

Supporting Information

Structural Insight into Tetrameric hTRPV1 from Homology Modeling, Molecular Docking, Molecular Dynamics Simulation, Virtual Screening, and Bioassay Validations

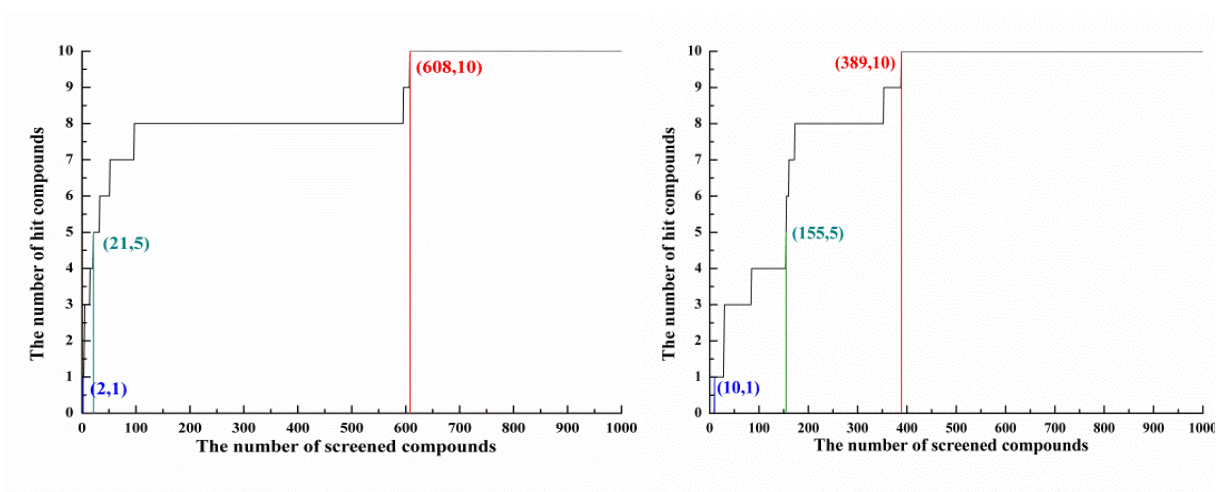
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(a)

(b)

Figure S3. Correlation between the number of hit compounds identified and the number of compounds screened for the other two hTRPV1 models.

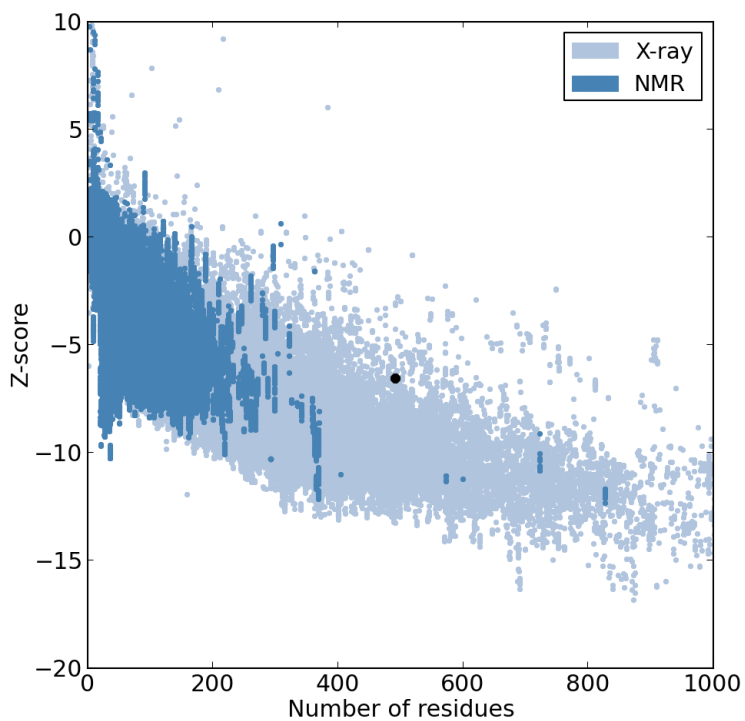


Figure S4. Overall model quality of hTRPV1 model constructed by rTRPV1. The Z-score was -6.57.

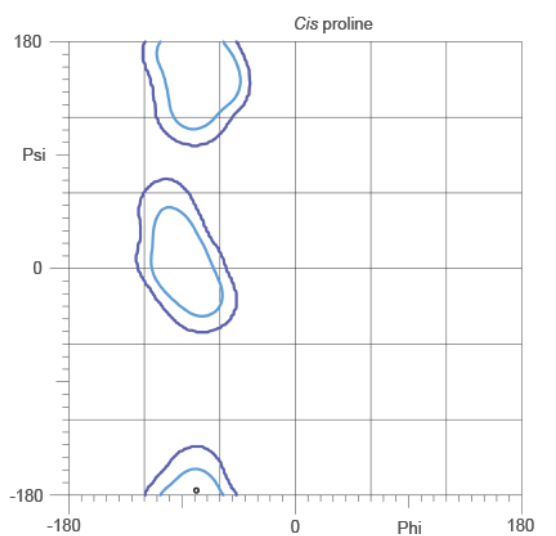
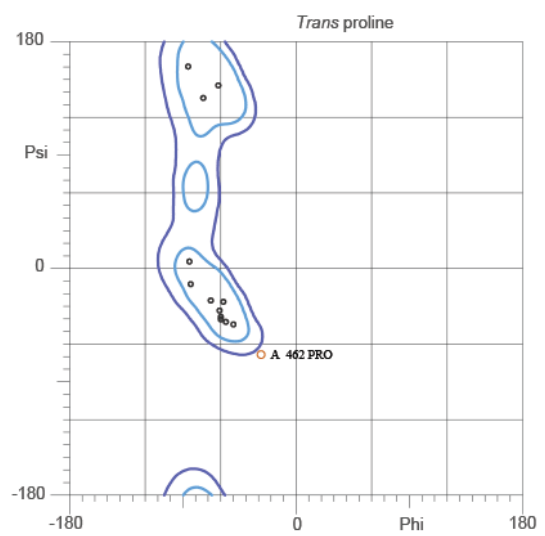
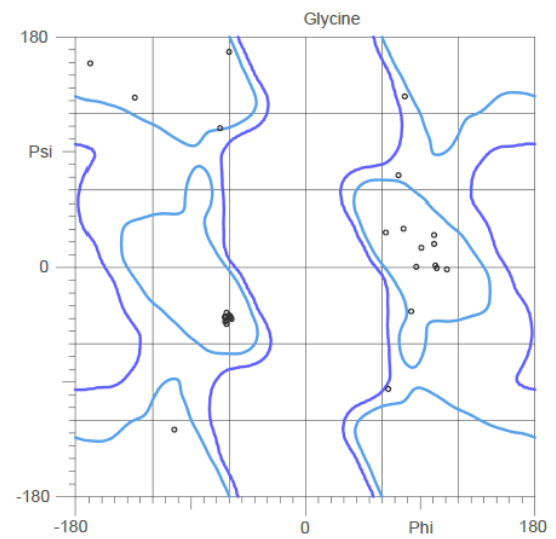
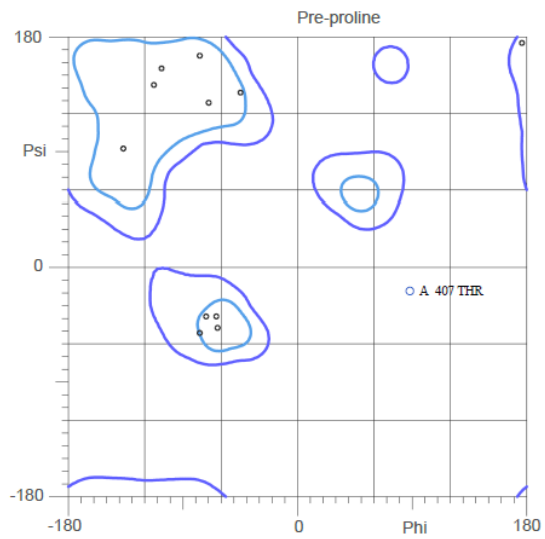
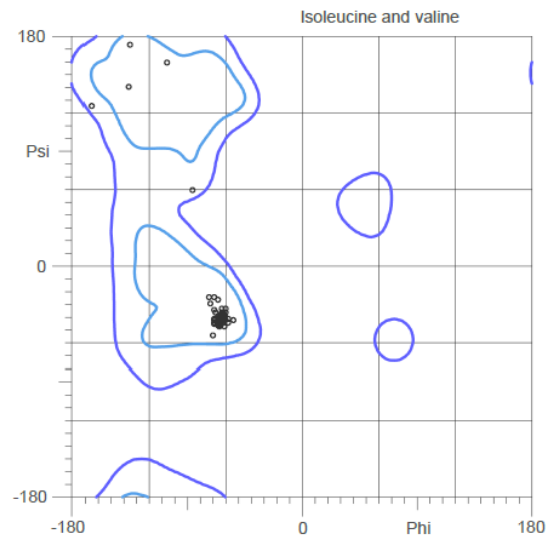
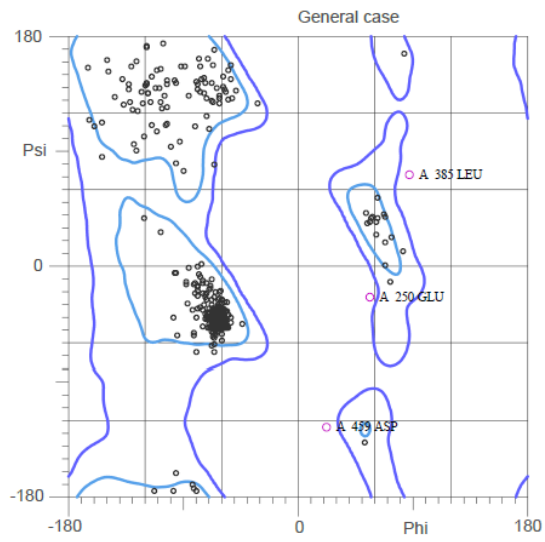


Figure S5. Ramachandran plots of hTRPV1 model constructed by rTRPV1. 95.5% (554/580) of all residues were in favored regions. 99.1% (575/580) of all residues were in allowed regions. There were 5 outliers (phi, psi): Glu250 (56.0, -24.3), Leu385 (88.0, 72.8), Thr407 (88.0, -19.7), Asp459 (22.4, -126.2), Pro462 (-28.9, -68.7).

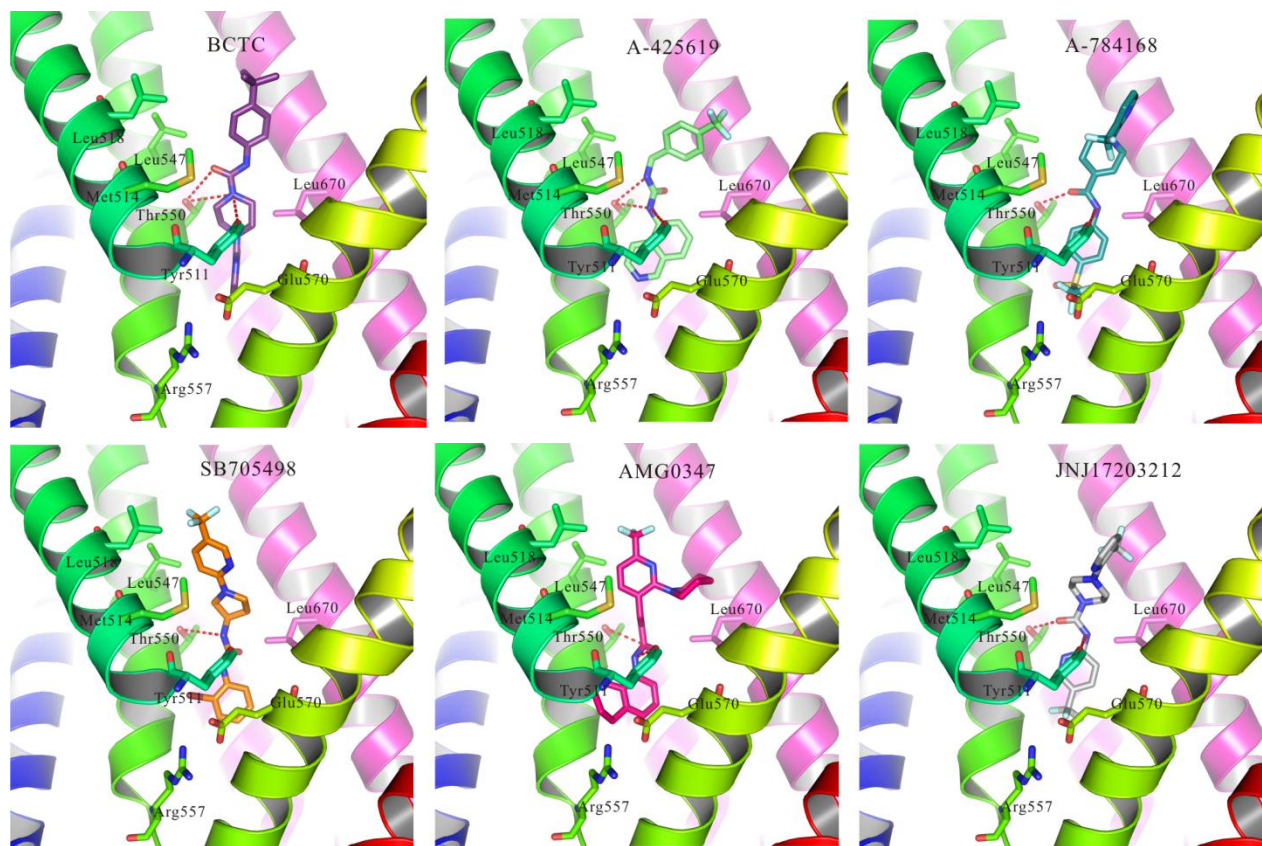


Figure S6. Detailed binding modes of other six antagonists with hTRPV1, including BCTC, A-425619, A-784168, SB705498, AMG0347, and JNJ17203212. Two residues, Tyr511 and Thr550, formed strong hydrogen bonds with the antagonists.

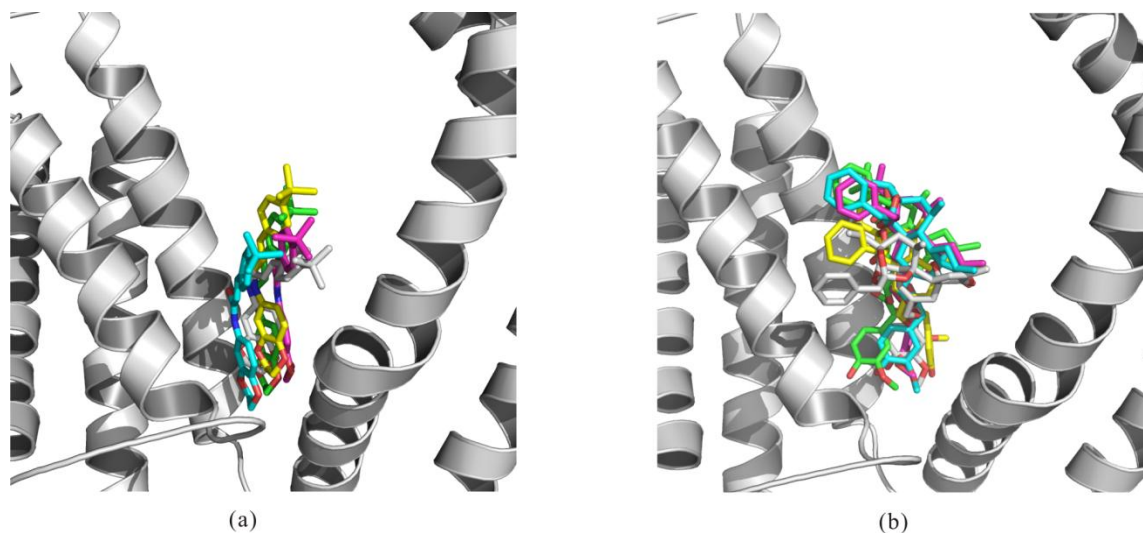


Figure S7. Alignments of (a) four AMG9810 and (b) of four RTX after MD simulation. The hTRPV1 and its compounds before MD simulation were highlighted in gray, while the four AMG9810 and four RTX in different monomers were highlighted in colors.

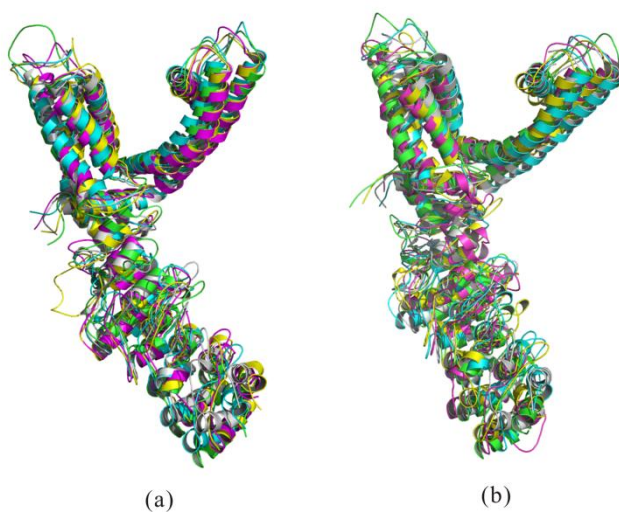


Figure S8. Alignments of four monomers (or units) (a) of hTRPV1 bound with AMG9810 and (b) of hTRPV1 bound with RTX.



Figure S9. Alignments of hTRPV1 bound with AMG9810 and bound with RTX. hTRPV1 highlighted in green color was the structure of hTRPV1 bound with antagonist, while hTRPV1 highlighted in red color was the structure of hTRPV1 bound with agonist. We hid residues from 112 to 364 for clarity.

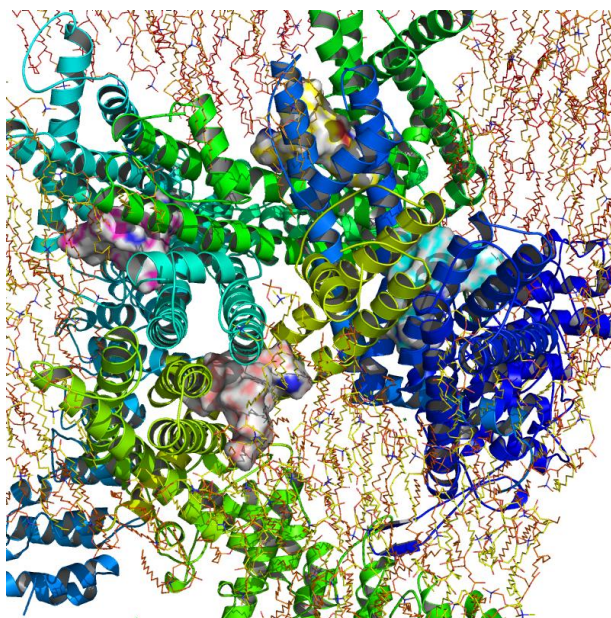


Figure S10. Four allosteric binding pockets in tetramer hTRPV1 model.

Table S1. List of structure and bioactivity information on 74 agonists for hTRPV1.

SMILES Structure	Ki for TRPV1(nM)	ChEMBL_ID
<chem>FC(F)(F)c1cc(NC(=O)N2CCc3c([nH]e4c3cc(O)cc4)C2)ccc1</chem>	0.005	CHEMBL2312051
<chem>Oc1cc2c3CCN(Cc3[nH]e2cc1)C(=O)Nc1ccc(cc1)C(C)(C)C</chem>	0.019	CHEMBL2312050
<chem>Oc1cc2c3CCN(Cc3[nH]e2cc1)C(=O)Nc1ccc(cc1)C(C)(C)C</chem>	0.019	CHEMBL2312049
<chem>O(C(=O)N1CCc2c([nH]e3c2cc(O)cc3)C1)c1ccc(cc1)-c1ccccc1</chem>	0.150	CHEMBL2312048
<chem>O(C(=O)N1CCc2c([nH]e3c2cc(O)cc3)C1)c1ccc(cc1)-c1ccccc1</chem>	0.650	CHEMBL2312047
<chem>O(C(=O)N1CCc2c([nH]e3c2cc(O)cc3)C1)c1ccc(cc1)-c1ccccc1</chem>	0.920	CHEMBL2312046
<chem>O(C(=O)N1CCc2c([nH]e3c2cc(O)cc3)C1)c1ccc(cc1)C(C)(C)C</chem>	0.980	CHEMBL2312045
<chem>O(C(=O)N1CCc2c([nH]e3c2cc(O)cc3)C1)c1ccc(cc1)CCCC</chem>	1.500	CHEMBL2312044
<chem>FC(F)(F)c1cc(OC(=O)N2CCc3c([nH]e4c3cc(O)cc4)C2)ccc1</chem>	1.900	CHEMBL2312043
<chem>O(C(=O)N1CCc2c([nH]e3c2cc(O)cc3)C1)c1ccc(cc1)C(C)(C)C</chem>	10.000	CHEMBL2312062
<chem>Oc1cc2c3CCN(Cc3[nH]e2cc1)C(=O)Cc1ccc(cc1)-c1ccccc1</chem>	100.000	CHEMBL2312061
<chem>Oc1cc2c3CCN(Cc3[nH]e2cc1)C(=O)c1ccc(cc1)-c1ccccc1</chem>	1000.000	CHEMBL2312060
<chem>Oc1cc2c3CCN(Cc3[nH]e2cc1)C(=O)c1ccc(cc1)C(C)(C)C</chem>	1000.000	CHEMBL2312059
<chem>O=C(C)c1ccc(cc1)-c1ccc(cc1)Cc1nn(nn1)C(=O)N(C)C</chem>	2.510	CHEMBL2376845
<chem>O=C(n1nnnc1Cc1ccc(cc1)-c1ccc(cc1)N(Cc1cc2c(cc1)cccc2)C</chem>	3.900	CHEMBL2375374
<chem>O=C(n1nc(nn1)Cc1ccc(cc1)-c1ccc(cc1)C)N(C)C</chem>	13.000	CHEMBL2376855
<chem>O=C(n1nc(nn1)Cc1ccc(cc1)-c1ccc(cc1)C)N(C)C</chem>	13.700	CHEMBL2376854
<chem>Oc1ccccc1-c1ccc(cc1)Cc1nn(nn1)C(=O)N(C)C</chem>	15.200	CHEMBL2376849
<chem>OCc1ccc(cc1)-c1ccc(cc1)Cc1nn(nn1)C(=O)N(C)C</chem>	15.800	CHEMBL2376848
<chem>O=C(n1nnnc1Cc1ccc(cc1)-c1ccc(cc1)C)N(C)C</chem>	16.300	CHEMBL2376869
<chem>O=C(n1nnnc1Cc1ccc(cc1)-c1ccc(cc1)C)N(C)C</chem>	16.500	CHEMBL2376868
<chem>Oc1ccc(cc1)-c1ccc(cc1)Cc1nnnn1C(=O)N(C)C</chem>	17.400	CHEMBL2376865
<chem>Oc1ccc(cc1)-c1ccc(cc1)Cc1nnnn1C(=O)N(C)C</chem>	17.900	CHEMBL2376864
<chem>O=C(n1nc(nn1)Cc1ccc(cc1)-c1ccc(cc1)C)N(C)C</chem>	19.000	CHEMBL2376855
<chem>O=C(n1nc(nn1)Cc1ccc(cc1)-c1ccc(cc1)C)N(C)C</chem>	19.000	CHEMBL2376854
<chem>O=C(n1nc(nn1)Cc1ccc(cc1)-c1ccc(cc1)C)N(C)C</chem>	19.000	CHEMBL2376853
<chem>O=C(n1nc(nn1)Cc1ccc(cc1)-c1ccc(cc1)N(Cc1cc2c(cc1)cccc2)C</chem>	20.000	CHEMBL2376844
<chem>O=C(n1nc(nn1)Cc1ccc(cc1)-c1ccc(cc1)N(C)C</chem>	23.000	CHEMBL485841
<chem>O=C(N)c1ccc(cc1)-c1ccc(cc1)Cc1nnnn1C(=O)N(C)C</chem>	25.500	CHEMBL2376866
<chem>OCc1ccc(cc1)-c1ccc(cc1)Cc1nn(nn1)C(=O)N(C)C</chem>	150.000	CHEMBL2376847
<chem>O=C(N)c1ccc(cc1)-c1ccc(cc1)Cc1nnnn1C(=O)N(C)C</chem>	160.000	CHEMBL2376866

<chem>OCc1ccc(cc1)-c1ccc(cc1)Cc1nnnn1C(=O)N(C)C</chem>	170.000	CHEMBL2376862
<chem>O=C(C)c1ccc(cc1)-c1ccc(cc1)Cc1nnnn1C(=O)N(C)C</chem>	180.000	CHEMBL2376859
<chem>O=C(n1nnnc1Cc1ccc(cc1)-c1ccc(cc1)N(CCCCc1ccc(cc1)C</chem>	183.000	CHEMBL2376858
<chem>O=C(n1nc(nn1)Cc1ccc(cc1)-c1ccc(cc1)N(CCCCc1ccc(cc1)C</chem>	200.000	CHEMBL2376843
<chem>O=C(n1nnnc1Cc1ccc(cc1)-c1ccc(cc1)C)N(C)C</chem>	230.000	CHEMBL2376869
<chem>Oc1ccc(cc1)-c1ccc(cc1)Cc1nnnn1C(=O)N(C)C</chem>	250.000	CHEMBL2376865
<chem>Oc1cc(ccc1)-c1ccc(cc1)Cc1nnnn1C(=O)N(C)C</chem>	250.000	CHEMBL2376864
<chem>OCc1cc(ccc1)-c1ccc(cc1)Cc1nnnn1C(=O)N(C)C</chem>	260.000	CHEMBL2376861
<chem>O(C(=O)c1ccc(cc1)-c1ccc(cc1)Cc1nnnn1C(=O)N(C)C)C</chem>	263.000	CHEMBL2376860
<chem>O=C(n1nnnc1Cc1ccc(cc1)-c1ccc(cc1)N(C)C1CCCCC1</chem>	320.000	CHEMBL2376857
<chem>O=C(n1nc(nn1)Cc1ccc(cc1)-c1ccc(cc1)C)N(C)C</chem>	1300.000	CHEMBL2376853
<chem>O=C(n1nc(nn1)Cc1ccc(cc1)-c1ccc(cc1)N1CCCCC1</chem>	1500.000	CHEMBL2376841
<chem>O(C(=O)c1ccc(cc1)-c1ccc(cc1)Cc1nnnn1C(=O)N(C)C)C</chem>	1700.000	CHEMBL2376860
<chem>O=C(n1nnnc1Cc1ccc(cc1)-c1ccc(cc1)N(Cc1cc2c(cc1)ccc2)C</chem>	1800.000	CHEMBL2375374
<chem>O=C(n1nnnc1Cc1ccc(cc1)-c1ccc(cc1)N1CCCCC1</chem>	1890.000	CHEMBL2376856
<chem>O=C(N)c1ccc(cc1)-c1ccc(cc1)Cc1nn(nn1)C(=O)N(C)C</chem>	1900.000	CHEMBL2376852
<chem>O=C(n1nc(nn1)Cc1ccc(cc1)-c1ccc(cc1)N1CCCCC1</chem>	2270.000	CHEMBL2376841
<chem>O=C(n1nnnc1Cc1ccc(cc1)-c1ccc(cc1)C)N(C)C</chem>	2400.000	CHEMBL2376868
<chem>O=C(n1nnnc1Cc1ccc(cc1)-c1ccc(cc1)N(C)C</chem>	2400.000	CHEMBL2376867
<chem>Oc1ccc(cc1)-c1ccc(cc1)Cc1nnnn1C(=O)N(C)C</chem>	2500.000	CHEMBL2376863
<chem>OCc1ccc(cc1)-c1ccc(cc1)Cc1nnnn1C(=O)N(C)C</chem>	2511.890	CHEMBL2376862
<chem>O=C(n1nnnc1Cc1ccc(cc1)-c1ccc(cc1)N(C)C</chem>	3300.000	CHEMBL509860
<chem>O(C(=O)N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C)c1ccc(cc1)C(C)C</chem>	4.600	CHEMBL1098094
<chem>O(C(=O)N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C)c1ccc(cc1)C(C)C</chem>	4.700	CHEMBL1098095
<chem>O(C(=O)N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C)c1ccc(OC)cc1</chem>	6.280	CHEMBL1096336
<chem>O(C(=O)N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C)c1ccc(cc1)-c1ccc(cc1)C</chem>	40.000	CHEMBL1098096
<chem>Clc1cc(OC(=O)N[C@@H]2C[C@@H](CC[C@H]2C(C)C)C)ccc1</chem>	40.000	CHEMBL1095974
<chem>Clc1ccc(OC(=O)N[C@@H]2C[C@@H](CC[C@H]2C(C)C)C)ccc1</chem>	40.000	CHEMBL1094393
<chem>O(C(=O)N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C)c1ccc(OC)cc1</chem>	40.000	CHEMBL1096336
<chem>O(C(=O)N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C)c1ccc(cc1)-c1ccc(cc1)C</chem>	540.000	CHEMBL1094392
<chem>O(C(=O)N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C)c1ccc(cc1)C</chem>	5100.000	CHEMBL1098431
<chem>FC(F)F)c1ccc(OC(=O)N[C@@H]2C[C@@H](CC[C@H]2C(C)C)C)ccc1</chem>	5200.000	CHEMBL1098432
<chem>O(C(=O)N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C)c1ccc(cc1)C(C)C</chem>	5290.000	CHEMBL1098094
<chem>Clc1cc(OC(=O)N[C@@H]2C[C@@H](CC[C@H]2C(C)C)C)ccc1</chem>	5800.000	CHEMBL1095974

<chem>C1c1ccc(OC(=O)N[C@@H]2C[C@@H](CC[C@H]2C(C)C)C)cc1</chem>	5900.000	CHEMBL1094393
<chem>O(C)c1ccc(cc1)C(=O)N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C</chem>	51.500	CHEMBL1098430
<chem>O=C(N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C)c1ccc(cc1)-c1ccc1</chem>	470.000	CHEMBL1094770
<chem>C1c1ccc(cc1)C(=O)N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C</chem>	500.000	CHEMBL1095651
<chem>O=C(N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C)c1ccc(cc1)C(C)C</chem>	3650.000	CHEMBL1094768
<chem>C1c1cc(ccc1)C(=O)N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C</chem>	3700.000	CHEMBL1095651
<chem>O=C(N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C)c1ccc(cc1)C(C)C</chem>	4400.000	CHEMBL1094768
<chem>C1c1ccc(cc1)C(=O)N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C</chem>	5000.000	CHEMBL1098429
<chem>O=C(N[C@@H]1C[C@@H](CC[C@H]1C(C)C)C)c1ccc(cc1)C</chem>	6309.570	CHEMBL1098074

Table S2. List of structure and bioactivity information on 734 antagonists for hTRPV1.

SMILES Structure	Ki for TRPV1 (nM)	ChEMBL_ID
<chem>S(=O)(=O)(Nc1ccc(cc1)F)C(C(=O)NCc1ccc(nc1)OCc1cccc1)C(F)(F)C</chem>	0.001	CHEMBL2385223
<chem>S(=O)(=O)(Nc1ccc(cc1)F)[C@@H](C(=O)NCc1ccc(nc1)N1CCC(CC1)C)C(F)(F)C</chem>	0.010	CHEMBL2177429
<chem>S(c1nc(ccc1)CNC(=O)[C@@H](C)c1ccc(F)c(NS(=O)(=O)C)cc1)C(F)(F)C1CCCC1</chem>	0.050	CHEMBL2442912
<chem>FC(F)(F)c1cccnc1-c1nc2nccc(Nc3ccc(cc3)C(F)(F)F)e2nc1</chem>	0.200	CHEMBL1214342
<chem>S(=O)(=O)(Nc1ccc(cc1)F)C(C(=O)NCc1ccc(nc1)N1CCC(CC1)Cc1ccc(F)c(F)cc1)C(F)(F)C</chem>	0.200	CHEMBL2178059
<chem>S(=O)(=O)(Nc1ccc(cc1)F)C(C(=O)NCc1ccc(nc1)N1CCC(CC1)Cc1ccc(cc1)C)C(F)(F)C</chem>	0.200	CHEMBL2177441
<chem>S(=O)(=O)(Nc1ccc(cc1)F)C(C(=O)NCc1ccc(nc1)N1CCC(CC1)Cc1ccc1)C(F)(F)C</chem>	0.200	CHEMBL2177440
<chem>S(=O)(=O)(Nc1ccc(cc1)F)[C@@H](C(=O)NCc1ccc(nc1)N1CCC(CC1)C)C(F)(F)C</chem>	0.200	CHEMBL2177429
<chem>S(=O)(=O)(Nc1ccc(cc1)F)C(C(=O)NCc1ccc(nc1)N(CCC)CCC)C(F)(F)C</chem>	0.200	CHEMBL2178063
<chem>FC(F)(F)c1cccnc1-c1nc2nenc(Nc3ccc(cc3)C(F)(F)F)e2nc1</chem>	0.210	CHEMBL1092853
<chem>FC(F)(F)c1cccnc1-c1nc2nccc(Nc3ccc(cc3)C(F)(F)F)e2nc1</chem>	0.230	CHEMBL1089452
<chem>S(=O)(=O)(Nc1ccc(cc1)F)C(C(=O)NCc1ccc(nc1)N1CCC(CC1)C)C(F)(F)C</chem>	0.230	CHEMBL2177428
<chem>S(=O)(=O)(Nc1ccc(cc1)F)C(C(=O)NCc1ccc(nc1)OCC(C)C)C(F)(F)C</chem>	0.290	CHEMBL2385408
<chem>S(=O)(=O)(Nc1ccc(cc1)F)[C@@H](C(=O)NCc1ccc(nc1)N1CCC(CC1)c1ccc1)C(F)(F)C</chem>	0.300	CHEMBL2177435
<chem>S(=O)(=O)(Nc1ccc(cc1)F)C(C(=O)NCc1ccc(nc1)N1CCC(CC1)(C)C)C(F)(F)C</chem>	0.300	CHEMBL2177432
<chem>S(=O)(=O)(Nc1ccc(cc1)F)C(C(=O)NCc1ccc(nc1)N1CCC(CC1)C)C(F)(F)C</chem>	0.300	CHEMBL2177428
<chem>S(=O)(=O)(Nc1ccc(cc1)F)C(C(=O)NCc1ccc(nc1)N1CCC=CC1)C(F)(F)C</chem>	0.300	CHEMBL2177425
<chem>S(=O)(=O)(Nc1ccc(cc1)F)[C@@H](C(=O)NCc1ccc(nc1)N1CCCC1)C(F)(F)C</chem>	0.300	CHEMBL2177424
<chem>S(=O)(=O)(Nc1ccc(cc1)F)[C@@H](C(=O)NCc1ccc(nc1)N1CCCC1)C(F)(F)C</chem>	0.300	CHEMBL2178068
<chem>S(=O)(=O)(Nc1ccc(cc1)F)C(C(=O)NCc1ccc(nc1)OCCC1N(CCCC1)C(OC(C)C)C)C(F)(F)C</chem>	0.300	CHEMBL2385220
<chem>S(=O)(=O)(Nc1ccc(cc1)F)C(C(=O)NCc1ccc(nc1)OCC1CCC1)C(F)(F)C</chem>	0.300	CHEMBL2385248

S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC[C@H]1C[C@H]1C)C(F)(F)F)C)C	0.300	CHEMBL2385246
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCCC(C)C)C(F)(F)F)C(F)(F)F)C)C	0.300	CHEMBL2385418
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCCCC)C(F)(F)F)C)C	0.300	CHEMBL2385423
FC(F)(F)c1cccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)COC(C)C	0.300	CHEMBL457188
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)Cc1cc(F)cc(F)c1)C(F)(F)F)C)C	0.400	CHEMBL2177402
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCC1CCCC1)C(F)(F)F)C)C	0.400	CHEMBL2385249
S(=O)(=O)(Nc1ccc(cc1F)[C@H](C(=O)NCc1ccc(nc1OCCCCC)C(F)(F)F)C)C	0.400	CHEMBL2385426
S(c1nc(ccc1CNC(=O)[C@H](C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F)C1CCCCC1	0.400	CHEMBL2442912
FC(F)(F)c1cccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)CN1CC(OC(C1)C)C	0.400	CHEMBL456162
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCCC1)C(F)(F)F)C)C	0.430	CHEMBL2177423
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(F)CC1)C(F)(F)F)C)C	0.500	CHEMBL2177404
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCCc1ccccc1)C(F)(F)F)C)C	0.500	CHEMBL2385224
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1ccccc1)C(F)(F)F)C)C	0.500	CHEMBL2385223
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC(CCCC)CCC)C(F)(F)F)C)C	0.500	CHEMBL2385413
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCC(C)C)C(F)(F)F)C)C	0.500	CHEMBL2385408
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCCCCC)C(F)(F)F)C)C	0.500	CHEMBL2385425
S(c1nc(ccc1CNC(=O)C(C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F)C1CCC(CC1)C	0.500	CHEMBL2442916
FC(F)(F)c1cccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)COCc1ccccc1	0.500	CHEMBL456778
FC(F)(F)c1cccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)C	0.500	CHEMBL526827
Clc1cccnc1N1CCN(CC1)C(=O)Nc1ccc(cc1)C(C)C)C	0.600	CHEMBL441472
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)C(F)(F)F)C(F)(F)F)C)C	0.600	CHEMBL2177405
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)c1ccccc1)C(F)(F)F)C)C	0.600	CHEMBL2177434
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCCC1)C(F)(F)F)C)C	0.600	CHEMBL2178067
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N(CCCC)CCCC)C(F)(F)F)C)C	0.600	CHEMBL2178064
FC(F)(F)c1cccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)C	0.630	CHEMBL1089824
Clc1cccnc1N1CCN(CC1)C(=O)Nc1ccc(cc1)C(C)C)C	0.700	CHEMBL441472
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCN(CC1)c1ccccc1)C(F)(F)F)C)C	0.700	CHEMBL2179146
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCCCC1)C(F)(F)F)C)C	0.700	CHEMBL2177419
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CC(C)C(C)C)C(F)(F)F)C)C	0.700	CHEMBL2177433
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1cc(OC)cc(OC)c1)C(F)(F)F)C)C	0.700	CHEMBL2385238
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCC1CCCCC1)C(F)(F)F)C)C	0.700	CHEMBL2385250
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC(C)C)CC(C)C)C(F)(F)F)C)C	0.700	CHEMBL2385414
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC(CCC)CCC)C(F)(F)F)C)C	0.700	CHEMBL2385412
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCCCC)C(F)(F)F)C)C	0.700	CHEMBL2385424

S(CCC(C)C)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	0.700	CHEMBL2442897
S(CCCC)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	0.700	CHEMBL2442894
FC(F)(F)c1cc(ene1-c1nc2nccc(Nc3ncc(cc3)C(F)(F)F)c2nc1)C(=O)N	0.800	CHEMBL1214402
S(=O)(=O)(Nc1ccc(cc1F)[C@@H](C(=O)NCc1ccc(nc1N1CCC(CC1)C)C(F)(F)F)C)C	0.800	CHEMBL2177429
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCCCC1)C(F)(F)F)C)C	0.800	CHEMBL2177418
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CC(CCC1)C)C(F)(F)F)C)C	0.800	CHEMBL2177427
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N(CCCC)C)C(F)(F)F)C)C	0.800	CHEMBL2178065
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1cc(OC)ccc1)C(F)(F)F)C)C	0.800	CHEMBL2385235
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1cc(F)ccc1)C(F)(F)F)C)C	0.800	CHEMBL2385233
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCCC(C)C)C(F)(F)F)C)C	0.800	CHEMBL2385409
FC(F)(F)c1ccene1-c1cc2nenc(Nc3ccc(cc3)C(F)(F)F)c2cc1	0.800	CHEMBL214796
FC(F)(F)c1ccene1-c1nc2nenc(Nc3ccc(cc3)C(F)(F)F)c2cc1	0.830	CHEMBL1092852
FC(F)(F)c1ccene1-c1cc2nenc(Nc3ncc(cc3)C(F)(F)F)c2cc1	0.850	CHEMBL456571
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N(C)c1ccccc1)C(F)(F)F)C)C	0.900	CHEMBL2178066
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCC(CC1)C)C)C(F)(F)F)C)C	0.900	CHEMBL2385241
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCCC1)C(F)(F)F)C)C	0.900	CHEMBL2385416
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCCC(C)C)C)C(F)(F)F)C)C	0.900	CHEMBL2385410
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCCC)C(F)(F)F)C)C	0.900	CHEMBL2385422
S(c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F)C1CCCCC1	0.900	CHEMBL2442911
FC(F)(F)c1ccene1-c1cc2nenc(Nc3ccc(cc3)C(F)(F)F)c2cc1)COCC	0.900	CHEMBL498666
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1cc(F)cc(F)c1)C(F)(F)F)C)C	1.000	CHEMBL2385236
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCC1CCC(CC1)C)C)C(F)(F)F)C)C	1.000	CHEMBL2385251
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC(C=C)C)C)C(F)(F)F)C)C	1.000	CHEMBL2385255
S(c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F)C1CCC(CC1)CC	1.000	CHEMBL2442918
FC(F)(F)c1ccene1-c1cc2nenc(Nc3ccc(cc3)C(F)(F)F)c2cc1)COC(C)C	1.000	CHEMBL513942
FC(F)(F)c1ccene1-c1cc2nenc(Nc3ncc(cc3)C(F)(F)F)c2cc1)CN1C[C@H](O[C@H](C1)C)C	1.000	CHEMBL457003
FC(F)(F)c1ccene1-c1cc2nenc(Nc3ccc(cc3)C(F)(F)F)c2cc1	1.100	CHEMBL214796
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCN(CC1)c1ccc(F)cc1)C(F)(F)F)C)C	1.100	CHEMBL2179150
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCC1CC1(C)C)C)C(F)(F)F)C)C	1.100	CHEMBL2385247
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCC1CC1)C)C(F)(F)F)C)C	1.100	CHEMBL2385082
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC(CC)C)C)C(F)(F)F)C)C	1.100	CHEMBL2385411
FC(F)(F)c1nc(N2CCOCC2)c(cc1)C=C(C(=O)Nc1cc2cccc2cc1	1.200	CHEMBL191247
S(c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F)C1CCCCC1	1.200	CHEMBL2442910
FC(F)(F)c1ccene1-c1cc2nenc(Nc3ccc(cc3)C(F)(F)F)c2cc1)CN(CC)CC	1.200	CHEMBL457842

S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCOCC1)C(F)(F)F)C)C	1.300	CHEMBL2177400
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(OCC)CC1)C(F)(F)F)C)C	1.300	CHEMBL2177409
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCN(CC1)C(OC(C)C)C)=O)C(F)(F)F)C)C	1.300	CHEMBL2385244
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCCC1)C(F)(F)F)C)C	1.300	CHEMBL2385417
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCN(CC1)e1ncccc1)C(F)(F)F)C)C	1.400	CHEMBL2179153
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)COC)C(F)(F)F)C)C	1.400	CHEMBL2177410
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1C[C@H](OCe2cccc2)CC1)C(F)(F)F)C)C	1.400	CHEMBL2178072
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCC1)C(F)(F)F)C)C	1.400	CHEMBL2385415
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1C[C@H](O[C@H](C1)C)C)C(F)(F)F)C)C	1.430	CHEMBL2177401
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)CC)C(F)(F)F)C)C	1.500	CHEMBL2177431
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1ccc(cc1)C)C(F)(F)F)C)C	1.500	CHEMBL2385225
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCCCOe1cccc1)C(F)(F)F)C)C	1.500	CHEMBL2385406
FC(F)(F)c1cccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)COC	1.500	CHEMBL497650
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC(C=C)C)C(F)(F)F)C)C	1.600	CHEMBL2385254
FC(F)(F)c1cccnc1-c1cc2nccc(Nc3ncc(cc3)C(F)(F)F)c2cc1	1.650	CHEMBL1093132
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(=CC1)e1cccc1)C(F)(F)F)C)C	1.700	CHEMBL2177437
S(Cc1cccnc1)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	1.900	CHEMBL2442928
S(C1CCCCC1C)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	1.900	CHEMBL2442917
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(OC(=O)C(C)C)CC1)C(F)(F)F)C)C	2.000	CHEMBL2177414
FC(F)(F)c1cccnc1-c1cc2nc(nc(Nc3ccc(nc3)C(F)(F)F)c2cc1)CN1C[C@H](O[C@H](C1)C)C	2.000	CHEMBL456128
FC(F)(F)c1cccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)CCCN1C[C@H](O[C@H](C1)C)C	2.000	CHEMBL446258
FC(F)(F)c1cccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)CCOC	2.000	CHEMBL456152
C1c1cccnc1N1CCN(CC1)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	2.100	CHEMBL2179154
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)CN(C)C)C(F)(F)F)C)C	2.100	CHEMBL2177415
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCe1ccc(cc1)C(C)C)C(F)(F)F)C)C	2.100	CHEMBL2385228
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC(C)C)C(F)(F)F)C)C	2.100	CHEMBL2385407
FC(F)(F)c1cccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)CN1CCOCC1	2.100	CHEMBL458058
FC(F)(F)c1cccnc1-c1nc2nccc(Nc3ncc(cc3)C(F)(F)F)c2cc1	2.200	CHEMBL1089119
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCN(CC1)e1ccc(cc1)C(F)(F)F)C(F)(F)F)C)C	2.300	CHEMBL2179151
S(Cc1ccc(OC)cc1)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	2.300	CHEMBL2442923
S(C1CCCCC1)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	2.300	CHEMBL2442920
S(CCOc1cccnc1)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	2.300	CHEMBL2442900
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCN(CC1)e1cccnc1)C(F)(F)F)C)C	2.400	CHEMBL2179149
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(OC)CC1)C(F)(F)F)C)C	2.400	CHEMBL2177408

S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(=CC1)c1ccc(F)cc1)C(F)(F)F)C)C	2.400	CHEMBL2177439
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCN(CC1)c1ccc(OC)cc1)C(F)(F)F)C)C	2.500	CHEMBL2179152
Clc1ccc(cc1)COc1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	2.500	CHEMBL2385230
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1ccc(F)cc1)C(F)(F)F)C)C	2.500	CHEMBL2385229
S(CCCC)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	2.500	CHEMBL2442895
FC(F)(F)c1cccnc1-c1cc2ncnc(Nc3ccc(cc3)C(F)(F)F)c2cc1	2.500	CHEMBL456571
S(=O)(=O)(Nc1ccc(cc1F)C[C@@H](C(=O)NCc1ccc(nc1N1CCC[C@H]1C(OC(C)(C)C)=O)C(F)(F)F)C)C	2.600	CHEMBL2178071
Clc1ccc(cc1)c1COc1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	2.600	CHEMBL2385237
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1ccc(OC)cc1)C(F)(F)F)C)C	2.600	CHEMBL2385232
S(c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F)C1CCC(CC1)C(C)(C)C	2.600	CHEMBL2442919
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1Cc2c(C1)cccc2)C(F)(F)F)C)C	2.700	CHEMBL2385245
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCN(CC1)c1ccc1C(F)(F)F)C(F)(F)F)C)C	2.800	CHEMBL2177398
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1Oe1ccc(cc1)C)C(F)(F)F)C)C	2.800	CHEMBL2385222
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCCC1C)C(F)(F)F)C)C	2.900	CHEMBL2177426
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCC(CC1)C)C(F)(F)F)C)C	2.900	CHEMBL2385419
S(CCCN1CCC(CC1)C)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	2.900	CHEMBL2442905
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(OC(C)C)CC1)C(F)(F)F)C)C	3.000	CHEMBL2177412
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CC(CC(C1)C)C)C(F)(F)F)C)C	3.000	CHEMBL2385242
S(CCCN1CCCC1)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	3.000	CHEMBL2442904
FC(F)(F)c1cccnc1-c1cc2ncnc(Nc3ccc(cc3)C(F)(F)F)c2cc1CCC1CCOCC1	3.000	CHEMBL456570
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1ccc(cc1)C)C(F)(F)F)C(F)(F)F)C)C	3.200	CHEMBL2385231
S(Cc1ccc(cc1)C)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	3.200	CHEMBL2442922
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCN(CC1)c1ccc(cc1)C)C(F)(F)F)C)C	3.300	CHEMBL2179148
S(CCCN1CCCC1)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	3.300	CHEMBL2442903
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCN(CC1)c1ccc(cc1)C)C(F)(F)F)C)C	3.400	CHEMBL2179147
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCC1CCN(CC1)C(OC(C)(C)C)=O)C(F)(F)F)C)C	3.400	CHEMBL2385219
FC(F)(F)c1nc(N2CCCC2)c(cc1)CNC(=O)Nc1c2c([nH]nc2)ccc1	3.500	CHEMBL1083396
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(OCCCC)CC1)C(F)(F)F)C)C	3.500	CHEMBL2177411
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N(CC)CC)C(F)(F)F)C)C	3.500	CHEMBL2178062
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1ccc(cc1)C)C(F)(F)F)C)C	3.700	CHEMBL2385226
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC2(ON=C(C2)C(C)C)CC1)C(F)(F)F)C)C	3.800	CHEMBL2177416
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)C(=O)c1ccc(F)cc1)C(F)(F)F)C)C	3.900	CHEMBL2177403
S(Cc1ccc(cc1)C(F)(F)F)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	3.900	CHEMBL2442925
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(OC(=O)C)CC1)C(F)(F)F)C)C	4.000	CHEMBL2177413

FC(F)(F)c1ccene1-c1ce2nc(nc3ccc(cc3)C(F)(F)F)c2cc1CO	4.000	CHEMBL497649
Cle1ccene1N1CC(N(CC)1)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F)C	4.100	CHEMBL2177397
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)c1ccc(F)cc1)C(F)(F)F)C)C	4.200	CHEMBL2177438
S(CC(F)(F)F)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	4.300	CHEMBL2442898
FC(F)(F)c1ccene1-c1ne2nccc(Nc3ccc(cc3)C(F)(F)F)c2cc1	4.400	CHEMBL1214147
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(Nc2cccc2)CC1)C(F)(F)F)C)C	4.400	CHEMBL2177108
FC(F)(F)c1nc(N2CCCC2)c(cc1)C=C(C(=O)Nc1cc2ncccc2cc1	4.400	CHEMBL190874
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)C)C(F)(F)F)C)C	4.500	CHEMBL2177428
FC(F)(F)c1ccene1-c1ce2nc(nc3ccc(nc3)C(F)(F)F)c2cc1COCC	4.500	CHEMBL456961
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCC(CC1)CC)C(F)(F)F)C)C	4.800	CHEMBL2385239
Cle1ccc(cc1)COc1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	4.900	CHEMBL2385234
Cle1ccc(cc1)CSc1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	4.900	CHEMBL2442924
Cle1ccene1N1CCN(CC1)C(=O)Nc1ccc(cc1)C(C)(C)C	5.000	CHEMBL441472
FC(F)(F)c1nc(CCC(C)(C)C)cc1)CNC(=O)Nc1c2c([nH]nc2)ccc1	5.000	CHEMBL1083712
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1Cc2c(C1)cccc2)C(F)(F)F)C)C	5.000	CHEMBL2177422
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC[C@@H]1[C@H]1C)C(F)(F)F)C)C	5.100	CHEMBL2385246
FC(F)(F)c1ccene1-c1ne2nccc(Nc3ccc(nc3)C(F)(F)F)c2cc1	5.500	CHEMBL1214146
S(CCCCC)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	5.600	CHEMBL2442896
s1c2c(nc1N(C)C)cc(NC(=O)c1ccc(nc1C)-c1ccc(F)cc1)cc2	5.800	CHEMBL477202
FC(F)(F)c1ccenc1N1CCc2c(nc2Nc2ccc(cc2)C(F)(F)F)N2CCOCC2)CC1	6.000	CHEMBL1289607
FC(F)(F)c1ccene1N1CCC(=CC1)C(=O)Nc1ccc(cc1)C(C)(C)C	6.000	CHEMBL518979
FC(F)(F)c1nc(OCC(C)(C)C)cc1)CNC(=O)Nc1c2c([nH]nc2)ccc1	6.000	CHEMBL1084293
Fe1ccc(cc1)-c1nc(C)c(cc1)C(=O)Nc1cc2[nH]c(nc2cc1)C	6.000	CHEMBL477623
FC(F)(F)c1ccene1-c1ce2nc(nc3ccc(cc3)C(F)(F)F)c2cc1)CNC1CCCCC1	6.000	CHEMBL456764
FC(F)(F)c1ccene1-c1ne2nccc(Nc3ccc(cc3)C(F)(F)F)c2cc1	6.100	CHEMBL1089118
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC2(ON=C(C2)c2cccc2)CC1)C(F)(F)F)C)C	6.100	CHEMBL2177417
S(=O)(=O)(Nc1ccc(cc1F)[C@@H](C(=O)NCc1ccc(nc1N1CCC(CC1)C)C(F)(F)F)C)C	6.300	CHEMBL2177429
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1Oc1cccc1)C(F)(F)F)C)C	6.400	CHEMBL2385221
Fe1ccc(cc1)-c1nc(C)c(cc1)C(=O)Nc1cc2n(ccc2cc1)C	6.500	CHEMBL477409
O=C(Nc1cc2ncccc2cc1)c1ccc(nc1)-c1ccc(cc1)C#N	6.600	CHEMBL517053
Cle1ccenc1N1CCN(CC1)C(=O)Nc1ccc(cc1)C(C)(C)C	6.700	CHEMBL441472
s1c2c(nc1CN(C)C)cc(NC(=O)c1ccc(nc1C)-c1ccc(F)cc1)cc2	6.700	CHEMBL477000
s1c2cc(NC(=O)c3ccc(nc3C)-c3ccc(F)cc3)ccc2nc1	6.700	CHEMBL477831
Fe1ccc(cc1)-c1nc(C)c(cc1)C(=O)Nc1cc2oc(nc2cc1)C	6.700	CHEMBL499768

Fe1ccc(cc1)-c1nc(C)c(cc1)C(=O)Nc1cc2n(ene2cc1)C	6.700	CHEMBL477622
O=C(Nc1cc2ncccc2cc1)c1nc(cc1C)-c1ccc1	6.700	CHEMBL477205
Clc1ccc(cc1)C(=O)Nc1cc2ncccc2cc1	6.700	CHEMBL477203
O=C(Nc1cc2ncccc2cc1)c1ccc(nc1)C#N	6.700	CHEMBL477830
Fe1ccc(cc1)-c1nc(C)c(cc1)C(=O)Nc1cc2[nH]nc(c2cc1)C	6.900	CHEMBL478245
BrCCCSc1nc(ccc1)CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	7.000	CHEMBL2442899
FC(F)(F)c1cccnc1-c1cc2ncnc(Nc3ccc(nc3)C(F)(F)F)c2cc1	7.000	CHEMBL463382
FC(F)(F)c1cccnc1-c1cc2ncnc(Nc3ccc(nc3)C(F)(F)F)c2cc1	7.100	CHEMBL1204401
S(=O)(=O)(Nc1ccc(cc1F)[C@@H](C(=O)NCc1ccc(nc1N1C[C@@H](NC(OC(C)C)C)C)C)C)C(F)C)C(F)C	7.100	CHEMBL2177421
s1c2c(nc1C)cc(NC(=O)c1ccc(nc1C)-c1ccc(F)cc1)cc2	7.200	CHEMBL514691
Fe1ccc(cc1)-c1nc(C)c(cc1)C(=O)Nc1cc2[nH]nc2cc1	7.200	CHEMBL477621
FC(F)(F)c1ccc(cc1)-c1ccc(cc1)C(=O)Nc1cc2ncccc2cc1	7.300	CHEMBL477829
s1c2c(nc1C)cc(NC(=O)c1ccc(nc1C)-c1ccc(F)cc1)cc2	7.400	CHEMBL514691
S(=O)(=O)(Nc1ccc(cc1F)[C@H](C(=O)NCc1ccc(nc1N1CCC(CC1)c1ccc1)C(F)(F)C)C	7.500	CHEMBL2177436
s1c2c(nc1)cc(NC(=O)c1ccc(nc1C)-c1ccc(F)cc1)cc2	7.500	CHEMBL476999
Fe1ccc(cc1)-c1nc(C)c(cc1)C(=O)Nc1cc2[nH]nc2cc1	7.500	CHEMBL477588
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCC(CC1)C(C)C)C)C)C(F)(F)C)C	7.700	CHEMBL2385240
Clc1ccc(cc1)-c1ccc(cc1)C(=O)Nc1cc2ncccc2cc1	7.800	CHEMBL516420
FC(F)(F)c1cccnc1N1CCC(=CC1)C(=O)Nc1ccc(cc1)C(F)(F)F	8.000	CHEMBL522425
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)C)C)C)C(F)(F)C)C	8.000	CHEMBL2177432
FC(F)(F)c1cccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)CN1CCN(CC1)C1CCCC1	8.000	CHEMBL451895
FC(F)(F)c1cccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)CNC(C)C	8.000	CHEMBL456546
Fe1ccc(cc1)-c1ccc(cc1)C(=O)Nc1cc2ncccc2cc1	8.200	CHEMBL478244
FC(F)(F)c1cccnc1-c1cc2ncccc2cc1	8.400	CHEMBL1214266
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)C)C)C)C(F)(F)C)C	8.400	CHEMBL2177428
Fe1ccc(cc1)-c1nc(C)c(cc1)C(=O)Nc1cc2ncccc2cc1	8.500	CHEMBL477204
Fe1ccc(cc1)-c1ccc(cc1)C(=O)Nc1cc2ncccc2cc1	8.600	CHEMBL516424
Clc1ccc(cc1)CSc1nc(ccc1)CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	8.700	CHEMBL2442921
O=C(Nc1cc2ncccc2cc1)c1ccc(nc1)-c1ccc1	8.700	CHEMBL213390
Fe1cccc1-c1ccc(cc1)C(=O)Nc1cc2ncccc2cc1	8.700	CHEMBL478243
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCN(CC1)Cc1ccc1)C(F)(F)C)C	8.800	CHEMBL2177399
FC(F)(F)c1cccnc1N1CCc2c(ncnc2)C(C)C)C1	9.000	CHEMBL1290369
FC(F)(F)c1nc(Oc2cccc2)c(cc1)CNC(=O)Nc1c2c([nH]nc2)ccc1	9.000	CHEMBL1085786
s1c2c(nc1C)cc(NC(=O)c1ccc(nc1C)-c1ccc(F)cc1)cc2	9.000	CHEMBL514691

O=C(Nc1cc2ncccc2cc1)c1ccc(nc1C)-c1cccc1	9.000	CHEMBL516431
FC(F)(F)c1cccn1-c1cc2nc(nc3nccc(cc3)C(F)(F)F)c2cc1)CN1CCOCC1	9.000	CHEMBL457002
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1NCCCC)C(F)(F)F)C	9.100	CHEMBL2178076
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCCCC)C(F)(F)F)C	9.700	CHEMBL2385405
S(=O)(=O)(Nc1ccc(cc1F)[C@H](C(=O)NCc1ccc(nc1N1CCC(CC1)C)C(F)(F)F)C)C	9.800	CHEMBL2177430
Clc1cccn1N1CCC(=CC1)C(=O)Nc1ccc(cc1)C(C)(C)C	10.000	CHEMBL482835
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N(CCCC)CCCC)C(F)(F)F)C	10.500	CHEMBL2178064
S(=O)(=O)(Nc1ccc(cc1F)[C@@H](C(=O)NCc1ccc(nc1N1C[C@H](NC(OC(C)C)C)=O)CC1)C(F)(F)F)C	11.000	CHEMBL2177420
FC(F)(F)c1cccn1N1CCc2c(nc2Nc2ccc(cc2)C(F)(F)F)N2CCN(CC2)CC(C)C)CC1	11.000	CHEMBL1630299
FC(F)(F)c1cccn1N1CCc2c(nc2Nc2ccc(cc2)C(F)(F)F)N2CCN(CC2)C2CC2)CC1	11.000	CHEMBL1630301
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCC1CCCC)C(F)(F)F)C	11.600	CHEMBL2385249
FC(F)(F)c1nc(N2CCOCC2)c(cc1)CNC(=O)Nc1c2c([nH]nc2)ccc1	12.000	CHEMBL1082445
FC(F)(F)c1nc(CCCOC)c(cc1)CNC(=O)Nc1c2c([nH]nc2)ccc1	12.000	CHEMBL1086019
s1enc(-c2nc3ncccc(Nc4nccc(cc4)C(F)(F)F)c3cc2)c1C(F)(F)F	12.000	CHEMBL1214341
FC(F)(F)c1cccn1-c1cc2nc(nc3nccc(cc3)C(F)(F)F)c2cc1)COC	12.000	CHEMBL456572
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCC=CC1)C(F)(F)F)C	12.100	CHEMBL2177425
S(=O)(=O)(Nc1ccc(cc1F)[C@@H](C(=O)NCc1ccc(nc1OCCCC)C(F)(F)F)C)C	12.300	CHEMBL2385426
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCC)C(F)(F)F)C	12.700	CHEMBL2385421
FC(F)(F)c1c1c(nccc1C(=O)N)-c1nc2nccc(Nc3nccc(cc3)C(F)(F)F)c2cc1	13.000	CHEMBL1214339
O=C(Nc1c2c([nH]nc2)ccc1)NCc1ccc(nc1N1CCCC1)-c1cccc1	14.000	CHEMBL1086487
Clc1cc(Nc2nc(ccc2)CNC(=O)C)C)c2cc(F)c(NS(=O)(=O)C)cc2)C(F)(F)F)c(cc1)C	14.000	CHEMBL2178083
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OC1CCC(CC1)C(F)(F)F)C(F)(F)F)C	14.000	CHEMBL2385418
Clc1ccc(Cl)c1Nc1se2nnc(Nc3ccc(cc3)C(F)(F)F)c2n1	14.000	CHEMBL467007
FC(F)(F)c1cccn1-c1ccc(cc1)C(=O)Nc1ccc(cc1)C(F)(F)F	14.000	CHEMBL378563
S(Cc1occc1)c1nc(ccc1)CNC(=O)C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	14.600	CHEMBL2442926
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N(CCC)CCC)C(F)(F)F)C	14.700	CHEMBL2178063
FC(F)(F)c1cccn1N1CCc2c(nc2Nc2ccc(cc2)C(F)(F)F)C1	15.000	CHEMBL461658
FC(F)(F)c1cc(cnc1-c1nc2nccc(Nc3nccc(cc3)C(F)(F)F)c2nc1)C#N	15.000	CHEMBL1214401
s1cccc1CSe1nc(ccc1)CNC(=O)C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	15.000	CHEMBL2442927
FC(F)(F)c1cccn1N1CCc2c(nc2Nc2ccc(cc2)C(F)(F)F)C1	15.000	CHEMBL461658
FC(F)(F)c1cccn1N1CCc2c(nc2Nc2ccc(cc2)C(F)(F)F)N2CCN(CC2)C2CCCC2)CC1	15.000	CHEMBL1630303
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCCC(C)C)C(F)(F)F)C	15.100	CHEMBL2385409
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCCOC)C(F)(F)F)C	15.300	CHEMBL2385404
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1Nc1cccc1)C(F)(F)F)C	15.800	CHEMBL2178084

<chem>O=C(Nc1c2c([nH]ne2)ccc1)NCc1ccc(nc1N1CCCC1)C</chem>	16.000	CHEMBL1083697
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCc1ccc(cc1)CCCC)C(F)(F)F)C</chem>	16.000	CHEMBL2385227
<chem>FC(F)(F)c1ccnc1N1CCN(CC1)C(=O)Nc1ccc(cc1)C(F)(F)F</chem>	16.000	CHEMBL254778
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCCC1N(CCCC1)C(OC(C)(C)C)=O)C(F)(F)F)C</chem>	16.600	CHEMBL2385220
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCC(CC1)Cc1ccc(cc1)C)C(F)(F)F)C</chem>	17.000	CHEMBL2177441
<chem>S(=O)(=O)(Nc1ccc(cc1F)[C@@H](C(=O)NCc1ccc(nc1N1CCC(CC1)c1ccc(c1)C(F)(F)F)C)C</chem>	17.400	CHEMBL2177435
<chem>FC(F)(F)c1ccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(C)(C)C)C(C)C)C1</chem>	18.000	CHEMBL1290584
<chem>FC(F)(F)c1ccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(C#N)(C)C)N2CCCC2)CC1</chem>	18.000	CHEMBL1289152
<chem>FC(F)(F)c1nc(OCCOC)c(cc1)CNC(=O)Nc1c2c([nH]ne2)ccc1</chem>	18.000	CHEMBL1086018
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCc1ccc(c1)C(F)(F)F)C</chem>	18.600	CHEMBL2385223
<chem>S1CCN(CC1)c1nc(Nc2ccc(cc2)C(F)(F)F)e2CCN(CCc2n1)c1ccc(c1)C(F)(F)F</chem>	19.000	CHEMBL1289712
<chem>C1c1ccc(NC(=O)C=2CCN(CC=2)c2ccc(c2)C(F)(F)F)cc1</chem>	19.000	CHEMBL489400
<chem>Fe1ccnc1N1CCC(=CC1)C(=O)Nc1ccc(cc1)C(C)(C)C</chem>	19.000	CHEMBL491035
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N(C)C)C(F)(F)F)C</chem>	19.100	CHEMBL2178061
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1NCC1CCN(CC1)C(OC(C)(C)C)=O)C(F)(F)F)C</chem>	19.300	CHEMBL2178079
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCC1CCCC1)C(F)(F)F)C</chem>	19.700	CHEMBL2385250
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCC(F)CC1)C(F)(F)F)C</chem>	19.800	CHEMBL2177404
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCCC1)C(F)(F)F)C</chem>	20.400	CHEMBL2178077
<chem>FC(F)(F)c1ccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)N2CCCC2)CC1</chem>	21.000	CHEMBL1290255
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N(CCCC)C)C(F)(F)F)C</chem>	21.300	CHEMBL2178065
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCN(CC1)C1CCCC1)C(F)(F)F)C</chem>	21.600	CHEMBL2179145
<chem>FC(F)(F)c1ccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)CCO</chem>	22.000	CHEMBL456358
<chem>S(c1nc(ccc1)CNC(=O)[C@@H](C)c1ccc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F)C1CCCC1</chem>	22.300	CHEMBL2442912
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCN(CC1)c1ccc(F)cc1)C(F)(F)F)C</chem>	23.100	CHEMBL2179150
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCCC(C)(C)C)C(F)(F)F)C</chem>	23.800	CHEMBL2385410
<chem>S(=O)(=O)(C(F)(F)F)c1ccc(NC(=O)C=2CCN(CC=2)c2ccc(c2)C(F)(F)F)cc1</chem>	24.000	CHEMBL482834
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCC(CC1)Cc1cc(F)cc(F)c1)C(F)(F)F)C</chem>	24.000	CHEMBL2177402
<chem>FC(F)(F)c1ccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)N2CCN(CC2)C2CCC2)CC1</chem>	24.000	CHEMBL1630302
<chem>FC(F)(F)c1ccnc1-c1cc2nc(nc(Nc3ccc(nc3)C(F)(F)F)c2cc1)CN1CCOCC1</chem>	24.000	CHEMBL456127
<chem>FC(F)(F)c1ccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(C)(C)C)C(C)C)C1</chem>	25.000	CHEMBL1290704
<chem>S(=O)(=O)(N(C)C)c1ccc(Nc2nc(nc3c2CCN(CC3)c2ccc(c2)C(F)(F)F)N2CCCC2)cc1</chem>	25.000	CHEMBL1289818
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCc1ccc(F)cc1)C(F)(F)F)C</chem>	25.000	CHEMBL2385229
<chem>S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCC(CC1)c1ccc(c1)C(F)(F)F)C)C</chem>	25.000	CHEMBL2177434
<chem>FC(F)(F)c1ccnc1-c1cc2nc(nc(Nc3ccc(nc3)C(F)(F)F)c2cc1)COC</chem>	25.000	CHEMBL463578

FC(F)(F)c1ccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)CN1CCCC1	25.000	CHEMBL457843
FC(F)(F)c1ccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)CCCO	25.000	CHEMBL464386
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCCCC1)C(F)(F)F)C	25.100	CHEMBL2177418
FC(F)(F)c1ccnc1-c1nc2nccc(Nc3nc(C#N)c(en3)C(F)(F)F)c2cc1	25.400	CHEMBL1214207
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CC(C(C1)C)C)C(F)(F)F)C	25.600	CHEMBL2177433
FC(F)(F)c1ccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)CNC	26.000	CHEMBL462981
O=C(Nc1ccc(cc1)C(C)(C)C)=1CCN(CC=1)c1ncccc1	27.000	CHEMBL491034
FC(F)(F)c1ccc(nc1-c1nc2nccc(Nc3ncc(cc3)C(F)(F)F)c2nc1)C(O)=O	27.000	CHEMBL1214403
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CC(C(C1)C)C)C(F)(F)F)C	27.200	CHEMBL2178078
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCCCC)C(F)(F)F)C	27.300	CHEMBL2385424
S(CCCN(C)C)c1nc(ccc1CNC(=O)C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	27.400	CHEMBL2442902
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCCc1ccccc1)C(F)(F)F)C	27.600	CHEMBL2385224
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCCCC1)C(F)(F)F)C	27.800	CHEMBL2177419
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCC(OCCCC)CC1)C(F)(F)F)C	28.200	CHEMBL2177411
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OC1CCCC1)C(F)(F)F)C	28.700	CHEMBL2385416
FC(F)(F)c1ccnc1-c1cc2nccc(Nc3ccc(cc3)C(F)(F)F)c2cc1	29.000	CHEMBL1092544
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCc1ncccc1)C(F)(F)F)C	29.500	CHEMBL2385216
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCCCC)C(F)(F)F)C	29.900	CHEMBL2385425
Brc1cc(C(F)(F)F)c(nc1)-c1nc2nccc(Nc3ncc(cc3)C(F)(F)F)c2nc1	30.000	CHEMBL1214400
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCC(CC1)Cc1cc(F)c(F)cc1)C(F)(F)F)C	30.000	CHEMBL2178059
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1OCCCC)C(F)(F)F)C	30.500	CHEMBL2385423
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCN(CC1)c1ccccc1)C(F)(F)F)C	30.700	CHEMBL2179146
FC(F)(F)c1ccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)C2CC2)CC1	31.000	CHEMBL1289150
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCC(CC1)COC)C(F)(F)F)C	31.000	CHEMBL2177410
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCC(CC1)C(F)(F)F)C(F)(F)F)C	31.000	CHEMBL2177405
FC(F)(F)c1ccnc1N1C[C@H](N(CC1)c1[nH]c2cc(ccc2n1)C(C)(C)C	32.000	CHEMBL254984
Clc1ccnc1N1CCC(=CC1)C(=O)Nc1ccc(Cl)cc1	33.000	CHEMBL488972
O(CC(=O)Nc1ccc(nc1)N(CCO)c1ccc(cc1)C(C)(C)C	33.000	CHEMBL2380435
S(=O)(=O)(Nc1ccc(cc1F)C(C=O)NCc1ccc(nc1N1CCN(CC1)c1ccccc1)C(F)(F)F)C	34.000	CHEMBL2179149
S(=O)(=O)(C(F)(F)F)c1ccc(NC(=O)C=2CCN(CC=2)c2ncccc2)cc1	35.000	CHEMBL523605
FC(F)(F)c1ccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)CNC(C)C	35.000	CHEMBL456545
S(=O)(=O)(CCc1nc(Nc2ccc(cc2)C(F)(F)F)c2c(n1)cc(cc2)-c1ncccc1)C(F)(F)F)C	36.000	CHEMBL462783
FC(F)(F)c1ccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)-c2ccccc2)CC1	37.000	CHEMBL1289264
FC(F)(F)c1ccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(C#N)(C)N2CCOCC2)CC1	37.000	CHEMBL1289266

Clc1cccnc1-c1ccc(cc1)C(=O)Nc1ccc(cc1)C(C)(C)C	37.000	CHEMBL183752
FC(F)(F)c1ccenc1N1CCe2e(nc(ne2Ne2nce(cc2)C(F)(F)F)N2CCOCC2)CC1	38.000	CHEMBL1290143
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1N1CCN(CC1)c1ccc(cc1)C)C(F)(F)F)C)C	38.300	CHEMBL2179148
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1Nc1ccc(F)cc1)C(F)(F)F)C)C	39.200	CHEMBL2178081
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1N1CCN(CC1)c1ccc(cc1)C)C(F)(F)F)C)C	39.200	CHEMBL2179147
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1Nc1cc(C)(cc1)C)C(F)(F)F)C)C	39.300	CHEMBL2178082
s1c2c(nc1C)cc(NC(=O)c1ccc(nc1C)-c1ccc(F)cc1)cc2	39.810	CHEMBL514691
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1N1CCC(CC1)Cc1ccc(cc1)C(F)(F)F)C)C	40.000	CHEMBL2177440
S(CCCC)c1nc(ccc1CNC(=O)C)C)c1ccc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	40.400	CHEMBL2442894
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1OCC1CCC1)C(F)(F)F)C)C	40.500	CHEMBL2385248
Clc1cccnc1N1CCC(=CC1)C(=O)Nc1ccc(S(=O)(=O)C(F)(F)F)cc1	41.000	CHEMBL522481
FC(F)(F)c1ccenc1N1CCC(=CC1)C(=O)Nc1ccc(cc1)C(C#N)(C)C	41.000	CHEMBL491241
s1c2c(nc1CO)cc(NC(=O)c1ccc(OCC(F)(F)F)nc1)cc2	41.000	CHEMBL2088406
FC(F)(F)c1ccenc1N1CCe2e(nc(ne2Ne2ccc(cc2)C(F)(F)F)N2CCN(CC2)C(CC)CC)CC1	41.000	CHEMBL1630300
FC(F)(F)c1ccenc1N1CCC(=CC1)C(=O)Nc1ccc(nc1)C(F)(F)F	42.000	CHEMBL523307
O=C(Nc1ccc(cc1)C(C)(C)C)c1ccc(cc1)-c1ccc1	42.000	CHEMBL183121
Clc1cccnc1-c1ccc(cc1)C(=O)Nc1ccc(cc1)C(C(F)(F)F)(C)C	42.000	CHEMBL238016
FC(F)(F)c1ccenc1N1CCe2e(nc(ne2Ne2nce(cc2)C(F)(F)F)N2CCCC2)CC1	43.000	CHEMBL1290034
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1OC)C=C/CC)C(F)(F)F)C)C	43.000	CHEMBL2385255
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1N1CCC(=CC1)c1ccc(cc1)C(F)(F)F)C)C	43.000	CHEMBL2177437
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1OC1CCC(CC1)C)C(F)(F)F)C)C	43.100	CHEMBL2385419
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1OC1CCCCC1)C(F)(F)F)C)C	43.400	CHEMBL2385417
S(c1nc(ccc1CNC(=O)[C@H](C)c1ccc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F)C1CCCCC1	43.500	CHEMBL2442913
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1OCc1ccc(OC)ccc1)C(F)(F)F)C)C	43.700	CHEMBL2385235
Clc1cc(NC(=O)COe2ccc(cc2)C(C)(C)C)ene1N(CCO)C	44.000	CHEMBL2380437
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1OCC1CCC(CC1)C)C(F)(F)F)C)C	44.400	CHEMBL2385251
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1N1CCN(CC1)c1ccc(OC)cc1)C(F)(F)F)C)C	44.500	CHEMBL2179152
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1N1CCC(OC(=O)C(C)(C)CC1)C(F)(F)F)C)C	45.200	CHEMBL2177414
P(OCc1nc(Nc2ccc(cc2)C(F)(F)F)e2c(nc1)cc(cc2)-c1ccc1C(F)(F)F)(O)(O)=O	46.000	CHEMBL456982
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1N1CCCCC1)C(F)(F)F)C)C	46.700	CHEMBL2177424
s1cc(nc1Nc1e2ccc(nc2nce1)-c1ccc1C(F)(F)F)C(F)(F)F	47.000	CHEMBL1214264
S(CCC(OC)=O)c1nc(ccc1CNC(=O)C)C)c1ccc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	48.200	CHEMBL2442908
FC(F)(F)c1ccenc1-c1nc2ccc(Nc3nc(C(=O)N)c(c3)C(F)(F)F)e2cc1	48.700	CHEMBL1214208
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)N)Cc1ccc(nc1OCCOC)C(F)(F)F)C)C	49.000	CHEMBL2385256

s1e2c(nc1C)cc(NC(=O)c1ccc(nc1C)-c1ccc(F)cc1)cc2	49.000	CHEMBL514691
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCCOCC)C(F)(F)C)C	50.000	CHEMBL2385257
S(=O)(=O)(Nc1ccc(cc1F)[C@@H](C(=O)NCc1ccc(nc1N1C[C@H](OCc2ccccc2)CC1)C(F)(F)C)C	50.000	CHEMBL2178072
FC(F)(F)c1cccnc1-c1cc2nc(nc3ccc(cc3)C(F)(F)F)c2cc1CCN1CCCC1	50.000	CHEMBL457197
FC(F)(F)c1cccnc1N1CCc2c(nc3ccc(cc2)C(F)(F)C(C)C)CC1	51.000	CHEMBL1289151
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1cccnc1)C(F)(F)C)C	51.000	CHEMBL2385218
S(=O)(=O)(N(C)C)c1ccc(Nc2nc(nc3c2CCN(CC3)c2ccc2C(F)(F)N2CCOCC2)cc1	52.000	CHEMBL1289934
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1cccnc1)C(F)(F)C)C	52.300	CHEMBL2385223
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCC(C)C)C(F)(F)C)C	52.600	CHEMBL2385408
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1ccc(cc1)C)C(F)(F)C)C	53.000	CHEMBL2385225
FC(F)(F)c1cccnc1N1CCc2c(nc3ccc(cc2)C(F)(F)N(C)C2CCCN(C2)C(OC(C)C)C)C)CC1	53.000	CHEMBL1630628
FC(F)(F)c1cccnc1N1CCc2c(nc3ccc(cc2)C(F)(F)N(C)C)CC1	56.000	CHEMBL1289383
FC(F)(F)c1cccnc1N1CCc2c(nc3ccc(cc2)C(O)(C)N2CCOCC2)CC1	56.000	CHEMBL1289036
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N(C)c1cccnc1)C(F)(F)C)C	57.400	CHEMBL2178066
FC(F)(F)c1cccnc1N1CCc2c(nc3ccc(cc2)C(C(=O)O)(C)N2CCCC2)CC1	58.000	CHEMBL1289501
O(CC(=O)Nc1ccc(nc1)N(C)C)c1ccc(cc1)C(C)C	59.000	CHEMBL2380433
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1Nc1cccnc1)C(F)(F)C)C	59.600	CHEMBL2178080
FC(F)(F)c1cccnc1N1CCc2c(nc3ccc(cc2)C(F)(F)N2CCCC2)CC1	61.000	CHEMBL1289500
FC(F)(F)c1cccnc1N1CCc2c(nc3ccc(cc2)C(F)(F)N2CC(N(C(=O)C)C)CC2)CC1	62.000	CHEMBL1630622
FC(F)(F)c1cccnc1-c1cc2nc(nc3ccc(cc3)C(F)(F)F)c2cc1CN1CCN(CC1)C	62.000	CHEMBL456990
FC(F)(F)c1cccnc1N1CCN(CC1)C(=O)Nc1ccc(cc1)C(F)F	65.000	CHEMBL254778
FC(F)(F)c1cccnc1N1CCc2c(nc3ccc(cc2)C(F)(F)N2CCN(CC2)CCOC)CC1	65.000	CHEMBL1630304
C1c1ccc(cc1)CNc1ccc(cc1)CNC(=O)C(C)c1ccc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	65.700	CHEMBL2178085
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1ccc(cc1)C(F)(F)C(F)(F)C)C	66.100	CHEMBL2385231
S(=O)(=O)(C(F)(F)F)c1ccc(NC(=O)C=2CCN(CC=2)c2ccc2F)cc1	67.000	CHEMBL489570
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCC(C)C)C(F)(F)C)C	67.500	CHEMBL2385408
BrCCSc1ccc(cc1)CNC(=O)C(C)c1ccc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	68.000	CHEMBL2442899
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC)C(F)(F)C)C	68.800	CHEMBL2385420
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1ccc(F)ccc1)C(F)(F)C)C	69.000	CHEMBL2385233
FC(F)(F)c1cccnc1-c1cc2nc(nc3ccc(cc3)C(F)(F)F)c2cc1CCN1CCN(CC1)C	69.000	CHEMBL514248
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCCC1)C(F)(F)C)C	69.800	CHEMBL2385415
FC(F)(F)c1cccnc1N1CCc2c(nc3ccc(cc2)C(F)(F)C(C)C)CC1	70.000	CHEMBL1290144
[nH]1c2ccc(cc2nc1N1CCN(C[C@H]1C)c1cccnc1)C(C)C	70.000	CHEMBL403013
S(Cc1ccc(cc1)C(F)(F)F)c1ccc(cc1)CNC(=O)C(C)c1ccc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	71.000	CHEMBL2442925

S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1cc(OC)cc(OC)c1)C(F)(F)F)C)C	76.000	CHEMBL2385238
Clc1ccc(NC(=O)C=2CCN(CC=2)c2ncccc2Cl)cc1F	78.000	CHEMBL488782
O=C(Nc1ccc(cc1)C(C)(C)C)C=1CCN(CC=1)c1ncccc1C#N	78.000	CHEMBL491033
FC(F)(F)c1cccnc1-c1nc2c(nc1c(nc2)Nc1ccc(cc1)C(F)(F)F	79.000	CHEMBL1092192
FC(F)(F)c1ccene1N1CCc2c(nc2Nc2ccc(cc2)C(C)(C)C)C1	80.000	CHEMBL1290478
Clc1nc(nc1C(F)(F)F)Nc1c2ccc(nc2nc1)-c1ncccc1C(F)(F)F	81.000	CHEMBL1214206
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)c1ccc(F)cc1)C(F)(F)F)C)C	81.000	CHEMBL2177438
FC(F)(F)c1ccene1-c1cc2nc(nc2Nc3ccc(cc3)C(F)(F)F)c2cc1)COCC(O)=O	81.000	CHEMBL456151
S(CCC(C)C)c1nc(cc1CNC(=O)C(C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	82.000	CHEMBL2442897
S(CCC(=O)N1CCCC1)c1nc(cc1CNC(=O)C(C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	85.000	CHEMBL2442909
s1c2c(nc1CO)cc(NC(=O)c1ccc(nc1)N1CCCC1)cc2	85.600	CHEMBL2088405
Brc1ccc(cc1OCC(=O)Nc1ccc(nc1)N(CCO)C(C)(C)C	86.000	CHEMBL2380571
FC(F)(F)c1ccene1N1CCc2c(nc2Nc2ccc(cc2)C(F)(F)F)N2CCC2)CC1	87.000	CHEMBL1289384
S(c1nc(cc1CNC(=O)C(C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F)C1CCC(CC1)C(C)(C)C	89.600	CHEMBL2442919
Clc1ccnc1N1C[C@H](N(CC1)c1[nH]e2cc(ccc2n1)C(C)(C)C)C	90.000	CHEMBL254779
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCCC)C(F)(F)F)C)C	90.100	CHEMBL2385422
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(=O)CC1)C(F)(F)F)C)C	91.000	CHEMBL2177406
FC(F)(F)c1ccene1N1CCc2c(nc2Nc2ccc(cc2)C(F)(F)F)N2CCN(CC2)C(C)C)CC1	91.000	CHEMBL1630298
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1cc(F)cc(F)c1)C(F)(F)F)C)C	93.000	CHEMBL2385236
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC(C)C)C(F)(F)F)C)C	93.400	CHEMBL2385407
Clc1ccc(cc1)COc1nc(ccc1CNC(=O)C(C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	95.000	CHEMBL2385234
S(CCCCC)c1nc(ccc1CNC(=O)C(C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	95.600	CHEMBL2442895
s1c2c(nc1C)cc(NC(=O)c1ccc(nc1C)-c1ccc(F)cc1)cc2	96.000	CHEMBL514691
FC(F)(F)c1ccene1N1CCc2c(nc2Nc2ccc(cc2)C(F)(F)F)C)CC1	97.000	CHEMBL1289035
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)CC)C(F)(F)F)C)C	97.300	CHEMBL2177431
s1c2c(nc1C)cc(NC(=O)c1ccc(nc1C)-c1ccc(F)cc1)cc2	100.000	CHEMBL514691
FC(F)(F)c1ccene1N1CCc2c(nc2Nc2ccc(cc2)C(F)(F)F)NCC2NCCCC2)CC1	100.000	CHEMBL1630632
S(=O)(=O)(Nc1ccc(cc1F)[C@@H](C(=O)NCc1ccc(nc1N1C[C@H](N(C)C)CC1)C(F)(F)F)C)C	101.000	CHEMBL2178073
S(=O)(=O)(Nc1ccc(cc1F)[C@@H](C(=O)NCc1ccc(nc1N1C[C@H](N(C)C)CC1)C(F)(F)F)C)C	103.000	CHEMBL2178074
Clc1ccnc1N1C[C@H](N(CC1)c1[nH]e2cc(ccc2n1)C(C)(C)C)C	104.000	CHEMBL254779
O(CC(=O)Nc1ccc(nc1)N(CCO)C)c1ccc(cc1C(C)(C)C)C(C)(C)C	107.000	CHEMBL2380570
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCN(CC1)c1ncccc1)C(F)(F)F)C)C	108.000	CHEMBL2179153
O(CC(=O)Nc1ccc(nc1)N(CCO)C)c1ccc(cc1)C(C)C	110.000	CHEMBL2380567
S(CCc1ccc(c1)c1nc(ccc1CNC(=O)C(C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	111.000	CHEMBL2442928

Clc1ccc(cc1Cl)c1COe1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	114.000	CHEMBL2385237
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCC1CC1)C(F)(F)F)C)C	115.000	CHEMBL2385082
FC(F)(F)c1nc(N2CCOCC2)c(cc1)C=C(C(=O)Nc1cc2ncccc2cc1	116.000	CHEMBL191247
Clc1cccnc1N1CCN(CC1)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	117.000	CHEMBL2179154
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCN(CC1)c1ccc(cc1)C(F)(F)F)C(F)(F)C)C	117.000	CHEMBL2179151
S(CCOe1cccc1)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	118.000	CHEMBL2442900
Brc1cccc1NC(=O)N[C@H]1CCN(C1)c1ncc(cc1)C(F)(F)F	120.000	CHEMBL2380430
Clc1cc(NC(=O)C=2CCN(CC=2)c2ncccc2Cl)ccc1Cl	124.000	CHEMBL491225
O1CCN(CC1)c1nc(ccc1CNC(=O)Nc1c2c([nH]nc2)ccc1)C	125.000	CHEMBL1082446
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCC(CC1)CC)C(F)(F)F)C)C	125.000	CHEMBL2385239
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2ncc(cc2)C(F)(F)F)C(C)C)CC1	130.000	CHEMBL1289933
O(CC(=O)Nc1cc(C)c(nc1)N(CCO)C)c1ccc(cc1)C(C)(C)C	130.000	CHEMBL2380436
Clc1ccc(cc1)COe1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	132.000	CHEMBL2385230
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2ncc(cc2)C(F)(F)F)N2CCN(CC2)CC)CC1	132.000	CHEMBL1630297
FC(F)(F)c1cncnc1-c1nc2nccc(Nc3ncc(cc3)C(F)(F)F)c2cc1	134.000	CHEMBL1214267
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(OC(=O)C)CC1)C(F)(F)F)C)C	139.000	CHEMBL2177413
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCC(CC1)(C)C)C(F)(F)F)C)C	140.000	CHEMBL2385241
Clc1cc(Nc2nc(ccc2CNC(=O)C(C)c2cc(F)c(NS(=O)(=O)C)cc2)C(F)(F)F)c(cc1)C	140.000	CHEMBL2178083
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2ncc(cc2)C(F)(F)F)N2CCCN(C2)C(OC(C)C)=O)CC1	140.000	CHEMBL1630625
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1cccnc1)C(F)(F)F)C)C	142.000	CHEMBL2385217
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCN(CC1)C)C(F)(F)F)C)C	146.000	CHEMBL2179144
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N(CC)CC)C(F)(F)F)C)C	148.000	CHEMBL2178062
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2ncc(cc2)C(F)(F)F)N2CCN(C(=O)C)CC2)CC1	150.000	CHEMBL1630620
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(=CC1)c1ccc(F)cc1)C(F)(F)F)C)C	159.000	CHEMBL2177439
FC(F)(F)c1cccnc1N1CCN(CC1)C(=O)Nc1ncc(cc1)C(F)(F)F	160.000	CHEMBL254778
FC(F)(F)c1ncccc1-c1nc2nccc(Nc3ncc(cc3)C(F)(F)F)c2cc1	161.000	CHEMBL1214265
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCC1CC1)C(C)C)C(F)(F)F)C)C	161.000	CHEMBL2385247
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCCCOe1cccc1)C(F)(F)F)C)C	161.000	CHEMBL2385406
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1ccc(cc1)CC)C(F)(F)F)C)C	165.000	CHEMBL2385226
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCOCC1)C(F)(F)F)C)C	169.000	CHEMBL2177400
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CC(CC1)C)C)C(F)(F)F)C)C	174.000	CHEMBL2385242
Clc1cc(ene1N1CCc2c(nc(nc2Ne2ncc(cc2)C(F)(F)F)N2CCOCC2)CC1)C(OC)=O	176.000	CHEMBL1290588
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2ncc(cc2)C(O)(C)C)C(C)C)CC1	180.000	CHEMBL1290587
S(c1ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F1CCC(CC1)C	180.000	CHEMBL2442916

S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1ccc(cc1)C(C)C)C(F)F)C)C	182.000	CHEMBL2385228
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC)C=C)C(F)F)C)C	183.000	CHEMBL2385254
O(C)c1ccc(cc1)C(Cc1ccnc1)CNC(=O)Nc1c2c(ccc1)nc2	184.000	CHEMBL250169
FC(F)(F)c1ccc(cc1)CNC(=O)Nc1c2c([nH]nc2)ccc1	184.000	CHEMBL1085724
FC(F)(F)c1ccnc1-c1cc2nc(nc1c3ccc(cc3)C(F)F)F)2cc1)CCCN1CCCC1	184.000	CHEMBL458925
FC(F)(F)c1ccnc1N1CCc2c(nc1c2Nc2ccc(cc2)C(F)F)N2C[C@H](N(C)C)CC2)CC1	185.000	CHEMBL1630624
FC(F)(F)c1ccnc1N1CCc2c(nc1c2Nc2ccc(cc2)C(F)F)CC1	188.000	CHEMBL1289034
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1Cc2c(C1)cccc2)C(F)F)C)C	192.000	CHEMBL2177422
Clc1ccnc1N1CCC(CC1)C(=O)Nc1ccc(cc1)C(C)C)C	196.000	CHEMBL491816
Clc1ccnc1-c1ccc(cc1)C(=O)Nc1ccc(cc1)C(F)F	200.000	CHEMBL217147
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1Nc1ccc(cc1)C(F)F)C)C	203.000	CHEMBL2178084
S(=O)(=O)(Nc1ccc(cc1F)[C@H](C(=O)NCc1ccc(nc1N1CCC[C@H]1C(OC(C)C)C)O)C(F)F)C)C	209.000	CHEMBL2178071
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCCC1)C(F)F)C)C	211.000	CHEMBL2178067
S(CCCN1CCCC1)C)c1nc(ccc1)CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)F	217.000	CHEMBL2442905
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCCC1)C(F)F)C)C	218.000	CHEMBL2177423
FC(F)(F)c1ccnc1N1CCc2c(nc1c2Nc2ccc(cc2)C(C)O)(C)N2CCOCC2)CC1	230.000	CHEMBL1289608
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCC(CC1)C(C)C)C(F)F)C)C	242.000	CHEMBL2385240
FC(F)(F)c1ccnc1N1CCc2c(nc1c2Nc2ccc(cc2)C(F)F)N2C[C@H](N(C)C)CC2)CC1	243.000	CHEMBL1630623
S(CCCN1CCCC1)c1nc(ccc1)CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)F	250.000	CHEMBL2442904
FC(F)(F)c1ccnc1N1CCc2c(nc1c2Nc2ccc(cc2)C(F)F)NCC2N(CCCC2)C(OC(C)C)O)CC1	250.000	CHEMBL1630631
S(=O)(=O)(Nc1ccc(cc1F)[C@H](C(=O)NCc1ccc(nc1N1CCC(CC1)C)C(F)F)C)C	254.000	CHEMBL2177430
S(C1CCCC1)c1nc(ccc1)CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)F	254.000	CHEMBL2442920
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCCC1)C(F)F)C)C	260.000	CHEMBL2178077
FC(F)(F)c1ccnc1N1CCN(CC1)C(Oc1ccc(cc1)C(C)C)O	260.000	CHEMBL1079443
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCC)C(F)F)C)C	277.000	CHEMBL2385421
S(Cc1ccc(OC)cc1)c1nc(ccc1)CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)F	279.000	CHEMBL2442923
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(OC)CC1)C(F)F)C)C	280.000	CHEMBL2177408
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC2(ON=C(C2)C(C)C)CC1)C(F)F)C)C	281.000	CHEMBL2177416
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC2(ON=C(C2)c2ccc2)CC1)C(F)F)C)C	289.000	CHEMBL2177417
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCN(CC1)C(OC(C)C)O)C(F)F)C)C	293.000	CHEMBL2385244
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1NCCCC)C(F)F)C)C	293.000	CHEMBL2178076
FC(F)(F)c1ccnc1-c1cc2nccc(Nc3ccc(cc3)C(F)F)2nc1	308.000	CHEMBL1089117
S(CCCN1CCCC1)c1nc(ccc1)CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)F	312.000	CHEMBL2442903
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1ccc(cc1)CCCC)C(F)F)C)C	337.000	CHEMBL2385227

S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCC1CCN(CC1)C(OC(C)(C)C)=O)C(F)(F)F)C)C	342.000	CHEMBL2385219
FC(F)(F)c1ccenc1N1CCc2c(nc(nc2Nc2ccc(cc2)C(O)(C)C)N2CCCC2)CC1	361.000	CHEMBL1290705
FC(F)(F)c1ccenc1N1CCc2c(nc(nc2Nc2ccc(cc2)C(F)(F)F)N2CCN(CC2)C)CC1	367.000	CHEMBL1630296
FC(F)(F)c1ccenc1-c1cc2nc(nc(Nc3ccc(nc3)C(F)(F)F)c2cc1)CCCCO	380.000	CHEMBL456962
O(CC(=O)Nc1ccc(nc1)N1CCCC1)c1ccc(cc1)C(C)(C)C	411.000	CHEMBL2380431
Clc1ccc(cc1)CNc1nc(ccc1CNC(=O)C(C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	414.000	CHEMBL2178085
s1c2c(nc1CO)cc(NC(=O)c1ccc(nc1)C(F)(F)F)cc2	417.200	CHEMBL2088404
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)CN(C)C)C(F)(F)F)C)C	426.000	CHEMBL2177415
S(=O)(=O)(N)c1ccenc1N1CCc2c(nc(nc2Nc2ccc(cc2)C(F)(F)F)N2CCCC2)CC1	449.000	CHEMBL1290373
FC(F)(F)c1ccenc1-c1nc2c(cc1)c(Nc1ccc(cc1)C(F)(F)F)cnc2	460.000	CHEMBL1092545
Clc1ccc(nc1N1CCc2c(nc(nc2Nc2ccc(cc2)C(F)(F)F)N2CCCC2)CC1)C(O)=O	462.000	CHEMBL1290480
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCCOCC)C(F)(F)F)C)C	462.000	CHEMBL2385405
FC(F)(F)c1ccenc1N1CCc2c(nc(nc2Nc2ccc(cc2)C(F)(F)F)Nc2ccc2)CC1	476.000	CHEMBL1631259
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(Nc2ccc2)CC1)C(F)(F)F)C)C	480.000	CHEMBL2177108
Clc1ccenc1N1CCN(CC1)C(Oc1ccc(cc1)C(C)(C)C)=O	480.000	CHEMBL1080805
FC(F)(F)c1ccenc1N1CCc2c(nc(nc2Nc2ccc(cc2)C(F)(F)F)N2CCN(CC2)C)CO)CC1	498.000	CHEMBL1630618
FC(F)(F)c1nc(ccc1)-c1n2c(cc1C(=O)N(CCO)CC)C=CC=C2	501.190	CHEMBL2164885
O(CC(=O)Nc1ccc(nc1)N1CC(O)CC1)c1ccc(cc1)C(C)(C)C	516.000	CHEMBL2380432
FC(F)(F)c1ccenc1N1CCc2c(nc(nc2Nc2ccc(cc2)C(C)(C)C)C)C)C)C1	520.000	CHEMBL1290370
FC(F)(F)c1ccenc1N1CCc2c(nc(nc2Cc2ccc(cc2)C(C#N)(C)C)C)C)C)CC1	580.000	CHEMBL1289037
O(CC(=O)Nc1ccc(nc1)N(C)C)c1ccc(cc1)C(C)(C)C	583.000	CHEMBL2380434
[nH]1c2ccc(ccc2nc1N1CCN(C[C@H]1)C)c1nccc1C(C)(C)C	597.000	CHEMBL403013
FC(F)(F)c1c1nccc1C(O)=O)-c1nc2ccc(Nc3ccc(cc3)C(F)(F)F)c2cc1	607.000	CHEMBL1214340
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(OCC)CC1)C(F)(F)F)C)C	612.000	CHEMBL2177409
Clc1ccenc1N1CCC(=CC1)C(=O)Nc1ccc(Cl)cc1F	618.000	CHEMBL522969
Clc1cccc1CSc1nc(ccc1CNC(=O)C(C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	620.000	CHEMBL2442924
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCN(CC1)Cc1cccc1)C(F)(F)F)C)C	634.000	CHEMBL2177399
S(=O)(=O)(Nc1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCc1ccc(OC)cc1)C(F)(F)F)C)C	653.000	CHEMBL2385232
FC(F)(F)c1ccenc1-c1nc2nenc(Nc3ccc(cc3)C(F)(F)F)c2en1	665.000	CHEMBL1093131
Clc1ccc(cc1)CSc1nc(ccc1CNC(=O)C(C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	674.000	CHEMBL2442921
S(CCCCC)c1nc(ccc1CNC(=O)C(C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	719.000	CHEMBL2442896
S(=O)(=O)(Nc1ccc(cc1F)[C@@H](C(=O)NCc1ccc(nc1N1C[C@@H](NC(OC(C)(C)C)=O)CC1)C(F)(F)F)C)C	737.000	CHEMBL2177421
S(=O)(=O)(Nc1ccc(cc1F)[C@@H](C(=O)NCc1ccc(nc1N1C[C@@H](NC(OC(C)(C)C)=O)CC1)C(F)(F)F)C)C	757.000	CHEMBL2177420
S(Cc1ccc(cc1)C)c1nc(ccc1CNC(=O)C(C)C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	764.000	CHEMBL2442922

O(CC(=O)Ne1ccc(nc1)N(CCO)C)c1cccc1C(C)(C)C	796.000	CHEMBL2380565
Clc1ccnc1N1CCc2c(ncnc2Ne2ccc(cc2)C(F)(F)F)CC1	907.000	CHEMBL1290035
O(CC(=O)Ne1ccc(nc1)N(CCO)C)c1ccc(cc1N1CCCC1)C(C)(C)C	941.000	CHEMBL2380572
S(=O)(=O)(Ne1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)C(=O)c1ccc(F)cc1)C(F)(F)F)C)C	990.000	CHEMBL2177403
O(C)c1cc2c(cc1)C(Cc1ccnc1)C(NC(=O)Ne1c3c(ccc1)encc3)CC2	1000.000	CHEMBL399535
S(=O)(=O)(Ne1ccc(cc1F)C(C(=O)NCc1ccc(nc1OCC1CCNCC1)C(F)(F)F)C)C	1000.000	CHEMBL2385252
S(=O)(=O)(Ne1ccc(cc1F)C(C(=O)NCc1ccc(nc1OC1CCNCC1)C(F)(F)F)C)C	1000.000	CHEMBL2385243
S(=O)(=O)(Ne1ccc(cc1F)[C@H](C(=O)NCc1ccc(nc1OCCCC)C(F)(F)F)C)C	1000.000	CHEMBL2385253
S(c1nc(ccc1CNC(=O)[C@@H](C)c1ccc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F)C1CCCCC1	1000.000	CHEMBL2442912
FC(F)(F)c1ccnc1N1CCN(CC1)C(Oc1ccc(cc1)C(F)(F)F)=O	1000.000	CHEMBL1079559
FC(F)(F)c1ccnc1N1CCc2c(ncnc2Ne2ccc(cc2)C(F)(F)F)N)CC1	1058.000	CHEMBL1289265
S(=O)(=O)(Ne1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1C[C@H](O[C@H](C1)C)C)C)C(F)(F)F)C)C	1090.000	CHEMBL2177401
S(CCC(OC)=O)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	1099.000	CHEMBL2442908
S(=O)(=O)(Ne1ccc(cc1F)C(C(=O)NCc1ccc(nc1N1CCC(CC1)C)C(F)(F)F)C)C	1130.000	CHEMBL2178078
S(=O)(=O)(Ne1ccc(cc1F)C(C(=O)NCc1ccc(nc1NCC1CCN(CC1)C(OC(C)C)C)=O)C(F)(F)F)C)C	1140.000	CHEMBL2178079
S(=O)(=O)(Ne1ccc(cc1F)C(C(=O)NCc1ccc(nc1Nc1cc(C)c(cc1)C)C(F)(F)F)C)C	1160.000	CHEMBL2178082
O(C)c1nc(ccc1)-c1n2c(cc1C(=O)N(CCO)CC)C=CC=C2	1258.930	CHEMBL2164884
Clc1c(c2NC(=O)C(=O)Ne2cc1Cl)C(CC)c1ncccc1	1400.000	CHEMBL437587
S(=O)(=O)(Ne1ccc(cc1F)C(C(=O)NCc1ccc(nc1Nc1ccccc1)C(F)(F)F)C)C	1400.000	CHEMBL2178080
FC(F)(F)c1ccnc1N1CCc2c(ncnc2Ne2ccc(cc2)C(F)(F)F)C1	1450.000	CHEMBL1290254
FC(F)(F)c1ccnc1N1CCc2c(ncnc2Ne2ccc(cc2)C(C(O)=O)(C)C(C)C)CC1	1450.000	CHEMBL1289385
FC(F)(F)c1ccnc1-c1nc2ccc(Nc3nc(C(O)=O)c(en3)C(F)(F)F)c2cc1	1450.000	CHEMBL1214209
S(CCC(C)C)c1nc(ccc1CNC(=O)C(C)c1cc(F)c(NS(=O)(=O)C)cc1)C(F)(F)F	1498.000	CHEMBL2442902
FC(F)(F)c1ccnc1-c1cc2nc(nc(Nc3ccc(cc3)C(F)(F)F)c2cc1)CCC(O)=O	1627.000	CHEMBL464592
FC(F)(F)c1ccnc1N1CCc2c(ncnc2Ne2ccc(cc2)C(F)(F)F)NCC2N(CCCC2)C)CC1	1756.000	CHEMBL1630633
FC(F)(F)c1ccnc1N1C[C@H](N(CC1)c1[nH]c2cc(ccc2n1)C(C)(C)C)C	1778.000	CHEMBL254984
S(=O)(=O)(C)c1ccnc1N1CCc2c(ncnc2Ne2ccc(cc2)C(F)(F)F)C(C)CC1	1940.000	CHEMBL1290256
FC(F)(F)c1ccnc1N1CCc2c(ncnc2Ne2ccc(cc2)C(F)(F)F)N2CCN(CC2)CCN(C)C)CC1	2000.000	CHEMBL1630617
FC(F)(F)c1ccnc1N1CCCc2c(ncnc2Ne2ccc(cc2)C(C)(C)C)C1	2040.000	CHEMBL1290703
S(=O)(=O)(C)c1ccnc1N1CCc2c(ncnc2Ne2ccc(cc2)C(F)(F)F)CC1	2330.000	CHEMBL1290036
S(=O)(=O)(Ne1ccc(cc1F)[C@H](C(=O)NCc1ccc(nc1N1CCC(CC1)c1ccccc1)C(F)(F)F)C)C	2350.000	CHEMBL2177436
FC(F)(F)c1ccc(Nc2nnc3c2CCN(CC3)c2ncccc2C(=O)N)cc1	2360.000	CHEMBL1290146
S(=O)(=O)(Ne1ccc(cc1F)C(C(=O)NCc1ccc(nc1N(C)C)C)C(F)(F)F)C)C	2390.000	CHEMBL2178061
FC(F)(F)c1ccnc1N1CCc2c(ncnc2Ne2nc(OC)c(cc2)C(F)(F)F)C(C)CC1	2460.000	CHEMBL1290372

FC(F)(F)c1ccc(ene1-e1nc2necc(Nc3ncc(cc3)C(F)(F)F)c2nc1)C(=O)N	2500.000	CHEMBL1214402
S(=O)(=O)(N(C)C)c1ccc(Nc2nc(nc3e2CCN(CC3)e2neccc2C(F)(F)F)C(C)C)cc1	2520.000	CHEMBL1289713
O(CC(=O)Nc1ccc(nc1)N(CCO)C)c1ccc(cc1)C(C)(C)C	2620.000	CHEMBL2380564
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)N(CCN(C)C)C)CC1	2667.000	CHEMBL1630619
Clc1cccnc1N1CCC(=CC1)C(=O)Nc1ccc(Cl)cc1C(F)(F)F	2746.000	CHEMBL491226
S(=O)(=O)(N)c1cccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)CC1	2780.000	CHEMBL1290145
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)N2CC(NC)CC2)CC1	2790.000	CHEMBL1629722
FC(F)(F)c1cccnc1-c1cc2nc(nc(Nc3ccc(nc3)C(F)(F)F)c2cc1)CCC(O)=O	3000.000	CHEMBL515050
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)N2CCCN(C2)C)CC1	3080.000	CHEMBL1630627
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)N(CCN(CCCC)C)C)CC1	3330.000	CHEMBL1631258
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)N2CCNCC2)CC1	3350.000	CHEMBL1289932
FC(F)(F)COc1ncc(cc1)C(=O)NCCc1c2cc(OC)ccc2[nH]c1	3400.000	CHEMBL252178
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)N(C)C2CCCN(C2)CC1	3600.000	CHEMBL1630629
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)N2CC(N)CC2)CC1	3700.000	CHEMBL1630621
Clc1cccnc1N1CCN(CC1)C(Oc1ccc(cc1)C(F)(F)F)=O	3900.000	CHEMBL1080129
O(C)c1cc2c([nH]cc2CCNC(=O)c2ccc(nc2)-c2ccccc2)cc1	3940.000	CHEMBL252177
Clc1cc(ene1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)C(C)C)CC1)C(O)=O	4220.000	CHEMBL1290257
Clc1ccc(OC(=O)N2CCN(CC2)c2neccc2C(F)(F)F)cc1	4600.000	CHEMBL1079737
s1e2nenc(Nc3ccc(cc3)C(F)(F)F)c2nc1Nc1nccc1C(F)(F)F	5000.000	CHEMBL469093
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)N2CCCN(C2)CC1	5000.000	CHEMBL1630626
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2ccc(cc2)C(F)(F)F)N(C)C2CCCN(C2)C)CC1	5000.000	CHEMBL1630630
FC(F)(F)c1cccnc1N1CCc2c(nc(nc2Ne2nc(OC)c(cc2)C(F)(F)F)N2CCCCC2)CC1	6670.000	CHEMBL1290479
FC(F)(F)c1cc2c(cc1)C(NC(=O)Nc1c3c([nH]nc3)ccc1)CC2	3.000	CHEMBL254866
O1c2c(cccc2C(C)(C)C)[C@H](NC(=O)Nc2c3c([nH]nc3)ccc2)CC1	3.000	CHEMBL1684275
FC(F)(F)c1cc2OCC[C@@H](NC(=O)Nc3c4c([nH]nc4)ccc3)c2cc1	4.000	CHEMBL1684271
FC(F)(F)c1ccc(CCC(C)(C)C)c(cc1)CNC(=O)Nc1c2c([nH]nc2)ccc1	4.300	CHEMBL1086278
FC(F)(F)c1c2OCCC(NC(=O)Nc3c4c([nH]nc4)ccc3)c2ccc1	5.000	CHEMBL1684253
FC(F)(F)Oc1c2OCCC(NC(=O)Nc3c4c([nH]nc4)ccc3)c2ccc1	5.000	CHEMBL1684254
O1c2c(cccc2C(C)(C)C)C(NC(=O)Nc2c3c([nH]nc3)ccc2)CC1	5.000	CHEMBL1684255
FC(F)(F)c1ccc(CCC(F)(C)C)c(cc1)CNC(=O)Nc1c2c([nH]nc2)ccc1	6.000	CHEMBL1086277
O=C(NC1CCN(c2c1cccc2C(C)(C)C)C)Nc1c2c([nH]nc2)ccc1	6.000	CHEMBL1684262
FC(F)(F)c1cc2N(CCC(NC(=O)Nc3c4c([nH]nc4)ccc3)c2cc1)C	7.000	CHEMBL254226
FC(F)(F)c1ccc(CCC(C)(C)C)c(cc1)CNC(=O)Nc1c2c(nc2)C)ccc1	7.000	CHEMBL1085324
FC(F)(F)c1ccc(CCCOC)c(cc1)CNC(=O)Nc1c2c([nH]nc2)ccc1	8.000	CHEMBL1083713

<chem>FC(F)(F)c1cc(CCe2ceccc2)c(cc1)CNC(=O)Nc1c2c([nH]nc2)ccc1</chem>	8.000	CHEMBL1082460
<chem>FC(F)(F)Oe1cc2OCCC(NC(=O)Nc3c4c([nH]nc4)ccc3)c2cc1</chem>	8.000	CHEMBL1684251
<chem>FC(F)(F)c1cc(Oc2ceccc2)c(cc1)CNC(=O)Nc1c2c([nH]nc2)ccc1</chem>	9.000	CHEMBL1082461
<chem>FC(F)(F)c1cc(C(C)C)c(cc1)CNC(=O)Nc1c2c([nH]nc2)ccc1</chem>	9.000	CHEMBL1086276
<chem>O=C(Nc1c2c([nH]nc2)ccc1)NCc1ccc(N2[C@H]3CCCC[C@@H]2CC3)cc1CCC(C)(C)C</chem>	10.300	CHEMBL231535
<chem>FC(F)(F)c1cc2OCCC(NC(=O)Nc3c4c([nH]nc4)ccc3)c2cc1</chem>	11.000	CHEMBL254225
<chem>Clc1c2N(CCC(NC(=O)Nc3c4c([nH]nc4)ccc3)c2ccc1)CCC(C)C</chem>	11.000	CHEMBL1684270
<chem>Fc1cc(cc(F)c1N1[C@H]2CCC[C@@H]1CC2)CNC(=O)Nc1c2c([nH]nc2)ccc1</chem>	12.600	CHEMBL395262
<chem>O=C(Nc1c2c([nH]nc2)ccc1)N[C@@H]1CCc2cc(N3CCCCC3)ccc12</chem>	14.000	CHEMBL520995
<chem>Fc1cc(ccc1N1CCCCC1)CNC(=O)Nc1c2c([nH]nc2)ccc1</chem>	14.200	CHEMBL231422
<chem>Fc1cc(ccc1N1[C@H]2CCC[C@@H]1CC2)CNC(=O)Nc1c2c([nH]nc2)ccc1</chem>	14.800	CHEMBL231227
<chem>O1c2c(cccc2C2CCCC2)C(NC(=O)Nc2c3c([nH]nc3)ccc2)CC1</chem>	15.000	CHEMBL1684249
<chem>FC(F)(F)c1cc(CCC(C)(C)C)c(cc1)CNC(=O)Nc1c2c(n(nc2)C)ccc1</chem>	15.000	CHEMBL1085324
<chem>O1c2c(cccc2N2CCCC2)C(NC(=O)Nc2c3c([nH]nc3)ccc2)CC1</chem>	16.000	CHEMBL1684256
<chem>O=C(Nc1c2c([nH]nc2)ccc1)NCc1ccc(N2[C@H]3CCCC[C@@H]2CC3)cc1</chem>	18.000	CHEMBL231519
<chem>O1c2c(cccc2C(C)(C)C)[C@@H](NC(=O)Nc2c3c([nH]nc3)ccc2)CC1</chem>	19.000	CHEMBL1684276
<chem>O=C(Nc1c2c(n(nc2)C)ccc1)NCc1ccc(N2[C@H]3CCCC[C@@H]2CC3)cc1Cc1ccccc1</chem>	19.000	CHEMBL231437
<chem>O=C(Nc1c2c([nH]nc2)ccc1)NCc1cc(C)c(N2[C@H]3CCCC[C@@H]2CC3)cc1</chem>	19.800	CHEMBL231436
<chem>Clc1cc(ccc1N1[C@H]2CCC[C@@H]1CC2)CNC(=O)Nc1c2c([nH]nc2)ccc1</chem>	20.400	CHEMBL396960
<chem>Fc1cc(N2[C@H]3CCCC[C@@H]2CC3)c(F)cc1CNC(=O)Nc1c2c([nH]nc2)ccc1</chem>	21.300	CHEMBL230919
<chem>O=C(Nc1c2c([nH]nc2)ccc1)NCc1ccc(N2[C@H]3CCCC[C@@H]2CC3)cc1Cc1ccccc1</chem>	22.400	CHEMBL437165
<chem>Fc1c(F)c(N2[C@H]3CCCC[C@@H]2CC3)ccc1CNC(=O)Nc1c2c([nH]nc2)ccc1</chem>	25.500	CHEMBL437195
<chem>FC(F)(F)c1cc(ccc1N1[C@H]2CCC[C@@H]1CC2)CNC(=O)Nc1c2c([nH]nc2)ccc1</chem>	26.900	CHEMBL231225
<chem>O=C(Nc1c2c([nH]nc2)ccc1)NCc1ccc(N2[C@H]3CCCC[C@@H]2CC3)cc1C</chem>	29.000	CHEMBL438656
<chem>FC(F)(F)c1cc(ccc1N1CCCCC1)CNC(=O)Nc1c2c([nH]nc2)ccc1</chem>	29.500	CHEMBL388032
<chem>O1CC[C@@H](NC(=O)Nc2c3c([nH]nc3)ccc2)c2c1cc(cc2)C(C)C</chem>	31.000	CHEMBL1684273
<chem>Fc1cc2N(CCC(NC(=O)Nc3c4c([nH]nc4)ccc3)c2cc1)C</chem>	34.000	CHEMBL1684261
<chem>O=C(Nc1c2c([nH]nc2)ccc1)NCc1ccc(N2[C@H]3CCCC[C@@H]2CC3)cc1C(C)C</chem>	35.300	CHEMBL231438
<chem>Fc1cc(cc(F)c1N1CCCCC1)CNC(=O)Nc1c2c([nH]nc2)ccc1</chem>	39.300	CHEMBL396713
<chem>FC(F)(F)c1ccc(cc1)[C@H](NC(=O)Nc1c2c([nH]nc2)ccc1)C</chem>	41.000	CHEMBL231291
<chem>O1CCC(NC(=O)Nc2c3c([nH]nc3)ccc2)c2c1cc(cc2)C(C)(C)C</chem>	43.000	CHEMBL1684252
<chem>FC(F)(F)c1cc2OCCC[C@H](NC(=O)Nc3c4c([nH]nc4)ccc3)c2cc1</chem>	43.000	CHEMBL1684272
<chem>Brc1cc(ccc1N1[C@H]2CCC[C@@H]1CC2)CNC(=O)Nc1c2c([nH]nc2)ccc1</chem>	43.200	CHEMBL231226
<chem>FC(F)(F)c1ccc(cc1)C(NC(=O)Nc1c2c([nH]nc2)ccc1)C</chem>	47.000	CHEMBL397922

FC(F)(F)c1cc(CCC(C)(C)C)c(cc1)CNC(=O)Nc1c2c(n(nc2)CC)ccc1	53.000	CHEMBL1085067
FC(F)(F)c1cc(N2[C@H]3CCC[C@@H]2CC3)ccc1CNC(=O)Nc1c2c([nH]nc2)ccc1	54.500	CHEMBL231520
Clc1cc(N2[C@H]3CCC[C@@H]2CC3)ccc1CNC(=O)Nc1c2c([nH]nc2)ccc1	58.800	CHEMBL396714
Fc1cc2c(N(CCC2NC(=O)Nc2c3c([nH]nc3)ccc2)Cc2cccc2)cc1	66.000	CHEMBL1684266
FC(F)(F)c1cc(CCC(C)(C)C)c(cc1)CNC(=O)Nc1c2c(n(nc2)C(C)C)ccc1	69.000	CHEMBL1085068
O=C(NC1CCN(c2c1cccc2)Cc1cccc1)Nc1c2c([nH]nc2)ccc1	70.000	CHEMBL1684265
O=C(Nc1c2c([nH]nc2)ccc1)N[C@H](C)c1ccc(cc1)C	73.000	CHEMBL397459
Fc1cc(N2[C@H]3CC4(OCCO4)C[C@@H]2CC3)c(F)cc1CNC(=O)Nc1c2c([nH]nc2)ccc1	82.000	CHEMBL231019
FC(F)(F)c1ccc(cc1)-c1oc(nc1)Nc1c2c([nH]nc2)ccc1	101.000	CHEMBL1173746
O1c2c(cccc2N2CCOCC2)C(NC(=O)Nc2c3c([nH]nc3)ccc2)CC1	110.000	CHEMBL1684250
O=C(NC1CCN(c2c1ccc(c2)C(C)(C)C)Nc1c2c([nH]nc2)ccc1	115.000	CHEMBL1684263
O=C(NC1CCN(c2c1cc(cc2)C(C)(C)C)Cc1cccc1)Nc1c2c([nH]nc2)ccc1	121.000	CHEMBL1684267
O=C(Nc1c2c([nH]nc2)ccc1)N[C@H](C)c1c2c(ccc1)cccc2	123.000	CHEMBL396018
FC(F)(F)c1cc(N2CCCCC2)ccc1CNC(=O)Nc1c2c([nH]nc2)ccc1	133.000	CHEMBL230485
Fc1cc(N2[C@H]3CC(=O)C[C@@H]2CC3)c(F)cc1CNC(=O)Nc1c2c([nH]nc2)ccc1	157.000	CHEMBL231020
O(C)c1cc2c(N(CCC2NC(=O)Nc2c3c([nH]nc3)ccc2)Cc2cccc2)cc1	160.000	CHEMBL1684268
Clc1cc(N2CCCCC2)ccc1CNC(=O)Nc1c2c([nH]nc2)ccc1	190.000	CHEMBL230380
O(C)c1cc2c(N(CCC2NC(=O)Nc2c3c([nH]nc3)ccc2)CC2CCCC2)cc1	196.000	CHEMBL1684269
O=C(NC1CCN(c2c1cccc2)C)Nc1c2c([nH]nc2)ccc1	215.000	CHEMBL1684260
O1CCC(NC(=O)Nc2c3c([nH]nc3)ccc2)c2c1cccc2	234.000	CHEMBL1684259
FC(F)(F)c1ccc(cc1)[C@@H](NC(=O)Nc1c2c([nH]nc2)ccc1)C	248.000	CHEMBL395995
O=C(Nc1c2c([nH]nc2)ccc1)NCc1cc2CCN(c2cc1)CC	285.000	CHEMBL388870
O=C(Nc1c2c(n(nc2)C)ccc1)NCc1cc2CCN(c2cc1)CC	305.000	CHEMBL231238
Fc1cc2c(OCCC2NC(=O)Nc2c3c([nH]nc3)ccc2)cc1	718.000	CHEMBL1684258
O=C(Nc1c2c([nH]nc2)ccc1)N[C@@H](C)c1ccc(cc1)C	749.000	CHEMBL231392
O=C(NC1CCN(c2c1cc(cc2)C(C)(C)C)Nc1c2c([nH]nc2)ccc1	853.000	CHEMBL1684248
O=C(Nc1c2c([nH]nc2)ccc1)NCc1cc2c3c(n(cc21)C)cccc3	902.000	CHEMBL388871
O1CCC(NC(=O)Nc2c3c([nH]nc3)ccc2)c2cc(ccc12)C	933.000	CHEMBL1684257
O1CC[C@H](NC(=O)Nc2c3c([nH]nc3)ccc2)c2c1cc(cc2)C(C)(C)C	1200.000	CHEMBL1684274
O(C)c1cc2c(N(CCC2NC(=O)Nc2c3c([nH]nc3)ccc2)C)cc1	1380.000	CHEMBL1684264
O=C(Nc1c2c(n(nc2)C)ccc1)NCc1cc2c(n(cc2)C)cc1	1850.000	CHEMBL442070
O=C(Nc1c2c([nH]nc2)ccc1)N[C@@H](C)c1c2c(ccc1)cccc2	3750.000	CHEMBL231593
FC(F)(F)c1ccc(cc1)CC1c2c(cc(OC)cc2)CCC1NC(=O)Nc1c2c(ccc1)cncc2	2.000	CHEMBL436638
FC(F)(F)c1ccc(cc1)CNC(=O)Nc1c2c(ccc1)cncc2	2.000	CHEMBL104028

FC(F)(F)c1ccc(cc1)CNC(=O)Nc1c2c(ccc1)ence2	2.100	CHEMBL104028
Fe1cc(ccc1N1CCCCC1)CNC(=O)Nc1c2c(ccc1)ence2	2.800	CHEMBL231518
O=C(Nc1c2c(ccc1)ence2)NCc1ccc(N2[C@H]3CCC[C@H]2CC3)cc1	3.300	CHEMBL231206
O=C(Nc1c2c(ccc1)ence2)NCc1ccc(N2CCCCC2)cc1	3.300	CHEMBL387996
O=C(Nc1c2c(ccc1)ence2)NCc1ccc(N2CCCCC2)cc1	3.800	CHEMBL427266
FC(F)(F)c1ccc(cc1)CNC(=O)Nc1c2c(ccc1)ence2	4.000	CHEMBL104028
FC(F)(F)c1ccc(ccc1N1CCCCC1)CNC(=O)Nc1c2c(ccc1)ence2	4.600	CHEMBL397272
O=C(Nc1c2c(ccc1)ence2)NCc1ccc(N2CCCCC2)cc1	4.700	CHEMBL230998
Fe1ccc(cc1)C(Cc1cccc1)CNC(=O)Nc1c2c(ccc1)ence2	5.000	CHEMBL250370
FC(F)(F)c1ccc(cc1)CNC(=O)Nc1c2c(ccc1)ence2	5.000	CHEMBL104028
Clc1cc(N2CCCCC2)ccc1CNC(=O)Nc1c2c(ccc1)ence2	5.200	CHEMBL427111
O=C(Nc1c2c(ccc1)ence2)NCc1ccc(N2CCCCC2)cc1	5.300	CHEMBL230896
FC(F)(F)c1ccc(N2CCCCC2)ccc1CNC(=O)Nc1c2c(ccc1)ence2	5.700	CHEMBL231517
O=C(Nc1c2c(ccc1)ence2)NCc1ccc(N2CCCCC2)cc1	7.300	CHEMBL230997
Fe1cc(cc(F)c1N1CCOCC1)CNC(=O)Nc1c2c(ccc1)ence2	9.300	CHEMBL231619
O=C(Nc1c2c(ccc1)ence2)NCc1ccc(N2CCC(CC2)C)cc1	9.300	CHEMBL231104
O=C(Nc1c2c(ccc1)N)NCc1ccc(N2CCCCC2)cc1	9.800	CHEMBL387579
Fe1c2c(cc1)C(Cc1ccc(cc1)C(F)(F)C(NC(=O)Nc1c3c(ccc1)ence3)CC2	10.000	CHEMBL250594
Fe1c2c(cc1)C(Cc1cccc1)C(NC(=O)Nc1c3c(ccc1)ence3)CC2	12.000	CHEMBL250557
Clc1cc(ccc1)CC1c2c(cc(OC)cc2)CCC1NC(=O)Nc1c2c(ccc1)ence2	13.000	CHEMBL400312
O(C)c1ccc(cc1)C(Cc1cccc1)CNC(=O)Nc1c2c(ccc1)ence2	14.000	CHEMBL250368
FC(F)(F)c1ccc(ccc1N1[C@H]2CCC[C@H]1CC2)CNC(=O)Nc1c2c(ccc1)N	14.000	CHEMBL439007
Fe1cc(ccc1N1CCCC1)CNC(=O)Nc1c2c(ccc1)C	15.500	CHEMBL397273
Clc1c2c(ccc1)C(Cc1cccc1)C(NC(=O)Nc1c3c(ccc1)ence3)CC2	16.000	CHEMBL400069
Bre1cc2c(cc1)C(Cc1cccc1)C(NC(=O)Nc1c3c(ccc1)ence3)CC2	17.000	CHEMBL250558
O=C(Nc1c2c(ccc1)ence2)NC(C)c1ccc(cc1C(C)C(C)C(C)C	17.000	CHEMBL230669
Fe1ccc(cc1)C(Cc1ccc(cc1)C(F)(F)CNC(=O)Nc1c2c(ccc1)ence2	19.000	CHEMBL250983
Fe1cc(ccc1C(F)(F)C(NC(=O)Nc1c2c(ccc1)ence2)C	19.000	CHEMBL230561
O=C(NC1CCc2c(ccc2)C1Cc1cccc1)Nc1c2c(ccc1)ence2	20.000	CHEMBL249946
O=C(Nc1c2c(ccc1)ence2)NC(C)c1ccc(cc1CC)C(C)C(C)C	20.000	CHEMBL230668
O(C)c1cc2c(cc1)C(Cc1ccc(cc1)C#N)C(NC(=O)Nc1c3c(ccc1)ence3)CC2	21.000	CHEMBL399277
Bre1ccc(cc1)CC1c2c(cc(OC)cc2)CCC1NC(=O)Nc1c2c(ccc1)ence2	22.000	CHEMBL250593
FC(F)(F)c1ccc(cc1)C(NC(=O)Nc1c2c(ccc1)ence2)C	22.000	CHEMBL389715
S1CCN(CC1)c1ccc(cc1)CNC(=O)Nc1c2c(ccc1)ence2	23.800	CHEMBL231106

O=C(Nc1c2c(ccc1)encc2)NC(C)c1ccc(cc1)C(C)(C)C	24.000	CHEMBL230457
O(C)c1cc2c(cc1)C(Cc1cccc1)C(NC(=O)Nc1c3c(ccc1)encc3)CC2	25.000	CHEMBL250149
BrC1ccc(cc1)C(NC(=O)Nc1c2c(ccc1)encc2)C	26.000	CHEMBL427105
O(C)c1ccc(cc1)CC1c2c(cc(OC)cc2)CCC1NC(=O)Nc1c2c(ccc1)encc2	36.000	CHEMBL248762
O=C(Nc1c2c(ccc1)encc2)NC(C)c1ccc(cc1)C(C)(C)C	46.000	CHEMBL230667
Clc1cc2c(cc1)C(Cc1cccc1)C(NC(=O)Nc1c3c(ccc1)encc3)CC2	63.000	CHEMBL250761
Fe1cc2c(cc1)C(Cc1ccoc1)C(NC(=O)Nc1c3c(ccc1)encc3)CC2	83.000	CHEMBL428057
Clc1cc2c(CCC(NC(=O)Nc3c4c(ccc3)encc4)C2Cc2cccc2)cc1	86.000	CHEMBL250762
O1CCN(CC1)c1ccc(cc1)CNC(=O)Nc1c2c(ccc1)encc2	91.000	CHEMBL231105
FC(F)(F)c1ccc(cc1)C(NC(=O)Nc1c2c(ccc1)encc2)(C)C	94.000	CHEMBL230983
Fe1cc2c(cc1)C(CC=C)C(NC(=O)Nc1c3c(ccc1)encc3)CC2	100.000	CHEMBL251182
Fe1cc(ccc1C(F)(F)F)C(NC(=O)Nc1c2c(ccc1)encc2)CC	109.000	CHEMBL397898
O=C(Nc1c2c(ccc1)encc2)NC(c1ccc(cc1)C(C)(C)C)c1cccc1	125.000	CHEMBL397896
s1cccc1CC1c2c(cc(F)cc2)CCC1NC(=O)Nc1c2c(ccc1)encc2	140.000	CHEMBL251181
Clc1ccc(cc1)C(NC(=O)Nc1c2c(ccc1)encc2)(C)C	143.000	CHEMBL230982
FC(F)(F)c1ccc(cc1)C(NC(=O)Nc1c2c(ccc1)encc2)c1cccc1	147.000	CHEMBL230562
FC(F)(F)c1ccc(cc1)C(NC(=O)Nc1c2c(ccc1)encc2)C1CC1	149.000	CHEMBL230774
Clc1ccc2c(c1)c(NC(=O)NCc1ccc(N3CCOCC3)cc1)ccc2	156.000	CHEMBL230689
O=C(Nc1c2c(ccc1)encc2)NCc1ccc(N(C)C)cc1	157.000	CHEMBL387995
O=C(Nc1c2c(ccc1)encc2)NC(c1ccc(N2CCCC2)cc1)c1cccc1	171.000	CHEMBL230563
Oc1cc2c(cc1)C(Cc1cccc1)C(NC(=O)Nc1c3c(ccc1)encc3)CC2	200.000	CHEMBL248761
FC(F)(F)c1ccc(cc1)-c1oc(nc1)Nc1c2c(ccc1)encc2	229.000	CHEMBL1173681
O(C)c1cc2c(cc1OC)CCC(NC(=O)Nc1c3c(ccc1)encc3)C2Cc1cccc1	230.000	CHEMBL251582
O1C(CN(CC1C)c1ccc(cc1)CNC(=O)Nc1c2c(ccc1)encc2)C	258.000	CHEMBL387578
FC(F)(F)c1ccc(cc1)C(NC(=O)Nc1c2c(ccc1)encc2)C1CCCC1	287.000	CHEMBL230881
Fe1cc2c(cc1)C(CC1CC1)C(NC(=O)Nc1c3c(ccc1)encc3)CC2	350.000	CHEMBL248561
FC(F)(F)c1ccc(cc1)C(NC(=O)Nc1c2c(ccc1)encc2)C1CCCC1	476.000	CHEMBL395720
O=C(Nc1c2c(ccc1)encc2)NC(c1cccc1)c1cccc1	600.000	CHEMBL397897
O(C)c1ccc(cc1)C(CNC(=O)Nc1c2c(ccc1)encc2)C	680.000	CHEMBL249943
Clc1cc2c(cc1)C(CC#N)C(NC(=O)Nc1c3c(ccc1)encc3)CC2	1000.000	CHEMBL399987
O=C(Nc1c2c(ccc1)encc2)NC(CC)c1cccc1	2580.000	CHEMBL230772
FC(F)(F)Oe1ccc(cc1)C(=O)NCCc1c2c(ccc1)encc2	6700.000	CHEMBL398540
Fe1cc(ccc1N1Cc2c(C1)cccc2)CNC(=O)Nc1c2c(ccc1)encc2	7360.000	CHEMBL230379

Table S3. The C α rmsd of the four monomers (or units) in hTRPV1 bound with AMG9810.

	A	B	C	D
A	----	4.37	3.79	4.28
B	4.37	----	4.26	4.361
C	3.79	4.26	----	2.853
D	4.28	4.361	2.853	----

Table S4. The C α rmsd of the four monomers (or units) in hTRPV1 bound with RTX.

	A	B	C	D
A	----	4.835	4.423	6.554
B	4.835	----	5.341	4.979
C	4.423	5.341	----	4.962
D	6.554	4.979	4.962	----

3D coordinates of hTRPV1 in the present work:

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ATOM 1 N LEU A 112 53.798 -38.802 -73.817 1.00 0.00 A N
ATOM 2 CA LEU A 112 53.730 -37.474 -74.438 1.00 0.00 A C
ATOM 3 CB LEU A 112 53.269 -37.608 -75.899 1.00 0.00 A C
ATOM 4 CG LEU A 112 54.222 -38.453 -76.772 1.00 0.00 A C
ATOM 5 CD1 LEU A 112 53.745 -38.518 -78.233 1.00 0.00 A C
ATOM 6 CD2 LEU A 112 55.674 -37.973 -76.642 1.00 0.00 A C
ATOM 7 C LEU A 112 52.726 -36.646 -73.712 1.00 0.00 A C
ATOM 8 O LEU A 112 52.588 -35.452 -73.970 1.00 0.00 A O
ATOM 9 N TYR A 113 51.986 -37.272 -72.774 1.00 0.00 A N
ATOM 10 CA TYR A 113 50.974 -36.528 -72.088 1.00 0.00 A C
ATOM 11 CB TYR A 113 49.549 -36.964 -72.469 1.00 0.00 A C
ATOM 12 CG TYR A 113 49.285 -36.574 -73.880 1.00 0.00 A C
ATOM 13 CD1 TYR A 113 49.807 -37.307 -74.918 1.00 0.00 A C
ATOM 14 CE1 TYR A 113 49.555 -36.945 -76.220 1.00 0.00 A C
ATOM 15 CZ TYR A 113 48.773 -35.846 -76.489 1.00 0.00 A C
ATOM 16 OH TYR A 113 48.513 -35.470 -77.823 1.00 0.00 A O
ATOM 17 CD2 TYR A 113 48.500 -35.478 -74.159 1.00 0.00 A C
ATOM 18 CE2 TYR A 113 48.243 -35.111 -75.458 1.00 0.00 A C
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ATOM	19	C	TYR	A	113	51.071	-36.751	-70.616	1.00	0.00	A	C
ATOM	20	O	TYR	A	113	51.152	-37.886	-70.148	1.00	0.00	A	O
ATOM	21	N	ASP	A	114	51.089	-35.642	-69.852	1.00	0.00	A	N
ATOM	22	CA	ASP	A	114	50.984	-35.696	-68.426	1.00	0.00	A	C
ATOM	23	CB	ASP	A	114	52.037	-34.841	-67.700	1.00	0.00	A	C
ATOM	24	CG	ASP	A	114	51.924	-33.411	-68.194	1.00	0.00	A	C
ATOM	25	OD1	ASP	A	114	52.110	-33.196	-69.425	1.00	0.00	A	O
ATOM	26	OD2	ASP	A	114	51.666	-32.511	-67.354	1.00	0.00	A	O
ATOM	27	C	ASP	A	114	49.597	-35.221	-68.094	1.00	0.00	A	C
ATOM	28	O	ASP	A	114	48.847	-34.814	-68.979	1.00	0.00	A	O
ATOM	29	N	ARG	A	115	49.210	-35.259	-66.805	1.00	0.00	A	N
ATOM	30	CA	ARG	A	115	47.879	-34.864	-66.426	1.00	0.00	A	C
ATOM	31	CB	ARG	A	115	47.626	-35.044	-64.919	1.00	0.00	A	C
ATOM	32	CG	ARG	A	115	46.224	-34.641	-64.456	1.00	0.00	A	C
ATOM	33	CD	ARG	A	115	45.978	-34.929	-62.973	1.00	0.00	A	C
ATOM	34	NE	ARG	A	115	46.684	-33.883	-62.178	1.00	0.00	A	N
ATOM	35	CZ	ARG	A	115	46.023	-32.746	-61.809	1.00	0.00	A	C
ATOM	36	NH1	ARG	A	115	44.714	-32.582	-62.148	1.00	0.00	A	N
ATOM	37	NH2	ARG	A	115	46.672	-31.780	-61.093	1.00	0.00	A	N
ATOM	38	C	ARG	A	115	47.690	-33.414	-66.756	1.00	0.00	A	C
ATOM	39	O	ARG	A	115	46.646	-33.013	-67.268	1.00	0.00	A	O
ATOM	40	N	ARG	A	116	48.727	-32.604	-66.497	1.00	0.00	A	N
ATOM	41	CA	ARG	A	116	48.663	-31.179	-66.644	1.00	0.00	A	C
ATOM	42	CB	ARG	A	116	49.998	-30.523	-66.255	1.00	0.00	A	C
ATOM	43	CG	ARG	A	116	49.848	-29.113	-65.687	1.00	0.00	A	C
ATOM	44	CD	ARG	A	116	49.109	-28.122	-66.579	1.00	0.00	A	C
ATOM	45	NE	ARG	A	116	48.806	-26.952	-65.709	1.00	0.00	A	N
ATOM	46	CZ	ARG	A	116	47.681	-26.967	-64.932	1.00	0.00	A	C
ATOM	47	NH1	ARG	A	116	46.798	-28.000	-65.032	1.00	0.00	A	N
ATOM	48	NH2	ARG	A	116	47.448	-25.952	-64.047	1.00	0.00	A	N
ATOM	49	C	ARG	A	116	48.393	-30.833	-68.078	1.00	0.00	A	C
ATOM	50	O	ARG	A	116	47.577	-29.960	-68.369	1.00	0.00	A	O
ATOM	51	N	SER	A	117	49.060	-31.530	-69.018	1.00	0.00	A	N
ATOM	52	CA	SER	A	117	48.963	-31.187	-70.408	1.00	0.00	A	C
ATOM	53	CB	SER	A	117	49.845	-32.075	-71.304	1.00	0.00	A	C
ATOM	54	OG	SER	A	117	49.447	-33.435	-71.201	1.00	0.00	A	O
ATOM	55	C	SER	A	117	47.546	-31.284	-70.898	1.00	0.00	A	C
ATOM	56	O	SER	A	117	47.064	-30.371	-71.565	1.00	0.00	A	O

ATOM	57	N	ILE A 118	46.840	-32.388	-70.588	1.00	0.00	A	N
ATOM	58	CA	ILE A 118	45.498	-32.591	-71.069	1.00	0.00	A	C
ATOM	59	CB	ILE A 118	44.954	-33.955	-70.766	1.00	0.00	A	C
ATOM	60	CG2	ILE A 118	43.497	-33.991	-71.255	1.00	0.00	A	C
ATOM	61	CG1	ILE A 118	45.834	-35.043	-71.403	1.00	0.00	A	C
ATOM	62	CD	ILE A 118	45.509	-36.450	-70.902	1.00	0.00	A	C
ATOM	63	C	ILE A 118	44.549	-31.603	-70.459	1.00	0.00	A	C
ATOM	64	O	ILE A 118	43.678	-31.064	-71.141	1.00	0.00	A	O
ATOM	65	N	PHE A 119	44.697	-31.334	-69.149	1.00	0.00	A	N
ATOM	66	CA	PHE A 119	43.794	-30.470	-68.444	1.00	0.00	A	C
ATOM	67	CB	PHE A 119	44.177	-30.285	-66.961	1.00	0.00	A	C
ATOM	68	CG	PHE A 119	43.609	-31.414	-66.165	1.00	0.00	A	C
ATOM	69	CD1	PHE A 119	44.091	-32.694	-66.291	1.00	0.00	A	C
ATOM	70	CE1	PHE A 119	43.551	-33.723	-65.556	1.00	0.00	A	C
ATOM	71	CZ	PHE A 119	42.513	-33.486	-64.689	1.00	0.00	A	C
ATOM	72	CD2	PHE A 119	42.555	-31.188	-65.308	1.00	0.00	A	C
ATOM	73	CE2	PHE A 119	42.010	-32.211	-64.568	1.00	0.00	A	C
ATOM	74	C	PHE A 119	43.789	-29.126	-69.093	1.00	0.00	A	C
ATOM	75	O	PHE A 119	42.731	-28.509	-69.228	1.00	0.00	A	O
ATOM	76	N	GLU A 120	44.972	-28.623	-69.484	1.00	0.00	A	N
ATOM	77	CA	GLU A 120	45.064	-27.340	-70.118	1.00	0.00	A	C
ATOM	78	CB	GLU A 120	46.518	-26.874	-70.303	1.00	0.00	A	C
ATOM	79	CG	GLU A 120	47.241	-26.614	-68.977	1.00	0.00	A	C
ATOM	80	CD	GLU A 120	46.628	-25.381	-68.320	1.00	0.00	A	C
ATOM	81	OE1	GLU A 120	45.379	-25.240	-68.378	1.00	0.00	A	O
ATOM	82	OE2	GLU A 120	47.405	-24.567	-67.754	1.00	0.00	A	O
ATOM	83	C	GLU A 120	44.410	-27.392	-71.467	1.00	0.00	A	C
ATOM	84	O	GLU A 120	43.746	-26.440	-71.877	1.00	0.00	A	O
ATOM	85	N	ALA A 121	44.578	-28.506	-72.200	1.00	0.00	A	N
ATOM	86	CA	ALA A 121	44.008	-28.608	-73.517	1.00	0.00	A	C
ATOM	87	CB	ALA A 121	44.337	-29.943	-74.207	1.00	0.00	A	C
ATOM	88	C	ALA A 121	42.515	-28.516	-73.405	1.00	0.00	A	C
ATOM	89	O	ALA A 121	41.866	-27.835	-74.197	1.00	0.00	A	O
ATOM	90	N	VAL A 122	41.941	-29.195	-72.395	1.00	0.00	A	N
ATOM	91	CA	VAL A 122	40.520	-29.254	-72.181	1.00	0.00	A	C
ATOM	92	CB	VAL A 122	40.152	-30.159	-71.039	1.00	0.00	A	C
ATOM	93	CG1	VAL A 122	38.643	-30.043	-70.772	1.00	0.00	A	C
ATOM	94	CG2	VAL A 122	40.605	-31.587	-71.389	1.00	0.00	A	C

ATOM	95	C	VAL A 122	39.974	-27.890	-71.876	1.00	0.00	A	C
ATOM	96	O	VAL A 122	38.880	-27.538	-72.317	1.00	0.00	A	O
ATOM	97	N	ALA A 123	40.728	-27.070	-71.121	1.00	0.00	A	N
ATOM	98	CA	ALA A 123	40.229	-25.787	-70.706	1.00	0.00	A	C
ATOM	99	CB	ALA A 123	41.252	-24.997	-69.871	1.00	0.00	A	C
ATOM	100	C	ALA A 123	39.897	-24.963	-71.917	1.00	0.00	A	C
ATOM	101	O	ALA A 123	38.923	-24.214	-71.929	1.00	0.00	A	O
ATOM	102	N	GLN A 124	40.757	-25.060	-72.943	1.00	0.00	A	N
ATOM	103	CA	GLN A 124	40.722	-24.392	-74.216	1.00	0.00	A	C
ATOM	104	CB	GLN A 124	42.076	-24.469	-74.941	1.00	0.00	A	C
ATOM	105	CG	GLN A 124	43.224	-23.830	-74.161	1.00	0.00	A	C
ATOM	106	CD	GLN A 124	44.491	-24.010	-74.986	1.00	0.00	A	C
ATOM	107	OE1	GLN A 124	45.023	-23.057	-75.553	1.00	0.00	A	O
ATOM	108	NE2	GLN A 124	44.991	-25.273	-75.060	1.00	0.00	A	N
ATOM	109	C	GLN A 124	39.700	-24.964	-75.158	1.00	0.00	A	C
ATOM	110	O	GLN A 124	39.318	-24.296	-76.119	1.00	0.00	A	O
ATOM	111	N	ASN A 125	39.267	-26.224	-74.956	1.00	0.00	A	N
ATOM	112	CA	ASN A 125	38.402	-26.864	-75.912	1.00	0.00	A	C
ATOM	113	CB	ASN A 125	37.166	-26.021	-76.268	1.00	0.00	A	C
ATOM	114	CG	ASN A 125	36.216	-26.886	-77.083	1.00	0.00	A	C
ATOM	115	OD1	ASN A 125	35.772	-27.934	-76.619	1.00	0.00	A	O
ATOM	116	ND2	ASN A 125	35.895	-26.441	-78.328	1.00	0.00	A	N
ATOM	117	C	ASN A 125	39.189	-27.097	-77.169	1.00	0.00	A	C
ATOM	118	O	ASN A 125	38.686	-26.905	-78.277	1.00	0.00	A	O
ATOM	119	N	ASN A 126	40.457	-27.535	-77.023	1.00	0.00	A	N
ATOM	120	CA	ASN A 126	41.299	-27.742	-78.165	1.00	0.00	A	C
ATOM	121	CB	ASN A 126	42.727	-27.209	-77.944	1.00	0.00	A	C
ATOM	122	CG	ASN A 126	43.358	-26.939	-79.299	1.00	0.00	A	C
ATOM	123	OD1	ASN A 126	42.703	-27.052	-80.333	1.00	0.00	A	O
ATOM	124	ND2	ASN A 126	44.664	-26.562	-79.298	1.00	0.00	A	N
ATOM	125	C	ASN A 126	41.389	-29.217	-78.456	1.00	0.00	A	C
ATOM	126	O	ASN A 126	41.912	-29.997	-77.662	1.00	0.00	A	O
ATOM	127	N	CYS A 127	40.818	-29.634	-79.605	1.00	0.00	A	N
ATOM	128	CA	CYS A 127	40.816	-30.990	-80.088	1.00	0.00	A	C
ATOM	129	CB	CYS A 127	39.785	-31.228	-81.201	1.00	0.00	A	C
ATOM	130	SG	CYS A 127	38.083	-31.186	-80.575	1.00	0.00	A	S
ATOM	131	C	CYS A 127	42.153	-31.403	-80.635	1.00	0.00	A	C
ATOM	132	O	CYS A 127	42.477	-32.588	-80.637	1.00	0.00	A	O

ATOM	133	N	GLN A 128	42.935	-30.456	-81.189	1.00	0.00	A	N
ATOM	134	CA	GLN A 128	44.165	-30.805	-81.857	1.00	0.00	A	C
ATOM	135	CB	GLN A 128	44.729	-29.673	-82.739	1.00	0.00	A	C
ATOM	136	CG	GLN A 128	43.865	-29.420	-83.978	1.00	0.00	A	C
ATOM	137	CD	GLN A 128	44.586	-28.457	-84.914	1.00	0.00	A	C
ATOM	138	OE1	GLN A 128	43.959	-27.623	-85.565	1.00	0.00	A	O
ATOM	139	NE2	GLN A 128	45.938	-28.581	-84.998	1.00	0.00	A	N
ATOM	140	C	GLN A 128	45.255	-31.300	-80.944	1.00	0.00	A	C
ATOM	141	O	GLN A 128	45.936	-32.272	-81.268	1.00	0.00	A	O
ATOM	142	N	ASP A 129	45.436	-30.686	-79.763	1.00	0.00	A	N
ATOM	143	CA	ASP A 129	46.526	-31.055	-78.895	1.00	0.00	A	C
ATOM	144	CB	ASP A 129	46.553	-30.227	-77.598	1.00	0.00	A	C
ATOM	145	CG	ASP A 129	46.934	-28.798	-77.960	1.00	0.00	A	C
ATOM	146	OD1	ASP A 129	47.420	-28.589	-79.104	1.00	0.00	A	O
ATOM	147	OD2	ASP A 129	46.743	-27.897	-77.100	1.00	0.00	A	O
ATOM	148	C	ASP A 129	46.362	-32.498	-78.524	1.00	0.00	A	C
ATOM	149	O	ASP A 129	47.316	-33.174	-78.144	1.00	0.00	A	O
ATOM	150	N	LEU A 130	45.100	-32.951	-78.544	1.00	0.00	A	N
ATOM	151	CA	LEU A 130	44.597	-34.267	-78.277	1.00	0.00	A	C
ATOM	152	CB	LEU A 130	43.094	-34.265	-77.946	1.00	0.00	A	C
ATOM	153	CG	LEU A 130	42.782	-33.548	-76.615	1.00	0.00	A	C
ATOM	154	CD1	LEU A 130	41.278	-33.553	-76.302	1.00	0.00	A	C
ATOM	155	CD2	LEU A 130	43.616	-34.131	-75.464	1.00	0.00	A	C
ATOM	156	C	LEU A 130	44.839	-35.226	-79.402	1.00	0.00	A	C
ATOM	157	O	LEU A 130	44.541	-36.410	-79.261	1.00	0.00	A	O
ATOM	158	N	GLU A 131	45.263	-34.745	-80.585	1.00	0.00	A	N
ATOM	159	CA	GLU A 131	45.404	-35.610	-81.726	1.00	0.00	A	C
ATOM	160	CB	GLU A 131	45.913	-34.844	-82.956	1.00	0.00	A	C
ATOM	161	CG	GLU A 131	44.927	-33.759	-83.403	1.00	0.00	A	C
ATOM	162	CD	GLU A 131	45.564	-32.960	-84.530	1.00	0.00	A	C
ATOM	163	OE1	GLU A 131	46.277	-31.966	-84.224	1.00	0.00	A	O
ATOM	164	OE2	GLU A 131	45.351	-33.333	-85.713	1.00	0.00	A	O
ATOM	165	C	GLU A 131	46.351	-36.746	-81.432	1.00	0.00	A	C
ATOM	166	O	GLU A 131	46.067	-37.893	-81.772	1.00	0.00	A	O
ATOM	167	N	SER A 132	47.506	-36.471	-80.797	1.00	0.00	A	N
ATOM	168	CA	SER A 132	48.487	-37.486	-80.503	1.00	0.00	A	C
ATOM	169	CB	SER A 132	49.882	-36.895	-80.227	1.00	0.00	A	C
ATOM	170	OG	SER A 132	50.391	-36.270	-81.396	1.00	0.00	A	O

ATOM	171	C	SER A 132	48.104	-38.298	-79.296	1.00	0.00	A	C
ATOM	172	O	SER A 132	48.861	-39.174	-78.880	1.00	0.00	A	O
ATOM	173	N	LEU A 133	46.944	-38.009	-78.673	1.00	0.00	A	N
ATOM	174	CA	LEU A 133	46.589	-38.615	-77.418	1.00	0.00	A	C
ATOM	175	CB	LEU A 133	45.341	-37.963	-76.784	1.00	0.00	A	C
ATOM	176	CG	LEU A 133	44.958	-38.548	-75.407	1.00	0.00	A	C
ATOM	177	CD1	LEU A 133	46.108	-38.392	-74.399	1.00	0.00	A	C
ATOM	178	CD2	LEU A 133	43.644	-37.941	-74.876	1.00	0.00	A	C
ATOM	179	C	LEU A 133	46.363	-40.106	-77.466	1.00	0.00	A	C
ATOM	180	O	LEU A 133	47.002	-40.845	-76.717	1.00	0.00	A	O
ATOM	181	N	LEU A 134	45.509	-40.610	-78.381	1.00	0.00	A	N
ATOM	182	CA	LEU A 134	45.129	-41.996	-78.360	1.00	0.00	A	C
ATOM	183	CB	LEU A 134	44.152	-42.329	-79.502	1.00	0.00	A	C
ATOM	184	CG	LEU A 134	43.387	-43.668	-79.397	1.00	0.00	A	C
ATOM	185	CD1	LEU A 134	42.680	-43.963	-80.723	1.00	0.00	A	C
ATOM	186	CD2	LEU A 134	44.230	-44.850	-78.903	1.00	0.00	A	C
ATOM	187	C	LEU A 134	46.353	-42.847	-78.551	1.00	0.00	A	C
ATOM	188	O	LEU A 134	46.551	-43.840	-77.857	1.00	0.00	A	O
ATOM	189	N	LEU A 135	47.236	-42.465	-79.487	1.00	0.00	A	N
ATOM	190	CA	LEU A 135	48.372	-43.284	-79.787	1.00	0.00	A	C
ATOM	191	CB	LEU A 135	49.180	-42.783	-81.004	1.00	0.00	A	C
ATOM	192	CG	LEU A 135	49.699	-41.336	-80.914	1.00	0.00	A	C
ATOM	193	CD1	LEU A 135	50.813	-41.189	-79.867	1.00	0.00	A	C
ATOM	194	CD2	LEU A 135	50.112	-40.815	-82.301	1.00	0.00	A	C
ATOM	195	C	LEU A 135	49.277	-43.416	-78.595	1.00	0.00	A	C
ATOM	196	O	LEU A 135	49.912	-44.455	-78.427	1.00	0.00	A	O
ATOM	197	N	PHE A 136	49.375	-42.375	-77.745	1.00	0.00	A	N
ATOM	198	CA	PHE A 136	50.283	-42.395	-76.627	1.00	0.00	A	C
ATOM	199	CB	PHE A 136	50.275	-41.060	-75.855	1.00	0.00	A	C
ATOM	200	CG	PHE A 136	50.926	-41.252	-74.527	1.00	0.00	A	C
ATOM	201	CD1	PHE A 136	52.295	-41.304	-74.403	1.00	0.00	A	C
ATOM	202	CE1	PHE A 136	52.876	-41.485	-73.172	1.00	0.00	A	C
ATOM	203	CZ	PHE A 136	52.087	-41.620	-72.054	1.00	0.00	A	C
ATOM	204	CD2	PHE A 136	50.144	-41.398	-73.405	1.00	0.00	A	C
ATOM	205	CE2	PHE A 136	50.717	-41.578	-72.170	1.00	0.00	A	C
ATOM	206	C	PHE A 136	49.980	-43.511	-75.664	1.00	0.00	A	C
ATOM	207	O	PHE A 136	50.848	-44.333	-75.371	1.00	0.00	A	O
ATOM	208	N	LEU A 137	48.729	-43.598	-75.176	1.00	0.00	A	N

ATOM	209	CA	LEU A 137	48.341	-44.587	-74.210	1.00	0.00	A	C
ATOM	210	CB	LEU A 137	46.992	-44.349	-73.488	1.00	0.00	A	C
ATOM	211	CG	LEU A 137	45.749	-44.143	-74.371	1.00	0.00	A	C
ATOM	212	CD1	LEU A 137	44.486	-43.948	-73.512	1.00	0.00	A	C
ATOM	213	CD2	LEU A 137	45.952	-42.966	-75.330	1.00	0.00	A	C
ATOM	214	C	LEU A 137	48.329	-45.942	-74.833	1.00	0.00	A	C
ATOM	215	O	LEU A 137	48.127	-46.934	-74.137	1.00	0.00	A	O
ATOM	216	N	GLN A 138	48.353	-46.007	-76.178	1.00	0.00	A	N
ATOM	217	CA	GLN A 138	48.450	-47.280	-76.829	1.00	0.00	A	C
ATOM	218	CB	GLN A 138	48.270	-47.167	-78.353	1.00	0.00	A	C
ATOM	219	CG	GLN A 138	46.865	-46.718	-78.767	1.00	0.00	A	C
ATOM	220	CD	GLN A 138	46.811	-46.640	-80.288	1.00	0.00	A	C
ATOM	221	OE1	GLN A 138	47.840	-46.680	-80.964	1.00	0.00	A	O
ATOM	222	NE2	GLN A 138	45.579	-46.518	-80.848	1.00	0.00	A	N
ATOM	223	C	GLN A 138	49.805	-47.880	-76.566	1.00	0.00	A	C
ATOM	224	O	GLN A 138	49.905	-49.051	-76.199	1.00	0.00	A	O
ATOM	225	N	LYS A 139	50.892	-47.097	-76.753	1.00	0.00	A	N
ATOM	226	CA	LYS A 139	52.207	-47.643	-76.534	1.00	0.00	A	C
ATOM	227	CB	LYS A 139	53.356	-46.691	-76.887	1.00	0.00	A	C
ATOM	228	CG	LYS A 139	54.706	-47.304	-76.501	1.00	0.00	A	C
ATOM	229	CD	LYS A 139	55.919	-46.433	-76.820	1.00	0.00	A	C
ATOM	230	CE	LYS A 139	57.221	-46.980	-76.230	1.00	0.00	A	C
ATOM	231	NZ	LYS A 139	58.324	-46.024	-76.469	1.00	0.00	A	N
ATOM	232	C	LYS A 139	52.421	-47.948	-75.089	1.00	0.00	A	C
ATOM	233	O	LYS A 139	52.735	-49.079	-74.720	1.00	0.00	A	O
ATOM	234	N	SER A 140	52.236	-46.922	-74.240	1.00	0.00	A	N
ATOM	235	CA	SER A 140	52.472	-47.021	-72.829	1.00	0.00	A	C
ATOM	236	CB	SER A 140	52.456	-45.653	-72.125	1.00	0.00	A	C
ATOM	237	OG	SER A 140	51.184	-45.041	-72.267	1.00	0.00	A	O
ATOM	238	C	SER A 140	51.413	-47.875	-72.218	1.00	0.00	A	C
ATOM	239	O	SER A 140	51.569	-48.381	-71.110	1.00	0.00	A	O
ATOM	240	N	LYS A 141	50.295	-48.060	-72.935	1.00	0.00	A	N
ATOM	241	CA	LYS A 141	49.208	-48.839	-72.423	1.00	0.00	A	C
ATOM	242	CB	LYS A 141	49.589	-50.282	-72.041	1.00	0.00	A	C
ATOM	243	CG	LYS A 141	49.910	-51.200	-73.222	1.00	0.00	A	C
ATOM	244	CD	LYS A 141	48.762	-51.358	-74.216	1.00	0.00	A	C
ATOM	245	CE	LYS A 141	48.955	-52.528	-75.183	1.00	0.00	A	C
ATOM	246	NZ	LYS A 141	50.257	-52.416	-75.876	1.00	0.00	A	N

ATOM	247	C	LYS A 141	48.702	-48.184	-71.179	1.00	0.00	A	C
ATOM	248	O	LYS A 141	48.120	-48.844	-70.320	1.00	0.00	A	O
ATOM	249	N	LYS A 142	48.900	-46.857	-71.051	1.00	0.00	A	N
ATOM	250	CA	LYS A 142	48.397	-46.149	-69.911	1.00	0.00	A	C
ATOM	251	CB	LYS A 142	49.027	-44.760	-69.700	1.00	0.00	A	C
ATOM	252	CG	LYS A 142	50.426	-44.813	-69.079	1.00	0.00	A	C
ATOM	253	CD	LYS A 142	51.182	-43.484	-69.134	1.00	0.00	A	C
ATOM	254	CE	LYS A 142	52.379	-43.424	-68.182	1.00	0.00	A	C
ATOM	255	NZ	LYS A 142	53.322	-44.529	-68.468	1.00	0.00	A	N
ATOM	256	C	LYS A 142	46.932	-45.953	-70.124	1.00	0.00	A	C
ATOM	257	O	LYS A 142	46.451	-45.999	-71.254	1.00	0.00	A	O
ATOM	258	N	HSD A 143	46.170	-45.753	-69.028	1.00	0.00	A	N
ATOM	259	CA	HSD A 143	44.757	-45.577	-69.188	1.00	0.00	A	C
ATOM	260	CB	HSD A 143	43.899	-46.562	-68.369	1.00	0.00	A	C
ATOM	261	ND1	HSD A 143	43.316	-48.470	-69.947	1.00	0.00	A	N
ATOM	262	CG	HSD A 143	43.987	-47.982	-68.846	1.00	0.00	A	C
ATOM	263	CE1	HSD A 143	43.637	-49.782	-70.051	1.00	0.00	A	C
ATOM	264	NE2	HSD A 143	44.464	-50.173	-69.097	1.00	0.00	A	N
ATOM	265	CD2	HSD A 143	44.681	-49.036	-68.339	1.00	0.00	A	C
ATOM	266	C	HSD A 143	44.382	-44.198	-68.753	1.00	0.00	A	C
ATOM	267	O	HSD A 143	44.982	-43.611	-67.855	1.00	0.00	A	O
ATOM	268	N	LEU A 144	43.321	-43.666	-69.385	1.00	0.00	A	N
ATOM	269	CA	LEU A 144	42.808	-42.349	-69.152	1.00	0.00	A	C
ATOM	270	CB	LEU A 144	41.611	-42.043	-70.073	1.00	0.00	A	C
ATOM	271	CG	LEU A 144	41.126	-40.586	-70.022	1.00	0.00	A	C
ATOM	272	CD1	LEU A 144	42.227	-39.632	-70.509	1.00	0.00	A	C
ATOM	273	CD2	LEU A 144	39.815	-40.407	-70.804	1.00	0.00	A	C
ATOM	274	C	LEU A 144	42.346	-42.298	-67.720	1.00	0.00	A	C
ATOM	275	O	LEU A 144	42.186	-41.229	-67.136	1.00	0.00	A	O
ATOM	276	N	THR A 145	42.007	-43.483	-67.183	1.00	0.00	A	N
ATOM	277	CA	THR A 145	41.536	-43.766	-65.850	1.00	0.00	A	C
ATOM	278	CB	THR A 145	40.800	-45.068	-65.783	1.00	0.00	A	C
ATOM	279	OG1	THR A 145	41.657	-46.136	-66.155	1.00	0.00	A	O
ATOM	280	CG2	THR A 145	39.596	-44.992	-66.737	1.00	0.00	A	C
ATOM	281	C	THR A 145	42.617	-43.816	-64.806	1.00	0.00	A	C
ATOM	282	O	THR A 145	42.308	-43.741	-63.620	1.00	0.00	A	O
ATOM	283	N	ASP A 146	43.898	-43.998	-65.190	1.00	0.00	A	N
ATOM	284	CA	ASP A 146	44.942	-44.218	-64.218	1.00	0.00	A	C

ATOM	285	CB	ASP A 146	46.352	-44.270	-64.829	1.00	0.00	A	C
ATOM	286	CG	ASP A 146	46.481	-45.559	-65.627	1.00	0.00	A	C
ATOM	287	OD1	ASP A 146	45.564	-46.420	-65.520	1.00	0.00	A	O
ATOM	288	OD2	ASP A 146	47.502	-45.703	-66.350	1.00	0.00	A	O
ATOM	289	C	ASP A 146	44.945	-43.142	-63.175	1.00	0.00	A	C
ATOM	290	O	ASP A 146	44.438	-42.039	-63.376	1.00	0.00	A	O
ATOM	291	N	ASN A 147	45.541	-43.466	-62.010	1.00	0.00	A	N
ATOM	292	CA	ASN A 147	45.578	-42.606	-60.857	1.00	0.00	A	C
ATOM	293	CB	ASN A 147	46.328	-43.223	-59.664	1.00	0.00	A	C
ATOM	294	CG	ASN A 147	45.524	-44.410	-59.150	1.00	0.00	A	C
ATOM	295	OD1	ASN A 147	46.056	-45.509	-58.998	1.00	0.00	A	O
ATOM	296	ND2	ASN A 147	44.212	-44.189	-58.869	1.00	0.00	A	N
ATOM	297	C	ASN A 147	46.273	-41.329	-61.222	1.00	0.00	A	C
ATOM	298	O	ASN A 147	45.928	-40.261	-60.718	1.00	0.00	A	O
ATOM	299	N	GLU A 148	47.263	-41.420	-62.129	1.00	0.00	A	N
ATOM	300	CA	GLU A 148	48.090	-40.325	-62.569	1.00	0.00	A	C
ATOM	301	CB	GLU A 148	49.000	-40.728	-63.743	1.00	0.00	A	C
ATOM	302	CG	GLU A 148	49.924	-41.919	-63.507	1.00	0.00	A	C
ATOM	303	CD	GLU A 148	50.368	-42.397	-64.886	1.00	0.00	A	C
ATOM	304	OE1	GLU A 148	49.492	-42.492	-65.789	1.00	0.00	A	O
ATOM	305	OE2	GLU A 148	51.585	-42.671	-65.059	1.00	0.00	A	O
ATOM	306	C	GLU A 148	47.233	-39.269	-63.201	1.00	0.00	A	C
ATOM	307	O	GLU A 148	47.526	-38.077	-63.132	1.00	0.00	A	O
ATOM	308	N	PHE A 149	46.190	-39.722	-63.909	1.00	0.00	A	N
ATOM	309	CA	PHE A 149	45.267	-38.947	-64.686	1.00	0.00	A	C
ATOM	310	CB	PHE A 149	44.546	-39.769	-65.769	1.00	0.00	A	C
ATOM	311	CG	PHE A 149	45.588	-40.083	-66.792	1.00	0.00	A	C
ATOM	312	CD1	PHE A 149	45.996	-39.116	-67.684	1.00	0.00	A	C
ATOM	313	CE1	PHE A 149	46.954	-39.389	-68.634	1.00	0.00	A	C
ATOM	314	CZ	PHE A 149	47.521	-40.640	-68.702	1.00	0.00	A	C
ATOM	315	CD2	PHE A 149	46.160	-41.332	-66.870	1.00	0.00	A	C
ATOM	316	CE2	PHE A 149	47.119	-41.612	-67.818	1.00	0.00	A	C
ATOM	317	C	PHE A 149	44.265	-38.196	-63.856	1.00	0.00	A	C
ATOM	318	O	PHE A 149	43.505	-37.395	-64.397	1.00	0.00	A	O
ATOM	319	N	LYS A 150	44.128	-38.521	-62.558	1.00	0.00	A	N
ATOM	320	CA	LYS A 150	43.137	-37.856	-61.751	1.00	0.00	A	C
ATOM	321	CB	LYS A 150	42.359	-38.831	-60.859	1.00	0.00	A	C
ATOM	322	CG	LYS A 150	41.796	-40.057	-61.574	1.00	0.00	A	C

ATOM	323	CD	LYS	A	150	41.403	-41.154	-60.580	1.00	0.00	A	C
ATOM	324	CE	LYS	A	150	41.092	-42.508	-61.216	1.00	0.00	A	C
ATOM	325	NZ	LYS	A	150	40.939	-43.532	-60.158	1.00	0.00	A	N
ATOM	326	C	LYS	A	150	43.805	-36.931	-60.773	1.00	0.00	A	C
ATOM	327	O	LYS	A	150	44.971	-37.107	-60.420	1.00	0.00	A	O
ATOM	328	N	ASP	A	151	43.064	-35.893	-60.315	1.00	0.00	A	N
ATOM	329	CA	ASP	A	151	43.549	-35.008	-59.293	1.00	0.00	A	C
ATOM	330	CB	ASP	A	151	42.632	-33.787	-59.084	1.00	0.00	A	C
ATOM	331	CG	ASP	A	151	43.228	-32.828	-58.061	1.00	0.00	A	C
ATOM	332	OD1	ASP	A	151	44.323	-33.126	-57.513	1.00	0.00	A	O
ATOM	333	OD2	ASP	A	151	42.583	-31.774	-57.814	1.00	0.00	A	O
ATOM	334	C	ASP	A	151	43.561	-35.816	-58.035	1.00	0.00	A	C
ATOM	335	O	ASP	A	151	42.564	-36.431	-57.656	1.00	0.00	A	O
ATOM	336	N	PRO	A	152	44.668	-35.797	-57.360	1.00	0.00	A	N
ATOM	337	CD	PRO	A	152	45.933	-35.403	-57.958	1.00	0.00	A	C
ATOM	338	CA	PRO	A	152	44.849	-36.625	-56.204	1.00	0.00	A	C
ATOM	339	CB	PRO	A	152	46.332	-36.502	-55.837	1.00	0.00	A	C
ATOM	340	CG	PRO	A	152	46.885	-35.390	-56.757	1.00	0.00	A	C
ATOM	341	C	PRO	A	152	43.901	-36.387	-55.065	1.00	0.00	A	C
ATOM	342	O	PRO	A	152	43.670	-37.334	-54.311	1.00	0.00	A	O
ATOM	343	N	GLU	A	153	43.444	-35.138	-54.829	1.00	0.00	A	N
ATOM	344	CA	GLU	A	153	42.509	-34.908	-53.757	1.00	0.00	A	C
ATOM	345	CB	GLU	A	153	42.560	-33.472	-53.198	1.00	0.00	A	C
ATOM	346	CG	GLU	A	153	42.393	-32.368	-54.244	1.00	0.00	A	C
ATOM	347	CD	GLU	A	153	43.771	-31.780	-54.522	1.00	0.00	A	C
ATOM	348	OE1	GLU	A	153	44.718	-32.110	-53.759	1.00	0.00	A	O
ATOM	349	OE2	GLU	A	153	43.893	-30.989	-55.494	1.00	0.00	A	O
ATOM	350	C	GLU	A	153	41.070	-35.198	-54.114	1.00	0.00	A	C
ATOM	351	O	GLU	A	153	40.367	-35.886	-53.374	1.00	0.00	A	O
ATOM	352	N	THR	A	154	40.599	-34.597	-55.233	1.00	0.00	A	N
ATOM	353	CA	THR	A	154	39.237	-34.644	-55.714	1.00	0.00	A	C
ATOM	354	CB	THR	A	154	38.913	-33.490	-56.616	1.00	0.00	A	C
ATOM	355	OG1	THR	A	154	39.738	-33.520	-57.771	1.00	0.00	A	O
ATOM	356	CG2	THR	A	154	39.140	-32.184	-55.841	1.00	0.00	A	C
ATOM	357	C	THR	A	154	38.867	-35.898	-56.455	1.00	0.00	A	C
ATOM	358	O	THR	A	154	37.764	-36.422	-56.287	1.00	0.00	A	O
ATOM	359	N	GLY	A	155	39.769	-36.414	-57.313	1.00	0.00	A	N
ATOM	360	CA	GLY	A	155	39.440	-37.563	-58.114	1.00	0.00	A	C

ATOM	361	C	GLY A 155	38.885	-37.103	-59.435	1.00	0.00	A	C
ATOM	362	O	GLY A 155	38.288	-37.887	-60.172	1.00	0.00	A	O
ATOM	363	N	LYS A 156	39.076	-35.811	-59.767	1.00	0.00	A	N
ATOM	364	CA	LYS A 156	38.608	-35.223	-60.993	1.00	0.00	A	C
ATOM	365	CB	LYS A 156	38.793	-33.695	-61.002	1.00	0.00	A	C
ATOM	366	CG	LYS A 156	38.246	-32.977	-62.236	1.00	0.00	A	C
ATOM	367	CD	LYS A 156	38.251	-31.454	-62.087	1.00	0.00	A	C
ATOM	368	CE	LYS A 156	39.559	-30.914	-61.497	1.00	0.00	A	C
ATOM	369	NZ	LYS A 156	39.503	-29.440	-61.377	1.00	0.00	A	N
ATOM	370	C	LYS A 156	39.385	-35.795	-62.146	1.00	0.00	A	C
ATOM	371	O	LYS A 156	40.577	-36.083	-62.034	1.00	0.00	A	O
ATOM	372	N	THR A 157	38.701	-35.975	-63.296	1.00	0.00	A	N
ATOM	373	CA	THR A 157	39.310	-36.512	-64.482	1.00	0.00	A	C
ATOM	374	CB	THR A 157	38.638	-37.756	-64.980	1.00	0.00	A	C
ATOM	375	OG1	THR A 157	37.293	-37.478	-65.335	1.00	0.00	A	O
ATOM	376	CG2	THR A 157	38.685	-38.811	-63.860	1.00	0.00	A	C
ATOM	377	C	THR A 157	39.183	-35.464	-65.540	1.00	0.00	A	C
ATOM	378	O	THR A 157	38.542	-34.436	-65.333	1.00	0.00	A	O
ATOM	379	N	CYS A 158	39.808	-35.697	-66.709	1.00	0.00	A	N
ATOM	380	CA	CYS A 158	39.797	-34.731	-67.769	1.00	0.00	A	C
ATOM	381	CB	CYS A 158	40.630	-35.181	-68.980	1.00	0.00	A	C
ATOM	382	SG	CYS A 158	40.079	-36.779	-69.645	1.00	0.00	A	S
ATOM	383	C	CYS A 158	38.386	-34.502	-68.210	1.00	0.00	A	C
ATOM	384	O	CYS A 158	37.992	-33.368	-68.481	1.00	0.00	A	O
ATOM	385	N	LEU A 159	37.570	-35.567	-68.279	1.00	0.00	A	N
ATOM	386	CA	LEU A 159	36.217	-35.385	-68.714	1.00	0.00	A	C
ATOM	387	CB	LEU A 159	35.394	-36.680	-68.755	1.00	0.00	A	C
ATOM	388	CG	LEU A 159	33.959	-36.425	-69.249	1.00	0.00	A	C
ATOM	389	CD1	LEU A 159	33.939	-36.096	-70.749	1.00	0.00	A	C
ATOM	390	CD2	LEU A 159	33.008	-37.561	-68.873	1.00	0.00	A	C
ATOM	391	C	LEU A 159	35.533	-34.466	-67.743	1.00	0.00	A	C
ATOM	392	O	LEU A 159	34.728	-33.625	-68.138	1.00	0.00	A	O
ATOM	393	N	LEU A 160	35.818	-34.628	-66.438	1.00	0.00	A	N
ATOM	394	CA	LEU A 160	35.215	-33.789	-65.439	1.00	0.00	A	C
ATOM	395	CB	LEU A 160	35.526	-34.266	-64.009	1.00	0.00	A	C
ATOM	396	CG	LEU A 160	34.825	-35.595	-63.651	1.00	0.00	A	C
ATOM	397	CD1	LEU A 160	35.151	-36.044	-62.218	1.00	0.00	A	C
ATOM	398	CD2	LEU A 160	33.308	-35.499	-63.887	1.00	0.00	A	C

ATOM	399	C	LEU A 160	35.693	-32.374	-65.606	1.00	0.00	A	C
ATOM	400	O	LEU A 160	34.901	-31.440	-65.506	1.00	0.00	A	O
ATOM	401	N	LYS A 161	37.001	-32.164	-65.876	1.00	0.00	A	N
ATOM	402	CA	LYS A 161	37.456	-30.807	-66.035	1.00	0.00	A	C
ATOM	403	CB	LYS A 161	38.963	-30.619	-66.277	1.00	0.00	A	C
ATOM	404	CG	LYS A 161	39.284	-29.125	-66.419	1.00	0.00	A	C
ATOM	405	CD	LYS A 161	40.751	-28.735	-66.253	1.00	0.00	A	C
ATOM	406	CE	LYS A 161	40.993	-27.232	-66.424	1.00	0.00	A	C
ATOM	407	NZ	LYS A 161	42.397	-26.900	-66.099	1.00	0.00	A	N
ATOM	408	C	LYS A 161	36.741	-30.220	-67.206	1.00	0.00	A	C
ATOM	409	O	LYS A 161	36.369	-29.048	-67.197	1.00	0.00	A	O
ATOM	410	N	ALA A 162	36.526	-31.040	-68.246	1.00	0.00	A	N
ATOM	411	CA	ALA A 162	35.850	-30.600	-69.429	1.00	0.00	A	C
ATOM	412	CB	ALA A 162	35.714	-31.723	-70.476	1.00	0.00	A	C
ATOM	413	C	ALA A 162	34.472	-30.171	-69.034	1.00	0.00	A	C
ATOM	414	O	ALA A 162	33.939	-29.195	-69.561	1.00	0.00	A	O
ATOM	415	N	MET A 163	33.856	-30.899	-68.083	1.00	0.00	A	N
ATOM	416	CA	MET A 163	32.521	-30.596	-67.659	1.00	0.00	A	C
ATOM	417	CB	MET A 163	31.959	-31.640	-66.679	1.00	0.00	A	C
ATOM	418	CG	MET A 163	31.725	-32.993	-67.356	1.00	0.00	A	C
ATOM	419	SD	MET A 163	30.451	-32.946	-68.653	1.00	0.00	A	S
ATOM	420	CE	MET A 163	30.852	-34.573	-69.352	1.00	0.00	A	C
ATOM	421	C	MET A 163	32.483	-29.241	-67.021	1.00	0.00	A	C
ATOM	422	O	MET A 163	31.501	-28.514	-67.170	1.00	0.00	A	O
ATOM	423	N	LEU A 164	33.514	-28.888	-66.232	1.00	0.00	A	N
ATOM	424	CA	LEU A 164	33.569	-27.583	-65.632	1.00	0.00	A	C
ATOM	425	CB	LEU A 164	34.590	-27.470	-64.490	1.00	0.00	A	C
ATOM	426	CG	LEU A 164	34.176	-28.253	-63.228	1.00	0.00	A	C
ATOM	427	CD1	LEU A 164	32.844	-27.732	-62.665	1.00	0.00	A	C
ATOM	428	CD2	LEU A 164	34.163	-29.768	-63.464	1.00	0.00	A	C
ATOM	429	C	LEU A 164	33.888	-26.540	-66.659	1.00	0.00	A	C
ATOM	430	O	LEU A 164	33.343	-25.437	-66.626	1.00	0.00	A	O
ATOM	431	N	ASN A 165	34.792	-26.852	-67.608	1.00	0.00	A	N
ATOM	432	CA	ASN A 165	35.181	-25.839	-68.546	1.00	0.00	A	C
ATOM	433	CB	ASN A 165	36.621	-26.017	-69.065	1.00	0.00	A	C
ATOM	434	CG	ASN A 165	37.619	-25.761	-67.937	1.00	0.00	A	C
ATOM	435	OD1	ASN A 165	38.778	-25.446	-68.201	1.00	0.00	A	O
ATOM	436	ND2	ASN A 165	37.180	-25.900	-66.658	1.00	0.00	A	N

ATOM	437	C	ASN A 165	34.282	-25.911	-69.736	1.00	0.00	A	C
ATOM	438	O	ASN A 165	34.685	-26.365	-70.807	1.00	0.00	A	O
ATOM	439	N	LEU A 166	33.037	-25.422	-69.594	1.00	0.00	A	N
ATOM	440	CA	LEU A 166	32.149	-25.440	-70.717	1.00	0.00	A	C
ATOM	441	CB	LEU A 166	30.709	-25.869	-70.385	1.00	0.00	A	C
ATOM	442	CG	LEU A 166	30.572	-27.353	-70.006	1.00	0.00	A	C
ATOM	443	CD1	LEU A 166	29.112	-27.710	-69.690	1.00	0.00	A	C
ATOM	444	CD2	LEU A 166	31.174	-28.261	-71.091	1.00	0.00	A	C
ATOM	445	C	LEU A 166	32.072	-24.061	-71.274	1.00	0.00	A	C
ATOM	446	O	LEU A 166	32.213	-23.077	-70.551	1.00	0.00	A	O
ATOM	447	N	HSD A 167	31.904	-23.974	-72.607	1.00	0.00	A	N
ATOM	448	CA	HSD A 167	31.690	-22.712	-73.247	1.00	0.00	A	C
ATOM	449	CB	HSD A 167	32.826	-22.278	-74.194	1.00	0.00	A	C
ATOM	450	ND1	HSD A 167	33.449	-24.394	-75.461	1.00	0.00	A	N
ATOM	451	CG	HSD A 167	32.958	-23.108	-75.437	1.00	0.00	A	C
ATOM	452	CE1	HSD A 167	33.405	-24.806	-76.753	1.00	0.00	A	C
ATOM	453	NE2	HSD A 167	32.921	-23.877	-77.558	1.00	0.00	A	N
ATOM	454	CD2	HSD A 167	32.640	-22.808	-76.728	1.00	0.00	A	C
ATOM	455	C	HSD A 167	30.433	-22.895	-74.041	1.00	0.00	A	C
ATOM	456	O	HSD A 167	30.332	-23.800	-74.871	1.00	0.00	A	O
ATOM	457	N	ASP A 168	29.420	-22.049	-73.780	1.00	0.00	A	N
ATOM	458	CA	ASP A 168	28.168	-22.156	-74.472	1.00	0.00	A	C
ATOM	459	CB	ASP A 168	28.254	-21.795	-75.968	1.00	0.00	A	C
ATOM	460	CG	ASP A 168	28.194	-20.278	-76.089	1.00	0.00	A	C
ATOM	461	OD1	ASP A 168	27.069	-19.727	-75.928	1.00	0.00	A	O
ATOM	462	OD2	ASP A 168	29.256	-19.646	-76.326	1.00	0.00	A	O
ATOM	463	C	ASP A 168	27.617	-23.539	-74.326	1.00	0.00	A	C
ATOM	464	O	ASP A 168	26.981	-24.057	-75.244	1.00	0.00	A	O
ATOM	465	N	GLY A 169	27.837	-24.176	-73.160	1.00	0.00	A	N
ATOM	466	CA	GLY A 169	27.277	-25.470	-72.892	1.00	0.00	A	C
ATOM	467	C	GLY A 169	27.838	-26.471	-73.854	1.00	0.00	A	C
ATOM	468	O	GLY A 169	27.185	-27.472	-74.148	1.00	0.00	A	O
ATOM	469	N	GLN A 170	29.067	-26.239	-74.364	1.00	0.00	A	N
ATOM	470	CA	GLN A 170	29.610	-27.146	-75.340	1.00	0.00	A	C
ATOM	471	CB	GLN A 170	29.540	-26.599	-76.774	1.00	0.00	A	C
ATOM	472	CG	GLN A 170	28.114	-26.400	-77.285	1.00	0.00	A	C
ATOM	473	CD	GLN A 170	28.193	-25.747	-78.659	1.00	0.00	A	C
ATOM	474	OE1	GLN A 170	27.664	-24.658	-78.872	1.00	0.00	A	O

ATOM	475	NE2	GLN	A	170	28.875	-26.427	-79.617	1.00	0.00	A	N
ATOM	476	C	GLN	A	170	31.059	-27.421	-75.075	1.00	0.00	A	C
ATOM	477	O	GLN	A	170	31.794	-26.574	-74.566	1.00	0.00	A	O
ATOM	478	N	ASN	A	171	31.488	-28.658	-75.406	1.00	0.00	A	N
ATOM	479	CA	ASN	A	171	32.864	-29.057	-75.306	1.00	0.00	A	C
ATOM	480	CB	ASN	A	171	33.266	-29.371	-73.851	1.00	0.00	A	C
ATOM	481	CG	ASN	A	171	34.780	-29.423	-73.744	1.00	0.00	A	C
ATOM	482	OD1	ASN	A	171	35.482	-29.611	-74.735	1.00	0.00	A	O
ATOM	483	ND2	ASN	A	171	35.298	-29.254	-72.498	1.00	0.00	A	N
ATOM	484	C	ASN	A	171	32.993	-30.322	-76.109	1.00	0.00	A	C
ATOM	485	O	ASN	A	171	32.353	-31.328	-75.805	1.00	0.00	A	O
ATOM	486	N	THR	A	172	33.785	-30.269	-77.198	1.00	0.00	A	N
ATOM	487	CA	THR	A	172	34.091	-31.339	-78.111	1.00	0.00	A	C
ATOM	488	CB	THR	A	172	34.571	-30.824	-79.431	1.00	0.00	A	C
ATOM	489	OG1	THR	A	172	35.752	-30.055	-79.258	1.00	0.00	A	O
ATOM	490	CG2	THR	A	172	33.459	-29.951	-80.039	1.00	0.00	A	C
ATOM	491	C	THR	A	172	35.142	-32.240	-77.543	1.00	0.00	A	C
ATOM	492	O	THR	A	172	35.293	-33.386	-77.965	1.00	0.00	A	O
ATOM	493	N	THR	A	173	35.945	-31.708	-76.607	1.00	0.00	A	N
ATOM	494	CA	THR	A	173	36.991	-32.453	-75.981	1.00	0.00	A	C
ATOM	495	CB	THR	A	173	37.684	-31.663	-74.906	1.00	0.00	A	C
ATOM	496	OG1	THR	A	173	38.289	-30.500	-75.456	1.00	0.00	A	O
ATOM	497	CG2	THR	A	173	38.747	-32.546	-74.236	1.00	0.00	A	C
ATOM	498	C	THR	A	173	36.331	-33.629	-75.344	1.00	0.00	A	C
ATOM	499	O	THR	A	173	36.913	-34.711	-75.275	1.00	0.00	A	O
ATOM	500	N	ILE	A	174	35.096	-33.445	-74.839	1.00	0.00	A	N
ATOM	501	CA	ILE	A	174	34.403	-34.535	-74.219	1.00	0.00	A	C
ATOM	502	CB	ILE	A	174	33.079	-34.149	-73.616	1.00	0.00	A	C
ATOM	503	CG2	ILE	A	174	32.371	-35.435	-73.159	1.00	0.00	A	C
ATOM	504	CG1	ILE	A	174	33.261	-33.120	-72.488	1.00	0.00	A	C
ATOM	505	CD	ILE	A	174	31.948	-32.489	-72.029	1.00	0.00	A	C
ATOM	506	C	ILE	A	174	34.155	-35.611	-75.238	1.00	0.00	A	C
ATOM	507	O	ILE	A	174	34.463	-36.772	-74.976	1.00	0.00	A	O
ATOM	508	N	PRO	A	175	33.648	-35.297	-76.407	1.00	0.00	A	N
ATOM	509	CD	PRO	A	175	32.846	-34.105	-76.629	1.00	0.00	A	C
ATOM	510	CA	PRO	A	175	33.381	-36.318	-77.380	1.00	0.00	A	C
ATOM	511	CB	PRO	A	175	32.675	-35.616	-78.535	1.00	0.00	A	C
ATOM	512	CG	PRO	A	175	31.969	-34.427	-77.853	1.00	0.00	A	C

ATOM	513	C	PRO A 175	34.626	-37.047	-77.764	1.00	0.00	A	C
ATOM	514	O	PRO A 175	34.563	-38.254	-77.991	1.00	0.00	A	O
ATOM	515	N	LEU A 176	35.754	-36.327	-77.876	1.00	0.00	A	N
ATOM	516	CA	LEU A 176	36.998	-36.943	-78.225	1.00	0.00	A	C
ATOM	517	CB	LEU A 176	38.063	-35.893	-78.607	1.00	0.00	A	C
ATOM	518	CG	LEU A 176	39.383	-36.445	-79.192	1.00	0.00	A	C
ATOM	519	CD1	LEU A 176	40.269	-35.295	-79.692	1.00	0.00	A	C
ATOM	520	CD2	LEU A 176	40.144	-37.352	-78.211	1.00	0.00	A	C
ATOM	521	C	LEU A 176	37.473	-37.762	-77.063	1.00	0.00	A	C
ATOM	522	O	LEU A 176	37.989	-38.865	-77.238	1.00	0.00	A	O
ATOM	523	N	LEU A 177	37.306	-37.238	-75.834	1.00	0.00	A	N
ATOM	524	CA	LEU A 177	37.811	-37.902	-74.665	1.00	0.00	A	C
ATOM	525	CB	LEU A 177	37.620	-37.078	-73.385	1.00	0.00	A	C
ATOM	526	CG	LEU A 177	38.517	-35.828	-73.358	1.00	0.00	A	C
ATOM	527	CD1	LEU A 177	38.318	-35.024	-72.076	1.00	0.00	A	C
ATOM	528	CD2	LEU A 177	39.992	-36.189	-73.590	1.00	0.00	A	C
ATOM	529	C	LEU A 177	37.135	-39.223	-74.492	1.00	0.00	A	C
ATOM	530	O	LEU A 177	37.785	-40.228	-74.209	1.00	0.00	A	O
ATOM	531	N	LEU A 178	35.805	-39.255	-74.672	1.00	0.00	A	N
ATOM	532	CA	LEU A 178	35.029	-40.452	-74.531	1.00	0.00	A	C
ATOM	533	CB	LEU A 178	33.550	-40.154	-74.792	1.00	0.00	A	C
ATOM	534	CG	LEU A 178	32.962	-39.150	-73.788	1.00	0.00	A	C
ATOM	535	CD1	LEU A 178	31.565	-38.687	-74.219	1.00	0.00	A	C
ATOM	536	CD2	LEU A 178	32.970	-39.723	-72.360	1.00	0.00	A	C
ATOM	537	C	LEU A 178	35.471	-41.436	-75.572	1.00	0.00	A	C
ATOM	538	O	LEU A 178	35.694	-42.613	-75.288	1.00	0.00	A	O
ATOM	539	N	GLU A 179	35.663	-40.952	-76.811	1.00	0.00	A	N
ATOM	540	CA	GLU A 179	35.996	-41.796	-77.923	1.00	0.00	A	C
ATOM	541	CB	GLU A 179	36.291	-40.972	-79.186	1.00	0.00	A	C
ATOM	542	CG	GLU A 179	36.696	-41.805	-80.402	1.00	0.00	A	C
ATOM	543	CD	GLU A 179	37.148	-40.841	-81.491	1.00	0.00	A	C
ATOM	544	OE1	GLU A 179	36.499	-39.771	-81.644	1.00	0.00	A	O
ATOM	545	OE2	GLU A 179	38.155	-41.157	-82.176	1.00	0.00	A	O
ATOM	546	C	GLU A 179	37.250	-42.543	-77.597	1.00	0.00	A	C
ATOM	547	O	GLU A 179	37.360	-43.740	-77.854	1.00	0.00	A	O
ATOM	548	N	ILE A 180	38.233	-41.843	-77.003	1.00	0.00	A	N
ATOM	549	CA	ILE A 180	39.488	-42.451	-76.685	1.00	0.00	A	C
ATOM	550	CB	ILE A 180	40.494	-41.491	-76.123	1.00	0.00	A	C

ATOM	551	CG2 ILE A 180	41.705	-42.303	-75.635	1.00	0.00	A	C
ATOM	552	CG1 ILE A 180	40.854	-40.435	-77.179	1.00	0.00	A	C
ATOM	553	CD ILE A 180	41.711	-39.295	-76.638	1.00	0.00	A	C
ATOM	554	C ILE A 180	39.276	-43.523	-75.667	1.00	0.00	A	C
ATOM	555	O ILE A 180	39.928	-44.565	-75.712	1.00	0.00	A	O
ATOM	556	N ALA A 181	38.367	-43.274	-74.709	1.00	0.00	A	N
ATOM	557	CA ALA A 181	38.119	-44.167	-73.620	1.00	0.00	A	C
ATOM	558	CB ALA A 181	37.077	-43.628	-72.624	1.00	0.00	A	C
ATOM	559	C ALA A 181	37.613	-45.480	-74.109	1.00	0.00	A	C
ATOM	560	O ALA A 181	37.957	-46.494	-73.520	1.00	0.00	A	O
ATOM	561	N ARG A 182	36.740	-45.512	-75.133	1.00	0.00	A	N
ATOM	562	CA ARG A 182	36.202	-46.754	-75.628	1.00	0.00	A	C
ATOM	563	CB ARG A 182	34.957	-46.579	-76.523	1.00	0.00	A	C
ATOM	564	CG ARG A 182	35.174	-45.698	-77.752	1.00	0.00	A	C
ATOM	565	CD ARG A 182	33.930	-45.542	-78.635	1.00	0.00	A	C
ATOM	566	NE ARG A 182	32.898	-44.775	-77.878	1.00	0.00	A	N
ATOM	567	CZ ARG A 182	31.809	-45.421	-77.368	1.00	0.00	A	C
ATOM	568	NH1 ARG A 182	31.655	-46.761	-77.573	1.00	0.00	A	N
ATOM	569	NH2 ARG A 182	30.866	-44.729	-76.665	1.00	0.00	A	N
ATOM	570	C ARG A 182	37.235	-47.554	-76.363	1.00	0.00	A	C
ATOM	571	O ARG A 182	37.256	-48.782	-76.278	1.00	0.00	A	O
ATOM	572	N GLN A 183	38.129	-46.883	-77.113	1.00	0.00	A	N
ATOM	573	CA GLN A 183	39.107	-47.601	-77.874	1.00	0.00	A	C
ATOM	574	CB GLN A 183	39.963	-46.685	-78.770	1.00	0.00	A	C
ATOM	575	CG GLN A 183	39.099	-45.997	-79.836	1.00	0.00	A	C
ATOM	576	CD GLN A 183	39.984	-45.293	-80.849	1.00	0.00	A	C
ATOM	577	OE1 GLN A 183	39.845	-44.092	-81.085	1.00	0.00	A	O
ATOM	578	NE2 GLN A 183	40.899	-46.068	-81.491	1.00	0.00	A	N
ATOM	579	C GLN A 183	39.955	-48.358	-76.901	1.00	0.00	A	C
ATOM	580	O GLN A 183	40.468	-49.435	-77.206	1.00	0.00	A	O
ATOM	581	N THR A 184	40.192	-47.757	-75.724	1.00	0.00	A	N
ATOM	582	CA THR A 184	40.853	-48.378	-74.613	1.00	0.00	A	C
ATOM	583	CB THR A 184	41.447	-47.377	-73.674	1.00	0.00	A	C
ATOM	584	OG1 THR A 184	42.334	-46.523	-74.382	1.00	0.00	A	O
ATOM	585	CG2 THR A 184	42.221	-48.138	-72.583	1.00	0.00	A	C
ATOM	586	C THR A 184	39.872	-49.233	-73.856	1.00	0.00	A	C
ATOM	587	O THR A 184	40.254	-50.114	-73.092	1.00	0.00	A	O
ATOM	588	N ASP A 185	38.566	-48.958	-74.015	1.00	0.00	A	N

ATOM	589	CA	ASP A 185	37.517	-49.637	-73.303	1.00	0.00	A	C
ATOM	590	CB	ASP A 185	37.624	-51.169	-73.404	1.00	0.00	A	C
ATOM	591	CG	ASP A 185	37.279	-51.579	-74.830	1.00	0.00	A	C
ATOM	592	OD1	ASP A 185	36.324	-50.988	-75.403	1.00	0.00	A	O
ATOM	593	OD2	ASP A 185	37.970	-52.484	-75.368	1.00	0.00	A	O
ATOM	594	C	ASP A 185	37.557	-49.269	-71.850	1.00	0.00	A	C
ATOM	595	O	ASP A 185	36.987	-49.961	-71.010	1.00	0.00	A	O
ATOM	596	N	SER A 186	38.210	-48.139	-71.522	1.00	0.00	A	N
ATOM	597	CA	SER A 186	38.187	-47.572	-70.203	1.00	0.00	A	C
ATOM	598	CB	SER A 186	39.239	-46.467	-70.012	1.00	0.00	A	C
ATOM	599	OG	SER A 186	40.544	-47.010	-70.158	1.00	0.00	A	O
ATOM	600	C	SER A 186	36.850	-46.910	-70.071	1.00	0.00	A	C
ATOM	601	O	SER A 186	36.519	-46.334	-69.034	1.00	0.00	A	O
ATOM	602	N	LEU A 187	36.020	-47.040	-71.118	1.00	0.00	A	N
ATOM	603	CA	LEU A 187	34.856	-46.222	-71.267	1.00	0.00	A	C
ATOM	604	CB	LEU A 187	34.039	-46.534	-72.532	1.00	0.00	A	C
ATOM	605	CG	LEU A 187	32.885	-45.531	-72.721	1.00	0.00	A	C
ATOM	606	CD1	LEU A 187	33.425	-44.105	-72.903	1.00	0.00	A	C
ATOM	607	CD2	LEU A 187	31.941	-45.948	-73.854	1.00	0.00	A	C
ATOM	608	C	LEU A 187	33.919	-46.252	-70.094	1.00	0.00	A	C
ATOM	609	O	LEU A 187	33.522	-45.186	-69.630	1.00	0.00	A	O
ATOM	610	N	LYS A 188	33.539	-47.425	-69.557	1.00	0.00	A	N
ATOM	611	CA	LYS A 188	32.547	-47.404	-68.508	1.00	0.00	A	C
ATOM	612	CB	LYS A 188	32.134	-48.807	-68.036	1.00	0.00	A	C
ATOM	613	CG	LYS A 188	31.123	-48.758	-66.891	1.00	0.00	A	C
ATOM	614	CD	LYS A 188	30.478	-50.101	-66.556	1.00	0.00	A	C
ATOM	615	CE	LYS A 188	29.120	-50.312	-67.222	1.00	0.00	A	C
ATOM	616	NZ	LYS A 188	28.429	-51.454	-66.586	1.00	0.00	A	N
ATOM	617	C	LYS A 188	33.031	-46.679	-67.285	1.00	0.00	A	C
ATOM	618	O	LYS A 188	32.353	-45.778	-66.785	1.00	0.00	A	O
ATOM	619	N	GLU A 189	34.226	-47.044	-66.782	1.00	0.00	A	N
ATOM	620	CA	GLU A 189	34.738	-46.490	-65.558	1.00	0.00	A	C
ATOM	621	CB	GLU A 189	36.000	-47.203	-65.019	1.00	0.00	A	C
ATOM	622	CG	GLU A 189	37.208	-47.205	-65.958	1.00	0.00	A	C
ATOM	623	CD	GLU A 189	37.248	-48.547	-66.676	1.00	0.00	A	C
ATOM	624	OE1	GLU A 189	36.268	-48.862	-67.404	1.00	0.00	A	O
ATOM	625	OE2	GLU A 189	38.258	-49.279	-66.505	1.00	0.00	A	O
ATOM	626	C	GLU A 189	35.069	-45.045	-65.747	1.00	0.00	A	C

ATOM	627	O	GLU A 189	35.045	-44.271	-64.791	1.00	0.00	A	O
ATOM	628	N	LEU A 190	35.459	-44.652	-66.976	1.00	0.00	A	N
ATOM	629	CA	LEU A 190	35.819	-43.286	-67.225	1.00	0.00	A	C
ATOM	630	CB	LEU A 190	36.342	-43.070	-68.654	1.00	0.00	A	C
ATOM	631	CG	LEU A 190	36.716	-41.605	-68.944	1.00	0.00	A	C
ATOM	632	CD1	LEU A 190	37.883	-41.134	-68.066	1.00	0.00	A	C
ATOM	633	CD2	LEU A 190	36.968	-41.384	-70.443	1.00	0.00	A	C
ATOM	634	C	LEU A 190	34.635	-42.383	-67.054	1.00	0.00	A	C
ATOM	635	O	LEU A 190	34.689	-41.391	-66.327	1.00	0.00	A	O
ATOM	636	N	VAL A 191	33.516	-42.733	-67.708	1.00	0.00	A	N
ATOM	637	CA	VAL A 191	32.309	-41.961	-67.677	1.00	0.00	A	C
ATOM	638	CB	VAL A 191	31.273	-42.468	-68.643	1.00	0.00	A	C
ATOM	639	CG1	VAL A 191	29.925	-41.805	-68.331	1.00	0.00	A	C
ATOM	640	CG2	VAL A 191	31.753	-42.141	-70.068	1.00	0.00	A	C
ATOM	641	C	VAL A 191	31.741	-41.968	-66.287	1.00	0.00	A	C
ATOM	642	O	VAL A 191	30.993	-41.060	-65.924	1.00	0.00	A	O
ATOM	643	N	ASN A 192	32.028	-43.009	-65.479	1.00	0.00	A	N
ATOM	644	CA	ASN A 192	31.408	-43.028	-64.181	1.00	0.00	A	C
ATOM	645	CB	ASN A 192	30.760	-44.382	-63.854	1.00	0.00	A	C
ATOM	646	CG	ASN A 192	29.572	-44.590	-64.781	1.00	0.00	A	C
ATOM	647	OD1	ASN A 192	28.867	-43.650	-65.143	1.00	0.00	A	O
ATOM	648	ND2	ASN A 192	29.344	-45.870	-65.180	1.00	0.00	A	N
ATOM	649	C	ASN A 192	32.368	-42.754	-63.051	1.00	0.00	A	C
ATOM	650	O	ASN A 192	32.107	-43.181	-61.927	1.00	0.00	A	O
ATOM	651	N	ALA A 193	33.467	-42.004	-63.270	1.00	0.00	A	N
ATOM	652	CA	ALA A 193	34.352	-41.734	-62.163	1.00	0.00	A	C
ATOM	653	CB	ALA A 193	35.733	-41.210	-62.592	1.00	0.00	A	C
ATOM	654	C	ALA A 193	33.713	-40.679	-61.308	1.00	0.00	A	C
ATOM	655	O	ALA A 193	33.034	-39.794	-61.821	1.00	0.00	A	O
ATOM	656	N	SER A 194	33.940	-40.726	-59.975	1.00	0.00	A	N
ATOM	657	CA	SER A 194	33.280	-39.789	-59.103	1.00	0.00	A	C
ATOM	658	CB	SER A 194	32.225	-40.453	-58.199	1.00	0.00	A	C
ATOM	659	OG	SER A 194	32.829	-41.443	-57.379	1.00	0.00	A	O
ATOM	660	C	SER A 194	34.267	-39.080	-58.217	1.00	0.00	A	C
ATOM	661	O	SER A 194	35.407	-39.511	-58.046	1.00	0.00	A	O
ATOM	662	N	TYR A 195	33.829	-37.934	-57.644	1.00	0.00	A	N
ATOM	663	CA	TYR A 195	34.628	-37.122	-56.758	1.00	0.00	A	C
ATOM	664	CB	TYR A 195	34.018	-35.738	-56.450	1.00	0.00	A	C

ATOM	665	CG	TYR	A	195	34.182	-34.822	-57.615	1.00	0.00	A	C
ATOM	666	CD1	TYR	A	195	33.341	-34.874	-58.702	1.00	0.00	A	C
ATOM	667	CE1	TYR	A	195	33.516	-34.011	-59.759	1.00	0.00	A	C
ATOM	668	CZ	TYR	A	195	34.530	-33.082	-59.734	1.00	0.00	A	C
ATOM	669	OH	TYR	A	195	34.712	-32.195	-60.817	1.00	0.00	A	O
ATOM	670	CD2	TYR	A	195	35.189	-33.883	-57.598	1.00	0.00	A	C
ATOM	671	CE2	TYR	A	195	35.367	-33.019	-58.650	1.00	0.00	A	C
ATOM	672	C	TYR	A	195	34.765	-37.818	-55.432	1.00	0.00	A	C
ATOM	673	O	TYR	A	195	33.815	-38.404	-54.924	1.00	0.00	A	O
ATOM	674	N	THR	A	196	36.006	-37.874	-54.919	1.00	0.00	A	N
ATOM	675	CA	THR	A	196	36.405	-38.439	-53.652	1.00	0.00	A	C
ATOM	676	CB	THR	A	196	37.799	-38.983	-53.708	1.00	0.00	A	C
ATOM	677	OG1	THR	A	196	38.727	-37.937	-53.954	1.00	0.00	A	O
ATOM	678	CG2	THR	A	196	37.863	-40.014	-54.847	1.00	0.00	A	C
ATOM	679	C	THR	A	196	36.326	-37.502	-52.470	1.00	0.00	A	C
ATOM	680	O	THR	A	196	36.154	-37.958	-51.341	1.00	0.00	A	O
ATOM	681	N	ASP	A	197	36.504	-36.180	-52.676	1.00	0.00	A	N
ATOM	682	CA	ASP	A	197	36.595	-35.266	-51.566	1.00	0.00	A	C
ATOM	683	CB	ASP	A	197	36.999	-33.836	-51.968	1.00	0.00	A	C
ATOM	684	CG	ASP	A	197	35.927	-33.267	-52.886	1.00	0.00	A	C
ATOM	685	OD1	ASP	A	197	35.344	-34.052	-53.680	1.00	0.00	A	O
ATOM	686	OD2	ASP	A	197	35.677	-32.035	-52.800	1.00	0.00	A	O
ATOM	687	C	ASP	A	197	35.273	-35.204	-50.869	1.00	0.00	A	C
ATOM	688	O	ASP	A	197	34.236	-35.541	-51.433	1.00	0.00	A	O
ATOM	689	N	SER	A	198	35.282	-34.765	-49.596	1.00	0.00	A	N
ATOM	690	CA	SER	A	198	34.081	-34.764	-48.814	1.00	0.00	A	C
ATOM	691	CB	SER	A	198	34.309	-34.320	-47.358	1.00	0.00	A	C
ATOM	692	OG	SER	A	198	34.725	-32.965	-47.315	1.00	0.00	A	O
ATOM	693	C	SER	A	198	33.071	-33.834	-49.411	1.00	0.00	A	C
ATOM	694	O	SER	A	198	31.867	-34.045	-49.265	1.00	0.00	A	O
ATOM	695	N	TYR	A	199	33.522	-32.751	-50.067	1.00	0.00	A	N
ATOM	696	CA	TYR	A	199	32.555	-31.798	-50.539	1.00	0.00	A	C
ATOM	697	CB	TYR	A	199	33.273	-30.526	-51.033	1.00	0.00	A	C
ATOM	698	CG	TYR	A	199	32.306	-29.413	-51.252	1.00	0.00	A	C
ATOM	699	CD1	TYR	A	199	31.687	-28.824	-50.175	1.00	0.00	A	C
ATOM	700	CE1	TYR	A	199	30.802	-27.788	-50.354	1.00	0.00	A	C
ATOM	701	CZ	TYR	A	199	30.536	-27.319	-51.615	1.00	0.00	A	C
ATOM	702	OH	TYR	A	199	29.630	-26.254	-51.786	1.00	0.00	A	O

ATOM	703	CD2 TYR A 199	32.049	-28.927	-52.514	1.00	0.00	A	C
ATOM	704	CE2 TYR A 199	31.164	-27.887	-52.700	1.00	0.00	A	C
ATOM	705	C TYR A 199	31.692	-32.336	-51.663	1.00	0.00	A	C
ATOM	706	O TYR A 199	30.477	-32.472	-51.521	1.00	0.00	A	O
ATOM	707	N TYR A 200	32.325	-32.677	-52.803	1.00	0.00	A	N
ATOM	708	CA TYR A 200	31.728	-33.130	-54.041	1.00	0.00	A	C
ATOM	709	CB TYR A 200	32.511	-32.737	-55.304	1.00	0.00	A	C
ATOM	710	CG TYR A 200	33.211	-31.471	-54.946	1.00	0.00	A	C
ATOM	711	CD1 TYR A 200	32.486	-30.314	-54.769	1.00	0.00	A	C
ATOM	712	CE1 TYR A 200	33.110	-29.135	-54.435	1.00	0.00	A	C
ATOM	713	CZ TYR A 200	34.475	-29.105	-54.284	1.00	0.00	A	C
ATOM	714	OH TYR A 200	35.123	-27.900	-53.942	1.00	0.00	A	O
ATOM	715	CD2 TYR A 200	34.578	-31.429	-54.803	1.00	0.00	A	C
ATOM	716	CE2 TYR A 200	35.209	-30.254	-54.470	1.00	0.00	A	C
ATOM	717	C TYR A 200	31.392	-34.584	-54.103	1.00	0.00	A	C
ATOM	718	O TYR A 200	30.742	-35.013	-55.058	1.00	0.00	A	O
ATOM	719	N LYS A 201	31.934	-35.382	-53.161	1.00	0.00	A	N
ATOM	720	CA LYS A 201	31.956	-36.822	-53.203	1.00	0.00	A	C
ATOM	721	CB LYS A 201	32.196	-37.501	-51.838	1.00	0.00	A	C
ATOM	722	CG LYS A 201	31.120	-37.231	-50.790	1.00	0.00	A	C
ATOM	723	CD LYS A 201	31.188	-38.186	-49.597	1.00	0.00	A	C
ATOM	724	CE LYS A 201	32.594	-38.713	-49.314	1.00	0.00	A	C
ATOM	725	NZ LYS A 201	33.463	-37.617	-48.829	1.00	0.00	A	N
ATOM	726	C LYS A 201	30.771	-37.454	-53.869	1.00	0.00	A	C
ATOM	727	O LYS A 201	29.612	-37.140	-53.606	1.00	0.00	A	O
ATOM	728	N GLY A 202	31.091	-38.351	-54.823	1.00	0.00	A	N
ATOM	729	CA GLY A 202	30.128	-39.146	-55.523	1.00	0.00	A	C
ATOM	730	C GLY A 202	29.601	-38.429	-56.731	1.00	0.00	A	C
ATOM	731	O GLY A 202	28.769	-38.981	-57.452	1.00	0.00	A	O
ATOM	732	N GLN A 203	30.056	-37.188	-56.998	1.00	0.00	A	N
ATOM	733	CA GLN A 203	29.559	-36.503	-58.160	1.00	0.00	A	C
ATOM	734	CB GLN A 203	29.772	-34.977	-58.134	1.00	0.00	A	C
ATOM	735	CG GLN A 203	29.222	-34.263	-59.374	1.00	0.00	A	C
ATOM	736	CD GLN A 203	29.413	-32.763	-59.189	1.00	0.00	A	C
ATOM	737	OE1 GLN A 203	30.518	-32.285	-58.933	1.00	0.00	A	O
ATOM	738	NE2 GLN A 203	28.300	-31.994	-59.319	1.00	0.00	A	N
ATOM	739	C GLN A 203	30.234	-37.053	-59.377	1.00	0.00	A	C
ATOM	740	O GLN A 203	31.445	-37.283	-59.393	1.00	0.00	A	O

ATOM	741	N	THR	A	204	29.432	-37.264	-60.442	1.00	0.00	A	N
ATOM	742	CA	THR	A	204	29.876	-37.802	-61.697	1.00	0.00	A	C
ATOM	743	CB	THR	A	204	29.129	-39.035	-62.110	1.00	0.00	A	C
ATOM	744	OG1	THR	A	204	27.751	-38.732	-62.271	1.00	0.00	A	O
ATOM	745	CG2	THR	A	204	29.309	-40.118	-61.034	1.00	0.00	A	C
ATOM	746	C	THR	A	204	29.585	-36.770	-62.739	1.00	0.00	A	C
ATOM	747	O	THR	A	204	28.941	-35.759	-62.466	1.00	0.00	A	O
ATOM	748	N	ALA	A	205	30.062	-37.007	-63.977	1.00	0.00	A	N
ATOM	749	CA	ALA	A	205	29.866	-36.081	-65.055	1.00	0.00	A	C
ATOM	750	CB	ALA	A	205	30.498	-36.561	-66.372	1.00	0.00	A	C
ATOM	751	C	ALA	A	205	28.396	-35.903	-65.298	1.00	0.00	A	C
ATOM	752	O	ALA	A	205	27.935	-34.794	-65.556	1.00	0.00	A	O
ATOM	753	N	LEU	A	206	27.604	-36.987	-65.202	1.00	0.00	A	N
ATOM	754	CA	LEU	A	206	26.196	-36.894	-65.477	1.00	0.00	A	C
ATOM	755	CB	LEU	A	206	25.466	-38.246	-65.368	1.00	0.00	A	C
ATOM	756	CG	LEU	A	206	23.970	-38.163	-65.724	1.00	0.00	A	C
ATOM	757	CD1	LEU	A	206	23.780	-37.643	-67.157	1.00	0.00	A	C
ATOM	758	CD2	LEU	A	206	23.261	-39.509	-65.502	1.00	0.00	A	C
ATOM	759	C	LEU	A	206	25.557	-35.927	-64.522	1.00	0.00	A	C
ATOM	760	O	LEU	A	206	24.632	-35.206	-64.892	1.00	0.00	A	O
ATOM	761	N	HSD	A	207	26.025	-35.881	-63.261	1.00	0.00	A	N
ATOM	762	CA	HSD	A	207	25.417	-34.970	-62.329	1.00	0.00	A	C
ATOM	763	CB	HSD	A	207	26.068	-34.989	-60.932	1.00	0.00	A	C
ATOM	764	ND1	HSD	A	207	26.646	-37.345	-60.169	1.00	0.00	A	N
ATOM	765	CG	HSD	A	207	25.819	-36.243	-60.154	1.00	0.00	A	C
ATOM	766	CE1	HSD	A	207	26.095	-38.261	-59.333	1.00	0.00	A	C
ATOM	767	NE2	HSD	A	207	24.976	-37.825	-58.783	1.00	0.00	A	N
ATOM	768	CD2	HSD	A	207	24.804	-36.555	-59.302	1.00	0.00	A	C
ATOM	769	C	HSD	A	207	25.591	-33.577	-62.852	1.00	0.00	A	C
ATOM	770	O	HSD	A	207	24.648	-32.788	-62.878	1.00	0.00	A	O
ATOM	771	N	ILE	A	208	26.812	-33.251	-63.318	1.00	0.00	A	N
ATOM	772	CA	ILE	A	208	27.153	-31.930	-63.756	1.00	0.00	A	C
ATOM	773	CB	ILE	A	208	28.601	-31.814	-64.148	1.00	0.00	A	C
ATOM	774	CG2	ILE	A	208	28.817	-30.449	-64.821	1.00	0.00	A	C
ATOM	775	CG1	ILE	A	208	29.505	-32.050	-62.921	1.00	0.00	A	C
ATOM	776	CD	ILE	A	208	30.986	-32.215	-63.268	1.00	0.00	A	C
ATOM	777	C	ILE	A	208	26.317	-31.522	-64.934	1.00	0.00	A	C
ATOM	778	O	ILE	A	208	25.867	-30.378	-65.008	1.00	0.00	A	O

ATOM	779	N	ALA A 209	26.081	-32.443	-65.885	1.00	0.00	A	N
ATOM	780	CA	ALA A 209	25.350	-32.116	-67.080	1.00	0.00	A	C
ATOM	781	CB	ALA A 209	25.207	-33.314	-68.033	1.00	0.00	A	C
ATOM	782	C	ALA A 209	23.974	-31.670	-66.709	1.00	0.00	A	C
ATOM	783	O	ALA A 209	23.429	-30.750	-67.318	1.00	0.00	A	O
ATOM	784	N	ILE A 210	23.361	-32.351	-65.728	1.00	0.00	A	N
ATOM	785	CA	ILE A 210	22.037	-32.011	-65.288	1.00	0.00	A	C
ATOM	786	CB	ILE A 210	21.459	-33.038	-64.359	1.00	0.00	A	C
ATOM	787	CG2	ILE A 210	20.107	-32.521	-63.839	1.00	0.00	A	C
ATOM	788	CG1	ILE A 210	21.357	-34.392	-65.078	1.00	0.00	A	C
ATOM	789	CD	ILE A 210	21.047	-35.555	-64.142	1.00	0.00	A	C
ATOM	790	C	ILE A 210	22.058	-30.694	-64.578	1.00	0.00	A	C
ATOM	791	O	ILE A 210	21.222	-29.829	-64.829	1.00	0.00	A	O
ATOM	792	N	GLU A 211	23.049	-30.491	-63.693	1.00	0.00	A	N
ATOM	793	CA	GLU A 211	23.121	-29.277	-62.934	1.00	0.00	A	C
ATOM	794	CB	GLU A 211	24.343	-29.260	-62.005	1.00	0.00	A	C
ATOM	795	CG	GLU A 211	24.169	-30.248	-60.847	1.00	0.00	A	C
ATOM	796	CD	GLU A 211	25.505	-30.481	-60.167	1.00	0.00	A	C
ATOM	797	OE1	GLU A 211	26.555	-30.284	-60.835	1.00	0.00	A	O
ATOM	798	OE2	GLU A 211	25.497	-30.874	-58.970	1.00	0.00	A	O
ATOM	799	C	GLU A 211	23.185	-28.145	-63.913	1.00	0.00	A	C
ATOM	800	O	GLU A 211	22.645	-27.067	-63.677	1.00	0.00	A	O
ATOM	801	N	ARG A 212	23.867	-28.383	-65.042	1.00	0.00	A	N
ATOM	802	CA	ARG A 212	24.041	-27.463	-66.130	1.00	0.00	A	C
ATOM	803	CB	ARG A 212	25.160	-27.904	-67.089	1.00	0.00	A	C
ATOM	804	CG	ARG A 212	26.526	-27.941	-66.399	1.00	0.00	A	C
ATOM	805	CD	ARG A 212	26.803	-26.691	-65.560	1.00	0.00	A	C
ATOM	806	NE	ARG A 212	28.172	-26.814	-64.988	1.00	0.00	A	N
ATOM	807	CZ	ARG A 212	28.376	-26.607	-63.656	1.00	0.00	A	C
ATOM	808	NH1	ARG A 212	27.314	-26.346	-62.837	1.00	0.00	A	N
ATOM	809	NH2	ARG A 212	29.640	-26.657	-63.142	1.00	0.00	A	N
ATOM	810	C	ARG A 212	22.773	-27.289	-66.914	1.00	0.00	A	C
ATOM	811	O	ARG A 212	22.628	-26.305	-67.639	1.00	0.00	A	O
ATOM	812	N	ARG A 213	21.835	-28.253	-66.830	1.00	0.00	A	N
ATOM	813	CA	ARG A 213	20.616	-28.190	-67.589	1.00	0.00	A	C
ATOM	814	CB	ARG A 213	19.884	-26.848	-67.453	1.00	0.00	A	C
ATOM	815	CG	ARG A 213	19.395	-26.565	-66.039	1.00	0.00	A	C
ATOM	816	CD	ARG A 213	18.651	-25.238	-65.907	1.00	0.00	A	C

ATOM	817	NE	ARG	A	213	18.200	-25.145	-64.494	1.00	0.00	A	N
ATOM	818	CZ	ARG	A	213	17.014	-25.705	-64.113	1.00	0.00	A	C
ATOM	819	NH1	ARG	A	213	16.196	-26.299	-65.030	1.00	0.00	A	N
ATOM	820	NH2	ARG	A	213	16.660	-25.677	-62.799	1.00	0.00	A	N
ATOM	821	C	ARG	A	213	20.927	-28.356	-69.042	1.00	0.00	A	C
ATOM	822	O	ARG	A	213	20.346	-27.671	-69.883	1.00	0.00	A	O
ATOM	823	N	ASN	A	214	21.866	-29.263	-69.388	1.00	0.00	A	N
ATOM	824	CA	ASN	A	214	22.098	-29.443	-70.792	1.00	0.00	A	C
ATOM	825	CB	ASN	A	214	23.512	-29.059	-71.298	1.00	0.00	A	C
ATOM	826	CG	ASN	A	214	24.626	-29.876	-70.666	1.00	0.00	A	C
ATOM	827	OD1	ASN	A	214	24.430	-30.834	-69.922	1.00	0.00	A	O
ATOM	828	ND2	ASN	A	214	25.881	-29.450	-70.969	1.00	0.00	A	N
ATOM	829	C	ASN	A	214	21.707	-30.826	-71.211	1.00	0.00	A	C
ATOM	830	O	ASN	A	214	22.316	-31.835	-70.856	1.00	0.00	A	O
ATOM	831	N	MET	A	215	20.636	-30.893	-72.016	1.00	0.00	A	N
ATOM	832	CA	MET	A	215	20.077	-32.142	-72.439	1.00	0.00	A	C
ATOM	833	CB	MET	A	215	18.808	-31.933	-73.282	1.00	0.00	A	C
ATOM	834	CG	MET	A	215	17.716	-32.991	-73.079	1.00	0.00	A	C
ATOM	835	SD	MET	A	215	18.162	-34.712	-73.441	1.00	0.00	A	S
ATOM	836	CE	MET	A	215	19.079	-35.011	-71.904	1.00	0.00	A	C
ATOM	837	C	MET	A	215	21.099	-32.847	-73.276	1.00	0.00	A	C
ATOM	838	O	MET	A	215	21.334	-34.043	-73.118	1.00	0.00	A	O
ATOM	839	N	ALA	A	216	21.788	-32.096	-74.151	1.00	0.00	A	N
ATOM	840	CA	ALA	A	216	22.685	-32.717	-75.078	1.00	0.00	A	C
ATOM	841	CB	ALA	A	216	23.422	-31.694	-75.950	1.00	0.00	A	C
ATOM	842	C	ALA	A	216	23.727	-33.494	-74.333	1.00	0.00	A	C
ATOM	843	O	ALA	A	216	24.037	-34.622	-74.711	1.00	0.00	A	O
ATOM	844	N	LEU	A	217	24.302	-32.914	-73.264	1.00	0.00	A	N
ATOM	845	CA	LEU	A	217	25.307	-33.625	-72.525	1.00	0.00	A	C
ATOM	846	CB	LEU	A	217	26.131	-32.776	-71.540	1.00	0.00	A	C
ATOM	847	CG	LEU	A	217	27.099	-31.798	-72.229	1.00	0.00	A	C
ATOM	848	CD1	LEU	A	217	28.117	-31.225	-71.229	1.00	0.00	A	C
ATOM	849	CD2	LEU	A	217	27.765	-32.440	-73.457	1.00	0.00	A	C
ATOM	850	C	LEU	A	217	24.709	-34.760	-71.764	1.00	0.00	A	C
ATOM	851	O	LEU	A	217	25.345	-35.798	-71.596	1.00	0.00	A	O
ATOM	852	N	VAL	A	218	23.483	-34.590	-71.232	1.00	0.00	A	N
ATOM	853	CA	VAL	A	218	22.896	-35.685	-70.517	1.00	0.00	A	C
ATOM	854	CB	VAL	A	218	21.524	-35.369	-69.993	1.00	0.00	A	C

ATOM	855	CG1 VAL A 218	20.900	-36.658	-69.431	1.00	0.00	A	C
ATOM	856	CG2 VAL A 218	21.645	-34.237	-68.960	1.00	0.00	A	C
ATOM	857	C VAL A 218	22.760	-36.813	-71.489	1.00	0.00	A	C
ATOM	858	O VAL A 218	23.192	-37.935	-71.228	1.00	0.00	A	O
ATOM	859	N THR A 219	22.221	-36.513	-72.684	1.00	0.00	A	N
ATOM	860	CA THR A 219	21.967	-37.527	-73.665	1.00	0.00	A	C
ATOM	861	CB THR A 219	21.469	-36.959	-74.962	1.00	0.00	A	C
ATOM	862	OG1 THR A 219	20.298	-36.188	-74.744	1.00	0.00	A	O
ATOM	863	CG2 THR A 219	21.160	-38.119	-75.925	1.00	0.00	A	C
ATOM	864	C THR A 219	23.254	-38.215	-73.984	1.00	0.00	A	C
ATOM	865	O THR A 219	23.317	-39.441	-74.027	1.00	0.00	A	O
ATOM	866	N LEU A 220	24.329	-37.439	-74.197	1.00	0.00	A	N
ATOM	867	CA LEU A 220	25.559	-38.042	-74.622	1.00	0.00	A	C
ATOM	868	CB LEU A 220	26.657	-37.007	-74.922	1.00	0.00	A	C
ATOM	869	CG LEU A 220	27.978	-37.628	-75.413	1.00	0.00	A	C
ATOM	870	CD1 LEU A 220	27.782	-38.370	-76.745	1.00	0.00	A	C
ATOM	871	CD2 LEU A 220	29.097	-36.576	-75.486	1.00	0.00	A	C
ATOM	872	C LEU A 220	26.073	-38.976	-73.568	1.00	0.00	A	C
ATOM	873	O LEU A 220	26.443	-40.106	-73.876	1.00	0.00	A	O
ATOM	874	N LEU A 221	26.079	-38.550	-72.288	1.00	0.00	A	N
ATOM	875	CA LEU A 221	26.653	-39.363	-71.247	1.00	0.00	A	C
ATOM	876	CB LEU A 221	26.721	-38.663	-69.881	1.00	0.00	A	C
ATOM	877	CG LEU A 221	27.892	-37.667	-69.764	1.00	0.00	A	C
ATOM	878	CD1 LEU A 221	27.874	-36.615	-70.881	1.00	0.00	A	C
ATOM	879	CD2 LEU A 221	27.933	-37.037	-68.365	1.00	0.00	A	C
ATOM	880	C LEU A 221	25.911	-40.652	-71.084	1.00	0.00	A	C
ATOM	881	O LEU A 221	26.528	-41.699	-70.898	1.00	0.00	A	O
ATOM	882	N VAL A 222	24.569	-40.611	-71.152	1.00	0.00	A	N
ATOM	883	CA VAL A 222	23.758	-41.785	-70.986	1.00	0.00	A	C
ATOM	884	CB VAL A 222	22.289	-41.482	-71.042	1.00	0.00	A	C
ATOM	885	CG1 VAL A 222	21.509	-42.807	-71.044	1.00	0.00	A	C
ATOM	886	CG2 VAL A 222	21.937	-40.561	-69.860	1.00	0.00	A	C
ATOM	887	C VAL A 222	24.061	-42.776	-72.074	1.00	0.00	A	C
ATOM	888	O VAL A 222	24.077	-43.982	-71.834	1.00	0.00	A	O
ATOM	889	N GLU A 223	24.274	-42.295	-73.315	1.00	0.00	A	N
ATOM	890	CA GLU A 223	24.559	-43.169	-74.422	1.00	0.00	A	C
ATOM	891	CB GLU A 223	24.560	-42.452	-75.783	1.00	0.00	A	C
ATOM	892	CG GLU A 223	23.158	-42.014	-76.208	1.00	0.00	A	C

ATOM	893	CD	GLU A 223	23.219	-41.493	-77.635	1.00	0.00	A	C
ATOM	894	OE1	GLU A 223	24.337	-41.146	-78.097	1.00	0.00	A	O
ATOM	895	OE2	GLU A 223	22.141	-41.438	-78.284	1.00	0.00	A	O
ATOM	896	C	GLU A 223	25.893	-43.819	-74.219	1.00	0.00	A	C
ATOM	897	O	GLU A 223	26.111	-44.961	-74.617	1.00	0.00	A	O
ATOM	898	N	ASN A 224	26.832	-43.066	-73.622	1.00	0.00	A	N
ATOM	899	CA	ASN A 224	28.167	-43.475	-73.286	1.00	0.00	A	C
ATOM	900	CB	ASN A 224	29.059	-42.309	-72.847	1.00	0.00	A	C
ATOM	901	CG	ASN A 224	29.202	-41.391	-74.044	1.00	0.00	A	C
ATOM	902	OD1	ASN A 224	29.389	-41.832	-75.176	1.00	0.00	A	O
ATOM	903	ND2	ASN A 224	29.094	-40.063	-73.784	1.00	0.00	A	N
ATOM	904	C	ASN A 224	28.105	-44.427	-72.132	1.00	0.00	A	C
ATOM	905	O	ASN A 224	29.116	-45.023	-71.765	1.00	0.00	A	O
ATOM	906	N	GLY A 225	26.944	-44.522	-71.449	1.00	0.00	A	N
ATOM	907	CA	GLY A 225	26.859	-45.504	-70.407	1.00	0.00	A	C
ATOM	908	C	GLY A 225	27.023	-44.912	-69.041	1.00	0.00	A	C
ATOM	909	O	GLY A 225	27.450	-45.608	-68.122	1.00	0.00	A	O
ATOM	910	N	ALA A 226	26.701	-43.616	-68.858	1.00	0.00	A	N
ATOM	911	CA	ALA A 226	26.795	-43.061	-67.537	1.00	0.00	A	C
ATOM	912	CB	ALA A 226	26.504	-41.552	-67.475	1.00	0.00	A	C
ATOM	913	C	ALA A 226	25.797	-43.757	-66.656	1.00	0.00	A	C
ATOM	914	O	ALA A 226	24.685	-44.076	-67.077	1.00	0.00	A	O
ATOM	915	N	ASP A 227	26.205	-44.034	-65.397	1.00	0.00	A	N
ATOM	916	CA	ASP A 227	25.364	-44.676	-64.428	1.00	0.00	A	C
ATOM	917	CB	ASP A 227	26.131	-45.120	-63.172	1.00	0.00	A	C
ATOM	918	CG	ASP A 227	25.187	-45.897	-62.269	1.00	0.00	A	C
ATOM	919	OD1	ASP A 227	24.043	-46.187	-62.711	1.00	0.00	A	O
ATOM	920	OD2	ASP A 227	25.598	-46.209	-61.119	1.00	0.00	A	O
ATOM	921	C	ASP A 227	24.327	-43.685	-63.993	1.00	0.00	A	C
ATOM	922	O	ASP A 227	24.642	-42.638	-63.429	1.00	0.00	A	O
ATOM	923	N	VAL A 228	23.052	-44.016	-64.252	1.00	0.00	A	N
ATOM	924	CA	VAL A 228	21.919	-43.191	-63.944	1.00	0.00	A	C
ATOM	925	CB	VAL A 228	20.672	-43.653	-64.643	1.00	0.00	A	C
ATOM	926	CG1	VAL A 228	19.477	-42.828	-64.135	1.00	0.00	A	C
ATOM	927	CG2	VAL A 228	20.896	-43.529	-66.162	1.00	0.00	A	C
ATOM	928	C	VAL A 228	21.649	-43.147	-62.463	1.00	0.00	A	C
ATOM	929	O	VAL A 228	21.034	-42.205	-61.965	1.00	0.00	A	O
ATOM	930	N	GLN A 229	21.997	-44.234	-61.755	1.00	0.00	A	N

ATOM	931	CA	GLN A 229	21.811	-44.433	-60.339	1.00	0.00	A	C
ATOM	932	CB	GLN A 229	21.726	-45.915	-59.943	1.00	0.00	A	C
ATOM	933	CG	GLN A 229	20.461	-46.573	-60.496	1.00	0.00	A	C
ATOM	934	CD	GLN A 229	19.283	-45.696	-60.088	1.00	0.00	A	C
ATOM	935	OE1	GLN A 229	18.923	-44.751	-60.786	1.00	0.00	A	O
ATOM	936	NE2	GLN A 229	18.669	-46.009	-58.917	1.00	0.00	A	N
ATOM	937	C	GLN A 229	22.827	-43.749	-59.456	1.00	0.00	A	C
ATOM	938	O	GLN A 229	22.620	-43.685	-58.246	1.00	0.00	A	O
ATOM	939	N	ALA A 230	23.987	-43.310	-59.989	1.00	0.00	A	N
ATOM	940	CA	ALA A 230	25.052	-42.789	-59.160	1.00	0.00	A	C
ATOM	941	CB	ALA A 230	26.221	-42.195	-59.967	1.00	0.00	A	C
ATOM	942	C	ALA A 230	24.567	-41.712	-58.233	1.00	0.00	A	C
ATOM	943	O	ALA A 230	23.905	-40.763	-58.644	1.00	0.00	A	O
ATOM	944	N	ALA A 231	24.944	-41.822	-56.940	1.00	0.00	A	N
ATOM	945	CA	ALA A 231	24.478	-40.875	-55.964	1.00	0.00	A	C
ATOM	946	CB	ALA A 231	24.036	-41.532	-54.645	1.00	0.00	A	C
ATOM	947	C	ALA A 231	25.567	-39.906	-55.618	1.00	0.00	A	C
ATOM	948	O	ALA A 231	26.663	-40.294	-55.216	1.00	0.00	A	O
ATOM	949	N	ALA A 232	25.272	-38.594	-55.763	1.00	0.00	A	N
ATOM	950	CA	ALA A 232	26.227	-37.601	-55.361	1.00	0.00	A	C
ATOM	951	CB	ALA A 232	26.141	-36.305	-56.182	1.00	0.00	A	C
ATOM	952	C	ALA A 232	25.855	-37.264	-53.945	1.00	0.00	A	C
ATOM	953	O	ALA A 232	24.892	-36.542	-53.703	1.00	0.00	A	O
ATOM	954	N	HSD A 233	26.589	-37.881	-52.993	1.00	0.00	A	N
ATOM	955	CA	HSD A 233	26.475	-37.844	-51.555	1.00	0.00	A	C
ATOM	956	CB	HSD A 233	26.832	-39.196	-50.914	1.00	0.00	A	C
ATOM	957	ND1	HSD A 233	27.910	-40.634	-52.698	1.00	0.00	A	N
ATOM	958	CG	HSD A 233	28.009	-39.859	-51.562	1.00	0.00	A	C
ATOM	959	CE1	HSD A 233	29.163	-41.057	-52.992	1.00	0.00	A	C
ATOM	960	NE2	HSD A 233	30.059	-40.611	-52.131	1.00	0.00	A	N
ATOM	961	CD2	HSD A 233	29.327	-39.858	-51.230	1.00	0.00	A	C
ATOM	962	C	HSD A 233	27.216	-36.759	-50.814	1.00	0.00	A	C
ATOM	963	O	HSD A 233	26.975	-36.580	-49.621	1.00	0.00	A	O
ATOM	964	N	GLY A 234	28.181	-36.053	-51.431	1.00	0.00	A	N
ATOM	965	CA	GLY A 234	29.038	-35.157	-50.682	1.00	0.00	A	C
ATOM	966	C	GLY A 234	28.258	-34.064	-50.008	1.00	0.00	A	C
ATOM	967	O	GLY A 234	27.081	-33.856	-50.279	1.00	0.00	A	O
ATOM	968	N	ASP A 235	28.940	-33.310	-49.118	1.00	0.00	A	N

ATOM	969	CA	ASP A 235	28.346	-32.271	-48.316	1.00	0.00	A	C
ATOM	970	CB	ASP A 235	29.334	-31.605	-47.340	1.00	0.00	A	C
ATOM	971	CG	ASP A 235	29.536	-32.565	-46.172	1.00	0.00	A	C
ATOM	972	OD1	ASP A 235	28.724	-33.522	-46.051	1.00	0.00	A	O
ATOM	973	OD2	ASP A 235	30.499	-32.356	-45.386	1.00	0.00	A	O
ATOM	974	C	ASP A 235	27.754	-31.218	-49.202	1.00	0.00	A	C
ATOM	975	O	ASP A 235	26.828	-30.512	-48.809	1.00	0.00	A	O
ATOM	976	N	PHE A 236	28.285	-31.077	-50.428	1.00	0.00	A	N
ATOM	977	CA	PHE A 236	27.780	-30.110	-51.361	1.00	0.00	A	C
ATOM	978	CB	PHE A 236	28.595	-30.063	-52.669	1.00	0.00	A	C
ATOM	979	CG	PHE A 236	27.904	-29.140	-53.614	1.00	0.00	A	C
ATOM	980	CD1	PHE A 236	28.033	-27.776	-53.488	1.00	0.00	A	C
ATOM	981	CE1	PHE A 236	27.390	-26.926	-54.359	1.00	0.00	A	C
ATOM	982	CZ	PHE A 236	26.604	-27.438	-55.363	1.00	0.00	A	C
ATOM	983	CD2	PHE A 236	27.109	-29.643	-54.617	1.00	0.00	A	C
ATOM	984	CE2	PHE A 236	26.464	-28.799	-55.491	1.00	0.00	A	C
ATOM	985	C	PHE A 236	26.353	-30.439	-51.689	1.00	0.00	A	C
ATOM	986	O	PHE A 236	25.566	-29.561	-52.028	1.00	0.00	A	O
ATOM	987	N	PHE A 237	26.029	-31.740	-51.683	1.00	0.00	A	N
ATOM	988	CA	PHE A 237	24.770	-32.355	-51.996	1.00	0.00	A	C
ATOM	989	CB	PHE A 237	24.971	-33.791	-52.499	1.00	0.00	A	C
ATOM	990	CG	PHE A 237	25.844	-33.602	-53.696	1.00	0.00	A	C
ATOM	991	CD1	PHE A 237	25.326	-33.102	-54.869	1.00	0.00	A	C
ATOM	992	CE1	PHE A 237	26.129	-32.920	-55.970	1.00	0.00	A	C
ATOM	993	CZ	PHE A 237	27.464	-33.238	-55.912	1.00	0.00	A	C
ATOM	994	CD2	PHE A 237	27.182	-33.916	-53.644	1.00	0.00	A	C
ATOM	995	CE2	PHE A 237	27.990	-33.736	-54.744	1.00	0.00	A	C
ATOM	996	C	PHE A 237	23.751	-32.315	-50.893	1.00	0.00	A	C
ATOM	997	O	PHE A 237	22.607	-32.688	-51.142	1.00	0.00	A	O
ATOM	998	N	LYS A 238	24.150	-32.014	-49.634	1.00	0.00	A	N
ATOM	999	CA	LYS A 238	23.225	-31.999	-48.531	1.00	0.00	A	C
ATOM	1000	CB	LYS A 238	23.654	-32.907	-47.367	1.00	0.00	A	C
ATOM	1001	CG	LYS A 238	23.513	-34.398	-47.681	1.00	0.00	A	C
ATOM	1002	CD	LYS A 238	24.284	-35.311	-46.724	1.00	0.00	A	C
ATOM	1003	CE	LYS A 238	24.313	-34.818	-45.276	1.00	0.00	A	C
ATOM	1004	NZ	LYS A 238	25.309	-33.735	-45.125	1.00	0.00	A	N
ATOM	1005	C	LYS A 238	23.047	-30.604	-47.994	1.00	0.00	A	C
ATOM	1006	O	LYS A 238	23.593	-29.636	-48.522	1.00	0.00	A	O

ATOM	1007	N	LYS A 239	22.248	-30.502	-46.904	1.00	0.00	A	N
ATOM	1008	CA	LYS A 239	21.845	-29.268	-46.288	1.00	0.00	A	C
ATOM	1009	CB	LYS A 239	20.943	-29.483	-45.060	1.00	0.00	A	C
ATOM	1010	CG	LYS A 239	19.617	-30.165	-45.409	1.00	0.00	A	C
ATOM	1011	CD	LYS A 239	18.865	-30.729	-44.201	1.00	0.00	A	C
ATOM	1012	CE	LYS A 239	17.571	-31.459	-44.575	1.00	0.00	A	C
ATOM	1013	NZ	LYS A 239	16.964	-32.072	-43.372	1.00	0.00	A	N
ATOM	1014	C	LYS A 239	23.037	-28.479	-45.864	1.00	0.00	A	C
ATOM	1015	O	LYS A 239	24.012	-28.996	-45.322	1.00	0.00	A	O
ATOM	1016	N	THR A 240	22.922	-27.158	-46.095	1.00	0.00	A	N
ATOM	1017	CA	THR A 240	23.919	-26.155	-45.904	1.00	0.00	A	C
ATOM	1018	CB	THR A 240	23.379	-24.834	-46.384	1.00	0.00	A	C
ATOM	1019	OG1	THR A 240	24.408	-23.881	-46.587	1.00	0.00	A	O
ATOM	1020	CG2	THR A 240	22.354	-24.324	-45.359	1.00	0.00	A	C
ATOM	1021	C	THR A 240	24.280	-26.083	-44.450	1.00	0.00	A	C
ATOM	1022	O	THR A 240	23.425	-26.111	-43.569	1.00	0.00	A	O
ATOM	1023	N	LYS A 241	25.601	-26.030	-44.199	1.00	0.00	A	N
ATOM	1024	CA	LYS A 241	26.275	-25.926	-42.937	1.00	0.00	A	C
ATOM	1025	CB	LYS A 241	27.794	-26.109	-43.062	1.00	0.00	A	C
ATOM	1026	CG	LYS A 241	28.191	-27.570	-43.263	1.00	0.00	A	C
ATOM	1027	CD	LYS A 241	29.624	-27.765	-43.755	1.00	0.00	A	C
ATOM	1028	CE	LYS A 241	30.667	-26.955	-42.985	1.00	0.00	A	C
ATOM	1029	NZ	LYS A 241	30.624	-25.530	-43.382	1.00	0.00	A	N
ATOM	1030	C	LYS A 241	26.034	-24.616	-42.239	1.00	0.00	A	C
ATOM	1031	O	LYS A 241	25.923	-24.618	-41.013	1.00	0.00	A	O
ATOM	1032	N	GLY A 242	25.909	-23.456	-42.933	1.00	0.00	A	N
ATOM	1033	CA	GLY A 242	25.888	-23.250	-44.354	1.00	0.00	A	C
ATOM	1034	C	GLY A 242	27.196	-23.547	-45.015	1.00	0.00	A	C
ATOM	1035	O	GLY A 242	28.178	-22.835	-44.823	1.00	0.00	A	O
ATOM	1036	N	ARG A 243	27.244	-24.650	-45.796	1.00	0.00	A	N
ATOM	1037	CA	ARG A 243	28.398	-24.948	-46.579	1.00	0.00	A	C
ATOM	1038	CB	ARG A 243	28.528	-26.426	-46.977	1.00	0.00	A	C
ATOM	1039	CG	ARG A 243	29.831	-26.703	-47.726	1.00	0.00	A	C
ATOM	1040	CD	ARG A 243	30.444	-28.075	-47.444	1.00	0.00	A	C
ATOM	1041	NE	ARG A 243	31.177	-27.956	-46.155	1.00	0.00	A	N
ATOM	1042	CZ	ARG A 243	32.102	-28.890	-45.791	1.00	0.00	A	C
ATOM	1043	NH1	ARG A 243	32.376	-29.947	-46.612	1.00	0.00	A	N
ATOM	1044	NH2	ARG A 243	32.753	-28.765	-44.598	1.00	0.00	A	N

ATOM	1045	C	ARG A 243	28.441	-24.087	-47.803	1.00	0.00	A	C
ATOM	1046	O	ARG A 243	29.460	-23.426	-48.010	1.00	0.00	A	O
ATOM	1047	N	PRO A 244	27.427	-23.985	-48.649	1.00	0.00	A	N
ATOM	1048	CD	PRO A 244	27.237	-22.676	-49.250	1.00	0.00	A	C
ATOM	1049	CA	PRO A 244	26.172	-24.732	-48.609	1.00	0.00	A	C
ATOM	1050	CB	PRO A 244	25.166	-23.874	-49.379	1.00	0.00	A	C
ATOM	1051	CG	PRO A 244	25.727	-22.455	-49.330	1.00	0.00	A	C
ATOM	1052	C	PRO A 244	26.296	-26.131	-49.171	1.00	0.00	A	C
ATOM	1053	O	PRO A 244	27.400	-26.501	-49.562	1.00	0.00	A	O
ATOM	1054	N	GLY A 245	25.190	-26.924	-49.271	1.00	0.00	A	N
ATOM	1055	CA	GLY A 245	23.969	-26.566	-49.964	1.00	0.00	A	C
ATOM	1056	C	GLY A 245	24.243	-26.760	-51.428	1.00	0.00	A	C
ATOM	1057	O	GLY A 245	25.250	-26.258	-51.928	1.00	0.00	A	O
ATOM	1058	N	PHE A 246	23.333	-27.404	-52.209	1.00	0.00	A	N
ATOM	1059	CA	PHE A 246	21.961	-27.729	-51.893	1.00	0.00	A	C
ATOM	1060	CB	PHE A 246	21.033	-26.785	-52.685	1.00	0.00	A	C
ATOM	1061	CG	PHE A 246	19.675	-27.353	-52.904	1.00	0.00	A	C
ATOM	1062	CD1	PHE A 246	18.682	-27.306	-51.952	1.00	0.00	A	C
ATOM	1063	CE1	PHE A 246	17.442	-27.840	-52.222	1.00	0.00	A	C
ATOM	1064	CZ	PHE A 246	17.182	-28.419	-53.443	1.00	0.00	A	C
ATOM	1065	CD2	PHE A 246	19.402	-27.925	-54.126	1.00	0.00	A	C
ATOM	1066	CE2	PHE A 246	18.167	-28.461	-54.402	1.00	0.00	A	C
ATOM	1067	C	PHE A 246	21.608	-29.162	-52.199	1.00	0.00	A	C
ATOM	1068	O	PHE A 246	22.224	-29.807	-53.047	1.00	0.00	A	O
ATOM	1069	N	TYR A 247	20.543	-29.664	-51.519	1.00	0.00	A	N
ATOM	1070	CA	TYR A 247	20.191	-31.063	-51.516	1.00	0.00	A	C
ATOM	1071	CB	TYR A 247	20.095	-31.553	-50.062	1.00	0.00	A	C
ATOM	1072	CG	TYR A 247	19.364	-32.839	-49.979	1.00	0.00	A	C
ATOM	1073	CD1	TYR A 247	19.999	-34.049	-50.131	1.00	0.00	A	C
ATOM	1074	CE1	TYR A 247	19.274	-35.216	-50.035	1.00	0.00	A	C
ATOM	1075	CZ	TYR A 247	17.920	-35.169	-49.785	1.00	0.00	A	C
ATOM	1076	OH	TYR A 247	17.170	-36.354	-49.682	1.00	0.00	A	O
ATOM	1077	CD2	TYR A 247	18.015	-32.804	-49.731	1.00	0.00	A	C
ATOM	1078	CE2	TYR A 247	17.289	-33.960	-49.633	1.00	0.00	A	C
ATOM	1079	C	TYR A 247	18.901	-31.369	-52.236	1.00	0.00	A	C
ATOM	1080	O	TYR A 247	17.812	-30.988	-51.817	1.00	0.00	A	O
ATOM	1081	N	PHE A 248	19.050	-31.976	-53.428	1.00	0.00	A	N
ATOM	1082	CA	PHE A 248	18.102	-32.534	-54.363	1.00	0.00	A	C

ATOM	1083	CB	PHE A 248	18.449	-32.190	-55.813	1.00	0.00	A	C
ATOM	1084	CG	PHE A 248	19.842	-32.631	-56.060	1.00	0.00	A	C
ATOM	1085	CD1	PHE A 248	20.888	-31.805	-55.728	1.00	0.00	A	C
ATOM	1086	CE1	PHE A 248	22.184	-32.201	-55.955	1.00	0.00	A	C
ATOM	1087	CZ	PHE A 248	22.434	-33.431	-56.515	1.00	0.00	A	C
ATOM	1088	CD2	PHE A 248	20.098	-33.864	-56.612	1.00	0.00	A	C
ATOM	1089	CE2	PHE A 248	21.392	-34.264	-56.843	1.00	0.00	A	C
ATOM	1090	C	PHE A 248	17.935	-34.004	-54.203	1.00	0.00	A	C
ATOM	1091	O	PHE A 248	17.321	-34.673	-55.031	1.00	0.00	A	O
ATOM	1092	N	GLY A 249	18.773	-34.531	-53.321	1.00	0.00	A	N
ATOM	1093	CA	GLY A 249	18.939	-35.862	-52.887	1.00	0.00	A	C
ATOM	1094	C	GLY A 249	19.594	-36.695	-53.938	1.00	0.00	A	C
ATOM	1095	O	GLY A 249	18.897	-37.382	-54.675	1.00	0.00	A	O
ATOM	1096	N	GLU A 250	20.904	-36.484	-54.155	1.00	0.00	A	N
ATOM	1097	CA	GLU A 250	21.887	-37.421	-54.651	1.00	0.00	A	C
ATOM	1098	CB	GLU A 250	22.168	-38.503	-53.599	1.00	0.00	A	C
ATOM	1099	CG	GLU A 250	22.650	-37.915	-52.271	1.00	0.00	A	C
ATOM	1100	CD	GLU A 250	22.901	-39.058	-51.300	1.00	0.00	A	C
ATOM	1101	OE1	GLU A 250	22.860	-40.234	-51.752	1.00	0.00	A	O
ATOM	1102	OE2	GLU A 250	23.145	-38.773	-50.099	1.00	0.00	A	O
ATOM	1103	C	GLU A 250	21.707	-38.141	-55.970	1.00	0.00	A	C
ATOM	1104	O	GLU A 250	22.717	-38.478	-56.592	1.00	0.00	A	O
ATOM	1105	N	LEU A 251	20.487	-38.335	-56.498	1.00	0.00	A	N
ATOM	1106	CA	LEU A 251	20.335	-39.180	-57.664	1.00	0.00	A	C
ATOM	1107	CB	LEU A 251	19.229	-40.243	-57.512	1.00	0.00	A	C
ATOM	1108	CG	LEU A 251	19.486	-41.338	-56.461	1.00	0.00	A	C
ATOM	1109	CD1	LEU A 251	18.291	-42.299	-56.382	1.00	0.00	A	C
ATOM	1110	CD2	LEU A 251	20.798	-42.092	-56.731	1.00	0.00	A	C
ATOM	1111	C	LEU A 251	19.891	-38.321	-58.799	1.00	0.00	A	C
ATOM	1112	O	LEU A 251	19.062	-37.435	-58.612	1.00	0.00	A	O
ATOM	1113	N	PRO A 252	20.370	-38.613	-59.982	1.00	0.00	A	N
ATOM	1114	CD	PRO A 252	21.478	-39.535	-60.165	1.00	0.00	A	C
ATOM	1115	CA	PRO A 252	20.109	-37.824	-61.152	1.00	0.00	A	C
ATOM	1116	CB	PRO A 252	20.819	-38.546	-62.296	1.00	0.00	A	C
ATOM	1117	CG	PRO A 252	21.988	-39.266	-61.593	1.00	0.00	A	C
ATOM	1118	C	PRO A 252	18.656	-37.536	-61.380	1.00	0.00	A	C
ATOM	1119	O	PRO A 252	18.329	-36.389	-61.672	1.00	0.00	A	O
ATOM	1120	N	LEU A 253	17.766	-38.531	-61.232	1.00	0.00	A	N

ATOM	1121	CA	LEU	A	253	16.364	-38.283	-61.425	1.00	0.00	A	C
ATOM	1122	CB	LEU	A	253	15.496	-39.534	-61.211	1.00	0.00	A	C
ATOM	1123	CG	LEU	A	253	13.989	-39.282	-61.419	1.00	0.00	A	C
ATOM	1124	CD1	LEU	A	253	13.638	-39.032	-62.890	1.00	0.00	A	C
ATOM	1125	CD2	LEU	A	253	13.146	-40.398	-60.798	1.00	0.00	A	C
ATOM	1126	C	LEU	A	253	15.919	-37.278	-60.402	1.00	0.00	A	C
ATOM	1127	O	LEU	A	253	15.190	-36.339	-60.718	1.00	0.00	A	O
ATOM	1128	N	SER	A	254	16.370	-37.442	-59.143	1.00	0.00	A	N
ATOM	1129	CA	SER	A	254	15.944	-36.585	-58.070	1.00	0.00	A	C
ATOM	1130	CB	SER	A	254	16.563	-36.985	-56.722	1.00	0.00	A	C
ATOM	1131	OG	SER	A	254	16.113	-38.282	-56.358	1.00	0.00	A	O
ATOM	1132	C	SER	A	254	16.371	-35.185	-58.375	1.00	0.00	A	C
ATOM	1133	O	SER	A	254	15.602	-34.239	-58.212	1.00	0.00	A	O
ATOM	1134	N	LEU	A	255	17.619	-35.030	-58.843	1.00	0.00	A	N
ATOM	1135	CA	LEU	A	255	18.155	-33.746	-59.182	1.00	0.00	A	C
ATOM	1136	CB	LEU	A	255	19.605	-33.852	-59.699	1.00	0.00	A	C
ATOM	1137	CG	LEU	A	255	20.244	-32.502	-60.084	1.00	0.00	A	C
ATOM	1138	CD1	LEU	A	255	20.357	-31.574	-58.869	1.00	0.00	A	C
ATOM	1139	CD2	LEU	A	255	21.598	-32.698	-60.792	1.00	0.00	A	C
ATOM	1140	C	LEU	A	255	17.328	-33.154	-60.279	1.00	0.00	A	C
ATOM	1141	O	LEU	A	255	16.893	-32.006	-60.200	1.00	0.00	A	O
ATOM	1142	N	ALA	A	256	17.031	-33.957	-61.317	1.00	0.00	A	N
ATOM	1143	CA	ALA	A	256	16.350	-33.445	-62.477	1.00	0.00	A	C
ATOM	1144	CB	ALA	A	256	16.125	-34.515	-63.559	1.00	0.00	A	C
ATOM	1145	C	ALA	A	256	15.008	-32.915	-62.073	1.00	0.00	A	C
ATOM	1146	O	ALA	A	256	14.546	-31.912	-62.618	1.00	0.00	A	O
ATOM	1147	N	ALA	A	257	14.313	-33.622	-61.161	1.00	0.00	A	N
ATOM	1148	CA	ALA	A	257	13.015	-33.195	-60.715	1.00	0.00	A	C
ATOM	1149	CB	ALA	A	257	12.301	-34.290	-59.899	1.00	0.00	A	C
ATOM	1150	C	ALA	A	257	13.082	-31.952	-59.863	1.00	0.00	A	C
ATOM	1151	O	ALA	A	257	12.368	-30.981	-60.117	1.00	0.00	A	O
ATOM	1152	N	CYS	A	258	13.995	-31.924	-58.866	1.00	0.00	A	N
ATOM	1153	CA	CYS	A	258	14.077	-30.865	-57.893	1.00	0.00	A	C
ATOM	1154	CB	CYS	A	258	15.152	-31.106	-56.817	1.00	0.00	A	C
ATOM	1155	SG	CYS	A	258	14.708	-32.442	-55.665	1.00	0.00	A	S
ATOM	1156	C	CYS	A	258	14.403	-29.574	-58.569	1.00	0.00	A	C
ATOM	1157	O	CYS	A	258	14.057	-28.499	-58.086	1.00	0.00	A	O
ATOM	1158	N	THR	A	259	15.164	-29.662	-59.666	1.00	0.00	A	N

ATOM	1159	CA THR A 259	15.569	-28.575	-60.512	1.00	0.00	A	C
ATOM	1160	CB THR A 259	16.772	-28.895	-61.353	1.00	0.00	A	C
ATOM	1161	OG1 THR A 259	16.498	-29.981	-62.223	1.00	0.00	A	O
ATOM	1162	CG2 THR A 259	17.942	-29.243	-60.416	1.00	0.00	A	C
ATOM	1163	C THR A 259	14.447	-28.166	-61.415	1.00	0.00	A	C
ATOM	1164	O THR A 259	14.573	-27.192	-62.155	1.00	0.00	A	O
ATOM	1165	N ASN A 260	13.348	-28.946	-61.441	1.00	0.00	A	N
ATOM	1166	CA ASN A 260	12.224	-28.666	-62.284	1.00	0.00	A	C
ATOM	1167	CB ASN A 260	11.561	-27.306	-61.985	1.00	0.00	A	C
ATOM	1168	CG ASN A 260	10.140	-27.368	-62.525	1.00	0.00	A	C
ATOM	1169	OD1 ASN A 260	9.477	-28.398	-62.414	1.00	0.00	A	O
ATOM	1170	ND2 ASN A 260	9.664	-26.247	-63.128	1.00	0.00	A	N
ATOM	1171	C ASN A 260	12.619	-28.732	-63.727	1.00	0.00	A	C
ATOM	1172	O ASN A 260	12.453	-27.780	-64.489	1.00	0.00	A	O
ATOM	1173	N GLN A 261	13.213	-29.869	-64.136	1.00	0.00	A	N
ATOM	1174	CA GLN A 261	13.489	-30.034	-65.532	1.00	0.00	A	C
ATOM	1175	CB GLN A 261	14.973	-29.827	-65.891	1.00	0.00	A	C
ATOM	1176	CG GLN A 261	15.981	-30.639	-65.087	1.00	0.00	A	C
ATOM	1177	CD GLN A 261	17.338	-29.988	-65.338	1.00	0.00	A	C
ATOM	1178	OE1 GLN A 261	17.600	-29.477	-66.425	1.00	0.00	A	O
ATOM	1179	NE2 GLN A 261	18.222	-29.996	-64.306	1.00	0.00	A	N
ATOM	1180	C GLN A 261	12.908	-31.342	-65.976	1.00	0.00	A	C
ATOM	1181	O GLN A 261	13.543	-32.395	-65.952	1.00	0.00	A	O
ATOM	1182	N LEU A 262	11.642	-31.261	-66.439	1.00	0.00	A	N
ATOM	1183	CA LEU A 262	10.836	-32.406	-66.745	1.00	0.00	A	C
ATOM	1184	CB LEU A 262	9.378	-32.070	-67.077	1.00	0.00	A	C
ATOM	1185	CG LEU A 262	8.561	-33.336	-67.386	1.00	0.00	A	C
ATOM	1186	CD1 LEU A 262	8.465	-34.253	-66.156	1.00	0.00	A	C
ATOM	1187	CD2 LEU A 262	7.193	-32.988	-67.981	1.00	0.00	A	C
ATOM	1188	C LEU A 262	11.370	-33.213	-67.881	1.00	0.00	A	C
ATOM	1189	O LEU A 262	11.370	-34.440	-67.806	1.00	0.00	A	O
ATOM	1190	N GLY A 263	11.862	-32.566	-68.955	1.00	0.00	A	N
ATOM	1191	CA GLY A 263	12.251	-33.311	-70.120	1.00	0.00	A	C
ATOM	1192	C GLY A 263	13.304	-34.303	-69.746	1.00	0.00	A	C
ATOM	1193	O GLY A 263	13.286	-35.443	-70.209	1.00	0.00	A	O
ATOM	1194	N ILE A 264	14.266	-33.885	-68.908	1.00	0.00	A	N
ATOM	1195	CA ILE A 264	15.321	-34.756	-68.482	1.00	0.00	A	C
ATOM	1196	CB ILE A 264	16.447	-34.046	-67.783	1.00	0.00	A	C

ATOM	1197	CG2	ILE A 264	17.434	-35.106	-67.269	1.00	0.00	A	C
ATOM	1198	CG1	ILE A 264	17.097	-33.037	-68.747	1.00	0.00	A	C
ATOM	1199	CD	ILE A 264	18.195	-32.189	-68.105	1.00	0.00	A	C
ATOM	1200	C	ILE A 264	14.764	-35.830	-67.598	1.00	0.00	A	C
ATOM	1201	O	ILE A 264	15.231	-36.968	-67.628	1.00	0.00	A	O
ATOM	1202	N	VAL A 265	13.762	-35.500	-66.754	1.00	0.00	A	N
ATOM	1203	CA	VAL A 265	13.190	-36.523	-65.925	1.00	0.00	A	C
ATOM	1204	CB	VAL A 265	12.031	-36.036	-65.093	1.00	0.00	A	C
ATOM	1205	CG1	VAL A 265	11.352	-37.245	-64.424	1.00	0.00	A	C
ATOM	1206	CG2	VAL A 265	12.552	-35.007	-64.079	1.00	0.00	A	C
ATOM	1207	C	VAL A 265	12.670	-37.597	-66.831	1.00	0.00	A	C
ATOM	1208	O	VAL A 265	12.901	-38.783	-66.592	1.00	0.00	A	O
ATOM	1209	N	LYS A 266	11.967	-37.206	-67.913	1.00	0.00	A	N
ATOM	1210	CA	LYS A 266	11.416	-38.181	-68.815	1.00	0.00	A	C
ATOM	1211	CB	LYS A 266	10.562	-37.555	-69.933	1.00	0.00	A	C
ATOM	1212	CG	LYS A 266	9.227	-36.989	-69.438	1.00	0.00	A	C
ATOM	1213	CD	LYS A 266	8.472	-36.158	-70.479	1.00	0.00	A	C
ATOM	1214	CE	LYS A 266	7.090	-35.689	-70.008	1.00	0.00	A	C
ATOM	1215	NZ	LYS A 266	6.414	-34.929	-71.084	1.00	0.00	A	N
ATOM	1216	C	LYS A 266	12.523	-38.959	-69.460	1.00	0.00	A	C
ATOM	1217	O	LYS A 266	12.489	-40.187	-69.519	1.00	0.00	A	O
ATOM	1218	N	PHE A 267	13.572	-38.257	-69.910	1.00	0.00	A	N
ATOM	1219	CA	PHE A 267	14.672	-38.865	-70.603	1.00	0.00	A	C
ATOM	1220	CB	PHE A 267	15.737	-37.809	-70.972	1.00	0.00	A	C
ATOM	1221	CG	PHE A 267	16.904	-38.451	-71.640	1.00	0.00	A	C
ATOM	1222	CD1	PHE A 267	17.948	-38.944	-70.889	1.00	0.00	A	C
ATOM	1223	CE1	PHE A 267	19.033	-39.531	-71.495	1.00	0.00	A	C
ATOM	1224	CZ	PHE A 267	19.085	-39.631	-72.864	1.00	0.00	A	C
ATOM	1225	CD2	PHE A 267	16.967	-38.548	-73.011	1.00	0.00	A	C
ATOM	1226	CE2	PHE A 267	18.049	-39.139	-73.621	1.00	0.00	A	C
ATOM	1227	C	PHE A 267	15.299	-39.885	-69.707	1.00	0.00	A	C
ATOM	1228	O	PHE A 267	15.698	-40.955	-70.163	1.00	0.00	A	O
ATOM	1229	N	LEU A 268	15.433	-39.577	-68.404	1.00	0.00	A	N
ATOM	1230	CA	LEU A 268	16.083	-40.522	-67.540	1.00	0.00	A	C
ATOM	1231	CB	LEU A 268	16.268	-40.000	-66.103	1.00	0.00	A	C
ATOM	1232	CG	LEU A 268	17.254	-38.823	-65.979	1.00	0.00	A	C
ATOM	1233	CD1	LEU A 268	17.386	-38.361	-64.519	1.00	0.00	A	C
ATOM	1234	CD2	LEU A 268	18.616	-39.156	-66.610	1.00	0.00	A	C

ATOM	1235	C	LEU A 268	15.283	-41.791	-67.458	1.00	0.00	A	C
ATOM	1236	O	LEU A 268	15.825	-42.884	-67.598	1.00	0.00	A	O
ATOM	1237	N	LEU A 269	13.966	-41.672	-67.221	1.00	0.00	A	N
ATOM	1238	CA	LEU A 269	13.115	-42.816	-67.048	1.00	0.00	A	C
ATOM	1239	CB	LEU A 269	11.729	-42.425	-66.512	1.00	0.00	A	C
ATOM	1240	CG	LEU A 269	11.750	-41.843	-65.084	1.00	0.00	A	C
ATOM	1241	CD1	LEU A 269	10.334	-41.475	-64.620	1.00	0.00	A	C
ATOM	1242	CD2	LEU A 269	12.453	-42.786	-64.095	1.00	0.00	A	C
ATOM	1243	C	LEU A 269	12.904	-43.592	-68.323	1.00	0.00	A	C
ATOM	1244	O	LEU A 269	12.830	-44.819	-68.299	1.00	0.00	A	O
ATOM	1245	N	GLN A 270	12.700	-42.880	-69.450	1.00	0.00	A	N
ATOM	1246	CA	GLN A 270	12.376	-43.444	-70.738	1.00	0.00	A	C
ATOM	1247	CB	GLN A 270	11.583	-42.461	-71.612	1.00	0.00	A	C
ATOM	1248	CG	GLN A 270	10.198	-42.188	-71.020	1.00	0.00	A	C
ATOM	1249	CD	GLN A 270	9.465	-41.210	-71.922	1.00	0.00	A	C
ATOM	1250	OE1	GLN A 270	9.954	-40.840	-72.988	1.00	0.00	A	O
ATOM	1251	NE2	GLN A 270	8.255	-40.782	-71.479	1.00	0.00	A	N
ATOM	1252	C	GLN A 270	13.504	-44.027	-71.561	1.00	0.00	A	C
ATOM	1253	O	GLN A 270	13.285	-44.997	-72.285	1.00	0.00	A	O
ATOM	1254	N	ASN A 271	14.733	-43.471	-71.489	1.00	0.00	A	N
ATOM	1255	CA	ASN A 271	15.780	-43.800	-72.436	1.00	0.00	A	C
ATOM	1256	CB	ASN A 271	17.120	-43.066	-72.214	1.00	0.00	A	C
ATOM	1257	CG	ASN A 271	17.777	-43.576	-70.942	1.00	0.00	A	C
ATOM	1258	OD1	ASN A 271	18.666	-44.424	-70.996	1.00	0.00	A	O
ATOM	1259	ND2	ASN A 271	17.345	-43.044	-69.771	1.00	0.00	A	N
ATOM	1260	C	ASN A 271	16.073	-45.270	-72.532	1.00	0.00	A	C
ATOM	1261	O	ASN A 271	15.792	-46.060	-71.633	1.00	0.00	A	O
ATOM	1262	N	SER A 272	16.612	-45.661	-73.711	1.00	0.00	A	N
ATOM	1263	CA	SER A 272	16.942	-47.010	-74.079	1.00	0.00	A	C
ATOM	1264	CB	SER A 272	17.298	-47.130	-75.568	1.00	0.00	A	C
ATOM	1265	OG	SER A 272	16.185	-46.763	-76.368	1.00	0.00	A	O
ATOM	1266	C	SER A 272	18.131	-47.522	-73.322	1.00	0.00	A	C
ATOM	1267	O	SER A 272	18.186	-48.704	-72.980	1.00	0.00	A	O
ATOM	1268	N	TRP A 273	19.131	-46.655	-73.083	1.00	0.00	A	N
ATOM	1269	CA	TRP A 273	20.374	-47.089	-72.502	1.00	0.00	A	C
ATOM	1270	CB	TRP A 273	21.455	-46.006	-72.564	1.00	0.00	A	C
ATOM	1271	CG	TRP A 273	21.860	-45.730	-73.991	1.00	0.00	A	C
ATOM	1272	CD1	TRP A 273	21.334	-44.831	-74.873	1.00	0.00	A	C

ATOM	1273	NE1 TRP A 273	21.975	-44.938	-76.083	1.00	0.00	A	N
ATOM	1274	CE2 TRP A 273	22.938	-45.922	-75.987	1.00	0.00	A	C
ATOM	1275	CD2 TRP A 273	22.890	-46.434	-74.691	1.00	0.00	A	C
ATOM	1276	CE3 TRP A 273	23.736	-47.434	-74.290	1.00	0.00	A	C
ATOM	1277	CZ3 TRP A 273	24.633	-47.913	-75.217	1.00	0.00	A	C
ATOM	1278	CZ2 TRP A 273	23.830	-46.397	-76.903	1.00	0.00	A	C
ATOM	1279	CH2 TRP A 273	24.678	-47.403	-76.500	1.00	0.00	A	C
ATOM	1280	C TRP A 273	20.227	-47.552	-71.089	1.00	0.00	A	C
ATOM	1281	O TRP A 273	20.613	-48.674	-70.763	1.00	0.00	A	O
ATOM	1282	N GLN A 274	19.686	-46.703	-70.195	1.00	0.00	A	N
ATOM	1283	CA GLN A 274	19.500	-47.160	-68.849	1.00	0.00	A	C
ATOM	1284	CB GLN A 274	20.746	-46.971	-67.964	1.00	0.00	A	C
ATOM	1285	CG GLN A 274	20.597	-47.531	-66.547	1.00	0.00	A	C
ATOM	1286	CD GLN A 274	21.945	-47.423	-65.847	1.00	0.00	A	C
ATOM	1287	OE1 GLN A 274	22.922	-46.932	-66.413	1.00	0.00	A	O
ATOM	1288	NE2 GLN A 274	22.008	-47.906	-64.577	1.00	0.00	A	N
ATOM	1289	C GLN A 274	18.379	-46.360	-68.272	1.00	0.00	A	C
ATOM	1290	O GLN A 274	18.503	-45.153	-68.070	1.00	0.00	A	O
ATOM	1291	N THR A 275	17.251	-47.027	-67.980	1.00	0.00	A	N
ATOM	1292	CA THR A 275	16.126	-46.324	-67.444	1.00	0.00	A	C
ATOM	1293	CB THR A 275	14.842	-47.092	-67.549	1.00	0.00	A	C
ATOM	1294	OG1 THR A 275	14.936	-48.304	-66.813	1.00	0.00	A	O
ATOM	1295	CG2 THR A 275	14.568	-47.395	-69.033	1.00	0.00	A	C
ATOM	1296	C THR A 275	16.402	-46.114	-65.995	1.00	0.00	A	C
ATOM	1297	O THR A 275	16.996	-46.970	-65.339	1.00	0.00	A	O
ATOM	1298	N ALA A 276	15.981	-44.954	-65.459	1.00	0.00	A	N
ATOM	1299	CA ALA A 276	16.219	-44.683	-64.076	1.00	0.00	A	C
ATOM	1300	CB ALA A 276	15.998	-43.208	-63.690	1.00	0.00	A	C
ATOM	1301	C ALA A 276	15.284	-45.517	-63.259	1.00	0.00	A	C
ATOM	1302	O ALA A 276	14.175	-45.831	-63.685	1.00	0.00	A	O
ATOM	1303	N ASP A 277	15.745	-45.918	-62.056	1.00	0.00	A	N
ATOM	1304	CA ASP A 277	14.913	-46.643	-61.142	1.00	0.00	A	C
ATOM	1305	CB ASP A 277	15.710	-47.384	-60.048	1.00	0.00	A	C
ATOM	1306	CG ASP A 277	14.759	-48.143	-59.127	1.00	0.00	A	C
ATOM	1307	OD1 ASP A 277	13.517	-47.965	-59.247	1.00	0.00	A	O
ATOM	1308	OD2 ASP A 277	15.275	-48.917	-58.277	1.00	0.00	A	O
ATOM	1309	C ASP A 277	14.104	-45.584	-60.465	1.00	0.00	A	C
ATOM	1310	O ASP A 277	14.620	-44.799	-59.673	1.00	0.00	A	O

ATOM	1311	N	ILE A 278	12.797	-45.555	-60.763	1.00	0.00	A	N
ATOM	1312	CA	ILE A 278	11.912	-44.543	-60.267	1.00	0.00	A	C
ATOM	1313	CB	ILE A 278	10.528	-44.657	-60.836	1.00	0.00	A	C
ATOM	1314	CG2	ILE A 278	9.898	-45.961	-60.312	1.00	0.00	A	C
ATOM	1315	CG1	ILE A 278	9.712	-43.391	-60.518	1.00	0.00	A	C
ATOM	1316	CD	ILE A 278	10.217	-42.140	-61.233	1.00	0.00	A	C
ATOM	1317	C	ILE A 278	11.804	-44.593	-58.766	1.00	0.00	A	C
ATOM	1318	O	ILE A 278	11.535	-43.574	-58.136	1.00	0.00	A	O
ATOM	1319	N	SER A 279	11.876	-45.798	-58.170	1.00	0.00	A	N
ATOM	1320	CA	SER A 279	11.718	-46.002	-56.750	1.00	0.00	A	C
ATOM	1321	CB	SER A 279	11.125	-47.384	-56.427	1.00	0.00	A	C
ATOM	1322	OG	SER A 279	12.023	-48.410	-56.820	1.00	0.00	A	O
ATOM	1323	C	SER A 279	12.973	-45.856	-55.931	1.00	0.00	A	C
ATOM	1324	O	SER A 279	12.913	-46.008	-54.713	1.00	0.00	A	O
ATOM	1325	N	ALA A 280	14.146	-45.580	-56.529	1.00	0.00	A	N
ATOM	1326	CA	ALA A 280	15.354	-45.597	-55.741	1.00	0.00	A	C
ATOM	1327	CB	ALA A 280	16.619	-45.281	-56.557	1.00	0.00	A	C
ATOM	1328	C	ALA A 280	15.285	-44.605	-54.615	1.00	0.00	A	C
ATOM	1329	O	ALA A 280	14.611	-43.580	-54.694	1.00	0.00	A	O
ATOM	1330	N	ARG A 281	15.978	-44.929	-53.501	1.00	0.00	A	N
ATOM	1331	CA	ARG A 281	16.022	-44.049	-52.368	1.00	0.00	A	C
ATOM	1332	CB	ARG A 281	15.371	-44.639	-51.106	1.00	0.00	A	C
ATOM	1333	CG	ARG A 281	15.864	-46.035	-50.736	1.00	0.00	A	C
ATOM	1334	CD	ARG A 281	15.205	-47.125	-51.588	1.00	0.00	A	C
ATOM	1335	NE	ARG A 281	15.543	-48.453	-51.004	1.00	0.00	A	N
ATOM	1336	CZ	ARG A 281	14.735	-49.007	-50.053	1.00	0.00	A	C
ATOM	1337	NH1	ARG A 281	13.621	-48.339	-49.627	1.00	0.00	A	N
ATOM	1338	NH2	ARG A 281	15.033	-50.232	-49.529	1.00	0.00	A	N
ATOM	1339	C	ARG A 281	17.443	-43.648	-52.102	1.00	0.00	A	C
ATOM	1340	O	ARG A 281	18.372	-44.431	-52.286	1.00	0.00	A	O
ATOM	1341	N	ASP A 282	17.640	-42.376	-51.685	1.00	0.00	A	N
ATOM	1342	CA	ASP A 282	18.962	-41.871	-51.435	1.00	0.00	A	C
ATOM	1343	CB	ASP A 282	19.129	-40.357	-51.656	1.00	0.00	A	C
ATOM	1344	CG	ASP A 282	18.223	-39.561	-50.732	1.00	0.00	A	C
ATOM	1345	OD1	ASP A 282	17.708	-40.115	-49.724	1.00	0.00	A	O
ATOM	1346	OD2	ASP A 282	18.040	-38.355	-51.044	1.00	0.00	A	O
ATOM	1347	C	ASP A 282	19.383	-42.256	-50.050	1.00	0.00	A	C
ATOM	1348	O	ASP A 282	18.701	-43.022	-49.374	1.00	0.00	A	O

ATOM	1349	N	SER A 283	20.526	-41.711	-49.584	1.00	0.00	A	N
ATOM	1350	CA	SER A 283	21.103	-42.116	-48.332	1.00	0.00	A	C
ATOM	1351	CB	SER A 283	22.327	-41.271	-47.944	1.00	0.00	A	C
ATOM	1352	OG	SER A 283	23.367	-41.459	-48.892	1.00	0.00	A	O
ATOM	1353	C	SER A 283	20.097	-41.957	-47.229	1.00	0.00	A	C
ATOM	1354	O	SER A 283	20.030	-42.784	-46.319	1.00	0.00	A	O
ATOM	1355	N	VAL A 284	19.309	-40.875	-47.294	1.00	0.00	A	N
ATOM	1356	CA	VAL A 284	18.288	-40.513	-46.350	1.00	0.00	A	C
ATOM	1357	CB	VAL A 284	17.760	-39.129	-46.601	1.00	0.00	A	C
ATOM	1358	CG1	VAL A 284	16.576	-38.866	-45.655	1.00	0.00	A	C
ATOM	1359	CG2	VAL A 284	18.918	-38.129	-46.441	1.00	0.00	A	C
ATOM	1360	C	VAL A 284	17.131	-41.468	-46.429	1.00	0.00	A	C
ATOM	1361	O	VAL A 284	16.371	-41.601	-45.473	1.00	0.00	A	O
ATOM	1362	N	GLY A 285	16.928	-42.134	-47.583	1.00	0.00	A	N
ATOM	1363	CA	GLY A 285	15.803	-43.017	-47.722	1.00	0.00	A	C
ATOM	1364	C	GLY A 285	14.788	-42.308	-48.557	1.00	0.00	A	C
ATOM	1365	O	GLY A 285	13.729	-42.847	-48.872	1.00	0.00	A	O
ATOM	1366	N	ASN A 286	15.104	-41.060	-48.949	1.00	0.00	A	N
ATOM	1367	CA	ASN A 286	14.175	-40.278	-49.711	1.00	0.00	A	C
ATOM	1368	CB	ASN A 286	14.451	-38.765	-49.646	1.00	0.00	A	C
ATOM	1369	CG	ASN A 286	14.109	-38.285	-48.242	1.00	0.00	A	C
ATOM	1370	OD1	ASN A 286	13.368	-38.939	-47.511	1.00	0.00	A	O
ATOM	1371	ND2	ASN A 286	14.659	-37.101	-47.860	1.00	0.00	A	N
ATOM	1372	C	ASN A 286	14.186	-40.668	-51.151	1.00	0.00	A	C
ATOM	1373	O	ASN A 286	15.232	-40.926	-51.747	1.00	0.00	A	O
ATOM	1374	N	THR A 287	12.975	-40.725	-51.739	1.00	0.00	A	N
ATOM	1375	CA	THR A 287	12.812	-40.966	-53.141	1.00	0.00	A	C
ATOM	1376	CB	THR A 287	11.621	-41.821	-53.465	1.00	0.00	A	C
ATOM	1377	OG1	THR A 287	10.431	-41.178	-53.041	1.00	0.00	A	O
ATOM	1378	CG2	THR A 287	11.778	-43.180	-52.757	1.00	0.00	A	C
ATOM	1379	C	THR A 287	12.602	-39.616	-53.757	1.00	0.00	A	C
ATOM	1380	O	THR A 287	12.653	-38.596	-53.066	1.00	0.00	A	O
ATOM	1381	N	VAL A 288	12.350	-39.581	-55.081	1.00	0.00	A	N
ATOM	1382	CA	VAL A 288	12.169	-38.331	-55.766	1.00	0.00	A	C
ATOM	1383	CB	VAL A 288	11.929	-38.468	-57.246	1.00	0.00	A	C
ATOM	1384	CG1	VAL A 288	13.207	-39.010	-57.898	1.00	0.00	A	C
ATOM	1385	CG2	VAL A 288	10.699	-39.355	-57.484	1.00	0.00	A	C
ATOM	1386	C	VAL A 288	10.996	-37.624	-55.167	1.00	0.00	A	C

ATOM	1387	O	VAL A 288	10.991	-36.396	-55.078	1.00	0.00	A	O
ATOM	1388	N	LEU A 289	9.957	-38.381	-54.774	1.00	0.00	A	N
ATOM	1389	CA	LEU A 289	8.809	-37.775	-54.165	1.00	0.00	A	C
ATOM	1390	CB	LEU A 289	7.692	-38.793	-53.880	1.00	0.00	A	C
ATOM	1391	CG	LEU A 289	7.165	-39.483	-55.157	1.00	0.00	A	C
ATOM	1392	CD1	LEU A 289	5.966	-40.397	-54.852	1.00	0.00	A	C
ATOM	1393	CD2	LEU A 289	6.880	-38.462	-56.271	1.00	0.00	A	C
ATOM	1394	C	LEU A 289	9.240	-37.153	-52.866	1.00	0.00	A	C
ATOM	1395	O	LEU A 289	8.879	-36.018	-52.561	1.00	0.00	A	O
ATOM	1396	N	HSD A 290	10.054	-37.869	-52.063	1.00	0.00	A	N
ATOM	1397	CA	HSD A 290	10.479	-37.305	-50.811	1.00	0.00	A	C
ATOM	1398	CB	HSD A 290	11.353	-38.253	-49.971	1.00	0.00	A	C
ATOM	1399	ND1	HSD A 290	9.618	-39.373	-48.492	1.00	0.00	A	N
ATOM	1400	CG	HSD A 290	10.608	-39.442	-49.446	1.00	0.00	A	C
ATOM	1401	CE1	HSD A 290	9.200	-40.645	-48.267	1.00	0.00	A	C
ATOM	1402	NE2	HSD A 290	9.850	-41.523	-49.006	1.00	0.00	A	N
ATOM	1403	CD2	HSD A 290	10.737	-40.763	-49.751	1.00	0.00	A	C
ATOM	1404	C	HSD A 290	11.294	-36.063	-51.058	1.00	0.00	A	C
ATOM	1405	O	HSD A 290	11.100	-35.039	-50.404	1.00	0.00	A	O
ATOM	1406	N	ALA A 291	12.218	-36.109	-52.034	1.00	0.00	A	N
ATOM	1407	CA	ALA A 291	13.101	-34.999	-52.285	1.00	0.00	A	C
ATOM	1408	CB	ALA A 291	14.101	-35.269	-53.423	1.00	0.00	A	C
ATOM	1409	C	ALA A 291	12.307	-33.783	-52.667	1.00	0.00	A	C
ATOM	1410	O	ALA A 291	12.635	-32.671	-52.251	1.00	0.00	A	O
ATOM	1411	N	LEU A 292	11.241	-33.961	-53.470	1.00	0.00	A	N
ATOM	1412	CA	LEU A 292	10.431	-32.864	-53.927	1.00	0.00	A	C
ATOM	1413	CB	LEU A 292	9.302	-33.319	-54.866	1.00	0.00	A	C
ATOM	1414	CG	LEU A 292	9.800	-33.740	-56.260	1.00	0.00	A	C
ATOM	1415	CD1	LEU A 292	8.637	-34.193	-57.155	1.00	0.00	A	C
ATOM	1416	CD2	LEU A 292	10.624	-32.611	-56.905	1.00	0.00	A	C
ATOM	1417	C	LEU A 292	9.805	-32.188	-52.747	1.00	0.00	A	C
ATOM	1418	O	LEU A 292	9.754	-30.962	-52.680	1.00	0.00	A	O
ATOM	1419	N	VAL A 293	9.313	-32.980	-51.777	1.00	0.00	A	N
ATOM	1420	CA	VAL A 293	8.698	-32.444	-50.599	1.00	0.00	A	C
ATOM	1421	CB	VAL A 293	8.224	-33.517	-49.664	1.00	0.00	A	C
ATOM	1422	CG1	VAL A 293	7.721	-32.856	-48.369	1.00	0.00	A	C
ATOM	1423	CG2	VAL A 293	7.155	-34.358	-50.382	1.00	0.00	A	C
ATOM	1424	C	VAL A 293	9.726	-31.631	-49.876	1.00	0.00	A	C

ATOM	1425	O	VAL A 293	9.421	-30.580	-49.322	1.00	0.00	A	O
ATOM	1426	N	GLU A 294	10.983	-32.108	-49.858	1.00	0.00	A	N
ATOM	1427	CA	GLU A 294	12.032	-31.431	-49.148	1.00	0.00	A	C
ATOM	1428	CB	GLU A 294	13.332	-32.252	-49.076	1.00	0.00	A	C
ATOM	1429	CG	GLU A 294	14.233	-31.809	-47.926	1.00	0.00	A	C
ATOM	1430	CD	GLU A 294	13.536	-32.249	-46.645	1.00	0.00	A	C
ATOM	1431	OE1	GLU A 294	13.406	-33.487	-46.446	1.00	0.00	A	O
ATOM	1432	OE2	GLU A 294	13.112	-31.360	-45.863	1.00	0.00	A	O
ATOM	1433	C	GLU A 294	12.345	-30.116	-49.800	1.00	0.00	A	C
ATOM	1434	O	GLU A 294	12.731	-29.160	-49.131	1.00	0.00	A	O
ATOM	1435	N	VAL A 295	12.227	-30.048	-51.139	1.00	0.00	A	N
ATOM	1436	CA	VAL A 295	12.577	-28.880	-51.900	1.00	0.00	A	C
ATOM	1437	CB	VAL A 295	12.771	-29.143	-53.370	1.00	0.00	A	C
ATOM	1438	CG1	VAL A 295	11.410	-29.274	-54.068	1.00	0.00	A	C
ATOM	1439	CG2	VAL A 295	13.668	-28.034	-53.944	1.00	0.00	A	C
ATOM	1440	C	VAL A 295	11.578	-27.761	-51.728	1.00	0.00	A	C
ATOM	1441	O	VAL A 295	11.914	-26.605	-51.985	1.00	0.00	A	O
ATOM	1442	N	ALA A 296	10.311	-28.062	-51.362	1.00	0.00	A	N
ATOM	1443	CA	ALA A 296	9.292	-27.042	-51.274	1.00	0.00	A	C
ATOM	1444	CB	ALA A 296	7.881	-27.616	-51.059	1.00	0.00	A	C
ATOM	1445	C	ALA A 296	9.557	-26.057	-50.160	1.00	0.00	A	C
ATOM	1446	O	ALA A 296	9.928	-26.438	-49.051	1.00	0.00	A	O
ATOM	1447	N	ASP A 297	9.495	-24.745	-50.497	1.00	0.00	A	N
ATOM	1448	CA	ASP A 297	9.586	-23.618	-49.595	1.00	0.00	A	C
ATOM	1449	CB	ASP A 297	10.568	-22.494	-49.997	1.00	0.00	A	C
ATOM	1450	CG	ASP A 297	10.108	-21.767	-51.236	1.00	0.00	A	C
ATOM	1451	OD1	ASP A 297	9.672	-22.457	-52.185	1.00	0.00	A	O
ATOM	1452	OD2	ASP A 297	10.205	-20.510	-51.262	1.00	0.00	A	O
ATOM	1453	C	ASP A 297	8.263	-23.020	-49.178	1.00	0.00	A	C
ATOM	1454	O	ASP A 297	8.246	-22.068	-48.397	1.00	0.00	A	O
ATOM	1455	N	ASN A 298	7.127	-23.472	-49.745	1.00	0.00	A	N
ATOM	1456	CA	ASN A 298	5.835	-22.918	-49.427	1.00	0.00	A	C
ATOM	1457	CB	ASN A 298	5.569	-22.829	-47.915	1.00	0.00	A	C
ATOM	1458	CG	ASN A 298	5.377	-24.254	-47.417	1.00	0.00	A	C
ATOM	1459	OD1	ASN A 298	4.621	-25.026	-48.005	1.00	0.00	A	O
ATOM	1460	ND2	ASN A 298	6.088	-24.621	-46.317	1.00	0.00	A	N
ATOM	1461	C	ASN A 298	5.627	-21.566	-50.041	1.00	0.00	A	C
ATOM	1462	O	ASN A 298	4.816	-20.774	-49.558	1.00	0.00	A	O

ATOM	1463	N	THR A 299	6.347	-21.259	-51.135	1.00	0.00	A	N
ATOM	1464	CA	THR A 299	6.050	-20.062	-51.862	1.00	0.00	A	C
ATOM	1465	CB	THR A 299	7.255	-19.443	-52.503	1.00	0.00	A	C
ATOM	1466	OG1	THR A 299	6.919	-18.186	-53.059	1.00	0.00	A	O
ATOM	1467	CG2	THR A 299	7.784	-20.371	-53.598	1.00	0.00	A	C
ATOM	1468	C	THR A 299	5.081	-20.497	-52.923	1.00	0.00	A	C
ATOM	1469	O	THR A 299	5.035	-21.675	-53.271	1.00	0.00	A	O
ATOM	1470	N	ALA A 300	4.276	-19.568	-53.473	1.00	0.00	A	N
ATOM	1471	CA	ALA A 300	3.254	-19.951	-54.410	1.00	0.00	A	C
ATOM	1472	CB	ALA A 300	2.405	-18.758	-54.886	1.00	0.00	A	C
ATOM	1473	C	ALA A 300	3.862	-20.581	-55.624	1.00	0.00	A	C
ATOM	1474	O	ALA A 300	3.378	-21.602	-56.111	1.00	0.00	A	O
ATOM	1475	N	ASP A 301	4.953	-19.990	-56.137	1.00	0.00	A	N
ATOM	1476	CA	ASP A 301	5.589	-20.462	-57.334	1.00	0.00	A	C
ATOM	1477	CB	ASP A 301	6.762	-19.557	-57.746	1.00	0.00	A	C
ATOM	1478	CG	ASP A 301	6.203	-18.179	-58.077	1.00	0.00	A	C
ATOM	1479	OD1	ASP A 301	5.142	-18.114	-58.756	1.00	0.00	A	O
ATOM	1480	OD2	ASP A 301	6.820	-17.173	-57.639	1.00	0.00	A	O
ATOM	1481	C	ASP A 301	6.146	-21.830	-57.087	1.00	0.00	A	C
ATOM	1482	O	ASP A 301	6.114	-22.688	-57.969	1.00	0.00	A	O
ATOM	1483	N	ASN A 302	6.697	-22.048	-55.878	1.00	0.00	A	N
ATOM	1484	CA	ASN A 302	7.339	-23.285	-55.534	1.00	0.00	A	C
ATOM	1485	CB	ASN A 302	7.969	-23.247	-54.146	1.00	0.00	A	C
ATOM	1486	CG	ASN A 302	8.630	-24.582	-53.849	1.00	0.00	A	C
ATOM	1487	OD1	ASN A 302	7.961	-25.536	-53.454	1.00	0.00	A	O
ATOM	1488	ND2	ASN A 302	9.972	-24.661	-54.041	1.00	0.00	A	N
ATOM	1489	C	ASN A 302	6.370	-24.413	-55.503	1.00	0.00	A	C
ATOM	1490	O	ASN A 302	6.636	-25.473	-56.069	1.00	0.00	A	O
ATOM	1491	N	THR A 303	5.215	-24.214	-54.842	1.00	0.00	A	N
ATOM	1492	CA	THR A 303	4.282	-25.293	-54.741	1.00	0.00	A	C
ATOM	1493	CB	THR A 303	3.020	-24.955	-54.004	1.00	0.00	A	C
ATOM	1494	OG1	THR A 303	2.320	-23.917	-54.671	1.00	0.00	A	O
ATOM	1495	CG2	THR A 303	3.380	-24.530	-52.577	1.00	0.00	A	C
ATOM	1496	C	THR A 303	3.881	-25.668	-56.119	1.00	0.00	A	C
ATOM	1497	O	THR A 303	3.830	-26.848	-56.460	1.00	0.00	A	O
ATOM	1498	N	LYS A 304	3.640	-24.660	-56.974	1.00	0.00	A	N
ATOM	1499	CA	LYS A 304	3.127	-24.938	-58.278	1.00	0.00	A	C
ATOM	1500	CB	LYS A 304	2.961	-23.675	-59.145	1.00	0.00	A	C

ATOM	1501	CG	LYS A 304	1.918	-22.700	-58.596	1.00	0.00	A	C
ATOM	1502	CD	LYS A 304	0.520	-23.307	-58.451	1.00	0.00	A	C
ATOM	1503	CE	LYS A 304	-0.492	-22.376	-57.779	1.00	0.00	A	C
ATOM	1504	NZ	LYS A 304	-1.808	-23.046	-57.675	1.00	0.00	A	N
ATOM	1505	C	LYS A 304	4.057	-25.857	-59.009	1.00	0.00	A	C
ATOM	1506	O	LYS A 304	3.613	-26.854	-59.572	1.00	0.00	A	O
ATOM	1507	N	PHE A 305	5.372	-25.567	-59.024	1.00	0.00	A	N
ATOM	1508	CA	PHE A 305	6.233	-26.411	-59.805	1.00	0.00	A	C
ATOM	1509	CB	PHE A 305	7.622	-25.813	-60.122	1.00	0.00	A	C
ATOM	1510	CG	PHE A 305	8.528	-25.891	-58.946	1.00	0.00	A	C
ATOM	1511	CD1	PHE A 305	9.275	-27.028	-58.751	1.00	0.00	A	C
ATOM	1512	CE1	PHE A 305	10.129	-27.133	-57.681	1.00	0.00	A	C
ATOM	1513	CZ	PHE A 305	10.241	-26.087	-56.797	1.00	0.00	A	C
ATOM	1514	CD2	PHE A 305	8.648	-24.843	-58.064	1.00	0.00	A	C
ATOM	1515	CE2	PHE A 305	9.502	-24.944	-56.990	1.00	0.00	A	C
ATOM	1516	C	PHE A 305	6.405	-27.766	-59.169	1.00	0.00	A	C
ATOM	1517	O	PHE A 305	6.441	-28.778	-59.866	1.00	0.00	A	O
ATOM	1518	N	VAL A 306	6.539	-27.830	-57.827	1.00	0.00	A	N
ATOM	1519	CA	VAL A 306	6.750	-29.095	-57.170	1.00	0.00	A	C
ATOM	1520	CB	VAL A 306	6.995	-28.950	-55.697	1.00	0.00	A	C
ATOM	1521	CG1	VAL A 306	7.055	-30.352	-55.068	1.00	0.00	A	C
ATOM	1522	CG2	VAL A 306	8.283	-28.132	-55.502	1.00	0.00	A	C
ATOM	1523	C	VAL A 306	5.538	-29.950	-57.350	1.00	0.00	A	C
ATOM	1524	O	VAL A 306	5.635	-31.137	-57.659	1.00	0.00	A	O
ATOM	1525	N	THR A 307	4.354	-29.333	-57.204	1.00	0.00	A	N
ATOM	1526	CA	THR A 307	3.095	-30.014	-57.245	1.00	0.00	A	C
ATOM	1527	CB	THR A 307	1.962	-29.031	-57.125	1.00	0.00	A	C
ATOM	1528	OG1	THR A 307	1.929	-28.470	-55.822	1.00	0.00	A	O
ATOM	1529	CG2	THR A 307	0.639	-29.698	-57.501	1.00	0.00	A	C
ATOM	1530	C	THR A 307	2.926	-30.768	-58.530	1.00	0.00	A	C
ATOM	1531	O	THR A 307	2.532	-31.932	-58.513	1.00	0.00	A	O
ATOM	1532	N	SER A 308	3.196	-30.112	-59.670	1.00	0.00	A	N
ATOM	1533	CA	SER A 308	3.034	-30.686	-60.979	1.00	0.00	A	C
ATOM	1534	CB	SER A 308	3.113	-29.619	-62.082	1.00	0.00	A	C
ATOM	1535	OG	SER A 308	2.950	-30.224	-63.350	1.00	0.00	A	O
ATOM	1536	C	SER A 308	4.100	-31.689	-61.276	1.00	0.00	A	C
ATOM	1537	O	SER A 308	3.848	-32.700	-61.931	1.00	0.00	A	O
ATOM	1538	N	MET A 309	5.341	-31.433	-60.829	1.00	0.00	A	N

ATOM	1539	CA	MET	A	309	6.397	-32.356	-61.118	1.00	0.00	A	C
ATOM	1540	CB	MET	A	309	7.784	-31.882	-60.661	1.00	0.00	A	C
ATOM	1541	CG	MET	A	309	8.883	-32.889	-61.003	1.00	0.00	A	C
ATOM	1542	SD	MET	A	309	9.097	-33.173	-62.788	1.00	0.00	A	S
ATOM	1543	CE	MET	A	309	9.520	-31.456	-63.196	1.00	0.00	A	C
ATOM	1544	C	MET	A	309	6.079	-33.632	-60.412	1.00	0.00	A	C
ATOM	1545	O	MET	A	309	6.368	-34.716	-60.910	1.00	0.00	A	O
ATOM	1546	N	TYR	A	310	5.484	-33.512	-59.212	1.00	0.00	A	N
ATOM	1547	CA	TYR	A	310	5.099	-34.642	-58.419	1.00	0.00	A	C
ATOM	1548	CB	TYR	A	310	4.424	-34.174	-57.112	1.00	0.00	A	C
ATOM	1549	CG	TYR	A	310	4.142	-35.300	-56.171	1.00	0.00	A	C
ATOM	1550	CD1	TYR	A	310	5.114	-35.742	-55.304	1.00	0.00	A	C
ATOM	1551	CE1	TYR	A	310	4.867	-36.767	-54.422	1.00	0.00	A	C
ATOM	1552	CZ	TYR	A	310	3.629	-37.364	-54.394	1.00	0.00	A	C
ATOM	1553	OH	TYR	A	310	3.368	-38.416	-53.490	1.00	0.00	A	O
ATOM	1554	CD2	TYR	A	310	2.903	-35.901	-56.130	1.00	0.00	A	C
ATOM	1555	CE2	TYR	A	310	2.648	-36.928	-55.250	1.00	0.00	A	C
ATOM	1556	C	TYR	A	310	4.090	-35.412	-59.221	1.00	0.00	A	C
ATOM	1557	O	TYR	A	310	4.208	-36.625	-59.389	1.00	0.00	A	O
ATOM	1558	N	ASN	A	311	3.096	-34.703	-59.791	1.00	0.00	A	N
ATOM	1559	CA	ASN	A	311	2.055	-35.331	-60.551	1.00	0.00	A	C
ATOM	1560	CB	ASN	A	311	1.043	-34.326	-61.120	1.00	0.00	A	C
ATOM	1561	CG	ASN	A	311	-0.096	-35.126	-61.735	1.00	0.00	A	C
ATOM	1562	OD1	ASN	A	311	-0.129	-36.352	-61.641	1.00	0.00	A	O
ATOM	1563	ND2	ASN	A	311	-1.049	-34.415	-62.393	1.00	0.00	A	N
ATOM	1564	C	ASN	A	311	2.681	-36.036	-61.708	1.00	0.00	A	C
ATOM	1565	O	ASN	A	311	2.305	-37.156	-62.047	1.00	0.00	A	O
ATOM	1566	N	GLU	A	312	3.677	-35.388	-62.335	1.00	0.00	A	N
ATOM	1567	CA	GLU	A	312	4.325	-35.932	-63.489	1.00	0.00	A	C
ATOM	1568	CB	GLU	A	312	5.421	-35.009	-64.044	1.00	0.00	A	C
ATOM	1569	CG	GLU	A	312	4.868	-33.825	-64.831	1.00	0.00	A	C
ATOM	1570	CD	GLU	A	312	4.293	-34.401	-66.114	1.00	0.00	A	C
ATOM	1571	OE1	GLU	A	312	4.862	-35.409	-66.607	1.00	0.00	A	O
ATOM	1572	OE2	GLU	A	312	3.276	-33.851	-66.613	1.00	0.00	A	O
ATOM	1573	C	GLU	A	312	4.987	-37.224	-63.139	1.00	0.00	A	C
ATOM	1574	O	GLU	A	312	4.928	-38.177	-63.909	1.00	0.00	A	O
ATOM	1575	N	ILE	A	313	5.634	-37.301	-61.964	1.00	0.00	A	N
ATOM	1576	CA	ILE	A	313	6.337	-38.496	-61.602	1.00	0.00	A	C

ATOM	1577	CB	ILE	A	313	7.037	-38.374	-60.279	1.00	0.00	A	C
ATOM	1578	CG2	ILE	A	313	7.514	-39.776	-59.868	1.00	0.00	A	C
ATOM	1579	CG1	ILE	A	313	8.168	-37.331	-60.353	1.00	0.00	A	C
ATOM	1580	CD	ILE	A	313	9.271	-37.698	-61.344	1.00	0.00	A	C
ATOM	1581	C	ILE	A	313	5.363	-39.623	-61.490	1.00	0.00	A	C
ATOM	1582	O	ILE	A	313	5.622	-40.724	-61.972	1.00	0.00	A	O
ATOM	1583	N	LEU	A	314	4.207	-39.376	-60.845	1.00	0.00	A	N
ATOM	1584	CA	LEU	A	314	3.252	-40.428	-60.652	1.00	0.00	A	C
ATOM	1585	CB	LEU	A	314	2.074	-40.035	-59.745	1.00	0.00	A	C
ATOM	1586	CG	LEU	A	314	2.481	-39.833	-58.271	1.00	0.00	A	C
ATOM	1587	CD1	LEU	A	314	1.258	-39.535	-57.390	1.00	0.00	A	C
ATOM	1588	CD2	LEU	A	314	3.307	-41.020	-57.749	1.00	0.00	A	C
ATOM	1589	C	LEU	A	314	2.714	-40.902	-61.972	1.00	0.00	A	C
ATOM	1590	O	LEU	A	314	2.597	-42.105	-62.197	1.00	0.00	A	O
ATOM	1591	N	MET	A	315	2.411	-39.976	-62.901	1.00	0.00	A	N
ATOM	1592	CA	MET	A	315	1.850	-40.360	-64.165	1.00	0.00	A	C
ATOM	1593	CB	MET	A	315	1.596	-39.149	-65.082	1.00	0.00	A	C
ATOM	1594	CG	MET	A	315	0.553	-38.179	-64.521	1.00	0.00	A	C
ATOM	1595	SD	MET	A	315	0.218	-36.735	-65.571	1.00	0.00	A	S
ATOM	1596	CE	MET	A	315	1.846	-35.975	-65.301	1.00	0.00	A	C
ATOM	1597	C	MET	A	315	2.831	-41.263	-64.847	1.00	0.00	A	C
ATOM	1598	O	MET	A	315	2.455	-42.242	-65.486	1.00	0.00	A	O
ATOM	1599	N	LEU	A	316	4.128	-40.937	-64.746	1.00	0.00	A	N
ATOM	1600	CA	LEU	A	316	5.170	-41.734	-65.332	1.00	0.00	A	C
ATOM	1601	CB	LEU	A	316	6.552	-41.049	-65.289	1.00	0.00	A	C
ATOM	1602	CG	LEU	A	316	6.792	-39.997	-66.398	1.00	0.00	A	C
ATOM	1603	CD1	LEU	A	316	5.715	-38.905	-66.425	1.00	0.00	A	C
ATOM	1604	CD2	LEU	A	316	8.206	-39.398	-66.294	1.00	0.00	A	C
ATOM	1605	C	LEU	A	316	5.261	-43.064	-64.642	1.00	0.00	A	C
ATOM	1606	O	LEU	A	316	5.500	-44.085	-65.286	1.00	0.00	A	O
ATOM	1607	N	GLY	A	317	5.096	-43.088	-63.306	1.00	0.00	A	N
ATOM	1608	CA	GLY	A	317	5.200	-44.337	-62.605	1.00	0.00	A	C
ATOM	1609	C	GLY	A	317	4.116	-45.251	-63.080	1.00	0.00	A	C
ATOM	1610	O	GLY	A	317	4.360	-46.419	-63.378	1.00	0.00	A	O
ATOM	1611	N	ALA	A	318	2.878	-44.732	-63.180	1.00	0.00	A	N
ATOM	1612	CA	ALA	A	318	1.766	-45.549	-63.562	1.00	0.00	A	C
ATOM	1613	CB	ALA	A	318	0.430	-44.790	-63.506	1.00	0.00	A	C
ATOM	1614	C	ALA	A	318	1.951	-46.046	-64.961	1.00	0.00	A	C

ATOM	1615	O	ALA A 318	1.669	-47.206	-65.253	1.00	0.00	A	O
ATOM	1616	N	LYS A 319	2.399	-45.182	-65.888	1.00	0.00	A	N
ATOM	1617	CA	LYS A 319	2.540	-45.680	-67.223	1.00	0.00	A	C
ATOM	1618	CB	LYS A 319	2.769	-44.574	-68.273	1.00	0.00	A	C
ATOM	1619	CG	LYS A 319	3.972	-43.663	-68.032	1.00	0.00	A	C
ATOM	1620	CD	LYS A 319	4.323	-42.808	-69.251	1.00	0.00	A	C
ATOM	1621	CE	LYS A 319	5.517	-41.879	-69.040	1.00	0.00	A	C
ATOM	1622	NZ	LYS A 319	5.724	-41.056	-70.252	1.00	0.00	A	N
ATOM	1623	C	LYS A 319	3.640	-46.703	-67.316	1.00	0.00	A	C
ATOM	1624	O	LYS A 319	3.417	-47.803	-67.821	1.00	0.00	A	O
ATOM	1625	N	LEU A 320	4.856	-46.377	-66.831	1.00	0.00	A	N
ATOM	1626	CA	LEU A 320	5.964	-47.284	-66.960	1.00	0.00	A	C
ATOM	1627	CB	LEU A 320	7.330	-46.613	-66.711	1.00	0.00	A	C
ATOM	1628	CG	LEU A 320	7.768	-45.669	-67.854	1.00	0.00	A	C
ATOM	1629	CD1	LEU A 320	6.802	-44.489	-68.027	1.00	0.00	A	C
ATOM	1630	CD2	LEU A 320	9.223	-45.202	-67.686	1.00	0.00	A	C
ATOM	1631	C	LEU A 320	5.856	-48.499	-66.081	1.00	0.00	A	C
ATOM	1632	O	LEU A 320	6.036	-49.616	-66.562	1.00	0.00	A	O
ATOM	1633	N	HSD A 321	5.556	-48.334	-64.773	1.00	0.00	A	N
ATOM	1634	CA	HSD A 321	5.507	-49.492	-63.913	1.00	0.00	A	C
ATOM	1635	CB	HSD A 321	6.745	-49.592	-63.007	1.00	0.00	A	C
ATOM	1636	ND1	HSD A 321	8.590	-50.653	-64.397	1.00	0.00	A	N
ATOM	1637	CG	HSD A 321	8.012	-49.551	-63.810	1.00	0.00	A	C
ATOM	1638	CE1	HSD A 321	9.691	-50.212	-65.055	1.00	0.00	A	C
ATOM	1639	NE2	HSD A 321	9.862	-48.908	-64.933	1.00	0.00	A	N
ATOM	1640	CD2	HSD A 321	8.802	-48.492	-64.147	1.00	0.00	A	C
ATOM	1641	C	HSD A 321	4.306	-49.347	-63.023	1.00	0.00	A	C
ATOM	1642	O	HSD A 321	4.380	-48.743	-61.954	1.00	0.00	A	O
ATOM	1643	N	PRO A 322	3.207	-49.915	-63.432	1.00	0.00	A	N
ATOM	1644	CD	PRO A 322	2.995	-50.223	-64.834	1.00	0.00	A	C
ATOM	1645	CA	PRO A 322	1.965	-49.759	-62.721	1.00	0.00	A	C
ATOM	1646	CB	PRO A 322	0.863	-50.191	-63.695	1.00	0.00	A	C
ATOM	1647	CG	PRO A 322	1.604	-50.872	-64.862	1.00	0.00	A	C
ATOM	1648	C	PRO A 322	1.866	-50.407	-61.378	1.00	0.00	A	C
ATOM	1649	O	PRO A 322	1.072	-49.946	-60.560	1.00	0.00	A	O
ATOM	1650	N	THR A 323	2.646	-51.469	-61.124	1.00	0.00	A	N
ATOM	1651	CA	THR A 323	2.524	-52.217	-59.911	1.00	0.00	A	C
ATOM	1652	CB	THR A 323	3.385	-53.439	-59.909	1.00	0.00	A	C

ATOM	1653	OG1 THR A 323	3.084	-54.246	-61.038	1.00	0.00	A	O
ATOM	1654	CG2 THR A 323	3.097	-54.220	-58.618	1.00	0.00	A	C
ATOM	1655	C THR A 323	2.937	-51.398	-58.728	1.00	0.00	A	C
ATOM	1656	O THR A 323	2.353	-51.522	-57.651	1.00	0.00	A	O
ATOM	1657	N LEU A 324	3.956	-50.537	-58.901	1.00	0.00	A	N
ATOM	1658	CA LEU A 324	4.562	-49.859	-57.790	1.00	0.00	A	C
ATOM	1659	CB LEU A 324	5.842	-49.108	-58.187	1.00	0.00	A	C
ATOM	1660	CG LEU A 324	6.874	-49.987	-58.915	1.00	0.00	A	C
ATOM	1661	CD1 LEU A 324	8.219	-49.258	-59.034	1.00	0.00	A	C
ATOM	1662	CD2 LEU A 324	6.985	-51.385	-58.291	1.00	0.00	A	C
ATOM	1663	C LEU A 324	3.644	-48.850	-57.170	1.00	0.00	A	C
ATOM	1664	O LEU A 324	3.059	-48.012	-57.852	1.00	0.00	A	O
ATOM	1665	N LYS A 325	3.508	-48.913	-55.825	1.00	0.00	A	N
ATOM	1666	CA LYS A 325	2.762	-47.903	-55.132	1.00	0.00	A	C
ATOM	1667	CB LYS A 325	1.871	-48.421	-53.986	1.00	0.00	A	C
ATOM	1668	CG LYS A 325	0.616	-49.142	-54.486	1.00	0.00	A	C
ATOM	1669	CD LYS A 325	-0.255	-49.746	-53.381	1.00	0.00	A	C
ATOM	1670	CE LYS A 325	-1.568	-50.330	-53.910	1.00	0.00	A	C
ATOM	1671	NZ LYS A 325	-2.371	-50.886	-52.798	1.00	0.00	A	N
ATOM	1672	C LYS A 325	3.792	-46.977	-54.560	1.00	0.00	A	C
ATOM	1673	O LYS A 325	4.321	-47.192	-53.469	1.00	0.00	A	O
ATOM	1674	N LEU A 326	4.086	-45.903	-55.313	1.00	0.00	A	N
ATOM	1675	CA LEU A 326	5.137	-44.980	-54.993	1.00	0.00	A	C
ATOM	1676	CB LEU A 326	5.422	-43.957	-56.111	1.00	0.00	A	C
ATOM	1677	CG LEU A 326	6.122	-44.535	-57.359	1.00	0.00	A	C
ATOM	1678	CD1 LEU A 326	5.234	-45.540	-58.107	1.00	0.00	A	C
ATOM	1679	CD2 LEU A 326	6.639	-43.416	-58.276	1.00	0.00	A	C
ATOM	1680	C LEU A 326	4.892	-44.197	-53.738	1.00	0.00	A	C
ATOM	1681	O LEU A 326	5.817	-43.963	-52.964	1.00	0.00	A	O
ATOM	1682	N GLU A 327	3.645	-43.763	-53.491	1.00	0.00	A	N
ATOM	1683	CA GLU A 327	3.371	-42.886	-52.383	1.00	0.00	A	C
ATOM	1684	CB GLU A 327	1.955	-42.292	-52.420	1.00	0.00	A	C
ATOM	1685	CG GLU A 327	1.822	-41.236	-53.519	1.00	0.00	A	C
ATOM	1686	CD GLU A 327	0.421	-40.648	-53.473	1.00	0.00	A	C
ATOM	1687	OE1 GLU A 327	-0.538	-41.376	-53.848	1.00	0.00	A	O
ATOM	1688	OE2 GLU A 327	0.290	-39.464	-53.066	1.00	0.00	A	O
ATOM	1689	C GLU A 327	3.599	-43.552	-51.063	1.00	0.00	A	C
ATOM	1690	O GLU A 327	3.780	-42.884	-50.045	1.00	0.00	A	O

ATOM	1691	N	GLU A 328	3.508	-44.887	-51.030	1.00	0.00	A	N
ATOM	1692	CA	GLU A 328	3.664	-45.673	-49.841	1.00	0.00	A	C
ATOM	1693	CB	GLU A 328	3.109	-47.091	-50.032	1.00	0.00	A	C
ATOM	1694	CG	GLU A 328	1.583	-47.049	-50.166	1.00	0.00	A	C
ATOM	1695	CD	GLU A 328	1.058	-48.441	-50.480	1.00	0.00	A	C
ATOM	1696	OE1	GLU A 328	1.838	-49.267	-51.023	1.00	0.00	A	O
ATOM	1697	OE2	GLU A 328	-0.140	-48.690	-50.188	1.00	0.00	A	O
ATOM	1698	C	GLU A 328	5.088	-45.750	-49.335	1.00	0.00	A	C
ATOM	1699	O	GLU A 328	5.286	-45.968	-48.141	1.00	0.00	A	O
ATOM	1700	N	LEU A 329	6.117	-45.609	-50.202	1.00	0.00	A	N
ATOM	1701	CA	LEU A 329	7.495	-45.823	-49.807	1.00	0.00	A	C
ATOM	1702	CB	LEU A 329	8.491	-45.725	-50.978	1.00	0.00	A	C
ATOM	1703	CG	LEU A 329	8.305	-46.813	-52.053	1.00	0.00	A	C
ATOM	1704	CD1	LEU A 329	6.938	-46.689	-52.745	1.00	0.00	A	C
ATOM	1705	CD2	LEU A 329	9.477	-46.817	-53.050	1.00	0.00	A	C
ATOM	1706	C	LEU A 329	7.961	-44.855	-48.750	1.00	0.00	A	C
ATOM	1707	O	LEU A 329	7.872	-43.638	-48.907	1.00	0.00	A	O
ATOM	1708	N	THR A 330	8.537	-45.410	-47.653	1.00	0.00	A	N
ATOM	1709	CA	THR A 330	8.972	-44.651	-46.508	1.00	0.00	A	C
ATOM	1710	CB	THR A 330	8.765	-45.383	-45.216	1.00	0.00	A	C
ATOM	1711	OG1	THR A 330	9.572	-46.552	-45.190	1.00	0.00	A	O
ATOM	1712	CG2	THR A 330	7.281	-45.765	-45.100	1.00	0.00	A	C
ATOM	1713	C	THR A 330	10.441	-44.349	-46.578	1.00	0.00	A	C
ATOM	1714	O	THR A 330	11.241	-45.162	-47.034	1.00	0.00	A	O
ATOM	1715	N	ASN A 331	10.825	-43.148	-46.084	1.00	0.00	A	N
ATOM	1716	CA	ASN A 331	12.202	-42.747	-46.021	1.00	0.00	A	C
ATOM	1717	CB	ASN A 331	12.417	-41.215	-46.000	1.00	0.00	A	C
ATOM	1718	CG	ASN A 331	11.780	-40.606	-44.758	1.00	0.00	A	C
ATOM	1719	OD1	ASN A 331	11.195	-41.294	-43.925	1.00	0.00	A	O
ATOM	1720	ND2	ASN A 331	11.886	-39.255	-44.639	1.00	0.00	A	N
ATOM	1721	C	ASN A 331	12.782	-43.361	-44.779	1.00	0.00	A	C
ATOM	1722	O	ASN A 331	12.115	-44.127	-44.088	1.00	0.00	A	O
ATOM	1723	N	LYS A 332	14.043	-43.026	-44.453	1.00	0.00	A	N
ATOM	1724	CA	LYS A 332	14.757	-43.628	-43.357	1.00	0.00	A	C
ATOM	1725	CB	LYS A 332	16.061	-42.872	-43.067	1.00	0.00	A	C
ATOM	1726	CG	LYS A 332	16.950	-43.453	-41.970	1.00	0.00	A	C
ATOM	1727	CD	LYS A 332	18.224	-42.622	-41.766	1.00	0.00	A	C
ATOM	1728	CE	LYS A 332	18.846	-42.115	-43.072	1.00	0.00	A	C

ATOM	1729	NZ	LYS	A	332	19.821	-41.037	-42.786	1.00	0.00	A	N
ATOM	1730	C	LYS	A	332	13.940	-43.496	-42.108	1.00	0.00	A	C
ATOM	1731	O	LYS	A	332	13.796	-44.449	-41.342	1.00	0.00	A	O
ATOM	1732	N	LYS	A	333	13.366	-42.307	-41.885	1.00	0.00	A	N
ATOM	1733	CA	LYS	A	333	12.626	-41.987	-40.698	1.00	0.00	A	C
ATOM	1734	CB	LYS	A	333	12.235	-40.502	-40.622	1.00	0.00	A	C
ATOM	1735	CG	LYS	A	333	13.453	-39.587	-40.487	1.00	0.00	A	C
ATOM	1736	CD	LYS	A	333	13.147	-38.107	-40.711	1.00	0.00	A	C
ATOM	1737	CE	LYS	A	333	14.398	-37.228	-40.700	1.00	0.00	A	C
ATOM	1738	NZ	LYS	A	333	15.156	-37.453	-39.450	1.00	0.00	A	N
ATOM	1739	C	LYS	A	333	11.377	-42.817	-40.616	1.00	0.00	A	C
ATOM	1740	O	LYS	A	333	10.798	-42.957	-39.542	1.00	0.00	A	O
ATOM	1741	N	GLY	A	334	10.897	-43.368	-41.746	1.00	0.00	A	N
ATOM	1742	CA	GLY	A	334	9.683	-44.132	-41.686	1.00	0.00	A	C
ATOM	1743	C	GLY	A	334	8.574	-43.271	-42.191	1.00	0.00	A	C
ATOM	1744	O	GLY	A	334	7.400	-43.553	-41.956	1.00	0.00	A	O
ATOM	1745	N	MET	A	335	8.924	-42.192	-42.921	1.00	0.00	A	N
ATOM	1746	CA	MET	A	335	7.908	-41.287	-43.372	1.00	0.00	A	C
ATOM	1747	CB	MET	A	335	8.291	-39.813	-43.158	1.00	0.00	A	C
ATOM	1748	CG	MET	A	335	8.498	-39.447	-41.687	1.00	0.00	A	C
ATOM	1749	SD	MET	A	335	8.970	-37.715	-41.391	1.00	0.00	A	S
ATOM	1750	CE	MET	A	335	9.442	-37.972	-39.656	1.00	0.00	A	C
ATOM	1751	C	MET	A	335	7.644	-41.451	-44.840	1.00	0.00	A	C
ATOM	1752	O	MET	A	335	8.555	-41.553	-45.660	1.00	0.00	A	O
ATOM	1753	N	THR	A	336	6.341	-41.485	-45.192	1.00	0.00	A	N
ATOM	1754	CA	THR	A	336	5.928	-41.487	-46.564	1.00	0.00	A	C
ATOM	1755	CB	THR	A	336	4.493	-41.873	-46.771	1.00	0.00	A	C
ATOM	1756	OG1	THR	A	336	3.634	-40.941	-46.130	1.00	0.00	A	O
ATOM	1757	CG2	THR	A	336	4.270	-43.286	-46.205	1.00	0.00	A	C
ATOM	1758	C	THR	A	336	6.078	-40.060	-46.987	1.00	0.00	A	C
ATOM	1759	O	THR	A	336	6.246	-39.187	-46.137	1.00	0.00	A	O
ATOM	1760	N	PRO	A	337	6.028	-39.770	-48.261	1.00	0.00	A	N
ATOM	1761	CD	PRO	A	337	6.181	-40.760	-49.312	1.00	0.00	A	C
ATOM	1762	CA	PRO	A	337	6.205	-38.424	-48.728	1.00	0.00	A	C
ATOM	1763	CB	PRO	A	337	6.103	-38.508	-50.249	1.00	0.00	A	C
ATOM	1764	CG	PRO	A	337	6.562	-39.947	-50.564	1.00	0.00	A	C
ATOM	1765	C	PRO	A	337	5.211	-37.514	-48.077	1.00	0.00	A	C
ATOM	1766	O	PRO	A	337	5.593	-36.434	-47.636	1.00	0.00	A	O

ATOM	1767	N	LEU	A	338	3.946	-37.949	-47.958	1.00	0.00	A	N
ATOM	1768	CA	LEU	A	338	2.923	-37.138	-47.367	1.00	0.00	A	C
ATOM	1769	CB	LEU	A	338	1.578	-37.882	-47.315	1.00	0.00	A	C
ATOM	1770	CG	LEU	A	338	0.433	-37.079	-46.678	1.00	0.00	A	C
ATOM	1771	CD1	LEU	A	338	0.021	-35.887	-47.555	1.00	0.00	A	C
ATOM	1772	CD2	LEU	A	338	-0.741	-38.000	-46.317	1.00	0.00	A	C
ATOM	1773	C	LEU	A	338	3.302	-36.834	-45.953	1.00	0.00	A	C
ATOM	1774	O	LEU	A	338	3.246	-35.688	-45.515	1.00	0.00	A	O
ATOM	1775	N	ALA	A	339	3.741	-37.864	-45.207	1.00	0.00	A	N
ATOM	1776	CA	ALA	A	339	4.032	-37.722	-43.809	1.00	0.00	A	C
ATOM	1777	CB	ALA	A	339	4.467	-39.046	-43.159	1.00	0.00	A	C
ATOM	1778	C	ALA	A	339	5.146	-36.742	-43.620	1.00	0.00	A	C
ATOM	1779	O	ALA	A	339	5.143	-35.970	-42.664	1.00	0.00	A	O
ATOM	1780	N	LEU	A	340	6.147	-36.780	-44.517	1.00	0.00	A	N
ATOM	1781	CA	LEU	A	340	7.283	-35.904	-44.432	1.00	0.00	A	C
ATOM	1782	CB	LEU	A	340	8.303	-36.213	-45.548	1.00	0.00	A	C
ATOM	1783	CG	LEU	A	340	9.708	-35.587	-45.401	1.00	0.00	A	C
ATOM	1784	CD1	LEU	A	340	10.543	-35.843	-46.665	1.00	0.00	A	C
ATOM	1785	CD2	LEU	A	340	9.685	-34.107	-45.005	1.00	0.00	A	C
ATOM	1786	C	LEU	A	340	6.795	-34.498	-44.619	1.00	0.00	A	C
ATOM	1787	O	LEU	A	340	7.141	-33.601	-43.852	1.00	0.00	A	O
ATOM	1788	N	ALA	A	341	5.914	-34.285	-45.617	1.00	0.00	A	N
ATOM	1789	CA	ALA	A	341	5.470	-32.956	-45.928	1.00	0.00	A	C
ATOM	1790	CB	ALA	A	341	4.414	-32.934	-47.047	1.00	0.00	A	C
ATOM	1791	C	ALA	A	341	4.845	-32.362	-44.704	1.00	0.00	A	C
ATOM	1792	O	ALA	A	341	5.077	-31.194	-44.396	1.00	0.00	A	O
ATOM	1793	N	ALA	A	342	4.029	-33.158	-43.989	1.00	0.00	A	N
ATOM	1794	CA	ALA	A	342	3.343	-32.732	-42.797	1.00	0.00	A	C
ATOM	1795	CB	ALA	A	342	2.313	-33.759	-42.315	1.00	0.00	A	C
ATOM	1796	C	ALA	A	342	4.307	-32.480	-41.677	1.00	0.00	A	C
ATOM	1797	O	ALA	A	342	4.107	-31.573	-40.870	1.00	0.00	A	O
ATOM	1798	N	GLY	A	343	5.359	-33.311	-41.557	1.00	0.00	A	N
ATOM	1799	CA	GLY	A	343	6.304	-33.113	-40.496	1.00	0.00	A	C
ATOM	1800	C	GLY	A	343	6.998	-31.789	-40.681	1.00	0.00	A	C
ATOM	1801	O	GLY	A	343	7.295	-31.090	-39.713	1.00	0.00	A	O
ATOM	1802	N	THR	A	344	7.331	-31.460	-41.943	1.00	0.00	A	N
ATOM	1803	CA	THR	A	344	8.071	-30.301	-42.387	1.00	0.00	A	C
ATOM	1804	CB	THR	A	344	8.803	-30.582	-43.676	1.00	0.00	A	C

ATOM	1805	OG1 THR A 344	9.590	-31.753	-43.519	1.00	0.00	A	O
ATOM	1806	CG2 THR A 344	9.762	-29.422	-43.993	1.00	0.00	A	C
ATOM	1807	C THR A 344	7.248	-29.041	-42.525	1.00	0.00	A	C
ATOM	1808	O THR A 344	7.806	-27.973	-42.768	1.00	0.00	A	O
ATOM	1809	N GLY A 345	5.901	-29.109	-42.510	1.00	0.00	A	N
ATOM	1810	CA GLY A 345	5.149	-27.888	-42.630	1.00	0.00	A	C
ATOM	1811	C GLY A 345	5.120	-27.434	-44.062	1.00	0.00	A	C
ATOM	1812	O GLY A 345	5.081	-26.233	-44.334	1.00	0.00	A	O
ATOM	1813	N LYS A 346	5.176	-28.376	-45.025	1.00	0.00	A	N
ATOM	1814	CA LYS A 346	5.055	-27.976	-46.405	1.00	0.00	A	C
ATOM	1815	CB LYS A 346	5.950	-28.775	-47.371	1.00	0.00	A	C
ATOM	1816	CG LYS A 346	7.367	-28.205	-47.477	1.00	0.00	A	C
ATOM	1817	CD LYS A 346	8.177	-28.255	-46.185	1.00	0.00	A	C
ATOM	1818	CE LYS A 346	9.553	-27.593	-46.297	1.00	0.00	A	C
ATOM	1819	NZ LYS A 346	10.432	-28.384	-47.188	1.00	0.00	A	N
ATOM	1820	C LYS A 346	3.620	-28.188	-46.778	1.00	0.00	A	C
ATOM	1821	O LYS A 346	3.262	-29.173	-47.419	1.00	0.00	A	O
ATOM	1822	N ILE A 347	2.785	-27.195	-46.409	1.00	0.00	A	N
ATOM	1823	CA ILE A 347	1.349	-27.255	-46.467	1.00	0.00	A	C
ATOM	1824	CB ILE A 347	0.674	-26.056	-45.862	1.00	0.00	A	C
ATOM	1825	CG2 ILE A 347	-0.838	-26.220	-46.105	1.00	0.00	A	C
ATOM	1826	CG1 ILE A 347	1.026	-25.888	-44.376	1.00	0.00	A	C
ATOM	1827	CD ILE A 347	2.462	-25.430	-44.125	1.00	0.00	A	C
ATOM	1828	C ILE A 347	0.791	-27.341	-47.851	1.00	0.00	A	C
ATOM	1829	O ILE A 347	-0.092	-28.155	-48.111	1.00	0.00	A	O
ATOM	1830	N GLY A 348	1.281	-26.506	-48.781	1.00	0.00	A	N
ATOM	1831	CA GLY A 348	0.668	-26.452	-50.076	1.00	0.00	A	C
ATOM	1832	C GLY A 348	0.734	-27.805	-50.703	1.00	0.00	A	C
ATOM	1833	O GLY A 348	-0.210	-28.241	-51.360	1.00	0.00	A	O
ATOM	1834	N VAL A 349	1.880	-28.487	-50.541	1.00	0.00	A	N
ATOM	1835	CA VAL A 349	2.104	-29.787	-51.104	1.00	0.00	A	C
ATOM	1836	CB VAL A 349	3.538	-30.222	-50.977	1.00	0.00	A	C
ATOM	1837	CG1 VAL A 349	3.689	-31.623	-51.594	1.00	0.00	A	C
ATOM	1838	CG2 VAL A 349	4.430	-29.157	-51.637	1.00	0.00	A	C
ATOM	1839	C VAL A 349	1.244	-30.799	-50.411	1.00	0.00	A	C
ATOM	1840	O VAL A 349	0.641	-31.656	-51.052	1.00	0.00	A	O
ATOM	1841	N LEU A 350	1.153	-30.701	-49.071	1.00	0.00	A	N
ATOM	1842	CA LEU A 350	0.395	-31.651	-48.309	1.00	0.00	A	C

ATOM	1843	CB	LEU	A	350	0.411	-31.292	-46.808	1.00	0.00	A	C
ATOM	1844	CG	LEU	A	350	-0.197	-32.321	-45.828	1.00	0.00	A	C
ATOM	1845	CD1	LEU	A	350	-0.090	-31.799	-44.387	1.00	0.00	A	C
ATOM	1846	CD2	LEU	A	350	-1.638	-32.726	-46.178	1.00	0.00	A	C
ATOM	1847	C	LEU	A	350	-1.017	-31.599	-48.815	1.00	0.00	A	C
ATOM	1848	O	LEU	A	350	-1.634	-32.631	-49.079	1.00	0.00	A	O
ATOM	1849	N	ALA	A	351	-1.557	-30.379	-49.002	1.00	0.00	A	N
ATOM	1850	CA	ALA	A	351	-2.904	-30.228	-49.470	1.00	0.00	A	C
ATOM	1851	CB	ALA	A	351	-3.313	-28.752	-49.610	1.00	0.00	A	C
ATOM	1852	C	ALA	A	351	-2.998	-30.850	-50.828	1.00	0.00	A	C
ATOM	1853	O	ALA	A	351	-3.981	-31.509	-51.158	1.00	0.00	A	O
ATOM	1854	N	TYR	A	352	-1.955	-30.646	-51.647	1.00	0.00	A	N
ATOM	1855	CA	TYR	A	352	-1.897	-31.141	-52.990	1.00	0.00	A	C
ATOM	1856	CB	TYR	A	352	-0.616	-30.652	-53.677	1.00	0.00	A	C
ATOM	1857	CG	TYR	A	352	-0.305	-31.537	-54.829	1.00	0.00	A	C
ATOM	1858	CD1	TYR	A	352	-1.066	-31.529	-55.972	1.00	0.00	A	C
ATOM	1859	CE1	TYR	A	352	-0.735	-32.354	-57.023	1.00	0.00	A	C
ATOM	1860	CZ	TYR	A	352	0.356	-33.185	-56.937	1.00	0.00	A	C
ATOM	1861	OH	TYR	A	352	0.698	-34.028	-58.015	1.00	0.00	A	O
ATOM	1862	CD2	TYR	A	352	0.782	-32.373	-54.747	1.00	0.00	A	C
ATOM	1863	CE2	TYR	A	352	1.116	-33.197	-55.793	1.00	0.00	A	C
ATOM	1864	C	TYR	A	352	-1.933	-32.637	-53.022	1.00	0.00	A	C
ATOM	1865	O	TYR	A	352	-2.661	-33.216	-53.823	1.00	0.00	A	O
ATOM	1866	N	ILE	A	353	-1.153	-33.319	-52.165	1.00	0.00	A	N
ATOM	1867	CA	ILE	A	353	-1.106	-34.752	-52.232	1.00	0.00	A	C
ATOM	1868	CB	ILE	A	353	-0.017	-35.362	-51.394	1.00	0.00	A	C
ATOM	1869	CG2	ILE	A	353	-0.234	-36.885	-51.356	1.00	0.00	A	C
ATOM	1870	CG1	ILE	A	353	1.361	-34.955	-51.946	1.00	0.00	A	C
ATOM	1871	CD	ILE	A	353	2.527	-35.356	-51.042	1.00	0.00	A	C
ATOM	1872	C	ILE	A	353	-2.412	-35.366	-51.845	1.00	0.00	A	C
ATOM	1873	O	ILE	A	353	-2.839	-36.336	-52.463	1.00	0.00	A	O
ATOM	1874	N	LEU	A	354	-3.044	-34.863	-50.768	1.00	0.00	A	N
ATOM	1875	CA	LEU	A	354	-4.293	-35.379	-50.274	1.00	0.00	A	C
ATOM	1876	CB	LEU	A	354	-4.637	-34.800	-48.898	1.00	0.00	A	C
ATOM	1877	CG	LEU	A	354	-3.604	-35.142	-47.810	1.00	0.00	A	C
ATOM	1878	CD1	LEU	A	354	-3.990	-34.493	-46.474	1.00	0.00	A	C
ATOM	1879	CD2	LEU	A	354	-3.384	-36.658	-47.688	1.00	0.00	A	C
ATOM	1880	C	LEU	A	354	-5.434	-35.018	-51.181	1.00	0.00	A	C

ATOM	1881	O	LEU A 354	-6.394	-35.756	-51.332	1.00	0.00	A	O
ATOM	1882	N	GLN A 355	-5.441	-33.784	-51.685	1.00	0.00	A	N
ATOM	1883	CA	GLN A 355	-6.464	-33.223	-52.520	1.00	0.00	A	C
ATOM	1884	CB	GLN A 355	-6.681	-31.728	-52.243	1.00	0.00	A	C
ATOM	1885	CG	GLN A 355	-7.503	-31.479	-50.967	1.00	0.00	A	C
ATOM	1886	CD	GLN A 355	-6.936	-32.306	-49.818	1.00	0.00	A	C
ATOM	1887	OE1	GLN A 355	-6.091	-31.848	-49.054	1.00	0.00	A	O
ATOM	1888	NE2	GLN A 355	-7.409	-33.578	-49.699	1.00	0.00	A	N
ATOM	1889	C	GLN A 355	-6.277	-33.456	-53.983	1.00	0.00	A	C
ATOM	1890	O	GLN A 355	-7.163	-33.090	-54.746	1.00	0.00	A	O
ATOM	1891	N	ARG A 356	-5.094	-33.929	-54.430	1.00	0.00	A	N
ATOM	1892	CA	ARG A 356	-4.780	-34.005	-55.835	1.00	0.00	A	C
ATOM	1893	CB	ARG A 356	-3.358	-34.501	-56.135	1.00	0.00	A	C
ATOM	1894	CG	ARG A 356	-3.070	-34.578	-57.635	1.00	0.00	A	C
ATOM	1895	CD	ARG A 356	-1.938	-35.537	-58.007	1.00	0.00	A	C
ATOM	1896	NE	ARG A 356	-2.404	-36.915	-57.684	1.00	0.00	A	N
ATOM	1897	CZ	ARG A 356	-1.829	-37.610	-56.659	1.00	0.00	A	C
ATOM	1898	NH1	ARG A 356	-0.768	-37.076	-55.987	1.00	0.00	A	N
ATOM	1899	NH2	ARG A 356	-2.311	-38.837	-56.312	1.00	0.00	A	N
ATOM	1900	C	ARG A 356	-5.656	-34.994	-56.530	1.00	0.00	A	C
ATOM	1901	O	ARG A 356	-5.219	-36.099	-56.852	1.00	0.00	A	O
ATOM	1902	N	GLU A 357	-6.891	-34.574	-56.854	1.00	0.00	A	N
ATOM	1903	CA	GLU A 357	-7.847	-35.403	-57.523	1.00	0.00	A	C
ATOM	1904	CB	GLU A 357	-9.231	-34.748	-57.618	1.00	0.00	A	C
ATOM	1905	CG	GLU A 357	-9.149	-33.452	-58.434	1.00	0.00	A	C
ATOM	1906	CD	GLU A 357	-10.546	-32.909	-58.686	1.00	0.00	A	C
ATOM	1907	OE1	GLU A 357	-11.303	-32.728	-57.697	1.00	0.00	A	O
ATOM	1908	OE2	GLU A 357	-10.872	-32.663	-59.879	1.00	0.00	A	O
ATOM	1909	C	GLU A 357	-7.384	-35.512	-58.937	1.00	0.00	A	C
ATOM	1910	O	GLU A 357	-6.829	-34.559	-59.485	1.00	0.00	A	O
ATOM	1911	N	ILE A 358	-7.580	-36.680	-59.581	1.00	0.00	A	N
ATOM	1912	CA	ILE A 358	-7.144	-36.738	-60.942	1.00	0.00	A	C
ATOM	1913	CB	ILE A 358	-5.824	-37.444	-61.085	1.00	0.00	A	C
ATOM	1914	CG2	ILE A 358	-6.056	-38.942	-60.829	1.00	0.00	A	C
ATOM	1915	CG1	ILE A 358	-5.149	-37.091	-62.423	1.00	0.00	A	C
ATOM	1916	CD	ILE A 358	-4.716	-35.629	-62.540	1.00	0.00	A	C
ATOM	1917	C	ILE A 358	-8.213	-37.427	-61.744	1.00	0.00	A	C
ATOM	1918	O	ILE A 358	-8.852	-38.362	-61.262	1.00	0.00	A	O

ATOM	1919	N	GLN A 359	-8.470	-36.953	-62.983	1.00	0.00	A	N
ATOM	1920	CA	GLN A 359	-9.484	-37.582	-63.787	1.00	0.00	A	C
ATOM	1921	CB	GLN A 359	-10.744	-36.721	-63.985	1.00	0.00	A	C
ATOM	1922	CG	GLN A 359	-11.819	-37.405	-64.834	1.00	0.00	A	C
ATOM	1923	CD	GLN A 359	-12.449	-38.525	-64.013	1.00	0.00	A	C
ATOM	1924	OE1	GLN A 359	-11.895	-38.964	-63.004	1.00	0.00	A	O
ATOM	1925	NE2	GLN A 359	-13.640	-39.005	-64.457	1.00	0.00	A	N
ATOM	1926	C	GLN A 359	-8.903	-37.861	-65.139	1.00	0.00	A	C
ATOM	1927	O	GLN A 359	-8.414	-36.961	-65.823	1.00	0.00	A	O
ATOM	1928	N	GLU A 360	-8.954	-39.149	-65.545	1.00	0.00	A	N
ATOM	1929	CA	GLU A 360	-8.387	-39.626	-66.776	1.00	0.00	A	C
ATOM	1930	CB	GLU A 360	-6.876	-39.290	-66.864	1.00	0.00	A	C
ATOM	1931	CG	GLU A 360	-6.114	-39.684	-68.131	1.00	0.00	A	C
ATOM	1932	CD	GLU A 360	-5.413	-41.000	-67.834	1.00	0.00	A	C
ATOM	1933	OE1	GLU A 360	-4.933	-41.162	-66.680	1.00	0.00	A	O
ATOM	1934	OE2	GLU A 360	-5.346	-41.860	-68.752	1.00	0.00	A	O
ATOM	1935	C	GLU A 360	-8.606	-41.114	-66.735	1.00	0.00	A	C
ATOM	1936	O	GLU A 360	-9.108	-41.619	-65.729	1.00	0.00	A	O
ATOM	1937	N	PRO A 361	-8.262	-41.856	-67.755	1.00	0.00	A	N
ATOM	1938	CD	PRO A 361	-8.411	-41.361	-69.117	1.00	0.00	A	C
ATOM	1939	CA	PRO A 361	-8.531	-43.264	-67.703	1.00	0.00	A	C
ATOM	1940	CB	PRO A 361	-8.237	-43.793	-69.102	1.00	0.00	A	C
ATOM	1941	CG	PRO A 361	-8.633	-42.604	-69.998	1.00	0.00	A	C
ATOM	1942	C	PRO A 361	-7.917	-44.038	-66.585	1.00	0.00	A	C
ATOM	1943	O	PRO A 361	-8.427	-45.094	-66.252	1.00	0.00	A	O
ATOM	1944	N	GLU A 362	-6.804	-43.665	-65.971	1.00	0.00	A	N
ATOM	1945	CA	GLU A 362	-6.597	-44.562	-64.873	1.00	0.00	A	C
ATOM	1946	CB	GLU A 362	-5.245	-45.288	-64.936	1.00	0.00	A	C
ATOM	1947	CG	GLU A 362	-5.086	-46.160	-66.183	1.00	0.00	A	C
ATOM	1948	CD	GLU A 362	-4.669	-45.248	-67.331	1.00	0.00	A	C
ATOM	1949	OE1	GLU A 362	-3.591	-44.608	-67.212	1.00	0.00	A	O
ATOM	1950	OE2	GLU A 362	-5.424	-45.176	-68.339	1.00	0.00	A	O
ATOM	1951	C	GLU A 362	-6.557	-43.682	-63.683	1.00	0.00	A	C
ATOM	1952	O	GLU A 362	-5.773	-43.888	-62.760	1.00	0.00	A	O
ATOM	1953	N	CYS A 363	-7.409	-42.653	-63.676	1.00	0.00	A	N
ATOM	1954	CA	CYS A 363	-7.339	-41.684	-62.627	1.00	0.00	A	C
ATOM	1955	CB	CYS A 363	-7.905	-40.318	-62.999	1.00	0.00	A	C
ATOM	1956	SG	CYS A 363	-6.592	-39.391	-63.822	1.00	0.00	A	S

ATOM	1957	C	CYS A 363	-7.876	-42.078	-61.288	1.00	0.00	A	C
ATOM	1958	O	CYS A 363	-7.321	-41.668	-60.272	1.00	0.00	A	O
ATOM	1959	N	ARG A 364	-8.947	-42.882	-61.234	1.00	0.00	A	N
ATOM	1960	CA	ARG A 364	-9.639	-43.074	-59.989	1.00	0.00	A	C
ATOM	1961	CB	ARG A 364	-10.896	-43.957	-60.134	1.00	0.00	A	C
ATOM	1962	CG	ARG A 364	-11.730	-44.083	-58.852	1.00	0.00	A	C
ATOM	1963	CD	ARG A 364	-13.003	-44.920	-59.034	1.00	0.00	A	C
ATOM	1964	NE	ARG A 364	-13.599	-45.165	-57.687	1.00	0.00	A	N
ATOM	1965	CZ	ARG A 364	-14.487	-44.285	-57.138	1.00	0.00	A	C
ATOM	1966	NH1	ARG A 364	-14.827	-43.143	-57.806	1.00	0.00	A	N
ATOM	1967	NH2	ARG A 364	-15.048	-44.551	-55.921	1.00	0.00	A	N
ATOM	1968	C	ARG A 364	-8.759	-43.658	-58.926	1.00	0.00	A	C
ATOM	1969	O	ARG A 364	-8.819	-43.224	-57.778	1.00	0.00	A	O
ATOM	1970	N	HSD A 365	-7.908	-44.647	-59.251	1.00	0.00	A	N
ATOM	1971	CA	HSD A 365	-7.129	-45.261	-58.211	1.00	0.00	A	C
ATOM	1972	CB	HSD A 365	-6.301	-46.465	-58.685	1.00	0.00	A	C
ATOM	1973	ND1	HSD A 365	-5.175	-45.323	-60.629	1.00	0.00	A	N
ATOM	1974	CG	HSD A 365	-5.101	-46.058	-59.472	1.00	0.00	A	C
ATOM	1975	CE1	HSD A 365	-3.904	-45.146	-61.064	1.00	0.00	A	C
ATOM	1976	NE2	HSD A 365	-3.020	-45.717	-60.268	1.00	0.00	A	N
ATOM	1977	CD2	HSD A 365	-3.777	-46.292	-59.265	1.00	0.00	A	C
ATOM	1978	C	HSD A 365	-6.187	-44.253	-57.617	1.00	0.00	A	C
ATOM	1979	O	HSD A 365	-5.935	-44.264	-56.412	1.00	0.00	A	O
ATOM	1980	N	LEU A 366	-5.616	-43.379	-58.465	1.00	0.00	A	N
ATOM	1981	CA	LEU A 366	-4.650	-42.371	-58.096	1.00	0.00	A	C
ATOM	1982	CB	LEU A 366	-4.058	-41.703	-59.354	1.00	0.00	A	C
ATOM	1983	CG	LEU A 366	-2.955	-40.665	-59.090	1.00	0.00	A	C
ATOM	1984	CD1	LEU A 366	-1.700	-41.320	-58.493	1.00	0.00	A	C
ATOM	1985	CD2	LEU A 366	-2.651	-39.848	-60.359	1.00	0.00	A	C
ATOM	1986	C	LEU A 366	-5.226	-41.271	-57.232	1.00	0.00	A	C
ATOM	1987	O	LEU A 366	-4.590	-40.856	-56.262	1.00	0.00	A	O
ATOM	1988	N	SER A 367	-6.442	-40.774	-57.549	1.00	0.00	A	N
ATOM	1989	CA	SER A 367	-6.939	-39.573	-56.916	1.00	0.00	A	C
ATOM	1990	CB	SER A 367	-8.093	-38.897	-57.681	1.00	0.00	A	C
ATOM	1991	OG	SER A 367	-9.248	-39.723	-57.683	1.00	0.00	A	O
ATOM	1992	C	SER A 367	-7.396	-39.769	-55.510	1.00	0.00	A	C
ATOM	1993	O	SER A 367	-8.010	-40.772	-55.150	1.00	0.00	A	O
ATOM	1994	N	ARG A 368	-7.002	-38.815	-54.645	1.00	0.00	A	N

ATOM	1995	CA	ARG A 368	-7.425	-38.778	-53.283	1.00	0.00	A	C
ATOM	1996	CB	ARG A 368	-6.332	-38.209	-52.390	1.00	0.00	A	C
ATOM	1997	CG	ARG A 368	-4.994	-38.942	-52.514	1.00	0.00	A	C
ATOM	1998	CD	ARG A 368	-4.596	-39.723	-51.266	1.00	0.00	A	C
ATOM	1999	NE	ARG A 368	-5.852	-39.963	-50.516	1.00	0.00	A	N
ATOM	2000	CZ	ARG A 368	-6.204	-39.055	-49.567	1.00	0.00	A	C
ATOM	2001	NH1	ARG A 368	-5.330	-38.065	-49.235	1.00	0.00	A	N
ATOM	2002	NH2	ARG A 368	-7.427	-39.095	-48.974	1.00	0.00	A	N
ATOM	2003	C	ARG A 368	-8.780	-38.120	-53.110	1.00	0.00	A	C
ATOM	2004	O	ARG A 368	-9.544	-38.520	-52.243	1.00	0.00	A	O
ATOM	2005	N	LYS A 369	-9.157	-37.089	-53.900	1.00	0.00	A	N
ATOM	2006	CA	LYS A 369	-10.441	-36.485	-53.627	1.00	0.00	A	C
ATOM	2007	CB	LYS A 369	-10.345	-35.022	-53.154	1.00	0.00	A	C
ATOM	2008	CG	LYS A 369	-9.805	-34.045	-54.198	1.00	0.00	A	C
ATOM	2009	CD	LYS A 369	-9.986	-32.581	-53.790	1.00	0.00	A	C
ATOM	2010	CE	LYS A 369	-9.452	-31.580	-54.815	1.00	0.00	A	C
ATOM	2011	NZ	LYS A 369	-9.566	-30.203	-54.284	1.00	0.00	A	N
ATOM	2012	C	LYS A 369	-11.328	-36.515	-54.843	1.00	0.00	A	C
ATOM	2013	O	LYS A 369	-10.896	-36.240	-55.965	1.00	0.00	A	O
ATOM	2014	N	PHE A 370	-12.618	-36.857	-54.623	1.00	0.00	A	N
ATOM	2015	CA	PHE A 370	-13.600	-36.926	-55.670	1.00	0.00	A	C
ATOM	2016	CB	PHE A 370	-14.293	-38.296	-55.730	1.00	0.00	A	C
ATOM	2017	CG	PHE A 370	-13.260	-39.368	-55.826	1.00	0.00	A	C
ATOM	2018	CD1	PHE A 370	-12.491	-39.678	-54.730	1.00	0.00	A	C
ATOM	2019	CE1	PHE A 370	-11.540	-40.669	-54.790	1.00	0.00	A	C
ATOM	2020	CZ	PHE A 370	-11.354	-41.368	-55.958	1.00	0.00	A	C
ATOM	2021	CD2	PHE A 370	-13.077	-40.080	-56.989	1.00	0.00	A	C
ATOM	2022	CE2	PHE A 370	-12.126	-41.071	-57.056	1.00	0.00	A	C
ATOM	2023	C	PHE A 370	-14.698	-35.990	-55.263	1.00	0.00	A	C
ATOM	2024	O	PHE A 370	-15.199	-36.089	-54.149	1.00	0.00	A	O
ATOM	2025	N	THR A 371	-15.120	-35.052	-56.129	1.00	0.00	A	N
ATOM	2026	CA	THR A 371	-16.185	-34.188	-55.703	1.00	0.00	A	C
ATOM	2027	CB	THR A 371	-15.701	-32.808	-55.362	1.00	0.00	A	C
ATOM	2028	OG1	THR A 371	-15.267	-32.122	-56.528	1.00	0.00	A	O
ATOM	2029	CG2	THR A 371	-14.503	-32.963	-54.415	1.00	0.00	A	C
ATOM	2030	C	THR A 371	-17.133	-34.038	-56.853	1.00	0.00	A	C
ATOM	2031	O	THR A 371	-16.704	-33.709	-57.957	1.00	0.00	A	O
ATOM	2032	N	GLU A 372	-18.445	-34.293	-56.650	1.00	0.00	A	N

ATOM	2033	CA	GLU	A	372	-19.308	-34.057	-57.773	1.00	0.00	A	C
ATOM	2034	CB	GLU	A	372	-19.389	-35.238	-58.759	1.00	0.00	A	C
ATOM	2035	CG	GLU	A	372	-18.093	-35.466	-59.536	1.00	0.00	A	C
ATOM	2036	CD	GLU	A	372	-18.342	-36.548	-60.572	1.00	0.00	A	C
ATOM	2037	OE1	GLU	A	372	-19.535	-36.807	-60.880	1.00	0.00	A	O
ATOM	2038	OE2	GLU	A	372	-17.340	-37.124	-61.075	1.00	0.00	A	O
ATOM	2039	C	GLU	A	372	-20.712	-33.753	-57.330	1.00	0.00	A	C
ATOM	2040	O	GLU	A	372	-21.556	-34.646	-57.257	1.00	0.00	A	O
ATOM	2041	N	TRP	A	373	-20.997	-32.468	-57.034	1.00	0.00	A	N
ATOM	2042	CA	TRP	A	373	-22.325	-32.010	-56.732	1.00	0.00	A	C
ATOM	2043	CB	TRP	A	373	-22.762	-32.227	-55.268	1.00	0.00	A	C
ATOM	2044	CG	TRP	A	373	-23.167	-33.633	-54.880	1.00	0.00	A	C
ATOM	2045	CD1	TRP	A	373	-22.400	-34.736	-54.644	1.00	0.00	A	C
ATOM	2046	NE1	TRP	A	373	-23.198	-35.793	-54.270	1.00	0.00	A	N
ATOM	2047	CE2	TRP	A	373	-24.512	-35.366	-54.258	1.00	0.00	A	C
ATOM	2048	CD2	TRP	A	373	-24.526	-34.024	-54.635	1.00	0.00	A	C
ATOM	2049	CE3	TRP	A	373	-25.695	-33.320	-54.714	1.00	0.00	A	C
ATOM	2050	CZ3	TRP	A	373	-26.861	-33.990	-54.407	1.00	0.00	A	C
ATOM	2051	CZ2	TRP	A	373	-25.667	-36.027	-53.954	1.00	0.00	A	C
ATOM	2052	CH2	TRP	A	373	-26.846	-35.318	-54.035	1.00	0.00	A	C
ATOM	2053	C	TRP	A	373	-22.302	-30.528	-56.937	1.00	0.00	A	C
ATOM	2054	O	TRP	A	373	-21.680	-29.804	-56.165	1.00	0.00	A	O
ATOM	2055	N	ALA	A	374	-22.981	-29.994	-57.967	1.00	0.00	A	N
ATOM	2056	CA	ALA	A	374	-22.867	-28.564	-58.059	1.00	0.00	A	C
ATOM	2057	CB	ALA	A	374	-21.760	-28.093	-59.021	1.00	0.00	A	C
ATOM	2058	C	ALA	A	374	-24.144	-27.970	-58.551	1.00	0.00	A	C
ATOM	2059	O	ALA	A	374	-24.748	-28.461	-59.504	1.00	0.00	A	O
ATOM	2060	N	TYR	A	375	-24.601	-26.890	-57.881	1.00	0.00	A	N
ATOM	2061	CA	TYR	A	375	-25.768	-26.194	-58.338	1.00	0.00	A	C
ATOM	2062	CB	TYR	A	375	-26.976	-26.315	-57.396	1.00	0.00	A	C
ATOM	2063	CG	TYR	A	375	-28.188	-25.998	-58.206	1.00	0.00	A	C
ATOM	2064	CD1	TYR	A	375	-28.708	-26.913	-59.092	1.00	0.00	A	C
ATOM	2065	CE1	TYR	A	375	-29.825	-26.612	-59.836	1.00	0.00	A	C
ATOM	2066	CZ	TYR	A	375	-30.435	-25.389	-59.695	1.00	0.00	A	C
ATOM	2067	OH	TYR	A	375	-31.582	-25.074	-60.457	1.00	0.00	A	O
ATOM	2068	CD2	TYR	A	375	-28.810	-24.778	-58.070	1.00	0.00	A	C
ATOM	2069	CE2	TYR	A	375	-29.926	-24.472	-58.811	1.00	0.00	A	C
ATOM	2070	C	TYR	A	375	-25.461	-24.736	-58.429	1.00	0.00	A	C

ATOM	2071	O	TYR A 375	-25.476	-24.040	-57.416	1.00	0.00	A	O
ATOM	2072	N	GLY A 376	-25.096	-24.254	-59.631	1.00	0.00	A	N
ATOM	2073	CA	GLY A 376	-24.978	-22.847	-59.878	1.00	0.00	A	C
ATOM	2074	C	GLY A 376	-23.861	-22.300	-59.052	1.00	0.00	A	C
ATOM	2075	O	GLY A 376	-22.687	-22.267	-59.414	1.00	0.00	A	O
ATOM	2076	N	PRO A 377	-24.340	-21.788	-57.952	1.00	0.00	A	N
ATOM	2077	CD	PRO A 377	-25.682	-21.235	-57.965	1.00	0.00	A	C
ATOM	2078	CA	PRO A 377	-23.531	-21.205	-56.911	1.00	0.00	A	C
ATOM	2079	CB	PRO A 377	-24.404	-20.151	-56.234	1.00	0.00	A	C
ATOM	2080	CG	PRO A 377	-25.841	-20.549	-56.603	1.00	0.00	A	C
ATOM	2081	C	PRO A 377	-22.971	-22.168	-55.915	1.00	0.00	A	C
ATOM	2082	O	PRO A 377	-22.111	-21.753	-55.139	1.00	0.00	A	O
ATOM	2083	N	VAL A 378	-23.434	-23.436	-55.890	1.00	0.00	A	N
ATOM	2084	CA	VAL A 378	-23.053	-24.298	-54.806	1.00	0.00	A	C
ATOM	2085	CB	VAL A 378	-24.224	-25.008	-54.186	1.00	0.00	A	C
ATOM	2086	CG1	VAL A 378	-24.841	-25.952	-55.227	1.00	0.00	A	C
ATOM	2087	CG2	VAL A 378	-23.765	-25.714	-52.900	1.00	0.00	A	C
ATOM	2088	C	VAL A 378	-22.063	-25.317	-55.272	1.00	0.00	A	C
ATOM	2089	O	VAL A 378	-21.905	-25.553	-56.468	1.00	0.00	A	O
ATOM	2090	N	HSD A 379	-21.331	-25.920	-54.314	1.00	0.00	A	N
ATOM	2091	CA	HSD A 379	-20.325	-26.875	-54.674	1.00	0.00	A	C
ATOM	2092	CB	HSD A 379	-18.954	-26.205	-54.860	1.00	0.00	A	C
ATOM	2093	ND1	HSD A 379	-17.042	-27.868	-54.659	1.00	0.00	A	N
ATOM	2094	CG	HSD A 379	-17.899	-27.103	-55.419	1.00	0.00	A	C
ATOM	2095	CE1	HSD A 379	-16.229	-28.523	-55.525	1.00	0.00	A	C
ATOM	2096	NE2	HSD A 379	-16.503	-28.235	-56.785	1.00	0.00	A	N
ATOM	2097	CD2	HSD A 379	-17.557	-27.340	-56.716	1.00	0.00	A	C
ATOM	2098	C	HSD A 379	-20.202	-27.875	-53.562	1.00	0.00	A	C
ATOM	2099	O	HSD A 379	-20.506	-27.578	-52.409	1.00	0.00	A	O
ATOM	2100	N	SER A 380	-19.768	-29.108	-53.896	1.00	0.00	A	N
ATOM	2101	CA	SER A 380	-19.576	-30.131	-52.908	1.00	0.00	A	C
ATOM	2102	CB	SER A 380	-20.609	-31.267	-52.974	1.00	0.00	A	C
ATOM	2103	OG	SER A 380	-20.334	-32.233	-51.969	1.00	0.00	A	O
ATOM	2104	C	SER A 380	-18.246	-30.754	-53.182	1.00	0.00	A	C
ATOM	2105	O	SER A 380	-17.845	-30.897	-54.334	1.00	0.00	A	O
ATOM	2106	N	SER A 381	-17.513	-31.138	-52.121	1.00	0.00	A	N
ATOM	2107	CA	SER A 381	-16.234	-31.740	-52.356	1.00	0.00	A	C
ATOM	2108	CB	SER A 381	-15.070	-30.800	-51.981	1.00	0.00	A	C

ATOM	2109	OG	SER	A	381	-13.814	-31.414	-52.218	1.00	0.00	A	O
ATOM	2110	C	SER	A	381	-16.139	-32.960	-51.500	1.00	0.00	A	C
ATOM	2111	O	SER	A	381	-16.595	-32.956	-50.359	1.00	0.00	A	O
ATOM	2112	N	LEU	A	382	-15.575	-34.058	-52.042	1.00	0.00	A	N
ATOM	2113	CA	LEU	A	382	-15.385	-35.214	-51.218	1.00	0.00	A	C
ATOM	2114	CB	LEU	A	382	-16.147	-36.495	-51.624	1.00	0.00	A	C
ATOM	2115	CG	LEU	A	382	-17.672	-36.417	-51.422	1.00	0.00	A	C
ATOM	2116	CD1	LEU	A	382	-18.307	-35.361	-52.337	1.00	0.00	A	C
ATOM	2117	CD2	LEU	A	382	-18.321	-37.802	-51.559	1.00	0.00	A	C
ATOM	2118	C	LEU	A	382	-13.926	-35.520	-51.173	1.00	0.00	A	C
ATOM	2119	O	LEU	A	382	-13.197	-35.319	-52.146	1.00	0.00	A	O
ATOM	2120	N	TYR	A	383	-13.468	-36.007	-50.002	1.00	0.00	A	N
ATOM	2121	CA	TYR	A	383	-12.077	-36.301	-49.802	1.00	0.00	A	C
ATOM	2122	CB	TYR	A	383	-11.464	-35.439	-48.699	1.00	0.00	A	C
ATOM	2123	CG	TYR	A	383	-11.544	-34.044	-49.225	1.00	0.00	A	C
ATOM	2124	CD1	TYR	A	383	-12.742	-33.368	-49.211	1.00	0.00	A	C
ATOM	2125	CE1	TYR	A	383	-12.833	-32.088	-49.704	1.00	0.00	A	C
ATOM	2126	CZ	TYR	A	383	-11.725	-31.464	-50.224	1.00	0.00	A	C
ATOM	2127	OH	TYR	A	383	-11.822	-30.148	-50.724	1.00	0.00	A	O
ATOM	2128	CD2	TYR	A	383	-10.441	-33.423	-49.771	1.00	0.00	A	C
ATOM	2129	CE2	TYR	A	383	-10.528	-32.138	-50.262	1.00	0.00	A	C
ATOM	2130	C	TYR	A	383	-11.975	-37.759	-49.470	1.00	0.00	A	C
ATOM	2131	O	TYR	A	383	-12.837	-38.313	-48.793	1.00	0.00	A	O
ATOM	2132	N	ASP	A	384	-10.912	-38.431	-49.962	1.00	0.00	A	N
ATOM	2133	CA	ASP	A	384	-10.845	-39.863	-49.841	1.00	0.00	A	C
ATOM	2134	CB	ASP	A	384	-9.527	-40.464	-50.354	1.00	0.00	A	C
ATOM	2135	CG	ASP	A	384	-9.673	-41.962	-50.537	1.00	0.00	A	C
ATOM	2136	OD1	ASP	A	384	-10.828	-42.464	-50.516	1.00	0.00	A	O
ATOM	2137	OD2	ASP	A	384	-8.615	-42.622	-50.716	1.00	0.00	A	O
ATOM	2138	C	ASP	A	384	-10.866	-40.188	-48.420	1.00	0.00	A	C
ATOM	2139	O	ASP	A	384	-11.747	-40.884	-47.919	1.00	0.00	A	O
ATOM	2140	N	LEU	A	385	-9.847	-39.590	-47.808	1.00	0.00	A	N
ATOM	2141	CA	LEU	A	385	-9.399	-39.461	-46.495	1.00	0.00	A	C
ATOM	2142	CB	LEU	A	385	-10.546	-39.348	-45.480	1.00	0.00	A	C
ATOM	2143	CG	LEU	A	385	-10.141	-38.586	-44.210	1.00	0.00	A	C
ATOM	2144	CD1	LEU	A	385	-11.103	-38.873	-43.052	1.00	0.00	A	C
ATOM	2145	CD2	LEU	A	385	-8.658	-38.728	-43.881	1.00	0.00	A	C
ATOM	2146	C	LEU	A	385	-8.498	-40.604	-46.139	1.00	0.00	A	C

ATOM	2147	O	LEU A 385	-8.876	-41.490	-45.372	1.00	0.00	A	O
ATOM	2148	N	SER A 386	-7.269	-40.597	-46.693	1.00	0.00	A	N
ATOM	2149	CA	SER A 386	-6.256	-41.562	-46.370	1.00	0.00	A	C
ATOM	2150	CB	SER A 386	-5.115	-41.597	-47.405	1.00	0.00	A	C
ATOM	2151	OG	SER A 386	-4.392	-40.376	-47.390	1.00	0.00	A	O
ATOM	2152	C	SER A 386	-5.642	-41.209	-45.044	1.00	0.00	A	C
ATOM	2153	O	SER A 386	-5.270	-42.084	-44.266	1.00	0.00	A	O
ATOM	2154	N	CYS A 387	-5.577	-39.901	-44.741	1.00	0.00	A	N
ATOM	2155	CA	CYS A 387	-4.903	-39.341	-43.597	1.00	0.00	A	C
ATOM	2156	CB	CYS A 387	-5.261	-37.859	-43.454	1.00	0.00	A	C
ATOM	2157	SG	CYS A 387	-5.090	-36.966	-45.023	1.00	0.00	A	S
ATOM	2158	C	CYS A 387	-5.439	-39.957	-42.351	1.00	0.00	A	C
ATOM	2159	O	CYS A 387	-4.694	-40.362	-41.462	1.00	0.00	A	O
ATOM	2160	N	ILE A 388	-6.770	-40.017	-42.252	1.00	0.00	A	N
ATOM	2161	CA	ILE A 388	-7.440	-40.560	-41.115	1.00	0.00	A	C
ATOM	2162	CB	ILE A 388	-8.934	-40.460	-41.209	1.00	0.00	A	C
ATOM	2163	CG2	ILE A 388	-9.389	-41.213	-42.472	1.00	0.00	A	C
ATOM	2164	CG1	ILE A 388	-9.582	-40.974	-39.911	1.00	0.00	A	C
ATOM	2165	CD	ILE A 388	-9.247	-40.137	-38.677	1.00	0.00	A	C
ATOM	2166	C	ILE A 388	-7.084	-42.005	-41.034	1.00	0.00	A	C
ATOM	2167	O	ILE A 388	-6.919	-42.547	-39.946	1.00	0.00	A	O
ATOM	2168	N	ASP A 389	-6.975	-42.661	-42.202	1.00	0.00	A	N
ATOM	2169	CA	ASP A 389	-6.732	-44.068	-42.273	1.00	0.00	A	C
ATOM	2170	CB	ASP A 389	-6.766	-44.604	-43.714	1.00	0.00	A	C
ATOM	2171	CG	ASP A 389	-8.204	-44.547	-44.215	1.00	0.00	A	C
ATOM	2172	OD1	ASP A 389	-9.130	-44.774	-43.392	1.00	0.00	A	O
ATOM	2173	OD2	ASP A 389	-8.393	-44.272	-45.430	1.00	0.00	A	O
ATOM	2174	C	ASP A 389	-5.399	-44.439	-41.696	1.00	0.00	A	C
ATOM	2175	O	ASP A 389	-5.309	-45.425	-40.970	1.00	0.00	A	O
ATOM	2176	N	THR A 390	-4.320	-43.675	-41.968	1.00	0.00	A	N
ATOM	2177	CA	THR A 390	-3.064	-44.205	-41.525	1.00	0.00	A	C
ATOM	2178	CB	THR A 390	-1.874	-43.544	-42.155	1.00	0.00	A	C
ATOM	2179	OG1	THR A 390	-2.047	-43.493	-43.564	1.00	0.00	A	O
ATOM	2180	CG2	THR A 390	-0.651	-44.438	-41.878	1.00	0.00	A	C
ATOM	2181	C	THR A 390	-2.996	-44.147	-40.024	1.00	0.00	A	C
ATOM	2182	O	THR A 390	-3.113	-43.074	-39.438	1.00	0.00	A	O
ATOM	2183	N	CYS A 391	-3.075	-45.319	-39.347	1.00	0.00	A	N
ATOM	2184	CA	CYS A 391	-2.871	-45.405	-37.919	1.00	0.00	A	C

ATOM	2185	CB	CYS	A	391	-3.844	-46.386	-37.246	1.00	0.00	A	C
ATOM	2186	SG	CYS	A	391	-3.637	-46.426	-35.439	1.00	0.00	A	S
ATOM	2187	C	CYS	A	391	-1.489	-45.772	-37.433	1.00	0.00	A	C
ATOM	2188	O	CYS	A	391	-0.872	-45.056	-36.646	1.00	0.00	A	O
ATOM	2189	N	GLU	A	392	-0.961	-46.918	-37.931	1.00	0.00	A	N
ATOM	2190	CA	GLU	A	392	0.218	-47.548	-37.385	1.00	0.00	A	C
ATOM	2191	CB	GLU	A	392	0.542	-48.865	-38.112	1.00	0.00	A	C
ATOM	2192	CG	GLU	A	392	1.669	-49.680	-37.484	1.00	0.00	A	C
ATOM	2193	CD	GLU	A	392	1.837	-50.932	-38.332	1.00	0.00	A	C
ATOM	2194	OE1	GLU	A	392	1.478	-50.877	-39.538	1.00	0.00	A	O
ATOM	2195	OE2	GLU	A	392	2.324	-51.962	-37.789	1.00	0.00	A	O
ATOM	2196	C	GLU	A	392	1.379	-46.637	-37.536	1.00	0.00	A	C
ATOM	2197	O	GLU	A	392	2.154	-46.416	-36.605	1.00	0.00	A	O
ATOM	2198	N	LYS	A	393	1.515	-46.086	-38.746	1.00	0.00	A	N
ATOM	2199	CA	LYS	A	393	2.531	-45.128	-39.015	1.00	0.00	A	C
ATOM	2200	CB	LYS	A	393	2.791	-45.005	-40.523	1.00	0.00	A	C
ATOM	2201	CG	LYS	A	393	3.325	-46.336	-41.066	1.00	0.00	A	C
ATOM	2202	CD	LYS	A	393	3.202	-46.535	-42.578	1.00	0.00	A	C
ATOM	2203	CE	LYS	A	393	3.698	-47.911	-43.031	1.00	0.00	A	C
ATOM	2204	NZ	LYS	A	393	3.411	-48.118	-44.467	1.00	0.00	A	N
ATOM	2205	C	LYS	A	393	2.002	-43.854	-38.446	1.00	0.00	A	C
ATOM	2206	O	LYS	A	393	0.814	-43.765	-38.140	1.00	0.00	A	O
ATOM	2207	N	ASN	A	394	2.872	-42.847	-38.242	1.00	0.00	A	N
ATOM	2208	CA	ASN	A	394	2.396	-41.627	-37.660	1.00	0.00	A	C
ATOM	2209	CB	ASN	A	394	3.495	-40.560	-37.523	1.00	0.00	A	C
ATOM	2210	CG	ASN	A	394	4.439	-41.031	-36.428	1.00	0.00	A	C
ATOM	2211	OD1	ASN	A	394	5.599	-41.342	-36.680	1.00	0.00	A	O
ATOM	2212	ND2	ASN	A	394	3.919	-41.096	-35.172	1.00	0.00	A	N
ATOM	2213	C	ASN	A	394	1.335	-41.096	-38.561	1.00	0.00	A	C
ATOM	2214	O	ASN	A	394	0.287	-40.690	-38.082	1.00	0.00	A	O
ATOM	2215	N	SER	A	395	1.566	-41.069	-39.885	1.00	0.00	A	N
ATOM	2216	CA	SER	A	395	0.530	-40.712	-40.823	1.00	0.00	A	C
ATOM	2217	CB	SER	A	395	-0.853	-41.267	-40.467	1.00	0.00	A	C
ATOM	2218	OG	SER	A	395	-0.653	-42.537	-39.869	1.00	0.00	A	O
ATOM	2219	C	SER	A	395	0.434	-39.224	-40.941	1.00	0.00	A	C
ATOM	2220	O	SER	A	395	1.034	-38.483	-40.165	1.00	0.00	A	O
ATOM	2221	N	VAL	A	396	-0.295	-38.751	-41.969	1.00	0.00	A	N
ATOM	2222	CA	VAL	A	396	-0.446	-37.336	-42.123	1.00	0.00	A	C

ATOM	2223	CB VAL A 396	-0.964	-36.930	-43.471	1.00	0.00	A	C
ATOM	2224	CG1 VAL A 396	-2.365	-37.505	-43.660	1.00	0.00	A	C
ATOM	2225	CG2 VAL A 396	-0.874	-35.400	-43.592	1.00	0.00	A	C
ATOM	2226	C VAL A 396	-1.305	-36.796	-41.016	1.00	0.00	A	C
ATOM	2227	O VAL A 396	-1.017	-35.740	-40.458	1.00	0.00	A	O
ATOM	2228	N LEU A 397	-2.394	-37.507	-40.666	1.00	0.00	A	N
ATOM	2229	CA LEU A 397	-3.255	-37.038	-39.614	1.00	0.00	A	C
ATOM	2230	CB LEU A 397	-4.546	-37.858	-39.470	1.00	0.00	A	C
ATOM	2231	CG LEU A 397	-5.456	-37.344	-38.339	1.00	0.00	A	C
ATOM	2232	CD1 LEU A 397	-5.882	-35.887	-38.588	1.00	0.00	A	C
ATOM	2233	CD2 LEU A 397	-6.653	-38.280	-38.113	1.00	0.00	A	C
ATOM	2234	C LEU A 397	-2.544	-37.082	-38.296	1.00	0.00	A	C
ATOM	2235	O LEU A 397	-2.619	-36.129	-37.525	1.00	0.00	A	O
ATOM	2236	N GLU A 398	-1.828	-38.180	-37.969	1.00	0.00	A	N
ATOM	2237	CA GLU A 398	-1.237	-38.130	-36.664	1.00	0.00	A	C
ATOM	2238	CB GLU A 398	-0.790	-39.430	-35.977	1.00	0.00	A	C
ATOM	2239	CG GLU A 398	-1.940	-40.345	-35.548	1.00	0.00	A	C
ATOM	2240	CD GLU A 398	-2.381	-41.160	-36.753	1.00	0.00	A	C
ATOM	2241	OE1 GLU A 398	-1.636	-42.102	-37.136	1.00	0.00	A	O
ATOM	2242	OE2 GLU A 398	-3.469	-40.853	-37.309	1.00	0.00	A	O
ATOM	2243	C GLU A 398	-0.130	-37.136	-36.619	1.00	0.00	A	C
ATOM	2244	O GLU A 398	0.089	-36.521	-35.579	1.00	0.00	A	O
ATOM	2245	N VAL A 399	0.618	-36.951	-37.724	1.00	0.00	A	N
ATOM	2246	CA VAL A 399	1.682	-35.994	-37.661	1.00	0.00	A	C
ATOM	2247	CB VAL A 399	2.547	-35.957	-38.886	1.00	0.00	A	C
ATOM	2248	CG1 VAL A 399	3.250	-37.319	-39.020	1.00	0.00	A	C
ATOM	2249	CG2 VAL A 399	1.689	-35.596	-40.099	1.00	0.00	A	C
ATOM	2250	C VAL A 399	1.086	-34.639	-37.420	1.00	0.00	A	C
ATOM	2251	O VAL A 399	1.622	-33.851	-36.643	1.00	0.00	A	O
ATOM	2252	N ILE A 400	-0.055	-34.330	-38.062	1.00	0.00	A	N
ATOM	2253	CA ILE A 400	-0.620	-33.029	-37.849	1.00	0.00	A	C
ATOM	2254	CB ILE A 400	-1.812	-32.699	-38.696	1.00	0.00	A	C
ATOM	2255	CG2 ILE A 400	-3.022	-33.520	-38.232	1.00	0.00	A	C
ATOM	2256	CG1 ILE A 400	-2.061	-31.189	-38.616	1.00	0.00	A	C
ATOM	2257	CD ILE A 400	-3.139	-30.713	-39.575	1.00	0.00	A	C
ATOM	2258	C ILE A 400	-1.028	-32.895	-36.411	1.00	0.00	A	C
ATOM	2259	O ILE A 400	-0.858	-31.836	-35.808	1.00	0.00	A	O
ATOM	2260	N ALA A 401	-1.603	-33.962	-35.828	1.00	0.00	A	N

ATOM	2261	CA	ALA	A	401	-2.056	-33.907	-34.465	1.00	0.00	A	C
ATOM	2262	CB	ALA	A	401	-2.692	-35.219	-34.000	1.00	0.00	A	C
ATOM	2263	C	ALA	A	401	-0.900	-33.692	-33.530	1.00	0.00	A	C
ATOM	2264	O	ALA	A	401	-0.982	-32.883	-32.606	1.00	0.00	A	O
ATOM	2265	N	TYR	A	402	0.180	-34.466	-33.735	1.00	0.00	A	N
ATOM	2266	CA	TYR	A	402	1.376	-34.525	-32.935	1.00	0.00	A	C
ATOM	2267	CB	TYR	A	402	2.166	-35.804	-33.298	1.00	0.00	A	C
ATOM	2268	CG	TYR	A	402	3.431	-35.986	-32.523	1.00	0.00	A	C
ATOM	2269	CD1	TYR	A	402	3.403	-36.437	-31.222	1.00	0.00	A	C
ATOM	2270	CE1	TYR	A	402	4.572	-36.624	-30.518	1.00	0.00	A	C
ATOM	2271	CZ	TYR	A	402	5.785	-36.370	-31.113	1.00	0.00	A	C
ATOM	2272	OH	TYR	A	402	6.986	-36.562	-30.396	1.00	0.00	A	O
ATOM	2273	CD2	TYR	A	402	4.650	-35.749	-33.112	1.00	0.00	A	C
ATOM	2274	CE2	TYR	A	402	5.822	-35.932	-32.414	1.00	0.00	A	C
ATOM	2275	C	TYR	A	402	2.282	-33.326	-33.081	1.00	0.00	A	C
ATOM	2276	O	TYR	A	402	2.800	-32.813	-32.089	1.00	0.00	A	O
ATOM	2277	N	SER	A	403	2.474	-32.828	-34.321	1.00	0.00	A	N
ATOM	2278	CA	SER	A	403	3.514	-31.871	-34.621	1.00	0.00	A	C
ATOM	2279	CB	SER	A	403	3.539	-31.442	-36.100	1.00	0.00	A	C
ATOM	2280	OG	SER	A	403	3.843	-32.560	-36.922	1.00	0.00	A	O
ATOM	2281	C	SER	A	403	3.449	-30.615	-33.804	1.00	0.00	A	C
ATOM	2282	O	SER	A	403	2.386	-30.034	-33.601	1.00	0.00	A	O
ATOM	2283	N	SER	A	404	4.636	-30.161	-33.330	1.00	0.00	A	N
ATOM	2284	CA	SER	A	404	4.722	-28.948	-32.561	1.00	0.00	A	C
ATOM	2285	CB	SER	A	404	4.589	-29.150	-31.039	1.00	0.00	A	C
ATOM	2286	OG	SER	A	404	3.268	-29.534	-30.690	1.00	0.00	A	O
ATOM	2287	C	SER	A	404	6.055	-28.300	-32.767	1.00	0.00	A	C
ATOM	2288	O	SER	A	404	7.014	-28.906	-33.242	1.00	0.00	A	O
ATOM	2289	N	SER	A	405	6.111	-27.000	-32.408	1.00	0.00	A	N
ATOM	2290	CA	SER	A	405	7.308	-26.209	-32.370	1.00	0.00	A	C
ATOM	2291	CB	SER	A	405	8.414	-26.921	-31.584	1.00	0.00	A	C
ATOM	2292	OG	SER	A	405	7.921	-27.281	-30.306	1.00	0.00	A	O
ATOM	2293	C	SER	A	405	7.851	-25.943	-33.739	1.00	0.00	A	C
ATOM	2294	O	SER	A	405	8.890	-25.296	-33.869	1.00	0.00	A	O
ATOM	2295	N	GLU	A	406	7.180	-26.410	-34.803	1.00	0.00	A	N
ATOM	2296	CA	GLU	A	406	7.710	-26.132	-36.107	1.00	0.00	A	C
ATOM	2297	CB	GLU	A	406	7.068	-26.945	-37.241	1.00	0.00	A	C
ATOM	2298	CG	GLU	A	406	7.655	-28.351	-37.351	1.00	0.00	A	C

ATOM	2299	CD	GLU	A	406	9.120	-28.201	-37.755	1.00	0.00	A	C
ATOM	2300	OE1	GLU	A	406	9.551	-27.043	-38.001	1.00	0.00	A	O
ATOM	2301	OE2	GLU	A	406	9.828	-29.243	-37.820	1.00	0.00	A	O
ATOM	2302	C	GLU	A	406	7.560	-24.680	-36.420	1.00	0.00	A	C
ATOM	2303	O	GLU	A	406	8.486	-24.068	-36.947	1.00	0.00	A	O
ATOM	2304	N	THR	A	407	6.396	-24.091	-36.068	1.00	0.00	A	N
ATOM	2305	CA	THR	A	407	6.002	-22.725	-36.329	1.00	0.00	A	C
ATOM	2306	CB	THR	A	407	7.168	-21.774	-36.233	1.00	0.00	A	C
ATOM	2307	OG1	THR	A	407	7.743	-21.860	-34.937	1.00	0.00	A	O
ATOM	2308	CG2	THR	A	407	6.701	-20.332	-36.493	1.00	0.00	A	C
ATOM	2309	C	THR	A	407	5.314	-22.546	-37.672	1.00	0.00	A	C
ATOM	2310	O	THR	A	407	4.631	-21.530	-37.822	1.00	0.00	A	O
ATOM	2311	N	PRO	A	408	5.412	-23.399	-38.666	1.00	0.00	A	N
ATOM	2312	CD	PRO	A	408	6.749	-23.734	-39.133	1.00	0.00	A	C
ATOM	2313	CA	PRO	A	408	4.538	-23.252	-39.813	1.00	0.00	A	C
ATOM	2314	CB	PRO	A	408	5.273	-23.824	-41.022	1.00	0.00	A	C
ATOM	2315	CG	PRO	A	408	6.746	-23.656	-40.662	1.00	0.00	A	C
ATOM	2316	C	PRO	A	408	3.204	-23.918	-39.616	1.00	0.00	A	C
ATOM	2317	O	PRO	A	408	2.430	-23.967	-40.571	1.00	0.00	A	O
ATOM	2318	N	ASN	A	409	2.919	-24.428	-38.404	1.00	0.00	A	N
ATOM	2319	CA	ASN	A	409	1.817	-25.315	-38.139	1.00	0.00	A	C
ATOM	2320	CB	ASN	A	409	1.806	-25.871	-36.698	1.00	0.00	A	C
ATOM	2321	CG	ASN	A	409	1.563	-24.765	-35.676	1.00	0.00	A	C
ATOM	2322	OD1	ASN	A	409	0.575	-24.032	-35.718	1.00	0.00	A	O
ATOM	2323	ND2	ASN	A	409	2.498	-24.649	-34.698	1.00	0.00	A	N
ATOM	2324	C	ASN	A	409	0.446	-24.782	-38.428	1.00	0.00	A	C
ATOM	2325	O	ASN	A	409	-0.410	-25.554	-38.858	1.00	0.00	A	O
ATOM	2326	N	ARG	A	410	0.198	-23.473	-38.244	1.00	0.00	A	N
ATOM	2327	CA	ARG	A	410	-1.125	-22.917	-38.332	1.00	0.00	A	C
ATOM	2328	CB	ARG	A	410	-1.044	-21.387	-38.217	1.00	0.00	A	C
ATOM	2329	CG	ARG	A	410	-0.288	-20.996	-36.941	1.00	0.00	A	C
ATOM	2330	CD	ARG	A	410	0.255	-19.565	-36.903	1.00	0.00	A	C
ATOM	2331	NE	ARG	A	410	1.134	-19.465	-35.700	1.00	0.00	A	N
ATOM	2332	CZ	ARG	A	410	2.338	-18.821	-35.776	1.00	0.00	A	C
ATOM	2333	NH1	ARG	A	410	2.733	-18.245	-36.946	1.00	0.00	A	N
ATOM	2334	NH2	ARG	A	410	3.149	-18.756	-34.677	1.00	0.00	A	N
ATOM	2335	C	ARG	A	410	-1.721	-23.315	-39.654	1.00	0.00	A	C
ATOM	2336	O	ARG	A	410	-2.891	-23.689	-39.727	1.00	0.00	A	O

ATOM	2337	N	HSD A 411	-0.914	-23.292	-40.728	1.00	0.00	A	N
ATOM	2338	CA	HSD A 411	-1.381	-23.664	-42.036	1.00	0.00	A	C
ATOM	2339	CB	HSD A 411	-0.356	-23.372	-43.146	1.00	0.00	A	C
ATOM	2340	ND1	HSD A 411	0.978	-21.241	-42.770	1.00	0.00	A	N
ATOM	2341	CG	HSD A 411	-0.092	-21.909	-43.323	1.00	0.00	A	C
ATOM	2342	CE1	HSD A 411	0.867	-19.942	-43.144	1.00	0.00	A	C
ATOM	2343	NE2	HSD A 411	-0.198	-19.727	-43.898	1.00	0.00	A	N
ATOM	2344	CD2	HSD A 411	-0.801	-20.968	-44.008	1.00	0.00	A	C
ATOM	2345	C	HSD A 411	-1.728	-25.128	-42.123	1.00	0.00	A	C
ATOM	2346	O	HSD A 411	-2.732	-25.492	-42.733	1.00	0.00	A	O
ATOM	2347	N	ASP A 412	-0.908	-26.016	-41.526	1.00	0.00	A	N
ATOM	2348	CA	ASP A 412	-1.087	-27.442	-41.658	1.00	0.00	A	C
ATOM	2349	CB	ASP A 412	0.016	-28.224	-40.922	1.00	0.00	A	C
ATOM	2350	CG	ASP A 412	1.365	-27.925	-41.559	1.00	0.00	A	C
ATOM	2351	OD1	ASP A 412	1.484	-28.087	-42.804	1.00	0.00	A	O
ATOM	2352	OD2	ASP A 412	2.292	-27.521	-40.809	1.00	0.00	A	O
ATOM	2353	C	ASP A 412	-2.390	-27.870	-41.040	1.00	0.00	A	C
ATOM	2354	O	ASP A 412	-3.128	-28.671	-41.612	1.00	0.00	A	O
ATOM	2355	N	MET A 413	-2.703	-27.347	-39.841	1.00	0.00	A	N
ATOM	2356	CA	MET A 413	-3.897	-27.726	-39.139	1.00	0.00	A	C
ATOM	2357	CB	MET A 413	-4.016	-27.079	-37.750	1.00	0.00	A	C
ATOM	2358	CG	MET A 413	-5.286	-27.494	-37.006	1.00	0.00	A	C
ATOM	2359	SD	MET A 413	-5.303	-29.233	-36.479	1.00	0.00	A	S
ATOM	2360	CE	MET A 413	-5.956	-29.888	-38.040	1.00	0.00	A	C
ATOM	2361	C	MET A 413	-5.089	-27.286	-39.931	1.00	0.00	A	C
ATOM	2362	O	MET A 413	-6.092	-27.991	-40.015	1.00	0.00	A	O
ATOM	2363	N	LEU A 414	-4.983	-26.105	-40.557	1.00	0.00	A	N
ATOM	2364	CA	LEU A 414	-6.050	-25.479	-41.285	1.00	0.00	A	C
ATOM	2365	CB	LEU A 414	-5.674	-24.099	-41.839	1.00	0.00	A	C
ATOM	2366	CG	LEU A 414	-6.763	-23.539	-42.764	1.00	0.00	A	C
ATOM	2367	CD1	LEU A 414	-8.104	-23.402	-42.029	1.00	0.00	A	C
ATOM	2368	CD2	LEU A 414	-6.298	-22.242	-43.442	1.00	0.00	A	C
ATOM	2369	C	LEU A 414	-6.472	-26.301	-42.461	1.00	0.00	A	C
ATOM	2370	O	LEU A 414	-7.618	-26.213	-42.896	1.00	0.00	A	O
ATOM	2371	N	LEU A 415	-5.555	-27.119	-43.006	1.00	0.00	A	N
ATOM	2372	CA	LEU A 415	-5.776	-27.827	-44.237	1.00	0.00	A	C
ATOM	2373	CB	LEU A 415	-4.659	-28.846	-44.534	1.00	0.00	A	C
ATOM	2374	CG	LEU A 415	-4.838	-29.606	-45.859	1.00	0.00	A	C

ATOM	2375	CD1	LEU	A	415	-4.808	-28.638	-47.052	1.00	0.00	A	C
ATOM	2376	CD2	LEU	A	415	-3.813	-30.739	-46.003	1.00	0.00	A	C
ATOM	2377	C	LEU	A	415	-7.095	-28.544	-44.231	1.00	0.00	A	C
ATOM	2378	O	LEU	A	415	-7.508	-29.141	-43.239	1.00	0.00	A	O
ATOM	2379	N	VAL	A	416	-7.804	-28.472	-45.379	1.00	0.00	A	N
ATOM	2380	CA	VAL	A	416	-9.107	-29.051	-45.527	1.00	0.00	A	C
ATOM	2381	CB	VAL	A	416	-10.190	-28.005	-45.566	1.00	0.00	A	C
ATOM	2382	CG1	VAL	A	416	-10.148	-27.209	-44.250	1.00	0.00	A	C
ATOM	2383	CG2	VAL	A	416	-10.001	-27.135	-46.820	1.00	0.00	A	C
ATOM	2384	C	VAL	A	416	-9.132	-29.752	-46.852	1.00	0.00	A	C
ATOM	2385	O	VAL	A	416	-8.182	-29.662	-47.627	1.00	0.00	A	O
ATOM	2386	N	GLU	A	417	-10.223	-30.477	-47.159	1.00	0.00	A	N
ATOM	2387	CA	GLU	A	417	-11.334	-30.622	-46.271	1.00	0.00	A	C
ATOM	2388	CB	GLU	A	417	-12.596	-31.199	-46.919	1.00	0.00	A	C
ATOM	2389	CG	GLU	A	417	-13.817	-31.157	-45.995	1.00	0.00	A	C
ATOM	2390	CD	GLU	A	417	-14.187	-29.692	-45.780	1.00	0.00	A	C
ATOM	2391	OE1	GLU	A	417	-13.432	-28.995	-45.053	1.00	0.00	A	O
ATOM	2392	OE2	GLU	A	417	-15.225	-29.252	-46.341	1.00	0.00	A	O
ATOM	2393	C	GLU	A	417	-11.013	-31.516	-45.126	1.00	0.00	A	C
ATOM	2394	O	GLU	A	417	-11.422	-31.187	-44.027	1.00	0.00	A	O
ATOM	2395	N	PRO	A	418	-10.306	-32.603	-45.256	1.00	0.00	A	N
ATOM	2396	CD	PRO	A	418	-10.172	-33.303	-46.524	1.00	0.00	A	C
ATOM	2397	CA	PRO	A	418	-10.225	-33.513	-44.145	1.00	0.00	A	C
ATOM	2398	CB	PRO	A	418	-9.539	-34.766	-44.680	1.00	0.00	A	C
ATOM	2399	CG	PRO	A	418	-9.950	-34.783	-46.160	1.00	0.00	A	C
ATOM	2400	C	PRO	A	418	-9.657	-33.046	-42.852	1.00	0.00	A	C
ATOM	2401	O	PRO	A	418	-10.198	-33.433	-41.826	1.00	0.00	A	O
ATOM	2402	N	LEU	A	419	-8.590	-32.247	-42.811	1.00	0.00	A	N
ATOM	2403	CA	LEU	A	419	-8.100	-31.953	-41.495	1.00	0.00	A	C
ATOM	2404	CB	LEU	A	419	-6.790	-31.151	-41.526	1.00	0.00	A	C
ATOM	2405	CG	LEU	A	419	-5.658	-31.866	-42.289	1.00	0.00	A	C
ATOM	2406	CD1	LEU	A	419	-4.352	-31.061	-42.235	1.00	0.00	A	C
ATOM	2407	CD2	LEU	A	419	-5.489	-33.321	-41.822	1.00	0.00	A	C
ATOM	2408	C	LEU	A	419	-9.139	-31.157	-40.761	1.00	0.00	A	C
ATOM	2409	O	LEU	A	419	-9.476	-31.465	-39.618	1.00	0.00	A	O
ATOM	2410	N	ASN	A	420	-9.691	-30.118	-41.407	1.00	0.00	A	N
ATOM	2411	CA	ASN	A	420	-10.708	-29.322	-40.773	1.00	0.00	A	C
ATOM	2412	CB	ASN	A	420	-11.046	-28.049	-41.570	1.00	0.00	A	C

ATOM	2413	CG	ASN	A 420	-12.134	-27.266	-40.834	1.00	0.00	A	C
ATOM	2414	OD1	ASN	A 420	-13.275	-27.701	-40.750	1.00	0.00	A	O
ATOM	2415	ND2	ASN	A 420	-11.762	-26.071	-40.293	1.00	0.00	A	N
ATOM	2416	C	ASN	A 420	-11.975	-30.108	-40.621	1.00	0.00	A	C
ATOM	2417	O	ASN	A 420	-12.589	-30.133	-39.557	1.00	0.00	A	O
ATOM	2418	N	ARG	A 421	-12.388	-30.782	-41.704	1.00	0.00	A	N
ATOM	2419	CA	ARG	A 421	-13.619	-31.507	-41.824	1.00	0.00	A	C
ATOM	2420	CB	ARG	A 421	-13.855	-32.143	-43.206	1.00	0.00	A	C
ATOM	2421	CG	ARG	A 421	-15.169	-32.931	-43.241	1.00	0.00	A	C
ATOM	2422	CD	ARG	A 421	-15.140	-34.179	-44.127	1.00	0.00	A	C
ATOM	2423	NE	ARG	A 421	-15.159	-33.748	-45.550	1.00	0.00	A	N
ATOM	2424	CZ	ARG	A 421	-15.354	-34.687	-46.524	1.00	0.00	A	C
ATOM	2425	NH1	ARG	A 421	-15.488	-36.001	-46.180	1.00	0.00	A	N
ATOM	2426	NH2	ARG	A 421	-15.415	-34.312	-47.835	1.00	0.00	A	N
ATOM	2427	C	ARG	A 421	-13.651	-32.655	-40.872	1.00	0.00	A	C
ATOM	2428	O	ARG	A 421	-14.652	-32.887	-40.201	1.00	0.00	A	O
ATOM	2429	N	LEU	A 422	-12.541	-33.401	-40.788	1.00	0.00	A	N
ATOM	2430	CA	LEU	A 422	-12.480	-34.605	-40.013	1.00	0.00	A	C
ATOM	2431	CB	LEU	A 422	-11.137	-35.366	-40.151	1.00	0.00	A	C
ATOM	2432	CG	LEU	A 422	-11.041	-36.769	-39.505	1.00	0.00	A	C
ATOM	2433	CD1	LEU	A 422	-9.697	-37.434	-39.844	1.00	0.00	A	C
ATOM	2434	CD2	LEU	A 422	-11.262	-36.746	-37.989	1.00	0.00	A	C
ATOM	2435	C	LEU	A 422	-12.694	-34.262	-38.575	1.00	0.00	A	C
ATOM	2436	O	LEU	A 422	-13.432	-34.956	-37.878	1.00	0.00	A	O
ATOM	2437	N	LEU	A 423	-12.064	-33.179	-38.090	1.00	0.00	A	N
ATOM	2438	CA	LEU	A 423	-12.189	-32.854	-36.698	1.00	0.00	A	C
ATOM	2439	CB	LEU	A 423	-11.278	-31.701	-36.245	1.00	0.00	A	C
ATOM	2440	CG	LEU	A 423	-9.816	-32.136	-36.017	1.00	0.00	A	C
ATOM	2441	CD1	LEU	A 423	-9.699	-33.026	-34.771	1.00	0.00	A	C
ATOM	2442	CD2	LEU	A 423	-9.219	-32.819	-37.254	1.00	0.00	A	C
ATOM	2443	C	LEU	A 423	-13.606	-32.522	-36.344	1.00	0.00	A	C
ATOM	2444	O	LEU	A 423	-14.091	-32.909	-35.282	1.00	0.00	A	O
ATOM	2445	N	GLN	A 424	-14.315	-31.801	-37.227	1.00	0.00	A	N
ATOM	2446	CA	GLN	A 424	-15.659	-31.403	-36.916	1.00	0.00	A	C
ATOM	2447	CB	GLN	A 424	-16.279	-30.554	-38.041	1.00	0.00	A	C
ATOM	2448	CG	GLN	A 424	-17.693	-30.056	-37.742	1.00	0.00	A	C
ATOM	2449	CD	GLN	A 424	-17.582	-29.019	-36.638	1.00	0.00	A	C
ATOM	2450	OE1	GLN	A 424	-16.642	-29.045	-35.846	1.00	0.00	A	O

ATOM	2451	NE2	GLN A 424	-18.562	-28.075	-36.585	1.00	0.00	A	N
ATOM	2452	C	GLN A 424	-16.495	-32.631	-36.752	1.00	0.00	A	C
ATOM	2453	O	GLN A 424	-17.307	-32.732	-35.832	1.00	0.00	A	O
ATOM	2454	N	ASP A 425	-16.291	-33.613	-37.643	1.00	0.00	A	N
ATOM	2455	CA	ASP A 425	-17.078	-34.808	-37.629	1.00	0.00	A	C
ATOM	2456	CB	ASP A 425	-16.717	-35.731	-38.806	1.00	0.00	A	C
ATOM	2457	CG	ASP A 425	-17.863	-36.702	-39.047	1.00	0.00	A	C
ATOM	2458	OD1	ASP A 425	-18.425	-37.224	-38.050	1.00	0.00	A	O
ATOM	2459	OD2	ASP A 425	-18.186	-36.934	-40.243	1.00	0.00	A	O
ATOM	2460	C	ASP A 425	-16.827	-35.546	-36.350	1.00	0.00	A	C
ATOM	2461	O	ASP A 425	-17.761	-36.043	-35.721	1.00	0.00	A	O
ATOM	2462	N	LYS A 426	-15.553	-35.643	-35.929	1.00	0.00	A	N
ATOM	2463	CA	LYS A 426	-15.258	-36.385	-34.736	1.00	0.00	A	C
ATOM	2464	CB	LYS A 426	-13.755	-36.605	-34.494	1.00	0.00	A	C
ATOM	2465	CG	LYS A 426	-13.144	-37.681	-35.394	1.00	0.00	A	C
ATOM	2466	CD	LYS A 426	-11.624	-37.782	-35.257	1.00	0.00	A	C
ATOM	2467	CE	LYS A 426	-11.008	-38.943	-36.041	1.00	0.00	A	C
ATOM	2468	NZ	LYS A 426	-9.541	-38.764	-36.128	1.00	0.00	A	N
ATOM	2469	C	LYS A 426	-15.814	-35.728	-33.503	1.00	0.00	A	C
ATOM	2470	O	LYS A 426	-16.397	-36.398	-32.652	1.00	0.00	A	O
ATOM	2471	N	TRP A 427	-15.595	-34.409	-33.351	1.00	0.00	A	N
ATOM	2472	CA	TRP A 427	-15.969	-33.682	-32.163	1.00	0.00	A	C
ATOM	2473	CB	TRP A 427	-15.207	-32.336	-32.061	1.00	0.00	A	C
ATOM	2474	CG	TRP A 427	-15.263	-31.643	-30.714	1.00	0.00	A	C
ATOM	2475	CD1	TRP A 427	-14.692	-32.059	-29.553	1.00	0.00	A	C
ATOM	2476	NE1	TRP A 427	-14.939	-31.161	-28.545	1.00	0.00	A	N
ATOM	2477	CE2	TRP A 427	-15.667	-30.118	-29.063	1.00	0.00	A	C
ATOM	2478	CD2	TRP A 427	-15.886	-30.379	-30.419	1.00	0.00	A	C
ATOM	2479	CE3	TRP A 427	-16.575	-29.504	-31.204	1.00	0.00	A	C
ATOM	2480	CZ3	TRP A 427	-17.054	-28.359	-30.604	1.00	0.00	A	C
ATOM	2481	CZ2	TRP A 427	-16.138	-28.979	-28.473	1.00	0.00	A	C
ATOM	2482	CH2	TRP A 427	-16.844	-28.101	-29.265	1.00	0.00	A	C
ATOM	2483	C	TRP A 427	-17.433	-33.406	-32.068	1.00	0.00	A	C
ATOM	2484	O	TRP A 427	-18.052	-33.657	-31.036	1.00	0.00	A	O
ATOM	2485	N	ASP A 428	-18.028	-32.904	-33.165	1.00	0.00	A	N
ATOM	2486	CA	ASP A 428	-19.380	-32.445	-33.114	1.00	0.00	A	C
ATOM	2487	CB	ASP A 428	-19.887	-31.973	-34.489	1.00	0.00	A	C
ATOM	2488	CG	ASP A 428	-21.278	-31.364	-34.350	1.00	0.00	A	C

ATOM	2489	OD1	ASP	A	428	-21.862	-31.430	-33.233	1.00	0.00	A	O
ATOM	2490	OD2	ASP	A	428	-21.774	-30.814	-35.369	1.00	0.00	A	O
ATOM	2491	C	ASP	A	428	-20.240	-33.569	-32.681	1.00	0.00	A	C
ATOM	2492	O	ASP	A	428	-21.073	-33.403	-31.792	1.00	0.00	A	O
ATOM	2493	N	ARG	A	429	-20.086	-34.749	-33.298	1.00	0.00	A	N
ATOM	2494	CA	ARG	A	429	-21.007	-35.722	-32.833	1.00	0.00	A	C
ATOM	2495	CB	ARG	A	429	-21.057	-36.993	-33.696	1.00	0.00	A	C
ATOM	2496	CG	ARG	A	429	-19.722	-37.714	-33.863	1.00	0.00	A	C
ATOM	2497	CD	ARG	A	429	-19.831	-38.972	-34.728	1.00	0.00	A	C
ATOM	2498	NE	ARG	A	429	-20.379	-38.552	-36.048	1.00	0.00	A	N
ATOM	2499	CZ	ARG	A	429	-21.078	-39.440	-36.814	1.00	0.00	A	C
ATOM	2500	NH1	ARG	A	429	-21.302	-40.709	-36.362	1.00	0.00	A	N
ATOM	2501	NH2	ARG	A	429	-21.558	-39.053	-38.033	1.00	0.00	A	N
ATOM	2502	C	ARG	A	429	-20.760	-36.100	-31.397	1.00	0.00	A	C
ATOM	2503	O	ARG	A	429	-21.616	-35.852	-30.552	1.00	0.00	A	O
ATOM	2504	N	PHE	A	430	-19.620	-36.770	-31.103	1.00	0.00	A	N
ATOM	2505	CA	PHE	A	430	-19.288	-37.231	-29.773	1.00	0.00	A	C
ATOM	2506	CB	PHE	A	430	-18.826	-38.701	-29.777	1.00	0.00	A	C
ATOM	2507	CG	PHE	A	430	-17.741	-38.849	-30.788	1.00	0.00	A	C
ATOM	2508	CD1	PHE	A	430	-16.442	-38.536	-30.482	1.00	0.00	A	C
ATOM	2509	CE1	PHE	A	430	-15.457	-38.673	-31.430	1.00	0.00	A	C
ATOM	2510	CZ	PHE	A	430	-15.753	-39.126	-32.692	1.00	0.00	A	C
ATOM	2511	CD2	PHE	A	430	-18.029	-39.301	-32.055	1.00	0.00	A	C
ATOM	2512	CE2	PHE	A	430	-17.051	-39.439	-33.010	1.00	0.00	A	C
ATOM	2513	C	PHE	A	430	-18.343	-36.450	-28.881	1.00	0.00	A	C
ATOM	2514	O	PHE	A	430	-18.581	-36.337	-27.678	1.00	0.00	A	O
ATOM	2515	N	VAL	A	431	-17.250	-35.888	-29.441	1.00	0.00	A	N
ATOM	2516	CA	VAL	A	431	-16.100	-35.491	-28.653	1.00	0.00	A	C
ATOM	2517	CB	VAL	A	431	-14.948	-34.987	-29.465	1.00	0.00	A	C
ATOM	2518	CG1	VAL	A	431	-13.803	-34.647	-28.491	1.00	0.00	A	C
ATOM	2519	CG2	VAL	A	431	-14.589	-36.007	-30.548	1.00	0.00	A	C
ATOM	2520	C	VAL	A	431	-16.364	-34.428	-27.639	1.00	0.00	A	C
ATOM	2521	O	VAL	A	431	-15.849	-34.495	-26.524	1.00	0.00	A	O
ATOM	2522	N	LYS	A	432	-17.154	-33.404	-27.984	1.00	0.00	A	N
ATOM	2523	CA	LYS	A	432	-17.337	-32.313	-27.080	1.00	0.00	A	C
ATOM	2524	CB	LYS	A	432	-18.303	-31.254	-27.632	1.00	0.00	A	C
ATOM	2525	CG	LYS	A	432	-19.692	-31.812	-27.942	1.00	0.00	A	C
ATOM	2526	CD	LYS	A	432	-20.731	-30.738	-28.273	1.00	0.00	A	C

ATOM	2527	CE	LYS	A	432	-22.089	-31.310	-28.684	1.00	0.00	A	C
ATOM	2528	NZ	LYS	A	432	-23.016	-30.208	-29.020	1.00	0.00	A	N
ATOM	2529	C	LYS	A	432	-17.899	-32.831	-25.800	1.00	0.00	A	C
ATOM	2530	O	LYS	A	432	-17.503	-32.397	-24.719	1.00	0.00	A	O
ATOM	2531	N	ARG	A	433	-18.828	-33.794	-25.886	1.00	0.00	A	N
ATOM	2532	CA	ARG	A	433	-19.470	-34.313	-24.717	1.00	0.00	A	C
ATOM	2533	CB	ARG	A	433	-20.588	-35.311	-25.055	1.00	0.00	A	C
ATOM	2534	CG	ARG	A	433	-21.453	-35.679	-23.848	1.00	0.00	A	C
ATOM	2535	CD	ARG	A	433	-22.813	-36.263	-24.233	1.00	0.00	A	C
ATOM	2536	NE	ARG	A	433	-23.510	-35.229	-25.052	1.00	0.00	A	N
ATOM	2537	CZ	ARG	A	433	-24.219	-34.235	-24.441	1.00	0.00	A	C
ATOM	2538	NH1	ARG	A	433	-24.350	-34.222	-23.084	1.00	0.00	A	N
ATOM	2539	NH2	ARG	A	433	-24.786	-33.247	-25.194	1.00	0.00	A	N
ATOM	2540	C	ARG	A	433	-18.475	-34.994	-23.824	1.00	0.00	A	C
ATOM	2541	O	ARG	A	433	-18.543	-34.850	-22.604	1.00	0.00	A	O
ATOM	2542	N	ILE	A	434	-17.515	-35.747	-24.404	1.00	0.00	A	N
ATOM	2543	CA	ILE	A	434	-16.587	-36.525	-23.623	1.00	0.00	A	C
ATOM	2544	CB	ILE	A	434	-15.679	-37.403	-24.441	1.00	0.00	A	C
ATOM	2545	CG2	ILE	A	434	-16.585	-38.256	-25.337	1.00	0.00	A	C
ATOM	2546	CG1	ILE	A	434	-14.656	-36.599	-25.255	1.00	0.00	A	C
ATOM	2547	CD	ILE	A	434	-13.552	-37.462	-25.866	1.00	0.00	A	C
ATOM	2548	C	ILE	A	434	-15.709	-35.629	-22.805	1.00	0.00	A	C
ATOM	2549	O	ILE	A	434	-15.415	-35.920	-21.648	1.00	0.00	A	O
ATOM	2550	N	PHE	A	435	-15.260	-34.514	-23.402	1.00	0.00	A	N
ATOM	2551	CA	PHE	A	435	-14.332	-33.597	-22.808	1.00	0.00	A	C
ATOM	2552	CB	PHE	A	435	-13.928	-32.542	-23.850	1.00	0.00	A	C
ATOM	2553	CG	PHE	A	435	-12.872	-31.668	-23.293	1.00	0.00	A	C
ATOM	2554	CD1	PHE	A	435	-11.685	-32.197	-22.837	1.00	0.00	A	C
ATOM	2555	CE1	PHE	A	435	-10.702	-31.377	-22.335	1.00	0.00	A	C
ATOM	2556	CZ	PHE	A	435	-10.901	-30.019	-22.311	1.00	0.00	A	C
ATOM	2557	CD2	PHE	A	435	-13.058	-30.311	-23.290	1.00	0.00	A	C
ATOM	2558	CE2	PHE	A	435	-12.078	-29.495	-22.795	1.00	0.00	A	C
ATOM	2559	C	PHE	A	435	-14.914	-32.954	-21.580	1.00	0.00	A	C
ATOM	2560	O	PHE	A	435	-14.234	-32.832	-20.560	1.00	0.00	A	O
ATOM	2561	N	TYR	A	436	-16.192	-32.540	-21.633	1.00	0.00	A	N
ATOM	2562	CA	TYR	A	436	-16.822	-31.890	-20.516	1.00	0.00	A	C
ATOM	2563	CB	TYR	A	436	-18.282	-31.488	-20.782	1.00	0.00	A	C
ATOM	2564	CG	TYR	A	436	-18.296	-30.300	-21.676	1.00	0.00	A	C

ATOM	2565	CD1 TYR A 436	-18.178	-29.039	-21.134	1.00	0.00	A	C
ATOM	2566	CE1 TYR A 436	-18.195	-27.925	-21.934	1.00	0.00	A	C
ATOM	2567	CZ TYR A 436	-18.332	-28.070	-23.292	1.00	0.00	A	C
ATOM	2568	OH TYR A 436	-18.355	-26.930	-24.120	1.00	0.00	A	O
ATOM	2569	CD2 TYR A 436	-18.427	-30.436	-23.036	1.00	0.00	A	C
ATOM	2570	CE2 TYR A 436	-18.445	-29.322	-23.845	1.00	0.00	A	C
ATOM	2571	C TYR A 436	-16.839	-32.820	-19.346	1.00	0.00	A	C
ATOM	2572	O TYR A 436	-16.606	-32.403	-18.214	1.00	0.00	A	O
ATOM	2573	N PHE A 437	-17.119	-34.112	-19.593	1.00	0.00	A	N
ATOM	2574	CA PHE A 437	-17.179	-35.057	-18.518	1.00	0.00	A	C
ATOM	2575	CB PHE A 437	-17.508	-36.489	-18.986	1.00	0.00	A	C
ATOM	2576	CG PHE A 437	-17.479	-37.390	-17.797	1.00	0.00	A	C
ATOM	2577	CD1 PHE A 437	-18.576	-37.511	-16.974	1.00	0.00	A	C
ATOM	2578	CE1 PHE A 437	-18.543	-38.341	-15.878	1.00	0.00	A	C
ATOM	2579	CZ PHE A 437	-17.408	-39.060	-15.590	1.00	0.00	A	C
ATOM	2580	CD2 PHE A 437	-16.345	-38.108	-17.496	1.00	0.00	A	C
ATOM	2581	CE2 PHE A 437	-16.306	-38.943	-16.402	1.00	0.00	A	C
ATOM	2582	C PHE A 437	-15.842	-35.078	-17.857	1.00	0.00	A	C
ATOM	2583	O PHE A 437	-15.753	-35.097	-16.631	1.00	0.00	A	O
ATOM	2584	N ASN A 438	-14.762	-35.056	-18.656	1.00	0.00	A	N
ATOM	2585	CA ASN A 438	-13.446	-35.108	-18.090	1.00	0.00	A	C
ATOM	2586	CB ASN A 438	-12.339	-35.037	-19.159	1.00	0.00	A	C
ATOM	2587	CG ASN A 438	-12.450	-36.257	-20.059	1.00	0.00	A	C
ATOM	2588	OD1 ASN A 438	-13.046	-37.266	-19.685	1.00	0.00	A	O
ATOM	2589	ND2 ASN A 438	-11.860	-36.168	-21.282	1.00	0.00	A	N
ATOM	2590	C ASN A 438	-13.265	-33.914	-17.204	1.00	0.00	A	C
ATOM	2591	O ASN A 438	-12.780	-34.034	-16.080	1.00	0.00	A	O
ATOM	2592	N PHE A 439	-13.673	-32.725	-17.687	1.00	0.00	A	N
ATOM	2593	CA PHE A 439	-13.490	-31.501	-16.956	1.00	0.00	A	C
ATOM	2594	CB PHE A 439	-13.939	-30.262	-17.756	1.00	0.00	A	C
ATOM	2595	CG PHE A 439	-14.004	-29.072	-16.852	1.00	0.00	A	C
ATOM	2596	CD1 PHE A 439	-12.874	-28.565	-16.252	1.00	0.00	A	C
ATOM	2597	CE1 PHE A 439	-12.949	-27.464	-15.431	1.00	0.00	A	C
ATOM	2598	CZ PHE A 439	-14.155	-26.847	-15.209	1.00	0.00	A	C
ATOM	2599	CD2 PHE A 439	-15.205	-28.437	-16.635	1.00	0.00	A	C
ATOM	2600	CE2 PHE A 439	-15.286	-27.335	-15.816	1.00	0.00	A	C
ATOM	2601	C PHE A 439	-14.247	-31.535	-15.669	1.00	0.00	A	C
ATOM	2602	O PHE A 439	-13.710	-31.189	-14.618	1.00	0.00	A	O

ATOM 2603 N LEU A 440 -15.520 -31.968 -15.708 1.00 0.00 A N
ATOM 2604 CA LEU A 440 -16.314 -31.953 -14.515 1.00 0.00 A C
ATOM 2605 CB LEU A 440 -17.779 -32.363 -14.751 1.00 0.00 A C
ATOM 2606 CG LEU A 440 -18.544 -31.373 -15.650 1.00 0.00 A C
ATOM 2607 CD1 LEU A 440 -20.019 -31.777 -15.803 1.00 0.00 A C
ATOM 2608 CD2 LEU A 440 -18.364 -29.927 -15.161 1.00 0.00 A C
ATOM 2609 C LEU A 440 -15.727 -32.888 -13.507 1.00 0.00 A C
ATOM 2610 O LEU A 440 -15.632 -32.550 -12.329 1.00 0.00 A O
ATOM 2611 N VAL A 441 -15.287 -34.080 -13.949 1.00 0.00 A N
ATOM 2612 CA VAL A 441 -14.770 -35.057 -13.031 1.00 0.00 A C
ATOM 2613 CB VAL A 441 -14.342 -36.330 -13.694 1.00 0.00 A C
ATOM 2614 CG1 VAL A 441 -13.692 -37.242 -12.640 1.00 0.00 A C
ATOM 2615 CG2 VAL A 441 -15.573 -36.952 -14.362 1.00 0.00 A C
ATOM 2616 C VAL A 441 -13.566 -34.493 -12.348 1.00 0.00 A C
ATOM 2617 O VAL A 441 -13.368 -34.693 -11.152 1.00 0.00 A O
ATOM 2618 N TYR A 442 -12.732 -33.763 -13.107 1.00 0.00 A N
ATOM 2619 CA TYR A 442 -11.517 -33.192 -12.605 1.00 0.00 A C
ATOM 2620 CB TYR A 442 -10.749 -32.458 -13.719 1.00 0.00 A C
ATOM 2621 CG TYR A 442 -9.510 -31.852 -13.153 1.00 0.00 A C
ATOM 2622 CD1 TYR A 442 -8.342 -32.576 -13.089 1.00 0.00 A C
ATOM 2623 CE1 TYR A 442 -7.196 -32.019 -12.574 1.00 0.00 A C
ATOM 2624 CZ TYR A 442 -7.215 -30.725 -12.114 1.00 0.00 A C
ATOM 2625 OH TYR A 442 -6.043 -30.144 -11.582 1.00 0.00 A O
ATOM 2626 CD2 TYR A 442 -9.519 -30.559 -12.684 1.00 0.00 A C
ATOM 2627 CE2 TYR A 442 -8.378 -29.996 -12.166 1.00 0.00 A C
ATOM 2628 C TYR A 442 -11.841 -32.208 -11.525 1.00 0.00 A C
ATOM 2629 O TYR A 442 -11.164 -32.164 -10.497 1.00 0.00 A O
ATOM 2630 N CYS A 443 -12.905 -31.410 -11.717 1.00 0.00 A N
ATOM 2631 CA CYS A 443 -13.247 -30.367 -10.790 1.00 0.00 A C
ATOM 2632 CB CYS A 443 -14.511 -29.602 -11.208 1.00 0.00 A C
ATOM 2633 SG CYS A 443 -14.323 -28.838 -12.843 1.00 0.00 A S
ATOM 2634 C CYS A 443 -13.519 -30.958 -9.439 1.00 0.00 A C
ATOM 2635 O CYS A 443 -13.098 -30.411 -8.421 1.00 0.00 A O
ATOM 2636 N LEU A 444 -14.219 -32.104 -9.400 1.00 0.00 A N
ATOM 2637 CA LEU A 444 -14.588 -32.771 -8.181 1.00 0.00 A C
ATOM 2638 CB LEU A 444 -15.422 -34.030 -8.498 1.00 0.00 A C
ATOM 2639 CG LEU A 444 -15.819 -34.922 -7.307 1.00 0.00 A C
ATOM 2640 CD1 LEU A 444 -14.621 -35.732 -6.790 1.00 0.00 A C

ATOM	2641	CD2	LEU	A	444	-16.524	-34.117	-6.208	1.00	0.00	A	C
ATOM	2642	C	LEU	A	444	-13.338	-33.162	-7.452	1.00	0.00	A	C
ATOM	2643	O	LEU	A	444	-13.247	-33.072	-6.229	1.00	0.00	A	O
ATOM	2644	N	TYR	A	445	-12.319	-33.604	-8.193	1.00	0.00	A	N
ATOM	2645	CA	TYR	A	445	-11.100	-34.014	-7.572	1.00	0.00	A	C
ATOM	2646	CB	TYR	A	445	-10.099	-34.511	-8.636	1.00	0.00	A	C
ATOM	2647	CG	TYR	A	445	-8.736	-34.675	-8.061	1.00	0.00	A	C
ATOM	2648	CD1	TYR	A	445	-8.383	-35.821	-7.388	1.00	0.00	A	C
ATOM	2649	CE1	TYR	A	445	-7.118	-35.961	-6.865	1.00	0.00	A	C
ATOM	2650	CZ	TYR	A	445	-6.193	-34.954	-7.010	1.00	0.00	A	C
ATOM	2651	OH	TYR	A	445	-4.895	-35.099	-6.477	1.00	0.00	A	O
ATOM	2652	CD2	TYR	A	445	-7.802	-33.671	-8.198	1.00	0.00	A	C
ATOM	2653	CE2	TYR	A	445	-6.537	-33.807	-7.678	1.00	0.00	A	C
ATOM	2654	C	TYR	A	445	-10.526	-32.839	-6.846	1.00	0.00	A	C
ATOM	2655	O	TYR	A	445	-10.031	-32.962	-5.726	1.00	0.00	A	O
ATOM	2656	N	MET	A	446	-10.591	-31.657	-7.478	1.00	0.00	A	N
ATOM	2657	CA	MET	A	446	-10.002	-30.469	-6.932	1.00	0.00	A	C
ATOM	2658	CB	MET	A	446	-10.085	-29.291	-7.910	1.00	0.00	A	C
ATOM	2659	CG	MET	A	446	-9.454	-29.627	-9.261	1.00	0.00	A	C
ATOM	2660	SD	MET	A	446	-7.836	-30.438	-9.127	1.00	0.00	A	S
ATOM	2661	CE	MET	A	446	-7.116	-29.227	-7.985	1.00	0.00	A	C
ATOM	2662	C	MET	A	446	-10.678	-30.066	-5.659	1.00	0.00	A	C
ATOM	2663	O	MET	A	446	-10.016	-29.678	-4.697	1.00	0.00	A	O
ATOM	2664	N	ILE	A	447	-12.018	-30.146	-5.612	1.00	0.00	A	N
ATOM	2665	CA	ILE	A	447	-12.738	-29.701	-4.460	1.00	0.00	A	C
ATOM	2666	CB	ILE	A	447	-14.224	-29.735	-4.667	1.00	0.00	A	C
ATOM	2667	CG2	ILE	A	447	-14.549	-28.774	-5.824	1.00	0.00	A	C
ATOM	2668	CG1	ILE	A	447	-14.692	-31.171	-4.915	1.00	0.00	A	C
ATOM	2669	CD	ILE	A	447	-16.190	-31.322	-5.143	1.00	0.00	A	C
ATOM	2670	C	ILE	A	447	-12.357	-30.559	-3.292	1.00	0.00	A	C
ATOM	2671	O	ILE	A	447	-12.194	-30.065	-2.176	1.00	0.00	A	O
ATOM	2672	N	ILE	A	448	-12.210	-31.872	-3.519	1.00	0.00	A	N
ATOM	2673	CA	ILE	A	448	-11.868	-32.785	-2.469	1.00	0.00	A	C
ATOM	2674	CB	ILE	A	448	-11.863	-34.210	-2.920	1.00	0.00	A	C
ATOM	2675	CG2	ILE	A	448	-11.377	-35.085	-1.753	1.00	0.00	A	C
ATOM	2676	CG1	ILE	A	448	-13.254	-34.597	-3.434	1.00	0.00	A	C
ATOM	2677	CD	ILE	A	448	-13.239	-35.911	-4.200	1.00	0.00	A	C
ATOM	2678	C	ILE	A	448	-10.486	-32.511	-1.949	1.00	0.00	A	C

ATOM	2679	O	ILE A 448	-10.262	-32.523	-0.740	1.00	0.00	A	O
ATOM	2680	N	PHE A 449	-9.518	-32.258	-2.849	1.00	0.00	A	N
ATOM	2681	CA	PHE A 449	-8.150	-32.090	-2.431	1.00	0.00	A	C
ATOM	2682	CB	PHE A 449	-7.206	-31.816	-3.618	1.00	0.00	A	C
ATOM	2683	CG	PHE A 449	-5.784	-31.886	-3.158	1.00	0.00	A	C
ATOM	2684	CD1	PHE A 449	-5.206	-30.844	-2.472	1.00	0.00	A	C
ATOM	2685	CE1	PHE A 449	-3.894	-30.913	-2.061	1.00	0.00	A	C
ATOM	2686	CZ	PHE A 449	-3.143	-32.030	-2.333	1.00	0.00	A	C
ATOM	2687	CD2	PHE A 449	-5.020	-33.000	-3.431	1.00	0.00	A	C
ATOM	2688	CE2	PHE A 449	-3.709	-33.076	-3.023	1.00	0.00	A	C
ATOM	2689	C	PHE A 449	-8.074	-30.911	-1.512	1.00	0.00	A	C
ATOM	2690	O	PHE A 449	-7.414	-30.963	-0.474	1.00	0.00	A	O
ATOM	2691	N	THR A 450	-8.732	-29.803	-1.895	1.00	0.00	A	N
ATOM	2692	CA	THR A 450	-8.736	-28.599	-1.117	1.00	0.00	A	C
ATOM	2693	CB	THR A 450	-9.329	-27.436	-1.858	1.00	0.00	A	C
ATOM	2694	OG1	THR A 450	-9.114	-26.231	-1.135	1.00	0.00	A	O
ATOM	2695	CG2	THR A 450	-10.834	-27.681	-2.060	1.00	0.00	A	C
ATOM	2696	C	THR A 450	-9.510	-28.789	0.149	1.00	0.00	A	C
ATOM	2697	O	THR A 450	-9.107	-28.299	1.198	1.00	0.00	A	O
ATOM	2698	N	MET A 451	-10.650	-29.504	0.095	1.00	0.00	A	N
ATOM	2699	CA	MET A 451	-11.472	-29.627	1.267	1.00	0.00	A	C
ATOM	2700	CB	MET A 451	-12.778	-30.401	1.025	1.00	0.00	A	C
ATOM	2701	CG	MET A 451	-13.809	-29.611	0.221	1.00	0.00	A	C
ATOM	2702	SD	MET A 451	-15.400	-30.461	0.002	1.00	0.00	A	S
ATOM	2703	CE	MET A 451	-16.252	-29.007	-0.675	1.00	0.00	A	C
ATOM	2704	C	MET A 451	-10.737	-30.332	2.360	1.00	0.00	A	C
ATOM	2705	O	MET A 451	-10.761	-29.896	3.509	1.00	0.00	A	O
ATOM	2706	N	ALA A 452	-10.055	-31.444	2.039	1.00	0.00	A	N
ATOM	2707	CA	ALA A 452	-9.368	-32.157	3.071	1.00	0.00	A	C
ATOM	2708	CB	ALA A 452	-8.677	-33.432	2.561	1.00	0.00	A	C
ATOM	2709	C	ALA A 452	-8.302	-31.264	3.612	1.00	0.00	A	C
ATOM	2710	O	ALA A 452	-8.104	-31.175	4.821	1.00	0.00	A	O
ATOM	2711	N	ALA A 453	-7.596	-30.556	2.713	1.00	0.00	A	N
ATOM	2712	CA	ALA A 453	-6.509	-29.707	3.108	1.00	0.00	A	C
ATOM	2713	CB	ALA A 453	-5.804	-29.056	1.904	1.00	0.00	A	C
ATOM	2714	C	ALA A 453	-7.020	-28.605	3.984	1.00	0.00	A	C
ATOM	2715	O	ALA A 453	-6.414	-28.283	5.003	1.00	0.00	A	O
ATOM	2716	N	TYR A 454	-8.162	-28.001	3.608	1.00	0.00	A	N

ATOM	2717	CA	TYR	A	454	-8.730	-26.909	4.347	1.00	0.00	A	C
ATOM	2718	CB	TYR	A	454	-9.999	-26.353	3.677	1.00	0.00	A	C
ATOM	2719	CG	TYR	A	454	-10.651	-25.417	4.637	1.00	0.00	A	C
ATOM	2720	CD1	TYR	A	454	-10.261	-24.099	4.718	1.00	0.00	A	C
ATOM	2721	CE1	TYR	A	454	-10.869	-23.245	5.608	1.00	0.00	A	C
ATOM	2722	CZ	TYR	A	454	-11.875	-23.705	6.425	1.00	0.00	A	C
ATOM	2723	OH	TYR	A	454	-12.495	-22.823	7.336	1.00	0.00	A	O
ATOM	2724	CD2	TYR	A	454	-11.657	-25.867	5.460	1.00	0.00	A	C
ATOM	2725	CE2	TYR	A	454	-12.268	-25.020	6.352	1.00	0.00	A	C
ATOM	2726	C	TYR	A	454	-9.132	-27.392	5.710	1.00	0.00	A	C
ATOM	2727	O	TYR	A	454	-8.846	-26.756	6.722	1.00	0.00	A	O
ATOM	2728	N	TYR	A	455	-9.825	-28.541	5.742	1.00	0.00	A	N
ATOM	2729	CA	TYR	A	455	-10.367	-29.192	6.901	1.00	0.00	A	C
ATOM	2730	CB	TYR	A	455	-11.445	-30.247	6.592	1.00	0.00	A	C
ATOM	2731	CG	TYR	A	455	-12.675	-29.520	6.178	1.00	0.00	A	C
ATOM	2732	CD1	TYR	A	455	-13.395	-28.796	7.102	1.00	0.00	A	C
ATOM	2733	CE1	TYR	A	455	-14.536	-28.125	6.735	1.00	0.00	A	C
ATOM	2734	CZ	TYR	A	455	-14.975	-28.178	5.434	1.00	0.00	A	C
ATOM	2735	OH	TYR	A	455	-16.146	-27.492	5.050	1.00	0.00	A	O
ATOM	2736	CD2	TYR	A	455	-13.126	-29.576	4.881	1.00	0.00	A	C
ATOM	2737	CE2	TYR	A	455	-14.267	-28.908	4.507	1.00	0.00	A	C
ATOM	2738	C	TYR	A	455	-9.342	-29.852	7.776	1.00	0.00	A	C
ATOM	2739	O	TYR	A	455	-9.650	-30.137	8.930	1.00	0.00	A	O
ATOM	2740	N	ARG	A	456	-8.150	-30.200	7.246	1.00	0.00	A	N
ATOM	2741	CA	ARG	A	456	-7.172	-31.001	7.944	1.00	0.00	A	C
ATOM	2742	CB	ARG	A	456	-5.764	-30.980	7.320	1.00	0.00	A	C
ATOM	2743	CG	ARG	A	456	-5.144	-29.581	7.307	1.00	0.00	A	C
ATOM	2744	CD	ARG	A	456	-3.636	-29.553	7.044	1.00	0.00	A	C
ATOM	2745	NE	ARG	A	456	-2.934	-29.873	8.318	1.00	0.00	A	N
ATOM	2746	CZ	ARG	A	456	-1.749	-30.554	8.292	1.00	0.00	A	C
ATOM	2747	NH1	ARG	A	456	-1.250	-30.991	7.100	1.00	0.00	A	N
ATOM	2748	NH2	ARG	A	456	-1.070	-30.796	9.451	1.00	0.00	A	N
ATOM	2749	C	ARG	A	456	-6.981	-30.554	9.361	1.00	0.00	A	C
ATOM	2750	O	ARG	A	456	-6.945	-29.365	9.676	1.00	0.00	A	O
ATOM	2751	N	PRO	A	457	-6.904	-31.545	10.225	1.00	0.00	A	N
ATOM	2752	CD	PRO	A	457	-7.682	-32.754	10.015	1.00	0.00	A	C
ATOM	2753	CA	PRO	A	457	-6.677	-31.296	11.624	1.00	0.00	A	C
ATOM	2754	CB	PRO	A	457	-7.096	-32.568	12.360	1.00	0.00	A	C

ATOM	2755	CG	PRO A 457	-8.116	-33.218	11.415	1.00	0.00	A	C
ATOM	2756	C	PRO A 457	-5.258	-30.913	11.901	1.00	0.00	A	C
ATOM	2757	O	PRO A 457	-4.351	-31.556	11.370	1.00	0.00	A	O
ATOM	2758	N	VAL A 458	-5.053	-29.891	12.755	1.00	0.00	A	N
ATOM	2759	CA	VAL A 458	-3.746	-29.415	13.112	1.00	0.00	A	C
ATOM	2760	CB	VAL A 458	-3.805	-28.158	13.926	1.00	0.00	A	C
ATOM	2761	CG1	VAL A 458	-2.383	-27.797	14.388	1.00	0.00	A	C
ATOM	2762	CG2	VAL A 458	-4.483	-27.070	13.075	1.00	0.00	A	C
ATOM	2763	C	VAL A 458	-3.040	-30.452	13.917	1.00	0.00	A	C
ATOM	2764	O	VAL A 458	-1.871	-30.741	13.654	1.00	0.00	A	O
ATOM	2765	N	ASP A 459	-3.784	-31.045	14.879	1.00	0.00	A	N
ATOM	2766	CA	ASP A 459	-3.378	-32.022	15.848	1.00	0.00	A	C
ATOM	2767	CB	ASP A 459	-3.763	-33.459	15.461	1.00	0.00	A	C
ATOM	2768	CG	ASP A 459	-5.277	-33.572	15.557	1.00	0.00	A	C
ATOM	2769	OD1	ASP A 459	-5.843	-33.086	16.570	1.00	0.00	A	O
ATOM	2770	OD2	ASP A 459	-5.886	-34.155	14.617	1.00	0.00	A	O
ATOM	2771	C	ASP A 459	-1.919	-31.978	16.069	1.00	0.00	A	C
ATOM	2772	O	ASP A 459	-1.343	-30.947	16.425	1.00	0.00	A	O
ATOM	2773	N	GLY A 460	-1.337	-33.170	15.905	1.00	0.00	A	N
ATOM	2774	CA	GLY A 460	0.051	-33.435	15.920	1.00	0.00	A	C
ATOM	2775	C	GLY A 460	0.355	-33.611	14.474	1.00	0.00	A	C
ATOM	2776	O	GLY A 460	-0.014	-32.768	13.656	1.00	0.00	A	O
ATOM	2777	N	LEU A 461	1.028	-34.718	14.122	1.00	0.00	A	N
ATOM	2778	CA	LEU A 461	1.387	-34.985	12.761	1.00	0.00	A	C
ATOM	2779	CB	LEU A 461	2.855	-35.401	12.652	1.00	0.00	A	C
ATOM	2780	CG	LEU A 461	3.844	-34.299	13.090	1.00	0.00	A	C
ATOM	2781	CD1	LEU A 461	3.705	-33.961	14.584	1.00	0.00	A	C
ATOM	2782	CD2	LEU A 461	5.287	-34.664	12.724	1.00	0.00	A	C
ATOM	2783	C	LEU A 461	0.505	-36.101	12.294	1.00	0.00	A	C
ATOM	2784	O	LEU A 461	0.130	-36.942	13.098	1.00	0.00	A	O
ATOM	2785	N	PRO A 462	0.281	-36.236	11.018	1.00	0.00	A	N
ATOM	2786	CD	PRO A 462	1.414	-36.202	10.105	1.00	0.00	A	C
ATOM	2787	CA	PRO A 462	-0.816	-37.012	10.479	1.00	0.00	A	C
ATOM	2788	CB	PRO A 462	-0.436	-37.320	9.033	1.00	0.00	A	C
ATOM	2789	CG	PRO A 462	1.099	-37.252	9.031	1.00	0.00	A	C
ATOM	2790	C	PRO A 462	-1.390	-38.200	11.210	1.00	0.00	A	C
ATOM	2791	O	PRO A 462	-2.535	-37.999	11.625	1.00	0.00	A	O
ATOM	2792	N	PRO A 463	-0.835	-39.364	11.441	1.00	0.00	A	N

ATOM	2793	CD	PRO	A	463	0.067	-40.006	10.500	1.00	0.00	A	C
ATOM	2794	CA	PRO	A	463	-1.566	-40.328	12.226	1.00	0.00	A	C
ATOM	2795	CB	PRO	A	463	-1.086	-41.708	11.775	1.00	0.00	A	C
ATOM	2796	CG	PRO	A	463	0.244	-41.428	11.055	1.00	0.00	A	C
ATOM	2797	C	PRO	A	463	-1.264	-40.039	13.651	1.00	0.00	A	C
ATOM	2798	O	PRO	A	463	-0.250	-39.389	13.901	1.00	0.00	A	O
ATOM	2799	N	PHE	A	464	-2.093	-40.521	14.596	1.00	0.00	A	N
ATOM	2800	CA	PHE	A	464	-3.242	-41.297	14.255	1.00	0.00	A	C
ATOM	2801	CB	PHE	A	464	-3.605	-42.378	15.288	1.00	0.00	A	C
ATOM	2802	CG	PHE	A	464	-2.619	-43.480	15.094	1.00	0.00	A	C
ATOM	2803	CD1	PHE	A	464	-1.378	-43.439	15.687	1.00	0.00	A	C
ATOM	2804	CE1	PHE	A	464	-0.476	-44.459	15.494	1.00	0.00	A	C
ATOM	2805	CZ	PHE	A	464	-0.805	-45.533	14.702	1.00	0.00	A	C
ATOM	2806	CD2	PHE	A	464	-2.939	-44.558	14.299	1.00	0.00	A	C
ATOM	2807	CE2	PHE	A	464	-2.040	-45.581	14.105	1.00	0.00	A	C
ATOM	2808	C	PHE	A	464	-4.416	-40.397	14.045	1.00	0.00	A	C
ATOM	2809	O	PHE	A	464	-4.438	-39.256	14.502	1.00	0.00	A	O
ATOM	2810	N	LYS	A	465	-5.410	-40.904	13.289	1.00	0.00	A	N
ATOM	2811	CA	LYS	A	465	-6.607	-40.170	13.002	1.00	0.00	A	C
ATOM	2812	CB	LYS	A	465	-6.970	-40.176	11.507	1.00	0.00	A	C
ATOM	2813	CG	LYS	A	465	-5.909	-39.540	10.608	1.00	0.00	A	C
ATOM	2814	CD	LYS	A	465	-6.101	-39.861	9.125	1.00	0.00	A	C
ATOM	2815	CE	LYS	A	465	-5.883	-41.336	8.784	1.00	0.00	A	C
ATOM	2816	NZ	LYS	A	465	-4.452	-41.688	8.934	1.00	0.00	A	N
ATOM	2817	C	LYS	A	465	-7.738	-40.869	13.705	1.00	0.00	A	C
ATOM	2818	O	LYS	A	465	-7.780	-42.097	13.752	1.00	0.00	A	O
ATOM	2819	N	MET	A	466	-8.679	-40.089	14.284	1.00	0.00	A	N
ATOM	2820	CA	MET	A	466	-9.801	-40.610	15.020	1.00	0.00	A	C
ATOM	2821	CB	MET	A	466	-10.647	-39.497	15.668	1.00	0.00	A	C
ATOM	2822	CG	MET	A	466	-9.882	-38.572	16.623	1.00	0.00	A	C
ATOM	2823	SD	MET	A	466	-10.930	-37.303	17.405	1.00	0.00	A	S
ATOM	2824	CE	MET	A	466	-9.625	-36.098	17.788	1.00	0.00	A	C
ATOM	2825	C	MET	A	466	-10.724	-41.357	14.102	1.00	0.00	A	C
ATOM	2826	O	MET	A	466	-11.183	-42.451	14.427	1.00	0.00	A	O
ATOM	2827	N	GLU	A	467	-11.001	-40.794	12.911	1.00	0.00	A	N
ATOM	2828	CA	GLU	A	467	-11.914	-41.419	11.999	1.00	0.00	A	C
ATOM	2829	CB	GLU	A	467	-11.503	-42.851	11.630	1.00	0.00	A	C
ATOM	2830	CG	GLU	A	467	-10.218	-42.941	10.814	1.00	0.00	A	C

ATOM	2831	CD	GLU A 467	-9.984	-44.421	10.552	1.00	0.00	A	C
ATOM	2832	OE1	GLU A 467	-10.942	-45.207	10.783	1.00	0.00	A	O
ATOM	2833	OE2	GLU A 467	-8.859	-44.786	10.119	1.00	0.00	A	O
ATOM	2834	C	GLU A 467	-13.270	-41.521	12.640	1.00	0.00	A	C
ATOM	2835	O	GLU A 467	-14.000	-42.483	12.402	1.00	0.00	A	O
ATOM	2836	N	LYS A 468	-13.661	-40.521	13.457	1.00	0.00	A	N
ATOM	2837	CA	LYS A 468	-14.957	-40.523	14.081	1.00	0.00	A	C
ATOM	2838	CB	LYS A 468	-14.961	-39.977	15.520	1.00	0.00	A	C
ATOM	2839	CG	LYS A 468	-14.362	-40.970	16.519	1.00	0.00	A	C
ATOM	2840	CD	LYS A 468	-15.099	-42.313	16.523	1.00	0.00	A	C
ATOM	2841	CE	LYS A 468	-14.501	-43.365	17.461	1.00	0.00	A	C
ATOM	2842	NZ	LYS A 468	-15.275	-44.626	17.363	1.00	0.00	A	N
ATOM	2843	C	LYS A 468	-15.875	-39.683	13.243	1.00	0.00	A	C
ATOM	2844	O	LYS A 468	-15.592	-39.428	12.079	1.00	0.00	A	O
ATOM	2845	N	THR A 469	-17.022	-39.249	13.800	1.00	0.00	A	N
ATOM	2846	CA	THR A 469	-17.951	-38.490	13.007	1.00	0.00	A	C
ATOM	2847	CB	THR A 469	-19.173	-38.063	13.762	1.00	0.00	A	C
ATOM	2848	OG1	THR A 469	-20.111	-37.462	12.880	1.00	0.00	A	O
ATOM	2849	CG2	THR A 469	-18.753	-37.067	14.858	1.00	0.00	A	C
ATOM	2850	C	THR A 469	-17.259	-37.259	12.521	1.00	0.00	A	C
ATOM	2851	O	THR A 469	-16.401	-36.695	13.195	1.00	0.00	A	O
ATOM	2852	N	GLY A 470	-17.535	-36.857	11.263	1.00	0.00	A	N
ATOM	2853	CA	GLY A 470	-16.944	-35.672	10.705	1.00	0.00	A	C
ATOM	2854	C	GLY A 470	-15.603	-36.075	10.197	1.00	0.00	A	C
ATOM	2855	O	GLY A 470	-15.110	-35.558	9.195	1.00	0.00	A	O
ATOM	2856	N	ASP A 471	-14.976	-37.009	10.932	1.00	0.00	A	N
ATOM	2857	CA	ASP A 471	-13.730	-37.604	10.606	1.00	0.00	A	C
ATOM	2858	CB	ASP A 471	-13.068	-38.361	11.760	1.00	0.00	A	C
ATOM	2859	CG	ASP A 471	-12.577	-37.326	12.762	1.00	0.00	A	C
ATOM	2860	OD1	ASP A 471	-12.647	-36.109	12.438	1.00	0.00	A	O
ATOM	2861	OD2	ASP A 471	-12.122	-37.740	13.861	1.00	0.00	A	O
ATOM	2862	C	ASP A 471	-13.972	-38.544	9.483	1.00	0.00	A	C
ATOM	2863	O	ASP A 471	-13.056	-38.892	8.749	1.00	0.00	A	O
ATOM	2864	N	TYR A 472	-15.214	-39.039	9.358	1.00	0.00	A	N
ATOM	2865	CA	TYR A 472	-15.497	-39.973	8.312	1.00	0.00	A	C
ATOM	2866	CB	TYR A 472	-16.920	-40.552	8.430	1.00	0.00	A	C
ATOM	2867	CG	TYR A 472	-17.095	-41.636	7.422	1.00	0.00	A	C
ATOM	2868	CD1	TYR A 472	-16.487	-42.860	7.597	1.00	0.00	A	C

ATOM	2869	CE1 TYR A 472	-16.650	-43.868	6.674	1.00	0.00	A	C
ATOM	2870	CZ TYR A 472	-17.433	-43.662	5.565	1.00	0.00	A	C
ATOM	2871	OH TYR A 472	-17.606	-44.693	4.616	1.00	0.00	A	O
ATOM	2872	CD2 TYR A 472	-17.886	-41.445	6.313	1.00	0.00	A	C
ATOM	2873	CE2 TYR A 472	-18.053	-42.449	5.386	1.00	0.00	A	C
ATOM	2874	C TYR A 472	-15.354	-39.289	6.982	1.00	0.00	A	C
ATOM	2875	O TYR A 472	-14.708	-39.816	6.078	1.00	0.00	A	O
ATOM	2876	N PHE A 473	-15.935	-38.080	6.834	1.00	0.00	A	N
ATOM	2877	CA PHE A 473	-15.913	-37.390	5.573	1.00	0.00	A	C
ATOM	2878	CB PHE A 473	-16.735	-36.089	5.544	1.00	0.00	A	C
ATOM	2879	CG PHE A 473	-18.177	-36.434	5.470	1.00	0.00	A	C
ATOM	2880	CD1 PHE A 473	-18.724	-36.840	4.275	1.00	0.00	A	C
ATOM	2881	CE1 PHE A 473	-20.060	-37.156	4.185	1.00	0.00	A	C
ATOM	2882	CZ PHE A 473	-20.858	-37.063	5.298	1.00	0.00	A	C
ATOM	2883	CD2 PHE A 473	-18.987	-36.336	6.579	1.00	0.00	A	C
ATOM	2884	CE2 PHE A 473	-20.323	-36.651	6.494	1.00	0.00	A	C
ATOM	2885	C PHE A 473	-14.524	-36.997	5.173	1.00	0.00	A	C
ATOM	2886	O PHE A 473	-14.130	-37.194	4.025	1.00	0.00	A	O
ATOM	2887	N ARG A 474	-13.746	-36.418	6.104	1.00	0.00	A	N
ATOM	2888	CA ARG A 474	-12.449	-35.921	5.745	1.00	0.00	A	C
ATOM	2889	CB ARG A 474	-11.757	-35.147	6.877	1.00	0.00	A	C
ATOM	2890	CG ARG A 474	-11.441	-35.983	8.115	1.00	0.00	A	C
ATOM	2891	CD ARG A 474	-10.801	-35.156	9.229	1.00	0.00	A	C
ATOM	2892	NE ARG A 474	-10.227	-36.104	10.223	1.00	0.00	A	N
ATOM	2893	CZ ARG A 474	-8.935	-36.517	10.084	1.00	0.00	A	C
ATOM	2894	NH1 ARG A 474	-8.170	-36.033	9.063	1.00	0.00	A	N
ATOM	2895	NH2 ARG A 474	-8.408	-37.417	10.965	1.00	0.00	A	N
ATOM	2896	C ARG A 474	-11.546	-37.048	5.343	1.00	0.00	A	C
ATOM	2897	O ARG A 474	-10.776	-36.919	4.391	1.00	0.00	A	O
ATOM	2898	N VAL A 475	-11.622	-38.187	6.052	1.00	0.00	A	N
ATOM	2899	CA VAL A 475	-10.763	-39.306	5.778	1.00	0.00	A	C
ATOM	2900	CB VAL A 475	-10.971	-40.458	6.715	1.00	0.00	A	C
ATOM	2901	CG1 VAL A 475	-10.100	-41.630	6.232	1.00	0.00	A	C
ATOM	2902	CG2 VAL A 475	-10.623	-40.003	8.142	1.00	0.00	A	C
ATOM	2903	C VAL A 475	-11.007	-39.801	4.390	1.00	0.00	A	C
ATOM	2904	O VAL A 475	-10.073	-40.174	3.683	1.00	0.00	A	O
ATOM	2905	N THR A 476	-12.280	-39.837	3.957	1.00	0.00	A	N
ATOM	2906	CA THR A 476	-12.559	-40.340	2.645	1.00	0.00	A	C

ATOM	2907	CB	THR	A	476	-14.028	-40.391	2.333	1.00	0.00	A	C
ATOM	2908	OG1	THR	A	476	-14.582	-39.085	2.329	1.00	0.00	A	O
ATOM	2909	CG2	THR	A	476	-14.723	-41.258	3.396	1.00	0.00	A	C
ATOM	2910	C	THR	A	476	-11.904	-39.431	1.652	1.00	0.00	A	C
ATOM	2911	O	THR	A	476	-11.330	-39.886	0.663	1.00	0.00	A	O
ATOM	2912	N	GLY	A	477	-11.964	-38.113	1.908	1.00	0.00	A	N
ATOM	2913	CA	GLY	A	477	-11.422	-37.157	0.986	1.00	0.00	A	C
ATOM	2914	C	GLY	A	477	-9.943	-37.341	0.844	1.00	0.00	A	C
ATOM	2915	O	GLY	A	477	-9.406	-37.231	-0.257	1.00	0.00	A	O
ATOM	2916	N	GLU	A	478	-9.236	-37.608	1.958	1.00	0.00	A	N
ATOM	2917	CA	GLU	A	478	-7.808	-37.725	1.901	1.00	0.00	A	C
ATOM	2918	CB	GLU	A	478	-7.156	-37.939	3.281	1.00	0.00	A	C
ATOM	2919	CG	GLU	A	478	-7.487	-39.289	3.916	1.00	0.00	A	C
ATOM	2920	CD	GLU	A	478	-6.829	-39.358	5.285	1.00	0.00	A	C
ATOM	2921	OE1	GLU	A	478	-6.477	-38.279	5.831	1.00	0.00	A	O
ATOM	2922	OE2	GLU	A	478	-6.675	-40.495	5.807	1.00	0.00	A	O
ATOM	2923	C	GLU	A	478	-7.441	-38.896	1.048	1.00	0.00	A	C
ATOM	2924	O	GLU	A	478	-6.526	-38.813	0.229	1.00	0.00	A	O
ATOM	2925	N	ILE	A	479	-8.146	-40.028	1.221	1.00	0.00	A	N
ATOM	2926	CA	ILE	A	479	-7.842	-41.196	0.447	1.00	0.00	A	C
ATOM	2927	CB	ILE	A	479	-8.633	-42.408	0.846	1.00	0.00	A	C
ATOM	2928	CG2	ILE	A	479	-8.374	-43.506	-0.201	1.00	0.00	A	C
ATOM	2929	CG1	ILE	A	479	-8.283	-42.832	2.283	1.00	0.00	A	C
ATOM	2930	CD	ILE	A	479	-9.206	-43.911	2.845	1.00	0.00	A	C
ATOM	2931	C	ILE	A	479	-8.135	-40.912	-0.992	1.00	0.00	A	C
ATOM	2932	O	ILE	A	479	-7.358	-41.270	-1.875	1.00	0.00	A	O
ATOM	2933	N	LEU	A	480	-9.271	-40.242	-1.258	1.00	0.00	A	N
ATOM	2934	CA	LEU	A	480	-9.703	-39.982	-2.600	1.00	0.00	A	C
ATOM	2935	CB	LEU	A	480	-11.067	-39.277	-2.653	1.00	0.00	A	C
ATOM	2936	CG	LEU	A	480	-12.198	-40.114	-2.025	1.00	0.00	A	C
ATOM	2937	CD1	LEU	A	480	-13.565	-39.434	-2.200	1.00	0.00	A	C
ATOM	2938	CD2	LEU	A	480	-12.169	-41.562	-2.542	1.00	0.00	A	C
ATOM	2939	C	LEU	A	480	-8.708	-39.105	-3.301	1.00	0.00	A	C
ATOM	2940	O	LEU	A	480	-8.393	-39.329	-4.466	1.00	0.00	A	O
ATOM	2941	N	SER	A	481	-8.180	-38.082	-2.605	1.00	0.00	A	N
ATOM	2942	CA	SER	A	481	-7.271	-37.170	-3.238	1.00	0.00	A	C
ATOM	2943	CB	SER	A	481	-6.835	-36.023	-2.311	1.00	0.00	A	C
ATOM	2944	OG	SER	A	481	-6.097	-36.531	-1.211	1.00	0.00	A	O

ATOM	2945	C	SER A 481	-6.033	-37.902	-3.664	1.00	0.00	A	C
ATOM	2946	O	SER A 481	-5.520	-37.684	-4.760	1.00	0.00	A	O
ATOM	2947	N	VAL A 482	-5.514	-38.796	-2.805	1.00	0.00	A	N
ATOM	2948	CA	VAL A 482	-4.313	-39.506	-3.135	1.00	0.00	A	C
ATOM	2949	CB	VAL A 482	-3.854	-40.418	-2.037	1.00	0.00	A	C
ATOM	2950	CG1	VAL A 482	-2.570	-41.132	-2.493	1.00	0.00	A	C
ATOM	2951	CG2	VAL A 482	-3.705	-39.596	-0.744	1.00	0.00	A	C
ATOM	2952	C	VAL A 482	-4.580	-40.356	-4.335	1.00	0.00	A	C
ATOM	2953	O	VAL A 482	-3.768	-40.427	-5.258	1.00	0.00	A	O
ATOM	2954	N	LEU A 483	-5.757	-41.013	-4.354	1.00	0.00	A	N
ATOM	2955	CA	LEU A 483	-6.127	-41.904	-5.415	1.00	0.00	A	C
ATOM	2956	CB	LEU A 483	-7.519	-42.528	-5.178	1.00	0.00	A	C
ATOM	2957	CG	LEU A 483	-7.952	-43.663	-6.142	1.00	0.00	A	C
ATOM	2958	CD1	LEU A 483	-9.353	-44.173	-5.776	1.00	0.00	A	C
ATOM	2959	CD2	LEU A 483	-7.876	-43.270	-7.626	1.00	0.00	A	C
ATOM	2960	C	LEU A 483	-6.172	-41.084	-6.661	1.00	0.00	A	C
ATOM	2961	O	LEU A 483	-5.748	-41.528	-7.727	1.00	0.00	A	O
ATOM	2962	N	GLY A 484	-6.696	-39.852	-6.555	1.00	0.00	A	N
ATOM	2963	CA	GLY A 484	-6.786	-39.001	-7.698	1.00	0.00	A	C
ATOM	2964	C	GLY A 484	-5.396	-38.736	-8.178	1.00	0.00	A	C
ATOM	2965	O	GLY A 484	-5.148	-38.619	-9.377	1.00	0.00	A	O
ATOM	2966	N	GLY A 485	-4.453	-38.611	-7.231	1.00	0.00	A	N
ATOM	2967	CA	GLY A 485	-3.089	-38.300	-7.549	1.00	0.00	A	C
ATOM	2968	C	GLY A 485	-2.460	-39.381	-8.378	1.00	0.00	A	C
ATOM	2969	O	GLY A 485	-1.688	-39.091	-9.288	1.00	0.00	A	O
ATOM	2970	N	VAL A 486	-2.759	-40.659	-8.079	1.00	0.00	A	N
ATOM	2971	CA	VAL A 486	-2.104	-41.753	-8.749	1.00	0.00	A	C
ATOM	2972	CB	VAL A 486	-2.486	-43.095	-8.202	1.00	0.00	A	C
ATOM	2973	CG1	VAL A 486	-3.939	-43.398	-8.601	1.00	0.00	A	C
ATOM	2974	CG2	VAL A 486	-1.470	-44.134	-8.704	1.00	0.00	A	C
ATOM	2975	C	VAL A 486	-2.421	-41.755	-10.214	1.00	0.00	A	C
ATOM	2976	O	VAL A 486	-1.565	-42.068	-11.041	1.00	0.00	A	O
ATOM	2977	N	TYR A 487	-3.661	-41.395	-10.584	1.00	0.00	A	N
ATOM	2978	CA	TYR A 487	-4.051	-41.497	-11.961	1.00	0.00	A	C
ATOM	2979	CB	TYR A 487	-5.513	-41.099	-12.207	1.00	0.00	A	C
ATOM	2980	CG	TYR A 487	-5.745	-41.327	-13.657	1.00	0.00	A	C
ATOM	2981	CD1	TYR A 487	-5.998	-42.601	-14.108	1.00	0.00	A	C
ATOM	2982	CE1	TYR A 487	-6.207	-42.844	-15.442	1.00	0.00	A	C

ATOM	2983	CZ	TYR	A	487	-6.157	-41.810	-16.340	1.00	0.00	A	C
ATOM	2984	OH	TYR	A	487	-6.374	-42.058	-17.712	1.00	0.00	A	O
ATOM	2985	CD2	TYR	A	487	-5.680	-40.294	-14.564	1.00	0.00	A	C
ATOM	2986	CE2	TYR	A	487	-5.892	-40.534	-15.901	1.00	0.00	A	C
ATOM	2987	C	TYR	A	487	-3.182	-40.614	-12.800	1.00	0.00	A	C
ATOM	2988	O	TYR	A	487	-2.755	-41.004	-13.885	1.00	0.00	A	O
ATOM	2989	N	PHE	A	488	-2.892	-39.397	-12.310	1.00	0.00	A	N
ATOM	2990	CA	PHE	A	488	-2.088	-38.465	-13.042	1.00	0.00	A	C
ATOM	2991	CB	PHE	A	488	-1.885	-37.135	-12.286	1.00	0.00	A	C
ATOM	2992	CG	PHE	A	488	-3.180	-36.396	-12.182	1.00	0.00	A	C
ATOM	2993	CD1	PHE	A	488	-3.647	-35.654	-13.243	1.00	0.00	A	C
ATOM	2994	CE1	PHE	A	488	-4.834	-34.964	-13.152	1.00	0.00	A	C
ATOM	2995	CZ	PHE	A	488	-5.569	-35.003	-11.991	1.00	0.00	A	C
ATOM	2996	CD2	PHE	A	488	-3.920	-36.419	-11.018	1.00	0.00	A	C
ATOM	2997	CE2	PHE	A	488	-5.108	-35.730	-10.921	1.00	0.00	A	C
ATOM	2998	C	PHE	A	488	-0.727	-39.059	-13.250	1.00	0.00	A	C
ATOM	2999	O	PHE	A	488	-0.159	-38.958	-14.338	1.00	0.00	A	O
ATOM	3000	N	PHE	A	489	-0.155	-39.692	-12.205	1.00	0.00	A	N
ATOM	3001	CA	PHE	A	489	1.167	-40.238	-12.324	1.00	0.00	A	C
ATOM	3002	CB	PHE	A	489	1.712	-40.843	-11.018	1.00	0.00	A	C
ATOM	3003	CG	PHE	A	489	3.089	-41.333	-11.320	1.00	0.00	A	C
ATOM	3004	CD1	PHE	A	489	4.171	-40.493	-11.176	1.00	0.00	A	C
ATOM	3005	CE1	PHE	A	489	5.445	-40.932	-11.455	1.00	0.00	A	C
ATOM	3006	CZ	PHE	A	489	5.648	-42.220	-11.888	1.00	0.00	A	C
ATOM	3007	CD2	PHE	A	489	3.302	-42.619	-11.760	1.00	0.00	A	C
ATOM	3008	CE2	PHE	A	489	4.575	-43.062	-12.041	1.00	0.00	A	C
ATOM	3009	C	PHE	A	489	1.163	-41.329	-13.349	1.00	0.00	A	C
ATOM	3010	O	PHE	A	489	2.067	-41.414	-14.178	1.00	0.00	A	O
ATOM	3011	N	PHE	A	490	0.142	-42.207	-13.315	1.00	0.00	A	N
ATOM	3012	CA	PHE	A	490	0.079	-43.307	-14.238	1.00	0.00	A	C
ATOM	3013	CB	PHE	A	490	-1.098	-44.258	-13.950	1.00	0.00	A	C
ATOM	3014	CG	PHE	A	490	-1.128	-45.332	-14.985	1.00	0.00	A	C
ATOM	3015	CD1	PHE	A	490	-0.186	-46.337	-14.998	1.00	0.00	A	C
ATOM	3016	CE1	PHE	A	490	-0.231	-47.324	-15.954	1.00	0.00	A	C
ATOM	3017	CZ	PHE	A	490	-1.225	-47.323	-16.904	1.00	0.00	A	C
ATOM	3018	CD2	PHE	A	490	-2.123	-45.345	-15.935	1.00	0.00	A	C
ATOM	3019	CE2	PHE	A	490	-2.174	-46.331	-16.892	1.00	0.00	A	C
ATOM	3020	C	PHE	A	490	-0.059	-42.789	-15.636	1.00	0.00	A	C

ATOM	3021	O	PHE A 490	0.620	-43.262	-16.545	1.00	0.00	A	O
ATOM	3022	N	ARG A 491	-0.944	-41.800	-15.851	1.00	0.00	A	N
ATOM	3023	CA	ARG A 491	-1.159	-41.289	-17.176	1.00	0.00	A	C
ATOM	3024	CB	ARG A 491	-2.323	-40.281	-17.248	1.00	0.00	A	C
ATOM	3025	CG	ARG A 491	-2.154	-39.059	-16.344	1.00	0.00	A	C
ATOM	3026	CD	ARG A 491	-3.418	-38.199	-16.242	1.00	0.00	A	C
ATOM	3027	NE	ARG A 491	-3.539	-37.410	-17.499	1.00	0.00	A	N
ATOM	3028	CZ	ARG A 491	-3.168	-36.097	-17.513	1.00	0.00	A	C
ATOM	3029	NH1	ARG A 491	-2.751	-35.495	-16.361	1.00	0.00	A	N
ATOM	3030	NH2	ARG A 491	-3.223	-35.382	-18.675	1.00	0.00	A	N
ATOM	3031	C	ARG A 491	0.087	-40.629	-17.684	1.00	0.00	A	C
ATOM	3032	O	ARG A 491	0.434	-40.769	-18.855	1.00	0.00	A	O
ATOM	3033	N	GLY A 492	0.796	-39.887	-16.813	1.00	0.00	A	N
ATOM	3034	CA	GLY A 492	1.969	-39.153	-17.206	1.00	0.00	A	C
ATOM	3035	C	GLY A 492	3.065	-40.069	-17.662	1.00	0.00	A	C
ATOM	3036	O	GLY A 492	3.773	-39.769	-18.623	1.00	0.00	A	O
ATOM	3037	N	ILE A 493	3.238	-41.215	-16.978	1.00	0.00	A	N
ATOM	3038	CA	ILE A 493	4.325	-42.096	-17.291	1.00	0.00	A	C
ATOM	3039	CB	ILE A 493	4.405	-43.294	-16.385	1.00	0.00	A	C
ATOM	3040	CG2	ILE A 493	3.195	-44.204	-16.649	1.00	0.00	A	C
ATOM	3041	CG1	ILE A 493	5.764	-43.995	-16.552	1.00	0.00	A	C
ATOM	3042	CD	ILE A 493	6.062	-45.010	-15.450	1.00	0.00	A	C
ATOM	3043	C	ILE A 493	4.174	-42.565	-18.697	1.00	0.00	A	C
ATOM	3044	O	ILE A 493	5.158	-42.674	-19.424	1.00	0.00	A	O
ATOM	3045	N	GLN A 494	2.933	-42.855	-19.117	1.00	0.00	A	N
ATOM	3046	CA	GLN A 494	2.673	-43.326	-20.445	1.00	0.00	A	C
ATOM	3047	CB	GLN A 494	1.182	-43.587	-20.702	1.00	0.00	A	C
ATOM	3048	CG	GLN A 494	0.889	-44.091	-22.117	1.00	0.00	A	C
ATOM	3049	CD	GLN A 494	-0.621	-44.134	-22.288	1.00	0.00	A	C
ATOM	3050	OE1	GLN A 494	-1.161	-44.992	-22.983	1.00	0.00	A	O
ATOM	3051	NE2	GLN A 494	-1.326	-43.169	-21.638	1.00	0.00	A	N
ATOM	3052	C	GLN A 494	3.074	-42.268	-21.414	1.00	0.00	A	C
ATOM	3053	O	GLN A 494	3.583	-42.569	-22.487	1.00	0.00	A	O
ATOM	3054	N	TYR A 495	2.839	-40.990	-21.086	1.00	0.00	A	N
ATOM	3055	CA	TYR A 495	3.167	-39.954	-22.022	1.00	0.00	A	C
ATOM	3056	CB	TYR A 495	2.738	-38.566	-21.524	1.00	0.00	A	C
ATOM	3057	CG	TYR A 495	2.842	-37.604	-22.657	1.00	0.00	A	C
ATOM	3058	CD1	TYR A 495	4.016	-36.942	-22.929	1.00	0.00	A	C

ATOM	3059	CE1 TYR A 495	4.085	-36.058	-23.980	1.00	0.00	A	C
ATOM	3060	CZ TYR A 495	2.981	-35.830	-24.768	1.00	0.00	A	C
ATOM	3061	OH TYR A 495	3.052	-34.920	-25.844	1.00	0.00	A	O
ATOM	3062	CD2 TYR A 495	1.746	-37.375	-23.454	1.00	0.00	A	C
ATOM	3063	CE2 TYR A 495	1.808	-36.492	-24.506	1.00	0.00	A	C
ATOM	3064	C TYR A 495	4.649	-39.963	-22.216	1.00	0.00	A	C
ATOM	3065	O TYR A 495	5.145	-39.839	-23.335	1.00	0.00	A	O
ATOM	3066	N PHE A 496	5.400	-40.096	-21.108	1.00	0.00	A	N
ATOM	3067	CA PHE A 496	6.830	-40.129	-21.159	1.00	0.00	A	C
ATOM	3068	CB PHE A 496	7.438	-40.180	-19.743	1.00	0.00	A	C
ATOM	3069	CG PHE A 496	8.923	-40.067	-19.809	1.00	0.00	A	C
ATOM	3070	CD1 PHE A 496	9.517	-38.851	-20.051	1.00	0.00	A	C
ATOM	3071	CE1 PHE A 496	10.885	-38.733	-20.104	1.00	0.00	A	C
ATOM	3072	CZ PHE A 496	11.678	-39.839	-19.905	1.00	0.00	A	C
ATOM	3073	CD2 PHE A 496	9.725	-41.167	-19.600	1.00	0.00	A	C
ATOM	3074	CE2 PHE A 496	11.096	-41.057	-19.650	1.00	0.00	A	C
ATOM	3075	C PHE A 496	7.256	-41.361	-21.894	1.00	0.00	A	C
ATOM	3076	O PHE A 496	8.122	-41.306	-22.767	1.00	0.00	A	O
ATOM	3077	N LEU A 497	6.640	-42.512	-21.560	1.00	0.00	A	N
ATOM	3078	CA LEU A 497	7.024	-43.780	-22.108	1.00	0.00	A	C
ATOM	3079	CB LEU A 497	6.361	-44.966	-21.375	1.00	0.00	A	C
ATOM	3080	CG LEU A 497	6.931	-46.365	-21.712	1.00	0.00	A	C
ATOM	3081	CD1 LEU A 497	6.331	-47.421	-20.773	1.00	0.00	A	C
ATOM	3082	CD2 LEU A 497	6.745	-46.761	-23.187	1.00	0.00	A	C
ATOM	3083	C LEU A 497	6.711	-43.856	-23.570	1.00	0.00	A	C
ATOM	3084	O LEU A 497	7.514	-44.351	-24.358	1.00	0.00	A	O
ATOM	3085	N GLN A 498	5.536	-43.365	-23.983	1.00	0.00	A	N
ATOM	3086	CA GLN A 498	5.104	-43.459	-25.343	1.00	0.00	A	C
ATOM	3087	CB GLN A 498	3.734	-42.795	-25.517	1.00	0.00	A	C
ATOM	3088	CG GLN A 498	3.157	-42.841	-26.925	1.00	0.00	A	C
ATOM	3089	CD GLN A 498	1.818	-42.131	-26.826	1.00	0.00	A	C
ATOM	3090	OE1 GLN A 498	1.737	-41.025	-26.293	1.00	0.00	A	O
ATOM	3091	NE2 GLN A 498	0.738	-42.789	-27.322	1.00	0.00	A	N
ATOM	3092	C GLN A 498	6.091	-42.722	-26.182	1.00	0.00	A	C
ATOM	3093	O GLN A 498	6.539	-43.230	-27.210	1.00	0.00	A	O
ATOM	3094	N ARG A 499	6.465	-41.502	-25.758	1.00	0.00	A	N
ATOM	3095	CA ARG A 499	7.447	-40.789	-26.512	1.00	0.00	A	C
ATOM	3096	CB ARG A 499	6.955	-39.447	-27.075	1.00	0.00	A	C

ATOM	3097	CG	ARG	A 499	5.950	-39.631	-28.210	1.00	0.00	A	C
ATOM	3098	CD	ARG	A 499	6.582	-40.284	-29.439	1.00	0.00	A	C
ATOM	3099	NE	ARG	A 499	5.531	-40.391	-30.487	1.00	0.00	A	N
ATOM	3100	CZ	ARG	A 499	5.838	-40.075	-31.776	1.00	0.00	A	C
ATOM	3101	NH1	ARG	A 499	7.106	-39.685	-32.098	1.00	0.00	A	N
ATOM	3102	NH2	ARG	A 499	4.873	-40.121	-32.741	1.00	0.00	A	N
ATOM	3103	C	ARG	A 499	8.595	-40.509	-25.606	1.00	0.00	A	C
ATOM	3104	O	ARG	A 499	8.567	-39.590	-24.788	1.00	0.00	A	O
ATOM	3105	N	ARG	A 500	9.650	-41.314	-25.777	1.00	0.00	A	N
ATOM	3106	CA	ARG	A 500	10.870	-41.264	-25.032	1.00	0.00	A	C
ATOM	3107	CB	ARG	A 500	11.829	-42.378	-25.477	1.00	0.00	A	C
ATOM	3108	CG	ARG	A 500	11.238	-43.775	-25.309	1.00	0.00	A	C
ATOM	3109	CD	ARG	A 500	11.966	-44.842	-26.127	1.00	0.00	A	C
ATOM	3110	NE	ARG	A 500	11.707	-44.554	-27.567	1.00	0.00	A	N
ATOM	3111	CZ	ARG	A 500	12.522	-45.081	-28.527	1.00	0.00	A	C
ATOM	3112	NH1	ARG	A 500	13.601	-45.834	-28.164	1.00	0.00	A	N
ATOM	3113	NH2	ARG	A 500	12.258	-44.855	-29.847	1.00	0.00	A	N
ATOM	3114	C	ARG	A 500	11.572	-39.966	-25.296	1.00	0.00	A	C
ATOM	3115	O	ARG	A 500	12.129	-39.378	-24.368	1.00	0.00	A	O
ATOM	3116	N	PRO	A 501	11.568	-39.473	-26.510	1.00	0.00	A	N
ATOM	3117	CD	PRO	A 501	11.577	-40.323	-27.692	1.00	0.00	A	C
ATOM	3118	CA	PRO	A 501	12.296	-38.265	-26.770	1.00	0.00	A	C
ATOM	3119	CB	PRO	A 501	12.309	-38.090	-28.293	1.00	0.00	A	C
ATOM	3120	CG	PRO	A 501	11.532	-39.306	-28.841	1.00	0.00	A	C
ATOM	3121	C	PRO	A 501	11.778	-37.107	-25.988	1.00	0.00	A	C
ATOM	3122	O	PRO	A 501	10.577	-37.018	-25.743	1.00	0.00	A	O
ATOM	3123	N	SER	A 502	12.690	-36.200	-25.595	1.00	0.00	A	N
ATOM	3124	CA	SER	A 502	12.387	-35.106	-24.727	1.00	0.00	A	C
ATOM	3125	CB	SER	A 502	13.658	-34.559	-24.041	1.00	0.00	A	C
ATOM	3126	OG	SER	A 502	13.356	-33.574	-23.065	1.00	0.00	A	O
ATOM	3127	C	SER	A 502	11.747	-34.008	-25.503	1.00	0.00	A	C
ATOM	3128	O	SER	A 502	11.412	-34.159	-26.674	1.00	0.00	A	O
ATOM	3129	N	MET	A 503	11.479	-32.895	-24.804	1.00	0.00	A	N
ATOM	3130	CA	MET	A 503	10.989	-31.700	-25.404	1.00	0.00	A	C
ATOM	3131	CB	MET	A 503	9.633	-31.261	-24.826	1.00	0.00	A	C
ATOM	3132	CG	MET	A 503	9.605	-31.203	-23.300	1.00	0.00	A	C
ATOM	3133	SD	MET	A 503	7.934	-31.285	-22.590	1.00	0.00	A	S
ATOM	3134	CE	MET	A 503	7.659	-33.006	-23.106	1.00	0.00	A	C

ATOM	3135	C	MET A 503	12.045	-30.689	-25.104	1.00	0.00	A	C
ATOM	3136	O	MET A 503	12.567	-30.640	-23.991	1.00	0.00	A	O
ATOM	3137	N	LYS A 504	12.401	-29.872	-26.110	1.00	0.00	A	N
ATOM	3138	CA	LYS A 504	13.478	-28.944	-25.959	1.00	0.00	A	C
ATOM	3139	CB	LYS A 504	13.961	-28.318	-27.280	1.00	0.00	A	C
ATOM	3140	CG	LYS A 504	15.299	-27.590	-27.141	1.00	0.00	A	C
ATOM	3141	CD	LYS A 504	15.991	-27.307	-28.476	1.00	0.00	A	C
ATOM	3142	CE	LYS A 504	17.415	-26.767	-28.324	1.00	0.00	A	C
ATOM	3143	NZ	LYS A 504	17.382	-25.393	-27.773	1.00	0.00	A	N
ATOM	3144	C	LYS A 504	13.052	-27.854	-25.043	1.00	0.00	A	C
ATOM	3145	O	LYS A 504	11.868	-27.680	-24.754	1.00	0.00	A	O
ATOM	3146	N	THR A 505	14.045	-27.112	-24.528	1.00	0.00	A	N
ATOM	3147	CA	THR A 505	13.791	-26.048	-23.613	1.00	0.00	A	C
ATOM	3148	CB	THR A 505	15.048	-25.383	-23.142	1.00	0.00	A	C
ATOM	3149	OG1	THR A 505	15.706	-24.755	-24.234	1.00	0.00	A	O
ATOM	3150	CG2	THR A 505	15.958	-26.452	-22.518	1.00	0.00	A	C
ATOM	3151	C	THR A 505	12.989	-25.008	-24.312	1.00	0.00	A	C
ATOM	3152	O	THR A 505	12.066	-24.440	-23.734	1.00	0.00	A	O
ATOM	3153	N	LEU A 506	13.306	-24.743	-25.594	1.00	0.00	A	N
ATOM	3154	CA	LEU A 506	12.606	-23.693	-26.271	1.00	0.00	A	C
ATOM	3155	CB	LEU A 506	13.028	-23.502	-27.738	1.00	0.00	A	C
ATOM	3156	CG	LEU A 506	14.444	-22.933	-27.924	1.00	0.00	A	C
ATOM	3157	CD1	LEU A 506	14.762	-22.728	-29.415	1.00	0.00	A	C
ATOM	3158	CD2	LEU A 506	14.643	-21.655	-27.098	1.00	0.00	A	C
ATOM	3159	C	LEU A 506	11.155	-24.025	-26.288	1.00	0.00	A	C
ATOM	3160	O	LEU A 506	10.320	-23.175	-25.981	1.00	0.00	A	O
ATOM	3161	N	PHE A 507	10.802	-25.275	-26.629	1.00	0.00	A	N
ATOM	3162	CA	PHE A 507	9.399	-25.545	-26.652	1.00	0.00	A	C
ATOM	3163	CB	PHE A 507	8.912	-26.280	-27.914	1.00	0.00	A	C
ATOM	3164	CG	PHE A 507	9.585	-27.604	-28.083	1.00	0.00	A	C
ATOM	3165	CD1	PHE A 507	10.846	-27.680	-28.632	1.00	0.00	A	C
ATOM	3166	CE1	PHE A 507	11.462	-28.898	-28.806	1.00	0.00	A	C
ATOM	3167	CZ	PHE A 507	10.815	-30.053	-28.435	1.00	0.00	A	C
ATOM	3168	CD2	PHE A 507	8.943	-28.769	-27.723	1.00	0.00	A	C
ATOM	3169	CE2	PHE A 507	9.553	-29.989	-27.894	1.00	0.00	A	C
ATOM	3170	C	PHE A 507	9.026	-26.349	-25.458	1.00	0.00	A	C
ATOM	3171	O	PHE A 507	9.396	-27.514	-25.321	1.00	0.00	A	O
ATOM	3172	N	VAL A 508	8.259	-25.720	-24.554	1.00	0.00	A	N

ATOM	3173	CA	VAL A 508	7.784	-26.408	-23.409	1.00	0.00	A	C
ATOM	3174	CB	VAL A 508	7.434	-25.471	-22.292	1.00	0.00	A	C
ATOM	3175	CG1	VAL A 508	6.920	-26.293	-21.103	1.00	0.00	A	C
ATOM	3176	CG2	VAL A 508	8.661	-24.600	-21.970	1.00	0.00	A	C
ATOM	3177	C	VAL A 508	6.521	-27.034	-23.883	1.00	0.00	A	C
ATOM	3178	O	VAL A 508	5.439	-26.779	-23.360	1.00	0.00	A	O
ATOM	3179	N	ASP A 509	6.653	-27.901	-24.899	1.00	0.00	A	N
ATOM	3180	CA	ASP A 509	5.508	-28.541	-25.458	1.00	0.00	A	C
ATOM	3181	CB	ASP A 509	5.387	-28.333	-26.978	1.00	0.00	A	C
ATOM	3182	CG	ASP A 509	4.092	-28.964	-27.469	1.00	0.00	A	C
ATOM	3183	OD1	ASP A 509	3.926	-30.202	-27.312	1.00	0.00	A	O
ATOM	3184	OD2	ASP A 509	3.245	-28.205	-28.012	1.00	0.00	A	O
ATOM	3185	C	ASP A 509	5.668	-30.004	-25.208	1.00	0.00	A	C
ATOM	3186	O	ASP A 509	6.712	-30.578	-25.516	1.00	0.00	A	O
ATOM	3187	N	SER A 510	4.624	-30.644	-24.649	1.00	0.00	A	N
ATOM	3188	CA	SER A 510	3.416	-29.939	-24.335	1.00	0.00	A	C
ATOM	3189	CB	SER A 510	2.164	-30.840	-24.315	1.00	0.00	A	C
ATOM	3190	OG	SER A 510	2.277	-31.829	-23.304	1.00	0.00	A	O
ATOM	3191	C	SER A 510	3.564	-29.326	-22.976	1.00	0.00	A	C
ATOM	3192	O	SER A 510	4.035	-29.956	-22.032	1.00	0.00	A	O
ATOM	3193	N	TYR A 511	3.165	-28.044	-22.871	1.00	0.00	A	N
ATOM	3194	CA	TYR A 511	3.252	-27.258	-21.675	1.00	0.00	A	C
ATOM	3195	CB	TYR A 511	2.769	-25.820	-21.956	1.00	0.00	A	C
ATOM	3196	CG	TYR A 511	2.575	-25.041	-20.694	1.00	0.00	A	C
ATOM	3197	CD1	TYR A 511	1.377	-25.074	-20.017	1.00	0.00	A	C
ATOM	3198	CE1	TYR A 511	1.189	-24.355	-18.860	1.00	0.00	A	C
ATOM	3199	CZ	TYR A 511	2.209	-23.584	-18.366	1.00	0.00	A	C
ATOM	3200	OH	TYR A 511	2.030	-22.839	-17.181	1.00	0.00	A	O
ATOM	3201	CD2	TYR A 511	3.584	-24.261	-20.189	1.00	0.00	A	C
ATOM	3202	CE2	TYR A 511	3.407	-23.538	-19.035	1.00	0.00	A	C
ATOM	3203	C	TYR A 511	2.359	-27.790	-20.594	1.00	0.00	A	C
ATOM	3204	O	TYR A 511	2.786	-27.965	-19.455	1.00	0.00	A	O
ATOM	3205	N	SER A 512	1.083	-28.052	-20.933	1.00	0.00	A	N
ATOM	3206	CA	SER A 512	0.081	-28.398	-19.964	1.00	0.00	A	C
ATOM	3207	CB	SER A 512	-1.337	-28.349	-20.560	1.00	0.00	A	C
ATOM	3208	OG	SER A 512	-1.447	-29.276	-21.632	1.00	0.00	A	O
ATOM	3209	C	SER A 512	0.276	-29.752	-19.364	1.00	0.00	A	C
ATOM	3210	O	SER A 512	0.192	-29.919	-18.148	1.00	0.00	A	O

ATOM	3211	N	GLU A 513	0.553	-30.758	-20.205	1.00	0.00	A	N
ATOM	3212	CA	GLU A 513	0.649	-32.101	-19.720	1.00	0.00	A	C
ATOM	3213	CB	GLU A 513	0.833	-33.109	-20.864	1.00	0.00	A	C
ATOM	3214	CG	GLU A 513	-0.423	-33.180	-21.736	1.00	0.00	A	C
ATOM	3215	CD	GLU A 513	-0.130	-34.066	-22.932	1.00	0.00	A	C
ATOM	3216	OE1	GLU A 513	1.054	-34.115	-23.359	1.00	0.00	A	O
ATOM	3217	OE2	GLU A 513	-1.089	-34.706	-23.435	1.00	0.00	A	O
ATOM	3218	C	GLU A 513	1.791	-32.185	-18.759	1.00	0.00	A	C
ATOM	3219	O	GLU A 513	1.714	-32.895	-17.755	1.00	0.00	A	O
ATOM	3220	N	MET A 514	2.876	-31.436	-19.020	1.00	0.00	A	N
ATOM	3221	CA	MET A 514	4.021	-31.504	-18.156	1.00	0.00	A	C
ATOM	3222	CB	MET A 514	5.218	-30.650	-18.612	1.00	0.00	A	C
ATOM	3223	CG	MET A 514	5.026	-29.147	-18.406	1.00	0.00	A	C
ATOM	3224	SD	MET A 514	6.516	-28.145	-18.691	1.00	0.00	A	S
ATOM	3225	CE	MET A 514	7.152	-28.262	-16.995	1.00	0.00	A	C
ATOM	3226	C	MET A 514	3.641	-31.036	-16.787	1.00	0.00	A	C
ATOM	3227	O	MET A 514	4.120	-31.579	-15.795	1.00	0.00	A	O
ATOM	3228	N	LEU A 515	2.776	-30.009	-16.691	1.00	0.00	A	N
ATOM	3229	CA	LEU A 515	2.398	-29.461	-15.416	1.00	0.00	A	C
ATOM	3230	CB	LEU A 515	1.472	-28.240	-15.543	1.00	0.00	A	C
ATOM	3231	CG	LEU A 515	2.140	-27.041	-16.241	1.00	0.00	A	C
ATOM	3232	CD1	LEU A 515	1.194	-25.833	-16.309	1.00	0.00	A	C
ATOM	3233	CD2	LEU A 515	3.495	-26.708	-15.600	1.00	0.00	A	C
ATOM	3234	C	LEU A 515	1.666	-30.491	-14.612	1.00	0.00	A	C
ATOM	3235	O	LEU A 515	1.867	-30.603	-13.403	1.00	0.00	A	O
ATOM	3236	N	PHE A 516	0.804	-31.286	-15.270	1.00	0.00	A	N
ATOM	3237	CA	PHE A 516	-0.006	-32.242	-14.570	1.00	0.00	A	C
ATOM	3238	CB	PHE A 516	-0.979	-33.007	-15.484	1.00	0.00	A	C
ATOM	3239	CG	PHE A 516	-2.049	-32.053	-15.903	1.00	0.00	A	C
ATOM	3240	CD1	PHE A 516	-3.081	-31.748	-15.043	1.00	0.00	A	C
ATOM	3241	CE1	PHE A 516	-4.075	-30.874	-15.417	1.00	0.00	A	C
ATOM	3242	CZ	PHE A 516	-4.051	-30.293	-16.659	1.00	0.00	A	C
ATOM	3243	CD2	PHE A 516	-2.035	-31.468	-17.149	1.00	0.00	A	C
ATOM	3244	CE2	PHE A 516	-3.029	-30.592	-17.527	1.00	0.00	A	C
ATOM	3245	C	PHE A 516	0.869	-33.235	-13.872	1.00	0.00	A	C
ATOM	3246	O	PHE A 516	0.592	-33.623	-12.736	1.00	0.00	A	O
ATOM	3247	N	PHE A 517	1.953	-33.678	-14.529	1.00	0.00	A	N
ATOM	3248	CA	PHE A 517	2.840	-34.648	-13.951	1.00	0.00	A	C

ATOM	3249	CB	PHE A 517	3.988	-35.033	-14.902	1.00	0.00	A	C
ATOM	3250	CG	PHE A 517	5.017	-35.759	-14.105	1.00	0.00	A	C
ATOM	3251	CD1	PHE A 517	4.826	-37.066	-13.728	1.00	0.00	A	C
ATOM	3252	CE1	PHE A 517	5.777	-37.727	-12.988	1.00	0.00	A	C
ATOM	3253	CZ	PHE A 517	6.930	-37.088	-12.607	1.00	0.00	A	C
ATOM	3254	CD2	PHE A 517	6.171	-35.119	-13.706	1.00	0.00	A	C
ATOM	3255	CE2	PHE A 517	7.126	-35.778	-12.968	1.00	0.00	A	C
ATOM	3256	C	PHE A 517	3.446	-34.105	-12.696	1.00	0.00	A	C
ATOM	3257	O	PHE A 517	3.544	-34.815	-11.696	1.00	0.00	A	O
ATOM	3258	N	LEU A 518	3.872	-32.832	-12.712	1.00	0.00	A	N
ATOM	3259	CA	LEU A 518	4.541	-32.271	-11.574	1.00	0.00	A	C
ATOM	3260	CB	LEU A 518	5.092	-30.857	-11.817	1.00	0.00	A	C
ATOM	3261	CG	LEU A 518	5.854	-30.296	-10.599	1.00	0.00	A	C
ATOM	3262	CD1	LEU A 518	7.108	-31.130	-10.291	1.00	0.00	A	C
ATOM	3263	CD2	LEU A 518	6.171	-28.801	-10.772	1.00	0.00	A	C
ATOM	3264	C	LEU A 518	3.612	-32.204	-10.394	1.00	0.00	A	C
ATOM	3265	O	LEU A 518	4.017	-32.462	-9.267	1.00	0.00	A	O
ATOM	3266	N	GLN A 519	2.338	-31.837	-10.586	1.00	0.00	A	N
ATOM	3267	CA	GLN A 519	1.466	-31.721	-9.448	1.00	0.00	A	C
ATOM	3268	CB	GLN A 519	0.052	-31.244	-9.814	1.00	0.00	A	C
ATOM	3269	CG	GLN A 519	-0.870	-31.153	-8.596	1.00	0.00	A	C
ATOM	3270	CD	GLN A 519	-2.303	-31.126	-9.100	1.00	0.00	A	C
ATOM	3271	OE1	GLN A 519	-2.553	-31.112	-10.305	1.00	0.00	A	O
ATOM	3272	NE2	GLN A 519	-3.277	-31.134	-8.152	1.00	0.00	A	N
ATOM	3273	C	GLN A 519	1.259	-33.054	-8.804	1.00	0.00	A	C
ATOM	3274	O	GLN A 519	1.311	-33.180	-7.581	1.00	0.00	A	O
ATOM	3275	N	SER A 520	1.014	-34.086	-9.627	1.00	0.00	A	N
ATOM	3276	CA	SER A 520	0.682	-35.380	-9.109	1.00	0.00	A	C
ATOM	3277	CB	SER A 520	0.313	-36.386	-10.213	1.00	0.00	A	C
ATOM	3278	OG	SER A 520	1.407	-36.564	-11.097	1.00	0.00	A	O
ATOM	3279	C	SER A 520	1.835	-35.927	-8.331	1.00	0.00	A	C
ATOM	3280	O	SER A 520	1.635	-36.556	-7.293	1.00	0.00	A	O
ATOM	3281	N	LEU A 521	3.078	-35.706	-8.798	1.00	0.00	A	N
ATOM	3282	CA	LEU A 521	4.176	-36.261	-8.059	1.00	0.00	A	C
ATOM	3283	CB	LEU A 521	5.543	-36.222	-8.782	1.00	0.00	A	C
ATOM	3284	CG	LEU A 521	6.622	-35.234	-8.274	1.00	0.00	A	C
ATOM	3285	CD1	LEU A 521	6.189	-33.777	-8.327	1.00	0.00	A	C
ATOM	3286	CD2	LEU A 521	7.194	-35.644	-6.906	1.00	0.00	A	C

ATOM	3287	C	LEU A 521	4.258	-35.548	-6.743	1.00	0.00	A	C
ATOM	3288	O	LEU A 521	4.609	-36.147	-5.729	1.00	0.00	A	O
ATOM	3289	N	PHE A 522	3.920	-34.243	-6.720	1.00	0.00	A	N
ATOM	3290	CA	PHE A 522	3.991	-33.478	-5.504	1.00	0.00	A	C
ATOM	3291	CB	PHE A 522	3.595	-31.997	-5.666	1.00	0.00	A	C
ATOM	3292	CG	PHE A 522	4.825	-31.214	-5.988	1.00	0.00	A	C
ATOM	3293	CD1	PHE A 522	5.291	-31.081	-7.273	1.00	0.00	A	C
ATOM	3294	CE1	PHE A 522	6.433	-30.352	-7.528	1.00	0.00	A	C
ATOM	3295	CZ	PHE A 522	7.122	-29.751	-6.504	1.00	0.00	A	C
ATOM	3296	CD2	PHE A 522	5.526	-30.610	-4.968	1.00	0.00	A	C
ATOM	3297	CE2	PHE A 522	6.664	-29.882	-5.216	1.00	0.00	A	C
ATOM	3298	C	PHE A 522	3.099	-34.093	-4.479	1.00	0.00	A	C
ATOM	3299	O	PHE A 522	3.466	-34.191	-3.310	1.00	0.00	A	O
ATOM	3300	N	MET A 523	1.889	-34.518	-4.881	1.00	0.00	A	N
ATOM	3301	CA	MET A 523	1.010	-35.124	-3.929	1.00	0.00	A	C
ATOM	3302	CB	MET A 523	-0.364	-35.491	-4.505	1.00	0.00	A	C
ATOM	3303	CG	MET A 523	-1.354	-35.897	-3.410	1.00	0.00	A	C
ATOM	3304	SD	MET A 523	-2.955	-36.502	-4.016	1.00	0.00	A	S
ATOM	3305	CE	MET A 523	-2.271	-38.037	-4.701	1.00	0.00	A	C
ATOM	3306	C	MET A 523	1.634	-36.399	-3.436	1.00	0.00	A	C
ATOM	3307	O	MET A 523	1.524	-36.741	-2.261	1.00	0.00	A	O
ATOM	3308	N	LEU A 524	2.315	-37.145	-4.324	1.00	0.00	A	N
ATOM	3309	CA	LEU A 524	2.898	-38.402	-3.940	1.00	0.00	A	C
ATOM	3310	CB	LEU A 524	3.622	-39.098	-5.105	1.00	0.00	A	C
ATOM	3311	CG	LEU A 524	2.709	-39.463	-6.290	1.00	0.00	A	C
ATOM	3312	CD1	LEU A 524	3.504	-40.159	-7.408	1.00	0.00	A	C
ATOM	3313	CD2	LEU A 524	1.484	-40.272	-5.834	1.00	0.00	A	C
ATOM	3314	C	LEU A 524	3.925	-38.145	-2.886	1.00	0.00	A	C
ATOM	3315	O	LEU A 524	4.057	-38.900	-1.925	1.00	0.00	A	O
ATOM	3316	N	ALA A 525	4.696	-37.056	-3.042	1.00	0.00	A	N
ATOM	3317	CA	ALA A 525	5.721	-36.759	-2.087	1.00	0.00	A	C
ATOM	3318	CB	ALA A 525	6.510	-35.488	-2.441	1.00	0.00	A	C
ATOM	3319	C	ALA A 525	5.078	-36.526	-0.759	1.00	0.00	A	C
ATOM	3320	O	ALA A 525	5.590	-36.958	0.272	1.00	0.00	A	O
ATOM	3321	N	THR A 526	3.927	-35.826	-0.740	1.00	0.00	A	N
ATOM	3322	CA	THR A 526	3.314	-35.540	0.521	1.00	0.00	A	C
ATOM	3323	CB	THR A 526	2.133	-34.609	0.439	1.00	0.00	A	C
ATOM	3324	OG1	THR A 526	1.052	-35.211	-0.252	1.00	0.00	A	O

ATOM	3325	CG2 THR A 526	2.577	-33.327	-0.289	1.00	0.00	A	C
ATOM	3326	C THR A 526	2.856	-36.816	1.160	1.00	0.00	A	C
ATOM	3327	O THR A 526	2.999	-36.985	2.370	1.00	0.00	A	O
ATOM	3328	N VAL A 527	2.303	-37.756	0.368	1.00	0.00	A	N
ATOM	3329	CA VAL A 527	1.760	-38.959	0.941	1.00	0.00	A	C
ATOM	3330	CB VAL A 527	1.051	-39.859	-0.037	1.00	0.00	A	C
ATOM	3331	CG1 VAL A 527	-0.062	-39.048	-0.724	1.00	0.00	A	C
ATOM	3332	CG2 VAL A 527	2.066	-40.516	-0.982	1.00	0.00	A	C
ATOM	3333	C VAL A 527	2.843	-39.753	1.602	1.00	0.00	A	C
ATOM	3334	O VAL A 527	2.644	-40.291	2.691	1.00	0.00	A	O
ATOM	3335	N VAL A 528	4.027	-39.856	0.972	1.00	0.00	A	N
ATOM	3336	CA VAL A 528	5.066	-40.622	1.593	1.00	0.00	A	C
ATOM	3337	CB VAL A 528	6.324	-40.715	0.771	1.00	0.00	A	C
ATOM	3338	CG1 VAL A 528	5.984	-41.406	-0.560	1.00	0.00	A	C
ATOM	3339	CG2 VAL A 528	6.944	-39.319	0.614	1.00	0.00	A	C
ATOM	3340	C VAL A 528	5.390	-39.951	2.885	1.00	0.00	A	C
ATOM	3341	O VAL A 528	5.621	-40.605	3.899	1.00	0.00	A	O
ATOM	3342	N LEU A 529	5.399	-38.607	2.867	1.00	0.00	A	N
ATOM	3343	CA LEU A 529	5.709	-37.811	4.014	1.00	0.00	A	C
ATOM	3344	CB LEU A 529	5.792	-36.307	3.699	1.00	0.00	A	C
ATOM	3345	CG LEU A 529	6.928	-35.935	2.726	1.00	0.00	A	C
ATOM	3346	CD1 LEU A 529	6.980	-34.418	2.478	1.00	0.00	A	C
ATOM	3347	CD2 LEU A 529	8.275	-36.508	3.195	1.00	0.00	A	C
ATOM	3348	C LEU A 529	4.648	-38.008	5.046	1.00	0.00	A	C
ATOM	3349	O LEU A 529	4.943	-37.930	6.228	1.00	0.00	A	O
ATOM	3350	N TYR A 530	3.384	-38.228	4.646	1.00	0.00	A	N
ATOM	3351	CA TYR A 530	2.268	-38.409	5.540	1.00	0.00	A	C
ATOM	3352	CB TYR A 530	0.981	-38.591	4.712	1.00	0.00	A	C
ATOM	3353	CG TYR A 530	-0.260	-38.419	5.520	1.00	0.00	A	C
ATOM	3354	CD1 TYR A 530	-0.790	-37.162	5.701	1.00	0.00	A	C
ATOM	3355	CE1 TYR A 530	-1.942	-36.979	6.430	1.00	0.00	A	C
ATOM	3356	CZ TYR A 530	-2.576	-38.063	6.982	1.00	0.00	A	C
ATOM	3357	OH TYR A 530	-3.758	-37.879	7.731	1.00	0.00	A	O
ATOM	3358	CD2 TYR A 530	-0.908	-39.500	6.070	1.00	0.00	A	C
ATOM	3359	CE2 TYR A 530	-2.060	-39.324	6.800	1.00	0.00	A	C
ATOM	3360	C TYR A 530	2.521	-39.664	6.318	1.00	0.00	A	C
ATOM	3361	O TYR A 530	2.301	-39.724	7.528	1.00	0.00	A	O
ATOM	3362	N PHE A 531	2.998	-40.714	5.627	1.00	0.00	A	N

ATOM	3363	CA	PHE	A	531	3.307	-41.944	6.289	1.00	0.00	A	C
ATOM	3364	CB	PHE	A	531	3.725	-43.079	5.341	1.00	0.00	A	C
ATOM	3365	CG	PHE	A	531	2.465	-43.563	4.724	1.00	0.00	A	C
ATOM	3366	CD1	PHE	A	531	1.585	-44.295	5.486	1.00	0.00	A	C
ATOM	3367	CE1	PHE	A	531	0.411	-44.760	4.947	1.00	0.00	A	C
ATOM	3368	CZ	PHE	A	531	0.112	-44.497	3.633	1.00	0.00	A	C
ATOM	3369	CD2	PHE	A	531	2.165	-43.306	3.406	1.00	0.00	A	C
ATOM	3370	CE2	PHE	A	531	0.989	-43.770	2.864	1.00	0.00	A	C
ATOM	3371	C	PHE	A	531	4.422	-41.693	7.246	1.00	0.00	A	C
ATOM	3372	O	PHE	A	531	4.411	-42.206	8.364	1.00	0.00	A	O
ATOM	3373	N	SER	A	532	5.429	-40.907	6.821	1.00	0.00	A	N
ATOM	3374	CA	SER	A	532	6.513	-40.606	7.707	1.00	0.00	A	C
ATOM	3375	CB	SER	A	532	7.727	-39.942	7.023	1.00	0.00	A	C
ATOM	3376	OG	SER	A	532	7.386	-38.683	6.464	1.00	0.00	A	O
ATOM	3377	C	SER	A	532	5.978	-39.706	8.778	1.00	0.00	A	C
ATOM	3378	O	SER	A	532	6.584	-39.549	9.834	1.00	0.00	A	O
ATOM	3379	N	HSD	A	533	4.810	-39.103	8.491	1.00	0.00	A	N
ATOM	3380	CA	HSD	A	533	4.028	-38.203	9.285	1.00	0.00	A	C
ATOM	3381	CB	HSD	A	533	3.379	-38.864	10.518	1.00	0.00	A	C
ATOM	3382	ND1	HSD	A	533	5.047	-38.640	12.419	1.00	0.00	A	N
ATOM	3383	CG	HSD	A	533	4.368	-39.412	11.502	1.00	0.00	A	C
ATOM	3384	CE1	HSD	A	533	5.850	-39.482	13.119	1.00	0.00	A	C
ATOM	3385	NE2	HSD	A	533	5.732	-40.736	12.718	1.00	0.00	A	N
ATOM	3386	CD2	HSD	A	533	4.797	-40.689	11.697	1.00	0.00	A	C
ATOM	3387	C	HSD	A	533	4.794	-36.990	9.724	1.00	0.00	A	C
ATOM	3388	O	HSD	A	533	4.550	-36.479	10.808	1.00	0.00	A	O
ATOM	3389	N	LEU	A	534	5.717	-36.456	8.901	1.00	0.00	A	N
ATOM	3390	CA	LEU	A	534	6.399	-35.254	9.312	1.00	0.00	A	C
ATOM	3391	CB	LEU	A	534	7.722	-35.009	8.569	1.00	0.00	A	C
ATOM	3392	CG	LEU	A	534	8.759	-36.125	8.806	1.00	0.00	A	C
ATOM	3393	CD1	LEU	A	534	10.082	-35.828	8.085	1.00	0.00	A	C
ATOM	3394	CD2	LEU	A	534	8.942	-36.409	10.305	1.00	0.00	A	C
ATOM	3395	C	LEU	A	534	5.485	-34.106	9.018	1.00	0.00	A	C
ATOM	3396	O	LEU	A	534	4.764	-34.129	8.028	1.00	0.00	A	O
ATOM	3397	N	LYS	A	535	5.507	-33.062	9.867	1.00	0.00	A	N
ATOM	3398	CA	LYS	A	535	4.642	-31.916	9.757	1.00	0.00	A	C
ATOM	3399	CB	LYS	A	535	4.826	-30.936	10.924	1.00	0.00	A	C
ATOM	3400	CG	LYS	A	535	4.331	-31.482	12.264	1.00	0.00	A	C

ATOM	3401	CD	LYS	A	535	4.832	-30.696	13.476	1.00	0.00	A	C
ATOM	3402	CE	LYS	A	535	4.569	-29.192	13.389	1.00	0.00	A	C
ATOM	3403	NZ	LYS	A	535	5.529	-28.564	12.452	1.00	0.00	A	N
ATOM	3404	C	LYS	A	535	4.920	-31.168	8.488	1.00	0.00	A	C
ATOM	3405	O	LYS	A	535	4.007	-30.626	7.867	1.00	0.00	A	O
ATOM	3406	N	GLU	A	536	6.192	-31.135	8.059	1.00	0.00	A	N
ATOM	3407	CA	GLU	A	536	6.597	-30.371	6.911	1.00	0.00	A	C
ATOM	3408	CB	GLU	A	536	8.107	-30.393	6.619	1.00	0.00	A	C
ATOM	3409	CG	GLU	A	536	8.920	-29.453	7.507	1.00	0.00	A	C
ATOM	3410	CD	GLU	A	536	10.259	-29.236	6.817	1.00	0.00	A	C
ATOM	3411	OE1	GLU	A	536	10.695	-30.158	6.076	1.00	0.00	A	O
ATOM	3412	OE2	GLU	A	536	10.858	-28.147	7.016	1.00	0.00	A	O
ATOM	3413	C	GLU	A	536	5.904	-30.861	5.684	1.00	0.00	A	C
ATOM	3414	O	GLU	A	536	5.835	-30.149	4.683	1.00	0.00	A	O
ATOM	3415	N	TYR	A	537	5.374	-32.095	5.718	1.00	0.00	A	N
ATOM	3416	CA	TYR	A	537	4.815	-32.703	4.544	1.00	0.00	A	C
ATOM	3417	CB	TYR	A	537	4.190	-34.090	4.799	1.00	0.00	A	C
ATOM	3418	CG	TYR	A	537	2.785	-33.965	5.287	1.00	0.00	A	C
ATOM	3419	CD1	TYR	A	537	2.486	-33.722	6.605	1.00	0.00	A	C
ATOM	3420	CE1	TYR	A	537	1.188	-33.615	7.043	1.00	0.00	A	C
ATOM	3421	CZ	TYR	A	537	0.162	-33.748	6.142	1.00	0.00	A	C
ATOM	3422	OH	TYR	A	537	-1.177	-33.643	6.575	1.00	0.00	A	O
ATOM	3423	CD2	TYR	A	537	1.745	-34.088	4.396	1.00	0.00	A	C
ATOM	3424	CE2	TYR	A	537	0.444	-33.985	4.819	1.00	0.00	A	C
ATOM	3425	C	TYR	A	537	3.737	-31.815	3.999	1.00	0.00	A	C
ATOM	3426	O	TYR	A	537	3.581	-31.697	2.785	1.00	0.00	A	O
ATOM	3427	N	VAL	A	538	2.977	-31.140	4.879	1.00	0.00	A	N
ATOM	3428	CA	VAL	A	538	1.851	-30.359	4.446	1.00	0.00	A	C
ATOM	3429	CB	VAL	A	538	1.190	-29.614	5.567	1.00	0.00	A	C
ATOM	3430	CG1	VAL	A	538	2.163	-28.548	6.096	1.00	0.00	A	C
ATOM	3431	CG2	VAL	A	538	-0.151	-29.054	5.057	1.00	0.00	A	C
ATOM	3432	C	VAL	A	538	2.252	-29.365	3.400	1.00	0.00	A	C
ATOM	3433	O	VAL	A	538	1.556	-29.247	2.393	1.00	0.00	A	O
ATOM	3434	N	ALA	A	539	3.405	-28.683	3.560	1.00	0.00	A	N
ATOM	3435	CA	ALA	A	539	3.782	-27.630	2.653	1.00	0.00	A	C
ATOM	3436	CB	ALA	A	539	5.187	-27.063	2.931	1.00	0.00	A	C
ATOM	3437	C	ALA	A	539	3.796	-28.181	1.261	1.00	0.00	A	C
ATOM	3438	O	ALA	A	539	3.375	-27.508	0.321	1.00	0.00	A	O

ATOM	3439	N	SER A 540	4.265	-29.428	1.095	1.00	0.00	A	N
ATOM	3440	CA	SER A 540	4.298	-30.039	-0.204	1.00	0.00	A	C
ATOM	3441	CB	SER A 540	4.926	-31.444	-0.179	1.00	0.00	A	C
ATOM	3442	OG	SER A 540	6.288	-31.360	0.209	1.00	0.00	A	O
ATOM	3443	C	SER A 540	2.894	-30.189	-0.714	1.00	0.00	A	C
ATOM	3444	O	SER A 540	2.625	-29.968	-1.895	1.00	0.00	A	O
ATOM	3445	N	MET A 541	1.956	-30.574	0.171	1.00	0.00	A	N
ATOM	3446	CA	MET A 541	0.587	-30.753	-0.225	1.00	0.00	A	C
ATOM	3447	CB	MET A 541	-0.322	-31.278	0.899	1.00	0.00	A	C
ATOM	3448	CG	MET A 541	-0.068	-32.736	1.275	1.00	0.00	A	C
ATOM	3449	SD	MET A 541	-1.334	-33.422	2.382	1.00	0.00	A	S
ATOM	3450	CE	MET A 541	-2.666	-33.320	1.148	1.00	0.00	A	C
ATOM	3451	C	MET A 541	0.029	-29.430	-0.644	1.00	0.00	A	C
ATOM	3452	O	MET A 541	-0.739	-29.346	-1.602	1.00	0.00	A	O
ATOM	3453	N	VAL A 542	0.422	-28.355	0.063	1.00	0.00	A	N
ATOM	3454	CA	VAL A 542	-0.094	-27.046	-0.218	1.00	0.00	A	C
ATOM	3455	CB	VAL A 542	0.547	-25.975	0.615	1.00	0.00	A	C
ATOM	3456	CG1	VAL A 542	0.047	-24.610	0.115	1.00	0.00	A	C
ATOM	3457	CG2	VAL A 542	0.241	-26.240	2.098	1.00	0.00	A	C
ATOM	3458	C	VAL A 542	0.218	-26.731	-1.641	1.00	0.00	A	C
ATOM	3459	O	VAL A 542	-0.620	-26.187	-2.360	1.00	0.00	A	O
ATOM	3460	N	PHE A 543	1.436	-27.073	-2.095	1.00	0.00	A	N
ATOM	3461	CA	PHE A 543	1.762	-26.836	-3.472	1.00	0.00	A	C
ATOM	3462	CB	PHE A 543	3.152	-27.344	-3.899	1.00	0.00	A	C
ATOM	3463	CG	PHE A 543	4.161	-26.273	-3.712	1.00	0.00	A	C
ATOM	3464	CD1	PHE A 543	4.695	-25.983	-2.479	1.00	0.00	A	C
ATOM	3465	CE1	PHE A 543	5.631	-24.983	-2.354	1.00	0.00	A	C
ATOM	3466	CZ	PHE A 543	6.044	-24.274	-3.458	1.00	0.00	A	C
ATOM	3467	CD2	PHE A 543	4.585	-25.563	-4.812	1.00	0.00	A	C
ATOM	3468	CE2	PHE A 543	5.520	-24.564	-4.693	1.00	0.00	A	C
ATOM	3469	C	PHE A 543	0.809	-27.609	-4.318	1.00	0.00	A	C
ATOM	3470	O	PHE A 543	0.314	-27.109	-5.328	1.00	0.00	A	O
ATOM	3471	N	SER A 544	0.531	-28.857	-3.919	1.00	0.00	A	N
ATOM	3472	CA	SER A 544	-0.279	-29.737	-4.711	1.00	0.00	A	C
ATOM	3473	CB	SER A 544	-0.432	-31.127	-4.061	1.00	0.00	A	C
ATOM	3474	OG	SER A 544	-1.243	-31.969	-4.868	1.00	0.00	A	O
ATOM	3475	C	SER A 544	-1.656	-29.179	-4.911	1.00	0.00	A	C
ATOM	3476	O	SER A 544	-2.181	-29.228	-6.022	1.00	0.00	A	O

ATOM	3477	N	LEU	A	545	-2.285	-28.642	-3.851	1.00	0.00	A	N
ATOM	3478	CA	LEU	A	545	-3.645	-28.186	-3.963	1.00	0.00	A	C
ATOM	3479	CB	LEU	A	545	-4.232	-27.703	-2.630	1.00	0.00	A	C
ATOM	3480	CG	LEU	A	545	-5.686	-27.218	-2.774	1.00	0.00	A	C
ATOM	3481	CD1	LEU	A	545	-6.629	-28.357	-3.184	1.00	0.00	A	C
ATOM	3482	CD2	LEU	A	545	-6.156	-26.492	-1.508	1.00	0.00	A	C
ATOM	3483	C	LEU	A	545	-3.774	-27.037	-4.915	1.00	0.00	A	C
ATOM	3484	O	LEU	A	545	-4.684	-27.023	-5.743	1.00	0.00	A	O
ATOM	3485	N	ALA	A	546	-2.891	-26.026	-4.786	1.00	0.00	A	N
ATOM	3486	CA	ALA	A	546	-2.911	-24.836	-5.597	1.00	0.00	A	C
ATOM	3487	CB	ALA	A	546	-1.904	-23.779	-5.117	1.00	0.00	A	C
ATOM	3488	C	ALA	A	546	-2.568	-25.161	-7.017	1.00	0.00	A	C
ATOM	3489	O	ALA	A	546	-3.195	-24.659	-7.948	1.00	0.00	A	O
ATOM	3490	N	LEU	A	547	-1.554	-26.022	-7.213	1.00	0.00	A	N
ATOM	3491	CA	LEU	A	547	-1.086	-26.332	-8.530	1.00	0.00	A	C
ATOM	3492	CB	LEU	A	547	0.093	-27.322	-8.533	1.00	0.00	A	C
ATOM	3493	CG	LEU	A	547	1.390	-26.770	-7.908	1.00	0.00	A	C
ATOM	3494	CD1	LEU	A	547	2.524	-27.806	-7.981	1.00	0.00	A	C
ATOM	3495	CD2	LEU	A	547	1.780	-25.421	-8.534	1.00	0.00	A	C
ATOM	3496	C	LEU	A	547	-2.194	-26.978	-9.296	1.00	0.00	A	C
ATOM	3497	O	LEU	A	547	-2.399	-26.687	-10.474	1.00	0.00	A	O
ATOM	3498	N	GLY	A	548	-2.942	-27.880	-8.640	1.00	0.00	A	N
ATOM	3499	CA	GLY	A	548	-3.994	-28.578	-9.318	1.00	0.00	A	C
ATOM	3500	C	GLY	A	548	-5.027	-27.600	-9.781	1.00	0.00	A	C
ATOM	3501	O	GLY	A	548	-5.532	-27.705	-10.897	1.00	0.00	A	O
ATOM	3502	N	TRP	A	549	-5.375	-26.613	-8.933	1.00	0.00	A	N
ATOM	3503	CA	TRP	A	549	-6.384	-25.672	-9.323	1.00	0.00	A	C
ATOM	3504	CB	TRP	A	549	-6.763	-24.656	-8.232	1.00	0.00	A	C
ATOM	3505	CG	TRP	A	549	-7.700	-25.223	-7.199	1.00	0.00	A	C
ATOM	3506	CD1	TRP	A	549	-7.502	-25.553	-5.888	1.00	0.00	A	C
ATOM	3507	NE1	TRP	A	549	-8.662	-26.061	-5.354	1.00	0.00	A	N
ATOM	3508	CE2	TRP	A	549	-9.632	-26.067	-6.336	1.00	0.00	A	C
ATOM	3509	CD2	TRP	A	549	-9.064	-25.551	-7.501	1.00	0.00	A	C
ATOM	3510	CE3	TRP	A	549	-9.779	-25.433	-8.657	1.00	0.00	A	C
ATOM	3511	CZ3	TRP	A	549	-11.093	-25.842	-8.629	1.00	0.00	A	C
ATOM	3512	CZ2	TRP	A	549	-10.936	-26.475	-6.312	1.00	0.00	A	C
ATOM	3513	CH2	TRP	A	549	-11.660	-26.351	-7.479	1.00	0.00	A	C
ATOM	3514	C	TRP	A	549	-5.932	-24.911	-10.527	1.00	0.00	A	C

ATOM	3515	O	TRP A 549	-6.700	-24.726	-11.468	1.00	0.00	A	O
ATOM	3516	N	THR A 550	-4.666	-24.467	-10.542	1.00	0.00	A	N
ATOM	3517	CA	THR A 550	-4.194	-23.686	-11.648	1.00	0.00	A	C
ATOM	3518	CB	THR A 550	-2.772	-23.237	-11.478	1.00	0.00	A	C
ATOM	3519	OG1	THR A 550	-1.890	-24.349	-11.490	1.00	0.00	A	O
ATOM	3520	CG2	THR A 550	-2.668	-22.504	-10.130	1.00	0.00	A	C
ATOM	3521	C	THR A 550	-4.286	-24.533	-12.882	1.00	0.00	A	C
ATOM	3522	O	THR A 550	-4.612	-24.040	-13.960	1.00	0.00	A	O
ATOM	3523	N	ASN A 551	-4.004	-25.840	-12.741	1.00	0.00	A	N
ATOM	3524	CA	ASN A 551	-4.024	-26.785	-13.826	1.00	0.00	A	C
ATOM	3525	CB	ASN A 551	-3.602	-28.202	-13.400	1.00	0.00	A	C
ATOM	3526	CG	ASN A 551	-2.125	-28.201	-13.040	1.00	0.00	A	C
ATOM	3527	OD1	ASN A 551	-1.385	-27.277	-13.376	1.00	0.00	A	O
ATOM	3528	ND2	ASN A 551	-1.675	-29.278	-12.341	1.00	0.00	A	N
ATOM	3529	C	ASN A 551	-5.420	-26.906	-14.372	1.00	0.00	A	C
ATOM	3530	O	ASN A 551	-5.608	-27.099	-15.573	1.00	0.00	A	O
ATOM	3531	N	MET A 552	-6.436	-26.764	-13.503	1.00	0.00	A	N
ATOM	3532	CA	MET A 552	-7.817	-26.997	-13.839	1.00	0.00	A	C
ATOM	3533	CB	MET A 552	-8.767	-26.782	-12.649	1.00	0.00	A	C
ATOM	3534	CG	MET A 552	-10.170	-27.335	-12.908	1.00	0.00	A	C
ATOM	3535	SD	MET A 552	-11.349	-27.119	-11.544	1.00	0.00	A	S
ATOM	3536	CE	MET A 552	-11.773	-25.403	-11.943	1.00	0.00	A	C
ATOM	3537	C	MET A 552	-8.258	-26.073	-14.935	1.00	0.00	A	C
ATOM	3538	O	MET A 552	-9.123	-26.416	-15.740	1.00	0.00	A	O
ATOM	3539	N	LEU A 553	-7.657	-24.875	-15.001	1.00	0.00	A	N
ATOM	3540	CA	LEU A 553	-8.013	-23.816	-15.910	1.00	0.00	A	C
ATOM	3541	CB	LEU A 553	-7.021	-22.648	-15.837	1.00	0.00	A	C
ATOM	3542	CG	LEU A 553	-6.712	-22.201	-14.402	1.00	0.00	A	C
ATOM	3543	CD1	LEU A 553	-5.950	-20.865	-14.387	1.00	0.00	A	C
ATOM	3544	CD2	LEU A 553	-7.964	-22.231	-13.519	1.00	0.00	A	C
ATOM	3545	C	LEU A 553	-7.898	-24.316	-17.326	1.00	0.00	A	C
ATOM	3546	O	LEU A 553	-8.571	-23.824	-18.229	1.00	0.00	A	O
ATOM	3547	N	TYR A 554	-7.003	-25.294	-17.536	1.00	0.00	A	N
ATOM	3548	CA	TYR A 554	-6.637	-25.896	-18.792	1.00	0.00	A	C
ATOM	3549	CB	TYR A 554	-5.546	-26.960	-18.548	1.00	0.00	A	C
ATOM	3550	CG	TYR A 554	-5.643	-28.112	-19.489	1.00	0.00	A	C
ATOM	3551	CD1	TYR A 554	-5.338	-28.018	-20.827	1.00	0.00	A	C
ATOM	3552	CE1	TYR A 554	-5.437	-29.131	-21.637	1.00	0.00	A	C

ATOM	3553	CZ	TYR	A	554	-5.829	-30.342	-21.117	1.00	0.00	A	C
ATOM	3554	OH	TYR	A	554	-5.929	-31.481	-21.944	1.00	0.00	A	O
ATOM	3555	CD2	TYR	A	554	-6.023	-29.331	-18.980	1.00	0.00	A	C
ATOM	3556	CE2	TYR	A	554	-6.122	-30.443	-19.781	1.00	0.00	A	C
ATOM	3557	C	TYR	A	554	-7.803	-26.510	-19.522	1.00	0.00	A	C
ATOM	3558	O	TYR	A	554	-7.890	-26.401	-20.744	1.00	0.00	A	O
ATOM	3559	N	TYR	A	555	-8.749	-27.132	-18.803	1.00	0.00	A	N
ATOM	3560	CA	TYR	A	555	-9.848	-27.834	-19.412	1.00	0.00	A	C
ATOM	3561	CB	TYR	A	555	-10.839	-28.470	-18.415	1.00	0.00	A	C
ATOM	3562	CG	TYR	A	555	-10.294	-29.784	-17.966	1.00	0.00	A	C
ATOM	3563	CD1	TYR	A	555	-10.490	-30.897	-18.753	1.00	0.00	A	C
ATOM	3564	CE1	TYR	A	555	-10.011	-32.126	-18.375	1.00	0.00	A	C
ATOM	3565	CZ	TYR	A	555	-9.324	-32.257	-17.193	1.00	0.00	A	C
ATOM	3566	OH	TYR	A	555	-8.832	-33.521	-16.806	1.00	0.00	A	O
ATOM	3567	CD2	TYR	A	555	-9.607	-29.923	-16.781	1.00	0.00	A	C
ATOM	3568	CE2	TYR	A	555	-9.122	-31.154	-16.396	1.00	0.00	A	C
ATOM	3569	C	TYR	A	555	-10.620	-26.936	-20.317	1.00	0.00	A	C
ATOM	3570	O	TYR	A	555	-11.245	-27.402	-21.265	1.00	0.00	A	O
ATOM	3571	N	THR	A	556	-10.636	-25.631	-20.040	1.00	0.00	A	N
ATOM	3572	CA	THR	A	556	-11.411	-24.714	-20.818	1.00	0.00	A	C
ATOM	3573	CB	THR	A	556	-11.362	-23.328	-20.267	1.00	0.00	A	C
ATOM	3574	OG1	THR	A	556	-11.671	-23.352	-18.882	1.00	0.00	A	O
ATOM	3575	CG2	THR	A	556	-12.456	-22.522	-20.980	1.00	0.00	A	C
ATOM	3576	C	THR	A	556	-10.909	-24.722	-22.238	1.00	0.00	A	C
ATOM	3577	O	THR	A	556	-11.616	-24.308	-23.152	1.00	0.00	A	O
ATOM	3578	N	ARG	A	557	-9.660	-25.170	-22.471	1.00	0.00	A	N
ATOM	3579	CA	ARG	A	557	-9.057	-25.154	-23.780	1.00	0.00	A	C
ATOM	3580	CB	ARG	A	557	-7.656	-25.793	-23.794	1.00	0.00	A	C
ATOM	3581	CG	ARG	A	557	-6.635	-24.992	-22.982	1.00	0.00	A	C
ATOM	3582	CD	ARG	A	557	-5.281	-25.683	-22.792	1.00	0.00	A	C
ATOM	3583	NE	ARG	A	557	-4.515	-25.572	-24.064	1.00	0.00	A	N
ATOM	3584	CZ	ARG	A	557	-3.151	-25.543	-24.052	1.00	0.00	A	C
ATOM	3585	NH1	ARG	A	557	-2.458	-25.577	-22.874	1.00	0.00	A	N
ATOM	3586	NH2	ARG	A	557	-2.470	-25.476	-25.234	1.00	0.00	A	N
ATOM	3587	C	ARG	A	557	-9.908	-25.846	-24.808	1.00	0.00	A	C
ATOM	3588	O	ARG	A	557	-10.594	-26.834	-24.536	1.00	0.00	A	O
ATOM	3589	N	GLY	A	558	-9.828	-25.327	-26.052	1.00	0.00	A	N
ATOM	3590	CA	GLY	A	558	-10.604	-25.795	-27.163	1.00	0.00	A	C

ATOM	3591	C	GLY A 558	-11.732	-24.835	-27.402	1.00	0.00	A	C
ATOM	3592	O	GLY A 558	-12.561	-25.056	-28.284	1.00	0.00	A	O
ATOM	3593	N	PHE A 559	-11.805	-23.741	-26.618	1.00	0.00	A	N
ATOM	3594	CA	PHE A 559	-12.846	-22.769	-26.824	1.00	0.00	A	C
ATOM	3595	CB	PHE A 559	-13.628	-22.454	-25.535	1.00	0.00	A	C
ATOM	3596	CG	PHE A 559	-14.408	-23.698	-25.265	1.00	0.00	A	C
ATOM	3597	CD1	PHE A 559	-13.794	-24.797	-24.713	1.00	0.00	A	C
ATOM	3598	CE1	PHE A 559	-14.480	-25.960	-24.466	1.00	0.00	A	C
ATOM	3599	CZ	PHE A 559	-15.812	-26.031	-24.789	1.00	0.00	A	C
ATOM	3600	CD2	PHE A 559	-15.739	-23.789	-25.602	1.00	0.00	A	C
ATOM	3601	CE2	PHE A 559	-16.440	-24.948	-25.358	1.00	0.00	A	C
ATOM	3602	C	PHE A 559	-12.190	-21.556	-27.380	1.00	0.00	A	C
ATOM	3603	O	PHE A 559	-11.081	-21.221	-26.998	1.00	0.00	A	O
ATOM	3604	N	GLN A 560	-12.814	-20.864	-28.342	1.00	0.00	A	N
ATOM	3605	CA	GLN A 560	-12.128	-19.800	-29.015	1.00	0.00	A	C
ATOM	3606	CB	GLN A 560	-12.994	-19.151	-30.108	1.00	0.00	A	C
ATOM	3607	CG	GLN A 560	-13.380	-20.074	-31.266	1.00	0.00	A	C
ATOM	3608	CD	GLN A 560	-14.619	-20.891	-30.914	1.00	0.00	A	C
ATOM	3609	OE1	GLN A 560	-14.995	-21.080	-29.760	1.00	0.00	A	O
ATOM	3610	NE2	GLN A 560	-15.292	-21.401	-31.981	1.00	0.00	A	N
ATOM	3611	C	GLN A 560	-11.770	-18.701	-28.067	1.00	0.00	A	C
ATOM	3612	O	GLN A 560	-10.639	-18.223	-28.058	1.00	0.00	A	O
ATOM	3613	N	GLN A 561	-12.731	-18.246	-27.248	1.00	0.00	A	N
ATOM	3614	CA	GLN A 561	-12.418	-17.167	-26.357	1.00	0.00	A	C
ATOM	3615	CB	GLN A 561	-13.649	-16.684	-25.568	1.00	0.00	A	C
ATOM	3616	CG	GLN A 561	-14.715	-15.964	-26.399	1.00	0.00	A	C
ATOM	3617	CD	GLN A 561	-14.370	-14.482	-26.400	1.00	0.00	A	C
ATOM	3618	OE1	GLN A 561	-13.220	-14.107	-26.179	1.00	0.00	A	O
ATOM	3619	NE2	GLN A 561	-15.391	-13.616	-26.640	1.00	0.00	A	N
ATOM	3620	C	GLN A 561	-11.438	-17.645	-25.331	1.00	0.00	A	C
ATOM	3621	O	GLN A 561	-10.409	-17.018	-25.084	1.00	0.00	A	O
ATOM	3622	N	MET A 562	-11.752	-18.801	-24.721	1.00	0.00	A	N
ATOM	3623	CA	MET A 562	-11.030	-19.343	-23.608	1.00	0.00	A	C
ATOM	3624	CB	MET A 562	-11.759	-20.557	-23.039	1.00	0.00	A	C
ATOM	3625	CG	MET A 562	-13.222	-20.248	-22.727	1.00	0.00	A	C
ATOM	3626	SD	MET A 562	-13.463	-18.740	-21.743	1.00	0.00	A	S
ATOM	3627	CE	MET A 562	-12.571	-19.350	-20.282	1.00	0.00	A	C
ATOM	3628	C	MET A 562	-9.655	-19.796	-23.974	1.00	0.00	A	C

ATOM	3629	O	MET A 562	-8.681	-19.548	-23.271	1.00	0.00	A	O
ATOM	3630	N	GLY A 563	-9.565	-20.470	-25.117	1.00	0.00	A	N
ATOM	3631	CA	GLY A 563	-8.400	-21.106	-25.644	1.00	0.00	A	C
ATOM	3632	C	GLY A 563	-7.374	-20.060	-25.853	1.00	0.00	A	C
ATOM	3633	O	GLY A 563	-6.187	-20.285	-25.632	1.00	0.00	A	O
ATOM	3634	N	ILE A 564	-7.806	-18.875	-26.308	1.00	0.00	A	N
ATOM	3635	CA	ILE A 564	-6.842	-17.857	-26.579	1.00	0.00	A	C
ATOM	3636	CB	ILE A 564	-7.428	-16.649	-27.232	1.00	0.00	A	C
ATOM	3637	CG2	ILE A 564	-6.297	-15.640	-27.488	1.00	0.00	A	C
ATOM	3638	CG1	ILE A 564	-8.180	-17.103	-28.491	1.00	0.00	A	C
ATOM	3639	CD	ILE A 564	-7.450	-18.198	-29.269	1.00	0.00	A	C
ATOM	3640	C	ILE A 564	-6.171	-17.447	-25.303	1.00	0.00	A	C
ATOM	3641	O	ILE A 564	-4.957	-17.265	-25.270	1.00	0.00	A	O
ATOM	3642	N	TYR A 565	-6.940	-17.298	-24.212	1.00	0.00	A	N
ATOM	3643	CA	TYR A 565	-6.371	-16.833	-22.978	1.00	0.00	A	C
ATOM	3644	CB	TYR A 565	-7.443	-16.507	-21.927	1.00	0.00	A	C
ATOM	3645	CG	TYR A 565	-8.058	-15.240	-22.417	1.00	0.00	A	C
ATOM	3646	CD1	TYR A 565	-9.098	-15.254	-23.316	1.00	0.00	A	C
ATOM	3647	CE1	TYR A 565	-9.645	-14.077	-23.766	1.00	0.00	A	C
ATOM	3648	CZ	TYR A 565	-9.151	-12.872	-23.328	1.00	0.00	A	C
ATOM	3649	OH	TYR A 565	-9.715	-11.665	-23.792	1.00	0.00	A	O
ATOM	3650	CD2	TYR A 565	-7.562	-14.027	-21.991	1.00	0.00	A	C
ATOM	3651	CE2	TYR A 565	-8.104	-12.847	-22.437	1.00	0.00	A	C
ATOM	3652	C	TYR A 565	-5.373	-17.801	-22.419	1.00	0.00	A	C
ATOM	3653	O	TYR A 565	-4.306	-17.392	-21.963	1.00	0.00	A	O
ATOM	3654	N	ALA A 566	-5.674	-19.110	-22.442	1.00	0.00	A	N
ATOM	3655	CA	ALA A 566	-4.754	-20.057	-21.875	1.00	0.00	A	C
ATOM	3656	CB	ALA A 566	-5.249	-21.509	-21.958	1.00	0.00	A	C
ATOM	3657	C	ALA A 566	-3.471	-19.992	-22.637	1.00	0.00	A	C
ATOM	3658	O	ALA A 566	-2.389	-20.010	-22.056	1.00	0.00	A	O
ATOM	3659	N	VAL A 567	-3.575	-19.901	-23.973	1.00	0.00	A	N
ATOM	3660	CA	VAL A 567	-2.416	-19.904	-24.813	1.00	0.00	A	C
ATOM	3661	CB	VAL A 567	-2.757	-19.858	-26.274	1.00	0.00	A	C
ATOM	3662	CG1	VAL A 567	-1.449	-19.804	-27.082	1.00	0.00	A	C
ATOM	3663	CG2	VAL A 567	-3.641	-21.073	-26.606	1.00	0.00	A	C
ATOM	3664	C	VAL A 567	-1.575	-18.709	-24.486	1.00	0.00	A	C
ATOM	3665	O	VAL A 567	-0.353	-18.811	-24.388	1.00	0.00	A	O
ATOM	3666	N	MET A 568	-2.205	-17.535	-24.293	1.00	0.00	A	N

ATOM	3667	CA	MET A 568	-1.428	-16.355	-24.045	1.00	0.00	A	C
ATOM	3668	CB	MET A 568	-2.253	-15.058	-24.026	1.00	0.00	A	C
ATOM	3669	CG	MET A 568	-3.287	-14.970	-22.907	1.00	0.00	A	C
ATOM	3670	SD	MET A 568	-4.173	-13.384	-22.866	1.00	0.00	A	S
ATOM	3671	CE	MET A 568	-4.923	-13.591	-24.507	1.00	0.00	A	C
ATOM	3672	C	MET A 568	-0.712	-16.498	-22.742	1.00	0.00	A	C
ATOM	3673	O	MET A 568	0.442	-16.092	-22.612	1.00	0.00	A	O
ATOM	3674	N	ILE A 569	-1.381	-17.093	-21.739	1.00	0.00	A	N
ATOM	3675	CA	ILE A 569	-0.787	-17.258	-20.445	1.00	0.00	A	C
ATOM	3676	CB	ILE A 569	-1.711	-17.926	-19.473	1.00	0.00	A	C
ATOM	3677	CG2	ILE A 569	-0.876	-18.416	-18.287	1.00	0.00	A	C
ATOM	3678	CG1	ILE A 569	-2.875	-17.000	-19.097	1.00	0.00	A	C
ATOM	3679	CD	ILE A 569	-3.977	-17.706	-18.308	1.00	0.00	A	C
ATOM	3680	C	ILE A 569	0.415	-18.131	-20.567	1.00	0.00	A	C
ATOM	3681	O	ILE A 569	1.469	-17.833	-20.009	1.00	0.00	A	O
ATOM	3682	N	GLU A 570	0.295	-19.237	-21.314	1.00	0.00	A	N
ATOM	3683	CA	GLU A 570	1.407	-20.129	-21.422	1.00	0.00	A	C
ATOM	3684	CB	GLU A 570	1.053	-21.433	-22.132	1.00	0.00	A	C
ATOM	3685	CG	GLU A 570	0.256	-22.325	-21.188	1.00	0.00	A	C
ATOM	3686	CD	GLU A 570	-0.489	-23.324	-22.033	1.00	0.00	A	C
ATOM	3687	OE1	GLU A 570	0.115	-24.359	-22.416	1.00	0.00	A	O
ATOM	3688	OE2	GLU A 570	-1.686	-23.054	-22.312	1.00	0.00	A	O
ATOM	3689	C	GLU A 570	2.531	-19.438	-22.117	1.00	0.00	A	C
ATOM	3690	O	GLU A 570	3.691	-19.650	-21.774	1.00	0.00	A	O
ATOM	3691	N	LYS A 571	2.217	-18.583	-23.105	1.00	0.00	A	N
ATOM	3692	CA	LYS A 571	3.231	-17.889	-23.846	1.00	0.00	A	C
ATOM	3693	CB	LYS A 571	2.655	-16.963	-24.929	1.00	0.00	A	C
ATOM	3694	CG	LYS A 571	3.727	-16.132	-25.644	1.00	0.00	A	C
ATOM	3695	CD	LYS A 571	4.669	-16.935	-26.543	1.00	0.00	A	C
ATOM	3696	CE	LYS A 571	5.757	-16.075	-27.192	1.00	0.00	A	C
ATOM	3697	NZ	LYS A 571	6.270	-16.736	-28.409	1.00	0.00	A	N
ATOM	3698	C	LYS A 571	4.017	-17.002	-22.935	1.00	0.00	A	C
ATOM	3699	O	LYS A 571	5.238	-16.913	-23.038	1.00	0.00	A	O
ATOM	3700	N	MET A 572	3.338	-16.298	-22.019	1.00	0.00	A	N
ATOM	3701	CA	MET A 572	4.063	-15.378	-21.199	1.00	0.00	A	C
ATOM	3702	CB	MET A 572	3.126	-14.511	-20.347	1.00	0.00	A	C
ATOM	3703	CG	MET A 572	2.237	-13.661	-21.257	1.00	0.00	A	C
ATOM	3704	SD	MET A 572	1.088	-12.517	-20.446	1.00	0.00	A	S

ATOM	3705	CE MET A 572	0.407	-11.963	-22.035	1.00	0.00	A	C
ATOM	3706	C MET A 572	5.021	-16.116	-20.323	1.00	0.00	A	C
ATOM	3707	O MET A 572	6.167	-15.693	-20.149	1.00	0.00	A	O
ATOM	3708	N ILE A 573	4.575	-17.237	-19.741	1.00	0.00	A	N
ATOM	3709	CA ILE A 573	5.362	-18.016	-18.830	1.00	0.00	A	C
ATOM	3710	CB ILE A 573	4.523	-19.055	-18.147	1.00	0.00	A	C
ATOM	3711	CG2 ILE A 573	5.424	-19.856	-17.191	1.00	0.00	A	C
ATOM	3712	CG1 ILE A 573	3.346	-18.364	-17.434	1.00	0.00	A	C
ATOM	3713	CD ILE A 573	2.244	-19.317	-16.979	1.00	0.00	A	C
ATOM	3714	C ILE A 573	6.491	-18.691	-19.540	1.00	0.00	A	C
ATOM	3715	O ILE A 573	7.618	-18.706	-19.049	1.00	0.00	A	O
ATOM	3716	N LEU A 574	6.233	-19.311	-20.704	1.00	0.00	A	N
ATOM	3717	CA LEU A 574	7.332	-19.986	-21.315	1.00	0.00	A	C
ATOM	3718	CB LEU A 574	6.881	-20.767	-22.558	1.00	0.00	A	C
ATOM	3719	CG LEU A 574	5.711	-21.721	-22.244	1.00	0.00	A	C
ATOM	3720	CD1 LEU A 574	5.325	-22.566	-23.463	1.00	0.00	A	C
ATOM	3721	CD2 LEU A 574	5.979	-22.558	-20.984	1.00	0.00	A	C
ATOM	3722	C LEU A 574	8.364	-18.976	-21.740	1.00	0.00	A	C
ATOM	3723	O LEU A 574	9.509	-19.030	-21.293	1.00	0.00	A	O
ATOM	3724	N ARG A 575	7.987	-18.047	-22.647	1.00	0.00	A	N
ATOM	3725	CA ARG A 575	8.926	-17.097	-23.191	1.00	0.00	A	C
ATOM	3726	CB ARG A 575	8.421	-16.574	-24.540	1.00	0.00	A	C
ATOM	3727	CG ARG A 575	8.025	-17.705	-25.488	1.00	0.00	A	C
ATOM	3728	CD ARG A 575	9.202	-18.583	-25.908	1.00	0.00	A	C
ATOM	3729	NE ARG A 575	8.672	-19.613	-26.847	1.00	0.00	A	N
ATOM	3730	CZ ARG A 575	8.489	-19.300	-28.164	1.00	0.00	A	C
ATOM	3731	NH1 ARG A 575	8.774	-18.046	-28.617	1.00	0.00	A	N
ATOM	3732	NH2 ARG A 575	8.014	-20.242	-29.033	1.00	0.00	A	N
ATOM	3733	C ARG A 575	9.273	-15.873	-22.380	1.00	0.00	A	C
ATOM	3734	O ARG A 575	10.378	-15.741	-21.856	1.00	0.00	A	O
ATOM	3735	N ASP A 576	8.279	-14.967	-22.214	1.00	0.00	A	N
ATOM	3736	CA ASP A 576	8.505	-13.619	-21.745	1.00	0.00	A	C
ATOM	3737	CB ASP A 576	7.244	-12.748	-21.908	1.00	0.00	A	C
ATOM	3738	CG ASP A 576	7.634	-11.277	-21.872	1.00	0.00	A	C
ATOM	3739	OD1 ASP A 576	8.588	-10.926	-21.130	1.00	0.00	A	O
ATOM	3740	OD2 ASP A 576	6.974	-10.480	-22.594	1.00	0.00	A	O
ATOM	3741	C ASP A 576	8.940	-13.549	-20.317	1.00	0.00	A	C
ATOM	3742	O ASP A 576	9.938	-12.909	-19.989	1.00	0.00	A	O

ATOM	3743	N	LEU A 577	8.188	-14.212	-19.425	1.00	0.00	A	N
ATOM	3744	CA	LEU A 577	8.489	-14.190	-18.028	1.00	0.00	A	C
ATOM	3745	CB	LEU A 577	7.459	-14.956	-17.188	1.00	0.00	A	C
ATOM	3746	CG	LEU A 577	7.909	-15.137	-15.730	1.00	0.00	A	C
ATOM	3747	CD1	LEU A 577	8.166	-13.787	-15.048	1.00	0.00	A	C
ATOM	3748	CD2	LEU A 577	6.933	-16.028	-14.952	1.00	0.00	A	C
ATOM	3749	C	LEU A 577	9.795	-14.868	-17.818	1.00	0.00	A	C
ATOM	3750	O	LEU A 577	10.646	-14.385	-17.074	1.00	0.00	A	O
ATOM	3751	N	CYS A 578	9.986	-16.007	-18.499	1.00	0.00	A	N
ATOM	3752	CA	CYS A 578	11.168	-16.786	-18.301	1.00	0.00	A	C
ATOM	3753	CB	CYS A 578	11.173	-18.071	-19.145	1.00	0.00	A	C
ATOM	3754	SG	CYS A 578	12.670	-19.069	-18.900	1.00	0.00	A	S
ATOM	3755	C	CYS A 578	12.356	-15.977	-18.701	1.00	0.00	A	C
ATOM	3756	O	CYS A 578	13.360	-15.950	-17.993	1.00	0.00	A	O
ATOM	3757	N	ARG A 579	12.277	-15.291	-19.853	1.00	0.00	A	N
ATOM	3758	CA	ARG A 579	13.402	-14.538	-20.315	1.00	0.00	A	C
ATOM	3759	CB	ARG A 579	13.164	-13.923	-21.704	1.00	0.00	A	C
ATOM	3760	CG	ARG A 579	13.131	-14.955	-22.833	1.00	0.00	A	C
ATOM	3761	CD	ARG A 579	12.554	-14.410	-24.138	1.00	0.00	A	C
ATOM	3762	NE	ARG A 579	12.788	-15.428	-25.204	1.00	0.00	A	N
ATOM	3763	CZ	ARG A 579	11.854	-15.631	-26.176	1.00	0.00	A	C
ATOM	3764	NH1	ARG A 579	10.674	-14.946	-26.140	1.00	0.00	A	N
ATOM	3765	NH2	ARG A 579	12.091	-16.528	-27.179	1.00	0.00	A	N
ATOM	3766	C	ARG A 579	13.690	-13.420	-19.360	1.00	0.00	A	C
ATOM	3767	O	ARG A 579	14.841	-13.181	-19.004	1.00	0.00	A	O
ATOM	3768	N	PHE A 580	12.635	-12.717	-18.905	1.00	0.00	A	N
ATOM	3769	CA	PHE A 580	12.774	-11.562	-18.061	1.00	0.00	A	C
ATOM	3770	CB	PHE A 580	11.438	-10.847	-17.810	1.00	0.00	A	C
ATOM	3771	CG	PHE A 580	11.773	-9.514	-17.244	1.00	0.00	A	C
ATOM	3772	CD1	PHE A 580	12.134	-8.490	-18.088	1.00	0.00	A	C
ATOM	3773	CE1	PHE A 580	12.450	-7.251	-17.588	1.00	0.00	A	C
ATOM	3774	CZ	PHE A 580	12.402	-7.037	-16.233	1.00	0.00	A	C
ATOM	3775	CD2	PHE A 580	11.729	-9.287	-15.887	1.00	0.00	A	C
ATOM	3776	CE2	PHE A 580	12.042	-8.049	-15.380	1.00	0.00	A	C
ATOM	3777	C	PHE A 580	13.328	-11.951	-16.733	1.00	0.00	A	C
ATOM	3778	O	PHE A 580	14.175	-11.254	-16.180	1.00	0.00	A	O
ATOM	3779	N	MET A 581	12.884	-13.094	-16.188	1.00	0.00	A	N
ATOM	3780	CA	MET A 581	13.311	-13.456	-14.873	1.00	0.00	A	C

ATOM	3781	CB	MET	A	581	12.724	-14.774	-14.361	1.00	0.00	A	C
ATOM	3782	CG	MET	A	581	13.400	-15.199	-13.059	1.00	0.00	A	C
ATOM	3783	SD	MET	A	581	12.455	-16.357	-12.044	1.00	0.00	A	S
ATOM	3784	CE	MET	A	581	11.591	-15.054	-11.119	1.00	0.00	A	C
ATOM	3785	C	MET	A	581	14.793	-13.577	-14.872	1.00	0.00	A	C
ATOM	3786	O	MET	A	581	15.441	-13.236	-13.885	1.00	0.00	A	O
ATOM	3787	N	PHE	A	582	15.388	-14.070	-15.969	1.00	0.00	A	N
ATOM	3788	CA	PHE	A	582	16.817	-14.151	-15.953	1.00	0.00	A	C
ATOM	3789	CB	PHE	A	582	17.422	-14.719	-17.249	1.00	0.00	A	C
ATOM	3790	CG	PHE	A	582	17.154	-16.184	-17.304	1.00	0.00	A	C
ATOM	3791	CD1	PHE	A	582	17.805	-17.034	-16.439	1.00	0.00	A	C
ATOM	3792	CE1	PHE	A	582	17.578	-18.388	-16.476	1.00	0.00	A	C
ATOM	3793	CZ	PHE	A	582	16.696	-18.909	-17.395	1.00	0.00	A	C
ATOM	3794	CD2	PHE	A	582	16.281	-16.714	-18.226	1.00	0.00	A	C
ATOM	3795	CE2	PHE	A	582	16.051	-18.070	-18.269	1.00	0.00	A	C
ATOM	3796	C	PHE	A	582	17.371	-12.769	-15.776	1.00	0.00	A	C
ATOM	3797	O	PHE	A	582	18.249	-12.553	-14.943	1.00	0.00	A	O
ATOM	3798	N	VAL	A	583	16.866	-11.794	-16.558	1.00	0.00	A	N
ATOM	3799	CA	VAL	A	583	17.355	-10.442	-16.526	1.00	0.00	A	C
ATOM	3800	CB	VAL	A	583	16.705	-9.586	-17.574	1.00	0.00	A	C
ATOM	3801	CG1	VAL	A	583	17.233	-8.148	-17.430	1.00	0.00	A	C
ATOM	3802	CG2	VAL	A	583	16.951	-10.217	-18.953	1.00	0.00	A	C
ATOM	3803	C	VAL	A	583	17.072	-9.784	-15.203	1.00	0.00	A	C
ATOM	3804	O	VAL	A	583	17.954	-9.169	-14.609	1.00	0.00	A	O
ATOM	3805	N	TYR	A	584	15.830	-9.892	-14.698	1.00	0.00	A	N
ATOM	3806	CA	TYR	A	584	15.470	-9.243	-13.471	1.00	0.00	A	C
ATOM	3807	CB	TYR	A	584	13.978	-9.384	-13.109	1.00	0.00	A	C
ATOM	3808	CG	TYR	A	584	13.793	-8.869	-11.722	1.00	0.00	A	C
ATOM	3809	CD1	TYR	A	584	14.010	-7.543	-11.417	1.00	0.00	A	C
ATOM	3810	CE1	TYR	A	584	13.835	-7.078	-10.132	1.00	0.00	A	C
ATOM	3811	CZ	TYR	A	584	13.427	-7.942	-9.142	1.00	0.00	A	C
ATOM	3812	OH	TYR	A	584	13.243	-7.494	-7.819	1.00	0.00	A	O
ATOM	3813	CD2	TYR	A	584	13.367	-9.716	-10.723	1.00	0.00	A	C
ATOM	3814	CE2	TYR	A	584	13.190	-9.259	-9.440	1.00	0.00	A	C
ATOM	3815	C	TYR	A	584	16.285	-9.828	-12.376	1.00	0.00	A	C
ATOM	3816	O	TYR	A	584	16.773	-9.116	-11.501	1.00	0.00	A	O
ATOM	3817	N	ILE	A	585	16.459	-11.160	-12.399	1.00	0.00	A	N
ATOM	3818	CA	ILE	A	585	17.240	-11.785	-11.380	1.00	0.00	A	C

ATOM	3819	CB	ILE	A	585	17.218	-13.283	-11.433	1.00	0.00	A	C
ATOM	3820	CG2	ILE	A	585	18.533	-13.814	-10.844	1.00	0.00	A	C
ATOM	3821	CG1	ILE	A	585	15.957	-13.793	-10.711	1.00	0.00	A	C
ATOM	3822	CD	ILE	A	585	14.652	-13.233	-11.261	1.00	0.00	A	C
ATOM	3823	C	ILE	A	585	18.649	-11.293	-11.423	1.00	0.00	A	C
ATOM	3824	O	ILE	A	585	19.230	-11.031	-10.372	1.00	0.00	A	O
ATOM	3825	N	VAL	A	586	19.251	-11.151	-12.619	1.00	0.00	A	N
ATOM	3826	CA	VAL	A	586	20.615	-10.712	-12.633	1.00	0.00	A	C
ATOM	3827	CB	VAL	A	586	21.260	-10.742	-13.993	1.00	0.00	A	C
ATOM	3828	CG1	VAL	A	586	20.626	-9.679	-14.904	1.00	0.00	A	C
ATOM	3829	CG2	VAL	A	586	22.774	-10.559	-13.806	1.00	0.00	A	C
ATOM	3830	C	VAL	A	586	20.708	-9.323	-12.077	1.00	0.00	A	C
ATOM	3831	O	VAL	A	586	21.565	-9.049	-11.238	1.00	0.00	A	O
ATOM	3832	N	PHE	A	587	19.823	-8.402	-12.513	1.00	0.00	A	N
ATOM	3833	CA	PHE	A	587	19.893	-7.054	-12.021	1.00	0.00	A	C
ATOM	3834	CB	PHE	A	587	18.950	-6.069	-12.739	1.00	0.00	A	C
ATOM	3835	CG	PHE	A	587	19.625	-5.625	-13.996	1.00	0.00	A	C
ATOM	3836	CD1	PHE	A	587	20.482	-4.546	-13.972	1.00	0.00	A	C
ATOM	3837	CE1	PHE	A	587	21.117	-4.118	-15.116	1.00	0.00	A	C
ATOM	3838	CZ	PHE	A	587	20.896	-4.769	-16.304	1.00	0.00	A	C
ATOM	3839	CD2	PHE	A	587	19.411	-6.270	-15.191	1.00	0.00	A	C
ATOM	3840	CE2	PHE	A	587	20.042	-5.844	-16.339	1.00	0.00	A	C
ATOM	3841	C	PHE	A	587	19.595	-7.022	-10.556	1.00	0.00	A	C
ATOM	3842	O	PHE	A	587	20.297	-6.362	-9.791	1.00	0.00	A	O
ATOM	3843	N	LEU	A	588	18.549	-7.746	-10.119	1.00	0.00	A	N
ATOM	3844	CA	LEU	A	588	18.178	-7.707	-8.734	1.00	0.00	A	C
ATOM	3845	CB	LEU	A	588	16.901	-8.525	-8.434	1.00	0.00	A	C
ATOM	3846	CG	LEU	A	588	17.067	-10.064	-8.355	1.00	0.00	A	C
ATOM	3847	CD1	LEU	A	588	17.652	-10.525	-7.006	1.00	0.00	A	C
ATOM	3848	CD2	LEU	A	588	15.759	-10.794	-8.688	1.00	0.00	A	C
ATOM	3849	C	LEU	A	588	19.295	-8.270	-7.916	1.00	0.00	A	C
ATOM	3850	O	LEU	A	588	19.684	-7.701	-6.898	1.00	0.00	A	O
ATOM	3851	N	PHE	A	589	19.861	-9.402	-8.364	1.00	0.00	A	N
ATOM	3852	CA	PHE	A	589	20.845	-10.072	-7.573	1.00	0.00	A	C
ATOM	3853	CB	PHE	A	589	21.278	-11.420	-8.167	1.00	0.00	A	C
ATOM	3854	CG	PHE	A	589	22.129	-12.092	-7.145	1.00	0.00	A	C
ATOM	3855	CD1	PHE	A	589	21.556	-12.905	-6.193	1.00	0.00	A	C
ATOM	3856	CE1	PHE	A	589	22.329	-13.527	-5.243	1.00	0.00	A	C

ATOM	3857	CZ	PHE A 589	23.691	-13.336	-5.239	1.00	0.00	A	C
ATOM	3858	CD2	PHE A 589	23.490	-11.901	-7.133	1.00	0.00	A	C
ATOM	3859	CE2	PHE A 589	24.269	-12.523	-6.185	1.00	0.00	A	C
ATOM	3860	C	PHE A 589	22.054	-9.204	-7.422	1.00	0.00	A	C
ATOM	3861	O	PHE A 589	22.589	-9.067	-6.323	1.00	0.00	A	O
ATOM	3862	N	GLY A 590	22.515	-8.581	-8.521	1.00	0.00	A	N
ATOM	3863	CA	GLY A 590	23.704	-7.785	-8.448	1.00	0.00	A	C
ATOM	3864	C	GLY A 590	23.476	-6.633	-7.521	1.00	0.00	A	C
ATOM	3865	O	GLY A 590	24.329	-6.311	-6.695	1.00	0.00	A	O
ATOM	3866	N	PHE A 591	22.307	-5.976	-7.624	1.00	0.00	A	N
ATOM	3867	CA	PHE A 591	22.052	-4.841	-6.790	1.00	0.00	A	C
ATOM	3868	CB	PHE A 591	20.758	-4.089	-7.130	1.00	0.00	A	C
ATOM	3869	CG	PHE A 591	21.080	-3.169	-8.258	1.00	0.00	A	C
ATOM	3870	CD1	PHE A 591	21.209	-3.624	-9.550	1.00	0.00	A	C
ATOM	3871	CE1	PHE A 591	21.501	-2.753	-10.573	1.00	0.00	A	C
ATOM	3872	CZ	PHE A 591	21.661	-1.412	-10.314	1.00	0.00	A	C
ATOM	3873	CD2	PHE A 591	21.236	-1.825	-8.010	1.00	0.00	A	C
ATOM	3874	CE2	PHE A 591	21.526	-0.947	-9.028	1.00	0.00	A	C
ATOM	3875	C	PHE A 591	22.009	-5.265	-5.359	1.00	0.00	A	C
ATOM	3876	O	PHE A 591	22.495	-4.556	-4.480	1.00	0.00	A	O
ATOM	3877	N	SER A 592	21.415	-6.436	-5.095	1.00	0.00	A	N
ATOM	3878	CA	SER A 592	21.303	-6.950	-3.764	1.00	0.00	A	C
ATOM	3879	CB	SER A 592	20.591	-8.305	-3.755	1.00	0.00	A	C
ATOM	3880	OG	SER A 592	20.568	-8.814	-2.436	1.00	0.00	A	O
ATOM	3881	C	SER A 592	22.675	-7.161	-3.199	1.00	0.00	A	C
ATOM	3882	O	SER A 592	22.939	-6.813	-2.048	1.00	0.00	A	O
ATOM	3883	N	THR A 593	23.593	-7.730	-4.000	1.00	0.00	A	N
ATOM	3884	CA	THR A 593	24.911	-7.997	-3.502	1.00	0.00	A	C
ATOM	3885	CB	THR A 593	25.794	-8.712	-4.481	1.00	0.00	A	C
ATOM	3886	OG1	THR A 593	26.045	-7.905	-5.621	1.00	0.00	A	O
ATOM	3887	CG2	THR A 593	25.083	-10.006	-4.890	1.00	0.00	A	C
ATOM	3888	C	THR A 593	25.564	-6.695	-3.180	1.00	0.00	A	C
ATOM	3889	O	THR A 593	26.253	-6.574	-2.170	1.00	0.00	A	O
ATOM	3890	N	ALA A 594	25.358	-5.680	-4.038	1.00	0.00	A	N
ATOM	3891	CA	ALA A 594	25.990	-4.411	-3.829	1.00	0.00	A	C
ATOM	3892	CB	ALA A 594	25.664	-3.396	-4.939	1.00	0.00	A	C
ATOM	3893	C	ALA A 594	25.514	-3.832	-2.532	1.00	0.00	A	C
ATOM	3894	O	ALA A 594	26.300	-3.277	-1.769	1.00	0.00	A	O

ATOM	3895	N	VAL A 595	24.202	-3.941	-2.248	1.00	0.00	A	N
ATOM	3896	CA	VAL A 595	23.654	-3.377	-1.046	1.00	0.00	A	C
ATOM	3897	CB	VAL A 595	22.155	-3.475	-0.962	1.00	0.00	A	C
ATOM	3898	CG1	VAL A 595	21.709	-2.901	0.394	1.00	0.00	A	C
ATOM	3899	CG2	VAL A 595	21.537	-2.760	-2.176	1.00	0.00	A	C
ATOM	3900	C	VAL A 595	24.195	-4.083	0.160	1.00	0.00	A	C
ATOM	3901	O	VAL A 595	24.507	-3.451	1.166	1.00	0.00	A	O
ATOM	3902	N	VAL A 596	24.335	-5.418	0.084	1.00	0.00	A	N
ATOM	3903	CA	VAL A 596	24.704	-6.192	1.237	1.00	0.00	A	C
ATOM	3904	CB	VAL A 596	24.724	-7.671	0.943	1.00	0.00	A	C
ATOM	3905	CG1	VAL A 596	25.980	-8.033	0.135	1.00	0.00	A	C
ATOM	3906	CG2	VAL A 596	24.565	-8.446	2.256	1.00	0.00	A	C
ATOM	3907	C	VAL A 596	26.042	-5.739	1.744	1.00	0.00	A	C
ATOM	3908	O	VAL A 596	26.247	-5.618	2.950	1.00	0.00	A	O
ATOM	3909	N	THR A 597	26.998	-5.492	0.835	1.00	0.00	A	N
ATOM	3910	CA	THR A 597	28.311	-5.055	1.220	1.00	0.00	A	C
ATOM	3911	CB	THR A 597	29.282	-5.097	0.080	1.00	0.00	A	C
ATOM	3912	OG1	THR A 597	30.559	-4.684	0.527	1.00	0.00	A	O
ATOM	3913	CG2	THR A 597	28.789	-4.169	-1.040	1.00	0.00	A	C
ATOM	3914	C	THR A 597	28.305	-3.644	1.745	1.00	0.00	A	C
ATOM	3915	O	THR A 597	29.018	-3.329	2.699	1.00	0.00	A	O
ATOM	3916	N	LEU A 598	27.489	-2.756	1.146	1.00	0.00	A	N
ATOM	3917	CA	LEU A 598	27.554	-1.343	1.420	1.00	0.00	A	C
ATOM	3918	CB	LEU A 598	26.505	-0.556	0.613	1.00	0.00	A	C
ATOM	3919	CG	LEU A 598	26.651	0.973	0.702	1.00	0.00	A	C
ATOM	3920	CD1	LEU A 598	27.829	1.472	-0.148	1.00	0.00	A	C
ATOM	3921	CD2	LEU A 598	25.337	1.690	0.370	1.00	0.00	A	C
ATOM	3922	C	LEU A 598	27.282	-1.056	2.860	1.00	0.00	A	C
ATOM	3923	O	LEU A 598	28.018	-0.305	3.500	1.00	0.00	A	O
ATOM	3924	N	ILE A 599	26.191	-1.620	3.406	1.00	0.00	A	N
ATOM	3925	CA	ILE A 599	25.915	-1.383	4.783	1.00	0.00	A	C
ATOM	3926	CB	ILE A 599	25.469	0.015	5.007	1.00	0.00	A	C
ATOM	3927	CG2	ILE A 599	24.380	0.383	3.991	1.00	0.00	A	C
ATOM	3928	CG1	ILE A 599	25.140	0.208	6.475	1.00	0.00	A	C
ATOM	3929	CD	ILE A 599	25.021	1.675	6.801	1.00	0.00	A	C
ATOM	3930	C	ILE A 599	24.895	-2.372	5.259	1.00	0.00	A	C
ATOM	3931	O	ILE A 599	23.819	-2.496	4.680	1.00	0.00	A	O
ATOM	3932	N	GLU A 600	25.210	-3.099	6.350	1.00	0.00	A	N

ATOM	3933	CA	GLU	A	600	24.325	-4.116	6.844	1.00	0.00	A	C
ATOM	3934	CB	GLU	A	600	24.943	-4.939	7.993	1.00	0.00	A	C
ATOM	3935	CG	GLU	A	600	25.421	-4.122	9.194	1.00	0.00	A	C
ATOM	3936	CD	GLU	A	600	24.281	-3.952	10.185	1.00	0.00	A	C
ATOM	3937	OE1	GLU	A	600	23.745	-4.989	10.661	1.00	0.00	A	O
ATOM	3938	OE2	GLU	A	600	23.944	-2.779	10.489	1.00	0.00	A	O
ATOM	3939	C	GLU	A	600	23.049	-3.485	7.299	1.00	0.00	A	C
ATOM	3940	O	GLU	A	600	21.969	-3.975	6.971	1.00	0.00	A	O
ATOM	3941	N	ASP	A	601	23.141	-2.357	8.029	1.00	0.00	A	N
ATOM	3942	CA	ASP	A	601	21.965	-1.674	8.486	1.00	0.00	A	C
ATOM	3943	CB	ASP	A	601	21.112	-1.125	7.339	1.00	0.00	A	C
ATOM	3944	CG	ASP	A	601	21.943	-0.102	6.602	1.00	0.00	A	C
ATOM	3945	OD1	ASP	A	601	22.447	0.845	7.263	1.00	0.00	A	O
ATOM	3946	OD2	ASP	A	601	22.104	-0.267	5.363	1.00	0.00	A	O
ATOM	3947	C	ASP	A	601	21.094	-2.644	9.194	1.00	0.00	A	C
ATOM	3948	O	ASP	A	601	21.553	-3.467	9.988	1.00	0.00	A	O
ATOM	3949	N	GLY	A	602	19.775	-2.539	8.943	1.00	0.00	A	N
ATOM	3950	CA	GLY	A	602	18.893	-3.485	9.541	1.00	0.00	A	C
ATOM	3951	C	GLY	A	602	17.935	-3.940	8.488	1.00	0.00	A	C
ATOM	3952	O	GLY	A	602	17.393	-3.109	7.762	1.00	0.00	A	O
ATOM	3953	N	LYS	A	603	17.737	-5.280	8.396	1.00	0.00	A	N
ATOM	3954	CA	LYS	A	603	16.779	-5.952	7.544	1.00	0.00	A	C
ATOM	3955	CB	LYS	A	603	16.150	-5.104	6.432	1.00	0.00	A	C
ATOM	3956	CG	LYS	A	603	14.937	-5.732	5.761	1.00	0.00	A	C
ATOM	3957	CD	LYS	A	603	14.144	-4.650	5.050	1.00	0.00	A	C
ATOM	3958	CE	LYS	A	603	14.054	-3.389	5.914	1.00	0.00	A	C
ATOM	3959	NZ	LYS	A	603	13.402	-2.295	5.168	1.00	0.00	A	N
ATOM	3960	C	LYS	A	603	17.362	-7.158	6.828	1.00	0.00	A	C
ATOM	3961	O	LYS	A	603	17.323	-7.117	5.565	1.00	0.00	A	O
ATOM	3962	N	TYR	B	628	19.007	-4.991	5.906	1.00	0.00	A	N
ATOM	3963	CA	TYR	B	628	19.672	-5.573	4.725	1.00	0.00	A	C
ATOM	3964	CB	TYR	B	628	20.244	-4.448	3.861	1.00	0.00	A	C
ATOM	3965	CG	TYR	B	628	19.108	-3.694	3.273	1.00	0.00	A	C
ATOM	3966	CD1	TYR	B	628	18.413	-2.767	4.016	1.00	0.00	A	C
ATOM	3967	CE1	TYR	B	628	17.368	-2.069	3.458	1.00	0.00	A	C
ATOM	3968	CZ	TYR	B	628	17.014	-2.294	2.148	1.00	0.00	A	C
ATOM	3969	OH	TYR	B	628	15.942	-1.577	1.575	1.00	0.00	A	O
ATOM	3970	CD2	TYR	B	628	18.747	-3.912	1.965	1.00	0.00	A	C

ATOM	3971	CE2 TYR B 628	17.705	-3.218	1.402	1.00	0.00	A	C
ATOM	3972	C TYR B 628	20.801	-6.503	5.039	1.00	0.00	A	C
ATOM	3973	O TYR B 628	21.624	-6.802	4.175	1.00	0.00	A	O
ATOM	3974	N ASN B 629	20.865	-6.999	6.286	1.00	0.00	A	N
ATOM	3975	CA ASN B 629	21.937	-7.861	6.678	1.00	0.00	A	C
ATOM	3976	CB ASN B 629	21.846	-8.278	8.154	1.00	0.00	A	C
ATOM	3977	CG ASN B 629	21.977	-7.027	9.002	1.00	0.00	A	C
ATOM	3978	OD1 ASN B 629	22.338	-5.958	8.511	1.00	0.00	A	O
ATOM	3979	ND2 ASN B 629	21.675	-7.162	10.321	1.00	0.00	A	N
ATOM	3980	C ASN B 629	21.884	-9.121	5.866	1.00	0.00	A	C
ATOM	3981	O ASN B 629	22.916	-9.614	5.413	1.00	0.00	A	O
ATOM	3982	N SER B 630	20.672	-9.668	5.649	1.00	0.00	A	N
ATOM	3983	CA SER B 630	20.555	-10.923	4.954	1.00	0.00	A	C
ATOM	3984	CB SER B 630	19.447	-11.837	5.510	1.00	0.00	A	C
ATOM	3985	OG SER B 630	19.386	-13.045	4.765	1.00	0.00	A	O
ATOM	3986	C SER B 630	20.233	-10.683	3.516	1.00	0.00	A	C
ATOM	3987	O SER B 630	19.574	-9.712	3.158	1.00	0.00	A	O
ATOM	3988	N LEU B 631	20.761	-11.575	2.651	1.00	0.00	A	N
ATOM	3989	CA LEU B 631	20.538	-11.548	1.234	1.00	0.00	A	C
ATOM	3990	CB LEU B 631	21.416	-12.570	0.494	1.00	0.00	A	C
ATOM	3991	CG LEU B 631	21.224	-12.564	-1.032	1.00	0.00	A	C
ATOM	3992	CD1 LEU B 631	21.689	-11.232	-1.640	1.00	0.00	A	C
ATOM	3993	CD2 LEU B 631	21.901	-13.776	-1.690	1.00	0.00	A	C
ATOM	3994	C LEU B 631	19.105	-11.894	0.952	1.00	0.00	A	C
ATOM	3995	O LEU B 631	18.454	-11.262	0.121	1.00	0.00	A	O
ATOM	3996	N TYR B 632	18.566	-12.910	1.656	1.00	0.00	A	N
ATOM	3997	CA TYR B 632	17.218	-13.341	1.413	1.00	0.00	A	C
ATOM	3998	CB TYR B 632	16.809	-14.543	2.285	1.00	0.00	A	C
ATOM	3999	CG TYR B 632	15.341	-14.752	2.124	1.00	0.00	A	C
ATOM	4000	CD1 TYR B 632	14.829	-15.333	0.988	1.00	0.00	A	C
ATOM	4001	CE1 TYR B 632	13.474	-15.527	0.848	1.00	0.00	A	C
ATOM	4002	CZ TYR B 632	12.616	-15.140	1.850	1.00	0.00	A	C
ATOM	4003	OH TYR B 632	11.226	-15.338	1.711	1.00	0.00	A	O
ATOM	4004	CD2 TYR B 632	14.473	-14.371	3.123	1.00	0.00	A	C
ATOM	4005	CE2 TYR B 632	13.117	-14.562	2.989	1.00	0.00	A	C
ATOM	4006	C TYR B 632	16.286	-12.217	1.720	1.00	0.00	A	C
ATOM	4007	O TYR B 632	15.359	-11.946	0.957	1.00	0.00	A	O
ATOM	4008	N SER B 633	16.496	-11.539	2.861	1.00	0.00	A	N

ATOM	4009	CA	SER B 633	15.652	-10.445	3.250	1.00	0.00	A	C
ATOM	4010	CB	SER B 633	15.932	-9.980	4.688	1.00	0.00	A	C
ATOM	4011	OG	SER B 633	17.286	-9.577	4.806	1.00	0.00	A	O
ATOM	4012	C	SER B 633	15.853	-9.271	2.334	1.00	0.00	A	C
ATOM	4013	O	SER B 633	14.886	-8.649	1.896	1.00	0.00	A	O
ATOM	4014	N	THR B 634	17.118	-8.944	2.004	1.00	0.00	A	N
ATOM	4015	CA	THR B 634	17.396	-7.800	1.179	1.00	0.00	A	C
ATOM	4016	CB	THR B 634	18.859	-7.549	0.934	1.00	0.00	A	C
ATOM	4017	OG1	THR B 634	19.475	-8.702	0.382	1.00	0.00	A	O
ATOM	4018	CG2	THR B 634	19.544	-7.132	2.238	1.00	0.00	A	C
ATOM	4019	C	THR B 634	16.778	-7.990	-0.165	1.00	0.00	A	C
ATOM	4020	O	THR B 634	16.243	-7.049	-0.746	1.00	0.00	A	O
ATOM	4021	N	CYS B 635	16.847	-9.220	-0.706	1.00	0.00	A	N
ATOM	4022	CA	CYS B 635	16.299	-9.465	-2.007	1.00	0.00	A	C
ATOM	4023	CB	CYS B 635	16.484	-10.922	-2.470	1.00	0.00	A	C
ATOM	4024	SG	CYS B 635	15.785	-11.228	-4.121	1.00	0.00	A	S
ATOM	4025	C	CYS B 635	14.834	-9.191	-1.945	1.00	0.00	A	C
ATOM	4026	O	CYS B 635	14.271	-8.566	-2.842	1.00	0.00	A	O
ATOM	4027	N	LEU B 636	14.176	-9.642	-0.860	1.00	0.00	A	N
ATOM	4028	CA	LEU B 636	12.764	-9.432	-0.732	1.00	0.00	A	C
ATOM	4029	CB	LEU B 636	12.153	-10.080	0.521	1.00	0.00	A	C
ATOM	4030	CG	LEU B 636	12.148	-11.616	0.467	1.00	0.00	A	C
ATOM	4031	CD1	LEU B 636	11.475	-12.215	1.712	1.00	0.00	A	C
ATOM	4032	CD2	LEU B 636	11.538	-12.125	-0.852	1.00	0.00	A	C
ATOM	4033	C	LEU B 636	12.517	-7.964	-0.655	1.00	0.00	A	C
ATOM	4034	O	LEU B 636	11.545	-7.459	-1.216	1.00	0.00	A	O
ATOM	4035	N	GLU B 637	13.396	-7.235	0.051	1.00	0.00	A	N
ATOM	4036	CA	GLU B 637	13.211	-5.825	0.200	1.00	0.00	A	C
ATOM	4037	CB	GLU B 637	14.282	-5.197	1.108	1.00	0.00	A	C
ATOM	4038	CG	GLU B 637	13.780	-4.007	1.931	1.00	0.00	A	C
ATOM	4039	CD	GLU B 637	13.090	-3.016	1.013	1.00	0.00	A	C
ATOM	4040	OE1	GLU B 637	13.758	-2.518	0.068	1.00	0.00	A	O
ATOM	4041	OE2	GLU B 637	11.883	-2.746	1.246	1.00	0.00	A	O
ATOM	4042	C	GLU B 637	13.321	-5.204	-1.165	1.00	0.00	A	C
ATOM	4043	O	GLU B 637	12.552	-4.308	-1.509	1.00	0.00	A	O
ATOM	4044	N	LEU B 638	14.293	-5.670	-1.977	1.00	0.00	A	N
ATOM	4045	CA	LEU B 638	14.533	-5.153	-3.302	1.00	0.00	A	C
ATOM	4046	CB	LEU B 638	15.787	-5.739	-3.974	1.00	0.00	A	C

ATOM	4047	CG	LEU B 638	17.113	-5.336	-3.307	1.00	0.00	A	C
ATOM	4048	CD1	LEU B 638	18.311	-5.876	-4.105	1.00	0.00	A	C
ATOM	4049	CD2	LEU B 638	17.182	-3.818	-3.075	1.00	0.00	A	C
ATOM	4050	C	LEU B 638	13.389	-5.464	-4.216	1.00	0.00	A	C
ATOM	4051	O	LEU B 638	12.982	-4.626	-5.018	1.00	0.00	A	O
ATOM	4052	N	PHE B 639	12.843	-6.688	-4.115	1.00	0.00	A	N
ATOM	4053	CA	PHE B 639	11.783	-7.136	-4.975	1.00	0.00	A	C
ATOM	4054	CB	PHE B 639	11.369	-8.590	-4.688	1.00	0.00	A	C
ATOM	4055	CG	PHE B 639	10.277	-8.957	-5.633	1.00	0.00	A	C
ATOM	4056	CD1	PHE B 639	10.580	-9.400	-6.900	1.00	0.00	A	C
ATOM	4057	CE1	PHE B 639	9.584	-9.740	-7.785	1.00	0.00	A	C
ATOM	4058	CZ	PHE B 639	8.267	-9.641	-7.411	1.00	0.00	A	C
ATOM	4059	CD2	PHE B 639	8.956	-8.853	-5.268	1.00	0.00	A	C
ATOM	4060	CE2	PHE B 639	7.957	-9.195	-6.151	1.00	0.00	A	C
ATOM	4061	C	PHE B 639	10.602	-6.254	-4.741	1.00	0.00	A	C
ATOM	4062	O	PHE B 639	9.869	-5.918	-5.672	1.00	0.00	A	O
ATOM	4063	N	LYS B 640	10.394	-5.844	-3.476	1.00	0.00	A	N
ATOM	4064	CA	LYS B 640	9.278	-5.014	-3.125	1.00	0.00	A	C
ATOM	4065	CB	LYS B 640	9.339	-4.526	-1.667	1.00	0.00	A	C
ATOM	4066	CG	LYS B 640	9.322	-5.631	-0.611	1.00	0.00	A	C
ATOM	4067	CD	LYS B 640	9.759	-5.127	0.767	1.00	0.00	A	C
ATOM	4068	CE	LYS B 640	9.760	-6.196	1.860	1.00	0.00	A	C
ATOM	4069	NZ	LYS B 640	10.329	-5.631	3.104	1.00	0.00	A	N
ATOM	4070	C	LYS B 640	9.379	-3.775	-3.949	1.00	0.00	A	C
ATOM	4071	O	LYS B 640	8.384	-3.285	-4.481	1.00	0.00	A	O
ATOM	4072	N	PHE B 641	10.603	-3.235	-4.071	1.00	0.00	A	N
ATOM	4073	CA	PHE B 641	10.815	-2.032	-4.820	1.00	0.00	A	C
ATOM	4074	CB	PHE B 641	12.246	-1.475	-4.711	1.00	0.00	A	C
ATOM	4075	CG	PHE B 641	12.279	-0.625	-3.491	1.00	0.00	A	C
ATOM	4076	CD1	PHE B 641	11.965	0.712	-3.587	1.00	0.00	A	C
ATOM	4077	CE1	PHE B 641	11.984	1.519	-2.479	1.00	0.00	A	C
ATOM	4078	CZ	PHE B 641	12.313	0.998	-1.254	1.00	0.00	A	C
ATOM	4079	CD2	PHE B 641	12.604	-1.146	-2.261	1.00	0.00	A	C
ATOM	4080	CE2	PHE B 641	12.623	-0.336	-1.148	1.00	0.00	A	C
ATOM	4081	C	PHE B 641	10.498	-2.236	-6.269	1.00	0.00	A	C
ATOM	4082	O	PHE B 641	9.910	-1.359	-6.903	1.00	0.00	A	O
ATOM	4083	N	THR B 642	10.882	-3.390	-6.843	1.00	0.00	A	N
ATOM	4084	CA	THR B 642	10.658	-3.622	-8.244	1.00	0.00	A	C

ATOM	4085	CB	THR B 642	11.308	-4.880	-8.731	1.00	0.00	A	C
ATOM	4086	OG1	THR B 642	10.704	-6.030	-8.163	1.00	0.00	A	O
ATOM	4087	CG2	THR B 642	12.775	-4.806	-8.291	1.00	0.00	A	C
ATOM	4088	C	THR B 642	9.185	-3.679	-8.512	1.00	0.00	A	C
ATOM	4089	O	THR B 642	8.709	-3.212	-9.545	1.00	0.00	A	O
ATOM	4090	N	ILE B 643	8.429	-4.247	-7.556	1.00	0.00	A	N
ATOM	4091	CA	ILE B 643	7.002	-4.380	-7.621	1.00	0.00	A	C
ATOM	4092	CB	ILE B 643	6.428	-4.990	-6.371	1.00	0.00	A	C
ATOM	4093	CG2	ILE B 643	4.896	-4.987	-6.499	1.00	0.00	A	C
ATOM	4094	CG1	ILE B 643	7.014	-6.389	-6.126	1.00	0.00	A	C
ATOM	4095	CD	ILE B 643	6.723	-6.931	-4.725	1.00	0.00	A	C
ATOM	4096	C	ILE B 643	6.443	-2.995	-7.719	1.00	0.00	A	C
ATOM	4097	O	ILE B 643	5.410	-2.773	-8.347	1.00	0.00	A	O
ATOM	4098	N	GLY B 644	7.112	-2.018	-7.072	1.00	0.00	A	N
ATOM	4099	CA	GLY B 644	6.645	-0.664	-7.126	1.00	0.00	A	C
ATOM	4100	C	GLY B 644	6.137	-0.239	-5.788	1.00	0.00	A	C
ATOM	4101	O	GLY B 644	5.711	0.902	-5.617	1.00	0.00	A	O
ATOM	4102	N	MET B 645	6.147	-1.147	-4.796	1.00	0.00	A	N
ATOM	4103	CA	MET B 645	5.716	-0.737	-3.493	1.00	0.00	A	C
ATOM	4104	CB	MET B 645	4.723	-1.725	-2.857	1.00	0.00	A	C
ATOM	4105	CG	MET B 645	5.260	-3.154	-2.774	1.00	0.00	A	C
ATOM	4106	SD	MET B 645	4.073	-4.359	-2.111	1.00	0.00	A	S
ATOM	4107	CE	MET B 645	2.951	-4.233	-3.532	1.00	0.00	A	C
ATOM	4108	C	MET B 645	6.933	-0.654	-2.629	1.00	0.00	A	C
ATOM	4109	O	MET B 645	7.687	-1.619	-2.510	1.00	0.00	A	O
ATOM	4110	N	GLY B 646	7.164	0.518	-2.004	1.00	0.00	A	N
ATOM	4111	CA	GLY B 646	8.326	0.644	-1.170	1.00	0.00	A	C
ATOM	4112	C	GLY B 646	8.244	1.917	-0.387	1.00	0.00	A	C
ATOM	4113	O	GLY B 646	7.496	2.835	-0.722	1.00	0.00	A	O
ATOM	4114	N	ASP B 647	9.030	1.982	0.707	1.00	0.00	A	N
ATOM	4115	CA	ASP B 647	9.115	3.157	1.529	1.00	0.00	A	C
ATOM	4116	CB	ASP B 647	9.051	2.856	3.031	1.00	0.00	A	C
ATOM	4117	CG	ASP B 647	7.703	2.262	3.399	1.00	0.00	A	C
ATOM	4118	OD1	ASP B 647	6.720	2.484	2.644	1.00	0.00	A	O
ATOM	4119	OD2	ASP B 647	7.646	1.565	4.449	1.00	0.00	A	O
ATOM	4120	C	ASP B 647	10.476	3.713	1.253	1.00	0.00	A	C
ATOM	4121	O	ASP B 647	11.469	2.991	1.320	1.00	0.00	A	O
ATOM	4122	N	LEU B 648	10.577	5.021	0.942	1.00	0.00	A	N

ATOM	4123	CA	LEU B 648	11.858	5.508	0.515	1.00	0.00	A	C
ATOM	4124	CB	LEU B 648	11.829	6.283	-0.816	1.00	0.00	A	C
ATOM	4125	CG	LEU B 648	11.531	5.429	-2.062	1.00	0.00	A	C
ATOM	4126	CD1	LEU B 648	12.632	4.387	-2.289	1.00	0.00	A	C
ATOM	4127	CD2	LEU B 648	10.120	4.825	-2.022	1.00	0.00	A	C
ATOM	4128	C	LEU B 648	12.502	6.428	1.505	1.00	0.00	A	C
ATOM	4129	O	LEU B 648	11.859	7.072	2.331	1.00	0.00	A	O
ATOM	4130	N	GLU B 649	13.848	6.464	1.414	1.00	0.00	A	N
ATOM	4131	CA	GLU B 649	14.735	7.355	2.104	1.00	0.00	A	C
ATOM	4132	CB	GLU B 649	14.600	8.816	1.638	1.00	0.00	A	C
ATOM	4133	CG	GLU B 649	15.017	9.043	0.185	1.00	0.00	A	C
ATOM	4134	CD	GLU B 649	16.521	8.849	0.099	1.00	0.00	A	C
ATOM	4135	OE1	GLU B 649	16.954	7.675	-0.057	1.00	0.00	A	O
ATOM	4136	OE2	GLU B 649	17.254	9.868	0.195	1.00	0.00	A	O
ATOM	4137	C	GLU B 649	14.545	7.355	3.588	1.00	0.00	A	C
ATOM	4138	O	GLU B 649	14.590	8.423	4.197	1.00	0.00	A	O
ATOM	4139	N	PHE B 650	14.356	6.184	4.231	1.00	0.00	A	N
ATOM	4140	CA	PHE B 650	14.274	6.242	5.668	1.00	0.00	A	C
ATOM	4141	CB	PHE B 650	14.148	4.886	6.379	1.00	0.00	A	C
ATOM	4142	CG	PHE B 650	12.794	4.318	6.177	1.00	0.00	A	C
ATOM	4143	CD1	PHE B 650	12.544	3.523	5.089	1.00	0.00	A	C
ATOM	4144	CE1	PHE B 650	11.296	2.989	4.907	1.00	0.00	A	C
ATOM	4145	CZ	PHE B 650	10.286	3.241	5.804	1.00	0.00	A	C
ATOM	4146	CD2	PHE B 650	11.785	4.570	7.079	1.00	0.00	A	C
ATOM	4147	CE2	PHE B 650	10.532	4.037	6.895	1.00	0.00	A	C
ATOM	4148	C	PHE B 650	15.593	6.765	6.137	1.00	0.00	A	C
ATOM	4149	O	PHE B 650	15.669	7.686	6.948	1.00	0.00	A	O
ATOM	4150	N	THR B 651	16.673	6.153	5.622	1.00	0.00	A	N
ATOM	4151	CA	THR B 651	18.016	6.577	5.888	1.00	0.00	A	C
ATOM	4152	CB	THR B 651	18.145	8.065	5.754	1.00	0.00	A	C
ATOM	4153	OG1	THR B 651	17.788	8.470	4.445	1.00	0.00	A	O
ATOM	4154	CG2	THR B 651	19.580	8.503	6.100	1.00	0.00	A	C
ATOM	4155	C	THR B 651	18.430	6.250	7.286	1.00	0.00	A	C
ATOM	4156	O	THR B 651	19.628	6.181	7.558	1.00	0.00	A	O
ATOM	4157	N	GLU B 652	17.493	5.877	8.168	1.00	0.00	A	N
ATOM	4158	CA	GLU B 652	17.884	5.726	9.540	1.00	0.00	A	C
ATOM	4159	CB	GLU B 652	16.712	5.359	10.447	1.00	0.00	A	C
ATOM	4160	CG	GLU B 652	15.590	6.385	10.365	1.00	0.00	A	C

ATOM	4161	CD	GLU B 652	14.513	5.912	11.311	1.00	0.00	A	C
ATOM	4162	OE1	GLU B 652	14.634	6.247	12.517	1.00	0.00	A	O
ATOM	4163	OE2	GLU B 652	13.572	5.206	10.858	1.00	0.00	A	O
ATOM	4164	C	GLU B 652	18.907	4.647	9.675	1.00	0.00	A	C
ATOM	4165	O	GLU B 652	18.746	3.548	9.148	1.00	0.00	A	O
ATOM	4166	N	ASN B 653	19.985	4.954	10.426	1.00	0.00	A	N
ATOM	4167	CA	ASN B 653	21.070	4.039	10.649	1.00	0.00	A	C
ATOM	4168	CB	ASN B 653	20.585	2.713	11.237	1.00	0.00	A	C
ATOM	4169	CG	ASN B 653	19.787	3.078	12.466	1.00	0.00	A	C
ATOM	4170	OD1	ASN B 653	20.334	3.364	13.525	1.00	0.00	A	O
ATOM	4171	ND2	ASN B 653	18.437	3.099	12.298	1.00	0.00	A	N
ATOM	4172	C	ASN B 653	21.729	3.700	9.349	1.00	0.00	A	C
ATOM	4173	O	ASN B 653	22.140	2.558	9.142	1.00	0.00	A	O
ATOM	4174	N	TYR B 654	21.875	4.681	8.439	1.00	0.00	A	N
ATOM	4175	CA	TYR B 654	22.486	4.366	7.177	1.00	0.00	A	C
ATOM	4176	CB	TYR B 654	21.598	4.634	5.943	1.00	0.00	A	C
ATOM	4177	CG	TYR B 654	20.587	3.543	5.787	1.00	0.00	A	C
ATOM	4178	CD1	TYR B 654	20.898	2.391	5.109	1.00	0.00	A	C
ATOM	4179	CE1	TYR B 654	19.965	1.392	4.961	1.00	0.00	A	C
ATOM	4180	CZ	TYR B 654	18.703	1.529	5.487	1.00	0.00	A	C
ATOM	4181	OH	TYR B 654	17.751	0.499	5.329	1.00	0.00	A	O
ATOM	4182	CD2	TYR B 654	19.322	3.656	6.304	1.00	0.00	A	C
ATOM	4183	CE2	TYR B 654	18.375	2.671	6.168	1.00	0.00	A	C
ATOM	4184	C	TYR B 654	23.747	5.151	6.990	1.00	0.00	A	C
ATOM	4185	O	TYR B 654	23.823	6.346	7.274	1.00	0.00	A	O
ATOM	4186	N	ASP B 655	24.783	4.450	6.495	1.00	0.00	A	N
ATOM	4187	CA	ASP B 655	26.079	4.994	6.237	1.00	0.00	A	C
ATOM	4188	CB	ASP B 655	27.239	4.080	6.651	1.00	0.00	A	C
ATOM	4189	CG	ASP B 655	27.272	4.053	8.168	1.00	0.00	A	C
ATOM	4190	OD1	ASP B 655	26.297	4.551	8.791	1.00	0.00	A	O
ATOM	4191	OD2	ASP B 655	28.279	3.544	8.722	1.00	0.00	A	O
ATOM	4192	C	ASP B 655	26.191	5.180	4.772	1.00	0.00	A	C
ATOM	4193	O	ASP B 655	25.732	4.352	3.984	1.00	0.00	A	O
ATOM	4194	N	PHE B 656	26.860	6.273	4.372	1.00	0.00	A	N
ATOM	4195	CA	PHE B 656	26.953	6.560	2.983	1.00	0.00	A	C
ATOM	4196	CB	PHE B 656	27.552	5.402	2.177	1.00	0.00	A	C
ATOM	4197	CG	PHE B 656	28.214	4.493	3.143	1.00	0.00	A	C
ATOM	4198	CD1	PHE B 656	29.450	4.788	3.661	1.00	0.00	A	C

ATOM	4199	CE1	PHE B 656	30.047	3.930	4.553	1.00	0.00	A	C
ATOM	4200	CZ	PHE B 656	29.404	2.775	4.927	1.00	0.00	A	C
ATOM	4201	CD2	PHE B 656	27.576	3.333	3.520	1.00	0.00	A	C
ATOM	4202	CE2	PHE B 656	28.167	2.473	4.410	1.00	0.00	A	C
ATOM	4203	C	PHE B 656	25.552	6.673	2.525	1.00	0.00	A	C
ATOM	4204	O	PHE B 656	25.217	6.158	1.472	1.00	0.00	A	O
ATOM	4205	N	LYS B 657	24.669	7.293	3.321	1.00	0.00	A	N
ATOM	4206	CA	LYS B 657	23.305	7.414	2.906	1.00	0.00	A	C
ATOM	4207	CB	LYS B 657	22.367	8.005	3.961	1.00	0.00	A	C
ATOM	4208	CG	LYS B 657	20.903	7.857	3.550	1.00	0.00	A	C
ATOM	4209	CD	LYS B 657	20.450	6.395	3.527	1.00	0.00	A	C
ATOM	4210	CE	LYS B 657	18.988	6.200	3.124	1.00	0.00	A	C
ATOM	4211	NZ	LYS B 657	18.627	4.769	3.235	1.00	0.00	A	N
ATOM	4212	C	LYS B 657	23.249	8.320	1.728	1.00	0.00	A	C
ATOM	4213	O	LYS B 657	22.416	8.151	0.848	1.00	0.00	A	O
ATOM	4214	N	ALA B 658	24.111	9.344	1.685	1.00	0.00	A	N
ATOM	4215	CA	ALA B 658	24.054	10.206	0.546	1.00	0.00	A	C
ATOM	4216	CB	ALA B 658	25.073	11.353	0.607	1.00	0.00	A	C
ATOM	4217	C	ALA B 658	24.388	9.381	-0.652	1.00	0.00	A	C
ATOM	4218	O	ALA B 658	23.746	9.504	-1.695	1.00	0.00	A	O
ATOM	4219	N	VAL B 659	25.415	8.515	-0.542	1.00	0.00	A	N
ATOM	4220	CA	VAL B 659	25.753	7.713	-1.679	1.00	0.00	A	C
ATOM	4221	CB	VAL B 659	27.036	6.925	-1.585	1.00	0.00	A	C
ATOM	4222	CG1	VAL B 659	28.190	7.871	-1.227	1.00	0.00	A	C
ATOM	4223	CG2	VAL B 659	26.851	5.711	-0.669	1.00	0.00	A	C
ATOM	4224	C	VAL B 659	24.657	6.712	-1.896	1.00	0.00	A	C
ATOM	4225	O	VAL B 659	24.361	6.337	-3.025	1.00	0.00	A	O
ATOM	4226	N	PHE B 660	24.060	6.234	-0.792	1.00	0.00	A	N
ATOM	4227	CA	PHE B 660	23.073	5.193	-0.722	1.00	0.00	A	C
ATOM	4228	CB	PHE B 660	22.731	4.791	0.728	1.00	0.00	A	C
ATOM	4229	CG	PHE B 660	21.681	3.724	0.714	1.00	0.00	A	C
ATOM	4230	CD1	PHE B 660	20.346	4.053	0.668	1.00	0.00	A	C
ATOM	4231	CE1	PHE B 660	19.373	3.080	0.657	1.00	0.00	A	C
ATOM	4232	CZ	PHE B 660	19.730	1.755	0.696	1.00	0.00	A	C
ATOM	4233	CD2	PHE B 660	22.030	2.393	0.755	1.00	0.00	A	C
ATOM	4234	CE2	PHE B 660	21.060	1.415	0.746	1.00	0.00	A	C
ATOM	4235	C	PHE B 660	21.809	5.607	-1.385	1.00	0.00	A	C
ATOM	4236	O	PHE B 660	21.243	4.868	-2.183	1.00	0.00	A	O

ATOM	4237	N	ILE B 661	21.343	6.820	-1.077	1.00	0.00	A	N
ATOM	4238	CA	ILE B 661	20.118	7.338	-1.588	1.00	0.00	A	C
ATOM	4239	CB	ILE B 661	19.857	8.708	-1.033	1.00	0.00	A	C
ATOM	4240	CG2	ILE B 661	19.653	8.578	0.487	1.00	0.00	A	C
ATOM	4241	CG1	ILE B 661	21.019	9.635	-1.417	1.00	0.00	A	C
ATOM	4242	CD	ILE B 661	20.847	11.080	-0.989	1.00	0.00	A	C
ATOM	4243	C	ILE B 661	20.269	7.389	-3.066	1.00	0.00	A	C
ATOM	4244	O	ILE B 661	19.369	7.000	-3.804	1.00	0.00	A	O
ATOM	4245	N	ILE B 662	21.446	7.827	-3.536	1.00	0.00	A	N
ATOM	4246	CA	ILE B 662	21.684	7.931	-4.938	1.00	0.00	A	C
ATOM	4247	CB	ILE B 662	23.047	8.484	-5.223	1.00	0.00	A	C
ATOM	4248	CG2	ILE B 662	23.254	8.492	-6.745	1.00	0.00	A	C
ATOM	4249	CG1	ILE B 662	23.174	9.873	-4.578	1.00	0.00	A	C
ATOM	4250	CD	ILE B 662	24.611	10.366	-4.463	1.00	0.00	A	C
ATOM	4251	C	ILE B 662	21.592	6.558	-5.525	1.00	0.00	A	C
ATOM	4252	O	ILE B 662	21.020	6.367	-6.596	1.00	0.00	A	O
ATOM	4253	N	LEU B 663	22.151	5.559	-4.819	1.00	0.00	A	N
ATOM	4254	CA	LEU B 663	22.176	4.203	-5.283	1.00	0.00	A	C
ATOM	4255	CB	LEU B 663	22.975	3.309	-4.313	1.00	0.00	A	C
ATOM	4256	CG	LEU B 663	23.079	1.825	-4.707	1.00	0.00	A	C
ATOM	4257	CD1	LEU B 663	21.753	1.081	-4.477	1.00	0.00	A	C
ATOM	4258	CD2	LEU B 663	23.604	1.673	-6.140	1.00	0.00	A	C
ATOM	4259	C	LEU B 663	20.767	3.703	-5.405	1.00	0.00	A	C
ATOM	4260	O	LEU B 663	20.420	3.005	-6.359	1.00	0.00	A	O
ATOM	4261	N	LEU B 664	19.909	4.050	-4.431	1.00	0.00	A	N
ATOM	4262	CA	LEU B 664	18.553	3.590	-4.418	1.00	0.00	A	C
ATOM	4263	CB	LEU B 664	17.866	3.979	-3.095	1.00	0.00	A	C
ATOM	4264	CG	LEU B 664	16.520	3.290	-2.834	1.00	0.00	A	C
ATOM	4265	CD1	LEU B 664	15.449	3.757	-3.825	1.00	0.00	A	C
ATOM	4266	CD2	LEU B 664	16.675	1.761	-2.798	1.00	0.00	A	C
ATOM	4267	C	LEU B 664	17.832	4.186	-5.586	1.00	0.00	A	C
ATOM	4268	O	LEU B 664	17.066	3.508	-6.272	1.00	0.00	A	O
ATOM	4269	N	LEU B 665	18.076	5.482	-5.864	1.00	0.00	A	N
ATOM	4270	CA	LEU B 665	17.424	6.106	-6.976	1.00	0.00	A	C
ATOM	4271	CB	LEU B 665	17.678	7.619	-7.087	1.00	0.00	A	C
ATOM	4272	CG	LEU B 665	16.801	8.466	-6.137	1.00	0.00	A	C
ATOM	4273	CD1	LEU B 665	17.021	8.114	-4.660	1.00	0.00	A	C
ATOM	4274	CD2	LEU B 665	16.973	9.965	-6.417	1.00	0.00	A	C

ATOM	4275	C	LEU B 665	17.856	5.446	-8.243	1.00	0.00	A	C
ATOM	4276	O	LEU B 665	17.040	5.220	-9.133	1.00	0.00	A	O
ATOM	4277	N	ALA B 666	19.153	5.109	-8.368	1.00	0.00	A	N
ATOM	4278	CA	ALA B 666	19.623	4.521	-9.587	1.00	0.00	A	C
ATOM	4279	CB	ALA B 666	21.143	4.282	-9.576	1.00	0.00	A	C
ATOM	4280	C	ALA B 666	18.971	3.190	-9.823	1.00	0.00	A	C
ATOM	4281	O	ALA B 666	18.491	2.919	-10.921	1.00	0.00	A	O
ATOM	4282	N	TYR B 667	18.946	2.317	-8.798	1.00	0.00	A	N
ATOM	4283	CA	TYR B 667	18.410	0.997	-8.979	1.00	0.00	A	C
ATOM	4284	CB	TYR B 667	18.744	0.063	-7.804	1.00	0.00	A	C
ATOM	4285	CG	TYR B 667	18.093	-1.251	-8.058	1.00	0.00	A	C
ATOM	4286	CD1	TYR B 667	18.505	-2.046	-9.100	1.00	0.00	A	C
ATOM	4287	CE1	TYR B 667	17.915	-3.265	-9.332	1.00	0.00	A	C
ATOM	4288	CZ	TYR B 667	16.905	-3.702	-8.515	1.00	0.00	A	C
ATOM	4289	OH	TYR B 667	16.300	-4.953	-8.754	1.00	0.00	A	O
ATOM	4290	CD2	TYR B 667	17.081	-1.699	-7.240	1.00	0.00	A	C
ATOM	4291	CE2	TYR B 667	16.486	-2.916	-7.467	1.00	0.00	A	C
ATOM	4292	C	TYR B 667	16.926	1.014	-9.157	1.00	0.00	A	C
ATOM	4293	O	TYR B 667	16.399	0.390	-10.076	1.00	0.00	A	O
ATOM	4294	N	VAL B 668	16.208	1.736	-8.281	1.00	0.00	A	N
ATOM	4295	CA	VAL B 668	14.777	1.708	-8.341	1.00	0.00	A	C
ATOM	4296	CB	VAL B 668	14.122	2.446	-7.214	1.00	0.00	A	C
ATOM	4297	CG1	VAL B 668	12.601	2.418	-7.436	1.00	0.00	A	C
ATOM	4298	CG2	VAL B 668	14.574	1.814	-5.886	1.00	0.00	A	C
ATOM	4299	C	VAL B 668	14.299	2.328	-9.612	1.00	0.00	A	C
ATOM	4300	O	VAL B 668	13.448	1.767	-10.302	1.00	0.00	A	O
ATOM	4301	N	ILE B 669	14.850	3.500	-9.975	1.00	0.00	A	N
ATOM	4302	CA	ILE B 669	14.313	4.170	-11.121	1.00	0.00	A	C
ATOM	4303	CB	ILE B 669	14.891	5.547	-11.354	1.00	0.00	A	C
ATOM	4304	CG2	ILE B 669	14.627	6.352	-10.068	1.00	0.00	A	C
ATOM	4305	CG1	ILE B 669	16.372	5.531	-11.774	1.00	0.00	A	C
ATOM	4306	CD	ILE B 669	16.588	5.287	-13.269	1.00	0.00	A	C
ATOM	4307	C	ILE B 669	14.541	3.309	-12.319	1.00	0.00	A	C
ATOM	4308	O	ILE B 669	13.637	3.111	-13.128	1.00	0.00	A	O
ATOM	4309	N	LEU B 670	15.749	2.735	-12.441	1.00	0.00	A	N
ATOM	4310	CA	LEU B 670	16.076	1.955	-13.598	1.00	0.00	A	C
ATOM	4311	CB	LEU B 670	17.509	1.392	-13.535	1.00	0.00	A	C
ATOM	4312	CG	LEU B 670	17.826	0.379	-14.653	1.00	0.00	A	C

ATOM	4313	CD1	LEU	B	670	17.726	1.029	-16.040	1.00	0.00	A	C
ATOM	4314	CD2	LEU	B	670	19.176	-0.321	-14.421	1.00	0.00	A	C
ATOM	4315	C	LEU	B	670	15.164	0.778	-13.689	1.00	0.00	A	C
ATOM	4316	O	LEU	B	670	14.599	0.504	-14.748	1.00	0.00	A	O
ATOM	4317	N	THR	B	671	14.970	0.060	-12.567	1.00	0.00	A	N
ATOM	4318	CA	THR	B	671	14.218	-1.158	-12.658	1.00	0.00	A	C
ATOM	4319	CB	THR	B	671	14.179	-1.975	-11.394	1.00	0.00	A	C
ATOM	4320	OG1	THR	B	671	13.382	-1.358	-10.396	1.00	0.00	A	O
ATOM	4321	CG2	THR	B	671	15.615	-2.116	-10.888	1.00	0.00	A	C
ATOM	4322	C	THR	B	671	12.810	-0.864	-13.037	1.00	0.00	A	C
ATOM	4323	O	THR	B	671	12.229	-1.546	-13.881	1.00	0.00	A	O
ATOM	4324	N	TYR	B	672	12.205	0.155	-12.412	1.00	0.00	A	N
ATOM	4325	CA	TYR	B	672	10.838	0.436	-12.726	1.00	0.00	A	C
ATOM	4326	CB	TYR	B	672	10.250	1.534	-11.818	1.00	0.00	A	C
ATOM	4327	CG	TYR	B	672	8.831	1.782	-12.207	1.00	0.00	A	C
ATOM	4328	CD1	TYR	B	672	7.832	0.900	-11.851	1.00	0.00	A	C
ATOM	4329	CE1	TYR	B	672	6.526	1.137	-12.209	1.00	0.00	A	C
ATOM	4330	CZ	TYR	B	672	6.203	2.270	-12.925	1.00	0.00	A	C
ATOM	4331	OH	TYR	B	672	4.865	2.523	-13.299	1.00	0.00	A	O
ATOM	4332	CD2	TYR	B	672	8.495	2.913	-12.910	1.00	0.00	A	C
ATOM	4333	CE2	TYR	B	672	7.190	3.156	-13.272	1.00	0.00	A	C
ATOM	4334	C	TYR	B	672	10.779	0.895	-14.140	1.00	0.00	A	C
ATOM	4335	O	TYR	B	672	9.937	0.454	-14.922	1.00	0.00	A	O
ATOM	4336	N	ILE	B	673	11.698	1.805	-14.506	1.00	0.00	A	N
ATOM	4337	CA	ILE	B	673	11.611	2.381	-15.803	1.00	0.00	A	C
ATOM	4338	CB	ILE	B	673	12.444	3.625	-15.925	1.00	0.00	A	C
ATOM	4339	CG2	ILE	B	673	13.936	3.262	-15.859	1.00	0.00	A	C
ATOM	4340	CG1	ILE	B	673	12.030	4.390	-17.185	1.00	0.00	A	C
ATOM	4341	CD	ILE	B	673	10.595	4.910	-17.113	1.00	0.00	A	C
ATOM	4342	C	ILE	B	673	11.941	1.432	-16.923	1.00	0.00	A	C
ATOM	4343	O	ILE	B	673	11.156	1.311	-17.858	1.00	0.00	A	O
ATOM	4344	N	LEU	B	674	13.122	0.774	-16.910	1.00	0.00	A	N
ATOM	4345	CA	LEU	B	674	13.467	-0.059	-18.034	1.00	0.00	A	C
ATOM	4346	CB	LEU	B	674	14.986	-0.189	-18.218	1.00	0.00	A	C
ATOM	4347	CG	LEU	B	674	15.652	1.171	-18.483	1.00	0.00	A	C
ATOM	4348	CD1	LEU	B	674	17.111	1.000	-18.926	1.00	0.00	A	C
ATOM	4349	CD2	LEU	B	674	14.822	2.018	-19.458	1.00	0.00	A	C
ATOM	4350	C	LEU	B	674	12.880	-1.444	-18.041	1.00	0.00	A	C

ATOM	4351	O	LEU B 674	12.230	-1.845	-19.004	1.00	0.00	A	O
ATOM	4352	N	LEU B 675	13.093	-2.210	-16.952	1.00	0.00	A	N
ATOM	4353	CA	LEU B 675	12.745	-3.609	-16.916	1.00	0.00	A	C
ATOM	4354	CB	LEU B 675	13.186	-4.278	-15.601	1.00	0.00	A	C
ATOM	4355	CG	LEU B 675	14.687	-4.601	-15.498	1.00	0.00	A	C
ATOM	4356	CD1	LEU B 675	15.060	-5.770	-16.425	1.00	0.00	A	C
ATOM	4357	CD2	LEU B 675	15.552	-3.354	-15.725	1.00	0.00	A	C
ATOM	4358	C	LEU B 675	11.276	-3.848	-17.012	1.00	0.00	A	C
ATOM	4359	O	LEU B 675	10.814	-4.582	-17.885	1.00	0.00	A	O
ATOM	4360	N	LEU B 676	10.500	-3.217	-16.117	1.00	0.00	A	N
ATOM	4361	CA	LEU B 676	9.100	-3.511	-16.073	1.00	0.00	A	C
ATOM	4362	CB	LEU B 676	8.364	-2.845	-14.901	1.00	0.00	A	C
ATOM	4363	CG	LEU B 676	8.686	-3.494	-13.546	1.00	0.00	A	C
ATOM	4364	CD1	LEU B 676	8.200	-4.955	-13.524	1.00	0.00	A	C
ATOM	4365	CD2	LEU B 676	10.169	-3.345	-13.172	1.00	0.00	A	C
ATOM	4366	C	LEU B 676	8.457	-3.071	-17.335	1.00	0.00	A	C
ATOM	4367	O	LEU B 676	7.678	-3.817	-17.926	1.00	0.00	A	O
ATOM	4368	N	ASN B 677	8.783	-1.853	-17.794	1.00	0.00	A	N
ATOM	4369	CA	ASN B 677	8.185	-1.331	-18.983	1.00	0.00	A	C
ATOM	4370	CB	ASN B 677	8.630	0.111	-19.277	1.00	0.00	A	C
ATOM	4371	CG	ASN B 677	8.156	0.972	-18.116	1.00	0.00	A	C
ATOM	4372	OD1	ASN B 677	7.346	0.537	-17.300	1.00	0.00	A	O
ATOM	4373	ND2	ASN B 677	8.665	2.230	-18.038	1.00	0.00	A	N
ATOM	4374	C	ASN B 677	8.618	-2.185	-20.127	1.00	0.00	A	C
ATOM	4375	O	ASN B 677	7.822	-2.502	-21.009	1.00	0.00	A	O
ATOM	4376	N	MET B 678	9.902	-2.582	-20.137	1.00	0.00	A	N
ATOM	4377	CA	MET B 678	10.433	-3.378	-21.204	1.00	0.00	A	C
ATOM	4378	CB	MET B 678	11.926	-3.693	-21.008	1.00	0.00	A	C
ATOM	4379	CG	MET B 678	12.528	-4.611	-22.075	1.00	0.00	A	C
ATOM	4380	SD	MET B 678	14.336	-4.789	-21.968	1.00	0.00	A	S
ATOM	4381	CE	MET B 678	14.333	-5.621	-20.353	1.00	0.00	A	C
ATOM	4382	C	MET B 678	9.716	-4.686	-21.256	1.00	0.00	A	C
ATOM	4383	O	MET B 678	9.318	-5.130	-22.329	1.00	0.00	A	O
ATOM	4384	N	LEU B 679	9.522	-5.350	-20.099	1.00	0.00	A	N
ATOM	4385	CA	LEU B 679	8.874	-6.626	-20.164	1.00	0.00	A	C
ATOM	4386	CB	LEU B 679	8.922	-7.429	-18.842	1.00	0.00	A	C
ATOM	4387	CG	LEU B 679	7.768	-7.214	-17.838	1.00	0.00	A	C
ATOM	4388	CD1	LEU B 679	6.485	-7.953	-18.260	1.00	0.00	A	C

ATOM	4389	CD2 LEU B 679	8.209	-7.584	-16.411	1.00	0.00	A	C
ATOM	4390	C LEU B 679	7.447	-6.426	-20.574	1.00	0.00	A	C
ATOM	4391	O LEU B 679	6.929	-7.150	-21.421	1.00	0.00	A	O
ATOM	4392	N ILE B 680	6.789	-5.406	-19.988	1.00	0.00	A	N
ATOM	4393	CA ILE B 680	5.393	-5.142	-20.206	1.00	0.00	A	C
ATOM	4394	CB ILE B 680	4.863	-4.024	-19.354	1.00	0.00	A	C
ATOM	4395	CG2 ILE B 680	3.413	-3.748	-19.784	1.00	0.00	A	C
ATOM	4396	CG1 ILE B 680	5.000	-4.378	-17.861	1.00	0.00	A	C
ATOM	4397	CD ILE B 680	4.263	-5.652	-17.457	1.00	0.00	A	C
ATOM	4398	C ILE B 680	5.165	-4.791	-21.642	1.00	0.00	A	C
ATOM	4399	O ILE B 680	4.167	-5.196	-22.237	1.00	0.00	A	O
ATOM	4400	N ALA B 681	6.084	-4.011	-22.235	1.00	0.00	A	N
ATOM	4401	CA ALA B 681	5.957	-3.600	-23.601	1.00	0.00	A	C
ATOM	4402	CB ALA B 681	7.131	-2.726	-24.075	1.00	0.00	A	C
ATOM	4403	C ALA B 681	5.959	-4.843	-24.426	1.00	0.00	A	C
ATOM	4404	O ALA B 681	5.233	-4.954	-25.412	1.00	0.00	A	O
ATOM	4405	N LEU B 682	6.786	-5.815	-24.013	1.00	0.00	A	N
ATOM	4406	CA LEU B 682	6.940	-7.076	-24.676	1.00	0.00	A	C
ATOM	4407	CB LEU B 682	7.946	-7.986	-23.945	1.00	0.00	A	C
ATOM	4408	CG LEU B 682	9.384	-7.440	-23.881	1.00	0.00	A	C
ATOM	4409	CD1 LEU B 682	10.296	-8.381	-23.077	1.00	0.00	A	C
ATOM	4410	CD2 LEU B 682	9.934	-7.154	-25.288	1.00	0.00	A	C
ATOM	4411	C LEU B 682	5.627	-7.807	-24.639	1.00	0.00	A	C
ATOM	4412	O LEU B 682	5.257	-8.479	-25.602	1.00	0.00	A	O
ATOM	4413	N MET B 683	4.876	-7.670	-23.528	1.00	0.00	A	N
ATOM	4414	CA MET B 683	3.668	-8.414	-23.277	1.00	0.00	A	C
ATOM	4415	CB MET B 683	2.977	-7.991	-21.964	1.00	0.00	A	C
ATOM	4416	CG MET B 683	3.736	-8.310	-20.672	1.00	0.00	A	C
ATOM	4417	SD MET B 683	3.664	-10.048	-20.142	1.00	0.00	A	S
ATOM	4418	CE MET B 683	4.095	-9.698	-18.411	1.00	0.00	A	C
ATOM	4419	C MET B 683	2.645	-8.181	-24.349	1.00	0.00	A	C
ATOM	4420	O MET B 683	1.995	-9.121	-24.805	1.00	0.00	A	O
ATOM	4421	N GLY B 684	2.476	-6.931	-24.807	1.00	0.00	A	N
ATOM	4422	CA GLY B 684	1.412	-6.656	-25.729	1.00	0.00	A	C
ATOM	4423	C GLY B 684	1.573	-7.479	-26.968	1.00	0.00	A	C
ATOM	4424	O GLY B 684	0.594	-7.988	-27.507	1.00	0.00	A	O
ATOM	4425	N GLU B 685	2.815	-7.645	-27.448	1.00	0.00	A	N
ATOM	4426	CA GLU B 685	3.061	-8.319	-28.691	1.00	0.00	A	C

ATOM	4427	CB	GLU B 685	4.564	-8.414	-28.987	1.00	0.00	A	C
ATOM	4428	CG	GLU B 685	5.235	-7.051	-29.154	1.00	0.00	A	C
ATOM	4429	CD	GLU B 685	6.742	-7.269	-29.101	1.00	0.00	A	C
ATOM	4430	OE1	GLU B 685	7.273	-7.432	-27.969	1.00	0.00	A	O
ATOM	4431	OE2	GLU B 685	7.380	-7.279	-30.185	1.00	0.00	A	O
ATOM	4432	C	GLU B 685	2.556	-9.725	-28.621	1.00	0.00	A	C
ATOM	4433	O	GLU B 685	1.900	-10.198	-29.548	1.00	0.00	A	O
ATOM	4434	N	THR B 686	2.847	-10.429	-27.512	1.00	0.00	A	N
ATOM	4435	CA	THR B 686	2.449	-11.801	-27.387	1.00	0.00	A	C
ATOM	4436	CB	THR B 686	2.914	-12.440	-26.110	1.00	0.00	A	C
ATOM	4437	OG1	THR B 686	2.311	-11.803	-24.991	1.00	0.00	A	O
ATOM	4438	CG2	THR B 686	4.444	-12.322	-26.032	1.00	0.00	A	C
ATOM	4439	C	THR B 686	0.960	-11.866	-27.391	1.00	0.00	A	C
ATOM	4440	O	THR B 686	0.371	-12.741	-28.023	1.00	0.00	A	O
ATOM	4441	N	VAL B 687	0.314	-10.937	-26.660	1.00	0.00	A	N
ATOM	4442	CA	VAL B 687	-1.116	-10.904	-26.585	1.00	0.00	A	C
ATOM	4443	CB	VAL B 687	-1.633	-9.866	-25.630	1.00	0.00	A	C
ATOM	4444	CG1	VAL B 687	-3.165	-9.815	-25.751	1.00	0.00	A	C
ATOM	4445	CG2	VAL B 687	-1.135	-10.211	-24.217	1.00	0.00	A	C
ATOM	4446	C	VAL B 687	-1.681	-10.589	-27.939	1.00	0.00	A	C
ATOM	4447	O	VAL B 687	-2.677	-11.175	-28.358	1.00	0.00	A	O
ATOM	4448	N	ASN B 688	-1.075	-9.632	-28.659	1.00	0.00	A	N
ATOM	4449	CA	ASN B 688	-1.594	-9.252	-29.941	1.00	0.00	A	C
ATOM	4450	CB	ASN B 688	-0.862	-8.048	-30.564	1.00	0.00	A	C
ATOM	4451	CG	ASN B 688	-1.378	-6.767	-29.921	1.00	0.00	A	C
ATOM	4452	OD1	ASN B 688	-2.490	-6.327	-30.208	1.00	0.00	A	O
ATOM	4453	ND2	ASN B 688	-0.559	-6.148	-29.034	1.00	0.00	A	N
ATOM	4454	C	ASN B 688	-1.469	-10.382	-30.908	1.00	0.00	A	C
ATOM	4455	O	ASN B 688	-2.422	-10.702	-31.619	1.00	0.00	A	O
ATOM	4456	N	LYS B 689	-0.289	-11.025	-30.965	1.00	0.00	A	N
ATOM	4457	CA	LYS B 689	-0.120	-12.055	-31.942	1.00	0.00	A	C
ATOM	4458	CB	LYS B 689	1.326	-12.541	-32.135	1.00	0.00	A	C
ATOM	4459	CG	LYS B 689	1.935	-13.344	-30.991	1.00	0.00	A	C
ATOM	4460	CD	LYS B 689	3.201	-14.065	-31.460	1.00	0.00	A	C
ATOM	4461	CE	LYS B 689	4.053	-14.666	-30.345	1.00	0.00	A	C
ATOM	4462	NZ	LYS B 689	5.307	-15.204	-30.921	1.00	0.00	A	N
ATOM	4463	C	LYS B 689	-1.002	-13.214	-31.619	1.00	0.00	A	C
ATOM	4464	O	LYS B 689	-1.566	-13.834	-32.518	1.00	0.00	A	O

ATOM	4465	N	ILE B 690	-1.155	-13.534	-30.323	1.00	0.00	A	N
ATOM	4466	CA	ILE B 690	-1.995	-14.645	-29.987	1.00	0.00	A	C
ATOM	4467	CB	ILE B 690	-2.003	-15.020	-28.536	1.00	0.00	A	C
ATOM	4468	CG2	ILE B 690	-2.364	-13.803	-27.684	1.00	0.00	A	C
ATOM	4469	CG1	ILE B 690	-2.935	-16.223	-28.341	1.00	0.00	A	C
ATOM	4470	CD	ILE B 690	-2.836	-16.831	-26.949	1.00	0.00	A	C
ATOM	4471	C	ILE B 690	-3.391	-14.354	-30.425	1.00	0.00	A	C
ATOM	4472	O	ILE B 690	-4.100	-15.255	-30.868	1.00	0.00	A	O
ATOM	4473	N	ALA B 691	-3.835	-13.091	-30.283	1.00	0.00	A	N
ATOM	4474	CA	ALA B 691	-5.171	-12.722	-30.661	1.00	0.00	A	C
ATOM	4475	CB	ALA B 691	-5.480	-11.247	-30.356	1.00	0.00	A	C
ATOM	4476	C	ALA B 691	-5.373	-12.931	-32.135	1.00	0.00	A	C
ATOM	4477	O	ALA B 691	-6.401	-13.459	-32.554	1.00	0.00	A	O
ATOM	4478	N	GLN B 692	-4.395	-12.532	-32.974	1.00	0.00	A	N
ATOM	4479	CA	GLN B 692	-4.557	-12.656	-34.399	1.00	0.00	A	C
ATOM	4480	CB	GLN B 692	-3.322	-12.173	-35.167	1.00	0.00	A	C
ATOM	4481	CG	GLN B 692	-2.924	-10.727	-34.901	1.00	0.00	A	C
ATOM	4482	CD	GLN B 692	-1.572	-10.555	-35.564	1.00	0.00	A	C
ATOM	4483	OE1	GLN B 692	-1.388	-10.973	-36.705	1.00	0.00	A	O
ATOM	4484	NE2	GLN B 692	-0.595	-9.956	-34.831	1.00	0.00	A	N
ATOM	4485	C	GLN B 692	-4.656	-14.108	-34.737	1.00	0.00	A	C
ATOM	4486	O	GLN B 692	-5.492	-14.533	-35.535	1.00	0.00	A	O
ATOM	4487	N	GLU B 693	-3.770	-14.895	-34.111	1.00	0.00	A	N
ATOM	4488	CA	GLU B 693	-3.620	-16.306	-34.299	1.00	0.00	A	C
ATOM	4489	CB	GLU B 693	-2.374	-16.850	-33.580	1.00	0.00	A	C
ATOM	4490	CG	GLU B 693	-1.061	-16.307	-34.156	1.00	0.00	A	C
ATOM	4491	CD	GLU B 693	0.079	-16.739	-33.244	1.00	0.00	A	C
ATOM	4492	OE1	GLU B 693	0.282	-16.074	-32.191	1.00	0.00	A	O
ATOM	4493	OE2	GLU B 693	0.762	-17.739	-33.585	1.00	0.00	A	O
ATOM	4494	C	GLU B 693	-4.806	-17.040	-33.758	1.00	0.00	A	C
ATOM	4495	O	GLU B 693	-5.133	-18.104	-34.268	1.00	0.00	A	O
ATOM	4496	N	SER B 694	-5.513	-16.469	-32.765	1.00	0.00	A	N
ATOM	4497	CA	SER B 694	-6.522	-17.084	-31.937	1.00	0.00	A	C
ATOM	4498	CB	SER B 694	-7.369	-16.018	-31.221	1.00	0.00	A	C
ATOM	4499	OG	SER B 694	-6.597	-15.348	-30.241	1.00	0.00	A	O
ATOM	4500	C	SER B 694	-7.498	-17.923	-32.683	1.00	0.00	A	C
ATOM	4501	O	SER B 694	-7.817	-19.016	-32.218	1.00	0.00	A	O
ATOM	4502	N	LYS B 695	-8.033	-17.451	-33.819	1.00	0.00	A	N

ATOM	4503	CA	LYS B 695	-8.978	-18.292	-34.493	1.00	0.00	A	C
ATOM	4504	CB	LYS B 695	-9.442	-17.700	-35.833	1.00	0.00	A	C
ATOM	4505	CG	LYS B 695	-10.428	-16.540	-35.722	1.00	0.00	A	C
ATOM	4506	CD	LYS B 695	-11.788	-16.960	-35.170	1.00	0.00	A	C
ATOM	4507	CE	LYS B 695	-12.881	-15.913	-35.389	1.00	0.00	A	C
ATOM	4508	NZ	LYS B 695	-14.202	-16.509	-35.096	1.00	0.00	A	N
ATOM	4509	C	LYS B 695	-8.258	-19.560	-34.831	1.00	0.00	A	C
ATOM	4510	O	LYS B 695	-8.720	-20.661	-34.530	1.00	0.00	A	O
ATOM	4511	N	ASN B 696	-7.060	-19.398	-35.413	1.00	0.00	A	N
ATOM	4512	CA	ASN B 696	-6.186	-20.440	-35.870	1.00	0.00	A	C
ATOM	4513	CB	ASN B 696	-4.960	-19.865	-36.595	1.00	0.00	A	C
ATOM	4514	CG	ASN B 696	-5.448	-18.932	-37.694	1.00	0.00	A	C
ATOM	4515	OD1	ASN B 696	-6.371	-19.250	-38.441	1.00	0.00	A	O
ATOM	4516	ND2	ASN B 696	-4.821	-17.727	-37.778	1.00	0.00	A	N
ATOM	4517	C	ASN B 696	-5.640	-21.279	-34.746	1.00	0.00	A	C
ATOM	4518	O	ASN B 696	-5.665	-22.506	-34.812	1.00	0.00	A	O
ATOM	4519	N	ILE B 697	-5.114	-20.633	-33.687	1.00	0.00	A	N
ATOM	4520	CA	ILE B 697	-4.494	-21.300	-32.578	1.00	0.00	A	C
ATOM	4521	CB	ILE B 697	-3.906	-20.343	-31.590	1.00	0.00	A	C
ATOM	4522	CG2	ILE B 697	-2.755	-19.572	-32.263	1.00	0.00	A	C
ATOM	4523	CG1	ILE B 697	-5.018	-19.446	-31.043	1.00	0.00	A	C
ATOM	4524	CD	ILE B 697	-4.589	-18.594	-29.868	1.00	0.00	A	C
ATOM	4525	C	ILE B 697	-5.525	-22.126	-31.887	1.00	0.00	A	C
ATOM	4526	O	ILE B 697	-5.273	-23.267	-31.503	1.00	0.00	A	O
ATOM	4527	N	TRP B 698	-6.734	-21.562	-31.746	1.00	0.00	A	N
ATOM	4528	CA	TRP B 698	-7.813	-22.241	-31.111	1.00	0.00	A	C
ATOM	4529	CB	TRP B 698	-9.125	-21.455	-31.255	1.00	0.00	A	C
ATOM	4530	CG	TRP B 698	-10.382	-22.257	-31.017	1.00	0.00	A	C
ATOM	4531	CD1	TRP B 698	-10.997	-22.588	-29.853	1.00	0.00	A	C
ATOM	4532	NE1	TRP B 698	-12.151	-23.289	-30.112	1.00	0.00	A	N
ATOM	4533	CE2	TRP B 698	-12.282	-23.429	-31.475	1.00	0.00	A	C
ATOM	4534	CD2	TRP B 698	-11.191	-22.799	-32.073	1.00	0.00	A	C
ATOM	4535	CE3	TRP B 698	-11.043	-22.772	-33.429	1.00	0.00	A	C
ATOM	4536	CZ3	TRP B 698	-12.013	-23.393	-34.184	1.00	0.00	A	C
ATOM	4537	CZ2	TRP B 698	-13.244	-24.040	-32.225	1.00	0.00	A	C
ATOM	4538	CH2	TRP B 698	-13.091	-24.014	-33.592	1.00	0.00	A	C
ATOM	4539	C	TRP B 698	-8.010	-23.507	-31.860	1.00	0.00	A	C
ATOM	4540	O	TRP B 698	-8.214	-24.563	-31.266	1.00	0.00	A	O

ATOM	4541	N	LYS B 699	-7.959	-23.417	-33.199	1.00	0.00	A	N
ATOM	4542	CA	LYS B 699	-8.259	-24.551	-34.017	1.00	0.00	A	C
ATOM	4543	CB	LYS B 699	-8.395	-24.201	-35.511	1.00	0.00	A	C
ATOM	4544	CG	LYS B 699	-9.346	-25.137	-36.269	1.00	0.00	A	C
ATOM	4545	CD	LYS B 699	-9.037	-26.631	-36.144	1.00	0.00	A	C
ATOM	4546	CE	LYS B 699	-10.109	-27.523	-36.783	1.00	0.00	A	C
ATOM	4547	NZ	LYS B 699	-9.847	-28.947	-36.473	1.00	0.00	A	N
ATOM	4548	C	LYS B 699	-7.241	-25.660	-33.894	1.00	0.00	A	C
ATOM	4549	O	LYS B 699	-7.621	-26.823	-33.780	1.00	0.00	A	O
ATOM	4550	N	LEU B 700	-5.924	-25.352	-33.913	1.00	0.00	A	N
ATOM	4551	CA	LEU B 700	-4.926	-26.398	-33.951	1.00	0.00	A	C
ATOM	4552	CB	LEU B 700	-3.508	-25.878	-34.280	1.00	0.00	A	C
ATOM	4553	CG	LEU B 700	-2.771	-25.078	-33.184	1.00	0.00	A	C
ATOM	4554	CD1	LEU B 700	-2.237	-25.977	-32.054	1.00	0.00	A	C
ATOM	4555	CD2	LEU B 700	-1.662	-24.213	-33.800	1.00	0.00	A	C
ATOM	4556	C	LEU B 700	-4.878	-27.217	-32.696	1.00	0.00	A	C
ATOM	4557	O	LEU B 700	-4.790	-28.446	-32.757	1.00	0.00	A	O
ATOM	4558	N	GLN B 701	-4.938	-26.553	-31.528	1.00	0.00	A	N
ATOM	4559	CA	GLN B 701	-4.840	-27.157	-30.226	1.00	0.00	A	C
ATOM	4560	CB	GLN B 701	-4.739	-26.136	-29.088	1.00	0.00	A	C
ATOM	4561	CG	GLN B 701	-5.966	-25.246	-28.928	1.00	0.00	A	C
ATOM	4562	CD	GLN B 701	-5.661	-24.320	-27.764	1.00	0.00	A	C
ATOM	4563	OE1	GLN B 701	-4.573	-24.384	-27.190	1.00	0.00	A	O
ATOM	4564	NE2	GLN B 701	-6.626	-23.436	-27.402	1.00	0.00	A	N
ATOM	4565	C	GLN B 701	-6.026	-28.030	-29.985	1.00	0.00	A	C
ATOM	4566	O	GLN B 701	-5.923	-29.061	-29.322	1.00	0.00	A	O
ATOM	4567	N	ARG B 702	-7.199	-27.626	-30.492	1.00	0.00	A	N
ATOM	4568	CA	ARG B 702	-8.358	-28.431	-30.269	1.00	0.00	A	C
ATOM	4569	CB	ARG B 702	-9.646	-27.791	-30.824	1.00	0.00	A	C
ATOM	4570	CG	ARG B 702	-10.909	-28.615	-30.555	1.00	0.00	A	C
ATOM	4571	CD	ARG B 702	-12.191	-27.782	-30.474	1.00	0.00	A	C
ATOM	4572	NE	ARG B 702	-12.625	-27.405	-31.847	1.00	0.00	A	N
ATOM	4573	CZ	ARG B 702	-13.884	-26.909	-32.022	1.00	0.00	A	C
ATOM	4574	NH1	ARG B 702	-14.704	-26.747	-30.940	1.00	0.00	A	N
ATOM	4575	NH2	ARG B 702	-14.327	-26.565	-33.263	1.00	0.00	A	N
ATOM	4576	C	ARG B 702	-8.119	-29.760	-30.922	1.00	0.00	A	C
ATOM	4577	O	ARG B 702	-8.392	-30.802	-30.332	1.00	0.00	A	O
ATOM	4578	N	ALA B 703	-7.540	-29.766	-32.135	1.00	0.00	A	N

ATOM	4579	CA	ALA B 703	-7.324	-30.997	-32.841	1.00	0.00	A	C
ATOM	4580	CB	ALA B 703	-6.636	-30.804	-34.202	1.00	0.00	A	C
ATOM	4581	C	ALA B 703	-6.440	-31.875	-32.018	1.00	0.00	A	C
ATOM	4582	O	ALA B 703	-6.633	-33.088	-31.956	1.00	0.00	A	O
ATOM	4583	N	ILE B 704	-5.426	-31.282	-31.365	1.00	0.00	A	N
ATOM	4584	CA	ILE B 704	-4.532	-32.057	-30.561	1.00	0.00	A	C
ATOM	4585	CB	ILE B 704	-3.436	-31.241	-29.941	1.00	0.00	A	C
ATOM	4586	CG2	ILE B 704	-2.680	-32.133	-28.945	1.00	0.00	A	C
ATOM	4587	CG1	ILE B 704	-2.536	-30.633	-31.027	1.00	0.00	A	C
ATOM	4588	CD	ILE B 704	-1.564	-29.585	-30.488	1.00	0.00	A	C
ATOM	4589	C	ILE B 704	-5.304	-32.677	-29.439	1.00	0.00	A	C
ATOM	4590	O	ILE B 704	-5.104	-33.846	-29.116	1.00	0.00	A	O
ATOM	4591	N	THR B 705	-6.214	-31.907	-28.808	1.00	0.00	A	N
ATOM	4592	CA	THR B 705	-6.916	-32.443	-27.678	1.00	0.00	A	C
ATOM	4593	CB	THR B 705	-7.796	-31.456	-26.959	1.00	0.00	A	C
ATOM	4594	OG1	THR B 705	-8.091	-31.947	-25.660	1.00	0.00	A	O
ATOM	4595	CG2	THR B 705	-9.111	-31.267	-27.733	1.00	0.00	A	C
ATOM	4596	C	THR B 705	-7.754	-33.597	-28.129	1.00	0.00	A	C
ATOM	4597	O	THR B 705	-7.863	-34.598	-27.425	1.00	0.00	A	O
ATOM	4598	N	ILE B 706	-8.378	-33.483	-29.316	1.00	0.00	A	N
ATOM	4599	CA	ILE B 706	-9.224	-34.532	-29.807	1.00	0.00	A	C
ATOM	4600	CB	ILE B 706	-9.961	-34.147	-31.054	1.00	0.00	A	C
ATOM	4601	CG2	ILE B 706	-10.621	-35.408	-31.630	1.00	0.00	A	C
ATOM	4602	CG1	ILE B 706	-10.945	-33.002	-30.750	1.00	0.00	A	C
ATOM	4603	CD	ILE B 706	-11.579	-32.373	-31.989	1.00	0.00	A	C
ATOM	4604	C	ILE B 706	-8.426	-35.764	-30.096	1.00	0.00	A	C
ATOM	4605	O	ILE B 706	-8.828	-36.870	-29.747	1.00	0.00	A	O
ATOM	4606	N	LEU B 707	-7.261	-35.615	-30.752	1.00	0.00	A	N
ATOM	4607	CA	LEU B 707	-6.524	-36.778	-31.150	1.00	0.00	A	C
ATOM	4608	CB	LEU B 707	-5.485	-36.464	-32.236	1.00	0.00	A	C
ATOM	4609	CG	LEU B 707	-6.266	-35.954	-33.468	1.00	0.00	A	C
ATOM	4610	CD1	LEU B 707	-5.437	-35.925	-34.759	1.00	0.00	A	C
ATOM	4611	CD2	LEU B 707	-7.584	-36.732	-33.614	1.00	0.00	A	C
ATOM	4612	C	LEU B 707	-5.982	-37.533	-29.971	1.00	0.00	A	C
ATOM	4613	O	LEU B 707	-5.978	-38.762	-29.974	1.00	0.00	A	O
ATOM	4614	N	ASP B 708	-5.530	-36.832	-28.915	1.00	0.00	A	N
ATOM	4615	CA	ASP B 708	-4.999	-37.520	-27.769	1.00	0.00	A	C
ATOM	4616	CB	ASP B 708	-4.504	-36.551	-26.681	1.00	0.00	A	C

ATOM	4617	CG	ASP B 708	-3.282	-35.808	-27.206	1.00	0.00	A	C
ATOM	4618	OD1	ASP B 708	-2.776	-36.192	-28.294	1.00	0.00	A	O
ATOM	4619	OD2	ASP B 708	-2.835	-34.849	-26.521	1.00	0.00	A	O
ATOM	4620	C	ASP B 708	-6.080	-38.359	-27.162	1.00	0.00	A	C
ATOM	4621	O	ASP B 708	-5.859	-39.518	-26.813	1.00	0.00	A	O
ATOM	4622	N	THR B 709	-7.300	-37.799	-27.030	1.00	0.00	A	N
ATOM	4623	CA	THR B 709	-8.358	-38.543	-26.406	1.00	0.00	A	C
ATOM	4624	CB	THR B 709	-9.620	-37.755	-26.186	1.00	0.00	A	C
ATOM	4625	OG1	THR B 709	-10.493	-38.476	-25.326	1.00	0.00	A	O
ATOM	4626	CG2	THR B 709	-10.313	-37.508	-27.535	1.00	0.00	A	C
ATOM	4627	C	THR B 709	-8.685	-39.722	-27.265	1.00	0.00	A	C
ATOM	4628	O	THR B 709	-8.939	-40.812	-26.757	1.00	0.00	A	O
ATOM	4629	N	GLU B 710	-8.669	-39.544	-28.600	1.00	0.00	A	N
ATOM	4630	CA	GLU B 710	-9.030	-40.629	-29.465	1.00	0.00	A	C
ATOM	4631	CB	GLU B 710	-8.939	-40.292	-30.964	1.00	0.00	A	C
ATOM	4632	CG	GLU B 710	-9.335	-41.477	-31.855	1.00	0.00	A	C
ATOM	4633	CD	GLU B 710	-8.962	-41.164	-33.299	1.00	0.00	A	C
ATOM	4634	OE1	GLU B 710	-8.330	-40.101	-33.533	1.00	0.00	A	O
ATOM	4635	OE2	GLU B 710	-9.298	-41.994	-34.188	1.00	0.00	A	O
ATOM	4636	C	GLU B 710	-8.094	-41.768	-29.233	1.00	0.00	A	C
ATOM	4637	O	GLU B 710	-8.530	-42.915	-29.140	1.00	0.00	A	O
ATOM	4638	N	LYS B 711	-6.778	-41.495	-29.139	1.00	0.00	A	N
ATOM	4639	CA	LYS B 711	-5.841	-42.567	-28.947	1.00	0.00	A	C
ATOM	4640	CB	LYS B 711	-4.370	-42.126	-29.028	1.00	0.00	A	C
ATOM	4641	CG	LYS B 711	-3.892	-41.846	-30.455	1.00	0.00	A	C
ATOM	4642	CD	LYS B 711	-3.973	-43.064	-31.383	1.00	0.00	A	C
ATOM	4643	CE	LYS B 711	-5.065	-42.959	-32.451	1.00	0.00	A	C
ATOM	4644	NZ	LYS B 711	-6.396	-42.841	-31.815	1.00	0.00	A	N
ATOM	4645	C	LYS B 711	-6.046	-43.223	-27.606	1.00	0.00	A	C
ATOM	4646	O	LYS B 711	-6.003	-44.447	-27.505	1.00	0.00	A	O
ATOM	4647	N	SER B 712	-6.257	-42.420	-26.542	1.00	0.00	A	N
ATOM	4648	CA	SER B 712	-6.402	-42.885	-25.181	1.00	0.00	A	C
ATOM	4649	CB	SER B 712	-6.165	-41.763	-24.154	1.00	0.00	A	C
ATOM	4650	OG	SER B 712	-6.302	-42.272	-22.835	1.00	0.00	A	O
ATOM	4651	C	SER B 712	-7.772	-43.446	-24.933	1.00	0.00	A	C
ATOM	4652	O	SER B 712	-8.042	-44.002	-23.870	1.00	0.00	A	O
ATOM	4653	N	PHE B 713	-8.671	-43.324	-25.918	1.00	0.00	A	N
ATOM	4654	CA	PHE B 713	-10.048	-43.723	-25.826	1.00	0.00	A	C

ATOM	4655	CB	PHE B 713	-10.907	-43.242	-27.005	1.00	0.00	A	C
ATOM	4656	CG	PHE B 713	-12.325	-43.446	-26.595	1.00	0.00	A	C
ATOM	4657	CD1	PHE B 713	-12.899	-42.592	-25.680	1.00	0.00	A	C
ATOM	4658	CE1	PHE B 713	-14.206	-42.754	-25.286	1.00	0.00	A	C
ATOM	4659	CZ	PHE B 713	-14.954	-43.778	-25.811	1.00	0.00	A	C
ATOM	4660	CD2	PHE B 713	-13.083	-44.467	-27.120	1.00	0.00	A	C
ATOM	4661	CE2	PHE B 713	-14.391	-44.633	-26.729	1.00	0.00	A	C
ATOM	4662	C	PHE B 713	-10.145	-45.218	-25.750	1.00	0.00	A	C
ATOM	4663	O	PHE B 713	-11.220	-45.754	-25.485	1.00	0.00	A	O
ATOM	4664	N	LEU B 714	-9.027	-45.927	-25.998	1.00	0.00	A	N
ATOM	4665	CA	LEU B 714	-8.997	-47.357	-26.144	1.00	0.00	A	C
ATOM	4666	CB	LEU B 714	-9.931	-48.156	-25.211	1.00	0.00	A	C
ATOM	4667	CG	LEU B 714	-9.445	-48.295	-23.756	1.00	0.00	A	C
ATOM	4668	CD1	LEU B 714	-8.143	-49.110	-23.692	1.00	0.00	A	C
ATOM	4669	CD2	LEU B 714	-9.348	-46.940	-23.041	1.00	0.00	A	C
ATOM	4670	C	LEU B 714	-9.389	-47.676	-27.537	1.00	0.00	A	C
ATOM	4671	O	LEU B 714	-9.644	-48.833	-27.867	1.00	0.00	A	O
ATOM	4672	N	LYS B 715	-9.411	-46.636	-28.393	1.00	0.00	A	N
ATOM	4673	CA	LYS B 715	-9.633	-46.857	-29.788	1.00	0.00	A	C
ATOM	4674	CB	LYS B 715	-8.533	-47.766	-30.348	1.00	0.00	A	C
ATOM	4675	CG	LYS B 715	-7.145	-47.237	-29.976	1.00	0.00	A	C
ATOM	4676	CD	LYS B 715	-6.059	-48.313	-29.957	1.00	0.00	A	C
ATOM	4677	CE	LYS B 715	-4.810	-47.890	-29.180	1.00	0.00	A	C
ATOM	4678	NZ	LYS B 715	-3.987	-49.075	-28.856	1.00	0.00	A	N
ATOM	4679	C	LYS B 715	-10.941	-47.548	-29.902	1.00	0.00	A	C
ATOM	4680	O	LYS B 715	-11.126	-48.434	-30.736	1.00	0.00	A	O
ATOM	4681	N	CYS B 716	-11.897	-47.138	-29.051	1.00	0.00	A	N
ATOM	4682	CA	CYS B 716	-13.174	-47.773	-29.064	1.00	0.00	A	C
ATOM	4683	CB	CYS B 716	-14.123	-47.301	-27.950	1.00	0.00	A	C
ATOM	4684	SG	CYS B 716	-13.537	-47.754	-26.290	1.00	0.00	A	S
ATOM	4685	C	CYS B 716	-13.801	-47.448	-30.377	1.00	0.00	A	C
ATOM	4686	O	CYS B 716	-13.269	-46.641	-31.138	1.00	0.00	A	O
ATOM	4687	N	MET B 717	-14.937	-48.103	-30.680	1.00	0.00	A	N
ATOM	4688	CA	MET B 717	-15.577	-47.899	-31.946	1.00	0.00	A	C
ATOM	4689	CB	MET B 717	-16.956	-48.564	-32.073	1.00	0.00	A	C
ATOM	4690	CG	MET B 717	-17.684	-48.146	-33.355	1.00	0.00	A	C
ATOM	4691	SD	MET B 717	-19.425	-48.650	-33.455	1.00	0.00	A	S
ATOM	4692	CE	MET B 717	-19.779	-47.665	-34.940	1.00	0.00	A	C

ATOM 4693 C MET B 717 -15.825 -46.442 -32.113 1.00 0.00 A C
ATOM 4694 O MET B 717 -16.333 -45.775 -31.213 1.00 0.00 A O
ATOM 4695 N ARG B 718 -15.447 -45.919 -33.293 1.00 0.00 A N
ATOM 4696 CA ARG B 718 -15.648 -44.542 -33.619 1.00 0.00 A C
ATOM 4697 CB ARG B 718 -14.632 -43.619 -32.924 1.00 0.00 A C
ATOM 4698 CG ARG B 718 -14.789 -42.133 -33.238 1.00 0.00 A C
ATOM 4699 CD ARG B 718 -13.765 -41.275 -32.493 1.00 0.00 A C
ATOM 4700 NE ARG B 718 -14.132 -41.314 -31.048 1.00 0.00 A N
ATOM 4701 CZ ARG B 718 -13.180 -41.080 -30.098 1.00 0.00 A C
ATOM 4702 NH1 ARG B 718 -11.889 -40.837 -30.472 1.00 0.00 A N
ATOM 4703 NH2 ARG B 718 -13.521 -41.070 -28.776 1.00 0.00 A N
ATOM 4704 C ARG B 718 -15.430 -44.438 -35.090 1.00 0.00 A C
ATOM 4705 O ARG B 718 -14.767 -45.292 -35.676 1.00 0.00 A O
ATOM 4706 C LYS B 719 -14.462 -42.457 -37.290 1.00 0.00 A C
ATOM 4707 OT1 LYS B 719 -14.190 -42.130 -36.385 0.00 0.00 A O
ATOM 4708 OT2 LYS B 719 -14.213 -42.399 -38.257 0.00 0.00 A O
ATOM 4709 N LYS B 719 -15.998 -43.410 -35.752 1.00 0.00 A N
ATOM 4710 CA LYS B 719 -15.678 -43.356 -37.146 1.00 0.00 A C
ATOM 4711 CB LYS B 719 -16.751 -42.797 -38.088 1.00 0.00 A C
ATOM 4712 CG LYS B 719 -16.214 -42.825 -39.523 1.00 0.00 A C
ATOM 4713 CD LYS B 719 -15.911 -44.247 -40.008 1.00 0.00 A C
ATOM 4714 CE LYS B 719 -14.673 -44.356 -40.908 1.00 0.00 A C
ATOM 4715 NZ LYS B 719 -14.838 -43.527 -42.121 1.00 0.00 A N
ATOM 4716 N LEU A 112 -54.905 33.567 -75.286 1.00 0.00 B N
ATOM 4717 CA LEU A 112 -54.857 32.186 -75.778 1.00 0.00 B C
ATOM 4718 CB LEU A 112 -54.451 32.176 -77.261 1.00 0.00 B C
ATOM 4719 CG LEU A 112 -55.438 32.934 -78.175 1.00 0.00 B C
ATOM 4720 CD1 LEU A 112 -55.016 32.857 -79.652 1.00 0.00 B C
ATOM 4721 CD2 LEU A 112 -56.884 32.472 -77.944 1.00 0.00 B C
ATOM 4722 C LEU A 112 -53.825 31.430 -75.012 1.00 0.00 B C
ATOM 4723 O LEU A 112 -53.695 30.216 -75.159 1.00 0.00 B O
ATOM 4724 N TYR A 113 -53.051 32.142 -74.168 1.00 0.00 B N
ATOM 4725 CA TYR A 113 -52.013 31.467 -73.452 1.00 0.00 B C
ATOM 4726 CB TYR A 113 -50.604 31.861 -73.926 1.00 0.00 B C
ATOM 4727 CG TYR A 113 -50.392 31.336 -75.302 1.00 0.00 B C
ATOM 4728 CD1 TYR A 113 -50.955 31.966 -76.386 1.00 0.00 B C
ATOM 4729 CE1 TYR A 113 -50.751 31.479 -77.655 1.00 0.00 B C
ATOM 4730 CZ TYR A 113 -49.978 30.357 -77.845 1.00 0.00 B C

ATOM 4731 OH TYR A 113 -49.767 29.853 -79.146 1.00 0.00 B O
ATOM 4732 CD2 TYR A 113 -49.616 30.217 -75.503 1.00 0.00 B C
ATOM 4733 CE2 TYR A 113 -49.408 29.725 -76.769 1.00 0.00 B C
ATOM 4734 C TYR A 113 -52.055 31.831 -72.006 1.00 0.00 B C
ATOM 4735 O TYR A 113 -52.121 33.007 -71.647 1.00 0.00 B O
ATOM 4736 N ASP A 114 -52.043 30.802 -71.138 1.00 0.00 B N
ATOM 4737 CA ASP A 114 -51.884 30.993 -69.728 1.00 0.00 B C
ATOM 4738 CB ASP A 114 -52.907 30.214 -68.884 1.00 0.00 B C
ATOM 4739 CG ASP A 114 -52.810 28.743 -69.241 1.00 0.00 B C
ATOM 4740 OD1 ASP A 114 -53.043 28.411 -70.437 1.00 0.00 B O
ATOM 4741 OD2 ASP A 114 -52.520 27.928 -68.328 1.00 0.00 B O
ATOM 4742 C ASP A 114 -50.485 30.550 -69.405 1.00 0.00 B C
ATOM 4743 O ASP A 114 -49.767 30.058 -70.274 1.00 0.00 B O
ATOM 4744 N ARG A 115 -50.050 30.712 -68.141 1.00 0.00 B N
ATOM 4745 CA ARG A 115 -48.705 30.354 -67.775 1.00 0.00 B C
ATOM 4746 CB ARG A 115 -48.396 30.678 -66.303 1.00 0.00 B C
ATOM 4747 CG ARG A 115 -46.976 30.319 -65.857 1.00 0.00 B C
ATOM 4748 CD ARG A 115 -46.676 30.749 -64.418 1.00 0.00 B C
ATOM 4749 NE ARG A 115 -47.350 29.786 -63.500 1.00 0.00 B N
ATOM 4750 CZ ARG A 115 -46.673 28.689 -63.048 1.00 0.00 B C
ATOM 4751 NH1 ARG A 115 -45.377 28.490 -63.418 1.00 0.00 B N
ATOM 4752 NH2 ARG A 115 -47.293 27.798 -62.218 1.00 0.00 B N
ATOM 4753 C ARG A 115 -48.526 28.878 -67.971 1.00 0.00 B C
ATOM 4754 O ARG A 115 -47.501 28.427 -68.480 1.00 0.00 B O
ATOM 4755 N ARG A 116 -49.551 28.099 -67.595 1.00 0.00 B N
ATOM 4756 CA ARG A 116 -49.489 26.666 -67.606 1.00 0.00 B C
ATOM 4757 CB ARG A 116 -50.807 26.053 -67.106 1.00 0.00 B C
ATOM 4758 CG ARG A 116 -50.634 24.704 -66.410 1.00 0.00 B C
ATOM 4759 CD ARG A 116 -49.927 23.630 -67.228 1.00 0.00 B C
ATOM 4760 NE ARG A 116 -49.589 22.549 -66.261 1.00 0.00 B N
ATOM 4761 CZ ARG A 116 -48.436 22.638 -65.532 1.00 0.00 B C
ATOM 4762 NH1 ARG A 116 -47.559 23.654 -65.765 1.00 0.00 B N
ATOM 4763 NH2 ARG A 116 -48.168 21.712 -64.563 1.00 0.00 B N
ATOM 4764 C ARG A 116 -49.273 26.183 -69.008 1.00 0.00 B C
ATOM 4765 O ARG A 116 -48.466 25.284 -69.244 1.00 0.00 B O
ATOM 4766 N SER A 117 -49.976 26.786 -69.986 1.00 0.00 B N
ATOM 4767 CA SER A 117 -49.930 26.310 -71.339 1.00 0.00 B C
ATOM 4768 CB SER A 117 -50.847 27.108 -72.283 1.00 0.00 B C

ATOM 4769 OG SER A 117 -50.448 28.471 -72.328 1.00 0.00 B O
ATOM 4770 C SER A 117 -48.533 26.356 -71.889 1.00 0.00 B C
ATOM 4771 O SER A 117 -48.074 25.382 -72.482 1.00 0.00 B O
ATOM 4772 N ILE A 118 -47.818 27.484 -71.714 1.00 0.00 B N
ATOM 4773 CA ILE A 118 -46.495 27.637 -72.262 1.00 0.00 B C
ATOM 4774 CB ILE A 118 -45.944 29.023 -72.114 1.00 0.00 B C
ATOM 4775 CG2 ILE A 118 -44.505 29.008 -72.658 1.00 0.00 B C
ATOM 4776 CG1 ILE A 118 -46.849 30.046 -72.819 1.00 0.00 B C
ATOM 4777 CD ILE A 118 -46.508 31.494 -72.469 1.00 0.00 B C
ATOM 4778 C ILE A 118 -45.522 26.712 -71.596 1.00 0.00 B C
ATOM 4779 O ILE A 118 -44.676 26.107 -72.254 1.00 0.00 B O
ATOM 4780 N PHE A 119 -45.621 26.570 -70.261 1.00 0.00 B N
ATOM 4781 CA PHE A 119 -44.690 25.777 -69.510 1.00 0.00 B C
ATOM 4782 CB PHE A 119 -45.017 25.738 -68.003 1.00 0.00 B C
ATOM 4783 CG PHE A 119 -44.422 26.937 -67.342 1.00 0.00 B C
ATOM 4784 CD1 PHE A 119 -44.910 28.200 -67.573 1.00 0.00 B C
ATOM 4785 CE1 PHE A 119 -44.345 29.294 -66.962 1.00 0.00 B C
ATOM 4786 CZ PHE A 119 -43.274 29.140 -66.115 1.00 0.00 B C
ATOM 4787 CD2 PHE A 119 -43.335 26.794 -66.507 1.00 0.00 B C
ATOM 4788 CE2 PHE A 119 -42.765 27.882 -65.891 1.00 0.00 B C
ATOM 4789 C PHE A 119 -44.707 24.377 -70.026 1.00 0.00 B C
ATOM 4790 O PHE A 119 -43.654 23.748 -70.139 1.00 0.00 B O
ATOM 4791 N GLU A 120 -45.903 23.840 -70.322 1.00 0.00 B N
ATOM 4792 CA GLU A 120 -46.017 22.502 -70.825 1.00 0.00 B C
ATOM 4793 CB GLU A 120 -47.475 22.023 -70.908 1.00 0.00 B C
ATOM 4794 CG GLU A 120 -48.147 21.894 -69.537 1.00 0.00 B C
ATOM 4795 CD GLU A 120 -47.508 20.729 -68.788 1.00 0.00 B C
ATOM 4796 OE1 GLU A 120 -46.261 20.581 -68.878 1.00 0.00 B O
ATOM 4797 OE2 GLU A 120 -48.262 19.975 -68.116 1.00 0.00 B O
ATOM 4798 C GLU A 120 -45.413 22.422 -72.196 1.00 0.00 B C
ATOM 4799 O GLU A 120 -44.763 21.434 -72.536 1.00 0.00 B O
ATOM 4800 N ALA A 121 -45.611 23.460 -73.027 1.00 0.00 B N
ATOM 4801 CA ALA A 121 -45.091 23.433 -74.367 1.00 0.00 B C
ATOM 4802 CB ALA A 121 -45.448 24.695 -75.170 1.00 0.00 B C
ATOM 4803 C ALA A 121 -43.595 23.350 -74.303 1.00 0.00 B C
ATOM 4804 O ALA A 121 -42.975 22.594 -75.049 1.00 0.00 B O
ATOM 4805 N VAL A 122 -42.984 24.122 -73.386 1.00 0.00 B N
ATOM 4806 CA VAL A 122 -41.556 24.199 -73.232 1.00 0.00 B C

ATOM	4807	CB VAL A 122	-41.148	25.210	-72.198	1.00	0.00	B	C
ATOM	4808	CG1 VAL A 122	-39.629	25.118	-71.978	1.00	0.00	B	C
ATOM	4809	CG2 VAL A 122	-41.616	26.598	-72.667	1.00	0.00	B	C
ATOM	4810	C VAL A 122	-40.997	22.870	-72.817	1.00	0.00	B	C
ATOM	4811	O VAL A 122	-39.919	22.476	-73.263	1.00	0.00	B	O
ATOM	4812	N ALA A 123	-41.721	22.128	-71.959	1.00	0.00	B	N
ATOM	4813	CA ALA A 123	-41.204	20.891	-71.440	1.00	0.00	B	C
ATOM	4814	CB ALA A 123	-42.193	20.187	-70.495	1.00	0.00	B	C
ATOM	4815	C ALA A 123	-40.916	19.953	-72.577	1.00	0.00	B	C
ATOM	4816	O ALA A 123	-39.942	19.205	-72.553	1.00	0.00	B	O
ATOM	4817	N GLN A 124	-41.814	19.952	-73.575	1.00	0.00	B	N
ATOM	4818	CA GLN A 124	-41.826	19.163	-74.778	1.00	0.00	B	C
ATOM	4819	CB GLN A 124	-43.206	19.172	-75.455	1.00	0.00	B	C
ATOM	4820	CG GLN A 124	-44.323	18.613	-74.574	1.00	0.00	B	C
ATOM	4821	CD GLN A 124	-45.620	18.715	-75.365	1.00	0.00	B	C
ATOM	4822	OE1 GLN A 124	-46.171	17.713	-75.816	1.00	0.00	B	O
ATOM	4823	NE2 GLN A 124	-46.125	19.966	-75.542	1.00	0.00	B	N
ATOM	4824	C GLN A 124	-40.841	19.639	-75.808	1.00	0.00	B	C
ATOM	4825	O GLN A 124	-40.494	18.881	-76.714	1.00	0.00	B	O
ATOM	4826	N ASN A 125	-40.403	20.912	-75.746	1.00	0.00	B	N
ATOM	4827	CA ASN A 125	-39.576	21.455	-76.791	1.00	0.00	B	C
ATOM	4828	CB ASN A 125	-38.352	20.579	-77.110	1.00	0.00	B	C
ATOM	4829	CG ASN A 125	-37.435	21.359	-78.040	1.00	0.00	B	C
ATOM	4830	OD1 ASN A 125	-36.976	22.447	-77.696	1.00	0.00	B	O
ATOM	4831	ND2 ASN A 125	-37.161	20.796	-79.247	1.00	0.00	B	N
ATOM	4832	C ASN A 125	-40.409	21.566	-78.034	1.00	0.00	B	C
ATOM	4833	O ASN A 125	-39.948	21.267	-79.136	1.00	0.00	B	O
ATOM	4834	N ASN A 126	-41.672	22.020	-77.883	1.00	0.00	B	N
ATOM	4835	CA ASN A 126	-42.556	22.116	-79.008	1.00	0.00	B	C
ATOM	4836	CB ASN A 126	-43.974	21.609	-78.683	1.00	0.00	B	C
ATOM	4837	CG ASN A 126	-44.655	21.211	-79.981	1.00	0.00	B	C
ATOM	4838	OD1 ASN A 126	-44.039	21.222	-81.045	1.00	0.00	B	O
ATOM	4839	ND2 ASN A 126	-45.960	20.837	-79.894	1.00	0.00	B	N
ATOM	4840	C ASN A 126	-42.660	23.556	-79.437	1.00	0.00	B	C
ATOM	4841	O ASN A 126	-43.154	24.410	-78.703	1.00	0.00	B	O
ATOM	4842	N CYS A 127	-42.133	23.859	-80.642	1.00	0.00	B	N
ATOM	4843	CA CYS A 127	-42.152	25.162	-81.253	1.00	0.00	B	C
ATOM	4844	CB CYS A 127	-41.164	25.289	-82.423	1.00	0.00	B	C

ATOM	4845	SG	CYS	A	127	-39.440	25.305	-81.859	1.00	0.00	B	S
ATOM	4846	C	CYS	A	127	-43.510	25.522	-81.787	1.00	0.00	B	C
ATOM	4847	O	CYS	A	127	-43.835	26.702	-81.892	1.00	0.00	B	O
ATOM	4848	N	GLN	A	128	-44.310	24.528	-82.217	1.00	0.00	B	N
ATOM	4849	CA	GLN	A	128	-45.565	24.812	-82.869	1.00	0.00	B	C
ATOM	4850	CB	GLN	A	128	-46.159	23.601	-83.616	1.00	0.00	B	C
ATOM	4851	CG	GLN	A	128	-45.342	23.227	-84.855	1.00	0.00	B	C
ATOM	4852	CD	GLN	A	128	-46.096	22.180	-85.667	1.00	0.00	B	C
ATOM	4853	OE1	GLN	A	128	-45.492	21.285	-86.256	1.00	0.00	B	O
ATOM	4854	NE2	GLN	A	128	-47.450	22.298	-85.711	1.00	0.00	B	N
ATOM	4855	C	GLN	A	128	-46.620	25.395	-81.969	1.00	0.00	B	C
ATOM	4856	O	GLN	A	128	-47.315	26.333	-82.359	1.00	0.00	B	O
ATOM	4857	N	ASP	A	129	-46.757	24.899	-80.727	1.00	0.00	B	N
ATOM	4858	CA	ASP	A	129	-47.813	25.352	-79.859	1.00	0.00	B	C
ATOM	4859	CB	ASP	A	129	-47.790	24.654	-78.488	1.00	0.00	B	C
ATOM	4860	CG	ASP	A	129	-48.182	23.197	-78.695	1.00	0.00	B	C
ATOM	4861	OD1	ASP	A	129	-48.711	22.879	-79.794	1.00	0.00	B	O
ATOM	4862	OD2	ASP	A	129	-47.958	22.383	-77.760	1.00	0.00	B	O
ATOM	4863	C	ASP	A	129	-47.638	26.824	-79.636	1.00	0.00	B	C
ATOM	4864	O	ASP	A	129	-48.579	27.535	-79.288	1.00	0.00	B	O
ATOM	4865	N	LEU	A	130	-46.379	27.270	-79.747	1.00	0.00	B	N
ATOM	4866	CA	LEU	A	130	-45.869	28.606	-79.628	1.00	0.00	B	C
ATOM	4867	CB	LEU	A	130	-44.355	28.633	-79.354	1.00	0.00	B	C
ATOM	4868	CG	LEU	A	130	-43.991	28.047	-77.973	1.00	0.00	B	C
ATOM	4869	CD1	LEU	A	130	-42.477	28.081	-77.719	1.00	0.00	B	C
ATOM	4870	CD2	LEU	A	130	-44.783	28.741	-76.853	1.00	0.00	B	C
ATOM	4871	C	LEU	A	130	-46.154	29.451	-80.830	1.00	0.00	B	C
ATOM	4872	O	LEU	A	130	-45.854	30.643	-80.816	1.00	0.00	B	O
ATOM	4873	N	GLU	A	131	-46.622	28.859	-81.944	1.00	0.00	B	N
ATOM	4874	CA	GLU	A	131	-46.808	29.609	-83.158	1.00	0.00	B	C
ATOM	4875	CB	GLU	A	131	-47.360	28.729	-84.287	1.00	0.00	B	C
ATOM	4876	CG	GLU	A	131	-46.390	27.604	-84.665	1.00	0.00	B	C
ATOM	4877	CD	GLU	A	131	-47.068	26.700	-85.683	1.00	0.00	B	C
ATOM	4878	OE1	GLU	A	131	-47.766	25.742	-85.256	1.00	0.00	B	O
ATOM	4879	OE2	GLU	A	131	-46.899	26.957	-86.905	1.00	0.00	B	O
ATOM	4880	C	GLU	A	131	-47.745	30.770	-82.940	1.00	0.00	B	C
ATOM	4881	O	GLU	A	131	-47.475	31.878	-83.400	1.00	0.00	B	O
ATOM	4882	N	SER	A	132	-48.875	30.560	-82.238	1.00	0.00	B	N

ATOM	4883	CA	SER A 132	-49.846	31.600	-82.008	1.00	0.00	B	C
ATOM	4884	CB	SER A 132	-51.229	31.042	-81.623	1.00	0.00	B	C
ATOM	4885	OG	SER A 132	-51.779	30.308	-82.707	1.00	0.00	B	O
ATOM	4886	C	SER A 132	-49.419	32.525	-80.900	1.00	0.00	B	C
ATOM	4887	O	SER A 132	-50.162	33.438	-80.543	1.00	0.00	B	O
ATOM	4888	N	LEU A 133	-48.236	32.296	-80.296	1.00	0.00	B	N
ATOM	4889	CA	LEU A 133	-47.835	33.020	-79.119	1.00	0.00	B	C
ATOM	4890	CB	LEU A 133	-46.563	32.430	-78.473	1.00	0.00	B	C
ATOM	4891	CG	LEU A 133	-46.130	33.145	-77.174	1.00	0.00	B	C
ATOM	4892	CD1	LEU A 133	-47.241	33.089	-76.114	1.00	0.00	B	C
ATOM	4893	CD2	LEU A 133	-44.795	32.589	-76.636	1.00	0.00	B	C
ATOM	4894	C	LEU A 133	-47.614	34.499	-79.320	1.00	0.00	B	C
ATOM	4895	O	LEU A 133	-48.226	35.308	-78.623	1.00	0.00	B	O
ATOM	4896	N	LEU A 134	-46.796	34.911	-80.311	1.00	0.00	B	N
ATOM	4897	CA	LEU A 134	-46.418	36.291	-80.439	1.00	0.00	B	C
ATOM	4898	CB	LEU A 134	-45.485	36.510	-81.644	1.00	0.00	B	C
ATOM	4899	CG	LEU A 134	-44.719	37.852	-81.697	1.00	0.00	B	C
ATOM	4900	CD1	LEU A 134	-44.063	38.015	-83.072	1.00	0.00	B	C
ATOM	4901	CD2	LEU A 134	-45.546	39.077	-81.289	1.00	0.00	B	C
ATOM	4902	C	LEU A 134	-47.650	37.121	-80.666	1.00	0.00	B	C
ATOM	4903	O	LEU A 134	-47.824	38.178	-80.064	1.00	0.00	B	O
ATOM	4904	N	LEU A 135	-48.567	36.653	-81.526	1.00	0.00	B	N
ATOM	4905	CA	LEU A 135	-49.714	37.440	-81.861	1.00	0.00	B	C
ATOM	4906	CB	LEU A 135	-50.567	36.826	-82.993	1.00	0.00	B	C
ATOM	4907	CG	LEU A 135	-51.079	35.395	-82.743	1.00	0.00	B	C
ATOM	4908	CD1	LEU A 135	-52.153	35.352	-81.646	1.00	0.00	B	C
ATOM	4909	CD2	LEU A 135	-51.543	34.743	-84.057	1.00	0.00	B	C
ATOM	4910	C	LEU A 135	-50.574	37.689	-80.654	1.00	0.00	B	C
ATOM	4911	O	LEU A 135	-51.205	38.740	-80.564	1.00	0.00	B	O
ATOM	4912	N	PHE A 136	-50.638	36.735	-79.704	1.00	0.00	B	N
ATOM	4913	CA	PHE A 136	-51.504	36.865	-78.560	1.00	0.00	B	C
ATOM	4914	CB	PHE A 136	-51.465	35.611	-77.664	1.00	0.00	B	C
ATOM	4915	CG	PHE A 136	-52.066	35.932	-76.337	1.00	0.00	B	C
ATOM	4916	CD1	PHE A 136	-53.429	35.999	-76.168	1.00	0.00	B	C
ATOM	4917	CE1	PHE A 136	-53.964	36.299	-74.938	1.00	0.00	B	C
ATOM	4918	CZ	PHE A 136	-53.133	36.540	-73.869	1.00	0.00	B	C
ATOM	4919	CD2	PHE A 136	-51.242	36.184	-75.264	1.00	0.00	B	C
ATOM	4920	CE2	PHE A 136	-51.769	36.485	-74.032	1.00	0.00	B	C

ATOM	4921	C	PHE	A	136	-51.168	38.068	-77.722	1.00	0.00	B	C
ATOM	4922	O	PHE	A	136	-52.025	38.917	-77.478	1.00	0.00	B	O
ATOM	4923	N	LEU	A	137	-49.899	38.200	-77.292	1.00	0.00	B	N
ATOM	4924	CA	LEU	A	137	-49.477	39.277	-76.442	1.00	0.00	B	C
ATOM	4925	CB	LEU	A	137	-48.101	39.108	-75.751	1.00	0.00	B	C
ATOM	4926	CG	LEU	A	137	-46.891	38.815	-76.657	1.00	0.00	B	C
ATOM	4927	CD1	LEU	A	137	-45.597	38.702	-75.830	1.00	0.00	B	C
ATOM	4928	CD2	LEU	A	137	-47.128	37.552	-77.488	1.00	0.00	B	C
ATOM	4929	C	LEU	A	137	-49.491	40.565	-77.193	1.00	0.00	B	C
ATOM	4930	O	LEU	A	137	-49.265	41.620	-76.605	1.00	0.00	B	O
ATOM	4931	N	GLN	A	138	-49.566	40.500	-78.536	1.00	0.00	B	N
ATOM	4932	CA	GLN	A	138	-49.689	41.704	-79.304	1.00	0.00	B	C
ATOM	4933	CB	GLN	A	138	-49.566	41.444	-80.814	1.00	0.00	B	C
ATOM	4934	CG	GLN	A	138	-48.177	40.954	-81.236	1.00	0.00	B	C
ATOM	4935	CD	GLN	A	138	-48.180	40.729	-82.743	1.00	0.00	B	C
ATOM	4936	OE1	GLN	A	138	-49.234	40.706	-83.380	1.00	0.00	B	O
ATOM	4937	NE2	GLN	A	138	-46.969	40.552	-83.334	1.00	0.00	B	N
ATOM	4938	C	GLN	A	138	-51.035	42.329	-79.049	1.00	0.00	B	C
ATOM	4939	O	GLN	A	138	-51.123	43.530	-78.793	1.00	0.00	B	O
ATOM	4940	N	LYS	A	139	-52.126	41.534	-79.118	1.00	0.00	B	N
ATOM	4941	CA	LYS	A	139	-53.433	42.101	-78.904	1.00	0.00	B	C
ATOM	4942	CB	LYS	A	139	-54.593	41.121	-79.120	1.00	0.00	B	C
ATOM	4943	CG	LYS	A	139	-55.929	41.771	-78.745	1.00	0.00	B	C
ATOM	4944	CD	LYS	A	139	-57.151	40.876	-78.932	1.00	0.00	B	C
ATOM	4945	CE	LYS	A	139	-58.431	41.480	-78.349	1.00	0.00	B	C
ATOM	4946	NZ	LYS	A	139	-59.540	40.507	-78.453	1.00	0.00	B	N
ATOM	4947	C	LYS	A	139	-53.593	42.545	-77.488	1.00	0.00	B	C
ATOM	4948	O	LYS	A	139	-53.895	43.707	-77.219	1.00	0.00	B	O
ATOM	4949	N	SER	A	140	-53.374	41.606	-76.552	1.00	0.00	B	N
ATOM	4950	CA	SER	A	140	-53.558	41.841	-75.149	1.00	0.00	B	C
ATOM	4951	CB	SER	A	140	-53.512	40.548	-74.317	1.00	0.00	B	C
ATOM	4952	OG	SER	A	140	-52.245	39.922	-74.447	1.00	0.00	B	O
ATOM	4953	C	SER	A	140	-52.478	42.749	-74.664	1.00	0.00	B	C
ATOM	4954	O	SER	A	140	-52.594	43.360	-73.605	1.00	0.00	B	O
ATOM	4955	N	LYS	A	141	-51.388	42.861	-75.436	1.00	0.00	B	N
ATOM	4956	CA	LYS	A	141	-50.284	43.684	-75.044	1.00	0.00	B	C
ATOM	4957	CB	LYS	A	141	-50.653	45.158	-74.789	1.00	0.00	B	C
ATOM	4958	CG	LYS	A	141	-51.020	45.958	-76.040	1.00	0.00	B	C

ATOM	4959	CD	LYS	A	141	-49.910	46.017	-77.087	1.00	0.00	B	C
ATOM	4960	CE	LYS	A	141	-50.141	47.088	-78.155	1.00	0.00	B	C
ATOM	4961	NZ	LYS	A	141	-51.469	46.912	-78.785	1.00	0.00	B	N
ATOM	4962	C	LYS	A	141	-49.730	43.152	-73.761	1.00	0.00	B	C
ATOM	4963	O	LYS	A	141	-49.117	43.890	-72.994	1.00	0.00	B	O
ATOM	4964	N	LYS	A	142	-49.921	41.844	-73.499	1.00	0.00	B	N
ATOM	4965	CA	LYS	A	142	-49.374	41.248	-72.315	1.00	0.00	B	C
ATOM	4966	CB	LYS	A	142	-49.994	39.888	-71.947	1.00	0.00	B	C
ATOM	4967	CG	LYS	A	142	-51.368	40.003	-71.282	1.00	0.00	B	C
ATOM	4968	CD	LYS	A	142	-52.123	38.676	-71.179	1.00	0.00	B	C
ATOM	4969	CE	LYS	A	142	-53.284	38.711	-70.182	1.00	0.00	B	C
ATOM	4970	NZ	LYS	A	142	-54.239	39.785	-70.538	1.00	0.00	B	N
ATOM	4971	C	LYS	A	142	-47.918	41.031	-72.563	1.00	0.00	B	C
ATOM	4972	O	LYS	A	142	-47.480	40.965	-73.710	1.00	0.00	B	O
ATOM	4973	N	HSD	A	143	-47.115	40.936	-71.482	1.00	0.00	B	N
ATOM	4974	CA	HSD	A	143	-45.708	40.743	-71.677	1.00	0.00	B	C
ATOM	4975	CB	HSD	A	143	-44.823	41.801	-70.990	1.00	0.00	B	C
ATOM	4976	ND1	HSD	A	143	-44.302	43.546	-72.766	1.00	0.00	B	N
ATOM	4977	CG	HSD	A	143	-44.931	43.168	-71.598	1.00	0.00	B	C
ATOM	4978	CE1	HSD	A	143	-44.630	44.842	-72.985	1.00	0.00	B	C
ATOM	4979	NE2	HSD	A	143	-45.421	45.326	-72.043	1.00	0.00	B	N
ATOM	4980	CD2	HSD	A	143	-45.607	44.268	-71.170	1.00	0.00	B	C
ATOM	4981	C	HSD	A	143	-45.315	39.412	-71.126	1.00	0.00	B	C
ATOM	4982	O	HSD	A	143	-45.880	38.915	-70.153	1.00	0.00	B	O
ATOM	4983	N	LEU	A	144	-44.278	38.819	-71.742	1.00	0.00	B	N
ATOM	4984	CA	LEU	A	144	-43.753	37.530	-71.402	1.00	0.00	B	C
ATOM	4985	CB	LEU	A	144	-42.592	37.134	-72.333	1.00	0.00	B	C
ATOM	4986	CG	LEU	A	144	-42.102	35.688	-72.160	1.00	0.00	B	C
ATOM	4987	CD1	LEU	A	144	-43.219	34.693	-72.510	1.00	0.00	B	C
ATOM	4988	CD2	LEU	A	144	-40.821	35.431	-72.970	1.00	0.00	B	C
ATOM	4989	C	LEU	A	144	-43.238	37.618	-69.990	1.00	0.00	B	C
ATOM	4990	O	LEU	A	144	-43.055	36.609	-69.312	1.00	0.00	B	O
ATOM	4991	N	THR	A	145	-42.882	38.848	-69.584	1.00	0.00	B	N
ATOM	4992	CA	THR	A	145	-42.361	39.258	-68.303	1.00	0.00	B	C
ATOM	4993	CB	THR	A	145	-41.625	40.559	-68.390	1.00	0.00	B	C
ATOM	4994	OG1	THR	A	145	-42.498	41.587	-68.831	1.00	0.00	B	O
ATOM	4995	CG2	THR	A	145	-40.458	40.388	-69.377	1.00	0.00	B	C
ATOM	4996	C	THR	A	145	-43.403	39.411	-67.229	1.00	0.00	B	C

ATOM	4997	O	THR A 145	-43.049	39.450	-66.053	1.00	0.00	B	O
ATOM	4998	N	ASP A 146	-44.697	39.557	-67.580	1.00	0.00	B	N
ATOM	4999	CA	ASP A 146	-45.705	39.872	-66.595	1.00	0.00	B	C
ATOM	5000	CB	ASP A 146	-47.136	39.867	-67.155	1.00	0.00	B	C
ATOM	5001	CG	ASP A 146	-47.297	41.073	-68.069	1.00	0.00	B	C
ATOM	5002	OD1	ASP A 146	-46.379	41.938	-68.081	1.00	0.00	B	O
ATOM	5003	OD2	ASP A 146	-48.345	41.148	-68.764	1.00	0.00	B	O
ATOM	5004	C	ASP A 146	-45.666	38.902	-65.454	1.00	0.00	B	C
ATOM	5005	O	ASP A 146	-45.165	37.784	-65.566	1.00	0.00	B	O
ATOM	5006	N	ASN A 147	-46.218	39.339	-64.304	1.00	0.00	B	N
ATOM	5007	CA	ASN A 147	-46.211	38.595	-63.072	1.00	0.00	B	C
ATOM	5008	CB	ASN A 147	-46.917	39.326	-61.918	1.00	0.00	B	C
ATOM	5009	CG	ASN A 147	-46.096	40.555	-61.551	1.00	0.00	B	C
ATOM	5010	OD1	ASN A 147	-46.624	41.665	-61.487	1.00	0.00	B	O
ATOM	5011	ND2	ASN A 147	-44.774	40.360	-61.300	1.00	0.00	B	N
ATOM	5012	C	ASN A 147	-46.917	37.289	-63.286	1.00	0.00	B	C
ATOM	5013	O	ASN A 147	-46.551	36.274	-62.694	1.00	0.00	B	O
ATOM	5014	N	GLU A 148	-47.940	37.294	-64.159	1.00	0.00	B	N
ATOM	5015	CA	GLU A 148	-48.781	36.163	-64.460	1.00	0.00	B	C
ATOM	5016	CB	GLU A 148	-49.736	36.452	-65.633	1.00	0.00	B	C
ATOM	5017	CG	GLU A 148	-50.651	37.661	-65.479	1.00	0.00	B	C
ATOM	5018	CD	GLU A 148	-51.148	38.004	-66.880	1.00	0.00	B	C
ATOM	5019	OE1	GLU A 148	-50.307	38.010	-67.820	1.00	0.00	B	O
ATOM	5020	OE2	GLU A 148	-52.371	38.263	-67.033	1.00	0.00	B	O
ATOM	5021	C	GLU A 148	-47.946	35.049	-65.019	1.00	0.00	B	C
ATOM	5022	O	GLU A 148	-48.234	33.869	-64.824	1.00	0.00	B	O
ATOM	5023	N	PHE A 149	-46.931	35.429	-65.806	1.00	0.00	B	N
ATOM	5024	CA	PHE A 149	-46.037	34.581	-66.539	1.00	0.00	B	C
ATOM	5025	CB	PHE A 149	-45.359	35.293	-67.723	1.00	0.00	B	C
ATOM	5026	CG	PHE A 149	-46.438	35.509	-68.731	1.00	0.00	B	C
ATOM	5027	CD1	PHE A 149	-46.878	34.460	-69.509	1.00	0.00	B	C
ATOM	5028	CE1	PHE A 149	-47.872	34.641	-70.444	1.00	0.00	B	C
ATOM	5029	CZ	PHE A 149	-48.443	35.881	-70.612	1.00	0.00	B	C
ATOM	5030	CD2	PHE A 149	-47.015	36.744	-68.908	1.00	0.00	B	C
ATOM	5031	CE2	PHE A 149	-48.010	36.934	-69.842	1.00	0.00	B	C
ATOM	5032	C	PHE A 149	-45.003	33.913	-65.678	1.00	0.00	B	C
ATOM	5033	O	PHE A 149	-44.263	33.061	-66.167	1.00	0.00	B	O
ATOM	5034	N	LYS A 150	-44.818	34.361	-64.423	1.00	0.00	B	N

ATOM	5035	CA	LYS	A	150	-43.796	33.776	-63.594	1.00	0.00	B	C
ATOM	5036	CB	LYS	A	150	-42.987	34.831	-62.830	1.00	0.00	B	C
ATOM	5037	CG	LYS	A	150	-42.453	35.981	-63.681	1.00	0.00	B	C
ATOM	5038	CD	LYS	A	150	-42.025	37.168	-62.813	1.00	0.00	B	C
ATOM	5039	CE	LYS	A	150	-41.742	38.453	-63.589	1.00	0.00	B	C
ATOM	5040	NZ	LYS	A	150	-41.551	39.575	-62.642	1.00	0.00	B	N
ATOM	5041	C	LYS	A	150	-44.425	32.951	-62.506	1.00	0.00	B	C
ATOM	5042	O	LYS	A	150	-45.577	33.162	-62.129	1.00	0.00	B	O
ATOM	5043	N	ASP	A	151	-43.666	31.961	-61.978	1.00	0.00	B	N
ATOM	5044	CA	ASP	A	151	-44.111	31.180	-60.857	1.00	0.00	B	C
ATOM	5045	CB	ASP	A	151	-43.184	29.983	-60.565	1.00	0.00	B	C
ATOM	5046	CG	ASP	A	151	-43.739	29.129	-59.433	1.00	0.00	B	C
ATOM	5047	OD1	ASP	A	151	-44.814	29.480	-58.875	1.00	0.00	B	O
ATOM	5048	OD2	ASP	A	151	-43.083	28.103	-59.109	1.00	0.00	B	O
ATOM	5049	C	ASP	A	151	-44.077	32.106	-59.684	1.00	0.00	B	C
ATOM	5050	O	ASP	A	151	-43.067	32.753	-59.404	1.00	0.00	B	O
ATOM	5051	N	PRO	A	152	-45.158	32.154	-58.969	1.00	0.00	B	N
ATOM	5052	CD	PRO	A	152	-46.443	31.707	-59.478	1.00	0.00	B	C
ATOM	5053	CA	PRO	A	152	-45.296	33.091	-57.893	1.00	0.00	B	C
ATOM	5054	CB	PRO	A	152	-46.764	33.006	-57.461	1.00	0.00	B	C
ATOM	5055	CG	PRO	A	152	-47.349	31.812	-58.247	1.00	0.00	B	C
ATOM	5056	C	PRO	A	152	-44.306	32.962	-56.773	1.00	0.00	B	C
ATOM	5057	O	PRO	A	152	-44.049	33.978	-56.123	1.00	0.00	B	O
ATOM	5058	N	GLU	A	153	-43.838	31.741	-56.434	1.00	0.00	B	N
ATOM	5059	CA	GLU	A	153	-42.863	31.615	-55.381	1.00	0.00	B	C
ATOM	5060	CB	GLU	A	153	-42.891	30.239	-54.683	1.00	0.00	B	C
ATOM	5061	CG	GLU	A	153	-42.761	29.039	-55.623	1.00	0.00	B	C
ATOM	5062	CD	GLU	A	153	-44.147	28.429	-55.792	1.00	0.00	B	C
ATOM	5063	OE1	GLU	A	153	-45.066	28.834	-55.029	1.00	0.00	B	O
ATOM	5064	OE2	GLU	A	153	-44.304	27.548	-56.677	1.00	0.00	B	O
ATOM	5065	C	GLU	A	153	-41.440	31.866	-55.818	1.00	0.00	B	C
ATOM	5066	O	GLU	A	153	-40.710	32.621	-55.175	1.00	0.00	B	O
ATOM	5067	N	THR	A	154	-41.009	31.158	-56.890	1.00	0.00	B	N
ATOM	5068	CA	THR	A	154	-39.667	31.156	-57.424	1.00	0.00	B	C
ATOM	5069	CB	THR	A	154	-39.374	29.920	-58.222	1.00	0.00	B	C
ATOM	5070	OG1	THR	A	154	-40.242	29.839	-59.342	1.00	0.00	B	O
ATOM	5071	CG2	THR	A	154	-39.570	28.696	-57.316	1.00	0.00	B	C
ATOM	5072	C	THR	A	154	-39.327	32.332	-58.297	1.00	0.00	B	C

ATOM 5073 O THR A 154 -38.219 32.868 -58.221 1.00 0.00 B O
ATOM 5074 N GLY A 155 -40.261 32.764 -59.166 1.00 0.00 B N
ATOM 5075 CA GLY A 155 -39.965 33.830 -60.087 1.00 0.00 B C
ATOM 5076 C GLY A 155 -39.459 33.243 -61.376 1.00 0.00 B C
ATOM 5077 O GLY A 155 -38.891 33.951 -62.208 1.00 0.00 B O
ATOM 5078 N LYS A 156 -39.660 31.925 -61.574 1.00 0.00 B N
ATOM 5079 CA LYS A 156 -39.237 31.221 -62.755 1.00 0.00 B C
ATOM 5080 CB LYS A 156 -39.420 29.699 -62.608 1.00 0.00 B C
ATOM 5081 CG LYS A 156 -38.918 28.864 -63.787 1.00 0.00 B C
ATOM 5082 CD LYS A 156 -38.915 27.363 -63.491 1.00 0.00 B C
ATOM 5083 CE LYS A 156 -40.198 26.884 -62.802 1.00 0.00 B C
ATOM 5084 NZ LYS A 156 -40.135 25.429 -62.543 1.00 0.00 B N
ATOM 5085 C LYS A 156 -40.058 31.680 -63.928 1.00 0.00 B C
ATOM 5086 O LYS A 156 -41.246 31.979 -63.799 1.00 0.00 B O
ATOM 5087 N THR A 157 -39.417 31.746 -65.115 1.00 0.00 B N
ATOM 5088 CA THR A 157 -40.072 32.166 -66.323 1.00 0.00 B C
ATOM 5089 CB THR A 157 -39.422 33.356 -66.964 1.00 0.00 B C
ATOM 5090 OG1 THR A 157 -38.090 33.042 -67.341 1.00 0.00 B O
ATOM 5091 CG2 THR A 157 -39.428 34.513 -65.951 1.00 0.00 B C
ATOM 5092 C THR A 157 -39.983 31.021 -67.279 1.00 0.00 B C
ATOM 5093 O THR A 157 -39.333 30.016 -66.997 1.00 0.00 B O
ATOM 5094 N CYS A 158 -40.652 31.141 -68.441 1.00 0.00 B N
ATOM 5095 CA CYS A 158 -40.678 30.076 -69.402 1.00 0.00 B C
ATOM 5096 CB CYS A 158 -41.558 30.409 -70.618 1.00 0.00 B C
ATOM 5097 SG CYS A 158 -41.035 31.934 -71.455 1.00 0.00 B S
ATOM 5098 C CYS A 158 -39.285 29.803 -69.871 1.00 0.00 B C
ATOM 5099 O CYS A 158 -38.899 28.647 -70.045 1.00 0.00 B O
ATOM 5100 N LEU A 159 -38.474 30.855 -70.073 1.00 0.00 B N
ATOM 5101 CA LEU A 159 -37.137 30.630 -70.539 1.00 0.00 B C
ATOM 5102 CB LEU A 159 -36.320 31.913 -70.737 1.00 0.00 B C
ATOM 5103 CG LEU A 159 -34.904 31.609 -71.257 1.00 0.00 B C
ATOM 5104 CD1 LEU A 159 -34.939 31.136 -72.718 1.00 0.00 B C
ATOM 5105 CD2 LEU A 159 -33.941 32.774 -71.028 1.00 0.00 B C
ATOM 5106 C LEU A 159 -36.416 29.808 -69.510 1.00 0.00 B C
ATOM 5107 O LEU A 159 -35.625 28.931 -69.852 1.00 0.00 B O
ATOM 5108 N LEU A 160 -36.652 30.096 -68.217 1.00 0.00 B N
ATOM 5109 CA LEU A 160 -36.011 29.356 -67.165 1.00 0.00 B C
ATOM 5110 CB LEU A 160 -36.269 29.971 -65.777 1.00 0.00 B C

ATOM	5111	CG	LEU	A	160	-35.558	31.326	-65.577	1.00	0.00	B	C
ATOM	5112	CD1	LEU	A	160	-35.830	31.913	-64.182	1.00	0.00	B	C
ATOM	5113	CD2	LEU	A	160	-34.050	31.205	-65.858	1.00	0.00	B	C
ATOM	5114	C	LEU	A	160	-36.492	27.933	-67.176	1.00	0.00	B	C
ATOM	5115	O	LEU	A	160	-35.695	27.012	-67.016	1.00	0.00	B	O
ATOM	5116	N	LYS	A	161	-37.809	27.700	-67.375	1.00	0.00	B	N
ATOM	5117	CA	LYS	A	161	-38.266	26.335	-67.385	1.00	0.00	B	C
ATOM	5118	CB	LYS	A	161	-39.781	26.127	-67.551	1.00	0.00	B	C
ATOM	5119	CG	LYS	A	161	-40.105	24.627	-67.535	1.00	0.00	B	C
ATOM	5120	CD	LYS	A	161	-41.564	24.257	-67.278	1.00	0.00	B	C
ATOM	5121	CE	LYS	A	161	-41.810	22.745	-67.293	1.00	0.00	B	C
ATOM	5122	NZ	LYS	A	161	-43.200	22.449	-66.885	1.00	0.00	B	N
ATOM	5123	C	LYS	A	161	-37.595	25.636	-68.520	1.00	0.00	B	C
ATOM	5124	O	LYS	A	161	-37.221	24.470	-68.411	1.00	0.00	B	O
ATOM	5125	N	ALA	A	162	-37.421	26.351	-69.641	1.00	0.00	B	N
ATOM	5126	CA	ALA	A	162	-36.789	25.797	-70.801	1.00	0.00	B	C
ATOM	5127	CB	ALA	A	162	-36.694	26.813	-71.956	1.00	0.00	B	C
ATOM	5128	C	ALA	A	162	-35.397	25.406	-70.418	1.00	0.00	B	C
ATOM	5129	O	ALA	A	162	-34.881	24.382	-70.868	1.00	0.00	B	O
ATOM	5130	N	MET	A	163	-34.746	26.221	-69.566	1.00	0.00	B	N
ATOM	5131	CA	MET	A	163	-33.395	25.959	-69.165	1.00	0.00	B	C
ATOM	5132	CB	MET	A	163	-32.799	27.092	-68.312	1.00	0.00	B	C
ATOM	5133	CG	MET	A	163	-32.594	28.373	-69.126	1.00	0.00	B	C
ATOM	5134	SD	MET	A	163	-31.369	28.198	-70.459	1.00	0.00	B	S
ATOM	5135	CE	MET	A	163	-31.799	29.750	-71.297	1.00	0.00	B	C
ATOM	5136	C	MET	A	163	-33.331	24.672	-68.401	1.00	0.00	B	C
ATOM	5137	O	MET	A	163	-32.355	23.932	-68.515	1.00	0.00	B	O
ATOM	5138	N	LEU	A	164	-34.332	24.399	-67.543	1.00	0.00	B	N
ATOM	5139	CA	LEU	A	164	-34.362	23.158	-66.818	1.00	0.00	B	C
ATOM	5140	CB	LEU	A	164	-35.339	23.157	-65.633	1.00	0.00	B	C
ATOM	5141	CG	LEU	A	164	-34.880	24.059	-64.469	1.00	0.00	B	C
ATOM	5142	CD1	LEU	A	164	-33.526	23.592	-63.909	1.00	0.00	B	C
ATOM	5143	CD2	LEU	A	164	-34.878	25.543	-64.850	1.00	0.00	B	C
ATOM	5144	C	LEU	A	164	-34.717	22.021	-67.726	1.00	0.00	B	C
ATOM	5145	O	LEU	A	164	-34.169	20.925	-67.606	1.00	0.00	B	O
ATOM	5146	N	ASN	A	165	-35.656	22.241	-68.667	1.00	0.00	B	N
ATOM	5147	CA	ASN	A	165	-36.079	21.143	-69.487	1.00	0.00	B	C
ATOM	5148	CB	ASN	A	165	-37.537	21.272	-69.966	1.00	0.00	B	C

ATOM	5149	CG	ASN	A	165	-38.492	21.129	-68.782	1.00	0.00	B	C
ATOM	5150	OD1	ASN	A	165	-39.660	20.791	-68.971	1.00	0.00	B	O
ATOM	5151	ND2	ASN	A	165	-38.005	21.390	-67.540	1.00	0.00	B	N
ATOM	5152	C	ASN	A	165	-35.225	21.098	-70.711	1.00	0.00	B	C
ATOM	5153	O	ASN	A	165	-35.669	21.446	-71.805	1.00	0.00	B	O
ATOM	5154	N	LEU	A	166	-33.975	20.622	-70.568	1.00	0.00	B	N
ATOM	5155	CA	LEU	A	166	-33.130	20.530	-71.720	1.00	0.00	B	C
ATOM	5156	CB	LEU	A	166	-31.679	20.987	-71.486	1.00	0.00	B	C
ATOM	5157	CG	LEU	A	166	-31.530	22.500	-71.258	1.00	0.00	B	C
ATOM	5158	CD1	LEU	A	166	-30.060	22.884	-71.033	1.00	0.00	B	C
ATOM	5159	CD2	LEU	A	166	-32.175	23.300	-72.402	1.00	0.00	B	C
ATOM	5160	C	LEU	A	166	-33.071	19.103	-72.144	1.00	0.00	B	C
ATOM	5161	O	LEU	A	166	-33.183	18.195	-71.325	1.00	0.00	B	O
ATOM	5162	N	HSD	A	167	-32.952	18.888	-73.467	1.00	0.00	B	N
ATOM	5163	CA	HSD	A	167	-32.760	17.569	-73.990	1.00	0.00	B	C
ATOM	5164	CB	HSD	A	167	-33.931	17.047	-74.848	1.00	0.00	B	C
ATOM	5165	ND1	HSD	A	167	-34.604	19.032	-76.289	1.00	0.00	B	N
ATOM	5166	CG	HSD	A	167	-34.111	17.753	-76.159	1.00	0.00	B	C
ATOM	5167	CE1	HSD	A	167	-34.610	19.316	-77.616	1.00	0.00	B	C
ATOM	5168	NE2	HSD	A	167	-34.155	18.313	-78.345	1.00	0.00	B	N
ATOM	5169	CD2	HSD	A	167	-33.841	17.329	-77.426	1.00	0.00	B	C
ATOM	5170	C	HSD	A	167	-31.535	17.672	-74.845	1.00	0.00	B	C
ATOM	5171	O	HSD	A	167	-31.466	18.492	-75.761	1.00	0.00	B	O
ATOM	5172	N	ASP	A	168	-30.511	16.854	-74.541	1.00	0.00	B	N
ATOM	5173	CA	ASP	A	168	-29.286	16.891	-75.287	1.00	0.00	B	C
ATOM	5174	CB	ASP	A	168	-29.427	16.386	-76.737	1.00	0.00	B	C
ATOM	5175	CG	ASP	A	168	-29.369	14.865	-76.712	1.00	0.00	B	C
ATOM	5176	OD1	ASP	A	168	-28.238	14.330	-76.541	1.00	0.00	B	O
ATOM	5177	OD2	ASP	A	168	-30.438	14.215	-76.847	1.00	0.00	B	O
ATOM	5178	C	ASP	A	168	-28.732	18.280	-75.297	1.00	0.00	B	C
ATOM	5179	O	ASP	A	168	-28.132	18.706	-76.283	1.00	0.00	B	O
ATOM	5180	N	GLY	A	169	-28.910	19.027	-74.190	1.00	0.00	B	N
ATOM	5181	CA	GLY	A	169	-28.342	20.340	-74.070	1.00	0.00	B	C
ATOM	5182	C	GLY	A	169	-28.941	21.244	-75.102	1.00	0.00	B	C
ATOM	5183	O	GLY	A	169	-28.302	22.211	-75.517	1.00	0.00	B	O
ATOM	5184	N	GLN	A	170	-30.187	20.967	-75.541	1.00	0.00	B	N
ATOM	5185	CA	GLN	A	170	-30.769	21.775	-76.580	1.00	0.00	B	C
ATOM	5186	CB	GLN	A	170	-30.752	21.092	-77.956	1.00	0.00	B	C

ATOM	5187	CG	GLN	A	170	-29.345	20.842	-78.498	1.00	0.00	B	C
ATOM	5188	CD	GLN	A	170	-29.475	20.059	-79.798	1.00	0.00	B	C
ATOM	5189	OE1	GLN	A	170	-28.952	18.954	-79.925	1.00	0.00	B	O
ATOM	5190	NE2	GLN	A	170	-30.194	20.644	-80.791	1.00	0.00	B	N
ATOM	5191	C	GLN	A	170	-32.207	22.078	-76.288	1.00	0.00	B	C
ATOM	5192	O	GLN	A	170	-32.921	21.285	-75.672	1.00	0.00	B	O
ATOM	5193	N	ASN	A	171	-32.651	23.277	-76.721	1.00	0.00	B	N
ATOM	5194	CA	ASN	A	171	-34.023	23.686	-76.608	1.00	0.00	B	C
ATOM	5195	CB	ASN	A	171	-34.371	24.141	-75.177	1.00	0.00	B	C
ATOM	5196	CG	ASN	A	171	-35.880	24.206	-75.018	1.00	0.00	B	C
ATOM	5197	OD1	ASN	A	171	-36.619	24.298	-75.996	1.00	0.00	B	O
ATOM	5198	ND2	ASN	A	171	-36.351	24.159	-73.743	1.00	0.00	B	N
ATOM	5199	C	ASN	A	171	-34.184	24.868	-77.525	1.00	0.00	B	C
ATOM	5200	O	ASN	A	171	-33.535	25.897	-77.343	1.00	0.00	B	O
ATOM	5201	N	THR	A	172	-35.016	24.711	-78.573	1.00	0.00	B	N
ATOM	5202	CA	THR	A	172	-35.359	25.689	-79.573	1.00	0.00	B	C
ATOM	5203	CB	THR	A	172	-35.887	25.049	-80.818	1.00	0.00	B	C
ATOM	5204	OG1	THR	A	172	-37.059	24.303	-80.527	1.00	0.00	B	O
ATOM	5205	CG2	THR	A	172	-34.797	24.119	-81.380	1.00	0.00	B	C
ATOM	5206	C	THR	A	172	-36.389	26.642	-79.056	1.00	0.00	B	C
ATOM	5207	O	THR	A	172	-36.558	27.742	-79.581	1.00	0.00	B	O
ATOM	5208	N	THR	A	173	-37.156	26.204	-78.043	1.00	0.00	B	N
ATOM	5209	CA	THR	A	173	-38.178	27.008	-77.454	1.00	0.00	B	C
ATOM	5210	CB	THR	A	173	-38.830	26.327	-76.282	1.00	0.00	B	C
ATOM	5211	OG1	THR	A	173	-39.453	25.118	-76.694	1.00	0.00	B	O
ATOM	5212	CG2	THR	A	173	-39.868	27.273	-75.662	1.00	0.00	B	C
ATOM	5213	C	THR	A	173	-37.497	28.240	-76.959	1.00	0.00	B	C
ATOM	5214	O	THR	A	173	-38.079	29.325	-76.974	1.00	0.00	B	O
ATOM	5215	N	ILE	A	174	-36.244	28.104	-76.485	1.00	0.00	B	N
ATOM	5216	CA	ILE	A	174	-35.530	29.247	-76.000	1.00	0.00	B	C
ATOM	5217	CB	ILE	A	174	-34.183	28.919	-75.413	1.00	0.00	B	C
ATOM	5218	CG2	ILE	A	174	-33.461	30.242	-75.109	1.00	0.00	B	C
ATOM	5219	CG1	ILE	A	174	-34.322	28.005	-74.184	1.00	0.00	B	C
ATOM	5220	CD	ILE	A	174	-32.991	27.418	-73.716	1.00	0.00	B	C
ATOM	5221	C	ILE	A	174	-35.323	30.219	-77.127	1.00	0.00	B	C
ATOM	5222	O	ILE	A	174	-35.623	31.401	-76.967	1.00	0.00	B	O
ATOM	5223	N	PRO	A	175	-34.860	29.792	-78.279	1.00	0.00	B	N
ATOM	5224	CD	PRO	A	175	-34.064	28.583	-78.414	1.00	0.00	B	C

ATOM	5225	CA	PRO A 175	-34.631	30.714	-79.355	1.00	0.00	B	C
ATOM	5226	CB	PRO A 175	-33.967	29.902	-80.463	1.00	0.00	B	C
ATOM	5227	CG	PRO A 175	-33.234	28.784	-79.695	1.00	0.00	B	C
ATOM	5228	C	PRO A 175	-35.891	31.404	-79.761	1.00	0.00	B	C
ATOM	5229	O	PRO A 175	-35.839	32.583	-80.106	1.00	0.00	B	O
ATOM	5230	N	LEU A 176	-37.020	30.679	-79.760	1.00	0.00	B	N
ATOM	5231	CA	LEU A 176	-38.278	31.260	-80.120	1.00	0.00	B	C
ATOM	5232	CB	LEU A 176	-39.354	30.180	-80.359	1.00	0.00	B	C
ATOM	5233	CG	LEU A 176	-40.697	30.676	-80.944	1.00	0.00	B	C
ATOM	5234	CD1	LEU A 176	-41.599	29.484	-81.297	1.00	0.00	B	C
ATOM	5235	CD2	LEU A 176	-41.423	31.675	-80.028	1.00	0.00	B	C
ATOM	5236	C	LEU A 176	-38.711	32.189	-79.026	1.00	0.00	B	C
ATOM	5237	O	LEU A 176	-39.235	33.271	-79.287	1.00	0.00	B	O
ATOM	5238	N	LEU A 177	-38.497	31.787	-77.759	1.00	0.00	B	N
ATOM	5239	CA	LEU A 177	-38.959	32.561	-76.642	1.00	0.00	B	C
ATOM	5240	CB	LEU A 177	-38.718	31.864	-75.296	1.00	0.00	B	C
ATOM	5241	CG	LEU A 177	-39.612	30.625	-75.114	1.00	0.00	B	C
ATOM	5242	CD1	LEU A 177	-39.363	29.948	-73.769	1.00	0.00	B	C
ATOM	5243	CD2	LEU A 177	-41.095	30.964	-75.325	1.00	0.00	B	C
ATOM	5244	C	LEU A 177	-38.279	33.891	-76.624	1.00	0.00	B	C
ATOM	5245	O	LEU A 177	-38.920	34.920	-76.414	1.00	0.00	B	O
ATOM	5246	N	LEU A 178	-36.957	33.903	-76.855	1.00	0.00	B	N
ATOM	5247	CA	LEU A 178	-36.178	35.107	-76.860	1.00	0.00	B	C
ATOM	5248	CB	LEU A 178	-34.710	34.782	-77.147	1.00	0.00	B	C
ATOM	5249	CG	LEU A 178	-34.083	33.880	-76.072	1.00	0.00	B	C
ATOM	5250	CD1	LEU A 178	-32.702	33.375	-76.509	1.00	0.00	B	C
ATOM	5251	CD2	LEU A 178	-34.038	34.588	-74.708	1.00	0.00	B	C
ATOM	5252	C	LEU A 178	-36.662	35.987	-77.974	1.00	0.00	B	C
ATOM	5253	O	LEU A 178	-36.876	37.186	-77.797	1.00	0.00	B	O
ATOM	5254	N	GLU A 179	-36.899	35.385	-79.152	1.00	0.00	B	N
ATOM	5255	CA	GLU A 179	-37.275	36.118	-80.327	1.00	0.00	B	C
ATOM	5256	CB	GLU A 179	-37.615	35.176	-81.493	1.00	0.00	B	C
ATOM	5257	CG	GLU A 179	-38.067	35.888	-82.768	1.00	0.00	B	C
ATOM	5258	CD	GLU A 179	-38.558	34.824	-83.740	1.00	0.00	B	C
ATOM	5259	OE1	GLU A 179	-37.913	33.743	-83.813	1.00	0.00	B	O
ATOM	5260	OE2	GLU A 179	-39.591	35.074	-84.415	1.00	0.00	B	O
ATOM	5261	C	GLU A 179	-38.517	36.895	-80.028	1.00	0.00	B	C
ATOM	5262	O	GLU A 179	-38.639	38.062	-80.396	1.00	0.00	B	O

ATOM	5263	N	ILE A 180	-39.475	36.257	-79.334	1.00	0.00	B	N
ATOM	5264	CA	ILE A 180	-40.719	36.896	-79.029	1.00	0.00	B	C
ATOM	5265	CB	ILE A 180	-41.702	35.996	-78.339	1.00	0.00	B	C
ATOM	5266	CG2	ILE A 180	-42.895	36.854	-77.887	1.00	0.00	B	C
ATOM	5267	CG1	ILE A 180	-42.099	34.844	-79.274	1.00	0.00	B	C
ATOM	5268	CD	ILE A 180	-42.932	33.764	-78.593	1.00	0.00	B	C
ATOM	5269	C	ILE A 180	-40.470	38.061	-78.128	1.00	0.00	B	C
ATOM	5270	O	ILE A 180	-41.126	39.095	-78.250	1.00	0.00	B	O
ATOM	5271	N	ALA A 181	-39.526	37.904	-77.185	1.00	0.00	B	N
ATOM	5272	CA	ALA A 181	-39.239	38.898	-76.198	1.00	0.00	B	C
ATOM	5273	CB	ALA A 181	-38.159	38.457	-75.194	1.00	0.00	B	C
ATOM	5274	C	ALA A 181	-38.754	40.157	-76.831	1.00	0.00	B	C
ATOM	5275	O	ALA A 181	-39.078	41.224	-76.330	1.00	0.00	B	O
ATOM	5276	N	ARG A 182	-37.920	40.088	-77.884	1.00	0.00	B	N
ATOM	5277	CA	ARG A 182	-37.403	41.276	-78.517	1.00	0.00	B	C
ATOM	5278	CB	ARG A 182	-36.193	41.012	-79.438	1.00	0.00	B	C
ATOM	5279	CG	ARG A 182	-36.454	40.017	-80.566	1.00	0.00	B	C
ATOM	5280	CD	ARG A 182	-35.244	39.774	-81.476	1.00	0.00	B	C
ATOM	5281	NE	ARG A 182	-34.183	39.082	-80.688	1.00	0.00	B	N
ATOM	5282	CZ	ARG A 182	-33.076	39.772	-80.284	1.00	0.00	B	C
ATOM	5283	NH1	ARG A 182	-32.933	41.086	-80.623	1.00	0.00	B	N
ATOM	5284	NH2	ARG A 182	-32.107	39.150	-79.553	1.00	0.00	B	N
ATOM	5285	C	ARG A 182	-38.464	42.003	-79.288	1.00	0.00	B	C
ATOM	5286	O	ARG A 182	-38.485	43.233	-79.321	1.00	0.00	B	O
ATOM	5287	N	GLN A 183	-39.385	41.263	-79.935	1.00	0.00	B	N
ATOM	5288	CA	GLN A 183	-40.393	41.906	-80.725	1.00	0.00	B	C
ATOM	5289	CB	GLN A 183	-41.280	40.909	-81.495	1.00	0.00	B	C
ATOM	5290	CG	GLN A 183	-40.455	40.120	-82.521	1.00	0.00	B	C
ATOM	5291	CD	GLN A 183	-41.376	39.322	-83.427	1.00	0.00	B	C
ATOM	5292	OE1	GLN A 183	-41.244	38.104	-83.550	1.00	0.00	B	O
ATOM	5293	NE2	GLN A 183	-42.316	40.033	-84.107	1.00	0.00	B	N
ATOM	5294	C	GLN A 183	-41.205	42.756	-79.799	1.00	0.00	B	C
ATOM	5295	O	GLN A 183	-41.731	43.799	-80.187	1.00	0.00	B	O
ATOM	5296	N	THR A 184	-41.397	42.271	-78.561	1.00	0.00	B	N
ATOM	5297	CA	THR A 184	-42.016	42.998	-77.491	1.00	0.00	B	C
ATOM	5298	CB	THR A 184	-42.573	42.094	-76.437	1.00	0.00	B	C
ATOM	5299	OG1	THR A 184	-43.484	41.177	-77.025	1.00	0.00	B	O
ATOM	5300	CG2	THR A 184	-43.306	42.958	-75.397	1.00	0.00	B	C

ATOM	5301	C	THR	A	184	-41.009	43.920	-76.858	1.00	0.00	B	C
ATOM	5302	O	THR	A	184	-41.364	44.873	-76.168	1.00	0.00	B	O
ATOM	5303	N	ASP	A	185	-39.709	43.629	-77.038	1.00	0.00	B	N
ATOM	5304	CA	ASP	A	185	-38.636	44.373	-76.435	1.00	0.00	B	C
ATOM	5305	CB	ASP	A	185	-38.750	45.888	-76.680	1.00	0.00	B	C
ATOM	5306	CG	ASP	A	185	-38.458	46.157	-78.151	1.00	0.00	B	C
ATOM	5307	OD1	ASP	A	185	-37.525	45.511	-78.700	1.00	0.00	B	O
ATOM	5308	OD2	ASP	A	185	-39.172	47.007	-78.747	1.00	0.00	B	O
ATOM	5309	C	ASP	A	185	-38.620	44.147	-74.953	1.00	0.00	B	C
ATOM	5310	O	ASP	A	185	-38.021	44.916	-74.205	1.00	0.00	B	O
ATOM	5311	N	SER	A	186	-39.259	43.055	-74.492	1.00	0.00	B	N
ATOM	5312	CA	SER	A	186	-39.186	42.619	-73.127	1.00	0.00	B	C
ATOM	5313	CB	SER	A	186	-40.227	41.539	-72.790	1.00	0.00	B	C
ATOM	5314	OG	SER	A	186	-41.538	42.068	-72.939	1.00	0.00	B	O
ATOM	5315	C	SER	A	186	-37.843	41.970	-72.981	1.00	0.00	B	C
ATOM	5316	O	SER	A	186	-37.472	41.497	-71.907	1.00	0.00	B	O
ATOM	5317	N	LEU	A	187	-37.053	41.996	-74.067	1.00	0.00	B	N
ATOM	5318	CA	LEU	A	187	-35.894	41.166	-74.180	1.00	0.00	B	C
ATOM	5319	CB	LEU	A	187	-35.126	41.352	-75.498	1.00	0.00	B	C
ATOM	5320	CG	LEU	A	187	-33.978	40.334	-75.632	1.00	0.00	B	C
ATOM	5321	CD1	LEU	A	187	-34.521	38.897	-75.655	1.00	0.00	B	C
ATOM	5322	CD2	LEU	A	187	-33.077	40.637	-76.835	1.00	0.00	B	C
ATOM	5323	C	LEU	A	187	-34.914	41.308	-73.050	1.00	0.00	B	C
ATOM	5324	O	LEU	A	187	-34.498	40.291	-72.501	1.00	0.00	B	O
ATOM	5325	N	LYS	A	188	-34.516	42.526	-72.644	1.00	0.00	B	N
ATOM	5326	CA	LYS	A	188	-33.485	42.606	-71.636	1.00	0.00	B	C
ATOM	5327	CB	LYS	A	188	-33.058	44.047	-71.319	1.00	0.00	B	C
ATOM	5328	CG	LYS	A	188	-32.004	44.107	-70.213	1.00	0.00	B	C
ATOM	5329	CD	LYS	A	188	-31.349	45.475	-70.033	1.00	0.00	B	C
ATOM	5330	CE	LYS	A	188	-30.017	45.618	-70.767	1.00	0.00	B	C
ATOM	5331	NZ	LYS	A	188	-29.305	46.815	-70.272	1.00	0.00	B	N
ATOM	5332	C	LYS	A	188	-33.922	42.003	-70.331	1.00	0.00	B	C
ATOM	5333	O	LYS	A	188	-33.224	41.154	-69.772	1.00	0.00	B	O
ATOM	5334	N	GLU	A	189	-35.098	42.417	-69.821	1.00	0.00	B	N
ATOM	5335	CA	GLU	A	189	-35.563	41.985	-68.531	1.00	0.00	B	C
ATOM	5336	CB	GLU	A	189	-36.804	42.750	-68.017	1.00	0.00	B	C
ATOM	5337	CG	GLU	A	189	-38.047	42.663	-68.906	1.00	0.00	B	C
ATOM	5338	CD	GLU	A	189	-38.117	43.929	-69.749	1.00	0.00	B	C

ATOM 5339 OE1 GLU A 189 -37.165 44.170 -70.539 1.00 0.00 B O
ATOM 5340 OE2 GLU A 189 -39.120 44.675 -69.611 1.00 0.00 B O
ATOM 5341 C GLU A 189 -35.897 40.529 -68.567 1.00 0.00 B C
ATOM 5342 O GLU A 189 -35.836 39.852 -67.542 1.00 0.00 B O
ATOM 5343 N LEU A 190 -36.332 40.020 -69.737 1.00 0.00 B N
ATOM 5344 CA LEU A 190 -36.699 38.637 -69.838 1.00 0.00 B C
ATOM 5345 CB LEU A 190 -37.275 38.285 -71.219 1.00 0.00 B C
ATOM 5346 CG LEU A 190 -37.657 36.799 -71.352 1.00 0.00 B C
ATOM 5347 CD1 LEU A 190 -38.789 36.418 -70.389 1.00 0.00 B C
ATOM 5348 CD2 LEU A 190 -37.964 36.434 -72.812 1.00 0.00 B C
ATOM 5349 C LEU A 190 -35.508 37.753 -69.625 1.00 0.00 B C
ATOM 5350 O LEU A 190 -35.533 36.835 -68.804 1.00 0.00 B O
ATOM 5351 N VAL A 191 -34.415 38.036 -70.352 1.00 0.00 B N
ATOM 5352 CA VAL A 191 -33.206 37.269 -70.291 1.00 0.00 B C
ATOM 5353 CB VAL A 191 -32.208 37.678 -71.340 1.00 0.00 B C
ATOM 5354 CG1 VAL A 191 -30.848 37.045 -71.017 1.00 0.00 B C
ATOM 5355 CG2 VAL A 191 -32.740 37.215 -72.707 1.00 0.00 B C
ATOM 5356 C VAL A 191 -32.586 37.409 -68.931 1.00 0.00 B C
ATOM 5357 O VAL A 191 -31.824 36.539 -68.510 1.00 0.00 B O
ATOM 5358 N ASN A 192 -32.845 38.523 -68.218 1.00 0.00 B N
ATOM 5359 CA ASN A 192 -32.177 38.667 -66.952 1.00 0.00 B C
ATOM 5360 CB ASN A 192 -31.519 40.046 -66.782 1.00 0.00 B C
ATOM 5361 CG ASN A 192 -30.367 40.161 -67.768 1.00 0.00 B C
ATOM 5362 OD1 ASN A 192 -29.674 39.188 -68.064 1.00 0.00 B O
ATOM 5363 ND2 ASN A 192 -30.156 41.396 -68.298 1.00 0.00 B N
ATOM 5364 C ASN A 192 -33.093 38.505 -65.765 1.00 0.00 B C
ATOM 5365 O ASN A 192 -32.791 39.039 -64.698 1.00 0.00 B O
ATOM 5366 N ALA A 193 -34.197 37.740 -65.869 1.00 0.00 B N
ATOM 5367 CA ALA A 193 -35.040 37.580 -64.708 1.00 0.00 B C
ATOM 5368 CB ALA A 193 -36.435 37.019 -65.032 1.00 0.00 B C
ATOM 5369 C ALA A 193 -34.367 36.611 -63.780 1.00 0.00 B C
ATOM 5370 O ALA A 193 -33.706 35.679 -64.230 1.00 0.00 B O
ATOM 5371 N SER A 194 -34.544 36.787 -62.450 1.00 0.00 B N
ATOM 5372 CA SER A 194 -33.850 35.939 -61.517 1.00 0.00 B C
ATOM 5373 CB SER A 194 -32.764 36.685 -60.722 1.00 0.00 B C
ATOM 5374 OG SER A 194 -33.338 37.751 -59.979 1.00 0.00 B O
ATOM 5375 C SER A 194 -34.802 35.321 -60.530 1.00 0.00 B C
ATOM 5376 O SER A 194 -35.936 35.768 -60.359 1.00 0.00 B O

ATOM	5377	N	TYR	A	195	-34.341	34.234	-59.866	1.00	0.00	B	N
ATOM	5378	CA	TYR	A	195	-35.104	33.513	-58.876	1.00	0.00	B	C
ATOM	5379	CB	TYR	A	195	-34.481	32.165	-58.458	1.00	0.00	B	C
ATOM	5380	CG	TYR	A	195	-34.687	31.141	-59.522	1.00	0.00	B	C
ATOM	5381	CD1	TYR	A	195	-33.887	31.086	-60.640	1.00	0.00	B	C
ATOM	5382	CE1	TYR	A	195	-34.100	30.124	-61.601	1.00	0.00	B	C
ATOM	5383	CZ	TYR	A	195	-35.110	29.204	-61.449	1.00	0.00	B	C
ATOM	5384	OH	TYR	A	195	-35.331	28.217	-62.433	1.00	0.00	B	O
ATOM	5385	CD2	TYR	A	195	-35.691	30.210	-59.377	1.00	0.00	B	C
ATOM	5386	CE2	TYR	A	195	-35.907	29.248	-60.332	1.00	0.00	B	C
ATOM	5387	C	TYR	A	195	-35.193	34.335	-57.619	1.00	0.00	B	C
ATOM	5388	O	TYR	A	195	-34.225	34.966	-57.207	1.00	0.00	B	O
ATOM	5389	N	THR	A	196	-36.414	34.443	-57.068	1.00	0.00	B	N
ATOM	5390	CA	THR	A	196	-36.766	35.128	-55.847	1.00	0.00	B	C
ATOM	5391	CB	THR	A	196	-38.162	35.667	-55.904	1.00	0.00	B	C
ATOM	5392	OG1	THR	A	196	-39.097	34.604	-56.012	1.00	0.00	B	O
ATOM	5393	CG2	THR	A	196	-38.270	36.583	-57.134	1.00	0.00	B	C
ATOM	5394	C	THR	A	196	-36.641	34.311	-54.584	1.00	0.00	B	C
ATOM	5395	O	THR	A	196	-36.428	34.873	-53.512	1.00	0.00	B	O
ATOM	5396	N	ASP	A	197	-36.825	32.975	-54.654	1.00	0.00	B	N
ATOM	5397	CA	ASP	A	197	-36.871	32.172	-53.459	1.00	0.00	B	C
ATOM	5398	CB	ASP	A	197	-37.288	30.711	-53.704	1.00	0.00	B	C
ATOM	5399	CG	ASP	A	197	-36.250	30.054	-54.602	1.00	0.00	B	C
ATOM	5400	OD1	ASP	A	197	-35.698	30.757	-55.490	1.00	0.00	B	O
ATOM	5401	OD2	ASP	A	197	-35.994	28.835	-54.408	1.00	0.00	B	O
ATOM	5402	C	ASP	A	197	-35.524	32.176	-52.809	1.00	0.00	B	C
ATOM	5403	O	ASP	A	197	-34.510	32.455	-53.442	1.00	0.00	B	O
ATOM	5404	N	SER	A	198	-35.485	31.863	-51.500	1.00	0.00	B	N
ATOM	5405	CA	SER	A	198	-34.255	31.935	-50.767	1.00	0.00	B	C
ATOM	5406	CB	SER	A	198	-34.428	31.635	-49.268	1.00	0.00	B	C
ATOM	5407	OG	SER	A	198	-34.839	30.291	-49.078	1.00	0.00	B	O
ATOM	5408	C	SER	A	198	-33.266	30.950	-51.308	1.00	0.00	B	C
ATOM	5409	O	SER	A	198	-32.058	31.172	-51.228	1.00	0.00	B	O
ATOM	5410	N	TYR	A	199	-33.740	29.809	-51.839	1.00	0.00	B	N
ATOM	5411	CA	TYR	A	199	-32.790	28.813	-52.253	1.00	0.00	B	C
ATOM	5412	CB	TYR	A	199	-33.523	27.500	-52.594	1.00	0.00	B	C
ATOM	5413	CG	TYR	A	199	-32.563	26.370	-52.740	1.00	0.00	B	C
ATOM	5414	CD1	TYR	A	199	-31.903	25.887	-51.635	1.00	0.00	B	C

ATOM	5415	CE1 TYR A 199	-31.023	24.837	-51.746	1.00	0.00	B	C
ATOM	5416	CZ TYR A 199	-30.804	24.248	-52.965	1.00	0.00	B	C
ATOM	5417	OH TYR A 199	-29.903	23.169	-53.066	1.00	0.00	B	O
ATOM	5418	CD2 TYR A 199	-32.353	25.763	-53.958	1.00	0.00	B	C
ATOM	5419	CE2 TYR A 199	-31.474	24.709	-54.075	1.00	0.00	B	C
ATOM	5420	C TYR A 199	-31.971	29.238	-53.455	1.00	0.00	B	C
ATOM	5421	O TYR A 199	-30.751	29.385	-53.372	1.00	0.00	B	O
ATOM	5422	N TYR A 200	-32.646	29.468	-54.598	1.00	0.00	B	N
ATOM	5423	CA TYR A 200	-32.097	29.798	-55.895	1.00	0.00	B	C
ATOM	5424	CB TYR A 200	-32.927	29.286	-57.085	1.00	0.00	B	C
ATOM	5425	CG TYR A 200	-33.610	28.062	-56.580	1.00	0.00	B	C
ATOM	5426	CD1 TYR A 200	-32.877	26.927	-56.318	1.00	0.00	B	C
ATOM	5427	CE1 TYR A 200	-33.486	25.787	-55.849	1.00	0.00	B	C
ATOM	5428	CZ TYR A 200	-34.844	25.773	-55.645	1.00	0.00	B	C
ATOM	5429	OH TYR A 200	-35.476	24.608	-55.164	1.00	0.00	B	O
ATOM	5430	CD2 TYR A 200	-34.970	28.037	-56.382	1.00	0.00	B	C
ATOM	5431	CE2 TYR A 200	-35.586	26.900	-55.914	1.00	0.00	B	C
ATOM	5432	C TYR A 200	-31.766	31.239	-56.111	1.00	0.00	B	C
ATOM	5433	O TYR A 200	-31.154	31.572	-57.127	1.00	0.00	B	O
ATOM	5434	N LYS A 201	-32.274	32.125	-55.231	1.00	0.00	B	N
ATOM	5435	CA LYS A 201	-32.300	33.555	-55.411	1.00	0.00	B	C
ATOM	5436	CB LYS A 201	-32.490	34.362	-54.111	1.00	0.00	B	C
ATOM	5437	CG LYS A 201	-31.376	34.194	-53.082	1.00	0.00	B	C
ATOM	5438	CD LYS A 201	-31.400	35.260	-51.986	1.00	0.00	B	C
ATOM	5439	CE LYS A 201	-32.796	35.814	-51.702	1.00	0.00	B	C
ATOM	5440	NZ LYS A 201	-33.644	34.772	-51.081	1.00	0.00	B	N
ATOM	5441	C LYS A 201	-31.142	34.117	-56.179	1.00	0.00	B	C
ATOM	5442	O LYS A 201	-29.974	33.828	-55.931	1.00	0.00	B	O
ATOM	5443	N GLY A 202	-31.499	34.918	-57.204	1.00	0.00	B	N
ATOM	5444	CA GLY A 202	-30.565	35.639	-58.012	1.00	0.00	B	C
ATOM	5445	C GLY A 202	-30.083	34.808	-59.164	1.00	0.00	B	C
ATOM	5446	O GLY A 202	-29.279	35.286	-59.966	1.00	0.00	B	O
ATOM	5447	N GLN A 203	-30.544	33.548	-59.293	1.00	0.00	B	N
ATOM	5448	CA GLN A 203	-30.090	32.753	-60.400	1.00	0.00	B	C
ATOM	5449	CB GLN A 203	-30.300	31.236	-60.219	1.00	0.00	B	C
ATOM	5450	CG GLN A 203	-29.795	30.405	-61.404	1.00	0.00	B	C
ATOM	5451	CD GLN A 203	-29.976	28.931	-61.067	1.00	0.00	B	C
ATOM	5452	OE1 GLN A 203	-31.070	28.482	-60.724	1.00	0.00	B	O

ATOM	5453	NE2	GLN	A	203	-28.867	28.150	-61.163	1.00	0.00	B	N
ATOM	5454	C	GLN	A	203	-30.812	33.184	-61.639	1.00	0.00	B	C
ATOM	5455	O	GLN	A	203	-32.023	33.413	-61.632	1.00	0.00	B	O
ATOM	5456	N	THR	A	204	-30.051	33.289	-62.748	1.00	0.00	B	N
ATOM	5457	CA	THR	A	204	-30.542	33.703	-64.032	1.00	0.00	B	C
ATOM	5458	CB	THR	A	204	-29.813	34.889	-64.591	1.00	0.00	B	C
ATOM	5459	OG1	THR	A	204	-28.442	34.570	-64.773	1.00	0.00	B	O
ATOM	5460	CG2	THR	A	204	-29.956	36.072	-63.618	1.00	0.00	B	C
ATOM	5461	C	THR	A	204	-30.289	32.574	-64.979	1.00	0.00	B	C
ATOM	5462	O	THR	A	204	-29.633	31.594	-64.635	1.00	0.00	B	O
ATOM	5463	N	ALA	A	205	-30.812	32.692	-66.216	1.00	0.00	B	N
ATOM	5464	CA	ALA	A	205	-30.656	31.665	-67.206	1.00	0.00	B	C
ATOM	5465	CB	ALA	A	205	-31.337	32.016	-68.538	1.00	0.00	B	C
ATOM	5466	C	ALA	A	205	-29.195	31.462	-67.485	1.00	0.00	B	C
ATOM	5467	O	ALA	A	205	-28.742	30.332	-67.652	1.00	0.00	B	O
ATOM	5468	N	LEU	A	206	-28.402	32.549	-67.525	1.00	0.00	B	N
ATOM	5469	CA	LEU	A	206	-27.005	32.427	-67.842	1.00	0.00	B	C
ATOM	5470	CB	LEU	A	206	-26.275	33.782	-67.892	1.00	0.00	B	C
ATOM	5471	CG	LEU	A	206	-24.793	33.662	-68.295	1.00	0.00	B	C
ATOM	5472	CD1	LEU	A	206	-24.655	33.006	-69.676	1.00	0.00	B	C
ATOM	5473	CD2	LEU	A	206	-24.078	35.022	-68.231	1.00	0.00	B	C
ATOM	5474	C	LEU	A	206	-26.330	31.556	-66.823	1.00	0.00	B	C
ATOM	5475	O	LEU	A	206	-25.418	30.800	-67.156	1.00	0.00	B	O
ATOM	5476	N	HSD	A	207	-26.749	31.633	-65.547	1.00	0.00	B	N
ATOM	5477	CA	HSD	A	207	-26.105	30.816	-64.554	1.00	0.00	B	C
ATOM	5478	CB	HSD	A	207	-26.703	30.971	-63.142	1.00	0.00	B	C
ATOM	5479	ND1	HSD	A	207	-27.256	33.390	-62.589	1.00	0.00	B	N
ATOM	5480	CG	HSD	A	207	-26.428	32.294	-62.499	1.00	0.00	B	C
ATOM	5481	CE1	HSD	A	207	-26.677	34.383	-61.867	1.00	0.00	B	C
ATOM	5482	NE2	HSD	A	207	-25.536	33.999	-61.321	1.00	0.00	B	N
ATOM	5483	CD2	HSD	A	207	-25.382	32.685	-61.720	1.00	0.00	B	C
ATOM	5484	C	HSD	A	207	-26.296	29.379	-64.932	1.00	0.00	B	C
ATOM	5485	O	HSD	A	207	-25.353	28.590	-64.918	1.00	0.00	B	O
ATOM	5486	N	ILE	A	208	-27.533	29.012	-65.319	1.00	0.00	B	N
ATOM	5487	CA	ILE	A	208	-27.888	27.654	-65.614	1.00	0.00	B	C
ATOM	5488	CB	ILE	A	208	-29.350	27.504	-65.937	1.00	0.00	B	C
ATOM	5489	CG2	ILE	A	208	-29.588	26.081	-66.467	1.00	0.00	B	C
ATOM	5490	CG1	ILE	A	208	-30.207	27.859	-64.707	1.00	0.00	B	C

ATOM	5491	CD	ILE	A	208	-31.700	27.993	-65.012	1.00	0.00	B	C
ATOM	5492	C	ILE	A	208	-27.096	27.133	-66.777	1.00	0.00	B	C
ATOM	5493	O	ILE	A	208	-26.647	25.986	-66.757	1.00	0.00	B	O
ATOM	5494	N	ALA	A	209	-26.897	27.957	-67.821	1.00	0.00	B	N
ATOM	5495	CA	ALA	A	209	-26.211	27.515	-69.005	1.00	0.00	B	C
ATOM	5496	CB	ALA	A	209	-26.106	28.614	-70.075	1.00	0.00	B	C
ATOM	5497	C	ALA	A	209	-24.821	27.104	-68.645	1.00	0.00	B	C
ATOM	5498	O	ALA	A	209	-24.297	26.129	-69.182	1.00	0.00	B	O
ATOM	5499	N	ILE	A	210	-24.173	27.876	-67.758	1.00	0.00	B	N
ATOM	5500	CA	ILE	A	210	-22.833	27.578	-67.337	1.00	0.00	B	C
ATOM	5501	CB	ILE	A	210	-22.223	28.689	-66.535	1.00	0.00	B	C
ATOM	5502	CG2	ILE	A	210	-20.851	28.222	-66.018	1.00	0.00	B	C
ATOM	5503	CG1	ILE	A	210	-22.150	29.966	-67.385	1.00	0.00	B	C
ATOM	5504	CD	ILE	A	210	-21.807	31.214	-66.578	1.00	0.00	B	C
ATOM	5505	C	ILE	A	210	-22.825	26.336	-66.503	1.00	0.00	B	C
ATOM	5506	O	ILE	A	210	-21.997	25.450	-66.700	1.00	0.00	B	O
ATOM	5507	N	GLU	A	211	-23.782	26.222	-65.565	1.00	0.00	B	N
ATOM	5508	CA	GLU	A	211	-23.822	25.087	-64.690	1.00	0.00	B	C
ATOM	5509	CB	GLU	A	211	-25.009	25.162	-63.719	1.00	0.00	B	C
ATOM	5510	CG	GLU	A	211	-24.793	26.257	-62.669	1.00	0.00	B	C
ATOM	5511	CD	GLU	A	211	-26.104	26.557	-61.965	1.00	0.00	B	C
ATOM	5512	OE1	GLU	A	211	-27.178	26.298	-62.571	1.00	0.00	B	O
ATOM	5513	OE2	GLU	A	211	-26.051	27.064	-60.813	1.00	0.00	B	O
ATOM	5514	C	GLU	A	211	-23.921	23.865	-65.553	1.00	0.00	B	C
ATOM	5515	O	GLU	A	211	-23.371	22.814	-65.234	1.00	0.00	B	O
ATOM	5516	N	ARG	A	212	-24.646	23.994	-66.673	1.00	0.00	B	N
ATOM	5517	CA	ARG	A	212	-24.859	22.973	-67.659	1.00	0.00	B	C
ATOM	5518	CB	ARG	A	212	-26.014	23.322	-68.613	1.00	0.00	B	C
ATOM	5519	CG	ARG	A	212	-27.352	23.428	-67.879	1.00	0.00	B	C
ATOM	5520	CD	ARG	A	212	-27.596	22.265	-66.914	1.00	0.00	B	C
ATOM	5521	NE	ARG	A	212	-28.943	22.445	-66.305	1.00	0.00	B	N
ATOM	5522	CZ	ARG	A	212	-29.096	22.368	-64.953	1.00	0.00	B	C
ATOM	5523	NH1	ARG	A	212	-28.003	22.187	-64.153	1.00	0.00	B	N
ATOM	5524	NH2	ARG	A	212	-30.340	22.471	-64.399	1.00	0.00	B	N
ATOM	5525	C	ARG	A	212	-23.621	22.722	-68.470	1.00	0.00	B	C
ATOM	5526	O	ARG	A	212	-23.501	21.673	-69.101	1.00	0.00	B	O
ATOM	5527	N	ARG	A	213	-22.681	23.688	-68.514	1.00	0.00	B	N
ATOM	5528	CA	ARG	A	213	-21.492	23.549	-69.309	1.00	0.00	B	C

ATOM	5529	CB	ARG	A	213	-20.753	22.225	-69.071	1.00	0.00	B	C
ATOM	5530	CG	ARG	A	213	-20.211	22.081	-67.656	1.00	0.00	B	C
ATOM	5531	CD	ARG	A	213	-19.459	20.771	-67.424	1.00	0.00	B	C
ATOM	5532	NE	ARG	A	213	-18.956	20.815	-66.027	1.00	0.00	B	N
ATOM	5533	CZ	ARG	A	213	-17.758	21.407	-65.746	1.00	0.00	B	C
ATOM	5534	NH1	ARG	A	213	-16.976	21.908	-66.747	1.00	0.00	B	N
ATOM	5535	NH2	ARG	A	213	-17.355	21.505	-64.450	1.00	0.00	B	N
ATOM	5536	C	ARG	A	213	-21.858	23.574	-70.758	1.00	0.00	B	C
ATOM	5537	O	ARG	A	213	-21.307	22.810	-71.551	1.00	0.00	B	O
ATOM	5538	N	ASN	A	214	-22.811	24.445	-71.155	1.00	0.00	B	N
ATOM	5539	CA	ASN	A	214	-23.096	24.489	-72.561	1.00	0.00	B	C
ATOM	5540	CB	ASN	A	214	-24.527	24.061	-72.974	1.00	0.00	B	C
ATOM	5541	CG	ASN	A	214	-25.618	24.937	-72.382	1.00	0.00	B	C
ATOM	5542	OD1	ASN	A	214	-25.396	25.962	-71.743	1.00	0.00	B	O
ATOM	5543	ND2	ASN	A	214	-26.883	24.486	-72.596	1.00	0.00	B	N
ATOM	5544	C	ASN	A	214	-22.723	25.824	-73.126	1.00	0.00	B	C
ATOM	5545	O	ASN	A	214	-23.320	26.864	-72.848	1.00	0.00	B	O
ATOM	5546	N	MET	A	215	-21.683	25.811	-73.973	1.00	0.00	B	N
ATOM	5547	CA	MET	A	215	-21.143	27.012	-74.535	1.00	0.00	B	C
ATOM	5548	CB	MET	A	215	-19.906	26.721	-75.402	1.00	0.00	B	C
ATOM	5549	CG	MET	A	215	-18.809	27.791	-75.343	1.00	0.00	B	C
ATOM	5550	SD	MET	A	215	-19.272	29.469	-75.853	1.00	0.00	B	S
ATOM	5551	CE	MET	A	215	-20.131	29.918	-74.319	1.00	0.00	B	C
ATOM	5552	C	MET	A	215	-22.197	27.634	-75.398	1.00	0.00	B	C
ATOM	5553	O	MET	A	215	-22.428	28.841	-75.348	1.00	0.00	B	O
ATOM	5554	N	ALA	A	216	-22.917	26.804	-76.170	1.00	0.00	B	N
ATOM	5555	CA	ALA	A	216	-23.849	27.334	-77.119	1.00	0.00	B	C
ATOM	5556	CB	ALA	A	216	-24.616	26.232	-77.859	1.00	0.00	B	C
ATOM	5557	C	ALA	A	216	-24.864	28.181	-76.414	1.00	0.00	B	C
ATOM	5558	O	ALA	A	216	-25.190	29.268	-76.887	1.00	0.00	B	O
ATOM	5559	N	LEU	A	217	-25.398	27.708	-75.272	1.00	0.00	B	N
ATOM	5560	CA	LEU	A	217	-26.375	28.489	-74.569	1.00	0.00	B	C
ATOM	5561	CB	LEU	A	217	-27.160	27.741	-73.476	1.00	0.00	B	C
ATOM	5562	CG	LEU	A	217	-28.152	26.702	-74.030	1.00	0.00	B	C
ATOM	5563	CD1	LEU	A	217	-29.131	26.231	-72.941	1.00	0.00	B	C
ATOM	5564	CD2	LEU	A	217	-28.864	27.224	-75.289	1.00	0.00	B	C
ATOM	5565	C	LEU	A	217	-25.751	29.692	-73.944	1.00	0.00	B	C
ATOM	5566	O	LEU	A	217	-26.383	30.742	-73.854	1.00	0.00	B	O

ATOM	5567	N	VAL A 218	-24.506	29.571	-73.445	1.00	0.00	B	N
ATOM	5568	CA	VAL A 218	-23.895	30.730	-72.862	1.00	0.00	B	C
ATOM	5569	CB	VAL A 218	-22.503	30.464	-72.361	1.00	0.00	B	C
ATOM	5570	CG1	VAL A 218	-21.861	31.800	-71.950	1.00	0.00	B	C
ATOM	5571	CG2	VAL A 218	-22.583	29.437	-71.219	1.00	0.00	B	C
ATOM	5572	C	VAL A 218	-23.797	31.758	-73.943	1.00	0.00	B	C
ATOM	5573	O	VAL A 218	-24.221	32.900	-73.776	1.00	0.00	B	O
ATOM	5574	N	THR A 219	-23.303	31.343	-75.122	1.00	0.00	B	N
ATOM	5575	CA	THR A 219	-23.088	32.256	-76.206	1.00	0.00	B	C
ATOM	5576	CB	THR A 219	-22.637	31.565	-77.460	1.00	0.00	B	C
ATOM	5577	OG1	THR A 219	-21.458	30.816	-77.212	1.00	0.00	B	O
ATOM	5578	CG2	THR A 219	-22.367	32.626	-78.541	1.00	0.00	B	C
ATOM	5579	C	THR A 219	-24.387	32.912	-76.541	1.00	0.00	B	C
ATOM	5580	O	THR A 219	-24.454	34.129	-76.701	1.00	0.00	B	O
ATOM	5581	N	LEU A 220	-25.468	32.121	-76.638	1.00	0.00	B	N
ATOM	5582	CA	LEU A 220	-26.714	32.682	-77.073	1.00	0.00	B	C
ATOM	5583	CB	LEU A 220	-27.821	31.625	-77.229	1.00	0.00	B	C
ATOM	5584	CG	LEU A 220	-29.161	32.199	-77.728	1.00	0.00	B	C
ATOM	5585	CD1	LEU A 220	-29.016	32.808	-79.133	1.00	0.00	B	C
ATOM	5586	CD2	LEU A 220	-30.280	31.146	-77.657	1.00	0.00	B	C
ATOM	5587	C	LEU A 220	-27.190	33.716	-76.096	1.00	0.00	B	C
ATOM	5588	O	LEU A 220	-27.573	34.811	-76.497	1.00	0.00	B	O
ATOM	5589	N	LEU A 221	-27.147	33.416	-74.781	1.00	0.00	B	N
ATOM	5590	CA	LEU A 221	-27.683	34.326	-73.803	1.00	0.00	B	C
ATOM	5591	CB	LEU A 221	-27.699	33.762	-72.373	1.00	0.00	B	C
ATOM	5592	CG	LEU A 221	-28.862	32.784	-72.117	1.00	0.00	B	C
ATOM	5593	CD1	LEU A 221	-28.884	31.629	-73.127	1.00	0.00	B	C
ATOM	5594	CD2	LEU A 221	-28.849	32.292	-70.663	1.00	0.00	B	C
ATOM	5595	C	LEU A 221	-26.938	35.624	-73.794	1.00	0.00	B	C
ATOM	5596	O	LEU A 221	-27.549	36.685	-73.687	1.00	0.00	B	O
ATOM	5597	N	VAL A 222	-25.600	35.574	-73.908	1.00	0.00	B	N
ATOM	5598	CA	VAL A 222	-24.785	36.758	-73.886	1.00	0.00	B	C
ATOM	5599	CB	VAL A 222	-23.318	36.447	-73.968	1.00	0.00	B	C
ATOM	5600	CG1	VAL A 222	-22.542	37.765	-74.128	1.00	0.00	B	C
ATOM	5601	CG2	VAL A 222	-22.920	35.645	-72.717	1.00	0.00	B	C
ATOM	5602	C	VAL A 222	-25.130	37.639	-75.053	1.00	0.00	B	C
ATOM	5603	O	VAL A 222	-25.139	38.862	-74.931	1.00	0.00	B	O
ATOM	5604	N	GLU A 223	-25.389	37.040	-76.233	1.00	0.00	B	N

ATOM	5605	CA	GLU A 223	-25.717	37.803	-77.408	1.00	0.00	B	C
ATOM	5606	CB	GLU A 223	-25.768	36.957	-78.692	1.00	0.00	B	C
ATOM	5607	CG	GLU A 223	-24.382	36.478	-79.125	1.00	0.00	B	C
ATOM	5608	CD	GLU A 223	-24.495	35.821	-80.491	1.00	0.00	B	C
ATOM	5609	OE1	GLU A 223	-25.630	35.434	-80.876	1.00	0.00	B	O
ATOM	5610	OE2	GLU A 223	-23.442	35.702	-81.172	1.00	0.00	B	O
ATOM	5611	C	GLU A 223	-27.043	38.472	-77.218	1.00	0.00	B	C
ATOM	5612	O	GLU A 223	-27.278	39.571	-77.717	1.00	0.00	B	O
ATOM	5613	N	ASN A 224	-27.958	37.782	-76.517	1.00	0.00	B	N
ATOM	5614	CA	ASN A 224	-29.280	38.224	-76.172	1.00	0.00	B	C
ATOM	5615	CB	ASN A 224	-30.153	37.108	-75.589	1.00	0.00	B	C
ATOM	5616	CG	ASN A 224	-30.339	36.078	-76.686	1.00	0.00	B	C
ATOM	5617	OD1	ASN A 224	-30.569	36.408	-77.847	1.00	0.00	B	O
ATOM	5618	ND2	ASN A 224	-30.219	34.782	-76.303	1.00	0.00	B	N
ATOM	5619	C	ASN A 224	-29.176	39.283	-75.119	1.00	0.00	B	C
ATOM	5620	O	ASN A 224	-30.174	39.914	-74.774	1.00	0.00	B	O
ATOM	5621	N	GLY A 225	-27.991	39.442	-74.493	1.00	0.00	B	N
ATOM	5622	CA	GLY A 225	-27.869	40.520	-73.554	1.00	0.00	B	C
ATOM	5623	C	GLY A 225	-27.980	40.064	-72.132	1.00	0.00	B	C
ATOM	5624	O	GLY A 225	-28.374	40.846	-71.269	1.00	0.00	B	O
ATOM	5625	N	ALA A 226	-27.649	38.791	-71.837	1.00	0.00	B	N
ATOM	5626	CA	ALA A 226	-27.692	38.366	-70.466	1.00	0.00	B	C
ATOM	5627	CB	ALA A 226	-27.397	36.870	-70.269	1.00	0.00	B	C
ATOM	5628	C	ALA A 226	-26.664	39.143	-69.694	1.00	0.00	B	C
ATOM	5629	O	ALA A 226	-25.568	39.418	-70.185	1.00	0.00	B	O
ATOM	5630	N	ASP A 227	-27.025	39.542	-68.454	1.00	0.00	B	N
ATOM	5631	CA	ASP A 227	-26.149	40.273	-67.584	1.00	0.00	B	C
ATOM	5632	CB	ASP A 227	-26.869	40.837	-66.349	1.00	0.00	B	C
ATOM	5633	CG	ASP A 227	-25.894	41.696	-65.562	1.00	0.00	B	C
ATOM	5634	OD1	ASP A 227	-24.767	41.941	-66.072	1.00	0.00	B	O
ATOM	5635	OD2	ASP A 227	-26.261	42.119	-64.433	1.00	0.00	B	O
ATOM	5636	C	ASP A 227	-25.095	39.327	-67.094	1.00	0.00	B	C
ATOM	5637	O	ASP A 227	-25.386	38.340	-66.420	1.00	0.00	B	O
ATOM	5638	N	VAL A 228	-23.831	39.629	-67.432	1.00	0.00	B	N
ATOM	5639	CA	VAL A 228	-22.685	38.835	-67.088	1.00	0.00	B	C
ATOM	5640	CB	VAL A 228	-21.467	39.225	-67.875	1.00	0.00	B	C
ATOM	5641	CG1	VAL A 228	-20.252	38.452	-67.335	1.00	0.00	B	C
ATOM	5642	CG2	VAL A 228	-21.747	38.955	-69.365	1.00	0.00	B	C

ATOM	5643	C	VAL A 228	-22.360	38.935	-65.621	1.00	0.00	B	C
ATOM	5644	O	VAL A 228	-21.725	38.044	-65.057	1.00	0.00	B	O
ATOM	5645	N	GLN A 229	-22.683	40.086	-65.009	1.00	0.00	B	N
ATOM	5646	CA	GLN A 229	-22.445	40.421	-63.627	1.00	0.00	B	C
ATOM	5647	CB	GLN A 229	-22.348	41.933	-63.380	1.00	0.00	B	C
ATOM	5648	CG	GLN A 229	-21.106	42.533	-64.041	1.00	0.00	B	C
ATOM	5649	CD	GLN A 229	-19.911	41.697	-63.594	1.00	0.00	B	C
ATOM	5650	OE1	GLN A 229	-19.576	40.689	-64.211	1.00	0.00	B	O
ATOM	5651	NE2	GLN A 229	-19.255	42.121	-62.483	1.00	0.00	B	N
ATOM	5652	C	GLN A 229	-23.426	39.827	-62.644	1.00	0.00	B	C
ATOM	5653	O	GLN A 229	-23.173	39.880	-61.442	1.00	0.00	B	O
ATOM	5654	N	ALA A 230	-24.604	39.340	-63.088	1.00	0.00	B	N
ATOM	5655	CA	ALA A 230	-25.636	38.905	-62.174	1.00	0.00	B	C
ATOM	5656	CB	ALA A 230	-26.833	38.237	-62.875	1.00	0.00	B	C
ATOM	5657	C	ALA A 230	-25.115	37.922	-61.165	1.00	0.00	B	C
ATOM	5658	O	ALA A 230	-24.467	36.936	-61.507	1.00	0.00	B	O
ATOM	5659	N	ALA A 231	-25.442	38.157	-59.876	1.00	0.00	B	N
ATOM	5660	CA	ALA A 231	-24.939	37.307	-58.831	1.00	0.00	B	C
ATOM	5661	CB	ALA A 231	-24.449	38.089	-57.599	1.00	0.00	B	C
ATOM	5662	C	ALA A 231	-26.012	36.378	-58.352	1.00	0.00	B	C
ATOM	5663	O	ALA A 231	-27.093	36.806	-57.949	1.00	0.00	B	O
ATOM	5664	N	ALA A 232	-25.721	35.059	-58.380	1.00	0.00	B	N
ATOM	5665	CA	ALA A 232	-26.658	34.111	-57.848	1.00	0.00	B	C
ATOM	5666	CB	ALA A 232	-26.600	32.741	-58.542	1.00	0.00	B	C
ATOM	5667	C	ALA A 232	-26.233	33.912	-56.421	1.00	0.00	B	C
ATOM	5668	O	ALA A 232	-25.260	33.215	-56.147	1.00	0.00	B	O
ATOM	5669	N	HSD A 233	-26.931	34.619	-55.507	1.00	0.00	B	N
ATOM	5670	CA	HSD A 233	-26.763	34.721	-54.077	1.00	0.00	B	C
ATOM	5671	CB	HSD A 233	-27.099	36.130	-53.557	1.00	0.00	B	C
ATOM	5672	ND1	HSD A 233	-28.245	37.390	-55.430	1.00	0.00	B	N
ATOM	5673	CG	HSD A 233	-28.300	36.729	-54.221	1.00	0.00	B	C
ATOM	5674	CE1	HSD A 233	-29.510	37.785	-55.717	1.00	0.00	B	C
ATOM	5675	NE2	HSD A 233	-30.371	37.426	-54.783	1.00	0.00	B	N
ATOM	5676	CD2	HSD A 233	-29.605	36.763	-53.842	1.00	0.00	B	C
ATOM	5677	C	HSD A 233	-27.474	33.715	-53.207	1.00	0.00	B	C
ATOM	5678	O	HSD A 233	-27.187	33.652	-52.012	1.00	0.00	B	O
ATOM	5679	N	GLY A 234	-28.460	32.954	-53.716	1.00	0.00	B	N
ATOM	5680	CA	GLY A 234	-29.286	32.136	-52.852	1.00	0.00	B	C

ATOM	5681	C	GLY A 234	-28.479	31.113	-52.105	1.00	0.00	B	C
ATOM	5682	O	GLY A 234	-27.313	30.877	-52.399	1.00	0.00	B	O
ATOM	5683	N	ASP A 235	-29.127	30.449	-51.121	1.00	0.00	B	N
ATOM	5684	CA	ASP A 235	-28.501	29.492	-50.246	1.00	0.00	B	C
ATOM	5685	CB	ASP A 235	-29.450	28.925	-49.173	1.00	0.00	B	C
ATOM	5686	CG	ASP A 235	-29.611	29.995	-48.097	1.00	0.00	B	C
ATOM	5687	OD1	ASP A 235	-28.796	30.957	-48.100	1.00	0.00	B	O
ATOM	5688	OD2	ASP A 235	-30.543	29.865	-47.259	1.00	0.00	B	O
ATOM	5689	C	ASP A 235	-27.941	28.357	-51.047	1.00	0.00	B	C
ATOM	5690	O	ASP A 235	-26.999	27.691	-50.622	1.00	0.00	B	O
ATOM	5691	N	PHE A 236	-28.517	28.099	-52.232	1.00	0.00	B	N
ATOM	5692	CA	PHE A 236	-28.046	27.045	-53.086	1.00	0.00	B	C
ATOM	5693	CB	PHE A 236	-28.909	26.873	-54.352	1.00	0.00	B	C
ATOM	5694	CG	PHE A 236	-28.252	25.861	-55.228	1.00	0.00	B	C
ATOM	5695	CD1	PHE A 236	-28.374	24.517	-54.966	1.00	0.00	B	C
ATOM	5696	CE1	PHE A 236	-27.762	23.585	-55.774	1.00	0.00	B	C
ATOM	5697	CZ	PHE A 236	-27.016	23.995	-56.852	1.00	0.00	B	C
ATOM	5698	CD2	PHE A 236	-27.496	26.263	-56.304	1.00	0.00	B	C
ATOM	5699	CE2	PHE A 236	-26.883	25.338	-57.116	1.00	0.00	B	C
ATOM	5700	C	PHE A 236	-26.633	27.338	-53.498	1.00	0.00	B	C
ATOM	5701	O	PHE A 236	-25.858	26.430	-53.780	1.00	0.00	B	O
ATOM	5702	N	PHE A 237	-26.311	28.633	-53.630	1.00	0.00	B	N
ATOM	5703	CA	PHE A 237	-25.066	29.213	-54.048	1.00	0.00	B	C
ATOM	5704	CB	PHE A 237	-25.288	30.593	-54.679	1.00	0.00	B	C
ATOM	5705	CG	PHE A 237	-26.205	30.291	-55.819	1.00	0.00	B	C
ATOM	5706	CD1	PHE A 237	-25.730	29.679	-56.957	1.00	0.00	B	C
ATOM	5707	CE1	PHE A 237	-26.574	29.393	-58.004	1.00	0.00	B	C
ATOM	5708	CZ	PHE A 237	-27.907	29.717	-57.927	1.00	0.00	B	C
ATOM	5709	CD2	PHE A 237	-27.541	30.611	-55.747	1.00	0.00	B	C
ATOM	5710	CE2	PHE A 237	-28.389	30.327	-56.794	1.00	0.00	B	C
ATOM	5711	C	PHE A 237	-24.006	29.278	-52.985	1.00	0.00	B	C
ATOM	5712	O	PHE A 237	-22.873	29.623	-53.312	1.00	0.00	B	O
ATOM	5713	N	LYS A 238	-24.357	29.101	-51.689	1.00	0.00	B	N
ATOM	5714	CA	LYS A 238	-23.391	29.191	-50.625	1.00	0.00	B	C
ATOM	5715	CB	LYS A 238	-23.778	30.208	-49.539	1.00	0.00	B	C
ATOM	5716	CG	LYS A 238	-23.652	31.661	-50.001	1.00	0.00	B	C
ATOM	5717	CD	LYS A 238	-24.387	32.665	-49.109	1.00	0.00	B	C
ATOM	5718	CE	LYS A 238	-24.361	32.314	-47.619	1.00	0.00	B	C

ATOM	5719	NZ	LYS	A	238	-25.350	31.253	-47.327	1.00	0.00	B	N
ATOM	5720	C	LYS	A	238	-23.191	27.855	-49.963	1.00	0.00	B	C
ATOM	5721	O	LYS	A	238	-23.755	26.840	-50.373	1.00	0.00	B	O
ATOM	5722	N	LYS	A	239	-22.351	27.857	-48.899	1.00	0.00	B	N
ATOM	5723	CA	LYS	A	239	-21.923	26.688	-48.181	1.00	0.00	B	C
ATOM	5724	CB	LYS	A	239	-20.975	27.019	-47.015	1.00	0.00	B	C
ATOM	5725	CG	LYS	A	239	-19.665	27.662	-47.478	1.00	0.00	B	C
ATOM	5726	CD	LYS	A	239	-18.869	28.338	-46.359	1.00	0.00	B	C
ATOM	5727	CE	LYS	A	239	-17.592	29.027	-46.850	1.00	0.00	B	C
ATOM	5728	NZ	LYS	A	239	-16.941	29.753	-45.736	1.00	0.00	B	N
ATOM	5729	C	LYS	A	239	-23.096	25.946	-47.639	1.00	0.00	B	C
ATOM	5730	O	LYS	A	239	-24.052	26.514	-47.113	1.00	0.00	B	O
ATOM	5731	N	THR	A	240	-22.988	24.609	-47.745	1.00	0.00	B	N
ATOM	5732	CA	THR	A	240	-23.976	23.630	-47.421	1.00	0.00	B	C
ATOM	5733	CB	THR	A	240	-23.452	22.268	-47.790	1.00	0.00	B	C
ATOM	5734	OG1	THR	A	240	-24.485	21.302	-47.861	1.00	0.00	B	O
ATOM	5735	CG2	THR	A	240	-22.388	21.858	-46.760	1.00	0.00	B	C
ATOM	5736	C	THR	A	240	-24.282	23.700	-45.953	1.00	0.00	B	C
ATOM	5737	O	THR	A	240	-23.394	23.812	-45.112	1.00	0.00	B	O
ATOM	5738	N	LYS	A	241	-25.591	23.675	-45.649	1.00	0.00	B	N
ATOM	5739	CA	LYS	A	241	-26.218	23.694	-44.359	1.00	0.00	B	C
ATOM	5740	CB	LYS	A	241	-27.741	23.866	-44.443	1.00	0.00	B	C
ATOM	5741	CG	LYS	A	241	-28.148	25.302	-44.770	1.00	0.00	B	C
ATOM	5742	CD	LYS	A	241	-29.599	25.451	-45.224	1.00	0.00	B	C
ATOM	5743	CE	LYS	A	241	-30.611	24.722	-44.341	1.00	0.00	B	C
ATOM	5744	NZ	LYS	A	241	-30.579	23.265	-44.600	1.00	0.00	B	N
ATOM	5745	C	LYS	A	241	-25.948	22.457	-43.547	1.00	0.00	B	C
ATOM	5746	O	LYS	A	241	-25.792	22.578	-42.332	1.00	0.00	B	O
ATOM	5747	N	GLY	A	242	-25.847	21.235	-44.129	1.00	0.00	B	N
ATOM	5748	CA	GLY	A	242	-25.879	20.892	-45.524	1.00	0.00	B	C
ATOM	5749	C	GLY	A	242	-27.212	21.127	-46.161	1.00	0.00	B	C
ATOM	5750	O	GLY	A	242	-28.185	20.439	-45.864	1.00	0.00	B	O
ATOM	5751	N	ARG	A	243	-27.291	22.149	-47.042	1.00	0.00	B	N
ATOM	5752	CA	ARG	A	243	-28.474	22.371	-47.807	1.00	0.00	B	C
ATOM	5753	CB	ARG	A	243	-28.622	23.804	-48.341	1.00	0.00	B	C
ATOM	5754	CG	ARG	A	243	-29.952	24.010	-49.064	1.00	0.00	B	C
ATOM	5755	CD	ARG	A	243	-30.557	25.404	-48.893	1.00	0.00	B	C
ATOM	5756	NE	ARG	A	243	-31.241	25.411	-47.572	1.00	0.00	B	N

ATOM	5757	CZ	ARG A 243	-32.153	26.378	-47.266	1.00	0.00	B	C
ATOM	5758	NH1	ARG A 243	-32.460	27.351	-48.175	1.00	0.00	B	N
ATOM	5759	NH2	ARG A 243	-32.759	26.370	-46.043	1.00	0.00	B	N
ATOM	5760	C	ARG A 243	-28.562	21.396	-48.939	1.00	0.00	B	C
ATOM	5761	O	ARG A 243	-29.586	20.720	-49.042	1.00	0.00	B	O
ATOM	5762	N	PRO A 244	-27.580	21.211	-49.809	1.00	0.00	B	N
ATOM	5763	CD	PRO A 244	-27.410	19.849	-50.287	1.00	0.00	B	C
ATOM	5764	CA	PRO A 244	-26.326	21.956	-49.888	1.00	0.00	B	C
ATOM	5765	CB	PRO A 244	-25.347	21.026	-50.609	1.00	0.00	B	C
ATOM	5766	CG	PRO A 244	-25.903	19.619	-50.401	1.00	0.00	B	C
ATOM	5767	C	PRO A 244	-26.473	23.295	-50.578	1.00	0.00	B	C
ATOM	5768	O	PRO A 244	-27.591	23.627	-50.961	1.00	0.00	B	O
ATOM	5769	N	GLY A 245	-25.373	24.072	-50.795	1.00	0.00	B	N
ATOM	5770	CA	GLY A 245	-24.179	23.646	-51.496	1.00	0.00	B	C
ATOM	5771	C	GLY A 245	-24.507	23.698	-52.960	1.00	0.00	B	C
ATOM	5772	O	GLY A 245	-25.532	23.152	-53.371	1.00	0.00	B	O
ATOM	5773	N	PHE A 246	-23.629	24.262	-53.834	1.00	0.00	B	N
ATOM	5774	CA	PHE A 246	-22.247	24.613	-53.603	1.00	0.00	B	C
ATOM	5775	CB	PHE A 246	-21.347	23.595	-54.334	1.00	0.00	B	C
ATOM	5776	CG	PHE A 246	-19.999	24.138	-54.658	1.00	0.00	B	C
ATOM	5777	CD1	PHE A 246	-18.971	24.181	-53.744	1.00	0.00	B	C
ATOM	5778	CE1	PHE A 246	-17.743	24.684	-54.111	1.00	0.00	B	C
ATOM	5779	CZ	PHE A 246	-17.530	25.142	-55.391	1.00	0.00	B	C
ATOM	5780	CD2	PHE A 246	-19.774	24.588	-55.939	1.00	0.00	B	C
ATOM	5781	CE2	PHE A 246	-18.550	25.092	-56.311	1.00	0.00	B	C
ATOM	5782	C	PHE A 246	-21.908	26.009	-54.059	1.00	0.00	B	C
ATOM	5783	O	PHE A 246	-22.556	26.571	-54.942	1.00	0.00	B	O
ATOM	5784	N	TYR A 247	-20.819	26.573	-53.472	1.00	0.00	B	N
ATOM	5785	CA	TYR A 247	-20.470	27.965	-53.617	1.00	0.00	B	C
ATOM	5786	CB	TYR A 247	-20.320	28.593	-52.222	1.00	0.00	B	C
ATOM	5787	CG	TYR A 247	-19.588	29.880	-52.291	1.00	0.00	B	C
ATOM	5788	CD1	TYR A 247	-20.231	31.071	-52.536	1.00	0.00	B	C
ATOM	5789	CE1	TYR A 247	-19.505	32.240	-52.581	1.00	0.00	B	C
ATOM	5790	CZ	TYR A 247	-18.143	32.215	-52.379	1.00	0.00	B	C
ATOM	5791	OH	TYR A 247	-17.392	33.404	-52.419	1.00	0.00	B	O
ATOM	5792	CD2	TYR A 247	-18.232	29.867	-52.092	1.00	0.00	B	C
ATOM	5793	CE2	TYR A 247	-17.504	31.026	-52.134	1.00	0.00	B	C
ATOM	5794	C	TYR A 247	-19.208	28.197	-54.411	1.00	0.00	B	C

ATOM 5795 O TYR A 247 -18.104 27.857 -53.999 1.00 0.00 B O
ATOM 5796 N PHE A 248 -19.403 28.686 -55.650 1.00 0.00 B N
ATOM 5797 CA PHE A 248 -18.492 29.149 -56.670 1.00 0.00 B C
ATOM 5798 CB PHE A 248 -18.892 28.668 -58.066 1.00 0.00 B C
ATOM 5799 CG PHE A 248 -20.294 29.085 -58.302 1.00 0.00 B C
ATOM 5800 CD1 PHE A 248 -21.325 28.296 -57.852 1.00 0.00 B C
ATOM 5801 CE1 PHE A 248 -22.630 28.671 -58.068 1.00 0.00 B C
ATOM 5802 CZ PHE A 248 -22.903 29.842 -58.734 1.00 0.00 B C
ATOM 5803 CD2 PHE A 248 -20.573 30.260 -58.960 1.00 0.00 B C
ATOM 5804 CE2 PHE A 248 -21.876 30.637 -59.181 1.00 0.00 B C
ATOM 5805 C PHE A 248 -18.322 30.628 -56.659 1.00 0.00 B C
ATOM 5806 O PHE A 248 -17.740 31.213 -57.571 1.00 0.00 B O
ATOM 5807 N GLY A 249 -19.127 31.240 -55.802 1.00 0.00 B N
ATOM 5808 CA GLY A 249 -19.279 32.606 -55.493 1.00 0.00 B C
ATOM 5809 C GLY A 249 -19.975 33.335 -56.594 1.00 0.00 B C
ATOM 5810 O GLY A 249 -19.307 33.946 -57.420 1.00 0.00 B O
ATOM 5811 N GLU A 250 -21.291 33.107 -56.740 1.00 0.00 B N
ATOM 5812 CA GLU A 250 -22.294 33.993 -57.288 1.00 0.00 B C
ATOM 5813 CB GLU A 250 -22.537 35.172 -56.335 1.00 0.00 B C
ATOM 5814 CG GLU A 250 -22.968 34.716 -54.940 1.00 0.00 B C
ATOM 5815 CD GLU A 250 -23.184 35.948 -54.075 1.00 0.00 B C
ATOM 5816 OE1 GLU A 250 -23.162 37.075 -54.640 1.00 0.00 B O
ATOM 5817 OE2 GLU A 250 -23.383 35.781 -52.844 1.00 0.00 B O
ATOM 5818 C GLU A 250 -22.165 34.581 -58.675 1.00 0.00 B C
ATOM 5819 O GLU A 250 -23.198 34.858 -59.289 1.00 0.00 B O
ATOM 5820 N LEU A 251 -20.966 34.721 -59.266 1.00 0.00 B N
ATOM 5821 CA LEU A 251 -20.860 35.449 -60.513 1.00 0.00 B C
ATOM 5822 CB LEU A 251 -19.750 36.519 -60.506 1.00 0.00 B C
ATOM 5823 CG LEU A 251 -19.970 37.711 -59.558 1.00 0.00 B C
ATOM 5824 CD1 LEU A 251 -18.775 38.674 -59.617 1.00 0.00 B C
ATOM 5825 CD2 LEU A 251 -21.293 38.438 -59.849 1.00 0.00 B C
ATOM 5826 C LEU A 251 -20.457 34.483 -61.575 1.00 0.00 B C
ATOM 5827 O LEU A 251 -19.620 33.618 -61.334 1.00 0.00 B O
ATOM 5828 N PRO A 252 -20.980 34.660 -62.762 1.00 0.00 B N
ATOM 5829 CD PRO A 252 -22.096 35.561 -62.992 1.00 0.00 B C
ATOM 5830 CA PRO A 252 -20.762 33.760 -63.859 1.00 0.00 B C
ATOM 5831 CB PRO A 252 -21.515 34.369 -65.040 1.00 0.00 B C
ATOM 5832 CG PRO A 252 -22.659 35.157 -64.367 1.00 0.00 B C

ATOM	5833	C	PRO A 252	-19.318	33.449	-64.112	1.00	0.00	B	C
ATOM	5834	O	PRO A 252	-19.000	32.279	-64.304	1.00	0.00	B	O
ATOM	5835	N	LEU A 253	-18.425	34.452	-64.095	1.00	0.00	B	N
ATOM	5836	CA	LEU A 253	-17.031	34.184	-64.315	1.00	0.00	B	C
ATOM	5837	CB	LEU A 253	-16.158	35.449	-64.257	1.00	0.00	B	C
ATOM	5838	CG	LEU A 253	-14.659	35.175	-64.495	1.00	0.00	B	C
ATOM	5839	CD1	LEU A 253	-14.363	34.783	-65.948	1.00	0.00	B	C
ATOM	5840	CD2	LEU A 253	-13.795	36.345	-64.017	1.00	0.00	B	C
ATOM	5841	C	LEU A 253	-16.546	33.283	-63.217	1.00	0.00	B	C
ATOM	5842	O	LEU A 253	-15.827	32.316	-63.468	1.00	0.00	B	O
ATOM	5843	N	SER A 254	-16.949	33.568	-61.964	1.00	0.00	B	N
ATOM	5844	CA	SER A 254	-16.482	32.818	-60.830	1.00	0.00	B	C
ATOM	5845	CB	SER A 254	-17.051	33.348	-59.505	1.00	0.00	B	C
ATOM	5846	OG	SER A 254	-16.589	34.673	-59.286	1.00	0.00	B	O
ATOM	5847	C	SER A 254	-16.917	31.396	-60.982	1.00	0.00	B	C
ATOM	5848	O	SER A 254	-16.141	30.469	-60.757	1.00	0.00	B	O
ATOM	5849	N	LEU A 255	-18.182	31.199	-61.385	1.00	0.00	B	N
ATOM	5850	CA	LEU A 255	-18.728	29.889	-61.578	1.00	0.00	B	C
ATOM	5851	CB	LEU A 255	-20.197	29.947	-62.048	1.00	0.00	B	C
ATOM	5852	CG	LEU A 255	-20.847	28.568	-62.277	1.00	0.00	B	C
ATOM	5853	CD1	LEU A 255	-20.913	27.762	-60.974	1.00	0.00	B	C
ATOM	5854	CD2	LEU A 255	-22.227	28.696	-62.949	1.00	0.00	B	C
ATOM	5855	C	LEU A 255	-17.942	29.192	-62.643	1.00	0.00	B	C
ATOM	5856	O	LEU A 255	-17.502	28.057	-62.469	1.00	0.00	B	O
ATOM	5857	N	ALA A 256	-17.685	29.890	-63.764	1.00	0.00	B	N
ATOM	5858	CA	ALA A 256	-17.047	29.268	-64.894	1.00	0.00	B	C
ATOM	5859	CB	ALA A 256	-16.865	30.227	-66.082	1.00	0.00	B	C
ATOM	5860	C	ALA A 256	-15.690	28.776	-64.491	1.00	0.00	B	C
ATOM	5861	O	ALA A 256	-15.247	27.725	-64.954	1.00	0.00	B	O
ATOM	5862	N	ALA A 257	-14.963	29.567	-63.679	1.00	0.00	B	N
ATOM	5863	CA	ALA A 257	-13.648	29.183	-63.242	1.00	0.00	B	C
ATOM	5864	CB	ALA A 257	-12.906	30.351	-62.564	1.00	0.00	B	C
ATOM	5865	C	ALA A 257	-13.680	28.029	-62.272	1.00	0.00	B	C
ATOM	5866	O	ALA A 257	-12.974	27.037	-62.458	1.00	0.00	B	O
ATOM	5867	N	CYS A 258	-14.555	28.099	-61.244	1.00	0.00	B	N
ATOM	5868	CA	CYS A 258	-14.599	27.139	-60.170	1.00	0.00	B	C
ATOM	5869	CB	CYS A 258	-15.634	27.486	-59.083	1.00	0.00	B	C
ATOM	5870	SG	CYS A 258	-15.149	28.926	-58.083	1.00	0.00	B	S

ATOM	5871	C	CYS A 258	-14.948	25.790	-60.705	1.00	0.00	B	C
ATOM	5872	O	CYS A 258	-14.581	24.766	-60.133	1.00	0.00	B	O
ATOM	5873	N	THR A 259	-15.750	25.772	-61.776	1.00	0.00	B	N
ATOM	5874	CA	THR A 259	-16.184	24.610	-62.497	1.00	0.00	B	C
ATOM	5875	CB	THR A 259	-17.418	24.849	-63.319	1.00	0.00	B	C
ATOM	5876	OG1	THR A 259	-17.179	25.844	-64.300	1.00	0.00	B	O
ATOM	5877	CG2	THR A 259	-18.552	25.288	-62.377	1.00	0.00	B	C
ATOM	5878	C	THR A 259	-15.096	24.113	-63.397	1.00	0.00	B	C
ATOM	5879	O	THR A 259	-15.247	23.072	-64.035	1.00	0.00	B	O
ATOM	5880	N	ASN A 260	-14.000	24.884	-63.541	1.00	0.00	B	N
ATOM	5881	CA	ASN A 260	-12.908	24.522	-64.394	1.00	0.00	B	C
ATOM	5882	CB	ASN A 260	-12.231	23.196	-63.990	1.00	0.00	B	C
ATOM	5883	CG	ASN A 260	-10.832	23.203	-64.586	1.00	0.00	B	C
ATOM	5884	OD1	ASN A 260	-10.168	24.238	-64.601	1.00	0.00	B	O
ATOM	5885	ND2	ASN A 260	-10.377	22.028	-65.095	1.00	0.00	B	N
ATOM	5886	C	ASN A 260	-13.356	24.449	-65.821	1.00	0.00	B	C
ATOM	5887	O	ASN A 260	-13.218	23.427	-66.493	1.00	0.00	B	O
ATOM	5888	N	GLN A 261	-13.968	25.542	-66.315	1.00	0.00	B	N
ATOM	5889	CA	GLN A 261	-14.297	25.571	-67.709	1.00	0.00	B	C
ATOM	5890	CB	GLN A 261	-15.793	25.333	-67.991	1.00	0.00	B	C
ATOM	5891	CG	GLN A 261	-16.772	26.221	-67.231	1.00	0.00	B	C
ATOM	5892	CD	GLN A 261	-18.135	25.551	-67.367	1.00	0.00	B	C
ATOM	5893	OE1	GLN A 261	-18.437	24.938	-68.389	1.00	0.00	B	O
ATOM	5894	NE2	GLN A 261	-18.980	25.661	-66.308	1.00	0.00	B	N
ATOM	5895	C	GLN A 261	-13.735	26.829	-68.299	1.00	0.00	B	C
ATOM	5896	O	GLN A 261	-14.370	27.881	-68.353	1.00	0.00	B	O
ATOM	5897	N	LEU A 262	-12.487	26.701	-68.799	1.00	0.00	B	N
ATOM	5898	CA	LEU A 262	-11.696	27.810	-69.245	1.00	0.00	B	C
ATOM	5899	CB	LEU A 262	-10.250	27.441	-69.597	1.00	0.00	B	C
ATOM	5900	CG	LEU A 262	-9.448	28.669	-70.058	1.00	0.00	B	C
ATOM	5901	CD1	LEU A 262	-9.307	29.701	-68.927	1.00	0.00	B	C
ATOM	5902	CD2	LEU A 262	-8.102	28.263	-70.668	1.00	0.00	B	C
ATOM	5903	C	LEU A 262	-12.273	28.504	-70.433	1.00	0.00	B	C
ATOM	5904	O	LEU A 262	-12.272	29.733	-70.477	1.00	0.00	B	O
ATOM	5905	N	GLY A 263	-12.804	27.757	-71.420	1.00	0.00	B	N
ATOM	5906	CA	GLY A 263	-13.238	28.386	-72.636	1.00	0.00	B	C
ATOM	5907	C	GLY A 263	-14.278	29.412	-72.321	1.00	0.00	B	C
ATOM	5908	O	GLY A 263	-14.279	30.502	-72.892	1.00	0.00	B	O

ATOM 5909 N ILE A 264 -15.207 29.078 -71.411 1.00 0.00 B N
ATOM 5910 CA ILE A 264 -16.247 29.989 -71.032 1.00 0.00 B C
ATOM 5911 CB ILE A 264 -17.344 29.351 -70.225 1.00 0.00 B C
ATOM 5912 CG2 ILE A 264 -18.313 30.459 -69.780 1.00 0.00 B C
ATOM 5913 CG1 ILE A 264 -18.028 28.256 -71.062 1.00 0.00 B C
ATOM 5914 CD ILE A 264 -19.099 27.476 -70.301 1.00 0.00 B C
ATOM 5915 C ILE A 264 -15.659 31.143 -70.278 1.00 0.00 B C
ATOM 5916 O ILE A 264 -16.129 32.273 -70.400 1.00 0.00 B O
ATOM 5917 N VAL A 265 -14.625 30.894 -69.444 1.00 0.00 B N
ATOM 5918 CA VAL A 265 -14.025 31.991 -68.740 1.00 0.00 B C
ATOM 5919 CB VAL A 265 -12.834 31.586 -67.909 1.00 0.00 B C
ATOM 5920 CG1 VAL A 265 -12.133 32.852 -67.386 1.00 0.00 B C
ATOM 5921 CG2 VAL A 265 -13.315 30.660 -66.781 1.00 0.00 B C
ATOM 5922 C VAL A 265 -13.541 32.972 -69.765 1.00 0.00 B C
ATOM 5923 O VAL A 265 -13.765 34.175 -69.633 1.00 0.00 B O
ATOM 5924 N LYS A 266 -12.878 32.477 -70.829 1.00 0.00 B N
ATOM 5925 CA LYS A 266 -12.364 33.359 -71.841 1.00 0.00 B C
ATOM 5926 CB LYS A 266 -11.550 32.626 -72.925 1.00 0.00 B C
ATOM 5927 CG LYS A 266 -10.197 32.107 -72.428 1.00 0.00 B C
ATOM 5928 CD LYS A 266 -9.480 31.179 -73.411 1.00 0.00 B C
ATOM 5929 CE LYS A 266 -8.081 30.755 -72.949 1.00 0.00 B C
ATOM 5930 NZ LYS A 266 -7.444 29.893 -73.971 1.00 0.00 B N
ATOM 5931 C LYS A 266 -13.495 34.072 -72.516 1.00 0.00 B C
ATOM 5932 O LYS A 266 -13.466 35.289 -72.696 1.00 0.00 B O
ATOM 5933 N PHE A 267 -14.560 33.332 -72.857 1.00 0.00 B N
ATOM 5934 CA PHE A 267 -15.685 33.871 -73.564 1.00 0.00 B C
ATOM 5935 CB PHE A 267 -16.762 32.787 -73.788 1.00 0.00 B C
ATOM 5936 CG PHE A 267 -17.954 33.363 -74.471 1.00 0.00 B C
ATOM 5937 CD1 PHE A 267 -18.970 33.928 -73.733 1.00 0.00 B C
ATOM 5938 CE1 PHE A 267 -20.078 34.456 -74.352 1.00 0.00 B C
ATOM 5939 CZ PHE A 267 -20.181 34.423 -75.721 1.00 0.00 B C
ATOM 5940 CD2 PHE A 267 -18.068 33.327 -75.842 1.00 0.00 B C
ATOM 5941 CE2 PHE A 267 -19.174 33.858 -76.466 1.00 0.00 B C
ATOM 5942 C PHE A 267 -16.281 34.975 -72.748 1.00 0.00 B C
ATOM 5943 O PHE A 267 -16.698 35.997 -73.291 1.00 0.00 B O
ATOM 5944 N LEU A 268 -16.365 34.794 -71.417 1.00 0.00 B N
ATOM 5945 CA LEU A 268 -16.983 35.820 -70.625 1.00 0.00 B C
ATOM 5946 CB LEU A 268 -17.114 35.440 -69.138 1.00 0.00 B C

ATOM	5947	CG	LEU A 268	-18.092	34.282	-68.864	1.00	0.00	B	C
ATOM	5948	CD1	LEU A 268	-18.168	33.964	-67.362	1.00	0.00	B	C
ATOM	5949	CD2	LEU A 268	-19.478	34.555	-69.472	1.00	0.00	B	C
ATOM	5950	C	LEU A 268	-16.184	37.090	-70.697	1.00	0.00	B	C
ATOM	5951	O	LEU A 268	-16.732	38.165	-70.921	1.00	0.00	B	O
ATOM	5952	N	LEU A 269	-14.858	36.992	-70.499	1.00	0.00	B	N
ATOM	5953	CA	LEU A 269	-14.004	38.146	-70.469	1.00	0.00	B	C
ATOM	5954	CB	LEU A 269	-12.598	37.806	-69.951	1.00	0.00	B	C
ATOM	5955	CG	LEU A 269	-12.564	37.365	-68.473	1.00	0.00	B	C
ATOM	5956	CD1	LEU A 269	-11.131	37.041	-68.029	1.00	0.00	B	C
ATOM	5957	CD2	LEU A 269	-13.232	38.401	-67.554	1.00	0.00	B	C
ATOM	5958	C	LEU A 269	-13.842	38.794	-71.821	1.00	0.00	B	C
ATOM	5959	O	LEU A 269	-13.770	40.018	-71.919	1.00	0.00	B	O
ATOM	5960	N	GLN A 270	-13.679	37.977	-72.880	1.00	0.00	B	N
ATOM	5961	CA	GLN A 270	-13.405	38.412	-74.228	1.00	0.00	B	C
ATOM	5962	CB	GLN A 270	-12.644	37.348	-75.031	1.00	0.00	B	C
ATOM	5963	CG	GLN A 270	-11.237	37.131	-74.469	1.00	0.00	B	C
ATOM	5964	CD	GLN A 270	-10.536	36.069	-75.298	1.00	0.00	B	C
ATOM	5965	OE1	GLN A 270	-11.064	35.598	-76.304	1.00	0.00	B	O
ATOM	5966	NE2	GLN A 270	-9.310	35.683	-74.861	1.00	0.00	B	N
ATOM	5967	C	GLN A 270	-14.564	38.915	-75.060	1.00	0.00	B	C
ATOM	5968	O	GLN A 270	-14.374	39.810	-75.882	1.00	0.00	B	O
ATOM	5969	N	ASN A 271	-15.789	38.371	-74.889	1.00	0.00	B	N
ATOM	5970	CA	ASN A 271	-16.871	38.608	-75.823	1.00	0.00	B	C
ATOM	5971	CB	ASN A 271	-18.200	37.901	-75.482	1.00	0.00	B	C
ATOM	5972	CG	ASN A 271	-18.810	38.533	-74.241	1.00	0.00	B	C
ATOM	5973	OD1	ASN A 271	-19.702	39.373	-74.343	1.00	0.00	B	O
ATOM	5974	ND2	ASN A 271	-18.333	38.117	-73.041	1.00	0.00	B	N
ATOM	5975	C	ASN A 271	-17.169	40.062	-76.050	1.00	0.00	B	C
ATOM	5976	O	ASN A 271	-16.856	40.935	-75.243	1.00	0.00	B	O
ATOM	5977	N	SER A 272	-17.753	40.338	-77.240	1.00	0.00	B	N
ATOM	5978	CA	SER A 272	-18.099	41.645	-77.725	1.00	0.00	B	C
ATOM	5979	CB	SER A 272	-18.511	41.622	-79.204	1.00	0.00	B	C
ATOM	5980	OG	SER A 272	-17.428	41.176	-80.006	1.00	0.00	B	O
ATOM	5981	C	SER A 272	-19.260	42.230	-76.976	1.00	0.00	B	C
ATOM	5982	O	SER A 272	-19.305	43.440	-76.749	1.00	0.00	B	O
ATOM	5983	N	TRP A 273	-20.249	41.393	-76.618	1.00	0.00	B	N
ATOM	5984	CA	TRP A 273	-21.470	41.884	-76.035	1.00	0.00	B	C

ATOM	5985	CB	TRP	A	273	-22.551	40.802	-75.951	1.00	0.00	B	C
ATOM	5986	CG	TRP	A	273	-23.008	40.389	-77.328	1.00	0.00	B	C
ATOM	5987	CD1	TRP	A	273	-22.514	39.408	-78.138	1.00	0.00	B	C
ATOM	5988	NE1	TRP	A	273	-23.200	39.399	-79.328	1.00	0.00	B	N
ATOM	5989	CE2	TRP	A	273	-24.161	40.389	-79.292	1.00	0.00	B	C
ATOM	5990	CD2	TRP	A	273	-24.065	41.024	-78.054	1.00	0.00	B	C
ATOM	5991	CE3	TRP	A	273	-24.897	42.060	-77.720	1.00	0.00	B	C
ATOM	5992	CZ3	TRP	A	273	-25.829	42.448	-78.655	1.00	0.00	B	C
ATOM	5993	CZ2	TRP	A	273	-25.087	40.774	-80.216	1.00	0.00	B	C
ATOM	5994	CH2	TRP	A	273	-25.922	41.817	-79.880	1.00	0.00	B	C
ATOM	5995	C	TRP	A	273	-21.271	42.480	-74.680	1.00	0.00	B	C
ATOM	5996	O	TRP	A	273	-21.646	43.629	-74.450	1.00	0.00	B	O
ATOM	5997	N	GLN	A	274	-20.695	41.722	-73.729	1.00	0.00	B	N
ATOM	5998	CA	GLN	A	274	-20.460	42.306	-72.441	1.00	0.00	B	C
ATOM	5999	CB	GLN	A	274	-21.672	42.206	-71.497	1.00	0.00	B	C
ATOM	6000	CG	GLN	A	274	-21.470	42.901	-70.147	1.00	0.00	B	C
ATOM	6001	CD	GLN	A	274	-22.791	42.863	-69.390	1.00	0.00	B	C
ATOM	6002	OE1	GLN	A	274	-23.787	42.321	-69.868	1.00	0.00	B	O
ATOM	6003	NE2	GLN	A	274	-22.807	43.467	-68.171	1.00	0.00	B	N
ATOM	6004	C	GLN	A	274	-19.317	41.564	-71.832	1.00	0.00	B	C
ATOM	6005	O	GLN	A	274	-19.431	40.382	-71.509	1.00	0.00	B	O
ATOM	6006	N	THR	A	275	-18.179	42.254	-71.649	1.00	0.00	B	N
ATOM	6007	CA	THR	A	275	-17.033	41.605	-71.090	1.00	0.00	B	C
ATOM	6008	CB	THR	A	275	-15.756	42.356	-71.317	1.00	0.00	B	C
ATOM	6009	OG1	THR	A	275	-15.824	43.634	-70.698	1.00	0.00	B	O
ATOM	6010	CG2	THR	A	275	-15.539	42.514	-72.832	1.00	0.00	B	C
ATOM	6011	C	THR	A	275	-17.254	41.536	-69.618	1.00	0.00	B	C
ATOM	6012	O	THR	A	275	-17.825	42.452	-69.026	1.00	0.00	B	O
ATOM	6013	N	ALA	A	276	-16.812	40.432	-68.989	1.00	0.00	B	N
ATOM	6014	CA	ALA	A	276	-16.997	40.298	-67.578	1.00	0.00	B	C
ATOM	6015	CB	ALA	A	276	-16.759	38.866	-67.059	1.00	0.00	B	C
ATOM	6016	C	ALA	A	276	-16.034	41.205	-66.881	1.00	0.00	B	C
ATOM	6017	O	ALA	A	276	-14.942	41.474	-67.377	1.00	0.00	B	O
ATOM	6018	N	ASP	A	277	-16.450	41.722	-65.706	1.00	0.00	B	N
ATOM	6019	CA	ASP	A	277	-15.586	42.530	-64.899	1.00	0.00	B	C
ATOM	6020	CB	ASP	A	277	-16.343	43.375	-63.852	1.00	0.00	B	C
ATOM	6021	CG	ASP	A	277	-15.359	44.218	-63.045	1.00	0.00	B	C
ATOM	6022	OD1	ASP	A	277	-14.122	44.027	-63.194	1.00	0.00	B	O

ATOM 6023 OD2 ASP A 277 -15.845 45.072 -62.255 1.00 0.00 B O
ATOM 6024 C ASP A 277 -14.750 41.540 -64.152 1.00 0.00 B C
ATOM 6025 O ASP A 277 -15.234 40.836 -63.270 1.00 0.00 B O
ATOM 6026 N ILE A 278 -13.455 41.480 -64.495 1.00 0.00 B N
ATOM 6027 CA ILE A 278 -12.550 40.520 -63.937 1.00 0.00 B C
ATOM 6028 CB ILE A 278 -11.188 40.575 -64.566 1.00 0.00 B C
ATOM 6029 CG2 ILE A 278 -10.541 41.922 -64.195 1.00 0.00 B C
ATOM 6030 CG1 ILE A 278 -10.359 39.344 -64.157 1.00 0.00 B C
ATOM 6031 CD ILE A 278 -10.888 38.031 -64.729 1.00 0.00 B C
ATOM 6032 C ILE A 278 -12.386 40.715 -62.453 1.00 0.00 B C
ATOM 6033 O ILE A 278 -12.092 39.760 -61.738 1.00 0.00 B O
ATOM 6034 N SER A 279 -12.437 41.971 -61.975 1.00 0.00 B N
ATOM 6035 CA SER A 279 -12.227 42.312 -60.588 1.00 0.00 B C
ATOM 6036 CB SER A 279 -11.624 43.718 -60.423 1.00 0.00 B C
ATOM 6037 OG SER A 279 -12.539 44.702 -60.880 1.00 0.00 B O
ATOM 6038 C SER A 279 -13.450 42.248 -59.712 1.00 0.00 B C
ATOM 6039 O SER A 279 -13.344 42.518 -58.518 1.00 0.00 B O
ATOM 6040 N ALA A 280 -14.644 41.918 -60.236 1.00 0.00 B N
ATOM 6041 CA ALA A 280 -15.821 42.012 -59.409 1.00 0.00 B C
ATOM 6042 CB ALA A 280 -17.116 41.622 -60.142 1.00 0.00 B C
ATOM 6043 C ALA A 280 -15.709 41.135 -58.196 1.00 0.00 B C
ATOM 6044 O ALA A 280 -15.036 40.105 -58.199 1.00 0.00 B O
ATOM 6045 N ARG A 281 -16.360 41.566 -57.093 1.00 0.00 B N
ATOM 6046 CA ARG A 281 -16.360 40.800 -55.879 1.00 0.00 B C
ATOM 6047 CB ARG A 281 -15.663 41.508 -54.705 1.00 0.00 B C
ATOM 6048 CG ARG A 281 -16.144 42.935 -54.454 1.00 0.00 B C
ATOM 6049 CD ARG A 281 -15.519 43.936 -55.432 1.00 0.00 B C
ATOM 6050 NE ARG A 281 -15.838 45.315 -54.966 1.00 0.00 B N
ATOM 6051 CZ ARG A 281 -14.996 45.957 -54.105 1.00 0.00 B C
ATOM 6052 NH1 ARG A 281 -13.866 45.331 -53.658 1.00 0.00 B N
ATOM 6053 NH2 ARG A 281 -15.277 47.227 -53.691 1.00 0.00 B N
ATOM 6054 C ARG A 281 -17.769 40.429 -55.522 1.00 0.00 B C
ATOM 6055 O ARG A 281 -18.705 41.192 -55.746 1.00 0.00 B O
ATOM 6056 N ASP A 282 -17.948 39.204 -54.977 1.00 0.00 B N
ATOM 6057 CA ASP A 282 -19.259 38.728 -54.630 1.00 0.00 B C
ATOM 6058 CB ASP A 282 -19.431 37.200 -54.696 1.00 0.00 B C
ATOM 6059 CG ASP A 282 -18.490 36.495 -53.735 1.00 0.00 B C
ATOM 6060 OD1 ASP A 282 -17.938 37.144 -52.805 1.00 0.00 B O

ATOM 6061 OD2 ASP A 282 -18.316 35.265 -53.935 1.00 0.00 B O
ATOM 6062 C ASP A 282 -19.628 39.246 -53.274 1.00 0.00 B C
ATOM 6063 O ASP A 282 -18.922 40.073 -52.701 1.00 0.00 B O
ATOM 6064 N SER A 283 -20.752 38.751 -52.714 1.00 0.00 B N
ATOM 6065 CA SER A 283 -21.282 39.276 -51.487 1.00 0.00 B C
ATOM 6066 CB SER A 283 -22.489 38.475 -50.973 1.00 0.00 B C
ATOM 6067 OG SER A 283 -23.564 38.572 -51.895 1.00 0.00 B O
ATOM 6068 C SER A 283 -20.235 39.223 -50.413 1.00 0.00 B C
ATOM 6069 O SER A 283 -20.136 40.134 -49.589 1.00 0.00 B O
ATOM 6070 N VAL A 284 -19.448 38.138 -50.402 1.00 0.00 B N
ATOM 6071 CA VAL A 284 -18.392 37.867 -49.466 1.00 0.00 B C
ATOM 6072 CB VAL A 284 -17.871 36.465 -49.601 1.00 0.00 B C
ATOM 6073 CG1 VAL A 284 -16.652 36.293 -48.679 1.00 0.00 B C
ATOM 6074 CG2 VAL A 284 -19.020 35.487 -49.302 1.00 0.00 B C
ATOM 6075 C VAL A 284 -17.240 38.808 -49.681 1.00 0.00 B C
ATOM 6076 O VAL A 284 -16.445 39.032 -48.771 1.00 0.00 B O
ATOM 6077 N GLY A 285 -17.082 39.359 -50.900 1.00 0.00 B N
ATOM 6078 CA GLY A 285 -15.965 40.223 -51.166 1.00 0.00 B C
ATOM 6079 C GLY A 285 -14.981 39.434 -51.967 1.00 0.00 B C
ATOM 6080 O GLY A 285 -13.935 39.938 -52.371 1.00 0.00 B O
ATOM 6081 N ASN A 286 -15.308 38.155 -52.224 1.00 0.00 B N
ATOM 6082 CA ASN A 286 -14.407 37.301 -52.940 1.00 0.00 B C
ATOM 6083 CB ASN A 286 -14.677 35.801 -52.719 1.00 0.00 B C
ATOM 6084 CG ASN A 286 -14.283 35.459 -51.289 1.00 0.00 B C
ATOM 6085 OD1 ASN A 286 -13.516 36.180 -50.653 1.00 0.00 B O
ATOM 6086 ND2 ASN A 286 -14.815 34.319 -50.773 1.00 0.00 B N
ATOM 6087 C ASN A 286 -14.473 37.550 -54.410 1.00 0.00 B C
ATOM 6088 O ASN A 286 -15.541 37.751 -54.989 1.00 0.00 B O
ATOM 6089 N THR A 287 -13.285 37.547 -55.046 1.00 0.00 B N
ATOM 6090 CA THR A 287 -13.175 37.651 -56.469 1.00 0.00 B C
ATOM 6091 CB THR A 287 -11.999 38.468 -56.919 1.00 0.00 B C
ATOM 6092 OG1 THR A 287 -10.792 37.867 -56.480 1.00 0.00 B O
ATOM 6093 CG2 THR A 287 -12.132 39.890 -56.341 1.00 0.00 B C
ATOM 6094 C THR A 287 -12.986 36.248 -56.959 1.00 0.00 B C
ATOM 6095 O THR A 287 -13.010 35.299 -56.172 1.00 0.00 B O
ATOM 6096 N VAL A 288 -12.784 36.084 -58.282 1.00 0.00 B N
ATOM 6097 CA VAL A 288 -12.626 34.773 -58.849 1.00 0.00 B C
ATOM 6098 CB VAL A 288 -12.443 34.766 -60.343 1.00 0.00 B C

ATOM	6099	CG1	VAL A 288	-13.745	35.244	-60.997	1.00	0.00	B	C
ATOM	6100	CG2	VAL A 288	-11.224	35.623	-60.712	1.00	0.00	B	C
ATOM	6101	C	VAL A 288	-11.431	34.125	-58.229	1.00	0.00	B	C
ATOM	6102	O	VAL A 288	-11.419	32.912	-58.022	1.00	0.00	B	O
ATOM	6103	N	LEU A 289	-10.379	34.915	-57.951	1.00	0.00	B	N
ATOM	6104	CA	LEU A 289	-9.208	34.369	-57.330	1.00	0.00	B	C
ATOM	6105	CB	LEU A 289	-8.083	35.408	-57.186	1.00	0.00	B	C
ATOM	6106	CG	LEU A 289	-7.605	35.969	-58.543	1.00	0.00	B	C
ATOM	6107	CD1	LEU A 289	-6.397	36.907	-58.373	1.00	0.00	B	C
ATOM	6108	CD2	LEU A 289	-7.360	34.846	-59.563	1.00	0.00	B	C
ATOM	6109	C	LEU A 289	-9.588	33.876	-55.961	1.00	0.00	B	C
ATOM	6110	O	LEU A 289	-9.214	32.775	-55.561	1.00	0.00	B	O
ATOM	6111	N	HSD A 290	-10.373	34.668	-55.200	1.00	0.00	B	N
ATOM	6112	CA	HSD A 290	-10.749	34.229	-53.885	1.00	0.00	B	C
ATOM	6113	CB	HSD A 290	-11.593	35.255	-53.109	1.00	0.00	B	C
ATOM	6114	ND1	HSD A 290	-9.806	36.510	-51.812	1.00	0.00	B	N
ATOM	6115	CG	HSD A 290	-10.831	36.488	-52.730	1.00	0.00	B	C
ATOM	6116	CE1	HSD A 290	-9.382	37.797	-51.726	1.00	0.00	B	C
ATOM	6117	NE2	HSD A 290	-10.061	38.601	-52.522	1.00	0.00	B	N
ATOM	6118	CD2	HSD A 290	-10.974	37.774	-53.156	1.00	0.00	B	C
ATOM	6119	C	HSD A 290	-11.571	32.970	-53.980	1.00	0.00	B	C
ATOM	6120	O	HSD A 290	-11.351	32.014	-53.238	1.00	0.00	B	O
ATOM	6121	N	ALA A 291	-12.532	32.923	-54.920	1.00	0.00	B	N
ATOM	6122	CA	ALA A 291	-13.421	31.795	-55.030	1.00	0.00	B	C
ATOM	6123	CB	ALA A 291	-14.463	31.956	-56.150	1.00	0.00	B	C
ATOM	6124	C	ALA A 291	-12.639	30.547	-55.321	1.00	0.00	B	C
ATOM	6125	O	ALA A 291	-12.950	29.481	-54.787	1.00	0.00	B	O
ATOM	6126	N	LEU A 292	-11.604	30.644	-56.178	1.00	0.00	B	N
ATOM	6127	CA	LEU A 292	-10.811	29.507	-56.556	1.00	0.00	B	C
ATOM	6128	CB	LEU A 292	-9.719	29.866	-57.576	1.00	0.00	B	C
ATOM	6129	CG	LEU A 292	-10.269	30.152	-58.985	1.00	0.00	B	C
ATOM	6130	CD1	LEU A 292	-9.141	30.514	-59.963	1.00	0.00	B	C
ATOM	6131	CD2	LEU A 292	-11.114	28.966	-59.486	1.00	0.00	B	C
ATOM	6132	C	LEU A 292	-10.139	28.947	-55.341	1.00	0.00	B	C
ATOM	6133	O	LEU A 292	-10.083	27.733	-55.157	1.00	0.00	B	O
ATOM	6134	N	VAL A 293	-9.613	29.829	-54.471	1.00	0.00	B	N
ATOM	6135	CA	VAL A 293	-8.953	29.408	-53.271	1.00	0.00	B	C
ATOM	6136	CB	VAL A 293	-8.446	30.565	-52.462	1.00	0.00	B	C

ATOM	6137	CG1	VAL A 293	-7.894	30.032	-51.129	1.00	0.00	B	C
ATOM	6138	CG2	VAL A 293	-7.406	31.331	-53.298	1.00	0.00	B	C
ATOM	6139	C	VAL A 293	-9.951	28.671	-52.434	1.00	0.00	B	C
ATOM	6140	O	VAL A 293	-9.624	27.678	-51.792	1.00	0.00	B	O
ATOM	6141	N	GLU A 294	-11.208	29.150	-52.415	1.00	0.00	B	N
ATOM	6142	CA	GLU A 294	-12.228	28.546	-51.604	1.00	0.00	B	C
ATOM	6143	CB	GLU A 294	-13.526	29.373	-51.563	1.00	0.00	B	C
ATOM	6144	CG	GLU A 294	-14.383	29.044	-50.342	1.00	0.00	B	C
ATOM	6145	CD	GLU A 294	-13.639	29.605	-49.138	1.00	0.00	B	C
ATOM	6146	OE1	GLU A 294	-13.503	30.856	-49.064	1.00	0.00	B	O
ATOM	6147	OE2	GLU A 294	-13.184	28.795	-48.289	1.00	0.00	B	O
ATOM	6148	C	GLU A 294	-12.563	27.175	-52.113	1.00	0.00	B	C
ATOM	6149	O	GLU A 294	-12.922	26.289	-51.340	1.00	0.00	B	O
ATOM	6150	N	VAL A 295	-12.496	26.977	-53.443	1.00	0.00	B	N
ATOM	6151	CA	VAL A 295	-12.871	25.742	-54.074	1.00	0.00	B	C
ATOM	6152	CB	VAL A 295	-13.121	25.861	-55.554	1.00	0.00	B	C
ATOM	6153	CG1	VAL A 295	-11.787	25.921	-56.312	1.00	0.00	B	C
ATOM	6154	CG2	VAL A 295	-14.037	24.703	-55.984	1.00	0.00	B	C
ATOM	6155	C	VAL A 295	-11.865	24.643	-53.832	1.00	0.00	B	C
ATOM	6156	O	VAL A 295	-12.207	23.468	-53.963	1.00	0.00	B	O
ATOM	6157	N	ALA A 296	-10.586	24.975	-53.545	1.00	0.00	B	N
ATOM	6158	CA	ALA A 296	-9.562	23.967	-53.396	1.00	0.00	B	C
ATOM	6159	CB	ALA A 296	-8.145	24.557	-53.291	1.00	0.00	B	C
ATOM	6160	C	ALA A 296	-9.782	23.095	-52.183	1.00	0.00	B	C
ATOM	6161	O	ALA A 296	-10.113	23.582	-51.103	1.00	0.00	B	O
ATOM	6162	N	ASP A 297	-9.731	21.757	-52.393	1.00	0.00	B	N
ATOM	6163	CA	ASP A 297	-9.786	20.722	-51.384	1.00	0.00	B	C
ATOM	6164	CB	ASP A 297	-10.781	19.567	-51.637	1.00	0.00	B	C
ATOM	6165	CG	ASP A 297	-10.366	18.722	-52.817	1.00	0.00	B	C
ATOM	6166	OD1	ASP A 297	-9.967	19.316	-53.843	1.00	0.00	B	O
ATOM	6167	OD2	ASP A 297	-10.461	17.469	-52.717	1.00	0.00	B	O
ATOM	6168	C	ASP A 297	-8.448	20.166	-50.960	1.00	0.00	B	C
ATOM	6169	O	ASP A 297	-8.399	19.293	-50.093	1.00	0.00	B	O
ATOM	6170	N	ASN A 298	-7.334	20.558	-51.611	1.00	0.00	B	N
ATOM	6171	CA	ASN A 298	-6.030	20.035	-51.290	1.00	0.00	B	C
ATOM	6172	CB	ASN A 298	-5.707	20.093	-49.788	1.00	0.00	B	C
ATOM	6173	CG	ASN A 298	-5.500	21.559	-49.437	1.00	0.00	B	C
ATOM	6174	OD1	ASN A 298	-4.768	22.269	-50.125	1.00	0.00	B	O

ATOM	6175	ND2 ASN A 298	-6.169	22.032	-48.352	1.00	0.00	B	N
ATOM	6176	C ASN A 298	-5.842	18.629	-51.777	1.00	0.00	B	C
ATOM	6177	O ASN A 298	-5.013	17.887	-51.251	1.00	0.00	B	O
ATOM	6178	N THR A 299	-6.603	18.220	-52.808	1.00	0.00	B	N
ATOM	6179	CA THR A 299	-6.331	16.957	-53.427	1.00	0.00	B	C
ATOM	6180	CB THR A 299	-7.558	16.281	-53.959	1.00	0.00	B	C
ATOM	6181	OG1 THR A 299	-7.241	14.976	-54.403	1.00	0.00	B	O
ATOM	6182	CG2 THR A 299	-8.130	17.100	-55.118	1.00	0.00	B	C
ATOM	6183	C THR A 299	-5.404	17.286	-54.561	1.00	0.00	B	C
ATOM	6184	O THR A 299	-5.373	18.425	-55.022	1.00	0.00	B	O
ATOM	6185	N ALA A 300	-4.618	16.306	-55.048	1.00	0.00	B	N
ATOM	6186	CA ALA A 300	-3.633	16.595	-56.056	1.00	0.00	B	C
ATOM	6187	CB ALA A 300	-2.799	15.360	-56.445	1.00	0.00	B	C
ATOM	6188	C ALA A 300	-4.286	17.105	-57.301	1.00	0.00	B	C
ATOM	6189	O ALA A 300	-3.823	18.073	-57.902	1.00	0.00	B	O
ATOM	6190	N ASP A 301	-5.395	16.470	-57.713	1.00	0.00	B	N
ATOM	6191	CA ASP A 301	-6.076	16.825	-58.925	1.00	0.00	B	C
ATOM	6192	CB ASP A 301	-7.263	15.886	-59.203	1.00	0.00	B	C
ATOM	6193	CG ASP A 301	-6.714	14.481	-59.420	1.00	0.00	B	C
ATOM	6194	OD1 ASP A 301	-5.679	14.349	-60.129	1.00	0.00	B	O
ATOM	6195	OD2 ASP A 301	-7.312	13.524	-58.863	1.00	0.00	B	O
ATOM	6196	C ASP A 301	-6.626	18.210	-58.791	1.00	0.00	B	C
ATOM	6197	O ASP A 301	-6.629	18.980	-59.753	1.00	0.00	B	O
ATOM	6198	N ASN A 302	-7.132	18.546	-57.589	1.00	0.00	B	N
ATOM	6199	CA ASN A 302	-7.763	19.812	-57.343	1.00	0.00	B	C
ATOM	6200	CB ASN A 302	-8.340	19.910	-55.935	1.00	0.00	B	C
ATOM	6201	CG ASN A 302	-8.992	21.268	-55.744	1.00	0.00	B	C
ATOM	6202	OD1 ASN A 302	-8.311	22.255	-55.468	1.00	0.00	B	O
ATOM	6203	ND2 ASN A 302	-10.340	21.330	-55.892	1.00	0.00	B	N
ATOM	6204	C ASN A 302	-6.795	20.936	-57.457	1.00	0.00	B	C
ATOM	6205	O ASN A 302	-7.084	21.936	-58.113	1.00	0.00	B	O
ATOM	6206	N THR A 303	-5.616	20.799	-56.824	1.00	0.00	B	N
ATOM	6207	CA THR A 303	-4.682	21.882	-56.863	1.00	0.00	B	C
ATOM	6208	CB THR A 303	-3.393	21.614	-56.144	1.00	0.00	B	C
ATOM	6209	OG1 THR A 303	-2.716	20.515	-56.734	1.00	0.00	B	O
ATOM	6210	CG2 THR A 303	-3.699	21.330	-54.671	1.00	0.00	B	C
ATOM	6211	C THR A 303	-4.334	22.121	-58.285	1.00	0.00	B	C
ATOM	6212	O THR A 303	-4.298	23.262	-58.741	1.00	0.00	B	O

ATOM	6213	N	LYS A 304	-4.123	21.034	-59.046	1.00	0.00	B	N
ATOM	6214	CA	LYS A 304	-3.660	21.184	-60.390	1.00	0.00	B	C
ATOM	6215	CB	LYS A 304	-3.524	19.842	-61.136	1.00	0.00	B	C
ATOM	6216	CG	LYS A 304	-2.459	18.923	-60.534	1.00	0.00	B	C
ATOM	6217	CD	LYS A 304	-1.059	19.539	-60.502	1.00	0.00	B	C
ATOM	6218	CE	LYS A 304	-0.020	18.676	-59.781	1.00	0.00	B	C
ATOM	6219	NZ	LYS A 304	1.297	19.350	-59.793	1.00	0.00	B	N
ATOM	6220	C	LYS A 304	-4.618	22.029	-61.171	1.00	0.00	B	C
ATOM	6221	O	LYS A 304	-4.197	22.966	-61.844	1.00	0.00	B	O
ATOM	6222	N	PHE A 305	-5.933	21.742	-61.109	1.00	0.00	B	N
ATOM	6223	CA	PHE A 305	-6.824	22.507	-61.935	1.00	0.00	B	C
ATOM	6224	CB	PHE A 305	-8.223	21.884	-62.140	1.00	0.00	B	C
ATOM	6225	CG	PHE A 305	-9.084	22.077	-60.944	1.00	0.00	B	C
ATOM	6226	CD1	PHE A 305	-9.826	23.229	-60.832	1.00	0.00	B	C
ATOM	6227	CE1	PHE A 305	-10.639	23.439	-59.746	1.00	0.00	B	C
ATOM	6228	CZ	PHE A 305	-10.716	22.484	-58.762	1.00	0.00	B	C
ATOM	6229	CD2	PHE A 305	-9.169	21.120	-59.961	1.00	0.00	B	C
ATOM	6230	CE2	PHE A 305	-9.983	21.325	-58.870	1.00	0.00	B	C
ATOM	6231	C	PHE A 305	-6.974	23.918	-61.427	1.00	0.00	B	C
ATOM	6232	O	PHE A 305	-7.039	24.857	-62.217	1.00	0.00	B	O
ATOM	6233	N	VAL A 306	-7.058	24.112	-60.094	1.00	0.00	B	N
ATOM	6234	CA	VAL A 306	-7.247	25.434	-59.555	1.00	0.00	B	C
ATOM	6235	CB	VAL A 306	-7.436	25.433	-58.066	1.00	0.00	B	C
ATOM	6236	CG1	VAL A 306	-7.475	26.890	-57.574	1.00	0.00	B	C
ATOM	6237	CG2	VAL A 306	-8.714	24.641	-57.745	1.00	0.00	B	C
ATOM	6238	C	VAL A 306	-6.044	26.266	-59.862	1.00	0.00	B	C
ATOM	6239	O	VAL A 306	-6.155	27.418	-60.280	1.00	0.00	B	O
ATOM	6240	N	THR A 307	-4.854	25.664	-59.701	1.00	0.00	B	N
ATOM	6241	CA	THR A 307	-3.599	26.335	-59.855	1.00	0.00	B	C
ATOM	6242	CB	THR A 307	-2.461	25.367	-59.684	1.00	0.00	B	C
ATOM	6243	OG1	THR A 307	-2.378	24.934	-58.334	1.00	0.00	B	O
ATOM	6244	CG2	THR A 307	-1.153	25.992	-60.172	1.00	0.00	B	C
ATOM	6245	C	THR A 307	-3.479	26.961	-61.213	1.00	0.00	B	C
ATOM	6246	O	THR A 307	-3.087	28.121	-61.323	1.00	0.00	B	O
ATOM	6247	N	SER A 308	-3.791	26.198	-62.273	1.00	0.00	B	N
ATOM	6248	CA	SER A 308	-3.679	26.642	-63.637	1.00	0.00	B	C
ATOM	6249	CB	SER A 308	-3.797	25.474	-64.627	1.00	0.00	B	C
ATOM	6250	OG	SER A 308	-3.684	25.953	-65.953	1.00	0.00	B	O

ATOM	6251	C	SER A 308	-4.758	27.615	-63.989	1.00	0.00	B	C
ATOM	6252	O	SER A 308	-4.532	28.556	-64.748	1.00	0.00	B	O
ATOM	6253	N	MET A 309	-5.980	27.404	-63.473	1.00	0.00	B	N
ATOM	6254	CA	MET A 309	-7.048	28.298	-63.810	1.00	0.00	B	C
ATOM	6255	CB	MET A 309	-8.416	27.873	-63.258	1.00	0.00	B	C
ATOM	6256	CG	MET A 309	-9.529	28.843	-63.655	1.00	0.00	B	C
ATOM	6257	SD	MET A 309	-9.810	28.954	-65.449	1.00	0.00	B	S
ATOM	6258	CE	MET A 309	-10.245	27.206	-65.673	1.00	0.00	B	C
ATOM	6259	C	MET A 309	-6.707	29.635	-63.243	1.00	0.00	B	C
ATOM	6260	O	MET A 309	-7.016	30.666	-63.833	1.00	0.00	B	O
ATOM	6261	N	TYR A 310	-6.066	29.631	-62.061	1.00	0.00	B	N
ATOM	6262	CA	TYR A 310	-5.654	30.831	-61.396	1.00	0.00	B	C
ATOM	6263	CB	TYR A 310	-4.930	30.491	-60.076	1.00	0.00	B	C
ATOM	6264	CG	TYR A 310	-4.615	31.703	-59.259	1.00	0.00	B	C
ATOM	6265	CD1	TYR A 310	-5.555	32.228	-58.404	1.00	0.00	B	C
ATOM	6266	CE1	TYR A 310	-5.276	33.334	-57.635	1.00	0.00	B	C
ATOM	6267	CZ	TYR A 310	-4.039	33.928	-57.712	1.00	0.00	B	C
ATOM	6268	OH	TYR A 310	-3.747	35.063	-56.924	1.00	0.00	B	O
ATOM	6269	CD2	TYR A 310	-3.376	32.302	-59.324	1.00	0.00	B	C
ATOM	6270	CE2	TYR A 310	-3.090	33.409	-58.558	1.00	0.00	B	C
ATOM	6271	C	TYR A 310	-4.677	31.519	-62.306	1.00	0.00	B	C
ATOM	6272	O	TYR A 310	-4.804	32.710	-62.586	1.00	0.00	B	O
ATOM	6273	N	ASN A 311	-3.704	30.756	-62.842	1.00	0.00	B	N
ATOM	6274	CA	ASN A 311	-2.694	31.306	-63.697	1.00	0.00	B	C
ATOM	6275	CB	ASN A 311	-1.702	30.248	-64.204	1.00	0.00	B	C
ATOM	6276	CG	ASN A 311	-0.588	30.983	-64.936	1.00	0.00	B	C
ATOM	6277	OD1	ASN A 311	-0.554	32.212	-64.962	1.00	0.00	B	O
ATOM	6278	ND2	ASN A 311	0.341	30.210	-65.558	1.00	0.00	B	N
ATOM	6279	C	ASN A 311	-3.364	31.897	-64.893	1.00	0.00	B	C
ATOM	6280	O	ASN A 311	-3.003	32.978	-65.353	1.00	0.00	B	O
ATOM	6281	N	GLU A 312	-4.381	31.193	-65.416	1.00	0.00	B	N
ATOM	6282	CA	GLU A 312	-5.074	31.624	-66.593	1.00	0.00	B	C
ATOM	6283	CB	GLU A 312	-6.188	30.653	-67.015	1.00	0.00	B	C
ATOM	6284	CG	GLU A 312	-5.662	29.397	-67.702	1.00	0.00	B	C
ATOM	6285	CD	GLU A 312	-5.137	29.845	-69.056	1.00	0.00	B	C
ATOM	6286	OE1	GLU A 312	-5.726	30.801	-69.623	1.00	0.00	B	O
ATOM	6287	OE2	GLU A 312	-4.138	29.248	-69.537	1.00	0.00	B	O
ATOM	6288	C	GLU A 312	-5.724	32.944	-66.344	1.00	0.00	B	C

ATOM	6289	O	GLU A 312	-5.696	33.818	-67.205	1.00	0.00	B	O
ATOM	6290	N	ILE A 313	-6.327	33.135	-65.160	1.00	0.00	B	N
ATOM	6291	CA	ILE A 313	-7.018	34.361	-64.889	1.00	0.00	B	C
ATOM	6292	CB	ILE A 313	-7.667	34.370	-63.535	1.00	0.00	B	C
ATOM	6293	CG2	ILE A 313	-8.132	35.805	-63.244	1.00	0.00	B	C
ATOM	6294	CG1	ILE A 313	-8.798	33.327	-63.465	1.00	0.00	B	C
ATOM	6295	CD	ILE A 313	-9.939	33.597	-64.444	1.00	0.00	B	C
ATOM	6296	C	ILE A 313	-6.043	35.492	-64.923	1.00	0.00	B	C
ATOM	6297	O	ILE A 313	-6.321	36.542	-65.499	1.00	0.00	B	O
ATOM	6298	N	LEU A 314	-4.862	35.307	-64.301	1.00	0.00	B	N
ATOM	6299	CA	LEU A 314	-3.903	36.371	-64.247	1.00	0.00	B	C
ATOM	6300	CB	LEU A 314	-2.691	36.065	-63.351	1.00	0.00	B	C
ATOM	6301	CG	LEU A 314	-3.042	36.008	-61.850	1.00	0.00	B	C
ATOM	6302	CD1	LEU A 314	-1.786	35.795	-60.991	1.00	0.00	B	C
ATOM	6303	CD2	LEU A 314	-3.850	37.242	-61.415	1.00	0.00	B	C
ATOM	6304	C	LEU A 314	-3.416	36.714	-65.625	1.00	0.00	B	C
ATOM	6305	O	LEU A 314	-3.309	37.889	-65.971	1.00	0.00	B	O
ATOM	6306	N	MET A 315	-3.146	35.701	-66.472	1.00	0.00	B	N
ATOM	6307	CA	MET A 315	-2.634	35.960	-67.786	1.00	0.00	B	C
ATOM	6308	CB	MET A 315	-2.412	34.666	-68.591	1.00	0.00	B	C
ATOM	6309	CG	MET A 315	-1.347	33.753	-67.978	1.00	0.00	B	C
ATOM	6310	SD	MET A 315	-1.049	32.213	-68.895	1.00	0.00	B	S
ATOM	6311	CE	MET A 315	-2.664	31.486	-68.492	1.00	0.00	B	C
ATOM	6312	C	MET A 315	-3.642	36.795	-68.516	1.00	0.00	B	C
ATOM	6313	O	MET A 315	-3.292	37.707	-69.260	1.00	0.00	B	O
ATOM	6314	N	LEU A 316	-4.933	36.482	-68.335	1.00	0.00	B	N
ATOM	6315	CA	LEU A 316	-5.998	37.221	-68.956	1.00	0.00	B	C
ATOM	6316	CB	LEU A 316	-7.376	36.546	-68.795	1.00	0.00	B	C
ATOM	6317	CG	LEU A 316	-7.655	35.392	-69.787	1.00	0.00	B	C
ATOM	6318	CD1	LEU A 316	-6.578	34.300	-69.749	1.00	0.00	B	C
ATOM	6319	CD2	LEU A 316	-9.063	34.808	-69.572	1.00	0.00	B	C
ATOM	6320	C	LEU A 316	-6.065	38.612	-68.395	1.00	0.00	B	C
ATOM	6321	O	LEU A 316	-6.330	39.566	-69.126	1.00	0.00	B	O
ATOM	6322	N	GLY A 317	-5.851	38.765	-67.075	1.00	0.00	B	N
ATOM	6323	CA	GLY A 317	-5.930	40.075	-66.494	1.00	0.00	B	C
ATOM	6324	C	GLY A 317	-4.867	40.938	-67.097	1.00	0.00	B	C
ATOM	6325	O	GLY A 317	-5.124	42.072	-67.496	1.00	0.00	B	O
ATOM	6326	N	ALA A 318	-3.633	40.409	-67.192	1.00	0.00	B	N

ATOM	6327	CA	ALA A 318	-2.537	41.184	-67.693	1.00	0.00	B	C
ATOM	6328	CB	ALA A 318	-1.198	40.431	-67.614	1.00	0.00	B	C
ATOM	6329	C	ALA A 318	-2.775	41.543	-69.125	1.00	0.00	B	C
ATOM	6330	O	ALA A 318	-2.506	42.669	-69.539	1.00	0.00	B	O
ATOM	6331	N	LYS A 319	-3.256	40.594	-69.947	1.00	0.00	B	N
ATOM	6332	CA	LYS A 319	-3.448	40.961	-71.317	1.00	0.00	B	C
ATOM	6333	CB	LYS A 319	-3.714	39.758	-72.246	1.00	0.00	B	C
ATOM	6334	CG	LYS A 319	-4.906	38.877	-71.873	1.00	0.00	B	C
ATOM	6335	CD	LYS A 319	-5.301	37.909	-72.990	1.00	0.00	B	C
ATOM	6336	CE	LYS A 319	-6.484	37.007	-72.644	1.00	0.00	B	C
ATOM	6337	NZ	LYS A 319	-6.735	36.071	-73.763	1.00	0.00	B	N
ATOM	6338	C	LYS A 319	-4.553	41.971	-71.468	1.00	0.00	B	C
ATOM	6339	O	LYS A 319	-4.350	43.017	-72.085	1.00	0.00	B	O
ATOM	6340	N	LEU A 320	-5.748	41.696	-70.908	1.00	0.00	B	N
ATOM	6341	CA	LEU A 320	-6.862	42.589	-71.083	1.00	0.00	B	C
ATOM	6342	CB	LEU A 320	-8.217	41.947	-70.719	1.00	0.00	B	C
ATOM	6343	CG	LEU A 320	-8.696	40.898	-71.748	1.00	0.00	B	C
ATOM	6344	CD1	LEU A 320	-7.734	39.705	-71.842	1.00	0.00	B	C
ATOM	6345	CD2	LEU A 320	-10.143	40.452	-71.481	1.00	0.00	B	C
ATOM	6346	C	LEU A 320	-6.724	43.882	-70.330	1.00	0.00	B	C
ATOM	6347	O	LEU A 320	-6.924	44.948	-70.911	1.00	0.00	B	O
ATOM	6348	N	HSD A 321	-6.375	43.845	-69.025	1.00	0.00	B	N
ATOM	6349	CA	HSD A 321	-6.295	45.080	-68.283	1.00	0.00	B	C
ATOM	6350	CB	HSD A 321	-7.499	45.270	-67.346	1.00	0.00	B	C
ATOM	6351	ND1	HSD A 321	-9.397	46.195	-68.762	1.00	0.00	B	N
ATOM	6352	CG	HSD A 321	-8.795	45.154	-68.093	1.00	0.00	B	C
ATOM	6353	CE1	HSD A 321	-10.521	45.694	-69.332	1.00	0.00	B	C
ATOM	6354	NE2	HSD A 321	-10.684	44.408	-69.077	1.00	0.00	B	N
ATOM	6355	CD2	HSD A 321	-9.595	44.069	-68.295	1.00	0.00	B	C
ATOM	6356	C	HSD A 321	-5.062	45.020	-67.429	1.00	0.00	B	C
ATOM	6357	O	HSD A 321	-5.094	44.523	-66.305	1.00	0.00	B	O
ATOM	6358	N	PRO A 322	-3.980	45.544	-67.933	1.00	0.00	B	N
ATOM	6359	CD	PRO A 322	-3.821	45.714	-69.365	1.00	0.00	B	C
ATOM	6360	CA	PRO A 322	-2.712	45.455	-67.256	1.00	0.00	B	C
ATOM	6361	CB	PRO A 322	-1.648	45.789	-68.309	1.00	0.00	B	C
ATOM	6362	CG	PRO A 322	-2.433	46.355	-69.507	1.00	0.00	B	C
ATOM	6363	C	PRO A 322	-2.564	46.230	-65.987	1.00	0.00	B	C
ATOM	6364	O	PRO A 322	-1.739	45.849	-65.159	1.00	0.00	B	O

ATOM	6365	N	THR	A	323	-3.335	47.313	-65.809	1.00	0.00	B	N
ATOM	6366	CA	THR	A	323	-3.170	48.175	-64.679	1.00	0.00	B	C
ATOM	6367	CB	THR	A	323	-4.032	49.393	-64.763	1.00	0.00	B	C
ATOM	6368	OG1	THR	A	323	-3.775	50.086	-65.975	1.00	0.00	B	O
ATOM	6369	CG2	THR	A	323	-3.698	50.294	-63.565	1.00	0.00	B	C
ATOM	6370	C	THR	A	323	-3.536	47.476	-63.408	1.00	0.00	B	C
ATOM	6371	O	THR	A	323	-2.912	47.702	-62.370	1.00	0.00	B	O
ATOM	6372	N	LEU	A	324	-4.559	46.603	-63.458	1.00	0.00	B	N
ATOM	6373	CA	LEU	A	324	-5.123	46.037	-62.265	1.00	0.00	B	C
ATOM	6374	CB	LEU	A	324	-6.414	45.254	-62.539	1.00	0.00	B	C
ATOM	6375	CG	LEU	A	324	-7.475	46.059	-63.309	1.00	0.00	B	C
ATOM	6376	CD1	LEU	A	324	-8.823	45.325	-63.306	1.00	0.00	B	C
ATOM	6377	CD2	LEU	A	324	-7.566	47.511	-62.820	1.00	0.00	B	C
ATOM	6378	C	LEU	A	324	-4.180	45.091	-61.585	1.00	0.00	B	C
ATOM	6379	O	LEU	A	324	-3.619	44.190	-62.204	1.00	0.00	B	O
ATOM	6380	N	LYS	A	325	-3.993	45.284	-60.259	1.00	0.00	B	N
ATOM	6381	CA	LYS	A	325	-3.220	44.344	-59.499	1.00	0.00	B	C
ATOM	6382	CB	LYS	A	325	-2.288	44.970	-58.443	1.00	0.00	B	C
ATOM	6383	CG	LYS	A	325	-1.053	45.636	-59.057	1.00	0.00	B	C
ATOM	6384	CD	LYS	A	325	-0.143	46.343	-58.049	1.00	0.00	B	C
ATOM	6385	CE	LYS	A	325	1.148	46.871	-58.681	1.00	0.00	B	C
ATOM	6386	NZ	LYS	A	325	1.992	47.530	-57.659	1.00	0.00	B	N
ATOM	6387	C	LYS	A	325	-4.226	43.480	-58.802	1.00	0.00	B	C
ATOM	6388	O	LYS	A	325	-4.715	43.801	-57.718	1.00	0.00	B	O
ATOM	6389	N	LEU	A	326	-4.546	42.339	-59.435	1.00	0.00	B	N
ATOM	6390	CA	LEU	A	326	-5.583	41.453	-58.988	1.00	0.00	B	C
ATOM	6391	CB	LEU	A	326	-5.908	40.327	-59.991	1.00	0.00	B	C
ATOM	6392	CG	LEU	A	326	-6.655	40.783	-61.262	1.00	0.00	B	C
ATOM	6393	CD1	LEU	A	326	-5.798	41.709	-62.136	1.00	0.00	B	C
ATOM	6394	CD2	LEU	A	326	-7.204	39.581	-62.046	1.00	0.00	B	C
ATOM	6395	C	LEU	A	326	-5.289	40.795	-57.673	1.00	0.00	B	C
ATOM	6396	O	LEU	A	326	-6.185	40.639	-56.847	1.00	0.00	B	O
ATOM	6397	N	GLU	A	327	-4.033	40.384	-57.433	1.00	0.00	B	N
ATOM	6398	CA	GLU	A	327	-3.716	39.618	-56.256	1.00	0.00	B	C
ATOM	6399	CB	GLU	A	327	-2.301	39.021	-56.289	1.00	0.00	B	C
ATOM	6400	CG	GLU	A	327	-2.207	37.864	-57.285	1.00	0.00	B	C
ATOM	6401	CD	GLU	A	327	-0.805	37.280	-57.235	1.00	0.00	B	C
ATOM	6402	OE1	GLU	A	327	0.138	37.966	-57.713	1.00	0.00	B	O

ATOM	6403	OE2	GLU	A	327	-0.657	36.141	-56.719	1.00	0.00	B	O
ATOM	6404	C	GLU	A	327	-3.896	40.409	-54.999	1.00	0.00	B	C
ATOM	6405	O	GLU	A	327	-4.037	39.844	-53.916	1.00	0.00	B	O
ATOM	6406	N	GLU	A	328	-3.806	41.742	-55.099	1.00	0.00	B	N
ATOM	6407	CA	GLU	A	328	-3.919	42.639	-53.986	1.00	0.00	B	C
ATOM	6408	CB	GLU	A	328	-3.374	44.031	-54.334	1.00	0.00	B	C
ATOM	6409	CG	GLU	A	328	-1.854	43.974	-54.521	1.00	0.00	B	C
ATOM	6410	CD	GLU	A	328	-1.344	45.327	-54.988	1.00	0.00	B	C
ATOM	6411	OE1	GLU	A	328	-2.145	46.098	-55.579	1.00	0.00	B	O
ATOM	6412	OE2	GLU	A	328	-0.136	45.601	-54.767	1.00	0.00	B	O
ATOM	6413	C	GLU	A	328	-5.323	42.767	-53.437	1.00	0.00	B	C
ATOM	6414	O	GLU	A	328	-5.476	43.100	-52.264	1.00	0.00	B	O
ATOM	6415	N	LEU	A	329	-6.383	42.545	-54.248	1.00	0.00	B	N
ATOM	6416	CA	LEU	A	329	-7.746	42.799	-53.824	1.00	0.00	B	C
ATOM	6417	CB	LEU	A	329	-8.785	42.589	-54.942	1.00	0.00	B	C
ATOM	6418	CG	LEU	A	329	-8.641	43.568	-56.124	1.00	0.00	B	C
ATOM	6419	CD1	LEU	A	329	-7.302	43.375	-56.850	1.00	0.00	B	C
ATOM	6420	CD2	LEU	A	329	-9.850	43.477	-57.071	1.00	0.00	B	C
ATOM	6421	C	LEU	A	329	-8.170	41.938	-52.661	1.00	0.00	B	C
ATOM	6422	O	LEU	A	329	-8.085	40.711	-52.703	1.00	0.00	B	O
ATOM	6423	N	THR	A	330	-8.705	42.598	-51.602	1.00	0.00	B	N
ATOM	6424	CA	THR	A	330	-9.096	41.954	-50.374	1.00	0.00	B	C
ATOM	6425	CB	THR	A	330	-8.842	42.808	-49.168	1.00	0.00	B	C
ATOM	6426	OG1	THR	A	330	-9.650	43.975	-49.224	1.00	0.00	B	O
ATOM	6427	CG2	THR	A	330	-7.355	43.197	-49.144	1.00	0.00	B	C
ATOM	6428	C	THR	A	330	-10.566	41.650	-50.359	1.00	0.00	B	C
ATOM	6429	O	THR	A	330	-11.384	42.416	-50.861	1.00	0.00	B	O
ATOM	6430	N	ASN	A	331	-10.929	40.503	-49.736	1.00	0.00	B	N
ATOM	6431	CA	ASN	A	331	-12.302	40.112	-49.583	1.00	0.00	B	C
ATOM	6432	CB	ASN	A	331	-12.513	38.590	-49.407	1.00	0.00	B	C
ATOM	6433	CG	ASN	A	331	-11.829	38.102	-48.136	1.00	0.00	B	C
ATOM	6434	OD1	ASN	A	331	-11.214	38.868	-47.396	1.00	0.00	B	O
ATOM	6435	ND2	ASN	A	331	-11.928	36.770	-47.882	1.00	0.00	B	N
ATOM	6436	C	ASN	A	331	-12.836	40.845	-48.386	1.00	0.00	B	C
ATOM	6437	O	ASN	A	331	-12.145	41.673	-47.798	1.00	0.00	B	O
ATOM	6438	N	LYS	A	332	-14.083	40.545	-47.982	1.00	0.00	B	N
ATOM	6439	CA	LYS	A	332	-14.756	41.252	-46.923	1.00	0.00	B	C
ATOM	6440	CB	LYS	A	332	-16.048	40.529	-46.513	1.00	0.00	B	C

ATOM	6441	CG	LYS	A	332	-16.896	41.216	-45.445	1.00	0.00	B	C
ATOM	6442	CD	LYS	A	332	-18.159	40.410	-45.114	1.00	0.00	B	C
ATOM	6443	CE	LYS	A	332	-18.830	39.780	-46.339	1.00	0.00	B	C
ATOM	6444	NZ	LYS	A	332	-19.791	38.737	-45.914	1.00	0.00	B	N
ATOM	6445	C	LYS	A	332	-13.893	41.240	-45.699	1.00	0.00	B	C
ATOM	6446	O	LYS	A	332	-13.722	42.262	-45.035	1.00	0.00	B	O
ATOM	6447	N	LYS	A	333	-13.308	40.077	-45.383	1.00	0.00	B	N
ATOM	6448	CA	LYS	A	333	-12.524	39.872	-44.199	1.00	0.00	B	C
ATOM	6449	CB	LYS	A	333	-12.127	38.401	-43.995	1.00	0.00	B	C
ATOM	6450	CG	LYS	A	333	-13.338	37.506	-43.727	1.00	0.00	B	C
ATOM	6451	CD	LYS	A	333	-13.038	36.010	-43.817	1.00	0.00	B	C
ATOM	6452	CE	LYS	A	333	-14.286	35.138	-43.674	1.00	0.00	B	C
ATOM	6453	NZ	LYS	A	333	-14.997	35.484	-42.424	1.00	0.00	B	N
ATOM	6454	C	LYS	A	333	-11.275	40.704	-44.245	1.00	0.00	B	C
ATOM	6455	O	LYS	A	333	-10.656	40.946	-43.212	1.00	0.00	B	O
ATOM	6456	N	GLY	A	334	-10.839	41.142	-45.441	1.00	0.00	B	N
ATOM	6457	CA	GLY	A	334	-9.625	41.906	-45.501	1.00	0.00	B	C
ATOM	6458	C	GLY	A	334	-8.533	40.998	-45.961	1.00	0.00	B	C
ATOM	6459	O	GLY	A	334	-7.352	41.299	-45.799	1.00	0.00	B	O
ATOM	6460	N	MET	A	335	-8.909	39.854	-46.570	1.00	0.00	B	N
ATOM	6461	CA	MET	A	335	-7.909	38.908	-46.969	1.00	0.00	B	C
ATOM	6462	CB	MET	A	335	-8.280	37.462	-46.599	1.00	0.00	B	C
ATOM	6463	CG	MET	A	335	-8.431	37.241	-45.092	1.00	0.00	B	C
ATOM	6464	SD	MET	A	335	-8.888	35.547	-44.613	1.00	0.00	B	S
ATOM	6465	CE	MET	A	335	-9.296	35.972	-42.894	1.00	0.00	B	C
ATOM	6466	C	MET	A	335	-7.700	38.929	-48.454	1.00	0.00	B	C
ATOM	6467	O	MET	A	335	-8.642	38.952	-49.246	1.00	0.00	B	O
ATOM	6468	N	THR	A	336	-6.412	38.926	-48.857	1.00	0.00	B	N
ATOM	6469	CA	THR	A	336	-6.050	38.794	-50.237	1.00	0.00	B	C
ATOM	6470	CB	THR	A	336	-4.625	39.156	-50.535	1.00	0.00	B	C
ATOM	6471	OG1	THR	A	336	-3.741	38.289	-49.838	1.00	0.00	B	O
ATOM	6472	CG2	THR	A	336	-4.383	40.616	-50.116	1.00	0.00	B	C
ATOM	6473	C	THR	A	336	-6.213	37.333	-50.514	1.00	0.00	B	C
ATOM	6474	O	THR	A	336	-6.348	36.547	-49.578	1.00	0.00	B	O
ATOM	6475	N	PRO	A	337	-6.211	36.921	-51.755	1.00	0.00	B	N
ATOM	6476	CD	PRO	A	337	-6.405	37.805	-52.890	1.00	0.00	B	C
ATOM	6477	CA	PRO	A	337	-6.402	35.536	-52.082	1.00	0.00	B	C
ATOM	6478	CB	PRO	A	337	-6.358	35.473	-53.607	1.00	0.00	B	C

ATOM	6479	CG	PRO	A	337	-6.831	36.875	-54.042	1.00	0.00	B	C
ATOM	6480	C	PRO	A	337	-5.383	34.692	-51.384	1.00	0.00	B	C
ATOM	6481	O	PRO	A	337	-5.746	33.661	-50.827	1.00	0.00	B	O
ATOM	6482	N	LEU	A	338	-4.115	35.135	-51.355	1.00	0.00	B	N
ATOM	6483	CA	LEU	A	338	-3.069	34.383	-50.728	1.00	0.00	B	C
ATOM	6484	CB	LEU	A	338	-1.725	35.126	-50.798	1.00	0.00	B	C
ATOM	6485	CG	LEU	A	338	-0.556	34.386	-50.129	1.00	0.00	B	C
ATOM	6486	CD1	LEU	A	338	-0.174	33.114	-50.902	1.00	0.00	B	C
ATOM	6487	CD2	LEU	A	338	0.630	35.335	-49.904	1.00	0.00	B	C
ATOM	6488	C	LEU	A	338	-3.394	34.218	-49.278	1.00	0.00	B	C
ATOM	6489	O	LEU	A	338	-3.320	33.119	-48.733	1.00	0.00	B	O
ATOM	6490	N	ALA	A	339	-3.807	35.316	-48.618	1.00	0.00	B	N
ATOM	6491	CA	ALA	A	339	-4.045	35.310	-47.204	1.00	0.00	B	C
ATOM	6492	CB	ALA	A	339	-4.458	36.692	-46.669	1.00	0.00	B	C
ATOM	6493	C	ALA	A	339	-5.149	34.356	-46.879	1.00	0.00	B	C
ATOM	6494	O	ALA	A	339	-5.109	33.680	-45.853	1.00	0.00	B	O
ATOM	6495	N	LEU	A	340	-6.184	34.308	-47.737	1.00	0.00	B	N
ATOM	6496	CA	LEU	A	340	-7.314	33.446	-47.525	1.00	0.00	B	C
ATOM	6497	CB	LEU	A	340	-8.375	33.648	-48.627	1.00	0.00	B	C
ATOM	6498	CG	LEU	A	340	-9.773	33.041	-48.367	1.00	0.00	B	C
ATOM	6499	CD1	LEU	A	340	-10.655	33.176	-49.617	1.00	0.00	B	C
ATOM	6500	CD2	LEU	A	340	-9.732	31.606	-47.830	1.00	0.00	B	C
ATOM	6501	C	LEU	A	340	-6.830	32.028	-47.593	1.00	0.00	B	C
ATOM	6502	O	LEU	A	340	-7.145	31.210	-46.730	1.00	0.00	B	O
ATOM	6503	N	ALA	A	341	-5.987	31.718	-48.598	1.00	0.00	B	N
ATOM	6504	CA	ALA	A	341	-5.553	30.364	-48.796	1.00	0.00	B	C
ATOM	6505	CB	ALA	A	341	-4.539	30.232	-49.946	1.00	0.00	B	C
ATOM	6506	C	ALA	A	341	-4.882	29.891	-47.544	1.00	0.00	B	C
ATOM	6507	O	ALA	A	341	-5.099	28.758	-47.116	1.00	0.00	B	O
ATOM	6508	N	ALA	A	342	-4.040	30.750	-46.940	1.00	0.00	B	N
ATOM	6509	CA	ALA	A	342	-3.309	30.441	-45.740	1.00	0.00	B	C
ATOM	6510	CB	ALA	A	342	-2.263	31.508	-45.398	1.00	0.00	B	C
ATOM	6511	C	ALA	A	342	-4.230	30.300	-44.565	1.00	0.00	B	C
ATOM	6512	O	ALA	A	342	-3.998	29.475	-43.682	1.00	0.00	B	O
ATOM	6513	N	GLY	A	343	-5.278	31.140	-44.487	1.00	0.00	B	N
ATOM	6514	CA	GLY	A	343	-6.183	31.048	-43.377	1.00	0.00	B	C
ATOM	6515	C	GLY	A	343	-6.881	29.713	-43.406	1.00	0.00	B	C
ATOM	6516	O	GLY	A	343	-7.139	29.112	-42.365	1.00	0.00	B	O

ATOM	6517	N	THR A 344	-7.260	29.264	-44.617	1.00	0.00	B	N
ATOM	6518	CA	THR A 344	-8.014	28.069	-44.919	1.00	0.00	B	C
ATOM	6519	CB	THR A 344	-8.795	28.225	-46.201	1.00	0.00	B	C
ATOM	6520	OG1	THR A 344	-9.577	29.408	-46.128	1.00	0.00	B	O
ATOM	6521	CG2	THR A 344	-9.762	27.042	-46.368	1.00	0.00	B	C
ATOM	6522	C	THR A 344	-7.195	26.800	-44.965	1.00	0.00	B	C
ATOM	6523	O	THR A 344	-7.760	25.715	-45.082	1.00	0.00	B	O
ATOM	6524	N	GLY A 345	-5.848	26.867	-45.007	1.00	0.00	B	N
ATOM	6525	CA	GLY A 345	-5.099	25.639	-45.036	1.00	0.00	B	C
ATOM	6526	C	GLY A 345	-5.123	25.048	-46.418	1.00	0.00	B	C
ATOM	6527	O	GLY A 345	-5.091	23.827	-46.574	1.00	0.00	B	O
ATOM	6528	N	LYS A 346	-5.217	25.893	-47.465	1.00	0.00	B	N
ATOM	6529	CA	LYS A 346	-5.147	25.361	-48.803	1.00	0.00	B	C
ATOM	6530	CB	LYS A 346	-6.079	26.064	-49.808	1.00	0.00	B	C
ATOM	6531	CG	LYS A 346	-7.497	25.489	-49.804	1.00	0.00	B	C
ATOM	6532	CD	LYS A 346	-8.259	25.666	-48.494	1.00	0.00	B	C
ATOM	6533	CE	LYS A 346	-9.637	24.998	-48.490	1.00	0.00	B	C
ATOM	6534	NZ	LYS A 346	-10.550	25.701	-49.420	1.00	0.00	B	N
ATOM	6535	C	LYS A 346	-3.727	25.533	-49.249	1.00	0.00	B	C
ATOM	6536	O	LYS A 346	-3.395	26.451	-49.994	1.00	0.00	B	O
ATOM	6537	N	ILE A 347	-2.877	24.579	-48.817	1.00	0.00	B	N
ATOM	6538	CA	ILE A 347	-1.444	24.631	-48.934	1.00	0.00	B	C
ATOM	6539	CB	ILE A 347	-0.745	23.495	-48.242	1.00	0.00	B	C
ATOM	6540	CG2	ILE A 347	0.756	23.632	-48.556	1.00	0.00	B	C
ATOM	6541	CG1	ILE A 347	-1.040	23.471	-46.734	1.00	0.00	B	C
ATOM	6542	CD	ILE A 347	-2.465	23.043	-46.386	1.00	0.00	B	C
ATOM	6543	C	ILE A 347	-0.939	24.581	-50.339	1.00	0.00	B	C
ATOM	6544	O	ILE A 347	-0.067	25.365	-50.710	1.00	0.00	B	O
ATOM	6545	N	GLY A 348	-1.462	23.660	-51.165	1.00	0.00	B	N
ATOM	6546	CA	GLY A 348	-0.898	23.480	-52.472	1.00	0.00	B	C
ATOM	6547	C	GLY A 348	-0.989	24.767	-53.223	1.00	0.00	B	C
ATOM	6548	O	GLY A 348	-0.072	25.135	-53.954	1.00	0.00	B	O
ATOM	6549	N	VAL A 349	-2.130	25.463	-53.085	1.00	0.00	B	N
ATOM	6550	CA	VAL A 349	-2.377	26.703	-53.763	1.00	0.00	B	C
ATOM	6551	CB	VAL A 349	-3.806	27.151	-53.624	1.00	0.00	B	C
ATOM	6552	CG1	VAL A 349	-3.983	28.485	-54.369	1.00	0.00	B	C
ATOM	6553	CG2	VAL A 349	-4.721	26.029	-54.145	1.00	0.00	B	C
ATOM	6554	C	VAL A 349	-1.494	27.775	-53.204	1.00	0.00	B	C

ATOM	6555	O	VAL A 349	-0.917	28.565	-53.947	1.00	0.00	B	O
ATOM	6556	N	LEU A 350	-1.353	27.808	-51.865	1.00	0.00	B	N
ATOM	6557	CA	LEU A 350	-0.568	28.825	-51.227	1.00	0.00	B	C
ATOM	6558	CB	LEU A 350	-0.527	28.614	-49.700	1.00	0.00	B	C
ATOM	6559	CG	LEU A 350	0.115	29.732	-48.847	1.00	0.00	B	C
ATOM	6560	CD1	LEU A 350	0.063	29.352	-47.359	1.00	0.00	B	C
ATOM	6561	CD2	LEU A 350	1.541	30.099	-49.289	1.00	0.00	B	C
ATOM	6562	C	LEU A 350	0.824	28.722	-51.779	1.00	0.00	B	C
ATOM	6563	O	LEU A 350	1.428	29.723	-52.164	1.00	0.00	B	O
ATOM	6564	N	ALA A 351	1.358	27.489	-51.866	1.00	0.00	B	N
ATOM	6565	CA	ALA A 351	2.687	27.291	-52.369	1.00	0.00	B	C
ATOM	6566	CB	ALA A 351	3.093	25.807	-52.380	1.00	0.00	B	C
ATOM	6567	C	ALA A 351	2.729	27.778	-53.783	1.00	0.00	B	C
ATOM	6568	O	ALA A 351	3.698	28.400	-54.212	1.00	0.00	B	O
ATOM	6569	N	TYR A 352	1.657	27.498	-54.538	1.00	0.00	B	N
ATOM	6570	CA	TYR A 352	1.547	27.861	-55.920	1.00	0.00	B	C
ATOM	6571	CB	TYR A 352	0.242	27.310	-56.508	1.00	0.00	B	C
ATOM	6572	CG	TYR A 352	-0.113	28.080	-57.727	1.00	0.00	B	C
ATOM	6573	CD1	TYR A 352	0.605	27.960	-58.893	1.00	0.00	B	C
ATOM	6574	CE1	TYR A 352	0.232	28.679	-60.005	1.00	0.00	B	C
ATOM	6575	CZ	TYR A 352	-0.856	29.516	-59.959	1.00	0.00	B	C
ATOM	6576	OH	TYR A 352	-1.240	30.252	-61.100	1.00	0.00	B	O
ATOM	6577	CD2	TYR A 352	-1.197	28.921	-57.686	1.00	0.00	B	C
ATOM	6578	CE2	TYR A 352	-1.573	29.641	-58.794	1.00	0.00	B	C
ATOM	6579	C	TYR A 352	1.579	29.347	-56.098	1.00	0.00	B	C
ATOM	6580	O	TYR A 352	2.276	29.844	-56.978	1.00	0.00	B	O
ATOM	6581	N	ILE A 353	0.831	30.110	-55.282	1.00	0.00	B	N
ATOM	6582	CA	ILE A 353	0.778	31.530	-55.486	1.00	0.00	B	C
ATOM	6583	CB	ILE A 353	-0.279	32.219	-54.671	1.00	0.00	B	C
ATOM	6584	CG2	ILE A 353	-0.063	33.738	-54.789	1.00	0.00	B	C
ATOM	6585	CG1	ILE A 353	-1.676	31.764	-55.129	1.00	0.00	B	C
ATOM	6586	CD	ILE A 353	-2.808	32.252	-54.224	1.00	0.00	B	C
ATOM	6587	C	ILE A 353	2.097	32.176	-55.210	1.00	0.00	B	C
ATOM	6588	O	ILE A 353	2.499	33.081	-55.934	1.00	0.00	B	O
ATOM	6589	N	LEU A 354	2.770	31.779	-54.114	1.00	0.00	B	N
ATOM	6590	CA	LEU A 354	4.035	32.337	-53.719	1.00	0.00	B	C
ATOM	6591	CB	LEU A 354	4.433	31.894	-52.307	1.00	0.00	B	C
ATOM	6592	CG	LEU A 354	3.440	32.342	-51.220	1.00	0.00	B	C

ATOM	6593	CD1 LEU A 354	3.877	31.824	-49.842	1.00	0.00	B	C
ATOM	6594	CD2 LEU A 354	3.222	33.862	-51.236	1.00	0.00	B	C
ATOM	6595	C LEU A 354	5.142	31.889	-54.629	1.00	0.00	B	C
ATOM	6596	O LEU A 354	6.095	32.606	-54.886	1.00	0.00	B	O
ATOM	6597	N GLN A 355	5.133	30.612	-55.011	1.00	0.00	B	N
ATOM	6598	CA GLN A 355	6.125	29.970	-55.826	1.00	0.00	B	C
ATOM	6599	CB GLN A 355	6.355	28.509	-55.414	1.00	0.00	B	C
ATOM	6600	CG GLN A 355	7.225	28.383	-54.151	1.00	0.00	B	C
ATOM	6601	CD GLN A 355	6.700	29.318	-53.067	1.00	0.00	B	C
ATOM	6602	OE1 GLN A 355	5.884	28.938	-52.231	1.00	0.00	B	O
ATOM	6603	NE2 GLN A 355	7.174	30.595	-53.090	1.00	0.00	B	N
ATOM	6604	C GLN A 355	5.882	30.061	-57.296	1.00	0.00	B	C
ATOM	6605	O GLN A 355	6.740	29.621	-58.053	1.00	0.00	B	O
ATOM	6606	N ARG A 356	4.683	30.490	-57.742	1.00	0.00	B	N
ATOM	6607	CA ARG A 356	4.316	30.431	-59.135	1.00	0.00	B	C
ATOM	6608	CB ARG A 356	2.883	30.898	-59.429	1.00	0.00	B	C
ATOM	6609	CG ARG A 356	2.539	30.829	-60.917	1.00	0.00	B	C
ATOM	6610	CD ARG A 356	1.391	31.749	-61.337	1.00	0.00	B	C
ATOM	6611	NE ARG A 356	1.867	33.152	-61.167	1.00	0.00	B	N
ATOM	6612	CZ ARG A 356	1.330	33.944	-60.193	1.00	0.00	B	C
ATOM	6613	NH1 ARG A 356	0.296	33.479	-59.433	1.00	0.00	B	N
ATOM	6614	NH2 ARG A 356	1.822	35.198	-59.985	1.00	0.00	B	N
ATOM	6615	C ARG A 356	5.164	31.346	-59.955	1.00	0.00	B	C
ATOM	6616	O ARG A 356	4.713	32.415	-60.366	1.00	0.00	B	O
ATOM	6617	N GLU A 357	6.387	30.894	-60.283	1.00	0.00	B	N
ATOM	6618	CA GLU A 357	7.315	31.652	-61.065	1.00	0.00	B	C
ATOM	6619	CB GLU A 357	8.696	30.989	-61.147	1.00	0.00	B	C
ATOM	6620	CG GLU A 357	8.586	29.620	-61.831	1.00	0.00	B	C
ATOM	6621	CD GLU A 357	9.973	29.053	-62.081	1.00	0.00	B	C
ATOM	6622	OE1 GLU A 357	10.767	28.968	-61.108	1.00	0.00	B	O
ATOM	6623	OE2 GLU A 357	10.254	28.692	-63.256	1.00	0.00	B	O
ATOM	6624	C GLU A 357	6.799	31.625	-62.464	1.00	0.00	B	C
ATOM	6625	O GLU A 357	6.226	30.625	-62.896	1.00	0.00	B	O
ATOM	6626	N ILE A 358	6.969	32.725	-63.225	1.00	0.00	B	N
ATOM	6627	CA ILE A 358	6.482	32.652	-64.568	1.00	0.00	B	C
ATOM	6628	CB ILE A 358	5.156	33.342	-64.729	1.00	0.00	B	C
ATOM	6629	CG2 ILE A 358	5.395	34.858	-64.629	1.00	0.00	B	C
ATOM	6630	CG1 ILE A 358	4.432	32.863	-66.001	1.00	0.00	B	C

ATOM	6631	CD	ILE	A	358	3.997	31.398	-65.959	1.00	0.00	B	C
ATOM	6632	C	ILE	A	358	7.518	33.258	-65.472	1.00	0.00	B	C
ATOM	6633	O	ILE	A	358	8.174	34.234	-65.108	1.00	0.00	B	O
ATOM	6634	N	GLN	A	359	7.730	32.666	-66.669	1.00	0.00	B	N
ATOM	6635	CA	GLN	A	359	8.712	33.212	-67.567	1.00	0.00	B	C
ATOM	6636	CB	GLN	A	359	9.965	32.333	-67.728	1.00	0.00	B	C
ATOM	6637	CG	GLN	A	359	11.006	32.930	-68.679	1.00	0.00	B	C
ATOM	6638	CD	GLN	A	359	11.664	34.124	-67.994	1.00	0.00	B	C
ATOM	6639	OE1	GLN	A	359	11.148	34.659	-67.013	1.00	0.00	B	O
ATOM	6640	NE2	GLN	A	359	12.837	34.556	-68.527	1.00	0.00	B	N
ATOM	6641	C	GLN	A	359	8.080	33.360	-68.917	1.00	0.00	B	C
ATOM	6642	O	GLN	A	359	7.568	32.398	-69.492	1.00	0.00	B	O
ATOM	6643	N	GLU	A	360	8.113	34.602	-69.448	1.00	0.00	B	N
ATOM	6644	CA	GLU	A	360	7.499	34.959	-70.697	1.00	0.00	B	C
ATOM	6645	CB	GLU	A	360	5.987	34.618	-70.695	1.00	0.00	B	C
ATOM	6646	CG	GLU	A	360	5.177	34.889	-71.965	1.00	0.00	B	C
ATOM	6647	CD	GLU	A	360	4.485	36.229	-71.771	1.00	0.00	B	C
ATOM	6648	OE1	GLU	A	360	4.049	36.503	-70.620	1.00	0.00	B	O
ATOM	6649	OE2	GLU	A	360	4.383	36.997	-72.764	1.00	0.00	B	O
ATOM	6650	C	GLU	A	360	7.717	36.444	-70.808	1.00	0.00	B	C
ATOM	6651	O	GLU	A	360	8.256	37.043	-69.875	1.00	0.00	B	O
ATOM	6652	N	PRO	A	361	7.334	37.084	-71.882	1.00	0.00	B	N
ATOM	6653	CD	PRO	A	361	7.433	36.459	-73.194	1.00	0.00	B	C
ATOM	6654	CA	PRO	A	361	7.602	38.490	-71.977	1.00	0.00	B	C
ATOM	6655	CB	PRO	A	361	7.254	38.881	-73.408	1.00	0.00	B	C
ATOM	6656	CG	PRO	A	361	7.619	37.611	-74.199	1.00	0.00	B	C
ATOM	6657	C	PRO	A	361	7.029	39.370	-70.916	1.00	0.00	B	C
ATOM	6658	O	PRO	A	361	7.549	40.452	-70.706	1.00	0.00	B	O
ATOM	6659	N	GLU	A	362	5.940	39.060	-70.228	1.00	0.00	B	N
ATOM	6660	CA	GLU	A	362	5.773	40.059	-69.215	1.00	0.00	B	C
ATOM	6661	CB	GLU	A	362	4.418	40.778	-69.297	1.00	0.00	B	C
ATOM	6662	CG	GLU	A	362	4.211	41.525	-70.617	1.00	0.00	B	C
ATOM	6663	CD	GLU	A	362	3.753	40.508	-71.654	1.00	0.00	B	C
ATOM	6664	OE1	GLU	A	362	2.682	39.883	-71.433	1.00	0.00	B	O
ATOM	6665	OE2	GLU	A	362	4.469	40.336	-72.678	1.00	0.00	B	O
ATOM	6666	C	GLU	A	362	5.780	39.299	-67.944	1.00	0.00	B	C
ATOM	6667	O	GLU	A	362	5.030	39.594	-67.017	1.00	0.00	B	O
ATOM	6668	N	CYS	A	363	6.633	38.274	-67.870	1.00	0.00	B	N

ATOM	6669	CA	CYS	A	363	6.604	37.411	-66.730	1.00	0.00	B	C
ATOM	6670	CB	CYS	A	363	7.158	36.014	-66.989	1.00	0.00	B	C
ATOM	6671	SG	CYS	A	363	5.817	35.014	-67.668	1.00	0.00	B	S
ATOM	6672	C	CYS	A	363	7.190	37.932	-65.456	1.00	0.00	B	C
ATOM	6673	O	CYS	A	363	6.674	37.623	-64.385	1.00	0.00	B	O
ATOM	6674	N	ARG	A	364	8.261	38.735	-65.522	1.00	0.00	B	N
ATOM	6675	CA	ARG	A	364	8.999	39.046	-64.328	1.00	0.00	B	C
ATOM	6676	CB	ARG	A	364	10.248	39.908	-64.604	1.00	0.00	B	C
ATOM	6677	CG	ARG	A	364	11.130	40.157	-63.373	1.00	0.00	B	C
ATOM	6678	CD	ARG	A	364	12.393	40.969	-63.683	1.00	0.00	B	C
ATOM	6679	NE	ARG	A	364	13.039	41.343	-62.389	1.00	0.00	B	N
ATOM	6680	CZ	ARG	A	364	13.949	40.518	-61.792	1.00	0.00	B	C
ATOM	6681	NH1	ARG	A	364	14.265	39.317	-62.358	1.00	0.00	B	N
ATOM	6682	NH2	ARG	A	364	14.554	40.900	-60.628	1.00	0.00	B	N
ATOM	6683	C	ARG	A	364	8.158	39.732	-63.294	1.00	0.00	B	C
ATOM	6684	O	ARG	A	364	8.262	39.411	-62.113	1.00	0.00	B	O
ATOM	6685	N	HSD	A	365	7.294	40.686	-63.681	1.00	0.00	B	N
ATOM	6686	CA	HSD	A	365	6.553	41.400	-62.677	1.00	0.00	B	C
ATOM	6687	CB	HSD	A	365	5.706	42.553	-63.233	1.00	0.00	B	C
ATOM	6688	ND1	HSD	A	365	4.510	41.230	-65.014	1.00	0.00	B	N
ATOM	6689	CG	HSD	A	365	4.478	42.074	-63.932	1.00	0.00	B	C
ATOM	6690	CE1	HSD	A	365	3.224	41.014	-65.382	1.00	0.00	B	C
ATOM	6691	NE2	HSD	A	365	2.369	41.661	-64.612	1.00	0.00	B	N
ATOM	6692	CD2	HSD	A	365	3.162	42.329	-63.699	1.00	0.00	B	C
ATOM	6693	C	HSD	A	365	5.636	40.455	-61.953	1.00	0.00	B	C
ATOM	6694	O	HSD	A	365	5.430	40.583	-60.746	1.00	0.00	B	O
ATOM	6695	N	LEU	A	366	5.036	39.504	-62.690	1.00	0.00	B	N
ATOM	6696	CA	LEU	A	366	4.085	38.539	-62.189	1.00	0.00	B	C
ATOM	6697	CB	LEU	A	366	3.448	37.753	-63.354	1.00	0.00	B	C
ATOM	6698	CG	LEU	A	366	2.358	36.747	-62.949	1.00	0.00	B	C
ATOM	6699	CD1	LEU	A	366	1.125	37.459	-62.371	1.00	0.00	B	C
ATOM	6700	CD2	LEU	A	366	2.008	35.812	-64.121	1.00	0.00	B	C
ATOM	6701	C	LEU	A	366	4.696	37.527	-61.245	1.00	0.00	B	C
ATOM	6702	O	LEU	A	366	4.097	37.208	-60.216	1.00	0.00	B	O
ATOM	6703	N	SER	A	367	5.900	36.999	-61.558	1.00	0.00	B	N
ATOM	6704	CA	SER	A	367	6.423	35.864	-60.831	1.00	0.00	B	C
ATOM	6705	CB	SER	A	367	7.548	35.115	-61.569	1.00	0.00	B	C
ATOM	6706	OG	SER	A	367	8.701	35.935	-61.695	1.00	0.00	B	O

ATOM	6707	C	SER A 367	6.932	36.194	-59.468	1.00	0.00	B	C
ATOM	6708	O	SER A 367	7.557	37.226	-59.231	1.00	0.00	B	O
ATOM	6709	N	ARG A 368	6.572	35.329	-58.501	1.00	0.00	B	N
ATOM	6710	CA	ARG A 368	7.046	35.424	-57.159	1.00	0.00	B	C
ATOM	6711	CB	ARG A 368	5.989	34.946	-56.175	1.00	0.00	B	C
ATOM	6712	CG	ARG A 368	4.645	35.666	-56.318	1.00	0.00	B	C
ATOM	6713	CD	ARG A 368	4.293	36.565	-55.138	1.00	0.00	B	C
ATOM	6714	NE	ARG A 368	5.576	36.873	-54.462	1.00	0.00	B	N
ATOM	6715	CZ	ARG A 368	5.965	36.061	-53.444	1.00	0.00	B	C
ATOM	6716	NH1	ARG A 368	5.106	35.110	-52.985	1.00	0.00	B	N
ATOM	6717	NH2	ARG A 368	7.209	36.156	-52.904	1.00	0.00	B	N
ATOM	6718	C	ARG A 368	8.408	34.783	-56.973	1.00	0.00	B	C
ATOM	6719	O	ARG A 368	9.203	35.264	-56.178	1.00	0.00	B	O
ATOM	6720	N	LYS A 369	8.757	33.680	-57.673	1.00	0.00	B	N
ATOM	6721	CA	LYS A 369	10.052	33.103	-57.392	1.00	0.00	B	C
ATOM	6722	CB	LYS A 369	9.976	31.693	-56.776	1.00	0.00	B	C
ATOM	6723	CG	LYS A 369	9.399	30.620	-57.699	1.00	0.00	B	C
ATOM	6724	CD	LYS A 369	9.598	29.202	-57.158	1.00	0.00	B	C
ATOM	6725	CE	LYS A 369	9.028	28.107	-58.061	1.00	0.00	B	C
ATOM	6726	NZ	LYS A 369	9.164	26.788	-57.404	1.00	0.00	B	N
ATOM	6727	C	LYS A 369	10.892	33.013	-58.637	1.00	0.00	B	C
ATOM	6728	O	LYS A 369	10.419	32.632	-59.710	1.00	0.00	B	O
ATOM	6729	N	PHE A 370	12.189	33.373	-58.500	1.00	0.00	B	N
ATOM	6730	CA	PHE A 370	13.131	33.338	-59.585	1.00	0.00	B	C
ATOM	6731	CB	PHE A 370	13.818	34.694	-59.803	1.00	0.00	B	C
ATOM	6732	CG	PHE A 370	12.781	35.754	-59.964	1.00	0.00	B	C
ATOM	6733	CD1	PHE A 370	12.053	36.170	-58.875	1.00	0.00	B	C
ATOM	6734	CE1	PHE A 370	11.099	37.152	-58.995	1.00	0.00	B	C
ATOM	6735	CZ	PHE A 370	10.867	37.736	-60.218	1.00	0.00	B	C
ATOM	6736	CD2	PHE A 370	12.552	36.350	-61.183	1.00	0.00	B	C
ATOM	6737	CE2	PHE A 370	11.598	37.331	-61.309	1.00	0.00	B	C
ATOM	6738	C	PHE A 370	14.245	32.444	-59.130	1.00	0.00	B	C
ATOM	6739	O	PHE A 370	14.787	32.650	-58.051	1.00	0.00	B	O
ATOM	6740	N	THR A 371	14.636	31.426	-59.918	1.00	0.00	B	N
ATOM	6741	CA	THR A 371	15.718	30.605	-59.449	1.00	0.00	B	C
ATOM	6742	CB	THR A 371	15.250	29.265	-58.959	1.00	0.00	B	C
ATOM	6743	OG1	THR A 371	14.773	28.471	-60.036	1.00	0.00	B	O
ATOM	6744	CG2	THR A 371	14.088	29.513	-57.987	1.00	0.00	B	C

ATOM	6745	C	THR	A 371	16.622	30.343	-60.614	1.00	0.00	B	C
ATOM	6746	O	THR	A 371	16.153	29.909	-61.665	1.00	0.00	B	O
ATOM	6747	N	GLU	A 372	17.940	30.614	-60.487	1.00	0.00	B	N
ATOM	6748	CA	GLU	A 372	18.761	30.269	-61.613	1.00	0.00	B	C
ATOM	6749	CB	GLU	A 372	18.802	31.348	-62.711	1.00	0.00	B	C
ATOM	6750	CG	GLU	A 372	17.478	31.502	-63.457	1.00	0.00	B	C
ATOM	6751	CD	GLU	A 372	17.686	32.478	-64.602	1.00	0.00	B	C
ATOM	6752	OE1	GLU	A 372	18.866	32.705	-64.978	1.00	0.00	B	O
ATOM	6753	OE2	GLU	A 372	16.665	33.005	-65.120	1.00	0.00	B	O
ATOM	6754	C	GLU	A 372	20.181	30.006	-61.196	1.00	0.00	B	C
ATOM	6755	O	GLU	A 372	21.025	30.901	-61.241	1.00	0.00	B	O
ATOM	6756	N	TRP	A 373	20.480	28.756	-60.788	1.00	0.00	B	N
ATOM	6757	CA	TRP	A 373	21.819	28.326	-60.493	1.00	0.00	B	C
ATOM	6758	CB	TRP	A 373	22.310	28.684	-59.074	1.00	0.00	B	C
ATOM	6759	CG	TRP	A 373	22.727	30.120	-58.840	1.00	0.00	B	C
ATOM	6760	CD1	TRP	A 373	21.967	31.242	-58.683	1.00	0.00	B	C
ATOM	6761	NE1	TRP	A 373	22.777	32.329	-58.443	1.00	0.00	B	N
ATOM	6762	CE2	TRP	A 373	24.091	31.903	-58.439	1.00	0.00	B	C
ATOM	6763	CD2	TRP	A 373	24.094	30.531	-58.685	1.00	0.00	B	C
ATOM	6764	CE3	TRP	A 373	25.260	29.820	-58.739	1.00	0.00	B	C
ATOM	6765	CZ3	TRP	A 373	26.435	30.514	-58.542	1.00	0.00	B	C
ATOM	6766	CZ2	TRP	A 373	25.255	32.588	-58.244	1.00	0.00	B	C
ATOM	6767	CH2	TRP	A 373	26.432	31.872	-58.301	1.00	0.00	B	C
ATOM	6768	C	TRP	A 373	21.791	26.832	-60.552	1.00	0.00	B	C
ATOM	6769	O	TRP	A 373	21.200	26.187	-59.691	1.00	0.00	B	O
ATOM	6770	N	ALA	A 374	22.432	26.199	-61.551	1.00	0.00	B	N
ATOM	6771	CA	ALA	A 374	22.317	24.767	-61.499	1.00	0.00	B	C
ATOM	6772	CB	ALA	A 374	21.176	24.207	-62.369	1.00	0.00	B	C
ATOM	6773	C	ALA	A 374	23.576	24.126	-61.979	1.00	0.00	B	C
ATOM	6774	O	ALA	A 374	24.143	24.521	-62.997	1.00	0.00	B	O
ATOM	6775	N	TYR	A 375	24.059	23.116	-61.225	1.00	0.00	B	N
ATOM	6776	CA	TYR	A 375	25.210	22.376	-61.656	1.00	0.00	B	C
ATOM	6777	CB	TYR	A 375	26.452	22.585	-60.776	1.00	0.00	B	C
ATOM	6778	CG	TYR	A 375	27.633	22.190	-61.596	1.00	0.00	B	C
ATOM	6779	CD1	TYR	A 375	28.118	23.014	-62.586	1.00	0.00	B	C
ATOM	6780	CE1	TYR	A 375	29.207	22.640	-63.339	1.00	0.00	B	C
ATOM	6781	CZ	TYR	A 375	29.824	21.435	-63.103	1.00	0.00	B	C
ATOM	6782	OH	TYR	A 375	30.942	21.046	-63.873	1.00	0.00	B	O

ATOM	6783	CD2 TYR A 375	28.263	20.987	-61.367	1.00	0.00	B	C
ATOM	6784	CE2 TYR A 375	29.351	20.610	-62.116	1.00	0.00	B	C
ATOM	6785	C TYR A 375	24.903	20.917	-61.593	1.00	0.00	B	C
ATOM	6786	O TYR A 375	24.957	20.323	-60.519	1.00	0.00	B	O
ATOM	6787	N GLY A 376	24.494	20.321	-62.728	1.00	0.00	B	N
ATOM	6788	CA GLY A 376	24.369	18.898	-62.834	1.00	0.00	B	C
ATOM	6789	C GLY A 376	23.285	18.435	-61.917	1.00	0.00	B	C
ATOM	6790	O GLY A 376	22.098	18.369	-62.230	1.00	0.00	B	O
ATOM	6791	N PRO A 377	23.806	18.031	-60.792	1.00	0.00	B	N
ATOM	6792	CD PRO A 377	25.147	17.477	-60.801	1.00	0.00	B	C
ATOM	6793	CA PRO A 377	23.038	17.553	-59.670	1.00	0.00	B	C
ATOM	6794	CB PRO A 377	23.937	16.568	-58.927	1.00	0.00	B	C
ATOM	6795	CG PRO A 377	25.358	16.926	-59.387	1.00	0.00	B	C
ATOM	6796	C PRO A 377	22.513	18.609	-58.751	1.00	0.00	B	C
ATOM	6797	O PRO A 377	21.684	18.273	-57.907	1.00	0.00	B	O
ATOM	6798	N VAL A 378	22.974	19.872	-58.867	1.00	0.00	B	N
ATOM	6799	CA VAL A 378	22.632	20.836	-57.858	1.00	0.00	B	C
ATOM	6800	CB VAL A 378	23.825	21.601	-57.354	1.00	0.00	B	C
ATOM	6801	CG1 VAL A 378	24.401	22.439	-58.504	1.00	0.00	B	C
ATOM	6802	CG2 VAL A 378	23.413	22.429	-56.125	1.00	0.00	B	C
ATOM	6803	C VAL A 378	21.625	21.807	-58.383	1.00	0.00	B	C
ATOM	6804	O VAL A 378	21.421	21.926	-59.589	1.00	0.00	B	O
ATOM	6805	N HSD A 379	20.927	22.502	-57.461	1.00	0.00	B	N
ATOM	6806	CA HSD A 379	19.907	23.419	-57.874	1.00	0.00	B	C
ATOM	6807	CB HSD A 379	18.531	22.737	-57.942	1.00	0.00	B	C
ATOM	6808	ND1 HSD A 379	16.625	24.414	-57.831	1.00	0.00	B	N
ATOM	6809	CG HSD A 379	17.454	23.578	-58.545	1.00	0.00	B	C
ATOM	6810	CE1 HSD A 379	15.779	24.984	-58.725	1.00	0.00	B	C
ATOM	6811	NE2 HSD A 379	16.006	24.575	-59.961	1.00	0.00	B	N
ATOM	6812	CD2 HSD A 379	17.064	23.689	-59.845	1.00	0.00	B	C
ATOM	6813	C HSD A 379	19.824	24.522	-56.859	1.00	0.00	B	C
ATOM	6814	O HSD A 379	20.171	24.337	-55.695	1.00	0.00	B	O
ATOM	6815	N SER A 380	19.376	25.718	-57.295	1.00	0.00	B	N
ATOM	6816	CA SER A 380	19.219	26.832	-56.404	1.00	0.00	B	C
ATOM	6817	CB SER A 380	20.247	27.955	-56.618	1.00	0.00	B	C
ATOM	6818	OG SER A 380	20.007	29.013	-55.703	1.00	0.00	B	O
ATOM	6819	C SER A 380	17.878	27.427	-56.687	1.00	0.00	B	C
ATOM	6820	O SER A 380	17.434	27.459	-57.832	1.00	0.00	B	O

ATOM	6821	N	SER A 381	17.185	27.914	-55.641	1.00	0.00	B	N
ATOM	6822	CA	SER A 381	15.897	28.492	-55.886	1.00	0.00	B	C
ATOM	6823	CB	SER A 381	14.750	27.596	-55.378	1.00	0.00	B	C
ATOM	6824	OG	SER A 381	13.484	28.186	-55.626	1.00	0.00	B	O
ATOM	6825	C	SER A 381	15.832	29.789	-55.149	1.00	0.00	B	C
ATOM	6826	O	SER A 381	16.330	29.896	-54.031	1.00	0.00	B	O
ATOM	6827	N	LEU A 382	15.246	30.831	-55.774	1.00	0.00	B	N
ATOM	6828	CA	LEU A 382	15.085	32.062	-55.058	1.00	0.00	B	C
ATOM	6829	CB	LEU A 382	15.828	33.296	-55.615	1.00	0.00	B	C
ATOM	6830	CG	LEU A 382	17.360	33.236	-55.463	1.00	0.00	B	C
ATOM	6831	CD1	LEU A 382	17.963	32.095	-56.296	1.00	0.00	B	C
ATOM	6832	CD2	LEU A 382	18.001	34.600	-55.759	1.00	0.00	B	C
ATOM	6833	C	LEU A 382	13.628	32.374	-54.989	1.00	0.00	B	C
ATOM	6834	O	LEU A 382	12.863	32.080	-55.910	1.00	0.00	B	O
ATOM	6835	N	TYR A 383	13.213	32.972	-53.854	1.00	0.00	B	N
ATOM	6836	CA	TYR A 383	11.830	33.287	-53.632	1.00	0.00	B	C
ATOM	6837	CB	TYR A 383	11.261	32.537	-52.428	1.00	0.00	B	C
ATOM	6838	CG	TYR A 383	11.323	31.098	-52.819	1.00	0.00	B	C
ATOM	6839	CD1	TYR A 383	12.522	30.424	-52.785	1.00	0.00	B	C
ATOM	6840	CE1	TYR A 383	12.597	29.101	-53.154	1.00	0.00	B	C
ATOM	6841	CZ	TYR A 383	11.472	28.433	-53.569	1.00	0.00	B	C
ATOM	6842	OH	TYR A 383	11.552	27.074	-53.943	1.00	0.00	B	O
ATOM	6843	CD2	TYR A 383	10.202	30.428	-53.260	1.00	0.00	B	C
ATOM	6844	CE2	TYR A 383	10.273	29.102	-53.627	1.00	0.00	B	C
ATOM	6845	C	TYR A 383	11.738	34.771	-53.438	1.00	0.00	B	C
ATOM	6846	O	TYR A 383	12.624	35.386	-52.851	1.00	0.00	B	O
ATOM	6847	N	ASP A 384	10.656	35.394	-53.953	1.00	0.00	B	N
ATOM	6848	CA	ASP A 384	10.591	36.831	-53.968	1.00	0.00	B	C
ATOM	6849	CB	ASP A 384	9.254	37.382	-54.488	1.00	0.00	B	C
ATOM	6850	CG	ASP A 384	9.390	38.854	-54.820	1.00	0.00	B	C
ATOM	6851	OD1	ASP A 384	10.543	39.354	-54.891	1.00	0.00	B	O
ATOM	6852	OD2	ASP A 384	8.325	39.496	-55.022	1.00	0.00	B	O
ATOM	6853	C	ASP A 384	10.664	37.292	-52.587	1.00	0.00	B	C
ATOM	6854	O	ASP A 384	11.562	38.032	-52.189	1.00	0.00	B	O
ATOM	6855	N	LEU A 385	9.670	36.758	-51.883	1.00	0.00	B	N
ATOM	6856	CA	LEU A 385	9.272	36.757	-50.547	1.00	0.00	B	C
ATOM	6857	CB	LEU A 385	10.457	36.741	-49.571	1.00	0.00	B	C
ATOM	6858	CG	LEU A 385	10.101	36.106	-48.218	1.00	0.00	B	C

ATOM	6859	CD1 LEU A 385	11.105	36.502	-47.130	1.00	0.00	B	C
ATOM	6860	CD2 LEU A 385	8.632	36.282	-47.849	1.00	0.00	B	C
ATOM	6861	C LEU A 385	8.383	37.931	-50.270	1.00	0.00	B	C
ATOM	6862	O LEU A 385	8.788	38.886	-49.607	1.00	0.00	B	O
ATOM	6863	N SER A 386	7.134	37.873	-50.775	1.00	0.00	B	N
ATOM	6864	CA SER A 386	6.132	38.866	-50.509	1.00	0.00	B	C
ATOM	6865	CB SER A 386	4.953	38.803	-51.499	1.00	0.00	B	C
ATOM	6866	OG SER A 386	4.234	37.590	-51.338	1.00	0.00	B	O
ATOM	6867	C SER A 386	5.569	38.645	-49.132	1.00	0.00	B	C
ATOM	6868	O SER A 386	5.225	39.591	-48.430	1.00	0.00	B	O
ATOM	6869	N CYS A 387	5.518	37.372	-48.702	1.00	0.00	B	N
ATOM	6870	CA CYS A 387	4.888	36.927	-47.485	1.00	0.00	B	C
ATOM	6871	CB CYS A 387	5.254	35.464	-47.213	1.00	0.00	B	C
ATOM	6872	SG CYS A 387	5.026	34.425	-48.680	1.00	0.00	B	S
ATOM	6873	C CYS A 387	5.470	37.659	-46.325	1.00	0.00	B	C
ATOM	6874	O CYS A 387	4.758	38.150	-45.452	1.00	0.00	B	O
ATOM	6875	N ILE A 388	6.804	37.726	-46.282	1.00	0.00	B	N
ATOM	6876	CA ILE A 388	7.515	38.376	-45.230	1.00	0.00	B	C
ATOM	6877	CB ILE A 388	9.005	38.264	-45.369	1.00	0.00	B	C
ATOM	6878	CG2 ILE A 388	9.410	38.891	-46.715	1.00	0.00	B	C
ATOM	6879	CG1 ILE A 388	9.699	38.901	-44.153	1.00	0.00	B	C
ATOM	6880	CD ILE A 388	9.413	38.188	-42.832	1.00	0.00	B	C
ATOM	6881	C ILE A 388	7.159	39.822	-45.275	1.00	0.00	B	C
ATOM	6882	O ILE A 388	7.034	40.468	-44.240	1.00	0.00	B	O
ATOM	6883	N ASP A 389	7.006	40.362	-46.497	1.00	0.00	B	N
ATOM	6884	CA ASP A 389	6.757	41.757	-46.694	1.00	0.00	B	C
ATOM	6885	CB ASP A 389	6.736	42.150	-48.181	1.00	0.00	B	C
ATOM	6886	CG ASP A 389	8.154	42.042	-48.728	1.00	0.00	B	C
ATOM	6887	OD1 ASP A 389	9.110	42.346	-47.966	1.00	0.00	B	O
ATOM	6888	OD2 ASP A 389	8.298	41.651	-49.916	1.00	0.00	B	O
ATOM	6889	C ASP A 389	5.446	42.183	-46.106	1.00	0.00	B	C
ATOM	6890	O ASP A 389	5.381	43.236	-45.476	1.00	0.00	B	O
ATOM	6891	N THR A 390	4.359	41.399	-46.262	1.00	0.00	B	N
ATOM	6892	CA THR A 390	3.120	41.972	-45.826	1.00	0.00	B	C
ATOM	6893	CB THR A 390	1.908	41.255	-46.344	1.00	0.00	B	C
ATOM	6894	OG1 THR A 390	2.028	41.068	-47.747	1.00	0.00	B	O
ATOM	6895	CG2 THR A 390	0.695	42.174	-46.109	1.00	0.00	B	C
ATOM	6896	C THR A 390	3.108	42.059	-44.325	1.00	0.00	B	C

ATOM	6897	O	THR A 390	3.248	41.048	-43.643	1.00	0.00	B	O
ATOM	6898	N	CYS A 391	3.210	43.292	-43.768	1.00	0.00	B	N
ATOM	6899	CA	CYS A 391	3.059	43.516	-42.349	1.00	0.00	B	C
ATOM	6900	CB	CYS A 391	4.055	44.556	-41.811	1.00	0.00	B	C
ATOM	6901	SG	CYS A 391	3.916	44.771	-40.010	1.00	0.00	B	S
ATOM	6902	C	CYS A 391	1.697	43.930	-41.849	1.00	0.00	B	C
ATOM	6903	O	CYS A 391	1.110	43.295	-40.974	1.00	0.00	B	O
ATOM	6904	N	GLU A 392	1.148	45.024	-42.435	1.00	0.00	B	N
ATOM	6905	CA	GLU A 392	-0.011	45.706	-41.909	1.00	0.00	B	C
ATOM	6906	CB	GLU A 392	-0.364	46.947	-42.748	1.00	0.00	B	C
ATOM	6907	CG	GLU A 392	-1.469	47.821	-42.159	1.00	0.00	B	C
ATOM	6908	CD	GLU A 392	-1.671	48.985	-43.118	1.00	0.00	B	C
ATOM	6909	OE1	GLU A 392	-1.357	48.813	-44.326	1.00	0.00	B	O
ATOM	6910	OE2	GLU A 392	-2.139	50.064	-42.659	1.00	0.00	B	O
ATOM	6911	C	GLU A 392	-1.175	44.787	-41.928	1.00	0.00	B	C
ATOM	6912	O	GLU A 392	-1.914	44.658	-40.951	1.00	0.00	B	O
ATOM	6913	N	LYS A 393	-1.356	44.121	-43.073	1.00	0.00	B	N
ATOM	6914	CA	LYS A 393	-2.379	43.144	-43.209	1.00	0.00	B	C
ATOM	6915	CB	LYS A 393	-2.696	42.876	-44.687	1.00	0.00	B	C
ATOM	6916	CG	LYS A 393	-3.251	44.149	-45.336	1.00	0.00	B	C
ATOM	6917	CD	LYS A 393	-3.186	44.200	-46.864	1.00	0.00	B	C
ATOM	6918	CE	LYS A 393	-3.701	45.527	-47.429	1.00	0.00	B	C
ATOM	6919	NZ	LYS A 393	-3.468	45.593	-48.888	1.00	0.00	B	N
ATOM	6920	C	LYS A 393	-1.826	41.929	-42.540	1.00	0.00	B	C
ATOM	6921	O	LYS A 393	-0.628	41.868	-42.271	1.00	0.00	B	O
ATOM	6922	N	ASN A 394	-2.687	40.949	-42.207	1.00	0.00	B	N
ATOM	6923	CA	ASN A 394	-2.187	39.790	-41.527	1.00	0.00	B	C
ATOM	6924	CB	ASN A 394	-3.277	38.743	-41.246	1.00	0.00	B	C
ATOM	6925	CG	ASN A 394	-4.181	39.319	-40.168	1.00	0.00	B	C
ATOM	6926	OD1	ASN A 394	-5.351	39.607	-40.405	1.00	0.00	B	O
ATOM	6927	ND2	ASN A 394	-3.615	39.505	-38.944	1.00	0.00	B	N
ATOM	6928	C	ASN A 394	-1.159	39.172	-42.412	1.00	0.00	B	C
ATOM	6929	O	ASN A 394	-0.093	38.813	-41.935	1.00	0.00	B	O
ATOM	6930	N	SER A 395	-1.440	39.017	-43.718	1.00	0.00	B	N
ATOM	6931	CA	SER A 395	-0.439	38.569	-44.655	1.00	0.00	B	C
ATOM	6932	CB	SER A 395	0.955	39.154	-44.406	1.00	0.00	B	C
ATOM	6933	OG	SER A 395	0.775	40.476	-43.927	1.00	0.00	B	O
ATOM	6934	C	SER A 395	-0.345	37.077	-44.631	1.00	0.00	B	C

ATOM	6935	O	SER A 395	-0.914	36.416	-43.765	1.00	0.00	B	O
ATOM	6936	N	VAL A 396	0.346	36.505	-45.636	1.00	0.00	B	N
ATOM	6937	CA	VAL A 396	0.494	35.081	-45.658	1.00	0.00	B	C
ATOM	6938	CB	VAL A 396	0.962	34.546	-46.978	1.00	0.00	B	C
ATOM	6939	CG1	VAL A 396	2.353	35.097	-47.275	1.00	0.00	B	C
ATOM	6940	CG2	VAL A 396	0.869	33.011	-46.947	1.00	0.00	B	C
ATOM	6941	C	VAL A 396	1.395	34.650	-44.536	1.00	0.00	B	C
ATOM	6942	O	VAL A 396	1.130	33.653	-43.868	1.00	0.00	B	O
ATOM	6943	N	LEU A 397	2.494	35.390	-44.297	1.00	0.00	B	N
ATOM	6944	CA	LEU A 397	3.396	35.024	-43.238	1.00	0.00	B	C
ATOM	6945	CB	LEU A 397	4.690	35.851	-43.224	1.00	0.00	B	C
ATOM	6946	CG	LEU A 397	5.642	35.447	-42.082	1.00	0.00	B	C
ATOM	6947	CD1	LEU A 397	6.062	33.973	-42.205	1.00	0.00	B	C
ATOM	6948	CD2	LEU A 397	6.845	36.399	-41.994	1.00	0.00	B	C
ATOM	6949	C	LEU A 397	2.734	35.196	-41.905	1.00	0.00	B	C
ATOM	6950	O	LEU A 397	2.840	34.322	-41.049	1.00	0.00	B	O
ATOM	6951	N	GLU A 398	2.029	36.322	-41.659	1.00	0.00	B	N
ATOM	6952	CA	GLU A 398	1.488	36.399	-40.334	1.00	0.00	B	C
ATOM	6953	CB	GLU A 398	1.064	37.760	-39.760	1.00	0.00	B	C
ATOM	6954	CG	GLU A 398	2.227	38.710	-39.466	1.00	0.00	B	C
ATOM	6955	CD	GLU A 398	2.622	39.404	-40.760	1.00	0.00	B	C
ATOM	6956	OE1	GLU A 398	1.861	40.306	-41.204	1.00	0.00	B	O
ATOM	6957	OE2	GLU A 398	3.689	39.043	-41.324	1.00	0.00	B	O
ATOM	6958	C	GLU A 398	0.385	35.417	-40.152	1.00	0.00	B	C
ATOM	6959	O	GLU A 398	0.206	34.905	-39.050	1.00	0.00	B	O
ATOM	6960	N	VAL A 399	-0.404	35.126	-41.205	1.00	0.00	B	N
ATOM	6961	CA	VAL A 399	-1.463	34.182	-41.009	1.00	0.00	B	C
ATOM	6962	CB	VAL A 399	-2.373	34.028	-42.192	1.00	0.00	B	C
ATOM	6963	CG1	VAL A 399	-3.083	35.372	-42.430	1.00	0.00	B	C
ATOM	6964	CG2	VAL A 399	-1.561	33.549	-43.396	1.00	0.00	B	C
ATOM	6965	C	VAL A 399	-0.855	32.856	-40.661	1.00	0.00	B	C
ATOM	6966	O	VAL A 399	-1.360	32.148	-39.792	1.00	0.00	B	O
ATOM	6967	N	ILE A 400	0.261	32.484	-41.313	1.00	0.00	B	N
ATOM	6968	CA	ILE A 400	0.836	31.209	-40.996	1.00	0.00	B	C
ATOM	6969	CB	ILE A 400	1.996	30.796	-41.851	1.00	0.00	B	C
ATOM	6970	CG2	ILE A 400	3.221	31.656	-41.514	1.00	0.00	B	C
ATOM	6971	CG1	ILE A 400	2.250	29.300	-41.634	1.00	0.00	B	C
ATOM	6972	CD	ILE A 400	3.292	28.732	-42.583	1.00	0.00	B	C

ATOM	6973	C	ILE A 400	1.298	31.214	-39.568	1.00	0.00	B	C
ATOM	6974	O	ILE A 400	1.152	30.219	-38.859	1.00	0.00	B	O
ATOM	6975	N	ALA A 401	1.893	32.331	-39.113	1.00	0.00	B	N
ATOM	6976	CA	ALA A 401	2.396	32.407	-37.769	1.00	0.00	B	C
ATOM	6977	CB	ALA A 401	3.047	33.757	-37.457	1.00	0.00	B	C
ATOM	6978	C	ALA A 401	1.277	32.286	-36.775	1.00	0.00	B	C
ATOM	6979	O	ALA A 401	1.395	31.571	-35.780	1.00	0.00	B	O
ATOM	6980	N	TYR A 402	0.188	33.039	-37.013	1.00	0.00	B	N
ATOM	6981	CA	TYR A 402	-0.977	33.177	-36.178	1.00	0.00	B	C
ATOM	6982	CB	TYR A 402	-1.783	34.416	-36.634	1.00	0.00	B	C
ATOM	6983	CG	TYR A 402	-3.017	34.675	-35.833	1.00	0.00	B	C
ATOM	6984	CD1	TYR A 402	-2.942	35.249	-34.583	1.00	0.00	B	C
ATOM	6985	CE1	TYR A 402	-4.084	35.506	-33.857	1.00	0.00	B	C
ATOM	6986	CZ	TYR A 402	-5.318	35.198	-34.379	1.00	0.00	B	C
ATOM	6987	OH	TYR A 402	-6.491	35.460	-33.640	1.00	0.00	B	O
ATOM	6988	CD2	TYR A 402	-4.258	34.384	-36.350	1.00	0.00	B	C
ATOM	6989	CE2	TYR A 402	-5.403	34.636	-35.630	1.00	0.00	B	C
ATOM	6990	C	TYR A 402	-1.886	31.971	-36.174	1.00	0.00	B	C
ATOM	6991	O	TYR A 402	-2.365	31.558	-35.118	1.00	0.00	B	O
ATOM	6992	N	SER A 403	-2.122	31.355	-37.351	1.00	0.00	B	N
ATOM	6993	CA	SER A 403	-3.171	30.376	-37.518	1.00	0.00	B	C
ATOM	6994	CB	SER A 403	-3.251	29.806	-38.947	1.00	0.00	B	C
ATOM	6995	OG	SER A 403	-3.589	30.839	-39.861	1.00	0.00	B	O
ATOM	6996	C	SER A 403	-3.074	29.205	-36.586	1.00	0.00	B	C
ATOM	6997	O	SER A 403	-2.003	28.645	-36.367	1.00	0.00	B	O
ATOM	6998	N	SER A 404	-4.241	28.801	-36.027	1.00	0.00	B	N
ATOM	6999	CA	SER A 404	-4.296	27.668	-35.140	1.00	0.00	B	C
ATOM	7000	CB	SER A 404	-4.106	28.016	-33.652	1.00	0.00	B	C
ATOM	7001	OG	SER A 404	-2.774	28.430	-33.392	1.00	0.00	B	O
ATOM	7002	C	SER A 404	-5.634	27.006	-35.232	1.00	0.00	B	C
ATOM	7003	O	SER A 404	-6.612	27.565	-35.728	1.00	0.00	B	O
ATOM	7004	N	SER A 405	-5.675	25.746	-34.748	1.00	0.00	B	N
ATOM	7005	CA	SER A 405	-6.868	24.965	-34.588	1.00	0.00	B	C
ATOM	7006	CB	SER A 405	-7.945	25.752	-33.834	1.00	0.00	B	C
ATOM	7007	OG	SER A 405	-7.406	26.234	-32.616	1.00	0.00	B	O
ATOM	7008	C	SER A 405	-7.461	24.569	-35.904	1.00	0.00	B	C
ATOM	7009	O	SER A 405	-8.503	23.915	-35.932	1.00	0.00	B	O
ATOM	7010	N	GLU A 406	-6.832	24.930	-37.033	1.00	0.00	B	N

ATOM	7011	CA	GLU	A	406	-7.410	24.528	-38.283	1.00	0.00	B	C
ATOM	7012	CB	GLU	A	406	-6.812	25.226	-39.514	1.00	0.00	B	C
ATOM	7013	CG	GLU	A	406	-7.406	26.616	-39.737	1.00	0.00	B	C
ATOM	7014	CD	GLU	A	406	-8.884	26.430	-40.069	1.00	0.00	B	C
ATOM	7015	OE1	GLU	A	406	-9.322	25.254	-40.186	1.00	0.00	B	O
ATOM	7016	OE2	GLU	A	406	-9.597	27.461	-40.208	1.00	0.00	B	O
ATOM	7017	C	GLU	A	406	-7.269	23.052	-38.458	1.00	0.00	B	C
ATOM	7018	O	GLU	A	406	-8.213	22.393	-38.889	1.00	0.00	B	O
ATOM	7019	N	THR	A	407	-6.092	22.498	-38.095	1.00	0.00	B	N
ATOM	7020	CA	THR	A	407	-5.705	21.112	-38.237	1.00	0.00	B	C
ATOM	7021	CB	THR	A	407	-6.865	20.177	-38.006	1.00	0.00	B	C
ATOM	7022	OG1	THR	A	407	-7.390	20.389	-36.704	1.00	0.00	B	O
ATOM	7023	CG2	THR	A	407	-6.405	18.716	-38.143	1.00	0.00	B	C
ATOM	7024	C	THR	A	407	-5.068	20.802	-39.581	1.00	0.00	B	C
ATOM	7025	O	THR	A	407	-4.389	19.775	-39.658	1.00	0.00	B	O
ATOM	7026	N	PRO	A	408	-5.204	21.556	-40.650	1.00	0.00	B	N
ATOM	7027	CD	PRO	A	408	-6.559	21.846	-41.096	1.00	0.00	B	C
ATOM	7028	CA	PRO	A	408	-4.373	21.296	-41.808	1.00	0.00	B	C
ATOM	7029	CB	PRO	A	408	-5.155	21.750	-43.039	1.00	0.00	B	C
ATOM	7030	CG	PRO	A	408	-6.613	21.620	-42.609	1.00	0.00	B	C
ATOM	7031	C	PRO	A	408	-3.035	21.976	-41.727	1.00	0.00	B	C
ATOM	7032	O	PRO	A	408	-2.297	21.931	-42.711	1.00	0.00	B	O
ATOM	7033	N	ASN	A	409	-2.705	22.600	-40.582	1.00	0.00	B	N
ATOM	7034	CA	ASN	A	409	-1.596	23.508	-40.446	1.00	0.00	B	C
ATOM	7035	CB	ASN	A	409	-1.532	24.200	-39.067	1.00	0.00	B	C
ATOM	7036	CG	ASN	A	409	-1.248	23.197	-37.952	1.00	0.00	B	C
ATOM	7037	OD1	ASN	A	409	-0.262	22.463	-37.960	1.00	0.00	B	O
ATOM	7038	ND2	ASN	A	409	-2.146	23.178	-36.933	1.00	0.00	B	N
ATOM	7039	C	ASN	A	409	-0.236	22.946	-40.732	1.00	0.00	B	C
ATOM	7040	O	ASN	A	409	0.602	23.672	-41.267	1.00	0.00	B	O
ATOM	7041	N	ARG	A	410	0.021	21.660	-40.433	1.00	0.00	B	N
ATOM	7042	CA	ARG	A	410	1.341	21.096	-40.516	1.00	0.00	B	C
ATOM	7043	CB	ARG	A	410	1.268	19.585	-40.250	1.00	0.00	B	C
ATOM	7044	CG	ARG	A	410	0.561	19.321	-38.915	1.00	0.00	B	C
ATOM	7045	CD	ARG	A	410	0.023	17.901	-38.718	1.00	0.00	B	C
ATOM	7046	NE	ARG	A	410	-0.811	17.920	-37.479	1.00	0.00	B	N
ATOM	7047	CZ	ARG	A	410	-2.016	17.274	-37.447	1.00	0.00	B	C
ATOM	7048	NH1	ARG	A	410	-2.453	16.587	-38.540	1.00	0.00	B	N

ATOM	7049	NH2 ARG A 410	-2.785	17.317	-36.317	1.00	0.00	B	N
ATOM	7050	C ARG A 410	1.886	21.364	-41.891	1.00	0.00	B	C
ATOM	7051	O ARG A 410	3.052	21.727	-42.044	1.00	0.00	B	O
ATOM	7052	N HSD A 411	1.040	21.238	-42.928	1.00	0.00	B	N
ATOM	7053	CA HSD A 411	1.457	21.480	-44.282	1.00	0.00	B	C
ATOM	7054	CB HSD A 411	0.391	21.085	-45.319	1.00	0.00	B	C
ATOM	7055	ND1 HSD A 411	-0.924	19.002	-44.689	1.00	0.00	B	N
ATOM	7056	CG HSD A 411	0.124	19.611	-45.343	1.00	0.00	B	C
ATOM	7057	CE1 HSD A 411	-0.824	17.673	-44.939	1.00	0.00	B	C
ATOM	7058	NE2 HSD A 411	0.212	17.384	-45.708	1.00	0.00	B	N
ATOM	7059	CD2 HSD A 411	0.809	18.607	-45.960	1.00	0.00	B	C
ATOM	7060	C HSD A 411	1.797	22.929	-44.523	1.00	0.00	B	C
ATOM	7061	O HSD A 411	2.777	23.230	-45.203	1.00	0.00	B	O
ATOM	7062	N ASP A 412	0.999	23.872	-43.985	1.00	0.00	B	N
ATOM	7063	CA ASP A 412	1.171	25.278	-44.261	1.00	0.00	B	C
ATOM	7064	CB ASP A 412	0.094	26.130	-43.563	1.00	0.00	B	C
ATOM	7065	CG ASP A 412	-1.277	25.773	-44.117	1.00	0.00	B	C
ATOM	7066	OD1 ASP A 412	-1.443	25.814	-45.366	1.00	0.00	B	O
ATOM	7067	OD2 ASP A 412	-2.175	25.445	-43.297	1.00	0.00	B	O
ATOM	7068	C ASP A 412	2.494	25.762	-43.736	1.00	0.00	B	C
ATOM	7069	O ASP A 412	3.209	26.502	-44.410	1.00	0.00	B	O
ATOM	7070	N MET A 413	2.853	25.356	-42.505	1.00	0.00	B	N
ATOM	7071	CA MET A 413	4.072	25.800	-41.888	1.00	0.00	B	C
ATOM	7072	CB MET A 413	4.245	25.290	-40.449	1.00	0.00	B	C
ATOM	7073	CG MET A 413	5.541	25.773	-39.797	1.00	0.00	B	C
ATOM	7074	SD MET A 413	5.574	27.555	-39.441	1.00	0.00	B	S
ATOM	7075	CE MET A 413	6.167	28.054	-41.082	1.00	0.00	B	C
ATOM	7076	C MET A 413	5.234	25.283	-42.678	1.00	0.00	B	C
ATOM	7077	O MET A 413	6.233	25.975	-42.868	1.00	0.00	B	O
ATOM	7078	N LEU A 414	5.108	24.047	-43.182	1.00	0.00	B	N
ATOM	7079	CA LEU A 414	6.147	23.352	-43.886	1.00	0.00	B	C
ATOM	7080	CB LEU A 414	5.753	21.925	-44.289	1.00	0.00	B	C
ATOM	7081	CG LEU A 414	6.808	21.276	-45.196	1.00	0.00	B	C
ATOM	7082	CD1 LEU A 414	8.175	21.209	-44.501	1.00	0.00	B	C
ATOM	7083	CD2 LEU A 414	6.320	19.921	-45.727	1.00	0.00	B	C
ATOM	7084	C LEU A 414	6.523	24.055	-45.151	1.00	0.00	B	C
ATOM	7085	O LEU A 414	7.653	23.923	-45.619	1.00	0.00	B	O
ATOM	7086	N LEU A 415	5.585	24.818	-45.738	1.00	0.00	B	N

ATOM	7087	CA	LEU	A 415	5.759	25.403	-47.039	1.00	0.00	B	C
ATOM	7088	CB	LEU	A 415	4.629	26.391	-47.391	1.00	0.00	B	C
ATOM	7089	CG	LEU	A 415	4.757	27.018	-48.789	1.00	0.00	B	C
ATOM	7090	CD1	LEU	A 415	4.684	25.940	-49.881	1.00	0.00	B	C
ATOM	7091	CD2	LEU	A 415	3.725	28.134	-49.003	1.00	0.00	B	C
ATOM	7092	C	LEU	A 415	7.075	26.115	-47.152	1.00	0.00	B	C
ATOM	7093	O	LEU	A 415	7.525	26.805	-46.239	1.00	0.00	B	O
ATOM	7094	N	VAL	A 416	7.741	25.931	-48.313	1.00	0.00	B	N
ATOM	7095	CA	VAL	A 416	9.037	26.490	-48.566	1.00	0.00	B	C
ATOM	7096	CB	VAL	A 416	10.119	25.443	-48.543	1.00	0.00	B	C
ATOM	7097	CG1	VAL	A 416	10.128	24.779	-47.157	1.00	0.00	B	C
ATOM	7098	CG2	VAL	A 416	9.885	24.456	-49.700	1.00	0.00	B	C
ATOM	7099	C	VAL	A 416	9.010	27.060	-49.952	1.00	0.00	B	C
ATOM	7100	O	VAL	A 416	8.032	26.897	-50.679	1.00	0.00	B	O
ATOM	7101	N	GLU	A 417	10.087	27.749	-50.369	1.00	0.00	B	N
ATOM	7102	CA	GLU	A 417	11.231	27.978	-49.541	1.00	0.00	B	C
ATOM	7103	CB	GLU	A 417	12.467	28.487	-50.289	1.00	0.00	B	C
ATOM	7104	CG	GLU	A 417	13.722	28.533	-49.412	1.00	0.00	B	C
ATOM	7105	CD	GLU	A 417	14.102	27.095	-49.070	1.00	0.00	B	C
ATOM	7106	OE1	GLU	A 417	13.376	26.473	-48.251	1.00	0.00	B	O
ATOM	7107	OE2	GLU	A 417	15.119	26.601	-49.624	1.00	0.00	B	O
ATOM	7108	C	GLU	A 417	10.952	28.980	-48.477	1.00	0.00	B	C
ATOM	7109	O	GLU	A 417	11.402	28.758	-47.368	1.00	0.00	B	O
ATOM	7110	N	PRO	A 418	10.238	30.050	-48.685	1.00	0.00	B	N
ATOM	7111	CD	PRO	A 418	10.056	30.624	-50.009	1.00	0.00	B	C
ATOM	7112	CA	PRO	A 418	10.197	31.063	-47.665	1.00	0.00	B	C
ATOM	7113	CB	PRO	A 418	9.489	32.260	-48.293	1.00	0.00	B	C
ATOM	7114	CG	PRO	A 418	9.844	32.132	-49.782	1.00	0.00	B	C
ATOM	7115	C	PRO	A 418	9.679	30.725	-46.313	1.00	0.00	B	C
ATOM	7116	O	PRO	A 418	10.257	31.208	-45.350	1.00	0.00	B	O
ATOM	7117	N	LEU	A 419	8.616	29.935	-46.155	1.00	0.00	B	N
ATOM	7118	CA	LEU	A 419	8.176	29.771	-44.799	1.00	0.00	B	C
ATOM	7119	CB	LEU	A 419	6.867	28.972	-44.702	1.00	0.00	B	C
ATOM	7120	CG	LEU	A 419	5.706	29.612	-45.488	1.00	0.00	B	C
ATOM	7121	CD1	LEU	A 419	4.404	28.818	-45.307	1.00	0.00	B	C
ATOM	7122	CD2	LEU	A 419	5.551	31.105	-45.158	1.00	0.00	B	C
ATOM	7123	C	LEU	A 419	9.243	29.048	-44.031	1.00	0.00	B	C
ATOM	7124	O	LEU	A 419	9.622	29.465	-42.936	1.00	0.00	B	O

ATOM	7125	N	ASN A 420	9.773	27.950	-44.593	1.00	0.00	B	N
ATOM	7126	CA	ASN A 420	10.814	27.217	-43.923	1.00	0.00	B	C
ATOM	7127	CB	ASN A 420	11.124	25.873	-44.606	1.00	0.00	B	C
ATOM	7128	CG	ASN A 420	12.240	25.163	-43.838	1.00	0.00	B	C
ATOM	7129	OD1	ASN A 420	13.383	25.602	-43.840	1.00	0.00	B	O
ATOM	7130	ND2	ASN A 420	11.891	24.027	-43.171	1.00	0.00	B	N
ATOM	7131	C	ASN A 420	12.084	28.013	-43.897	1.00	0.00	B	C
ATOM	7132	O	ASN A 420	12.737	28.140	-42.864	1.00	0.00	B	O
ATOM	7133	N	ARG A 421	12.456	28.578	-45.054	1.00	0.00	B	N
ATOM	7134	CA	ARG A 421	13.680	29.286	-45.290	1.00	0.00	B	C
ATOM	7135	CB	ARG A 421	13.863	29.784	-46.735	1.00	0.00	B	C
ATOM	7136	CG	ARG A 421	15.172	30.563	-46.895	1.00	0.00	B	C
ATOM	7137	CD	ARG A 421	15.108	31.719	-47.896	1.00	0.00	B	C
ATOM	7138	NE	ARG A 421	15.074	31.153	-49.270	1.00	0.00	B	N
ATOM	7139	CZ	ARG A 421	15.231	31.993	-50.337	1.00	0.00	B	C
ATOM	7140	NH1	ARG A 421	15.375	33.333	-50.128	1.00	0.00	B	N
ATOM	7141	NH2	ARG A 421	15.244	31.492	-51.608	1.00	0.00	B	N
ATOM	7142	C	ARG A 421	13.745	30.520	-44.455	1.00	0.00	B	C
ATOM	7143	O	ARG A 421	14.770	30.814	-43.848	1.00	0.00	B	O
ATOM	7144	N	LEU A 422	12.638	31.273	-44.403	1.00	0.00	B	N
ATOM	7145	CA	LEU A 422	12.603	32.547	-43.746	1.00	0.00	B	C
ATOM	7146	CB	LEU A 422	11.255	33.293	-43.907	1.00	0.00	B	C
ATOM	7147	CG	LEU A 422	11.181	34.752	-43.396	1.00	0.00	B	C
ATOM	7148	CD1	LEU A 422	9.824	35.383	-43.747	1.00	0.00	B	C
ATOM	7149	CD2	LEU A 422	11.459	34.876	-41.895	1.00	0.00	B	C
ATOM	7150	C	LEU A 422	12.872	32.344	-42.291	1.00	0.00	B	C
ATOM	7151	O	LEU A 422	13.634	33.101	-41.692	1.00	0.00	B	O
ATOM	7152	N	LEU A 423	12.263	31.314	-41.680	1.00	0.00	B	N
ATOM	7153	CA	LEU A 423	12.440	31.125	-40.268	1.00	0.00	B	C
ATOM	7154	CB	LEU A 423	11.549	30.023	-39.672	1.00	0.00	B	C
ATOM	7155	CG	LEU A 423	10.096	30.481	-39.433	1.00	0.00	B	C
ATOM	7156	CD1	LEU A 423	10.024	31.487	-38.275	1.00	0.00	B	C
ATOM	7157	CD2	LEU A 423	9.452	31.042	-40.707	1.00	0.00	B	C
ATOM	7158	C	LEU A 423	13.870	30.826	-39.937	1.00	0.00	B	C
ATOM	7159	O	LEU A 423	14.394	31.314	-38.937	1.00	0.00	B	O
ATOM	7160	N	GLN A 424	14.547	30.022	-40.772	1.00	0.00	B	N
ATOM	7161	CA	GLN A 424	15.903	29.654	-40.475	1.00	0.00	B	C
ATOM	7162	CB	GLN A 424	16.481	28.698	-41.535	1.00	0.00	B	C

ATOM	7163	CG	GLN A 424	17.907	28.229	-41.243	1.00	0.00	B	C
ATOM	7164	CD	GLN A 424	17.839	27.304	-40.040	1.00	0.00	B	C
ATOM	7165	OE1	GLN A 424	16.929	27.409	-39.219	1.00	0.00	B	O
ATOM	7166	NE2	GLN A 424	18.822	26.368	-39.932	1.00	0.00	B	N
ATOM	7167	C	GLN A 424	16.742	30.890	-40.462	1.00	0.00	B	C
ATOM	7168	O	GLN A 424	17.587	31.078	-39.588	1.00	0.00	B	O
ATOM	7169	N	ASP A 425	16.502	31.782	-41.436	1.00	0.00	B	N
ATOM	7170	CA	ASP A 425	17.287	32.971	-41.567	1.00	0.00	B	C
ATOM	7171	CB	ASP A 425	16.881	33.776	-42.813	1.00	0.00	B	C
ATOM	7172	CG	ASP A 425	18.015	34.717	-43.190	1.00	0.00	B	C
ATOM	7173	OD1	ASP A 425	18.613	35.333	-42.271	1.00	0.00	B	O
ATOM	7174	OD2	ASP A 425	18.293	34.832	-44.414	1.00	0.00	B	O
ATOM	7175	C	ASP A 425	17.083	33.830	-40.358	1.00	0.00	B	C
ATOM	7176	O	ASP A 425	18.039	34.384	-39.815	1.00	0.00	B	O
ATOM	7177	N	LYS A 426	15.826	33.970	-39.900	1.00	0.00	B	N
ATOM	7178	CA	LYS A 426	15.575	34.825	-38.774	1.00	0.00	B	C
ATOM	7179	CB	LYS A 426	14.081	35.069	-38.499	1.00	0.00	B	C
ATOM	7180	CG	LYS A 426	13.435	36.055	-39.475	1.00	0.00	B	C
ATOM	7181	CD	LYS A 426	11.921	36.171	-39.292	1.00	0.00	B	C
ATOM	7182	CE	LYS A 426	11.274	37.251	-40.160	1.00	0.00	B	C
ATOM	7183	NZ	LYS A 426	9.805	37.067	-40.174	1.00	0.00	B	N
ATOM	7184	C	LYS A 426	16.177	34.289	-37.505	1.00	0.00	B	C
ATOM	7185	O	LYS A 426	16.791	35.037	-36.746	1.00	0.00	B	O
ATOM	7186	N	TRP A 427	15.967	32.991	-37.218	1.00	0.00	B	N
ATOM	7187	CA	TRP A 427	16.387	32.382	-35.980	1.00	0.00	B	C
ATOM	7188	CB	TRP A 427	15.631	31.053	-35.719	1.00	0.00	B	C
ATOM	7189	CG	TRP A 427	15.739	30.495	-34.315	1.00	0.00	B	C
ATOM	7190	CD1	TRP A 427	15.211	31.021	-33.179	1.00	0.00	B	C
ATOM	7191	NE1	TRP A 427	15.497	30.225	-32.099	1.00	0.00	B	N
ATOM	7192	CE2	TRP A 427	16.208	29.135	-32.540	1.00	0.00	B	C
ATOM	7193	CD2	TRP A 427	16.375	29.263	-33.922	1.00	0.00	B	C
ATOM	7194	CE3	TRP A 427	17.036	28.315	-34.645	1.00	0.00	B	C
ATOM	7195	CZ3	TRP A 427	17.539	27.233	-33.955	1.00	0.00	B	C
ATOM	7196	CZ2	TRP A 427	16.702	28.058	-31.861	1.00	0.00	B	C
ATOM	7197	CH2	TRP A 427	17.380	27.107	-32.590	1.00	0.00	B	C
ATOM	7198	C	TRP A 427	17.854	32.114	-35.914	1.00	0.00	B	C
ATOM	7199	O	TRP A 427	18.510	32.463	-34.935	1.00	0.00	B	O
ATOM	7200	N	ASP A 428	18.408	31.507	-36.978	1.00	0.00	B	N

ATOM	7201	CA	ASP A 428	19.762	31.053	-36.934	1.00	0.00	B	C
ATOM	7202	CB	ASP A 428	20.218	30.449	-38.275	1.00	0.00	B	C
ATOM	7203	CG	ASP A 428	21.614	29.854	-38.130	1.00	0.00	B	C
ATOM	7204	OD1	ASP A 428	22.239	30.026	-37.048	1.00	0.00	B	O
ATOM	7205	OD2	ASP A 428	22.072	29.207	-39.109	1.00	0.00	B	O
ATOM	7206	C	ASP A 428	20.635	32.211	-36.645	1.00	0.00	B	C
ATOM	7207	O	ASP A 428	21.501	32.131	-35.776	1.00	0.00	B	O
ATOM	7208	N	ARG A 429	20.456	33.327	-37.366	1.00	0.00	B	N
ATOM	7209	CA	ARG A 429	21.392	34.339	-37.033	1.00	0.00	B	C
ATOM	7210	CB	ARG A 429	21.407	35.520	-38.016	1.00	0.00	B	C
ATOM	7211	CG	ARG A 429	20.065	36.223	-38.203	1.00	0.00	B	C
ATOM	7212	CD	ARG A 429	20.139	37.392	-39.189	1.00	0.00	B	C
ATOM	7213	NE	ARG A 429	20.638	36.844	-40.482	1.00	0.00	B	N
ATOM	7214	CZ	ARG A 429	21.306	37.654	-41.355	1.00	0.00	B	C
ATOM	7215	NH1	ARG A 429	21.545	38.959	-41.037	1.00	0.00	B	N
ATOM	7216	NH2	ARG A 429	21.741	37.149	-42.548	1.00	0.00	B	N
ATOM	7217	C	ARG A 429	21.199	34.854	-35.632	1.00	0.00	B	C
ATOM	7218	O	ARG A 429	22.085	34.687	-34.800	1.00	0.00	B	O
ATOM	7219	N	PHE A 430	20.069	35.551	-35.362	1.00	0.00	B	N
ATOM	7220	CA	PHE A 430	19.787	36.140	-34.072	1.00	0.00	B	C
ATOM	7221	CB	PHE A 430	19.321	37.603	-34.200	1.00	0.00	B	C
ATOM	7222	CG	PHE A 430	18.199	37.655	-35.180	1.00	0.00	B	C
ATOM	7223	CD1	PHE A 430	16.913	37.375	-34.796	1.00	0.00	B	C
ATOM	7224	CE1	PHE A 430	15.893	37.421	-35.715	1.00	0.00	B	C
ATOM	7225	CZ	PHE A 430	16.141	37.749	-37.025	1.00	0.00	B	C
ATOM	7226	CD2	PHE A 430	18.439	37.981	-36.494	1.00	0.00	B	C
ATOM	7227	CE2	PHE A 430	17.425	38.028	-37.420	1.00	0.00	B	C
ATOM	7228	C	PHE A 430	18.877	35.450	-33.073	1.00	0.00	B	C
ATOM	7229	O	PHE A 430	19.160	35.454	-31.875	1.00	0.00	B	O
ATOM	7230	N	VAL A 431	17.765	34.839	-33.534	1.00	0.00	B	N
ATOM	7231	CA	VAL A 431	16.646	34.522	-32.669	1.00	0.00	B	C
ATOM	7232	CB	VAL A 431	15.465	33.944	-33.384	1.00	0.00	B	C
ATOM	7233	CG1	VAL A 431	14.358	33.702	-32.340	1.00	0.00	B	C
ATOM	7234	CG2	VAL A 431	15.063	34.855	-34.547	1.00	0.00	B	C
ATOM	7235	C	VAL A 431	16.949	33.562	-31.567	1.00	0.00	B	C
ATOM	7236	O	VAL A 431	16.476	33.737	-30.445	1.00	0.00	B	O
ATOM	7237	N	LYS A 432	17.728	32.508	-31.841	1.00	0.00	B	N
ATOM	7238	CA	LYS A 432	17.946	31.509	-30.843	1.00	0.00	B	C

ATOM	7239	CB	LYS	A	432	18.893	30.400	-31.326	1.00	0.00	B	C
ATOM	7240	CG	LYS	A	432	20.269	30.923	-31.741	1.00	0.00	B	C
ATOM	7241	CD	LYS	A	432	21.296	29.820	-32.005	1.00	0.00	B	C
ATOM	7242	CE	LYS	A	432	22.637	30.347	-32.520	1.00	0.00	B	C
ATOM	7243	NZ	LYS	A	432	23.553	29.216	-32.782	1.00	0.00	B	N
ATOM	7244	C	LYS	A	432	18.556	32.148	-29.641	1.00	0.00	B	C
ATOM	7245	O	LYS	A	432	18.201	31.822	-28.509	1.00	0.00	B	O
ATOM	7246	N	ARG	A	433	19.479	33.096	-29.855	1.00	0.00	B	N
ATOM	7247	CA	ARG	A	433	20.164	33.725	-28.767	1.00	0.00	B	C
ATOM	7248	CB	ARG	A	433	21.266	34.684	-29.241	1.00	0.00	B	C
ATOM	7249	CG	ARG	A	433	22.175	35.165	-28.109	1.00	0.00	B	C
ATOM	7250	CD	ARG	A	433	23.519	35.707	-28.599	1.00	0.00	B	C
ATOM	7251	NE	ARG	A	433	24.186	34.597	-29.340	1.00	0.00	B	N
ATOM	7252	CZ	ARG	A	433	24.919	33.665	-28.663	1.00	0.00	B	C
ATOM	7253	NH1	ARG	A	433	25.101	33.783	-27.317	1.00	0.00	B	N
ATOM	7254	NH2	ARG	A	433	25.459	32.608	-29.338	1.00	0.00	B	N
ATOM	7255	C	ARG	A	433	19.201	34.491	-27.908	1.00	0.00	B	C
ATOM	7256	O	ARG	A	433	19.315	34.466	-26.683	1.00	0.00	B	O
ATOM	7257	N	ILE	A	434	18.219	35.186	-28.521	1.00	0.00	B	N
ATOM	7258	CA	ILE	A	434	17.320	36.037	-27.785	1.00	0.00	B	C
ATOM	7259	CB	ILE	A	434	16.379	36.834	-28.649	1.00	0.00	B	C
ATOM	7260	CG2	ILE	A	434	17.250	37.594	-29.657	1.00	0.00	B	C
ATOM	7261	CG1	ILE	A	434	15.328	35.957	-29.343	1.00	0.00	B	C
ATOM	7262	CD	ILE	A	434	14.200	36.758	-29.992	1.00	0.00	B	C
ATOM	7263	C	ILE	A	434	16.474	35.226	-26.852	1.00	0.00	B	C
ATOM	7264	O	ILE	A	434	16.223	35.629	-25.718	1.00	0.00	B	O
ATOM	7265	N	PHE	A	435	16.005	34.060	-27.321	1.00	0.00	B	N
ATOM	7266	CA	PHE	A	435	15.101	33.206	-26.606	1.00	0.00	B	C
ATOM	7267	CB	PHE	A	435	14.661	32.056	-27.525	1.00	0.00	B	C
ATOM	7268	CG	PHE	A	435	13.628	31.242	-26.847	1.00	0.00	B	C
ATOM	7269	CD1	PHE	A	435	12.459	31.814	-26.400	1.00	0.00	B	C
ATOM	7270	CE1	PHE	A	435	11.497	31.049	-25.784	1.00	0.00	B	C
ATOM	7271	CZ	PHE	A	435	11.699	29.700	-25.636	1.00	0.00	B	C
ATOM	7272	CD2	PHE	A	435	13.817	29.892	-26.719	1.00	0.00	B	C
ATOM	7273	CE2	PHE	A	435	12.857	29.129	-26.111	1.00	0.00	B	C
ATOM	7274	C	PHE	A	435	15.730	32.684	-25.344	1.00	0.00	B	C
ATOM	7275	O	PHE	A	435	15.090	32.663	-24.292	1.00	0.00	B	O
ATOM	7276	N	TYR	A	436	17.007	32.265	-25.405	1.00	0.00	B	N

ATOM	7277	CA	TYR	A 436	17.679	31.725	-24.254	1.00	0.00	B	C
ATOM	7278	CB	TYR	A 436	19.130	31.297	-24.535	1.00	0.00	B	C
ATOM	7279	CG	TYR	A 436	19.112	30.027	-25.309	1.00	0.00	B	C
ATOM	7280	CD1	TYR	A 436	19.017	28.825	-24.644	1.00	0.00	B	C
ATOM	7281	CE1	TYR	A 436	19.006	27.639	-25.332	1.00	0.00	B	C
ATOM	7282	CZ	TYR	A 436	19.091	27.651	-26.702	1.00	0.00	B	C
ATOM	7283	OH	TYR	A 436	19.085	26.436	-27.416	1.00	0.00	B	O
ATOM	7284	CD2	TYR	A 436	19.192	30.031	-26.681	1.00	0.00	B	C
ATOM	7285	CE2	TYR	A 436	19.181	28.844	-27.378	1.00	0.00	B	C
ATOM	7286	C	TYR	A 436	17.739	32.764	-23.182	1.00	0.00	B	C
ATOM	7287	O	TYR	A 436	17.549	32.459	-22.006	1.00	0.00	B	O
ATOM	7288	N	PHE	A 437	18.007	34.025	-23.563	1.00	0.00	B	N
ATOM	7289	CA	PHE	A 437	18.105	35.070	-22.588	1.00	0.00	B	C
ATOM	7290	CB	PHE	A 437	18.413	36.449	-23.204	1.00	0.00	B	C
ATOM	7291	CG	PHE	A 437	18.428	37.461	-22.107	1.00	0.00	B	C
ATOM	7292	CD1	PHE	A 437	19.555	37.659	-21.342	1.00	0.00	B	C
ATOM	7293	CE1	PHE	A 437	19.561	38.592	-20.331	1.00	0.00	B	C
ATOM	7294	CZ	PHE	A 437	18.437	39.338	-20.071	1.00	0.00	B	C
ATOM	7295	CD2	PHE	A 437	17.304	38.207	-21.835	1.00	0.00	B	C
ATOM	7296	CE2	PHE	A 437	17.305	39.145	-20.827	1.00	0.00	B	C
ATOM	7297	C	PHE	A 437	16.794	35.157	-21.881	1.00	0.00	B	C
ATOM	7298	O	PHE	A 437	16.751	35.295	-20.661	1.00	0.00	B	O
ATOM	7299	N	ASN	A 438	15.685	35.060	-22.634	1.00	0.00	B	N
ATOM	7300	CA	ASN	A 438	14.391	35.169	-22.027	1.00	0.00	B	C
ATOM	7301	CB	ASN	A 438	13.244	34.997	-23.042	1.00	0.00	B	C
ATOM	7302	CG	ASN	A 438	13.319	36.124	-24.059	1.00	0.00	B	C
ATOM	7303	OD1	ASN	A 438	13.927	37.163	-23.807	1.00	0.00	B	O
ATOM	7304	ND2	ASN	A 438	12.684	35.917	-25.245	1.00	0.00	B	N
ATOM	7305	C	ASN	A 438	14.246	34.067	-21.023	1.00	0.00	B	C
ATOM	7306	O	ASN	A 438	13.803	34.296	-19.899	1.00	0.00	B	O
ATOM	7307	N	PHE	A 439	14.637	32.835	-21.404	1.00	0.00	B	N
ATOM	7308	CA	PHE	A 439	14.484	31.689	-20.551	1.00	0.00	B	C
ATOM	7309	CB	PHE	A 439	14.905	30.377	-21.243	1.00	0.00	B	C
ATOM	7310	CG	PHE	A 439	15.006	29.281	-20.232	1.00	0.00	B	C
ATOM	7311	CD1	PHE	A 439	13.901	28.836	-19.544	1.00	0.00	B	C
ATOM	7312	CE1	PHE	A 439	14.008	27.819	-18.623	1.00	0.00	B	C
ATOM	7313	CZ	PHE	A 439	15.223	27.224	-18.388	1.00	0.00	B	C
ATOM	7314	CD2	PHE	A 439	16.216	28.667	-20.000	1.00	0.00	B	C

ATOM	7315	CE2 PHE A 439	16.330	27.649	-19.081	1.00	0.00	B	C
ATOM	7316	C PHE A 439	15.289	31.846	-19.302	1.00	0.00	B	C
ATOM	7317	O PHE A 439	14.792	31.604	-18.204	1.00	0.00	B	O
ATOM	7318	N LEU A 440	16.558	32.270	-19.431	1.00	0.00	B	N
ATOM	7319	CA LEU A 440	17.397	32.370	-18.273	1.00	0.00	B	C
ATOM	7320	CB LEU A 440	18.851	32.753	-18.602	1.00	0.00	B	C
ATOM	7321	CG LEU A 440	19.584	31.679	-19.429	1.00	0.00	B	C
ATOM	7322	CD1 LEU A 440	21.051	32.063	-19.677	1.00	0.00	B	C
ATOM	7323	CD2 LEU A 440	19.425	30.287	-18.796	1.00	0.00	B	C
ATOM	7324	C LEU A 440	16.846	33.399	-17.339	1.00	0.00	B	C
ATOM	7325	O LEU A 440	16.797	33.177	-16.131	1.00	0.00	B	O
ATOM	7326	N VAL A 441	16.388	34.544	-17.878	1.00	0.00	B	N
ATOM	7327	CA VAL A 441	15.904	35.606	-17.040	1.00	0.00	B	C
ATOM	7328	CB VAL A 441	15.449	36.809	-17.807	1.00	0.00	B	C
ATOM	7329	CG1 VAL A 441	14.837	37.820	-16.822	1.00	0.00	B	C
ATOM	7330	CG2 VAL A 441	16.653	37.362	-18.577	1.00	0.00	B	C
ATOM	7331	C VAL A 441	14.727	35.113	-16.261	1.00	0.00	B	C
ATOM	7332	O VAL A 441	14.574	35.428	-15.083	1.00	0.00	B	O
ATOM	7333	N TYR A 442	13.867	34.314	-16.914	1.00	0.00	B	N
ATOM	7334	CA TYR A 442	12.672	33.796	-16.314	1.00	0.00	B	C
ATOM	7335	CB TYR A 442	11.864	32.959	-17.321	1.00	0.00	B	C
ATOM	7336	CG TYR A 442	10.649	32.414	-16.653	1.00	0.00	B	C
ATOM	7337	CD1 TYR A 442	9.482	33.143	-16.615	1.00	0.00	B	C
ATOM	7338	CE1 TYR A 442	8.358	32.639	-16.006	1.00	0.00	B	C
ATOM	7339	CZ TYR A 442	8.396	31.396	-15.425	1.00	0.00	B	C
ATOM	7340	OH TYR A 442	7.247	30.872	-14.795	1.00	0.00	B	O
ATOM	7341	CD2 TYR A 442	10.678	31.172	-16.062	1.00	0.00	B	C
ATOM	7342	CE2 TYR A 442	9.559	30.664	-15.449	1.00	0.00	B	C
ATOM	7343	C TYR A 442	13.039	32.921	-15.155	1.00	0.00	B	C
ATOM	7344	O TYR A 442	12.401	32.978	-14.104	1.00	0.00	B	O
ATOM	7345	N CYS A 443	14.096	32.106	-15.309	1.00	0.00	B	N
ATOM	7346	CA CYS A 443	14.475	31.158	-14.300	1.00	0.00	B	C
ATOM	7347	CB CYS A 443	15.724	30.354	-14.689	1.00	0.00	B	C
ATOM	7348	SG CYS A 443	15.476	29.435	-16.234	1.00	0.00	B	S
ATOM	7349	C CYS A 443	14.796	31.876	-13.023	1.00	0.00	B	C
ATOM	7350	O CYS A 443	14.415	31.431	-11.942	1.00	0.00	B	O
ATOM	7351	N LEU A 444	15.495	33.019	-13.122	1.00	0.00	B	N
ATOM	7352	CA LEU A 444	15.908	33.800	-11.988	1.00	0.00	B	C

ATOM	7353	CB	LEU	A 444	16.728	35.022	-12.456	1.00	0.00	B	C
ATOM	7354	CG	LEU	A 444	17.167	36.024	-11.373	1.00	0.00	B	C
ATOM	7355	CD1	LEU	A 444	15.988	36.882	-10.892	1.00	0.00	B	C
ATOM	7356	CD2	LEU	A 444	17.914	35.328	-10.228	1.00	0.00	B	C
ATOM	7357	C	LEU	A 444	14.686	34.263	-11.253	1.00	0.00	B	C
ATOM	7358	O	LEU	A 444	14.640	34.292	-10.025	1.00	0.00	B	O
ATOM	7359	N	TYR	A 445	13.639	34.633	-11.995	1.00	0.00	B	N
ATOM	7360	CA	TYR	A 445	12.443	35.102	-11.372	1.00	0.00	B	C
ATOM	7361	CB	TYR	A 445	11.402	35.496	-12.440	1.00	0.00	B	C
ATOM	7362	CG	TYR	A 445	10.061	35.718	-11.833	1.00	0.00	B	C
ATOM	7363	CD1	TYR	A 445	9.732	36.924	-11.261	1.00	0.00	B	C
ATOM	7364	CE1	TYR	A 445	8.487	37.117	-10.707	1.00	0.00	B	C
ATOM	7365	CZ	TYR	A 445	7.559	36.102	-10.720	1.00	0.00	B	C
ATOM	7366	OH	TYR	A 445	6.282	36.300	-10.155	1.00	0.00	B	O
ATOM	7367	CD2	TYR	A 445	9.125	34.707	-11.837	1.00	0.00	B	C
ATOM	7368	CE2	TYR	A 445	7.879	34.895	-11.286	1.00	0.00	B	C
ATOM	7369	C	TYR	A 445	11.899	34.005	-10.514	1.00	0.00	B	C
ATOM	7370	O	TYR	A 445	11.447	34.236	-9.394	1.00	0.00	B	O
ATOM	7371	N	MET	A 446	11.942	32.767	-11.031	1.00	0.00	B	N
ATOM	7372	CA	MET	A 446	11.377	31.639	-10.351	1.00	0.00	B	C
ATOM	7373	CB	MET	A 446	11.425	30.371	-11.212	1.00	0.00	B	C
ATOM	7374	CG	MET	A 446	10.743	30.576	-12.564	1.00	0.00	B	C
ATOM	7375	SD	MET	A 446	9.130	31.399	-12.449	1.00	0.00	B	S
ATOM	7376	CE	MET	A 446	8.456	30.306	-11.169	1.00	0.00	B	C
ATOM	7377	C	MET	A 446	12.100	31.359	-9.071	1.00	0.00	B	C
ATOM	7378	O	MET	A 446	11.476	31.068	-8.052	1.00	0.00	B	O
ATOM	7379	N	ILE	A 447	13.442	31.441	-9.082	1.00	0.00	B	N
ATOM	7380	CA	ILE	A 447	14.205	31.109	-7.920	1.00	0.00	B	C
ATOM	7381	CB	ILE	A 447	15.682	31.120	-8.185	1.00	0.00	B	C
ATOM	7382	CG2	ILE	A 447	15.966	30.051	-9.254	1.00	0.00	B	C
ATOM	7383	CG1	ILE	A 447	16.137	32.524	-8.589	1.00	0.00	B	C
ATOM	7384	CD	ILE	A 447	17.626	32.650	-8.886	1.00	0.00	B	C
ATOM	7385	C	ILE	A 447	13.867	32.077	-6.827	1.00	0.00	B	C
ATOM	7386	O	ILE	A 447	13.746	31.693	-5.663	1.00	0.00	B	O
ATOM	7387	N	ILE	A 448	13.708	33.362	-7.175	1.00	0.00	B	N
ATOM	7388	CA	ILE	A 448	13.404	34.373	-6.206	1.00	0.00	B	C
ATOM	7389	CB	ILE	A 448	13.380	35.748	-6.793	1.00	0.00	B	C
ATOM	7390	CG2	ILE	A 448	12.937	36.732	-5.698	1.00	0.00	B	C

ATOM	7391	CG1	ILE	A 448	14.749	36.080	-7.393	1.00	0.00	B	C
ATOM	7392	CD	ILE	A 448	14.704	37.313	-8.281	1.00	0.00	B	C
ATOM	7393	C	ILE	A 448	12.044	34.153	-5.611	1.00	0.00	B	C
ATOM	7394	O	ILE	A 448	11.865	34.282	-4.401	1.00	0.00	B	O
ATOM	7395	N	PHE	A 449	11.042	33.816	-6.445	1.00	0.00	B	N
ATOM	7396	CA	PHE	A 449	9.692	33.692	-5.962	1.00	0.00	B	C
ATOM	7397	CB	PHE	A 449	8.704	33.305	-7.080	1.00	0.00	B	C
ATOM	7398	CG	PHE	A 449	7.301	33.422	-6.575	1.00	0.00	B	C
ATOM	7399	CD1	PHE	A 449	6.751	32.452	-5.771	1.00	0.00	B	C
ATOM	7400	CE1	PHE	A 449	5.455	32.563	-5.319	1.00	0.00	B	C
ATOM	7401	CZ	PHE	A 449	4.692	33.650	-5.670	1.00	0.00	B	C
ATOM	7402	CD2	PHE	A 449	6.525	34.506	-6.927	1.00	0.00	B	C
ATOM	7403	CE2	PHE	A 449	5.230	34.623	-6.479	1.00	0.00	B	C
ATOM	7404	C	PHE	A 449	9.652	32.607	-4.930	1.00	0.00	B	C
ATOM	7405	O	PHE	A 449	9.032	32.760	-3.878	1.00	0.00	B	O
ATOM	7406	N	THR	A 450	10.298	31.465	-5.228	1.00	0.00	B	N
ATOM	7407	CA	THR	A 450	10.333	30.343	-4.338	1.00	0.00	B	C
ATOM	7408	CB	THR	A 450	10.900	29.112	-4.985	1.00	0.00	B	C
ATOM	7409	OG1	THR	A 450	10.715	27.984	-4.141	1.00	0.00	B	O
ATOM	7410	CG2	THR	A 450	12.397	29.333	-5.266	1.00	0.00	B	C
ATOM	7411	C	THR	A 450	11.154	30.653	-3.126	1.00	0.00	B	C
ATOM	7412	O	THR	A 450	10.792	30.267	-2.021	1.00	0.00	B	O
ATOM	7413	N	MET	A 451	12.290	31.358	-3.293	1.00	0.00	B	N
ATOM	7414	CA	MET	A 451	13.155	31.592	-2.170	1.00	0.00	B	C
ATOM	7415	CB	MET	A 451	14.449	32.337	-2.534	1.00	0.00	B	C
ATOM	7416	CG	MET	A 451	15.451	31.470	-3.295	1.00	0.00	B	C
ATOM	7417	SD	MET	A 451	17.031	32.292	-3.655	1.00	0.00	B	S
ATOM	7418	CE	MET	A 451	17.859	30.778	-4.220	1.00	0.00	B	C
ATOM	7419	C	MET	A 451	12.460	32.401	-1.122	1.00	0.00	B	C
ATOM	7420	O	MET	A 451	12.528	32.078	0.062	1.00	0.00	B	O
ATOM	7421	N	ALA	A 452	11.765	33.478	-1.524	1.00	0.00	B	N
ATOM	7422	CA	ALA	A 452	11.115	34.289	-0.541	1.00	0.00	B	C
ATOM	7423	CB	ALA	A 452	10.403	35.509	-1.145	1.00	0.00	B	C
ATOM	7424	C	ALA	A 452	10.072	33.454	0.123	1.00	0.00	B	C
ATOM	7425	O	ALA	A 452	9.920	33.483	1.342	1.00	0.00	B	O
ATOM	7426	N	ALA	A 453	9.334	32.664	-0.676	1.00	0.00	B	N
ATOM	7427	CA	ALA	A 453	8.264	31.859	-0.160	1.00	0.00	B	C
ATOM	7428	CB	ALA	A 453	7.516	31.095	-1.268	1.00	0.00	B	C

ATOM	7429	C	ALA A 453	8.810	30.846	0.799	1.00	0.00	B	C
ATOM	7430	O	ALA A 453	8.244	30.625	1.867	1.00	0.00	B	O
ATOM	7431	N	TYR A 454	9.938	30.206	0.440	1.00	0.00	B	N
ATOM	7432	CA	TYR A 454	10.535	29.190	1.260	1.00	0.00	B	C
ATOM	7433	CB	TYR A 454	11.780	28.570	0.600	1.00	0.00	B	C
ATOM	7434	CG	TYR A 454	12.469	27.729	1.621	1.00	0.00	B	C
ATOM	7435	CD1	TYR A 454	12.085	26.427	1.844	1.00	0.00	B	C
ATOM	7436	CE1	TYR A 454	12.728	25.662	2.789	1.00	0.00	B	C
ATOM	7437	CZ	TYR A 454	13.762	26.196	3.519	1.00	0.00	B	C
ATOM	7438	OH	TYR A 454	14.418	25.406	4.487	1.00	0.00	B	O
ATOM	7439	CD2	TYR A 454	13.504	28.256	2.358	1.00	0.00	B	C
ATOM	7440	CE2	TYR A 454	14.150	27.498	3.304	1.00	0.00	B	C
ATOM	7441	C	TYR A 454	10.988	29.802	2.554	1.00	0.00	B	C
ATOM	7442	O	TYR A 454	10.741	29.268	3.633	1.00	0.00	B	O
ATOM	7443	N	TYR A 455	11.679	30.947	2.448	1.00	0.00	B	N
ATOM	7444	CA	TYR A 455	12.263	31.707	3.518	1.00	0.00	B	C
ATOM	7445	CB	TYR A 455	13.326	32.725	3.068	1.00	0.00	B	C
ATOM	7446	CG	TYR A 455	14.542	31.959	2.680	1.00	0.00	B	C
ATOM	7447	CD1	TYR A 455	15.298	31.327	3.643	1.00	0.00	B	C
ATOM	7448	CE1	TYR A 455	16.425	30.621	3.299	1.00	0.00	B	C
ATOM	7449	CZ	TYR A 455	16.814	30.548	1.984	1.00	0.00	B	C
ATOM	7450	OH	TYR A 455	17.972	29.825	1.625	1.00	0.00	B	O
ATOM	7451	CD2	TYR A 455	14.944	31.889	1.368	1.00	0.00	B	C
ATOM	7452	CE2	TYR A 455	16.071	31.186	1.018	1.00	0.00	B	C
ATOM	7453	C	TYR A 455	11.270	32.450	4.363	1.00	0.00	B	C
ATOM	7454	O	TYR A 455	11.621	32.845	5.472	1.00	0.00	B	O
ATOM	7455	N	ARG A 456	10.059	32.747	3.847	1.00	0.00	B	N
ATOM	7456	CA	ARG A 456	9.106	33.614	4.500	1.00	0.00	B	C
ATOM	7457	CB	ARG A 456	7.676	33.535	3.934	1.00	0.00	B	C
ATOM	7458	CG	ARG A 456	7.058	32.142	4.080	1.00	0.00	B	C
ATOM	7459	CD	ARG A 456	5.542	32.092	3.878	1.00	0.00	B	C
ATOM	7460	NE	ARG A 456	4.887	32.535	5.140	1.00	0.00	B	N
ATOM	7461	CZ	ARG A 456	3.701	33.212	5.093	1.00	0.00	B	C
ATOM	7462	NH1	ARG A 456	3.156	33.532	3.884	1.00	0.00	B	N
ATOM	7463	NH2	ARG A 456	3.065	33.567	6.247	1.00	0.00	B	N
ATOM	7464	C	ARG A 456	8.969	33.307	5.960	1.00	0.00	B	C
ATOM	7465	O	ARG A 456	8.947	32.154	6.390	1.00	0.00	B	O
ATOM	7466	N	PRO A 457	8.923	34.376	6.726	1.00	0.00	B	N

ATOM	7467	CD	PRO A 457	9.690	35.558	6.371	1.00	0.00	B	C
ATOM	7468	CA	PRO A 457	8.749	34.265	8.150	1.00	0.00	B	C
ATOM	7469	CB	PRO A 457	9.193	35.601	8.743	1.00	0.00	B	C
ATOM	7470	CG	PRO A 457	10.175	36.155	7.701	1.00	0.00	B	C
ATOM	7471	C	PRO A 457	7.342	33.913	8.515	1.00	0.00	B	C
ATOM	7472	O	PRO A 457	6.415	34.503	7.960	1.00	0.00	B	O
ATOM	7473	N	VAL A 458	7.171	32.979	9.472	1.00	0.00	B	N
ATOM	7474	CA	VAL A 458	5.880	32.542	9.922	1.00	0.00	B	C
ATOM	7475	CB	VAL A 458	5.971	31.370	10.852	1.00	0.00	B	C
ATOM	7476	CG1	VAL A 458	4.568	31.057	11.399	1.00	0.00	B	C
ATOM	7477	CG2	VAL A 458	6.619	30.203	10.085	1.00	0.00	B	C
ATOM	7478	C	VAL A 458	5.202	33.654	10.649	1.00	0.00	B	C
ATOM	7479	O	VAL A 458	4.024	33.917	10.403	1.00	0.00	B	O
ATOM	7480	N	ASP A 459	5.980	34.335	11.521	1.00	0.00	B	N
ATOM	7481	CA	ASP A 459	5.609	35.403	12.405	1.00	0.00	B	C
ATOM	7482	CB	ASP A 459	5.977	36.794	11.866	1.00	0.00	B	C
ATOM	7483	CG	ASP A 459	7.493	36.914	11.894	1.00	0.00	B	C
ATOM	7484	OD1	ASP A 459	8.098	36.527	12.928	1.00	0.00	B	O
ATOM	7485	OD2	ASP A 459	8.065	37.402	10.880	1.00	0.00	B	O
ATOM	7486	C	ASP A 459	4.160	35.382	12.684	1.00	0.00	B	C
ATOM	7487	O	ASP A 459	3.600	34.392	13.159	1.00	0.00	B	O
ATOM	7488	N	GLY A 460	3.570	36.554	12.427	1.00	0.00	B	N
ATOM	7489	CA	GLY A 460	2.183	36.822	12.468	1.00	0.00	B	C
ATOM	7490	C	GLY A 460	1.825	36.857	11.025	1.00	0.00	B	C
ATOM	7491	O	GLY A 460	2.165	35.938	10.279	1.00	0.00	B	O
ATOM	7492	N	LEU A 461	1.137	37.927	10.592	1.00	0.00	B	N
ATOM	7493	CA	LEU A 461	0.727	38.061	9.227	1.00	0.00	B	C
ATOM	7494	CB	LEU A 461	-0.745	38.467	9.132	1.00	0.00	B	C
ATOM	7495	CG	LEU A 461	-1.715	37.415	9.712	1.00	0.00	B	C
ATOM	7496	CD1	LEU A 461	-1.520	37.223	11.225	1.00	0.00	B	C
ATOM	7497	CD2	LEU A 461	-3.171	37.745	9.367	1.00	0.00	B	C
ATOM	7498	C	LEU A 461	1.588	39.125	8.620	1.00	0.00	B	C
ATOM	7499	O	LEU A 461	1.991	40.040	9.325	1.00	0.00	B	O
ATOM	7500	N	PRO A 462	1.764	39.136	7.330	1.00	0.00	B	N
ATOM	7501	CD	PRO A 462	0.598	39.015	6.468	1.00	0.00	B	C
ATOM	7502	CA	PRO A 462	2.839	39.854	6.678	1.00	0.00	B	C
ATOM	7503	CB	PRO A 462	2.403	40.021	5.224	1.00	0.00	B	C
ATOM	7504	CG	PRO A 462	0.870	39.955	5.286	1.00	0.00	B	C

ATOM	7505	C	PRO A 462	3.437	41.106	7.268	1.00	0.00	B	C
ATOM	7506	O	PRO A 462	4.598	40.944	7.657	1.00	0.00	B	O
ATOM	7507	N	PRO A 463	2.889	42.287	7.406	1.00	0.00	B	N
ATOM	7508	CD	PRO A 463	1.951	42.837	6.441	1.00	0.00	B	C
ATOM	7509	CA	PRO A 463	3.648	43.322	8.065	1.00	0.00	B	C
ATOM	7510	CB	PRO A 463	3.148	44.652	7.501	1.00	0.00	B	C
ATOM	7511	CG	PRO A 463	1.793	44.307	6.863	1.00	0.00	B	C
ATOM	7512	C	PRO A 463	3.399	43.173	9.522	1.00	0.00	B	C
ATOM	7513	O	PRO A 463	2.397	42.552	9.873	1.00	0.00	B	O
ATOM	7514	N	PHE A 464	4.262	43.743	10.385	1.00	0.00	B	N
ATOM	7515	CA	PHE A 464	5.397	44.479	9.927	1.00	0.00	B	C
ATOM	7516	CB	PHE A 464	5.796	45.655	10.836	1.00	0.00	B	C
ATOM	7517	CG	PHE A 464	4.801	46.735	10.574	1.00	0.00	B	C
ATOM	7518	CD1	PHE A 464	3.583	46.753	11.214	1.00	0.00	B	C
ATOM	7519	CE1	PHE A 464	2.673	47.752	10.957	1.00	0.00	B	C
ATOM	7520	CZ	PHE A 464	2.970	48.743	10.053	1.00	0.00	B	C
ATOM	7521	CD2	PHE A 464	5.089	47.730	9.667	1.00	0.00	B	C
ATOM	7522	CE2	PHE A 464	4.181	48.731	9.408	1.00	0.00	B	C
ATOM	7523	C	PHE A 464	6.564	43.561	9.761	1.00	0.00	B	C
ATOM	7524	O	PHE A 464	6.605	42.470	10.325	1.00	0.00	B	O
ATOM	7525	N	LYS A 465	7.527	43.992	8.923	1.00	0.00	B	N
ATOM	7526	CA	LYS A 465	8.715	43.231	8.663	1.00	0.00	B	C
ATOM	7527	CB	LYS A 465	9.021	43.091	7.162	1.00	0.00	B	C
ATOM	7528	CG	LYS A 465	7.928	42.373	6.370	1.00	0.00	B	C
ATOM	7529	CD	LYS A 465	8.064	42.549	4.857	1.00	0.00	B	C
ATOM	7530	CE	LYS A 465	7.830	43.984	4.383	1.00	0.00	B	C
ATOM	7531	NZ	LYS A 465	6.405	44.351	4.552	1.00	0.00	B	N
ATOM	7532	C	LYS A 465	9.870	43.993	9.253	1.00	0.00	B	C
ATOM	7533	O	LYS A 465	9.911	45.219	9.179	1.00	0.00	B	O
ATOM	7534	N	MET A 466	10.833	43.271	9.869	1.00	0.00	B	N
ATOM	7535	CA	MET A 466	11.981	43.858	10.508	1.00	0.00	B	C
ATOM	7536	CB	MET A 466	12.853	42.812	11.228	1.00	0.00	B	C
ATOM	7537	CG	MET A 466	12.126	41.985	12.297	1.00	0.00	B	C
ATOM	7538	SD	MET A 466	13.204	40.796	13.158	1.00	0.00	B	S
ATOM	7539	CE	MET A 466	11.917	39.636	13.705	1.00	0.00	B	C
ATOM	7540	C	MET A 466	12.868	44.512	9.488	1.00	0.00	B	C
ATOM	7541	O	MET A 466	13.337	45.631	9.689	1.00	0.00	B	O
ATOM	7542	N	GLU A 467	13.101	43.835	8.348	1.00	0.00	B	N

ATOM	7543	CA	GLU A 467	13.978	44.367	7.346	1.00	0.00	B	C
ATOM	7544	CB	GLU A 467	13.550	45.757	6.856	1.00	0.00	B	C
ATOM	7545	CG	GLU A 467	12.235	45.771	6.084	1.00	0.00	B	C
ATOM	7546	CD	GLU A 467	11.989	47.218	5.689	1.00	0.00	B	C
ATOM	7547	OE1	GLU A 467	12.953	48.021	5.806	1.00	0.00	B	O
ATOM	7548	OE2	GLU A 467	10.848	47.542	5.265	1.00	0.00	B	O
ATOM	7549	C	GLU A 467	15.356	44.528	7.923	1.00	0.00	B	C
ATOM	7550	O	GLU A 467	16.075	45.461	7.566	1.00	0.00	B	O
ATOM	7551	N	LYS A 468	15.780	43.612	8.817	1.00	0.00	B	N
ATOM	7552	CA	LYS A 468	17.098	43.672	9.390	1.00	0.00	B	C
ATOM	7553	CB	LYS A 468	17.158	43.267	10.873	1.00	0.00	B	C
ATOM	7554	CG	LYS A 468	16.595	44.353	11.793	1.00	0.00	B	C
ATOM	7555	CD	LYS A 468	17.328	45.689	11.639	1.00	0.00	B	C
ATOM	7556	CE	LYS A 468	16.764	46.829	12.493	1.00	0.00	B	C
ATOM	7557	NZ	LYS A 468	17.531	48.073	12.244	1.00	0.00	B	N
ATOM	7558	C	LYS A 468	17.985	42.753	8.602	1.00	0.00	B	C
ATOM	7559	O	LYS A 468	17.659	42.387	7.481	1.00	0.00	B	O
ATOM	7560	N	THR A 469	19.153	42.373	9.156	1.00	0.00	B	N
ATOM	7561	CA	THR A 469	20.053	41.539	8.405	1.00	0.00	B	C
ATOM	7562	CB	THR A 469	21.304	41.185	9.152	1.00	0.00	B	C
ATOM	7563	OG1	THR A 469	22.209	40.500	8.298	1.00	0.00	B	O
ATOM	7564	CG2	THR A 469	20.927	40.301	10.354	1.00	0.00	B	C
ATOM	7565	C	THR A 469	19.346	40.268	8.067	1.00	0.00	B	C
ATOM	7566	O	THR A 469	18.515	39.773	8.825	1.00	0.00	B	O
ATOM	7567	N	GLY A 470	19.576	39.746	6.845	1.00	0.00	B	N
ATOM	7568	CA	GLY A 470	18.966	38.513	6.426	1.00	0.00	B	C
ATOM	7569	C	GLY A 470	17.606	38.867	5.933	1.00	0.00	B	C
ATOM	7570	O	GLY A 470	17.077	38.257	5.004	1.00	0.00	B	O
ATOM	7571	N	ASP A 471	17.005	39.869	6.597	1.00	0.00	B	N
ATOM	7572	CA	ASP A 471	15.747	40.432	6.262	1.00	0.00	B	C
ATOM	7573	CB	ASP A 471	15.128	41.298	7.361	1.00	0.00	B	C
ATOM	7574	CG	ASP A 471	14.676	40.366	8.476	1.00	0.00	B	C
ATOM	7575	OD1	ASP A 471	14.736	39.123	8.270	1.00	0.00	B	O
ATOM	7576	OD2	ASP A 471	14.262	40.885	9.546	1.00	0.00	B	O
ATOM	7577	C	ASP A 471	15.945	41.258	5.044	1.00	0.00	B	C
ATOM	7578	O	ASP A 471	15.001	41.535	4.316	1.00	0.00	B	O
ATOM	7579	N	TYR A 472	17.181	41.736	4.826	1.00	0.00	B	N
ATOM	7580	CA	TYR A 472	17.423	42.564	3.684	1.00	0.00	B	C

ATOM	7581	CB	TYR	A 472	18.847	43.150	3.692	1.00	0.00	B	C
ATOM	7582	CG	TYR	A 472	18.983	44.131	2.578	1.00	0.00	B	C
ATOM	7583	CD1	TYR	A 472	18.379	45.367	2.656	1.00	0.00	B	C
ATOM	7584	CE1	TYR	A 472	18.506	46.281	1.635	1.00	0.00	B	C
ATOM	7585	CZ	TYR	A 472	19.247	45.967	0.522	1.00	0.00	B	C
ATOM	7586	OH	TYR	A 472	19.383	46.900	-0.528	1.00	0.00	B	O
ATOM	7587	CD2	TYR	A 472	19.732	43.832	1.464	1.00	0.00	B	C
ATOM	7588	CE2	TYR	A 472	19.862	44.741	0.439	1.00	0.00	B	C
ATOM	7589	C	TYR	A 472	17.231	41.755	2.434	1.00	0.00	B	C
ATOM	7590	O	TYR	A 472	16.550	42.193	1.508	1.00	0.00	B	O
ATOM	7591	N	PHE	A 473	17.808	40.537	2.382	1.00	0.00	B	N
ATOM	7592	CA	PHE	A 473	17.740	39.728	1.194	1.00	0.00	B	C
ATOM	7593	CB	PHE	A 473	18.563	38.428	1.261	1.00	0.00	B	C
ATOM	7594	CG	PHE	A 473	20.001	38.763	1.100	1.00	0.00	B	C
ATOM	7595	CD1	PHE	A 473	20.502	39.049	-0.148	1.00	0.00	B	C
ATOM	7596	CE1	PHE	A 473	21.832	39.353	-0.318	1.00	0.00	B	C
ATOM	7597	CZ	PHE	A 473	22.672	39.367	0.768	1.00	0.00	B	C
ATOM	7598	CD2	PHE	A 473	20.852	38.771	2.182	1.00	0.00	B	C
ATOM	7599	CE2	PHE	A 473	22.183	39.074	2.017	1.00	0.00	B	C
ATOM	7600	C	PHE	A 473	16.338	39.300	0.887	1.00	0.00	B	C
ATOM	7601	O	PHE	A 473	15.901	39.386	-0.259	1.00	0.00	B	O
ATOM	7602	N	ARG	A 474	15.596	38.815	1.898	1.00	0.00	B	N
ATOM	7603	CA	ARG	A 474	14.288	38.288	1.639	1.00	0.00	B	C
ATOM	7604	CB	ARG	A 474	13.640	37.629	2.865	1.00	0.00	B	C
ATOM	7605	CG	ARG	A 474	13.369	38.582	4.027	1.00	0.00	B	C
ATOM	7606	CD	ARG	A 474	12.773	37.867	5.239	1.00	0.00	B	C
ATOM	7607	NE	ARG	A 474	12.235	38.908	6.157	1.00	0.00	B	N
ATOM	7608	CZ	ARG	A 474	10.938	39.308	6.028	1.00	0.00	B	C
ATOM	7609	NH1	ARG	A 474	10.136	38.729	5.088	1.00	0.00	B	N
ATOM	7610	NH2	ARG	A 474	10.443	40.290	6.837	1.00	0.00	B	N
ATOM	7611	C	ARG	A 474	13.368	39.372	1.163	1.00	0.00	B	C
ATOM	7612	O	ARG	A 474	12.563	39.154	0.257	1.00	0.00	B	O
ATOM	7613	N	VAL	A 475	13.469	40.574	1.755	1.00	0.00	B	N
ATOM	7614	CA	VAL	A 475	12.597	41.664	1.407	1.00	0.00	B	C
ATOM	7615	CB	VAL	A 475	12.838	42.901	2.219	1.00	0.00	B	C
ATOM	7616	CG1	VAL	A 475	11.948	44.022	1.658	1.00	0.00	B	C
ATOM	7617	CG2	VAL	A 475	12.546	42.586	3.695	1.00	0.00	B	C
ATOM	7618	C	VAL	A 475	12.789	42.022	-0.031	1.00	0.00	B	C

ATOM	7619	O	VAL A 475	11.828	42.326	-0.735	1.00	0.00	B	O
ATOM	7620	N	THR A 476	14.044	42.014	-0.513	1.00	0.00	B	N
ATOM	7621	CA	THR A 476	14.273	42.386	-1.877	1.00	0.00	B	C
ATOM	7622	CB	THR A 476	15.729	42.404	-2.248	1.00	0.00	B	C
ATOM	7623	OG1	THR A 476	16.285	41.103	-2.146	1.00	0.00	B	O
ATOM	7624	CG2	THR A 476	16.462	43.369	-1.300	1.00	0.00	B	C
ATOM	7625	C	THR A 476	13.583	41.387	-2.752	1.00	0.00	B	C
ATOM	7626	O	THR A 476	12.972	41.744	-3.758	1.00	0.00	B	O
ATOM	7627	N	GLY A 477	13.655	40.099	-2.373	1.00	0.00	B	N
ATOM	7628	CA	GLY A 477	13.080	39.059	-3.177	1.00	0.00	B	C
ATOM	7629	C	GLY A 477	11.597	39.232	-3.280	1.00	0.00	B	C
ATOM	7630	O	GLY A 477	11.019	39.016	-4.344	1.00	0.00	B	O
ATOM	7631	N	GLU A 478	10.931	39.606	-2.171	1.00	0.00	B	N
ATOM	7632	CA	GLU A 478	9.502	39.719	-2.186	1.00	0.00	B	C
ATOM	7633	CB	GLU A 478	8.902	40.067	-0.810	1.00	0.00	B	C
ATOM	7634	CG	GLU A 478	9.254	41.472	-0.321	1.00	0.00	B	C
ATOM	7635	CD	GLU A 478	8.648	41.675	1.059	1.00	0.00	B	C
ATOM	7636	OE1	GLU A 478	8.319	40.654	1.719	1.00	0.00	B	O
ATOM	7637	OE2	GLU A 478	8.512	42.857	1.474	1.00	0.00	B	O
ATOM	7638	C	GLU A 478	9.102	40.804	-3.133	1.00	0.00	B	C
ATOM	7639	O	GLU A 478	8.156	40.643	-3.906	1.00	0.00	B	O
ATOM	7640	N	ILE A 479	9.810	41.945	-3.098	1.00	0.00	B	N
ATOM	7641	CA	ILE A 479	9.475	43.033	-3.969	1.00	0.00	B	C
ATOM	7642	CB	ILE A 479	10.278	44.277	-3.719	1.00	0.00	B	C
ATOM	7643	CG2	ILE A 479	9.978	45.269	-4.857	1.00	0.00	B	C
ATOM	7644	CG1	ILE A 479	9.981	44.839	-2.318	1.00	0.00	B	C
ATOM	7645	CD	ILE A 479	10.923	45.965	-1.898	1.00	0.00	B	C
ATOM	7646	C	ILE A 479	9.715	42.611	-5.383	1.00	0.00	B	C
ATOM	7647	O	ILE A 479	8.905	42.883	-6.268	1.00	0.00	B	O
ATOM	7648	N	LEU A 480	10.841	41.916	-5.626	1.00	0.00	B	N
ATOM	7649	CA	LEU A 480	11.222	41.527	-6.952	1.00	0.00	B	C
ATOM	7650	CB	LEU A 480	12.585	40.818	-6.988	1.00	0.00	B	C
ATOM	7651	CG	LEU A 480	13.738	41.709	-6.487	1.00	0.00	B	C
ATOM	7652	CD1	LEU A 480	15.098	41.013	-6.646	1.00	0.00	B	C
ATOM	7653	CD2	LEU A 480	13.686	43.100	-7.140	1.00	0.00	B	C
ATOM	7654	C	LEU A 480	10.204	40.588	-7.526	1.00	0.00	B	C
ATOM	7655	O	LEU A 480	9.845	40.699	-8.696	1.00	0.00	B	O
ATOM	7656	N	SER A 481	9.705	39.638	-6.716	1.00	0.00	B	N

ATOM	7657	CA	SER A 481	8.774	38.671	-7.223	1.00	0.00	B	C
ATOM	7658	CB	SER A 481	8.375	37.619	-6.173	1.00	0.00	B	C
ATOM	7659	OG	SER A 481	7.678	38.233	-5.101	1.00	0.00	B	O
ATOM	7660	C	SER A 481	7.519	39.360	-7.671	1.00	0.00	B	C
ATOM	7661	O	SER A 481	6.966	39.038	-8.721	1.00	0.00	B	O
ATOM	7662	N	VAL A 482	7.031	40.334	-6.884	1.00	0.00	B	N
ATOM	7663	CA	VAL A 482	5.817	41.010	-7.235	1.00	0.00	B	C
ATOM	7664	CB	VAL A 482	5.399	42.026	-6.215	1.00	0.00	B	C
ATOM	7665	CG1	VAL A 482	4.097	42.694	-6.689	1.00	0.00	B	C
ATOM	7666	CG2	VAL A 482	5.300	41.333	-4.844	1.00	0.00	B	C
ATOM	7667	C	VAL A 482	6.037	41.740	-8.521	1.00	0.00	B	C
ATOM	7668	O	VAL A 482	5.192	41.723	-9.416	1.00	0.00	B	O
ATOM	7669	N	LEU A 483	7.212	42.390	-8.648	1.00	0.00	B	N
ATOM	7670	CA	LEU A 483	7.540	43.174	-9.804	1.00	0.00	B	C
ATOM	7671	CB	LEU A 483	8.939	43.815	-9.681	1.00	0.00	B	C
ATOM	7672	CG	LEU A 483	9.333	44.850	-10.766	1.00	0.00	B	C
ATOM	7673	CD1	LEU A 483	10.746	45.391	-10.503	1.00	0.00	B	C
ATOM	7674	CD2	LEU A 483	9.203	44.315	-12.201	1.00	0.00	B	C
ATOM	7675	C	LEU A 483	7.539	42.237	-10.965	1.00	0.00	B	C
ATOM	7676	O	LEU A 483	7.075	42.576	-12.052	1.00	0.00	B	O
ATOM	7677	N	GLY A 484	8.070	41.020	-10.760	1.00	0.00	B	N
ATOM	7678	CA	GLY A 484	8.118	40.062	-11.818	1.00	0.00	B	C
ATOM	7679	C	GLY A 484	6.712	39.754	-12.218	1.00	0.00	B	C
ATOM	7680	O	GLY A 484	6.419	39.522	-13.390	1.00	0.00	B	O
ATOM	7681	N	GLY A 485	5.805	39.723	-11.228	1.00	0.00	B	N
ATOM	7682	CA	GLY A 485	4.431	39.385	-11.463	1.00	0.00	B	C
ATOM	7683	C	GLY A 485	3.769	40.382	-12.368	1.00	0.00	B	C
ATOM	7684	O	GLY A 485	2.964	40.006	-13.217	1.00	0.00	B	O
ATOM	7685	N	VAL A 486	4.077	41.683	-12.207	1.00	0.00	B	N
ATOM	7686	CA	VAL A 486	3.395	42.707	-12.954	1.00	0.00	B	C
ATOM	7687	CB	VAL A 486	3.795	44.095	-12.554	1.00	0.00	B	C
ATOM	7688	CG1	VAL A 486	5.231	44.356	-13.035	1.00	0.00	B	C
ATOM	7689	CG2	VAL A 486	2.759	45.082	-13.116	1.00	0.00	B	C
ATOM	7690	C	VAL A 486	3.656	42.567	-14.423	1.00	0.00	B	C
ATOM	7691	O	VAL A 486	2.769	42.800	-15.243	1.00	0.00	B	O
ATOM	7692	N	TYR A 487	4.883	42.171	-14.803	1.00	0.00	B	N
ATOM	7693	CA	TYR A 487	5.221	42.138	-16.197	1.00	0.00	B	C
ATOM	7694	CB	TYR A 487	6.673	41.716	-16.458	1.00	0.00	B	C

ATOM	7695	CG TYR A 487	6.850	41.802	-17.931	1.00	0.00	B	C
ATOM	7696	CD1 TYR A 487	7.084	43.025	-18.512	1.00	0.00	B	C
ATOM	7697	CE1 TYR A 487	7.242	43.137	-19.870	1.00	0.00	B	C
ATOM	7698	CZ TYR A 487	7.160	42.021	-20.661	1.00	0.00	B	C
ATOM	7699	OH TYR A 487	7.325	42.136	-22.058	1.00	0.00	B	O
ATOM	7700	CD2 TYR A 487	6.753	40.686	-18.730	1.00	0.00	B	C
ATOM	7701	CE2 TYR A 487	6.914	40.794	-20.092	1.00	0.00	B	C
ATOM	7702	C TYR A 487	4.322	41.180	-16.913	1.00	0.00	B	C
ATOM	7703	O TYR A 487	3.854	41.463	-18.014	1.00	0.00	B	O
ATOM	7704	N PHE A 488	4.054	40.017	-16.297	1.00	0.00	B	N
ATOM	7705	CA PHE A 488	3.224	39.019	-16.905	1.00	0.00	B	C
ATOM	7706	CB PHE A 488	3.052	37.769	-16.016	1.00	0.00	B	C
ATOM	7707	CG PHE A 488	4.352	37.042	-15.890	1.00	0.00	B	C
ATOM	7708	CD1 PHE A 488	4.779	36.199	-16.891	1.00	0.00	B	C
ATOM	7709	CE1 PHE A 488	5.971	35.519	-16.778	1.00	0.00	B	C
ATOM	7710	CZ PHE A 488	6.748	35.669	-15.655	1.00	0.00	B	C
ATOM	7711	CD2 PHE A 488	5.135	37.176	-14.763	1.00	0.00	B	C
ATOM	7712	CE2 PHE A 488	6.327	36.497	-14.644	1.00	0.00	B	C
ATOM	7713	C PHE A 488	1.855	39.593	-17.118	1.00	0.00	B	C
ATOM	7714	O PHE A 488	1.247	39.388	-18.169	1.00	0.00	B	O
ATOM	7715	N PHE A 489	1.321	40.325	-16.118	1.00	0.00	B	N
ATOM	7716	CA PHE A 489	-0.005	40.859	-16.240	1.00	0.00	B	C
ATOM	7717	CB PHE A 489	-0.502	41.589	-14.979	1.00	0.00	B	C
ATOM	7718	CG PHE A 489	-1.890	42.049	-15.276	1.00	0.00	B	C
ATOM	7719	CD1 PHE A 489	-2.964	41.230	-15.010	1.00	0.00	B	C
ATOM	7720	CE1 PHE A 489	-4.249	41.641	-15.282	1.00	0.00	B	C
ATOM	7721	CZ PHE A 489	-4.470	42.882	-15.830	1.00	0.00	B	C
ATOM	7722	CD2 PHE A 489	-2.122	43.288	-15.830	1.00	0.00	B	C
ATOM	7723	CE2 PHE A 489	-3.405	43.703	-16.104	1.00	0.00	B	C
ATOM	7724	C PHE A 489	-0.041	41.845	-17.365	1.00	0.00	B	C
ATOM	7725	O PHE A 489	-0.976	41.851	-18.164	1.00	0.00	B	O
ATOM	7726	N PHE A 490	0.979	42.721	-17.455	1.00	0.00	B	N
ATOM	7727	CA PHE A 490	1.004	43.726	-18.481	1.00	0.00	B	C
ATOM	7728	CB PHE A 490	2.190	44.699	-18.332	1.00	0.00	B	C
ATOM	7729	CG PHE A 490	2.179	45.668	-19.466	1.00	0.00	B	C
ATOM	7730	CD1 PHE A 490	1.236	46.668	-19.541	1.00	0.00	B	C
ATOM	7731	CE1 PHE A 490	1.243	47.558	-20.589	1.00	0.00	B	C
ATOM	7732	CZ PHE A 490	2.200	47.463	-21.571	1.00	0.00	B	C

ATOM	7733	CD2 PHE A 490	3.138	45.586	-20.449	1.00	0.00	B	C
ATOM	7734	CE2 PHE A 490	3.151	46.475	-21.499	1.00	0.00	B	C
ATOM	7735	C PHE A 490	1.091	43.075	-19.827	1.00	0.00	B	C
ATOM	7736	O PHE A 490	0.378	43.459	-20.752	1.00	0.00	B	O
ATOM	7737	N ARG A 491	1.969	42.068	-19.978	1.00	0.00	B	N
ATOM	7738	CA ARG A 491	2.136	41.432	-21.255	1.00	0.00	B	C
ATOM	7739	CB ARG A 491	3.298	40.418	-21.273	1.00	0.00	B	C
ATOM	7740	CG ARG A 491	3.165	39.291	-20.249	1.00	0.00	B	C
ATOM	7741	CD ARG A 491	4.433	38.442	-20.111	1.00	0.00	B	C
ATOM	7742	NE ARG A 491	4.509	37.535	-21.290	1.00	0.00	B	N
ATOM	7743	CZ ARG A 491	4.139	36.227	-21.163	1.00	0.00	B	C
ATOM	7744	NH1 ARG A 491	3.767	35.741	-19.942	1.00	0.00	B	N
ATOM	7745	NH2 ARG A 491	4.152	35.403	-22.251	1.00	0.00	B	N
ATOM	7746	C ARG A 491	0.873	40.727	-21.650	1.00	0.00	B	C
ATOM	7747	O ARG A 491	0.481	40.754	-22.815	1.00	0.00	B	O
ATOM	7748	N GLY A 492	0.198	40.074	-20.684	1.00	0.00	B	N
ATOM	7749	CA GLY A 492	-0.987	39.308	-20.960	1.00	0.00	B	C
ATOM	7750	C GLY A 492	-2.102	40.177	-21.461	1.00	0.00	B	C
ATOM	7751	O GLY A 492	-2.845	39.787	-22.362	1.00	0.00	B	O
ATOM	7752	N ILE A 493	-2.251	41.384	-20.886	1.00	0.00	B	N
ATOM	7753	CA ILE A 493	-3.351	42.233	-21.242	1.00	0.00	B	C
ATOM	7754	CB ILE A 493	-3.399	43.513	-20.453	1.00	0.00	B	C
ATOM	7755	CG2 ILE A 493	-2.201	44.391	-20.850	1.00	0.00	B	C
ATOM	7756	CG1 ILE A 493	-4.764	44.197	-20.637	1.00	0.00	B	C
ATOM	7757	CD ILE A 493	-5.022	45.314	-19.628	1.00	0.00	B	C
ATOM	7758	C ILE A 493	-3.253	42.564	-22.691	1.00	0.00	B	C
ATOM	7759	O ILE A 493	-4.265	42.604	-23.388	1.00	0.00	B	O
ATOM	7760	N GLN A 494	-2.030	42.809	-23.183	1.00	0.00	B	N
ATOM	7761	CA GLN A 494	-1.821	43.149	-24.560	1.00	0.00	B	C
ATOM	7762	CB GLN A 494	-0.341	43.381	-24.896	1.00	0.00	B	C
ATOM	7763	CG GLN A 494	-0.102	43.745	-26.363	1.00	0.00	B	C
ATOM	7764	CD GLN A 494	1.400	43.769	-26.595	1.00	0.00	B	C
ATOM	7765	OE1 GLN A 494	1.912	44.555	-27.390	1.00	0.00	B	O
ATOM	7766	NE2 GLN A 494	2.131	42.870	-25.881	1.00	0.00	B	N
ATOM	7767	C GLN A 494	-2.256	42.002	-25.406	1.00	0.00	B	C
ATOM	7768	O GLN A 494	-2.805	42.199	-26.483	1.00	0.00	B	O
ATOM	7769	N TYR A 495	-2.006	40.762	-24.965	1.00	0.00	B	N
ATOM	7770	CA TYR A 495	-2.367	39.641	-25.783	1.00	0.00	B	C

ATOM	7771	CB	TYR	A	495	-1.917	38.306	-25.169	1.00	0.00	B	C
ATOM	7772	CG	TYR	A	495	-2.062	37.240	-26.199	1.00	0.00	B	C
ATOM	7773	CD1	TYR	A	495	-3.244	36.556	-26.362	1.00	0.00	B	C
ATOM	7774	CE1	TYR	A	495	-3.350	35.575	-27.319	1.00	0.00	B	C
ATOM	7775	CZ	TYR	A	495	-2.277	35.270	-28.122	1.00	0.00	B	C
ATOM	7776	OH	TYR	A	495	-2.386	34.260	-29.101	1.00	0.00	B	O
ATOM	7777	CD2	TYR	A	495	-0.996	36.933	-27.011	1.00	0.00	B	C
ATOM	7778	CE2	TYR	A	495	-1.095	35.952	-27.969	1.00	0.00	B	C
ATOM	7779	C	TYR	A	495	-3.856	39.633	-25.921	1.00	0.00	B	C
ATOM	7780	O	TYR	A	495	-4.393	39.403	-27.003	1.00	0.00	B	O
ATOM	7781	N	PHE	A	496	-4.564	39.875	-24.804	1.00	0.00	B	N
ATOM	7782	CA	PHE	A	496	-5.995	39.905	-24.804	1.00	0.00	B	C
ATOM	7783	CB	PHE	A	496	-6.550	40.094	-23.378	1.00	0.00	B	C
ATOM	7784	CG	PHE	A	496	-8.037	39.978	-23.377	1.00	0.00	B	C
ATOM	7785	CD1	PHE	A	496	-8.637	38.746	-23.478	1.00	0.00	B	C
ATOM	7786	CE1	PHE	A	496	-10.006	38.625	-23.467	1.00	0.00	B	C
ATOM	7787	CZ	PHE	A	496	-10.793	39.746	-23.347	1.00	0.00	B	C
ATOM	7788	CD2	PHE	A	496	-8.832	41.094	-23.246	1.00	0.00	B	C
ATOM	7789	CE2	PHE	A	496	-10.204	40.982	-23.233	1.00	0.00	B	C
ATOM	7790	C	PHE	A	496	-6.451	41.061	-25.639	1.00	0.00	B	C
ATOM	7791	O	PHE	A	496	-7.349	40.923	-26.469	1.00	0.00	B	O
ATOM	7792	N	LEU	A	497	-5.825	42.238	-25.440	1.00	0.00	B	N
ATOM	7793	CA	LEU	A	497	-6.232	43.448	-26.094	1.00	0.00	B	C
ATOM	7794	CB	LEU	A	497	-5.544	44.697	-25.505	1.00	0.00	B	C
ATOM	7795	CG	LEU	A	497	-6.128	46.058	-25.955	1.00	0.00	B	C
ATOM	7796	CD1	LEU	A	497	-5.496	47.199	-25.146	1.00	0.00	B	C
ATOM	7797	CD2	LEU	A	497	-5.999	46.309	-27.466	1.00	0.00	B	C
ATOM	7798	C	LEU	A	497	-5.974	43.380	-27.568	1.00	0.00	B	C
ATOM	7799	O	LEU	A	497	-6.807	43.799	-28.369	1.00	0.00	B	O
ATOM	7800	N	GLN	A	498	-4.815	42.850	-27.975	1.00	0.00	B	N
ATOM	7801	CA	GLN	A	498	-4.434	42.811	-29.353	1.00	0.00	B	C
ATOM	7802	CB	GLN	A	498	-3.070	42.131	-29.513	1.00	0.00	B	C
ATOM	7803	CG	GLN	A	498	-2.546	42.040	-30.940	1.00	0.00	B	C
ATOM	7804	CD	GLN	A	498	-1.204	41.340	-30.822	1.00	0.00	B	C
ATOM	7805	OE1	GLN	A	498	-1.100	40.291	-30.188	1.00	0.00	B	O
ATOM	7806	NE2	GLN	A	498	-0.144	41.945	-31.420	1.00	0.00	B	N
ATOM	7807	C	GLN	A	498	-5.450	41.998	-30.079	1.00	0.00	B	C
ATOM	7808	O	GLN	A	498	-5.938	42.405	-31.133	1.00	0.00	B	O

ATOM	7809	N	ARG A 499	-5.805	40.826	-29.525	1.00	0.00	B	N
ATOM	7810	CA	ARG A 499	-6.814	40.044	-30.169	1.00	0.00	B	C
ATOM	7811	CB	ARG A 499	-6.341	38.653	-30.617	1.00	0.00	B	C
ATOM	7812	CG	ARG A 499	-5.380	38.725	-31.802	1.00	0.00	B	C
ATOM	7813	CD	ARG A 499	-6.059	39.257	-33.064	1.00	0.00	B	C
ATOM	7814	NE	ARG A 499	-5.048	39.260	-34.156	1.00	0.00	B	N
ATOM	7815	CZ	ARG A 499	-5.403	38.821	-35.395	1.00	0.00	B	C
ATOM	7816	NH1	ARG A 499	-6.681	38.404	-35.630	1.00	0.00	B	N
ATOM	7817	NH2	ARG A 499	-4.474	38.771	-36.396	1.00	0.00	B	N
ATOM	7818	C	ARG A 499	-7.926	39.856	-29.198	1.00	0.00	B	C
ATOM	7819	O	ARG A 499	-7.866	39.020	-28.296	1.00	0.00	B	O
ATOM	7820	N	ARG A 500	-8.989	40.642	-29.406	1.00	0.00	B	N
ATOM	7821	CA	ARG A 500	-10.180	40.667	-28.615	1.00	0.00	B	C
ATOM	7822	CB	ARG A 500	-11.157	41.734	-29.129	1.00	0.00	B	C
ATOM	7823	CG	ARG A 500	-10.563	43.140	-29.119	1.00	0.00	B	C
ATOM	7824	CD	ARG A 500	-11.323	44.123	-30.009	1.00	0.00	B	C
ATOM	7825	NE	ARG A 500	-11.118	43.697	-31.423	1.00	0.00	B	N
ATOM	7826	CZ	ARG A 500	-11.969	44.130	-32.398	1.00	0.00	B	C
ATOM	7827	NH1	ARG A 500	-13.035	44.917	-32.070	1.00	0.00	B	N
ATOM	7828	NH2	ARG A 500	-11.755	43.777	-33.699	1.00	0.00	B	N
ATOM	7829	C	ARG A 500	-10.889	39.351	-28.725	1.00	0.00	B	C
ATOM	7830	O	ARG A 500	-11.410	38.856	-27.724	1.00	0.00	B	O
ATOM	7831	N	PRO A 501	-10.930	38.743	-29.885	1.00	0.00	B	N
ATOM	7832	CD	PRO A 501	-10.985	39.474	-31.142	1.00	0.00	B	C
ATOM	7833	CA	PRO A 501	-11.665	37.516	-29.999	1.00	0.00	B	C
ATOM	7834	CB	PRO A 501	-11.735	37.194	-31.496	1.00	0.00	B	C
ATOM	7835	CG	PRO A 501	-10.981	38.350	-32.188	1.00	0.00	B	C
ATOM	7836	C	PRO A 501	-11.116	36.438	-29.128	1.00	0.00	B	C
ATOM	7837	O	PRO A 501	-9.906	36.371	-28.921	1.00	0.00	B	O
ATOM	7838	N	SER A 502	-12.010	35.575	-28.616	1.00	0.00	B	N
ATOM	7839	CA	SER A 502	-11.673	34.569	-27.658	1.00	0.00	B	C
ATOM	7840	CB	SER A 502	-12.916	34.094	-26.875	1.00	0.00	B	C
ATOM	7841	OG	SER A 502	-12.576	33.208	-25.820	1.00	0.00	B	O
ATOM	7842	C	SER A 502	-11.061	33.401	-28.347	1.00	0.00	B	C
ATOM	7843	O	SER A 502	-10.770	33.437	-29.539	1.00	0.00	B	O
ATOM	7844	N	MET A 503	-10.764	32.360	-27.554	1.00	0.00	B	N
ATOM	7845	CA	MET A 503	-10.295	31.112	-28.054	1.00	0.00	B	C
ATOM	7846	CB	MET A 503	-8.918	30.729	-27.488	1.00	0.00	B	C

ATOM	7847	CG	MET A 503	-8.833	30.819	-25.964	1.00	0.00	B	C
ATOM	7848	SD	MET A 503	-7.136	30.966	-25.330	1.00	0.00	B	S
ATOM	7849	CE	MET A 503	-6.884	32.628	-26.020	1.00	0.00	B	C
ATOM	7850	C	MET A 503	-11.337	30.137	-27.618	1.00	0.00	B	C
ATOM	7851	O	MET A 503	-11.817	30.196	-26.486	1.00	0.00	B	O
ATOM	7852	N	LYS A 504	-11.729	29.227	-28.525	1.00	0.00	B	N
ATOM	7853	CA	LYS A 504	-12.798	28.320	-28.245	1.00	0.00	B	C
ATOM	7854	CB	LYS A 504	-13.329	27.569	-29.480	1.00	0.00	B	C
ATOM	7855	CG	LYS A 504	-14.660	26.860	-29.222	1.00	0.00	B	C
ATOM	7856	CD	LYS A 504	-15.401	26.451	-30.496	1.00	0.00	B	C
ATOM	7857	CE	LYS A 504	-16.817	25.931	-30.238	1.00	0.00	B	C
ATOM	7858	NZ	LYS A 504	-16.761	24.616	-29.559	1.00	0.00	B	N
ATOM	7859	C	LYS A 504	-12.336	27.323	-27.245	1.00	0.00	B	C
ATOM	7860	O	LYS A 504	-11.141	27.176	-26.985	1.00	0.00	B	O
ATOM	7861	N	THR A 505	-13.307	26.636	-26.624	1.00	0.00	B	N
ATOM	7862	CA	THR A 505	-13.018	25.665	-25.620	1.00	0.00	B	C
ATOM	7863	CB	THR A 505	-14.254	25.050	-25.040	1.00	0.00	B	C
ATOM	7864	OG1	THR A 505	-14.951	24.322	-26.040	1.00	0.00	B	O
ATOM	7865	CG2	THR A 505	-15.142	26.177	-24.488	1.00	0.00	B	C
ATOM	7866	C	THR A 505	-12.240	24.561	-26.245	1.00	0.00	B	C
ATOM	7867	O	THR A 505	-11.295	24.050	-25.649	1.00	0.00	B	O
ATOM	7868	N	LEU A 506	-12.604	24.173	-27.482	1.00	0.00	B	N
ATOM	7869	CA	LEU A 506	-11.928	23.062	-28.079	1.00	0.00	B	C
ATOM	7870	CB	LEU A 506	-12.405	22.730	-29.504	1.00	0.00	B	C
ATOM	7871	CG	LEU A 506	-13.826	22.148	-29.581	1.00	0.00	B	C
ATOM	7872	CD1	LEU A 506	-14.200	21.800	-31.032	1.00	0.00	B	C
ATOM	7873	CD2	LEU A 506	-13.991	20.957	-28.628	1.00	0.00	B	C
ATOM	7874	C	LEU A 506	-10.480	23.387	-28.183	1.00	0.00	B	C
ATOM	7875	O	LEU A 506	-9.633	22.570	-27.827	1.00	0.00	B	O
ATOM	7876	N	PHE A 507	-10.142	24.598	-28.657	1.00	0.00	B	N
ATOM	7877	CA	PHE A 507	-8.742	24.862	-28.758	1.00	0.00	B	C
ATOM	7878	CB	PHE A 507	-8.304	25.470	-30.103	1.00	0.00	B	C
ATOM	7879	CG	PHE A 507	-8.985	26.773	-30.374	1.00	0.00	B	C
ATOM	7880	CD1	PHE A 507	-10.265	26.798	-30.880	1.00	0.00	B	C
ATOM	7881	CE1	PHE A 507	-10.890	27.995	-31.148	1.00	0.00	B	C
ATOM	7882	CZ	PHE A 507	-10.232	29.179	-30.915	1.00	0.00	B	C
ATOM	7883	CD2	PHE A 507	-8.333	27.967	-30.153	1.00	0.00	B	C
ATOM	7884	CE2	PHE A 507	-8.950	29.165	-30.418	1.00	0.00	B	C

ATOM	7885	C	PHE A 507	-8.326	25.777	-27.663	1.00	0.00	B	C
ATOM	7886	O	PHE A 507	-8.692	26.950	-27.626	1.00	0.00	B	O
ATOM	7887	N	VAL A 508	-7.524	25.237	-26.732	1.00	0.00	B	N
ATOM	7888	CA	VAL A 508	-7.008	26.032	-25.677	1.00	0.00	B	C
ATOM	7889	CB	VAL A 508	-6.615	25.208	-24.488	1.00	0.00	B	C
ATOM	7890	CG1	VAL A 508	-6.058	26.140	-23.405	1.00	0.00	B	C
ATOM	7891	CG2	VAL A 508	-7.827	24.374	-24.037	1.00	0.00	B	C
ATOM	7892	C	VAL A 508	-5.765	26.608	-26.256	1.00	0.00	B	C
ATOM	7893	O	VAL A 508	-4.663	26.402	-25.752	1.00	0.00	B	O
ATOM	7894	N	ASP A 509	-5.936	27.372	-27.346	1.00	0.00	B	N
ATOM	7895	CA	ASP A 509	-4.814	27.953	-28.007	1.00	0.00	B	C
ATOM	7896	CB	ASP A 509	-4.750	27.598	-29.503	1.00	0.00	B	C
ATOM	7897	CG	ASP A 509	-3.475	28.176	-30.102	1.00	0.00	B	C
ATOM	7898	OD1	ASP A 509	-3.306	29.423	-30.071	1.00	0.00	B	O
ATOM	7899	OD2	ASP A 509	-2.648	27.367	-30.600	1.00	0.00	B	O
ATOM	7900	C	ASP A 509	-4.968	29.433	-27.894	1.00	0.00	B	C
ATOM	7901	O	ASP A 509	-6.024	29.976	-28.216	1.00	0.00	B	O
ATOM	7902	N	SER A 510	-3.904	30.123	-27.439	1.00	0.00	B	N
ATOM	7903	CA	SER A 510	-2.684	29.449	-27.104	1.00	0.00	B	C
ATOM	7904	CB	SER A 510	-1.434	30.346	-27.218	1.00	0.00	B	C
ATOM	7905	OG	SER A 510	-1.511	31.428	-26.305	1.00	0.00	B	O
ATOM	7906	C	SER A 510	-2.780	28.971	-25.687	1.00	0.00	B	C
ATOM	7907	O	SER A 510	-3.216	29.690	-24.792	1.00	0.00	B	O
ATOM	7908	N	TYR A 511	-2.375	27.705	-25.474	1.00	0.00	B	N
ATOM	7909	CA	TYR A 511	-2.416	27.038	-24.205	1.00	0.00	B	C
ATOM	7910	CB	TYR A 511	-1.941	25.579	-24.363	1.00	0.00	B	C
ATOM	7911	CG	TYR A 511	-1.698	24.926	-23.040	1.00	0.00	B	C
ATOM	7912	CD1	TYR A 511	-0.475	25.021	-22.415	1.00	0.00	B	C
ATOM	7913	CE1	TYR A 511	-0.243	24.417	-21.201	1.00	0.00	B	C
ATOM	7914	CZ	TYR A 511	-1.242	23.700	-20.597	1.00	0.00	B	C
ATOM	7915	OH	TYR A 511	-1.017	23.073	-19.353	1.00	0.00	B	O
ATOM	7916	CD2	TYR A 511	-2.686	24.200	-22.424	1.00	0.00	B	C
ATOM	7917	CE2	TYR A 511	-2.464	23.591	-21.213	1.00	0.00	B	C
ATOM	7918	C	TYR A 511	-1.483	27.671	-23.215	1.00	0.00	B	C
ATOM	7919	O	TYR A 511	-1.868	27.956	-22.083	1.00	0.00	B	O
ATOM	7920	N	SER A 512	-0.222	27.896	-23.625	1.00	0.00	B	N
ATOM	7921	CA	SER A 512	0.816	28.333	-22.733	1.00	0.00	B	C
ATOM	7922	CB	SER A 512	2.210	28.224	-23.374	1.00	0.00	B	C

ATOM	7923	OG	SER	A	512	2.278	29.042	-24.534	1.00	0.00	B	O
ATOM	7924	C	SER	A	512	0.640	29.739	-22.260	1.00	0.00	B	C
ATOM	7925	O	SER	A	512	0.770	30.023	-21.070	1.00	0.00	B	O
ATOM	7926	N	GLU	A	513	0.330	30.660	-23.183	1.00	0.00	B	N
ATOM	7927	CA	GLU	A	513	0.250	32.043	-22.827	1.00	0.00	B	C
ATOM	7928	CB	GLU	A	513	0.022	32.936	-24.056	1.00	0.00	B	C
ATOM	7929	CG	GLU	A	513	1.244	32.920	-24.977	1.00	0.00	B	C
ATOM	7930	CD	GLU	A	513	0.904	33.686	-26.242	1.00	0.00	B	C
ATOM	7931	OE1	GLU	A	513	-0.295	33.696	-26.626	1.00	0.00	B	O
ATOM	7932	OE2	GLU	A	513	1.842	34.273	-26.839	1.00	0.00	B	O
ATOM	7933	C	GLU	A	513	-0.855	32.222	-21.837	1.00	0.00	B	C
ATOM	7934	O	GLU	A	513	-0.742	33.025	-20.909	1.00	0.00	B	O
ATOM	7935	N	MET	A	514	-1.948	31.453	-21.983	1.00	0.00	B	N
ATOM	7936	CA	MET	A	514	-3.059	31.607	-21.087	1.00	0.00	B	C
ATOM	7937	CB	MET	A	514	-4.271	30.714	-21.413	1.00	0.00	B	C
ATOM	7938	CG	MET	A	514	-4.069	29.238	-21.070	1.00	0.00	B	C
ATOM	7939	SD	MET	A	514	-5.567	28.216	-21.200	1.00	0.00	B	S
ATOM	7940	CE	MET	A	514	-6.139	28.498	-19.501	1.00	0.00	B	C
ATOM	7941	C	MET	A	514	-2.627	31.273	-19.695	1.00	0.00	B	C
ATOM	7942	O	MET	A	514	-3.070	31.910	-18.743	1.00	0.00	B	O
ATOM	7943	N	LEU	A	515	-1.758	30.258	-19.532	1.00	0.00	B	N
ATOM	7944	CA	LEU	A	515	-1.331	29.836	-18.225	1.00	0.00	B	C
ATOM	7945	CB	LEU	A	515	-0.408	28.606	-18.268	1.00	0.00	B	C
ATOM	7946	CG	LEU	A	515	-1.100	27.347	-18.821	1.00	0.00	B	C
ATOM	7947	CD1	LEU	A	515	-0.155	26.136	-18.807	1.00	0.00	B	C
ATOM	7948	CD2	LEU	A	515	-2.429	27.080	-18.101	1.00	0.00	B	C
ATOM	7949	C	LEU	A	515	-0.571	30.937	-17.553	1.00	0.00	B	C
ATOM	7950	O	LEU	A	515	-0.727	31.166	-16.354	1.00	0.00	B	O
ATOM	7951	N	PHE	A	516	0.264	31.664	-18.317	1.00	0.00	B	N
ATOM	7952	CA	PHE	A	516	1.098	32.681	-17.743	1.00	0.00	B	C
ATOM	7953	CB	PHE	A	516	2.035	33.352	-18.764	1.00	0.00	B	C
ATOM	7954	CG	PHE	A	516	3.089	32.360	-19.128	1.00	0.00	B	C
ATOM	7955	CD1	PHE	A	516	4.154	32.138	-18.282	1.00	0.00	B	C
ATOM	7956	CE1	PHE	A	516	5.135	31.231	-18.606	1.00	0.00	B	C
ATOM	7957	CZ	PHE	A	516	5.065	30.532	-19.784	1.00	0.00	B	C
ATOM	7958	CD2	PHE	A	516	3.030	31.657	-20.309	1.00	0.00	B	C
ATOM	7959	CE2	PHE	A	516	4.011	30.747	-20.638	1.00	0.00	B	C
ATOM	7960	C	PHE	A	516	0.247	33.739	-17.113	1.00	0.00	B	C

ATOM	7961	O	PHE A 516	0.567	34.234	-16.031	1.00	0.00	B	O
ATOM	7962	N	PHE A 517	-0.861	34.117	-17.768	1.00	0.00	B	N
ATOM	7963	CA	PHE A 517	-1.728	35.141	-17.254	1.00	0.00	B	C
ATOM	7964	CB	PHE A 517	-2.911	35.434	-18.194	1.00	0.00	B	C
ATOM	7965	CG	PHE A 517	-3.911	36.235	-17.433	1.00	0.00	B	C
ATOM	7966	CD1	PHE A 517	-3.708	37.572	-17.192	1.00	0.00	B	C
ATOM	7967	CE1	PHE A 517	-4.632	38.304	-16.484	1.00	0.00	B	C
ATOM	7968	CZ	PHE A 517	-5.769	37.707	-16.000	1.00	0.00	B	C
ATOM	7969	CD2	PHE A 517	-5.047	35.639	-16.931	1.00	0.00	B	C
ATOM	7970	CE2	PHE A 517	-5.976	36.368	-16.225	1.00	0.00	B	C
ATOM	7971	C	PHE A 517	-2.285	34.723	-15.930	1.00	0.00	B	C
ATOM	7972	O	PHE A 517	-2.346	35.527	-15.001	1.00	0.00	B	O
ATOM	7973	N	LEU A 518	-2.709	33.455	-15.807	1.00	0.00	B	N
ATOM	7974	CA	LEU A 518	-3.334	33.008	-14.595	1.00	0.00	B	C
ATOM	7975	CB	LEU A 518	-3.891	31.578	-14.680	1.00	0.00	B	C
ATOM	7976	CG	LEU A 518	-4.606	31.139	-13.385	1.00	0.00	B	C
ATOM	7977	CD1	LEU A 518	-5.848	32.002	-13.112	1.00	0.00	B	C
ATOM	7978	CD2	LEU A 518	-4.926	29.635	-13.400	1.00	0.00	B	C
ATOM	7979	C	LEU A 518	-2.361	33.054	-13.450	1.00	0.00	B	C
ATOM	7980	O	LEU A 518	-2.724	33.421	-12.340	1.00	0.00	B	O
ATOM	7981	N	GLN A 519	-1.094	32.668	-13.654	1.00	0.00	B	N
ATOM	7982	CA	GLN A 519	-0.180	32.661	-12.543	1.00	0.00	B	C
ATOM	7983	CB	GLN A 519	1.220	32.148	-12.914	1.00	0.00	B	C
ATOM	7984	CG	GLN A 519	2.187	32.174	-11.729	1.00	0.00	B	C
ATOM	7985	CD	GLN A 519	3.600	32.096	-12.281	1.00	0.00	B	C
ATOM	7986	OE1	GLN A 519	3.805	31.965	-13.487	1.00	0.00	B	O
ATOM	7987	NE2	GLN A 519	4.610	32.194	-11.376	1.00	0.00	B	N
ATOM	7988	C	GLN A 519	0.048	34.050	-12.040	1.00	0.00	B	C
ATOM	7989	O	GLN A 519	0.042	34.294	-10.834	1.00	0.00	B	O
ATOM	7990	N	SER A 520	0.260	34.998	-12.967	1.00	0.00	B	N
ATOM	7991	CA	SER A 520	0.609	36.335	-12.590	1.00	0.00	B	C
ATOM	7992	CB	SER A 520	0.935	37.228	-13.799	1.00	0.00	B	C
ATOM	7993	OG	SER A 520	-0.192	37.322	-14.655	1.00	0.00	B	O
ATOM	7994	C	SER A 520	-0.515	36.956	-11.826	1.00	0.00	B	C
ATOM	7995	O	SER A 520	-0.277	37.683	-10.862	1.00	0.00	B	O
ATOM	7996	N	LEU A 521	-1.774	36.694	-12.222	1.00	0.00	B	N
ATOM	7997	CA	LEU A 521	-2.844	37.320	-11.500	1.00	0.00	B	C
ATOM	7998	CB	LEU A 521	-4.238	37.213	-12.164	1.00	0.00	B	C

ATOM	7999	CG	LEU	A	521	-5.295	36.281	-11.523	1.00	0.00	B	C
ATOM	8000	CD1	LEU	A	521	-4.862	34.825	-11.450	1.00	0.00	B	C
ATOM	8001	CD2	LEU	A	521	-5.816	36.822	-10.181	1.00	0.00	B	C
ATOM	8002	C	LEU	A	521	-2.875	36.738	-10.119	1.00	0.00	B	C
ATOM	8003	O	LEU	A	521	-3.189	37.433	-9.155	1.00	0.00	B	O
ATOM	8004	N	PHE	A	522	-2.535	35.440	-9.982	1.00	0.00	B	N
ATOM	8005	CA	PHE	A	522	-2.559	34.797	-8.697	1.00	0.00	B	C
ATOM	8006	CB	PHE	A	522	-2.166	33.306	-8.729	1.00	0.00	B	C
ATOM	8007	CG	PHE	A	522	-3.406	32.498	-8.927	1.00	0.00	B	C
ATOM	8008	CD1	PHE	A	522	-3.920	32.242	-10.174	1.00	0.00	B	C
ATOM	8009	CE1	PHE	A	522	-5.069	31.493	-10.315	1.00	0.00	B	C
ATOM	8010	CZ	PHE	A	522	-5.718	30.996	-9.212	1.00	0.00	B	C
ATOM	8011	CD2	PHE	A	522	-4.067	31.996	-7.828	1.00	0.00	B	C
ATOM	8012	CE2	PHE	A	522	-5.212	31.250	-7.961	1.00	0.00	B	C
ATOM	8013	C	PHE	A	522	-1.630	35.506	-7.770	1.00	0.00	B	C
ATOM	8014	O	PHE	A	522	-1.953	35.717	-6.603	1.00	0.00	B	O
ATOM	8015	N	MET	A	523	-0.437	35.888	-8.256	1.00	0.00	B	N
ATOM	8016	CA	MET	A	523	0.477	36.582	-7.401	1.00	0.00	B	C
ATOM	8017	CB	MET	A	523	1.828	36.889	-8.061	1.00	0.00	B	C
ATOM	8018	CG	MET	A	523	2.857	37.397	-7.048	1.00	0.00	B	C
ATOM	8019	SD	MET	A	523	4.432	37.938	-7.770	1.00	0.00	B	S
ATOM	8020	CE	MET	A	523	3.720	39.401	-8.575	1.00	0.00	B	C
ATOM	8021	C	MET	A	523	-0.131	37.900	-7.010	1.00	0.00	B	C
ATOM	8022	O	MET	A	523	0.023	38.353	-5.880	1.00	0.00	B	O
ATOM	8023	N	LEU	A	524	-0.846	38.558	-7.941	1.00	0.00	B	N
ATOM	8024	CA	LEU	A	524	-1.417	39.847	-7.658	1.00	0.00	B	C
ATOM	8025	CB	LEU	A	524	-2.186	40.428	-8.858	1.00	0.00	B	C
ATOM	8026	CG	LEU	A	524	-1.318	40.675	-10.106	1.00	0.00	B	C
ATOM	8027	CD1	LEU	A	524	-2.156	41.261	-11.255	1.00	0.00	B	C
ATOM	8028	CD2	LEU	A	524	-0.078	41.522	-9.777	1.00	0.00	B	C
ATOM	8029	C	LEU	A	524	-2.403	39.695	-6.547	1.00	0.00	B	C
ATOM	8030	O	LEU	A	524	-2.500	40.540	-5.659	1.00	0.00	B	O
ATOM	8031	N	ALA	A	525	-3.177	38.598	-6.567	1.00	0.00	B	N
ATOM	8032	CA	ALA	A	525	-4.165	38.396	-5.551	1.00	0.00	B	C
ATOM	8033	CB	ALA	A	525	-4.965	37.098	-5.750	1.00	0.00	B	C
ATOM	8034	C	ALA	A	525	-3.472	38.291	-4.231	1.00	0.00	B	C
ATOM	8035	O	ALA	A	525	-3.946	38.823	-3.228	1.00	0.00	B	O
ATOM	8036	N	THR	A	526	-2.320	37.595	-4.188	1.00	0.00	B	N

ATOM	8037	CA	THR	A 526	-1.659	37.432	-2.929	1.00	0.00	B	C
ATOM	8038	CB	THR	A 526	-0.481	36.495	-2.964	1.00	0.00	B	C
ATOM	8039	OG1	THR	A 526	0.573	37.025	-3.751	1.00	0.00	B	O
ATOM	8040	CG2	THR	A 526	-0.950	35.149	-3.548	1.00	0.00	B	C
ATOM	8041	C	THR	A 526	-1.180	38.762	-2.434	1.00	0.00	B	C
ATOM	8042	O	THR	A 526	-1.279	39.048	-1.242	1.00	0.00	B	O
ATOM	8043	N	VAL	A 527	-0.659	39.620	-3.334	1.00	0.00	B	N
ATOM	8044	CA	VAL	A 527	-0.097	40.872	-2.900	1.00	0.00	B	C
ATOM	8045	CB	VAL	A 527	0.573	41.672	-3.987	1.00	0.00	B	C
ATOM	8046	CG1	VAL	A 527	1.660	40.797	-4.634	1.00	0.00	B	C
ATOM	8047	CG2	VAL	A 527	-0.478	42.236	-4.952	1.00	0.00	B	C
ATOM	8048	C	VAL	A 527	-1.156	41.728	-2.279	1.00	0.00	B	C
ATOM	8049	O	VAL	A 527	-0.917	42.369	-1.256	1.00	0.00	B	O
ATOM	8050	N	VAL	A 528	-2.364	41.772	-2.871	1.00	0.00	B	N
ATOM	8051	CA	VAL	A 528	-3.380	42.597	-2.290	1.00	0.00	B	C
ATOM	8052	CB	VAL	A 528	-4.668	42.611	-3.068	1.00	0.00	B	C
ATOM	8053	CG1	VAL	A 528	-4.380	43.170	-4.472	1.00	0.00	B	C
ATOM	8054	CG2	VAL	A 528	-5.290	41.208	-3.066	1.00	0.00	B	C
ATOM	8055	C	VAL	A 528	-3.654	42.054	-0.927	1.00	0.00	B	C
ATOM	8056	O	VAL	A 528	-3.848	42.804	0.026	1.00	0.00	B	O
ATOM	8057	N	LEU	A 529	-3.661	40.715	-0.814	1.00	0.00	B	N
ATOM	8058	CA	LEU	A 529	-3.926	40.034	0.416	1.00	0.00	B	C
ATOM	8059	CB	LEU	A 529	-4.018	38.507	0.251	1.00	0.00	B	C
ATOM	8060	CG	LEU	A 529	-5.189	38.044	-0.639	1.00	0.00	B	C
ATOM	8061	CD1	LEU	A 529	-5.248	36.511	-0.736	1.00	0.00	B	C
ATOM	8062	CD2	LEU	A 529	-6.519	38.662	-0.177	1.00	0.00	B	C
ATOM	8063	C	LEU	A 529	-2.828	40.329	1.383	1.00	0.00	B	C
ATOM	8064	O	LEU	A 529	-3.078	40.366	2.576	1.00	0.00	B	O
ATOM	8065	N	TYR	A 530	-1.580	40.506	0.916	1.00	0.00	B	N
ATOM	8066	CA	TYR	A 530	-0.431	40.771	1.746	1.00	0.00	B	C
ATOM	8067	CB	TYR	A 530	0.823	40.870	0.856	1.00	0.00	B	C
ATOM	8068	CG	TYR	A 530	2.094	40.774	1.630	1.00	0.00	B	C
ATOM	8069	CD1	TYR	A 530	2.633	39.540	1.912	1.00	0.00	B	C
ATOM	8070	CE1	TYR	A 530	3.812	39.426	2.612	1.00	0.00	B	C
ATOM	8071	CZ	TYR	A 530	4.464	40.557	3.032	1.00	0.00	B	C
ATOM	8072	OH	TYR	A 530	5.673	40.445	3.750	1.00	0.00	B	O
ATOM	8073	CD2	TYR	A 530	2.760	41.903	2.048	1.00	0.00	B	C
ATOM	8074	CE2	TYR	A 530	3.939	41.797	2.748	1.00	0.00	B	C

ATOM	8075	C	TYR A 530	-0.657	42.096	2.408	1.00	0.00	B	C
ATOM	8076	O	TYR A 530	-0.392	42.272	3.597	1.00	0.00	B	O
ATOM	8077	N	PHE A 531	-1.162	43.075	1.636	1.00	0.00	B	N
ATOM	8078	CA	PHE A 531	-1.448	44.364	2.188	1.00	0.00	B	C
ATOM	8079	CB	PHE A 531	-1.904	45.402	1.150	1.00	0.00	B	C
ATOM	8080	CG	PHE A 531	-0.669	45.822	0.442	1.00	0.00	B	C
ATOM	8081	CD1	PHE A 531	0.238	46.623	1.096	1.00	0.00	B	C
ATOM	8082	CE1	PHE A 531	1.391	47.032	0.471	1.00	0.00	B	C
ATOM	8083	CZ	PHE A 531	1.640	46.641	-0.822	1.00	0.00	B	C
ATOM	8084	CD2	PHE A 531	-0.417	45.438	-0.855	1.00	0.00	B	C
ATOM	8085	CE2	PHE A 531	0.736	45.845	-1.483	1.00	0.00	B	C
ATOM	8086	C	PHE A 531	-2.526	44.209	3.206	1.00	0.00	B	C
ATOM	8087	O	PHE A 531	-2.474	44.828	4.267	1.00	0.00	B	O
ATOM	8088	N	SER A 532	-3.546	43.387	2.896	1.00	0.00	B	N
ATOM	8089	CA	SER A 532	-4.596	43.175	3.848	1.00	0.00	B	C
ATOM	8090	CB	SER A 532	-5.834	42.450	3.277	1.00	0.00	B	C
ATOM	8091	OG	SER A 532	-5.511	41.142	2.830	1.00	0.00	B	O
ATOM	8092	C	SER A 532	-4.020	42.382	4.980	1.00	0.00	B	C
ATOM	8093	O	SER A 532	-4.586	42.330	6.068	1.00	0.00	B	O
ATOM	8094	N	HSD A 533	-2.863	41.753	4.709	1.00	0.00	B	N
ATOM	8095	CA	HSD A 533	-2.049	40.932	5.557	1.00	0.00	B	C
ATOM	8096	CB	HSD A 533	-1.356	41.708	6.695	1.00	0.00	B	C
ATOM	8097	ND1	HSD A 533	-2.951	41.672	8.670	1.00	0.00	B	N
ATOM	8098	CG	HSD A 533	-2.308	42.350	7.658	1.00	0.00	B	C
ATOM	8099	CE1	HSD A 533	-3.728	42.580	9.314	1.00	0.00	B	C
ATOM	8100	NE2	HSD A 533	-3.628	43.788	8.789	1.00	0.00	B	N
ATOM	8101	CD2	HSD A 533	-2.732	43.641	7.743	1.00	0.00	B	C
ATOM	8102	C	HSD A 533	-2.796	39.769	6.139	1.00	0.00	B	C
ATOM	8103	O	HSD A 533	-2.510	39.364	7.258	1.00	0.00	B	O
ATOM	8104	N	LEU A 534	-3.748	39.159	5.407	1.00	0.00	B	N
ATOM	8105	CA	LEU A 534	-4.412	38.004	5.958	1.00	0.00	B	C
ATOM	8106	CB	LEU A 534	-5.762	37.690	5.292	1.00	0.00	B	C
ATOM	8107	CG	LEU A 534	-6.791	38.826	5.459	1.00	0.00	B	C
ATOM	8108	CD1	LEU A 534	-8.140	38.463	4.821	1.00	0.00	B	C
ATOM	8109	CD2	LEU A 534	-6.918	39.254	6.929	1.00	0.00	B	C
ATOM	8110	C	LEU A 534	-3.508	36.830	5.742	1.00	0.00	B	C
ATOM	8111	O	LEU A 534	-2.825	36.757	4.728	1.00	0.00	B	O
ATOM	8112	N	LYS A 535	-3.496	35.874	6.689	1.00	0.00	B	N

ATOM	8113	CA	LYS	A	535	-2.633	34.721	6.658	1.00	0.00	B	C
ATOM	8114	CB	LYS	A	535	-2.771	33.859	7.920	1.00	0.00	B	C
ATOM	8115	CG	LYS	A	535	-2.227	34.532	9.182	1.00	0.00	B	C
ATOM	8116	CD	LYS	A	535	-2.681	33.867	10.483	1.00	0.00	B	C
ATOM	8117	CE	LYS	A	535	-2.419	32.361	10.532	1.00	0.00	B	C
ATOM	8118	NZ	LYS	A	535	-3.412	31.648	9.697	1.00	0.00	B	N
ATOM	8119	C	LYS	A	535	-2.958	33.854	5.479	1.00	0.00	B	C
ATOM	8120	O	LYS	A	535	-2.067	33.253	4.879	1.00	0.00	B	O
ATOM	8121	N	GLU	A	536	-4.244	33.783	5.103	1.00	0.00	B	N
ATOM	8122	CA	GLU	A	536	-4.691	32.911	4.050	1.00	0.00	B	C
ATOM	8123	CB	GLU	A	536	-6.210	32.907	3.814	1.00	0.00	B	C
ATOM	8124	CG	GLU	A	536	-6.988	32.060	4.819	1.00	0.00	B	C
ATOM	8125	CD	GLU	A	536	-8.351	31.779	4.205	1.00	0.00	B	C
ATOM	8126	OE1	GLU	A	536	-8.817	32.626	3.394	1.00	0.00	B	O
ATOM	8127	OE2	GLU	A	536	-8.941	30.715	4.530	1.00	0.00	B	O
ATOM	8128	C	GLU	A	536	-4.046	33.279	2.756	1.00	0.00	B	C
ATOM	8129	O	GLU	A	536	-4.013	32.473	1.827	1.00	0.00	B	O
ATOM	8130	N	TYR	A	537	-3.517	34.510	2.651	1.00	0.00	B	N
ATOM	8131	CA	TYR	A	537	-3.003	35.000	1.403	1.00	0.00	B	C
ATOM	8132	CB	TYR	A	537	-2.372	36.404	1.500	1.00	0.00	B	C
ATOM	8133	CG	TYR	A	537	-0.949	36.324	1.944	1.00	0.00	B	C
ATOM	8134	CD1	TYR	A	537	-0.600	36.210	3.267	1.00	0.00	B	C
ATOM	8135	CE1	TYR	A	537	0.713	36.143	3.664	1.00	0.00	B	C
ATOM	8136	CZ	TYR	A	537	1.704	36.187	2.717	1.00	0.00	B	C
ATOM	8137	OH	TYR	A	537	3.059	36.121	3.108	1.00	0.00	B	O
ATOM	8138	CD2	TYR	A	537	0.056	36.359	1.007	1.00	0.00	B	C
ATOM	8139	CE2	TYR	A	537	1.373	36.295	1.389	1.00	0.00	B	C
ATOM	8140	C	TYR	A	537	-1.944	34.061	0.907	1.00	0.00	B	C
ATOM	8141	O	TYR	A	537	-1.835	33.826	-0.295	1.00	0.00	B	O
ATOM	8142	N	VAL	A	538	-1.151	33.473	1.819	1.00	0.00	B	N
ATOM	8143	CA	VAL	A	538	-0.041	32.652	1.422	1.00	0.00	B	C
ATOM	8144	CB	VAL	A	538	0.663	32.018	2.584	1.00	0.00	B	C
ATOM	8145	CG1	VAL	A	538	-0.287	31.010	3.250	1.00	0.00	B	C
ATOM	8146	CG2	VAL	A	538	1.985	31.409	2.081	1.00	0.00	B	C
ATOM	8147	C	VAL	A	538	-0.478	31.562	0.492	1.00	0.00	B	C
ATOM	8148	O	VAL	A	538	0.180	31.346	-0.524	1.00	0.00	B	O
ATOM	8149	N	ALA	A	539	-1.624	30.901	0.761	1.00	0.00	B	N
ATOM	8150	CA	ALA	A	539	-2.033	29.766	-0.025	1.00	0.00	B	C

ATOM	8151	CB	ALA A 539	-3.425	29.231	0.360	1.00	0.00	B	C
ATOM	8152	C	ALA A 539	-2.100	30.180	-1.462	1.00	0.00	B	C
ATOM	8153	O	ALA A 539	-1.713	29.418	-2.347	1.00	0.00	B	O
ATOM	8154	N	SER A 540	-2.577	31.406	-1.731	1.00	0.00	B	N
ATOM	8155	CA	SER A 540	-2.660	31.887	-3.080	1.00	0.00	B	C
ATOM	8156	CB	SER A 540	-3.289	33.289	-3.167	1.00	0.00	B	C
ATOM	8157	OG	SER A 540	-4.636	33.246	-2.722	1.00	0.00	B	O
ATOM	8158	C	SER A 540	-1.276	31.985	-3.655	1.00	0.00	B	C
ATOM	8159	O	SER A 540	-1.052	31.650	-4.818	1.00	0.00	B	O
ATOM	8160	N	MET A 541	-0.306	32.453	-2.848	1.00	0.00	B	N
ATOM	8161	CA	MET A 541	1.047	32.590	-3.309	1.00	0.00	B	C
ATOM	8162	CB	MET A 541	1.996	33.219	-2.277	1.00	0.00	B	C
ATOM	8163	CG	MET A 541	1.754	34.707	-2.034	1.00	0.00	B	C
ATOM	8164	SD	MET A 541	3.059	35.495	-1.048	1.00	0.00	B	S
ATOM	8165	CE	MET A 541	4.343	35.272	-2.315	1.00	0.00	B	C
ATOM	8166	C	MET A 541	1.590	31.232	-3.619	1.00	0.00	B	C
ATOM	8167	O	MET A 541	2.323	31.054	-4.592	1.00	0.00	B	O
ATOM	8168	N	VAL A 542	1.226	30.230	-2.798	1.00	0.00	B	N
ATOM	8169	CA	VAL A 542	1.734	28.900	-2.969	1.00	0.00	B	C
ATOM	8170	CB	VAL A 542	1.127	27.915	-2.012	1.00	0.00	B	C
ATOM	8171	CG1	VAL A 542	1.611	26.508	-2.397	1.00	0.00	B	C
ATOM	8172	CG2	VAL A 542	1.488	28.322	-0.575	1.00	0.00	B	C
ATOM	8173	C	VAL A 542	1.369	28.449	-4.342	1.00	0.00	B	C
ATOM	8174	O	VAL A 542	2.181	27.836	-5.036	1.00	0.00	B	O
ATOM	8175	N	PHE A 543	0.135	28.747	-4.781	1.00	0.00	B	N
ATOM	8176	CA	PHE A 543	-0.242	28.378	-6.116	1.00	0.00	B	C
ATOM	8177	CB	PHE A 543	-1.649	28.846	-6.538	1.00	0.00	B	C
ATOM	8178	CG	PHE A 543	-2.648	27.799	-6.210	1.00	0.00	B	C
ATOM	8179	CD1	PHE A 543	-3.134	27.631	-4.936	1.00	0.00	B	C
ATOM	8180	CE1	PHE A 543	-4.063	26.649	-4.679	1.00	0.00	B	C
ATOM	8181	CZ	PHE A 543	-4.516	25.837	-5.693	1.00	0.00	B	C
ATOM	8182	CD2	PHE A 543	-3.111	26.986	-7.219	1.00	0.00	B	C
ATOM	8183	CE2	PHE A 543	-4.039	26.006	-6.969	1.00	0.00	B	C
ATOM	8184	C	PHE A 543	0.677	29.065	-7.068	1.00	0.00	B	C
ATOM	8185	O	PHE A 543	1.135	28.468	-8.043	1.00	0.00	B	O
ATOM	8186	N	SER A 544	0.967	30.345	-6.802	1.00	0.00	B	N
ATOM	8187	CA	SER A 544	1.745	31.142	-7.705	1.00	0.00	B	C
ATOM	8188	CB	SER A 544	1.920	32.588	-7.200	1.00	0.00	B	C

ATOM	8189	OG	SER A 544	2.698	33.347	-8.114	1.00	0.00	B	O
ATOM	8190	C	SER A 544	3.115	30.566	-7.902	1.00	0.00	B	C
ATOM	8191	O	SER A 544	3.597	30.505	-9.032	1.00	0.00	B	O
ATOM	8192	N	LEU A 545	3.784	30.133	-6.819	1.00	0.00	B	N
ATOM	8193	CA	LEU A 545	5.140	29.665	-6.937	1.00	0.00	B	C
ATOM	8194	CB	LEU A 545	5.777	29.313	-5.587	1.00	0.00	B	C
ATOM	8195	CG	LEU A 545	7.225	28.813	-5.738	1.00	0.00	B	C
ATOM	8196	CD1	LEU A 545	8.151	29.906	-6.292	1.00	0.00	B	C
ATOM	8197	CD2	LEU A 545	7.745	28.212	-4.426	1.00	0.00	B	C
ATOM	8198	C	LEU A 545	5.235	28.430	-7.778	1.00	0.00	B	C
ATOM	8199	O	LEU A 545	6.114	28.333	-8.634	1.00	0.00	B	O
ATOM	8200	N	ALA A 546	4.360	27.437	-7.518	1.00	0.00	B	N
ATOM	8201	CA	ALA A 546	4.351	26.174	-8.211	1.00	0.00	B	C
ATOM	8202	CB	ALA A 546	3.365	25.170	-7.593	1.00	0.00	B	C
ATOM	8203	C	ALA A 546	3.954	26.360	-9.642	1.00	0.00	B	C
ATOM	8204	O	ALA A 546	4.548	25.769	-10.542	1.00	0.00	B	O
ATOM	8205	N	LEU A 547	2.933	27.200	-9.882	1.00	0.00	B	N
ATOM	8206	CA	LEU A 547	2.415	27.382	-11.204	1.00	0.00	B	C
ATOM	8207	CB	LEU A 547	1.234	28.370	-11.259	1.00	0.00	B	C
ATOM	8208	CG	LEU A 547	-0.037	27.883	-10.536	1.00	0.00	B	C
ATOM	8209	CD1	LEU A 547	-1.175	28.909	-10.665	1.00	0.00	B	C
ATOM	8210	CD2	LEU A 547	-0.447	26.480	-11.013	1.00	0.00	B	C
ATOM	8211	C	LEU A 547	3.492	27.949	-12.070	1.00	0.00	B	C
ATOM	8212	O	LEU A 547	3.653	27.545	-13.221	1.00	0.00	B	O
ATOM	8213	N	GLY A 548	4.263	28.909	-11.533	1.00	0.00	B	N
ATOM	8214	CA	GLY A 548	5.286	29.536	-12.315	1.00	0.00	B	C
ATOM	8215	C	GLY A 548	6.303	28.516	-12.719	1.00	0.00	B	C
ATOM	8216	O	GLY A 548	6.766	28.512	-13.858	1.00	0.00	B	O
ATOM	8217	N	TRP A 549	6.685	27.615	-11.793	1.00	0.00	B	N
ATOM	8218	CA	TRP A 549	7.680	26.639	-12.128	1.00	0.00	B	C
ATOM	8219	CB	TRP A 549	8.102	25.733	-10.959	1.00	0.00	B	C
ATOM	8220	CG	TRP A 549	9.076	26.395	-10.021	1.00	0.00	B	C
ATOM	8221	CD1	TRP A 549	8.927	26.852	-8.743	1.00	0.00	B	C
ATOM	8222	NE1	TRP A 549	10.105	27.406	-8.304	1.00	0.00	B	N
ATOM	8223	CE2	TRP A 549	11.038	27.315	-9.317	1.00	0.00	B	C
ATOM	8224	CD2	TRP A 549	10.427	26.690	-10.405	1.00	0.00	B	C
ATOM	8225	CE3	TRP A 549	11.098	26.460	-11.570	1.00	0.00	B	C
ATOM	8226	CZ3	TRP A 549	12.412	26.867	-11.631	1.00	0.00	B	C

ATOM	8227	CZ2 TRP A 549	12.340	27.721	-9.382	1.00	0.00	B	C
ATOM	8228	CH2 TRP A 549	13.020	27.483	-10.557	1.00	0.00	B	C
ATOM	8229	C TRP A 549	7.185	25.765	-13.234	1.00	0.00	B	C
ATOM	8230	O TRP A 549	7.917	25.489	-14.182	1.00	0.00	B	O
ATOM	8231	N THR A 550	5.920	25.324	-13.159	1.00	0.00	B	N
ATOM	8232	CA THR A 550	5.408	24.440	-14.166	1.00	0.00	B	C
ATOM	8233	CB THR A 550	3.995	24.013	-13.900	1.00	0.00	B	C
ATOM	8234	OG1 THR A 550	3.110	25.120	-13.986	1.00	0.00	B	O
ATOM	8235	CG2 THR A 550	3.942	23.414	-12.484	1.00	0.00	B	C
ATOM	8236	C THR A 550	5.453	25.164	-15.479	1.00	0.00	B	C
ATOM	8237	O THR A 550	5.739	24.569	-16.516	1.00	0.00	B	O
ATOM	8238	N ASN A 551	5.174	26.479	-15.454	1.00	0.00	B	N
ATOM	8239	CA ASN A 551	5.151	27.314	-16.626	1.00	0.00	B	C
ATOM	8240	CB ASN A 551	4.743	28.767	-16.324	1.00	0.00	B	C
ATOM	8241	CG ASN A 551	3.280	28.803	-15.910	1.00	0.00	B	C
ATOM	8242	OD1 ASN A 551	2.530	27.853	-16.127	1.00	0.00	B	O
ATOM	8243	ND2 ASN A 551	2.855	29.944	-15.302	1.00	0.00	B	N
ATOM	8244	C ASN A 551	6.525	27.380	-17.232	1.00	0.00	B	C
ATOM	8245	O ASN A 551	6.668	27.455	-18.453	1.00	0.00	B	O
ATOM	8246	N MET A 552	7.573	27.321	-16.393	1.00	0.00	B	N
ATOM	8247	CA MET A 552	8.941	27.518	-16.802	1.00	0.00	B	C
ATOM	8248	CB MET A 552	9.935	27.417	-15.633	1.00	0.00	B	C
ATOM	8249	CG MET A 552	11.326	27.940	-15.997	1.00	0.00	B	C
ATOM	8250	SD MET A 552	12.556	27.855	-14.663	1.00	0.00	B	S
ATOM	8251	CE MET A 552	12.968	26.108	-14.910	1.00	0.00	B	C
ATOM	8252	C MET A 552	9.342	26.491	-17.819	1.00	0.00	B	C
ATOM	8253	O MET A 552	10.175	26.753	-18.685	1.00	0.00	B	O
ATOM	8254	N LEU A 553	8.741	25.293	-17.746	1.00	0.00	B	N
ATOM	8255	CA LEU A 553	9.064	24.151	-18.561	1.00	0.00	B	C
ATOM	8256	CB LEU A 553	8.078	22.997	-18.338	1.00	0.00	B	C
ATOM	8257	CG LEU A 553	7.824	22.692	-16.855	1.00	0.00	B	C
ATOM	8258	CD1 LEU A 553	7.066	21.365	-16.682	1.00	0.00	B	C
ATOM	8259	CD2 LEU A 553	9.109	22.805	-16.028	1.00	0.00	B	C
ATOM	8260	C LEU A 553	8.895	24.511	-20.013	1.00	0.00	B	C
ATOM	8261	O LEU A 553	9.535	23.933	-20.889	1.00	0.00	B	O
ATOM	8262	N TYR A 554	7.992	25.466	-20.283	1.00	0.00	B	N
ATOM	8263	CA TYR A 554	7.577	25.944	-21.577	1.00	0.00	B	C
ATOM	8264	CB TYR A 554	6.495	27.029	-21.397	1.00	0.00	B	C

ATOM	8265	CG	TYR	A 554	6.554	28.084	-22.447	1.00	0.00	B	C
ATOM	8266	CD1	TYR	A 554	6.199	27.862	-23.758	1.00	0.00	B	C
ATOM	8267	CE1	TYR	A 554	6.265	28.890	-24.675	1.00	0.00	B	C
ATOM	8268	CZ	TYR	A 554	6.674	30.145	-24.290	1.00	0.00	B	C
ATOM	8269	OH	TYR	A 554	6.742	31.199	-25.226	1.00	0.00	B	O
ATOM	8270	CD2	TYR	A 554	6.951	29.346	-22.073	1.00	0.00	B	C
ATOM	8271	CE2	TYR	A 554	7.017	30.375	-22.982	1.00	0.00	B	C
ATOM	8272	C	TYR	A 554	8.714	26.483	-22.406	1.00	0.00	B	C
ATOM	8273	O	TYR	A 554	8.755	26.256	-23.614	1.00	0.00	B	O
ATOM	8274	N	TYR	A 555	9.686	27.170	-21.787	1.00	0.00	B	N
ATOM	8275	CA	TYR	A 555	10.759	27.807	-22.502	1.00	0.00	B	C
ATOM	8276	CB	TYR	A 555	11.785	28.535	-21.609	1.00	0.00	B	C
ATOM	8277	CG	TYR	A 555	11.255	29.887	-21.269	1.00	0.00	B	C
ATOM	8278	CD1	TYR	A 555	11.420	30.919	-22.168	1.00	0.00	B	C
ATOM	8279	CE1	TYR	A 555	10.953	32.180	-21.892	1.00	0.00	B	C
ATOM	8280	CZ	TYR	A 555	10.311	32.425	-20.704	1.00	0.00	B	C
ATOM	8281	OH	TYR	A 555	9.831	33.722	-20.422	1.00	0.00	B	O
ATOM	8282	CD2	TYR	A 555	10.614	30.142	-20.078	1.00	0.00	B	C
ATOM	8283	CE2	TYR	A 555	10.141	31.405	-19.797	1.00	0.00	B	C
ATOM	8284	C	TYR	A 555	11.498	26.825	-23.344	1.00	0.00	B	C
ATOM	8285	O	TYR	A 555	12.086	27.195	-24.356	1.00	0.00	B	O
ATOM	8286	N	THR	A 556	11.527	25.552	-22.943	1.00	0.00	B	N
ATOM	8287	CA	THR	A 556	12.274	24.563	-23.657	1.00	0.00	B	C
ATOM	8288	CB	THR	A 556	12.248	23.237	-22.973	1.00	0.00	B	C
ATOM	8289	OG1	THR	A 556	12.609	23.394	-21.609	1.00	0.00	B	O
ATOM	8290	CG2	THR	A 556	13.317	22.364	-23.645	1.00	0.00	B	C
ATOM	8291	C	THR	A 556	11.719	24.434	-25.051	1.00	0.00	B	C
ATOM	8292	O	THR	A 556	12.392	23.932	-25.946	1.00	0.00	B	O
ATOM	8293	N	ARG	A 557	10.462	24.860	-25.279	1.00	0.00	B	N
ATOM	8294	CA	ARG	A 557	9.810	24.718	-26.557	1.00	0.00	B	C
ATOM	8295	CB	ARG	A 557	8.408	25.355	-26.580	1.00	0.00	B	C
ATOM	8296	CG	ARG	A 557	7.420	24.638	-25.657	1.00	0.00	B	C
ATOM	8297	CD	ARG	A 557	6.073	25.348	-25.484	1.00	0.00	B	C
ATOM	8298	NE	ARG	A 557	5.260	25.115	-26.710	1.00	0.00	B	N
ATOM	8299	CZ	ARG	A 557	3.898	25.090	-26.644	1.00	0.00	B	C
ATOM	8300	NH1	ARG	A 557	3.249	25.239	-25.449	1.00	0.00	B	N
ATOM	8301	NH2	ARG	A 557	3.173	24.909	-27.787	1.00	0.00	B	N
ATOM	8302	C	ARG	A 557	10.620	25.306	-27.678	1.00	0.00	B	C

ATOM	8303	O	ARG A 557	11.315	26.314	-27.530	1.00	0.00	B	O
ATOM	8304	N	GLY A 558	10.495	24.669	-28.862	1.00	0.00	B	N
ATOM	8305	CA	GLY A 558	11.227	25.026	-30.042	1.00	0.00	B	C
ATOM	8306	C	GLY A 558	12.347	24.045	-30.229	1.00	0.00	B	C
ATOM	8307	O	GLY A 558	13.142	24.178	-31.158	1.00	0.00	B	O
ATOM	8308	N	PHE A 559	12.452	23.032	-29.345	1.00	0.00	B	N
ATOM	8309	CA	PHE A 559	13.486	22.043	-29.495	1.00	0.00	B	C
ATOM	8310	CB	PHE A 559	14.316	21.853	-28.213	1.00	0.00	B	C
ATOM	8311	CG	PHE A 559	15.104	23.116	-28.094	1.00	0.00	B	C
ATOM	8312	CD1	PHE A 559	14.509	24.264	-27.628	1.00	0.00	B	C
ATOM	8313	CE1	PHE A 559	15.202	25.444	-27.521	1.00	0.00	B	C
ATOM	8314	CZ	PHE A 559	16.521	25.482	-27.899	1.00	0.00	B	C
ATOM	8315	CD2	PHE A 559	16.421	23.172	-28.488	1.00	0.00	B	C
ATOM	8316	CE2	PHE A 559	17.129	24.347	-28.384	1.00	0.00	B	C
ATOM	8317	C	PHE A 559	12.812	20.783	-29.907	1.00	0.00	B	C
ATOM	8318	O	PHE A 559	11.719	20.489	-29.453	1.00	0.00	B	O
ATOM	8319	N	GLN A 560	13.401	20.000	-30.819	1.00	0.00	B	N
ATOM	8320	CA	GLN A 560	12.692	18.877	-31.360	1.00	0.00	B	C
ATOM	8321	CB	GLN A 560	13.518	18.124	-32.417	1.00	0.00	B	C
ATOM	8322	CG	GLN A 560	13.858	18.929	-33.673	1.00	0.00	B	C
ATOM	8323	CD	GLN A 560	15.108	19.774	-33.448	1.00	0.00	B	C
ATOM	8324	OE1	GLN A 560	15.527	20.073	-32.333	1.00	0.00	B	O
ATOM	8325	NE2	GLN A 560	15.739	20.177	-34.584	1.00	0.00	B	N
ATOM	8326	C	GLN A 560	12.372	17.875	-30.297	1.00	0.00	B	C
ATOM	8327	O	GLN A 560	11.243	17.402	-30.200	1.00	0.00	B	O
ATOM	8328	N	GLN A 561	13.364	17.500	-29.475	1.00	0.00	B	N
ATOM	8329	CA	GLN A 561	13.087	16.513	-28.472	1.00	0.00	B	C
ATOM	8330	CB	GLN A 561	14.347	16.107	-27.687	1.00	0.00	B	C
ATOM	8331	CG	GLN A 561	15.383	15.308	-28.484	1.00	0.00	B	C
ATOM	8332	CD	GLN A 561	15.041	13.833	-28.328	1.00	0.00	B	C
ATOM	8333	OE1	GLN A 561	13.900	13.484	-28.029	1.00	0.00	B	O
ATOM	8334	NE2	GLN A 561	16.054	12.946	-28.521	1.00	0.00	B	N
ATOM	8335	C	GLN A 561	12.145	17.090	-27.461	1.00	0.00	B	C
ATOM	8336	O	GLN A 561	11.127	16.492	-27.117	1.00	0.00	B	O
ATOM	8337	N	MET A 562	12.480	18.299	-26.978	1.00	0.00	B	N
ATOM	8338	CA	MET A 562	11.799	18.948	-25.897	1.00	0.00	B	C
ATOM	8339	CB	MET A 562	12.547	20.210	-25.476	1.00	0.00	B	C
ATOM	8340	CG	MET A 562	14.020	19.929	-25.191	1.00	0.00	B	C

ATOM	8341	SD	MET A 562	14.301	18.524	-24.075	1.00	0.00	B	S
ATOM	8342	CE	MET A 562	13.464	19.274	-22.647	1.00	0.00	B	C
ATOM	8343	C	MET A 562	10.410	19.366	-26.253	1.00	0.00	B	C
ATOM	8344	O	MET A 562	9.463	19.188	-25.494	1.00	0.00	B	O
ATOM	8345	N	GLY A 563	10.276	19.926	-27.453	1.00	0.00	B	N
ATOM	8346	CA	GLY A 563	9.091	20.510	-27.994	1.00	0.00	B	C
ATOM	8347	C	GLY A 563	8.059	19.450	-28.062	1.00	0.00	B	C
ATOM	8348	O	GLY A 563	6.881	19.698	-27.819	1.00	0.00	B	O
ATOM	8349	N	ILE A 564	8.476	18.226	-28.416	1.00	0.00	B	N
ATOM	8350	CA	ILE A 564	7.505	17.189	-28.551	1.00	0.00	B	C
ATOM	8351	CB	ILE A 564	8.068	15.922	-29.105	1.00	0.00	B	C
ATOM	8352	CG2	ILE A 564	6.930	14.895	-29.219	1.00	0.00	B	C
ATOM	8353	CG1	ILE A 564	8.772	16.250	-30.429	1.00	0.00	B	C
ATOM	8354	CD	ILE A 564	8.011	17.266	-31.282	1.00	0.00	B	C
ATOM	8355	C	ILE A 564	6.883	16.905	-27.217	1.00	0.00	B	C
ATOM	8356	O	ILE A 564	5.671	16.729	-27.121	1.00	0.00	B	O
ATOM	8357	N	TYR A 565	7.693	16.861	-26.146	1.00	0.00	B	N
ATOM	8358	CA	TYR A 565	7.171	16.519	-24.853	1.00	0.00	B	C
ATOM	8359	CB	TYR A 565	8.283	16.294	-23.816	1.00	0.00	B	C
ATOM	8360	CG	TYR A 565	8.881	14.985	-24.204	1.00	0.00	B	C
ATOM	8361	CD1	TYR A 565	9.887	14.910	-25.138	1.00	0.00	B	C
ATOM	8362	CE1	TYR A 565	10.419	13.694	-25.493	1.00	0.00	B	C
ATOM	8363	CZ	TYR A 565	9.944	12.537	-24.921	1.00	0.00	B	C
ATOM	8364	OH	TYR A 565	10.492	11.290	-25.287	1.00	0.00	B	O
ATOM	8365	CD2	TYR A 565	8.404	13.820	-23.643	1.00	0.00	B	C
ATOM	8366	CE2	TYR A 565	8.931	12.601	-23.994	1.00	0.00	B	C
ATOM	8367	C	TYR A 565	6.194	17.538	-24.353	1.00	0.00	B	C
ATOM	8368	O	TYR A 565	5.145	17.177	-23.819	1.00	0.00	B	O
ATOM	8369	N	ALA A 566	6.491	18.839	-24.514	1.00	0.00	B	N
ATOM	8370	CA	ALA A 566	5.591	19.838	-24.007	1.00	0.00	B	C
ATOM	8371	CB	ALA A 566	6.080	21.274	-24.249	1.00	0.00	B	C
ATOM	8372	C	ALA A 566	4.280	19.702	-24.710	1.00	0.00	B	C
ATOM	8373	O	ALA A 566	3.221	19.778	-24.093	1.00	0.00	B	O
ATOM	8374	N	VAL A 567	4.335	19.481	-26.035	1.00	0.00	B	N
ATOM	8375	CA	VAL A 567	3.144	19.405	-26.826	1.00	0.00	B	C
ATOM	8376	CB	VAL A 567	3.431	19.217	-28.288	1.00	0.00	B	C
ATOM	8377	CG1	VAL A 567	2.094	19.088	-29.037	1.00	0.00	B	C
ATOM	8378	CG2	VAL A 567	4.299	20.392	-28.769	1.00	0.00	B	C

ATOM	8379	C	VAL A 567	2.319	18.248	-26.354	1.00	0.00	B	C
ATOM	8380	O	VAL A 567	1.101	18.361	-26.221	1.00	0.00	B	O
ATOM	8381	N	MET A 568	2.957	17.098	-26.072	1.00	0.00	B	N
ATOM	8382	CA	MET A 568	2.193	15.949	-25.682	1.00	0.00	B	C
ATOM	8383	CB	MET A 568	3.020	14.658	-25.568	1.00	0.00	B	C
ATOM	8384	CG	MET A 568	4.096	14.677	-24.486	1.00	0.00	B	C
ATOM	8385	SD	MET A 568	4.985	13.101	-24.324	1.00	0.00	B	S
ATOM	8386	CE	MET A 568	5.673	13.147	-26.005	1.00	0.00	B	C
ATOM	8387	C	MET A 568	1.525	16.218	-24.372	1.00	0.00	B	C
ATOM	8388	O	MET A 568	0.378	15.829	-24.161	1.00	0.00	B	O
ATOM	8389	N	ILE A 569	2.231	16.906	-23.458	1.00	0.00	B	N
ATOM	8390	CA	ILE A 569	1.686	17.197	-22.165	1.00	0.00	B	C
ATOM	8391	CB	ILE A 569	2.644	17.955	-21.297	1.00	0.00	B	C
ATOM	8392	CG2	ILE A 569	1.853	18.558	-20.134	1.00	0.00	B	C
ATOM	8393	CG1	ILE A 569	3.823	17.067	-20.877	1.00	0.00	B	C
ATOM	8394	CD	ILE A 569	4.952	17.844	-20.202	1.00	0.00	B	C
ATOM	8395	C	ILE A 569	0.478	18.057	-22.325	1.00	0.00	B	C
ATOM	8396	O	ILE A 569	-0.553	17.816	-21.702	1.00	0.00	B	O
ATOM	8397	N	GLU A 570	0.568	19.084	-23.180	1.00	0.00	B	N
ATOM	8398	CA	GLU A 570	-0.549	19.964	-23.333	1.00	0.00	B	C
ATOM	8399	CB	GLU A 570	-0.224	21.192	-24.178	1.00	0.00	B	C
ATOM	8400	CG	GLU A 570	0.606	22.170	-23.355	1.00	0.00	B	C
ATOM	8401	CD	GLU A 570	1.317	23.081	-24.321	1.00	0.00	B	C
ATOM	8402	OE1	GLU A 570	0.697	24.075	-24.779	1.00	0.00	B	O
ATOM	8403	OE2	GLU A 570	2.504	22.783	-24.617	1.00	0.00	B	O
ATOM	8404	C	GLU A 570	-1.697	19.211	-23.914	1.00	0.00	B	C
ATOM	8405	O	GLU A 570	-2.843	19.458	-23.550	1.00	0.00	B	O
ATOM	8406	N	LYS A 571	-1.418	18.264	-24.826	1.00	0.00	B	N
ATOM	8407	CA	LYS A 571	-2.459	17.503	-25.457	1.00	0.00	B	C
ATOM	8408	CB	LYS A 571	-1.922	16.476	-26.467	1.00	0.00	B	C
ATOM	8409	CG	LYS A 571	-3.018	15.581	-27.057	1.00	0.00	B	C
ATOM	8410	CD	LYS A 571	-3.995	16.295	-27.993	1.00	0.00	B	C
ATOM	8411	CE	LYS A 571	-5.105	15.378	-28.515	1.00	0.00	B	C
ATOM	8412	NZ	LYS A 571	-5.665	15.918	-29.770	1.00	0.00	B	N
ATOM	8413	C	LYS A 571	-3.208	16.710	-24.436	1.00	0.00	B	C
ATOM	8414	O	LYS A 571	-4.432	16.614	-24.484	1.00	0.00	B	O
ATOM	8415	N	MET A 572	-2.494	16.096	-23.483	1.00	0.00	B	N
ATOM	8416	CA	MET A 572	-3.186	15.262	-22.550	1.00	0.00	B	C

ATOM	8417	CB	MET A 572	-2.215	14.480	-21.654	1.00	0.00	B	C
ATOM	8418	CG	MET A 572	-1.360	13.544	-22.510	1.00	0.00	B	C
ATOM	8419	SD	MET A 572	-0.179	12.482	-21.636	1.00	0.00	B	S
ATOM	8420	CE	MET A 572	0.443	11.775	-23.188	1.00	0.00	B	C
ATOM	8421	C	MET A 572	-4.111	16.083	-21.714	1.00	0.00	B	C
ATOM	8422	O	MET A 572	-5.249	15.680	-21.458	1.00	0.00	B	O
ATOM	8423	N	ILE A 573	-3.646	17.254	-21.261	1.00	0.00	B	N
ATOM	8424	CA	ILE A 573	-4.400	18.119	-20.401	1.00	0.00	B	C
ATOM	8425	CB	ILE A 573	-3.538	19.218	-19.854	1.00	0.00	B	C
ATOM	8426	CG2	ILE A 573	-4.403	20.109	-18.947	1.00	0.00	B	C
ATOM	8427	CG1	ILE A 573	-2.333	18.597	-19.122	1.00	0.00	B	C
ATOM	8428	CD	ILE A 573	-1.217	19.588	-18.803	1.00	0.00	B	C
ATOM	8429	C	ILE A 573	-5.556	18.724	-21.130	1.00	0.00	B	C
ATOM	8430	O	ILE A 573	-6.664	18.788	-20.601	1.00	0.00	B	O
ATOM	8431	N	LEU A 574	-5.343	19.228	-22.357	1.00	0.00	B	N
ATOM	8432	CA	LEU A 574	-6.466	19.843	-22.989	1.00	0.00	B	C
ATOM	8433	CB	LEU A 574	-6.063	20.498	-24.318	1.00	0.00	B	C
ATOM	8434	CG	LEU A 574	-4.884	21.476	-24.142	1.00	0.00	B	C
ATOM	8435	CD1	LEU A 574	-4.545	22.199	-25.451	1.00	0.00	B	C
ATOM	8436	CD2	LEU A 574	-5.105	22.433	-22.960	1.00	0.00	B	C
ATOM	8437	C	LEU A 574	-7.511	18.798	-23.275	1.00	0.00	B	C
ATOM	8438	O	LEU A 574	-8.638	18.897	-22.793	1.00	0.00	B	O
ATOM	8439	N	ARG A 575	-7.166	17.785	-24.102	1.00	0.00	B	N
ATOM	8440	CA	ARG A 575	-8.124	16.788	-24.516	1.00	0.00	B	C
ATOM	8441	CB	ARG A 575	-7.668	16.137	-25.826	1.00	0.00	B	C
ATOM	8442	CG	ARG A 575	-7.310	17.170	-26.893	1.00	0.00	B	C
ATOM	8443	CD	ARG A 575	-8.503	18.005	-27.352	1.00	0.00	B	C
ATOM	8444	NE	ARG A 575	-8.011	18.938	-28.405	1.00	0.00	B	N
ATOM	8445	CZ	ARG A 575	-7.877	18.499	-29.691	1.00	0.00	B	C
ATOM	8446	NH1	ARG A 575	-8.177	17.207	-30.010	1.00	0.00	B	N
ATOM	8447	NH2	ARG A 575	-7.437	19.351	-30.665	1.00	0.00	B	N
ATOM	8448	C	ARG A 575	-8.438	15.649	-23.578	1.00	0.00	B	C
ATOM	8449	O	ARG A 575	-9.522	15.571	-23.002	1.00	0.00	B	O
ATOM	8450	N	ASP A 576	-7.436	14.762	-23.362	1.00	0.00	B	N
ATOM	8451	CA	ASP A 576	-7.642	13.466	-22.757	1.00	0.00	B	C
ATOM	8452	CB	ASP A 576	-6.386	12.581	-22.882	1.00	0.00	B	C
ATOM	8453	CG	ASP A 576	-6.772	11.122	-22.688	1.00	0.00	B	C
ATOM	8454	OD1	ASP A 576	-7.697	10.846	-21.880	1.00	0.00	B	O

ATOM	8455	OD2 ASP A 576	-6.138	10.257	-23.354	1.00	0.00	B	O
ATOM	8456	C ASP A 576	-8.022	13.536	-21.313	1.00	0.00	B	C
ATOM	8457	O ASP A 576	-9.007	12.932	-20.888	1.00	0.00	B	O
ATOM	8458	N LEU A 577	-7.239	14.280	-20.519	1.00	0.00	B	N
ATOM	8459	CA LEU A 577	-7.488	14.394	-19.116	1.00	0.00	B	C
ATOM	8460	CB LEU A 577	-6.428	15.236	-18.392	1.00	0.00	B	C
ATOM	8461	CG LEU A 577	-6.824	15.559	-16.944	1.00	0.00	B	C
ATOM	8462	CD1 LEU A 577	-7.052	14.281	-16.124	1.00	0.00	B	C
ATOM	8463	CD2 LEU A 577	-5.820	16.519	-16.292	1.00	0.00	B	C
ATOM	8464	C LEU A 577	-8.786	15.091	-18.923	1.00	0.00	B	C
ATOM	8465	O LEU A 577	-9.608	14.685	-18.105	1.00	0.00	B	O
ATOM	8466	N CYS A 578	-9.004	16.160	-19.703	1.00	0.00	B	N
ATOM	8467	CA CYS A 578	-10.180	16.957	-19.538	1.00	0.00	B	C
ATOM	8468	CB CYS A 578	-10.218	18.154	-20.501	1.00	0.00	B	C
ATOM	8469	SG CYS A 578	-11.708	19.173	-20.298	1.00	0.00	B	S
ATOM	8470	C CYS A 578	-11.381	16.115	-19.813	1.00	0.00	B	C
ATOM	8471	O CYS A 578	-12.357	16.158	-19.069	1.00	0.00	B	O
ATOM	8472	N ARG A 579	-11.343	15.320	-20.895	1.00	0.00	B	N
ATOM	8473	CA ARG A 579	-12.483	14.528	-21.239	1.00	0.00	B	C
ATOM	8474	CB ARG A 579	-12.296	13.781	-22.570	1.00	0.00	B	C
ATOM	8475	CG ARG A 579	-12.308	14.699	-23.794	1.00	0.00	B	C
ATOM	8476	CD ARG A 579	-11.780	14.028	-25.061	1.00	0.00	B	C
ATOM	8477	NE ARG A 579	-12.055	14.939	-26.211	1.00	0.00	B	N
ATOM	8478	CZ ARG A 579	-11.159	15.045	-27.232	1.00	0.00	B	C
ATOM	8479	NH1 ARG A 579	-9.977	14.365	-27.174	1.00	0.00	B	N
ATOM	8480	NH2 ARG A 579	-11.435	15.842	-28.308	1.00	0.00	B	N
ATOM	8481	C ARG A 579	-12.733	13.508	-20.171	1.00	0.00	B	C
ATOM	8482	O ARG A 579	-13.870	13.307	-19.750	1.00	0.00	B	O
ATOM	8483	N PHE A 580	-11.660	12.850	-19.689	1.00	0.00	B	N
ATOM	8484	CA PHE A 580	-11.766	11.783	-18.733	1.00	0.00	B	C
ATOM	8485	CB PHE A 580	-10.419	11.093	-18.464	1.00	0.00	B	C
ATOM	8486	CG PHE A 580	-10.731	9.822	-17.759	1.00	0.00	B	C
ATOM	8487	CD1 PHE A 580	-11.122	8.722	-18.487	1.00	0.00	B	C
ATOM	8488	CE1 PHE A 580	-11.416	7.537	-17.857	1.00	0.00	B	C
ATOM	8489	CZ PHE A 580	-11.316	7.456	-16.490	1.00	0.00	B	C
ATOM	8490	CD2 PHE A 580	-10.636	9.727	-16.390	1.00	0.00	B	C
ATOM	8491	CE2 PHE A 580	-10.927	8.545	-15.754	1.00	0.00	B	C
ATOM	8492	C PHE A 580	-12.271	12.300	-17.429	1.00	0.00	B	C

ATOM	8493	O	PHE A 580	-13.094	11.661	-16.780	1.00	0.00	B	O
ATOM	8494	N	MET A 581	-11.808	13.489	-17.014	1.00	0.00	B	N
ATOM	8495	CA	MET A 581	-12.186	13.978	-15.726	1.00	0.00	B	C
ATOM	8496	CB	MET A 581	-11.583	15.338	-15.365	1.00	0.00	B	C
ATOM	8497	CG	MET A 581	-12.210	15.888	-14.087	1.00	0.00	B	C
ATOM	8498	SD	MET A 581	-11.230	17.138	-13.225	1.00	0.00	B	S
ATOM	8499	CE	MET A 581	-10.330	15.928	-12.211	1.00	0.00	B	C
ATOM	8500	C	MET A 581	-13.668	14.101	-15.681	1.00	0.00	B	C
ATOM	8501	O	MET A 581	-14.277	13.858	-14.641	1.00	0.00	B	O
ATOM	8502	N	PHE A 582	-14.304	14.487	-16.797	1.00	0.00	B	N
ATOM	8503	CA	PHE A 582	-15.731	14.571	-16.735	1.00	0.00	B	C
ATOM	8504	CB	PHE A 582	-16.386	15.012	-18.057	1.00	0.00	B	C
ATOM	8505	CG	PHE A 582	-16.123	16.464	-18.264	1.00	0.00	B	C
ATOM	8506	CD1	PHE A 582	-16.743	17.395	-17.461	1.00	0.00	B	C
ATOM	8507	CE1	PHE A 582	-16.520	18.739	-17.637	1.00	0.00	B	C
ATOM	8508	CZ	PHE A 582	-15.674	19.167	-18.634	1.00	0.00	B	C
ATOM	8509	CD2	PHE A 582	-15.286	16.901	-19.265	1.00	0.00	B	C
ATOM	8510	CE2	PHE A 582	-15.060	18.246	-19.447	1.00	0.00	B	C
ATOM	8511	C	PHE A 582	-16.276	13.214	-16.405	1.00	0.00	B	C
ATOM	8512	O	PHE A 582	-17.122	13.081	-15.522	1.00	0.00	B	O
ATOM	8513	N	VAL A 583	-15.799	12.167	-17.107	1.00	0.00	B	N
ATOM	8514	CA	VAL A 583	-16.284	10.825	-16.925	1.00	0.00	B	C
ATOM	8515	CB	VAL A 583	-15.672	9.870	-17.909	1.00	0.00	B	C
ATOM	8516	CG1	VAL A 583	-16.192	8.454	-17.607	1.00	0.00	B	C
ATOM	8517	CG2	VAL A 583	-15.971	10.366	-19.333	1.00	0.00	B	C
ATOM	8518	C	VAL A 583	-15.950	10.298	-15.556	1.00	0.00	B	C
ATOM	8519	O	VAL A 583	-16.808	9.745	-14.874	1.00	0.00	B	O
ATOM	8520	N	TYR A 584	-14.690	10.452	-15.112	1.00	0.00	B	N
ATOM	8521	CA	TYR A 584	-14.283	9.925	-13.842	1.00	0.00	B	C
ATOM	8522	CB	TYR A 584	-12.779	10.097	-13.552	1.00	0.00	B	C
ATOM	8523	CG	TYR A 584	-12.541	9.718	-12.129	1.00	0.00	B	C
ATOM	8524	CD1	TYR A 584	-12.744	8.429	-11.689	1.00	0.00	B	C
ATOM	8525	CE1	TYR A 584	-12.520	8.090	-10.373	1.00	0.00	B	C
ATOM	8526	CZ	TYR A 584	-12.077	9.045	-9.487	1.00	0.00	B	C
ATOM	8527	OH	TYR A 584	-11.842	8.727	-8.134	1.00	0.00	B	O
ATOM	8528	CD2	TYR A 584	-12.079	10.657	-11.234	1.00	0.00	B	C
ATOM	8529	CE2	TYR A 584	-11.853	10.326	-9.920	1.00	0.00	B	C
ATOM	8530	C	TYR A 584	-15.058	10.614	-12.779	1.00	0.00	B	C

ATOM	8531	O	TYR A 584	-15.512	9.991	-11.822	1.00	0.00	B	O
ATOM	8532	N	ILE A 585	-15.235	11.938	-12.924	1.00	0.00	B	N
ATOM	8533	CA	ILE A 585	-15.978	12.660	-11.942	1.00	0.00	B	C
ATOM	8534	CB	ILE A 585	-15.961	14.146	-12.141	1.00	0.00	B	C
ATOM	8535	CG2	ILE A 585	-17.254	14.733	-11.556	1.00	0.00	B	C
ATOM	8536	CG1	ILE A 585	-14.675	14.722	-11.519	1.00	0.00	B	C
ATOM	8537	CD	ILE A 585	-13.390	14.108	-12.061	1.00	0.00	B	C
ATOM	8538	C	ILE A 585	-17.387	12.169	-11.884	1.00	0.00	B	C
ATOM	8539	O	ILE A 585	-17.928	12.010	-10.792	1.00	0.00	B	O
ATOM	8540	N	VAL A 586	-18.033	11.913	-13.037	1.00	0.00	B	N
ATOM	8541	CA	VAL A 586	-19.396	11.477	-12.957	1.00	0.00	B	C
ATOM	8542	CB	VAL A 586	-20.091	11.376	-14.289	1.00	0.00	B	C
ATOM	8543	CG1	VAL A 586	-19.490	10.228	-15.116	1.00	0.00	B	C
ATOM	8544	CG2	VAL A 586	-21.597	11.214	-14.029	1.00	0.00	B	C
ATOM	8545	C	VAL A 586	-19.466	10.148	-12.267	1.00	0.00	B	C
ATOM	8546	O	VAL A 586	-20.289	9.958	-11.374	1.00	0.00	B	O
ATOM	8547	N	PHE A 587	-18.596	9.188	-12.644	1.00	0.00	B	N
ATOM	8548	CA	PHE A 587	-18.645	7.894	-12.022	1.00	0.00	B	C
ATOM	8549	CB	PHE A 587	-17.728	6.842	-12.676	1.00	0.00	B	C
ATOM	8550	CG	PHE A 587	-18.448	6.279	-13.857	1.00	0.00	B	C
ATOM	8551	CD1	PHE A 587	-19.302	5.210	-13.697	1.00	0.00	B	C
ATOM	8552	CE1	PHE A 587	-19.978	4.674	-14.769	1.00	0.00	B	C
ATOM	8553	CZ	PHE A 587	-19.804	5.207	-16.023	1.00	0.00	B	C
ATOM	8554	CD2	PHE A 587	-18.280	6.806	-15.117	1.00	0.00	B	C
ATOM	8555	CE2	PHE A 587	-18.953	6.271	-16.194	1.00	0.00	B	C
ATOM	8556	C	PHE A 587	-18.292	8.004	-10.573	1.00	0.00	B	C
ATOM	8557	O	PHE A 587	-18.963	7.422	-9.722	1.00	0.00	B	O
ATOM	8558	N	LEU A 588	-17.231	8.765	-10.248	1.00	0.00	B	N
ATOM	8559	CA	LEU A 588	-16.809	8.859	-8.881	1.00	0.00	B	C
ATOM	8560	CB	LEU A 588	-15.523	9.700	-8.709	1.00	0.00	B	C
ATOM	8561	CG	LEU A 588	-15.688	11.240	-8.773	1.00	0.00	B	C
ATOM	8562	CD1	LEU A 588	-16.223	11.830	-7.455	1.00	0.00	B	C
ATOM	8563	CD2	LEU A 588	-14.395	11.932	-9.224	1.00	0.00	B	C
ATOM	8564	C	LEU A 588	-17.895	9.500	-8.079	1.00	0.00	B	C
ATOM	8565	O	LEU A 588	-18.244	9.034	-6.996	1.00	0.00	B	O
ATOM	8566	N	PHE A 589	-18.479	10.585	-8.613	1.00	0.00	B	N
ATOM	8567	CA	PHE A 589	-19.435	11.330	-7.855	1.00	0.00	B	C
ATOM	8568	CB	PHE A 589	-19.892	12.616	-8.559	1.00	0.00	B	C

ATOM	8569	CG	PHE A 589	-20.705	13.385	-7.576	1.00	0.00	B	C
ATOM	8570	CD1	PHE A 589	-20.099	14.284	-6.730	1.00	0.00	B	C
ATOM	8571	CE1	PHE A 589	-20.837	14.997	-5.816	1.00	0.00	B	C
ATOM	8572	CZ	PHE A 589	-22.197	14.810	-5.742	1.00	0.00	B	C
ATOM	8573	CD2	PHE A 589	-22.064	13.198	-7.494	1.00	0.00	B	C
ATOM	8574	CE2	PHE A 589	-22.809	13.910	-6.582	1.00	0.00	B	C
ATOM	8575	C	PHE A 589	-20.636	10.483	-7.575	1.00	0.00	B	C
ATOM	8576	O	PHE A 589	-21.129	10.454	-6.448	1.00	0.00	B	O
ATOM	8577	N	GLY A 590	-21.136	9.757	-8.590	1.00	0.00	B	N
ATOM	8578	CA	GLY A 590	-22.320	8.975	-8.396	1.00	0.00	B	C
ATOM	8579	C	GLY A 590	-22.055	7.917	-7.370	1.00	0.00	B	C
ATOM	8580	O	GLY A 590	-22.876	7.678	-6.486	1.00	0.00	B	O
ATOM	8581	N	PHE A 591	-20.890	7.251	-7.453	1.00	0.00	B	N
ATOM	8582	CA	PHE A 591	-20.602	6.202	-6.523	1.00	0.00	B	C
ATOM	8583	CB	PHE A 591	-19.319	5.418	-6.838	1.00	0.00	B	C
ATOM	8584	CG	PHE A 591	-19.683	4.394	-7.858	1.00	0.00	B	C
ATOM	8585	CD1	PHE A 591	-19.861	4.722	-9.182	1.00	0.00	B	C
ATOM	8586	CE1	PHE A 591	-20.189	3.756	-10.104	1.00	0.00	B	C
ATOM	8587	CZ	PHE A 591	-20.337	2.447	-9.711	1.00	0.00	B	C
ATOM	8588	CD2	PHE A 591	-19.827	3.080	-7.475	1.00	0.00	B	C
ATOM	8589	CE2	PHE A 591	-20.153	2.109	-8.392	1.00	0.00	B	C
ATOM	8590	C	PHE A 591	-20.506	6.762	-5.143	1.00	0.00	B	C
ATOM	8591	O	PHE A 591	-20.957	6.143	-4.182	1.00	0.00	B	O
ATOM	8592	N	SER A 592	-19.904	7.953	-5.016	1.00	0.00	B	N
ATOM	8593	CA	SER A 592	-19.744	8.593	-3.747	1.00	0.00	B	C
ATOM	8594	CB	SER A 592	-19.034	9.941	-3.895	1.00	0.00	B	C
ATOM	8595	OG	SER A 592	-18.963	10.575	-2.634	1.00	0.00	B	O
ATOM	8596	C	SER A 592	-21.094	8.859	-3.153	1.00	0.00	B	C
ATOM	8597	O	SER A 592	-21.314	8.626	-1.965	1.00	0.00	B	O
ATOM	8598	N	THR A 593	-22.042	9.351	-3.970	1.00	0.00	B	N
ATOM	8599	CA	THR A 593	-23.341	9.666	-3.452	1.00	0.00	B	C
ATOM	8600	CB	THR A 593	-24.261	10.285	-4.462	1.00	0.00	B	C
ATOM	8601	OG1	THR A 593	-24.553	9.371	-5.507	1.00	0.00	B	O
ATOM	8602	CG2	THR A 593	-23.569	11.532	-5.020	1.00	0.00	B	C
ATOM	8603	C	THR A 593	-23.979	8.403	-2.981	1.00	0.00	B	C
ATOM	8604	O	THR A 593	-24.630	8.382	-1.939	1.00	0.00	B	O
ATOM	8605	N	ALA A 594	-23.804	7.309	-3.743	1.00	0.00	B	N
ATOM	8606	CA	ALA A 594	-24.425	6.068	-3.389	1.00	0.00	B	C

ATOM	8607	CB	ALA A 594	-24.139	4.949	-4.407	1.00	0.00	B	C
ATOM	8608	C	ALA A 594	-23.899	5.616	-2.061	1.00	0.00	B	C
ATOM	8609	O	ALA A 594	-24.656	5.139	-1.219	1.00	0.00	B	O
ATOM	8610	N	VAL A 595	-22.578	5.750	-1.838	1.00	0.00	B	N
ATOM	8611	CA	VAL A 595	-21.985	5.304	-0.609	1.00	0.00	B	C
ATOM	8612	CB	VAL A 595	-20.483	5.407	-0.591	1.00	0.00	B	C
ATOM	8613	CG1	VAL A 595	-19.986	4.966	0.797	1.00	0.00	B	C
ATOM	8614	CG2	VAL A 595	-19.910	4.577	-1.752	1.00	0.00	B	C
ATOM	8615	C	VAL A 595	-22.481	6.124	0.542	1.00	0.00	B	C
ATOM	8616	O	VAL A 595	-22.753	5.593	1.617	1.00	0.00	B	O
ATOM	8617	N	VAL A 596	-22.626	7.446	0.343	1.00	0.00	B	N
ATOM	8618	CA	VAL A 596	-22.953	8.328	1.429	1.00	0.00	B	C
ATOM	8619	CB	VAL A 596	-22.986	9.772	0.994	1.00	0.00	B	C
ATOM	8620	CG1	VAL A 596	-24.273	10.057	0.202	1.00	0.00	B	C
ATOM	8621	CG2	VAL A 596	-22.780	10.671	2.219	1.00	0.00	B	C
ATOM	8622	C	VAL A 596	-24.270	7.930	2.027	1.00	0.00	B	C
ATOM	8623	O	VAL A 596	-24.430	7.926	3.246	1.00	0.00	B	O
ATOM	8624	N	THR A 597	-25.259	7.597	1.183	1.00	0.00	B	N
ATOM	8625	CA	THR A 597	-26.556	7.202	1.657	1.00	0.00	B	C
ATOM	8626	CB	THR A 597	-27.569	7.135	0.556	1.00	0.00	B	C
ATOM	8627	OG1	THR A 597	-28.828	6.770	1.088	1.00	0.00	B	O
ATOM	8628	CG2	THR A 597	-27.117	6.102	-0.487	1.00	0.00	B	C
ATOM	8629	C	THR A 597	-26.528	5.848	2.316	1.00	0.00	B	C
ATOM	8630	O	THR A 597	-27.203	5.628	3.322	1.00	0.00	B	O
ATOM	8631	N	LEU A 598	-25.733	4.905	1.775	1.00	0.00	B	N
ATOM	8632	CA	LEU A 598	-25.785	3.526	2.187	1.00	0.00	B	C
ATOM	8633	CB	LEU A 598	-24.765	2.662	1.421	1.00	0.00	B	C
ATOM	8634	CG	LEU A 598	-24.905	1.149	1.663	1.00	0.00	B	C
ATOM	8635	CD1	LEU A 598	-26.113	0.572	0.911	1.00	0.00	B	C
ATOM	8636	CD2	LEU A 598	-23.603	0.401	1.354	1.00	0.00	B	C
ATOM	8637	C	LEU A 598	-25.458	3.379	3.637	1.00	0.00	B	C
ATOM	8638	O	LEU A 598	-26.169	2.694	4.374	1.00	0.00	B	O
ATOM	8639	N	ILE A 599	-24.349	3.991	4.085	1.00	0.00	B	N
ATOM	8640	CA	ILE A 599	-24.021	3.888	5.467	1.00	0.00	B	C
ATOM	8641	CB	ILE A 599	-23.564	2.517	5.808	1.00	0.00	B	C
ATOM	8642	CG2	ILE A 599	-22.513	2.051	4.793	1.00	0.00	B	C
ATOM	8643	CG1	ILE A 599	-23.180	2.467	7.275	1.00	0.00	B	C
ATOM	8644	CD	ILE A 599	-23.046	1.038	7.736	1.00	0.00	B	C

ATOM 8645 C ILE A 599 -22.986 4.917 5.806 1.00 0.00 B C
ATOM 8646 O ILE A 599 -21.932 4.982 5.178 1.00 0.00 B O
ATOM 8647 N GLU A 600 -23.261 5.747 6.833 1.00 0.00 B N
ATOM 8648 CA GLU A 600 -22.360 6.805 7.192 1.00 0.00 B C
ATOM 8649 CB GLU A 600 -22.935 7.736 8.278 1.00 0.00 B C
ATOM 8650 CG GLU A 600 -23.367 7.040 9.570 1.00 0.00 B C
ATOM 8651 CD GLU A 600 -22.190 6.966 10.530 1.00 0.00 B C
ATOM 8652 OE1 GLU A 600 -21.638 8.042 10.882 1.00 0.00 B O
ATOM 8653 OE2 GLU A 600 -21.839 5.827 10.933 1.00 0.00 B O
ATOM 8654 C GLU A 600 -21.067 6.218 7.658 1.00 0.00 B C
ATOM 8655 O GLU A 600 -20.000 6.673 7.244 1.00 0.00 B O
ATOM 8656 N ASP A 601 -21.129 5.167 8.497 1.00 0.00 B N
ATOM 8657 CA ASP A 601 -19.935 4.529 8.973 1.00 0.00 B C
ATOM 8658 CB ASP A 601 -19.124 3.870 7.853 1.00 0.00 B C
ATOM 8659 CG ASP A 601 -19.981 2.782 7.251 1.00 0.00 B C
ATOM 8660 OD1 ASP A 601 -20.458 1.904 8.019 1.00 0.00 B O
ATOM 8661 OD2 ASP A 601 -20.189 2.827 6.008 1.00 0.00 B O
ATOM 8662 C ASP A 601 -19.040 5.562 9.551 1.00 0.00 B C
ATOM 8663 O ASP A 601 -19.471 6.459 10.278 1.00 0.00 B O
ATOM 8664 N GLY A 602 -17.731 5.430 9.261 1.00 0.00 B N
ATOM 8665 CA GLY A 602 -16.829 6.429 9.732 1.00 0.00 B C
ATOM 8666 C GLY A 602 -15.912 6.778 8.604 1.00 0.00 B C
ATOM 8667 O GLY A 602 -15.396 5.879 7.943 1.00 0.00 B O
ATOM 8668 N LYS A 603 -15.720 8.102 8.376 1.00 0.00 B N
ATOM 8669 CA LYS A 603 -14.797 8.687 7.427 1.00 0.00 B C
ATOM 8670 CB LYS A 603 -14.208 7.734 6.380 1.00 0.00 B C
ATOM 8671 CG LYS A 603 -13.023 8.292 5.606 1.00 0.00 B C
ATOM 8672 CD LYS A 603 -12.255 7.144 4.974 1.00 0.00 B C
ATOM 8673 CE LYS A 603 -12.130 5.973 5.953 1.00 0.00 B C
ATOM 8674 NZ LYS A 603 -11.504 4.810 5.292 1.00 0.00 B N
ATOM 8675 C LYS A 603 -15.408 9.819 6.621 1.00 0.00 B C
ATOM 8676 O LYS A 603 -15.416 9.656 5.367 1.00 0.00 B O
ATOM 8677 N TYR B 628 -17.083 7.576 5.975 1.00 0.00 B N
ATOM 8678 CA TYR B 628 -17.792 8.041 4.769 1.00 0.00 B C
ATOM 8679 CB TYR B 628 -18.394 6.839 4.040 1.00 0.00 B C
ATOM 8680 CG TYR B 628 -17.279 6.030 3.485 1.00 0.00 B C
ATOM 8681 CD1 TYR B 628 -16.555 5.178 4.288 1.00 0.00 B C
ATOM 8682 CE1 TYR B 628 -15.531 4.427 3.761 1.00 0.00 B C

ATOM	8683	CZ	TYR	B	628	-15.227	4.524	2.424	1.00	0.00	B	C
ATOM	8684	OH	TYR	B	628	-14.176	3.753	1.883	1.00	0.00	B	O
ATOM	8685	CD2	TYR	B	628	-16.968	6.119	2.150	1.00	0.00	B	C
ATOM	8686	CE2	TYR	B	628	-15.947	5.372	1.618	1.00	0.00	B	C
ATOM	8687	C	TYR	B	628	-18.911	8.999	5.034	1.00	0.00	B	C
ATOM	8688	O	TYR	B	628	-19.766	9.215	4.176	1.00	0.00	B	O
ATOM	8689	N	ASN	B	629	-18.928	9.614	6.228	1.00	0.00	B	N
ATOM	8690	CA	ASN	B	629	-19.987	10.512	6.575	1.00	0.00	B	C
ATOM	8691	CB	ASN	B	629	-19.841	11.069	7.999	1.00	0.00	B	C
ATOM	8692	CG	ASN	B	629	-19.938	9.907	8.969	1.00	0.00	B	C
ATOM	8693	OD1	ASN	B	629	-20.315	8.796	8.597	1.00	0.00	B	O
ATOM	8694	ND2	ASN	B	629	-19.587	10.169	10.256	1.00	0.00	B	N
ATOM	8695	C	ASN	B	629	-19.967	11.688	5.643	1.00	0.00	B	C
ATOM	8696	O	ASN	B	629	-21.016	12.136	5.184	1.00	0.00	B	O
ATOM	8697	N	SER	B	630	-18.765	12.209	5.329	1.00	0.00	B	N
ATOM	8698	CA	SER	B	630	-18.676	13.390	4.512	1.00	0.00	B	C
ATOM	8699	CB	SER	B	630	-17.550	14.352	4.935	1.00	0.00	B	C
ATOM	8700	OG	SER	B	630	-17.519	15.482	4.074	1.00	0.00	B	O
ATOM	8701	C	SER	B	630	-18.407	13.011	3.093	1.00	0.00	B	C
ATOM	8702	O	SER	B	630	-17.761	12.009	2.806	1.00	0.00	B	O
ATOM	8703	N	LEU	B	631	-18.969	13.816	2.166	1.00	0.00	B	N
ATOM	8704	CA	LEU	B	631	-18.800	13.652	0.751	1.00	0.00	B	C
ATOM	8705	CB	LEU	B	631	-19.707	14.599	-0.051	1.00	0.00	B	C
ATOM	8706	CG	LEU	B	631	-19.573	14.445	-1.575	1.00	0.00	B	C
ATOM	8707	CD1	LEU	B	631	-20.057	13.061	-2.034	1.00	0.00	B	C
ATOM	8708	CD2	LEU	B	631	-20.276	15.588	-2.323	1.00	0.00	B	C
ATOM	8709	C	LEU	B	631	-17.379	13.966	0.383	1.00	0.00	B	C
ATOM	8710	O	LEU	B	631	-16.758	13.256	-0.407	1.00	0.00	B	O
ATOM	8711	N	TYR	B	632	-16.816	15.045	0.964	1.00	0.00	B	N
ATOM	8712	CA	TYR	B	632	-15.479	15.448	0.630	1.00	0.00	B	C
ATOM	8713	CB	TYR	B	632	-15.040	16.727	1.366	1.00	0.00	B	C
ATOM	8714	CG	TYR	B	632	-13.579	16.917	1.130	1.00	0.00	B	C
ATOM	8715	CD1	TYR	B	632	-13.112	17.385	-0.075	1.00	0.00	B	C
ATOM	8716	CE1	TYR	B	632	-11.763	17.562	-0.284	1.00	0.00	B	C
ATOM	8717	CZ	TYR	B	632	-10.867	17.273	0.718	1.00	0.00	B	C
ATOM	8718	OH	TYR	B	632	-9.484	17.453	0.508	1.00	0.00	B	O
ATOM	8719	CD2	TYR	B	632	-12.674	16.633	2.128	1.00	0.00	B	C
ATOM	8720	CE2	TYR	B	632	-11.324	16.809	1.926	1.00	0.00	B	C

ATOM	8721	C	TYR B 632	-14.534	14.357	1.010	1.00	0.00	B	C
ATOM	8722	O	TYR B 632	-13.636	14.012	0.243	1.00	0.00	B	O
ATOM	8723	N	SER B 633	-14.700	13.793	2.218	1.00	0.00	B	N
ATOM	8724	CA	SER B 633	-13.840	12.741	2.679	1.00	0.00	B	C
ATOM	8725	CB	SER B 633	-14.065	12.418	4.165	1.00	0.00	B	C
ATOM	8726	OG	SER B 633	-15.412	12.030	4.373	1.00	0.00	B	O
ATOM	8727	C	SER B 633	-14.072	11.484	1.889	1.00	0.00	B	C
ATOM	8728	O	SER B 633	-13.122	10.821	1.477	1.00	0.00	B	O
ATOM	8729	N	THR B 634	-15.349	11.128	1.640	1.00	0.00	B	N
ATOM	8730	CA	THR B 634	-15.655	9.911	0.941	1.00	0.00	B	C
ATOM	8731	CB	THR B 634	-17.125	9.640	0.777	1.00	0.00	B	C
ATOM	8732	OG1	THR B 634	-17.765	10.735	0.139	1.00	0.00	B	O
ATOM	8733	CG2	THR B 634	-17.760	9.352	2.139	1.00	0.00	B	C
ATOM	8734	C	THR B 634	-15.088	9.969	-0.437	1.00	0.00	B	C
ATOM	8735	O	THR B 634	-14.574	8.974	-0.944	1.00	0.00	B	O
ATOM	8736	N	CYS B 635	-15.180	11.141	-1.092	1.00	0.00	B	N
ATOM	8737	CA	CYS B 635	-14.682	11.258	-2.430	1.00	0.00	B	C
ATOM	8738	CB	CYS B 635	-14.886	12.663	-3.025	1.00	0.00	B	C
ATOM	8739	SG	CYS B 635	-14.250	12.806	-4.723	1.00	0.00	B	S
ATOM	8740	C	CYS B 635	-13.215	10.988	-2.397	1.00	0.00	B	C
ATOM	8741	O	CYS B 635	-12.684	10.277	-3.250	1.00	0.00	B	O
ATOM	8742	N	LEU B 636	-12.517	11.540	-1.386	1.00	0.00	B	N
ATOM	8743	CA	LEU B 636	-11.102	11.342	-1.292	1.00	0.00	B	C
ATOM	8744	CB	LEU B 636	-10.445	12.107	-0.132	1.00	0.00	B	C
ATOM	8745	CG	LEU B 636	-10.445	13.630	-0.334	1.00	0.00	B	C
ATOM	8746	CD1	LEU B 636	-9.727	14.346	0.821	1.00	0.00	B	C
ATOM	8747	CD2	LEU B 636	-9.886	14.008	-1.717	1.00	0.00	B	C
ATOM	8748	C	LEU B 636	-10.849	9.888	-1.082	1.00	0.00	B	C
ATOM	8749	O	LEU B 636	-9.898	9.329	-1.627	1.00	0.00	B	O
ATOM	8750	N	GLU B 637	-11.700	9.231	-0.276	1.00	0.00	B	N
ATOM	8751	CA	GLU B 637	-11.506	7.843	0.001	1.00	0.00	B	C
ATOM	8752	CB	GLU B 637	-12.541	7.308	1.006	1.00	0.00	B	C
ATOM	8753	CG	GLU B 637	-12.007	6.202	1.921	1.00	0.00	B	C
ATOM	8754	CD	GLU B 637	-11.349	5.125	1.077	1.00	0.00	B	C
ATOM	8755	OE1	GLU B 637	-12.052	4.539	0.211	1.00	0.00	B	O
ATOM	8756	OE2	GLU B 637	-10.134	4.877	1.290	1.00	0.00	B	O
ATOM	8757	C	GLU B 637	-11.666	7.092	-1.292	1.00	0.00	B	C
ATOM	8758	O	GLU B 637	-10.909	6.166	-1.576	1.00	0.00	B	O

ATOM	8759	N	LEU B 638	-12.668	7.479	-2.108	1.00	0.00	B	N
ATOM	8760	CA	LEU B 638	-12.957	6.836	-3.366	1.00	0.00	B	C
ATOM	8761	CB	LEU B 638	-14.236	7.357	-4.045	1.00	0.00	B	C
ATOM	8762	CG	LEU B 638	-15.536	7.023	-3.293	1.00	0.00	B	C
ATOM	8763	CD1	LEU B 638	-16.764	7.486	-4.093	1.00	0.00	B	C
ATOM	8764	CD2	LEU B 638	-15.594	5.535	-2.912	1.00	0.00	B	C
ATOM	8765	C	LEU B 638	-11.849	7.056	-4.349	1.00	0.00	B	C
ATOM	8766	O	LEU B 638	-11.471	6.144	-5.081	1.00	0.00	B	O
ATOM	8767	N	PHE B 639	-11.302	8.283	-4.388	1.00	0.00	B	N
ATOM	8768	CA	PHE B 639	-10.276	8.644	-5.326	1.00	0.00	B	C
ATOM	8769	CB	PHE B 639	-9.854	10.118	-5.197	1.00	0.00	B	C
ATOM	8770	CG	PHE B 639	-8.799	10.390	-6.214	1.00	0.00	B	C
ATOM	8771	CD1	PHE B 639	-9.150	10.708	-7.505	1.00	0.00	B	C
ATOM	8772	CE1	PHE B 639	-8.189	10.959	-8.456	1.00	0.00	B	C
ATOM	8773	CZ	PHE B 639	-6.859	10.895	-8.124	1.00	0.00	B	C
ATOM	8774	CD2	PHE B 639	-7.465	10.319	-5.890	1.00	0.00	B	C
ATOM	8775	CE2	PHE B 639	-6.501	10.572	-6.838	1.00	0.00	B	C
ATOM	8776	C	PHE B 639	-9.085	7.786	-5.052	1.00	0.00	B	C
ATOM	8777	O	PHE B 639	-8.387	7.360	-5.973	1.00	0.00	B	O
ATOM	8778	N	LYS B 640	-8.830	7.500	-3.763	1.00	0.00	B	N
ATOM	8779	CA	LYS B 640	-7.699	6.706	-3.375	1.00	0.00	B	C
ATOM	8780	CB	LYS B 640	-7.705	6.362	-1.875	1.00	0.00	B	C
ATOM	8781	CG	LYS B 640	-7.650	7.564	-0.932	1.00	0.00	B	C
ATOM	8782	CD	LYS B 640	-8.034	7.197	0.503	1.00	0.00	B	C
ATOM	8783	CE	LYS B 640	-7.996	8.366	1.487	1.00	0.00	B	C
ATOM	8784	NZ	LYS B 640	-8.517	7.926	2.801	1.00	0.00	B	N
ATOM	8785	C	LYS B 640	-7.829	5.394	-4.071	1.00	0.00	B	C
ATOM	8786	O	LYS B 640	-6.853	4.853	-4.590	1.00	0.00	B	O
ATOM	8787	N	PHE B 641	-9.056	4.846	-4.093	1.00	0.00	B	N
ATOM	8788	CA	PHE B 641	-9.294	3.577	-4.714	1.00	0.00	B	C
ATOM	8789	CB	PHE B 641	-10.718	3.036	-4.498	1.00	0.00	B	C
ATOM	8790	CG	PHE B 641	-10.704	2.308	-3.201	1.00	0.00	B	C
ATOM	8791	CD1	PHE B 641	-10.391	0.967	-3.179	1.00	0.00	B	C
ATOM	8792	CE1	PHE B 641	-10.367	0.271	-1.998	1.00	0.00	B	C
ATOM	8793	CZ	PHE B 641	-10.651	0.909	-0.817	1.00	0.00	B	C
ATOM	8794	CD2	PHE B 641	-10.983	2.946	-2.016	1.00	0.00	B	C
ATOM	8795	CE2	PHE B 641	-10.959	2.248	-0.830	1.00	0.00	B	C
ATOM	8796	C	PHE B 641	-9.031	3.639	-6.187	1.00	0.00	B	C

ATOM 8797 O PHE B 641 -8.466 2.704 -6.754 1.00 0.00 B O
ATOM 8798 N THR B 642 -9.439 4.732 -6.855 1.00 0.00 B N
ATOM 8799 CA THR B 642 -9.268 4.828 -8.279 1.00 0.00 B C
ATOM 8800 CB THR B 642 -9.938 6.034 -8.862 1.00 0.00 B C
ATOM 8801 OG1 THR B 642 -9.315 7.232 -8.430 1.00 0.00 B O
ATOM 8802 CG2 THR B 642 -11.387 6.006 -8.361 1.00 0.00 B C
ATOM 8803 C THR B 642 -7.807 4.856 -8.606 1.00 0.00 B C
ATOM 8804 O THR B 642 -7.369 4.290 -9.606 1.00 0.00 B O
ATOM 8805 N ILE B 643 -7.015 5.512 -7.740 1.00 0.00 B N
ATOM 8806 CA ILE B 643 -5.592 5.635 -7.871 1.00 0.00 B C
ATOM 8807 CB ILE B 643 -4.973 6.363 -6.708 1.00 0.00 B C
ATOM 8808 CG2 ILE B 643 -3.447 6.345 -6.892 1.00 0.00 B C
ATOM 8809 CG1 ILE B 643 -5.552 7.780 -6.578 1.00 0.00 B C
ATOM 8810 CD ILE B 643 -5.210 8.455 -5.248 1.00 0.00 B C
ATOM 8811 C ILE B 643 -5.035 4.246 -7.855 1.00 0.00 B C
ATOM 8812 O ILE B 643 -4.025 3.963 -8.497 1.00 0.00 B O
ATOM 8813 N GLY B 644 -5.677 3.338 -7.092 1.00 0.00 B N
ATOM 8814 CA GLY B 644 -5.210 1.984 -7.032 1.00 0.00 B C
ATOM 8815 C GLY B 644 -4.652 1.690 -5.678 1.00 0.00 B C
ATOM 8816 O GLY B 644 -4.217 0.570 -5.414 1.00 0.00 B O
ATOM 8817 N MET B 645 -4.626 2.690 -4.780 1.00 0.00 B N
ATOM 8818 CA MET B 645 -4.146 2.407 -3.460 1.00 0.00 B C
ATOM 8819 CB MET B 645 -3.132 3.450 -2.960 1.00 0.00 B C
ATOM 8820 CG MET B 645 -3.668 4.882 -2.997 1.00 0.00 B C
ATOM 8821 SD MET B 645 -2.459 6.144 -2.498 1.00 0.00 B S
ATOM 8822 CE MET B 645 -1.390 5.878 -3.941 1.00 0.00 B C
ATOM 8823 C MET B 645 -5.329 2.411 -2.547 1.00 0.00 B C
ATOM 8824 O MET B 645 -6.080 3.384 -2.494 1.00 0.00 B O
ATOM 8825 N GLY B 646 -5.534 1.305 -1.804 1.00 0.00 B N
ATOM 8826 CA GLY B 646 -6.664 1.262 -0.918 1.00 0.00 B C
ATOM 8827 C GLY B 646 -6.551 0.071 -0.019 1.00 0.00 B C
ATOM 8828 O GLY B 646 -5.814 -0.876 -0.292 1.00 0.00 B O
ATOM 8829 N ASP B 647 -7.294 0.114 1.105 1.00 0.00 B N
ATOM 8830 CA ASP B 647 -7.346 -0.976 2.039 1.00 0.00 B C
ATOM 8831 CB ASP B 647 -7.227 -0.530 3.502 1.00 0.00 B C
ATOM 8832 CG ASP B 647 -5.867 0.094 3.760 1.00 0.00 B C
ATOM 8833 OD1 ASP B 647 -4.913 -0.202 2.993 1.00 0.00 B O
ATOM 8834 OD2 ASP B 647 -5.772 0.889 4.735 1.00 0.00 B O

ATOM 8835 C ASP B 647 -8.716 -1.554 1.870 1.00 0.00 B C
ATOM 8836 O ASP B 647 -9.707 -0.826 1.904 1.00 0.00 B O
ATOM 8837 N LEU B 648 -8.826 -2.885 1.691 1.00 0.00 B N
ATOM 8838 CA LEU B 648 -10.122 -3.409 1.362 1.00 0.00 B C
ATOM 8839 CB LEU B 648 -10.141 -4.309 0.111 1.00 0.00 B C
ATOM 8840 CG LEU B 648 -9.891 -3.581 -1.221 1.00 0.00 B C
ATOM 8841 CD1 LEU B 648 -11.002 -2.563 -1.507 1.00 0.00 B C
ATOM 8842 CD2 LEU B 648 -8.481 -2.978 -1.293 1.00 0.00 B C
ATOM 8843 C LEU B 648 -10.726 -4.227 2.460 1.00 0.00 B C
ATOM 8844 O LEU B 648 -10.051 -4.789 3.319 1.00 0.00 B O
ATOM 8845 N GLU B 649 -12.074 -4.270 2.423 1.00 0.00 B N
ATOM 8846 CA GLU B 649 -12.933 -5.088 3.229 1.00 0.00 B C
ATOM 8847 CB GLU B 649 -12.813 -6.587 2.902 1.00 0.00 B C
ATOM 8848 CG GLU B 649 -13.284 -6.954 1.494 1.00 0.00 B C
ATOM 8849 CD GLU B 649 -14.790 -6.767 1.447 1.00 0.00 B C
ATOM 8850 OE1 GLU B 649 -15.231 -5.613 1.194 1.00 0.00 B O
ATOM 8851 OE2 GLU B 649 -15.518 -7.770 1.668 1.00 0.00 B O
ATOM 8852 C GLU B 649 -12.688 -4.945 4.698 1.00 0.00 B C
ATOM 8853 O GLU B 649 -12.708 -5.949 5.408 1.00 0.00 B O
ATOM 8854 N PHE B 650 -12.476 -3.718 5.217 1.00 0.00 B N
ATOM 8855 CA PHE B 650 -12.341 -3.637 6.649 1.00 0.00 B C
ATOM 8856 CB PHE B 650 -12.191 -2.218 7.219 1.00 0.00 B C
ATOM 8857 CG PHE B 650 -10.847 -1.674 6.913 1.00 0.00 B C
ATOM 8858 CD1 PHE B 650 -10.638 -0.989 5.745 1.00 0.00 B C
ATOM 8859 CE1 PHE B 650 -9.400 -0.477 5.465 1.00 0.00 B C
ATOM 8860 CZ PHE B 650 -8.356 -0.643 6.344 1.00 0.00 B C
ATOM 8861 CD2 PHE B 650 -9.804 -1.840 7.797 1.00 0.00 B C
ATOM 8862 CE2 PHE B 650 -8.560 -1.330 7.515 1.00 0.00 B C
ATOM 8863 C PHE B 650 -13.640 -4.109 7.215 1.00 0.00 B C
ATOM 8864 O PHE B 650 -13.684 -4.947 8.114 1.00 0.00 B O
ATOM 8865 N THR B 651 -14.740 -3.548 6.684 1.00 0.00 B N
ATOM 8866 CA THR B 651 -16.072 -3.941 7.040 1.00 0.00 B C
ATOM 8867 CB THR B 651 -16.202 -5.436 7.056 1.00 0.00 B C
ATOM 8868 OG1 THR B 651 -15.894 -5.966 5.779 1.00 0.00 B O
ATOM 8869 CG2 THR B 651 -17.622 -5.835 7.496 1.00 0.00 B C
ATOM 8870 C THR B 651 -16.433 -3.480 8.415 1.00 0.00 B C
ATOM 8871 O THR B 651 -17.620 -3.383 8.724 1.00 0.00 B O
ATOM 8872 N GLU B 652 -15.464 -3.025 9.220 1.00 0.00 B N

ATOM	8873	CA	GLU	B	652	-15.804	-2.741	10.585	1.00	0.00	B	C
ATOM	8874	CB	GLU	B	652	-14.599	-2.290	11.408	1.00	0.00	B	C
ATOM	8875	CG	GLU	B	652	-13.479	-3.321	11.384	1.00	0.00	B	C
ATOM	8876	CD	GLU	B	652	-12.369	-2.761	12.238	1.00	0.00	B	C
ATOM	8877	OE1	GLU	B	652	-12.443	-2.977	13.474	1.00	0.00	B	O
ATOM	8878	OE2	GLU	B	652	-11.446	-2.104	11.684	1.00	0.00	B	O
ATOM	8879	C	GLU	B	652	-16.823	-1.652	10.653	1.00	0.00	B	C
ATOM	8880	O	GLU	B	652	-16.684	-0.610	10.016	1.00	0.00	B	O
ATOM	8881	N	ASN	B	653	-17.872	-1.883	11.470	1.00	0.00	B	N
ATOM	8882	CA	ASN	B	653	-18.949	-0.949	11.645	1.00	0.00	B	C
ATOM	8883	CB	ASN	B	653	-18.444	0.427	12.082	1.00	0.00	B	C
ATOM	8884	CG	ASN	B	653	-17.601	0.182	13.310	1.00	0.00	B	C
ATOM	8885	OD1	ASN	B	653	-18.107	0.000	14.412	1.00	0.00	B	O
ATOM	8886	ND2	ASN	B	653	-16.258	0.141	13.094	1.00	0.00	B	N
ATOM	8887	C	ASN	B	653	-19.657	-0.736	10.343	1.00	0.00	B	C
ATOM	8888	O	ASN	B	653	-20.078	0.381	10.042	1.00	0.00	B	O
ATOM	8889	N	TYR	B	654	-19.835	-1.801	9.539	1.00	0.00	B	N
ATOM	8890	CA	TYR	B	654	-20.494	-1.608	8.276	1.00	0.00	B	C
ATOM	8891	CB	TYR	B	654	-19.653	-1.996	7.041	1.00	0.00	B	C
ATOM	8892	CG	TYR	B	654	-18.650	-0.927	6.742	1.00	0.00	B	C
ATOM	8893	CD1	TYR	B	654	-18.988	0.154	5.968	1.00	0.00	B	C
ATOM	8894	CE1	TYR	B	654	-18.063	1.133	5.689	1.00	0.00	B	C
ATOM	8895	CZ	TYR	B	654	-16.782	1.045	6.178	1.00	0.00	B	C
ATOM	8896	OH	TYR	B	654	-15.839	2.053	5.886	1.00	0.00	B	O
ATOM	8897	CD2	TYR	B	654	-17.366	-0.992	7.220	1.00	0.00	B	C
ATOM	8898	CE2	TYR	B	654	-16.427	-0.026	6.954	1.00	0.00	B	C
ATOM	8899	C	TYR	B	654	-21.759	-2.405	8.213	1.00	0.00	B	C
ATOM	8900	O	TYR	B	654	-21.823	-3.567	8.614	1.00	0.00	B	O
ATOM	8901	N	ASP	B	655	-22.815	-1.753	7.692	1.00	0.00	B	N
ATOM	8902	CA	ASP	B	655	-24.118	-2.318	7.537	1.00	0.00	B	C
ATOM	8903	CB	ASP	B	655	-25.264	-1.367	7.903	1.00	0.00	B	C
ATOM	8904	CG	ASP	B	655	-25.240	-1.192	9.411	1.00	0.00	B	C
ATOM	8905	OD1	ASP	B	655	-24.241	-1.629	10.042	1.00	0.00	B	O
ATOM	8906	OD2	ASP	B	655	-26.226	-0.630	9.951	1.00	0.00	B	O
ATOM	8907	C	ASP	B	655	-24.285	-2.645	6.102	1.00	0.00	B	C
ATOM	8908	O	ASP	B	655	-23.857	-1.897	5.221	1.00	0.00	B	O
ATOM	8909	N	PHE	B	656	-24.966	-3.770	5.836	1.00	0.00	B	N
ATOM	8910	CA	PHE	B	656	-25.111	-4.190	4.485	1.00	0.00	B	C

ATOM	8911	CB	PHE B 656	-25.742	-3.115	3.593	1.00	0.00	B	C
ATOM	8912	CG	PHE B 656	-26.369	-2.115	4.491	1.00	0.00	B	C
ATOM	8913	CD1	PHE B 656	-27.584	-2.357	5.081	1.00	0.00	B	C
ATOM	8914	CE1	PHE B 656	-28.149	-1.415	5.907	1.00	0.00	B	C
ATOM	8915	CZ	PHE B 656	-27.494	-0.230	6.144	1.00	0.00	B	C
ATOM	8916	CD2	PHE B 656	-25.720	-0.926	4.729	1.00	0.00	B	C
ATOM	8917	CE2	PHE B 656	-26.279	0.018	5.554	1.00	0.00	B	C
ATOM	8918	C	PHE B 656	-23.728	-4.350	3.988	1.00	0.00	B	C
ATOM	8919	O	PHE B 656	-23.433	-3.939	2.878	1.00	0.00	B	O
ATOM	8920	N	LYS B 657	-22.814	-4.891	4.806	1.00	0.00	B	N
ATOM	8921	CA	LYS B 657	-21.467	-5.055	4.354	1.00	0.00	B	C
ATOM	8922	CB	LYS B 657	-20.489	-5.541	5.426	1.00	0.00	B	C
ATOM	8923	CG	LYS B 657	-19.041	-5.437	4.947	1.00	0.00	B	C
ATOM	8924	CD	LYS B 657	-18.592	-3.985	4.766	1.00	0.00	B	C
ATOM	8925	CE	LYS B 657	-17.147	-3.832	4.292	1.00	0.00	B	C
ATOM	8926	NZ	LYS B 657	-16.785	-2.398	4.249	1.00	0.00	B	N
ATOM	8927	C	LYS B 657	-21.454	-6.070	3.269	1.00	0.00	B	C
ATOM	8928	O	LYS B 657	-20.654	-5.989	2.345	1.00	0.00	B	O
ATOM	8929	N	ALA B 658	-22.315	-7.092	3.357	1.00	0.00	B	N
ATOM	8930	CA	ALA B 658	-22.299	-8.060	2.306	1.00	0.00	B	C
ATOM	8931	CB	ALA B 658	-23.313	-9.194	2.516	1.00	0.00	B	C
ATOM	8932	C	ALA B 658	-22.679	-7.354	1.047	1.00	0.00	B	C
ATOM	8933	O	ALA B 658	-22.076	-7.579	-0.003	1.00	0.00	B	O
ATOM	8934	N	VAL B 659	-23.703	-6.480	1.111	1.00	0.00	B	N
ATOM	8935	CA	VAL B 659	-24.084	-5.791	-0.085	1.00	0.00	B	C
ATOM	8936	CB	VAL B 659	-25.364	-4.996	-0.020	1.00	0.00	B	C
ATOM	8937	CG1	VAL B 659	-26.502	-5.901	0.471	1.00	0.00	B	C
ATOM	8938	CG2	VAL B 659	-25.148	-3.699	0.767	1.00	0.00	B	C
ATOM	8939	C	VAL B 659	-22.999	-4.818	-0.439	1.00	0.00	B	C
ATOM	8940	O	VAL B 659	-22.747	-4.555	-1.609	1.00	0.00	B	O
ATOM	8941	N	PHE B 660	-22.363	-4.236	0.590	1.00	0.00	B	N
ATOM	8942	CA	PHE B 660	-21.375	-3.196	0.522	1.00	0.00	B	C
ATOM	8943	CB	PHE B 660	-20.980	-2.656	1.912	1.00	0.00	B	C
ATOM	8944	CG	PHE B 660	-19.933	-1.597	1.755	1.00	0.00	B	C
ATOM	8945	CD1	PHE B 660	-18.600	-1.931	1.691	1.00	0.00	B	C
ATOM	8946	CE1	PHE B 660	-17.630	-0.965	1.550	1.00	0.00	B	C
ATOM	8947	CZ	PHE B 660	-17.988	0.358	1.474	1.00	0.00	B	C
ATOM	8948	CD2	PHE B 660	-20.283	-0.267	1.680	1.00	0.00	B	C

ATOM	8949	CE2 PHE B 660	-19.316	0.703	1.541	1.00	0.00	B	C
ATOM	8950	C PHE B 660	-20.136	-3.674	-0.145	1.00	0.00	B	C
ATOM	8951	O PHE B 660	-19.602	-3.017	-1.031	1.00	0.00	B	O
ATOM	8952	N ILE B 661	-19.657	-4.852	0.262	1.00	0.00	B	N
ATOM	8953	CA ILE B 661	-18.451	-5.420	-0.242	1.00	0.00	B	C
ATOM	8954	CB ILE B 661	-18.167	-6.730	0.432	1.00	0.00	B	C
ATOM	8955	CG2 ILE B 661	-17.906	-6.454	1.924	1.00	0.00	B	C
ATOM	8956	CG1 ILE B 661	-19.341	-7.687	0.184	1.00	0.00	B	C
ATOM	8957	CD ILE B 661	-19.150	-9.085	0.743	1.00	0.00	B	C
ATOM	8958	C ILE B 661	-18.657	-5.613	-1.702	1.00	0.00	B	C
ATOM	8959	O ILE B 661	-17.786	-5.299	-2.508	1.00	0.00	B	O
ATOM	8960	N ILE B 662	-19.850	-6.092	-2.083	1.00	0.00	B	N
ATOM	8961	CA ILE B 662	-20.141	-6.331	-3.459	1.00	0.00	B	C
ATOM	8962	CB ILE B 662	-21.512	-6.907	-3.637	1.00	0.00	B	C
ATOM	8963	CG2 ILE B 662	-21.776	-7.062	-5.143	1.00	0.00	B	C
ATOM	8964	CG1 ILE B 662	-21.612	-8.227	-2.856	1.00	0.00	B	C
ATOM	8965	CD ILE B 662	-23.043	-8.704	-2.640	1.00	0.00	B	C
ATOM	8966	C ILE B 662	-20.073	-5.022	-4.178	1.00	0.00	B	C
ATOM	8967	O ILE B 662	-19.542	-4.937	-5.284	1.00	0.00	B	O
ATOM	8968	N LEU B 663	-20.607	-3.959	-3.552	1.00	0.00	B	N
ATOM	8969	CA LEU B 663	-20.652	-2.653	-4.144	1.00	0.00	B	C
ATOM	8970	CB LEU B 663	-21.416	-1.669	-3.236	1.00	0.00	B	C
ATOM	8971	CG LEU B 663	-21.537	-0.229	-3.767	1.00	0.00	B	C
ATOM	8972	CD1 LEU B 663	-20.205	0.531	-3.661	1.00	0.00	B	C
ATOM	8973	CD2 LEU B 663	-22.116	-0.216	-5.188	1.00	0.00	B	C
ATOM	8974	C LEU B 663	-19.249	-2.170	-4.367	1.00	0.00	B	C
ATOM	8975	O LEU B 663	-18.940	-1.568	-5.397	1.00	0.00	B	O
ATOM	8976	N LEU B 664	-18.355	-2.423	-3.396	1.00	0.00	B	N
ATOM	8977	CA LEU B 664	-17.001	-1.966	-3.479	1.00	0.00	B	C
ATOM	8978	CB LEU B 664	-16.264	-2.227	-2.152	1.00	0.00	B	C
ATOM	8979	CG LEU B 664	-14.909	-1.518	-2.009	1.00	0.00	B	C
ATOM	8980	CD1 LEU B 664	-13.876	-2.080	-2.990	1.00	0.00	B	C
ATOM	8981	CD2 LEU B 664	-15.067	0.008	-2.115	1.00	0.00	B	C
ATOM	8982	C LEU B 664	-16.323	-2.673	-4.610	1.00	0.00	B	C
ATOM	8983	O LEU B 664	-15.584	-2.066	-5.386	1.00	0.00	B	O
ATOM	8984	N LEU B 665	-16.574	-3.990	-4.752	1.00	0.00	B	N
ATOM	8985	CA LEU B 665	-15.964	-4.719	-5.822	1.00	0.00	B	C
ATOM	8986	CB LEU B 665	-16.218	-6.236	-5.776	1.00	0.00	B	C

ATOM	8987	CG	LEU	B	665	-15.305	-6.988	-4.782	1.00	0.00	B	C
ATOM	8988	CD1	LEU	B	665	-15.470	-6.494	-3.339	1.00	0.00	B	C
ATOM	8989	CD2	LEU	B	665	-15.484	-8.507	-4.910	1.00	0.00	B	C
ATOM	8990	C	LEU	B	665	-16.444	-4.185	-7.130	1.00	0.00	B	C
ATOM	8991	O	LEU	B	665	-15.662	-4.047	-8.068	1.00	0.00	B	O
ATOM	8992	N	ALA	B	666	-17.745	-3.859	-7.238	1.00	0.00	B	N
ATOM	8993	CA	ALA	B	666	-18.262	-3.392	-8.490	1.00	0.00	B	C
ATOM	8994	CB	ALA	B	666	-19.781	-3.150	-8.445	1.00	0.00	B	C
ATOM	8995	C	ALA	B	666	-17.622	-2.090	-8.878	1.00	0.00	B	C
ATOM	8996	O	ALA	B	666	-17.183	-1.928	-10.014	1.00	0.00	B	O
ATOM	8997	N	TYR	B	667	-17.559	-1.122	-7.944	1.00	0.00	B	N
ATOM	8998	CA	TYR	B	667	-17.033	0.172	-8.272	1.00	0.00	B	C
ATOM	8999	CB	TYR	B	667	-17.325	1.216	-7.181	1.00	0.00	B	C
ATOM	9000	CG	TYR	B	667	-16.686	2.499	-7.586	1.00	0.00	B	C
ATOM	9001	CD1	TYR	B	667	-17.139	3.190	-8.683	1.00	0.00	B	C
ATOM	9002	CE1	TYR	B	667	-16.560	4.380	-9.054	1.00	0.00	B	C
ATOM	9003	CZ	TYR	B	667	-15.520	4.892	-8.322	1.00	0.00	B	C
ATOM	9004	OH	TYR	B	667	-14.928	6.113	-8.704	1.00	0.00	B	O
ATOM	9005	CD2	TYR	B	667	-15.645	3.022	-6.854	1.00	0.00	B	C
ATOM	9006	CE2	TYR	B	667	-15.061	4.211	-7.220	1.00	0.00	B	C
ATOM	9007	C	TYR	B	667	-15.557	0.136	-8.503	1.00	0.00	B	C
ATOM	9008	O	TYR	B	667	-15.066	0.668	-9.497	1.00	0.00	B	O
ATOM	9009	N	VAL	B	668	-14.805	-0.499	-7.589	1.00	0.00	B	N
ATOM	9010	CA	VAL	B	668	-13.378	-0.480	-7.705	1.00	0.00	B	C
ATOM	9011	CB	VAL	B	668	-12.680	-1.106	-6.537	1.00	0.00	B	C
ATOM	9012	CG1	VAL	B	668	-11.168	-1.102	-6.818	1.00	0.00	B	C
ATOM	9013	CG2	VAL	B	668	-13.083	-0.348	-5.261	1.00	0.00	B	C
ATOM	9014	C	VAL	B	668	-12.946	-1.220	-8.927	1.00	0.00	B	C
ATOM	9015	O	VAL	B	668	-12.123	-0.730	-9.700	1.00	0.00	B	O
ATOM	9016	N	ILE	B	669	-13.508	-2.421	-9.154	1.00	0.00	B	N
ATOM	9017	CA	ILE	B	669	-13.014	-3.200	-10.249	1.00	0.00	B	C
ATOM	9018	CB	ILE	B	669	-13.598	-4.592	-10.325	1.00	0.00	B	C
ATOM	9019	CG2	ILE	B	669	-13.284	-5.269	-8.978	1.00	0.00	B	C
ATOM	9020	CG1	ILE	B	669	-15.093	-4.615	-10.689	1.00	0.00	B	C
ATOM	9021	CD	ILE	B	669	-15.366	-4.516	-12.192	1.00	0.00	B	C
ATOM	9022	C	ILE	B	669	-13.288	-2.459	-11.515	1.00	0.00	B	C
ATOM	9023	O	ILE	B	669	-12.416	-2.341	-12.373	1.00	0.00	B	O
ATOM	9024	N	LEU	B	670	-14.501	-1.898	-11.646	1.00	0.00	B	N

ATOM	9025	CA	LEU	B	670	-14.873	-1.232	-12.860	1.00	0.00	B	C
ATOM	9026	CB	LEU	B	670	-16.303	-0.663	-12.799	1.00	0.00	B	C
ATOM	9027	CG	LEU	B	670	-16.664	0.237	-13.997	1.00	0.00	B	C
ATOM	9028	CD1	LEU	B	670	-16.614	-0.544	-15.317	1.00	0.00	B	C
ATOM	9029	CD2	LEU	B	670	-18.006	0.959	-13.784	1.00	0.00	B	C
ATOM	9030	C	LEU	B	670	-13.967	-0.071	-13.100	1.00	0.00	B	C
ATOM	9031	O	LEU	B	670	-13.443	0.098	-14.200	1.00	0.00	B	O
ATOM	9032	N	THR	B	671	-13.733	0.752	-12.061	1.00	0.00	B	N
ATOM	9033	CA	THR	B	671	-12.986	1.954	-12.297	1.00	0.00	B	C
ATOM	9034	CB	THR	B	671	-12.901	2.889	-11.121	1.00	0.00	B	C
ATOM	9035	OG1	THR	B	671	-12.067	2.370	-10.098	1.00	0.00	B	O
ATOM	9036	CG2	THR	B	671	-14.318	3.081	-10.577	1.00	0.00	B	C
ATOM	9037	C	THR	B	671	-11.593	1.622	-12.699	1.00	0.00	B	C
ATOM	9038	O	THR	B	671	-11.046	2.218	-13.625	1.00	0.00	B	O
ATOM	9039	N	TYR	B	672	-10.963	0.667	-12.001	1.00	0.00	B	N
ATOM	9040	CA	TYR	B	672	-9.609	0.355	-12.337	1.00	0.00	B	C
ATOM	9041	CB	TYR	B	672	-8.984	-0.651	-11.350	1.00	0.00	B	C
ATOM	9042	CG	TYR	B	672	-7.581	-0.938	-11.766	1.00	0.00	B	C
ATOM	9043	CD1	TYR	B	672	-6.571	-0.028	-11.535	1.00	0.00	B	C
ATOM	9044	CE1	TYR	B	672	-5.279	-0.301	-11.917	1.00	0.00	B	C
ATOM	9045	CZ	TYR	B	672	-4.981	-1.499	-12.532	1.00	0.00	B	C
ATOM	9046	OH	TYR	B	672	-3.658	-1.789	-12.929	1.00	0.00	B	O
ATOM	9047	CD2	TYR	B	672	-7.269	-2.132	-12.369	1.00	0.00	B	C
ATOM	9048	CE2	TYR	B	672	-5.978	-2.412	-12.754	1.00	0.00	B	C
ATOM	9049	C	TYR	B	672	-9.602	-0.239	-13.702	1.00	0.00	B	C
ATOM	9050	O	TYR	B	672	-8.791	0.123	-14.553	1.00	0.00	B	O
ATOM	9051	N	ILE	B	673	-10.532	-1.179	-13.943	1.00	0.00	B	N
ATOM	9052	CA	ILE	B	673	-10.492	-1.878	-15.180	1.00	0.00	B	C
ATOM	9053	CB	ILE	B	673	-11.328	-3.127	-15.150	1.00	0.00	B	C
ATOM	9054	CG2	ILE	B	673	-12.817	-2.756	-15.063	1.00	0.00	B	C
ATOM	9055	CG1	ILE	B	673	-10.960	-4.011	-16.345	1.00	0.00	B	C
ATOM	9056	CD	ILE	B	673	-9.522	-4.524	-16.276	1.00	0.00	B	C
ATOM	9057	C	ILE	B	673	-10.867	-1.041	-16.374	1.00	0.00	B	C
ATOM	9058	O	ILE	B	673	-10.117	-1.013	-17.345	1.00	0.00	B	O
ATOM	9059	N	LEU	B	674	-12.047	-0.383	-16.380	1.00	0.00	B	N
ATOM	9060	CA	LEU	B	674	-12.435	0.338	-17.566	1.00	0.00	B	C
ATOM	9061	CB	LEU	B	674	-13.960	0.452	-17.705	1.00	0.00	B	C
ATOM	9062	CG	LEU	B	674	-14.634	-0.926	-17.811	1.00	0.00	B	C

ATOM	9063	CD1	LEU	B	674	-16.109	-0.796	-18.213	1.00	0.00	B	C
ATOM	9064	CD2	LEU	B	674	-13.839	-1.865	-18.730	1.00	0.00	B	C
ATOM	9065	C	LEU	B	674	-11.852	1.715	-17.729	1.00	0.00	B	C
ATOM	9066	O	LEU	B	674	-11.239	2.019	-18.750	1.00	0.00	B	O
ATOM	9067	N	LEU	B	675	-12.025	2.583	-16.712	1.00	0.00	B	N
ATOM	9068	CA	LEU	B	675	-11.679	3.978	-16.825	1.00	0.00	B	C
ATOM	9069	CB	LEU	B	675	-12.072	4.772	-15.566	1.00	0.00	B	C
ATOM	9070	CG	LEU	B	675	-13.568	5.107	-15.437	1.00	0.00	B	C
ATOM	9071	CD1	LEU	B	675	-13.978	6.181	-16.459	1.00	0.00	B	C
ATOM	9072	CD2	LEU	B	675	-14.439	3.845	-15.510	1.00	0.00	B	C
ATOM	9073	C	LEU	B	675	-10.215	4.204	-16.999	1.00	0.00	B	C
ATOM	9074	O	LEU	B	675	-9.787	4.849	-17.955	1.00	0.00	B	O
ATOM	9075	N	LEU	B	676	-9.405	3.662	-16.076	1.00	0.00	B	N
ATOM	9076	CA	LEU	B	676	-8.005	3.956	-16.114	1.00	0.00	B	C
ATOM	9077	CB	LEU	B	676	-7.224	3.405	-14.911	1.00	0.00	B	C
ATOM	9078	CG	LEU	B	676	-7.496	4.183	-13.614	1.00	0.00	B	C
ATOM	9079	CD1	LEU	B	676	-7.013	5.639	-13.752	1.00	0.00	B	C
ATOM	9080	CD2	LEU	B	676	-8.963	4.074	-13.172	1.00	0.00	B	C
ATOM	9081	C	LEU	B	676	-7.408	3.395	-17.351	1.00	0.00	B	C
ATOM	9082	O	LEU	B	676	-6.654	4.078	-18.040	1.00	0.00	B	O
ATOM	9083	N	ASN	B	677	-7.749	2.138	-17.677	1.00	0.00	B	N
ATOM	9084	CA	ASN	B	677	-7.195	1.503	-18.831	1.00	0.00	B	C
ATOM	9085	CB	ASN	B	677	-7.649	0.040	-18.967	1.00	0.00	B	C
ATOM	9086	CG	ASN	B	677	-7.130	-0.706	-17.747	1.00	0.00	B	C
ATOM	9087	OD1	ASN	B	677	-6.291	-0.195	-17.007	1.00	0.00	B	O
ATOM	9088	ND2	ASN	B	677	-7.633	-1.949	-17.529	1.00	0.00	B	N
ATOM	9089	C	ASN	B	677	-7.673	2.243	-20.036	1.00	0.00	B	C
ATOM	9090	O	ASN	B	677	-6.911	2.471	-20.973	1.00	0.00	B	O
ATOM	9091	N	MET	B	678	-8.957	2.640	-20.036	1.00	0.00	B	N
ATOM	9092	CA	MET	B	678	-9.529	3.329	-21.154	1.00	0.00	B	C
ATOM	9093	CB	MET	B	678	-11.015	3.664	-20.934	1.00	0.00	B	C
ATOM	9094	CG	MET	B	678	-11.658	4.476	-22.061	1.00	0.00	B	C
ATOM	9095	SD	MET	B	678	-13.461	4.666	-21.904	1.00	0.00	B	S
ATOM	9096	CE	MET	B	678	-13.399	5.650	-20.379	1.00	0.00	B	C
ATOM	9097	C	MET	B	678	-8.817	4.624	-21.359	1.00	0.00	B	C
ATOM	9098	O	MET	B	678	-8.461	4.962	-22.485	1.00	0.00	B	O
ATOM	9099	N	LEU	B	679	-8.581	5.397	-20.280	1.00	0.00	B	N
ATOM	9100	CA	LEU	B	679	-7.938	6.659	-20.493	1.00	0.00	B	C

ATOM	9101	CB	LEU	B	679	-7.938	7.587	-19.253	1.00	0.00	B	C
ATOM	9102	CG	LEU	B	679	-6.747	7.468	-18.278	1.00	0.00	B	C
ATOM	9103	CD1	LEU	B	679	-5.482	8.161	-18.817	1.00	0.00	B	C
ATOM	9104	CD2	LEU	B	679	-7.135	7.975	-16.878	1.00	0.00	B	C
ATOM	9105	C	LEU	B	679	-6.528	6.418	-20.935	1.00	0.00	B	C
ATOM	9106	O	LEU	B	679	-6.043	7.056	-21.867	1.00	0.00	B	O
ATOM	9107	N	ILE	B	680	-5.846	5.459	-20.278	1.00	0.00	B	N
ATOM	9108	CA	ILE	B	680	-4.458	5.172	-20.522	1.00	0.00	B	C
ATOM	9109	CB	ILE	B	680	-3.895	4.141	-19.586	1.00	0.00	B	C
ATOM	9110	CG2	ILE	B	680	-2.461	3.822	-20.041	1.00	0.00	B	C
ATOM	9111	CG1	ILE	B	680	-3.976	4.638	-18.130	1.00	0.00	B	C
ATOM	9112	CD	ILE	B	680	-3.227	5.944	-17.880	1.00	0.00	B	C
ATOM	9113	C	ILE	B	680	-4.284	4.683	-21.924	1.00	0.00	B	C
ATOM	9114	O	ILE	B	680	-3.310	5.027	-22.593	1.00	0.00	B	O
ATOM	9115	N	ALA	B	681	-5.223	3.851	-22.404	1.00	0.00	B	N
ATOM	9116	CA	ALA	B	681	-5.147	3.310	-23.728	1.00	0.00	B	C
ATOM	9117	CB	ALA	B	681	-6.336	2.396	-24.071	1.00	0.00	B	C
ATOM	9118	C	ALA	B	681	-5.182	4.467	-24.668	1.00	0.00	B	C
ATOM	9119	O	ALA	B	681	-4.494	4.480	-25.687	1.00	0.00	B	O
ATOM	9120	N	LEU	B	682	-5.994	5.476	-24.321	1.00	0.00	B	N
ATOM	9121	CA	LEU	B	682	-6.176	6.667	-25.097	1.00	0.00	B	C
ATOM	9122	CB	LEU	B	682	-7.155	7.645	-24.420	1.00	0.00	B	C
ATOM	9123	CG	LEU	B	682	-8.589	7.111	-24.249	1.00	0.00	B	C
ATOM	9124	CD1	LEU	B	682	-9.472	8.126	-23.507	1.00	0.00	B	C
ATOM	9125	CD2	LEU	B	682	-9.191	6.691	-25.600	1.00	0.00	B	C
ATOM	9126	C	LEU	B	682	-4.863	7.396	-25.180	1.00	0.00	B	C
ATOM	9127	O	LEU	B	682	-4.532	7.971	-26.217	1.00	0.00	B	O
ATOM	9128	N	MET	B	683	-4.071	7.366	-24.090	1.00	0.00	B	N
ATOM	9129	CA	MET	B	683	-2.856	8.128	-23.958	1.00	0.00	B	C
ATOM	9130	CB	MET	B	683	-2.116	7.834	-22.636	1.00	0.00	B	C
ATOM	9131	CG	MET	B	683	-2.826	8.278	-21.354	1.00	0.00	B	C
ATOM	9132	SD	MET	B	683	-2.738	10.058	-20.998	1.00	0.00	B	S
ATOM	9133	CE	MET	B	683	-3.102	9.878	-19.226	1.00	0.00	B	C
ATOM	9134	C	MET	B	683	-1.873	7.791	-25.039	1.00	0.00	B	C
ATOM	9135	O	MET	B	683	-1.243	8.681	-25.609	1.00	0.00	B	O
ATOM	9136	N	GLY	B	684	-1.719	6.502	-25.380	1.00	0.00	B	N
ATOM	9137	CA	GLY	B	684	-0.690	6.137	-26.311	1.00	0.00	B	C
ATOM	9138	C	GLY	B	684	-0.900	6.837	-27.617	1.00	0.00	B	C

ATOM	9139	O	GLY B 684	0.058	7.290	-28.238	1.00	0.00	B	O
ATOM	9140	N	GLU B 685	-2.159	6.957	-28.063	1.00	0.00	B	N
ATOM	9141	CA	GLU B 685	-2.453	7.508	-29.355	1.00	0.00	B	C
ATOM	9142	CB	GLU B 685	-3.966	7.577	-29.603	1.00	0.00	B	C
ATOM	9143	CG	GLU B 685	-4.640	6.206	-29.612	1.00	0.00	B	C
ATOM	9144	CD	GLU B 685	-6.144	6.430	-29.524	1.00	0.00	B	C
ATOM	9145	OE1	GLU B 685	-6.633	6.702	-28.394	1.00	0.00	B	O
ATOM	9146	OE2	GLU B 685	-6.822	6.337	-30.579	1.00	0.00	B	O
ATOM	9147	C	GLU B 685	-1.947	8.913	-29.441	1.00	0.00	B	C
ATOM	9148	O	GLU B 685	-1.328	9.293	-30.433	1.00	0.00	B	O
ATOM	9149	N	THR B 686	-2.198	9.722	-28.395	1.00	0.00	B	N
ATOM	9150	CA	THR B 686	-1.798	11.099	-28.419	1.00	0.00	B	C
ATOM	9151	CB	THR B 686	-2.216	11.859	-27.194	1.00	0.00	B	C
ATOM	9152	OG1	THR B 686	-1.571	11.333	-26.042	1.00	0.00	B	O
ATOM	9153	CG2	THR B 686	-3.742	11.752	-27.047	1.00	0.00	B	C
ATOM	9154	C	THR B 686	-0.311	11.161	-28.485	1.00	0.00	B	C
ATOM	9155	O	THR B 686	0.252	11.970	-29.221	1.00	0.00	B	O
ATOM	9156	N	VAL B 687	0.363	10.306	-27.693	1.00	0.00	B	N
ATOM	9157	CA	VAL B 687	1.796	10.278	-27.668	1.00	0.00	B	C
ATOM	9158	CB	VAL B 687	2.350	9.336	-26.637	1.00	0.00	B	C
ATOM	9159	CG1	VAL B 687	3.877	9.271	-26.810	1.00	0.00	B	C
ATOM	9160	CG2	VAL B 687	1.905	9.817	-25.247	1.00	0.00	B	C
ATOM	9161	C	VAL B 687	2.311	9.832	-29.006	1.00	0.00	B	C
ATOM	9162	O	VAL B 687	3.289	10.374	-29.516	1.00	0.00	B	O
ATOM	9163	N	ASN B 688	1.679	8.811	-29.606	1.00	0.00	B	N
ATOM	9164	CA	ASN B 688	2.151	8.308	-30.865	1.00	0.00	B	C
ATOM	9165	CB	ASN B 688	1.397	7.050	-31.340	1.00	0.00	B	C
ATOM	9166	CG	ASN B 688	1.940	5.837	-30.596	1.00	0.00	B	C
ATOM	9167	OD1	ASN B 688	3.042	5.369	-30.880	1.00	0.00	B	O
ATOM	9168	ND2	ASN B 688	1.156	5.307	-29.623	1.00	0.00	B	N
ATOM	9169	C	ASN B 688	1.988	9.339	-31.931	1.00	0.00	B	C
ATOM	9170	O	ASN B 688	2.912	9.587	-32.704	1.00	0.00	B	O
ATOM	9171	N	LYS B 689	0.805	9.976	-32.006	1.00	0.00	B	N
ATOM	9172	CA	LYS B 689	0.597	10.906	-33.070	1.00	0.00	B	C
ATOM	9173	CB	LYS B 689	-0.856	11.374	-33.255	1.00	0.00	B	C
ATOM	9174	CG	LYS B 689	-1.423	12.285	-32.172	1.00	0.00	B	C
ATOM	9175	CD	LYS B 689	-2.707	12.959	-32.661	1.00	0.00	B	C
ATOM	9176	CE	LYS B 689	-3.518	13.667	-31.579	1.00	0.00	B	C

ATOM	9177	NZ	LYS	B	689	-4.793	14.149	-32.156	1.00	0.00	B	N
ATOM	9178	C	LYS	B	689	1.489	12.089	-32.894	1.00	0.00	B	C
ATOM	9179	O	LYS	B	689	2.017	12.618	-33.870	1.00	0.00	B	O
ATOM	9180	N	ILE	B	690	1.689	12.533	-31.643	1.00	0.00	B	N
ATOM	9181	CA	ILE	B	690	2.539	13.670	-31.448	1.00	0.00	B	C
ATOM	9182	CB	ILE	B	690	2.602	14.184	-30.041	1.00	0.00	B	C
ATOM	9183	CG2	ILE	B	690	2.996	13.054	-29.089	1.00	0.00	B	C
ATOM	9184	CG1	ILE	B	690	3.537	15.399	-29.998	1.00	0.00	B	C
ATOM	9185	CD	ILE	B	690	3.490	16.138	-28.669	1.00	0.00	B	C
ATOM	9186	C	ILE	B	690	3.918	13.335	-31.907	1.00	0.00	B	C
ATOM	9187	O	ILE	B	690	4.608	14.188	-32.462	1.00	0.00	B	O
ATOM	9188	N	ALA	B	691	4.370	12.091	-31.661	1.00	0.00	B	N
ATOM	9189	CA	ALA	B	691	5.692	11.685	-32.050	1.00	0.00	B	C
ATOM	9190	CB	ALA	B	691	6.014	10.246	-31.616	1.00	0.00	B	C
ATOM	9191	C	ALA	B	691	5.838	11.751	-33.544	1.00	0.00	B	C
ATOM	9192	O	ALA	B	691	6.848	12.233	-34.051	1.00	0.00	B	O
ATOM	9193	N	GLN	B	692	4.830	11.273	-34.303	1.00	0.00	B	N
ATOM	9194	CA	GLN	B	692	4.938	11.259	-35.739	1.00	0.00	B	C
ATOM	9195	CB	GLN	B	692	3.676	10.706	-36.410	1.00	0.00	B	C
ATOM	9196	CG	GLN	B	692	3.291	9.293	-35.990	1.00	0.00	B	C
ATOM	9197	CD	GLN	B	692	1.915	9.059	-36.582	1.00	0.00	B	C
ATOM	9198	OE1	GLN	B	692	1.687	9.366	-37.750	1.00	0.00	B	O
ATOM	9199	NE2	GLN	B	692	0.967	8.536	-35.758	1.00	0.00	B	N
ATOM	9200	C	GLN	B	692	5.022	12.671	-36.219	1.00	0.00	B	C
ATOM	9201	O	GLN	B	692	5.826	13.015	-37.086	1.00	0.00	B	O
ATOM	9202	N	GLU	B	693	4.158	13.517	-35.640	1.00	0.00	B	N
ATOM	9203	CA	GLU	B	693	3.999	14.903	-35.958	1.00	0.00	B	C
ATOM	9204	CB	GLU	B	693	2.779	15.516	-35.249	1.00	0.00	B	C
ATOM	9205	CG	GLU	B	693	1.447	14.922	-35.719	1.00	0.00	B	C
ATOM	9206	CD	GLU	B	693	0.341	15.443	-34.812	1.00	0.00	B	C
ATOM	9207	OE1	GLU	B	693	0.179	14.883	-33.692	1.00	0.00	B	O
ATOM	9208	OE2	GLU	B	693	-0.357	16.406	-35.222	1.00	0.00	B	O
ATOM	9209	C	GLU	B	693	5.202	15.684	-35.536	1.00	0.00	B	C
ATOM	9210	O	GLU	B	693	5.508	16.693	-36.158	1.00	0.00	B	O
ATOM	9211	N	SER	B	694	5.947	15.211	-34.519	1.00	0.00	B	N
ATOM	9212	CA	SER	B	694	6.985	15.900	-33.793	1.00	0.00	B	C
ATOM	9213	CB	SER	B	694	7.861	14.908	-33.010	1.00	0.00	B	C
ATOM	9214	OG	SER	B	694	7.128	14.337	-31.941	1.00	0.00	B	O

ATOM	9215	C	SER B 694	7.932	16.662	-34.653	1.00	0.00	B	C
ATOM	9216	O	SER B 694	8.266	17.794	-34.308	1.00	0.00	B	O
ATOM	9217	N	LYS B 695	8.424	16.081	-35.757	1.00	0.00	B	N
ATOM	9218	CA	LYS B 695	9.342	16.851	-36.544	1.00	0.00	B	C
ATOM	9219	CB	LYS B 695	9.756	16.131	-37.837	1.00	0.00	B	C
ATOM	9220	CG	LYS B 695	10.748	14.985	-37.652	1.00	0.00	B	C
ATOM	9221	CD	LYS B 695	12.127	15.455	-37.194	1.00	0.00	B	C
ATOM	9222	CE	LYS B 695	13.212	14.390	-37.352	1.00	0.00	B	C
ATOM	9223	NZ	LYS B 695	14.542	15.008	-37.168	1.00	0.00	B	N
ATOM	9224	C	LYS B 695	8.607	18.082	-36.977	1.00	0.00	B	C
ATOM	9225	O	LYS B 695	9.078	19.205	-36.801	1.00	0.00	B	O
ATOM	9226	N	ASN B 696	7.389	17.866	-37.494	1.00	0.00	B	N
ATOM	9227	CA	ASN B 696	6.496	18.861	-38.017	1.00	0.00	B	C
ATOM	9228	CB	ASN B 696	5.244	18.220	-38.637	1.00	0.00	B	C
ATOM	9229	CG	ASN B 696	5.692	17.184	-39.657	1.00	0.00	B	C
ATOM	9230	OD1	ASN B 696	6.586	17.426	-40.466	1.00	0.00	B	O
ATOM	9231	ND2	ASN B 696	5.065	15.978	-39.601	1.00	0.00	B	N
ATOM	9232	C	ASN B 696	5.991	19.806	-36.960	1.00	0.00	B	C
ATOM	9233	O	ASN B 696	6.011	21.020	-37.146	1.00	0.00	B	O
ATOM	9234	N	ILE B 697	5.506	19.266	-35.824	1.00	0.00	B	N
ATOM	9235	CA	ILE B 697	4.927	20.039	-34.762	1.00	0.00	B	C
ATOM	9236	CB	ILE B 697	4.378	19.182	-33.665	1.00	0.00	B	C
ATOM	9237	CG2	ILE B 697	3.204	18.352	-34.217	1.00	0.00	B	C
ATOM	9238	CG1	ILE B 697	5.512	18.341	-33.076	1.00	0.00	B	C
ATOM	9239	CD	ILE B 697	5.129	17.607	-31.808	1.00	0.00	B	C
ATOM	9240	C	ILE B 697	5.981	20.926	-34.194	1.00	0.00	B	C
ATOM	9241	O	ILE B 697	5.742	22.099	-33.913	1.00	0.00	B	O
ATOM	9242	N	TRP B 698	7.196	20.376	-34.044	1.00	0.00	B	N
ATOM	9243	CA	TRP B 698	8.297	21.111	-33.519	1.00	0.00	B	C
ATOM	9244	CB	TRP B 698	9.604	20.313	-33.636	1.00	0.00	B	C
ATOM	9245	CG	TRP B 698	10.867	21.131	-33.524	1.00	0.00	B	C
ATOM	9246	CD1	TRP B 698	11.526	21.573	-32.422	1.00	0.00	B	C
ATOM	9247	NE1	TRP B 698	12.667	22.243	-32.790	1.00	0.00	B	N
ATOM	9248	CE2	TRP B 698	12.747	22.250	-34.165	1.00	0.00	B	C
ATOM	9249	CD2	TRP B 698	11.635	21.567	-34.657	1.00	0.00	B	C
ATOM	9250	CE3	TRP B 698	11.437	21.409	-35.998	1.00	0.00	B	C
ATOM	9251	CZ3	TRP B 698	12.376	21.953	-36.845	1.00	0.00	B	C
ATOM	9252	CZ2	TRP B 698	13.679	22.785	-35.005	1.00	0.00	B	C

ATOM	9253	CH2 TRP B 698	13.475	22.626	-36.357	1.00	0.00	B	C
ATOM	9254	C TRP B 698	8.463	22.298	-34.395	1.00	0.00	B	C
ATOM	9255	O TRP B 698	8.687	23.406	-33.913	1.00	0.00	B	O
ATOM	9256	N LYS B 699	8.362	22.079	-35.715	1.00	0.00	B	N
ATOM	9257	CA LYS B 699	8.629	23.128	-36.650	1.00	0.00	B	C
ATOM	9258	CB LYS B 699	8.709	22.635	-38.107	1.00	0.00	B	C
ATOM	9259	CG LYS B 699	9.630	23.491	-38.988	1.00	0.00	B	C
ATOM	9260	CD LYS B 699	9.323	24.991	-38.997	1.00	0.00	B	C
ATOM	9261	CE LYS B 699	10.368	25.814	-39.758	1.00	0.00	B	C
ATOM	9262	NZ LYS B 699	10.116	27.263	-39.578	1.00	0.00	B	N
ATOM	9263	C LYS B 699	7.614	24.245	-36.597	1.00	0.00	B	C
ATOM	9264	O LYS B 699	7.997	25.413	-36.611	1.00	0.00	B	O
ATOM	9265	N LEU B 700	6.299	23.940	-36.537	1.00	0.00	B	N
ATOM	9266	CA LEU B 700	5.297	24.978	-36.638	1.00	0.00	B	C
ATOM	9267	CB LEU B 700	3.869	24.432	-36.862	1.00	0.00	B	C
ATOM	9268	CG LEU B 700	3.175	23.743	-35.666	1.00	0.00	B	C
ATOM	9269	CD1 LEU B 700	2.683	24.748	-34.610	1.00	0.00	B	C
ATOM	9270	CD2 LEU B 700	2.046	22.824	-36.154	1.00	0.00	B	C
ATOM	9271	C LEU B 700	5.295	25.915	-35.468	1.00	0.00	B	C
ATOM	9272	O LEU B 700	5.203	27.133	-35.644	1.00	0.00	B	O
ATOM	9273	N GLN B 701	5.400	25.367	-34.244	1.00	0.00	B	N
ATOM	9274	CA GLN B 701	5.351	26.095	-33.003	1.00	0.00	B	C
ATOM	9275	CB GLN B 701	5.294	25.189	-31.769	1.00	0.00	B	C
ATOM	9276	CG GLN B 701	6.528	24.317	-31.569	1.00	0.00	B	C
ATOM	9277	CD GLN B 701	6.268	23.508	-30.311	1.00	0.00	B	C
ATOM	9278	OE1 GLN B 701	5.202	23.630	-29.706	1.00	0.00	B	O
ATOM	9279	NE2 GLN B 701	7.248	22.662	-29.902	1.00	0.00	B	N
ATOM	9280	C GLN B 701	6.542	26.985	-32.893	1.00	0.00	B	C
ATOM	9281	O GLN B 701	6.463	28.076	-32.329	1.00	0.00	B	O
ATOM	9282	N ARG B 702	7.696	26.532	-33.402	1.00	0.00	B	N
ATOM	9283	CA ARG B 702	8.861	27.353	-33.302	1.00	0.00	B	C
ATOM	9284	CB ARG B 702	10.129	26.660	-33.841	1.00	0.00	B	C
ATOM	9285	CG ARG B 702	11.399	27.503	-33.700	1.00	0.00	B	C
ATOM	9286	CD ARG B 702	12.685	26.680	-33.587	1.00	0.00	B	C
ATOM	9287	NE ARG B 702	13.069	26.171	-34.933	1.00	0.00	B	N
ATOM	9288	CZ ARG B 702	14.321	25.659	-35.106	1.00	0.00	B	C
ATOM	9289	NH1 ARG B 702	15.181	25.600	-34.045	1.00	0.00	B	N
ATOM	9290	NH2 ARG B 702	14.717	25.195	-36.323	1.00	0.00	B	N

ATOM	9291	C	ARG B 702	8.596	28.613	-34.071	1.00	0.00	B	C
ATOM	9292	O	ARG B 702	8.889	29.707	-33.596	1.00	0.00	B	O
ATOM	9293	N	ALA B 703	7.971	28.502	-35.256	1.00	0.00	B	N
ATOM	9294	CA	ALA B 703	7.727	29.659	-36.070	1.00	0.00	B	C
ATOM	9295	CB	ALA B 703	6.989	29.337	-37.379	1.00	0.00	B	C
ATOM	9296	C	ALA B 703	6.873	30.614	-35.303	1.00	0.00	B	C
ATOM	9297	O	ALA B 703	7.066	31.827	-35.367	1.00	0.00	B	O
ATOM	9298	N	ILE B 704	5.886	30.089	-34.558	1.00	0.00	B	N
ATOM	9299	CA	ILE B 704	5.020	30.941	-33.800	1.00	0.00	B	C
ATOM	9300	CB	ILE B 704	3.951	30.189	-33.063	1.00	0.00	B	C
ATOM	9301	CG2	ILE B 704	3.231	31.176	-32.131	1.00	0.00	B	C
ATOM	9302	CG1	ILE B 704	3.011	29.481	-34.051	1.00	0.00	B	C
ATOM	9303	CD	ILE B 704	2.062	28.492	-33.376	1.00	0.00	B	C
ATOM	9304	C	ILE B 704	5.833	31.664	-32.773	1.00	0.00	B	C
ATOM	9305	O	ILE B 704	5.643	32.859	-32.557	1.00	0.00	B	O
ATOM	9306	N	THR B 705	6.767	30.958	-32.105	1.00	0.00	B	N
ATOM	9307	CA	THR B 705	7.510	31.599	-31.059	1.00	0.00	B	C
ATOM	9308	CB	THR B 705	8.419	30.685	-30.282	1.00	0.00	B	C
ATOM	9309	OG1	THR B 705	8.761	31.299	-29.048	1.00	0.00	B	O
ATOM	9310	CG2	THR B 705	9.704	30.419	-31.082	1.00	0.00	B	C
ATOM	9311	C	THR B 705	8.329	32.703	-31.651	1.00	0.00	B	C
ATOM	9312	O	THR B 705	8.462	33.767	-31.052	1.00	0.00	B	O
ATOM	9313	N	ILE B 706	8.908	32.473	-32.844	1.00	0.00	B	N
ATOM	9314	CA	ILE B 706	9.733	33.468	-33.466	1.00	0.00	B	C
ATOM	9315	CB	ILE B 706	10.423	32.962	-34.697	1.00	0.00	B	C
ATOM	9316	CG2	ILE B 706	11.059	34.161	-35.417	1.00	0.00	B	C
ATOM	9317	CG1	ILE B 706	11.421	31.851	-34.320	1.00	0.00	B	C
ATOM	9318	CD	ILE B 706	12.008	31.104	-35.516	1.00	0.00	B	C
ATOM	9319	C	ILE B 706	8.923	34.668	-33.843	1.00	0.00	B	C
ATOM	9320	O	ILE B 706	9.335	35.802	-33.617	1.00	0.00	B	O
ATOM	9321	N	LEU B 707	7.734	34.458	-34.437	1.00	0.00	B	N
ATOM	9322	CA	LEU B 707	6.980	35.578	-34.918	1.00	0.00	B	C
ATOM	9323	CB	LEU B 707	5.902	35.162	-35.928	1.00	0.00	B	C
ATOM	9324	CG	LEU B 707	6.637	34.534	-37.134	1.00	0.00	B	C
ATOM	9325	CD1	LEU B 707	5.761	34.382	-38.384	1.00	0.00	B	C
ATOM	9326	CD2	LEU B 707	7.947	35.292	-37.404	1.00	0.00	B	C
ATOM	9327	C	LEU B 707	6.482	36.445	-33.798	1.00	0.00	B	C
ATOM	9328	O	LEU B 707	6.475	37.668	-33.920	1.00	0.00	B	O

ATOM	9329	N	ASP B 708	6.071	35.850	-32.663	1.00	0.00	B	N
ATOM	9330	CA	ASP B 708	5.582	36.647	-31.570	1.00	0.00	B	C
ATOM	9331	CB	ASP B 708	5.130	35.789	-30.375	1.00	0.00	B	C
ATOM	9332	CG	ASP B 708	3.890	35.000	-30.780	1.00	0.00	B	C
ATOM	9333	OD1	ASP B 708	3.343	35.278	-31.880	1.00	0.00	B	O
ATOM	9334	OD2	ASP B 708	3.471	34.113	-29.989	1.00	0.00	B	O
ATOM	9335	C	ASP B 708	6.684	37.539	-31.087	1.00	0.00	B	C
ATOM	9336	O	ASP B 708	6.473	38.727	-30.845	1.00	0.00	B	O
ATOM	9337	N	THR B 709	7.908	36.992	-30.948	1.00	0.00	B	N
ATOM	9338	CA	THR B 709	8.988	37.791	-30.439	1.00	0.00	B	C
ATOM	9339	CB	THR B 709	10.259	37.026	-30.192	1.00	0.00	B	C
ATOM	9340	OG1	THR B 709	11.162	37.826	-29.439	1.00	0.00	B	O
ATOM	9341	CG2	THR B 709	10.901	36.648	-31.535	1.00	0.00	B	C
ATOM	9342	C	THR B 709	9.281	38.881	-31.420	1.00	0.00	B	C
ATOM	9343	O	THR B 709	9.551	40.014	-31.030	1.00	0.00	B	O
ATOM	9344	N	GLU B 710	9.214	38.574	-32.730	1.00	0.00	B	N
ATOM	9345	CA	GLU B 710	9.541	39.569	-33.709	1.00	0.00	B	C
ATOM	9346	CB	GLU B 710	9.394	39.089	-35.164	1.00	0.00	B	C
ATOM	9347	CG	GLU B 710	9.754	40.181	-36.180	1.00	0.00	B	C
ATOM	9348	CD	GLU B 710	9.328	39.732	-37.571	1.00	0.00	B	C
ATOM	9349	OE1	GLU B 710	8.690	38.652	-37.678	1.00	0.00	B	O
ATOM	9350	OE2	GLU B 710	9.629	40.470	-38.549	1.00	0.00	B	O
ATOM	9351	C	GLU B 710	8.612	40.727	-33.553	1.00	0.00	B	C
ATOM	9352	O	GLU B 710	9.049	41.877	-33.588	1.00	0.00	B	O
ATOM	9353	N	LYS B 711	7.300	40.467	-33.384	1.00	0.00	B	N
ATOM	9354	CA	LYS B 711	6.369	41.555	-33.262	1.00	0.00	B	C
ATOM	9355	CB	LYS B 711	4.898	41.111	-33.245	1.00	0.00	B	C
ATOM	9356	CG	LYS B 711	4.366	40.695	-34.619	1.00	0.00	B	C
ATOM	9357	CD	LYS B 711	4.411	41.817	-35.662	1.00	0.00	B	C
ATOM	9358	CE	LYS B 711	5.462	41.607	-36.755	1.00	0.00	B	C
ATOM	9359	NZ	LYS B 711	6.816	41.549	-36.162	1.00	0.00	B	N
ATOM	9360	C	LYS B 711	6.624	42.337	-31.999	1.00	0.00	B	C
ATOM	9361	O	LYS B 711	6.583	43.565	-32.016	1.00	0.00	B	O
ATOM	9362	N	SER B 712	6.875	41.640	-30.871	1.00	0.00	B	N
ATOM	9363	CA	SER B 712	7.071	42.235	-29.568	1.00	0.00	B	C
ATOM	9364	CB	SER B 712	6.875	41.218	-28.429	1.00	0.00	B	C
ATOM	9365	OG	SER B 712	7.061	41.852	-27.171	1.00	0.00	B	O
ATOM	9366	C	SER B 712	8.448	42.815	-29.427	1.00	0.00	B	C

ATOM	9367	O	SER	B	712	8.757	43.470	-28.434	1.00	0.00	B	O
ATOM	9368	N	PHE	B	713	9.310	42.596	-30.429	1.00	0.00	B	N
ATOM	9369	CA	PHE	B	713	10.689	43.000	-30.427	1.00	0.00	B	C
ATOM	9370	CB	PHE	B	713	11.504	42.406	-31.585	1.00	0.00	B	C
ATOM	9371	CG	PHE	B	713	12.936	42.646	-31.252	1.00	0.00	B	C
ATOM	9372	CD1	PHE	B	713	13.545	41.883	-30.280	1.00	0.00	B	C
ATOM	9373	CE1	PHE	B	713	14.865	42.080	-29.953	1.00	0.00	B	C
ATOM	9374	CZ	PHE	B	713	15.591	43.048	-30.602	1.00	0.00	B	C
ATOM	9375	CD2	PHE	B	713	13.672	43.610	-31.901	1.00	0.00	B	C
ATOM	9376	CE2	PHE	B	713	14.993	43.811	-31.577	1.00	0.00	B	C
ATOM	9377	C	PHE	B	713	10.785	44.495	-30.501	1.00	0.00	B	C
ATOM	9378	O	PHE	B	713	11.869	45.053	-30.329	1.00	0.00	B	O
ATOM	9379	N	LEU	B	714	9.657	45.179	-30.774	1.00	0.00	B	N
ATOM	9380	CA	LEU	B	714	9.619	46.588	-31.056	1.00	0.00	B	C
ATOM	9381	CB	LEU	B	714	10.587	47.472	-30.241	1.00	0.00	B	C
ATOM	9382	CG	LEU	B	714	10.155	47.752	-28.789	1.00	0.00	B	C
ATOM	9383	CD1	LEU	B	714	8.855	48.572	-28.756	1.00	0.00	B	C
ATOM	9384	CD2	LEU	B	714	10.088	46.473	-27.943	1.00	0.00	B	C
ATOM	9385	C	LEU	B	714	9.959	46.770	-32.487	1.00	0.00	B	C
ATOM	9386	O	LEU	B	714	10.199	47.889	-32.937	1.00	0.00	B	O
ATOM	9387	N	LYS	B	715	9.951	45.652	-33.239	1.00	0.00	B	N
ATOM	9388	CA	LYS	B	715	10.119	45.736	-34.656	1.00	0.00	B	C
ATOM	9389	CB	LYS	B	715	8.997	46.588	-35.260	1.00	0.00	B	C
ATOM	9390	CG	LYS	B	715	7.626	46.101	-34.787	1.00	0.00	B	C
ATOM	9391	CD	LYS	B	715	6.539	47.176	-34.831	1.00	0.00	B	C
ATOM	9392	CE	LYS	B	715	5.321	46.832	-33.970	1.00	0.00	B	C
ATOM	9393	NZ	LYS	B	715	4.508	48.045	-33.732	1.00	0.00	B	N
ATOM	9394	C	LYS	B	715	11.421	46.411	-34.885	1.00	0.00	B	C
ATOM	9395	O	LYS	B	715	11.573	47.211	-35.807	1.00	0.00	B	O
ATOM	9396	N	CYS	B	716	12.409	46.084	-34.035	1.00	0.00	B	N
ATOM	9397	CA	CYS	B	716	13.684	46.711	-34.157	1.00	0.00	B	C
ATOM	9398	CB	CYS	B	716	14.675	46.349	-33.040	1.00	0.00	B	C
ATOM	9399	SG	CYS	B	716	14.151	46.961	-31.411	1.00	0.00	B	S
ATOM	9400	C	CYS	B	716	14.261	46.260	-35.455	1.00	0.00	B	C
ATOM	9401	O	CYS	B	716	13.703	45.384	-36.114	1.00	0.00	B	O
ATOM	9402	N	MET	B	717	15.384	46.880	-35.863	1.00	0.00	B	N
ATOM	9403	CA	MET	B	717	15.976	46.553	-37.127	1.00	0.00	B	C
ATOM	9404	CB	MET	B	717	17.349	47.201	-37.369	1.00	0.00	B	C

ATOM	9405	CG	MET	B	717	18.028	46.659	-38.631	1.00	0.00	B	C
ATOM	9406	SD	MET	B	717	19.764	47.149	-38.844	1.00	0.00	B	S
ATOM	9407	CE	MET	B	717	20.063	46.023	-40.239	1.00	0.00	B	C
ATOM	9408	C	MET	B	717	16.221	45.087	-37.160	1.00	0.00	B	C
ATOM	9409	O	MET	B	717	16.763	44.510	-36.220	1.00	0.00	B	O
ATOM	9410	N	ARG	B	718	15.799	44.453	-38.269	1.00	0.00	B	N
ATOM	9411	CA	ARG	B	718	15.990	43.050	-38.468	1.00	0.00	B	C
ATOM	9412	CB	ARG	B	718	15.004	42.201	-37.649	1.00	0.00	B	C
ATOM	9413	CG	ARG	B	718	15.151	40.691	-37.823	1.00	0.00	B	C
ATOM	9414	CD	ARG	B	718	14.157	39.912	-36.961	1.00	0.00	B	C
ATOM	9415	NE	ARG	B	718	14.578	40.089	-35.541	1.00	0.00	B	N
ATOM	9416	CZ	ARG	B	718	13.663	39.950	-34.538	1.00	0.00	B	C
ATOM	9417	NH1	ARG	B	718	12.359	39.675	-34.839	1.00	0.00	B	N
ATOM	9418	NH2	ARG	B	718	14.053	40.068	-33.235	1.00	0.00	B	N
ATOM	9419	C	ARG	B	718	15.718	42.805	-39.913	1.00	0.00	B	C
ATOM	9420	O	ARG	B	718	15.032	43.599	-40.554	1.00	0.00	B	O
ATOM	9421	C	LYS	B	719	14.672	40.622	-41.872	1.00	0.00	B	C
ATOM	9422	OT1	LYS	B	719	14.435	40.385	-40.930	0.00	0.00	B	O
ATOM	9423	OT2	LYS	B	719	14.387	40.470	-42.818	0.00	0.00	B	O
ATOM	9424	N	LYS	B	719	16.263	41.717	-40.493	1.00	0.00	B	N
ATOM	9425	CA	LYS	B	719	15.891	41.528	-41.862	1.00	0.00	B	C
ATOM	9426	CB	LYS	B	719	16.928	40.879	-42.785	1.00	0.00	B	C
ATOM	9427	CG	LYS	B	719	16.338	40.768	-44.195	1.00	0.00	B	C
ATOM	9428	CD	LYS	B	719	16.015	42.137	-44.804	1.00	0.00	B	C
ATOM	9429	CE	LYS	B	719	14.744	42.161	-45.663	1.00	0.00	B	C
ATOM	9430	NZ	LYS	B	719	14.864	41.218	-46.796	1.00	0.00	B	N
ATOM	9431	N	LEU	A	112	35.654	51.645	-77.920	1.00	0.00	C	N
ATOM	9432	CA	LEU	A	112	34.288	51.564	-78.448	1.00	0.00	C	C
ATOM	9433	CB	LEU	A	112	34.322	51.059	-79.900	1.00	0.00	C	C
ATOM	9434	CG	LEU	A	112	35.108	51.982	-80.856	1.00	0.00	C	C
ATOM	9435	CD1	LEU	A	112	35.073	51.461	-82.303	1.00	0.00	C	C
ATOM	9436	CD2	LEU	A	112	34.641	53.440	-80.737	1.00	0.00	C	C
ATOM	9437	C	LEU	A	112	33.509	50.585	-77.638	1.00	0.00	C	C
ATOM	9438	O	LEU	A	112	32.300	50.444	-77.811	1.00	0.00	C	O
ATOM	9439	N	TYR	A	113	34.195	49.870	-76.723	1.00	0.00	C	N
ATOM	9440	CA	TYR	A	113	33.498	48.883	-75.959	1.00	0.00	C	C
ATOM	9441	CB	TYR	A	113	33.904	47.445	-76.325	1.00	0.00	C	C
ATOM	9442	CG	TYR	A	113	33.419	47.140	-77.698	1.00	0.00	C	C

ATOM	9443	CD1 TYR A 113	34.081	47.629	-78.799	1.00	0.00	C	C
ATOM	9444	CE1 TYR A 113	33.632	47.340	-80.065	1.00	0.00	C	C
ATOM	9445	CZ TYR A 113	32.515	46.554	-80.236	1.00	0.00	C	C
ATOM	9446	OH TYR A 113	32.050	46.256	-81.533	1.00	0.00	C	O
ATOM	9447	CD2 TYR A 113	32.305	46.352	-77.880	1.00	0.00	C	C
ATOM	9448	CE2 TYR A 113	31.851	46.058	-79.142	1.00	0.00	C	C
ATOM	9449	C TYR A 113	33.819	49.022	-74.508	1.00	0.00	C	C
ATOM	9450	O TYR A 113	34.984	49.113	-74.120	1.00	0.00	C	O
ATOM	9451	N ASP A 114	32.765	49.067	-73.673	1.00	0.00	C	N
ATOM	9452	CA ASP A 114	32.914	49.004	-72.250	1.00	0.00	C	C
ATOM	9453	CB ASP A 114	32.112	50.081	-71.500	1.00	0.00	C	C
ATOM	9454	CG ASP A 114	30.652	49.960	-71.893	1.00	0.00	C	C
ATOM	9455	OD1 ASP A 114	30.355	50.110	-73.112	1.00	0.00	C	O
ATOM	9456	OD2 ASP A 114	29.810	49.730	-70.987	1.00	0.00	C	O
ATOM	9457	C ASP A 114	32.460	47.630	-71.846	1.00	0.00	C	C
ATOM	9458	O ASP A 114	31.993	46.855	-72.679	1.00	0.00	C	O
ATOM	9459	N ARG A 115	32.584	47.281	-70.552	1.00	0.00	C	N
ATOM	9460	CA ARG A 115	32.213	45.964	-70.107	1.00	0.00	C	C
ATOM	9461	CB ARG A 115	32.493	45.755	-68.608	1.00	0.00	C	C
ATOM	9462	CG ARG A 115	32.120	44.368	-68.078	1.00	0.00	C	C
ATOM	9463	CD ARG A 115	32.507	44.166	-66.611	1.00	0.00	C	C
ATOM	9464	NE ARG A 115	31.518	44.899	-65.768	1.00	0.00	C	N
ATOM	9465	CZ ARG A 115	30.408	44.254	-65.304	1.00	0.00	C	C
ATOM	9466	NH1 ARG A 115	30.218	42.936	-65.592	1.00	0.00	C	N
ATOM	9467	NH2 ARG A 115	29.493	44.927	-64.545	1.00	0.00	C	N
ATOM	9468	C ARG A 115	30.744	45.771	-70.333	1.00	0.00	C	C
ATOM	9469	O ARG A 115	30.307	44.713	-70.785	1.00	0.00	C	O
ATOM	9470	N ARG A 116	29.955	46.818	-70.051	1.00	0.00	C	N
ATOM	9471	CA ARG A 116	28.524	46.755	-70.100	1.00	0.00	C	C
ATOM	9472	CB ARG A 116	27.897	48.103	-69.708	1.00	0.00	C	C
ATOM	9473	CG ARG A 116	26.529	47.976	-69.042	1.00	0.00	C	C
ATOM	9474	CD ARG A 116	25.478	47.214	-69.842	1.00	0.00	C	C
ATOM	9475	NE ARG A 116	24.369	46.942	-68.886	1.00	0.00	C	N
ATOM	9476	CZ ARG A 116	24.435	45.841	-68.079	1.00	0.00	C	C
ATOM	9477	NH1 ARG A 116	25.456	44.951	-68.222	1.00	0.00	C	N
ATOM	9478	NH2 ARG A 116	23.481	45.638	-67.122	1.00	0.00	C	N
ATOM	9479	C ARG A 116	28.081	46.444	-71.498	1.00	0.00	C	C
ATOM	9480	O ARG A 116	27.189	45.623	-71.706	1.00	0.00	C	O

ATOM	9481	N	SER A 117	28.714	47.080	-72.502	1.00	0.00	C	N
ATOM	9482	CA	SER A 117	28.278	46.943	-73.863	1.00	0.00	C	C
ATOM	9483	CB	SER A 117	29.105	47.795	-74.843	1.00	0.00	C	C
ATOM	9484	OG	SER A 117	30.468	47.395	-74.820	1.00	0.00	C	O
ATOM	9485	C	SER A 117	28.339	45.512	-74.316	1.00	0.00	C	C
ATOM	9486	O	SER A 117	27.382	45.014	-74.905	1.00	0.00	C	O
ATOM	9487	N	ILE A 118	29.460	44.811	-74.060	1.00	0.00	C	N
ATOM	9488	CA	ILE A 118	29.628	43.454	-74.513	1.00	0.00	C	C
ATOM	9489	CB	ILE A 118	31.008	42.915	-74.287	1.00	0.00	C	C
ATOM	9490	CG2	ILE A 118	31.007	41.443	-74.733	1.00	0.00	C	C
ATOM	9491	CG1	ILE A 118	32.052	43.771	-75.021	1.00	0.00	C	C
ATOM	9492	CD	ILE A 118	33.488	43.456	-74.607	1.00	0.00	C	C
ATOM	9493	C	ILE A 118	28.681	42.528	-73.810	1.00	0.00	C	C
ATOM	9494	O	ILE A 118	28.096	41.639	-74.428	1.00	0.00	C	O
ATOM	9495	N	PHE A 119	28.501	42.716	-72.490	1.00	0.00	C	N
ATOM	9496	CA	PHE A 119	27.685	41.837	-71.702	1.00	0.00	C	C
ATOM	9497	CB	PHE A 119	27.601	42.265	-70.222	1.00	0.00	C	C
ATOM	9498	CG	PHE A 119	28.780	41.717	-69.487	1.00	0.00	C	C
ATOM	9499	CD1	PHE A 119	30.050	42.190	-69.713	1.00	0.00	C	C
ATOM	9500	CE1	PHE A 119	31.125	41.667	-69.033	1.00	0.00	C	C
ATOM	9501	CZ	PHE A 119	30.945	40.656	-68.121	1.00	0.00	C	C
ATOM	9502	CD2	PHE A 119	28.611	40.689	-68.585	1.00	0.00	C	C
ATOM	9503	CE2	PHE A 119	29.680	40.163	-67.900	1.00	0.00	C	C
ATOM	9504	C	PHE A 119	26.300	41.818	-72.259	1.00	0.00	C	C
ATOM	9505	O	PHE A 119	25.674	40.760	-72.319	1.00	0.00	C	O
ATOM	9506	N	GLU A 120	25.775	42.991	-72.650	1.00	0.00	C	N
ATOM	9507	CA	GLU A 120	24.452	43.070	-73.199	1.00	0.00	C	C
ATOM	9508	CB	GLU A 120	23.978	44.519	-73.394	1.00	0.00	C	C
ATOM	9509	CG	GLU A 120	23.808	45.282	-72.076	1.00	0.00	C	C
ATOM	9510	CD	GLU A 120	22.621	44.694	-71.320	1.00	0.00	C	C
ATOM	9511	OE1	GLU A 120	22.474	43.444	-71.331	1.00	0.00	C	O
ATOM	9512	OE2	GLU A 120	21.849	45.491	-70.723	1.00	0.00	C	O
ATOM	9513	C	GLU A 120	24.411	42.376	-74.528	1.00	0.00	C	C
ATOM	9514	O	GLU A 120	23.432	41.703	-74.852	1.00	0.00	C	O
ATOM	9515	N	ALA A 121	25.473	42.518	-75.339	1.00	0.00	C	N
ATOM	9516	CA	ALA A 121	25.486	41.908	-76.641	1.00	0.00	C	C
ATOM	9517	CB	ALA A 121	26.771	42.212	-77.430	1.00	0.00	C	C
ATOM	9518	C	ALA A 121	25.399	40.420	-76.479	1.00	0.00	C	C

ATOM	9519	O	ALA A 121	24.664	39.750	-77.204	1.00	0.00	C	O
ATOM	9520	N	VAL A 122	26.142	39.873	-75.500	1.00	0.00	C	N
ATOM	9521	CA	VAL A 122	26.214	38.459	-75.249	1.00	0.00	C	C
ATOM	9522	CB	VAL A 122	27.193	38.121	-74.160	1.00	0.00	C	C
ATOM	9523	CG1	VAL A 122	27.092	36.621	-73.841	1.00	0.00	C	C
ATOM	9524	CG2	VAL A 122	28.594	38.558	-74.619	1.00	0.00	C	C
ATOM	9525	C	VAL A 122	24.872	37.928	-74.837	1.00	0.00	C	C
ATOM	9526	O	VAL A 122	24.489	36.822	-75.220	1.00	0.00	C	O
ATOM	9527	N	ALA A 123	24.106	38.707	-74.051	1.00	0.00	C	N
ATOM	9528	CA	ALA A 123	22.854	38.226	-73.535	1.00	0.00	C	C
ATOM	9529	CB	ALA A 123	22.124	39.276	-72.680	1.00	0.00	C	C
ATOM	9530	C	ALA A 123	21.949	37.861	-74.678	1.00	0.00	C	C
ATOM	9531	O	ALA A 123	21.199	36.890	-74.610	1.00	0.00	C	O
ATOM	9532	N	GLN A 124	21.978	38.690	-75.733	1.00	0.00	C	N
ATOM	9533	CA	GLN A 124	21.226	38.620	-76.957	1.00	0.00	C	C
ATOM	9534	CB	GLN A 124	21.256	39.951	-77.725	1.00	0.00	C	C
ATOM	9535	CG	GLN A 124	20.673	41.124	-76.938	1.00	0.00	C	C
ATOM	9536	CD	GLN A 124	20.800	42.365	-77.811	1.00	0.00	C	C
ATOM	9537	OE1	GLN A 124	19.812	42.884	-78.328	1.00	0.00	C	O
ATOM	9538	NE2	GLN A 124	22.056	42.859	-77.985	1.00	0.00	C	N
ATOM	9539	C	GLN A 124	21.731	37.568	-77.904	1.00	0.00	C	C
ATOM	9540	O	GLN A 124	20.999	37.160	-78.806	1.00	0.00	C	O
ATOM	9541	N	ASN A 125	23.001	37.136	-77.775	1.00	0.00	C	N
ATOM	9542	CA	ASN A 125	23.573	36.241	-78.745	1.00	0.00	C	C
ATOM	9543	CB	ASN A 125	22.705	34.998	-79.007	1.00	0.00	C	C
ATOM	9544	CG	ASN A 125	23.511	34.020	-79.850	1.00	0.00	C	C
ATOM	9545	OD1	ASN A 125	24.588	33.587	-79.444	1.00	0.00	C	O
ATOM	9546	ND2	ASN A 125	22.984	33.665	-81.051	1.00	0.00	C	N
ATOM	9547	C	ASN A 125	23.722	36.989	-80.038	1.00	0.00	C	C
ATOM	9548	O	ASN A 125	23.455	36.454	-81.115	1.00	0.00	C	O
ATOM	9549	N	ASN A 126	24.172	38.259	-79.960	1.00	0.00	C	N
ATOM	9550	CA	ASN A 126	24.303	39.066	-81.138	1.00	0.00	C	C
ATOM	9551	CB	ASN A 126	23.788	40.502	-80.925	1.00	0.00	C	C
ATOM	9552	CG	ASN A 126	23.429	41.093	-82.276	1.00	0.00	C	C
ATOM	9553	OD1	ASN A 126	23.471	40.407	-83.295	1.00	0.00	C	O
ATOM	9554	ND2	ASN A 126	23.055	42.401	-82.289	1.00	0.00	C	N
ATOM	9555	C	ASN A 126	25.755	39.141	-81.531	1.00	0.00	C	C
ATOM	9556	O	ASN A 126	26.587	39.685	-80.807	1.00	0.00	C	O

ATOM	9557	N	CYS A 127	26.093	38.535	-82.687	1.00	0.00	C	N
ATOM	9558	CA	CYS A 127	27.412	38.513	-83.260	1.00	0.00	C	C
ATOM	9559	CB	CYS A 127	27.573	37.449	-84.356	1.00	0.00	C	C
ATOM	9560	SG	CYS A 127	27.570	35.767	-83.677	1.00	0.00	C	S
ATOM	9561	C	CYS A 127	27.790	39.832	-83.873	1.00	0.00	C	C
ATOM	9562	O	CYS A 127	28.973	40.151	-83.965	1.00	0.00	C	O
ATOM	9563	N	GLN A 128	26.810	40.601	-84.386	1.00	0.00	C	N
ATOM	9564	CA	GLN A 128	27.115	41.809	-85.112	1.00	0.00	C	C
ATOM	9565	CB	GLN A 128	25.928	42.351	-85.932	1.00	0.00	C	C
ATOM	9566	CG	GLN A 128	25.589	41.452	-87.124	1.00	0.00	C	C
ATOM	9567	CD	GLN A 128	24.567	42.149	-88.015	1.00	0.00	C	C
ATOM	9568	OE1	GLN A 128	23.690	41.506	-88.589	1.00	0.00	C	O
ATOM	9569	NE2	GLN A 128	24.688	43.497	-88.147	1.00	0.00	C	N
ATOM	9570	C	GLN A 128	27.673	42.923	-84.268	1.00	0.00	C	C
ATOM	9571	O	GLN A 128	28.622	43.591	-84.677	1.00	0.00	C	O
ATOM	9572	N	ASP A 129	27.140	43.142	-83.054	1.00	0.00	C	N
ATOM	9573	CA	ASP A 129	27.569	44.256	-82.246	1.00	0.00	C	C
ATOM	9574	CB	ASP A 129	26.831	44.325	-80.897	1.00	0.00	C	C
ATOM	9575	CG	ASP A 129	25.381	44.700	-81.173	1.00	0.00	C	C
ATOM	9576	OD1	ASP A 129	25.097	45.153	-82.315	1.00	0.00	C	O
ATOM	9577	OD2	ASP A 129	24.540	44.539	-80.249	1.00	0.00	C	O
ATOM	9578	C	ASP A 129	29.033	44.097	-81.967	1.00	0.00	C	C
ATOM	9579	O	ASP A 129	29.735	45.060	-81.663	1.00	0.00	C	O
ATOM	9580	N	LEU A 130	29.481	42.834	-81.980	1.00	0.00	C	N
ATOM	9581	CA	LEU A 130	30.812	42.333	-81.788	1.00	0.00	C	C
ATOM	9582	CB	LEU A 130	30.829	40.841	-81.412	1.00	0.00	C	C
ATOM	9583	CG	LEU A 130	30.203	40.571	-80.028	1.00	0.00	C	C
ATOM	9584	CD1	LEU A 130	30.227	39.078	-79.671	1.00	0.00	C	C
ATOM	9585	CD2	LEU A 130	30.864	41.437	-78.944	1.00	0.00	C	C
ATOM	9586	C	LEU A 130	31.693	42.538	-82.981	1.00	0.00	C	C
ATOM	9587	O	LEU A 130	32.883	42.240	-82.911	1.00	0.00	C	O
ATOM	9588	N	GLU A 131	31.134	42.929	-84.141	1.00	0.00	C	N
ATOM	9589	CA	GLU A 131	31.920	43.033	-85.342	1.00	0.00	C	C
ATOM	9590	CB	GLU A 131	31.074	43.508	-86.532	1.00	0.00	C	C
ATOM	9591	CG	GLU A 131	29.959	42.513	-86.876	1.00	0.00	C	C
ATOM	9592	CD	GLU A 131	29.087	43.120	-87.964	1.00	0.00	C	C
ATOM	9593	OE1	GLU A 131	28.118	43.845	-87.613	1.00	0.00	C	O
ATOM	9594	OE2	GLU A 131	29.380	42.870	-89.163	1.00	0.00	C	O

ATOM	9595	C	GLU A 131	33.075	43.984	-85.154	1.00	0.00	C	C
ATOM	9596	O	GLU A 131	34.196	43.684	-85.561	1.00	0.00	C	O
ATOM	9597	N	SER A 132	32.846	45.158	-84.536	1.00	0.00	C	N
ATOM	9598	CA	SER A 132	33.880	46.143	-84.341	1.00	0.00	C	C
ATOM	9599	CB	SER A 132	33.313	47.548	-84.067	1.00	0.00	C	C
ATOM	9600	OG	SER A 132	32.611	48.024	-85.207	1.00	0.00	C	O
ATOM	9601	C	SER A 132	34.772	45.793	-83.180	1.00	0.00	C	C
ATOM	9602	O	SER A 132	35.675	46.559	-82.847	1.00	0.00	C	O
ATOM	9603	N	LEU A 133	34.523	44.653	-82.505	1.00	0.00	C	N
ATOM	9604	CA	LEU A 133	35.211	44.333	-81.283	1.00	0.00	C	C
ATOM	9605	CB	LEU A 133	34.601	43.107	-80.570	1.00	0.00	C	C
ATOM	9606	CG	LEU A 133	35.277	42.763	-79.224	1.00	0.00	C	C
ATOM	9607	CD1	LEU A 133	35.192	43.943	-78.244	1.00	0.00	C	C
ATOM	9608	CD2	LEU A 133	34.704	41.467	-78.615	1.00	0.00	C	C
ATOM	9609	C	LEU A 133	36.696	44.100	-81.425	1.00	0.00	C	C
ATOM	9610	O	LEU A 133	37.484	44.758	-80.747	1.00	0.00	C	O
ATOM	9611	N	LEU A 134	37.135	43.217	-82.346	1.00	0.00	C	N
ATOM	9612	CA	LEU A 134	38.519	42.833	-82.408	1.00	0.00	C	C
ATOM	9613	CB	LEU A 134	38.772	41.821	-83.540	1.00	0.00	C	C
ATOM	9614	CG	LEU A 134	40.113	41.054	-83.502	1.00	0.00	C	C
ATOM	9615	CD1	LEU A 134	40.316	40.307	-84.823	1.00	0.00	C	C
ATOM	9616	CD2	LEU A 134	41.327	41.907	-83.114	1.00	0.00	C	C
ATOM	9617	C	LEU A 134	39.357	44.047	-82.692	1.00	0.00	C	C
ATOM	9618	O	LEU A 134	40.395	44.261	-82.072	1.00	0.00	C	O
ATOM	9619	N	LEU A 135	38.915	44.904	-83.625	1.00	0.00	C	N
ATOM	9620	CA	LEU A 135	39.713	46.026	-84.014	1.00	0.00	C	C
ATOM	9621	CB	LEU A 135	39.133	46.800	-85.218	1.00	0.00	C	C
ATOM	9622	CG	LEU A 135	37.697	47.327	-85.046	1.00	0.00	C	C
ATOM	9623	CD1	LEU A 135	37.623	48.473	-84.025	1.00	0.00	C	C
ATOM	9624	CD2	LEU A 135	37.084	47.701	-86.406	1.00	0.00	C	C
ATOM	9625	C	LEU A 135	39.927	46.966	-82.861	1.00	0.00	C	C
ATOM	9626	O	LEU A 135	40.976	47.602	-82.783	1.00	0.00	C	O
ATOM	9627	N	PHE A 136	38.946	47.093	-81.946	1.00	0.00	C	N
ATOM	9628	CA	PHE A 136	39.044	48.034	-80.859	1.00	0.00	C	C
ATOM	9629	CB	PHE A 136	37.763	48.054	-80.000	1.00	0.00	C	C
ATOM	9630	CG	PHE A 136	38.046	48.744	-78.708	1.00	0.00	C	C
ATOM	9631	CD1	PHE A 136	38.109	50.115	-78.629	1.00	0.00	C	C
ATOM	9632	CE1	PHE A 136	38.374	50.732	-77.430	1.00	0.00	C	C

ATOM	9633	CZ	PHE	A	136	38.582	49.976	-76.301	1.00	0.00	C	C
ATOM	9634	CD2	PHE	A	136	38.265	47.994	-77.575	1.00	0.00	C	C
ATOM	9635	CE2	PHE	A	136	38.530	48.604	-76.373	1.00	0.00	C	C
ATOM	9636	C	PHE	A	136	40.221	47.756	-79.966	1.00	0.00	C	C
ATOM	9637	O	PHE	A	136	41.063	48.628	-79.755	1.00	0.00	C	O
ATOM	9638	N	LEU	A	137	40.338	46.519	-79.447	1.00	0.00	C	N
ATOM	9639	CA	LEU	A	137	41.389	46.156	-78.539	1.00	0.00	C	C
ATOM	9640	CB	LEU	A	137	41.198	44.830	-77.762	1.00	0.00	C	C
ATOM	9641	CG	LEU	A	137	40.930	43.562	-78.593	1.00	0.00	C	C
ATOM	9642	CD1	LEU	A	137	40.792	42.325	-77.685	1.00	0.00	C	C
ATOM	9643	CD2	LEU	A	137	39.693	43.741	-79.475	1.00	0.00	C	C
ATOM	9644	C	LEU	A	137	42.699	46.120	-79.251	1.00	0.00	C	C
ATOM	9645	O	LEU	A	137	43.736	45.935	-78.618	1.00	0.00	C	O
ATOM	9646	N	GLN	A	138	42.674	46.104	-80.598	1.00	0.00	C	N
ATOM	9647	CA	GLN	A	138	43.900	46.177	-81.336	1.00	0.00	C	C
ATOM	9648	CB	GLN	A	138	43.684	45.951	-82.842	1.00	0.00	C	C
ATOM	9649	CG	GLN	A	138	43.205	44.537	-83.183	1.00	0.00	C	C
ATOM	9650	CD	GLN	A	138	43.025	44.438	-84.693	1.00	0.00	C	C
ATOM	9651	OE1	GLN	A	138	43.021	45.446	-85.400	1.00	0.00	C	O
ATOM	9652	NE2	GLN	A	138	42.863	43.190	-85.206	1.00	0.00	C	N
ATOM	9653	C	GLN	A	138	44.519	47.537	-81.154	1.00	0.00	C	C
ATOM	9654	O	GLN	A	138	45.712	47.643	-80.870	1.00	0.00	C	O
ATOM	9655	N	LYS	A	139	43.727	48.621	-81.320	1.00	0.00	C	N
ATOM	9656	CA	LYS	A	139	44.289	49.939	-81.178	1.00	0.00	C	C
ATOM	9657	CB	LYS	A	139	43.318	51.081	-81.500	1.00	0.00	C	C
ATOM	9658	CG	LYS	A	139	43.958	52.440	-81.197	1.00	0.00	C	C
ATOM	9659	CD	LYS	A	139	43.070	53.646	-81.492	1.00	0.00	C	C
ATOM	9660	CE	LYS	A	139	43.658	54.963	-80.980	1.00	0.00	C	C
ATOM	9661	NZ	LYS	A	139	42.690	56.061	-81.187	1.00	0.00	C	N
ATOM	9662	C	LYS	A	139	44.691	50.195	-79.764	1.00	0.00	C	C
ATOM	9663	O	LYS	A	139	45.846	50.515	-79.481	1.00	0.00	C	O
ATOM	9664	N	SER	A	140	43.725	50.039	-78.843	1.00	0.00	C	N
ATOM	9665	CA	SER	A	140	43.919	50.317	-77.449	1.00	0.00	C	C
ATOM	9666	CB	SER	A	140	42.602	50.326	-76.654	1.00	0.00	C	C
ATOM	9667	OG	SER	A	140	41.979	49.053	-76.717	1.00	0.00	C	O
ATOM	9668	C	SER	A	140	44.811	49.272	-76.865	1.00	0.00	C	C
ATOM	9669	O	SER	A	140	45.390	49.460	-75.799	1.00	0.00	C	O
ATOM	9670	N	LYS	A	141	44.944	48.133	-77.560	1.00	0.00	C	N

ATOM	9671	CA	LYS	A	141	45.754	47.059	-77.069	1.00	0.00	C	C
ATOM	9672	CB	LYS	A	141	47.220	47.445	-76.796	1.00	0.00	C	C
ATOM	9673	CG	LYS	A	141	48.057	47.727	-78.046	1.00	0.00	C	C
ATOM	9674	CD	LYS	A	141	48.146	46.550	-79.013	1.00	0.00	C	C
ATOM	9675	CE	LYS	A	141	49.248	46.709	-80.062	1.00	0.00	C	C
ATOM	9676	NZ	LYS	A	141	49.092	47.991	-80.785	1.00	0.00	C	N
ATOM	9677	C	LYS	A	141	45.184	46.592	-75.769	1.00	0.00	C	C
ATOM	9678	O	LYS	A	141	45.898	46.033	-74.940	1.00	0.00	C	O
ATOM	9679	N	LYS	A	142	43.869	46.800	-75.559	1.00	0.00	C	N
ATOM	9680	CA	LYS	A	142	43.238	46.333	-74.358	1.00	0.00	C	C
ATOM	9681	CB	LYS	A	142	41.868	46.975	-74.073	1.00	0.00	C	C
ATOM	9682	CG	LYS	A	142	41.965	48.391	-73.499	1.00	0.00	C	C
ATOM	9683	CD	LYS	A	142	40.637	49.150	-73.487	1.00	0.00	C	C
ATOM	9684	CE	LYS	A	142	40.644	50.376	-72.569	1.00	0.00	C	C
ATOM	9685	NZ	LYS	A	142	41.729	51.305	-72.957	1.00	0.00	C	N
ATOM	9686	C	LYS	A	142	43.026	44.863	-74.514	1.00	0.00	C	C
ATOM	9687	O	LYS	A	142	42.994	44.349	-75.630	1.00	0.00	C	O
ATOM	9688	N	HSD	A	143	42.898	44.135	-73.385	1.00	0.00	C	N
ATOM	9689	CA	HSD	A	143	42.710	42.718	-73.490	1.00	0.00	C	C
ATOM	9690	CB	HSD	A	143	43.745	41.882	-72.714	1.00	0.00	C	C
ATOM	9691	ND1	HSD	A	143	45.541	41.244	-74.399	1.00	0.00	C	N
ATOM	9692	CG	HSD	A	143	45.130	41.950	-73.288	1.00	0.00	C	C
ATOM	9693	CE1	HSD	A	143	46.844	41.557	-74.601	1.00	0.00	C	C
ATOM	9694	NE2	HSD	A	143	47.301	42.411	-73.701	1.00	0.00	C	N
ATOM	9695	CD2	HSD	A	143	46.218	42.654	-72.874	1.00	0.00	C	C
ATOM	9696	C	HSD	A	143	41.362	42.362	-72.953	1.00	0.00	C	C
ATOM	9697	O	HSD	A	143	40.838	42.991	-72.035	1.00	0.00	C	O
ATOM	9698	N	LEU	A	144	40.786	41.285	-73.515	1.00	0.00	C	N
ATOM	9699	CA	LEU	A	144	39.487	40.784	-73.179	1.00	0.00	C	C
ATOM	9700	CB	LEU	A	144	39.118	39.562	-74.040	1.00	0.00	C	C
ATOM	9701	CG	LEU	A	144	37.666	39.084	-73.877	1.00	0.00	C	C
ATOM	9702	CD1	LEU	A	144	36.683	40.174	-74.331	1.00	0.00	C	C
ATOM	9703	CD2	LEU	A	144	37.432	37.751	-74.606	1.00	0.00	C	C
ATOM	9704	C	LEU	A	144	39.533	40.365	-71.733	1.00	0.00	C	C
ATOM	9705	O	LEU	A	144	38.505	40.227	-71.074	1.00	0.00	C	O
ATOM	9706	N	THR	A	145	40.750	40.038	-71.268	1.00	0.00	C	N
ATOM	9707	CA	THR	A	145	41.122	39.605	-69.943	1.00	0.00	C	C
ATOM	9708	CB	THR	A	145	42.423	38.866	-69.942	1.00	0.00	C	C

ATOM	9709	OG1 THR A 145	43.466	39.708	-70.410	1.00	0.00	C	O
ATOM	9710	CG2 THR A 145	42.281	37.635	-70.852	1.00	0.00	C	C
ATOM	9711	C THR A 145	41.244	40.717	-68.938	1.00	0.00	C	C
ATOM	9712	O THR A 145	41.248	40.443	-67.740	1.00	0.00	C	O
ATOM	9713	N ASP A 146	41.402	41.984	-69.371	1.00	0.00	C	N
ATOM	9714	CA ASP A 146	41.689	43.057	-68.448	1.00	0.00	C	C
ATOM	9715	CB ASP A 146	41.702	44.447	-69.102	1.00	0.00	C	C
ATOM	9716	CG ASP A 146	42.934	44.547	-69.989	1.00	0.00	C	C
ATOM	9717	OD1 ASP A 146	43.799	43.631	-69.913	1.00	0.00	C	O
ATOM	9718	OD2 ASP A 146	43.032	45.546	-70.750	1.00	0.00	C	O
ATOM	9719	C ASP A 146	40.685	43.094	-67.335	1.00	0.00	C	C
ATOM	9720	O ASP A 146	39.571	42.586	-67.446	1.00	0.00	C	O
ATOM	9721	N ASN A 147	41.089	43.723	-66.213	1.00	0.00	C	N
ATOM	9722	CA ASN A 147	40.309	43.798	-65.006	1.00	0.00	C	C
ATOM	9723	CB ASN A 147	41.007	44.581	-63.880	1.00	0.00	C	C
ATOM	9724	CG ASN A 147	42.224	43.787	-63.423	1.00	0.00	C	C
ATOM	9725	OD1 ASN A 147	43.332	44.319	-63.362	1.00	0.00	C	O
ATOM	9726	ND2 ASN A 147	42.020	42.485	-63.090	1.00	0.00	C	N
ATOM	9727	C ASN A 147	39.011	44.487	-65.305	1.00	0.00	C	C
ATOM	9728	O ASN A 147	37.979	44.161	-64.720	1.00	0.00	C	O
ATOM	9729	N GLU A 148	39.043	45.449	-66.245	1.00	0.00	C	N
ATOM	9730	CA GLU A 148	37.922	46.267	-66.635	1.00	0.00	C	C
ATOM	9731	CB GLU A 148	38.247	47.141	-67.860	1.00	0.00	C	C
ATOM	9732	CG GLU A 148	39.453	48.066	-67.733	1.00	0.00	C	C
ATOM	9733	CD GLU A 148	39.837	48.467	-69.153	1.00	0.00	C	C
ATOM	9734	OE1 GLU A 148	39.870	47.565	-70.034	1.00	0.00	C	O
ATOM	9735	OE2 GLU A 148	40.102	49.677	-69.381	1.00	0.00	C	O
ATOM	9736	C GLU A 148	36.824	45.396	-67.168	1.00	0.00	C	C
ATOM	9737	O GLU A 148	35.640	45.695	-67.028	1.00	0.00	C	O
ATOM	9738	N PHE A 149	37.226	44.330	-67.874	1.00	0.00	C	N
ATOM	9739	CA PHE A 149	36.399	43.388	-68.569	1.00	0.00	C	C
ATOM	9740	CB PHE A 149	37.145	42.632	-69.683	1.00	0.00	C	C
ATOM	9741	CG PHE A 149	37.391	43.641	-70.756	1.00	0.00	C	C
ATOM	9742	CD1 PHE A 149	36.367	44.027	-71.592	1.00	0.00	C	C
ATOM	9743	CE1 PHE A 149	36.577	44.956	-72.586	1.00	0.00	C	C
ATOM	9744	CZ PHE A 149	37.821	45.515	-72.756	1.00	0.00	C	C
ATOM	9745	CD2 PHE A 149	38.633	44.206	-70.935	1.00	0.00	C	C
ATOM	9746	CE2 PHE A 149	38.851	45.136	-71.927	1.00	0.00	C	C

ATOM	9747	C	PHE A 149	35.704	42.414	-67.661	1.00	0.00	C	C
ATOM	9748	O	PHE A 149	34.867	41.642	-68.124	1.00	0.00	C	O
ATOM	9749	N	LYS A 150	36.115	42.315	-66.384	1.00	0.00	C	N
ATOM	9750	CA	LYS A 150	35.504	41.350	-65.505	1.00	0.00	C	C
ATOM	9751	CB	LYS A 150	36.536	40.595	-64.658	1.00	0.00	C	C
ATOM	9752	CG	LYS A 150	37.709	40.006	-65.437	1.00	0.00	C	C
ATOM	9753	CD	LYS A 150	38.870	39.639	-64.507	1.00	0.00	C	C
ATOM	9754	CE	LYS A 150	40.178	39.304	-65.224	1.00	0.00	C	C
ATOM	9755	NZ	LYS A 150	41.270	39.178	-64.233	1.00	0.00	C	N
ATOM	9756	C	LYS A 150	34.649	42.051	-64.487	1.00	0.00	C	C
ATOM	9757	O	LYS A 150	34.850	43.226	-64.182	1.00	0.00	C	O
ATOM	9758	N	ASP A 151	33.643	41.328	-63.939	1.00	0.00	C	N
ATOM	9759	CA	ASP A 151	32.830	41.847	-62.874	1.00	0.00	C	C
ATOM	9760	CB	ASP A 151	31.623	40.941	-62.556	1.00	0.00	C	C
ATOM	9761	CG	ASP A 151	30.737	41.571	-61.489	1.00	0.00	C	C
ATOM	9762	OD1	ASP A 151	31.073	42.681	-60.995	1.00	0.00	C	O
ATOM	9763	OD2	ASP A 151	29.701	40.937	-61.152	1.00	0.00	C	O
ATOM	9764	C	ASP A 151	33.720	41.893	-61.675	1.00	0.00	C	C
ATOM	9765	O	ASP A 151	34.358	40.904	-61.308	1.00	0.00	C	O
ATOM	9766	N	PRO A 152	33.749	43.019	-61.033	1.00	0.00	C	N
ATOM	9767	CD	PRO A 152	33.318	44.267	-61.640	1.00	0.00	C	C
ATOM	9768	CA	PRO A 152	34.654	43.231	-59.941	1.00	0.00	C	C
ATOM	9769	CB	PRO A 152	34.558	44.725	-59.611	1.00	0.00	C	C
ATOM	9770	CG	PRO A 152	33.388	45.255	-60.470	1.00	0.00	C	C
ATOM	9771	C	PRO A 152	34.491	42.318	-58.761	1.00	0.00	C	C
ATOM	9772	O	PRO A 152	35.486	42.106	-58.065	1.00	0.00	C	O
ATOM	9773	N	GLU A 153	33.260	41.874	-58.427	1.00	0.00	C	N
ATOM	9774	CA	GLU A 153	33.102	40.971	-57.315	1.00	0.00	C	C
ATOM	9775	CB	GLU A 153	31.706	41.045	-56.662	1.00	0.00	C	C
ATOM	9776	CG	GLU A 153	30.534	40.851	-57.626	1.00	0.00	C	C
ATOM	9777	CD	GLU A 153	29.931	42.222	-57.905	1.00	0.00	C	C
ATOM	9778	OE1	GLU A 153	30.314	43.191	-57.195	1.00	0.00	C	O
ATOM	9779	OE2	GLU A 153	29.076	42.319	-58.825	1.00	0.00	C	O
ATOM	9780	C	GLU A 153	33.363	39.522	-57.648	1.00	0.00	C	C
ATOM	9781	O	GLU A 153	34.099	38.837	-56.935	1.00	0.00	C	O
ATOM	9782	N	THR A 154	32.687	39.020	-58.709	1.00	0.00	C	N
ATOM	9783	CA	THR A 154	32.699	37.644	-59.151	1.00	0.00	C	C
ATOM	9784	CB	THR A 154	31.486	37.298	-59.963	1.00	0.00	C	C

ATOM	9785	OG1 THR A 154	31.440	38.088	-61.142	1.00	0.00	C	O
ATOM	9786	CG2 THR A 154	30.236	37.553	-59.109	1.00	0.00	C	C
ATOM	9787	C THR A 154	33.900	37.247	-59.964	1.00	0.00	C	C
ATOM	9788	O THR A 154	34.432	36.148	-59.798	1.00	0.00	C	O
ATOM	9789	N GLY A 155	34.358	38.121	-60.881	1.00	0.00	C	N
ATOM	9790	CA GLY A 155	35.450	37.764	-61.748	1.00	0.00	C	C
ATOM	9791	C GLY A 155	34.901	37.172	-63.017	1.00	0.00	C	C
ATOM	9792	O GLY A 155	35.633	36.550	-63.787	1.00	0.00	C	O
ATOM	9793	N LYS A 156	33.590	37.358	-63.267	1.00	0.00	C	N
ATOM	9794	CA LYS A 156	32.920	36.856	-64.436	1.00	0.00	C	C
ATOM	9795	CB LYS A 156	31.395	37.047	-64.347	1.00	0.00	C	C
ATOM	9796	CG LYS A 156	30.594	36.466	-65.514	1.00	0.00	C	C
ATOM	9797	CD LYS A 156	29.085	36.482	-65.262	1.00	0.00	C	C
ATOM	9798	CE LYS A 156	28.588	37.809	-64.677	1.00	0.00	C	C
ATOM	9799	NZ LYS A 156	27.126	37.762	-64.456	1.00	0.00	C	N
ATOM	9800	C LYS A 156	33.415	37.596	-65.648	1.00	0.00	C	C
ATOM	9801	O LYS A 156	33.711	38.791	-65.591	1.00	0.00	C	O
ATOM	9802	N THR A 157	33.515	36.878	-66.787	1.00	0.00	C	N
ATOM	9803	CA THR A 157	33.971	37.449	-68.024	1.00	0.00	C	C
ATOM	9804	CB THR A 157	35.178	36.758	-68.584	1.00	0.00	C	C
ATOM	9805	OG1 THR A 157	34.874	35.404	-68.879	1.00	0.00	C	O
ATOM	9806	CG2 THR A 157	36.306	36.834	-67.540	1.00	0.00	C	C
ATOM	9807	C THR A 157	32.855	37.295	-69.005	1.00	0.00	C	C
ATOM	9808	O THR A 157	31.841	36.665	-68.709	1.00	0.00	C	O
ATOM	9809	N CYS A 158	33.010	37.884	-70.205	1.00	0.00	C	N
ATOM	9810	CA CYS A 158	31.974	37.845	-71.197	1.00	0.00	C	C
ATOM	9811	CB CYS A 158	32.343	38.641	-72.459	1.00	0.00	C	C
ATOM	9812	SG CYS A 158	33.892	38.064	-73.213	1.00	0.00	C	S
ATOM	9813	C CYS A 158	31.713	36.423	-71.578	1.00	0.00	C	C
ATOM	9814	O CYS A 158	30.562	36.025	-71.760	1.00	0.00	C	O
ATOM	9815	N LEU A 159	32.770	35.601	-71.694	1.00	0.00	C	N
ATOM	9816	CA LEU A 159	32.556	34.236	-72.075	1.00	0.00	C	C
ATOM	9817	CB LEU A 159	33.844	33.408	-72.180	1.00	0.00	C	C
ATOM	9818	CG LEU A 159	33.553	31.960	-72.612	1.00	0.00	C	C
ATOM	9819	CD1 LEU A 159	33.124	31.896	-74.085	1.00	0.00	C	C
ATOM	9820	CD2 LEU A 159	34.710	31.016	-72.285	1.00	0.00	C	C
ATOM	9821	C LEU A 159	31.704	33.585	-71.025	1.00	0.00	C	C
ATOM	9822	O LEU A 159	30.836	32.773	-71.339	1.00	0.00	C	O

ATOM	9823	N	LEU A 160	31.953	33.908	-69.743	1.00	0.00	C	N
ATOM	9824	CA	LEU A 160	31.182	33.339	-68.672	1.00	0.00	C	C
ATOM	9825	CB	LEU A 160	31.756	33.690	-67.287	1.00	0.00	C	C
ATOM	9826	CG	LEU A 160	33.104	32.995	-66.999	1.00	0.00	C	C
ATOM	9827	CD1	LEU A 160	33.650	33.361	-65.610	1.00	0.00	C	C
ATOM	9828	CD2	LEU A 160	32.989	31.472	-67.183	1.00	0.00	C	C
ATOM	9829	C	LEU A 160	29.761	33.817	-68.757	1.00	0.00	C	C
ATOM	9830	O	LEU A 160	28.834	33.032	-68.571	1.00	0.00	C	O
ATOM	9831	N	LYS A 161	29.536	35.117	-69.052	1.00	0.00	C	N
ATOM	9832	CA	LYS A 161	28.172	35.572	-69.133	1.00	0.00	C	C
ATOM	9833	CB	LYS A 161	27.970	37.072	-69.407	1.00	0.00	C	C
ATOM	9834	CG	LYS A 161	26.471	37.395	-69.457	1.00	0.00	C	C
ATOM	9835	CD	LYS A 161	26.096	38.868	-69.309	1.00	0.00	C	C
ATOM	9836	CE	LYS A 161	24.585	39.111	-69.385	1.00	0.00	C	C
ATOM	9837	NZ	LYS A 161	24.279	40.525	-69.081	1.00	0.00	C	N
ATOM	9838	C	LYS A 161	27.505	34.825	-70.240	1.00	0.00	C	C
ATOM	9839	O	LYS A 161	26.336	34.458	-70.140	1.00	0.00	C	O
ATOM	9840	N	ALA A 162	28.253	34.577	-71.325	1.00	0.00	C	N
ATOM	9841	CA	ALA A 162	27.733	33.868	-72.455	1.00	0.00	C	C
ATOM	9842	CB	ALA A 162	28.782	33.696	-73.572	1.00	0.00	C	C
ATOM	9843	C	ALA A 162	27.329	32.504	-71.992	1.00	0.00	C	C
ATOM	9844	O	ALA A 162	26.319	31.959	-72.436	1.00	0.00	C	O
ATOM	9845	N	MET A 163	28.118	31.913	-71.074	1.00	0.00	C	N
ATOM	9846	CA	MET A 163	27.842	30.592	-70.591	1.00	0.00	C	C
ATOM	9847	CB	MET A 163	28.949	30.056	-69.666	1.00	0.00	C	C
ATOM	9848	CG	MET A 163	30.253	29.796	-70.427	1.00	0.00	C	C
ATOM	9849	SD	MET A 163	30.116	28.485	-71.679	1.00	0.00	C	S
ATOM	9850	CE	MET A 163	31.692	28.859	-72.497	1.00	0.00	C	C
ATOM	9851	C	MET A 163	26.533	30.578	-69.862	1.00	0.00	C	C
ATOM	9852	O	MET A 163	25.795	29.596	-69.933	1.00	0.00	C	O
ATOM	9853	N	LEU A 164	26.236	31.634	-69.082	1.00	0.00	C	N
ATOM	9854	CA	LEU A 164	24.975	31.712	-68.398	1.00	0.00	C	C
ATOM	9855	CB	LEU A 164	24.940	32.767	-67.282	1.00	0.00	C	C
ATOM	9856	CG	LEU A 164	25.807	32.388	-66.063	1.00	0.00	C	C
ATOM	9857	CD1	LEU A 164	25.322	31.075	-65.427	1.00	0.00	C	C
ATOM	9858	CD2	LEU A 164	27.302	32.362	-66.400	1.00	0.00	C	C
ATOM	9859	C	LEU A 164	23.866	32.004	-69.361	1.00	0.00	C	C
ATOM	9860	O	LEU A 164	22.766	31.465	-69.237	1.00	0.00	C	O

ATOM	9861	N	ASN A 165	24.114	32.878	-70.356	1.00	0.00	C	N
ATOM	9862	CA	ASN A 165	23.042	33.244	-71.234	1.00	0.00	C	C
ATOM	9863	CB	ASN A 165	23.186	34.667	-71.807	1.00	0.00	C	C
ATOM	9864	CG	ASN A 165	23.009	35.699	-70.694	1.00	0.00	C	C
ATOM	9865	OD1	ASN A 165	22.679	36.851	-70.972	1.00	0.00	C	O
ATOM	9866	ND2	ASN A 165	23.233	35.297	-69.415	1.00	0.00	C	N
ATOM	9867	C	ASN A 165	23.031	32.310	-72.399	1.00	0.00	C	C
ATOM	9868	O	ASN A 165	23.412	32.679	-73.510	1.00	0.00	C	O
ATOM	9869	N	LEU A 166	22.550	31.071	-72.187	1.00	0.00	C	N
ATOM	9870	CA	LEU A 166	22.491	30.151	-73.281	1.00	0.00	C	C
ATOM	9871	CB	LEU A 166	22.938	28.719	-72.937	1.00	0.00	C	C
ATOM	9872	CG	LEU A 166	24.444	28.587	-72.655	1.00	0.00	C	C
ATOM	9873	CD1	LEU A 166	24.819	27.136	-72.320	1.00	0.00	C	C
ATOM	9874	CD2	LEU A 166	25.279	29.154	-73.816	1.00	0.00	C	C
ATOM	9875	C	LEU A 166	21.077	30.062	-73.742	1.00	0.00	C	C
ATOM	9876	O	LEU A 166	20.145	30.228	-72.959	1.00	0.00	C	O
ATOM	9877	N	HSD A 167	20.900	29.854	-75.060	1.00	0.00	C	N
ATOM	9878	CA	HSD A 167	19.597	29.627	-75.607	1.00	0.00	C	C
ATOM	9879	CB	HSD A 167	19.102	30.736	-76.557	1.00	0.00	C	C
ATOM	9880	ND1	HSD A 167	21.129	31.312	-77.981	1.00	0.00	C	N
ATOM	9881	CG	HSD A 167	19.847	30.828	-77.856	1.00	0.00	C	C
ATOM	9882	CE1	HSD A 167	21.453	31.229	-79.296	1.00	0.00	C	C
ATOM	9883	NE2	HSD A 167	20.471	30.725	-80.022	1.00	0.00	C	N
ATOM	9884	CD2	HSD A 167	19.460	30.473	-79.113	1.00	0.00	C	C
ATOM	9885	C	HSD A 167	19.724	28.347	-76.374	1.00	0.00	C	C
ATOM	9886	O	HSD A 167	20.570	28.217	-77.259	1.00	0.00	C	O
ATOM	9887	N	ASP A 168	18.896	27.345	-76.026	1.00	0.00	C	N
ATOM	9888	CA	ASP A 168	18.953	26.072	-76.687	1.00	0.00	C	C
ATOM	9889	CB	ASP A 168	18.492	26.115	-78.157	1.00	0.00	C	C
ATOM	9890	CG	ASP A 168	16.970	26.058	-78.173	1.00	0.00	C	C
ATOM	9891	OD1	ASP A 168	16.429	24.941	-77.942	1.00	0.00	C	O
ATOM	9892	OD2	ASP A 168	16.326	27.114	-78.399	1.00	0.00	C	O
ATOM	9893	C	ASP A 168	20.342	25.521	-76.618	1.00	0.00	C	C
ATOM	9894	O	ASP A 168	20.796	24.855	-77.549	1.00	0.00	C	O
ATOM	9895	N	GLY A 169	21.056	25.773	-75.504	1.00	0.00	C	N
ATOM	9896	CA	GLY A 169	22.364	25.215	-75.308	1.00	0.00	C	C
ATOM	9897	C	GLY A 169	23.299	25.744	-76.351	1.00	0.00	C	C
ATOM	9898	O	GLY A 169	24.277	25.079	-76.692	1.00	0.00	C	O

ATOM	9899	N	GLN A 170	23.036	26.958	-76.880	1.00	0.00	C	N
ATOM	9900	CA	GLN A 170	23.876	27.469	-77.932	1.00	0.00	C	C
ATOM	9901	CB	GLN A 170	23.233	27.358	-79.323	1.00	0.00	C	C
ATOM	9902	CG	GLN A 170	22.997	25.918	-79.776	1.00	0.00	C	C
ATOM	9903	CD	GLN A 170	22.254	25.959	-81.105	1.00	0.00	C	C
ATOM	9904	OE1	GLN A 170	21.152	25.428	-81.228	1.00	0.00	C	O
ATOM	9905	NE2	GLN A 170	22.868	26.610	-82.126	1.00	0.00	C	N
ATOM	9906	C	GLN A 170	24.171	28.923	-77.729	1.00	0.00	C	C
ATOM	9907	O	GLN A 170	23.361	29.677	-77.186	1.00	0.00	C	O
ATOM	9908	N	ASN A 171	25.384	29.338	-78.155	1.00	0.00	C	N
ATOM	9909	CA	ASN A 171	25.791	30.715	-78.123	1.00	0.00	C	C
ATOM	9910	CB	ASN A 171	26.204	31.159	-76.706	1.00	0.00	C	C
ATOM	9911	CG	ASN A 171	26.265	32.675	-76.647	1.00	0.00	C	C
ATOM	9912	OD1	ASN A 171	26.388	33.346	-77.670	1.00	0.00	C	O
ATOM	9913	ND2	ASN A 171	26.182	33.230	-75.409	1.00	0.00	C	N
ATOM	9914	C	ASN A 171	27.000	30.814	-79.013	1.00	0.00	C	C
ATOM	9915	O	ASN A 171	28.022	30.180	-78.758	1.00	0.00	C	O
ATOM	9916	N	THR A 172	26.874	31.574	-80.119	1.00	0.00	C	N
ATOM	9917	CA	THR A 172	27.881	31.849	-81.111	1.00	0.00	C	C
ATOM	9918	CB	THR A 172	27.279	32.291	-82.407	1.00	0.00	C	C
ATOM	9919	OG1	THR A 172	26.526	33.480	-82.218	1.00	0.00	C	O
ATOM	9920	CG2	THR A 172	26.365	31.165	-82.921	1.00	0.00	C	C
ATOM	9921	C	THR A 172	28.821	32.913	-80.637	1.00	0.00	C	C
ATOM	9922	O	THR A 172	29.936	33.047	-81.139	1.00	0.00	C	O
ATOM	9923	N	THR A 173	28.354	33.745	-79.691	1.00	0.00	C	N
ATOM	9924	CA	THR A 173	29.141	34.806	-79.149	1.00	0.00	C	C
ATOM	9925	CB	THR A 173	28.427	35.534	-78.044	1.00	0.00	C	C
ATOM	9926	OG1	THR A 173	27.231	36.127	-78.532	1.00	0.00	C	O
ATOM	9927	CG2	THR A 173	29.356	36.612	-77.467	1.00	0.00	C	C
ATOM	9928	C	THR A 173	30.357	34.161	-78.573	1.00	0.00	C	C
ATOM	9929	O	THR A 173	31.443	34.741	-78.595	1.00	0.00	C	O
ATOM	9930	N	ILE A 174	30.205	32.942	-78.020	1.00	0.00	C	N
ATOM	9931	CA	ILE A 174	31.333	32.264	-77.455	1.00	0.00	C	C
ATOM	9932	CB	ILE A 174	30.986	30.959	-76.788	1.00	0.00	C	C
ATOM	9933	CG2	ILE A 174	32.299	30.260	-76.397	1.00	0.00	C	C
ATOM	9934	CG1	ILE A 174	30.036	31.179	-75.599	1.00	0.00	C	C
ATOM	9935	CD	ILE A 174	29.435	29.882	-75.060	1.00	0.00	C	C
ATOM	9936	C	ILE A 174	32.337	31.981	-78.535	1.00	0.00	C	C

ATOM	9937	O	ILE A 174	33.514	32.292	-78.362	1.00	0.00	C	O
ATOM	9938	N	PRO A 175	31.944	31.441	-79.665	1.00	0.00	C	N
ATOM	9939	CD	PRO A 175	30.738	30.637	-79.782	1.00	0.00	C	C
ATOM	9940	CA	PRO A 175	32.897	31.141	-80.696	1.00	0.00	C	C
ATOM	9941	CB	PRO A 175	32.117	30.403	-81.780	1.00	0.00	C	C
ATOM	9942	CG	PRO A 175	30.976	29.723	-80.998	1.00	0.00	C	C
ATOM	9943	C	PRO A 175	33.601	32.371	-81.166	1.00	0.00	C	C
ATOM	9944	O	PRO A 175	34.789	32.297	-81.471	1.00	0.00	C	O
ATOM	9945	N	LEU A 176	32.877	33.498	-81.262	1.00	0.00	C	N
ATOM	9946	CA	LEU A 176	33.470	34.729	-81.689	1.00	0.00	C	C
ATOM	9947	CB	LEU A 176	32.399	35.786	-82.031	1.00	0.00	C	C
ATOM	9948	CG	LEU A 176	32.913	37.086	-82.691	1.00	0.00	C	C
ATOM	9949	CD1	LEU A 176	31.734	37.961	-83.139	1.00	0.00	C	C
ATOM	9950	CD2	LEU A 176	33.886	37.873	-81.797	1.00	0.00	C	C
ATOM	9951	C	LEU A 176	34.367	35.235	-80.600	1.00	0.00	C	C
ATOM	9952	O	LEU A 176	35.457	35.741	-80.864	1.00	0.00	C	O
ATOM	9953	N	LEU A 177	33.927	35.107	-79.334	1.00	0.00	C	N
ATOM	9954	CA	LEU A 177	34.669	35.643	-78.228	1.00	0.00	C	C
ATOM	9955	CB	LEU A 177	33.932	35.493	-76.890	1.00	0.00	C	C
ATOM	9956	CG	LEU A 177	32.689	36.397	-76.805	1.00	0.00	C	C
ATOM	9957	CD1	LEU A 177	31.973	36.238	-75.467	1.00	0.00	C	C
ATOM	9958	CD2	LEU A 177	33.037	37.862	-77.106	1.00	0.00	C	C
ATOM	9959	C	LEU A 177	35.997	34.967	-78.124	1.00	0.00	C	C
ATOM	9960	O	LEU A 177	37.020	35.621	-77.928	1.00	0.00	C	O
ATOM	9961	N	LEU A 178	36.014	33.633	-78.266	1.00	0.00	C	N
ATOM	9962	CA	LEU A 178	37.217	32.857	-78.183	1.00	0.00	C	C
ATOM	9963	CB	LEU A 178	36.899	31.372	-78.379	1.00	0.00	C	C
ATOM	9964	CG	LEU A 178	35.964	30.818	-77.292	1.00	0.00	C	C
ATOM	9965	CD1	LEU A 178	35.470	29.410	-77.650	1.00	0.00	C	C
ATOM	9966	CD2	LEU A 178	36.632	30.866	-75.907	1.00	0.00	C	C
ATOM	9967	C	LEU A 178	38.129	33.264	-79.301	1.00	0.00	C	C
ATOM	9968	O	LEU A 178	39.323	33.491	-79.103	1.00	0.00	C	O
ATOM	9969	N	GLU A 179	37.563	33.421	-80.509	1.00	0.00	C	N
ATOM	9970	CA	GLU A 179	38.331	33.717	-81.685	1.00	0.00	C	C
ATOM	9971	CB	GLU A 179	37.424	33.978	-82.898	1.00	0.00	C	C
ATOM	9972	CG	GLU A 179	38.174	34.343	-84.179	1.00	0.00	C	C
ATOM	9973	CD	GLU A 179	37.140	34.767	-85.213	1.00	0.00	C	C
ATOM	9974	OE1	GLU A 179	36.060	34.118	-85.274	1.00	0.00	C	O

ATOM	9975	OE2	GLU	A	179	37.410	35.752	-85.948	1.00	0.00	C	O
ATOM	9976	C	GLU	A	179	39.100	34.977	-81.447	1.00	0.00	C	C
ATOM	9977	O	GLU	A	179	40.278	35.075	-81.788	1.00	0.00	C	O
ATOM	9978	N	ILE	A	180	38.444	35.980	-80.838	1.00	0.00	C	N
ATOM	9979	CA	ILE	A	180	39.074	37.242	-80.599	1.00	0.00	C	C
ATOM	9980	CB	ILE	A	180	38.156	38.268	-80.003	1.00	0.00	C	C
ATOM	9981	CG2	ILE	A	180	39.002	39.489	-79.608	1.00	0.00	C	C
ATOM	9982	CG1	ILE	A	180	37.032	38.601	-80.997	1.00	0.00	C	C
ATOM	9983	CD	ILE	A	180	35.933	39.477	-80.406	1.00	0.00	C	C
ATOM	9984	C	ILE	A	180	40.213	37.056	-79.649	1.00	0.00	C	C
ATOM	9985	O	ILE	A	180	41.250	37.702	-79.784	1.00	0.00	C	O
ATOM	9986	N	ALA	A	181	40.026	36.177	-78.650	1.00	0.00	C	N
ATOM	9987	CA	ALA	A	181	40.991	35.958	-77.617	1.00	0.00	C	C
ATOM	9988	CB	ALA	A	181	40.518	34.948	-76.556	1.00	0.00	C	C
ATOM	9989	C	ALA	A	181	42.266	35.432	-78.178	1.00	0.00	C	C
ATOM	9990	O	ALA	A	181	43.319	35.789	-77.669	1.00	0.00	C	O
ATOM	9991	N	ARG	A	182	42.227	34.529	-79.175	1.00	0.00	C	N
ATOM	9992	CA	ARG	A	182	43.433	33.971	-79.736	1.00	0.00	C	C
ATOM	9993	CB	ARG	A	182	43.196	32.701	-80.580	1.00	0.00	C	C
ATOM	9994	CG	ARG	A	182	42.234	32.885	-81.753	1.00	0.00	C	C
ATOM	9995	CD	ARG	A	182	42.016	31.617	-82.586	1.00	0.00	C	C
ATOM	9996	NE	ARG	A	182	41.300	30.610	-81.748	1.00	0.00	C	N
ATOM	9997	CZ	ARG	A	182	41.977	29.534	-81.251	1.00	0.00	C	C
ATOM	9998	NH1	ARG	A	182	43.300	29.369	-81.540	1.00	0.00	C	N
ATOM	9999	NH2	ARG	A	182	41.332	28.616	-80.475	1.00	0.00	C	N
ATOM	10000	C	ARG	A	182	44.184	34.979	-80.555	1.00	0.00	C	C
ATOM	10001	O	ARG	A	182	45.414	34.998	-80.553	1.00	0.00	C	O
ATOM	10002	N	GLN	A	183	43.465	35.853	-81.284	1.00	0.00	C	N
ATOM	10003	CA	GLN	A	183	44.131	36.806	-82.121	1.00	0.00	C	C
ATOM	10004	CB	GLN	A	183	43.159	37.638	-82.978	1.00	0.00	C	C
ATOM	10005	CG	GLN	A	183	42.399	36.745	-83.968	1.00	0.00	C	C
ATOM	10006	CD	GLN	A	183	41.630	37.603	-84.958	1.00	0.00	C	C
ATOM	10007	OE1	GLN	A	183	40.416	37.462	-85.108	1.00	0.00	C	O
ATOM	10008	NE2	GLN	A	183	42.361	38.495	-85.678	1.00	0.00	C	N
ATOM	10009	C	GLN	A	183	44.955	37.679	-81.226	1.00	0.00	C	C
ATOM	10010	O	GLN	A	183	46.010	38.179	-81.618	1.00	0.00	C	O
ATOM	10011	N	THR	A	184	44.435	37.954	-80.019	1.00	0.00	C	N
ATOM	10012	CA	THR	A	184	45.130	38.645	-78.973	1.00	0.00	C	C

ATOM	10013	CB	THR	A	184	44.196	39.270	-77.986	1.00	0.00	C	C
ATOM	10014	OG1	THR	A	184	43.298	40.139	-78.661	1.00	0.00	C	O
ATOM	10015	CG2	THR	A	184	45.030	40.072	-76.972	1.00	0.00	C	C
ATOM	10016	C	THR	A	184	46.032	37.683	-78.246	1.00	0.00	C	C
ATOM	10017	O	THR	A	184	46.964	38.084	-77.554	1.00	0.00	C	O
ATOM	10018	N	ASP	A	185	45.745	36.373	-78.347	1.00	0.00	C	N
ATOM	10019	CA	ASP	A	185	46.469	35.344	-77.651	1.00	0.00	C	C
ATOM	10020	CB	ASP	A	185	47.991	35.442	-77.859	1.00	0.00	C	C
ATOM	10021	CG	ASP	A	185	48.303	35.053	-79.298	1.00	0.00	C	C
ATOM	10022	OD1	ASP	A	185	47.672	34.084	-79.801	1.00	0.00	C	O
ATOM	10023	OD2	ASP	A	185	49.171	35.724	-79.916	1.00	0.00	C	O
ATOM	10024	C	ASP	A	185	46.200	35.428	-76.179	1.00	0.00	C	C
ATOM	10025	O	ASP	A	185	46.946	34.881	-75.370	1.00	0.00	C	O
ATOM	10026	N	SER	A	186	45.096	36.096	-75.795	1.00	0.00	C	N
ATOM	10027	CA	SER	A	186	44.619	36.114	-74.441	1.00	0.00	C	C
ATOM	10028	CB	SER	A	186	43.531	37.175	-74.207	1.00	0.00	C	C
ATOM	10029	OG	SER	A	186	44.066	38.473	-74.428	1.00	0.00	C	O
ATOM	10030	C	SER	A	186	43.965	34.783	-74.224	1.00	0.00	C	C
ATOM	10031	O	SER	A	186	43.459	34.486	-73.142	1.00	0.00	C	O
ATOM	10032	N	LEU	A	187	44.021	33.922	-75.253	1.00	0.00	C	N
ATOM	10033	CA	LEU	A	187	43.194	32.758	-75.312	1.00	0.00	C	C
ATOM	10034	CB	LEU	A	187	43.417	31.903	-76.569	1.00	0.00	C	C
ATOM	10035	CG	LEU	A	187	42.402	30.747	-76.656	1.00	0.00	C	C
ATOM	10036	CD1	LEU	A	187	40.968	31.287	-76.757	1.00	0.00	C	C
ATOM	10037	CD2	LEU	A	187	42.740	29.768	-77.785	1.00	0.00	C	C
ATOM	10038	C	LEU	A	187	43.301	31.856	-74.115	1.00	0.00	C	C
ATOM	10039	O	LEU	A	187	42.268	31.477	-73.570	1.00	0.00	C	O
ATOM	10040	N	LYS	A	188	44.506	31.488	-73.648	1.00	0.00	C	N
ATOM	10041	CA	LYS	A	188	44.555	30.527	-72.570	1.00	0.00	C	C
ATOM	10042	CB	LYS	A	188	45.985	30.123	-72.182	1.00	0.00	C	C
ATOM	10043	CG	LYS	A	188	46.012	29.146	-71.007	1.00	0.00	C	C
ATOM	10044	CD	LYS	A	188	47.373	28.506	-70.743	1.00	0.00	C	C
ATOM	10045	CE	LYS	A	188	47.536	27.128	-71.381	1.00	0.00	C	C
ATOM	10046	NZ	LYS	A	188	48.717	26.452	-70.804	1.00	0.00	C	N
ATOM	10047	C	LYS	A	188	43.915	31.050	-71.316	1.00	0.00	C	C
ATOM	10048	O	LYS	A	188	43.048	30.391	-70.737	1.00	0.00	C	O
ATOM	10049	N	GLU	A	189	44.315	32.258	-70.875	1.00	0.00	C	N
ATOM	10050	CA	GLU	A	189	43.845	32.809	-69.632	1.00	0.00	C	C

ATOM	10051	CB	GLU A 189	44.596	34.083	-69.180	1.00	0.00	C	C
ATOM	10052	CG	GLU A 189	44.537	35.263	-70.153	1.00	0.00	C	C
ATOM	10053	CD	GLU A 189	45.828	35.276	-70.961	1.00	0.00	C	C
ATOM	10054	OE1	GLU A 189	46.091	34.274	-71.678	1.00	0.00	C	O
ATOM	10055	OE2	GLU A 189	46.571	36.287	-70.869	1.00	0.00	C	O
ATOM	10056	C	GLU A 189	42.392	33.139	-69.733	1.00	0.00	C	C
ATOM	10057	O	GLU A 189	41.684	33.147	-68.727	1.00	0.00	C	O
ATOM	10058	N	LEU A 190	41.918	33.494	-70.944	1.00	0.00	C	N
ATOM	10059	CA	LEU A 190	40.539	33.851	-71.111	1.00	0.00	C	C
ATOM	10060	CB	LEU A 190	40.228	34.333	-72.537	1.00	0.00	C	C
ATOM	10061	CG	LEU A 190	38.747	34.704	-72.739	1.00	0.00	C	C
ATOM	10062	CD1	LEU A 190	38.339	35.899	-71.867	1.00	0.00	C	C
ATOM	10063	CD2	LEU A 190	38.426	34.912	-74.227	1.00	0.00	C	C
ATOM	10064	C	LEU A 190	39.647	32.677	-70.844	1.00	0.00	C	C
ATOM	10065	O	LEU A 190	38.706	32.757	-70.054	1.00	0.00	C	O
ATOM	10066	N	VAL A 191	39.950	31.538	-71.487	1.00	0.00	C	N
ATOM	10067	CA	VAL A 191	39.180	30.335	-71.367	1.00	0.00	C	C
ATOM	10068	CB	VAL A 191	39.618	29.269	-72.334	1.00	0.00	C	C
ATOM	10069	CG1	VAL A 191	38.975	27.933	-71.939	1.00	0.00	C	C
ATOM	10070	CG2	VAL A 191	39.197	29.708	-73.747	1.00	0.00	C	C
ATOM	10071	C	VAL A 191	39.279	29.809	-69.965	1.00	0.00	C	C
ATOM	10072	O	VAL A 191	38.396	29.076	-69.520	1.00	0.00	C	O
ATOM	10073	N	ASN A 192	40.372	30.116	-69.238	1.00	0.00	C	N
ATOM	10074	CA	ASN A 192	40.478	29.534	-67.926	1.00	0.00	C	C
ATOM	10075	CB	ASN A 192	41.850	28.890	-67.672	1.00	0.00	C	C
ATOM	10076	CG	ASN A 192	41.993	27.675	-68.575	1.00	0.00	C	C
ATOM	10077	OD1	ASN A 192	41.029	26.963	-68.852	1.00	0.00	C	O
ATOM	10078	ND2	ASN A 192	43.243	27.430	-69.052	1.00	0.00	C	N
ATOM	10079	C	ASN A 192	40.282	30.528	-66.810	1.00	0.00	C	C
ATOM	10080	O	ASN A 192	40.784	30.299	-65.709	1.00	0.00	C	O
ATOM	10081	N	ALA A 193	39.522	31.623	-67.011	1.00	0.00	C	N
ATOM	10082	CA	ALA A 193	39.329	32.542	-65.914	1.00	0.00	C	C
ATOM	10083	CB	ALA A 193	38.780	33.912	-66.348	1.00	0.00	C	C
ATOM	10084	C	ALA A 193	38.332	31.932	-64.971	1.00	0.00	C	C
ATOM	10085	O	ALA A 193	37.413	31.242	-65.404	1.00	0.00	C	O
ATOM	10086	N	SER A 194	38.470	32.199	-63.652	1.00	0.00	C	N
ATOM	10087	CA	SER A 194	37.593	31.569	-62.699	1.00	0.00	C	C
ATOM	10088	CB	SER A 194	38.314	30.539	-61.812	1.00	0.00	C	C

ATOM	10089	OG	SER A 194	39.358	31.162	-61.078	1.00	0.00	C	O
ATOM	10090	C	SER A 194	36.947	32.585	-61.798	1.00	0.00	C	C
ATOM	10091	O	SER A 194	37.391	33.727	-61.690	1.00	0.00	C	O
ATOM	10092	N	TYR A 195	35.841	32.168	-61.136	1.00	0.00	C	N
ATOM	10093	CA	TYR A 195	35.092	32.996	-60.222	1.00	0.00	C	C
ATOM	10094	CB	TYR A 195	33.731	32.401	-59.803	1.00	0.00	C	C
ATOM	10095	CG	TYR A 195	32.740	32.534	-60.908	1.00	0.00	C	C
ATOM	10096	CD1	TYR A 195	32.716	31.661	-61.970	1.00	0.00	C	C
ATOM	10097	CE1	TYR A 195	31.784	31.808	-62.972	1.00	0.00	C	C
ATOM	10098	CZ	TYR A 195	30.861	32.825	-62.915	1.00	0.00	C	C
ATOM	10099	OH	TYR A 195	29.903	32.979	-63.941	1.00	0.00	C	O
ATOM	10100	CD2	TYR A 195	31.806	33.545	-60.858	1.00	0.00	C	C
ATOM	10101	CE2	TYR A 195	30.873	33.695	-61.854	1.00	0.00	C	C
ATOM	10102	C	TYR A 195	35.877	33.169	-58.951	1.00	0.00	C	C
ATOM	10103	O	TYR A 195	36.494	32.232	-58.455	1.00	0.00	C	O
ATOM	10104	N	THR A 196	35.970	34.426	-58.480	1.00	0.00	C	N
ATOM	10105	CA	THR A 196	36.619	34.859	-57.266	1.00	0.00	C	C
ATOM	10106	CB	THR A 196	37.161	36.249	-57.401	1.00	0.00	C	C
ATOM	10107	OG1	THR A 196	36.103	37.174	-57.603	1.00	0.00	C	O
ATOM	10108	CG2	THR A 196	38.113	36.275	-58.608	1.00	0.00	C	C
ATOM	10109	C	THR A 196	35.765	34.819	-56.022	1.00	0.00	C	C
ATOM	10110	O	THR A 196	36.295	34.679	-54.921	1.00	0.00	C	O
ATOM	10111	N	ASP A 197	34.431	34.997	-56.143	1.00	0.00	C	N
ATOM	10112	CA	ASP A 197	33.594	35.123	-54.978	1.00	0.00	C	C
ATOM	10113	CB	ASP A 197	32.141	35.522	-55.294	1.00	0.00	C	C
ATOM	10114	CG	ASP A 197	31.510	34.425	-56.139	1.00	0.00	C	C
ATOM	10115	OD1	ASP A 197	32.238	33.815	-56.966	1.00	0.00	C	O
ATOM	10116	OD2	ASP A 197	30.286	34.182	-55.964	1.00	0.00	C	O
ATOM	10117	C	ASP A 197	33.577	33.823	-54.239	1.00	0.00	C	C
ATOM	10118	O	ASP A 197	33.873	32.769	-54.793	1.00	0.00	C	O
ATOM	10119	N	SER A 198	33.226	33.872	-52.940	1.00	0.00	C	N
ATOM	10120	CA	SER A 198	33.275	32.694	-52.124	1.00	0.00	C	C
ATOM	10121	CB	SER A 198	32.931	32.967	-50.650	1.00	0.00	C	C
ATOM	10122	OG	SER A 198	31.583	33.389	-50.527	1.00	0.00	C	O
ATOM	10123	C	SER A 198	32.304	31.671	-52.626	1.00	0.00	C	C
ATOM	10124	O	SER A 198	32.522	30.471	-52.459	1.00	0.00	C	O
ATOM	10125	N	TYR A 199	31.181	32.106	-53.221	1.00	0.00	C	N
ATOM	10126	CA	TYR A 199	30.196	31.130	-53.599	1.00	0.00	C	C

ATOM	10127	CB	TYR	A	199	28.895	31.837	-54.028	1.00	0.00	C	C
ATOM	10128	CG	TYR	A	199	27.768	30.868	-54.142	1.00	0.00	C	C
ATOM	10129	CD1	TYR	A	199	27.252	30.284	-53.010	1.00	0.00	C	C
ATOM	10130	CE1	TYR	A	199	26.204	29.399	-53.092	1.00	0.00	C	C
ATOM	10131	CZ	TYR	A	199	25.651	29.097	-54.310	1.00	0.00	C	C
ATOM	10132	OH	TYR	A	199	24.575	28.190	-54.382	1.00	0.00	C	O
ATOM	10133	CD2	TYR	A	199	27.197	30.576	-55.360	1.00	0.00	C	C
ATOM	10134	CE2	TYR	A	199	26.146	29.691	-55.449	1.00	0.00	C	C
ATOM	10135	C	TYR	A	199	30.655	30.232	-54.731	1.00	0.00	C	C
ATOM	10136	O	TYR	A	199	30.798	29.021	-54.562	1.00	0.00	C	O
ATOM	10137	N	TYR	A	200	30.920	30.829	-55.910	1.00	0.00	C	N
ATOM	10138	CA	TYR	A	200	31.287	30.193	-57.156	1.00	0.00	C	C
ATOM	10139	CB	TYR	A	200	30.811	30.941	-58.413	1.00	0.00	C	C
ATOM	10140	CG	TYR	A	200	29.573	31.656	-57.992	1.00	0.00	C	C
ATOM	10141	CD1	TYR	A	200	28.430	30.941	-57.715	1.00	0.00	C	C
ATOM	10142	CE1	TYR	A	200	27.278	31.580	-57.322	1.00	0.00	C	C
ATOM	10143	CZ	TYR	A	200	27.260	32.948	-57.210	1.00	0.00	C	C
ATOM	10144	OH	TYR	A	200	26.082	33.610	-56.807	1.00	0.00	C	O
ATOM	10145	CD2	TYR	A	200	29.545	33.027	-57.887	1.00	0.00	C	C
ATOM	10146	CE2	TYR	A	200	28.395	33.672	-57.495	1.00	0.00	C	C
ATOM	10147	C	TYR	A	200	32.733	29.850	-57.306	1.00	0.00	C	C
ATOM	10148	O	TYR	A	200	33.095	29.171	-58.269	1.00	0.00	C	O
ATOM	10149	N	LYS	A	201	33.594	30.417	-56.437	1.00	0.00	C	N
ATOM	10150	CA	LYS	A	201	35.028	30.432	-56.576	1.00	0.00	C	C
ATOM	10151	CB	LYS	A	201	35.797	30.710	-55.269	1.00	0.00	C	C
ATOM	10152	CG	LYS	A	201	35.597	29.667	-54.173	1.00	0.00	C	C
ATOM	10153	CD	LYS	A	201	36.630	29.766	-53.049	1.00	0.00	C	C
ATOM	10154	CE	LYS	A	201	37.178	31.178	-52.844	1.00	0.00	C	C
ATOM	10155	NZ	LYS	A	201	36.119	32.065	-52.312	1.00	0.00	C	N
ATOM	10156	C	LYS	A	201	35.611	29.225	-57.248	1.00	0.00	C	C
ATOM	10157	O	LYS	A	201	35.313	28.076	-56.930	1.00	0.00	C	O
ATOM	10158	N	GLY	A	202	36.442	29.513	-58.270	1.00	0.00	C	N
ATOM	10159	CA	GLY	A	202	37.186	28.527	-58.992	1.00	0.00	C	C
ATOM	10160	C	GLY	A	202	36.388	27.967	-60.133	1.00	0.00	C	C
ATOM	10161	O	GLY	A	202	36.889	27.112	-60.864	1.00	0.00	C	O
ATOM	10162	N	GLN	A	203	35.134	28.418	-60.329	1.00	0.00	C	N
ATOM	10163	CA	GLN	A	203	34.371	27.890	-61.427	1.00	0.00	C	C
ATOM	10164	CB	GLN	A	203	32.850	28.110	-61.304	1.00	0.00	C	C

ATOM	10165	CG	GLN	A	203	32.053	27.527	-62.477	1.00	0.00	C	C
ATOM	10166	CD	GLN	A	203	30.570	27.728	-62.197	1.00	0.00	C	C
ATOM	10167	OE1	GLN	A	203	30.112	28.842	-61.942	1.00	0.00	C	O
ATOM	10168	NE2	GLN	A	203	29.791	26.615	-62.241	1.00	0.00	C	N
ATOM	10169	C	GLN	A	203	34.839	28.527	-62.698	1.00	0.00	C	C
ATOM	10170	O	GLN	A	203	35.069	29.735	-62.766	1.00	0.00	C	O
ATOM	10171	N	THR	A	204	34.976	27.693	-63.750	1.00	0.00	C	N
ATOM	10172	CA	THR	A	204	35.428	28.097	-65.051	1.00	0.00	C	C
ATOM	10173	CB	THR	A	204	36.629	27.333	-65.524	1.00	0.00	C	C
ATOM	10174	OG1	THR	A	204	36.314	25.952	-65.623	1.00	0.00	C	O
ATOM	10175	CG2	THR	A	204	37.783	27.541	-64.529	1.00	0.00	C	C
ATOM	10176	C	THR	A	204	34.328	27.779	-66.012	1.00	0.00	C	C
ATOM	10177	O	THR	A	204	33.337	27.148	-65.653	1.00	0.00	C	O
ATOM	10178	N	ALA	A	205	34.482	28.218	-67.277	1.00	0.00	C	N
ATOM	10179	CA	ALA	A	205	33.485	27.995	-68.284	1.00	0.00	C	C
ATOM	10180	CB	ALA	A	205	33.876	28.585	-69.648	1.00	0.00	C	C
ATOM	10181	C	ALA	A	205	33.289	26.518	-68.470	1.00	0.00	C	C
ATOM	10182	O	ALA	A	205	32.163	26.054	-68.639	1.00	0.00	C	O
ATOM	10183	N	LEU	A	206	34.375	25.725	-68.424	1.00	0.00	C	N
ATOM	10184	CA	LEU	A	206	34.260	24.310	-68.649	1.00	0.00	C	C
ATOM	10185	CB	LEU	A	206	35.616	23.579	-68.611	1.00	0.00	C	C
ATOM	10186	CG	LEU	A	206	35.506	22.073	-68.916	1.00	0.00	C	C
ATOM	10187	CD1	LEU	A	206	34.890	21.843	-70.304	1.00	0.00	C	C
ATOM	10188	CD2	LEU	A	206	36.863	21.366	-68.764	1.00	0.00	C	C
ATOM	10189	C	LEU	A	206	33.359	23.704	-67.613	1.00	0.00	C	C
ATOM	10190	O	LEU	A	206	32.612	22.771	-67.906	1.00	0.00	C	O
ATOM	10191	N	HSD	A	207	33.399	24.209	-66.367	1.00	0.00	C	N
ATOM	10192	CA	HSD	A	207	32.552	23.633	-65.358	1.00	0.00	C	C
ATOM	10193	CB	HSD	A	207	32.666	24.324	-63.986	1.00	0.00	C	C
ATOM	10194	ND1	HSD	A	207	35.069	24.915	-63.400	1.00	0.00	C	N
ATOM	10195	CG	HSD	A	207	33.969	24.094	-63.286	1.00	0.00	C	C
ATOM	10196	CE1	HSD	A	207	36.039	24.386	-62.612	1.00	0.00	C	C
ATOM	10197	NE2	HSD	A	207	35.638	23.285	-62.001	1.00	0.00	C	N
ATOM	10198	CD2	HSD	A	207	34.336	23.103	-62.428	1.00	0.00	C	C
ATOM	10199	C	HSD	A	207	31.127	23.796	-65.790	1.00	0.00	C	C
ATOM	10200	O	HSD	A	207	30.336	22.856	-65.735	1.00	0.00	C	O
ATOM	10201	N	ILE	A	208	30.773	25.004	-66.270	1.00	0.00	C	N
ATOM	10202	CA	ILE	A	208	29.425	25.337	-66.628	1.00	0.00	C	C

ATOM	10203	CB	ILE A 208	29.286	26.774	-67.054	1.00	0.00	C	C
ATOM	10204	CG2	ILE A 208	27.880	26.975	-67.640	1.00	0.00	C	C
ATOM	10205	CG1	ILE A 208	29.607	27.713	-65.874	1.00	0.00	C	C
ATOM	10206	CD	ILE A 208	29.750	29.182	-66.274	1.00	0.00	C	C
ATOM	10207	C	ILE A 208	28.938	24.468	-67.750	1.00	0.00	C	C
ATOM	10208	O	ILE A 208	27.790	24.021	-67.733	1.00	0.00	C	O
ATOM	10209	N	ALA A 209	29.792	24.200	-68.753	1.00	0.00	C	N
ATOM	10210	CA	ALA A 209	29.384	23.436	-69.901	1.00	0.00	C	C
ATOM	10211	CB	ALA A 209	30.514	23.260	-70.928	1.00	0.00	C	C
ATOM	10212	C	ALA A 209	28.961	22.073	-69.460	1.00	0.00	C	C
ATOM	10213	O	ALA A 209	28.001	21.514	-69.990	1.00	0.00	C	O
ATOM	10214	N	ILE A 210	29.706	21.486	-68.510	1.00	0.00	C	N
ATOM	10215	CA	ILE A 210	29.394	20.178	-68.008	1.00	0.00	C	C
ATOM	10216	CB	ILE A 210	30.480	19.624	-67.134	1.00	0.00	C	C
ATOM	10217	CG2	ILE A 210	29.996	18.290	-66.540	1.00	0.00	C	C
ATOM	10218	CG1	ILE A 210	31.781	19.495	-67.939	1.00	0.00	C	C
ATOM	10219	CD	ILE A 210	33.004	19.208	-67.074	1.00	0.00	C	C
ATOM	10220	C	ILE A 210	28.127	20.225	-67.213	1.00	0.00	C	C
ATOM	10221	O	ILE A 210	27.246	19.385	-67.379	1.00	0.00	C	O
ATOM	10222	N	GLU A 211	27.987	21.243	-66.345	1.00	0.00	C	N
ATOM	10223	CA	GLU A 211	26.826	21.342	-65.509	1.00	0.00	C	C
ATOM	10224	CB	GLU A 211	26.875	22.591	-64.617	1.00	0.00	C	C
ATOM	10225	CG	GLU A 211	27.938	22.447	-63.524	1.00	0.00	C	C
ATOM	10226	CD	GLU A 211	28.219	23.802	-62.901	1.00	0.00	C	C
ATOM	10227	OE1	GLU A 211	27.979	24.833	-63.586	1.00	0.00	C	O
ATOM	10228	OE2	GLU A 211	28.692	23.828	-61.734	1.00	0.00	C	O
ATOM	10229	C	GLU A 211	25.631	21.381	-66.411	1.00	0.00	C	C
ATOM	10230	O	GLU A 211	24.571	20.852	-66.087	1.00	0.00	C	O
ATOM	10231	N	ARG A 212	25.794	22.029	-67.573	1.00	0.00	C	N
ATOM	10232	CA	ARG A 212	24.803	22.174	-68.601	1.00	0.00	C	C
ATOM	10233	CB	ARG A 212	25.181	23.262	-69.621	1.00	0.00	C	C
ATOM	10234	CG	ARG A 212	25.267	24.647	-68.976	1.00	0.00	C	C
ATOM	10235	CD	ARG A 212	24.076	24.955	-68.064	1.00	0.00	C	C
ATOM	10236	NE	ARG A 212	24.240	26.340	-67.542	1.00	0.00	C	N
ATOM	10237	CZ	ARG A 212	24.124	26.583	-66.206	1.00	0.00	C	C
ATOM	10238	NH1	ARG A 212	23.917	25.547	-65.340	1.00	0.00	C	N
ATOM	10239	NH2	ARG A 212	24.211	27.862	-65.734	1.00	0.00	C	N
ATOM	10240	C	ARG A 212	24.574	20.884	-69.334	1.00	0.00	C	C

ATOM	10241	O	ARG A 212	23.543	20.721	-69.986	1.00	0.00	C	O
ATOM	10242	N	ARG A 213	25.540	19.945	-69.287	1.00	0.00	C	N
ATOM	10243	CA	ARG A 213	25.423	18.704	-70.003	1.00	0.00	C	C
ATOM	10244	CB	ARG A 213	24.092	17.982	-69.755	1.00	0.00	C	C
ATOM	10245	CG	ARG A 213	23.905	17.537	-68.311	1.00	0.00	C	C
ATOM	10246	CD	ARG A 213	22.587	16.801	-68.068	1.00	0.00	C	C
ATOM	10247	NE	ARG A 213	22.590	16.393	-66.639	1.00	0.00	C	N
ATOM	10248	CZ	ARG A 213	23.172	15.217	-66.262	1.00	0.00	C	C
ATOM	10249	NH1	ARG A 213	23.701	14.370	-67.192	1.00	0.00	C	N
ATOM	10250	NH2	ARG A 213	23.232	14.902	-64.939	1.00	0.00	C	N
ATOM	10251	C	ARG A 213	25.491	18.972	-71.472	1.00	0.00	C	C
ATOM	10252	O	ARG A 213	24.750	18.368	-72.248	1.00	0.00	C	O
ATOM	10253	N	ASN A 214	26.374	19.896	-71.907	1.00	0.00	C	N
ATOM	10254	CA	ASN A 214	26.460	20.086	-73.326	1.00	0.00	C	C
ATOM	10255	CB	ASN A 214	26.046	21.485	-73.847	1.00	0.00	C	C
ATOM	10256	CG	ASN A 214	26.905	22.614	-73.305	1.00	0.00	C	C
ATOM	10257	OD1	ASN A 214	27.911	22.437	-72.622	1.00	0.00	C	O
ATOM	10258	ND2	ASN A 214	26.463	23.862	-73.616	1.00	0.00	C	N
ATOM	10259	C	ASN A 214	27.811	19.677	-73.826	1.00	0.00	C	C
ATOM	10260	O	ASN A 214	28.843	20.292	-73.558	1.00	0.00	C	O
ATOM	10261	N	MET A 215	27.821	18.582	-74.601	1.00	0.00	C	N
ATOM	10262	CA	MET A 215	29.038	18.006	-75.090	1.00	0.00	C	C
ATOM	10263	CB	MET A 215	28.771	16.713	-75.879	1.00	0.00	C	C
ATOM	10264	CG	MET A 215	29.838	15.624	-75.715	1.00	0.00	C	C
ATOM	10265	SD	MET A 215	31.531	16.052	-76.205	1.00	0.00	C	S
ATOM	10266	CE	MET A 215	31.935	17.013	-74.720	1.00	0.00	C	C
ATOM	10267	C	MET A 215	29.687	19.000	-76.003	1.00	0.00	C	C
ATOM	10268	O	MET A 215	30.891	19.234	-75.933	1.00	0.00	C	O
ATOM	10269	N	ALA A 216	28.880	19.666	-76.846	1.00	0.00	C	N
ATOM	10270	CA	ALA A 216	29.439	20.532	-77.839	1.00	0.00	C	C
ATOM	10271	CB	ALA A 216	28.361	21.247	-78.661	1.00	0.00	C	C
ATOM	10272	C	ALA A 216	30.266	21.593	-77.179	1.00	0.00	C	C
ATOM	10273	O	ALA A 216	31.367	21.887	-77.641	1.00	0.00	C	O
ATOM	10274	N	LEU A 217	29.760	22.202	-76.091	1.00	0.00	C	N
ATOM	10275	CA	LEU A 217	30.522	23.225	-75.432	1.00	0.00	C	C
ATOM	10276	CB	LEU A 217	29.743	24.081	-74.417	1.00	0.00	C	C
ATOM	10277	CG	LEU A 217	28.722	25.033	-75.067	1.00	0.00	C	C
ATOM	10278	CD1	LEU A 217	28.221	26.082	-74.061	1.00	0.00	C	C

ATOM	10279	CD2 LEU A 217	29.281	25.659	-76.355	1.00	0.00	C	C
ATOM	10280	C LEU A 217	31.705	22.646	-74.731	1.00	0.00	C	C
ATOM	10281	O LEU A 217	32.753	23.283	-74.653	1.00	0.00	C	O
ATOM	10282	N VAL A 218	31.568	21.437	-74.153	1.00	0.00	C	N
ATOM	10283	CA VAL A 218	32.708	20.867	-73.496	1.00	0.00	C	C
ATOM	10284	CB VAL A 218	32.426	19.512	-72.911	1.00	0.00	C	C
ATOM	10285	CG1 VAL A 218	33.748	18.900	-72.419	1.00	0.00	C	C
ATOM	10286	CG2 VAL A 218	31.366	19.669	-71.808	1.00	0.00	C	C
ATOM	10287	C VAL A 218	33.767	20.697	-74.537	1.00	0.00	C	C
ATOM	10288	O VAL A 218	34.905	21.132	-74.366	1.00	0.00	C	O
ATOM	10289	N THR A 219	33.387	20.124	-75.693	1.00	0.00	C	N
ATOM	10290	CA THR A 219	34.332	19.838	-76.732	1.00	0.00	C	C
ATOM	10291	CB THR A 219	33.677	19.303	-77.973	1.00	0.00	C	C
ATOM	10292	OG1 THR A 219	32.919	18.142	-77.668	1.00	0.00	C	O
ATOM	10293	CG2 THR A 219	34.769	18.961	-79.001	1.00	0.00	C	C
ATOM	10294	C THR A 219	34.999	21.112	-77.135	1.00	0.00	C	C
ATOM	10295	O THR A 219	36.220	21.169	-77.263	1.00	0.00	C	O
ATOM	10296	N LEU A 220	34.212	22.183	-77.327	1.00	0.00	C	N
ATOM	10297	CA LEU A 220	34.787	23.397	-77.829	1.00	0.00	C	C
ATOM	10298	CB LEU A 220	33.737	24.491	-78.090	1.00	0.00	C	C
ATOM	10299	CG LEU A 220	34.326	25.794	-78.661	1.00	0.00	C	C
ATOM	10300	CD1 LEU A 220	34.976	25.556	-80.034	1.00	0.00	C	C
ATOM	10301	CD2 LEU A 220	33.274	26.914	-78.697	1.00	0.00	C	C
ATOM	10302	C LEU A 220	35.792	23.939	-76.856	1.00	0.00	C	C
ATOM	10303	O LEU A 220	36.899	24.295	-77.250	1.00	0.00	C	O
ATOM	10304	N LEU A 221	35.453	23.985	-75.551	1.00	0.00	C	N
ATOM	10305	CA LEU A 221	36.335	24.586	-74.584	1.00	0.00	C	C
ATOM	10306	CB LEU A 221	35.729	24.698	-73.176	1.00	0.00	C	C
ATOM	10307	CG LEU A 221	34.746	25.875	-73.028	1.00	0.00	C	C
ATOM	10308	CD1 LEU A 221	33.621	25.828	-74.070	1.00	0.00	C	C
ATOM	10309	CD2 LEU A 221	34.211	25.960	-71.592	1.00	0.00	C	C
ATOM	10310	C LEU A 221	37.631	23.844	-74.487	1.00	0.00	C	C
ATOM	10311	O LEU A 221	38.689	24.462	-74.390	1.00	0.00	C	O
ATOM	10312	N VAL A 222	37.583	22.501	-74.512	1.00	0.00	C	N
ATOM	10313	CA VAL A 222	38.765	21.690	-74.400	1.00	0.00	C	C
ATOM	10314	CB VAL A 222	38.455	20.221	-74.392	1.00	0.00	C	C
ATOM	10315	CG1 VAL A 222	39.776	19.437	-74.460	1.00	0.00	C	C
ATOM	10316	CG2 VAL A 222	37.616	19.908	-73.141	1.00	0.00	C	C

ATOM	10317	C	VAL A 222	39.680	21.957	-75.561	1.00	0.00	C	C
ATOM	10318	O	VAL A 222	40.899	21.975	-75.404	1.00	0.00	C	O
ATOM	10319	N	GLU A 223	39.117	22.136	-76.773	1.00	0.00	C	N
ATOM	10320	CA	GLU A 223	39.915	22.384	-77.945	1.00	0.00	C	C
ATOM	10321	CB	GLU A 223	39.107	22.348	-79.253	1.00	0.00	C	C
ATOM	10322	CG	GLU A 223	38.639	20.935	-79.606	1.00	0.00	C	C
ATOM	10323	CD	GLU A 223	38.023	20.956	-80.996	1.00	0.00	C	C
ATOM	10324	OE1	GLU A 223	37.648	22.061	-81.467	1.00	0.00	C	O
ATOM	10325	OE2	GLU A 223	37.923	19.859	-81.607	1.00	0.00	C	O
ATOM	10326	C	GLU A 223	40.579	23.721	-77.825	1.00	0.00	C	C
ATOM	10327	O	GLU A 223	41.692	23.922	-78.306	1.00	0.00	C	O
ATOM	10328	N	ASN A 224	39.870	24.680	-77.208	1.00	0.00	C	N
ATOM	10329	CA	ASN A 224	40.304	26.023	-76.940	1.00	0.00	C	C
ATOM	10330	CB	ASN A 224	39.171	26.932	-76.450	1.00	0.00	C	C
ATOM	10331	CG	ASN A 224	38.175	27.043	-77.587	1.00	0.00	C	C
ATOM	10332	OD1	ASN A 224	38.540	27.194	-78.751	1.00	0.00	C	O
ATOM	10333	ND2	ASN A 224	36.868	26.948	-77.235	1.00	0.00	C	N
ATOM	10334	C	ASN A 224	41.331	25.991	-75.851	1.00	0.00	C	C
ATOM	10335	O	ASN A 224	41.953	27.010	-75.556	1.00	0.00	C	O
ATOM	10336	N	GLY A 225	41.469	24.850	-75.142	1.00	0.00	C	N
ATOM	10337	CA	GLY A 225	42.520	24.792	-74.166	1.00	0.00	C	C
ATOM	10338	C	GLY A 225	42.022	24.999	-72.769	1.00	0.00	C	C
ATOM	10339	O	GLY A 225	42.778	25.451	-71.912	1.00	0.00	C	O
ATOM	10340	N	ALA A 226	40.740	24.688	-72.490	1.00	0.00	C	N
ATOM	10341	CA	ALA A 226	40.275	24.823	-71.138	1.00	0.00	C	C
ATOM	10342	CB	ALA A 226	38.773	24.540	-70.965	1.00	0.00	C	C
ATOM	10343	C	ALA A 226	41.028	23.849	-70.276	1.00	0.00	C	C
ATOM	10344	O	ALA A 226	41.316	22.724	-70.684	1.00	0.00	C	O
ATOM	10345	N	ASP A 227	41.390	24.294	-69.051	1.00	0.00	C	N
ATOM	10346	CA	ASP A 227	42.094	23.479	-68.103	1.00	0.00	C	C
ATOM	10347	CB	ASP A 227	42.623	24.281	-66.903	1.00	0.00	C	C
ATOM	10348	CG	ASP A 227	43.457	23.362	-66.027	1.00	0.00	C	C
ATOM	10349	OD1	ASP A 227	43.715	22.204	-66.453	1.00	0.00	C	O
ATOM	10350	OD2	ASP A 227	43.847	23.805	-64.914	1.00	0.00	C	O
ATOM	10351	C	ASP A 227	41.133	22.459	-67.571	1.00	0.00	C	C
ATOM	10352	O	ASP A 227	40.127	22.795	-66.948	1.00	0.00	C	O
ATOM	10353	N	VAL A 228	41.443	21.176	-67.814	1.00	0.00	C	N
ATOM	10354	CA	VAL A 228	40.638	20.055	-67.418	1.00	0.00	C	C

ATOM	10355	CB VAL A 228	41.050	18.787	-68.109	1.00	0.00	C	C
ATOM	10356	CG1 VAL A 228	40.259	17.611	-67.511	1.00	0.00	C	C
ATOM	10357	CG2 VAL A 228	40.824	18.966	-69.622	1.00	0.00	C	C
ATOM	10358	C VAL A 228	40.694	19.830	-65.930	1.00	0.00	C	C
ATOM	10359	O VAL A 228	39.787	19.234	-65.351	1.00	0.00	C	O
ATOM	10360	N GLN A 229	41.827	20.194	-65.307	1.00	0.00	C	N
ATOM	10361	CA GLN A 229	42.121	20.050	-63.903	1.00	0.00	C	C
ATOM	10362	CB GLN A 229	43.625	19.971	-63.605	1.00	0.00	C	C
ATOM	10363	CG GLN A 229	44.242	18.688	-64.163	1.00	0.00	C	C
ATOM	10364	CD GLN A 229	43.393	17.526	-63.662	1.00	0.00	C	C
ATOM	10365	OE1 GLN A 229	42.403	17.148	-64.284	1.00	0.00	C	O
ATOM	10366	NE2 GLN A 229	43.782	16.946	-62.497	1.00	0.00	C	N
ATOM	10367	C GLN A 229	41.500	21.094	-63.007	1.00	0.00	C	C
ATOM	10368	O GLN A 229	41.517	20.923	-61.789	1.00	0.00	C	O
ATOM	10369	N ALA A 230	41.028	22.240	-63.543	1.00	0.00	C	N
ATOM	10370	CA ALA A 230	40.566	23.330	-62.713	1.00	0.00	C	C
ATOM	10371	CB ALA A 230	39.921	24.477	-63.513	1.00	0.00	C	C
ATOM	10372	C ALA A 230	39.554	22.878	-61.702	1.00	0.00	C	C
ATOM	10373	O ALA A 230	38.577	22.208	-62.028	1.00	0.00	C	O
ATOM	10374	N ALA A 231	39.751	23.292	-60.431	1.00	0.00	C	N
ATOM	10375	CA ALA A 231	38.871	22.860	-59.380	1.00	0.00	C	C
ATOM	10376	CB ALA A 231	39.615	22.454	-58.095	1.00	0.00	C	C
ATOM	10377	C ALA A 231	37.929	23.962	-59.002	1.00	0.00	C	C
ATOM	10378	O ALA A 231	38.346	25.068	-58.660	1.00	0.00	C	O
ATOM	10379	N ALA A 232	36.610	23.668	-59.050	1.00	0.00	C	N
ATOM	10380	CA ALA A 232	35.649	24.638	-58.610	1.00	0.00	C	C
ATOM	10381	CB ALA A 232	34.300	24.534	-59.338	1.00	0.00	C	C
ATOM	10382	C ALA A 232	35.407	24.310	-57.164	1.00	0.00	C	C
ATOM	10383	O ALA A 232	34.701	23.358	-56.845	1.00	0.00	C	O
ATOM	10384	N HSD A 233	36.088	25.070	-56.278	1.00	0.00	C	N
ATOM	10385	CA HSD A 233	36.148	24.998	-54.838	1.00	0.00	C	C
ATOM	10386	CB HSD A 233	37.541	25.369	-54.301	1.00	0.00	C	C
ATOM	10387	ND1 HSD A 233	38.857	26.388	-56.209	1.00	0.00	C	N
ATOM	10388	CG HSD A 233	38.161	26.524	-55.027	1.00	0.00	C	C
ATOM	10389	CE1 HSD A 233	39.262	27.630	-56.568	1.00	0.00	C	C
ATOM	10390	NE2 HSD A 233	38.877	28.553	-55.706	1.00	0.00	C	N
ATOM	10391	CD2 HSD A 233	38.185	27.851	-54.735	1.00	0.00	C	C
ATOM	10392	C HSD A 233	35.117	25.765	-54.049	1.00	0.00	C	C

ATOM	10393	O	HSD A 233	35.019	25.560	-52.839	1.00	0.00	C	O
ATOM	10394	N	GLY A 234	34.373	26.714	-54.644	1.00	0.00	C	N
ATOM	10395	CA	GLY A 234	33.531	27.596	-53.863	1.00	0.00	C	C
ATOM	10396	C	GLY A 234	32.485	26.841	-53.094	1.00	0.00	C	C
ATOM	10397	O	GLY A 234	32.256	25.657	-53.315	1.00	0.00	C	O
ATOM	10398	N	ASP A 235	31.793	27.553	-52.176	1.00	0.00	C	N
ATOM	10399	CA	ASP A 235	30.810	26.987	-51.288	1.00	0.00	C	C
ATOM	10400	CB	ASP A 235	30.213	28.005	-50.299	1.00	0.00	C	C
ATOM	10401	CG	ASP A 235	31.251	28.239	-49.206	1.00	0.00	C	C
ATOM	10402	OD1	ASP A 235	32.211	27.427	-49.126	1.00	0.00	C	O
ATOM	10403	OD2	ASP A 235	31.097	29.225	-48.437	1.00	0.00	C	O
ATOM	10404	C	ASP A 235	29.699	26.373	-52.084	1.00	0.00	C	C
ATOM	10405	O	ASP A 235	29.019	25.461	-51.616	1.00	0.00	C	O
ATOM	10406	N	PHE A 236	29.476	26.867	-53.312	1.00	0.00	C	N
ATOM	10407	CA	PHE A 236	28.447	26.339	-54.163	1.00	0.00	C	C
ATOM	10408	CB	PHE A 236	28.314	27.115	-55.488	1.00	0.00	C	C
ATOM	10409	CG	PHE A 236	27.327	26.400	-56.348	1.00	0.00	C	C
ATOM	10410	CD1	PHE A 236	25.976	26.538	-56.134	1.00	0.00	C	C
ATOM	10411	CE1	PHE A 236	25.067	25.872	-56.926	1.00	0.00	C	C
ATOM	10412	CZ	PHE A 236	25.509	25.056	-57.939	1.00	0.00	C	C
ATOM	10413	CD2	PHE A 236	27.760	25.573	-57.358	1.00	0.00	C	C
ATOM	10414	CE2	PHE A 236	26.858	24.907	-58.154	1.00	0.00	C	C
ATOM	10415	C	PHE A 236	28.751	24.902	-54.469	1.00	0.00	C	C
ATOM	10416	O	PHE A 236	27.850	24.109	-54.725	1.00	0.00	C	O
ATOM	10417	N	PHE A 237	30.049	24.573	-54.541	1.00	0.00	C	N
ATOM	10418	CA	PHE A 237	30.639	23.303	-54.857	1.00	0.00	C	C
ATOM	10419	CB	PHE A 237	32.037	23.483	-55.461	1.00	0.00	C	C
ATOM	10420	CG	PHE A 237	31.771	24.320	-56.668	1.00	0.00	C	C
ATOM	10421	CD1	PHE A 237	31.191	23.770	-57.789	1.00	0.00	C	C
ATOM	10422	CE1	PHE A 237	30.937	24.541	-58.899	1.00	0.00	C	C
ATOM	10423	CZ	PHE A 237	31.261	25.876	-58.902	1.00	0.00	C	C
ATOM	10424	CD2	PHE A 237	32.090	25.659	-56.678	1.00	0.00	C	C
ATOM	10425	CE2	PHE A 237	31.837	26.434	-57.787	1.00	0.00	C	C
ATOM	10426	C	PHE A 237	30.671	22.317	-53.724	1.00	0.00	C	C
ATOM	10427	O	PHE A 237	31.024	21.164	-53.963	1.00	0.00	C	O
ATOM	10428	N	LYS A 238	30.457	22.755	-52.461	1.00	0.00	C	N
ATOM	10429	CA	LYS A 238	30.514	21.862	-51.332	1.00	0.00	C	C
ATOM	10430	CB	LYS A 238	31.499	22.322	-50.244	1.00	0.00	C	C

ATOM	10431	CG	LYS A 238	32.965	22.166	-50.654	1.00	0.00	C	C
ATOM	10432	CD	LYS A 238	33.943	22.961	-49.784	1.00	0.00	C	C
ATOM	10433	CE	LYS A 238	33.548	23.035	-48.307	1.00	0.00	C	C
ATOM	10434	NZ	LYS A 238	32.480	24.040	-48.114	1.00	0.00	C	N
ATOM	10435	C	LYS A 238	29.158	21.706	-50.697	1.00	0.00	C	C
ATOM	10436	O	LYS A 238	28.157	22.240	-51.174	1.00	0.00	C	O
ATOM	10437	N	LYS A 239	29.129	20.940	-49.579	1.00	0.00	C	N
ATOM	10438	CA	LYS A 239	27.938	20.560	-48.869	1.00	0.00	C	C
ATOM	10439	CB	LYS A 239	28.234	19.694	-47.632	1.00	0.00	C	C
ATOM	10440	CG	LYS A 239	28.888	18.356	-47.987	1.00	0.00	C	C
ATOM	10441	CD	LYS A 239	29.530	17.638	-46.798	1.00	0.00	C	C
ATOM	10442	CE	LYS A 239	30.231	16.331	-47.181	1.00	0.00	C	C
ATOM	10443	NZ	LYS A 239	30.923	15.757	-46.004	1.00	0.00	C	N
ATOM	10444	C	LYS A 239	27.182	21.767	-48.429	1.00	0.00	C	C
ATOM	10445	O	LYS A 239	27.736	22.757	-47.952	1.00	0.00	C	O
ATOM	10446	N	THR A 240	25.848	21.651	-48.567	1.00	0.00	C	N
ATOM	10447	CA	THR A 240	24.862	22.658	-48.339	1.00	0.00	C	C
ATOM	10448	CB	THR A 240	23.511	22.109	-48.712	1.00	0.00	C	C
ATOM	10449	OG1	THR A 240	22.548	23.135	-48.881	1.00	0.00	C	O
ATOM	10450	CG2	THR A 240	23.069	21.116	-47.625	1.00	0.00	C	C
ATOM	10451	C	THR A 240	24.889	23.062	-46.894	1.00	0.00	C	C
ATOM	10452	O	THR A 240	24.975	22.233	-45.992	1.00	0.00	C	O
ATOM	10453	N	LYS A 241	24.856	24.389	-46.680	1.00	0.00	C	N
ATOM	10454	CA	LYS A 241	24.838	25.101	-45.434	1.00	0.00	C	C
ATOM	10455	CB	LYS A 241	25.015	26.615	-45.617	1.00	0.00	C	C
ATOM	10456	CG	LYS A 241	26.460	27.000	-45.927	1.00	0.00	C	C
ATOM	10457	CD	LYS A 241	26.625	28.417	-46.474	1.00	0.00	C	C
ATOM	10458	CE	LYS A 241	25.871	29.486	-45.683	1.00	0.00	C	C
ATOM	10459	NZ	LYS A 241	24.422	29.436	-45.982	1.00	0.00	C	N
ATOM	10460	C	LYS A 241	23.578	24.886	-44.643	1.00	0.00	C	C
ATOM	10461	O	LYS A 241	23.662	24.812	-43.417	1.00	0.00	C	O
ATOM	10462	N	GLY A 242	22.373	24.745	-45.253	1.00	0.00	C	N
ATOM	10463	CA	GLY A 242	22.072	24.682	-46.656	1.00	0.00	C	C
ATOM	10464	C	GLY A 242	22.326	25.969	-47.375	1.00	0.00	C	C
ATOM	10465	O	GLY A 242	21.631	26.960	-47.164	1.00	0.00	C	O
ATOM	10466	N	ARG A 243	23.374	25.990	-48.229	1.00	0.00	C	N
ATOM	10467	CA	ARG A 243	23.621	27.119	-49.064	1.00	0.00	C	C
ATOM	10468	CB	ARG A 243	25.069	27.232	-49.565	1.00	0.00	C	C

ATOM	10469	CG	ARG A 243	25.298	28.510	-50.370	1.00	0.00	C	C
ATOM	10470	CD	ARG A 243	26.686	29.126	-50.199	1.00	0.00	C	C
ATOM	10471	NE	ARG A 243	26.656	29.897	-48.927	1.00	0.00	C	N
ATOM	10472	CZ	ARG A 243	27.614	30.829	-48.655	1.00	0.00	C	C
ATOM	10473	NH1	ARG A 243	28.614	31.074	-49.553	1.00	0.00	C	N
ATOM	10474	NH2	ARG A 243	27.571	31.516	-47.476	1.00	0.00	C	N
ATOM	10475	C	ARG A 243	22.679	27.129	-50.229	1.00	0.00	C	C
ATOM	10476	O	ARG A 243	22.008	28.144	-50.420	1.00	0.00	C	O
ATOM	10477	N	PRO A 244	22.519	26.091	-51.035	1.00	0.00	C	N
ATOM	10478	CD	PRO A 244	21.171	25.888	-51.540	1.00	0.00	C	C
ATOM	10479	CA	PRO A 244	23.264	24.835	-51.007	1.00	0.00	C	C
ATOM	10480	CB	PRO A 244	22.354	23.809	-51.688	1.00	0.00	C	C
ATOM	10481	CG	PRO A 244	20.943	24.377	-51.560	1.00	0.00	C	C
ATOM	10482	C	PRO A 244	24.623	24.936	-51.666	1.00	0.00	C	C
ATOM	10483	O	PRO A 244	24.967	26.027	-52.114	1.00	0.00	C	O
ATOM	10484	N	GLY A 245	25.404	23.825	-51.786	1.00	0.00	C	N
ATOM	10485	CA	GLY A 245	24.998	22.585	-52.417	1.00	0.00	C	C
ATOM	10486	C	GLY A 245	25.093	22.815	-53.898	1.00	0.00	C	C
ATOM	10487	O	GLY A 245	24.561	23.809	-54.393	1.00	0.00	C	O
ATOM	10488	N	PHE A 246	25.682	21.879	-54.693	1.00	0.00	C	N
ATOM	10489	CA	PHE A 246	26.025	20.516	-54.359	1.00	0.00	C	C
ATOM	10490	CB	PHE A 246	25.027	19.569	-55.057	1.00	0.00	C	C
ATOM	10491	CG	PHE A 246	25.577	18.203	-55.274	1.00	0.00	C	C
ATOM	10492	CD1	PHE A 246	25.593	17.238	-54.292	1.00	0.00	C	C
ATOM	10493	CE1	PHE A 246	26.105	15.989	-54.560	1.00	0.00	C	C
ATOM	10494	CZ	PHE A 246	26.600	15.691	-55.809	1.00	0.00	C	C
ATOM	10495	CD2	PHE A 246	26.065	17.892	-56.522	1.00	0.00	C	C
ATOM	10496	CE2	PHE A 246	26.579	16.647	-56.797	1.00	0.00	C	C
ATOM	10497	C	PHE A 246	27.433	20.149	-54.750	1.00	0.00	C	C
ATOM	10498	O	PHE A 246	28.021	20.737	-55.658	1.00	0.00	C	O
ATOM	10499	N	TYR A 247	27.977	19.102	-54.074	1.00	0.00	C	N
ATOM	10500	CA	TYR A 247	29.373	18.745	-54.154	1.00	0.00	C	C
ATOM	10501	CB	TYR A 247	29.959	18.690	-52.735	1.00	0.00	C	C
ATOM	10502	CG	TYR A 247	31.247	17.957	-52.717	1.00	0.00	C	C
ATOM	10503	CD1	TYR A 247	32.445	18.582	-52.969	1.00	0.00	C	C
ATOM	10504	CE1	TYR A 247	33.615	17.856	-52.930	1.00	0.00	C	C
ATOM	10505	CZ	TYR A 247	33.582	16.511	-52.638	1.00	0.00	C	C
ATOM	10506	OH	TYR A 247	34.770	15.759	-52.592	1.00	0.00	C	O

ATOM	10507	CD2 TYR A 247	31.226	16.616	-52.427	1.00	0.00	C	C
ATOM	10508	CE2 TYR A 247	32.385	15.889	-52.385	1.00	0.00	C	C
ATOM	10509	C TYR A 247	29.627	17.433	-54.854	1.00	0.00	C	C
ATOM	10510	O TYR A 247	29.273	16.359	-54.379	1.00	0.00	C	O
ATOM	10511	N PHE A 248	30.153	17.544	-56.088	1.00	0.00	C	N
ATOM	10512	CA PHE A 248	30.644	16.567	-57.031	1.00	0.00	C	C
ATOM	10513	CB PHE A 248	30.204	16.872	-58.464	1.00	0.00	C	C
ATOM	10514	CG PHE A 248	30.630	18.255	-58.782	1.00	0.00	C	C
ATOM	10515	CD1 PHE A 248	29.830	19.314	-58.426	1.00	0.00	C	C
ATOM	10516	CE1 PHE A 248	30.213	20.601	-58.718	1.00	0.00	C	C
ATOM	10517	CZ PHE A 248	31.403	20.830	-59.366	1.00	0.00	C	C
ATOM	10518	CD2 PHE A 248	31.824	18.490	-59.423	1.00	0.00	C	C
ATOM	10519	CE2 PHE A 248	32.210	19.775	-59.719	1.00	0.00	C	C
ATOM	10520	C PHE A 248	32.121	16.399	-56.965	1.00	0.00	C	C
ATOM	10521	O PHE A 248	32.732	15.758	-57.818	1.00	0.00	C	O
ATOM	10522	N GLY A 249	32.709	17.260	-56.146	1.00	0.00	C	N
ATOM	10523	CA GLY A 249	34.066	17.434	-55.808	1.00	0.00	C	C
ATOM	10524	C GLY A 249	34.828	18.054	-56.932	1.00	0.00	C	C
ATOM	10525	O GLY A 249	35.462	17.333	-57.692	1.00	0.00	C	O
ATOM	10526	N GLU A 250	34.605	19.358	-57.173	1.00	0.00	C	N
ATOM	10527	CA GLU A 250	35.509	20.322	-57.760	1.00	0.00	C	C
ATOM	10528	CB GLU A 250	36.659	20.630	-56.792	1.00	0.00	C	C
ATOM	10529	CG GLU A 250	36.163	21.153	-55.443	1.00	0.00	C	C
ATOM	10530	CD GLU A 250	37.370	21.429	-54.559	1.00	0.00	C	C
ATOM	10531	OE1 GLU A 250	38.513	21.369	-55.088	1.00	0.00	C	O
ATOM	10532	OE2 GLU A 250	37.167	21.709	-53.349	1.00	0.00	C	O
ATOM	10533	C GLU A 250	36.137	20.101	-59.118	1.00	0.00	C	C
ATOM	10534	O GLU A 250	36.434	21.090	-59.792	1.00	0.00	C	O
ATOM	10535	N LEU A 251	36.293	18.864	-59.622	1.00	0.00	C	N
ATOM	10536	CA LEU A 251	37.058	18.675	-60.837	1.00	0.00	C	C
ATOM	10537	CB LEU A 251	38.126	17.569	-60.724	1.00	0.00	C	C
ATOM	10538	CG LEU A 251	39.290	17.853	-59.758	1.00	0.00	C	C
ATOM	10539	CD1 LEU A 251	40.252	16.657	-59.708	1.00	0.00	C	C
ATOM	10540	CD2 LEU A 251	40.027	19.154	-60.117	1.00	0.00	C	C
ATOM	10541	C LEU A 251	36.123	18.201	-61.898	1.00	0.00	C	C
ATOM	10542	O LEU A 251	35.250	17.381	-61.627	1.00	0.00	C	O
ATOM	10543	N PRO A 252	36.335	18.643	-63.112	1.00	0.00	C	N
ATOM	10544	CD PRO A 252	37.244	19.742	-63.390	1.00	0.00	C	C

ATOM	10545	CA	PRO A 252	35.468	18.350	-64.218	1.00	0.00	C	C
ATOM	10546	CB	PRO A 252	36.113	19.023	-65.428	1.00	0.00	C	C
ATOM	10547	CG	PRO A 252	36.881	20.210	-64.811	1.00	0.00	C	C
ATOM	10548	C	PRO A 252	35.163	16.892	-64.382	1.00	0.00	C	C
ATOM	10549	O	PRO A 252	33.998	16.561	-64.586	1.00	0.00	C	O
ATOM	10550	N	LEU A 253	36.164	16.003	-64.275	1.00	0.00	C	N
ATOM	10551	CA	LEU A 253	35.901	14.597	-64.409	1.00	0.00	C	C
ATOM	10552	CB	LEU A 253	37.162	13.731	-64.254	1.00	0.00	C	C
ATOM	10553	CG	LEU A 253	36.893	12.219	-64.399	1.00	0.00	C	C
ATOM	10554	CD1	LEU A 253	36.544	11.826	-65.839	1.00	0.00	C	C
ATOM	10555	CD2	LEU A 253	38.047	11.391	-63.830	1.00	0.00	C	C
ATOM	10556	C	LEU A 253	34.966	14.187	-63.307	1.00	0.00	C	C
ATOM	10557	O	LEU A 253	34.007	13.452	-63.538	1.00	0.00	C	O
ATOM	10558	N	SER A 254	35.215	14.674	-62.076	1.00	0.00	C	N
ATOM	10559	CA	SER A 254	34.432	14.283	-60.936	1.00	0.00	C	C
ATOM	10560	CB	SER A 254	34.923	14.941	-59.637	1.00	0.00	C	C
ATOM	10561	OG	SER A 254	36.241	14.496	-59.348	1.00	0.00	C	O
ATOM	10562	C	SER A 254	33.015	14.707	-61.159	1.00	0.00	C	C
ATOM	10563	O	SER A 254	32.081	13.947	-60.910	1.00	0.00	C	O
ATOM	10564	N	LEU A 255	32.832	15.941	-61.652	1.00	0.00	C	N
ATOM	10565	CA	LEU A 255	31.529	16.472	-61.919	1.00	0.00	C	C
ATOM	10566	CB	LEU A 255	31.602	17.906	-62.486	1.00	0.00	C	C
ATOM	10567	CG	LEU A 255	30.231	18.538	-62.798	1.00	0.00	C	C
ATOM	10568	CD1	LEU A 255	29.388	18.691	-61.527	1.00	0.00	C	C
ATOM	10569	CD2	LEU A 255	30.381	19.870	-63.558	1.00	0.00	C	C
ATOM	10570	C	LEU A 255	30.863	15.616	-62.950	1.00	0.00	C	C
ATOM	10571	O	LEU A 255	29.722	15.187	-62.780	1.00	0.00	C	O
ATOM	10572	N	ALA A 256	31.593	15.285	-64.030	1.00	0.00	C	N
ATOM	10573	CA	ALA A 256	31.003	14.571	-65.131	1.00	0.00	C	C
ATOM	10574	CB	ALA A 256	31.997	14.310	-66.276	1.00	0.00	C	C
ATOM	10575	C	ALA A 256	30.498	13.244	-64.653	1.00	0.00	C	C
ATOM	10576	O	ALA A 256	29.461	12.770	-65.116	1.00	0.00	C	O
ATOM	10577	N	ALA A 257	31.264	12.574	-63.770	1.00	0.00	C	N
ATOM	10578	CA	ALA A 257	30.865	11.291	-63.258	1.00	0.00	C	C
ATOM	10579	CB	ALA A 257	32.012	10.597	-62.497	1.00	0.00	C	C
ATOM	10580	C	ALA A 257	29.684	11.388	-62.327	1.00	0.00	C	C
ATOM	10581	O	ALA A 257	28.696	10.670	-62.493	1.00	0.00	C	O
ATOM	10582	N	CYS A 258	29.725	12.330	-61.358	1.00	0.00	C	N

ATOM	10583	CA	CYS A 258	28.733	12.445	-60.318	1.00	0.00	C	C
ATOM	10584	CB	CYS A 258	29.049	13.551	-59.294	1.00	0.00	C	C
ATOM	10585	SG	CYS A 258	30.458	13.136	-58.222	1.00	0.00	C	S
ATOM	10586	C	CYS A 258	27.401	12.756	-60.915	1.00	0.00	C	C
ATOM	10587	O	CYS A 258	26.360	12.429	-60.351	1.00	0.00	C	O
ATOM	10588	N	THR A 259	27.416	13.484	-62.038	1.00	0.00	C	N
ATOM	10589	CA	THR A 259	26.275	13.868	-62.820	1.00	0.00	C	C
ATOM	10590	CB	THR A 259	26.540	15.044	-63.717	1.00	0.00	C	C
ATOM	10591	OG1	THR A 259	27.564	14.740	-64.650	1.00	0.00	C	O
ATOM	10592	CG2	THR A 259	26.953	16.240	-62.841	1.00	0.00	C	C
ATOM	10593	C	THR A 259	25.804	12.722	-63.660	1.00	0.00	C	C
ATOM	10594	O	THR A 259	24.782	12.829	-64.337	1.00	0.00	C	O
ATOM	10595	N	ASN A 260	26.578	11.619	-63.706	1.00	0.00	C	N
ATOM	10596	CA	ASN A 260	26.239	10.471	-64.494	1.00	0.00	C	C
ATOM	10597	CB	ASN A 260	24.902	9.823	-64.084	1.00	0.00	C	C
ATOM	10598	CG	ASN A 260	24.925	8.387	-64.585	1.00	0.00	C	C
ATOM	10599	OD1	ASN A 260	25.958	7.723	-64.524	1.00	0.00	C	O
ATOM	10600	ND2	ASN A 260	23.764	7.897	-65.096	1.00	0.00	C	N
ATOM	10601	C	ASN A 260	26.209	10.823	-65.949	1.00	0.00	C	C
ATOM	10602	O	ASN A 260	25.208	10.639	-66.640	1.00	0.00	C	O
ATOM	10603	N	GLN A 261	27.317	11.401	-66.451	1.00	0.00	C	N
ATOM	10604	CA	GLN A 261	27.388	11.634	-67.863	1.00	0.00	C	C
ATOM	10605	CB	GLN A 261	27.160	13.108	-68.252	1.00	0.00	C	C
ATOM	10606	CG	GLN A 261	28.026	14.136	-67.534	1.00	0.00	C	C
ATOM	10607	CD	GLN A 261	27.363	15.487	-67.781	1.00	0.00	C	C
ATOM	10608	OE1	GLN A 261	26.780	15.719	-68.839	1.00	0.00	C	O
ATOM	10609	NE2	GLN A 261	27.442	16.402	-66.779	1.00	0.00	C	N
ATOM	10610	C	GLN A 261	28.662	11.035	-68.376	1.00	0.00	C	C
ATOM	10611	O	GLN A 261	29.716	11.666	-68.442	1.00	0.00	C	O
ATOM	10612	N	LEU A 262	28.547	9.756	-68.795	1.00	0.00	C	N
ATOM	10613	CA	LEU A 262	29.668	8.937	-69.154	1.00	0.00	C	C
ATOM	10614	CB	LEU A 262	29.307	7.471	-69.418	1.00	0.00	C	C
ATOM	10615	CG	LEU A 262	30.548	6.641	-69.788	1.00	0.00	C	C
ATOM	10616	CD1	LEU A 262	31.545	6.577	-68.620	1.00	0.00	C	C
ATOM	10617	CD2	LEU A 262	30.158	5.257	-70.317	1.00	0.00	C	C
ATOM	10618	C	LEU A 262	30.397	9.434	-70.356	1.00	0.00	C	C
ATOM	10619	O	LEU A 262	31.627	9.431	-70.364	1.00	0.00	C	O
ATOM	10620	N	GLY A 263	29.680	9.897	-71.399	1.00	0.00	C	N

ATOM	10621	CA	GLY A 263	30.346	10.248	-72.622	1.00	0.00	C	C
ATOM	10622	C	GLY A 263	31.363	11.308	-72.347	1.00	0.00	C	C
ATOM	10623	O	GLY A 263	32.469	11.271	-72.885	1.00	0.00	C	O
ATOM	10624	N	ILE A 264	31.004	12.296	-71.512	1.00	0.00	C	N
ATOM	10625	CA	ILE A 264	31.904	13.360	-71.178	1.00	0.00	C	C
ATOM	10626	CB	ILE A 264	31.244	14.508	-70.466	1.00	0.00	C	C
ATOM	10627	CG2	ILE A 264	32.339	15.506	-70.055	1.00	0.00	C	C
ATOM	10628	CG1	ILE A 264	30.175	15.133	-71.380	1.00	0.00	C	C
ATOM	10629	CD	ILE A 264	29.374	16.253	-70.715	1.00	0.00	C	C
ATOM	10630	C	ILE A 264	33.034	12.824	-70.352	1.00	0.00	C	C
ATOM	10631	O	ILE A 264	34.168	13.286	-70.472	1.00	0.00	C	O
ATOM	10632	N	VAL A 265	32.760	11.849	-69.458	1.00	0.00	C	N
ATOM	10633	CA	VAL A 265	33.835	11.298	-68.683	1.00	0.00	C	C
ATOM	10634	CB	VAL A 265	33.404	10.166	-67.786	1.00	0.00	C	C
ATOM	10635	CG1	VAL A 265	34.653	9.503	-67.180	1.00	0.00	C	C
ATOM	10636	CG2	VAL A 265	32.446	10.722	-66.721	1.00	0.00	C	C
ATOM	10637	C	VAL A 265	34.845	10.747	-69.644	1.00	0.00	C	C
ATOM	10638	O	VAL A 265	36.044	10.980	-69.492	1.00	0.00	C	O
ATOM	10639	N	LYS A 266	34.381	10.014	-70.675	1.00	0.00	C	N
ATOM	10640	CA	LYS A 266	35.291	9.433	-71.624	1.00	0.00	C	C
ATOM	10641	CB	LYS A 266	34.590	8.548	-72.672	1.00	0.00	C	C
ATOM	10642	CG	LYS A 266	34.055	7.230	-72.100	1.00	0.00	C	C
ATOM	10643	CD	LYS A 266	33.155	6.449	-73.059	1.00	0.00	C	C
ATOM	10644	CE	LYS A 266	32.716	5.083	-72.517	1.00	0.00	C	C
ATOM	10645	NZ	LYS A 266	31.884	4.379	-73.518	1.00	0.00	C	N
ATOM	10646	C	LYS A 266	36.026	10.517	-72.352	1.00	0.00	C	C
ATOM	10647	O	LYS A 266	37.247	10.477	-72.494	1.00	0.00	C	O
ATOM	10648	N	PHE A 267	35.297	11.555	-72.786	1.00	0.00	C	N
ATOM	10649	CA	PHE A 267	35.859	12.631	-73.551	1.00	0.00	C	C
ATOM	10650	CB	PHE A 267	34.783	13.689	-73.879	1.00	0.00	C	C
ATOM	10651	CG	PHE A 267	35.380	14.833	-74.623	1.00	0.00	C	C
ATOM	10652	CD1	PHE A 267	35.924	15.897	-73.939	1.00	0.00	C	C
ATOM	10653	CE1	PHE A 267	36.472	16.961	-74.615	1.00	0.00	C	C
ATOM	10654	CZ	PHE A 267	36.479	16.972	-75.989	1.00	0.00	C	C
ATOM	10655	CD2	PHE A 267	35.385	14.855	-75.999	1.00	0.00	C	C
ATOM	10656	CE2	PHE A 267	35.935	15.917	-76.680	1.00	0.00	C	C
ATOM	10657	C	PHE A 267	36.938	13.281	-72.745	1.00	0.00	C	C
ATOM	10658	O	PHE A 267	37.976	13.662	-73.284	1.00	0.00	C	O

ATOM	10659	N	LEU A 268	36.719	13.454	-71.428	1.00	0.00	C	N
ATOM	10660	CA	LEU A 268	37.722	14.126	-70.650	1.00	0.00	C	C
ATOM	10661	CB	LEU A 268	37.298	14.356	-69.187	1.00	0.00	C	C
ATOM	10662	CG	LEU A 268	36.134	15.350	-69.014	1.00	0.00	C	C
ATOM	10663	CD1	LEU A 268	35.772	15.526	-67.531	1.00	0.00	C	C
ATOM	10664	CD2	LEU A 268	36.426	16.691	-69.706	1.00	0.00	C	C
ATOM	10665	C	LEU A 268	38.992	13.324	-70.630	1.00	0.00	C	C
ATOM	10666	O	LEU A 268	40.074	13.857	-70.859	1.00	0.00	C	O
ATOM	10667	N	LEU A 269	38.887	12.015	-70.346	1.00	0.00	C	N
ATOM	10668	CA	LEU A 269	40.038	11.166	-70.225	1.00	0.00	C	C
ATOM	10669	CB	LEU A 269	39.681	9.797	-69.623	1.00	0.00	C	C
ATOM	10670	CG	LEU A 269	39.196	9.863	-68.160	1.00	0.00	C	C
ATOM	10671	CD1	LEU A 269	38.858	8.463	-67.630	1.00	0.00	C	C
ATOM	10672	CD2	LEU A 269	40.206	10.592	-67.258	1.00	0.00	C	C
ATOM	10673	C	LEU A 269	40.726	10.914	-71.543	1.00	0.00	C	C
ATOM	10674	O	LEU A 269	41.952	10.835	-71.599	1.00	0.00	C	O
ATOM	10675	N	GLN A 270	39.939	10.679	-72.612	1.00	0.00	C	N
ATOM	10676	CA	GLN A 270	40.414	10.315	-73.925	1.00	0.00	C	C
ATOM	10677	CB	GLN A 270	39.373	9.500	-74.707	1.00	0.00	C	C
ATOM	10678	CG	GLN A 270	39.138	8.134	-74.057	1.00	0.00	C	C
ATOM	10679	CD	GLN A 270	38.100	7.379	-74.869	1.00	0.00	C	C
ATOM	10680	OE1	GLN A 270	37.660	7.837	-75.921	1.00	0.00	C	O
ATOM	10681	NE2	GLN A 270	37.700	6.184	-74.361	1.00	0.00	C	N
ATOM	10682	C	GLN A 270	40.942	11.416	-74.819	1.00	0.00	C	C
ATOM	10683	O	GLN A 270	41.861	11.171	-75.599	1.00	0.00	C	O
ATOM	10684	N	ASN A 271	40.395	12.648	-74.746	1.00	0.00	C	N
ATOM	10685	CA	ASN A 271	40.662	13.665	-75.744	1.00	0.00	C	C
ATOM	10686	CB	ASN A 271	39.947	15.014	-75.514	1.00	0.00	C	C
ATOM	10687	CG	ASN A 271	40.542	15.707	-74.299	1.00	0.00	C	C
ATOM	10688	OD1	ASN A 271	41.386	16.590	-74.436	1.00	0.00	C	O
ATOM	10689	ND2	ASN A 271	40.090	15.311	-73.083	1.00	0.00	C	N
ATOM	10690	C	ASN A 271	42.122	13.949	-75.948	1.00	0.00	C	C
ATOM	10691	O	ASN A 271	42.970	13.692	-75.096	1.00	0.00	C	O
ATOM	10692	N	SER A 272	42.434	14.452	-77.166	1.00	0.00	C	N
ATOM	10693	CA	SER A 272	43.755	14.765	-77.634	1.00	0.00	C	C
ATOM	10694	CB	SER A 272	43.775	15.076	-79.137	1.00	0.00	C	C
ATOM	10695	OG	SER A 272	43.353	13.941	-79.877	1.00	0.00	C	O
ATOM	10696	C	SER A 272	44.319	15.974	-76.948	1.00	0.00	C	C

ATOM	10697	O	SER A 272	45.522	16.035	-76.689	1.00	0.00	C	O
ATOM	10698	N	TRP A 273	43.473	16.984	-76.682	1.00	0.00	C	N
ATOM	10699	CA	TRP A 273	43.948	18.242	-76.169	1.00	0.00	C	C
ATOM	10700	CB	TRP A 273	42.865	19.325	-76.190	1.00	0.00	C	C
ATOM	10701	CG	TRP A 273	42.493	19.688	-77.606	1.00	0.00	C	C
ATOM	10702	CD1	TRP A 273	41.536	19.140	-78.409	1.00	0.00	C	C
ATOM	10703	NE1	TRP A 273	41.563	19.744	-79.643	1.00	0.00	C	N
ATOM	10704	CE2	TRP A 273	42.552	20.707	-79.643	1.00	0.00	C	C
ATOM	10705	CD2	TRP A 273	43.151	20.695	-78.383	1.00	0.00	C	C
ATOM	10706	CE3	TRP A 273	44.178	21.548	-78.075	1.00	0.00	C	C
ATOM	10707	CZ3	TRP A 273	44.594	22.415	-79.059	1.00	0.00	C	C
ATOM	10708	CZ2	TRP A 273	42.966	21.568	-80.615	1.00	0.00	C	C
ATOM	10709	CH2	TRP A 273	43.999	22.425	-80.305	1.00	0.00	C	C
ATOM	10710	C	TRP A 273	44.504	18.135	-74.786	1.00	0.00	C	C
ATOM	10711	O	TRP A 273	45.646	18.526	-74.548	1.00	0.00	C	O
ATOM	10712	N	GLN A 274	43.717	17.624	-73.822	1.00	0.00	C	N
ATOM	10713	CA	GLN A 274	44.263	17.477	-72.504	1.00	0.00	C	C
ATOM	10714	CB	GLN A 274	44.137	18.749	-71.647	1.00	0.00	C	C
ATOM	10715	CG	GLN A 274	44.791	18.640	-70.267	1.00	0.00	C	C
ATOM	10716	CD	GLN A 274	44.732	20.009	-69.601	1.00	0.00	C	C
ATOM	10717	OE1	GLN A 274	44.206	20.970	-70.162	1.00	0.00	C	O
ATOM	10718	NE2	GLN A 274	45.300	20.107	-68.369	1.00	0.00	C	N
ATOM	10719	C	GLN A 274	43.501	16.377	-71.841	1.00	0.00	C	C
ATOM	10720	O	GLN A 274	42.311	16.511	-71.562	1.00	0.00	C	O
ATOM	10721	N	THR A 275	44.184	15.255	-71.561	1.00	0.00	C	N
ATOM	10722	CA	THR A 275	43.517	14.149	-70.946	1.00	0.00	C	C
ATOM	10723	CB	THR A 275	44.274	12.860	-71.064	1.00	0.00	C	C
ATOM	10724	OG1	THR A 275	45.533	12.970	-70.414	1.00	0.00	C	O
ATOM	10725	CG2	THR A 275	44.476	12.541	-72.556	1.00	0.00	C	C
ATOM	10726	C	THR A 275	43.406	14.469	-69.495	1.00	0.00	C	C
ATOM	10727	O	THR A 275	44.305	15.079	-68.917	1.00	0.00	C	O
ATOM	10728	N	ALA A 276	42.283	14.069	-68.870	1.00	0.00	C	N
ATOM	10729	CA	ALA A 276	42.108	14.348	-67.479	1.00	0.00	C	C
ATOM	10730	CB	ALA A 276	40.661	14.145	-66.988	1.00	0.00	C	C
ATOM	10731	C	ALA A 276	42.993	13.435	-66.693	1.00	0.00	C	C
ATOM	10732	O	ALA A 276	43.275	12.312	-67.106	1.00	0.00	C	O
ATOM	10733	N	ASP A 277	43.475	13.930	-65.534	1.00	0.00	C	N
ATOM	10734	CA	ASP A 277	44.258	13.123	-64.647	1.00	0.00	C	C

ATOM	10735	CB	ASP A 277	45.073	13.949	-63.629	1.00	0.00	C	C
ATOM	10736	CG	ASP A 277	45.890	13.022	-62.733	1.00	0.00	C	C
ATOM	10737	OD1	ASP A 277	45.702	11.778	-62.804	1.00	0.00	C	O
ATOM	10738	OD2	ASP A 277	46.721	13.561	-61.953	1.00	0.00	C	O
ATOM	10739	C	ASP A 277	43.246	12.338	-63.875	1.00	0.00	C	C
ATOM	10740	O	ASP A 277	42.517	12.880	-63.049	1.00	0.00	C	O
ATOM	10741	N	ILE A 278	43.194	11.023	-64.132	1.00	0.00	C	N
ATOM	10742	CA	ILE A 278	42.217	10.157	-63.542	1.00	0.00	C	C
ATOM	10743	CB	ILE A 278	42.288	8.756	-64.076	1.00	0.00	C	C
ATOM	10744	CG2	ILE A 278	43.623	8.137	-63.623	1.00	0.00	C	C
ATOM	10745	CG1	ILE A 278	41.045	7.955	-63.649	1.00	0.00	C	C
ATOM	10746	CD	ILE A 278	39.750	8.443	-64.293	1.00	0.00	C	C
ATOM	10747	C	ILE A 278	42.367	10.093	-62.046	1.00	0.00	C	C
ATOM	10748	O	ILE A 278	41.392	9.847	-61.341	1.00	0.00	C	O
ATOM	10749	N	SER A 279	43.609	10.178	-61.535	1.00	0.00	C	N
ATOM	10750	CA	SER A 279	43.909	10.062	-60.128	1.00	0.00	C	C
ATOM	10751	CB	SER A 279	45.308	9.473	-59.881	1.00	0.00	C	C
ATOM	10752	OG	SER A 279	46.307	10.355	-60.369	1.00	0.00	C	O
ATOM	10753	C	SER A 279	43.821	11.341	-59.339	1.00	0.00	C	C
ATOM	10754	O	SER A 279	44.055	11.316	-58.132	1.00	0.00	C	O
ATOM	10755	N	ALA A 280	43.507	12.497	-59.952	1.00	0.00	C	N
ATOM	10756	CA	ALA A 280	43.579	13.727	-59.203	1.00	0.00	C	C
ATOM	10757	CB	ALA A 280	43.212	14.969	-60.033	1.00	0.00	C	C
ATOM	10758	C	ALA A 280	42.666	13.696	-58.011	1.00	0.00	C	C
ATOM	10759	O	ALA A 280	41.636	13.024	-58.000	1.00	0.00	C	O
ATOM	10760	N	ARG A 281	43.065	14.421	-56.943	1.00	0.00	C	N
ATOM	10761	CA	ARG A 281	42.264	14.502	-55.755	1.00	0.00	C	C
ATOM	10762	CB	ARG A 281	42.936	13.886	-54.516	1.00	0.00	C	C
ATOM	10763	CG	ARG A 281	44.356	14.384	-54.256	1.00	0.00	C	C
ATOM	10764	CD	ARG A 281	45.384	13.696	-55.160	1.00	0.00	C	C
ATOM	10765	NE	ARG A 281	46.749	14.046	-54.676	1.00	0.00	C	N
ATOM	10766	CZ	ARG A 281	47.365	13.264	-53.742	1.00	0.00	C	C
ATOM	10767	NH1	ARG A 281	46.724	12.166	-53.239	1.00	0.00	C	N
ATOM	10768	NH2	ARG A 281	48.622	13.573	-53.310	1.00	0.00	C	N
ATOM	10769	C	ARG A 281	41.884	15.932	-55.505	1.00	0.00	C	C
ATOM	10770	O	ARG A 281	42.655	16.851	-55.769	1.00	0.00	C	O
ATOM	10771	N	ASP A 282	40.644	16.145	-55.009	1.00	0.00	C	N
ATOM	10772	CA	ASP A 282	40.159	17.476	-54.765	1.00	0.00	C	C

ATOM	10773	CB	ASP A 282	38.635	17.643	-54.889	1.00	0.00	C	C
ATOM	10774	CG	ASP A 282	37.901	16.768	-53.887	1.00	0.00	C	C
ATOM	10775	OD1	ASP A 282	38.521	16.281	-52.903	1.00	0.00	C	O
ATOM	10776	OD2	ASP A 282	36.677	16.580	-54.111	1.00	0.00	C	O
ATOM	10777	C	ASP A 282	40.638	17.937	-53.423	1.00	0.00	C	C
ATOM	10778	O	ASP A 282	41.447	17.272	-52.780	1.00	0.00	C	O
ATOM	10779	N	SER A 283	40.128	19.095	-52.955	1.00	0.00	C	N
ATOM	10780	CA	SER A 283	40.617	19.708	-51.751	1.00	0.00	C	C
ATOM	10781	CB	SER A 283	39.803	20.946	-51.343	1.00	0.00	C	C
ATOM	10782	OG	SER A 283	39.929	21.957	-52.333	1.00	0.00	C	O
ATOM	10783	C	SER A 283	40.532	18.736	-50.611	1.00	0.00	C	C
ATOM	10784	O	SER A 283	41.418	18.692	-49.756	1.00	0.00	C	O
ATOM	10785	N	VAL A 284	39.446	17.950	-50.579	1.00	0.00	C	N
ATOM	10786	CA	VAL A 284	39.146	16.959	-49.583	1.00	0.00	C	C
ATOM	10787	CB	VAL A 284	37.748	16.429	-49.724	1.00	0.00	C	C
ATOM	10788	CG1	VAL A 284	37.547	15.275	-48.727	1.00	0.00	C	C
ATOM	10789	CG2	VAL A 284	36.763	17.595	-49.531	1.00	0.00	C	C
ATOM	10790	C	VAL A 284	40.092	15.796	-49.691	1.00	0.00	C	C
ATOM	10791	O	VAL A 284	40.287	15.064	-48.724	1.00	0.00	C	O
ATOM	10792	N	GLY A 285	40.678	15.556	-50.880	1.00	0.00	C	N
ATOM	10793	CA	GLY A 285	41.548	14.425	-51.045	1.00	0.00	C	C
ATOM	10794	C	GLY A 285	40.781	13.388	-51.800	1.00	0.00	C	C
ATOM	10795	O	GLY A 285	41.296	12.318	-52.118	1.00	0.00	C	O
ATOM	10796	N	ASN A 286	39.511	13.697	-52.117	1.00	0.00	C	N
ATOM	10797	CA	ASN A 286	38.678	12.749	-52.796	1.00	0.00	C	C
ATOM	10798	CB	ASN A 286	37.172	13.032	-52.638	1.00	0.00	C	C
ATOM	10799	CG	ASN A 286	36.787	12.735	-51.195	1.00	0.00	C	C
ATOM	10800	OD1	ASN A 286	37.488	12.013	-50.487	1.00	0.00	C	O
ATOM	10801	ND2	ASN A 286	35.634	13.300	-50.750	1.00	0.00	C	N
ATOM	10802	C	ASN A 286	38.969	12.716	-54.259	1.00	0.00	C	C
ATOM	10803	O	ASN A 286	39.189	13.742	-54.901	1.00	0.00	C	O
ATOM	10804	N	THR A 287	38.984	11.487	-54.813	1.00	0.00	C	N
ATOM	10805	CA	THR A 287	39.129	11.282	-56.222	1.00	0.00	C	C
ATOM	10806	CB	THR A 287	39.958	10.079	-56.567	1.00	0.00	C	C
ATOM	10807	OG1	THR A 287	39.343	8.904	-56.066	1.00	0.00	C	O
ATOM	10808	CG2	THR A 287	41.363	10.252	-55.957	1.00	0.00	C	C
ATOM	10809	C	THR A 287	37.741	11.059	-56.739	1.00	0.00	C	C
ATOM	10810	O	THR A 287	36.770	11.135	-55.983	1.00	0.00	C	O

ATOM	10811	N	VAL A 288	37.616	10.769	-58.049	1.00	0.00	C	N
ATOM	10812	CA	VAL A 288	36.322	10.571	-58.643	1.00	0.00	C	C
ATOM	10813	CB	VAL A 288	36.359	10.288	-60.121	1.00	0.00	C	C
ATOM	10814	CG1	VAL A 288	36.858	11.543	-60.846	1.00	0.00	C	C
ATOM	10815	CG2	VAL A 288	37.225	9.048	-60.381	1.00	0.00	C	C
ATOM	10816	C	VAL A 288	35.655	9.420	-57.963	1.00	0.00	C	C
ATOM	10817	O	VAL A 288	34.436	9.422	-57.791	1.00	0.00	C	O
ATOM	10818	N	LEU A 289	36.435	8.390	-57.592	1.00	0.00	C	N
ATOM	10819	CA	LEU A 289	35.869	7.263	-56.909	1.00	0.00	C	C
ATOM	10820	CB	LEU A 289	36.902	6.151	-56.659	1.00	0.00	C	C
ATOM	10821	CG	LEU A 289	37.503	5.583	-57.964	1.00	0.00	C	C
ATOM	10822	CD1	LEU A 289	38.434	4.391	-57.685	1.00	0.00	C	C
ATOM	10823	CD2	LEU A 289	36.409	5.270	-58.997	1.00	0.00	C	C
ATOM	10824	C	LEU A 289	35.337	7.735	-55.584	1.00	0.00	C	C
ATOM	10825	O	LEU A 289	34.224	7.388	-55.193	1.00	0.00	C	O
ATOM	10826	N	HSD A 290	36.107	8.570	-54.855	1.00	0.00	C	N
ATOM	10827	CA	HSD A 290	35.629	9.033	-53.582	1.00	0.00	C	C
ATOM	10828	CB	HSD A 290	36.634	9.928	-52.835	1.00	0.00	C	C
ATOM	10829	ND1	HSD A 290	37.848	8.234	-51.383	1.00	0.00	C	N
ATOM	10830	CG	HSD A 290	37.854	9.194	-52.369	1.00	0.00	C	C
ATOM	10831	CE1	HSD A 290	39.131	7.817	-51.231	1.00	0.00	C	C
ATOM	10832	NE2	HSD A 290	39.959	8.442	-52.048	1.00	0.00	C	N
ATOM	10833	CD2	HSD A 290	39.152	9.309	-52.765	1.00	0.00	C	C
ATOM	10834	C	HSD A 290	34.376	9.846	-53.769	1.00	0.00	C	C
ATOM	10835	O	HSD A 290	33.398	9.676	-53.042	1.00	0.00	C	O
ATOM	10836	N	ALA A 291	34.358	10.741	-54.773	1.00	0.00	C	N
ATOM	10837	CA	ALA A 291	33.234	11.620	-54.975	1.00	0.00	C	C
ATOM	10838	CB	ALA A 291	33.430	12.585	-56.158	1.00	0.00	C	C
ATOM	10839	C	ALA A 291	31.994	10.819	-55.250	1.00	0.00	C	C
ATOM	10840	O	ALA A 291	30.914	11.164	-54.770	1.00	0.00	C	O
ATOM	10841	N	LEU A 292	32.115	9.729	-56.032	1.00	0.00	C	N
ATOM	10842	CA	LEU A 292	30.988	8.911	-56.389	1.00	0.00	C	C
ATOM	10843	CB	LEU A 292	31.376	7.753	-57.322	1.00	0.00	C	C
ATOM	10844	CG	LEU A 292	31.704	8.208	-58.756	1.00	0.00	C	C
ATOM	10845	CD1	LEU A 292	32.093	7.016	-59.644	1.00	0.00	C	C
ATOM	10846	CD2	LEU A 292	30.535	9.016	-59.348	1.00	0.00	C	C
ATOM	10847	C	LEU A 292	30.392	8.322	-55.148	1.00	0.00	C	C
ATOM	10848	O	LEU A 292	29.174	8.278	-54.997	1.00	0.00	C	O

ATOM	10849	N	VAL A 293	31.247	7.857	-54.220	1.00	0.00	C	N
ATOM	10850	CA	VAL A 293	30.791	7.279	-52.990	1.00	0.00	C	C
ATOM	10851	CB	VAL A 293	31.923	6.828	-52.116	1.00	0.00	C	C
ATOM	10852	CG1	VAL A 293	31.350	6.367	-50.765	1.00	0.00	C	C
ATOM	10853	CG2	VAL A 293	32.712	5.735	-52.857	1.00	0.00	C	C
ATOM	10854	C	VAL A 293	30.030	8.331	-52.245	1.00	0.00	C	C
ATOM	10855	O	VAL A 293	29.019	8.047	-51.612	1.00	0.00	C	O
ATOM	10856	N	GLU A 294	30.510	9.586	-52.296	1.00	0.00	C	N
ATOM	10857	CA	GLU A 294	29.884	10.659	-51.574	1.00	0.00	C	C
ATOM	10858	CB	GLU A 294	30.711	11.957	-51.596	1.00	0.00	C	C
ATOM	10859	CG	GLU A 294	30.348	12.894	-50.446	1.00	0.00	C	C
ATOM	10860	CD	GLU A 294	30.872	12.233	-49.178	1.00	0.00	C	C
ATOM	10861	OE1	GLU A 294	32.120	12.104	-49.059	1.00	0.00	C	O
ATOM	10862	OE2	GLU A 294	30.037	11.836	-48.325	1.00	0.00	C	O
ATOM	10863	C	GLU A 294	28.529	10.957	-52.145	1.00	0.00	C	C
ATOM	10864	O	GLU A 294	27.621	11.367	-51.425	1.00	0.00	C	O
ATOM	10865	N	VAL A 295	28.371	10.800	-53.472	1.00	0.00	C	N
ATOM	10866	CA	VAL A 295	27.155	11.131	-54.163	1.00	0.00	C	C
ATOM	10867	CB	VAL A 295	27.318	11.281	-55.653	1.00	0.00	C	C
ATOM	10868	CG1	VAL A 295	27.399	9.899	-56.317	1.00	0.00	C	C
ATOM	10869	CG2	VAL A 295	26.175	12.165	-56.178	1.00	0.00	C	C
ATOM	10870	C	VAL A 295	26.048	10.143	-53.887	1.00	0.00	C	C
ATOM	10871	O	VAL A 295	24.878	10.475	-54.075	1.00	0.00	C	O
ATOM	10872	N	ALA A 296	26.370	8.886	-53.504	1.00	0.00	C	N
ATOM	10873	CA	ALA A 296	25.356	7.874	-53.317	1.00	0.00	C	C
ATOM	10874	CB	ALA A 296	25.941	6.468	-53.099	1.00	0.00	C	C
ATOM	10875	C	ALA A 296	24.450	8.175	-52.147	1.00	0.00	C	C
ATOM	10876	O	ALA A 296	24.905	8.578	-51.078	1.00	0.00	C	O
ATOM	10877	N	ASP A 297	23.118	8.109	-52.393	1.00	0.00	C	N
ATOM	10878	CA	ASP A 297	22.054	8.231	-51.421	1.00	0.00	C	C
ATOM	10879	CB	ASP A 297	20.908	9.205	-51.775	1.00	0.00	C	C
ATOM	10880	CG	ASP A 297	20.098	8.711	-52.948	1.00	0.00	C	C
ATOM	10881	OD1	ASP A 297	20.721	8.245	-53.927	1.00	0.00	C	O
ATOM	10882	OD2	ASP A 297	18.843	8.812	-52.892	1.00	0.00	C	O
ATOM	10883	C	ASP A 297	21.484	6.924	-50.925	1.00	0.00	C	C
ATOM	10884	O	ASP A 297	20.586	6.933	-50.082	1.00	0.00	C	O
ATOM	10885	N	ASN A 298	21.894	5.769	-51.487	1.00	0.00	C	N
ATOM	10886	CA	ASN A 298	21.360	4.489	-51.094	1.00	0.00	C	C

ATOM	10887	CB	ASN A 298	21.373	4.268	-49.573	1.00	0.00	C	C
ATOM	10888	CG	ASN A 298	22.828	4.086	-49.166	1.00	0.00	C	C
ATOM	10889	OD1	ASN A 298	23.557	3.310	-49.782	1.00	0.00	C	O
ATOM	10890	ND2	ASN A 298	23.270	4.827	-48.115	1.00	0.00	C	N
ATOM	10891	C	ASN A 298	19.969	4.268	-51.609	1.00	0.00	C	C
ATOM	10892	O	ASN A 298	19.210	3.476	-51.050	1.00	0.00	C	O
ATOM	10893	N	THR A 299	19.591	4.958	-52.701	1.00	0.00	C	N
ATOM	10894	CA	THR A 299	18.347	4.644	-53.336	1.00	0.00	C	C
ATOM	10895	CB	THR A 299	17.688	5.831	-53.970	1.00	0.00	C	C
ATOM	10896	OG1	THR A 299	16.396	5.484	-54.430	1.00	0.00	C	O
ATOM	10897	CG2	THR A 299	18.541	6.324	-55.140	1.00	0.00	C	C
ATOM	10898	C	THR A 299	18.707	3.642	-54.395	1.00	0.00	C	C
ATOM	10899	O	THR A 299	19.859	3.581	-54.820	1.00	0.00	C	O
ATOM	10900	N	ALA A 300	17.742	2.824	-54.857	1.00	0.00	C	N
ATOM	10901	CA	ALA A 300	18.058	1.774	-55.787	1.00	0.00	C	C
ATOM	10902	CB	ALA A 300	16.835	0.915	-56.155	1.00	0.00	C	C
ATOM	10903	C	ALA A 300	18.606	2.342	-57.058	1.00	0.00	C	C
ATOM	10904	O	ALA A 300	19.591	1.840	-57.598	1.00	0.00	C	O
ATOM	10905	N	ASP A 301	17.984	3.421	-57.562	1.00	0.00	C	N
ATOM	10906	CA	ASP A 301	18.376	4.019	-58.806	1.00	0.00	C	C
ATOM	10907	CB	ASP A 301	17.448	5.183	-59.192	1.00	0.00	C	C
ATOM	10908	CG	ASP A 301	16.049	4.619	-59.412	1.00	0.00	C	C
ATOM	10909	OD1	ASP A 301	15.936	3.539	-60.053	1.00	0.00	C	O
ATOM	10910	OD2	ASP A 301	15.076	5.253	-58.926	1.00	0.00	C	O
ATOM	10911	C	ASP A 301	19.758	4.577	-58.669	1.00	0.00	C	C
ATOM	10912	O	ASP A 301	20.555	4.516	-59.606	1.00	0.00	C	O
ATOM	10913	N	ASN A 302	20.059	5.163	-57.495	1.00	0.00	C	N
ATOM	10914	CA	ASN A 302	21.317	5.811	-57.254	1.00	0.00	C	C
ATOM	10915	CB	ASN A 302	21.374	6.481	-55.886	1.00	0.00	C	C
ATOM	10916	CG	ASN A 302	22.727	7.145	-55.699	1.00	0.00	C	C
ATOM	10917	OD1	ASN A 302	23.705	6.485	-55.349	1.00	0.00	C	O
ATOM	10918	ND2	ASN A 302	22.795	8.481	-55.936	1.00	0.00	C	N
ATOM	10919	C	ASN A 302	22.443	4.838	-57.270	1.00	0.00	C	C
ATOM	10920	O	ASN A 302	23.462	5.083	-57.914	1.00	0.00	C	O
ATOM	10921	N	THR A 303	22.286	3.704	-56.563	1.00	0.00	C	N
ATOM	10922	CA	THR A 303	23.368	2.770	-56.507	1.00	0.00	C	C
ATOM	10923	CB	THR A 303	23.078	1.532	-55.711	1.00	0.00	C	C
ATOM	10924	OG1	THR A 303	21.996	0.816	-56.286	1.00	0.00	C	O

ATOM	10925	CG2 THR A 303	22.751	1.936	-54.271	1.00	0.00	C	C
ATOM	10926	C THR A 303	23.649	2.327	-57.895	1.00	0.00	C	C
ATOM	10927	O THR A 303	24.803	2.261	-58.313	1.00	0.00	C	O
ATOM	10928	N LYS A 304	22.584	2.064	-58.672	1.00	0.00	C	N
ATOM	10929	CA LYS A 304	22.773	1.512	-59.976	1.00	0.00	C	C
ATOM	10930	CB LYS A 304	21.454	1.325	-60.750	1.00	0.00	C	C
ATOM	10931	CG LYS A 304	20.516	0.303	-60.106	1.00	0.00	C	C
ATOM	10932	CD LYS A 304	21.129	-1.092	-59.960	1.00	0.00	C	C
ATOM	10933	CE LYS A 304	20.244	-2.080	-59.198	1.00	0.00	C	C
ATOM	10934	NZ LYS A 304	20.917	-3.395	-59.100	1.00	0.00	C	N
ATOM	10935	C LYS A 304	23.643	2.416	-60.795	1.00	0.00	C	C
ATOM	10936	O LYS A 304	24.598	1.952	-61.410	1.00	0.00	C	O
ATOM	10937	N PHE A 305	23.355	3.732	-60.829	1.00	0.00	C	N
ATOM	10938	CA PHE A 305	24.146	4.566	-61.691	1.00	0.00	C	C
ATOM	10939	CB PHE A 305	23.530	5.947	-62.008	1.00	0.00	C	C
ATOM	10940	CG PHE A 305	23.689	6.887	-60.868	1.00	0.00	C	C
ATOM	10941	CD1 PHE A 305	24.838	7.636	-60.772	1.00	0.00	C	C
ATOM	10942	CE1 PHE A 305	25.017	8.520	-59.737	1.00	0.00	C	C
ATOM	10943	CZ PHE A 305	24.033	8.663	-58.789	1.00	0.00	C	C
ATOM	10944	CD2 PHE A 305	22.704	7.037	-59.922	1.00	0.00	C	C
ATOM	10945	CE2 PHE A 305	22.878	7.923	-58.882	1.00	0.00	C	C
ATOM	10946	C PHE A 305	25.541	4.751	-61.153	1.00	0.00	C	C
ATOM	10947	O PHE A 305	26.503	4.763	-61.918	1.00	0.00	C	O
ATOM	10948	N VAL A 306	25.696	4.924	-59.823	1.00	0.00	C	N
ATOM	10949	CA VAL A 306	27.002	5.150	-59.259	1.00	0.00	C	C
ATOM	10950	CB VAL A 306	26.957	5.439	-57.788	1.00	0.00	C	C
ATOM	10951	CG1 VAL A 306	28.399	5.512	-57.257	1.00	0.00	C	C
ATOM	10952	CG2 VAL A 306	26.157	6.736	-57.577	1.00	0.00	C	C
ATOM	10953	C VAL A 306	27.841	3.930	-59.460	1.00	0.00	C	C
ATOM	10954	O VAL A 306	29.004	4.013	-59.851	1.00	0.00	C	O
ATOM	10955	N THR A 307	27.233	2.753	-59.237	1.00	0.00	C	N
ATOM	10956	CA THR A 307	27.907	1.491	-59.287	1.00	0.00	C	C
ATOM	10957	CB THR A 307	26.932	0.366	-59.067	1.00	0.00	C	C
ATOM	10958	OG1 THR A 307	26.460	0.374	-57.729	1.00	0.00	C	O
ATOM	10959	CG2 THR A 307	27.570	-0.971	-59.448	1.00	0.00	C	C
ATOM	10960	C THR A 307	28.572	1.281	-60.614	1.00	0.00	C	C
ATOM	10961	O THR A 307	29.734	0.883	-60.664	1.00	0.00	C	O
ATOM	10962	N SER A 308	27.841	1.520	-61.715	1.00	0.00	C	N

ATOM	10963	CA	SER A 308	28.325	1.316	-63.054	1.00	0.00	C	C
ATOM	10964	CB	SER A 308	27.187	1.366	-64.085	1.00	0.00	C	C
ATOM	10965	OG	SER A 308	27.705	1.164	-65.385	1.00	0.00	C	O
ATOM	10966	C	SER A 308	29.309	2.370	-63.450	1.00	0.00	C	C
ATOM	10967	O	SER A 308	30.272	2.093	-64.164	1.00	0.00	C	O
ATOM	10968	N	MET A 309	29.085	3.624	-63.024	1.00	0.00	C	N
ATOM	10969	CA	MET A 309	29.989	4.667	-63.405	1.00	0.00	C	C
ATOM	10970	CB	MET A 309	29.550	6.069	-62.959	1.00	0.00	C	C
ATOM	10971	CG	MET A 309	30.533	7.153	-63.401	1.00	0.00	C	C
ATOM	10972	SD	MET A 309	30.696	7.313	-65.207	1.00	0.00	C	S
ATOM	10973	CE	MET A 309	28.957	7.731	-65.511	1.00	0.00	C	C
ATOM	10974	C	MET A 309	31.309	4.366	-62.778	1.00	0.00	C	C
ATOM	10975	O	MET A 309	32.357	4.636	-63.357	1.00	0.00	C	O
ATOM	10976	N	TYR A 310	31.269	3.806	-61.555	1.00	0.00	C	N
ATOM	10977	CA	TYR A 310	32.449	3.441	-60.829	1.00	0.00	C	C
ATOM	10978	CB	TYR A 310	32.069	2.807	-59.474	1.00	0.00	C	C
ATOM	10979	CG	TYR A 310	33.256	2.549	-58.603	1.00	0.00	C	C
ATOM	10980	CD1	TYR A 310	33.757	3.544	-57.798	1.00	0.00	C	C
ATOM	10981	CE1	TYR A 310	34.839	3.319	-56.979	1.00	0.00	C	C
ATOM	10982	CZ	TYR A 310	35.434	2.080	-56.955	1.00	0.00	C	C
ATOM	10983	OH	TYR A 310	36.544	1.842	-56.116	1.00	0.00	C	O
ATOM	10984	CD2	TYR A 310	33.855	1.309	-58.566	1.00	0.00	C	C
ATOM	10985	CE2	TYR A 310	34.939	1.076	-57.750	1.00	0.00	C	C
ATOM	10986	C	TYR A 310	33.161	2.405	-61.651	1.00	0.00	C	C
ATOM	10987	O	TYR A 310	34.360	2.514	-61.903	1.00	0.00	C	O
ATOM	10988	N	ASN A 311	32.414	1.398	-62.142	1.00	0.00	C	N
ATOM	10989	CA	ASN A 311	32.987	0.332	-62.911	1.00	0.00	C	C
ATOM	10990	CB	ASN A 311	31.944	-0.692	-63.381	1.00	0.00	C	C
ATOM	10991	CG	ASN A 311	32.699	-1.852	-64.014	1.00	0.00	C	C
ATOM	10992	OD1	ASN A 311	33.927	-1.887	-64.001	1.00	0.00	C	O
ATOM	10993	ND2	ASN A 311	31.943	-2.821	-64.594	1.00	0.00	C	N
ATOM	10994	C	ASN A 311	33.614	0.921	-64.131	1.00	0.00	C	C
ATOM	10995	O	ASN A 311	34.707	0.530	-64.533	1.00	0.00	C	O
ATOM	10996	N	GLU A 312	32.927	1.900	-64.742	1.00	0.00	C	N
ATOM	10997	CA	GLU A 312	33.393	2.512	-65.950	1.00	0.00	C	C
ATOM	10998	CB	GLU A 312	32.436	3.595	-66.474	1.00	0.00	C	C
ATOM	10999	CG	GLU A 312	31.201	3.023	-67.161	1.00	0.00	C	C
ATOM	11000	CD	GLU A 312	31.688	2.408	-68.463	1.00	0.00	C	C

ATOM 11001	OE1	GLU A 312	32.661	2.958	-69.040	1.00	0.00	C	O
ATOM 11002	OE2	GLU A 312	31.104	1.378	-68.893	1.00	0.00	C	O
ATOM 11003	C	GLU A 312	34.707	3.179	-65.707	1.00	0.00	C	C
ATOM 11004	O	GLU A 312	35.606	3.093	-66.538	1.00	0.00	C	O
ATOM 11005	N	ILE A 313	34.864	3.860	-64.560	1.00	0.00	C	N
ATOM 11006	CA	ILE A 313	36.082	4.569	-64.300	1.00	0.00	C	C
ATOM 11007	CB	ILE A 313	36.051	5.308	-62.994	1.00	0.00	C	C
ATOM 11008	CG2	ILE A 313	37.478	5.792	-62.692	1.00	0.00	C	C
ATOM 11009	CG1	ILE A 313	35.008	6.440	-63.031	1.00	0.00	C	C
ATOM 11010	CD	ILE A 313	35.309	7.513	-64.076	1.00	0.00	C	C
ATOM 11011	C	ILE A 313	37.212	3.594	-64.235	1.00	0.00	C	C
ATOM 11012	O	ILE A 313	38.278	3.834	-64.798	1.00	0.00	C	O
ATOM 11013	N	LEU A 314	37.007	2.459	-63.541	1.00	0.00	C	N
ATOM 11014	CA	LEU A 314	38.068	1.506	-63.391	1.00	0.00	C	C
ATOM 11015	CB	LEU A 314	37.734	0.357	-62.424	1.00	0.00	C	C
ATOM 11016	CG	LEU A 314	37.633	0.808	-60.953	1.00	0.00	C	C
ATOM 11017	CD1	LEU A 314	37.393	-0.387	-60.018	1.00	0.00	C	C
ATOM 11018	CD2	LEU A 314	38.855	1.645	-60.538	1.00	0.00	C	C
ATOM 11019	C	LEU A 314	38.451	0.927	-64.723	1.00	0.00	C	C
ATOM 11020	O	LEU A 314	39.635	0.798	-65.025	1.00	0.00	C	O
ATOM 11021	N	MET A 315	37.463	0.600	-65.578	1.00	0.00	C	N
ATOM 11022	CA	MET A 315	37.760	0.001	-66.848	1.00	0.00	C	C
ATOM 11023	CB	MET A 315	36.490	-0.276	-67.673	1.00	0.00	C	C
ATOM 11024	CG	MET A 315	35.558	-1.298	-67.017	1.00	0.00	C	C
ATOM 11025	SD	MET A 315	34.045	-1.658	-67.957	1.00	0.00	C	S
ATOM 11026	CE	MET A 315	33.308	-0.020	-67.685	1.00	0.00	C	C
ATOM 11027	C	MET A 315	38.617	0.958	-67.618	1.00	0.00	C	C
ATOM 11028	O	MET A 315	39.551	0.559	-68.310	1.00	0.00	C	O
ATOM 11029	N	LEU A 316	38.301	2.258	-67.535	1.00	0.00	C	N
ATOM 11030	CA	LEU A 316	39.059	3.279	-68.203	1.00	0.00	C	C
ATOM 11031	CB	LEU A 316	38.381	4.664	-68.156	1.00	0.00	C	C
ATOM 11032	CG	LEU A 316	37.257	4.875	-69.198	1.00	0.00	C	C
ATOM 11033	CD1	LEU A 316	36.163	3.803	-69.119	1.00	0.00	C	C
ATOM 11034	CD2	LEU A 316	36.669	6.294	-69.096	1.00	0.00	C	C
ATOM 11035	C	LEU A 316	40.433	3.385	-67.608	1.00	0.00	C	C
ATOM 11036	O	LEU A 316	41.408	3.601	-68.326	1.00	0.00	C	O
ATOM 11037	N	GLY A 317	40.546	3.260	-66.272	1.00	0.00	C	N
ATOM 11038	CA	GLY A 317	41.839	3.379	-65.660	1.00	0.00	C	C

ATOM	11039	C	GLY A 317	42.718	2.278	-66.163	1.00	0.00	C	C
ATOM	11040	O	GLY A 317	43.864	2.509	-66.546	1.00	0.00	C	O
ATOM	11041	N	ALA A 318	42.191	1.040	-66.190	1.00	0.00	C	N
ATOM	11042	CA	ALA A 318	42.978	-0.086	-66.594	1.00	0.00	C	C
ATOM	11043	CB	ALA A 318	42.222	-1.417	-66.447	1.00	0.00	C	C
ATOM	11044	C	ALA A 318	43.380	0.055	-68.027	1.00	0.00	C	C
ATOM	11045	O	ALA A 318	44.517	-0.240	-68.389	1.00	0.00	C	O
ATOM	11046	N	LYS A 319	42.456	0.479	-68.908	1.00	0.00	C	N
ATOM	11047	CA	LYS A 319	42.864	0.578	-70.276	1.00	0.00	C	C
ATOM	11048	CB	LYS A 319	41.689	0.780	-71.256	1.00	0.00	C	C
ATOM	11049	CG	LYS A 319	40.799	1.994	-70.990	1.00	0.00	C	C
ATOM	11050	CD	LYS A 319	39.864	2.312	-72.159	1.00	0.00	C	C
ATOM	11051	CE	LYS A 319	38.954	3.515	-71.921	1.00	0.00	C	C
ATOM	11052	NZ	LYS A 319	38.052	3.690	-73.081	1.00	0.00	C	N
ATOM	11053	C	LYS A 319	43.879	1.671	-70.471	1.00	0.00	C	C
ATOM	11054	O	LYS A 319	44.943	1.429	-71.042	1.00	0.00	C	O
ATOM	11055	N	LEU A 320	43.589	2.902	-70.002	1.00	0.00	C	N
ATOM	11056	CA	LEU A 320	44.488	4.002	-70.224	1.00	0.00	C	C
ATOM	11057	CB	LEU A 320	43.838	5.378	-69.972	1.00	0.00	C	C
ATOM	11058	CG	LEU A 320	42.820	5.786	-71.062	1.00	0.00	C	C
ATOM	11059	CD1	LEU A 320	41.629	4.819	-71.125	1.00	0.00	C	C
ATOM	11060	CD2	LEU A 320	42.368	7.247	-70.906	1.00	0.00	C	C
ATOM	11061	C	LEU A 320	45.759	3.915	-69.426	1.00	0.00	C	C
ATOM	11062	O	LEU A 320	46.841	4.077	-69.987	1.00	0.00	C	O
ATOM	11063	N	HSD A 321	45.682	3.656	-68.102	1.00	0.00	C	N
ATOM	11064	CA	HSD A 321	46.895	3.627	-67.321	1.00	0.00	C	C
ATOM	11065	CB	HSD A 321	47.059	4.891	-66.461	1.00	0.00	C	C
ATOM	11066	ND1	HSD A 321	48.027	6.690	-67.974	1.00	0.00	C	N
ATOM	11067	CG	HSD A 321	46.966	6.134	-67.297	1.00	0.00	C	C
ATOM	11068	CE1	HSD A 321	47.545	7.773	-68.634	1.00	0.00	C	C
ATOM	11069	NE2	HSD A 321	46.252	7.952	-68.428	1.00	0.00	C	N
ATOM	11070	CD2	HSD A 321	45.889	6.918	-67.585	1.00	0.00	C	C
ATOM	11071	C	HSD A 321	46.809	2.454	-66.388	1.00	0.00	C	C
ATOM	11072	O	HSD A 321	46.278	2.561	-65.284	1.00	0.00	C	O
ATOM	11073	N	PRO A 322	47.346	1.341	-66.802	1.00	0.00	C	N
ATOM	11074	CD	PRO A 322	47.558	1.086	-68.214	1.00	0.00	C	C
ATOM	11075	CA	PRO A 322	47.235	0.122	-66.044	1.00	0.00	C	C
ATOM	11076	CB	PRO A 322	47.599	-1.011	-67.012	1.00	0.00	C	C

ATOM	11077	CG	PRO A 322	48.201	-0.308	-68.244	1.00	0.00	C	C
ATOM	11078	C	PRO A 322	47.972	0.060	-64.745	1.00	0.00	C	C
ATOM	11079	O	PRO A 322	47.566	-0.708	-63.875	1.00	0.00	C	O
ATOM	11080	N	THR A 323	49.050	0.842	-64.588	1.00	0.00	C	N
ATOM	11081	CA	THR A 323	49.879	0.753	-63.424	1.00	0.00	C	C
ATOM	11082	CB	THR A 323	51.100	1.609	-63.530	1.00	0.00	C	C
ATOM	11083	OG1	THR A 323	51.828	1.272	-64.701	1.00	0.00	C	O
ATOM	11084	CG2	THR A 323	51.965	1.357	-62.287	1.00	0.00	C	C
ATOM	11085	C	THR A 323	49.142	1.204	-62.202	1.00	0.00	C	C
ATOM	11086	O	THR A 323	49.337	0.652	-61.118	1.00	0.00	C	O
ATOM	11087	N	LEU A 324	48.273	2.221	-62.347	1.00	0.00	C	N
ATOM	11088	CA	LEU A 324	47.673	2.863	-61.211	1.00	0.00	C	C
ATOM	11089	CB	LEU A 324	46.899	4.133	-61.595	1.00	0.00	C	C
ATOM	11090	CG	LEU A 324	47.729	5.140	-62.411	1.00	0.00	C	C
ATOM	11091	CD1	LEU A 324	46.996	6.484	-62.520	1.00	0.00	C	C
ATOM	11092	CD2	LEU A 324	49.166	5.264	-61.886	1.00	0.00	C	C
ATOM	11093	C	LEU A 324	46.706	1.968	-60.497	1.00	0.00	C	C
ATOM	11094	O	LEU A 324	45.823	1.366	-61.104	1.00	0.00	C	O
ATOM	11095	N	LYS A 325	46.859	1.871	-59.157	1.00	0.00	C	N
ATOM	11096	CA	LYS A 325	45.897	1.150	-58.374	1.00	0.00	C	C
ATOM	11097	CB	LYS A 325	46.490	0.292	-57.240	1.00	0.00	C	C
ATOM	11098	CG	LYS A 325	47.173	-0.981	-57.750	1.00	0.00	C	C
ATOM	11099	CD	LYS A 325	47.848	-1.821	-56.663	1.00	0.00	C	C
ATOM	11100	CE	LYS A 325	48.393	-3.151	-57.190	1.00	0.00	C	C
ATOM	11101	NZ	LYS A 325	49.021	-3.923	-56.095	1.00	0.00	C	N
ATOM	11102	C	LYS A 325	45.014	2.201	-57.773	1.00	0.00	C	C
ATOM	11103	O	LYS A 325	45.303	2.761	-56.715	1.00	0.00	C	O
ATOM	11104	N	LEU A 326	43.892	2.476	-58.460	1.00	0.00	C	N
ATOM	11105	CA	LEU A 326	42.995	3.540	-58.110	1.00	0.00	C	C
ATOM	11106	CB	LEU A 326	41.899	3.796	-59.165	1.00	0.00	C	C
ATOM	11107	CG	LEU A 326	42.393	4.456	-60.469	1.00	0.00	C	C
ATOM	11108	CD1	LEU A 326	43.344	3.542	-61.256	1.00	0.00	C	C
ATOM	11109	CD2	LEU A 326	41.216	4.950	-61.324	1.00	0.00	C	C
ATOM	11110	C	LEU A 326	42.298	3.335	-56.798	1.00	0.00	C	C
ATOM	11111	O	LEU A 326	42.118	4.284	-56.039	1.00	0.00	C	O
ATOM	11112	N	GLU A 327	41.879	2.098	-56.486	1.00	0.00	C	N
ATOM	11113	CA	GLU A 327	41.078	1.860	-55.313	1.00	0.00	C	C
ATOM	11114	CB	GLU A 327	40.480	0.446	-55.268	1.00	0.00	C	C

ATOM	11115	CG	GLU A 327	39.353	0.284	-56.289	1.00	0.00	C	C
ATOM	11116	CD	GLU A 327	38.766	-1.112	-56.162	1.00	0.00	C	C
ATOM	11117	OE1	GLU A 327	39.465	-2.085	-56.556	1.00	0.00	C	O
ATOM	11118	OE2	GLU A 327	37.612	-1.226	-55.672	1.00	0.00	C	O
ATOM	11119	C	GLU A 327	41.832	2.125	-54.049	1.00	0.00	C	C
ATOM	11120	O	GLU A 327	41.235	2.338	-52.994	1.00	0.00	C	O
ATOM	11121	N	GLU A 328	43.166	2.029	-54.103	1.00	0.00	C	N
ATOM	11122	CA	GLU A 328	44.031	2.218	-52.974	1.00	0.00	C	C
ATOM	11123	CB	GLU A 328	45.432	1.652	-53.244	1.00	0.00	C	C
ATOM	11124	CG	GLU A 328	45.378	0.123	-53.330	1.00	0.00	C	C
ATOM	11125	CD	GLU A 328	46.744	-0.417	-53.721	1.00	0.00	C	C
ATOM	11126	OE1	GLU A 328	47.533	0.343	-54.342	1.00	0.00	C	O
ATOM	11127	OE2	GLU A 328	47.010	-1.607	-53.411	1.00	0.00	C	O
ATOM	11128	C	GLU A 328	44.145	3.655	-52.518	1.00	0.00	C	C
ATOM	11129	O	GLU A 328	44.443	3.888	-51.348	1.00	0.00	C	O
ATOM	11130	N	LEU A 329	43.947	4.659	-53.404	1.00	0.00	C	N
ATOM	11131	CA	LEU A 329	44.191	6.048	-53.066	1.00	0.00	C	C
ATOM	11132	CB	LEU A 329	44.015	7.008	-54.257	1.00	0.00	C	C
ATOM	11133	CG	LEU A 329	45.028	6.786	-55.397	1.00	0.00	C	C
ATOM	11134	CD1	LEU A 329	44.855	5.400	-56.037	1.00	0.00	C	C
ATOM	11135	CD2	LEU A 329	44.967	7.928	-56.426	1.00	0.00	C	C
ATOM	11136	C	LEU A 329	43.297	6.548	-51.960	1.00	0.00	C	C
ATOM	11137	O	LEU A 329	42.071	6.460	-52.032	1.00	0.00	C	O
ATOM	11138	N	THR A 330	43.926	7.154	-50.921	1.00	0.00	C	N
ATOM	11139	CA	THR A 330	43.246	7.626	-49.741	1.00	0.00	C	C
ATOM	11140	CB	THR A 330	44.064	7.455	-48.496	1.00	0.00	C	C
ATOM	11141	OG1	THR A 330	45.233	8.258	-48.572	1.00	0.00	C	O
ATOM	11142	CG2	THR A 330	44.450	5.973	-48.361	1.00	0.00	C	C
ATOM	11143	C	THR A 330	42.943	9.093	-49.834	1.00	0.00	C	C
ATOM	11144	O	THR A 330	43.725	9.877	-50.367	1.00	0.00	C	O
ATOM	11145	N	ASN A 331	41.779	9.497	-49.272	1.00	0.00	C	N
ATOM	11146	CA	ASN A 331	41.386	10.877	-49.223	1.00	0.00	C	C
ATOM	11147	CB	ASN A 331	39.860	11.099	-49.106	1.00	0.00	C	C
ATOM	11148	CG	ASN A 331	39.334	10.501	-47.807	1.00	0.00	C	C
ATOM	11149	OD1	ASN A 331	40.076	9.938	-47.005	1.00	0.00	C	O
ATOM	11150	ND2	ASN A 331	37.995	10.616	-47.600	1.00	0.00	C	N
ATOM	11151	C	ASN A 331	42.083	11.491	-48.044	1.00	0.00	C	C
ATOM	11152	O	ASN A 331	42.893	10.842	-47.385	1.00	0.00	C	O

ATOM	11153	N	LYS A 332	41.773	12.763	-47.733	1.00	0.00	C	N
ATOM	11154	CA	LYS A 332	42.450	13.506	-46.702	1.00	0.00	C	C
ATOM	11155	CB	LYS A 332	41.717	14.821	-46.401	1.00	0.00	C	C
ATOM	11156	CG	LYS A 332	42.373	15.740	-45.373	1.00	0.00	C	C
ATOM	11157	CD	LYS A 332	41.559	17.022	-45.152	1.00	0.00	C	C
ATOM	11158	CE	LYS A 332	40.967	17.608	-46.438	1.00	0.00	C	C
ATOM	11159	NZ	LYS A 332	39.912	18.595	-46.109	1.00	0.00	C	N
ATOM	11160	C	LYS A 332	42.401	12.727	-45.423	1.00	0.00	C	C
ATOM	11161	O	LYS A 332	43.402	12.602	-44.719	1.00	0.00	C	O
ATOM	11162	N	LYS A 333	41.228	12.164	-45.103	1.00	0.00	C	N
ATOM	11163	CA	LYS A 333	40.987	11.462	-43.876	1.00	0.00	C	C
ATOM	11164	CB	LYS A 333	39.510	11.078	-43.689	1.00	0.00	C	C
ATOM	11165	CG	LYS A 333	38.609	12.304	-43.529	1.00	0.00	C	C
ATOM	11166	CD	LYS A 333	37.116	11.997	-43.643	1.00	0.00	C	C
ATOM	11167	CE	LYS A 333	36.242	13.252	-43.610	1.00	0.00	C	C
ATOM	11168	NZ	LYS A 333	36.552	14.045	-42.401	1.00	0.00	C	N
ATOM	11169	C	LYS A 333	41.818	10.212	-43.813	1.00	0.00	C	C
ATOM	11170	O	LYS A 333	42.030	9.664	-42.734	1.00	0.00	C	O
ATOM	11171	N	GLY A 334	42.291	9.697	-44.963	1.00	0.00	C	N
ATOM	11172	CA	GLY A 334	43.055	8.482	-44.918	1.00	0.00	C	C
ATOM	11173	C	GLY A 334	42.160	7.362	-45.331	1.00	0.00	C	C
ATOM	11174	O	GLY A 334	42.455	6.194	-45.080	1.00	0.00	C	O
ATOM	11175	N	MET A 335	41.034	7.694	-45.996	1.00	0.00	C	N
ATOM	11176	CA	MET A 335	40.100	6.669	-46.355	1.00	0.00	C	C
ATOM	11177	CB	MET A 335	38.644	7.063	-46.053	1.00	0.00	C	C
ATOM	11178	CG	MET A 335	38.378	7.316	-44.568	1.00	0.00	C	C
ATOM	11179	SD	MET A 335	36.672	7.803	-44.170	1.00	0.00	C	S
ATOM	11180	CE	MET A 335	37.046	8.326	-42.472	1.00	0.00	C	C
ATOM	11181	C	MET A 335	40.164	6.360	-47.821	1.00	0.00	C	C
ATOM	11182	O	MET A 335	40.212	7.247	-48.674	1.00	0.00	C	O
ATOM	11183	N	THR A 336	40.171	5.048	-48.136	1.00	0.00	C	N
ATOM	11184	CA	THR A 336	40.080	4.594	-49.492	1.00	0.00	C	C
ATOM	11185	CB	THR A 336	40.448	3.152	-49.682	1.00	0.00	C	C
ATOM	11186	OG1	THR A 336	39.560	2.317	-48.954	1.00	0.00	C	O
ATOM	11187	CG2	THR A 336	41.896	2.941	-49.206	1.00	0.00	C	C
ATOM	11188	C	THR A 336	38.628	4.737	-49.823	1.00	0.00	C	C
ATOM	11189	O	THR A 336	37.815	4.934	-48.921	1.00	0.00	C	O
ATOM	11190	N	PRO A 337	38.252	4.651	-51.072	1.00	0.00	C	N

ATOM 11191	CD PRO A 337	39.170	4.769	-52.191	1.00	0.00	C	C
ATOM 11192	CA PRO A 337	36.878	4.819	-51.452	1.00	0.00	C	C
ATOM 11193	CB PRO A 337	36.860	4.672	-52.972	1.00	0.00	C	C
ATOM 11194	CG PRO A 337	38.275	5.115	-53.397	1.00	0.00	C	C
ATOM 11195	C PRO A 337	36.012	3.848	-50.712	1.00	0.00	C	C
ATOM 11196	O PRO A 337	34.965	4.248	-50.211	1.00	0.00	C	O
ATOM 11197	N LEU A 338	36.452	2.585	-50.585	1.00	0.00	C	N
ATOM 11198	CA LEU A 338	35.681	1.584	-49.911	1.00	0.00	C	C
ATOM 11199	CB LEU A 338	36.424	0.239	-49.869	1.00	0.00	C	C
ATOM 11200	CG LEU A 338	35.664	-0.884	-49.145	1.00	0.00	C	C
ATOM 11201	CD1 LEU A 338	34.414	-1.317	-49.927	1.00	0.00	C	C
ATOM 11202	CD2 LEU A 338	36.604	-2.051	-48.812	1.00	0.00	C	C
ATOM 11203	C LEU A 338	35.474	2.006	-48.492	1.00	0.00	C	C
ATOM 11204	O LEU A 338	34.360	1.968	-47.976	1.00	0.00	C	O
ATOM 11205	N ALA A 339	36.553	2.463	-47.829	1.00	0.00	C	N
ATOM 11206	CA ALA A 339	36.505	2.796	-46.435	1.00	0.00	C	C
ATOM 11207	CB ALA A 339	37.871	3.244	-45.889	1.00	0.00	C	C
ATOM 11208	C ALA A 339	35.543	3.919	-46.214	1.00	0.00	C	C
ATOM 11209	O ALA A 339	34.837	3.947	-45.207	1.00	0.00	C	O
ATOM 11210	N LEU A 340	35.522	4.893	-47.140	1.00	0.00	C	N
ATOM 11211	CA LEU A 340	34.656	6.034	-47.031	1.00	0.00	C	C
ATOM 11212	CB LEU A 340	34.891	7.019	-48.195	1.00	0.00	C	C
ATOM 11213	CG LEU A 340	34.279	8.431	-48.048	1.00	0.00	C	C
ATOM 11214	CD1 LEU A 340	34.451	9.227	-49.350	1.00	0.00	C	C
ATOM 11215	CD2 LEU A 340	32.829	8.425	-47.552	1.00	0.00	C	C
ATOM 11216	C LEU A 340	33.240	5.546	-47.107	1.00	0.00	C	C
ATOM 11217	O LEU A 340	32.397	5.918	-46.292	1.00	0.00	C	O
ATOM 11218	N ALA A 341	32.958	4.636	-48.062	1.00	0.00	C	N
ATOM 11219	CA ALA A 341	31.610	4.189	-48.270	1.00	0.00	C	C
ATOM 11220	CB ALA A 341	31.511	3.100	-49.353	1.00	0.00	C	C
ATOM 11221	C ALA A 341	31.099	3.603	-46.990	1.00	0.00	C	C
ATOM 11222	O ALA A 341	29.955	3.848	-46.612	1.00	0.00	C	O
ATOM 11223	N ALA A 342	31.939	2.805	-46.306	1.00	0.00	C	N
ATOM 11224	CA ALA A 342	31.594	2.157	-45.069	1.00	0.00	C	C
ATOM 11225	CB ALA A 342	32.649	1.137	-44.627	1.00	0.00	C	C
ATOM 11226	C ALA A 342	31.420	3.155	-43.963	1.00	0.00	C	C
ATOM 11227	O ALA A 342	30.569	2.982	-43.092	1.00	0.00	C	O
ATOM 11228	N GLY A 343	32.259	4.206	-43.931	1.00	0.00	C	N

ATOM	11229	CA	GLY A 343	32.135	5.183	-42.888	1.00	0.00	C	C
ATOM	11230	C	GLY A 343	30.803	5.877	-43.004	1.00	0.00	C	C
ATOM	11231	O	GLY A 343	30.171	6.205	-42.000	1.00	0.00	C	O
ATOM	11232	N	THR A 344	30.390	6.173	-44.250	1.00	0.00	C	N
ATOM	11233	CA	THR A 344	29.205	6.904	-44.638	1.00	0.00	C	C
ATOM	11234	CB	THR A 344	29.400	7.597	-45.964	1.00	0.00	C	C
ATOM	11235	OG1	THR A 344	30.581	8.383	-45.909	1.00	0.00	C	O
ATOM	11236	CG2	THR A 344	28.223	8.550	-46.230	1.00	0.00	C	C
ATOM	11237	C	THR A 344	27.937	6.083	-44.666	1.00	0.00	C	C
ATOM	11238	O	THR A 344	26.857	6.638	-44.852	1.00	0.00	C	O
ATOM	11239	N	GLY A 345	28.004	4.736	-44.614	1.00	0.00	C	N
ATOM	11240	CA	GLY A 345	26.775	3.986	-44.630	1.00	0.00	C	C
ATOM	11241	C	GLY A 345	26.226	3.916	-46.027	1.00	0.00	C	C
ATOM	11242	O	GLY A 345	25.010	3.874	-46.216	1.00	0.00	C	O
ATOM	11243	N	LYS A 346	27.101	3.940	-47.052	1.00	0.00	C	N
ATOM	11244	CA	LYS A 346	26.609	3.779	-48.398	1.00	0.00	C	C
ATOM	11245	CB	LYS A 346	27.342	4.642	-49.442	1.00	0.00	C	C
ATOM	11246	CG	LYS A 346	26.769	6.058	-49.551	1.00	0.00	C	C
ATOM	11247	CD	LYS A 346	26.908	6.906	-48.290	1.00	0.00	C	C
ATOM	11248	CE	LYS A 346	26.243	8.281	-48.398	1.00	0.00	C	C
ATOM	11249	NZ	LYS A 346	26.973	9.129	-49.367	1.00	0.00	C	N
ATOM	11250	C	LYS A 346	26.792	2.333	-48.741	1.00	0.00	C	C
ATOM	11251	O	LYS A 346	27.731	1.953	-49.435	1.00	0.00	C	O
ATOM	11252	N	ILE A 347	25.825	1.513	-48.281	1.00	0.00	C	N
ATOM	11253	CA	ILE A 347	25.878	0.076	-48.300	1.00	0.00	C	C
ATOM	11254	CB	ILE A 347	24.722	-0.576	-47.596	1.00	0.00	C	C
ATOM	11255	CG2	ILE A 347	24.866	-2.095	-47.804	1.00	0.00	C	C
ATOM	11256	CG1	ILE A 347	24.654	-0.179	-46.113	1.00	0.00	C	C
ATOM	11257	CD	ILE A 347	24.217	1.265	-45.874	1.00	0.00	C	C
ATOM	11258	C	ILE A 347	25.869	-0.523	-49.669	1.00	0.00	C	C
ATOM	11259	O	ILE A 347	26.662	-1.417	-49.957	1.00	0.00	C	O
ATOM	11260	N	GLY A 348	24.974	-0.057	-50.555	1.00	0.00	C	N
ATOM	11261	CA	GLY A 348	24.832	-0.708	-51.825	1.00	0.00	C	C
ATOM	11262	C	GLY A 348	26.140	-0.667	-52.543	1.00	0.00	C	C
ATOM	11263	O	GLY A 348	26.529	-1.631	-53.200	1.00	0.00	C	O
ATOM	11264	N	VAL A 349	26.833	0.481	-52.462	1.00	0.00	C	N
ATOM	11265	CA	VAL A 349	28.093	0.683	-53.118	1.00	0.00	C	C
ATOM	11266	CB	VAL A 349	28.538	2.119	-53.063	1.00	0.00	C	C

ATOM	11267	CG1 VAL A 349	29.894	2.246	-53.778	1.00	0.00	C	C
ATOM	11268	CG2 VAL A 349	27.433	2.995	-53.676	1.00	0.00	C	C
ATOM	11269	C VAL A 349	29.147	-0.159	-52.469	1.00	0.00	C	C
ATOM	11270	O VAL A 349	29.958	-0.785	-53.148	1.00	0.00	C	O
ATOM	11271	N LEU A 350	29.140	-0.210	-51.123	1.00	0.00	C	N
ATOM	11272	CA LEU A 350	30.138	-0.949	-50.404	1.00	0.00	C	C
ATOM	11273	CB LEU A 350	29.881	-0.887	-48.884	1.00	0.00	C	C
ATOM	11274	CG LEU A 350	30.973	-1.470	-47.958	1.00	0.00	C	C
ATOM	11275	CD1 LEU A 350	30.549	-1.318	-46.489	1.00	0.00	C	C
ATOM	11276	CD2 LEU A 350	31.351	-2.922	-48.292	1.00	0.00	C	C
ATOM	11277	C LEU A 350	30.049	-2.375	-50.864	1.00	0.00	C	C
ATOM	11278	O LEU A 350	31.060	-3.004	-51.178	1.00	0.00	C	O
ATOM	11279	N ALA A 351	28.818	-2.916	-50.951	1.00	0.00	C	N
ATOM	11280	CA ALA A 351	28.633	-4.276	-51.368	1.00	0.00	C	C
ATOM	11281	CB ALA A 351	27.150	-4.682	-51.397	1.00	0.00	C	C
ATOM	11282	C ALA A 351	29.162	-4.412	-52.762	1.00	0.00	C	C
ATOM	11283	O ALA A 351	29.795	-5.407	-53.106	1.00	0.00	C	O
ATOM	11284	N TYR A 352	28.906	-3.394	-53.595	1.00	0.00	C	N
ATOM	11285	CA TYR A 352	29.309	-3.377	-54.970	1.00	0.00	C	C
ATOM	11286	CB TYR A 352	28.777	-2.115	-55.661	1.00	0.00	C	C
ATOM	11287	CG TYR A 352	29.583	-1.842	-56.878	1.00	0.00	C	C
ATOM	11288	CD1 TYR A 352	29.497	-2.637	-57.995	1.00	0.00	C	C
ATOM	11289	CE1 TYR A 352	30.249	-2.340	-59.109	1.00	0.00	C	C
ATOM	11290	CZ TYR A 352	31.086	-1.250	-59.112	1.00	0.00	C	C
ATOM	11291	OH TYR A 352	31.856	-0.944	-60.254	1.00	0.00	C	O
ATOM	11292	CD2 TYR A 352	30.424	-0.757	-56.885	1.00	0.00	C	C
ATOM	11293	CE2 TYR A 352	31.177	-0.457	-57.994	1.00	0.00	C	C
ATOM	11294	C TYR A 352	30.800	-3.420	-55.102	1.00	0.00	C	C
ATOM	11295	O TYR A 352	31.321	-4.174	-55.918	1.00	0.00	C	O
ATOM	11296	N ILE A 353	31.539	-2.618	-54.316	1.00	0.00	C	N
ATOM	11297	CA ILE A 353	32.965	-2.578	-54.481	1.00	0.00	C	C
ATOM	11298	CB ILE A 353	33.631	-1.467	-53.719	1.00	0.00	C	C
ATOM	11299	CG2 ILE A 353	35.153	-1.689	-53.777	1.00	0.00	C	C
ATOM	11300	CG1 ILE A 353	33.191	-0.105	-54.284	1.00	0.00	C	C
ATOM	11301	CD ILE A 353	33.654	1.086	-53.443	1.00	0.00	C	C
ATOM	11302	C ILE A 353	33.601	-3.875	-54.098	1.00	0.00	C	C
ATOM	11303	O ILE A 353	34.526	-4.324	-54.766	1.00	0.00	C	O
ATOM	11304	N LEU A 354	33.170	-4.472	-52.971	1.00	0.00	C	N

ATOM	11305	CA	LEU A 354	33.716	-5.708	-52.476	1.00	0.00	C	C
ATOM	11306	CB	LEU A 354	33.231	-6.009	-51.054	1.00	0.00	C	C
ATOM	11307	CG	LEU A 354	33.647	-4.946	-50.023	1.00	0.00	C	C
ATOM	11308	CD1	LEU A 354	33.089	-5.289	-48.635	1.00	0.00	C	C
ATOM	11309	CD2	LEU A 354	35.168	-4.727	-50.010	1.00	0.00	C	C
ATOM	11310	C	LEU A 354	33.293	-6.874	-53.322	1.00	0.00	C	C
ATOM	11311	O	LEU A 354	34.016	-7.841	-53.493	1.00	0.00	C	O
ATOM	11312	N	GLN A 355	32.027	-6.891	-53.741	1.00	0.00	C	N
ATOM	11313	CA	GLN A 355	31.409	-7.936	-54.505	1.00	0.00	C	C
ATOM	11314	CB	GLN A 355	29.936	-8.140	-54.122	1.00	0.00	C	C
ATOM	11315	CG	GLN A 355	29.772	-8.922	-52.808	1.00	0.00	C	C
ATOM	11316	CD	GLN A 355	30.675	-8.325	-51.735	1.00	0.00	C	C
ATOM	11317	OE1	GLN A 355	30.272	-7.455	-50.967	1.00	0.00	C	O
ATOM	11318	NE2	GLN A 355	31.952	-8.799	-51.688	1.00	0.00	C	N
ATOM	11319	C	GLN A 355	31.543	-7.793	-55.986	1.00	0.00	C	C
ATOM	11320	O	GLN A 355	31.125	-8.700	-56.696	1.00	0.00	C	O
ATOM	11321	N	ARG A 356	31.987	-6.626	-56.499	1.00	0.00	C	N
ATOM	11322	CA	ARG A 356	31.969	-6.355	-57.915	1.00	0.00	C	C
ATOM	11323	CB	ARG A 356	32.447	-4.944	-58.290	1.00	0.00	C	C
ATOM	11324	CG	ARG A 356	32.422	-4.701	-59.799	1.00	0.00	C	C
ATOM	11325	CD	ARG A 356	33.356	-3.584	-60.269	1.00	0.00	C	C
ATOM	11326	NE	ARG A 356	34.752	-4.046	-60.025	1.00	0.00	C	N
ATOM	11327	CZ	ARG A 356	35.516	-3.443	-59.067	1.00	0.00	C	C
ATOM	11328	NH1	ARG A 356	35.030	-2.361	-58.392	1.00	0.00	C	N
ATOM	11329	NH2	ARG A 356	36.763	-3.920	-58.789	1.00	0.00	C	N
ATOM	11330	C	ARG A 356	32.907	-7.255	-58.648	1.00	0.00	C	C
ATOM	11331	O	ARG A 356	33.988	-6.832	-59.056	1.00	0.00	C	O
ATOM	11332	N	GLU A 357	32.463	-8.497	-58.906	1.00	0.00	C	N
ATOM	11333	CA	GLU A 357	33.243	-9.476	-59.600	1.00	0.00	C	C
ATOM	11334	CB	GLU A 357	32.581	-10.859	-59.609	1.00	0.00	C	C
ATOM	11335	CG	GLU A 357	31.233	-10.797	-60.339	1.00	0.00	C	C
ATOM	11336	CD	GLU A 357	30.671	-12.198	-60.511	1.00	0.00	C	C
ATOM	11337	OE1	GLU A 357	30.557	-12.925	-59.490	1.00	0.00	C	O
ATOM	11338	OE2	GLU A 357	30.345	-12.558	-61.675	1.00	0.00	C	O
ATOM	11339	C	GLU A 357	33.258	-9.055	-61.032	1.00	0.00	C	C
ATOM	11340	O	GLU A 357	32.272	-8.513	-61.530	1.00	0.00	C	O
ATOM	11341	N	ILE A 358	34.380	-9.275	-61.747	1.00	0.00	C	N
ATOM	11342	CA	ILE A 358	34.347	-8.880	-63.121	1.00	0.00	C	C

ATOM 11343	CB ILE A 358	35.043	-7.567	-63.350	1.00	0.00	C	C
ATOM 11344	CG2 ILE A 358	36.555	-7.798	-63.190	1.00	0.00	C	C
ATOM 11345	CG1 ILE A 358	34.602	-6.931	-64.682	1.00	0.00	C	C
ATOM 11346	CD ILE A 358	33.137	-6.496	-64.712	1.00	0.00	C	C
ATOM 11347	C ILE A 358	34.978	-9.974	-63.935	1.00	0.00	C	C
ATOM 11348	O ILE A 358	35.942	-10.603	-63.499	1.00	0.00	C	O
ATOM 11349	N GLN A 359	34.421	-10.267	-65.132	1.00	0.00	C	N
ATOM 11350	CA GLN A 359	34.992	-11.307	-65.945	1.00	0.00	C	C
ATOM 11351	CB GLN A 359	34.117	-12.569	-66.047	1.00	0.00	C	C
ATOM 11352	CG GLN A 359	34.740	-13.670	-66.908	1.00	0.00	C	C
ATOM 11353	CD GLN A 359	35.912	-14.281	-66.145	1.00	0.00	C	C
ATOM 11354	OE1 GLN A 359	36.419	-13.699	-65.186	1.00	0.00	C	O
ATOM 11355	NE2 GLN A 359	36.359	-15.487	-66.585	1.00	0.00	C	N
ATOM 11356	C GLN A 359	35.181	-10.767	-67.330	1.00	0.00	C	C
ATOM 11357	O GLN A 359	34.237	-10.295	-67.966	1.00	0.00	C	O
ATOM 11358	N GLU A 360	36.438	-10.835	-67.820	1.00	0.00	C	N
ATOM 11359	CA GLU A 360	36.832	-10.306	-69.097	1.00	0.00	C	C
ATOM 11360	CB GLU A 360	36.494	-8.797	-69.207	1.00	0.00	C	C
ATOM 11361	CG GLU A 360	36.803	-8.075	-70.520	1.00	0.00	C	C
ATOM 11362	CD GLU A 360	38.137	-7.371	-70.333	1.00	0.00	C	C
ATOM 11363	OE1 GLU A 360	38.378	-6.858	-69.207	1.00	0.00	C	O
ATOM 11364	OE2 GLU A 360	38.934	-7.335	-71.308	1.00	0.00	C	O
ATOM 11365	C GLU A 360	38.319	-10.531	-69.149	1.00	0.00	C	C
ATOM 11366	O GLU A 360	38.890	-11.004	-68.165	1.00	0.00	C	O
ATOM 11367	N PRO A 361	38.991	-10.220	-70.227	1.00	0.00	C	N
ATOM 11368	CD PRO A 361	38.405	-10.407	-71.547	1.00	0.00	C	C
ATOM 11369	CA PRO A 361	40.399	-10.493	-70.262	1.00	0.00	C	C
ATOM 11370	CB PRO A 361	40.833	-10.242	-71.702	1.00	0.00	C	C
ATOM 11371	CG PRO A 361	39.586	-10.660	-72.503	1.00	0.00	C	C
ATOM 11372	C PRO A 361	41.248	-9.848	-69.217	1.00	0.00	C	C
ATOM 11373	O PRO A 361	42.323	-10.353	-68.941	1.00	0.00	C	O
ATOM 11374	N GLU A 362	40.919	-8.716	-68.613	1.00	0.00	C	N
ATOM 11375	CA GLU A 362	41.888	-8.481	-67.585	1.00	0.00	C	C
ATOM 11376	CB GLU A 362	42.611	-7.134	-67.737	1.00	0.00	C	C
ATOM 11377	CG GLU A 362	43.397	-7.016	-69.044	1.00	0.00	C	C
ATOM 11378	CD GLU A 362	42.411	-6.629	-70.140	1.00	0.00	C	C
ATOM 11379	OE1 GLU A 362	41.782	-5.546	-70.011	1.00	0.00	C	O
ATOM 11380	OE2 GLU A 362	42.269	-7.413	-71.118	1.00	0.00	C	O

ATOM	11381	C	GLU A 362	41.091	-8.402	-66.340	1.00	0.00	C	C
ATOM	11382	O	GLU A 362	41.360	-7.592	-65.457	1.00	0.00	C	O
ATOM	11383	N	CYS A 363	40.063	-9.249	-66.238	1.00	0.00	C	N
ATOM	11384	CA	CYS A 363	39.167	-9.144	-65.128	1.00	0.00	C	C
ATOM	11385	CB	CYS A 363	37.778	-9.715	-65.391	1.00	0.00	C	C
ATOM	11386	SG	CYS A 363	36.800	-8.423	-66.188	1.00	0.00	C	S
ATOM	11387	C	CYS A 363	39.650	-9.643	-63.803	1.00	0.00	C	C
ATOM	11388	O	CYS A 363	39.310	-9.056	-62.779	1.00	0.00	C	O
ATOM	11389	N	ARG A 364	40.453	-10.714	-63.773	1.00	0.00	C	N
ATOM	11390	CA	ARG A 364	40.728	-11.371	-62.523	1.00	0.00	C	C
ATOM	11391	CB	ARG A 364	41.597	-12.635	-62.689	1.00	0.00	C	C
ATOM	11392	CG	ARG A 364	41.807	-13.431	-61.395	1.00	0.00	C	C
ATOM	11393	CD	ARG A 364	42.627	-14.712	-61.594	1.00	0.00	C	C
ATOM	11394	NE	ARG A 364	42.962	-15.269	-60.250	1.00	0.00	C	N
ATOM	11395	CZ	ARG A 364	42.118	-16.137	-59.617	1.00	0.00	C	C
ATOM	11396	NH1	ARG A 364	40.934	-16.491	-60.196	1.00	0.00	C	N
ATOM	11397	NH2	ARG A 364	42.465	-16.662	-58.404	1.00	0.00	C	N
ATOM	11398	C	ARG A 364	41.384	-10.462	-61.528	1.00	0.00	C	C
ATOM	11399	O	ARG A 364	41.028	-10.485	-60.353	1.00	0.00	C	O
ATOM	11400	N	HSD A 365	42.350	-9.625	-61.945	1.00	0.00	C	N
ATOM	11401	CA	HSD A 365	43.035	-8.817	-60.972	1.00	0.00	C	C
ATOM	11402	CB	HSD A 365	44.205	-8.008	-61.550	1.00	0.00	C	C
ATOM	11403	ND1	HSD A 365	42.937	-6.936	-63.446	1.00	0.00	C	N
ATOM	11404	CG	HSD A 365	43.749	-6.831	-62.344	1.00	0.00	C	C
ATOM	11405	CE1	HSD A 365	42.734	-5.678	-63.906	1.00	0.00	C	C
ATOM	11406	NE2	HSD A 365	43.359	-4.772	-63.177	1.00	0.00	C	N
ATOM	11407	CD2	HSD A 365	43.998	-5.502	-62.193	1.00	0.00	C	C
ATOM	11408	C	HSD A 365	42.070	-7.854	-60.340	1.00	0.00	C	C
ATOM	11409	O	HSD A 365	42.163	-7.567	-59.147	1.00	0.00	C	O
ATOM	11410	N	LEU A 366	41.142	-7.305	-61.144	1.00	0.00	C	N
ATOM	11411	CA	LEU A 366	40.164	-6.324	-60.736	1.00	0.00	C	C
ATOM	11412	CB	LEU A 366	39.414	-5.768	-61.964	1.00	0.00	C	C
ATOM	11413	CG	LEU A 366	38.397	-4.653	-61.663	1.00	0.00	C	C
ATOM	11414	CD1	LEU A 366	39.094	-3.384	-61.150	1.00	0.00	C	C
ATOM	11415	CD2	LEU A 366	37.498	-4.384	-62.883	1.00	0.00	C	C
ATOM	11416	C	LEU A 366	39.124	-6.870	-59.784	1.00	0.00	C	C
ATOM	11417	O	LEU A 366	38.776	-6.204	-58.807	1.00	0.00	C	O
ATOM	11418	N	SER A 367	38.603	-8.094	-60.030	1.00	0.00	C	N

ATOM	11419	CA	SER A 367	37.447	-8.567	-59.303	1.00	0.00	C	C
ATOM	11420	CB	SER A 367	36.719	-9.740	-59.986	1.00	0.00	C	C
ATOM	11421	OG	SER A 367	37.541	-10.897	-60.009	1.00	0.00	C	O
ATOM	11422	C	SER A 367	37.737	-8.983	-57.900	1.00	0.00	C	C
ATOM	11423	O	SER A 367	38.760	-9.589	-57.591	1.00	0.00	C	O
ATOM	11424	N	ARG A 368	36.844	-8.559	-56.986	1.00	0.00	C	N
ATOM	11425	CA	ARG A 368	36.898	-8.941	-55.612	1.00	0.00	C	C
ATOM	11426	CB	ARG A 368	36.393	-7.820	-54.716	1.00	0.00	C	C
ATOM	11427	CG	ARG A 368	37.118	-6.489	-54.929	1.00	0.00	C	C
ATOM	11428	CD	ARG A 368	37.983	-6.057	-53.748	1.00	0.00	C	C
ATOM	11429	NE	ARG A 368	38.270	-7.291	-52.979	1.00	0.00	C	N
ATOM	11430	CZ	ARG A 368	37.428	-7.612	-51.961	1.00	0.00	C	C
ATOM	11431	NH1	ARG A 368	36.464	-6.724	-51.589	1.00	0.00	C	N
ATOM	11432	NH2	ARG A 368	37.505	-8.817	-51.336	1.00	0.00	C	N
ATOM	11433	C	ARG A 368	36.251	-10.288	-55.354	1.00	0.00	C	C
ATOM	11434	O	ARG A 368	36.707	-11.027	-54.494	1.00	0.00	C	O
ATOM	11435	N	LYS A 369	35.168	-10.685	-56.061	1.00	0.00	C	N
ATOM	11436	CA	LYS A 369	34.582	-11.957	-55.711	1.00	0.00	C	C
ATOM	11437	CB	LYS A 369	33.154	-11.841	-55.143	1.00	0.00	C	C
ATOM	11438	CG	LYS A 369	32.109	-11.328	-56.134	1.00	0.00	C	C
ATOM	11439	CD	LYS A 369	30.676	-11.492	-55.623	1.00	0.00	C	C
ATOM	11440	CE	LYS A 369	29.609	-10.985	-56.594	1.00	0.00	C	C
ATOM	11441	NZ	LYS A 369	28.271	-11.077	-55.968	1.00	0.00	C	N
ATOM	11442	C	LYS A 369	34.527	-12.880	-56.898	1.00	0.00	C	C
ATOM	11443	O	LYS A 369	34.179	-12.480	-58.012	1.00	0.00	C	O
ATOM	11444	N	PHE A 370	34.881	-14.164	-56.663	1.00	0.00	C	N
ATOM	11445	CA	PHE A 370	34.878	-15.177	-57.683	1.00	0.00	C	C
ATOM	11446	CB	PHE A 370	36.239	-15.877	-57.814	1.00	0.00	C	C
ATOM	11447	CG	PHE A 370	37.304	-14.852	-58.014	1.00	0.00	C	C
ATOM	11448	CD1	PHE A 370	37.689	-14.052	-56.965	1.00	0.00	C	C
ATOM	11449	CE1	PHE A 370	38.675	-13.107	-57.119	1.00	0.00	C	C
ATOM	11450	CZ	PHE A 370	39.295	-12.958	-58.337	1.00	0.00	C	C
ATOM	11451	CD2	PHE A 370	37.936	-14.705	-59.227	1.00	0.00	C	C
ATOM	11452	CE2	PHE A 370	38.922	-13.761	-59.388	1.00	0.00	C	C
ATOM	11453	C	PHE A 370	33.969	-16.259	-57.181	1.00	0.00	C	C
ATOM	11454	O	PHE A 370	34.142	-16.727	-56.062	1.00	0.00	C	O
ATOM	11455	N	THR A 371	32.974	-16.702	-57.970	1.00	0.00	C	N
ATOM	11456	CA	THR A 371	32.138	-17.751	-57.454	1.00	0.00	C	C

ATOM	11457	CB THR A 371	30.785	-17.252	-57.036	1.00	0.00	C	C
ATOM	11458	OG1 THR A 371	30.023	-16.850	-58.166	1.00	0.00	C	O
ATOM	11459	CG2 THR A 371	31.006	-16.027	-56.138	1.00	0.00	C	C
ATOM	11460	C THR A 371	31.910	-18.732	-58.563	1.00	0.00	C	C
ATOM	11461	O THR A 371	31.507	-18.335	-59.655	1.00	0.00	C	O
ATOM	11462	N GLU A 372	32.175	-20.038	-58.339	1.00	0.00	C	N
ATOM	11463	CA GLU A 372	31.862	-20.934	-59.417	1.00	0.00	C	C
ATOM	11464	CB GLU A 372	32.973	-21.048	-60.477	1.00	0.00	C	C
ATOM	11465	CG GLU A 372	33.151	-19.777	-61.306	1.00	0.00	C	C
ATOM	11466	CD GLU A 372	34.160	-20.061	-62.405	1.00	0.00	C	C
ATOM	11467	OE1 GLU A 372	34.396	-21.263	-62.693	1.00	0.00	C	O
ATOM	11468	OE2 GLU A 372	34.703	-19.077	-62.975	1.00	0.00	C	O
ATOM	11469	C GLU A 372	31.586	-22.323	-58.912	1.00	0.00	C	C
ATOM	11470	O GLU A 372	32.480	-23.167	-58.874	1.00	0.00	C	O
ATOM	11471	N TRP A 373	30.323	-22.594	-58.523	1.00	0.00	C	N
ATOM	11472	CA TRP A 373	29.884	-23.911	-58.151	1.00	0.00	C	C
ATOM	11473	CB TRP A 373	30.199	-24.305	-56.692	1.00	0.00	C	C
ATOM	11474	CG TRP A 373	31.626	-24.704	-56.388	1.00	0.00	C	C
ATOM	11475	CD1 TRP A 373	32.745	-23.934	-56.249	1.00	0.00	C	C
ATOM	11476	NE1 TRP A 373	33.823	-24.725	-55.924	1.00	0.00	C	N
ATOM	11477	CE2 TRP A 373	33.396	-26.036	-55.844	1.00	0.00	C	C
ATOM	11478	CD2 TRP A 373	32.031	-26.056	-56.129	1.00	0.00	C	C
ATOM	11479	CE3 TRP A 373	31.321	-27.224	-56.125	1.00	0.00	C	C
ATOM	11480	CZ3 TRP A 373	32.007	-28.383	-55.829	1.00	0.00	C	C
ATOM	11481	CZ2 TRP A 373	34.072	-27.184	-55.551	1.00	0.00	C	C
ATOM	11482	CH2 TRP A 373	33.358	-28.362	-55.549	1.00	0.00	C	C
ATOM	11483	C TRP A 373	28.391	-23.888	-58.256	1.00	0.00	C	C
ATOM	11484	O TRP A 373	27.722	-23.240	-57.455	1.00	0.00	C	O
ATOM	11485	N ALA A 374	27.788	-24.595	-59.227	1.00	0.00	C	N
ATOM	11486	CA ALA A 374	26.355	-24.478	-59.226	1.00	0.00	C	C
ATOM	11487	CB ALA A 374	25.823	-23.398	-60.186	1.00	0.00	C	C
ATOM	11488	C ALA A 374	25.727	-25.767	-59.638	1.00	0.00	C	C
ATOM	11489	O ALA A 374	26.151	-26.401	-60.603	1.00	0.00	C	O
ATOM	11490	N TYR A 375	24.694	-26.199	-58.883	1.00	0.00	C	N
ATOM	11491	CA TYR A 375	23.966	-27.376	-59.257	1.00	0.00	C	C
ATOM	11492	CB TYR A 375	24.148	-28.556	-58.290	1.00	0.00	C	C
ATOM	11493	CG TYR A 375	23.775	-29.790	-59.040	1.00	0.00	C	C
ATOM	11494	CD1 TYR A 375	24.627	-30.340	-59.970	1.00	0.00	C	C

ATOM 11495	CE1 TYR A 375	24.275	-31.478	-60.659	1.00	0.00	C	C
ATOM 11496	CZ TYR A 375	23.063	-32.079	-60.417	1.00	0.00	C	C
ATOM 11497	OH TYR A 375	22.695	-33.246	-61.122	1.00	0.00	C	O
ATOM 11498	CD2 TYR A 375	22.565	-30.404	-58.804	1.00	0.00	C	C
ATOM 11499	CE2 TYR A 375	22.209	-31.541	-59.489	1.00	0.00	C	C
ATOM 11500	C TYR A 375	22.506	-27.067	-59.259	1.00	0.00	C	C
ATOM 11501	O TYR A 375	21.880	-27.049	-58.201	1.00	0.00	C	O
ATOM 11502	N GLY A 376	21.945	-26.736	-60.436	1.00	0.00	C	N
ATOM 11503	CA GLY A 376	20.525	-26.620	-60.592	1.00	0.00	C	C
ATOM 11504	C GLY A 376	20.037	-25.476	-59.764	1.00	0.00	C	C
ATOM 11505	O GLY A 376	19.982	-24.313	-60.158	1.00	0.00	C	O
ATOM 11506	N PRO A 377	19.600	-25.920	-58.619	1.00	0.00	C	N
ATOM 11507	CD PRO A 377	19.044	-27.260	-58.554	1.00	0.00	C	C
ATOM 11508	CA PRO A 377	19.090	-25.079	-57.565	1.00	0.00	C	C
ATOM 11509	CB PRO A 377	18.082	-25.927	-56.793	1.00	0.00	C	C
ATOM 11510	CG PRO A 377	18.451	-27.376	-57.145	1.00	0.00	C	C
ATOM 11511	C PRO A 377	20.118	-24.493	-56.653	1.00	0.00	C	C
ATOM 11512	O PRO A 377	19.759	-23.609	-55.877	1.00	0.00	C	O
ATOM 11513	N VAL A 378	21.384	-24.960	-56.701	1.00	0.00	C	N
ATOM 11514	CA VAL A 378	22.318	-24.550	-55.689	1.00	0.00	C	C
ATOM 11515	CB VAL A 378	23.066	-25.706	-55.083	1.00	0.00	C	C
ATOM 11516	CG1 VAL A 378	23.937	-26.357	-56.166	1.00	0.00	C	C
ATOM 11517	CG2 VAL A 378	23.858	-25.211	-53.861	1.00	0.00	C	C
ATOM 11518	C VAL A 378	23.306	-23.579	-56.251	1.00	0.00	C	C
ATOM 11519	O VAL A 378	23.460	-23.457	-57.465	1.00	0.00	C	O
ATOM 11520	N HSD A 379	23.973	-22.821	-55.359	1.00	0.00	C	N
ATOM 11521	CA HSD A 379	24.903	-21.830	-55.812	1.00	0.00	C	C
ATOM 11522	CB HSD A 379	24.225	-20.463	-55.993	1.00	0.00	C	C
ATOM 11523	ND1 HSD A 379	25.901	-18.552	-55.962	1.00	0.00	C	N
ATOM 11524	CG HSD A 379	25.086	-19.428	-56.643	1.00	0.00	C	C
ATOM 11525	CE1 HSD A 379	26.498	-17.768	-56.893	1.00	0.00	C	C
ATOM 11526	NE2 HSD A 379	26.126	-18.078	-58.123	1.00	0.00	C	N
ATOM 11527	CD2 HSD A 379	25.235	-19.126	-57.962	1.00	0.00	C	C
ATOM 11528	C HSD A 379	25.977	-21.678	-54.774	1.00	0.00	C	C
ATOM 11529	O HSD A 379	25.757	-21.946	-53.595	1.00	0.00	C	O
ATOM 11530	N SER A 380	27.185	-21.259	-55.203	1.00	0.00	C	N
ATOM 11531	CA SER A 380	28.273	-21.042	-54.292	1.00	0.00	C	C
ATOM 11532	CB SER A 380	29.400	-22.081	-54.403	1.00	0.00	C	C

ATOM	11533	OG	SER A 380	30.432	-21.780	-53.475	1.00	0.00	C	O
ATOM	11534	C	SER A 380	28.878	-19.723	-54.648	1.00	0.00	C	C
ATOM	11535	O	SER A 380	28.944	-19.357	-55.818	1.00	0.00	C	O
ATOM	11536	N	SER A 381	29.335	-18.960	-53.637	1.00	0.00	C	N
ATOM	11537	CA	SER A 381	29.921	-17.691	-53.950	1.00	0.00	C	C
ATOM	11538	CB	SER A 381	29.012	-16.513	-53.548	1.00	0.00	C	C
ATOM	11539	OG	SER A 381	29.610	-15.267	-53.863	1.00	0.00	C	O
ATOM	11540	C	SER A 381	31.196	-17.576	-53.182	1.00	0.00	C	C
ATOM	11541	O	SER A 381	31.269	-17.998	-52.030	1.00	0.00	C	O
ATOM	11542	N	LEU A 382	32.257	-17.032	-53.813	1.00	0.00	C	N
ATOM	11543	CA	LEU A 382	33.466	-16.823	-53.074	1.00	0.00	C	C
ATOM	11544	CB	LEU A 382	34.715	-17.601	-53.543	1.00	0.00	C	C
ATOM	11545	CG	LEU A 382	34.649	-19.119	-53.291	1.00	0.00	C	C
ATOM	11546	CD1	LEU A 382	33.532	-19.777	-54.113	1.00	0.00	C	C
ATOM	11547	CD2	LEU A 382	36.020	-19.778	-53.502	1.00	0.00	C	C
ATOM	11548	C	LEU A 382	33.777	-15.364	-53.094	1.00	0.00	C	C
ATOM	11549	O	LEU A 382	33.512	-14.663	-54.073	1.00	0.00	C	O
ATOM	11550	N	TYR A 383	34.343	-14.873	-51.972	1.00	0.00	C	N
ATOM	11551	CA	TYR A 383	34.653	-13.478	-51.835	1.00	0.00	C	C
ATOM	11552	CB	TYR A 383	33.868	-12.830	-50.695	1.00	0.00	C	C
ATOM	11553	CG	TYR A 383	32.441	-12.919	-51.123	1.00	0.00	C	C
ATOM	11554	CD1	TYR A 383	31.765	-14.113	-51.028	1.00	0.00	C	C
ATOM	11555	CE1	TYR A 383	30.454	-14.215	-51.431	1.00	0.00	C	C
ATOM	11556	CZ	TYR A 383	29.799	-13.120	-51.940	1.00	0.00	C	C
ATOM	11557	OH	TYR A 383	28.452	-13.227	-52.347	1.00	0.00	C	O
ATOM	11558	CD2	TYR A 383	31.786	-11.831	-51.658	1.00	0.00	C	C
ATOM	11559	CE2	TYR A 383	30.471	-11.928	-52.059	1.00	0.00	C	C
ATOM	11560	C	TYR A 383	36.130	-13.372	-51.605	1.00	0.00	C	C
ATOM	11561	O	TYR A 383	36.726	-14.216	-50.941	1.00	0.00	C	O
ATOM	11562	N	ASP A 384	36.769	-12.326	-52.172	1.00	0.00	C	N
ATOM	11563	CA	ASP A 384	38.206	-12.262	-52.150	1.00	0.00	C	C
ATOM	11564	CB	ASP A 384	38.774	-10.963	-52.742	1.00	0.00	C	C
ATOM	11565	CG	ASP A 384	40.255	-11.119	-53.020	1.00	0.00	C	C
ATOM	11566	OD1	ASP A 384	40.756	-12.275	-52.999	1.00	0.00	C	O
ATOM	11567	OD2	ASP A 384	40.905	-10.070	-53.275	1.00	0.00	C	O
ATOM	11568	C	ASP A 384	38.626	-12.242	-50.754	1.00	0.00	C	C
ATOM	11569	O	ASP A 384	39.353	-13.110	-50.275	1.00	0.00	C	O
ATOM	11570	N	LEU A 385	38.073	-11.203	-50.134	1.00	0.00	C	N

ATOM	11571	CA	LEU	A	385	38.034	-10.716	-48.829	1.00	0.00	C	C
ATOM	11572	CB	LEU	A	385	37.988	-11.832	-47.776	1.00	0.00	C	C
ATOM	11573	CG	LEU	A	385	37.313	-11.387	-46.470	1.00	0.00	C	C
ATOM	11574	CD1	LEU	A	385	37.676	-12.314	-45.305	1.00	0.00	C	C
ATOM	11575	CD2	LEU	A	385	37.480	-9.895	-46.195	1.00	0.00	C	C
ATOM	11576	C	LEU	A	385	39.200	-9.809	-48.578	1.00	0.00	C	C
ATOM	11577	O	LEU	A	385	40.134	-10.168	-47.861	1.00	0.00	C	O
ATOM	11578	N	SER	A	386	39.158	-8.597	-49.167	1.00	0.00	C	N
ATOM	11579	CA	SER	A	386	40.144	-7.579	-48.940	1.00	0.00	C	C
ATOM	11580	CB	SER	A	386	40.112	-6.469	-50.009	1.00	0.00	C	C
ATOM	11581	OG	SER	A	386	38.896	-5.741	-49.933	1.00	0.00	C	O
ATOM	11582	C	SER	A	386	39.883	-6.925	-47.612	1.00	0.00	C	C
ATOM	11583	O	SER	A	386	40.809	-6.532	-46.907	1.00	0.00	C	O
ATOM	11584	N	CYS	A	387	38.598	-6.845	-47.224	1.00	0.00	C	N
ATOM	11585	CA	CYS	A	387	38.118	-6.135	-46.066	1.00	0.00	C	C
ATOM	11586	CB	CYS	A	387	36.648	-6.483	-45.813	1.00	0.00	C	C
ATOM	11587	SG	CYS	A	387	35.652	-6.355	-47.322	1.00	0.00	C	S
ATOM	11588	C	CYS	A	387	38.815	-6.637	-44.848	1.00	0.00	C	C
ATOM	11589	O	CYS	A	387	39.282	-5.867	-44.011	1.00	0.00	C	O
ATOM	11590	N	ILE	A	388	38.879	-7.964	-44.713	1.00	0.00	C	N
ATOM	11591	CA	ILE	A	388	39.497	-8.602	-43.597	1.00	0.00	C	C
ATOM	11592	CB	ILE	A	388	39.387	-10.099	-43.639	1.00	0.00	C	C
ATOM	11593	CG2	ILE	A	388	40.053	-10.593	-44.935	1.00	0.00	C	C
ATOM	11594	CG1	ILE	A	388	39.987	-10.709	-42.360	1.00	0.00	C	C
ATOM	11595	CD	ILE	A	388	39.236	-10.335	-41.083	1.00	0.00	C	C
ATOM	11596	C	ILE	A	388	40.944	-8.250	-43.623	1.00	0.00	C	C
ATOM	11597	O	ILE	A	388	41.559	-8.055	-42.580	1.00	0.00	C	O
ATOM	11598	N	ASP	A	389	41.520	-8.179	-44.836	1.00	0.00	C	N
ATOM	11599	CA	ASP	A	389	42.920	-7.943	-45.009	1.00	0.00	C	C
ATOM	11600	CB	ASP	A	389	43.357	-8.022	-46.481	1.00	0.00	C	C
ATOM	11601	CG	ASP	A	389	43.264	-9.474	-46.934	1.00	0.00	C	C
ATOM	11602	OD1	ASP	A	389	43.544	-10.376	-46.101	1.00	0.00	C	O
ATOM	11603	OD2	ASP	A	389	42.908	-9.697	-48.121	1.00	0.00	C	O
ATOM	11604	C	ASP	A	389	43.331	-6.595	-44.498	1.00	0.00	C	C
ATOM	11605	O	ASP	A	389	44.365	-6.487	-43.843	1.00	0.00	C	O
ATOM	11606	N	THR	A	390	42.553	-5.522	-44.750	1.00	0.00	C	N
ATOM	11607	CA	THR	A	390	43.114	-4.255	-44.382	1.00	0.00	C	C
ATOM	11608	CB	THR	A	390	42.415	-3.082	-45.001	1.00	0.00	C	C

ATOM	11609	OG1 THR A 390	42.269	-3.297	-46.398	1.00	0.00	C	O
ATOM	11610	CG2 THR A 390	43.328	-1.854	-44.821	1.00	0.00	C	C
ATOM	11611	C THR A 390	43.157	-4.142	-42.883	1.00	0.00	C	C
ATOM	11612	O THR A 390	42.126	-4.237	-42.223	1.00	0.00	C	O
ATOM	11613	N CYS A 391	44.373	-4.206	-42.284	1.00	0.00	C	N
ATOM	11614	CA CYS A 391	44.556	-3.959	-40.873	1.00	0.00	C	C
ATOM	11615	CB CYS A 391	45.578	-4.916	-40.238	1.00	0.00	C	C
ATOM	11616	SG CYS A 391	45.740	-4.656	-38.445	1.00	0.00	C	S
ATOM	11617	C CYS A 391	44.957	-2.566	-40.453	1.00	0.00	C	C
ATOM	11618	O CYS A 391	44.297	-1.922	-39.639	1.00	0.00	C	O
ATOM	11619	N GLU A 392	46.068	-2.057	-41.043	1.00	0.00	C	N
ATOM	11620	CA GLU A 392	46.735	-0.865	-40.576	1.00	0.00	C	C
ATOM	11621	CB GLU A 392	48.001	-0.568	-41.400	1.00	0.00	C	C
ATOM	11622	CG GLU A 392	48.859	0.574	-40.862	1.00	0.00	C	C
ATOM	11623	CD GLU A 392	50.051	0.712	-41.797	1.00	0.00	C	C
ATOM	11624	OE1 GLU A 392	49.914	0.318	-42.985	1.00	0.00	C	O
ATOM	11625	OE2 GLU A 392	51.116	1.211	-41.339	1.00	0.00	C	O
ATOM	11626	C GLU A 392	45.819	0.295	-40.700	1.00	0.00	C	C
ATOM	11627	O GLU A 392	45.662	1.098	-39.780	1.00	0.00	C	O
ATOM	11628	N LYS A 393	45.187	0.397	-41.874	1.00	0.00	C	N
ATOM	11629	CA LYS A 393	44.216	1.408	-42.108	1.00	0.00	C	C
ATOM	11630	CB LYS A 393	43.992	1.625	-43.611	1.00	0.00	C	C
ATOM	11631	CG LYS A 393	45.284	2.136	-44.258	1.00	0.00	C	C
ATOM	11632	CD LYS A 393	45.380	1.968	-45.776	1.00	0.00	C	C
ATOM	11633	CE LYS A 393	46.724	2.445	-46.336	1.00	0.00	C	C
ATOM	11634	NZ LYS A 393	46.833	2.114	-47.772	1.00	0.00	C	N
ATOM	11635	C LYS A 393	42.981	0.901	-41.439	1.00	0.00	C	C
ATOM	11636	O LYS A 393	42.911	-0.277	-41.092	1.00	0.00	C	O
ATOM	11637	N ASN A 394	41.993	1.781	-41.193	1.00	0.00	C	N
ATOM	11638	CA ASN A 394	40.814	1.328	-40.516	1.00	0.00	C	C
ATOM	11639	CB ASN A 394	39.760	2.434	-40.341	1.00	0.00	C	C
ATOM	11640	CG ASN A 394	40.306	3.408	-39.309	1.00	0.00	C	C
ATOM	11641	OD1 ASN A 394	40.601	4.560	-39.616	1.00	0.00	C	O
ATOM	11642	ND2 ASN A 394	40.454	2.926	-38.045	1.00	0.00	C	N
ATOM	11643	C ASN A 394	40.221	0.242	-41.347	1.00	0.00	C	C
ATOM	11644	O ASN A 394	39.846	-0.790	-40.811	1.00	0.00	C	O
ATOM	11645	N SER A 395	40.105	0.434	-42.673	1.00	0.00	C	N
ATOM	11646	CA SER A 395	39.683	-0.628	-43.554	1.00	0.00	C	C

ATOM 11647	CB SER A 395	40.259	-2.002	-43.194	1.00	0.00	C	C
ATOM 11648	OG SER A 395	41.566	-1.789	-42.690	1.00	0.00	C	O
ATOM 11649	C SER A 395	38.191	-0.721	-43.568	1.00	0.00	C	C
ATOM 11650	O SER A 395	37.505	-0.096	-42.762	1.00	0.00	C	O
ATOM 11651	N VAL A 396	37.648	-1.479	-44.540	1.00	0.00	C	N
ATOM 11652	CA VAL A 396	36.225	-1.629	-44.594	1.00	0.00	C	C
ATOM 11653	CB VAL A 396	35.728	-2.185	-45.895	1.00	0.00	C	C
ATOM 11654	CG1 VAL A 396	36.286	-3.593	-46.081	1.00	0.00	C	C
ATOM 11655	CG2 VAL A 396	34.194	-2.092	-45.916	1.00	0.00	C	C
ATOM 11656	C VAL A 396	35.760	-2.452	-43.427	1.00	0.00	C	C
ATOM 11657	O VAL A 396	34.744	-2.144	-42.808	1.00	0.00	C	O
ATOM 11658	N LEU A 397	36.491	-3.533	-43.093	1.00	0.00	C	N
ATOM 11659	CA LEU A 397	36.093	-4.361	-41.987	1.00	0.00	C	C
ATOM 11660	CB LEU A 397	36.918	-5.651	-41.861	1.00	0.00	C	C
ATOM 11661	CG LEU A 397	36.479	-6.524	-40.670	1.00	0.00	C	C
ATOM 11662	CD1 LEU A 397	35.008	-6.952	-40.808	1.00	0.00	C	C
ATOM 11663	CD2 LEU A 397	37.426	-7.718	-40.473	1.00	0.00	C	C
ATOM 11664	C LEU A 397	36.226	-3.611	-40.697	1.00	0.00	C	C
ATOM 11665	O LEU A 397	35.327	-3.660	-39.862	1.00	0.00	C	O
ATOM 11666	N GLU A 398	37.345	-2.891	-40.466	1.00	0.00	C	N
ATOM 11667	CA GLU A 398	37.384	-2.261	-39.179	1.00	0.00	C	C
ATOM 11668	CB GLU A 398	38.728	-1.799	-38.595	1.00	0.00	C	C
ATOM 11669	CG GLU A 398	39.668	-2.939	-38.195	1.00	0.00	C	C
ATOM 11670	CD GLU A 398	40.399	-3.419	-39.438	1.00	0.00	C	C
ATOM 11671	OE1 GLU A 398	41.315	-2.689	-39.906	1.00	0.00	C	O
ATOM 11672	OE2 GLU A 398	40.053	-4.522	-39.940	1.00	0.00	C	O
ATOM 11673	C GLU A 398	36.398	-1.149	-39.100	1.00	0.00	C	C
ATOM 11674	O GLU A 398	35.855	-0.896	-38.029	1.00	0.00	C	O
ATOM 11675	N VAL A 399	36.140	-0.433	-40.212	1.00	0.00	C	N
ATOM 11676	CA VAL A 399	35.192	0.636	-40.116	1.00	0.00	C	C
ATOM 11677	CB VAL A 399	35.074	1.465	-41.362	1.00	0.00	C	C
ATOM 11678	CG1 VAL A 399	36.425	2.158	-41.608	1.00	0.00	C	C
ATOM 11679	CG2 VAL A 399	34.630	0.572	-42.522	1.00	0.00	C	C
ATOM 11680	C VAL A 399	33.855	0.053	-39.767	1.00	0.00	C	C
ATOM 11681	O VAL A 399	33.122	0.614	-38.955	1.00	0.00	C	O
ATOM 11682	N ILE A 400	33.501	-1.106	-40.353	1.00	0.00	C	N
ATOM 11683	CA ILE A 400	32.217	-1.659	-40.036	1.00	0.00	C	C
ATOM 11684	CB ILE A 400	31.828	-2.874	-40.823	1.00	0.00	C	C

ATOM	11685	CG2 ILE A 400	32.676	-4.073	-40.379	1.00	0.00	C	C
ATOM	11686	CG1 ILE A 400	30.326	-3.114	-40.633	1.00	0.00	C	C
ATOM	11687	CD ILE A 400	29.785	-4.218	-41.526	1.00	0.00	C	C
ATOM	11688	C ILE A 400	32.179	-2.023	-38.581	1.00	0.00	C	C
ATOM	11689	O ILE A 400	31.164	-1.831	-37.913	1.00	0.00	C	O
ATOM	11690	N ALA A 401	33.282	-2.586	-38.054	1.00	0.00	C	N
ATOM	11691	CA ALA A 401	33.318	-2.997	-36.677	1.00	0.00	C	C
ATOM	11692	CB ALA A 401	34.657	-3.624	-36.283	1.00	0.00	C	C
ATOM	11693	C ALA A 401	33.169	-1.813	-35.765	1.00	0.00	C	C
ATOM	11694	O ALA A 401	32.424	-1.865	-34.786	1.00	0.00	C	O
ATOM	11695	N TYR A 402	33.929	-0.742	-36.054	1.00	0.00	C	N
ATOM	11696	CA TYR A 402	34.044	0.476	-35.295	1.00	0.00	C	C
ATOM	11697	CB TYR A 402	35.297	1.250	-35.767	1.00	0.00	C	C
ATOM	11698	CG TYR A 402	35.534	2.536	-35.044	1.00	0.00	C	C
ATOM	11699	CD1 TYR A 402	36.071	2.545	-33.776	1.00	0.00	C	C
ATOM	11700	CE1 TYR A 402	36.307	3.734	-33.122	1.00	0.00	C	C
ATOM	11701	CZ TYR A 402	36.017	4.930	-33.734	1.00	0.00	C	C
ATOM	11702	OH TYR A 402	36.258	6.150	-33.068	1.00	0.00	C	O
ATOM	11703	CD2 TYR A 402	35.260	3.739	-35.652	1.00	0.00	C	C
ATOM	11704	CE2 TYR A 402	35.492	4.930	-35.004	1.00	0.00	C	C
ATOM	11705	C TYR A 402	32.840	1.382	-35.388	1.00	0.00	C	C
ATOM	11706	O TYR A 402	32.396	1.931	-34.379	1.00	0.00	C	O
ATOM	11707	N SER A 403	32.259	1.539	-36.596	1.00	0.00	C	N
ATOM	11708	CA SER A 403	31.287	2.573	-36.862	1.00	0.00	C	C
ATOM	11709	CB SER A 403	30.759	2.556	-38.309	1.00	0.00	C	C
ATOM	11710	OG SER A 403	31.819	2.832	-39.213	1.00	0.00	C	O
ATOM	11711	C SER A 403	30.089	2.538	-35.960	1.00	0.00	C	C
ATOM	11712	O SER A 403	29.521	1.484	-35.687	1.00	0.00	C	O
ATOM	11713	N SER A 404	29.670	3.740	-35.493	1.00	0.00	C	N
ATOM	11714	CA SER A 404	28.511	3.853	-34.646	1.00	0.00	C	C
ATOM	11715	CB SER A 404	28.815	3.765	-33.139	1.00	0.00	C	C
ATOM	11716	OG SER A 404	29.220	2.454	-32.777	1.00	0.00	C	O
ATOM	11717	C SER A 404	27.854	5.182	-34.848	1.00	0.00	C	C
ATOM	11718	O SER A 404	28.429	6.124	-35.391	1.00	0.00	C	O
ATOM	11719	N SER A 405	26.581	5.255	-34.405	1.00	0.00	C	N
ATOM	11720	CA SER A 405	25.797	6.455	-34.349	1.00	0.00	C	C
ATOM	11721	CB SER A 405	26.562	7.581	-33.646	1.00	0.00	C	C
ATOM	11722	OG SER A 405	27.007	7.125	-32.381	1.00	0.00	C	O

ATOM	11723	C	SER A 405	25.440	6.958	-35.713	1.00	0.00	C	C
ATOM	11724	O	SER A 405	24.788	7.995	-35.830	1.00	0.00	C	O
ATOM	11725	N	GLU A 406	25.833	6.254	-36.785	1.00	0.00	C	N
ATOM	11726	CA	GLU A 406	25.469	6.746	-38.083	1.00	0.00	C	C
ATOM	11727	CB	GLU A 406	26.202	6.067	-39.250	1.00	0.00	C	C
ATOM	11728	CG	GLU A 406	27.599	6.646	-39.472	1.00	0.00	C	C
ATOM	11729	CD	GLU A 406	27.425	8.098	-39.907	1.00	0.00	C	C
ATOM	11730	OE1	GLU A 406	26.254	8.527	-40.088	1.00	0.00	C	O
ATOM	11731	OE2	GLU A 406	28.461	8.800	-40.063	1.00	0.00	C	O
ATOM	11732	C	GLU A 406	23.998	6.593	-38.292	1.00	0.00	C	C
ATOM	11733	O	GLU A 406	23.354	7.505	-38.805	1.00	0.00	C	O
ATOM	11734	N	THR A 407	23.433	5.442	-37.867	1.00	0.00	C	N
ATOM	11735	CA	THR A 407	22.051	5.046	-38.023	1.00	0.00	C	C
ATOM	11736	CB	THR A 407	21.111	6.218	-37.898	1.00	0.00	C	C
ATOM	11737	OG1	THR A 407	21.286	6.830	-36.629	1.00	0.00	C	O
ATOM	11738	CG2	THR A 407	19.654	5.749	-38.047	1.00	0.00	C	C
ATOM	11739	C	THR A 407	21.781	4.319	-39.330	1.00	0.00	C	C
ATOM	11740	O	THR A 407	20.755	3.636	-39.391	1.00	0.00	C	O
ATOM	11741	N	PRO A 408	22.565	4.384	-40.382	1.00	0.00	C	N
ATOM	11742	CD	PRO A 408	22.870	5.706	-40.910	1.00	0.00	C	C
ATOM	11743	CA	PRO A 408	22.339	3.477	-41.489	1.00	0.00	C	C
ATOM	11744	CB	PRO A 408	22.830	4.174	-42.756	1.00	0.00	C	C
ATOM	11745	CG	PRO A 408	22.689	5.657	-42.429	1.00	0.00	C	C
ATOM	11746	C	PRO A 408	23.014	2.147	-41.298	1.00	0.00	C	C
ATOM	11747	O	PRO A 408	22.997	1.344	-42.231	1.00	0.00	C	O
ATOM	11748	N	ASN A 409	23.604	1.895	-40.116	1.00	0.00	C	N
ATOM	11749	CA	ASN A 409	24.506	0.799	-39.878	1.00	0.00	C	C
ATOM	11750	CB	ASN A 409	25.157	0.829	-38.478	1.00	0.00	C	C
ATOM	11751	CG	ASN A 409	24.122	0.620	-37.377	1.00	0.00	C	C
ATOM	11752	OD1	ASN A 409	23.386	-0.365	-37.340	1.00	0.00	C	O
ATOM	11753	ND2	ASN A 409	24.074	1.585	-36.421	1.00	0.00	C	N
ATOM	11754	C	ASN A 409	23.951	-0.578	-40.089	1.00	0.00	C	C
ATOM	11755	O	ASN A 409	24.691	-1.449	-40.544	1.00	0.00	C	O
ATOM	11756	N	ARG A 410	22.657	-0.815	-39.810	1.00	0.00	C	N
ATOM	11757	CA	ARG A 410	22.093	-2.138	-39.821	1.00	0.00	C	C
ATOM	11758	CB	ARG A 410	20.575	-2.048	-39.606	1.00	0.00	C	C
ATOM	11759	CG	ARG A 410	20.273	-1.253	-38.330	1.00	0.00	C	C
ATOM	11760	CD	ARG A 410	18.848	-0.704	-38.211	1.00	0.00	C	C

ATOM	11761	NE	ARG	A	410	18.832	0.212	-37.031	1.00	0.00	C	N
ATOM	11762	CZ	ARG	A	410	18.187	1.416	-37.099	1.00	0.00	C	C
ATOM	11763	NH1	ARG	A	410	17.533	1.777	-38.239	1.00	0.00	C	N
ATOM	11764	NH2	ARG	A	410	18.197	2.259	-36.023	1.00	0.00	C	N
ATOM	11765	C	ARG	A	410	22.401	-2.774	-41.148	1.00	0.00	C	C
ATOM	11766	O	ARG	A	410	22.767	-3.948	-41.211	1.00	0.00	C	O
ATOM	11767	N	HSD	A	411	22.306	-2.000	-42.243	1.00	0.00	C	N
ATOM	11768	CA	HSD	A	411	22.589	-2.507	-43.558	1.00	0.00	C	C
ATOM	11769	CB	HSD	A	411	22.225	-1.514	-44.676	1.00	0.00	C	C
ATOM	11770	ND1	HSD	A	411	20.127	-0.161	-44.197	1.00	0.00	C	N
ATOM	11771	CG	HSD	A	411	20.753	-1.250	-44.761	1.00	0.00	C	C
ATOM	11772	CE1	HSD	A	411	18.805	-0.278	-44.479	1.00	0.00	C	C
ATOM	11773	NE2	HSD	A	411	18.537	-1.364	-45.185	1.00	0.00	C	N
ATOM	11774	CD2	HSD	A	411	19.767	-1.975	-45.360	1.00	0.00	C	C
ATOM	11775	C	HSD	A	411	24.043	-2.862	-43.733	1.00	0.00	C	C
ATOM	11776	O	HSD	A	411	24.363	-3.885	-44.336	1.00	0.00	C	O
ATOM	11777	N	ASP	A	412	24.971	-2.029	-43.222	1.00	0.00	C	N
ATOM	11778	CA	ASP	A	412	26.384	-2.217	-43.444	1.00	0.00	C	C
ATOM	11779	CB	ASP	A	412	27.217	-1.095	-42.795	1.00	0.00	C	C
ATOM	11780	CG	ASP	A	412	26.878	0.235	-43.452	1.00	0.00	C	C
ATOM	11781	OD1	ASP	A	412	26.956	0.317	-44.707	1.00	0.00	C	O
ATOM	11782	OD2	ASP	A	412	26.527	1.186	-42.703	1.00	0.00	C	O
ATOM	11783	C	ASP	A	412	26.851	-3.502	-42.818	1.00	0.00	C	C
ATOM	11784	O	ASP	A	412	27.609	-4.260	-43.420	1.00	0.00	C	O
ATOM	11785	N	MET	A	413	26.409	-3.777	-41.577	1.00	0.00	C	N
ATOM	11786	CA	MET	A	413	26.833	-4.951	-40.867	1.00	0.00	C	C
ATOM	11787	CB	MET	A	413	26.280	-5.027	-39.435	1.00	0.00	C	C
ATOM	11788	CG	MET	A	413	26.742	-6.277	-38.683	1.00	0.00	C	C
ATOM	11789	SD	MET	A	413	28.513	-6.284	-38.274	1.00	0.00	C	S
ATOM	11790	CE	MET	A	413	29.059	-6.986	-39.855	1.00	0.00	C	C
ATOM	11791	C	MET	A	413	26.337	-6.165	-41.592	1.00	0.00	C	C
ATOM	11792	O	MET	A	413	27.034	-7.173	-41.693	1.00	0.00	C	O
ATOM	11793	N	LEU	A	414	25.117	-6.073	-42.140	1.00	0.00	C	N
ATOM	11794	CA	LEU	A	414	24.442	-7.158	-42.792	1.00	0.00	C	C
ATOM	11795	CB	LEU	A	414	23.028	-6.794	-43.263	1.00	0.00	C	C
ATOM	11796	CG	LEU	A	414	22.405	-7.908	-44.115	1.00	0.00	C	C
ATOM	11797	CD1	LEU	A	414	22.315	-9.225	-43.332	1.00	0.00	C	C
ATOM	11798	CD2	LEU	A	414	21.066	-7.458	-44.717	1.00	0.00	C	C

ATOM 11799	C	LEU A 414	25.182	-7.619	-44.007	1.00	0.00	C	C
ATOM 11800	O	LEU A 414	25.062	-8.777	-44.401	1.00	0.00	C	O
ATOM 11801	N	LEU A 415	25.963	-6.722	-44.634	1.00	0.00	C	N
ATOM 11802	CA	LEU A 415	26.585	-6.982	-45.902	1.00	0.00	C	C
ATOM 11803	CB	LEU A 415	27.584	-5.878	-46.300	1.00	0.00	C	C
ATOM 11804	CG	LEU A 415	28.252	-6.100	-47.667	1.00	0.00	C	C
ATOM 11805	CD1	LEU A 415	27.207	-6.101	-48.793	1.00	0.00	C	C
ATOM 11806	CD2	LEU A 415	29.376	-5.083	-47.918	1.00	0.00	C	C
ATOM 11807	C	LEU A 415	27.298	-8.302	-45.905	1.00	0.00	C	C
ATOM 11808	O	LEU A 415	27.961	-8.689	-44.943	1.00	0.00	C	O
ATOM 11809	N	VAL A 416	27.148	-9.045	-47.023	1.00	0.00	C	N
ATOM 11810	CA	VAL A 416	27.713	-10.355	-47.172	1.00	0.00	C	C
ATOM 11811	CB	VAL A 416	26.665	-11.434	-47.107	1.00	0.00	C	C
ATOM 11812	CG1	VAL A 416	25.960	-11.350	-45.743	1.00	0.00	C	C
ATOM 11813	CG2	VAL A 416	25.712	-11.279	-48.305	1.00	0.00	C	C
ATOM 11814	C	VAL A 416	28.324	-10.421	-48.539	1.00	0.00	C	C
ATOM 11815	O	VAL A 416	28.183	-9.495	-49.334	1.00	0.00	C	O
ATOM 11816	N	GLU A 417	29.023	-11.524	-48.862	1.00	0.00	C	N
ATOM 11817	CA	GLU A 417	29.226	-12.609	-47.953	1.00	0.00	C	C
ATOM 11818	CB	GLU A 417	29.756	-13.892	-48.600	1.00	0.00	C	C
ATOM 11819	CG	GLU A 417	29.774	-15.085	-47.639	1.00	0.00	C	C
ATOM 11820	CD	GLU A 417	28.326	-15.442	-47.315	1.00	0.00	C	C
ATOM 11821	OE1	GLU A 417	27.681	-14.663	-46.566	1.00	0.00	C	O
ATOM 11822	OE2	GLU A 417	27.847	-16.495	-47.814	1.00	0.00	C	O
ATOM 11823	C	GLU A 417	30.196	-12.257	-46.881	1.00	0.00	C	C
ATOM 11824	O	GLU A 417	29.941	-12.632	-45.750	1.00	0.00	C	O
ATOM 11825	N	PRO A 418	31.273	-11.559	-47.105	1.00	0.00	C	N
ATOM 11826	CD	PRO A 418	31.886	-11.466	-48.421	1.00	0.00	C	C
ATOM 11827	CA	PRO A 418	32.256	-11.449	-46.060	1.00	0.00	C	C
ATOM 11828	CB	PRO A 418	33.471	-10.783	-46.698	1.00	0.00	C	C
ATOM 11829	CG	PRO A 418	33.387	-11.238	-48.164	1.00	0.00	C	C
ATOM 11830	C	PRO A 418	31.879	-10.840	-44.757	1.00	0.00	C	C
ATOM 11831	O	PRO A 418	32.333	-11.352	-43.743	1.00	0.00	C	O
ATOM 11832	N	LEU A 419	31.086	-9.770	-44.694	1.00	0.00	C	N
ATOM 11833	CA	LEU A 419	30.882	-9.240	-43.376	1.00	0.00	C	C
ATOM 11834	CB	LEU A 419	30.082	-7.927	-43.391	1.00	0.00	C	C
ATOM 11835	CG	LEU A 419	30.747	-6.822	-44.235	1.00	0.00	C	C
ATOM 11836	CD1	LEU A 419	29.949	-5.511	-44.165	1.00	0.00	C	C

ATOM 11837	CD2 LEU A 419	32.230	-6.644	-43.872	1.00	0.00	C	C
ATOM 11838	C LEU A 419	30.136	-10.253	-42.559	1.00	0.00	C	C
ATOM 11839	O LEU A 419	30.520	-10.557	-41.430	1.00	0.00	C	O
ATOM 11840	N ASN A 420	29.054	-10.820	-43.117	1.00	0.00	C	N
ATOM 11841	CA ASN A 420	28.301	-11.814	-42.400	1.00	0.00	C	C
ATOM 11842	CB ASN A 420	26.977	-12.171	-43.100	1.00	0.00	C	C
ATOM 11843	CG ASN A 420	26.243	-13.233	-42.280	1.00	0.00	C	C
ATOM 11844	OD1 ASN A 420	26.680	-14.374	-42.192	1.00	0.00	C	O
ATOM 11845	ND2 ASN A 420	25.088	-12.841	-41.671	1.00	0.00	C	N
ATOM 11846	C ASN A 420	29.093	-13.080	-42.265	1.00	0.00	C	C
ATOM 11847	O ASN A 420	29.189	-13.661	-41.187	1.00	0.00	C	O
ATOM 11848	N ARG A 421	29.692	-13.527	-43.378	1.00	0.00	C	N
ATOM 11849	CA ARG A 421	30.405	-14.764	-43.509	1.00	0.00	C	C
ATOM 11850	CB ARG A 421	30.945	-15.044	-44.923	1.00	0.00	C	C
ATOM 11851	CG ARG A 421	31.727	-16.361	-44.972	1.00	0.00	C	C
ATOM 11852	CD ARG A 421	32.912	-16.364	-45.941	1.00	0.00	C	C
ATOM 11853	NE ARG A 421	32.387	-16.422	-47.330	1.00	0.00	C	N
ATOM 11854	CZ ARG A 421	33.257	-16.650	-48.358	1.00	0.00	C	C
ATOM 11855	NH1 ARG A 421	34.591	-16.779	-48.100	1.00	0.00	C	N
ATOM 11856	NH2 ARG A 421	32.794	-16.749	-49.640	1.00	0.00	C	N
ATOM 11857	C ARG A 421	31.614	-14.772	-42.636	1.00	0.00	C	C
ATOM 11858	O ARG A 421	31.889	-15.754	-41.952	1.00	0.00	C	O
ATOM 11859	N LEU A 422	32.366	-13.664	-42.636	1.00	0.00	C	N
ATOM 11860	CA LEU A 422	33.620	-13.584	-41.946	1.00	0.00	C	C
ATOM 11861	CB LEU A 422	34.372	-12.249	-42.175	1.00	0.00	C	C
ATOM 11862	CG LEU A 422	35.816	-12.140	-41.628	1.00	0.00	C	C
ATOM 11863	CD1 LEU A 422	36.459	-10.809	-42.051	1.00	0.00	C	C
ATOM 11864	CD2 LEU A 422	35.895	-12.315	-40.108	1.00	0.00	C	C
ATOM 11865	C LEU A 422	33.374	-13.754	-40.483	1.00	0.00	C	C
ATOM 11866	O LEU A 422	34.113	-14.473	-39.812	1.00	0.00	C	O
ATOM 11867	N LEU A 423	32.327	-13.106	-39.945	1.00	0.00	C	N
ATOM 11868	CA LEU A 423	32.097	-13.188	-38.530	1.00	0.00	C	C
ATOM 11869	CB LEU A 423	30.979	-12.259	-38.029	1.00	0.00	C	C
ATOM 11870	CG LEU A 423	31.431	-10.793	-37.874	1.00	0.00	C	C
ATOM 11871	CD1 LEU A 423	32.403	-10.643	-36.694	1.00	0.00	C	C
ATOM 11872	CD2 LEU A 423	32.031	-10.236	-39.171	1.00	0.00	C	C
ATOM 11873	C LEU A 423	31.787	-14.593	-38.113	1.00	0.00	C	C
ATOM 11874	O LEU A 423	32.244	-15.048	-37.066	1.00	0.00	C	O

ATOM 11875	N	GLN A 424	31.007	-15.325	-38.923	1.00	0.00	C	N
ATOM 11876	CA	GLN A 424	30.628	-16.657	-38.547	1.00	0.00	C	C
ATOM 11877	CB	GLN A 424	29.703	-17.307	-39.593	1.00	0.00	C	C
ATOM 11878	CG	GLN A 424	29.224	-18.710	-39.219	1.00	0.00	C	C
ATOM 11879	CD	GLN A 424	28.264	-18.562	-38.052	1.00	0.00	C	C
ATOM 11880	OE1	GLN A 424	28.346	-17.598	-37.291	1.00	0.00	C	O
ATOM 11881	NE2	GLN A 424	27.324	-19.536	-37.905	1.00	0.00	C	N
ATOM 11882	C	GLN A 424	31.863	-17.492	-38.440	1.00	0.00	C	C
ATOM 11883	O	GLN A 424	32.023	-18.277	-37.506	1.00	0.00	C	O
ATOM 11884	N	ASP A 425	32.783	-17.319	-39.402	1.00	0.00	C	N
ATOM 11885	CA	ASP A 425	33.975	-18.110	-39.445	1.00	0.00	C	C
ATOM 11886	CB	ASP A 425	34.817	-17.788	-40.691	1.00	0.00	C	C
ATOM 11887	CG	ASP A 425	35.767	-18.944	-40.962	1.00	0.00	C	C
ATOM 11888	OD1	ASP A 425	36.354	-19.479	-39.987	1.00	0.00	C	O
ATOM 11889	OD2	ASP A 425	35.917	-19.304	-42.161	1.00	0.00	C	O
ATOM 11890	C	ASP A 425	34.797	-17.824	-38.227	1.00	0.00	C	C
ATOM 11891	O	ASP A 425	35.334	-18.741	-37.605	1.00	0.00	C	O
ATOM 11892	N	LYS A 426	34.926	-16.538	-37.851	1.00	0.00	C	N
ATOM 11893	CA	LYS A 426	35.747	-16.212	-36.720	1.00	0.00	C	C
ATOM 11894	CB	LYS A 426	35.985	-14.703	-36.539	1.00	0.00	C	C
ATOM 11895	CG	LYS A 426	37.000	-14.123	-37.527	1.00	0.00	C	C
ATOM 11896	CD	LYS A 426	37.112	-12.600	-37.443	1.00	0.00	C	C
ATOM 11897	CE	LYS A 426	38.219	-12.012	-38.320	1.00	0.00	C	C
ATOM 11898	NZ	LYS A 426	38.037	-10.547	-38.439	1.00	0.00	C	N
ATOM 11899	C	LYS A 426	35.173	-16.728	-35.429	1.00	0.00	C	C
ATOM 11900	O	LYS A 426	35.898	-17.288	-34.609	1.00	0.00	C	O
ATOM 11901	N	TRP A 427	33.868	-16.499	-35.195	1.00	0.00	C	N
ATOM 11902	CA	TRP A 427	33.222	-16.835	-33.951	1.00	0.00	C	C
ATOM 11903	CB	TRP A 427	31.887	-16.065	-33.781	1.00	0.00	C	C
ATOM 11904	CG	TRP A 427	31.287	-16.078	-32.389	1.00	0.00	C	C
ATOM 11905	CD1	TRP A 427	31.781	-15.474	-31.276	1.00	0.00	C	C
ATOM 11906	NE1	TRP A 427	30.953	-15.688	-30.204	1.00	0.00	C	N
ATOM 11907	CE2	TRP A 427	29.876	-16.427	-30.628	1.00	0.00	C	C
ATOM 11908	CD2	TRP A 427	30.044	-16.687	-31.991	1.00	0.00	C	C
ATOM 11909	CE3	TRP A 427	29.117	-17.396	-32.695	1.00	0.00	C	C
ATOM 11910	CZ3	TRP A 427	28.014	-17.852	-32.005	1.00	0.00	C	C
ATOM 11911	CZ2	TRP A 427	28.778	-16.876	-29.949	1.00	0.00	C	C
ATOM 11912	CH2	TRP A 427	27.848	-17.601	-30.658	1.00	0.00	C	C

ATOM	11913	C	TRP A 427	32.950	-18.295	-33.794	1.00	0.00	C	C
ATOM	11914	O	TRP A 427	33.269	-18.883	-32.763	1.00	0.00	C	O
ATOM	11915	N	ASP A 428	32.374	-18.920	-34.836	1.00	0.00	C	N
ATOM	11916	CA	ASP A 428	31.917	-20.268	-34.714	1.00	0.00	C	C
ATOM	11917	CB	ASP A 428	31.353	-20.813	-36.038	1.00	0.00	C	C
ATOM	11918	CG	ASP A 428	30.752	-22.197	-35.817	1.00	0.00	C	C
ATOM	11919	OD1	ASP A 428	30.891	-22.748	-34.690	1.00	0.00	C	O
ATOM	11920	OD2	ASP A 428	30.133	-22.721	-36.781	1.00	0.00	C	O
ATOM	11921	C	ASP A 428	33.066	-21.119	-34.332	1.00	0.00	C	C
ATOM	11922	O	ASP A 428	32.958	-21.925	-33.410	1.00	0.00	C	O
ATOM	11923	N	ARG A 429	34.202	-20.988	-35.031	1.00	0.00	C	N
ATOM	11924	CA	ARG A 429	35.202	-21.899	-34.605	1.00	0.00	C	C
ATOM	11925	CB	ARG A 429	36.412	-21.979	-35.551	1.00	0.00	C	C
ATOM	11926	CG	ARG A 429	37.122	-20.652	-35.806	1.00	0.00	C	C
ATOM	11927	CD	ARG A 429	38.319	-20.792	-36.750	1.00	0.00	C	C
ATOM	11928	NE	ARG A 429	37.810	-21.377	-38.022	1.00	0.00	C	N
ATOM	11929	CZ	ARG A 429	38.644	-22.102	-38.825	1.00	0.00	C	C
ATOM	11930	NH1	ARG A 429	39.939	-22.318	-38.452	1.00	0.00	C	N
ATOM	11931	NH2	ARG A 429	38.174	-22.617	-39.999	1.00	0.00	C	N
ATOM	11932	C	ARG A 429	35.677	-21.611	-33.207	1.00	0.00	C	C
ATOM	11933	O	ARG A 429	35.484	-22.440	-32.321	1.00	0.00	C	O
ATOM	11934	N	PHE A 430	36.367	-20.465	-32.993	1.00	0.00	C	N
ATOM	11935	CA	PHE A 430	36.917	-20.096	-31.708	1.00	0.00	C	C
ATOM	11936	CB	PHE A 430	38.385	-19.639	-31.824	1.00	0.00	C	C
ATOM	11937	CG	PHE A 430	38.466	-18.586	-32.875	1.00	0.00	C	C
ATOM	11938	CD1	PHE A 430	38.177	-17.277	-32.587	1.00	0.00	C	C
ATOM	11939	CE1	PHE A 430	38.252	-16.321	-33.571	1.00	0.00	C	C
ATOM	11940	CZ	PHE A 430	38.618	-16.656	-34.851	1.00	0.00	C	C
ATOM	11941	CD2	PHE A 430	38.831	-18.913	-34.160	1.00	0.00	C	C
ATOM	11942	CE2	PHE A 430	38.906	-17.964	-35.151	1.00	0.00	C	C
ATOM	11943	C	PHE A 430	36.200	-19.121	-30.793	1.00	0.00	C	C
ATOM	11944	O	PHE A 430	36.168	-19.323	-29.579	1.00	0.00	C	O
ATOM	11945	N	VAL A 431	35.604	-18.044	-31.346	1.00	0.00	C	N
ATOM	11946	CA	VAL A 431	35.263	-16.869	-30.569	1.00	0.00	C	C
ATOM	11947	CB	VAL A 431	34.708	-15.739	-31.378	1.00	0.00	C	C
ATOM	11948	CG1	VAL A 431	34.437	-14.565	-30.419	1.00	0.00	C	C
ATOM	11949	CG2	VAL A 431	35.653	-15.416	-32.538	1.00	0.00	C	C
ATOM	11950	C	VAL A 431	34.271	-17.098	-29.477	1.00	0.00	C	C

ATOM	11951	O	VAL A 431	34.413	-16.551	-28.385	1.00	0.00	C	O
ATOM	11952	N	LYS A 432	33.224	-17.894	-29.729	1.00	0.00	C	N
ATOM	11953	CA	LYS A 432	32.196	-18.046	-28.749	1.00	0.00	C	C
ATOM	11954	CB	LYS A 432	31.100	-19.024	-29.199	1.00	0.00	C	C
ATOM	11955	CG	LYS A 432	31.634	-20.424	-29.504	1.00	0.00	C	C
ATOM	11956	CD	LYS A 432	30.538	-21.467	-29.731	1.00	0.00	C	C
ATOM	11957	CE	LYS A 432	31.078	-22.839	-30.138	1.00	0.00	C	C
ATOM	11958	NZ	LYS A 432	29.954	-23.772	-30.372	1.00	0.00	C	N
ATOM	11959	C	LYS A 432	32.799	-18.572	-27.490	1.00	0.00	C	C
ATOM	11960	O	LYS A 432	32.439	-18.142	-26.394	1.00	0.00	C	O
ATOM	11961	N	ARG A 433	33.751	-19.507	-27.613	1.00	0.00	C	N
ATOM	11962	CA	ARG A 433	34.347	-20.116	-26.463	1.00	0.00	C	C
ATOM	11963	CB	ARG A 433	35.318	-21.247	-26.834	1.00	0.00	C	C
ATOM	11964	CG	ARG A 433	35.764	-22.078	-25.629	1.00	0.00	C	C
ATOM	11965	CD	ARG A 433	36.319	-23.451	-26.011	1.00	0.00	C	C
ATOM	11966	NE	ARG A 433	35.231	-24.168	-26.738	1.00	0.00	C	N
ATOM	11967	CZ	ARG A 433	34.278	-24.854	-26.041	1.00	0.00	C	C
ATOM	11968	NH1	ARG A 433	34.357	-24.945	-24.683	1.00	0.00	C	N
ATOM	11969	NH2	ARG A 433	33.240	-25.439	-26.708	1.00	0.00	C	N
ATOM	11970	C	ARG A 433	35.089	-19.098	-25.648	1.00	0.00	C	C
ATOM	11971	O	ARG A 433	35.027	-19.129	-24.420	1.00	0.00	C	O
ATOM	11972	N	ILE A 434	35.803	-18.158	-26.305	1.00	0.00	C	N
ATOM	11973	CA	ILE A 434	36.633	-17.211	-25.607	1.00	0.00	C	C
ATOM	11974	CB	ILE A 434	37.456	-16.330	-26.509	1.00	0.00	C	C
ATOM	11975	CG2	ILE A 434	38.245	-17.266	-27.433	1.00	0.00	C	C
ATOM	11976	CG1	ILE A 434	36.601	-15.329	-27.297	1.00	0.00	C	C
ATOM	11977	CD	ILE A 434	37.423	-14.247	-27.998	1.00	0.00	C	C
ATOM	11978	C	ILE A 434	35.796	-16.305	-24.757	1.00	0.00	C	C
ATOM	11979	O	ILE A 434	36.165	-15.978	-23.632	1.00	0.00	C	O
ATOM	11980	N	PHE A 435	34.645	-15.869	-25.291	1.00	0.00	C	N
ATOM	11981	CA	PHE A 435	33.771	-14.920	-24.664	1.00	0.00	C	C
ATOM	11982	CB	PHE A 435	32.649	-14.544	-25.644	1.00	0.00	C	C
ATOM	11983	CG	PHE A 435	31.817	-13.468	-25.062	1.00	0.00	C	C
ATOM	11984	CD1	PHE A 435	32.377	-12.271	-24.678	1.00	0.00	C	C
ATOM	11985	CE1	PHE A 435	31.595	-11.270	-24.151	1.00	0.00	C	C
ATOM	11986	CZ	PHE A 435	30.242	-11.463	-24.030	1.00	0.00	C	C
ATOM	11987	CD2	PHE A 435	30.463	-13.649	-24.961	1.00	0.00	C	C
ATOM	11988	CE2	PHE A 435	29.684	-12.651	-24.442	1.00	0.00	C	C

ATOM	11989	C	PHE A 435	33.211	-15.463	-23.379	1.00	0.00	C	C
ATOM	11990	O	PHE A 435	33.160	-14.753	-22.373	1.00	0.00	C	O
ATOM	11991	N	TYR A 436	32.792	-16.741	-23.366	1.00	0.00	C	N
ATOM	11992	CA	TYR A 436	32.218	-17.335	-22.189	1.00	0.00	C	C
ATOM	11993	CB	TYR A 436	31.796	-18.801	-22.384	1.00	0.00	C	C
ATOM	11994	CG	TYR A 436	30.550	-18.837	-23.194	1.00	0.00	C	C
ATOM	11995	CD1	TYR A 436	29.329	-18.698	-22.573	1.00	0.00	C	C
ATOM	11996	CE1	TYR A 436	28.164	-18.734	-23.295	1.00	0.00	C	C
ATOM	11997	CZ	TYR A 436	28.216	-18.911	-24.656	1.00	0.00	C	C
ATOM	11998	OH	TYR A 436	27.023	-18.954	-25.404	1.00	0.00	C	O
ATOM	11999	CD2	TYR A 436	30.594	-19.009	-24.557	1.00	0.00	C	C
ATOM	12000	CE2	TYR A 436	29.429	-19.046	-25.288	1.00	0.00	C	C
ATOM	12001	C	TYR A 436	33.225	-17.321	-21.085	1.00	0.00	C	C
ATOM	12002	O	TYR A 436	32.885	-17.053	-19.934	1.00	0.00	C	O
ATOM	12003	N	PHE A 437	34.497	-17.613	-21.409	1.00	0.00	C	N
ATOM	12004	CA	PHE A 437	35.512	-17.645	-20.400	1.00	0.00	C	C
ATOM	12005	CB	PHE A 437	36.908	-17.993	-20.953	1.00	0.00	C	C
ATOM	12006	CG	PHE A 437	37.887	-17.933	-19.828	1.00	0.00	C	C
ATOM	12007	CD1	PHE A 437	38.062	-19.005	-18.983	1.00	0.00	C	C
ATOM	12008	CE1	PHE A 437	38.964	-18.942	-17.947	1.00	0.00	C	C
ATOM	12009	CZ	PHE A 437	39.703	-17.803	-17.742	1.00	0.00	C	C
ATOM	12010	CD2	PHE A 437	38.626	-16.793	-19.610	1.00	0.00	C	C
ATOM	12011	CE2	PHE A 437	39.534	-16.725	-18.577	1.00	0.00	C	C
ATOM	12012	C	PHE A 437	35.580	-16.289	-19.781	1.00	0.00	C	C
ATOM	12013	O	PHE A 437	35.682	-16.163	-18.562	1.00	0.00	C	O
ATOM	12014	N	ASN A 438	35.506	-15.233	-20.609	1.00	0.00	C	N
ATOM	12015	CA	ASN A 438	35.599	-13.901	-20.088	1.00	0.00	C	C
ATOM	12016	CB	ASN A 438	35.458	-12.826	-21.182	1.00	0.00	C	C
ATOM	12017	CG	ASN A 438	36.615	-12.969	-22.158	1.00	0.00	C	C
ATOM	12018	OD1	ASN A 438	37.645	-13.557	-21.836	1.00	0.00	C	O
ATOM	12019	ND2	ASN A 438	36.444	-12.415	-23.390	1.00	0.00	C	N
ATOM	12020	C	ASN A 438	34.468	-13.690	-19.128	1.00	0.00	C	C
ATOM	12021	O	ASN A 438	34.664	-13.172	-18.031	1.00	0.00	C	O
ATOM	12022	N	PHE A 439	33.248	-14.106	-19.519	1.00	0.00	C	N
ATOM	12023	CA	PHE A 439	32.077	-13.897	-18.712	1.00	0.00	C	C
ATOM	12024	CB	PHE A 439	30.785	-14.365	-19.413	1.00	0.00	C	C
ATOM	12025	CG	PHE A 439	29.659	-14.398	-18.430	1.00	0.00	C	C
ATOM	12026	CD1	PHE A 439	29.196	-13.249	-17.831	1.00	0.00	C	C

ATOM	12027	CE1 PHE A 439	28.153	-13.296	-16.936	1.00	0.00	C	C
ATOM	12028	CZ PHE A 439	27.550	-14.492	-16.637	1.00	0.00	C	C
ATOM	12029	CD2 PHE A 439	29.038	-15.590	-18.135	1.00	0.00	C	C
ATOM	12030	CE2 PHE A 439	27.993	-15.642	-17.241	1.00	0.00	C	C
ATOM	12031	C PHE A 439	32.196	-14.616	-17.408	1.00	0.00	C	C
ATOM	12032	O PHE A 439	31.922	-14.047	-16.353	1.00	0.00	C	O
ATOM	12033	N LEU A 440	32.622	-15.891	-17.438	1.00	0.00	C	N
ATOM	12034	CA LEU A 440	32.686	-16.649	-16.224	1.00	0.00	C	C
ATOM	12035	CB LEU A 440	33.077	-18.122	-16.443	1.00	0.00	C	C
ATOM	12036	CG LEU A 440	32.028	-18.910	-17.250	1.00	0.00	C	C
ATOM	12037	CD1 LEU A 440	32.417	-20.390	-17.386	1.00	0.00	C	C
ATOM	12038	CD2 LEU A 440	30.618	-18.710	-16.670	1.00	0.00	C	C
ATOM	12039	C LEU A 440	33.688	-16.036	-15.299	1.00	0.00	C	C
ATOM	12040	O LEU A 440	33.431	-15.906	-14.104	1.00	0.00	C	O
ATOM	12041	N VAL A 441	34.849	-15.615	-15.834	1.00	0.00	C	N
ATOM	12042	CA VAL A 441	35.887	-15.074	-14.999	1.00	0.00	C	C
ATOM	12043	CB VAL A 441	37.112	-14.671	-15.759	1.00	0.00	C	C
ATOM	12044	CG1 VAL A 441	38.095	-13.993	-14.789	1.00	0.00	C	C
ATOM	12045	CG2 VAL A 441	37.686	-15.924	-16.430	1.00	0.00	C	C
ATOM	12046	C VAL A 441	35.372	-13.848	-14.316	1.00	0.00	C	C
ATOM	12047	O VAL A 441	35.653	-13.615	-13.142	1.00	0.00	C	O
ATOM	12048	N TYR A 442	34.594	-13.034	-15.049	1.00	0.00	C	N
ATOM	12049	CA TYR A 442	34.060	-11.803	-14.546	1.00	0.00	C	C
ATOM	12050	CB TYR A 442	33.255	-11.065	-15.630	1.00	0.00	C	C
ATOM	12051	CG TYR A 442	32.691	-9.808	-15.062	1.00	0.00	C	C
ATOM	12052	CD1 TYR A 442	33.420	-8.641	-15.082	1.00	0.00	C	C
ATOM	12053	CE1 TYR A 442	32.901	-7.479	-14.564	1.00	0.00	C	C
ATOM	12054	CZ TYR A 442	31.641	-7.478	-14.019	1.00	0.00	C	C
ATOM	12055	OH TYR A 442	31.099	-6.289	-13.484	1.00	0.00	C	O
ATOM	12056	CD2 TYR A 442	31.432	-9.798	-14.507	1.00	0.00	C	C
ATOM	12057	CE2 TYR A 442	30.908	-8.640	-13.986	1.00	0.00	C	C
ATOM	12058	C TYR A 442	33.151	-12.091	-13.392	1.00	0.00	C	C
ATOM	12059	O TYR A 442	33.178	-11.384	-12.385	1.00	0.00	C	O
ATOM	12060	N CYS A 443	32.340	-13.157	-13.498	1.00	0.00	C	N
ATOM	12061	CA CYS A 443	31.362	-13.467	-12.494	1.00	0.00	C	C
ATOM	12062	CB CYS A 443	30.568	-14.740	-12.822	1.00	0.00	C	C
ATOM	12063	SG CYS A 443	29.695	-14.598	-14.406	1.00	0.00	C	S
ATOM	12064	C CYS A 443	32.042	-13.701	-11.178	1.00	0.00	C	C

ATOM	12065	O	CYS A 443	31.565	-13.248	-10.139	1.00	0.00	C	O
ATOM	12066	N	LEU A 444	33.186	-14.404	-11.196	1.00	0.00	C	N
ATOM	12067	CA	LEU A 444	33.933	-14.739	-10.014	1.00	0.00	C	C
ATOM	12068	CB	LEU A 444	35.167	-15.588	-10.390	1.00	0.00	C	C
ATOM	12069	CG	LEU A 444	36.136	-15.952	-9.251	1.00	0.00	C	C
ATOM	12070	CD1	LEU A 444	36.981	-14.743	-8.825	1.00	0.00	C	C
ATOM	12071	CD2	LEU A 444	35.405	-16.621	-8.079	1.00	0.00	C	C
ATOM	12072	C	LEU A 444	34.375	-13.470	-9.350	1.00	0.00	C	C
ATOM	12073	O	LEU A 444	34.368	-13.342	-8.128	1.00	0.00	C	O
ATOM	12074	N	TYR A 445	34.768	-12.475	-10.150	1.00	0.00	C	N
ATOM	12075	CA	TYR A 445	35.221	-11.240	-9.595	1.00	0.00	C	C
ATOM	12076	CB	TYR A 445	35.647	-10.272	-10.719	1.00	0.00	C	C
ATOM	12077	CG	TYR A 445	35.853	-8.894	-10.197	1.00	0.00	C	C
ATOM	12078	CD1	TYR A 445	37.041	-8.526	-9.613	1.00	0.00	C	C
ATOM	12079	CE1	TYR A 445	37.220	-7.246	-9.139	1.00	0.00	C	C
ATOM	12080	CZ	TYR A 445	36.207	-6.322	-9.244	1.00	0.00	C	C
ATOM	12081	OH	TYR A 445	36.390	-5.009	-8.761	1.00	0.00	C	O
ATOM	12082	CD2	TYR A 445	34.844	-7.960	-10.294	1.00	0.00	C	C
ATOM	12083	CE2	TYR A 445	35.017	-6.681	-9.823	1.00	0.00	C	C
ATOM	12084	C	TYR A 445	34.099	-10.640	-8.809	1.00	0.00	C	C
ATOM	12085	O	TYR A 445	34.298	-10.113	-7.715	1.00	0.00	C	O
ATOM	12086	N	MET A 446	32.877	-10.719	-9.357	1.00	0.00	C	N
ATOM	12087	CA	MET A 446	31.730	-10.110	-8.750	1.00	0.00	C	C
ATOM	12088	CB	MET A 446	30.488	-10.216	-9.644	1.00	0.00	C	C
ATOM	12089	CG	MET A 446	30.733	-9.627	-11.032	1.00	0.00	C	C
ATOM	12090	SD	MET A 446	31.555	-8.009	-11.001	1.00	0.00	C	S
ATOM	12091	CE	MET A 446	30.425	-7.251	-9.803	1.00	0.00	C	C
ATOM	12092	C	MET A 446	31.412	-10.745	-7.434	1.00	0.00	C	C
ATOM	12093	O	MET A 446	31.091	-10.054	-6.468	1.00	0.00	C	O
ATOM	12094	N	ILE A 447	31.493	-12.084	-7.352	1.00	0.00	C	N
ATOM	12095	CA	ILE A 447	31.125	-12.768	-6.151	1.00	0.00	C	C
ATOM	12096	CB	ILE A 447	31.142	-14.259	-6.316	1.00	0.00	C	C
ATOM	12097	CG2	ILE A 447	30.105	-14.615	-7.395	1.00	0.00	C	C
ATOM	12098	CG1	ILE A 447	32.557	-14.740	-6.646	1.00	0.00	C	C
ATOM	12099	CD	ILE A 447	32.690	-16.245	-6.839	1.00	0.00	C	C
ATOM	12100	C	ILE A 447	32.061	-12.356	-5.055	1.00	0.00	C	C
ATOM	12101	O	ILE A 447	31.643	-12.157	-3.915	1.00	0.00	C	O
ATOM	12102	N	ILE A 448	33.356	-12.221	-5.375	1.00	0.00	C	N

ATOM	12103	CA	ILE A 448	34.338	-11.851	-4.399	1.00	0.00	C	C
ATOM	12104	CB	ILE A 448	35.730	-11.865	-4.946	1.00	0.00	C	C
ATOM	12105	CG2	ILE A 448	36.682	-11.349	-3.856	1.00	0.00	C	C
ATOM	12106	CG1	ILE A 448	36.078	-13.272	-5.443	1.00	0.00	C	C
ATOM	12107	CD	ILE A 448	37.337	-13.285	-6.295	1.00	0.00	C	C
ATOM	12108	C	ILE A 448	34.102	-10.454	-3.904	1.00	0.00	C	C
ATOM	12109	O	ILE A 448	34.196	-10.194	-2.706	1.00	0.00	C	O
ATOM	12110	N	PHE A 449	33.791	-9.511	-4.813	1.00	0.00	C	N
ATOM	12111	CA	PHE A 449	33.655	-8.131	-4.426	1.00	0.00	C	C
ATOM	12112	CB	PHE A 449	33.303	-7.221	-5.619	1.00	0.00	C	C
ATOM	12113	CG	PHE A 449	33.406	-5.787	-5.208	1.00	0.00	C	C
ATOM	12114	CD1	PHE A 449	32.414	-5.185	-4.471	1.00	0.00	C	C
ATOM	12115	CE1	PHE A 449	32.513	-3.862	-4.105	1.00	0.00	C	C
ATOM	12116	CZ	PHE A 449	33.610	-3.123	-4.474	1.00	0.00	C	C
ATOM	12117	CD2	PHE A 449	34.501	-5.036	-5.578	1.00	0.00	C	C
ATOM	12118	CE2	PHE A 449	34.607	-3.713	-5.215	1.00	0.00	C	C
ATOM	12119	C	PHE A 449	32.540	-8.023	-3.432	1.00	0.00	C	C
ATOM	12120	O	PHE A 449	32.663	-7.333	-2.421	1.00	0.00	C	O
ATOM	12121	N	THR A 450	31.407	-8.688	-3.720	1.00	0.00	C	N
ATOM	12122	CA	THR A 450	30.259	-8.664	-2.863	1.00	0.00	C	C
ATOM	12123	CB	THR A 450	29.047	-9.274	-3.506	1.00	0.00	C	C
ATOM	12124	OG1	THR A 450	27.894	-9.033	-2.710	1.00	0.00	C	O
ATOM	12125	CG2	THR A 450	29.275	-10.786	-3.679	1.00	0.00	C	C
ATOM	12126	C	THR A 450	30.532	-9.401	-1.589	1.00	0.00	C	C
ATOM	12127	O	THR A 450	30.114	-8.965	-0.523	1.00	0.00	C	O
ATOM	12128	N	MET A 451	31.240	-10.545	-1.658	1.00	0.00	C	N
ATOM	12129	CA	MET A 451	31.440	-11.332	-0.473	1.00	0.00	C	C
ATOM	12130	CB	MET A 451	32.193	-12.648	-0.727	1.00	0.00	C	C
ATOM	12131	CG	MET A 451	31.349	-13.699	-1.445	1.00	0.00	C	C
ATOM	12132	SD	MET A 451	32.179	-15.299	-1.673	1.00	0.00	C	S
ATOM	12133	CE	MET A 451	30.681	-16.165	-2.225	1.00	0.00	C	C
ATOM	12134	C	MET A 451	32.218	-10.567	0.548	1.00	0.00	C	C
ATOM	12135	O	MET A 451	31.861	-10.556	1.724	1.00	0.00	C	O
ATOM	12136	N	ALA A 452	33.307	-9.900	0.133	1.00	0.00	C	N
ATOM	12137	CA	ALA A 452	34.090	-9.185	1.093	1.00	0.00	C	C
ATOM	12138	CB	ALA A 452	35.329	-8.515	0.478	1.00	0.00	C	C
ATOM	12139	C	ALA A 452	33.237	-8.101	1.660	1.00	0.00	C	C
ATOM	12140	O	ALA A 452	33.231	-7.867	2.867	1.00	0.00	C	O

ATOM	12141	N	ALA A 453	32.472	-7.419	0.791	1.00	0.00	C	N
ATOM	12142	CA	ALA A 453	31.654	-6.317	1.209	1.00	0.00	C	C
ATOM	12143	CB	ALA A 453	30.924	-5.646	0.032	1.00	0.00	C	C
ATOM	12144	C	ALA A 453	30.612	-6.798	2.173	1.00	0.00	C	C
ATOM	12145	O	ALA A 453	30.360	-6.161	3.193	1.00	0.00	C	O
ATOM	12146	N	TYR A 454	29.982	-7.948	1.872	1.00	0.00	C	N
ATOM	12147	CA	TYR A 454	28.941	-8.489	2.700	1.00	0.00	C	C
ATOM	12148	CB	TYR A 454	28.339	-9.776	2.107	1.00	0.00	C	C
ATOM	12149	CG	TYR A 454	27.468	-10.395	3.148	1.00	0.00	C	C
ATOM	12150	CD1	TYR A 454	26.160	-9.998	3.305	1.00	0.00	C	C
ATOM	12151	CE1	TYR A 454	25.367	-10.576	4.269	1.00	0.00	C	C
ATOM	12152	CZ	TYR A 454	25.878	-11.558	5.082	1.00	0.00	C	C
ATOM	12153	OH	TYR A 454	25.059	-12.148	6.068	1.00	0.00	C	O
ATOM	12154	CD2	TYR A 454	27.971	-11.378	3.968	1.00	0.00	C	C
ATOM	12155	CE2	TYR A 454	27.185	-11.959	4.932	1.00	0.00	C	C
ATOM	12156	C	TYR A 454	29.514	-8.853	4.039	1.00	0.00	C	C
ATOM	12157	O	TYR A 454	28.949	-8.534	5.083	1.00	0.00	C	O
ATOM	12158	N	TYR A 455	30.661	-9.548	4.014	1.00	0.00	C	N
ATOM	12159	CA	TYR A 455	31.388	-10.059	5.142	1.00	0.00	C	C
ATOM	12160	CB	TYR A 455	32.417	-11.149	4.796	1.00	0.00	C	C
ATOM	12161	CG	TYR A 455	31.662	-12.389	4.468	1.00	0.00	C	C
ATOM	12162	CD1	TYR A 455	31.001	-13.078	5.460	1.00	0.00	C	C
ATOM	12163	CE1	TYR A 455	30.304	-14.227	5.173	1.00	0.00	C	C
ATOM	12164	CZ	TYR A 455	30.269	-14.704	3.885	1.00	0.00	C	C
ATOM	12165	OH	TYR A 455	29.556	-15.883	3.583	1.00	0.00	C	O
ATOM	12166	CD2	TYR A 455	31.630	-12.878	3.184	1.00	0.00	C	C
ATOM	12167	CE2	TYR A 455	30.936	-14.027	2.890	1.00	0.00	C	C
ATOM	12168	C	TYR A 455	32.108	-9.011	5.940	1.00	0.00	C	C
ATOM	12169	O	TYR A 455	32.469	-9.286	7.081	1.00	0.00	C	O
ATOM	12170	N	ARG A 456	32.421	-7.837	5.352	1.00	0.00	C	N
ATOM	12171	CA	ARG A 456	33.270	-6.841	5.965	1.00	0.00	C	C
ATOM	12172	CB	ARG A 456	33.209	-5.453	5.302	1.00	0.00	C	C
ATOM	12173	CG	ARG A 456	31.814	-4.827	5.364	1.00	0.00	C	C
ATOM	12174	CD	ARG A 456	31.771	-3.328	5.060	1.00	0.00	C	C
ATOM	12175	NE	ARG A 456	32.178	-2.590	6.287	1.00	0.00	C	N
ATOM	12176	CZ	ARG A 456	32.857	-1.409	6.181	1.00	0.00	C	C
ATOM	12177	NH1	ARG A 456	33.213	-0.947	4.948	1.00	0.00	C	N
ATOM	12178	NH2	ARG A 456	33.178	-0.696	7.299	1.00	0.00	C	N

ATOM	12179	C	ARG A 456	32.920	-6.607	7.403	1.00	0.00	C	C
ATOM	12180	O	ARG A 456	31.754	-6.557	7.796	1.00	0.00	C	O
ATOM	12181	N	PRO A 457	33.966	-6.508	8.195	1.00	0.00	C	N
ATOM	12182	CD	PRO A 457	35.157	-7.296	7.927	1.00	0.00	C	C
ATOM	12183	CA	PRO A 457	33.813	-6.238	9.601	1.00	0.00	C	C
ATOM	12184	CB	PRO A 457	35.131	-6.640	10.261	1.00	0.00	C	C
ATOM	12185	CG	PRO A 457	35.714	-7.691	9.305	1.00	0.00	C	C
ATOM	12186	C	PRO A 457	33.452	-4.810	9.860	1.00	0.00	C	C
ATOM	12187	O	PRO A 457	34.060	-3.922	9.260	1.00	0.00	C	O
ATOM	12188	N	VAL A 458	32.491	-4.576	10.775	1.00	0.00	C	N
ATOM	12189	CA	VAL A 458	32.042	-3.257	11.124	1.00	0.00	C	C
ATOM	12190	CB	VAL A 458	30.843	-3.287	12.022	1.00	0.00	C	C
ATOM	12191	CG1	VAL A 458	30.516	-1.850	12.464	1.00	0.00	C	C
ATOM	12192	CG2	VAL A 458	29.699	-3.986	11.267	1.00	0.00	C	C
ATOM	12193	C	VAL A 458	33.133	-2.532	11.836	1.00	0.00	C	C
ATOM	12194	O	VAL A 458	33.405	-1.372	11.519	1.00	0.00	C	O
ATOM	12195	N	ASP A 459	33.787	-3.249	12.777	1.00	0.00	C	N
ATOM	12196	CA	ASP A 459	34.829	-2.819	13.666	1.00	0.00	C	C
ATOM	12197	CB	ASP A 459	36.235	-3.221	13.194	1.00	0.00	C	C
ATOM	12198	CG	ASP A 459	36.352	-4.732	13.327	1.00	0.00	C	C
ATOM	12199	OD1	ASP A 459	35.934	-5.266	14.388	1.00	0.00	C	O
ATOM	12200	OD2	ASP A 459	36.869	-5.370	12.369	1.00	0.00	C	O
ATOM	12201	C	ASP A 459	34.802	-1.354	13.845	1.00	0.00	C	C
ATOM	12202	O	ASP A 459	33.799	-0.764	14.252	1.00	0.00	C	O
ATOM	12203	N	GLY A 460	35.982	-0.782	13.584	1.00	0.00	C	N
ATOM	12204	CA	GLY A 460	36.250	0.606	13.539	1.00	0.00	C	C
ATOM	12205	C	GLY A 460	36.328	0.865	12.077	1.00	0.00	C	C
ATOM	12206	O	GLY A 460	35.431	0.475	11.329	1.00	0.00	C	O
ATOM	12207	N	LEU A 461	37.411	1.523	11.631	1.00	0.00	C	N
ATOM	12208	CA	LEU A 461	37.586	1.841	10.245	1.00	0.00	C	C
ATOM	12209	CB	LEU A 461	37.996	3.303	10.064	1.00	0.00	C	C
ATOM	12210	CG	LEU A 461	36.929	4.309	10.546	1.00	0.00	C	C
ATOM	12211	CD1	LEU A 461	36.692	4.216	12.062	1.00	0.00	C	C
ATOM	12212	CD2	LEU A 461	37.271	5.739	10.114	1.00	0.00	C	C
ATOM	12213	C	LEU A 461	38.666	0.941	9.730	1.00	0.00	C	C
ATOM	12214	O	LEU A 461	39.559	0.587	10.487	1.00	0.00	C	O
ATOM	12215	N	PRO A 462	38.715	0.679	8.455	1.00	0.00	C	N
ATOM	12216	CD	PRO A 462	38.621	1.784	7.514	1.00	0.00	C	C

ATOM	12217	CA	PRO A 462	39.450	-0.437	7.899	1.00	0.00	C	C
ATOM	12218	CB	PRO A 462	39.661	-0.101	6.424	1.00	0.00	C	C
ATOM	12219	CG	PRO A 462	39.595	1.434	6.381	1.00	0.00	C	C
ATOM	12220	C	PRO A 462	40.684	-0.993	8.564	1.00	0.00	C	C
ATOM	12221	O	PRO A 462	40.509	-2.125	9.026	1.00	0.00	C	O
ATOM	12222	N	PRO A 463	41.861	-0.437	8.700	1.00	0.00	C	N
ATOM	12223	CD	PRO A 463	42.440	0.435	7.691	1.00	0.00	C	C
ATOM	12224	CA	PRO A 463	42.875	-1.148	9.439	1.00	0.00	C	C
ATOM	12225	CB	PRO A 463	44.222	-0.686	8.882	1.00	0.00	C	C
ATOM	12226	CG	PRO A 463	43.897	0.622	8.144	1.00	0.00	C	C
ATOM	12227	C	PRO A 463	42.683	-0.802	10.871	1.00	0.00	C	C
ATOM	12228	O	PRO A 463	42.054	0.221	11.135	1.00	0.00	C	O
ATOM	12229	N	PHE A 464	43.226	-1.605	11.806	1.00	0.00	C	N
ATOM	12230	CA	PHE A 464	43.975	-2.767	11.448	1.00	0.00	C	C
ATOM	12231	CB	PHE A 464	45.123	-3.103	12.416	1.00	0.00	C	C
ATOM	12232	CG	PHE A 464	46.211	-2.127	12.119	1.00	0.00	C	C
ATOM	12233	CD1	PHE A 464	46.212	-0.869	12.676	1.00	0.00	C	C
ATOM	12234	CE1	PHE A 464	47.219	0.023	12.388	1.00	0.00	C	C
ATOM	12235	CZ	PHE A 464	48.236	-0.334	11.536	1.00	0.00	C	C
ATOM	12236	CD2	PHE A 464	47.233	-2.475	11.263	1.00	0.00	C	C
ATOM	12237	CE2	PHE A 464	48.241	-1.586	10.974	1.00	0.00	C	C
ATOM	12238	C	PHE A 464	43.061	-3.943	11.334	1.00	0.00	C	C
ATOM	12239	O	PHE A 464	41.953	-3.947	11.867	1.00	0.00	C	O
ATOM	12240	N	LYS A 465	43.514	-4.960	10.576	1.00	0.00	C	N
ATOM	12241	CA	LYS A 465	42.760	-6.163	10.374	1.00	0.00	C	C
ATOM	12242	CB	LYS A 465	42.664	-6.570	8.894	1.00	0.00	C	C
ATOM	12243	CG	LYS A 465	41.971	-5.533	8.009	1.00	0.00	C	C
ATOM	12244	CD	LYS A 465	42.191	-5.771	6.514	1.00	0.00	C	C
ATOM	12245	CE	LYS A 465	43.640	-5.569	6.068	1.00	0.00	C	C
ATOM	12246	NZ	LYS A 465	44.004	-4.135	6.152	1.00	0.00	C	N
ATOM	12247	C	LYS A 465	43.503	-7.275	11.062	1.00	0.00	C	C
ATOM	12248	O	LYS A 465	44.730	-7.321	11.028	1.00	0.00	C	O
ATOM	12249	N	MET A 466	42.762	-8.195	11.721	1.00	0.00	C	N
ATOM	12250	CA	MET A 466	43.328	-9.297	12.453	1.00	0.00	C	C
ATOM	12251	CB	MET A 466	42.261	-10.120	13.199	1.00	0.00	C	C
ATOM	12252	CG	MET A 466	41.403	-9.323	14.191	1.00	0.00	C	C
ATOM	12253	SD	MET A 466	40.188	-10.341	15.088	1.00	0.00	C	S
ATOM	12254	CE	MET A 466	39.014	-9.021	15.512	1.00	0.00	C	C

ATOM	12255	C	MET A 466	44.011	-10.250	11.515	1.00	0.00	C	C
ATOM	12256	O	MET A 466	45.123	-10.704	11.779	1.00	0.00	C	O
ATOM	12257	N	GLU A 467	43.367	-10.560	10.374	1.00	0.00	C	N
ATOM	12258	CA	GLU A 467	43.928	-11.502	9.449	1.00	0.00	C	C
ATOM	12259	CB	GLU A 467	45.332	-11.108	8.972	1.00	0.00	C	C
ATOM	12260	CG	GLU A 467	45.370	-9.848	8.114	1.00	0.00	C	C
ATOM	12261	CD	GLU A 467	46.829	-9.628	7.746	1.00	0.00	C	C
ATOM	12262	OE1	GLU A 467	47.627	-10.581	7.952	1.00	0.00	C	O
ATOM	12263	OE2	GLU A 467	47.167	-8.517	7.256	1.00	0.00	C	O
ATOM	12264	C	GLU A 467	44.070	-12.838	10.122	1.00	0.00	C	C
ATOM	12265	O	GLU A 467	45.012	-13.579	9.842	1.00	0.00	C	O
ATOM	12266	N	LYS A 468	43.127	-13.202	11.016	1.00	0.00	C	N
ATOM	12267	CA	LYS A 468	43.169	-14.478	11.677	1.00	0.00	C	C
ATOM	12268	CB	LYS A 468	42.720	-14.438	13.148	1.00	0.00	C	C
ATOM	12269	CG	LYS A 468	43.780	-13.813	14.060	1.00	0.00	C	C
ATOM	12270	CD	LYS A 468	45.119	-14.555	13.996	1.00	0.00	C	C
ATOM	12271	CE	LYS A 468	46.233	-13.934	14.842	1.00	0.00	C	C
ATOM	12272	NZ	LYS A 468	47.484	-14.715	14.682	1.00	0.00	C	N
ATOM	12273	C	LYS A 468	42.272	-15.417	10.924	1.00	0.00	C	C
ATOM	12274	O	LYS A 468	41.940	-15.168	9.773	1.00	0.00	C	O
ATOM	12275	N	THR A 469	41.875	-16.546	11.544	1.00	0.00	C	N
ATOM	12276	CA	THR A 469	41.062	-17.494	10.831	1.00	0.00	C	C
ATOM	12277	CB	THR A 469	40.685	-18.692	11.650	1.00	0.00	C	C
ATOM	12278	OG1	THR A 469	40.024	-19.654	10.839	1.00	0.00	C	O
ATOM	12279	CG2	THR A 469	39.766	-18.236	12.798	1.00	0.00	C	C
ATOM	12280	C	THR A 469	39.803	-16.813	10.409	1.00	0.00	C	C
ATOM	12281	O	THR A 469	39.287	-15.933	11.094	1.00	0.00	C	O
ATOM	12282	N	GLY A 470	39.316	-17.125	9.190	1.00	0.00	C	N
ATOM	12283	CA	GLY A 470	38.098	-16.546	8.695	1.00	0.00	C	C
ATOM	12284	C	GLY A 470	38.467	-15.222	8.122	1.00	0.00	C	C
ATOM	12285	O	GLY A 470	37.885	-14.757	7.142	1.00	0.00	C	O
ATOM	12286	N	ASP A 471	39.450	-14.577	8.773	1.00	0.00	C	N
ATOM	12287	CA	ASP A 471	40.024	-13.343	8.371	1.00	0.00	C	C
ATOM	12288	CB	ASP A 471	40.859	-12.651	9.451	1.00	0.00	C	C
ATOM	12289	CG	ASP A 471	39.894	-12.126	10.505	1.00	0.00	C	C
ATOM	12290	OD1	ASP A 471	38.658	-12.200	10.267	1.00	0.00	C	O
ATOM	12291	OD2	ASP A 471	40.382	-11.640	11.559	1.00	0.00	C	O
ATOM	12292	C	ASP A 471	40.886	-13.623	7.194	1.00	0.00	C	C

ATOM	12293	O	ASP A 471	41.185	-12.730	6.412	1.00	0.00	C	O
ATOM	12294	N	TYR A 472	41.368	-14.870	7.074	1.00	0.00	C	N
ATOM	12295	CA	TYR A 472	42.229	-15.187	5.976	1.00	0.00	C	C
ATOM	12296	CB	TYR A 472	42.813	-16.608	6.097	1.00	0.00	C	C
ATOM	12297	CG	TYR A 472	43.826	-16.818	5.024	1.00	0.00	C	C
ATOM	12298	CD1	TYR A 472	45.060	-16.209	5.098	1.00	0.00	C	C
ATOM	12299	CE1	TYR A 472	46.003	-16.404	4.115	1.00	0.00	C	C
ATOM	12300	CZ	TYR A 472	45.722	-17.219	3.046	1.00	0.00	C	C
ATOM	12301	OH	TYR A 472	46.685	-17.424	2.035	1.00	0.00	C	O
ATOM	12302	CD2	TYR A 472	43.559	-17.640	3.955	1.00	0.00	C	C
ATOM	12303	CE2	TYR A 472	44.498	-17.839	2.968	1.00	0.00	C	C
ATOM	12304	C	TYR A 472	41.458	-15.081	4.692	1.00	0.00	C	C
ATOM	12305	O	TYR A 472	41.924	-14.464	3.736	1.00	0.00	C	O
ATOM	12306	N	PHE A 473	40.241	-15.661	4.643	1.00	0.00	C	N
ATOM	12307	CA	PHE A 473	39.467	-15.674	3.431	1.00	0.00	C	C
ATOM	12308	CB	PHE A 473	38.165	-16.491	3.514	1.00	0.00	C	C
ATOM	12309	CG	PHE A 473	38.502	-17.937	3.460	1.00	0.00	C	C
ATOM	12310	CD1	PHE A 473	38.825	-18.520	2.258	1.00	0.00	C	C
ATOM	12311	CE1	PHE A 473	39.132	-19.859	2.187	1.00	0.00	C	C
ATOM	12312	CZ	PHE A 473	39.113	-20.624	3.327	1.00	0.00	C	C
ATOM	12313	CD2	PHE A 473	38.477	-18.713	4.597	1.00	0.00	C	C
ATOM	12314	CE2	PHE A 473	38.783	-20.052	4.531	1.00	0.00	C	C
ATOM	12315	C	PHE A 473	39.051	-14.296	3.017	1.00	0.00	C	C
ATOM	12316	O	PHE A 473	39.171	-13.937	1.847	1.00	0.00	C	O
ATOM	12317	N	ARG A 474	38.537	-13.488	3.961	1.00	0.00	C	N
ATOM	12318	CA	ARG A 474	38.019	-12.201	3.599	1.00	0.00	C	C
ATOM	12319	CB	ARG A 474	37.325	-11.473	4.759	1.00	0.00	C	C
ATOM	12320	CG	ARG A 474	38.243	-11.123	5.927	1.00	0.00	C	C
ATOM	12321	CD	ARG A 474	37.495	-10.447	7.075	1.00	0.00	C	C
ATOM	12322	NE	ARG A 474	38.508	-9.848	7.985	1.00	0.00	C	N
ATOM	12323	CZ	ARG A 474	38.914	-8.562	7.781	1.00	0.00	C	C
ATOM	12324	NH1	ARG A 474	38.363	-7.826	6.772	1.00	0.00	C	N
ATOM	12325	NH2	ARG A 474	39.872	-8.013	8.583	1.00	0.00	C	N
ATOM	12326	C	ARG A 474	39.118	-11.314	3.094	1.00	0.00	C	C
ATOM	12327	O	ARG A 474	38.928	-10.573	2.130	1.00	0.00	C	O
ATOM	12328	N	VAL A 475	40.302	-11.374	3.727	1.00	0.00	C	N
ATOM	12329	CA	VAL A 475	41.402	-10.527	3.353	1.00	0.00	C	C
ATOM	12330	CB	VAL A 475	42.615	-10.712	4.216	1.00	0.00	C	C

ATOM	12331	CG1 VAL A 475	43.753	-9.860	3.629	1.00	0.00	C	C
ATOM	12332	CG2 VAL A 475	42.257	-10.321	5.659	1.00	0.00	C	C
ATOM	12333	C VAL A 475	41.803	-10.815	1.942	1.00	0.00	C	C
ATOM	12334	O VAL A 475	42.129	-9.903	1.185	1.00	0.00	C	O
ATOM	12335	N THR A 476	41.807	-12.100	1.546	1.00	0.00	C	N
ATOM	12336	CA THR A 476	42.219	-12.420	0.212	1.00	0.00	C	C
ATOM	12337	CB THR A 476	42.247	-13.898	-0.059	1.00	0.00	C	C
ATOM	12338	OG1 THR A 476	40.942	-14.447	0.042	1.00	0.00	C	O
ATOM	12339	CG2 THR A 476	43.182	-14.564	0.964	1.00	0.00	C	C
ATOM	12340	C THR A 476	41.247	-11.791	-0.736	1.00	0.00	C	C
ATOM	12341	O THR A 476	41.635	-11.249	-1.770	1.00	0.00	C	O
ATOM	12342	N GLY A 477	39.949	-11.839	-0.391	1.00	0.00	C	N
ATOM	12343	CA GLY A 477	38.934	-11.320	-1.262	1.00	0.00	C	C
ATOM	12344	C GLY A 477	39.111	-9.847	-1.460	1.00	0.00	C	C
ATOM	12345	O GLY A 477	38.927	-9.343	-2.567	1.00	0.00	C	O
ATOM	12346	N GLU A 478	39.453	-9.108	-0.388	1.00	0.00	C	N
ATOM	12347	CA GLU A 478	39.569	-7.683	-0.496	1.00	0.00	C	C
ATOM	12348	CB GLU A 478	39.877	-6.991	0.846	1.00	0.00	C	C
ATOM	12349	CG GLU A 478	41.266	-7.309	1.399	1.00	0.00	C	C
ATOM	12350	CD GLU A 478	41.429	-6.610	2.740	1.00	0.00	C	C
ATOM	12351	OE1 GLU A 478	40.390	-6.238	3.347	1.00	0.00	C	O
ATOM	12352	OE2 GLU A 478	42.599	-6.446	3.179	1.00	0.00	C	O
ATOM	12353	C GLU A 478	40.681	-7.346	-1.436	1.00	0.00	C	C
ATOM	12354	O GLU A 478	40.545	-6.455	-2.275	1.00	0.00	C	O
ATOM	12355	N ILE A 479	41.820	-8.050	-1.319	1.00	0.00	C	N
ATOM	12356	CA ILE A 479	42.934	-7.773	-2.179	1.00	0.00	C	C
ATOM	12357	CB ILE A 479	44.169	-8.557	-1.839	1.00	0.00	C	C
ATOM	12358	CG2 ILE A 479	45.194	-8.334	-2.964	1.00	0.00	C	C
ATOM	12359	CG1 ILE A 479	44.689	-8.166	-0.445	1.00	0.00	C	C
ATOM	12360	CD ILE A 479	45.802	-9.077	0.071	1.00	0.00	C	C
ATOM	12361	C ILE A 479	42.553	-8.108	-3.585	1.00	0.00	C	C
ATOM	12362	O ILE A 479	42.852	-7.359	-4.513	1.00	0.00	C	O
ATOM	12363	N LEU A 480	41.865	-9.249	-3.772	1.00	0.00	C	N
ATOM	12364	CA LEU A 480	41.513	-9.719	-5.080	1.00	0.00	C	C
ATOM	12365	CB LEU A 480	40.804	-11.081	-5.044	1.00	0.00	C	C
ATOM	12366	CG LEU A 480	41.679	-12.197	-4.441	1.00	0.00	C	C
ATOM	12367	CD1 LEU A 480	40.986	-13.565	-4.528	1.00	0.00	C	C
ATOM	12368	CD2 LEU A 480	43.089	-12.189	-5.055	1.00	0.00	C	C

ATOM	12369	C	LEU A 480	40.593	-8.743	-5.749	1.00	0.00	C	C
ATOM	12370	O	LEU A 480	40.739	-8.463	-6.936	1.00	0.00	C	O
ATOM	12371	N	SER A 481	39.620	-8.190	-5.002	1.00	0.00	C	N
ATOM	12372	CA	SER A 481	38.670	-7.296	-5.600	1.00	0.00	C	C
ATOM	12373	CB	SER A 481	37.588	-6.828	-4.610	1.00	0.00	C	C
ATOM	12374	OG	SER A 481	38.171	-6.060	-3.569	1.00	0.00	C	O
ATOM	12375	C	SER A 481	39.373	-6.074	-6.110	1.00	0.00	C	C
ATOM	12376	O	SER A 481	39.084	-5.593	-7.204	1.00	0.00	C	O
ATOM	12377	N	VAL A 482	40.324	-5.533	-5.329	1.00	0.00	C	N
ATOM	12378	CA	VAL A 482	41.013	-4.345	-5.742	1.00	0.00	C	C
ATOM	12379	CB	VAL A 482	41.998	-3.858	-4.723	1.00	0.00	C	C
ATOM	12380	CG1	VAL A 482	42.682	-2.591	-5.263	1.00	0.00	C	C
ATOM	12381	CG2	VAL A 482	41.266	-3.668	-3.382	1.00	0.00	C	C
ATOM	12382	C	VAL A 482	41.780	-4.651	-6.988	1.00	0.00	C	C
ATOM	12383	O	VAL A 482	41.790	-3.868	-7.938	1.00	0.00	C	O
ATOM	12384	N	LEU A 483	42.432	-5.831	-7.016	1.00	0.00	C	N
ATOM	12385	CA	LEU A 483	43.249	-6.237	-8.123	1.00	0.00	C	C
ATOM	12386	CB	LEU A 483	43.884	-7.623	-7.888	1.00	0.00	C	C
ATOM	12387	CG	LEU A 483	44.950	-8.088	-8.913	1.00	0.00	C	C
ATOM	12388	CD1	LEU A 483	45.482	-9.480	-8.540	1.00	0.00	C	C
ATOM	12389	CD2	LEU A 483	44.458	-8.056	-10.368	1.00	0.00	C	C
ATOM	12390	C	LEU A 483	42.346	-6.314	-9.309	1.00	0.00	C	C
ATOM	12391	O	LEU A 483	42.718	-5.924	-10.415	1.00	0.00	C	O
ATOM	12392	N	GLY A 484	41.123	-6.831	-9.105	1.00	0.00	C	N
ATOM	12393	CA	GLY A 484	40.197	-6.951	-10.185	1.00	0.00	C	C
ATOM	12394	C	GLY A 484	39.903	-5.575	-10.688	1.00	0.00	C	C
ATOM	12395	O	GLY A 484	39.706	-5.362	-11.883	1.00	0.00	C	O
ATOM	12396	N	GLY A 485	39.844	-4.603	-9.762	1.00	0.00	C	N
ATOM	12397	CA	GLY A 485	39.515	-3.249	-10.100	1.00	0.00	C	C
ATOM	12398	C	GLY A 485	40.539	-2.649	-11.017	1.00	0.00	C	C
ATOM	12399	O	GLY A 485	40.189	-1.903	-11.929	1.00	0.00	C	O
ATOM	12400	N	VAL A 486	41.833	-2.944	-10.797	1.00	0.00	C	N
ATOM	12401	CA	VAL A 486	42.880	-2.314	-11.558	1.00	0.00	C	C
ATOM	12402	CB	VAL A 486	44.256	-2.684	-11.091	1.00	0.00	C	C
ATOM	12403	CG1	VAL A 486	44.528	-4.150	-11.467	1.00	0.00	C	C
ATOM	12404	CG2	VAL A 486	45.260	-1.688	-11.693	1.00	0.00	C	C
ATOM	12405	C	VAL A 486	42.783	-2.673	-13.010	1.00	0.00	C	C
ATOM	12406	O	VAL A 486	43.042	-1.843	-13.881	1.00	0.00	C	O

ATOM	12407	N	TYR A 487	42.397	-3.923	-13.318	1.00	0.00	C	N
ATOM	12408	CA	TYR A 487	42.405	-4.354	-14.686	1.00	0.00	C	C
ATOM	12409	CB	TYR A 487	41.988	-5.821	-14.861	1.00	0.00	C	C
ATOM	12410	CG	TYR A 487	42.118	-6.097	-16.316	1.00	0.00	C	C
ATOM	12411	CD1	TYR A 487	43.357	-6.368	-16.843	1.00	0.00	C	C
ATOM	12412	CE1	TYR A 487	43.509	-6.618	-18.184	1.00	0.00	C	C
ATOM	12413	CZ	TYR A 487	42.417	-6.590	-19.011	1.00	0.00	C	C
ATOM	12414	OH	TYR A 487	42.572	-6.848	-20.390	1.00	0.00	C	O
ATOM	12415	CD2	TYR A 487	41.026	-6.055	-17.152	1.00	0.00	C	C
ATOM	12416	CE2	TYR A 487	41.174	-6.307	-18.496	1.00	0.00	C	C
ATOM	12417	C	TYR A 487	41.469	-3.507	-15.489	1.00	0.00	C	C
ATOM	12418	O	TYR A 487	41.785	-3.113	-16.610	1.00	0.00	C	O
ATOM	12419	N	PHE A 488	40.289	-3.198	-14.927	1.00	0.00	C	N
ATOM	12420	CA	PHE A 488	39.311	-2.412	-15.619	1.00	0.00	C	C
ATOM	12421	CB	PHE A 488	38.035	-2.182	-14.781	1.00	0.00	C	C
ATOM	12422	CG	PHE A 488	37.302	-3.470	-14.589	1.00	0.00	C	C
ATOM	12423	CD1	PHE A 488	36.490	-3.965	-15.583	1.00	0.00	C	C
ATOM	12424	CE1	PHE A 488	35.805	-5.146	-15.410	1.00	0.00	C	C
ATOM	12425	CZ	PHE A 488	35.920	-5.846	-14.234	1.00	0.00	C	C
ATOM	12426	CD2	PHE A 488	37.402	-4.175	-13.408	1.00	0.00	C	C
ATOM	12427	CE2	PHE A 488	36.719	-5.357	-13.229	1.00	0.00	C	C
ATOM	12428	C	PHE A 488	39.892	-1.060	-15.907	1.00	0.00	C	C
ATOM	12429	O	PHE A 488	39.719	-0.524	-17.002	1.00	0.00	C	O
ATOM	12430	N	PHE A 489	40.595	-0.460	-14.924	1.00	0.00	C	N
ATOM	12431	CA	PHE A 489	41.134	0.857	-15.119	1.00	0.00	C	C
ATOM	12432	CB	PHE A 489	41.827	1.438	-13.873	1.00	0.00	C	C
ATOM	12433	CG	PHE A 489	42.298	2.803	-14.249	1.00	0.00	C	C
ATOM	12434	CD1	PHE A 489	41.472	3.892	-14.081	1.00	0.00	C	C
ATOM	12435	CE1	PHE A 489	41.893	5.155	-14.427	1.00	0.00	C	C
ATOM	12436	CZ	PHE A 489	43.149	5.340	-14.952	1.00	0.00	C	C
ATOM	12437	CD2	PHE A 489	43.552	2.998	-14.781	1.00	0.00	C	C
ATOM	12438	CE2	PHE A 489	43.977	4.260	-15.129	1.00	0.00	C	C
ATOM	12439	C	PHE A 489	42.153	0.817	-16.215	1.00	0.00	C	C
ATOM	12440	O	PHE A 489	42.184	1.696	-17.074	1.00	0.00	C	O
ATOM	12441	N	PHE A 490	43.030	-0.206	-16.210	1.00	0.00	C	N
ATOM	12442	CA	PHE A 490	44.065	-0.300	-17.202	1.00	0.00	C	C
ATOM	12443	CB	PHE A 490	45.031	-1.472	-16.944	1.00	0.00	C	C
ATOM	12444	CG	PHE A 490	46.033	-1.537	-18.047	1.00	0.00	C	C

ATOM	12445	CD1 PHE A 490	47.036	-0.600	-18.156	1.00	0.00	C	C
ATOM	12446	CE1 PHE A 490	47.957	-0.677	-19.175	1.00	0.00	C	C
ATOM	12447	CZ PHE A 490	47.889	-1.699	-20.092	1.00	0.00	C	C
ATOM	12448	CD2 PHE A 490	45.979	-2.560	-18.966	1.00	0.00	C	C
ATOM	12449	CE2 PHE A 490	46.899	-2.643	-19.986	1.00	0.00	C	C
ATOM	12450	C PHE A 490	43.454	-0.478	-18.558	1.00	0.00	C	C
ATOM	12451	O PHE A 490	43.865	0.172	-19.516	1.00	0.00	C	O
ATOM	12452	N ARG A 491	42.450	-1.365	-18.679	1.00	0.00	C	N
ATOM	12453	CA ARG A 491	41.851	-1.617	-19.960	1.00	0.00	C	C
ATOM	12454	CB ARG A 491	40.838	-2.779	-19.929	1.00	0.00	C	C
ATOM	12455	CG ARG A 491	39.681	-2.578	-18.949	1.00	0.00	C	C
ATOM	12456	CD ARG A 491	38.826	-3.835	-18.752	1.00	0.00	C	C
ATOM	12457	NE ARG A 491	37.955	-3.990	-19.949	1.00	0.00	C	N
ATOM	12458	CZ ARG A 491	36.644	-3.614	-19.886	1.00	0.00	C	C
ATOM	12459	NH1 ARG A 491	36.122	-3.161	-18.708	1.00	0.00	C	N
ATOM	12460	NH2 ARG A 491	35.852	-3.701	-20.995	1.00	0.00	C	N
ATOM	12461	C ARG A 491	41.161	-0.384	-20.459	1.00	0.00	C	C
ATOM	12462	O ARG A 491	41.223	-0.072	-21.646	1.00	0.00	C	O
ATOM	12463	N GLY A 492	40.480	0.353	-19.561	1.00	0.00	C	N
ATOM	12464	CA GLY A 492	39.724	1.517	-19.939	1.00	0.00	C	C
ATOM	12465	C GLY A 492	40.609	2.595	-20.488	1.00	0.00	C	C
ATOM	12466	O GLY A 492	40.246	3.276	-21.447	1.00	0.00	C	O
ATOM	12467	N ILE A 493	41.799	2.785	-19.889	1.00	0.00	C	N
ATOM	12468	CA ILE A 493	42.659	3.858	-20.293	1.00	0.00	C	C
ATOM	12469	CB ILE A 493	43.915	3.960	-19.471	1.00	0.00	C	C
ATOM	12470	CG2 ILE A 493	44.803	2.739	-19.760	1.00	0.00	C	C
ATOM	12471	CG1 ILE A 493	44.606	5.311	-19.726	1.00	0.00	C	C
ATOM	12472	CD ILE A 493	45.694	5.637	-18.705	1.00	0.00	C	C
ATOM	12473	C ILE A 493	43.032	3.663	-21.721	1.00	0.00	C	C
ATOM	12474	O ILE A 493	43.094	4.626	-22.483	1.00	0.00	C	O
ATOM	12475	N GLN A 494	43.291	2.410	-22.123	1.00	0.00	C	N
ATOM	12476	CA GLN A 494	43.670	2.109	-23.471	1.00	0.00	C	C
ATOM	12477	CB GLN A 494	43.911	0.609	-23.700	1.00	0.00	C	C
ATOM	12478	CG GLN A 494	44.317	0.273	-25.136	1.00	0.00	C	C
ATOM	12479	CD GLN A 494	44.346	-1.242	-25.265	1.00	0.00	C	C
ATOM	12480	OE1 GLN A 494	45.154	-1.806	-26.000	1.00	0.00	C	O
ATOM	12481	NE2 GLN A 494	43.425	-1.923	-24.531	1.00	0.00	C	N
ATOM	12482	C GLN A 494	42.550	2.485	-24.378	1.00	0.00	C	C

ATOM	12483	O	GLN A 494	42.779	2.960	-25.483	1.00	0.00	C	O
ATOM	12484	N	TYR A 495	41.297	2.264	-23.958	1.00	0.00	C	N
ATOM	12485	CA	TYR A 495	40.201	2.568	-24.831	1.00	0.00	C	C
ATOM	12486	CB	TYR A 495	38.848	2.160	-24.228	1.00	0.00	C	C
ATOM	12487	CG	TYR A 495	37.813	2.234	-25.297	1.00	0.00	C	C
ATOM	12488	CD1	TYR A 495	37.136	3.402	-25.559	1.00	0.00	C	C
ATOM	12489	CE1	TYR A 495	36.183	3.443	-26.549	1.00	0.00	C	C
ATOM	12490	CZ	TYR A 495	35.900	2.318	-27.287	1.00	0.00	C	C
ATOM	12491	OH	TYR A 495	34.920	2.360	-28.301	1.00	0.00	C	O
ATOM	12492	CD2	TYR A 495	37.529	1.116	-26.044	1.00	0.00	C	C
ATOM	12493	CE2	TYR A 495	36.577	1.150	-27.035	1.00	0.00	C	C
ATOM	12494	C	TYR A 495	40.199	4.045	-25.070	1.00	0.00	C	C
ATOM	12495	O	TYR A 495	40.001	4.507	-26.192	1.00	0.00	C	O
ATOM	12496	N	PHE A 496	40.408	4.827	-23.996	1.00	0.00	C	N
ATOM	12497	CA	PHE A 496	40.440	6.255	-24.092	1.00	0.00	C	C
ATOM	12498	CB	PHE A 496	40.588	6.904	-22.702	1.00	0.00	C	C
ATOM	12499	CG	PHE A 496	40.474	8.388	-22.804	1.00	0.00	C	C
ATOM	12500	CD1	PHE A 496	39.246	8.979	-22.981	1.00	0.00	C	C
ATOM	12501	CE1	PHE A 496	39.127	10.345	-23.067	1.00	0.00	C	C
ATOM	12502	CZ	PHE A 496	40.245	11.139	-22.966	1.00	0.00	C	C
ATOM	12503	CD2	PHE A 496	41.586	9.191	-22.694	1.00	0.00	C	C
ATOM	12504	CE2	PHE A 496	41.476	10.561	-22.777	1.00	0.00	C	C
ATOM	12505	C	PHE A 496	41.621	6.654	-24.921	1.00	0.00	C	C
ATOM	12506	O	PHE A 496	41.509	7.494	-25.813	1.00	0.00	C	O
ATOM	12507	N	LEU A 497	42.790	6.044	-24.646	1.00	0.00	C	N
ATOM	12508	CA	LEU A 497	44.020	6.406	-25.290	1.00	0.00	C	C
ATOM	12509	CB	LEU A 497	45.251	5.760	-24.619	1.00	0.00	C	C
ATOM	12510	CG	LEU A 497	46.625	6.315	-25.067	1.00	0.00	C	C
ATOM	12511	CD1	LEU A 497	47.741	5.739	-24.184	1.00	0.00	C	C
ATOM	12512	CD2	LEU A 497	46.920	6.083	-26.558	1.00	0.00	C	C
ATOM	12513	C	LEU A 497	43.996	6.050	-26.744	1.00	0.00	C	C
ATOM	12514	O	LEU A 497	44.439	6.828	-27.587	1.00	0.00	C	O
ATOM	12515	N	GLN A 498	43.476	4.865	-27.087	1.00	0.00	C	N
ATOM	12516	CA	GLN A 498	43.477	4.392	-28.437	1.00	0.00	C	C
ATOM	12517	CB	GLN A 498	42.801	3.020	-28.525	1.00	0.00	C	C
ATOM	12518	CG	GLN A 498	42.751	2.401	-29.916	1.00	0.00	C	C
ATOM	12519	CD	GLN A 498	42.046	1.069	-29.728	1.00	0.00	C	C
ATOM	12520	OE1	GLN A 498	40.979	1.008	-29.120	1.00	0.00	C	O

ATOM	12521	NE2	GLN A 498	42.667	-0.028	-30.235	1.00	0.00	C	N
ATOM	12522	C	GLN A 498	42.688	5.357	-29.254	1.00	0.00	C	C
ATOM	12523	O	GLN A 498	43.125	5.773	-30.326	1.00	0.00	C	O
ATOM	12524	N	ARG A 499	41.500	5.748	-28.760	1.00	0.00	C	N
ATOM	12525	CA	ARG A 499	40.739	6.710	-29.493	1.00	0.00	C	C
ATOM	12526	CB	ARG A 499	39.361	6.207	-29.949	1.00	0.00	C	C
ATOM	12527	CG	ARG A 499	39.467	5.168	-31.064	1.00	0.00	C	C
ATOM	12528	CD	ARG A 499	40.036	5.761	-32.353	1.00	0.00	C	C
ATOM	12529	NE	ARG A 499	40.070	4.679	-33.373	1.00	0.00	C	N
ATOM	12530	CZ	ARG A 499	39.669	4.949	-34.646	1.00	0.00	C	C
ATOM	12531	NH1	ARG A 499	39.260	6.208	-34.979	1.00	0.00	C	N
ATOM	12532	NH2	ARG A 499	39.647	3.955	-35.583	1.00	0.00	C	N
ATOM	12533	C	ARG A 499	40.523	7.885	-28.605	1.00	0.00	C	C
ATOM	12534	O	ARG A 499	39.661	7.885	-27.727	1.00	0.00	C	O
ATOM	12535	N	ARG A 500	41.317	8.932	-28.862	1.00	0.00	C	N
ATOM	12536	CA	ARG A 500	41.319	10.174	-28.152	1.00	0.00	C	C
ATOM	12537	CB	ARG A 500	42.402	11.115	-28.699	1.00	0.00	C	C
ATOM	12538	CG	ARG A 500	43.807	10.524	-28.608	1.00	0.00	C	C
ATOM	12539	CD	ARG A 500	44.817	11.222	-29.517	1.00	0.00	C	C
ATOM	12540	NE	ARG A 500	44.432	10.922	-30.926	1.00	0.00	C	N
ATOM	12541	CZ	ARG A 500	44.895	11.706	-31.943	1.00	0.00	C	C
ATOM	12542	NH1	ARG A 500	45.673	12.792	-31.665	1.00	0.00	C	N
ATOM	12543	NH2	ARG A 500	44.580	11.404	-33.237	1.00	0.00	C	N
ATOM	12544	C	ARG A 500	40.008	10.873	-28.348	1.00	0.00	C	C
ATOM	12545	O	ARG A 500	39.485	11.459	-27.400	1.00	0.00	C	O
ATOM	12546	N	PRO A 501	39.434	10.835	-29.526	1.00	0.00	C	N
ATOM	12547	CD	PRO A 501	40.202	10.805	-30.762	1.00	0.00	C	C
ATOM	12548	CA	PRO A 501	38.213	11.560	-29.726	1.00	0.00	C	C
ATOM	12549	CB	PRO A 501	37.935	11.528	-31.233	1.00	0.00	C	C
ATOM	12550	CG	PRO A 501	39.110	10.730	-31.838	1.00	0.00	C	C
ATOM	12551	C	PRO A 501	37.109	11.069	-28.852	1.00	0.00	C	C
ATOM	12552	O	PRO A 501	37.034	9.877	-28.566	1.00	0.00	C	O
ATOM	12553	N	SER A 502	36.232	11.996	-28.426	1.00	0.00	C	N
ATOM	12554	CA	SER A 502	35.198	11.724	-27.478	1.00	0.00	C	C
ATOM	12555	CB	SER A 502	34.702	13.016	-26.795	1.00	0.00	C	C
ATOM	12556	OG	SER A 502	33.785	12.747	-25.746	1.00	0.00	C	O
ATOM	12557	C	SER A 502	34.050	11.065	-28.158	1.00	0.00	C	C
ATOM	12558	O	SER A 502	34.121	10.694	-29.326	1.00	0.00	C	O

ATOM	12559	N	MET A 503	32.986	10.822	-27.378	1.00	0.00	C	N
ATOM	12560	CA	MET A 503	31.752	10.319	-27.882	1.00	0.00	C	C
ATOM	12561	CB	MET A 503	31.351	8.983	-27.236	1.00	0.00	C	C
ATOM	12562	CG	MET A 503	31.396	9.001	-25.708	1.00	0.00	C	C
ATOM	12563	SD	MET A 503	31.522	7.351	-24.956	1.00	0.00	C	S
ATOM	12564	CE	MET A 503	33.204	7.054	-25.579	1.00	0.00	C	C
ATOM	12565	C	MET A 503	30.766	11.387	-27.546	1.00	0.00	C	C
ATOM	12566	O	MET A 503	30.793	11.943	-26.448	1.00	0.00	C	O
ATOM	12567	N	LYS A 504	29.883	11.717	-28.504	1.00	0.00	C	N
ATOM	12568	CA	LYS A 504	28.970	12.801	-28.324	1.00	0.00	C	C
ATOM	12569	CB	LYS A 504	28.257	13.248	-29.614	1.00	0.00	C	C
ATOM	12570	CG	LYS A 504	27.543	14.592	-29.466	1.00	0.00	C	C
ATOM	12571	CD	LYS A 504	27.172	15.246	-30.799	1.00	0.00	C	C
ATOM	12572	CE	LYS A 504	26.646	16.676	-30.653	1.00	0.00	C	C
ATOM	12573	NZ	LYS A 504	25.312	16.664	-30.010	1.00	0.00	C	N
ATOM	12574	C	LYS A 504	27.943	12.407	-27.325	1.00	0.00	C	C
ATOM	12575	O	LYS A 504	27.787	11.233	-26.989	1.00	0.00	C	O
ATOM	12576	N	THR A 505	27.240	13.418	-26.791	1.00	0.00	C	N
ATOM	12577	CA	THR A 505	26.239	13.196	-25.799	1.00	0.00	C	C
ATOM	12578	CB	THR A 505	25.610	14.468	-25.322	1.00	0.00	C	C
ATOM	12579	OG1	THR A 505	24.912	15.096	-26.387	1.00	0.00	C	O
ATOM	12580	CG2	THR A 505	26.721	15.392	-24.798	1.00	0.00	C	C
ATOM	12581	C	THR A 505	25.153	12.377	-26.402	1.00	0.00	C	C
ATOM	12582	O	THR A 505	24.624	11.474	-25.759	1.00	0.00	C	O
ATOM	12583	N	LEU A 506	24.802	12.657	-27.672	1.00	0.00	C	N
ATOM	12584	CA	LEU A 506	23.708	11.941	-28.255	1.00	0.00	C	C
ATOM	12585	CB	LEU A 506	23.419	12.321	-29.718	1.00	0.00	C	C
ATOM	12586	CG	LEU A 506	22.842	13.733	-29.908	1.00	0.00	C	C
ATOM	12587	CD1	LEU A 506	22.537	14.007	-31.390	1.00	0.00	C	C
ATOM	12588	CD2	LEU A 506	21.623	13.961	-29.003	1.00	0.00	C	C
ATOM	12589	C	LEU A 506	24.035	10.490	-28.251	1.00	0.00	C	C
ATOM	12590	O	LEU A 506	23.207	9.667	-27.863	1.00	0.00	C	O
ATOM	12591	N	PHE A 507	25.259	10.121	-28.665	1.00	0.00	C	N
ATOM	12592	CA	PHE A 507	25.524	8.717	-28.664	1.00	0.00	C	C
ATOM	12593	CB	PHE A 507	26.171	8.190	-29.958	1.00	0.00	C	C
ATOM	12594	CG	PHE A 507	27.482	8.853	-30.236	1.00	0.00	C	C
ATOM	12595	CD1	PHE A 507	27.524	10.096	-30.826	1.00	0.00	C	C
ATOM	12596	CE1	PHE A 507	28.728	10.702	-31.100	1.00	0.00	C	C

ATOM	12597	CZ	PHE A 507	29.904	10.062	-30.788	1.00	0.00	C	C
ATOM	12598	CD2	PHE A 507	28.668	8.217	-29.936	1.00	0.00	C	C
ATOM	12599	CE2	PHE A 507	29.874	8.816	-30.207	1.00	0.00	C	C
ATOM	12600	C	PHE A 507	26.406	8.377	-27.517	1.00	0.00	C	C
ATOM	12601	O	PHE A 507	27.578	8.746	-27.470	1.00	0.00	C	O
ATOM	12602	N	VAL A 508	25.838	7.639	-26.550	1.00	0.00	C	N
ATOM	12603	CA	VAL A 508	26.600	7.196	-25.440	1.00	0.00	C	C
ATOM	12604	CB	VAL A 508	25.741	6.883	-24.252	1.00	0.00	C	C
ATOM	12605	CG1	VAL A 508	26.640	6.401	-23.107	1.00	0.00	C	C
ATOM	12606	CG2	VAL A 508	24.895	8.122	-23.909	1.00	0.00	C	C
ATOM	12607	C	VAL A 508	27.191	5.917	-25.917	1.00	0.00	C	C
ATOM	12608	O	VAL A 508	26.970	4.851	-25.346	1.00	0.00	C	O
ATOM	12609	N	ASP A 509	27.987	6.015	-26.992	1.00	0.00	C	N
ATOM	12610	CA	ASP A 509	28.586	4.851	-27.559	1.00	0.00	C	C
ATOM	12611	CB	ASP A 509	28.276	4.687	-29.057	1.00	0.00	C	C
ATOM	12612	CG	ASP A 509	28.870	3.374	-29.551	1.00	0.00	C	C
ATOM	12613	OD1	ASP A 509	30.115	3.209	-29.473	1.00	0.00	C	O
ATOM	12614	OD2	ASP A 509	28.075	2.515	-30.016	1.00	0.00	C	O
ATOM	12615	C	ASP A 509	30.063	5.014	-27.413	1.00	0.00	C	C
ATOM	12616	O	ASP A 509	30.617	6.046	-27.790	1.00	0.00	C	O
ATOM	12617	N	SER A 510	30.738	3.984	-26.867	1.00	0.00	C	N
ATOM	12618	CA	SER A 510	30.053	2.788	-26.471	1.00	0.00	C	C
ATOM	12619	CB	SER A 510	30.951	1.534	-26.474	1.00	0.00	C	C
ATOM	12620	OG	SER A 510	32.006	1.673	-25.536	1.00	0.00	C	O
ATOM	12621	C	SER A 510	29.533	2.979	-25.078	1.00	0.00	C	C
ATOM	12622	O	SER A 510	30.226	3.475	-24.193	1.00	0.00	C	O
ATOM	12623	N	TYR A 511	28.261	2.588	-24.876	1.00	0.00	C	N
ATOM	12624	CA	TYR A 511	27.557	2.714	-23.633	1.00	0.00	C	C
ATOM	12625	CB	TYR A 511	26.102	2.229	-23.801	1.00	0.00	C	C
ATOM	12626	CG	TYR A 511	25.410	2.075	-22.485	1.00	0.00	C	C
ATOM	12627	CD1	TYR A 511	25.486	0.897	-21.776	1.00	0.00	C	C
ATOM	12628	CE1	TYR A 511	24.846	0.747	-20.568	1.00	0.00	C	C
ATOM	12629	CZ	TYR A 511	24.112	1.784	-20.054	1.00	0.00	C	C
ATOM	12630	OH	TYR A 511	23.449	1.643	-18.816	1.00	0.00	C	O
ATOM	12631	CD2	TYR A 511	24.668	3.102	-21.959	1.00	0.00	C	C
ATOM	12632	CE2	TYR A 511	24.024	2.961	-20.754	1.00	0.00	C	C
ATOM	12633	C	TYR A 511	28.159	1.851	-22.564	1.00	0.00	C	C
ATOM	12634	O	TYR A 511	28.411	2.312	-21.453	1.00	0.00	C	O

ATOM	12635	N	SER A 512	28.395	0.565	-22.881	1.00	0.00	C	N
ATOM	12636	CA	SER A 512	28.804	-0.409	-21.908	1.00	0.00	C	C
ATOM	12637	CB	SER A 512	28.712	-1.844	-22.457	1.00	0.00	C	C
ATOM	12638	OG	SER A 512	29.564	-1.990	-23.585	1.00	0.00	C	O
ATOM	12639	C	SER A 512	30.195	-0.202	-21.407	1.00	0.00	C	C
ATOM	12640	O	SER A 512	30.444	-0.251	-20.203	1.00	0.00	C	O
ATOM	12641	N	GLU A 513	31.143	0.046	-22.322	1.00	0.00	C	N
ATOM	12642	CA	GLU A 513	32.516	0.151	-21.931	1.00	0.00	C	C
ATOM	12643	CB	GLU A 513	33.445	0.297	-23.146	1.00	0.00	C	C
ATOM	12644	CG	GLU A 513	33.455	-0.985	-23.983	1.00	0.00	C	C
ATOM	12645	CD	GLU A 513	34.258	-0.730	-25.244	1.00	0.00	C	C
ATOM	12646	OE1	GLU A 513	34.280	0.440	-25.708	1.00	0.00	C	O
ATOM	12647	OE2	GLU A 513	34.861	-1.706	-25.760	1.00	0.00	C	O
ATOM	12648	C	GLU A 513	32.666	1.320	-21.013	1.00	0.00	C	C
ATOM	12649	O	GLU A 513	33.442	1.271	-20.057	1.00	0.00	C	O
ATOM	12650	N	MET A 514	31.904	2.401	-21.255	1.00	0.00	C	N
ATOM	12651	CA	MET A 514	32.032	3.570	-20.432	1.00	0.00	C	C
ATOM	12652	CB	MET A 514	31.152	4.756	-20.865	1.00	0.00	C	C
ATOM	12653	CG	MET A 514	29.666	4.577	-20.552	1.00	0.00	C	C
ATOM	12654	SD	MET A 514	28.650	6.062	-20.814	1.00	0.00	C	S
ATOM	12655	CE	MET A 514	28.882	6.747	-19.149	1.00	0.00	C	C
ATOM	12656	C	MET A 514	31.657	3.233	-19.024	1.00	0.00	C	C
ATOM	12657	O	MET A 514	32.267	3.739	-18.086	1.00	0.00	C	O
ATOM	12658	N	LEU A 515	30.637	2.376	-18.833	1.00	0.00	C	N
ATOM	12659	CA	LEU A 515	30.176	2.038	-17.513	1.00	0.00	C	C
ATOM	12660	CB	LEU A 515	28.947	1.113	-17.530	1.00	0.00	C	C
ATOM	12661	CG	LEU A 515	27.705	1.765	-18.165	1.00	0.00	C	C
ATOM	12662	CD1	LEU A 515	26.494	0.822	-18.123	1.00	0.00	C	C
ATOM	12663	CD2	LEU A 515	27.418	3.139	-17.545	1.00	0.00	C	C
ATOM	12664	C	LEU A 515	31.256	1.325	-16.759	1.00	0.00	C	C
ATOM	12665	O	LEU A 515	31.449	1.561	-15.567	1.00	0.00	C	O
ATOM	12666	N	PHE A 516	32.004	0.441	-17.443	1.00	0.00	C	N
ATOM	12667	CA	PHE A 516	33.003	-0.351	-16.785	1.00	0.00	C	C
ATOM	12668	CB	PHE A 516	33.702	-1.355	-17.720	1.00	0.00	C	C
ATOM	12669	CG	PHE A 516	32.720	-2.432	-18.041	1.00	0.00	C	C
ATOM	12670	CD1	PHE A 516	32.472	-3.437	-17.132	1.00	0.00	C	C
ATOM	12671	CE1	PHE A 516	31.573	-4.439	-17.416	1.00	0.00	C	C
ATOM	12672	CZ	PHE A 516	30.910	-4.449	-18.617	1.00	0.00	C	C

ATOM	12673	CD2 PHE A 516	32.052	-2.453	-19.244	1.00	0.00	C	C
ATOM	12674	CE2 PHE A 516	31.151	-3.454	-19.533	1.00	0.00	C	C
ATOM	12675	C PHE A 516	34.043	0.540	-16.182	1.00	0.00	C	C
ATOM	12676	O PHE A 516	34.505	0.295	-15.068	1.00	0.00	C	O
ATOM	12677	N PHE A 517	34.442	1.603	-16.899	1.00	0.00	C	N
ATOM	12678	CA PHE A 517	35.450	2.502	-16.415	1.00	0.00	C	C
ATOM	12679	CB PHE A 517	35.773	3.620	-17.423	1.00	0.00	C	C
ATOM	12680	CG PHE A 517	36.553	4.670	-16.708	1.00	0.00	C	C
ATOM	12681	CD1 PHE A 517	37.881	4.484	-16.415	1.00	0.00	C	C
ATOM	12682	CE1 PHE A 517	38.593	5.454	-15.750	1.00	0.00	C	C
ATOM	12683	CZ PHE A 517	37.984	6.620	-15.361	1.00	0.00	C	C
ATOM	12684	CD2 PHE A 517	35.943	5.837	-16.302	1.00	0.00	C	C
ATOM	12685	CE2 PHE A 517	36.652	6.811	-15.639	1.00	0.00	C	C
ATOM	12686	C PHE A 517	34.995	3.147	-15.145	1.00	0.00	C	C
ATOM	12687	O PHE A 517	35.770	3.272	-14.198	1.00	0.00	C	O
ATOM	12688	N LEU A 518	33.724	3.577	-15.088	1.00	0.00	C	N
ATOM	12689	CA LEU A 518	33.243	4.282	-13.935	1.00	0.00	C	C
ATOM	12690	CB LEU A 518	31.816	4.831	-14.099	1.00	0.00	C	C
ATOM	12691	CG LEU A 518	31.340	5.632	-12.869	1.00	0.00	C	C
ATOM	12692	CD1 LEU A 518	32.196	6.890	-12.655	1.00	0.00	C	C
ATOM	12693	CD2 LEU A 518	29.837	5.949	-12.950	1.00	0.00	C	C
ATOM	12694	C LEU A 518	33.253	3.389	-12.726	1.00	0.00	C	C
ATOM	12695	O LEU A 518	33.587	3.827	-11.632	1.00	0.00	C	O
ATOM	12696	N GLN A 519	32.872	2.111	-12.855	1.00	0.00	C	N
ATOM	12697	CA GLN A 519	32.831	1.274	-11.686	1.00	0.00	C	C
ATOM	12698	CB GLN A 519	32.328	-0.148	-11.976	1.00	0.00	C	C
ATOM	12699	CG GLN A 519	32.317	-1.033	-10.729	1.00	0.00	C	C
ATOM	12700	CD GLN A 519	32.254	-2.480	-11.187	1.00	0.00	C	C
ATOM	12701	OE1 GLN A 519	32.158	-2.766	-12.380	1.00	0.00	C	O
ATOM	12702	NE2 GLN A 519	32.324	-3.427	-10.213	1.00	0.00	C	N
ATOM	12703	C GLN A 519	34.204	1.081	-11.128	1.00	0.00	C	C
ATOM	12704	O GLN A 519	34.412	1.168	-9.918	1.00	0.00	C	O
ATOM	12705	N SER A 520	35.178	0.808	-12.010	1.00	0.00	C	N
ATOM	12706	CA SER A 520	36.504	0.486	-11.571	1.00	0.00	C	C
ATOM	12707	CB SER A 520	37.432	0.080	-12.728	1.00	0.00	C	C
ATOM	12708	OG SER A 520	37.552	1.147	-13.655	1.00	0.00	C	O
ATOM	12709	C SER A 520	37.104	1.659	-10.866	1.00	0.00	C	C
ATOM	12710	O SER A 520	37.801	1.488	-9.868	1.00	0.00	C	O

ATOM	12711	N	LEU A 521	36.855	2.888	-11.354	1.00	0.00	C	N
ATOM	12712	CA	LEU A 521	37.460	4.006	-10.688	1.00	0.00	C	C
ATOM	12713	CB	LEU A 521	37.375	5.351	-11.447	1.00	0.00	C	C
ATOM	12714	CG	LEU A 521	36.426	6.449	-10.907	1.00	0.00	C	C
ATOM	12715	CD1	LEU A 521	34.967	6.020	-10.848	1.00	0.00	C	C
ATOM	12716	CD2	LEU A 521	36.928	7.059	-9.587	1.00	0.00	C	C
ATOM	12717	C	LEU A 521	36.838	4.129	-9.329	1.00	0.00	C	C
ATOM	12718	O	LEU A 521	37.504	4.508	-8.369	1.00	0.00	C	O
ATOM	12719	N	PHE A 522	35.536	3.798	-9.208	1.00	0.00	C	N
ATOM	12720	CA	PHE A 522	34.855	3.908	-7.947	1.00	0.00	C	C
ATOM	12721	CB	PHE A 522	33.366	3.513	-7.997	1.00	0.00	C	C
ATOM	12722	CG	PHE A 522	32.565	4.736	-8.301	1.00	0.00	C	C
ATOM	12723	CD1	PHE A 522	32.347	5.165	-9.588	1.00	0.00	C	C
ATOM	12724	CE1	PHE A 522	31.604	6.301	-9.827	1.00	0.00	C	C
ATOM	12725	CZ	PHE A 522	31.075	7.023	-8.786	1.00	0.00	C	C
ATOM	12726	CD2	PHE A 522	32.033	5.469	-7.265	1.00	0.00	C	C
ATOM	12727	CE2	PHE A 522	31.292	6.603	-7.497	1.00	0.00	C	C
ATOM	12728	C	PHE A 522	35.536	3.044	-6.940	1.00	0.00	C	C
ATOM	12729	O	PHE A 522	35.713	3.446	-5.791	1.00	0.00	C	O
ATOM	12730	N	MET A 523	35.931	1.822	-7.332	1.00	0.00	C	N
ATOM	12731	CA	MET A 523	36.598	0.968	-6.398	1.00	0.00	C	C
ATOM	12732	CB	MET A 523	36.923	-0.424	-6.955	1.00	0.00	C	C
ATOM	12733	CG	MET A 523	37.399	-1.382	-5.861	1.00	0.00	C	C
ATOM	12734	SD	MET A 523	37.959	-3.002	-6.459	1.00	0.00	C	S
ATOM	12735	CE	MET A 523	39.446	-2.345	-7.266	1.00	0.00	C	C
ATOM	12736	C	MET A 523	37.905	1.602	-6.010	1.00	0.00	C	C
ATOM	12737	O	MET A 523	38.324	1.525	-4.859	1.00	0.00	C	O
ATOM	12738	N	LEU A 524	38.590	2.253	-6.967	1.00	0.00	C	N
ATOM	12739	CA	LEU A 524	39.871	2.843	-6.686	1.00	0.00	C	C
ATOM	12740	CB	LEU A 524	40.488	3.529	-7.917	1.00	0.00	C	C
ATOM	12741	CG	LEU A 524	40.771	2.580	-9.095	1.00	0.00	C	C
ATOM	12742	CD1	LEU A 524	41.392	3.339	-10.281	1.00	0.00	C	C
ATOM	12743	CD2	LEU A 524	41.607	1.365	-8.659	1.00	0.00	C	C
ATOM	12744	C	LEU A 524	39.688	3.902	-5.648	1.00	0.00	C	C
ATOM	12745	O	LEU A 524	40.507	4.059	-4.744	1.00	0.00	C	O
ATOM	12746	N	ALA A 525	38.593	4.671	-5.753	1.00	0.00	C	N
ATOM	12747	CA	ALA A 525	38.362	5.726	-4.812	1.00	0.00	C	C
ATOM	12748	CB	ALA A 525	37.072	6.509	-5.103	1.00	0.00	C	C

ATOM	12749	C	ALA A 525	38.218	5.123	-3.452	1.00	0.00	C	C
ATOM	12750	O	ALA A 525	38.720	5.664	-2.468	1.00	0.00	C	O
ATOM	12751	N	THR A 526	37.519	3.976	-3.352	1.00	0.00	C	N
ATOM	12752	CA	THR A 526	37.318	3.402	-2.057	1.00	0.00	C	C
ATOM	12753	CB	THR A 526	36.381	2.223	-2.040	1.00	0.00	C	C
ATOM	12754	OG1	THR A 526	36.933	1.119	-2.738	1.00	0.00	C	O
ATOM	12755	CG2	THR A 526	35.054	2.650	-2.694	1.00	0.00	C	C
ATOM	12756	C	THR A 526	38.632	2.958	-1.492	1.00	0.00	C	C
ATOM	12757	O	THR A 526	38.884	3.136	-0.301	1.00	0.00	C	O
ATOM	12758	N	VAL A 527	39.516	2.378	-2.329	1.00	0.00	C	N
ATOM	12759	CA	VAL A 527	40.754	1.847	-1.822	1.00	0.00	C	C
ATOM	12760	CB	VAL A 527	41.585	1.106	-2.837	1.00	0.00	C	C
ATOM	12761	CG1	VAL A 527	40.728	-0.023	-3.434	1.00	0.00	C	C
ATOM	12762	CG2	VAL A 527	42.178	2.090	-3.853	1.00	0.00	C	C
ATOM	12763	C	VAL A 527	41.593	2.947	-1.248	1.00	0.00	C	C
ATOM	12764	O	VAL A 527	42.203	2.778	-0.193	1.00	0.00	C	O
ATOM	12765	N	VAL A 528	41.655	4.111	-1.919	1.00	0.00	C	N
ATOM	12766	CA	VAL A 528	42.464	5.165	-1.383	1.00	0.00	C	C
ATOM	12767	CB	VAL A 528	42.503	6.398	-2.246	1.00	0.00	C	C
ATOM	12768	CG1	VAL A 528	43.102	6.016	-3.610	1.00	0.00	C	C
ATOM	12769	CG2	VAL A 528	41.101	7.018	-2.327	1.00	0.00	C	C
ATOM	12770	C	VAL A 528	41.882	5.530	-0.059	1.00	0.00	C	C
ATOM	12771	O	VAL A 528	42.604	5.788	0.901	1.00	0.00	C	O
ATOM	12772	N	LEU A 529	40.540	5.544	0.014	1.00	0.00	C	N
ATOM	12773	CA	LEU A 529	39.823	5.890	1.203	1.00	0.00	C	C
ATOM	12774	CB	LEU A 529	38.302	5.970	0.987	1.00	0.00	C	C
ATOM	12775	CG	LEU A 529	37.867	7.078	0.007	1.00	0.00	C	C
ATOM	12776	CD1	LEU A 529	36.337	7.129	-0.139	1.00	0.00	C	C
ATOM	12777	CD2	LEU A 529	38.473	8.436	0.396	1.00	0.00	C	C
ATOM	12778	C	LEU A 529	40.088	4.860	2.250	1.00	0.00	C	C
ATOM	12779	O	LEU A 529	40.091	5.190	3.425	1.00	0.00	C	O
ATOM	12780	N	TYR A 530	40.277	3.584	1.874	1.00	0.00	C	N
ATOM	12781	CA	TYR A 530	40.517	2.494	2.787	1.00	0.00	C	C
ATOM	12782	CB	TYR A 530	40.640	1.182	1.987	1.00	0.00	C	C
ATOM	12783	CG	TYR A 530	40.520	-0.033	2.842	1.00	0.00	C	C
ATOM	12784	CD1	TYR A 530	39.277	-0.553	3.123	1.00	0.00	C	C
ATOM	12785	CE1	TYR A 530	39.142	-1.683	3.896	1.00	0.00	C	C
ATOM	12786	CZ	TYR A 530	40.259	-2.304	4.393	1.00	0.00	C	C

ATOM	12787	OH	TYR	A	530	40.124	-3.462	5.187	1.00	0.00	C	O
ATOM	12788	CD2	TYR	A	530	41.635	-0.669	3.336	1.00	0.00	C	C
ATOM	12789	CE2	TYR	A	530	41.507	-1.798	4.111	1.00	0.00	C	C
ATOM	12790	C	TYR	A	530	41.821	2.765	3.471	1.00	0.00	C	C
ATOM	12791	O	TYR	A	530	41.962	2.580	4.680	1.00	0.00	C	O
ATOM	12792	N	PHE	A	531	42.824	3.217	2.696	1.00	0.00	C	N
ATOM	12793	CA	PHE	A	531	44.096	3.540	3.265	1.00	0.00	C	C
ATOM	12794	CB	PHE	A	531	45.165	3.926	2.230	1.00	0.00	C	C
ATOM	12795	CG	PHE	A	531	45.605	2.647	1.619	1.00	0.00	C	C
ATOM	12796	CD1	PHE	A	531	46.384	1.787	2.356	1.00	0.00	C	C
ATOM	12797	CE1	PHE	A	531	46.810	0.595	1.822	1.00	0.00	C	C
ATOM	12798	CZ	PHE	A	531	46.458	0.258	0.539	1.00	0.00	C	C
ATOM	12799	CD2	PHE	A	531	45.258	2.308	0.332	1.00	0.00	C	C
ATOM	12800	CE2	PHE	A	531	45.682	1.115	-0.205	1.00	0.00	C	C
ATOM	12801	C	PHE	A	531	43.913	4.684	4.203	1.00	0.00	C	C
ATOM	12802	O	PHE	A	531	44.500	4.705	5.283	1.00	0.00	C	O
ATOM	12803	N	SER	A	532	43.101	5.681	3.801	1.00	0.00	C	N
ATOM	12804	CA	SER	A	532	42.863	6.792	4.673	1.00	0.00	C	C
ATOM	12805	CB	SER	A	532	42.156	7.988	3.999	1.00	0.00	C	C
ATOM	12806	OG	SER	A	532	40.862	7.636	3.536	1.00	0.00	C	O
ATOM	12807	C	SER	A	532	42.036	6.293	5.817	1.00	0.00	C	C
ATOM	12808	O	SER	A	532	41.952	6.931	6.863	1.00	0.00	C	O
ATOM	12809	N	HSD	A	533	41.413	5.120	5.607	1.00	0.00	C	N
ATOM	12810	CA	HSD	A	533	40.567	4.365	6.483	1.00	0.00	C	C
ATOM	12811	CB	HSD	A	533	41.308	3.750	7.687	1.00	0.00	C	C
ATOM	12812	ND1	HSD	A	533	41.216	5.475	9.549	1.00	0.00	C	N
ATOM	12813	CG	HSD	A	533	41.923	4.766	8.603	1.00	0.00	C	C
ATOM	12814	CE1	HSD	A	533	42.106	6.295	10.166	1.00	0.00	C	C
ATOM	12815	NE2	HSD	A	533	43.329	6.160	9.685	1.00	0.00	C	N
ATOM	12816	CD2	HSD	A	533	43.211	5.196	8.697	1.00	0.00	C	C
ATOM	12817	C	HSD	A	533	39.388	5.149	6.979	1.00	0.00	C	C
ATOM	12818	O	HSD	A	533	38.950	4.939	8.102	1.00	0.00	C	O
ATOM	12819	N	LEU	A	534	38.801	6.049	6.167	1.00	0.00	C	N
ATOM	12820	CA	LEU	A	534	37.631	6.747	6.637	1.00	0.00	C	C
ATOM	12821	CB	LEU	A	534	37.339	8.049	5.873	1.00	0.00	C	C
ATOM	12822	CG	LEU	A	534	38.471	9.088	6.003	1.00	0.00	C	C
ATOM	12823	CD1	LEU	A	534	38.128	10.391	5.266	1.00	0.00	C	C
ATOM	12824	CD2	LEU	A	534	38.855	9.314	7.474	1.00	0.00	C	C

ATOM	12825	C	LEU A 534	36.464	5.830	6.449	1.00	0.00	C	C
ATOM	12826	O	LEU A 534	36.419	5.080	5.482	1.00	0.00	C	O
ATOM	12827	N	LYS A 535	35.480	5.881	7.365	1.00	0.00	C	N
ATOM	12828	CA	LYS A 535	34.327	5.018	7.359	1.00	0.00	C	C
ATOM	12829	CB	LYS A 535	33.429	5.240	8.583	1.00	0.00	C	C
ATOM	12830	CG	LYS A 535	34.063	4.783	9.898	1.00	0.00	C	C
ATOM	12831	CD	LYS A 535	33.361	5.323	11.144	1.00	0.00	C	C
ATOM	12832	CE	LYS A 535	31.854	5.063	11.167	1.00	0.00	C	C
ATOM	12833	NZ	LYS A 535	31.167	5.997	10.246	1.00	0.00	C	N
ATOM	12834	C	LYS A 535	33.496	5.261	6.135	1.00	0.00	C	C
ATOM	12835	O	LYS A 535	32.912	4.332	5.580	1.00	0.00	C	O
ATOM	12836	N	GLU A 536	33.437	6.519	5.671	1.00	0.00	C	N
ATOM	12837	CA	GLU A 536	32.598	6.894	4.566	1.00	0.00	C	C
ATOM	12838	CB	GLU A 536	32.602	8.393	4.228	1.00	0.00	C	C
ATOM	12839	CG	GLU A 536	31.727	9.236	5.153	1.00	0.00	C	C
ATOM	12840	CD	GLU A 536	31.466	10.555	4.440	1.00	0.00	C	C
ATOM	12841	OE1	GLU A 536	32.337	10.966	3.625	1.00	0.00	C	O
ATOM	12842	OE2	GLU A 536	30.394	11.164	4.693	1.00	0.00	C	O
ATOM	12843	C	GLU A 536	33.003	6.163	3.330	1.00	0.00	C	C
ATOM	12844	O	GLU A 536	32.225	6.067	2.382	1.00	0.00	C	O
ATOM	12845	N	TYR A 537	34.235	5.629	3.296	1.00	0.00	C	N
ATOM	12846	CA	TYR A 537	34.762	5.032	2.102	1.00	0.00	C	C
ATOM	12847	CB	TYR A 537	36.161	4.411	2.282	1.00	0.00	C	C
ATOM	12848	CG	TYR A 537	36.066	3.020	2.819	1.00	0.00	C	C
ATOM	12849	CD1	TYR A 537	35.913	2.762	4.158	1.00	0.00	C	C
ATOM	12850	CE1	TYR A 537	35.832	1.478	4.641	1.00	0.00	C	C
ATOM	12851	CZ	TYR A 537	35.903	0.425	3.764	1.00	0.00	C	C
ATOM	12852	OH	TYR A 537	35.824	-0.900	4.243	1.00	0.00	C	O
ATOM	12853	CD2	TYR A 537	36.128	1.955	1.952	1.00	0.00	C	C
ATOM	12854	CE2	TYR A 537	36.051	0.666	2.420	1.00	0.00	C	C
ATOM	12855	C	TYR A 537	33.836	3.942	1.651	1.00	0.00	C	C
ATOM	12856	O	TYR A 537	33.637	3.751	0.452	1.00	0.00	C	O
ATOM	12857	N	VAL A 538	33.221	3.211	2.596	1.00	0.00	C	N
ATOM	12858	CA	VAL A 538	32.410	2.076	2.250	1.00	0.00	C	C
ATOM	12859	CB	VAL A 538	31.742	1.452	3.438	1.00	0.00	C	C
ATOM	12860	CG1	VAL A 538	30.715	2.444	4.009	1.00	0.00	C	C
ATOM	12861	CG2	VAL A 538	31.146	0.099	3.007	1.00	0.00	C	C
ATOM	12862	C	VAL A 538	31.349	2.450	1.262	1.00	0.00	C	C

ATOM	12863	O	VAL A 538	31.162	1.724	0.286	1.00	0.00	C	O
ATOM	12864	N	ALA A 539	30.681	3.610	1.433	1.00	0.00	C	N
ATOM	12865	CA	ALA A 539	29.571	3.964	0.588	1.00	0.00	C	C
ATOM	12866	CB	ALA A 539	29.026	5.379	0.862	1.00	0.00	C	C
ATOM	12867	C	ALA A 539	30.026	3.934	-0.837	1.00	0.00	C	C
ATOM	12868	O	ALA A 539	29.291	3.488	-1.717	1.00	0.00	C	O
ATOM	12869	N	SER A 540	31.260	4.393	-1.101	1.00	0.00	C	N
ATOM	12870	CA	SER A 540	31.782	4.386	-2.439	1.00	0.00	C	C
ATOM	12871	CB	SER A 540	33.186	5.008	-2.527	1.00	0.00	C	C
ATOM	12872	OG	SER A 540	33.132	6.382	-2.175	1.00	0.00	C	O
ATOM	12873	C	SER A 540	31.895	2.967	-2.915	1.00	0.00	C	C
ATOM	12874	O	SER A 540	31.594	2.664	-4.070	1.00	0.00	C	O
ATOM	12875	N	MET A 541	32.337	2.053	-2.031	1.00	0.00	C	N
ATOM	12876	CA	MET A 541	32.486	0.672	-2.396	1.00	0.00	C	C
ATOM	12877	CB	MET A 541	33.083	-0.205	-1.284	1.00	0.00	C	C
ATOM	12878	CG	MET A 541	34.564	0.054	-1.015	1.00	0.00	C	C
ATOM	12879	SD	MET A 541	35.321	-1.181	0.080	1.00	0.00	C	S
ATOM	12880	CE	MET A 541	35.134	-2.548	-1.103	1.00	0.00	C	C
ATOM	12881	C	MET A 541	31.137	0.108	-2.709	1.00	0.00	C	C
ATOM	12882	O	MET A 541	30.987	-0.688	-3.635	1.00	0.00	C	O
ATOM	12883	N	VAL A 542	30.112	0.526	-1.944	1.00	0.00	C	N
ATOM	12884	CA	VAL A 542	28.787	0.007	-2.119	1.00	0.00	C	C
ATOM	12885	CB	VAL A 542	27.775	0.677	-1.236	1.00	0.00	C	C
ATOM	12886	CG1	VAL A 542	26.379	0.167	-1.628	1.00	0.00	C	C
ATOM	12887	CG2	VAL A 542	28.139	0.413	0.234	1.00	0.00	C	C
ATOM	12888	C	VAL A 542	28.377	0.278	-3.527	1.00	0.00	C	C
ATOM	12889	O	VAL A 542	27.784	-0.579	-4.183	1.00	0.00	C	O
ATOM	12890	N	PHE A 543	28.690	1.481	-4.039	1.00	0.00	C	N
ATOM	12891	CA	PHE A 543	28.361	1.766	-5.406	1.00	0.00	C	C
ATOM	12892	CB	PHE A 543	28.842	3.142	-5.908	1.00	0.00	C	C
ATOM	12893	CG	PHE A 543	27.788	4.159	-5.679	1.00	0.00	C	C
ATOM	12894	CD1	PHE A 543	27.583	4.730	-4.446	1.00	0.00	C	C
ATOM	12895	CE1	PHE A 543	26.595	5.674	-4.282	1.00	0.00	C	C
ATOM	12896	CZ	PHE A 543	25.814	6.056	-5.347	1.00	0.00	C	C
ATOM	12897	CD2	PHE A 543	27.006	4.553	-6.741	1.00	0.00	C	C
ATOM	12898	CE2	PHE A 543	26.019	5.495	-6.583	1.00	0.00	C	C
ATOM	12899	C	PHE A 543	29.074	0.785	-6.273	1.00	0.00	C	C
ATOM	12900	O	PHE A 543	28.506	0.263	-7.232	1.00	0.00	C	O

ATOM	12901	N	SER A 544	30.345	0.515	-5.951	1.00	0.00	C	N
ATOM	12902	CA	SER A 544	31.168	-0.322	-6.776	1.00	0.00	C	C
ATOM	12903	CB	SER A 544	32.598	-0.461	-6.218	1.00	0.00	C	C
ATOM	12904	OG	SER A 544	33.382	-1.299	-7.055	1.00	0.00	C	O
ATOM	12905	C	SER A 544	30.595	-1.702	-6.897	1.00	0.00	C	C
ATOM	12906	O	SER A 544	30.568	-2.260	-7.993	1.00	0.00	C	O
ATOM	12907	N	LEU A 545	30.130	-2.297	-5.785	1.00	0.00	C	N
ATOM	12908	CA	LEU A 545	29.664	-3.658	-5.825	1.00	0.00	C	C
ATOM	12909	CB	LEU A 545	29.272	-4.203	-4.446	1.00	0.00	C	C
ATOM	12910	CG	LEU A 545	28.775	-5.659	-4.513	1.00	0.00	C	C
ATOM	12911	CD1	LEU A 545	29.882	-6.619	-4.971	1.00	0.00	C	C
ATOM	12912	CD2	LEU A 545	28.135	-6.089	-3.188	1.00	0.00	C	C
ATOM	12913	C	LEU A 545	28.454	-3.810	-6.694	1.00	0.00	C	C
ATOM	12914	O	LEU A 545	28.382	-4.745	-7.491	1.00	0.00	C	O
ATOM	12915	N	ALA A 546	27.455	-2.920	-6.523	1.00	0.00	C	N
ATOM	12916	CA	ALA A 546	26.213	-2.960	-7.251	1.00	0.00	C	C
ATOM	12917	CB	ALA A 546	25.193	-1.934	-6.731	1.00	0.00	C	C
ATOM	12918	C	ALA A 546	26.442	-2.660	-8.699	1.00	0.00	C	C
ATOM	12919	O	ALA A 546	25.877	-3.313	-9.575	1.00	0.00	C	O
ATOM	12920	N	LEU A 547	27.290	-1.656	-8.983	1.00	0.00	C	N
ATOM	12921	CA	LEU A 547	27.511	-1.228	-10.331	1.00	0.00	C	C
ATOM	12922	CB	LEU A 547	28.502	-0.054	-10.436	1.00	0.00	C	C
ATOM	12923	CG	LEU A 547	27.995	1.263	-9.815	1.00	0.00	C	C
ATOM	12924	CD1	LEU A 547	29.026	2.390	-9.991	1.00	0.00	C	C
ATOM	12925	CD2	LEU A 547	26.608	1.639	-10.360	1.00	0.00	C	C
ATOM	12926	C	LEU A 547	28.103	-2.361	-11.106	1.00	0.00	C	C
ATOM	12927	O	LEU A 547	27.733	-2.600	-12.254	1.00	0.00	C	O
ATOM	12928	N	GLY A 548	29.045	-3.093	-10.490	1.00	0.00	C	N
ATOM	12929	CA	GLY A 548	29.694	-4.167	-11.182	1.00	0.00	C	C
ATOM	12930	C	GLY A 548	28.684	-5.210	-11.547	1.00	0.00	C	C
ATOM	12931	O	GLY A 548	28.713	-5.748	-12.652	1.00	0.00	C	O
ATOM	12932	N	TRP A 549	27.756	-5.528	-10.624	1.00	0.00	C	N
ATOM	12933	CA	TRP A 549	26.789	-6.545	-10.920	1.00	0.00	C	C
ATOM	12934	CB	TRP A 549	25.849	-6.887	-9.752	1.00	0.00	C	C
ATOM	12935	CG	TRP A 549	26.482	-7.795	-8.731	1.00	0.00	C	C
ATOM	12936	CD1	TRP A 549	26.901	-7.560	-7.453	1.00	0.00	C	C
ATOM	12937	NE1	TRP A 549	27.441	-8.706	-6.920	1.00	0.00	C	N
ATOM	12938	CE2	TRP A 549	27.378	-9.705	-7.870	1.00	0.00	C	C

ATOM	12939	CD2 TRP A 549	26.786	-9.169	-9.015	1.00	0.00	C	C
ATOM	12940	CE3 TRP A 549	26.590	-9.917	-10.138	1.00	0.00	C	C
ATOM	12941	CZ3 TRP A 549	26.996	-11.232	-10.098	1.00	0.00	C	C
ATOM	12942	CZ2 TRP A 549	27.785	-11.009	-7.835	1.00	0.00	C	C
ATOM	12943	CH2 TRP A 549	27.581	-11.766	-8.968	1.00	0.00	C	C
ATOM	12944	C TRP A 549	25.949	-6.126	-12.082	1.00	0.00	C	C
ATOM	12945	O TRP A 549	25.700	-6.921	-12.986	1.00	0.00	C	O
ATOM	12946	N THR A 550	25.508	-4.859	-12.105	1.00	0.00	C	N
ATOM	12947	CA THR A 550	24.655	-4.417	-13.170	1.00	0.00	C	C
ATOM	12948	CB THR A 550	24.221	-2.989	-13.013	1.00	0.00	C	C
ATOM	12949	OG1 THR A 550	25.331	-2.112	-13.126	1.00	0.00	C	O
ATOM	12950	CG2 THR A 550	23.581	-2.842	-11.622	1.00	0.00	C	C
ATOM	12951	C THR A 550	25.416	-4.550	-14.455	1.00	0.00	C	C
ATOM	12952	O THR A 550	24.852	-4.905	-15.487	1.00	0.00	C	O
ATOM	12953	N ASN A 551	26.731	-4.269	-14.410	1.00	0.00	C	N
ATOM	12954	CA ASN A 551	27.600	-4.324	-15.556	1.00	0.00	C	C
ATOM	12955	CB ASN A 551	29.043	-3.895	-15.239	1.00	0.00	C	C
ATOM	12956	CG ASN A 551	29.070	-2.408	-14.924	1.00	0.00	C	C
ATOM	12957	OD1 ASN A 551	28.127	-1.675	-15.219	1.00	0.00	C	O
ATOM	12958	ND2 ASN A 551	30.193	-1.942	-14.313	1.00	0.00	C	N
ATOM	12959	C ASN A 551	27.682	-5.736	-16.066	1.00	0.00	C	C
ATOM	12960	O ASN A 551	27.793	-5.961	-17.272	1.00	0.00	C	O
ATOM	12961	N MET A 552	27.597	-6.725	-15.160	1.00	0.00	C	N
ATOM	12962	CA MET A 552	27.804	-8.117	-15.470	1.00	0.00	C	C
ATOM	12963	CB MET A 552	27.668	-9.030	-14.240	1.00	0.00	C	C
ATOM	12964	CG MET A 552	28.200	-10.442	-14.494	1.00	0.00	C	C
ATOM	12965	SD MET A 552	28.074	-11.579	-13.084	1.00	0.00	C	S
ATOM	12966	CE MET A 552	26.334	-12.008	-13.353	1.00	0.00	C	C
ATOM	12967	C MET A 552	26.807	-8.586	-16.488	1.00	0.00	C	C
ATOM	12968	O MET A 552	27.093	-9.476	-17.287	1.00	0.00	C	O
ATOM	12969	N LEU A 553	25.609	-7.983	-16.490	1.00	0.00	C	N
ATOM	12970	CA LEU A 553	24.490	-8.361	-17.315	1.00	0.00	C	C
ATOM	12971	CB LEU A 553	23.331	-7.363	-17.193	1.00	0.00	C	C
ATOM	12972	CG LEU A 553	22.983	-7.010	-15.741	1.00	0.00	C	C
ATOM	12973	CD1 LEU A 553	21.653	-6.242	-15.659	1.00	0.00	C	C
ATOM	12974	CD2 LEU A 553	23.070	-8.236	-14.825	1.00	0.00	C	C
ATOM	12975	C LEU A 553	24.894	-8.290	-18.764	1.00	0.00	C	C
ATOM	12976	O LEU A 553	24.341	-8.988	-19.612	1.00	0.00	C	O

ATOM 12977	N	TYR A 554	25.857	-7.406	-19.066	1.00	0.00	C	N
ATOM 12978	CA	TYR A 554	26.373	-7.080	-20.370	1.00	0.00	C	C
ATOM 12979	CB	TYR A 554	27.454	-5.986	-20.231	1.00	0.00	C	C
ATOM 12980	CG	TYR A 554	28.539	-6.115	-21.244	1.00	0.00	C	C
ATOM 12981	CD1	TYR A 554	28.356	-5.850	-22.581	1.00	0.00	C	C
ATOM 12982	CE1	TYR A 554	29.411	-5.977	-23.461	1.00	0.00	C	C
ATOM 12983	CZ	TYR A 554	30.654	-6.359	-23.013	1.00	0.00	C	C
ATOM 12984	OH	TYR A 554	31.734	-6.488	-23.911	1.00	0.00	C	O
ATOM 12985	CD2	TYR A 554	29.790	-6.485	-20.807	1.00	0.00	C	C
ATOM 12986	CE2	TYR A 554	30.845	-6.612	-21.678	1.00	0.00	C	C
ATOM 12987	C	TYR A 554	26.935	-8.269	-21.105	1.00	0.00	C	C
ATOM 12988	O	TYR A 554	26.743	-8.392	-22.314	1.00	0.00	C	O
ATOM 12989	N	TYR A 555	27.602	-9.196	-20.401	1.00	0.00	C	N
ATOM 12990	CA	TYR A 555	28.259	-10.315	-21.023	1.00	0.00	C	C
ATOM 12991	CB	TYR A 555	28.959	-11.278	-20.042	1.00	0.00	C	C
ATOM 12992	CG	TYR A 555	30.301	-10.726	-19.699	1.00	0.00	C	C
ATOM 12993	CD1	TYR A 555	31.359	-10.949	-20.554	1.00	0.00	C	C
ATOM 12994	CE1	TYR A 555	32.611	-10.464	-20.274	1.00	0.00	C	C
ATOM 12995	CZ	TYR A 555	32.822	-9.743	-19.124	1.00	0.00	C	C
ATOM 12996	OH	TYR A 555	34.111	-9.245	-18.837	1.00	0.00	C	O
ATOM 12997	CD2	TYR A 555	30.522	-10.005	-18.547	1.00	0.00	C	C
ATOM 12998	CE2	TYR A 555	31.776	-9.513	-18.261	1.00	0.00	C	C
ATOM 12999	C	TYR A 555	27.301	-11.110	-21.843	1.00	0.00	C	C
ATOM 13000	O	TYR A 555	27.700	-11.765	-22.801	1.00	0.00	C	O
ATOM 13001	N	THR A 556	26.017	-11.113	-21.478	1.00	0.00	C	N
ATOM 13002	CA	THR A 556	25.049	-11.907	-22.169	1.00	0.00	C	C
ATOM 13003	CB	THR A 556	23.702	-11.836	-21.528	1.00	0.00	C	C
ATOM 13004	OG1	THR A 556	23.819	-12.104	-20.138	1.00	0.00	C	O
ATOM 13005	CG2	THR A 556	22.849	-12.948	-22.151	1.00	0.00	C	C
ATOM 13006	C	THR A 556	24.962	-11.448	-23.600	1.00	0.00	C	C
ATOM 13007	O	THR A 556	24.485	-12.179	-24.463	1.00	0.00	C	O
ATOM 13008	N	ARG A 557	25.395	-10.208	-23.900	1.00	0.00	C	N
ATOM 13009	CA	ARG A 557	25.292	-9.644	-25.222	1.00	0.00	C	C
ATOM 13010	CB	ARG A 557	25.932	-8.246	-25.322	1.00	0.00	C	C
ATOM 13011	CG	ARG A 557	25.189	-7.198	-24.488	1.00	0.00	C	C
ATOM 13012	CD	ARG A 557	25.894	-5.842	-24.385	1.00	0.00	C	C
ATOM 13013	NE	ARG A 557	25.699	-5.114	-25.670	1.00	0.00	C	N
ATOM 13014	CZ	ARG A 557	25.674	-3.750	-25.697	1.00	0.00	C	C

ATOM	13015	NH1	ARG	A 557	25.788	-3.023	-24.545	1.00	0.00	C	N
ATOM	13016	NH2	ARG	A 557	25.528	-3.104	-26.891	1.00	0.00	C	N
ATOM	13017	C	ARG	A 557	25.912	-10.527	-26.269	1.00	0.00	C	C
ATOM	13018	O	ARG	A 557	26.914	-11.209	-26.044	1.00	0.00	C	O
ATOM	13019	N	GLY	A 558	25.310	-10.483	-27.477	1.00	0.00	C	N
ATOM	13020	CA	GLY	A 558	25.700	-11.293	-28.594	1.00	0.00	C	C
ATOM	13021	C	GLY	A 558	24.724	-12.424	-28.733	1.00	0.00	C	C
ATOM	13022	O	GLY	A 558	24.883	-13.279	-29.603	1.00	0.00	C	O
ATOM	13023	N	PHE	A 559	23.685	-12.470	-27.875	1.00	0.00	C	N
ATOM	13024	CA	PHE	A 559	22.700	-13.512	-27.984	1.00	0.00	C	C
ATOM	13025	CB	PHE	A 559	22.471	-14.254	-26.655	1.00	0.00	C	C
ATOM	13026	CG	PHE	A 559	23.729	-15.031	-26.445	1.00	0.00	C	C
ATOM	13027	CD1	PHE	A 559	24.864	-14.404	-25.988	1.00	0.00	C	C
ATOM	13028	CE1	PHE	A 559	26.039	-15.088	-25.799	1.00	0.00	C	C
ATOM	13029	CZ	PHE	A 559	26.086	-16.429	-26.086	1.00	0.00	C	C
ATOM	13030	CD2	PHE	A 559	23.795	-16.371	-26.748	1.00	0.00	C	C
ATOM	13031	CE2	PHE	A 559	24.966	-17.070	-26.562	1.00	0.00	C	C
ATOM	13032	C	PHE	A 559	21.454	-12.867	-28.477	1.00	0.00	C	C
ATOM	13033	O	PHE	A 559	21.147	-11.747	-28.106	1.00	0.00	C	O
ATOM	13034	N	GLN	A 560	20.697	-13.517	-29.371	1.00	0.00	C	N
ATOM	13035	CA	GLN	A 560	19.592	-12.848	-29.991	1.00	0.00	C	C
ATOM	13036	CB	GLN	A 560	18.869	-13.743	-31.011	1.00	0.00	C	C
ATOM	13037	CG	GLN	A 560	19.710	-14.166	-32.217	1.00	0.00	C	C
ATOM	13038	CD	GLN	A 560	20.547	-15.398	-31.884	1.00	0.00	C	C
ATOM	13039	OE1	GLN	A 560	20.812	-15.741	-30.734	1.00	0.00	C	O
ATOM	13040	NE2	GLN	A 560	20.982	-16.104	-32.962	1.00	0.00	C	N
ATOM	13041	C	GLN	A 560	18.559	-12.458	-28.982	1.00	0.00	C	C
ATOM	13042	O	GLN	A 560	18.085	-11.324	-28.975	1.00	0.00	C	O
ATOM	13043	N	GLN	A 561	18.159	-13.392	-28.106	1.00	0.00	C	N
ATOM	13044	CA	GLN	A 561	17.143	-13.048	-27.154	1.00	0.00	C	C
ATOM	13045	CB	GLN	A 561	16.712	-14.253	-26.298	1.00	0.00	C	C
ATOM	13046	CG	GLN	A 561	15.935	-15.341	-27.046	1.00	0.00	C	C
ATOM	13047	CD	GLN	A 561	14.457	-14.990	-26.957	1.00	0.00	C	C
ATOM	13048	OE1	GLN	A 561	14.101	-13.832	-26.746	1.00	0.00	C	O
ATOM	13049	NE2	GLN	A 561	13.575	-16.014	-27.108	1.00	0.00	C	N
ATOM	13050	C	GLN	A 561	17.691	-12.040	-26.192	1.00	0.00	C	C
ATOM	13051	O	GLN	A 561	17.084	-11.002	-25.935	1.00	0.00	C	O
ATOM	13052	N	MET	A 562	18.885	-12.341	-25.652	1.00	0.00	C	N

ATOM	13053	CA	MET A 562	19.502	-11.588	-24.600	1.00	0.00	C	C
ATOM	13054	CB	MET A 562	20.750	-12.305	-24.093	1.00	0.00	C	C
ATOM	13055	CG	MET A 562	20.460	-13.756	-23.718	1.00	0.00	C	C
ATOM	13056	SD	MET A 562	19.022	-13.962	-22.627	1.00	0.00	C	S
ATOM	13057	CE	MET A 562	19.731	-13.030	-21.238	1.00	0.00	C	C
ATOM	13058	C	MET A 562	19.932	-10.226	-25.037	1.00	0.00	C	C
ATOM	13059	O	MET A 562	19.734	-9.230	-24.349	1.00	0.00	C	O
ATOM	13060	N	GLY A 563	20.528	-10.173	-26.226	1.00	0.00	C	N
ATOM	13061	CA	GLY A 563	21.129	-9.026	-26.829	1.00	0.00	C	C
ATOM	13062	C	GLY A 563	20.073	-8.002	-26.997	1.00	0.00	C	C
ATOM	13063	O	GLY A 563	20.315	-6.811	-26.827	1.00	0.00	C	O
ATOM	13064	N	ILE A 564	18.859	-8.443	-27.358	1.00	0.00	C	N
ATOM	13065	CA	ILE A 564	17.828	-7.485	-27.589	1.00	0.00	C	C
ATOM	13066	CB	ILE A 564	16.577	-8.084	-28.141	1.00	0.00	C	C
ATOM	13067	CG2	ILE A 564	15.555	-6.957	-28.362	1.00	0.00	C	C
ATOM	13068	CG1	ILE A 564	16.943	-8.875	-29.404	1.00	0.00	C	C
ATOM	13069	CD	ILE A 564	17.985	-8.173	-30.276	1.00	0.00	C	C
ATOM	13070	C	ILE A 564	17.506	-6.774	-26.309	1.00	0.00	C	C
ATOM	13071	O	ILE A 564	17.329	-5.558	-26.299	1.00	0.00	C	O
ATOM	13072	N	TYR A 565	17.429	-7.510	-25.187	1.00	0.00	C	N
ATOM	13073	CA	TYR A 565	17.049	-6.902	-23.943	1.00	0.00	C	C
ATOM	13074	CB	TYR A 565	16.793	-7.942	-22.841	1.00	0.00	C	C
ATOM	13075	CG	TYR A 565	15.494	-8.565	-23.225	1.00	0.00	C	C
ATOM	13076	CD1	TYR A 565	15.446	-9.632	-24.092	1.00	0.00	C	C
ATOM	13077	CE1	TYR A 565	14.240	-10.188	-24.445	1.00	0.00	C	C
ATOM	13078	CZ	TYR A 565	13.068	-9.676	-23.941	1.00	0.00	C	C
ATOM	13079	OH	TYR A 565	11.832	-10.248	-24.306	1.00	0.00	C	O
ATOM	13080	CD2	TYR A 565	14.314	-8.052	-22.733	1.00	0.00	C	C
ATOM	13081	CE2	TYR A 565	13.106	-8.603	-23.083	1.00	0.00	C	C
ATOM	13082	C	TYR A 565	18.055	-5.892	-23.480	1.00	0.00	C	C
ATOM	13083	O	TYR A 565	17.679	-4.810	-23.029	1.00	0.00	C	O
ATOM	13084	N	ALA A 566	19.359	-6.199	-23.582	1.00	0.00	C	N
ATOM	13085	CA	ALA A 566	20.344	-5.266	-23.107	1.00	0.00	C	C
ATOM	13086	CB	ALA A 566	21.786	-5.769	-23.274	1.00	0.00	C	C
ATOM	13087	C	ALA A 566	20.230	-4.006	-23.902	1.00	0.00	C	C
ATOM	13088	O	ALA A 566	20.289	-2.907	-23.355	1.00	0.00	C	O
ATOM	13089	N	VAL A 567	20.049	-4.150	-25.225	1.00	0.00	C	N
ATOM	13090	CA	VAL A 567	19.997	-3.015	-26.097	1.00	0.00	C	C

ATOM	13091	CB VAL A 567	19.852	-3.400	-27.541	1.00	0.00	C	C
ATOM	13092	CG1 VAL A 567	19.747	-2.116	-28.382	1.00	0.00	C	C
ATOM	13093	CG2 VAL A 567	21.040	-4.298	-27.927	1.00	0.00	C	C
ATOM	13094	C VAL A 567	18.828	-2.161	-25.716	1.00	0.00	C	C
ATOM	13095	O VAL A 567	18.939	-0.937	-25.662	1.00	0.00	C	O
ATOM	13096	N MET A 568	17.670	-2.780	-25.426	1.00	0.00	C	N
ATOM	13097	CA MET A 568	16.510	-1.991	-25.122	1.00	0.00	C	C
ATOM	13098	CB MET A 568	15.216	-2.810	-24.991	1.00	0.00	C	C
ATOM	13099	CG MET A 568	15.202	-3.811	-23.839	1.00	0.00	C	C
ATOM	13100	SD MET A 568	13.620	-4.688	-23.664	1.00	0.00	C	S
ATOM	13101	CE MET A 568	13.715	-5.488	-25.292	1.00	0.00	C	C
ATOM	13102	C MET A 568	16.742	-1.237	-23.853	1.00	0.00	C	C
ATOM	13103	O MET A 568	16.348	-0.078	-23.731	1.00	0.00	C	O
ATOM	13104	N ILE A 569	17.402	-1.879	-22.873	1.00	0.00	C	N
ATOM	13105	CA ILE A 569	17.655	-1.247	-21.612	1.00	0.00	C	C
ATOM	13106	CB ILE A 569	18.386	-2.145	-20.660	1.00	0.00	C	C
ATOM	13107	CG2 ILE A 569	18.955	-1.277	-19.535	1.00	0.00	C	C
ATOM	13108	CG1 ILE A 569	17.484	-3.294	-20.187	1.00	0.00	C	C
ATOM	13109	CD ILE A 569	18.240	-4.374	-19.415	1.00	0.00	C	C
ATOM	13110	C ILE A 569	18.520	-0.053	-21.828	1.00	0.00	C	C
ATOM	13111	O ILE A 569	18.263	1.018	-21.283	1.00	0.00	C	O
ATOM	13112	N GLU A 570	19.573	-0.200	-22.643	1.00	0.00	C	N
ATOM	13113	CA GLU A 570	20.458	0.905	-22.845	1.00	0.00	C	C
ATOM	13114	CB GLU A 570	21.710	0.525	-23.631	1.00	0.00	C	C
ATOM	13115	CG GLU A 570	22.662	-0.247	-22.725	1.00	0.00	C	C
ATOM	13116	CD GLU A 570	23.601	-1.021	-23.613	1.00	0.00	C	C
ATOM	13117	OE1 GLU A 570	24.608	-0.432	-24.083	1.00	0.00	C	O
ATOM	13118	OE2 GLU A 570	23.310	-2.225	-23.838	1.00	0.00	C	O
ATOM	13119	C GLU A 570	19.724	2.011	-23.525	1.00	0.00	C	C
ATOM	13120	O GLU A 570	19.961	3.179	-23.232	1.00	0.00	C	O
ATOM	13121	N LYS A 571	18.804	1.671	-24.443	1.00	0.00	C	N
ATOM	13122	CA LYS A 571	18.063	2.666	-25.166	1.00	0.00	C	C
ATOM	13123	CB LYS A 571	17.065	2.061	-26.167	1.00	0.00	C	C
ATOM	13124	CG LYS A 571	16.190	3.115	-26.855	1.00	0.00	C	C
ATOM	13125	CD LYS A 571	16.932	4.027	-27.834	1.00	0.00	C	C
ATOM	13126	CE LYS A 571	16.032	5.098	-28.456	1.00	0.00	C	C
ATOM	13127	NZ LYS A 571	16.610	5.573	-29.730	1.00	0.00	C	N
ATOM	13128	C LYS A 571	17.241	3.482	-24.221	1.00	0.00	C	C

ATOM	13129	O	LYS A 571	17.148	4.700	-24.354	1.00	0.00	C	O
ATOM	13130	N	MET A 572	16.599	2.833	-23.240	1.00	0.00	C	N
ATOM	13131	CA	MET A 572	15.738	3.586	-22.381	1.00	0.00	C	C
ATOM	13132	CB	MET A 572	14.929	2.677	-21.446	1.00	0.00	C	C
ATOM	13133	CG	MET A 572	14.018	1.765	-22.269	1.00	0.00	C	C
ATOM	13134	SD	MET A 572	12.928	0.645	-21.349	1.00	0.00	C	S
ATOM	13135	CE	MET A 572	12.267	-0.081	-22.876	1.00	0.00	C	C
ATOM	13136	C	MET A 572	16.535	4.566	-21.586	1.00	0.00	C	C
ATOM	13137	O	MET A 572	16.127	5.718	-21.419	1.00	0.00	C	O
ATOM	13138	N	ILE A 573	17.692	4.133	-21.068	1.00	0.00	C	N
ATOM	13139	CA	ILE A 573	18.532	4.944	-20.235	1.00	0.00	C	C
ATOM	13140	CB	ILE A 573	19.614	4.122	-19.599	1.00	0.00	C	C
ATOM	13141	CG2	ILE A 573	20.479	5.047	-18.727	1.00	0.00	C	C
ATOM	13142	CG1	ILE A 573	18.969	2.968	-18.807	1.00	0.00	C	C
ATOM	13143	CD	ILE A 573	19.949	1.877	-18.384	1.00	0.00	C	C
ATOM	13144	C	ILE A 573	19.160	6.049	-21.023	1.00	0.00	C	C
ATOM	13145	O	ILE A 573	19.210	7.190	-20.568	1.00	0.00	C	O
ATOM	13146	N	LEU A 574	19.699	5.754	-22.218	1.00	0.00	C	N
ATOM	13147	CA	LEU A 574	20.334	6.832	-22.905	1.00	0.00	C	C
ATOM	13148	CB	LEU A 574	21.028	6.341	-24.184	1.00	0.00	C	C
ATOM	13149	CG	LEU A 574	21.999	5.177	-23.901	1.00	0.00	C	C
ATOM	13150	CD1	LEU A 574	22.759	4.752	-25.161	1.00	0.00	C	C
ATOM	13151	CD2	LEU A 574	22.920	5.478	-22.708	1.00	0.00	C	C
ATOM	13152	C	LEU A 574	19.299	7.855	-23.292	1.00	0.00	C	C
ATOM	13153	O	LEU A 574	19.386	9.011	-22.884	1.00	0.00	C	O
ATOM	13154	N	ARG A 575	18.311	7.454	-24.123	1.00	0.00	C	N
ATOM	13155	CA	ARG A 575	17.328	8.381	-24.630	1.00	0.00	C	C
ATOM	13156	CB	ARG A 575	16.715	7.838	-25.924	1.00	0.00	C	C
ATOM	13157	CG	ARG A 575	17.778	7.409	-26.934	1.00	0.00	C	C
ATOM	13158	CD	ARG A 575	18.628	8.569	-27.447	1.00	0.00	C	C
ATOM	13159	NE	ARG A 575	19.591	8.008	-28.438	1.00	0.00	C	N
ATOM	13160	CZ	ARG A 575	19.190	7.787	-29.724	1.00	0.00	C	C
ATOM	13161	NH1	ARG A 575	17.909	8.064	-30.100	1.00	0.00	C	N
ATOM	13162	NH2	ARG A 575	20.070	7.283	-30.641	1.00	0.00	C	N
ATOM	13163	C	ARG A 575	16.162	8.756	-23.749	1.00	0.00	C	C
ATOM	13164	O	ARG A 575	16.068	9.877	-23.250	1.00	0.00	C	O
ATOM	13165	N	ASP A 576	15.268	7.771	-23.492	1.00	0.00	C	N
ATOM	13166	CA	ASP A 576	13.954	8.017	-22.941	1.00	0.00	C	C

ATOM	13167	CB	ASP A 576	13.072	6.754	-23.007	1.00	0.00	C	C
ATOM	13168	CG	ASP A 576	11.608	7.151	-22.883	1.00	0.00	C	C
ATOM	13169	OD1	ASP A 576	11.310	8.128	-22.148	1.00	0.00	C	O
ATOM	13170	OD2	ASP A 576	10.763	6.473	-23.530	1.00	0.00	C	O
ATOM	13171	C	ASP A 576	13.982	8.493	-21.524	1.00	0.00	C	C
ATOM	13172	O	ASP A 576	13.368	9.503	-21.184	1.00	0.00	C	O
ATOM	13173	N	LEU A 577	14.702	7.766	-20.658	1.00	0.00	C	N
ATOM	13174	CA	LEU A 577	14.775	8.109	-19.272	1.00	0.00	C	C
ATOM	13175	CB	LEU A 577	15.594	7.100	-18.454	1.00	0.00	C	C
ATOM	13176	CG	LEU A 577	15.874	7.593	-17.026	1.00	0.00	C	C
ATOM	13177	CD1	LEU A 577	14.573	7.875	-16.262	1.00	0.00	C	C
ATOM	13178	CD2	LEU A 577	16.814	6.637	-16.281	1.00	0.00	C	C
ATOM	13179	C	LEU A 577	15.468	9.417	-19.146	1.00	0.00	C	C
ATOM	13180	O	LEU A 577	15.038	10.292	-18.398	1.00	0.00	C	O
ATOM	13181	N	CYS A 578	16.559	9.583	-19.908	1.00	0.00	C	N
ATOM	13182	CA	CYS A 578	17.352	10.768	-19.799	1.00	0.00	C	C
ATOM	13183	CB	CYS A 578	18.577	10.742	-20.727	1.00	0.00	C	C
ATOM	13184	SG	CYS A 578	19.592	12.243	-20.595	1.00	0.00	C	S
ATOM	13185	C	CYS A 578	16.520	11.947	-20.179	1.00	0.00	C	C
ATOM	13186	O	CYS A 578	16.543	12.972	-19.501	1.00	0.00	C	O
ATOM	13187	N	ARG A 579	15.758	11.836	-21.279	1.00	0.00	C	N
ATOM	13188	CA	ARG A 579	14.978	12.950	-21.722	1.00	0.00	C	C
ATOM	13189	CB	ARG A 579	14.270	12.673	-23.059	1.00	0.00	C	C
ATOM	13190	CG	ARG A 579	15.223	12.603	-24.254	1.00	0.00	C	C
ATOM	13191	CD	ARG A 579	14.590	11.990	-25.501	1.00	0.00	C	C
ATOM	13192	NE	ARG A 579	15.534	12.188	-26.640	1.00	0.00	C	N
ATOM	13193	CZ	ARG A 579	15.669	11.224	-27.595	1.00	0.00	C	C
ATOM	13194	NH1	ARG A 579	14.986	10.049	-27.477	1.00	0.00	C	N
ATOM	13195	NH2	ARG A 579	16.498	11.428	-28.663	1.00	0.00	C	N
ATOM	13196	C	ARG A 579	13.927	13.270	-20.704	1.00	0.00	C	C
ATOM	13197	O	ARG A 579	13.715	14.432	-20.367	1.00	0.00	C	O
ATOM	13198	N	PHE A 580	13.254	12.232	-20.171	1.00	0.00	C	N
ATOM	13199	CA	PHE A 580	12.159	12.401	-19.256	1.00	0.00	C	C
ATOM	13200	CB	PHE A 580	11.460	11.075	-18.917	1.00	0.00	C	C
ATOM	13201	CG	PHE A 580	10.169	11.433	-18.273	1.00	0.00	C	C
ATOM	13202	CD1	PHE A 580	9.091	11.773	-19.057	1.00	0.00	C	C
ATOM	13203	CE1	PHE A 580	7.889	12.108	-18.483	1.00	0.00	C	C
ATOM	13204	CZ	PHE A 580	7.767	12.101	-17.116	1.00	0.00	C	C

ATOM	13205	CD2 PHE A 580	10.033	11.430	-16.903	1.00	0.00	C	C
ATOM	13206	CE2 PHE A 580	8.834	11.763	-16.324	1.00	0.00	C	C
ATOM	13207	C PHE A 580	12.638	12.993	-17.974	1.00	0.00	C	C
ATOM	13208	O PHE A 580	11.981	13.858	-17.401	1.00	0.00	C	O
ATOM	13209	N MET A 581	13.814	12.560	-17.494	1.00	0.00	C	N
ATOM	13210	CA MET A 581	14.265	13.025	-16.220	1.00	0.00	C	C
ATOM	13211	CB MET A 581	15.613	12.448	-15.780	1.00	0.00	C	C
ATOM	13212	CG MET A 581	16.126	13.160	-14.531	1.00	0.00	C	C
ATOM	13213	SD MET A 581	17.349	12.242	-13.569	1.00	0.00	C	S
ATOM	13214	CE MET A 581	16.109	11.411	-12.532	1.00	0.00	C	C
ATOM	13215	C MET A 581	14.388	14.506	-16.271	1.00	0.00	C	C
ATOM	13216	O MET A 581	14.116	15.184	-15.283	1.00	0.00	C	O
ATOM	13217	N PHE A 582	14.807	15.066	-17.416	1.00	0.00	C	N
ATOM	13218	CA PHE A 582	14.892	16.494	-17.448	1.00	0.00	C	C
ATOM	13219	CB PHE A 582	15.372	17.059	-18.798	1.00	0.00	C	C
ATOM	13220	CG PHE A 582	16.830	16.783	-18.943	1.00	0.00	C	C
ATOM	13221	CD1 PHE A 582	17.737	17.456	-18.157	1.00	0.00	C	C
ATOM	13222	CE1 PHE A 582	19.085	17.223	-18.278	1.00	0.00	C	C
ATOM	13223	CZ PHE A 582	19.541	16.312	-19.203	1.00	0.00	C	C
ATOM	13224	CD2 PHE A 582	17.295	15.881	-19.872	1.00	0.00	C	C
ATOM	13225	CE2 PHE A 582	18.644	15.644	-20.000	1.00	0.00	C	C
ATOM	13226	C PHE A 582	13.526	17.059	-17.195	1.00	0.00	C	C
ATOM	13227	O PHE A 582	13.369	17.962	-16.376	1.00	0.00	C	O
ATOM	13228	N VAL A 583	12.500	16.534	-17.894	1.00	0.00	C	N
ATOM	13229	CA VAL A 583	11.154	17.029	-17.786	1.00	0.00	C	C
ATOM	13230	CB VAL A 583	10.228	16.352	-18.754	1.00	0.00	C	C
ATOM	13231	CG1 VAL A 583	8.804	16.890	-18.529	1.00	0.00	C	C
ATOM	13232	CG2 VAL A 583	10.765	16.555	-20.180	1.00	0.00	C	C
ATOM	13233	C VAL A 583	10.586	16.789	-16.413	1.00	0.00	C	C
ATOM	13234	O VAL A 583	10.014	17.690	-15.807	1.00	0.00	C	O
ATOM	13235	N TYR A 584	10.725	15.562	-15.881	1.00	0.00	C	N
ATOM	13236	CA TYR A 584	10.160	15.241	-14.603	1.00	0.00	C	C
ATOM	13237	CB TYR A 584	10.323	13.760	-14.206	1.00	0.00	C	C
ATOM	13238	CG TYR A 584	9.901	13.618	-12.782	1.00	0.00	C	C
ATOM	13239	CD1 TYR A 584	8.600	13.849	-12.395	1.00	0.00	C	C
ATOM	13240	CE1 TYR A 584	8.222	13.714	-11.078	1.00	0.00	C	C
ATOM	13241	CZ TYR A 584	9.150	13.332	-10.137	1.00	0.00	C	C
ATOM	13242	OH TYR A 584	8.792	13.189	-8.781	1.00	0.00	C	O

ATOM	13243	CD2 TYR A 584	10.813	13.218	-11.831	1.00	0.00	C	C
ATOM	13244	CE2 TYR A 584	10.443	13.081	-10.515	1.00	0.00	C	C
ATOM	13245	C TYR A 584	10.820	16.086	-13.574	1.00	0.00	C	C
ATOM	13246	O TYR A 584	10.169	16.603	-12.668	1.00	0.00	C	O
ATOM	13247	N ILE A 585	12.147	16.254	-13.691	1.00	0.00	C	N
ATOM	13248	CA ILE A 585	12.841	17.062	-12.741	1.00	0.00	C	C
ATOM	13249	CB ILE A 585	14.331	17.033	-12.895	1.00	0.00	C	C
ATOM	13250	CG2 ILE A 585	14.903	18.363	-12.381	1.00	0.00	C	C
ATOM	13251	CG1 ILE A 585	14.887	15.792	-12.171	1.00	0.00	C	C
ATOM	13252	CD ILE A 585	14.288	14.473	-12.643	1.00	0.00	C	C
ATOM	13253	C ILE A 585	12.350	18.471	-12.793	1.00	0.00	C	C
ATOM	13254	O ILE A 585	12.160	19.084	-11.744	1.00	0.00	C	O
ATOM	13255	N VAL A 586	12.129	19.038	-13.994	1.00	0.00	C	N
ATOM	13256	CA VAL A 586	11.692	20.403	-14.019	1.00	0.00	C	C
ATOM	13257	CB VAL A 586	11.631	21.007	-15.397	1.00	0.00	C	C
ATOM	13258	CG1 VAL A 586	10.508	20.350	-16.215	1.00	0.00	C	C
ATOM	13259	CG2 VAL A 586	11.464	22.526	-15.243	1.00	0.00	C	C
ATOM	13260	C VAL A 586	10.344	20.518	-13.374	1.00	0.00	C	C
ATOM	13261	O VAL A 586	10.129	21.400	-12.545	1.00	0.00	C	O
ATOM	13262	N PHE A 587	9.394	19.624	-13.720	1.00	0.00	C	N
ATOM	13263	CA PHE A 587	8.083	19.713	-13.141	1.00	0.00	C	C
ATOM	13264	CB PHE A 587	7.049	18.754	-13.762	1.00	0.00	C	C
ATOM	13265	CG PHE A 587	6.523	19.393	-15.006	1.00	0.00	C	C
ATOM	13266	CD1 PHE A 587	5.450	20.254	-14.935	1.00	0.00	C	C
ATOM	13267	CE1 PHE A 587	4.947	20.856	-16.066	1.00	0.00	C	C
ATOM	13268	CZ PHE A 587	5.516	20.598	-17.289	1.00	0.00	C	C
ATOM	13269	CD2 PHE A 587	7.086	19.140	-16.235	1.00	0.00	C	C
ATOM	13270	CE2 PHE A 587	6.584	19.739	-17.370	1.00	0.00	C	C
ATOM	13271	C PHE A 587	8.149	19.459	-11.668	1.00	0.00	C	C
ATOM	13272	O PHE A 587	7.544	20.186	-10.882	1.00	0.00	C	O
ATOM	13273	N LEU A 588	8.899	18.423	-11.251	1.00	0.00	C	N
ATOM	13274	CA LEU A 588	8.952	18.094	-9.856	1.00	0.00	C	C
ATOM	13275	CB LEU A 588	9.786	16.824	-9.574	1.00	0.00	C	C
ATOM	13276	CG LEU A 588	11.327	16.985	-9.603	1.00	0.00	C	C
ATOM	13277	CD1 LEU A 588	11.879	17.609	-8.307	1.00	0.00	C	C
ATOM	13278	CD2 LEU A 588	12.031	15.665	-9.945	1.00	0.00	C	C
ATOM	13279	C LEU A 588	9.571	19.233	-9.111	1.00	0.00	C	C
ATOM	13280	O LEU A 588	9.073	19.654	-8.069	1.00	0.00	C	O

ATOM	13281	N	PHE A 589	10.672	19.780	-9.651	1.00	0.00	C	N
ATOM	13282	CA	PHE A 589	11.395	20.785	-8.937	1.00	0.00	C	C
ATOM	13283	CB	PHE A 589	12.702	21.195	-9.632	1.00	0.00	C	C
ATOM	13284	CG	PHE A 589	13.442	22.073	-8.684	1.00	0.00	C	C
ATOM	13285	CD1	PHE A 589	14.316	21.526	-7.773	1.00	0.00	C	C
ATOM	13286	CE1	PHE A 589	15.002	22.324	-6.890	1.00	0.00	C	C
ATOM	13287	CZ	PHE A 589	14.815	23.686	-6.914	1.00	0.00	C	C
ATOM	13288	CD2	PHE A 589	13.255	23.434	-8.700	1.00	0.00	C	C
ATOM	13289	CE2	PHE A 589	13.941	24.239	-7.820	1.00	0.00	C	C
ATOM	13290	C	PHE A 589	10.542	22.002	-8.764	1.00	0.00	C	C
ATOM	13291	O	PHE A 589	10.480	22.569	-7.674	1.00	0.00	C	O
ATOM	13292	N	GLY A 590	9.847	22.432	-9.832	1.00	0.00	C	N
ATOM	13293	CA	GLY A 590	9.060	23.626	-9.741	1.00	0.00	C	C
ATOM	13294	C	GLY A 590	7.973	23.430	-8.731	1.00	0.00	C	C
ATOM	13295	O	GLY A 590	7.709	24.308	-7.912	1.00	0.00	C	O
ATOM	13296	N	PHE A 591	7.308	22.261	-8.755	1.00	0.00	C	N
ATOM	13297	CA	PHE A 591	6.231	22.036	-7.839	1.00	0.00	C	C
ATOM	13298	CB	PHE A 591	5.456	20.734	-8.090	1.00	0.00	C	C
ATOM	13299	CG	PHE A 591	4.463	21.027	-9.161	1.00	0.00	C	C
ATOM	13300	CD1	PHE A 591	4.830	21.116	-10.484	1.00	0.00	C	C
ATOM	13301	CE1	PHE A 591	3.892	21.381	-11.455	1.00	0.00	C	C
ATOM	13302	CZ	PHE A 591	2.572	21.554	-11.111	1.00	0.00	C	C
ATOM	13303	CD2	PHE A 591	3.138	21.196	-8.828	1.00	0.00	C	C
ATOM	13304	CE2	PHE A 591	2.195	21.459	-9.793	1.00	0.00	C	C
ATOM	13305	C	PHE A 591	6.751	22.033	-6.440	1.00	0.00	C	C
ATOM	13306	O	PHE A 591	6.104	22.548	-5.529	1.00	0.00	C	O
ATOM	13307	N	SER A 592	7.936	21.443	-6.237	1.00	0.00	C	N
ATOM	13308	CA	SER A 592	8.538	21.368	-4.942	1.00	0.00	C	C
ATOM	13309	CB	SER A 592	9.889	20.652	-5.002	1.00	0.00	C	C
ATOM	13310	OG	SER A 592	10.486	20.666	-3.721	1.00	0.00	C	O
ATOM	13311	C	SER A 592	8.789	22.756	-4.433	1.00	0.00	C	C
ATOM	13312	O	SER A 592	8.521	23.055	-3.270	1.00	0.00	C	O
ATOM	13313	N	THR A 593	9.305	23.647	-5.297	1.00	0.00	C	N
ATOM	13314	CA	THR A 593	9.607	24.978	-4.858	1.00	0.00	C	C
ATOM	13315	CB	THR A 593	10.256	25.829	-5.909	1.00	0.00	C	C
ATOM	13316	OG1	THR A 593	9.375	26.049	-6.999	1.00	0.00	C	O
ATOM	13317	CG2	THR A 593	11.519	25.101	-6.383	1.00	0.00	C	C
ATOM	13318	C	THR A 593	8.332	25.646	-4.469	1.00	0.00	C	C

ATOM	13319	O	THR A 593	8.281	26.365	-3.475	1.00	0.00	C	O
ATOM	13320	N	ALA A 594	7.260	25.419	-5.250	1.00	0.00	C	N
ATOM	13321	CA	ALA A 594	6.010	26.061	-4.975	1.00	0.00	C	C
ATOM	13322	CB	ALA A 594	4.921	25.706	-6.004	1.00	0.00	C	C
ATOM	13323	C	ALA A 594	5.518	25.626	-3.628	1.00	0.00	C	C
ATOM	13324	O	ALA A 594	5.018	26.437	-2.853	1.00	0.00	C	O
ATOM	13325	N	VAL A 595	5.644	24.323	-3.313	1.00	0.00	C	N
ATOM	13326	CA	VAL A 595	5.161	23.813	-2.060	1.00	0.00	C	C
ATOM	13327	CB	VAL A 595	5.262	22.317	-1.938	1.00	0.00	C	C
ATOM	13328	CG1	VAL A 595	4.779	21.913	-0.534	1.00	0.00	C	C
ATOM	13329	CG2	VAL A 595	4.465	21.666	-3.082	1.00	0.00	C	C
ATOM	13330	C	VAL A 595	5.948	24.387	-0.922	1.00	0.00	C	C
ATOM	13331	O	VAL A 595	5.386	24.730	0.116	1.00	0.00	C	O
ATOM	13332	N	VAL A 596	7.276	24.519	-1.092	1.00	0.00	C	N
ATOM	13333	CA	VAL A 596	8.126	24.919	-0.005	1.00	0.00	C	C
ATOM	13334	CB	VAL A 596	9.581	24.924	-0.398	1.00	0.00	C	C
ATOM	13335	CG1	VAL A 596	9.891	26.155	-1.266	1.00	0.00	C	C
ATOM	13336	CG2	VAL A 596	10.444	24.802	0.864	1.00	0.00	C	C
ATOM	13337	C	VAL A 596	7.711	26.273	0.492	1.00	0.00	C	C
ATOM	13338	O	VAL A 596	7.672	26.515	1.697	1.00	0.00	C	O
ATOM	13339	N	THR A 597	7.405	27.203	-0.427	1.00	0.00	C	N
ATOM	13340	CA	THR A 597	6.998	28.528	-0.053	1.00	0.00	C	C
ATOM	13341	CB	THR A 597	6.965	29.465	-1.221	1.00	0.00	C	C
ATOM	13342	OG1	THR A 597	6.585	30.757	-0.786	1.00	0.00	C	O
ATOM	13343	CG2	THR A 597	5.962	28.943	-2.261	1.00	0.00	C	C
ATOM	13344	C	THR A 597	5.625	28.544	0.566	1.00	0.00	C	C
ATOM	13345	O	THR A 597	5.376	29.285	1.517	1.00	0.00	C	O
ATOM	13346	N	LEU A 598	4.697	27.714	0.053	1.00	0.00	C	N
ATOM	13347	CA	LEU A 598	3.306	27.792	0.420	1.00	0.00	C	C
ATOM	13348	CB	LEU A 598	2.465	26.723	-0.301	1.00	0.00	C	C
ATOM	13349	CG	LEU A 598	0.944	26.877	-0.114	1.00	0.00	C	C
ATOM	13350	CD1	LEU A 598	0.392	28.032	-0.962	1.00	0.00	C	C
ATOM	13351	CD2	LEU A 598	0.205	25.557	-0.357	1.00	0.00	C	C
ATOM	13352	C	LEU A 598	3.117	27.564	1.883	1.00	0.00	C	C
ATOM	13353	O	LEU A 598	2.411	28.322	2.550	1.00	0.00	C	O
ATOM	13354	N	ILE A 599	3.714	26.488	2.422	1.00	0.00	C	N
ATOM	13355	CA	ILE A 599	3.570	26.254	3.820	1.00	0.00	C	C
ATOM	13356	CB	ILE A 599	2.189	25.820	4.151	1.00	0.00	C	C

ATOM	13357	CG2	ILE A 599	1.751	24.702	3.195	1.00	0.00	C	C
ATOM	13358	CG1	ILE A 599	2.094	25.536	5.638	1.00	0.00	C	C
ATOM	13359	CD	ILE A 599	0.653	25.432	6.065	1.00	0.00	C	C
ATOM	13360	C	ILE A 599	4.586	25.244	4.259	1.00	0.00	C	C
ATOM	13361	O	ILE A 599	4.669	24.151	3.704	1.00	0.00	C	O
ATOM	13362	N	GLU A 600	5.386	25.589	5.288	1.00	0.00	C	N
ATOM	13363	CA	GLU A 600	6.432	24.715	5.738	1.00	0.00	C	C
ATOM	13364	CB	GLU A 600	7.332	25.363	6.810	1.00	0.00	C	C
ATOM	13365	CG	GLU A 600	6.598	25.880	8.049	1.00	0.00	C	C
ATOM	13366	CD	GLU A 600	6.494	24.771	9.083	1.00	0.00	C	C
ATOM	13367	OE1	GLU A 600	7.560	24.244	9.504	1.00	0.00	C	O
ATOM	13368	OE2	GLU A 600	5.344	24.447	9.475	1.00	0.00	C	O
ATOM	13369	C	GLU A 600	5.831	23.455	6.273	1.00	0.00	C	C
ATOM	13370	O	GLU A 600	6.296	22.364	5.945	1.00	0.00	C	O
ATOM	13371	N	ASP A 601	4.755	23.574	7.074	1.00	0.00	C	N
ATOM	13372	CA	ASP A 601	4.102	22.414	7.611	1.00	0.00	C	C
ATOM	13373	CB	ASP A 601	3.475	21.529	6.529	1.00	0.00	C	C
ATOM	13374	CG	ASP A 601	2.407	22.342	5.839	1.00	0.00	C	C
ATOM	13375	OD1	ASP A 601	1.507	22.869	6.547	1.00	0.00	C	O
ATOM	13376	OD2	ASP A 601	2.488	22.466	4.587	1.00	0.00	C	O
ATOM	13377	C	ASP A 601	5.116	21.561	8.278	1.00	0.00	C	C
ATOM	13378	O	ASP A 601	5.992	22.040	9.000	1.00	0.00	C	O
ATOM	13379	N	GLY A 602	4.991	20.235	8.074	1.00	0.00	C	N
ATOM	13380	CA	GLY A 602	5.975	19.368	8.633	1.00	0.00	C	C
ATOM	13381	C	GLY A 602	6.355	18.377	7.580	1.00	0.00	C	C
ATOM	13382	O	GLY A 602	5.476	17.817	6.929	1.00	0.00	C	O
ATOM	13383	N	LYS A 603	7.686	18.171	7.405	1.00	0.00	C	N
ATOM	13384	CA	LYS A 603	8.297	17.186	6.538	1.00	0.00	C	C
ATOM	13385	CB	LYS A 603	7.374	16.528	5.505	1.00	0.00	C	C
ATOM	13386	CG	LYS A 603	7.953	15.293	4.830	1.00	0.00	C	C
ATOM	13387	CD	LYS A 603	6.824	14.483	4.217	1.00	0.00	C	C
ATOM	13388	CE	LYS A 603	5.624	14.424	5.167	1.00	0.00	C	C
ATOM	13389	NZ	LYS A 603	4.481	13.755	4.517	1.00	0.00	C	N
ATOM	13390	C	LYS A 603	9.453	17.743	5.726	1.00	0.00	C	C
ATOM	13391	O	LYS A 603	9.327	17.666	4.470	1.00	0.00	C	O
ATOM	13392	N	TYR B 628	7.232	19.368	4.903	1.00	0.00	C	N
ATOM	13393	CA	TYR B 628	7.734	19.995	3.666	1.00	0.00	C	C
ATOM	13394	CB	TYR B 628	6.554	20.545	2.863	1.00	0.00	C	C

ATOM	13395	CG	TYR B 628	5.760	19.395	2.361	1.00	0.00	C	C
ATOM	13396	CD1	TYR B 628	4.884	18.726	3.185	1.00	0.00	C	C
ATOM	13397	CE1	TYR B 628	4.148	17.668	2.707	1.00	0.00	C	C
ATOM	13398	CZ	TYR B 628	4.284	17.275	1.397	1.00	0.00	C	C
ATOM	13399	OH	TYR B 628	3.527	16.189	0.905	1.00	0.00	C	O
ATOM	13400	CD2	TYR B 628	5.889	18.995	1.053	1.00	0.00	C	C
ATOM	13401	CE2	TYR B 628	5.156	17.939	0.570	1.00	0.00	C	C
ATOM	13402	C	TYR B 628	8.685	21.130	3.883	1.00	0.00	C	C
ATOM	13403	O	TYR B 628	8.927	21.925	2.977	1.00	0.00	C	O
ATOM	13404	N	ASN B 629	9.264	21.228	5.091	1.00	0.00	C	N
ATOM	13405	CA	ASN B 629	10.153	22.309	5.392	1.00	0.00	C	C
ATOM	13406	CB	ASN B 629	10.668	22.260	6.839	1.00	0.00	C	C
ATOM	13407	CG	ASN B 629	9.477	22.420	7.765	1.00	0.00	C	C
ATOM	13408	OD1	ASN B 629	8.379	22.771	7.336	1.00	0.00	C	O
ATOM	13409	ND2	ASN B 629	9.701	22.157	9.080	1.00	0.00	C	N
ATOM	13410	C	ASN B 629	11.355	22.227	4.499	1.00	0.00	C	C
ATOM	13411	O	ASN B 629	11.819	23.242	3.983	1.00	0.00	C	O
ATOM	13412	N	SER B 630	11.884	21.006	4.282	1.00	0.00	C	N
ATOM	13413	CA	SER B 630	13.088	20.863	3.508	1.00	0.00	C	C
ATOM	13414	CB	SER B 630	14.036	19.769	4.034	1.00	0.00	C	C
ATOM	13415	OG	SER B 630	15.191	19.681	3.211	1.00	0.00	C	O
ATOM	13416	C	SER B 630	12.752	20.500	2.099	1.00	0.00	C	C
ATOM	13417	O	SER B 630	11.758	19.835	1.827	1.00	0.00	C	O
ATOM	13418	N	LEU B 631	13.585	20.998	1.161	1.00	0.00	C	N
ATOM	13419	CA	LEU B 631	13.462	20.734	-0.244	1.00	0.00	C	C
ATOM	13420	CB	LEU B 631	14.433	21.586	-1.077	1.00	0.00	C	C
ATOM	13421	CG	LEU B 631	14.323	21.348	-2.592	1.00	0.00	C	C
ATOM	13422	CD1	LEU B 631	12.955	21.800	-3.123	1.00	0.00	C	C
ATOM	13423	CD2	LEU B 631	15.490	22.001	-3.351	1.00	0.00	C	C
ATOM	13424	C	LEU B 631	13.785	19.291	-0.505	1.00	0.00	C	C
ATOM	13425	O	LEU B 631	13.097	18.618	-1.272	1.00	0.00	C	O
ATOM	13426	N	TYR B 632	14.846	18.769	0.144	1.00	0.00	C	N
ATOM	13427	CA	TYR B 632	15.256	17.414	-0.087	1.00	0.00	C	C
ATOM	13428	CB	TYR B 632	16.513	17.026	0.714	1.00	0.00	C	C
ATOM	13429	CG	TYR B 632	16.708	15.552	0.583	1.00	0.00	C	C
ATOM	13430	CD1	TYR B 632	17.210	15.005	-0.574	1.00	0.00	C	C
ATOM	13431	CE1	TYR B 632	17.392	13.646	-0.686	1.00	0.00	C	C
ATOM	13432	CZ	TYR B 632	17.072	12.819	0.365	1.00	0.00	C	C

ATOM	13433	OH	TYR	B	632	17.257	11.425	0.255	1.00	0.00	C	O
ATOM	13434	CD2	TYR	B	632	16.394	14.717	1.631	1.00	0.00	C	C
ATOM	13435	CE2	TYR	B	632	16.573	13.357	1.525	1.00	0.00	C	C
ATOM	13436	C	TYR	B	632	14.153	16.496	0.323	1.00	0.00	C	C
ATOM	13437	O	TYR	B	632	13.830	15.548	-0.392	1.00	0.00	C	O
ATOM	13438	N	SER	B	633	13.554	16.742	1.500	1.00	0.00	C	N
ATOM	13439	CA	SER	B	633	12.488	15.914	1.987	1.00	0.00	C	C
ATOM	13440	CB	SER	B	633	12.121	16.238	3.444	1.00	0.00	C	C
ATOM	13441	OG	SER	B	633	11.730	17.597	3.549	1.00	0.00	C	O
ATOM	13442	C	SER	B	633	11.255	16.092	1.147	1.00	0.00	C	C
ATOM	13443	O	SER	B	633	10.603	15.115	0.780	1.00	0.00	C	O
ATOM	13444	N	THR	B	634	10.909	17.348	0.802	1.00	0.00	C	N
ATOM	13445	CA	THR	B	634	9.712	17.606	0.048	1.00	0.00	C	C
ATOM	13446	CB	THR	B	634	9.448	19.062	-0.223	1.00	0.00	C	C
ATOM	13447	OG1	THR	B	634	10.563	19.657	-0.870	1.00	0.00	C	O
ATOM	13448	CG2	THR	B	634	9.122	19.787	1.085	1.00	0.00	C	C
ATOM	13449	C	THR	B	634	9.810	16.948	-1.287	1.00	0.00	C	C
ATOM	13450	O	THR	B	634	8.831	16.399	-1.787	1.00	0.00	C	O
ATOM	13451	N	CYS	B	635	11.001	16.996	-1.912	1.00	0.00	C	N
ATOM	13452	CA	CYS	B	635	11.157	16.409	-3.209	1.00	0.00	C	C
ATOM	13453	CB	CYS	B	635	12.580	16.574	-3.775	1.00	0.00	C	C
ATOM	13454	SG	CYS	B	635	12.772	15.825	-5.421	1.00	0.00	C	S
ATOM	13455	C	CYS	B	635	10.884	14.947	-3.085	1.00	0.00	C	C
ATOM	13456	O	CYS	B	635	10.199	14.360	-3.921	1.00	0.00	C	O
ATOM	13457	N	LEU	B	636	11.406	14.320	-2.013	1.00	0.00	C	N
ATOM	13458	CA	LEU	B	636	11.203	12.913	-1.830	1.00	0.00	C	C
ATOM	13459	CB	LEU	B	636	11.933	12.337	-0.606	1.00	0.00	C	C
ATOM	13460	CG	LEU	B	636	13.461	12.325	-0.763	1.00	0.00	C	C
ATOM	13461	CD1	LEU	B	636	14.142	11.687	0.458	1.00	0.00	C	C
ATOM	13462	CD2	LEU	B	636	13.879	11.674	-2.094	1.00	0.00	C	C
ATOM	13463	C	LEU	B	636	9.743	12.674	-1.646	1.00	0.00	C	C
ATOM	13464	O	LEU	B	636	9.199	11.688	-2.143	1.00	0.00	C	O
ATOM	13465	N	GLU	B	637	9.064	13.577	-0.919	1.00	0.00	C	N
ATOM	13466	CA	GLU	B	637	7.668	13.402	-0.671	1.00	0.00	C	C
ATOM	13467	CB	GLU	B	637	7.105	14.501	0.246	1.00	0.00	C	C
ATOM	13468	CG	GLU	B	637	5.972	14.029	1.161	1.00	0.00	C	C
ATOM	13469	CD	GLU	B	637	4.919	13.316	0.333	1.00	0.00	C	C
ATOM	13470	OE1	GLU	B	637	4.360	13.958	-0.596	1.00	0.00	C	O

ATOM	13471	OE2	GLU	B	637	4.664	12.117	0.619	1.00	0.00	C	O
ATOM	13472	C	GLU	B	637	6.956	13.473	-1.994	1.00	0.00	C	C
ATOM	13473	O	GLU	B	637	6.038	12.698	-2.253	1.00	0.00	C	O
ATOM	13474	N	LEU	B	638	7.368	14.419	-2.864	1.00	0.00	C	N
ATOM	13475	CA	LEU	B	638	6.763	14.622	-4.157	1.00	0.00	C	C
ATOM	13476	CB	LEU	B	638	7.305	15.853	-4.904	1.00	0.00	C	C
ATOM	13477	CG	LEU	B	638	6.951	17.200	-4.252	1.00	0.00	C	C
ATOM	13478	CD1	LEU	B	638	7.438	18.372	-5.119	1.00	0.00	C	C
ATOM	13479	CD2	LEU	B	638	5.452	17.282	-3.920	1.00	0.00	C	C
ATOM	13480	C	LEU	B	638	7.010	13.450	-5.056	1.00	0.00	C	C
ATOM	13481	O	LEU	B	638	6.119	13.023	-5.787	1.00	0.00	C	O
ATOM	13482	N	PHE	B	639	8.237	12.902	-5.021	1.00	0.00	C	N
ATOM	13483	CA	PHE	B	639	8.624	11.816	-5.877	1.00	0.00	C	C
ATOM	13484	CB	PHE	B	639	10.093	11.405	-5.677	1.00	0.00	C	C
ATOM	13485	CG	PHE	B	639	10.394	10.284	-6.611	1.00	0.00	C	C
ATOM	13486	CD1	PHE	B	639	10.750	10.547	-7.913	1.00	0.00	C	C
ATOM	13487	CE1	PHE	B	639	11.028	9.524	-8.789	1.00	0.00	C	C
ATOM	13488	CZ	PHE	B	639	10.952	8.219	-8.371	1.00	0.00	C	C
ATOM	13489	CD2	PHE	B	639	10.312	8.974	-6.200	1.00	0.00	C	C
ATOM	13490	CE2	PHE	B	639	10.591	7.949	-7.074	1.00	0.00	C	C
ATOM	13491	C	PHE	B	639	7.757	10.646	-5.549	1.00	0.00	C	C
ATOM	13492	O	PHE	B	639	7.358	9.887	-6.433	1.00	0.00	C	O
ATOM	13493	N	LYS	B	640	7.433	10.477	-4.254	1.00	0.00	C	N
ATOM	13494	CA	LYS	B	640	6.627	9.375	-3.815	1.00	0.00	C	C
ATOM	13495	CB	LYS	B	640	6.239	9.481	-2.329	1.00	0.00	C	C
ATOM	13496	CG	LYS	B	640	7.412	9.491	-1.350	1.00	0.00	C	C
ATOM	13497	CD	LYS	B	640	7.003	9.971	0.044	1.00	0.00	C	C
ATOM	13498	CE	LYS	B	640	8.143	10.000	1.063	1.00	0.00	C	C
ATOM	13499	NZ	LYS	B	640	7.665	10.608	2.325	1.00	0.00	C	N
ATOM	13500	C	LYS	B	640	5.335	9.456	-4.556	1.00	0.00	C	C
ATOM	13501	O	LYS	B	640	4.809	8.448	-5.024	1.00	0.00	C	O
ATOM	13502	N	PHE	B	641	4.790	10.679	-4.677	1.00	0.00	C	N
ATOM	13503	CA	PHE	B	641	3.540	10.873	-5.350	1.00	0.00	C	C
ATOM	13504	CB	PHE	B	641	2.995	12.308	-5.246	1.00	0.00	C	C
ATOM	13505	CG	PHE	B	641	2.229	12.381	-3.974	1.00	0.00	C	C
ATOM	13506	CD1	PHE	B	641	0.888	12.069	-3.970	1.00	0.00	C	C
ATOM	13507	CE1	PHE	B	641	0.157	12.124	-2.811	1.00	0.00	C	C
ATOM	13508	CZ	PHE	B	641	0.760	12.488	-1.634	1.00	0.00	C	C

ATOM	13509	CD2 PHE B 641	2.832	12.740	-2.792	1.00	0.00	C	C
ATOM	13510	CE2 PHE B 641	2.099	12.796	-1.628	1.00	0.00	C	C
ATOM	13511	C PHE B 641	3.645	10.512	-6.799	1.00	0.00	C	C
ATOM	13512	O PHE B 641	2.727	9.909	-7.354	1.00	0.00	C	O
ATOM	13513	N THR B 642	4.758	10.875	-7.461	1.00	0.00	C	N
ATOM	13514	CA THR B 642	4.896	10.608	-8.867	1.00	0.00	C	C
ATOM	13515	CB THR B 642	6.119	11.238	-9.457	1.00	0.00	C	C
ATOM	13516	OG1 THR B 642	7.303	10.647	-8.949	1.00	0.00	C	O
ATOM	13517	CG2 THR B 642	6.078	12.718	-9.057	1.00	0.00	C	C
ATOM	13518	C THR B 642	4.932	9.128	-9.094	1.00	0.00	C	C
ATOM	13519	O THR B 642	4.395	8.623	-10.078	1.00	0.00	C	O
ATOM	13520	N ILE B 643	5.561	8.398	-8.157	1.00	0.00	C	N
ATOM	13521	CA ILE B 643	5.686	6.969	-8.188	1.00	0.00	C	C
ATOM	13522	CB ILE B 643	6.378	6.430	-6.965	1.00	0.00	C	C
ATOM	13523	CG2 ILE B 643	6.364	4.895	-7.046	1.00	0.00	C	C
ATOM	13524	CG1 ILE B 643	7.792	7.018	-6.832	1.00	0.00	C	C
ATOM	13525	CD ILE B 643	8.426	6.767	-5.463	1.00	0.00	C	C
ATOM	13526	C ILE B 643	4.297	6.413	-8.175	1.00	0.00	C	C
ATOM	13527	O ILE B 643	4.031	5.362	-8.756	1.00	0.00	C	O
ATOM	13528	N GLY B 644	3.367	7.105	-7.484	1.00	0.00	C	N
ATOM	13529	CA GLY B 644	2.011	6.642	-7.433	1.00	0.00	C	C
ATOM	13530	C GLY B 644	1.677	6.175	-6.054	1.00	0.00	C	C
ATOM	13531	O GLY B 644	0.549	5.759	-5.794	1.00	0.00	C	O
ATOM	13532	N MET B 645	2.650	6.211	-5.127	1.00	0.00	C	N
ATOM	13533	CA MET B 645	2.328	5.821	-3.787	1.00	0.00	C	C
ATOM	13534	CB MET B 645	3.354	4.843	-3.189	1.00	0.00	C	C
ATOM	13535	CG MET B 645	4.787	5.377	-3.220	1.00	0.00	C	C
ATOM	13536	SD MET B 645	6.032	4.206	-2.603	1.00	0.00	C	S
ATOM	13537	CE MET B 645	5.808	3.042	-3.978	1.00	0.00	C	C
ATOM	13538	C MET B 645	2.306	7.063	-2.956	1.00	0.00	C	C
ATOM	13539	O MET B 645	3.278	7.816	-2.925	1.00	0.00	C	O
ATOM	13540	N GLY B 646	1.179	7.317	-2.261	1.00	0.00	C	N
ATOM	13541	CA GLY B 646	1.111	8.504	-1.455	1.00	0.00	C	C
ATOM	13542	C GLY B 646	-0.106	8.450	-0.587	1.00	0.00	C	C
ATOM	13543	O GLY B 646	-1.046	7.697	-0.836	1.00	0.00	C	O
ATOM	13544	N ASP B 647	-0.096	9.268	0.486	1.00	0.00	C	N
ATOM	13545	CA ASP B 647	-1.212	9.382	1.382	1.00	0.00	C	C
ATOM	13546	CB ASP B 647	-0.810	9.362	2.862	1.00	0.00	C	C

ATOM	13547	CG	ASP B 647	-0.195	8.023	3.229	1.00	0.00	C	C
ATOM	13548	OD1	ASP B 647	-0.470	7.019	2.520	1.00	0.00	C	O
ATOM	13549	OD2	ASP B 647	0.570	7.994	4.231	1.00	0.00	C	O
ATOM	13550	C	ASP B 647	-1.783	10.737	1.103	1.00	0.00	C	C
ATOM	13551	O	ASP B 647	-1.056	11.729	1.092	1.00	0.00	C	O
ATOM	13552	N	LEU B 648	-3.109	10.834	0.879	1.00	0.00	C	N
ATOM	13553	CA	LEU B 648	-3.621	12.104	0.448	1.00	0.00	C	C
ATOM	13554	CB	LEU B 648	-4.484	12.038	-0.827	1.00	0.00	C	C
ATOM	13555	CG	LEU B 648	-3.717	11.699	-2.118	1.00	0.00	C	C
ATOM	13556	CD1	LEU B 648	-2.690	12.789	-2.448	1.00	0.00	C	C
ATOM	13557	CD2	LEU B 648	-3.114	10.288	-2.077	1.00	0.00	C	C
ATOM	13558	C	LEU B 648	-4.470	12.780	1.478	1.00	0.00	C	C
ATOM	13559	O	LEU B 648	-5.058	12.165	2.364	1.00	0.00	C	O
ATOM	13560	N	GLU B 649	-4.510	14.123	1.349	1.00	0.00	C	N
ATOM	13561	CA	GLU B 649	-5.351	15.033	2.071	1.00	0.00	C	C
ATOM	13562	CB	GLU B 649	-6.840	14.890	1.708	1.00	0.00	C	C
ATOM	13563	CG	GLU B 649	-7.164	15.265	0.262	1.00	0.00	C	C
ATOM	13564	CD	GLU B 649	-6.974	16.765	0.119	1.00	0.00	C	C
ATOM	13565	OE1	GLU B 649	-5.812	17.189	-0.129	1.00	0.00	C	O
ATOM	13566	OE2	GLU B 649	-7.982	17.505	0.261	1.00	0.00	C	O
ATOM	13567	C	GLU B 649	-5.251	14.888	3.557	1.00	0.00	C	C
ATOM	13568	O	GLU B 649	-6.275	14.955	4.234	1.00	0.00	C	O
ATOM	13569	N	PHE B 650	-4.040	14.713	4.124	1.00	0.00	C	N
ATOM	13570	CA	PHE B 650	-4.001	14.675	5.564	1.00	0.00	C	C
ATOM	13571	CB	PHE B 650	-2.601	14.564	6.185	1.00	0.00	C	C
ATOM	13572	CG	PHE B 650	-2.050	13.203	5.986	1.00	0.00	C	C
ATOM	13573	CD1	PHE B 650	-1.331	12.917	4.855	1.00	0.00	C	C
ATOM	13574	CE1	PHE B 650	-0.812	11.662	4.675	1.00	0.00	C	C
ATOM	13575	CZ	PHE B 650	-1.005	10.680	5.617	1.00	0.00	C	C
ATOM	13576	CD2	PHE B 650	-2.242	12.222	6.933	1.00	0.00	C	C
ATOM	13577	CE2	PHE B 650	-1.726	10.962	6.751	1.00	0.00	C	C
ATOM	13578	C	PHE B 650	-4.488	16.008	6.027	1.00	0.00	C	C
ATOM	13579	O	PHE B 650	-5.352	16.113	6.896	1.00	0.00	C	O
ATOM	13580	N	THR B 651	-3.911	17.070	5.440	1.00	0.00	C	N
ATOM	13581	CA	THR B 651	-4.313	18.423	5.694	1.00	0.00	C	C
ATOM	13582	CB	THR B 651	-5.807	18.553	5.657	1.00	0.00	C	C
ATOM	13583	OG1	THR B 651	-6.300	18.159	4.389	1.00	0.00	C	O
ATOM	13584	CG2	THR B 651	-6.217	19.999	5.988	1.00	0.00	C	C

ATOM	13585	C	THR B 651	-3.892	18.877	7.054	1.00	0.00	C	C
ATOM	13586	O	THR B 651	-3.802	20.081	7.285	1.00	0.00	C	O
ATOM	13587	N	GLU B 652	-3.461	17.964	7.936	1.00	0.00	C	N
ATOM	13588	CA	GLU B 652	-3.218	18.396	9.282	1.00	0.00	C	C
ATOM	13589	CB	GLU B 652	-2.793	17.249	10.197	1.00	0.00	C	C
ATOM	13590	CG	GLU B 652	-3.824	16.130	10.218	1.00	0.00	C	C
ATOM	13591	CD	GLU B 652	-3.290	15.079	11.162	1.00	0.00	C	C
ATOM	13592	OE1	GLU B 652	-3.543	15.237	12.383	1.00	0.00	C	O
ATOM	13593	OE2	GLU B 652	-2.619	14.122	10.691	1.00	0.00	C	O
ATOM	13594	C	GLU B 652	-2.130	19.417	9.314	1.00	0.00	C	C
ATOM	13595	O	GLU B 652	-1.069	19.237	8.719	1.00	0.00	C	O
ATOM	13596	N	ASN B 653	-2.383	20.519	10.051	1.00	0.00	C	N
ATOM	13597	CA	ASN B 653	-1.453	21.606	10.180	1.00	0.00	C	C
ATOM	13598	CB	ASN B 653	-0.092	21.133	10.691	1.00	0.00	C	C
ATOM	13599	CG	ASN B 653	-0.375	20.374	11.965	1.00	0.00	C	C
ATOM	13600	OD1	ASN B 653	-0.588	20.953	13.024	1.00	0.00	C	O
ATOM	13601	ND2	ASN B 653	-0.410	19.020	11.839	1.00	0.00	C	N
ATOM	13602	C	ASN B 653	-1.202	22.225	8.840	1.00	0.00	C	C
ATOM	13603	O	ASN B 653	-0.076	22.626	8.545	1.00	0.00	C	O
ATOM	13604	N	TYR B 654	-2.242	22.347	7.995	1.00	0.00	C	N
ATOM	13605	CA	TYR B 654	-2.011	22.920	6.697	1.00	0.00	C	C
ATOM	13606	CB	TYR B 654	-2.364	21.997	5.511	1.00	0.00	C	C
ATOM	13607	CG	TYR B 654	-1.288	20.977	5.312	1.00	0.00	C	C
ATOM	13608	CD1	TYR B 654	-0.184	21.263	4.549	1.00	0.00	C	C
ATOM	13609	CE1	TYR B 654	0.801	20.322	4.362	1.00	0.00	C	C
ATOM	13610	CZ	TYR B 654	0.698	19.077	4.933	1.00	0.00	C	C
ATOM	13611	OH	TYR B 654	1.713	18.117	4.735	1.00	0.00	C	O
ATOM	13612	CD2	TYR B 654	-1.369	19.728	5.873	1.00	0.00	C	C
ATOM	13613	CE2	TYR B 654	-0.396	18.774	5.700	1.00	0.00	C	C
ATOM	13614	C	TYR B 654	-2.805	24.178	6.526	1.00	0.00	C	C
ATOM	13615	O	TYR B 654	-3.978	24.267	6.887	1.00	0.00	C	O
ATOM	13616	N	ASP B 655	-2.137	25.196	5.954	1.00	0.00	C	N
ATOM	13617	CA	ASP B 655	-2.694	26.486	5.694	1.00	0.00	C	C
ATOM	13618	CB	ASP B 655	-1.753	27.654	6.011	1.00	0.00	C	C
ATOM	13619	CG	ASP B 655	-1.623	27.732	7.521	1.00	0.00	C	C
ATOM	13620	OD1	ASP B 655	-2.080	26.778	8.205	1.00	0.00	C	O
ATOM	13621	OD2	ASP B 655	-1.076	28.752	8.010	1.00	0.00	C	O
ATOM	13622	C	ASP B 655	-2.979	26.555	4.242	1.00	0.00	C	C

ATOM	13623	O	ASP B 655	-2.206	26.070	3.415	1.00	0.00	C	O
ATOM	13624	N	PHE B 656	-4.095	27.216	3.898	1.00	0.00	C	N
ATOM	13625	CA	PHE B 656	-4.474	27.269	2.529	1.00	0.00	C	C
ATOM	13626	CB	PHE B 656	-3.373	27.839	1.629	1.00	0.00	C	C
ATOM	13627	CG	PHE B 656	-2.399	28.526	2.511	1.00	0.00	C	C
ATOM	13628	CD1	PHE B 656	-2.657	29.778	3.011	1.00	0.00	C	C
ATOM	13629	CE1	PHE B 656	-1.739	30.398	3.824	1.00	0.00	C	C
ATOM	13630	CZ	PHE B 656	-0.562	29.761	4.139	1.00	0.00	C	C
ATOM	13631	CD2	PHE B 656	-1.218	27.895	2.828	1.00	0.00	C	C
ATOM	13632	CE2	PHE B 656	-0.298	28.509	3.641	1.00	0.00	C	C
ATOM	13633	C	PHE B 656	-4.621	25.856	2.122	1.00	0.00	C	C
ATOM	13634	O	PHE B 656	-4.179	25.487	1.047	1.00	0.00	C	O
ATOM	13635	N	LYS B 657	-5.187	24.999	2.983	1.00	0.00	C	N
ATOM	13636	CA	LYS B 657	-5.340	23.624	2.618	1.00	0.00	C	C
ATOM	13637	CB	LYS B 657	-5.859	22.720	3.739	1.00	0.00	C	C
ATOM	13638	CG	LYS B 657	-5.742	21.243	3.362	1.00	0.00	C	C
ATOM	13639	CD	LYS B 657	-4.287	20.784	3.254	1.00	0.00	C	C
ATOM	13640	CE	LYS B 657	-4.122	19.310	2.883	1.00	0.00	C	C
ATOM	13641	NZ	LYS B 657	-2.687	18.947	2.908	1.00	0.00	C	N
ATOM	13642	C	LYS B 657	-6.323	23.537	1.507	1.00	0.00	C	C
ATOM	13643	O	LYS B 657	-6.215	22.677	0.642	1.00	0.00	C	O
ATOM	13644	N	ALA B 658	-7.345	24.401	1.507	1.00	0.00	C	N
ATOM	13645	CA	ALA B 658	-8.283	24.313	0.431	1.00	0.00	C	C
ATOM	13646	CB	ALA B 658	-9.421	25.339	0.539	1.00	0.00	C	C
ATOM	13647	C	ALA B 658	-7.539	24.608	-0.829	1.00	0.00	C	C
ATOM	13648	O	ALA B 658	-7.734	23.936	-1.842	1.00	0.00	C	O
ATOM	13649	N	VAL B 659	-6.666	25.635	-0.809	1.00	0.00	C	N
ATOM	13650	CA	VAL B 659	-5.942	25.935	-2.007	1.00	0.00	C	C
ATOM	13651	CB	VAL B 659	-5.147	27.218	-2.004	1.00	0.00	C	C
ATOM	13652	CG1	VAL B 659	-6.064	28.385	-1.618	1.00	0.00	C	C
ATOM	13653	CG2	VAL B 659	-3.874	27.055	-1.167	1.00	0.00	C	C
ATOM	13654	C	VAL B 659	-4.960	24.830	-2.258	1.00	0.00	C	C
ATOM	13655	O	VAL B 659	-4.663	24.499	-3.400	1.00	0.00	C	O
ATOM	13656	N	PHE B 660	-4.409	24.264	-1.171	1.00	0.00	C	N
ATOM	13657	CA	PHE B 660	-3.369	23.275	-1.142	1.00	0.00	C	C
ATOM	13658	CB	PHE B 660	-2.870	22.975	0.287	1.00	0.00	C	C
ATOM	13659	CG	PHE B 660	-1.809	21.921	0.232	1.00	0.00	C	C
ATOM	13660	CD1	PHE B 660	-2.143	20.586	0.248	1.00	0.00	C	C

ATOM	13661	CE1 PHE B 660	-1.174	19.609	0.201	1.00	0.00	C	C
ATOM	13662	CZ PHE B 660	0.151	19.962	0.140	1.00	0.00	C	C
ATOM	13663	CD2 PHE B 660	-0.477	22.266	0.173	1.00	0.00	C	C
ATOM	13664	CE2 PHE B 660	0.496	21.292	0.128	1.00	0.00	C	C
ATOM	13665	C PHE B 660	-3.828	21.994	-1.738	1.00	0.00	C	C
ATOM	13666	O PHE B 660	-3.146	21.402	-2.566	1.00	0.00	C	O
ATOM	13667	N ILE B 661	-5.019	21.542	-1.335	1.00	0.00	C	N
ATOM	13668	CA ILE B 661	-5.573	20.304	-1.773	1.00	0.00	C	C
ATOM	13669	CB ILE B 661	-6.902	20.066	-1.120	1.00	0.00	C	C
ATOM	13670	CG2 ILE B 661	-6.671	19.906	0.393	1.00	0.00	C	C
ATOM	13671	CG1 ILE B 661	-7.851	21.220	-1.475	1.00	0.00	C	C
ATOM	13672	CD ILE B 661	-9.265	21.066	-0.946	1.00	0.00	C	C
ATOM	13673	C ILE B 661	-5.723	20.412	-3.248	1.00	0.00	C	C
ATOM	13674	O ILE B 661	-5.386	19.488	-3.984	1.00	0.00	C	O
ATOM	13675	N ILE B 662	-6.189	21.576	-3.722	1.00	0.00	C	N
ATOM	13676	CA ILE B 662	-6.387	21.773	-5.121	1.00	0.00	C	C
ATOM	13677	CB ILE B 662	-6.955	23.129	-5.409	1.00	0.00	C	C
ATOM	13678	CG2 ILE B 662	-7.066	23.290	-6.933	1.00	0.00	C	C
ATOM	13679	CG1 ILE B 662	-8.298	23.280	-4.676	1.00	0.00	C	C
ATOM	13680	CD ILE B 662	-8.779	24.722	-4.570	1.00	0.00	C	C
ATOM	13681	C ILE B 662	-5.057	21.658	-5.796	1.00	0.00	C	C
ATOM	13682	O ILE B 662	-4.940	21.053	-6.860	1.00	0.00	C	O
ATOM	13683	N LEU B 663	-4.012	22.233	-5.176	1.00	0.00	C	N
ATOM	13684	CA LEU B 663	-2.690	22.239	-5.731	1.00	0.00	C	C
ATOM	13685	CB LEU B 663	-1.731	23.064	-4.848	1.00	0.00	C	C
ATOM	13686	CG LEU B 663	-0.276	23.150	-5.343	1.00	0.00	C	C
ATOM	13687	CD1 LEU B 663	0.479	21.829	-5.125	1.00	0.00	C	C
ATOM	13688	CD2 LEU B 663	-0.221	23.631	-6.799	1.00	0.00	C	C
ATOM	13689	C LEU B 663	-2.202	20.825	-5.845	1.00	0.00	C	C
ATOM	13690	O LEU B 663	-1.570	20.448	-6.833	1.00	0.00	C	O
ATOM	13691	N LEU B 664	-2.485	19.998	-4.824	1.00	0.00	C	N
ATOM	13692	CA LEU B 664	-2.027	18.642	-4.801	1.00	0.00	C	C
ATOM	13693	CB LEU B 664	-2.328	17.996	-3.435	1.00	0.00	C	C
ATOM	13694	CG LEU B 664	-1.625	16.655	-3.181	1.00	0.00	C	C
ATOM	13695	CD1 LEU B 664	-2.159	15.557	-4.106	1.00	0.00	C	C
ATOM	13696	CD2 LEU B 664	-0.097	16.806	-3.253	1.00	0.00	C	C
ATOM	13697	C LEU B 664	-2.702	17.889	-5.904	1.00	0.00	C	C
ATOM	13698	O LEU B 664	-2.073	17.100	-6.611	1.00	0.00	C	O

ATOM	13699	N	LEU B 665	-4.013	18.129	-6.101	1.00	0.00	C	N
ATOM	13700	CA	LEU B 665	-4.712	17.447	-7.149	1.00	0.00	C	C
ATOM	13701	CB	LEU B 665	-6.228	17.703	-7.165	1.00	0.00	C	C
ATOM	13702	CG	LEU B 665	-7.011	16.858	-6.135	1.00	0.00	C	C
ATOM	13703	CD1	LEU B 665	-6.560	17.121	-4.692	1.00	0.00	C	C
ATOM	13704	CD2	LEU B 665	-8.525	17.028	-6.319	1.00	0.00	C	C
ATOM	13705	C	LEU B 665	-4.138	17.839	-8.470	1.00	0.00	C	C
ATOM	13706	O	LEU B 665	-3.974	16.995	-9.349	1.00	0.00	C	O
ATOM	13707	N	ALA B 666	-3.808	19.130	-8.656	1.00	0.00	C	N
ATOM	13708	CA	ALA B 666	-3.303	19.562	-9.926	1.00	0.00	C	C
ATOM	13709	CB	ALA B 666	-3.061	21.080	-9.976	1.00	0.00	C	C
ATOM	13710	C	ALA B 666	-1.991	18.898	-10.231	1.00	0.00	C	C
ATOM	13711	O	ALA B 666	-1.796	18.384	-11.330	1.00	0.00	C	O
ATOM	13712	N	TYR B 667	-1.051	18.899	-9.266	1.00	0.00	C	N
ATOM	13713	CA	TYR B 667	0.252	18.353	-9.520	1.00	0.00	C	C
ATOM	13714	CB	TYR B 667	1.264	18.719	-8.421	1.00	0.00	C	C
ATOM	13715	CG	TYR B 667	2.556	18.055	-8.744	1.00	0.00	C	C
ATOM	13716	CD1	TYR B 667	3.281	18.433	-9.849	1.00	0.00	C	C
ATOM	13717	CE1	TYR B 667	4.480	17.831	-10.145	1.00	0.00	C	C
ATOM	13718	CZ	TYR B 667	4.969	16.844	-9.329	1.00	0.00	C	C
ATOM	13719	OH	TYR B 667	6.200	16.227	-9.634	1.00	0.00	C	O
ATOM	13720	CD2	TYR B 667	3.056	17.065	-7.928	1.00	0.00	C	C
ATOM	13721	CE2	TYR B 667	4.255	16.459	-8.219	1.00	0.00	C	C
ATOM	13722	C	TYR B 667	0.220	16.864	-9.652	1.00	0.00	C	C
ATOM	13723	O	TYR B 667	0.780	16.308	-10.595	1.00	0.00	C	O
ATOM	13724	N	VAL B 668	-0.442	16.176	-8.709	1.00	0.00	C	N
ATOM	13725	CA	VAL B 668	-0.421	14.744	-8.728	1.00	0.00	C	C
ATOM	13726	CB	VAL B 668	-1.083	14.125	-7.534	1.00	0.00	C	C
ATOM	13727	CG1	VAL B 668	-1.072	12.598	-7.713	1.00	0.00	C	C
ATOM	13728	CG2	VAL B 668	-0.362	14.614	-6.266	1.00	0.00	C	C
ATOM	13729	C	VAL B 668	-1.126	14.230	-9.939	1.00	0.00	C	C
ATOM	13730	O	VAL B 668	-0.615	13.357	-10.640	1.00	0.00	C	O
ATOM	13731	N	ILE B 669	-2.319	14.775	-10.239	1.00	0.00	C	N
ATOM	13732	CA	ILE B 669	-3.066	14.207	-11.321	1.00	0.00	C	C
ATOM	13733	CB	ILE B 669	-4.454	14.783	-11.477	1.00	0.00	C	C
ATOM	13734	CG2	ILE B 669	-5.172	14.561	-10.132	1.00	0.00	C	C
ATOM	13735	CG1	ILE B 669	-4.464	16.251	-11.942	1.00	0.00	C	C
ATOM	13736	CD	ILE B 669	-4.321	16.422	-13.456	1.00	0.00	C	C

ATOM	13737	C	ILE B 669	-2.287	14.395	-12.580	1.00	0.00	C	C
ATOM	13738	O	ILE B 669	-2.146	13.468	-13.373	1.00	0.00	C	O
ATOM	13739	N	LEU B 670	-1.721	15.597	-12.776	1.00	0.00	C	N
ATOM	13740	CA	LEU B 670	-1.020	15.887	-13.992	1.00	0.00	C	C
ATOM	13741	CB	LEU B 670	-0.451	17.319	-14.010	1.00	0.00	C	C
ATOM	13742	CG	LEU B 670	0.485	17.599	-15.203	1.00	0.00	C	C
ATOM	13743	CD1	LEU B 670	-0.257	17.460	-16.539	1.00	0.00	C	C
ATOM	13744	CD2	LEU B 670	1.202	18.952	-15.060	1.00	0.00	C	C
ATOM	13745	C	LEU B 670	0.147	14.968	-14.136	1.00	0.00	C	C
ATOM	13746	O	LEU B 670	0.347	14.371	-15.193	1.00	0.00	C	O
ATOM	13747	N	THR B 671	0.939	14.805	-13.059	1.00	0.00	C	N
ATOM	13748	CA	THR B 671	2.146	14.045	-13.209	1.00	0.00	C	C
ATOM	13749	CB	THR B 671	3.046	14.040	-12.003	1.00	0.00	C	C
ATOM	13750	OG1	THR B 671	2.496	13.276	-10.942	1.00	0.00	C	O
ATOM	13751	CG2	THR B 671	3.224	15.491	-11.550	1.00	0.00	C	C
ATOM	13752	C	THR B 671	1.824	12.627	-13.526	1.00	0.00	C	C
ATOM	13753	O	THR B 671	2.446	12.020	-14.395	1.00	0.00	C	O
ATOM	13754	N	TYR B 672	0.848	12.046	-12.815	1.00	0.00	C	N
ATOM	13755	CA	TYR B 672	0.544	10.671	-13.069	1.00	0.00	C	C
ATOM	13756	CB	TYR B 672	-0.491	10.114	-12.072	1.00	0.00	C	C
ATOM	13757	CG	TYR B 672	-0.767	8.685	-12.401	1.00	0.00	C	C
ATOM	13758	CD1	TYR B 672	0.135	7.694	-12.075	1.00	0.00	C	C
ATOM	13759	CE1	TYR B 672	-0.129	6.379	-12.377	1.00	0.00	C	C
ATOM	13760	CZ	TYR B 672	-1.308	6.040	-13.005	1.00	0.00	C	C
ATOM	13761	OH	TYR B 672	-1.588	4.692	-13.321	1.00	0.00	C	O
ATOM	13762	CD2	TYR B 672	-1.944	8.333	-13.016	1.00	0.00	C	C
ATOM	13763	CE2	TYR B 672	-2.214	7.019	-13.321	1.00	0.00	C	C
ATOM	13764	C	TYR B 672	-0.009	10.572	-14.446	1.00	0.00	C	C
ATOM	13765	O	TYR B 672	0.377	9.706	-15.231	1.00	0.00	C	O
ATOM	13766	N	ILE B 673	-0.940	11.483	-14.778	1.00	0.00	C	N
ATOM	13767	CA	ILE B 673	-1.602	11.360	-16.030	1.00	0.00	C	C
ATOM	13768	CB	ILE B 673	-2.850	12.194	-16.093	1.00	0.00	C	C
ATOM	13769	CG2	ILE B 673	-2.480	13.686	-16.095	1.00	0.00	C	C
ATOM	13770	CG1	ILE B 673	-3.699	11.746	-17.285	1.00	0.00	C	C
ATOM	13771	CD	ILE B 673	-4.216	10.315	-17.135	1.00	0.00	C	C
ATOM	13772	C	ILE B 673	-0.730	11.653	-17.220	1.00	0.00	C	C
ATOM	13773	O	ILE B 673	-0.674	10.840	-18.138	1.00	0.00	C	O
ATOM	13774	N	LEU B 674	-0.071	12.831	-17.287	1.00	0.00	C	N

ATOM 13775	CA	LEU B 674	0.685	13.139	-18.474	1.00	0.00	C	C
ATOM 13776	CB	LEU B 674	0.806	14.651	-18.712	1.00	0.00	C	C
ATOM 13777	CG	LEU B 674	-0.568	15.315	-18.904	1.00	0.00	C	C
ATOM 13778	CD1	LEU B 674	-0.424	16.759	-19.401	1.00	0.00	C	C
ATOM 13779	CD2	LEU B 674	-1.481	14.460	-19.795	1.00	0.00	C	C
ATOM 13780	C	LEU B 674	2.066	12.547	-18.557	1.00	0.00	C	C
ATOM 13781	O	LEU B 674	2.399	11.867	-19.525	1.00	0.00	C	O
ATOM 13782	N	LEU B 675	2.903	12.789	-17.529	1.00	0.00	C	N
ATOM 13783	CA	LEU B 675	4.301	12.437	-17.577	1.00	0.00	C	C
ATOM 13784	CB	LEU B 675	5.058	12.914	-16.324	1.00	0.00	C	C
ATOM 13785	CG	LEU B 675	5.391	14.416	-16.287	1.00	0.00	C	C
ATOM 13786	CD1	LEU B 675	6.495	14.757	-17.302	1.00	0.00	C	C
ATOM 13787	CD2	LEU B 675	4.132	15.279	-16.456	1.00	0.00	C	C
ATOM 13788	C	LEU B 675	4.531	10.965	-17.645	1.00	0.00	C	C
ATOM 13789	O	LEU B 675	5.203	10.474	-18.551	1.00	0.00	C	O
ATOM 13790	N	LEU B 676	3.960	10.218	-16.687	1.00	0.00	C	N
ATOM 13791	CA	LEU B 676	4.254	8.819	-16.621	1.00	0.00	C	C
ATOM 13792	CB	LEU B 676	3.666	8.121	-15.385	1.00	0.00	C	C
ATOM 13793	CG	LEU B 676	4.406	8.481	-14.087	1.00	0.00	C	C
ATOM 13794	CD1	LEU B 676	5.864	7.990	-14.149	1.00	0.00	C	C
ATOM 13795	CD2	LEU B 676	4.286	9.974	-13.748	1.00	0.00	C	C
ATOM 13796	C	LEU B 676	3.728	8.140	-17.831	1.00	0.00	C	C
ATOM 13797	O	LEU B 676	4.431	7.342	-18.447	1.00	0.00	C	O
ATOM 13798	N	ASN B 677	2.482	8.457	-18.216	1.00	0.00	C	N
ATOM 13799	CA	ASN B 677	1.881	7.827	-19.348	1.00	0.00	C	C
ATOM 13800	CB	ASN B 677	0.423	8.269	-19.558	1.00	0.00	C	C
ATOM 13801	CG	ASN B 677	-0.359	7.833	-18.328	1.00	0.00	C	C
ATOM 13802	OD1	ASN B 677	0.128	7.046	-17.519	1.00	0.00	C	O
ATOM 13803	ND2	ASN B 677	-1.608	8.348	-18.181	1.00	0.00	C	N
ATOM 13804	C	ASN B 677	2.656	8.222	-20.560	1.00	0.00	C	C
ATOM 13805	O	ASN B 677	2.911	7.399	-21.437	1.00	0.00	C	O
ATOM 13806	N	MET B 678	3.054	9.504	-20.635	1.00	0.00	C	N
ATOM 13807	CA	MET B 678	3.777	10.000	-21.768	1.00	0.00	C	C
ATOM 13808	CB	MET B 678	4.107	11.497	-21.639	1.00	0.00	C	C
ATOM 13809	CG	MET B 678	4.953	12.063	-22.782	1.00	0.00	C	C
ATOM 13810	SD	MET B 678	5.140	13.873	-22.742	1.00	0.00	C	S
ATOM 13811	CE	MET B 678	6.079	13.914	-21.188	1.00	0.00	C	C
ATOM 13812	C	MET B 678	5.077	9.277	-21.887	1.00	0.00	C	C

ATOM	13813	O	MET B 678	5.447	8.845	-22.976	1.00	0.00	C	O
ATOM	13814	N	LEU B 679	5.818	9.115	-20.772	1.00	0.00	C	N
ATOM	13815	CA	LEU B 679	7.085	8.460	-20.904	1.00	0.00	C	C
ATOM	13816	CB	LEU B 679	7.975	8.544	-19.640	1.00	0.00	C	C
ATOM	13817	CG	LEU B 679	7.826	7.421	-18.591	1.00	0.00	C	C
ATOM	13818	CD1	LEU B 679	8.533	6.123	-19.022	1.00	0.00	C	C
ATOM	13819	CD2	LEU B 679	8.292	7.902	-17.206	1.00	0.00	C	C
ATOM	13820	C	LEU B 679	6.854	7.022	-21.256	1.00	0.00	C	C
ATOM	13821	O	LEU B 679	7.519	6.476	-22.135	1.00	0.00	C	O
ATOM	13822	N	ILE B 680	5.875	6.385	-20.584	1.00	0.00	C	N
ATOM	13823	CA	ILE B 680	5.595	4.984	-20.742	1.00	0.00	C	C
ATOM	13824	CB	ILE B 680	4.536	4.484	-19.801	1.00	0.00	C	C
ATOM	13825	CG2	ILE B 680	4.228	3.023	-20.168	1.00	0.00	C	C
ATOM	13826	CG1	ILE B 680	4.990	4.664	-18.339	1.00	0.00	C	C
ATOM	13827	CD	ILE B 680	6.287	3.934	-18.001	1.00	0.00	C	C
ATOM	13828	C	ILE B 680	5.147	4.715	-22.143	1.00	0.00	C	C
ATOM	13829	O	ILE B 680	5.509	3.699	-22.734	1.00	0.00	C	O
ATOM	13830	N	ALA B 681	4.330	5.619	-22.709	1.00	0.00	C	N
ATOM	13831	CA	ALA B 681	3.829	5.454	-24.040	1.00	0.00	C	C
ATOM	13832	CB	ALA B 681	2.926	6.617	-24.490	1.00	0.00	C	C
ATOM	13833	C	ALA B 681	5.013	5.426	-24.947	1.00	0.00	C	C
ATOM	13834	O	ALA B 681	5.055	4.671	-25.916	1.00	0.00	C	O
ATOM	13835	N	LEU B 682	6.012	6.261	-24.625	1.00	0.00	C	N
ATOM	13836	CA	LEU B 682	7.225	6.391	-25.376	1.00	0.00	C	C
ATOM	13837	CB	LEU B 682	8.185	7.414	-24.738	1.00	0.00	C	C
ATOM	13838	CG	LEU B 682	7.647	8.856	-24.680	1.00	0.00	C	C
ATOM	13839	CD1	LEU B 682	8.642	9.788	-23.969	1.00	0.00	C	C
ATOM	13840	CD2	LEU B 682	7.268	9.365	-26.081	1.00	0.00	C	C
ATOM	13841	C	LEU B 682	7.955	5.076	-25.349	1.00	0.00	C	C
ATOM	13842	O	LEU B 682	8.560	4.676	-26.344	1.00	0.00	C	O
ATOM	13843	N	MET B 683	7.892	4.359	-24.210	1.00	0.00	C	N
ATOM	13844	CA	MET B 683	8.649	3.157	-23.973	1.00	0.00	C	C
ATOM	13845	CB	MET B 683	8.314	2.507	-22.614	1.00	0.00	C	C
ATOM	13846	CG	MET B 683	8.721	3.302	-21.370	1.00	0.00	C	C
ATOM	13847	SD	MET B 683	10.490	3.239	-20.957	1.00	0.00	C	S
ATOM	13848	CE	MET B 683	10.258	3.722	-19.220	1.00	0.00	C	C
ATOM	13849	C	MET B 683	8.342	2.103	-24.996	1.00	0.00	C	C
ATOM	13850	O	MET B 683	9.248	1.436	-25.495	1.00	0.00	C	O

ATOM	13851	N	GLY B 684	7.063	1.925	-25.363	1.00	0.00	C	N
ATOM	13852	CA	GLY B 684	6.725	0.836	-26.233	1.00	0.00	C	C
ATOM	13853	C	GLY B 684	7.463	0.957	-27.529	1.00	0.00	C	C
ATOM	13854	O	GLY B 684	7.933	-0.040	-28.071	1.00	0.00	C	O
ATOM	13855	N	GLU B 685	7.598	2.183	-28.055	1.00	0.00	C	N
ATOM	13856	CA	GLU B 685	8.188	2.390	-29.347	1.00	0.00	C	C
ATOM	13857	CB	GLU B 685	8.265	3.883	-29.694	1.00	0.00	C	C
ATOM	13858	CG	GLU B 685	6.896	4.554	-29.789	1.00	0.00	C	C
ATOM	13859	CD	GLU B 685	7.119	6.060	-29.796	1.00	0.00	C	C
ATOM	13860	OE1	GLU B 685	7.359	6.624	-28.694	1.00	0.00	C	O
ATOM	13861	OE2	GLU B 685	7.058	6.666	-30.897	1.00	0.00	C	O
ATOM	13862	C	GLU B 685	9.594	1.881	-29.357	1.00	0.00	C	C
ATOM	13863	O	GLU B 685	10.002	1.196	-30.294	1.00	0.00	C	O
ATOM	13864	N	THR B 686	10.372	2.202	-28.307	1.00	0.00	C	N
ATOM	13865	CA	THR B 686	11.748	1.802	-28.264	1.00	0.00	C	C
ATOM	13866	CB	THR B 686	12.473	2.303	-27.047	1.00	0.00	C	C
ATOM	13867	OG1	THR B 686	11.912	1.736	-25.871	1.00	0.00	C	O
ATOM	13868	CG2	THR B 686	12.363	3.835	-27.007	1.00	0.00	C	C
ATOM	13869	C	THR B 686	11.810	0.314	-28.228	1.00	0.00	C	C
ATOM	13870	O	THR B 686	12.640	-0.296	-28.900	1.00	0.00	C	O
ATOM	13871	N	VAL B 687	10.932	-0.306	-27.417	1.00	0.00	C	N
ATOM	13872	CA	VAL B 687	10.901	-1.733	-27.297	1.00	0.00	C	C
ATOM	13873	CB	VAL B 687	9.929	-2.217	-26.259	1.00	0.00	C	C
ATOM	13874	CG1	VAL B 687	9.867	-3.752	-26.331	1.00	0.00	C	C
ATOM	13875	CG2	VAL B 687	10.369	-1.680	-24.888	1.00	0.00	C	C
ATOM	13876	C	VAL B 687	10.494	-2.338	-28.609	1.00	0.00	C	C
ATOM	13877	O	VAL B 687	11.049	-3.348	-29.036	1.00	0.00	C	O
ATOM	13878	N	ASN B 688	9.492	-1.748	-29.281	1.00	0.00	C	N
ATOM	13879	CA	ASN B 688	9.025	-2.304	-30.519	1.00	0.00	C	C
ATOM	13880	CB	ASN B 688	7.783	-1.586	-31.081	1.00	0.00	C	C
ATOM	13881	CG	ASN B 688	6.548	-2.078	-30.338	1.00	0.00	C	C
ATOM	13882	OD1	ASN B 688	6.087	-3.197	-30.561	1.00	0.00	C	O
ATOM	13883	ND2	ASN B 688	5.991	-1.230	-29.436	1.00	0.00	C	N
ATOM	13884	C	ASN B 688	10.088	-2.213	-31.563	1.00	0.00	C	C
ATOM	13885	O	ASN B 688	10.357	-3.187	-32.264	1.00	0.00	C	O
ATOM	13886	N	LYS B 689	10.728	-1.037	-31.698	1.00	0.00	C	N
ATOM	13887	CA	LYS B 689	11.689	-0.901	-32.747	1.00	0.00	C	C
ATOM	13888	CB	LYS B 689	12.164	0.536	-33.015	1.00	0.00	C	C

ATOM	13889	CG	LYS	B	689	13.044	1.176	-31.946	1.00	0.00	C	C
ATOM	13890	CD	LYS	B	689	13.734	2.424	-32.501	1.00	0.00	C	C
ATOM	13891	CE	LYS	B	689	14.411	3.307	-31.455	1.00	0.00	C	C
ATOM	13892	NZ	LYS	B	689	14.910	4.541	-32.102	1.00	0.00	C	N
ATOM	13893	C	LYS	B	689	12.866	-1.778	-32.476	1.00	0.00	C	C
ATOM	13894	O	LYS	B	689	13.423	-2.371	-33.398	1.00	0.00	C	O
ATOM	13895	N	ILE	B	690	13.272	-1.893	-31.201	1.00	0.00	C	N
ATOM	13896	CA	ILE	B	690	14.402	-2.727	-30.916	1.00	0.00	C	C
ATOM	13897	CB	ILE	B	690	14.874	-2.694	-29.493	1.00	0.00	C	C
ATOM	13898	CG2	ILE	B	690	13.716	-3.025	-28.551	1.00	0.00	C	C
ATOM	13899	CG1	ILE	B	690	16.086	-3.624	-29.352	1.00	0.00	C	C
ATOM	13900	CD	ILE	B	690	16.786	-3.487	-28.008	1.00	0.00	C	C
ATOM	13901	C	ILE	B	690	14.079	-4.135	-31.291	1.00	0.00	C	C
ATOM	13902	O	ILE	B	690	14.947	-4.860	-31.773	1.00	0.00	C	O
ATOM	13903	N	ALA	B	691	12.828	-4.569	-31.051	1.00	0.00	C	N
ATOM	13904	CA	ALA	B	691	12.432	-5.915	-31.363	1.00	0.00	C	C
ATOM	13905	CB	ALA	B	691	10.980	-6.209	-30.951	1.00	0.00	C	C
ATOM	13906	C	ALA	B	691	12.541	-6.161	-32.841	1.00	0.00	C	C
ATOM	13907	O	ALA	B	691	13.037	-7.203	-33.264	1.00	0.00	C	O
ATOM	13908	N	GLN	B	692	12.088	-5.207	-33.680	1.00	0.00	C	N
ATOM	13909	CA	GLN	B	692	12.115	-5.411	-35.105	1.00	0.00	C	C
ATOM	13910	CB	GLN	B	692	11.584	-4.198	-35.876	1.00	0.00	C	C
ATOM	13911	CG	GLN	B	692	10.160	-3.786	-35.524	1.00	0.00	C	C
ATOM	13912	CD	GLN	B	692	9.945	-2.454	-36.215	1.00	0.00	C	C
ATOM	13913	OE1	GLN	B	692	10.286	-2.306	-37.386	1.00	0.00	C	O
ATOM	13914	NE2	GLN	B	692	9.400	-1.453	-35.472	1.00	0.00	C	N
ATOM	13915	C	GLN	B	692	13.541	-5.526	-35.537	1.00	0.00	C	C
ATOM	13916	O	GLN	B	692	13.910	-6.387	-36.337	1.00	0.00	C	O
ATOM	13917	N	GLU	B	693	14.370	-4.626	-34.992	1.00	0.00	C	N
ATOM	13918	CA	GLU	B	693	15.765	-4.487	-35.279	1.00	0.00	C	C
ATOM	13919	CB	GLU	B	693	16.358	-3.221	-34.636	1.00	0.00	C	C
ATOM	13920	CG	GLU	B	693	15.781	-1.925	-35.213	1.00	0.00	C	C
ATOM	13921	CD	GLU	B	693	16.276	-0.760	-34.367	1.00	0.00	C	C
ATOM	13922	OE1	GLU	B	693	15.683	-0.523	-33.277	1.00	0.00	C	O
ATOM	13923	OE2	GLU	B	693	17.252	-0.090	-34.794	1.00	0.00	C	O
ATOM	13924	C	GLU	B	693	16.532	-5.659	-34.754	1.00	0.00	C	C
ATOM	13925	O	GLU	B	693	17.558	-6.005	-35.324	1.00	0.00	C	O
ATOM	13926	N	SER	B	694	16.028	-6.333	-33.704	1.00	0.00	C	N

ATOM	13927	CA	SER B 694	16.695	-7.320	-32.890	1.00	0.00	C	C
ATOM	13928	CB	SER B 694	15.679	-8.141	-32.078	1.00	0.00	C	C
ATOM	13929	OG	SER B 694	15.078	-7.338	-31.079	1.00	0.00	C	O
ATOM	13930	C	SER B 694	17.480	-8.321	-33.661	1.00	0.00	C	C
ATOM	13931	O	SER B 694	18.601	-8.631	-33.261	1.00	0.00	C	O
ATOM	13932	N	LYS B 695	16.931	-8.887	-34.745	1.00	0.00	C	N
ATOM	13933	CA	LYS B 695	17.723	-9.856	-35.446	1.00	0.00	C	C
ATOM	13934	CB	LYS B 695	17.041	-10.357	-36.729	1.00	0.00	C	C
ATOM	13935	CG	LYS B 695	15.889	-11.335	-36.511	1.00	0.00	C	C
ATOM	13936	CD	LYS B 695	16.343	-12.680	-35.948	1.00	0.00	C	C
ATOM	13937	CE	LYS B 695	15.282	-13.774	-36.063	1.00	0.00	C	C
ATOM	13938	NZ	LYS B 695	15.893	-15.088	-35.772	1.00	0.00	C	N
ATOM	13939	C	LYS B 695	18.967	-9.151	-35.891	1.00	0.00	C	C
ATOM	13940	O	LYS B 695	20.084	-9.608	-35.650	1.00	0.00	C	O
ATOM	13941	N	ASN B 696	18.769	-7.970	-36.495	1.00	0.00	C	N
ATOM	13942	CA	ASN B 696	19.779	-7.114	-37.048	1.00	0.00	C	C
ATOM	13943	CB	ASN B 696	19.159	-5.907	-37.769	1.00	0.00	C	C
ATOM	13944	CG	ASN B 696	18.152	-6.424	-38.787	1.00	0.00	C	C
ATOM	13945	OD1	ASN B 696	18.417	-7.371	-39.526	1.00	0.00	C	O
ATOM	13946	ND2	ASN B 696	16.946	-5.795	-38.809	1.00	0.00	C	N
ATOM	13947	C	ASN B 696	20.693	-6.538	-36.000	1.00	0.00	C	C
ATOM	13948	O	ASN B 696	21.913	-6.570	-36.148	1.00	0.00	C	O
ATOM	13949	N	ILE B 697	20.121	-5.978	-34.916	1.00	0.00	C	N
ATOM	13950	CA	ILE B 697	20.863	-5.328	-33.873	1.00	0.00	C	C
ATOM	13951	CB	ILE B 697	19.975	-4.707	-32.841	1.00	0.00	C	C
ATOM	13952	CG2	ILE B 697	19.163	-3.574	-33.494	1.00	0.00	C	C
ATOM	13953	CG1	ILE B 697	19.115	-5.800	-32.202	1.00	0.00	C	C
ATOM	13954	CD	ILE B 697	18.345	-5.332	-30.985	1.00	0.00	C	C
ATOM	13955	C	ILE B 697	21.731	-6.342	-33.209	1.00	0.00	C	C
ATOM	13956	O	ILE B 697	22.896	-6.083	-32.911	1.00	0.00	C	O
ATOM	13957	N	TRP B 698	21.176	-7.544	-32.994	1.00	0.00	C	N
ATOM	13958	CA	TRP B 698	21.894	-8.606	-32.374	1.00	0.00	C	C
ATOM	13959	CB	TRP B 698	21.098	-9.919	-32.426	1.00	0.00	C	C
ATOM	13960	CG	TRP B 698	21.911	-11.171	-32.205	1.00	0.00	C	C
ATOM	13961	CD1	TRP B 698	22.319	-11.753	-31.048	1.00	0.00	C	C
ATOM	13962	NE1	TRP B 698	22.998	-12.917	-31.319	1.00	0.00	C	N
ATOM	13963	CE2	TRP B 698	23.045	-13.089	-32.684	1.00	0.00	C	C
ATOM	13964	CD2	TRP B 698	22.379	-12.013	-33.271	1.00	0.00	C	C

ATOM	13965	CE3 TRP B 698	22.261	-11.906	-34.626	1.00	0.00	C	C
ATOM	13966	CZ3 TRP B 698	22.828	-12.900	-35.391	1.00	0.00	C	C
ATOM	13967	CZ2 TRP B 698	23.603	-14.075	-33.444	1.00	0.00	C	C
ATOM	13968	CH2 TRP B 698	23.485	-13.963	-34.810	1.00	0.00	C	C
ATOM	13969	C TRP B 698	23.106	-8.830	-33.201	1.00	0.00	C	C
ATOM	13970	O TRP B 698	24.199	-9.021	-32.673	1.00	0.00	C	O
ATOM	13971	N LYS B 699	22.926	-8.819	-34.531	1.00	0.00	C	N
ATOM	13972	CA LYS B 699	24.001	-9.147	-35.415	1.00	0.00	C	C
ATOM	13973	CB LYS B 699	23.551	-9.326	-36.877	1.00	0.00	C	C
ATOM	13974	CG LYS B 699	24.432	-10.303	-37.668	1.00	0.00	C	C
ATOM	13975	CD LYS B 699	25.932	-9.997	-37.653	1.00	0.00	C	C
ATOM	13976	CE LYS B 699	26.776	-11.090	-38.318	1.00	0.00	C	C
ATOM	13977	NZ LYS B 699	28.219	-10.825	-38.113	1.00	0.00	C	N
ATOM	13978	C LYS B 699	25.118	-8.130	-35.398	1.00	0.00	C	C
ATOM	13979	O LYS B 699	26.285	-8.512	-35.351	1.00	0.00	C	O
ATOM	13980	N LEU B 700	24.812	-6.814	-35.435	1.00	0.00	C	N
ATOM	13981	CA LEU B 700	25.855	-5.821	-35.573	1.00	0.00	C	C
ATOM	13982	CB LEU B 700	25.317	-4.412	-35.909	1.00	0.00	C	C
ATOM	13983	CG LEU B 700	24.594	-3.639	-34.783	1.00	0.00	C	C
ATOM	13984	CD1 LEU B 700	25.568	-3.076	-33.734	1.00	0.00	C	C
ATOM	13985	CD2 LEU B 700	23.692	-2.546	-35.373	1.00	0.00	C	C
ATOM	13986	C LEU B 700	26.757	-5.739	-34.378	1.00	0.00	C	C
ATOM	13987	O LEU B 700	27.979	-5.658	-34.524	1.00	0.00	C	O
ATOM	13988	N GLN B 701	26.173	-5.762	-33.167	1.00	0.00	C	N
ATOM	13989	CA GLN B 701	26.864	-5.628	-31.912	1.00	0.00	C	C
ATOM	13990	CB GLN B 701	25.922	-5.489	-30.711	1.00	0.00	C	C
ATOM	13991	CG GLN B 701	25.043	-6.707	-30.455	1.00	0.00	C	C
ATOM	13992	CD GLN B 701	24.197	-6.364	-29.241	1.00	0.00	C	C
ATOM	13993	OE1 GLN B 701	24.303	-5.259	-28.706	1.00	0.00	C	O
ATOM	13994	NE2 GLN B 701	23.338	-7.315	-28.791	1.00	0.00	C	N
ATOM	13995	C GLN B 701	27.749	-6.809	-31.695	1.00	0.00	C	C
ATOM	13996	O GLN B 701	28.823	-6.691	-31.106	1.00	0.00	C	O
ATOM	13997	N ARG B 702	27.310	-7.995	-32.138	1.00	0.00	C	N
ATOM	13998	CA ARG B 702	28.125	-9.150	-31.935	1.00	0.00	C	C
ATOM	13999	CB ARG B 702	27.447	-10.451	-32.408	1.00	0.00	C	C
ATOM	14000	CG ARG B 702	28.285	-11.709	-32.157	1.00	0.00	C	C
ATOM	14001	CD ARG B 702	27.456	-12.985	-31.982	1.00	0.00	C	C
ATOM	14002	NE ARG B 702	26.987	-13.459	-33.313	1.00	0.00	C	N

ATOM	14003	CZ	ARG B 702	26.478	-14.720	-33.416	1.00	0.00	C	C
ATOM	14004	NH1	ARG B 702	26.387	-15.507	-32.302	1.00	0.00	C	N
ATOM	14005	NH2	ARG B 702	26.050	-15.198	-34.618	1.00	0.00	C	N
ATOM	14006	C	ARG B 702	29.408	-8.936	-32.683	1.00	0.00	C	C
ATOM	14007	O	ARG B 702	30.487	-9.196	-32.157	1.00	0.00	C	O
ATOM	14008	N	ALA B 703	29.333	-8.393	-33.911	1.00	0.00	C	N
ATOM	14009	CA	ALA B 703	30.514	-8.204	-34.704	1.00	0.00	C	C
ATOM	14010	CB	ALA B 703	30.231	-7.555	-36.069	1.00	0.00	C	C
ATOM	14011	C	ALA B 703	31.447	-7.299	-33.969	1.00	0.00	C	C
ATOM	14012	O	ALA B 703	32.661	-7.494	-33.984	1.00	0.00	C	O
ATOM	14013	N	ILE B 704	30.902	-6.264	-33.308	1.00	0.00	C	N
ATOM	14014	CA	ILE B 704	31.731	-5.349	-32.585	1.00	0.00	C	C
ATOM	14015	CB	ILE B 704	30.960	-4.232	-31.944	1.00	0.00	C	C
ATOM	14016	CG2	ILE B 704	31.920	-3.451	-31.034	1.00	0.00	C	C
ATOM	14017	CG1	ILE B 704	30.283	-3.362	-33.014	1.00	0.00	C	C
ATOM	14018	CD	ILE B 704	29.274	-2.370	-32.434	1.00	0.00	C	C
ATOM	14019	C	ILE B 704	32.423	-6.090	-31.485	1.00	0.00	C	C
ATOM	14020	O	ILE B 704	33.612	-5.885	-31.247	1.00	0.00	C	O
ATOM	14021	N	THR B 705	31.696	-6.977	-30.777	1.00	0.00	C	N
ATOM	14022	CA	THR B 705	32.305	-7.648	-29.665	1.00	0.00	C	C
ATOM	14023	CB	THR B 705	31.368	-8.502	-28.855	1.00	0.00	C	C
ATOM	14024	OG1	THR B 705	31.945	-8.760	-27.584	1.00	0.00	C	O
ATOM	14025	CG2	THR B 705	31.124	-9.839	-29.574	1.00	0.00	C	C
ATOM	14026	C	THR B 705	33.425	-8.504	-30.167	1.00	0.00	C	C
ATOM	14027	O	THR B 705	34.471	-8.595	-29.529	1.00	0.00	C	O
ATOM	14028	N	ILE B 706	33.230	-9.162	-31.325	1.00	0.00	C	N
ATOM	14029	CA	ILE B 706	34.241	-10.026	-31.860	1.00	0.00	C	C
ATOM	14030	CB	ILE B 706	33.772	-10.798	-33.056	1.00	0.00	C	C
ATOM	14031	CG2	ILE B 706	34.990	-11.481	-33.696	1.00	0.00	C	C
ATOM	14032	CG1	ILE B 706	32.649	-11.769	-32.646	1.00	0.00	C	C
ATOM	14033	CD	ILE B 706	31.936	-12.436	-33.820	1.00	0.00	C	C
ATOM	14034	C	ILE B 706	35.453	-9.243	-32.255	1.00	0.00	C	C
ATOM	14035	O	ILE B 706	36.579	-9.638	-31.969	1.00	0.00	C	O
ATOM	14036	N	LEU B 707	35.262	-8.097	-32.934	1.00	0.00	C	N
ATOM	14037	CA	LEU B 707	36.397	-7.376	-33.432	1.00	0.00	C	C
ATOM	14038	CB	LEU B 707	36.013	-6.369	-34.524	1.00	0.00	C	C
ATOM	14039	CG	LEU B 707	35.420	-7.184	-35.695	1.00	0.00	C	C
ATOM	14040	CD1	LEU B 707	35.305	-6.394	-37.005	1.00	0.00	C	C

ATOM	14041	CD2	LEU	B	707	36.183	-8.509	-35.854	1.00	0.00	C	C
ATOM	14042	C	LEU	B	707	37.231	-6.803	-32.323	1.00	0.00	C	C
ATOM	14043	O	LEU	B	707	38.458	-6.803	-32.408	1.00	0.00	C	O
ATOM	14044	N	ASP	B	708	36.604	-6.317	-31.236	1.00	0.00	C	N
ATOM	14045	CA	ASP	B	708	37.369	-5.754	-30.155	1.00	0.00	C	C
ATOM	14046	CB	ASP	B	708	36.476	-5.224	-29.020	1.00	0.00	C	C
ATOM	14047	CG	ASP	B	708	35.702	-4.015	-29.529	1.00	0.00	C	C
ATOM	14048	OD1	ASP	B	708	36.012	-3.543	-30.656	1.00	0.00	C	O
ATOM	14049	OD2	ASP	B	708	34.792	-3.544	-28.795	1.00	0.00	C	O
ATOM	14050	C	ASP	B	708	38.245	-6.821	-29.573	1.00	0.00	C	C
ATOM	14051	O	ASP	B	708	39.425	-6.594	-29.310	1.00	0.00	C	O
ATOM	14052	N	THR	B	709	37.693	-8.033	-29.368	1.00	0.00	C	N
ATOM	14053	CA	THR	B	709	38.475	-9.076	-28.764	1.00	0.00	C	C
ATOM	14054	CB	THR	B	709	37.701	-10.327	-28.454	1.00	0.00	C	C
ATOM	14055	OG1	THR	B	709	38.477	-11.177	-27.619	1.00	0.00	C	O
ATOM	14056	CG2	THR	B	709	37.362	-11.059	-29.762	1.00	0.00	C	C
ATOM	14057	C	THR	B	709	39.592	-9.433	-29.690	1.00	0.00	C	C
ATOM	14058	O	THR	B	709	40.714	-9.676	-29.250	1.00	0.00	C	O
ATOM	14059	N	GLU	B	710	39.325	-9.456	-31.011	1.00	0.00	C	N
ATOM	14060	CA	GLU	B	710	40.348	-9.847	-31.935	1.00	0.00	C	C
ATOM	14061	CB	GLU	B	710	39.911	-9.799	-33.410	1.00	0.00	C	C
ATOM	14062	CG	GLU	B	710	41.032	-10.226	-34.367	1.00	0.00	C	C
ATOM	14063	CD	GLU	B	710	40.624	-9.894	-35.797	1.00	0.00	C	C
ATOM	14064	OE1	GLU	B	710	39.549	-9.266	-35.978	1.00	0.00	C	O
ATOM	14065	OE2	GLU	B	710	41.391	-10.260	-36.730	1.00	0.00	C	O
ATOM	14066	C	GLU	B	710	41.502	-8.908	-31.809	1.00	0.00	C	C
ATOM	14067	O	GLU	B	710	42.652	-9.346	-31.780	1.00	0.00	C	O
ATOM	14068	N	LYS	B	711	41.238	-7.589	-31.736	1.00	0.00	C	N
ATOM	14069	CA	LYS	B	711	42.323	-6.651	-31.645	1.00	0.00	C	C
ATOM	14070	CB	LYS	B	711	41.881	-5.182	-31.740	1.00	0.00	C	C
ATOM	14071	CG	LYS	B	711	41.506	-4.744	-33.158	1.00	0.00	C	C
ATOM	14072	CD	LYS	B	711	42.658	-4.858	-34.163	1.00	0.00	C	C
ATOM	14073	CE	LYS	B	711	42.479	-5.981	-35.188	1.00	0.00	C	C
ATOM	14074	NZ	LYS	B	711	42.402	-7.292	-34.507	1.00	0.00	C	N
ATOM	14075	C	LYS	B	711	43.068	-6.819	-30.345	1.00	0.00	C	C
ATOM	14076	O	LYS	B	711	44.296	-6.778	-30.328	1.00	0.00	C	O
ATOM	14077	N	SER	B	712	42.338	-6.994	-29.224	1.00	0.00	C	N
ATOM	14078	CA	SER	B	712	42.893	-7.101	-27.894	1.00	0.00	C	C

ATOM	14079	CB	SER	B	712	41.843	-6.829	-26.800	1.00	0.00	C	C
ATOM	14080	OG	SER	B	712	42.440	-6.930	-25.515	1.00	0.00	C	O
ATOM	14081	C	SER	B	712	43.467	-8.465	-27.643	1.00	0.00	C	C
ATOM	14082	O	SER	B	712	44.093	-8.706	-26.613	1.00	0.00	C	O
ATOM	14083	N	PHE	B	713	43.277	-9.392	-28.590	1.00	0.00	C	N
ATOM	14084	CA	PHE	B	713	43.679	-10.768	-28.484	1.00	0.00	C	C
ATOM	14085	CB	PHE	B	713	43.118	-11.660	-29.602	1.00	0.00	C	C
ATOM	14086	CG	PHE	B	713	43.346	-13.066	-29.165	1.00	0.00	C	C
ATOM	14087	CD1	PHE	B	713	42.555	-13.609	-28.177	1.00	0.00	C	C
ATOM	14088	CE1	PHE	B	713	42.740	-14.904	-27.756	1.00	0.00	C	C
ATOM	14089	CZ	PHE	B	713	43.726	-15.671	-28.326	1.00	0.00	C	C
ATOM	14090	CD2	PHE	B	713	44.328	-13.843	-29.735	1.00	0.00	C	C
ATOM	14091	CE2	PHE	B	713	44.518	-15.139	-29.317	1.00	0.00	C	C
ATOM	14092	C	PHE	B	713	45.176	-10.868	-28.507	1.00	0.00	C	C
ATOM	14093	O	PHE	B	713	45.726	-11.937	-28.246	1.00	0.00	C	O
ATOM	14094	N	LEU	B	714	45.868	-9.761	-28.835	1.00	0.00	C	N
ATOM	14095	CA	LEU	B	714	47.286	-9.741	-29.077	1.00	0.00	C	C
ATOM	14096	CB	LEU	B	714	48.143	-10.650	-28.173	1.00	0.00	C	C
ATOM	14097	CG	LEU	B	714	48.382	-10.122	-26.746	1.00	0.00	C	C
ATOM	14098	CD1	LEU	B	714	49.201	-8.822	-26.776	1.00	0.00	C	C
ATOM	14099	CD2	LEU	B	714	47.078	-9.998	-25.945	1.00	0.00	C	C
ATOM	14100	C	LEU	B	714	47.509	-10.176	-30.476	1.00	0.00	C	C
ATOM	14101	O	LEU	B	714	48.641	-10.445	-30.876	1.00	0.00	C	O
ATOM	14102	N	LYS	B	715	46.414	-10.219	-31.259	1.00	0.00	C	N
ATOM	14103	CA	LYS	B	715	46.539	-10.483	-32.659	1.00	0.00	C	C
ATOM	14104	CB	LYS	B	715	47.410	-9.403	-33.312	1.00	0.00	C	C
ATOM	14105	CG	LYS	B	715	46.910	-8.004	-32.947	1.00	0.00	C	C
ATOM	14106	CD	LYS	B	715	47.988	-6.921	-33.032	1.00	0.00	C	C
ATOM	14107	CE	LYS	B	715	47.621	-5.649	-32.266	1.00	0.00	C	C
ATOM	14108	NZ	LYS	B	715	48.826	-4.820	-32.048	1.00	0.00	C	N
ATOM	14109	C	LYS	B	715	47.219	-11.797	-32.780	1.00	0.00	C	C
ATOM	14110	O	LYS	B	715	48.046	-12.010	-33.666	1.00	0.00	C	O
ATOM	14111	N	CYS	B	716	46.865	-12.725	-31.875	1.00	0.00	C	N
ATOM	14112	CA	CYS	B	716	47.495	-14.005	-31.893	1.00	0.00	C	C
ATOM	14113	CB	CYS	B	716	47.098	-14.918	-30.722	1.00	0.00	C	C
ATOM	14114	SG	CYS	B	716	47.663	-14.285	-29.115	1.00	0.00	C	S
ATOM	14115	C	CYS	B	716	47.081	-14.669	-33.161	1.00	0.00	C	C
ATOM	14116	O	CYS	B	716	46.226	-14.157	-33.882	1.00	0.00	C	O

ATOM	14117	N	MET B 717	47.712	-15.816	-33.474	1.00	0.00	C	N
ATOM	14118	CA	MET B 717	47.422	-16.493	-34.704	1.00	0.00	C	C
ATOM	14119	CB	MET B 717	48.074	-17.878	-34.834	1.00	0.00	C	C
ATOM	14120	CG	MET B 717	47.569	-18.641	-36.062	1.00	0.00	C	C
ATOM	14121	SD	MET B 717	48.062	-20.387	-36.144	1.00	0.00	C	S
ATOM	14122	CE	MET B 717	46.978	-20.780	-37.548	1.00	0.00	C	C
ATOM	14123	C	MET B 717	45.956	-16.740	-34.765	1.00	0.00	C	C
ATOM	14124	O	MET B 717	45.351	-17.218	-33.807	1.00	0.00	C	O
ATOM	14125	N	ARG B 718	45.356	-16.395	-35.917	1.00	0.00	C	N
ATOM	14126	CA	ARG B 718	43.959	-16.600	-36.144	1.00	0.00	C	C
ATOM	14127	CB	ARG B 718	43.087	-15.561	-35.419	1.00	0.00	C	C
ATOM	14128	CG	ARG B 718	41.583	-15.721	-35.627	1.00	0.00	C	C
ATOM	14129	CD	ARG B 718	40.780	-14.671	-34.857	1.00	0.00	C	C
ATOM	14130	NE	ARG B 718	40.915	-14.996	-33.408	1.00	0.00	C	N
ATOM	14131	CZ	ARG B 718	40.748	-14.015	-32.473	1.00	0.00	C	C
ATOM	14132	NH1	ARG B 718	40.483	-12.735	-32.869	1.00	0.00	C	N
ATOM	14133	NH2	ARG B 718	40.827	-14.316	-31.144	1.00	0.00	C	N
ATOM	14134	C	ARG B 718	43.757	-16.425	-37.611	1.00	0.00	C	C
ATOM	14135	O	ARG B 718	44.571	-15.783	-38.273	1.00	0.00	C	O
ATOM	14136	C	LYS B 719	41.634	-15.516	-39.700	1.00	0.00	C	C
ATOM	14137	OT1	LYS B 719	41.369	-15.216	-38.783	0.00	0.00	C	O
ATOM	14138	OT2	LYS B 719	41.511	-15.295	-40.668	0.00	0.00	C	O
ATOM	14139	N	LYS B 719	42.686	-17.009	-38.185	1.00	0.00	C	N
ATOM	14140	CA	LYS B 719	42.538	-16.730	-39.581	1.00	0.00	C	C
ATOM	14141	CB	LYS B 719	41.915	-17.828	-40.451	1.00	0.00	C	C
ATOM	14142	CG	LYS B 719	41.847	-17.335	-41.899	1.00	0.00	C	C
ATOM	14143	CD	LYS B 719	43.234	-17.052	-42.488	1.00	0.00	C	C
ATOM	14144	CE	LYS B 719	43.284	-15.841	-43.430	1.00	0.00	C	C
ATOM	14145	NZ	LYS B 719	42.375	-16.039	-44.579	1.00	0.00	C	N
ATOM	14146	N	LEU A 112	-36.712	-56.883	-71.221	1.00	0.00	D	N
ATOM	14147	CA	LEU A 112	-35.367	-56.853	-71.806	1.00	0.00	D	C
ATOM	14148	CB	LEU A 112	-35.457	-56.492	-73.297	1.00	0.00	D	C
ATOM	14149	CG	LEU A 112	-36.275	-57.504	-74.129	1.00	0.00	D	C
ATOM	14150	CD1	LEU A 112	-36.297	-57.126	-75.620	1.00	0.00	D	C
ATOM	14151	CD2	LEU A 112	-35.798	-58.943	-73.887	1.00	0.00	D	C
ATOM	14152	C	LEU A 112	-34.561	-55.800	-71.124	1.00	0.00	D	C
ATOM	14153	O	LEU A 112	-33.360	-55.677	-71.356	1.00	0.00	D	O
ATOM	14154	N	TYR A 113	-35.215	-55.000	-70.257	1.00	0.00	D	N

ATOM	14155	CA	TYR	A	113	-34.493	-53.943	-69.619	1.00	0.00	D	C
ATOM	14156	CB	TYR	A	113	-34.918	-52.547	-70.108	1.00	0.00	D	C
ATOM	14157	CG	TYR	A	113	-34.486	-52.378	-71.521	1.00	0.00	D	C
ATOM	14158	CD1	TYR	A	113	-35.187	-52.971	-72.544	1.00	0.00	D	C
ATOM	14159	CE1	TYR	A	113	-34.787	-52.807	-73.848	1.00	0.00	D	C
ATOM	14160	CZ	TYR	A	113	-33.681	-52.041	-74.136	1.00	0.00	D	C
ATOM	14161	OH	TYR	A	113	-33.265	-51.870	-75.473	1.00	0.00	D	O
ATOM	14162	CD2	TYR	A	113	-33.383	-51.611	-71.821	1.00	0.00	D	C
ATOM	14163	CE2	TYR	A	113	-32.977	-51.441	-73.122	1.00	0.00	D	C
ATOM	14164	C	TYR	A	113	-34.759	-53.941	-68.152	1.00	0.00	D	C
ATOM	14165	O	TYR	A	113	-35.908	-53.993	-67.713	1.00	0.00	D	O
ATOM	14166	N	ASP	A	114	-33.674	-53.905	-67.356	1.00	0.00	D	N
ATOM	14167	CA	ASP	A	114	-33.770	-53.704	-65.942	1.00	0.00	D	C
ATOM	14168	CB	ASP	A	114	-32.937	-54.703	-65.122	1.00	0.00	D	C
ATOM	14169	CG	ASP	A	114	-31.492	-54.620	-65.579	1.00	0.00	D	C
ATOM	14170	OD1	ASP	A	114	-31.241	-54.889	-66.788	1.00	0.00	D	O
ATOM	14171	OD2	ASP	A	114	-30.618	-54.304	-64.732	1.00	0.00	D	O
ATOM	14172	C	ASP	A	114	-33.306	-52.297	-65.690	1.00	0.00	D	C
ATOM	14173	O	ASP	A	114	-32.874	-51.606	-66.611	1.00	0.00	D	O
ATOM	14174	N	ARG	A	115	-33.383	-51.824	-64.432	1.00	0.00	D	N
ATOM	14175	CA	ARG	A	115	-33.000	-50.470	-64.132	1.00	0.00	D	C
ATOM	14176	CB	ARG	A	115	-33.224	-50.116	-62.651	1.00	0.00	D	C
ATOM	14177	CG	ARG	A	115	-32.836	-48.685	-62.272	1.00	0.00	D	C
ATOM	14178	CD	ARG	A	115	-33.169	-48.341	-60.818	1.00	0.00	D	C
ATOM	14179	NE	ARG	A	115	-32.146	-48.989	-59.946	1.00	0.00	D	N
ATOM	14180	CZ	ARG	A	115	-31.022	-48.302	-59.589	1.00	0.00	D	C
ATOM	14181	NH1	ARG	A	115	-30.848	-47.018	-60.010	1.00	0.00	D	N
ATOM	14182	NH2	ARG	A	115	-30.077	-48.898	-58.803	1.00	0.00	D	N
ATOM	14183	C	ARG	A	115	-31.541	-50.300	-64.431	1.00	0.00	D	C
ATOM	14184	O	ARG	A	115	-31.125	-49.291	-64.999	1.00	0.00	D	O
ATOM	14185	N	ARG	A	116	-30.739	-51.314	-64.078	1.00	0.00	D	N
ATOM	14186	CA	ARG	A	116	-29.310	-51.256	-64.187	1.00	0.00	D	C
ATOM	14187	CB	ARG	A	116	-28.665	-52.561	-63.690	1.00	0.00	D	C
ATOM	14188	CG	ARG	A	116	-27.272	-52.370	-63.091	1.00	0.00	D	C
ATOM	14189	CD	ARG	A	116	-26.256	-51.689	-64.001	1.00	0.00	D	C
ATOM	14190	NE	ARG	A	116	-25.112	-51.326	-63.119	1.00	0.00	D	N
ATOM	14191	CZ	ARG	A	116	-25.151	-50.151	-62.420	1.00	0.00	D	C
ATOM	14192	NH1	ARG	A	116	-26.181	-49.279	-62.610	1.00	0.00	D	N

ATOM 14193 NH2 ARG A 116 -24.163 -49.856 -61.524 1.00 0.00 D N
ATOM 14194 C ARG A 116 -28.921 -51.083 -65.624 1.00 0.00 D C
ATOM 14195 O ARG A 116 -28.040 -50.286 -65.944 1.00 0.00 D O
ATOM 14196 N SER A 117 -29.589 -51.813 -66.538 1.00 0.00 D N
ATOM 14197 CA SER A 117 -29.205 -51.809 -67.921 1.00 0.00 D C
ATOM 14198 CB SER A 117 -30.065 -52.752 -68.781 1.00 0.00 D C
ATOM 14199 OG SER A 117 -31.428 -52.352 -68.746 1.00 0.00 D O
ATOM 14200 C SER A 117 -29.288 -50.429 -68.507 1.00 0.00 D C
ATOM 14201 O SER A 117 -28.356 -49.990 -69.178 1.00 0.00 D O
ATOM 14202 N ILE A 118 -30.401 -49.707 -68.279 1.00 0.00 D N
ATOM 14203 CA ILE A 118 -30.591 -48.400 -68.855 1.00 0.00 D C
ATOM 14204 CB ILE A 118 -31.964 -47.841 -68.630 1.00 0.00 D C
ATOM 14205 CG2 ILE A 118 -31.985 -46.420 -69.216 1.00 0.00 D C
ATOM 14206 CG1 ILE A 118 -33.032 -48.765 -69.238 1.00 0.00 D C
ATOM 14207 CD ILE A 118 -34.453 -48.410 -68.802 1.00 0.00 D C
ATOM 14208 C ILE A 118 -29.622 -47.410 -68.281 1.00 0.00 D C
ATOM 14209 O ILE A 118 -29.063 -46.585 -69.004 1.00 0.00 D O
ATOM 14210 N PHE A 119 -29.392 -47.469 -66.957 1.00 0.00 D N
ATOM 14211 CA PHE A 119 -28.550 -46.518 -66.289 1.00 0.00 D C
ATOM 14212 CB PHE A 119 -28.409 -46.800 -64.779 1.00 0.00 D C
ATOM 14213 CG PHE A 119 -29.561 -46.183 -64.056 1.00 0.00 D C
ATOM 14214 CD1 PHE A 119 -30.837 -46.675 -64.188 1.00 0.00 D C
ATOM 14215 CE1 PHE A 119 -31.888 -46.089 -63.522 1.00 0.00 D C
ATOM 14216 CZ PHE A 119 -31.677 -44.995 -62.720 1.00 0.00 D C
ATOM 14217 CD2 PHE A 119 -29.362 -45.072 -63.266 1.00 0.00 D C
ATOM 14218 CE2 PHE A 119 -30.407 -44.482 -62.595 1.00 0.00 D C
ATOM 14219 C PHE A 119 -27.187 -46.553 -66.897 1.00 0.00 D C
ATOM 14220 O PHE A 119 -26.567 -45.506 -67.084 1.00 0.00 D O
ATOM 14221 N GLU A 120 -26.672 -47.758 -67.192 1.00 0.00 D N
ATOM 14222 CA GLU A 120 -25.371 -47.890 -67.780 1.00 0.00 D C
ATOM 14223 CB GLU A 120 -24.899 -49.352 -67.852 1.00 0.00 D C
ATOM 14224 CG GLU A 120 -24.678 -49.983 -66.474 1.00 0.00 D C
ATOM 14225 CD GLU A 120 -23.465 -49.324 -65.824 1.00 0.00 D C
ATOM 14226 OE1 GLU A 120 -23.323 -48.081 -65.961 1.00 0.00 D O
ATOM 14227 OE2 GLU A 120 -22.668 -50.059 -65.182 1.00 0.00 D O
ATOM 14228 C GLU A 120 -25.383 -47.328 -69.171 1.00 0.00 D C
ATOM 14229 O GLU A 120 -24.419 -46.691 -69.596 1.00 0.00 D O
ATOM 14230 N ALA A 121 -26.474 -47.548 -69.924 1.00 0.00 D N

ATOM	14231	CA	ALA	A	121	-26.538	-47.068	-71.278	1.00	0.00	D	C
ATOM	14232	CB	ALA	A	121	-27.851	-47.447	-71.984	1.00	0.00	D	C
ATOM	14233	C	ALA	A	121	-26.450	-45.572	-71.264	1.00	0.00	D	C
ATOM	14234	O	ALA	A	121	-25.746	-44.975	-72.078	1.00	0.00	D	O
ATOM	14235	N	VAL	A	122	-27.158	-44.932	-70.316	1.00	0.00	D	N
ATOM	14236	CA	VAL	A	122	-27.225	-43.500	-70.200	1.00	0.00	D	C
ATOM	14237	CB	VAL	A	122	-28.164	-43.058	-69.113	1.00	0.00	D	C
ATOM	14238	CG1	VAL	A	122	-28.057	-41.534	-68.945	1.00	0.00	D	C
ATOM	14239	CG2	VAL	A	122	-29.580	-43.537	-69.474	1.00	0.00	D	C
ATOM	14240	C	VAL	A	122	-25.871	-42.932	-69.893	1.00	0.00	D	C
ATOM	14241	O	VAL	A	122	-25.507	-41.868	-70.396	1.00	0.00	D	O
ATOM	14242	N	ALA	A	123	-25.073	-43.631	-69.064	1.00	0.00	D	N
ATOM	14243	CA	ALA	A	123	-23.804	-43.102	-68.645	1.00	0.00	D	C
ATOM	14244	CB	ALA	A	123	-23.038	-44.064	-67.721	1.00	0.00	D	C
ATOM	14245	C	ALA	A	123	-22.944	-42.850	-69.851	1.00	0.00	D	C
ATOM	14246	O	ALA	A	123	-22.196	-41.877	-69.907	1.00	0.00	D	O
ATOM	14247	N	GLN	A	124	-23.010	-43.777	-70.819	1.00	0.00	D	N
ATOM	14248	CA	GLN	A	124	-22.304	-43.826	-72.072	1.00	0.00	D	C
ATOM	14249	CB	GLN	A	124	-22.359	-45.226	-72.706	1.00	0.00	D	C
ATOM	14250	CG	GLN	A	124	-21.742	-46.317	-71.831	1.00	0.00	D	C
ATOM	14251	CD	GLN	A	124	-21.897	-47.637	-72.574	1.00	0.00	D	C
ATOM	14252	OE1	GLN	A	124	-20.928	-48.203	-73.075	1.00	0.00	D	O
ATOM	14253	NE2	GLN	A	124	-23.157	-48.145	-72.652	1.00	0.00	D	N
ATOM	14254	C	GLN	A	124	-22.848	-42.871	-73.097	1.00	0.00	D	C
ATOM	14255	O	GLN	A	124	-22.152	-42.553	-74.061	1.00	0.00	D	O
ATOM	14256	N	ASN	A	125	-24.114	-42.429	-72.962	1.00	0.00	D	N
ATOM	14257	CA	ASN	A	125	-24.725	-41.632	-73.993	1.00	0.00	D	C
ATOM	14258	CB	ASN	A	125	-23.873	-40.420	-74.406	1.00	0.00	D	C
ATOM	14259	CG	ASN	A	125	-24.714	-39.530	-75.309	1.00	0.00	D	C
ATOM	14260	OD1	ASN	A	125	-25.776	-39.059	-74.906	1.00	0.00	D	O
ATOM	14261	ND2	ASN	A	125	-24.233	-39.293	-76.558	1.00	0.00	D	N
ATOM	14262	C	ASN	A	125	-24.921	-42.502	-75.200	1.00	0.00	D	C
ATOM	14263	O	ASN	A	125	-24.696	-42.075	-76.333	1.00	0.00	D	O
ATOM	14264	N	ASN	A	126	-25.363	-43.759	-74.982	1.00	0.00	D	N
ATOM	14265	CA	ASN	A	126	-25.535	-44.676	-76.071	1.00	0.00	D	C
ATOM	14266	CB	ASN	A	126	-25.008	-46.084	-75.739	1.00	0.00	D	C
ATOM	14267	CG	ASN	A	126	-24.697	-46.804	-77.039	1.00	0.00	D	C
ATOM	14268	OD1	ASN	A	126	-24.780	-46.221	-78.117	1.00	0.00	D	O

ATOM	14269	ND2	ASN	A	126	-24.319	-48.107	-76.939	1.00	0.00	D	N
ATOM	14270	C	ASN	A	126	-27.001	-44.789	-76.399	1.00	0.00	D	C
ATOM	14271	O	ASN	A	126	-27.803	-45.260	-75.595	1.00	0.00	D	O
ATOM	14272	N	CYS	A	127	-27.384	-44.298	-77.595	1.00	0.00	D	N
ATOM	14273	CA	CYS	A	127	-28.724	-44.332	-78.117	1.00	0.00	D	C
ATOM	14274	CB	CYS	A	127	-28.930	-43.379	-79.304	1.00	0.00	D	C
ATOM	14275	SG	CYS	A	127	-28.907	-41.639	-78.793	1.00	0.00	D	S
ATOM	14276	C	CYS	A	127	-29.120	-45.704	-78.585	1.00	0.00	D	C
ATOM	14277	O	CYS	A	127	-30.305	-46.030	-78.601	1.00	0.00	D	O
ATOM	14278	N	GLN	A	128	-28.157	-46.519	-79.057	1.00	0.00	D	N
ATOM	14279	CA	GLN	A	128	-28.485	-47.792	-79.651	1.00	0.00	D	C
ATOM	14280	CB	GLN	A	128	-27.327	-48.411	-80.458	1.00	0.00	D	C
ATOM	14281	CG	GLN	A	128	-27.037	-47.632	-81.744	1.00	0.00	D	C
ATOM	14282	CD	GLN	A	128	-26.046	-48.412	-82.601	1.00	0.00	D	C
ATOM	14283	OE1	GLN	A	128	-25.194	-47.828	-83.268	1.00	0.00	D	O
ATOM	14284	NE2	GLN	A	128	-26.167	-49.767	-82.597	1.00	0.00	D	N
ATOM	14285	C	GLN	A	128	-29.006	-48.819	-78.682	1.00	0.00	D	C
ATOM	14286	O	GLN	A	128	-29.968	-49.523	-78.988	1.00	0.00	D	O
ATOM	14287	N	ASP	A	129	-28.428	-48.919	-77.473	1.00	0.00	D	N
ATOM	14288	CA	ASP	A	129	-28.821	-49.949	-76.545	1.00	0.00	D	C
ATOM	14289	CB	ASP	A	129	-28.033	-49.887	-75.225	1.00	0.00	D	C
ATOM	14290	CG	ASP	A	129	-26.594	-50.287	-75.518	1.00	0.00	D	C
ATOM	14291	OD1	ASP	A	129	-26.350	-50.849	-76.620	1.00	0.00	D	O
ATOM	14292	OD2	ASP	A	129	-25.719	-50.037	-74.647	1.00	0.00	D	O
ATOM	14293	C	ASP	A	129	-30.275	-49.764	-76.229	1.00	0.00	D	C
ATOM	14294	O	ASP	A	129	-30.962	-50.693	-75.806	1.00	0.00	D	O
ATOM	14295	N	LEU	A	130	-30.728	-48.508	-76.347	1.00	0.00	D	N
ATOM	14296	CA	LEU	A	130	-32.052	-47.991	-76.154	1.00	0.00	D	C
ATOM	14297	CB	LEU	A	130	-32.060	-46.469	-75.925	1.00	0.00	D	C
ATOM	14298	CG	LEU	A	130	-31.383	-46.066	-74.597	1.00	0.00	D	C
ATOM	14299	CD1	LEU	A	130	-31.399	-44.545	-74.387	1.00	0.00	D	C
ATOM	14300	CD2	LEU	A	130	-32.000	-46.823	-73.410	1.00	0.00	D	C
ATOM	14301	C	LEU	A	130	-32.976	-48.310	-77.288	1.00	0.00	D	C
ATOM	14302	O	LEU	A	130	-34.164	-48.007	-77.202	1.00	0.00	D	O
ATOM	14303	N	GLU	A	131	-32.460	-48.812	-78.425	1.00	0.00	D	N
ATOM	14304	CA	GLU	A	131	-33.291	-49.032	-79.579	1.00	0.00	D	C
ATOM	14305	CB	GLU	A	131	-32.488	-49.620	-80.748	1.00	0.00	D	C
ATOM	14306	CG	GLU	A	131	-31.391	-48.664	-81.229	1.00	0.00	D	C

ATOM	14307	CD	GLU A 131	-30.558	-49.374	-82.285	1.00	0.00	D	C
ATOM	14308	OE1	GLU A 131	-29.574	-50.061	-81.903	1.00	0.00	D	O
ATOM	14309	OE2	GLU A 131	-30.896	-49.241	-83.491	1.00	0.00	D	O
ATOM	14310	C	GLU A 131	-34.434	-49.960	-79.256	1.00	0.00	D	C
ATOM	14311	O	GLU A 131	-35.571	-49.702	-79.648	1.00	0.00	D	O
ATOM	14312	N	SER A 132	-34.178	-51.069	-78.536	1.00	0.00	D	N
ATOM	14313	CA	SER A 132	-35.200	-52.031	-78.208	1.00	0.00	D	C
ATOM	14314	CB	SER A 132	-34.618	-53.402	-77.820	1.00	0.00	D	C
ATOM	14315	OG	SER A 132	-33.958	-53.987	-78.934	1.00	0.00	D	O
ATOM	14316	C	SER A 132	-36.049	-51.569	-77.054	1.00	0.00	D	C
ATOM	14317	O	SER A 132	-36.936	-52.299	-76.614	1.00	0.00	D	O
ATOM	14318	N	LEU A 133	-35.779	-50.369	-76.502	1.00	0.00	D	N
ATOM	14319	CA	LEU A 133	-36.422	-49.932	-75.292	1.00	0.00	D	C
ATOM	14320	CB	LEU A 133	-35.790	-48.642	-74.725	1.00	0.00	D	C
ATOM	14321	CG	LEU A 133	-36.416	-48.169	-73.394	1.00	0.00	D	C
ATOM	14322	CD1	LEU A 133	-36.290	-49.248	-72.307	1.00	0.00	D	C
ATOM	14323	CD2	LEU A 133	-35.826	-46.820	-72.935	1.00	0.00	D	C
ATOM	14324	C	LEU A 133	-37.912	-49.713	-75.400	1.00	0.00	D	C
ATOM	14325	O	LEU A 133	-38.672	-50.302	-74.632	1.00	0.00	D	O
ATOM	14326	N	LEU A 134	-38.389	-48.924	-76.384	1.00	0.00	D	N
ATOM	14327	CA	LEU A 134	-39.775	-48.548	-76.431	1.00	0.00	D	C
ATOM	14328	CB	LEU A 134	-40.074	-47.650	-77.645	1.00	0.00	D	C
ATOM	14329	CG	LEU A 134	-41.416	-46.883	-77.631	1.00	0.00	D	C
ATOM	14330	CD1	LEU A 134	-41.671	-46.268	-79.010	1.00	0.00	D	C
ATOM	14331	CD2	LEU A 134	-42.611	-47.694	-77.117	1.00	0.00	D	C
ATOM	14332	C	LEU A 134	-40.619	-49.783	-76.564	1.00	0.00	D	C
ATOM	14333	O	LEU A 134	-41.632	-49.937	-75.888	1.00	0.00	D	O
ATOM	14334	N	LEU A 135	-40.209	-50.727	-77.426	1.00	0.00	D	N
ATOM	14335	CA	LEU A 135	-41.018	-51.882	-77.673	1.00	0.00	D	C
ATOM	14336	CB	LEU A 135	-40.480	-52.769	-78.818	1.00	0.00	D	C
ATOM	14337	CG	LEU A 135	-39.036	-53.277	-78.650	1.00	0.00	D	C
ATOM	14338	CD1	LEU A 135	-38.920	-54.318	-77.526	1.00	0.00	D	C
ATOM	14339	CD2	LEU A 135	-38.474	-53.781	-79.990	1.00	0.00	D	C
ATOM	14340	C	LEU A 135	-41.185	-52.705	-76.427	1.00	0.00	D	C
ATOM	14341	O	LEU A 135	-42.228	-53.330	-76.248	1.00	0.00	D	O
ATOM	14342	N	PHE A 136	-40.169	-52.743	-75.542	1.00	0.00	D	N
ATOM	14343	CA	PHE A 136	-40.222	-53.574	-74.366	1.00	0.00	D	C
ATOM	14344	CB	PHE A 136	-38.910	-53.511	-73.558	1.00	0.00	D	C

ATOM	14345	CG	PHE A 136	-39.142	-54.071	-72.195	1.00	0.00	D	C
ATOM	14346	CD1	PHE A 136	-39.197	-55.429	-71.981	1.00	0.00	D	C
ATOM	14347	CE1	PHE A 136	-39.414	-55.926	-70.719	1.00	0.00	D	C
ATOM	14348	CZ	PHE A 136	-39.583	-55.064	-69.662	1.00	0.00	D	C
ATOM	14349	CD2	PHE A 136	-39.321	-53.215	-71.133	1.00	0.00	D	C
ATOM	14350	CE2	PHE A 136	-39.538	-53.705	-69.869	1.00	0.00	D	C
ATOM	14351	C	PHE A 136	-41.366	-53.210	-73.460	1.00	0.00	D	C
ATOM	14352	O	PHE A 136	-42.197	-54.058	-73.134	1.00	0.00	D	O
ATOM	14353	N	LEU A 137	-41.469	-51.929	-73.060	1.00	0.00	D	N
ATOM	14354	CA	LEU A 137	-42.486	-51.479	-72.153	1.00	0.00	D	C
ATOM	14355	CB	LEU A 137	-42.270	-50.084	-71.516	1.00	0.00	D	C
ATOM	14356	CG	LEU A 137	-42.039	-48.902	-72.475	1.00	0.00	D	C
ATOM	14357	CD1	LEU A 137	-41.871	-47.584	-71.697	1.00	0.00	D	C
ATOM	14358	CD2	LEU A 137	-40.834	-49.167	-73.382	1.00	0.00	D	C
ATOM	14359	C	LEU A 137	-43.822	-51.513	-72.815	1.00	0.00	D	C
ATOM	14360	O	LEU A 137	-44.835	-51.267	-72.164	1.00	0.00	D	O
ATOM	14361	N	GLN A 138	-43.847	-51.628	-74.157	1.00	0.00	D	N
ATOM	14362	CA	GLN A 138	-45.100	-51.771	-74.837	1.00	0.00	D	C
ATOM	14363	CB	GLN A 138	-44.941	-51.693	-76.365	1.00	0.00	D	C
ATOM	14364	CG	GLN A 138	-44.481	-50.319	-76.860	1.00	0.00	D	C
ATOM	14365	CD	GLN A 138	-44.358	-50.367	-78.378	1.00	0.00	D	C
ATOM	14366	OE1	GLN A 138	-44.377	-51.439	-78.983	1.00	0.00	D	O
ATOM	14367	NE2	GLN A 138	-44.220	-49.175	-79.015	1.00	0.00	D	N
ATOM	14368	C	GLN A 138	-45.706	-53.107	-74.501	1.00	0.00	D	C
ATOM	14369	O	GLN A 138	-46.888	-53.185	-74.163	1.00	0.00	D	O
ATOM	14370	N	LYS A 139	-44.918	-54.202	-74.591	1.00	0.00	D	N
ATOM	14371	CA	LYS A 139	-45.469	-55.501	-74.300	1.00	0.00	D	C
ATOM	14372	CB	LYS A 139	-44.507	-56.669	-74.547	1.00	0.00	D	C
ATOM	14373	CG	LYS A 139	-45.130	-57.991	-74.089	1.00	0.00	D	C
ATOM	14374	CD	LYS A 139	-44.250	-59.220	-74.299	1.00	0.00	D	C
ATOM	14375	CE	LYS A 139	-44.813	-60.481	-73.640	1.00	0.00	D	C
ATOM	14376	NZ	LYS A 139	-43.850	-61.595	-73.776	1.00	0.00	D	N
ATOM	14377	C	LYS A 139	-45.817	-55.618	-72.854	1.00	0.00	D	C
ATOM	14378	O	LYS A 139	-46.959	-55.909	-72.498	1.00	0.00	D	O
ATOM	14379	N	SER A 140	-44.818	-55.373	-71.989	1.00	0.00	D	N
ATOM	14380	CA	SER A 140	-44.958	-55.514	-70.569	1.00	0.00	D	C
ATOM	14381	CB	SER A 140	-43.611	-55.447	-69.828	1.00	0.00	D	C
ATOM	14382	OG	SER A 140	-42.996	-54.186	-70.037	1.00	0.00	D	O

ATOM 14383 C SER A 140 -45.831 -54.418 -70.056 1.00 0.00 D C
ATOM 14384 O SER A 140 -46.369 -54.501 -68.956 1.00 0.00 D O
ATOM 14385 N LYS A 141 -45.994 -53.352 -70.852 1.00 0.00 D N
ATOM 14386 CA LYS A 141 -46.789 -52.235 -70.438 1.00 0.00 D C
ATOM 14387 CB LYS A 141 -48.242 -52.593 -70.074 1.00 0.00 D C
ATOM 14388 CG LYS A 141 -49.125 -52.995 -71.257 1.00 0.00 D C
ATOM 14389 CD LYS A 141 -49.254 -51.917 -72.331 1.00 0.00 D C
ATOM 14390 CE LYS A 141 -50.394 -52.177 -73.317 1.00 0.00 D C
ATOM 14391 NZ LYS A 141 -50.261 -53.523 -73.917 1.00 0.00 D N
ATOM 14392 C LYS A 141 -46.172 -51.644 -69.211 1.00 0.00 D C
ATOM 14393 O LYS A 141 -46.857 -51.007 -68.414 1.00 0.00 D O
ATOM 14394 N LYS A 142 -44.849 -51.830 -69.032 1.00 0.00 D N
ATOM 14395 CA LYS A 142 -44.175 -51.249 -67.907 1.00 0.00 D C
ATOM 14396 CB LYS A 142 -42.793 -51.861 -67.613 1.00 0.00 D C
ATOM 14397 CG LYS A 142 -42.864 -53.214 -66.901 1.00 0.00 D C
ATOM 14398 CD LYS A 142 -41.533 -53.969 -66.865 1.00 0.00 D C
ATOM 14399 CE LYS A 142 -41.501 -55.100 -65.834 1.00 0.00 D C
ATOM 14400 NZ LYS A 142 -42.597 -56.062 -66.089 1.00 0.00 D N
ATOM 14401 C LYS A 142 -43.975 -49.802 -68.213 1.00 0.00 D C
ATOM 14402 O LYS A 142 -43.986 -49.398 -69.374 1.00 0.00 D O
ATOM 14403 N HSD A 143 -43.807 -48.967 -67.165 1.00 0.00 D N
ATOM 14404 CA HSD A 143 -43.628 -47.568 -67.415 1.00 0.00 D C
ATOM 14405 CB HSD A 143 -44.636 -46.659 -66.685 1.00 0.00 D C
ATOM 14406 ND1 HSD A 143 -46.497 -46.188 -68.354 1.00 0.00 D N
ATOM 14407 CG HSD A 143 -46.042 -46.783 -67.196 1.00 0.00 D C
ATOM 14408 CE1 HSD A 143 -47.805 -46.519 -68.476 1.00 0.00 D C
ATOM 14409 NE2 HSD A 143 -48.225 -47.281 -67.481 1.00 0.00 D N
ATOM 14410 CD2 HSD A 143 -47.110 -47.444 -66.676 1.00 0.00 D C
ATOM 14411 C HSD A 143 -42.262 -47.161 -66.966 1.00 0.00 D C
ATOM 14412 O HSD A 143 -41.702 -47.698 -66.012 1.00 0.00 D O
ATOM 14413 N LEU A 144 -41.712 -46.144 -67.651 1.00 0.00 D N
ATOM 14414 CA LEU A 144 -40.403 -45.612 -67.414 1.00 0.00 D C
ATOM 14415 CB LEU A 144 -40.070 -44.480 -68.404 1.00 0.00 D C
ATOM 14416 CG LEU A 144 -38.616 -43.988 -68.343 1.00 0.00 D C
ATOM 14417 CD1 LEU A 144 -37.647 -45.117 -68.726 1.00 0.00 D C
ATOM 14418 CD2 LEU A 144 -38.414 -42.733 -69.206 1.00 0.00 D C
ATOM 14419 C LEU A 144 -40.395 -45.055 -66.016 1.00 0.00 D C
ATOM 14420 O LEU A 144 -39.344 -44.854 -65.412 1.00 0.00 D O

ATOM 14421 N THR A 145 -41.595 -44.684 -65.539 1.00 0.00 D N
ATOM 14422 CA THR A 145 -41.919 -44.125 -64.249 1.00 0.00 D C
ATOM 14423 CB THR A 145 -43.222 -43.389 -64.270 1.00 0.00 D C
ATOM 14424 OG1 THR A 145 -44.278 -44.272 -64.615 1.00 0.00 D O
ATOM 14425 CG2 THR A 145 -43.118 -42.252 -65.301 1.00 0.00 D C
ATOM 14426 C THR A 145 -41.999 -45.133 -63.137 1.00 0.00 D C
ATOM 14427 O THR A 145 -41.960 -44.745 -61.972 1.00 0.00 D O
ATOM 14428 N ASP A 146 -42.169 -46.437 -63.439 1.00 0.00 D N
ATOM 14429 CA ASP A 146 -42.417 -47.415 -62.405 1.00 0.00 D C
ATOM 14430 CB ASP A 146 -42.450 -48.862 -62.921 1.00 0.00 D C
ATOM 14431 CG ASP A 146 -43.714 -49.048 -63.746 1.00 0.00 D C
ATOM 14432 OD1 ASP A 146 -44.579 -48.129 -63.728 1.00 0.00 D O
ATOM 14433 OD2 ASP A 146 -43.836 -50.116 -64.403 1.00 0.00 D O
ATOM 14434 C ASP A 146 -41.372 -47.344 -61.333 1.00 0.00 D C
ATOM 14435 O ASP A 146 -40.265 -46.849 -61.535 1.00 0.00 D O
ATOM 14436 N ASN A 147 -41.731 -47.861 -60.140 1.00 0.00 D N
ATOM 14437 CA ASN A 147 -40.906 -47.818 -58.962 1.00 0.00 D C
ATOM 14438 CB ASN A 147 -41.558 -48.488 -57.741 1.00 0.00 D C
ATOM 14439 CG ASN A 147 -42.760 -47.654 -57.317 1.00 0.00 D C
ATOM 14440 OD1 ASN A 147 -43.863 -48.177 -57.163 1.00 0.00 D O
ATOM 14441 ND2 ASN A 147 -42.548 -46.326 -57.119 1.00 0.00 D N
ATOM 14442 C ASN A 147 -39.618 -48.533 -59.242 1.00 0.00 D C
ATOM 14443 O ASN A 147 -38.566 -48.152 -58.731 1.00 0.00 D O
ATOM 14444 N GLU A 148 -39.681 -49.582 -60.082 1.00 0.00 D N
ATOM 14445 CA GLU A 148 -38.573 -50.434 -60.433 1.00 0.00 D C
ATOM 14446 CB GLU A 148 -38.941 -51.422 -61.554 1.00 0.00 D C
ATOM 14447 CG GLU A 148 -40.137 -52.331 -61.293 1.00 0.00 D C
ATOM 14448 CD GLU A 148 -40.574 -52.868 -62.652 1.00 0.00 D C
ATOM 14449 OE1 GLU A 148 -40.643 -52.056 -63.615 1.00 0.00 D O
ATOM 14450 OE2 GLU A 148 -40.842 -54.094 -62.751 1.00 0.00 D O
ATOM 14451 C GLU A 148 -37.499 -49.619 -61.090 1.00 0.00 D C
ATOM 14452 O GLU A 148 -36.309 -49.903 -60.966 1.00 0.00 D O
ATOM 14453 N PHE A 149 -37.931 -48.627 -61.880 1.00 0.00 D N
ATOM 14454 CA PHE A 149 -37.134 -47.756 -62.694 1.00 0.00 D C
ATOM 14455 CB PHE A 149 -37.924 -47.113 -63.847 1.00 0.00 D C
ATOM 14456 CG PHE A 149 -38.207 -48.221 -64.806 1.00 0.00 D C
ATOM 14457 CD1 PHE A 149 -37.214 -48.686 -65.639 1.00 0.00 D C
ATOM 14458 CE1 PHE A 149 -37.457 -49.707 -66.530 1.00 0.00 D C

ATOM	14459	CZ	PHE A 149	-38.705	-50.280	-66.597	1.00	0.00	D	C
ATOM	14460	CD2	PHE A 149	-39.452	-48.800	-64.883	1.00	0.00	D	C
ATOM	14461	CE2	PHE A 149	-39.704	-49.822	-65.772	1.00	0.00	D	C
ATOM	14462	C	PHE A 149	-36.409	-46.699	-61.911	1.00	0.00	D	C
ATOM	14463	O	PHE A 149	-35.593	-45.975	-62.478	1.00	0.00	D	O
ATOM	14464	N	LYS A 150	-36.773	-46.476	-60.635	1.00	0.00	D	N
ATOM	14465	CA	LYS A 150	-36.132	-45.431	-59.878	1.00	0.00	D	C
ATOM	14466	CB	LYS A 150	-37.134	-44.597	-59.070	1.00	0.00	D	C
ATOM	14467	CG	LYS A 150	-38.338	-44.086	-59.857	1.00	0.00	D	C
ATOM	14468	CD	LYS A 150	-39.465	-43.630	-58.925	1.00	0.00	D	C
ATOM	14469	CE	LYS A 150	-40.799	-43.367	-59.620	1.00	0.00	D	C
ATOM	14470	NZ	LYS A 150	-41.854	-43.145	-58.606	1.00	0.00	D	N
ATOM	14471	C	LYS A 150	-35.237	-46.029	-58.829	1.00	0.00	D	C
ATOM	14472	O	LYS A 150	-35.422	-47.169	-58.405	1.00	0.00	D	O
ATOM	14473	N	ASP A 151	-34.213	-45.256	-58.393	1.00	0.00	D	N
ATOM	14474	CA	ASP A 151	-33.359	-45.670	-57.314	1.00	0.00	D	C
ATOM	14475	CB	ASP A 151	-32.145	-44.737	-57.131	1.00	0.00	D	C
ATOM	14476	CG	ASP A 151	-31.217	-45.260	-56.042	1.00	0.00	D	C
ATOM	14477	OD1	ASP A 151	-31.530	-46.317	-55.430	1.00	0.00	D	O
ATOM	14478	OD2	ASP A 151	-30.171	-44.597	-55.808	1.00	0.00	D	O
ATOM	14479	C	ASP A 151	-34.204	-45.599	-56.083	1.00	0.00	D	C
ATOM	14480	O	ASP A 151	-34.831	-44.579	-55.790	1.00	0.00	D	O
ATOM	14481	N	PRO A 152	-34.204	-46.658	-55.334	1.00	0.00	D	N
ATOM	14482	CD	PRO A 152	-33.792	-47.959	-55.834	1.00	0.00	D	C
ATOM	14483	CA	PRO A 152	-35.066	-46.762	-54.194	1.00	0.00	D	C
ATOM	14484	CB	PRO A 152	-34.953	-48.217	-53.724	1.00	0.00	D	C
ATOM	14485	CG	PRO A 152	-33.815	-48.828	-54.571	1.00	0.00	D	C
ATOM	14486	C	PRO A 152	-34.863	-45.739	-53.115	1.00	0.00	D	C
ATOM	14487	O	PRO A 152	-35.832	-45.460	-52.406	1.00	0.00	D	O
ATOM	14488	N	GLU A 153	-33.622	-45.265	-52.873	1.00	0.00	D	N
ATOM	14489	CA	GLU A 153	-33.425	-44.258	-51.860	1.00	0.00	D	C
ATOM	14490	CB	GLU A 153	-32.006	-44.268	-51.256	1.00	0.00	D	C
ATOM	14491	CG	GLU A 153	-30.871	-44.169	-52.278	1.00	0.00	D	C
ATOM	14492	CD	GLU A 153	-30.274	-45.561	-52.446	1.00	0.00	D	C
ATOM	14493	OE1	GLU A 153	-30.627	-46.456	-51.630	1.00	0.00	D	O
ATOM	14494	OE2	GLU A 153	-29.454	-45.746	-53.383	1.00	0.00	D	O
ATOM	14495	C	GLU A 153	-33.704	-42.848	-52.322	1.00	0.00	D	C
ATOM	14496	O	GLU A 153	-34.415	-42.098	-51.651	1.00	0.00	D	O

ATOM 14497 N THR A 154 -33.070 -42.451 -53.452 1.00 0.00 D N
ATOM 14498 CA THR A 154 -33.104 -41.125 -54.024 1.00 0.00 D C
ATOM 14499 CB THR A 154 -31.923 -40.860 -54.911 1.00 0.00 D C
ATOM 14500 OG1 THR A 154 -31.919 -41.761 -56.008 1.00 0.00 D O
ATOM 14501 CG2 THR A 154 -30.641 -41.031 -54.084 1.00 0.00 D C
ATOM 14502 C THR A 154 -34.336 -40.809 -54.825 1.00 0.00 D C
ATOM 14503 O THR A 154 -34.865 -39.699 -54.747 1.00 0.00 D O
ATOM 14504 N GLY A 155 -34.825 -41.768 -55.636 1.00 0.00 D N
ATOM 14505 CA GLY A 155 -35.950 -41.497 -56.491 1.00 0.00 D C
ATOM 14506 C GLY A 155 -35.451 -41.031 -57.832 1.00 0.00 D C
ATOM 14507 O GLY A 155 -36.213 -40.486 -58.630 1.00 0.00 D O
ATOM 14508 N LYS A 156 -34.150 -41.240 -58.111 1.00 0.00 D N
ATOM 14509 CA LYS A 156 -33.526 -40.855 -59.349 1.00 0.00 D C
ATOM 14510 CB LYS A 156 -31.998 -41.036 -59.299 1.00 0.00 D C
ATOM 14511 CG LYS A 156 -31.244 -40.571 -60.546 1.00 0.00 D C
ATOM 14512 CD LYS A 156 -29.727 -40.563 -60.351 1.00 0.00 D C
ATOM 14513 CE LYS A 156 -29.203 -41.826 -59.659 1.00 0.00 D C
ATOM 14514 NZ LYS A 156 -27.733 -41.759 -59.500 1.00 0.00 D N
ATOM 14515 C LYS A 156 -34.063 -41.709 -60.464 1.00 0.00 D C
ATOM 14516 O LYS A 156 -34.353 -42.892 -60.279 1.00 0.00 D O
ATOM 14517 N THR A 157 -34.209 -41.104 -61.662 1.00 0.00 D N
ATOM 14518 CA THR A 157 -34.709 -41.793 -62.820 1.00 0.00 D C
ATOM 14519 CB THR A 157 -35.939 -41.160 -63.398 1.00 0.00 D C
ATOM 14520 OG1 THR A 157 -35.651 -39.840 -63.834 1.00 0.00 D O
ATOM 14521 CG2 THR A 157 -37.026 -41.133 -62.309 1.00 0.00 D C
ATOM 14522 C THR A 157 -33.631 -41.735 -63.852 1.00 0.00 D C
ATOM 14523 O THR A 157 -32.609 -41.079 -63.658 1.00 0.00 D O
ATOM 14524 N CYS A 158 -33.829 -42.438 -64.983 1.00 0.00 D N
ATOM 14525 CA CYS A 158 -32.831 -42.496 -66.012 1.00 0.00 D C
ATOM 14526 CB CYS A 158 -33.245 -43.410 -67.176 1.00 0.00 D C
ATOM 14527 SG CYS A 158 -34.823 -42.909 -67.924 1.00 0.00 D S
ATOM 14528 C CYS A 158 -32.590 -41.117 -66.539 1.00 0.00 D C
ATOM 14529 O CYS A 158 -31.448 -40.739 -66.802 1.00 0.00 D O
ATOM 14530 N LEU A 159 -33.653 -40.310 -66.695 1.00 0.00 D N
ATOM 14531 CA LEU A 159 -33.459 -38.989 -67.214 1.00 0.00 D C
ATOM 14532 CB LEU A 159 -34.753 -38.174 -67.350 1.00 0.00 D C
ATOM 14533 CG LEU A 159 -34.484 -36.775 -67.932 1.00 0.00 D C
ATOM 14534 CD1 LEU A 159 -34.111 -36.855 -69.419 1.00 0.00 D C

ATOM	14535	CD2	LEU	A	159	-35.631	-35.804	-67.654	1.00	0.00	D	C
ATOM	14536	C	LEU	A	159	-32.570	-38.239	-66.265	1.00	0.00	D	C
ATOM	14537	O	LEU	A	159	-31.717	-37.461	-66.688	1.00	0.00	D	O
ATOM	14538	N	LEU	A	160	-32.770	-38.436	-64.949	1.00	0.00	D	N
ATOM	14539	CA	LEU	A	160	-31.961	-37.765	-63.968	1.00	0.00	D	C
ATOM	14540	CB	LEU	A	160	-32.481	-37.980	-62.535	1.00	0.00	D	C
ATOM	14541	CG	LEU	A	160	-33.820	-37.260	-62.266	1.00	0.00	D	C
ATOM	14542	CD1	LEU	A	160	-34.312	-37.490	-60.827	1.00	0.00	D	C
ATOM	14543	CD2	LEU	A	160	-33.718	-35.763	-62.600	1.00	0.00	D	C
ATOM	14544	C	LEU	A	160	-30.543	-38.250	-64.061	1.00	0.00	D	C
ATOM	14545	O	LEU	A	160	-29.612	-37.450	-63.987	1.00	0.00	D	O
ATOM	14546	N	LYS	A	161	-30.324	-39.572	-64.236	1.00	0.00	D	N
ATOM	14547	CA	LYS	A	161	-28.962	-40.033	-64.324	1.00	0.00	D	C
ATOM	14548	CB	LYS	A	161	-28.766	-41.553	-64.458	1.00	0.00	D	C
ATOM	14549	CG	LYS	A	161	-27.269	-41.878	-64.533	1.00	0.00	D	C
ATOM	14550	CD	LYS	A	161	-26.883	-43.330	-64.258	1.00	0.00	D	C
ATOM	14551	CE	LYS	A	161	-25.375	-43.579	-64.367	1.00	0.00	D	C
ATOM	14552	NZ	LYS	A	161	-25.053	-44.958	-63.938	1.00	0.00	D	N
ATOM	14553	C	LYS	A	161	-28.341	-39.397	-65.522	1.00	0.00	D	C
ATOM	14554	O	LYS	A	161	-27.170	-39.022	-65.503	1.00	0.00	D	O
ATOM	14555	N	ALA	A	162	-29.130	-39.255	-66.598	1.00	0.00	D	N
ATOM	14556	CA	ALA	A	162	-28.655	-38.659	-67.810	1.00	0.00	D	C
ATOM	14557	CB	ALA	A	162	-29.746	-38.596	-68.897	1.00	0.00	D	C
ATOM	14558	C	ALA	A	162	-28.239	-37.257	-67.497	1.00	0.00	D	C
ATOM	14559	O	ALA	A	162	-27.248	-36.757	-68.029	1.00	0.00	D	O
ATOM	14560	N	MET	A	163	-28.995	-36.579	-66.611	1.00	0.00	D	N
ATOM	14561	CA	MET	A	163	-28.706	-35.218	-66.269	1.00	0.00	D	C
ATOM	14562	CB	MET	A	163	-29.779	-34.594	-65.360	1.00	0.00	D	C
ATOM	14563	CG	MET	A	163	-31.111	-34.410	-66.092	1.00	0.00	D	C
ATOM	14564	SD	MET	A	163	-31.026	-33.226	-67.470	1.00	0.00	D	S
ATOM	14565	CE	MET	A	163	-32.631	-33.677	-68.188	1.00	0.00	D	C
ATOM	14566	C	MET	A	163	-27.371	-35.134	-65.596	1.00	0.00	D	C
ATOM	14567	O	MET	A	163	-26.639	-34.163	-65.789	1.00	0.00	D	O
ATOM	14568	N	LEU	A	164	-27.040	-36.109	-64.728	1.00	0.00	D	N
ATOM	14569	CA	LEU	A	164	-25.754	-36.120	-64.088	1.00	0.00	D	C
ATOM	14570	CB	LEU	A	164	-25.674	-37.061	-62.877	1.00	0.00	D	C
ATOM	14571	CG	LEU	A	164	-26.495	-36.566	-61.669	1.00	0.00	D	C
ATOM	14572	CD1	LEU	A	164	-25.991	-35.197	-61.182	1.00	0.00	D	C

ATOM	14573	CD2	LEU	A	164	-28.002	-36.572	-61.950	1.00	0.00	D	C
ATOM	14574	C	LEU	A	164	-24.681	-36.505	-65.060	1.00	0.00	D	C
ATOM	14575	O	LEU	A	164	-23.579	-35.955	-65.030	1.00	0.00	D	O
ATOM	14576	N	ASN	A	165	-24.963	-37.471	-65.955	1.00	0.00	D	N
ATOM	14577	CA	ASN	A	165	-23.923	-37.920	-66.833	1.00	0.00	D	C
ATOM	14578	CB	ASN	A	165	-24.084	-39.392	-67.260	1.00	0.00	D	C
ATOM	14579	CG	ASN	A	165	-23.862	-40.311	-66.059	1.00	0.00	D	C
ATOM	14580	OD1	ASN	A	165	-23.538	-41.485	-66.236	1.00	0.00	D	O
ATOM	14581	ND2	ASN	A	165	-24.039	-39.787	-64.818	1.00	0.00	D	N
ATOM	14582	C	ASN	A	165	-23.960	-37.103	-68.083	1.00	0.00	D	C
ATOM	14583	O	ASN	A	165	-24.381	-37.578	-69.138	1.00	0.00	D	O
ATOM	14584	N	LEU	A	166	-23.476	-35.850	-68.010	1.00	0.00	D	N
ATOM	14585	CA	LEU	A	166	-23.461	-35.040	-69.190	1.00	0.00	D	C
ATOM	14586	CB	LEU	A	166	-23.900	-33.582	-68.970	1.00	0.00	D	C
ATOM	14587	CG	LEU	A	166	-25.395	-33.423	-68.645	1.00	0.00	D	C
ATOM	14588	CD1	LEU	A	166	-25.762	-31.946	-68.438	1.00	0.00	D	C
ATOM	14589	CD2	LEU	A	166	-26.270	-34.100	-69.713	1.00	0.00	D	C
ATOM	14590	C	LEU	A	166	-22.066	-34.997	-69.710	1.00	0.00	D	C
ATOM	14591	O	LEU	A	166	-21.104	-35.086	-68.951	1.00	0.00	D	O
ATOM	14592	N	HSD	A	167	-21.940	-34.918	-71.048	1.00	0.00	D	N
ATOM	14593	CA	HSD	A	167	-20.659	-34.745	-71.664	1.00	0.00	D	C
ATOM	14594	CB	HSD	A	167	-20.196	-35.941	-72.519	1.00	0.00	D	C
ATOM	14595	ND1	HSD	A	167	-22.273	-36.653	-73.803	1.00	0.00	D	N
ATOM	14596	CG	HSD	A	167	-20.989	-36.159	-73.775	1.00	0.00	D	C
ATOM	14597	CE1	HSD	A	167	-22.646	-36.698	-75.107	1.00	0.00	D	C
ATOM	14598	NE2	HSD	A	167	-21.694	-36.267	-75.915	1.00	0.00	D	N
ATOM	14599	CD2	HSD	A	167	-20.650	-35.928	-75.074	1.00	0.00	D	C
ATOM	14600	C	HSD	A	167	-20.819	-33.545	-72.546	1.00	0.00	D	C
ATOM	14601	O	HSD	A	167	-21.698	-33.502	-73.407	1.00	0.00	D	O
ATOM	14602	N	ASP	A	168	-19.982	-32.514	-72.329	1.00	0.00	D	N
ATOM	14603	CA	ASP	A	168	-20.068	-31.312	-73.106	1.00	0.00	D	C
ATOM	14604	CB	ASP	A	168	-19.663	-31.498	-74.582	1.00	0.00	D	C
ATOM	14605	CG	ASP	A	168	-18.143	-31.442	-74.661	1.00	0.00	D	C
ATOM	14606	OD1	ASP	A	168	-17.598	-30.308	-74.561	1.00	0.00	D	O
ATOM	14607	OD2	ASP	A	168	-17.504	-32.516	-74.807	1.00	0.00	D	O
ATOM	14608	C	ASP	A	168	-21.456	-30.756	-73.039	1.00	0.00	D	C
ATOM	14609	O	ASP	A	168	-21.947	-30.184	-74.012	1.00	0.00	D	O
ATOM	14610	N	GLY	A	169	-22.127	-30.899	-71.880	1.00	0.00	D	N

ATOM	14611	CA	GLY A 169	-23.429	-30.325	-71.689	1.00	0.00	D	C
ATOM	14612	C	GLY A 169	-24.400	-30.952	-72.640	1.00	0.00	D	C
ATOM	14613	O	GLY A 169	-25.392	-30.323	-73.007	1.00	0.00	D	O
ATOM	14614	N	GLN A 170	-24.153	-32.212	-73.059	1.00	0.00	D	N
ATOM	14615	CA	GLN A 170	-25.029	-32.823	-74.023	1.00	0.00	D	C
ATOM	14616	CB	GLN A 170	-24.440	-32.847	-75.442	1.00	0.00	D	C
ATOM	14617	CG	GLN A 170	-24.227	-31.458	-76.041	1.00	0.00	D	C
ATOM	14618	CD	GLN A 170	-23.533	-31.628	-77.387	1.00	0.00	D	C
ATOM	14619	OE1	GLN A 170	-22.438	-31.112	-77.603	1.00	0.00	D	O
ATOM	14620	NE2	GLN A 170	-24.184	-32.375	-78.317	1.00	0.00	D	N
ATOM	14621	C	GLN A 170	-25.312	-34.251	-73.669	1.00	0.00	D	C
ATOM	14622	O	GLN A 170	-24.479	-34.948	-73.087	1.00	0.00	D	O
ATOM	14623	N	ASN A 171	-26.538	-34.704	-74.007	1.00	0.00	D	N
ATOM	14624	CA	ASN A 171	-26.939	-36.071	-73.826	1.00	0.00	D	C
ATOM	14625	CB	ASN A 171	-27.296	-36.376	-72.358	1.00	0.00	D	C
ATOM	14626	CG	ASN A 171	-27.350	-37.879	-72.150	1.00	0.00	D	C
ATOM	14627	OD1	ASN A 171	-27.509	-38.647	-73.097	1.00	0.00	D	O
ATOM	14628	ND2	ASN A 171	-27.218	-38.312	-70.868	1.00	0.00	D	N
ATOM	14629	C	ASN A 171	-28.180	-36.257	-74.656	1.00	0.00	D	C
ATOM	14630	O	ASN A 171	-29.194	-35.601	-74.426	1.00	0.00	D	O
ATOM	14631	N	THR A 172	-28.093	-37.121	-75.687	1.00	0.00	D	N
ATOM	14632	CA	THR A 172	-29.136	-37.490	-76.609	1.00	0.00	D	C
ATOM	14633	CB	THR A 172	-28.581	-38.057	-77.877	1.00	0.00	D	C
ATOM	14634	OG1	THR A 172	-27.817	-39.221	-77.603	1.00	0.00	D	O
ATOM	14635	CG2	THR A 172	-27.691	-36.986	-78.533	1.00	0.00	D	C
ATOM	14636	C	THR A 172	-30.053	-38.503	-75.999	1.00	0.00	D	C
ATOM	14637	O	THR A 172	-31.186	-38.685	-76.443	1.00	0.00	D	O
ATOM	14638	N	THR A 173	-29.548	-39.240	-74.995	1.00	0.00	D	N
ATOM	14639	CA	THR A 173	-30.311	-40.243	-74.323	1.00	0.00	D	C
ATOM	14640	CB	THR A 173	-29.553	-40.861	-73.181	1.00	0.00	D	C
ATOM	14641	OG1	THR A 173	-28.374	-41.498	-73.653	1.00	0.00	D	O
ATOM	14642	CG2	THR A 173	-30.455	-41.877	-72.467	1.00	0.00	D	C
ATOM	14643	C	THR A 173	-31.506	-39.545	-73.767	1.00	0.00	D	C
ATOM	14644	O	THR A 173	-32.589	-40.124	-73.691	1.00	0.00	D	O
ATOM	14645	N	ILE A 174	-31.338	-38.278	-73.341	1.00	0.00	D	N
ATOM	14646	CA	ILE A 174	-32.447	-37.548	-72.802	1.00	0.00	D	C
ATOM	14647	CB	ILE A 174	-32.079	-36.185	-72.278	1.00	0.00	D	C
ATOM	14648	CG2	ILE A 174	-33.378	-35.451	-71.908	1.00	0.00	D	C

ATOM	14649	CG1	ILE	A	174	-31.084	-36.289	-71.110	1.00	0.00	D	C
ATOM	14650	CD	ILE	A	174	-30.468	-34.945	-70.723	1.00	0.00	D	C
ATOM	14651	C	ILE	A	174	-33.491	-37.372	-73.866	1.00	0.00	D	C
ATOM	14652	O	ILE	A	174	-34.660	-37.665	-73.619	1.00	0.00	D	O
ATOM	14653	N	PRO	A	175	-33.143	-36.944	-75.057	1.00	0.00	D	N
ATOM	14654	CD	PRO	A	175	-31.945	-36.156	-75.297	1.00	0.00	D	C
ATOM	14655	CA	PRO	A	175	-34.135	-36.746	-76.076	1.00	0.00	D	C
ATOM	14656	CB	PRO	A	175	-33.399	-36.116	-77.255	1.00	0.00	D	C
ATOM	14657	CG	PRO	A	175	-32.232	-35.363	-76.586	1.00	0.00	D	C
ATOM	14658	C	PRO	A	175	-34.852	-38.016	-76.397	1.00	0.00	D	C
ATOM	14659	O	PRO	A	175	-36.051	-37.971	-76.663	1.00	0.00	D	O
ATOM	14660	N	LEU	A	176	-34.128	-39.146	-76.411	1.00	0.00	D	N
ATOM	14661	CA	LEU	A	176	-34.732	-40.413	-76.693	1.00	0.00	D	C
ATOM	14662	CB	LEU	A	176	-33.670	-41.498	-76.972	1.00	0.00	D	C
ATOM	14663	CG	LEU	A	176	-34.205	-42.856	-77.482	1.00	0.00	D	C
ATOM	14664	CD1	LEU	A	176	-33.040	-43.771	-77.887	1.00	0.00	D	C
ATOM	14665	CD2	LEU	A	176	-35.140	-43.552	-76.479	1.00	0.00	D	C
ATOM	14666	C	LEU	A	176	-35.585	-40.811	-75.527	1.00	0.00	D	C
ATOM	14667	O	LEU	A	176	-36.682	-41.339	-75.699	1.00	0.00	D	O
ATOM	14668	N	LEU	A	177	-35.099	-40.560	-74.297	1.00	0.00	D	N
ATOM	14669	CA	LEU	A	177	-35.797	-40.986	-73.117	1.00	0.00	D	C
ATOM	14670	CB	LEU	A	177	-35.011	-40.707	-71.829	1.00	0.00	D	C
ATOM	14671	CG	LEU	A	177	-33.762	-41.598	-71.704	1.00	0.00	D	C
ATOM	14672	CD1	LEU	A	177	-32.996	-41.311	-70.415	1.00	0.00	D	C
ATOM	14673	CD2	LEU	A	177	-34.115	-43.086	-71.847	1.00	0.00	D	C
ATOM	14674	C	LEU	A	177	-37.122	-40.303	-73.029	1.00	0.00	D	C
ATOM	14675	O	LEU	A	177	-38.135	-40.935	-72.732	1.00	0.00	D	O
ATOM	14676	N	LEU	A	178	-37.150	-38.989	-73.299	1.00	0.00	D	N
ATOM	14677	CA	LEU	A	178	-38.351	-38.208	-73.247	1.00	0.00	D	C
ATOM	14678	CB	LEU	A	178	-38.046	-36.749	-73.598	1.00	0.00	D	C
ATOM	14679	CG	LEU	A	178	-37.073	-36.093	-72.605	1.00	0.00	D	C
ATOM	14680	CD1	LEU	A	178	-36.598	-34.727	-73.116	1.00	0.00	D	C
ATOM	14681	CD2	LEU	A	178	-37.688	-36.006	-71.198	1.00	0.00	D	C
ATOM	14682	C	LEU	A	178	-39.303	-38.722	-74.284	1.00	0.00	D	C
ATOM	14683	O	LEU	A	178	-40.488	-38.929	-74.021	1.00	0.00	D	O
ATOM	14684	N	GLU	A	179	-38.782	-38.996	-75.492	1.00	0.00	D	N
ATOM	14685	CA	GLU	A	179	-39.593	-39.405	-76.604	1.00	0.00	D	C
ATOM	14686	CB	GLU	A	179	-38.731	-39.782	-77.819	1.00	0.00	D	C

ATOM 14687 CG GLU A 179 -39.528 -40.270 -79.029 1.00 0.00 D C
ATOM 14688 CD GLU A 179 -38.531 -40.792 -80.056 1.00 0.00 D C
ATOM 14689 OE1 GLU A 179 -37.458 -40.152 -80.220 1.00 0.00 D O
ATOM 14690 OE2 GLU A 179 -38.826 -41.844 -80.681 1.00 0.00 D O
ATOM 14691 C GLU A 179 -40.348 -40.636 -76.216 1.00 0.00 D C
ATOM 14692 O GLU A 179 -41.537 -40.766 -76.501 1.00 0.00 D O
ATOM 14693 N ILE A 180 -39.665 -41.575 -75.537 1.00 0.00 D N
ATOM 14694 CA ILE A 180 -40.282 -42.807 -75.153 1.00 0.00 D C
ATOM 14695 CB ILE A 180 -39.339 -43.771 -74.496 1.00 0.00 D C
ATOM 14696 CG2 ILE A 180 -40.164 -44.948 -73.953 1.00 0.00 D C
ATOM 14697 CG1 ILE A 180 -38.252 -44.199 -75.494 1.00 0.00 D C
ATOM 14698 CD ILE A 180 -37.128 -45.014 -74.863 1.00 0.00 D C
ATOM 14699 C ILE A 180 -41.385 -42.530 -74.184 1.00 0.00 D C
ATOM 14700 O ILE A 180 -42.424 -43.187 -74.217 1.00 0.00 D O
ATOM 14701 N ALA A 181 -41.164 -41.558 -73.283 1.00 0.00 D N
ATOM 14702 CA ALA A 181 -42.090 -41.240 -72.240 1.00 0.00 D C
ATOM 14703 CB ALA A 181 -41.581 -40.131 -71.301 1.00 0.00 D C
ATOM 14704 C ALA A 181 -43.388 -40.771 -72.801 1.00 0.00 D C
ATOM 14705 O ALA A 181 -44.419 -41.077 -72.220 1.00 0.00 D O
ATOM 14706 N ARG A 182 -43.389 -39.969 -73.881 1.00 0.00 D N
ATOM 14707 CA ARG A 182 -44.617 -39.468 -74.448 1.00 0.00 D C
ATOM 14708 CB ARG A 182 -44.416 -38.286 -75.420 1.00 0.00 D C
ATOM 14709 CG ARG A 182 -43.499 -38.583 -76.604 1.00 0.00 D C
ATOM 14710 CD ARG A 182 -43.317 -37.402 -77.564 1.00 0.00 D C
ATOM 14711 NE ARG A 182 -42.574 -36.319 -76.856 1.00 0.00 D N
ATOM 14712 CZ ARG A 182 -43.235 -35.199 -76.440 1.00 0.00 D C
ATOM 14713 NH1 ARG A 182 -44.568 -35.063 -76.694 1.00 0.00 D N
ATOM 14714 NH2 ARG A 182 -42.564 -34.210 -75.782 1.00 0.00 D N
ATOM 14715 C ARG A 182 -45.394 -40.551 -75.136 1.00 0.00 D C
ATOM 14716 O ARG A 182 -46.624 -40.570 -75.086 1.00 0.00 D O
ATOM 14717 N GLN A 183 -44.701 -41.492 -75.803 1.00 0.00 D N
ATOM 14718 CA GLN A 183 -45.394 -42.521 -76.518 1.00 0.00 D C
ATOM 14719 CB GLN A 183 -44.452 -43.433 -77.327 1.00 0.00 D C
ATOM 14720 CG GLN A 183 -43.733 -42.640 -78.427 1.00 0.00 D C
ATOM 14721 CD GLN A 183 -42.998 -43.590 -79.357 1.00 0.00 D C
ATOM 14722 OE1 GLN A 183 -41.792 -43.464 -79.566 1.00 0.00 D O
ATOM 14723 NE2 GLN A 183 -43.753 -44.548 -79.959 1.00 0.00 D N
ATOM 14724 C GLN A 183 -46.180 -43.303 -75.513 1.00 0.00 D C

ATOM 14725 O GLN A 183 -47.248 -43.839 -75.815 1.00 0.00 D O
ATOM 14726 N THR A 184 -45.614 -43.459 -74.306 1.00 0.00 D N
ATOM 14727 CA THR A 184 -46.268 -44.045 -73.171 1.00 0.00 D C
ATOM 14728 CB THR A 184 -45.295 -44.572 -72.165 1.00 0.00 D C
ATOM 14729 OG1 THR A 184 -44.419 -45.503 -72.786 1.00 0.00 D O
ATOM 14730 CG2 THR A 184 -46.087 -45.272 -71.047 1.00 0.00 D C
ATOM 14731 C THR A 184 -47.145 -43.018 -72.508 1.00 0.00 D C
ATOM 14732 O THR A 184 -48.049 -43.349 -71.746 1.00 0.00 D O
ATOM 14733 N ASP A 185 -46.866 -41.724 -72.746 1.00 0.00 D N
ATOM 14734 CA ASP A 185 -47.567 -40.632 -72.126 1.00 0.00 D C
ATOM 14735 CB ASP A 185 -49.096 -40.750 -72.266 1.00 0.00 D C
ATOM 14736 CG ASP A 185 -49.463 -40.502 -73.723 1.00 0.00 D C
ATOM 14737 OD1 ASP A 185 -48.855 -39.586 -74.342 1.00 0.00 D O
ATOM 14738 OD2 ASP A 185 -50.351 -41.230 -74.240 1.00 0.00 D O
ATOM 14739 C ASP A 185 -47.243 -40.572 -70.664 1.00 0.00 D C
ATOM 14740 O ASP A 185 -47.960 -39.949 -69.885 1.00 0.00 D O
ATOM 14741 N SER A 186 -46.123 -41.200 -70.259 1.00 0.00 D N
ATOM 14742 CA SER A 186 -45.595 -41.087 -68.929 1.00 0.00 D C
ATOM 14743 CB SER A 186 -44.496 -42.120 -68.635 1.00 0.00 D C
ATOM 14744 OG SER A 186 -45.033 -43.433 -68.708 1.00 0.00 D O
ATOM 14745 C SER A 186 -44.938 -39.741 -68.868 1.00 0.00 D C
ATOM 14746 O SER A 186 -44.394 -39.340 -67.839 1.00 0.00 D O
ATOM 14747 N LEU A 187 -45.037 -38.984 -69.972 1.00 0.00 D N
ATOM 14748 CA LEU A 187 -44.216 -37.831 -70.175 1.00 0.00 D C
ATOM 14749 CB LEU A 187 -44.490 -37.102 -71.500 1.00 0.00 D C
ATOM 14750 CG LEU A 187 -43.483 -35.961 -71.736 1.00 0.00 D C
ATOM 14751 CD1 LEU A 187 -42.051 -36.507 -71.839 1.00 0.00 D C
ATOM 14752 CD2 LEU A 187 -43.866 -35.096 -72.942 1.00 0.00 D C
ATOM 14753 C LEU A 187 -44.281 -36.817 -69.068 1.00 0.00 D C
ATOM 14754 O LEU A 187 -43.230 -36.387 -68.601 1.00 0.00 D O
ATOM 14755 N LYS A 188 -45.470 -36.405 -68.593 1.00 0.00 D N
ATOM 14756 CA LYS A 188 -45.481 -35.344 -67.613 1.00 0.00 D C
ATOM 14757 CB LYS A 188 -46.897 -34.904 -67.213 1.00 0.00 D C
ATOM 14758 CG LYS A 188 -46.883 -33.818 -66.137 1.00 0.00 D C
ATOM 14759 CD LYS A 188 -48.236 -33.155 -65.886 1.00 0.00 D C
ATOM 14760 CE LYS A 188 -48.427 -31.846 -66.648 1.00 0.00 D C
ATOM 14761 NZ LYS A 188 -49.588 -31.117 -66.095 1.00 0.00 D N
ATOM 14762 C LYS A 188 -44.792 -35.743 -66.339 1.00 0.00 D C

ATOM 14763 O LYS A 188 -43.907 -35.031 -65.860 1.00 0.00 D O
ATOM 14764 N GLU A 189 -45.171 -36.903 -65.768 1.00 0.00 D N
ATOM 14765 CA GLU A 189 -44.653 -37.330 -64.496 1.00 0.00 D C
ATOM 14766 CB GLU A 189 -45.382 -38.554 -63.895 1.00 0.00 D C
ATOM 14767 CG GLU A 189 -45.356 -39.823 -64.750 1.00 0.00 D C
ATOM 14768 CD GLU A 189 -46.676 -39.915 -65.504 1.00 0.00 D C
ATOM 14769 OE1 GLU A 189 -46.969 -38.987 -66.305 1.00 0.00 D O
ATOM 14770 OE2 GLU A 189 -47.411 -40.912 -65.286 1.00 0.00 D O
ATOM 14771 C GLU A 189 -43.203 -37.669 -64.620 1.00 0.00 D C
ATOM 14772 O GLU A 189 -42.459 -37.579 -63.645 1.00 0.00 D O
ATOM 14773 N LEU A 190 -42.774 -38.140 -65.808 1.00 0.00 D N
ATOM 14774 CA LEU A 190 -41.401 -38.512 -65.991 1.00 0.00 D C
ATOM 14775 CB LEU A 190 -41.142 -39.129 -67.374 1.00 0.00 D C
ATOM 14776 CG LEU A 190 -39.669 -39.518 -67.595 1.00 0.00 D C
ATOM 14777 CD1 LEU A 190 -39.224 -40.623 -66.627 1.00 0.00 D C
ATOM 14778 CD2 LEU A 190 -39.403 -39.870 -69.066 1.00 0.00 D C
ATOM 14779 C LEU A 190 -40.504 -37.317 -65.873 1.00 0.00 D C
ATOM 14780 O LEU A 190 -39.534 -37.319 -65.116 1.00 0.00 D O
ATOM 14781 N VAL A 191 -40.835 -36.246 -66.611 1.00 0.00 D N
ATOM 14782 CA VAL A 191 -40.066 -35.037 -66.639 1.00 0.00 D C
ATOM 14783 CB VAL A 191 -40.544 -34.070 -67.687 1.00 0.00 D C
ATOM 14784 CG1 VAL A 191 -39.891 -32.702 -67.447 1.00 0.00 D C
ATOM 14785 CG2 VAL A 191 -40.174 -34.644 -69.066 1.00 0.00 D C
ATOM 14786 C VAL A 191 -40.114 -34.377 -65.291 1.00 0.00 D C
ATOM 14787 O VAL A 191 -39.217 -33.604 -64.953 1.00 0.00 D O
ATOM 14788 N ASN A 192 -41.178 -34.612 -64.497 1.00 0.00 D N
ATOM 14789 CA ASN A 192 -41.236 -33.906 -63.245 1.00 0.00 D C
ATOM 14790 CB ASN A 192 -42.600 -33.240 -63.002 1.00 0.00 D C
ATOM 14791 CG ASN A 192 -42.781 -32.118 -64.013 1.00 0.00 D C
ATOM 14792 OD1 ASN A 192 -41.830 -31.436 -64.394 1.00 0.00 D O
ATOM 14793 ND2 ASN A 192 -44.049 -31.920 -64.464 1.00 0.00 D N
ATOM 14794 C ASN A 192 -40.995 -34.787 -62.045 1.00 0.00 D C
ATOM 14795 O ASN A 192 -41.456 -34.452 -60.954 1.00 0.00 D O
ATOM 14796 N ALA A 193 -40.239 -35.895 -62.167 1.00 0.00 D N
ATOM 14797 CA ALA A 193 -40.002 -36.704 -60.995 1.00 0.00 D C
ATOM 14798 CB ALA A 193 -39.464 -38.109 -61.314 1.00 0.00 D C
ATOM 14799 C ALA A 193 -38.972 -36.006 -60.154 1.00 0.00 D C
ATOM 14800 O ALA A 193 -38.073 -35.360 -60.686 1.00 0.00 D O

ATOM	14801	N	SER A 194	-39.059	-36.142	-58.811	1.00	0.00	D	N
ATOM	14802	CA	SER A 194	-38.149	-35.423	-57.958	1.00	0.00	D	C
ATOM	14803	CB	SER A 194	-38.840	-34.312	-57.148	1.00	0.00	D	C
ATOM	14804	OG	SER A 194	-39.854	-34.861	-56.318	1.00	0.00	D	O
ATOM	14805	C	SER A 194	-37.466	-36.347	-56.988	1.00	0.00	D	C
ATOM	14806	O	SER A 194	-37.901	-37.473	-56.752	1.00	0.00	D	O
ATOM	14807	N	TYR A 195	-36.338	-35.868	-56.411	1.00	0.00	D	N
ATOM	14808	CA	TYR A 195	-35.552	-36.603	-55.450	1.00	0.00	D	C
ATOM	14809	CB	TYR A 195	-34.178	-35.971	-55.142	1.00	0.00	D	C
ATOM	14810	CG	TYR A 195	-33.229	-36.210	-56.266	1.00	0.00	D	C
ATOM	14811	CD1	TYR A 195	-33.248	-35.444	-57.408	1.00	0.00	D	C
ATOM	14812	CE1	TYR A 195	-32.353	-35.688	-58.425	1.00	0.00	D	C
ATOM	14813	CZ	TYR A 195	-31.426	-36.695	-58.305	1.00	0.00	D	C
ATOM	14814	OH	TYR A 195	-30.507	-36.948	-59.346	1.00	0.00	D	O
ATOM	14815	CD2	TYR A 195	-32.290	-37.212	-56.153	1.00	0.00	D	C
ATOM	14816	CE2	TYR A 195	-31.395	-37.458	-57.165	1.00	0.00	D	C
ATOM	14817	C	TYR A 195	-36.288	-36.652	-54.139	1.00	0.00	D	C
ATOM	14818	O	TYR A 195	-36.889	-35.672	-53.714	1.00	0.00	D	O
ATOM	14819	N	THR A 196	-36.358	-37.857	-53.545	1.00	0.00	D	N
ATOM	14820	CA	THR A 196	-36.960	-38.170	-52.271	1.00	0.00	D	C
ATOM	14821	CB	THR A 196	-37.502	-39.566	-52.250	1.00	0.00	D	C
ATOM	14822	OG1	THR A 196	-36.449	-40.507	-52.401	1.00	0.00	D	O
ATOM	14823	CG2	THR A 196	-38.498	-39.709	-53.412	1.00	0.00	D	C
ATOM	14824	C	THR A 196	-36.060	-38.009	-51.070	1.00	0.00	D	C
ATOM	14825	O	THR A 196	-36.549	-37.764	-49.969	1.00	0.00	D	O
ATOM	14826	N	ASP A 197	-34.731	-38.198	-51.224	1.00	0.00	D	N
ATOM	14827	CA	ASP A 197	-33.851	-38.211	-50.084	1.00	0.00	D	C
ATOM	14828	CB	ASP A 197	-32.409	-38.638	-50.415	1.00	0.00	D	C
ATOM	14829	CG	ASP A 197	-31.813	-37.629	-51.386	1.00	0.00	D	C
ATOM	14830	OD1	ASP A 197	-32.575	-37.102	-52.240	1.00	0.00	D	O
ATOM	14831	OD2	ASP A 197	-30.585	-37.370	-51.281	1.00	0.00	D	O
ATOM	14832	C	ASP A 197	-33.810	-36.845	-49.477	1.00	0.00	D	C
ATOM	14833	O	ASP A 197	-34.130	-35.850	-50.119	1.00	0.00	D	O
ATOM	14834	N	SER A 198	-33.410	-36.768	-48.193	1.00	0.00	D	N
ATOM	14835	CA	SER A 198	-33.433	-35.517	-47.494	1.00	0.00	D	C
ATOM	14836	CB	SER A 198	-33.032	-35.645	-46.014	1.00	0.00	D	C
ATOM	14837	OG	SER A 198	-31.679	-36.053	-45.902	1.00	0.00	D	O
ATOM	14838	C	SER A 198	-32.486	-34.547	-48.129	1.00	0.00	D	C

ATOM 14839 O SER A 198 -32.701 -33.336 -48.071 1.00 0.00 D O
ATOM 14840 N TYR A 199 -31.383 -35.038 -48.721 1.00 0.00 D N
ATOM 14841 CA TYR A 199 -30.417 -34.103 -49.229 1.00 0.00 D C
ATOM 14842 CB TYR A 199 -29.130 -34.849 -49.636 1.00 0.00 D C
ATOM 14843 CG TYR A 199 -28.013 -33.896 -49.886 1.00 0.00 D C
ATOM 14844 CD1 TYR A 199 -27.456 -33.204 -48.836 1.00 0.00 D C
ATOM 14845 CE1 TYR A 199 -26.416 -32.331 -49.043 1.00 0.00 D C
ATOM 14846 CZ TYR A 199 -25.909 -32.149 -50.305 1.00 0.00 D C
ATOM 14847 OH TYR A 199 -24.840 -31.254 -50.505 1.00 0.00 D O
ATOM 14848 CD2 TYR A 199 -27.489 -33.723 -51.147 1.00 0.00 D C
ATOM 14849 CE2 TYR A 199 -26.444 -32.851 -51.362 1.00 0.00 D C
ATOM 14850 C TYR A 199 -30.922 -33.319 -50.425 1.00 0.00 D C
ATOM 14851 O TYR A 199 -31.063 -32.097 -50.368 1.00 0.00 D O
ATOM 14852 N TYR A 200 -31.228 -34.027 -51.529 1.00 0.00 D N
ATOM 14853 CA TYR A 200 -31.644 -33.516 -52.817 1.00 0.00 D C
ATOM 14854 CB TYR A 200 -31.214 -34.382 -54.012 1.00 0.00 D C
ATOM 14855 CG TYR A 200 -29.958 -35.053 -53.571 1.00 0.00 D C
ATOM 14856 CD1 TYR A 200 -28.808 -34.315 -53.408 1.00 0.00 D C
ATOM 14857 CE1 TYR A 200 -27.639 -34.912 -52.998 1.00 0.00 D C
ATOM 14858 CZ TYR A 200 -27.612 -36.263 -52.755 1.00 0.00 D C
ATOM 14859 OH TYR A 200 -26.418 -36.884 -52.334 1.00 0.00 D O
ATOM 14860 CD2 TYR A 200 -29.921 -36.407 -53.334 1.00 0.00 D C
ATOM 14861 CE2 TYR A 200 -28.755 -37.011 -52.925 1.00 0.00 D C
ATOM 14862 C TYR A 200 -33.096 -33.189 -52.944 1.00 0.00 D C
ATOM 14863 O TYR A 200 -33.497 -32.606 -53.954 1.00 0.00 D O
ATOM 14864 N LYS A 201 -33.922 -33.669 -51.992 1.00 0.00 D N
ATOM 14865 CA LYS A 201 -35.360 -33.697 -52.075 1.00 0.00 D C
ATOM 14866 CB LYS A 201 -36.079 -33.847 -50.719 1.00 0.00 D C
ATOM 14867 CG LYS A 201 -35.841 -32.702 -49.737 1.00 0.00 D C
ATOM 14868 CD LYS A 201 -36.831 -32.692 -48.572 1.00 0.00 D C
ATOM 14869 CE LYS A 201 -37.366 -34.077 -48.210 1.00 0.00 D C
ATOM 14870 NZ LYS A 201 -36.284 -34.909 -47.635 1.00 0.00 D N
ATOM 14871 C LYS A 201 -35.973 -32.561 -52.838 1.00 0.00 D C
ATOM 14872 O LYS A 201 -35.667 -31.387 -52.644 1.00 0.00 D O
ATOM 14873 N GLY A 202 -36.840 -32.947 -53.795 1.00 0.00 D N
ATOM 14874 CA GLY A 202 -37.614 -32.035 -54.581 1.00 0.00 D C
ATOM 14875 C GLY A 202 -36.862 -31.589 -55.800 1.00 0.00 D C
ATOM 14876 O GLY A 202 -37.393 -30.809 -56.591 1.00 0.00 D O

ATOM	14877	N	GLN	A	203	-35.614	-32.058	-55.999	1.00	0.00	D	N
ATOM	14878	CA	GLN	A	203	-34.895	-31.638	-57.171	1.00	0.00	D	C
ATOM	14879	CB	GLN	A	203	-33.370	-31.846	-57.085	1.00	0.00	D	C
ATOM	14880	CG	GLN	A	203	-32.619	-31.379	-58.338	1.00	0.00	D	C
ATOM	14881	CD	GLN	A	203	-31.126	-31.552	-58.096	1.00	0.00	D	C
ATOM	14882	OE1	GLN	A	203	-30.655	-32.637	-57.752	1.00	0.00	D	O
ATOM	14883	NE2	GLN	A	203	-30.354	-30.448	-58.277	1.00	0.00	D	N
ATOM	14884	C	GLN	A	203	-35.408	-32.395	-58.356	1.00	0.00	D	C
ATOM	14885	O	GLN	A	203	-35.637	-33.605	-58.297	1.00	0.00	D	O
ATOM	14886	N	THR	A	204	-35.588	-31.668	-59.478	1.00	0.00	D	N
ATOM	14887	CA	THR	A	204	-36.087	-32.196	-60.715	1.00	0.00	D	C
ATOM	14888	CB	THR	A	204	-37.308	-31.482	-61.215	1.00	0.00	D	C
ATOM	14889	OG1	THR	A	204	-37.001	-30.117	-61.459	1.00	0.00	D	O
ATOM	14890	CG2	THR	A	204	-38.423	-31.592	-60.161	1.00	0.00	D	C
ATOM	14891	C	THR	A	204	-35.025	-31.973	-61.743	1.00	0.00	D	C
ATOM	14892	O	THR	A	204	-34.023	-31.310	-61.485	1.00	0.00	D	O
ATOM	14893	N	ALA	A	205	-35.225	-32.533	-62.953	1.00	0.00	D	N
ATOM	14894	CA	ALA	A	205	-34.267	-32.408	-64.014	1.00	0.00	D	C
ATOM	14895	CB	ALA	A	205	-34.707	-33.129	-65.299	1.00	0.00	D	C
ATOM	14896	C	ALA	A	205	-34.083	-30.957	-64.350	1.00	0.00	D	C
ATOM	14897	O	ALA	A	205	-32.967	-30.511	-64.606	1.00	0.00	D	O
ATOM	14898	N	LEU	A	206	-35.170	-30.163	-64.340	1.00	0.00	D	N
ATOM	14899	CA	LEU	A	206	-35.069	-28.777	-64.706	1.00	0.00	D	C
ATOM	14900	CB	LEU	A	206	-36.425	-28.045	-64.687	1.00	0.00	D	C
ATOM	14901	CG	LEU	A	206	-36.332	-26.576	-65.141	1.00	0.00	D	C
ATOM	14902	CD1	LEU	A	206	-35.769	-26.481	-66.567	1.00	0.00	D	C
ATOM	14903	CD2	LEU	A	206	-37.684	-25.857	-65.007	1.00	0.00	D	C
ATOM	14904	C	LEU	A	206	-34.132	-28.073	-63.768	1.00	0.00	D	C
ATOM	14905	O	LEU	A	206	-33.400	-27.173	-64.178	1.00	0.00	D	O
ATOM	14906	N	HSD	A	207	-34.123	-28.454	-62.478	1.00	0.00	D	N
ATOM	14907	CA	HSD	A	207	-33.241	-27.783	-61.562	1.00	0.00	D	C
ATOM	14908	CB	HSD	A	207	-33.300	-28.338	-60.126	1.00	0.00	D	C
ATOM	14909	ND1	HSD	A	207	-35.678	-28.869	-59.396	1.00	0.00	D	N
ATOM	14910	CG	HSD	A	207	-34.577	-28.041	-59.404	1.00	0.00	D	C
ATOM	14911	CE1	HSD	A	207	-36.619	-28.266	-58.626	1.00	0.00	D	C
ATOM	14912	NE2	HSD	A	207	-36.200	-27.111	-58.141	1.00	0.00	D	N
ATOM	14913	CD2	HSD	A	207	-34.915	-26.971	-58.632	1.00	0.00	D	C
ATOM	14914	C	HSD	A	207	-31.832	-27.988	-62.030	1.00	0.00	D	C

ATOM 14915 O HSD A 207 -31.044 -27.047 -62.097 1.00 0.00 D O
ATOM 14916 N ILE A 208 -31.492 -29.237 -62.403 1.00 0.00 D N
ATOM 14917 CA ILE A 208 -30.158 -29.603 -62.778 1.00 0.00 D C
ATOM 14918 CB ILE A 208 -30.029 -31.074 -63.067 1.00 0.00 D C
ATOM 14919 CG2 ILE A 208 -28.645 -31.332 -63.684 1.00 0.00 D C
ATOM 14920 CG1 ILE A 208 -30.302 -31.894 -61.791 1.00 0.00 D C
ATOM 14921 CD ILE A 208 -30.455 -33.395 -62.041 1.00 0.00 D C
ATOM 14922 C ILE A 208 -29.716 -28.847 -63.997 1.00 0.00 D C
ATOM 14923 O ILE A 208 -28.570 -28.401 -64.067 1.00 0.00 D O
ATOM 14924 N ALA A 209 -30.608 -28.678 -64.989 1.00 0.00 D N
ATOM 14925 CA ALA A 209 -30.246 -28.028 -66.220 1.00 0.00 D C
ATOM 14926 CB ALA A 209 -31.415 -27.953 -67.216 1.00 0.00 D C
ATOM 14927 C ALA A 209 -29.812 -26.629 -65.929 1.00 0.00 D C
ATOM 14928 O ALA A 209 -28.875 -26.124 -66.546 1.00 0.00 D O
ATOM 14929 N ILE A 210 -30.523 -25.953 -65.013 1.00 0.00 D N
ATOM 14930 CA ILE A 210 -30.196 -24.602 -64.653 1.00 0.00 D C
ATOM 14931 CB ILE A 210 -31.251 -23.966 -63.796 1.00 0.00 D C
ATOM 14932 CG2 ILE A 210 -30.750 -22.580 -63.353 1.00 0.00 D C
ATOM 14933 CG1 ILE A 210 -32.583 -23.916 -64.560 1.00 0.00 D C
ATOM 14934 CD ILE A 210 -33.773 -23.546 -63.682 1.00 0.00 D C
ATOM 14935 C ILE A 210 -28.901 -24.572 -63.905 1.00 0.00 D C
ATOM 14936 O ILE A 210 -28.030 -23.752 -64.185 1.00 0.00 D O
ATOM 14937 N GLU A 211 -28.724 -25.501 -62.949 1.00 0.00 D N
ATOM 14938 CA GLU A 211 -27.533 -25.518 -62.151 1.00 0.00 D C
ATOM 14939 CB GLU A 211 -27.543 -26.675 -61.141 1.00 0.00 D C
ATOM 14940 CG GLU A 211 -28.565 -26.425 -60.028 1.00 0.00 D C
ATOM 14941 CD GLU A 211 -28.817 -27.714 -59.266 1.00 0.00 D C
ATOM 14942 OE1 GLU A 211 -28.600 -28.806 -59.856 1.00 0.00 D O
ATOM 14943 OE2 GLU A 211 -29.246 -27.626 -58.085 1.00 0.00 D O
ATOM 14944 C GLU A 211 -26.372 -25.645 -63.090 1.00 0.00 D C
ATOM 14945 O GLU A 211 -25.302 -25.087 -62.859 1.00 0.00 D O
ATOM 14946 N ARG A 212 -26.576 -26.403 -64.177 1.00 0.00 D N
ATOM 14947 CA ARG A 212 -25.624 -26.646 -65.222 1.00 0.00 D C
ATOM 14948 CB ARG A 212 -26.036 -27.829 -66.116 1.00 0.00 D C
ATOM 14949 CG ARG A 212 -26.093 -29.145 -65.337 1.00 0.00 D C
ATOM 14950 CD ARG A 212 -24.868 -29.362 -64.445 1.00 0.00 D C
ATOM 14951 NE ARG A 212 -25.007 -30.690 -63.786 1.00 0.00 D N
ATOM 14952 CZ ARG A 212 -24.839 -30.803 -62.438 1.00 0.00 D C

ATOM	14953	NH1	ARG	A	212	-24.604	-29.687	-61.685	1.00	0.00	D	N
ATOM	14954	NH2	ARG	A	212	-24.905	-32.029	-61.842	1.00	0.00	D	N
ATOM	14955	C	ARG	A	212	-25.427	-25.434	-66.085	1.00	0.00	D	C
ATOM	14956	O	ARG	A	212	-24.423	-25.336	-66.789	1.00	0.00	D	O
ATOM	14957	N	ARG	A	213	-26.394	-24.494	-66.093	1.00	0.00	D	N
ATOM	14958	CA	ARG	A	213	-26.309	-23.329	-66.930	1.00	0.00	D	C
ATOM	14959	CB	ARG	A	213	-24.972	-22.587	-66.804	1.00	0.00	D	C
ATOM	14960	CG	ARG	A	213	-24.732	-22.003	-65.418	1.00	0.00	D	C
ATOM	14961	CD	ARG	A	213	-23.410	-21.248	-65.297	1.00	0.00	D	C
ATOM	14962	NE	ARG	A	213	-23.360	-20.702	-63.916	1.00	0.00	D	N
ATOM	14963	CZ	ARG	A	213	-23.931	-19.496	-63.632	1.00	0.00	D	C
ATOM	14964	NH1	ARG	A	213	-24.498	-18.743	-64.620	1.00	0.00	D	N
ATOM	14965	NH2	ARG	A	213	-23.943	-19.054	-62.345	1.00	0.00	D	N
ATOM	14966	C	ARG	A	213	-26.432	-23.738	-68.363	1.00	0.00	D	C
ATOM	14967	O	ARG	A	213	-25.722	-23.213	-69.221	1.00	0.00	D	O
ATOM	14968	N	ASN	A	214	-27.327	-24.701	-68.672	1.00	0.00	D	N
ATOM	14969	CA	ASN	A	214	-27.465	-25.027	-70.062	1.00	0.00	D	C
ATOM	14970	CB	ASN	A	214	-27.066	-26.470	-70.460	1.00	0.00	D	C
ATOM	14971	CG	ASN	A	214	-27.900	-27.542	-69.778	1.00	0.00	D	C
ATOM	14972	OD1	ASN	A	214	-28.881	-27.299	-69.079	1.00	0.00	D	O
ATOM	14973	ND2	ASN	A	214	-27.465	-28.814	-69.984	1.00	0.00	D	N
ATOM	14974	C	ASN	A	214	-28.836	-24.669	-70.547	1.00	0.00	D	C
ATOM	14975	O	ASN	A	214	-29.854	-25.255	-70.182	1.00	0.00	D	O
ATOM	14976	N	MET	A	215	-28.879	-23.654	-71.424	1.00	0.00	D	N
ATOM	14977	CA	MET	A	215	-30.115	-23.128	-71.920	1.00	0.00	D	C
ATOM	14978	CB	MET	A	215	-29.882	-21.918	-72.840	1.00	0.00	D	C
ATOM	14979	CG	MET	A	215	-30.947	-20.818	-72.743	1.00	0.00	D	C
ATOM	14980	SD	MET	A	215	-32.655	-21.292	-73.125	1.00	0.00	D	S
ATOM	14981	CE	MET	A	215	-33.000	-22.103	-71.539	1.00	0.00	D	C
ATOM	14982	C	MET	A	215	-30.794	-24.206	-72.707	1.00	0.00	D	C
ATOM	14983	O	MET	A	215	-31.995	-24.433	-72.569	1.00	0.00	D	O
ATOM	14984	N	ALA	A	216	-30.017	-24.951	-73.511	1.00	0.00	D	N
ATOM	14985	CA	ALA	A	216	-30.610	-25.910	-74.394	1.00	0.00	D	C
ATOM	14986	CB	ALA	A	216	-29.561	-26.701	-75.183	1.00	0.00	D	C
ATOM	14987	C	ALA	A	216	-31.408	-26.901	-73.604	1.00	0.00	D	C
ATOM	14988	O	ALA	A	216	-32.524	-27.238	-73.993	1.00	0.00	D	O
ATOM	14989	N	LEU	A	217	-30.860	-27.401	-72.481	1.00	0.00	D	N
ATOM	14990	CA	LEU	A	217	-31.592	-28.356	-71.698	1.00	0.00	D	C

ATOM	14991	CB	LEU	A	217	-30.773	-29.109	-70.635	1.00	0.00	D	C
ATOM	14992	CG	LEU	A	217	-29.773	-30.120	-71.228	1.00	0.00	D	C
ATOM	14993	CD1	LEU	A	217	-29.231	-31.067	-70.144	1.00	0.00	D	C
ATOM	14994	CD2	LEU	A	217	-30.378	-30.868	-72.427	1.00	0.00	D	C
ATOM	14995	C	LEU	A	217	-32.750	-27.711	-71.013	1.00	0.00	D	C
ATOM	14996	O	LEU	A	217	-33.792	-28.337	-70.833	1.00	0.00	D	O
ATOM	14997	N	VAL	A	218	-32.596	-26.452	-70.560	1.00	0.00	D	N
ATOM	14998	CA	VAL	A	218	-33.712	-25.821	-69.919	1.00	0.00	D	C
ATOM	14999	CB	VAL	A	218	-33.413	-24.415	-69.479	1.00	0.00	D	C
ATOM	15000	CG1	VAL	A	218	-34.719	-23.759	-68.999	1.00	0.00	D	C
ATOM	15001	CG2	VAL	A	218	-32.312	-24.464	-68.407	1.00	0.00	D	C
ATOM	15002	C	VAL	A	218	-34.811	-25.753	-70.931	1.00	0.00	D	C
ATOM	15003	O	VAL	A	218	-35.940	-26.169	-70.675	1.00	0.00	D	O
ATOM	15004	N	THR	A	219	-34.476	-25.295	-72.150	1.00	0.00	D	N
ATOM	15005	CA	THR	A	219	-35.460	-25.110	-73.176	1.00	0.00	D	C
ATOM	15006	CB	THR	A	219	-34.854	-24.699	-74.486	1.00	0.00	D	C
ATOM	15007	OG1	THR	A	219	-34.090	-23.514	-74.325	1.00	0.00	D	O
ATOM	15008	CG2	THR	A	219	-35.985	-24.459	-75.501	1.00	0.00	D	C
ATOM	15009	C	THR	A	219	-36.137	-26.417	-73.427	1.00	0.00	D	C
ATOM	15010	O	THR	A	219	-37.362	-26.486	-73.503	1.00	0.00	D	O
ATOM	15011	N	LEU	A	220	-35.355	-27.503	-73.544	1.00	0.00	D	N
ATOM	15012	CA	LEU	A	220	-35.944	-28.760	-73.904	1.00	0.00	D	C
ATOM	15013	CB	LEU	A	220	-34.900	-29.873	-74.097	1.00	0.00	D	C
ATOM	15014	CG	LEU	A	220	-35.506	-31.226	-74.517	1.00	0.00	D	C
ATOM	15015	CD1	LEU	A	220	-36.208	-31.122	-75.881	1.00	0.00	D	C
ATOM	15016	CD2	LEU	A	220	-34.451	-32.345	-74.483	1.00	0.00	D	C
ATOM	15017	C	LEU	A	220	-36.910	-29.204	-72.846	1.00	0.00	D	C
ATOM	15018	O	LEU	A	220	-38.030	-29.596	-73.161	1.00	0.00	D	O
ATOM	15019	N	LEU	A	221	-36.522	-29.123	-71.556	1.00	0.00	D	N
ATOM	15020	CA	LEU	A	221	-37.364	-29.628	-70.503	1.00	0.00	D	C
ATOM	15021	CB	LEU	A	221	-36.706	-29.602	-69.115	1.00	0.00	D	C
ATOM	15022	CG	LEU	A	221	-35.713	-30.759	-68.890	1.00	0.00	D	C
ATOM	15023	CD1	LEU	A	221	-34.629	-30.814	-69.974	1.00	0.00	D	C
ATOM	15024	CD2	LEU	A	221	-35.125	-30.705	-67.474	1.00	0.00	D	C
ATOM	15025	C	LEU	A	221	-38.658	-28.880	-70.429	1.00	0.00	D	C
ATOM	15026	O	LEU	A	221	-39.710	-29.485	-70.233	1.00	0.00	D	O
ATOM	15027	N	VAL	A	222	-38.616	-27.545	-70.586	1.00	0.00	D	N
ATOM	15028	CA	VAL	A	222	-39.796	-26.728	-70.510	1.00	0.00	D	C

ATOM	15029	CB	VAL A 222	-39.491	-25.265	-70.656	1.00	0.00	D	C
ATOM	15030	CG1	VAL A 222	-40.816	-24.491	-70.749	1.00	0.00	D	C
ATOM	15031	CG2	VAL A 222	-38.607	-24.832	-69.474	1.00	0.00	D	C
ATOM	15032	C	VAL A 222	-40.754	-27.106	-71.604	1.00	0.00	D	C
ATOM	15033	O	VAL A 222	-41.966	-27.109	-71.400	1.00	0.00	D	O
ATOM	15034	N	GLU A 223	-40.235	-27.401	-72.813	1.00	0.00	D	N
ATOM	15035	CA	GLU A 223	-41.076	-27.762	-73.924	1.00	0.00	D	C
ATOM	15036	CB	GLU A 223	-40.318	-27.853	-75.260	1.00	0.00	D	C
ATOM	15037	CG	GLU A 223	-39.868	-26.481	-75.765	1.00	0.00	D	C
ATOM	15038	CD	GLU A 223	-39.305	-26.637	-77.168	1.00	0.00	D	C
ATOM	15039	OE1	GLU A 223	-38.944	-27.783	-77.544	1.00	0.00	D	O
ATOM	15040	OE2	GLU A 223	-39.232	-25.605	-77.887	1.00	0.00	D	O
ATOM	15041	C	GLU A 223	-41.730	-29.081	-73.650	1.00	0.00	D	C
ATOM	15042	O	GLU A 223	-42.860	-29.328	-74.067	1.00	0.00	D	O
ATOM	15043	N	ASN A 224	-40.995	-29.975	-72.970	1.00	0.00	D	N
ATOM	15044	CA	ASN A 224	-41.413	-31.286	-72.557	1.00	0.00	D	C
ATOM	15045	CB	ASN A 224	-40.260	-32.143	-72.024	1.00	0.00	D	C
ATOM	15046	CG	ASN A 224	-39.307	-32.365	-73.181	1.00	0.00	D	C
ATOM	15047	OD1	ASN A 224	-39.715	-32.628	-74.311	1.00	0.00	D	O
ATOM	15048	ND2	ASN A 224	-37.988	-32.236	-72.890	1.00	0.00	D	N
ATOM	15049	C	ASN A 224	-42.399	-31.148	-71.438	1.00	0.00	D	C
ATOM	15050	O	ASN A 224	-43.006	-32.134	-71.022	1.00	0.00	D	O
ATOM	15051	N	GLY A 225	-42.515	-29.944	-70.839	1.00	0.00	D	N
ATOM	15052	CA	GLY A 225	-43.528	-29.792	-69.834	1.00	0.00	D	C
ATOM	15053	C	GLY A 225	-42.977	-29.862	-68.443	1.00	0.00	D	C
ATOM	15054	O	GLY A 225	-43.699	-30.229	-67.518	1.00	0.00	D	O
ATOM	15055	N	ALA A 226	-41.687	-29.525	-68.244	1.00	0.00	D	N
ATOM	15056	CA	ALA A 226	-41.172	-29.529	-66.904	1.00	0.00	D	C
ATOM	15057	CB	ALA A 226	-39.665	-29.231	-66.816	1.00	0.00	D	C
ATOM	15058	C	ALA A 226	-41.894	-28.476	-66.112	1.00	0.00	D	C
ATOM	15059	O	ALA A 226	-42.201	-27.395	-66.617	1.00	0.00	D	O
ATOM	15060	N	ASP A 227	-42.209	-28.799	-64.838	1.00	0.00	D	N
ATOM	15061	CA	ASP A 227	-42.880	-27.896	-63.947	1.00	0.00	D	C
ATOM	15062	CB	ASP A 227	-43.360	-28.578	-62.656	1.00	0.00	D	C
ATOM	15063	CG	ASP A 227	-44.164	-27.578	-61.843	1.00	0.00	D	C
ATOM	15064	OD1	ASP A 227	-44.442	-26.466	-62.369	1.00	0.00	D	O
ATOM	15065	OD2	ASP A 227	-44.511	-27.911	-60.677	1.00	0.00	D	O
ATOM	15066	C	ASP A 227	-41.903	-26.830	-63.554	1.00	0.00	D	C

ATOM	15067	O	ASP A 227	-40.873	-27.103	-62.939	1.00	0.00	D	O
ATOM	15068	N	VAL A 228	-42.227	-25.576	-63.908	1.00	0.00	D	N
ATOM	15069	CA	VAL A 228	-41.411	-24.422	-63.653	1.00	0.00	D	C
ATOM	15070	CB	VAL A 228	-41.853	-23.227	-64.448	1.00	0.00	D	C
ATOM	15071	CG1	VAL A 228	-41.045	-21.998	-63.997	1.00	0.00	D	C
ATOM	15072	CG2	VAL A 228	-41.683	-23.552	-65.943	1.00	0.00	D	C
ATOM	15073	C	VAL A 228	-41.412	-24.053	-62.193	1.00	0.00	D	C
ATOM	15074	O	VAL A 228	-40.486	-23.404	-61.709	1.00	0.00	D	O
ATOM	15075	N	GLN A 229	-42.520	-24.355	-61.496	1.00	0.00	D	N
ATOM	15076	CA	GLN A 229	-42.761	-24.076	-60.102	1.00	0.00	D	C
ATOM	15077	CB	GLN A 229	-44.253	-23.968	-59.756	1.00	0.00	D	C
ATOM	15078	CG	GLN A 229	-44.895	-22.745	-60.413	1.00	0.00	D	C
ATOM	15079	CD	GLN A 229	-44.032	-21.539	-60.059	1.00	0.00	D	C
ATOM	15080	OE1	GLN A 229	-43.067	-21.224	-60.751	1.00	0.00	D	O
ATOM	15081	NE2	GLN A 229	-44.380	-20.849	-58.942	1.00	0.00	D	N
ATOM	15082	C	GLN A 229	-42.103	-25.028	-59.132	1.00	0.00	D	C
ATOM	15083	O	GLN A 229	-42.074	-24.739	-57.937	1.00	0.00	D	O
ATOM	15084	N	ALA A 230	-41.647	-26.220	-59.573	1.00	0.00	D	N
ATOM	15085	CA	ALA A 230	-41.151	-27.225	-58.659	1.00	0.00	D	C
ATOM	15086	CB	ALA A 230	-40.532	-28.444	-59.367	1.00	0.00	D	C
ATOM	15087	C	ALA A 230	-40.102	-26.677	-57.735	1.00	0.00	D	C
ATOM	15088	O	ALA A 230	-39.141	-26.041	-58.161	1.00	0.00	D	O
ATOM	15089	N	ALA A 231	-40.251	-26.965	-56.423	1.00	0.00	D	N
ATOM	15090	CA	ALA A 231	-39.333	-26.433	-55.453	1.00	0.00	D	C
ATOM	15091	CB	ALA A 231	-40.029	-25.905	-54.187	1.00	0.00	D	C
ATOM	15092	C	ALA A 231	-38.374	-27.493	-55.006	1.00	0.00	D	C
ATOM	15093	O	ALA A 231	-38.773	-28.561	-54.543	1.00	0.00	D	O
ATOM	15094	N	ALA A 232	-37.059	-27.206	-55.132	1.00	0.00	D	N
ATOM	15095	CA	ALA A 232	-36.078	-28.128	-54.637	1.00	0.00	D	C
ATOM	15096	CB	ALA A 232	-34.758	-28.095	-55.422	1.00	0.00	D	C
ATOM	15097	C	ALA A 232	-35.783	-27.662	-53.239	1.00	0.00	D	C
ATOM	15098	O	ALA A 232	-35.069	-26.683	-53.042	1.00	0.00	D	O
ATOM	15099	N	HSD A 233	-36.427	-28.331	-52.259	1.00	0.00	D	N
ATOM	15100	CA	HSD A 233	-36.433	-28.120	-50.831	1.00	0.00	D	C
ATOM	15101	CB	HSD A 233	-37.804	-28.437	-50.208	1.00	0.00	D	C
ATOM	15102	ND1	HSD A 233	-39.188	-29.636	-51.957	1.00	0.00	D	N
ATOM	15103	CG	HSD A 233	-38.447	-29.657	-50.795	1.00	0.00	D	C
ATOM	15104	CE1	HSD A 233	-39.600	-30.908	-52.179	1.00	0.00	D	C

ATOM	15105	NE2	HSD	A	233	-39.180	-31.742	-51.246	1.00	0.00	D	N
ATOM	15106	CD2	HSD	A	233	-38.455	-30.949	-50.375	1.00	0.00	D	C
ATOM	15107	C	HSD	A	233	-35.371	-28.807	-50.011	1.00	0.00	D	C
ATOM	15108	O	HSD	A	233	-35.228	-28.485	-48.831	1.00	0.00	D	O
ATOM	15109	N	GLY	A	234	-34.646	-29.809	-50.539	1.00	0.00	D	N
ATOM	15110	CA	GLY	A	234	-33.773	-30.612	-49.709	1.00	0.00	D	C
ATOM	15111	C	GLY	A	234	-32.701	-29.785	-49.056	1.00	0.00	D	C
ATOM	15112	O	GLY	A	234	-32.485	-28.629	-49.400	1.00	0.00	D	O
ATOM	15113	N	ASP	A	235	-31.973	-30.404	-48.100	1.00	0.00	D	N
ATOM	15114	CA	ASP	A	235	-30.959	-29.755	-47.310	1.00	0.00	D	C
ATOM	15115	CB	ASP	A	235	-30.321	-30.673	-46.250	1.00	0.00	D	C
ATOM	15116	CG	ASP	A	235	-31.316	-30.799	-45.100	1.00	0.00	D	C
ATOM	15117	OD1	ASP	A	235	-32.276	-29.983	-45.063	1.00	0.00	D	O
ATOM	15118	OD2	ASP	A	235	-31.130	-31.706	-44.246	1.00	0.00	D	O
ATOM	15119	C	ASP	A	235	-29.880	-29.221	-48.202	1.00	0.00	D	C
ATOM	15120	O	ASP	A	235	-29.187	-28.269	-47.851	1.00	0.00	D	O
ATOM	15121	N	PHE	A	236	-29.702	-29.833	-49.384	1.00	0.00	D	N
ATOM	15122	CA	PHE	A	236	-28.708	-29.390	-50.321	1.00	0.00	D	C
ATOM	15123	CB	PHE	A	236	-28.622	-30.291	-51.568	1.00	0.00	D	C
ATOM	15124	CG	PHE	A	236	-27.671	-29.662	-52.530	1.00	0.00	D	C
ATOM	15125	CD1	PHE	A	236	-26.312	-29.779	-52.356	1.00	0.00	D	C
ATOM	15126	CE1	PHE	A	236	-25.436	-29.194	-53.242	1.00	0.00	D	C
ATOM	15127	CZ	PHE	A	236	-25.918	-28.479	-54.312	1.00	0.00	D	C
ATOM	15128	CD2	PHE	A	236	-28.144	-28.938	-53.599	1.00	0.00	D	C
ATOM	15129	CE2	PHE	A	236	-27.275	-28.352	-54.489	1.00	0.00	D	C
ATOM	15130	C	PHE	A	236	-29.028	-27.989	-50.753	1.00	0.00	D	C
ATOM	15131	O	PHE	A	236	-28.141	-27.225	-51.119	1.00	0.00	D	O
ATOM	15132	N	PHE	A	237	-30.329	-27.668	-50.808	1.00	0.00	D	N
ATOM	15133	CA	PHE	A	237	-30.935	-26.435	-51.223	1.00	0.00	D	C
ATOM	15134	CB	PHE	A	237	-32.355	-26.673	-51.753	1.00	0.00	D	C
ATOM	15135	CG	PHE	A	237	-32.131	-27.624	-52.883	1.00	0.00	D	C
ATOM	15136	CD1	PHE	A	237	-31.596	-27.184	-54.073	1.00	0.00	D	C
ATOM	15137	CE1	PHE	A	237	-31.381	-28.060	-55.112	1.00	0.00	D	C
ATOM	15138	CZ	PHE	A	237	-31.700	-29.389	-54.973	1.00	0.00	D	C
ATOM	15139	CD2	PHE	A	237	-32.445	-28.956	-52.750	1.00	0.00	D	C
ATOM	15140	CE2	PHE	A	237	-32.232	-29.836	-53.788	1.00	0.00	D	C
ATOM	15141	C	PHE	A	237	-30.928	-25.344	-50.191	1.00	0.00	D	C
ATOM	15142	O	PHE	A	237	-31.294	-24.220	-50.527	1.00	0.00	D	O

ATOM	15143	N	LYS A 238	-30.665	-25.657	-48.900	1.00	0.00	D	N
ATOM	15144	CA	LYS A 238	-30.683	-24.659	-47.861	1.00	0.00	D	C
ATOM	15145	CB	LYS A 238	-31.625	-25.011	-46.698	1.00	0.00	D	C
ATOM	15146	CG	LYS A 238	-33.106	-24.896	-47.065	1.00	0.00	D	C
ATOM	15147	CD	LYS A 238	-34.047	-25.602	-46.086	1.00	0.00	D	C
ATOM	15148	CE	LYS A 238	-33.597	-25.533	-44.625	1.00	0.00	D	C
ATOM	15149	NZ	LYS A 238	-32.519	-26.514	-44.375	1.00	0.00	D	N
ATOM	15150	C	LYS A 238	-29.305	-24.442	-47.296	1.00	0.00	D	C
ATOM	15151	O	LYS A 238	-28.321	-25.020	-47.757	1.00	0.00	D	O
ATOM	15152	N	LYS A 239	-29.236	-23.571	-46.260	1.00	0.00	D	N
ATOM	15153	CA	LYS A 239	-28.021	-23.124	-45.636	1.00	0.00	D	C
ATOM	15154	CB	LYS A 239	-28.273	-22.142	-44.478	1.00	0.00	D	C
ATOM	15155	CG	LYS A 239	-28.945	-20.844	-44.936	1.00	0.00	D	C
ATOM	15156	CD	LYS A 239	-29.545	-20.014	-43.799	1.00	0.00	D	C
ATOM	15157	CE	LYS A 239	-30.264	-18.751	-44.280	1.00	0.00	D	C
ATOM	15158	NZ	LYS A 239	-30.914	-18.065	-43.140	1.00	0.00	D	N
ATOM	15159	C	LYS A 239	-27.244	-24.283	-45.109	1.00	0.00	D	C
ATOM	15160	O	LYS A 239	-27.776	-25.221	-44.518	1.00	0.00	D	O
ATOM	15161	N	THR A 240	-25.918	-24.181	-45.309	1.00	0.00	D	N
ATOM	15162	CA	THR A 240	-24.920	-25.160	-45.021	1.00	0.00	D	C
ATOM	15163	CB	THR A 240	-23.586	-24.650	-45.497	1.00	0.00	D	C
ATOM	15164	OG1	THR A 240	-22.626	-25.688	-45.601	1.00	0.00	D	O
ATOM	15165	CG2	THR A 240	-23.107	-23.557	-44.528	1.00	0.00	D	C
ATOM	15166	C	THR A 240	-24.891	-25.422	-43.544	1.00	0.00	D	C
ATOM	15167	O	THR A 240	-24.946	-24.510	-42.724	1.00	0.00	D	O
ATOM	15168	N	LYS A 241	-24.845	-26.723	-43.203	1.00	0.00	D	N
ATOM	15169	CA	LYS A 241	-24.778	-27.310	-41.896	1.00	0.00	D	C
ATOM	15170	CB	LYS A 241	-24.956	-28.835	-41.924	1.00	0.00	D	C
ATOM	15171	CG	LYS A 241	-26.411	-29.248	-42.141	1.00	0.00	D	C
ATOM	15172	CD	LYS A 241	-26.590	-30.712	-42.541	1.00	0.00	D	C
ATOM	15173	CE	LYS A 241	-25.803	-31.698	-41.678	1.00	0.00	D	C
ATOM	15174	NZ	LYS A 241	-24.367	-31.678	-42.036	1.00	0.00	D	N
ATOM	15175	C	LYS A 241	-23.489	-27.019	-41.178	1.00	0.00	D	C
ATOM	15176	O	LYS A 241	-23.528	-26.826	-39.963	1.00	0.00	D	O
ATOM	15177	N	GLY A 242	-22.309	-26.939	-41.843	1.00	0.00	D	N
ATOM	15178	CA	GLY A 242	-22.061	-27.012	-43.256	1.00	0.00	D	C
ATOM	15179	C	GLY A 242	-22.338	-28.363	-43.836	1.00	0.00	D	C
ATOM	15180	O	GLY A 242	-21.631	-29.328	-43.557	1.00	0.00	D	O

ATOM	15181	N	ARG A 243	-23.417	-28.466	-44.644	1.00	0.00	D	N
ATOM	15182	CA	ARG A 243	-23.690	-29.671	-45.357	1.00	0.00	D	C
ATOM	15183	CB	ARG A 243	-25.156	-29.832	-45.789	1.00	0.00	D	C
ATOM	15184	CG	ARG A 243	-25.410	-31.182	-46.456	1.00	0.00	D	C
ATOM	15185	CD	ARG A 243	-26.789	-31.779	-46.174	1.00	0.00	D	C
ATOM	15186	NE	ARG A 243	-26.708	-32.423	-44.836	1.00	0.00	D	N
ATOM	15187	CZ	ARG A 243	-27.653	-33.323	-44.438	1.00	0.00	D	C
ATOM	15188	NH1	ARG A 243	-28.684	-33.655	-45.270	1.00	0.00	D	N
ATOM	15189	NH2	ARG A 243	-27.563	-33.893	-43.201	1.00	0.00	D	N
ATOM	15190	C	ARG A 243	-22.793	-29.795	-46.549	1.00	0.00	D	C
ATOM	15191	O	ARG A 243	-22.126	-30.823	-46.667	1.00	0.00	D	O
ATOM	15192	N	PRO A 244	-22.667	-28.840	-47.458	1.00	0.00	D	N
ATOM	15193	CD	PRO A 244	-21.341	-28.687	-48.031	1.00	0.00	D	C
ATOM	15194	CA	PRO A 244	-23.416	-27.587	-47.524	1.00	0.00	D	C
ATOM	15195	CB	PRO A 244	-22.536	-26.632	-48.335	1.00	0.00	D	C
ATOM	15196	CG	PRO A 244	-21.118	-27.185	-48.205	1.00	0.00	D	C
ATOM	15197	C	PRO A 244	-24.797	-27.751	-48.118	1.00	0.00	D	C
ATOM	15198	O	PRO A 244	-25.155	-28.880	-48.445	1.00	0.00	D	O
ATOM	15199	N	GLY A 245	-25.587	-26.657	-48.315	1.00	0.00	D	N
ATOM	15200	CA	GLY A 245	-25.209	-25.484	-49.079	1.00	0.00	D	C
ATOM	15201	C	GLY A 245	-25.359	-25.856	-50.526	1.00	0.00	D	C
ATOM	15202	O	GLY A 245	-24.843	-26.894	-50.941	1.00	0.00	D	O
ATOM	15203	N	PHE A 246	-25.981	-25.003	-51.386	1.00	0.00	D	N
ATOM	15204	CA	PHE A 246	-26.316	-23.614	-51.173	1.00	0.00	D	C
ATOM	15205	CB	PHE A 246	-25.348	-22.739	-51.996	1.00	0.00	D	C
ATOM	15206	CG	PHE A 246	-25.911	-21.400	-52.323	1.00	0.00	D	C
ATOM	15207	CD1	PHE A 246	-25.893	-20.345	-51.440	1.00	0.00	D	C
ATOM	15208	CE1	PHE A 246	-26.420	-19.127	-51.808	1.00	0.00	D	C
ATOM	15209	CZ	PHE A 246	-26.962	-18.952	-53.061	1.00	0.00	D	C
ATOM	15210	CD2	PHE A 246	-26.447	-21.211	-53.577	1.00	0.00	D	C
ATOM	15211	CE2	PHE A 246	-26.975	-19.999	-53.952	1.00	0.00	D	C
ATOM	15212	C	PHE A 246	-27.739	-23.286	-51.543	1.00	0.00	D	C
ATOM	15213	O	PHE A 246	-28.359	-23.959	-52.367	1.00	0.00	D	O
ATOM	15214	N	TYR A 247	-28.261	-22.178	-50.952	1.00	0.00	D	N
ATOM	15215	CA	TYR A 247	-29.660	-21.831	-51.014	1.00	0.00	D	C
ATOM	15216	CB	TYR A 247	-30.193	-21.638	-49.586	1.00	0.00	D	C
ATOM	15217	CG	TYR A 247	-31.481	-20.906	-49.590	1.00	0.00	D	C
ATOM	15218	CD1	TYR A 247	-32.686	-21.553	-49.735	1.00	0.00	D	C

ATOM	15219	CE1 TYR A 247	-33.856	-20.827	-49.723	1.00	0.00	D	C
ATOM	15220	CZ TYR A 247	-33.817	-19.459	-49.564	1.00	0.00	D	C
ATOM	15221	OH TYR A 247	-35.006	-18.707	-49.546	1.00	0.00	D	O
ATOM	15222	CD2 TYR A 247	-31.455	-19.544	-49.433	1.00	0.00	D	C
ATOM	15223	CE2 TYR A 247	-32.614	-18.816	-49.418	1.00	0.00	D	C
ATOM	15224	C TYR A 247	-29.945	-20.592	-51.828	1.00	0.00	D	C
ATOM	15225	O TYR A 247	-29.577	-19.477	-51.473	1.00	0.00	D	O
ATOM	15226	N PHE A 248	-30.516	-20.823	-53.025	1.00	0.00	D	N
ATOM	15227	CA PHE A 248	-31.047	-19.942	-54.038	1.00	0.00	D	C
ATOM	15228	CB PHE A 248	-30.660	-20.385	-55.451	1.00	0.00	D	C
ATOM	15229	CG PHE A 248	-31.092	-21.792	-55.616	1.00	0.00	D	C
ATOM	15230	CD1 PHE A 248	-30.276	-22.811	-55.190	1.00	0.00	D	C
ATOM	15231	CE1 PHE A 248	-30.664	-24.121	-55.341	1.00	0.00	D	C
ATOM	15232	CZ PHE A 248	-31.877	-24.411	-55.919	1.00	0.00	D	C
ATOM	15233	CD2 PHE A 248	-32.309	-22.088	-56.186	1.00	0.00	D	C
ATOM	15234	CE2 PHE A 248	-32.700	-23.396	-56.341	1.00	0.00	D	C
ATOM	15235	C PHE A 248	-32.521	-19.769	-53.934	1.00	0.00	D	C
ATOM	15236	O PHE A 248	-33.166	-19.213	-54.821	1.00	0.00	D	O
ATOM	15237	N GLY A 249	-33.074	-20.546	-53.013	1.00	0.00	D	N
ATOM	15238	CA GLY A 249	-34.417	-20.686	-52.609	1.00	0.00	D	C
ATOM	15239	C GLY A 249	-35.218	-21.413	-53.638	1.00	0.00	D	C
ATOM	15240	O GLY A 249	-35.883	-20.768	-54.440	1.00	0.00	D	O
ATOM	15241	N GLU A 250	-35.000	-22.733	-53.759	1.00	0.00	D	N
ATOM	15242	CA GLU A 250	-35.921	-23.750	-54.216	1.00	0.00	D	C
ATOM	15243	CB GLU A 250	-37.034	-23.962	-53.179	1.00	0.00	D	C
ATOM	15244	CG GLU A 250	-36.486	-24.352	-51.806	1.00	0.00	D	C
ATOM	15245	CD GLU A 250	-37.657	-24.540	-50.854	1.00	0.00	D	C
ATOM	15246	OE1 GLU A 250	-38.819	-24.533	-51.343	1.00	0.00	D	O
ATOM	15247	OE2 GLU A 250	-37.407	-24.702	-49.631	1.00	0.00	D	O
ATOM	15248	C GLU A 250	-36.602	-23.662	-55.564	1.00	0.00	D	C
ATOM	15249	O GLU A 250	-36.919	-24.711	-56.127	1.00	0.00	D	O
ATOM	15250	N LEU A 251	-36.781	-22.480	-56.179	1.00	0.00	D	N
ATOM	15251	CA LEU A 251	-37.591	-22.409	-57.377	1.00	0.00	D	C
ATOM	15252	CB LEU A 251	-38.658	-21.298	-57.332	1.00	0.00	D	C
ATOM	15253	CG LEU A 251	-39.784	-21.487	-56.299	1.00	0.00	D	C
ATOM	15254	CD1 LEU A 251	-40.748	-20.291	-56.329	1.00	0.00	D	C
ATOM	15255	CD2 LEU A 251	-40.529	-22.816	-56.502	1.00	0.00	D	C
ATOM	15256	C LEU A 251	-36.698	-22.041	-58.513	1.00	0.00	D	C

ATOM 15257 O LEU A 251 -35.819 -21.198 -58.356 1.00 0.00 D O
ATOM 15258 N PRO A 252 -36.954 -22.599 -59.670 1.00 0.00 D N
ATOM 15259 CD PRO A 252 -37.870 -23.719 -59.805 1.00 0.00 D C
ATOM 15260 CA PRO A 252 -36.131 -22.415 -60.831 1.00 0.00 D C
ATOM 15261 CB PRO A 252 -36.818 -23.202 -61.945 1.00 0.00 D C
ATOM 15262 CG PRO A 252 -37.558 -24.323 -61.187 1.00 0.00 D C
ATOM 15263 C PRO A 252 -35.837 -20.979 -61.147 1.00 0.00 D C
ATOM 15264 O PRO A 252 -34.682 -20.670 -61.427 1.00 0.00 D O
ATOM 15265 N LEU A 253 -36.837 -20.084 -61.089 1.00 0.00 D N
ATOM 15266 CA LEU A 253 -36.584 -18.698 -61.369 1.00 0.00 D C
ATOM 15267 CB LEU A 253 -37.841 -17.821 -61.252 1.00 0.00 D C
ATOM 15268 CG LEU A 253 -37.584 -16.330 -61.552 1.00 0.00 D C
ATOM 15269 CD1 LEU A 253 -37.290 -16.079 -63.036 1.00 0.00 D C
ATOM 15270 CD2 LEU A 253 -38.718 -15.450 -61.023 1.00 0.00 D C
ATOM 15271 C LEU A 253 -35.610 -18.182 -60.349 1.00 0.00 D C
ATOM 15272 O LEU A 253 -34.663 -17.474 -60.685 1.00 0.00 D O
ATOM 15273 N SER A 254 -35.811 -18.548 -59.067 1.00 0.00 D N
ATOM 15274 CA SER A 254 -34.986 -18.048 -58.001 1.00 0.00 D C
ATOM 15275 CB SER A 254 -35.426 -18.577 -56.627 1.00 0.00 D C
ATOM 15276 OG SER A 254 -36.734 -18.106 -56.333 1.00 0.00 D O
ATOM 15277 C SER A 254 -33.578 -18.492 -58.235 1.00 0.00 D C
ATOM 15278 O SER A 254 -32.638 -17.711 -58.096 1.00 0.00 D O
ATOM 15279 N LEU A 255 -33.409 -19.768 -58.612 1.00 0.00 D N
ATOM 15280 CA LEU A 255 -32.114 -20.322 -58.876 1.00 0.00 D C
ATOM 15281 CB LEU A 255 -32.204 -21.804 -59.298 1.00 0.00 D C
ATOM 15282 CG LEU A 255 -30.844 -22.464 -59.599 1.00 0.00 D C
ATOM 15283 CD1 LEU A 255 -29.952 -22.493 -58.352 1.00 0.00 D C
ATOM 15284 CD2 LEU A 255 -31.017 -23.863 -60.220 1.00 0.00 D C
ATOM 15285 C LEU A 255 -31.491 -19.570 -60.009 1.00 0.00 D C
ATOM 15286 O LEU A 255 -30.346 -19.127 -59.925 1.00 0.00 D O
ATOM 15287 N ALA A 256 -32.262 -19.345 -61.088 1.00 0.00 D N
ATOM 15288 CA ALA A 256 -31.717 -18.743 -62.275 1.00 0.00 D C
ATOM 15289 CB ALA A 256 -32.754 -18.593 -63.401 1.00 0.00 D C
ATOM 15290 C ALA A 256 -31.199 -17.375 -61.947 1.00 0.00 D C
ATOM 15291 O ALA A 256 -30.182 -16.949 -62.492 1.00 0.00 D O
ATOM 15292 N ALA A 257 -31.934 -16.622 -61.105 1.00 0.00 D N
ATOM 15293 CA ALA A 257 -31.521 -15.296 -60.735 1.00 0.00 D C
ATOM 15294 CB ALA A 257 -32.641 -14.531 -60.002 1.00 0.00 D C

ATOM	15295	C	ALA A 257	-30.304	-15.302	-59.844	1.00	0.00	D	C
ATOM	15296	O	ALA A 257	-29.326	-14.604	-60.117	1.00	0.00	D	O
ATOM	15297	N	CYS A 258	-30.305	-16.146	-58.788	1.00	0.00	D	N
ATOM	15298	CA	CYS A 258	-29.275	-16.159	-57.780	1.00	0.00	D	C
ATOM	15299	CB	CYS A 258	-29.549	-17.161	-56.642	1.00	0.00	D	C
ATOM	15300	SG	CYS A 258	-30.918	-16.643	-55.563	1.00	0.00	D	S
ATOM	15301	C	CYS A 258	-27.965	-16.527	-58.394	1.00	0.00	D	C
ATOM	15302	O	CYS A 258	-26.905	-16.146	-57.903	1.00	0.00	D	O
ATOM	15303	N	THR A 259	-28.020	-17.360	-59.440	1.00	0.00	D	N
ATOM	15304	CA	THR A 259	-26.908	-17.818	-60.223	1.00	0.00	D	C
ATOM	15305	CB	THR A 259	-27.202	-19.076	-60.991	1.00	0.00	D	C
ATOM	15306	OG1	THR A 259	-28.262	-18.864	-61.909	1.00	0.00	D	O
ATOM	15307	CG2	THR A 259	-27.578	-20.181	-59.988	1.00	0.00	D	C
ATOM	15308	C	THR A 259	-26.473	-16.759	-61.187	1.00	0.00	D	C
ATOM	15309	O	THR A 259	-25.477	-16.931	-61.889	1.00	0.00	D	O
ATOM	15310	N	ASN A 260	-27.252	-15.666	-61.311	1.00	0.00	D	N
ATOM	15311	CA	ASN A 260	-26.947	-14.600	-62.219	1.00	0.00	D	C
ATOM	15312	CB	ASN A 260	-25.598	-13.915	-61.925	1.00	0.00	D	C
ATOM	15313	CG	ASN A 260	-25.645	-12.535	-62.561	1.00	0.00	D	C
ATOM	15314	OD1	ASN A 260	-26.678	-11.868	-62.526	1.00	0.00	D	O
ATOM	15315	ND2	ASN A 260	-24.506	-12.097	-63.161	1.00	0.00	D	N
ATOM	15316	C	ASN A 260	-26.971	-15.092	-63.633	1.00	0.00	D	C
ATOM	15317	O	ASN A 260	-25.996	-14.975	-64.376	1.00	0.00	D	O
ATOM	15318	N	GLN A 261	-28.095	-15.715	-64.034	1.00	0.00	D	N
ATOM	15319	CA	GLN A 261	-28.218	-16.085	-65.413	1.00	0.00	D	C
ATOM	15320	CB	GLN A 261	-27.999	-17.589	-65.665	1.00	0.00	D	C
ATOM	15321	CG	GLN A 261	-28.834	-18.543	-64.819	1.00	0.00	D	C
ATOM	15322	CD	GLN A 261	-28.176	-19.912	-64.959	1.00	0.00	D	C
ATOM	15323	OE1	GLN A 261	-27.632	-20.245	-66.011	1.00	0.00	D	O
ATOM	15324	NE2	GLN A 261	-28.214	-20.725	-63.871	1.00	0.00	D	N
ATOM	15325	C	GLN A 261	-29.512	-15.538	-65.934	1.00	0.00	D	C
ATOM	15326	O	GLN A 261	-30.566	-16.173	-65.898	1.00	0.00	D	O
ATOM	15327	N	LEU A 262	-29.418	-14.306	-66.478	1.00	0.00	D	N
ATOM	15328	CA	LEU A 262	-30.554	-13.526	-66.873	1.00	0.00	D	C
ATOM	15329	CB	LEU A 262	-30.209	-12.092	-67.291	1.00	0.00	D	C
ATOM	15330	CG	LEU A 262	-31.465	-11.302	-67.693	1.00	0.00	D	C
ATOM	15331	CD1	LEU A 262	-32.419	-11.125	-66.500	1.00	0.00	D	C
ATOM	15332	CD2	LEU A 262	-31.101	-9.975	-68.368	1.00	0.00	D	C

ATOM	15333	C	LEU A 262	-31.326	-14.137	-67.993	1.00	0.00	D	C
ATOM	15334	O	LEU A 262	-32.555	-14.135	-67.955	1.00	0.00	D	O
ATOM	15335	N	GLY A 263	-30.647	-14.699	-69.012	1.00	0.00	D	N
ATOM	15336	CA	GLY A 263	-31.357	-15.167	-70.169	1.00	0.00	D	C
ATOM	15337	C	GLY A 263	-32.360	-16.195	-69.755	1.00	0.00	D	C
ATOM	15338	O	GLY A 263	-33.485	-16.211	-70.252	1.00	0.00	D	O
ATOM	15339	N	ILE A 264	-31.966	-17.097	-68.842	1.00	0.00	D	N
ATOM	15340	CA	ILE A 264	-32.849	-18.124	-68.372	1.00	0.00	D	C
ATOM	15341	CB	ILE A 264	-32.159	-19.198	-67.578	1.00	0.00	D	C
ATOM	15342	CG2	ILE A 264	-33.234	-20.151	-67.031	1.00	0.00	D	C
ATOM	15343	CG1	ILE A 264	-31.122	-19.909	-68.466	1.00	0.00	D	C
ATOM	15344	CD	ILE A 264	-30.293	-20.958	-67.726	1.00	0.00	D	C
ATOM	15345	C	ILE A 264	-33.949	-17.511	-67.560	1.00	0.00	D	C
ATOM	15346	O	ILE A 264	-35.085	-17.982	-67.592	1.00	0.00	D	O
ATOM	15347	N	VAL A 265	-33.645	-16.453	-66.776	1.00	0.00	D	N
ATOM	15348	CA	VAL A 265	-34.692	-15.830	-66.018	1.00	0.00	D	C
ATOM	15349	CB	VAL A 265	-34.231	-14.616	-65.252	1.00	0.00	D	C
ATOM	15350	CG1	VAL A 265	-35.460	-13.897	-64.666	1.00	0.00	D	C
ATOM	15351	CG2	VAL A 265	-33.232	-15.065	-64.175	1.00	0.00	D	C
ATOM	15352	C	VAL A 265	-35.739	-15.374	-66.989	1.00	0.00	D	C
ATOM	15353	O	VAL A 265	-36.932	-15.592	-66.770	1.00	0.00	D	O
ATOM	15354	N	LYS A 266	-35.317	-14.745	-68.104	1.00	0.00	D	N
ATOM	15355	CA	LYS A 266	-36.264	-14.259	-69.069	1.00	0.00	D	C
ATOM	15356	CB	LYS A 266	-35.606	-13.480	-70.224	1.00	0.00	D	C
ATOM	15357	CG	LYS A 266	-35.055	-12.113	-69.803	1.00	0.00	D	C
ATOM	15358	CD	LYS A 266	-34.194	-11.428	-70.867	1.00	0.00	D	C
ATOM	15359	CE	LYS A 266	-33.741	-10.017	-70.476	1.00	0.00	D	C
ATOM	15360	NZ	LYS A 266	-32.949	-9.412	-71.572	1.00	0.00	D	N
ATOM	15361	C	LYS A 266	-37.022	-15.408	-69.661	1.00	0.00	D	C
ATOM	15362	O	LYS A 266	-38.248	-15.382	-69.759	1.00	0.00	D	O
ATOM	15363	N	PHE A 267	-36.306	-16.484	-70.018	1.00	0.00	D	N
ATOM	15364	CA	PHE A 267	-36.893	-17.629	-70.653	1.00	0.00	D	C
ATOM	15365	CB	PHE A 267	-35.826	-18.714	-70.918	1.00	0.00	D	C
ATOM	15366	CG	PHE A 267	-36.447	-19.925	-71.524	1.00	0.00	D	C
ATOM	15367	CD1	PHE A 267	-36.961	-20.917	-70.720	1.00	0.00	D	C
ATOM	15368	CE1	PHE A 267	-37.530	-22.042	-71.269	1.00	0.00	D	C
ATOM	15369	CZ	PHE A 267	-37.589	-22.186	-72.634	1.00	0.00	D	C
ATOM	15370	CD2	PHE A 267	-36.503	-20.080	-72.891	1.00	0.00	D	C

ATOM	15371	CE2	PHE	A	267	-37.075	-21.203	-73.444	1.00	0.00	D	C
ATOM	15372	C	PHE	A	267	-37.939	-18.198	-69.748	1.00	0.00	D	C
ATOM	15373	O	PHE	A	267	-38.995	-18.628	-70.208	1.00	0.00	D	O
ATOM	15374	N	LEU	A	268	-37.669	-18.242	-68.430	1.00	0.00	D	N
ATOM	15375	CA	LEU	A	268	-38.640	-18.835	-67.553	1.00	0.00	D	C
ATOM	15376	CB	LEU	A	268	-38.161	-18.922	-66.092	1.00	0.00	D	C
ATOM	15377	CG	LEU	A	268	-36.987	-19.894	-65.867	1.00	0.00	D	C
ATOM	15378	CD1	LEU	A	268	-36.569	-19.926	-64.388	1.00	0.00	D	C
ATOM	15379	CD2	LEU	A	268	-37.300	-21.297	-66.414	1.00	0.00	D	C
ATOM	15380	C	LEU	A	268	-39.911	-18.035	-67.563	1.00	0.00	D	C
ATOM	15381	O	LEU	A	268	-40.999	-18.588	-67.698	1.00	0.00	D	O
ATOM	15382	N	LEU	A	269	-39.800	-16.704	-67.411	1.00	0.00	D	N
ATOM	15383	CA	LEU	A	269	-40.949	-15.847	-67.330	1.00	0.00	D	C
ATOM	15384	CB	LEU	A	269	-40.575	-14.427	-66.878	1.00	0.00	D	C
ATOM	15385	CG	LEU	A	269	-40.035	-14.350	-65.435	1.00	0.00	D	C
ATOM	15386	CD1	LEU	A	269	-39.683	-12.905	-65.056	1.00	0.00	D	C
ATOM	15387	CD2	LEU	A	269	-41.008	-14.988	-64.429	1.00	0.00	D	C
ATOM	15388	C	LEU	A	269	-41.687	-15.724	-68.639	1.00	0.00	D	C
ATOM	15389	O	LEU	A	269	-42.914	-15.652	-68.657	1.00	0.00	D	O
ATOM	15390	N	GLN	A	270	-40.942	-15.594	-69.755	1.00	0.00	D	N
ATOM	15391	CA	GLN	A	270	-41.468	-15.359	-71.078	1.00	0.00	D	C
ATOM	15392	CB	GLN	A	270	-40.459	-14.625	-71.974	1.00	0.00	D	C
ATOM	15393	CG	GLN	A	270	-40.205	-13.202	-71.469	1.00	0.00	D	C
ATOM	15394	CD	GLN	A	270	-39.201	-12.529	-72.389	1.00	0.00	D	C
ATOM	15395	OE1	GLN	A	270	-38.799	-13.087	-73.408	1.00	0.00	D	O
ATOM	15396	NE2	GLN	A	270	-38.787	-11.291	-72.016	1.00	0.00	D	N
ATOM	15397	C	GLN	A	270	-42.025	-16.542	-71.841	1.00	0.00	D	C
ATOM	15398	O	GLN	A	270	-42.973	-16.374	-72.606	1.00	0.00	D	O
ATOM	15399	N	ASN	A	271	-41.471	-17.762	-71.669	1.00	0.00	D	N
ATOM	15400	CA	ASN	A	271	-41.771	-18.871	-72.553	1.00	0.00	D	C
ATOM	15401	CB	ASN	A	271	-41.043	-20.191	-72.220	1.00	0.00	D	C
ATOM	15402	CG	ASN	A	271	-41.590	-20.762	-70.922	1.00	0.00	D	C
ATOM	15403	OD1	ASN	A	271	-42.435	-21.655	-70.941	1.00	0.00	D	O
ATOM	15404	ND2	ASN	A	271	-41.094	-20.251	-69.768	1.00	0.00	D	N
ATOM	15405	C	ASN	A	271	-43.237	-19.173	-72.673	1.00	0.00	D	C
ATOM	15406	O	ASN	A	271	-44.053	-18.834	-71.819	1.00	0.00	D	O
ATOM	15407	N	SER	A	272	-43.592	-19.792	-73.824	1.00	0.00	D	N
ATOM	15408	CA	SER	A	272	-44.929	-20.149	-74.209	1.00	0.00	D	C

ATOM	15409	CB	SER	A	272	-45.005	-20.605	-75.673	1.00	0.00	D	C
ATOM	15410	OG	SER	A	272	-44.614	-19.547	-76.535	1.00	0.00	D	O
ATOM	15411	C	SER	A	272	-45.463	-21.286	-73.389	1.00	0.00	D	C
ATOM	15412	O	SER	A	272	-46.655	-21.321	-73.079	1.00	0.00	D	O
ATOM	15413	N	TRP	A	273	-44.603	-22.265	-73.058	1.00	0.00	D	N
ATOM	15414	CA	TRP	A	273	-45.054	-23.467	-72.407	1.00	0.00	D	C
ATOM	15415	CB	TRP	A	273	-43.969	-24.547	-72.364	1.00	0.00	D	C
ATOM	15416	CG	TRP	A	273	-43.650	-25.046	-73.751	1.00	0.00	D	C
ATOM	15417	CD1	TRP	A	273	-42.725	-24.578	-74.640	1.00	0.00	D	C
ATOM	15418	NE1	TRP	A	273	-42.796	-25.300	-75.807	1.00	0.00	D	N
ATOM	15419	CE2	TRP	A	273	-43.781	-26.257	-75.676	1.00	0.00	D	C
ATOM	15420	CD2	TRP	A	273	-44.333	-26.123	-74.401	1.00	0.00	D	C
ATOM	15421	CE3	TRP	A	273	-45.344	-26.943	-73.974	1.00	0.00	D	C
ATOM	15422	CZ3	TRP	A	273	-45.794	-27.901	-74.852	1.00	0.00	D	C
ATOM	15423	CZ2	TRP	A	273	-44.229	-27.210	-76.543	1.00	0.00	D	C
ATOM	15424	CH2	TRP	A	273	-45.246	-28.032	-76.114	1.00	0.00	D	C
ATOM	15425	C	TRP	A	273	-45.558	-23.226	-71.021	1.00	0.00	D	C
ATOM	15426	O	TRP	A	273	-46.689	-23.592	-70.704	1.00	0.00	D	O
ATOM	15427	N	GLN	A	274	-44.737	-22.624	-70.142	1.00	0.00	D	N
ATOM	15428	CA	GLN	A	274	-45.234	-22.350	-68.825	1.00	0.00	D	C
ATOM	15429	CB	GLN	A	274	-45.071	-23.533	-67.853	1.00	0.00	D	C
ATOM	15430	CG	GLN	A	274	-45.673	-23.290	-66.467	1.00	0.00	D	C
ATOM	15431	CD	GLN	A	274	-45.585	-24.588	-65.674	1.00	0.00	D	C
ATOM	15432	OE1	GLN	A	274	-45.077	-25.599	-66.158	1.00	0.00	D	O
ATOM	15433	NE2	GLN	A	274	-46.106	-24.566	-64.418	1.00	0.00	D	N
ATOM	15434	C	GLN	A	274	-44.452	-21.190	-68.301	1.00	0.00	D	C
ATOM	15435	O	GLN	A	274	-43.252	-21.297	-68.055	1.00	0.00	D	O
ATOM	15436	N	THR	A	275	-45.128	-20.046	-68.106	1.00	0.00	D	N
ATOM	15437	CA	THR	A	275	-44.442	-18.886	-67.627	1.00	0.00	D	C
ATOM	15438	CB	THR	A	275	-45.208	-17.615	-67.840	1.00	0.00	D	C
ATOM	15439	OG1	THR	A	275	-46.441	-17.661	-67.136	1.00	0.00	D	O
ATOM	15440	CG2	THR	A	275	-45.466	-17.442	-69.348	1.00	0.00	D	C
ATOM	15441	C	THR	A	275	-44.275	-19.063	-66.156	1.00	0.00	D	C
ATOM	15442	O	THR	A	275	-45.150	-19.614	-65.488	1.00	0.00	D	O
ATOM	15443	N	ALA	A	276	-43.132	-18.605	-65.616	1.00	0.00	D	N
ATOM	15444	CA	ALA	A	276	-42.903	-18.748	-64.213	1.00	0.00	D	C
ATOM	15445	CB	ALA	A	276	-41.439	-18.498	-63.799	1.00	0.00	D	C
ATOM	15446	C	ALA	A	276	-43.761	-17.763	-63.485	1.00	0.00	D	C

ATOM	15447	O	ALA A 276	-44.062	-16.685	-63.995	1.00	0.00	D	O
ATOM	15448	N	ASP A 277	-44.197	-18.142	-62.267	1.00	0.00	D	N
ATOM	15449	CA	ASP A 277	-44.949	-17.253	-61.433	1.00	0.00	D	C
ATOM	15450	CB	ASP A 277	-45.723	-17.977	-60.310	1.00	0.00	D	C
ATOM	15451	CG	ASP A 277	-46.509	-16.967	-59.478	1.00	0.00	D	C
ATOM	15452	OD1	ASP A 277	-46.328	-15.736	-59.676	1.00	0.00	D	O
ATOM	15453	OD2	ASP A 277	-47.308	-17.427	-58.618	1.00	0.00	D	O
ATOM	15454	C	ASP A 277	-43.912	-16.398	-60.780	1.00	0.00	D	C
ATOM	15455	O	ASP A 277	-43.150	-16.857	-59.933	1.00	0.00	D	O
ATOM	15456	N	ILE A 278	-43.874	-15.113	-61.165	1.00	0.00	D	N
ATOM	15457	CA	ILE A 278	-42.879	-14.194	-60.699	1.00	0.00	D	C
ATOM	15458	CB	ILE A 278	-42.975	-12.852	-61.364	1.00	0.00	D	C
ATOM	15459	CG2	ILE A 278	-44.295	-12.191	-60.923	1.00	0.00	D	C
ATOM	15460	CG1	ILE A 278	-41.720	-12.013	-61.064	1.00	0.00	D	C
ATOM	15461	CD	ILE A 278	-40.449	-12.562	-61.706	1.00	0.00	D	C
ATOM	15462	C	ILE A 278	-42.973	-13.985	-59.212	1.00	0.00	D	C
ATOM	15463	O	ILE A 278	-41.973	-13.672	-58.571	1.00	0.00	D	O
ATOM	15464	N	SER A 279	-44.195	-14.020	-58.648	1.00	0.00	D	N
ATOM	15465	CA	SER A 279	-44.441	-13.768	-57.249	1.00	0.00	D	C
ATOM	15466	CB	SER A 279	-45.833	-13.157	-57.007	1.00	0.00	D	C
ATOM	15467	OG	SER A 279	-46.846	-14.083	-57.370	1.00	0.00	D	O
ATOM	15468	C	SER A 279	-44.319	-14.964	-56.343	1.00	0.00	D	C
ATOM	15469	O	SER A 279	-44.508	-14.822	-55.137	1.00	0.00	D	O
ATOM	15470	N	ALA A 280	-44.025	-16.174	-56.853	1.00	0.00	D	N
ATOM	15471	CA	ALA A 280	-44.064	-17.326	-55.986	1.00	0.00	D	C
ATOM	15472	CB	ALA A 280	-43.724	-18.643	-56.705	1.00	0.00	D	C
ATOM	15473	C	ALA A 280	-43.107	-17.179	-54.838	1.00	0.00	D	C
ATOM	15474	O	ALA A 280	-42.080	-16.510	-54.931	1.00	0.00	D	O
ATOM	15475	N	ARG A 281	-43.463	-17.797	-53.690	1.00	0.00	D	N
ATOM	15476	CA	ARG A 281	-42.617	-17.762	-52.531	1.00	0.00	D	C
ATOM	15477	CB	ARG A 281	-43.245	-17.028	-51.333	1.00	0.00	D	C
ATOM	15478	CG	ARG A 281	-44.652	-17.499	-50.972	1.00	0.00	D	C
ATOM	15479	CD	ARG A 281	-45.716	-16.902	-51.900	1.00	0.00	D	C
ATOM	15480	NE	ARG A 281	-47.061	-17.203	-51.333	1.00	0.00	D	N
ATOM	15481	CZ	ARG A 281	-47.643	-16.334	-50.456	1.00	0.00	D	C
ATOM	15482	NH1	ARG A 281	-46.988	-15.193	-50.086	1.00	0.00	D	N
ATOM	15483	NH2	ARG A 281	-48.883	-16.600	-49.949	1.00	0.00	D	N
ATOM	15484	C	ARG A 281	-42.224	-19.161	-52.158	1.00	0.00	D	C

ATOM	15485	O	ARG A 281	-43.000	-20.101	-52.302	1.00	0.00	D	O
ATOM	15486	N	ASP A 282	-40.965	-19.326	-51.691	1.00	0.00	D	N
ATOM	15487	CA	ASP A 282	-40.466	-20.627	-51.337	1.00	0.00	D	C
ATOM	15488	CB	ASP A 282	-38.947	-20.804	-51.502	1.00	0.00	D	C
ATOM	15489	CG	ASP A 282	-38.179	-19.836	-50.618	1.00	0.00	D	C
ATOM	15490	OD1	ASP A 282	-38.763	-19.256	-49.664	1.00	0.00	D	O
ATOM	15491	OD2	ASP A 282	-36.965	-19.672	-50.905	1.00	0.00	D	O
ATOM	15492	C	ASP A 282	-40.893	-20.955	-49.940	1.00	0.00	D	C
ATOM	15493	O	ASP A 282	-41.679	-20.230	-49.334	1.00	0.00	D	O
ATOM	15494	N	SER A 283	-40.361	-22.062	-49.381	1.00	0.00	D	N
ATOM	15495	CA	SER A 283	-40.802	-22.555	-48.106	1.00	0.00	D	C
ATOM	15496	CB	SER A 283	-39.969	-23.747	-47.611	1.00	0.00	D	C
ATOM	15497	OG	SER A 283	-40.128	-24.850	-48.493	1.00	0.00	D	O
ATOM	15498	C	SER A 283	-40.678	-21.476	-47.069	1.00	0.00	D	C
ATOM	15499	O	SER A 283	-41.531	-21.350	-46.190	1.00	0.00	D	O
ATOM	15500	N	VAL A 284	-39.594	-20.692	-47.155	1.00	0.00	D	N
ATOM	15501	CA	VAL A 284	-39.261	-19.609	-46.272	1.00	0.00	D	C
ATOM	15502	CB	VAL A 284	-37.871	-19.095	-46.516	1.00	0.00	D	C
ATOM	15503	CG1	VAL A 284	-37.636	-17.849	-45.645	1.00	0.00	D	C
ATOM	15504	CG2	VAL A 284	-36.875	-20.237	-46.249	1.00	0.00	D	C
ATOM	15505	C	VAL A 284	-40.214	-18.462	-46.457	1.00	0.00	D	C
ATOM	15506	O	VAL A 284	-40.376	-17.639	-45.558	1.00	0.00	D	O
ATOM	15507	N	GLY A 285	-40.845	-18.338	-47.641	1.00	0.00	D	N
ATOM	15508	CA	GLY A 285	-41.725	-17.228	-47.881	1.00	0.00	D	C
ATOM	15509	C	GLY A 285	-40.991	-16.270	-48.762	1.00	0.00	D	C
ATOM	15510	O	GLY A 285	-41.521	-15.236	-49.163	1.00	0.00	D	O
ATOM	15511	N	ASN A 286	-39.732	-16.608	-49.094	1.00	0.00	D	N
ATOM	15512	CA	ASN A 286	-38.929	-15.730	-49.893	1.00	0.00	D	C
ATOM	15513	CB	ASN A 286	-37.417	-15.997	-49.765	1.00	0.00	D	C
ATOM	15514	CG	ASN A 286	-36.980	-15.561	-48.374	1.00	0.00	D	C
ATOM	15515	OD1	ASN A 286	-37.656	-14.774	-47.714	1.00	0.00	D	O
ATOM	15516	ND2	ASN A 286	-35.808	-16.080	-47.920	1.00	0.00	D	N
ATOM	15517	C	ASN A 286	-39.275	-15.839	-51.340	1.00	0.00	D	C
ATOM	15518	O	ASN A 286	-39.515	-16.923	-51.872	1.00	0.00	D	O
ATOM	15519	N	THR A 287	-39.315	-14.671	-52.010	1.00	0.00	D	N
ATOM	15520	CA	THR A 287	-39.514	-14.603	-53.426	1.00	0.00	D	C
ATOM	15521	CB	THR A 287	-40.360	-13.439	-53.855	1.00	0.00	D	C
ATOM	15522	OG1	THR A 287	-39.730	-12.221	-53.494	1.00	0.00	D	O

ATOM	15523	CG2 THR A 287	-41.740	-13.552	-53.179	1.00	0.00	D	C
ATOM	15524	C THR A 287	-38.147	-14.432	-54.015	1.00	0.00	D	C
ATOM	15525	O THR A 287	-37.148	-14.434	-53.292	1.00	0.00	D	O
ATOM	15526	N VAL A 288	-38.073	-14.270	-55.351	1.00	0.00	D	N
ATOM	15527	CA VAL A 288	-36.803	-14.131	-56.009	1.00	0.00	D	C
ATOM	15528	CB VAL A 288	-36.896	-13.993	-57.505	1.00	0.00	D	C
ATOM	15529	CG1 VAL A 288	-37.418	-15.313	-58.086	1.00	0.00	D	C
ATOM	15530	CG2 VAL A 288	-37.776	-12.784	-57.852	1.00	0.00	D	C
ATOM	15531	C VAL A 288	-36.115	-12.920	-55.470	1.00	0.00	D	C
ATOM	15532	O VAL A 288	-34.890	-12.905	-55.345	1.00	0.00	D	O
ATOM	15533	N LEU A 289	-36.884	-11.858	-55.171	1.00	0.00	D	N
ATOM	15534	CA LEU A 289	-36.297	-10.670	-54.623	1.00	0.00	D	C
ATOM	15535	CB LEU A 289	-37.324	-9.539	-54.443	1.00	0.00	D	C
ATOM	15536	CG LEU A 289	-37.975	-9.101	-55.773	1.00	0.00	D	C
ATOM	15537	CD1 LEU A 289	-38.899	-7.887	-55.577	1.00	0.00	D	C
ATOM	15538	CD2 LEU A 289	-36.922	-8.889	-56.873	1.00	0.00	D	C
ATOM	15539	C LEU A 289	-35.714	-11.011	-53.280	1.00	0.00	D	C
ATOM	15540	O LEU A 289	-34.588	-10.627	-52.966	1.00	0.00	D	O
ATOM	15541	N HSD A 290	-36.452	-11.771	-52.445	1.00	0.00	D	N
ATOM	15542	CA HSD A 290	-35.926	-12.109	-51.151	1.00	0.00	D	C
ATOM	15543	CB HSD A 290	-36.898	-12.927	-50.283	1.00	0.00	D	C
ATOM	15544	ND1 HSD A 290	-38.063	-11.099	-48.958	1.00	0.00	D	N
ATOM	15545	CG HSD A 290	-38.103	-12.151	-49.845	1.00	0.00	D	C
ATOM	15546	CE1 HSD A 290	-39.341	-10.670	-48.799	1.00	0.00	D	C
ATOM	15547	NE2 HSD A 290	-40.196	-11.371	-49.519	1.00	0.00	D	N
ATOM	15548	CD2 HSD A 290	-39.414	-12.304	-50.179	1.00	0.00	D	C
ATOM	15549	C HSD A 290	-34.677	-12.936	-51.306	1.00	0.00	D	C
ATOM	15550	O HSD A 290	-33.673	-12.696	-50.636	1.00	0.00	D	O
ATOM	15551	N ALA A 291	-34.694	-13.924	-52.218	1.00	0.00	D	N
ATOM	15552	CA ALA A 291	-33.575	-14.819	-52.376	1.00	0.00	D	C
ATOM	15553	CB ALA A 291	-33.811	-15.894	-53.451	1.00	0.00	D	C
ATOM	15554	C ALA A 291	-32.349	-14.049	-52.774	1.00	0.00	D	C
ATOM	15555	O ALA A 291	-31.250	-14.346	-52.304	1.00	0.00	D	O
ATOM	15556	N LEU A 292	-32.503	-13.040	-53.653	1.00	0.00	D	N
ATOM	15557	CA LEU A 292	-31.394	-12.260	-54.130	1.00	0.00	D	C
ATOM	15558	CB LEU A 292	-31.821	-11.198	-55.156	1.00	0.00	D	C
ATOM	15559	CG LEU A 292	-32.201	-11.790	-56.525	1.00	0.00	D	C
ATOM	15560	CD1 LEU A 292	-32.627	-10.690	-57.510	1.00	0.00	D	C

ATOM 15561 CD2 LEU A 292 -31.052 -12.652 -57.079 1.00 0.00 D C
ATOM 15562 C LEU A 292 -30.754 -11.554 -52.976 1.00 0.00 D C
ATOM 15563 O LEU A 292 -29.530 -11.495 -52.875 1.00 0.00 D O
ATOM 15564 N VAL A 293 -31.575 -11.000 -52.065 1.00 0.00 D N
ATOM 15565 CA VAL A 293 -31.075 -10.306 -50.916 1.00 0.00 D C
ATOM 15566 CB VAL A 293 -32.175 -9.772 -50.047 1.00 0.00 D C
ATOM 15567 CG1 VAL A 293 -31.553 -9.182 -48.769 1.00 0.00 D C
ATOM 15568 CG2 VAL A 293 -32.995 -8.756 -50.860 1.00 0.00 D C
ATOM 15569 C VAL A 293 -30.283 -11.281 -50.101 1.00 0.00 D C
ATOM 15570 O VAL A 293 -29.249 -10.936 -49.537 1.00 0.00 D O
ATOM 15571 N GLU A 294 -30.760 -12.535 -50.012 1.00 0.00 D N
ATOM 15572 CA GLU A 294 -30.104 -13.532 -49.214 1.00 0.00 D C
ATOM 15573 CB GLU A 294 -30.926 -14.826 -49.078 1.00 0.00 D C
ATOM 15574 CG GLU A 294 -30.516 -15.647 -47.857 1.00 0.00 D C
ATOM 15575 CD GLU A 294 -30.995 -14.866 -46.641 1.00 0.00 D C
ATOM 15576 OE1 GLU A 294 -32.238 -14.726 -46.487 1.00 0.00 D O
ATOM 15577 OE2 GLU A 294 -30.129 -14.388 -45.862 1.00 0.00 D O
ATOM 15578 C GLU A 294 -28.769 -13.884 -49.803 1.00 0.00 D C
ATOM 15579 O GLU A 294 -27.833 -14.223 -49.082 1.00 0.00 D O
ATOM 15580 N VAL A 295 -28.662 -13.857 -51.145 1.00 0.00 D N
ATOM 15581 CA VAL A 295 -27.471 -14.254 -51.846 1.00 0.00 D C
ATOM 15582 CB VAL A 295 -27.690 -14.548 -53.306 1.00 0.00 D C
ATOM 15583 CG1 VAL A 295 -27.801 -13.237 -54.098 1.00 0.00 D C
ATOM 15584 CG2 VAL A 295 -26.564 -15.478 -53.786 1.00 0.00 D C
ATOM 15585 C VAL A 295 -26.358 -13.243 -51.708 1.00 0.00 D C
ATOM 15586 O VAL A 295 -25.195 -13.592 -51.908 1.00 0.00 D O
ATOM 15587 N ALA A 296 -26.671 -11.955 -51.438 1.00 0.00 D N
ATOM 15588 CA ALA A 296 -25.654 -10.930 -51.388 1.00 0.00 D C
ATOM 15589 CB ALA A 296 -26.236 -9.510 -51.286 1.00 0.00 D C
ATOM 15590 C ALA A 296 -24.703 -11.116 -50.230 1.00 0.00 D C
ATOM 15591 O ALA A 296 -25.116 -11.413 -49.110 1.00 0.00 D O
ATOM 15592 N ASP A 297 -23.382 -11.074 -50.531 1.00 0.00 D N
ATOM 15593 CA ASP A 297 -22.282 -11.102 -49.592 1.00 0.00 D C
ATOM 15594 CB ASP A 297 -21.146 -12.106 -49.893 1.00 0.00 D C
ATOM 15595 CG ASP A 297 -20.383 -11.728 -51.138 1.00 0.00 D C
ATOM 15596 OD1 ASP A 297 -21.044 -11.359 -52.134 1.00 0.00 D O
ATOM 15597 OD2 ASP A 297 -19.126 -11.823 -51.120 1.00 0.00 D O
ATOM 15598 C ASP A 297 -21.698 -9.752 -49.247 1.00 0.00 D C

ATOM	15599	O	ASP A 297	-20.769	-9.680	-48.442	1.00	0.00	D	O
ATOM	15600	N	ASN A 298	-22.133	-8.658	-49.903	1.00	0.00	D	N
ATOM	15601	CA	ASN A 298	-21.589	-7.345	-49.657	1.00	0.00	D	C
ATOM	15602	CB	ASN A 298	-21.546	-6.978	-48.164	1.00	0.00	D	C
ATOM	15603	CG	ASN A 298	-22.985	-6.757	-47.722	1.00	0.00	D	C
ATOM	15604	OD1	ASN A 298	-23.740	-6.044	-48.383	1.00	0.00	D	O
ATOM	15605	ND2	ASN A 298	-23.384	-7.393	-46.589	1.00	0.00	D	N
ATOM	15606	C	ASN A 298	-20.219	-7.176	-50.242	1.00	0.00	D	C
ATOM	15607	O	ASN A 298	-19.443	-6.333	-49.792	1.00	0.00	D	O
ATOM	15608	N	THR A 299	-19.880	-7.968	-51.276	1.00	0.00	D	N
ATOM	15609	CA	THR A 299	-18.662	-7.717	-51.986	1.00	0.00	D	C
ATOM	15610	CB	THR A 299	-18.023	-8.960	-52.525	1.00	0.00	D	C
ATOM	15611	OG1	THR A 299	-16.751	-8.660	-53.065	1.00	0.00	D	O
ATOM	15612	CG2	THR A 299	-18.918	-9.565	-53.609	1.00	0.00	D	C
ATOM	15613	C	THR A 299	-19.066	-6.823	-53.122	1.00	0.00	D	C
ATOM	15614	O	THR A 299	-20.233	-6.804	-53.507	1.00	0.00	D	O
ATOM	15615	N	ALA A 300	-18.121	-6.054	-53.697	1.00	0.00	D	N
ATOM	15616	CA	ALA A 300	-18.476	-5.099	-54.712	1.00	0.00	D	C
ATOM	15617	CB	ALA A 300	-17.270	-4.280	-55.208	1.00	0.00	D	C
ATOM	15618	C	ALA A 300	-19.069	-5.788	-55.900	1.00	0.00	D	C
ATOM	15619	O	ALA A 300	-20.076	-5.341	-56.449	1.00	0.00	D	O
ATOM	15620	N	ASP A 301	-18.463	-6.910	-56.320	1.00	0.00	D	N
ATOM	15621	CA	ASP A 301	-18.899	-7.626	-57.485	1.00	0.00	D	C
ATOM	15622	CB	ASP A 301	-17.982	-8.822	-57.791	1.00	0.00	D	C
ATOM	15623	CG	ASP A 301	-16.594	-8.283	-58.117	1.00	0.00	D	C
ATOM	15624	OD1	ASP A 301	-16.510	-7.270	-58.864	1.00	0.00	D	O
ATOM	15625	OD2	ASP A 301	-15.602	-8.867	-57.609	1.00	0.00	D	O
ATOM	15626	C	ASP A 301	-20.273	-8.169	-57.243	1.00	0.00	D	C
ATOM	15627	O	ASP A 301	-21.105	-8.199	-58.150	1.00	0.00	D	O
ATOM	15628	N	ASN A 302	-20.527	-8.638	-56.006	1.00	0.00	D	N
ATOM	15629	CA	ASN A 302	-21.773	-9.259	-55.656	1.00	0.00	D	C
ATOM	15630	CB	ASN A 302	-21.777	-9.793	-54.228	1.00	0.00	D	C
ATOM	15631	CG	ASN A 302	-23.119	-10.436	-53.928	1.00	0.00	D	C
ATOM	15632	OD1	ASN A 302	-24.085	-9.745	-53.607	1.00	0.00	D	O
ATOM	15633	ND2	ASN A 302	-23.191	-11.788	-54.031	1.00	0.00	D	N
ATOM	15634	C	ASN A 302	-22.902	-8.292	-55.724	1.00	0.00	D	C
ATOM	15635	O	ASN A 302	-23.944	-8.598	-56.303	1.00	0.00	D	O
ATOM	15636	N	THR A 303	-22.724	-7.095	-55.137	1.00	0.00	D	N

ATOM	15637	CA	THR	A	303	-23.806	-6.160	-55.131	1.00	0.00	D	C
ATOM	15638	CB	THR	A	303	-23.490	-4.851	-54.471	1.00	0.00	D	C
ATOM	15639	OG1	THR	A	303	-22.433	-4.194	-55.152	1.00	0.00	D	O
ATOM	15640	CG2	THR	A	303	-23.108	-5.113	-53.011	1.00	0.00	D	C
ATOM	15641	C	THR	A	303	-24.140	-5.854	-56.544	1.00	0.00	D	C
ATOM	15642	O	THR	A	303	-25.309	-5.829	-56.922	1.00	0.00	D	O
ATOM	15643	N	LYS	A	304	-23.107	-5.668	-57.382	1.00	0.00	D	N
ATOM	15644	CA	LYS	A	304	-23.346	-5.245	-58.726	1.00	0.00	D	C
ATOM	15645	CB	LYS	A	304	-22.058	-5.134	-59.564	1.00	0.00	D	C
ATOM	15646	CG	LYS	A	304	-21.100	-4.054	-59.058	1.00	0.00	D	C
ATOM	15647	CD	LYS	A	304	-21.712	-2.652	-59.025	1.00	0.00	D	C
ATOM	15648	CE	LYS	A	304	-20.802	-1.594	-58.396	1.00	0.00	D	C
ATOM	15649	NZ	LYS	A	304	-21.476	-0.276	-58.401	1.00	0.00	D	N
ATOM	15650	C	LYS	A	304	-24.243	-6.224	-59.420	1.00	0.00	D	C
ATOM	15651	O	LYS	A	304	-25.222	-5.821	-60.041	1.00	0.00	D	O
ATOM	15652	N	PHE	A	305	-23.952	-7.537	-59.337	1.00	0.00	D	N
ATOM	15653	CA	PHE	A	305	-24.771	-8.451	-60.083	1.00	0.00	D	C
ATOM	15654	CB	PHE	A	305	-24.163	-9.857	-60.288	1.00	0.00	D	C
ATOM	15655	CG	PHE	A	305	-24.276	-10.681	-59.057	1.00	0.00	D	C
ATOM	15656	CD1	PHE	A	305	-25.417	-11.417	-58.845	1.00	0.00	D	C
ATOM	15657	CE1	PHE	A	305	-25.554	-12.197	-57.723	1.00	0.00	D	C
ATOM	15658	CZ	PHE	A	305	-24.535	-12.246	-56.804	1.00	0.00	D	C
ATOM	15659	CD2	PHE	A	305	-23.255	-10.739	-58.138	1.00	0.00	D	C
ATOM	15660	CE2	PHE	A	305	-23.387	-11.519	-57.012	1.00	0.00	D	C
ATOM	15661	C	PHE	A	305	-26.145	-8.583	-59.477	1.00	0.00	D	C
ATOM	15662	O	PHE	A	305	-27.135	-8.668	-60.201	1.00	0.00	D	O
ATOM	15663	N	VAL	A	306	-26.248	-8.626	-58.133	1.00	0.00	D	N
ATOM	15664	CA	VAL	A	306	-27.532	-8.796	-57.500	1.00	0.00	D	C
ATOM	15665	CB	VAL	A	306	-27.431	-8.940	-56.010	1.00	0.00	D	C
ATOM	15666	CG1	VAL	A	306	-28.851	-8.962	-55.421	1.00	0.00	D	C
ATOM	15667	CG2	VAL	A	306	-26.619	-10.211	-55.705	1.00	0.00	D	C
ATOM	15668	C	VAL	A	306	-28.382	-7.601	-57.787	1.00	0.00	D	C
ATOM	15669	O	VAL	A	306	-29.559	-7.722	-58.123	1.00	0.00	D	O
ATOM	15670	N	THR	A	307	-27.771	-6.408	-57.702	1.00	0.00	D	N
ATOM	15671	CA	THR	A	307	-28.450	-5.157	-57.848	1.00	0.00	D	C
ATOM	15672	CB	THR	A	307	-27.472	-4.016	-57.776	1.00	0.00	D	C
ATOM	15673	OG1	THR	A	307	-26.950	-3.894	-56.462	1.00	0.00	D	O
ATOM	15674	CG2	THR	A	307	-28.129	-2.722	-58.260	1.00	0.00	D	C

ATOM	15675	C	THR	A 307	-29.166	-5.076	-59.164	1.00	0.00	D	C
ATOM	15676	O	THR	A 307	-30.330	-4.685	-59.208	1.00	0.00	D	O
ATOM	15677	N	SER	A 308	-28.476	-5.421	-60.263	1.00	0.00	D	N
ATOM	15678	CA	SER	A 308	-29.010	-5.349	-61.597	1.00	0.00	D	C
ATOM	15679	CB	SER	A 308	-27.912	-5.499	-62.659	1.00	0.00	D	C
ATOM	15680	OG	SER	A 308	-28.479	-5.424	-63.953	1.00	0.00	D	O
ATOM	15681	C	SER	A 308	-30.005	-6.435	-61.851	1.00	0.00	D	C
ATOM	15682	O	SER	A 308	-30.995	-6.230	-62.551	1.00	0.00	D	O
ATOM	15683	N	MET	A 309	-29.760	-7.642	-61.314	1.00	0.00	D	N
ATOM	15684	CA	MET	A 309	-30.675	-8.718	-61.558	1.00	0.00	D	C
ATOM	15685	CB	MET	A 309	-30.214	-10.070	-60.995	1.00	0.00	D	C
ATOM	15686	CG	MET	A 309	-31.209	-11.192	-61.292	1.00	0.00	D	C
ATOM	15687	SD	MET	A 309	-31.440	-11.526	-63.066	1.00	0.00	D	S
ATOM	15688	CE	MET	A 309	-29.711	-11.971	-63.393	1.00	0.00	D	C
ATOM	15689	C	MET	A 309	-31.971	-8.357	-60.913	1.00	0.00	D	C
ATOM	15690	O	MET	A 309	-33.039	-8.681	-61.423	1.00	0.00	D	O
ATOM	15691	N	TYR	A 310	-31.887	-7.681	-59.753	1.00	0.00	D	N
ATOM	15692	CA	TYR	A 310	-33.040	-7.246	-59.021	1.00	0.00	D	C
ATOM	15693	CB	TYR	A 310	-32.611	-6.484	-57.750	1.00	0.00	D	C
ATOM	15694	CG	TYR	A 310	-33.766	-6.143	-56.863	1.00	0.00	D	C
ATOM	15695	CD1	TYR	A 310	-34.233	-7.055	-55.947	1.00	0.00	D	C
ATOM	15696	CE1	TYR	A 310	-35.284	-6.752	-55.114	1.00	0.00	D	C
ATOM	15697	CZ	TYR	A 310	-35.882	-5.516	-55.188	1.00	0.00	D	C
ATOM	15698	OH	TYR	A 310	-36.961	-5.198	-54.335	1.00	0.00	D	O
ATOM	15699	CD2	TYR	A 310	-34.368	-4.905	-56.924	1.00	0.00	D	C
ATOM	15700	CE2	TYR	A 310	-35.421	-4.594	-56.095	1.00	0.00	D	C
ATOM	15701	C	TYR	A 310	-33.787	-6.296	-59.913	1.00	0.00	D	C
ATOM	15702	O	TYR	A 310	-34.994	-6.428	-60.108	1.00	0.00	D	O
ATOM	15703	N	ASN	A 311	-33.061	-5.341	-60.527	1.00	0.00	D	N
ATOM	15704	CA	ASN	A 311	-33.667	-4.355	-61.373	1.00	0.00	D	C
ATOM	15705	CB	ASN	A 311	-32.646	-3.381	-61.980	1.00	0.00	D	C
ATOM	15706	CG	ASN	A 311	-33.428	-2.288	-62.693	1.00	0.00	D	C
ATOM	15707	OD1	ASN	A 311	-34.656	-2.252	-62.638	1.00	0.00	D	O
ATOM	15708	ND2	ASN	A 311	-32.699	-1.380	-63.393	1.00	0.00	D	N
ATOM	15709	C	ASN	A 311	-34.337	-5.060	-62.506	1.00	0.00	D	C
ATOM	15710	O	ASN	A 311	-35.447	-4.710	-62.903	1.00	0.00	D	O
ATOM	15711	N	GLU	A 312	-33.670	-6.094	-63.045	1.00	0.00	D	N
ATOM	15712	CA	GLU	A 312	-34.180	-6.820	-64.169	1.00	0.00	D	C

ATOM	15713	CB	GLU	A	312	-33.239	-7.948	-64.621	1.00	0.00	D	C
ATOM	15714	CG	GLU	A	312	-32.032	-7.446	-65.407	1.00	0.00	D	C
ATOM	15715	CD	GLU	A	312	-32.571	-6.960	-66.743	1.00	0.00	D	C
ATOM	15716	OE1	GLU	A	312	-33.563	-7.564	-67.226	1.00	0.00	D	O
ATOM	15717	OE2	GLU	A	312	-32.007	-5.977	-67.293	1.00	0.00	D	O
ATOM	15718	C	GLU	A	312	-35.480	-7.460	-63.813	1.00	0.00	D	C
ATOM	15719	O	GLU	A	312	-36.410	-7.455	-64.614	1.00	0.00	D	O
ATOM	15720	N	ILE	A	313	-35.592	-8.026	-62.600	1.00	0.00	D	N
ATOM	15721	CA	ILE	A	313	-36.797	-8.706	-62.227	1.00	0.00	D	C
ATOM	15722	CB	ILE	A	313	-36.715	-9.315	-60.857	1.00	0.00	D	C
ATOM	15723	CG2	ILE	A	313	-38.127	-9.767	-60.456	1.00	0.00	D	C
ATOM	15724	CG1	ILE	A	313	-35.669	-10.446	-60.824	1.00	0.00	D	C
ATOM	15725	CD	ILE	A	313	-36.005	-11.615	-61.748	1.00	0.00	D	C
ATOM	15726	C	ILE	A	313	-37.928	-7.730	-62.215	1.00	0.00	D	C
ATOM	15727	O	ILE	A	313	-39.013	-8.023	-62.711	1.00	0.00	D	O
ATOM	15728	N	LEU	A	314	-37.700	-6.532	-61.642	1.00	0.00	D	N
ATOM	15729	CA	LEU	A	314	-38.758	-5.570	-61.545	1.00	0.00	D	C
ATOM	15730	CB	LEU	A	314	-38.393	-4.332	-60.708	1.00	0.00	D	C
ATOM	15731	CG	LEU	A	314	-38.235	-4.638	-59.205	1.00	0.00	D	C
ATOM	15732	CD1	LEU	A	314	-37.964	-3.358	-58.400	1.00	0.00	D	C
ATOM	15733	CD2	LEU	A	314	-39.437	-5.430	-58.664	1.00	0.00	D	C
ATOM	15734	C	LEU	A	314	-39.193	-5.122	-62.911	1.00	0.00	D	C
ATOM	15735	O	LEU	A	314	-40.389	-5.024	-63.180	1.00	0.00	D	O
ATOM	15736	N	MET	A	315	-38.239	-4.880	-63.831	1.00	0.00	D	N
ATOM	15737	CA	MET	A	315	-38.586	-4.407	-65.141	1.00	0.00	D	C
ATOM	15738	CB	MET	A	315	-37.349	-4.211	-66.037	1.00	0.00	D	C
ATOM	15739	CG	MET	A	315	-36.397	-3.131	-65.518	1.00	0.00	D	C
ATOM	15740	SD	MET	A	315	-34.922	-2.864	-66.545	1.00	0.00	D	S
ATOM	15741	CE	MET	A	315	-34.169	-4.468	-66.144	1.00	0.00	D	C
ATOM	15742	C	MET	A	315	-39.468	-5.434	-65.782	1.00	0.00	D	C
ATOM	15743	O	MET	A	315	-40.428	-5.104	-66.473	1.00	0.00	D	O
ATOM	15744	N	LEU	A	316	-39.144	-6.720	-65.584	1.00	0.00	D	N
ATOM	15745	CA	LEU	A	316	-39.923	-7.801	-66.122	1.00	0.00	D	C
ATOM	15746	CB	LEU	A	316	-39.239	-9.175	-65.966	1.00	0.00	D	C
ATOM	15747	CG	LEU	A	316	-38.154	-9.487	-67.024	1.00	0.00	D	C
ATOM	15748	CD1	LEU	A	316	-37.062	-8.412	-67.091	1.00	0.00	D	C
ATOM	15749	CD2	LEU	A	316	-37.558	-10.889	-66.807	1.00	0.00	D	C
ATOM	15750	C	LEU	A	316	-41.273	-7.849	-65.467	1.00	0.00	D	C

ATOM	15751	O	LEU A 316	-42.274	-8.134	-66.124	1.00	0.00	D	O
ATOM	15752	N	GLY A 317	-41.337	-7.595	-64.147	1.00	0.00	D	N
ATOM	15753	CA	GLY A 317	-42.606	-7.654	-63.477	1.00	0.00	D	C
ATOM	15754	C	GLY A 317	-43.507	-6.607	-64.052	1.00	0.00	D	C
ATOM	15755	O	GLY A 317	-44.665	-6.874	-64.367	1.00	0.00	D	O
ATOM	15756	N	ALA A 318	-42.985	-5.378	-64.219	1.00	0.00	D	N
ATOM	15757	CA	ALA A 318	-43.791	-4.296	-64.700	1.00	0.00	D	C
ATOM	15758	CB	ALA A 318	-43.035	-2.957	-64.711	1.00	0.00	D	C
ATOM	15759	C	ALA A 318	-44.246	-4.576	-66.097	1.00	0.00	D	C
ATOM	15760	O	ALA A 318	-45.397	-4.317	-66.442	1.00	0.00	D	O
ATOM	15761	N	LYS A 319	-43.354	-5.083	-66.966	1.00	0.00	D	N
ATOM	15762	CA	LYS A 319	-43.813	-5.315	-68.302	1.00	0.00	D	C
ATOM	15763	CB	LYS A 319	-42.675	-5.611	-69.301	1.00	0.00	D	C
ATOM	15764	CG	LYS A 319	-41.771	-6.793	-68.952	1.00	0.00	D	C
ATOM	15765	CD	LYS A 319	-40.880	-7.223	-70.119	1.00	0.00	D	C
ATOM	15766	CE	LYS A 319	-39.958	-8.398	-69.800	1.00	0.00	D	C
ATOM	15767	NZ	LYS A 319	-39.099	-8.684	-70.971	1.00	0.00	D	N
ATOM	15768	C	LYS A 319	-44.831	-6.421	-68.351	1.00	0.00	D	C
ATOM	15769	O	LYS A 319	-45.916	-6.235	-68.902	1.00	0.00	D	O
ATOM	15770	N	LEU A 320	-44.519	-7.600	-67.776	1.00	0.00	D	N
ATOM	15771	CA	LEU A 320	-45.422	-8.717	-67.857	1.00	0.00	D	C
ATOM	15772	CB	LEU A 320	-44.758	-10.062	-67.496	1.00	0.00	D	C
ATOM	15773	CG	LEU A 320	-43.780	-10.574	-68.579	1.00	0.00	D	C
ATOM	15774	CD1	LEU A 320	-42.596	-9.618	-68.781	1.00	0.00	D	C
ATOM	15775	CD2	LEU A 320	-43.318	-12.013	-68.300	1.00	0.00	D	C
ATOM	15776	C	LEU A 320	-46.662	-8.553	-67.023	1.00	0.00	D	C
ATOM	15777	O	LEU A 320	-47.764	-8.769	-67.525	1.00	0.00	D	O
ATOM	15778	N	HSD A 321	-46.536	-8.166	-65.735	1.00	0.00	D	N
ATOM	15779	CA	HSD A 321	-47.719	-8.062	-64.914	1.00	0.00	D	C
ATOM	15780	CB	HSD A 321	-47.846	-9.236	-63.931	1.00	0.00	D	C
ATOM	15781	ND1	HSD A 321	-48.864	-11.174	-65.224	1.00	0.00	D	N
ATOM	15782	CG	HSD A 321	-47.780	-10.555	-64.645	1.00	0.00	D	C
ATOM	15783	CE1	HSD A 321	-48.404	-12.315	-65.793	1.00	0.00	D	C
ATOM	15784	NE2	HSD A 321	-47.103	-12.474	-65.621	1.00	0.00	D	N
ATOM	15785	CD2	HSD A 321	-46.712	-11.363	-64.896	1.00	0.00	D	C
ATOM	15786	C	HSD A 321	-47.602	-6.803	-64.104	1.00	0.00	D	C
ATOM	15787	O	HSD A 321	-47.030	-6.803	-63.015	1.00	0.00	D	O
ATOM	15788	N	PRO A 322	-48.158	-5.736	-64.603	1.00	0.00	D	N

ATOM	15789	CD	PRO A 322	-48.424	-5.619	-66.024	1.00	0.00	D	C
ATOM	15790	CA	PRO A 322	-48.024	-4.449	-63.972	1.00	0.00	D	C
ATOM	15791	CB	PRO A 322	-48.428	-3.416	-65.031	1.00	0.00	D	C
ATOM	15792	CG	PRO A 322	-49.073	-4.235	-66.165	1.00	0.00	D	C
ATOM	15793	C	PRO A 322	-48.712	-4.261	-62.658	1.00	0.00	D	C
ATOM	15794	O	PRO A 322	-48.276	-3.412	-61.883	1.00	0.00	D	O
ATOM	15795	N	THR A 323	-49.780	-5.024	-62.385	1.00	0.00	D	N
ATOM	15796	CA	THR A 323	-50.565	-4.823	-61.205	1.00	0.00	D	C
ATOM	15797	CB	THR A 323	-51.786	-5.685	-61.182	1.00	0.00	D	C
ATOM	15798	OG1	THR A 323	-52.559	-5.463	-62.351	1.00	0.00	D	O
ATOM	15799	CG2	THR A 323	-52.604	-5.313	-59.937	1.00	0.00	D	C
ATOM	15800	C	THR A 323	-49.781	-5.153	-59.973	1.00	0.00	D	C
ATOM	15801	O	THR A 323	-49.937	-4.498	-58.942	1.00	0.00	D	O
ATOM	15802	N	LEU A 324	-48.915	-6.179	-60.052	1.00	0.00	D	N
ATOM	15803	CA	LEU A 324	-48.269	-6.708	-58.883	1.00	0.00	D	C
ATOM	15804	CB	LEU A 324	-47.506	-8.009	-59.170	1.00	0.00	D	C
ATOM	15805	CG	LEU A 324	-48.363	-9.090	-59.852	1.00	0.00	D	C
ATOM	15806	CD1	LEU A 324	-47.630	-10.439	-59.859	1.00	0.00	D	C
ATOM	15807	CD2	LEU A 324	-49.778	-9.163	-59.265	1.00	0.00	D	C
ATOM	15808	C	LEU A 324	-47.280	-5.748	-58.296	1.00	0.00	D	C
ATOM	15809	O	LEU A 324	-46.423	-5.208	-58.991	1.00	0.00	D	O
ATOM	15810	N	LYS A 325	-47.383	-5.521	-56.966	1.00	0.00	D	N
ATOM	15811	CA	LYS A 325	-46.394	-4.728	-56.295	1.00	0.00	D	C
ATOM	15812	CB	LYS A 325	-46.947	-3.763	-55.228	1.00	0.00	D	C
ATOM	15813	CG	LYS A 325	-47.654	-2.546	-55.832	1.00	0.00	D	C
ATOM	15814	CD	LYS A 325	-48.291	-1.605	-54.807	1.00	0.00	D	C
ATOM	15815	CE	LYS A 325	-48.860	-0.332	-55.440	1.00	0.00	D	C
ATOM	15816	NZ	LYS A 325	-49.449	0.543	-54.402	1.00	0.00	D	N
ATOM	15817	C	LYS A 325	-45.486	-5.715	-55.628	1.00	0.00	D	C
ATOM	15818	O	LYS A 325	-45.733	-6.170	-54.510	1.00	0.00	D	O
ATOM	15819	N	LEU A 326	-44.390	-6.056	-56.327	1.00	0.00	D	N
ATOM	15820	CA	LEU A 326	-43.476	-7.081	-55.909	1.00	0.00	D	C
ATOM	15821	CB	LEU A 326	-42.420	-7.438	-56.975	1.00	0.00	D	C
ATOM	15822	CG	LEU A 326	-42.960	-8.222	-58.190	1.00	0.00	D	C
ATOM	15823	CD1	LEU A 326	-43.943	-7.388	-59.025	1.00	0.00	D	C
ATOM	15824	CD2	LEU A 326	-41.814	-8.796	-59.036	1.00	0.00	D	C
ATOM	15825	C	LEU A 326	-42.731	-6.749	-54.651	1.00	0.00	D	C
ATOM	15826	O	LEU A 326	-42.520	-7.620	-53.810	1.00	0.00	D	O

ATOM	15827	N	GLU A 327	-42.305	-5.487	-54.476	1.00	0.00	D	N
ATOM	15828	CA	GLU A 327	-41.461	-5.137	-53.363	1.00	0.00	D	C
ATOM	15829	CB	GLU A 327	-40.867	-3.725	-53.478	1.00	0.00	D	C
ATOM	15830	CG	GLU A 327	-39.780	-3.664	-54.552	1.00	0.00	D	C
ATOM	15831	CD	GLU A 327	-39.193	-2.262	-54.583	1.00	0.00	D	C
ATOM	15832	OE1	GLU A 327	-39.910	-1.332	-55.042	1.00	0.00	D	O
ATOM	15833	OE2	GLU A 327	-38.023	-2.101	-54.150	1.00	0.00	D	O
ATOM	15834	C	GLU A 327	-42.166	-5.278	-52.051	1.00	0.00	D	C
ATOM	15835	O	GLU A 327	-41.529	-5.388	-51.005	1.00	0.00	D	O
ATOM	15836	N	GLU A 328	-43.502	-5.188	-52.065	1.00	0.00	D	N
ATOM	15837	CA	GLU A 328	-44.323	-5.266	-50.891	1.00	0.00	D	C
ATOM	15838	CB	GLU A 328	-45.735	-4.729	-51.161	1.00	0.00	D	C
ATOM	15839	CG	GLU A 328	-45.690	-3.215	-51.397	1.00	0.00	D	C
ATOM	15840	CD	GLU A 328	-47.072	-2.716	-51.786	1.00	0.00	D	C
ATOM	15841	OE1	GLU A 328	-47.881	-3.533	-52.300	1.00	0.00	D	O
ATOM	15842	OE2	GLU A 328	-47.330	-1.501	-51.583	1.00	0.00	D	O
ATOM	15843	C	GLU A 328	-44.414	-6.653	-50.293	1.00	0.00	D	C
ATOM	15844	O	GLU A 328	-44.668	-6.771	-49.096	1.00	0.00	D	O
ATOM	15845	N	LEU A 329	-44.247	-7.737	-51.085	1.00	0.00	D	N
ATOM	15846	CA	LEU A 329	-44.472	-9.087	-50.604	1.00	0.00	D	C
ATOM	15847	CB	LEU A 329	-44.338	-10.158	-51.702	1.00	0.00	D	C
ATOM	15848	CG	LEU A 329	-45.394	-10.048	-52.819	1.00	0.00	D	C
ATOM	15849	CD1	LEU A 329	-45.250	-8.731	-53.597	1.00	0.00	D	C
ATOM	15850	CD2	LEU A 329	-45.367	-11.284	-53.734	1.00	0.00	D	C
ATOM	15851	C	LEU A 329	-43.536	-9.477	-49.489	1.00	0.00	D	C
ATOM	15852	O	LEU A 329	-42.314	-9.397	-49.616	1.00	0.00	D	O
ATOM	15853	N	THR A 330	-44.123	-9.979	-48.373	1.00	0.00	D	N
ATOM	15854	CA	THR A 330	-43.398	-10.335	-47.180	1.00	0.00	D	C
ATOM	15855	CB	THR A 330	-44.168	-10.043	-45.927	1.00	0.00	D	C
ATOM	15856	OG1	THR A 330	-45.337	-10.850	-45.881	1.00	0.00	D	O
ATOM	15857	CG2	THR A 330	-44.555	-8.555	-45.922	1.00	0.00	D	C
ATOM	15858	C	THR A 330	-43.093	-11.804	-47.141	1.00	0.00	D	C
ATOM	15859	O	THR A 330	-43.892	-12.636	-47.566	1.00	0.00	D	O
ATOM	15860	N	ASN A 331	-41.907	-12.151	-46.587	1.00	0.00	D	N
ATOM	15861	CA	ASN A 331	-41.507	-13.520	-46.420	1.00	0.00	D	C
ATOM	15862	CB	ASN A 331	-39.977	-13.729	-46.339	1.00	0.00	D	C
ATOM	15863	CG	ASN A 331	-39.405	-13.009	-45.125	1.00	0.00	D	C
ATOM	15864	OD1	ASN A 331	-40.118	-12.370	-44.354	1.00	0.00	D	O

ATOM 15865 ND2 ASN A 331 -38.059 -13.103 -44.959 1.00 0.00 D N
ATOM 15866 C ASN A 331 -42.158 -14.017 -45.161 1.00 0.00 D C
ATOM 15867 O ASN A 331 -42.944 -13.306 -44.538 1.00 0.00 D O
ATOM 15868 N LYS A 332 -41.831 -15.252 -44.740 1.00 0.00 D N
ATOM 15869 CA LYS A 332 -42.466 -15.891 -43.617 1.00 0.00 D C
ATOM 15870 CB LYS A 332 -41.718 -17.172 -43.218 1.00 0.00 D C
ATOM 15871 CG LYS A 332 -42.331 -17.986 -42.081 1.00 0.00 D C
ATOM 15872 CD LYS A 332 -41.506 -19.241 -41.767 1.00 0.00 D C
ATOM 15873 CE LYS A 332 -40.960 -19.949 -43.012 1.00 0.00 D C
ATOM 15874 NZ LYS A 332 -39.890 -20.900 -42.629 1.00 0.00 D N
ATOM 15875 C LYS A 332 -42.372 -14.992 -42.422 1.00 0.00 D C
ATOM 15876 O LYS A 332 -43.347 -14.799 -41.696 1.00 0.00 D O
ATOM 15877 N LYS A 333 -41.190 -14.401 -42.203 1.00 0.00 D N
ATOM 15878 CA LYS A 333 -40.906 -13.583 -41.060 1.00 0.00 D C
ATOM 15879 CB LYS A 333 -39.424 -13.183 -40.967 1.00 0.00 D C
ATOM 15880 CG LYS A 333 -38.513 -14.387 -40.723 1.00 0.00 D C
ATOM 15881 CD LYS A 333 -37.027 -14.093 -40.922 1.00 0.00 D C
ATOM 15882 CE LYS A 333 -36.148 -15.339 -40.801 1.00 0.00 D C
ATOM 15883 NZ LYS A 333 -36.410 -16.011 -39.510 1.00 0.00 D N
ATOM 15884 C LYS A 333 -41.739 -12.333 -41.087 1.00 0.00 D C
ATOM 15885 O LYS A 333 -41.911 -11.683 -40.059 1.00 0.00 D O
ATOM 15886 N GLY A 334 -42.256 -11.932 -42.263 1.00 0.00 D N
ATOM 15887 CA GLY A 334 -43.022 -10.719 -42.308 1.00 0.00 D C
ATOM 15888 C GLY A 334 -42.147 -9.643 -42.860 1.00 0.00 D C
ATOM 15889 O GLY A 334 -42.437 -8.457 -42.713 1.00 0.00 D O
ATOM 15890 N MET A 335 -41.046 -10.039 -43.532 1.00 0.00 D N
ATOM 15891 CA MET A 335 -40.130 -9.054 -44.024 1.00 0.00 D C
ATOM 15892 CB MET A 335 -38.662 -9.417 -43.741 1.00 0.00 D C
ATOM 15893 CG MET A 335 -38.340 -9.524 -42.249 1.00 0.00 D C
ATOM 15894 SD MET A 335 -36.618 -9.970 -41.871 1.00 0.00 D S
ATOM 15895 CE MET A 335 -36.926 -10.326 -40.116 1.00 0.00 D C
ATOM 15896 C MET A 335 -40.250 -8.889 -45.510 1.00 0.00 D C
ATOM 15897 O MET A 335 -40.327 -9.854 -46.270 1.00 0.00 D O
ATOM 15898 N THR A 336 -40.274 -7.613 -45.950 1.00 0.00 D N
ATOM 15899 CA THR A 336 -40.235 -7.293 -47.346 1.00 0.00 D C
ATOM 15900 CB THR A 336 -40.616 -5.876 -47.661 1.00 0.00 D C
ATOM 15901 OG1 THR A 336 -39.704 -4.974 -47.052 1.00 0.00 D O
ATOM 15902 CG2 THR A 336 -42.045 -5.620 -47.153 1.00 0.00 D C

ATOM	15903	C	THR	A	336	-38.796	-7.468	-47.716	1.00	0.00	D	C
ATOM	15904	O	THR	A	336	-37.949	-7.576	-46.831	1.00	0.00	D	O
ATOM	15905	N	PRO	A	337	-38.468	-7.503	-48.981	1.00	0.00	D	N
ATOM	15906	CD	PRO	A	337	-39.426	-7.729	-50.048	1.00	0.00	D	C
ATOM	15907	CA	PRO	A	337	-37.109	-7.707	-49.395	1.00	0.00	D	C
ATOM	15908	CB	PRO	A	337	-37.148	-7.709	-50.921	1.00	0.00	D	C
ATOM	15909	CG	PRO	A	337	-38.576	-8.191	-51.247	1.00	0.00	D	C
ATOM	15910	C	PRO	A	337	-36.219	-6.670	-48.786	1.00	0.00	D	C
ATOM	15911	O	PRO	A	337	-35.153	-7.019	-48.288	1.00	0.00	D	O
ATOM	15912	N	LEU	A	338	-36.659	-5.400	-48.765	1.00	0.00	D	N
ATOM	15913	CA	LEU	A	338	-35.866	-4.338	-48.221	1.00	0.00	D	C
ATOM	15914	CB	LEU	A	338	-36.612	-2.995	-48.281	1.00	0.00	D	C
ATOM	15915	CG	LEU	A	338	-35.829	-1.808	-47.699	1.00	0.00	D	C
ATOM	15916	CD1	LEU	A	338	-34.611	-1.452	-48.566	1.00	0.00	D	C
ATOM	15917	CD2	LEU	A	338	-36.761	-0.614	-47.446	1.00	0.00	D	C
ATOM	15918	C	LEU	A	338	-35.604	-4.620	-46.776	1.00	0.00	D	C
ATOM	15919	O	LEU	A	338	-34.472	-4.532	-46.309	1.00	0.00	D	O
ATOM	15920	N	ALA	A	339	-36.656	-5.011	-46.033	1.00	0.00	D	N
ATOM	15921	CA	ALA	A	339	-36.555	-5.207	-44.615	1.00	0.00	D	C
ATOM	15922	CB	ALA	A	339	-37.898	-5.600	-43.977	1.00	0.00	D	C
ATOM	15923	C	ALA	A	339	-35.581	-6.303	-44.323	1.00	0.00	D	C
ATOM	15924	O	ALA	A	339	-34.838	-6.234	-43.346	1.00	0.00	D	O
ATOM	15925	N	LEU	A	340	-35.591	-7.362	-45.150	1.00	0.00	D	N
ATOM	15926	CA	LEU	A	340	-34.717	-8.488	-44.964	1.00	0.00	D	C
ATOM	15927	CB	LEU	A	340	-34.993	-9.581	-46.017	1.00	0.00	D	C
ATOM	15928	CG	LEU	A	340	-34.370	-10.972	-45.756	1.00	0.00	D	C
ATOM	15929	CD1	LEU	A	340	-34.588	-11.890	-46.968	1.00	0.00	D	C
ATOM	15930	CD2	LEU	A	340	-32.903	-10.918	-45.319	1.00	0.00	D	C
ATOM	15931	C	LEU	A	340	-33.307	-8.009	-45.140	1.00	0.00	D	C
ATOM	15932	O	LEU	A	340	-32.433	-8.300	-44.326	1.00	0.00	D	O
ATOM	15933	N	ALA	A	341	-33.065	-7.197	-46.189	1.00	0.00	D	N
ATOM	15934	CA	ALA	A	341	-31.727	-6.772	-46.490	1.00	0.00	D	C
ATOM	15935	CB	ALA	A	341	-31.672	-5.793	-47.676	1.00	0.00	D	C
ATOM	15936	C	ALA	A	341	-31.171	-6.065	-45.293	1.00	0.00	D	C
ATOM	15937	O	ALA	A	341	-30.012	-6.272	-44.936	1.00	0.00	D	O
ATOM	15938	N	ALA	A	342	-31.987	-5.204	-44.659	1.00	0.00	D	N
ATOM	15939	CA	ALA	A	342	-31.598	-4.438	-43.504	1.00	0.00	D	C
ATOM	15940	CB	ALA	A	342	-32.640	-3.380	-43.123	1.00	0.00	D	C

ATOM 15941 C ALA A 342 -31.378 -5.324 -42.314 1.00 0.00 D C
ATOM 15942 O ALA A 342 -30.496 -5.068 -41.496 1.00 0.00 D O
ATOM 15943 N GLY A 343 -32.212 -6.367 -42.149 1.00 0.00 D N
ATOM 15944 CA GLY A 343 -32.046 -7.239 -41.021 1.00 0.00 D C
ATOM 15945 C GLY A 343 -30.716 -7.940 -41.119 1.00 0.00 D C
ATOM 15946 O GLY A 343 -30.046 -8.169 -40.113 1.00 0.00 D O
ATOM 15947 N THR A 344 -30.349 -8.356 -42.345 1.00 0.00 D N
ATOM 15948 CA THR A 344 -29.178 -9.122 -42.705 1.00 0.00 D C
ATOM 15949 CB THR A 344 -29.419 -9.940 -43.949 1.00 0.00 D C
ATOM 15950 OG1 THR A 344 -30.595 -10.717 -43.774 1.00 0.00 D O
ATOM 15951 CG2 THR A 344 -28.250 -10.915 -44.166 1.00 0.00 D C
ATOM 15952 C THR A 344 -27.914 -8.307 -42.860 1.00 0.00 D C
ATOM 15953 O THR A 344 -26.839 -8.877 -43.033 1.00 0.00 D O
ATOM 15954 N GLY A 345 -27.984 -6.962 -42.937 1.00 0.00 D N
ATOM 15955 CA GLY A 345 -26.760 -6.216 -43.072 1.00 0.00 D C
ATOM 15956 C GLY A 345 -26.263 -6.283 -44.489 1.00 0.00 D C
ATOM 15957 O GLY A 345 -25.055 -6.259 -44.727 1.00 0.00 D O
ATOM 15958 N LYS A 346 -27.176 -6.406 -45.473 1.00 0.00 D N
ATOM 15959 CA LYS A 346 -26.736 -6.377 -46.845 1.00 0.00 D C
ATOM 15960 CB LYS A 346 -27.505 -7.337 -47.773 1.00 0.00 D C
ATOM 15961 CG LYS A 346 -26.931 -8.756 -47.765 1.00 0.00 D C
ATOM 15962 CD LYS A 346 -27.020 -9.478 -46.424 1.00 0.00 D C
ATOM 15963 CE LYS A 346 -26.353 -10.857 -46.423 1.00 0.00 D C
ATOM 15964 NZ LYS A 346 -27.117 -11.796 -47.276 1.00 0.00 D N
ATOM 15965 C LYS A 346 -26.937 -4.971 -47.321 1.00 0.00 D C
ATOM 15966 O LYS A 346 -27.903 -4.660 -48.013 1.00 0.00 D O
ATOM 15967 N ILE A 347 -25.956 -4.110 -46.979 1.00 0.00 D N
ATOM 15968 CA ILE A 347 -26.015 -2.682 -47.136 1.00 0.00 D C
ATOM 15969 CB ILE A 347 -24.835 -1.965 -46.542 1.00 0.00 D C
ATOM 15970 CG2 ILE A 347 -24.993 -0.473 -46.891 1.00 0.00 D C
ATOM 15971 CG1 ILE A 347 -24.711 -2.215 -45.031 1.00 0.00 D C
ATOM 15972 CD ILE A 347 -24.260 -3.630 -44.670 1.00 0.00 D C
ATOM 15973 C ILE A 347 -26.060 -2.218 -48.555 1.00 0.00 D C
ATOM 15974 O ILE A 347 -26.866 -1.357 -48.899 1.00 0.00 D O
ATOM 15975 N GLY A 348 -25.197 -2.768 -49.425 1.00 0.00 D N
ATOM 15976 CA GLY A 348 -25.105 -2.243 -50.757 1.00 0.00 D C
ATOM 15977 C GLY A 348 -26.439 -2.354 -51.418 1.00 0.00 D C
ATOM 15978 O GLY A 348 -26.856 -1.458 -52.149 1.00 0.00 D O

ATOM	15979	N	VAL A 349	-27.125	-3.489	-51.199	1.00	0.00	D	N
ATOM	15980	CA	VAL A 349	-28.407	-3.753	-51.784	1.00	0.00	D	C
ATOM	15981	CB	VAL A 349	-28.845	-5.177	-51.574	1.00	0.00	D	C
ATOM	15982	CG1	VAL A 349	-30.227	-5.373	-52.221	1.00	0.00	D	C
ATOM	15983	CG2	VAL A 349	-27.761	-6.109	-52.140	1.00	0.00	D	C
ATOM	15984	C	VAL A 349	-29.439	-2.852	-51.181	1.00	0.00	D	C
ATOM	15985	O	VAL A 349	-30.278	-2.295	-51.886	1.00	0.00	D	O
ATOM	15986	N	LEU A 350	-29.382	-2.671	-49.848	1.00	0.00	D	N
ATOM	15987	CA	LEU A 350	-30.354	-1.865	-49.167	1.00	0.00	D	C
ATOM	15988	CB	LEU A 350	-30.040	-1.779	-47.659	1.00	0.00	D	C
ATOM	15989	CG	LEU A 350	-31.099	-1.109	-46.752	1.00	0.00	D	C
ATOM	15990	CD1	LEU A 350	-30.619	-1.118	-45.293	1.00	0.00	D	C
ATOM	15991	CD2	LEU A 350	-31.494	0.303	-47.211	1.00	0.00	D	C
ATOM	15992	C	LEU A 350	-30.288	-0.491	-49.766	1.00	0.00	D	C
ATOM	15993	O	LEU A 350	-31.313	0.104	-50.101	1.00	0.00	D	O
ATOM	15994	N	ALA A 351	-29.063	0.039	-49.952	1.00	0.00	D	N
ATOM	15995	CA	ALA A 351	-28.899	1.352	-50.505	1.00	0.00	D	C
ATOM	15996	CB	ALA A 351	-27.420	1.754	-50.629	1.00	0.00	D	C
ATOM	15997	C	ALA A 351	-29.481	1.352	-51.884	1.00	0.00	D	C
ATOM	15998	O	ALA A 351	-30.130	2.310	-52.299	1.00	0.00	D	O
ATOM	15999	N	TYR A 352	-29.252	0.258	-52.624	1.00	0.00	D	N
ATOM	16000	CA	TYR A 352	-29.707	0.107	-53.974	1.00	0.00	D	C
ATOM	16001	CB	TYR A 352	-29.197	-1.216	-54.559	1.00	0.00	D	C
ATOM	16002	CG	TYR A 352	-30.047	-1.605	-55.713	1.00	0.00	D	C
ATOM	16003	CD1	TYR A 352	-30.006	-0.923	-56.905	1.00	0.00	D	C
ATOM	16004	CE1	TYR A 352	-30.798	-1.327	-57.955	1.00	0.00	D	C
ATOM	16005	CZ	TYR A 352	-31.630	-2.411	-57.820	1.00	0.00	D	C
ATOM	16006	OH	TYR A 352	-32.441	-2.827	-58.897	1.00	0.00	D	O
ATOM	16007	CD2	TYR A 352	-30.884	-2.686	-55.583	1.00	0.00	D	C
ATOM	16008	CE2	TYR A 352	-31.677	-3.093	-56.629	1.00	0.00	D	C
ATOM	16009	C	TYR A 352	-31.201	0.138	-54.054	1.00	0.00	D	C
ATOM	16010	O	TYR A 352	-31.756	0.809	-54.918	1.00	0.00	D	O
ATOM	16011	N	ILE A 353	-31.908	-0.585	-53.166	1.00	0.00	D	N
ATOM	16012	CA	ILE A 353	-33.339	-0.640	-53.273	1.00	0.00	D	C
ATOM	16013	CB	ILE A 353	-33.972	-1.671	-52.382	1.00	0.00	D	C
ATOM	16014	CG2	ILE A 353	-35.495	-1.456	-52.404	1.00	0.00	D	C
ATOM	16015	CG1	ILE A 353	-33.549	-3.083	-52.828	1.00	0.00	D	C
ATOM	16016	CD	ILE A 353	-33.975	-4.186	-51.859	1.00	0.00	D	C

ATOM 16017 C ILE A 353 -33.965 0.688 -52.993 1.00 0.00 D C
ATOM 16018 O ILE A 353 -34.916 1.070 -53.667 1.00 0.00 D O
ATOM 16019 N LEU A 354 -33.494 1.392 -51.947 1.00 0.00 D N
ATOM 16020 CA LEU A 354 -34.025 2.670 -51.554 1.00 0.00 D C
ATOM 16021 CB LEU A 354 -33.488 3.108 -50.187 1.00 0.00 D C
ATOM 16022 CG LEU A 354 -33.861 2.149 -49.043 1.00 0.00 D C
ATOM 16023 CD1 LEU A 354 -33.253 2.626 -47.717 1.00 0.00 D C
ATOM 16024 CD2 LEU A 354 -35.380 1.934 -48.951 1.00 0.00 D C
ATOM 16025 C LEU A 354 -33.638 3.748 -52.525 1.00 0.00 D C
ATOM 16026 O LEU A 354 -34.371 4.694 -52.761 1.00 0.00 D O
ATOM 16027 N GLN A 355 -32.390 3.724 -52.990 1.00 0.00 D N
ATOM 16028 CA GLN A 355 -31.804 4.690 -53.876 1.00 0.00 D C
ATOM 16029 CB GLN A 355 -30.318 4.930 -53.570 1.00 0.00 D C
ATOM 16030 CG GLN A 355 -30.108 5.837 -52.345 1.00 0.00 D C
ATOM 16031 CD GLN A 355 -30.968 5.346 -51.186 1.00 0.00 D C
ATOM 16032 OE1 GLN A 355 -30.533 4.555 -50.353 1.00 0.00 D O
ATOM 16033 NE2 GLN A 355 -32.244 5.822 -51.137 1.00 0.00 D N
ATOM 16034 C GLN A 355 -31.993 4.405 -55.329 1.00 0.00 D C
ATOM 16035 O GLN A 355 -31.605 5.238 -56.139 1.00 0.00 D O
ATOM 16036 N ARG A 356 -32.452 3.193 -55.709 1.00 0.00 D N
ATOM 16037 CA ARG A 356 -32.487 2.786 -57.092 1.00 0.00 D C
ATOM 16038 CB ARG A 356 -32.973 1.345 -57.310 1.00 0.00 D C
ATOM 16039 CG ARG A 356 -33.004 0.957 -58.788 1.00 0.00 D C
ATOM 16040 CD ARG A 356 -33.951 -0.201 -59.112 1.00 0.00 D C
ATOM 16041 NE ARG A 356 -35.339 0.283 -58.862 1.00 0.00 D N
ATOM 16042 CZ ARG A 356 -36.063 -0.224 -57.821 1.00 0.00 D C
ATOM 16043 NH1 ARG A 356 -35.549 -1.236 -57.064 1.00 0.00 D N
ATOM 16044 NH2 ARG A 356 -37.301 0.277 -57.544 1.00 0.00 D N
ATOM 16045 C ARG A 356 -33.454 3.610 -57.873 1.00 0.00 D C
ATOM 16046 O ARG A 356 -34.549 3.150 -58.197 1.00 0.00 D O
ATOM 16047 N GLU A 357 -33.025 4.822 -58.267 1.00 0.00 D N
ATOM 16048 CA GLU A 357 -33.834 5.728 -59.023 1.00 0.00 D C
ATOM 16049 CB GLU A 357 -33.178 7.104 -59.191 1.00 0.00 D C
ATOM 16050 CG GLU A 357 -31.858 6.971 -59.962 1.00 0.00 D C
ATOM 16051 CD GLU A 357 -31.308 8.349 -60.290 1.00 0.00 D C
ATOM 16052 OE1 GLU A 357 -31.158 9.172 -59.350 1.00 0.00 D O
ATOM 16053 OE2 GLU A 357 -31.027 8.594 -61.495 1.00 0.00 D O
ATOM 16054 C GLU A 357 -33.902 5.171 -60.405 1.00 0.00 D C

ATOM 16055 O GLU A 357 -32.933 4.583 -60.886 1.00 0.00 D O
ATOM 16056 N ILE A 358 -35.050 5.320 -61.095 1.00 0.00 D N
ATOM 16057 CA ILE A 358 -35.067 4.794 -62.425 1.00 0.00 D C
ATOM 16058 CB ILE A 358 -35.767 3.465 -62.499 1.00 0.00 D C
ATOM 16059 CG2 ILE A 358 -37.272 3.710 -62.305 1.00 0.00 D C
ATOM 16060 CG1 ILE A 358 -35.374 2.702 -63.778 1.00 0.00 D C
ATOM 16061 CD ILE A 358 -33.910 2.266 -63.822 1.00 0.00 D C
ATOM 16062 C ILE A 358 -35.732 5.804 -63.317 1.00 0.00 D C
ATOM 16063 O ILE A 358 -36.682 6.472 -62.908 1.00 0.00 D O
ATOM 16064 N GLN A 359 -35.222 5.978 -64.557 1.00 0.00 D N
ATOM 16065 CA GLN A 359 -35.827 6.934 -65.445 1.00 0.00 D C
ATOM 16066 CB GLN A 359 -34.961 8.181 -65.702 1.00 0.00 D C
ATOM 16067 CG GLN A 359 -35.620 9.193 -66.641 1.00 0.00 D C
ATOM 16068 CD GLN A 359 -36.765 9.875 -65.898 1.00 0.00 D C
ATOM 16069 OE1 GLN A 359 -37.233 9.389 -64.868 1.00 0.00 D O
ATOM 16070 NE2 GLN A 359 -37.232 11.032 -66.435 1.00 0.00 D N
ATOM 16071 C GLN A 359 -36.066 6.263 -66.763 1.00 0.00 D C
ATOM 16072 O GLN A 359 -35.145 5.731 -67.385 1.00 0.00 D O
ATOM 16073 N GLU A 360 -37.341 6.283 -67.209 1.00 0.00 D N
ATOM 16074 CA GLU A 360 -37.781 5.633 -68.413 1.00 0.00 D C
ATOM 16075 CB GLU A 360 -37.441 4.120 -68.389 1.00 0.00 D C
ATOM 16076 CG GLU A 360 -37.797 3.274 -69.613 1.00 0.00 D C
ATOM 16077 CD GLU A 360 -39.120 2.591 -69.308 1.00 0.00 D C
ATOM 16078 OE1 GLU A 360 -39.317 2.190 -68.130 1.00 0.00 D O
ATOM 16079 OE2 GLU A 360 -39.953 2.461 -70.245 1.00 0.00 D O
ATOM 16080 C GLU A 360 -39.270 5.851 -68.431 1.00 0.00 D C
ATOM 16081 O GLU A 360 -39.804 6.418 -67.476 1.00 0.00 D O
ATOM 16082 N PRO A 361 -39.980 5.437 -69.447 1.00 0.00 D N
ATOM 16083 CD PRO A 361 -39.445 5.495 -70.800 1.00 0.00 D C
ATOM 16084 CA PRO A 361 -41.389 5.705 -69.455 1.00 0.00 D C
ATOM 16085 CB PRO A 361 -41.876 5.316 -70.846 1.00 0.00 D C
ATOM 16086 CG PRO A 361 -40.662 5.654 -71.731 1.00 0.00 D C
ATOM 16087 C PRO A 361 -42.196 5.165 -68.321 1.00 0.00 D C
ATOM 16088 O PRO A 361 -43.262 5.695 -68.055 1.00 0.00 D O
ATOM 16089 N GLU A 362 -41.841 4.097 -67.623 1.00 0.00 D N
ATOM 16090 CA GLU A 362 -42.770 3.963 -66.541 1.00 0.00 D C
ATOM 16091 CB GLU A 362 -43.493 2.608 -66.534 1.00 0.00 D C
ATOM 16092 CG GLU A 362 -44.327 2.363 -67.793 1.00 0.00 D C

ATOM	16093	CD	GLU A 362	-43.382	1.872	-68.883	1.00	0.00	D	C
ATOM	16094	OE1	GLU A 362	-42.744	0.806	-68.673	1.00	0.00	D	O
ATOM	16095	OE2	GLU A 362	-43.280	2.557	-69.936	1.00	0.00	D	O
ATOM	16096	C	GLU A 362	-41.926	4.006	-65.325	1.00	0.00	D	C
ATOM	16097	O	GLU A 362	-42.158	3.285	-64.358	1.00	0.00	D	O
ATOM	16098	N	CYS A 363	-40.898	4.858	-65.345	1.00	0.00	D	N
ATOM	16099	CA	CYS A 363	-39.961	4.862	-64.265	1.00	0.00	D	C
ATOM	16100	CB	CYS A 363	-38.584	5.405	-64.634	1.00	0.00	D	C
ATOM	16101	SG	CYS A 363	-37.632	4.041	-65.338	1.00	0.00	D	S
ATOM	16102	C	CYS A 363	-40.395	5.487	-62.977	1.00	0.00	D	C
ATOM	16103	O	CYS A 363	-40.015	5.002	-61.915	1.00	0.00	D	O
ATOM	16104	N	ARG A 364	-41.200	6.556	-63.020	1.00	0.00	D	N
ATOM	16105	CA	ARG A 364	-41.430	7.331	-61.831	1.00	0.00	D	C
ATOM	16106	CB	ARG A 364	-42.309	8.573	-62.086	1.00	0.00	D	C
ATOM	16107	CG	ARG A 364	-42.474	9.491	-60.868	1.00	0.00	D	C
ATOM	16108	CD	ARG A 364	-43.305	10.747	-61.160	1.00	0.00	D	C
ATOM	16109	NE	ARG A 364	-43.591	11.431	-59.864	1.00	0.00	D	N
ATOM	16110	CZ	ARG A 364	-42.728	12.357	-59.351	1.00	0.00	D	C
ATOM	16111	NH1	ARG A 364	-41.567	12.653	-60.006	1.00	0.00	D	N
ATOM	16112	NH2	ARG A 364	-43.030	12.997	-58.183	1.00	0.00	D	N
ATOM	16113	C	ARG A 364	-42.045	6.523	-60.729	1.00	0.00	D	C
ATOM	16114	O	ARG A 364	-41.646	6.660	-59.575	1.00	0.00	D	O
ATOM	16115	N	HSD A 365	-43.023	5.649	-61.025	1.00	0.00	D	N
ATOM	16116	CA	HSD A 365	-43.668	4.940	-59.953	1.00	0.00	D	C
ATOM	16117	CB	HSD A 365	-44.857	4.079	-60.406	1.00	0.00	D	C
ATOM	16118	ND1	HSD A 365	-43.656	2.828	-62.235	1.00	0.00	D	N
ATOM	16119	CG	HSD A 365	-44.426	2.830	-61.098	1.00	0.00	D	C
ATOM	16120	CE1	HSD A 365	-43.466	1.531	-62.578	1.00	0.00	D	C
ATOM	16121	NE2	HSD A 365	-44.060	0.700	-61.741	1.00	0.00	D	N
ATOM	16122	CD2	HSD A 365	-44.665	1.522	-60.810	1.00	0.00	D	C
ATOM	16123	C	HSD A 365	-42.677	4.043	-59.268	1.00	0.00	D	C
ATOM	16124	O	HSD A 365	-42.724	3.873	-58.050	1.00	0.00	D	O
ATOM	16125	N	LEU A 366	-41.778	3.418	-60.049	1.00	0.00	D	N
ATOM	16126	CA	LEU A 366	-40.781	2.482	-59.586	1.00	0.00	D	C
ATOM	16127	CB	LEU A 366	-40.076	1.808	-60.781	1.00	0.00	D	C
ATOM	16128	CG	LEU A 366	-39.045	0.728	-60.412	1.00	0.00	D	C
ATOM	16129	CD1	LEU A 366	-39.717	-0.485	-59.752	1.00	0.00	D	C
ATOM	16130	CD2	LEU A 366	-38.191	0.342	-61.633	1.00	0.00	D	C

ATOM	16131	C	LEU A 366	-39.708	3.118	-58.731	1.00	0.00	D	C
ATOM	16132	O	LEU A 366	-39.321	2.549	-57.708	1.00	0.00	D	O
ATOM	16133	N	SER A 367	-39.202	4.311	-59.114	1.00	0.00	D	N
ATOM	16134	CA	SER A 367	-38.021	4.852	-58.480	1.00	0.00	D	C
ATOM	16135	CB	SER A 367	-37.323	5.954	-59.301	1.00	0.00	D	C
ATOM	16136	OG	SER A 367	-38.149	7.104	-59.405	1.00	0.00	D	O
ATOM	16137	C	SER A 367	-38.259	5.403	-57.115	1.00	0.00	D	C
ATOM	16138	O	SER A 367	-39.272	6.036	-56.827	1.00	0.00	D	O
ATOM	16139	N	ARG A 368	-37.330	5.070	-56.198	1.00	0.00	D	N
ATOM	16140	CA	ARG A 368	-37.335	5.583	-54.867	1.00	0.00	D	C
ATOM	16141	CB	ARG A 368	-36.792	4.555	-53.885	1.00	0.00	D	C
ATOM	16142	CG	ARG A 368	-37.520	3.210	-53.941	1.00	0.00	D	C
ATOM	16143	CD	ARG A 368	-38.338	2.894	-52.692	1.00	0.00	D	C
ATOM	16144	NE	ARG A 368	-38.600	4.197	-52.036	1.00	0.00	D	N
ATOM	16145	CZ	ARG A 368	-37.722	4.615	-51.086	1.00	0.00	D	C
ATOM	16146	NH1	ARG A 368	-36.741	3.768	-50.667	1.00	0.00	D	N
ATOM	16147	NH2	ARG A 368	-37.780	5.875	-50.579	1.00	0.00	D	N
ATOM	16148	C	ARG A 368	-36.683	6.949	-54.765	1.00	0.00	D	C
ATOM	16149	O	ARG A 368	-37.109	7.768	-53.964	1.00	0.00	D	O
ATOM	16150	N	LYS A 369	-35.629	7.275	-55.548	1.00	0.00	D	N
ATOM	16151	CA	LYS A 369	-35.034	8.576	-55.345	1.00	0.00	D	C
ATOM	16152	CB	LYS A 369	-33.586	8.515	-54.822	1.00	0.00	D	C
ATOM	16153	CG	LYS A 369	-32.577	7.909	-55.798	1.00	0.00	D	C
ATOM	16154	CD	LYS A 369	-31.127	8.121	-55.360	1.00	0.00	D	C
ATOM	16155	CE	LYS A 369	-30.095	7.522	-56.317	1.00	0.00	D	C
ATOM	16156	NZ	LYS A 369	-28.735	7.674	-55.754	1.00	0.00	D	N
ATOM	16157	C	LYS A 369	-35.028	9.378	-56.618	1.00	0.00	D	C
ATOM	16158	O	LYS A 369	-34.720	8.873	-57.699	1.00	0.00	D	O
ATOM	16159	N	PHE A 370	-35.378	10.680	-56.495	1.00	0.00	D	N
ATOM	16160	CA	PHE A 370	-35.416	11.589	-57.608	1.00	0.00	D	C
ATOM	16161	CB	PHE A 370	-36.784	12.273	-57.755	1.00	0.00	D	C
ATOM	16162	CG	PHE A 370	-37.852	11.233	-57.813	1.00	0.00	D	C
ATOM	16163	CD1	PHE A 370	-38.194	10.539	-56.678	1.00	0.00	D	C
ATOM	16164	CE1	PHE A 370	-39.182	9.584	-56.703	1.00	0.00	D	C
ATOM	16165	CZ	PHE A 370	-39.846	9.317	-57.876	1.00	0.00	D	C
ATOM	16166	CD2	PHE A 370	-38.529	10.970	-58.982	1.00	0.00	D	C
ATOM	16167	CE2	PHE A 370	-39.516	10.014	-59.014	1.00	0.00	D	C
ATOM	16168	C	PHE A 370	-34.493	12.714	-57.248	1.00	0.00	D	C

ATOM 16169 O PHE A 370 -34.625 13.289 -56.174 1.00 0.00 D O
ATOM 16170 N THR A 371 -33.530 13.079 -58.113 1.00 0.00 D N
ATOM 16171 CA THR A 371 -32.679 14.173 -57.733 1.00 0.00 D C
ATOM 16172 CB THR A 371 -31.310 13.717 -57.320 1.00 0.00 D C
ATOM 16173 OG1 THR A 371 -30.589 13.207 -58.433 1.00 0.00 D O
ATOM 16174 CG2 THR A 371 -31.492 12.585 -56.299 1.00 0.00 D C
ATOM 16175 C THR A 371 -32.496 15.042 -58.939 1.00 0.00 D C
ATOM 16176 O THR A 371 -32.133 14.540 -60.002 1.00 0.00 D O
ATOM 16177 N GLU A 372 -32.757 16.363 -58.834 1.00 0.00 D N
ATOM 16178 CA GLU A 372 -32.489 17.150 -60.005 1.00 0.00 D C
ATOM 16179 CB GLU A 372 -33.639 17.161 -61.028 1.00 0.00 D C
ATOM 16180 CG GLU A 372 -33.843 15.815 -61.723 1.00 0.00 D C
ATOM 16181 CD GLU A 372 -34.894 15.991 -62.805 1.00 0.00 D C
ATOM 16182 OE1 GLU A 372 -35.145 17.160 -63.200 1.00 0.00 D O
ATOM 16183 OE2 GLU A 372 -35.455 14.956 -63.256 1.00 0.00 D O
ATOM 16184 C GLU A 372 -32.199 18.581 -59.648 1.00 0.00 D C
ATOM 16185 O GLU A 372 -33.094 19.425 -59.658 1.00 0.00 D O
ATOM 16186 N TRP A 373 -30.923 18.889 -59.334 1.00 0.00 D N
ATOM 16187 CA TRP A 373 -30.475 20.235 -59.109 1.00 0.00 D C
ATOM 16188 CB TRP A 373 -30.736 20.769 -57.684 1.00 0.00 D C
ATOM 16189 CG TRP A 373 -32.153 21.196 -57.367 1.00 0.00 D C
ATOM 16190 CD1 TRP A 373 -33.262 20.444 -57.112 1.00 0.00 D C
ATOM 16191 NE1 TRP A 373 -34.331 21.263 -56.825 1.00 0.00 D N
ATOM 16192 CE2 TRP A 373 -33.905 22.575 -56.888 1.00 0.00 D C
ATOM 16193 CD2 TRP A 373 -32.552 22.567 -57.226 1.00 0.00 D C
ATOM 16194 CE3 TRP A 373 -31.847 23.730 -57.362 1.00 0.00 D C
ATOM 16195 CZ3 TRP A 373 -32.526 24.912 -57.154 1.00 0.00 D C
ATOM 16196 CZ2 TRP A 373 -34.575 23.746 -56.682 1.00 0.00 D C
ATOM 16197 CH2 TRP A 373 -33.864 24.919 -56.822 1.00 0.00 D C
ATOM 16198 C TRP A 373 -28.987 20.202 -59.268 1.00 0.00 D C
ATOM 16199 O TRP A 373 -28.286 19.636 -58.434 1.00 0.00 D O
ATOM 16200 N ALA A 374 -28.423 20.812 -60.325 1.00 0.00 D N
ATOM 16201 CA ALA A 374 -26.991 20.695 -60.366 1.00 0.00 D C
ATOM 16202 CB ALA A 374 -26.491 19.527 -61.237 1.00 0.00 D C
ATOM 16203 C ALA A 374 -26.384 21.938 -60.925 1.00 0.00 D C
ATOM 16204 O ALA A 374 -26.846 22.476 -61.931 1.00 0.00 D O
ATOM 16205 N TYR A 375 -25.325 22.441 -60.255 1.00 0.00 D N
ATOM 16206 CA TYR A 375 -24.616 23.577 -60.770 1.00 0.00 D C

ATOM	16207	CB	TYR	A	375	-24.765	24.845	-59.915	1.00	0.00	D	C
ATOM	16208	CG	TYR	A	375	-24.425	26.001	-60.795	1.00	0.00	D	C
ATOM	16209	CD1	TYR	A	375	-25.314	26.458	-61.741	1.00	0.00	D	C
ATOM	16210	CE1	TYR	A	375	-24.991	27.523	-62.550	1.00	0.00	D	C
ATOM	16211	CZ	TYR	A	375	-23.773	28.144	-62.414	1.00	0.00	D	C
ATOM	16212	OH	TYR	A	375	-23.436	29.238	-63.241	1.00	0.00	D	O
ATOM	16213	CD2	TYR	A	375	-23.210	26.634	-60.665	1.00	0.00	D	C
ATOM	16214	CE2	TYR	A	375	-22.883	27.699	-61.470	1.00	0.00	D	C
ATOM	16215	C	TYR	A	375	-23.155	23.269	-60.796	1.00	0.00	D	C
ATOM	16216	O	TYR	A	375	-22.490	23.353	-59.766	1.00	0.00	D	O
ATOM	16217	N	GLY	A	376	-22.637	22.825	-61.956	1.00	0.00	D	N
ATOM	16218	CA	GLY	A	376	-21.224	22.694	-62.153	1.00	0.00	D	C
ATOM	16219	C	GLY	A	376	-20.701	21.636	-61.237	1.00	0.00	D	C
ATOM	16220	O	GLY	A	376	-20.657	20.441	-61.518	1.00	0.00	D	O
ATOM	16221	N	PRO	A	377	-20.223	22.189	-60.158	1.00	0.00	D	N
ATOM	16222	CD	PRO	A	377	-19.670	23.529	-60.244	1.00	0.00	D	C
ATOM	16223	CA	PRO	A	377	-19.671	21.454	-59.048	1.00	0.00	D	C
ATOM	16224	CB	PRO	A	377	-18.638	22.373	-58.400	1.00	0.00	D	C
ATOM	16225	CG	PRO	A	377	-19.025	23.781	-58.877	1.00	0.00	D	C
ATOM	16226	C	PRO	A	377	-20.662	20.960	-58.045	1.00	0.00	D	C
ATOM	16227	O	PRO	A	377	-20.270	20.155	-57.201	1.00	0.00	D	O
ATOM	16228	N	VAL	A	378	-21.930	21.420	-58.089	1.00	0.00	D	N
ATOM	16229	CA	VAL	A	378	-22.824	21.110	-57.008	1.00	0.00	D	C
ATOM	16230	CB	VAL	A	378	-23.553	22.319	-56.490	1.00	0.00	D	C
ATOM	16231	CG1	VAL	A	378	-24.466	22.863	-57.597	1.00	0.00	D	C
ATOM	16232	CG2	VAL	A	378	-24.297	21.946	-55.197	1.00	0.00	D	C
ATOM	16233	C	VAL	A	378	-23.829	20.090	-57.436	1.00	0.00	D	C
ATOM	16234	O	VAL	A	378	-24.028	19.851	-58.626	1.00	0.00	D	O
ATOM	16235	N	HSD	A	379	-24.459	19.421	-56.450	1.00	0.00	D	N
ATOM	16236	CA	HSD	A	379	-25.403	18.391	-56.769	1.00	0.00	D	C
ATOM	16237	CB	HSD	A	379	-24.727	17.013	-56.842	1.00	0.00	D	C
ATOM	16238	ND1	HSD	A	379	-26.393	15.115	-56.562	1.00	0.00	D	N
ATOM	16239	CG	HSD	A	379	-25.607	15.920	-57.355	1.00	0.00	D	C
ATOM	16240	CE1	HSD	A	379	-27.022	14.243	-57.390	1.00	0.00	D	C
ATOM	16241	NE2	HSD	A	379	-26.697	14.433	-58.657	1.00	0.00	D	N
ATOM	16242	CD2	HSD	A	379	-25.805	15.491	-58.632	1.00	0.00	D	C
ATOM	16243	C	HSD	A	379	-26.435	18.341	-55.681	1.00	0.00	D	C
ATOM	16244	O	HSD	A	379	-26.173	18.722	-54.543	1.00	0.00	D	O

ATOM	16245	N	SER A 380	-27.658	17.882	-56.022	1.00	0.00	D	N
ATOM	16246	CA	SER A 380	-28.709	17.755	-55.054	1.00	0.00	D	C
ATOM	16247	CB	SER A 380	-29.844	18.778	-55.223	1.00	0.00	D	C
ATOM	16248	OG	SER A 380	-30.839	18.569	-54.232	1.00	0.00	D	O
ATOM	16249	C	SER A 380	-29.323	16.408	-55.256	1.00	0.00	D	C
ATOM	16250	O	SER A 380	-29.431	15.930	-56.383	1.00	0.00	D	O
ATOM	16251	N	SER A 381	-29.739	15.747	-54.160	1.00	0.00	D	N
ATOM	16252	CA	SER A 381	-30.332	14.453	-54.326	1.00	0.00	D	C
ATOM	16253	CB	SER A 381	-29.404	13.320	-53.846	1.00	0.00	D	C
ATOM	16254	OG	SER A 381	-30.009	12.049	-54.016	1.00	0.00	D	O
ATOM	16255	C	SER A 381	-31.577	14.413	-53.503	1.00	0.00	D	C
ATOM	16256	O	SER A 381	-31.608	14.945	-52.396	1.00	0.00	D	O
ATOM	16257	N	LEU A 382	-32.658	13.811	-54.038	1.00	0.00	D	N
ATOM	16258	CA	LEU A 382	-33.838	13.674	-53.237	1.00	0.00	D	C
ATOM	16259	CB	LEU A 382	-35.107	14.403	-53.731	1.00	0.00	D	C
ATOM	16260	CG	LEU A 382	-35.036	15.939	-53.630	1.00	0.00	D	C
ATOM	16261	CD1	LEU A 382	-33.954	16.514	-54.555	1.00	0.00	D	C
ATOM	16262	CD2	LEU A 382	-36.417	16.574	-53.853	1.00	0.00	D	C
ATOM	16263	C	LEU A 382	-34.145	12.220	-53.104	1.00	0.00	D	C
ATOM	16264	O	LEU A 382	-33.914	11.428	-54.019	1.00	0.00	D	O
ATOM	16265	N	TYR A 383	-34.666	11.841	-51.919	1.00	0.00	D	N
ATOM	16266	CA	TYR A 383	-34.965	10.466	-51.635	1.00	0.00	D	C
ATOM	16267	CB	TYR A 383	-34.136	9.931	-50.468	1.00	0.00	D	C
ATOM	16268	CG	TYR A 383	-32.726	9.978	-50.956	1.00	0.00	D	C
ATOM	16269	CD1	TYR A 383	-32.052	11.176	-51.003	1.00	0.00	D	C
ATOM	16270	CE1	TYR A 383	-30.757	11.238	-51.463	1.00	0.00	D	C
ATOM	16271	CZ	TYR A 383	-30.118	10.099	-51.888	1.00	0.00	D	C
ATOM	16272	OH	TYR A 383	-28.787	10.165	-52.354	1.00	0.00	D	O
ATOM	16273	CD2	TYR A 383	-32.088	8.843	-51.408	1.00	0.00	D	C
ATOM	16274	CE2	TYR A 383	-30.790	8.900	-51.865	1.00	0.00	D	C
ATOM	16275	C	TYR A 383	-36.433	10.383	-51.340	1.00	0.00	D	C
ATOM	16276	O	TYR A 383	-37.007	11.287	-50.739	1.00	0.00	D	O
ATOM	16277	N	ASP A 384	-37.089	9.287	-51.779	1.00	0.00	D	N
ATOM	16278	CA	ASP A 384	-38.524	9.225	-51.696	1.00	0.00	D	C
ATOM	16279	CB	ASP A 384	-39.109	7.874	-52.137	1.00	0.00	D	C
ATOM	16280	CG	ASP A 384	-40.600	8.003	-52.374	1.00	0.00	D	C
ATOM	16281	OD1	ASP A 384	-41.103	9.156	-52.445	1.00	0.00	D	O
ATOM	16282	OD2	ASP A 384	-41.255	6.934	-52.501	1.00	0.00	D	O

ATOM	16283	C	ASP A 384	-38.891	9.340	-50.290	1.00	0.00	D	C
ATOM	16284	O	ASP A 384	-39.602	10.251	-49.870	1.00	0.00	D	O
ATOM	16285	N	LEU A 385	-38.311	8.367	-49.593	1.00	0.00	D	N
ATOM	16286	CA	LEU A 385	-38.221	8.009	-48.250	1.00	0.00	D	C
ATOM	16287	CB	LEU A 385	-38.139	9.221	-47.312	1.00	0.00	D	C
ATOM	16288	CG	LEU A 385	-37.414	8.905	-45.995	1.00	0.00	D	C
ATOM	16289	CD1	LEU A 385	-37.737	9.942	-44.913	1.00	0.00	D	C
ATOM	16290	CD2	LEU A 385	-37.566	7.447	-45.571	1.00	0.00	D	C
ATOM	16291	C	LEU A 385	-39.374	7.131	-47.868	1.00	0.00	D	C
ATOM	16292	O	LEU A 385	-40.281	7.557	-47.155	1.00	0.00	D	O
ATOM	16293	N	SER A 386	-39.349	5.867	-48.338	1.00	0.00	D	N
ATOM	16294	CA	SER A 386	-40.322	4.876	-47.976	1.00	0.00	D	C
ATOM	16295	CB	SER A 386	-40.327	3.668	-48.932	1.00	0.00	D	C
ATOM	16296	OG	SER A 386	-39.106	2.951	-48.832	1.00	0.00	D	O
ATOM	16297	C	SER A 386	-40.009	4.354	-46.601	1.00	0.00	D	C
ATOM	16298	O	SER A 386	-40.906	4.032	-45.827	1.00	0.00	D	O
ATOM	16299	N	CYS A 387	-38.710	4.312	-46.256	1.00	0.00	D	N
ATOM	16300	CA	CYS A 387	-38.185	3.718	-45.054	1.00	0.00	D	C
ATOM	16301	CB	CYS A 387	-36.708	4.088	-44.891	1.00	0.00	D	C
ATOM	16302	SG	CYS A 387	-35.769	3.815	-46.418	1.00	0.00	D	S
ATOM	16303	C	CYS A 387	-38.838	4.336	-43.865	1.00	0.00	D	C
ATOM	16304	O	CYS A 387	-39.269	3.651	-42.940	1.00	0.00	D	O
ATOM	16305	N	ILE A 388	-38.901	5.670	-43.857	1.00	0.00	D	N
ATOM	16306	CA	ILE A 388	-39.479	6.413	-42.785	1.00	0.00	D	C
ATOM	16307	CB	ILE A 388	-39.376	7.898	-42.977	1.00	0.00	D	C
ATOM	16308	CG2	ILE A 388	-40.092	8.265	-44.289	1.00	0.00	D	C
ATOM	16309	CG1	ILE A 388	-39.930	8.630	-41.741	1.00	0.00	D	C
ATOM	16310	CD	ILE A 388	-39.129	8.382	-40.463	1.00	0.00	D	C
ATOM	16311	C	ILE A 388	-40.925	6.060	-42.723	1.00	0.00	D	C
ATOM	16312	O	ILE A 388	-41.499	5.967	-41.643	1.00	0.00	D	O
ATOM	16313	N	ASP A 389	-41.546	5.871	-43.901	1.00	0.00	D	N
ATOM	16314	CA	ASP A 389	-42.950	5.620	-43.996	1.00	0.00	D	C
ATOM	16315	CB	ASP A 389	-43.443	5.556	-45.452	1.00	0.00	D	C
ATOM	16316	CG	ASP A 389	-43.371	6.957	-46.047	1.00	0.00	D	C
ATOM	16317	OD1	ASP A 389	-43.623	7.935	-45.295	1.00	0.00	D	O
ATOM	16318	OD2	ASP A 389	-43.061	7.064	-47.263	1.00	0.00	D	O
ATOM	16319	C	ASP A 389	-43.337	4.328	-43.342	1.00	0.00	D	C
ATOM	16320	O	ASP A 389	-44.344	4.284	-42.641	1.00	0.00	D	O

ATOM	16321	N	THR	A	390	-42.565	3.235	-43.518	1.00	0.00	D	N
ATOM	16322	CA	THR	A	390	-43.107	2.011	-43.008	1.00	0.00	D	C
ATOM	16323	CB	THR	A	390	-42.427	0.783	-43.536	1.00	0.00	D	C
ATOM	16324	OG1	THR	A	390	-42.335	0.861	-44.952	1.00	0.00	D	O
ATOM	16325	CG2	THR	A	390	-43.329	-0.421	-43.204	1.00	0.00	D	C
ATOM	16326	C	THR	A	390	-43.094	2.044	-41.504	1.00	0.00	D	C
ATOM	16327	O	THR	A	390	-42.039	2.202	-40.896	1.00	0.00	D	O
ATOM	16328	N	CYS	A	391	-44.286	2.165	-40.869	1.00	0.00	D	N
ATOM	16329	CA	CYS	A	391	-44.414	2.057	-39.434	1.00	0.00	D	C
ATOM	16330	CB	CYS	A	391	-45.416	3.071	-38.857	1.00	0.00	D	C
ATOM	16331	SG	CYS	A	391	-45.509	2.986	-37.043	1.00	0.00	D	S
ATOM	16332	C	CYS	A	391	-44.794	0.711	-38.867	1.00	0.00	D	C
ATOM	16333	O	CYS	A	391	-44.102	0.150	-38.020	1.00	0.00	D	O
ATOM	16334	N	GLU	A	392	-45.925	0.147	-39.362	1.00	0.00	D	N
ATOM	16335	CA	GLU	A	392	-46.570	-0.994	-38.757	1.00	0.00	D	C
ATOM	16336	CB	GLU	A	392	-47.865	-1.369	-39.499	1.00	0.00	D	C
ATOM	16337	CG	GLU	A	392	-48.698	-2.454	-38.821	1.00	0.00	D	C
ATOM	16338	CD	GLU	A	392	-49.924	-2.682	-39.693	1.00	0.00	D	C
ATOM	16339	OE1	GLU	A	392	-49.833	-2.405	-40.918	1.00	0.00	D	O
ATOM	16340	OE2	GLU	A	392	-50.969	-3.133	-39.149	1.00	0.00	D	O
ATOM	16341	C	GLU	A	392	-45.655	-2.160	-38.802	1.00	0.00	D	C
ATOM	16342	O	GLU	A	392	-45.461	-2.870	-37.815	1.00	0.00	D	O
ATOM	16343	N	LYS	A	393	-45.068	-2.376	-39.984	1.00	0.00	D	N
ATOM	16344	CA	LYS	A	393	-44.102	-3.405	-40.155	1.00	0.00	D	C
ATOM	16345	CB	LYS	A	393	-43.934	-3.766	-41.638	1.00	0.00	D	C
ATOM	16346	CG	LYS	A	393	-45.248	-4.338	-42.183	1.00	0.00	D	C
ATOM	16347	CD	LYS	A	393	-45.402	-4.318	-43.705	1.00	0.00	D	C
ATOM	16348	CE	LYS	A	393	-46.763	-4.847	-44.164	1.00	0.00	D	C
ATOM	16349	NZ	LYS	A	393	-46.928	-4.658	-45.621	1.00	0.00	D	N
ATOM	16350	C	LYS	A	393	-42.845	-2.836	-39.585	1.00	0.00	D	C
ATOM	16351	O	LYS	A	393	-42.766	-1.629	-39.357	1.00	0.00	D	O
ATOM	16352	N	ASN	A	394	-41.845	-3.688	-39.293	1.00	0.00	D	N
ATOM	16353	CA	ASN	A	394	-40.643	-3.170	-38.708	1.00	0.00	D	C
ATOM	16354	CB	ASN	A	394	-39.579	-4.254	-38.466	1.00	0.00	D	C
ATOM	16355	CG	ASN	A	394	-40.082	-5.124	-37.325	1.00	0.00	D	C
ATOM	16356	OD1	ASN	A	394	-40.385	-6.300	-37.507	1.00	0.00	D	O
ATOM	16357	ND2	ASN	A	394	-40.185	-4.521	-36.109	1.00	0.00	D	N
ATOM	16358	C	ASN	A	394	-40.085	-2.171	-39.663	1.00	0.00	D	C

ATOM 16359 O ASN A 394 -39.694 -1.092 -39.244 1.00 0.00 D O
ATOM 16360 N SER A 395 -40.019 -2.491 -40.967 1.00 0.00 D N
ATOM 16361 CA SER A 395 -39.634 -1.519 -41.962 1.00 0.00 D C
ATOM 16362 CB SER A 395 -40.201 -0.117 -41.716 1.00 0.00 D C
ATOM 16363 OG SER A 395 -41.488 -0.280 -41.144 1.00 0.00 D O
ATOM 16364 C SER A 395 -38.144 -1.428 -42.041 1.00 0.00 D C
ATOM 16365 O SER A 395 -37.426 -1.972 -41.205 1.00 0.00 D O
ATOM 16366 N VAL A 396 -37.641 -0.768 -43.102 1.00 0.00 D N
ATOM 16367 CA VAL A 396 -36.222 -0.624 -43.224 1.00 0.00 D C
ATOM 16368 CB VAL A 396 -35.776 -0.197 -44.591 1.00 0.00 D C
ATOM 16369 CG1 VAL A 396 -36.346 1.186 -44.891 1.00 0.00 D C
ATOM 16370 CG2 VAL A 396 -34.243 -0.292 -44.660 1.00 0.00 D C
ATOM 16371 C VAL A 396 -35.716 0.309 -42.161 1.00 0.00 D C
ATOM 16372 O VAL A 396 -34.677 0.062 -41.554 1.00 0.00 D O
ATOM 16373 N LEU A 397 -36.438 1.417 -41.906 1.00 0.00 D N
ATOM 16374 CA LEU A 397 -36.001 2.348 -40.901 1.00 0.00 D C
ATOM 16375 CB LEU A 397 -36.825 3.644 -40.870 1.00 0.00 D C
ATOM 16376 CG LEU A 397 -36.345 4.629 -39.787 1.00 0.00 D C
ATOM 16377 CD1 LEU A 397 -34.882 5.041 -40.021 1.00 0.00 D C
ATOM 16378 CD2 LEU A 397 -37.289 5.836 -39.671 1.00 0.00 D C
ATOM 16379 C LEU A 397 -36.083 1.727 -39.541 1.00 0.00 D C
ATOM 16380 O LEU A 397 -35.154 1.857 -38.749 1.00 0.00 D O
ATOM 16381 N GLU A 398 -37.190 1.032 -39.199 1.00 0.00 D N
ATOM 16382 CA GLU A 398 -37.178 0.531 -37.856 1.00 0.00 D C
ATOM 16383 CB GLU A 398 -38.498 0.127 -37.180 1.00 0.00 D C
ATOM 16384 CG GLU A 398 -39.426 1.301 -36.857 1.00 0.00 D C
ATOM 16385 CD GLU A 398 -40.205 1.658 -38.112 1.00 0.00 D C
ATOM 16386 OE1 GLU A 398 -41.135 0.887 -38.472 1.00 0.00 D O
ATOM 16387 OE2 GLU A 398 -39.883 2.707 -38.731 1.00 0.00 D O
ATOM 16388 C GLU A 398 -36.186 -0.569 -37.707 1.00 0.00 D C
ATOM 16389 O GLU A 398 -35.602 -0.716 -36.637 1.00 0.00 D O
ATOM 16390 N VAL A 399 -35.967 -1.389 -38.754 1.00 0.00 D N
ATOM 16391 CA VAL A 399 -35.012 -2.444 -38.590 1.00 0.00 D C
ATOM 16392 CB VAL A 399 -34.939 -3.389 -39.753 1.00 0.00 D C
ATOM 16393 CG1 VAL A 399 -36.295 -4.103 -39.879 1.00 0.00 D C
ATOM 16394 CG2 VAL A 399 -34.542 -2.614 -41.010 1.00 0.00 D C
ATOM 16395 C VAL A 399 -33.666 -1.829 -38.350 1.00 0.00 D C
ATOM 16396 O VAL A 399 -32.901 -2.310 -37.516 1.00 0.00 D O

ATOM 16397 N ILE A 400 -33.338 -0.733 -39.058 1.00 0.00 D N
ATOM 16398 CA ILE A 400 -32.045 -0.152 -38.845 1.00 0.00 D C
ATOM 16399 CB ILE A 400 -31.690 0.981 -39.760 1.00 0.00 D C
ATOM 16400 CG2 ILE A 400 -32.526 2.217 -39.403 1.00 0.00 D C
ATOM 16401 CG1 ILE A 400 -30.183 1.238 -39.652 1.00 0.00 D C
ATOM 16402 CD ILE A 400 -29.680 2.251 -40.667 1.00 0.00 D C
ATOM 16403 C ILE A 400 -31.953 0.352 -37.435 1.00 0.00 D C
ATOM 16404 O ILE A 400 -30.913 0.226 -36.790 1.00 0.00 D O
ATOM 16405 N ALA A 401 -33.038 0.963 -36.923 1.00 0.00 D N
ATOM 16406 CA ALA A 401 -33.023 1.506 -35.593 1.00 0.00 D C
ATOM 16407 CB ALA A 401 -34.349 2.169 -35.211 1.00 0.00 D C
ATOM 16408 C ALA A 401 -32.836 0.416 -34.576 1.00 0.00 D C
ATOM 16409 O ALA A 401 -32.055 0.563 -33.636 1.00 0.00 D O
ATOM 16410 N TYR A 402 -33.603 -0.677 -34.731 1.00 0.00 D N
ATOM 16411 CA TYR A 402 -33.685 -1.817 -33.854 1.00 0.00 D C
ATOM 16412 CB TYR A 402 -34.952 -2.632 -34.201 1.00 0.00 D C
ATOM 16413 CG TYR A 402 -35.157 -3.842 -33.348 1.00 0.00 D C
ATOM 16414 CD1 TYR A 402 -35.646 -3.728 -32.066 1.00 0.00 D C
ATOM 16415 CE1 TYR A 402 -35.853 -4.848 -31.291 1.00 0.00 D C
ATOM 16416 CZ TYR A 402 -35.582 -6.097 -31.795 1.00 0.00 D C
ATOM 16417 OH TYR A 402 -35.793 -7.247 -31.005 1.00 0.00 D O
ATOM 16418 CD2 TYR A 402 -34.901 -5.098 -33.847 1.00 0.00 D C
ATOM 16419 CE2 TYR A 402 -35.105 -6.221 -33.077 1.00 0.00 D C
ATOM 16420 C TYR A 402 -32.482 -2.727 -33.903 1.00 0.00 D C
ATOM 16421 O TYR A 402 -31.998 -3.176 -32.864 1.00 0.00 D O
ATOM 16422 N SER A 403 -31.947 -3.000 -35.112 1.00 0.00 D N
ATOM 16423 CA SER A 403 -30.981 -4.056 -35.313 1.00 0.00 D C
ATOM 16424 CB SER A 403 -30.508 -4.180 -36.774 1.00 0.00 D C
ATOM 16425 OG SER A 403 -31.600 -4.542 -37.606 1.00 0.00 D O
ATOM 16426 C SER A 403 -29.750 -3.934 -34.465 1.00 0.00 D C
ATOM 16427 O SER A 403 -29.176 -2.858 -34.317 1.00 0.00 D O
ATOM 16428 N SER A 404 -29.310 -5.084 -33.899 1.00 0.00 D N
ATOM 16429 CA SER A 404 -28.119 -5.115 -33.090 1.00 0.00 D C
ATOM 16430 CB SER A 404 -28.367 -4.880 -31.588 1.00 0.00 D C
ATOM 16431 OG SER A 404 -28.762 -3.541 -31.340 1.00 0.00 D O
ATOM 16432 C SER A 404 -27.465 -6.457 -33.186 1.00 0.00 D C
ATOM 16433 O SER A 404 -28.057 -7.448 -33.614 1.00 0.00 D O
ATOM 16434 N SER A 405 -26.176 -6.486 -32.786 1.00 0.00 D N

ATOM	16435	CA	SER A 405	-25.386	-7.675	-32.644	1.00	0.00	D	C
ATOM	16436	CB	SER A 405	-26.121	-8.728	-31.807	1.00	0.00	D	C
ATOM	16437	OG	SER A 405	-26.519	-8.151	-30.576	1.00	0.00	D	O
ATOM	16438	C	SER A 405	-25.079	-8.309	-33.965	1.00	0.00	D	C
ATOM	16439	O	SER A 405	-24.428	-9.352	-34.006	1.00	0.00	D	O
ATOM	16440	N	GLU A 406	-25.515	-7.713	-35.085	1.00	0.00	D	N
ATOM	16441	CA	GLU A 406	-25.198	-8.328	-36.342	1.00	0.00	D	C
ATOM	16442	CB	GLU A 406	-25.977	-7.766	-37.540	1.00	0.00	D	C
ATOM	16443	CG	GLU A 406	-27.379	-8.363	-37.652	1.00	0.00	D	C
ATOM	16444	CD	GLU A 406	-27.216	-9.851	-37.951	1.00	0.00	D	C
ATOM	16445	OE1	GLU A 406	-26.051	-10.295	-38.134	1.00	0.00	D	O
ATOM	16446	OE2	GLU A 406	-28.255	-10.565	-37.999	1.00	0.00	D	O
ATOM	16447	C	GLU A 406	-23.737	-8.196	-36.620	1.00	0.00	D	C
ATOM	16448	O	GLU A 406	-23.109	-9.153	-37.066	1.00	0.00	D	O
ATOM	16449	N	THR A 407	-23.160	-7.009	-36.330	1.00	0.00	D	N
ATOM	16450	CA	THR A 407	-21.787	-6.630	-36.577	1.00	0.00	D	C
ATOM	16451	CB	THR A 407	-20.838	-7.785	-36.374	1.00	0.00	D	C
ATOM	16452	OG1	THR A 407	-20.963	-8.271	-35.046	1.00	0.00	D	O
ATOM	16453	CG2	THR A 407	-19.390	-7.332	-36.623	1.00	0.00	D	C
ATOM	16454	C	THR A 407	-21.568	-6.034	-37.957	1.00	0.00	D	C
ATOM	16455	O	THR A 407	-20.548	-5.360	-38.123	1.00	0.00	D	O
ATOM	16456	N	PRO A 408	-22.391	-6.200	-38.968	1.00	0.00	D	N
ATOM	16457	CD	PRO A 408	-22.711	-7.567	-39.353	1.00	0.00	D	C
ATOM	16458	CA	PRO A 408	-22.210	-5.405	-40.165	1.00	0.00	D	C
ATOM	16459	CB	PRO A 408	-22.746	-6.222	-41.339	1.00	0.00	D	C
ATOM	16460	CG	PRO A 408	-22.588	-7.667	-40.875	1.00	0.00	D	C
ATOM	16461	C	PRO A 408	-22.882	-4.063	-40.079	1.00	0.00	D	C
ATOM	16462	O	PRO A 408	-22.904	-3.355	-41.085	1.00	0.00	D	O
ATOM	16463	N	ASN A 409	-23.428	-3.698	-38.905	1.00	0.00	D	N
ATOM	16464	CA	ASN A 409	-24.324	-2.583	-38.741	1.00	0.00	D	C
ATOM	16465	CB	ASN A 409	-24.923	-2.477	-37.321	1.00	0.00	D	C
ATOM	16466	CG	ASN A 409	-23.847	-2.163	-36.285	1.00	0.00	D	C
ATOM	16467	OD1	ASN A 409	-23.114	-1.178	-36.372	1.00	0.00	D	O
ATOM	16468	ND2	ASN A 409	-23.760	-3.030	-35.243	1.00	0.00	D	N
ATOM	16469	C	ASN A 409	-23.783	-1.233	-39.105	1.00	0.00	D	C
ATOM	16470	O	ASN A 409	-24.543	-0.410	-39.615	1.00	0.00	D	O
ATOM	16471	N	ARG A 410	-22.480	-0.970	-38.900	1.00	0.00	D	N
ATOM	16472	CA	ARG A 410	-21.922	0.345	-39.061	1.00	0.00	D	C

ATOM	16473	CB	ARG A 410	-20.397	0.277	-38.895	1.00	0.00	D	C
ATOM	16474	CG	ARG A 410	-20.044	-0.391	-37.560	1.00	0.00	D	C
ATOM	16475	CD	ARG A 410	-18.614	-0.926	-37.443	1.00	0.00	D	C
ATOM	16476	NE	ARG A 410	-18.549	-1.723	-36.181	1.00	0.00	D	N
ATOM	16477	CZ	ARG A 410	-17.903	-2.928	-36.156	1.00	0.00	D	C
ATOM	16478	NH1	ARG A 410	-17.292	-3.398	-37.279	1.00	0.00	D	N
ATOM	16479	NH2	ARG A 410	-17.870	-3.663	-35.003	1.00	0.00	D	N
ATOM	16480	C	ARG A 410	-22.282	0.850	-40.430	1.00	0.00	D	C
ATOM	16481	O	ARG A 410	-22.654	2.011	-40.593	1.00	0.00	D	O
ATOM	16482	N	HSD A 411	-22.226	-0.028	-41.447	1.00	0.00	D	N
ATOM	16483	CA	HSD A 411	-22.559	0.349	-42.794	1.00	0.00	D	C
ATOM	16484	CB	HSD A 411	-22.234	-0.748	-43.823	1.00	0.00	D	C
ATOM	16485	ND1	HSD A 411	-20.114	-2.048	-43.295	1.00	0.00	D	N
ATOM	16486	CG	HSD A 411	-20.765	-1.019	-43.938	1.00	0.00	D	C
ATOM	16487	CE1	HSD A 411	-18.805	-1.958	-43.637	1.00	0.00	D	C
ATOM	16488	NE2	HSD A 411	-18.568	-0.946	-44.454	1.00	0.00	D	N
ATOM	16489	CD2	HSD A 411	-19.805	-0.355	-44.641	1.00	0.00	D	C
ATOM	16490	C	HSD A 411	-24.021	0.686	-42.947	1.00	0.00	D	C
ATOM	16491	O	HSD A 411	-24.366	1.646	-43.634	1.00	0.00	D	O
ATOM	16492	N	ASP A 412	-24.925	-0.094	-42.324	1.00	0.00	D	N
ATOM	16493	CA	ASP A 412	-26.347	0.072	-42.509	1.00	0.00	D	C
ATOM	16494	CB	ASP A 412	-27.150	-0.981	-41.724	1.00	0.00	D	C
ATOM	16495	CG	ASP A 412	-26.831	-2.369	-42.260	1.00	0.00	D	C
ATOM	16496	OD1	ASP A 412	-26.956	-2.572	-43.498	1.00	0.00	D	O
ATOM	16497	OD2	ASP A 412	-26.449	-3.243	-41.437	1.00	0.00	D	O
ATOM	16498	C	ASP A 412	-26.794	1.412	-41.993	1.00	0.00	D	C
ATOM	16499	O	ASP A 412	-27.577	2.108	-42.637	1.00	0.00	D	O
ATOM	16500	N	MET A 413	-26.306	1.806	-40.803	1.00	0.00	D	N
ATOM	16501	CA	MET A 413	-26.708	3.044	-40.195	1.00	0.00	D	C
ATOM	16502	CB	MET A 413	-26.102	3.258	-38.799	1.00	0.00	D	C
ATOM	16503	CG	MET A 413	-26.540	4.575	-38.154	1.00	0.00	D	C
ATOM	16504	SD	MET A 413	-28.294	4.622	-37.681	1.00	0.00	D	S
ATOM	16505	CE	MET A 413	-28.902	5.167	-39.301	1.00	0.00	D	C
ATOM	16506	C	MET A 413	-26.244	4.181	-41.052	1.00	0.00	D	C
ATOM	16507	O	MET A 413	-26.948	5.175	-41.224	1.00	0.00	D	O
ATOM	16508	N	LEU A 414	-25.045	4.037	-41.634	1.00	0.00	D	N
ATOM	16509	CA	LEU A 414	-24.399	5.053	-42.414	1.00	0.00	D	C
ATOM	16510	CB	LEU A 414	-23.002	4.645	-42.900	1.00	0.00	D	C

ATOM	16511	CG	LEU	A	414	-22.415	5.671	-43.879	1.00	0.00	D	C
ATOM	16512	CD1	LEU	A	414	-22.301	7.058	-43.231	1.00	0.00	D	C
ATOM	16513	CD2	LEU	A	414	-21.099	5.164	-44.485	1.00	0.00	D	C
ATOM	16514	C	LEU	A	414	-25.185	5.394	-43.639	1.00	0.00	D	C
ATOM	16515	O	LEU	A	414	-25.085	6.508	-44.148	1.00	0.00	D	O
ATOM	16516	N	LEU	A	415	-25.986	4.440	-44.145	1.00	0.00	D	N
ATOM	16517	CA	LEU	A	415	-26.657	4.576	-45.408	1.00	0.00	D	C
ATOM	16518	CB	LEU	A	415	-27.666	3.438	-45.659	1.00	0.00	D	C
ATOM	16519	CG	LEU	A	415	-28.386	3.526	-47.016	1.00	0.00	D	C
ATOM	16520	CD1	LEU	A	415	-27.384	3.419	-48.175	1.00	0.00	D	C
ATOM	16521	CD2	LEU	A	415	-29.514	2.491	-47.124	1.00	0.00	D	C
ATOM	16522	C	LEU	A	415	-27.374	5.890	-45.513	1.00	0.00	D	C
ATOM	16523	O	LEU	A	415	-28.002	6.368	-44.569	1.00	0.00	D	O
ATOM	16524	N	VAL	A	416	-27.269	6.520	-46.703	1.00	0.00	D	N
ATOM	16525	CA	VAL	A	416	-27.844	7.809	-46.956	1.00	0.00	D	C
ATOM	16526	CB	VAL	A	416	-26.798	8.890	-47.036	1.00	0.00	D	C
ATOM	16527	CG1	VAL	A	416	-26.042	8.939	-45.698	1.00	0.00	D	C
ATOM	16528	CG2	VAL	A	416	-25.890	8.619	-48.249	1.00	0.00	D	C
ATOM	16529	C	VAL	A	416	-28.506	7.743	-48.299	1.00	0.00	D	C
ATOM	16530	O	VAL	A	416	-28.392	6.744	-49.006	1.00	0.00	D	O
ATOM	16531	N	GLU	A	417	-29.221	8.809	-48.701	1.00	0.00	D	N
ATOM	16532	CA	GLU	A	417	-29.393	9.977	-47.895	1.00	0.00	D	C
ATOM	16533	CB	GLU	A	417	-29.952	11.191	-48.643	1.00	0.00	D	C
ATOM	16534	CG	GLU	A	417	-29.938	12.472	-47.803	1.00	0.00	D	C
ATOM	16535	CD	GLU	A	417	-28.480	12.858	-47.569	1.00	0.00	D	C
ATOM	16536	OE1	GLU	A	417	-27.805	12.156	-46.773	1.00	0.00	D	O
ATOM	16537	OE2	GLU	A	417	-28.024	13.858	-48.185	1.00	0.00	D	O
ATOM	16538	C	GLU	A	417	-30.321	9.732	-46.758	1.00	0.00	D	C
ATOM	16539	O	GLU	A	417	-30.026	10.214	-45.679	1.00	0.00	D	O
ATOM	16540	N	PRO	A	418	-31.403	9.015	-46.872	1.00	0.00	D	N
ATOM	16541	CD	PRO	A	418	-32.065	8.794	-48.148	1.00	0.00	D	C
ATOM	16542	CA	PRO	A	418	-32.346	9.006	-45.785	1.00	0.00	D	C
ATOM	16543	CB	PRO	A	418	-33.582	8.282	-46.310	1.00	0.00	D	C
ATOM	16544	CG	PRO	A	418	-33.555	8.592	-47.814	1.00	0.00	D	C
ATOM	16545	C	PRO	A	418	-31.918	8.528	-44.444	1.00	0.00	D	C
ATOM	16546	O	PRO	A	418	-32.335	9.136	-43.469	1.00	0.00	D	O
ATOM	16547	N	LEU	A	419	-31.119	7.468	-44.307	1.00	0.00	D	N
ATOM	16548	CA	LEU	A	419	-30.864	7.069	-42.953	1.00	0.00	D	C

ATOM	16549	CB	LEU	A	419	-30.061	5.761	-42.871	1.00	0.00	D	C
ATOM	16550	CG	LEU	A	419	-30.752	4.579	-43.578	1.00	0.00	D	C
ATOM	16551	CD1	LEU	A	419	-29.948	3.281	-43.412	1.00	0.00	D	C
ATOM	16552	CD2	LEU	A	419	-32.220	4.437	-43.144	1.00	0.00	D	C
ATOM	16553	C	LEU	A	419	-30.091	8.156	-42.267	1.00	0.00	D	C
ATOM	16554	O	LEU	A	419	-30.434	8.569	-41.160	1.00	0.00	D	O
ATOM	16555	N	ASN	A	420	-29.033	8.667	-42.918	1.00	0.00	D	N
ATOM	16556	CA	ASN	A	420	-28.257	9.725	-42.330	1.00	0.00	D	C
ATOM	16557	CB	ASN	A	420	-26.961	10.013	-43.110	1.00	0.00	D	C
ATOM	16558	CG	ASN	A	420	-26.202	11.149	-42.426	1.00	0.00	D	C
ATOM	16559	OD1	ASN	A	420	-26.639	12.293	-42.432	1.00	0.00	D	O
ATOM	16560	ND2	ASN	A	420	-25.023	10.818	-41.826	1.00	0.00	D	N
ATOM	16561	C	ASN	A	420	-29.049	10.998	-42.288	1.00	0.00	D	C
ATOM	16562	O	ASN	A	420	-29.106	11.682	-41.269	1.00	0.00	D	O
ATOM	16563	N	ARG	A	421	-29.690	11.336	-43.416	1.00	0.00	D	N
ATOM	16564	CA	ARG	A	421	-30.412	12.554	-43.640	1.00	0.00	D	C
ATOM	16565	CB	ARG	A	421	-31.006	12.695	-45.053	1.00	0.00	D	C
ATOM	16566	CG	ARG	A	421	-31.794	14.001	-45.199	1.00	0.00	D	C
ATOM	16567	CD	ARG	A	421	-33.015	13.910	-46.118	1.00	0.00	D	C
ATOM	16568	NE	ARG	A	421	-32.542	13.834	-47.525	1.00	0.00	D	N
ATOM	16569	CZ	ARG	A	421	-33.451	13.960	-48.538	1.00	0.00	D	C
ATOM	16570	NH1	ARG	A	421	-34.775	14.114	-48.243	1.00	0.00	D	N
ATOM	16571	NH2	ARG	A	421	-33.037	13.934	-49.839	1.00	0.00	D	N
ATOM	16572	C	ARG	A	421	-31.588	12.647	-42.726	1.00	0.00	D	C
ATOM	16573	O	ARG	A	421	-31.840	13.690	-42.131	1.00	0.00	D	O
ATOM	16574	N	LEU	A	422	-32.335	11.544	-42.590	1.00	0.00	D	N
ATOM	16575	CA	LEU	A	422	-33.562	11.531	-41.849	1.00	0.00	D	C
ATOM	16576	CB	LEU	A	422	-34.318	10.180	-41.919	1.00	0.00	D	C
ATOM	16577	CG	LEU	A	422	-35.739	10.125	-41.310	1.00	0.00	D	C
ATOM	16578	CD1	LEU	A	422	-36.393	8.759	-41.577	1.00	0.00	D	C
ATOM	16579	CD2	LEU	A	422	-35.762	10.447	-39.812	1.00	0.00	D	C
ATOM	16580	C	LEU	A	422	-33.262	11.843	-40.420	1.00	0.00	D	C
ATOM	16581	O	LEU	A	422	-33.977	12.624	-39.794	1.00	0.00	D	O
ATOM	16582	N	LEU	A	423	-32.193	11.250	-39.861	1.00	0.00	D	N
ATOM	16583	CA	LEU	A	423	-31.910	11.469	-38.471	1.00	0.00	D	C
ATOM	16584	CB	LEU	A	423	-30.770	10.593	-37.924	1.00	0.00	D	C
ATOM	16585	CG	LEU	A	423	-31.211	9.149	-37.611	1.00	0.00	D	C
ATOM	16586	CD1	LEU	A	423	-32.138	9.114	-36.387	1.00	0.00	D	C

ATOM	16587	CD2	LEU	A	423	-31.857	8.469	-38.825	1.00	0.00	D	C
ATOM	16588	C	LEU	A	423	-31.589	12.907	-38.204	1.00	0.00	D	C
ATOM	16589	O	LEU	A	423	-32.009	13.462	-37.189	1.00	0.00	D	O
ATOM	16590	N	GLN	A	424	-30.843	13.557	-39.110	1.00	0.00	D	N
ATOM	16591	CA	GLN	A	424	-30.456	14.920	-38.880	1.00	0.00	D	C
ATOM	16592	CB	GLN	A	424	-29.573	15.465	-40.018	1.00	0.00	D	C
ATOM	16593	CG	GLN	A	424	-29.085	16.897	-39.801	1.00	0.00	D	C
ATOM	16594	CD	GLN	A	424	-28.081	16.863	-38.661	1.00	0.00	D	C
ATOM	16595	OE1	GLN	A	424	-28.131	15.978	-37.808	1.00	0.00	D	O
ATOM	16596	NE2	GLN	A	424	-27.140	17.847	-38.646	1.00	0.00	D	N
ATOM	16597	C	GLN	A	424	-31.688	15.762	-38.808	1.00	0.00	D	C
ATOM	16598	O	GLN	A	424	-31.816	16.633	-37.949	1.00	0.00	D	O
ATOM	16599	N	ASP	A	425	-32.643	15.495	-39.713	1.00	0.00	D	N
ATOM	16600	CA	ASP	A	425	-33.838	16.279	-39.787	1.00	0.00	D	C
ATOM	16601	CB	ASP	A	425	-34.725	15.837	-40.964	1.00	0.00	D	C
ATOM	16602	CG	ASP	A	425	-35.689	16.962	-41.310	1.00	0.00	D	C
ATOM	16603	OD1	ASP	A	425	-36.242	17.589	-40.370	1.00	0.00	D	O
ATOM	16604	OD2	ASP	A	425	-35.886	17.203	-42.532	1.00	0.00	D	O
ATOM	16605	C	ASP	A	425	-34.613	16.113	-38.517	1.00	0.00	D	C
ATOM	16606	O	ASP	A	425	-35.130	17.085	-37.967	1.00	0.00	D	O
ATOM	16607	N	LYS	A	426	-34.723	14.870	-38.014	1.00	0.00	D	N
ATOM	16608	CA	LYS	A	426	-35.500	14.654	-36.826	1.00	0.00	D	C
ATOM	16609	CB	LYS	A	426	-35.726	13.170	-36.491	1.00	0.00	D	C
ATOM	16610	CG	LYS	A	426	-36.775	12.497	-37.378	1.00	0.00	D	C
ATOM	16611	CD	LYS	A	426	-36.879	10.989	-37.143	1.00	0.00	D	C
ATOM	16612	CE	LYS	A	426	-38.015	10.319	-37.917	1.00	0.00	D	C
ATOM	16613	NZ	LYS	A	426	-37.833	8.850	-37.900	1.00	0.00	D	N
ATOM	16614	C	LYS	A	426	-34.880	15.293	-35.614	1.00	0.00	D	C
ATOM	16615	O	LYS	A	426	-35.576	15.930	-34.825	1.00	0.00	D	O
ATOM	16616	N	TRP	A	427	-33.566	15.089	-35.409	1.00	0.00	D	N
ATOM	16617	CA	TRP	A	427	-32.875	15.544	-34.228	1.00	0.00	D	C
ATOM	16618	CB	TRP	A	427	-31.532	14.793	-34.035	1.00	0.00	D	C
ATOM	16619	CG	TRP	A	427	-30.880	14.942	-32.674	1.00	0.00	D	C
ATOM	16620	CD1	TRP	A	427	-31.329	14.449	-31.490	1.00	0.00	D	C
ATOM	16621	NE1	TRP	A	427	-30.462	14.765	-30.476	1.00	0.00	D	N
ATOM	16622	CE2	TRP	A	427	-29.405	15.460	-31.010	1.00	0.00	D	C
ATOM	16623	CD2	TRP	A	427	-29.625	15.586	-32.385	1.00	0.00	D	C
ATOM	16624	CE3	TRP	A	427	-28.728	16.224	-33.189	1.00	0.00	D	C

ATOM	16625	CZ3	TRP	A 427	-27.601	16.745	-32.588	1.00	0.00	D	C
ATOM	16626	CZ2	TRP	A 427	-28.284	15.972	-30.420	1.00	0.00	D	C
ATOM	16627	CH2	TRP	A 427	-27.384	16.625	-31.231	1.00	0.00	D	C
ATOM	16628	C	TRP	A 427	-32.603	17.011	-34.224	1.00	0.00	D	C
ATOM	16629	O	TRP	A 427	-32.885	17.697	-33.243	1.00	0.00	D	O
ATOM	16630	N	ASP	A 428	-32.068	17.532	-35.343	1.00	0.00	D	N
ATOM	16631	CA	ASP	A 428	-31.612	18.886	-35.369	1.00	0.00	D	C
ATOM	16632	CB	ASP	A 428	-31.100	19.300	-36.761	1.00	0.00	D	C
ATOM	16633	CG	ASP	A 428	-30.496	20.699	-36.698	1.00	0.00	D	C
ATOM	16634	OD1	ASP	A 428	-30.595	21.357	-35.625	1.00	0.00	D	O
ATOM	16635	OD2	ASP	A 428	-29.916	21.126	-37.731	1.00	0.00	D	O
ATOM	16636	C	ASP	A 428	-32.749	19.770	-35.029	1.00	0.00	D	C
ATOM	16637	O	ASP	A 428	-32.610	20.662	-34.194	1.00	0.00	D	O
ATOM	16638	N	ARG	A 429	-33.910	19.572	-35.669	1.00	0.00	D	N
ATOM	16639	CA	ARG	A 429	-34.897	20.520	-35.296	1.00	0.00	D	C
ATOM	16640	CB	ARG	A 429	-36.142	20.508	-36.198	1.00	0.00	D	C
ATOM	16641	CG	ARG	A 429	-36.856	19.163	-36.296	1.00	0.00	D	C
ATOM	16642	CD	ARG	A 429	-38.088	19.210	-37.204	1.00	0.00	D	C
ATOM	16643	NE	ARG	A 429	-37.629	19.669	-38.544	1.00	0.00	D	N
ATOM	16644	CZ	ARG	A 429	-38.495	20.313	-39.382	1.00	0.00	D	C
ATOM	16645	NH1	ARG	A 429	-39.776	20.563	-38.983	1.00	0.00	D	N
ATOM	16646	NH2	ARG	A 429	-38.072	20.711	-40.618	1.00	0.00	D	N
ATOM	16647	C	ARG	A 429	-35.317	20.369	-33.858	1.00	0.00	D	C
ATOM	16648	O	ARG	A 429	-35.095	21.280	-33.066	1.00	0.00	D	O
ATOM	16649	N	PHE	A 430	-35.995	19.250	-33.509	1.00	0.00	D	N
ATOM	16650	CA	PHE	A 430	-36.495	19.007	-32.174	1.00	0.00	D	C
ATOM	16651	CB	PHE	A 430	-37.964	18.541	-32.190	1.00	0.00	D	C
ATOM	16652	CG	PHE	A 430	-38.082	17.391	-33.130	1.00	0.00	D	C
ATOM	16653	CD1	PHE	A 430	-37.777	16.116	-32.727	1.00	0.00	D	C
ATOM	16654	CE1	PHE	A 430	-37.885	15.069	-33.610	1.00	0.00	D	C
ATOM	16655	CZ	PHE	A 430	-38.301	15.279	-34.902	1.00	0.00	D	C
ATOM	16656	CD2	PHE	A 430	-38.496	17.592	-34.426	1.00	0.00	D	C
ATOM	16657	CE2	PHE	A 430	-38.605	16.551	-35.316	1.00	0.00	D	C
ATOM	16658	C	PHE	A 430	-35.741	18.126	-31.197	1.00	0.00	D	C
ATOM	16659	O	PHE	A 430	-35.664	18.444	-30.010	1.00	0.00	D	O
ATOM	16660	N	VAL	A 431	-35.162	16.999	-31.665	1.00	0.00	D	N
ATOM	16661	CA	VAL	A 431	-34.788	15.906	-30.790	1.00	0.00	D	C
ATOM	16662	CB	VAL	A 431	-34.259	14.703	-31.507	1.00	0.00	D	C

ATOM	16663	CG1 VAL A 431	-33.948	13.627	-30.449	1.00	0.00	D	C
ATOM	16664	CG2 VAL A 431	-35.246	14.269	-32.594	1.00	0.00	D	C
ATOM	16665	C VAL A 431	-33.756	16.240	-29.764	1.00	0.00	D	C
ATOM	16666	O VAL A 431	-33.856	15.801	-28.620	1.00	0.00	D	O
ATOM	16667	N LYS A 432	-32.722	17.008	-30.132	1.00	0.00	D	N
ATOM	16668	CA LYS A 432	-31.659	17.253	-29.210	1.00	0.00	D	C
ATOM	16669	CB LYS A 432	-30.584	18.183	-29.794	1.00	0.00	D	C
ATOM	16670	CG LYS A 432	-31.134	19.547	-30.214	1.00	0.00	D	C
ATOM	16671	CD LYS A 432	-30.051	20.564	-30.582	1.00	0.00	D	C
ATOM	16672	CE LYS A 432	-30.611	21.889	-31.100	1.00	0.00	D	C
ATOM	16673	NZ LYS A 432	-29.501	22.795	-31.465	1.00	0.00	D	N
ATOM	16674	C LYS A 432	-32.215	17.900	-27.987	1.00	0.00	D	C
ATOM	16675	O LYS A 432	-31.814	17.578	-26.869	1.00	0.00	D	O
ATOM	16676	N ARG A 433	-33.175	18.818	-28.163	1.00	0.00	D	N
ATOM	16677	CA ARG A 433	-33.729	19.536	-27.056	1.00	0.00	D	C
ATOM	16678	CB ARG A 433	-34.718	20.626	-27.499	1.00	0.00	D	C
ATOM	16679	CG ARG A 433	-35.122	21.570	-26.364	1.00	0.00	D	C
ATOM	16680	CD ARG A 433	-35.695	22.899	-26.857	1.00	0.00	D	C
ATOM	16681	NE ARG A 433	-34.638	23.542	-27.690	1.00	0.00	D	N
ATOM	16682	CZ ARG A 433	-33.662	24.293	-27.099	1.00	0.00	D	C
ATOM	16683	NH1 ARG A 433	-33.690	24.515	-25.754	1.00	0.00	D	N
ATOM	16684	NH2 ARG A 433	-32.652	24.810	-27.859	1.00	0.00	D	N
ATOM	16685	C ARG A 433	-34.437	18.602	-26.120	1.00	0.00	D	C
ATOM	16686	O ARG A 433	-34.329	18.752	-24.903	1.00	0.00	D	O
ATOM	16687	N ILE A 434	-35.171	17.603	-26.655	1.00	0.00	D	N
ATOM	16688	CA ILE A 434	-35.971	16.728	-25.837	1.00	0.00	D	C
ATOM	16689	CB ILE A 434	-36.825	15.764	-26.618	1.00	0.00	D	C
ATOM	16690	CG2 ILE A 434	-37.651	16.606	-27.597	1.00	0.00	D	C
ATOM	16691	CG1 ILE A 434	-35.996	14.691	-27.337	1.00	0.00	D	C
ATOM	16692	CD ILE A 434	-36.840	13.546	-27.897	1.00	0.00	D	C
ATOM	16693	C ILE A 434	-35.100	15.909	-24.936	1.00	0.00	D	C
ATOM	16694	O ILE A 434	-35.425	15.692	-23.770	1.00	0.00	D	O
ATOM	16695	N PHE A 435	-33.968	15.423	-25.468	1.00	0.00	D	N
ATOM	16696	CA PHE A 435	-33.068	14.540	-24.785	1.00	0.00	D	C
ATOM	16697	CB PHE A 435	-31.982	14.070	-25.766	1.00	0.00	D	C
ATOM	16698	CG PHE A 435	-31.125	13.055	-25.114	1.00	0.00	D	C
ATOM	16699	CD1 PHE A 435	-31.666	11.901	-24.595	1.00	0.00	D	C
ATOM	16700	CE1 PHE A 435	-30.861	10.956	-24.003	1.00	0.00	D	C

ATOM	16701	CZ	PHE A 435	-29.505	11.160	-23.952	1.00	0.00	D	C
ATOM	16702	CD2	PHE A 435	-29.769	13.245	-25.082	1.00	0.00	D	C
ATOM	16703	CE2	PHE A 435	-28.967	12.302	-24.499	1.00	0.00	D	C
ATOM	16704	C	PHE A 435	-32.462	15.205	-23.581	1.00	0.00	D	C
ATOM	16705	O	PHE A 435	-32.370	14.596	-22.514	1.00	0.00	D	O
ATOM	16706	N	TYR A 436	-32.048	16.478	-23.708	1.00	0.00	D	N
ATOM	16707	CA	TYR A 436	-31.432	17.183	-22.616	1.00	0.00	D	C
ATOM	16708	CB	TYR A 436	-31.023	18.623	-22.968	1.00	0.00	D	C
ATOM	16709	CG	TYR A 436	-29.808	18.580	-23.825	1.00	0.00	D	C
ATOM	16710	CD1	TYR A 436	-28.564	18.502	-23.240	1.00	0.00	D	C
ATOM	16711	CE1	TYR A 436	-27.427	18.468	-24.006	1.00	0.00	D	C
ATOM	16712	CZ	TYR A 436	-27.531	18.512	-25.374	1.00	0.00	D	C
ATOM	16713	OH	TYR A 436	-26.367	18.482	-26.167	1.00	0.00	D	O
ATOM	16714	CD2	TYR A 436	-29.904	18.619	-25.195	1.00	0.00	D	C
ATOM	16715	CE2	TYR A 436	-28.767	18.585	-25.970	1.00	0.00	D	C
ATOM	16716	C	TYR A 436	-32.396	17.277	-21.479	1.00	0.00	D	C
ATOM	16717	O	TYR A 436	-32.013	17.121	-20.321	1.00	0.00	D	O
ATOM	16718	N	PHE A 437	-33.680	17.536	-21.782	1.00	0.00	D	N
ATOM	16719	CA	PHE A 437	-34.657	17.666	-20.743	1.00	0.00	D	C
ATOM	16720	CB	PHE A 437	-36.074	17.958	-21.274	1.00	0.00	D	C
ATOM	16721	CG	PHE A 437	-37.010	18.008	-20.112	1.00	0.00	D	C
ATOM	16722	CD1	PHE A 437	-37.156	19.157	-19.369	1.00	0.00	D	C
ATOM	16723	CE1	PHE A 437	-38.019	19.195	-18.299	1.00	0.00	D	C
ATOM	16724	CZ	PHE A 437	-38.746	18.081	-17.956	1.00	0.00	D	C
ATOM	16725	CD2	PHE A 437	-37.736	16.894	-19.757	1.00	0.00	D	C
ATOM	16726	CE2	PHE A 437	-38.604	16.927	-18.689	1.00	0.00	D	C
ATOM	16727	C	PHE A 437	-34.697	16.376	-19.993	1.00	0.00	D	C
ATOM	16728	O	PHE A 437	-34.752	16.370	-18.765	1.00	0.00	D	O
ATOM	16729	N	ASN A 438	-34.650	15.245	-20.717	1.00	0.00	D	N
ATOM	16730	CA	ASN A 438	-34.719	13.970	-20.066	1.00	0.00	D	C
ATOM	16731	CB	ASN A 438	-34.615	12.793	-21.055	1.00	0.00	D	C
ATOM	16732	CG	ASN A 438	-35.808	12.841	-21.996	1.00	0.00	D	C
ATOM	16733	OD1	ASN A 438	-36.828	13.458	-21.694	1.00	0.00	D	O
ATOM	16734	ND2	ASN A 438	-35.682	12.170	-23.174	1.00	0.00	D	N
ATOM	16735	C	ASN A 438	-33.552	13.852	-19.134	1.00	0.00	D	C
ATOM	16736	O	ASN A 438	-33.705	13.444	-17.985	1.00	0.00	D	O
ATOM	16737	N	PHE A 439	-32.349	14.229	-19.608	1.00	0.00	D	N
ATOM	16738	CA	PHE A 439	-31.147	14.099	-18.831	1.00	0.00	D	C

ATOM	16739	CB	PHE A 439	-29.885	14.497	-19.622	1.00	0.00	D	C
ATOM	16740	CG	PHE A 439	-28.723	14.625	-18.689	1.00	0.00	D	C
ATOM	16741	CD1	PHE A 439	-28.233	13.540	-18.000	1.00	0.00	D	C
ATOM	16742	CE1	PHE A 439	-27.157	13.673	-17.153	1.00	0.00	D	C
ATOM	16743	CZ	PHE A 439	-26.547	14.893	-16.995	1.00	0.00	D	C
ATOM	16744	CD2	PHE A 439	-28.095	15.840	-18.535	1.00	0.00	D	C
ATOM	16745	CE2	PHE A 439	-27.018	15.979	-17.691	1.00	0.00	D	C
ATOM	16746	C	PHE A 439	-31.220	14.941	-17.598	1.00	0.00	D	C
ATOM	16747	O	PHE A 439	-30.905	14.477	-16.504	1.00	0.00	D	O
ATOM	16748	N	LEU A 440	-31.652	16.207	-17.736	1.00	0.00	D	N
ATOM	16749	CA	LEU A 440	-31.673	17.080	-16.600	1.00	0.00	D	C
ATOM	16750	CB	LEU A 440	-32.077	18.524	-16.946	1.00	0.00	D	C
ATOM	16751	CG	LEU A 440	-31.061	19.230	-17.864	1.00	0.00	D	C
ATOM	16752	CD1	LEU A 440	-31.461	20.690	-18.129	1.00	0.00	D	C
ATOM	16753	CD2	LEU A 440	-29.630	19.087	-17.321	1.00	0.00	D	C
ATOM	16754	C	LEU A 440	-32.637	16.559	-15.583	1.00	0.00	D	C
ATOM	16755	O	LEU A 440	-32.334	16.546	-14.391	1.00	0.00	D	O
ATOM	16756	N	VAL A 441	-33.816	16.088	-16.029	1.00	0.00	D	N
ATOM	16757	CA	VAL A 441	-34.819	15.631	-15.108	1.00	0.00	D	C
ATOM	16758	CB	VAL A 441	-36.071	15.156	-15.778	1.00	0.00	D	C
ATOM	16759	CG1	VAL A 441	-37.014	14.576	-14.710	1.00	0.00	D	C
ATOM	16760	CG2	VAL A 441	-36.674	16.338	-16.546	1.00	0.00	D	C
ATOM	16761	C	VAL A 441	-34.275	14.478	-14.329	1.00	0.00	D	C
ATOM	16762	O	VAL A 441	-34.510	14.360	-13.128	1.00	0.00	D	O
ATOM	16763	N	TYR A 442	-33.522	13.596	-15.008	1.00	0.00	D	N
ATOM	16764	CA	TYR A 442	-32.965	12.419	-14.409	1.00	0.00	D	C
ATOM	16765	CB	TYR A 442	-32.198	11.580	-15.446	1.00	0.00	D	C
ATOM	16766	CG	TYR A 442	-31.609	10.384	-14.780	1.00	0.00	D	C
ATOM	16767	CD1	TYR A 442	-32.334	9.220	-14.659	1.00	0.00	D	C
ATOM	16768	CE1	TYR A 442	-31.791	8.114	-14.051	1.00	0.00	D	C
ATOM	16769	CZ	TYR A 442	-30.512	8.166	-13.556	1.00	0.00	D	C
ATOM	16770	OH	TYR A 442	-29.947	7.035	-12.929	1.00	0.00	D	O
ATOM	16771	CD2	TYR A 442	-30.330	10.428	-14.274	1.00	0.00	D	C
ATOM	16772	CE2	TYR A 442	-29.783	9.326	-13.664	1.00	0.00	D	C
ATOM	16773	C	TYR A 442	-32.014	12.818	-13.324	1.00	0.00	D	C
ATOM	16774	O	TYR A 442	-32.001	12.212	-12.252	1.00	0.00	D	O
ATOM	16775	N	CYS A 443	-31.212	13.869	-13.563	1.00	0.00	D	N
ATOM	16776	CA	CYS A 443	-30.197	14.275	-12.631	1.00	0.00	D	C

ATOM 16777	CB	CYS A 443	-29.421	15.510	-13.111	1.00	0.00	D	C
ATOM 16778	SG	CYS A 443	-28.608	15.214	-14.706	1.00	0.00	D	S
ATOM 16779	C	CYS A 443	-30.829	14.636	-11.319	1.00	0.00	D	C
ATOM 16780	O	CYS A 443	-30.312	14.286	-10.260	1.00	0.00	D	O
ATOM 16781	N	LEU A 444	-31.975	15.333	-11.362	1.00	0.00	D	N
ATOM 16782	CA	LEU A 444	-32.679	15.782	-10.191	1.00	0.00	D	C
ATOM 16783	CB	LEU A 444	-33.928	16.590	-10.600	1.00	0.00	D	C
ATOM 16784	CG	LEU A 444	-34.855	17.064	-9.466	1.00	0.00	D	C
ATOM 16785	CD1	LEU A 444	-35.680	15.901	-8.894	1.00	0.00	D	C
ATOM 16786	CD2	LEU A 444	-34.084	17.843	-8.393	1.00	0.00	D	C
ATOM 16787	C	LEU A 444	-33.091	14.584	-9.391	1.00	0.00	D	C
ATOM 16788	O	LEU A 444	-33.037	14.575	-8.163	1.00	0.00	D	O
ATOM 16789	N	TYR A 445	-33.510	13.516	-10.075	1.00	0.00	D	N
ATOM 16790	CA	TYR A 445	-33.937	12.340	-9.386	1.00	0.00	D	C
ATOM 16791	CB	TYR A 445	-34.402	11.268	-10.393	1.00	0.00	D	C
ATOM 16792	CG	TYR A 445	-34.582	9.947	-9.733	1.00	0.00	D	C
ATOM 16793	CD1	TYR A 445	-35.747	9.637	-9.072	1.00	0.00	D	C
ATOM 16794	CE1	TYR A 445	-35.903	8.409	-8.470	1.00	0.00	D	C
ATOM 16795	CZ	TYR A 445	-34.891	7.480	-8.523	1.00	0.00	D	C
ATOM 16796	OH	TYR A 445	-35.051	6.220	-7.908	1.00	0.00	D	O
ATOM 16797	CD2	TYR A 445	-33.574	9.008	-9.777	1.00	0.00	D	C
ATOM 16798	CE2	TYR A 445	-33.725	7.780	-9.178	1.00	0.00	D	C
ATOM 16799	C	TYR A 445	-32.784	11.819	-8.588	1.00	0.00	D	C
ATOM 16800	O	TYR A 445	-32.940	11.401	-7.441	1.00	0.00	D	O
ATOM 16801	N	MET A 446	-31.584	11.844	-9.188	1.00	0.00	D	N
ATOM 16802	CA	MET A 446	-30.413	11.297	-8.568	1.00	0.00	D	C
ATOM 16803	CB	MET A 446	-29.206	11.316	-9.514	1.00	0.00	D	C
ATOM 16804	CG	MET A 446	-29.501	10.595	-10.828	1.00	0.00	D	C
ATOM 16805	SD	MET A 446	-30.315	8.988	-10.610	1.00	0.00	D	S
ATOM 16806	CE	MET A 446	-29.138	8.350	-9.387	1.00	0.00	D	C
ATOM 16807	C	MET A 446	-30.047	12.057	-7.332	1.00	0.00	D	C
ATOM 16808	O	MET A 446	-29.688	11.463	-6.317	1.00	0.00	D	O
ATOM 16809	N	ILE A 447	-30.130	13.398	-7.378	1.00	0.00	D	N
ATOM 16810	CA	ILE A 447	-29.720	14.195	-6.264	1.00	0.00	D	C
ATOM 16811	CB	ILE A 447	-29.749	15.664	-6.572	1.00	0.00	D	C
ATOM 16812	CG2	ILE A 447	-28.754	15.913	-7.718	1.00	0.00	D	C
ATOM 16813	CG1	ILE A 447	-31.177	16.110	-6.893	1.00	0.00	D	C
ATOM 16814	CD	ILE A 447	-31.322	17.589	-7.226	1.00	0.00	D	C

ATOM 16815 C ILE A 447 -30.612 13.892 -5.099 1.00 0.00 D C
ATOM 16816 O ILE A 447 -30.151 13.805 -3.961 1.00 0.00 D O
ATOM 16817 N ILE A 448 -31.918 13.726 -5.355 1.00 0.00 D N
ATOM 16818 CA ILE A 448 -32.862 13.453 -4.311 1.00 0.00 D C
ATOM 16819 CB ILE A 448 -34.273 13.414 -4.804 1.00 0.00 D C
ATOM 16820 CG2 ILE A 448 -35.181 13.006 -3.633 1.00 0.00 D C
ATOM 16821 CG1 ILE A 448 -34.644 14.766 -5.421 1.00 0.00 D C
ATOM 16822 CD ILE A 448 -35.935 14.696 -6.223 1.00 0.00 D C
ATOM 16823 C ILE A 448 -32.602 12.110 -3.692 1.00 0.00 D C
ATOM 16824 O ILE A 448 -32.650 11.968 -2.472 1.00 0.00 D O
ATOM 16825 N PHE A 449 -32.322 11.084 -4.517 1.00 0.00 D N
ATOM 16826 CA PHE A 449 -32.166 9.748 -4.003 1.00 0.00 D C
ATOM 16827 CB PHE A 449 -31.856 8.726 -5.115 1.00 0.00 D C
ATOM 16828 CG PHE A 449 -31.939 7.339 -4.562 1.00 0.00 D C
ATOM 16829 CD1 PHE A 449 -30.917 6.811 -3.808 1.00 0.00 D C
ATOM 16830 CE1 PHE A 449 -30.998 5.530 -3.312 1.00 0.00 D C
ATOM 16831 CZ PHE A 449 -32.106 4.759 -3.566 1.00 0.00 D C
ATOM 16832 CD2 PHE A 449 -33.044 6.556 -4.816 1.00 0.00 D C
ATOM 16833 CE2 PHE A 449 -33.131 5.275 -4.323 1.00 0.00 D C
ATOM 16834 C PHE A 449 -31.015 9.737 -3.046 1.00 0.00 D C
ATOM 16835 O PHE A 449 -31.097 9.148 -1.968 1.00 0.00 D O
ATOM 16836 N THR A 450 -29.896 10.371 -3.439 1.00 0.00 D N
ATOM 16837 CA THR A 450 -28.716 10.429 -2.628 1.00 0.00 D C
ATOM 16838 CB THR A 450 -27.531 10.975 -3.373 1.00 0.00 D C
ATOM 16839 OG1 THR A 450 -26.348 10.812 -2.601 1.00 0.00 D O
ATOM 16840 CG2 THR A 450 -27.771 12.462 -3.683 1.00 0.00 D C
ATOM 16841 C THR A 450 -28.943 11.287 -1.423 1.00 0.00 D C
ATOM 16842 O THR A 450 -28.485 10.957 -0.336 1.00 0.00 D O
ATOM 16843 N MET A 451 -29.658 12.419 -1.575 1.00 0.00 D N
ATOM 16844 CA MET A 451 -29.816 13.317 -0.466 1.00 0.00 D C
ATOM 16845 CB MET A 451 -30.583 14.602 -0.817 1.00 0.00 D C
ATOM 16846 CG MET A 451 -29.770 15.579 -1.665 1.00 0.00 D C
ATOM 16847 SD MET A 451 -30.613 17.149 -2.016 1.00 0.00 D S
ATOM 16848 CE MET A 451 -29.141 17.957 -2.706 1.00 0.00 D C
ATOM 16849 C MET A 451 -30.552 12.656 0.654 1.00 0.00 D C
ATOM 16850 O MET A 451 -30.151 12.758 1.811 1.00 0.00 D O
ATOM 16851 N ALA A 452 -31.654 11.951 0.346 1.00 0.00 D N
ATOM 16852 CA ALA A 452 -32.398 11.333 1.401 1.00 0.00 D C

ATOM	16853	CB	ALA A 452	-33.656	10.606	0.901	1.00	0.00	D	C
ATOM	16854	C	ALA A 452	-31.520	10.309	2.038	1.00	0.00	D	C
ATOM	16855	O	ALA A 452	-31.468	10.193	3.260	1.00	0.00	D	O
ATOM	16856	N	ALA A 453	-30.786	9.545	1.210	1.00	0.00	D	N
ATOM	16857	CA	ALA A 453	-29.948	8.490	1.702	1.00	0.00	D	C
ATOM	16858	CB	ALA A 453	-29.261	7.707	0.569	1.00	0.00	D	C
ATOM	16859	C	ALA A 453	-28.873	9.061	2.575	1.00	0.00	D	C
ATOM	16860	O	ALA A 453	-28.581	8.526	3.642	1.00	0.00	D	O
ATOM	16861	N	TYR A 454	-28.258	10.177	2.140	1.00	0.00	D	N
ATOM	16862	CA	TYR A 454	-27.189	10.796	2.872	1.00	0.00	D	C
ATOM	16863	CB	TYR A 454	-26.614	12.019	2.135	1.00	0.00	D	C
ATOM	16864	CG	TYR A 454	-25.707	12.736	3.076	1.00	0.00	D	C
ATOM	16865	CD1	TYR A 454	-24.393	12.356	3.222	1.00	0.00	D	C
ATOM	16866	CE1	TYR A 454	-23.566	13.025	4.095	1.00	0.00	D	C
ATOM	16867	CZ	TYR A 454	-24.050	14.082	4.827	1.00	0.00	D	C
ATOM	16868	OH	TYR A 454	-23.197	14.764	5.720	1.00	0.00	D	O
ATOM	16869	CD2	TYR A 454	-26.183	13.794	3.816	1.00	0.00	D	C
ATOM	16870	CE2	TYR A 454	-25.363	14.466	4.689	1.00	0.00	D	C
ATOM	16871	C	TYR A 454	-27.713	11.288	4.190	1.00	0.00	D	C
ATOM	16872	O	TYR A 454	-27.107	11.072	5.237	1.00	0.00	D	O
ATOM	16873	N	TYR A 455	-28.863	11.978	4.141	1.00	0.00	D	N
ATOM	16874	CA	TYR A 455	-29.549	12.595	5.241	1.00	0.00	D	C
ATOM	16875	CB	TYR A 455	-30.594	13.647	4.829	1.00	0.00	D	C
ATOM	16876	CG	TYR A 455	-29.855	14.849	4.354	1.00	0.00	D	C
ATOM	16877	CD1	TYR A 455	-29.160	15.632	5.249	1.00	0.00	D	C
ATOM	16878	CE1	TYR A 455	-28.479	16.747	4.826	1.00	0.00	D	C
ATOM	16879	CZ	TYR A 455	-28.494	17.097	3.497	1.00	0.00	D	C
ATOM	16880	OH	TYR A 455	-27.797	18.241	3.056	1.00	0.00	D	O
ATOM	16881	CD2	TYR A 455	-29.874	15.211	3.029	1.00	0.00	D	C
ATOM	16882	CE2	TYR A 455	-29.196	16.326	2.599	1.00	0.00	D	C
ATOM	16883	C	TYR A 455	-30.234	11.630	6.163	1.00	0.00	D	C
ATOM	16884	O	TYR A 455	-30.553	12.015	7.285	1.00	0.00	D	O
ATOM	16885	N	ARG A 456	-30.565	10.404	5.704	1.00	0.00	D	N
ATOM	16886	CA	ARG A 456	-31.386	9.473	6.443	1.00	0.00	D	C
ATOM	16887	CB	ARG A 456	-31.345	8.027	5.916	1.00	0.00	D	C
ATOM	16888	CG	ARG A 456	-29.946	7.410	5.986	1.00	0.00	D	C
ATOM	16889	CD	ARG A 456	-29.910	5.889	5.827	1.00	0.00	D	C
ATOM	16890	NE	ARG A 456	-30.267	5.273	7.134	1.00	0.00	D	N

ATOM 16891 CZ ARG A 456 -30.946 4.087 7.168 1.00 0.00 D C
ATOM 16892 NH1 ARG A 456 -31.347 3.508 6.001 1.00 0.00 D N
ATOM 16893 NH2 ARG A 456 -31.222 3.487 8.362 1.00 0.00 D N
ATOM 16894 C ARG A 456 -30.981 9.379 7.882 1.00 0.00 D C
ATOM 16895 O ARG A 456 -29.802 9.368 8.234 1.00 0.00 D O
ATOM 16896 N PRO A 457 -31.997 9.358 8.719 1.00 0.00 D N
ATOM 16897 CD PRO A 457 -33.200 10.117 8.421 1.00 0.00 D C
ATOM 16898 CA PRO A 457 -31.790 9.226 10.138 1.00 0.00 D C
ATOM 16899 CB PRO A 457 -33.083 9.691 10.805 1.00 0.00 D C
ATOM 16900 CG PRO A 457 -33.706 10.643 9.774 1.00 0.00 D C
ATOM 16901 C PRO A 457 -31.414 7.830 10.520 1.00 0.00 D C
ATOM 16902 O PRO A 457 -32.041 6.888 10.033 1.00 0.00 D O
ATOM 16903 N VAL A 458 -30.419 7.686 11.416 1.00 0.00 D N
ATOM 16904 CA VAL A 458 -29.952 6.407 11.874 1.00 0.00 D C
ATOM 16905 CB VAL A 458 -28.720 6.524 12.720 1.00 0.00 D C
ATOM 16906 CG1 VAL A 458 -28.372 5.137 13.286 1.00 0.00 D C
ATOM 16907 CG2 VAL A 458 -27.608 7.146 11.858 1.00 0.00 D C
ATOM 16908 C VAL A 458 -31.013 5.754 12.694 1.00 0.00 D C
ATOM 16909 O VAL A 458 -31.293 4.569 12.502 1.00 0.00 D O
ATOM 16910 N ASP A 459 -31.634 6.559 13.586 1.00 0.00 D N
ATOM 16911 CA ASP A 459 -32.640 6.217 14.551 1.00 0.00 D C
ATOM 16912 CB ASP A 459 -34.065 6.572 14.096 1.00 0.00 D C
ATOM 16913 CG ASP A 459 -34.182 8.089 14.086 1.00 0.00 D C
ATOM 16914 OD1 ASP A 459 -33.726 8.723 15.073 1.00 0.00 D O
ATOM 16915 OD2 ASP A 459 -34.736 8.631 13.091 1.00 0.00 D O
ATOM 16916 C ASP A 459 -32.601 4.777 14.870 1.00 0.00 D C
ATOM 16917 O ASP A 459 -31.581 4.229 15.295 1.00 0.00 D O
ATOM 16918 N GLY A 460 -33.788 4.182 14.710 1.00 0.00 D N
ATOM 16919 CA GLY A 460 -34.053 2.797 14.811 1.00 0.00 D C
ATOM 16920 C GLY A 460 -34.185 2.397 13.385 1.00 0.00 D C
ATOM 16921 O GLY A 460 -33.318 2.712 12.569 1.00 0.00 D O
ATOM 16922 N LEU A 461 -35.281 1.699 13.046 1.00 0.00 D N
ATOM 16923 CA LEU A 461 -35.507 1.248 11.705 1.00 0.00 D C
ATOM 16924 CB LEU A 461 -35.919 -0.225 11.682 1.00 0.00 D C
ATOM 16925 CG LEU A 461 -34.830 -1.179 12.219 1.00 0.00 D C
ATOM 16926 CD1 LEU A 461 -34.537 -0.940 13.709 1.00 0.00 D C
ATOM 16927 CD2 LEU A 461 -35.183 -2.645 11.941 1.00 0.00 D C
ATOM 16928 C LEU A 461 -36.609 2.094 11.146 1.00 0.00 D C

ATOM	16929	O	LEU A 461	-37.474	2.519	11.899	1.00	0.00	D	O
ATOM	16930	N	PRO A 462	-36.706	2.230	9.854	1.00	0.00	D	N
ATOM	16931	CD	PRO A 462	-36.644	1.039	9.022	1.00	0.00	D	C
ATOM	16932	CA	PRO A 462	-37.466	3.287	9.220	1.00	0.00	D	C
ATOM	16933	CB	PRO A 462	-37.731	2.809	7.795	1.00	0.00	D	C
ATOM	16934	CG	PRO A 462	-37.662	1.278	7.898	1.00	0.00	D	C
ATOM	16935	C	PRO A 462	-38.676	3.906	9.875	1.00	0.00	D	C
ATOM	16936	O	PRO A 462	-38.488	5.077	10.218	1.00	0.00	D	O
ATOM	16937	N	PRO A 463	-39.845	3.365	10.108	1.00	0.00	D	N
ATOM	16938	CD	PRO A 463	-40.459	2.400	9.212	1.00	0.00	D	C
ATOM	16939	CA	PRO A 463	-40.834	4.145	10.813	1.00	0.00	D	C
ATOM	16940	CB	PRO A 463	-42.199	3.631	10.355	1.00	0.00	D	C
ATOM	16941	CG	PRO A 463	-41.897	2.257	9.735	1.00	0.00	D	C
ATOM	16942	C	PRO A 463	-40.587	3.939	12.263	1.00	0.00	D	C
ATOM	16943	O	PRO A 463	-39.944	2.947	12.601	1.00	0.00	D	O
ATOM	16944	N	PHE A 464	-41.097	4.829	13.136	1.00	0.00	D	N
ATOM	16945	CA	PHE A 464	-41.863	5.951	12.695	1.00	0.00	D	C
ATOM	16946	CB	PHE A 464	-42.975	6.379	13.669	1.00	0.00	D	C
ATOM	16947	CG	PHE A 464	-44.070	5.380	13.509	1.00	0.00	D	C
ATOM	16948	CD1	PHE A 464	-44.045	4.181	14.185	1.00	0.00	D	C
ATOM	16949	CE1	PHE A 464	-45.059	3.266	14.023	1.00	0.00	D	C
ATOM	16950	CZ	PHE A 464	-46.109	3.539	13.180	1.00	0.00	D	C
ATOM	16951	CD2	PHE A 464	-45.124	5.643	12.663	1.00	0.00	D	C
ATOM	16952	CE2	PHE A 464	-46.140	4.730	12.499	1.00	0.00	D	C
ATOM	16953	C	PHE A 464	-40.958	7.110	12.434	1.00	0.00	D	C
ATOM	16954	O	PHE A 464	-39.831	7.166	12.921	1.00	0.00	D	O
ATOM	16955	N	LYS A 465	-41.443	8.050	11.598	1.00	0.00	D	N
ATOM	16956	CA	LYS A 465	-40.701	9.227	11.252	1.00	0.00	D	C
ATOM	16957	CB	LYS A 465	-40.663	9.488	9.737	1.00	0.00	D	C
ATOM	16958	CG	LYS A 465	-40.000	8.370	8.931	1.00	0.00	D	C
ATOM	16959	CD	LYS A 465	-40.277	8.461	7.429	1.00	0.00	D	C
ATOM	16960	CE	LYS A 465	-41.741	8.217	7.060	1.00	0.00	D	C
ATOM	16961	NZ	LYS A 465	-42.096	6.799	7.296	1.00	0.00	D	N
ATOM	16962	C	LYS A 465	-41.422	10.401	11.857	1.00	0.00	D	C
ATOM	16963	O	LYS A 465	-42.650	10.443	11.865	1.00	0.00	D	O
ATOM	16964	N	MET A 466	-40.660	11.380	12.394	1.00	0.00	D	N
ATOM	16965	CA	MET A 466	-41.203	12.548	13.037	1.00	0.00	D	C
ATOM	16966	CB	MET A 466	-40.111	13.439	13.659	1.00	0.00	D	C

ATOM	16967	CG	MET A 466	-39.214	12.742	14.690	1.00	0.00	D	C
ATOM	16968	SD	MET A 466	-37.969	13.843	15.437	1.00	0.00	D	S
ATOM	16969	CE	MET A 466	-36.775	12.570	15.944	1.00	0.00	D	C
ATOM	16970	C	MET A 466	-41.923	13.405	12.037	1.00	0.00	D	C
ATOM	16971	O	MET A 466	-43.026	13.883	12.298	1.00	0.00	D	O
ATOM	16972	N	GLU A 467	-41.324	13.603	10.848	1.00	0.00	D	N
ATOM	16973	CA	GLU A 467	-41.923	14.451	9.857	1.00	0.00	D	C
ATOM	16974	CB	GLU A 467	-43.343	14.012	9.475	1.00	0.00	D	C
ATOM	16975	CG	GLU A 467	-43.408	12.675	8.745	1.00	0.00	D	C
ATOM	16976	CD	GLU A 467	-44.879	12.420	8.456	1.00	0.00	D	C
ATOM	16977	OE1	GLU A 467	-45.672	13.389	8.598	1.00	0.00	D	O
ATOM	16978	OE2	GLU A 467	-45.231	11.267	8.089	1.00	0.00	D	O
ATOM	16979	C	GLU A 467	-42.044	15.846	10.403	1.00	0.00	D	C
ATOM	16980	O	GLU A 467	-42.999	16.557	10.088	1.00	0.00	D	O
ATOM	16981	N	LYS A 468	-41.070	16.294	11.221	1.00	0.00	D	N
ATOM	16982	CA	LYS A 468	-41.091	17.629	11.756	1.00	0.00	D	C
ATOM	16983	CB	LYS A 468	-40.587	17.732	13.206	1.00	0.00	D	C
ATOM	16984	CG	LYS A 468	-41.610	17.199	14.214	1.00	0.00	D	C
ATOM	16985	CD	LYS A 468	-42.953	17.931	14.128	1.00	0.00	D	C
ATOM	16986	CE	LYS A 468	-44.032	17.395	15.073	1.00	0.00	D	C
ATOM	16987	NZ	LYS A 468	-45.291	18.157	14.885	1.00	0.00	D	N
ATOM	16988	C	LYS A 468	-40.227	18.491	10.883	1.00	0.00	D	C
ATOM	16989	O	LYS A 468	-39.937	18.130	9.749	1.00	0.00	D	O
ATOM	16990	N	THR A 469	-39.810	19.674	11.374	1.00	0.00	D	N
ATOM	16991	CA	THR A 469	-39.029	20.549	10.543	1.00	0.00	D	C
ATOM	16992	CB	THR A 469	-38.625	21.820	11.226	1.00	0.00	D	C
ATOM	16993	OG1	THR A 469	-37.999	22.699	10.302	1.00	0.00	D	O
ATOM	16994	CG2	THR A 469	-37.662	21.478	12.377	1.00	0.00	D	C
ATOM	16995	C	THR A 469	-37.783	19.829	10.142	1.00	0.00	D	C
ATOM	16996	O	THR A 469	-37.239	19.020	10.889	1.00	0.00	D	O
ATOM	16997	N	GLY A 470	-37.344	20.022	8.881	1.00	0.00	D	N
ATOM	16998	CA	GLY A 470	-36.143	19.397	8.399	1.00	0.00	D	C
ATOM	16999	C	GLY A 470	-36.529	18.024	7.971	1.00	0.00	D	C
ATOM	17000	O	GLY A 470	-35.983	17.466	7.020	1.00	0.00	D	O
ATOM	17001	N	ASP A 471	-37.484	17.445	8.718	1.00	0.00	D	N
ATOM	17002	CA	ASP A 471	-38.069	16.179	8.459	1.00	0.00	D	C
ATOM	17003	CB	ASP A 471	-38.859	15.594	9.632	1.00	0.00	D	C
ATOM	17004	CG	ASP A 471	-37.854	15.174	10.695	1.00	0.00	D	C

ATOM 17005 OD1 ASP A 471 -36.628 15.225 10.404 1.00 0.00 D O
ATOM 17006 OD2 ASP A 471 -38.301 14.793 11.810 1.00 0.00 D O
ATOM 17007 C ASP A 471 -38.975 16.342 7.295 1.00 0.00 D C
ATOM 17008 O ASP A 471 -39.300 15.378 6.615 1.00 0.00 D O
ATOM 17009 N TYR A 472 -39.466 17.572 7.072 1.00 0.00 D N
ATOM 17010 CA TYR A 472 -40.369 17.782 5.982 1.00 0.00 D C
ATOM 17011 CB TYR A 472 -40.953 19.207 5.987 1.00 0.00 D C
ATOM 17012 CG TYR A 472 -42.006 19.312 4.937 1.00 0.00 D C
ATOM 17013 CD1 TYR A 472 -43.234 18.713 5.116 1.00 0.00 D C
ATOM 17014 CE1 TYR A 472 -44.215 18.812 4.156 1.00 0.00 D C
ATOM 17015 CZ TYR A 472 -43.976 19.519 3.002 1.00 0.00 D C
ATOM 17016 OH TYR A 472 -44.978 19.625 2.014 1.00 0.00 D O
ATOM 17017 CD2 TYR A 472 -41.783 20.026 3.784 1.00 0.00 D C
ATOM 17018 CE2 TYR A 472 -42.759 20.128 2.819 1.00 0.00 D C
ATOM 17019 C TYR A 472 -39.646 17.551 4.686 1.00 0.00 D C
ATOM 17020 O TYR A 472 -40.145 16.844 3.813 1.00 0.00 D O
ATOM 17021 N PHE A 473 -38.434 18.123 4.535 1.00 0.00 D N
ATOM 17022 CA PHE A 473 -37.706 18.019 3.299 1.00 0.00 D C
ATOM 17023 CB PHE A 473 -36.405 18.840 3.254 1.00 0.00 D C
ATOM 17024 CG PHE A 473 -36.749 20.273 3.072 1.00 0.00 D C
ATOM 17025 CD1 PHE A 473 -37.119 20.737 1.832 1.00 0.00 D C
ATOM 17026 CE1 PHE A 473 -37.433 22.063 1.643 1.00 0.00 D C
ATOM 17027 CZ PHE A 473 -37.374 22.935 2.702 1.00 0.00 D C
ATOM 17028 CD2 PHE A 473 -36.684 21.156 4.127 1.00 0.00 D C
ATOM 17029 CE2 PHE A 473 -36.997 22.482 3.943 1.00 0.00 D C
ATOM 17030 C PHE A 473 -37.301 16.607 3.006 1.00 0.00 D C
ATOM 17031 O PHE A 473 -37.464 16.136 1.881 1.00 0.00 D O
ATOM 17032 N ARG A 474 -36.749 15.894 4.003 1.00 0.00 D N
ATOM 17033 CA ARG A 474 -36.241 14.578 3.748 1.00 0.00 D C
ATOM 17034 CB ARG A 474 -35.500 13.966 4.947 1.00 0.00 D C
ATOM 17035 CG ARG A 474 -36.373 13.732 6.177 1.00 0.00 D C
ATOM 17036 CD ARG A 474 -35.579 13.170 7.356 1.00 0.00 D C
ATOM 17037 NE ARG A 474 -36.556 12.662 8.358 1.00 0.00 D N
ATOM 17038 CZ ARG A 474 -36.965 11.362 8.294 1.00 0.00 D C
ATOM 17039 NH1 ARG A 474 -36.449 10.532 7.342 1.00 0.00 D N
ATOM 17040 NH2 ARG A 474 -37.889 10.894 9.182 1.00 0.00 D N
ATOM 17041 C ARG A 474 -37.355 13.646 3.374 1.00 0.00 D C
ATOM 17042 O ARG A 474 -37.198 12.815 2.480 1.00 0.00 D O

ATOM	17043	N	VAL A 475	-38.514	13.767	4.043	1.00	0.00	D	N
ATOM	17044	CA	VAL A 475	-39.624	12.889	3.794	1.00	0.00	D	C
ATOM	17045	CB	VAL A 475	-40.804	13.156	4.680	1.00	0.00	D	C
ATOM	17046	CG1	VAL A 475	-41.961	12.252	4.222	1.00	0.00	D	C
ATOM	17047	CG2	VAL A 475	-40.391	12.907	6.140	1.00	0.00	D	C
ATOM	17048	C	VAL A 475	-40.079	13.038	2.378	1.00	0.00	D	C
ATOM	17049	O	VAL A 475	-40.430	12.057	1.726	1.00	0.00	D	O
ATOM	17050	N	THR A 476	-40.102	14.278	1.860	1.00	0.00	D	N
ATOM	17051	CA	THR A 476	-40.565	14.467	0.517	1.00	0.00	D	C
ATOM	17052	CB	THR A 476	-40.609	15.912	0.106	1.00	0.00	D	C
ATOM	17053	OG1	THR A 476	-39.303	16.468	0.103	1.00	0.00	D	O
ATOM	17054	CG2	THR A 476	-41.507	16.675	1.094	1.00	0.00	D	C
ATOM	17055	C	THR A 476	-39.627	13.749	-0.401	1.00	0.00	D	C
ATOM	17056	O	THR A 476	-40.052	13.109	-1.363	1.00	0.00	D	O
ATOM	17057	N	GLY A 477	-38.317	13.830	-0.112	1.00	0.00	D	N
ATOM	17058	CA	GLY A 477	-37.334	13.229	-0.966	1.00	0.00	D	C
ATOM	17059	C	GLY A 477	-37.513	11.744	-1.014	1.00	0.00	D	C
ATOM	17060	O	GLY A 477	-37.370	11.135	-2.072	1.00	0.00	D	O
ATOM	17061	N	GLU A 478	-37.812	11.113	0.137	1.00	0.00	D	N
ATOM	17062	CA	GLU A 478	-37.927	9.683	0.173	1.00	0.00	D	C
ATOM	17063	CB	GLU A 478	-38.181	9.125	1.587	1.00	0.00	D	C
ATOM	17064	CG	GLU A 478	-39.550	9.495	2.158	1.00	0.00	D	C
ATOM	17065	CD	GLU A 478	-39.660	8.931	3.566	1.00	0.00	D	C
ATOM	17066	OE1	GLU A 478	-38.597	8.619	4.166	1.00	0.00	D	O
ATOM	17067	OE2	GLU A 478	-40.812	8.809	4.063	1.00	0.00	D	O
ATOM	17068	C	GLU A 478	-39.072	9.258	-0.687	1.00	0.00	D	C
ATOM	17069	O	GLU A 478	-38.964	8.289	-1.440	1.00	0.00	D	O
ATOM	17070	N	ILE A 479	-40.209	9.969	-0.596	1.00	0.00	D	N
ATOM	17071	CA	ILE A 479	-41.353	9.611	-1.382	1.00	0.00	D	C
ATOM	17072	CB	ILE A 479	-42.577	10.423	-1.073	1.00	0.00	D	C
ATOM	17073	CG2	ILE A 479	-43.643	10.092	-2.133	1.00	0.00	D	C
ATOM	17074	CG1	ILE A 479	-43.043	10.170	0.371	1.00	0.00	D	C
ATOM	17075	CD	ILE A 479	-44.139	11.126	0.837	1.00	0.00	D	C
ATOM	17076	C	ILE A 479	-41.026	9.808	-2.828	1.00	0.00	D	C
ATOM	17077	O	ILE A 479	-41.358	8.972	-3.667	1.00	0.00	D	O
ATOM	17078	N	LEU A 480	-40.350	10.925	-3.150	1.00	0.00	D	N
ATOM	17079	CA	LEU A 480	-40.050	11.265	-4.510	1.00	0.00	D	C
ATOM	17080	CB	LEU A 480	-39.345	12.625	-4.634	1.00	0.00	D	C

ATOM	17081	CG	LEU	A	480	-40.200	13.794	-4.109	1.00	0.00	D	C
ATOM	17082	CD1	LEU	A	480	-39.516	15.147	-4.355	1.00	0.00	D	C
ATOM	17083	CD2	LEU	A	480	-41.632	13.726	-4.666	1.00	0.00	D	C
ATOM	17084	C	LEU	A	480	-39.152	10.228	-5.116	1.00	0.00	D	C
ATOM	17085	O	LEU	A	480	-39.341	9.834	-6.264	1.00	0.00	D	O
ATOM	17086	N	SER	A	481	-38.149	9.751	-4.356	1.00	0.00	D	N
ATOM	17087	CA	SER	A	481	-37.219	8.803	-4.899	1.00	0.00	D	C
ATOM	17088	CB	SER	A	481	-36.099	8.434	-3.911	1.00	0.00	D	C
ATOM	17089	OG	SER	A	481	-36.640	7.770	-2.779	1.00	0.00	D	O
ATOM	17090	C	SER	A	481	-37.937	7.538	-5.262	1.00	0.00	D	C
ATOM	17091	O	SER	A	481	-37.687	6.953	-6.315	1.00	0.00	D	O
ATOM	17092	N	VAL	A	482	-38.856	7.075	-4.397	1.00	0.00	D	N
ATOM	17093	CA	VAL	A	482	-39.555	5.853	-4.666	1.00	0.00	D	C
ATOM	17094	CB	VAL	A	482	-40.499	5.467	-3.568	1.00	0.00	D	C
ATOM	17095	CG1	VAL	A	482	-41.198	4.153	-3.957	1.00	0.00	D	C
ATOM	17096	CG2	VAL	A	482	-39.716	5.408	-2.244	1.00	0.00	D	C
ATOM	17097	C	VAL	A	482	-40.369	6.036	-5.906	1.00	0.00	D	C
ATOM	17098	O	VAL	A	482	-40.412	5.164	-6.774	1.00	0.00	D	O
ATOM	17099	N	LEU	A	483	-41.026	7.208	-6.024	1.00	0.00	D	N
ATOM	17100	CA	LEU	A	483	-41.886	7.504	-7.134	1.00	0.00	D	C
ATOM	17101	CB	LEU	A	483	-42.516	8.907	-7.010	1.00	0.00	D	C
ATOM	17102	CG	LEU	A	483	-43.622	9.270	-8.034	1.00	0.00	D	C
ATOM	17103	CD1	LEU	A	483	-44.144	10.692	-7.778	1.00	0.00	D	C
ATOM	17104	CD2	LEU	A	483	-43.185	9.097	-9.497	1.00	0.00	D	C
ATOM	17105	C	LEU	A	483	-41.029	7.466	-8.355	1.00	0.00	D	C
ATOM	17106	O	LEU	A	483	-41.440	6.970	-9.402	1.00	0.00	D	O
ATOM	17107	N	GLY	A	484	-39.801	8.000	-8.247	1.00	0.00	D	N
ATOM	17108	CA	GLY	A	484	-38.916	8.015	-9.368	1.00	0.00	D	C
ATOM	17109	C	GLY	A	484	-38.636	6.596	-9.746	1.00	0.00	D	C
ATOM	17110	O	GLY	A	484	-38.483	6.268	-10.922	1.00	0.00	D	O
ATOM	17111	N	GLY	A	485	-38.539	5.719	-8.734	1.00	0.00	D	N
ATOM	17112	CA	GLY	A	485	-38.217	4.338	-8.950	1.00	0.00	D	C
ATOM	17113	C	GLY	A	485	-39.273	3.652	-9.766	1.00	0.00	D	C
ATOM	17114	O	GLY	A	485	-38.956	2.821	-10.614	1.00	0.00	D	O
ATOM	17115	N	VAL	A	486	-40.560	3.967	-9.527	1.00	0.00	D	N
ATOM	17116	CA	VAL	A	486	-41.632	3.266	-10.183	1.00	0.00	D	C
ATOM	17117	CB	VAL	A	486	-42.990	3.680	-9.703	1.00	0.00	D	C
ATOM	17118	CG1	VAL	A	486	-43.282	5.102	-10.208	1.00	0.00	D	C

ATOM 17119 CG2 VAL A 486 -44.013 2.630 -10.166 1.00 0.00 D C
ATOM 17120 C VAL A 486 -41.591 3.483 -11.665 1.00 0.00 D C
ATOM 17121 O VAL A 486 -41.879 2.572 -12.441 1.00 0.00 D O
ATOM 17122 N TYR A 487 -41.221 4.696 -12.108 1.00 0.00 D N
ATOM 17123 CA TYR A 487 -41.282 4.993 -13.510 1.00 0.00 D C
ATOM 17124 CB TYR A 487 -40.878 6.436 -13.842 1.00 0.00 D C
ATOM 17125 CG TYR A 487 -41.063 6.569 -15.311 1.00 0.00 D C
ATOM 17126 CD1 TYR A 487 -42.322 6.788 -15.815 1.00 0.00 D C
ATOM 17127 CE1 TYR A 487 -42.526 6.906 -17.166 1.00 0.00 D C
ATOM 17128 CZ TYR A 487 -41.465 6.798 -18.028 1.00 0.00 D C
ATOM 17129 OH TYR A 487 -41.673 6.921 -19.418 1.00 0.00 D O
ATOM 17130 CD2 TYR A 487 -40.003 6.446 -16.180 1.00 0.00 D C
ATOM 17131 CE2 TYR A 487 -40.203 6.566 -17.535 1.00 0.00 D C
ATOM 17132 C TYR A 487 -40.374 4.071 -14.262 1.00 0.00 D C
ATOM 17133 O TYR A 487 -40.731 3.571 -15.326 1.00 0.00 D O
ATOM 17134 N PHE A 488 -39.173 3.818 -13.718 1.00 0.00 D N
ATOM 17135 CA PHE A 488 -38.218 2.969 -14.366 1.00 0.00 D C
ATOM 17136 CB PHE A 488 -36.911 2.821 -13.558 1.00 0.00 D C
ATOM 17137 CG PHE A 488 -36.177 4.122 -13.520 1.00 0.00 D C
ATOM 17138 CD1 PHE A 488 -35.403 4.518 -14.587 1.00 0.00 D C
ATOM 17139 CE1 PHE A 488 -34.717 5.710 -14.556 1.00 0.00 D C
ATOM 17140 CZ PHE A 488 -34.791 6.521 -13.450 1.00 0.00 D C
ATOM 17141 CD2 PHE A 488 -36.234 4.938 -12.410 1.00 0.00 D C
ATOM 17142 CE2 PHE A 488 -35.550 6.132 -12.373 1.00 0.00 D C
ATOM 17143 C PHE A 488 -38.805 1.595 -14.499 1.00 0.00 D C
ATOM 17144 O PHE A 488 -38.671 0.956 -15.543 1.00 0.00 D O
ATOM 17145 N PHE A 489 -39.469 1.093 -13.437 1.00 0.00 D N
ATOM 17146 CA PHE A 489 -40.010 -0.235 -13.483 1.00 0.00 D C
ATOM 17147 CB PHE A 489 -40.653 -0.693 -12.161 1.00 0.00 D C
ATOM 17148 CG PHE A 489 -41.133 -2.088 -12.385 1.00 0.00 D C
ATOM 17149 CD1 PHE A 489 -40.298 -3.155 -12.143 1.00 0.00 D C
ATOM 17150 CE1 PHE A 489 -40.727 -4.447 -12.349 1.00 0.00 D C
ATOM 17151 CZ PHE A 489 -42.001 -4.682 -12.805 1.00 0.00 D C
ATOM 17152 CD2 PHE A 489 -42.406 -2.334 -12.848 1.00 0.00 D C
ATOM 17153 CE2 PHE A 489 -42.839 -3.623 -13.055 1.00 0.00 D C
ATOM 17154 C PHE A 489 -41.070 -0.303 -14.538 1.00 0.00 D C
ATOM 17155 O PHE A 489 -41.129 -1.261 -15.306 1.00 0.00 D O
ATOM 17156 N PHE A 490 -41.949 0.716 -14.599 1.00 0.00 D N

ATOM	17157	CA	PHE A 490	-43.021	0.714	-15.556	1.00	0.00	D	C
ATOM	17158	CB	PHE A 490	-43.981	1.905	-15.377	1.00	0.00	D	C
ATOM	17159	CG	PHE A 490	-45.024	1.863	-16.442	1.00	0.00	D	C
ATOM	17160	CD1	PHE A 490	-46.027	0.920	-16.422	1.00	0.00	D	C
ATOM	17161	CE1	PHE A 490	-46.986	0.897	-17.408	1.00	0.00	D	C
ATOM	17162	CZ	PHE A 490	-46.956	1.825	-18.422	1.00	0.00	D	C
ATOM	17163	CD2	PHE A 490	-45.008	2.792	-17.457	1.00	0.00	D	C
ATOM	17164	CE2	PHE A 490	-45.966	2.775	-18.445	1.00	0.00	D	C
ATOM	17165	C	PHE A 490	-42.462	0.759	-16.945	1.00	0.00	D	C
ATOM	17166	O	PHE A 490	-42.907	0.019	-17.819	1.00	0.00	D	O
ATOM	17167	N	ARG A 491	-41.467	1.630	-17.189	1.00	0.00	D	N
ATOM	17168	CA	ARG A 491	-40.918	1.757	-18.510	1.00	0.00	D	C
ATOM	17169	CB	ARG A 491	-39.908	2.916	-18.631	1.00	0.00	D	C
ATOM	17170	CG	ARG A 491	-38.714	2.811	-17.681	1.00	0.00	D	C
ATOM	17171	CD	ARG A 491	-37.857	4.081	-17.638	1.00	0.00	D	C
ATOM	17172	NE	ARG A 491	-37.032	4.120	-18.877	1.00	0.00	D	N
ATOM	17173	CZ	ARG A 491	-35.718	3.751	-18.827	1.00	0.00	D	C
ATOM	17174	NH1	ARG A 491	-35.151	3.415	-17.632	1.00	0.00	D	N
ATOM	17175	NH2	ARG A 491	-34.969	3.730	-19.969	1.00	0.00	D	N
ATOM	17176	C	ARG A 491	-40.242	0.481	-18.913	1.00	0.00	D	C
ATOM	17177	O	ARG A 491	-40.347	0.055	-20.061	1.00	0.00	D	O
ATOM	17178	N	GLY A 492	-39.525	-0.166	-17.974	1.00	0.00	D	N
ATOM	17179	CA	GLY A 492	-38.780	-1.361	-18.265	1.00	0.00	D	C
ATOM	17180	C	GLY A 492	-39.681	-2.487	-18.673	1.00	0.00	D	C
ATOM	17181	O	GLY A 492	-39.352	-3.258	-19.575	1.00	0.00	D	O
ATOM	17182	N	ILE A 493	-40.847	-2.617	-18.014	1.00	0.00	D	N
ATOM	17183	CA	ILE A 493	-41.718	-3.725	-18.279	1.00	0.00	D	C
ATOM	17184	CB	ILE A 493	-42.942	-3.746	-17.405	1.00	0.00	D	C
ATOM	17185	CG2	ILE A 493	-43.844	-2.559	-17.777	1.00	0.00	D	C
ATOM	17186	CG1	ILE A 493	-43.637	-5.116	-17.502	1.00	0.00	D	C
ATOM	17187	CD	ILE A 493	-44.684	-5.341	-16.413	1.00	0.00	D	C
ATOM	17188	C	ILE A 493	-42.145	-3.670	-19.705	1.00	0.00	D	C
ATOM	17189	O	ILE A 493	-42.231	-4.701	-20.367	1.00	0.00	D	O
ATOM	17190	N	GLN A 494	-42.423	-2.461	-20.216	1.00	0.00	D	N
ATOM	17191	CA	GLN A 494	-42.854	-2.292	-21.572	1.00	0.00	D	C
ATOM	17192	CB	GLN A 494	-43.108	-0.822	-21.936	1.00	0.00	D	C
ATOM	17193	CG	GLN A 494	-43.569	-0.627	-23.382	1.00	0.00	D	C
ATOM	17194	CD	GLN A 494	-43.609	0.868	-23.656	1.00	0.00	D	C

ATOM 17195 OE1 GLN A 494 -44.446 1.358 -24.412 1.00 0.00 D O
ATOM 17196 NE2 GLN A 494 -42.663 1.618 -23.027 1.00 0.00 D N
ATOM 17197 C GLN A 494 -41.767 -2.755 -22.480 1.00 0.00 D C
ATOM 17198 O GLN A 494 -42.035 -3.335 -23.524 1.00 0.00 D O
ATOM 17199 N TYR A 495 -40.500 -2.495 -22.131 1.00 0.00 D N
ATOM 17200 CA TYR A 495 -39.436 -2.882 -23.012 1.00 0.00 D C
ATOM 17201 CB TYR A 495 -38.063 -2.417 -22.502 1.00 0.00 D C
ATOM 17202 CG TYR A 495 -37.069 -2.595 -23.597 1.00 0.00 D C
ATOM 17203 CD1 TYR A 495 -36.398 -3.783 -23.770 1.00 0.00 D C
ATOM 17204 CE1 TYR A 495 -35.483 -3.920 -24.787 1.00 0.00 D C
ATOM 17205 CZ TYR A 495 -35.232 -2.872 -25.641 1.00 0.00 D C
ATOM 17206 OH TYR A 495 -34.291 -3.012 -26.682 1.00 0.00 D O
ATOM 17207 CD2 TYR A 495 -36.817 -1.555 -24.459 1.00 0.00 D C
ATOM 17208 CE2 TYR A 495 -35.903 -1.685 -25.477 1.00 0.00 D C
ATOM 17209 C TYR A 495 -39.438 -4.375 -23.105 1.00 0.00 D C
ATOM 17210 O TYR A 495 -39.281 -4.944 -24.184 1.00 0.00 D O
ATOM 17211 N PHE A 496 -39.604 -5.049 -21.954 1.00 0.00 D N
ATOM 17212 CA PHE A 496 -39.635 -6.479 -21.910 1.00 0.00 D C
ATOM 17213 CB PHE A 496 -39.727 -6.991 -20.458 1.00 0.00 D C
ATOM 17214 CG PHE A 496 -39.612 -8.477 -20.420 1.00 0.00 D C
ATOM 17215 CD1 PHE A 496 -38.389 -9.083 -20.586 1.00 0.00 D C
ATOM 17216 CE1 PHE A 496 -38.269 -10.451 -20.542 1.00 0.00 D C
ATOM 17217 CZ PHE A 496 -39.379 -11.231 -20.323 1.00 0.00 D C
ATOM 17218 CD2 PHE A 496 -40.717 -9.266 -20.191 1.00 0.00 D C
ATOM 17219 CE2 PHE A 496 -40.605 -10.637 -20.145 1.00 0.00 D C
ATOM 17220 C PHE A 496 -40.844 -6.957 -22.651 1.00 0.00 D C
ATOM 17221 O PHE A 496 -40.763 -7.880 -23.460 1.00 0.00 D O
ATOM 17222 N LEU A 497 -42.005 -6.323 -22.392 1.00 0.00 D N
ATOM 17223 CA LEU A 497 -43.256 -6.746 -22.951 1.00 0.00 D C
ATOM 17224 CB LEU A 497 -44.463 -6.038 -22.300 1.00 0.00 D C
ATOM 17225 CG LEU A 497 -45.851 -6.633 -22.639 1.00 0.00 D C
ATOM 17226 CD1 LEU A 497 -46.935 -5.975 -21.775 1.00 0.00 D C
ATOM 17227 CD2 LEU A 497 -46.203 -6.548 -24.134 1.00 0.00 D C
ATOM 17228 C LEU A 497 -43.288 -6.533 -24.433 1.00 0.00 D C
ATOM 17229 O LEU A 497 -43.759 -7.389 -25.178 1.00 0.00 D O
ATOM 17230 N GLN A 498 -42.785 -5.387 -24.909 1.00 0.00 D N
ATOM 17231 CA GLN A 498 -42.840 -5.047 -26.297 1.00 0.00 D C
ATOM 17232 CB GLN A 498 -42.172 -3.690 -26.543 1.00 0.00 D C

ATOM	17233	CG	GLN A 498	-42.176	-3.210	-27.988	1.00	0.00	D	C
ATOM	17234	CD	GLN A 498	-41.470	-1.866	-27.958	1.00	0.00	D	C
ATOM	17235	OE1	GLN A 498	-40.380	-1.746	-27.399	1.00	0.00	D	O
ATOM	17236	NE2	GLN A 498	-42.113	-0.823	-28.545	1.00	0.00	D	N
ATOM	17237	C	GLN A 498	-42.078	-6.087	-27.046	1.00	0.00	D	C
ATOM	17238	O	GLN A 498	-42.554	-6.605	-28.055	1.00	0.00	D	O
ATOM	17239	N	ARG A 499	-40.870	-6.428	-26.561	1.00	0.00	D	N
ATOM	17240	CA	ARG A 499	-40.134	-7.457	-27.226	1.00	0.00	D	C
ATOM	17241	CB	ARG A 499	-38.776	-7.001	-27.780	1.00	0.00	D	C
ATOM	17242	CG	ARG A 499	-38.927	-6.075	-28.986	1.00	0.00	D	C
ATOM	17243	CD	ARG A 499	-39.543	-6.790	-30.188	1.00	0.00	D	C
ATOM	17244	NE	ARG A 499	-39.619	-5.812	-31.307	1.00	0.00	D	N
ATOM	17245	CZ	ARG A 499	-39.265	-6.204	-32.562	1.00	0.00	D	C
ATOM	17246	NH1	ARG A 499	-38.864	-7.490	-32.787	1.00	0.00	D	N
ATOM	17247	NH2	ARG A 499	-39.282	-5.306	-33.591	1.00	0.00	D	N
ATOM	17248	C	ARG A 499	-39.881	-8.541	-26.237	1.00	0.00	D	C
ATOM	17249	O	ARG A 499	-38.987	-8.455	-25.395	1.00	0.00	D	O
ATOM	17250	N	ARG A 500	-40.680	-9.607	-26.360	1.00	0.00	D	N
ATOM	17251	CA	ARG A 500	-40.651	-10.774	-25.534	1.00	0.00	D	C
ATOM	17252	CB	ARG A 500	-41.751	-11.764	-25.946	1.00	0.00	D	C
ATOM	17253	CG	ARG A 500	-43.153	-11.167	-25.859	1.00	0.00	D	C
ATOM	17254	CD	ARG A 500	-44.194	-11.950	-26.658	1.00	0.00	D	C
ATOM	17255	NE	ARG A 500	-43.863	-11.788	-28.103	1.00	0.00	D	N
ATOM	17256	CZ	ARG A 500	-44.362	-12.667	-29.021	1.00	0.00	D	C
ATOM	17257	NH1	ARG A 500	-45.125	-13.721	-28.609	1.00	0.00	D	N
ATOM	17258	NH2	ARG A 500	-44.097	-12.493	-30.348	1.00	0.00	D	N
ATOM	17259	C	ARG A 500	-39.346	-11.489	-25.711	1.00	0.00	D	C
ATOM	17260	O	ARG A 500	-38.785	-11.981	-24.730	1.00	0.00	D	O
ATOM	17261	N	PRO A 501	-38.817	-11.566	-26.908	1.00	0.00	D	N
ATOM	17262	CD	PRO A 501	-39.631	-11.656	-28.110	1.00	0.00	D	C
ATOM	17263	CA	PRO A 501	-37.601	-12.306	-27.082	1.00	0.00	D	C
ATOM	17264	CB	PRO A 501	-37.381	-12.421	-28.594	1.00	0.00	D	C
ATOM	17265	CG	PRO A 501	-38.580	-11.686	-29.229	1.00	0.00	D	C
ATOM	17266	C	PRO A 501	-36.467	-11.734	-26.302	1.00	0.00	D	C
ATOM	17267	O	PRO A 501	-36.386	-10.519	-26.136	1.00	0.00	D	O
ATOM	17268	N	SER A 502	-35.572	-12.615	-25.822	1.00	0.00	D	N
ATOM	17269	CA	SER A 502	-34.504	-12.252	-24.944	1.00	0.00	D	C
ATOM	17270	CB	SER A 502	-33.978	-13.472	-24.158	1.00	0.00	D	C

ATOM 17271	OG	SER A 502	-33.022	-13.102	-23.176	1.00	0.00	D	O
ATOM 17272	C	SER A 502	-33.384	-11.662	-25.728	1.00	0.00	D	C
ATOM 17273	O	SER A 502	-33.500	-11.407	-26.923	1.00	0.00	D	O
ATOM 17274	N	MET A 503	-32.292	-11.345	-25.016	1.00	0.00	D	N
ATOM 17275	CA	MET A 503	-31.080	-10.893	-25.613	1.00	0.00	D	C
ATOM 17276	CB	MET A 503	-30.660	-9.500	-25.114	1.00	0.00	D	C
ATOM 17277	CG	MET A 503	-30.648	-9.370	-23.592	1.00	0.00	D	C
ATOM 17278	SD	MET A 503	-30.751	-7.655	-23.000	1.00	0.00	D	S
ATOM 17279	CE	MET A 503	-32.456	-7.420	-23.584	1.00	0.00	D	C
ATOM 17280	C	MET A 503	-30.079	-11.924	-25.212	1.00	0.00	D	C
ATOM 17281	O	MET A 503	-30.062	-12.370	-24.065	1.00	0.00	D	O
ATOM 17282	N	LYS A 504	-29.231	-12.345	-26.166	1.00	0.00	D	N
ATOM 17283	CA	LYS A 504	-28.308	-13.406	-25.916	1.00	0.00	D	C
ATOM 17284	CB	LYS A 504	-27.642	-13.976	-27.182	1.00	0.00	D	C
ATOM 17285	CG	LYS A 504	-26.918	-15.300	-26.932	1.00	0.00	D	C
ATOM 17286	CD	LYS A 504	-26.596	-16.080	-28.208	1.00	0.00	D	C
ATOM 17287	CE	LYS A 504	-26.059	-17.489	-27.944	1.00	0.00	D	C
ATOM 17288	NZ	LYS A 504	-24.702	-17.415	-27.357	1.00	0.00	D	N
ATOM 17289	C	LYS A 504	-27.246	-12.918	-24.999	1.00	0.00	D	C
ATOM 17290	O	LYS A 504	-27.082	-11.716	-24.785	1.00	0.00	D	O
ATOM 17291	N	THR A 505	-26.519	-13.871	-24.397	1.00	0.00	D	N
ATOM 17292	CA	THR A 505	-25.483	-13.554	-23.469	1.00	0.00	D	C
ATOM 17293	CB	THR A 505	-24.831	-14.775	-22.896	1.00	0.00	D	C
ATOM 17294	OG1	THR A 505	-24.171	-15.503	-23.921	1.00	0.00	D	O
ATOM 17295	CG2	THR A 505	-25.919	-15.643	-22.243	1.00	0.00	D	C
ATOM 17296	C	THR A 505	-24.423	-12.798	-24.190	1.00	0.00	D	C
ATOM 17297	O	THR A 505	-23.873	-11.837	-23.658	1.00	0.00	D	O
ATOM 17298	N	LEU A 506	-24.119	-13.200	-25.439	1.00	0.00	D	N
ATOM 17299	CA	LEU A 506	-23.050	-12.544	-26.130	1.00	0.00	D	C
ATOM 17300	CB	LEU A 506	-22.815	-13.064	-27.559	1.00	0.00	D	C
ATOM 17301	CG	LEU A 506	-22.240	-14.488	-27.632	1.00	0.00	D	C
ATOM 17302	CD1	LEU A 506	-21.990	-14.905	-29.092	1.00	0.00	D	C
ATOM 17303	CD2	LEU A 506	-20.988	-14.627	-26.757	1.00	0.00	D	C
ATOM 17304	C	LEU A 506	-23.382	-11.099	-26.255	1.00	0.00	D	C
ATOM 17305	O	LEU A 506	-22.543	-10.243	-25.980	1.00	0.00	D	O
ATOM 17306	N	PHE A 507	-24.622	-10.773	-26.656	1.00	0.00	D	N
ATOM 17307	CA	PHE A 507	-24.892	-9.375	-26.781	1.00	0.00	D	C
ATOM 17308	CB	PHE A 507	-25.589	-8.976	-28.094	1.00	0.00	D	C

ATOM	17309	CG	PHE A 507	-26.907	-9.663	-28.257	1.00	0.00	D	C
ATOM	17310	CD1	PHE A 507	-26.966	-10.957	-28.722	1.00	0.00	D	C
ATOM	17311	CE1	PHE A 507	-28.178	-11.587	-28.890	1.00	0.00	D	C
ATOM	17312	CZ	PHE A 507	-29.344	-10.919	-28.598	1.00	0.00	D	C
ATOM	17313	CD2	PHE A 507	-28.083	-9.001	-27.976	1.00	0.00	D	C
ATOM	17314	CE2	PHE A 507	-29.296	-9.623	-28.141	1.00	0.00	D	C
ATOM	17315	C	PHE A 507	-25.731	-8.925	-25.640	1.00	0.00	D	C
ATOM	17316	O	PHE A 507	-26.899	-9.288	-25.513	1.00	0.00	D	O
ATOM	17317	N	VAL A 508	-25.130	-8.097	-24.771	1.00	0.00	D	N
ATOM	17318	CA	VAL A 508	-25.852	-7.548	-23.682	1.00	0.00	D	C
ATOM	17319	CB	VAL A 508	-24.949	-7.121	-22.563	1.00	0.00	D	C
ATOM	17320	CG1	VAL A 508	-25.807	-6.530	-21.437	1.00	0.00	D	C
ATOM	17321	CG2	VAL A 508	-24.087	-8.321	-22.133	1.00	0.00	D	C
ATOM	17322	C	VAL A 508	-26.465	-6.321	-24.257	1.00	0.00	D	C
ATOM	17323	O	VAL A 508	-26.226	-5.205	-23.802	1.00	0.00	D	O
ATOM	17324	N	ASP A 509	-27.300	-6.523	-25.287	1.00	0.00	D	N
ATOM	17325	CA	ASP A 509	-27.924	-5.420	-25.941	1.00	0.00	D	C
ATOM	17326	CB	ASP A 509	-27.671	-5.401	-27.459	1.00	0.00	D	C
ATOM	17327	CG	ASP A 509	-28.288	-4.144	-28.055	1.00	0.00	D	C
ATOM	17328	OD1	ASP A 509	-29.530	-3.971	-27.946	1.00	0.00	D	O
ATOM	17329	OD2	ASP A 509	-27.514	-3.333	-28.631	1.00	0.00	D	O
ATOM	17330	C	ASP A 509	-29.394	-5.567	-25.725	1.00	0.00	D	C
ATOM	17331	O	ASP A 509	-29.958	-6.631	-25.978	1.00	0.00	D	O
ATOM	17332	N	SER A 510	-30.051	-4.489	-25.257	1.00	0.00	D	N
ATOM	17333	CA	SER A 510	-29.356	-3.261	-25.004	1.00	0.00	D	C
ATOM	17334	CB	SER A 510	-30.259	-2.013	-25.095	1.00	0.00	D	C
ATOM	17335	OG	SER A 510	-31.277	-2.060	-24.109	1.00	0.00	D	O
ATOM	17336	C	SER A 510	-28.784	-3.316	-23.620	1.00	0.00	D	C
ATOM	17337	O	SER A 510	-29.441	-3.724	-22.666	1.00	0.00	D	O
ATOM	17338	N	TYR A 511	-27.506	-2.907	-23.505	1.00	0.00	D	N
ATOM	17339	CA	TYR A 511	-26.756	-2.912	-22.283	1.00	0.00	D	C
ATOM	17340	CB	TYR A 511	-25.310	-2.445	-22.552	1.00	0.00	D	C
ATOM	17341	CG	TYR A 511	-24.570	-2.164	-21.284	1.00	0.00	D	C
ATOM	17342	CD1	TYR A 511	-24.623	-0.923	-20.691	1.00	0.00	D	C
ATOM	17343	CE1	TYR A 511	-23.939	-0.656	-19.528	1.00	0.00	D	C
ATOM	17344	CZ	TYR A 511	-23.182	-1.638	-18.943	1.00	0.00	D	C
ATOM	17345	OH	TYR A 511	-22.473	-1.378	-17.752	1.00	0.00	D	O
ATOM	17346	CD2	TYR A 511	-23.804	-3.135	-20.689	1.00	0.00	D	C

ATOM	17347	CE2 TYR A 511	-23.116	-2.878	-19.529	1.00	0.00	D	C
ATOM	17348	C TYR A 511	-27.320	-1.949	-21.281	1.00	0.00	D	C
ATOM	17349	O TYR A 511	-27.529	-2.299	-20.121	1.00	0.00	D	O
ATOM	17350	N SER A 512	-27.572	-0.700	-21.712	1.00	0.00	D	N
ATOM	17351	CA SER A 512	-27.948	0.365	-20.824	1.00	0.00	D	C
ATOM	17352	CB SER A 512	-27.882	1.739	-21.512	1.00	0.00	D	C
ATOM	17353	OG SER A 512	-28.777	1.775	-22.616	1.00	0.00	D	O
ATOM	17354	C SER A 512	-29.319	0.207	-20.253	1.00	0.00	D	C
ATOM	17355	O SER A 512	-29.522	0.373	-19.050	1.00	0.00	D	O
ATOM	17356	N GLU A 513	-30.300	-0.129	-21.102	1.00	0.00	D	N
ATOM	17357	CA GLU A 513	-31.656	-0.195	-20.652	1.00	0.00	D	C
ATOM	17358	CB GLU A 513	-32.630	-0.458	-21.810	1.00	0.00	D	C
ATOM	17359	CG GLU A 513	-32.676	0.736	-22.767	1.00	0.00	D	C
ATOM	17360	CD GLU A 513	-33.525	0.361	-23.966	1.00	0.00	D	C
ATOM	17361	OE1 GLU A 513	-33.560	-0.850	-24.313	1.00	0.00	D	O
ATOM	17362	OE2 GLU A 513	-34.151	1.282	-24.551	1.00	0.00	D	O
ATOM	17363	C GLU A 513	-31.768	-1.270	-19.619	1.00	0.00	D	C
ATOM	17364	O GLU A 513	-32.508	-1.128	-18.644	1.00	0.00	D	O
ATOM	17365	N MET A 514	-31.012	-2.369	-19.784	1.00	0.00	D	N
ATOM	17366	CA MET A 514	-31.105	-3.452	-18.848	1.00	0.00	D	C
ATOM	17367	CB MET A 514	-30.236	-4.675	-19.196	1.00	0.00	D	C
ATOM	17368	CG MET A 514	-28.741	-4.466	-18.959	1.00	0.00	D	C
ATOM	17369	SD MET A 514	-27.730	-5.970	-19.113	1.00	0.00	D	S
ATOM	17370	CE MET A 514	-27.897	-6.490	-17.382	1.00	0.00	D	C
ATOM	17371	C MET A 514	-30.678	-2.980	-17.494	1.00	0.00	D	C
ATOM	17372	O MET A 514	-31.250	-3.393	-16.488	1.00	0.00	D	O
ATOM	17373	N LEU A 515	-29.655	-2.108	-17.426	1.00	0.00	D	N
ATOM	17374	CA LEU A 515	-29.145	-1.644	-16.163	1.00	0.00	D	C
ATOM	17375	CB LEU A 515	-27.921	-0.725	-16.316	1.00	0.00	D	C
ATOM	17376	CG LEU A 515	-26.702	-1.436	-16.931	1.00	0.00	D	C
ATOM	17377	CD1 LEU A 515	-25.493	-0.493	-17.027	1.00	0.00	D	C
ATOM	17378	CD2 LEU A 515	-26.387	-2.744	-16.192	1.00	0.00	D	C
ATOM	17379	C LEU A 515	-30.198	-0.862	-15.442	1.00	0.00	D	C
ATOM	17380	O LEU A 515	-30.346	-0.981	-14.226	1.00	0.00	D	O
ATOM	17381	N PHE A 516	-30.975	-0.048	-16.180	1.00	0.00	D	N
ATOM	17382	CA PHE A 516	-31.951	0.805	-15.564	1.00	0.00	D	C
ATOM	17383	CB PHE A 516	-32.689	1.712	-16.565	1.00	0.00	D	C
ATOM	17384	CG PHE A 516	-31.724	2.753	-17.026	1.00	0.00	D	C

ATOM	17385	CD1	PHE	A	516	-31.445	3.842	-16.229	1.00	0.00	D	C
ATOM	17386	CE1	PHE	A	516	-30.561	4.811	-16.642	1.00	0.00	D	C
ATOM	17387	CZ	PHE	A	516	-29.943	4.705	-17.862	1.00	0.00	D	C
ATOM	17388	CD2	PHE	A	516	-31.101	2.657	-18.250	1.00	0.00	D	C
ATOM	17389	CE2	PHE	A	516	-30.216	3.626	-18.668	1.00	0.00	D	C
ATOM	17390	C	PHE	A	516	-32.965	-0.024	-14.839	1.00	0.00	D	C
ATOM	17391	O	PHE	A	516	-33.386	0.328	-13.736	1.00	0.00	D	O
ATOM	17392	N	PHE	A	517	-33.386	-1.151	-15.434	1.00	0.00	D	N
ATOM	17393	CA	PHE	A	517	-34.373	-1.999	-14.826	1.00	0.00	D	C
ATOM	17394	CB	PHE	A	517	-34.729	-3.210	-15.709	1.00	0.00	D	C
ATOM	17395	CG	PHE	A	517	-35.478	-4.185	-14.866	1.00	0.00	D	C
ATOM	17396	CD1	PHE	A	517	-36.795	-3.972	-14.543	1.00	0.00	D	C
ATOM	17397	CE1	PHE	A	517	-37.478	-4.873	-13.760	1.00	0.00	D	C
ATOM	17398	CZ	PHE	A	517	-36.850	-5.996	-13.284	1.00	0.00	D	C
ATOM	17399	CD2	PHE	A	517	-34.849	-5.307	-14.372	1.00	0.00	D	C
ATOM	17400	CE2	PHE	A	517	-35.529	-6.212	-13.591	1.00	0.00	D	C
ATOM	17401	C	PHE	A	517	-33.867	-2.518	-13.518	1.00	0.00	D	C
ATOM	17402	O	PHE	A	517	-34.607	-2.550	-12.535	1.00	0.00	D	O
ATOM	17403	N	LEU	A	518	-32.594	-2.941	-13.468	1.00	0.00	D	N
ATOM	17404	CA	LEU	A	518	-32.067	-3.530	-12.271	1.00	0.00	D	C
ATOM	17405	CB	LEU	A	518	-30.646	-4.093	-12.434	1.00	0.00	D	C
ATOM	17406	CG	LEU	A	518	-30.121	-4.770	-11.151	1.00	0.00	D	C
ATOM	17407	CD1	LEU	A	518	-30.964	-6.002	-10.784	1.00	0.00	D	C
ATOM	17408	CD2	LEU	A	518	-28.621	-5.094	-11.258	1.00	0.00	D	C
ATOM	17409	C	LEU	A	518	-32.035	-2.524	-11.155	1.00	0.00	D	C
ATOM	17410	O	LEU	A	518	-32.327	-2.853	-10.012	1.00	0.00	D	O
ATOM	17411	N	GLN	A	519	-31.664	-1.264	-11.421	1.00	0.00	D	N
ATOM	17412	CA	GLN	A	519	-31.582	-0.318	-10.341	1.00	0.00	D	C
ATOM	17413	CB	GLN	A	519	-31.095	1.069	-10.787	1.00	0.00	D	C
ATOM	17414	CG	GLN	A	519	-31.041	2.072	-9.633	1.00	0.00	D	C
ATOM	17415	CD	GLN	A	519	-31.000	3.467	-10.231	1.00	0.00	D	C
ATOM	17416	OE1	GLN	A	519	-30.950	3.636	-11.449	1.00	0.00	D	O
ATOM	17417	NE2	GLN	A	519	-31.037	4.504	-9.351	1.00	0.00	D	N
ATOM	17418	C	GLN	A	519	-32.934	-0.071	-9.753	1.00	0.00	D	C
ATOM	17419	O	GLN	A	519	-33.096	-0.041	-8.534	1.00	0.00	D	O
ATOM	17420	N	SER	A	520	-33.942	0.115	-10.620	1.00	0.00	D	N
ATOM	17421	CA	SER	A	520	-35.251	0.477	-10.165	1.00	0.00	D	C
ATOM	17422	CB	SER	A	520	-36.223	0.769	-11.320	1.00	0.00	D	C

ATOM	17423	OG	SER	A	520	-36.374	-0.382	-12.134	1.00	0.00	D	O
ATOM	17424	C	SER	A	520	-35.820	-0.622	-9.328	1.00	0.00	D	C
ATOM	17425	O	SER	A	520	-36.479	-0.354	-8.325	1.00	0.00	D	O
ATOM	17426	N	LEU	A	521	-35.584	-1.892	-9.703	1.00	0.00	D	N
ATOM	17427	CA	LEU	A	521	-36.161	-2.940	-8.909	1.00	0.00	D	C
ATOM	17428	CB	LEU	A	521	-36.099	-4.352	-9.536	1.00	0.00	D	C
ATOM	17429	CG	LEU	A	521	-35.126	-5.393	-8.928	1.00	0.00	D	C
ATOM	17430	CD1	LEU	A	521	-33.668	-4.960	-8.967	1.00	0.00	D	C
ATOM	17431	CD2	LEU	A	521	-35.576	-5.872	-7.538	1.00	0.00	D	C
ATOM	17432	C	LEU	A	521	-35.487	-2.931	-7.569	1.00	0.00	D	C
ATOM	17433	O	LEU	A	521	-36.116	-3.214	-6.552	1.00	0.00	D	O
ATOM	17434	N	PHE	A	522	-34.183	-2.589	-7.530	1.00	0.00	D	N
ATOM	17435	CA	PHE	A	522	-33.455	-2.576	-6.291	1.00	0.00	D	C
ATOM	17436	CB	PHE	A	522	-31.970	-2.188	-6.435	1.00	0.00	D	C
ATOM	17437	CG	PHE	A	522	-31.177	-3.435	-6.649	1.00	0.00	D	C
ATOM	17438	CD1	PHE	A	522	-31.006	-3.986	-7.896	1.00	0.00	D	C
ATOM	17439	CE1	PHE	A	522	-30.268	-5.141	-8.052	1.00	0.00	D	C
ATOM	17440	CZ	PHE	A	522	-29.698	-5.758	-6.966	1.00	0.00	D	C
ATOM	17441	CD2	PHE	A	522	-30.603	-4.064	-5.567	1.00	0.00	D	C
ATOM	17442	CE2	PHE	A	522	-29.868	-5.215	-5.716	1.00	0.00	D	C
ATOM	17443	C	PHE	A	522	-34.100	-1.618	-5.347	1.00	0.00	D	C
ATOM	17444	O	PHE	A	522	-34.233	-1.907	-4.159	1.00	0.00	D	O
ATOM	17445	N	MET	A	523	-34.514	-0.440	-5.841	1.00	0.00	D	N
ATOM	17446	CA	MET	A	523	-35.149	0.500	-4.970	1.00	0.00	D	C
ATOM	17447	CB	MET	A	523	-35.499	1.832	-5.647	1.00	0.00	D	C
ATOM	17448	CG	MET	A	523	-35.938	2.891	-4.634	1.00	0.00	D	C
ATOM	17449	SD	MET	A	523	-36.526	4.446	-5.364	1.00	0.00	D	S
ATOM	17450	CE	MET	A	523	-38.039	3.714	-6.047	1.00	0.00	D	C
ATOM	17451	C	MET	A	523	-36.438	-0.093	-4.473	1.00	0.00	D	C
ATOM	17452	O	MET	A	523	-36.814	0.096	-3.320	1.00	0.00	D	O
ATOM	17453	N	LEU	A	524	-37.156	-0.833	-5.336	1.00	0.00	D	N
ATOM	17454	CA	LEU	A	524	-38.423	-1.393	-4.950	1.00	0.00	D	C
ATOM	17455	CB	LEU	A	524	-39.084	-2.196	-6.085	1.00	0.00	D	C
ATOM	17456	CG	LEU	A	524	-39.414	-1.365	-7.338	1.00	0.00	D	C
ATOM	17457	CD1	LEU	A	524	-40.076	-2.236	-8.420	1.00	0.00	D	C
ATOM	17458	CD2	LEU	A	524	-40.238	-0.114	-6.990	1.00	0.00	D	C
ATOM	17459	C	LEU	A	524	-38.197	-2.346	-3.823	1.00	0.00	D	C
ATOM	17460	O	LEU	A	524	-38.981	-2.415	-2.877	1.00	0.00	D	O

ATOM	17461	N	ALA A 525	-37.104	-3.123	-3.894	1.00	0.00	D	N
ATOM	17462	CA	ALA A 525	-36.835	-4.081	-2.864	1.00	0.00	D	C
ATOM	17463	CB	ALA A 525	-35.553	-4.888	-3.126	1.00	0.00	D	C
ATOM	17464	C	ALA A 525	-36.642	-3.349	-1.575	1.00	0.00	D	C
ATOM	17465	O	ALA A 525	-37.105	-3.791	-0.526	1.00	0.00	D	O
ATOM	17466	N	THR A 526	-35.943	-2.198	-1.613	1.00	0.00	D	N
ATOM	17467	CA	THR A 526	-35.696	-1.500	-0.389	1.00	0.00	D	C
ATOM	17468	CB	THR A 526	-34.764	-0.325	-0.522	1.00	0.00	D	C
ATOM	17469	OG1	THR A 526	-35.345	0.706	-1.302	1.00	0.00	D	O
ATOM	17470	CG2	THR A 526	-33.460	-0.814	-1.181	1.00	0.00	D	C
ATOM	17471	C	THR A 526	-36.990	-1.003	0.180	1.00	0.00	D	C
ATOM	17472	O	THR A 526	-37.196	-1.066	1.391	1.00	0.00	D	O
ATOM	17473	N	VAL A 527	-37.907	-0.507	-0.675	1.00	0.00	D	N
ATOM	17474	CA	VAL A 527	-39.126	0.070	-0.176	1.00	0.00	D	C
ATOM	17475	CB	VAL A 527	-39.997	0.709	-1.226	1.00	0.00	D	C
ATOM	17476	CG1	VAL A 527	-39.167	1.775	-1.962	1.00	0.00	D	C
ATOM	17477	CG2	VAL A 527	-40.625	-0.369	-2.119	1.00	0.00	D	C
ATOM	17478	C	VAL A 527	-39.939	-0.969	0.533	1.00	0.00	D	C
ATOM	17479	O	VAL A 527	-40.510	-0.698	1.589	1.00	0.00	D	O
ATOM	17480	N	VAL A 528	-40.023	-2.193	-0.019	1.00	0.00	D	N
ATOM	17481	CA	VAL A 528	-40.807	-3.190	0.647	1.00	0.00	D	C
ATOM	17482	CB	VAL A 528	-40.874	-4.500	-0.090	1.00	0.00	D	C
ATOM	17483	CG1	VAL A 528	-41.525	-4.252	-1.462	1.00	0.00	D	C
ATOM	17484	CG2	VAL A 528	-39.474	-5.125	-0.164	1.00	0.00	D	C
ATOM	17485	C	VAL A 528	-40.174	-3.424	1.978	1.00	0.00	D	C
ATOM	17486	O	VAL A 528	-40.858	-3.588	2.985	1.00	0.00	D	O
ATOM	17487	N	LEU A 529	-38.830	-3.431	2.001	1.00	0.00	D	N
ATOM	17488	CA	LEU A 529	-38.068	-3.660	3.189	1.00	0.00	D	C
ATOM	17489	CB	LEU A 529	-36.556	-3.761	2.925	1.00	0.00	D	C
ATOM	17490	CG	LEU A 529	-36.154	-4.959	2.042	1.00	0.00	D	C
ATOM	17491	CD1	LEU A 529	-34.631	-5.023	1.843	1.00	0.00	D	C
ATOM	17492	CD2	LEU A 529	-36.740	-6.272	2.583	1.00	0.00	D	C
ATOM	17493	C	LEU A 529	-38.297	-2.533	4.141	1.00	0.00	D	C
ATOM	17494	O	LEU A 529	-38.254	-2.748	5.341	1.00	0.00	D	O
ATOM	17495	N	TYR A 530	-38.505	-1.300	3.650	1.00	0.00	D	N
ATOM	17496	CA	TYR A 530	-38.714	-0.126	4.461	1.00	0.00	D	C
ATOM	17497	CB	TYR A 530	-38.872	1.102	3.543	1.00	0.00	D	C
ATOM	17498	CG	TYR A 530	-38.724	2.394	4.271	1.00	0.00	D	C

ATOM	17499	CD1 TYR A 530	-37.474	2.939	4.453	1.00	0.00	D	C
ATOM	17500	CE1 TYR A 530	-37.313	4.138	5.108	1.00	0.00	D	C
ATOM	17501	CZ TYR A 530	-38.413	4.805	5.584	1.00	0.00	D	C
ATOM	17502	OH TYR A 530	-38.252	6.035	6.256	1.00	0.00	D	O
ATOM	17503	CD2 TYR A 530	-39.822	3.076	4.743	1.00	0.00	D	C
ATOM	17504	CE2 TYR A 530	-39.669	4.275	5.399	1.00	0.00	D	C
ATOM	17505	C TYR A 530	-39.991	-0.329	5.217	1.00	0.00	D	C
ATOM	17506	O TYR A 530	-40.087	-0.028	6.407	1.00	0.00	D	O
ATOM	17507	N PHE A 531	-41.020	-0.855	4.528	1.00	0.00	D	N
ATOM	17508	CA PHE A 531	-42.269	-1.121	5.173	1.00	0.00	D	C
ATOM	17509	CB PHE A 531	-43.375	-1.606	4.222	1.00	0.00	D	C
ATOM	17510	CG PHE A 531	-43.841	-0.391	3.507	1.00	0.00	D	C
ATOM	17511	CD1 PHE A 531	-44.596	0.536	4.186	1.00	0.00	D	C
ATOM	17512	CE1 PHE A 531	-45.045	1.671	3.555	1.00	0.00	D	C
ATOM	17513	CZ PHE A 531	-44.743	1.881	2.233	1.00	0.00	D	C
ATOM	17514	CD2 PHE A 531	-43.545	-0.179	2.180	1.00	0.00	D	C
ATOM	17515	CE2 PHE A 531	-43.993	0.956	1.547	1.00	0.00	D	C
ATOM	17516	C PHE A 531	-42.046	-2.168	6.210	1.00	0.00	D	C
ATOM	17517	O PHE A 531	-42.592	-2.084	7.309	1.00	0.00	D	O
ATOM	17518	N SER A 532	-41.247	-3.200	5.877	1.00	0.00	D	N
ATOM	17519	CA SER A 532	-40.972	-4.221	6.843	1.00	0.00	D	C
ATOM	17520	CB SER A 532	-40.287	-5.477	6.262	1.00	0.00	D	C
ATOM	17521	OG SER A 532	-39.012	-5.171	5.719	1.00	0.00	D	O
ATOM	17522	C SER A 532	-40.105	-3.613	7.901	1.00	0.00	D	C
ATOM	17523	O SER A 532	-39.979	-4.147	9.001	1.00	0.00	D	O
ATOM	17524	N HSD A 533	-39.494	-2.466	7.555	1.00	0.00	D	N
ATOM	17525	CA HSD A 533	-38.618	-1.629	8.321	1.00	0.00	D	C
ATOM	17526	CB HSD A 533	-39.316	-0.901	9.487	1.00	0.00	D	C
ATOM	17527	ND1 HSD A 533	-39.148	-2.437	11.502	1.00	0.00	D	N
ATOM	17528	CG HSD A 533	-39.892	-1.822	10.519	1.00	0.00	D	C
ATOM	17529	CE1 HSD A 533	-40.011	-3.192	12.229	1.00	0.00	D	C
ATOM	17530	NE2 HSD A 533	-41.251	-3.105	11.784	1.00	0.00	D	N
ATOM	17531	CD2 HSD A 533	-41.174	-2.241	10.704	1.00	0.00	D	C
ATOM	17532	C HSD A 533	-37.419	-2.361	8.846	1.00	0.00	D	C
ATOM	17533	O HSD A 533	-36.940	-2.043	9.926	1.00	0.00	D	O
ATOM	17534	N LEU A 534	-36.860	-3.336	8.103	1.00	0.00	D	N
ATOM	17535	CA LEU A 534	-35.670	-3.986	8.594	1.00	0.00	D	C
ATOM	17536	CB LEU A 534	-35.403	-5.356	7.950	1.00	0.00	D	C

ATOM	17537	CG	LEU	A	534	-36.524	-6.377	8.223	1.00	0.00	D	C
ATOM	17538	CD1	LEU	A	534	-36.205	-7.745	7.603	1.00	0.00	D	C
ATOM	17539	CD2	LEU	A	534	-36.853	-6.459	9.722	1.00	0.00	D	C
ATOM	17540	C	LEU	A	534	-34.514	-3.091	8.274	1.00	0.00	D	C
ATOM	17541	O	LEU	A	534	-34.508	-2.438	7.237	1.00	0.00	D	O
ATOM	17542	N	LYS	A	535	-33.496	-3.053	9.153	1.00	0.00	D	N
ATOM	17543	CA	LYS	A	535	-32.348	-2.194	9.020	1.00	0.00	D	C
ATOM	17544	CB	LYS	A	535	-31.403	-2.296	10.224	1.00	0.00	D	C
ATOM	17545	CG	LYS	A	535	-31.989	-1.714	11.512	1.00	0.00	D	C
ATOM	17546	CD	LYS	A	535	-31.239	-2.130	12.778	1.00	0.00	D	C
ATOM	17547	CE	LYS	A	535	-29.733	-1.870	12.718	1.00	0.00	D	C
ATOM	17548	NZ	LYS	A	535	-29.077	-2.889	11.867	1.00	0.00	D	N
ATOM	17549	C	LYS	A	535	-31.562	-2.556	7.795	1.00	0.00	D	C
ATOM	17550	O	LYS	A	535	-31.003	-1.684	7.130	1.00	0.00	D	O
ATOM	17551	N	GLU	A	536	-31.516	-3.853	7.453	1.00	0.00	D	N
ATOM	17552	CA	GLU	A	536	-30.718	-4.333	6.358	1.00	0.00	D	C
ATOM	17553	CB	GLU	A	536	-30.730	-5.858	6.168	1.00	0.00	D	C
ATOM	17554	CG	GLU	A	536	-29.817	-6.607	7.137	1.00	0.00	D	C
ATOM	17555	CD	GLU	A	536	-29.579	-7.989	6.546	1.00	0.00	D	C
ATOM	17556	OE1	GLU	A	536	-30.478	-8.477	5.808	1.00	0.00	D	O
ATOM	17557	OE2	GLU	A	536	-28.495	-8.571	6.816	1.00	0.00	D	O
ATOM	17558	C	GLU	A	536	-31.172	-3.725	5.073	1.00	0.00	D	C
ATOM	17559	O	GLU	A	536	-30.430	-3.722	4.092	1.00	0.00	D	O
ATOM	17560	N	TYR	A	537	-32.406	-3.197	5.035	1.00	0.00	D	N
ATOM	17561	CA	TYR	A	537	-32.979	-2.720	3.809	1.00	0.00	D	C
ATOM	17562	CB	TYR	A	537	-34.374	-2.083	3.980	1.00	0.00	D	C
ATOM	17563	CG	TYR	A	537	-34.263	-0.647	4.376	1.00	0.00	D	C
ATOM	17564	CD1	TYR	A	537	-34.061	-0.260	5.677	1.00	0.00	D	C
ATOM	17565	CE1	TYR	A	537	-33.967	1.065	6.029	1.00	0.00	D	C
ATOM	17566	CZ	TYR	A	537	-34.074	2.027	5.058	1.00	0.00	D	C
ATOM	17567	OH	TYR	A	537	-33.982	3.393	5.403	1.00	0.00	D	O
ATOM	17568	CD2	TYR	A	537	-34.361	0.329	3.413	1.00	0.00	D	C
ATOM	17569	CE2	TYR	A	537	-34.271	1.657	3.750	1.00	0.00	D	C
ATOM	17570	C	TYR	A	537	-32.076	-1.678	3.219	1.00	0.00	D	C
ATOM	17571	O	TYR	A	537	-31.922	-1.605	2.001	1.00	0.00	D	O
ATOM	17572	N	VAL	A	538	-31.428	-0.859	4.066	1.00	0.00	D	N
ATOM	17573	CA	VAL	A	538	-30.635	0.237	3.581	1.00	0.00	D	C
ATOM	17574	CB	VAL	A	538	-29.924	0.974	4.676	1.00	0.00	D	C

ATOM	17575	CG1 VAL A 538	-28.874	0.042	5.302	1.00	0.00	D	C
ATOM	17576	CG2 VAL A 538	-29.350	2.279	4.094	1.00	0.00	D	C
ATOM	17577	C VAL A 538	-29.610	-0.231	2.594	1.00	0.00	D	C
ATOM	17578	O VAL A 538	-29.463	0.396	1.546	1.00	0.00	D	O
ATOM	17579	N ALA A 539	-28.932	-1.369	2.852	1.00	0.00	D	N
ATOM	17580	CA ALA A 539	-27.853	-1.804	2.004	1.00	0.00	D	C
ATOM	17581	CB ALA A 539	-27.293	-3.185	2.393	1.00	0.00	D	C
ATOM	17582	C ALA A 539	-28.362	-1.912	0.601	1.00	0.00	D	C
ATOM	17583	O ALA A 539	-27.661	-1.554	-0.345	1.00	0.00	D	O
ATOM	17584	N SER A 540	-29.603	-2.395	0.429	1.00	0.00	D	N
ATOM	17585	CA SER A 540	-30.175	-2.517	-0.882	1.00	0.00	D	C
ATOM	17586	CB SER A 540	-31.579	-3.145	-0.856	1.00	0.00	D	C
ATOM	17587	OG SER A 540	-31.506	-4.478	-0.375	1.00	0.00	D	O
ATOM	17588	C SER A 540	-30.311	-1.151	-1.490	1.00	0.00	D	C
ATOM	17589	O SER A 540	-30.055	-0.962	-2.679	1.00	0.00	D	O
ATOM	17590	N MET A 541	-30.723	-0.156	-0.682	1.00	0.00	D	N
ATOM	17591	CA MET A 541	-30.890	1.183	-1.174	1.00	0.00	D	C
ATOM	17592	CB MET A 541	-31.449	2.164	-0.131	1.00	0.00	D	C
ATOM	17593	CG MET A 541	-32.917	1.932	0.219	1.00	0.00	D	C
ATOM	17594	SD MET A 541	-33.637	3.268	1.217	1.00	0.00	D	S
ATOM	17595	CE MET A 541	-33.499	4.514	-0.100	1.00	0.00	D	C
ATOM	17596	C MET A 541	-29.556	1.714	-1.590	1.00	0.00	D	C
ATOM	17597	O MET A 541	-29.443	2.417	-2.595	1.00	0.00	D	O
ATOM	17598	N VAL A 542	-28.502	1.373	-0.827	1.00	0.00	D	N
ATOM	17599	CA VAL A 542	-27.185	1.872	-1.103	1.00	0.00	D	C
ATOM	17600	CB VAL A 542	-26.139	1.291	-0.197	1.00	0.00	D	C
ATOM	17601	CG1 VAL A 542	-24.760	1.760	-0.689	1.00	0.00	D	C
ATOM	17602	CG2 VAL A 542	-26.449	1.696	1.253	1.00	0.00	D	C
ATOM	17603	C VAL A 542	-26.828	1.466	-2.492	1.00	0.00	D	C
ATOM	17604	O VAL A 542	-26.263	2.255	-3.249	1.00	0.00	D	O
ATOM	17605	N PHE A 543	-27.155	0.219	-2.872	1.00	0.00	D	N
ATOM	17606	CA PHE A 543	-26.877	-0.198	-4.217	1.00	0.00	D	C
ATOM	17607	CB PHE A 543	-27.372	-1.616	-4.564	1.00	0.00	D	C
ATOM	17608	CG PHE A 543	-26.306	-2.606	-4.278	1.00	0.00	D	C
ATOM	17609	CD1 PHE A 543	-26.053	-3.055	-3.004	1.00	0.00	D	C
ATOM	17610	CE1 PHE A 543	-25.056	-3.979	-2.787	1.00	0.00	D	C
ATOM	17611	CZ PHE A 543	-24.314	-4.463	-3.838	1.00	0.00	D	C
ATOM	17612	CD2 PHE A 543	-25.563	-3.102	-5.325	1.00	0.00	D	C

ATOM	17613	CE2 PHE A 543	-24.568	-4.024	-5.114	1.00	0.00	D	C
ATOM	17614	C PHE A 543	-27.626	0.694	-5.148	1.00	0.00	D	C
ATOM	17615	O PHE A 543	-27.096	1.121	-6.174	1.00	0.00	D	O
ATOM	17616	N SER A 544	-28.885	0.995	-4.805	1.00	0.00	D	N
ATOM	17617	CA SER A 544	-29.741	1.747	-5.676	1.00	0.00	D	C
ATOM	17618	CB SER A 544	-31.150	1.940	-5.080	1.00	0.00	D	C
ATOM	17619	OG SER A 544	-31.968	2.692	-5.964	1.00	0.00	D	O
ATOM	17620	C SER A 544	-29.179	3.109	-5.952	1.00	0.00	D	C
ATOM	17621	O SER A 544	-29.194	3.558	-7.097	1.00	0.00	D	O
ATOM	17622	N LEU A 545	-28.674	3.809	-4.921	1.00	0.00	D	N
ATOM	17623	CA LEU A 545	-28.215	5.160	-5.111	1.00	0.00	D	C
ATOM	17624	CB LEU A 545	-27.773	5.837	-3.807	1.00	0.00	D	C
ATOM	17625	CG LEU A 545	-27.284	7.278	-4.033	1.00	0.00	D	C
ATOM	17626	CD1 LEU A 545	-28.411	8.189	-4.540	1.00	0.00	D	C
ATOM	17627	CD2 LEU A 545	-26.597	7.835	-2.782	1.00	0.00	D	C
ATOM	17628	C LEU A 545	-27.039	5.227	-6.035	1.00	0.00	D	C
ATOM	17629	O LEU A 545	-27.000	6.080	-6.922	1.00	0.00	D	O
ATOM	17630	N ALA A 546	-26.031	4.358	-5.817	1.00	0.00	D	N
ATOM	17631	CA ALA A 546	-24.818	4.326	-6.592	1.00	0.00	D	C
ATOM	17632	CB ALA A 546	-23.774	3.356	-6.013	1.00	0.00	D	C
ATOM	17633	C ALA A 546	-25.100	3.887	-7.994	1.00	0.00	D	C
ATOM	17634	O ALA A 546	-24.570	4.452	-8.950	1.00	0.00	D	O
ATOM	17635	N LEU A 547	-25.954	2.861	-8.147	1.00	0.00	D	N
ATOM	17636	CA LEU A 547	-26.224	2.304	-9.438	1.00	0.00	D	C
ATOM	17637	CB LEU A 547	-27.214	1.125	-9.391	1.00	0.00	D	C
ATOM	17638	CG LEU A 547	-26.680	-0.125	-8.664	1.00	0.00	D	C
ATOM	17639	CD1 LEU A 547	-27.712	-1.265	-8.691	1.00	0.00	D	C
ATOM	17640	CD2 LEU A 547	-25.313	-0.553	-9.222	1.00	0.00	D	C
ATOM	17641	C LEU A 547	-26.848	3.356	-10.296	1.00	0.00	D	C
ATOM	17642	O LEU A 547	-26.523	3.483	-11.475	1.00	0.00	D	O
ATOM	17643	N GLY A 548	-27.770	4.145	-9.719	1.00	0.00	D	N
ATOM	17644	CA GLY A 548	-28.448	5.146	-10.487	1.00	0.00	D	C
ATOM	17645	C GLY A 548	-27.457	6.148	-10.989	1.00	0.00	D	C
ATOM	17646	O GLY A 548	-27.529	6.577	-12.139	1.00	0.00	D	O
ATOM	17647	N TRP A 549	-26.496	6.555	-10.137	1.00	0.00	D	N
ATOM	17648	CA TRP A 549	-25.544	7.538	-10.567	1.00	0.00	D	C
ATOM	17649	CB TRP A 549	-24.562	7.992	-9.474	1.00	0.00	D	C
ATOM	17650	CG TRP A 549	-25.159	8.995	-8.523	1.00	0.00	D	C

ATOM	17651	CD1 TRP A 549	-25.529	8.885	-7.213	1.00	0.00	D	C
ATOM	17652	NE1 TRP A 549	-26.052	10.077	-6.773	1.00	0.00	D	N
ATOM	17653	CE2 TRP A 549	-26.029	10.979	-7.818	1.00	0.00	D	C
ATOM	17654	CD2 TRP A 549	-25.479	10.335	-8.927	1.00	0.00	D	C
ATOM	17655	CE3 TRP A 549	-25.327	10.971	-10.124	1.00	0.00	D	C
ATOM	17656	CZ3 TRP A 549	-25.737	12.283	-10.196	1.00	0.00	D	C
ATOM	17657	CZ2 TRP A 549	-26.439	12.280	-7.894	1.00	0.00	D	C
ATOM	17658	CH2 TRP A 549	-26.280	12.924	-9.103	1.00	0.00	D	C
ATOM	17659	C TRP A 549	-24.747	7.009	-11.713	1.00	0.00	D	C
ATOM	17660	O TRP A 549	-24.535	7.711	-12.699	1.00	0.00	D	O
ATOM	17661	N THR A 550	-24.302	5.745	-11.630	1.00	0.00	D	N
ATOM	17662	CA THR A 550	-23.488	5.202	-12.679	1.00	0.00	D	C
ATOM	17663	CB THR A 550	-23.044	3.796	-12.400	1.00	0.00	D	C
ATOM	17664	OG1 THR A 550	-24.154	2.912	-12.385	1.00	0.00	D	O
ATOM	17665	CG2 THR A 550	-22.351	3.784	-11.027	1.00	0.00	D	C
ATOM	17666	C THR A 550	-24.298	5.209	-13.940	1.00	0.00	D	C
ATOM	17667	O THR A 550	-23.774	5.463	-15.023	1.00	0.00	D	O
ATOM	17668	N ASN A 551	-25.609	4.934	-13.819	1.00	0.00	D	N
ATOM	17669	CA ASN A 551	-26.521	4.878	-14.931	1.00	0.00	D	C
ATOM	17670	CB ASN A 551	-27.949	4.481	-14.520	1.00	0.00	D	C
ATOM	17671	CG ASN A 551	-27.958	3.032	-14.061	1.00	0.00	D	C
ATOM	17672	OD1 ASN A 551	-27.025	2.274	-14.319	1.00	0.00	D	O
ATOM	17673	ND2 ASN A 551	-29.056	2.628	-13.366	1.00	0.00	D	N
ATOM	17674	C ASN A 551	-26.626	6.233	-15.573	1.00	0.00	D	C
ATOM	17675	O ASN A 551	-26.783	6.340	-16.790	1.00	0.00	D	O
ATOM	17676	N MET A 552	-26.511	7.306	-14.771	1.00	0.00	D	N
ATOM	17677	CA MET A 552	-26.735	8.661	-15.206	1.00	0.00	D	C
ATOM	17678	CB MET A 552	-26.556	9.689	-14.077	1.00	0.00	D	C
ATOM	17679	CG MET A 552	-27.102	11.070	-14.446	1.00	0.00	D	C
ATOM	17680	SD MET A 552	-26.927	12.339	-13.158	1.00	0.00	D	S
ATOM	17681	CE MET A 552	-25.200	12.739	-13.534	1.00	0.00	D	C
ATOM	17682	C MET A 552	-25.778	9.029	-16.301	1.00	0.00	D	C
ATOM	17683	O MET A 552	-26.098	9.837	-17.172	1.00	0.00	D	O
ATOM	17684	N LEU A 553	-24.579	8.429	-16.291	1.00	0.00	D	N
ATOM	17685	CA LEU A 553	-23.494	8.725	-17.190	1.00	0.00	D	C
ATOM	17686	CB LEU A 553	-22.327	7.743	-17.016	1.00	0.00	D	C
ATOM	17687	CG LEU A 553	-21.923	7.532	-15.550	1.00	0.00	D	C
ATOM	17688	CD1 LEU A 553	-20.588	6.777	-15.444	1.00	0.00	D	C

ATOM	17689	CD2	LEU	A	553	-21.980	8.841	-14.756	1.00	0.00	D	C
ATOM	17690	C	LEU	A	553	-23.951	8.513	-18.609	1.00	0.00	D	C
ATOM	17691	O	LEU	A	553	-23.433	9.126	-19.541	1.00	0.00	D	O
ATOM	17692	N	TYR	A	554	-24.921	7.604	-18.788	1.00	0.00	D	N
ATOM	17693	CA	TYR	A	554	-25.486	7.153	-20.033	1.00	0.00	D	C
ATOM	17694	CB	TYR	A	554	-26.556	6.078	-19.748	1.00	0.00	D	C
ATOM	17695	CG	TYR	A	554	-27.679	6.108	-20.727	1.00	0.00	D	C
ATOM	17696	CD1	TYR	A	554	-27.546	5.714	-22.038	1.00	0.00	D	C
ATOM	17697	CE1	TYR	A	554	-28.634	5.755	-22.886	1.00	0.00	D	C
ATOM	17698	CZ	TYR	A	554	-29.860	6.179	-22.430	1.00	0.00	D	C
ATOM	17699	OH	TYR	A	554	-30.974	6.220	-23.295	1.00	0.00	D	O
ATOM	17700	CD2	TYR	A	554	-28.914	6.519	-20.281	1.00	0.00	D	C
ATOM	17701	CE2	TYR	A	554	-30.001	6.560	-21.120	1.00	0.00	D	C
ATOM	17702	C	TYR	A	554	-26.079	8.265	-20.858	1.00	0.00	D	C
ATOM	17703	O	TYR	A	554	-25.933	8.270	-22.080	1.00	0.00	D	O
ATOM	17704	N	TYR	A	555	-26.722	9.256	-20.223	1.00	0.00	D	N
ATOM	17705	CA	TYR	A	555	-27.406	10.310	-20.925	1.00	0.00	D	C
ATOM	17706	CB	TYR	A	555	-28.072	11.363	-20.017	1.00	0.00	D	C
ATOM	17707	CG	TYR	A	555	-29.399	10.847	-19.571	1.00	0.00	D	C
ATOM	17708	CD1	TYR	A	555	-30.488	10.987	-20.403	1.00	0.00	D	C
ATOM	17709	CE1	TYR	A	555	-31.728	10.531	-20.030	1.00	0.00	D	C
ATOM	17710	CZ	TYR	A	555	-31.893	9.925	-18.809	1.00	0.00	D	C
ATOM	17711	OH	TYR	A	555	-33.168	9.457	-18.427	1.00	0.00	D	O
ATOM	17712	CD2	TYR	A	555	-29.573	10.241	-18.347	1.00	0.00	D	C
ATOM	17713	CE2	TYR	A	555	-30.814	9.780	-17.968	1.00	0.00	D	C
ATOM	17714	C	TYR	A	555	-26.482	11.021	-21.854	1.00	0.00	D	C
ATOM	17715	O	TYR	A	555	-26.920	11.580	-22.855	1.00	0.00	D	O
ATOM	17716	N	THR	A	556	-25.186	11.059	-21.539	1.00	0.00	D	N
ATOM	17717	CA	THR	A	556	-24.247	11.783	-22.340	1.00	0.00	D	C
ATOM	17718	CB	THR	A	556	-22.877	11.774	-21.747	1.00	0.00	D	C
ATOM	17719	OG1	THR	A	556	-22.943	12.175	-20.386	1.00	0.00	D	O
ATOM	17720	CG2	THR	A	556	-22.052	12.820	-22.507	1.00	0.00	D	C
ATOM	17721	C	THR	A	556	-24.212	11.186	-23.723	1.00	0.00	D	C
ATOM	17722	O	THR	A	556	-23.771	11.831	-24.670	1.00	0.00	D	O
ATOM	17723	N	ARG	A	557	-24.652	9.923	-23.884	1.00	0.00	D	N
ATOM	17724	CA	ARG	A	557	-24.597	9.233	-25.149	1.00	0.00	D	C
ATOM	17725	CB	ARG	A	557	-25.235	7.833	-25.087	1.00	0.00	D	C
ATOM	17726	CG	ARG	A	557	-24.457	6.871	-24.185	1.00	0.00	D	C

ATOM	17727	CD	ARG	A	557	-25.153	5.531	-23.925	1.00	0.00	D	C
ATOM	17728	NE	ARG	A	557	-25.004	4.681	-25.139	1.00	0.00	D	N
ATOM	17729	CZ	ARG	A	557	-24.975	3.322	-25.034	1.00	0.00	D	C
ATOM	17730	NH1	ARG	A	557	-25.043	2.709	-23.813	1.00	0.00	D	N
ATOM	17731	NH2	ARG	A	557	-24.871	2.563	-26.165	1.00	0.00	D	N
ATOM	17732	C	ARG	A	557	-25.259	10.011	-26.251	1.00	0.00	D	C
ATOM	17733	O	ARG	A	557	-26.254	10.712	-26.057	1.00	0.00	D	O
ATOM	17734	N	GLY	A	558	-24.702	9.850	-27.472	1.00	0.00	D	N
ATOM	17735	CA	GLY	A	558	-25.138	10.547	-28.646	1.00	0.00	D	C
ATOM	17736	C	GLY	A	558	-24.172	11.659	-28.932	1.00	0.00	D	C
ATOM	17737	O	GLY	A	558	-24.366	12.426	-29.873	1.00	0.00	D	O
ATOM	17738	N	PHE	A	559	-23.101	11.788	-28.122	1.00	0.00	D	N
ATOM	17739	CA	PHE	A	559	-22.124	12.815	-28.368	1.00	0.00	D	C
ATOM	17740	CB	PHE	A	559	-21.848	13.682	-27.127	1.00	0.00	D	C
ATOM	17741	CG	PHE	A	559	-23.100	14.476	-26.947	1.00	0.00	D	C
ATOM	17742	CD1	PHE	A	559	-24.215	13.897	-26.388	1.00	0.00	D	C
ATOM	17743	CE1	PHE	A	559	-25.385	14.596	-26.222	1.00	0.00	D	C
ATOM	17744	CZ	PHE	A	559	-25.447	15.903	-26.636	1.00	0.00	D	C
ATOM	17745	CD2	PHE	A	559	-23.182	15.781	-27.375	1.00	0.00	D	C
ATOM	17746	CE2	PHE	A	559	-24.348	16.494	-27.214	1.00	0.00	D	C
ATOM	17747	C	PHE	A	559	-20.895	12.125	-28.844	1.00	0.00	D	C
ATOM	17748	O	PHE	A	559	-20.571	11.046	-28.378	1.00	0.00	D	O
ATOM	17749	N	GLN	A	560	-20.175	12.685	-29.824	1.00	0.00	D	N
ATOM	17750	CA	GLN	A	560	-19.091	11.959	-30.417	1.00	0.00	D	C
ATOM	17751	CB	GLN	A	560	-18.410	12.751	-31.546	1.00	0.00	D	C
ATOM	17752	CG	GLN	A	560	-19.298	13.055	-32.755	1.00	0.00	D	C
ATOM	17753	CD	GLN	A	560	-20.126	14.314	-32.511	1.00	0.00	D	C
ATOM	17754	OE1	GLN	A	560	-20.349	14.766	-31.392	1.00	0.00	D	O
ATOM	17755	NE2	GLN	A	560	-20.605	14.911	-33.636	1.00	0.00	D	N
ATOM	17756	C	GLN	A	560	-18.020	11.668	-29.415	1.00	0.00	D	C
ATOM	17757	O	GLN	A	560	-17.542	10.541	-29.316	1.00	0.00	D	O
ATOM	17758	N	GLN	A	561	-17.590	12.683	-28.649	1.00	0.00	D	N
ATOM	17759	CA	GLN	A	561	-16.539	12.434	-27.708	1.00	0.00	D	C
ATOM	17760	CB	GLN	A	561	-16.080	13.716	-26.990	1.00	0.00	D	C
ATOM	17761	CG	GLN	A	561	-15.336	14.726	-27.869	1.00	0.00	D	C
ATOM	17762	CD	GLN	A	561	-13.854	14.385	-27.802	1.00	0.00	D	C
ATOM	17763	OE1	GLN	A	561	-13.486	13.253	-27.494	1.00	0.00	D	O
ATOM	17764	NE2	GLN	A	561	-12.982	15.390	-28.085	1.00	0.00	D	N

ATOM	17765	C	GLN A 561	-17.046	11.524	-26.633	1.00	0.00	D	C
ATOM	17766	O	GLN A 561	-16.426	10.515	-26.299	1.00	0.00	D	O
ATOM	17767	N	MET A 562	-18.220	11.875	-26.080	1.00	0.00	D	N
ATOM	17768	CA	MET A 562	-18.795	11.228	-24.937	1.00	0.00	D	C
ATOM	17769	CB	MET A 562	-20.025	11.991	-24.455	1.00	0.00	D	C
ATOM	17770	CG	MET A 562	-19.726	13.472	-24.234	1.00	0.00	D	C
ATOM	17771	SD	MET A 562	-18.249	13.783	-23.223	1.00	0.00	D	S
ATOM	17772	CE	MET A 562	-18.902	12.990	-21.724	1.00	0.00	D	C
ATOM	17773	C	MET A 562	-19.236	9.830	-25.223	1.00	0.00	D	C
ATOM	17774	O	MET A 562	-19.008	8.906	-24.450	1.00	0.00	D	O
ATOM	17775	N	GLY A 563	-19.876	9.662	-26.378	1.00	0.00	D	N
ATOM	17776	CA	GLY A 563	-20.494	8.462	-26.843	1.00	0.00	D	C
ATOM	17777	C	GLY A 563	-19.442	7.427	-26.951	1.00	0.00	D	C
ATOM	17778	O	GLY A 563	-19.674	6.258	-26.657	1.00	0.00	D	O
ATOM	17779	N	ILE A 564	-18.245	7.831	-27.399	1.00	0.00	D	N
ATOM	17780	CA	ILE A 564	-17.219	6.854	-27.575	1.00	0.00	D	C
ATOM	17781	CB	ILE A 564	-15.992	7.397	-28.229	1.00	0.00	D	C
ATOM	17782	CG2	ILE A 564	-14.976	6.254	-28.378	1.00	0.00	D	C
ATOM	17783	CG1	ILE A 564	-16.409	8.062	-29.548	1.00	0.00	D	C
ATOM	17784	CD	ILE A 564	-17.479	7.278	-30.308	1.00	0.00	D	C
ATOM	17785	C	ILE A 564	-16.846	6.271	-26.245	1.00	0.00	D	C
ATOM	17786	O	ILE A 564	-16.665	5.062	-26.124	1.00	0.00	D	O
ATOM	17787	N	TYR A 565	-16.731	7.113	-25.203	1.00	0.00	D	N
ATOM	17788	CA	TYR A 565	-16.302	6.629	-23.921	1.00	0.00	D	C
ATOM	17789	CB	TYR A 565	-16.008	7.770	-22.936	1.00	0.00	D	C
ATOM	17790	CG	TYR A 565	-14.727	8.353	-23.428	1.00	0.00	D	C
ATOM	17791	CD1	TYR A 565	-14.715	9.331	-24.395	1.00	0.00	D	C
ATOM	17792	CE1	TYR A 565	-13.526	9.849	-24.846	1.00	0.00	D	C
ATOM	17793	CZ	TYR A 565	-12.334	9.389	-24.339	1.00	0.00	D	C
ATOM	17794	OH	TYR A 565	-11.114	9.923	-24.805	1.00	0.00	D	O
ATOM	17795	CD2	TYR A 565	-13.528	7.890	-22.933	1.00	0.00	D	C
ATOM	17796	CE2	TYR A 565	-12.335	8.404	-23.380	1.00	0.00	D	C
ATOM	17797	C	TYR A 565	-17.285	5.668	-23.325	1.00	0.00	D	C
ATOM	17798	O	TYR A 565	-16.889	4.635	-22.786	1.00	0.00	D	O
ATOM	17799	N	ALA A 566	-18.594	5.964	-23.407	1.00	0.00	D	N
ATOM	17800	CA	ALA A 566	-19.557	5.081	-22.807	1.00	0.00	D	C
ATOM	17801	CB	ALA A 566	-21.006	5.566	-22.967	1.00	0.00	D	C
ATOM	17802	C	ALA A 566	-19.468	3.750	-23.479	1.00	0.00	D	C

ATOM	17803	O	ALA A 566	-19.503	2.709	-22.827	1.00	0.00	D	O
ATOM	17804	N	VAL A 567	-19.338	3.764	-24.816	1.00	0.00	D	N
ATOM	17805	CA	VAL A 567	-19.315	2.551	-25.576	1.00	0.00	D	C
ATOM	17806	CB	VAL A 567	-19.225	2.794	-27.054	1.00	0.00	D	C
ATOM	17807	CG1	VAL A 567	-19.147	1.434	-27.770	1.00	0.00	D	C
ATOM	17808	CG2	VAL A 567	-20.430	3.650	-27.481	1.00	0.00	D	C
ATOM	17809	C	VAL A 567	-18.129	1.737	-25.158	1.00	0.00	D	C
ATOM	17810	O	VAL A 567	-18.233	0.525	-24.981	1.00	0.00	D	O
ATOM	17811	N	MET A 568	-16.963	2.381	-24.973	1.00	0.00	D	N
ATOM	17812	CA	MET A 568	-15.790	1.626	-24.637	1.00	0.00	D	C
ATOM	17813	CB	MET A 568	-14.494	2.454	-24.636	1.00	0.00	D	C
ATOM	17814	CG	MET A 568	-14.440	3.562	-23.587	1.00	0.00	D	C
ATOM	17815	SD	MET A 568	-12.857	4.452	-23.558	1.00	0.00	D	S
ATOM	17816	CE	MET A 568	-13.015	5.090	-25.252	1.00	0.00	D	C
ATOM	17817	C	MET A 568	-15.971	0.999	-23.294	1.00	0.00	D	C
ATOM	17818	O	MET A 568	-15.568	-0.143	-23.075	1.00	0.00	D	O
ATOM	17819	N	ILE A 569	-16.596	1.733	-22.356	1.00	0.00	D	N
ATOM	17820	CA	ILE A 569	-16.800	1.227	-21.031	1.00	0.00	D	C
ATOM	17821	CB	ILE A 569	-17.497	2.212	-20.144	1.00	0.00	D	C
ATOM	17822	CG2	ILE A 569	-18.021	1.458	-18.920	1.00	0.00	D	C
ATOM	17823	CG1	ILE A 569	-16.583	3.402	-19.819	1.00	0.00	D	C
ATOM	17824	CD	ILE A 569	-17.312	4.552	-19.128	1.00	0.00	D	C
ATOM	17825	C	ILE A 569	-17.668	0.017	-21.097	1.00	0.00	D	C
ATOM	17826	O	ILE A 569	-17.386	-0.996	-20.461	1.00	0.00	D	O
ATOM	17827	N	GLU A 570	-18.751	0.084	-21.883	1.00	0.00	D	N
ATOM	17828	CA	GLU A 570	-19.638	-1.035	-21.943	1.00	0.00	D	C
ATOM	17829	CB	GLU A 570	-20.921	-0.733	-22.714	1.00	0.00	D	C
ATOM	17830	CG	GLU A 570	-21.841	0.123	-21.852	1.00	0.00	D	C
ATOM	17831	CD	GLU A 570	-22.815	0.807	-22.775	1.00	0.00	D	C
ATOM	17832	OE1	GLU A 570	-23.838	0.176	-23.147	1.00	0.00	D	O
ATOM	17833	OE2	GLU A 570	-22.537	1.984	-23.126	1.00	0.00	D	O
ATOM	17834	C	GLU A 570	-18.927	-2.202	-22.540	1.00	0.00	D	C
ATOM	17835	O	GLU A 570	-19.148	-3.336	-22.126	1.00	0.00	D	O
ATOM	17836	N	LYS A 571	-18.043	-1.952	-23.521	1.00	0.00	D	N
ATOM	17837	CA	LYS A 571	-17.327	-3.013	-24.171	1.00	0.00	D	C
ATOM	17838	CB	LYS A 571	-16.369	-2.509	-25.263	1.00	0.00	D	C
ATOM	17839	CG	LYS A 571	-15.517	-3.624	-25.878	1.00	0.00	D	C
ATOM	17840	CD	LYS A 571	-16.292	-4.627	-26.735	1.00	0.00	D	C

ATOM	17841	CE	LYS	A	571	-15.412	-5.753	-27.284	1.00	0.00	D	C
ATOM	17842	NZ	LYS	A	571	-16.036	-6.349	-28.482	1.00	0.00	D	N
ATOM	17843	C	LYS	A	571	-16.467	-3.733	-23.183	1.00	0.00	D	C
ATOM	17844	O	LYS	A	571	-16.374	-4.958	-23.201	1.00	0.00	D	O
ATOM	17845	N	MET	A	572	-15.790	-2.993	-22.295	1.00	0.00	D	N
ATOM	17846	CA	MET	A	572	-14.895	-3.659	-21.400	1.00	0.00	D	C
ATOM	17847	CB	MET	A	572	-14.055	-2.663	-20.588	1.00	0.00	D	C
ATOM	17848	CG	MET	A	572	-13.178	-1.836	-21.530	1.00	0.00	D	C
ATOM	17849	SD	MET	A	572	-12.059	-0.631	-20.764	1.00	0.00	D	S
ATOM	17850	CE	MET	A	572	-11.459	-0.058	-22.379	1.00	0.00	D	C
ATOM	17851	C	MET	A	572	-15.658	-4.557	-20.484	1.00	0.00	D	C
ATOM	17852	O	MET	A	572	-15.239	-5.687	-20.221	1.00	0.00	D	O
ATOM	17853	N	ILE	A	573	-16.796	-4.076	-19.967	1.00	0.00	D	N
ATOM	17854	CA	ILE	A	573	-17.601	-4.801	-19.029	1.00	0.00	D	C
ATOM	17855	CB	ILE	A	573	-18.661	-3.921	-18.435	1.00	0.00	D	C
ATOM	17856	CG2	ILE	A	573	-19.490	-4.757	-17.445	1.00	0.00	D	C
ATOM	17857	CG1	ILE	A	573	-17.992	-2.697	-17.783	1.00	0.00	D	C
ATOM	17858	CD	ILE	A	573	-18.959	-1.569	-17.431	1.00	0.00	D	C
ATOM	17859	C	ILE	A	573	-18.255	-5.978	-19.681	1.00	0.00	D	C
ATOM	17860	O	ILE	A	573	-18.283	-7.069	-19.116	1.00	0.00	D	O
ATOM	17861	N	LEU	A	574	-18.840	-5.800	-20.877	1.00	0.00	D	N
ATOM	17862	CA	LEU	A	574	-19.496	-6.939	-21.432	1.00	0.00	D	C
ATOM	17863	CB	LEU	A	574	-20.239	-6.575	-22.726	1.00	0.00	D	C
ATOM	17864	CG	LEU	A	574	-21.203	-5.389	-22.520	1.00	0.00	D	C
ATOM	17865	CD1	LEU	A	574	-22.012	-5.088	-23.786	1.00	0.00	D	C
ATOM	17866	CD2	LEU	A	574	-22.078	-5.573	-21.270	1.00	0.00	D	C
ATOM	17867	C	LEU	A	574	-18.473	-7.995	-21.757	1.00	0.00	D	C
ATOM	17868	O	LEU	A	574	-18.539	-9.107	-21.236	1.00	0.00	D	O
ATOM	17869	N	ARG	A	575	-17.518	-7.678	-22.659	1.00	0.00	D	N
ATOM	17870	CA	ARG	A	575	-16.551	-8.649	-23.111	1.00	0.00	D	C
ATOM	17871	CB	ARG	A	575	-15.989	-8.234	-24.474	1.00	0.00	D	C
ATOM	17872	CG	ARG	A	575	-17.091	-7.906	-25.480	1.00	0.00	D	C
ATOM	17873	CD	ARG	A	575	-17.956	-9.110	-25.846	1.00	0.00	D	C
ATOM	17874	NE	ARG	A	575	-18.957	-8.648	-26.849	1.00	0.00	D	N
ATOM	17875	CZ	ARG	A	575	-18.606	-8.553	-28.165	1.00	0.00	D	C
ATOM	17876	NH1	ARG	A	575	-17.338	-8.865	-28.560	1.00	0.00	D	N
ATOM	17877	NH2	ARG	A	575	-19.521	-8.140	-29.092	1.00	0.00	D	N
ATOM	17878	C	ARG	A	575	-15.351	-8.937	-22.242	1.00	0.00	D	C

ATOM 17879 O ARG A 575 -15.235 -10.004 -21.641 1.00 0.00 D O
ATOM 17880 N ASP A 576 -14.452 -7.931 -22.117 1.00 0.00 D N
ATOM 17881 CA ASP A 576 -13.118 -8.123 -21.594 1.00 0.00 D C
ATOM 17882 CB ASP A 576 -12.243 -6.873 -21.815 1.00 0.00 D C
ATOM 17883 CG ASP A 576 -10.774 -7.256 -21.709 1.00 0.00 D C
ATOM 17884 OD1 ASP A 576 -10.445 -8.157 -20.894 1.00 0.00 D O
ATOM 17885 OD2 ASP A 576 -9.956 -6.644 -22.450 1.00 0.00 D O
ATOM 17886 C ASP A 576 -13.091 -8.460 -20.138 1.00 0.00 D C
ATOM 17887 O ASP A 576 -12.460 -9.432 -19.725 1.00 0.00 D O
ATOM 17888 N LEU A 577 -13.780 -7.651 -19.319 1.00 0.00 D N
ATOM 17889 CA LEU A 577 -13.799 -7.858 -17.905 1.00 0.00 D C
ATOM 17890 CB LEU A 577 -14.591 -6.775 -17.159 1.00 0.00 D C
ATOM 17891 CG LEU A 577 -14.815 -7.127 -15.680 1.00 0.00 D C
ATOM 17892 CD1 LEU A 577 -13.485 -7.334 -14.942 1.00 0.00 D C
ATOM 17893 CD2 LEU A 577 -15.729 -6.102 -14.996 1.00 0.00 D C
ATOM 17894 C LEU A 577 -14.482 -9.148 -17.627 1.00 0.00 D C
ATOM 17895 O LEU A 577 -14.022 -9.946 -16.814 1.00 0.00 D O
ATOM 17896 N CYS A 578 -15.601 -9.387 -18.327 1.00 0.00 D N
ATOM 17897 CA CYS A 578 -16.385 -10.556 -18.073 1.00 0.00 D C
ATOM 17898 CB CYS A 578 -17.644 -10.620 -18.953 1.00 0.00 D C
ATOM 17899 SG CYS A 578 -18.647 -12.101 -18.638 1.00 0.00 D S
ATOM 17900 C CYS A 578 -15.564 -11.766 -18.368 1.00 0.00 D C
ATOM 17901 O CYS A 578 -15.557 -12.720 -17.594 1.00 0.00 D O
ATOM 17902 N ARG A 579 -14.844 -11.763 -19.503 1.00 0.00 D N
ATOM 17903 CA ARG A 579 -14.077 -12.914 -19.865 1.00 0.00 D C
ATOM 17904 CB ARG A 579 -13.421 -12.768 -21.248 1.00 0.00 D C
ATOM 17905 CG ARG A 579 -14.418 -12.815 -22.406 1.00 0.00 D C
ATOM 17906 CD ARG A 579 -13.835 -12.326 -23.731 1.00 0.00 D C
ATOM 17907 NE ARG A 579 -14.820 -12.633 -24.808 1.00 0.00 D N
ATOM 17908 CZ ARG A 579 -14.995 -11.767 -25.846 1.00 0.00 D C
ATOM 17909 NH1 ARG A 579 -14.312 -10.586 -25.869 1.00 0.00 D N
ATOM 17910 NH2 ARG A 579 -15.862 -12.073 -26.857 1.00 0.00 D N
ATOM 17911 C ARG A 579 -12.987 -13.134 -18.860 1.00 0.00 D C
ATOM 17912 O ARG A 579 -12.759 -14.258 -18.420 1.00 0.00 D O
ATOM 17913 N PHE A 580 -12.299 -12.049 -18.456 1.00 0.00 D N
ATOM 17914 CA PHE A 580 -11.169 -12.129 -17.571 1.00 0.00 D C
ATOM 17915 CB PHE A 580 -10.463 -10.776 -17.389 1.00 0.00 D C
ATOM 17916 CG PHE A 580 -9.147 -11.070 -16.762 1.00 0.00 D C

ATOM	17917	CD1 PHE A 580	-8.098	-11.484	-17.550	1.00	0.00	D	C
ATOM	17918	CE1 PHE A 580	-6.874	-11.762	-16.993	1.00	0.00	D	C
ATOM	17919	CZ PHE A 580	-6.701	-11.622	-15.638	1.00	0.00	D	C
ATOM	17920	CD2 PHE A 580	-8.960	-10.933	-15.406	1.00	0.00	D	C
ATOM	17921	CE2 PHE A 580	-7.738	-11.209	-14.842	1.00	0.00	D	C
ATOM	17922	C PHE A 580	-11.598	-12.593	-16.221	1.00	0.00	D	C
ATOM	17923	O PHE A 580	-10.916	-13.398	-15.592	1.00	0.00	D	O
ATOM	17924	N MET A 581	-12.756	-12.116	-15.741	1.00	0.00	D	N
ATOM	17925	CA MET A 581	-13.157	-12.455	-14.412	1.00	0.00	D	C
ATOM	17926	CB MET A 581	-14.490	-11.838	-13.979	1.00	0.00	D	C
ATOM	17927	CG MET A 581	-14.953	-12.425	-12.648	1.00	0.00	D	C
ATOM	17928	SD MET A 581	-16.142	-11.418	-11.734	1.00	0.00	D	S
ATOM	17929	CE MET A 581	-14.867	-10.490	-10.831	1.00	0.00	D	C
ATOM	17930	C MET A 581	-13.277	-13.933	-14.314	1.00	0.00	D	C
ATOM	17931	O MET A 581	-12.965	-14.513	-13.276	1.00	0.00	D	O
ATOM	17932	N PHE A 582	-13.737	-14.602	-15.383	1.00	0.00	D	N
ATOM	17933	CA PHE A 582	-13.818	-16.027	-15.273	1.00	0.00	D	C
ATOM	17934	CB PHE A 582	-14.346	-16.720	-16.542	1.00	0.00	D	C
ATOM	17935	CG PHE A 582	-15.809	-16.459	-16.658	1.00	0.00	D	C
ATOM	17936	CD1 PHE A 582	-16.684	-17.053	-15.777	1.00	0.00	D	C
ATOM	17937	CE1 PHE A 582	-18.036	-16.832	-15.869	1.00	0.00	D	C
ATOM	17938	CZ PHE A 582	-18.530	-16.015	-16.860	1.00	0.00	D	C
ATOM	17939	CD2 PHE A 582	-16.313	-15.652	-17.653	1.00	0.00	D	C
ATOM	17940	CE2 PHE A 582	-17.666	-15.428	-17.751	1.00	0.00	D	C
ATOM	17941	C PHE A 582	-12.441	-16.564	-15.018	1.00	0.00	D	C
ATOM	17942	O PHE A 582	-12.250	-17.384	-14.122	1.00	0.00	D	O
ATOM	17943	N VAL A 583	-11.444	-16.110	-15.803	1.00	0.00	D	N
ATOM	17944	CA VAL A 583	-10.093	-16.593	-15.698	1.00	0.00	D	C
ATOM	17945	CB VAL A 583	-9.206	-16.012	-16.761	1.00	0.00	D	C
ATOM	17946	CG1 VAL A 583	-7.773	-16.526	-16.540	1.00	0.00	D	C
ATOM	17947	CG2 VAL A 583	-9.796	-16.353	-18.139	1.00	0.00	D	C
ATOM	17948	C VAL A 583	-9.475	-16.220	-14.378	1.00	0.00	D	C
ATOM	17949	O VAL A 583	-8.877	-17.058	-13.708	1.00	0.00	D	O
ATOM	17950	N TYR A 584	-9.598	-14.947	-13.962	1.00	0.00	D	N
ATOM	17951	CA TYR A 584	-8.987	-14.503	-12.743	1.00	0.00	D	C
ATOM	17952	CB TYR A 584	-9.140	-12.991	-12.486	1.00	0.00	D	C
ATOM	17953	CG TYR A 584	-8.666	-12.711	-11.100	1.00	0.00	D	C
ATOM	17954	CD1 TYR A 584	-7.350	-12.904	-10.742	1.00	0.00	D	C

ATOM	17955	CE1 TYR A 584	-6.923	-12.642	-9.459	1.00	0.00	D	C
ATOM	17956	CZ TYR A 584	-7.816	-12.170	-8.525	1.00	0.00	D	C
ATOM	17957	OH TYR A 584	-7.409	-11.896	-7.204	1.00	0.00	D	O
ATOM	17958	CD2 TYR A 584	-9.542	-12.221	-10.158	1.00	0.00	D	C
ATOM	17959	CE2 TYR A 584	-9.124	-11.957	-8.877	1.00	0.00	D	C
ATOM	17960	C TYR A 584	-9.604	-15.244	-11.613	1.00	0.00	D	C
ATOM	17961	O TYR A 584	-8.918	-15.671	-10.687	1.00	0.00	D	O
ATOM	17962	N ILE A 585	-10.934	-15.423	-11.663	1.00	0.00	D	N
ATOM	17963	CA ILE A 585	-11.589	-16.135	-10.614	1.00	0.00	D	C
ATOM	17964	CB ILE A 585	-13.084	-16.121	-10.713	1.00	0.00	D	C
ATOM	17965	CG2 ILE A 585	-13.632	-17.395	-10.052	1.00	0.00	D	C
ATOM	17966	CG1 ILE A 585	-13.617	-14.815	-10.093	1.00	0.00	D	C
ATOM	17967	CD ILE A 585	-13.041	-13.548	-10.713	1.00	0.00	D	C
ATOM	17968	C ILE A 585	-11.095	-17.542	-10.547	1.00	0.00	D	C
ATOM	17969	O ILE A 585	-10.864	-18.051	-9.452	1.00	0.00	D	O
ATOM	17970	N VAL A 586	-10.917	-18.223	-11.695	1.00	0.00	D	N
ATOM	17971	CA VAL A 586	-10.477	-19.584	-11.604	1.00	0.00	D	C
ATOM	17972	CB VAL A 586	-10.466	-20.319	-12.918	1.00	0.00	D	C
ATOM	17973	CG1 VAL A 586	-9.376	-19.745	-13.838	1.00	0.00	D	C
ATOM	17974	CG2 VAL A 586	-10.288	-21.817	-12.624	1.00	0.00	D	C
ATOM	17975	C VAL A 586	-9.105	-19.636	-11.002	1.00	0.00	D	C
ATOM	17976	O VAL A 586	-8.856	-20.433	-10.100	1.00	0.00	D	O
ATOM	17977	N PHE A 587	-8.172	-18.780	-11.469	1.00	0.00	D	N
ATOM	17978	CA PHE A 587	-6.840	-18.813	-10.934	1.00	0.00	D	C
ATOM	17979	CB PHE A 587	-5.834	-17.918	-11.684	1.00	0.00	D	C
ATOM	17980	CG PHE A 587	-5.352	-18.675	-12.879	1.00	0.00	D	C
ATOM	17981	CD1 PHE A 587	-4.274	-19.525	-12.766	1.00	0.00	D	C
ATOM	17982	CE1 PHE A 587	-3.812	-20.235	-13.850	1.00	0.00	D	C
ATOM	17983	CZ PHE A 587	-4.428	-20.096	-15.070	1.00	0.00	D	C
ATOM	17984	CD2 PHE A 587	-5.962	-18.543	-14.104	1.00	0.00	D	C
ATOM	17985	CE2 PHE A 587	-5.501	-19.249	-15.194	1.00	0.00	D	C
ATOM	17986	C PHE A 587	-6.852	-18.417	-9.492	1.00	0.00	D	C
ATOM	17987	O PHE A 587	-6.214	-19.064	-8.662	1.00	0.00	D	O
ATOM	17988	N LEU A 588	-7.589	-17.346	-9.148	1.00	0.00	D	N
ATOM	17989	CA LEU A 588	-7.591	-16.882	-7.791	1.00	0.00	D	C
ATOM	17990	CB LEU A 588	-8.418	-15.590	-7.602	1.00	0.00	D	C
ATOM	17991	CG LEU A 588	-9.959	-15.754	-7.557	1.00	0.00	D	C
ATOM	17992	CD1 LEU A 588	-10.459	-16.248	-6.187	1.00	0.00	D	C

ATOM 17993	CD2	LEU A 588	-10.679	-14.473	-7.999	1.00	0.00	D	C
ATOM 17994	C	LEU A 588	-8.177	-17.943	-6.916	1.00	0.00	D	C
ATOM 17995	O	LEU A 588	-7.639	-18.261	-5.858	1.00	0.00	D	O
ATOM 17996	N	PHE A 589	-9.295	-18.540	-7.359	1.00	0.00	D	N
ATOM 17997	CA	PHE A 589	-9.988	-19.471	-6.524	1.00	0.00	D	C
ATOM 17998	CB	PHE A 589	-11.318	-19.946	-7.126	1.00	0.00	D	C
ATOM 17999	CG	PHE A 589	-12.019	-20.728	-6.070	1.00	0.00	D	C
ATOM 18000	CD1	PHE A 589	-12.860	-20.095	-5.184	1.00	0.00	D	C
ATOM 18001	CE1	PHE A 589	-13.510	-20.804	-4.203	1.00	0.00	D	C
ATOM 18002	CZ	PHE A 589	-13.318	-22.162	-4.101	1.00	0.00	D	C
ATOM 18003	CD2	PHE A 589	-11.827	-22.085	-5.960	1.00	0.00	D	C
ATOM 18004	CE2	PHE A 589	-12.477	-22.800	-4.981	1.00	0.00	D	C
ATOM 18005	C	PHE A 589	-9.125	-20.665	-6.265	1.00	0.00	D	C
ATOM 18006	O	PHE A 589	-9.020	-21.124	-5.129	1.00	0.00	D	O
ATOM 18007	N	GLY A 590	-8.469	-21.197	-7.312	1.00	0.00	D	N
ATOM 18008	CA	GLY A 590	-7.675	-22.376	-7.136	1.00	0.00	D	C
ATOM 18009	C	GLY A 590	-6.551	-22.084	-6.192	1.00	0.00	D	C
ATOM 18010	O	GLY A 590	-6.253	-22.878	-5.301	1.00	0.00	D	O
ATOM 18011	N	PHE A 591	-5.892	-20.923	-6.354	1.00	0.00	D	N
ATOM 18012	CA	PHE A 591	-4.782	-20.610	-5.505	1.00	0.00	D	C
ATOM 18013	CB	PHE A 591	-4.021	-19.339	-5.910	1.00	0.00	D	C
ATOM 18014	CG	PHE A 591	-3.068	-19.734	-6.985	1.00	0.00	D	C
ATOM 18015	CD1	PHE A 591	-3.484	-19.951	-8.279	1.00	0.00	D	C
ATOM 18016	CE1	PHE A 591	-2.582	-20.309	-9.253	1.00	0.00	D	C
ATOM 18017	CZ	PHE A 591	-1.250	-20.448	-8.944	1.00	0.00	D	C
ATOM 18018	CD2	PHE A 591	-1.731	-19.870	-6.687	1.00	0.00	D	C
ATOM 18019	CE2	PHE A 591	-0.824	-20.225	-7.657	1.00	0.00	D	C
ATOM 18020	C	PHE A 591	-5.249	-20.471	-4.095	1.00	0.00	D	C
ATOM 18021	O	PHE A 591	-4.566	-20.895	-3.164	1.00	0.00	D	O
ATOM 18022	N	SER A 592	-6.427	-19.863	-3.906	1.00	0.00	D	N
ATOM 18023	CA	SER A 592	-6.981	-19.664	-2.601	1.00	0.00	D	C
ATOM 18024	CB	SER A 592	-8.335	-18.956	-2.680	1.00	0.00	D	C
ATOM 18025	OG	SER A 592	-8.884	-18.846	-1.382	1.00	0.00	D	O
ATOM 18026	C	SER A 592	-7.207	-20.995	-1.951	1.00	0.00	D	C
ATOM 18027	O	SER A 592	-6.894	-21.180	-0.776	1.00	0.00	D	O
ATOM 18028	N	THR A 593	-7.752	-21.966	-2.705	1.00	0.00	D	N
ATOM 18029	CA	THR A 593	-8.033	-23.248	-2.128	1.00	0.00	D	C
ATOM 18030	CB	THR A 593	-8.718	-24.197	-3.066	1.00	0.00	D	C

ATOM	18031	OG1 THR A 593	-7.877	-24.522	-4.161	1.00	0.00	D	O
ATOM	18032	CG2 THR A 593	-10.000	-23.519	-3.560	1.00	0.00	D	C
ATOM	18033	C THR A 593	-6.741	-23.875	-1.724	1.00	0.00	D	C
ATOM	18034	O THR A 593	-6.650	-24.494	-0.667	1.00	0.00	D	O
ATOM	18035	N ALA A 594	-5.700	-23.725	-2.563	1.00	0.00	D	N
ATOM	18036	CA ALA A 594	-4.438	-24.338	-2.274	1.00	0.00	D	C
ATOM	18037	CB ALA A 594	-3.391	-24.084	-3.374	1.00	0.00	D	C
ATOM	18038	C ALA A 594	-3.898	-23.774	-0.996	1.00	0.00	D	C
ATOM	18039	O ALA A 594	-3.366	-24.506	-0.165	1.00	0.00	D	O
ATOM	18040	N VAL A 595	-4.016	-22.446	-0.804	1.00	0.00	D	N
ATOM	18041	CA VAL A 595	-3.489	-21.818	0.374	1.00	0.00	D	C
ATOM	18042	CB VAL A 595	-3.590	-20.316	0.354	1.00	0.00	D	C
ATOM	18043	CG1 VAL A 595	-3.057	-19.779	1.694	1.00	0.00	D	C
ATOM	18044	CG2 VAL A 595	-2.840	-19.779	-0.877	1.00	0.00	D	C
ATOM	18045	C VAL A 595	-4.230	-22.278	1.592	1.00	0.00	D	C
ATOM	18046	O VAL A 595	-3.628	-22.519	2.636	1.00	0.00	D	O
ATOM	18047	N VAL A 596	-5.563	-22.426	1.486	1.00	0.00	D	N
ATOM	18048	CA VAL A 596	-6.370	-22.719	2.638	1.00	0.00	D	C
ATOM	18049	CB VAL A 596	-7.839	-22.762	2.302	1.00	0.00	D	C
ATOM	18050	CG1 VAL A 596	-8.177	-24.070	1.570	1.00	0.00	D	C
ATOM	18051	CG2 VAL A 596	-8.654	-22.517	3.578	1.00	0.00	D	C
ATOM	18052	C VAL A 596	-5.932	-24.018	3.248	1.00	0.00	D	C
ATOM	18053	O VAL A 596	-5.847	-24.141	4.468	1.00	0.00	D	O
ATOM	18054	N THR A 597	-5.657	-25.033	2.413	1.00	0.00	D	N
ATOM	18055	CA THR A 597	-5.232	-26.315	2.898	1.00	0.00	D	C
ATOM	18056	CB THR A 597	-5.239	-27.361	1.825	1.00	0.00	D	C
ATOM	18057	OG1 THR A 597	-4.839	-28.604	2.369	1.00	0.00	D	O
ATOM	18058	CG2 THR A 597	-4.278	-26.942	0.702	1.00	0.00	D	C
ATOM	18059	C THR A 597	-3.836	-26.271	3.463	1.00	0.00	D	C
ATOM	18060	O THR A 597	-3.549	-26.916	4.471	1.00	0.00	D	O
ATOM	18061	N LEU A 598	-2.931	-25.494	2.836	1.00	0.00	D	N
ATOM	18062	CA LEU A 598	-1.528	-25.537	3.157	1.00	0.00	D	C
ATOM	18063	CB LEU A 598	-0.718	-24.543	2.304	1.00	0.00	D	C
ATOM	18064	CG LEU A 598	0.809	-24.678	2.448	1.00	0.00	D	C
ATOM	18065	CD1 LEU A 598	1.333	-25.910	1.695	1.00	0.00	D	C
ATOM	18066	CD2 LEU A 598	1.534	-23.388	2.050	1.00	0.00	D	C
ATOM	18067	C LEU A 598	-1.284	-25.168	4.583	1.00	0.00	D	C
ATOM	18068	O LEU A 598	-0.551	-25.858	5.293	1.00	0.00	D	O

ATOM 18069	N	ILE A 599	-1.864	-24.044	5.037	1.00	0.00	D	N
ATOM 18070	CA	ILE A 599	-1.669	-23.676	6.399	1.00	0.00	D	C
ATOM 18071	CB	ILE A 599	-0.278	-23.211	6.634	1.00	0.00	D	C
ATOM 18072	CG2	ILE A 599	0.120	-22.192	5.558	1.00	0.00	D	C
ATOM 18073	CG1	ILE A 599	-0.129	-22.784	8.081	1.00	0.00	D	C
ATOM 18074	CD	ILE A 599	1.327	-22.640	8.441	1.00	0.00	D	C
ATOM 18075	C	ILE A 599	-2.672	-22.628	6.776	1.00	0.00	D	C
ATOM 18076	O	ILE A 599	-2.779	-21.594	6.122	1.00	0.00	D	O
ATOM 18077	N	GLU A 600	-3.431	-22.871	7.863	1.00	0.00	D	N
ATOM 18078	CA	GLU A 600	-4.462	-21.958	8.266	1.00	0.00	D	C
ATOM 18079	CB	GLU A 600	-5.319	-22.498	9.429	1.00	0.00	D	C
ATOM 18080	CG	GLU A 600	-4.538	-22.893	10.683	1.00	0.00	D	C
ATOM 18081	CD	GLU A 600	-4.399	-21.688	11.600	1.00	0.00	D	C
ATOM 18082	OE1	GLU A 600	-5.449	-21.124	12.008	1.00	0.00	D	O
ATOM 18083	OE2	GLU A 600	-3.235	-21.328	11.915	1.00	0.00	D	O
ATOM 18084	C	GLU A 600	-3.846	-20.652	8.652	1.00	0.00	D	C
ATOM 18085	O	GLU A 600	-4.327	-19.597	8.238	1.00	0.00	D	O
ATOM 18086	N	ASP A 601	-2.740	-20.692	9.420	1.00	0.00	D	N
ATOM 18087	CA	ASP A 601	-2.072	-19.486	9.817	1.00	0.00	D	C
ATOM 18088	CB	ASP A 601	-1.489	-18.710	8.632	1.00	0.00	D	C
ATOM 18089	CG	ASP A 601	-0.444	-19.587	7.984	1.00	0.00	D	C
ATOM 18090	OD1	ASP A 601	0.483	-20.043	8.704	1.00	0.00	D	O
ATOM 18091	OD2	ASP A 601	-0.573	-19.831	6.753	1.00	0.00	D	O
ATOM 18092	C	ASP A 601	-3.063	-18.572	10.436	1.00	0.00	D	C
ATOM 18093	O	ASP A 601	-3.909	-18.979	11.234	1.00	0.00	D	O
ATOM 18094	N	GLY A 602	-2.951	-17.272	10.099	1.00	0.00	D	N
ATOM 18095	CA	GLY A 602	-3.916	-16.354	10.608	1.00	0.00	D	C
ATOM 18096	C	GLY A 602	-4.339	-15.471	9.480	1.00	0.00	D	C
ATOM 18097	O	GLY A 602	-3.487	-14.976	8.745	1.00	0.00	D	O
ATOM 18098	N	LYS A 603	-5.676	-15.283	9.336	1.00	0.00	D	N
ATOM 18099	CA	LYS A 603	-6.323	-14.386	8.401	1.00	0.00	D	C
ATOM 18100	CB	LYS A 603	-5.442	-13.832	7.275	1.00	0.00	D	C
ATOM 18101	CG	LYS A 603	-6.051	-12.668	6.506	1.00	0.00	D	C
ATOM 18102	CD	LYS A 603	-4.948	-11.922	5.775	1.00	0.00	D	C
ATOM 18103	CE	LYS A 603	-3.713	-11.771	6.668	1.00	0.00	D	C
ATOM 18104	NZ	LYS A 603	-2.598	-11.168	5.913	1.00	0.00	D	N
ATOM 18105	C	LYS A 603	-7.506	-15.019	7.691	1.00	0.00	D	C
ATOM 18106	O	LYS A 603	-7.428	-15.065	6.430	1.00	0.00	D	O

ATOM 18107	N	TYR B 628	-5.312	-16.717	6.946	1.00	0.00	D	N
ATOM 18108	CA	TYR B 628	-5.858	-17.461	5.796	1.00	0.00	D	C
ATOM 18109	CB	TYR B 628	-4.707	-18.087	5.006	1.00	0.00	D	C
ATOM 18110	CG	TYR B 628	-3.937	-16.991	4.365	1.00	0.00	D	C
ATOM 18111	CD1	TYR B 628	-3.033	-16.245	5.087	1.00	0.00	D	C
ATOM 18112	CE1	TYR B 628	-2.320	-15.239	4.481	1.00	0.00	D	C
ATOM 18113	CZ	TYR B 628	-2.506	-14.975	3.145	1.00	0.00	D	C
ATOM 18114	OH	TYR B 628	-1.772	-13.942	2.522	1.00	0.00	D	O
ATOM 18115	CD2	TYR B 628	-4.116	-16.720	3.031	1.00	0.00	D	C
ATOM 18116	CE2	TYR B 628	-3.406	-15.716	2.420	1.00	0.00	D	C
ATOM 18117	C	TYR B 628	-6.796	-18.569	6.158	1.00	0.00	D	C
ATOM 18118	O	TYR B 628	-7.069	-19.449	5.343	1.00	0.00	D	O
ATOM 18119	N	ASN B 629	-7.329	-18.550	7.391	1.00	0.00	D	N
ATOM 18120	CA	ASN B 629	-8.203	-19.596	7.829	1.00	0.00	D	C
ATOM 18121	CB	ASN B 629	-8.663	-19.407	9.282	1.00	0.00	D	C
ATOM 18122	CG	ASN B 629	-7.437	-19.477	10.174	1.00	0.00	D	C
ATOM 18123	OD1	ASN B 629	-6.355	-19.868	9.740	1.00	0.00	D	O
ATOM 18124	ND2	ASN B 629	-7.612	-19.087	11.465	1.00	0.00	D	N
ATOM 18125	C	ASN B 629	-9.438	-19.601	6.978	1.00	0.00	D	C
ATOM 18126	O	ASN B 629	-9.917	-20.662	6.581	1.00	0.00	D	O
ATOM 18127	N	SER B 630	-9.979	-18.408	6.664	1.00	0.00	D	N
ATOM 18128	CA	SER B 630	-11.212	-18.340	5.925	1.00	0.00	D	C
ATOM 18129	CB	SER B 630	-12.143	-17.200	6.378	1.00	0.00	D	C
ATOM 18130	OG	SER B 630	-13.329	-17.193	5.595	1.00	0.00	D	O
ATOM 18131	C	SER B 630	-10.929	-18.115	4.476	1.00	0.00	D	C
ATOM 18132	O	SER B 630	-9.949	-17.480	4.103	1.00	0.00	D	O
ATOM 18133	N	LEU B 631	-11.795	-18.703	3.623	1.00	0.00	D	N
ATOM 18134	CA	LEU B 631	-11.726	-18.576	2.195	1.00	0.00	D	C
ATOM 18135	CB	LEU B 631	-12.725	-19.504	1.486	1.00	0.00	D	C
ATOM 18136	CG	LEU B 631	-12.673	-19.415	-0.048	1.00	0.00	D	C
ATOM 18137	CD1	LEU B 631	-11.324	-19.916	-0.584	1.00	0.00	D	C
ATOM 18138	CD2	LEU B 631	-13.865	-20.138	-0.695	1.00	0.00	D	C
ATOM 18139	C	LEU B 631	-12.064	-17.165	1.808	1.00	0.00	D	C
ATOM 18140	O	LEU B 631	-11.409	-16.570	0.953	1.00	0.00	D	O
ATOM 18141	N	TYR B 632	-13.102	-16.583	2.443	1.00	0.00	D	N
ATOM 18142	CA	TYR B 632	-13.526	-15.256	2.097	1.00	0.00	D	C
ATOM 18143	CB	TYR B 632	-14.753	-14.792	2.903	1.00	0.00	D	C
ATOM 18144	CG	TYR B 632	-14.958	-13.338	2.637	1.00	0.00	D	C

ATOM	18145	CD1 TYR B 632	-15.505	-12.906	1.453	1.00	0.00	D	C
ATOM	18146	CE1 TYR B 632	-15.696	-11.564	1.216	1.00	0.00	D	C
ATOM	18147	CZ TYR B 632	-15.340	-10.639	2.169	1.00	0.00	D	C
ATOM	18148	OH TYR B 632	-15.534	-9.263	1.931	1.00	0.00	D	O
ATOM	18149	CD2 TYR B 632	-14.607	-12.405	3.586	1.00	0.00	D	C
ATOM	18150	CE2 TYR B 632	-14.795	-11.061	3.356	1.00	0.00	D	C
ATOM	18151	C TYR B 632	-12.411	-14.302	2.374	1.00	0.00	D	C
ATOM	18152	O TYR B 632	-12.119	-13.428	1.559	1.00	0.00	D	O
ATOM	18153	N SER B 633	-11.767	-14.433	3.546	1.00	0.00	D	N
ATOM	18154	CA SER B 633	-10.686	-13.562	3.910	1.00	0.00	D	C
ATOM	18155	CB SER B 633	-10.264	-13.744	5.377	1.00	0.00	D	C
ATOM	18156	OG SER B 633	-9.864	-15.085	5.597	1.00	0.00	D	O
ATOM	18157	C SER B 633	-9.486	-13.821	3.044	1.00	0.00	D	C
ATOM	18158	O SER B 633	-8.851	-12.885	2.560	1.00	0.00	D	O
ATOM	18159	N THR B 634	-9.148	-15.105	2.810	1.00	0.00	D	N
ATOM	18160	CA THR B 634	-7.980	-15.435	2.040	1.00	0.00	D	C
ATOM	18161	CB THR B 634	-7.721	-16.910	1.902	1.00	0.00	D	C
ATOM	18162	OG1 THR B 634	-8.857	-17.565	1.358	1.00	0.00	D	O
ATOM	18163	CG2 THR B 634	-7.343	-17.505	3.261	1.00	0.00	D	C
ATOM	18164	C THR B 634	-8.130	-14.909	0.653	1.00	0.00	D	C
ATOM	18165	O THR B 634	-7.172	-14.412	0.065	1.00	0.00	D	O
ATOM	18166	N CYS B 635	-9.344	-15.018	0.081	1.00	0.00	D	N
ATOM	18167	CA CYS B 635	-9.550	-14.560	-1.260	1.00	0.00	D	C
ATOM	18168	CB CYS B 635	-10.992	-14.778	-1.753	1.00	0.00	D	C
ATOM	18169	SG CYS B 635	-11.249	-14.193	-3.456	1.00	0.00	D	S
ATOM	18170	C CYS B 635	-9.279	-13.093	-1.290	1.00	0.00	D	C
ATOM	18171	O CYS B 635	-8.627	-12.589	-2.204	1.00	0.00	D	O
ATOM	18172	N LEU B 636	-9.762	-12.364	-0.265	1.00	0.00	D	N
ATOM	18173	CA LEU B 636	-9.557	-10.946	-0.226	1.00	0.00	D	C
ATOM	18174	CB LEU B 636	-10.242	-10.254	0.963	1.00	0.00	D	C
ATOM	18175	CG LEU B 636	-11.776	-10.257	0.863	1.00	0.00	D	C
ATOM	18176	CD1 LEU B 636	-12.412	-9.503	2.041	1.00	0.00	D	C
ATOM	18177	CD2 LEU B 636	-12.245	-9.738	-0.508	1.00	0.00	D	C
ATOM	18178	C LEU B 636	-8.092	-10.691	-0.122	1.00	0.00	D	C
ATOM	18179	O LEU B 636	-7.571	-9.758	-0.732	1.00	0.00	D	O
ATOM	18180	N GLU B 637	-7.383	-11.519	0.663	1.00	0.00	D	N
ATOM	18181	CA GLU B 637	-5.979	-11.320	0.840	1.00	0.00	D	C
ATOM	18182	CB GLU B 637	-5.378	-12.326	1.837	1.00	0.00	D	C

ATOM	18183	CG	GLU B 637	-4.213	-11.767	2.659	1.00	0.00	D	C
ATOM	18184	CD	GLU B 637	-3.195	-11.137	1.726	1.00	0.00	D	C
ATOM	18185	OE1	GLU B 637	-2.669	-11.867	0.844	1.00	0.00	D	O
ATOM	18186	OE2	GLU B 637	-2.933	-9.917	1.885	1.00	0.00	D	O
ATOM	18187	C	GLU B 637	-5.317	-11.520	-0.495	1.00	0.00	D	C
ATOM	18188	O	GLU B 637	-4.412	-10.774	-0.863	1.00	0.00	D	O
ATOM	18189	N	LEU B 638	-5.758	-12.546	-1.253	1.00	0.00	D	N
ATOM	18190	CA	LEU B 638	-5.202	-12.873	-2.543	1.00	0.00	D	C
ATOM	18191	CB	LEU B 638	-5.767	-14.171	-3.146	1.00	0.00	D	C
ATOM	18192	CG	LEU B 638	-5.384	-15.448	-2.380	1.00	0.00	D	C
ATOM	18193	CD1	LEU B 638	-5.899	-16.699	-3.110	1.00	0.00	D	C
ATOM	18194	CD2	LEU B 638	-3.873	-15.498	-2.098	1.00	0.00	D	C
ATOM	18195	C	LEU B 638	-5.487	-11.794	-3.541	1.00	0.00	D	C
ATOM	18196	O	LEU B 638	-4.625	-11.440	-4.343	1.00	0.00	D	O
ATOM	18197	N	PHE B 639	-6.713	-11.246	-3.514	1.00	0.00	D	N
ATOM	18198	CA	PHE B 639	-7.136	-10.247	-4.455	1.00	0.00	D	C
ATOM	18199	CB	PHE B 639	-8.598	-9.818	-4.241	1.00	0.00	D	C
ATOM	18200	CG	PHE B 639	-8.938	-8.794	-5.267	1.00	0.00	D	C
ATOM	18201	CD1	PHE B 639	-9.342	-9.182	-6.524	1.00	0.00	D	C
ATOM	18202	CE1	PHE B 639	-9.656	-8.249	-7.483	1.00	0.00	D	C
ATOM	18203	CZ	PHE B 639	-9.569	-6.910	-7.197	1.00	0.00	D	C
ATOM	18204	CD2	PHE B 639	-8.845	-7.451	-4.989	1.00	0.00	D	C
ATOM	18205	CE2	PHE B 639	-9.161	-6.515	-5.947	1.00	0.00	D	C
ATOM	18206	C	PHE B 639	-6.261	-9.051	-4.276	1.00	0.00	D	C
ATOM	18207	O	PHE B 639	-5.899	-8.382	-5.243	1.00	0.00	D	O
ATOM	18208	N	LYS B 640	-5.890	-8.758	-3.016	1.00	0.00	D	N
ATOM	18209	CA	LYS B 640	-5.071	-7.618	-2.717	1.00	0.00	D	C
ATOM	18210	CB	LYS B 640	-4.627	-7.579	-1.244	1.00	0.00	D	C
ATOM	18211	CG	LYS B 640	-5.763	-7.494	-0.224	1.00	0.00	D	C
ATOM	18212	CD	LYS B 640	-5.300	-7.836	1.194	1.00	0.00	D	C
ATOM	18213	CE	LYS B 640	-6.401	-7.766	2.252	1.00	0.00	D	C
ATOM	18214	NZ	LYS B 640	-5.874	-8.248	3.549	1.00	0.00	D	N
ATOM	18215	C	LYS B 640	-3.809	-7.771	-3.495	1.00	0.00	D	C
ATOM	18216	O	LYS B 640	-3.303	-6.813	-4.078	1.00	0.00	D	O
ATOM	18217	N	PHE B 641	-3.264	-8.999	-3.517	1.00	0.00	D	N
ATOM	18218	CA	PHE B 641	-2.039	-9.258	-4.215	1.00	0.00	D	C
ATOM	18219	CB	PHE B 641	-1.485	-10.677	-3.993	1.00	0.00	D	C
ATOM	18220	CG	PHE B 641	-0.672	-10.625	-2.749	1.00	0.00	D	C

ATOM	18221	CD1	PHE	B 641	0.667	-10.315	-2.826	1.00	0.00	D	C
ATOM	18222	CE1	PHE	B 641	1.441	-10.257	-1.696	1.00	0.00	D	C
ATOM	18223	CZ	PHE	B 641	0.884	-10.505	-0.467	1.00	0.00	D	C
ATOM	18224	CD2	PHE	B 641	-1.229	-10.868	-1.516	1.00	0.00	D	C
ATOM	18225	CE2	PHE	B 641	-0.452	-10.810	-0.381	1.00	0.00	D	C
ATOM	18226	C	PHE	B 641	-2.200	-9.040	-5.687	1.00	0.00	D	C
ATOM	18227	O	PHE	B 641	-1.305	-8.494	-6.333	1.00	0.00	D	O
ATOM	18228	N	THR	B 642	-3.336	-9.465	-6.268	1.00	0.00	D	N
ATOM	18229	CA	THR	B 642	-3.527	-9.336	-7.687	1.00	0.00	D	C
ATOM	18230	CB	THR	B 642	-4.769	-10.020	-8.167	1.00	0.00	D	C
ATOM	18231	OG1	THR	B 642	-5.936	-9.383	-7.674	1.00	0.00	D	O
ATOM	18232	CG2	THR	B 642	-4.708	-11.454	-7.627	1.00	0.00	D	C
ATOM	18233	C	THR	B 642	-3.577	-7.885	-8.055	1.00	0.00	D	C
ATOM	18234	O	THR	B 642	-3.079	-7.478	-9.103	1.00	0.00	D	O
ATOM	18235	N	ILE	B 643	-4.173	-7.067	-7.170	1.00	0.00	D	N
ATOM	18236	CA	ILE	B 643	-4.304	-5.648	-7.335	1.00	0.00	D	C
ATOM	18237	CB	ILE	B 643	-4.952	-4.993	-6.145	1.00	0.00	D	C
ATOM	18238	CG2	ILE	B 643	-4.946	-3.473	-6.375	1.00	0.00	D	C
ATOM	18239	CG1	ILE	B 643	-6.358	-5.565	-5.903	1.00	0.00	D	C
ATOM	18240	CD	ILE	B 643	-6.941	-5.182	-4.541	1.00	0.00	D	C
ATOM	18241	C	ILE	B 643	-2.917	-5.094	-7.429	1.00	0.00	D	C
ATOM	18242	O	ILE	B 643	-2.678	-4.104	-8.119	1.00	0.00	D	O
ATOM	18243	N	GLY	B 644	-1.960	-5.715	-6.710	1.00	0.00	D	N
ATOM	18244	CA	GLY	B 644	-0.605	-5.249	-6.755	1.00	0.00	D	C
ATOM	18245	C	GLY	B 644	-0.221	-4.651	-5.441	1.00	0.00	D	C
ATOM	18246	O	GLY	B 644	0.914	-4.211	-5.266	1.00	0.00	D	O
ATOM	18247	N	MET	B 645	-1.158	-4.596	-4.479	1.00	0.00	D	N
ATOM	18248	CA	MET	B 645	-0.787	-4.078	-3.197	1.00	0.00	D	C
ATOM	18249	CB	MET	B 645	-1.794	-3.047	-2.658	1.00	0.00	D	C
ATOM	18250	CG	MET	B 645	-3.225	-3.581	-2.582	1.00	0.00	D	C
ATOM	18251	SD	MET	B 645	-4.450	-2.355	-2.036	1.00	0.00	D	S
ATOM	18252	CE	MET	B 645	-4.282	-1.330	-3.525	1.00	0.00	D	C
ATOM	18253	C	MET	B 645	-0.730	-5.233	-2.250	1.00	0.00	D	C
ATOM	18254	O	MET	B 645	-1.697	-5.980	-2.110	1.00	0.00	D	O
ATOM	18255	N	GLY	B 646	0.424	-5.419	-1.577	1.00	0.00	D	N
ATOM	18256	CA	GLY	B 646	0.526	-6.522	-0.663	1.00	0.00	D	C
ATOM	18257	C	GLY	B 646	1.775	-6.385	0.150	1.00	0.00	D	C
ATOM	18258	O	GLY	B 646	2.702	-5.659	-0.207	1.00	0.00	D	O

ATOM	18259	N	ASP B 647	1.808	-7.094	1.296	1.00	0.00	D	N
ATOM	18260	CA	ASP B 647	2.958	-7.121	2.156	1.00	0.00	D	C
ATOM	18261	CB	ASP B 647	2.611	-6.957	3.642	1.00	0.00	D	C
ATOM	18262	CG	ASP B 647	2.006	-5.589	3.900	1.00	0.00	D	C
ATOM	18263	OD1	ASP B 647	2.250	-4.658	3.087	1.00	0.00	D	O
ATOM	18264	OD2	ASP B 647	1.278	-5.463	4.923	1.00	0.00	D	O
ATOM	18265	C	ASP B 647	3.522	-8.496	1.989	1.00	0.00	D	C
ATOM	18266	O	ASP B 647	2.798	-9.484	2.102	1.00	0.00	D	O
ATOM	18267	N	LEU B 648	4.839	-8.614	1.725	1.00	0.00	D	N
ATOM	18268	CA	LEU B 648	5.339	-9.920	1.401	1.00	0.00	D	C
ATOM	18269	CB	LEU B 648	6.153	-9.979	0.093	1.00	0.00	D	C
ATOM	18270	CG	LEU B 648	5.337	-9.767	-1.194	1.00	0.00	D	C
ATOM	18271	CD1	LEU B 648	4.302	-10.884	-1.378	1.00	0.00	D	C
ATOM	18272	CD2	LEU B 648	4.731	-8.358	-1.268	1.00	0.00	D	C
ATOM	18273	C	LEU B 648	6.229	-10.494	2.458	1.00	0.00	D	C
ATOM	18274	O	LEU B 648	6.848	-9.795	3.258	1.00	0.00	D	O
ATOM	18275	N	GLU B 649	6.269	-11.842	2.459	1.00	0.00	D	N
ATOM	18276	CA	GLU B 649	7.139	-12.679	3.233	1.00	0.00	D	C
ATOM	18277	CB	GLU B 649	8.613	-12.572	2.803	1.00	0.00	D	C
ATOM	18278	CG	GLU B 649	8.884	-13.085	1.389	1.00	0.00	D	C
ATOM	18279	CD	GLU B 649	8.694	-14.592	1.399	1.00	0.00	D	C
ATOM	18280	OE1	GLU B 649	7.525	-15.038	1.237	1.00	0.00	D	O
ATOM	18281	OE2	GLU B 649	9.710	-15.314	1.574	1.00	0.00	D	O
ATOM	18282	C	GLU B 649	7.095	-12.390	4.701	1.00	0.00	D	C
ATOM	18283	O	GLU B 649	8.144	-12.391	5.342	1.00	0.00	D	O
ATOM	18284	N	PHE B 650	5.906	-12.160	5.294	1.00	0.00	D	N
ATOM	18285	CA	PHE B 650	5.921	-11.982	6.724	1.00	0.00	D	C
ATOM	18286	CB	PHE B 650	4.544	-11.812	7.384	1.00	0.00	D	C
ATOM	18287	CG	PHE B 650	3.981	-10.476	7.075	1.00	0.00	D	C
ATOM	18288	CD1	PHE B 650	3.219	-10.301	5.949	1.00	0.00	D	C
ATOM	18289	CE1	PHE B 650	2.690	-9.071	5.668	1.00	0.00	D	C
ATOM	18290	CZ	PHE B 650	2.914	-8.002	6.502	1.00	0.00	D	C
ATOM	18291	CD2	PHE B 650	4.205	-9.408	7.914	1.00	0.00	D	C
ATOM	18292	CE2	PHE B 650	3.678	-8.172	7.630	1.00	0.00	D	C
ATOM	18293	C	PHE B 650	6.430	-13.265	7.296	1.00	0.00	D	C
ATOM	18294	O	PHE B 650	7.326	-13.284	8.137	1.00	0.00	D	O
ATOM	18295	N	THR B 651	5.834	-14.379	6.836	1.00	0.00	D	N
ATOM	18296	CA	THR B 651	6.250	-15.700	7.205	1.00	0.00	D	C

ATOM 18297	CB THR B 651	7.742	-15.833	7.125	1.00	0.00	D	C
ATOM 18298	OG1 THR B 651	8.186	-15.565	5.806	1.00	0.00	D	O
ATOM 18299	CG2 THR B 651	8.170	-17.241	7.579	1.00	0.00	D	C
ATOM 18300	C THR B 651	5.882	-16.020	8.618	1.00	0.00	D	C
ATOM 18301	O THR B 651	5.806	-17.196	8.968	1.00	0.00	D	O
ATOM 18302	N GLU B 652	5.482	-15.026	9.423	1.00	0.00	D	N
ATOM 18303	CA GLU B 652	5.291	-15.324	10.813	1.00	0.00	D	C
ATOM 18304	CB GLU B 652	4.897	-14.095	11.628	1.00	0.00	D	C
ATOM 18305	CG GLU B 652	5.924	-12.978	11.501	1.00	0.00	D	C
ATOM 18306	CD GLU B 652	5.422	-11.841	12.357	1.00	0.00	D	C
ATOM 18307	OE1 GLU B 652	5.721	-11.880	13.578	1.00	0.00	D	O
ATOM 18308	OE2 GLU B 652	4.730	-10.934	11.821	1.00	0.00	D	O
ATOM 18309	C GLU B 652	4.209	-16.338	10.985	1.00	0.00	D	C
ATOM 18310	O GLU B 652	3.126	-16.216	10.415	1.00	0.00	D	O
ATOM 18311	N ASN B 653	4.494	-17.363	11.815	1.00	0.00	D	N
ATOM 18312	CA ASN B 653	3.573	-18.432	12.084	1.00	0.00	D	C
ATOM 18313	CB ASN B 653	2.231	-17.912	12.597	1.00	0.00	D	C
ATOM 18314	CG ASN B 653	2.558	-17.033	13.780	1.00	0.00	D	C
ATOM 18315	OD1 ASN B 653	2.813	-17.506	14.882	1.00	0.00	D	O
ATOM 18316	ND2 ASN B 653	2.584	-15.697	13.522	1.00	0.00	D	N
ATOM 18317	C ASN B 653	3.274	-19.178	10.821	1.00	0.00	D	C
ATOM 18318	O ASN B 653	2.139	-19.606	10.609	1.00	0.00	D	O
ATOM 18319	N TYR B 654	4.282	-19.383	9.953	1.00	0.00	D	N
ATOM 18320	CA TYR B 654	4.004	-20.079	8.726	1.00	0.00	D	C
ATOM 18321	CB TYR B 654	4.309	-19.275	7.444	1.00	0.00	D	C
ATOM 18322	CG TYR B 654	3.223	-18.280	7.187	1.00	0.00	D	C
ATOM 18323	CD1 TYR B 654	2.092	-18.638	6.498	1.00	0.00	D	C
ATOM 18324	CE1 TYR B 654	1.097	-17.719	6.258	1.00	0.00	D	C
ATOM 18325	CZ TYR B 654	1.217	-16.425	6.701	1.00	0.00	D	C
ATOM 18326	OH TYR B 654	0.192	-15.488	6.450	1.00	0.00	D	O
ATOM 18327	CD2 TYR B 654	3.320	-16.982	7.621	1.00	0.00	D	C
ATOM 18328	CE2 TYR B 654	2.338	-16.049	7.393	1.00	0.00	D	C
ATOM 18329	C TYR B 654	4.795	-21.347	8.648	1.00	0.00	D	C
ATOM 18330	O TYR B 654	5.982	-21.401	8.972	1.00	0.00	D	O
ATOM 18331	N ASP B 655	4.110	-22.416	8.203	1.00	0.00	D	N
ATOM 18332	CA ASP B 655	4.662	-23.725	8.049	1.00	0.00	D	C
ATOM 18333	CB ASP B 655	3.738	-24.857	8.513	1.00	0.00	D	C
ATOM 18334	CG ASP B 655	3.665	-24.788	10.027	1.00	0.00	D	C

ATOM	18335	OD1	ASP	B	655	4.143	-23.772	10.598	1.00	0.00	D	O
ATOM	18336	OD2	ASP	B	655	3.140	-25.756	10.633	1.00	0.00	D	O
ATOM	18337	C	ASP	B	655	4.892	-23.934	6.601	1.00	0.00	D	C
ATOM	18338	O	ASP	B	655	4.087	-23.532	5.760	1.00	0.00	D	O
ATOM	18339	N	PHE	B	656	5.997	-24.626	6.280	1.00	0.00	D	N
ATOM	18340	CA	PHE	B	656	6.325	-24.812	4.910	1.00	0.00	D	C
ATOM	18341	CB	PHE	B	656	5.192	-25.467	4.111	1.00	0.00	D	C
ATOM	18342	CG	PHE	B	656	4.255	-26.065	5.092	1.00	0.00	D	C
ATOM	18343	CD1	PHE	B	656	4.536	-27.262	5.701	1.00	0.00	D	C
ATOM	18344	CE1	PHE	B	656	3.652	-27.800	6.605	1.00	0.00	D	C
ATOM	18345	CZ	PHE	B	656	2.485	-27.136	6.901	1.00	0.00	D	C
ATOM	18346	CD2	PHE	B	656	3.084	-25.406	5.391	1.00	0.00	D	C
ATOM	18347	CE2	PHE	B	656	2.198	-25.938	6.294	1.00	0.00	D	C
ATOM	18348	C	PHE	B	656	6.451	-23.445	4.362	1.00	0.00	D	C
ATOM	18349	O	PHE	B	656	5.967	-23.182	3.274	1.00	0.00	D	O
ATOM	18350	N	LYS	B	657	7.046	-22.508	5.114	1.00	0.00	D	N
ATOM	18351	CA	LYS	B	657	7.180	-21.175	4.612	1.00	0.00	D	C
ATOM	18352	CB	LYS	B	657	7.738	-20.167	5.619	1.00	0.00	D	C
ATOM	18353	CG	LYS	B	657	7.601	-18.734	5.105	1.00	0.00	D	C
ATOM	18354	CD	LYS	B	657	6.141	-18.287	5.009	1.00	0.00	D	C
ATOM	18355	CE	LYS	B	657	5.957	-16.856	4.503	1.00	0.00	D	C
ATOM	18356	NZ	LYS	B	657	4.523	-16.493	4.547	1.00	0.00	D	N
ATOM	18357	C	LYS	B	657	8.120	-21.197	3.461	1.00	0.00	D	C
ATOM	18358	O	LYS	B	657	7.977	-20.425	2.522	1.00	0.00	D	O
ATOM	18359	N	ALA	B	658	9.145	-22.057	3.507	1.00	0.00	D	N
ATOM	18360	CA	ALA	B	658	10.041	-22.074	2.392	1.00	0.00	D	C
ATOM	18361	CB	ALA	B	658	11.186	-23.084	2.556	1.00	0.00	D	C
ATOM	18362	C	ALA	B	658	9.252	-22.490	1.196	1.00	0.00	D	C
ATOM	18363	O	ALA	B	658	9.406	-21.920	0.116	1.00	0.00	D	O
ATOM	18364	N	VAL	B	659	8.384	-23.510	1.349	1.00	0.00	D	N
ATOM	18365	CA	VAL	B	659	7.616	-23.925	0.214	1.00	0.00	D	C
ATOM	18366	CB	VAL	B	659	6.826	-25.201	0.371	1.00	0.00	D	C
ATOM	18367	CG1	VAL	B	659	7.762	-26.326	0.834	1.00	0.00	D	C
ATOM	18368	CG2	VAL	B	659	5.585	-24.958	1.235	1.00	0.00	D	C
ATOM	18369	C	VAL	B	659	6.621	-22.849	-0.106	1.00	0.00	D	C
ATOM	18370	O	VAL	B	659	6.280	-22.631	-1.263	1.00	0.00	D	O
ATOM	18371	N	PHE	B	660	6.110	-22.181	0.940	1.00	0.00	D	N
ATOM	18372	CA	PHE	B	660	5.068	-21.194	0.913	1.00	0.00	D	C

ATOM 18373	CB	PHE B 660	4.622	-20.756	2.324	1.00	0.00	D	C
ATOM 18374	CG	PHE B 660	3.556	-19.712	2.207	1.00	0.00	D	C
ATOM 18375	CD1	PHE B 660	3.885	-18.382	2.081	1.00	0.00	D	C
ATOM 18376	CE1	PHE B 660	2.912	-17.414	1.976	1.00	0.00	D	C
ATOM 18377	CZ	PHE B 660	1.586	-17.771	1.999	1.00	0.00	D	C
ATOM 18378	CD2	PHE B 660	2.223	-20.061	2.232	1.00	0.00	D	C
ATOM 18379	CE2	PHE B 660	1.246	-19.096	2.129	1.00	0.00	D	C
ATOM 18380	C	PHE B 660	5.500	-19.976	0.179	1.00	0.00	D	C
ATOM 18381	O	PHE B 660	4.785	-19.467	-0.677	1.00	0.00	D	O
ATOM 18382	N	ILE B 661	6.703	-19.487	0.491	1.00	0.00	D	N
ATOM 18383	CA	ILE B 661	7.236	-18.298	-0.086	1.00	0.00	D	C
ATOM 18384	CB	ILE B 661	8.588	-17.997	0.490	1.00	0.00	D	C
ATOM 18385	CG2	ILE B 661	8.413	-17.692	1.988	1.00	0.00	D	C
ATOM 18386	CG1	ILE B 661	9.526	-19.180	0.213	1.00	0.00	D	C
ATOM 18387	CD	ILE B 661	10.959	-18.976	0.671	1.00	0.00	D	C
ATOM 18388	C	ILE B 661	7.330	-18.548	-1.548	1.00	0.00	D	C
ATOM 18389	O	ILE B 661	6.963	-17.701	-2.357	1.00	0.00	D	O
ATOM 18390	N	ILE B 662	7.783	-19.753	-1.925	1.00	0.00	D	N
ATOM 18391	CA	ILE B 662	7.928	-20.085	-3.304	1.00	0.00	D	C
ATOM 18392	CB	ILE B 662	8.491	-21.462	-3.480	1.00	0.00	D	C
ATOM 18393	CG2	ILE B 662	8.545	-21.771	-4.984	1.00	0.00	D	C
ATOM 18394	CG1	ILE B 662	9.860	-21.542	-2.787	1.00	0.00	D	C
ATOM 18395	CD	ILE B 662	10.350	-22.967	-2.561	1.00	0.00	D	C
ATOM 18396	C	ILE B 662	6.574	-20.036	-3.936	1.00	0.00	D	C
ATOM 18397	O	ILE B 662	6.415	-19.537	-5.049	1.00	0.00	D	O
ATOM 18398	N	LEU B 663	5.555	-20.548	-3.224	1.00	0.00	D	N
ATOM 18399	CA	LEU B 663	4.213	-20.608	-3.726	1.00	0.00	D	C
ATOM 18400	CB	LEU B 663	3.291	-21.343	-2.732	1.00	0.00	D	C
ATOM 18401	CG	LEU B 663	1.819	-21.476	-3.161	1.00	0.00	D	C
ATOM 18402	CD1	LEU B 663	1.068	-20.140	-3.044	1.00	0.00	D	C
ATOM 18403	CD2	LEU B 663	1.711	-22.097	-4.560	1.00	0.00	D	C
ATOM 18404	C	LEU B 663	3.716	-19.212	-3.958	1.00	0.00	D	C
ATOM 18405	O	LEU B 663	3.046	-18.932	-4.953	1.00	0.00	D	O
ATOM 18406	N	LEU B 664	4.034	-18.289	-3.033	1.00	0.00	D	N
ATOM 18407	CA	LEU B 664	3.573	-16.937	-3.125	1.00	0.00	D	C
ATOM 18408	CB	LEU B 664	3.922	-16.162	-1.841	1.00	0.00	D	C
ATOM 18409	CG	LEU B 664	3.225	-14.802	-1.692	1.00	0.00	D	C
ATOM 18410	CD1	LEU B 664	3.720	-13.800	-2.738	1.00	0.00	D	C

ATOM	18411	CD2	LEU	B	664	1.695	-14.959	-1.690	1.00	0.00	D	C
ATOM	18412	C	LEU	B	664	4.203	-16.295	-4.321	1.00	0.00	D	C
ATOM	18413	O	LEU	B	664	3.545	-15.578	-5.077	1.00	0.00	D	O
ATOM	18414	N	LEU	B	665	5.507	-16.553	-4.543	1.00	0.00	D	N
ATOM	18415	CA	LEU	B	665	6.163	-15.977	-5.678	1.00	0.00	D	C
ATOM	18416	CB	LEU	B	665	7.679	-16.233	-5.726	1.00	0.00	D	C
ATOM	18417	CG	LEU	B	665	8.496	-15.292	-4.813	1.00	0.00	D	C
ATOM	18418	CD1	LEU	B	665	8.100	-15.413	-3.336	1.00	0.00	D	C
ATOM	18419	CD2	LEU	B	665	10.003	-15.479	-5.037	1.00	0.00	D	C
ATOM	18420	C	LEU	B	665	5.541	-16.495	-6.932	1.00	0.00	D	C
ATOM	18421	O	LEU	B	665	5.341	-15.740	-7.881	1.00	0.00	D	O
ATOM	18422	N	ALA	B	666	5.209	-17.797	-6.980	1.00	0.00	D	N
ATOM	18423	CA	ALA	B	666	4.658	-18.350	-8.181	1.00	0.00	D	C
ATOM	18424	CB	ALA	B	666	4.420	-19.866	-8.075	1.00	0.00	D	C
ATOM	18425	C	ALA	B	666	3.334	-17.719	-8.499	1.00	0.00	D	C
ATOM	18426	O	ALA	B	666	3.095	-17.314	-9.635	1.00	0.00	D	O
ATOM	18427	N	TYR	B	667	2.430	-17.627	-7.504	1.00	0.00	D	N
ATOM	18428	CA	TYR	B	667	1.117	-17.107	-7.760	1.00	0.00	D	C
ATOM	18429	CB	TYR	B	667	0.149	-17.365	-6.594	1.00	0.00	D	C
ATOM	18430	CG	TYR	B	667	-1.158	-16.735	-6.931	1.00	0.00	D	C
ATOM	18431	CD1	TYR	B	667	-1.922	-17.219	-7.965	1.00	0.00	D	C
ATOM	18432	CE1	TYR	B	667	-3.133	-16.649	-8.273	1.00	0.00	D	C
ATOM	18433	CZ	TYR	B	667	-3.595	-15.587	-7.539	1.00	0.00	D	C
ATOM	18434	OH	TYR	B	667	-4.839	-15.003	-7.855	1.00	0.00	D	O
ATOM	18435	CD2	TYR	B	667	-1.631	-15.671	-6.196	1.00	0.00	D	C
ATOM	18436	CE2	TYR	B	667	-2.841	-15.096	-6.499	1.00	0.00	D	C
ATOM	18437	C	TYR	B	667	1.138	-15.639	-8.037	1.00	0.00	D	C
ATOM	18438	O	TYR	B	667	0.541	-15.177	-9.008	1.00	0.00	D	O
ATOM	18439	N	VAL	B	668	1.833	-14.862	-7.191	1.00	0.00	D	N
ATOM	18440	CA	VAL	B	668	1.806	-13.439	-7.348	1.00	0.00	D	C
ATOM	18441	CB	VAL	B	668	2.510	-12.708	-6.246	1.00	0.00	D	C
ATOM	18442	CG1	VAL	B	668	2.487	-11.204	-6.571	1.00	0.00	D	C
ATOM	18443	CG2	VAL	B	668	1.839	-13.070	-4.910	1.00	0.00	D	C
ATOM	18444	C	VAL	B	668	2.463	-13.045	-8.629	1.00	0.00	D	C
ATOM	18445	O	VAL	B	668	1.923	-12.245	-9.392	1.00	0.00	D	O
ATOM	18446	N	ILE	B	669	3.646	-13.616	-8.920	1.00	0.00	D	N
ATOM	18447	CA	ILE	B	669	4.349	-13.156	-10.079	1.00	0.00	D	C
ATOM	18448	CB	ILE	B	669	5.733	-13.745	-10.231	1.00	0.00	D	C

ATOM	18449	CG2	ILE	B	669	6.500	-13.393	-8.942	1.00	0.00	D	C
ATOM	18450	CG1	ILE	B	669	5.731	-15.251	-10.551	1.00	0.00	D	C
ATOM	18451	CD	ILE	B	669	5.532	-15.568	-12.035	1.00	0.00	D	C
ATOM	18452	C	ILE	B	669	3.525	-13.466	-11.283	1.00	0.00	D	C
ATOM	18453	O	ILE	B	669	3.350	-12.620	-12.157	1.00	0.00	D	O
ATOM	18454	N	LEU	B	670	2.956	-14.681	-11.341	1.00	0.00	D	N
ATOM	18455	CA	LEU	B	670	2.211	-15.088	-12.495	1.00	0.00	D	C
ATOM	18456	CB	LEU	B	670	1.647	-16.515	-12.353	1.00	0.00	D	C
ATOM	18457	CG	LEU	B	670	0.668	-16.909	-13.477	1.00	0.00	D	C
ATOM	18458	CD1	LEU	B	670	1.358	-16.900	-14.848	1.00	0.00	D	C
ATOM	18459	CD2	LEU	B	670	-0.038	-18.242	-13.176	1.00	0.00	D	C
ATOM	18460	C	LEU	B	670	1.036	-14.187	-12.683	1.00	0.00	D	C
ATOM	18461	O	LEU	B	670	0.794	-13.696	-13.785	1.00	0.00	D	O
ATOM	18462	N	THR	B	671	0.285	-13.920	-11.599	1.00	0.00	D	N
ATOM	18463	CA	THR	B	671	-0.930	-13.178	-11.776	1.00	0.00	D	C
ATOM	18464	CB	THR	B	671	-1.784	-13.056	-10.543	1.00	0.00	D	C
ATOM	18465	OG1	THR	B	671	-1.198	-12.193	-9.582	1.00	0.00	D	O
ATOM	18466	CG2	THR	B	671	-1.940	-14.456	-9.945	1.00	0.00	D	C
ATOM	18467	C	THR	B	671	-0.625	-11.798	-12.241	1.00	0.00	D	C
ATOM	18468	O	THR	B	671	-1.282	-11.278	-13.141	1.00	0.00	D	O
ATOM	18469	N	TYR	B	672	0.374	-11.150	-11.627	1.00	0.00	D	N
ATOM	18470	CA	TYR	B	672	0.663	-9.807	-12.024	1.00	0.00	D	C
ATOM	18471	CB	TYR	B	672	1.733	-9.156	-11.126	1.00	0.00	D	C
ATOM	18472	CG	TYR	B	672	1.992	-7.766	-11.602	1.00	0.00	D	C
ATOM	18473	CD1	TYR	B	672	1.099	-6.747	-11.340	1.00	0.00	D	C
ATOM	18474	CE1	TYR	B	672	1.346	-5.468	-11.779	1.00	0.00	D	C
ATOM	18475	CZ	TYR	B	672	2.500	-5.191	-12.481	1.00	0.00	D	C
ATOM	18476	OH	TYR	B	672	2.763	-3.881	-12.936	1.00	0.00	D	O
ATOM	18477	CD2	TYR	B	672	3.143	-7.475	-12.293	1.00	0.00	D	C
ATOM	18478	CE2	TYR	B	672	3.397	-6.197	-12.734	1.00	0.00	D	C
ATOM	18479	C	TYR	B	672	1.164	-9.842	-13.425	1.00	0.00	D	C
ATOM	18480	O	TYR	B	672	0.746	-9.056	-14.274	1.00	0.00	D	O
ATOM	18481	N	ILE	B	673	2.085	-10.781	-13.701	1.00	0.00	D	N
ATOM	18482	CA	ILE	B	673	2.700	-10.780	-14.983	1.00	0.00	D	C
ATOM	18483	CB	ILE	B	673	3.947	-11.617	-15.012	1.00	0.00	D	C
ATOM	18484	CG2	ILE	B	673	3.583	-13.101	-14.856	1.00	0.00	D	C
ATOM	18485	CG1	ILE	B	673	4.749	-11.286	-16.274	1.00	0.00	D	C
ATOM	18486	CD	ILE	B	673	5.266	-9.848	-16.283	1.00	0.00	D	C

ATOM 18487	C	ILE B 673	1.784	-11.188	-16.106	1.00	0.00	D	C
ATOM 18488	O	ILE B 673	1.691	-10.467	-17.095	1.00	0.00	D	O
ATOM 18489	N	LEU B 674	1.127	-12.367	-16.033	1.00	0.00	D	N
ATOM 18490	CA	LEU B 674	0.328	-12.788	-17.155	1.00	0.00	D	C
ATOM 18491	CB	LEU B 674	0.204	-14.316	-17.241	1.00	0.00	D	C
ATOM 18492	CG	LEU B 674	1.572	-14.996	-17.420	1.00	0.00	D	C
ATOM 18493	CD1	LEU B 674	1.415	-16.481	-17.768	1.00	0.00	D	C
ATOM 18494	CD2	LEU B 674	2.448	-14.231	-18.423	1.00	0.00	D	C
ATOM 18495	C	LEU B 674	-1.056	-12.207	-17.244	1.00	0.00	D	C
ATOM 18496	O	LEU B 674	-1.429	-11.624	-18.259	1.00	0.00	D	O
ATOM 18497	N	LEU B 675	-1.854	-12.348	-16.165	1.00	0.00	D	N
ATOM 18498	CA	LEU B 675	-3.254	-12.002	-16.195	1.00	0.00	D	C
ATOM 18499	CB	LEU B 675	-3.962	-12.355	-14.874	1.00	0.00	D	C
ATOM 18500	CG	LEU B 675	-4.287	-13.846	-14.679	1.00	0.00	D	C
ATOM 18501	CD1	LEU B 675	-5.427	-14.284	-15.613	1.00	0.00	D	C
ATOM 18502	CD2	LEU B 675	-3.033	-14.722	-14.810	1.00	0.00	D	C
ATOM 18503	C	LEU B 675	-3.491	-10.543	-16.397	1.00	0.00	D	C
ATOM 18504	O	LEU B 675	-4.199	-10.143	-17.320	1.00	0.00	D	O
ATOM 18505	N	LEU B 676	-2.888	-9.707	-15.537	1.00	0.00	D	N
ATOM 18506	CA	LEU B 676	-3.184	-8.308	-15.597	1.00	0.00	D	C
ATOM 18507	CB	LEU B 676	-2.552	-7.493	-14.458	1.00	0.00	D	C
ATOM 18508	CG	LEU B 676	-3.242	-7.725	-13.104	1.00	0.00	D	C
ATOM 18509	CD1	LEU B 676	-4.703	-7.243	-13.158	1.00	0.00	D	C
ATOM 18510	CD2	LEU B 676	-3.103	-9.179	-12.626	1.00	0.00	D	C
ATOM 18511	C	LEU B 676	-2.707	-7.750	-16.886	1.00	0.00	D	C
ATOM 18512	O	LEU B 676	-3.434	-7.015	-17.550	1.00	0.00	D	O
ATOM 18513	N	ASN B 677	-1.475	-8.103	-17.285	1.00	0.00	D	N
ATOM 18514	CA	ASN B 677	-0.918	-7.586	-18.495	1.00	0.00	D	C
ATOM 18515	CB	ASN B 677	0.532	-8.046	-18.716	1.00	0.00	D	C
ATOM 18516	CG	ASN B 677	1.358	-7.493	-17.564	1.00	0.00	D	C
ATOM 18517	OD1	ASN B 677	0.899	-6.631	-16.818	1.00	0.00	D	O
ATOM 18518	ND2	ASN B 677	2.613	-7.992	-17.416	1.00	0.00	D	N
ATOM 18519	C	ASN B 677	-1.737	-8.097	-19.633	1.00	0.00	D	C
ATOM 18520	O	ASN B 677	-2.028	-7.363	-20.575	1.00	0.00	D	O
ATOM 18521	N	MET B 678	-2.133	-9.379	-19.568	1.00	0.00	D	N
ATOM 18522	CA	MET B 678	-2.897	-9.984	-20.620	1.00	0.00	D	C
ATOM 18523	CB	MET B 678	-3.216	-11.461	-20.334	1.00	0.00	D	C
ATOM 18524	CG	MET B 678	-4.102	-12.135	-21.384	1.00	0.00	D	C

ATOM	18525	SD	MET B 678	-4.282	-13.933	-21.161	1.00	0.00	D	S
ATOM	18526	CE	MET B 678	-5.161	-13.823	-19.575	1.00	0.00	D	C
ATOM	18527	C	MET B 678	-4.202	-9.275	-20.759	1.00	0.00	D	C
ATOM	18528	O	MET B 678	-4.615	-8.951	-21.869	1.00	0.00	D	O
ATOM	18529	N	LEU B 679	-4.901	-9.005	-19.637	1.00	0.00	D	N
ATOM	18530	CA	LEU B 679	-6.175	-8.366	-19.785	1.00	0.00	D	C
ATOM	18531	CB	LEU B 679	-7.017	-8.327	-18.486	1.00	0.00	D	C
ATOM	18532	CG	LEU B 679	-6.832	-7.108	-17.556	1.00	0.00	D	C
ATOM	18533	CD1	LEU B 679	-7.560	-5.858	-18.085	1.00	0.00	D	C
ATOM	18534	CD2	LEU B 679	-7.245	-7.452	-16.115	1.00	0.00	D	C
ATOM	18535	C	LEU B 679	-5.963	-6.970	-20.283	1.00	0.00	D	C
ATOM	18536	O	LEU B 679	-6.662	-6.512	-21.185	1.00	0.00	D	O
ATOM	18537	N	ILE B 680	-4.962	-6.271	-19.713	1.00	0.00	D	N
ATOM	18538	CA	ILE B 680	-4.692	-4.892	-20.017	1.00	0.00	D	C
ATOM	18539	CB	ILE B 680	-3.600	-4.303	-19.170	1.00	0.00	D	C
ATOM	18540	CG2	ILE B 680	-3.312	-2.884	-19.688	1.00	0.00	D	C
ATOM	18541	CG1	ILE B 680	-3.998	-4.340	-17.681	1.00	0.00	D	C
ATOM	18542	CD	ILE B 680	-5.285	-3.580	-17.367	1.00	0.00	D	C
ATOM	18543	C	ILE B 680	-4.298	-4.760	-21.453	1.00	0.00	D	C
ATOM	18544	O	ILE B 680	-4.686	-3.806	-22.126	1.00	0.00	D	O
ATOM	18545	N	ALA B 681	-3.501	-5.715	-21.960	1.00	0.00	D	N
ATOM	18546	CA	ALA B 681	-3.050	-5.680	-23.319	1.00	0.00	D	C
ATOM	18547	CB	ALA B 681	-2.161	-6.881	-23.686	1.00	0.00	D	C
ATOM	18548	C	ALA B 681	-4.267	-5.740	-24.178	1.00	0.00	D	C
ATOM	18549	O	ALA B 681	-4.349	-5.082	-25.214	1.00	0.00	D	O
ATOM	18550	N	LEU B 682	-5.251	-6.540	-23.739	1.00	0.00	D	N
ATOM	18551	CA	LEU B 682	-6.491	-6.741	-24.428	1.00	0.00	D	C
ATOM	18552	CB	LEU B 682	-7.422	-7.698	-23.658	1.00	0.00	D	C
ATOM	18553	CG	LEU B 682	-6.878	-9.127	-23.481	1.00	0.00	D	C
ATOM	18554	CD1	LEU B 682	-7.841	-9.986	-22.646	1.00	0.00	D	C
ATOM	18555	CD2	LEU B 682	-6.549	-9.770	-24.838	1.00	0.00	D	C
ATOM	18556	C	LEU B 682	-7.224	-5.431	-24.501	1.00	0.00	D	C
ATOM	18557	O	LEU B 682	-7.867	-5.129	-25.506	1.00	0.00	D	O
ATOM	18558	N	MET B 683	-7.121	-4.606	-23.440	1.00	0.00	D	N
ATOM	18559	CA	MET B 683	-7.872	-3.386	-23.293	1.00	0.00	D	C
ATOM	18560	CB	MET B 683	-7.489	-2.607	-22.017	1.00	0.00	D	C
ATOM	18561	CG	MET B 683	-7.846	-3.278	-20.687	1.00	0.00	D	C
ATOM	18562	SD	MET B 683	-9.599	-3.176	-20.215	1.00	0.00	D	S

ATOM	18563	CE	MET B 683	-9.300	-3.488	-18.449	1.00	0.00	D	C
ATOM	18564	C	MET B 683	-7.608	-2.437	-24.423	1.00	0.00	D	C
ATOM	18565	O	MET B 683	-8.534	-1.822	-24.950	1.00	0.00	D	O
ATOM	18566	N	GLY B 684	-6.345	-2.296	-24.854	1.00	0.00	D	N
ATOM	18567	CA	GLY B 684	-6.043	-1.296	-25.838	1.00	0.00	D	C
ATOM	18568	C	GLY B 684	-6.829	-1.542	-27.087	1.00	0.00	D	C
ATOM	18569	O	GLY B 684	-7.322	-0.603	-27.705	1.00	0.00	D	O
ATOM	18570	N	GLU B 685	-6.980	-2.814	-27.487	1.00	0.00	D	N
ATOM	18571	CA	GLU B 685	-7.616	-3.145	-28.729	1.00	0.00	D	C
ATOM	18572	CB	GLU B 685	-7.702	-4.665	-28.926	1.00	0.00	D	C
ATOM	18573	CG	GLU B 685	-6.334	-5.342	-29.007	1.00	0.00	D	C
ATOM	18574	CD	GLU B 685	-6.552	-6.842	-28.860	1.00	0.00	D	C
ATOM	18575	OE1	GLU B 685	-6.748	-7.296	-27.700	1.00	0.00	D	O
ATOM	18576	OE2	GLU B 685	-6.530	-7.552	-29.898	1.00	0.00	D	O
ATOM	18577	C	GLU B 685	-9.024	-2.639	-28.736	1.00	0.00	D	C
ATOM	18578	O	GLU B 685	-9.469	-2.049	-29.718	1.00	0.00	D	O
ATOM	18579	N	THR B 686	-9.760	-2.857	-27.631	1.00	0.00	D	N
ATOM	18580	CA	THR B 686	-11.136	-2.455	-27.574	1.00	0.00	D	C
ATOM	18581	CB	THR B 686	-11.812	-2.835	-26.289	1.00	0.00	D	C
ATOM	18582	OG1	THR B 686	-11.210	-2.157	-25.194	1.00	0.00	D	O
ATOM	18583	CG2	THR B 686	-11.696	-4.355	-26.104	1.00	0.00	D	C
ATOM	18584	C	THR B 686	-11.202	-0.970	-27.681	1.00	0.00	D	C
ATOM	18585	O	THR B 686	-12.058	-0.428	-28.377	1.00	0.00	D	O
ATOM	18586	N	VAL B 687	-10.295	-0.274	-26.967	1.00	0.00	D	N
ATOM	18587	CA	VAL B 687	-10.265	1.158	-26.988	1.00	0.00	D	C
ATOM	18588	CB	VAL B 687	-9.257	1.740	-26.039	1.00	0.00	D	C
ATOM	18589	CG1	VAL B 687	-9.203	3.261	-26.262	1.00	0.00	D	C
ATOM	18590	CG2	VAL B 687	-9.643	1.339	-24.607	1.00	0.00	D	C
ATOM	18591	C	VAL B 687	-9.910	1.632	-28.367	1.00	0.00	D	C
ATOM	18592	O	VAL B 687	-10.485	2.596	-28.869	1.00	0.00	D	O
ATOM	18593	N	ASN B 688	-8.932	0.980	-29.016	1.00	0.00	D	N
ATOM	18594	CA	ASN B 688	-8.514	1.413	-30.318	1.00	0.00	D	C
ATOM	18595	CB	ASN B 688	-7.292	0.644	-30.855	1.00	0.00	D	C
ATOM	18596	CG	ASN B 688	-6.031	1.205	-30.210	1.00	0.00	D	C
ATOM	18597	OD1	ASN B 688	-5.583	2.297	-30.558	1.00	0.00	D	O
ATOM	18598	ND2	ASN B 688	-5.438	0.449	-29.252	1.00	0.00	D	N
ATOM	18599	C	ASN B 688	-9.615	1.221	-31.308	1.00	0.00	D	C
ATOM	18600	O	ASN B 688	-9.914	2.122	-32.090	1.00	0.00	D	O

ATOM	18601	N	LYS B 689	-10.255	0.038	-31.304	1.00	0.00	D	N
ATOM	18602	CA	LYS B 689	-11.255	-0.200	-32.297	1.00	0.00	D	C
ATOM	18603	CB	LYS B 689	-11.734	-1.656	-32.407	1.00	0.00	D	C
ATOM	18604	CG	LYS B 689	-12.571	-2.189	-31.248	1.00	0.00	D	C
ATOM	18605	CD	LYS B 689	-13.277	-3.485	-31.653	1.00	0.00	D	C
ATOM	18606	CE	LYS B 689	-13.911	-4.262	-30.502	1.00	0.00	D	C
ATOM	18607	NZ	LYS B 689	-14.430	-5.553	-31.007	1.00	0.00	D	N
ATOM	18608	C	LYS B 689	-12.424	0.699	-32.069	1.00	0.00	D	C
ATOM	18609	O	LYS B 689	-13.017	1.200	-33.022	1.00	0.00	D	O
ATOM	18610	N	ILE B 690	-12.782	0.938	-30.797	1.00	0.00	D	N
ATOM	18611	CA	ILE B 690	-13.904	1.796	-30.551	1.00	0.00	D	C
ATOM	18612	CB	ILE B 690	-14.322	1.901	-29.115	1.00	0.00	D	C
ATOM	18613	CG2	ILE B 690	-13.130	2.322	-28.254	1.00	0.00	D	C
ATOM	18614	CG1	ILE B 690	-15.531	2.841	-29.019	1.00	0.00	D	C
ATOM	18615	CD	ILE B 690	-16.179	2.834	-27.643	1.00	0.00	D	C
ATOM	18616	C	ILE B 690	-13.600	3.160	-31.073	1.00	0.00	D	C
ATOM	18617	O	ILE B 690	-14.488	3.835	-31.590	1.00	0.00	D	O
ATOM	18618	N	ALA B 691	-12.342	3.616	-30.924	1.00	0.00	D	N
ATOM	18619	CA	ALA B 691	-11.963	4.925	-31.380	1.00	0.00	D	C
ATOM	18620	CB	ALA B 691	-10.498	5.257	-31.053	1.00	0.00	D	C
ATOM	18621	C	ALA B 691	-12.129	5.027	-32.870	1.00	0.00	D	C
ATOM	18622	O	ALA B 691	-12.644	6.023	-33.373	1.00	0.00	D	O
ATOM	18623	N	GLN B 692	-11.704	3.996	-33.628	1.00	0.00	D	N
ATOM	18624	CA	GLN B 692	-11.786	4.061	-35.064	1.00	0.00	D	C
ATOM	18625	CB	GLN B 692	-11.279	2.778	-35.733	1.00	0.00	D	C
ATOM	18626	CG	GLN B 692	-9.841	2.402	-35.397	1.00	0.00	D	C
ATOM	18627	CD	GLN B 692	-9.649	1.009	-35.963	1.00	0.00	D	C
ATOM	18628	OE1	GLN B 692	-10.033	0.748	-37.101	1.00	0.00	D	O
ATOM	18629	NE2	GLN B 692	-9.072	0.085	-35.148	1.00	0.00	D	N
ATOM	18630	C	GLN B 692	-13.227	4.133	-35.451	1.00	0.00	D	C
ATOM	18631	O	GLN B 692	-13.629	4.912	-36.317	1.00	0.00	D	O
ATOM	18632	N	GLU B 693	-14.032	3.289	-34.791	1.00	0.00	D	N
ATOM	18633	CA	GLU B 693	-15.436	3.123	-35.010	1.00	0.00	D	C
ATOM	18634	CB	GLU B 693	-16.000	1.927	-34.225	1.00	0.00	D	C
ATOM	18635	CG	GLU B 693	-15.440	0.580	-34.695	1.00	0.00	D	C
ATOM	18636	CD	GLU B 693	-15.899	-0.497	-33.722	1.00	0.00	D	C
ATOM	18637	OE1	GLU B 693	-15.265	-0.627	-32.638	1.00	0.00	D	O
ATOM	18638	OE2	GLU B 693	-16.888	-1.205	-34.045	1.00	0.00	D	O

ATOM	18639	C	GLU B 693	-16.187	4.341	-34.572	1.00	0.00	D	C
ATOM	18640	O	GLU B 693	-17.235	4.630	-35.135	1.00	0.00	D	O
ATOM	18641	N	SER B 694	-15.646	5.114	-33.613	1.00	0.00	D	N
ATOM	18642	CA	SER B 694	-16.286	6.175	-32.873	1.00	0.00	D	C
ATOM	18643	CB	SER B 694	-15.243	7.071	-32.185	1.00	0.00	D	C
ATOM	18644	OG	SER B 694	-14.602	6.369	-31.135	1.00	0.00	D	O
ATOM	18645	C	SER B 694	-17.103	7.097	-33.708	1.00	0.00	D	C
ATOM	18646	O	SER B 694	-18.209	7.444	-33.298	1.00	0.00	D	O
ATOM	18647	N	LYS B 695	-16.597	7.555	-34.862	1.00	0.00	D	N
ATOM	18648	CA	LYS B 695	-17.418	8.451	-35.623	1.00	0.00	D	C
ATOM	18649	CB	LYS B 695	-16.787	8.825	-36.973	1.00	0.00	D	C
ATOM	18650	CG	LYS B 695	-15.631	9.819	-36.895	1.00	0.00	D	C
ATOM	18651	CD	LYS B 695	-16.068	11.213	-36.448	1.00	0.00	D	C
ATOM	18652	CE	LYS B 695	-15.016	12.290	-36.710	1.00	0.00	D	C
ATOM	18653	NZ	LYS B 695	-15.621	13.626	-36.524	1.00	0.00	D	N
ATOM	18654	C	LYS B 695	-18.676	7.706	-35.950	1.00	0.00	D	C
ATOM	18655	O	LYS B 695	-19.785	8.185	-35.713	1.00	0.00	D	O
ATOM	18656	N	ASN B 696	-18.496	6.473	-36.444	1.00	0.00	D	N
ATOM	18657	CA	ASN B 696	-19.523	5.567	-36.873	1.00	0.00	D	C
ATOM	18658	CB	ASN B 696	-18.926	4.296	-37.496	1.00	0.00	D	C
ATOM	18659	CG	ASN B 696	-17.961	4.711	-38.597	1.00	0.00	D	C
ATOM	18660	OD1	ASN B 696	-18.257	5.581	-39.413	1.00	0.00	D	O
ATOM	18661	ND2	ASN B 696	-16.754	4.083	-38.603	1.00	0.00	D	N
ATOM	18662	C	ASN B 696	-20.395	5.095	-35.740	1.00	0.00	D	C
ATOM	18663	O	ASN B 696	-21.619	5.113	-35.844	1.00	0.00	D	O
ATOM	18664	N	ILE B 697	-19.781	4.644	-34.629	1.00	0.00	D	N
ATOM	18665	CA	ILE B 697	-20.480	4.098	-33.501	1.00	0.00	D	C
ATOM	18666	CB	ILE B 697	-19.552	3.580	-32.447	1.00	0.00	D	C
ATOM	18667	CG2	ILE B 697	-18.761	2.389	-33.018	1.00	0.00	D	C
ATOM	18668	CG1	ILE B 697	-18.673	4.729	-31.950	1.00	0.00	D	C
ATOM	18669	CD	ILE B 697	-17.856	4.382	-30.724	1.00	0.00	D	C
ATOM	18670	C	ILE B 697	-21.327	5.171	-32.906	1.00	0.00	D	C
ATOM	18671	O	ILE B 697	-22.479	4.942	-32.540	1.00	0.00	D	O
ATOM	18672	N	TRP B 698	-20.768	6.389	-32.830	1.00	0.00	D	N
ATOM	18673	CA	TRP B 698	-21.466	7.506	-32.289	1.00	0.00	D	C
ATOM	18674	CB	TRP B 698	-20.677	8.807	-32.498	1.00	0.00	D	C
ATOM	18675	CG	TRP B 698	-21.486	10.075	-32.370	1.00	0.00	D	C
ATOM	18676	CD1	TRP B 698	-21.853	10.767	-31.260	1.00	0.00	D	C

ATOM	18677	NE1 TRP B 698	-22.546	11.899	-31.616	1.00	0.00	D	N
ATOM	18678	CE2 TRP B 698	-22.645	11.937	-32.989	1.00	0.00	D	C
ATOM	18679	CD2 TRP B 698	-21.997	10.810	-33.493	1.00	0.00	D	C
ATOM	18680	CE3 TRP B 698	-21.929	10.571	-34.835	1.00	0.00	D	C
ATOM	18681	CZ3 TRP B 698	-22.528	11.486	-35.671	1.00	0.00	D	C
ATOM	18682	CZ2 TRP B 698	-23.234	12.845	-33.819	1.00	0.00	D	C
ATOM	18683	CH2 TRP B 698	-23.167	12.601	-35.172	1.00	0.00	D	C
ATOM	18684	C TRP B 698	-22.709	7.649	-33.088	1.00	0.00	D	C
ATOM	18685	O TRP B 698	-23.782	7.889	-32.540	1.00	0.00	D	O
ATOM	18686	N LYS B 699	-22.579	7.508	-34.416	1.00	0.00	D	N
ATOM	18687	CA LYS B 699	-23.688	7.749	-35.286	1.00	0.00	D	C
ATOM	18688	CB LYS B 699	-23.294	7.785	-36.774	1.00	0.00	D	C
ATOM	18689	CG LYS B 699	-24.208	8.680	-37.623	1.00	0.00	D	C
ATOM	18690	CD LYS B 699	-25.705	8.378	-37.522	1.00	0.00	D	C
ATOM	18691	CE LYS B 699	-26.578	9.401	-38.257	1.00	0.00	D	C
ATOM	18692	NZ LYS B 699	-28.010	9.157	-37.973	1.00	0.00	D	N
ATOM	18693	C LYS B 699	-24.800	6.739	-35.128	1.00	0.00	D	C
ATOM	18694	O LYS B 699	-25.966	7.123	-35.075	1.00	0.00	D	O
ATOM	18695	N LEU B 700	-24.491	5.425	-35.049	1.00	0.00	D	N
ATOM	18696	CA LEU B 700	-25.535	4.423	-35.051	1.00	0.00	D	C
ATOM	18697	CB LEU B 700	-25.004	2.988	-35.268	1.00	0.00	D	C
ATOM	18698	CG LEU B 700	-24.237	2.329	-34.101	1.00	0.00	D	C
ATOM	18699	CD1 LEU B 700	-25.169	1.870	-32.966	1.00	0.00	D	C
ATOM	18700	CD2 LEU B 700	-23.354	1.183	-34.616	1.00	0.00	D	C
ATOM	18701	C LEU B 700	-26.391	4.458	-33.821	1.00	0.00	D	C
ATOM	18702	O LEU B 700	-27.617	4.363	-33.911	1.00	0.00	D	O
ATOM	18703	N GLN B 701	-25.762	4.598	-32.640	1.00	0.00	D	N
ATOM	18704	CA GLN B 701	-26.405	4.587	-31.352	1.00	0.00	D	C
ATOM	18705	CB GLN B 701	-25.418	4.565	-30.180	1.00	0.00	D	C
ATOM	18706	CG GLN B 701	-24.534	5.802	-30.077	1.00	0.00	D	C
ATOM	18707	CD GLN B 701	-23.642	5.578	-28.868	1.00	0.00	D	C
ATOM	18708	OE1 GLN B 701	-23.723	4.531	-28.225	1.00	0.00	D	O
ATOM	18709	NE2 GLN B 701	-22.770	6.569	-28.546	1.00	0.00	D	N
ATOM	18710	C GLN B 701	-27.285	5.784	-31.218	1.00	0.00	D	C
ATOM	18711	O GLN B 701	-28.335	5.723	-30.580	1.00	0.00	D	O
ATOM	18712	N ARG B 702	-26.867	6.921	-31.791	1.00	0.00	D	N
ATOM	18713	CA ARG B 702	-27.679	8.090	-31.670	1.00	0.00	D	C
ATOM	18714	CB ARG B 702	-27.023	9.339	-32.292	1.00	0.00	D	C

ATOM 18715 CG ARG B 702 -27.855 10.616 -32.133 1.00 0.00 D C
ATOM 18716 CD ARG B 702 -27.026 11.902 -32.114 1.00 0.00 D C
ATOM 18717 NE ARG B 702 -26.608 12.245 -33.502 1.00 0.00 D N
ATOM 18718 CZ ARG B 702 -26.109 13.490 -33.746 1.00 0.00 D C
ATOM 18719 NH1 ARG B 702 -25.979 14.381 -32.717 1.00 0.00 D N
ATOM 18720 NH2 ARG B 702 -25.727 13.849 -35.003 1.00 0.00 D N
ATOM 18721 C ARG B 702 -28.988 7.805 -32.345 1.00 0.00 D C
ATOM 18722 O ARG B 702 -30.047 8.114 -31.806 1.00 0.00 D O
ATOM 18723 N ALA B 703 -28.957 7.145 -33.516 1.00 0.00 D N
ATOM 18724 CA ALA B 703 -30.166 6.879 -34.242 1.00 0.00 D C
ATOM 18725 CB ALA B 703 -29.933 6.102 -35.547 1.00 0.00 D C
ATOM 18726 C ALA B 703 -31.068 6.050 -33.388 1.00 0.00 D C
ATOM 18727 O ALA B 703 -32.282 6.244 -33.375 1.00 0.00 D O
ATOM 18728 N ILE B 704 -30.494 5.085 -32.651 1.00 0.00 D N
ATOM 18729 CA ILE B 704 -31.293 4.244 -31.812 1.00 0.00 D C
ATOM 18730 CB ILE B 704 -30.494 3.195 -31.095 1.00 0.00 D C
ATOM 18731 CG2 ILE B 704 -31.416 2.505 -30.077 1.00 0.00 D C
ATOM 18732 CG1 ILE B 704 -29.854 2.225 -32.100 1.00 0.00 D C
ATOM 18733 CD ILE B 704 -28.821 1.294 -31.465 1.00 0.00 D C
ATOM 18734 C ILE B 704 -31.945 5.089 -30.763 1.00 0.00 D C
ATOM 18735 O ILE B 704 -33.123 4.908 -30.462 1.00 0.00 D O
ATOM 18736 N THR B 705 -31.195 6.040 -30.172 1.00 0.00 D N
ATOM 18737 CA THR B 705 -31.765 6.816 -29.108 1.00 0.00 D C
ATOM 18738 CB THR B 705 -30.801 7.745 -28.421 1.00 0.00 D C
ATOM 18739 OG1 THR B 705 -31.330 8.125 -27.160 1.00 0.00 D O
ATOM 18740 CG2 THR B 705 -30.589 9.005 -29.276 1.00 0.00 D C
ATOM 18741 C THR B 705 -32.906 7.619 -29.648 1.00 0.00 D C
ATOM 18742 O THR B 705 -33.927 7.772 -28.984 1.00 0.00 D O
ATOM 18743 N ILE B 706 -32.757 8.161 -30.871 1.00 0.00 D N
ATOM 18744 CA ILE B 706 -33.791 8.970 -31.449 1.00 0.00 D C
ATOM 18745 CB ILE B 706 -33.369 9.622 -32.731 1.00 0.00 D C
ATOM 18746 CG2 ILE B 706 -34.613 10.239 -33.388 1.00 0.00 D C
ATOM 18747 CG1 ILE B 706 -32.235 10.628 -32.460 1.00 0.00 D C
ATOM 18748 CD ILE B 706 -31.570 11.178 -33.720 1.00 0.00 D C
ATOM 18749 C ILE B 706 -35.014 8.152 -31.721 1.00 0.00 D C
ATOM 18750 O ILE B 706 -36.130 8.573 -31.432 1.00 0.00 D O
ATOM 18751 N LEU B 707 -34.844 6.945 -32.292 1.00 0.00 D N
ATOM 18752 CA LEU B 707 -35.994 6.180 -32.674 1.00 0.00 D C

ATOM	18753	CB	LEU	B	707	-35.648	5.072	-33.677	1.00	0.00	D	C
ATOM	18754	CG	LEU	B	707	-35.102	5.769	-34.943	1.00	0.00	D	C
ATOM	18755	CD1	LEU	B	707	-35.034	4.855	-36.174	1.00	0.00	D	C
ATOM	18756	CD2	LEU	B	707	-35.876	7.072	-35.201	1.00	0.00	D	C
ATOM	18757	C	LEU	B	707	-36.784	5.717	-31.484	1.00	0.00	D	C
ATOM	18758	O	LEU	B	707	-38.013	5.709	-31.522	1.00	0.00	D	O
ATOM	18759	N	ASP	B	708	-36.114	5.339	-30.379	1.00	0.00	D	N
ATOM	18760	CA	ASP	B	708	-36.836	4.884	-29.221	1.00	0.00	D	C
ATOM	18761	CB	ASP	B	708	-35.900	4.466	-28.074	1.00	0.00	D	C
ATOM	18762	CG	ASP	B	708	-35.141	3.213	-28.493	1.00	0.00	D	C
ATOM	18763	OD1	ASP	B	708	-35.492	2.634	-29.556	1.00	0.00	D	O
ATOM	18764	OD2	ASP	B	708	-34.202	2.816	-27.751	1.00	0.00	D	O
ATOM	18765	C	ASP	B	708	-37.694	6.002	-28.713	1.00	0.00	D	C
ATOM	18766	O	ASP	B	708	-38.863	5.801	-28.385	1.00	0.00	D	O
ATOM	18767	N	THR	B	709	-37.139	7.229	-28.647	1.00	0.00	D	N
ATOM	18768	CA	THR	B	709	-37.901	8.325	-28.118	1.00	0.00	D	C
ATOM	18769	CB	THR	B	709	-37.121	9.601	-27.960	1.00	0.00	D	C
ATOM	18770	OG1	THR	B	709	-37.868	10.528	-27.183	1.00	0.00	D	O
ATOM	18771	CG2	THR	B	709	-36.834	10.202	-29.345	1.00	0.00	D	C
ATOM	18772	C	THR	B	709	-39.054	8.591	-29.031	1.00	0.00	D	C
ATOM	18773	O	THR	B	709	-40.159	8.875	-28.575	1.00	0.00	D	O
ATOM	18774	N	GLU	B	710	-38.837	8.485	-30.357	1.00	0.00	D	N
ATOM	18775	CA	GLU	B	710	-39.895	8.784	-31.276	1.00	0.00	D	C
ATOM	18776	CB	GLU	B	710	-39.514	8.593	-32.755	1.00	0.00	D	C
ATOM	18777	CG	GLU	B	710	-40.672	8.925	-33.706	1.00	0.00	D	C
ATOM	18778	CD	GLU	B	710	-40.316	8.456	-35.110	1.00	0.00	D	C
ATOM	18779	OE1	GLU	B	710	-39.246	7.813	-35.270	1.00	0.00	D	O
ATOM	18780	OE2	GLU	B	710	-41.119	8.730	-36.045	1.00	0.00	D	O
ATOM	18781	C	GLU	B	710	-41.040	7.862	-31.015	1.00	0.00	D	C
ATOM	18782	O	GLU	B	710	-42.190	8.301	-30.986	1.00	0.00	D	O
ATOM	18783	N	LYS	B	711	-40.769	6.556	-30.825	1.00	0.00	D	N
ATOM	18784	CA	LYS	B	711	-41.846	5.632	-30.602	1.00	0.00	D	C
ATOM	18785	CB	LYS	B	711	-41.402	4.161	-30.571	1.00	0.00	D	C
ATOM	18786	CG	LYS	B	711	-41.080	3.587	-31.953	1.00	0.00	D	C
ATOM	18787	CD	LYS	B	711	-42.269	3.603	-32.920	1.00	0.00	D	C
ATOM	18788	CE	LYS	B	711	-42.133	4.621	-34.056	1.00	0.00	D	C
ATOM	18789	NZ	LYS	B	711	-42.035	5.992	-33.508	1.00	0.00	D	N
ATOM	18790	C	LYS	B	711	-42.542	5.926	-29.298	1.00	0.00	D	C

ATOM	18791	O	LYS B 711	-43.769	5.886	-29.231	1.00	0.00	D	O
ATOM	18792	N	SER B 712	-41.771	6.209	-28.228	1.00	0.00	D	N
ATOM	18793	CA	SER B 712	-42.277	6.444	-26.894	1.00	0.00	D	C
ATOM	18794	CB	SER B 712	-41.185	6.280	-25.820	1.00	0.00	D	C
ATOM	18795	OG	SER B 712	-41.734	6.505	-24.529	1.00	0.00	D	O
ATOM	18796	C	SER B 712	-42.846	7.827	-26.755	1.00	0.00	D	C
ATOM	18797	O	SER B 712	-43.433	8.166	-25.730	1.00	0.00	D	O
ATOM	18798	N	PHE B 713	-42.695	8.657	-27.795	1.00	0.00	D	N
ATOM	18799	CA	PHE B 713	-43.098	10.037	-27.807	1.00	0.00	D	C
ATOM	18800	CB	PHE B 713	-42.582	10.816	-29.026	1.00	0.00	D	C
ATOM	18801	CG	PHE B 713	-42.799	12.258	-28.720	1.00	0.00	D	C
ATOM	18802	CD1	PHE B 713	-41.972	12.894	-27.820	1.00	0.00	D	C
ATOM	18803	CE1	PHE B 713	-42.147	14.224	-27.520	1.00	0.00	D	C
ATOM	18804	CZ	PHE B 713	-43.156	14.932	-28.124	1.00	0.00	D	C
ATOM	18805	CD2	PHE B 713	-43.804	12.976	-29.325	1.00	0.00	D	C
ATOM	18806	CE2	PHE B 713	-43.983	14.306	-29.028	1.00	0.00	D	C
ATOM	18807	C	PHE B 713	-44.594	10.134	-27.783	1.00	0.00	D	C
ATOM	18808	O	PHE B 713	-45.138	11.224	-27.606	1.00	0.00	D	O
ATOM	18809	N	LEU B 714	-45.294	9.000	-27.976	1.00	0.00	D	N
ATOM	18810	CA	LEU B 714	-46.720	8.957	-28.161	1.00	0.00	D	C
ATOM	18811	CB	LEU B 714	-47.546	9.950	-27.318	1.00	0.00	D	C
ATOM	18812	CG	LEU B 714	-47.729	9.562	-25.839	1.00	0.00	D	C
ATOM	18813	CD1	LEU B 714	-48.544	8.266	-25.711	1.00	0.00	D	C
ATOM	18814	CD2	LEU B 714	-46.396	9.517	-25.078	1.00	0.00	D	C
ATOM	18815	C	LEU B 714	-46.997	9.254	-29.586	1.00	0.00	D	C
ATOM	18816	O	LEU B 714	-48.144	9.483	-29.968	1.00	0.00	D	O
ATOM	18817	N	LYS B 715	-45.932	9.221	-30.411	1.00	0.00	D	N
ATOM	18818	CA	LYS B 715	-46.112	9.348	-31.824	1.00	0.00	D	C
ATOM	18819	CB	LYS B 715	-47.002	8.210	-32.335	1.00	0.00	D	C
ATOM	18820	CG	LYS B 715	-46.484	6.852	-31.855	1.00	0.00	D	C
ATOM	18821	CD	LYS B 715	-47.560	5.767	-31.794	1.00	0.00	D	C
ATOM	18822	CE	LYS B 715	-47.160	4.574	-30.923	1.00	0.00	D	C
ATOM	18823	NZ	LYS B 715	-48.354	3.771	-30.580	1.00	0.00	D	N
ATOM	18824	C	LYS B 715	-46.800	10.644	-32.046	1.00	0.00	D	C
ATOM	18825	O	LYS B 715	-47.660	10.770	-32.916	1.00	0.00	D	O
ATOM	18826	N	CYS B 716	-46.416	11.655	-31.249	1.00	0.00	D	N
ATOM	18827	CA	CYS B 716	-47.050	12.928	-31.367	1.00	0.00	D	C
ATOM	18828	CB	CYS B 716	-46.613	13.950	-30.307	1.00	0.00	D	C

ATOM 18829 SG CYS B 716 -47.114 13.476 -28.625 1.00 0.00 D S
ATOM 18830 C CYS B 716 -46.687 13.465 -32.709 1.00 0.00 D C
ATOM 18831 O CYS B 716 -45.857 12.885 -33.408 1.00 0.00 D O
ATOM 18832 N MET B 717 -47.333 14.576 -33.108 1.00 0.00 D N
ATOM 18833 CA MET B 717 -47.092 15.131 -34.408 1.00 0.00 D C
ATOM 18834 CB MET B 717 -47.754 16.496 -34.647 1.00 0.00 D C
ATOM 18835 CG MET B 717 -47.298 17.137 -35.961 1.00 0.00 D C
ATOM 18836 SD MET B 717 -47.800 18.867 -36.193 1.00 0.00 D S
ATOM 18837 CE MET B 717 -46.771 19.122 -37.669 1.00 0.00 D C
ATOM 18838 C MET B 717 -45.631 15.370 -34.547 1.00 0.00 D C
ATOM 18839 O MET B 717 -44.992 15.939 -33.664 1.00 0.00 D O
ATOM 18840 N ARG B 718 -45.073 14.915 -35.683 1.00 0.00 D N
ATOM 18841 CA ARG B 718 -43.687 15.097 -35.981 1.00 0.00 D C
ATOM 18842 CB ARG B 718 -42.784 14.133 -35.192 1.00 0.00 D C
ATOM 18843 CG ARG B 718 -41.289 14.272 -35.471 1.00 0.00 D C
ATOM 18844 CD ARG B 718 -40.454 13.302 -34.634 1.00 0.00 D C
ATOM 18845 NE ARG B 718 -40.536 13.766 -33.219 1.00 0.00 D N
ATOM 18846 CZ ARG B 718 -40.330 12.881 -32.200 1.00 0.00 D C
ATOM 18847 NH1 ARG B 718 -40.075 11.568 -32.480 1.00 0.00 D N
ATOM 18848 NH2 ARG B 718 -40.360 13.310 -30.905 1.00 0.00 D N
ATOM 18849 C ARG B 718 -43.539 14.781 -37.430 1.00 0.00 D C
ATOM 18850 O ARG B 718 -44.375 14.078 -37.995 1.00 0.00 D O
ATOM 18851 C LYS B 719 -41.492 13.673 -39.500 1.00 0.00 D C
ATOM 18852 OT1 LYS B 719 -41.192 13.464 -38.569 0.00 0.00 D O
ATOM 18853 OT2 LYS B 719 -41.405 13.359 -40.446 0.00 0.00 D O
ATOM 18854 N LYS B 719 -42.492 15.306 -38.099 1.00 0.00 D N
ATOM 18855 CA LYS B 719 -42.396 14.893 -39.465 1.00 0.00 D C
ATOM 18856 CB LYS B 719 -41.810 15.901 -40.460 1.00 0.00 D C
ATOM 18857 CG LYS B 719 -41.794 15.269 -41.856 1.00 0.00 D C
ATOM 18858 CD LYS B 719 -43.201 14.931 -42.362 1.00 0.00 D C
ATOM 18859 CE LYS B 719 -43.283 13.635 -43.179 1.00 0.00 D C
ATOM 18860 NZ LYS B 719 -42.418 13.720 -44.375 1.00 0.00 D N
END