HIS	A	375	41.097	-25.206	18.278	1.00	33.61	N
ATOM	2810	CD2	HIS	A	375	43.169	-24.561	18.038	1.00	32.94	C
ATOM	2811	CE1	HIS	A	375	41.667	-25.284	19.464	1.00	32.44	C
ATOM	2812	NE2	HIS	A	375	42.926	-24.903	19.342	1.00	33.20	N
ATOM	2813	N	PRO	A	376	40.272	-21.623	13.889	1.00	32.02	N
ATOM	2814	CA	PRO	A	376	39.929	-21.206	12.507	1.00	30.91	C
ATOM	2815	C	PRO	A	376	41.088	-21.111	11.532	1.00	31.55	C
ATOM	2816	O	PRO	A	376	40.864	-20.929	10.325	1.00	31.48	O
ATOM	2817	CB	PRO	A	376	39.289	-19.820	12.703	1.00	31.17	C

ATOM	2818	CG	PRO	A	376	39.884	-19.301	14.003	1.00	30.32	C
ATOM	2819	CD	PRO	A	376	39.929	-20.553	14.869	1.00	31.24	C
ATOM	2820	N	LYS	A	377	42.311	-21.236	12.029	1.00	31.74	N
ATOM	2821	CA	LYS	A	377	43.483	-21.065	11.168	1.00	33.17	C
ATOM	2822	C	LYS	A	377	44.440	-22.237	11.223	1.00	32.93	C
ATOM	2823	O	LYS	A	377	45.500	-22.191	10.623	1.00	35.10	O
ATOM	2824	CB	LYS	A	377	44.192	-19.779	11.561	1.00	34.55	C
ATOM	2825	CG	LYS	A	377	43.493	-18.562	10.956	1.00	38.42	C
ATOM	2826	CD	LYS	A	377	43.554	-17.367	11.841	1.00	46.12	C
ATOM	2827	CE	LYS	A	377	43.119	-16.156	11.039	1.00	50.24	C
ATOM	2828	NZ	LYS	A	377	44.088	-15.836	9.933	1.00	54.96	N
ATOM	2829	N	ALA	A	378	44.083	-23.281	11.966	1.00	31.56	N
ATOM	2830	CA	ALA	A	378	44.895	-24.467	12.026	1.00	30.52	C
ATOM	2831	C	ALA	A	378	45.172	-25.048	10.601	1.00	30.17	C
ATOM	2832	O	ALA	A	378	44.299	-25.040	9.732	1.00	29.78	O
ATOM	2833	CB	ALA	A	378	44.210	-25.493	12.914	1.00	29.31	C
ATOM	2834	N	LEU	A	379	46.363	-25.599	10.412	1.00	29.47	N
ATOM	2835	CA	LEU	A	379	46.761	-26.229	9.160	1.00	30.03	C
ATOM	2836	C	LEU	A	379	47.286	-27.644	9.426	1.00	30.26	C
ATOM	2837	O	LEU	A	379	47.647	-27.979	10.565	1.00	31.20	O
ATOM	2838	CB	LEU	A	379	47.873	-25.403	8.496	1.00	30.30	C
ATOM	2839	CG	LEU	A	379	47.557	-23.959	8.090	1.00	28.76	C
ATOM	2840	CD1	LEU	A	379	48.826	-23.276	7.618	1.00	27.39	C
ATOM	2841	CD2	LEU	A	379	46.508	-23.930	6.967	1.00	24.62	C
ATOM	2842	N	LEU	A	380	47.332	-28.457	8.384	1.00	30.20	N
ATOM	2843	CA	LEU	A	380	47.776	-29.844	8.451	1.00	31.08	C
ATOM	2844	C	LEU	A	380	49.189	-29.966	7.880	1.00	31.25	C
ATOM	2845	O	LEU	A	380	49.370	-30.183	6.732	1.00	33.69	O
ATOM	2846	CB	LEU	A	380	46.804	-30.745	7.663	1.00	30.63	C
ATOM	2847	CG	LEU	A	380	45.392	-31.009	8.217	1.00	32.24	C
ATOM	2848	CD1	LEU	A	380	44.525	-31.677	7.181	1.00	28.02	C
ATOM	2849	CD2	LEU	A	380	45.441	-31.848	9.470	1.00	30.42	C
ATOM	2850	N	LEU	A	381	50.200	-29.819	8.689	1.00	32.37	N
ATOM	2851	CA	LEU	A	381	51.568	-29.721	8.220	1.00	32.54	C
ATOM	2852	C	LEU	A	381	52.405	-30.607	9.096	1.00	33.37	C
ATOM	2853	O	LEU	A	381	51.905	-31.103	10.135	1.00	35.05	O
ATOM	2854	CB	LEU	A	381	52.046	-28.281	8.327	1.00	32.30	C
ATOM	2855	CG	LEU	A	381	51.228	-27.311	7.454	1.00	34.02	C
ATOM	2856	CD1	LEU	A	381	51.360	-25.931	8.043	1.00	36.45	C
ATOM	2857	CD2	LEU	A	381	51.483	-27.344	5.860	1.00	33.13	C
ATOM	2858	N	LEU	A	382	53.658	-30.840	8.709	1.00	31.79	N
ATOM	2859	CA	LEU	A	382	54.508	-31.714	9.508	1.00	29.99	C
ATOM	2860	C	LEU	A	382	55.390	-30.868	10.392	1.00	30.10	C
ATOM	2861	O	LEU	A	382	55.893	-29.785	9.971	1.00	30.26	O
ATOM	2862	CB	LEU	A	382	55.367	-32.620	8.628	1.00	30.07	C
ATOM	2863	CG	LEU	A	382	54.737	-33.439	7.497	1.00	27.46	C
ATOM	2864	CD1	LEU	A	382	55.854	-34.008	6.696	1.00	24.08	C
ATOM	2865	CD2	LEU	A	382	53.822	-34.563	7.994	1.00	25.55	C
ATOM	2866	N	ASN	A	383	55.600	-31.353	11.614	1.00	28.30	N
ATOM	2867	CA	ASN	A	383	56.464	-30.669	12.565	1.00	28.17	C

ATOM	2868	C	ASN	A	383	57.923	-30.865	12.145	1.00	28.32	C
ATOM	2869	O	ASN	A	383	58.352	-32.003	12.007	1.00	28.23	O
ATOM	2870	CB	ASN	A	383	56.184	-31.258	13.950	1.00	27.69	C
ATOM	2871	CG	ASN	A	383	56.979	-30.603	15.090	1.00	28.25	C
ATOM	2872	OD1	ASN	A	383	57.869	-29.750	14.907	1.00	26.65	O
ATOM	2873	ND2	ASN	A	383	56.664	-31.056	16.304	1.00	24.00	N
ATOM	2874	N	PRO	A	384	58.697	-29.760	11.935	1.00	28.82	N
ATOM	2875	CA	PRO	A	384	60.098	-29.971	11.550	1.00	29.06	C
ATOM	2876	C	PRO	A	384	60.938	-30.625	12.634	1.00	29.86	C
ATOM	2877	O	PRO	A	384	62.043	-31.065	12.341	1.00	31.43	O
ATOM	2878	CB	PRO	A	384	60.590	-28.558	11.252	1.00	28.73	C
ATOM	2879	CG	PRO	A	384	59.725	-27.706	12.161	1.00	28.69	C
ATOM	2880	CD	PRO	A	384	58.382	-28.318	12.032	1.00	28.20	C
ATOM	2881	N	ALA	A	385	60.436	-30.700	13.867	1.00	29.75	N
ATOM	2882	CA	ALA	A	385	61.131	-31.413	14.923	1.00	30.53	C
ATOM	2883	C	ALA	A	385	60.914	-32.920	14.849	1.00	30.70	C
ATOM	2884	O	ALA	A	385	61.724	-33.680	15.400	1.00	30.73	O
ATOM	2885	CB	ALA	A	385	60.736	-30.882	16.326	1.00	30.24	C
ATOM	2886	N	SER	A	386	59.817	-33.339	14.203	1.00	29.94	N
ATOM	2887	CA	SER	A	386	59.466	-34.753	14.067	1.00	30.02	C
ATOM	2888	C	SER	A	386	59.864	-35.348	12.725	1.00	30.31	C
ATOM	2889	O	SER	A	386	60.147	-36.561	12.645	1.00	30.10	O
ATOM	2890	CB	SER	A	386	57.970	-34.938	14.211	1.00	30.01	C
ATOM	2891	OG	SER	A	386	57.520	-34.373	15.417	1.00	32.75	O
ATOM	2892	N	PHE	A	387	59.858	-34.505	11.681	1.00	29.58	N
ATOM	2893	CA	PHE	A	387	60.112	-34.942	10.312	1.00	30.02	C
ATOM	2894	C	PHE	A	387	61.139	-34.061	9.625	1.00	31.17	C
ATOM	2895	O	PHE	A	387	61.290	-32.888	9.969	1.00	31.30	O
ATOM	2896	CB	PHE	A	387	58.846	-34.873	9.444	1.00	29.00	C
ATOM	2897	CG	PHE	A	387	57.772	-35.859	9.799	1.00	27.94	C
ATOM	2898	CD1	PHE	A	387	56.708	-35.477	10.645	1.00	28.89	C
ATOM	2899	CD2	PHE	A	387	57.784	-37.150	9.256	1.00	28.30	C
ATOM	2900	CE1	PHE	A	387	55.675	-36.362	10.982	1.00	27.88	C
ATOM	2901	CE2	PHE	A	387	56.750	-38.043	9.567	1.00	28.37	C
ATOM	2902	CZ	PHE	A	387	55.701	-37.654	10.435	1.00	27.57	C
ATOM	2903	N	SER	A	388	61.797	-34.642	8.625	1.00	31.82	N
ATOM	2904	CA	SER	A	388	62.725	-33.952	7.770	1.00	33.48	C
ATOM	2905	C	SER	A	388	62.389	-34.265	6.295	1.00	34.10	C
ATOM	2906	O	SER	A	388	62.185	-35.427	5.917	1.00	34.15	O
ATOM	2907	CB	SER	A	388	64.139	-34.408	8.120	1.00	34.37	C
ATOM	2908	OG	SER	A	388	65.098	-33.596	7.465	1.00	38.12	O
ATOM	2909	N	ILE	A	389	62.270	-33.233	5.467	1.00	34.54	N
ATOM	2910	CA	ILE	A	389	61.960	-33.462	4.067	1.00	34.46	C
ATOM	2911	C	ILE	A	389	63.238	-33.146	3.346	1.00	36.21	C
ATOM	2912	O	ILE	A	389	63.809	-32.075	3.541	1.00	36.42	O
ATOM	2913	CB	ILE	A	389	60.771	-32.584	3.552	1.00	33.99	C
ATOM	2914	CG1	ILE	A	389	59.438	-33.085	4.158	1.00	31.67	C
ATOM	2915	CG2	ILE	A	389	60.743	-32.553	2.008	1.00	31.75	C
ATOM	2916	CD1	ILE	A	389	58.295	-32.194	3.977	1.00	28.21	C
ATOM	2917	N	GLN	A	390	63.715	-34.082	2.533	1.00	38.16	N

ATOM	2918	CA	GLN	A	390	64.990	-33.854	1.867	1.00	40.54	C
ATOM	2919	C	GLN	A	390	65.063	-34.407	0.454	1.00	42.09	C
ATOM	2920	O	GLN	A	390	64.411	-35.406	0.114	1.00	41.06	O
ATOM	2921	CB	GLN	A	390	66.131	-34.490	2.662	1.00	40.72	C
ATOM	2922	CG	GLN	A	390	66.278	-33.952	4.074	1.00	20.00	C
ATOM	2923	CD	GLN	A	390	67.418	-34.605	4.831	1.00	20.00	C
ATOM	2924	OE1	GLN	A	390	68.110	-35.473	4.301	1.00	20.00	O
ATOM	2925	NE2	GLN	A	390	67.614	-34.190	6.076	1.00	20.00	N
ATOM	2926	N	LEU	A	391	65.882	-33.755	-0.358	1.00	45.47	N
ATOM	2927	CA	LEU	A	391	66.153	-34.264	-1.697	1.00	49.57	C
ATOM	2928	C	LEU	A	391	67.143	-35.412	-1.665	1.00	52.33	C
ATOM	2929	O	LEU	A	391	68.246	-35.267	-1.107	1.00	52.99	O
ATOM	2930	CB	LEU	A	391	66.669	-33.158	-2.612	1.00	49.32	C
ATOM	2931	CG	LEU	A	391	66.341	-33.403	-4.083	1.00	49.51	C
ATOM	2932	CD1	LEU	A	391	64.934	-34.026	-4.304	1.00	47.84	C
ATOM	2933	CD2	LEU	A	391	66.500	-32.088	-4.826	1.00	51.62	C
ATOM	2934	N	THR	A	392	66.750	-36.544	-2.259	1.00	55.49	N
ATOM	2935	CA	THR	A	392	67.647	-37.714	-2.403	1.00	58.78	C
ATOM	2936	C	THR	A	392	68.763	-37.411	-3.430	1.00	59.66	C
ATOM	2937	O	THR	A	392	68.459	-36.980	-4.550	1.00	59.97	O
ATOM	2938	CB	THR	A	392	66.869	-38.999	-2.828	1.00	58.65	C
ATOM	2939	OG1	THR	A	392	65.513	-38.922	-2.368	1.00	59.57	O
ATOM	2940	CG2	THR	A	392	67.528	-40.267	-2.264	1.00	58.91	C
ATOM	2941	N	PRO	A	393	70.054	-37.626	-3.049	1.00	60.97	N
ATOM	2942	CA	PRO	A	393	71.230	-37.322	-3.903	1.00	61.38	C
ATOM	2943	C	PRO	A	393	71.114	-37.687	-5.392	1.00	62.82	C
ATOM	2944	O	PRO	A	393	70.440	-38.667	-5.754	1.00	63.51	O
ATOM	2945	CB	PRO	A	393	72.350	-38.108	-3.239	1.00	61.63	C
ATOM	2946	CG	PRO	A	393	71.990	-38.034	-1.761	1.00	61.29	C
ATOM	2947	CD	PRO	A	393	70.476	-38.171	-1.738	1.00	61.01	C
ATOM	2948	N	GLY	A	394	71.761	-36.892	-6.245	1.00	63.20	N
ATOM	2949	CA	GLY	A	394	71.656	-37.075	-7.685	1.00	63.56	C
ATOM	2950	C	GLY	A	394	70.295	-36.587	-8.121	1.00	63.75	C
ATOM	2951	O	GLY	A	394	70.181	-35.861	-9.114	1.00	64.25	O
ATOM	2952	N	GLY	A	395	69.263	-36.982	-7.373	1.00	63.35	N
ATOM	2953	CA	GLY	A	395	67.910	-36.477	-7.598	1.00	63.03	C
ATOM	2954	C	GLY	A	395	66.816	-37.522	-7.756	1.00	62.29	C
ATOM	2955	O	GLY	A	395	66.076	-37.503	-8.736	1.00	62.32	O
ATOM	2956	N	GLY	A	396	66.710	-38.440	-6.797	1.00	61.32	N
ATOM	2957	CA	GLY	A	396	65.490	-39.233	-6.665	1.00	59.54	C
ATOM	2958	C	GLY	A	396	64.399	-38.250	-6.240	1.00	57.88	C
ATOM	2959	O	GLY	A	396	64.633	-37.039	-6.203	1.00	58.09	O
ATOM	2960	N	PRO	A	397	63.200	-38.748	-5.916	1.00	56.43	N
ATOM	2961	CA	PRO	A	397	62.220	-37.800	-5.407	1.00	55.14	C
ATOM	2962	C	PRO	A	397	62.540	-37.346	-3.973	1.00	53.78	C
ATOM	2963	O	PRO	A	397	63.499	-37.842	-3.342	1.00	53.85	O
ATOM	2964	CB	PRO	A	397	60.895	-38.585	-5.457	1.00	55.41	C
ATOM	2965	CG	PRO	A	397	61.196	-39.864	-6.223	1.00	56.21	C
ATOM	2966	CD	PRO	A	397	62.658	-40.115	-5.994	1.00	56.86	C
ATOM	2967	N	LEU	A	398	61.759	-36.392	-3.475	1.00	51.55	N

ATOM	2968	CA	LEU	A	398	61.875	-35.974	-2.094	1.00	49.52	C
ATOM	2969	C	LEU	A	398	61.509	-37.170	-1.254	1.00	49.03	C
ATOM	2970	O	LEU	A	398	60.528	-37.873	-1.543	1.00	48.71	O
ATOM	2971	CB	LEU	A	398	60.954	-34.793	-1.765	1.00	48.92	C
ATOM	2972	CG	LEU	A	398	61.209	-33.434	-2.427	1.00	47.51	C
ATOM	2973	CD1	LEU	A	398	59.989	-32.581	-2.279	1.00	44.19	C
ATOM	2974	CD2	LEU	A	398	62.481	-32.720	-1.902	1.00	45.04	C
ATOM	2975	N	SER	A	399	62.337	-37.408	-0.241	1.00	48.16	N
ATOM	2976	CA	SER	A	399	62.013	-38.353	0.821	1.00	47.55	C
ATOM	2977	C	SER	A	399	61.501	-37.643	2.073	1.00	46.95	C
ATOM	2978	O	SER	A	399	61.816	-36.479	2.369	1.00	46.85	O
ATOM	2979	CB	SER	A	399	63.227	-39.213	1.193	1.00	46.91	C
ATOM	2980	OG	SER	A	399	64.310	-38.406	1.623	1.00	46.01	O
ATOM	2981	N	LEU	A	400	60.700	-38.385	2.803	1.00	45.73	N
ATOM	2982	CA	LEU	A	400	60.306	-38.000	4.098	1.00	44.51	C
ATOM	2983	C	LEU	A	400	60.996	-38.961	5.104	1.00	44.56	C
ATOM	2984	O	LEU	A	400	60.895	-40.187	4.959	1.00	44.46	O
ATOM	2985	CB	LEU	A	400	58.782	-38.077	4.148	1.00	43.92	C
ATOM	2986	CG	LEU	A	400	58.124	-37.709	5.459	1.00	41.87	C
ATOM	2987	CD1	LEU	A	400	58.419	-36.269	5.784	1.00	39.55	C
ATOM	2988	CD2	LEU	A	400	56.663	-37.993	5.355	1.00	38.76	C
ATOM	2989	N	ARG	A	401	61.722	-38.401	6.080	1.00	44.05	N
ATOM	2990	CA	ARG	A	401	62.276	-39.170	7.213	1.00	44.30	C
ATOM	2991	C	ARG	A	401	61.647	-38.740	8.552	1.00	42.74	C
ATOM	2992	O	ARG	A	401	61.321	-37.563	8.761	1.00	41.92	O
ATOM	2993	CB	ARG	A	401	63.802	-38.985	7.337	1.00	45.19	C
ATOM	2994	CG	ARG	A	401	64.653	-39.453	6.154	1.00	50.37	C
ATOM	2995	CD	ARG	A	401	64.887	-40.984	6.118	1.00	58.25	C
ATOM	2996	NE	ARG	A	401	65.436	-41.433	4.821	1.00	62.36	N
ATOM	2997	CZ	ARG	A	401	64.705	-41.832	3.773	1.00	62.58	C
ATOM	2998	NH1	ARG	A	401	63.376	-41.862	3.834	1.00	62.18	N
ATOM	2999	NH2	ARG	A	401	65.312	-42.210	2.654	1.00	63.55	N
ATOM	3000	N	GLY	A	402	61.528	-39.696	9.466	1.00	41.38	N
ATOM	3001	CA	GLY	A	402	60.996	-39.428	10.794	1.00	39.43	C
ATOM	3002	C	GLY	A	402	59.638	-40.059	11.061	1.00	38.23	C
ATOM	3003	O	GLY	A	402	59.241	-41.029	10.402	1.00	37.34	O
ATOM	3004	N	ALA	A	403	58.926	-39.489	12.035	1.00	36.92	N
ATOM	3005	CA	ALA	A	403	57.734	-40.107	12.579	1.00	35.66	C
ATOM	3006	C	ALA	A	403	56.827	-39.093	13.259	1.00	34.91	C
ATOM	3007	O	ALA	A	403	57.282	-38.122	13.841	1.00	34.61	O
ATOM	3008	CB	ALA	A	403	58.151	-41.204	13.591	1.00	35.22	C
ATOM	3009	N	LEU	A	404	55.527	-39.332	13.199	1.00	34.39	N
ATOM	3010	CA	LEU	A	404	54.581	-38.475	13.887	1.00	34.23	C
ATOM	3011	C	LEU	A	404	54.689	-38.718	15.386	1.00	34.92	C
ATOM	3012	O	LEU	A	404	54.460	-39.843	15.847	1.00	35.97	O
ATOM	3013	CB	LEU	A	404	53.171	-38.811	13.418	1.00	34.41	C
ATOM	3014	CG	LEU	A	404	52.012	-37.887	13.735	1.00	32.45	C
ATOM	3015	CD1	LEU	A	404	52.082	-36.584	12.918	1.00	28.54	C
ATOM	3016	CD2	LEU	A	404	50.782	-38.696	13.409	1.00	31.43	C
ATOM	3017	N	SER	A	405	55.041	-37.681	16.143	1.00	34.22	N

ATOM	3018	CA	SER	A	405	55.215	-37.831	17.575	1.00	34.23	C
ATOM	3019	C	SER	A	405	53.863	-37.939	18.237	1.00	33.77	C
ATOM	3020	O	SER	A	405	52.863	-37.610	17.629	1.00	34.32	O
ATOM	3021	CB	SER	A	405	56.056	-36.682	18.182	1.00	34.24	C
ATOM	3022	OG	SER	A	405	55.307	-35.493	18.298	1.00	34.71	O
ATOM	3023	N	LEU	A	406	53.839	-38.427	19.478	1.00	33.83	N
ATOM	3024	CA	LEU	A	406	52.638	-38.382	20.315	1.00	33.10	C
ATOM	3025	C	LEU	A	406	52.173	-36.929	20.586	1.00	32.19	C
ATOM	3026	O	LEU	A	406	51.013	-36.670	20.587	1.00	32.14	O
ATOM	3027	CB	LEU	A	406	52.813	-39.206	21.616	1.00	32.99	C
ATOM	3028	CG	LEU	A	406	52.989	-40.745	21.507	1.00	33.64	C
ATOM	3029	CD1	LEU	A	406	53.046	-41.412	22.908	1.00	33.32	C
ATOM	3030	CD2	LEU	A	406	51.991	-41.503	20.593	1.00	32.20	C
ATOM	3031	N	GLU	A	407	53.074	-35.980	20.751	1.00	32.67	N
ATOM	3032	CA	GLU	A	407	52.688	-34.556	20.825	1.00	33.45	C
ATOM	3033	C	GLU	A	407	52.091	-33.978	19.517	1.00	33.66	C
ATOM	3034	O	GLU	A	407	51.207	-33.113	19.580	1.00	34.19	O
ATOM	3035	CB	GLU	A	407	53.889	-33.704	21.231	1.00	33.29	C
ATOM	3036	CG	GLU	A	407	53.567	-32.231	21.372	1.00	37.10	C
ATOM	3037	CD	GLU	A	407	54.640	-31.450	22.106	1.00	44.87	C
ATOM	3038	OE1	GLU	A	407	55.815	-31.888	22.158	1.00	46.35	O
ATOM	3039	OE2	GLU	A	407	54.291	-30.397	22.682	1.00	50.02	O
ATOM	3040	N	ASP	A	408	52.610	-34.403	18.366	1.00	32.85	N
ATOM	3041	CA	ASP	A	408	52.012	-34.023	17.065	1.00	34.16	C
ATOM	3042	C	ASP	A	408	50.604	-34.528	17.015	1.00	34.20	C
ATOM	3043	O	ASP	A	408	49.703	-33.800	16.646	1.00	35.71	O
ATOM	3044	CB	ASP	A	408	52.773	-34.615	15.868	1.00	33.14	C
ATOM	3045	CG	ASP	A	408	54.176	-34.047	15.711	1.00	33.70	C
ATOM	3046	OD1	ASP	A	408	54.437	-32.931	16.249	1.00	32.92	O
ATOM	3047	OD2	ASP	A	408	55.017	-34.705	15.028	1.00	30.82	O
ATOM	3048	N	GLN	A	409	50.412	-35.788	17.393	1.00	34.48	N
ATOM	3049	CA	GLN	A	409	49.079	-36.378	17.412	1.00	35.27	C
ATOM	3050	C	GLN	A	409	48.127	-35.660	18.400	1.00	34.02	C
ATOM	3051	O	GLN	A	409	46.992	-35.381	18.086	1.00	34.73	O
ATOM	3052	CB	GLN	A	409	49.184	-37.861	17.725	1.00	34.71	C
ATOM	3053	CG	GLN	A	409	49.927	-38.672	16.682	1.00	37.28	C
ATOM	3054	CD	GLN	A	409	50.042	-40.153	17.064	1.00	39.32	C
ATOM	3055	OE1	GLN	A	409	49.044	-40.779	17.447	1.00	44.08	O
ATOM	3056	NE2	GLN	A	409	51.260	-40.713	16.973	1.00	41.78	N
ATOM	3057	N	ALA	A	410	48.607	-35.347	19.588	1.00	33.59	N
ATOM	3058	CA	ALA	A	410	47.855	-34.528	20.570	1.00	32.49	C
ATOM	3059	C	ALA	A	410	47.458	-33.142	19.989	1.00	32.36	C
ATOM	3060	O	ALA	A	410	46.324	-32.679	20.153	1.00	32.43	O
ATOM	3061	CB	ALA	A	410	48.697	-34.392	21.888	1.00	31.02	C
ATOM	3062	N	GLN	A	411	48.376	-32.487	19.288	1.00	32.16	N
ATOM	3063	CA	GLN	A	411	48.026	-31.231	18.631	1.00	33.76	C
ATOM	3064	C	GLN	A	411	46.918	-31.372	17.543	1.00	32.64	C
ATOM	3065	O	GLN	A	411	45.984	-30.564	17.500	1.00	31.75	O
ATOM	3066	CB	GLN	A	411	49.283	-30.505	18.116	1.00	34.62	C
ATOM	3067	CG	GLN	A	411	49.116	-28.978	17.894	1.00	38.03	C

ATOM	3068	CD	GLN	A	411	48.718	-28.189	19.178	1.00	40.19	C
ATOM	3069	OE1	GLN	A	411	49.190	-28.479	20.286	1.00	41.98	O
ATOM	3070	NE2	GLN	A	411	47.846	-27.190	19.015	1.00	40.14	N
ATOM	3071	N	MET	A	412	46.977	-32.423	16.729	1.00	33.02	N
ATOM	3072	CA	MET	A	412	45.898	-32.726	15.761	1.00	34.34	C
ATOM	3073	C	MET	A	412	44.554	-32.909	16.455	1.00	33.46	C
ATOM	3074	O	MET	A	412	43.558	-32.392	15.971	1.00	33.04	O
ATOM	3075	CB	MET	A	412	46.177	-34.012	14.968	1.00	34.52	C
ATOM	3076	CG	MET	A	412	47.028	-33.839	13.749	1.00	35.88	C
ATOM	3077	SD	MET	A	412	47.916	-35.371	13.290	1.00	38.63	S
ATOM	3078	CE	MET	A	412	48.853	-34.713	11.918	1.00	37.91	C
ATOM	3079	N	ALA	A	413	44.530	-33.659	17.565	1.00	31.26	N
ATOM	3080	CA	ALA	A	413	43.295	-33.882	18.340	1.00	31.23	C
ATOM	3081	C	ALA	A	413	42.684	-32.577	18.857	1.00	31.16	C
ATOM	3082	O	ALA	A	413	41.485	-32.486	19.096	1.00	30.59	O
ATOM	3083	CB	ALA	A	413	43.556	-34.818	19.541	1.00	30.25	C
ATOM	3084	N	VAL	A	414	43.514	-31.581	19.111	1.00	30.54	N
ATOM	3085	CA	VAL	A	414	42.934	-30.338	19.527	1.00	31.44	C
ATOM	3086	C	VAL	A	414	42.548	-29.421	18.343	1.00	31.01	C
ATOM	3087	O	VAL	A	414	41.597	-28.638	18.441	1.00	31.87	O
ATOM	3088	CB	VAL	A	414	43.789	-29.614	20.627	1.00	32.99	C
ATOM	3089	CG1	VAL	A	414	44.965	-28.861	20.080	1.00	30.21	C
ATOM	3090	CG2	VAL	A	414	42.898	-28.673	21.340	1.00	37.27	C
ATOM	3091	N	GLU	A	415	43.254	-29.506	17.230	1.00	29.09	N
ATOM	3092	CA	GLU	A	415	42.958	-28.536	16.184	1.00	29.39	C
ATOM	3093	C	GLU	A	415	41.880	-28.974	15.188	1.00	29.40	C
ATOM	3094	O	GLU	A	415	41.204	-28.114	14.602	1.00	28.95	O
ATOM	3095	CB	GLU	A	415	44.233	-28.139	15.479	1.00	29.73	C
ATOM	3096	CG	GLU	A	415	45.132	-27.215	16.340	1.00	31.42	C
ATOM	3097	CD	GLU	A	415	46.472	-26.988	15.687	1.00	36.51	C
ATOM	3098	OE1	GLU	A	415	47.216	-26.122	16.167	1.00	41.73	O
ATOM	3099	OE2	GLU	A	415	46.804	-27.695	14.710	1.00	40.23	O
ATOM	3100	N	PHE	A	416	41.709	-30.298	15.078	1.00	27.12	N
ATOM	3101	CA	PHE	A	416	40.996	-30.987	14.005	1.00	28.03	C
ATOM	3102	C	PHE	A	416	39.964	-31.972	14.508	1.00	28.15	C
ATOM	3103	O	PHE	A	416	40.140	-32.566	15.591	1.00	27.48	O
ATOM	3104	CB	PHE	A	416	42.002	-31.725	13.075	1.00	26.95	C
ATOM	3105	CG	PHE	A	416	42.736	-30.785	12.211	1.00	27.88	C
ATOM	3106	CD1	PHE	A	416	42.136	-30.317	11.046	1.00	28.52	C
ATOM	3107	CD2	PHE	A	416	43.960	-30.237	12.623	1.00	26.99	C
ATOM	3108	CE1	PHE	A	416	42.760	-29.349	10.253	1.00	29.38	C
ATOM	3109	CE2	PHE	A	416	44.605	-29.257	11.856	1.00	29.12	C
ATOM	3110	CZ	PHE	A	416	44.012	-28.797	10.666	1.00	27.87	C
ATOM	3111	N	LYS	A	417	38.882	-32.102	13.719	1.00	28.76	N
ATOM	3112	CA	LYS	A	417	37.880	-33.151	13.842	1.00	29.22	C
ATOM	3113	C	LYS	A	417	37.820	-33.899	12.466	1.00	30.13	C
ATOM	3114	O	LYS	A	417	38.609	-33.598	11.573	1.00	28.72	O
ATOM	3115	CB	LYS	A	417	36.516	-32.560	14.160	1.00	28.70	C
ATOM	3116	CG	LYS	A	417	35.985	-31.714	13.013	1.00	30.54	C
ATOM	3117	CD	LYS	A	417	34.738	-30.969	13.416	1.00	34.50	C

ATOM	3118	CE	LYS	A	417	34.334	-29.978	12.311	1.00	36.55	C
ATOM	3119	NZ	LYS	A	417	32.965	-29.458	12.672	1.00	40.08	N
ATOM	3120	N	CYS	A	418	36.888	-34.853	12.337	1.00	29.64	N
ATOM	3121	CA	CYS	A	418	36.814	-35.723	11.193	1.00	30.47	C
ATOM	3122	C	CYS	A	418	35.583	-35.459	10.351	1.00	31.29	C
ATOM	3123	O	CYS	A	418	34.493	-35.274	10.866	1.00	30.76	O
ATOM	3124	CB	CYS	A	418	36.750	-37.199	11.606	1.00	29.72	C
ATOM	3125	SG	CYS	A	418	38.198	-37.814	12.499	1.00	29.34	S
ATOM	3126	N	ARG	A	419	35.775	-35.480	9.035	1.00	32.58	N
ATOM	3127	CA	ARG	A	419	34.646	-35.617	8.121	1.00	33.27	C
ATOM	3128	C	ARG	A	419	34.842	-36.981	7.442	1.00	32.99	C
ATOM	3129	O	ARG	A	419	35.785	-37.182	6.675	1.00	31.91	O
ATOM	3130	CB	ARG	A	419	34.610	-34.486	7.096	1.00	32.50	C
ATOM	3131	CG	ARG	A	419	33.285	-34.529	6.336	1.00	36.60	C
ATOM	3132	CD	ARG	A	419	33.320	-33.806	5.002	1.00	40.09	C
ATOM	3133	NE	ARG	A	419	33.716	-32.406	5.147	1.00	42.43	N
ATOM	3134	CZ	ARG	A	419	34.706	-31.855	4.433	1.00	43.26	C
ATOM	3135	NH1	ARG	A	419	35.418	-32.573	3.505	1.00	39.69	N
ATOM	3136	NH2	ARG	A	419	34.989	-30.594	4.650	1.00	39.74	N
ATOM	3137	N	CYS	A	420	33.961	-37.930	7.746	1.00	33.88	N
ATOM	3138	CA	CYS	A	420	34.193	-39.322	7.339	1.00	34.71	C
ATOM	3139	C	CYS	A	420	33.964	-39.523	5.838	1.00	32.87	C
ATOM	3140	O	CYS	A	420	33.156	-38.836	5.236	1.00	32.64	O
ATOM	3141	CB	CYS	A	420	33.359	-40.295	8.176	1.00	35.00	C
ATOM	3142	SG	CYS	A	420	33.759	-40.243	10.016	1.00	40.30	S
ATOM	3143	N	TYR	A	421	34.695	-40.444	5.242	1.00	31.90	N
ATOM	3144	CA	TYR	A	421	34.365	-40.868	3.889	1.00	33.36	C
ATOM	3145	C	TYR	A	421	32.965	-41.467	3.899	1.00	34.73	C
ATOM	3146	O	TYR	A	421	32.513	-41.952	4.935	1.00	35.09	O
ATOM	3147	CB	TYR	A	421	35.381	-41.873	3.412	1.00	31.99	C
ATOM	3148	CG	TYR	A	421	36.768	-41.303	3.329	1.00	28.62	C
ATOM	3149	CD1	TYR	A	421	37.864	-42.045	3.733	1.00	28.06	C
ATOM	3150	CD2	TYR	A	421	36.992	-40.037	2.814	1.00	27.87	C
ATOM	3151	CE1	TYR	A	421	39.145	-41.560	3.636	1.00	27.86	C
ATOM	3152	CE2	TYR	A	421	38.331	-39.538	2.680	1.00	28.35	C
ATOM	3153	CZ	TYR	A	421	39.357	-40.282	3.143	1.00	30.62	C
ATOM	3154	OH	TYR	A	421	40.667	-39.831	3.037	1.00	33.75	O
ATOM	3155	N	PRO	A	422	32.233	-41.360	2.770	1.00	37.44	N
ATOM	3156	CA	PRO	A	422	30.920	-41.979	2.714	1.00	37.78	C
ATOM	3157	C	PRO	A	422	31.004	-43.465	3.167	1.00	38.92	C
ATOM	3158	O	PRO	A	422	31.934	-44.210	2.791	1.00	38.32	O
ATOM	3159	CB	PRO	A	422	30.552	-41.866	1.233	1.00	37.38	C
ATOM	3160	CG	PRO	A	422	31.261	-40.695	0.749	1.00	38.00	C
ATOM	3161	CD	PRO	A	422	32.565	-40.669	1.495	1.00	37.53	C
ATOM	3162	N	GLY	A	423	30.060	-43.857	4.007	1.00	40.40	N
ATOM	3163	CA	GLY	A	423	30.062	-45.215	4.552	1.00	42.77	C
ATOM	3164	C	GLY	A	423	30.640	-45.382	5.954	1.00	42.95	C
ATOM	3165	O	GLY	A	423	30.510	-46.452	6.537	1.00	43.53	O
ATOM	3166	N	TRP	A	424	31.289	-44.346	6.492	1.00	42.46	N
ATOM	3167	CA	TRP	A	424	31.942	-44.465	7.789	1.00	40.91	C

ATOM	3168	C	TRP	A	424	31.317	-43.505	8.739	1.00	41.22	C
ATOM	3169	O	TRP	A	424	30.832	-42.436	8.350	1.00	41.24	O
ATOM	3170	CB	TRP	A	424	33.451	-44.289	7.688	1.00	40.33	C
ATOM	3171	CG	TRP	A	424	34.072	-45.379	6.895	1.00	39.62	C
ATOM	3172	CD1	TRP	A	424	34.277	-45.396	5.527	1.00	38.75	C
ATOM	3173	CD2	TRP	A	424	34.582	-46.636	7.393	1.00	39.67	C
ATOM	3174	NE1	TRP	A	424	34.878	-46.574	5.158	1.00	39.19	N
ATOM	3175	CE2	TRP	A	424	35.066	-47.360	6.273	1.00	40.21	C
ATOM	3176	CE3	TRP	A	424	34.653	-47.221	8.666	1.00	38.34	C
ATOM	3177	CZ2	TRP	A	424	35.638	-48.642	6.392	1.00	43.80	C
ATOM	3178	CZ3	TRP	A	424	35.217	-48.494	8.801	1.00	42.14	C
ATOM	3179	CH2	TRP	A	424	35.710	-49.202	7.657	1.00	41.53	C
ATOM	3180	N	GLN	A	425	31.255	-43.921	9.993	1.00	42.34	N
ATOM	3181	CA	GLN	A	425	30.460	-43.194	10.982	1.00	44.41	C
ATOM	3182	C	GLN	A	425	31.339	-42.247	11.818	1.00	42.20	C
ATOM	3183	O	GLN	A	425	32.440	-42.611	12.291	1.00	41.04	O
ATOM	3184	CB	GLN	A	425	29.759	-44.229	11.874	1.00	44.73	C
ATOM	3185	CG	GLN	A	425	28.579	-43.728	12.684	1.00	48.52	C
ATOM	3186	CD	GLN	A	425	27.773	-44.891	13.315	1.00	52.76	C
ATOM	3187	OE1	GLN	A	425	28.062	-46.099	13.066	1.00	61.40	O
ATOM	3188	NE2	GLN	A	425	26.747	-44.538	14.137	1.00	57.46	N
ATOM	3189	N	ALA	A	426	30.845	-41.026	11.909	1.00	41.93	N
ATOM	3190	CA	ALA	A	426	31.250	-40.007	12.834	1.00	42.76	C
ATOM	3191	C	ALA	A	426	31.082	-40.491	14.280	1.00	43.16	C
ATOM	3192	O	ALA	A	426	30.205	-41.341	14.541	1.00	43.52	O
ATOM	3193	CB	ALA	A	426	30.373	-38.770	12.602	1.00	43.41	C
ATOM	3194	N	PRO	A	427	31.891	-39.936	15.231	1.00	42.94	N
ATOM	3195	CA	PRO	A	427	32.900	-38.869	15.011	1.00	42.01	C
ATOM	3196	C	PRO	A	427	34.309	-39.269	14.537	1.00	40.87	C
ATOM	3197	O	PRO	A	427	35.013	-38.395	14.035	1.00	40.07	O
ATOM	3198	CB	PRO	A	427	32.985	-38.190	16.405	1.00	41.93	C
ATOM	3199	CG	PRO	A	427	32.876	-39.370	17.347	1.00	44.05	C
ATOM	3200	CD	PRO	A	427	31.774	-40.256	16.675	1.00	43.15	C
ATOM	3201	N	TRP	A	428	34.737	-40.528	14.715	1.00	38.96	N
ATOM	3202	CA	TRP	A	428	36.110	-40.910	14.371	1.00	37.86	C
ATOM	3203	C	TRP	A	428	36.281	-41.875	13.175	1.00	35.66	C
ATOM	3204	O	TRP	A	428	37.398	-42.315	12.919	1.00	33.63	O
ATOM	3205	CB	TRP	A	428	36.886	-41.479	15.612	1.00	39.92	C
ATOM	3206	CG	TRP	A	428	36.676	-40.654	16.868	1.00	40.98	C
ATOM	3207	CD1	TRP	A	428	36.012	-41.040	18.010	1.00	42.47	C
ATOM	3208	CD2	TRP	A	428	37.075	-39.286	17.071	1.00	43.07	C
ATOM	3209	NE1	TRP	A	428	35.975	-39.987	18.916	1.00	45.48	N
ATOM	3210	CE2	TRP	A	428	36.640	-38.910	18.376	1.00	46.28	C
ATOM	3211	CE3	TRP	A	428	37.785	-38.348	16.297	1.00	42.88	C
ATOM	3212	CZ2	TRP	A	428	36.869	-37.620	18.900	1.00	44.14	C
ATOM	3213	CZ3	TRP	A	428	38.032	-37.065	16.828	1.00	42.04	C
ATOM	3214	CH2	TRP	A	428	37.570	-36.721	18.120	1.00	42.69	C
ATOM	3215	N	CYS	A	429	35.192	-42.227	12.506	1.00	35.13	N
ATOM	3216	CA	CYS	A	429	35.230	-43.008	11.224	1.00	37.26	C
ATOM	3217	C	CYS	A	429	35.753	-44.402	11.444	1.00	38.61	C

ATOM	3218	O	CYS	A	429	36.370	-45.014	10.570	1.00	38.72	O
ATOM	3219	CB	CYS	A	429	36.049	-42.288	10.155	1.00	35.20	C
ATOM	3220	SG	CYS	A	429	35.796	-40.515	10.148	1.00	36.32	S
ATOM	3221	N	GLU	A	430	35.514	-44.900	12.646	1.00	41.35	N
ATOM	3222	CA	GLU	A	430	36.069	-46.165	13.066	1.00	44.50	C
ATOM	3223	C	GLU	A	430	35.202	-47.324	12.589	1.00	45.03	C
ATOM	3224	O	GLU	A	430	35.740	-48.354	12.183	1.00	45.31	O
ATOM	3225	CB	GLU	A	430	36.205	-46.194	14.588	1.00	44.35	C
ATOM	3226	CG	GLU	A	430	36.700	-47.494	15.088	1.00	51.49	C
ATOM	3227	CD	GLU	A	430	36.796	-47.503	16.600	1.00	60.38	C
ATOM	3228	OE1	GLU	A	430	35.911	-46.888	17.261	1.00	62.88	O
ATOM	3229	OE2	GLU	A	430	37.774	-48.107	17.106	1.00	62.73	O
ATOM	3230	N	ARG	A	431	33.888	-47.132	12.613	1.00	46.10	N
ATOM	3231	CA	ARG	A	431	32.925	-48.187	12.273	1.00	50.42	C
ATOM	3232	C	ARG	A	431	32.175	-47.765	11.022	1.00	50.30	C
ATOM	3233	O	ARG	A	431	31.910	-46.562	10.839	1.00	49.35	O
ATOM	3234	CB	ARG	A	431	31.857	-48.322	13.369	1.00	49.26	C
ATOM	3235	CG	ARG	A	431	32.346	-48.645	14.791	1.00	54.76	C
ATOM	3236	CD	ARG	A	431	31.210	-48.292	15.807	1.00	56.90	C
ATOM	3237	NE	ARG	A	431	30.606	-46.968	15.538	1.00	68.45	N
ATOM	3238	CZ	ARG	A	431	30.785	-45.877	16.296	1.00	72.93	C
ATOM	3239	NH1	ARG	A	431	31.528	-45.935	17.416	1.00	73.78	N
ATOM	3240	NH2	ARG	A	431	30.201	-44.725	15.953	1.00	74.50	N
ATOM	3241	N	LYS	A	432	31.777	-48.739	10.194	1.00	51.99	N
ATOM	3242	CA	LYS	A	432	30.967	-48.437	9.012	1.00	54.16	C
ATOM	3243	C	LYS	A	432	29.659	-47.898	9.488	1.00	54.70	C
ATOM	3244	O	LYS	A	432	29.221	-48.239	10.569	1.00	55.09	O
ATOM	3245	CB	LYS	A	432	30.760	-49.652	8.101	1.00	54.61	C
ATOM	3246	CG	LYS	A	432	32.054	-50.379	7.755	1.00	56.64	C
ATOM	3247	CD	LYS	A	432	32.205	-50.629	6.269	1.00	59.23	C
ATOM	3248	CE	LYS	A	432	33.376	-51.641	5.987	1.00	60.92	C
ATOM	3249	NZ	LYS	A	432	33.789	-51.712	4.497	1.00	62.64	N
ATOM	3250	N	SER	A	433	29.054	-47.022	8.708	1.00	56.66	N
ATOM	3251	CA	SER	A	433	27.804	-46.424	9.106	1.00	60.01	C
ATOM	3252	C	SER	A	433	26.598	-47.340	8.943	1.00	61.54	C
ATOM	3253	O	SER	A	433	26.664	-48.409	8.295	1.00	60.35	O
ATOM	3254	CB	SER	A	433	27.574	-45.068	8.410	1.00	60.54	C
ATOM	3255	OG	SER	A	433	28.178	-45.026	7.120	1.00	64.48	O
ATOM	3256	N	MET	A	434	25.509	-46.879	9.570	1.00	64.58	N
ATOM	3257	CA	MET	A	434	24.217	-47.546	9.616	1.00	68.14	C
ATOM	3258	C	MET	A	434	23.866	-48.270	8.306	1.00	66.74	C
ATOM	3259	O	MET	A	434	23.859	-49.517	8.244	1.00	67.70	O
ATOM	3260	CB	MET	A	434	23.109	-46.531	10.002	1.00	68.61	C
ATOM	3261	CG	MET	A	434	22.987	-46.164	11.511	1.00	71.68	C
ATOM	3262	SD	MET	A	434	21.582	-45.028	11.938	1.00	76.48	S
ATOM	3263	CE	MET	A	434	22.259	-44.109	13.359	1.00	75.04	C
ATOM	3264	N	TRP	A	435	23.630	-47.496	7.249	1.00	65.00	N
ATOM	3265	CA	TRP	A	435	22.935	-48.027	6.075	1.00	62.31	C
ATOM	3266	C	TRP	A	435	23.844	-48.383	4.942	1.00	61.22	C
ATOM	3267	O	TRP	A	435	23.609	-47.986	3.809	1.00	60.36	O

ATOM	3268	CB	TRP	A	435	21.882	-47.050	5.612	1.00	62.11	C
ATOM	3269	CG	TRP	A	435	21.087	-46.582	6.751	1.00	60.99	C
ATOM	3270	CD1	TRP	A	435	21.185	-45.375	7.363	1.00	60.44	C
ATOM	3271	CD2	TRP	A	435	20.079	-47.319	7.458	1.00	61.92	C
ATOM	3272	NE1	TRP	A	435	20.295	-45.302	8.405	1.00	61.84	N
ATOM	3273	CE2	TRP	A	435	19.600	-46.480	8.491	1.00	61.40	C
ATOM	3274	CE3	TRP	A	435	19.532	-48.600	7.319	1.00	61.40	C
ATOM	3275	CZ2	TRP	A	435	18.591	-46.874	9.383	1.00	61.81	C
ATOM	3276	CZ3	TRP	A	435	18.528	-48.995	8.207	1.00	62.17	C
ATOM	3277	CH2	TRP	A	435	18.064	-48.123	9.229	1.00	61.30	C
ATOM	3278	N	THR	A	436	24.821	-49.218	5.271	1.00	60.31	N
ATOM	3279	CA	THR	A	436	25.958	-49.561	4.429	1.00	59.92	C
ATOM	3280	C	THR	A	436	26.089	-51.059	4.094	1.00	59.41	C
ATOM	3281	O	THR	A	436	25.511	-51.915	4.794	1.00	59.50	O
ATOM	3282	CB	THR	A	436	27.238	-49.036	5.155	1.00	60.24	C
ATOM	3283	OG1	THR	A	436	27.572	-47.748	4.604	1.00	61.34	O
ATOM	3284	CG2	THR	A	436	28.410	-50.008	5.069	1.00	59.41	C
TER	3285		THR	A	436						
HETATM	3286	C1	NAG	B	1	55.813	-28.162	6.854	1.00	33.58	C
HETATM	3287	C2	NAG	B	1	57.242	-27.845	7.354	1.00	38.22	C
HETATM	3288	C3	NAG	B	1	57.133	-26.765	8.401	1.00	37.88	C
HETATM	3289	C4	NAG	B	1	56.534	-25.512	7.785	1.00	39.65	C
HETATM	3290	C5	NAG	B	1	55.254	-25.780	6.965	1.00	37.19	C
HETATM	3291	C6	NAG	B	1	55.477	-24.883	5.755	1.00	40.16	C
HETATM	3292	C7	NAG	B	1	58.787	-29.785	7.527	1.00	33.61	C
HETATM	3293	C8	NAG	B	1	58.891	-31.155	8.112	1.00	31.47	C
HETATM	3294	N2	NAG	B	1	57.795	-29.024	7.965	1.00	33.34	N
HETATM	3295	O3	NAG	B	1	58.434	-26.512	8.832	1.00	43.70	O
HETATM	3296	O4	NAG	B	1	56.190	-24.558	8.787	1.00	39.96	O
HETATM	3297	O5	NAG	B	1	55.342	-26.988	6.270	1.00	35.48	O
HETATM	3298	O6	NAG	B	1	54.533	-23.935	5.855	1.00	39.50	O
HETATM	3299	O7	NAG	B	1	59.655	-29.413	6.763	1.00	37.15	O
HETATM	3300	C1	NAG	B	2	56.508	-23.204	8.454	1.00	39.26	C
HETATM	3301	C2	NAG	B	2	55.830	-22.357	9.504	1.00	43.15	C
HETATM	3302	C3	NAG	B	2	56.261	-20.899	9.434	1.00	45.88	C
HETATM	3303	C4	NAG	B	2	57.778	-20.747	9.271	1.00	46.84	C
HETATM	3304	C5	NAG	B	2	58.322	-21.678	8.204	1.00	43.57	C
HETATM	3305	C6	NAG	B	2	59.826	-21.554	7.977	1.00	46.50	C
HETATM	3306	C7	NAG	B	2	53.672	-23.172	10.204	1.00	46.80	C
HETATM	3307	C8	NAG	B	2	52.186	-23.059	10.033	1.00	43.89	C
HETATM	3308	N2	NAG	B	2	54.394	-22.391	9.390	1.00	45.09	N
HETATM	3309	O3	NAG	B	2	55.785	-20.254	10.596	1.00	45.43	O
HETATM	3310	O4	NAG	B	2	58.037	-19.440	8.825	1.00	52.20	O
HETATM	3311	O5	NAG	B	2	57.923	-22.995	8.494	1.00	41.31	O
HETATM	3312	O6	NAG	B	2	60.528	-22.457	8.807	1.00	53.27	O
HETATM	3313	O7	NAG	B	2	54.198	-23.953	11.023	1.00	45.21	O
HETATM	3314	C1	BMA	B	3	58.582	-18.581	9.835	1.00	53.59	C
HETATM	3315	C2	BMA	B	3	59.244	-17.431	9.079	1.00	55.78	C
HETATM	3316	C3	BMA	B	3	59.724	-16.392	10.107	1.00	60.46	C
HETATM	3317	C4	BMA	B	3	58.562	-15.843	10.952	1.00	58.22	C

HETATM	3318	C5	BMA	B	3	57.973	-17.091	11.616	1.00	55.74	C
HETATM	3319	C6	BMA	B	3	56.795	-16.817	12.515	1.00	56.11	C
HETATM	3320	O2	BMA	B	3	58.349	-16.852	8.131	1.00	51.16	O
HETATM	3321	O3	BMA	B	3	60.473	-15.337	9.556	1.00	69.40	O
HETATM	3322	O4	BMA	B	3	59.067	-14.931	11.912	1.00	56.23	O
HETATM	3323	O5	BMA	B	3	57.560	-18.059	10.671	1.00	52.71	O
HETATM	3324	O6	BMA	B	3	56.701	-17.968	13.315	1.00	57.79	O
HETATM	3325	C1	MAN	B	4	55.609	-17.853	14.229	1.00	64.02	C
HETATM	3326	C2	MAN	B	4	55.617	-19.137	15.057	1.00	68.58	C
HETATM	3327	C3	MAN	B	4	55.129	-20.288	14.148	1.00	68.91	C
HETATM	3328	C4	MAN	B	4	53.739	-19.941	13.601	1.00	68.46	C
HETATM	3329	C5	MAN	B	4	53.739	-18.605	12.836	1.00	69.14	C
HETATM	3330	C6	MAN	B	4	52.320	-18.196	12.410	1.00	70.08	C
HETATM	3331	O2	MAN	B	4	54.871	-18.923	16.270	1.00	70.49	O
HETATM	3332	O3	MAN	B	4	55.162	-21.538	14.829	1.00	71.34	O
HETATM	3333	O4	MAN	B	4	53.287	-20.986	12.773	1.00	69.59	O
HETATM	3334	O5	MAN	B	4	54.349	-17.580	13.620	1.00	65.17	O
HETATM	3335	O6	MAN	B	4	52.136	-16.786	12.371	1.00	73.36	O
HETATM	3336	C1	MAN	B	5	55.905	-22.612	14.194	1.00	72.43	C
HETATM	3337	C2	MAN	B	5	55.890	-23.828	15.132	1.00	74.01	C
HETATM	3338	C3	MAN	B	5	56.950	-23.679	16.235	1.00	75.13	C
HETATM	3339	C4	MAN	B	5	58.356	-23.463	15.633	1.00	75.45	C
HETATM	3340	C5	MAN	B	5	58.364	-22.349	14.557	1.00	74.29	C
HETATM	3341	C6	MAN	B	5	59.556	-22.475	13.609	1.00	74.93	C
HETATM	3342	O2	MAN	B	5	56.070	-25.041	14.411	1.00	72.63	O
HETATM	3343	O3	MAN	B	5	56.926	-24.804	17.102	1.00	75.20	O
HETATM	3344	O4	MAN	B	5	59.322	-23.214	16.650	1.00	73.57	O
HETATM	3345	O5	MAN	B	5	57.210	-22.276	13.727	1.00	72.21	O
HETATM	3346	O6	MAN	B	5	59.718	-21.229	12.943	1.00	77.11	O
HETATM	3347	C1	MAN	B	6	61.078	-15.728	8.312	1.00	79.77	C
HETATM	3348	C2	MAN	B	6	62.565	-15.719	8.599	1.00	82.83	C
HETATM	3349	C3	MAN	B	6	62.822	-14.253	9.014	1.00	84.11	C
HETATM	3350	C4	MAN	B	6	62.471	-13.250	7.878	1.00	84.45	C
HETATM	3351	C5	MAN	B	6	60.999	-13.473	7.481	1.00	85.71	C
HETATM	3352	C6	MAN	B	6	60.533	-12.575	6.321	1.00	87.08	C
HETATM	3353	O2	MAN	B	6	63.260	-16.221	7.462	1.00	84.86	O
HETATM	3354	O3	MAN	B	6	64.081	-14.140	9.655	1.00	83.99	O
HETATM	3355	O4	MAN	B	6	62.571	-11.895	8.278	1.00	84.76	O
HETATM	3356	O5	MAN	B	6	60.723	-14.862	7.227	1.00	83.32	O
HETATM	3357	O6	MAN	B	6	59.637	-11.591	6.819	1.00	87.88	O
HETATM	3358	C1	NAG	C	1	21.364	-14.997	-33.008	1.00	53.34	C
HETATM	3359	C2	NAG	C	1	22.258	-13.744	-33.048	1.00	57.64	C
HETATM	3360	C3	NAG	C	1	22.491	-13.353	-34.515	1.00	61.26	C
HETATM	3361	C4	NAG	C	1	23.045	-14.503	-35.354	1.00	63.93	C
HETATM	3362	C5	NAG	C	1	22.165	-15.749	-35.137	1.00	60.50	C
HETATM	3363	C6	NAG	C	1	22.743	-16.974	-35.796	1.00	59.90	C
HETATM	3364	C7	NAG	C	1	22.227	-12.074	-31.209	1.00	56.01	C
HETATM	3365	C8	NAG	C	1	21.438	-11.062	-30.455	1.00	55.06	C
HETATM	3366	N2	NAG	C	1	21.690	-12.641	-32.281	1.00	55.34	N
HETATM	3367	O3	NAG	C	1	23.362	-12.246	-34.606	1.00	64.57	O

HETATM	3368	04	NAG	C	1	23.033	-14.100	-36.719	1.00	69.96	O
HETATM	3369	05	NAG	C	1	22.015	-16.020	-33.755	1.00	57.21	O
HETATM	3370	06	NAG	C	1	21.716	-17.903	-36.002	1.00	61.11	O
HETATM	3371	07	NAG	C	1	23.345	-12.321	-30.793	1.00	60.47	O
HETATM	3372	C1	NAG	C	2	24.309	-14.061	-37.404	1.00	74.29	C
HETATM	3373	C2	NAG	C	2	24.083	-14.351	-38.903	1.00	77.44	C
HETATM	3374	C3	NAG	C	2	25.319	-14.095	-39.771	1.00	79.77	C
HETATM	3375	C4	NAG	C	2	26.042	-12.783	-39.440	1.00	80.58	C
HETATM	3376	C5	NAG	C	2	26.193	-12.625	-37.906	1.00	78.72	C
HETATM	3377	C6	NAG	C	2	26.804	-11.267	-37.536	1.00	78.44	C
HETATM	3378	C7	NAG	C	2	22.529	-16.142	-39.599	1.00	77.75	C
HETATM	3379	C8	NAG	C	2	22.594	-17.408	-40.406	1.00	78.22	C
HETATM	3380	N2	NAG	C	2	23.723	-15.735	-39.161	1.00	77.58	N
HETATM	3381	03	NAG	C	2	24.911	-14.123	-41.127	1.00	81.99	O
HETATM	3382	04	NAG	C	2	27.277	-12.707	-40.170	1.00	81.91	O
HETATM	3383	05	NAG	C	2	24.947	-12.804	-37.223	1.00	76.01	O
HETATM	3384	06	NAG	C	2	25.850	-10.322	-37.087	1.00	78.26	O
HETATM	3385	07	NAG	C	2	21.449	-15.563	-39.354	1.00	74.88	O
HETATM	3386	C	ACT	A	901	54.372	-30.043	-25.398	1.00	70.11	C
HETATM	3387	O	ACT	A	901	55.412	-29.957	-26.078	1.00	70.69	O
HETATM	3388	OXT	ACT	A	901	54.442	-30.898	-24.487	1.00	70.14	O
HETATM	3389	CH3	ACT	A	901	53.155	-29.206	-25.656	1.00	69.12	C
HETATM	3390	C	ACT	A	902	53.986	-22.973	-23.999	1.00	65.62	C
HETATM	3391	O	ACT	A	902	54.208	-23.111	-22.733	1.00	64.84	O
HETATM	3392	OXT	ACT	A	902	54.467	-21.955	-24.577	1.00	66.39	O
HETATM	3393	CH3	ACT	A	902	53.195	-23.939	-24.845	1.00	64.12	C
HETATM	3394	C	ACT	A	903	20.576	-36.961	-20.914	1.00	62.70	C
HETATM	3395	O	ACT	A	903	20.413	-36.000	-20.111	1.00	63.78	O
HETATM	3396	OXT	ACT	A	903	20.637	-36.692	-22.141	1.00	63.53	O
HETATM	3397	CH3	ACT	A	903	20.702	-38.340	-20.411	1.00	61.61	C
HETATM	3398	C	ACT	A	904	17.529	-24.115	-7.695	1.00	64.85	C
HETATM	3399	O	ACT	A	904	18.371	-24.601	-8.421	1.00	64.74	O
HETATM	3400	OXT	ACT	A	904	16.510	-23.746	-8.335	1.00	66.67	O
HETATM	3401	CH3	ACT	A	904	17.742	-24.000	-6.214	1.00	64.64	C
HETATM	3402	C	ACT	A	905	41.934	-21.737	-16.316	1.00	56.52	C
HETATM	3403	O	ACT	A	905	42.336	-21.125	-15.286	1.00	54.27	O
HETATM	3404	OXT	ACT	A	905	41.419	-21.074	-17.288	1.00	57.66	O
HETATM	3405	CH3	ACT	A	905	42.091	-23.211	-16.454	1.00	56.14	C
HETATM	3406	C	ACT	A	906	41.606	-39.113	-9.926	1.00	65.75	C
HETATM	3407	O	ACT	A	906	40.443	-39.082	-9.493	1.00	66.68	O
HETATM	3408	OXT	ACT	A	906	41.865	-40.110	-10.645	1.00	65.20	O
HETATM	3409	CH3	ACT	A	906	42.565	-38.017	-9.575	1.00	65.19	C
HETATM	3410	C	ACT	A	907	39.413	-46.114	3.035	1.00	72.09	C
HETATM	3411	O	ACT	A	907	40.324	-45.469	2.467	1.00	72.03	O
HETATM	3412	OXT	ACT	A	907	38.541	-45.434	3.662	1.00	70.66	O
HETATM	3413	CH3	ACT	A	907	39.425	-47.628	2.943	1.00	72.15	C
HETATM	3414	C1	GOL	A	601	25.727	-38.039	0.303	1.00	72.79	C
HETATM	3415	O1	GOL	A	601	26.091	-36.984	-0.558	1.00	69.01	O
HETATM	3416	C2	GOL	A	601	24.321	-37.883	0.883	1.00	73.32	C
HETATM	3417	O2	GOL	A	601	24.425	-37.443	2.225	1.00	72.12	O

HETATM	3418	C3	GOL	A	601	23.618	-39.245	0.831	1.00	73.19	C
HETATM	3419	O3	GOL	A	601	22.390	-39.156	0.140	1.00	73.06	O
HETATM	3420	O	HOH	A	908	32.597	-43.041	-15.837	1.00	37.59	O
HETATM	3421	O	HOH	A	909	58.794	-15.116	-3.538	1.00	52.71	O
HETATM	3422	O	HOH	A	910	43.668	-21.153	15.037	1.00	26.33	O
HETATM	3423	O	HOH	A	911	46.854	-27.667	5.683	1.00	30.61	O
HETATM	3424	O	HOH	A	912	47.712	-16.488	12.703	1.00	65.12	O
HETATM	3425	O	HOH	A	913	36.292	-32.376	-0.643	1.00	26.11	O
HETATM	3426	O	HOH	A	914	27.448	-34.630	-13.608	1.00	34.47	O
HETATM	3427	O	HOH	A	915	42.471	-33.322	-21.297	1.00	28.88	O
HETATM	3428	O	HOH	A	916	41.069	-37.049	-2.004	1.00	28.69	O
HETATM	3429	O	HOH	A	917	39.451	-42.529	-20.553	1.00	31.84	O
HETATM	3430	O	HOH	A	918	34.019	-43.211	15.746	1.00	37.22	O
HETATM	3431	O	HOH	A	919	46.833	-36.471	1.200	1.00	27.73	O
HETATM	3432	O	HOH	A	920	33.327	-22.986	-16.300	1.00	29.45	O
HETATM	3433	O	HOH	A	921	30.186	-27.367	-11.275	1.00	26.04	O
HETATM	3434	O	HOH	A	922	63.858	-14.228	12.832	1.00	34.26	O
HETATM	3435	O	HOH	A	923	47.889	-20.827	-4.506	1.00	27.89	O
HETATM	3436	O	HOH	A	924	32.497	-26.413	-10.008	1.00	24.00	O
HETATM	3437	O	HOH	A	925	54.628	-41.575	11.179	1.00	40.16	O
HETATM	3438	O	HOH	A	926	37.436	-23.252	7.920	1.00	28.27	O
HETATM	3439	O	HOH	A	927	24.946	-24.893	3.613	1.00	38.72	O
HETATM	3440	O	HOH	A	928	50.808	-21.346	-11.519	1.00	38.00	O
HETATM	3441	O	HOH	A	929	46.703	-15.689	-16.387	1.00	45.84	O
HETATM	3442	O	HOH	A	930	28.946	-20.404	-19.494	1.00	35.22	O
HETATM	3443	O	HOH	A	931	43.029	-35.572	6.408	1.00	31.01	O
HETATM	3444	O	HOH	A	932	48.405	-15.938	-14.183	1.00	32.82	O
HETATM	3445	O	HOH	A	933	33.674	-41.139	-9.197	1.00	39.53	O
HETATM	3446	O	HOH	A	934	47.321	-17.195	-7.499	1.00	29.61	O
HETATM	3447	O	HOH	A	935	53.566	-31.101	-18.731	1.00	40.61	O
HETATM	3448	O	HOH	A	936	54.153	-37.283	-10.347	1.00	43.42	O
HETATM	3449	O	HOH	A	937	52.006	-24.490	-18.397	1.00	31.21	O
HETATM	3450	O	HOH	A	938	54.448	-33.898	12.403	1.00	43.58	O
HETATM	3451	O	HOH	A	939	31.062	-37.061	-6.727	1.00	35.34	O
HETATM	3452	O	HOH	A	940	26.729	-17.315	-12.313	1.00	40.74	O
HETATM	3453	O	HOH	A	941	31.063	-23.844	4.594	1.00	42.10	O
HETATM	3454	O	HOH	A	942	35.035	-19.885	-22.217	1.00	41.50	O
HETATM	3455	O	HOH	A	943	46.636	-13.758	4.921	1.00	39.54	O
HETATM	3456	O	HOH	A	944	62.742	-29.142	-9.993	1.00	41.42	O
HETATM	3457	O	HOH	A	945	45.629	-38.130	-16.458	1.00	40.71	O
HETATM	3458	O	HOH	A	946	47.654	-16.826	-18.795	1.00	41.97	O
HETATM	3459	O	HOH	A	947	35.439	-19.669	-7.972	1.00	34.42	O
HETATM	3460	O	HOH	A	948	18.748	-30.037	-13.202	1.00	37.18	O
HETATM	3461	O	HOH	A	949	58.227	-32.511	-7.637	1.00	39.23	O
HETATM	3462	O	HOH	A	950	37.423	-12.911	8.276	1.00	51.36	O
HETATM	3463	O	HOH	A	951	60.495	-29.938	-17.296	1.00	37.47	O
HETATM	3464	O	HOH	A	952	57.904	-28.023	3.612	1.00	34.14	O
HETATM	3465	O	HOH	A	953	68.134	-26.661	-15.947	1.00	45.81	O
HETATM	3466	O	HOH	A	954	44.416	-45.516	11.414	1.00	49.55	O
HETATM	3467	O	HOH	A	955	29.080	-19.029	-8.361	1.00	35.30	O

HETATM	3468	0	HOH	A	956	52.465	-41.682	-5.382	1.00	49.92	0
HETATM	3469	0	HOH	A	957	29.470	-17.465	-10.830	1.00	39.92	0
HETATM	3470	0	HOH	A	958	45.064	-28.489	-26.497	1.00	45.52	0
HETATM	3471	0	HOH	A	959	46.270	-19.429	-6.037	1.00	26.62	0
HETATM	3472	0	HOH	A	960	33.207	-7.867	4.379	1.00	54.99	0
HETATM	3473	0	HOH	A	961	23.396	-32.170	-35.069	1.00	50.71	0
HETATM	3474	0	HOH	A	962	21.988	-35.148	-9.868	1.00	43.77	0
HETATM	3475	0	HOH	A	963	50.309	-19.461	-13.808	1.00	28.98	0
HETATM	3476	0	HOH	A	964	17.818	-28.092	-14.421	1.00	41.62	0
HETATM	3477	0	HOH	A	965	56.620	-32.184	-16.577	1.00	39.59	0
HETATM	3478	0	HOH	A	966	11.268	-13.217	-27.759	1.00	51.80	0
HETATM	3479	0	HOH	A	967	23.165	-5.157	-27.674	1.00	55.16	0
HETATM	3480	0	HOH	A	968	53.313	-33.822	-19.119	1.00	56.21	0
HETATM	3481	0	HOH	A	969	35.057	-35.769	14.525	1.00	38.02	0
HETATM	3482	0	HOH	A	970	39.008	-23.251	-26.479	1.00	45.37	0
HETATM	3483	0	HOH	A	971	32.594	-22.599	-28.811	1.00	45.29	0
HETATM	3484	0	HOH	A	972	30.356	-39.175	-10.666	1.00	39.20	0
HETATM	3485	0	HOH	A	973	47.698	-22.827	-20.106	1.00	33.50	0
HETATM	3486	0	HOH	A	974	65.637	-18.530	-14.152	1.00	47.80	0
HETATM	3487	0	HOH	A	975	34.041	-44.281	1.084	1.00	37.63	0
HETATM	3488	0	HOH	A	976	50.226	-30.431	22.142	1.00	56.21	0
HETATM	3489	0	HOH	A	977	19.646	-20.118	-12.500	1.00	41.12	0
HETATM	3490	0	HOH	A	978	49.919	-38.475	-13.681	1.00	40.29	0
HETATM	3491	0	HOH	A	979	59.048	-13.903	-7.878	1.00	30.38	0
HETATM	3492	0	HOH	A	980	50.217	-8.238	-14.057	1.00	57.00	0
HETATM	3493	0	HOH	A	981	41.925	-32.673	2.744	1.00	34.77	0
HETATM	3494	0	HOH	A	982	42.876	-41.239	4.105	1.00	39.50	0
HETATM	3495	0	HOH	A	983	33.640	-14.327	8.403	1.00	56.15	0
HETATM	3496	0	HOH	A	984	34.000	-10.875	-11.859	1.00	41.64	0
HETATM	3497	0	HOH	A	985	32.149	-18.407	-14.701	1.00	36.06	0
HETATM	3498	0	HOH	A	986	58.582	-24.568	11.083	1.00	50.96	0
HETATM	3499	0	HOH	A	987	18.329	-11.749	-9.383	1.00	59.83	0
HETATM	3500	0	HOH	A	988	20.595	-19.856	-15.001	1.00	39.10	0
HETATM	3501	0	HOH	A	989	36.630	-44.442	-2.713	1.00	47.01	0
HETATM	3502	0	HOH	A	990	13.195	-7.396	-14.874	1.00	77.39	0
HETATM	3503	0	HOH	A	991	27.683	-17.839	4.674	1.00	65.39	0
HETATM	3504	0	HOH	A	992	29.677	-26.153	5.070	1.00	44.97	0
HETATM	3505	0	HOH	A	993	35.045	-28.910	-31.045	1.00	52.37	0
HETATM	3506	0	HOH	A	994	45.356	-38.793	18.745	1.00	52.68	0
HETATM	3507	0	HOH	A	995	35.726	-36.221	3.942	1.00	33.27	0
HETATM	3508	0	HOH	A	996	17.430	-34.340	-14.163	1.00	49.72	0
HETATM	3509	0	HOH	A	997	61.398	-15.199	-19.444	1.00	52.15	0
HETATM	3510	0	HOH	A	998	33.345	-37.217	2.728	1.00	38.76	0
HETATM	3511	0	HOH	A	999	62.207	-30.453	6.567	1.00	39.74	0
HETATM	3512	0	HOH	A	1000	50.479	-20.528	15.360	1.00	58.64	0
HETATM	3513	0	HOH	A	1001	31.810	-45.903	-24.887	1.00	58.33	0
HETATM	3514	0	HOH	A	1002	31.332	-37.117	9.198	1.00	42.63	0
HETATM	3515	0	HOH	A	1003	31.167	-15.917	3.429	1.00	40.72	0
HETATM	3516	0	HOH	A	1004	20.512	-13.288	-11.755	1.00	45.73	0
HETATM	3517	0	HOH	A	1005	64.689	-17.412	-21.612	1.00	53.74	0

HETATM	3518	0	HOH	A1006	61.148	-38.246	14.675	1.00	61.34	0
HETATM	3519	0	HOH	A1007	62.599	-19.055	-8.632	1.00	52.01	0
HETATM	3520	0	HOH	A1008	63.792	-18.828	-24.073	1.00	45.58	0
HETATM	3521	0	HOH	A1009	42.935	-45.073	1.069	1.00	36.10	0
HETATM	3522	0	HOH	A1010	51.628	-9.243	-7.671	1.00	50.60	0
HETATM	3523	0	HOH	A1011	23.182	-25.149	-2.582	1.00	52.81	0
HETATM	3524	0	HOH	A1012	39.775	-43.183	-14.715	1.00	33.15	0
HETATM	3525	0	HOH	A1013	35.333	-27.660	5.797	1.00	41.67	0
HETATM	3526	0	HOH	A1014	40.209	-40.157	-20.782	1.00	48.87	0
HETATM	3527	0	HOH	A1015	61.257	-39.173	-9.540	1.00	67.15	0
HETATM	3528	0	HOH	A1016	18.369	-29.876	-20.315	1.00	63.54	0
HETATM	3529	0	HOH	A1017	57.146	-16.781	-15.343	1.00	40.23	0
HETATM	3530	0	HOH	A1018	26.360	-39.929	-9.049	1.00	61.27	0
HETATM	3531	0	HOH	A1019	64.656	-36.672	4.196	1.00	54.31	0
HETATM	3532	0	HOH	A1020	35.904	-17.964	-10.185	1.00	43.79	0
HETATM	3533	0	HOH	A1021	42.088	-42.760	14.474	1.00	43.59	0
HETATM	3534	0	HOH	A1022	32.488	-51.588	11.105	1.00	51.50	0
HETATM	3535	0	HOH	A1023	38.233	-48.870	11.791	1.00	55.22	0
HETATM	3536	0	HOH	A1024	33.243	-16.360	-15.835	1.00	44.43	0
HETATM	3537	0	HOH	A1025	17.044	-26.784	-29.169	1.00	50.12	0
HETATM	3538	0	HOH	A1026	33.811	-20.207	-3.868	1.00	35.29	0
HETATM	3539	0	HOH	A1027	20.092	-33.491	-9.951	1.00	51.14	0
HETATM	3540	0	HOH	A1028	68.453	-22.778	-17.404	1.00	53.77	0
HETATM	3541	0	HOH	A1029	45.289	-9.589	-10.867	1.00	50.69	0
HETATM	3542	0	HOH	A1030	32.209	-25.629	-28.488	1.00	43.32	0
HETATM	3543	0	HOH	A1031	32.925	-18.905	5.600	1.00	57.37	0
HETATM	3544	0	HOH	A1032	40.335	-42.240	-10.252	1.00	42.10	0
HETATM	3545	0	HOH	A1033	63.164	-20.533	-5.593	1.00	61.18	0
HETATM	3546	0	HOH	A1034	25.974	-33.213	-6.206	1.00	46.93	0
HETATM	3547	0	HOH	A1035	36.439	-35.224	-27.971	1.00	46.34	0
HETATM	3548	0	HOH	A1036	16.835	-20.813	-12.538	1.00	46.06	0
HETATM	3549	0	HOH	A1037	49.563	-35.016	-19.340	1.00	50.94	0
HETATM	3550	0	HOH	A1038	31.774	-18.360	-11.902	1.00	37.22	0
HETATM	3551	0	HOH	A1039	38.631	-44.403	17.877	1.00	57.80	0
HETATM	3552	0	HOH	A1040	47.336	-39.577	-14.647	1.00	57.36	0
HETATM	3553	0	HOH	A1041	48.092	-42.842	-4.359	1.00	40.63	0
HETATM	3554	0	HOH	A1042	32.494	-18.454	2.711	1.00	53.45	0
HETATM	3555	0	HOH	A1043	33.521	-16.214	-11.729	1.00	45.92	0
HETATM	3556	0	HOH	A1044	53.666	-13.018	1.923	1.00	56.61	0
HETATM	3557	0	HOH	A1045	32.828	-38.242	-2.303	1.00	48.85	0
HETATM	3558	0	HOH	A1046	42.226	-33.462	5.428	1.00	37.36	0
HETATM	3559	0	HOH	A1047	47.897	-34.244	-21.339	1.00	51.57	0
HETATM	3560	0	HOH	A1048	30.837	-31.007	4.171	1.00	41.97	0
HETATM	3561	0	HOH	A1049	61.480	-19.291	11.818	1.00	57.64	0
HETATM	3562	0	HOH	A1050	40.899	-44.216	-3.398	1.00	49.08	0
HETATM	3563	0	HOH	A1051	26.859	-41.235	-11.419	1.00	53.52	0
HETATM	3564	0	HOH	A1052	46.167	-40.711	-25.606	1.00	56.07	0
HETATM	3565	0	HOH	A1053	14.773	-17.502	-14.445	1.00	60.83	0
HETATM	3566	0	HOH	A1054	21.017	-33.642	-21.230	1.00	51.28	0
HETATM	3567	0	HOH	A1055	28.051	-3.842	-15.982	1.00	52.51	0

HETATM	3568	0	HOH	A1056	52.276	-28.592	19.661	1.00	54.78	0
HETATM	3569	0	HOH	A1057	39.037	-32.831	-24.427	1.00	51.05	0
HETATM	3570	0	HOH	A1058	69.435	-26.971	-20.165	1.00	66.67	0
HETATM	3571	0	HOH	A1059	34.562	-34.739	16.833	1.00	53.04	0
HETATM	3572	0	HOH	A1060	64.168	-33.828	-12.307	1.00	74.20	0
HETATM	3573	0	HOH	A1061	59.008	-34.324	17.795	1.00	58.12	0
HETATM	3574	0	HOH	A1062	64.744	-27.649	-0.431	1.00	57.52	0
HETATM	3575	0	HOH	A1063	61.027	-21.394	0.562	1.00	53.05	0
HETATM	3576	0	HOH	A1064	50.914	-15.751	-14.814	1.00	34.94	0
HETATM	3577	0	HOH	A1065	34.542	-19.797	-14.562	1.00	37.27	0
HETATM	3578	0	HOH	A1066	38.033	-22.507	-22.481	1.00	42.91	0
HETATM	3579	0	HOH	A1067	30.352	-41.250	-6.287	1.00	43.23	0
HETATM	3580	0	HOH	A1068	15.048	-27.805	-30.665	1.00	46.21	0
HETATM	3581	0	HOH	A1069	30.045	-35.497	-33.838	1.00	68.01	0
HETATM	3582	0	HOH	A1070	40.097	-44.549	-17.151	1.00	41.12	0
HETATM	3583	0	HOH	A1071	32.580	-44.697	13.833	1.00	42.17	0
HETATM	3584	0	HOH	A1072	33.317	-43.640	-8.755	1.00	51.44	0
HETATM	3585	0	HOH	A1073	31.218	-39.651	-8.292	1.00	44.61	0
HETATM	3586	0	HOH	A1074	57.640	-17.428	-19.646	1.00	47.19	0
HETATM	3587	0	HOH	A1075	15.573	-20.445	-27.247	1.00	68.54	0
HETATM	3588	0	HOH	A1076	23.756	-22.562	3.575	1.00	42.02	0
HETATM	3589	0	HOH	A1077	54.623	-9.936	-13.472	1.00	47.07	0
HETATM	3590	0	HOH	A1078	30.890	-19.093	-16.809	1.00	48.14	0
HETATM	3591	0	HOH	A1079	36.497	-37.444	-1.913	1.00	39.05	0
HETATM	3592	0	HOH	A1080	34.706	-9.870	1.264	1.00	40.90	0
HETATM	3593	0	HOH	A1081	36.664	-23.165	10.979	1.00	53.03	0
HETATM	3594	0	HOH	A1082	42.755	-36.956	-20.486	1.00	49.04	0
HETATM	3595	0	HOH	A1083	55.570	-19.246	5.890	1.00	40.74	0
HETATM	3596	0	HOH	A1084	50.162	-24.470	-20.623	1.00	37.94	0
HETATM	3597	0	HOH	A1085	63.905	-33.613	12.439	1.00	56.22	0
HETATM	3598	0	HOH	A1086	56.335	-25.235	11.710	1.00	53.88	0
HETATM	3599	0	HOH	A1087	33.155	-35.345	19.043	1.00	56.98	0
HETATM	3600	0	HOH	A1088	48.083	-40.812	-20.762	1.00	72.65	0
HETATM	3601	0	HOH	A1089	59.487	-15.291	-12.197	1.00	60.41	0
HETATM	3602	0	HOH	A1090	60.938	-20.991	-27.413	1.00	43.11	0
HETATM	3603	0	HOH	A1091	19.828	-30.567	-10.575	1.00	45.30	0
HETATM	3604	0	HOH	A1092	23.498	-31.879	3.315	1.00	61.58	0
HETATM	3605	0	HOH	A1093	53.203	-11.575	-0.576	1.00	54.40	0
HETATM	3606	0	HOH	A1094	21.955	-19.851	-33.696	1.00	50.81	0
HETATM	3607	0	HOH	A1095	59.537	-35.461	-5.189	1.00	50.65	0
HETATM	3608	0	HOH	A1096	34.653	-25.095	5.205	1.00	39.17	0
HETATM	3609	0	HOH	A1097	49.453	-41.097	-5.447	1.00	44.89	0
HETATM	3610	0	HOH	A1098	36.078	-18.123	-13.080	1.00	40.67	0
HETATM	3611	0	HOH	A1099	36.232	-45.360	1.767	1.00	41.41	0
HETATM	3612	0	HOH	A1100	29.822	-21.183	4.923	1.00	56.20	0
HETATM	3613	0	HOH	A1101	32.773	-39.973	-30.888	1.00	50.65	0
HETATM	3614	0	HOH	A1102	43.670	-14.314	8.149	1.00	53.13	0
HETATM	3615	0	HOH	A1103	51.788	-37.963	-16.664	1.00	70.96	0
HETATM	3616	0	HOH	A1104	44.969	-24.133	-19.825	1.00	44.47	0
HETATM	3617	0	HOH	A1105	60.421	-24.720	18.574	1.00	55.26	0

HETATM	3618	0	HOH	A1106	32.761	-13.216	-23.658	1.00	47.44	0
HETATM	3619	0	HOH	A1107	15.938	-24.234	-17.563	1.00	45.97	0
HETATM	3620	0	HOH	A1108	49.096	-30.549	11.691	1.00	53.88	0
HETATM	3621	0	HOH	A1109	32.837	-29.666	-30.050	1.00	45.86	0
HETATM	3622	0	HOH	A1110	48.434	-26.227	12.838	1.00	52.25	0
HETATM	3623	0	HOH	A1111	59.313	-32.474	-16.164	1.00	48.63	0
HETATM	3624	0	HOH	A1112	68.029	-33.306	8.318	1.00	58.59	0
HETATM	3625	0	HOH	A1113	23.972	-17.994	3.550	1.00	53.79	0
HETATM	3626	0	HOH	A1114	49.730	-42.431	11.330	1.00	50.00	0
HETATM	3627	0	HOH	A1115	66.585	-20.400	-25.123	1.00	48.88	0
HETATM	3628	0	HOH	A1116	61.302	-18.608	-25.780	1.00	53.07	0
HETATM	3629	0	HOH	A1117	67.274	-28.734	-25.151	1.00	57.51	0
HETATM	3630	0	HOH	A1118	58.192	-37.738	-12.372	1.00	49.36	0
HETATM	3631	0	HOH	A1119	28.862	-10.180	3.821	1.00	65.02	0
HETATM	3632	0	HOH	A1120	67.068	-26.508	-8.528	1.00	58.03	0
HETATM	3633	0	HOH	A1121	52.590	-38.568	1.372	1.00	62.47	0
HETATM	3634	0	HOH	A1122	22.598	-26.364	4.587	1.00	56.87	0
HETATM	3635	0	HOH	A1123	58.974	-12.390	11.182	1.00	48.96	0
HETATM	3636	0	HOH	A1124	39.339	-17.507	-13.513	1.00	53.69	0
HETATM	3637	0	HOH	A1125	39.304	-46.795	-16.429	1.00	61.52	0
HETATM	3638	0	HOH	A1126	35.881	-47.966	2.572	1.00	50.32	0
HETATM	3639	0	HOH	A1127	35.524	-44.931	-8.541	1.00	56.45	0
HETATM	3640	0	HOH	A1128	19.784	-30.878	-5.868	1.00	61.98	0
HETATM	3641	0	HOH	A1129	55.795	-38.874	-4.981	1.00	61.57	0
HETATM	3642	0	HOH	A1130	58.464	-41.432	7.426	1.00	61.24	0
HETATM	3643	0	HOH	A1131	38.523	-46.248	-13.492	1.00	55.04	0
HETATM	3644	0	HOH	A1132	64.378	-41.026	-2.892	1.00	63.23	0
HETATM	3645	0	HOH	A1133	56.273	-36.902	21.812	1.00	41.31	0
HETATM	3646	0	HOH	A1134	63.340	-32.390	-27.153	1.00	55.69	0
HETATM	3647	0	HOH	A1135	53.617	-39.066	-7.566	1.00	62.81	0
HETATM	3648	0	HOH	A1136	53.121	-13.300	-21.540	1.00	61.00	0
HETATM	3649	0	HOH	A1137	43.979	-13.070	5.828	1.00	40.93	0
HETATM	3650	0	HOH	A1138	55.601	-34.150	-17.845	1.00	47.73	0
HETATM	3651	0	HOH	A1139	38.015	-43.196	-4.496	1.00	54.63	0
HETATM	3652	0	HOH	A1140	66.233	-23.101	-25.230	1.00	58.98	0
HETATM	3653	0	HOH	A1141	58.136	-37.249	-3.390	1.00	54.58	0
HETATM	3654	0	HOH	A1142	33.444	-47.300	17.840	1.00	59.34	0
HETATM	3655	0	HOH	A1143	53.813	-10.552	-16.130	1.00	59.55	0
HETATM	3656	0	HOH	A1144	50.984	-25.180	-23.068	1.00	43.32	0
HETATM	3657	0	HOH	A1145	47.197	-24.967	20.866	1.00	46.42	0
HETATM	3658	0	HOH	A1146	45.139	-46.094	8.867	1.00	49.62	0
HETATM	3659	0	HOH	A1147	25.541	-31.169	-33.739	1.00	49.45	0
HETATM	3660	0	HOH	A1148	58.032	-18.496	5.548	1.00	38.48	0
HETATM	3661	0	HOH	A1149	56.717	-39.352	20.278	1.00	46.22	0
HETATM	3662	0	HOH	A1150	49.563	-14.755	10.879	1.00	76.06	0
HETATM	3663	0	HOH	A1151	48.118	-30.075	14.057	1.00	55.47	0
HETATM	3664	0	HOH	A1152	15.633	-20.439	-14.690	1.00	54.25	0
HETATM	3665	0	HOH	A1153	51.391	-11.192	1.488	1.00	61.95	0
HETATM	3666	0	HOH	A1154	60.583	-28.535	3.980	1.00	49.76	0
HETATM	3667	0	HOH	A1155	32.556	-32.404	0.696	1.00	42.26	0

HETATM	3668	0	HOH	A1156	28.955	-46.961	-13.213	1.00	55.67	0
HETATM	3669	0	HOH	A1157	19.031	-26.513	1.316	1.00	57.05	0
HETATM	3670	0	HOH	A1158	48.305	-43.480	12.854	1.00	61.39	0
HETATM	3671	0	HOH	A1159	60.009	-35.721	-12.453	1.00	46.33	0
HETATM	3672	0	HOH	A1160	59.234	-18.129	0.640	1.00	54.73	0
HETATM	3673	0	HOH	A1161	31.072	-54.023	9.110	1.00	66.61	0
HETATM	3674	0	HOH	A1162	22.210	-17.653	1.632	1.00	58.00	0
HETATM	3675	0	HOH	A1163	34.584	-42.050	-30.576	1.00	61.55	0
HETATM	3676	0	HOH	A1164	58.670	-43.612	10.444	1.00	70.60	0
HETATM	3677	0	HOH	A1165	48.934	-23.904	12.058	1.00	51.41	0
HETATM	3678	0	HOH	A1166	27.007	-41.085	2.920	1.00	54.83	0
HETATM	3679	0	HOH	A1167	57.838	-34.669	-20.074	1.00	47.63	0
HETATM	3680	0	HOH	A1168	42.630	-27.094	-16.285	1.00	36.30	0
HETATM	3681	0	HOH	A1169	60.302	-19.505	5.020	1.00	42.85	0
HETATM	3682	0	HOH	A1170	64.005	-35.911	11.936	1.00	55.84	0
HETATM	3683	0	HOH	A1171	25.358	-37.645	-31.569	1.00	60.52	0
HETATM	3684	0	HOH	A1172	54.131	-13.368	-16.785	1.00	57.21	0
HETATM	3685	0	HOH	A1173	70.116	-26.905	-12.942	1.00	72.60	0
HETATM	3686	0	HOH	A1174	34.134	-25.735	-31.455	1.00	58.01	0
HETATM	3687	0	HOH	A1175	41.116	-45.914	-1.363	1.00	53.57	0
HETATM	3688	0	HOH	A1176	27.979	-42.241	5.009	1.00	60.83	0
HETATM	3689	0	HOH	A1177	61.843	-26.784	15.032	1.00	60.94	0
HETATM	3690	0	HOH	A1178	44.230	-15.834	-15.144	1.00	44.63	0
HETATM	3691	0	HOH	A1179	51.144	-12.168	-23.403	1.00	51.65	0
HETATM	3692	0	HOH	A1180	53.219	-40.357	5.285	1.00	65.27	0
HETATM	3693	0	HOH	A1181	44.293	-43.387	-11.316	1.00	62.02	0
HETATM	3694	0	HOH	A1182	44.381	-32.817	-19.582	1.00	71.37	0
HETATM	3695	0	HOH	A1183	29.486	-40.782	6.304	1.00	58.94	0
HETATM	3696	0	HOH	A1184	57.969	-9.011	-12.618	1.00	64.52	0
HETATM	3697	0	HOH	A1185	36.739	-18.486	-25.929	1.00	61.73	0
HETATM	3698	0	HOH	A1186	22.189	-39.884	-13.802	1.00	61.06	0
HETATM	3699	0	HOH	A1187	45.885	-42.785	16.705	1.00	52.54	0
HETATM	3700	0	HOH	A1188	47.064	-42.541	-10.365	1.00	57.90	0
HETATM	3701	0	HOH	A1189	45.637	-45.010	4.973	1.00	55.66	0
HETATM	3702	0	HOH	A1190	50.277	-26.691	15.488	1.00	59.36	0
HETATM	3703	0	HOH	A1191	39.216	-41.783	-28.474	1.00	56.93	0
HETATM	3704	0	HOH	A1192	49.888	-19.870	7.859	1.00	49.52	0
HETATM	3705	0	HOH	A1193	40.787	-43.807	-18.656	1.00	57.00	0
HETATM	3706	0	HOH	A1194	39.092	-36.051	-28.214	1.00	47.12	0
HETATM	3707	0	HOH	A1195	51.177	-5.867	-5.361	1.00	68.21	0
HETATM	3708	0	HOH	A1196	30.998	-47.304	-14.789	1.00	62.18	0
HETATM	3709	0	HOH	A1197	29.703	-45.559	-23.742	1.00	46.03	0
HETATM	3710	0	HOH	A1198	14.746	-18.060	-28.609	1.00	63.32	0
HETATM	3711	0	HOH	A1199	9.867	-16.394	-24.737	0.50	30.34	0
HETATM	3712	0	HOH	A1200	31.708	-34.705	14.562	1.00	56.74	0
HETATM	3713	0	HOH	A1201	29.170	-53.494	7.126	1.00	68.58	0
HETATM	3714	0	HOH	A1202	63.328	-10.899	-18.701	1.00	61.98	0
HETATM	3715	0	HOH	A1203	62.720	-42.518	9.202	1.00	58.43	0
HETATM	3716	0	HOH	A1204	30.024	-45.864	-0.613	1.00	54.99	0
HETATM	3717	0	HOH	A1205	58.357	-27.516	16.291	1.00	52.18	0

HETATM	3718	0	HOH	A1206	17.198	-28.980	-9.045	1.00	58.97	0
HETATM	3719	0	HOH	A1207	41.780	-19.506	7.661	1.00	47.54	0
HETATM	3720	0	HOH	A1208	23.064	-37.692	-31.780	1.00	60.58	0
HETATM	3721	0	HOH	A1209	27.596	-34.331	-33.944	1.00	62.19	0
HETATM	3722	0	HOH	A1210	23.971	-41.695	-14.555	1.00	57.71	0
HETATM	3723	0	HOH	A1211	20.180	-13.818	-38.260	1.00	67.15	0
HETATM	3724	0	HOH	A1212	30.032	-4.542	-11.304	1.00	60.03	0
HETATM	3725	0	HOH	A1213	16.968	-23.769	-23.749	1.00	56.30	0
HETATM	3726	0	HOH	A1214	52.023	-42.962	0.703	1.00	61.43	0
HETATM	3727	0	HOH	A1215	16.665	-32.175	-13.161	1.00	46.22	0
HETATM	3728	0	HOH	A1216	41.816	-17.150	7.476	1.00	48.63	0
HETATM	3729	0	HOH	A1217	41.094	-25.778	-16.844	1.00	54.24	0
HETATM	3730	0	HOH	A1218	53.931	-38.056	-15.360	1.00	54.38	0
HETATM	3731	0	HOH	A1219	57.327	-25.914	3.685	1.00	40.24	0
HETATM	3732	0	HOH	A1220	40.131	-15.052	-9.813	1.00	64.19	0
HETATM	3733	0	HOH	A1221	39.802	-34.119	17.706	1.00	38.41	0
HETATM	3734	0	HOH	A1222	32.535	-31.577	8.651	1.00	41.80	0
HETATM	3735	0	HOH	A1223	18.945	-10.280	-33.140	1.00	61.04	0
HETATM	3736	0	HOH	A1224	16.793	-12.947	-24.819	1.00	53.98	0
HETATM	3737	0	HOH	A1225	36.364	-14.391	-18.336	1.00	53.05	0
HETATM	3738	0	HOH	A1226	50.168	-35.048	-3.383	1.00	37.01	0
HETATM	3739	0	HOH	A1227	70.351	-34.203	-3.907	1.00	59.79	0
HETATM	3740	0	HOH	A1228	32.788	-10.072	-25.669	1.00	65.44	0
HETATM	3741	0	HOH	A1229	32.518	-26.542	-24.831	1.00	42.34	0
HETATM	3742	0	HOH	A1230	25.354	-26.179	-34.436	1.00	52.64	0
HETATM	3743	0	HOH	A1231	30.091	-19.414	2.544	1.00	56.73	0
HETATM	3744	0	HOH	A1232	34.301	-33.689	0.921	1.00	39.81	0
HETATM	3745	0	HOH	A1233	52.633	-35.902	-2.522	1.00	46.78	0
HETATM	3746	0	HOH	A1234	28.418	-6.777	1.215	1.00	58.76	0
HETATM	3747	0	HOH	A1235	36.823	-3.792	-17.627	1.00	59.99	0
HETATM	3748	0	HOH	A1236	67.275	-22.018	-6.248	1.00	65.65	0
HETATM	3749	0	HOH	A1237	58.715	-25.318	1.565	1.00	48.35	0
HETATM	3750	0	HOH	A1238	24.418	-9.486	-7.041	1.00	55.44	0
HETATM	3751	0	HOH	A1239	60.275	-32.487	-5.838	1.00	48.48	0
HETATM	3752	0	HOH	A1240	38.307	-20.674	9.354	1.00	49.67	0
HETATM	3753	0	HOH	A1241	45.430	-45.624	-8.099	1.00	51.60	0
HETATM	3754	0	HOH	A1242	59.537	-17.353	-3.116	1.00	56.53	0
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