```
HEADER    LYASE                                   06-MAY-02   1LOH
TITLE     STREPTOCOCCUS PNEUMONIAE HYALURONATE LYASE IN COMPLEX WITH
TITLE    2 HEXASACCHARIDE HYALURONAN SUBSTRATE
CAVEAT     1LOH    BDP B 6 HAS WRONG CHIRALITY AT ATOM C4
COMPND    MOL_ID: 1;
COMPND   2 MOLECULE: HYALURONATE LYASE;
COMPND   3 CHAIN: A;
COMPND   4 SYNONYM: HYALURONIDASE;
COMPND   5 EC: 4.2.2.1;
COMPND   6 ENGINEERED: YES;
COMPND   7 MUTATION: YES
SOURCE    MOL_ID: 1;
SOURCE   2 ORGANISM_SCIENTIFIC: STREPTOCOCCUS PNEUMONIAE;
SOURCE   3 ORGANISM_TAXID: 1313;
SOURCE   4 EXPRESSION_SYSTEM: ESCHERICHIA COLI;
SOURCE   5 EXPRESSION_SYSTEM_TAXID: 562
KEYWDS    PROTEIN-CARBOHYDRATE COMPLEX, LYASE
EXPDTA    X-RAY DIFFRACTION
AUTHOR    M.J.JEDRZEJAS,L.V.MELLO,B.L.DE GROOT,S.LI
REVDAT   8   14-FEB-24 1LOH    1       REMARK
REVDAT   7   27-OCT-21 1LOH    1       SEQADV HETSYN
REVDAT   6   29-JUL-20 1LOH    1       CAVEAT COMPND REMARK HETNAM
REVDAT   6 2                   1       LINK   SITE   ATOM
REVDAT   5   13-JUL-11 1LOH    1       VERSN
REVDAT   4   23-JUN-10 1LOH    1       HETNAM
REVDAT   3   24-FEB-09 1LOH    1       VERSN
REVDAT   2   01-APR-03 1LOH    1       JRNL
REVDAT   1   07-AUG-02 1LOH    0
JRNL        AUTH   M.J.JEDRZEJAS,L.V.MELLO,B.L.DE GROOT,S.LI
JRNL        TITL   MECHANISM OF HYALURONAN DEGRADATION BY STREPTOCOCCUS
JRNL        TITL 2 PNEUMONIAE HYALURONATE LYASE. STRUCTURES OF COMPLEXES WITH
JRNL        TITL 3 THE SUBSTRATE.
JRNL        REF    J.BIOL.CHEM.                  V. 277 28287 2002
JRNL        REFN                   ISSN 0021-9258
JRNL        PMID   11991948
JRNL        DOI    10.1074/JBC.M112009200
REMARK   2
REMARK   2 RESOLUTION.    2.00 ANGSTROMS.
REMARK   3
REMARK   3 REFINEMENT.
REMARK   3   PROGRAM     : X-PLOR 3.851
REMARK   3   AUTHORS     : BRUNGER
REMARK   3
REMARK   3  DATA USED IN REFINEMENT.
REMARK   3   RESOLUTION RANGE HIGH (ANGSTROMS) : 2.00
REMARK   3   RESOLUTION RANGE LOW  (ANGSTROMS) : 20.00
REMARK   3   DATA CUTOFF            (SIGMA(F)) : 2.000
REMARK   3   DATA CUTOFF HIGH         (ABS(F)) : NULL
REMARK   3   DATA CUTOFF LOW          (ABS(F)) : NULL
REMARK   3   COMPLETENESS (WORKING+TEST)   (%) : NULL
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Halozyme EX2178
Merck v. Halozyme
PGR2025-00050

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REMARK   3   NUMBER OF REFLECTIONS             : 58376
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT.
REMARK   3   CROSS-VALIDATION METHOD          : NULL
REMARK   3   FREE R VALUE TEST SET SELECTION  : 1 % REFS SELECTED
REMARK   3   R VALUE            (WORKING SET) : 0.224
REMARK   3   FREE R VALUE                     : 0.324
REMARK   3   FREE R VALUE TEST SET SIZE   (%) : NULL
REMARK   3   FREE R VALUE TEST SET COUNT      : 1205
REMARK   3   ESTIMATED ERROR OF FREE R VALUE  : NULL
REMARK   3
REMARK   3  FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3   TOTAL NUMBER OF BINS USED           : NULL
REMARK   3   BIN RESOLUTION RANGE HIGH       (A) : NULL
REMARK   3   BIN RESOLUTION RANGE LOW        (A) : NULL
REMARK   3   BIN COMPLETENESS (WORKING+TEST) (%) : NULL
REMARK   3   REFLECTIONS IN BIN    (WORKING SET) : NULL
REMARK   3   BIN R VALUE           (WORKING SET) : NULL
REMARK   3   BIN FREE R VALUE                    : NULL
REMARK   3   BIN FREE R VALUE TEST SET SIZE  (%) : NULL
REMARK   3   BIN FREE R VALUE TEST SET COUNT     : NULL
REMARK   3   ESTIMATED ERROR OF BIN FREE R VALUE : NULL
REMARK   3
REMARK   3  NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3   PROTEIN ATOMS            : 5785
REMARK   3   NUCLEIC ACID ATOMS       : 0
REMARK   3   HETEROGEN ATOMS          : 79
REMARK   3   SOLVENT ATOMS            : 515
REMARK   3
REMARK   3  B VALUES.
REMARK   3   FROM WILSON PLOT           (A**2) : NULL
REMARK   3   MEAN B VALUE      (OVERALL, A**2) : NULL
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 COORDINATE ERROR.
REMARK   3   ESD FROM LUZZATI PLOT        (A) : NULL
REMARK   3   ESD FROM SIGMAA              (A) : NULL
REMARK   3   LOW RESOLUTION CUTOFF        (A) : NULL
REMARK   3
REMARK   3  CROSS-VALIDATED ESTIMATED COORDINATE ERROR.
REMARK   3   ESD FROM C-V LUZZATI PLOT    (A) : NULL
REMARK   3   ESD FROM C-V SIGMAA          (A) : NULL
REMARK   3
REMARK   3  RMS DEVIATIONS FROM IDEAL VALUES.
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REMARK   3   BOND LENGTHS                (A) : NULL
REMARK   3   BOND ANGLES           (DEGREES) : NULL
REMARK   3   DIHEDRAL ANGLES       (DEGREES) : NULL
REMARK   3   IMPROPER ANGLES       (DEGREES) : NULL
REMARK   3
REMARK   3  ISOTROPIC THERMAL MODEL : 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  NCS MODEL : NULL
REMARK   3
REMARK   3  NCS RESTRAINTS.                         RMS   SIGMA/WEIGHT
REMARK   3   GROUP  1  POSITIONAL           (A) : NULL  ; NULL
REMARK   3   GROUP  1  B-FACTOR          (A**2) : NULL  ; NULL
REMARK   3
REMARK   3  PARAMETER FILE  1  : NULL
REMARK   3  TOPOLOGY FILE  1   : NULL
REMARK   3
REMARK   3  OTHER REFINEMENT REMARKS: NULL
REMARK   4
REMARK   4 1LOH COMPLIES WITH FORMAT V. 3.30, 13-JUL-11
REMARK 100
REMARK 100 THIS ENTRY HAS BEEN PROCESSED BY RCSB ON 09-MAY-02.
REMARK 100 THE DEPOSITION ID IS D_1000016134.
REMARK 200
REMARK 200 EXPERIMENTAL DETAILS
REMARK 200  EXPERIMENT TYPE                : X-RAY DIFFRACTION
REMARK 200  DATE OF DATA COLLECTION        : 20-MAR-01
REMARK 200  TEMPERATURE           (KELVIN) : 298
REMARK 200  PH                             : 6.0
REMARK 200  NUMBER OF CRYSTALS USED        : 1
REMARK 200
REMARK 200  SYNCHROTRON              (Y/N) : Y
REMARK 200  RADIATION SOURCE               : APS
REMARK 200  BEAMLINE                       : 19-BM
REMARK 200  X-RAY GENERATOR MODEL          : NULL
REMARK 200  MONOCHROMATIC OR LAUE    (M/L) : M
REMARK 200  WAVELENGTH OR RANGE        (A) : 1.0
REMARK 200  MONOCHROMATOR                  : SI
REMARK 200  OPTICS                         : NULL
REMARK 200
REMARK 200  DETECTOR TYPE                  : CCD
REMARK 200  DETECTOR MANUFACTURER          : OXFORD
REMARK 200  INTENSITY-INTEGRATION SOFTWARE : HKL-2000
REMARK 200  DATA SCALING SOFTWARE          : SCALEPACK
REMARK 200
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REMARK 200  NUMBER OF UNIQUE REFLECTIONS   : 60259
REMARK 200  RESOLUTION RANGE HIGH      (A) : 2.000
REMARK 200  RESOLUTION RANGE LOW       (A) : 50.000
REMARK 200  REJECTION CRITERIA  (SIGMA(I)) : 2.000
REMARK 200
REMARK 200 OVERALL.
REMARK 200  COMPLETENESS FOR RANGE     (%) : 99.9
REMARK 200  DATA REDUNDANCY                : NULL
REMARK 200  R MERGE                    (I) : NULL
REMARK 200  R SYM                      (I) : NULL
REMARK 200  <I/SIGMA(I)> FOR THE DATA SET  : NULL
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     (%) : 99.4
REMARK 200  DATA REDUNDANCY IN SHELL       : NULL
REMARK 200  R MERGE FOR SHELL          (I) : NULL
REMARK 200  R SYM FOR SHELL            (I) : NULL
REMARK 200  <I/SIGMA(I)> FOR SHELL         : NULL
REMARK 200
REMARK 200 DIFFRACTION PROTOCOL: SINGLE WAVELENGTH
REMARK 200 METHOD USED TO DETERMINE THE STRUCTURE: MOLECULAR REPLACEMENT
REMARK 200 SOFTWARE USED: X-PLOR
REMARK 200 STARTING MODEL: NULL
REMARK 200
REMARK 200 REMARK: NULL
REMARK 280
REMARK 280 CRYSTAL
REMARK 280 SOLVENT CONTENT, VS   (%): 53.86
REMARK 280 MATTHEWS COEFFICIENT, VM (ANGSTROMS**3/DA): 2.67
REMARK 280
REMARK 280 CRYSTALLIZATION CONDITIONS: AMMONIUM SULFATE, SODIUM CACODYLATE,
REMARK 280  PH 6.0, VAPOR DIFFUSION, HANGING DROP, TEMPERATURE 292K
REMARK 290
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY
REMARK 290 SYMMETRY OPERATORS FOR SPACE GROUP: P 21 21 21
REMARK 290
REMARK 290      SYMOP   SYMMETRY
REMARK 290     NNNMMM   OPERATOR
REMARK 290       1555   X,Y,Z
REMARK 290       2555   -X+1/2,-Y,Z+1/2
REMARK 290       3555   -X,Y+1/2,-Z+1/2
REMARK 290       4555   X+1/2,-Y+1/2,-Z
REMARK 290
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
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REMARK 290 RECORDS IN THIS ENTRY TO PRODUCE CRYSTALLOGRAPHICALLY
REMARK 290 RELATED MOLECULES.
REMARK 290   SMTRY1   1  1.000000  0.000000  0.000000        0.00000
REMARK 290   SMTRY2   1  0.000000  1.000000  0.000000        0.00000
REMARK 290   SMTRY3   1  0.000000  0.000000  1.000000        0.00000
REMARK 290   SMTRY1   2 -1.000000  0.000000  0.000000       41.85000
REMARK 290   SMTRY2   2  0.000000 -1.000000  0.000000        0.00000
REMARK 290   SMTRY3   2  0.000000  0.000000  1.000000       50.63450
REMARK 290   SMTRY1   3 -1.000000  0.000000  0.000000        0.00000
REMARK 290   SMTRY2   3  0.000000  1.000000  0.000000       51.78500
REMARK 290   SMTRY3   3  0.000000  0.000000 -1.000000       50.63450
REMARK 290   SMTRY1   4  1.000000  0.000000  0.000000       41.85000
REMARK 290   SMTRY2   4  0.000000 -1.000000  0.000000       51.78500
REMARK 290   SMTRY3   4  0.000000  0.000000 -1.000000        0.00000
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
REMARK 350   BIOMT1   1  1.000000  0.000000  0.000000        0.00000
REMARK 350   BIOMT2   1  0.000000  1.000000  0.000000        0.00000
REMARK 350   BIOMT3   1  0.000000  0.000000  1.000000        0.00000
REMARK 470
REMARK 470 MISSING ATOM
REMARK 470 THE FOLLOWING RESIDUES HAVE MISSING ATOMS (M=MODEL NUMBER;
REMARK 470 RES=RESIDUE NAME; C=CHAIN IDENTIFIER; SSEQ=SEQUENCE NUMBER;
REMARK 470 I=INSERTION CODE):
REMARK 470   M RES CSSEQI  ATOMS
REMARK 470     VAL A 170    CG1  CG2
REMARK 470     LEU A 890    CG   CD1  CD2
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
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REMARK 500   O    HOH A  1129     O    HOH A  1131              2.17
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
REMARK 500    ALA A 186      -53.48   -122.67
REMARK 500    GLN A 219      134.47     56.84
REMARK 500    ALA A 220       84.04     41.68
REMARK 500    ASP A 221      111.65     -0.37
REMARK 500    ASN A 231       89.66    -55.09
REMARK 500    VAL A 280      -41.69   -135.39
REMARK 500    ILE A 296      -66.45   -123.21
REMARK 500    ASN A 341       69.98   -118.61
REMARK 500    VAL A 356      -60.29    -92.74
REMARK 500    THR A 400      -56.37     71.46
REMARK 500    ASN A 401       34.97   -151.31
REMARK 500    ALA A 407      -60.34   -145.76
REMARK 500    MET A 458       -7.71    -59.00
REMARK 500    SER A 469       42.48   -140.92
REMARK 500    THR A 589        2.73    -64.40
REMARK 500    ASP A 591       46.40    -82.86
REMARK 500    ASN A 598     -155.09   -129.59
REMARK 500    SER A 605     -167.24   -124.02
REMARK 500    ALA A 666      137.50   -173.58
REMARK 500    LYS A 674      -73.36     67.79
REMARK 500    ASN A 705       68.19   -116.14
REMARK 500    ASN A 820       78.76   -161.42
REMARK 500    ASN A 821     -164.16   -128.41
REMARK 500    SER A 848       26.71     44.23
REMARK 500    SER A 880     -154.40    -96.44
REMARK 500
REMARK 500 REMARK: NULL
REMARK 900
REMARK 900 RELATED ENTRIES
REMARK 900 RELATED ID: 1C82   RELATED DB: PDB
REMARK 900 1C82 IS THE MECHANISM OF HYALURONAN BINDING AND DEGRADATION:
REMARK 900 STRUCTURE OF STREPTOCOCCUS PNEUMONIAE HYALURONATE LYASE IN COMPLEX
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REMARK 900 WITH HYALURONIC ACID DISACCHARIDE AT 1.7 A RESOLUTION
REMARK 900 RELATED ID: 1EGU   RELATED DB: PDB
REMARK 900 1EGU IS THE CRYSTAL STRUCTURE OF STREPTOCOCCUS PNEUMONIAE
REMARK 900 HYALURONATE LYASE AT 1.56 A RESOLUTION
DBREF  1LOH A  170   890  GB     437705   AAA53685       170    890
SEQADV 1LOH PHE A  408  GB   437705    TYR   408 ENGINEERED MUTATION
SEQADV 1LOH VAL A  731  GB   437705    GLY   731 SEE REMARK 999
SEQRES   1 A  721  VAL LYS ASP THR TYR THR ASP ARG LEU ASP ASP TRP ASN
SEQRES   2 A  721  GLY ILE ILE ALA GLY ASN GLN TYR TYR ASP SER LYS ASN
SEQRES   3 A  721  ASP GLN MET ALA LYS LEU ASN GLN GLU LEU GLU GLY LYS
SEQRES   4 A  721  VAL ALA ASP SER LEU SER SER ILE SER SER GLN ALA ASP
SEQRES   5 A  721  ARG ILE TYR LEU TRP GLU LYS PHE SER ASN TYR LYS THR
SEQRES   6 A  721  SER ALA ASN LEU THR ALA THR TYR ARG LYS LEU GLU GLU
SEQRES   7 A  721  MET ALA LYS GLN VAL THR ASN PRO SER SER ARG TYR TYR
SEQRES   8 A  721  GLN ASP GLU THR VAL VAL ARG THR VAL ARG ASP SER MET
SEQRES   9 A  721  GLU TRP MET HIS LYS HIS VAL TYR ASN SER GLU LYS SER
SEQRES  10 A  721  ILE VAL GLY ASN TRP TRP ASP TYR GLU ILE GLY THR PRO
SEQRES  11 A  721  ARG ALA ILE ASN ASN THR LEU SER LEU MET LYS GLU TYR
SEQRES  12 A  721  PHE SER ASP GLU GLU ILE LYS LYS TYR THR ASP VAL ILE
SEQRES  13 A  721  GLU LYS PHE VAL PRO ASP PRO GLU HIS PHE ARG LYS THR
SEQRES  14 A  721  THR ASP ASN PRO PHE LYS ALA LEU GLY GLY ASN LEU VAL
SEQRES  15 A  721  ASP MET GLY ARG VAL LYS VAL ILE ALA GLY LEU LEU ARG
SEQRES  16 A  721  LYS ASP ASP GLN GLU ILE SER SER THR ILE ARG SER ILE
SEQRES  17 A  721  GLU GLN VAL PHE LYS LEU VAL ASP GLN GLY GLU GLY PHE
SEQRES  18 A  721  TYR GLN ASP GLY SER TYR ILE ASP HIS THR ASN VAL ALA
SEQRES  19 A  721  TYR THR GLY ALA PHE GLY ASN VAL LEU ILE ASP GLY LEU
SEQRES  20 A  721  SER GLN LEU LEU PRO VAL ILE GLN LYS THR LYS ASN PRO
SEQRES  21 A  721  ILE ASP LYS ASP LYS MET GLN THR MET TYR HIS TRP ILE
SEQRES  22 A  721  ASP LYS SER PHE ALA PRO LEU LEU VAL ASN GLY GLU LEU
SEQRES  23 A  721  MET ASP MET SER ARG GLY ARG SER ILE SER ARG ALA ASN
SEQRES  24 A  721  SER GLU GLY HIS VAL ALA ALA VAL GLU VAL LEU ARG GLY
SEQRES  25 A  721  ILE HIS ARG ILE ALA ASP MET SER GLU GLY GLU THR LYS
SEQRES  26 A  721  GLN ARG LEU GLN SER LEU VAL LYS THR ILE VAL GLN SER
SEQRES  27 A  721  ASP SER TYR TYR ASP VAL PHE LYS ASN LEU LYS THR TYR
SEQRES  28 A  721  LYS ASP ILE SER LEU MET GLN SER LEU LEU SER ASP ALA
SEQRES  29 A  721  GLY VAL ALA SER VAL PRO ARG THR SER TYR LEU SER ALA
SEQRES  30 A  721  PHE ASN LYS MET ASP LYS THR ALA MET TYR ASN ALA GLU
SEQRES  31 A  721  LYS GLY PHE GLY PHE GLY LEU SER LEU PHE SER SER ARG
SEQRES  32 A  721  THR LEU ASN TYR GLU HIS MET ASN LYS GLU ASN LYS ARG
SEQRES  33 A  721  GLY TRP TYR THR SER ASP GLY MET PHE TYR LEU TYR ASN
SEQRES  34 A  721  GLY ASP LEU SER HIS TYR SER ASP GLY TYR TRP PRO THR
SEQRES  35 A  721  VAL ASN PRO TYR LYS MET PRO GLY THR THR GLU THR ASP
SEQRES  36 A  721  ALA LYS ARG ALA ASP SER ASP THR GLY LYS VAL LEU PRO
SEQRES  37 A  721  SER ALA PHE VAL GLY THR SER LYS LEU ASP ASP ALA ASN
SEQRES  38 A  721  ALA THR ALA THR MET ASP PHE THR ASN TRP ASN GLN THR
SEQRES  39 A  721  LEU THR ALA HIS LYS SER TRP PHE MET LEU LYS ASP LYS
SEQRES  40 A  721  ILE ALA PHE LEU GLY SER ASN ILE GLN ASN THR SER THR
SEQRES  41 A  721  ASP THR ALA ALA THR THR ILE ASP GLN ARG LYS LEU GLU
SEQRES  42 A  721  SER SER ASN PRO TYR LYS VAL TYR VAL ASN ASP LYS GLU
SEQRES  43 A  721  ALA SER LEU THR GLU GLN GLU LYS ASP TYR PRO GLU THR
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SEQRES  44 A  721  GLN SER VAL PHE LEU GLU SER SER ASP SER LYS LYS ASN
SEQRES  45 A  721  ILE GLY TYR PHE PHE PHE LYS LYS SER SER ILE SER MET
SEQRES  46 A  721  SER LYS ALA LEU GLN LYS GLY ALA TRP LYS ASP ILE ASN
SEQRES  47 A  721  GLU GLY GLN SER ASP LYS GLU VAL GLU ASN GLU PHE LEU
SEQRES  48 A  721  THR ILE SER GLN ALA HIS LYS GLN ASN GLY ASP SER TYR
SEQRES  49 A  721  GLY TYR MET LEU ILE PRO ASN VAL ASP ARG ALA THR PHE
SEQRES  50 A  721  ASN GLN MET ILE LYS GLU LEU GLU SER SER LEU ILE GLU
SEQRES  51 A  721  ASN ASN GLU THR LEU GLN SER VAL TYR ASP ALA LYS GLN
SEQRES  52 A  721  GLY VAL TRP GLY ILE VAL LYS TYR ASP ASP SER VAL SER
SEQRES  53 A  721  THR ILE SER ASN GLN PHE GLN VAL LEU LYS ARG GLY VAL
SEQRES  54 A  721  TYR THR ILE ARG LYS GLU GLY ASP GLU TYR LYS ILE ALA
SEQRES  55 A  721  TYR TYR ASN PRO GLU THR GLN GLU SER ALA PRO ASP GLN
SEQRES  56 A  721  GLU VAL PHE LYS LYS LEU
HET    NAG  B   1      15
HET    BDP  B   2      12
HET    NAG  B   3      14
HET    BDP  B   4      12
HET    NAG  B   5      14
HET    BDP  B   6      12
HETNAM     NAG 2-ACETAMIDO-2-DEOXY-BETA-D-GLUCOPYRANOSE
HETNAM     BDP BETA-D-GLUCOPYRANURONIC ACID
HETSYN     NAG N-ACETYL-BETA-D-GLUCOSAMINE; 2-ACETAMIDO-2-DEOXY-BETA-
HETSYN   2 NAG  D-GLUCOSE; 2-ACETAMIDO-2-DEOXY-D-GLUCOSE; 2-ACETAMIDO-
HETSYN   3 NAG  2-DEOXY-GLUCOSE; N-ACETYL-D-GLUCOSAMINE
HETSYN     BDP BETA-D-GLUCURONIC ACID; D-GLUCURONIC ACID; GLUCURONIC
HETSYN   2 BDP  ACID
FORMUL   2  NAG    3(C8 H15 N O6)
FORMUL   2  BDP    3(C6 H10 O7)
FORMUL   3  HOH   *515(H2 O)
HELIX    1   1 ASP A  172  ALA A  186  1                                  15
HELIX    2   2 GLY A  187  TYR A  191  5                                   5
HELIX    3   3 ASN A  195  ILE A  216  1                                  22
HELIX    4   4 TRP A  226  SER A  230  5                                   5
HELIX    5   5 THR A  234  THR A  253  1                                  20
HELIX    6   6 ASP A  262  VAL A  280  1                                  19
HELIX    7   7 ASN A  290  ILE A  296  1                                   7
HELIX    8   8 ILE A  296  MET A  309  1                                  14
HELIX    9   9 SER A  314  VAL A  329  1                                  16
HELIX   10  10 LEU A  346  ARG A  364  1                                  19
HELIX   11  11 ASP A  366  GLU A  378  1                                  13
HELIX   12  12 GLN A  379  LYS A  382  5                                   4
HELIX   13  13 ALA A  407  GLN A  424  1                                  18
HELIX   14  14 LYS A  432  MET A  435  5                                   4
HELIX   15  15 GLN A  436  SER A  445  1                                  10
HELIX   16  16 PHE A  446  PRO A  448  5                                   3
HELIX   17  17 ASP A  457  SER A  469  5                                  13
HELIX   18  18 GLU A  470  SER A  489  1                                  20
HELIX   19  19 GLU A  490  ASP A  508  1                                  19
HELIX   20  20 ASP A  512  LEU A  517  5                                   6
HELIX   21  21 THR A  519  ASP A  532  1                                  14
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HELIX   22  22 GLY A  607  VAL A  612  1                                   6
HELIX   23  23 ASP A  737  LYS A  740  5                                   4
HELIX   24  24 LYS A  764  ILE A  766  5                                   3
HELIX   25  25 ASP A  802  LEU A  813  1                                  12
HELIX   26  26 PRO A  882  VAL A  886  1                                   5
SHEET    1   A 2 HIS A 334  PHE A 335  0
SHEET    2   A 2 PHE A 343  LYS A 344 -1  O  PHE A 343   N  PHE A 335
SHEET    1   B 3 GLY A 389  PHE A 390  0
SHEET    2   B 3 TYR A 396  ASP A 398 -1  O  ILE A 397   N  GLY A 389
SHEET    3   B 3 VAL A 402  ALA A 403 -1  O  VAL A 402   N  ASP A 398
SHEET    1   C 2 LEU A 450  VAL A 451  0
SHEET    2   C 2 GLU A 454  LEU A 455 -1  O  GLU A 454   N  VAL A 451
SHEET    1   D 4 TYR A 543  PHE A 547  0
SHEET    2   D 4 LYS A 552  ASN A 557 -1  O  ALA A 554   N  SER A 545
SHEET    3   D 4 PHE A 562  SER A 567 -1  O  PHE A 564   N  MET A 555
SHEET    4   D 4 MET A 593  TYR A 597 -1  O  MET A 593   N  SER A 567
SHEET    1   E 7 THR A 621  THR A 623  0
SHEET    2   E 7 ALA A 692  LYS A 700 -1  O  ALA A 693   N  GLU A 622
SHEET    3   E 7 GLU A 774  HIS A 786 -1  O  HIS A 786   N  ALA A 692
SHEET    4   E 7 ILE A 742  ALA A 762 -1  N  GLY A 761   O  VAL A 775
SHEET    5   E 7 LYS A 723  GLU A 734 -1  N  TYR A 725   O  ILE A 752
SHEET    6   E 7 LYS A 708  VAL A 711 -1  N  TYR A 710   O  PHE A 732
SHEET    7   E 7 LYS A 714  ALA A 716 -1  O  ALA A 716   N  VAL A 709
SHEET    1   F 9 THR A 621  THR A 623  0
SHEET    2   F 9 ALA A 692  LYS A 700 -1  O  ALA A 693   N  GLU A 622
SHEET    3   F 9 GLU A 774  HIS A 786 -1  O  HIS A 786   N  ALA A 692
SHEET    4   F 9 ILE A 742  ALA A 762 -1  N  GLY A 761   O  VAL A 775
SHEET    5   F 9 ASP A 791  PRO A 799 -1  O  MET A 796   N  PHE A 745
SHEET    6   F 9 ILE A 677  ASN A 686 -1  N  PHE A 679   O  TYR A 795
SHEET    7   F 9 LEU A 664  LEU A 673 -1  N  SER A 669   O  LEU A 680
SHEET    8   F 9 ASN A 650  THR A 658 -1  N  ALA A 653   O  TRP A 670
SHEET    9   F 9 VAL A 641  LYS A 645 -1  N  SER A 644   O  THR A 652
SHEET    1   G 5 LEU A 817  ASN A 820  0
SHEET    2   G 5 LEU A 824  ASP A 829 -1  O  SER A 826   N  GLU A 819
SHEET    3   G 5 VAL A 834  LYS A 839 -1  O  VAL A 834   N  ASP A 829
SHEET    4   G 5 GLY A 857  GLU A 864 -1  O  TYR A 859   N  ILE A 837
SHEET    5   G 5 GLU A 867  TYR A 873 -1  O  GLU A 867   N  GLU A 864
SHEET    1   H 3 SER A 845  ILE A 847  0
SHEET    2   H 3 PHE A 851  VAL A 853 -1  O  PHE A 851   N  ILE A 847
SHEET    3   H 3 PHE A 887  LYS A 889 -1  O  LYS A 888   N  GLN A 852
LINK         O3  NAG B   1                 C1  BDP B   2     1555   1555  1.41
LINK         O4  BDP B   2                 C1  NAG B   3     1555   1555  1.42
LINK         O3  NAG B   3                 C1  BDP B   4     1555   1555  1.43
LINK         O4  BDP B   4                 C1  NAG B   5     1555   1555  1.41
LINK         O3  NAG B   5                 C1  BDP B   6     1555   1555  1.41
CRYST1   83.700  103.570  101.269  90.00  90.00  90.00 P 21 21 21    4
ORIGX1      1.000000  0.000000  0.000000        0.00000
ORIGX2      0.000000  1.000000  0.000000        0.00000
ORIGX3      0.000000  0.000000  1.000000        0.00000
SCALE1      0.011947  0.000000  0.000000        0.00000
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SCALE2      0.000000  0.009655  0.000000        0.00000
SCALE3      0.000000  0.000000  0.009875        0.00000
ATOM      1  N   VAL A 170       1.305  -7.754  -5.646  1.00 65.47           N
ATOM      2  CA  VAL A 170       0.328  -8.779  -5.162  1.00 65.66           C
ATOM      3  C   VAL A 170       0.816  -9.412  -3.855  1.00 65.39           C
ATOM      4  O   VAL A 170       1.776  -8.926  -3.243  1.00 67.14           O
ATOM      5  CB  VAL A 170       0.126  -9.862  -6.237  1.00 61.94           C
ATOM      6  N   LYS A 171       0.149 -10.483  -3.424  1.00 62.69           N
ATOM      7  CA  LYS A 171       0.534 -11.170  -2.198  1.00 56.88           C
ATOM      8  C   LYS A 171       0.298 -12.681  -2.184  1.00 53.32           C
ATOM      9  O   LYS A 171       0.008 -13.273  -3.222  1.00 54.88           O
ATOM     10  CB  LYS A 171      -0.112 -10.495  -0.994  1.00 54.73           C
ATOM     11  CG  LYS A 171       0.811  -9.438  -0.379  1.00 57.59           C
ATOM     12  CD  LYS A 171       2.270  -9.926  -0.311  1.00 52.53           C
ATOM     13  CE  LYS A 171       3.255  -8.862  -0.769  1.00 52.92           C
ATOM     14  NZ  LYS A 171       3.984  -9.300  -1.993  1.00 49.31           N
ATOM     15  N   ASP A 172       0.387 -13.306  -1.012  1.00 47.73           N
ATOM     16  CA  ASP A 172       0.307 -14.763  -0.956  1.00 41.90           C
ATOM     17  C   ASP A 172      -0.251 -15.403   0.313  1.00 40.52           C
ATOM     18  O   ASP A 172      -0.905 -14.760   1.135  1.00 40.15           O
ATOM     19  CB  ASP A 172       1.724 -15.278  -1.155  1.00 41.18           C
ATOM     20  CG  ASP A 172       2.753 -14.412  -0.417  1.00 39.25           C
ATOM     21  OD1 ASP A 172       3.839 -14.152  -0.971  1.00 41.70           O
ATOM     22  OD2 ASP A 172       2.469 -13.979   0.723  1.00 35.86           O
ATOM     23  N   THR A 173       0.055 -16.692   0.463  1.00 36.07           N
ATOM     24  CA  THR A 173      -0.369 -17.476   1.617  1.00 34.21           C
ATOM     25  C   THR A 173       0.311 -16.986   2.892  1.00 32.87           C
ATOM     26  O   THR A 173      -0.131 -17.287   4.007  1.00 30.52           O
ATOM     27  CB  THR A 173      -0.034 -18.963   1.429  1.00 33.06           C
ATOM     28  OG1 THR A 173       1.349 -19.183   1.728  1.00 33.67           O
ATOM     29  CG2 THR A 173      -0.304 -19.388  -0.007  1.00 39.65           C
ATOM     30  N   TYR A 174       1.398 -16.239   2.728  1.00 30.98           N
ATOM     31  CA  TYR A 174       2.104 -15.708   3.883  1.00 32.41           C
ATOM     32  C   TYR A 174       1.250 -14.598   4.467  1.00 31.83           C
ATOM     33  O   TYR A 174       1.049 -14.526   5.678  1.00 31.97           O
ATOM     34  CB  TYR A 174       3.469 -15.150   3.478  1.00 34.15           C
ATOM     35  CG  TYR A 174       4.466 -16.216   3.094  1.00 37.96           C
ATOM     36  CD1 TYR A 174       5.072 -17.016   4.065  1.00 35.74           C
ATOM     37  CD2 TYR A 174       4.803 -16.428   1.757  1.00 38.76           C
ATOM     38  CE1 TYR A 174       5.987 -17.999   3.712  1.00 37.23           C
ATOM     39  CE2 TYR A 174       5.718 -17.410   1.395  1.00 40.82           C
ATOM     40  CZ  TYR A 174       6.304 -18.189   2.378  1.00 38.06           C
ATOM     41  OH  TYR A 174       7.199 -19.161   2.018  1.00 38.41           O
ATOM     42  N   THR A 175       0.750 -13.730   3.595  1.00 31.33           N
ATOM     43  CA  THR A 175      -0.091 -12.627   4.030  1.00 31.91           C
ATOM     44  C   THR A 175      -1.415 -13.187   4.545  1.00 30.21           C
ATOM     45  O   THR A 175      -2.045 -12.606   5.432  1.00 29.93           O
ATOM     46  CB  THR A 175      -0.338 -11.634   2.879  1.00 31.71           C
ATOM     47  OG1 THR A 175      -0.865 -12.329   1.746  1.00 34.62           O
ATOM     48  CG2 THR A 175       0.967 -10.965   2.482  1.00 31.71           C
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ATOM	49	N	ASP	A	176	-1.817	-14.328	3.990	1.00	29.47	N
ATOM	50	CA	ASP	A	176	-3.045	-14.996	4.400	1.00	29.68	C
ATOM	51	C	ASP	A	176	-2.911	-15.378	5.858	1.00	29.92	C
ATOM	52	O	ASP	A	176	-3.862	-15.294	6.631	1.00	31.10	O
ATOM	53	CB	ASP	A	176	-3.260	-16.270	3.593	1.00	31.81	C
ATOM	54	CG	ASP	A	176	-3.707	-15.994	2.190	1.00	32.58	C
ATOM	55	OD1	ASP	A	176	-3.760	-16.952	1.393	1.00	32.60	O
ATOM	56	OD2	ASP	A	176	-4.005	-14.821	1.884	1.00	36.03	O
ATOM	57	N	ARG	A	177	-1.716	-15.818	6.226	1.00	28.12	N
ATOM	58	CA	ARG	A	177	-1.464	-16.216	7.594	1.00	24.88	C
ATOM	59	C	ARG	A	177	-1.402	-14.978	8.465	1.00	23.11	C
ATOM	60	O	ARG	A	177	-1.895	-14.984	9.587	1.00	25.09	O
ATOM	61	CB	ARG	A	177	-0.151	-16.997	7.686	1.00	27.66	C
ATOM	62	CG	ARG	A	177	-0.165	-18.327	6.948	1.00	24.98	C
ATOM	63	CD	ARG	A	177	-0.998	-19.351	7.697	1.00	26.86	C
ATOM	64	NE	ARG	A	177	-2.419	-19.078	7.537	1.00	26.13	N
ATOM	65	CZ	ARG	A	177	-3.068	-19.176	6.382	1.00	29.70	C
ATOM	66	NH1	ARG	A	177	-2.423	-19.543	5.288	1.00	29.83	N
ATOM	67	NH2	ARG	A	177	-4.358	-18.882	6.313	1.00	32.37	N
ATOM	68	N	LEU	A	178	-0.801	-13.912	7.945	1.00	21.53	N
ATOM	69	CA	LEU	A	178	-0.684	-12.673	8.708	1.00	23.11	C
ATOM	70	C	LEU	A	178	-2.056	-12.020	8.853	1.00	24.28	C
ATOM	71	O	LEU	A	178	-2.318	-11.289	9.813	1.00	23.53	O
ATOM	72	CB	LEU	A	178	0.296	-11.725	8.028	1.00	25.25	C
ATOM	73	CG	LEU	A	178	1.730	-12.263	7.943	1.00	28.31	C
ATOM	74	CD1	LEU	A	178	2.486	-11.501	6.871	1.00	31.74	C
ATOM	75	CD2	LEU	A	178	2.422	-12.127	9.292	1.00	25.22	C
ATOM	76	N	ASP	A	179	-2.932	-12.285	7.893	1.00	24.53	N
ATOM	77	CA	ASP	A	179	-4.289	-11.767	7.967	1.00	24.73	C
ATOM	78	C	ASP	A	179	-4.941	-12.486	9.151	1.00	25.25	C
ATOM	79	O	ASP	A	179	-5.608	-11.866	9.980	1.00	21.12	O
ATOM	80	CB	ASP	A	179	-5.041	-12.086	6.681	1.00	25.10	C
ATOM	81	CG	ASP	A	179	-4.940	-10.976	5.676	1.00	23.17	C
ATOM	82	OD1	ASP	A	179	-4.607	-9.847	6.088	1.00	26.16	O
ATOM	83	OD2	ASP	A	179	-5.191	-11.228	4.481	1.00	25.01	O
ATOM	84	N	ASP	A	180	-4.725	-13.797	9.230	1.00	25.14	N
ATOM	85	CA	ASP	A	180	-5.264	-14.601	10.319	1.00	23.86	C
ATOM	86	C	ASP	A	180	-4.709	-14.099	11.653	1.00	23.90	C
ATOM	87	O	ASP	A	180	-5.434	-13.981	12.644	1.00	24.51	O
ATOM	88	CB	ASP	A	180	-4.878	-16.072	10.134	1.00	26.01	C
ATOM	89	CG	ASP	A	180	-5.619	-16.742	8.981	1.00	30.51	C
ATOM	90	OD1	ASP	A	180	-6.469	-16.086	8.340	1.00	35.33	O
ATOM	91	OD2	ASP	A	180	-5.342	-17.932	8.713	1.00	30.65	O
ATOM	92	N	TRP	A	181	-3.417	-13.799	11.672	1.00	19.92	N
ATOM	93	CA	TRP	A	181	-2.761	-13.330	12.885	1.00	18.36	C
ATOM	94	C	TRP	A	181	-3.347	-12.005	13.369	1.00	17.87	C
ATOM	95	O	TRP	A	181	-3.531	-11.801	14.568	1.00	19.16	O
ATOM	96	CB	TRP	A	181	-1.252	-13.201	12.628	1.00	18.86	C
ATOM	97	CG	TRP	A	181	-0.450	-12.730	13.808	1.00	16.92	C
ATOM	98	CD1	TRP	A	181	0.236	-11.557	13.912	1.00	12.32	C

ATOM	99	CD2	TRP	A	181	-0.241	-13.430	15.039	1.00	16.17	C
ATOM	100	NE1	TRP	A	181	0.862	-11.481	15.131	1.00	17.96	N
ATOM	101	CE2	TRP	A	181	0.589	-12.618	15.843	1.00	18.45	C
ATOM	102	CE3	TRP	A	181	-0.673	-14.667	15.540	1.00	19.93	C
ATOM	103	CZ2	TRP	A	181	0.999	-13.002	17.126	1.00	18.83	C
ATOM	104	CZ3	TRP	A	181	-0.269	-15.050	16.813	1.00	19.84	C
ATOM	105	CH2	TRP	A	181	0.561	-14.218	17.593	1.00	20.33	C
ATOM	106	N	ASN	A	182	-3.637	-11.107	12.432	1.00	21.42	N
ATOM	107	CA	ASN	A	182	-4.217	-9.803	12.761	1.00	22.79	C
ATOM	108	C	ASN	A	182	-5.593	-9.951	13.418	1.00	22.02	C
ATOM	109	O	ASN	A	182	-5.928	-9.224	14.353	1.00	24.82	O
ATOM	110	CB	ASN	A	182	-4.356	-8.949	11.496	1.00	22.00	C
ATOM	111	CG	ASN	A	182	-3.023	-8.457	10.979	1.00	23.18	C
ATOM	112	OD1	ASN	A	182	-2.028	-8.489	11.699	1.00	21.68	O
ATOM	113	ND2	ASN	A	182	-2.994	-7.998	9.729	1.00	18.15	N
ATOM	114	N	GLY	A	183	-6.385	-10.892	12.916	1.00	22.13	N
ATOM	115	CA	GLY	A	183	-7.710	-11.116	13.463	1.00	21.98	C
ATOM	116	C	GLY	A	183	-7.633	-11.649	14.874	1.00	22.44	C
ATOM	117	O	GLY	A	183	-8.550	-11.467	15.682	1.00	21.56	O
ATOM	118	N	ILE	A	184	-6.517	-12.304	15.175	1.00	22.59	N
ATOM	119	CA	ILE	A	184	-6.304	-12.871	16.496	1.00	20.81	C
ATOM	120	C	ILE	A	184	-5.766	-11.812	17.443	1.00	20.27	C
ATOM	121	O	ILE	A	184	-6.232	-11.679	18.579	1.00	20.47	O
ATOM	122	CB	ILE	A	184	-5.282	-14.035	16.451	1.00	21.89	C
ATOM	123	CG1	ILE	A	184	-5.898	-15.255	15.785	1.00	20.13	C
ATOM	124	CG2	ILE	A	184	-4.829	-14.396	17.854	1.00	18.15	C
ATOM	125	CD1	ILE	A	184	-4.871	-16.177	15.172	1.00	24.26	C
ATOM	126	N	ILE	A	185	-4.785	-11.053	16.970	1.00	20.38	N
ATOM	127	CA	ILE	A	185	-4.164	-10.047	17.811	1.00	20.31	C
ATOM	128	C	ILE	A	185	-4.880	-8.715	17.894	1.00	22.22	C
ATOM	129	O	ILE	A	185	-4.707	-7.984	18.865	1.00	19.75	O
ATOM	130	CB	ILE	A	185	-2.693	-9.811	17.399	1.00	23.46	C
ATOM	131	CG1	ILE	A	185	-2.616	-9.148	16.033	1.00	21.82	C
ATOM	132	CG2	ILE	A	185	-1.957	-11.131	17.386	1.00	20.13	C
ATOM	133	CD1	ILE	A	185	-1.233	-8.663	15.704	1.00	20.25	C
ATOM	134	N	ALA	A	186	-5.690	-8.394	16.894	1.00	22.95	N
ATOM	135	CA	ALA	A	186	-6.422	-7.133	16.921	1.00	20.64	C
ATOM	136	C	ALA	A	186	-7.924	-7.415	16.814	1.00	20.30	C
ATOM	137	O	ALA	A	186	-8.711	-6.974	17.648	1.00	16.98	O
ATOM	138	CB	ALA	A	186	-5.961	-6.239	15.782	1.00	21.90	C
ATOM	139	N	GLY	A	187	-8.295	-8.166	15.783	1.00	21.57	N
ATOM	140	CA	GLY	A	187	-9.682	-8.523	15.564	1.00	27.15	C
ATOM	141	C	GLY	A	187	-10.492	-7.364	15.030	1.00	28.73	C
ATOM	142	O	GLY	A	187	-11.683	-7.266	15.303	1.00	30.52	O
ATOM	143	N	ASN	A	188	-9.851	-6.485	14.269	1.00	27.86	N
ATOM	144	CA	ASN	A	188	-10.542	-5.332	13.722	1.00	27.05	C
ATOM	145	C	ASN	A	188	-11.698	-5.782	12.854	1.00	29.21	C
ATOM	146	O	ASN	A	188	-12.730	-5.117	12.784	1.00	31.40	O
ATOM	147	CB	ASN	A	188	-9.592	-4.473	12.894	1.00	25.16	C
ATOM	148	CG	ASN	A	188	-8.837	-3.469	13.735	1.00	27.05	C

ATOM	149	OD1	ASN	A	188	-9.264	-3.111	14.837	1.00	25.01	O
ATOM	150	ND2	ASN	A	188	-7.702	-3.006	13.221	1.00	23.69	N
ATOM	151	N	GLN	A	189	-11.527	-6.919	12.194	1.00	28.90	N
ATOM	152	CA	GLN	A	189	-12.572	-7.435	11.326	1.00	29.84	C
ATOM	153	C	GLN	A	189	-13.826	-7.880	12.082	1.00	28.93	C
ATOM	154	O	GLN	A	189	-14.846	-8.164	11.457	1.00	32.39	O
ATOM	155	CB	GLN	A	189	-12.042	-8.607	10.509	1.00	32.91	C
ATOM	156	CG	GLN	A	189	-12.411	-9.952	11.093	1.00	35.34	C
ATOM	157	CD	GLN	A	189	-11.575	-11.059	10.532	1.00	38.79	C
ATOM	158	OE1	GLN	A	189	-10.344	-10.985	10.544	1.00	45.83	O
ATOM	159	NE2	GLN	A	189	-12.230	-12.100	10.030	1.00	37.87	N
ATOM	160	N	TYR	A	190	-13.751	-7.951	13.409	1.00	24.91	N
ATOM	161	CA	TYR	A	190	-14.891	-8.368	14.218	1.00	23.76	C
ATOM	162	C	TYR	A	190	-15.508	-7.195	14.964	1.00	25.45	C
ATOM	163	O	TYR	A	190	-16.486	-7.365	15.694	1.00	24.50	O
ATOM	164	CB	TYR	A	190	-14.478	-9.420	15.256	1.00	25.38	C
ATOM	165	CG	TYR	A	190	-13.773	-10.628	14.695	1.00	27.51	C
ATOM	166	CD1	TYR	A	190	-14.488	-11.661	14.095	1.00	25.28	C
ATOM	167	CD2	TYR	A	190	-12.386	-10.743	14.767	1.00	26.34	C
ATOM	168	CE1	TYR	A	190	-13.846	-12.772	13.582	1.00	26.81	C
ATOM	169	CE2	TYR	A	190	-11.736	-11.850	14.256	1.00	22.71	C
ATOM	170	CZ	TYR	A	190	-12.468	-12.863	13.667	1.00	25.16	C
ATOM	171	OH	TYR	A	190	-11.828	-13.980	13.176	1.00	26.34	O
ATOM	172	N	TYR	A	191	-14.942	-6.006	14.794	1.00	22.42	N
ATOM	173	CA	TYR	A	191	-15.463	-4.848	15.506	1.00	24.92	C
ATOM	174	C	TYR	A	191	-16.905	-4.500	15.161	1.00	26.04	C
ATOM	175	O	TYR	A	191	-17.339	-4.613	14.016	1.00	25.30	O
ATOM	176	CB	TYR	A	191	-14.595	-3.617	15.263	1.00	19.20	C
ATOM	177	CG	TYR	A	191	-14.962	-2.490	16.188	1.00	17.77	C
ATOM	178	CD1	TYR	A	191	-14.690	-2.568	17.546	1.00	17.07	C
ATOM	179	CD2	TYR	A	191	-15.612	-1.359	15.711	1.00	22.45	C
ATOM	180	CE1	TYR	A	191	-15.056	-1.549	18.412	1.00	17.86	C
ATOM	181	CE2	TYR	A	191	-15.984	-0.331	16.568	1.00	21.64	C
ATOM	182	CZ	TYR	A	191	-15.704	-0.429	17.914	1.00	20.08	C
ATOM	183	OH	TYR	A	191	-16.065	0.598	18.762	1.00	22.78	O
ATOM	184	N	ASP	A	192	-17.640	-4.061	16.170	1.00	29.51	N
ATOM	185	CA	ASP	A	192	-19.035	-3.677	16.006	1.00	26.88	C
ATOM	186	C	ASP	A	192	-19.277	-2.547	16.984	1.00	24.87	C
ATOM	187	O	ASP	A	192	-19.248	-2.754	18.199	1.00	24.87	O
ATOM	188	CB	ASP	A	192	-19.944	-4.864	16.327	1.00	28.87	C
ATOM	189	CG	ASP	A	192	-21.408	-4.470	16.461	1.00	32.04	C
ATOM	190	OD1	ASP	A	192	-21.766	-3.311	16.162	1.00	32.70	O
ATOM	191	OD2	ASP	A	192	-22.204	-5.333	16.872	1.00	30.86	O
ATOM	192	N	SER	A	193	-19.500	-1.349	16.451	1.00	26.80	N
ATOM	193	CA	SER	A	193	-19.735	-0.173	17.285	1.00	31.54	C
ATOM	194	C	SER	A	193	-20.946	-0.320	18.196	1.00	32.46	C
ATOM	195	O	SER	A	193	-20.988	0.271	19.275	1.00	35.05	O
ATOM	196	CB	SER	A	193	-19.898	1.081	16.415	1.00	32.12	C
ATOM	197	OG	SER	A	193	-20.823	0.873	15.360	1.00	33.42	O
ATOM	198	N	LYS	A	194	-21.929	-1.109	17.776	1.00	32.92	N

ATOM	199	CA	LYS	A	194	-23.121	-1.291	18.594	1.00	36.50	C
ATOM	200	C	LYS	A	194	-22.848	-2.254	19.746	1.00	35.06	C
ATOM	201	O	LYS	A	194	-23.696	-2.442	20.622	1.00	33.04	O
ATOM	202	CB	LYS	A	194	-24.290	-1.795	17.736	1.00	41.78	C
ATOM	203	CG	LYS	A	194	-25.100	-0.678	17.061	1.00	50.01	C
ATOM	204	CD	LYS	A	194	-25.798	0.240	18.088	1.00	59.61	C
ATOM	205	CE	LYS	A	194	-26.696	1.302	17.416	1.00	61.69	C
ATOM	206	NZ	LYS	A	194	-26.754	2.610	18.160	1.00	55.17	N
ATOM	207	N	ASN	A	195	-21.658	-2.854	19.741	1.00	32.29	N
ATOM	208	CA	ASN	A	195	-21.255	-3.788	20.790	1.00	26.47	C
ATOM	209	C	ASN	A	195	-20.607	-3.014	21.928	1.00	28.37	C
ATOM	210	O	ASN	A	195	-19.518	-2.470	21.777	1.00	33.56	O
ATOM	211	CB	ASN	A	195	-20.270	-4.823	20.237	1.00	22.17	C
ATOM	212	CG	ASN	A	195	-19.879	-5.874	21.269	1.00	15.37	C
ATOM	213	OD1	ASN	A	195	-19.615	-5.557	22.425	1.00	21.78	O
ATOM	214	ND2	ASN	A	195	-19.836	-7.128	20.848	1.00	16.44	N
ATOM	215	N	ASP	A	196	-21.291	-2.971	23.063	1.00	29.40	N
ATOM	216	CA	ASP	A	196	-20.838	-2.271	24.264	1.00	31.16	C
ATOM	217	C	ASP	A	196	-19.382	-2.547	24.662	1.00	29.81	C
ATOM	218	O	ASP	A	196	-18.589	-1.619	24.828	1.00	23.18	O
ATOM	219	CB	ASP	A	196	-21.741	-2.656	25.441	1.00	41.96	C
ATOM	220	CG	ASP	A	196	-22.412	-1.462	26.086	1.00	52.78	C
ATOM	221	OD1	ASP	A	196	-22.394	-1.372	27.337	1.00	57.45	O
ATOM	222	OD2	ASP	A	196	-22.962	-0.618	25.344	1.00	58.05	O
ATOM	223	N	GLN	A	197	-19.049	-3.824	24.834	1.00	25.61	N
ATOM	224	CA	GLN	A	197	-17.706	-4.222	25.247	1.00	26.24	C
ATOM	225	C	GLN	A	197	-16.621	-3.841	24.252	1.00	22.47	C
ATOM	226	O	GLN	A	197	-15.575	-3.338	24.639	1.00	25.12	O
ATOM	227	CB	GLN	A	197	-17.659	-5.728	25.507	1.00	25.03	C
ATOM	228	CG	GLN	A	197	-18.551	-6.198	26.649	1.00	29.71	C
ATOM	229	CD	GLN	A	197	-18.252	-5.519	27.978	1.00	31.88	C
ATOM	230	OE1	GLN	A	197	-17.245	-4.823	28.133	1.00	31.11	O
ATOM	231	NE2	GLN	A	197	-19.134	-5.723	28.947	1.00	34.08	N
ATOM	232	N	MET	A	198	-16.870	-4.086	22.973	1.00	23.25	N
ATOM	233	CA	MET	A	198	-15.903	-3.756	21.940	1.00	20.65	C
ATOM	234	C	MET	A	198	-15.674	-2.262	21.832	1.00	24.40	C
ATOM	235	O	MET	A	198	-14.536	-1.807	21.723	1.00	29.36	O
ATOM	236	CB	MET	A	198	-16.374	-4.279	20.596	1.00	16.82	C
ATOM	237	CG	MET	A	198	-16.575	-5.755	20.596	1.00	12.00	C
ATOM	238	SD	MET	A	198	-16.683	-6.307	18.938	1.00	21.29	S
ATOM	239	CE	MET	A	198	-16.595	-8.069	19.174	1.00	18.90	C
ATOM	240	N	ALA	A	199	-16.758	-1.498	21.849	1.00	21.81	N
ATOM	241	CA	ALA	A	199	-16.660	-0.049	21.750	1.00	21.18	C
ATOM	242	C	ALA	A	199	-15.783	0.497	22.871	1.00	22.66	C
ATOM	243	O	ALA	A	199	-15.050	1.465	22.679	1.00	26.47	O
ATOM	244	CB	ALA	A	199	-18.047	0.571	21.822	1.00	20.79	C
ATOM	245	N	LYS	A	200	-15.860	-0.135	24.039	1.00	24.96	N
ATOM	246	CA	LYS	A	200	-15.085	0.283	25.204	1.00	26.59	C
ATOM	247	C	LYS	A	200	-13.577	0.077	25.015	1.00	27.29	C
ATOM	248	O	LYS	A	200	-12.776	0.906	25.445	1.00	27.95	O

ATOM	249	CB	LYS	A	200	-15.558	-0.477	26.446	1.00	28.15	C
ATOM	250	CG	LYS	A	200	-15.111	0.152	27.746	1.00	36.34	C
ATOM	251	CD	LYS	A	200	-15.982	-0.267	28.920	1.00	43.70	C
ATOM	252	CE	LYS	A	200	-15.511	0.408	30.210	1.00	50.19	C
ATOM	253	NZ	LYS	A	200	-16.607	0.548	31.212	1.00	53.86	N
ATOM	254	N	LEU	A	201	-13.200	-1.030	24.378	1.00	25.09	N
ATOM	255	CA	LEU	A	201	-11.792	-1.337	24.124	1.00	25.47	C
ATOM	256	C	LEU	A	201	-11.276	-0.409	23.028	1.00	25.98	C
ATOM	257	O	LEU	A	201	-10.163	0.109	23.103	1.00	24.35	O
ATOM	258	CB	LEU	A	201	-11.638	-2.788	23.671	1.00	20.63	C
ATOM	259	CG	LEU	A	201	-10.275	-3.133	23.084	1.00	20.08	C
ATOM	260	CD1	LEU	A	201	-9.223	-2.894	24.154	1.00	19.31	C
ATOM	261	CD2	LEU	A	201	-10.247	-4.580	22.612	1.00	15.66	C
ATOM	262	N	ASN	A	202	-12.099	-0.210	22.006	1.00	25.19	N
ATOM	263	CA	ASN	A	202	-11.739	0.663	20.907	1.00	23.96	C
ATOM	264	C	ASN	A	202	-11.539	2.075	21.418	1.00	25.37	C
ATOM	265	O	ASN	A	202	-10.686	2.805	20.927	1.00	27.28	O
ATOM	266	CB	ASN	A	202	-12.831	0.667	19.847	1.00	24.10	C
ATOM	267	CG	ASN	A	202	-12.650	1.781	18.838	1.00	25.65	C
ATOM	268	OD1	ASN	A	202	-13.364	2.781	18.873	1.00	24.97	O
ATOM	269	ND2	ASN	A	202	-11.689	1.616	17.934	1.00	19.24	N
ATOM	270	N	GLN	A	203	-12.335	2.467	22.404	1.00	26.96	N
ATOM	271	CA	GLN	A	203	-12.217	3.803	22.961	1.00	27.55	C
ATOM	272	C	GLN	A	203	-10.902	3.897	23.725	1.00	27.26	C
ATOM	273	O	GLN	A	203	-10.249	4.942	23.736	1.00	24.34	O
ATOM	274	CB	GLN	A	203	-13.400	4.099	23.891	1.00	29.48	C
ATOM	275	CG	GLN	A	203	-13.732	5.587	24.043	1.00	37.48	C
ATOM	276	CD	GLN	A	203	-13.937	6.316	22.705	1.00	43.62	C
ATOM	277	OE1	GLN	A	203	-14.407	5.734	21.719	1.00	42.22	O
ATOM	278	NE2	GLN	A	203	-13.588	7.600	22.676	1.00	46.18	N
ATOM	279	N	GLU	A	204	-10.520	2.795	24.361	1.00	27.48	N
ATOM	280	CA	GLU	A	204	-9.277	2.746	25.119	1.00	28.10	C
ATOM	281	C	GLU	A	204	-8.094	2.910	24.156	1.00	27.44	C
ATOM	282	O	GLU	A	204	-7.138	3.627	24.448	1.00	26.98	O
ATOM	283	CB	GLU	A	204	-9.181	1.419	25.880	1.00	27.54	C
ATOM	284	CG	GLU	A	204	-7.776	0.830	25.969	1.00	37.36	C
ATOM	285	CD	GLU	A	204	-7.662	-0.252	27.033	1.00	39.98	C
ATOM	286	OE1	GLU	A	204	-7.179	-1.363	26.718	1.00	40.04	O
ATOM	287	OE2	GLU	A	204	-8.058	0.012	28.188	1.00	41.38	O
ATOM	288	N	LEU	A	205	-8.174	2.250	23.004	1.00	24.35	N
ATOM	289	CA	LEU	A	205	-7.124	2.335	22.000	1.00	23.98	C
ATOM	290	C	LEU	A	205	-7.103	3.713	21.320	1.00	29.76	C
ATOM	291	O	LEU	A	205	-6.045	4.179	20.886	1.00	29.42	O
ATOM	292	CB	LEU	A	205	-7.316	1.241	20.948	1.00	20.75	C
ATOM	293	CG	LEU	A	205	-6.980	-0.184	21.394	1.00	22.96	C
ATOM	294	CD1	LEU	A	205	-7.451	-1.195	20.344	1.00	18.14	C
ATOM	295	CD2	LEU	A	205	-5.473	-0.293	21.622	1.00	23.69	C
ATOM	296	N	GLU	A	206	-8.269	4.357	21.223	1.00	28.76	N
ATOM	297	CA	GLU	A	206	-8.379	5.683	20.610	1.00	26.35	C
ATOM	298	C	GLU	A	206	-7.653	6.695	21.482	1.00	26.14	C

ATOM	299	O	GLU	A	206	-6.941	7.568	20.984	1.00	31.14	O
ATOM	300	CB	GLU	A	206	-9.848	6.109	20.491	1.00	27.57	C
ATOM	301	CG	GLU	A	206	-10.644	5.352	19.455	1.00	28.09	C
ATOM	302	CD	GLU	A	206	-10.406	5.857	18.048	1.00	30.97	C
ATOM	303	OE1	GLU	A	206	-9.428	5.409	17.404	1.00	29.91	O
ATOM	304	OE2	GLU	A	206	-11.203	6.699	17.586	1.00	29.96	O
ATOM	305	N	GLY	A	207	-7.846	6.569	22.789	1.00	22.82	N
ATOM	306	CA	GLY	A	207	-7.207	7.470	23.728	1.00	24.97	C
ATOM	307	C	GLY	A	207	-5.700	7.282	23.805	1.00	27.29	C
ATOM	308	O	GLY	A	207	-4.966	8.246	24.006	1.00	27.41	O
ATOM	309	N	LYS	A	208	-5.235	6.044	23.652	1.00	26.67	N
ATOM	310	CA	LYS	A	208	-3.808	5.758	23.706	1.00	24.96	C
ATOM	311	C	LYS	A	208	-3.127	6.440	22.536	1.00	23.43	C
ATOM	312	O	LYS	A	208	-2.222	7.242	22.729	1.00	25.69	O
ATOM	313	CB	LYS	A	208	-3.558	4.251	23.637	1.00	23.56	C
ATOM	314	CG	LYS	A	208	-3.610	3.542	24.982	1.00	22.21	C
ATOM	315	CD	LYS	A	208	-3.859	2.051	24.786	1.00	24.52	C
ATOM	316	CE	LYS	A	208	-3.344	1.230	25.954	1.00	25.43	C
ATOM	317	NZ	LYS	A	208	-3.835	1.735	27.267	1.00	25.90	N
ATOM	318	N	VAL	A	209	-3.582	6.122	21.327	1.00	22.79	N
ATOM	319	CA	VAL	A	209	-3.023	6.691	20.106	1.00	22.87	C
ATOM	320	C	VAL	A	209	-2.992	8.216	20.135	1.00	26.28	C
ATOM	321	O	VAL	A	209	-2.013	8.835	19.718	1.00	28.10	O
ATOM	322	CB	VAL	A	209	-3.806	6.202	18.882	1.00	18.90	C
ATOM	323	CG1	VAL	A	209	-3.296	6.862	17.621	1.00	13.76	C
ATOM	324	CG2	VAL	A	209	-3.668	4.690	18.777	1.00	18.90	C
ATOM	325	N	ALA	A	210	-4.057	8.822	20.642	1.00	29.41	N
ATOM	326	CA	ALA	A	210	-4.125	10.273	20.738	1.00	28.43	C
ATOM	327	C	ALA	A	210	-3.062	10.793	21.707	1.00	30.14	C
ATOM	328	O	ALA	A	210	-2.409	11.803	21.445	1.00	30.84	O
ATOM	329	CB	ALA	A	210	-5.519	10.704	21.204	1.00	27.62	C
ATOM	330	N	ASP	A	211	-2.898	10.111	22.835	1.00	29.04	N
ATOM	331	CA	ASP	A	211	-1.906	10.523	23.817	1.00	31.89	C
ATOM	332	C	ASP	A	211	-0.517	10.393	23.201	1.00	30.61	C
ATOM	333	O	ASP	A	211	0.322	11.277	23.349	1.00	33.13	O
ATOM	334	CB	ASP	A	211	-2.009	9.651	25.069	1.00	34.60	C
ATOM	335	CG	ASP	A	211	-3.241	9.972	25.901	1.00	40.73	C
ATOM	336	OD1	ASP	A	211	-3.843	11.044	25.674	1.00	38.74	O
ATOM	337	OD2	ASP	A	211	-3.607	9.156	26.782	1.00	41.14	O
ATOM	338	N	SER	A	212	-0.296	9.287	22.499	1.00	28.68	N
ATOM	339	CA	SER	A	212	0.973	9.013	21.847	1.00	28.16	C
ATOM	340	C	SER	A	212	1.244	10.031	20.749	1.00	28.68	C
ATOM	341	O	SER	A	212	2.369	10.506	20.583	1.00	26.39	O
ATOM	342	CB	SER	A	212	0.959	7.606	21.238	1.00	27.32	C
ATOM	343	OG	SER	A	212	0.861	6.610	22.241	1.00	29.82	O
ATOM	344	N	LEU	A	213	0.204	10.361	19.997	1.00	27.03	N
ATOM	345	CA	LEU	A	213	0.331	11.303	18.897	1.00	27.23	C
ATOM	346	C	LEU	A	213	0.570	12.746	19.334	1.00	27.41	C
ATOM	347	O	LEU	A	213	1.237	13.501	18.636	1.00	30.36	O
ATOM	348	CB	LEU	A	213	-0.920	11.249	18.025	1.00	24.65	C

ATOM	349	CG	LEU	A	213	-1.045	10.095	17.038	1.00	22.93	C
ATOM	350	CD1	LEU	A	213	-2.366	10.234	16.280	1.00	20.30	C
ATOM	351	CD2	LEU	A	213	0.133	10.109	16.076	1.00	20.03	C
ATOM	352	N	SER	A	214	0.027	13.129	20.483	1.00	25.64	N
ATOM	353	CA	SER	A	214	0.179	14.496	20.961	1.00	32.16	C
ATOM	354	C	SER	A	214	1.405	14.708	21.845	1.00	35.56	C
ATOM	355	O	SER	A	214	1.698	15.835	22.254	1.00	36.68	O
ATOM	356	CB	SER	A	214	-1.070	14.916	21.727	1.00	29.35	C
ATOM	357	OG	SER	A	214	-1.206	14.155	22.911	1.00	36.25	O
ATOM	358	N	SER	A	215	2.116	13.624	22.140	1.00	37.38	N
ATOM	359	CA	SER	A	215	3.301	13.691	22.987	1.00	36.43	C
ATOM	360	C	SER	A	215	4.559	13.329	22.208	1.00	38.11	C
ATOM	361	O	SER	A	215	5.675	13.592	22.659	1.00	41.31	O
ATOM	362	CB	SER	A	215	3.151	12.741	24.171	1.00	32.54	C
ATOM	363	OG	SER	A	215	3.246	11.403	23.726	1.00	32.60	O
ATOM	364	N	ILE	A	216	4.384	12.723	21.041	1.00	36.96	N
ATOM	365	CA	ILE	A	216	5.529	12.344	20.231	1.00	39.41	C
ATOM	366	C	ILE	A	216	6.328	13.589	19.845	1.00	43.96	C
ATOM	367	O	ILE	A	216	5.764	14.589	19.385	1.00	46.85	O
ATOM	368	CB	ILE	A	216	5.089	11.569	18.953	1.00	34.89	C
ATOM	369	CG1	ILE	A	216	6.265	10.754	18.413	1.00	33.85	C
ATOM	370	CG2	ILE	A	216	4.575	12.529	17.893	1.00	32.20	C
ATOM	371	CD1	ILE	A	216	5.908	9.874	17.229	1.00	32.21	C
ATOM	372	N	SER	A	217	7.641	13.527	20.052	1.00	45.40	N
ATOM	373	CA	SER	A	217	8.526	14.642	19.731	1.00	46.51	C
ATOM	374	C	SER	A	217	8.641	14.845	18.222	1.00	46.45	C
ATOM	375	O	SER	A	217	8.673	13.883	17.450	1.00	44.01	O
ATOM	376	CB	SER	A	217	9.917	14.400	20.327	1.00	48.12	C
ATOM	377	OG	SER	A	217	10.049	15.014	21.602	1.00	52.62	O
ATOM	378	N	SER	A	218	8.703	16.105	17.804	1.00	50.77	N
ATOM	379	CA	SER	A	218	8.808	16.418	16.388	1.00	53.97	C
ATOM	380	C	SER	A	218	9.903	17.435	16.067	1.00	55.71	C
ATOM	381	O	SER	A	218	10.624	17.920	16.954	1.00	52.92	O
ATOM	382	CB	SER	A	218	7.463	16.935	15.865	1.00	55.53	C
ATOM	383	OG	SER	A	218	6.373	16.340	16.554	1.00	58.39	O
ATOM	384	N	GLN	A	219	10.009	17.730	14.773	1.00	59.11	N
ATOM	385	CA	GLN	A	219	10.969	18.682	14.217	1.00	61.20	C
ATOM	386	C	GLN	A	219	12.442	18.409	14.518	1.00	59.78	C
ATOM	387	O	GLN	A	219	12.814	18.113	15.659	1.00	60.78	O
ATOM	388	CB	GLN	A	219	10.612	20.110	14.663	1.00	64.29	C
ATOM	389	CG	GLN	A	219	9.566	20.807	13.781	1.00	62.21	C
ATOM	390	CD	GLN	A	219	10.163	21.886	12.892	1.00	63.11	C
ATOM	391	OE1	GLN	A	219	9.799	22.013	11.719	1.00	62.55	O
ATOM	392	NE2	GLN	A	219	11.084	22.672	13.447	1.00	62.80	N
ATOM	393	N	ALA	A	220	13.262	18.521	13.469	1.00	57.94	N
ATOM	394	CA	ALA	A	220	14.712	18.329	13.536	1.00	55.40	C
ATOM	395	C	ALA	A	220	15.102	17.144	14.406	1.00	55.00	C
ATOM	396	O	ALA	A	220	15.426	17.316	15.585	1.00	49.81	O
ATOM	397	CB	ALA	A	220	15.379	19.603	14.058	1.00	53.26	C
ATOM	398	N	ASP	A	221	15.079	15.954	13.806	1.00	57.54	N

ATOM	399	CA	ASP	A	221	15.405	14.699	14.490	1.00	59.73	C
ATOM	400	C	ASP	A	221	15.781	14.888	15.950	1.00	60.40	C
ATOM	401	O	ASP	A	221	16.828	15.455	16.274	1.00	63.03	O
ATOM	402	CB	ASP	A	221	16.532	13.975	13.759	1.00	62.91	C
ATOM	403	CG	ASP	A	221	16.018	13.078	12.656	1.00	63.74	C
ATOM	404	OD1	ASP	A	221	14.959	13.407	12.080	1.00	65.67	O
ATOM	405	OD2	ASP	A	221	16.670	12.049	12.367	1.00	64.74	O
ATOM	406	N	ARG	A	222	14.912	14.403	16.826	1.00	58.89	N
ATOM	407	CA	ARG	A	222	15.104	14.523	18.264	1.00	56.62	C
ATOM	408	C	ARG	A	222	16.021	13.450	18.838	1.00	53.75	C
ATOM	409	O	ARG	A	222	16.609	12.657	18.102	1.00	53.66	O
ATOM	410	CB	ARG	A	222	13.743	14.467	18.967	1.00	58.03	C
ATOM	411	CG	ARG	A	222	12.564	14.197	18.028	1.00	58.32	C
ATOM	412	CD	ARG	A	222	12.686	12.838	17.361	1.00	57.28	C
ATOM	413	NE	ARG	A	222	11.491	12.467	16.609	1.00	58.34	N
ATOM	414	CZ	ARG	A	222	11.479	12.214	15.304	1.00	58.40	C
ATOM	415	NH1	ARG	A	222	12.601	12.295	14.600	1.00	60.06	N
ATOM	416	NH2	ARG	A	222	10.351	11.859	14.705	1.00	56.21	N
ATOM	417	N	ILE	A	223	16.132	13.439	20.163	1.00	51.45	N
ATOM	418	CA	ILE	A	223	16.963	12.473	20.868	1.00	50.29	C
ATOM	419	C	ILE	A	223	16.097	11.345	21.441	1.00	51.24	C
ATOM	420	O	ILE	A	223	16.606	10.380	22.009	1.00	50.24	O
ATOM	421	CB	ILE	A	223	17.754	13.166	22.020	1.00	47.58	C
ATOM	422	CG1	ILE	A	223	16.929	13.176	23.307	1.00	46.76	C
ATOM	423	CG2	ILE	A	223	18.090	14.597	21.635	1.00	45.48	C
ATOM	424	CD1	ILE	A	223	17.765	13.128	24.565	1.00	48.08	C
ATOM	425	N	TYR	A	224	14.785	11.474	21.270	1.00	51.41	N
ATOM	426	CA	TYR	A	224	13.823	10.499	21.777	1.00	50.17	C
ATOM	427	C	TYR	A	224	12.491	10.652	21.051	1.00	49.09	C
ATOM	428	O	TYR	A	224	12.112	11.766	20.683	1.00	49.28	O
ATOM	429	CB	TYR	A	224	13.592	10.718	23.278	1.00	50.76	C
ATOM	430	CG	TYR	A	224	13.412	12.173	23.699	1.00	53.84	C
ATOM	431	CD1	TYR	A	224	13.380	12.525	25.046	1.00	54.76	C
ATOM	432	CD2	TYR	A	224	13.301	13.198	22.754	1.00	56.15	C
ATOM	433	CE1	TYR	A	224	13.245	13.850	25.447	1.00	55.51	C
ATOM	434	CE2	TYR	A	224	13.166	14.530	23.143	1.00	57.89	C
ATOM	435	CZ	TYR	A	224	13.140	14.848	24.492	1.00	58.94	C
ATOM	436	OH	TYR	A	224	13.022	16.161	24.887	1.00	60.64	O
ATOM	437	N	LEU	A	225	11.783	9.545	20.839	1.00	45.71	N
ATOM	438	CA	LEU	A	225	10.483	9.617	20.177	1.00	40.22	C
ATOM	439	C	LEU	A	225	9.488	10.123	21.210	1.00	39.70	C
ATOM	440	O	LEU	A	225	8.691	11.022	20.945	1.00	40.01	O
ATOM	441	CB	LEU	A	225	10.056	8.243	19.666	1.00	33.79	C
ATOM	442	CG	LEU	A	225	10.653	7.819	18.325	1.00	32.44	C
ATOM	443	CD1	LEU	A	225	9.784	6.745	17.716	1.00	31.25	C
ATOM	444	CD2	LEU	A	225	10.761	9.010	17.386	1.00	30.80	C
ATOM	445	N	TRP	A	226	9.563	9.551	22.403	1.00	36.66	N
ATOM	446	CA	TRP	A	226	8.688	9.939	23.486	1.00	37.07	C
ATOM	447	C	TRP	A	226	9.547	10.189	24.715	1.00	41.10	C
ATOM	448	O	TRP	A	226	10.284	9.308	25.153	1.00	42.37	O

ATOM	449	CB	TRP	A	226	7.665	8.826	23.752	1.00	35.18	C
ATOM	450	CG	TRP	A	226	6.503	8.858	22.792	1.00	31.67	C
ATOM	451	CD1	TRP	A	226	5.430	9.703	22.836	1.00	30.38	C
ATOM	452	CD2	TRP	A	226	6.322	8.045	21.626	1.00	31.06	C
ATOM	453	NE1	TRP	A	226	4.596	9.471	21.770	1.00	29.87	N
ATOM	454	CE2	TRP	A	226	5.118	8.457	21.010	1.00	29.55	C
ATOM	455	CE3	TRP	A	226	7.059	7.008	21.039	1.00	30.33	C
ATOM	456	CZ2	TRP	A	226	4.634	7.871	19.837	1.00	28.02	C
ATOM	457	CZ3	TRP	A	226	6.575	6.424	19.867	1.00	33.27	C
ATOM	458	CH2	TRP	A	226	5.372	6.859	19.281	1.00	29.10	C
ATOM	459	N	GLU	A	227	9.459	11.397	25.259	1.00	42.84	N
ATOM	460	CA	GLU	A	227	10.229	11.781	26.439	1.00	45.27	C
ATOM	461	C	GLU	A	227	10.171	10.767	27.591	1.00	46.31	C
ATOM	462	O	GLU	A	227	11.130	10.628	28.354	1.00	45.31	O
ATOM	463	CB	GLU	A	227	9.747	13.146	26.942	1.00	48.28	C
ATOM	464	CG	GLU	A	227	10.851	14.073	27.413	1.00	52.70	C
ATOM	465	CD	GLU	A	227	11.061	14.012	28.912	1.00	59.78	C
ATOM	466	OE1	GLU	A	227	11.345	15.069	29.515	1.00	67.76	O
ATOM	467	OE2	GLU	A	227	10.945	12.912	29.492	1.00	62.47	O
ATOM	468	N	LYS	A	228	9.048	10.066	27.725	1.00	47.22	N
ATOM	469	CA	LYS	A	228	8.881	9.085	28.797	1.00	46.79	C
ATOM	470	C	LYS	A	228	9.741	7.841	28.597	1.00	44.20	C
ATOM	471	O	LYS	A	228	10.081	7.158	29.562	1.00	44.29	O
ATOM	472	CB	LYS	A	228	7.411	8.674	28.916	1.00	51.24	C
ATOM	473	CG	LYS	A	228	6.612	9.494	29.921	1.00	57.40	C
ATOM	474	CD	LYS	A	228	5.360	10.100	29.279	1.00	63.26	C
ATOM	475	CE	LYS	A	228	4.083	9.404	29.747	1.00	62.52	C
ATOM	476	NZ	LYS	A	228	3.425	8.642	28.644	1.00	62.54	N
ATOM	477	N	PHE	A	229	10.081	7.548	27.346	1.00	39.64	N
ATOM	478	CA	PHE	A	229	10.906	6.387	27.016	1.00	40.93	C
ATOM	479	C	PHE	A	229	12.059	6.843	26.127	1.00	41.46	C
ATOM	480	O	PHE	A	229	12.278	6.310	25.035	1.00	40.57	O
ATOM	481	CB	PHE	A	229	10.066	5.332	26.291	1.00	41.02	C
ATOM	482	CG	PHE	A	229	8.678	5.175	26.851	1.00	39.17	C
ATOM	483	CD1	PHE	A	229	8.468	4.475	28.036	1.00	36.23	C
ATOM	484	CD2	PHE	A	229	7.586	5.749	26.209	1.00	38.48	C
ATOM	485	CE1	PHE	A	229	7.189	4.349	28.578	1.00	39.56	C
ATOM	486	CE2	PHE	A	229	6.304	5.630	26.742	1.00	41.01	C
ATOM	487	CZ	PHE	A	229	6.105	4.928	27.930	1.00	39.79	C
ATOM	488	N	SER	A	230	12.795	7.835	26.620	1.00	44.01	N
ATOM	489	CA	SER	A	230	13.923	8.429	25.904	1.00	46.38	C
ATOM	490	C	SER	A	230	15.230	7.663	26.082	1.00	46.62	C
ATOM	491	O	SER	A	230	15.915	7.341	25.103	1.00	47.04	O
ATOM	492	CB	SER	A	230	14.120	9.869	26.378	1.00	46.02	C
ATOM	493	OG	SER	A	230	13.942	9.974	27.783	1.00	47.73	O
ATOM	494	N	ASN	A	231	15.570	7.388	27.339	1.00	45.55	N
ATOM	495	CA	ASN	A	231	16.791	6.670	27.686	1.00	44.43	C
ATOM	496	C	ASN	A	231	16.890	5.326	26.975	1.00	43.30	C
ATOM	497	O	ASN	A	231	16.441	4.313	27.509	1.00	42.61	O
ATOM	498	CB	ASN	A	231	16.839	6.447	29.196	1.00	43.08	C

ATOM	499	CG	ASN	A	231	18.171	5.909	29.656	1.00	46.43	C
ATOM	500	OD1	ASN	A	231	19.085	5.712	28.849	1.00	43.54	O
ATOM	501	ND2	ASN	A	231	18.296	5.665	30.956	1.00	43.28	N
ATOM	502	N	TYR	A	232	17.487	5.316	25.784	1.00	43.58	N
ATOM	503	CA	TYR	A	232	17.625	4.086	25.009	1.00	46.64	C
ATOM	504	C	TYR	A	232	18.627	3.086	25.595	1.00	44.90	C
ATOM	505	O	TYR	A	232	18.972	2.102	24.952	1.00	41.63	O
ATOM	506	CB	TYR	A	232	17.984	4.412	23.551	1.00	54.49	C
ATOM	507	CG	TYR	A	232	19.400	4.922	23.321	1.00	65.85	C
ATOM	508	CD1	TYR	A	232	19.806	6.181	23.788	1.00	68.42	C
ATOM	509	CD2	TYR	A	232	20.328	4.159	22.604	1.00	68.20	C
ATOM	510	CE1	TYR	A	232	21.102	6.664	23.543	1.00	69.60	C
ATOM	511	CE2	TYR	A	232	21.623	4.633	22.355	1.00	70.98	C
ATOM	512	CZ	TYR	A	232	22.002	5.883	22.825	1.00	71.51	C
ATOM	513	OH	TYR	A	232	23.277	6.344	22.573	1.00	71.03	O
ATOM	514	N	LYS	A	233	19.084	3.347	26.817	1.00	46.53	N
ATOM	515	CA	LYS	A	233	20.019	2.460	27.508	1.00	47.93	C
ATOM	516	C	LYS	A	233	19.186	1.516	28.378	1.00	45.87	C
ATOM	517	O	LYS	A	233	19.663	0.466	28.819	1.00	45.65	O
ATOM	518	CB	LYS	A	233	20.989	3.268	28.380	1.00	48.98	C
ATOM	519	CG	LYS	A	233	22.195	3.823	27.630	1.00	51.82	C
ATOM	520	CD	LYS	A	233	22.964	4.830	28.486	1.00	56.42	C
ATOM	521	CE	LYS	A	233	24.418	4.412	28.697	1.00	58.89	C
ATOM	522	NZ	LYS	A	233	25.174	5.365	29.569	1.00	57.91	N
ATOM	523	N	THR	A	234	17.941	1.916	28.634	1.00	44.34	N
ATOM	524	CA	THR	A	234	16.991	1.103	29.396	1.00	41.15	C
ATOM	525	C	THR	A	234	16.218	0.323	28.337	1.00	38.52	C
ATOM	526	O	THR	A	234	15.370	0.888	27.651	1.00	39.15	O
ATOM	527	CB	THR	A	234	15.983	1.963	30.166	1.00	37.22	C
ATOM	528	OG1	THR	A	234	16.640	3.113	30.698	1.00	44.77	O
ATOM	529	CG2	THR	A	234	15.372	1.175	31.298	1.00	40.12	C
ATOM	530	N	SER	A	235	16.523	-0.962	28.190	1.00	35.42	N
ATOM	531	CA	SER	A	235	15.866	-1.794	27.190	1.00	29.24	C
ATOM	532	C	SER	A	235	14.345	-1.673	27.251	1.00	28.94	C
ATOM	533	O	SER	A	235	13.673	-1.794	26.233	1.00	28.85	O
ATOM	534	CB	SER	A	235	16.275	-3.255	27.376	1.00	30.51	C
ATOM	535	OG	SER	A	235	16.258	-3.600	28.750	1.00	28.50	O
ATOM	536	N	ALA	A	236	13.806	-1.436	28.443	1.00	28.03	N
ATOM	537	CA	ALA	A	236	12.365	-1.298	28.609	1.00	30.31	C
ATOM	538	C	ALA	A	236	11.781	-0.265	27.635	1.00	32.79	C
ATOM	539	O	ALA	A	236	10.808	-0.539	26.929	1.00	32.54	O
ATOM	540	CB	ALA	A	236	12.047	-0.902	30.044	1.00	28.13	C
ATOM	541	N	ASN	A	237	12.387	0.919	27.597	1.00	34.10	N
ATOM	542	CA	ASN	A	237	11.939	1.998	26.722	1.00	32.68	C
ATOM	543	C	ASN	A	237	11.920	1.588	25.255	1.00	33.29	C
ATOM	544	O	ASN	A	237	11.290	2.245	24.426	1.00	35.72	O
ATOM	545	CB	ASN	A	237	12.841	3.222	26.897	1.00	33.07	C
ATOM	546	CG	ASN	A	237	12.876	3.720	28.326	1.00	35.02	C
ATOM	547	OD1	ASN	A	237	13.744	4.511	28.700	1.00	38.08	O
ATOM	548	ND2	ASN	A	237	11.930	3.258	29.137	1.00	34.96	N

ATOM	549	N	LEU	A	238	12.605	0.499	24.934	1.00	33.79	N
ATOM	550	CA	LEU	A	238	12.658	0.014	23.561	1.00	32.59	C
ATOM	551	C	LEU	A	238	11.316	-0.581	23.133	1.00	35.15	C
ATOM	552	O	LEU	A	238	10.729	-0.150	22.140	1.00	34.28	O
ATOM	553	CB	LEU	A	238	13.753	-1.047	23.423	1.00	35.70	C
ATOM	554	CG	LEU	A	238	14.857	-0.871	22.378	1.00	37.04	C
ATOM	555	CD1	LEU	A	238	14.243	-0.880	20.998	1.00	40.88	C
ATOM	556	CD2	LEU	A	238	15.608	0.420	22.627	1.00	34.67	C
ATOM	557	N	THR	A	239	10.830	-1.568	23.882	1.00	33.79	N
ATOM	558	CA	THR	A	239	9.569	-2.216	23.537	1.00	33.51	C
ATOM	559	C	THR	A	239	8.333	-1.381	23.886	1.00	33.48	C
ATOM	560	O	THR	A	239	7.275	-1.567	23.292	1.00	33.91	O
ATOM	561	CB	THR	A	239	9.457	-3.624	24.186	1.00	34.57	C
ATOM	562	OG1	THR	A	239	8.661	-3.558	25.374	1.00	36.90	O
ATOM	563	CG2	THR	A	239	10.830	-4.161	24.525	1.00	26.43	C
ATOM	564	N	ALA	A	240	8.465	-0.465	24.841	1.00	32.87	N
ATOM	565	CA	ALA	A	240	7.353	0.402	25.217	1.00	32.26	C
ATOM	566	C	ALA	A	240	7.112	1.391	24.081	1.00	34.80	C
ATOM	567	O	ALA	A	240	5.988	1.855	23.859	1.00	37.42	O
ATOM	568	CB	ALA	A	240	7.678	1.155	26.484	1.00	27.57	C
ATOM	569	N	THR	A	241	8.184	1.701	23.361	1.00	33.25	N
ATOM	570	CA	THR	A	241	8.125	2.630	22.246	1.00	28.68	C
ATOM	571	C	THR	A	241	7.493	1.948	21.046	1.00	25.59	C
ATOM	572	O	THR	A	241	6.615	2.510	20.399	1.00	27.81	O
ATOM	573	CB	THR	A	241	9.549	3.139	21.860	1.00	29.16	C
ATOM	574	OG1	THR	A	241	9.954	4.175	22.766	1.00	25.42	O
ATOM	575	CG2	THR	A	241	9.557	3.689	20.440	1.00	25.67	C
ATOM	576	N	TYR	A	242	7.934	0.732	20.754	1.00	22.37	N
ATOM	577	CA	TYR	A	242	7.410	-0.013	19.616	1.00	26.52	C
ATOM	578	C	TYR	A	242	5.953	-0.437	19.824	1.00	27.57	C
ATOM	579	O	TYR	A	242	5.200	-0.622	18.867	1.00	23.29	O
ATOM	580	CB	TYR	A	242	8.286	-1.237	19.355	1.00	28.99	C
ATOM	581	CG	TYR	A	242	9.496	-0.923	18.507	1.00	31.58	C
ATOM	582	CD1	TYR	A	242	9.358	-0.657	17.147	1.00	32.69	C
ATOM	583	CD2	TYR	A	242	10.780	-0.905	19.057	1.00	31.23	C
ATOM	584	CE1	TYR	A	242	10.468	-0.383	16.347	1.00	34.78	C
ATOM	585	CE2	TYR	A	242	11.905	-0.631	18.260	1.00	32.36	C
ATOM	586	CZ	TYR	A	242	11.736	-0.374	16.906	1.00	34.16	C
ATOM	587	OH	TYR	A	242	12.818	-0.130	16.092	1.00	30.26	O
ATOM	588	N	ARG	A	243	5.571	-0.585	21.085	1.00	25.99	N
ATOM	589	CA	ARG	A	243	4.216	-0.972	21.435	1.00	27.56	C
ATOM	590	C	ARG	A	243	3.279	0.185	21.136	1.00	29.72	C
ATOM	591	O	ARG	A	243	2.111	-0.021	20.815	1.00	27.30	O
ATOM	592	CB	ARG	A	243	4.145	-1.329	22.913	1.00	23.64	C
ATOM	593	CG	ARG	A	243	4.015	-2.792	23.133	1.00	27.23	C
ATOM	594	CD	ARG	A	243	4.594	-3.199	24.454	1.00	30.28	C
ATOM	595	NE	ARG	A	243	5.058	-4.575	24.375	1.00	31.79	N
ATOM	596	CZ	ARG	A	243	5.323	-5.349	25.420	1.00	37.27	C
ATOM	597	NH1	ARG	A	243	5.741	-6.586	25.206	1.00	33.47	N
ATOM	598	NH2	ARG	A	243	5.178	-4.898	26.664	1.00	32.47	N

ATOM	599	N	LYS	A	244	3.801	1.404	21.250	1.00	28.92	N
ATOM	600	CA	LYS	A	244	3.014	2.596	20.969	1.00	28.82	C
ATOM	601	C	LYS	A	244	2.680	2.674	19.475	1.00	28.16	C
ATOM	602	O	LYS	A	244	1.617	3.175	19.102	1.00	25.57	O
ATOM	603	CB	LYS	A	244	3.773	3.851	21.408	1.00	25.68	C
ATOM	604	CG	LYS	A	244	3.672	4.139	22.898	1.00	25.39	C
ATOM	605	CD	LYS	A	244	3.825	5.624	23.169	1.00	31.20	C
ATOM	606	CE	LYS	A	244	2.952	6.076	24.326	1.00	33.92	C
ATOM	607	NZ	LYS	A	244	3.034	5.131	25.477	1.00	43.60	N
ATOM	608	N	LEU	A	245	3.579	2.170	18.627	1.00	24.58	N
ATOM	609	CA	LEU	A	245	3.360	2.184	17.179	1.00	26.00	C
ATOM	610	C	LEU	A	245	2.405	1.074	16.773	1.00	23.48	C
ATOM	611	O	LEU	A	245	1.694	1.169	15.774	1.00	22.96	O
ATOM	612	CB	LEU	A	245	4.678	1.996	16.429	1.00	24.56	C
ATOM	613	CG	LEU	A	245	5.702	3.117	16.586	1.00	30.07	C
ATOM	614	CD1	LEU	A	245	6.923	2.808	15.716	1.00	29.45	C
ATOM	615	CD2	LEU	A	245	5.077	4.451	16.204	1.00	25.03	C
ATOM	616	N	GLU	A	246	2.419	0.008	17.552	1.00	24.71	N
ATOM	617	CA	GLU	A	246	1.564	-1.138	17.315	1.00	25.78	C
ATOM	618	C	GLU	A	246	0.117	-0.727	17.600	1.00	25.12	C
ATOM	619	O	GLU	A	246	-0.811	-1.119	16.895	1.00	26.90	O
ATOM	620	CB	GLU	A	246	1.991	-2.244	18.253	1.00	23.35	C
ATOM	621	CG	GLU	A	246	1.380	-3.566	17.997	1.00	27.48	C
ATOM	622	CD	GLU	A	246	1.618	-4.441	19.171	1.00	30.39	C
ATOM	623	OE1	GLU	A	246	2.093	-5.574	18.991	1.00	43.97	O
ATOM	624	OE2	GLU	A	246	1.340	-3.983	20.290	1.00	31.73	O
ATOM	625	N	GLU	A	247	-0.056	0.067	18.649	1.00	23.32	N
ATOM	626	CA	GLU	A	247	-1.365	0.565	19.018	1.00	20.70	C
ATOM	627	C	GLU	A	247	-1.886	1.406	17.860	1.00	23.35	C
ATOM	628	O	GLU	A	247	-3.068	1.332	17.509	1.00	24.72	O
ATOM	629	CB	GLU	A	247	-1.258	1.405	20.286	1.00	18.86	C
ATOM	630	CG	GLU	A	247	-0.994	0.579	21.534	1.00	15.04	C
ATOM	631	CD	GLU	A	247	-0.769	1.440	22.755	1.00	17.41	C
ATOM	632	OE1	GLU	A	247	-0.525	2.655	22.580	1.00	21.23	O
ATOM	633	OE2	GLU	A	247	-0.835	0.906	23.888	1.00	20.63	O
ATOM	634	N	MET	A	248	-0.994	2.196	17.263	1.00	20.21	N
ATOM	635	CA	MET	A	248	-1.333	3.054	16.128	1.00	19.19	C
ATOM	636	C	MET	A	248	-1.691	2.206	14.924	1.00	18.31	C
ATOM	637	O	MET	A	248	-2.524	2.588	14.104	1.00	21.92	O
ATOM	638	CB	MET	A	248	-0.150	3.952	15.755	1.00	17.78	C
ATOM	639	CG	MET	A	248	0.064	5.139	16.669	1.00	23.45	C
ATOM	640	SD	MET	A	248	1.507	6.118	16.180	1.00	22.12	S
ATOM	641	CE	MET	A	248	1.938	6.862	17.770	1.00	14.59	C
ATOM	642	N	ALA	A	249	-1.049	1.052	14.816	1.00	17.28	N
ATOM	643	CA	ALA	A	249	-1.280	0.143	13.704	1.00	18.95	C
ATOM	644	C	ALA	A	249	-2.667	-0.480	13.794	1.00	21.57	C
ATOM	645	O	ALA	A	249	-3.312	-0.744	12.780	1.00	21.85	O
ATOM	646	CB	ALA	A	249	-0.234	-0.939	13.710	1.00	19.69	C
ATOM	647	N	LYS	A	250	-3.115	-0.722	15.020	1.00	20.42	N
ATOM	648	CA	LYS	A	250	-4.431	-1.300	15.245	1.00	21.24	C

ATOM	649	C	LYS	A	250	-5.535	-0.325	14.832	1.00	21.22	C
ATOM	650	O	LYS	A	250	-6.424	-0.676	14.059	1.00	24.69	O
ATOM	651	CB	LYS	A	250	-4.590	-1.663	16.718	1.00	19.20	C
ATOM	652	CG	LYS	A	250	-3.885	-2.952	17.114	1.00	20.04	C
ATOM	653	CD	LYS	A	250	-3.931	-3.121	18.615	1.00	18.21	C
ATOM	654	CE	LYS	A	250	-3.464	-4.489	19.024	1.00	16.16	C
ATOM	655	NZ	LYS	A	250	-3.549	-4.662	20.501	1.00	17.44	N
ATOM	656	N	GLN	A	251	-5.460	0.902	15.339	1.00	20.83	N
ATOM	657	CA	GLN	A	251	-6.454	1.919	15.039	1.00	18.78	C
ATOM	658	C	GLN	A	251	-6.458	2.369	13.591	1.00	20.52	C
ATOM	659	O	GLN	A	251	-7.516	2.640	13.026	1.00	22.65	O
ATOM	660	CB	GLN	A	251	-6.257	3.113	15.962	1.00	18.97	C
ATOM	661	CG	GLN	A	251	-6.544	2.786	17.423	1.00	22.19	C
ATOM	662	CD	GLN	A	251	-7.868	2.034	17.618	1.00	26.65	C
ATOM	663	OE1	GLN	A	251	-7.961	0.827	17.374	1.00	28.86	O
ATOM	664	NE2	GLN	A	251	-8.892	2.751	18.063	1.00	21.88	N
ATOM	665	N	VAL	A	252	-5.281	2.436	12.982	1.00	18.47	N
ATOM	666	CA	VAL	A	252	-5.169	2.860	11.597	1.00	20.58	C
ATOM	667	C	VAL	A	252	-5.815	1.866	10.631	1.00	21.03	C
ATOM	668	O	VAL	A	252	-6.106	2.202	9.479	1.00	21.32	O
ATOM	669	CB	VAL	A	252	-3.688	3.069	11.199	1.00	24.55	C
ATOM	670	CG1	VAL	A	252	-3.164	1.837	10.479	1.00	26.33	C
ATOM	671	CG2	VAL	A	252	-3.557	4.300	10.314	1.00	18.98	C
ATOM	672	N	THR	A	253	-6.027	0.639	11.097	1.00	22.32	N
ATOM	673	CA	THR	A	253	-6.648	-0.391	10.266	1.00	22.83	C
ATOM	674	C	THR	A	253	-8.041	-0.763	10.793	1.00	20.66	C
ATOM	675	O	THR	A	253	-8.588	-1.806	10.437	1.00	22.77	O
ATOM	676	CB	THR	A	253	-5.779	-1.670	10.213	1.00	23.10	C
ATOM	677	OG1	THR	A	253	-5.404	-2.046	11.543	1.00	19.37	O
ATOM	678	CG2	THR	A	253	-4.521	-1.433	9.370	1.00	19.68	C
ATOM	679	N	ASN	A	254	-8.596	0.095	11.644	1.00	22.50	N
ATOM	680	CA	ASN	A	254	-9.923	-0.106	12.238	1.00	23.82	C
ATOM	681	C	ASN	A	254	-10.871	0.916	11.601	1.00	22.80	C
ATOM	682	O	ASN	A	254	-10.845	2.099	11.949	1.00	24.47	O
ATOM	683	CB	ASN	A	254	-9.843	0.120	13.753	1.00	26.40	C
ATOM	684	CG	ASN	A	254	-11.169	-0.102	14.460	1.00	29.35	C
ATOM	685	OD1	ASN	A	254	-11.261	0.053	15.675	1.00	31.53	O
ATOM	686	ND2	ASN	A	254	-12.199	-0.464	13.705	1.00	29.44	N
ATOM	687	N	PRO	A	255	-11.725	0.471	10.661	1.00	22.45	N
ATOM	688	CA	PRO	A	255	-12.667	1.371	9.984	1.00	20.97	C
ATOM	689	C	PRO	A	255	-13.492	2.268	10.891	1.00	21.25	C
ATOM	690	O	PRO	A	255	-13.962	3.319	10.463	1.00	21.95	O
ATOM	691	CB	PRO	A	255	-13.533	0.428	9.154	1.00	19.58	C
ATOM	692	CG	PRO	A	255	-12.660	-0.760	8.907	1.00	18.31	C
ATOM	693	CD	PRO	A	255	-11.860	-0.917	10.181	1.00	19.56	C
ATOM	694	N	SER	A	256	-13.646	1.867	12.148	1.00	21.24	N
ATOM	695	CA	SER	A	256	-14.423	2.645	13.103	1.00	22.21	C
ATOM	696	C	SER	A	256	-13.573	3.584	13.936	1.00	25.58	C
ATOM	697	O	SER	A	256	-14.096	4.312	14.789	1.00	26.07	O
ATOM	698	CB	SER	A	256	-15.204	1.720	14.034	1.00	22.96	C

ATOM	699	OG	SER	A	256	-16.240	1.062	13.328	1.00	22.72	O
ATOM	700	N	SER	A	257	-12.263	3.572	13.706	1.00	24.21	N
ATOM	701	CA	SER	A	257	-11.383	4.462	14.456	1.00	21.38	C
ATOM	702	C	SER	A	257	-11.296	5.820	13.781	1.00	16.84	C
ATOM	703	O	SER	A	257	-11.356	5.930	12.554	1.00	16.35	O
ATOM	704	CB	SER	A	257	-9.971	3.882	14.573	1.00	26.62	C
ATOM	705	OG	SER	A	257	-9.078	4.881	15.051	1.00	21.66	O
ATOM	706	N	ARG	A	258	-11.152	6.855	14.596	1.00	20.75	N
ATOM	707	CA	ARG	A	258	-11.030	8.206	14.083	1.00	21.79	C
ATOM	708	C	ARG	A	258	-9.670	8.331	13.414	1.00	24.26	C
ATOM	709	O	ARG	A	258	-9.359	9.356	12.821	1.00	24.24	O
ATOM	710	CB	ARG	A	258	-11.126	9.210	15.223	1.00	21.27	C
ATOM	711	CG	ARG	A	258	-9.829	9.419	15.959	1.00	31.59	C
ATOM	712	CD	ARG	A	258	-9.874	10.688	16.770	1.00	34.98	C
ATOM	713	NE	ARG	A	258	-9.675	10.414	18.186	1.00	43.54	N
ATOM	714	CZ	ARG	A	258	-10.625	9.956	18.992	1.00	47.53	C
ATOM	715	NH1	ARG	A	258	-11.839	9.724	18.515	1.00	50.36	N
ATOM	716	NH2	ARG	A	258	-10.360	9.726	20.271	1.00	48.31	N
ATOM	717	N	TYR	A	259	-8.863	7.278	13.521	1.00	24.23	N
ATOM	718	CA	TYR	A	259	-7.532	7.270	12.931	1.00	22.40	C
ATOM	719	C	TYR	A	259	-7.464	6.340	11.738	1.00	23.85	C
ATOM	720	O	TYR	A	259	-6.395	6.102	11.186	1.00	25.04	O
ATOM	721	CB	TYR	A	259	-6.509	6.832	13.973	1.00	19.81	C
ATOM	722	CG	TYR	A	259	-6.438	7.760	15.147	1.00	11.65	C
ATOM	723	CD1	TYR	A	259	-6.041	9.085	14.980	1.00	12.66	C
ATOM	724	CD2	TYR	A	259	-6.808	7.332	16.414	1.00	8.73	C
ATOM	725	CE1	TYR	A	259	-6.017	9.965	16.047	1.00	12.53	C
ATOM	726	CE2	TYR	A	259	-6.790	8.198	17.489	1.00	13.34	C
ATOM	727	CZ	TYR	A	259	-6.394	9.517	17.299	1.00	16.78	C
ATOM	728	OH	TYR	A	259	-6.376	10.382	18.366	1.00	20.56	O
ATOM	729	N	TYR	A	260	-8.607	5.809	11.336	1.00	22.34	N
ATOM	730	CA	TYR	A	260	-8.641	4.897	10.210	1.00	21.71	C
ATOM	731	C	TYR	A	260	-8.011	5.547	8.989	1.00	24.82	C
ATOM	732	O	TYR	A	260	-8.445	6.610	8.552	1.00	21.76	O
ATOM	733	CB	TYR	A	260	-10.083	4.499	9.907	1.00	17.31	C
ATOM	734	CG	TYR	A	260	-10.224	3.524	8.773	1.00	12.31	C
ATOM	735	CD1	TYR	A	260	-9.628	2.268	8.831	1.00	15.42	C
ATOM	736	CD2	TYR	A	260	-10.980	3.842	7.655	1.00	14.56	C
ATOM	737	CE1	TYR	A	260	-9.787	1.351	7.796	1.00	13.82	C
ATOM	738	CE2	TYR	A	260	-11.147	2.936	6.613	1.00	18.23	C
ATOM	739	CZ	TYR	A	260	-10.549	1.693	6.689	1.00	17.70	C
ATOM	740	OH	TYR	A	260	-10.709	0.798	5.655	1.00	20.83	O
ATOM	741	N	GLN	A	261	-6.980	4.898	8.450	1.00	26.40	N
ATOM	742	CA	GLN	A	261	-6.264	5.382	7.271	1.00	22.82	C
ATOM	743	C	GLN	A	261	-5.819	6.842	7.348	1.00	20.40	C
ATOM	744	O	GLN	A	261	-5.690	7.517	6.324	1.00	24.43	O
ATOM	745	CB	GLN	A	261	-7.119	5.154	6.023	1.00	21.43	C
ATOM	746	CG	GLN	A	261	-7.298	3.680	5.706	1.00	23.77	C
ATOM	747	CD	GLN	A	261	-8.244	3.415	4.552	1.00	24.50	C
ATOM	748	OE1	GLN	A	261	-8.262	2.318	3.992	1.00	27.79	O

ATOM	749	NE2	GLN	A	261	-9.037	4.414	4.193	1.00	30.83	N
ATOM	750	N	ASP	A	262	-5.577	7.325	8.563	1.00	18.43	N
ATOM	751	CA	ASP	A	262	-5.146	8.703	8.770	1.00	24.86	C
ATOM	752	C	ASP	A	262	-3.714	8.895	8.248	1.00	28.82	C
ATOM	753	O	ASP	A	262	-2.787	8.218	8.698	1.00	26.19	O
ATOM	754	CB	ASP	A	262	-5.229	9.050	10.263	1.00	24.63	C
ATOM	755	CG	ASP	A	262	-4.749	10.464	10.570	1.00	30.09	C
ATOM	756	OD1	ASP	A	262	-3.879	10.971	9.840	1.00	36.93	O
ATOM	757	OD2	ASP	A	262	-5.233	11.073	11.546	1.00	33.35	O
ATOM	758	N	GLU	A	263	-3.549	9.822	7.303	1.00	30.54	N
ATOM	759	CA	GLU	A	263	-2.252	10.113	6.684	1.00	32.21	C
ATOM	760	C	GLU	A	263	-1.149	10.391	7.697	1.00	32.13	C
ATOM	761	O	GLU	A	263	-0.009	9.943	7.542	1.00	33.01	O
ATOM	762	CB	GLU	A	263	-2.374	11.318	5.743	1.00	36.41	C
ATOM	763	CG	GLU	A	263	-2.781	12.615	6.444	1.00	41.22	C
ATOM	764	CD	GLU	A	263	-1.847	13.782	6.150	1.00	44.60	C
ATOM	765	OE1	GLU	A	263	-0.722	13.543	5.667	1.00	41.83	O
ATOM	766	OE2	GLU	A	263	-2.243	14.942	6.403	1.00	45.06	O
ATOM	767	N	THR	A	264	-1.485	11.147	8.729	1.00	27.16	N
ATOM	768	CA	THR	A	264	-0.517	11.477	9.748	1.00	29.15	C
ATOM	769	C	THR	A	264	-0.121	10.234	10.545	1.00	31.30	C
ATOM	770	O	THR	A	264	1.061	10.004	10.795	1.00	34.12	O
ATOM	771	CB	THR	A	264	-1.083	12.553	10.689	1.00	29.11	C
ATOM	772	OG1	THR	A	264	-1.149	13.796	9.984	1.00	33.49	O
ATOM	773	CG2	THR	A	264	-0.204	12.725	11.921	1.00	32.08	C
ATOM	774	N	VAL	A	265	-1.105	9.430	10.937	1.00	29.04	N
ATOM	775	CA	VAL	A	265	-0.834	8.226	11.712	1.00	27.63	C
ATOM	776	C	VAL	A	265	-0.070	7.191	10.895	1.00	26.45	C
ATOM	777	O	VAL	A	265	0.733	6.436	11.440	1.00	23.93	O
ATOM	778	CB	VAL	A	265	-2.142	7.594	12.249	1.00	26.76	C
ATOM	779	CG1	VAL	A	265	-1.847	6.249	12.913	1.00	23.06	C
ATOM	780	CG2	VAL	A	265	-2.793	8.543	13.245	1.00	24.96	C
ATOM	781	N	VAL	A	266	-0.318	7.154	9.590	1.00	25.31	N
ATOM	782	CA	VAL	A	266	0.374	6.204	8.724	1.00	27.68	C
ATOM	783	C	VAL	A	266	1.846	6.606	8.608	1.00	28.63	C
ATOM	784	O	VAL	A	266	2.737	5.765	8.706	1.00	24.81	O
ATOM	785	CB	VAL	A	266	-0.247	6.166	7.307	1.00	26.96	C
ATOM	786	CG1	VAL	A	266	0.658	5.391	6.362	1.00	28.95	C
ATOM	787	CG2	VAL	A	266	-1.630	5.521	7.358	1.00	29.58	C
ATOM	788	N	ARG	A	267	2.084	7.902	8.410	1.00	26.19	N
ATOM	789	CA	ARG	A	267	3.433	8.425	8.278	1.00	26.21	C
ATOM	790	C	ARG	A	267	4.183	8.349	9.592	1.00	23.72	C
ATOM	791	O	ARG	A	267	5.371	8.058	9.619	1.00	24.11	O
ATOM	792	CB	ARG	A	267	3.399	9.872	7.799	1.00	28.43	C
ATOM	793	CG	ARG	A	267	4.781	10.458	7.562	1.00	29.22	C
ATOM	794	CD	ARG	A	267	4.730	11.639	6.607	1.00	32.84	C
ATOM	795	NE	ARG	A	267	3.907	12.708	7.155	1.00	34.85	N
ATOM	796	CZ	ARG	A	267	2.714	13.048	6.683	1.00	33.39	C
ATOM	797	NH1	ARG	A	267	2.197	12.402	5.644	1.00	31.38	N
ATOM	798	NH2	ARG	A	267	2.039	14.033	7.257	1.00	33.24	N

ATOM	799	N	THR	A	268	3.485	8.618	10.684	1.00	20.83	N
ATOM	800	CA	THR	A	268	4.104	8.565	11.995	1.00	22.96	C
ATOM	801	C	THR	A	268	4.661	7.178	12.249	1.00	26.28	C
ATOM	802	O	THR	A	268	5.769	7.033	12.765	1.00	29.95	O
ATOM	803	CB	THR	A	268	3.100	8.903	13.114	1.00	22.40	C
ATOM	804	OG1	THR	A	268	2.877	10.316	13.140	1.00	24.29	O
ATOM	805	CG2	THR	A	268	3.637	8.459	14.480	1.00	20.20	C
ATOM	806	N	VAL	A	269	3.894	6.155	11.894	1.00	27.19	N
ATOM	807	CA	VAL	A	269	4.348	4.788	12.107	1.00	25.87	C
ATOM	808	C	VAL	A	269	5.525	4.476	11.185	1.00	29.55	C
ATOM	809	O	VAL	A	269	6.548	3.953	11.625	1.00	30.07	O
ATOM	810	CB	VAL	A	269	3.214	3.774	11.852	1.00	24.75	C
ATOM	811	CG1	VAL	A	269	3.763	2.348	11.879	1.00	20.56	C
ATOM	812	CG2	VAL	A	269	2.132	3.942	12.905	1.00	17.66	C
ATOM	813	N	ARG	A	270	5.378	4.808	9.910	1.00	28.22	N
ATOM	814	CA	ARG	A	270	6.425	4.558	8.938	1.00	31.39	C
ATOM	815	C	ARG	A	270	7.694	5.335	9.268	1.00	33.54	C
ATOM	816	O	ARG	A	270	8.800	4.843	9.054	1.00	36.06	O
ATOM	817	CB	ARG	A	270	5.940	4.934	7.540	1.00	30.33	C
ATOM	818	CG	ARG	A	270	4.983	3.928	6.934	1.00	31.64	C
ATOM	819	CD	ARG	A	270	4.529	4.385	5.574	1.00	27.98	C
ATOM	820	NE	ARG	A	270	5.665	4.696	4.721	1.00	36.10	N
ATOM	821	CZ	ARG	A	270	6.416	3.778	4.121	1.00	42.07	C
ATOM	822	NH1	ARG	A	270	6.148	2.488	4.283	1.00	39.95	N
ATOM	823	NH2	ARG	A	270	7.433	4.148	3.354	1.00	46.07	N
ATOM	824	N	ASP	A	271	7.530	6.548	9.787	1.00	34.03	N
ATOM	825	CA	ASP	A	271	8.670	7.389	10.142	1.00	33.48	C
ATOM	826	C	ASP	A	271	9.339	6.871	11.398	1.00	33.48	C
ATOM	827	O	ASP	A	271	10.559	6.712	11.450	1.00	35.54	O
ATOM	828	CB	ASP	A	271	8.227	8.826	10.405	1.00	31.43	C
ATOM	829	CG	ASP	A	271	8.202	9.666	9.157	1.00	32.79	C
ATOM	830	OD1	ASP	A	271	8.160	10.910	9.293	1.00	36.66	O
ATOM	831	OD2	ASP	A	271	8.216	9.090	8.046	1.00	30.05	O
ATOM	832	N	SER	A	272	8.526	6.622	12.417	1.00	31.77	N
ATOM	833	CA	SER	A	272	9.029	6.140	13.686	1.00	31.81	C
ATOM	834	C	SER	A	272	9.803	4.837	13.533	1.00	31.12	C
ATOM	835	O	SER	A	272	10.759	4.586	14.267	1.00	31.55	O
ATOM	836	CB	SER	A	272	7.871	5.969	14.662	1.00	27.85	C
ATOM	837	OG	SER	A	272	7.303	7.231	14.961	1.00	23.45	O
ATOM	838	N	MET	A	273	9.394	4.015	12.577	1.00	30.98	N
ATOM	839	CA	MET	A	273	10.067	2.751	12.347	1.00	31.53	C
ATOM	840	C	MET	A	273	11.456	3.047	11.819	1.00	34.69	C
ATOM	841	O	MET	A	273	12.447	2.522	12.327	1.00	36.56	O
ATOM	842	CB	MET	A	273	9.303	1.907	11.328	1.00	27.42	C
ATOM	843	CG	MET	A	273	8.094	1.181	11.900	1.00	30.77	C
ATOM	844	SD	MET	A	273	8.459	0.198	13.367	1.00	30.35	S
ATOM	845	CE	MET	A	273	9.052	-1.309	12.595	1.00	23.01	C
ATOM	846	N	GLU	A	274	11.519	3.897	10.798	1.00	35.73	N
ATOM	847	CA	GLU	A	274	12.783	4.273	10.185	1.00	35.21	C
ATOM	848	C	GLU	A	274	13.723	4.952	11.173	1.00	34.51	C

ATOM	849	O	GLU	A	274	14.913	4.644	11.207	1.00	39.94	O
ATOM	850	CB	GLU	A	274	12.538	5.198	8.998	1.00	39.43	C
ATOM	851	CG	GLU	A	274	13.812	5.646	8.292	1.00	47.30	C
ATOM	852	CD	GLU	A	274	14.546	4.502	7.606	1.00	52.06	C
ATOM	853	OE1	GLU	A	274	15.708	4.700	7.181	1.00	53.62	O
ATOM	854	OE2	GLU	A	274	13.962	3.404	7.491	1.00	55.02	O
ATOM	855	N	TRP	A	275	13.202	5.872	11.977	1.00	32.10	N
ATOM	856	CA	TRP	A	275	14.043	6.560	12.947	1.00	32.24	C
ATOM	857	C	TRP	A	275	14.620	5.594	13.971	1.00	34.85	C
ATOM	858	O	TRP	A	275	15.823	5.584	14.219	1.00	36.80	O
ATOM	859	CB	TRP	A	275	13.261	7.649	13.675	1.00	31.10	C
ATOM	860	CG	TRP	A	275	14.147	8.552	14.495	1.00	32.60	C
ATOM	861	CD1	TRP	A	275	14.812	9.662	14.057	1.00	32.65	C
ATOM	862	CD2	TRP	A	275	14.457	8.426	15.892	1.00	32.56	C
ATOM	863	NE1	TRP	A	275	15.514	10.234	15.091	1.00	33.55	N
ATOM	864	CE2	TRP	A	275	15.314	9.497	16.228	1.00	32.19	C
ATOM	865	CE3	TRP	A	275	14.095	7.513	16.893	1.00	34.41	C
ATOM	866	CZ2	TRP	A	275	15.814	9.681	17.522	1.00	34.35	C
ATOM	867	CZ3	TRP	A	275	14.594	7.699	18.182	1.00	33.42	C
ATOM	868	CH2	TRP	A	275	15.444	8.775	18.482	1.00	33.26	C
ATOM	869	N	MET	A	276	13.759	4.784	14.574	1.00	35.73	N
ATOM	870	CA	MET	A	276	14.197	3.820	15.577	1.00	36.29	C
ATOM	871	C	MET	A	276	15.234	2.865	15.006	1.00	35.21	C
ATOM	872	O	MET	A	276	16.207	2.515	15.674	1.00	37.49	O
ATOM	873	CB	MET	A	276	13.001	3.023	16.100	1.00	35.33	C
ATOM	874	CG	MET	A	276	12.178	3.779	17.108	1.00	33.42	C
ATOM	875	SD	MET	A	276	12.953	3.703	18.708	1.00	37.86	S
ATOM	876	CE	MET	A	276	12.853	5.373	19.221	1.00	34.74	C
ATOM	877	N	HIS	A	277	15.017	2.450	13.766	1.00	33.98	N
ATOM	878	CA	HIS	A	277	15.914	1.527	13.090	1.00	39.21	C
ATOM	879	C	HIS	A	277	17.306	2.116	12.868	1.00	42.89	C
ATOM	880	O	HIS	A	277	18.322	1.430	12.996	1.00	43.12	O
ATOM	881	CB	HIS	A	277	15.307	1.126	11.748	1.00	38.01	C
ATOM	882	CG	HIS	A	277	16.321	0.854	10.682	1.00	43.03	C
ATOM	883	ND1	HIS	A	277	16.967	-0.357	10.563	1.00	45.66	N
ATOM	884	CD2	HIS	A	277	16.780	1.628	9.671	1.00	45.31	C
ATOM	885	CE1	HIS	A	277	17.780	-0.319	9.522	1.00	45.97	C
ATOM	886	NE2	HIS	A	277	17.685	0.875	8.964	1.00	46.40	N
ATOM	887	N	LYS	A	278	17.347	3.396	12.534	1.00	43.88	N
ATOM	888	CA	LYS	A	278	18.605	4.058	12.278	1.00	44.44	C
ATOM	889	C	LYS	A	278	19.382	4.427	13.530	1.00	45.38	C
ATOM	890	O	LYS	A	278	20.607	4.379	13.528	1.00	49.02	O
ATOM	891	CB	LYS	A	278	18.359	5.314	11.447	1.00	45.17	C
ATOM	892	CG	LYS	A	278	17.981	5.027	10.008	1.00	52.16	C
ATOM	893	CD	LYS	A	278	18.759	5.923	9.057	1.00	59.64	C
ATOM	894	CE	LYS	A	278	20.230	5.520	8.989	1.00	62.87	C
ATOM	895	NZ	LYS	A	278	21.153	6.665	9.260	1.00	64.63	N
ATOM	896	N	HIS	A	279	18.681	4.765	14.607	1.00	44.27	N
ATOM	897	CA	HIS	A	279	19.356	5.205	15.826	1.00	45.46	C
ATOM	898	C	HIS	A	279	19.256	4.386	17.100	1.00	45.34	C

ATOM	899	O	HIS	A	279	19.960	4.689	18.062	1.00	45.83	O
ATOM	900	CB	HIS	A	279	18.909	6.630	16.178	1.00	49.18	C
ATOM	901	CG	HIS	A	279	18.980	7.586	15.032	1.00	54.89	C
ATOM	902	ND1	HIS	A	279	19.650	8.789	15.109	1.00	55.69	N
ATOM	903	CD2	HIS	A	279	18.480	7.515	13.775	1.00	56.95	C
ATOM	904	CE1	HIS	A	279	19.560	9.414	13.949	1.00	58.40	C
ATOM	905	NE2	HIS	A	279	18.855	8.662	13.122	1.00	58.74	N
ATOM	906	N	VAL	A	280	18.403	3.370	17.148	1.00	43.17	N
ATOM	907	CA	VAL	A	280	18.285	2.629	18.398	1.00	41.90	C
ATOM	908	C	VAL	A	280	18.256	1.112	18.304	1.00	43.37	C
ATOM	909	O	VAL	A	280	18.889	0.428	19.110	1.00	43.88	O
ATOM	910	CB	VAL	A	280	17.031	3.085	19.187	1.00	40.19	C
ATOM	911	CG1	VAL	A	280	17.173	2.726	20.651	1.00	41.03	C
ATOM	912	CG2	VAL	A	280	16.840	4.581	19.044	1.00	40.05	C
ATOM	913	N	TYR	A	281	17.533	0.580	17.326	1.00	42.90	N
ATOM	914	CA	TYR	A	281	17.413	-0.867	17.191	1.00	40.07	C
ATOM	915	C	TYR	A	281	17.691	-1.346	15.775	1.00	42.29	C
ATOM	916	O	TYR	A	281	16.829	-1.269	14.897	1.00	43.73	O
ATOM	917	CB	TYR	A	281	16.008	-1.292	17.630	1.00	36.11	C
ATOM	918	CG	TYR	A	281	15.808	-2.778	17.805	1.00	31.31	C
ATOM	919	CD1	TYR	A	281	16.145	-3.415	19.002	1.00	30.52	C
ATOM	920	CD2	TYR	A	281	15.245	-3.542	16.786	1.00	28.19	C
ATOM	921	CE1	TYR	A	281	15.919	-4.782	19.177	1.00	29.13	C
ATOM	922	CE2	TYR	A	281	15.017	-4.902	16.949	1.00	28.76	C
ATOM	923	CZ	TYR	A	281	15.353	-5.516	18.142	1.00	26.58	C
ATOM	924	OH	TYR	A	281	15.111	-6.862	18.288	1.00	29.46	O
ATOM	925	N	ASN	A	282	18.901	-1.852	15.566	1.00	42.55	N
ATOM	926	CA	ASN	A	282	19.315	-2.353	14.260	1.00	44.03	C
ATOM	927	C	ASN	A	282	20.320	-3.489	14.450	1.00	43.68	C
ATOM	928	O	ASN	A	282	20.754	-3.761	15.573	1.00	40.22	O
ATOM	929	CB	ASN	A	282	19.948	-1.221	13.449	1.00	47.90	C
ATOM	930	CG	ASN	A	282	20.823	-0.324	14.301	1.00	49.61	C
ATOM	931	OD1	ASN	A	282	20.427	0.781	14.684	1.00	55.42	O
ATOM	932	ND2	ASN	A	282	22.020	-0.801	14.612	1.00	48.60	N
ATOM	933	N	SER	A	283	20.687	-4.139	13.348	1.00	43.29	N
ATOM	934	CA	SER	A	283	21.626	-5.266	13.364	1.00	43.37	C
ATOM	935	C	SER	A	283	23.024	-4.957	13.910	1.00	44.36	C
ATOM	936	O	SER	A	283	23.725	-5.852	14.392	1.00	43.20	O
ATOM	937	CB	SER	A	283	21.765	-5.840	11.955	1.00	39.61	C
ATOM	938	OG	SER	A	283	20.710	-6.730	11.670	1.00	36.46	O
ATOM	939	N	GLU	A	284	23.435	-3.698	13.829	1.00	42.79	N
ATOM	940	CA	GLU	A	284	24.755	-3.321	14.308	1.00	42.74	C
ATOM	941	C	GLU	A	284	24.794	-3.036	15.805	1.00	39.78	C
ATOM	942	O	GLU	A	284	25.850	-2.719	16.348	1.00	41.76	O
ATOM	943	CB	GLU	A	284	25.258	-2.095	13.544	1.00	44.89	C
ATOM	944	CG	GLU	A	284	25.072	-2.168	12.038	1.00	51.54	C
ATOM	945	CD	GLU	A	284	25.146	-0.794	11.384	1.00	57.90	C
ATOM	946	OE1	GLU	A	284	24.880	-0.688	10.166	1.00	61.44	O
ATOM	947	OE2	GLU	A	284	25.472	0.186	12.091	1.00	58.14	O
ATOM	948	N	LYS	A	285	23.654	-3.148	16.477	1.00	37.61	N

ATOM	949	CA	LYS	A	285	23.613	-2.874	17.911	1.00	36.16	C
ATOM	950	C	LYS	A	285	23.812	-4.133	18.741	1.00	34.49	C
ATOM	951	O	LYS	A	285	23.788	-5.247	18.217	1.00	34.26	O
ATOM	952	CB	LYS	A	285	22.283	-2.217	18.293	1.00	37.08	C
ATOM	953	CG	LYS	A	285	22.006	-0.910	17.566	1.00	38.13	C
ATOM	954	CD	LYS	A	285	22.279	0.294	18.457	1.00	40.88	C
ATOM	955	CE	LYS	A	285	22.324	1.592	17.651	1.00	39.70	C
ATOM	956	NZ	LYS	A	285	22.908	2.714	18.438	1.00	40.32	N
ATOM	957	N	SER	A	286	24.015	-3.941	20.039	1.00	30.84	N
ATOM	958	CA	SER	A	286	24.210	-5.051	20.958	1.00	32.66	C
ATOM	959	C	SER	A	286	23.259	-4.882	22.126	1.00	31.14	C
ATOM	960	O	SER	A	286	22.905	-3.763	22.501	1.00	34.36	O
ATOM	961	CB	SER	A	286	25.651	-5.078	21.481	1.00	33.68	C
ATOM	962	OG	SER	A	286	26.476	-5.880	20.655	1.00	34.39	O
ATOM	963	N	ILE	A	287	22.844	-5.996	22.707	1.00	29.73	N
ATOM	964	CA	ILE	A	287	21.935	-5.935	23.829	1.00	30.74	C
ATOM	965	C	ILE	A	287	22.445	-4.961	24.876	1.00	32.82	C
ATOM	966	O	ILE	A	287	23.533	-5.129	25.420	1.00	38.87	O
ATOM	967	CB	ILE	A	287	21.760	-7.314	24.476	1.00	28.25	C
ATOM	968	CG1	ILE	A	287	21.112	-8.271	23.473	1.00	31.91	C
ATOM	969	CG2	ILE	A	287	20.912	-7.193	25.731	1.00	29.39	C
ATOM	970	CD1	ILE	A	287	21.240	-9.741	23.842	1.00	29.02	C
ATOM	971	N	VAL	A	288	21.659	-3.928	25.138	1.00	33.74	N
ATOM	972	CA	VAL	A	288	21.998	-2.939	26.144	1.00	34.12	C
ATOM	973	C	VAL	A	288	20.851	-2.977	27.137	1.00	37.01	C
ATOM	974	O	VAL	A	288	19.775	-2.447	26.868	1.00	41.43	O
ATOM	975	CB	VAL	A	288	22.088	-1.543	25.539	1.00	34.07	C
ATOM	976	CG1	VAL	A	288	22.350	-0.520	26.634	1.00	35.11	C
ATOM	977	CG2	VAL	A	288	23.179	-1.514	24.489	1.00	34.93	C
ATOM	978	N	GLY	A	289	21.081	-3.612	28.281	1.00	36.53	N
ATOM	979	CA	GLY	A	289	20.036	-3.736	29.280	1.00	38.46	C
ATOM	980	C	GLY	A	289	19.490	-5.153	29.225	1.00	39.92	C
ATOM	981	O	GLY	A	289	20.256	-6.099	29.047	1.00	43.29	O
ATOM	982	N	ASN	A	290	18.175	-5.314	29.353	1.00	38.64	N
ATOM	983	CA	ASN	A	290	17.571	-6.648	29.321	1.00	34.90	C
ATOM	984	C	ASN	A	290	17.500	-7.258	27.922	1.00	31.27	C
ATOM	985	O	ASN	A	290	17.079	-6.612	26.962	1.00	34.51	O
ATOM	986	CB	ASN	A	290	16.167	-6.608	29.931	1.00	35.10	C
ATOM	987	CG	ASN	A	290	15.673	-7.982	30.353	1.00	38.29	C
ATOM	988	OD1	ASN	A	290	14.689	-8.102	31.080	1.00	42.41	O
ATOM	989	ND2	ASN	A	290	16.355	-9.025	29.900	1.00	40.02	N
ATOM	990	N	TRP	A	291	17.922	-8.511	27.818	1.00	27.96	N
ATOM	991	CA	TRP	A	291	17.899	-9.242	26.557	1.00	29.66	C
ATOM	992	C	TRP	A	291	16.452	-9.438	26.093	1.00	31.28	C
ATOM	993	O	TRP	A	291	16.151	-9.363	24.900	1.00	32.54	O
ATOM	994	CB	TRP	A	291	18.540	-10.621	26.746	1.00	31.27	C
ATOM	995	CG	TRP	A	291	17.729	-11.515	27.657	1.00	30.18	C
ATOM	996	CD1	TRP	A	291	17.742	-11.529	29.028	1.00	32.26	C
ATOM	997	CD2	TRP	A	291	16.735	-12.467	27.258	1.00	27.97	C
ATOM	998	NE1	TRP	A	291	16.815	-12.429	29.502	1.00	32.05	N

ATOM	999	CE2	TRP	A	291	16.184	-13.018	28.437	1.00	30.64	C
ATOM	1000	CE3	TRP	A	291	16.255	-12.907	26.017	1.00	26.81	C
ATOM	1001	CZ2	TRP	A	291	15.175	-13.988	28.410	1.00	30.51	C
ATOM	1002	CZ3	TRP	A	291	15.249	-13.873	25.992	1.00	27.67	C
ATOM	1003	CH2	TRP	A	291	14.722	-14.400	27.182	1.00	27.48	C
ATOM	1004	N	TRP	A	292	15.572	-9.713	27.054	1.00	33.47	N
ATOM	1005	CA	TRP	A	292	14.157	-9.950	26.792	1.00	33.28	C
ATOM	1006	C	TRP	A	292	13.570	-8.932	25.815	1.00	32.60	C
ATOM	1007	O	TRP	A	292	12.870	-9.302	24.870	1.00	32.87	O
ATOM	1008	CB	TRP	A	292	13.378	-9.934	28.114	1.00	37.64	C
ATOM	1009	CG	TRP	A	292	11.992	-10.489	27.990	1.00	40.97	C
ATOM	1010	CD1	TRP	A	292	11.606	-11.792	28.145	1.00	40.77	C
ATOM	1011	CD2	TRP	A	292	10.810	-9.759	27.639	1.00	42.02	C
ATOM	1012	NE1	TRP	A	292	10.256	-11.919	27.908	1.00	40.69	N
ATOM	1013	CE2	TRP	A	292	9.743	-10.686	27.596	1.00	42.10	C
ATOM	1014	CE3	TRP	A	292	10.548	-8.409	27.356	1.00	39.64	C
ATOM	1015	CZ2	TRP	A	292	8.433	-10.305	27.279	1.00	41.32	C
ATOM	1016	CZ3	TRP	A	292	9.245	-8.031	27.042	1.00	36.97	C
ATOM	1017	CH2	TRP	A	292	8.206	-8.977	27.007	1.00	35.65	C
ATOM	1018	N	ASP	A	293	13.873	-7.655	26.035	1.00	31.49	N
ATOM	1019	CA	ASP	A	293	13.385	-6.579	25.174	1.00	29.17	C
ATOM	1020	C	ASP	A	293	13.955	-6.655	23.763	1.00	30.19	C
ATOM	1021	O	ASP	A	293	13.274	-6.320	22.795	1.00	29.27	O
ATOM	1022	CB	ASP	A	293	13.741	-5.216	25.767	1.00	29.33	C
ATOM	1023	CG	ASP	A	293	12.939	-4.889	27.003	1.00	32.84	C
ATOM	1024	OD1	ASP	A	293	13.553	-4.485	28.014	1.00	30.59	O
ATOM	1025	OD2	ASP	A	293	11.694	-5.033	26.967	1.00	34.19	O
ATOM	1026	N	TYR	A	294	15.206	-7.093	23.643	1.00	28.02	N
ATOM	1027	CA	TYR	A	294	15.853	-7.176	22.337	1.00	27.86	C
ATOM	1028	C	TYR	A	294	15.438	-8.401	21.551	1.00	25.34	C
ATOM	1029	O	TYR	A	294	15.482	-8.406	20.322	1.00	23.76	O
ATOM	1030	CB	TYR	A	294	17.375	-7.194	22.498	1.00	26.37	C
ATOM	1031	CG	TYR	A	294	17.975	-5.843	22.749	1.00	19.99	C
ATOM	1032	CD1	TYR	A	294	17.994	-5.305	24.031	1.00	22.00	C
ATOM	1033	CD2	TYR	A	294	18.521	-5.098	21.703	1.00	23.83	C
ATOM	1034	CE1	TYR	A	294	18.543	-4.052	24.272	1.00	28.97	C
ATOM	1035	CE2	TYR	A	294	19.077	-3.836	21.929	1.00	22.89	C
ATOM	1036	CZ	TYR	A	294	19.083	-3.323	23.216	1.00	28.76	C
ATOM	1037	OH	TYR	A	294	19.623	-2.081	23.459	1.00	32.27	O
ATOM	1038	N	GLU	A	295	15.033	-9.443	22.263	1.00	27.18	N
ATOM	1039	CA	GLU	A	295	14.661	-10.680	21.604	1.00	28.36	C
ATOM	1040	C	GLU	A	295	13.198	-11.085	21.685	1.00	26.18	C
ATOM	1041	O	GLU	A	295	12.743	-11.888	20.876	1.00	25.09	O
ATOM	1042	CB	GLU	A	295	15.538	-11.808	22.138	1.00	30.23	C
ATOM	1043	CG	GLU	A	295	17.010	-11.572	21.877	1.00	36.10	C
ATOM	1044	CD	GLU	A	295	17.891	-12.566	22.597	1.00	40.33	C
ATOM	1045	OE1	GLU	A	295	17.661	-13.787	22.433	1.00	38.60	O
ATOM	1046	OE2	GLU	A	295	18.809	-12.122	23.323	1.00	41.38	O
ATOM	1047	N	ILE	A	296	12.462	-10.548	22.653	1.00	27.58	N
ATOM	1048	CA	ILE	A	296	11.042	-10.889	22.780	1.00	29.63	C

ATOM	1049	C	ILE	A	296	10.116	-9.663	22.734	1.00	26.35	C
ATOM	1050	O	ILE	A	296	9.340	-9.492	21.791	1.00	25.98	O
ATOM	1051	CB	ILE	A	296	10.776	-11.688	24.080	1.00	29.78	C
ATOM	1052	CG1	ILE	A	296	11.640	-12.951	24.102	1.00	26.46	C
ATOM	1053	CG2	ILE	A	296	9.311	-12.094	24.152	1.00	32.03	C
ATOM	1054	CD1	ILE	A	296	11.531	-13.743	25.392	1.00	27.75	C
ATOM	1055	N	GLY	A	297	10.209	-8.811	23.746	1.00	26.16	N
ATOM	1056	CA	GLY	A	297	9.370	-7.630	23.798	1.00	26.51	C
ATOM	1057	C	GLY	A	297	9.305	-6.825	22.514	1.00	28.70	C
ATOM	1058	O	GLY	A	297	8.249	-6.714	21.896	1.00	28.07	O
ATOM	1059	N	THR	A	298	10.437	-6.263	22.103	1.00	28.32	N
ATOM	1060	CA	THR	A	298	10.485	-5.434	20.901	1.00	27.57	C
ATOM	1061	C	THR	A	298	10.196	-6.170	19.593	1.00	25.94	C
ATOM	1062	O	THR	A	298	9.428	-5.684	18.770	1.00	29.77	O
ATOM	1063	CB	THR	A	298	11.847	-4.686	20.804	1.00	23.37	C
ATOM	1064	OG1	THR	A	298	11.859	-3.611	21.750	1.00	24.14	O
ATOM	1065	CG2	THR	A	298	12.062	-4.111	19.419	1.00	19.54	C
ATOM	1066	N	PRO	A	299	10.816	-7.338	19.373	1.00	25.03	N
ATOM	1067	CA	PRO	A	299	10.544	-8.055	18.123	1.00	20.78	C
ATOM	1068	C	PRO	A	299	9.061	-8.390	17.932	1.00	21.04	C
ATOM	1069	O	PRO	A	299	8.569	-8.438	16.804	1.00	18.43	O
ATOM	1070	CB	PRO	A	299	11.407	-9.310	18.229	1.00	23.43	C
ATOM	1071	CG	PRO	A	299	12.474	-8.955	19.233	1.00	23.96	C
ATOM	1072	CD	PRO	A	299	11.809	-8.033	20.209	1.00	25.07	C
ATOM	1073	N	ARG	A	300	8.352	-8.635	19.028	1.00	20.78	N
ATOM	1074	CA	ARG	A	300	6.928	-8.956	18.935	1.00	24.13	C
ATOM	1075	C	ARG	A	300	6.147	-7.712	18.496	1.00	24.12	C
ATOM	1076	O	ARG	A	300	5.358	-7.769	17.551	1.00	27.77	O
ATOM	1077	CB	ARG	A	300	6.405	-9.467	20.284	1.00	23.19	C
ATOM	1078	CG	ARG	A	300	6.615	-10.967	20.498	1.00	22.94	C
ATOM	1079	CD	ARG	A	300	6.331	-11.375	21.934	1.00	23.90	C
ATOM	1080	NE	ARG	A	300	5.059	-10.841	22.410	1.00	29.22	N
ATOM	1081	CZ	ARG	A	300	4.797	-10.545	23.681	1.00	27.62	C
ATOM	1082	NH1	ARG	A	300	5.717	-10.729	24.618	1.00	31.85	N
ATOM	1083	NH2	ARG	A	300	3.620	-10.045	24.015	1.00	25.61	N
ATOM	1084	N	ALA	A	301	6.387	-6.592	19.177	1.00	22.50	N
ATOM	1085	CA	ALA	A	301	5.726	-5.323	18.864	1.00	25.32	C
ATOM	1086	C	ALA	A	301	5.963	-4.915	17.408	1.00	27.01	C
ATOM	1087	O	ALA	A	301	5.082	-4.338	16.759	1.00	27.27	O
ATOM	1088	CB	ALA	A	301	6.233	-4.228	19.800	1.00	22.94	C
ATOM	1089	N	ILE	A	302	7.156	-5.226	16.903	1.00	23.57	N
ATOM	1090	CA	ILE	A	302	7.530	-4.900	15.535	1.00	20.42	C
ATOM	1091	C	ILE	A	302	6.808	-5.812	14.545	1.00	19.53	C
ATOM	1092	O	ILE	A	302	6.282	-5.356	13.533	1.00	22.62	O
ATOM	1093	CB	ILE	A	302	9.069	-5.043	15.334	1.00	20.95	C
ATOM	1094	CG1	ILE	A	302	9.790	-3.886	16.024	1.00	20.70	C
ATOM	1095	CG2	ILE	A	302	9.415	-5.071	13.836	1.00	19.11	C
ATOM	1096	CD1	ILE	A	302	11.297	-3.869	15.793	1.00	25.33	C
ATOM	1097	N	ASN	A	303	6.803	-7.105	14.835	1.00	18.78	N
ATOM	1098	CA	ASN	A	303	6.148	-8.080	13.978	1.00	20.66	C

ATOM	1099	C	ASN	A	303	4.674	-7.719	13.840	1.00	20.76	C
ATOM	1100	O	ASN	A	303	4.109	-7.749	12.748	1.00	21.26	O
ATOM	1101	CB	ASN	A	303	6.244	-9.480	14.595	1.00	23.23	C
ATOM	1102	CG	ASN	A	303	7.630	-10.083	14.472	1.00	25.48	C
ATOM	1103	OD1	ASN	A	303	8.412	-9.693	13.608	1.00	25.20	O
ATOM	1104	ND2	ASN	A	303	7.936	-11.046	15.336	1.00	24.26	N
ATOM	1105	N	ASN	A	304	4.062	-7.390	14.971	1.00	21.90	N
ATOM	1106	CA	ASN	A	304	2.651	-7.045	15.011	1.00	21.75	C
ATOM	1107	C	ASN	A	304	2.361	-5.764	14.253	1.00	22.34	C
ATOM	1108	O	ASN	A	304	1.396	-5.698	13.487	1.00	25.39	O
ATOM	1109	CB	ASN	A	304	2.195	-6.917	16.459	1.00	15.09	C
ATOM	1110	CG	ASN	A	304	2.070	-8.266	17.151	1.00	19.18	C
ATOM	1111	OD1	ASN	A	304	2.386	-9.314	16.575	1.00	19.19	O
ATOM	1112	ND2	ASN	A	304	1.607	-8.246	18.396	1.00	21.07	N
ATOM	1113	N	THR	A	305	3.200	-4.751	14.456	1.00	19.38	N
ATOM	1114	CA	THR	A	305	3.019	-3.477	13.777	1.00	19.36	C
ATOM	1115	C	THR	A	305	3.077	-3.646	12.268	1.00	19.67	C
ATOM	1116	O	THR	A	305	2.253	-3.099	11.538	1.00	20.53	O
ATOM	1117	CB	THR	A	305	4.095	-2.458	14.187	1.00	17.17	C
ATOM	1118	OG1	THR	A	305	4.030	-2.222	15.599	1.00	16.78	O
ATOM	1119	CG2	THR	A	305	3.880	-1.150	13.448	1.00	17.25	C
ATOM	1120	N	LEU	A	306	4.060	-4.410	11.805	1.00	21.63	N
ATOM	1121	CA	LEU	A	306	4.248	-4.650	10.380	1.00	20.58	C
ATOM	1122	C	LEU	A	306	3.153	-5.538	9.800	1.00	20.98	C
ATOM	1123	O	LEU	A	306	2.721	-5.344	8.669	1.00	21.47	O
ATOM	1124	CB	LEU	A	306	5.615	-5.293	10.141	1.00	21.35	C
ATOM	1125	CG	LEU	A	306	6.817	-4.420	10.506	1.00	23.97	C
ATOM	1126	CD1	LEU	A	306	8.081	-5.258	10.464	1.00	20.99	C
ATOM	1127	CD2	LEU	A	306	6.920	-3.252	9.527	1.00	24.00	C
ATOM	1128	N	SER	A	307	2.718	-6.523	10.575	1.00	23.65	N
ATOM	1129	CA	SER	A	307	1.658	-7.428	10.131	1.00	23.86	C
ATOM	1130	C	SER	A	307	0.351	-6.660	9.919	1.00	22.34	C
ATOM	1131	O	SER	A	307	-0.332	-6.839	8.910	1.00	22.24	O
ATOM	1132	CB	SER	A	307	1.433	-8.529	11.169	1.00	21.79	C
ATOM	1133	OG	SER	A	307	0.590	-9.547	10.657	1.00	22.07	O
ATOM	1134	N	LEU	A	308	0.013	-5.803	10.878	1.00	22.14	N
ATOM	1135	CA	LEU	A	308	-1.208	-5.015	10.795	1.00	23.09	C
ATOM	1136	C	LEU	A	308	-1.169	-4.022	9.635	1.00	25.14	C
ATOM	1137	O	LEU	A	308	-2.129	-3.923	8.868	1.00	25.10	O
ATOM	1138	CB	LEU	A	308	-1.448	-4.277	12.113	1.00	19.11	C
ATOM	1139	CG	LEU	A	308	-1.773	-5.198	13.293	1.00	19.05	C
ATOM	1140	CD1	LEU	A	308	-1.786	-4.413	14.605	1.00	14.50	C
ATOM	1141	CD2	LEU	A	308	-3.121	-5.855	13.057	1.00	22.21	C
ATOM	1142	N	MET	A	309	-0.054	-3.304	9.491	1.00	24.85	N
ATOM	1143	CA	MET	A	309	0.079	-2.314	8.423	1.00	21.92	C
ATOM	1144	C	MET	A	309	0.808	-2.814	7.183	1.00	23.98	C
ATOM	1145	O	MET	A	309	1.370	-2.022	6.431	1.00	25.94	O
ATOM	1146	CB	MET	A	309	0.788	-1.064	8.954	1.00	22.55	C
ATOM	1147	CG	MET	A	309	-0.046	-0.266	9.927	1.00	16.77	C
ATOM	1148	SD	MET	A	309	0.660	1.306	10.417	1.00	23.63	S

ATOM	1149	CE	MET	A	309	0.810	2.129	8.842	1.00	18.17	C
ATOM	1150	N	LYS	A	310	0.779	-4.116	6.943	1.00	24.50	N
ATOM	1151	CA	LYS	A	310	1.484	-4.659	5.793	1.00	24.26	C
ATOM	1152	C	LYS	A	310	1.080	-4.059	4.456	1.00	26.23	C
ATOM	1153	O	LYS	A	310	1.836	-4.134	3.485	1.00	25.95	O
ATOM	1154	CB	LYS	A	310	1.346	-6.183	5.752	1.00	23.96	C
ATOM	1155	CG	LYS	A	310	-0.061	-6.721	5.567	1.00	22.71	C
ATOM	1156	CD	LYS	A	310	-0.012	-8.223	5.272	1.00	21.40	C
ATOM	1157	CE	LYS	A	310	-1.224	-8.946	5.820	1.00	21.27	C
ATOM	1158	NZ	LYS	A	310	-2.476	-8.353	5.283	1.00	23.68	N
ATOM	1159	N	GLU	A	311	-0.099	-3.448	4.396	1.00	28.30	N
ATOM	1160	CA	GLU	A	311	-0.557	-2.845	3.141	1.00	27.27	C
ATOM	1161	C	GLU	A	311	0.019	-1.441	2.943	1.00	27.90	C
ATOM	1162	O	GLU	A	311	-0.263	-0.792	1.934	1.00	26.89	O
ATOM	1163	CB	GLU	A	311	-2.094	-2.792	3.091	1.00	27.32	C
ATOM	1164	CG	GLU	A	311	-2.767	-4.161	3.172	1.00	31.53	C
ATOM	1165	CD	GLU	A	311	-4.246	-4.143	2.782	1.00	34.26	C
ATOM	1166	OE1	GLU	A	311	-4.912	-3.101	2.963	1.00	34.24	O
ATOM	1167	OE2	GLU	A	311	-4.743	-5.180	2.294	1.00	35.40	O
ATOM	1168	N	TYR	A	312	0.825	-0.983	3.904	1.00	27.83	N
ATOM	1169	CA	TYR	A	312	1.453	0.337	3.848	1.00	27.15	C
ATOM	1170	C	TYR	A	312	2.975	0.255	3.774	1.00	28.69	C
ATOM	1171	O	TYR	A	312	3.640	1.265	3.553	1.00	28.85	O
ATOM	1172	CB	TYR	A	312	1.078	1.162	5.076	1.00	30.02	C
ATOM	1173	CG	TYR	A	312	-0.383	1.516	5.150	1.00	32.50	C
ATOM	1174	CD1	TYR	A	312	-0.895	2.587	4.420	1.00	33.12	C
ATOM	1175	CD2	TYR	A	312	-1.255	0.781	5.948	1.00	31.56	C
ATOM	1176	CE1	TYR	A	312	-2.252	2.921	4.484	1.00	35.97	C
ATOM	1177	CE2	TYR	A	312	-2.613	1.104	6.020	1.00	35.65	C
ATOM	1178	CZ	TYR	A	312	-3.103	2.175	5.286	1.00	32.98	C
ATOM	1179	OH	TYR	A	312	-4.436	2.499	5.358	1.00	33.63	O
ATOM	1180	N	PHE	A	313	3.515	-0.943	3.982	1.00	28.47	N
ATOM	1181	CA	PHE	A	313	4.959	-1.178	3.943	1.00	28.96	C
ATOM	1182	C	PHE	A	313	5.275	-2.088	2.769	1.00	29.82	C
ATOM	1183	O	PHE	A	313	4.497	-2.986	2.453	1.00	31.28	O
ATOM	1184	CB	PHE	A	313	5.426	-1.866	5.226	1.00	23.80	C
ATOM	1185	CG	PHE	A	313	5.572	-0.939	6.396	1.00	27.90	C
ATOM	1186	CD1	PHE	A	313	6.668	-0.082	6.491	1.00	27.25	C
ATOM	1187	CD2	PHE	A	313	4.625	-0.933	7.416	1.00	23.90	C
ATOM	1188	CE1	PHE	A	313	6.818	0.771	7.591	1.00	28.51	C
ATOM	1189	CE2	PHE	A	313	4.763	-0.088	8.519	1.00	24.22	C
ATOM	1190	CZ	PHE	A	313	5.862	0.767	8.608	1.00	27.65	C
ATOM	1191	N	SER	A	314	6.404	-1.854	2.113	1.00	30.18	N
ATOM	1192	CA	SER	A	314	6.794	-2.702	0.996	1.00	32.00	C
ATOM	1193	C	SER	A	314	7.495	-3.901	1.612	1.00	32.43	C
ATOM	1194	O	SER	A	314	7.927	-3.847	2.766	1.00	31.99	O
ATOM	1195	CB	SER	A	314	7.760	-1.966	0.068	1.00	33.29	C
ATOM	1196	OG	SER	A	314	9.049	-1.896	0.647	1.00	32.43	O
ATOM	1197	N	ASP	A	315	7.602	-4.987	0.859	1.00	31.97	N
ATOM	1198	CA	ASP	A	315	8.276	-6.168	1.371	1.00	35.06	C

ATOM	1199	C	ASP	A	315	9.720	-5.824	1.735	1.00	36.46	C
ATOM	1200	O	ASP	A	315	10.245	-6.285	2.749	1.00	37.15	O
ATOM	1201	CB	ASP	A	315	8.229	-7.276	0.329	1.00	33.19	C
ATOM	1202	CG	ASP	A	315	6.852	-7.878	0.207	1.00	36.12	C
ATOM	1203	OD1	ASP	A	315	6.133	-7.880	1.223	1.00	41.93	O
ATOM	1204	OD2	ASP	A	315	6.479	-8.343	-0.889	1.00	35.72	O
ATOM	1205	N	GLU	A	316	10.347	-4.990	0.914	1.00	38.52	N
ATOM	1206	CA	GLU	A	316	11.724	-4.567	1.145	1.00	41.15	C
ATOM	1207	C	GLU	A	316	11.843	-3.875	2.494	1.00	41.08	C
ATOM	1208	O	GLU	A	316	12.816	-4.066	3.232	1.00	38.78	O
ATOM	1209	CB	GLU	A	316	12.171	-3.597	0.049	1.00	46.26	C
ATOM	1210	CG	GLU	A	316	12.760	-4.265	-1.178	1.00	55.79	C
ATOM	1211	CD	GLU	A	316	11.698	-4.868	-2.080	1.00	62.26	C
ATOM	1212	OE1	GLU	A	316	11.980	-5.054	-3.284	1.00	67.83	O
ATOM	1213	OE2	GLU	A	316	10.582	-5.154	-1.592	1.00	64.74	O
ATOM	1214	N	GLU	A	317	10.850	-3.055	2.814	1.00	37.15	N
ATOM	1215	CA	GLU	A	317	10.869	-2.341	4.074	1.00	34.68	C
ATOM	1216	C	GLU	A	317	10.637	-3.320	5.213	1.00	33.17	C
ATOM	1217	O	GLU	A	317	11.258	-3.215	6.269	1.00	35.20	O
ATOM	1218	CB	GLU	A	317	9.798	-1.250	4.073	1.00	36.52	C
ATOM	1219	CG	GLU	A	317	10.287	0.088	3.540	1.00	36.97	C
ATOM	1220	CD	GLU	A	317	9.167	0.952	2.987	1.00	39.32	C
ATOM	1221	OE1	GLU	A	317	8.079	0.406	2.709	1.00	41.95	O
ATOM	1222	OE2	GLU	A	317	9.378	2.175	2.829	1.00	40.29	O
ATOM	1223	N	ILE	A	318	9.753	-4.287	4.998	1.00	31.45	N
ATOM	1224	CA	ILE	A	318	9.470	-5.263	6.039	1.00	32.38	C
ATOM	1225	C	ILE	A	318	10.737	-6.062	6.357	1.00	33.71	C
ATOM	1226	O	ILE	A	318	11.146	-6.162	7.519	1.00	29.01	O
ATOM	1227	CB	ILE	A	318	8.329	-6.216	5.613	1.00	33.09	C
ATOM	1228	CG1	ILE	A	318	6.999	-5.457	5.612	1.00	30.95	C
ATOM	1229	CG2	ILE	A	318	8.240	-7.393	6.576	1.00	28.97	C
ATOM	1230	CD1	ILE	A	318	5.922	-6.144	4.820	1.00	29.42	C
ATOM	1231	N	LYS	A	319	11.357	-6.627	5.323	1.00	33.09	N
ATOM	1232	CA	LYS	A	319	12.585	-7.390	5.506	1.00	33.31	C
ATOM	1233	C	LYS	A	319	13.592	-6.499	6.230	1.00	30.89	C
ATOM	1234	O	LYS	A	319	14.176	-6.882	7.248	1.00	28.57	O
ATOM	1235	CB	LYS	A	319	13.148	-7.811	4.149	1.00	35.46	C
ATOM	1236	CG	LYS	A	319	13.098	-9.308	3.900	1.00	44.20	C
ATOM	1237	CD	LYS	A	319	14.029	-9.717	2.766	1.00	47.92	C
ATOM	1238	CE	LYS	A	319	15.255	-10.462	3.288	1.00	51.52	C
ATOM	1239	NZ	LYS	A	319	15.146	-11.935	3.069	1.00	53.31	N
ATOM	1240	N	LYS	A	320	13.771	-5.295	5.703	1.00	27.58	N
ATOM	1241	CA	LYS	A	320	14.692	-4.336	6.282	1.00	27.96	C
ATOM	1242	C	LYS	A	320	14.449	-4.129	7.773	1.00	31.43	C
ATOM	1243	O	LYS	A	320	15.397	-4.060	8.561	1.00	35.58	O
ATOM	1244	CB	LYS	A	320	14.563	-3.000	5.550	1.00	29.40	C
ATOM	1245	CG	LYS	A	320	15.140	-1.806	6.295	1.00	29.53	C
ATOM	1246	CD	LYS	A	320	15.013	-0.539	5.460	1.00	33.45	C
ATOM	1247	CE	LYS	A	320	14.616	0.657	6.313	1.00	36.76	C
ATOM	1248	NZ	LYS	A	320	14.268	1.838	5.469	1.00	41.30	N

ATOM	1249	N	TYR	A	321	13.180	-4.035	8.166	1.00	31.13	N
ATOM	1250	CA	TYR	A	321	12.839	-3.803	9.566	1.00	26.82	C
ATOM	1251	C	TYR	A	321	12.855	-5.035	10.467	1.00	23.51	C
ATOM	1252	O	TYR	A	321	12.823	-4.912	11.692	1.00	23.05	O
ATOM	1253	CB	TYR	A	321	11.482	-3.107	9.651	1.00	31.65	C
ATOM	1254	CG	TYR	A	321	11.526	-1.683	9.155	1.00	31.21	C
ATOM	1255	CD1	TYR	A	321	12.405	-0.756	9.716	1.00	29.99	C
ATOM	1256	CD2	TYR	A	321	10.703	-1.264	8.116	1.00	30.71	C
ATOM	1257	CE1	TYR	A	321	12.459	0.551	9.253	1.00	34.24	C
ATOM	1258	CE2	TYR	A	321	10.748	0.037	7.646	1.00	32.88	C
ATOM	1259	CZ	TYR	A	321	11.623	0.942	8.216	1.00	33.15	C
ATOM	1260	OH	TYR	A	321	11.646	2.240	7.760	1.00	34.10	O
ATOM	1261	N	THR	A	322	12.909	-6.220	9.872	1.00	26.16	N
ATOM	1262	CA	THR	A	322	12.949	-7.441	10.667	1.00	29.60	C
ATOM	1263	C	THR	A	322	14.346	-8.086	10.664	1.00	32.47	C
ATOM	1264	O	THR	A	322	14.610	-9.026	11.419	1.00	33.11	O
ATOM	1265	CB	THR	A	322	11.898	-8.460	10.179	1.00	26.82	C
ATOM	1266	OG1	THR	A	322	12.026	-8.663	8.767	1.00	26.20	O
ATOM	1267	CG2	THR	A	322	10.497	-7.947	10.489	1.00	29.63	C
ATOM	1268	N	ASP	A	323	15.241	-7.573	9.821	1.00	32.23	N
ATOM	1269	CA	ASP	A	323	16.606	-8.092	9.756	1.00	29.43	C
ATOM	1270	C	ASP	A	323	17.174	-8.117	11.167	1.00	27.39	C
ATOM	1271	O	ASP	A	323	17.685	-9.135	11.620	1.00	31.12	O
ATOM	1272	CB	ASP	A	323	17.475	-7.193	8.877	1.00	26.81	C
ATOM	1273	CG	ASP	A	323	17.337	-7.508	7.397	1.00	31.62	C
ATOM	1274	OD1	ASP	A	323	17.503	-6.573	6.582	1.00	34.44	O
ATOM	1275	OD2	ASP	A	323	17.066	-8.681	7.040	1.00	29.48	O
ATOM	1276	N	VAL	A	324	17.067	-6.990	11.865	1.00	29.01	N
ATOM	1277	CA	VAL	A	324	17.566	-6.877	13.228	1.00	26.65	C
ATOM	1278	C	VAL	A	324	17.001	-7.952	14.156	1.00	30.28	C
ATOM	1279	O	VAL	A	324	17.657	-8.337	15.123	1.00	31.27	O
ATOM	1280	CB	VAL	A	324	17.258	-5.480	13.822	1.00	28.11	C
ATOM	1281	CG1	VAL	A	324	15.759	-5.208	13.774	1.00	30.83	C
ATOM	1282	CG2	VAL	A	324	17.773	-5.393	15.255	1.00	28.20	C
ATOM	1283	N	ILE	A	325	15.789	-8.432	13.875	1.00	29.56	N
ATOM	1284	CA	ILE	A	325	15.180	-9.469	14.710	1.00	28.67	C
ATOM	1285	C	ILE	A	325	15.929	-10.759	14.433	1.00	27.44	C
ATOM	1286	O	ILE	A	325	16.164	-11.563	15.330	1.00	25.26	O
ATOM	1287	CB	ILE	A	325	13.679	-9.692	14.371	1.00	32.05	C
ATOM	1288	CG1	ILE	A	325	12.812	-8.648	15.072	1.00	30.39	C
ATOM	1289	CG2	ILE	A	325	13.231	-11.078	14.828	1.00	30.90	C
ATOM	1290	CD1	ILE	A	325	11.430	-8.512	14.445	1.00	30.81	C
ATOM	1291	N	GLU	A	326	16.289	-10.951	13.170	1.00	30.85	N
ATOM	1292	CA	GLU	A	326	17.029	-12.136	12.754	1.00	33.24	C
ATOM	1293	C	GLU	A	326	18.421	-12.090	13.375	1.00	33.80	C
ATOM	1294	O	GLU	A	326	19.011	-13.123	13.669	1.00	35.53	O
ATOM	1295	CB	GLU	A	326	17.145	-12.186	11.227	1.00	33.41	C
ATOM	1296	CG	GLU	A	326	15.847	-12.518	10.520	1.00	35.28	C
ATOM	1297	CD	GLU	A	326	15.057	-13.585	11.246	1.00	40.13	C
ATOM	1298	OE1	GLU	A	326	15.634	-14.652	11.538	1.00	36.16	O

ATOM	1299	OE2	GLU	A	326	13.861	-13.358	11.527	1.00	41.26	O
ATOM	1300	N	LYS	A	327	18.935	-10.882	13.579	1.00	33.52	N
ATOM	1301	CA	LYS	A	327	20.249	-10.707	14.174	1.00	32.69	C
ATOM	1302	C	LYS	A	327	20.251	-11.104	15.649	1.00	33.84	C
ATOM	1303	O	LYS	A	327	21.107	-11.869	16.091	1.00	34.03	O
ATOM	1304	CB	LYS	A	327	20.702	-9.254	14.035	1.00	30.36	C
ATOM	1305	CG	LYS	A	327	22.121	-8.998	14.522	1.00	33.18	C
ATOM	1306	CD	LYS	A	327	22.128	-8.314	15.891	1.00	38.75	C
ATOM	1307	CE	LYS	A	327	23.406	-8.619	16.668	1.00	39.29	C
ATOM	1308	NZ	LYS	A	327	24.324	-7.448	16.725	1.00	37.76	N
ATOM	1309	N	PHE	A	328	19.293	-10.594	16.414	1.00	32.47	N
ATOM	1310	CA	PHE	A	328	19.241	-10.909	17.833	1.00	33.53	C
ATOM	1311	C	PHE	A	328	18.660	-12.282	18.141	1.00	33.69	C
ATOM	1312	O	PHE	A	328	18.996	-12.884	19.166	1.00	36.49	O
ATOM	1313	CB	PHE	A	328	18.452	-9.837	18.576	1.00	36.45	C
ATOM	1314	CG	PHE	A	328	19.201	-8.552	18.742	1.00	40.37	C
ATOM	1315	CD1	PHE	A	328	20.349	-8.500	19.532	1.00	43.60	C
ATOM	1316	CD2	PHE	A	328	18.777	-7.396	18.093	1.00	40.48	C
ATOM	1317	CE1	PHE	A	328	21.068	-7.310	19.673	1.00	43.23	C
ATOM	1318	CE2	PHE	A	328	19.485	-6.202	18.225	1.00	43.14	C
ATOM	1319	CZ	PHE	A	328	20.634	-6.158	19.017	1.00	43.34	C
ATOM	1320	N	VAL	A	329	17.798	-12.779	17.257	1.00	31.63	N
ATOM	1321	CA	VAL	A	329	17.162	-14.080	17.459	1.00	30.16	C
ATOM	1322	C	VAL	A	329	17.228	-14.947	16.206	1.00	32.50	C
ATOM	1323	O	VAL	A	329	16.232	-15.119	15.505	1.00	32.33	O
ATOM	1324	CB	VAL	A	329	15.679	-13.916	17.872	1.00	31.45	C
ATOM	1325	CG1	VAL	A	329	15.077	-15.264	18.215	1.00	29.01	C
ATOM	1326	CG2	VAL	A	329	15.573	-12.979	19.062	1.00	33.44	C
ATOM	1327	N	PRO	A	330	18.419	-15.493	15.899	1.00	35.11	N
ATOM	1328	CA	PRO	A	330	18.630	-16.354	14.725	1.00	32.16	C
ATOM	1329	C	PRO	A	330	18.316	-17.831	14.992	1.00	30.87	C
ATOM	1330	O	PRO	A	330	17.992	-18.594	14.077	1.00	28.44	O
ATOM	1331	CB	PRO	A	330	20.109	-16.163	14.423	1.00	33.40	C
ATOM	1332	CG	PRO	A	330	20.721	-15.993	15.801	1.00	28.91	C
ATOM	1333	CD	PRO	A	330	19.677	-15.279	16.648	1.00	32.30	C
ATOM	1334	N	ASP	A	331	18.418	-18.219	16.259	1.00	31.74	N
ATOM	1335	CA	ASP	A	331	18.214	-19.595	16.674	1.00	32.42	C
ATOM	1336	C	ASP	A	331	16.881	-19.826	17.363	1.00	30.25	C
ATOM	1337	O	ASP	A	331	16.656	-19.346	18.475	1.00	31.11	O
ATOM	1338	CB	ASP	A	331	19.361	-20.001	17.605	1.00	33.54	C
ATOM	1339	CG	ASP	A	331	19.362	-21.479	17.927	1.00	36.90	C
ATOM	1340	OD1	ASP	A	331	18.699	-22.254	17.197	1.00	35.71	O
ATOM	1341	OD2	ASP	A	331	20.031	-21.861	18.913	1.00	33.28	O
ATOM	1342	N	PRO	A	332	15.984	-20.587	16.716	1.00	30.09	N
ATOM	1343	CA	PRO	A	332	14.659	-20.889	17.265	1.00	31.45	C
ATOM	1344	C	PRO	A	332	14.706	-21.745	18.527	1.00	33.31	C
ATOM	1345	O	PRO	A	332	13.692	-21.908	19.208	1.00	36.27	O
ATOM	1346	CB	PRO	A	332	13.947	-21.609	16.120	1.00	30.34	C
ATOM	1347	CG	PRO	A	332	15.044	-22.213	15.329	1.00	31.55	C
ATOM	1348	CD	PRO	A	332	16.182	-21.220	15.401	1.00	31.94	C

ATOM	1349	N	GLU	A	333	15.875	-22.289	18.847	1.00	31.07	N
ATOM	1350	CA	GLU	A	333	16.000	-23.128	20.033	1.00	32.24	C
ATOM	1351	C	GLU	A	333	16.665	-22.426	21.204	1.00	31.76	C
ATOM	1352	O	GLU	A	333	16.537	-22.871	22.345	1.00	32.33	O
ATOM	1353	CB	GLU	A	333	16.774	-24.406	19.701	1.00	34.87	C
ATOM	1354	CG	GLU	A	333	16.246	-25.139	18.481	1.00	43.92	C
ATOM	1355	CD	GLU	A	333	16.728	-26.572	18.402	1.00	51.08	C
ATOM	1356	OE1	GLU	A	333	17.845	-26.801	17.889	1.00	56.51	O
ATOM	1357	OE2	GLU	A	333	15.989	-27.472	18.852	1.00	55.29	O
ATOM	1358	N	HIS	A	334	17.360	-21.323	20.928	1.00	32.12	N
ATOM	1359	CA	HIS	A	334	18.067	-20.589	21.978	1.00	30.77	C
ATOM	1360	C	HIS	A	334	17.772	-19.100	21.999	1.00	31.11	C
ATOM	1361	O	HIS	A	334	17.421	-18.504	20.980	1.00	29.92	O
ATOM	1362	CB	HIS	A	334	19.594	-20.770	21.831	1.00	28.34	C
ATOM	1363	CG	HIS	A	334	20.064	-22.183	21.999	1.00	23.59	C
ATOM	1364	ND1	HIS	A	334	20.019	-23.110	20.978	1.00	23.28	N
ATOM	1365	CD2	HIS	A	334	20.567	-22.835	23.075	1.00	23.82	C
ATOM	1366	CE1	HIS	A	334	20.472	-24.269	21.417	1.00	21.34	C
ATOM	1367	NE2	HIS	A	334	20.812	-24.130	22.686	1.00	24.26	N
ATOM	1368	N	PHE	A	335	17.926	-18.512	23.181	1.00	33.36	N
ATOM	1369	CA	PHE	A	335	17.747	-17.081	23.379	1.00	37.95	C
ATOM	1370	C	PHE	A	335	19.109	-16.562	23.854	1.00	41.56	C
ATOM	1371	O	PHE	A	335	19.927	-17.330	24.373	1.00	39.05	O
ATOM	1372	CB	PHE	A	335	16.675	-16.802	24.438	1.00	38.28	C
ATOM	1373	CG	PHE	A	335	15.290	-16.639	23.873	1.00	39.06	C
ATOM	1374	CD1	PHE	A	335	14.998	-15.597	22.997	1.00	38.47	C
ATOM	1375	CD2	PHE	A	335	14.275	-17.530	24.216	1.00	35.75	C
ATOM	1376	CE1	PHE	A	335	13.717	-15.445	22.469	1.00	37.49	C
ATOM	1377	CE2	PHE	A	335	12.994	-17.385	23.694	1.00	34.79	C
ATOM	1378	CZ	PHE	A	335	12.715	-16.340	22.819	1.00	35.29	C
ATOM	1379	N	ARG	A	336	19.350	-15.267	23.666	1.00	42.06	N
ATOM	1380	CA	ARG	A	336	20.611	-14.647	24.056	1.00	39.57	C
ATOM	1381	C	ARG	A	336	21.760	-15.243	23.246	1.00	40.87	C
ATOM	1382	O	ARG	A	336	22.848	-15.490	23.769	1.00	41.06	O
ATOM	1383	CB	ARG	A	336	20.852	-14.851	25.548	1.00	35.08	C
ATOM	1384	CG	ARG	A	336	20.046	-13.909	26.408	1.00	35.79	C
ATOM	1385	CD	ARG	A	336	20.609	-13.845	27.803	1.00	38.94	C
ATOM	1386	NE	ARG	A	336	20.802	-15.182	28.349	1.00	47.23	N
ATOM	1387	CZ	ARG	A	336	20.608	-15.500	29.625	1.00	52.52	C
ATOM	1388	NH1	ARG	A	336	20.217	-14.569	30.489	1.00	55.62	N
ATOM	1389	NH2	ARG	A	336	20.801	-16.749	30.037	1.00	51.76	N
ATOM	1390	N	LYS	A	337	21.505	-15.455	21.960	1.00	39.60	N
ATOM	1391	CA	LYS	A	337	22.492	-16.030	21.059	1.00	40.76	C
ATOM	1392	C	LYS	A	337	23.640	-15.092	20.714	1.00	41.47	C
ATOM	1393	O	LYS	A	337	24.677	-15.537	20.228	1.00	40.50	O
ATOM	1394	CB	LYS	A	337	21.820	-16.487	19.765	1.00	42.63	C
ATOM	1395	CG	LYS	A	337	22.541	-17.629	19.076	1.00	43.82	C
ATOM	1396	CD	LYS	A	337	22.886	-18.730	20.065	1.00	41.29	C
ATOM	1397	CE	LYS	A	337	23.386	-19.958	19.346	1.00	42.43	C
ATOM	1398	NZ	LYS	A	337	22.891	-19.980	17.946	1.00	41.23	N

ATOM	1399	N	THR	A	338	23.452	-13.796	20.941	1.00	40.56	N
ATOM	1400	CA	THR	A	338	24.505	-12.835	20.652	1.00	40.67	C
ATOM	1401	C	THR	A	338	25.331	-12.585	21.903	1.00	40.89	C
ATOM	1402	O	THR	A	338	26.223	-11.742	21.899	1.00	43.07	O
ATOM	1403	CB	THR	A	338	23.950	-11.479	20.167	1.00	38.04	C
ATOM	1404	OG1	THR	A	338	23.267	-10.824	21.245	1.00	39.99	O
ATOM	1405	CG2	THR	A	338	23.010	-11.678	18.994	1.00	37.01	C
ATOM	1406	N	THR	A	339	25.028	-13.307	22.977	1.00	40.02	N
ATOM	1407	CA	THR	A	339	25.774	-13.143	24.222	1.00	41.23	C
ATOM	1408	C	THR	A	339	26.737	-14.304	24.468	1.00	41.58	C
ATOM	1409	O	THR	A	339	26.953	-15.155	23.599	1.00	38.34	O
ATOM	1410	CB	THR	A	339	24.836	-13.031	25.451	1.00	43.28	C
ATOM	1411	OG1	THR	A	339	24.150	-14.276	25.650	1.00	42.61	O
ATOM	1412	CG2	THR	A	339	23.832	-11.903	25.258	1.00	41.38	C
ATOM	1413	N	ASP	A	340	27.312	-14.325	25.666	1.00	44.27	N
ATOM	1414	CA	ASP	A	340	28.249	-15.369	26.054	1.00	48.35	C
ATOM	1415	C	ASP	A	340	27.510	-16.503	26.736	1.00	48.94	C
ATOM	1416	O	ASP	A	340	27.948	-17.655	26.717	1.00	50.60	O
ATOM	1417	CB	ASP	A	340	29.284	-14.800	27.019	1.00	52.10	C
ATOM	1418	CG	ASP	A	340	30.389	-14.069	26.306	1.00	53.11	C
ATOM	1419	OD1	ASP	A	340	30.886	-13.057	26.849	1.00	55.17	O
ATOM	1420	OD2	ASP	A	340	30.751	-14.510	25.197	1.00	53.24	O
ATOM	1421	N	ASN	A	341	26.379	-16.161	27.338	1.00	49.07	N
ATOM	1422	CA	ASN	A	341	25.580	-17.133	28.056	1.00	48.40	C
ATOM	1423	C	ASN	A	341	24.176	-17.321	27.492	1.00	46.91	C
ATOM	1424	O	ASN	A	341	23.194	-16.899	28.104	1.00	45.97	O
ATOM	1425	CB	ASN	A	341	25.488	-16.731	29.530	1.00	52.64	C
ATOM	1426	CG	ASN	A	341	26.697	-15.938	29.994	1.00	57.15	C
ATOM	1427	OD1	ASN	A	341	27.540	-16.450	30.731	1.00	59.76	O
ATOM	1428	ND2	ASN	A	341	26.787	-14.681	29.565	1.00	56.30	N
ATOM	1429	N	PRO	A	342	24.066	-17.931	26.298	1.00	45.10	N
ATOM	1430	CA	PRO	A	342	22.747	-18.163	25.696	1.00	43.83	C
ATOM	1431	C	PRO	A	342	22.063	-19.294	26.461	1.00	43.36	C
ATOM	1432	O	PRO	A	342	22.716	-19.997	27.235	1.00	43.48	O
ATOM	1433	CB	PRO	A	342	23.071	-18.568	24.261	1.00	41.92	C
ATOM	1434	CG	PRO	A	342	24.437	-19.150	24.343	1.00	41.76	C
ATOM	1435	CD	PRO	A	342	25.159	-18.405	25.430	1.00	42.14	C
ATOM	1436	N	PHE	A	343	20.760	-19.473	26.259	1.00	41.40	N
ATOM	1437	CA	PHE	A	343	20.047	-20.544	26.947	1.00	38.69	C
ATOM	1438	C	PHE	A	343	19.010	-21.214	26.056	1.00	35.45	C
ATOM	1439	O	PHE	A	343	18.510	-20.604	25.115	1.00	36.40	O
ATOM	1440	CB	PHE	A	343	19.396	-20.017	28.240	1.00	36.22	C
ATOM	1441	CG	PHE	A	343	18.194	-19.132	28.021	1.00	38.01	C
ATOM	1442	CD1	PHE	A	343	16.913	-19.679	27.946	1.00	36.70	C
ATOM	1443	CD2	PHE	A	343	18.337	-17.746	27.945	1.00	36.16	C
ATOM	1444	CE1	PHE	A	343	15.793	-18.858	27.803	1.00	35.38	C
ATOM	1445	CE2	PHE	A	343	17.225	-16.915	27.803	1.00	34.01	C
ATOM	1446	CZ	PHE	A	343	15.950	-17.472	27.732	1.00	34.87	C
ATOM	1447	N	LYS	A	344	18.713	-22.478	26.344	1.00	33.33	N
ATOM	1448	CA	LYS	A	344	17.731	-23.240	25.572	1.00	35.15	C

ATOM	1449	C	LYS	A	344	16.318	-22.775	25.915	1.00	33.59	C
ATOM	1450	O	LYS	A	344	15.881	-22.863	27.066	1.00	31.71	O
ATOM	1451	CB	LYS	A	344	17.860	-24.740	25.864	1.00	33.30	C
ATOM	1452	CG	LYS	A	344	16.768	-25.595	25.239	1.00	32.71	C
ATOM	1453	CD	LYS	A	344	17.198	-26.163	23.894	1.00	37.70	C
ATOM	1454	CE	LYS	A	344	16.181	-27.157	23.346	1.00	38.23	C
ATOM	1455	NZ	LYS	A	344	16.752	-28.014	22.267	1.00	43.55	N
ATOM	1456	N	ALA	A	345	15.610	-22.281	24.906	1.00	34.69	N
ATOM	1457	CA	ALA	A	345	14.251	-21.788	25.092	1.00	33.04	C
ATOM	1458	C	ALA	A	345	13.291	-22.918	25.467	1.00	30.56	C
ATOM	1459	O	ALA	A	345	13.207	-23.928	24.765	1.00	29.86	O
ATOM	1460	CB	ALA	A	345	13.777	-21.085	23.814	1.00	28.86	C
ATOM	1461	N	LEU	A	346	12.587	-22.739	26.585	1.00	31.62	N
ATOM	1462	CA	LEU	A	346	11.602	-23.711	27.078	1.00	30.85	C
ATOM	1463	C	LEU	A	346	10.355	-22.971	27.575	1.00	31.60	C
ATOM	1464	O	LEU	A	346	10.406	-21.768	27.844	1.00	30.61	O
ATOM	1465	CB	LEU	A	346	12.170	-24.540	28.242	1.00	27.20	C
ATOM	1466	CG	LEU	A	346	13.324	-25.527	28.023	1.00	25.99	C
ATOM	1467	CD1	LEU	A	346	13.481	-26.375	29.268	1.00	21.97	C
ATOM	1468	CD2	LEU	A	346	13.059	-26.411	26.816	1.00	23.27	C
ATOM	1469	N	GLY	A	347	9.245	-23.702	27.687	1.00	32.08	N
ATOM	1470	CA	GLY	A	347	7.989	-23.145	28.180	1.00	29.62	C
ATOM	1471	C	GLY	A	347	7.508	-21.819	27.612	1.00	26.36	C
ATOM	1472	O	GLY	A	347	7.390	-21.656	26.392	1.00	25.44	O
ATOM	1473	N	GLY	A	348	7.222	-20.871	28.501	1.00	25.28	N
ATOM	1474	CA	GLY	A	348	6.753	-19.564	28.070	1.00	23.07	C
ATOM	1475	C	GLY	A	348	7.673	-18.923	27.049	1.00	26.47	C
ATOM	1476	O	GLY	A	348	7.218	-18.431	26.011	1.00	25.52	O
ATOM	1477	N	ASN	A	349	8.973	-18.934	27.348	1.00	27.41	N
ATOM	1478	CA	ASN	A	349	9.989	-18.359	26.470	1.00	26.06	C
ATOM	1479	C	ASN	A	349	9.960	-19.038	25.103	1.00	23.42	C
ATOM	1480	O	ASN	A	349	10.106	-18.386	24.064	1.00	23.04	O
ATOM	1481	CB	ASN	A	349	11.381	-18.522	27.100	1.00	27.00	C
ATOM	1482	CG	ASN	A	349	11.579	-17.644	28.332	1.00	26.85	C
ATOM	1483	OD1	ASN	A	349	12.283	-18.026	29.273	1.00	31.48	O
ATOM	1484	ND2	ASN	A	349	10.960	-16.464	28.333	1.00	25.39	N
ATOM	1485	N	LEU	A	350	9.775	-20.353	25.111	1.00	21.13	N
ATOM	1486	CA	LEU	A	350	9.717	-21.120	23.874	1.00	20.65	C
ATOM	1487	C	LEU	A	350	8.518	-20.660	23.053	1.00	25.82	C
ATOM	1488	O	LEU	A	350	8.583	-20.597	21.821	1.00	27.50	O
ATOM	1489	CB	LEU	A	350	9.597	-22.617	24.182	1.00	19.46	C
ATOM	1490	CG	LEU	A	350	9.634	-23.610	23.017	1.00	22.54	C
ATOM	1491	CD1	LEU	A	350	10.709	-23.203	22.014	1.00	26.32	C
ATOM	1492	CD2	LEU	A	350	9.902	-25.010	23.551	1.00	19.44	C
ATOM	1493	N	VAL	A	351	7.420	-20.334	23.732	1.00	23.76	N
ATOM	1494	CA	VAL	A	351	6.232	-19.876	23.025	1.00	24.89	C
ATOM	1495	C	VAL	A	351	6.492	-18.466	22.505	1.00	23.12	C
ATOM	1496	O	VAL	A	351	6.111	-18.131	21.385	1.00	24.81	O
ATOM	1497	CB	VAL	A	351	4.964	-19.890	23.939	1.00	26.62	C
ATOM	1498	CG1	VAL	A	351	3.811	-19.139	23.264	1.00	21.20	C

ATOM	1499	CG2	VAL	A	351	4.543	-21.335	24.218	1.00	25.87	C
ATOM	1500	N	ASP	A	352	7.150	-17.640	23.309	1.00	21.42	N
ATOM	1501	CA	ASP	A	352	7.441	-16.285	22.867	1.00	23.04	C
ATOM	1502	C	ASP	A	352	8.358	-16.354	21.645	1.00	25.87	C
ATOM	1503	O	ASP	A	352	8.335	-15.468	20.783	1.00	27.02	O
ATOM	1504	CB	ASP	A	352	8.080	-15.479	24.003	1.00	22.96	C
ATOM	1505	CG	ASP	A	352	7.074	-14.572	24.707	1.00	25.32	C
ATOM	1506	OD1	ASP	A	352	6.052	-14.230	24.080	1.00	26.10	O
ATOM	1507	OD2	ASP	A	352	7.294	-14.196	25.880	1.00	26.79	O
ATOM	1508	N	MET	A	353	9.148	-17.425	21.562	1.00	27.20	N
ATOM	1509	CA	MET	A	353	10.053	-17.622	20.432	1.00	27.18	C
ATOM	1510	C	MET	A	353	9.238	-17.748	19.146	1.00	26.45	C
ATOM	1511	O	MET	A	353	9.665	-17.294	18.083	1.00	25.26	O
ATOM	1512	CB	MET	A	353	10.895	-18.890	20.632	1.00	30.17	C
ATOM	1513	CG	MET	A	353	11.847	-19.209	19.466	1.00	29.81	C
ATOM	1514	SD	MET	A	353	13.202	-18.023	19.364	1.00	30.95	S
ATOM	1515	CE	MET	A	353	14.171	-18.512	20.805	1.00	32.76	C
ATOM	1516	N	GLY	A	354	8.066	-18.372	19.258	1.00	24.46	N
ATOM	1517	CA	GLY	A	354	7.190	-18.551	18.112	1.00	21.96	C
ATOM	1518	C	GLY	A	354	6.531	-17.251	17.679	1.00	23.59	C
ATOM	1519	O	GLY	A	354	6.430	-16.955	16.487	1.00	26.91	O
ATOM	1520	N	ARG	A	355	6.085	-16.462	18.648	1.00	23.15	N
ATOM	1521	CA	ARG	A	355	5.443	-15.192	18.341	1.00	25.34	C
ATOM	1522	C	ARG	A	355	6.447	-14.241	17.720	1.00	26.85	C
ATOM	1523	O	ARG	A	355	6.071	-13.238	17.110	1.00	27.53	O
ATOM	1524	CB	ARG	A	355	4.860	-14.577	19.609	1.00	24.06	C
ATOM	1525	CG	ARG	A	355	3.649	-15.324	20.117	1.00	25.20	C
ATOM	1526	CD	ARG	A	355	2.818	-14.449	21.013	1.00	27.62	C
ATOM	1527	NE	ARG	A	355	3.367	-14.378	22.362	1.00	28.85	N
ATOM	1528	CZ	ARG	A	355	2.694	-13.894	23.396	1.00	29.80	C
ATOM	1529	NH1	ARG	A	355	1.463	-13.454	23.209	1.00	29.03	N
ATOM	1530	NH2	ARG	A	355	3.240	-13.849	24.606	1.00	32.06	N
ATOM	1531	N	VAL	A	356	7.730	-14.561	17.890	1.00	28.05	N
ATOM	1532	CA	VAL	A	356	8.807	-13.751	17.338	1.00	23.66	C
ATOM	1533	C	VAL	A	356	9.225	-14.260	15.959	1.00	23.96	C
ATOM	1534	O	VAL	A	356	9.118	-13.544	14.963	1.00	25.90	O
ATOM	1535	CB	VAL	A	356	10.057	-13.760	18.259	1.00	21.14	C
ATOM	1536	CG1	VAL	A	356	11.277	-13.258	17.484	1.00	18.73	C
ATOM	1537	CG2	VAL	A	356	9.817	-12.887	19.483	1.00	18.71	C
ATOM	1538	N	LYS	A	357	9.677	-15.508	15.901	1.00	27.14	N
ATOM	1539	CA	LYS	A	357	10.153	-16.083	14.650	1.00	27.44	C
ATOM	1540	C	LYS	A	357	9.104	-16.608	13.666	1.00	25.16	C
ATOM	1541	O	LYS	A	357	9.313	-16.543	12.456	1.00	25.29	O
ATOM	1542	CB	LYS	A	357	11.214	-17.154	14.961	1.00	26.70	C
ATOM	1543	CG	LYS	A	357	12.358	-16.601	15.834	1.00	28.00	C
ATOM	1544	CD	LYS	A	357	13.651	-17.426	15.756	1.00	29.38	C
ATOM	1545	CE	LYS	A	357	14.129	-17.637	14.325	1.00	25.08	C
ATOM	1546	NZ	LYS	A	357	15.013	-16.536	13.847	1.00	28.96	N
ATOM	1547	N	VAL	A	358	7.979	-17.125	14.147	1.00	25.59	N
ATOM	1548	CA	VAL	A	358	6.961	-17.593	13.205	1.00	21.52	C

ATOM	1549	C	VAL	A	358	6.366	-16.388	12.454	1.00	20.47	C
ATOM	1550	O	VAL	A	358	6.209	-16.415	11.230	1.00	22.88	O
ATOM	1551	CB	VAL	A	358	5.825	-18.349	13.916	1.00	23.23	C
ATOM	1552	CG1	VAL	A	358	4.621	-18.494	12.972	1.00	21.05	C
ATOM	1553	CG2	VAL	A	358	6.316	-19.712	14.354	1.00	16.65	C
ATOM	1554	N	ILE	A	359	6.052	-15.326	13.190	1.00	18.76	N
ATOM	1555	CA	ILE	A	359	5.491	-14.131	12.578	1.00	22.37	C
ATOM	1556	C	ILE	A	359	6.530	-13.478	11.679	1.00	25.58	C
ATOM	1557	O	ILE	A	359	6.234	-13.114	10.537	1.00	26.24	O
ATOM	1558	CB	ILE	A	359	5.037	-13.122	13.640	1.00	23.37	C
ATOM	1559	CG1	ILE	A	359	4.088	-13.803	14.632	1.00	22.78	C
ATOM	1560	CG2	ILE	A	359	4.332	-11.950	12.970	1.00	26.29	C
ATOM	1561	CD1	ILE	A	359	3.012	-14.665	13.982	1.00	16.30	C
ATOM	1562	N	ALA	A	360	7.749	-13.328	12.196	1.00	26.25	N
ATOM	1563	CA	ALA	A	360	8.834	-12.746	11.411	1.00	24.30	C
ATOM	1564	C	ALA	A	360	9.008	-13.620	10.182	1.00	22.75	C
ATOM	1565	O	ALA	A	360	9.202	-13.132	9.074	1.00	27.89	O
ATOM	1566	CB	ALA	A	360	10.123	-12.719	12.217	1.00	23.35	C
ATOM	1567	N	GLY	A	361	8.930	-14.927	10.383	1.00	23.71	N
ATOM	1568	CA	GLY	A	361	9.064	-15.835	9.262	1.00	26.02	C
ATOM	1569	C	GLY	A	361	8.010	-15.548	8.211	1.00	28.14	C
ATOM	1570	O	GLY	A	361	8.305	-15.545	7.020	1.00	32.01	O
ATOM	1571	N	LEU	A	362	6.777	-15.308	8.648	1.00	27.95	N
ATOM	1572	CA	LEU	A	362	5.682	-15.022	7.724	1.00	25.83	C
ATOM	1573	C	LEU	A	362	5.918	-13.712	6.993	1.00	22.75	C
ATOM	1574	O	LEU	A	362	5.751	-13.624	5.778	1.00	23.28	O
ATOM	1575	CB	LEU	A	362	4.356	-14.946	8.484	1.00	23.48	C
ATOM	1576	CG	LEU	A	362	3.849	-16.296	8.975	1.00	23.27	C
ATOM	1577	CD1	LEU	A	362	2.712	-16.089	9.955	1.00	24.11	C
ATOM	1578	CD2	LEU	A	362	3.409	-17.135	7.788	1.00	21.92	C
ATOM	1579	N	LEU	A	363	6.306	-12.695	7.751	1.00	22.27	N
ATOM	1580	CA	LEU	A	363	6.560	-11.384	7.183	1.00	25.04	C
ATOM	1581	C	LEU	A	363	7.680	-11.429	6.149	1.00	28.03	C
ATOM	1582	O	LEU	A	363	7.609	-10.760	5.121	1.00	28.46	O
ATOM	1583	CB	LEU	A	363	6.911	-10.395	8.298	1.00	24.00	C
ATOM	1584	CG	LEU	A	363	5.747	-10.006	9.212	1.00	22.34	C
ATOM	1585	CD1	LEU	A	363	6.257	-9.375	10.487	1.00	20.10	C
ATOM	1586	CD2	LEU	A	363	4.844	-9.042	8.468	1.00	26.32	C
ATOM	1587	N	ARG	A	364	8.706	-12.235	6.416	1.00	31.89	N
ATOM	1588	CA	ARG	A	364	9.854	-12.344	5.517	1.00	30.70	C
ATOM	1589	C	ARG	A	364	9.667	-13.421	4.465	1.00	32.07	C
ATOM	1590	O	ARG	A	364	10.559	-13.670	3.657	1.00	32.31	O
ATOM	1591	CB	ARG	A	364	11.125	-12.626	6.323	1.00	28.84	C
ATOM	1592	CG	ARG	A	364	11.478	-11.524	7.312	1.00	29.02	C
ATOM	1593	CD	ARG	A	364	12.533	-11.983	8.314	1.00	34.76	C
ATOM	1594	NE	ARG	A	364	13.847	-12.118	7.689	1.00	37.07	N
ATOM	1595	CZ	ARG	A	364	14.711	-11.117	7.536	1.00	37.74	C
ATOM	1596	NH1	ARG	A	364	14.411	-9.895	7.963	1.00	31.21	N
ATOM	1597	NH2	ARG	A	364	15.875	-11.337	6.937	1.00	40.23	N
ATOM	1598	N	LYS	A	365	8.499	-14.052	4.474	1.00	35.47	N

ATOM	1599	CA	LYS	A	365	8.195	-15.109	3.516	1.00	37.43	C
ATOM	1600	C	LYS	A	365	9.335	-16.122	3.491	1.00	40.04	C
ATOM	1601	O	LYS	A	365	9.760	-16.571	2.424	1.00	41.91	O
ATOM	1602	CB	LYS	A	365	7.995	-14.504	2.127	1.00	35.88	C
ATOM	1603	CG	LYS	A	365	7.054	-13.310	2.120	1.00	32.99	C
ATOM	1604	CD	LYS	A	365	6.870	-12.741	0.720	1.00	32.58	C
ATOM	1605	CE	LYS	A	365	5.940	-11.536	0.739	1.00	35.57	C
ATOM	1606	NZ	LYS	A	365	4.515	-11.925	0.522	1.00	38.83	N
ATOM	1607	N	ASP	A	366	9.807	-16.482	4.685	1.00	40.39	N
ATOM	1608	CA	ASP	A	366	10.916	-17.418	4.874	1.00	38.83	C
ATOM	1609	C	ASP	A	366	10.458	-18.766	5.446	1.00	37.36	C
ATOM	1610	O	ASP	A	366	10.333	-18.927	6.662	1.00	39.06	O
ATOM	1611	CB	ASP	A	366	11.947	-16.769	5.806	1.00	39.00	C
ATOM	1612	CG	ASP	A	366	13.173	-17.631	6.027	1.00	39.91	C
ATOM	1613	OD1	ASP	A	366	13.209	-18.776	5.532	1.00	40.26	O
ATOM	1614	OD2	ASP	A	366	14.105	-17.152	6.706	1.00	39.61	O
ATOM	1615	N	ASP	A	367	10.226	-19.734	4.565	1.00	35.93	N
ATOM	1616	CA	ASP	A	367	9.772	-21.061	4.976	1.00	40.44	C
ATOM	1617	C	ASP	A	367	10.663	-21.734	6.013	1.00	41.19	C
ATOM	1618	O	ASP	A	367	10.183	-22.216	7.040	1.00	43.84	O
ATOM	1619	CB	ASP	A	367	9.656	-21.980	3.763	1.00	42.58	C
ATOM	1620	CG	ASP	A	367	8.801	-21.390	2.674	1.00	46.73	C
ATOM	1621	OD1	ASP	A	367	9.347	-20.625	1.856	1.00	53.93	O
ATOM	1622	OD2	ASP	A	367	7.587	-21.688	2.637	1.00	48.66	O
ATOM	1623	N	GLN	A	368	11.958	-21.779	5.739	1.00	38.60	N
ATOM	1624	CA	GLN	A	368	12.881	-22.408	6.662	1.00	37.00	C
ATOM	1625	C	GLN	A	368	12.667	-21.896	8.084	1.00	33.45	C
ATOM	1626	O	GLN	A	368	12.541	-22.684	9.023	1.00	32.74	O
ATOM	1627	CB	GLN	A	368	14.319	-22.141	6.219	1.00	40.84	C
ATOM	1628	CG	GLN	A	368	15.235	-23.338	6.386	1.00	46.54	C
ATOM	1629	CD	GLN	A	368	15.467	-23.694	7.845	1.00	50.37	C
ATOM	1630	OE1	GLN	A	368	15.258	-24.841	8.258	1.00	50.02	O
ATOM	1631	NE2	GLN	A	368	15.904	-22.711	8.636	1.00	49.46	N
ATOM	1632	N	GLU	A	369	12.614	-20.576	8.236	1.00	30.33	N
ATOM	1633	CA	GLU	A	369	12.425	-19.963	9.547	1.00	26.17	C
ATOM	1634	C	GLU	A	369	11.177	-20.482	10.224	1.00	30.72	C
ATOM	1635	O	GLU	A	369	11.193	-20.809	11.414	1.00	32.47	O
ATOM	1636	CB	GLU	A	369	12.322	-18.447	9.429	1.00	17.68	C
ATOM	1637	CG	GLU	A	369	12.349	-17.753	10.766	1.00	17.93	C
ATOM	1638	CD	GLU	A	369	12.479	-16.256	10.631	1.00	20.95	C
ATOM	1639	OE1	GLU	A	369	12.340	-15.752	9.496	1.00	30.56	O
ATOM	1640	OE2	GLU	A	369	12.717	-15.577	11.652	1.00	24.65	O
ATOM	1641	N	ILE	A	370	10.097	-20.560	9.453	1.00	31.43	N
ATOM	1642	CA	ILE	A	370	8.816	-21.031	9.959	1.00	29.36	C
ATOM	1643	C	ILE	A	370	8.864	-22.479	10.456	1.00	29.18	C
ATOM	1644	O	ILE	A	370	8.585	-22.747	11.629	1.00	28.26	O
ATOM	1645	CB	ILE	A	370	7.730	-20.864	8.874	1.00	28.81	C
ATOM	1646	CG1	ILE	A	370	7.413	-19.374	8.707	1.00	22.92	C
ATOM	1647	CG2	ILE	A	370	6.473	-21.635	9.251	1.00	29.29	C
ATOM	1648	CD1	ILE	A	370	7.056	-18.978	7.302	1.00	18.54	C

ATOM	1649	N	SER	A	371	9.229	-23.403	9.571	1.00	30.43	N
ATOM	1650	CA	SER	A	371	9.320	-24.822	9.911	1.00	31.18	C
ATOM	1651	C	SER	A	371	10.226	-25.099	11.118	1.00	31.50	C
ATOM	1652	O	SER	A	371	9.836	-25.797	12.056	1.00	32.57	O
ATOM	1653	CB	SER	A	371	9.832	-25.605	8.706	1.00	33.45	C
ATOM	1654	OG	SER	A	371	11.160	-25.215	8.396	1.00	36.87	O
ATOM	1655	N	SER	A	372	11.437	-24.555	11.093	1.00	31.76	N
ATOM	1656	CA	SER	A	372	12.375	-24.758	12.195	1.00	32.23	C
ATOM	1657	C	SER	A	372	11.806	-24.243	13.517	1.00	29.38	C
ATOM	1658	O	SER	A	372	11.872	-24.926	14.541	1.00	28.28	O
ATOM	1659	CB	SER	A	372	13.706	-24.057	11.897	1.00	33.19	C
ATOM	1660	OG	SER	A	372	13.509	-22.698	11.540	1.00	37.15	O
ATOM	1661	N	THR	A	373	11.251	-23.034	13.491	1.00	28.80	N
ATOM	1662	CA	THR	A	373	10.667	-22.439	14.689	1.00	29.38	C
ATOM	1663	C	THR	A	373	9.482	-23.270	15.165	1.00	30.35	C
ATOM	1664	O	THR	A	373	9.319	-23.490	16.360	1.00	30.57	O
ATOM	1665	CB	THR	A	373	10.176	-21.002	14.432	1.00	29.92	C
ATOM	1666	OG1	THR	A	373	11.244	-20.219	13.885	1.00	27.58	O
ATOM	1667	CG2	THR	A	373	9.698	-20.365	15.730	1.00	24.94	C
ATOM	1668	N	ILE	A	374	8.654	-23.729	14.233	1.00	29.22	N
ATOM	1669	CA	ILE	A	374	7.506	-24.541	14.605	1.00	30.60	C
ATOM	1670	C	ILE	A	374	8.007	-25.867	15.163	1.00	34.59	C
ATOM	1671	O	ILE	A	374	7.580	-26.299	16.238	1.00	37.03	O
ATOM	1672	CB	ILE	A	374	6.577	-24.801	13.394	1.00	30.70	C
ATOM	1673	CG1	ILE	A	374	5.758	-23.540	13.093	1.00	28.94	C
ATOM	1674	CG2	ILE	A	374	5.641	-25.975	13.683	1.00	25.27	C
ATOM	1675	CD1	ILE	A	374	5.100	-23.535	11.718	1.00	29.78	C
ATOM	1676	N	ARG	A	375	8.917	-26.513	14.440	1.00	34.73	N
ATOM	1677	CA	ARG	A	375	9.468	-27.783	14.904	1.00	35.43	C
ATOM	1678	C	ARG	A	375	9.967	-27.594	16.329	1.00	31.19	C
ATOM	1679	O	ARG	A	375	9.748	-28.431	17.202	1.00	31.34	O
ATOM	1680	CB	ARG	A	375	10.625	-28.219	14.008	1.00	42.61	C
ATOM	1681	CG	ARG	A	375	10.261	-29.328	13.039	1.00	53.44	C
ATOM	1682	CD	ARG	A	375	10.882	-29.089	11.672	1.00	61.85	C
ATOM	1683	NE	ARG	A	375	10.422	-30.064	10.687	1.00	68.75	N
ATOM	1684	CZ	ARG	A	375	10.732	-30.027	9.395	1.00	74.54	C
ATOM	1685	NH1	ARG	A	375	11.509	-29.057	8.923	1.00	74.02	N
ATOM	1686	NH2	ARG	A	375	10.264	-30.961	8.573	1.00	76.51	N
ATOM	1687	N	SER	A	376	10.635	-26.470	16.551	1.00	29.23	N
ATOM	1688	CA	SER	A	376	11.173	-26.139	17.857	1.00	25.94	C
ATOM	1689	C	SER	A	376	10.048	-25.983	18.886	1.00	26.25	C
ATOM	1690	O	SER	A	376	10.151	-26.475	20.014	1.00	23.71	O
ATOM	1691	CB	SER	A	376	11.996	-24.844	17.752	1.00	24.92	C
ATOM	1692	OG	SER	A	376	12.667	-24.534	18.965	1.00	24.97	O
ATOM	1693	N	ILE	A	377	8.969	-25.308	18.496	1.00	27.76	N
ATOM	1694	CA	ILE	A	377	7.837	-25.079	19.402	1.00	29.90	C
ATOM	1695	C	ILE	A	377	7.247	-26.383	19.922	1.00	29.94	C
ATOM	1696	O	ILE	A	377	6.890	-26.485	21.101	1.00	27.72	O
ATOM	1697	CB	ILE	A	377	6.710	-24.258	18.710	1.00	31.93	C
ATOM	1698	CG1	ILE	A	377	6.854	-22.783	19.074	1.00	33.58	C

ATOM	1699	CG2	ILE	A	377	5.335	-24.753	19.144	1.00	32.31	C
ATOM	1700	CD1	ILE	A	377	6.084	-21.859	18.159	1.00	37.34	C
ATOM	1701	N	GLU	A	378	7.154	-27.372	19.036	1.00	30.39	N
ATOM	1702	CA	GLU	A	378	6.605	-28.677	19.380	1.00	31.93	C
ATOM	1703	C	GLU	A	378	7.152	-29.232	20.691	1.00	32.49	C
ATOM	1704	O	GLU	A	378	6.484	-30.009	21.374	1.00	31.66	O
ATOM	1705	CB	GLU	A	378	6.884	-29.662	18.252	1.00	31.50	C
ATOM	1706	CG	GLU	A	378	5.732	-29.815	17.294	1.00	35.24	C
ATOM	1707	CD	GLU	A	378	6.160	-30.358	15.947	1.00	39.04	C
ATOM	1708	OE1	GLU	A	378	7.184	-31.071	15.879	1.00	42.16	O
ATOM	1709	OE2	GLU	A	378	5.468	-30.071	14.952	1.00	40.03	O
ATOM	1710	N	GLN	A	379	8.368	-28.824	21.037	1.00	33.95	N
ATOM	1711	CA	GLN	A	379	9.031	-29.266	22.259	1.00	33.78	C
ATOM	1712	C	GLN	A	379	8.202	-28.910	23.497	1.00	32.21	C
ATOM	1713	O	GLN	A	379	8.265	-29.594	24.524	1.00	29.56	O
ATOM	1714	CB	GLN	A	379	10.425	-28.618	22.335	1.00	37.94	C
ATOM	1715	CG	GLN	A	379	11.104	-28.650	23.704	1.00	44.16	C
ATOM	1716	CD	GLN	A	379	12.583	-28.266	23.635	1.00	45.52	C
ATOM	1717	OE1	GLN	A	379	12.942	-27.233	23.066	1.00	47.04	O
ATOM	1718	NE2	GLN	A	379	13.443	-29.101	24.214	1.00	45.30	N
ATOM	1719	N	VAL	A	380	7.411	-27.847	23.390	1.00	29.08	N
ATOM	1720	CA	VAL	A	380	6.594	-27.397	24.511	1.00	27.52	C
ATOM	1721	C	VAL	A	380	5.552	-28.412	24.960	1.00	24.25	C
ATOM	1722	O	VAL	A	380	5.113	-28.390	26.107	1.00	22.87	O
ATOM	1723	CB	VAL	A	380	5.870	-26.067	24.178	1.00	28.23	C
ATOM	1724	CG1	VAL	A	380	4.564	-26.344	23.437	1.00	27.23	C
ATOM	1725	CG2	VAL	A	380	5.604	-25.286	25.463	1.00	29.42	C
ATOM	1726	N	PHE	A	381	5.174	-29.309	24.058	1.00	26.58	N
ATOM	1727	CA	PHE	A	381	4.147	-30.303	24.355	1.00	29.70	C
ATOM	1728	C	PHE	A	381	4.606	-31.501	25.162	1.00	32.39	C
ATOM	1729	O	PHE	A	381	3.804	-32.379	25.484	1.00	32.80	O
ATOM	1730	CB	PHE	A	381	3.492	-30.777	23.054	1.00	24.29	C
ATOM	1731	CG	PHE	A	381	2.846	-29.670	22.274	1.00	24.25	C
ATOM	1732	CD1	PHE	A	381	1.800	-28.932	22.828	1.00	25.62	C
ATOM	1733	CD2	PHE	A	381	3.305	-29.333	21.007	1.00	23.13	C
ATOM	1734	CE1	PHE	A	381	1.226	-27.872	22.128	1.00	27.18	C
ATOM	1735	CE2	PHE	A	381	2.738	-28.277	20.300	1.00	24.24	C
ATOM	1736	CZ	PHE	A	381	1.699	-27.544	20.861	1.00	26.04	C
ATOM	1737	N	LYS	A	382	5.885	-31.544	25.508	1.00	30.93	N
ATOM	1738	CA	LYS	A	382	6.378	-32.674	26.275	1.00	29.91	C
ATOM	1739	C	LYS	A	382	6.280	-32.425	27.765	1.00	25.34	C
ATOM	1740	O	LYS	A	382	6.597	-31.339	28.237	1.00	24.88	O
ATOM	1741	CB	LYS	A	382	7.829	-32.977	25.900	1.00	35.88	C
ATOM	1742	CG	LYS	A	382	8.062	-33.123	24.405	1.00	44.05	C
ATOM	1743	CD	LYS	A	382	8.430	-34.552	24.044	1.00	48.47	C
ATOM	1744	CE	LYS	A	382	9.643	-34.591	23.123	1.00	53.05	C
ATOM	1745	NZ	LYS	A	382	9.780	-35.914	22.444	1.00	55.69	N
ATOM	1746	N	LEU	A	383	5.823	-33.434	28.501	1.00	23.91	N
ATOM	1747	CA	LEU	A	383	5.726	-33.336	29.951	1.00	26.91	C
ATOM	1748	C	LEU	A	383	7.108	-33.746	30.452	1.00	28.96	C

ATOM	1749	O	LEU	A	383	7.739	-34.625	29.867	1.00	30.62	O
ATOM	1750	CB	LEU	A	383	4.665	-34.305	30.484	1.00	27.57	C
ATOM	1751	CG	LEU	A	383	3.383	-33.720	31.093	1.00	30.04	C
ATOM	1752	CD1	LEU	A	383	2.881	-32.575	30.247	1.00	28.74	C
ATOM	1753	CD2	LEU	A	383	2.321	-34.804	31.188	1.00	26.63	C
ATOM	1754	N	VAL	A	384	7.585	-33.119	31.521	1.00	28.13	N
ATOM	1755	CA	VAL	A	384	8.912	-33.434	32.052	1.00	27.36	C
ATOM	1756	C	VAL	A	384	8.847	-34.058	33.443	1.00	29.12	C
ATOM	1757	O	VAL	A	384	7.812	-34.000	34.107	1.00	29.12	O
ATOM	1758	CB	VAL	A	384	9.798	-32.149	32.138	1.00	20.83	C
ATOM	1759	CG1	VAL	A	384	9.833	-31.440	30.797	1.00	23.11	C
ATOM	1760	CG2	VAL	A	384	9.253	-31.208	33.195	1.00	15.21	C
ATOM	1761	N	ASP	A	385	9.946	-34.674	33.877	1.00	30.31	N
ATOM	1762	CA	ASP	A	385	9.998	-35.240	35.224	1.00	28.24	C
ATOM	1763	C	ASP	A	385	11.205	-34.641	35.941	1.00	22.57	C
ATOM	1764	O	ASP	A	385	11.600	-35.077	37.020	1.00	19.31	O
ATOM	1765	CB	ASP	A	385	10.057	-36.772	35.207	1.00	35.78	C
ATOM	1766	CG	ASP	A	385	11.192	-37.306	34.387	1.00	37.15	C
ATOM	1767	OD1	ASP	A	385	10.923	-38.096	33.460	1.00	45.74	O
ATOM	1768	OD2	ASP	A	385	12.348	-36.944	34.670	1.00	44.64	O
ATOM	1769	N	GLN	A	386	11.761	-33.604	35.321	1.00	21.36	N
ATOM	1770	CA	GLN	A	386	12.894	-32.870	35.867	1.00	21.60	C
ATOM	1771	C	GLN	A	386	13.092	-31.592	35.058	1.00	16.60	C
ATOM	1772	O	GLN	A	386	12.822	-31.564	33.862	1.00	18.31	O
ATOM	1773	CB	GLN	A	386	14.165	-33.726	35.822	1.00	20.85	C
ATOM	1774	CG	GLN	A	386	15.338	-33.127	36.576	1.00	25.77	C
ATOM	1775	CD	GLN	A	386	16.579	-33.985	36.469	1.00	22.66	C
ATOM	1776	OE1	GLN	A	386	16.975	-34.626	37.434	1.00	25.10	O
ATOM	1777	NE2	GLN	A	386	17.191	-34.011	35.287	1.00	23.20	N
ATOM	1778	N	GLY	A	387	13.546	-30.532	35.719	1.00	17.32	N
ATOM	1779	CA	GLY	A	387	13.772	-29.282	35.021	1.00	20.41	C
ATOM	1780	C	GLY	A	387	12.557	-28.378	34.899	1.00	21.15	C
ATOM	1781	O	GLY	A	387	11.602	-28.487	35.661	1.00	23.95	O
ATOM	1782	N	GLU	A	388	12.601	-27.472	33.931	1.00	18.78	N
ATOM	1783	CA	GLU	A	388	11.511	-26.540	33.708	1.00	16.93	C
ATOM	1784	C	GLU	A	388	10.462	-27.166	32.812	1.00	16.74	C
ATOM	1785	O	GLU	A	388	10.783	-27.922	31.899	1.00	16.04	O
ATOM	1786	CB	GLU	A	388	12.043	-25.266	33.058	1.00	19.35	C
ATOM	1787	CG	GLU	A	388	13.225	-24.645	33.797	1.00	20.91	C
ATOM	1788	CD	GLU	A	388	13.781	-23.424	33.089	1.00	17.38	C
ATOM	1789	OE1	GLU	A	388	13.808	-23.423	31.839	1.00	19.70	O
ATOM	1790	OE2	GLU	A	388	14.193	-22.469	33.783	1.00	18.73	O
ATOM	1791	N	GLY	A	389	9.200	-26.849	33.079	1.00	19.80	N
ATOM	1792	CA	GLY	A	389	8.121	-27.395	32.275	1.00	16.92	C
ATOM	1793	C	GLY	A	389	6.980	-27.932	33.114	1.00	18.57	C
ATOM	1794	O	GLY	A	389	6.940	-27.731	34.330	1.00	18.32	O
ATOM	1795	N	PHE	A	390	6.054	-28.619	32.449	1.00	20.75	N
ATOM	1796	CA	PHE	A	390	4.885	-29.212	33.091	1.00	18.87	C
ATOM	1797	C	PHE	A	390	5.199	-30.633	33.519	1.00	17.43	C
ATOM	1798	O	PHE	A	390	5.802	-31.395	32.767	1.00	19.70	O

ATOM	1799	CB	PHE	A	390	3.705	-29.267	32.112	1.00	18.56	C
ATOM	1800	CG	PHE	A	390	3.053	-27.940	31.855	1.00	18.49	C
ATOM	1801	CD1	PHE	A	390	2.244	-27.347	32.820	1.00	16.74	C
ATOM	1802	CD2	PHE	A	390	3.209	-27.304	30.626	1.00	17.43	C
ATOM	1803	CE1	PHE	A	390	1.597	-26.144	32.560	1.00	17.51	C
ATOM	1804	CE2	PHE	A	390	2.566	-26.100	30.358	1.00	15.83	C
ATOM	1805	CZ	PHE	A	390	1.759	-25.520	31.323	1.00	14.74	C
ATOM	1806	N	TYR	A	391	4.776	-30.998	34.719	1.00	16.60	N
ATOM	1807	CA	TYR	A	391	5.007	-32.345	35.210	1.00	16.09	C
ATOM	1808	C	TYR	A	391	3.686	-33.099	35.162	1.00	19.74	C
ATOM	1809	O	TYR	A	391	2.625	-32.495	35.043	1.00	17.52	O
ATOM	1810	CB	TYR	A	391	5.526	-32.308	36.648	1.00	19.14	C
ATOM	1811	CG	TYR	A	391	6.939	-31.792	36.775	1.00	23.55	C
ATOM	1812	CD1	TYR	A	391	7.274	-30.496	36.364	1.00	22.65	C
ATOM	1813	CD2	TYR	A	391	7.949	-32.604	37.287	1.00	22.78	C
ATOM	1814	CE1	TYR	A	391	8.586	-30.025	36.461	1.00	23.30	C
ATOM	1815	CE2	TYR	A	391	9.258	-32.146	37.388	1.00	24.58	C
ATOM	1816	CZ	TYR	A	391	9.571	-30.859	36.974	1.00	26.56	C
ATOM	1817	OH	TYR	A	391	10.869	-30.415	37.082	1.00	25.09	O
ATOM	1818	N	GLN	A	392	3.766	-34.421	35.268	1.00	23.01	N
ATOM	1819	CA	GLN	A	392	2.597	-35.285	35.234	1.00	24.68	C
ATOM	1820	C	GLN	A	392	1.632	-34.996	36.385	1.00	24.31	C
ATOM	1821	O	GLN	A	392	0.433	-35.252	36.273	1.00	27.78	O
ATOM	1822	CB	GLN	A	392	3.041	-36.761	35.253	1.00	28.55	C
ATOM	1823	CG	GLN	A	392	2.707	-37.534	36.536	1.00	41.57	C
ATOM	1824	CD	GLN	A	392	3.916	-38.244	37.162	1.00	48.36	C
ATOM	1825	OE1	GLN	A	392	4.672	-38.948	36.480	1.00	47.26	O
ATOM	1826	NE2	GLN	A	392	4.095	-38.060	38.471	1.00	50.57	N
ATOM	1827	N	ASP	A	393	2.148	-34.460	37.487	1.00	19.99	N
ATOM	1828	CA	ASP	A	393	1.299	-34.160	38.626	1.00	14.73	C
ATOM	1829	C	ASP	A	393	0.682	-32.772	38.552	1.00	13.71	C
ATOM	1830	O	ASP	A	393	0.013	-32.331	39.488	1.00	17.40	O
ATOM	1831	CB	ASP	A	393	2.063	-34.358	39.947	1.00	14.32	C
ATOM	1832	CG	ASP	A	393	2.998	-33.200	40.292	1.00	13.16	C
ATOM	1833	OD1	ASP	A	393	3.198	-32.278	39.469	1.00	13.88	O
ATOM	1834	OD2	ASP	A	393	3.540	-33.230	41.415	1.00	14.44	O
ATOM	1835	N	GLY	A	394	0.904	-32.094	37.432	1.00	13.79	N
ATOM	1836	CA	GLY	A	394	0.340	-30.770	37.234	1.00	14.15	C
ATOM	1837	C	GLY	A	394	1.243	-29.587	37.530	1.00	18.27	C
ATOM	1838	O	GLY	A	394	0.968	-28.469	37.080	1.00	18.13	O
ATOM	1839	N	SER	A	395	2.313	-29.816	38.286	1.00	17.44	N
ATOM	1840	CA	SER	A	395	3.231	-28.739	38.627	1.00	13.29	C
ATOM	1841	C	SER	A	395	3.854	-28.179	37.372	1.00	14.55	C
ATOM	1842	O	SER	A	395	3.905	-28.847	36.340	1.00	17.48	O
ATOM	1843	CB	SER	A	395	4.350	-29.243	39.533	1.00	14.12	C
ATOM	1844	OG	SER	A	395	3.854	-30.075	40.549	1.00	12.80	O
ATOM	1845	N	TYR	A	396	4.329	-26.945	37.470	1.00	18.07	N
ATOM	1846	CA	TYR	A	396	4.985	-26.273	36.358	1.00	16.11	C
ATOM	1847	C	TYR	A	396	6.163	-25.514	36.939	1.00	18.79	C
ATOM	1848	O	TYR	A	396	5.996	-24.618	37.777	1.00	17.43	O

ATOM	1849	CB	TYR	A	396	4.050	-25.291	35.658	1.00	15.30	C
ATOM	1850	CG	TYR	A	396	4.748	-24.520	34.569	1.00	15.45	C
ATOM	1851	CD1	TYR	A	396	5.322	-23.269	34.823	1.00	15.36	C
ATOM	1852	CD2	TYR	A	396	4.877	-25.058	33.294	1.00	16.87	C
ATOM	1853	CE1	TYR	A	396	6.011	-22.575	33.824	1.00	12.70	C
ATOM	1854	CE2	TYR	A	396	5.562	-24.375	32.288	1.00	17.00	C
ATOM	1855	CZ	TYR	A	396	6.125	-23.137	32.560	1.00	16.61	C
ATOM	1856	OH	TYR	A	396	6.791	-22.470	31.549	1.00	20.37	O
ATOM	1857	N	ILE	A	397	7.357	-25.873	36.480	1.00	19.04	N
ATOM	1858	CA	ILE	A	397	8.572	-25.250	36.973	1.00	15.80	C
ATOM	1859	C	ILE	A	397	9.177	-24.355	35.917	1.00	11.60	C
ATOM	1860	O	ILE	A	397	9.145	-24.667	34.735	1.00	14.44	O
ATOM	1861	CB	ILE	A	397	9.622	-26.330	37.367	1.00	15.34	C
ATOM	1862	CG1	ILE	A	397	9.135	-27.114	38.584	1.00	10.31	C
ATOM	1863	CG2	ILE	A	397	10.984	-25.678	37.671	1.00	14.04	C
ATOM	1864	CD1	ILE	A	397	9.109	-26.324	39.842	1.00	7.59	C
ATOM	1865	N	ASP	A	398	9.708	-23.222	36.350	1.00	17.66	N
ATOM	1866	CA	ASP	A	398	10.394	-22.316	35.446	1.00	18.72	C
ATOM	1867	C	ASP	A	398	11.519	-21.617	36.189	1.00	15.89	C
ATOM	1868	O	ASP	A	398	11.619	-21.704	37.414	1.00	16.27	O
ATOM	1869	CB	ASP	A	398	9.451	-21.291	34.821	1.00	20.43	C
ATOM	1870	CG	ASP	A	398	9.913	-20.871	33.442	1.00	23.37	C
ATOM	1871	OD1	ASP	A	398	11.095	-20.486	33.318	1.00	28.29	O
ATOM	1872	OD2	ASP	A	398	9.114	-20.940	32.480	1.00	22.29	O
ATOM	1873	N	HIS	A	399	12.353	-20.905	35.445	1.00	20.34	N
ATOM	1874	CA	HIS	A	399	13.512	-20.249	36.030	1.00	19.37	C
ATOM	1875	C	HIS	A	399	14.228	-21.232	36.949	1.00	16.42	C
ATOM	1876	O	HIS	A	399	14.446	-20.980	38.132	1.00	17.80	O
ATOM	1877	CB	HIS	A	399	13.102	-18.976	36.753	1.00	22.56	C
ATOM	1878	CG	HIS	A	399	12.928	-17.814	35.824	1.00	31.00	C
ATOM	1879	ND1	HIS	A	399	12.575	-16.552	36.253	1.00	32.27	N
ATOM	1880	CD2	HIS	A	399	13.050	-17.732	34.476	1.00	27.72	C
ATOM	1881	CE1	HIS	A	399	12.485	-15.744	35.210	1.00	33.26	C
ATOM	1882	NE2	HIS	A	399	12.769	-16.436	34.120	1.00	31.54	N
ATOM	1883	N	THR	A	400	14.548	-22.381	36.355	1.00	17.85	N
ATOM	1884	CA	THR	A	400	15.264	-23.473	36.993	1.00	18.78	C
ATOM	1885	C	THR	A	400	14.507	-24.263	38.036	1.00	15.82	C
ATOM	1886	O	THR	A	400	14.385	-25.477	37.920	1.00	16.43	O
ATOM	1887	CB	THR	A	400	16.590	-22.969	37.626	1.00	23.37	C
ATOM	1888	OG1	THR	A	400	17.376	-22.322	36.618	1.00	27.49	O
ATOM	1889	CG2	THR	A	400	17.392	-24.130	38.216	1.00	20.11	C
ATOM	1890	N	ASN	A	401	13.993	-23.599	39.059	1.00	16.72	N
ATOM	1891	CA	ASN	A	401	13.304	-24.353	40.099	1.00	20.08	C
ATOM	1892	C	ASN	A	401	12.198	-23.599	40.835	1.00	16.56	C
ATOM	1893	O	ASN	A	401	11.994	-23.810	42.030	1.00	14.23	O
ATOM	1894	CB	ASN	A	401	14.342	-24.842	41.108	1.00	16.77	C
ATOM	1895	CG	ASN	A	401	15.129	-23.701	41.714	1.00	20.35	C
ATOM	1896	OD1	ASN	A	401	15.128	-22.587	41.186	1.00	22.81	O
ATOM	1897	ND2	ASN	A	401	15.797	-23.964	42.829	1.00	18.69	N
ATOM	1898	N	VAL	A	402	11.481	-22.733	40.125	1.00	20.87	N

ATOM	1899	CA	VAL	A	402	10.414	-21.953	40.754	1.00	19.69	C
ATOM	1900	C	VAL	A	402	9.010	-22.391	40.311	1.00	16.00	C
ATOM	1901	O	VAL	A	402	8.774	-22.627	39.131	1.00	12.31	O
ATOM	1902	CB	VAL	A	402	10.573	-20.447	40.434	1.00	19.00	C
ATOM	1903	CG1	VAL	A	402	9.693	-19.617	41.358	1.00	17.41	C
ATOM	1904	CG2	VAL	A	402	12.034	-20.032	40.569	1.00	16.17	C
ATOM	1905	N	ALA	A	403	8.093	-22.527	41.268	1.00	18.78	N
ATOM	1906	CA	ALA	A	403	6.697	-22.876	40.962	1.00	14.94	C
ATOM	1907	C	ALA	A	403	6.221	-21.675	40.150	1.00	12.38	C
ATOM	1908	O	ALA	A	403	6.143	-20.562	40.676	1.00	16.92	O
ATOM	1909	CB	ALA	A	403	5.907	-22.987	42.244	1.00	14.92	C
ATOM	1910	N	TYR	A	404	5.913	-21.881	38.875	1.00	13.53	N
ATOM	1911	CA	TYR	A	404	5.531	-20.749	38.034	1.00	15.94	C
ATOM	1912	C	TYR	A	404	4.338	-20.921	37.086	1.00	15.00	C
ATOM	1913	O	TYR	A	404	4.232	-20.207	36.082	1.00	15.63	O
ATOM	1914	CB	TYR	A	404	6.760	-20.296	37.221	1.00	12.77	C
ATOM	1915	CG	TYR	A	404	7.241	-18.896	37.542	1.00	17.25	C
ATOM	1916	CD1	TYR	A	404	6.335	-17.850	37.686	1.00	18.79	C
ATOM	1917	CD2	TYR	A	404	8.602	-18.609	37.686	1.00	18.49	C
ATOM	1918	CE1	TYR	A	404	6.757	-16.561	37.958	1.00	21.53	C
ATOM	1919	CE2	TYR	A	404	9.037	-17.306	37.962	1.00	21.01	C
ATOM	1920	CZ	TYR	A	404	8.104	-16.288	38.095	1.00	23.29	C
ATOM	1921	OH	TYR	A	404	8.485	-14.988	38.354	1.00	22.41	O
ATOM	1922	N	THR	A	405	3.438	-21.847	37.394	1.00	16.04	N
ATOM	1923	CA	THR	A	405	2.274	-22.044	36.541	1.00	14.81	C
ATOM	1924	C	THR	A	405	1.545	-20.720	36.262	1.00	16.73	C
ATOM	1925	O	THR	A	405	1.173	-20.433	35.116	1.00	13.35	O
ATOM	1926	CB	THR	A	405	1.243	-22.979	37.198	1.00	13.31	C
ATOM	1927	OG1	THR	A	405	1.909	-24.022	37.912	1.00	16.53	O
ATOM	1928	CG2	THR	A	405	0.343	-23.585	36.144	1.00	17.23	C
ATOM	1929	N	GLY	A	406	1.370	-19.924	37.324	1.00	15.08	N
ATOM	1930	CA	GLY	A	406	0.646	-18.666	37.246	1.00	16.18	C
ATOM	1931	C	GLY	A	406	1.259	-17.405	36.674	1.00	20.23	C
ATOM	1932	O	GLY	A	406	0.726	-16.317	36.886	1.00	21.43	O
ATOM	1933	N	ALA	A	407	2.369	-17.519	35.959	1.00	20.96	N
ATOM	1934	CA	ALA	A	407	2.985	-16.343	35.358	1.00	16.33	C
ATOM	1935	C	ALA	A	407	3.590	-16.785	34.048	1.00	16.74	C
ATOM	1936	O	ALA	A	407	3.212	-16.291	32.990	1.00	17.74	O
ATOM	1937	CB	ALA	A	407	4.041	-15.762	36.274	1.00	15.52	C
ATOM	1938	N	PHE	A	408	4.526	-17.724	34.110	1.00	17.70	N
ATOM	1939	CA	PHE	A	408	5.129	-18.231	32.889	1.00	17.31	C
ATOM	1940	C	PHE	A	408	4.155	-19.193	32.225	1.00	16.87	C
ATOM	1941	O	PHE	A	408	4.115	-19.309	30.995	1.00	16.82	O
ATOM	1942	CB	PHE	A	408	6.473	-18.907	33.196	1.00	19.46	C
ATOM	1943	CG	PHE	A	408	7.608	-17.933	33.266	1.00	19.00	C
ATOM	1944	CD1	PHE	A	408	8.194	-17.455	32.099	1.00	20.98	C
ATOM	1945	CD2	PHE	A	408	8.022	-17.412	34.489	1.00	21.09	C
ATOM	1946	CE1	PHE	A	408	9.175	-16.461	32.149	1.00	25.16	C
ATOM	1947	CE2	PHE	A	408	9.003	-16.417	34.553	1.00	26.47	C
ATOM	1948	CZ	PHE	A	408	9.578	-15.940	33.379	1.00	26.76	C

ATOM	1949	N	GLY	A	409	3.362	-19.881	33.039	1.00	16.18	N
ATOM	1950	CA	GLY	A	409	2.371	-20.776	32.474	1.00	19.27	C
ATOM	1951	C	GLY	A	409	1.375	-19.939	31.680	1.00	17.71	C
ATOM	1952	O	GLY	A	409	0.956	-20.319	30.581	1.00	18.46	O
ATOM	1953	N	ASN	A	410	0.998	-18.788	32.237	1.00	17.12	N
ATOM	1954	CA	ASN	A	410	0.056	-17.896	31.570	1.00	13.95	C
ATOM	1955	C	ASN	A	410	0.568	-17.564	30.190	1.00	15.20	C
ATOM	1956	O	ASN	A	410	-0.126	-17.774	29.192	1.00	17.95	O
ATOM	1957	CB	ASN	A	410	-0.113	-16.587	32.339	1.00	11.83	C
ATOM	1958	CG	ASN	A	410	-0.659	-16.790	33.730	1.00	18.30	C
ATOM	1959	OD1	ASN	A	410	-0.610	-17.893	34.276	1.00	21.79	O
ATOM	1960	ND2	ASN	A	410	-1.179	-15.715	34.324	1.00	18.66	N
ATOM	1961	N	VAL	A	411	1.792	-17.039	30.137	1.00	20.64	N
ATOM	1962	CA	VAL	A	411	2.419	-16.655	28.867	1.00	19.59	C
ATOM	1963	C	VAL	A	411	2.429	-17.814	27.892	1.00	17.21	C
ATOM	1964	O	VAL	A	411	2.218	-17.638	26.703	1.00	19.78	O
ATOM	1965	CB	VAL	A	411	3.880	-16.180	29.062	1.00	20.02	C
ATOM	1966	CG1	VAL	A	411	4.496	-15.850	27.709	1.00	19.04	C
ATOM	1967	CG2	VAL	A	411	3.920	-14.960	29.973	1.00	14.39	C
ATOM	1968	N	LEU	A	412	2.682	-19.006	28.405	1.00	20.07	N
ATOM	1969	CA	LEU	A	412	2.711	-20.191	27.569	1.00	22.22	C
ATOM	1970	C	LEU	A	412	1.341	-20.416	26.919	1.00	24.37	C
ATOM	1971	O	LEU	A	412	1.218	-20.412	25.693	1.00	24.92	O
ATOM	1972	CB	LEU	A	412	3.107	-21.408	28.415	1.00	18.91	C
ATOM	1973	CG	LEU	A	412	3.848	-22.562	27.738	1.00	18.00	C
ATOM	1974	CD1	LEU	A	412	4.466	-23.440	28.802	1.00	15.11	C
ATOM	1975	CD2	LEU	A	412	2.894	-23.370	26.875	1.00	18.02	C
ATOM	1976	N	ILE	A	413	0.309	-20.603	27.741	1.00	24.52	N
ATOM	1977	CA	ILE	A	413	-1.037	-20.843	27.216	1.00	22.39	C
ATOM	1978	C	ILE	A	413	-1.566	-19.651	26.422	1.00	16.41	C
ATOM	1979	O	ILE	A	413	-2.108	-19.804	25.335	1.00	19.11	O
ATOM	1980	CB	ILE	A	413	-2.035	-21.182	28.357	1.00	23.28	C
ATOM	1981	CG1	ILE	A	413	-3.345	-21.681	27.756	1.00	26.45	C
ATOM	1982	CG2	ILE	A	413	-2.291	-19.958	29.237	1.00	20.38	C
ATOM	1983	CD1	ILE	A	413	-3.759	-23.044	28.254	1.00	33.73	C
ATOM	1984	N	ASP	A	414	-1.394	-18.464	26.976	1.00	16.83	N
ATOM	1985	CA	ASP	A	414	-1.848	-17.251	26.329	1.00	18.77	C
ATOM	1986	C	ASP	A	414	-1.251	-17.125	24.933	1.00	20.57	C
ATOM	1987	O	ASP	A	414	-1.967	-16.949	23.943	1.00	21.29	O
ATOM	1988	CB	ASP	A	414	-1.450	-16.056	27.186	1.00	22.87	C
ATOM	1989	CG	ASP	A	414	-2.167	-14.796	26.792	1.00	25.97	C
ATOM	1990	OD1	ASP	A	414	-2.839	-14.790	25.742	1.00	29.25	O
ATOM	1991	OD2	ASP	A	414	-2.057	-13.808	27.540	1.00	31.77	O
ATOM	1992	N	GLY	A	415	0.070	-17.228	24.851	1.00	21.27	N
ATOM	1993	CA	GLY	A	415	0.731	-17.115	23.565	1.00	15.75	C
ATOM	1994	C	GLY	A	415	0.510	-18.289	22.634	1.00	14.27	C
ATOM	1995	O	GLY	A	415	0.286	-18.114	21.436	1.00	15.13	O
ATOM	1996	N	LEU	A	416	0.560	-19.501	23.164	1.00	14.39	N
ATOM	1997	CA	LEU	A	416	0.372	-20.649	22.297	1.00	16.03	C
ATOM	1998	C	LEU	A	416	-0.995	-20.629	21.628	1.00	19.14	C

ATOM	1999	O	LEU	A	416	-1.101	-20.907	20.438	1.00	21.14	O
ATOM	2000	CB	LEU	A	416	0.551	-21.954	23.080	1.00	16.20	C
ATOM	2001	CG	LEU	A	416	0.680	-23.213	22.212	1.00	18.43	C
ATOM	2002	CD1	LEU	A	416	1.807	-23.045	21.193	1.00	20.34	C
ATOM	2003	CD2	LEU	A	416	0.951	-24.413	23.103	1.00	17.18	C
ATOM	2004	N	SER	A	417	-2.038	-20.289	22.388	1.00	20.29	N
ATOM	2005	CA	SER	A	417	-3.397	-20.256	21.840	1.00	21.02	C
ATOM	2006	C	SER	A	417	-3.565	-19.244	20.705	1.00	18.73	C
ATOM	2007	O	SER	A	417	-4.396	-19.437	19.820	1.00	19.94	O
ATOM	2008	CB	SER	A	417	-4.419	-20.006	22.956	1.00	14.72	C
ATOM	2009	OG	SER	A	417	-4.230	-18.750	23.574	1.00	20.20	O
ATOM	2010	N	GLN	A	418	-2.769	-18.178	20.711	1.00	19.99	N
ATOM	2011	CA	GLN	A	418	-2.837	-17.182	19.633	1.00	21.94	C
ATOM	2012	C	GLN	A	418	-2.159	-17.730	18.375	1.00	21.90	C
ATOM	2013	O	GLN	A	418	-2.605	-17.499	17.254	1.00	20.00	O
ATOM	2014	CB	GLN	A	418	-2.090	-15.906	20.016	1.00	22.94	C
ATOM	2015	CG	GLN	A	418	-2.644	-15.135	21.170	1.00	27.64	C
ATOM	2016	CD	GLN	A	418	-2.167	-13.703	21.144	1.00	30.09	C
ATOM	2017	OE1	GLN	A	418	-0.965	-13.440	21.141	1.00	29.49	O
ATOM	2018	NE2	GLN	A	418	-3.105	-12.767	21.112	1.00	36.00	N
ATOM	2019	N	LEU	A	419	-1.067	-18.457	18.590	1.00	20.78	N
ATOM	2020	CA	LEU	A	419	-0.255	-19.009	17.518	1.00	19.63	C
ATOM	2021	C	LEU	A	419	-0.800	-20.236	16.807	1.00	19.46	C
ATOM	2022	O	LEU	A	419	-0.731	-20.321	15.588	1.00	21.15	O
ATOM	2023	CB	LEU	A	419	1.133	-19.331	18.079	1.00	25.56	C
ATOM	2024	CG	LEU	A	419	2.421	-19.044	17.302	1.00	29.75	C
ATOM	2025	CD1	LEU	A	419	2.244	-17.883	16.337	1.00	26.51	C
ATOM	2026	CD2	LEU	A	419	3.525	-18.745	18.312	1.00	29.28	C
ATOM	2027	N	LEU	A	420	-1.330	-21.187	17.568	1.00	21.04	N
ATOM	2028	CA	LEU	A	420	-1.848	-22.433	17.005	1.00	23.85	C
ATOM	2029	C	LEU	A	420	-2.707	-22.309	15.757	1.00	25.50	C
ATOM	2030	O	LEU	A	420	-2.503	-23.031	14.780	1.00	28.06	O
ATOM	2031	CB	LEU	A	420	-2.620	-23.198	18.070	1.00	24.37	C
ATOM	2032	CG	LEU	A	420	-1.690	-23.937	19.025	1.00	31.14	C
ATOM	2033	CD1	LEU	A	420	-2.517	-24.729	20.019	1.00	27.61	C
ATOM	2034	CD2	LEU	A	420	-0.751	-24.846	18.232	1.00	32.23	C
ATOM	2035	N	PRO	A	421	-3.713	-21.427	15.783	1.00	25.51	N
ATOM	2036	CA	PRO	A	421	-4.559	-21.277	14.597	1.00	23.30	C
ATOM	2037	C	PRO	A	421	-3.744	-20.924	13.354	1.00	23.84	C
ATOM	2038	O	PRO	A	421	-4.021	-21.407	12.259	1.00	23.59	O
ATOM	2039	CB	PRO	A	421	-5.531	-20.162	14.988	1.00	22.43	C
ATOM	2040	CG	PRO	A	421	-5.556	-20.198	16.475	1.00	25.14	C
ATOM	2041	CD	PRO	A	421	-4.161	-20.567	16.889	1.00	22.78	C
ATOM	2042	N	VAL	A	422	-2.737	-20.076	13.520	1.00	23.72	N
ATOM	2043	CA	VAL	A	422	-1.908	-19.684	12.390	1.00	26.05	C
ATOM	2044	C	VAL	A	422	-0.980	-20.820	11.973	1.00	25.52	C
ATOM	2045	O	VAL	A	422	-0.916	-21.178	10.800	1.00	26.93	O
ATOM	2046	CB	VAL	A	422	-1.055	-18.459	12.727	1.00	26.29	C
ATOM	2047	CG1	VAL	A	422	-0.147	-18.129	11.555	1.00	26.69	C
ATOM	2048	CG2	VAL	A	422	-1.953	-17.283	13.063	1.00	25.74	C

ATOM	2049	N	ILE	A	423	-0.261	-21.374	12.945	1.00	27.05	N
ATOM	2050	CA	ILE	A	423	0.671	-22.478	12.714	1.00	25.11	C
ATOM	2051	C	ILE	A	423	-0.040	-23.636	12.028	1.00	27.63	C
ATOM	2052	O	ILE	A	423	0.484	-24.247	11.100	1.00	25.33	O
ATOM	2053	CB	ILE	A	423	1.245	-23.000	14.052	1.00	23.82	C
ATOM	2054	CG1	ILE	A	423	2.409	-22.115	14.501	1.00	24.64	C
ATOM	2055	CG2	ILE	A	423	1.683	-24.457	13.909	1.00	26.94	C
ATOM	2056	CD1	ILE	A	423	2.763	-22.264	15.959	1.00	18.62	C
ATOM	2057	N	GLN	A	424	-1.243	-23.928	12.504	1.00	28.72	N
ATOM	2058	CA	GLN	A	424	-2.033	-25.020	11.974	1.00	31.26	C
ATOM	2059	C	GLN	A	424	-2.449	-24.837	10.520	1.00	35.47	C
ATOM	2060	O	GLN	A	424	-2.928	-25.779	9.880	1.00	35.63	O
ATOM	2061	CB	GLN	A	424	-3.257	-25.227	12.860	1.00	30.68	C
ATOM	2062	CG	GLN	A	424	-2.918	-25.914	14.170	1.00	33.08	C
ATOM	2063	CD	GLN	A	424	-1.846	-26.984	14.003	1.00	32.85	C
ATOM	2064	OE1	GLN	A	424	-0.674	-26.678	13.804	1.00	37.29	O
ATOM	2065	NE2	GLN	A	424	-2.249	-28.245	14.083	1.00	37.12	N
ATOM	2066	N	LYS	A	425	-2.261	-23.634	9.989	1.00	35.93	N
ATOM	2067	CA	LYS	A	425	-2.624	-23.377	8.605	1.00	36.90	C
ATOM	2068	C	LYS	A	425	-1.397	-23.162	7.728	1.00	39.00	C
ATOM	2069	O	LYS	A	425	-1.510	-22.727	6.581	1.00	40.88	O
ATOM	2070	CB	LYS	A	425	-3.562	-22.173	8.518	1.00	38.16	C
ATOM	2071	CG	LYS	A	425	-5.034	-22.569	8.453	1.00	37.02	C
ATOM	2072	CD	LYS	A	425	-5.950	-21.401	8.763	1.00	41.28	C
ATOM	2073	CE	LYS	A	425	-7.343	-21.637	8.194	1.00	45.56	C
ATOM	2074	NZ	LYS	A	425	-8.353	-20.701	8.780	1.00	51.01	N
ATOM	2075	N	THR	A	426	-0.224	-23.471	8.274	1.00	40.17	N
ATOM	2076	CA	THR	A	426	1.020	-23.330	7.531	1.00	39.97	C
ATOM	2077	C	THR	A	426	1.382	-24.658	6.884	1.00	43.79	C
ATOM	2078	O	THR	A	426	0.618	-25.624	6.939	1.00	44.12	O
ATOM	2079	CB	THR	A	426	2.194	-22.917	8.440	1.00	36.89	C
ATOM	2080	OG1	THR	A	426	2.563	-24.019	9.280	1.00	30.96	O
ATOM	2081	CG2	THR	A	426	1.813	-21.724	9.291	1.00	37.12	C
ATOM	2082	N	LYS	A	427	2.561	-24.693	6.274	1.00	48.51	N
ATOM	2083	CA	LYS	A	427	3.063	-25.888	5.607	1.00	49.16	C
ATOM	2084	C	LYS	A	427	3.454	-26.947	6.632	1.00	47.24	C
ATOM	2085	O	LYS	A	427	3.631	-28.113	6.284	1.00	47.48	O
ATOM	2086	CB	LYS	A	427	4.291	-25.529	4.763	1.00	54.24	C
ATOM	2087	CG	LYS	A	427	4.158	-25.815	3.278	1.00	60.26	C
ATOM	2088	CD	LYS	A	427	5.271	-25.130	2.478	1.00	65.19	C
ATOM	2089	CE	LYS	A	427	6.617	-25.833	2.661	1.00	65.55	C
ATOM	2090	NZ	LYS	A	427	6.754	-27.031	1.782	1.00	65.06	N
ATOM	2091	N	ASN	A	428	3.586	-26.537	7.894	1.00	45.18	N
ATOM	2092	CA	ASN	A	428	3.980	-27.456	8.956	1.00	42.35	C
ATOM	2093	C	ASN	A	428	3.039	-27.483	10.155	1.00	40.24	C
ATOM	2094	O	ASN	A	428	3.413	-27.084	11.260	1.00	39.83	O
ATOM	2095	CB	ASN	A	428	5.392	-27.115	9.435	1.00	47.04	C
ATOM	2096	CG	ASN	A	428	6.426	-27.238	8.334	1.00	51.78	C
ATOM	2097	OD1	ASN	A	428	6.532	-26.370	7.464	1.00	52.24	O
ATOM	2098	ND2	ASN	A	428	7.197	-28.322	8.364	1.00	58.10	N

ATOM	2099	N	PRO	A	429	1.805	-27.965	9.959	1.00	39.82	N
ATOM	2100	CA	PRO	A	429	0.858	-28.019	11.075	1.00	37.58	C
ATOM	2101	C	PRO	A	429	1.337	-29.037	12.095	1.00	39.40	C
ATOM	2102	O	PRO	A	429	2.012	-30.003	11.741	1.00	41.56	O
ATOM	2103	CB	PRO	A	429	-0.443	-28.449	10.416	1.00	37.21	C
ATOM	2104	CG	PRO	A	429	0.005	-29.225	9.221	1.00	38.72	C
ATOM	2105	CD	PRO	A	429	1.213	-28.492	8.718	1.00	36.87	C
ATOM	2106	N	ILE	A	430	0.982	-28.826	13.357	1.00	39.57	N
ATOM	2107	CA	ILE	A	430	1.387	-29.736	14.420	1.00	38.20	C
ATOM	2108	C	ILE	A	430	0.387	-30.880	14.580	1.00	38.66	C
ATOM	2109	O	ILE	A	430	-0.823	-30.660	14.581	1.00	39.20	O
ATOM	2110	CB	ILE	A	430	1.533	-28.975	15.764	1.00	36.70	C
ATOM	2111	CG1	ILE	A	430	2.582	-27.866	15.616	1.00	35.16	C
ATOM	2112	CG2	ILE	A	430	1.938	-29.933	16.872	1.00	36.43	C
ATOM	2113	CD1	ILE	A	430	2.699	-26.948	16.820	1.00	34.78	C
ATOM	2114	N	ASP	A	431	0.907	-32.100	14.707	1.00	38.46	N
ATOM	2115	CA	ASP	A	431	0.085	-33.296	14.874	1.00	38.43	C
ATOM	2116	C	ASP	A	431	-0.874	-33.171	16.047	1.00	37.51	C
ATOM	2117	O	ASP	A	431	-0.497	-32.713	17.119	1.00	35.71	O
ATOM	2118	CB	ASP	A	431	0.972	-34.523	15.103	1.00	43.86	C
ATOM	2119	CG	ASP	A	431	2.032	-34.688	14.033	1.00	48.34	C
ATOM	2120	OD1	ASP	A	431	1.842	-34.150	12.920	1.00	51.51	O
ATOM	2121	OD2	ASP	A	431	3.055	-35.356	14.306	1.00	50.41	O
ATOM	2122	N	LYS	A	432	-2.113	-33.600	15.840	1.00	40.63	N
ATOM	2123	CA	LYS	A	432	-3.133	-33.541	16.881	1.00	42.27	C
ATOM	2124	C	LYS	A	432	-2.664	-34.229	18.155	1.00	41.34	C
ATOM	2125	O	LYS	A	432	-2.831	-33.701	19.253	1.00	41.26	O
ATOM	2126	CB	LYS	A	432	-4.424	-34.207	16.398	1.00	45.66	C
ATOM	2127	CG	LYS	A	432	-4.749	-33.956	14.931	1.00	55.97	C
ATOM	2128	CD	LYS	A	432	-4.197	-35.066	14.035	1.00	60.22	C
ATOM	2129	CE	LYS	A	432	-5.194	-35.453	12.949	1.00	61.31	C
ATOM	2130	NZ	LYS	A	432	-4.524	-35.645	11.630	1.00	63.38	N
ATOM	2131	N	ASP	A	433	-2.077	-35.409	18.005	1.00	42.31	N
ATOM	2132	CA	ASP	A	433	-1.597	-36.168	19.152	1.00	44.86	C
ATOM	2133	C	ASP	A	433	-0.600	-35.370	19.968	1.00	41.91	C
ATOM	2134	O	ASP	A	433	-0.618	-35.410	21.197	1.00	41.20	O
ATOM	2135	CB	ASP	A	433	-0.934	-37.468	18.696	1.00	51.82	C
ATOM	2136	CG	ASP	A	433	-1.673	-38.128	17.552	1.00	60.85	C
ATOM	2137	OD1	ASP	A	433	-1.845	-37.470	16.499	1.00	66.09	O
ATOM	2138	OD2	ASP	A	433	-2.082	-39.304	17.705	1.00	64.72	O
ATOM	2139	N	LYS	A	434	0.272	-34.643	19.283	1.00	40.90	N
ATOM	2140	CA	LYS	A	434	1.285	-33.854	19.969	1.00	40.42	C
ATOM	2141	C	LYS	A	434	0.696	-32.731	20.806	1.00	39.43	C
ATOM	2142	O	LYS	A	434	1.289	-32.335	21.804	1.00	42.45	O
ATOM	2143	CB	LYS	A	434	2.286	-33.278	18.964	1.00	42.40	C
ATOM	2144	CG	LYS	A	434	3.559	-34.091	18.841	1.00	41.24	C
ATOM	2145	CD	LYS	A	434	4.190	-33.915	17.480	1.00	44.82	C
ATOM	2146	CE	LYS	A	434	5.702	-33.875	17.582	1.00	44.59	C
ATOM	2147	NZ	LYS	A	434	6.326	-33.665	16.242	1.00	50.95	N
ATOM	2148	N	MET	A	435	-0.468	-32.222	20.408	1.00	37.63	N

ATOM	2149	CA	MET	A	435	-1.111	-31.133	21.141	1.00	36.89	C
ATOM	2150	C	MET	A	435	-2.021	-31.643	22.256	1.00	36.14	C
ATOM	2151	O	MET	A	435	-2.622	-30.861	22.993	1.00	35.90	O
ATOM	2152	CB	MET	A	435	-1.905	-30.256	20.175	1.00	37.66	C
ATOM	2153	CG	MET	A	435	-1.047	-29.652	19.080	1.00	40.00	C
ATOM	2154	SD	MET	A	435	-2.022	-28.971	17.732	1.00	45.57	S
ATOM	2155	CE	MET	A	435	-3.061	-27.846	18.637	1.00	45.65	C
ATOM	2156	N	GLN	A	436	-2.100	-32.963	22.376	1.00	36.57	N
ATOM	2157	CA	GLN	A	436	-2.922	-33.631	23.385	1.00	36.08	C
ATOM	2158	C	GLN	A	436	-2.670	-33.131	24.801	1.00	34.26	C
ATOM	2159	O	GLN	A	436	-3.602	-32.878	25.560	1.00	32.57	O
ATOM	2160	CB	GLN	A	436	-2.644	-35.136	23.358	1.00	39.55	C
ATOM	2161	CG	GLN	A	436	-3.862	-35.990	23.561	1.00	46.35	C
ATOM	2162	CD	GLN	A	436	-4.964	-35.623	22.596	1.00	51.52	C
ATOM	2163	OE1	GLN	A	436	-6.147	-35.686	22.934	1.00	55.23	O
ATOM	2164	NE2	GLN	A	436	-4.581	-35.233	21.382	1.00	50.96	N
ATOM	2165	N	THR	A	437	-1.395	-33.013	25.152	1.00	31.79	N
ATOM	2166	CA	THR	A	437	-0.997	-32.586	26.480	1.00	28.81	C
ATOM	2167	C	THR	A	437	-1.592	-31.256	26.905	1.00	24.29	C
ATOM	2168	O	THR	A	437	-1.707	-30.986	28.098	1.00	26.47	O
ATOM	2169	CB	THR	A	437	0.541	-32.503	26.588	1.00	32.70	C
ATOM	2170	OG1	THR	A	437	1.053	-31.701	25.517	1.00	34.73	O
ATOM	2171	CG2	THR	A	437	1.155	-33.892	26.502	1.00	36.27	C
ATOM	2172	N	MET	A	438	-1.971	-30.427	25.939	1.00	23.12	N
ATOM	2173	CA	MET	A	438	-2.547	-29.123	26.249	1.00	22.70	C
ATOM	2174	C	MET	A	438	-3.706	-29.254	27.226	1.00	22.95	C
ATOM	2175	O	MET	A	438	-3.823	-28.493	28.185	1.00	23.80	O
ATOM	2176	CB	MET	A	438	-3.043	-28.456	24.973	1.00	22.83	C
ATOM	2177	CG	MET	A	438	-2.055	-27.510	24.362	1.00	29.18	C
ATOM	2178	SD	MET	A	438	-2.845	-26.460	23.149	1.00	32.92	S
ATOM	2179	CE	MET	A	438	-3.744	-27.640	22.191	1.00	26.14	C
ATOM	2180	N	TYR	A	439	-4.567	-30.229	26.975	1.00	22.91	N
ATOM	2181	CA	TYR	A	439	-5.722	-30.445	27.832	1.00	24.71	C
ATOM	2182	C	TYR	A	439	-5.286	-30.951	29.189	1.00	25.18	C
ATOM	2183	O	TYR	A	439	-6.018	-30.819	30.172	1.00	28.97	O
ATOM	2184	CB	TYR	A	439	-6.684	-31.419	27.155	1.00	21.04	C
ATOM	2185	CG	TYR	A	439	-6.990	-30.990	25.742	1.00	22.54	C
ATOM	2186	CD1	TYR	A	439	-7.779	-29.868	25.495	1.00	25.42	C
ATOM	2187	CD2	TYR	A	439	-6.439	-31.660	24.652	1.00	25.04	C
ATOM	2188	CE1	TYR	A	439	-8.010	-29.421	24.205	1.00	28.08	C
ATOM	2189	CE2	TYR	A	439	-6.662	-31.222	23.353	1.00	28.88	C
ATOM	2190	CZ	TYR	A	439	-7.450	-30.100	23.137	1.00	30.28	C
ATOM	2191	OH	TYR	A	439	-7.686	-29.657	21.855	1.00	31.49	O
ATOM	2192	N	HIS	A	440	-4.080	-31.515	29.247	1.00	24.98	N
ATOM	2193	CA	HIS	A	440	-3.544	-32.008	30.509	1.00	20.66	C
ATOM	2194	C	HIS	A	440	-3.114	-30.810	31.345	1.00	18.67	C
ATOM	2195	O	HIS	A	440	-3.232	-30.826	32.568	1.00	20.24	O
ATOM	2196	CB	HIS	A	440	-2.354	-32.937	30.265	1.00	22.79	C
ATOM	2197	CG	HIS	A	440	-1.936	-33.707	31.476	1.00	23.79	C
ATOM	2198	ND1	HIS	A	440	-1.049	-33.207	32.405	1.00	27.68	N

ATOM	2199	CD2	HIS	A	440	-2.285	-34.939	31.914	1.00	27.02	C
ATOM	2200	CE1	HIS	A	440	-0.869	-34.098	33.364	1.00	25.83	C
ATOM	2201	NE2	HIS	A	440	-1.608	-35.158	33.090	1.00	27.78	N
ATOM	2202	N	TRP	A	441	-2.624	-29.761	30.690	1.00	17.90	N
ATOM	2203	CA	TRP	A	441	-2.199	-28.570	31.422	1.00	19.77	C
ATOM	2204	C	TRP	A	441	-3.413	-27.890	32.028	1.00	20.15	C
ATOM	2205	O	TRP	A	441	-3.427	-27.524	33.200	1.00	23.56	O
ATOM	2206	CB	TRP	A	441	-1.527	-27.544	30.507	1.00	22.37	C
ATOM	2207	CG	TRP	A	441	-0.400	-28.035	29.658	1.00	23.02	C
ATOM	2208	CD1	TRP	A	441	0.419	-29.107	29.892	1.00	20.31	C
ATOM	2209	CD2	TRP	A	441	0.047	-27.443	28.436	1.00	23.87	C
ATOM	2210	NE1	TRP	A	441	1.352	-29.215	28.885	1.00	22.59	N
ATOM	2211	CE2	TRP	A	441	1.146	-28.206	27.979	1.00	22.92	C
ATOM	2212	CE3	TRP	A	441	-0.374	-26.339	27.681	1.00	23.83	C
ATOM	2213	CZ2	TRP	A	441	1.831	-27.899	26.797	1.00	23.63	C
ATOM	2214	CZ3	TRP	A	441	0.308	-26.035	26.507	1.00	27.24	C
ATOM	2215	CH2	TRP	A	441	1.400	-26.814	26.078	1.00	24.17	C
ATOM	2216	N	ILE	A	442	-4.427	-27.698	31.194	1.00	22.27	N
ATOM	2217	CA	ILE	A	442	-5.649	-27.041	31.618	1.00	22.42	C
ATOM	2218	C	ILE	A	442	-6.276	-27.741	32.823	1.00	18.56	C
ATOM	2219	O	ILE	A	442	-6.490	-27.128	33.872	1.00	18.77	O
ATOM	2220	CB	ILE	A	442	-6.651	-26.975	30.429	1.00	23.13	C
ATOM	2221	CG1	ILE	A	442	-6.048	-26.124	29.303	1.00	22.83	C
ATOM	2222	CG2	ILE	A	442	-7.982	-26.377	30.882	1.00	24.87	C
ATOM	2223	CD1	ILE	A	442	-6.752	-26.242	27.954	1.00	20.90	C
ATOM	2224	N	ASP	A	443	-6.536	-29.034	32.683	1.00	19.50	N
ATOM	2225	CA	ASP	A	443	-7.163	-29.808	33.749	1.00	19.21	C
ATOM	2226	C	ASP	A	443	-6.325	-30.061	34.998	1.00	20.71	C
ATOM	2227	O	ASP	A	443	-6.813	-29.923	36.117	1.00	19.96	O
ATOM	2228	CB	ASP	A	443	-7.629	-31.154	33.193	1.00	19.87	C
ATOM	2229	CG	ASP	A	443	-8.818	-31.022	32.266	1.00	22.48	C
ATOM	2230	OD1	ASP	A	443	-9.530	-29.999	32.341	1.00	22.32	O
ATOM	2231	OD2	ASP	A	443	-9.040	-31.946	31.458	1.00	26.57	O
ATOM	2232	N	LYS	A	444	-5.063	-30.433	34.810	1.00	22.66	N
ATOM	2233	CA	LYS	A	444	-4.187	-30.751	35.934	1.00	17.15	C
ATOM	2234	C	LYS	A	444	-3.388	-29.588	36.507	1.00	16.13	C
ATOM	2235	O	LYS	A	444	-3.151	-29.530	37.714	1.00	15.89	O
ATOM	2236	CB	LYS	A	444	-3.214	-31.862	35.520	1.00	18.91	C
ATOM	2237	CG	LYS	A	444	-3.763	-33.274	35.641	1.00	21.94	C
ATOM	2238	CD	LYS	A	444	-3.655	-33.767	37.077	1.00	26.67	C
ATOM	2239	CE	LYS	A	444	-2.856	-35.060	37.188	1.00	27.62	C
ATOM	2240	NZ	LYS	A	444	-2.739	-35.510	38.617	1.00	28.79	N
ATOM	2241	N	SER	A	445	-2.985	-28.657	35.647	1.00	16.44	N
ATOM	2242	CA	SER	A	445	-2.165	-27.528	36.077	1.00	18.17	C
ATOM	2243	C	SER	A	445	-2.881	-26.223	36.372	1.00	15.50	C
ATOM	2244	O	SER	A	445	-2.700	-25.640	37.445	1.00	14.74	O
ATOM	2245	CB	SER	A	445	-1.070	-27.245	35.033	1.00	15.47	C
ATOM	2246	OG	SER	A	445	-0.162	-28.325	34.920	1.00	19.89	O
ATOM	2247	N	PHE	A	446	-3.685	-25.766	35.417	1.00	14.55	N
ATOM	2248	CA	PHE	A	446	-4.377	-24.488	35.546	1.00	17.56	C

ATOM	2249	C	PHE	A	446	-5.665	-24.445	36.351	1.00	15.83	C
ATOM	2250	O	PHE	A	446	-5.784	-23.669	37.303	1.00	14.50	O
ATOM	2251	CB	PHE	A	446	-4.645	-23.922	34.155	1.00	14.73	C
ATOM	2252	CG	PHE	A	446	-3.408	-23.478	33.440	1.00	17.93	C
ATOM	2253	CD1	PHE	A	446	-2.669	-22.396	33.910	1.00	16.36	C
ATOM	2254	CD2	PHE	A	446	-2.987	-24.130	32.288	1.00	16.91	C
ATOM	2255	CE1	PHE	A	446	-1.528	-21.965	33.240	1.00	16.54	C
ATOM	2256	CE2	PHE	A	446	-1.848	-23.709	31.609	1.00	20.00	C
ATOM	2257	CZ	PHE	A	446	-1.117	-22.621	32.086	1.00	18.49	C
ATOM	2258	N	ALA	A	447	-6.625	-25.276	35.960	1.00	18.91	N
ATOM	2259	CA	ALA	A	447	-7.925	-25.316	36.615	1.00	16.02	C
ATOM	2260	C	ALA	A	447	-7.865	-25.265	38.134	1.00	15.41	C
ATOM	2261	O	ALA	A	447	-8.536	-24.430	38.748	1.00	18.11	O
ATOM	2262	CB	ALA	A	447	-8.703	-26.552	36.148	1.00	14.32	C
ATOM	2263	N	PRO	A	448	-7.044	-26.133	38.771	1.00	13.88	N
ATOM	2264	CA	PRO	A	448	-6.984	-26.098	40.235	1.00	9.60	C
ATOM	2265	C	PRO	A	448	-6.514	-24.793	40.855	1.00	10.87	C
ATOM	2266	O	PRO	A	448	-6.819	-24.516	42.014	1.00	10.44	O
ATOM	2267	CB	PRO	A	448	-6.067	-27.276	40.594	1.00	7.41	C
ATOM	2268	CG	PRO	A	448	-6.048	-28.129	39.404	1.00	10.14	C
ATOM	2269	CD	PRO	A	448	-6.173	-27.190	38.236	1.00	11.16	C
ATOM	2270	N	LEU	A	449	-5.798	-23.982	40.087	1.00	12.49	N
ATOM	2271	CA	LEU	A	449	-5.274	-22.726	40.619	1.00	15.32	C
ATOM	2272	C	LEU	A	449	-6.248	-21.571	40.507	1.00	16.27	C
ATOM	2273	O	LEU	A	449	-5.978	-20.473	40.997	1.00	16.73	O
ATOM	2274	CB	LEU	A	449	-3.970	-22.365	39.906	1.00	13.20	C
ATOM	2275	CG	LEU	A	449	-2.843	-23.386	40.103	1.00	11.58	C
ATOM	2276	CD1	LEU	A	449	-1.585	-22.962	39.320	1.00	8.48	C
ATOM	2277	CD2	LEU	A	449	-2.552	-23.496	41.594	1.00	8.71	C
ATOM	2278	N	LEU	A	450	-7.378	-21.823	39.861	1.00	17.49	N
ATOM	2279	CA	LEU	A	450	-8.402	-20.795	39.675	1.00	18.34	C
ATOM	2280	C	LEU	A	450	-9.542	-20.985	40.668	1.00	18.77	C
ATOM	2281	O	LEU	A	450	-10.206	-22.023	40.669	1.00	19.83	O
ATOM	2282	CB	LEU	A	450	-8.936	-20.853	38.249	1.00	17.08	C
ATOM	2283	CG	LEU	A	450	-7.914	-20.508	37.164	1.00	18.47	C
ATOM	2284	CD1	LEU	A	450	-8.297	-21.165	35.859	1.00	15.67	C
ATOM	2285	CD2	LEU	A	450	-7.845	-18.995	37.004	1.00	19.69	C
ATOM	2286	N	VAL	A	451	-9.748	-19.988	41.525	1.00	15.81	N
ATOM	2287	CA	VAL	A	451	-10.802	-20.036	42.530	1.00	20.19	C
ATOM	2288	C	VAL	A	451	-11.636	-18.769	42.493	1.00	16.93	C
ATOM	2289	O	VAL	A	451	-11.173	-17.697	42.877	1.00	20.61	O
ATOM	2290	CB	VAL	A	451	-10.223	-20.195	43.945	1.00	22.25	C
ATOM	2291	CG1	VAL	A	451	-11.345	-20.127	44.987	1.00	18.40	C
ATOM	2292	CG2	VAL	A	451	-9.492	-21.519	44.045	1.00	25.53	C
ATOM	2293	N	ASN	A	452	-12.874	-18.906	42.033	1.00	18.13	N
ATOM	2294	CA	ASN	A	452	-13.794	-17.780	41.932	1.00	14.13	C
ATOM	2295	C	ASN	A	452	-13.206	-16.696	41.054	1.00	12.61	C
ATOM	2296	O	ASN	A	452	-13.257	-15.520	41.389	1.00	13.06	O
ATOM	2297	CB	ASN	A	452	-14.121	-17.227	43.324	1.00	11.24	C
ATOM	2298	CG	ASN	A	452	-15.036	-18.154	44.115	1.00	16.40	C

ATOM	2299	OD1	ASN	A	452	-15.906	-18.815	43.544	1.00	19.80	O
ATOM	2300	ND2	ASN	A	452	-14.836	-18.218	45.427	1.00	13.81	N
ATOM	2301	N	GLY	A	453	-12.651	-17.115	39.921	1.00	14.69	N
ATOM	2302	CA	GLY	A	453	-12.052	-16.186	38.975	1.00	17.99	C
ATOM	2303	C	GLY	A	453	-10.654	-15.675	39.315	1.00	17.12	C
ATOM	2304	O	GLY	A	453	-10.088	-14.871	38.566	1.00	14.09	O
ATOM	2305	N	GLU	A	454	-10.103	-16.141	40.436	1.00	16.23	N
ATOM	2306	CA	GLU	A	454	-8.780	-15.717	40.897	1.00	19.91	C
ATOM	2307	C	GLU	A	454	-7.706	-16.776	40.700	1.00	21.01	C
ATOM	2308	O	GLU	A	454	-7.913	-17.939	41.035	1.00	20.48	O
ATOM	2309	CB	GLU	A	454	-8.832	-15.353	42.384	1.00	15.21	C
ATOM	2310	CG	GLU	A	454	-7.516	-14.829	42.934	1.00	18.16	C
ATOM	2311	CD	GLU	A	454	-7.667	-14.204	44.300	1.00	21.47	C
ATOM	2312	OE1	GLU	A	454	-8.781	-14.275	44.862	1.00	27.30	O
ATOM	2313	OE2	GLU	A	454	-6.679	-13.643	44.816	1.00	15.96	O
ATOM	2314	N	LEU	A	455	-6.559	-16.361	40.161	1.00	21.58	N
ATOM	2315	CA	LEU	A	455	-5.421	-17.262	39.950	1.00	18.45	C
ATOM	2316	C	LEU	A	455	-4.572	-17.162	41.211	1.00	15.85	C
ATOM	2317	O	LEU	A	455	-4.080	-16.087	41.548	1.00	17.79	O
ATOM	2318	CB	LEU	A	455	-4.612	-16.811	38.737	1.00	17.87	C
ATOM	2319	CG	LEU	A	455	-3.447	-17.688	38.284	1.00	13.92	C
ATOM	2320	CD1	LEU	A	455	-3.861	-19.144	38.184	1.00	14.68	C
ATOM	2321	CD2	LEU	A	455	-2.980	-17.176	36.941	1.00	11.48	C
ATOM	2322	N	MET	A	456	-4.418	-18.279	41.914	1.00	15.93	N
ATOM	2323	CA	MET	A	456	-3.664	-18.309	43.163	1.00	14.51	C
ATOM	2324	C	MET	A	456	-2.260	-17.717	43.051	1.00	16.18	C
ATOM	2325	O	MET	A	456	-1.436	-18.196	42.280	1.00	14.86	O
ATOM	2326	CB	MET	A	456	-3.574	-19.741	43.677	1.00	16.35	C
ATOM	2327	CG	MET	A	456	-4.834	-20.229	44.382	1.00	21.54	C
ATOM	2328	SD	MET	A	456	-4.710	-21.951	44.897	1.00	21.38	S
ATOM	2329	CE	MET	A	456	-6.433	-22.355	45.345	1.00	21.14	C
ATOM	2330	N	ASP	A	457	-2.003	-16.687	43.849	1.00	15.17	N
ATOM	2331	CA	ASP	A	457	-0.719	-15.983	43.867	1.00	17.63	C
ATOM	2332	C	ASP	A	457	0.518	-16.855	44.114	1.00	18.73	C
ATOM	2333	O	ASP	A	457	1.612	-16.558	43.613	1.00	19.57	O
ATOM	2334	CB	ASP	A	457	-0.761	-14.883	44.930	1.00	15.63	C
ATOM	2335	CG	ASP	A	457	-1.684	-13.735	44.555	1.00	15.74	C
ATOM	2336	OD1	ASP	A	457	-1.885	-13.486	43.344	1.00	15.90	O
ATOM	2337	OD2	ASP	A	457	-2.201	-13.080	45.483	1.00	17.88	O
ATOM	2338	N	MET	A	458	0.354	-17.917	44.896	1.00	19.33	N
ATOM	2339	CA	MET	A	458	1.471	-18.796	45.210	1.00	19.71	C
ATOM	2340	C	MET	A	458	2.102	-19.410	43.969	1.00	20.07	C
ATOM	2341	O	MET	A	458	3.157	-20.043	44.053	1.00	22.71	O
ATOM	2342	CB	MET	A	458	1.014	-19.898	46.174	1.00	19.63	C
ATOM	2343	CG	MET	A	458	0.335	-21.096	45.521	1.00	13.75	C
ATOM	2344	SD	MET	A	458	-0.254	-22.294	46.737	1.00	17.93	S
ATOM	2345	CE	MET	A	458	-1.181	-23.373	45.682	1.00	12.17	C
ATOM	2346	N	SER	A	459	1.472	-19.201	42.816	1.00	14.22	N
ATOM	2347	CA	SER	A	459	1.961	-19.767	41.562	1.00	13.89	C
ATOM	2348	C	SER	A	459	2.380	-18.711	40.564	1.00	10.66	C

ATOM	2349	O	SER	A	459	2.741	-19.033	39.434	1.00	11.51	O
ATOM	2350	CB	SER	A	459	0.869	-20.622	40.917	1.00	17.13	C
ATOM	2351	OG	SER	A	459	-0.080	-19.807	40.233	1.00	18.90	O
ATOM	2352	N	ARG	A	460	2.332	-17.452	40.981	1.00	15.24	N
ATOM	2353	CA	ARG	A	460	2.655	-16.347	40.086	1.00	15.91	C
ATOM	2354	C	ARG	A	460	4.028	-15.694	40.276	1.00	16.80	C
ATOM	2355	O	ARG	A	460	4.306	-14.637	39.708	1.00	16.57	O
ATOM	2356	CB	ARG	A	460	1.545	-15.293	40.180	1.00	17.27	C
ATOM	2357	CG	ARG	A	460	0.131	-15.906	40.159	1.00	13.61	C
ATOM	2358	CD	ARG	A	460	-0.940	-14.894	39.750	1.00	14.01	C
ATOM	2359	NE	ARG	A	460	-1.083	-13.816	40.726	1.00	13.20	N
ATOM	2360	CZ	ARG	A	460	-0.716	-12.563	40.498	1.00	11.13	C
ATOM	2361	NH1	ARG	A	460	-0.187	-12.243	39.328	1.00	13.77	N
ATOM	2362	NH2	ARG	A	460	-0.888	-11.630	41.430	1.00	15.57	N
ATOM	2363	N	GLY	A	461	4.883	-16.329	41.067	1.00	18.89	N
ATOM	2364	CA	GLY	A	461	6.218	-15.797	41.280	1.00	14.06	C
ATOM	2365	C	GLY	A	461	6.286	-14.331	41.645	1.00	13.90	C
ATOM	2366	O	GLY	A	461	5.629	-13.895	42.578	1.00	16.29	O
ATOM	2367	N	ARG	A	462	7.084	-13.566	40.906	1.00	14.74	N
ATOM	2368	CA	ARG	A	462	7.260	-12.151	41.191	1.00	17.87	C
ATOM	2369	C	ARG	A	462	6.178	-11.262	40.591	1.00	15.90	C
ATOM	2370	O	ARG	A	462	6.136	-10.061	40.856	1.00	18.39	O
ATOM	2371	CB	ARG	A	462	8.650	-11.687	40.718	1.00	18.34	C
ATOM	2372	CG	ARG	A	462	8.854	-11.702	39.212	1.00	20.30	C
ATOM	2373	CD	ARG	A	462	10.278	-11.261	38.820	1.00	19.42	C
ATOM	2374	NE	ARG	A	462	10.312	-10.732	37.459	1.00	17.17	N
ATOM	2375	CZ	ARG	A	462	10.464	-11.482	36.376	1.00	17.45	C
ATOM	2376	NH1	ARG	A	462	10.600	-12.793	36.495	1.00	17.51	N
ATOM	2377	NH2	ARG	A	462	10.442	-10.926	35.175	1.00	18.82	N
ATOM	2378	N	SER	A	463	5.303	-11.854	39.788	1.00	17.91	N
ATOM	2379	CA	SER	A	463	4.216	-11.111	39.160	1.00	17.32	C
ATOM	2380	C	SER	A	463	3.289	-10.487	40.191	1.00	16.29	C
ATOM	2381	O	SER	A	463	2.616	-9.499	39.911	1.00	21.20	O
ATOM	2382	CB	SER	A	463	3.405	-12.038	38.265	1.00	15.79	C
ATOM	2383	OG	SER	A	463	3.993	-12.114	36.988	1.00	24.37	O
ATOM	2384	N	ILE	A	464	3.262	-11.068	41.385	1.00	15.31	N
ATOM	2385	CA	ILE	A	464	2.399	-10.593	42.457	1.00	15.12	C
ATOM	2386	C	ILE	A	464	2.722	-9.171	42.873	1.00	20.08	C
ATOM	2387	O	ILE	A	464	1.904	-8.505	43.506	1.00	19.60	O
ATOM	2388	CB	ILE	A	464	2.506	-11.497	43.718	1.00	16.86	C
ATOM	2389	CG1	ILE	A	464	3.911	-11.390	44.312	1.00	15.32	C
ATOM	2390	CG2	ILE	A	464	2.191	-12.953	43.357	1.00	14.53	C
ATOM	2391	CD1	ILE	A	464	4.075	-12.080	45.634	1.00	12.65	C
ATOM	2392	N	SER	A	465	3.915	-8.704	42.520	1.00	18.11	N
ATOM	2393	CA	SER	A	465	4.339	-7.362	42.898	1.00	16.99	C
ATOM	2394	C	SER	A	465	3.928	-6.341	41.861	1.00	15.16	C
ATOM	2395	O	SER	A	465	4.274	-5.171	41.976	1.00	19.49	O
ATOM	2396	CB	SER	A	465	5.861	-7.319	43.086	1.00	15.42	C
ATOM	2397	OG	SER	A	465	6.527	-7.648	41.875	1.00	20.68	O
ATOM	2398	N	ARG	A	466	3.201	-6.787	40.845	1.00	15.66	N

ATOM	2399	CA	ARG	A	466	2.741	-5.895	39.787	1.00	19.61	C
ATOM	2400	C	ARG	A	466	1.307	-5.434	40.076	1.00	23.96	C
ATOM	2401	O	ARG	A	466	0.400	-6.252	40.266	1.00	23.41	O
ATOM	2402	CB	ARG	A	466	2.819	-6.611	38.444	1.00	19.65	C
ATOM	2403	CG	ARG	A	466	4.244	-6.882	38.014	1.00	17.76	C
ATOM	2404	CD	ARG	A	466	4.305	-7.910	36.910	1.00	22.70	C
ATOM	2405	NE	ARG	A	466	5.680	-8.327	36.656	1.00	25.78	N
ATOM	2406	CZ	ARG	A	466	6.027	-9.257	35.777	1.00	26.98	C
ATOM	2407	NH1	ARG	A	466	5.101	-9.874	35.061	1.00	27.70	N
ATOM	2408	NH2	ARG	A	466	7.301	-9.575	35.622	1.00	28.25	N
ATOM	2409	N	ALA	A	467	1.114	-4.120	40.113	1.00	21.61	N
ATOM	2410	CA	ALA	A	467	-0.187	-3.540	40.417	1.00	21.01	C
ATOM	2411	C	ALA	A	467	-1.278	-3.859	39.397	1.00	21.33	C
ATOM	2412	O	ALA	A	467	-2.440	-4.037	39.762	1.00	24.96	O
ATOM	2413	CB	ALA	A	467	-0.048	-2.031	40.581	1.00	14.43	C
ATOM	2414	N	ASN	A	468	-0.903	-3.936	38.127	1.00	22.73	N
ATOM	2415	CA	ASN	A	468	-1.852	-4.222	37.059	1.00	19.02	C
ATOM	2416	C	ASN	A	468	-2.041	-5.712	36.819	1.00	17.66	C
ATOM	2417	O	ASN	A	468	-2.566	-6.110	35.779	1.00	21.52	O
ATOM	2418	CB	ASN	A	468	-1.394	-3.560	35.753	1.00	21.47	C
ATOM	2419	CG	ASN	A	468	-0.046	-4.096	35.251	1.00	30.47	C
ATOM	2420	OD1	ASN	A	468	0.260	-4.021	34.056	1.00	31.56	O
ATOM	2421	ND2	ASN	A	468	0.760	-4.635	36.162	1.00	28.68	N
ATOM	2422	N	SER	A	469	-1.631	-6.543	37.769	1.00	16.90	N
ATOM	2423	CA	SER	A	469	-1.753	-7.980	37.571	1.00	16.86	C
ATOM	2424	C	SER	A	469	-2.164	-8.737	38.807	1.00	18.32	C
ATOM	2425	O	SER	A	469	-1.616	-9.805	39.089	1.00	21.39	O
ATOM	2426	CB	SER	A	469	-0.430	-8.568	37.074	1.00	22.46	C
ATOM	2427	OG	SER	A	469	0.123	-7.793	36.030	1.00	29.23	O
ATOM	2428	N	GLU	A	470	-3.118	-8.214	39.559	1.00	15.12	N
ATOM	2429	CA	GLU	A	470	-3.526	-8.951	40.731	1.00	13.17	C
ATOM	2430	C	GLU	A	470	-4.231	-10.245	40.287	1.00	10.80	C
ATOM	2431	O	GLU	A	470	-4.504	-10.443	39.103	1.00	9.66	O
ATOM	2432	CB	GLU	A	470	-4.380	-8.060	41.620	1.00	17.37	C
ATOM	2433	CG	GLU	A	470	-3.546	-6.952	42.255	1.00	15.41	C
ATOM	2434	CD	GLU	A	470	-4.371	-5.943	43.017	1.00	19.23	C
ATOM	2435	OE1	GLU	A	470	-5.450	-5.560	42.513	1.00	25.87	O
ATOM	2436	OE2	GLU	A	470	-3.944	-5.530	44.121	1.00	20.17	O
ATOM	2437	N	GLY	A	471	-4.482	-11.133	41.238	1.00	11.94	N
ATOM	2438	CA	GLY	A	471	-5.081	-12.429	40.948	1.00	16.67	C
ATOM	2439	C	GLY	A	471	-6.163	-12.635	39.902	1.00	14.98	C
ATOM	2440	O	GLY	A	471	-6.046	-13.536	39.070	1.00	12.72	O
ATOM	2441	N	HIS	A	472	-7.224	-11.832	39.953	1.00	16.99	N
ATOM	2442	CA	HIS	A	472	-8.331	-11.963	39.009	1.00	15.44	C
ATOM	2443	C	HIS	A	472	-7.921	-11.528	37.611	1.00	14.25	C
ATOM	2444	O	HIS	A	472	-8.353	-12.110	36.616	1.00	13.95	O
ATOM	2445	CB	HIS	A	472	-9.529	-11.146	39.502	1.00	16.97	C
ATOM	2446	CG	HIS	A	472	-10.169	-11.706	40.739	1.00	18.34	C
ATOM	2447	ND1	HIS	A	472	-11.220	-12.599	40.696	1.00	17.78	N
ATOM	2448	CD2	HIS	A	472	-9.882	-11.529	42.052	1.00	17.32	C

ATOM	2449	CE1	HIS	A	472	-11.550	-12.949	41.928	1.00	17.83	C
ATOM	2450	NE2	HIS	A	472	-10.753	-12.313	42.768	1.00	17.14	N
ATOM	2451	N	VAL	A	473	-7.063	-10.515	37.541	1.00	16.37	N
ATOM	2452	CA	VAL	A	473	-6.569	-10.018	36.261	1.00	15.29	C
ATOM	2453	C	VAL	A	473	-5.681	-11.076	35.595	1.00	18.01	C
ATOM	2454	O	VAL	A	473	-5.826	-11.373	34.410	1.00	16.17	O
ATOM	2455	CB	VAL	A	473	-5.740	-8.724	36.454	1.00	18.65	C
ATOM	2456	CG1	VAL	A	473	-5.329	-8.149	35.098	1.00	16.48	C
ATOM	2457	CG2	VAL	A	473	-6.545	-7.707	37.247	1.00	15.30	C
ATOM	2458	N	ALA	A	474	-4.761	-11.643	36.367	1.00	21.45	N
ATOM	2459	CA	ALA	A	474	-3.854	-12.662	35.851	1.00	18.55	C
ATOM	2460	C	ALA	A	474	-4.627	-13.868	35.352	1.00	18.33	C
ATOM	2461	O	ALA	A	474	-4.285	-14.451	34.328	1.00	17.48	O
ATOM	2462	CB	ALA	A	474	-2.878	-13.086	36.938	1.00	19.68	C
ATOM	2463	N	ALA	A	475	-5.673	-14.241	36.083	1.00	21.23	N
ATOM	2464	CA	ALA	A	475	-6.510	-15.383	35.714	1.00	17.72	C
ATOM	2465	C	ALA	A	475	-7.106	-15.249	34.318	1.00	17.28	C
ATOM	2466	O	ALA	A	475	-7.223	-16.237	33.593	1.00	20.14	O
ATOM	2467	CB	ALA	A	475	-7.630	-15.565	36.739	1.00	17.04	C
ATOM	2468	N	VAL	A	476	-7.479	-14.035	33.930	1.00	17.22	N
ATOM	2469	CA	VAL	A	476	-8.069	-13.840	32.611	1.00	17.86	C
ATOM	2470	C	VAL	A	476	-7.074	-14.202	31.517	1.00	19.31	C
ATOM	2471	O	VAL	A	476	-7.453	-14.580	30.410	1.00	21.69	O
ATOM	2472	CB	VAL	A	476	-8.550	-12.389	32.422	1.00	15.78	C
ATOM	2473	CG1	VAL	A	476	-9.146	-12.215	31.035	1.00	14.84	C
ATOM	2474	CG2	VAL	A	476	-9.577	-12.049	33.489	1.00	19.93	C
ATOM	2475	N	GLU	A	477	-5.792	-14.078	31.836	1.00	22.48	N
ATOM	2476	CA	GLU	A	477	-4.723	-14.413	30.901	1.00	21.17	C
ATOM	2477	C	GLU	A	477	-4.817	-15.898	30.562	1.00	17.16	C
ATOM	2478	O	GLU	A	477	-4.684	-16.297	29.408	1.00	18.24	O
ATOM	2479	CB	GLU	A	477	-3.382	-14.143	31.557	1.00	26.95	C
ATOM	2480	CG	GLU	A	477	-2.359	-13.511	30.674	1.00	30.55	C
ATOM	2481	CD	GLU	A	477	-1.283	-12.861	31.494	1.00	30.70	C
ATOM	2482	OE1	GLU	A	477	-1.026	-11.662	31.280	1.00	33.24	O
ATOM	2483	OE2	GLU	A	477	-0.710	-13.552	32.363	1.00	27.24	O
ATOM	2484	N	VAL	A	478	-5.034	-16.711	31.592	1.00	14.74	N
ATOM	2485	CA	VAL	A	478	-5.160	-18.149	31.416	1.00	14.40	C
ATOM	2486	C	VAL	A	478	-6.505	-18.461	30.752	1.00	18.71	C
ATOM	2487	O	VAL	A	478	-6.569	-19.182	29.752	1.00	19.17	O
ATOM	2488	CB	VAL	A	478	-5.105	-18.873	32.768	1.00	13.57	C
ATOM	2489	CG1	VAL	A	478	-5.286	-20.344	32.556	1.00	15.57	C
ATOM	2490	CG2	VAL	A	478	-3.780	-18.615	33.457	1.00	15.62	C
ATOM	2491	N	LEU	A	479	-7.577	-17.899	31.311	1.00	20.29	N
ATOM	2492	CA	LEU	A	479	-8.924	-18.113	30.793	1.00	17.71	C
ATOM	2493	C	LEU	A	479	-9.057	-17.789	29.303	1.00	18.89	C
ATOM	2494	O	LEU	A	479	-9.616	-18.590	28.549	1.00	22.14	O
ATOM	2495	CB	LEU	A	479	-9.932	-17.299	31.615	1.00	17.55	C
ATOM	2496	CG	LEU	A	479	-10.153	-17.844	33.033	1.00	19.23	C
ATOM	2497	CD1	LEU	A	479	-10.778	-16.774	33.903	1.00	15.80	C
ATOM	2498	CD2	LEU	A	479	-11.045	-19.090	32.990	1.00	17.09	C

ATOM	2499	N	ARG	A	480	-8.547	-16.641	28.856	1.00	17.46	N
ATOM	2500	CA	ARG	A	480	-8.656	-16.313	27.434	1.00	16.35	C
ATOM	2501	C	ARG	A	480	-7.880	-17.309	26.583	1.00	16.83	C
ATOM	2502	O	ARG	A	480	-8.226	-17.571	25.425	1.00	15.98	O
ATOM	2503	CB	ARG	A	480	-8.172	-14.886	27.155	1.00	18.64	C
ATOM	2504	CG	ARG	A	480	-6.764	-14.577	27.598	1.00	20.72	C
ATOM	2505	CD	ARG	A	480	-6.535	-13.075	27.623	1.00	21.96	C
ATOM	2506	NE	ARG	A	480	-5.149	-12.739	27.322	1.00	20.80	N
ATOM	2507	CZ	ARG	A	480	-4.586	-11.570	27.598	1.00	22.57	C
ATOM	2508	NH1	ARG	A	480	-5.292	-10.613	28.182	1.00	16.68	N
ATOM	2509	NH2	ARG	A	480	-3.308	-11.361	27.301	1.00	21.96	N
ATOM	2510	N	GLY	A	481	-6.828	-17.875	27.160	1.00	18.19	N
ATOM	2511	CA	GLY	A	481	-6.050	-18.858	26.430	1.00	16.35	C
ATOM	2512	C	GLY	A	481	-6.865	-20.133	26.326	1.00	15.70	C
ATOM	2513	O	GLY	A	481	-7.019	-20.712	25.249	1.00	15.53	O
ATOM	2514	N	ILE	A	482	-7.391	-20.570	27.462	1.00	16.77	N
ATOM	2515	CA	ILE	A	482	-8.218	-21.766	27.511	1.00	21.16	C
ATOM	2516	C	ILE	A	482	-9.400	-21.643	26.544	1.00	20.47	C
ATOM	2517	O	ILE	A	482	-9.700	-22.578	25.800	1.00	20.98	O
ATOM	2518	CB	ILE	A	482	-8.754	-21.996	28.938	1.00	18.22	C
ATOM	2519	CG1	ILE	A	482	-7.582	-22.279	29.882	1.00	19.48	C
ATOM	2520	CG2	ILE	A	482	-9.749	-23.139	28.940	1.00	21.46	C
ATOM	2521	CD1	ILE	A	482	-7.971	-22.450	31.338	1.00	16.55	C
ATOM	2522	N	HIS	A	483	-10.057	-20.482	26.549	1.00	23.12	N
ATOM	2523	CA	HIS	A	483	-11.206	-20.253	25.677	1.00	22.39	C
ATOM	2524	C	HIS	A	483	-10.815	-20.352	24.212	1.00	21.89	C
ATOM	2525	O	HIS	A	483	-11.537	-20.942	23.407	1.00	21.17	O
ATOM	2526	CB	HIS	A	483	-11.822	-18.880	25.958	1.00	28.75	C
ATOM	2527	CG	HIS	A	483	-13.232	-18.736	25.471	1.00	33.99	C
ATOM	2528	ND1	HIS	A	483	-13.844	-19.676	24.667	1.00	36.75	N
ATOM	2529	CD2	HIS	A	483	-14.147	-17.756	25.664	1.00	34.94	C
ATOM	2530	CE1	HIS	A	483	-15.073	-19.282	24.386	1.00	34.79	C
ATOM	2531	NE2	HIS	A	483	-15.283	-18.120	24.980	1.00	36.71	N
ATOM	2532	N	ARG	A	484	-9.671	-19.776	23.858	1.00	22.63	N
ATOM	2533	CA	ARG	A	484	-9.204	-19.833	22.477	1.00	19.09	C
ATOM	2534	C	ARG	A	484	-8.974	-21.286	22.075	1.00	19.68	C
ATOM	2535	O	ARG	A	484	-9.270	-21.683	20.951	1.00	21.83	O
ATOM	2536	CB	ARG	A	484	-7.902	-19.056	22.325	1.00	20.96	C
ATOM	2537	CG	ARG	A	484	-8.054	-17.552	22.354	1.00	23.05	C
ATOM	2538	CD	ARG	A	484	-6.725	-16.890	22.046	1.00	21.70	C
ATOM	2539	NE	ARG	A	484	-6.626	-15.565	22.636	1.00	21.15	N
ATOM	2540	CZ	ARG	A	484	-5.691	-15.198	23.500	1.00	16.17	C
ATOM	2541	NH1	ARG	A	484	-4.763	-16.059	23.883	1.00	19.08	N
ATOM	2542	NH2	ARG	A	484	-5.684	-13.965	23.980	1.00	21.28	N
ATOM	2543	N	ILE	A	485	-8.438	-22.077	22.999	1.00	21.78	N
ATOM	2544	CA	ILE	A	485	-8.169	-23.490	22.739	1.00	23.68	C
ATOM	2545	C	ILE	A	485	-9.477	-24.267	22.546	1.00	24.37	C
ATOM	2546	O	ILE	A	485	-9.612	-25.057	21.609	1.00	20.30	O
ATOM	2547	CB	ILE	A	485	-7.358	-24.118	23.897	1.00	21.64	C
ATOM	2548	CG1	ILE	A	485	-5.929	-23.571	23.871	1.00	24.52	C

ATOM	2549	CG2	ILE	A	485	-7.329	-25.638	23.762	1.00	22.35	C
ATOM	2550	CD1	ILE	A	485	-5.186	-23.750	25.167	1.00	26.40	C
ATOM	2551	N	ALA	A	486	-10.432	-24.047	23.442	1.00	26.00	N
ATOM	2552	CA	ALA	A	486	-11.728	-24.704	23.338	1.00	25.96	C
ATOM	2553	C	ALA	A	486	-12.293	-24.403	21.947	1.00	26.47	C
ATOM	2554	O	ALA	A	486	-12.824	-25.284	21.269	1.00	26.22	O
ATOM	2555	CB	ALA	A	486	-12.668	-24.167	24.419	1.00	22.47	C
ATOM	2556	N	ASP	A	487	-12.148	-23.150	21.523	1.00	27.15	N
ATOM	2557	CA	ASP	A	487	-12.644	-22.701	20.229	1.00	26.54	C
ATOM	2558	C	ASP	A	487	-12.028	-23.411	19.020	1.00	28.97	C
ATOM	2559	O	ASP	A	487	-12.663	-23.516	17.970	1.00	28.93	O
ATOM	2560	CB	ASP	A	487	-12.447	-21.193	20.093	1.00	28.11	C
ATOM	2561	CG	ASP	A	487	-13.116	-20.635	18.858	1.00	36.16	C
ATOM	2562	OD1	ASP	A	487	-14.334	-20.863	18.692	1.00	40.80	O
ATOM	2563	OD2	ASP	A	487	-12.428	-19.971	18.051	1.00	42.52	O
ATOM	2564	N	MET	A	488	-10.792	-23.882	19.143	1.00	28.41	N
ATOM	2565	CA	MET	A	488	-10.180	-24.591	18.026	1.00	32.16	C
ATOM	2566	C	MET	A	488	-10.353	-26.100	18.202	1.00	30.43	C
ATOM	2567	O	MET	A	488	-9.914	-26.891	17.373	1.00	32.73	O
ATOM	2568	CB	MET	A	488	-8.698	-24.213	17.879	1.00	33.51	C
ATOM	2569	CG	MET	A	488	-7.778	-24.696	18.987	1.00	40.86	C
ATOM	2570	SD	MET	A	488	-6.017	-24.312	18.659	1.00	45.33	S
ATOM	2571	CE	MET	A	488	-5.864	-24.721	16.856	1.00	38.24	C
ATOM	2572	N	SER	A	489	-11.008	-26.486	19.292	1.00	30.20	N
ATOM	2573	CA	SER	A	489	-11.273	-27.891	19.578	1.00	31.87	C
ATOM	2574	C	SER	A	489	-12.649	-28.204	19.015	1.00	33.27	C
ATOM	2575	O	SER	A	489	-13.211	-27.412	18.261	1.00	31.07	O
ATOM	2576	CB	SER	A	489	-11.282	-28.149	21.088	1.00	30.95	C
ATOM	2577	OG	SER	A	489	-10.056	-27.774	21.690	1.00	36.97	O
ATOM	2578	N	GLU	A	490	-13.199	-29.353	19.382	1.00	35.99	N
ATOM	2579	CA	GLU	A	490	-14.522	-29.708	18.897	1.00	41.82	C
ATOM	2580	C	GLU	A	490	-15.188	-30.778	19.735	1.00	40.22	C
ATOM	2581	O	GLU	A	490	-14.530	-31.523	20.457	1.00	39.53	O
ATOM	2582	CB	GLU	A	490	-14.448	-30.171	17.443	1.00	46.97	C
ATOM	2583	CG	GLU	A	490	-13.744	-31.496	17.250	1.00	58.25	C
ATOM	2584	CD	GLU	A	490	-13.804	-31.974	15.811	1.00	68.00	C
ATOM	2585	OE1	GLU	A	490	-14.852	-32.532	15.414	1.00	74.46	O
ATOM	2586	OE2	GLU	A	490	-12.806	-31.789	15.077	1.00	70.48	O
ATOM	2587	N	GLY	A	491	-16.510	-30.834	19.637	1.00	43.21	N
ATOM	2588	CA	GLY	A	491	-17.271	-31.822	20.376	1.00	42.99	C
ATOM	2589	C	GLY	A	491	-17.235	-31.667	21.882	1.00	43.61	C
ATOM	2590	O	GLY	A	491	-17.420	-30.570	22.421	1.00	43.49	O
ATOM	2591	N	GLU	A	492	-17.009	-32.788	22.559	1.00	41.76	N
ATOM	2592	CA	GLU	A	492	-16.946	-32.819	24.010	1.00	44.00	C
ATOM	2593	C	GLU	A	492	-15.876	-31.874	24.533	1.00	40.46	C
ATOM	2594	O	GLU	A	492	-16.147	-31.019	25.372	1.00	39.66	O
ATOM	2595	CB	GLU	A	492	-16.629	-34.236	24.488	1.00	49.40	C
ATOM	2596	CG	GLU	A	492	-17.597	-34.773	25.517	1.00	58.95	C
ATOM	2597	CD	GLU	A	492	-18.583	-35.753	24.912	1.00	65.61	C
ATOM	2598	OE1	GLU	A	492	-18.185	-36.496	23.984	1.00	67.46	O

ATOM	2599	OE2	GLU	A	492	-19.752	-35.777	25.361	1.00	68.38	O
ATOM	2600	N	THR	A	493	-14.655	-32.047	24.033	1.00	38.97	N
ATOM	2601	CA	THR	A	493	-13.526	-31.230	24.456	1.00	35.36	C
ATOM	2602	C	THR	A	493	-13.861	-29.753	24.383	1.00	31.81	C
ATOM	2603	O	THR	A	493	-13.598	-29.007	25.324	1.00	33.38	O
ATOM	2604	CB	THR	A	493	-12.281	-31.509	23.598	1.00	33.93	C
ATOM	2605	OG1	THR	A	493	-11.986	-32.909	23.630	1.00	35.12	O
ATOM	2606	CG2	THR	A	493	-11.084	-30.752	24.141	1.00	38.01	C
ATOM	2607	N	LYS	A	494	-14.447	-29.332	23.269	1.00	27.93	N
ATOM	2608	CA	LYS	A	494	-14.818	-27.937	23.105	1.00	27.56	C
ATOM	2609	C	LYS	A	494	-15.890	-27.592	24.127	1.00	28.91	C
ATOM	2610	O	LYS	A	494	-15.821	-26.569	24.805	1.00	28.91	O
ATOM	2611	CB	LYS	A	494	-15.350	-27.695	21.693	1.00	26.06	C
ATOM	2612	CG	LYS	A	494	-15.980	-26.331	21.501	1.00	23.64	C
ATOM	2613	CD	LYS	A	494	-16.186	-26.021	20.035	1.00	24.24	C
ATOM	2614	CE	LYS	A	494	-16.784	-24.636	19.860	1.00	31.03	C
ATOM	2615	NZ	LYS	A	494	-16.701	-24.149	18.453	1.00	37.55	N
ATOM	2616	N	GLN	A	495	-16.879	-28.471	24.233	1.00	33.57	N
ATOM	2617	CA	GLN	A	495	-17.992	-28.296	25.157	1.00	32.02	C
ATOM	2618	C	GLN	A	495	-17.547	-28.125	26.606	1.00	28.42	C
ATOM	2619	O	GLN	A	495	-17.858	-27.111	27.234	1.00	28.14	O
ATOM	2620	CB	GLN	A	495	-18.936	-29.496	25.059	1.00	39.78	C
ATOM	2621	CG	GLN	A	495	-20.214	-29.235	24.269	1.00	50.68	C
ATOM	2622	CD	GLN	A	495	-20.897	-30.527	23.835	1.00	57.28	C
ATOM	2623	OE1	GLN	A	495	-20.916	-30.865	22.650	1.00	60.01	O
ATOM	2624	NE2	GLN	A	495	-21.459	-31.257	24.797	1.00	56.65	N
ATOM	2625	N	ARG	A	496	-16.821	-29.107	27.137	1.00	24.77	N
ATOM	2626	CA	ARG	A	496	-16.373	-29.037	28.525	1.00	26.47	C
ATOM	2627	C	ARG	A	496	-15.433	-27.877	28.820	1.00	23.09	C
ATOM	2628	O	ARG	A	496	-15.471	-27.310	29.910	1.00	25.24	O
ATOM	2629	CB	ARG	A	496	-15.731	-30.356	28.962	1.00	28.37	C
ATOM	2630	CG	ARG	A	496	-14.555	-30.791	28.142	1.00	38.90	C
ATOM	2631	CD	ARG	A	496	-13.889	-32.002	28.782	1.00	45.68	C
ATOM	2632	NE	ARG	A	496	-12.453	-32.007	28.527	1.00	49.41	N
ATOM	2633	CZ	ARG	A	496	-11.570	-31.323	29.244	1.00	48.69	C
ATOM	2634	NH1	ARG	A	496	-11.977	-30.578	30.267	1.00	44.81	N
ATOM	2635	NH2	ARG	A	496	-10.283	-31.372	28.930	1.00	50.90	N
ATOM	2636	N	LEU	A	497	-14.592	-27.514	27.860	1.00	22.44	N
ATOM	2637	CA	LEU	A	497	-13.687	-26.397	28.077	1.00	21.24	C
ATOM	2638	C	LEU	A	497	-14.532	-25.131	28.180	1.00	19.62	C
ATOM	2639	O	LEU	A	497	-14.298	-24.277	29.037	1.00	20.83	O
ATOM	2640	CB	LEU	A	497	-12.684	-26.291	26.925	1.00	20.44	C
ATOM	2641	CG	LEU	A	497	-11.615	-27.389	26.912	1.00	20.10	C
ATOM	2642	CD1	LEU	A	497	-10.627	-27.146	25.788	1.00	24.33	C
ATOM	2643	CD2	LEU	A	497	-10.905	-27.420	28.251	1.00	19.62	C
ATOM	2644	N	GLN	A	498	-15.532	-25.025	27.315	1.00	21.60	N
ATOM	2645	CA	GLN	A	498	-16.427	-23.869	27.327	1.00	22.23	C
ATOM	2646	C	GLN	A	498	-17.095	-23.737	28.688	1.00	19.96	C
ATOM	2647	O	GLN	A	498	-17.163	-22.648	29.265	1.00	19.02	O
ATOM	2648	CB	GLN	A	498	-17.505	-24.031	26.266	1.00	23.34	C

ATOM	2649	CG	GLN	A	498	-17.010	-23.895	24.856	1.00	23.24	C
ATOM	2650	CD	GLN	A	498	-18.125	-24.055	23.857	1.00	22.47	C
ATOM	2651	OE1	GLN	A	498	-18.591	-25.166	23.596	1.00	22.41	O
ATOM	2652	NE2	GLN	A	498	-18.563	-22.943	23.290	1.00	22.50	N
ATOM	2653	N	SER	A	499	-17.592	-24.859	29.194	1.00	20.33	N
ATOM	2654	CA	SER	A	499	-18.263	-24.874	30.481	1.00	20.46	C
ATOM	2655	C	SER	A	499	-17.284	-24.483	31.563	1.00	21.14	C
ATOM	2656	O	SER	A	499	-17.643	-23.790	32.517	1.00	18.93	O
ATOM	2657	CB	SER	A	499	-18.829	-26.263	30.762	1.00	19.70	C
ATOM	2658	OG	SER	A	499	-19.820	-26.596	29.805	1.00	27.74	O
ATOM	2659	N	LEU	A	500	-16.041	-24.938	31.419	1.00	21.68	N
ATOM	2660	CA	LEU	A	500	-15.014	-24.610	32.398	1.00	18.97	C
ATOM	2661	C	LEU	A	500	-14.807	-23.100	32.449	1.00	13.48	C
ATOM	2662	O	LEU	A	500	-14.819	-22.504	33.522	1.00	16.62	O
ATOM	2663	CB	LEU	A	500	-13.690	-25.298	32.045	1.00	22.68	C
ATOM	2664	CG	LEU	A	500	-12.561	-25.095	33.067	1.00	25.38	C
ATOM	2665	CD1	LEU	A	500	-13.015	-25.552	34.442	1.00	25.04	C
ATOM	2666	CD2	LEU	A	500	-11.324	-25.880	32.629	1.00	29.46	C
ATOM	2667	N	VAL	A	501	-14.607	-22.487	31.286	1.00	13.24	N
ATOM	2668	CA	VAL	A	501	-14.405	-21.045	31.217	1.00	15.12	C
ATOM	2669	C	VAL	A	501	-15.664	-20.334	31.720	1.00	17.06	C
ATOM	2670	O	VAL	A	501	-15.592	-19.438	32.565	1.00	17.59	O
ATOM	2671	CB	VAL	A	501	-14.122	-20.585	29.765	1.00	16.19	C
ATOM	2672	CG1	VAL	A	501	-14.116	-19.071	29.687	1.00	13.59	C
ATOM	2673	CG2	VAL	A	501	-12.796	-21.156	29.282	1.00	20.10	C
ATOM	2674	N	LYS	A	502	-16.819	-20.743	31.200	1.00	18.33	N
ATOM	2675	CA	LYS	A	502	-18.096	-20.139	31.597	1.00	14.81	C
ATOM	2676	C	LYS	A	502	-18.307	-20.113	33.100	1.00	10.55	C
ATOM	2677	O	LYS	A	502	-18.497	-19.051	33.688	1.00	17.09	O
ATOM	2678	CB	LYS	A	502	-19.266	-20.880	30.949	1.00	15.44	C
ATOM	2679	CG	LYS	A	502	-20.530	-20.032	30.859	1.00	17.77	C
ATOM	2680	CD	LYS	A	502	-21.649	-20.771	30.149	1.00	20.86	C
ATOM	2681	CE	LYS	A	502	-22.948	-19.957	30.184	1.00	19.94	C
ATOM	2682	NZ	LYS	A	502	-23.712	-20.097	28.912	1.00	25.39	N
ATOM	2683	N	THR	A	503	-18.273	-21.279	33.730	1.00	10.56	N
ATOM	2684	CA	THR	A	503	-18.490	-21.340	35.167	1.00	13.47	C
ATOM	2685	C	THR	A	503	-17.484	-20.525	36.002	1.00	20.62	C
ATOM	2686	O	THR	A	503	-17.862	-19.884	37.000	1.00	16.37	O
ATOM	2687	CB	THR	A	503	-18.494	-22.796	35.652	1.00	16.17	C
ATOM	2688	OG1	THR	A	503	-18.811	-22.826	37.046	1.00	19.65	O
ATOM	2689	CG2	THR	A	503	-17.141	-23.435	35.437	1.00	20.00	C
ATOM	2690	N	ILE	A	504	-16.207	-20.545	35.613	1.00	18.91	N
ATOM	2691	CA	ILE	A	504	-15.199	-19.787	36.350	1.00	15.68	C
ATOM	2692	C	ILE	A	504	-15.530	-18.306	36.229	1.00	14.35	C
ATOM	2693	O	ILE	A	504	-15.624	-17.598	37.232	1.00	17.50	O
ATOM	2694	CB	ILE	A	504	-13.764	-20.036	35.799	1.00	14.74	C
ATOM	2695	CG1	ILE	A	504	-13.320	-21.467	36.112	1.00	14.25	C
ATOM	2696	CG2	ILE	A	504	-12.784	-19.061	36.438	1.00	14.19	C
ATOM	2697	CD1	ILE	A	504	-12.038	-21.881	35.390	1.00	16.81	C
ATOM	2698	N	VAL	A	505	-15.717	-17.848	34.994	1.00	16.81	N

ATOM	2699	CA	VAL	A	505	-16.047	-16.449	34.738	1.00	19.28	C
ATOM	2700	C	VAL	A	505	-17.317	-16.033	35.474	1.00	22.16	C
ATOM	2701	O	VAL	A	505	-17.386	-14.933	36.012	1.00	24.95	O
ATOM	2702	CB	VAL	A	505	-16.273	-16.175	33.226	1.00	20.90	C
ATOM	2703	CG1	VAL	A	505	-16.816	-14.759	33.037	1.00	15.39	C
ATOM	2704	CG2	VAL	A	505	-14.978	-16.363	32.446	1.00	19.61	C
ATOM	2705	N	GLN	A	506	-18.323	-16.909	35.495	1.00	20.45	N
ATOM	2706	CA	GLN	A	506	-19.584	-16.584	36.162	1.00	21.56	C
ATOM	2707	C	GLN	A	506	-19.512	-16.632	37.683	1.00	20.38	C
ATOM	2708	O	GLN	A	506	-20.331	-16.023	38.364	1.00	22.10	O
ATOM	2709	CB	GLN	A	506	-20.708	-17.492	35.633	1.00	20.26	C
ATOM	2710	CG	GLN	A	506	-20.995	-17.235	34.157	1.00	15.73	C
ATOM	2711	CD	GLN	A	506	-22.273	-17.872	33.652	1.00	20.13	C
ATOM	2712	OE1	GLN	A	506	-22.639	-18.965	34.063	1.00	22.30	O
ATOM	2713	NE2	GLN	A	506	-22.952	-17.188	32.738	1.00	19.02	N
ATOM	2714	N	SER	A	507	-18.525	-17.340	38.223	1.00	20.09	N
ATOM	2715	CA	SER	A	507	-18.372	-17.414	39.673	1.00	18.51	C
ATOM	2716	C	SER	A	507	-17.669	-16.160	40.191	1.00	18.24	C
ATOM	2717	O	SER	A	507	-17.627	-15.915	41.389	1.00	21.37	O
ATOM	2718	CB	SER	A	507	-17.559	-18.653	40.064	1.00	23.80	C
ATOM	2719	OG	SER	A	507	-16.181	-18.497	39.739	1.00	25.60	O
ATOM	2720	N	ASP	A	508	-17.134	-15.356	39.278	1.00	20.05	N
ATOM	2721	CA	ASP	A	508	-16.405	-14.147	39.652	1.00	20.68	C
ATOM	2722	C	ASP	A	508	-17.290	-12.909	39.777	1.00	21.70	C
ATOM	2723	O	ASP	A	508	-17.612	-12.253	38.782	1.00	24.19	O
ATOM	2724	CB	ASP	A	508	-15.277	-13.885	38.637	1.00	17.83	C
ATOM	2725	CG	ASP	A	508	-14.174	-12.992	39.195	1.00	19.67	C
ATOM	2726	OD1	ASP	A	508	-14.411	-12.291	40.199	1.00	17.18	O
ATOM	2727	OD2	ASP	A	508	-13.064	-12.987	38.622	1.00	19.43	O
ATOM	2728	N	SER	A	509	-17.655	-12.582	41.013	1.00	23.75	N
ATOM	2729	CA	SER	A	509	-18.502	-11.425	41.292	1.00	25.11	C
ATOM	2730	C	SER	A	509	-17.693	-10.164	41.575	1.00	27.54	C
ATOM	2731	O	SER	A	509	-18.257	-9.083	41.759	1.00	26.99	O
ATOM	2732	CB	SER	A	509	-19.397	-11.718	42.497	1.00	24.60	C
ATOM	2733	OG	SER	A	509	-18.628	-11.903	43.676	1.00	25.41	O
ATOM	2734	N	TYR	A	510	-16.372	-10.300	41.605	1.00	24.64	N
ATOM	2735	CA	TYR	A	510	-15.504	-9.171	41.901	1.00	23.14	C
ATOM	2736	C	TYR	A	510	-14.856	-8.514	40.681	1.00	21.48	C
ATOM	2737	O	TYR	A	510	-14.819	-7.287	40.573	1.00	22.31	O
ATOM	2738	CB	TYR	A	510	-14.424	-9.621	42.888	1.00	21.96	C
ATOM	2739	CG	TYR	A	510	-13.286	-8.649	43.027	1.00	24.02	C
ATOM	2740	CD1	TYR	A	510	-13.430	-7.486	43.780	1.00	23.46	C
ATOM	2741	CD2	TYR	A	510	-12.067	-8.881	42.392	1.00	21.82	C
ATOM	2742	CE1	TYR	A	510	-12.390	-6.576	43.896	1.00	25.03	C
ATOM	2743	CE2	TYR	A	510	-11.021	-7.979	42.503	1.00	24.58	C
ATOM	2744	CZ	TYR	A	510	-11.189	-6.827	43.256	1.00	26.53	C
ATOM	2745	OH	TYR	A	510	-10.152	-5.928	43.372	1.00	32.18	O
ATOM	2746	N	TYR	A	511	-14.356	-9.320	39.756	1.00	20.51	N
ATOM	2747	CA	TYR	A	511	-13.697	-8.772	38.583	1.00	21.81	C
ATOM	2748	C	TYR	A	511	-14.456	-8.990	37.288	1.00	22.78	C

ATOM	2749	O	TYR	A	511	-14.915	-10.095	36.994	1.00	25.57	O
ATOM	2750	CB	TYR	A	511	-12.291	-9.376	38.454	1.00	23.58	C
ATOM	2751	CG	TYR	A	511	-11.440	-8.784	37.349	1.00	20.75	C
ATOM	2752	CD1	TYR	A	511	-10.884	-7.504	37.471	1.00	18.70	C
ATOM	2753	CD2	TYR	A	511	-11.168	-9.517	36.188	1.00	19.48	C
ATOM	2754	CE1	TYR	A	511	-10.076	-6.971	36.458	1.00	18.36	C
ATOM	2755	CE2	TYR	A	511	-10.362	-8.996	35.174	1.00	21.29	C
ATOM	2756	CZ	TYR	A	511	-9.820	-7.724	35.316	1.00	19.65	C
ATOM	2757	OH	TYR	A	511	-9.028	-7.215	34.312	1.00	22.74	O
ATOM	2758	N	ASP	A	512	-14.566	-7.923	36.507	1.00	20.69	N
ATOM	2759	CA	ASP	A	512	-15.243	-7.967	35.225	1.00	18.96	C
ATOM	2760	C	ASP	A	512	-14.283	-8.538	34.190	1.00	19.54	C
ATOM	2761	O	ASP	A	512	-13.389	-7.842	33.721	1.00	21.28	O
ATOM	2762	CB	ASP	A	512	-15.662	-6.552	34.834	1.00	17.41	C
ATOM	2763	CG	ASP	A	512	-16.180	-6.470	33.421	1.00	19.44	C
ATOM	2764	OD1	ASP	A	512	-16.489	-7.528	32.832	1.00	25.25	O
ATOM	2765	OD2	ASP	A	512	-16.274	-5.342	32.897	1.00	24.90	O
ATOM	2766	N	VAL	A	513	-14.477	-9.803	33.831	1.00	19.24	N
ATOM	2767	CA	VAL	A	513	-13.610	-10.472	32.873	1.00	16.90	C
ATOM	2768	C	VAL	A	513	-13.238	-9.697	31.615	1.00	21.74	C
ATOM	2769	O	VAL	A	513	-12.192	-9.958	31.026	1.00	26.72	O
ATOM	2770	CB	VAL	A	513	-14.208	-11.818	32.419	1.00	20.06	C
ATOM	2771	CG1	VAL	A	513	-15.336	-11.585	31.413	1.00	18.71	C
ATOM	2772	CG2	VAL	A	513	-13.122	-12.678	31.782	1.00	16.61	C
ATOM	2773	N	PHE	A	514	-14.075	-8.760	31.185	1.00	19.41	N
ATOM	2774	CA	PHE	A	514	-13.792	-8.009	29.963	1.00	16.87	C
ATOM	2775	C	PHE	A	514	-12.689	-6.968	30.119	1.00	16.16	C
ATOM	2776	O	PHE	A	514	-12.123	-6.490	29.139	1.00	19.60	O
ATOM	2777	CB	PHE	A	514	-15.072	-7.347	29.444	1.00	16.48	C
ATOM	2778	CG	PHE	A	514	-16.031	-8.312	28.815	1.00	13.94	C
ATOM	2779	CD1	PHE	A	514	-15.848	-8.741	27.507	1.00	17.23	C
ATOM	2780	CD2	PHE	A	514	-17.098	-8.824	29.543	1.00	16.17	C
ATOM	2781	CE1	PHE	A	514	-16.712	-9.675	26.926	1.00	18.05	C
ATOM	2782	CE2	PHE	A	514	-17.968	-9.756	28.976	1.00	16.82	C
ATOM	2783	CZ	PHE	A	514	-17.774	-10.184	27.662	1.00	14.76	C
ATOM	2784	N	LYS	A	515	-12.382	-6.621	31.361	1.00	20.09	N
ATOM	2785	CA	LYS	A	515	-11.337	-5.652	31.639	1.00	20.89	C
ATOM	2786	C	LYS	A	515	-9.973	-6.156	31.167	1.00	23.51	C
ATOM	2787	O	LYS	A	515	-9.032	-5.379	31.024	1.00	27.60	O
ATOM	2788	CB	LYS	A	515	-11.304	-5.356	33.133	1.00	21.72	C
ATOM	2789	CG	LYS	A	515	-12.470	-4.503	33.588	1.00	17.98	C
ATOM	2790	CD	LYS	A	515	-12.079	-3.649	34.762	1.00	24.50	C
ATOM	2791	CE	LYS	A	515	-13.301	-3.016	35.384	1.00	29.26	C
ATOM	2792	NZ	LYS	A	515	-13.218	-3.078	36.865	1.00	35.83	N
ATOM	2793	N	ASN	A	516	-9.868	-7.457	30.919	1.00	22.37	N
ATOM	2794	CA	ASN	A	516	-8.616	-8.025	30.448	1.00	18.91	C
ATOM	2795	C	ASN	A	516	-8.791	-8.929	29.236	1.00	16.23	C
ATOM	2796	O	ASN	A	516	-8.157	-9.974	29.131	1.00	18.02	O
ATOM	2797	CB	ASN	A	516	-7.904	-8.779	31.578	1.00	20.32	C
ATOM	2798	CG	ASN	A	516	-6.395	-8.827	31.388	1.00	22.00	C

ATOM	2799	OD1	ASN	A	516	-5.835	-8.088	30.578	1.00	21.06	O
ATOM	2800	ND2	ASN	A	516	-5.734	-9.706	32.128	1.00	17.51	N
ATOM	2801	N	LEU	A	517	-9.687	-8.531	28.339	1.00	19.08	N
ATOM	2802	CA	LEU	A	517	-9.908	-9.232	27.078	1.00	18.82	C
ATOM	2803	C	LEU	A	517	-9.567	-8.069	26.151	1.00	22.51	C
ATOM	2804	O	LEU	A	517	-10.356	-7.133	25.996	1.00	24.13	O
ATOM	2805	CB	LEU	A	517	-11.369	-9.675	26.936	1.00	18.95	C
ATOM	2806	CG	LEU	A	517	-11.758	-10.943	27.717	1.00	24.05	C
ATOM	2807	CD1	LEU	A	517	-13.076	-11.504	27.195	1.00	16.21	C
ATOM	2808	CD2	LEU	A	517	-10.658	-11.993	27.585	1.00	20.33	C
ATOM	2809	N	LYS	A	518	-8.371	-8.121	25.565	1.00	24.61	N
ATOM	2810	CA	LYS	A	518	-7.865	-7.028	24.740	1.00	22.80	C
ATOM	2811	C	LYS	A	518	-7.868	-7.106	23.224	1.00	24.92	C
ATOM	2812	O	LYS	A	518	-7.040	-6.462	22.576	1.00	25.14	O
ATOM	2813	CB	LYS	A	518	-6.450	-6.665	25.200	1.00	20.92	C
ATOM	2814	CG	LYS	A	518	-6.146	-7.060	26.633	1.00	18.78	C
ATOM	2815	CD	LYS	A	518	-6.768	-6.113	27.627	1.00	20.53	C
ATOM	2816	CE	LYS	A	518	-6.520	-4.660	27.257	1.00	20.93	C
ATOM	2817	NZ	LYS	A	518	-7.067	-3.728	28.290	1.00	26.97	N
ATOM	2818	N	THR	A	519	-8.773	-7.894	22.656	1.00	23.01	N
ATOM	2819	CA	THR	A	519	-8.910	-7.968	21.207	1.00	22.23	C
ATOM	2820	C	THR	A	519	-10.401	-8.190	20.976	1.00	22.79	C
ATOM	2821	O	THR	A	519	-11.094	-8.705	21.853	1.00	24.07	O
ATOM	2822	CB	THR	A	519	-8.058	-9.105	20.567	1.00	22.79	C
ATOM	2823	OG1	THR	A	519	-8.664	-10.379	20.804	1.00	19.48	O
ATOM	2824	CG2	THR	A	519	-6.643	-9.091	21.144	1.00	23.12	C
ATOM	2825	N	TYR	A	520	-10.904	-7.774	19.824	1.00	20.28	N
ATOM	2826	CA	TYR	A	520	-12.320	-7.925	19.541	1.00	21.09	C
ATOM	2827	C	TYR	A	520	-12.739	-9.377	19.427	1.00	23.70	C
ATOM	2828	O	TYR	A	520	-13.859	-9.733	19.782	1.00	28.81	O
ATOM	2829	CB	TYR	A	520	-12.673	-7.156	18.272	1.00	20.67	C
ATOM	2830	CG	TYR	A	520	-12.326	-5.695	18.394	1.00	16.82	C
ATOM	2831	CD1	TYR	A	520	-12.662	-4.984	19.543	1.00	11.98	C
ATOM	2832	CD2	TYR	A	520	-11.595	-5.043	17.401	1.00	18.61	C
ATOM	2833	CE1	TYR	A	520	-12.273	-3.666	19.714	1.00	16.98	C
ATOM	2834	CE2	TYR	A	520	-11.196	-3.715	17.561	1.00	16.98	C
ATOM	2835	CZ	TYR	A	520	-11.535	-3.037	18.723	1.00	18.00	C
ATOM	2836	OH	TYR	A	520	-11.101	-1.749	18.930	1.00	20.05	O
ATOM	2837	N	LYS	A	521	-11.844	-10.227	18.943	1.00	23.38	N
ATOM	2838	CA	LYS	A	521	-12.173	-11.636	18.823	1.00	24.96	C
ATOM	2839	C	LYS	A	521	-12.337	-12.266	20.204	1.00	24.36	C
ATOM	2840	O	LYS	A	521	-13.193	-13.121	20.420	1.00	22.22	O
ATOM	2841	CB	LYS	A	521	-11.076	-12.366	18.055	1.00	32.71	C
ATOM	2842	CG	LYS	A	521	-11.593	-13.312	16.993	1.00	36.80	C
ATOM	2843	CD	LYS	A	521	-12.499	-14.377	17.574	1.00	42.87	C
ATOM	2844	CE	LYS	A	521	-12.062	-15.767	17.129	1.00	50.26	C
ATOM	2845	NZ	LYS	A	521	-10.848	-15.744	16.246	1.00	53.81	N
ATOM	2846	N	ASP	A	522	-11.505	-11.842	21.143	1.00	22.59	N
ATOM	2847	CA	ASP	A	522	-11.559	-12.378	22.491	1.00	19.15	C
ATOM	2848	C	ASP	A	522	-12.813	-11.925	23.201	1.00	20.40	C

ATOM	2849	O	ASP	A	522	-13.395	-12.669	23.982	1.00	21.08	O
ATOM	2850	CB	ASP	A	522	-10.340	-11.923	23.283	1.00	16.99	C
ATOM	2851	CG	ASP	A	522	-9.099	-12.704	22.922	1.00	23.70	C
ATOM	2852	OD1	ASP	A	522	-9.214	-13.933	22.707	1.00	21.96	O
ATOM	2853	OD2	ASP	A	522	-8.014	-12.088	22.851	1.00	23.01	O
ATOM	2854	N	ILE	A	523	-13.205	-10.685	22.944	1.00	22.63	N
ATOM	2855	CA	ILE	A	523	-14.395	-10.119	23.550	1.00	20.82	C
ATOM	2856	C	ILE	A	523	-15.596	-10.847	22.972	1.00	24.11	C
ATOM	2857	O	ILE	A	523	-16.489	-11.283	23.699	1.00	21.46	O
ATOM	2858	CB	ILE	A	523	-14.521	-8.622	23.224	1.00	22.21	C
ATOM	2859	CG1	ILE	A	523	-13.483	-7.834	24.034	1.00	21.60	C
ATOM	2860	CG2	ILE	A	523	-15.949	-8.135	23.530	1.00	18.98	C
ATOM	2861	CD1	ILE	A	523	-13.256	-6.416	23.555	1.00	16.65	C
ATOM	2862	N	SER	A	524	-15.596	-10.978	21.651	1.00	23.21	N
ATOM	2863	CA	SER	A	524	-16.670	-11.643	20.942	1.00	23.99	C
ATOM	2864	C	SER	A	524	-16.847	-13.090	21.399	1.00	27.52	C
ATOM	2865	O	SER	A	524	-17.964	-13.534	21.647	1.00	31.29	O
ATOM	2866	CB	SER	A	524	-16.397	-11.588	19.448	1.00	21.76	C
ATOM	2867	OG	SER	A	524	-17.134	-12.584	18.777	1.00	27.29	O
ATOM	2868	N	LEU	A	525	-15.749	-13.825	21.518	1.00	26.74	N
ATOM	2869	CA	LEU	A	525	-15.806	-15.214	21.961	1.00	26.56	C
ATOM	2870	C	LEU	A	525	-16.437	-15.334	23.344	1.00	25.97	C
ATOM	2871	O	LEU	A	525	-17.263	-16.210	23.586	1.00	26.97	O
ATOM	2872	CB	LEU	A	525	-14.399	-15.809	22.015	1.00	28.17	C
ATOM	2873	CG	LEU	A	525	-13.832	-16.363	20.709	1.00	32.91	C
ATOM	2874	CD1	LEU	A	525	-12.353	-16.687	20.895	1.00	35.22	C
ATOM	2875	CD2	LEU	A	525	-14.602	-17.608	20.304	1.00	30.90	C
ATOM	2876	N	MET	A	526	-16.033	-14.453	24.252	1.00	24.48	N
ATOM	2877	CA	MET	A	526	-16.539	-14.467	25.616	1.00	26.23	C
ATOM	2878	C	MET	A	526	-18.019	-14.105	25.697	1.00	28.23	C
ATOM	2879	O	MET	A	526	-18.739	-14.627	26.544	1.00	28.92	O
ATOM	2880	CB	MET	A	526	-15.736	-13.502	26.494	1.00	20.42	C
ATOM	2881	CG	MET	A	526	-16.152	-13.515	27.952	1.00	21.97	C
ATOM	2882	SD	MET	A	526	-16.005	-15.150	28.718	1.00	24.41	S
ATOM	2883	CE	MET	A	526	-14.264	-15.512	28.391	1.00	31.72	C
ATOM	2884	N	GLN	A	527	-18.470	-13.214	24.819	1.00	27.93	N
ATOM	2885	CA	GLN	A	527	-19.866	-12.798	24.824	1.00	24.91	C
ATOM	2886	C	GLN	A	527	-20.804	-13.934	24.415	1.00	24.37	C
ATOM	2887	O	GLN	A	527	-21.784	-14.219	25.110	1.00	25.75	O
ATOM	2888	CB	GLN	A	527	-20.051	-11.582	23.913	1.00	21.78	C
ATOM	2889	CG	GLN	A	527	-19.521	-10.299	24.540	1.00	21.91	C
ATOM	2890	CD	GLN	A	527	-19.527	-9.117	23.586	1.00	22.99	C
ATOM	2891	OE1	GLN	A	527	-19.314	-9.269	22.382	1.00	23.13	O
ATOM	2892	NE2	GLN	A	527	-19.770	-7.927	24.125	1.00	23.70	N
ATOM	2893	N	SER	A	528	-20.505	-14.595	23.305	1.00	21.70	N
ATOM	2894	CA	SER	A	528	-21.348	-15.694	22.857	1.00	27.29	C
ATOM	2895	C	SER	A	528	-21.328	-16.884	23.832	1.00	28.44	C
ATOM	2896	O	SER	A	528	-22.324	-17.599	23.972	1.00	29.14	O
ATOM	2897	CB	SER	A	528	-20.927	-16.147	21.454	1.00	28.21	C
ATOM	2898	OG	SER	A	528	-19.776	-16.969	21.504	1.00	37.70	O

ATOM	2899	N	LEU	A	529	-20.201	-17.089	24.508	1.00	26.26	N
ATOM	2900	CA	LEU	A	529	-20.066	-18.187	25.465	1.00	22.88	C
ATOM	2901	C	LEU	A	529	-21.007	-17.988	26.649	1.00	21.15	C
ATOM	2902	O	LEU	A	529	-21.740	-18.893	27.051	1.00	21.55	O
ATOM	2903	CB	LEU	A	529	-18.619	-18.268	25.981	1.00	20.23	C
ATOM	2904	CG	LEU	A	529	-18.393	-19.230	27.155	1.00	20.79	C
ATOM	2905	CD1	LEU	A	529	-18.268	-20.633	26.604	1.00	21.94	C
ATOM	2906	CD2	LEU	A	529	-17.153	-18.858	27.946	1.00	16.31	C
ATOM	2907	N	LEU	A	530	-20.967	-16.787	27.206	1.00	18.78	N
ATOM	2908	CA	LEU	A	530	-21.782	-16.432	28.352	1.00	20.38	C
ATOM	2909	C	LEU	A	530	-23.274	-16.378	28.036	1.00	24.02	C
ATOM	2910	O	LEU	A	530	-24.103	-16.599	28.912	1.00	23.24	O
ATOM	2911	CB	LEU	A	530	-21.336	-15.078	28.887	1.00	19.43	C
ATOM	2912	CG	LEU	A	530	-19.935	-15.086	29.497	1.00	19.88	C
ATOM	2913	CD1	LEU	A	530	-19.561	-13.677	29.907	1.00	18.79	C
ATOM	2914	CD2	LEU	A	530	-19.902	-16.026	30.702	1.00	18.51	C
ATOM	2915	N	SER	A	531	-23.607	-16.083	26.783	1.00	25.46	N
ATOM	2916	CA	SER	A	531	-24.997	-15.983	26.366	1.00	26.33	C
ATOM	2917	C	SER	A	531	-25.546	-17.289	25.808	1.00	25.50	C
ATOM	2918	O	SER	A	531	-26.759	-17.469	25.729	1.00	24.84	O
ATOM	2919	CB	SER	A	531	-25.146	-14.878	25.322	1.00	24.73	C
ATOM	2920	OG	SER	A	531	-24.655	-15.309	24.064	1.00	30.10	O
ATOM	2921	N	ASP	A	532	-24.657	-18.200	25.425	1.00	25.37	N
ATOM	2922	CA	ASP	A	532	-25.080	-19.479	24.876	1.00	24.64	C
ATOM	2923	C	ASP	A	532	-25.602	-20.417	25.964	1.00	27.33	C
ATOM	2924	O	ASP	A	532	-24.833	-20.967	26.750	1.00	27.00	O
ATOM	2925	CB	ASP	A	532	-23.921	-20.133	24.133	1.00	27.05	C
ATOM	2926	CG	ASP	A	532	-24.308	-21.456	23.503	1.00	34.59	C
ATOM	2927	OD1	ASP	A	532	-25.336	-22.035	23.911	1.00	39.46	O
ATOM	2928	OD2	ASP	A	532	-23.582	-21.920	22.599	1.00	35.02	O
ATOM	2929	N	ALA	A	533	-26.917	-20.604	25.998	1.00	27.92	N
ATOM	2930	CA	ALA	A	533	-27.541	-21.471	26.997	1.00	28.12	C
ATOM	2931	C	ALA	A	533	-27.175	-22.933	26.799	1.00	26.59	C
ATOM	2932	O	ALA	A	533	-27.295	-23.737	27.725	1.00	28.89	O
ATOM	2933	CB	ALA	A	533	-29.052	-21.309	26.956	1.00	30.50	C
ATOM	2934	N	GLY	A	534	-26.738	-23.275	25.590	1.00	23.26	N
ATOM	2935	CA	GLY	A	534	-26.356	-24.645	25.300	1.00	22.45	C
ATOM	2936	C	GLY	A	534	-25.099	-25.061	26.044	1.00	23.00	C
ATOM	2937	O	GLY	A	534	-24.810	-26.253	26.185	1.00	20.86	O
ATOM	2938	N	VAL	A	535	-24.353	-24.067	26.524	1.00	23.16	N
ATOM	2939	CA	VAL	A	535	-23.120	-24.309	27.267	1.00	20.95	C
ATOM	2940	C	VAL	A	535	-23.407	-24.273	28.764	1.00	18.09	C
ATOM	2941	O	VAL	A	535	-23.700	-23.216	29.333	1.00	20.61	O
ATOM	2942	CB	VAL	A	535	-22.037	-23.246	26.930	1.00	18.75	C
ATOM	2943	CG1	VAL	A	535	-20.817	-23.454	27.817	1.00	18.09	C
ATOM	2944	CG2	VAL	A	535	-21.662	-23.332	25.457	1.00	14.38	C
ATOM	2945	N	ALA	A	536	-23.317	-25.438	29.396	1.00	17.54	N
ATOM	2946	CA	ALA	A	536	-23.578	-25.571	30.819	1.00	19.48	C
ATOM	2947	C	ALA	A	536	-22.616	-24.763	31.670	1.00	21.52	C
ATOM	2948	O	ALA	A	536	-21.428	-24.686	31.379	1.00	30.13	O

ATOM	2949	CB	ALA	A	536	-23.507	-27.037	31.224	1.00	17.12	C
ATOM	2950	N	SER	A	537	-23.141	-24.158	32.724	1.00	18.37	N
ATOM	2951	CA	SER	A	537	-22.334	-23.390	33.647	1.00	18.20	C
ATOM	2952	C	SER	A	537	-22.745	-23.868	35.031	1.00	22.85	C
ATOM	2953	O	SER	A	537	-23.620	-23.287	35.674	1.00	29.34	O
ATOM	2954	CB	SER	A	537	-22.602	-21.897	33.488	1.00	18.64	C
ATOM	2955	OG	SER	A	537	-21.886	-21.154	34.458	1.00	24.43	O
ATOM	2956	N	VAL	A	538	-22.123	-24.956	35.471	1.00	24.00	N
ATOM	2957	CA	VAL	A	538	-22.410	-25.559	36.767	1.00	21.99	C
ATOM	2958	C	VAL	A	538	-21.238	-25.306	37.712	1.00	22.96	C
ATOM	2959	O	VAL	A	538	-20.086	-25.396	37.309	1.00	24.34	O
ATOM	2960	CB	VAL	A	538	-22.618	-27.091	36.609	1.00	18.65	C
ATOM	2961	CG1	VAL	A	538	-22.854	-27.742	37.964	1.00	18.57	C
ATOM	2962	CG2	VAL	A	538	-23.775	-27.359	35.675	1.00	19.06	C
ATOM	2963	N	PRO	A	539	-21.520	-24.968	38.977	1.00	21.77	N
ATOM	2964	CA	PRO	A	539	-20.443	-24.718	39.933	1.00	24.03	C
ATOM	2965	C	PRO	A	539	-19.488	-25.899	39.966	1.00	26.11	C
ATOM	2966	O	PRO	A	539	-19.920	-27.055	39.992	1.00	22.01	O
ATOM	2967	CB	PRO	A	539	-21.172	-24.538	41.258	1.00	25.09	C
ATOM	2968	CG	PRO	A	539	-22.517	-24.049	40.864	1.00	25.34	C
ATOM	2969	CD	PRO	A	539	-22.842	-24.770	39.586	1.00	27.53	C
ATOM	2970	N	ARG	A	540	-18.191	-25.610	39.963	1.00	24.27	N
ATOM	2971	CA	ARG	A	540	-17.206	-26.678	39.981	1.00	22.38	C
ATOM	2972	C	ARG	A	540	-17.285	-27.437	41.280	1.00	14.34	C
ATOM	2973	O	ARG	A	540	-17.563	-26.871	42.336	1.00	14.91	O
ATOM	2974	CB	ARG	A	540	-15.780	-26.138	39.804	1.00	27.55	C
ATOM	2975	CG	ARG	A	540	-15.663	-24.638	39.613	1.00	33.57	C
ATOM	2976	CD	ARG	A	540	-14.567	-24.299	38.606	1.00	37.33	C
ATOM	2977	NE	ARG	A	540	-13.600	-25.387	38.464	1.00	38.23	N
ATOM	2978	CZ	ARG	A	540	-12.308	-25.292	38.763	1.00	36.05	C
ATOM	2979	NH1	ARG	A	540	-11.806	-24.156	39.225	1.00	31.33	N
ATOM	2980	NH2	ARG	A	540	-11.517	-26.344	38.606	1.00	40.93	N
ATOM	2981	N	THR	A	541	-17.012	-28.728	41.188	1.00	14.62	N
ATOM	2982	CA	THR	A	541	-17.034	-29.616	42.332	1.00	17.09	C
ATOM	2983	C	THR	A	541	-15.716	-29.538	43.123	1.00	19.23	C
ATOM	2984	O	THR	A	541	-14.764	-28.885	42.694	1.00	16.55	O
ATOM	2985	CB	THR	A	541	-17.281	-31.054	41.865	1.00	16.64	C
ATOM	2986	OG1	THR	A	541	-17.397	-31.918	43.001	1.00	22.82	O
ATOM	2987	CG2	THR	A	541	-16.149	-31.517	40.980	1.00	17.97	C
ATOM	2988	N	SER	A	542	-15.686	-30.201	44.279	1.00	18.82	N
ATOM	2989	CA	SER	A	542	-14.532	-30.221	45.175	1.00	19.54	C
ATOM	2990	C	SER	A	542	-13.320	-30.922	44.563	1.00	22.85	C
ATOM	2991	O	SER	A	542	-13.460	-31.873	43.790	1.00	23.13	O
ATOM	2992	CB	SER	A	542	-14.894	-30.918	46.495	1.00	17.26	C
ATOM	2993	OG	SER	A	542	-15.843	-30.187	47.261	1.00	18.82	O
ATOM	2994	N	TYR	A	543	-12.130	-30.438	44.911	1.00	21.49	N
ATOM	2995	CA	TYR	A	543	-10.886	-31.021	44.419	1.00	20.80	C
ATOM	2996	C	TYR	A	543	-9.709	-30.631	45.313	1.00	19.26	C
ATOM	2997	O	TYR	A	543	-9.758	-29.639	46.044	1.00	18.06	O
ATOM	2998	CB	TYR	A	543	-10.613	-30.593	42.961	1.00	19.71	C

ATOM	2999	CG	TYR	A	543	-10.366	-29.113	42.771	1.00	22.70	C
ATOM	3000	CD1	TYR	A	543	-9.167	-28.527	43.180	1.00	27.25	C
ATOM	3001	CD2	TYR	A	543	-11.348	-28.287	42.217	1.00	22.96	C
ATOM	3002	CE1	TYR	A	543	-8.952	-27.155	43.051	1.00	25.49	C
ATOM	3003	CE2	TYR	A	543	-11.146	-26.912	42.082	1.00	23.19	C
ATOM	3004	CZ	TYR	A	543	-9.946	-26.352	42.502	1.00	25.27	C
ATOM	3005	OH	TYR	A	543	-9.740	-24.996	42.385	1.00	21.60	O
ATOM	3006	N	LEU	A	544	-8.661	-31.442	45.268	1.00	19.49	N
ATOM	3007	CA	LEU	A	544	-7.456	-31.193	46.047	1.00	14.96	C
ATOM	3008	C	LEU	A	544	-6.301	-31.636	45.173	1.00	15.34	C
ATOM	3009	O	LEU	A	544	-6.172	-32.815	44.853	1.00	16.12	O
ATOM	3010	CB	LEU	A	544	-7.466	-32.000	47.344	1.00	13.53	C
ATOM	3011	CG	LEU	A	544	-6.522	-31.452	48.415	1.00	9.05	C
ATOM	3012	CD1	LEU	A	544	-6.912	-31.929	49.796	1.00	8.65	C
ATOM	3013	CD2	LEU	A	544	-5.113	-31.925	48.087	1.00	20.36	C
ATOM	3014	N	SER	A	545	-5.474	-30.680	44.771	1.00	16.49	N
ATOM	3015	CA	SER	A	545	-4.326	-30.973	43.924	1.00	15.69	C
ATOM	3016	C	SER	A	545	-3.025	-30.897	44.728	1.00	15.37	C
ATOM	3017	O	SER	A	545	-2.724	-29.862	45.329	1.00	17.85	O
ATOM	3018	CB	SER	A	545	-4.268	-29.969	42.779	1.00	8.71	C
ATOM	3019	OG	SER	A	545	-5.069	-30.379	41.695	1.00	19.35	O
ATOM	3020	N	ALA	A	546	-2.273	-31.994	44.758	1.00	15.14	N
ATOM	3021	CA	ALA	A	546	-0.983	-32.020	45.460	1.00	14.18	C
ATOM	3022	C	ALA	A	546	0.109	-31.842	44.399	1.00	14.23	C
ATOM	3023	O	ALA	A	546	0.524	-32.813	43.769	1.00	17.46	O
ATOM	3024	CB	ALA	A	546	-0.800	-33.343	46.178	1.00	8.02	C
ATOM	3025	N	PHE	A	547	0.542	-30.600	44.172	1.00	14.46	N
ATOM	3026	CA	PHE	A	547	1.585	-30.327	43.180	1.00	14.90	C
ATOM	3027	C	PHE	A	547	2.923	-30.531	43.890	1.00	16.51	C
ATOM	3028	O	PHE	A	547	3.620	-29.573	44.205	1.00	14.20	O
ATOM	3029	CB	PHE	A	547	1.502	-28.882	42.678	1.00	18.17	C
ATOM	3030	CG	PHE	A	547	0.187	-28.518	42.033	1.00	14.95	C
ATOM	3031	CD1	PHE	A	547	-0.247	-29.166	40.891	1.00	15.86	C
ATOM	3032	CD2	PHE	A	547	-0.586	-27.489	42.548	1.00	13.10	C
ATOM	3033	CE1	PHE	A	547	-1.436	-28.792	40.262	1.00	21.71	C
ATOM	3034	CE2	PHE	A	547	-1.779	-27.104	41.929	1.00	16.91	C
ATOM	3035	CZ	PHE	A	547	-2.203	-27.756	40.785	1.00	15.35	C
ATOM	3036	N	ASN	A	548	3.270	-31.786	44.145	1.00	17.83	N
ATOM	3037	CA	ASN	A	548	4.500	-32.100	44.856	1.00	19.08	C
ATOM	3038	C	ASN	A	548	5.775	-31.754	44.095	1.00	17.37	C
ATOM	3039	O	ASN	A	548	6.813	-31.552	44.707	1.00	22.32	O
ATOM	3040	CB	ASN	A	548	4.511	-33.575	45.242	1.00	16.18	C
ATOM	3041	CG	ASN	A	548	3.659	-33.860	46.457	1.00	18.09	C
ATOM	3042	OD1	ASN	A	548	3.782	-33.196	47.486	1.00	15.72	O
ATOM	3043	ND2	ASN	A	548	2.789	-34.858	46.347	1.00	15.83	N
ATOM	3044	N	LYS	A	549	5.694	-31.680	42.772	1.00	14.88	N
ATOM	3045	CA	LYS	A	549	6.856	-31.345	41.967	1.00	18.28	C
ATOM	3046	C	LYS	A	549	7.179	-29.858	41.977	1.00	20.80	C
ATOM	3047	O	LYS	A	549	8.160	-29.426	41.367	1.00	21.11	O
ATOM	3048	CB	LYS	A	549	6.675	-31.830	40.532	1.00	20.77	C

ATOM	3049	CG	LYS	A	549	6.643	-33.346	40.410	1.00	25.40	C
ATOM	3050	CD	LYS	A	549	7.958	-33.976	40.843	1.00	22.56	C
ATOM	3051	CE	LYS	A	549	8.143	-35.346	40.199	1.00	26.33	C
ATOM	3052	NZ	LYS	A	549	8.018	-36.439	41.195	1.00	30.31	N
ATOM	3053	N	MET	A	550	6.348	-29.072	42.656	1.00	16.93	N
ATOM	3054	CA	MET	A	550	6.604	-27.646	42.784	1.00	12.03	C
ATOM	3055	C	MET	A	550	6.270	-27.190	44.193	1.00	11.69	C
ATOM	3056	O	MET	A	550	6.188	-25.998	44.487	1.00	14.34	O
ATOM	3057	CB	MET	A	550	5.858	-26.847	41.711	1.00	16.07	C
ATOM	3058	CG	MET	A	550	4.361	-26.623	41.890	1.00	12.57	C
ATOM	3059	SD	MET	A	550	3.837	-25.473	40.613	1.00	17.48	S
ATOM	3060	CE	MET	A	550	2.046	-25.251	41.040	1.00	17.26	C
ATOM	3061	N	ASP	A	551	6.125	-28.178	45.072	1.00	14.20	N
ATOM	3062	CA	ASP	A	551	5.826	-27.974	46.486	1.00	14.20	C
ATOM	3063	C	ASP	A	551	4.677	-27.027	46.810	1.00	15.57	C
ATOM	3064	O	ASP	A	551	4.779	-26.193	47.710	1.00	13.10	O
ATOM	3065	CB	ASP	A	551	7.089	-27.529	47.227	1.00	15.01	C
ATOM	3066	CG	ASP	A	551	8.209	-28.542	47.111	1.00	21.08	C
ATOM	3067	OD1	ASP	A	551	8.024	-29.688	47.572	1.00	21.55	O
ATOM	3068	OD2	ASP	A	551	9.266	-28.197	46.548	1.00	18.28	O
ATOM	3069	N	LYS	A	552	3.579	-27.171	46.075	1.00	18.81	N
ATOM	3070	CA	LYS	A	552	2.386	-26.365	46.310	1.00	17.38	C
ATOM	3071	C	LYS	A	552	1.199	-27.328	46.414	1.00	16.31	C
ATOM	3072	O	LYS	A	552	1.240	-28.444	45.889	1.00	12.60	O
ATOM	3073	CB	LYS	A	552	2.163	-25.369	45.167	1.00	15.49	C
ATOM	3074	CG	LYS	A	552	3.359	-24.459	44.872	1.00	14.61	C
ATOM	3075	CD	LYS	A	552	3.777	-23.636	46.089	1.00	8.60	C
ATOM	3076	CE	LYS	A	552	4.756	-22.548	45.683	1.00	9.92	C
ATOM	3077	NZ	LYS	A	552	5.419	-21.944	46.860	1.00	11.88	N
ATOM	3078	N	THR	A	553	0.159	-26.902	47.121	1.00	17.95	N
ATOM	3079	CA	THR	A	553	-1.045	-27.715	47.289	1.00	18.57	C
ATOM	3080	C	THR	A	553	-2.271	-26.800	47.209	1.00	13.72	C
ATOM	3081	O	THR	A	553	-2.364	-25.814	47.937	1.00	15.44	O
ATOM	3082	CB	THR	A	553	-1.032	-28.473	48.654	1.00	18.68	C
ATOM	3083	OG1	THR	A	553	-0.008	-29.478	48.630	1.00	20.47	O
ATOM	3084	CG2	THR	A	553	-2.377	-29.160	48.914	1.00	15.70	C
ATOM	3085	N	ALA	A	554	-3.186	-27.118	46.299	1.00	16.18	N
ATOM	3086	CA	ALA	A	554	-4.415	-26.334	46.122	1.00	16.30	C
ATOM	3087	C	ALA	A	554	-5.625	-27.179	46.516	1.00	16.58	C
ATOM	3088	O	ALA	A	554	-5.770	-28.327	46.079	1.00	16.15	O
ATOM	3089	CB	ALA	A	554	-4.550	-25.867	44.672	1.00	9.88	C
ATOM	3090	N	MET	A	555	-6.489	-26.600	47.345	1.00	17.32	N
ATOM	3091	CA	MET	A	555	-7.675	-27.294	47.823	1.00	15.79	C
ATOM	3092	C	MET	A	555	-8.936	-26.449	47.650	1.00	15.01	C
ATOM	3093	O	MET	A	555	-8.907	-25.236	47.856	1.00	15.88	O
ATOM	3094	CB	MET	A	555	-7.483	-27.646	49.294	1.00	14.86	C
ATOM	3095	CG	MET	A	555	-8.643	-28.366	49.928	1.00	15.75	C
ATOM	3096	SD	MET	A	555	-8.575	-28.198	51.697	1.00	20.46	S
ATOM	3097	CE	MET	A	555	-9.884	-29.322	52.202	1.00	28.78	C
ATOM	3098	N	TYR	A	556	-10.037	-27.095	47.264	1.00	19.12	N

ATOM	3099	CA	TYR	A	556	-11.322	-26.407	47.092	1.00	19.12	C
ATOM	3100	C	TYR	A	556	-12.519	-27.265	47.509	1.00	14.70	C
ATOM	3101	O	TYR	A	556	-12.656	-28.401	47.070	1.00	13.71	O
ATOM	3102	CB	TYR	A	556	-11.531	-25.959	45.640	1.00	19.50	C
ATOM	3103	CG	TYR	A	556	-12.864	-25.264	45.430	1.00	20.19	C
ATOM	3104	CD1	TYR	A	556	-13.133	-24.038	46.038	1.00	21.11	C
ATOM	3105	CD2	TYR	A	556	-13.868	-25.848	44.653	1.00	22.54	C
ATOM	3106	CE1	TYR	A	556	-14.371	-23.407	45.880	1.00	22.19	C
ATOM	3107	CE2	TYR	A	556	-15.116	-25.222	44.488	1.00	21.90	C
ATOM	3108	CZ	TYR	A	556	-15.354	-24.004	45.107	1.00	20.77	C
ATOM	3109	OH	TYR	A	556	-16.571	-23.380	44.965	1.00	21.95	O
ATOM	3110	N	ASN	A	557	-13.374	-26.686	48.352	1.00	14.99	N
ATOM	3111	CA	ASN	A	557	-14.589	-27.322	48.865	1.00	15.68	C
ATOM	3112	C	ASN	A	557	-15.803	-26.637	48.200	1.00	15.83	C
ATOM	3113	O	ASN	A	557	-16.110	-25.479	48.499	1.00	16.53	O
ATOM	3114	CB	ASN	A	557	-14.645	-27.136	50.381	1.00	14.69	C
ATOM	3115	CG	ASN	A	557	-15.805	-27.862	51.017	1.00	19.24	C
ATOM	3116	OD1	ASN	A	557	-15.671	-28.434	52.101	1.00	18.36	O
ATOM	3117	ND2	ASN	A	557	-16.953	-27.848	50.349	1.00	18.49	N
ATOM	3118	N	ALA	A	558	-16.476	-27.341	47.290	1.00	16.16	N
ATOM	3119	CA	ALA	A	558	-17.627	-26.760	46.590	1.00	15.92	C
ATOM	3120	C	ALA	A	558	-18.852	-26.647	47.481	1.00	14.79	C
ATOM	3121	O	ALA	A	558	-19.646	-25.727	47.322	1.00	17.61	O
ATOM	3122	CB	ALA	A	558	-17.968	-27.574	45.354	1.00	9.11	C
ATOM	3123	N	GLU	A	559	-18.998	-27.569	48.426	1.00	17.87	N
ATOM	3124	CA	GLU	A	559	-20.145	-27.554	49.328	1.00	18.05	C
ATOM	3125	C	GLU	A	559	-20.140	-26.315	50.200	1.00	20.89	C
ATOM	3126	O	GLU	A	559	-21.144	-25.622	50.288	1.00	20.22	O
ATOM	3127	CB	GLU	A	559	-20.166	-28.798	50.225	1.00	19.49	C
ATOM	3128	CG	GLU	A	559	-21.111	-28.671	51.432	1.00	22.65	C
ATOM	3129	CD	GLU	A	559	-21.142	-29.910	52.325	1.00	25.92	C
ATOM	3130	OE1	GLU	A	559	-20.353	-30.848	52.087	1.00	31.06	O
ATOM	3131	OE2	GLU	A	559	-21.955	-29.946	53.276	1.00	22.33	O
ATOM	3132	N	LYS	A	560	-19.007	-26.033	50.841	1.00	19.62	N
ATOM	3133	CA	LYS	A	560	-18.905	-24.870	51.714	1.00	15.49	C
ATOM	3134	C	LYS	A	560	-18.382	-23.648	50.975	1.00	14.98	C
ATOM	3135	O	LYS	A	560	-18.464	-22.531	51.483	1.00	18.46	O
ATOM	3136	CB	LYS	A	560	-18.036	-25.192	52.925	1.00	15.42	C
ATOM	3137	CG	LYS	A	560	-18.853	-25.463	54.180	1.00	21.68	C
ATOM	3138	CD	LYS	A	560	-18.685	-26.882	54.654	1.00	25.16	C
ATOM	3139	CE	LYS	A	560	-19.339	-27.087	56.012	1.00	34.78	C
ATOM	3140	NZ	LYS	A	560	-18.349	-27.172	57.133	1.00	32.40	N
ATOM	3141	N	GLY	A	561	-17.855	-23.872	49.774	1.00	13.26	N
ATOM	3142	CA	GLY	A	561	-17.372	-22.787	48.939	1.00	15.08	C
ATOM	3143	C	GLY	A	561	-16.120	-22.013	49.319	1.00	19.37	C
ATOM	3144	O	GLY	A	561	-16.068	-20.798	49.136	1.00	19.23	O
ATOM	3145	N	PHE	A	562	-15.107	-22.684	49.849	1.00	18.33	N
ATOM	3146	CA	PHE	A	562	-13.875	-21.971	50.175	1.00	16.64	C
ATOM	3147	C	PHE	A	562	-12.686	-22.650	49.498	1.00	18.19	C
ATOM	3148	O	PHE	A	562	-12.736	-23.838	49.178	1.00	18.01	O

ATOM	3149	CB	PHE	A	562	-13.666	-21.892	51.695	1.00	15.52	C
ATOM	3150	CG	PHE	A	562	-13.282	-23.199	52.340	1.00	18.79	C
ATOM	3151	CD1	PHE	A	562	-11.958	-23.636	52.336	1.00	19.41	C
ATOM	3152	CD2	PHE	A	562	-14.235	-23.968	53.003	1.00	18.21	C
ATOM	3153	CE1	PHE	A	562	-11.588	-24.823	52.988	1.00	18.54	C
ATOM	3154	CE2	PHE	A	562	-13.881	-25.157	53.659	1.00	18.72	C
ATOM	3155	CZ	PHE	A	562	-12.552	-25.585	53.652	1.00	20.77	C
ATOM	3156	N	GLY	A	563	-11.636	-21.876	49.246	1.00	18.26	N
ATOM	3157	CA	GLY	A	563	-10.440	-22.417	48.625	1.00	17.39	C
ATOM	3158	C	GLY	A	563	-9.289	-22.305	49.607	1.00	15.47	C
ATOM	3159	O	GLY	A	563	-9.298	-21.425	50.479	1.00	12.34	O
ATOM	3160	N	PHE	A	564	-8.308	-23.196	49.486	1.00	14.98	N
ATOM	3161	CA	PHE	A	564	-7.150	-23.180	50.382	1.00	15.63	C
ATOM	3162	C	PHE	A	564	-5.893	-23.499	49.594	1.00	15.61	C
ATOM	3163	O	PHE	A	564	-5.866	-24.460	48.826	1.00	12.40	O
ATOM	3164	CB	PHE	A	564	-7.343	-24.206	51.498	1.00	16.53	C
ATOM	3165	CG	PHE	A	564	-6.116	-24.443	52.345	1.00	17.53	C
ATOM	3166	CD1	PHE	A	564	-5.799	-23.587	53.395	1.00	15.55	C
ATOM	3167	CD2	PHE	A	564	-5.317	-25.564	52.135	1.00	17.32	C
ATOM	3168	CE1	PHE	A	564	-4.712	-23.845	54.226	1.00	17.48	C
ATOM	3169	CE2	PHE	A	564	-4.226	-25.832	52.960	1.00	13.51	C
ATOM	3170	CZ	PHE	A	564	-3.924	-24.972	54.007	1.00	15.94	C
ATOM	3171	N	GLY	A	565	-4.866	-22.670	49.781	1.00	17.08	N
ATOM	3172	CA	GLY	A	565	-3.595	-22.866	49.097	1.00	14.91	C
ATOM	3173	C	GLY	A	565	-2.430	-22.988	50.073	1.00	14.94	C
ATOM	3174	O	GLY	A	565	-2.274	-22.179	50.994	1.00	14.91	O
ATOM	3175	N	LEU	A	566	-1.614	-24.018	49.895	1.00	15.58	N
ATOM	3176	CA	LEU	A	566	-0.462	-24.208	50.773	1.00	16.98	C
ATOM	3177	C	LEU	A	566	0.781	-23.950	49.949	1.00	14.02	C
ATOM	3178	O	LEU	A	566	1.013	-24.632	48.955	1.00	12.08	O
ATOM	3179	CB	LEU	A	566	-0.438	-25.627	51.331	1.00	15.16	C
ATOM	3180	CG	LEU	A	566	0.599	-25.906	52.422	1.00	12.17	C
ATOM	3181	CD1	LEU	A	566	0.521	-24.855	53.532	1.00	10.47	C
ATOM	3182	CD2	LEU	A	566	0.360	-27.315	52.960	1.00	8.91	C
ATOM	3183	N	SER	A	567	1.560	-22.952	50.362	1.00	18.62	N
ATOM	3184	CA	SER	A	567	2.776	-22.554	49.650	1.00	17.62	C
ATOM	3185	C	SER	A	567	4.041	-22.926	50.398	1.00	17.72	C
ATOM	3186	O	SER	A	567	4.310	-22.422	51.490	1.00	17.98	O
ATOM	3187	CB	SER	A	567	2.780	-21.044	49.423	1.00	14.73	C
ATOM	3188	OG	SER	A	567	3.852	-20.657	48.589	1.00	14.77	O
ATOM	3189	N	LEU	A	568	4.824	-23.810	49.800	1.00	18.94	N
ATOM	3190	CA	LEU	A	568	6.071	-24.224	50.423	1.00	19.33	C
ATOM	3191	C	LEU	A	568	7.200	-24.267	49.387	1.00	15.24	C
ATOM	3192	O	LEU	A	568	7.035	-23.839	48.238	1.00	11.75	O
ATOM	3193	CB	LEU	A	568	5.907	-25.616	51.061	1.00	16.46	C
ATOM	3194	CG	LEU	A	568	4.543	-26.040	51.605	1.00	15.28	C
ATOM	3195	CD1	LEU	A	568	4.545	-27.537	51.843	1.00	12.94	C
ATOM	3196	CD2	LEU	A	568	4.245	-25.296	52.899	1.00	12.97	C
ATOM	3197	N	PHE	A	569	8.350	-24.768	49.831	1.00	16.23	N
ATOM	3198	CA	PHE	A	569	9.520	-24.965	48.989	1.00	16.35	C

ATOM	3199	C	PHE	A	569	10.386	-26.005	49.686	1.00	18.19	C
ATOM	3200	O	PHE	A	569	10.151	-26.351	50.847	1.00	12.52	O
ATOM	3201	CB	PHE	A	569	10.291	-23.653	48.746	1.00	17.20	C
ATOM	3202	CG	PHE	A	569	11.125	-23.180	49.913	1.00	16.12	C
ATOM	3203	CD1	PHE	A	569	10.525	-22.721	51.084	1.00	12.15	C
ATOM	3204	CD2	PHE	A	569	12.514	-23.118	49.808	1.00	19.07	C
ATOM	3205	CE1	PHE	A	569	11.288	-22.202	52.131	1.00	17.79	C
ATOM	3206	CE2	PHE	A	569	13.292	-22.599	50.852	1.00	16.10	C
ATOM	3207	CZ	PHE	A	569	12.678	-22.139	52.014	1.00	13.43	C
ATOM	3208	N	SER	A	570	11.368	-26.531	48.969	1.00	19.70	N
ATOM	3209	CA	SER	A	570	12.238	-27.542	49.545	1.00	17.96	C
ATOM	3210	C	SER	A	570	13.617	-27.435	48.914	1.00	19.83	C
ATOM	3211	O	SER	A	570	13.949	-26.428	48.284	1.00	19.28	O
ATOM	3212	CB	SER	A	570	11.669	-28.935	49.270	1.00	14.08	C
ATOM	3213	OG	SER	A	570	11.726	-29.214	47.880	1.00	12.60	O
ATOM	3214	N	SER	A	571	14.403	-28.494	49.072	1.00	21.62	N
ATOM	3215	CA	SER	A	571	15.737	-28.544	48.501	1.00	18.28	C
ATOM	3216	C	SER	A	571	15.598	-28.548	46.983	1.00	18.10	C
ATOM	3217	O	SER	A	571	16.550	-28.258	46.259	1.00	17.83	O
ATOM	3218	CB	SER	A	571	16.447	-29.812	48.967	1.00	16.99	C
ATOM	3219	OG	SER	A	571	15.776	-30.966	48.496	1.00	19.67	O
ATOM	3220	N	ARG	A	572	14.393	-28.861	46.507	1.00	16.68	N
ATOM	3221	CA	ARG	A	572	14.110	-28.917	45.073	1.00	11.33	C
ATOM	3222	C	ARG	A	572	13.550	-27.623	44.497	1.00	8.69	C
ATOM	3223	O	ARG	A	572	13.477	-27.471	43.294	1.00	12.48	O
ATOM	3224	CB	ARG	A	572	13.101	-30.032	44.768	1.00	13.06	C
ATOM	3225	CG	ARG	A	572	13.497	-31.421	45.246	1.00	15.81	C
ATOM	3226	CD	ARG	A	572	12.314	-32.380	45.203	1.00	15.29	C
ATOM	3227	NE	ARG	A	572	11.255	-31.917	46.091	1.00	20.40	N
ATOM	3228	CZ	ARG	A	572	11.058	-32.367	47.325	1.00	20.66	C
ATOM	3229	NH1	ARG	A	572	11.845	-33.307	47.834	1.00	15.25	N
ATOM	3230	NH2	ARG	A	572	10.090	-31.847	48.068	1.00	16.80	N
ATOM	3231	N	THR	A	573	13.171	-26.681	45.344	1.00	11.15	N
ATOM	3232	CA	THR	A	573	12.567	-25.465	44.831	1.00	11.43	C
ATOM	3233	C	THR	A	573	12.990	-24.210	45.569	1.00	9.73	C
ATOM	3234	O	THR	A	573	13.314	-24.250	46.751	1.00	12.69	O
ATOM	3235	CB	THR	A	573	11.018	-25.564	44.927	1.00	14.05	C
ATOM	3236	OG1	THR	A	573	10.664	-26.021	46.237	1.00	14.93	O
ATOM	3237	CG2	THR	A	573	10.465	-26.551	43.902	1.00	11.51	C
ATOM	3238	N	LEU	A	574	12.960	-23.093	44.852	1.00	11.49	N
ATOM	3239	CA	LEU	A	574	13.302	-21.788	45.410	1.00	14.38	C
ATOM	3240	C	LEU	A	574	12.107	-21.247	46.215	1.00	18.28	C
ATOM	3241	O	LEU	A	574	10.965	-21.389	45.779	1.00	17.28	O
ATOM	3242	CB	LEU	A	574	13.622	-20.833	44.260	1.00	15.33	C
ATOM	3243	CG	LEU	A	574	14.504	-19.642	44.613	1.00	19.80	C
ATOM	3244	CD1	LEU	A	574	15.940	-20.128	44.819	1.00	17.86	C
ATOM	3245	CD2	LEU	A	574	14.413	-18.605	43.510	1.00	19.93	C
ATOM	3246	N	ASN	A	575	12.352	-20.623	47.366	1.00	15.81	N
ATOM	3247	CA	ASN	A	575	11.241	-20.105	48.160	1.00	17.32	C
ATOM	3248	C	ASN	A	575	10.529	-18.927	47.499	1.00	22.21	C

ATOM	3249	O	ASN	A	575	9.300	-18.925	47.386	1.00	21.26	O
ATOM	3250	CB	ASN	A	575	11.689	-19.724	49.576	1.00	18.34	C
ATOM	3251	CG	ASN	A	575	12.953	-18.887	49.601	1.00	18.42	C
ATOM	3252	OD1	ASN	A	575	13.443	-18.438	48.564	1.00	17.61	O
ATOM	3253	ND2	ASN	A	575	13.483	-18.670	50.800	1.00	14.00	N
ATOM	3254	N	TYR	A	576	11.278	-17.920	47.066	1.00	21.06	N
ATOM	3255	CA	TYR	A	576	10.651	-16.790	46.391	1.00	21.12	C
ATOM	3256	C	TYR	A	576	11.554	-16.215	45.316	1.00	24.17	C
ATOM	3257	O	TYR	A	576	12.781	-16.354	45.378	1.00	25.81	O
ATOM	3258	CB	TYR	A	576	10.259	-15.703	47.393	1.00	20.31	C
ATOM	3259	CG	TYR	A	576	11.391	-14.795	47.814	1.00	23.59	C
ATOM	3260	CD1	TYR	A	576	12.354	-15.232	48.729	1.00	19.70	C
ATOM	3261	CD2	TYR	A	576	11.498	-13.496	47.310	1.00	21.96	C
ATOM	3262	CE1	TYR	A	576	13.395	-14.400	49.133	1.00	20.34	C
ATOM	3263	CE2	TYR	A	576	12.542	-12.651	47.710	1.00	22.11	C
ATOM	3264	CZ	TYR	A	576	13.486	-13.112	48.622	1.00	22.03	C
ATOM	3265	OH	TYR	A	576	14.513	-12.289	49.036	1.00	23.12	O
ATOM	3266	N	GLU	A	577	10.941	-15.588	44.316	1.00	24.18	N
ATOM	3267	CA	GLU	A	577	11.688	-14.990	43.221	1.00	20.88	C
ATOM	3268	C	GLU	A	577	11.705	-13.470	43.260	1.00	24.52	C
ATOM	3269	O	GLU	A	577	10.658	-12.823	43.145	1.00	20.99	O
ATOM	3270	CB	GLU	A	577	11.126	-15.440	41.877	1.00	20.06	C
ATOM	3271	CG	GLU	A	577	12.202	-15.676	40.841	1.00	23.05	C
ATOM	3272	CD	GLU	A	577	11.799	-15.234	39.461	1.00	23.44	C
ATOM	3273	OE1	GLU	A	577	11.447	-14.055	39.285	1.00	29.43	O
ATOM	3274	OE2	GLU	A	577	11.841	-16.071	38.544	1.00	29.27	O
ATOM	3275	N	HIS	A	578	12.901	-12.912	43.451	1.00	24.39	N
ATOM	3276	CA	HIS	A	578	13.108	-11.471	43.459	1.00	22.40	C
ATOM	3277	C	HIS	A	578	14.089	-11.244	42.335	1.00	25.19	C
ATOM	3278	O	HIS	A	578	15.279	-11.494	42.497	1.00	26.89	O
ATOM	3279	CB	HIS	A	578	13.742	-10.982	44.758	1.00	20.38	C
ATOM	3280	CG	HIS	A	578	14.297	-9.593	44.658	1.00	24.34	C
ATOM	3281	ND1	HIS	A	578	15.257	-9.104	45.519	1.00	24.91	N
ATOM	3282	CD2	HIS	A	578	14.032	-8.590	43.785	1.00	23.77	C
ATOM	3283	CE1	HIS	A	578	15.558	-7.863	45.180	1.00	25.40	C
ATOM	3284	NE2	HIS	A	578	14.830	-7.527	44.131	1.00	24.97	N
ATOM	3285	N	MET	A	579	13.588	-10.776	41.198	1.00	26.42	N
ATOM	3286	CA	MET	A	579	14.416	-10.537	40.032	1.00	25.66	C
ATOM	3287	C	MET	A	579	13.950	-9.269	39.331	1.00	28.32	C
ATOM	3288	O	MET	A	579	12.767	-8.943	39.339	1.00	31.02	O
ATOM	3289	CB	MET	A	579	14.320	-11.743	39.088	1.00	25.76	C
ATOM	3290	CG	MET	A	579	14.971	-11.563	37.727	1.00	31.65	C
ATOM	3291	SD	MET	A	579	14.735	-12.989	36.633	1.00	32.24	S
ATOM	3292	CE	MET	A	579	15.314	-14.290	37.692	1.00	35.17	C
ATOM	3293	N	ASN	A	580	14.892	-8.547	38.738	1.00	28.20	N
ATOM	3294	CA	ASN	A	580	14.588	-7.322	38.019	1.00	26.12	C
ATOM	3295	C	ASN	A	580	13.910	-6.272	38.885	1.00	26.65	C
ATOM	3296	O	ASN	A	580	13.121	-5.459	38.401	1.00	27.49	O
ATOM	3297	CB	ASN	A	580	13.728	-7.643	36.801	1.00	28.03	C
ATOM	3298	CG	ASN	A	580	14.515	-8.342	35.715	1.00	36.31	C

ATOM	3299	OD1	ASN	A	580	15.695	-8.650	35.891	1.00	45.13	O
ATOM	3300	ND2	ASN	A	580	13.873	-8.596	34.586	1.00	38.44	N
ATOM	3301	N	LYS	A	581	14.233	-6.293	40.170	1.00	25.38	N
ATOM	3302	CA	LYS	A	581	13.685	-5.338	41.118	1.00	30.90	C
ATOM	3303	C	LYS	A	581	12.216	-5.576	41.484	1.00	25.95	C
ATOM	3304	O	LYS	A	581	11.583	-4.722	42.107	1.00	25.47	O
ATOM	3305	CB	LYS	A	581	13.867	-3.919	40.572	1.00	36.08	C
ATOM	3306	CG	LYS	A	581	15.316	-3.454	40.532	1.00	42.17	C
ATOM	3307	CD	LYS	A	581	15.903	-3.609	39.143	1.00	48.76	C
ATOM	3308	CE	LYS	A	581	15.931	-2.280	38.392	1.00	54.74	C
ATOM	3309	NZ	LYS	A	581	16.977	-2.253	37.322	1.00	57.71	N
ATOM	3310	N	GLU	A	582	11.683	-6.732	41.104	1.00	23.54	N
ATOM	3311	CA	GLU	A	582	10.294	-7.075	41.412	1.00	21.01	C
ATOM	3312	C	GLU	A	582	10.229	-8.069	42.559	1.00	19.35	C
ATOM	3313	O	GLU	A	582	11.058	-8.964	42.658	1.00	15.42	O
ATOM	3314	CB	GLU	A	582	9.612	-7.692	40.196	1.00	17.76	C
ATOM	3315	CG	GLU	A	582	9.802	-6.926	38.920	1.00	16.55	C
ATOM	3316	CD	GLU	A	582	8.833	-7.361	37.855	1.00	22.35	C
ATOM	3317	OE1	GLU	A	582	9.177	-8.284	37.085	1.00	23.46	O
ATOM	3318	OE2	GLU	A	582	7.724	-6.782	37.789	1.00	26.02	O
ATOM	3319	N	ASN	A	583	9.221	-7.915	43.409	1.00	20.78	N
ATOM	3320	CA	ASN	A	583	9.003	-8.780	44.568	1.00	19.49	C
ATOM	3321	C	ASN	A	583	10.158	-8.733	45.556	1.00	20.70	C
ATOM	3322	O	ASN	A	583	10.687	-9.766	45.965	1.00	21.11	O
ATOM	3323	CB	ASN	A	583	8.736	-10.237	44.139	1.00	17.90	C
ATOM	3324	CG	ASN	A	583	8.045	-11.054	45.236	1.00	15.55	C
ATOM	3325	OD1	ASN	A	583	7.484	-10.488	46.172	1.00	17.87	O
ATOM	3326	ND2	ASN	A	583	8.091	-12.385	45.128	1.00	13.15	N
ATOM	3327	N	LYS	A	584	10.518	-7.519	45.958	1.00	19.22	N
ATOM	3328	CA	LYS	A	584	11.601	-7.294	46.902	1.00	19.21	C
ATOM	3329	C	LYS	A	584	11.355	-7.834	48.301	1.00	20.29	C
ATOM	3330	O	LYS	A	584	12.302	-8.050	49.043	1.00	20.70	O
ATOM	3331	CB	LYS	A	584	11.898	-5.799	47.006	1.00	19.67	C
ATOM	3332	CG	LYS	A	584	12.179	-5.131	45.676	1.00	22.73	C
ATOM	3333	CD	LYS	A	584	12.289	-3.644	45.847	1.00	25.08	C
ATOM	3334	CE	LYS	A	584	13.190	-3.051	44.801	1.00	32.67	C
ATOM	3335	NZ	LYS	A	584	13.181	-1.561	44.883	1.00	42.63	N
ATOM	3336	N	ARG	A	585	10.100	-8.049	48.682	1.00	17.53	N
ATOM	3337	CA	ARG	A	585	9.842	-8.547	50.027	1.00	15.92	C
ATOM	3338	C	ARG	A	585	9.029	-9.839	50.136	1.00	18.87	C
ATOM	3339	O	ARG	A	585	8.311	-10.053	51.120	1.00	18.34	O
ATOM	3340	CB	ARG	A	585	9.178	-7.460	50.864	1.00	18.21	C
ATOM	3341	CG	ARG	A	585	9.520	-6.056	50.424	1.00	18.20	C
ATOM	3342	CD	ARG	A	585	9.389	-5.085	51.574	1.00	17.84	C
ATOM	3343	NE	ARG	A	585	10.240	-3.924	51.370	1.00	22.81	N
ATOM	3344	CZ	ARG	A	585	10.008	-2.729	51.892	1.00	29.51	C
ATOM	3345	NH1	ARG	A	585	8.945	-2.533	52.656	1.00	30.89	N
ATOM	3346	NH2	ARG	A	585	10.837	-1.724	51.643	1.00	36.26	N
ATOM	3347	N	GLY	A	586	9.165	-10.714	49.146	1.00	17.02	N
ATOM	3348	CA	GLY	A	586	8.436	-11.968	49.185	1.00	18.63	C

ATOM	3349	C	GLY	A	586	9.162	-13.007	50.009	1.00	18.46	C
ATOM	3350	O	GLY	A	586	8.850	-14.198	49.931	1.00	18.12	O
ATOM	3351	N	TRP	A	587	10.118	-12.546	50.815	1.00	18.03	N
ATOM	3352	CA	TRP	A	587	10.943	-13.420	51.654	1.00	15.84	C
ATOM	3353	C	TRP	A	587	10.296	-14.676	52.202	1.00	19.57	C
ATOM	3354	O	TRP	A	587	10.815	-15.776	52.030	1.00	18.33	O
ATOM	3355	CB	TRP	A	587	11.495	-12.659	52.855	1.00	14.21	C
ATOM	3356	CG	TRP	A	587	12.090	-11.343	52.535	1.00	17.68	C
ATOM	3357	CD1	TRP	A	587	13.091	-11.084	51.651	1.00	16.19	C
ATOM	3358	CD2	TRP	A	587	11.725	-10.090	53.113	1.00	18.21	C
ATOM	3359	NE1	TRP	A	587	13.378	-9.741	51.640	1.00	19.25	N
ATOM	3360	CE2	TRP	A	587	12.552	-9.107	52.530	1.00	15.88	C
ATOM	3361	CE3	TRP	A	587	10.779	-9.701	54.070	1.00	16.80	C
ATOM	3362	CZ2	TRP	A	587	12.462	-7.760	52.868	1.00	18.62	C
ATOM	3363	CZ3	TRP	A	587	10.687	-8.361	54.407	1.00	18.04	C
ATOM	3364	CH2	TRP	A	587	11.526	-7.407	53.807	1.00	21.38	C
ATOM	3365	N	TYR	A	588	9.156	-14.508	52.864	1.00	22.40	N
ATOM	3366	CA	TYR	A	588	8.479	-15.624	53.511	1.00	19.10	C
ATOM	3367	C	TYR	A	588	7.216	-16.202	52.864	1.00	18.49	C
ATOM	3368	O	TYR	A	588	6.536	-17.035	53.458	1.00	20.41	O
ATOM	3369	CB	TYR	A	588	8.179	-15.204	54.949	1.00	22.75	C
ATOM	3370	CG	TYR	A	588	9.367	-14.589	55.668	1.00	22.00	C
ATOM	3371	CD1	TYR	A	588	10.612	-15.234	55.676	1.00	27.21	C
ATOM	3372	CD2	TYR	A	588	9.235	-13.406	56.400	1.00	18.33	C
ATOM	3373	CE1	TYR	A	588	11.690	-14.722	56.403	1.00	24.10	C
ATOM	3374	CE2	TYR	A	588	10.307	-12.884	57.131	1.00	22.88	C
ATOM	3375	CZ	TYR	A	588	11.528	-13.552	57.130	1.00	27.26	C
ATOM	3376	OH	TYR	A	588	12.577	-13.076	57.878	1.00	28.43	O
ATOM	3377	N	THR	A	589	6.919	-15.787	51.645	1.00	18.72	N
ATOM	3378	CA	THR	A	589	5.727	-16.258	50.958	1.00	17.71	C
ATOM	3379	C	THR	A	589	5.690	-17.747	50.636	1.00	18.84	C
ATOM	3380	O	THR	A	589	4.737	-18.223	50.019	1.00	18.69	O
ATOM	3381	CB	THR	A	589	5.500	-15.466	49.663	1.00	16.09	C
ATOM	3382	OG1	THR	A	589	6.584	-15.695	48.757	1.00	21.34	O
ATOM	3383	CG2	THR	A	589	5.409	-13.980	49.968	1.00	14.41	C
ATOM	3384	N	SER	A	590	6.708	-18.494	51.052	1.00	14.84	N
ATOM	3385	CA	SER	A	590	6.723	-19.931	50.781	1.00	11.45	C
ATOM	3386	C	SER	A	590	7.153	-20.694	52.016	1.00	10.48	C
ATOM	3387	O	SER	A	590	7.352	-21.906	51.974	1.00	15.15	O
ATOM	3388	CB	SER	A	590	7.678	-20.262	49.632	1.00	15.98	C
ATOM	3389	OG	SER	A	590	7.072	-20.086	48.364	1.00	16.66	O
ATOM	3390	N	ASP	A	591	7.295	-19.982	53.122	1.00	11.63	N
ATOM	3391	CA	ASP	A	591	7.719	-20.606	54.362	1.00	11.23	C
ATOM	3392	C	ASP	A	591	6.554	-21.248	55.086	1.00	15.46	C
ATOM	3393	O	ASP	A	591	6.402	-21.102	56.303	1.00	14.78	O
ATOM	3394	CB	ASP	A	591	8.373	-19.574	55.260	1.00	12.27	C
ATOM	3395	CG	ASP	A	591	9.764	-19.201	54.790	1.00	14.47	C
ATOM	3396	OD1	ASP	A	591	10.164	-19.636	53.688	1.00	10.47	O
ATOM	3397	OD2	ASP	A	591	10.448	-18.467	55.524	1.00	19.51	O
ATOM	3398	N	GLY	A	592	5.747	-21.990	54.341	1.00	18.06	N

ATOM	3399	CA	GLY	A	592	4.594	-22.611	54.955	1.00	17.39	C
ATOM	3400	C	GLY	A	592	3.504	-21.562	55.024	1.00	15.47	C
ATOM	3401	O	GLY	A	592	2.767	-21.482	56.003	1.00	18.47	O
ATOM	3402	N	MET	A	593	3.421	-20.741	53.983	1.00	14.99	N
ATOM	3403	CA	MET	A	593	2.399	-19.705	53.911	1.00	15.88	C
ATOM	3404	C	MET	A	593	1.108	-20.348	53.394	1.00	16.44	C
ATOM	3405	O	MET	A	593	1.145	-21.182	52.480	1.00	17.10	O
ATOM	3406	CB	MET	A	593	2.815	-18.595	52.946	1.00	12.17	C
ATOM	3407	CG	MET	A	593	1.856	-17.422	52.949	1.00	15.68	C
ATOM	3408	SD	MET	A	593	2.144	-16.179	51.699	1.00	18.88	S
ATOM	3409	CE	MET	A	593	0.488	-15.360	51.655	1.00	22.14	C
ATOM	3410	N	PHE	A	594	-0.023	-19.973	53.986	1.00	14.31	N
ATOM	3411	CA	PHE	A	594	-1.311	-20.512	53.548	1.00	15.28	C
ATOM	3412	C	PHE	A	594	-2.195	-19.398	52.994	1.00	16.91	C
ATOM	3413	O	PHE	A	594	-2.087	-18.229	53.385	1.00	14.86	O
ATOM	3414	CB	PHE	A	594	-2.029	-21.233	54.698	1.00	13.08	C
ATOM	3415	CG	PHE	A	594	-2.863	-20.324	55.567	1.00	16.70	C
ATOM	3416	CD1	PHE	A	594	-2.302	-19.688	56.669	1.00	15.95	C
ATOM	3417	CD2	PHE	A	594	-4.207	-20.087	55.269	1.00	14.60	C
ATOM	3418	CE1	PHE	A	594	-3.060	-18.820	57.468	1.00	19.60	C
ATOM	3419	CE2	PHE	A	594	-4.972	-19.222	56.057	1.00	14.15	C
ATOM	3420	CZ	PHE	A	594	-4.398	-18.588	57.157	1.00	18.73	C
ATOM	3421	N	TYR	A	595	-3.063	-19.779	52.069	1.00	15.95	N
ATOM	3422	CA	TYR	A	595	-3.987	-18.855	51.444	1.00	17.48	C
ATOM	3423	C	TYR	A	595	-5.415	-19.362	51.673	1.00	15.85	C
ATOM	3424	O	TYR	A	595	-5.674	-20.564	51.554	1.00	13.03	O
ATOM	3425	CB	TYR	A	595	-3.725	-18.806	49.943	1.00	17.10	C
ATOM	3426	CG	TYR	A	595	-2.492	-18.036	49.532	1.00	18.25	C
ATOM	3427	CD1	TYR	A	595	-1.238	-18.650	49.477	1.00	18.49	C
ATOM	3428	CD2	TYR	A	595	-2.594	-16.709	49.125	1.00	18.57	C
ATOM	3429	CE1	TYR	A	595	-0.108	-17.948	49.011	1.00	17.62	C
ATOM	3430	CE2	TYR	A	595	-1.488	-16.006	48.662	1.00	18.97	C
ATOM	3431	CZ	TYR	A	595	-0.254	-16.630	48.603	1.00	17.22	C
ATOM	3432	OH	TYR	A	595	0.798	-15.924	48.093	1.00	13.58	O
ATOM	3433	N	LEU	A	596	-6.327	-18.454	52.017	1.00	14.45	N
ATOM	3434	CA	LEU	A	596	-7.734	-18.822	52.196	1.00	15.23	C
ATOM	3435	C	LEU	A	596	-8.567	-17.984	51.236	1.00	14.23	C
ATOM	3436	O	LEU	A	596	-8.554	-16.752	51.303	1.00	15.84	O
ATOM	3437	CB	LEU	A	596	-8.218	-18.574	53.633	1.00	12.95	C
ATOM	3438	CG	LEU	A	596	-9.741	-18.750	53.839	1.00	12.43	C
ATOM	3439	CD1	LEU	A	596	-10.101	-20.208	53.666	1.00	8.33	C
ATOM	3440	CD2	LEU	A	596	-10.166	-18.276	55.219	1.00	10.19	C
ATOM	3441	N	TYR	A	597	-9.264	-18.658	50.326	1.00	16.88	N
ATOM	3442	CA	TYR	A	597	-10.125	-17.989	49.359	1.00	17.47	C
ATOM	3443	C	TYR	A	597	-11.571	-18.171	49.810	1.00	18.82	C
ATOM	3444	O	TYR	A	597	-12.094	-19.285	49.801	1.00	15.24	O
ATOM	3445	CB	TYR	A	597	-9.923	-18.587	47.970	1.00	16.85	C
ATOM	3446	CG	TYR	A	597	-8.541	-18.313	47.456	1.00	18.51	C
ATOM	3447	CD1	TYR	A	597	-8.236	-17.101	46.843	1.00	15.47	C
ATOM	3448	CD2	TYR	A	597	-7.521	-19.239	47.637	1.00	18.35	C

ATOM	3449	CE1	TYR	A	597	-6.944	-16.815	46.424	1.00	20.31	C
ATOM	3450	CE2	TYR	A	597	-6.226	-18.965	47.222	1.00	23.13	C
ATOM	3451	CZ	TYR	A	597	-5.943	-17.753	46.617	1.00	21.95	C
ATOM	3452	OH	TYR	A	597	-4.661	-17.487	46.205	1.00	22.20	O
ATOM	3453	N	ASN	A	598	-12.204	-17.079	50.222	1.00	17.53	N
ATOM	3454	CA	ASN	A	598	-13.579	-17.153	50.694	1.00	17.03	C
ATOM	3455	C	ASN	A	598	-14.509	-16.123	50.032	1.00	20.14	C
ATOM	3456	O	ASN	A	598	-14.252	-15.666	48.913	1.00	18.93	O
ATOM	3457	CB	ASN	A	598	-13.593	-17.005	52.221	1.00	11.88	C
ATOM	3458	CG	ASN	A	598	-13.112	-15.647	52.682	1.00	5.65	C
ATOM	3459	OD1	ASN	A	598	-12.838	-14.765	51.872	1.00	13.36	O
ATOM	3460	ND2	ASN	A	598	-13.010	-15.470	53.990	1.00	7.66	N
ATOM	3461	N	GLY	A	599	-15.590	-15.772	50.727	1.00	19.32	N
ATOM	3462	CA	GLY	A	599	-16.549	-14.823	50.192	1.00	17.77	C
ATOM	3463	C	GLY	A	599	-15.935	-13.546	49.664	1.00	19.67	C
ATOM	3464	O	GLY	A	599	-16.475	-12.930	48.743	1.00	19.30	O
ATOM	3465	N	ASP	A	600	-14.807	-13.142	50.247	1.00	22.09	N
ATOM	3466	CA	ASP	A	600	-14.117	-11.925	49.825	1.00	18.71	C
ATOM	3467	C	ASP	A	600	-13.198	-12.201	48.640	1.00	20.68	C
ATOM	3468	O	ASP	A	600	-12.025	-12.513	48.817	1.00	22.51	O
ATOM	3469	CB	ASP	A	600	-13.299	-11.363	50.982	1.00	18.22	C
ATOM	3470	CG	ASP	A	600	-12.706	-10.006	50.664	1.00	19.77	C
ATOM	3471	OD1	ASP	A	600	-12.999	-9.479	49.566	1.00	19.40	O
ATOM	3472	OD2	ASP	A	600	-11.953	-9.467	51.511	1.00	18.83	O
ATOM	3473	N	LEU	A	601	-13.731	-12.077	47.433	1.00	18.15	N
ATOM	3474	CA	LEU	A	601	-12.960	-12.327	46.228	1.00	14.76	C
ATOM	3475	C	LEU	A	601	-11.839	-11.304	46.008	1.00	20.13	C
ATOM	3476	O	LEU	A	601	-10.944	-11.526	45.193	1.00	17.19	O
ATOM	3477	CB	LEU	A	601	-13.885	-12.327	45.011	1.00	11.72	C
ATOM	3478	CG	LEU	A	601	-14.620	-13.628	44.675	1.00	12.86	C
ATOM	3479	CD1	LEU	A	601	-15.455	-14.078	45.856	1.00	15.69	C
ATOM	3480	CD2	LEU	A	601	-15.497	-13.411	43.473	1.00	13.75	C
ATOM	3481	N	SER	A	602	-11.883	-10.192	46.734	1.00	18.88	N
ATOM	3482	CA	SER	A	602	-10.884	-9.131	46.587	1.00	17.54	C
ATOM	3483	C	SER	A	602	-9.796	-9.148	47.657	1.00	17.19	C
ATOM	3484	O	SER	A	602	-8.969	-8.226	47.726	1.00	15.47	O
ATOM	3485	CB	SER	A	602	-11.569	-7.772	46.656	1.00	18.90	C
ATOM	3486	OG	SER	A	602	-11.713	-7.371	48.012	1.00	16.63	O
ATOM	3487	N	HIS	A	603	-9.797	-10.179	48.493	1.00	17.05	N
ATOM	3488	CA	HIS	A	603	-8.831	-10.248	49.574	1.00	18.25	C
ATOM	3489	C	HIS	A	603	-7.393	-10.023	49.158	1.00	18.16	C
ATOM	3490	O	HIS	A	603	-6.723	-9.151	49.695	1.00	20.48	O
ATOM	3491	CB	HIS	A	603	-8.902	-11.577	50.320	1.00	14.00	C
ATOM	3492	CG	HIS	A	603	-7.977	-11.635	51.496	1.00	13.32	C
ATOM	3493	ND1	HIS	A	603	-6.706	-12.165	51.419	1.00	15.87	N
ATOM	3494	CD2	HIS	A	603	-8.112	-11.168	52.760	1.00	15.31	C
ATOM	3495	CE1	HIS	A	603	-6.101	-12.024	52.585	1.00	14.82	C
ATOM	3496	NE2	HIS	A	603	-6.932	-11.421	53.417	1.00	18.55	N
ATOM	3497	N	TYR	A	604	-6.919	-10.808	48.205	1.00	16.49	N
ATOM	3498	CA	TYR	A	604	-5.537	-10.677	47.785	1.00	18.48	C

ATOM	3499	C	TYR	A	604	-5.364	-9.634	46.701	1.00	20.07	C
ATOM	3500	O	TYR	A	604	-4.348	-9.605	46.007	1.00	22.13	O
ATOM	3501	CB	TYR	A	604	-5.003	-12.044	47.343	1.00	13.80	C
ATOM	3502	CG	TYR	A	604	-5.060	-13.061	48.463	1.00	10.96	C
ATOM	3503	CD1	TYR	A	604	-4.126	-13.040	49.497	1.00	11.35	C
ATOM	3504	CD2	TYR	A	604	-6.077	-14.020	48.513	1.00	9.59	C
ATOM	3505	CE1	TYR	A	604	-4.204	-13.946	50.555	1.00	9.70	C
ATOM	3506	CE2	TYR	A	604	-6.163	-14.925	49.563	1.00	7.41	C
ATOM	3507	CZ	TYR	A	604	-5.229	-14.883	50.579	1.00	13.44	C
ATOM	3508	OH	TYR	A	604	-5.324	-15.771	51.628	1.00	15.63	O
ATOM	3509	N	SER	A	605	-6.361	-8.764	46.570	1.00	20.71	N
ATOM	3510	CA	SER	A	605	-6.316	-7.697	45.578	1.00	16.31	C
ATOM	3511	C	SER	A	605	-6.503	-6.362	46.290	1.00	14.54	C
ATOM	3512	O	SER	A	605	-6.422	-6.301	47.520	1.00	17.46	O
ATOM	3513	CB	SER	A	605	-7.413	-7.901	44.534	1.00	20.59	C
ATOM	3514	OG	SER	A	605	-7.297	-9.174	43.922	1.00	19.32	O
ATOM	3515	N	ASP	A	606	-6.751	-5.298	45.529	1.00	14.97	N
ATOM	3516	CA	ASP	A	606	-6.938	-3.966	46.115	1.00	19.04	C
ATOM	3517	C	ASP	A	606	-5.717	-3.536	46.920	1.00	20.72	C
ATOM	3518	O	ASP	A	606	-5.861	-2.893	47.962	1.00	20.78	O
ATOM	3519	CB	ASP	A	606	-8.144	-3.931	47.067	1.00	29.09	C
ATOM	3520	CG	ASP	A	606	-9.478	-4.105	46.357	1.00	32.39	C
ATOM	3521	OD1	ASP	A	606	-9.598	-3.747	45.162	1.00	28.89	O
ATOM	3522	OD2	ASP	A	606	-10.413	-4.608	47.020	1.00	39.11	O
ATOM	3523	N	GLY	A	607	-4.524	-3.908	46.464	1.00	22.30	N
ATOM	3524	CA	GLY	A	607	-3.318	-3.508	47.174	1.00	20.32	C
ATOM	3525	C	GLY	A	607	-2.951	-4.348	48.380	1.00	19.50	C
ATOM	3526	O	GLY	A	607	-2.358	-3.849	49.343	1.00	21.37	O
ATOM	3527	N	TYR	A	608	-3.304	-5.627	48.346	1.00	16.42	N
ATOM	3528	CA	TYR	A	608	-2.958	-6.515	49.448	1.00	16.72	C
ATOM	3529	C	TYR	A	608	-1.429	-6.610	49.574	1.00	19.96	C
ATOM	3530	O	TYR	A	608	-0.858	-6.422	50.652	1.00	19.58	O
ATOM	3531	CB	TYR	A	608	-3.513	-7.912	49.180	1.00	12.48	C
ATOM	3532	CG	TYR	A	608	-2.920	-8.999	50.052	1.00	13.57	C
ATOM	3533	CD1	TYR	A	608	-3.387	-9.216	51.347	1.00	12.23	C
ATOM	3534	CD2	TYR	A	608	-1.896	-9.820	49.578	1.00	13.62	C
ATOM	3535	CE1	TYR	A	608	-2.850	-10.228	52.156	1.00	11.08	C
ATOM	3536	CE2	TYR	A	608	-1.353	-10.831	50.377	1.00	12.50	C
ATOM	3537	CZ	TYR	A	608	-1.833	-11.028	51.658	1.00	12.65	C
ATOM	3538	OH	TYR	A	608	-1.294	-12.019	52.441	1.00	11.20	O
ATOM	3539	N	TRP	A	609	-0.780	-6.896	48.449	1.00	20.74	N
ATOM	3540	CA	TRP	A	609	0.664	-7.076	48.411	1.00	22.75	C
ATOM	3541	C	TRP	A	609	1.516	-5.901	48.897	1.00	24.08	C
ATOM	3542	O	TRP	A	609	2.410	-6.096	49.720	1.00	29.48	O
ATOM	3543	CB	TRP	A	609	1.072	-7.558	47.014	1.00	16.97	C
ATOM	3544	CG	TRP	A	609	0.733	-9.043	46.847	1.00	21.13	C
ATOM	3545	CD1	TRP	A	609	-0.190	-9.593	45.990	1.00	19.25	C
ATOM	3546	CD2	TRP	A	609	1.259	-10.141	47.620	1.00	19.14	C
ATOM	3547	NE1	TRP	A	609	-0.270	-10.956	46.189	1.00	17.09	N
ATOM	3548	CE2	TRP	A	609	0.606	-11.317	47.180	1.00	19.52	C

ATOM	3549	CE3	TRP	A	609	2.217	-10.241	48.642	1.00	16.58	C
ATOM	3550	CZ2	TRP	A	609	0.882	-12.579	47.728	1.00	18.61	C
ATOM	3551	CZ3	TRP	A	609	2.488	-11.496	49.186	1.00	19.55	C
ATOM	3552	CH2	TRP	A	609	1.821	-12.648	48.726	1.00	17.83	C
ATOM	3553	N	PRO	A	610	1.291	-4.681	48.385	1.00	21.01	N
ATOM	3554	CA	PRO	A	610	2.128	-3.597	48.905	1.00	20.42	C
ATOM	3555	C	PRO	A	610	1.750	-3.124	50.309	1.00	22.64	C
ATOM	3556	O	PRO	A	610	2.417	-2.244	50.858	1.00	24.85	O
ATOM	3557	CB	PRO	A	610	1.957	-2.482	47.880	1.00	22.44	C
ATOM	3558	CG	PRO	A	610	0.620	-2.726	47.294	1.00	22.93	C
ATOM	3559	CD	PRO	A	610	0.409	-4.221	47.299	1.00	20.00	C
ATOM	3560	N	THR	A	611	0.695	-3.687	50.904	1.00	17.89	N
ATOM	3561	CA	THR	A	611	0.291	-3.244	52.245	1.00	15.25	C
ATOM	3562	C	THR	A	611	0.421	-4.315	53.309	1.00	14.42	C
ATOM	3563	O	THR	A	611	0.454	-4.027	54.513	1.00	14.17	O
ATOM	3564	CB	THR	A	611	-1.165	-2.703	52.263	1.00	18.68	C
ATOM	3565	OG1	THR	A	611	-2.065	-3.691	51.746	1.00	18.52	O
ATOM	3566	CG2	THR	A	611	-1.266	-1.451	51.417	1.00	16.51	C
ATOM	3567	N	VAL	A	612	0.491	-5.560	52.867	1.00	15.34	N
ATOM	3568	CA	VAL	A	612	0.638	-6.667	53.795	1.00	16.58	C
ATOM	3569	C	VAL	A	612	2.026	-6.558	54.464	1.00	19.77	C
ATOM	3570	O	VAL	A	612	3.005	-6.212	53.800	1.00	21.95	O
ATOM	3571	CB	VAL	A	612	0.491	-8.007	53.024	1.00	13.17	C
ATOM	3572	CG1	VAL	A	612	1.620	-8.162	52.033	1.00	16.36	C
ATOM	3573	CG2	VAL	A	612	0.442	-9.173	53.986	1.00	14.35	C
ATOM	3574	N	ASN	A	613	2.104	-6.818	55.771	1.00	18.79	N
ATOM	3575	CA	ASN	A	613	3.381	-6.771	56.494	1.00	21.02	C
ATOM	3576	C	ASN	A	613	4.182	-7.993	56.038	1.00	20.32	C
ATOM	3577	O	ASN	A	613	3.880	-9.119	56.424	1.00	19.24	O
ATOM	3578	CB	ASN	A	613	3.141	-6.832	58.003	1.00	19.19	C
ATOM	3579	CG	ASN	A	613	4.429	-6.800	58.796	1.00	20.63	C
ATOM	3580	OD1	ASN	A	613	5.509	-6.936	58.234	1.00	22.51	O
ATOM	3581	ND2	ASN	A	613	4.320	-6.626	60.105	1.00	19.89	N
ATOM	3582	N	PRO	A	614	5.244	-7.779	55.241	1.00	22.02	N
ATOM	3583	CA	PRO	A	614	6.056	-8.896	54.735	1.00	19.06	C
ATOM	3584	C	PRO	A	614	6.750	-9.769	55.773	1.00	15.35	C
ATOM	3585	O	PRO	A	614	7.210	-10.871	55.456	1.00	17.62	O
ATOM	3586	CB	PRO	A	614	7.035	-8.225	53.766	1.00	19.44	C
ATOM	3587	CG	PRO	A	614	7.117	-6.817	54.227	1.00	19.49	C
ATOM	3588	CD	PRO	A	614	5.777	-6.471	54.823	1.00	21.70	C
ATOM	3589	N	TYR	A	615	6.798	-9.288	57.009	1.00	15.35	N
ATOM	3590	CA	TYR	A	615	7.427	-10.022	58.100	1.00	19.56	C
ATOM	3591	C	TYR	A	615	6.494	-11.032	58.760	1.00	21.87	C
ATOM	3592	O	TYR	A	615	6.945	-11.928	59.480	1.00	21.39	O
ATOM	3593	CB	TYR	A	615	7.939	-9.041	59.169	1.00	21.14	C
ATOM	3594	CG	TYR	A	615	9.178	-8.299	58.739	1.00	19.67	C
ATOM	3595	CD1	TYR	A	615	10.439	-8.881	58.859	1.00	20.50	C
ATOM	3596	CD2	TYR	A	615	9.085	-7.045	58.146	1.00	20.46	C
ATOM	3597	CE1	TYR	A	615	11.572	-8.236	58.391	1.00	22.20	C
ATOM	3598	CE2	TYR	A	615	10.213	-6.390	57.672	1.00	23.80	C

ATOM	3599	CZ	TYR	A	615	11.453	-6.995	57.794	1.00	24.69	C
ATOM	3600	OH	TYR	A	615	12.564	-6.372	57.281	1.00	24.36	O
ATOM	3601	N	LYS	A	616	5.193	-10.893	58.522	1.00	21.73	N
ATOM	3602	CA	LYS	A	616	4.233	-11.799	59.140	1.00	20.89	C
ATOM	3603	C	LYS	A	616	3.303	-12.486	58.154	1.00	20.22	C
ATOM	3604	O	LYS	A	616	2.093	-12.452	58.322	1.00	21.82	O
ATOM	3605	CB	LYS	A	616	3.395	-11.046	60.179	1.00	17.61	C
ATOM	3606	CG	LYS	A	616	4.096	-9.866	60.826	1.00	17.22	C
ATOM	3607	CD	LYS	A	616	3.881	-9.865	62.328	1.00	19.43	C
ATOM	3608	CE	LYS	A	616	4.267	-8.528	62.924	1.00	26.16	C
ATOM	3609	NZ	LYS	A	616	3.674	-8.322	64.272	1.00	31.36	N
ATOM	3610	N	MET	A	617	3.856	-13.101	57.118	1.00	19.87	N
ATOM	3611	CA	MET	A	617	3.014	-13.788	56.161	1.00	18.60	C
ATOM	3612	C	MET	A	617	2.245	-14.844	56.969	1.00	21.87	C
ATOM	3613	O	MET	A	617	2.810	-15.488	57.862	1.00	21.13	O
ATOM	3614	CB	MET	A	617	3.870	-14.418	55.062	1.00	16.19	C
ATOM	3615	CG	MET	A	617	4.523	-13.399	54.124	1.00	18.67	C
ATOM	3616	SD	MET	A	617	3.589	-11.869	53.819	1.00	21.28	S
ATOM	3617	CE	MET	A	617	2.644	-12.321	52.355	1.00	20.53	C
ATOM	3618	N	PRO	A	618	0.942	-15.026	56.674	1.00	18.57	N
ATOM	3619	CA	PRO	A	618	0.084	-15.990	57.375	1.00	15.96	C
ATOM	3620	C	PRO	A	618	0.517	-17.452	57.349	1.00	13.94	C
ATOM	3621	O	PRO	A	618	0.781	-18.019	56.291	1.00	12.10	O
ATOM	3622	CB	PRO	A	618	-1.293	-15.798	56.728	1.00	16.22	C
ATOM	3623	CG	PRO	A	618	-1.223	-14.510	56.005	1.00	19.64	C
ATOM	3624	CD	PRO	A	618	0.209	-14.323	55.607	1.00	20.23	C
ATOM	3625	N	GLY	A	619	0.559	-18.058	58.532	1.00	12.81	N
ATOM	3626	CA	GLY	A	619	0.948	-19.450	58.645	1.00	17.11	C
ATOM	3627	C	GLY	A	619	2.443	-19.681	58.821	1.00	17.66	C
ATOM	3628	O	GLY	A	619	2.860	-20.783	59.193	1.00	17.57	O
ATOM	3629	N	THR	A	620	3.250	-18.652	58.572	1.00	18.67	N
ATOM	3630	CA	THR	A	620	4.705	-18.790	58.680	1.00	12.85	C
ATOM	3631	C	THR	A	620	5.241	-18.603	60.084	1.00	15.54	C
ATOM	3632	O	THR	A	620	4.697	-17.845	60.885	1.00	17.15	O
ATOM	3633	CB	THR	A	620	5.436	-17.808	57.740	1.00	12.83	C
ATOM	3634	OG1	THR	A	620	5.209	-16.460	58.165	1.00	14.62	O
ATOM	3635	CG2	THR	A	620	4.948	-17.965	56.317	1.00	9.97	C
ATOM	3636	N	THR	A	621	6.319	-19.324	60.374	1.00	18.82	N
ATOM	3637	CA	THR	A	621	7.000	-19.269	61.660	1.00	19.15	C
ATOM	3638	C	THR	A	621	8.317	-18.553	61.342	1.00	21.56	C
ATOM	3639	O	THR	A	621	9.061	-18.993	60.463	1.00	21.93	O
ATOM	3640	CB	THR	A	621	7.268	-20.697	62.182	1.00	20.31	C
ATOM	3641	OG1	THR	A	621	6.015	-21.353	62.412	1.00	21.20	O
ATOM	3642	CG2	THR	A	621	8.049	-20.667	63.479	1.00	15.46	C
ATOM	3643	N	GLU	A	622	8.586	-17.439	62.024	1.00	18.53	N
ATOM	3644	CA	GLU	A	622	9.795	-16.660	61.761	1.00	20.04	C
ATOM	3645	C	GLU	A	622	10.268	-15.843	62.946	1.00	20.78	C
ATOM	3646	O	GLU	A	622	9.528	-15.633	63.908	1.00	22.65	O
ATOM	3647	CB	GLU	A	622	9.562	-15.684	60.601	1.00	14.62	C
ATOM	3648	CG	GLU	A	622	8.760	-16.228	59.438	1.00	17.78	C

ATOM	3649	CD	GLU	A	622	9.603	-17.028	58.469	1.00	18.87	C
ATOM	3650	OE1	GLU	A	622	10.813	-17.209	58.731	1.00	22.95	O
ATOM	3651	OE2	GLU	A	622	9.059	-17.481	57.443	1.00	14.22	O
ATOM	3652	N	THR	A	623	11.517	-15.385	62.875	1.00	20.13	N
ATOM	3653	CA	THR	A	623	12.058	-14.528	63.924	1.00	16.73	C
ATOM	3654	C	THR	A	623	11.821	-13.128	63.367	1.00	15.25	C
ATOM	3655	O	THR	A	623	11.586	-12.966	62.164	1.00	13.26	O
ATOM	3656	CB	THR	A	623	13.587	-14.737	64.151	1.00	18.68	C
ATOM	3657	OG1	THR	A	623	14.306	-14.327	62.982	1.00	20.05	O
ATOM	3658	CG2	THR	A	623	13.892	-16.190	64.465	1.00	13.22	C
ATOM	3659	N	ASP	A	624	11.890	-12.115	64.221	1.00	17.72	N
ATOM	3660	CA	ASP	A	624	11.643	-10.752	63.767	1.00	22.08	C
ATOM	3661	C	ASP	A	624	12.867	-9.984	63.286	1.00	25.02	C
ATOM	3662	O	ASP	A	624	12.889	-8.751	63.321	1.00	26.22	O
ATOM	3663	CB	ASP	A	624	10.959	-9.954	64.871	1.00	26.45	C
ATOM	3664	CG	ASP	A	624	11.858	-9.722	66.049	1.00	30.54	C
ATOM	3665	OD1	ASP	A	624	12.804	-10.515	66.234	1.00	36.63	O
ATOM	3666	OD2	ASP	A	624	11.622	-8.747	66.791	1.00	36.46	O
ATOM	3667	N	ALA	A	625	13.886	-10.702	62.833	1.00	26.06	N
ATOM	3668	CA	ALA	A	625	15.085	-10.045	62.331	1.00	24.66	C
ATOM	3669	C	ALA	A	625	14.751	-9.256	61.069	1.00	24.42	C
ATOM	3670	O	ALA	A	625	13.890	-9.652	60.282	1.00	23.95	O
ATOM	3671	CB	ALA	A	625	16.150	-11.071	62.029	1.00	21.97	C
ATOM	3672	N	LYS	A	626	15.432	-8.134	60.880	1.00	22.39	N
ATOM	3673	CA	LYS	A	626	15.211	-7.304	59.706	1.00	22.39	C
ATOM	3674	C	LYS	A	626	15.703	-8.054	58.477	1.00	23.17	C
ATOM	3675	O	LYS	A	626	16.606	-8.887	58.573	1.00	24.84	O
ATOM	3676	CB	LYS	A	626	15.968	-5.978	59.844	1.00	24.95	C
ATOM	3677	CG	LYS	A	626	16.076	-5.201	58.541	1.00	34.89	C
ATOM	3678	CD	LYS	A	626	16.435	-3.741	58.774	1.00	42.23	C
ATOM	3679	CE	LYS	A	626	16.153	-2.894	57.534	1.00	47.08	C
ATOM	3680	NZ	LYS	A	626	15.862	-3.723	56.320	1.00	44.83	N
ATOM	3681	N	ARG	A	627	15.101	-7.773	57.326	1.00	19.94	N
ATOM	3682	CA	ARG	A	627	15.504	-8.419	56.087	1.00	20.35	C
ATOM	3683	C	ARG	A	627	15.805	-7.332	55.075	1.00	22.79	C
ATOM	3684	O	ARG	A	627	15.272	-6.229	55.173	1.00	24.87	O
ATOM	3685	CB	ARG	A	627	14.397	-9.342	55.573	1.00	19.14	C
ATOM	3686	CG	ARG	A	627	14.131	-10.537	56.484	1.00	18.91	C
ATOM	3687	CD	ARG	A	627	15.320	-11.493	56.523	1.00	17.98	C
ATOM	3688	NE	ARG	A	627	15.783	-11.837	55.182	1.00	15.43	N
ATOM	3689	CZ	ARG	A	627	15.420	-12.934	54.528	1.00	13.77	C
ATOM	3690	NH1	ARG	A	627	14.590	-13.795	55.094	1.00	17.18	N
ATOM	3691	NH2	ARG	A	627	15.873	-13.165	53.303	1.00	15.09	N
ATOM	3692	N	ALA	A	628	16.662	-7.640	54.106	1.00	22.03	N
ATOM	3693	CA	ALA	A	628	17.043	-6.669	53.096	1.00	20.45	C
ATOM	3694	C	ALA	A	628	16.336	-6.913	51.779	1.00	21.86	C
ATOM	3695	O	ALA	A	628	16.269	-8.040	51.297	1.00	25.18	O
ATOM	3696	CB	ALA	A	628	18.553	-6.705	52.891	1.00	23.13	C
ATOM	3697	N	ASP	A	629	15.822	-5.842	51.189	1.00	21.52	N
ATOM	3698	CA	ASP	A	629	15.120	-5.948	49.924	1.00	21.16	C

ATOM	3699	C	ASP	A	629	16.029	-6.561	48.884	1.00	22.60	C
ATOM	3700	O	ASP	A	629	15.560	-7.223	47.954	1.00	20.73	O
ATOM	3701	CB	ASP	A	629	14.675	-4.571	49.430	1.00	18.91	C
ATOM	3702	CG	ASP	A	629	13.659	-3.919	50.342	1.00	19.38	C
ATOM	3703	OD1	ASP	A	629	13.213	-4.562	51.312	1.00	18.38	O
ATOM	3704	OD2	ASP	A	629	13.308	-2.752	50.086	1.00	21.96	O
ATOM	3705	N	SER	A	630	17.332	-6.342	49.033	1.00	21.13	N
ATOM	3706	CA	SER	A	630	18.271	-6.868	48.054	1.00	24.24	C
ATOM	3707	C	SER	A	630	18.457	-8.387	48.109	1.00	22.18	C
ATOM	3708	O	SER	A	630	19.029	-8.971	47.190	1.00	23.73	O
ATOM	3709	CB	SER	A	630	19.628	-6.148	48.165	1.00	23.32	C
ATOM	3710	OG	SER	A	630	20.247	-6.379	49.417	1.00	26.34	O
ATOM	3711	N	ASP	A	631	17.961	-9.035	49.161	1.00	22.98	N
ATOM	3712	CA	ASP	A	631	18.088	-10.489	49.265	1.00	22.20	C
ATOM	3713	C	ASP	A	631	17.417	-11.185	48.081	1.00	23.49	C
ATOM	3714	O	ASP	A	631	16.596	-10.592	47.386	1.00	27.89	O
ATOM	3715	CB	ASP	A	631	17.445	-10.995	50.553	1.00	20.78	C
ATOM	3716	CG	ASP	A	631	18.388	-10.955	51.725	1.00	25.72	C
ATOM	3717	OD1	ASP	A	631	18.177	-11.695	52.705	1.00	25.64	O
ATOM	3718	OD2	ASP	A	631	19.350	-10.172	51.668	1.00	31.01	O
ATOM	3719	N	THR	A	632	17.788	-12.441	47.846	1.00	22.90	N
ATOM	3720	CA	THR	A	632	17.199	-13.236	46.777	1.00	20.84	C
ATOM	3721	C	THR	A	632	16.870	-14.618	47.342	1.00	19.18	C
ATOM	3722	O	THR	A	632	17.289	-14.961	48.452	1.00	18.77	O
ATOM	3723	CB	THR	A	632	18.139	-13.371	45.535	1.00	26.27	C
ATOM	3724	OG1	THR	A	632	19.388	-13.963	45.913	1.00	26.96	O
ATOM	3725	CG2	THR	A	632	18.400	-12.011	44.920	1.00	23.05	C
ATOM	3726	N	GLY	A	633	16.114	-15.399	46.577	1.00	21.09	N
ATOM	3727	CA	GLY	A	633	15.692	-16.714	47.029	1.00	22.45	C
ATOM	3728	C	GLY	A	633	16.743	-17.751	47.359	1.00	22.91	C
ATOM	3729	O	GLY	A	633	17.890	-17.656	46.934	1.00	26.94	O
ATOM	3730	N	LYS	A	634	16.325	-18.754	48.127	1.00	21.11	N
ATOM	3731	CA	LYS	A	634	17.185	-19.860	48.548	1.00	22.16	C
ATOM	3732	C	LYS	A	634	16.368	-21.142	48.493	1.00	22.87	C
ATOM	3733	O	LYS	A	634	15.146	-21.094	48.598	1.00	26.78	O
ATOM	3734	CB	LYS	A	634	17.652	-19.665	49.997	1.00	17.59	C
ATOM	3735	CG	LYS	A	634	18.304	-18.323	50.296	1.00	22.99	C
ATOM	3736	CD	LYS	A	634	19.766	-18.312	49.881	1.00	32.38	C
ATOM	3737	CE	LYS	A	634	20.312	-16.890	49.795	1.00	35.16	C
ATOM	3738	NZ	LYS	A	634	20.196	-16.319	48.422	1.00	31.31	N
ATOM	3739	N	VAL	A	635	17.020	-22.288	48.315	1.00	20.24	N
ATOM	3740	CA	VAL	A	635	16.286	-23.547	48.333	1.00	14.72	C
ATOM	3741	C	VAL	A	635	16.315	-23.942	49.799	1.00	17.08	C
ATOM	3742	O	VAL	A	635	17.028	-23.326	50.593	1.00	20.14	O
ATOM	3743	CB	VAL	A	635	16.953	-24.643	47.499	1.00	12.28	C
ATOM	3744	CG1	VAL	A	635	16.986	-24.229	46.045	1.00	11.36	C
ATOM	3745	CG2	VAL	A	635	18.344	-24.931	48.028	1.00	12.97	C
ATOM	3746	N	LEU	A	636	15.532	-24.941	50.181	1.00	15.90	N
ATOM	3747	CA	LEU	A	636	15.511	-25.347	51.573	1.00	15.95	C
ATOM	3748	C	LEU	A	636	16.522	-26.462	51.806	1.00	15.32	C

ATOM	3749	O	LEU	A	636	16.767	-27.281	50.919	1.00	13.12	O
ATOM	3750	CB	LEU	A	636	14.107	-25.834	51.957	1.00	13.28	C
ATOM	3751	CG	LEU	A	636	13.898	-26.220	53.421	1.00	13.56	C
ATOM	3752	CD1	LEU	A	636	13.738	-24.972	54.253	1.00	10.44	C
ATOM	3753	CD2	LEU	A	636	12.673	-27.117	53.560	1.00	15.87	C
ATOM	3754	N	PRO	A	637	17.157	-26.481	52.988	1.00	15.92	N
ATOM	3755	CA	PRO	A	637	18.131	-27.538	53.275	1.00	18.30	C
ATOM	3756	C	PRO	A	637	17.522	-28.934	53.136	1.00	21.15	C
ATOM	3757	O	PRO	A	637	18.113	-29.823	52.518	1.00	22.74	O
ATOM	3758	CB	PRO	A	637	18.558	-27.259	54.718	1.00	14.98	C
ATOM	3759	CG	PRO	A	637	18.277	-25.807	54.925	1.00	14.03	C
ATOM	3760	CD	PRO	A	637	17.071	-25.497	54.084	1.00	16.16	C
ATOM	3761	N	SER	A	638	16.329	-29.109	53.706	1.00	19.93	N
ATOM	3762	CA	SER	A	638	15.633	-30.392	53.699	1.00	16.13	C
ATOM	3763	C	SER	A	638	14.785	-30.715	52.474	1.00	15.83	C
ATOM	3764	O	SER	A	638	14.253	-29.825	51.808	1.00	19.43	O
ATOM	3765	CB	SER	A	638	14.757	-30.503	54.949	1.00	15.49	C
ATOM	3766	OG	SER	A	638	14.127	-31.769	54.992	1.00	16.71	O
ATOM	3767	N	ALA	A	639	14.662	-32.010	52.193	1.00	14.58	N
ATOM	3768	CA	ALA	A	639	13.869	-32.498	51.069	1.00	15.34	C
ATOM	3769	C	ALA	A	639	12.575	-33.099	51.618	1.00	14.34	C
ATOM	3770	O	ALA	A	639	11.726	-33.579	50.863	1.00	16.75	O
ATOM	3771	CB	ALA	A	639	14.635	-33.558	50.303	1.00	11.43	C
ATOM	3772	N	PHE	A	640	12.455	-33.095	52.941	1.00	14.53	N
ATOM	3773	CA	PHE	A	640	11.281	-33.632	53.608	1.00	15.34	C
ATOM	3774	C	PHE	A	640	10.177	-32.579	53.593	1.00	16.07	C
ATOM	3775	O	PHE	A	640	9.866	-31.961	54.615	1.00	18.01	O
ATOM	3776	CB	PHE	A	640	11.616	-34.013	55.045	1.00	13.61	C
ATOM	3777	CG	PHE	A	640	10.643	-34.975	55.650	1.00	18.61	C
ATOM	3778	CD1	PHE	A	640	10.387	-36.203	55.040	1.00	20.39	C
ATOM	3779	CD2	PHE	A	640	9.981	-34.663	56.833	1.00	18.05	C
ATOM	3780	CE1	PHE	A	640	9.485	-37.108	55.605	1.00	23.30	C
ATOM	3781	CE2	PHE	A	640	9.079	-35.557	57.403	1.00	21.93	C
ATOM	3782	CZ	PHE	A	640	8.830	-36.782	56.791	1.00	21.89	C
ATOM	3783	N	VAL	A	641	9.608	-32.378	52.410	1.00	16.99	N
ATOM	3784	CA	VAL	A	641	8.536	-31.412	52.197	1.00	17.61	C
ATOM	3785	C	VAL	A	641	7.625	-32.081	51.164	1.00	18.11	C
ATOM	3786	O	VAL	A	641	8.089	-32.491	50.098	1.00	17.61	O
ATOM	3787	CB	VAL	A	641	9.098	-30.061	51.630	1.00	18.26	C
ATOM	3788	CG1	VAL	A	641	7.963	-29.060	51.411	1.00	19.17	C
ATOM	3789	CG2	VAL	A	641	10.134	-29.465	52.597	1.00	12.94	C
ATOM	3790	N	GLY	A	642	6.341	-32.223	51.485	1.00	15.83	N
ATOM	3791	CA	GLY	A	642	5.442	-32.865	50.542	1.00	15.49	C
ATOM	3792	C	GLY	A	642	4.024	-33.114	51.027	1.00	13.20	C
ATOM	3793	O	GLY	A	642	3.729	-33.006	52.219	1.00	14.34	O
ATOM	3794	N	THR	A	643	3.154	-33.483	50.092	1.00	18.05	N
ATOM	3795	CA	THR	A	643	1.743	-33.737	50.397	1.00	15.89	C
ATOM	3796	C	THR	A	643	1.258	-35.137	50.043	1.00	13.58	C
ATOM	3797	O	THR	A	643	1.454	-35.598	48.926	1.00	13.31	O
ATOM	3798	CB	THR	A	643	0.830	-32.744	49.640	1.00	15.75	C

ATOM	3799	OG1	THR	A	643	1.175	-31.402	50.001	1.00	12.58	O
ATOM	3800	CG2	THR	A	643	-0.651	-33.002	49.978	1.00	15.98	C
ATOM	3801	N	SER	A	644	0.626	-35.808	51.001	1.00	15.12	N
ATOM	3802	CA	SER	A	644	0.041	-37.121	50.757	1.00	14.46	C
ATOM	3803	C	SER	A	644	-1.479	-36.893	50.628	1.00	16.59	C
ATOM	3804	O	SER	A	644	-2.152	-36.569	51.611	1.00	17.58	O
ATOM	3805	CB	SER	A	644	0.306	-38.059	51.926	1.00	12.22	C
ATOM	3806	OG	SER	A	644	-0.155	-39.358	51.613	1.00	21.34	O
ATOM	3807	N	LYS	A	645	-2.006	-37.050	49.418	1.00	15.83	N
ATOM	3808	CA	LYS	A	645	-3.431	-36.849	49.146	1.00	17.28	C
ATOM	3809	C	LYS	A	645	-4.231	-38.157	49.181	1.00	19.12	C
ATOM	3810	O	LYS	A	645	-3.887	-39.109	48.483	1.00	21.82	O
ATOM	3811	CB	LYS	A	645	-3.589	-36.196	47.767	1.00	14.10	C
ATOM	3812	CG	LYS	A	645	-4.940	-36.407	47.123	1.00	16.72	C
ATOM	3813	CD	LYS	A	645	-4.957	-35.927	45.700	1.00	12.66	C
ATOM	3814	CE	LYS	A	645	-6.386	-35.903	45.161	1.00	14.19	C
ATOM	3815	NZ	LYS	A	645	-6.418	-35.478	43.730	1.00	22.69	N
ATOM	3816	N	LEU	A	646	-5.288	-38.217	49.990	1.00	19.83	N
ATOM	3817	CA	LEU	A	646	-6.118	-39.431	50.039	1.00	16.47	C
ATOM	3818	C	LEU	A	646	-7.187	-39.348	48.943	1.00	17.57	C
ATOM	3819	O	LEU	A	646	-7.327	-40.253	48.124	1.00	16.25	O
ATOM	3820	CB	LEU	A	646	-6.782	-39.583	51.409	1.00	15.71	C
ATOM	3821	CG	LEU	A	646	-7.814	-40.710	51.533	1.00	19.57	C
ATOM	3822	CD1	LEU	A	646	-7.170	-42.031	51.151	1.00	22.63	C
ATOM	3823	CD2	LEU	A	646	-8.349	-40.776	52.953	1.00	18.23	C
ATOM	3824	N	ASP	A	647	-7.935	-38.251	48.919	1.00	17.27	N
ATOM	3825	CA	ASP	A	647	-8.959	-38.063	47.905	1.00	19.07	C
ATOM	3826	C	ASP	A	647	-9.111	-36.579	47.600	1.00	21.01	C
ATOM	3827	O	ASP	A	647	-8.212	-35.805	47.900	1.00	27.03	O
ATOM	3828	CB	ASP	A	647	-10.291	-38.673	48.367	1.00	21.60	C
ATOM	3829	CG	ASP	A	647	-10.736	-38.173	49.729	1.00	21.83	C
ATOM	3830	OD1	ASP	A	647	-10.410	-37.025	50.095	1.00	24.69	O
ATOM	3831	OD2	ASP	A	647	-11.427	-38.938	50.436	1.00	30.33	O
ATOM	3832	N	ASP	A	648	-10.233	-36.173	47.012	1.00	19.47	N
ATOM	3833	CA	ASP	A	648	-10.436	-34.765	46.672	1.00	19.02	C
ATOM	3834	C	ASP	A	648	-10.743	-33.866	47.856	1.00	11.90	C
ATOM	3835	O	ASP	A	648	-10.856	-32.655	47.697	1.00	13.50	O
ATOM	3836	CB	ASP	A	648	-11.570	-34.609	45.662	1.00	29.87	C
ATOM	3837	CG	ASP	A	648	-11.469	-35.583	44.519	1.00	42.61	C
ATOM	3838	OD1	ASP	A	648	-10.334	-35.836	44.054	1.00	51.02	O
ATOM	3839	OD2	ASP	A	648	-12.529	-36.092	44.083	1.00	46.46	O
ATOM	3840	N	ALA	A	649	-10.881	-34.439	49.043	1.00	11.95	N
ATOM	3841	CA	ALA	A	649	-11.202	-33.627	50.205	1.00	15.36	C
ATOM	3842	C	ALA	A	649	-10.219	-33.756	51.356	1.00	15.00	C
ATOM	3843	O	ALA	A	649	-10.235	-32.946	52.286	1.00	13.56	O
ATOM	3844	CB	ALA	A	649	-12.612	-33.971	50.696	1.00	17.09	C
ATOM	3845	N	ASN	A	650	-9.364	-34.769	51.299	1.00	14.90	N
ATOM	3846	CA	ASN	A	650	-8.420	-34.992	52.379	1.00	16.14	C
ATOM	3847	C	ASN	A	650	-6.974	-35.225	51.943	1.00	17.44	C
ATOM	3848	O	ASN	A	650	-6.698	-35.976	51.006	1.00	17.38	O

ATOM	3849	CB	ASN	A	650	-8.897	-36.172	53.215	1.00	16.81	C
ATOM	3850	CG	ASN	A	650	-10.319	-35.998	53.688	1.00	21.06	C
ATOM	3851	OD1	ASN	A	650	-10.567	-35.382	54.727	1.00	18.14	O
ATOM	3852	ND2	ASN	A	650	-11.266	-36.525	52.921	1.00	20.25	N
ATOM	3853	N	ALA	A	651	-6.053	-34.574	52.640	1.00	15.84	N
ATOM	3854	CA	ALA	A	651	-4.637	-34.723	52.334	1.00	16.26	C
ATOM	3855	C	ALA	A	651	-3.830	-34.236	53.517	1.00	16.74	C
ATOM	3856	O	ALA	A	651	-4.328	-33.480	54.361	1.00	16.56	O
ATOM	3857	CB	ALA	A	651	-4.281	-33.931	51.085	1.00	13.74	C
ATOM	3858	N	THR	A	652	-2.589	-34.691	53.596	1.00	17.21	N
ATOM	3859	CA	THR	A	652	-1.719	-34.274	54.678	1.00	17.44	C
ATOM	3860	C	THR	A	652	-0.411	-33.772	54.094	1.00	15.53	C
ATOM	3861	O	THR	A	652	0.056	-34.277	53.075	1.00	13.60	O
ATOM	3862	CB	THR	A	652	-1.475	-35.417	55.645	1.00	16.83	C
ATOM	3863	OG1	THR	A	652	-2.744	-35.957	56.038	1.00	19.83	O
ATOM	3864	CG2	THR	A	652	-0.732	-34.918	56.883	1.00	9.21	C
ATOM	3865	N	ALA	A	653	0.156	-32.756	54.732	1.00	15.05	N
ATOM	3866	CA	ALA	A	653	1.395	-32.162	54.254	1.00	17.60	C
ATOM	3867	C	ALA	A	653	2.351	-31.860	55.396	1.00	16.53	C
ATOM	3868	O	ALA	A	653	1.940	-31.756	56.544	1.00	15.96	O
ATOM	3869	CB	ALA	A	653	1.086	-30.873	53.489	1.00	11.89	C
ATOM	3870	N	THR	A	654	3.634	-31.724	55.071	1.00	19.90	N
ATOM	3871	CA	THR	A	654	4.638	-31.400	56.081	1.00	19.62	C
ATOM	3872	C	THR	A	654	5.810	-30.644	55.482	1.00	18.31	C
ATOM	3873	O	THR	A	654	6.084	-30.753	54.292	1.00	15.97	O
ATOM	3874	CB	THR	A	654	5.191	-32.659	56.765	1.00	20.06	C
ATOM	3875	OG1	THR	A	654	5.858	-32.281	57.975	1.00	19.14	O
ATOM	3876	CG2	THR	A	654	6.163	-33.374	55.853	1.00	19.52	C
ATOM	3877	N	MET	A	655	6.489	-29.871	56.317	1.00	17.47	N
ATOM	3878	CA	MET	A	655	7.649	-29.116	55.876	1.00	19.43	C
ATOM	3879	C	MET	A	655	8.686	-29.124	56.993	1.00	20.42	C
ATOM	3880	O	MET	A	655	8.439	-28.633	58.089	1.00	20.10	O
ATOM	3881	CB	MET	A	655	7.268	-27.671	55.533	1.00	18.52	C
ATOM	3882	CG	MET	A	655	8.389	-26.873	54.862	1.00	20.10	C
ATOM	3883	SD	MET	A	655	8.006	-25.132	54.709	1.00	19.06	S
ATOM	3884	CE	MET	A	655	9.070	-24.624	53.376	1.00	23.28	C
ATOM	3885	N	ASP	A	656	9.836	-29.725	56.705	1.00	20.82	N
ATOM	3886	CA	ASP	A	656	10.956	-29.804	57.639	1.00	17.43	C
ATOM	3887	C	ASP	A	656	11.564	-28.416	57.486	1.00	18.74	C
ATOM	3888	O	ASP	A	656	12.478	-28.207	56.678	1.00	19.57	O
ATOM	3889	CB	ASP	A	656	11.911	-30.886	57.139	1.00	20.88	C
ATOM	3890	CG	ASP	A	656	13.017	-31.198	58.109	1.00	21.53	C
ATOM	3891	OD1	ASP	A	656	12.991	-30.706	59.260	1.00	19.53	O
ATOM	3892	OD2	ASP	A	656	13.924	-31.953	57.699	1.00	24.91	O
ATOM	3893	N	PHE	A	657	11.033	-27.466	58.249	1.00	12.67	N
ATOM	3894	CA	PHE	A	657	11.444	-26.078	58.149	1.00	14.06	C
ATOM	3895	C	PHE	A	657	12.678	-25.570	58.875	1.00	13.37	C
ATOM	3896	O	PHE	A	657	12.919	-25.896	60.035	1.00	17.71	O
ATOM	3897	CB	PHE	A	657	10.277	-25.180	58.544	1.00	11.47	C
ATOM	3898	CG	PHE	A	657	10.554	-23.711	58.374	1.00	7.10	C

ATOM	3899	CD1	PHE	A	657	10.562	-23.138	57.113	1.00	11.58	C
ATOM	3900	CD2	PHE	A	657	10.773	-22.900	59.482	1.00	10.10	C
ATOM	3901	CE1	PHE	A	657	10.779	-21.773	56.950	1.00	11.22	C
ATOM	3902	CE2	PHE	A	657	10.991	-21.535	59.336	1.00	10.61	C
ATOM	3903	CZ	PHE	A	657	10.994	-20.969	58.068	1.00	10.31	C
ATOM	3904	N	THR	A	658	13.418	-24.722	58.162	1.00	15.43	N
ATOM	3905	CA	THR	A	658	14.615	-24.046	58.655	1.00	16.22	C
ATOM	3906	C	THR	A	658	14.568	-22.666	58.008	1.00	11.10	C
ATOM	3907	O	THR	A	658	14.407	-22.558	56.788	1.00	12.53	O
ATOM	3908	CB	THR	A	658	15.905	-24.765	58.218	1.00	17.42	C
ATOM	3909	OG1	THR	A	658	15.970	-26.045	58.852	1.00	16.60	O
ATOM	3910	CG2	THR	A	658	17.122	-23.956	58.640	1.00	21.87	C
ATOM	3911	N	ASN	A	659	14.695	-21.607	58.799	1.00	14.43	N
ATOM	3912	CA	ASN	A	659	14.623	-20.273	58.213	1.00	17.83	C
ATOM	3913	C	ASN	A	659	15.858	-19.864	57.418	1.00	23.23	C
ATOM	3914	O	ASN	A	659	16.913	-20.505	57.481	1.00	23.51	O
ATOM	3915	CB	ASN	A	659	14.301	-19.218	59.277	1.00	19.05	C
ATOM	3916	CG	ASN	A	659	15.441	-18.982	60.241	1.00	19.61	C
ATOM	3917	OD1	ASN	A	659	16.335	-19.815	60.379	1.00	23.51	O
ATOM	3918	ND2	ASN	A	659	15.407	-17.841	60.930	1.00	11.75	N
ATOM	3919	N	TRP	A	660	15.695	-18.782	56.667	1.00	22.38	N
ATOM	3920	CA	TRP	A	660	16.716	-18.233	55.788	1.00	22.69	C
ATOM	3921	C	TRP	A	660	18.157	-18.185	56.307	1.00	23.34	C
ATOM	3922	O	TRP	A	660	19.092	-18.307	55.524	1.00	23.65	O
ATOM	3923	CB	TRP	A	660	16.281	-16.835	55.344	1.00	17.21	C
ATOM	3924	CG	TRP	A	660	16.339	-15.836	56.441	1.00	19.30	C
ATOM	3925	CD1	TRP	A	660	15.474	-15.712	57.488	1.00	18.06	C
ATOM	3926	CD2	TRP	A	660	17.356	-14.852	56.639	1.00	20.74	C
ATOM	3927	NE1	TRP	A	660	15.891	-14.711	58.332	1.00	17.68	N
ATOM	3928	CE2	TRP	A	660	17.045	-14.165	57.834	1.00	18.89	C
ATOM	3929	CE3	TRP	A	660	18.503	-14.484	55.923	1.00	22.51	C
ATOM	3930	CZ2	TRP	A	660	17.838	-13.132	58.331	1.00	19.27	C
ATOM	3931	CZ3	TRP	A	660	19.294	-13.455	56.418	1.00	21.11	C
ATOM	3932	CH2	TRP	A	660	18.956	-12.790	57.613	1.00	23.84	C
ATOM	3933	N	ASN	A	661	18.338	-18.016	57.614	1.00	23.28	N
ATOM	3934	CA	ASN	A	661	19.677	-17.926	58.184	1.00	22.57	C
ATOM	3935	C	ASN	A	661	19.973	-19.005	59.214	1.00	24.18	C
ATOM	3936	O	ASN	A	661	20.773	-18.802	60.122	1.00	27.82	O
ATOM	3937	CB	ASN	A	661	19.869	-16.555	58.825	1.00	21.47	C
ATOM	3938	CG	ASN	A	661	18.973	-16.343	60.027	1.00	25.75	C
ATOM	3939	OD1	ASN	A	661	18.233	-17.238	60.439	1.00	25.02	O
ATOM	3940	ND2	ASN	A	661	19.037	-15.152	60.603	1.00	26.44	N
ATOM	3941	N	GLN	A	662	19.319	-20.148	59.068	1.00	23.07	N
ATOM	3942	CA	GLN	A	662	19.500	-21.279	59.970	1.00	21.70	C
ATOM	3943	C	GLN	A	662	19.609	-20.945	61.446	1.00	20.78	C
ATOM	3944	O	GLN	A	662	20.568	-21.334	62.104	1.00	22.24	O
ATOM	3945	CB	GLN	A	662	20.720	-22.103	59.553	1.00	22.74	C
ATOM	3946	CG	GLN	A	662	20.595	-22.726	58.173	1.00	18.04	C
ATOM	3947	CD	GLN	A	662	20.961	-21.751	57.074	1.00	24.69	C
ATOM	3948	OE1	GLN	A	662	21.707	-20.794	57.295	1.00	28.43	O

ATOM	3949	NE2	GLN	A	662	20.437	-21.986	55.880	1.00	27.73	N
ATOM	3950	N	THR	A	663	18.632	-20.213	61.964	1.00	19.81	N
ATOM	3951	CA	THR	A	663	18.598	-19.899	63.386	1.00	20.20	C
ATOM	3952	C	THR	A	663	17.276	-20.411	63.962	1.00	20.40	C
ATOM	3953	O	THR	A	663	17.095	-20.461	65.176	1.00	21.34	O
ATOM	3954	CB	THR	A	663	18.705	-18.393	63.659	1.00	19.22	C
ATOM	3955	OG1	THR	A	663	17.710	-17.692	62.907	1.00	22.01	O
ATOM	3956	CG2	THR	A	663	20.081	-17.887	63.261	1.00	19.06	C
ATOM	3957	N	LEU	A	664	16.361	-20.808	63.083	1.00	20.69	N
ATOM	3958	CA	LEU	A	664	15.065	-21.311	63.526	1.00	21.04	C
ATOM	3959	C	LEU	A	664	14.630	-22.536	62.744	1.00	19.48	C
ATOM	3960	O	LEU	A	664	14.820	-22.619	61.532	1.00	18.10	O
ATOM	3961	CB	LEU	A	664	13.988	-20.230	63.393	1.00	22.69	C
ATOM	3962	CG	LEU	A	664	12.646	-20.571	64.061	1.00	24.60	C
ATOM	3963	CD1	LEU	A	664	11.941	-19.307	64.496	1.00	19.91	C
ATOM	3964	CD2	LEU	A	664	11.782	-21.340	63.093	1.00	24.25	C
ATOM	3965	N	THR	A	665	14.041	-23.487	63.459	1.00	20.07	N
ATOM	3966	CA	THR	A	665	13.548	-24.710	62.851	1.00	21.87	C
ATOM	3967	C	THR	A	665	12.148	-24.997	63.375	1.00	20.19	C
ATOM	3968	O	THR	A	665	11.738	-24.472	64.412	1.00	19.86	O
ATOM	3969	CB	THR	A	665	14.427	-25.920	63.201	1.00	20.96	C
ATOM	3970	OG1	THR	A	665	14.216	-26.278	64.573	1.00	21.04	O
ATOM	3971	CG2	THR	A	665	15.904	-25.599	62.974	1.00	28.54	C
ATOM	3972	N	ALA	A	666	11.431	-25.848	62.656	1.00	19.47	N
ATOM	3973	CA	ALA	A	666	10.088	-26.230	63.045	1.00	17.36	C
ATOM	3974	C	ALA	A	666	9.557	-27.328	62.141	1.00	15.68	C
ATOM	3975	O	ALA	A	666	9.766	-27.297	60.928	1.00	16.93	O
ATOM	3976	CB	ALA	A	666	9.164	-25.020	62.974	1.00	18.38	C
ATOM	3977	N	HIS	A	667	8.900	-28.315	62.739	1.00	16.33	N
ATOM	3978	CA	HIS	A	667	8.273	-29.371	61.957	1.00	17.73	C
ATOM	3979	C	HIS	A	667	6.856	-28.832	61.747	1.00	17.68	C
ATOM	3980	O	HIS	A	667	6.015	-28.895	62.643	1.00	17.47	O
ATOM	3981	CB	HIS	A	667	8.226	-30.684	62.740	1.00	19.60	C
ATOM	3982	CG	HIS	A	667	9.559	-31.347	62.888	1.00	23.93	C
ATOM	3983	ND1	HIS	A	667	10.730	-30.777	62.429	1.00	24.70	N
ATOM	3984	CD2	HIS	A	667	9.910	-32.529	63.448	1.00	23.79	C
ATOM	3985	CE1	HIS	A	667	11.743	-31.582	62.701	1.00	21.53	C
ATOM	3986	NE2	HIS	A	667	11.273	-32.651	63.318	1.00	26.39	N
ATOM	3987	N	LYS	A	668	6.612	-28.268	60.574	1.00	16.93	N
ATOM	3988	CA	LYS	A	668	5.309	-27.703	60.268	1.00	19.43	C
ATOM	3989	C	LYS	A	668	4.503	-28.685	59.445	1.00	20.61	C
ATOM	3990	O	LYS	A	668	4.940	-29.121	58.371	1.00	20.05	O
ATOM	3991	CB	LYS	A	668	5.470	-26.388	59.504	1.00	14.22	C
ATOM	3992	CG	LYS	A	668	5.984	-25.236	60.366	1.00	12.25	C
ATOM	3993	CD	LYS	A	668	6.395	-24.053	59.504	1.00	11.56	C
ATOM	3994	CE	LYS	A	668	5.206	-23.167	59.181	1.00	12.10	C
ATOM	3995	NZ	LYS	A	668	4.540	-22.694	60.423	1.00	12.00	N
ATOM	3996	N	SER	A	669	3.326	-29.041	59.951	1.00	16.11	N
ATOM	3997	CA	SER	A	669	2.477	-29.983	59.244	1.00	16.65	C
ATOM	3998	C	SER	A	669	1.061	-29.454	59.083	1.00	15.56	C

ATOM	3999	O	SER	A	669	0.573	-28.689	59.914	1.00	15.88	O
ATOM	4000	CB	SER	A	669	2.471	-31.318	59.984	1.00	17.56	C
ATOM	4001	OG	SER	A	669	3.756	-31.923	59.913	1.00	17.74	O
ATOM	4002	N	TRP	A	670	0.409	-29.855	58.000	1.00	16.02	N
ATOM	4003	CA	TRP	A	670	-0.952	-29.421	57.731	1.00	12.45	C
ATOM	4004	C	TRP	A	670	-1.841	-30.617	57.437	1.00	14.21	C
ATOM	4005	O	TRP	A	670	-1.474	-31.517	56.674	1.00	13.28	O
ATOM	4006	CB	TRP	A	670	-0.980	-28.465	56.544	1.00	13.03	C
ATOM	4007	CG	TRP	A	670	-0.196	-27.219	56.752	1.00	14.94	C
ATOM	4008	CD1	TRP	A	670	-0.672	-26.011	57.151	1.00	14.63	C
ATOM	4009	CD2	TRP	A	670	1.209	-27.045	56.521	1.00	17.93	C
ATOM	4010	NE1	TRP	A	670	0.346	-25.086	57.182	1.00	20.67	N
ATOM	4011	CE2	TRP	A	670	1.512	-25.698	56.799	1.00	20.41	C
ATOM	4012	CE3	TRP	A	670	2.240	-27.900	56.104	1.00	21.10	C
ATOM	4013	CZ2	TRP	A	670	2.809	-25.179	56.673	1.00	20.28	C
ATOM	4014	CZ3	TRP	A	670	3.532	-27.383	55.978	1.00	20.38	C
ATOM	4015	CH2	TRP	A	670	3.801	-26.037	56.263	1.00	18.91	C
ATOM	4016	N	PHE	A	671	-3.024	-30.614	58.038	1.00	16.67	N
ATOM	4017	CA	PHE	A	671	-3.970	-31.706	57.854	1.00	16.90	C
ATOM	4018	C	PHE	A	671	-5.258	-31.178	57.242	1.00	17.56	C
ATOM	4019	O	PHE	A	671	-6.084	-30.580	57.929	1.00	18.26	O
ATOM	4020	CB	PHE	A	671	-4.219	-32.377	59.203	1.00	14.37	C
ATOM	4021	CG	PHE	A	671	-2.952	-32.728	59.926	1.00	17.03	C
ATOM	4022	CD1	PHE	A	671	-2.216	-31.745	60.583	1.00	19.47	C
ATOM	4023	CD2	PHE	A	671	-2.454	-34.027	59.894	1.00	24.20	C
ATOM	4024	CE1	PHE	A	671	-0.992	-32.050	61.193	1.00	17.24	C
ATOM	4025	CE2	PHE	A	671	-1.228	-34.344	60.504	1.00	22.48	C
ATOM	4026	CZ	PHE	A	671	-0.501	-33.354	61.151	1.00	16.35	C
ATOM	4027	N	MET	A	672	-5.395	-31.374	55.935	1.00	16.26	N
ATOM	4028	CA	MET	A	672	-6.568	-30.914	55.212	1.00	18.50	C
ATOM	4029	C	MET	A	672	-7.653	-31.974	55.354	1.00	18.66	C
ATOM	4030	O	MET	A	672	-7.543	-33.088	54.834	1.00	13.97	O
ATOM	4031	CB	MET	A	672	-6.220	-30.673	53.743	1.00	15.63	C
ATOM	4032	CG	MET	A	672	-5.351	-29.426	53.503	1.00	19.39	C
ATOM	4033	SD	MET	A	672	-4.227	-29.561	52.071	1.00	18.28	S
ATOM	4034	CE	MET	A	672	-2.881	-30.512	52.795	1.00	23.68	C
ATOM	4035	N	LEU	A	673	-8.703	-31.610	56.075	1.00	17.57	N
ATOM	4036	CA	LEU	A	673	-9.791	-32.527	56.332	1.00	18.69	C
ATOM	4037	C	LEU	A	673	-11.157	-32.058	55.840	1.00	19.41	C
ATOM	4038	O	LEU	A	673	-12.042	-31.739	56.639	1.00	19.47	O
ATOM	4039	CB	LEU	A	673	-9.840	-32.824	57.827	1.00	12.86	C
ATOM	4040	CG	LEU	A	673	-8.554	-33.472	58.333	1.00	10.02	C
ATOM	4041	CD1	LEU	A	673	-8.425	-33.260	59.814	1.00	12.96	C
ATOM	4042	CD2	LEU	A	673	-8.568	-34.944	58.012	1.00	10.35	C
ATOM	4043	N	LYS	A	674	-11.306	-32.007	54.519	1.00	18.12	N
ATOM	4044	CA	LYS	A	674	-12.569	-31.637	53.872	1.00	19.38	C
ATOM	4045	C	LYS	A	674	-13.065	-30.205	54.012	1.00	13.53	C
ATOM	4046	O	LYS	A	674	-13.027	-29.435	53.055	1.00	13.10	O
ATOM	4047	CB	LYS	A	674	-13.682	-32.587	54.337	1.00	18.67	C
ATOM	4048	CG	LYS	A	674	-15.020	-32.368	53.634	1.00	21.72	C

ATOM	4049	CD	LYS	A	674	-15.651	-33.689	53.231	1.00	27.58	C
ATOM	4050	CE	LYS	A	674	-16.946	-33.928	53.976	1.00	29.97	C
ATOM	4051	NZ	LYS	A	674	-16.886	-33.368	55.357	1.00	33.44	N
ATOM	4052	N	ASP	A	675	-13.552	-29.863	55.198	1.00	15.08	N
ATOM	4053	CA	ASP	A	675	-14.101	-28.534	55.456	1.00	19.03	C
ATOM	4054	C	ASP	A	675	-13.293	-27.742	56.481	1.00	20.81	C
ATOM	4055	O	ASP	A	675	-13.753	-26.720	56.996	1.00	19.12	O
ATOM	4056	CB	ASP	A	675	-15.564	-28.667	55.930	1.00	16.90	C
ATOM	4057	CG	ASP	A	675	-15.712	-29.544	57.176	1.00	21.61	C
ATOM	4058	OD1	ASP	A	675	-14.694	-30.040	57.702	1.00	21.72	O
ATOM	4059	OD2	ASP	A	675	-16.860	-29.739	57.641	1.00	23.75	O
ATOM	4060	N	LYS	A	676	-12.086	-28.214	56.771	1.00	18.40	N
ATOM	4061	CA	LYS	A	676	-11.222	-27.564	57.748	1.00	18.29	C
ATOM	4062	C	LYS	A	676	-9.775	-28.002	57.509	1.00	18.05	C
ATOM	4063	O	LYS	A	676	-9.527	-28.994	56.816	1.00	14.58	O
ATOM	4064	CB	LYS	A	676	-11.639	-27.976	59.155	1.00	16.56	C
ATOM	4065	CG	LYS	A	676	-11.671	-29.488	59.339	1.00	17.00	C
ATOM	4066	CD	LYS	A	676	-12.407	-29.884	60.607	1.00	17.48	C
ATOM	4067	CE	LYS	A	676	-12.691	-31.371	60.629	1.00	16.07	C
ATOM	4068	NZ	LYS	A	676	-13.119	-31.857	59.291	1.00	18.59	N
ATOM	4069	N	ILE	A	677	-8.837	-27.256	58.089	1.00	17.44	N
ATOM	4070	CA	ILE	A	677	-7.408	-27.549	57.969	1.00	16.21	C
ATOM	4071	C	ILE	A	677	-6.734	-27.374	59.331	1.00	16.28	C
ATOM	4072	O	ILE	A	677	-6.823	-26.310	59.953	1.00	19.53	O
ATOM	4073	CB	ILE	A	677	-6.718	-26.608	56.945	1.00	15.68	C
ATOM	4074	CG1	ILE	A	677	-7.290	-26.830	55.543	1.00	15.11	C
ATOM	4075	CG2	ILE	A	677	-5.231	-26.889	56.909	1.00	18.43	C
ATOM	4076	CD1	ILE	A	677	-8.248	-25.742	55.080	1.00	12.33	C
ATOM	4077	N	ALA	A	678	-6.079	-28.424	59.811	1.00	16.13	N
ATOM	4078	CA	ALA	A	678	-5.394	-28.348	61.094	1.00	14.70	C
ATOM	4079	C	ALA	A	678	-3.936	-27.951	60.846	1.00	18.04	C
ATOM	4080	O	ALA	A	678	-3.276	-28.506	59.968	1.00	19.60	O
ATOM	4081	CB	ALA	A	678	-5.458	-29.694	61.802	1.00	11.75	C
ATOM	4082	N	PHE	A	679	-3.449	-26.978	61.604	1.00	17.71	N
ATOM	4083	CA	PHE	A	679	-2.067	-26.523	61.485	1.00	16.53	C
ATOM	4084	C	PHE	A	679	-1.319	-27.018	62.715	1.00	16.55	C
ATOM	4085	O	PHE	A	679	-1.669	-26.654	63.836	1.00	18.94	O
ATOM	4086	CB	PHE	A	679	-1.989	-24.995	61.467	1.00	11.89	C
ATOM	4087	CG	PHE	A	679	-2.513	-24.360	60.214	1.00	12.14	C
ATOM	4088	CD1	PHE	A	679	-3.849	-24.481	59.858	1.00	16.26	C
ATOM	4089	CD2	PHE	A	679	-1.674	-23.593	59.410	1.00	15.06	C
ATOM	4090	CE1	PHE	A	679	-4.341	-23.848	58.720	1.00	14.99	C
ATOM	4091	CE2	PHE	A	679	-2.157	-22.955	58.273	1.00	13.22	C
ATOM	4092	CZ	PHE	A	679	-3.489	-23.082	57.926	1.00	16.52	C
ATOM	4093	N	LEU	A	680	-0.301	-27.851	62.519	1.00	16.99	N
ATOM	4094	CA	LEU	A	680	0.481	-28.350	63.653	1.00	17.10	C
ATOM	4095	C	LEU	A	680	1.954	-27.963	63.498	1.00	16.76	C
ATOM	4096	O	LEU	A	680	2.522	-28.041	62.408	1.00	18.53	O
ATOM	4097	CB	LEU	A	680	0.374	-29.877	63.764	1.00	18.67	C
ATOM	4098	CG	LEU	A	680	-0.955	-30.528	64.162	1.00	17.73	C

ATOM	4099	CD1	LEU	A	680	-0.696	-31.981	64.562	1.00	13.98	C
ATOM	4100	CD2	LEU	A	680	-1.607	-29.752	65.304	1.00	16.35	C
ATOM	4101	N	GLY	A	681	2.565	-27.541	64.594	1.00	18.95	N
ATOM	4102	CA	GLY	A	681	3.966	-27.166	64.554	1.00	17.72	C
ATOM	4103	C	GLY	A	681	4.646	-27.646	65.813	1.00	18.63	C
ATOM	4104	O	GLY	A	681	4.152	-27.394	66.908	1.00	19.19	O
ATOM	4105	N	SER	A	682	5.769	-28.346	65.666	1.00	16.14	N
ATOM	4106	CA	SER	A	682	6.504	-28.846	66.820	1.00	13.27	C
ATOM	4107	C	SER	A	682	8.005	-28.678	66.613	1.00	15.95	C
ATOM	4108	O	SER	A	682	8.456	-28.300	65.527	1.00	15.30	O
ATOM	4109	CB	SER	A	682	6.206	-30.327	67.036	1.00	13.32	C
ATOM	4110	OG	SER	A	682	6.548	-31.087	65.882	1.00	17.69	O
ATOM	4111	N	ASN	A	683	8.773	-28.952	67.662	1.00	18.68	N
ATOM	4112	CA	ASN	A	683	10.225	-28.863	67.570	1.00	21.47	C
ATOM	4113	C	ASN	A	683	10.639	-27.463	67.142	1.00	20.47	C
ATOM	4114	O	ASN	A	683	11.541	-27.305	66.327	1.00	23.32	O
ATOM	4115	CB	ASN	A	683	10.715	-29.881	66.538	1.00	21.93	C
ATOM	4116	CG	ASN	A	683	12.162	-30.264	66.730	1.00	26.67	C
ATOM	4117	OD1	ASN	A	683	12.950	-30.243	65.783	1.00	28.58	O
ATOM	4118	ND2	ASN	A	683	12.520	-30.624	67.953	1.00	24.35	N
ATOM	4119	N	ILE	A	684	9.969	-26.445	67.666	1.00	18.14	N
ATOM	4120	CA	ILE	A	684	10.311	-25.082	67.290	1.00	19.34	C
ATOM	4121	C	ILE	A	684	11.553	-24.667	68.080	1.00	21.92	C
ATOM	4122	O	ILE	A	684	11.567	-24.721	69.315	1.00	18.13	O
ATOM	4123	CB	ILE	A	684	9.141	-24.116	67.574	1.00	18.33	C
ATOM	4124	CG1	ILE	A	684	7.946	-24.473	66.672	1.00	20.19	C
ATOM	4125	CG2	ILE	A	684	9.567	-22.686	67.313	1.00	13.06	C
ATOM	4126	CD1	ILE	A	684	6.694	-23.646	66.941	1.00	21.05	C
ATOM	4127	N	GLN	A	685	12.602	-24.268	67.365	1.00	23.39	N
ATOM	4128	CA	GLN	A	685	13.848	-23.886	68.026	1.00	22.53	C
ATOM	4129	C	GLN	A	685	14.462	-22.613	67.480	1.00	20.52	C
ATOM	4130	O	GLN	A	685	14.407	-22.334	66.282	1.00	24.38	O
ATOM	4131	CB	GLN	A	685	14.834	-25.050	67.951	1.00	21.38	C
ATOM	4132	CG	GLN	A	685	14.204	-26.329	68.453	1.00	21.91	C
ATOM	4133	CD	GLN	A	685	15.156	-27.503	68.508	1.00	28.30	C
ATOM	4134	OE1	GLN	A	685	15.439	-28.137	67.492	1.00	28.83	O
ATOM	4135	NE2	GLN	A	685	15.643	-27.812	69.706	1.00	35.22	N
ATOM	4136	N	ASN	A	686	15.039	-21.839	68.390	1.00	21.70	N
ATOM	4137	CA	ASN	A	686	15.642	-20.560	68.056	1.00	23.06	C
ATOM	4138	C	ASN	A	686	16.985	-20.406	68.760	1.00	24.36	C
ATOM	4139	O	ASN	A	686	17.055	-20.408	69.991	1.00	23.62	O
ATOM	4140	CB	ASN	A	686	14.707	-19.443	68.496	1.00	21.45	C
ATOM	4141	CG	ASN	A	686	15.161	-18.095	68.030	1.00	19.42	C
ATOM	4142	OD1	ASN	A	686	15.981	-17.989	67.129	1.00	24.98	O
ATOM	4143	ND2	ASN	A	686	14.628	-17.048	68.638	1.00	19.43	N
ATOM	4144	N	THR	A	687	18.046	-20.278	67.972	1.00	27.05	N
ATOM	4145	CA	THR	A	687	19.400	-20.126	68.507	1.00	28.17	C
ATOM	4146	C	THR	A	687	19.827	-18.664	68.433	1.00	30.84	C
ATOM	4147	O	THR	A	687	20.904	-18.302	68.902	1.00	32.98	O
ATOM	4148	CB	THR	A	687	20.427	-20.956	67.701	1.00	25.82	C

ATOM	4149	OG1	THR	A	687	20.462	-20.471	66.354	1.00	21.45	O
ATOM	4150	CG2	THR	A	687	20.061	-22.449	67.704	1.00	23.44	C
ATOM	4151	N	SER	A	688	18.973	-17.833	67.841	1.00	30.11	N
ATOM	4152	CA	SER	A	688	19.253	-16.411	67.688	1.00	30.33	C
ATOM	4153	C	SER	A	688	18.717	-15.596	68.854	1.00	32.46	C
ATOM	4154	O	SER	A	688	18.114	-16.141	69.783	1.00	33.53	O
ATOM	4155	CB	SER	A	688	18.643	-15.890	66.381	1.00	31.88	C
ATOM	4156	OG	SER	A	688	17.373	-15.296	66.603	1.00	30.85	O
ATOM	4157	N	THR	A	689	18.943	-14.286	68.801	1.00	34.00	N
ATOM	4158	CA	THR	A	689	18.479	-13.388	69.853	1.00	37.51	C
ATOM	4159	C	THR	A	689	17.126	-12.773	69.502	1.00	37.21	C
ATOM	4160	O	THR	A	689	16.448	-12.225	70.370	1.00	40.70	O
ATOM	4161	CB	THR	A	689	19.489	-12.241	70.106	1.00	37.17	C
ATOM	4162	OG1	THR	A	689	20.139	-11.886	68.876	1.00	34.31	O
ATOM	4163	CG2	THR	A	689	20.532	-12.669	71.142	1.00	38.58	C
ATOM	4164	N	ASP	A	690	16.740	-12.864	68.231	1.00	35.87	N
ATOM	4165	CA	ASP	A	690	15.465	-12.317	67.773	1.00	34.73	C
ATOM	4166	C	ASP	A	690	14.308	-13.173	68.266	1.00	34.05	C
ATOM	4167	O	ASP	A	690	14.481	-14.367	68.510	1.00	37.31	O
ATOM	4168	CB	ASP	A	690	15.439	-12.264	66.251	1.00	34.82	C
ATOM	4169	CG	ASP	A	690	16.766	-11.851	65.666	1.00	34.39	C
ATOM	4170	OD1	ASP	A	690	17.040	-10.636	65.638	1.00	36.34	O
ATOM	4171	OD2	ASP	A	690	17.531	-12.737	65.233	1.00	29.84	O
ATOM	4172	N	THR	A	691	13.129	-12.570	68.410	1.00	31.91	N
ATOM	4173	CA	THR	A	691	11.959	-13.312	68.879	1.00	28.71	C
ATOM	4174	C	THR	A	691	11.365	-14.151	67.770	1.00	24.30	C
ATOM	4175	O	THR	A	691	11.358	-13.756	66.606	1.00	25.60	O
ATOM	4176	CB	THR	A	691	10.840	-12.392	69.405	1.00	29.98	C
ATOM	4177	OG1	THR	A	691	11.106	-11.035	69.036	1.00	32.81	O
ATOM	4178	CG2	THR	A	691	10.738	-12.500	70.907	1.00	33.00	C
ATOM	4179	N	ALA	A	692	10.857	-15.313	68.146	1.00	23.88	N
ATOM	4180	CA	ALA	A	692	10.250	-16.219	67.189	1.00	25.11	C
ATOM	4181	C	ALA	A	692	8.735	-16.283	67.428	1.00	22.37	C
ATOM	4182	O	ALA	A	692	8.268	-16.301	68.566	1.00	19.84	O
ATOM	4183	CB	ALA	A	692	10.872	-17.605	67.326	1.00	24.26	C
ATOM	4184	N	ALA	A	693	7.973	-16.304	66.345	1.00	22.99	N
ATOM	4185	CA	ALA	A	693	6.522	-16.374	66.447	1.00	21.64	C
ATOM	4186	C	ALA	A	693	5.969	-16.893	65.138	1.00	22.27	C
ATOM	4187	O	ALA	A	693	6.603	-16.756	64.091	1.00	20.80	O
ATOM	4188	CB	ALA	A	693	5.948	-14.994	66.743	1.00	19.15	C
ATOM	4189	N	THR	A	694	4.792	-17.504	65.208	1.00	21.67	N
ATOM	4190	CA	THR	A	694	4.120	-18.021	64.021	1.00	19.48	C
ATOM	4191	C	THR	A	694	2.927	-17.101	63.765	1.00	19.62	C
ATOM	4192	O	THR	A	694	2.191	-16.767	64.700	1.00	21.08	O
ATOM	4193	CB	THR	A	694	3.600	-19.438	64.259	1.00	19.10	C
ATOM	4194	OG1	THR	A	694	4.706	-20.334	64.416	1.00	19.03	O
ATOM	4195	CG2	THR	A	694	2.748	-19.896	63.091	1.00	19.71	C
ATOM	4196	N	THR	A	695	2.749	-16.660	62.523	1.00	18.12	N
ATOM	4197	CA	THR	A	695	1.615	-15.796	62.203	1.00	17.42	C
ATOM	4198	C	THR	A	695	0.420	-16.702	61.900	1.00	15.76	C

ATOM	4199	O	THR	A	695	0.406	-17.390	60.881	1.00	13.54	O
ATOM	4200	CB	THR	A	695	1.893	-14.904	60.973	1.00	17.55	C
ATOM	4201	OG1	THR	A	695	2.854	-13.895	61.314	1.00	17.17	O
ATOM	4202	CG2	THR	A	695	0.602	-14.215	60.510	1.00	18.90	C
ATOM	4203	N	ILE	A	696	-0.562	-16.728	62.798	1.00	16.80	N
ATOM	4204	CA	ILE	A	696	-1.749	-17.559	62.587	1.00	16.80	C
ATOM	4205	C	ILE	A	696	-2.500	-16.995	61.389	1.00	13.79	C
ATOM	4206	O	ILE	A	696	-2.999	-17.733	60.553	1.00	16.27	O
ATOM	4207	CB	ILE	A	696	-2.644	-17.588	63.845	1.00	17.75	C
ATOM	4208	CG1	ILE	A	696	-1.953	-18.417	64.930	1.00	17.07	C
ATOM	4209	CG2	ILE	A	696	-4.001	-18.216	63.525	1.00	17.01	C
ATOM	4210	CD1	ILE	A	696	-2.291	-18.006	66.348	1.00	19.75	C
ATOM	4211	N	ASP	A	697	-2.547	-15.676	61.285	1.00	15.35	N
ATOM	4212	CA	ASP	A	697	-3.198	-15.059	60.147	1.00	15.00	C
ATOM	4213	C	ASP	A	697	-2.954	-13.557	60.095	1.00	10.78	C
ATOM	4214	O	ASP	A	697	-2.658	-12.920	61.104	1.00	14.44	O
ATOM	4215	CB	ASP	A	697	-4.714	-15.327	60.203	1.00	21.38	C
ATOM	4216	CG	ASP	A	697	-5.385	-15.287	58.825	1.00	22.73	C
ATOM	4217	OD1	ASP	A	697	-4.750	-14.844	57.846	1.00	17.52	O
ATOM	4218	OD2	ASP	A	697	-6.563	-15.706	58.722	1.00	21.73	O
ATOM	4219	N	GLN	A	698	-3.059	-13.015	58.891	1.00	11.91	N
ATOM	4220	CA	GLN	A	698	-2.966	-11.585	58.632	1.00	13.87	C
ATOM	4221	C	GLN	A	698	-3.998	-11.442	57.523	1.00	15.08	C
ATOM	4222	O	GLN	A	698	-3.695	-11.621	56.337	1.00	14.48	O
ATOM	4223	CB	GLN	A	698	-1.584	-11.150	58.125	1.00	14.67	C
ATOM	4224	CG	GLN	A	698	-1.403	-9.633	58.206	1.00	18.74	C
ATOM	4225	CD	GLN	A	698	-0.122	-9.119	57.556	1.00	22.87	C
ATOM	4226	OE1	GLN	A	698	0.884	-9.829	57.480	1.00	24.26	O
ATOM	4227	NE2	GLN	A	698	-0.156	-7.871	57.091	1.00	18.45	N
ATOM	4228	N	ARG	A	699	-5.236	-11.165	57.927	1.00	16.92	N
ATOM	4229	CA	ARG	A	699	-6.348	-11.044	56.991	1.00	14.70	C
ATOM	4230	C	ARG	A	699	-6.646	-9.605	56.608	1.00	9.40	C
ATOM	4231	O	ARG	A	699	-6.729	-8.741	57.469	1.00	14.43	O
ATOM	4232	CB	ARG	A	699	-7.597	-11.687	57.612	1.00	17.46	C
ATOM	4233	CG	ARG	A	699	-8.657	-12.108	56.616	1.00	13.09	C
ATOM	4234	CD	ARG	A	699	-8.258	-13.349	55.842	1.00	10.16	C
ATOM	4235	NE	ARG	A	699	-9.177	-13.562	54.726	1.00	15.23	N
ATOM	4236	CZ	ARG	A	699	-8.939	-14.350	53.684	1.00	17.42	C
ATOM	4237	NH1	ARG	A	699	-7.797	-15.021	53.600	1.00	19.93	N
ATOM	4238	NH2	ARG	A	699	-9.842	-14.459	52.714	1.00	13.20	N
ATOM	4239	N	LYS	A	700	-6.801	-9.354	55.313	1.00	14.72	N
ATOM	4240	CA	LYS	A	700	-7.106	-8.012	54.821	1.00	19.64	C
ATOM	4241	C	LYS	A	700	-8.600	-7.779	55.003	1.00	24.46	C
ATOM	4242	O	LYS	A	700	-9.410	-8.577	54.530	1.00	24.66	O
ATOM	4243	CB	LYS	A	700	-6.764	-7.887	53.335	1.00	16.70	C
ATOM	4244	CG	LYS	A	700	-6.299	-6.498	52.911	1.00	19.35	C
ATOM	4245	CD	LYS	A	700	-7.246	-5.856	51.937	1.00	23.17	C
ATOM	4246	CE	LYS	A	700	-6.825	-6.085	50.508	1.00	25.61	C
ATOM	4247	NZ	LYS	A	700	-7.995	-6.496	49.671	1.00	25.07	N
ATOM	4248	N	LEU	A	701	-8.956	-6.686	55.675	1.00	25.84	N

ATOM	4249	CA	LEU	A	701	-10.356	-6.349	55.935	1.00	23.49	C
ATOM	4250	C	LEU	A	701	-11.029	-5.491	54.864	1.00	24.99	C
ATOM	4251	O	LEU	A	701	-10.368	-4.847	54.045	1.00	26.59	O
ATOM	4252	CB	LEU	A	701	-10.469	-5.619	57.267	1.00	17.26	C
ATOM	4253	CG	LEU	A	701	-9.764	-6.250	58.454	1.00	13.98	C
ATOM	4254	CD1	LEU	A	701	-10.191	-5.517	59.693	1.00	17.40	C
ATOM	4255	CD2	LEU	A	701	-10.113	-7.714	58.563	1.00	17.51	C
ATOM	4256	N	GLU	A	702	-12.361	-5.501	54.884	1.00	25.99	N
ATOM	4257	CA	GLU	A	702	-13.177	-4.707	53.970	1.00	24.59	C
ATOM	4258	C	GLU	A	702	-13.855	-3.692	54.883	1.00	26.61	C
ATOM	4259	O	GLU	A	702	-14.489	-4.068	55.868	1.00	28.57	O
ATOM	4260	CB	GLU	A	702	-14.248	-5.567	53.302	1.00	26.53	C
ATOM	4261	CG	GLU	A	702	-13.731	-6.645	52.367	1.00	26.06	C
ATOM	4262	CD	GLU	A	702	-14.850	-7.543	51.858	1.00	25.99	C
ATOM	4263	OE1	GLU	A	702	-15.233	-8.494	52.574	1.00	23.17	O
ATOM	4264	OE2	GLU	A	702	-15.346	-7.298	50.742	1.00	23.48	O
ATOM	4265	N	SER	A	703	-13.711	-2.411	54.583	1.00	30.19	N
ATOM	4266	CA	SER	A	703	-14.329	-1.396	55.421	1.00	32.24	C
ATOM	4267	C	SER	A	703	-15.841	-1.569	55.393	1.00	33.61	C
ATOM	4268	O	SER	A	703	-16.534	-1.195	56.334	1.00	37.11	O
ATOM	4269	CB	SER	A	703	-13.954	0.007	54.932	1.00	32.63	C
ATOM	4270	OG	SER	A	703	-14.540	0.290	53.672	1.00	38.54	O
ATOM	4271	N	SER	A	704	-16.344	-2.159	54.315	1.00	36.30	N
ATOM	4272	CA	SER	A	704	-17.775	-2.370	54.154	1.00	39.62	C
ATOM	4273	C	SER	A	704	-18.323	-3.581	54.910	1.00	41.97	C
ATOM	4274	O	SER	A	704	-19.468	-3.557	55.367	1.00	44.26	O
ATOM	4275	CB	SER	A	704	-18.122	-2.490	52.661	1.00	37.43	C
ATOM	4276	OG	SER	A	704	-17.683	-3.725	52.123	1.00	41.22	O
ATOM	4277	N	ASN	A	705	-17.512	-4.630	55.053	1.00	41.46	N
ATOM	4278	CA	ASN	A	705	-17.945	-5.851	55.741	1.00	40.14	C
ATOM	4279	C	ASN	A	705	-17.149	-6.124	57.009	1.00	36.07	C
ATOM	4280	O	ASN	A	705	-16.398	-7.096	57.081	1.00	38.57	O
ATOM	4281	CB	ASN	A	705	-17.807	-7.056	54.805	1.00	47.14	C
ATOM	4282	CG	ASN	A	705	-19.078	-7.343	54.021	1.00	51.73	C
ATOM	4283	OD1	ASN	A	705	-19.765	-8.344	54.268	1.00	52.59	O
ATOM	4284	ND2	ASN	A	705	-19.395	-6.469	53.066	1.00	47.28	N
ATOM	4285	N	PRO	A	706	-17.317	-5.282	58.037	1.00	32.42	N
ATOM	4286	CA	PRO	A	706	-16.572	-5.494	59.279	1.00	30.01	C
ATOM	4287	C	PRO	A	706	-16.802	-6.839	59.954	1.00	30.05	C
ATOM	4288	O	PRO	A	706	-17.840	-7.489	59.783	1.00	28.53	O
ATOM	4289	CB	PRO	A	706	-16.997	-4.325	60.164	1.00	30.64	C
ATOM	4290	CG	PRO	A	706	-18.274	-3.822	59.559	1.00	29.03	C
ATOM	4291	CD	PRO	A	706	-18.189	-4.098	58.103	1.00	30.40	C
ATOM	4292	N	TYR	A	707	-15.805	-7.250	60.725	1.00	26.03	N
ATOM	4293	CA	TYR	A	707	-15.857	-8.502	61.451	1.00	22.79	C
ATOM	4294	C	TYR	A	707	-16.095	-8.184	62.910	1.00	22.69	C
ATOM	4295	O	TYR	A	707	-15.683	-7.135	63.401	1.00	24.54	O
ATOM	4296	CB	TYR	A	707	-14.522	-9.233	61.356	1.00	22.44	C
ATOM	4297	CG	TYR	A	707	-14.304	-10.063	60.117	1.00	23.80	C
ATOM	4298	CD1	TYR	A	707	-15.014	-11.249	59.908	1.00	17.98	C

ATOM	4299	CD2	TYR	A	707	-13.331	-9.706	59.188	1.00	20.80	C
ATOM	4300	CE1	TYR	A	707	-14.750	-12.058	58.803	1.00	20.55	C
ATOM	4301	CE2	TYR	A	707	-13.063	-10.510	58.084	1.00	21.25	C
ATOM	4302	CZ	TYR	A	707	-13.769	-11.681	57.897	1.00	16.54	C
ATOM	4303	OH	TYR	A	707	-13.477	-12.486	56.816	1.00	15.58	O
ATOM	4304	N	LYS	A	708	-16.767	-9.093	63.598	1.00	22.80	N
ATOM	4305	CA	LYS	A	708	-17.009	-8.953	65.024	1.00	26.01	C
ATOM	4306	C	LYS	A	708	-16.054	-10.019	65.550	1.00	24.91	C
ATOM	4307	O	LYS	A	708	-16.182	-11.191	65.204	1.00	22.82	O
ATOM	4308	CB	LYS	A	708	-18.461	-9.305	65.363	1.00	31.04	C
ATOM	4309	CG	LYS	A	708	-18.965	-8.702	66.658	1.00	35.97	C
ATOM	4310	CD	LYS	A	708	-20.314	-8.020	66.465	1.00	47.47	C
ATOM	4311	CE	LYS	A	708	-20.167	-6.497	66.367	1.00	52.77	C
ATOM	4312	NZ	LYS	A	708	-21.067	-5.768	67.320	1.00	53.20	N
ATOM	4313	N	VAL	A	709	-15.081	-9.617	66.358	1.00	26.00	N
ATOM	4314	CA	VAL	A	709	-14.093	-10.564	66.858	1.00	22.25	C
ATOM	4315	C	VAL	A	709	-14.420	-11.187	68.191	1.00	20.36	C
ATOM	4316	O	VAL	A	709	-14.666	-10.496	69.175	1.00	20.12	O
ATOM	4317	CB	VAL	A	709	-12.702	-9.901	66.964	1.00	26.95	C
ATOM	4318	CG1	VAL	A	709	-11.652	-10.935	67.373	1.00	26.92	C
ATOM	4319	CG2	VAL	A	709	-12.341	-9.262	65.635	1.00	23.89	C
ATOM	4320	N	TYR	A	710	-14.409	-12.510	68.222	1.00	20.52	N
ATOM	4321	CA	TYR	A	710	-14.689	-13.224	69.447	1.00	20.96	C
ATOM	4322	C	TYR	A	710	-13.474	-14.030	69.855	1.00	21.56	C
ATOM	4323	O	TYR	A	710	-12.844	-14.685	69.026	1.00	22.20	O
ATOM	4324	CB	TYR	A	710	-15.861	-14.195	69.269	1.00	23.32	C
ATOM	4325	CG	TYR	A	710	-17.180	-13.552	68.922	1.00	27.30	C
ATOM	4326	CD1	TYR	A	710	-17.505	-13.265	67.597	1.00	31.04	C
ATOM	4327	CD2	TYR	A	710	-18.122	-13.254	69.916	1.00	29.45	C
ATOM	4328	CE1	TYR	A	710	-18.737	-12.698	67.261	1.00	34.56	C
ATOM	4329	CE2	TYR	A	710	-19.362	-12.684	69.589	1.00	29.88	C
ATOM	4330	CZ	TYR	A	710	-19.659	-12.412	68.260	1.00	32.80	C
ATOM	4331	OH	TYR	A	710	-20.868	-11.860	67.914	1.00	37.04	O
ATOM	4332	N	VAL	A	711	-13.154	-13.980	71.138	1.00	18.50	N
ATOM	4333	CA	VAL	A	711	-12.057	-14.749	71.667	1.00	22.20	C
ATOM	4334	C	VAL	A	711	-12.705	-15.574	72.750	1.00	19.61	C
ATOM	4335	O	VAL	A	711	-13.198	-15.033	73.735	1.00	23.91	O
ATOM	4336	CB	VAL	A	711	-10.959	-13.858	72.277	1.00	22.97	C
ATOM	4337	CG1	VAL	A	711	-9.899	-14.725	72.932	1.00	22.31	C
ATOM	4338	CG2	VAL	A	711	-10.341	-13.004	71.197	1.00	15.51	C
ATOM	4339	N	ASN	A	712	-12.716	-16.885	72.561	1.00	20.86	N
ATOM	4340	CA	ASN	A	712	-13.336	-17.767	73.529	1.00	24.77	C
ATOM	4341	C	ASN	A	712	-14.837	-17.469	73.559	1.00	28.20	C
ATOM	4342	O	ASN	A	712	-15.480	-17.556	74.606	1.00	29.15	O
ATOM	4343	CB	ASN	A	712	-12.719	-17.542	74.907	1.00	23.46	C
ATOM	4344	CG	ASN	A	712	-11.308	-18.093	75.005	1.00	28.82	C
ATOM	4345	OD1	ASN	A	712	-10.862	-18.851	74.140	1.00	31.37	O
ATOM	4346	ND2	ASN	A	712	-10.598	-17.718	76.060	1.00	28.39	N
ATOM	4347	N	ASP	A	713	-15.377	-17.114	72.395	1.00	29.05	N
ATOM	4348	CA	ASP	A	713	-16.798	-16.791	72.233	1.00	33.51	C

ATOM	4349	C	ASP	A	713	-17.244	-15.549	73.002	1.00	32.79	C
ATOM	4350	O	ASP	A	713	-18.413	-15.430	73.371	1.00	32.73	O
ATOM	4351	CB	ASP	A	713	-17.675	-17.981	72.642	1.00	33.21	C
ATOM	4352	CG	ASP	A	713	-19.078	-17.897	72.059	1.00	34.56	C
ATOM	4353	OD1	ASP	A	713	-19.214	-17.418	70.912	1.00	27.61	O
ATOM	4354	OD2	ASP	A	713	-20.039	-18.310	72.744	1.00	33.83	O
ATOM	4355	N	LYS	A	714	-16.310	-14.633	73.243	1.00	31.63	N
ATOM	4356	CA	LYS	A	714	-16.606	-13.394	73.951	1.00	32.04	C
ATOM	4357	C	LYS	A	714	-16.124	-12.247	73.092	1.00	31.61	C
ATOM	4358	O	LYS	A	714	-14.956	-12.195	72.719	1.00	33.06	O
ATOM	4359	CB	LYS	A	714	-15.890	-13.345	75.298	1.00	33.93	C
ATOM	4360	CG	LYS	A	714	-16.495	-14.245	76.360	1.00	42.56	C
ATOM	4361	CD	LYS	A	714	-16.067	-13.809	77.758	1.00	50.44	C
ATOM	4362	CE	LYS	A	714	-15.278	-14.903	78.474	1.00	55.36	C
ATOM	4363	NZ	LYS	A	714	-14.970	-14.535	79.895	1.00	57.87	N
ATOM	4364	N	GLU	A	715	-17.027	-11.330	72.776	1.00	31.20	N
ATOM	4365	CA	GLU	A	715	-16.690	-10.183	71.950	1.00	32.44	C
ATOM	4366	C	GLU	A	715	-15.386	-9.543	72.410	1.00	33.17	C
ATOM	4367	O	GLU	A	715	-15.171	-9.326	73.606	1.00	32.11	O
ATOM	4368	CB	GLU	A	715	-17.817	-9.158	72.006	1.00	35.91	C
ATOM	4369	CG	GLU	A	715	-17.467	-7.818	71.407	1.00	43.49	C
ATOM	4370	CD	GLU	A	715	-18.184	-7.584	70.104	1.00	47.20	C
ATOM	4371	OE1	GLU	A	715	-18.386	-6.410	69.728	1.00	46.49	O
ATOM	4372	OE2	GLU	A	715	-18.549	-8.585	69.455	1.00	54.44	O
ATOM	4373	N	ALA	A	716	-14.516	-9.246	71.452	1.00	32.26	N
ATOM	4374	CA	ALA	A	716	-13.233	-8.627	71.751	1.00	34.06	C
ATOM	4375	C	ALA	A	716	-13.061	-7.395	70.894	1.00	32.91	C
ATOM	4376	O	ALA	A	716	-13.457	-7.375	69.728	1.00	36.85	O
ATOM	4377	CB	ALA	A	716	-12.092	-9.605	71.485	1.00	34.43	C
ATOM	4378	N	SER	A	717	-12.475	-6.361	71.475	1.00	29.82	N
ATOM	4379	CA	SER	A	717	-12.247	-5.137	70.736	1.00	31.92	C
ATOM	4380	C	SER	A	717	-10.761	-5.053	70.429	1.00	31.63	C
ATOM	4381	O	SER	A	717	-9.943	-4.864	71.324	1.00	32.26	O
ATOM	4382	CB	SER	A	717	-12.696	-3.943	71.567	1.00	31.70	C
ATOM	4383	OG	SER	A	717	-13.410	-4.390	72.707	1.00	43.11	O
ATOM	4384	N	LEU	A	718	-10.420	-5.219	69.157	1.00	32.06	N
ATOM	4385	CA	LEU	A	718	-9.034	-5.169	68.727	1.00	32.08	C
ATOM	4386	C	LEU	A	718	-8.600	-3.745	68.440	1.00	35.44	C
ATOM	4387	O	LEU	A	718	-9.397	-2.907	68.010	1.00	36.86	O
ATOM	4388	CB	LEU	A	718	-8.843	-6.023	67.481	1.00	27.06	C
ATOM	4389	CG	LEU	A	718	-9.232	-7.486	67.659	1.00	26.11	C
ATOM	4390	CD1	LEU	A	718	-8.815	-8.256	66.424	1.00	23.76	C
ATOM	4391	CD2	LEU	A	718	-8.579	-8.057	68.911	1.00	23.07	C
ATOM	4392	N	THR	A	719	-7.322	-3.482	68.675	1.00	36.15	N
ATOM	4393	CA	THR	A	719	-6.758	-2.166	68.460	1.00	34.20	C
ATOM	4394	C	THR	A	719	-5.498	-2.259	67.626	1.00	33.31	C
ATOM	4395	O	THR	A	719	-5.006	-3.352	67.336	1.00	29.14	O
ATOM	4396	CB	THR	A	719	-6.383	-1.523	69.786	1.00	36.69	C
ATOM	4397	OG1	THR	A	719	-5.645	-2.471	70.565	1.00	38.23	O
ATOM	4398	CG2	THR	A	719	-7.629	-1.112	70.556	1.00	39.61	C

ATOM	4399	N	GLU	A	720	-4.987	-1.097	67.238	1.00	34.11	N
ATOM	4400	CA	GLU	A	720	-3.760	-1.018	66.463	1.00	37.40	C
ATOM	4401	C	GLU	A	720	-2.687	-1.656	67.332	1.00	35.10	C
ATOM	4402	O	GLU	A	720	-1.872	-2.445	66.864	1.00	34.80	O
ATOM	4403	CB	GLU	A	720	-3.404	0.442	66.195	1.00	41.61	C
ATOM	4404	CG	GLU	A	720	-3.131	0.756	64.740	1.00	52.75	C
ATOM	4405	CD	GLU	A	720	-1.782	1.430	64.523	1.00	59.04	C
ATOM	4406	OE1	GLU	A	720	-1.322	2.160	65.429	1.00	62.67	O
ATOM	4407	OE2	GLU	A	720	-1.180	1.230	63.444	1.00	63.40	O
ATOM	4408	N	GLN	A	721	-2.713	-1.306	68.612	1.00	34.74	N
ATOM	4409	CA	GLN	A	721	-1.769	-1.843	69.575	1.00	38.20	C
ATOM	4410	C	GLN	A	721	-2.120	-3.293	69.859	1.00	36.44	C
ATOM	4411	O	GLN	A	721	-3.272	-3.624	70.128	1.00	36.35	O
ATOM	4412	CB	GLN	A	721	-1.816	-1.040	70.877	1.00	43.89	C
ATOM	4413	CG	GLN	A	721	-0.499	-0.359	71.230	1.00	52.56	C
ATOM	4414	CD	GLN	A	721	-0.077	-0.605	72.669	1.00	55.95	C
ATOM	4415	OE1	GLN	A	721	-0.303	-1.684	73.221	1.00	63.00	O
ATOM	4416	NE2	GLN	A	721	0.540	0.400	73.285	1.00	58.80	N
ATOM	4417	N	GLU	A	722	-1.113	-4.153	69.795	1.00	37.10	N
ATOM	4418	CA	GLU	A	722	-1.300	-5.573	70.033	1.00	36.26	C
ATOM	4419	C	GLU	A	722	-1.867	-5.842	71.413	1.00	34.90	C
ATOM	4420	O	GLU	A	722	-1.487	-5.200	72.390	1.00	37.55	O
ATOM	4421	CB	GLU	A	722	0.034	-6.294	69.904	1.00	38.14	C
ATOM	4422	CG	GLU	A	722	0.063	-7.385	68.875	1.00	43.93	C
ATOM	4423	CD	GLU	A	722	1.456	-7.959	68.714	1.00	49.34	C
ATOM	4424	OE1	GLU	A	722	1.922	-8.655	69.640	1.00	49.06	O
ATOM	4425	OE2	GLU	A	722	2.088	-7.708	67.665	1.00	52.76	O
ATOM	4426	N	LYS	A	723	-2.783	-6.797	71.487	1.00	32.25	N
ATOM	4427	CA	LYS	A	723	-3.377	-7.183	72.757	1.00	31.26	C
ATOM	4428	C	LYS	A	723	-3.100	-8.674	72.922	1.00	29.31	C
ATOM	4429	O	LYS	A	723	-3.178	-9.432	71.954	1.00	29.15	O
ATOM	4430	CB	LYS	A	723	-4.885	-6.922	72.740	1.00	34.80	C
ATOM	4431	CG	LYS	A	723	-5.261	-5.477	73.002	1.00	36.08	C
ATOM	4432	CD	LYS	A	723	-6.579	-5.123	72.335	1.00	39.87	C
ATOM	4433	CE	LYS	A	723	-7.631	-4.782	73.361	1.00	33.94	C
ATOM	4434	NZ	LYS	A	723	-7.410	-5.560	74.599	1.00	41.84	N
ATOM	4435	N	ASP	A	724	-2.764	-9.105	74.131	1.00	28.35	N
ATOM	4436	CA	ASP	A	724	-2.488	-10.519	74.336	1.00	30.84	C
ATOM	4437	C	ASP	A	724	-3.676	-11.257	74.924	1.00	29.74	C
ATOM	4438	O	ASP	A	724	-4.359	-10.761	75.818	1.00	31.41	O
ATOM	4439	CB	ASP	A	724	-1.278	-10.712	75.248	1.00	35.21	C
ATOM	4440	CG	ASP	A	724	-0.058	-9.964	74.765	1.00	38.04	C
ATOM	4441	OD1	ASP	A	724	0.685	-9.465	75.628	1.00	45.36	O
ATOM	4442	OD2	ASP	A	724	0.165	-9.871	73.538	1.00	36.86	O
ATOM	4443	N	TYR	A	725	-3.917	-12.453	74.414	1.00	26.21	N
ATOM	4444	CA	TYR	A	725	-5.017	-13.251	74.896	1.00	24.33	C
ATOM	4445	C	TYR	A	725	-4.476	-14.587	75.367	1.00	22.58	C
ATOM	4446	O	TYR	A	725	-4.251	-15.498	74.575	1.00	23.55	O
ATOM	4447	CB	TYR	A	725	-6.060	-13.431	73.784	1.00	26.35	C
ATOM	4448	CG	TYR	A	725	-6.713	-12.125	73.368	1.00	26.90	C

ATOM	4449	CD1	TYR	A	725	-6.170	-11.340	72.355	1.00	27.63	C
ATOM	4450	CD2	TYR	A	725	-7.844	-11.647	74.030	1.00	31.87	C
ATOM	4451	CE1	TYR	A	725	-6.734	-10.106	72.014	1.00	29.23	C
ATOM	4452	CE2	TYR	A	725	-8.414	-10.417	73.698	1.00	29.07	C
ATOM	4453	CZ	TYR	A	725	-7.855	-9.653	72.693	1.00	31.55	C
ATOM	4454	OH	TYR	A	725	-8.417	-8.435	72.375	1.00	37.99	O
ATOM	4455	N	PRO	A	726	-4.221	-14.707	76.674	1.00	26.35	N
ATOM	4456	CA	PRO	A	726	-3.703	-15.960	77.225	1.00	28.84	C
ATOM	4457	C	PRO	A	726	-4.845	-16.953	77.399	1.00	31.51	C
ATOM	4458	O	PRO	A	726	-6.012	-16.571	77.484	1.00	32.31	O
ATOM	4459	CB	PRO	A	726	-3.092	-15.551	78.565	1.00	27.97	C
ATOM	4460	CG	PRO	A	726	-3.368	-14.062	78.719	1.00	28.47	C
ATOM	4461	CD	PRO	A	726	-4.391	-13.679	77.712	1.00	27.50	C
ATOM	4462	N	GLU	A	727	-4.511	-18.232	77.438	1.00	33.80	N
ATOM	4463	CA	GLU	A	727	-5.525	-19.256	77.606	1.00	32.09	C
ATOM	4464	C	GLU	A	727	-6.624	-19.170	76.553	1.00	30.05	C
ATOM	4465	O	GLU	A	727	-7.792	-19.385	76.860	1.00	35.12	O
ATOM	4466	CB	GLU	A	727	-6.141	-19.140	78.996	1.00	32.86	C
ATOM	4467	CG	GLU	A	727	-5.117	-19.070	80.101	1.00	35.45	C
ATOM	4468	CD	GLU	A	727	-4.562	-20.429	80.451	1.00	41.45	C
ATOM	4469	OE1	GLU	A	727	-4.427	-21.281	79.545	1.00	42.76	O
ATOM	4470	OE2	GLU	A	727	-4.261	-20.648	81.640	1.00	48.63	O
ATOM	4471	N	THR	A	728	-6.251	-18.857	75.316	1.00	25.41	N
ATOM	4472	CA	THR	A	728	-7.221	-18.769	74.238	1.00	22.62	C
ATOM	4473	C	THR	A	728	-7.508	-20.156	73.687	1.00	23.73	C
ATOM	4474	O	THR	A	728	-6.598	-20.883	73.294	1.00	20.15	O
ATOM	4475	CB	THR	A	728	-6.711	-17.876	73.101	1.00	19.11	C
ATOM	4476	OG1	THR	A	728	-6.702	-16.514	73.541	1.00	20.50	O
ATOM	4477	CG2	THR	A	728	-7.605	-17.993	71.873	1.00	21.10	C
ATOM	4478	N	GLN	A	729	-8.783	-20.529	73.671	1.00	23.18	N
ATOM	4479	CA	GLN	A	729	-9.177	-21.833	73.155	1.00	22.63	C
ATOM	4480	C	GLN	A	729	-9.685	-21.656	71.735	1.00	19.95	C
ATOM	4481	O	GLN	A	729	-9.685	-22.590	70.940	1.00	19.91	O
ATOM	4482	CB	GLN	A	729	-10.270	-22.457	74.033	1.00	28.03	C
ATOM	4483	CG	GLN	A	729	-10.503	-23.949	73.776	1.00	36.04	C
ATOM	4484	CD	GLN	A	729	-9.711	-24.852	74.721	1.00	39.79	C
ATOM	4485	OE1	GLN	A	729	-9.772	-24.699	75.944	1.00	46.10	O
ATOM	4486	NE2	GLN	A	729	-8.963	-25.799	74.154	1.00	35.30	N
ATOM	4487	N	SER	A	730	-10.112	-20.443	71.412	1.00	18.51	N
ATOM	4488	CA	SER	A	730	-10.612	-20.180	70.081	1.00	16.55	C
ATOM	4489	C	SER	A	730	-10.738	-18.711	69.800	1.00	14.21	C
ATOM	4490	O	SER	A	730	-10.778	-17.889	70.708	1.00	19.36	O
ATOM	4491	CB	SER	A	730	-11.981	-20.829	69.889	1.00	21.14	C
ATOM	4492	OG	SER	A	730	-12.996	-20.020	70.461	1.00	20.11	O
ATOM	4493	N	VAL	A	731	-10.789	-18.398	68.516	1.00	17.51	N
ATOM	4494	CA	VAL	A	731	-10.958	-17.037	68.044	1.00	19.90	C
ATOM	4495	C	VAL	A	731	-11.937	-17.166	66.875	1.00	21.72	C
ATOM	4496	O	VAL	A	731	-11.830	-18.096	66.067	1.00	19.70	O
ATOM	4497	CB	VAL	A	731	-9.615	-16.422	67.549	1.00	21.14	C
ATOM	4498	CG1	VAL	A	731	-9.885	-15.131	66.765	1.00	17.89	C

ATOM	4499	CG2	VAL	A	731	-8.692	-16.142	68.748	1.00	13.43	C
ATOM	4500	N	PHE	A	732	-12.904	-16.259	66.794	1.00	21.50	N
ATOM	4501	CA	PHE	A	732	-13.876	-16.315	65.711	1.00	17.96	C
ATOM	4502	C	PHE	A	732	-14.076	-14.956	65.065	1.00	15.43	C
ATOM	4503	O	PHE	A	732	-14.322	-13.962	65.751	1.00	18.57	O
ATOM	4504	CB	PHE	A	732	-15.223	-16.845	66.228	1.00	19.56	C
ATOM	4505	CG	PHE	A	732	-16.215	-17.147	65.133	1.00	19.85	C
ATOM	4506	CD1	PHE	A	732	-16.008	-18.220	64.265	1.00	18.38	C
ATOM	4507	CD2	PHE	A	732	-17.321	-16.327	64.930	1.00	18.25	C
ATOM	4508	CE1	PHE	A	732	-16.881	-18.469	63.211	1.00	20.12	C
ATOM	4509	CE2	PHE	A	732	-18.200	-16.568	63.879	1.00	17.89	C
ATOM	4510	CZ	PHE	A	732	-17.980	-17.640	63.018	1.00	18.66	C
ATOM	4511	N	LEU	A	733	-13.944	-14.922	63.742	1.00	15.16	N
ATOM	4512	CA	LEU	A	733	-14.131	-13.708	62.960	1.00	15.32	C
ATOM	4513	C	LEU	A	733	-15.523	-13.818	62.353	1.00	15.72	C
ATOM	4514	O	LEU	A	733	-15.750	-14.617	61.442	1.00	15.15	O
ATOM	4515	CB	LEU	A	733	-13.093	-13.625	61.841	1.00	14.34	C
ATOM	4516	CG	LEU	A	733	-11.635	-13.684	62.310	1.00	19.29	C
ATOM	4517	CD1	LEU	A	733	-10.716	-13.262	61.180	1.00	16.55	C
ATOM	4518	CD2	LEU	A	733	-11.459	-12.783	63.526	1.00	20.90	C
ATOM	4519	N	GLU	A	734	-16.444	-13.005	62.852	1.00	16.57	N
ATOM	4520	CA	GLU	A	734	-17.831	-13.044	62.397	1.00	17.21	C
ATOM	4521	C	GLU	A	734	-18.250	-11.922	61.457	1.00	16.80	C
ATOM	4522	O	GLU	A	734	-18.238	-10.739	61.822	1.00	18.22	O
ATOM	4523	CB	GLU	A	734	-18.750	-13.054	63.615	1.00	17.72	C
ATOM	4524	CG	GLU	A	734	-20.227	-13.137	63.293	1.00	18.22	C
ATOM	4525	CD	GLU	A	734	-21.072	-13.168	64.546	1.00	14.89	C
ATOM	4526	OE1	GLU	A	734	-21.120	-12.133	65.248	1.00	20.77	O
ATOM	4527	OE2	GLU	A	734	-21.679	-14.226	64.827	1.00	18.02	O
ATOM	4528	N	SER	A	735	-18.626	-12.307	60.243	1.00	16.88	N
ATOM	4529	CA	SER	A	735	-19.076	-11.354	59.239	1.00	18.19	C
ATOM	4530	C	SER	A	735	-20.583	-11.520	59.090	1.00	20.63	C
ATOM	4531	O	SER	A	735	-21.163	-12.464	59.625	1.00	19.67	O
ATOM	4532	CB	SER	A	735	-18.418	-11.646	57.895	1.00	15.27	C
ATOM	4533	OG	SER	A	735	-19.081	-10.964	56.842	1.00	18.17	O
ATOM	4534	N	SER	A	736	-21.206	-10.605	58.358	1.00	21.62	N
ATOM	4535	CA	SER	A	736	-22.639	-10.676	58.113	1.00	23.02	C
ATOM	4536	C	SER	A	736	-22.827	-11.805	57.114	1.00	24.71	C
ATOM	4537	O	SER	A	736	-23.885	-12.429	57.045	1.00	25.51	O
ATOM	4538	CB	SER	A	736	-23.129	-9.371	57.505	1.00	20.98	C
ATOM	4539	OG	SER	A	736	-22.401	-9.084	56.326	1.00	26.95	O
ATOM	4540	N	ASP	A	737	-21.778	-12.062	56.341	1.00	22.98	N
ATOM	4541	CA	ASP	A	737	-21.796	-13.116	55.341	1.00	18.83	C
ATOM	4542	C	ASP	A	737	-21.056	-14.323	55.882	1.00	21.98	C
ATOM	4543	O	ASP	A	737	-19.840	-14.294	56.019	1.00	22.79	O
ATOM	4544	CB	ASP	A	737	-21.124	-12.635	54.061	1.00	17.92	C
ATOM	4545	CG	ASP	A	737	-21.245	-13.633	52.942	1.00	18.79	C
ATOM	4546	OD1	ASP	A	737	-20.952	-13.284	51.780	1.00	23.36	O
ATOM	4547	OD2	ASP	A	737	-21.639	-14.777	53.230	1.00	20.96	O
ATOM	4548	N	SER	A	738	-21.793	-15.383	56.190	1.00	21.56	N

ATOM	4549	CA	SER	A	738	-21.207	-16.606	56.729	1.00	23.25	C
ATOM	4550	C	SER	A	738	-20.068	-17.150	55.876	1.00	20.53	C
ATOM	4551	O	SER	A	738	-19.203	-17.852	56.380	1.00	21.43	O
ATOM	4552	CB	SER	A	738	-22.280	-17.690	56.872	1.00	23.95	C
ATOM	4553	OG	SER	A	738	-22.847	-17.670	58.171	1.00	35.00	O
ATOM	4554	N	LYS	A	739	-20.081	-16.835	54.586	1.00	19.79	N
ATOM	4555	CA	LYS	A	739	-19.049	-17.306	53.669	1.00	21.14	C
ATOM	4556	C	LYS	A	739	-17.765	-16.480	53.770	1.00	19.15	C
ATOM	4557	O	LYS	A	739	-16.908	-16.554	52.898	1.00	20.74	O
ATOM	4558	CB	LYS	A	739	-19.563	-17.266	52.232	1.00	19.19	C
ATOM	4559	CG	LYS	A	739	-19.517	-18.607	51.525	1.00	25.94	C
ATOM	4560	CD	LYS	A	739	-20.481	-19.597	52.151	1.00	21.88	C
ATOM	4561	CE	LYS	A	739	-21.517	-20.043	51.137	1.00	25.87	C
ATOM	4562	NZ	LYS	A	739	-21.352	-21.466	50.752	1.00	22.63	N
ATOM	4563	N	LYS	A	740	-17.655	-15.685	54.827	1.00	16.02	N
ATOM	4564	CA	LYS	A	740	-16.470	-14.862	55.059	1.00	18.36	C
ATOM	4565	C	LYS	A	740	-16.021	-15.068	56.498	1.00	17.79	C
ATOM	4566	O	LYS	A	740	-15.117	-14.399	56.984	1.00	21.45	O
ATOM	4567	CB	LYS	A	740	-16.781	-13.381	54.839	1.00	11.46	C
ATOM	4568	CG	LYS	A	740	-16.787	-12.973	53.385	1.00	8.36	C
ATOM	4569	CD	LYS	A	740	-17.164	-11.520	53.253	1.00	10.91	C
ATOM	4570	CE	LYS	A	740	-17.479	-11.174	51.820	1.00	13.46	C
ATOM	4571	NZ	LYS	A	740	-17.632	-9.702	51.674	1.00	20.28	N
ATOM	4572	N	ASN	A	741	-16.672	-15.997	57.183	1.00	18.77	N
ATOM	4573	CA	ASN	A	741	-16.342	-16.277	58.569	1.00	20.42	C
ATOM	4574	C	ASN	A	741	-15.072	-17.121	58.675	1.00	18.19	C
ATOM	4575	O	ASN	A	741	-14.801	-17.970	57.816	1.00	18.42	O
ATOM	4576	CB	ASN	A	741	-17.498	-17.024	59.239	1.00	19.45	C
ATOM	4577	CG	ASN	A	741	-18.690	-16.141	59.502	1.00	19.08	C
ATOM	4578	OD1	ASN	A	741	-18.651	-14.936	59.265	1.00	17.96	O
ATOM	4579	ND2	ASN	A	741	-19.763	-16.739	60.005	1.00	20.04	N
ATOM	4580	N	ILE	A	742	-14.291	-16.873	59.722	1.00	16.78	N
ATOM	4581	CA	ILE	A	742	-13.066	-17.629	59.955	1.00	14.73	C
ATOM	4582	C	ILE	A	742	-12.941	-17.949	61.426	1.00	11.50	C
ATOM	4583	O	ILE	A	742	-12.936	-17.050	62.270	1.00	18.00	O
ATOM	4584	CB	ILE	A	742	-11.794	-16.852	59.538	1.00	17.46	C
ATOM	4585	CG1	ILE	A	742	-11.938	-16.302	58.125	1.00	16.16	C
ATOM	4586	CG2	ILE	A	742	-10.597	-17.781	59.575	1.00	12.75	C
ATOM	4587	CD1	ILE	A	742	-10.967	-15.175	57.824	1.00	21.25	C
ATOM	4588	N	GLY	A	743	-12.861	-19.234	61.740	1.00	11.61	N
ATOM	4589	CA	GLY	A	743	-12.708	-19.636	63.123	1.00	12.78	C
ATOM	4590	C	GLY	A	743	-11.386	-20.364	63.314	1.00	17.17	C
ATOM	4591	O	GLY	A	743	-10.895	-21.028	62.395	1.00	18.22	O
ATOM	4592	N	TYR	A	744	-10.802	-20.227	64.499	1.00	19.29	N
ATOM	4593	CA	TYR	A	744	-9.546	-20.887	64.827	1.00	17.49	C
ATOM	4594	C	TYR	A	744	-9.710	-21.566	66.168	1.00	14.30	C
ATOM	4595	O	TYR	A	744	-9.891	-20.906	67.190	1.00	19.62	O
ATOM	4596	CB	TYR	A	744	-8.398	-19.883	64.924	1.00	15.97	C
ATOM	4597	CG	TYR	A	744	-8.327	-18.893	63.792	1.00	18.76	C
ATOM	4598	CD1	TYR	A	744	-8.989	-17.668	63.878	1.00	24.09	C

ATOM	4599	CD2	TYR	A	744	-7.566	-19.155	62.655	1.00	18.99	C
ATOM	4600	CE1	TYR	A	744	-8.894	-16.726	62.864	1.00	23.92	C
ATOM	4601	CE2	TYR	A	744	-7.462	-18.216	61.631	1.00	20.17	C
ATOM	4602	CZ	TYR	A	744	-8.129	-17.005	61.747	1.00	23.23	C
ATOM	4603	OH	TYR	A	744	-8.032	-16.062	60.755	1.00	26.83	O
ATOM	4604	N	PHE	A	745	-9.649	-22.891	66.155	1.00	14.29	N
ATOM	4605	CA	PHE	A	745	-9.779	-23.678	67.367	1.00	14.12	C
ATOM	4606	C	PHE	A	745	-8.400	-24.174	67.777	1.00	15.22	C
ATOM	4607	O	PHE	A	745	-7.760	-24.913	67.033	1.00	15.31	O
ATOM	4608	CB	PHE	A	745	-10.680	-24.885	67.119	1.00	12.00	C
ATOM	4609	CG	PHE	A	745	-10.653	-25.896	68.232	1.00	14.77	C
ATOM	4610	CD1	PHE	A	745	-10.854	-25.502	69.548	1.00	10.58	C
ATOM	4611	CD2	PHE	A	745	-10.430	-27.245	67.962	1.00	14.07	C
ATOM	4612	CE1	PHE	A	745	-10.835	-26.433	70.586	1.00	11.95	C
ATOM	4613	CE2	PHE	A	745	-10.407	-28.187	68.994	1.00	13.17	C
ATOM	4614	CZ	PHE	A	745	-10.609	-27.783	70.305	1.00	13.17	C
ATOM	4615	N	PHE	A	746	-7.953	-23.765	68.956	1.00	15.82	N
ATOM	4616	CA	PHE	A	746	-6.651	-24.180	69.478	1.00	18.36	C
ATOM	4617	C	PHE	A	746	-6.792	-25.459	70.295	1.00	17.44	C
ATOM	4618	O	PHE	A	746	-7.352	-25.439	71.390	1.00	19.21	O
ATOM	4619	CB	PHE	A	746	-6.077	-23.057	70.335	1.00	14.91	C
ATOM	4620	CG	PHE	A	746	-5.852	-21.799	69.571	1.00	17.89	C
ATOM	4621	CD1	PHE	A	746	-6.840	-20.826	69.507	1.00	18.85	C
ATOM	4622	CD2	PHE	A	746	-4.670	-21.605	68.861	1.00	18.69	C
ATOM	4623	CE1	PHE	A	746	-6.659	-19.677	68.743	1.00	21.36	C
ATOM	4624	CE2	PHE	A	746	-4.479	-20.458	68.093	1.00	17.10	C
ATOM	4625	CZ	PHE	A	746	-5.478	-19.491	68.034	1.00	18.60	C
ATOM	4626	N	PHE	A	747	-6.280	-26.567	69.762	1.00	19.43	N
ATOM	4627	CA	PHE	A	747	-6.370	-27.861	70.434	1.00	18.66	C
ATOM	4628	C	PHE	A	747	-6.039	-27.757	71.906	1.00	18.35	C
ATOM	4629	O	PHE	A	747	-6.668	-28.406	72.742	1.00	21.39	O
ATOM	4630	CB	PHE	A	747	-5.468	-28.877	69.744	1.00	18.00	C
ATOM	4631	CG	PHE	A	747	-5.794	-29.076	68.291	1.00	18.84	C
ATOM	4632	CD1	PHE	A	747	-7.016	-29.626	67.908	1.00	22.35	C
ATOM	4633	CD2	PHE	A	747	-4.891	-28.702	67.301	1.00	16.97	C
ATOM	4634	CE1	PHE	A	747	-7.332	-29.798	66.562	1.00	19.95	C
ATOM	4635	CE2	PHE	A	747	-5.193	-28.869	65.952	1.00	17.50	C
ATOM	4636	CZ	PHE	A	747	-6.419	-29.418	65.580	1.00	20.93	C
ATOM	4637	N	LYS	A	748	-5.056	-26.931	72.232	1.00	19.50	N
ATOM	4638	CA	LYS	A	748	-4.691	-26.716	73.626	1.00	21.46	C
ATOM	4639	C	LYS	A	748	-4.718	-25.211	73.840	1.00	19.82	C
ATOM	4640	O	LYS	A	748	-4.315	-24.454	72.963	1.00	21.76	O
ATOM	4641	CB	LYS	A	748	-3.294	-27.281	73.913	1.00	27.45	C
ATOM	4642	CG	LYS	A	748	-3.060	-28.669	73.317	1.00	34.35	C
ATOM	4643	CD	LYS	A	748	-2.489	-29.641	74.341	1.00	39.98	C
ATOM	4644	CE	LYS	A	748	-2.330	-31.042	73.758	1.00	39.29	C
ATOM	4645	NZ	LYS	A	748	-0.980	-31.255	73.158	1.00	45.33	N
ATOM	4646	N	LYS	A	749	-5.225	-24.771	74.986	1.00	24.25	N
ATOM	4647	CA	LYS	A	749	-5.289	-23.342	75.264	1.00	26.33	C
ATOM	4648	C	LYS	A	749	-3.906	-22.747	75.003	1.00	28.05	C

ATOM	4649	O	LYS	A	749	-2.916	-23.264	75.511	1.00	29.15	O
ATOM	4650	CB	LYS	A	749	-5.709	-23.116	76.717	1.00	28.01	C
ATOM	4651	CG	LYS	A	749	-7.215	-23.164	76.931	1.00	35.51	C
ATOM	4652	CD	LYS	A	749	-7.570	-23.175	78.410	1.00	41.10	C
ATOM	4653	CE	LYS	A	749	-8.537	-24.307	78.741	1.00	46.73	C
ATOM	4654	NZ	LYS	A	749	-8.187	-25.584	78.046	1.00	48.55	N
ATOM	4655	N	SER	A	750	-3.834	-21.681	74.204	1.00	26.99	N
ATOM	4656	CA	SER	A	750	-2.553	-21.053	73.885	1.00	28.28	C
ATOM	4657	C	SER	A	750	-2.539	-19.539	74.029	1.00	28.21	C
ATOM	4658	O	SER	A	750	-3.590	-18.893	74.074	1.00	25.53	O
ATOM	4659	CB	SER	A	750	-2.131	-21.410	72.465	1.00	29.79	C
ATOM	4660	OG	SER	A	750	-3.169	-22.091	71.795	1.00	37.14	O
ATOM	4661	N	SER	A	751	-1.330	-18.985	74.096	1.00	25.05	N
ATOM	4662	CA	SER	A	751	-1.131	-17.547	74.238	1.00	24.84	C
ATOM	4663	C	SER	A	751	-0.943	-16.922	72.877	1.00	23.49	C
ATOM	4664	O	SER	A	751	0.034	-17.203	72.183	1.00	25.10	O
ATOM	4665	CB	SER	A	751	0.102	-17.259	75.088	1.00	22.86	C
ATOM	4666	OG	SER	A	751	-0.209	-17.337	76.461	1.00	33.64	O
ATOM	4667	N	ILE	A	752	-1.877	-16.063	72.499	1.00	22.59	N
ATOM	4668	CA	ILE	A	752	-1.812	-15.416	71.203	1.00	20.10	C
ATOM	4669	C	ILE	A	752	-1.952	-13.910	71.323	1.00	18.88	C
ATOM	4670	O	ILE	A	752	-2.311	-13.385	72.375	1.00	21.88	O
ATOM	4671	CB	ILE	A	752	-2.917	-15.956	70.269	1.00	25.31	C
ATOM	4672	CG1	ILE	A	752	-4.294	-15.521	70.780	1.00	22.84	C
ATOM	4673	CG2	ILE	A	752	-2.841	-17.485	70.194	1.00	20.58	C
ATOM	4674	CD1	ILE	A	752	-5.356	-15.504	69.701	1.00	20.29	C
ATOM	4675	N	SER	A	753	-1.649	-13.216	70.237	1.00	20.23	N
ATOM	4676	CA	SER	A	753	-1.748	-11.769	70.203	1.00	19.49	C
ATOM	4677	C	SER	A	753	-2.528	-11.411	68.966	1.00	18.53	C
ATOM	4678	O	SER	A	753	-2.446	-12.103	67.950	1.00	20.97	O
ATOM	4679	CB	SER	A	753	-0.363	-11.135	70.115	1.00	20.47	C
ATOM	4680	OG	SER	A	753	0.308	-11.246	71.352	1.00	37.48	O
ATOM	4681	N	MET	A	754	-3.283	-10.325	69.052	1.00	20.08	N
ATOM	4682	CA	MET	A	754	-4.078	-9.876	67.929	1.00	20.45	C
ATOM	4683	C	MET	A	754	-4.063	-8.377	67.905	1.00	18.68	C
ATOM	4684	O	MET	A	754	-3.868	-7.739	68.937	1.00	22.57	O
ATOM	4685	CB	MET	A	754	-5.520	-10.355	68.074	1.00	24.04	C
ATOM	4686	CG	MET	A	754	-5.713	-11.827	67.774	1.00	33.24	C
ATOM	4687	SD	MET	A	754	-7.453	-12.245	67.706	1.00	35.63	S
ATOM	4688	CE	MET	A	754	-7.921	-11.886	69.373	1.00	27.30	C
ATOM	4689	N	SER	A	755	-4.267	-7.820	66.721	1.00	16.69	N
ATOM	4690	CA	SER	A	755	-4.317	-6.385	66.561	1.00	17.90	C
ATOM	4691	C	SER	A	755	-4.942	-6.128	65.209	1.00	18.47	C
ATOM	4692	O	SER	A	755	-4.880	-6.975	64.325	1.00	19.05	O
ATOM	4693	CB	SER	A	755	-2.912	-5.790	66.614	1.00	23.08	C
ATOM	4694	OG	SER	A	755	-2.202	-6.066	65.420	1.00	25.78	O
ATOM	4695	N	LYS	A	756	-5.578	-4.976	65.061	1.00	19.87	N
ATOM	4696	CA	LYS	A	756	-6.196	-4.607	63.793	1.00	23.99	C
ATOM	4697	C	LYS	A	756	-5.600	-3.252	63.512	1.00	23.98	C
ATOM	4698	O	LYS	A	756	-5.622	-2.377	64.376	1.00	27.26	O

ATOM	4699	CB	LYS	A	756	-7.718	-4.487	63.929	1.00	28.51	C
ATOM	4700	CG	LYS	A	756	-8.379	-3.726	62.779	1.00	32.05	C
ATOM	4701	CD	LYS	A	756	-9.889	-3.925	62.752	1.00	34.69	C
ATOM	4702	CE	LYS	A	756	-10.596	-2.952	63.683	1.00	39.73	C
ATOM	4703	NZ	LYS	A	756	-12.079	-3.140	63.656	1.00	49.10	N
ATOM	4704	N	ALA	A	757	-5.058	-3.062	62.320	1.00	23.09	N
ATOM	4705	CA	ALA	A	757	-4.438	-1.784	62.039	1.00	22.98	C
ATOM	4706	C	ALA	A	757	-4.348	-1.461	60.572	1.00	21.24	C
ATOM	4707	O	ALA	A	757	-4.306	-2.350	59.720	1.00	23.23	O
ATOM	4708	CB	ALA	A	757	-3.044	-1.750	62.659	1.00	25.30	C
ATOM	4709	N	LEU	A	758	-4.310	-0.167	60.288	1.00	19.41	N
ATOM	4710	CA	LEU	A	758	-4.197	0.308	58.928	1.00	22.52	C
ATOM	4711	C	LEU	A	758	-2.728	0.162	58.552	1.00	26.23	C
ATOM	4712	O	LEU	A	758	-1.848	0.608	59.289	1.00	28.39	O
ATOM	4713	CB	LEU	A	758	-4.619	1.774	58.855	1.00	22.57	C
ATOM	4714	CG	LEU	A	758	-4.669	2.427	57.474	1.00	27.44	C
ATOM	4715	CD1	LEU	A	758	-5.533	1.618	56.532	1.00	29.86	C
ATOM	4716	CD2	LEU	A	758	-5.228	3.820	57.614	1.00	31.47	C
ATOM	4717	N	GLN	A	759	-2.460	-0.480	57.422	1.00	25.56	N
ATOM	4718	CA	GLN	A	759	-1.091	-0.670	56.977	1.00	23.86	C
ATOM	4719	C	GLN	A	759	-0.879	0.028	55.638	1.00	23.70	C
ATOM	4720	O	GLN	A	759	-1.497	-0.326	54.642	1.00	26.25	O
ATOM	4721	CB	GLN	A	759	-0.788	-2.170	56.883	1.00	21.50	C
ATOM	4722	CG	GLN	A	759	-0.701	-2.829	58.263	1.00	18.12	C
ATOM	4723	CD	GLN	A	759	-0.465	-4.328	58.214	1.00	16.47	C
ATOM	4724	OE1	GLN	A	759	-0.291	-4.919	57.140	1.00	18.10	O
ATOM	4725	NE2	GLN	A	759	-0.460	-4.953	59.382	1.00	14.65	N
ATOM	4726	N	LYS	A	760	-0.014	1.038	55.628	1.00	26.29	N
ATOM	4727	CA	LYS	A	760	0.277	1.801	54.414	1.00	27.65	C
ATOM	4728	C	LYS	A	760	1.483	1.261	53.652	1.00	23.01	C
ATOM	4729	O	LYS	A	760	2.372	0.639	54.229	1.00	25.87	O
ATOM	4730	CB	LYS	A	760	0.522	3.271	54.761	1.00	30.67	C
ATOM	4731	CG	LYS	A	760	-0.664	3.962	55.421	1.00	36.43	C
ATOM	4732	CD	LYS	A	760	-0.304	5.371	55.881	1.00	40.40	C
ATOM	4733	CE	LYS	A	760	-0.964	5.710	57.212	1.00	45.73	C
ATOM	4734	NZ	LYS	A	760	-0.878	4.565	58.171	1.00	49.51	N
ATOM	4735	N	GLY	A	761	1.504	1.513	52.351	1.00	18.71	N
ATOM	4736	CA	GLY	A	761	2.594	1.053	51.517	1.00	18.89	C
ATOM	4737	C	GLY	A	761	2.392	1.496	50.085	1.00	23.37	C
ATOM	4738	O	GLY	A	761	1.388	2.122	49.761	1.00	28.51	O
ATOM	4739	N	ALA	A	762	3.348	1.183	49.223	1.00	22.68	N
ATOM	4740	CA	ALA	A	762	3.263	1.547	47.820	1.00	22.91	C
ATOM	4741	C	ALA	A	762	3.778	0.373	47.027	1.00	24.21	C
ATOM	4742	O	ALA	A	762	4.611	-0.390	47.508	1.00	26.43	O
ATOM	4743	CB	ALA	A	762	4.117	2.776	47.534	1.00	24.11	C
ATOM	4744	N	TRP	A	763	3.284	0.220	45.810	1.00	24.70	N
ATOM	4745	CA	TRP	A	763	3.734	-0.882	44.978	1.00	26.44	C
ATOM	4746	C	TRP	A	763	5.239	-0.771	44.696	1.00	28.11	C
ATOM	4747	O	TRP	A	763	5.931	-1.777	44.579	1.00	26.72	O
ATOM	4748	CB	TRP	A	763	2.942	-0.898	43.672	1.00	23.89	C

ATOM	4749	CG	TRP	A	763	1.538	-1.418	43.850	1.00	27.88	C
ATOM	4750	CD1	TRP	A	763	0.412	-0.679	44.086	1.00	26.92	C
ATOM	4751	CD2	TRP	A	763	1.116	-2.789	43.807	1.00	27.19	C
ATOM	4752	NE1	TRP	A	763	-0.686	-1.505	44.191	1.00	24.08	N
ATOM	4753	CE2	TRP	A	763	-0.282	-2.805	44.024	1.00	28.58	C
ATOM	4754	CE3	TRP	A	763	1.781	-4.005	43.606	1.00	21.18	C
ATOM	4755	CZ2	TRP	A	763	-1.026	-3.991	44.046	1.00	26.51	C
ATOM	4756	CZ3	TRP	A	763	1.041	-5.185	43.629	1.00	22.45	C
ATOM	4757	CH2	TRP	A	763	-0.348	-5.167	43.846	1.00	24.51	C
ATOM	4758	N	LYS	A	764	5.739	0.458	44.603	1.00	28.29	N
ATOM	4759	CA	LYS	A	764	7.152	0.685	44.330	1.00	26.73	C
ATOM	4760	C	LYS	A	764	8.019	0.074	45.422	1.00	26.34	C
ATOM	4761	O	LYS	A	764	9.155	-0.321	45.174	1.00	28.30	O
ATOM	4762	CB	LYS	A	764	7.436	2.180	44.230	1.00	27.67	C
ATOM	4763	CG	LYS	A	764	8.738	2.504	43.514	1.00	31.67	C
ATOM	4764	CD	LYS	A	764	9.187	3.921	43.810	1.00	30.40	C
ATOM	4765	CE	LYS	A	764	9.619	4.628	42.546	1.00	37.62	C
ATOM	4766	NZ	LYS	A	764	11.087	4.495	42.343	1.00	40.95	N
ATOM	4767	N	ASP	A	765	7.479	0.009	46.631	1.00	24.44	N
ATOM	4768	CA	ASP	A	765	8.196	-0.562	47.758	1.00	25.96	C
ATOM	4769	C	ASP	A	765	8.603	-2.004	47.470	1.00	28.22	C
ATOM	4770	O	ASP	A	765	9.622	-2.480	47.973	1.00	29.21	O
ATOM	4771	CB	ASP	A	765	7.320	-0.573	49.014	1.00	29.01	C
ATOM	4772	CG	ASP	A	765	7.014	0.815	49.543	1.00	36.09	C
ATOM	4773	OD1	ASP	A	765	7.586	1.800	49.035	1.00	33.32	O
ATOM	4774	OD2	ASP	A	765	6.189	0.915	50.481	1.00	36.85	O
ATOM	4775	N	ILE	A	766	7.803	-2.703	46.667	1.00	22.81	N
ATOM	4776	CA	ILE	A	766	8.073	-4.103	46.371	1.00	17.46	C
ATOM	4777	C	ILE	A	766	8.394	-4.361	44.918	1.00	15.45	C
ATOM	4778	O	ILE	A	766	8.720	-5.475	44.535	1.00	17.76	O
ATOM	4779	CB	ILE	A	766	6.871	-4.986	46.774	1.00	19.17	C
ATOM	4780	CG1	ILE	A	766	5.593	-4.451	46.123	1.00	19.16	C
ATOM	4781	CG2	ILE	A	766	6.720	-4.998	48.282	1.00	14.19	C
ATOM	4782	CD1	ILE	A	766	4.508	-5.495	45.985	1.00	23.30	C
ATOM	4783	N	ASN	A	767	8.290	-3.332	44.098	1.00	17.20	N
ATOM	4784	CA	ASN	A	767	8.591	-3.480	42.684	1.00	20.62	C
ATOM	4785	C	ASN	A	767	9.018	-2.120	42.164	1.00	26.61	C
ATOM	4786	O	ASN	A	767	8.192	-1.251	41.872	1.00	24.90	O
ATOM	4787	CB	ASN	A	767	7.373	-3.993	41.919	1.00	17.22	C
ATOM	4788	CG	ASN	A	767	7.691	-4.316	40.485	1.00	16.56	C
ATOM	4789	OD1	ASN	A	767	8.461	-3.609	39.834	1.00	23.24	O
ATOM	4790	ND2	ASN	A	767	7.104	-5.389	39.975	1.00	17.34	N
ATOM	4791	N	GLU	A	768	10.333	-1.950	42.078	1.00	27.59	N
ATOM	4792	CA	GLU	A	768	10.956	-0.716	41.622	1.00	28.41	C
ATOM	4793	C	GLU	A	768	10.240	-0.009	40.485	1.00	26.53	C
ATOM	4794	O	GLU	A	768	10.117	1.215	40.499	1.00	27.23	O
ATOM	4795	CB	GLU	A	768	12.396	-0.998	41.188	1.00	32.76	C
ATOM	4796	CG	GLU	A	768	13.439	-0.469	42.136	1.00	37.74	C
ATOM	4797	CD	GLU	A	768	13.189	0.966	42.506	1.00	38.79	C
ATOM	4798	OE1	GLU	A	768	13.039	1.241	43.713	1.00	46.83	O

ATOM	4799	OE2	GLU	A	768	13.137	1.815	41.590	1.00	41.74	O
ATOM	4800	N	GLY	A	769	9.783	-0.780	39.501	1.00	24.64	N
ATOM	4801	CA	GLY	A	769	9.110	-0.199	38.349	1.00	25.60	C
ATOM	4802	C	GLY	A	769	7.642	0.164	38.510	1.00	21.45	C
ATOM	4803	O	GLY	A	769	7.001	0.577	37.548	1.00	20.75	O
ATOM	4804	N	GLN	A	770	7.108	0.027	39.717	1.00	21.14	N
ATOM	4805	CA	GLN	A	770	5.703	0.338	39.957	1.00	20.93	C
ATOM	4806	C	GLN	A	770	5.524	1.752	40.497	1.00	22.76	C
ATOM	4807	O	GLN	A	770	6.504	2.455	40.730	1.00	23.49	O
ATOM	4808	CB	GLN	A	770	5.112	-0.681	40.933	1.00	19.58	C
ATOM	4809	CG	GLN	A	770	5.086	-2.088	40.377	1.00	17.60	C
ATOM	4810	CD	GLN	A	770	4.087	-2.253	39.250	1.00	21.53	C
ATOM	4811	OE1	GLN	A	770	2.887	-2.023	39.428	1.00	27.27	O
ATOM	4812	NE2	GLN	A	770	4.572	-2.657	38.080	1.00	16.98	N
ATOM	4813	N	SER	A	771	4.271	2.164	40.697	1.00	22.65	N
ATOM	4814	CA	SER	A	771	3.970	3.501	41.195	1.00	19.70	C
ATOM	4815	C	SER	A	771	4.252	3.644	42.677	1.00	24.67	C
ATOM	4816	O	SER	A	771	4.062	2.708	43.454	1.00	26.91	O
ATOM	4817	CB	SER	A	771	2.503	3.855	40.937	1.00	21.72	C
ATOM	4818	OG	SER	A	771	2.023	4.793	41.896	1.00	21.51	O
ATOM	4819	N	ASP	A	772	4.704	4.830	43.065	1.00	26.85	N
ATOM	4820	CA	ASP	A	772	5.002	5.109	44.457	1.00	30.17	C
ATOM	4821	C	ASP	A	772	3.778	5.704	45.138	1.00	29.48	C
ATOM	4822	O	ASP	A	772	3.854	6.127	46.287	1.00	30.40	O
ATOM	4823	CB	ASP	A	772	6.176	6.079	44.565	1.00	37.62	C
ATOM	4824	CG	ASP	A	772	5.862	7.443	43.979	1.00	49.38	C
ATOM	4825	OD1	ASP	A	772	5.037	7.527	43.037	1.00	54.59	O
ATOM	4826	OD2	ASP	A	772	6.445	8.439	44.463	1.00	55.14	O
ATOM	4827	N	LYS	A	773	2.652	5.749	44.430	1.00	27.80	N
ATOM	4828	CA	LYS	A	773	1.428	6.287	45.019	1.00	29.53	C
ATOM	4829	C	LYS	A	773	1.141	5.470	46.272	1.00	26.94	C
ATOM	4830	O	LYS	A	773	1.292	4.250	46.265	1.00	28.38	O
ATOM	4831	CB	LYS	A	773	0.263	6.167	44.031	1.00	36.10	C
ATOM	4832	CG	LYS	A	773	-1.033	6.809	44.513	1.00	45.95	C
ATOM	4833	CD	LYS	A	773	-2.157	6.650	43.491	1.00	51.42	C
ATOM	4834	CE	LYS	A	773	-2.614	8.006	42.950	1.00	59.61	C
ATOM	4835	NZ	LYS	A	773	-4.030	7.998	42.460	1.00	62.61	N
ATOM	4836	N	GLU	A	774	0.738	6.129	47.349	1.00	27.54	N
ATOM	4837	CA	GLU	A	774	0.465	5.422	48.597	1.00	28.86	C
ATOM	4838	C	GLU	A	774	-0.829	4.614	48.583	1.00	30.09	C
ATOM	4839	O	GLU	A	774	-1.868	5.093	48.138	1.00	30.41	O
ATOM	4840	CB	GLU	A	774	0.426	6.408	49.755	1.00	34.46	C
ATOM	4841	CG	GLU	A	774	-0.310	5.891	50.977	1.00	44.80	C
ATOM	4842	CD	GLU	A	774	0.187	6.533	52.249	1.00	51.21	C
ATOM	4843	OE1	GLU	A	774	1.425	6.578	52.437	1.00	53.17	O
ATOM	4844	OE2	GLU	A	774	-0.657	6.993	53.052	1.00	52.11	O
ATOM	4845	N	VAL	A	775	-0.747	3.388	49.088	1.00	28.10	N
ATOM	4846	CA	VAL	A	775	-1.887	2.479	49.164	1.00	28.48	C
ATOM	4847	C	VAL	A	775	-2.090	2.105	50.630	1.00	27.95	C
ATOM	4848	O	VAL	A	775	-1.156	2.179	51.433	1.00	25.98	O

ATOM	4849	CB	VAL	A	775	-1.624	1.164	48.370	1.00	27.98	C
ATOM	4850	CG1	VAL	A	775	-2.862	0.295	48.378	1.00	32.93	C
ATOM	4851	CG2	VAL	A	775	-1.217	1.472	46.946	1.00	29.11	C
ATOM	4852	N	GLU	A	776	-3.304	1.711	50.993	1.00	24.64	N
ATOM	4853	CA	GLU	A	776	-3.536	1.305	52.368	1.00	24.84	C
ATOM	4854	C	GLU	A	776	-4.700	0.342	52.511	1.00	23.00	C
ATOM	4855	O	GLU	A	776	-5.630	0.352	51.711	1.00	28.23	O
ATOM	4856	CB	GLU	A	776	-3.743	2.521	53.261	1.00	27.18	C
ATOM	4857	CG	GLU	A	776	-4.970	3.308	52.949	1.00	34.48	C
ATOM	4858	CD	GLU	A	776	-5.078	4.508	53.843	1.00	44.72	C
ATOM	4859	OE1	GLU	A	776	-6.125	4.660	54.507	1.00	47.00	O
ATOM	4860	OE2	GLU	A	776	-4.104	5.295	53.886	1.00	50.87	O
ATOM	4861	N	ASN	A	777	-4.624	-0.495	53.539	1.00	20.76	N
ATOM	4862	CA	ASN	A	777	-5.638	-1.495	53.815	1.00	18.71	C
ATOM	4863	C	ASN	A	777	-5.586	-1.823	55.286	1.00	19.47	C
ATOM	4864	O	ASN	A	777	-4.549	-1.666	55.927	1.00	21.30	O
ATOM	4865	CB	ASN	A	777	-5.364	-2.766	53.014	1.00	20.38	C
ATOM	4866	CG	ASN	A	777	-5.880	-2.685	51.614	1.00	17.25	C
ATOM	4867	OD1	ASN	A	777	-7.054	-2.424	51.404	1.00	22.80	O
ATOM	4868	ND2	ASN	A	777	-5.007	-2.908	50.639	1.00	16.29	N
ATOM	4869	N	GLU	A	778	-6.709	-2.278	55.824	1.00	19.97	N
ATOM	4870	CA	GLU	A	778	-6.772	-2.648	57.224	1.00	20.28	C
ATOM	4871	C	GLU	A	778	-6.496	-4.147	57.321	1.00	21.78	C
ATOM	4872	O	GLU	A	778	-6.963	-4.929	56.489	1.00	22.66	O
ATOM	4873	CB	GLU	A	778	-8.152	-2.326	57.793	1.00	22.68	C
ATOM	4874	CG	GLU	A	778	-8.208	-2.359	59.294	1.00	31.99	C
ATOM	4875	CD	GLU	A	778	-8.240	-0.973	59.893	1.00	40.22	C
ATOM	4876	OE1	GLU	A	778	-8.688	-0.839	61.053	1.00	47.50	O
ATOM	4877	OE2	GLU	A	778	-7.818	-0.018	59.204	1.00	40.60	O
ATOM	4878	N	PHE	A	779	-5.735	-4.545	58.336	1.00	17.19	N
ATOM	4879	CA	PHE	A	779	-5.389	-5.948	58.515	1.00	16.85	C
ATOM	4880	C	PHE	A	779	-5.621	-6.373	59.950	1.00	15.85	C
ATOM	4881	O	PHE	A	779	-5.453	-5.589	60.885	1.00	17.92	O
ATOM	4882	CB	PHE	A	779	-3.910	-6.189	58.147	1.00	14.87	C
ATOM	4883	CG	PHE	A	779	-3.646	-6.234	56.664	1.00	9.05	C
ATOM	4884	CD1	PHE	A	779	-3.464	-5.062	55.938	1.00	12.45	C
ATOM	4885	CD2	PHE	A	779	-3.579	-7.448	55.992	1.00	8.76	C
ATOM	4886	CE1	PHE	A	779	-3.216	-5.097	54.564	1.00	12.64	C
ATOM	4887	CE2	PHE	A	779	-3.334	-7.490	54.618	1.00	11.71	C
ATOM	4888	CZ	PHE	A	779	-3.152	-6.313	53.903	1.00	11.57	C
ATOM	4889	N	LEU	A	780	-6.036	-7.620	60.111	1.00	16.09	N
ATOM	4890	CA	LEU	A	780	-6.265	-8.199	61.425	1.00	20.21	C
ATOM	4891	C	LEU	A	780	-5.148	-9.244	61.505	1.00	21.69	C
ATOM	4892	O	LEU	A	780	-5.056	-10.147	60.664	1.00	18.96	O
ATOM	4893	CB	LEU	A	780	-7.658	-8.849	61.481	1.00	23.51	C
ATOM	4894	CG	LEU	A	780	-8.168	-9.707	62.651	1.00	27.07	C
ATOM	4895	CD1	LEU	A	780	-7.083	-10.024	63.654	1.00	29.35	C
ATOM	4896	CD2	LEU	A	780	-9.303	-8.967	63.314	1.00	28.98	C
ATOM	4897	N	THR	A	781	-4.286	-9.097	62.502	1.00	22.47	N
ATOM	4898	CA	THR	A	781	-3.153	-9.993	62.662	1.00	17.25	C

ATOM	4899	C	THR	A	781	-3.274	-10.813	63.931	1.00	15.22	C
ATOM	4900	O	THR	A	781	-3.603	-10.286	64.995	1.00	19.48	O
ATOM	4901	CB	THR	A	781	-1.847	-9.170	62.700	1.00	20.52	C
ATOM	4902	OG1	THR	A	781	-1.732	-8.410	61.489	1.00	17.85	O
ATOM	4903	CG2	THR	A	781	-0.641	-10.076	62.855	1.00	20.74	C
ATOM	4904	N	ILE	A	782	-3.016	-12.109	63.806	1.00	13.99	N
ATOM	4905	CA	ILE	A	782	-3.072	-13.027	64.935	1.00	15.40	C
ATOM	4906	C	ILE	A	782	-1.762	-13.811	64.925	1.00	17.17	C
ATOM	4907	O	ILE	A	782	-1.341	-14.302	63.883	1.00	17.06	O
ATOM	4908	CB	ILE	A	782	-4.215	-14.055	64.780	1.00	15.13	C
ATOM	4909	CG1	ILE	A	782	-5.554	-13.338	64.569	1.00	18.57	C
ATOM	4910	CG2	ILE	A	782	-4.255	-14.960	65.997	1.00	15.13	C
ATOM	4911	CD1	ILE	A	782	-6.620	-14.216	63.937	1.00	14.88	C
ATOM	4912	N	SER	A	783	-1.113	-13.939	66.071	1.00	20.04	N
ATOM	4913	CA	SER	A	783	0.135	-14.693	66.096	1.00	22.27	C
ATOM	4914	C	SER	A	783	0.421	-15.296	67.455	1.00	20.98	C
ATOM	4915	O	SER	A	783	-0.127	-14.865	68.470	1.00	21.31	O
ATOM	4916	CB	SER	A	783	1.310	-13.811	65.662	1.00	23.19	C
ATOM	4917	OG	SER	A	783	1.364	-12.623	66.423	1.00	22.95	O
ATOM	4918	N	GLN	A	784	1.281	-16.310	67.456	1.00	21.64	N
ATOM	4919	CA	GLN	A	784	1.666	-17.002	68.677	1.00	18.97	C
ATOM	4920	C	GLN	A	784	3.190	-16.957	68.832	1.00	20.23	C
ATOM	4921	O	GLN	A	784	3.927	-17.450	67.977	1.00	16.44	O
ATOM	4922	CB	GLN	A	784	1.193	-18.456	68.626	1.00	15.93	C
ATOM	4923	CG	GLN	A	784	1.469	-19.241	69.888	1.00	16.44	C
ATOM	4924	CD	GLN	A	784	0.970	-20.655	69.790	1.00	20.23	C
ATOM	4925	OE1	GLN	A	784	0.046	-20.940	69.039	1.00	24.36	O
ATOM	4926	NE2	GLN	A	784	1.577	-21.553	70.549	1.00	23.74	N
ATOM	4927	N	ALA	A	785	3.654	-16.359	69.921	1.00	20.74	N
ATOM	4928	CA	ALA	A	785	5.085	-16.261	70.160	1.00	22.52	C
ATOM	4929	C	ALA	A	785	5.613	-17.583	70.682	1.00	23.63	C
ATOM	4930	O	ALA	A	785	4.914	-18.311	71.395	1.00	20.30	O
ATOM	4931	CB	ALA	A	785	5.381	-15.149	71.158	1.00	22.18	C
ATOM	4932	N	HIS	A	786	6.853	-17.888	70.310	1.00	25.35	N
ATOM	4933	CA	HIS	A	786	7.517	-19.112	70.732	1.00	24.43	C
ATOM	4934	C	HIS	A	786	8.769	-18.682	71.477	1.00	26.87	C
ATOM	4935	O	HIS	A	786	9.821	-18.477	70.877	1.00	25.92	O
ATOM	4936	CB	HIS	A	786	7.881	-19.942	69.511	1.00	21.42	C
ATOM	4937	CG	HIS	A	786	6.734	-20.169	68.583	1.00	22.16	C
ATOM	4938	ND1	HIS	A	786	5.631	-20.917	68.936	1.00	26.68	N
ATOM	4939	CD2	HIS	A	786	6.511	-19.742	67.318	1.00	23.68	C
ATOM	4940	CE1	HIS	A	786	4.779	-20.941	67.928	1.00	25.36	C
ATOM	4941	NE2	HIS	A	786	5.289	-20.236	66.933	1.00	26.32	N
ATOM	4942	N	LYS	A	787	8.647	-18.547	72.790	1.00	27.26	N
ATOM	4943	CA	LYS	A	787	9.753	-18.092	73.611	1.00	28.29	C
ATOM	4944	C	LYS	A	787	10.709	-19.168	74.132	1.00	30.18	C
ATOM	4945	O	LYS	A	787	11.697	-18.852	74.796	1.00	32.91	O
ATOM	4946	CB	LYS	A	787	9.198	-17.273	74.779	1.00	28.78	C
ATOM	4947	CG	LYS	A	787	8.647	-15.911	74.363	1.00	30.77	C
ATOM	4948	CD	LYS	A	787	7.789	-15.298	75.463	1.00	40.69	C

ATOM	4949	CE	LYS	A	787	7.820	-13.760	75.447	1.00	44.69	C
ATOM	4950	NZ	LYS	A	787	8.071	-13.161	74.095	1.00	45.70	N
ATOM	4951	N	GLN	A	788	10.443	-20.433	73.834	1.00	28.39	N
ATOM	4952	CA	GLN	A	788	11.322	-21.487	74.321	1.00	29.88	C
ATOM	4953	C	GLN	A	788	11.609	-22.534	73.266	1.00	28.56	C
ATOM	4954	O	GLN	A	788	10.867	-22.668	72.300	1.00	29.49	O
ATOM	4955	CB	GLN	A	788	10.709	-22.172	75.539	1.00	35.93	C
ATOM	4956	CG	GLN	A	788	10.700	-21.342	76.800	1.00	43.42	C
ATOM	4957	CD	GLN	A	788	9.832	-21.969	77.875	1.00	54.09	C
ATOM	4958	OE1	GLN	A	788	8.907	-22.732	77.577	1.00	58.30	O
ATOM	4959	NE2	GLN	A	788	10.125	-21.654	79.133	1.00	58.78	N
ATOM	4960	N	ASN	A	789	12.694	-23.276	73.457	1.00	24.71	N
ATOM	4961	CA	ASN	A	789	13.062	-24.324	72.522	1.00	23.55	C
ATOM	4962	C	ASN	A	789	12.137	-25.497	72.784	1.00	19.52	C
ATOM	4963	O	ASN	A	789	11.829	-25.794	73.935	1.00	19.86	O
ATOM	4964	CB	ASN	A	789	14.516	-24.765	72.734	1.00	23.96	C
ATOM	4965	CG	ASN	A	789	15.521	-23.774	72.175	1.00	26.89	C
ATOM	4966	OD1	ASN	A	789	15.278	-23.110	71.163	1.00	27.15	O
ATOM	4967	ND2	ASN	A	789	16.665	-23.670	72.837	1.00	28.79	N
ATOM	4968	N	GLY	A	790	11.708	-26.161	71.715	1.00	19.65	N
ATOM	4969	CA	GLY	A	790	10.813	-27.294	71.850	1.00	22.04	C
ATOM	4970	C	GLY	A	790	9.375	-26.827	71.946	1.00	22.56	C
ATOM	4971	O	GLY	A	790	8.513	-27.541	72.447	1.00	25.11	O
ATOM	4972	N	ASP	A	791	9.123	-25.615	71.466	1.00	21.78	N
ATOM	4973	CA	ASP	A	791	7.791	-25.030	71.493	1.00	21.60	C
ATOM	4974	C	ASP	A	791	6.954	-25.627	70.371	1.00	20.85	C
ATOM	4975	O	ASP	A	791	7.468	-26.342	69.520	1.00	17.54	O
ATOM	4976	CB	ASP	A	791	7.877	-23.506	71.334	1.00	19.39	C
ATOM	4977	CG	ASP	A	791	7.779	-22.771	72.665	1.00	21.44	C
ATOM	4978	OD1	ASP	A	791	7.643	-23.440	73.714	1.00	26.80	O
ATOM	4979	OD2	ASP	A	791	7.838	-21.524	72.664	1.00	23.58	O
ATOM	4980	N	SER	A	792	5.660	-25.334	70.374	1.00	23.35	N
ATOM	4981	CA	SER	A	792	4.778	-25.862	69.348	1.00	20.09	C
ATOM	4982	C	SER	A	792	3.489	-25.060	69.248	1.00	19.73	C
ATOM	4983	O	SER	A	792	3.228	-24.169	70.057	1.00	16.93	O
ATOM	4984	CB	SER	A	792	4.435	-27.311	69.673	1.00	19.62	C
ATOM	4985	OG	SER	A	792	3.887	-27.399	70.975	1.00	16.96	O
ATOM	4986	N	TYR	A	793	2.704	-25.381	68.228	1.00	19.67	N
ATOM	4987	CA	TYR	A	793	1.415	-24.744	68.016	1.00	19.50	C
ATOM	4988	C	TYR	A	793	0.502	-25.763	67.379	1.00	20.29	C
ATOM	4989	O	TYR	A	793	0.953	-26.689	66.707	1.00	20.16	O
ATOM	4990	CB	TYR	A	793	1.527	-23.499	67.123	1.00	16.30	C
ATOM	4991	CG	TYR	A	793	1.933	-23.755	65.687	1.00	20.53	C
ATOM	4992	CD1	TYR	A	793	1.043	-24.330	64.776	1.00	17.89	C
ATOM	4993	CD2	TYR	A	793	3.215	-23.421	65.235	1.00	17.59	C
ATOM	4994	CE1	TYR	A	793	1.419	-24.568	63.457	1.00	19.95	C
ATOM	4995	CE2	TYR	A	793	3.600	-23.656	63.918	1.00	15.41	C
ATOM	4996	CZ	TYR	A	793	2.703	-24.229	63.035	1.00	20.33	C
ATOM	4997	OH	TYR	A	793	3.088	-24.470	61.735	1.00	16.23	O
ATOM	4998	N	GLY	A	794	-0.791	-25.589	67.607	1.00	20.27	N

ATOM	4999	CA	GLY	A	794	-1.759	-26.505	67.049	1.00	18.07	C
ATOM	5000	C	GLY	A	794	-3.131	-25.879	67.055	1.00	13.04	C
ATOM	5001	O	GLY	A	794	-3.671	-25.532	68.100	1.00	11.99	O
ATOM	5002	N	TYR	A	795	-3.686	-25.696	65.873	1.00	15.42	N
ATOM	5003	CA	TYR	A	795	-5.008	-25.135	65.785	1.00	16.94	C
ATOM	5004	C	TYR	A	795	-5.673	-25.600	64.521	1.00	16.65	C
ATOM	5005	O	TYR	A	795	-5.009	-25.988	63.560	1.00	13.36	O
ATOM	5006	CB	TYR	A	795	-4.958	-23.612	65.830	1.00	16.03	C
ATOM	5007	CG	TYR	A	795	-4.041	-22.984	64.820	1.00	19.96	C
ATOM	5008	CD1	TYR	A	795	-4.491	-22.679	63.538	1.00	21.76	C
ATOM	5009	CD2	TYR	A	795	-2.725	-22.675	65.150	1.00	22.35	C
ATOM	5010	CE1	TYR	A	795	-3.657	-22.083	62.610	1.00	23.18	C
ATOM	5011	CE2	TYR	A	795	-1.876	-22.075	64.228	1.00	23.27	C
ATOM	5012	CZ	TYR	A	795	-2.347	-21.784	62.963	1.00	26.33	C
ATOM	5013	OH	TYR	A	795	-1.505	-21.204	62.050	1.00	24.06	O
ATOM	5014	N	MET	A	796	-7.001	-25.579	64.542	1.00	19.66	N
ATOM	5015	CA	MET	A	796	-7.799	-25.984	63.397	1.00	17.36	C
ATOM	5016	C	MET	A	796	-8.425	-24.736	62.793	1.00	16.53	C
ATOM	5017	O	MET	A	796	-8.991	-23.911	63.510	1.00	16.74	O
ATOM	5018	CB	MET	A	796	-8.885	-26.963	63.844	1.00	17.33	C
ATOM	5019	CG	MET	A	796	-9.740	-27.488	62.715	1.00	16.30	C
ATOM	5020	SD	MET	A	796	-9.031	-28.913	61.893	1.00	20.60	S
ATOM	5021	CE	MET	A	796	-9.369	-30.196	63.094	1.00	10.95	C
ATOM	5022	N	LEU	A	797	-8.288	-24.576	61.482	1.00	13.96	N
ATOM	5023	CA	LEU	A	797	-8.877	-23.430	60.812	1.00	15.85	C
ATOM	5024	C	LEU	A	797	-10.229	-23.879	60.258	1.00	16.16	C
ATOM	5025	O	LEU	A	797	-10.289	-24.786	59.434	1.00	16.97	O
ATOM	5026	CB	LEU	A	797	-7.979	-22.959	59.668	1.00	14.01	C
ATOM	5027	CG	LEU	A	797	-8.501	-21.803	58.810	1.00	21.69	C
ATOM	5028	CD1	LEU	A	797	-8.571	-20.543	59.628	1.00	19.45	C
ATOM	5029	CD2	LEU	A	797	-7.583	-21.596	57.616	1.00	25.56	C
ATOM	5030	N	ILE	A	798	-11.311	-23.256	60.717	1.00	16.54	N
ATOM	5031	CA	ILE	A	798	-12.648	-23.616	60.243	1.00	12.94	C
ATOM	5032	C	ILE	A	798	-13.344	-22.417	59.603	1.00	10.11	C
ATOM	5033	O	ILE	A	798	-13.791	-21.507	60.297	1.00	16.79	O
ATOM	5034	CB	ILE	A	798	-13.525	-24.130	61.401	1.00	14.38	C
ATOM	5035	CG1	ILE	A	798	-12.879	-25.354	62.042	1.00	10.67	C
ATOM	5036	CG2	ILE	A	798	-14.912	-24.512	60.888	1.00	14.61	C
ATOM	5037	CD1	ILE	A	798	-13.244	-25.533	63.500	1.00	10.33	C
ATOM	5038	N	PRO	A	799	-13.419	-22.380	58.269	1.00	11.97	N
ATOM	5039	CA	PRO	A	799	-14.077	-21.260	57.594	1.00	17.02	C
ATOM	5040	C	PRO	A	799	-15.533	-21.561	57.167	1.00	17.84	C
ATOM	5041	O	PRO	A	799	-15.991	-22.704	57.209	1.00	14.65	O
ATOM	5042	CB	PRO	A	799	-13.198	-21.044	56.373	1.00	14.70	C
ATOM	5043	CG	PRO	A	799	-12.725	-22.458	56.027	1.00	13.27	C
ATOM	5044	CD	PRO	A	799	-12.858	-23.321	57.286	1.00	14.94	C
ATOM	5045	N	ASN	A	800	-16.232	-20.510	56.748	1.00	18.52	N
ATOM	5046	CA	ASN	A	800	-17.604	-20.579	56.243	1.00	18.74	C
ATOM	5047	C	ASN	A	800	-18.711	-21.266	57.056	1.00	17.49	C
ATOM	5048	O	ASN	A	800	-19.565	-21.949	56.490	1.00	22.76	O

ATOM	5049	CB	ASN	A	800	-17.572	-21.158	54.825	1.00	15.11	C
ATOM	5050	CG	ASN	A	800	-16.741	-20.314	53.873	1.00	17.36	C
ATOM	5051	OD1	ASN	A	800	-16.038	-19.393	54.290	1.00	19.38	O
ATOM	5052	ND2	ASN	A	800	-16.822	-20.620	52.588	1.00	14.08	N
ATOM	5053	N	VAL	A	801	-18.698	-21.088	58.375	1.00	16.05	N
ATOM	5054	CA	VAL	A	801	-19.743	-21.630	59.238	1.00	18.93	C
ATOM	5055	C	VAL	A	801	-20.091	-20.484	60.167	1.00	20.42	C
ATOM	5056	O	VAL	A	801	-19.237	-19.642	60.445	1.00	18.27	O
ATOM	5057	CB	VAL	A	801	-19.274	-22.837	60.086	1.00	20.06	C
ATOM	5058	CG1	VAL	A	801	-18.796	-23.948	59.185	1.00	22.64	C
ATOM	5059	CG2	VAL	A	801	-18.196	-22.417	61.053	1.00	18.40	C
ATOM	5060	N	ASP	A	802	-21.332	-20.418	60.638	1.00	20.32	N
ATOM	5061	CA	ASP	A	802	-21.689	-19.325	61.535	1.00	20.67	C
ATOM	5062	C	ASP	A	802	-21.179	-19.602	62.939	1.00	19.31	C
ATOM	5063	O	ASP	A	802	-20.735	-20.711	63.240	1.00	18.86	O
ATOM	5064	CB	ASP	A	802	-23.208	-19.072	61.539	1.00	25.44	C
ATOM	5065	CG	ASP	A	802	-24.006	-20.235	62.086	1.00	24.20	C
ATOM	5066	OD1	ASP	A	802	-23.628	-20.820	63.120	1.00	25.94	O
ATOM	5067	OD2	ASP	A	802	-25.035	-20.563	61.471	1.00	36.20	O
ATOM	5068	N	ARG	A	803	-21.237	-18.587	63.793	1.00	17.20	N
ATOM	5069	CA	ARG	A	803	-20.758	-18.706	65.159	1.00	18.46	C
ATOM	5070	C	ARG	A	803	-21.264	-19.915	65.938	1.00	24.99	C
ATOM	5071	O	ARG	A	803	-20.471	-20.664	66.520	1.00	22.09	O
ATOM	5072	CB	ARG	A	803	-21.105	-17.444	65.923	1.00	20.21	C
ATOM	5073	CG	ARG	A	803	-20.550	-17.411	67.317	1.00	24.89	C
ATOM	5074	CD	ARG	A	803	-20.805	-16.054	67.929	1.00	29.90	C
ATOM	5075	NE	ARG	A	803	-20.934	-16.129	69.379	1.00	38.44	N
ATOM	5076	CZ	ARG	A	803	-21.529	-15.201	70.118	1.00	39.50	C
ATOM	5077	NH1	ARG	A	803	-22.049	-14.131	69.531	1.00	44.66	N
ATOM	5078	NH2	ARG	A	803	-21.592	-15.334	71.439	1.00	44.03	N
ATOM	5079	N	ALA	A	804	-22.586	-20.093	65.966	1.00	27.18	N
ATOM	5080	CA	ALA	A	804	-23.206	-21.204	66.684	1.00	22.96	C
ATOM	5081	C	ALA	A	804	-22.712	-22.548	66.164	1.00	20.85	C
ATOM	5082	O	ALA	A	804	-22.478	-23.478	66.937	1.00	22.24	O
ATOM	5083	CB	ALA	A	804	-24.732	-21.125	66.563	1.00	26.99	C
ATOM	5084	N	THR	A	805	-22.555	-22.657	64.853	1.00	19.36	N
ATOM	5085	CA	THR	A	805	-22.078	-23.904	64.275	1.00	21.15	C
ATOM	5086	C	THR	A	805	-20.597	-24.100	64.627	1.00	23.71	C
ATOM	5087	O	THR	A	805	-20.170	-25.210	64.942	1.00	22.70	O
ATOM	5088	CB	THR	A	805	-22.279	-23.902	62.750	1.00	22.75	C
ATOM	5089	OG1	THR	A	805	-23.621	-23.488	62.455	1.00	27.14	O
ATOM	5090	CG2	THR	A	805	-22.050	-25.288	62.173	1.00	20.24	C
ATOM	5091	N	PHE	A	806	-19.825	-23.015	64.594	1.00	25.70	N
ATOM	5092	CA	PHE	A	806	-18.396	-23.076	64.934	1.00	23.75	C
ATOM	5093	C	PHE	A	806	-18.239	-23.570	66.364	1.00	25.04	C
ATOM	5094	O	PHE	A	806	-17.517	-24.531	66.623	1.00	25.12	O
ATOM	5095	CB	PHE	A	806	-17.743	-21.691	64.813	1.00	21.49	C
ATOM	5096	CG	PHE	A	806	-16.335	-21.626	65.373	1.00	20.72	C
ATOM	5097	CD1	PHE	A	806	-15.280	-22.271	64.727	1.00	23.86	C
ATOM	5098	CD2	PHE	A	806	-16.067	-20.922	66.537	1.00	14.35	C

ATOM	5099	CE1	PHE	A	806	-13.979	-22.216	65.236	1.00	16.84	C
ATOM	5100	CE2	PHE	A	806	-14.773	-20.858	67.055	1.00	18.50	C
ATOM	5101	CZ	PHE	A	806	-13.728	-21.508	66.400	1.00	18.29	C
ATOM	5102	N	ASN	A	807	-18.928	-22.913	67.290	1.00	24.82	N
ATOM	5103	CA	ASN	A	807	-18.848	-23.281	68.695	1.00	26.72	C
ATOM	5104	C	ASN	A	807	-19.203	-24.741	68.928	1.00	26.99	C
ATOM	5105	O	ASN	A	807	-18.687	-25.374	69.848	1.00	26.27	O
ATOM	5106	CB	ASN	A	807	-19.761	-22.385	69.523	1.00	27.81	C
ATOM	5107	CG	ASN	A	807	-19.181	-21.008	69.729	1.00	32.27	C
ATOM	5108	OD1	ASN	A	807	-17.974	-20.851	69.920	1.00	26.16	O
ATOM	5109	ND2	ASN	A	807	-20.037	-19.995	69.690	1.00	32.97	N
ATOM	5110	N	GLN	A	808	-20.080	-25.276	68.088	1.00	28.04	N
ATOM	5111	CA	GLN	A	808	-20.488	-26.661	68.220	1.00	30.61	C
ATOM	5112	C	GLN	A	808	-19.421	-27.577	67.641	1.00	30.71	C
ATOM	5113	O	GLN	A	808	-19.076	-28.598	68.230	1.00	31.40	O
ATOM	5114	CB	GLN	A	808	-21.812	-26.894	67.492	1.00	35.72	C
ATOM	5115	CG	GLN	A	808	-22.518	-28.181	67.885	1.00	40.31	C
ATOM	5116	CD	GLN	A	808	-24.028	-28.037	67.895	1.00	47.80	C
ATOM	5117	OE1	GLN	A	808	-24.570	-26.968	67.592	1.00	50.49	O
ATOM	5118	NE2	GLN	A	808	-24.718	-29.116	68.244	1.00	50.89	N
ATOM	5119	N	MET	A	809	-18.898	-27.197	66.482	1.00	30.40	N
ATOM	5120	CA	MET	A	809	-17.875	-27.979	65.796	1.00	27.40	C
ATOM	5121	C	MET	A	809	-16.599	-28.169	66.609	1.00	25.26	C
ATOM	5122	O	MET	A	809	-15.970	-29.223	66.533	1.00	24.08	O
ATOM	5123	CB	MET	A	809	-17.525	-27.317	64.468	1.00	27.87	C
ATOM	5124	CG	MET	A	809	-17.467	-28.269	63.294	1.00	34.81	C
ATOM	5125	SD	MET	A	809	-17.467	-27.385	61.726	1.00	36.75	S
ATOM	5126	CE	MET	A	809	-18.861	-26.341	61.933	1.00	36.19	C
ATOM	5127	N	ILE	A	810	-16.213	-27.158	67.381	1.00	21.86	N
ATOM	5128	CA	ILE	A	810	-14.994	-27.267	68.166	1.00	25.62	C
ATOM	5129	C	ILE	A	810	-15.168	-28.140	69.406	1.00	29.06	C
ATOM	5130	O	ILE	A	810	-14.186	-28.603	69.988	1.00	30.70	O
ATOM	5131	CB	ILE	A	810	-14.423	-25.866	68.556	1.00	22.95	C
ATOM	5132	CG1	ILE	A	810	-15.305	-25.175	69.589	1.00	20.53	C
ATOM	5133	CG2	ILE	A	810	-14.281	-25.003	67.311	1.00	23.26	C
ATOM	5134	CD1	ILE	A	810	-14.824	-23.769	69.948	1.00	16.47	C
ATOM	5135	N	LYS	A	811	-16.411	-28.386	69.804	1.00	29.62	N
ATOM	5136	CA	LYS	A	811	-16.650	-29.241	70.956	1.00	29.17	C
ATOM	5137	C	LYS	A	811	-16.416	-30.672	70.507	1.00	28.21	C
ATOM	5138	O	LYS	A	811	-15.827	-31.479	71.229	1.00	30.99	O
ATOM	5139	CB	LYS	A	811	-18.079	-29.074	71.466	1.00	34.36	C
ATOM	5140	CG	LYS	A	811	-18.260	-27.865	72.372	1.00	40.08	C
ATOM	5141	CD	LYS	A	811	-18.051	-28.228	73.833	1.00	46.36	C
ATOM	5142	CE	LYS	A	811	-17.500	-27.047	74.620	1.00	51.49	C
ATOM	5143	NZ	LYS	A	811	-16.636	-26.170	73.773	1.00	52.64	N
ATOM	5144	N	GLU	A	812	-16.876	-30.985	69.303	1.00	27.17	N
ATOM	5145	CA	GLU	A	812	-16.698	-32.321	68.747	1.00	32.59	C
ATOM	5146	C	GLU	A	812	-15.208	-32.563	68.487	1.00	32.60	C
ATOM	5147	O	GLU	A	812	-14.700	-33.674	68.655	1.00	28.34	O
ATOM	5148	CB	GLU	A	812	-17.475	-32.456	67.432	1.00	33.86	C

ATOM	5149	CG	GLU	A	812	-18.590	-31.426	67.252	1.00	47.86	C
ATOM	5150	CD	GLU	A	812	-19.788	-31.965	66.477	1.00	53.16	C
ATOM	5151	OE1	GLU	A	812	-19.800	-31.840	65.229	1.00	53.39	O
ATOM	5152	OE2	GLU	A	812	-20.720	-32.509	67.117	1.00	58.27	O
ATOM	5153	N	LEU	A	813	-14.525	-31.497	68.079	1.00	32.59	N
ATOM	5154	CA	LEU	A	813	-13.102	-31.525	67.760	1.00	29.45	C
ATOM	5155	C	LEU	A	813	-12.224	-31.530	69.006	1.00	30.79	C
ATOM	5156	O	LEU	A	813	-11.000	-31.488	68.911	1.00	27.56	O
ATOM	5157	CB	LEU	A	813	-12.753	-30.311	66.900	1.00	22.99	C
ATOM	5158	CG	LEU	A	813	-12.674	-30.474	65.381	1.00	23.23	C
ATOM	5159	CD1	LEU	A	813	-13.434	-31.695	64.922	1.00	25.83	C
ATOM	5160	CD2	LEU	A	813	-13.221	-29.221	64.727	1.00	23.26	C
ATOM	5161	N	GLU	A	814	-12.855	-31.596	70.172	1.00	36.28	N
ATOM	5162	CA	GLU	A	814	-12.125	-31.587	71.433	1.00	39.16	C
ATOM	5163	C	GLU	A	814	-11.060	-32.656	71.578	1.00	37.99	C
ATOM	5164	O	GLU	A	814	-10.219	-32.568	72.465	1.00	41.69	O
ATOM	5165	CB	GLU	A	814	-13.084	-31.709	72.615	1.00	40.62	C
ATOM	5166	CG	GLU	A	814	-12.555	-31.024	73.850	1.00	48.34	C
ATOM	5167	CD	GLU	A	814	-11.761	-29.777	73.500	1.00	54.89	C
ATOM	5168	OE1	GLU	A	814	-12.357	-28.839	72.925	1.00	57.47	O
ATOM	5169	OE2	GLU	A	814	-10.545	-29.736	73.787	1.00	57.65	O
ATOM	5170	N	SER	A	815	-11.088	-33.667	70.724	1.00	33.98	N
ATOM	5171	CA	SER	A	815	-10.104	-34.725	70.828	1.00	31.64	C
ATOM	5172	C	SER	A	815	-9.541	-35.136	69.477	1.00	27.62	C
ATOM	5173	O	SER	A	815	-9.111	-36.274	69.299	1.00	27.20	O
ATOM	5174	CB	SER	A	815	-10.734	-35.934	71.516	1.00	36.76	C
ATOM	5175	OG	SER	A	815	-12.090	-36.068	71.132	1.00	42.21	O
ATOM	5176	N	SER	A	816	-9.542	-34.211	68.525	1.00	25.23	N
ATOM	5177	CA	SER	A	816	-9.031	-34.497	67.192	1.00	23.62	C
ATOM	5178	C	SER	A	816	-7.498	-34.567	67.152	1.00	22.24	C
ATOM	5179	O	SER	A	816	-6.936	-35.258	66.307	1.00	19.56	O
ATOM	5180	CB	SER	A	816	-9.520	-33.441	66.207	1.00	22.07	C
ATOM	5181	OG	SER	A	816	-9.258	-32.140	66.703	1.00	27.87	O
ATOM	5182	N	LEU	A	817	-6.823	-33.858	68.053	1.00	20.48	N
ATOM	5183	CA	LEU	A	817	-5.359	-33.883	68.077	1.00	21.89	C
ATOM	5184	C	LEU	A	817	-4.877	-35.213	68.616	1.00	20.14	C
ATOM	5185	O	LEU	A	817	-5.046	-35.500	69.798	1.00	21.62	O
ATOM	5186	CB	LEU	A	817	-4.806	-32.764	68.963	1.00	22.44	C
ATOM	5187	CG	LEU	A	817	-3.310	-32.412	68.857	1.00	22.66	C
ATOM	5188	CD1	LEU	A	817	-2.517	-33.356	69.716	1.00	27.24	C
ATOM	5189	CD2	LEU	A	817	-2.834	-32.493	67.420	1.00	19.44	C
ATOM	5190	N	ILE	A	818	-4.283	-36.030	67.756	1.00	19.99	N
ATOM	5191	CA	ILE	A	818	-3.780	-37.323	68.199	1.00	23.03	C
ATOM	5192	C	ILE	A	818	-2.385	-37.161	68.800	1.00	24.83	C
ATOM	5193	O	ILE	A	818	-2.056	-37.780	69.809	1.00	26.14	O
ATOM	5194	CB	ILE	A	818	-3.702	-38.333	67.037	1.00	24.76	C
ATOM	5195	CG1	ILE	A	818	-5.091	-38.530	66.420	1.00	27.41	C
ATOM	5196	CG2	ILE	A	818	-3.166	-39.667	67.544	1.00	21.70	C
ATOM	5197	CD1	ILE	A	818	-6.103	-39.169	67.358	1.00	19.80	C
ATOM	5198	N	GLU	A	819	-1.568	-36.314	68.182	1.00	25.69	N

ATOM	5199	CA	GLU	A	819	-0.211	-36.088	68.659	1.00	24.44	C
ATOM	5200	C	GLU	A	819	0.453	-34.929	67.935	1.00	21.64	C
ATOM	5201	O	GLU	A	819	0.098	-34.590	66.807	1.00	19.88	O
ATOM	5202	CB	GLU	A	819	0.633	-37.352	68.461	1.00	24.87	C
ATOM	5203	CG	GLU	A	819	2.017	-37.268	69.074	1.00	33.16	C
ATOM	5204	CD	GLU	A	819	1.981	-36.892	70.546	1.00	38.89	C
ATOM	5205	OE1	GLU	A	819	1.762	-37.795	71.384	1.00	38.93	O
ATOM	5206	OE2	GLU	A	819	2.171	-35.694	70.863	1.00	38.13	O
ATOM	5207	N	ASN	A	820	1.430	-34.326	68.595	1.00	21.61	N
ATOM	5208	CA	ASN	A	820	2.163	-33.220	68.009	1.00	22.88	C
ATOM	5209	C	ASN	A	820	3.481	-33.024	68.747	1.00	21.82	C
ATOM	5210	O	ASN	A	820	3.592	-32.153	69.606	1.00	19.93	O
ATOM	5211	CB	ASN	A	820	1.344	-31.933	68.081	1.00	18.23	C
ATOM	5212	CG	ASN	A	820	2.047	-30.766	67.426	1.00	16.25	C
ATOM	5213	OD1	ASN	A	820	1.879	-29.614	67.831	1.00	19.25	O
ATOM	5214	ND2	ASN	A	820	2.836	-31.056	66.403	1.00	14.95	N
ATOM	5215	N	ASN	A	821	4.465	-33.862	68.437	1.00	21.52	N
ATOM	5216	CA	ASN	A	821	5.782	-33.734	69.060	1.00	20.73	C
ATOM	5217	C	ASN	A	821	6.864	-33.702	67.977	1.00	22.04	C
ATOM	5218	O	ASN	A	821	6.560	-33.491	66.796	1.00	22.42	O
ATOM	5219	CB	ASN	A	821	6.028	-34.872	70.055	1.00	15.79	C
ATOM	5220	CG	ASN	A	821	5.852	-36.238	69.440	1.00	17.20	C
ATOM	5221	OD1	ASN	A	821	6.230	-36.467	68.296	1.00	24.72	O
ATOM	5222	ND2	ASN	A	821	5.275	-37.162	70.203	1.00	18.04	N
ATOM	5223	N	GLU	A	822	8.118	-33.914	68.368	1.00	23.41	N
ATOM	5224	CA	GLU	A	822	9.236	-33.864	67.425	1.00	24.08	C
ATOM	5225	C	GLU	A	822	9.323	-34.980	66.383	1.00	24.10	C
ATOM	5226	O	GLU	A	822	10.039	-34.831	65.389	1.00	24.50	O
ATOM	5227	CB	GLU	A	822	10.565	-33.773	68.193	1.00	30.48	C
ATOM	5228	CG	GLU	A	822	10.969	-35.040	68.938	1.00	37.13	C
ATOM	5229	CD	GLU	A	822	10.122	-35.295	70.172	1.00	43.88	C
ATOM	5230	OE1	GLU	A	822	9.700	-36.458	70.379	1.00	47.59	O
ATOM	5231	OE2	GLU	A	822	9.875	-34.333	70.933	1.00	46.57	O
ATOM	5232	N	THR	A	823	8.612	-36.091	66.592	1.00	21.56	N
ATOM	5233	CA	THR	A	823	8.640	-37.198	65.627	1.00	20.47	C
ATOM	5234	C	THR	A	823	7.298	-37.577	65.004	1.00	19.74	C
ATOM	5235	O	THR	A	823	7.268	-38.135	63.904	1.00	14.93	O
ATOM	5236	CB	THR	A	823	9.201	-38.482	66.249	1.00	20.67	C
ATOM	5237	OG1	THR	A	823	8.600	-38.692	67.530	1.00	17.70	O
ATOM	5238	CG2	THR	A	823	10.705	-38.384	66.399	1.00	23.22	C
ATOM	5239	N	LEU	A	824	6.202	-37.288	65.706	1.00	23.06	N
ATOM	5240	CA	LEU	A	824	4.855	-37.631	65.228	1.00	23.76	C
ATOM	5241	C	LEU	A	824	3.825	-36.508	65.360	1.00	20.84	C
ATOM	5242	O	LEU	A	824	3.673	-35.902	66.423	1.00	21.44	O
ATOM	5243	CB	LEU	A	824	4.338	-38.861	65.980	1.00	23.57	C
ATOM	5244	CG	LEU	A	824	2.953	-39.383	65.590	1.00	23.36	C
ATOM	5245	CD1	LEU	A	824	2.990	-39.940	64.178	1.00	19.46	C
ATOM	5246	CD2	LEU	A	824	2.523	-40.462	66.570	1.00	23.64	C
ATOM	5247	N	GLN	A	825	3.118	-36.243	64.268	1.00	20.15	N
ATOM	5248	CA	GLN	A	825	2.080	-35.213	64.239	1.00	19.57	C

ATOM	5249	C	GLN	A	825	0.849	-35.826	63.573	1.00	21.51	C
ATOM	5250	O	GLN	A	825	0.926	-36.311	62.440	1.00	19.73	O
ATOM	5251	CB	GLN	A	825	2.561	-34.001	63.447	1.00	15.86	C
ATOM	5252	CG	GLN	A	825	3.611	-33.188	64.178	1.00	10.41	C
ATOM	5253	CD	GLN	A	825	4.065	-32.015	63.369	1.00	14.16	C
ATOM	5254	OE1	GLN	A	825	4.046	-30.877	63.839	1.00	20.58	O
ATOM	5255	NE2	GLN	A	825	4.474	-32.275	62.134	1.00	10.97	N
ATOM	5256	N	SER	A	826	-0.282	-35.811	64.275	1.00	21.64	N
ATOM	5257	CA	SER	A	826	-1.497	-36.414	63.734	1.00	22.50	C
ATOM	5258	C	SER	A	826	-2.801	-35.825	64.259	1.00	22.03	C
ATOM	5259	O	SER	A	826	-2.942	-35.520	65.447	1.00	19.08	O
ATOM	5260	CB	SER	A	826	-1.492	-37.925	64.011	1.00	20.31	C
ATOM	5261	OG	SER	A	826	-2.662	-38.563	63.522	1.00	21.70	O
ATOM	5262	N	VAL	A	827	-3.755	-35.682	63.348	1.00	18.84	N
ATOM	5263	CA	VAL	A	827	-5.071	-35.167	63.683	1.00	20.59	C
ATOM	5264	C	VAL	A	827	-6.091	-36.170	63.150	1.00	20.48	C
ATOM	5265	O	VAL	A	827	-5.916	-36.734	62.072	1.00	19.27	O
ATOM	5266	CB	VAL	A	827	-5.303	-33.795	63.051	1.00	18.09	C
ATOM	5267	CG1	VAL	A	827	-6.734	-33.327	63.328	1.00	17.75	C
ATOM	5268	CG2	VAL	A	827	-4.295	-32.800	63.619	1.00	15.22	C
ATOM	5269	N	TYR	A	828	-7.154	-36.389	63.912	1.00	21.18	N
ATOM	5270	CA	TYR	A	828	-8.181	-37.353	63.537	1.00	17.78	C
ATOM	5271	C	TYR	A	828	-9.562	-36.717	63.388	1.00	19.50	C
ATOM	5272	O	TYR	A	828	-10.001	-35.962	64.259	1.00	20.02	O
ATOM	5273	CB	TYR	A	828	-8.226	-38.448	64.598	1.00	19.17	C
ATOM	5274	CG	TYR	A	828	-9.361	-39.422	64.453	1.00	21.93	C
ATOM	5275	CD1	TYR	A	828	-9.506	-40.184	63.294	1.00	21.90	C
ATOM	5276	CD2	TYR	A	828	-10.279	-39.603	65.486	1.00	23.47	C
ATOM	5277	CE1	TYR	A	828	-10.540	-41.107	63.166	1.00	25.41	C
ATOM	5278	CE2	TYR	A	828	-11.318	-40.522	65.372	1.00	24.95	C
ATOM	5279	CZ	TYR	A	828	-11.445	-41.273	64.209	1.00	28.31	C
ATOM	5280	OH	TYR	A	828	-12.482	-42.181	64.081	1.00	32.49	O
ATOM	5281	N	ASP	A	829	-10.225	-37.021	62.273	1.00	17.92	N
ATOM	5282	CA	ASP	A	829	-11.573	-36.527	61.977	1.00	19.81	C
ATOM	5283	C	ASP	A	829	-12.567	-37.669	62.243	1.00	17.69	C
ATOM	5284	O	ASP	A	829	-12.791	-38.519	61.384	1.00	20.45	O
ATOM	5285	CB	ASP	A	829	-11.665	-36.097	60.509	1.00	18.13	C
ATOM	5286	CG	ASP	A	829	-12.930	-35.315	60.204	1.00	20.82	C
ATOM	5287	OD1	ASP	A	829	-13.871	-35.342	61.030	1.00	26.30	O
ATOM	5288	OD2	ASP	A	829	-12.982	-34.674	59.132	1.00	19.89	O
ATOM	5289	N	ALA	A	830	-13.145	-37.687	63.439	1.00	21.77	N
ATOM	5290	CA	ALA	A	830	-14.091	-38.735	63.825	1.00	23.40	C
ATOM	5291	C	ALA	A	830	-15.307	-38.835	62.907	1.00	23.99	C
ATOM	5292	O	ALA	A	830	-15.791	-39.929	62.628	1.00	25.02	O
ATOM	5293	CB	ALA	A	830	-14.544	-38.514	65.260	1.00	19.43	C
ATOM	5294	N	LYS	A	831	-15.803	-37.695	62.443	1.00	25.89	N
ATOM	5295	CA	LYS	A	831	-16.963	-37.675	61.561	1.00	25.63	C
ATOM	5296	C	LYS	A	831	-16.647	-38.423	60.272	1.00	26.72	C
ATOM	5297	O	LYS	A	831	-17.465	-39.193	59.763	1.00	24.07	O
ATOM	5298	CB	LYS	A	831	-17.344	-36.229	61.223	1.00	27.74	C

ATOM	5299	CG	LYS	A	831	-18.360	-35.586	62.163	1.00	35.88	C
ATOM	5300	CD	LYS	A	831	-19.189	-34.541	61.417	1.00	40.55	C
ATOM	5301	CE	LYS	A	831	-19.610	-33.384	62.317	1.00	44.35	C
ATOM	5302	NZ	LYS	A	831	-18.569	-33.034	63.322	1.00	44.01	N
ATOM	5303	N	GLN	A	832	-15.445	-38.195	59.752	1.00	23.33	N
ATOM	5304	CA	GLN	A	832	-15.013	-38.811	58.505	1.00	19.17	C
ATOM	5305	C	GLN	A	832	-14.327	-40.153	58.665	1.00	16.84	C
ATOM	5306	O	GLN	A	832	-14.336	-40.970	57.741	1.00	20.32	O
ATOM	5307	CB	GLN	A	832	-14.050	-37.878	57.783	1.00	22.26	C
ATOM	5308	CG	GLN	A	832	-14.688	-36.987	56.775	1.00	23.70	C
ATOM	5309	CD	GLN	A	832	-13.667	-36.233	55.964	1.00	21.29	C
ATOM	5310	OE1	GLN	A	832	-12.936	-35.391	56.489	1.00	23.79	O
ATOM	5311	NE2	GLN	A	832	-13.607	-36.528	54.678	1.00	19.07	N
ATOM	5312	N	GLY	A	833	-13.727	-40.386	59.826	1.00	17.55	N
ATOM	5313	CA	GLY	A	833	-13.004	-41.628	60.029	1.00	20.07	C
ATOM	5314	C	GLY	A	833	-11.708	-41.499	59.245	1.00	22.22	C
ATOM	5315	O	GLY	A	833	-11.207	-42.465	58.662	1.00	24.45	O
ATOM	5316	N	VAL	A	834	-11.175	-40.279	59.220	1.00	21.04	N
ATOM	5317	CA	VAL	A	834	-9.943	-39.987	58.492	1.00	21.63	C
ATOM	5318	C	VAL	A	834	-8.847	-39.538	59.453	1.00	22.00	C
ATOM	5319	O	VAL	A	834	-9.104	-38.800	60.410	1.00	21.16	O
ATOM	5320	CB	VAL	A	834	-10.170	-38.881	57.418	1.00	21.68	C
ATOM	5321	CG1	VAL	A	834	-8.840	-38.407	56.845	1.00	17.92	C
ATOM	5322	CG2	VAL	A	834	-11.038	-39.417	56.290	1.00	17.24	C
ATOM	5323	N	TRP	A	835	-7.626	-40.007	59.195	1.00	23.06	N
ATOM	5324	CA	TRP	A	835	-6.464	-39.662	60.015	1.00	22.17	C
ATOM	5325	C	TRP	A	835	-5.421	-38.967	59.152	1.00	20.47	C
ATOM	5326	O	TRP	A	835	-5.143	-39.412	58.038	1.00	22.05	O
ATOM	5327	CB	TRP	A	835	-5.794	-40.916	60.595	1.00	21.20	C
ATOM	5328	CG	TRP	A	835	-6.456	-41.527	61.785	1.00	17.17	C
ATOM	5329	CD1	TRP	A	835	-6.210	-41.247	63.094	1.00	18.37	C
ATOM	5330	CD2	TRP	A	835	-7.423	-42.581	61.772	1.00	18.17	C
ATOM	5331	NE1	TRP	A	835	-6.962	-42.068	63.902	1.00	19.29	N
ATOM	5332	CE2	TRP	A	835	-7.715	-42.897	63.113	1.00	16.62	C
ATOM	5333	CE3	TRP	A	835	-8.070	-43.292	60.754	1.00	17.21	C
ATOM	5334	CZ2	TRP	A	835	-8.630	-43.893	63.467	1.00	21.20	C
ATOM	5335	CZ3	TRP	A	835	-8.981	-44.286	61.106	1.00	19.29	C
ATOM	5336	CH2	TRP	A	835	-9.251	-44.575	62.454	1.00	18.40	C
ATOM	5337	N	GLY	A	836	-4.857	-37.878	59.666	1.00	20.28	N
ATOM	5338	CA	GLY	A	836	-3.790	-37.178	58.965	1.00	21.41	C
ATOM	5339	C	GLY	A	836	-2.567	-37.487	59.817	1.00	21.61	C
ATOM	5340	O	GLY	A	836	-2.621	-37.269	61.026	1.00	21.22	O
ATOM	5341	N	ILE	A	837	-1.484	-38.007	59.229	1.00	21.33	N
ATOM	5342	CA	ILE	A	837	-0.287	-38.350	60.021	1.00	21.40	C
ATOM	5343	C	ILE	A	837	1.041	-38.000	59.356	1.00	17.59	C
ATOM	5344	O	ILE	A	837	1.230	-38.236	58.164	1.00	16.28	O
ATOM	5345	CB	ILE	A	837	-0.212	-39.876	60.344	1.00	23.39	C
ATOM	5346	CG1	ILE	A	837	-1.467	-40.342	61.081	1.00	23.76	C
ATOM	5347	CG2	ILE	A	837	1.007	-40.166	61.209	1.00	22.31	C
ATOM	5348	CD1	ILE	A	837	-1.566	-41.855	61.207	1.00	25.91	C

ATOM	5349	N	VAL	A	838	1.957	-37.444	60.139	1.00	19.19	N
ATOM	5350	CA	VAL	A	838	3.289	-37.107	59.639	1.00	18.15	C
ATOM	5351	C	VAL	A	838	4.312	-37.714	60.589	1.00	17.25	C
ATOM	5352	O	VAL	A	838	4.324	-37.403	61.784	1.00	16.77	O
ATOM	5353	CB	VAL	A	838	3.540	-35.587	59.578	1.00	16.35	C
ATOM	5354	CG1	VAL	A	838	5.011	-35.329	59.252	1.00	13.51	C
ATOM	5355	CG2	VAL	A	838	2.660	-34.945	58.514	1.00	14.26	C
ATOM	5356	N	LYS	A	839	5.159	-38.589	60.059	1.00	16.92	N
ATOM	5357	CA	LYS	A	839	6.200	-39.231	60.862	1.00	18.88	C
ATOM	5358	C	LYS	A	839	7.587	-38.721	60.447	1.00	17.81	C
ATOM	5359	O	LYS	A	839	7.920	-38.710	59.256	1.00	15.98	O
ATOM	5360	CB	LYS	A	839	6.152	-40.749	60.676	1.00	18.55	C
ATOM	5361	CG	LYS	A	839	5.185	-41.468	61.585	1.00	19.45	C
ATOM	5362	CD	LYS	A	839	4.975	-42.901	61.109	1.00	20.15	C
ATOM	5363	CE	LYS	A	839	6.163	-43.780	61.461	1.00	19.57	C
ATOM	5364	NZ	LYS	A	839	6.783	-43.390	62.761	1.00	19.63	N
ATOM	5365	N	TYR	A	840	8.394	-38.300	61.419	1.00	18.79	N
ATOM	5366	CA	TYR	A	840	9.736	-37.814	61.096	1.00	21.33	C
ATOM	5367	C	TYR	A	840	10.799	-38.898	61.262	1.00	19.25	C
ATOM	5368	O	TYR	A	840	11.951	-38.696	60.895	1.00	25.78	O
ATOM	5369	CB	TYR	A	840	10.089	-36.567	61.927	1.00	20.67	C
ATOM	5370	CG	TYR	A	840	9.674	-35.268	61.247	1.00	22.64	C
ATOM	5371	CD1	TYR	A	840	8.351	-34.818	61.307	1.00	23.72	C
ATOM	5372	CD2	TYR	A	840	10.583	-34.526	60.486	1.00	21.75	C
ATOM	5373	CE1	TYR	A	840	7.937	-33.667	60.620	1.00	24.10	C
ATOM	5374	CE2	TYR	A	840	10.181	-33.369	59.791	1.00	22.91	C
ATOM	5375	CZ	TYR	A	840	8.851	-32.949	59.862	1.00	23.94	C
ATOM	5376	OH	TYR	A	840	8.424	-31.833	59.171	1.00	19.59	O
ATOM	5377	N	ASP	A	841	10.418	-40.049	61.807	1.00	21.45	N
ATOM	5378	CA	ASP	A	841	11.359	-41.157	61.959	1.00	25.82	C
ATOM	5379	C	ASP	A	841	10.674	-42.498	61.698	1.00	26.16	C
ATOM	5380	O	ASP	A	841	9.456	-42.562	61.577	1.00	27.75	O
ATOM	5381	CB	ASP	A	841	12.025	-41.136	63.341	1.00	22.93	C
ATOM	5382	CG	ASP	A	841	11.076	-41.490	64.457	1.00	30.30	C
ATOM	5383	OD1	ASP	A	841	10.018	-42.092	64.182	1.00	30.31	O
ATOM	5384	OD2	ASP	A	841	11.395	-41.163	65.622	1.00	29.59	O
ATOM	5385	N	ASP	A	842	11.456	-43.569	61.616	1.00	27.59	N
ATOM	5386	CA	ASP	A	842	10.908	-44.888	61.319	1.00	28.66	C
ATOM	5387	C	ASP	A	842	10.469	-45.746	62.501	1.00	27.04	C
ATOM	5388	O	ASP	A	842	10.399	-46.970	62.390	1.00	28.19	O
ATOM	5389	CB	ASP	A	842	11.899	-45.681	60.458	1.00	30.21	C
ATOM	5390	CG	ASP	A	842	12.000	-45.143	59.041	1.00	35.50	C
ATOM	5391	OD1	ASP	A	842	12.819	-45.658	58.254	1.00	42.24	O
ATOM	5392	OD2	ASP	A	842	11.259	-44.201	58.709	1.00	36.96	O
ATOM	5393	N	SER	A	843	10.162	-45.121	63.628	1.00	26.95	N
ATOM	5394	CA	SER	A	843	9.708	-45.883	64.781	1.00	24.83	C
ATOM	5395	C	SER	A	843	8.286	-46.380	64.506	1.00	27.69	C
ATOM	5396	O	SER	A	843	7.633	-45.920	63.569	1.00	26.08	O
ATOM	5397	CB	SER	A	843	9.709	-45.000	66.020	1.00	24.93	C
ATOM	5398	OG	SER	A	843	8.863	-43.884	65.826	1.00	29.96	O

ATOM	5399	N	VAL	A	844	7.818	-47.326	65.313	1.00	26.40	N
ATOM	5400	CA	VAL	A	844	6.472	-47.865	65.158	1.00	27.68	C
ATOM	5401	C	VAL	A	844	5.479	-46.989	65.919	1.00	28.93	C
ATOM	5402	O	VAL	A	844	5.536	-46.908	67.145	1.00	29.74	O
ATOM	5403	CB	VAL	A	844	6.370	-49.290	65.718	1.00	26.49	C
ATOM	5404	CG1	VAL	A	844	4.901	-49.687	65.858	1.00	28.15	C
ATOM	5405	CG2	VAL	A	844	7.086	-50.250	64.802	1.00	22.89	C
ATOM	5406	N	SER	A	845	4.570	-46.344	65.192	1.00	26.54	N
ATOM	5407	CA	SER	A	845	3.578	-45.471	65.813	1.00	24.36	C
ATOM	5408	C	SER	A	845	2.196	-46.104	65.785	1.00	25.75	C
ATOM	5409	O	SER	A	845	1.637	-46.343	64.718	1.00	24.65	O
ATOM	5410	CB	SER	A	845	3.524	-44.131	65.081	1.00	22.47	C
ATOM	5411	OG	SER	A	845	4.704	-43.388	65.289	1.00	23.38	O
ATOM	5412	N	THR	A	846	1.649	-46.373	66.963	1.00	29.88	N
ATOM	5413	CA	THR	A	846	0.321	-46.967	67.067	1.00	30.92	C
ATOM	5414	C	THR	A	846	-0.691	-45.833	67.120	1.00	28.42	C
ATOM	5415	O	THR	A	846	-0.599	-44.958	67.976	1.00	27.97	O
ATOM	5416	CB	THR	A	846	0.204	-47.812	68.334	1.00	31.53	C
ATOM	5417	OG1	THR	A	846	1.206	-48.833	68.307	1.00	32.15	O
ATOM	5418	CG2	THR	A	846	-1.163	-48.457	68.414	1.00	32.03	C
ATOM	5419	N	ILE	A	847	-1.654	-45.848	66.206	1.00	27.45	N
ATOM	5420	CA	ILE	A	847	-2.641	-44.778	66.154	1.00	27.73	C
ATOM	5421	C	ILE	A	847	-4.037	-45.174	66.605	1.00	27.75	C
ATOM	5422	O	ILE	A	847	-4.594	-46.161	66.137	1.00	27.41	O
ATOM	5423	CB	ILE	A	847	-2.748	-44.188	64.724	1.00	29.30	C
ATOM	5424	CG1	ILE	A	847	-1.350	-43.866	64.179	1.00	25.58	C
ATOM	5425	CG2	ILE	A	847	-3.624	-42.936	64.739	1.00	25.71	C
ATOM	5426	CD1	ILE	A	847	-0.560	-42.880	65.022	1.00	21.94	C
ATOM	5427	N	SER	A	848	-4.592	-44.379	67.514	1.00	29.10	N
ATOM	5428	CA	SER	A	848	-5.934	-44.605	68.038	1.00	31.31	C
ATOM	5429	C	SER	A	848	-6.187	-46.068	68.376	1.00	32.06	C
ATOM	5430	O	SER	A	848	-7.323	-46.526	68.349	1.00	33.64	O
ATOM	5431	CB	SER	A	848	-6.982	-44.123	67.025	1.00	30.59	C
ATOM	5432	OG	SER	A	848	-6.900	-42.719	66.832	1.00	31.61	O
ATOM	5433	N	ASN	A	849	-5.123	-46.797	68.688	1.00	33.38	N
ATOM	5434	CA	ASN	A	849	-5.242	-48.205	69.033	1.00	35.43	C
ATOM	5435	C	ASN	A	849	-5.913	-49.036	67.949	1.00	34.88	C
ATOM	5436	O	ASN	A	849	-6.498	-50.075	68.243	1.00	35.34	O
ATOM	5437	CB	ASN	A	849	-6.031	-48.364	70.333	1.00	41.08	C
ATOM	5438	CG	ASN	A	849	-5.160	-48.234	71.561	1.00	48.92	C
ATOM	5439	OD1	ASN	A	849	-5.497	-47.512	72.503	1.00	53.00	O
ATOM	5440	ND2	ASN	A	849	-4.030	-48.936	71.562	1.00	52.54	N
ATOM	5441	N	GLN	A	850	-5.839	-48.588	66.701	1.00	33.41	N
ATOM	5442	CA	GLN	A	850	-6.451	-49.334	65.605	1.00	32.13	C
ATOM	5443	C	GLN	A	850	-5.396	-49.844	64.647	1.00	31.47	C
ATOM	5444	O	GLN	A	850	-5.454	-50.986	64.185	1.00	31.74	O
ATOM	5445	CB	GLN	A	850	-7.414	-48.454	64.814	1.00	35.98	C
ATOM	5446	CG	GLN	A	850	-8.148	-47.434	65.636	1.00	41.56	C
ATOM	5447	CD	GLN	A	850	-9.631	-47.534	65.433	1.00	44.48	C
ATOM	5448	OE1	GLN	A	850	-10.157	-48.624	65.217	1.00	49.06	O

ATOM	5449	NE2	GLN	A	850	-10.321	-46.399	65.495	1.00	44.59	N
ATOM	5450	N	PHE	A	851	-4.437	-48.981	64.337	1.00	27.84	N
ATOM	5451	CA	PHE	A	851	-3.387	-49.351	63.414	1.00	27.32	C
ATOM	5452	C	PHE	A	851	-2.019	-48.831	63.815	1.00	24.01	C
ATOM	5453	O	PHE	A	851	-1.864	-48.112	64.804	1.00	20.52	O
ATOM	5454	CB	PHE	A	851	-3.731	-48.862	62.006	1.00	23.46	C
ATOM	5455	CG	PHE	A	851	-3.910	-47.371	61.906	1.00	27.70	C
ATOM	5456	CD1	PHE	A	851	-2.843	-46.549	61.560	1.00	21.58	C
ATOM	5457	CD2	PHE	A	851	-5.155	-46.786	62.137	1.00	28.45	C
ATOM	5458	CE1	PHE	A	851	-3.009	-45.172	61.444	1.00	19.29	C
ATOM	5459	CE2	PHE	A	851	-5.330	-45.405	62.023	1.00	27.85	C
ATOM	5460	CZ	PHE	A	851	-4.250	-44.597	61.675	1.00	23.58	C
ATOM	5461	N	GLN	A	852	-1.031	-49.220	63.021	1.00	23.99	N
ATOM	5462	CA	GLN	A	852	0.346	-48.833	63.237	1.00	23.33	C
ATOM	5463	C	GLN	A	852	0.915	-48.327	61.927	1.00	21.53	C
ATOM	5464	O	GLN	A	852	0.724	-48.951	60.888	1.00	24.77	O
ATOM	5465	CB	GLN	A	852	1.161	-50.040	63.700	1.00	20.40	C
ATOM	5466	CG	GLN	A	852	1.395	-50.078	65.191	1.00	26.34	C
ATOM	5467	CD	GLN	A	852	1.702	-51.471	65.696	1.00	28.14	C
ATOM	5468	OE1	GLN	A	852	1.844	-52.412	64.914	1.00	31.71	O
ATOM	5469	NE2	GLN	A	852	1.804	-51.612	67.014	1.00	29.64	N
ATOM	5470	N	VAL	A	853	1.588	-47.183	61.978	1.00	21.34	N
ATOM	5471	CA	VAL	A	853	2.224	-46.614	60.803	1.00	21.13	C
ATOM	5472	C	VAL	A	853	3.702	-46.831	61.098	1.00	23.28	C
ATOM	5473	O	VAL	A	853	4.164	-46.569	62.213	1.00	20.80	O
ATOM	5474	CB	VAL	A	853	1.877	-45.122	60.630	1.00	21.95	C
ATOM	5475	CG1	VAL	A	853	0.576	-45.007	59.856	1.00	20.48	C
ATOM	5476	CG2	VAL	A	853	1.741	-44.438	61.979	1.00	21.39	C
ATOM	5477	N	LEU	A	854	4.438	-47.318	60.105	1.00	24.13	N
ATOM	5478	CA	LEU	A	854	5.840	-47.669	60.307	1.00	24.65	C
ATOM	5479	C	LEU	A	854	6.967	-46.880	59.660	1.00	25.62	C
ATOM	5480	O	LEU	A	854	8.112	-47.013	60.075	1.00	27.45	O
ATOM	5481	CB	LEU	A	854	6.015	-49.142	59.932	1.00	23.00	C
ATOM	5482	CG	LEU	A	854	4.762	-49.988	60.158	1.00	20.11	C
ATOM	5483	CD1	LEU	A	854	4.864	-51.305	59.398	1.00	16.25	C
ATOM	5484	CD2	LEU	A	854	4.588	-50.215	61.658	1.00	18.16	C
ATOM	5485	N	LYS	A	855	6.675	-46.066	58.657	1.00	26.51	N
ATOM	5486	CA	LYS	A	855	7.742	-45.342	57.987	1.00	26.65	C
ATOM	5487	C	LYS	A	855	7.707	-43.825	58.071	1.00	29.55	C
ATOM	5488	O	LYS	A	855	6.643	-43.206	58.149	1.00	30.62	O
ATOM	5489	CB	LYS	A	855	7.784	-45.747	56.512	1.00	32.42	C
ATOM	5490	CG	LYS	A	855	8.548	-47.035	56.222	1.00	38.22	C
ATOM	5491	CD	LYS	A	855	8.846	-47.171	54.723	1.00	45.94	C
ATOM	5492	CE	LYS	A	855	9.476	-45.889	54.149	1.00	51.27	C
ATOM	5493	NZ	LYS	A	855	9.312	-45.720	52.664	1.00	47.51	N
ATOM	5494	N	ARG	A	856	8.894	-43.233	58.044	1.00	25.13	N
ATOM	5495	CA	ARG	A	856	9.041	-41.789	58.064	1.00	21.36	C
ATOM	5496	C	ARG	A	856	8.303	-41.323	56.802	1.00	19.89	C
ATOM	5497	O	ARG	A	856	8.459	-41.912	55.728	1.00	17.35	O
ATOM	5498	CB	ARG	A	856	10.543	-41.431	58.024	1.00	20.09	C

ATOM	5499	CG	ARG	A	856	10.928	-40.105	57.353	1.00	26.32	C
ATOM	5500	CD	ARG	A	856	12.281	-39.591	57.883	1.00	25.10	C
ATOM	5501	NE	ARG	A	856	12.837	-38.467	57.124	1.00	20.68	N
ATOM	5502	CZ	ARG	A	856	13.125	-37.283	57.659	1.00	16.26	C
ATOM	5503	NH1	ARG	A	856	12.907	-37.074	58.947	1.00	16.81	N
ATOM	5504	NH2	ARG	A	856	13.656	-36.315	56.921	1.00	18.85	N
ATOM	5505	N	GLY	A	857	7.474	-40.292	56.939	1.00	19.06	N
ATOM	5506	CA	GLY	A	857	6.727	-39.796	55.797	1.00	17.89	C
ATOM	5507	C	GLY	A	857	5.379	-39.184	56.159	1.00	16.82	C
ATOM	5508	O	GLY	A	857	5.099	-38.910	57.326	1.00	16.12	O
ATOM	5509	N	VAL	A	858	4.540	-38.986	55.146	1.00	19.71	N
ATOM	5510	CA	VAL	A	858	3.226	-38.374	55.322	1.00	19.21	C
ATOM	5511	C	VAL	A	858	2.101	-39.333	54.950	1.00	19.51	C
ATOM	5512	O	VAL	A	858	2.143	-39.982	53.905	1.00	19.68	O
ATOM	5513	CB	VAL	A	858	3.123	-37.096	54.475	1.00	21.24	C
ATOM	5514	CG1	VAL	A	858	1.802	-36.387	54.743	1.00	22.86	C
ATOM	5515	CG2	VAL	A	858	4.281	-36.173	54.814	1.00	17.93	C
ATOM	5516	N	TYR	A	859	1.096	-39.413	55.818	1.00	20.90	N
ATOM	5517	CA	TYR	A	859	-0.033	-40.315	55.616	1.00	19.66	C
ATOM	5518	C	TYR	A	859	-1.400	-39.649	55.710	1.00	19.04	C
ATOM	5519	O	TYR	A	859	-1.595	-38.687	56.450	1.00	18.21	O
ATOM	5520	CB	TYR	A	859	-0.046	-41.432	56.672	1.00	19.58	C
ATOM	5521	CG	TYR	A	859	1.225	-42.233	56.865	1.00	26.01	C
ATOM	5522	CD1	TYR	A	859	2.375	-41.655	57.406	1.00	23.77	C
ATOM	5523	CD2	TYR	A	859	1.248	-43.603	56.584	1.00	24.93	C
ATOM	5524	CE1	TYR	A	859	3.514	-42.428	57.666	1.00	23.77	C
ATOM	5525	CE2	TYR	A	859	2.374	-44.379	56.839	1.00	21.88	C
ATOM	5526	CZ	TYR	A	859	3.499	-43.792	57.379	1.00	23.71	C
ATOM	5527	OH	TYR	A	859	4.600	-44.577	57.632	1.00	19.41	O
ATOM	5528	N	THR	A	860	-2.337	-40.189	54.942	1.00	20.59	N
ATOM	5529	CA	THR	A	860	-3.735	-39.775	54.975	1.00	19.08	C
ATOM	5530	C	THR	A	860	-4.454	-41.119	54.832	1.00	18.49	C
ATOM	5531	O	THR	A	860	-4.406	-41.763	53.776	1.00	17.60	O
ATOM	5532	CB	THR	A	860	-4.135	-38.817	53.835	1.00	18.17	C
ATOM	5533	OG1	THR	A	860	-3.203	-37.726	53.758	1.00	17.33	O
ATOM	5534	CG2	THR	A	860	-5.538	-38.234	54.131	1.00	15.33	C
ATOM	5535	N	ILE	A	861	-5.076	-41.543	55.931	1.00	19.17	N
ATOM	5536	CA	ILE	A	861	-5.775	-42.820	56.024	1.00	21.35	C
ATOM	5537	C	ILE	A	861	-7.262	-42.674	56.349	1.00	20.77	C
ATOM	5538	O	ILE	A	861	-7.652	-41.828	57.154	1.00	19.72	O
ATOM	5539	CB	ILE	A	861	-5.128	-43.691	57.130	1.00	23.32	C
ATOM	5540	CG1	ILE	A	861	-3.736	-44.150	56.678	1.00	26.40	C
ATOM	5541	CG2	ILE	A	861	-6.026	-44.878	57.470	1.00	22.34	C
ATOM	5542	CD1	ILE	A	861	-2.750	-44.327	57.815	1.00	21.59	C
ATOM	5543	N	ARG	A	862	-8.080	-43.518	55.730	1.00	20.97	N
ATOM	5544	CA	ARG	A	862	-9.522	-43.504	55.975	1.00	23.76	C
ATOM	5545	C	ARG	A	862	-10.012	-44.898	56.337	1.00	24.02	C
ATOM	5546	O	ARG	A	862	-9.712	-45.869	55.643	1.00	22.21	O
ATOM	5547	CB	ARG	A	862	-10.278	-43.024	54.735	1.00	25.26	C
ATOM	5548	CG	ARG	A	862	-11.794	-42.978	54.918	1.00	31.48	C

ATOM	5549	CD	ARG	A	862	-12.522	-43.025	53.576	1.00	36.73	C
ATOM	5550	NE	ARG	A	862	-12.941	-41.699	53.133	1.00	46.82	N
ATOM	5551	CZ	ARG	A	862	-13.757	-40.902	53.820	1.00	53.45	C
ATOM	5552	NH1	ARG	A	862	-14.247	-41.298	54.989	1.00	54.65	N
ATOM	5553	NH2	ARG	A	862	-14.085	-39.704	53.342	1.00	56.05	N
ATOM	5554	N	LYS	A	863	-10.755	-45.008	57.432	1.00	27.72	N
ATOM	5555	CA	LYS	A	863	-11.294	-46.305	57.818	1.00	28.22	C
ATOM	5556	C	LYS	A	863	-12.689	-46.437	57.239	1.00	30.45	C
ATOM	5557	O	LYS	A	863	-13.544	-45.584	57.461	1.00	30.77	O
ATOM	5558	CB	LYS	A	863	-11.375	-46.450	59.330	1.00	25.74	C
ATOM	5559	CG	LYS	A	863	-11.996	-47.762	59.761	1.00	25.92	C
ATOM	5560	CD	LYS	A	863	-12.091	-47.842	61.263	1.00	28.58	C
ATOM	5561	CE	LYS	A	863	-11.774	-49.237	61.753	1.00	30.31	C
ATOM	5562	NZ	LYS	A	863	-13.016	-50.003	62.020	1.00	38.01	N
ATOM	5563	N	GLU	A	864	-12.902	-47.498	56.473	1.00	35.93	N
ATOM	5564	CA	GLU	A	864	-14.199	-47.770	55.865	1.00	42.48	C
ATOM	5565	C	GLU	A	864	-14.599	-49.167	56.328	1.00	44.02	C
ATOM	5566	O	GLU	A	864	-14.258	-50.169	55.694	1.00	45.22	O
ATOM	5567	CB	GLU	A	864	-14.092	-47.715	54.338	1.00	45.47	C
ATOM	5568	CG	GLU	A	864	-14.198	-46.307	53.771	1.00	52.67	C
ATOM	5569	CD	GLU	A	864	-13.974	-46.254	52.271	1.00	59.07	C
ATOM	5570	OE1	GLU	A	864	-13.424	-45.239	51.785	1.00	62.79	O
ATOM	5571	OE2	GLU	A	864	-14.351	-47.225	51.577	1.00	64.69	O
ATOM	5572	N	GLY	A	865	-15.314	-49.225	57.448	1.00	44.14	N
ATOM	5573	CA	GLY	A	865	-15.713	-50.504	57.996	1.00	43.54	C
ATOM	5574	C	GLY	A	865	-14.490	-51.100	58.655	1.00	44.52	C
ATOM	5575	O	GLY	A	865	-13.852	-50.447	59.482	1.00	46.18	O
ATOM	5576	N	ASP	A	866	-14.154	-52.332	58.292	1.00	44.81	N
ATOM	5577	CA	ASP	A	866	-12.979	-52.994	58.847	1.00	47.47	C
ATOM	5578	C	ASP	A	866	-11.820	-52.777	57.878	1.00	46.89	C
ATOM	5579	O	ASP	A	866	-10.723	-53.301	58.074	1.00	49.97	O
ATOM	5580	CB	ASP	A	866	-13.229	-54.499	59.011	1.00	51.14	C
ATOM	5581	CG	ASP	A	866	-14.540	-54.808	59.721	1.00	55.71	C
ATOM	5582	OD1	ASP	A	866	-15.082	-53.914	60.409	1.00	56.15	O
ATOM	5583	OD2	ASP	A	866	-15.029	-55.953	59.590	1.00	56.68	O
ATOM	5584	N	GLU	A	867	-12.080	-52.001	56.828	1.00	44.39	N
ATOM	5585	CA	GLU	A	867	-11.085	-51.713	55.803	1.00	39.93	C
ATOM	5586	C	GLU	A	867	-10.434	-50.346	55.977	1.00	36.11	C
ATOM	5587	O	GLU	A	867	-11.039	-49.412	56.505	1.00	35.80	O
ATOM	5588	CB	GLU	A	867	-11.727	-51.797	54.417	1.00	42.19	C
ATOM	5589	CG	GLU	A	867	-12.171	-53.193	54.023	1.00	49.00	C
ATOM	5590	CD	GLU	A	867	-11.145	-54.251	54.387	1.00	56.03	C
ATOM	5591	OE1	GLU	A	867	-10.261	-54.532	53.544	1.00	62.33	O
ATOM	5592	OE2	GLU	A	867	-11.219	-54.802	55.511	1.00	56.53	O
ATOM	5593	N	TYR	A	868	-9.191	-50.239	55.519	1.00	34.09	N
ATOM	5594	CA	TYR	A	868	-8.441	-48.997	55.614	1.00	27.67	C
ATOM	5595	C	TYR	A	868	-7.933	-48.587	54.242	1.00	27.16	C
ATOM	5596	O	TYR	A	868	-7.348	-49.387	53.514	1.00	28.57	O
ATOM	5597	CB	TYR	A	868	-7.259	-49.161	56.574	1.00	24.68	C
ATOM	5598	CG	TYR	A	868	-7.643	-49.173	58.039	1.00	20.74	C

ATOM	5599	CD1	TYR	A	868	-7.813	-47.985	58.741	1.00	23.04	C
ATOM	5600	CD2	TYR	A	868	-7.818	-50.371	58.725	1.00	18.07	C
ATOM	5601	CE1	TYR	A	868	-8.148	-47.984	60.101	1.00	26.13	C
ATOM	5602	CE2	TYR	A	868	-8.153	-50.387	60.087	1.00	21.71	C
ATOM	5603	CZ	TYR	A	868	-8.315	-49.189	60.772	1.00	24.64	C
ATOM	5604	OH	TYR	A	868	-8.630	-49.184	62.122	1.00	26.33	O
ATOM	5605	N	LYS	A	869	-8.197	-47.338	53.888	1.00	25.23	N
ATOM	5606	CA	LYS	A	869	-7.760	-46.776	52.624	1.00	27.43	C
ATOM	5607	C	LYS	A	869	-6.493	-46.040	53.023	1.00	27.36	C
ATOM	5608	O	LYS	A	869	-6.505	-45.253	53.973	1.00	26.11	O
ATOM	5609	CB	LYS	A	869	-8.805	-45.791	52.092	1.00	35.21	C
ATOM	5610	CG	LYS	A	869	-9.442	-46.189	50.769	1.00	41.91	C
ATOM	5611	CD	LYS	A	869	-9.471	-44.997	49.815	1.00	47.93	C
ATOM	5612	CE	LYS	A	869	-10.274	-45.293	48.554	1.00	48.37	C
ATOM	5613	NZ	LYS	A	869	-10.810	-44.035	47.956	1.00	51.01	N
ATOM	5614	N	ILE	A	870	-5.406	-46.285	52.304	1.00	25.04	N
ATOM	5615	CA	ILE	A	870	-4.135	-45.671	52.656	1.00	24.11	C
ATOM	5616	C	ILE	A	870	-3.513	-44.803	51.585	1.00	18.66	C
ATOM	5617	O	ILE	A	870	-3.432	-45.201	50.427	1.00	20.50	O
ATOM	5618	CB	ILE	A	870	-3.103	-46.759	53.031	1.00	25.48	C
ATOM	5619	CG1	ILE	A	870	-3.648	-47.626	54.163	1.00	28.16	C
ATOM	5620	CG2	ILE	A	870	-1.796	-46.125	53.442	1.00	28.04	C
ATOM	5621	CD1	ILE	A	870	-3.202	-49.077	54.083	1.00	27.76	C
ATOM	5622	N	ALA	A	871	-3.074	-43.615	51.986	1.00	17.08	N
ATOM	5623	CA	ALA	A	871	-2.393	-42.698	51.080	1.00	17.43	C
ATOM	5624	C	ALA	A	871	-1.051	-42.331	51.727	1.00	18.41	C
ATOM	5625	O	ALA	A	871	-0.990	-41.464	52.600	1.00	19.04	O
ATOM	5626	CB	ALA	A	871	-3.233	-41.452	50.849	1.00	17.96	C
ATOM	5627	N	TYR	A	872	0.019	-43.009	51.312	1.00	22.73	N
ATOM	5628	CA	TYR	A	872	1.356	-42.761	51.869	1.00	19.98	C
ATOM	5629	C	TYR	A	872	2.313	-42.099	50.890	1.00	19.21	C
ATOM	5630	O	TYR	A	872	2.400	-42.484	49.723	1.00	15.97	O
ATOM	5631	CB	TYR	A	872	2.003	-44.063	52.349	1.00	20.65	C
ATOM	5632	CG	TYR	A	872	3.482	-43.906	52.647	1.00	23.73	C
ATOM	5633	CD1	TYR	A	872	3.913	-43.339	53.849	1.00	21.79	C
ATOM	5634	CD2	TYR	A	872	4.448	-44.277	51.713	1.00	20.83	C
ATOM	5635	CE1	TYR	A	872	5.270	-43.142	54.111	1.00	22.36	C
ATOM	5636	CE2	TYR	A	872	5.811	-44.081	51.965	1.00	21.48	C
ATOM	5637	CZ	TYR	A	872	6.207	-43.513	53.164	1.00	20.00	C
ATOM	5638	OH	TYR	A	872	7.536	-43.312	53.422	1.00	23.43	O
ATOM	5639	N	TYR	A	873	3.056	-41.120	51.389	1.00	20.26	N
ATOM	5640	CA	TYR	A	873	4.013	-40.402	50.564	1.00	20.37	C
ATOM	5641	C	TYR	A	873	5.331	-40.099	51.279	1.00	19.33	C
ATOM	5642	O	TYR	A	873	5.344	-39.548	52.382	1.00	17.41	O
ATOM	5643	CB	TYR	A	873	3.401	-39.089	50.078	1.00	16.14	C
ATOM	5644	CG	TYR	A	873	4.264	-38.355	49.082	1.00	17.85	C
ATOM	5645	CD1	TYR	A	873	4.574	-38.929	47.857	1.00	17.84	C
ATOM	5646	CD2	TYR	A	873	4.776	-37.091	49.365	1.00	15.89	C
ATOM	5647	CE1	TYR	A	873	5.370	-38.270	46.932	1.00	22.39	C
ATOM	5648	CE2	TYR	A	873	5.579	-36.419	48.439	1.00	16.42	C

ATOM	5649	CZ	TYR	A	873	5.870	-37.017	47.224	1.00	17.27	C
ATOM	5650	OH	TYR	A	873	6.649	-36.375	46.283	1.00	17.82	O
ATOM	5651	N	ASN	A	874	6.436	-40.480	50.645	1.00	19.51	N
ATOM	5652	CA	ASN	A	874	7.765	-40.201	51.183	1.00	21.29	C
ATOM	5653	C	ASN	A	874	8.226	-38.981	50.387	1.00	16.09	C
ATOM	5654	O	ASN	A	874	8.573	-39.093	49.212	1.00	18.63	O
ATOM	5655	CB	ASN	A	874	8.702	-41.381	50.935	1.00	23.04	C
ATOM	5656	CG	ASN	A	874	10.135	-41.085	51.344	1.00	27.72	C
ATOM	5657	OD1	ASN	A	874	11.031	-41.879	51.084	1.00	35.69	O
ATOM	5658	ND2	ASN	A	874	10.354	-39.941	51.981	1.00	27.78	N
ATOM	5659	N	PRO	A	875	8.218	-37.795	51.012	1.00	15.76	N
ATOM	5660	CA	PRO	A	875	8.632	-36.574	50.314	1.00	17.57	C
ATOM	5661	C	PRO	A	875	10.090	-36.476	49.873	1.00	20.98	C
ATOM	5662	O	PRO	A	875	10.403	-35.729	48.943	1.00	23.80	O
ATOM	5663	CB	PRO	A	875	8.247	-35.454	51.282	1.00	17.33	C
ATOM	5664	CG	PRO	A	875	8.170	-36.088	52.599	1.00	12.81	C
ATOM	5665	CD	PRO	A	875	7.812	-37.530	52.402	1.00	13.70	C
ATOM	5666	N	GLU	A	876	10.977	-37.221	50.526	1.00	22.70	N
ATOM	5667	CA	GLU	A	876	12.394	-37.183	50.171	1.00	22.37	C
ATOM	5668	C	GLU	A	876	12.689	-37.939	48.881	1.00	21.23	C
ATOM	5669	O	GLU	A	876	13.325	-37.400	47.979	1.00	22.18	O
ATOM	5670	CB	GLU	A	876	13.233	-37.746	51.310	1.00	21.11	C
ATOM	5671	CG	GLU	A	876	13.718	-36.674	52.257	1.00	26.92	C
ATOM	5672	CD	GLU	A	876	13.880	-37.178	53.666	1.00	25.65	C
ATOM	5673	OE1	GLU	A	876	13.621	-38.375	53.907	1.00	27.25	O
ATOM	5674	OE2	GLU	A	876	14.268	-36.375	54.538	1.00	31.79	O
ATOM	5675	N	THR	A	877	12.221	-39.180	48.787	1.00	20.40	N
ATOM	5676	CA	THR	A	877	12.436	-39.976	47.583	1.00	18.63	C
ATOM	5677	C	THR	A	877	11.352	-39.681	46.556	1.00	19.94	C
ATOM	5678	O	THR	A	877	11.446	-40.108	45.412	1.00	17.88	O
ATOM	5679	CB	THR	A	877	12.402	-41.474	47.889	1.00	19.94	C
ATOM	5680	OG1	THR	A	877	11.083	-41.839	48.304	1.00	20.28	O
ATOM	5681	CG2	THR	A	877	13.375	-41.810	49.003	1.00	16.87	C
ATOM	5682	N	GLN	A	878	10.331	-38.936	46.969	1.00	19.02	N
ATOM	5683	CA	GLN	A	878	9.216	-38.598	46.093	1.00	17.22	C
ATOM	5684	C	GLN	A	878	8.540	-39.863	45.580	1.00	19.56	C
ATOM	5685	O	GLN	A	878	8.275	-39.991	44.388	1.00	22.55	O
ATOM	5686	CB	GLN	A	878	9.697	-37.753	44.913	1.00	17.06	C
ATOM	5687	CG	GLN	A	878	10.218	-36.392	45.328	1.00	19.05	C
ATOM	5688	CD	GLN	A	878	10.222	-35.396	44.194	1.00	22.70	C
ATOM	5689	OE1	GLN	A	878	10.661	-35.698	43.083	1.00	28.79	O
ATOM	5690	NE2	GLN	A	878	9.734	-34.195	44.467	1.00	21.61	N
ATOM	5691	N	GLU	A	879	8.274	-40.798	46.485	1.00	20.09	N
ATOM	5692	CA	GLU	A	879	7.625	-42.058	46.131	1.00	20.50	C
ATOM	5693	C	GLU	A	879	6.631	-42.490	47.191	1.00	22.44	C
ATOM	5694	O	GLU	A	879	6.657	-42.022	48.332	1.00	20.07	O
ATOM	5695	CB	GLU	A	879	8.640	-43.193	46.008	1.00	19.07	C
ATOM	5696	CG	GLU	A	879	9.792	-42.952	45.079	1.00	22.07	C
ATOM	5697	CD	GLU	A	879	10.617	-44.207	44.874	1.00	17.88	C
ATOM	5698	OE1	GLU	A	879	10.527	-45.143	45.701	1.00	21.19	O

ATOM	5699	OE2	GLU	A	879	11.352	-44.258	43.874	1.00	27.64	O
ATOM	5700	N	SER	A	880	5.755	-43.404	46.802	1.00	25.23	N
ATOM	5701	CA	SER	A	880	4.795	-43.952	47.742	1.00	27.86	C
ATOM	5702	C	SER	A	880	5.478	-45.236	48.182	1.00	28.75	C
ATOM	5703	O	SER	A	880	6.706	-45.337	48.117	1.00	29.61	O
ATOM	5704	CB	SER	A	880	3.465	-44.270	47.060	1.00	26.50	C
ATOM	5705	OG	SER	A	880	2.534	-44.739	48.015	1.00	28.87	O
ATOM	5706	N	ALA	A	881	4.700	-46.217	48.616	1.00	28.13	N
ATOM	5707	CA	ALA	A	881	5.275	-47.485	49.044	1.00	28.47	C
ATOM	5708	C	ALA	A	881	4.180	-48.506	49.283	1.00	30.47	C
ATOM	5709	O	ALA	A	881	3.033	-48.144	49.544	1.00	27.59	O
ATOM	5710	CB	ALA	A	881	6.083	-47.293	50.314	1.00	26.95	C
ATOM	5711	N	PRO	A	882	4.517	-49.801	49.163	1.00	31.15	N
ATOM	5712	CA	PRO	A	882	3.535	-50.867	49.382	1.00	29.83	C
ATOM	5713	C	PRO	A	882	2.935	-50.720	50.772	1.00	28.12	C
ATOM	5714	O	PRO	A	882	3.648	-50.435	51.731	1.00	25.75	O
ATOM	5715	CB	PRO	A	882	4.355	-52.149	49.246	1.00	30.45	C
ATOM	5716	CG	PRO	A	882	5.516	-51.757	48.387	1.00	29.57	C
ATOM	5717	CD	PRO	A	882	5.833	-50.338	48.776	1.00	30.11	C
ATOM	5718	N	ASP	A	883	1.624	-50.912	50.866	1.00	27.98	N
ATOM	5719	CA	ASP	A	883	0.912	-50.791	52.129	1.00	25.80	C
ATOM	5720	C	ASP	A	883	1.591	-51.489	53.308	1.00	25.78	C
ATOM	5721	O	ASP	A	883	1.707	-50.909	54.392	1.00	20.05	O
ATOM	5722	CB	ASP	A	883	-0.516	-51.347	51.992	1.00	28.04	C
ATOM	5723	CG	ASP	A	883	-1.321	-50.658	50.907	1.00	28.74	C
ATOM	5724	OD1	ASP	A	883	-1.113	-49.449	50.678	1.00	30.22	O
ATOM	5725	OD2	ASP	A	883	-2.171	-51.331	50.282	1.00	30.95	O
ATOM	5726	N	GLN	A	884	2.041	-52.727	53.110	1.00	24.74	N
ATOM	5727	CA	GLN	A	884	2.645	-53.475	54.211	1.00	27.30	C
ATOM	5728	C	GLN	A	884	3.979	-52.933	54.717	1.00	25.70	C
ATOM	5729	O	GLN	A	884	4.463	-53.343	55.770	1.00	23.01	O
ATOM	5730	CB	GLN	A	884	2.782	-54.958	53.837	1.00	30.12	C
ATOM	5731	CG	GLN	A	884	4.040	-55.324	53.064	1.00	35.88	C
ATOM	5732	CD	GLN	A	884	4.017	-54.793	51.653	1.00	41.97	C
ATOM	5733	OE1	GLN	A	884	2.975	-54.338	51.169	1.00	42.85	O
ATOM	5734	NE2	GLN	A	884	5.168	-54.843	50.977	1.00	42.65	N
ATOM	5735	N	GLU	A	885	4.563	-52.001	53.976	1.00	26.75	N
ATOM	5736	CA	GLU	A	885	5.835	-51.408	54.368	1.00	28.09	C
ATOM	5737	C	GLU	A	885	5.636	-50.236	55.328	1.00	26.78	C
ATOM	5738	O	GLU	A	885	6.496	-49.947	56.162	1.00	26.46	O
ATOM	5739	CB	GLU	A	885	6.584	-50.908	53.128	1.00	28.07	C
ATOM	5740	CG	GLU	A	885	7.410	-51.963	52.411	1.00	31.45	C
ATOM	5741	CD	GLU	A	885	8.186	-51.385	51.238	1.00	33.40	C
ATOM	5742	OE1	GLU	A	885	8.401	-50.153	51.212	1.00	34.05	O
ATOM	5743	OE2	GLU	A	885	8.581	-52.159	50.340	1.00	36.14	O
ATOM	5744	N	VAL	A	886	4.491	-49.574	55.218	1.00	23.37	N
ATOM	5745	CA	VAL	A	886	4.216	-48.400	56.032	1.00	22.01	C
ATOM	5746	C	VAL	A	886	3.022	-48.484	56.971	1.00	22.99	C
ATOM	5747	O	VAL	A	886	2.897	-47.670	57.888	1.00	22.36	O
ATOM	5748	CB	VAL	A	886	4.009	-47.188	55.114	1.00	20.78	C

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ATOM   5749  CG1 VAL A 886       5.048 -47.205  54.008  1.00 21.70           C
ATOM   5750  CG2 VAL A 886       2.619 -47.242  54.490  1.00 20.86           C
ATOM   5751  N   PHE A 887       2.156 -49.468  56.754  1.00 24.33           N
ATOM   5752  CA  PHE A 887       0.946 -49.596  57.555  1.00 23.81           C
ATOM   5753  C   PHE A 887       0.674 -51.008  58.044  1.00 24.10           C
ATOM   5754  O   PHE A 887       0.801 -51.972  57.298  1.00 24.96           O
ATOM   5755  CB  PHE A 887      -0.240 -49.096  56.720  1.00 27.39           C
ATOM   5756  CG  PHE A 887      -1.580 -49.295  57.363  1.00 25.74           C
ATOM   5757  CD1 PHE A 887      -2.194 -48.252  58.052  1.00 29.40           C
ATOM   5758  CD2 PHE A 887      -2.249 -50.507  57.247  1.00 27.86           C
ATOM   5759  CE1 PHE A 887      -3.459 -48.412  58.617  1.00 26.08           C
ATOM   5760  CE2 PHE A 887      -3.511 -50.679  57.807  1.00 28.45           C
ATOM   5761  CZ  PHE A 887      -4.117 -49.627  58.494  1.00 28.48           C
ATOM   5762  N   LYS A 888       0.275 -51.119  59.305  1.00 27.66           N
ATOM   5763  CA  LYS A 888      -0.038 -52.417  59.887  1.00 31.22           C
ATOM   5764  C   LYS A 888      -1.336 -52.363  60.696  1.00 29.97           C
ATOM   5765  O   LYS A 888      -1.432 -51.649  61.693  1.00 26.43           O
ATOM   5766  CB  LYS A 888       1.118 -52.883  60.778  1.00 32.00           C
ATOM   5767  CG  LYS A 888       0.744 -53.965  61.767  1.00 39.41           C
ATOM   5768  CD  LYS A 888       1.626 -55.184  61.611  1.00 41.70           C
ATOM   5769  CE  LYS A 888       0.789 -56.452  61.525  1.00 48.64           C
ATOM   5770  NZ  LYS A 888       1.633 -57.683  61.454  1.00 48.97           N
ATOM   5771  N   LYS A 889      -2.344 -53.107  60.252  1.00 32.65           N
ATOM   5772  CA  LYS A 889      -3.605 -53.139  60.973  1.00 34.68           C
ATOM   5773  C   LYS A 889      -3.344 -53.892  62.275  1.00 35.25           C
ATOM   5774  O   LYS A 889      -2.703 -54.946  62.266  1.00 33.74           O
ATOM   5775  CB  LYS A 889      -4.672 -53.856  60.141  1.00 36.41           C
ATOM   5776  CG  LYS A 889      -6.015 -54.005  60.846  1.00 40.99           C
ATOM   5777  CD  LYS A 889      -6.613 -55.394  60.617  1.00 46.28           C
ATOM   5778  CE  LYS A 889      -6.853 -56.131  61.939  1.00 49.02           C
ATOM   5779  NZ  LYS A 889      -6.216 -57.488  61.980  1.00 45.97           N
ATOM   5780  N   LEU A 890      -3.820 -53.346  63.393  1.00 36.71           N
ATOM   5781  CA  LEU A 890      -3.616 -53.984  64.696  1.00 38.76           C
ATOM   5782  C   LEU A 890      -4.547 -55.188  64.887  1.00 42.65           C
ATOM   5783  O   LEU A 890      -4.041 -56.334  65.004  1.00 43.48           O
ATOM   5784  CB  LEU A 890      -3.831 -52.966  65.820  1.00 32.78           C
ATOM   5785  OXT LEU A 890      -5.778 -54.967  64.914  1.00 43.67           O
TER    5786      LEU A 890
HETATM 5787  C1  NAG B   1      18.584 -15.887  33.735  1.00 17.59           C
HETATM 5788  C2  NAG B   1      18.112 -14.542  33.092  1.00 24.26           C
HETATM 5789  C3  NAG B   1      16.593 -14.687  32.737  1.00 24.40           C
HETATM 5790  C4  NAG B   1      16.428 -15.873  31.714  1.00 17.29           C
HETATM 5791  C5  NAG B   1      16.955 -17.212  32.384  1.00 25.35           C
HETATM 5792  C6  NAG B   1      16.849 -18.434  31.428  1.00 18.80           C
HETATM 5793  C7  NAG B   1      18.543 -12.071  33.705  1.00 17.74           C
HETATM 5794  C8  NAG B   1      18.689 -11.146  34.888  1.00 20.63           C
HETATM 5795  N2  NAG B   1      18.311 -13.409  34.092  1.00 25.44           N
HETATM 5796  O1  NAG B   1      19.962 -15.807  34.060  1.00 20.34           O
HETATM 5797  O3  NAG B   1      16.118 -13.448  32.110  1.00 13.46           O
HETATM 5798  O4  NAG B   1      15.028 -16.071  31.361  1.00 23.48           O
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HETATM 5799  O5  NAG B   1      18.393 -17.056  32.775  1.00 28.51           O
HETATM 5800  O6  NAG B   1      16.331 -19.635  32.074  1.00 19.93           O
HETATM 5801  O7  NAG B   1      18.616 -11.659  32.530  1.00 13.78           O
HETATM 5802  C1  BDP B   2      14.823 -13.005  32.453  1.00 24.85           C
HETATM 5803  C2  BDP B   2      14.636 -11.459  32.225  1.00 16.75           C
HETATM 5804  C3  BDP B   2      13.169 -11.142  32.664  1.00 20.49           C
HETATM 5805  C4  BDP B   2      12.176 -11.942  31.740  1.00 24.41           C
HETATM 5806  C5  BDP B   2      12.367 -13.562  31.770  1.00 25.24           C
HETATM 5807  C6  BDP B   2      11.630 -14.355  30.949  1.00 16.24           C
HETATM 5808  O2  BDP B   2      15.575 -10.715  33.054  1.00 22.87           O
HETATM 5809  O3  BDP B   2      12.911  -9.722  32.507  1.00 25.37           O
HETATM 5810  O4  BDP B   2      10.768 -11.753  32.147  1.00 17.94           O
HETATM 5811  O5  BDP B   2      13.881 -13.770  31.641  1.00 18.19           O
HETATM 5812  O6A BDP B   2      11.997 -15.560  30.926  1.00 27.78           O
HETATM 5813  O6B BDP B   2      10.715 -13.771  30.290  1.00 15.64           O
HETATM 5814  C1  NAG B   3       9.871 -10.885  31.481  1.00 16.82           C
HETATM 5815  C2  NAG B   3       8.458 -10.940  32.182  1.00 18.62           C
HETATM 5816  C3  NAG B   3       7.511  -9.982  31.424  1.00 18.43           C
HETATM 5817  C4  NAG B   3       8.098  -8.520  31.484  1.00 13.74           C
HETATM 5818  C5  NAG B   3       9.530  -8.516  30.803  1.00 10.81           C
HETATM 5819  C6  NAG B   3      10.188  -7.130  30.842  1.00 22.07           C
HETATM 5820  C7  NAG B   3       7.197 -12.844  33.290  1.00 25.62           C
HETATM 5821  C8  NAG B   3       6.650 -14.218  33.062  1.00 22.36           C
HETATM 5822  N2  NAG B   3       7.864 -12.335  32.155  1.00 26.61           N
HETATM 5823  O3  NAG B   3       6.133 -10.059  32.019  1.00 16.03           O
HETATM 5824  O4  NAG B   3       7.260  -7.578  30.771  1.00 23.61           O
HETATM 5825  O5  NAG B   3      10.432  -9.471  31.498  1.00 18.24           O
HETATM 5826  O6  NAG B   3      10.094  -6.495  32.134  1.00 18.39           O
HETATM 5827  O7  NAG B   3       7.047 -12.250  34.360  1.00 28.34           O
HETATM 5828  C1  BDP B   4       5.207 -10.217  30.946  1.00 20.97           C
HETATM 5829  C2  BDP B   4       3.694 -10.401  31.332  1.00 26.66           C
HETATM 5830  C3  BDP B   4       2.932 -10.545  29.945  1.00 21.47           C
HETATM 5831  C4  BDP B   4       3.137  -9.160  29.197  1.00 17.66           C
HETATM 5832  C5  BDP B   4       4.653  -8.801  28.858  1.00 23.18           C
HETATM 5833  C6  BDP B   4       4.950  -7.640  28.245  1.00 14.82           C
HETATM 5834  O2  BDP B   4       3.569 -11.609  32.120  1.00 16.18           O
HETATM 5835  O3  BDP B   4       1.532 -10.750  30.216  1.00 29.04           O
HETATM 5836  O4  BDP B   4       2.656  -8.869  27.821  1.00 13.75           O
HETATM 5837  O5  BDP B   4       5.394  -9.035  30.142  1.00 15.39           O
HETATM 5838  O6A BDP B   4       5.268  -7.773  27.043  1.00 22.61           O
HETATM 5839  O6B BDP B   4       4.827  -6.597  28.958  1.00 14.92           O
HETATM 5840  C1  NAG B   5       1.452  -8.971  27.095  1.00 12.57           C
HETATM 5841  C2  NAG B   5       1.789  -8.336  25.708  1.00 14.21           C
HETATM 5842  C3  NAG B   5       0.573  -8.457  24.774  1.00 17.60           C
HETATM 5843  C4  NAG B   5       0.238  -9.999  24.605  1.00 19.79           C
HETATM 5844  C5  NAG B   5      -0.092 -10.601  26.041  1.00 17.74           C
HETATM 5845  C6  NAG B   5      -0.400 -12.106  25.926  1.00 20.87           C
HETATM 5846  C7  NAG B   5       1.625  -5.944  26.877  1.00 20.27           C
HETATM 5847  C8  NAG B   5       2.150  -4.531  26.730  1.00 23.54           C
HETATM 5848  N2  NAG B   5       2.134  -6.830  25.859  1.00 23.07           N
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HETATM 5849  O3  NAG B   5       0.926  -7.864  23.467  1.00 28.67           O
HETATM 5850  O4  NAG B   5      -0.935 -10.213  23.732  1.00 21.50           O
HETATM 5851  O5  NAG B   5       1.112 -10.420  26.905  1.00 23.36           O
HETATM 5852  O6  NAG B   5      -0.337 -12.608  24.573  1.00 18.18           O
HETATM 5853  O7  NAG B   5       0.837  -6.245  27.796  1.00 17.65           O
HETATM 5854  C1  BDP B   6      -0.110  -7.440  22.615  1.00 13.31           C
HETATM 5855  C2  BDP B   6       0.507  -6.902  21.379  1.00 25.60           C
HETATM 5856  C3  BDP B   6      -0.705  -6.525  20.514  1.00 21.59           C
HETATM 5857  C4  BDP B   6      -2.030  -7.153  20.366  1.00 18.41           C
HETATM 5858  C5  BDP B   6      -2.096  -8.135  21.289  1.00 21.71           C
HETATM 5859  C6  BDP B   6      -2.784  -9.373  21.081  1.00 19.44           C
HETATM 5860  O2  BDP B   6       1.318  -5.791  21.734  1.00 18.68           O
HETATM 5861  O3  BDP B   6      -0.193  -6.084  19.210  1.00 27.11           O
HETATM 5862  O4  BDP B   6      -2.617  -7.244  19.466  1.00 17.96           O
HETATM 5863  O5  BDP B   6      -0.946  -8.523  22.189  1.00 19.33           O
HETATM 5864  O6A BDP B   6      -2.413 -10.054  20.066  1.00 22.75           O
HETATM 5865  O6B BDP B   6      -3.642  -9.638  21.986  1.00  8.26           O
HETATM 5866  O   HOH A1001     -23.366 -26.135  19.010  1.00 53.46           O
HETATM 5867  O   HOH A1002     -23.421 -25.627  22.500  1.00 37.58           O
HETATM 5868  O   HOH A1003     -21.637 -27.408  27.836  1.00 29.33           O
HETATM 5869  O   HOH A1004     -19.716 -26.017  34.258  1.00 33.56           O
HETATM 5870  O   HOH A1005     -18.396 -27.389  36.058  1.00 33.30           O
HETATM 5871  O   HOH A1006     -19.157 -28.805  38.071  1.00 39.70           O
HETATM 5872  O   HOH A1007     -13.330 -29.004  39.811  1.00 39.37           O
HETATM 5873  O   HOH A1008     -12.068 -31.805  40.258  1.00 36.88           O
HETATM 5874  O   HOH A1009      -9.087 -33.732  43.327  1.00 18.47           O
HETATM 5875  O   HOH A1010      -7.316 -31.995  41.345  1.00 47.15           O
HETATM 5876  O   HOH A1011      -4.060 -31.211  39.557  1.00 22.55           O
HETATM 5877  O   HOH A1012      -2.274 -32.763  40.905  1.00 20.97           O
HETATM 5878  O   HOH A1013      -2.799 -34.215  42.978  1.00 17.84           O
HETATM 5879  O   HOH A1015      -5.116 -36.370  41.199  1.00 20.59           O
HETATM 5880  O   HOH A1016       8.464  12.880   6.471  1.00 52.11           O
HETATM 5881  O   HOH A1017     -12.871 -38.226  46.262  1.00 33.83           O
HETATM 5882  O   HOH A1018     -12.536 -41.976  46.455  1.00 67.83           O
HETATM 5883  O   HOH A1019     -11.655 -41.953  50.236  1.00 39.42           O
HETATM 5884  O   HOH A1020     -12.845 -46.840  47.884  1.00 50.04           O
HETATM 5885  O   HOH A1021      -6.317 -45.258  48.952  1.00 39.13           O
HETATM 5886  O   HOH A1022      -5.569 -47.782  50.057  1.00 30.61           O
HETATM 5887  O   HOH A1023      -2.890 -48.472  48.821  1.00 28.37           O
HETATM 5888  O   HOH A1024      -2.319 -46.083  47.799  1.00 30.73           O
HETATM 5889  O   HOH A1025      -0.106 -45.115  49.172  1.00 20.71           O
HETATM 5890  O   HOH A1026       0.512 -47.206  50.372  1.00 37.22           O
HETATM 5891  O   HOH A1027       0.383 -41.698  46.924  1.00 64.47           O
HETATM 5892  O   HOH A1028       5.573 -39.997  43.447  1.00 20.18           O
HETATM 5893  O   HOH A1029       6.401 -36.594  43.742  1.00 30.51           O
HETATM 5894  O   HOH A1031       8.250 -34.512  47.171  1.00 20.11           O
HETATM 5895  O   HOH A1032       6.945 -32.671  46.794  1.00 35.64           O
HETATM 5896  O   HOH A1033       6.141 -30.973  48.352  1.00 54.19           O
HETATM 5897  O   HOH A1034       2.865 -30.213  47.866  1.00 31.06           O
HETATM 5898  O   HOH A1035       9.371 -30.297  44.697  1.00 13.77           O
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HETATM	5899	O	HOH	A1036	11.193	-30.142	40.912	1.00	34.83	O
HETATM	5900	O	HOH	A1037	11.616	-32.721	41.029	1.00	48.87	O
HETATM	5901	O	HOH	A1038	13.380	-28.369	39.761	1.00	28.04	O
HETATM	5902	O	HOH	A1039	16.227	-27.241	36.576	1.00	24.26	O
HETATM	5903	O	HOH	A1040	15.111	-27.192	32.394	1.00	43.49	O
HETATM	5904	O	HOH	A1041	13.071	-29.671	31.536	1.00	26.29	O
HETATM	5905	O	HOH	A1042	9.998	-27.698	29.419	1.00	34.89	O
HETATM	5906	O	HOH	A1043	9.276	-29.837	27.469	1.00	33.31	O
HETATM	5907	O	HOH	A1044	6.852	-29.130	29.615	1.00	26.12	O
HETATM	5908	O	HOH	A1045	6.132	-27.147	28.070	1.00	17.79	O
HETATM	5909	O	HOH	A1046	4.172	-30.305	28.289	1.00	38.97	O
HETATM	5910	O	HOH	A1047	4.785	-35.816	27.175	1.00	41.54	O
HETATM	5911	O	HOH	A1048	6.157	-32.563	20.841	1.00	34.71	O
HETATM	5912	O	HOH	A1049	15.480	-30.181	21.216	1.00	38.80	O
HETATM	5913	O	HOH	A1050	19.935	-27.005	22.175	1.00	56.20	O
HETATM	5914	O	HOH	A1051	16.765	-28.696	25.590	1.00	60.01	O
HETATM	5915	O	HOH	A1052	16.532	-26.052	29.539	1.00	52.91	O
HETATM	5916	O	HOH	A1053	16.322	-23.570	29.887	1.00	44.90	O
HETATM	5917	O	HOH	A1054	13.320	-21.154	28.934	1.00	28.70	O
HETATM	5918	O	HOH	A1055	11.757	-22.292	30.521	1.00	27.54	O
HETATM	5919	O	HOH	A1056	9.669	-20.036	29.893	1.00	24.93	O
HETATM	5920	O	HOH	A1057	9.736	-25.068	30.704	1.00	61.25	O
HETATM	5921	O	HOH	A1058	14.472	-24.766	22.862	1.00	27.68	O
HETATM	5922	O	HOH	A1059	18.346	-17.127	18.727	1.00	33.89	O
HETATM	5923	O	HOH	A1060	18.761	-15.294	20.483	1.00	26.57	O
HETATM	5924	O	HOH	A1061	23.884	-8.215	21.928	1.00	36.57	O
HETATM	5925	O	HOH	A1062	25.079	-8.735	13.824	1.00	44.36	O
HETATM	5926	O	HOH	A1063	21.632	-2.745	9.879	1.00	51.04	O
HETATM	5927	O	HOH	A1064	19.544	-3.624	11.102	1.00	36.92	O
HETATM	5928	O	HOH	A1065	16.497	-4.081	11.058	1.00	33.64	O
HETATM	5929	O	HOH	A1066	16.333	-2.170	12.654	1.00	26.18	O
HETATM	5930	O	HOH	A1067	13.215	-2.536	12.557	1.00	27.79	O
HETATM	5931	O	HOH	A1068	12.590	-0.254	13.571	1.00	26.58	O
HETATM	5932	O	HOH	A1069	9.359	3.516	6.874	1.00	23.17	O
HETATM	5933	O	HOH	A1070	6.793	1.781	0.527	1.00	46.76	O
HETATM	5934	O	HOH	A1071	11.176	3.226	0.659	1.00	43.60	O
HETATM	5935	O	HOH	A1072	10.648	0.255	-0.872	1.00	37.05	O
HETATM	5936	O	HOH	A1073	8.095	-4.576	-1.482	1.00	70.41	O
HETATM	5937	O	HOH	A1074	3.645	-5.442	-2.164	1.00	63.99	O
HETATM	5938	O	HOH	A1075	3.358	-5.425	0.463	1.00	41.48	O
HETATM	5939	O	HOH	A1076	2.256	-2.873	0.113	1.00	36.09	O
HETATM	5940	O	HOH	A1077	-2.511	-3.425	6.298	1.00	19.97	O
HETATM	5941	O	HOH	A1078	-3.529	-6.027	6.057	1.00	33.01	O
HETATM	5942	O	HOH	A1079	-5.412	-7.842	7.806	1.00	34.55	O
HETATM	5943	O	HOH	A1080	-4.749	-5.082	9.152	1.00	28.66	O
HETATM	5944	O	HOH	A1081	-6.433	-3.892	7.272	1.00	24.16	O
HETATM	5945	O	HOH	A1082	-4.840	-2.247	5.526	1.00	30.30	O
HETATM	5946	O	HOH	A1083	-5.877	0.780	7.017	1.00	39.42	O
HETATM	5947	O	HOH	A1084	-10.156	-2.126	5.169	1.00	38.03	O
HETATM	5948	O	HOH	A1085	-8.366	-3.213	3.523	1.00	53.11	O

HETATM	5949	O	HOH	A1086	-9.275	-6.179	9.235	1.00	40.10	O
HETATM	5950	O	HOH	A1087	-9.035	-8.550	11.526	1.00	17.55	O
HETATM	5951	O	HOH	A1088	-7.019	-6.513	13.048	1.00	19.66	O
HETATM	5952	O	HOH	A1089	-6.460	-4.789	11.089	1.00	20.97	O
HETATM	5953	O	HOH	A1091	-8.536	-1.973	17.256	1.00	32.16	O
HETATM	5954	O	HOH	A1092	-7.843	-4.395	18.822	1.00	29.11	O
HETATM	5955	O	HOH	A1093	-6.244	-4.959	20.628	1.00	22.25	O
HETATM	5956	O	HOH	A1094	-3.074	-5.636	23.635	1.00	41.90	O
HETATM	5957	O	HOH	A1096	-1.990	-2.891	21.854	1.00	26.52	O
HETATM	5958	O	HOH	A1097	0.804	-2.374	22.012	1.00	35.84	O
HETATM	5959	O	HOH	A1099	-3.224	-12.371	23.655	1.00	68.91	O
HETATM	5960	O	HOH	A1101	-4.104	-10.175	24.228	1.00	22.17	O
HETATM	5961	O	HOH	A1102	-7.172	-10.579	25.100	1.00	19.00	O
HETATM	5962	O	HOH	A1103	-3.261	-8.238	29.089	1.00	37.21	O
HETATM	5963	O	HOH	A1104	-1.056	-9.449	28.841	1.00	61.41	O
HETATM	5964	O	HOH	A1105	0.698	-13.328	28.692	1.00	26.65	O
HETATM	5965	O	HOH	A1106	2.588	-12.613	27.177	1.00	31.12	O
HETATM	5966	O	HOH	A1108	7.327	-5.454	28.879	1.00	31.95	O
HETATM	5967	O	HOH	A1109	10.035	-4.089	28.962	1.00	28.82	O
HETATM	5968	O	HOH	A1110	10.546	-3.826	31.361	1.00	49.83	O
HETATM	5969	O	HOH	A1111	8.373	-1.816	28.296	1.00	27.10	O
HETATM	5970	O	HOH	A1112	5.889	-3.809	30.384	1.00	40.44	O
HETATM	5971	O	HOH	A1113	7.201	-5.250	35.115	1.00	37.13	O
HETATM	5972	O	HOH	A1114	7.215	-3.146	37.090	1.00	24.55	O
HETATM	5973	O	HOH	A1115	6.221	-0.519	34.866	1.00	62.99	O
HETATM	5974	O	HOH	A1116	3.115	-3.643	35.616	1.00	42.70	O
HETATM	5975	O	HOH	A1117	2.301	-9.608	34.745	1.00	25.07	O
HETATM	5976	O	HOH	A1119	2.260	-13.159	33.827	1.00	45.41	O
HETATM	5977	O	HOH	A1120	0.773	-13.631	37.006	1.00	18.38	O
HETATM	5978	O	HOH	A1121	6.660	-13.396	36.728	1.00	14.00	O
HETATM	5979	O	HOH	A1122	10.563	-8.100	34.370	1.00	28.13	O
HETATM	5980	O	HOH	A1123	12.657	-1.283	37.107	1.00	37.58	O
HETATM	5981	O	HOH	A1124	17.354	-1.143	40.519	1.00	52.68	O
HETATM	5982	O	HOH	A1125	17.899	-5.011	37.763	1.00	38.59	O
HETATM	5983	O	HOH	A1126	16.712	-7.207	41.270	1.00	31.04	O
HETATM	5984	O	HOH	A1127	16.986	-4.812	44.240	1.00	19.24	O
HETATM	5985	O	HOH	A1128	17.813	-3.227	47.896	1.00	38.69	O
HETATM	5986	O	HOH	A1129	18.197	-3.212	50.798	1.00	19.88	O
HETATM	5987	O	HOH	A1130	18.851	-3.568	55.251	1.00	46.74	O
HETATM	5988	O	HOH	A1131	16.990	-3.305	52.600	1.00	59.15	O
HETATM	5989	O	HOH	A1132	12.083	-1.311	48.416	1.00	31.91	O
HETATM	5990	O	HOH	A1133	8.579	3.209	47.146	1.00	35.47	O
HETATM	5991	O	HOH	A1134	9.738	6.919	44.895	1.00	36.29	O
HETATM	5992	O	HOH	A1135	5.321	6.614	40.435	1.00	40.59	O
HETATM	5993	O	HOH	A1136	2.690	7.554	39.911	1.00	42.04	O
HETATM	5994	O	HOH	A1137	-0.457	1.488	40.499	1.00	20.52	O
HETATM	5995	O	HOH	A1138	-0.673	2.654	42.942	1.00	24.28	O
HETATM	5996	O	HOH	A1139	-3.355	1.655	43.258	1.00	36.27	O
HETATM	5997	O	HOH	A1140	-3.751	-0.930	44.437	1.00	25.63	O
HETATM	5998	O	HOH	A1141	-5.307	-2.495	42.645	1.00	32.01	O

HETATM	5999	O	HOH A1142	-4.558	-1.992	40.289	1.00	29.80	O
HETATM	6000	O	HOH A1143	-3.108	0.401	40.271	1.00	33.90	O
HETATM	6001	O	HOH A1144	-2.333	-1.335	37.090	1.00	38.02	O
HETATM	6002	O	HOH A1145	-1.911	-1.718	33.389	1.00	46.28	O
HETATM	6003	O	HOH A1146	-4.060	-2.381	29.918	1.00	59.86	O
HETATM	6004	O	HOH A1147	-5.450	-4.509	35.745	1.00	41.81	O
HETATM	6005	O	HOH A1148	-8.174	-4.957	34.929	1.00	19.28	O
HETATM	6006	O	HOH A1149	-7.268	-5.894	40.445	1.00	26.78	O
HETATM	6007	O	HOH A1150	-4.391	-5.762	38.987	1.00	20.01	O
HETATM	6008	O	HOH A1151	-7.594	-9.117	41.224	1.00	19.08	O
HETATM	6009	O	HOH A1152	-7.976	-11.252	45.571	1.00	20.12	O
HETATM	6010	O	HOH A1153	-9.427	-13.574	47.501	1.00	23.37	O
HETATM	6011	O	HOH A1154	-10.531	-14.832	49.725	1.00	14.11	O
HETATM	6012	O	HOH A1155	-12.737	-16.775	46.500	1.00	12.40	O
HETATM	6013	O	HOH A1156	-11.275	-15.436	44.615	1.00	17.08	O
HETATM	6014	O	HOH A1157	-4.215	-15.076	45.472	1.00	13.44	O
HETATM	6015	O	HOH A1158	-3.353	-10.977	43.812	1.00	18.47	O
HETATM	6016	O	HOH A1159	-0.535	-8.454	41.875	1.00	15.37	O
HETATM	6017	O	HOH A1160	-2.437	-7.306	45.834	1.00	12.80	O
HETATM	6018	O	HOH A1161	-7.772	-1.332	43.435	1.00	41.63	O
HETATM	6019	O	HOH A1162	-12.190	-2.932	43.847	1.00	46.07	O
HETATM	6020	O	HOH A1163	-14.605	-3.661	44.155	1.00	38.16	O
HETATM	6021	O	HOH A1164	-15.957	-5.417	42.533	1.00	43.30	O
HETATM	6022	O	HOH A1165	-17.354	-6.722	44.469	1.00	37.55	O
HETATM	6023	O	HOH A1166	-17.464	-9.856	45.142	1.00	35.52	O
HETATM	6024	O	HOH A1167	-16.042	-9.871	47.341	1.00	30.95	O
HETATM	6025	O	HOH A1168	-18.201	-9.096	48.563	1.00	37.65	O
HETATM	6026	O	HOH A1169	-20.173	-9.662	46.888	1.00	56.05	O
HETATM	6027	O	HOH A1170	-19.035	-13.400	48.033	1.00	29.56	O
HETATM	6028	O	HOH A1171	-20.749	-14.852	49.529	1.00	31.60	O
HETATM	6029	O	HOH A1172	-23.265	-13.723	48.401	1.00	53.41	O
HETATM	6030	O	HOH A1173	-24.941	-13.285	51.375	1.00	49.77	O
HETATM	6031	O	HOH A1174	-24.045	-16.072	51.881	1.00	29.59	O
HETATM	6032	O	HOH A1175	-23.516	-17.139	49.725	1.00	37.23	O
HETATM	6033	O	HOH A1176	-21.800	-20.857	54.799	1.00	22.37	O
HETATM	6034	O	HOH A1177	-20.829	-24.343	55.984	1.00	26.14	O
HETATM	6035	O	HOH A1178	-23.081	-22.135	59.257	1.00	33.35	O
HETATM	6036	O	HOH A1179	-26.587	-20.184	58.974	1.00	43.66	O
HETATM	6037	O	HOH A1180	-27.287	-17.716	59.267	1.00	34.90	O
HETATM	6038	O	HOH A1181	-27.014	-13.448	56.318	1.00	48.54	O
HETATM	6039	O	HOH A1182	-26.211	-12.833	58.710	1.00	49.86	O
HETATM	6040	O	HOH A1183	-22.034	-14.947	60.473	1.00	22.88	O
HETATM	6041	O	HOH A1184	-22.345	-16.065	62.837	1.00	22.05	O
HETATM	6042	O	HOH A1185	-24.064	-13.891	66.517	1.00	23.56	O
HETATM	6043	O	HOH A1186	-24.390	-14.177	72.201	1.00	37.12	O
HETATM	6044	O	HOH A1187	-22.913	-12.328	72.552	1.00	44.91	O
HETATM	6045	O	HOH A1188	-21.230	-14.258	75.009	1.00	65.92	O
HETATM	6046	O	HOH A1189	-21.004	-16.633	74.861	1.00	45.33	O
HETATM	6047	O	HOH A1190	-22.770	-17.696	72.213	1.00	42.76	O
HETATM	6048	O	HOH A1191	17.673	-33.706	32.477	1.00	47.41	O

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HETATM 6049  O   HOH A1192     -23.127 -21.963  70.340  1.00 40.46           O
HETATM 6050  O   HOH A1193     -17.731 -24.084  72.098  1.00 24.17           O
HETATM 6051  O   HOH A1194     -17.104 -21.616  72.022  1.00 32.48           O
HETATM 6052  O   HOH A1195     -14.267 -20.963  72.516  1.00 34.85           O
HETATM 6053  O   HOH A1196     -17.756 -21.561  74.916  1.00 33.92           O
HETATM 6054  O   HOH A1197      21.561 -26.913  24.465  1.00 25.04           O
HETATM 6055  O   HOH A1198     -21.892 -28.283  72.396  1.00 24.82           O
HETATM 6056  O   HOH A1199     -21.795 -29.932  70.383  1.00 54.72           O
HETATM 6057  O   HOH A1200      21.335 -13.648  33.124  1.00 51.45           O
HETATM 6058  O   HOH A1201     -18.349 -39.665  65.710  1.00 45.36           O
HETATM 6059  O   HOH A1202      20.199 -15.275  37.117  1.00 54.98           O
HETATM 6060  O   HOH A1203     -14.975 -34.863  64.327  1.00 42.77           O
HETATM 6061  O   HOH A1204     -12.695 -35.639  65.400  1.00 27.46           O
HETATM 6062  O   HOH A1205     -15.719 -33.544  60.205  1.00 37.55           O
HETATM 6063  O   HOH A1206     -16.836 -31.433  59.767  1.00 31.05           O
HETATM 6064  O   HOH A1207     -18.105 -34.577  57.644  1.00 35.72           O
HETATM 6065  O   HOH A1208     -19.004 -31.760  55.884  1.00 46.93           O
HETATM 6066  O   HOH A1209     -21.691 -30.259  55.871  1.00 35.33           O
HETATM 6067  O   HOH A1210     -17.889 -29.841  53.683  1.00 20.94           O
HETATM 6068  O   HOH A1211     -18.504 -31.940  50.312  1.00 25.32           O
HETATM 6069  O   HOH A1212     -15.877 -31.586  49.672  1.00 20.60           O
HETATM 6070  O   HOH A1213     -13.409 -30.477  50.570  1.00 16.96           O
HETATM 6071  O   HOH A1214     -11.503 -30.385  48.830  1.00 15.33           O
HETATM 6072  O   HOH A1215     -15.814 -34.115  48.966  1.00 29.12           O
HETATM 6073  O   HOH A1216     -14.747 -34.175  44.427  1.00 48.09           O
HETATM 6074  O   HOH A1217     -18.160 -24.575  43.194  1.00 20.40           O
HETATM 6075  O   HOH A1218     -18.190 -22.359  41.694  1.00 20.51           O
HETATM 6076  O   HOH A1219     -17.690 -22.831  39.464  1.00 24.37           O
HETATM 6077  O   HOH A1220     -15.271 -21.047  39.610  1.00 28.81           O
HETATM 6078  O   HOH A1221     -12.727 -20.158  39.289  1.00 40.27           O
HETATM 6079  O   HOH A1222     -14.143 -21.787  42.211  1.00 16.02           O
HETATM 6080  O   HOH A1223     -12.192 -23.541  42.503  1.00 15.04           O
HETATM 6081  O   HOH A1224     -16.512 -21.149  43.506  1.00 23.54           O
HETATM 6082  O   HOH A1225     -17.135 -20.639  46.450  1.00 45.13           O
HETATM 6083  O   HOH A1226     -18.819 -17.287  44.163  1.00 40.70           O
HETATM 6084  O   HOH A1227     -23.429 -19.006  38.918  1.00 47.78           O
HETATM 6085  O   HOH A1228     -20.501 -20.385  38.334  1.00 28.55           O
HETATM 6086  O   HOH A1229     -15.408 -12.201  35.443  1.00 36.16           O
HETATM 6087  O   HOH A1230     -18.050 -10.254  33.767  1.00 35.13           O
HETATM 6088  O   HOH A1231     -20.223  -8.338  32.754  1.00 47.40           O
HETATM 6089  O   HOH A1232     -17.884  -9.093  37.826  1.00 37.09           O
HETATM 6090  O   HOH A1233     -17.104  -5.333  38.042  1.00 33.41           O
HETATM 6091  O   HOH A1234     -14.157  -5.209  38.037  1.00 36.10           O
HETATM 6092  O   HOH A1235     -12.484  -5.236  40.466  1.00 29.77           O
HETATM 6093  O   HOH A1236     -18.230  -2.758  44.384  1.00 71.95           O
HETATM 6094  O   HOH A1237     -15.089  -2.523  51.539  1.00 32.06           O
HETATM 6095  O   HOH A1238     -10.510  -3.938  51.212  1.00 24.76           O
HETATM 6096  O   HOH A1239     -10.031  -1.646  50.869  1.00 45.61           O
HETATM 6097  O   HOH A1240      -8.775  -2.672  53.986  1.00 25.70           O
HETATM 6098  O   HOH A1241     -11.637  -2.312  57.513  1.00 37.84           O
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HETATM	6099	O	HOH A1242	-13.533	-3.816	58.660	1.00	28.15	O
HETATM	6100	O	HOH A1243	-13.305	-5.554	60.461	1.00	27.62	O
HETATM	6101	O	HOH A1244	-13.509	-7.380	56.602	1.00	25.30	O
HETATM	6102	O	HOH A1245	-14.198	-9.469	54.656	1.00	20.20	O
HETATM	6103	O	HOH A1246	-11.714	-10.088	53.938	1.00	13.30	O
HETATM	6104	O	HOH A1247	-12.001	-12.560	54.718	1.00	18.31	O
HETATM	6105	O	HOH A1248	-13.897	-17.802	55.344	1.00	19.09	O
HETATM	6106	O	HOH A1249	-16.276	-19.981	60.032	1.00	37.62	O
HETATM	6107	O	HOH A1250	-16.143	-25.424	57.104	1.00	15.64	O
HETATM	6108	O	HOH A1251	-20.917	-30.154	61.485	1.00	45.32	O
HETATM	6109	O	HOH A1252	-27.204	-21.653	62.922	1.00	25.66	O
HETATM	6110	O	HOH A1253	-22.771	-23.636	51.486	1.00	15.61	O
HETATM	6111	O	HOH A1254	-20.413	-23.097	48.532	1.00	39.20	O
HETATM	6112	O	HOH A1255	-21.669	-10.883	51.121	1.00	40.55	O
HETATM	6113	O	HOH A1256	-16.862	-9.490	56.229	1.00	25.68	O
HETATM	6114	O	HOH A1257	-19.904	-8.241	57.988	1.00	39.68	O
HETATM	6115	O	HOH A1258	-20.095	-8.752	62.100	1.00	36.38	O
HETATM	6116	O	HOH A1259	-14.961	-6.933	67.567	1.00	28.85	O
HETATM	6117	O	HOH A1260	-12.575	-5.380	66.571	1.00	33.10	O
HETATM	6118	O	HOH A1261	-8.048	-1.323	65.416	1.00	48.25	O
HETATM	6119	O	HOH A1262	-6.326	1.941	68.065	1.00	41.04	O
HETATM	6120	O	HOH A1263	-4.291	1.648	62.443	1.00	32.36	O
HETATM	6121	O	HOH A1264	-8.059	2.625	59.504	1.00	45.54	O
HETATM	6122	O	HOH A1265	0.601	-0.443	61.202	1.00	38.65	O
HETATM	6123	O	HOH A1266	1.755	1.746	57.956	1.00	35.90	O
HETATM	6124	O	HOH A1267	2.903	-2.684	58.468	1.00	39.02	O
HETATM	6125	O	HOH A1268	3.360	-3.101	55.983	1.00	31.25	O
HETATM	6126	O	HOH A1269	6.787	-3.919	58.364	1.00	44.32	O
HETATM	6127	O	HOH A1270	6.828	-5.828	61.555	1.00	43.31	O
HETATM	6128	O	HOH A1271	8.050	-9.705	63.010	1.00	32.62	O
HETATM	6129	O	HOH A1272	10.663	-6.848	62.346	1.00	33.55	O
HETATM	6130	O	HOH A1273	12.966	-6.033	64.383	1.00	47.26	O
HETATM	6131	O	HOH A1274	15.115	-9.111	66.391	1.00	29.75	O
HETATM	6132	O	HOH A1275	18.045	-7.089	63.080	1.00	40.34	O
HETATM	6133	O	HOH A1276	20.645	-12.341	60.624	1.00	43.88	O
HETATM	6134	O	HOH A1277	18.218	-10.154	54.641	1.00	22.41	O
HETATM	6135	O	HOH A1278	19.481	-14.110	51.896	1.00	24.79	O
HETATM	6136	O	HOH A1279	20.149	-13.340	49.340	1.00	25.41	O
HETATM	6137	O	HOH A1280	21.882	-12.228	46.482	1.00	52.42	O
HETATM	6138	O	HOH A1281	19.053	-8.565	44.824	1.00	31.96	O
HETATM	6139	O	HOH A1282	21.109	-8.640	50.221	1.00	28.35	O
HETATM	6140	O	HOH A1283	14.413	-9.653	48.541	1.00	21.79	O
HETATM	6141	O	HOH A1284	16.995	-15.057	50.996	1.00	20.01	O
HETATM	6142	O	HOH A1285	15.502	-17.008	51.820	1.00	19.16	O
HETATM	6143	O	HOH A1286	13.454	-16.075	53.430	1.00	18.61	O
HETATM	6144	O	HOH A1287	12.904	-18.888	53.875	1.00	16.90	O
HETATM	6145	O	HOH A1288	14.678	-20.824	54.691	1.00	13.59	O
HETATM	6146	O	HOH A1289	17.111	-22.018	52.954	1.00	19.29	O
HETATM	6147	O	HOH A1290	17.483	-22.849	55.627	1.00	29.88	O
HETATM	6148	O	HOH A1291	15.140	-27.687	56.504	1.00	15.90	O

HETATM	6149	O	HOH	A1292	16.974	-29.486	57.407	1.00	25.24	O
HETATM	6150	O	HOH	A1293	18.895	-31.733	55.043	1.00	59.23	O
HETATM	6151	O	HOH	A1294	16.189	-33.943	53.336	1.00	20.74	O
HETATM	6152	O	HOH	A1295	14.565	-34.708	60.406	1.00	34.37	O
HETATM	6153	O	HOH	A1296	13.882	-34.035	64.717	1.00	38.09	O
HETATM	6154	O	HOH	A1297	14.204	-33.188	68.421	1.00	36.42	O
HETATM	6155	O	HOH	A1298	12.242	-29.916	70.470	1.00	28.61	O
HETATM	6156	O	HOH	A1299	8.503	-25.799	75.058	1.00	33.70	O
HETATM	6157	O	HOH	A1300	5.555	-27.562	73.254	1.00	33.40	O
HETATM	6158	O	HOH	A1301	4.523	-24.328	72.961	1.00	28.54	O
HETATM	6159	O	HOH	A1302	1.844	-24.358	73.277	1.00	46.21	O
HETATM	6160	O	HOH	A1303	1.222	-20.880	73.797	1.00	38.61	O
HETATM	6161	O	HOH	A1304	2.755	-18.439	72.923	1.00	28.65	O
HETATM	6162	O	HOH	A1305	4.138	-21.628	71.426	1.00	32.48	O
HETATM	6163	O	HOH	A1306	6.291	-19.561	74.296	1.00	27.56	O
HETATM	6164	O	HOH	A1307	5.144	-23.523	78.927	1.00	59.16	O
HETATM	6165	O	HOH	A1308	11.621	-20.938	70.336	1.00	30.48	O
HETATM	6166	O	HOH	A1309	15.177	-15.168	71.248	1.00	38.90	O
HETATM	6167	O	HOH	A1310	15.490	-14.205	73.525	1.00	69.79	O
HETATM	6168	O	HOH	A1311	8.255	-12.516	66.542	1.00	43.36	O
HETATM	6169	O	HOH	A1312	6.907	-14.254	63.225	1.00	30.96	O
HETATM	6170	O	HOH	A1313	5.468	-14.803	60.718	1.00	18.81	O
HETATM	6171	O	HOH	A1314	6.409	-14.063	57.875	1.00	23.66	O
HETATM	6172	O	HOH	A1315	7.655	-11.927	53.220	1.00	18.84	O
HETATM	6173	O	HOH	A1316	5.324	-10.288	51.289	1.00	19.04	O
HETATM	6174	O	HOH	A1317	5.176	-7.890	49.678	1.00	22.65	O
HETATM	6175	O	HOH	A1318	4.633	-6.027	51.722	1.00	21.15	O
HETATM	6176	O	HOH	A1319	5.006	-1.667	51.233	1.00	23.61	O
HETATM	6177	O	HOH	A1320	9.799	0.220	55.208	1.00	34.20	O
HETATM	6178	O	HOH	A1321	11.410	1.061	53.536	1.00	54.43	O
HETATM	6179	O	HOH	A1322	13.343	-4.450	53.686	1.00	28.97	O
HETATM	6180	O	HOH	A1324	12.250	-4.009	56.127	1.00	22.26	O
HETATM	6181	O	HOH	A1325	12.539	-11.824	59.899	1.00	22.15	O
HETATM	6182	O	HOH	A1326	13.038	-16.014	60.261	1.00	23.10	O
HETATM	6183	O	HOH	A1327	13.032	-17.794	56.706	1.00	21.99	O
HETATM	6184	O	HOH	A1328	9.419	-18.309	51.558	1.00	15.10	O
HETATM	6185	O	HOH	A1329	7.728	-20.484	45.444	1.00	17.88	O
HETATM	6186	O	HOH	A1330	7.149	-18.267	44.376	1.00	20.42	O
HETATM	6187	O	HOH	A1331	5.257	-18.784	42.489	1.00	16.16	O
HETATM	6188	O	HOH	A1332	4.380	-15.580	44.349	1.00	18.78	O
HETATM	6189	O	HOH	A1333	5.066	-17.718	46.425	1.00	25.58	O
HETATM	6190	O	HOH	A1334	2.935	-17.583	48.104	1.00	15.19	O
HETATM	6191	O	HOH	A1335	-1.847	-18.886	46.536	1.00	20.22	O
HETATM	6192	O	HOH	A1336	-3.630	-15.717	53.710	1.00	16.47	O
HETATM	6193	O	HOH	A1337	-3.516	-13.103	54.271	1.00	18.65	O
HETATM	6194	O	HOH	A1338	-5.763	-15.817	55.488	1.00	21.10	O
HETATM	6195	O	HOH	A1339	-7.561	-17.174	56.893	1.00	17.17	O
HETATM	6196	O	HOH	A1340	-2.197	-19.993	60.102	1.00	24.41	O
HETATM	6197	O	HOH	A1341	1.126	-22.293	60.968	1.00	22.56	O
HETATM	6198	O	HOH	A1342	1.214	-22.746	58.004	1.00	25.28	O

HETATM	6199	O	HOH	A1343	1.435	-25.845	60.333	1.00	18.23	O
HETATM	6200	O	HOH	A1344	7.775	-21.083	58.645	1.00	13.56	O
HETATM	6201	O	HOH	A1345	12.957	-28.603	60.801	1.00	29.60	O
HETATM	6202	O	HOH	A1346	7.310	-34.019	64.006	1.00	28.92	O
HETATM	6203	O	HOH	A1347	7.881	-40.512	63.417	1.00	20.63	O
HETATM	6204	O	HOH	A1348	14.201	-44.131	62.931	1.00	32.85	O
HETATM	6205	O	HOH	A1349	14.288	-42.090	59.877	1.00	27.86	O
HETATM	6206	O	HOH	A1350	16.049	-40.214	55.938	1.00	50.48	O
HETATM	6207	O	HOH	A1351	13.798	-49.054	53.627	1.00	47.91	O
HETATM	6208	O	HOH	A1352	8.993	-45.427	49.646	1.00	23.93	O
HETATM	6209	O	HOH	A1353	7.998	-55.804	52.872	1.00	36.55	O
HETATM	6210	O	HOH	A1354	2.689	-54.408	57.781	1.00	38.45	O
HETATM	6211	O	HOH	A1355	-0.670	-53.234	55.328	1.00	33.47	O
HETATM	6212	O	HOH	A1356	-2.455	-54.958	57.986	1.00	32.05	O
HETATM	6213	O	HOH	A1357	-4.647	-55.107	55.454	1.00	52.91	O
HETATM	6214	O	HOH	A1358	-4.249	-53.751	52.785	1.00	48.47	O
HETATM	6215	O	HOH	A1359	-7.429	-53.140	54.445	1.00	36.14	O
HETATM	6216	O	HOH	A1360	-5.012	-51.624	51.300	1.00	36.89	O
HETATM	6217	O	HOH	A1361	-6.584	-56.668	53.943	1.00	50.60	O
HETATM	6218	O	HOH	A1362	-18.390	-53.281	60.029	1.00	41.34	O
HETATM	6219	O	HOH	A1363	-15.757	-48.171	62.803	1.00	48.25	O
HETATM	6220	O	HOH	A1364	-17.176	-45.141	56.572	1.00	49.57	O
HETATM	6221	O	HOH	A1365	-14.666	-43.578	56.429	1.00	38.96	O
HETATM	6222	O	HOH	A1366	-16.461	-39.783	54.936	1.00	52.56	O
HETATM	6223	O	HOH	A1367	-5.157	-34.775	57.147	1.00	13.36	O
HETATM	6224	O	HOH	A1368	-3.806	-29.180	55.927	1.00	74.66	O
HETATM	6225	O	HOH	A1369	-0.619	-28.727	69.859	1.00	18.06	O
HETATM	6226	O	HOH	A1370	-2.921	-26.329	70.360	1.00	24.41	O
HETATM	6227	O	HOH	A1371	-2.396	-24.260	71.445	1.00	69.20	O
HETATM	6228	O	HOH	A1372	-1.359	-23.108	69.088	1.00	18.02	O
HETATM	6229	O	HOH	A1373	1.596	-30.582	71.731	1.00	41.90	O
HETATM	6230	O	HOH	A1374	-0.581	-33.696	72.137	1.00	46.98	O
HETATM	6231	O	HOH	A1375	2.387	-34.456	72.773	1.00	29.61	O
HETATM	6232	O	HOH	A1376	0.691	-42.595	69.246	1.00	37.82	O
HETATM	6233	O	HOH	A1377	2.531	-44.537	69.114	1.00	39.40	O
HETATM	6234	O	HOH	A1378	-3.136	-42.479	69.183	1.00	28.47	O
HETATM	6235	O	HOH	A1379	-9.582	-38.716	68.346	1.00	44.14	O
HETATM	6236	O	HOH	A1380	-8.075	-32.285	70.233	1.00	30.73	O
HETATM	6237	O	HOH	A1381	-6.103	-27.181	77.289	1.00	22.82	O
HETATM	6238	O	HOH	A1382	-7.156	-26.235	81.462	1.00	57.61	O
HETATM	6239	O	HOH	A1383	-6.778	-16.619	81.622	1.00	44.42	O
HETATM	6240	O	HOH	A1384	-7.545	-15.393	75.649	1.00	33.52	O
HETATM	6241	O	HOH	A1385	-12.441	-12.993	75.508	1.00	24.01	O
HETATM	6242	O	HOH	A1386	-12.625	-10.379	75.290	1.00	44.37	O
HETATM	6243	O	HOH	A1387	-10.669	-7.343	74.725	1.00	22.71	O
HETATM	6244	O	HOH	A1388	-13.006	-6.312	74.929	1.00	49.94	O
HETATM	6245	O	HOH	A1389	-6.732	-10.403	77.183	1.00	41.55	O
HETATM	6246	O	HOH	A1390	-3.190	-6.586	76.711	1.00	45.47	O
HETATM	6247	O	HOH	A1391	3.660	-8.881	77.016	1.00	55.37	O
HETATM	6248	O	HOH	A1392	4.874	-10.912	75.679	1.00	55.23	O

HETATM	6249	O	HOH	A1393	2.014	-14.396	71.707	1.00	42.16	O
HETATM	6250	O	HOH	A1394	4.610	-8.776	68.519	1.00	51.07	O
HETATM	6251	O	HOH	A1395	1.903	-9.775	66.031	1.00	37.32	O
HETATM	6252	O	HOH	A1396	2.014	-6.444	62.766	1.00	40.56	O
HETATM	6253	O	HOH	A1397	0.482	-7.222	60.660	1.00	17.95	O
HETATM	6254	O	HOH	A1398	-2.859	-6.065	61.980	1.00	24.24	O
HETATM	6255	O	HOH	A1399	-1.176	-4.720	63.728	1.00	51.90	O
HETATM	6256	O	HOH	A1400	1.838	-3.347	68.953	1.00	40.85	O
HETATM	6257	O	HOH	A1401	-5.527	-5.357	69.621	1.00	33.05	O
HETATM	6258	O	HOH	A1402	-14.614	-17.731	69.796	1.00	24.45	O
HETATM	6259	O	HOH	A1403	-17.040	-18.423	69.201	1.00	20.18	O
HETATM	6260	O	HOH	A1404	-18.114	-17.240	77.169	1.00	62.01	O
HETATM	6261	O	HOH	A1405	-20.472	-1.266	57.362	1.00	41.40	O
HETATM	6262	O	HOH	A1406	-10.088	-7.509	51.787	1.00	19.92	O
HETATM	6263	O	HOH	A1407	-6.875	-0.521	48.622	1.00	36.98	O
HETATM	6264	O	HOH	A1408	-5.788	2.418	49.259	1.00	23.02	O
HETATM	6265	O	HOH	A1409	1.444	2.353	44.640	1.00	19.97	O
HETATM	6266	O	HOH	A1410	2.064	0.515	39.924	1.00	25.31	O
HETATM	6267	O	HOH	A1411	0.488	9.324	47.274	1.00	32.91	O
HETATM	6268	O	HOH	A1412	1.937	7.373	58.653	1.00	39.52	O
HETATM	6269	O	HOH	A1413	7.357	-8.311	47.725	1.00	17.15	O
HETATM	6270	O	HOH	A1414	6.585	-14.536	46.079	1.00	18.60	O
HETATM	6271	O	HOH	A1415	8.121	-15.844	44.164	1.00	14.64	O
HETATM	6272	O	HOH	A1416	8.932	-22.360	43.942	1.00	20.35	O
HETATM	6273	O	HOH	A1417	7.949	-24.279	45.468	1.00	20.17	O
HETATM	6274	O	HOH	A1418	16.988	-26.592	43.628	1.00	29.68	O
HETATM	6275	O	HOH	A1419	19.251	-28.352	46.897	1.00	29.32	O
HETATM	6276	O	HOH	A1420	13.664	-34.921	46.831	1.00	28.35	O
HETATM	6277	O	HOH	A1421	14.503	-38.863	35.668	1.00	68.02	O
HETATM	6278	O	HOH	A1422	12.634	-34.598	31.504	1.00	29.19	O
HETATM	6279	O	HOH	A1424	6.385	-35.657	35.801	1.00	22.30	O
HETATM	6280	O	HOH	A1425	4.925	-35.286	38.195	1.00	21.56	O
HETATM	6281	O	HOH	A1426	0.667	-30.655	33.404	1.00	20.23	O
HETATM	6282	O	HOH	A1427	0.106	-26.052	38.380	1.00	17.98	O
HETATM	6283	O	HOH	A1428	-11.351	-29.315	34.298	1.00	44.57	O
HETATM	6284	O	HOH	A1429	-13.613	-29.892	32.527	1.00	34.18	O
HETATM	6285	O	HOH	A1430	-15.907	-28.580	32.489	1.00	27.69	O
HETATM	6286	O	HOH	A1431	-11.739	-33.842	26.516	1.00	39.20	O
HETATM	6287	O	HOH	A1432	-13.679	-34.234	21.731	1.00	41.86	O
HETATM	6288	O	HOH	A1433	-5.894	-30.315	19.106	1.00	46.18	O
HETATM	6289	O	HOH	A1434	-6.060	-21.815	19.797	1.00	32.13	O
HETATM	6290	O	HOH	A1435	-8.678	-20.208	18.468	1.00	34.64	O
HETATM	6291	O	HOH	A1436	-6.552	-17.917	18.735	1.00	37.08	O
HETATM	6292	O	HOH	A1500	-8.089	-14.123	19.984	1.00	46.87	O
HETATM	6293	O	HOH	A1501	-12.218	-15.067	25.432	1.00	25.79	O
HETATM	6294	O	HOH	A1502	-16.970	-15.225	17.710	1.00	37.98	O
HETATM	6295	O	HOH	A1503	-20.537	-12.285	20.455	1.00	32.67	O
HETATM	6296	O	HOH	A1504	-24.498	-11.144	24.024	1.00	37.82	O
HETATM	6297	O	HOH	A1505	-23.025	-12.402	26.550	1.00	22.82	O
HETATM	6298	O	HOH	A1506	-21.282	-10.684	27.910	1.00	28.93	O

HETATM	6299	O	HOH A1507	-21.343	-8.329	26.714	1.00	30.30	O
HETATM	6300	O	HOH A1508	-21.587	-5.536	25.179	1.00	32.52	O
HETATM	6301	O	HOH A1509	-22.426	-5.471	27.686	1.00	40.75	O
HETATM	6302	O	HOH A1510	-23.603	-4.189	23.573	1.00	41.59	O
HETATM	6303	O	HOH A1511	-17.317	3.596	25.354	1.00	38.78	O
HETATM	6304	O	HOH A1512	-15.807	3.382	20.463	1.00	33.38	O
HETATM	6305	O	HOH A1513	-16.808	2.624	17.552	1.00	28.72	O
HETATM	6306	O	HOH A1514	-17.795	8.401	15.646	1.00	63.03	O
HETATM	6307	O	HOH A1515	-14.277	10.436	17.936	1.00	44.60	O
HETATM	6308	O	HOH A1516	-13.739	10.310	11.809	1.00	44.19	O
HETATM	6309	O	HOH A1517	-11.875	12.160	12.253	1.00	45.42	O
HETATM	6310	O	HOH A1518	-13.363	6.074	10.893	1.00	29.44	O
HETATM	6311	O	HOH A1519	-14.284	3.525	8.004	1.00	43.68	O
HETATM	6312	O	HOH A1520	-13.843	1.270	5.255	1.00	49.01	O
HETATM	6313	O	HOH A1521	-12.753	2.305	2.827	1.00	35.87	O
HETATM	6314	O	HOH A1522	-19.944	-1.882	12.947	1.00	41.53	O
HETATM	6315	O	HOH A1523	-15.693	-11.366	10.209	1.00	51.34	O
HETATM	6316	O	HOH A1524	-14.440	-15.554	10.582	1.00	37.79	O
HETATM	6317	O	HOH A1525	-13.361	-17.195	13.164	1.00	41.96	O
HETATM	6318	O	HOH A1526	-7.779	-15.066	12.811	1.00	22.91	O
HETATM	6319	O	HOH A1527	-6.477	-15.590	5.456	1.00	31.82	O
HETATM	6320	O	HOH A1528	-7.201	-19.379	4.211	1.00	30.93	O
HETATM	6321	O	HOH A1529	-3.822	-19.376	2.628	1.00	38.08	O
HETATM	6322	O	HOH A1530	-6.477	-23.041	12.277	1.00	34.29	O
HETATM	6323	O	HOH A1531	8.173	-27.727	11.484	1.00	35.84	O
HETATM	6324	O	HOH A1532	7.880	-30.237	5.686	1.00	49.02	O
HETATM	6325	O	HOH A1533	10.803	-25.685	4.524	1.00	32.81	O
HETATM	6326	O	HOH A1534	12.113	-28.347	2.479	1.00	51.10	O
HETATM	6327	O	HOH A1535	4.282	-12.178	3.674	1.00	39.53	O
HETATM	6328	O	HOH A1536	8.801	-9.491	2.943	1.00	36.03	O
HETATM	6329	O	HOH A1537	4.334	-11.145	17.639	1.00	24.25	O
HETATM	6330	O	HOH A1538	3.067	-10.797	20.059	1.00	33.35	O
HETATM	6331	O	HOH A1539	0.141	-11.135	20.915	1.00	37.45	O
HETATM	6332	O	HOH A1542	5.633	-6.727	22.751	1.00	22.16	O
HETATM	6333	O	HOH A1543	3.715	1.555	25.660	1.00	39.77	O
HETATM	6334	O	HOH A1544	0.587	3.842	24.940	1.00	45.81	O
HETATM	6335	O	HOH A1545	0.171	4.573	20.794	1.00	21.20	O
HETATM	6336	O	HOH A1546	10.450	6.854	22.884	1.00	24.60	O
HETATM	6337	O	HOH A1547	13.229	7.407	30.140	1.00	30.06	O
HETATM	6338	O	HOH A1548	14.856	-1.984	31.095	1.00	28.24	O
HETATM	6339	O	HOH A1549	17.523	-1.997	30.949	1.00	30.28	O
HETATM	6340	O	HOH A1550	18.044	-9.325	38.499	1.00	32.08	O
HETATM	6341	O	HOH A1551	15.008	-14.890	44.127	1.00	22.48	O
HETATM	6342	O	HOH A1552	16.004	-20.007	40.532	1.00	27.54	O
HETATM	6343	O	HOH A1553	21.823	-18.862	47.637	1.00	25.61	O
HETATM	6344	O	HOH A1554	21.981	-17.214	55.164	1.00	36.83	O
HETATM	6345	O	HOH A1555	23.585	-20.356	55.154	1.00	23.61	O
HETATM	6346	O	HOH A1556	23.301	-19.525	62.895	1.00	47.37	O
HETATM	6347	O	HOH A1557	22.674	-19.594	30.027	1.00	33.70	O
HETATM	6348	O	HOH A1558	7.865	-12.939	29.559	1.00	42.83	O

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HETATM 6349  O   HOH A1559      -2.540  -9.365  32.050  1.00 29.07           O
HETATM 6350  O   HOH A1560     -10.892 -13.608  36.081  1.00 27.60           O
HETATM 6351  O   HOH A1561     -15.738  -3.943  30.684  1.00 25.70           O
HETATM 6352  O   HOH A1562     -13.875  -4.085  27.054  1.00 26.42           O
HETATM 6353  O   HOH A1563     -10.577  -4.158  27.718  1.00 44.00           O
HETATM 6354  O   HOH A1564     -16.626  -3.426  35.230  1.00 53.79           O
HETATM 6355  O   HOH A1565     -26.606 -18.962  30.303  1.00 31.97           O
HETATM 6356  O   HOH A1566     -28.070 -17.811  28.771  1.00 32.26           O
HETATM 6357  O   HOH A1567     -28.692 -19.978  23.839  1.00 32.74           O
HETATM 6358  O   HOH A1568     -24.282 -17.103  22.200  1.00 29.09           O
HETATM 6359  O   HOH A1569      -7.014 -33.897  31.101  1.00 34.07           O
HETATM 6360  O   HOH A1570       8.942 -49.261  61.681  1.00 25.54           O
HETATM 6361  O   HOH A1571       2.039 -59.664  62.931  1.00 49.54           O
HETATM 6362  O   HOH A1572      -2.968 -50.195  74.269  1.00 53.30           O
HETATM 6363  O   HOH A1573      -9.562   9.679  22.603  1.00 30.91           O
HETATM 6364  O   HOH A1574       0.641  14.232  16.259  1.00 26.17           O
HETATM 6365  O   HOH A1575       3.503  13.286  14.778  1.00 42.67           O
HETATM 6366  O   HOH A1576       0.774  15.724   9.938  1.00 32.22           O
HETATM 6367  O   HOH A1577      -0.068  16.223   7.655  1.00 24.30           O
HETATM 6368  O   HOH A1578      -3.873  15.850   8.275  1.00 23.75           O
HETATM 6369  O   HOH A1579       3.431   7.291   4.719  1.00 56.30           O
HETATM 6370  O   HOH A1580      11.801  15.647  11.809  1.00 58.77           O
HETATM 6371  O   HOH A1581      10.357  15.319  13.900  1.00 45.42           O
HETATM 6372  O   HOH A1582     -15.494 -29.345  37.974  1.00 54.73           O
HETATM 6373  O   HOH A1583      22.926 -18.029  65.392  1.00 42.30           O
HETATM 6374  O   HOH A1584      22.848   6.915  19.049  1.00 45.16           O
HETATM 6375  O   HOH A1585      23.292   5.516  17.051  1.00 29.05           O
HETATM 6376  O   HOH A1586      23.309   4.260  14.957  1.00 32.00           O
HETATM 6377  O   HOH A1587      20.551   6.685  20.394  1.00 56.15           O
HETATM 6378  O   HOH A1588      22.599   0.898   7.709  1.00 44.02           O
HETATM 6379  O   HOH A1589      18.690   2.478   5.802  1.00 46.61           O
HETATM 6380  O   HOH A1590      27.730   0.798   8.496  1.00 54.73           O
CONECT 5787 5788 5796 5799
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