

Supporting Information

Covalent Inhibitors of Protein-Protein Interactions Targeting Lysine, Tyrosine, or Histidine Residues

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Jefferson P. Perry,² and Maurizio Pellecchia,^{1,*}*

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Riverside, CA 92521, USA.*

SI content:

Figure S1 (page S2): individual thermal shift data plots that generated the date reported in Tables 1-3.

Figure S2 and **Figure S3** (page S29): aqueous stability of selected compounds at neutral pH and in simulated gastric fluid (pH=1.5).

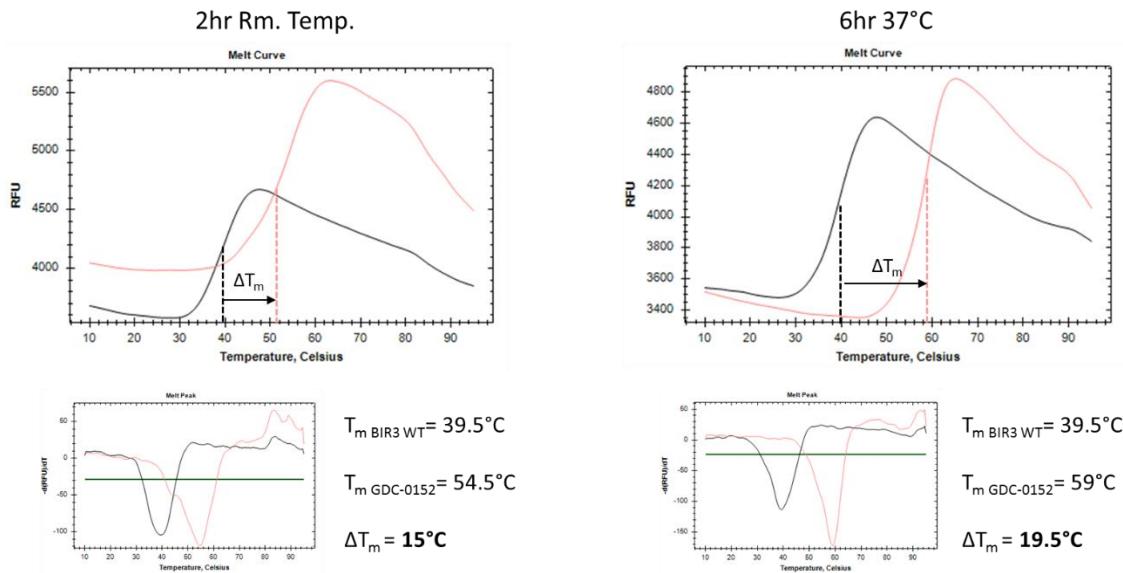
Figure S4 (page S30): SDS gel electrophoresis data with XIAP BIR3 mutant Lys311Ala in presence of various compounds.

Figure S5 (page S31): basic characterization of key compounds from Table 3.

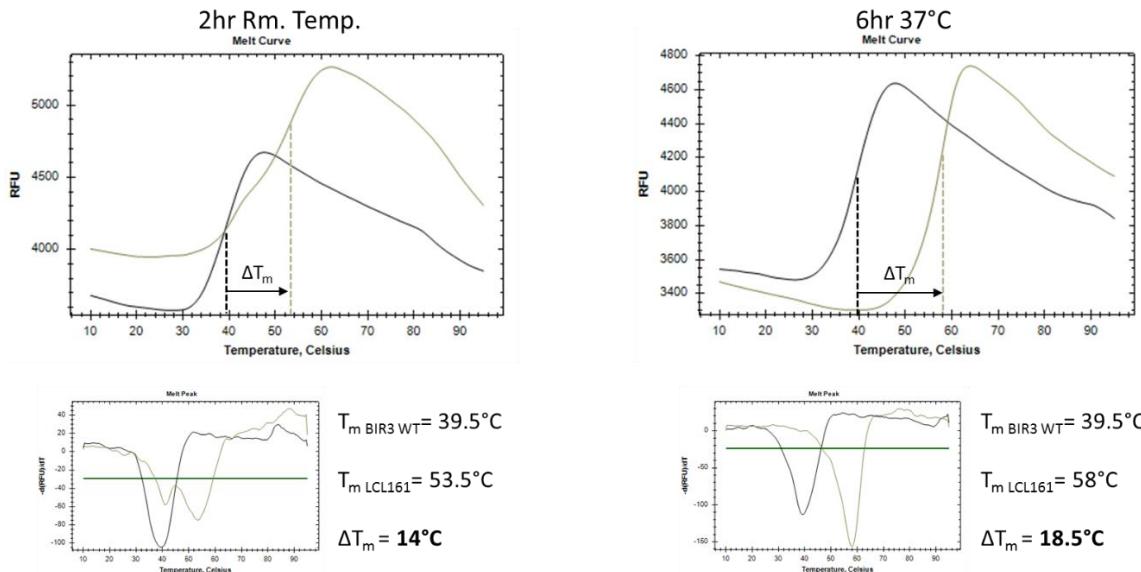
PDB files relative to the models prepared for compound **10** in complex with wt-BIR3 (page S33), Lys311Tyr BIR3 (page S103), and Lys311His BIR3 (page S172).

Figure S1. Thermal shift (ΔT_m) data obtained incubating protein and ligand for 2 h at room temperature or 6 h at 37°C, respectively.

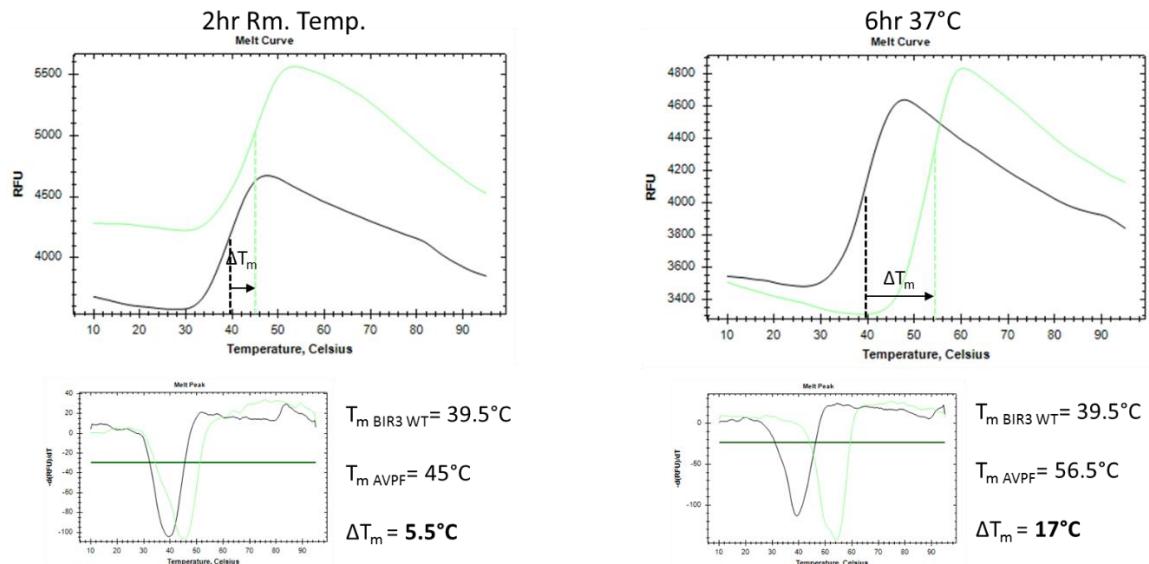
GDC-1052 + XIAP BIR3



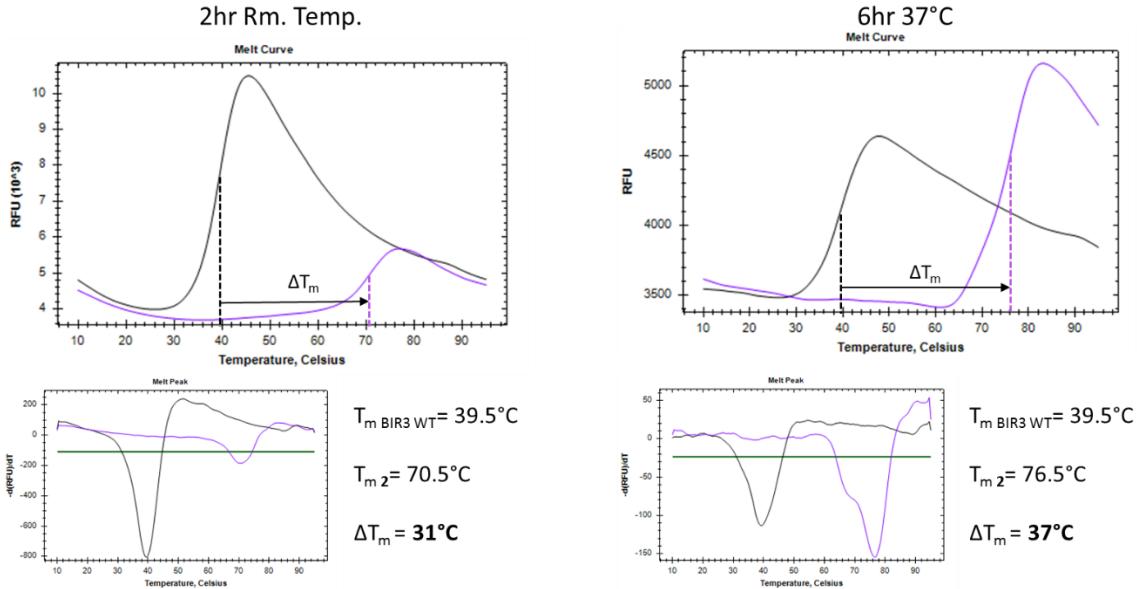
LCL161 + XIAP BIR3



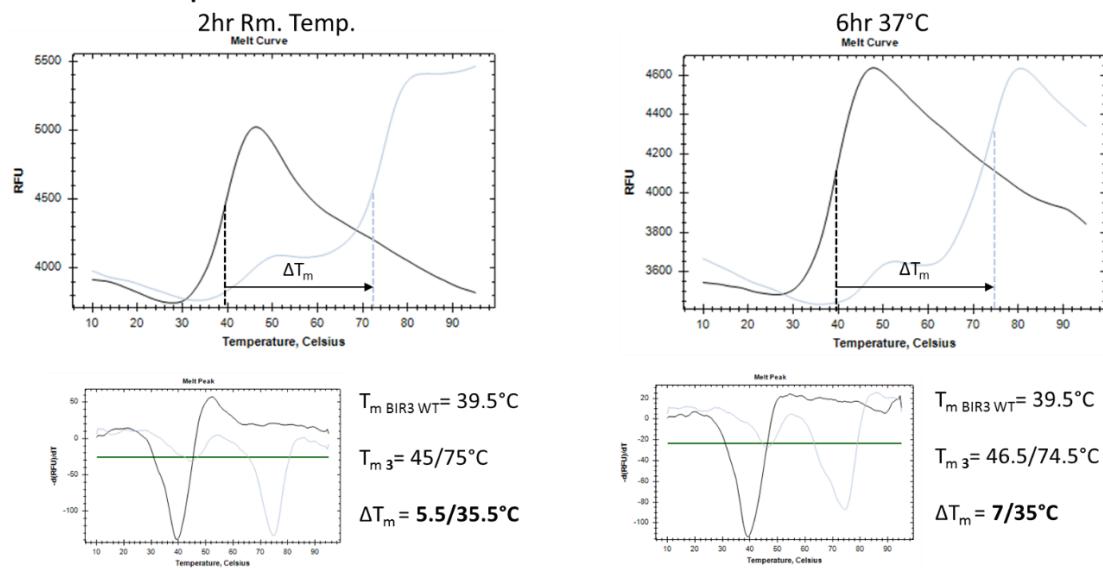
AVPF + XIAP BIR3



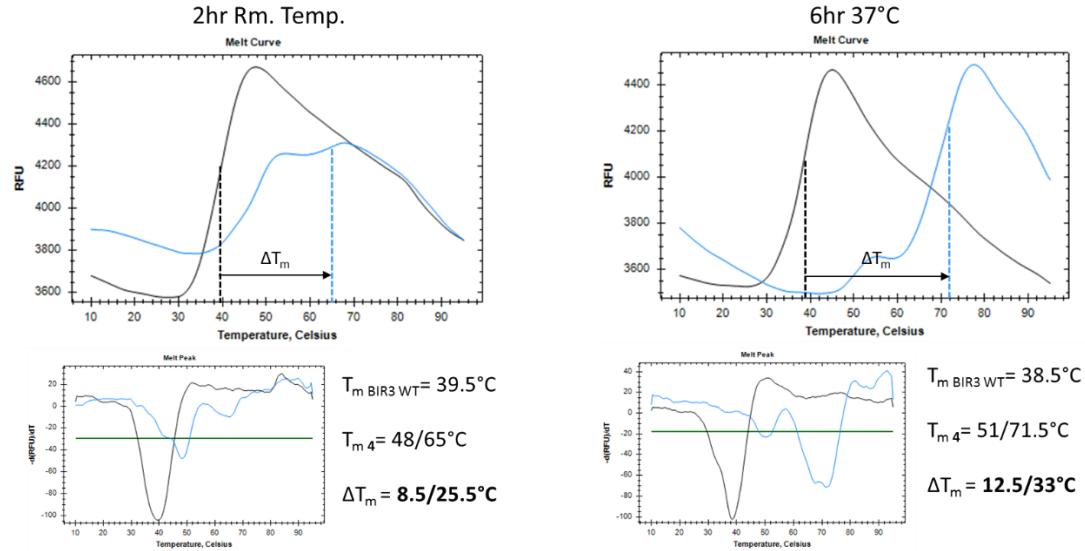
Compound 2 + XIAP BIR3



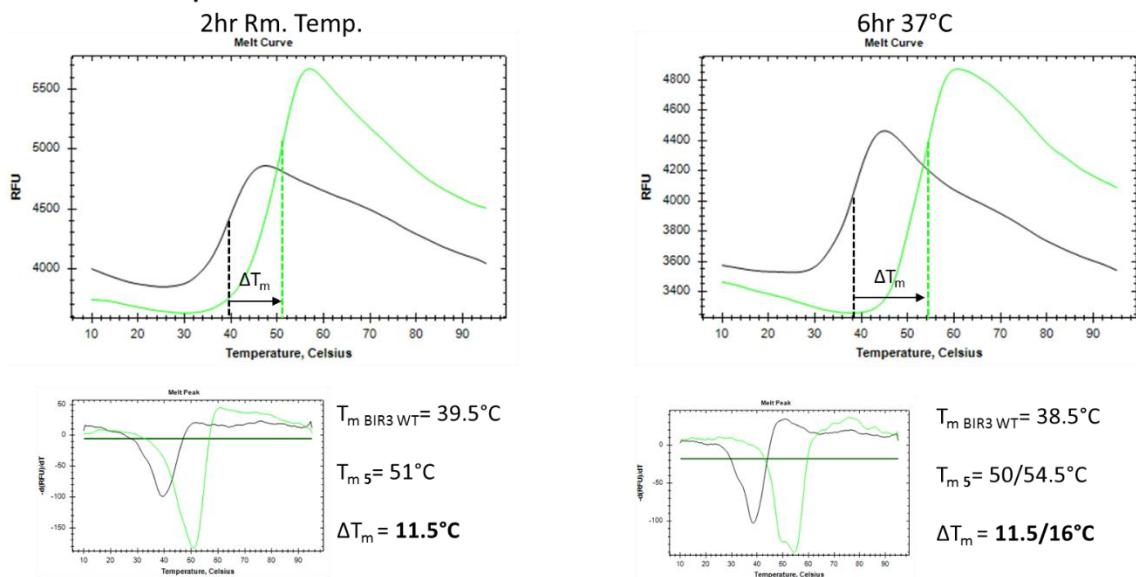
Compound 3 + XIAP BIR3



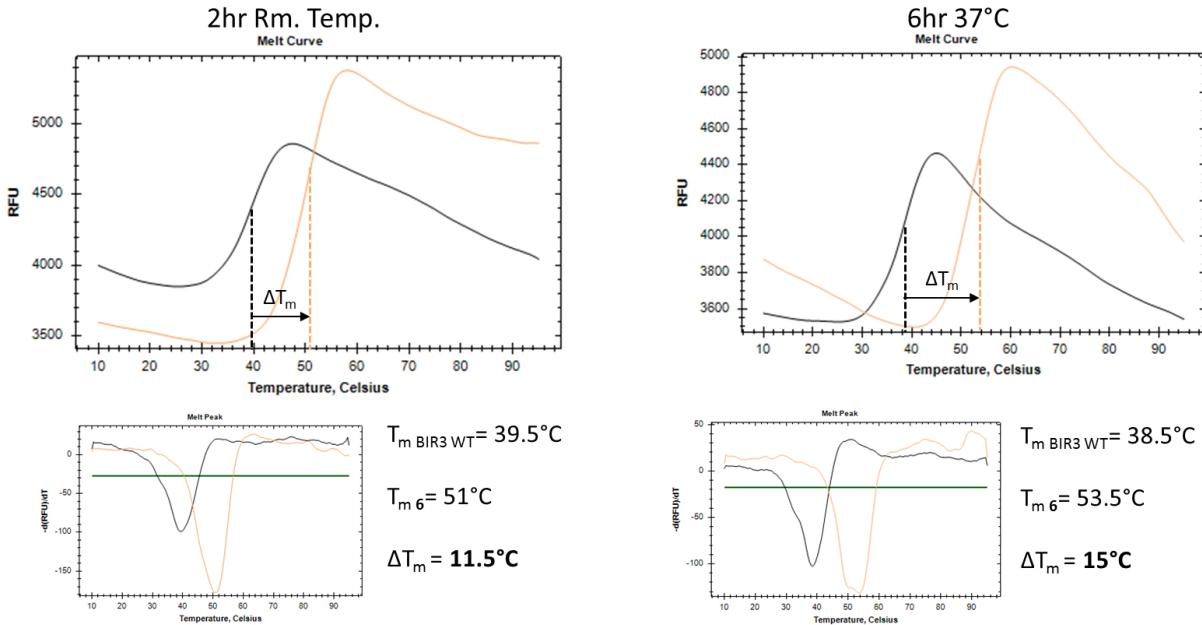
Compound 4 + XIAP BIR3



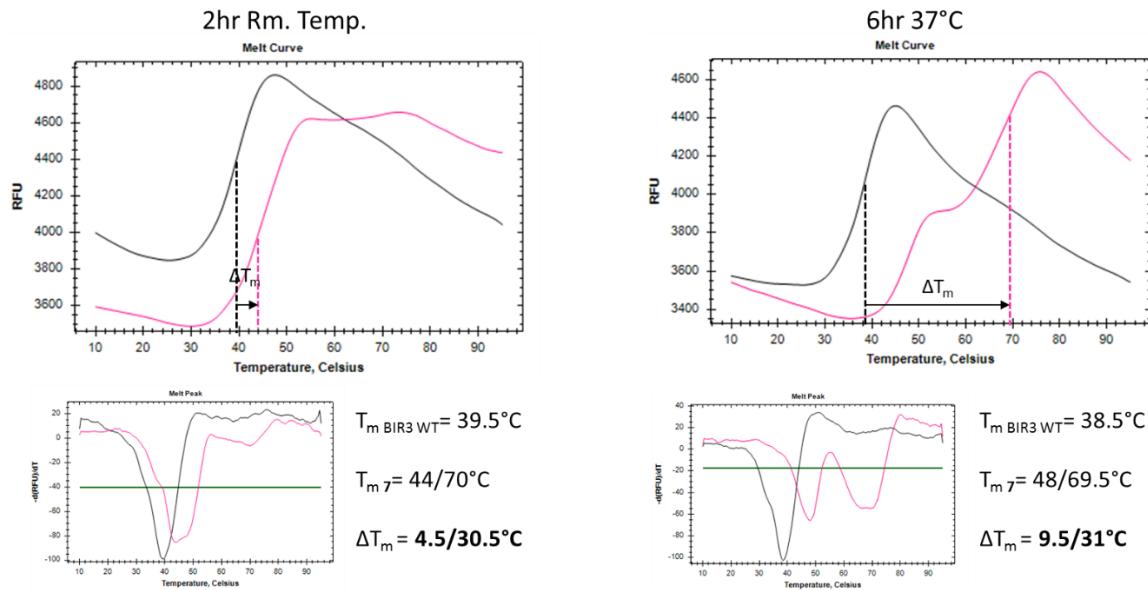
Compound 5 + XIAP BIR3



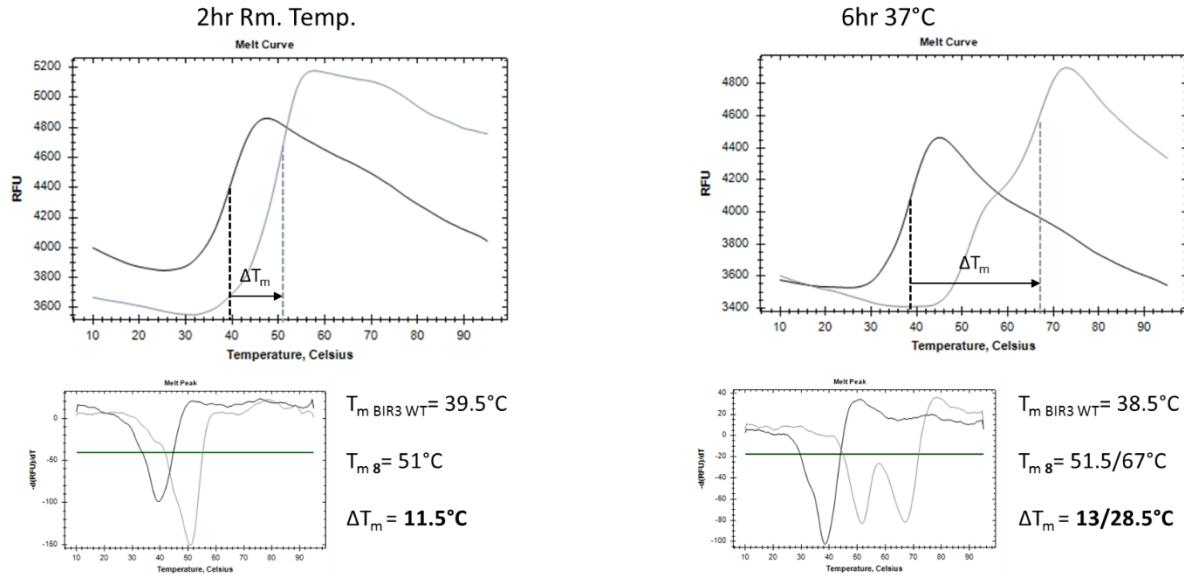
Compound 6 + XIAP BIR3



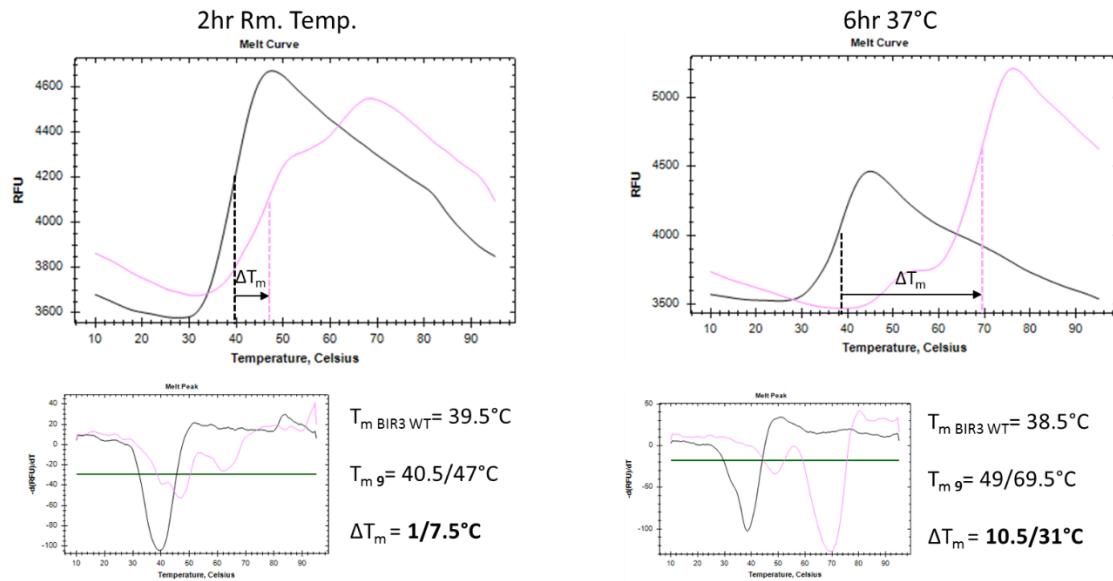
Compound 7 + XIAP BIR3



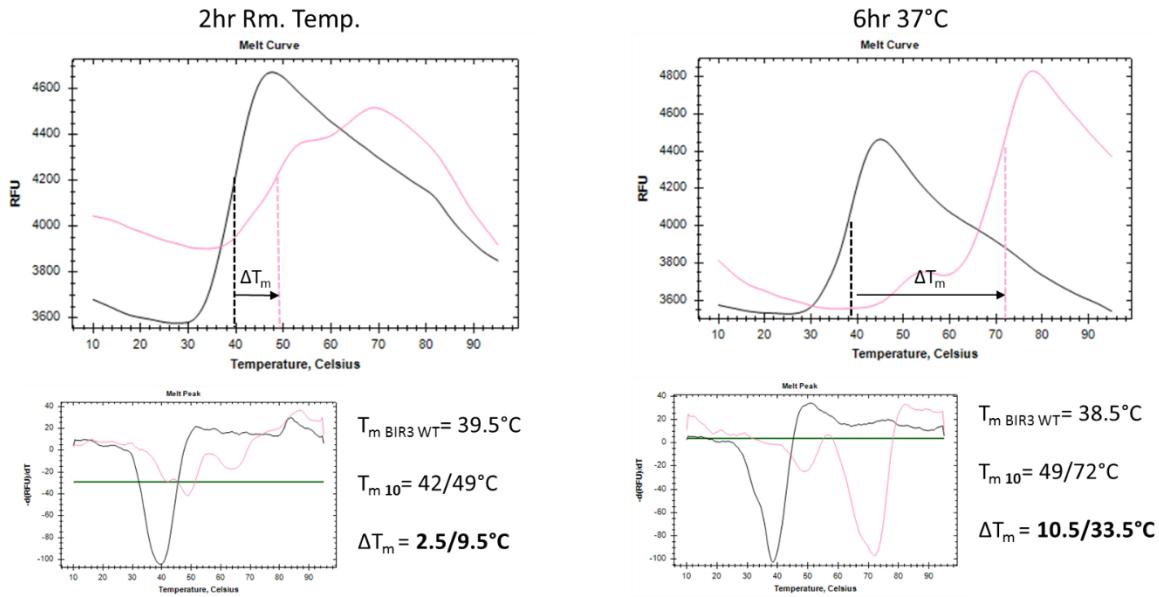
Compound 8 + XIAP BIR3



Compound 9 + XIAP BIR3

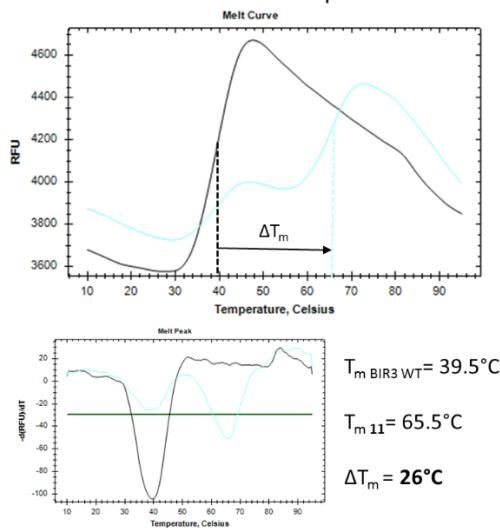


Compound 10 + XIAP BIR3

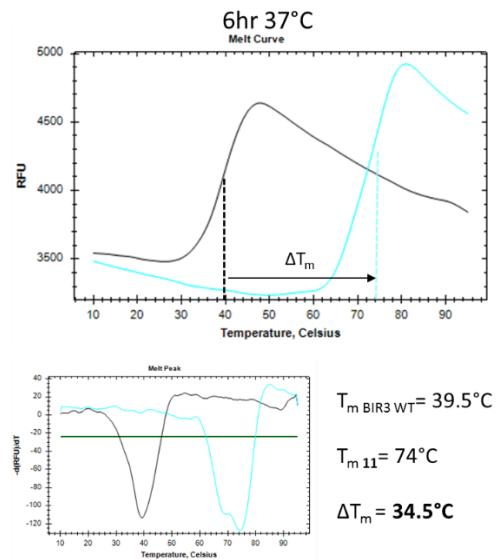


Compound 11 + XIAP BIR3

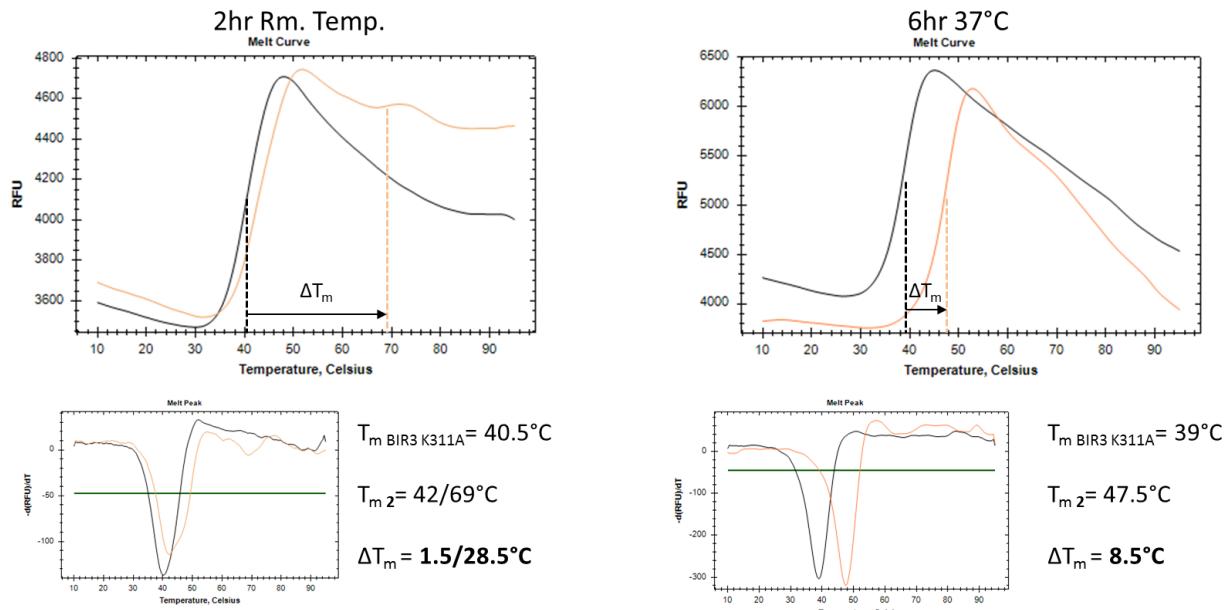
2hr Rm. Temp.



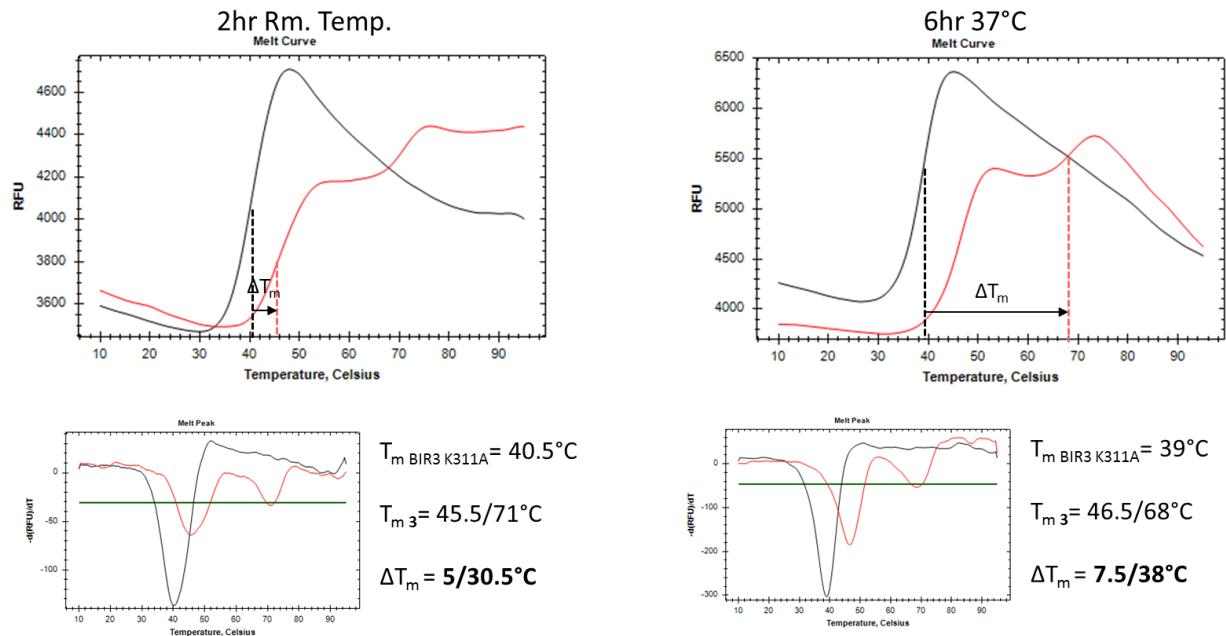
6hr 37°C



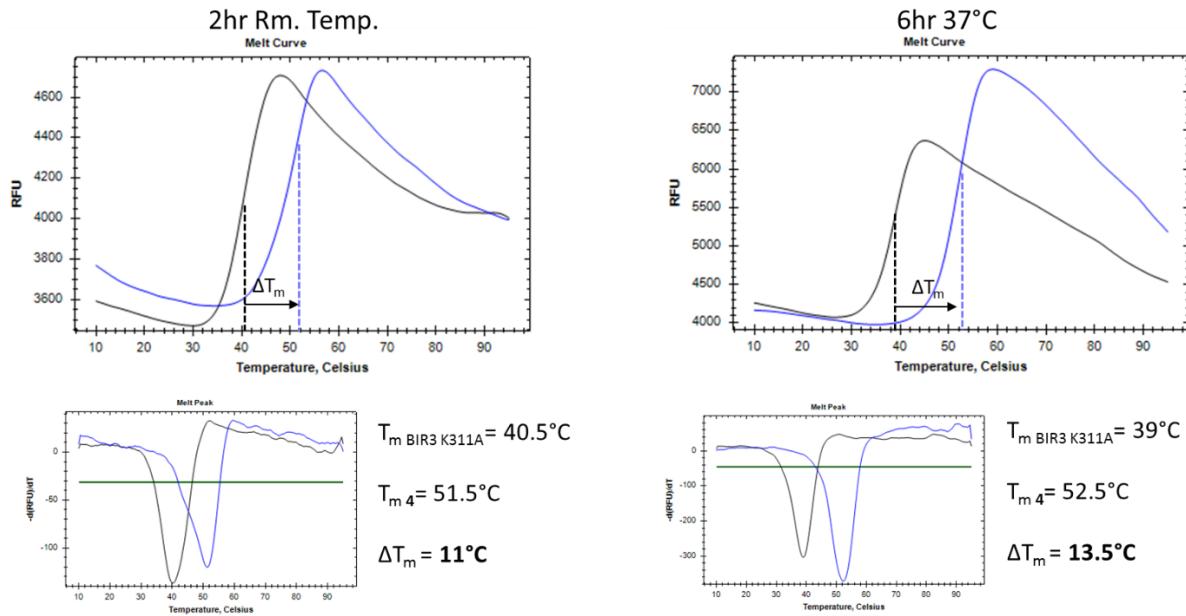
Compound 2 + XIAP BIR3 Lys311Ala



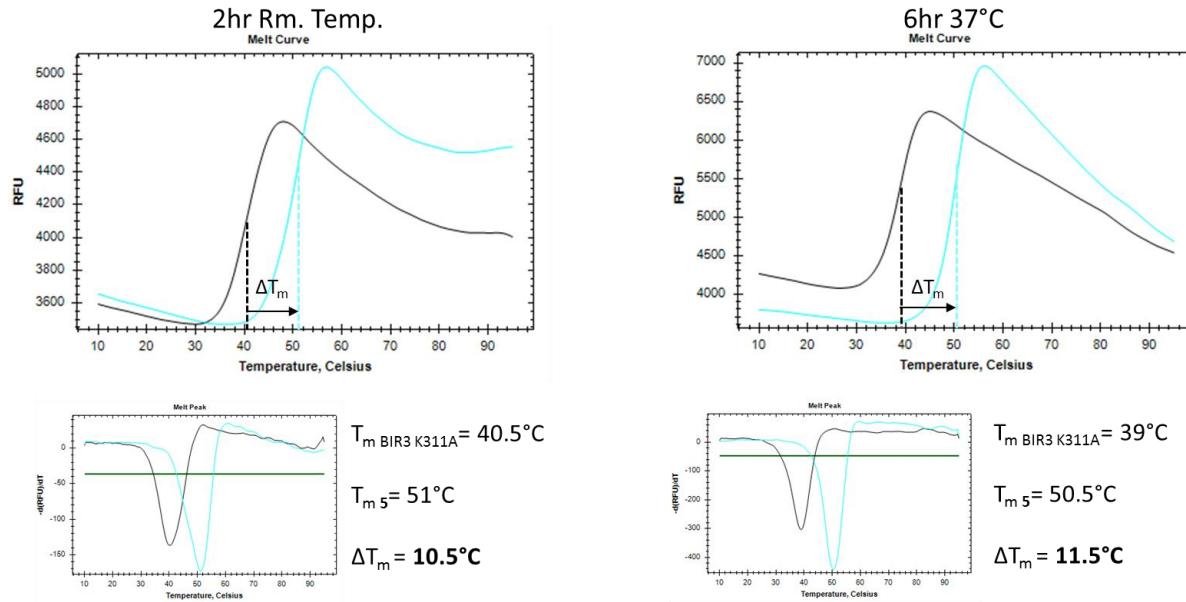
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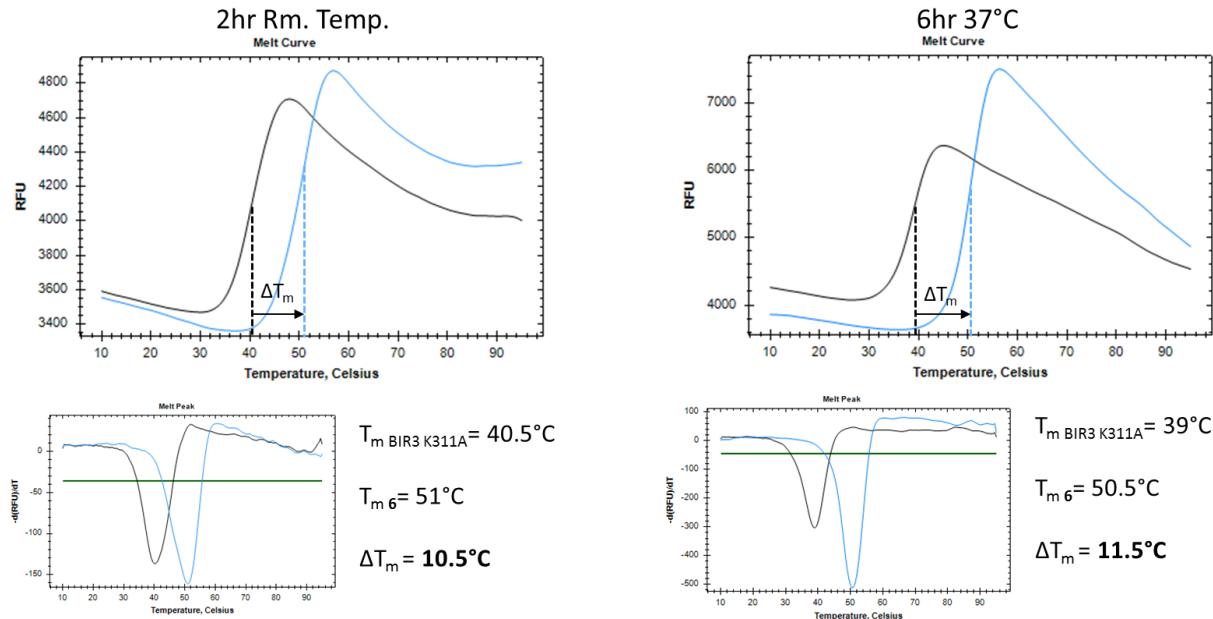
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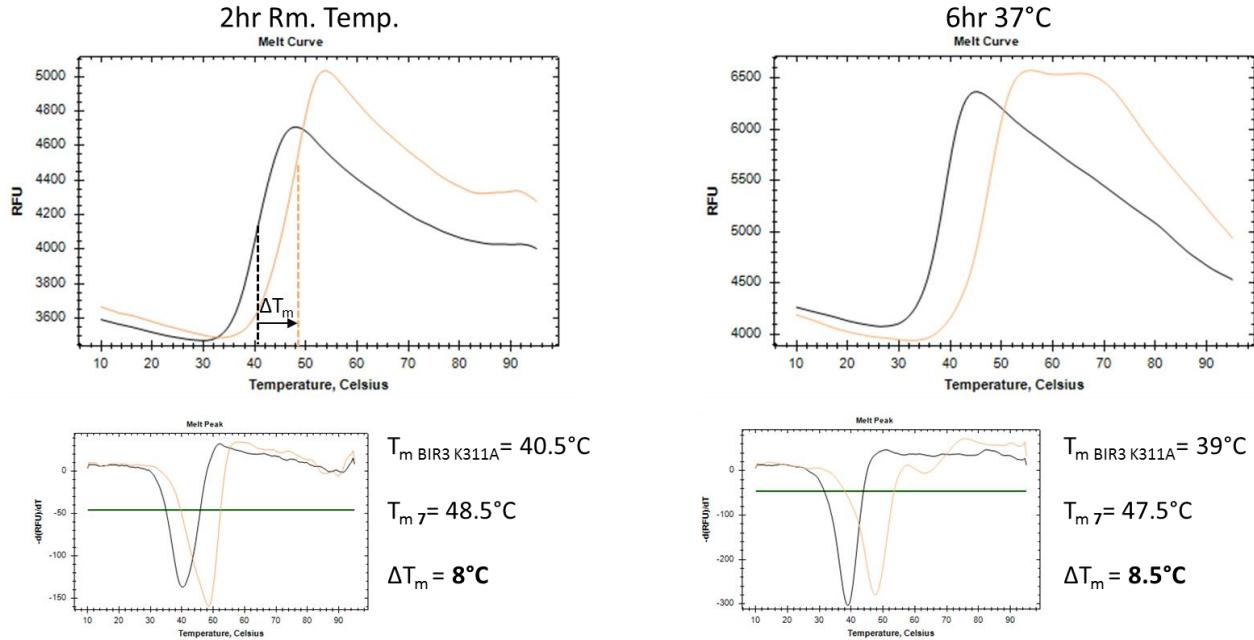
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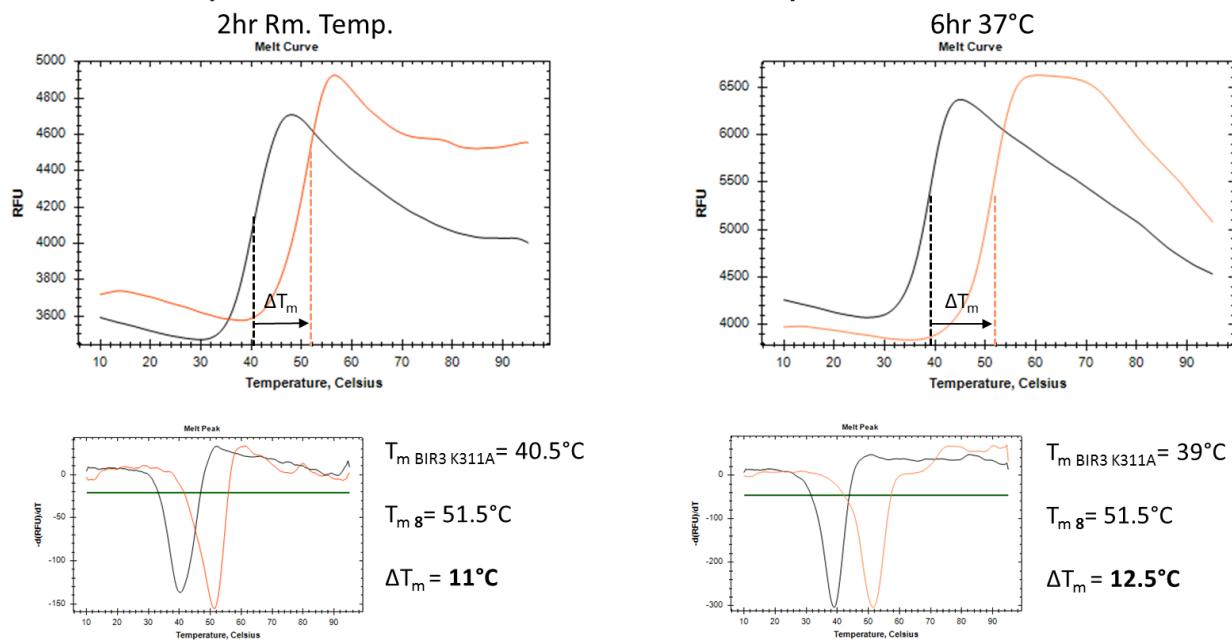
Compound 6 + XIAP BIR3 Lys311Ala



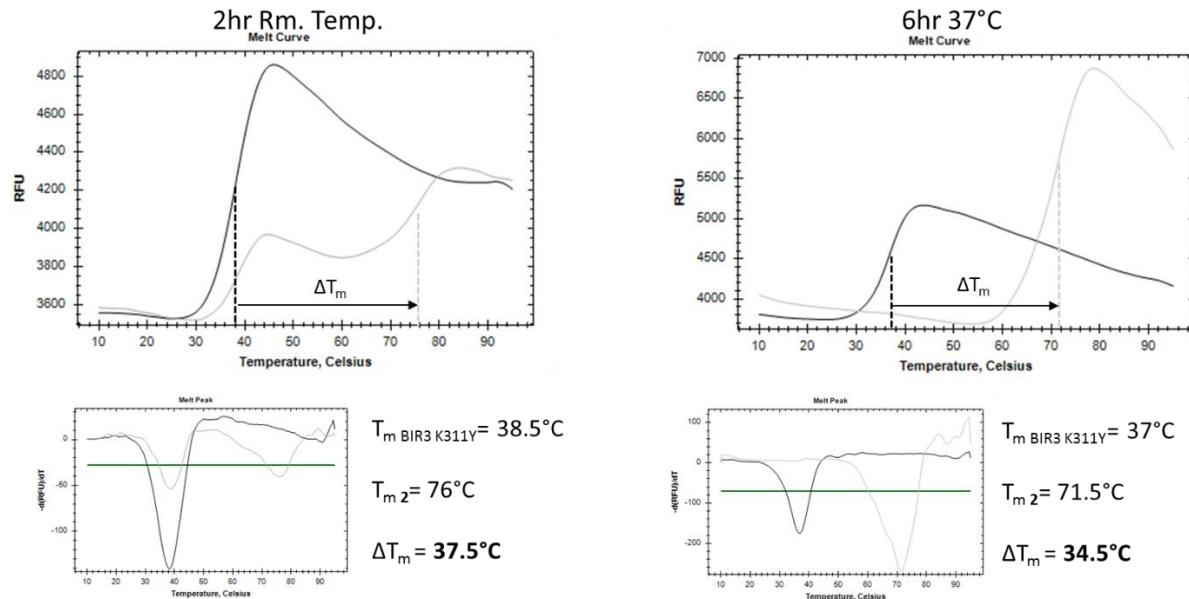
Compound 7 + XIAP BIR3 Lys311Ala



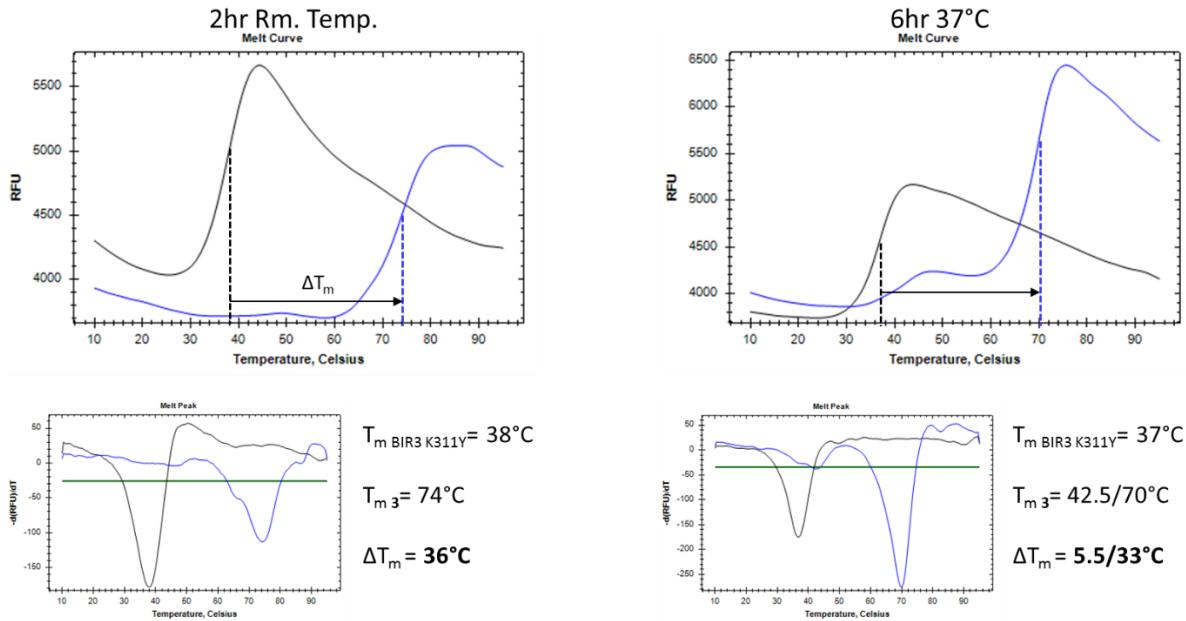
Compound 8 + XIAP BIR3 Lys311Ala



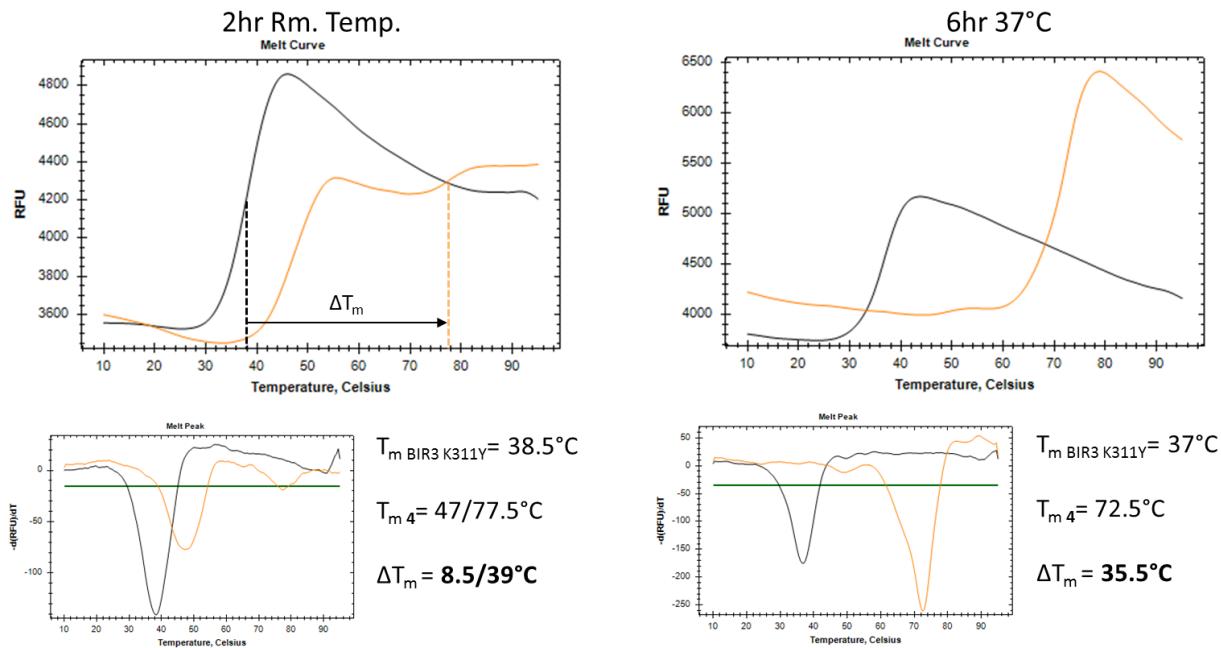
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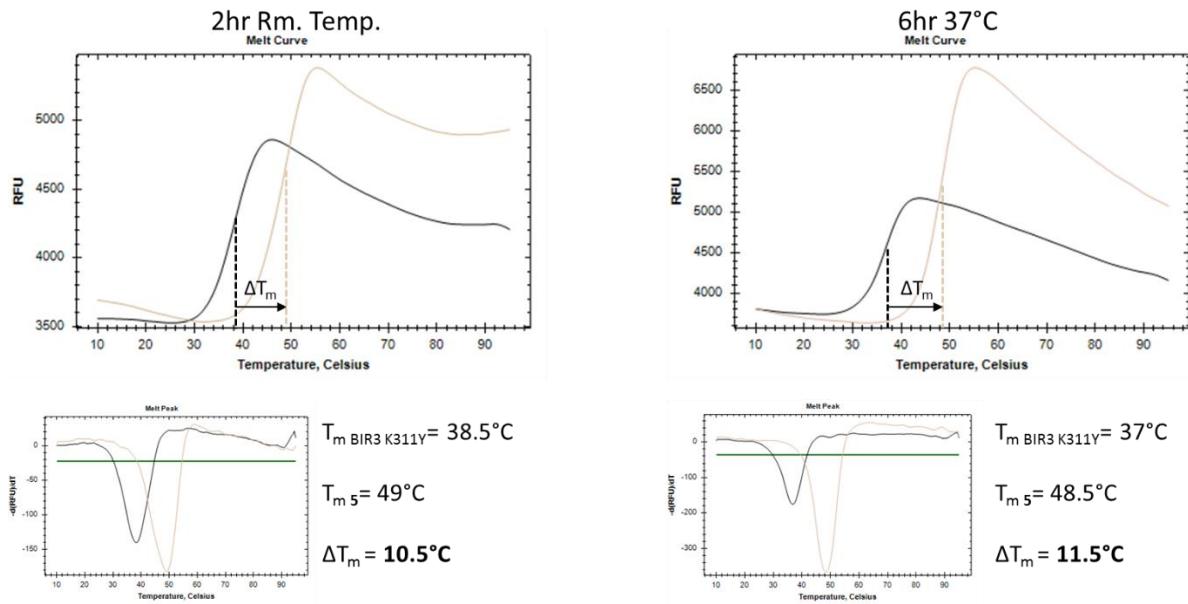
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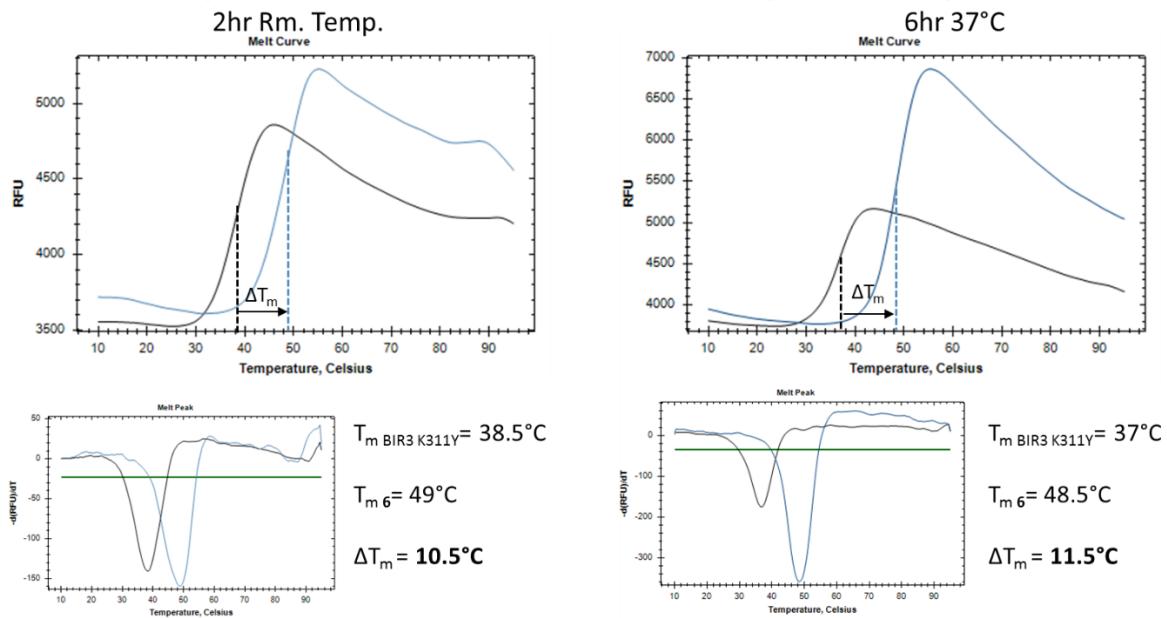
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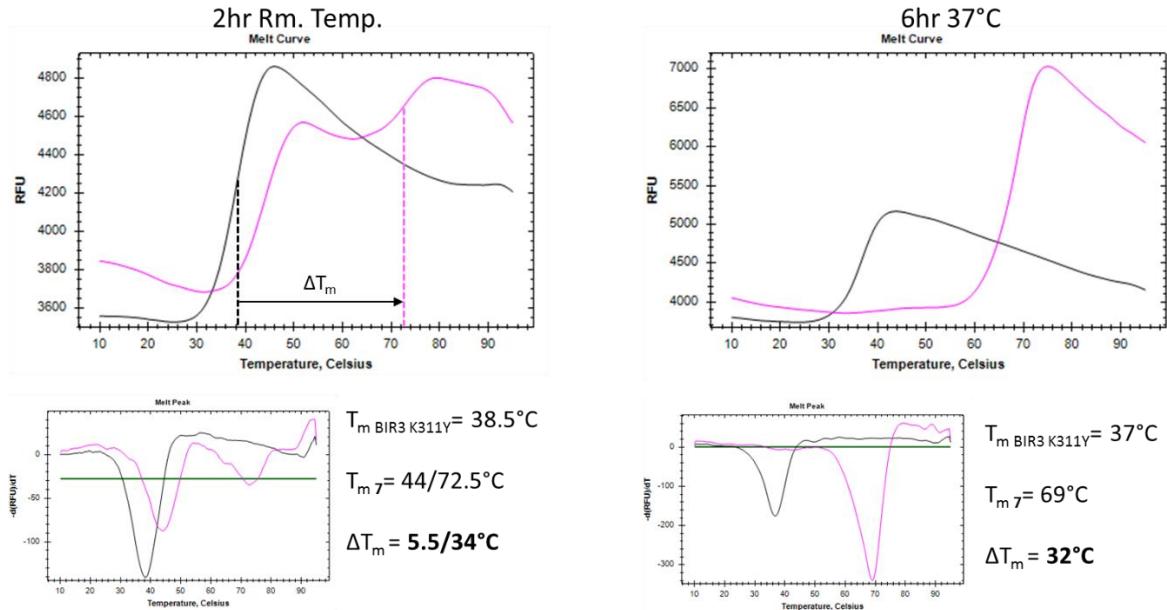
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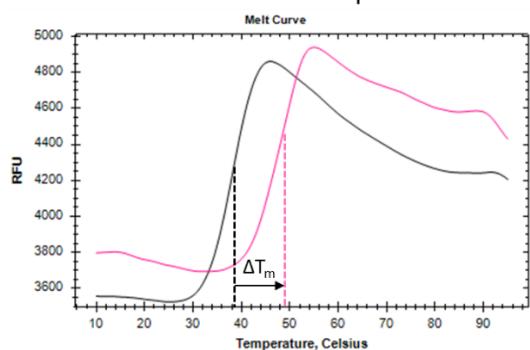


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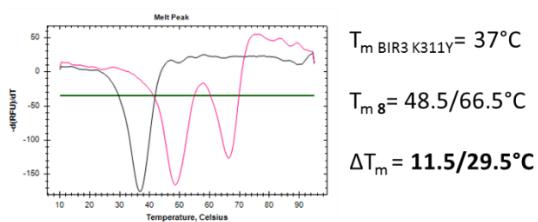
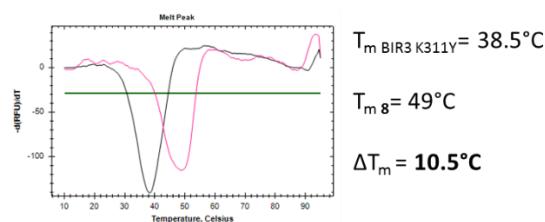
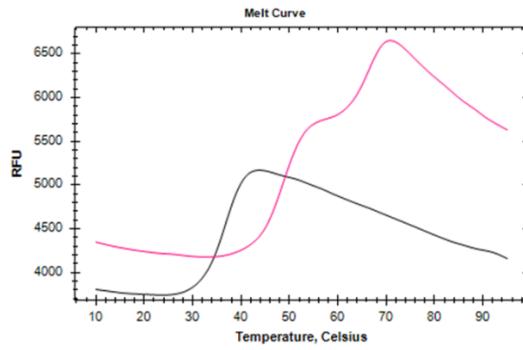


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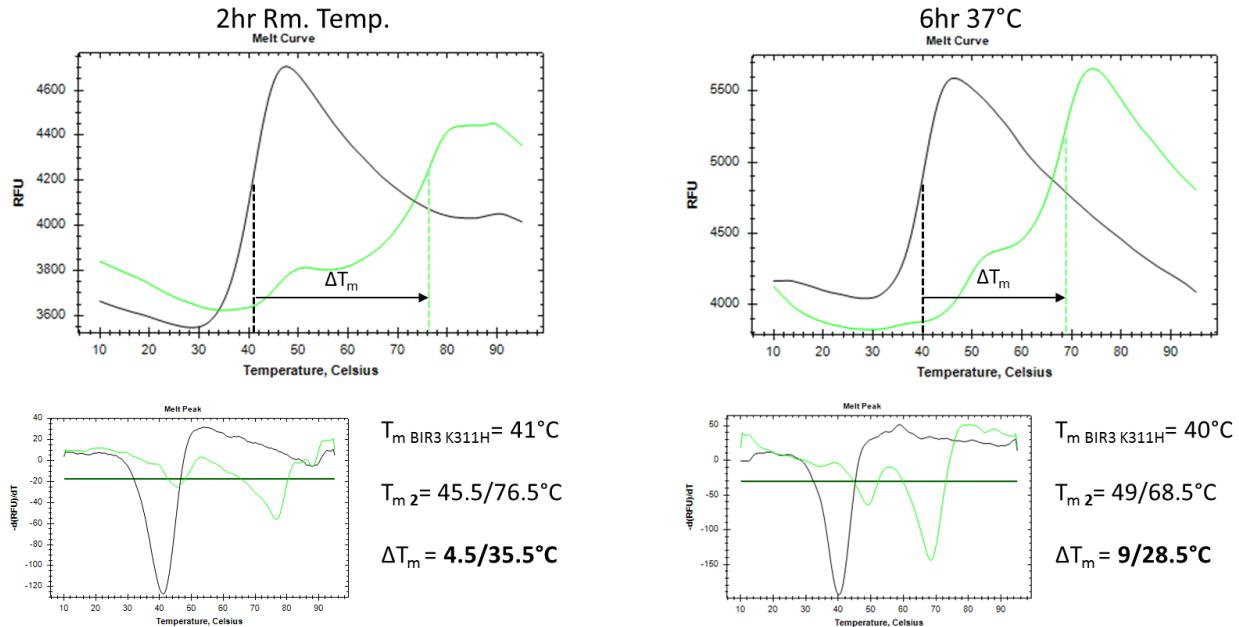
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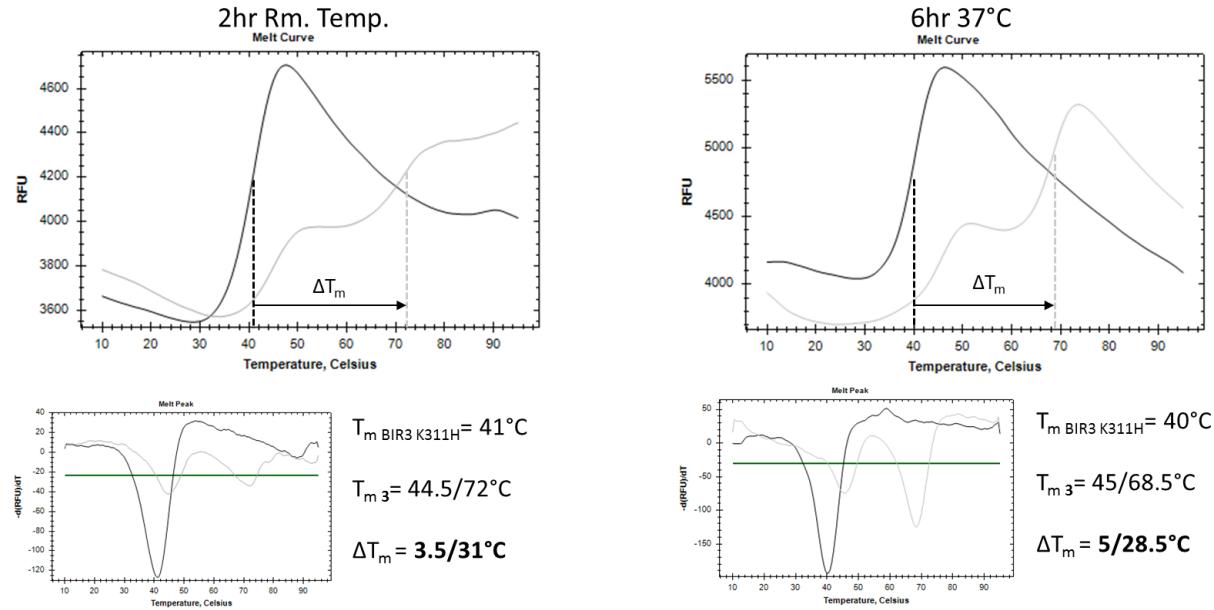
6hr 37°C



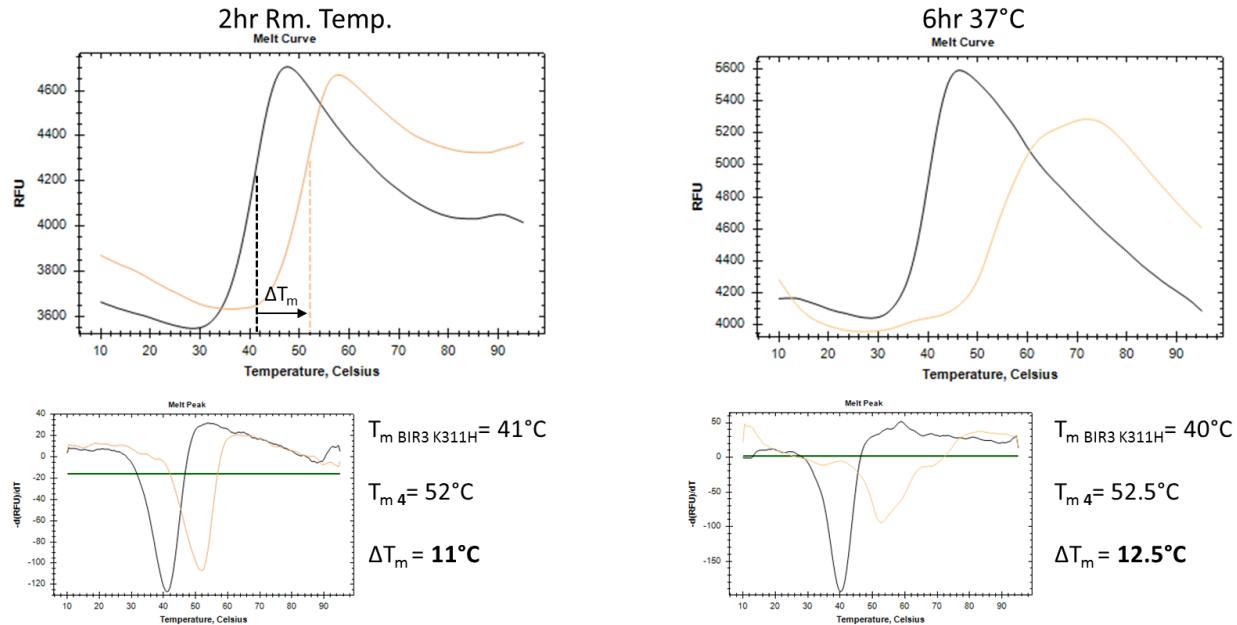
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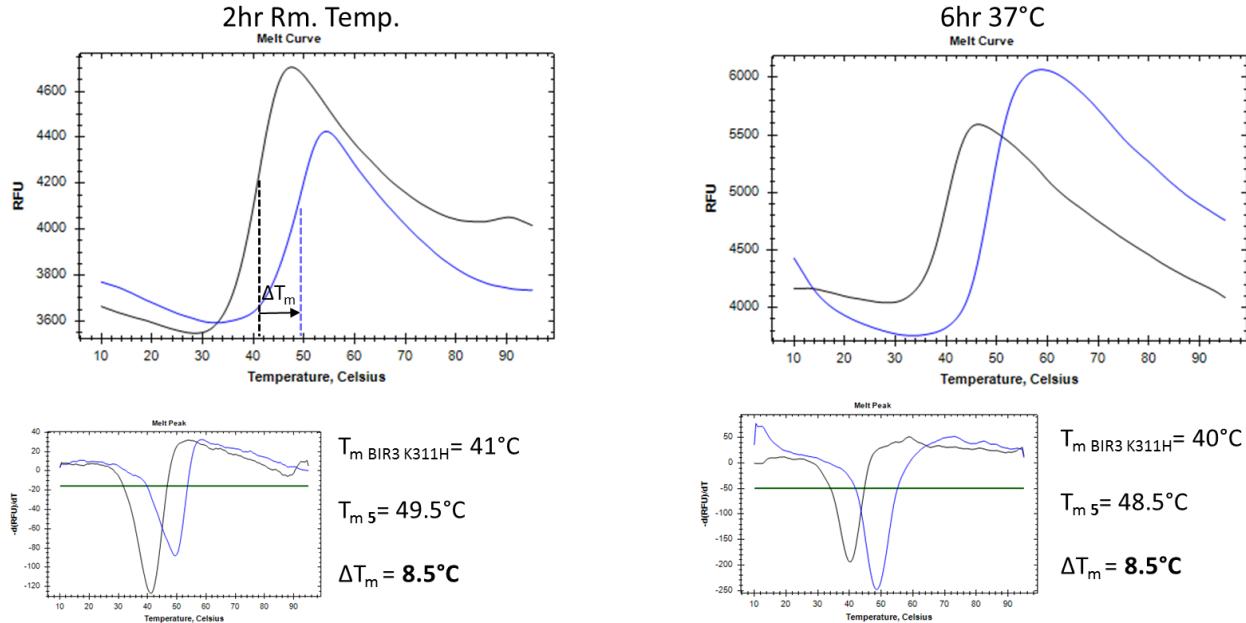
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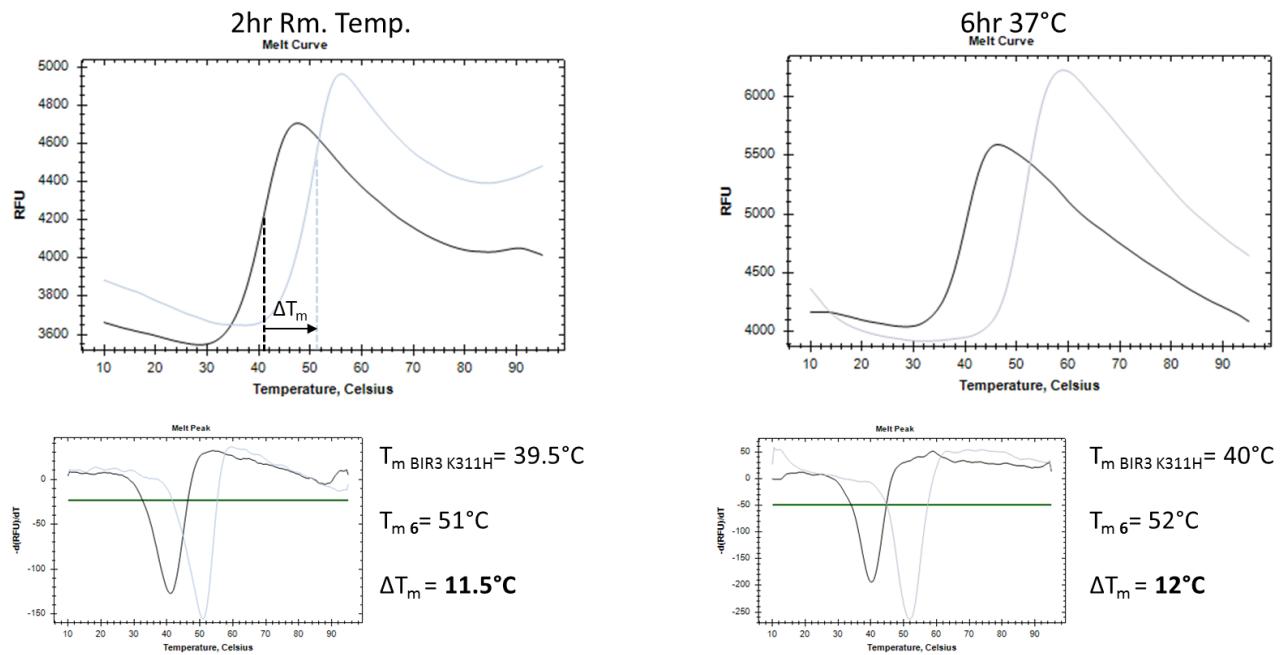
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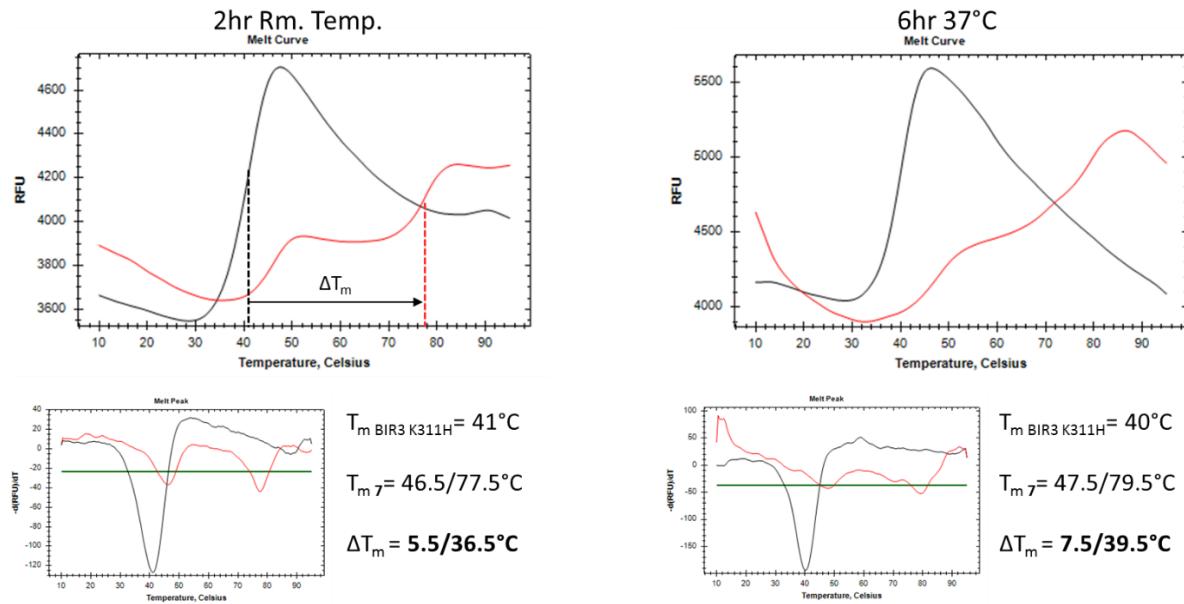
Compound 5 + XIAP BIR3 Lys311His



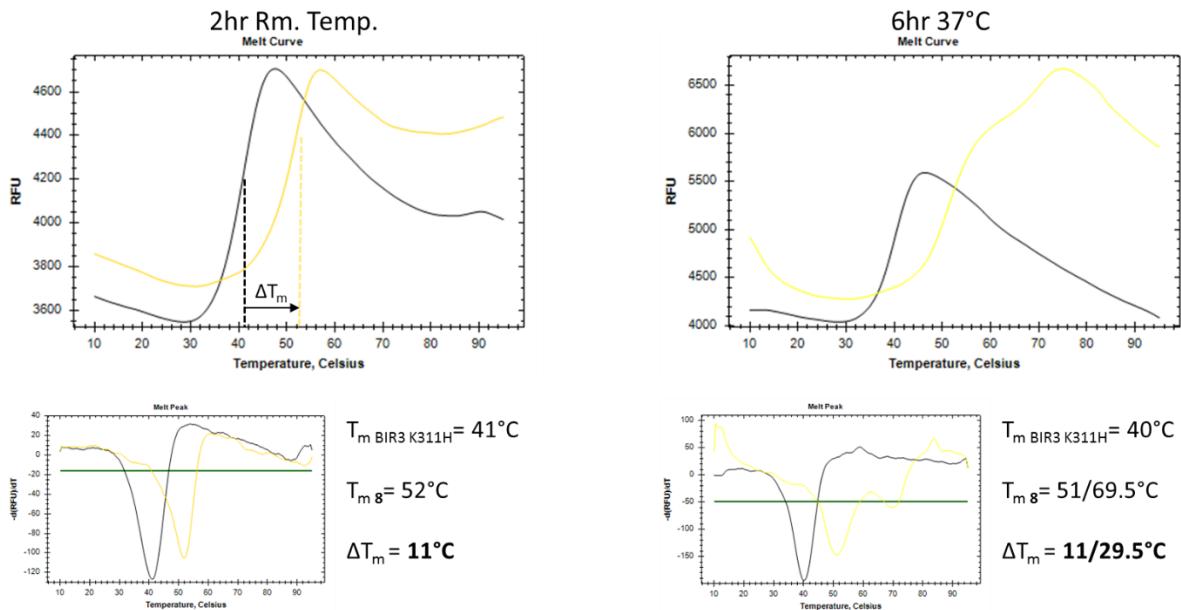
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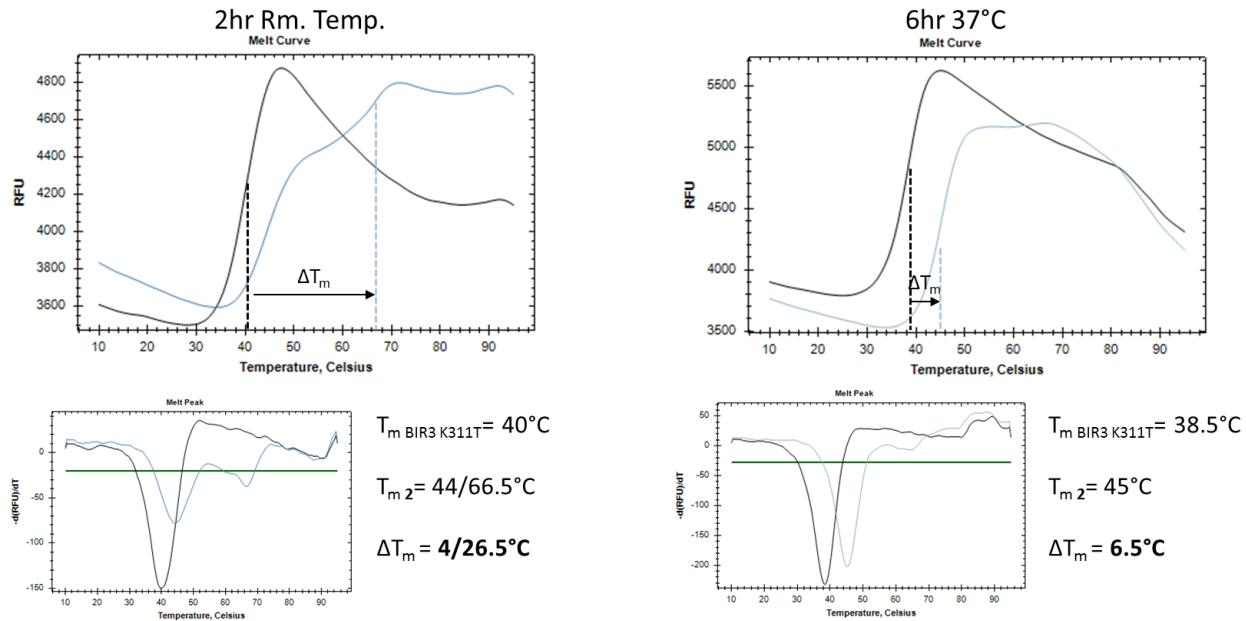
Compound 7 + XIAP BIR3 Lys311His



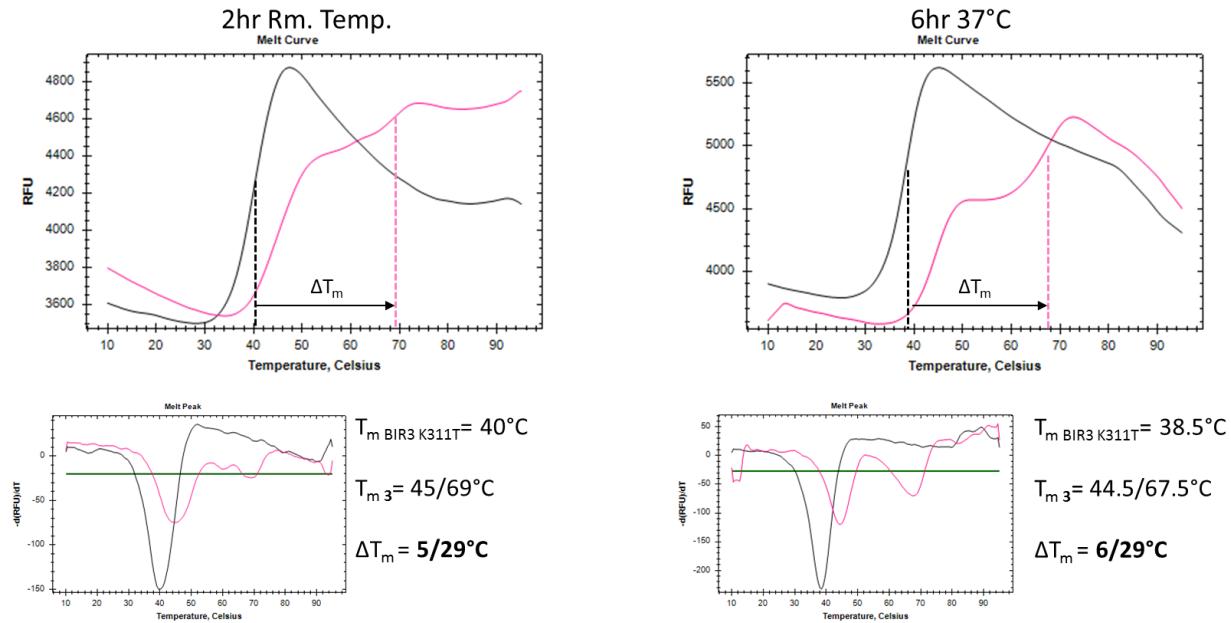
Compound 8 + XIAP BIR3 Lys311His



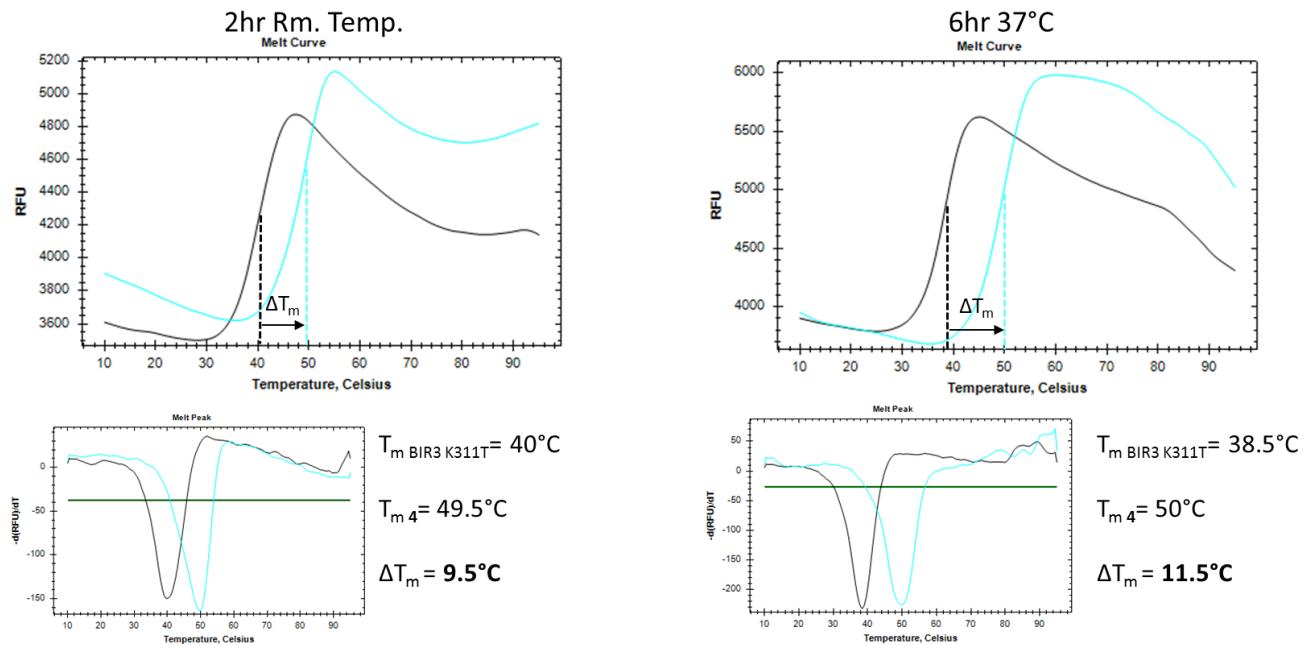
Compound 2 + XIAP BIR3 Lys311Thr



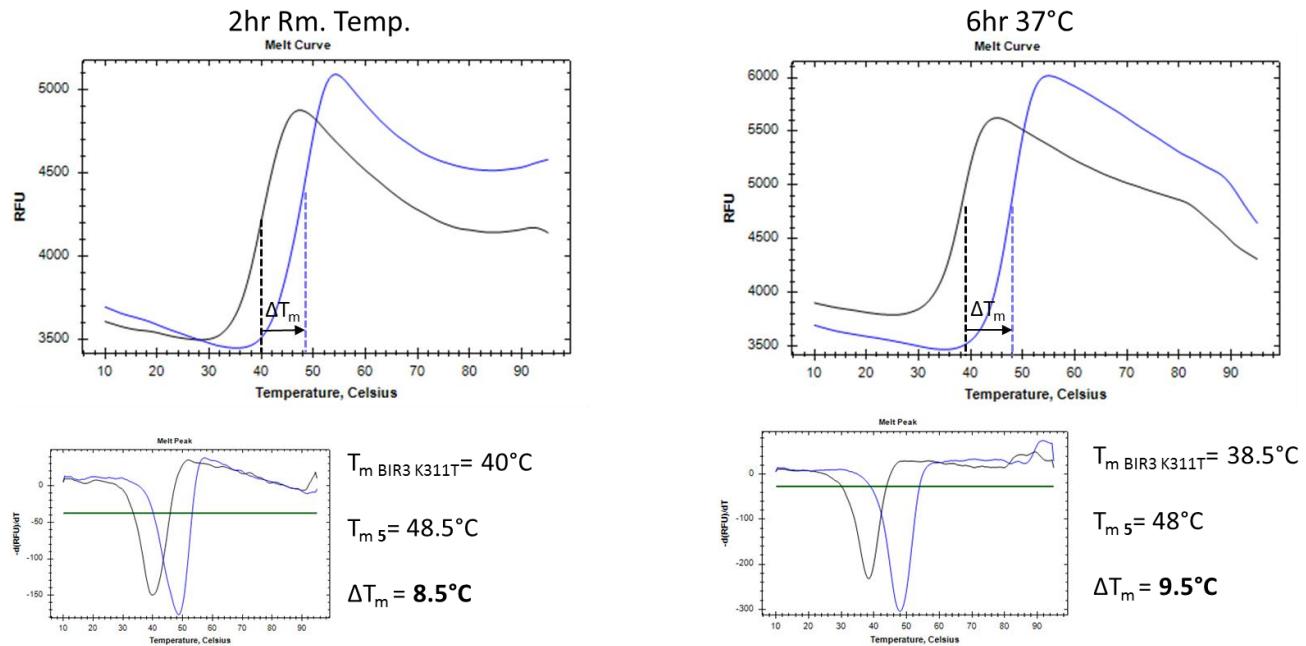
Compound 3 + XIAP BIR3 Lys311Thr



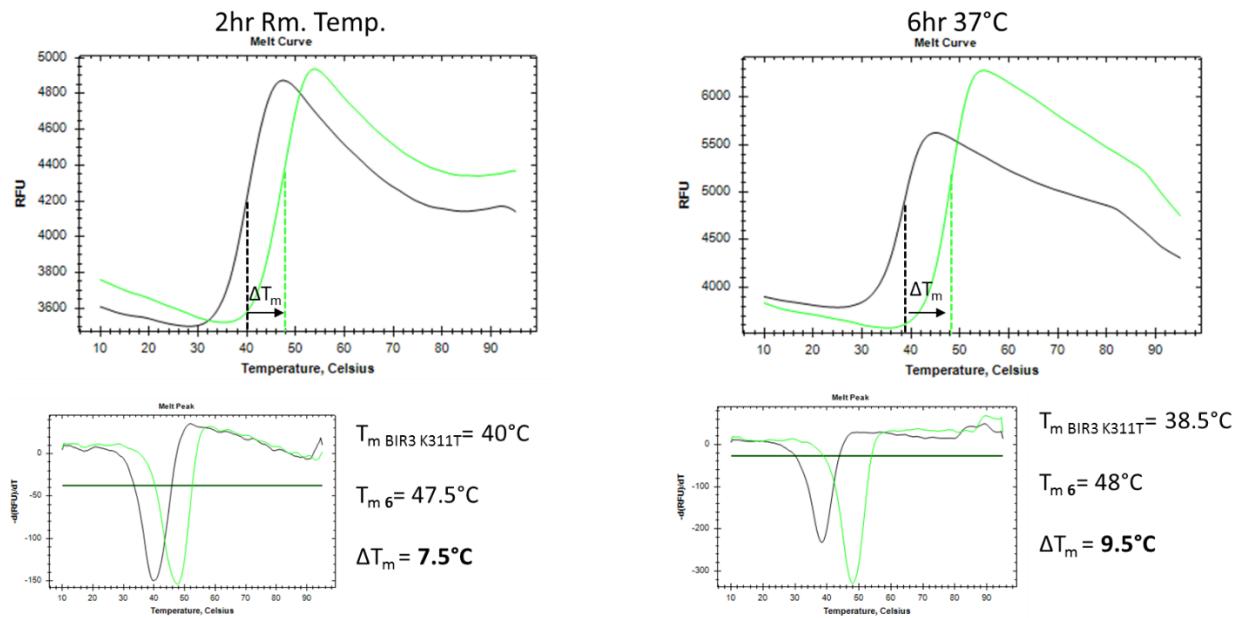
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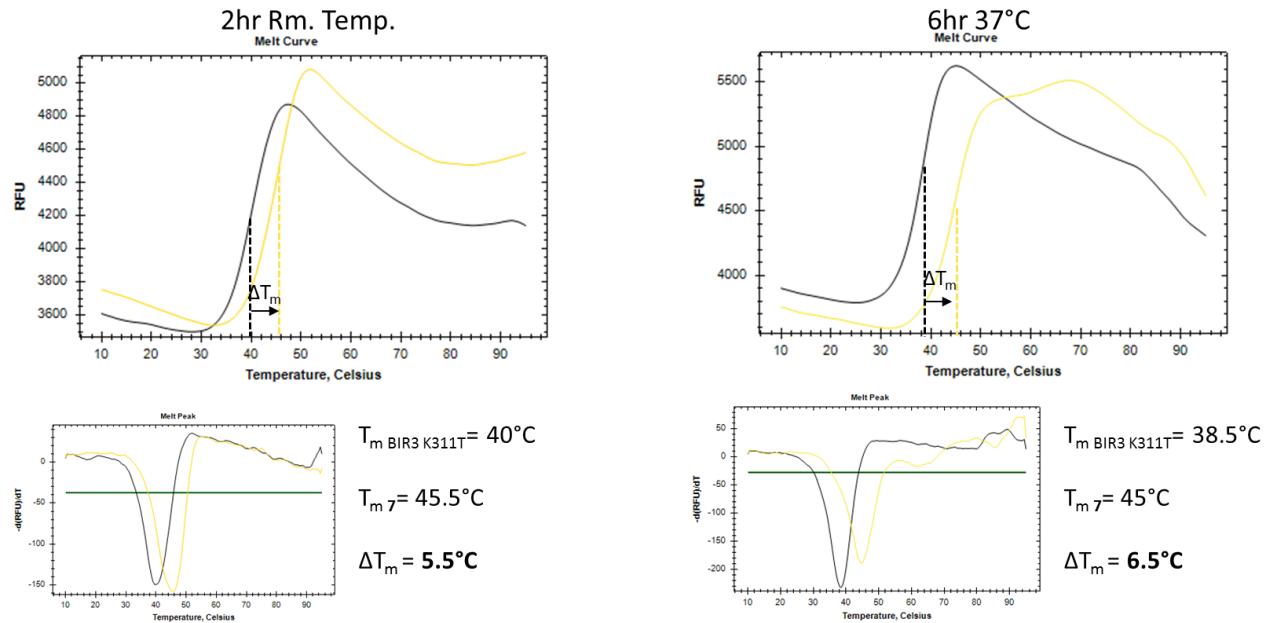
Compound 5 + XIAP BIR3 Lys311Thr



Compound 6 + XIAP BIR3 Lys311Thr

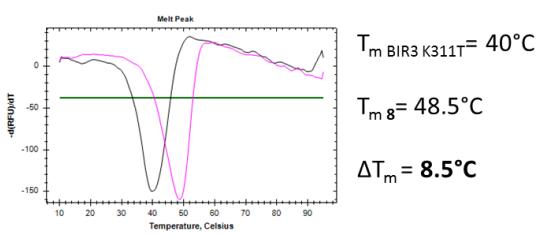
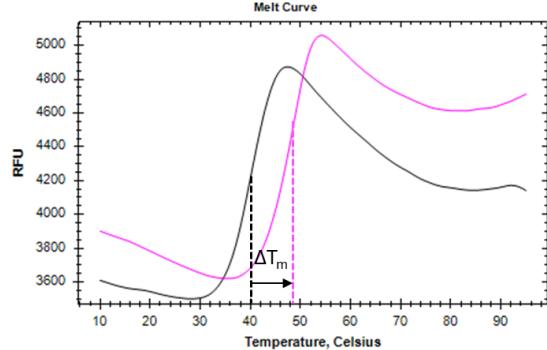


Compound 7 + XIAP BIR3 Lys311Thr

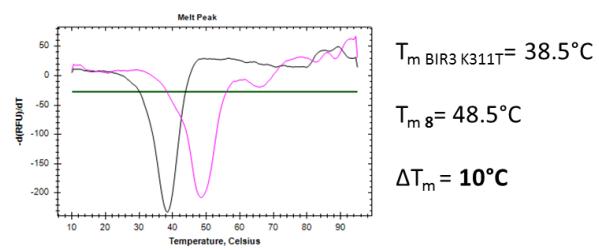
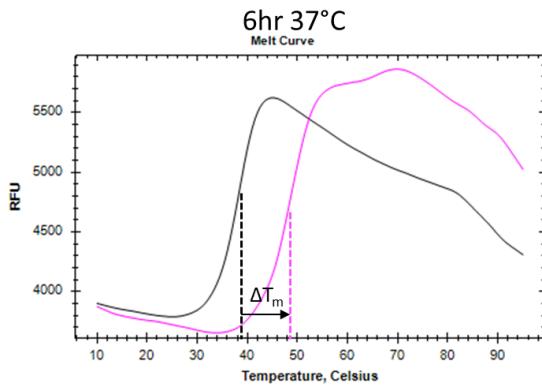


Compound 8 + XIAP BIR3 Lys311Thr

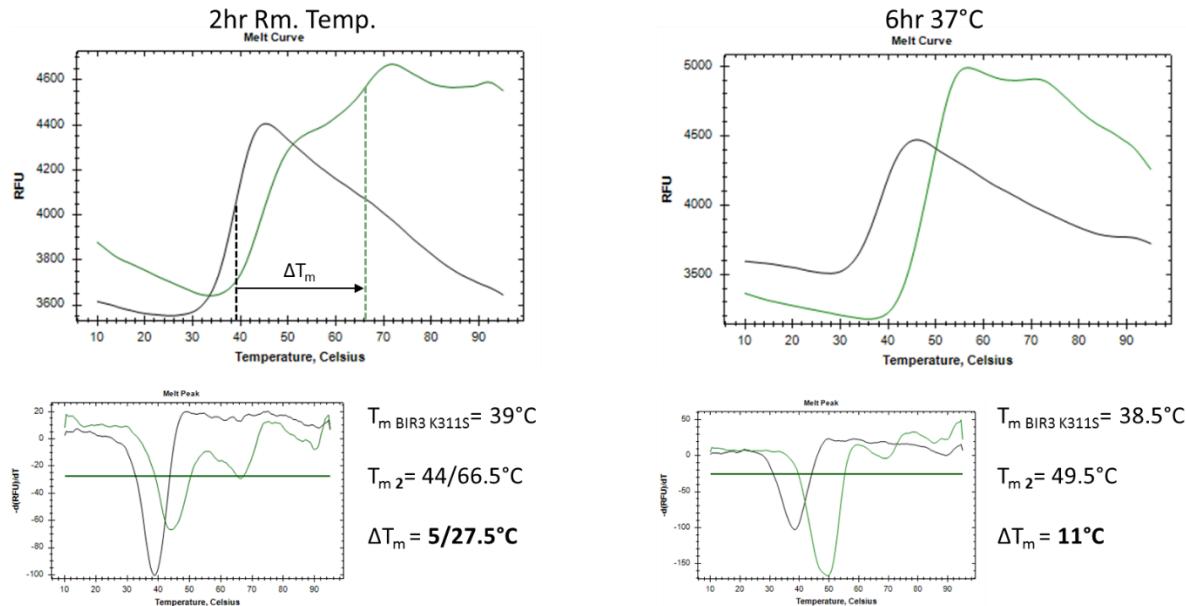
2hr Rm. Temp.



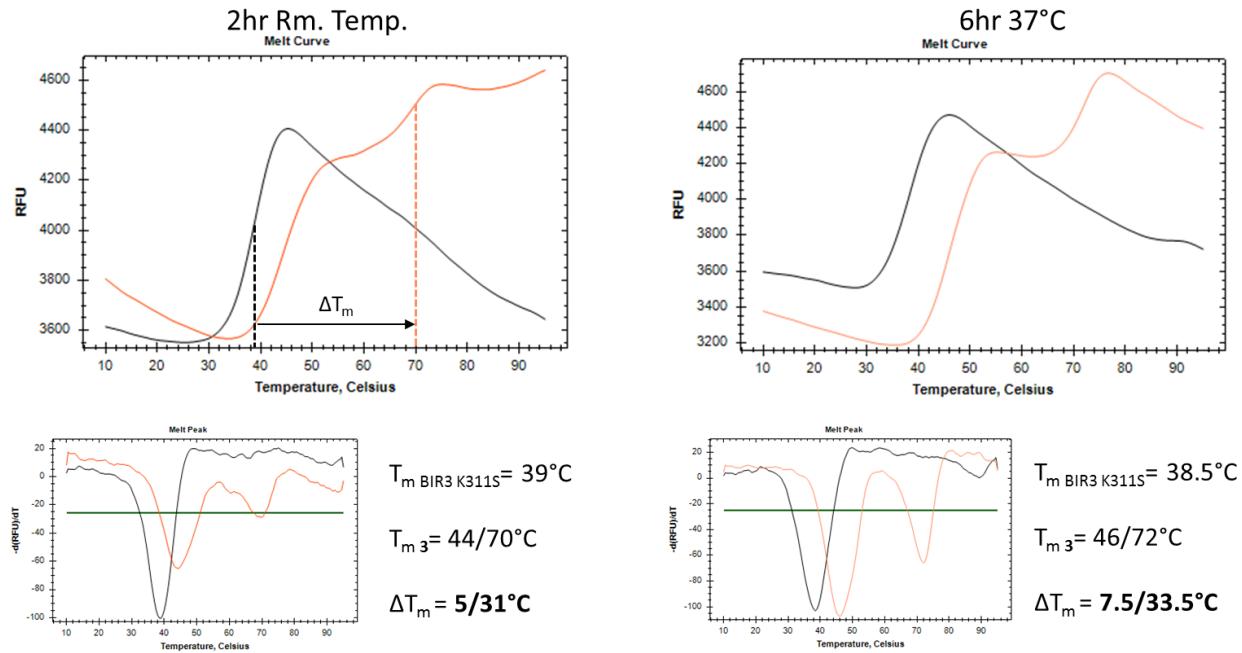
6hr 37°C



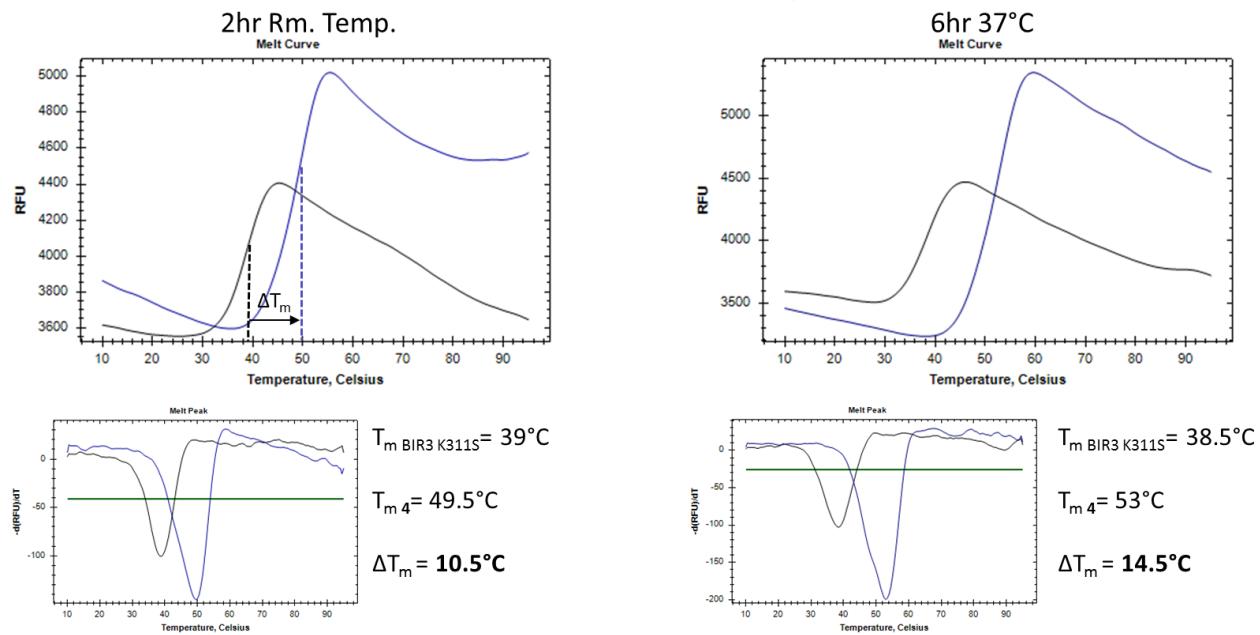
Compound 2 + XIAP BIR3 Lys311Ser



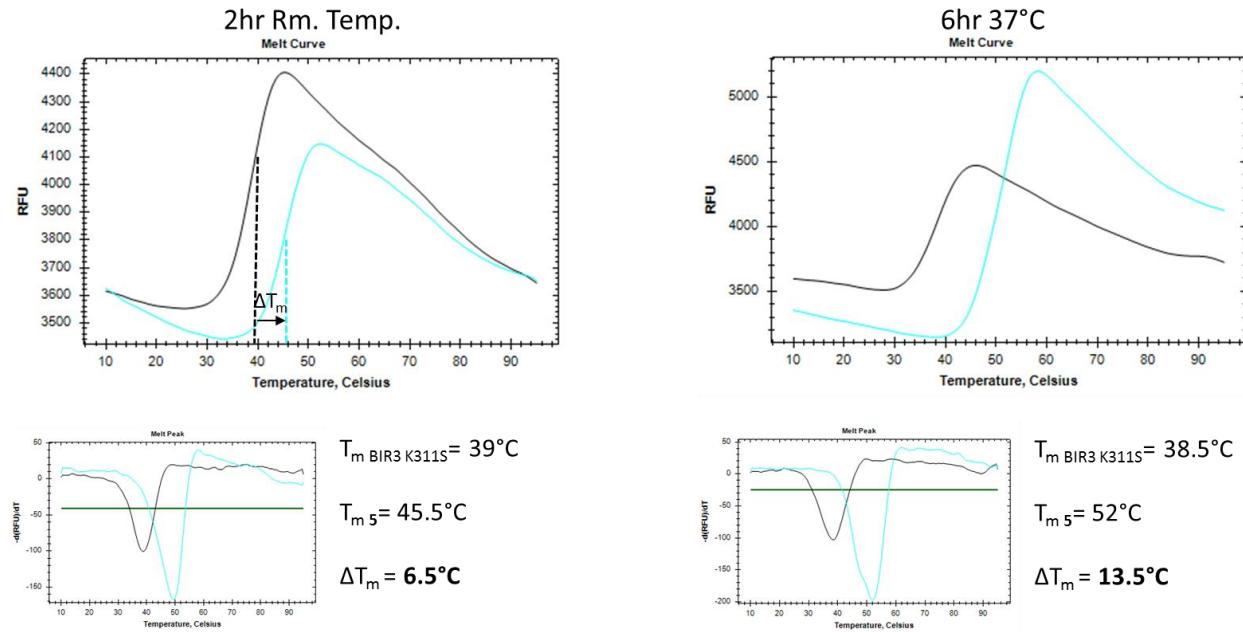
Compound 3 + XIAP BIR3 Lys311Ser



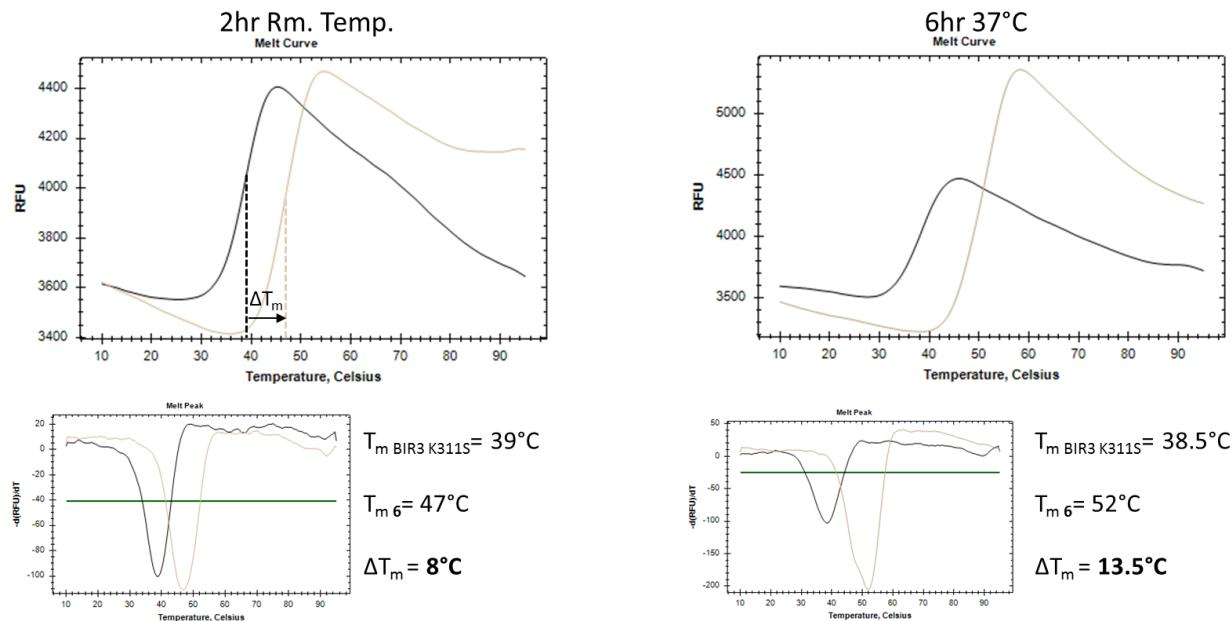
Compound 4 + XIAP BIR3 Lys311Ser



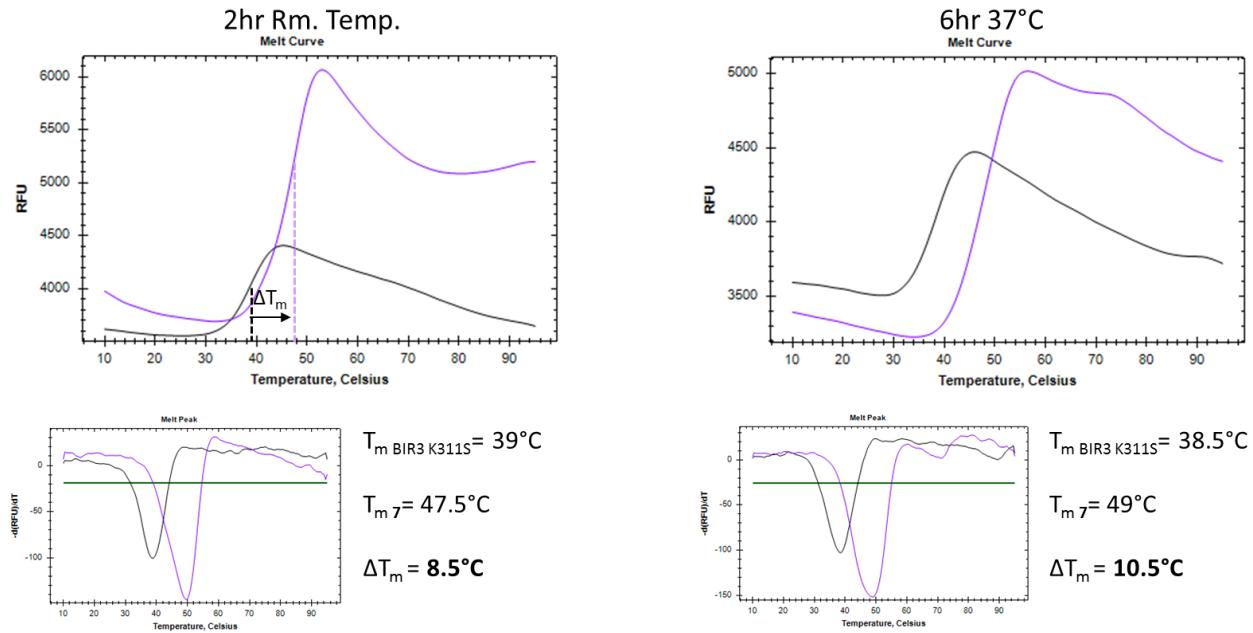
Compound 5 + XIAP BIR3 Lys311Ser



Compound 6 + XIAP BIR3 Lys311Ser



Compound 7 + XIAP BIR3 Lys311Ser



Compound 8 + XIAP BIR3 Lys311Ser

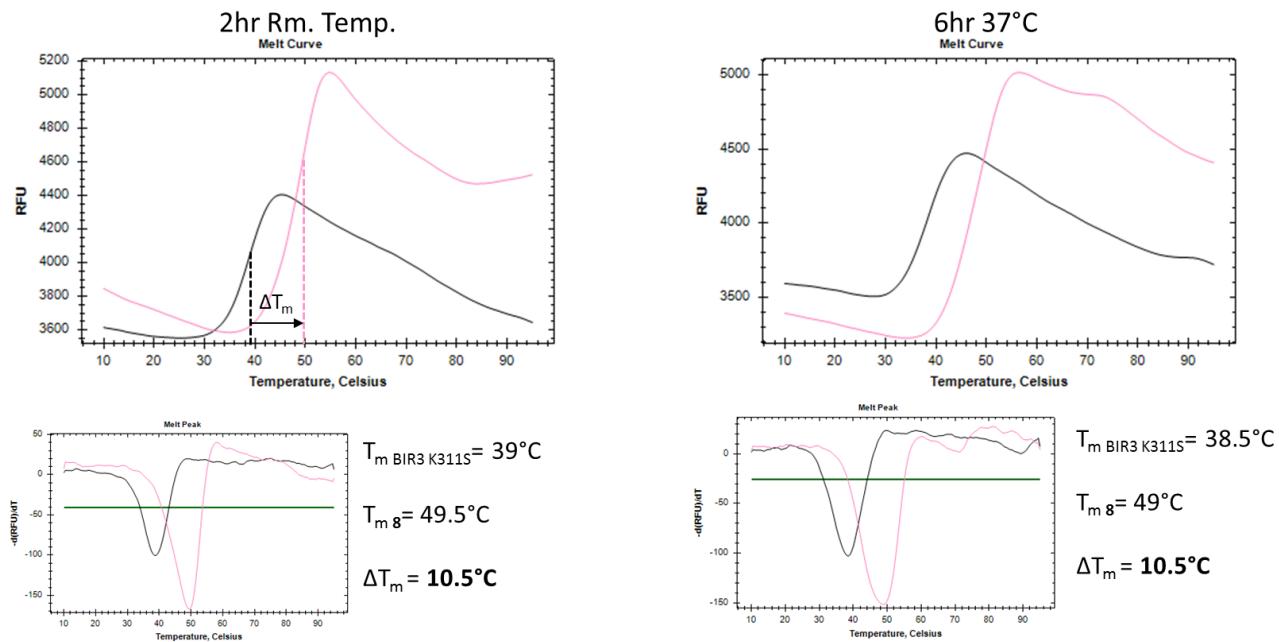


Figure S2. Aqueous stability of compounds **2**, **3**, and **4** measured at 37°C in simulated gastric fluid (pH 1.5). The stability was calculated by NMR spectroscopy by measuring the decrease in peak intensity in the aromatic region of the spectrum over time.

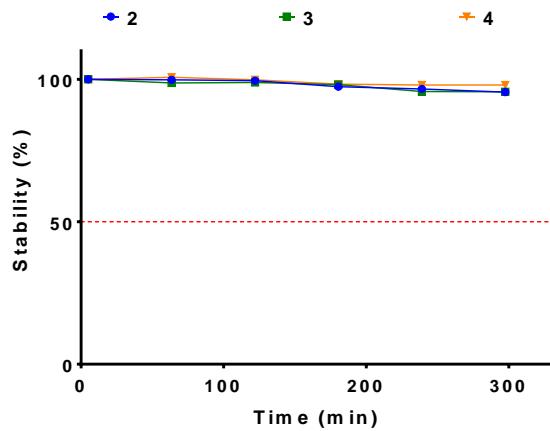


Figure S3. Aqueous stability of compounds **AVPF**, and **1** done at 37°C in 50 mM phosphate buffer pH 7.5, 150 mM NaCl. The stability was determined by NMR spectroscopy by measuring the decrease in peak intensity in the aromatic region of the spectrum.

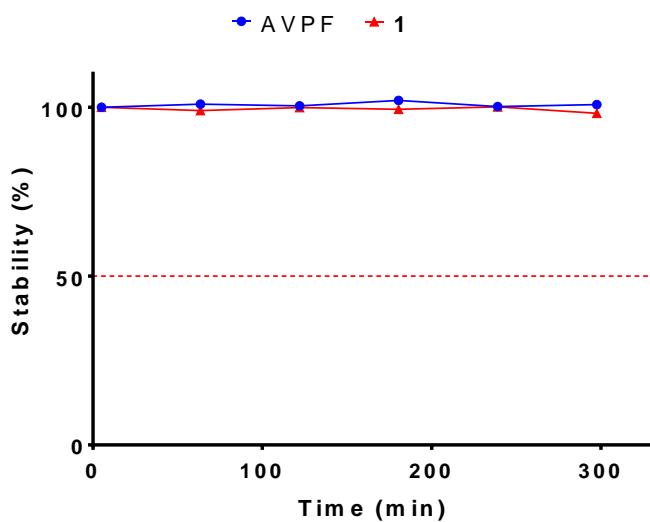


Figure S4. SDS-PAGE gel electrophoresis followed by Coomassie staining of 10 μ M of the Lys311Ala mutant BIR3 domain of XIAP in the absence and presence of 20 μ M of compounds **AVPF**, **2**, **3**, and **4** incubated at the minimum time that showed covalency with the wt form. For compounds **AVPF**, **2**, and **3** the incubation was performed at room temperature, while at 37°C for compound **4**.

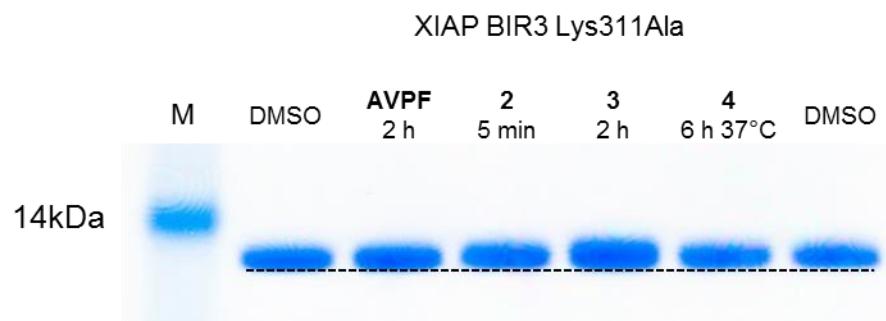


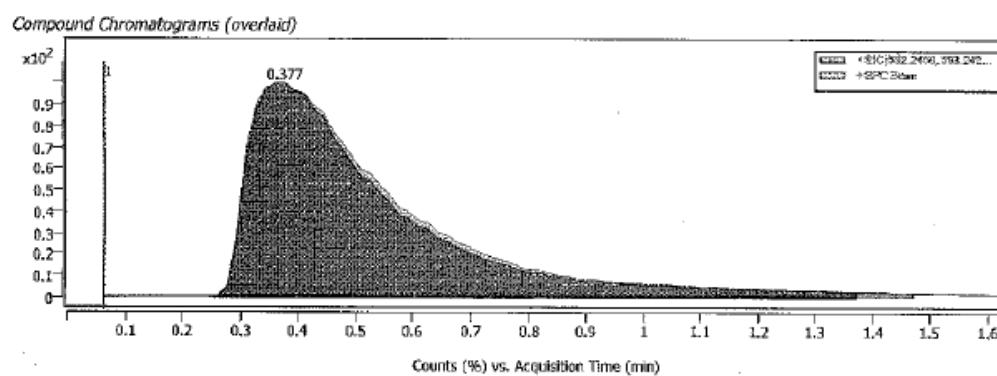
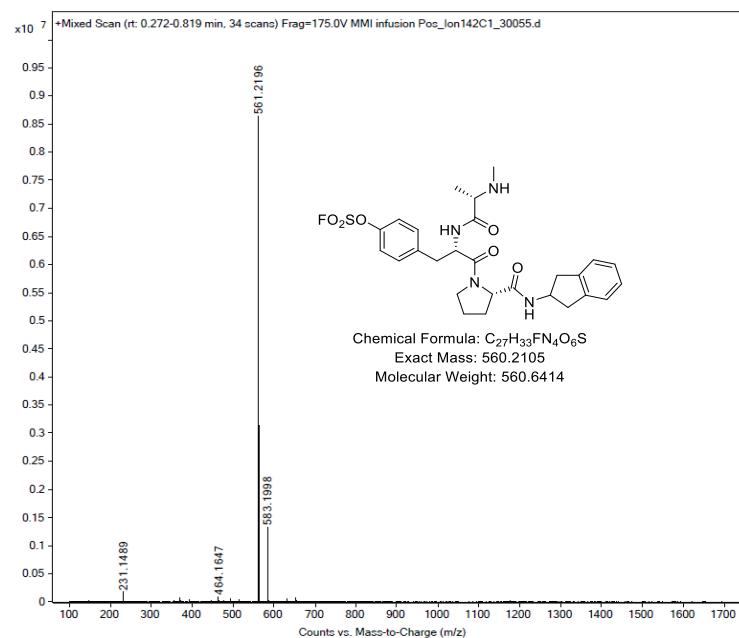
Figure S5. Compound characterizations.

Compound 9

HPLC-MS

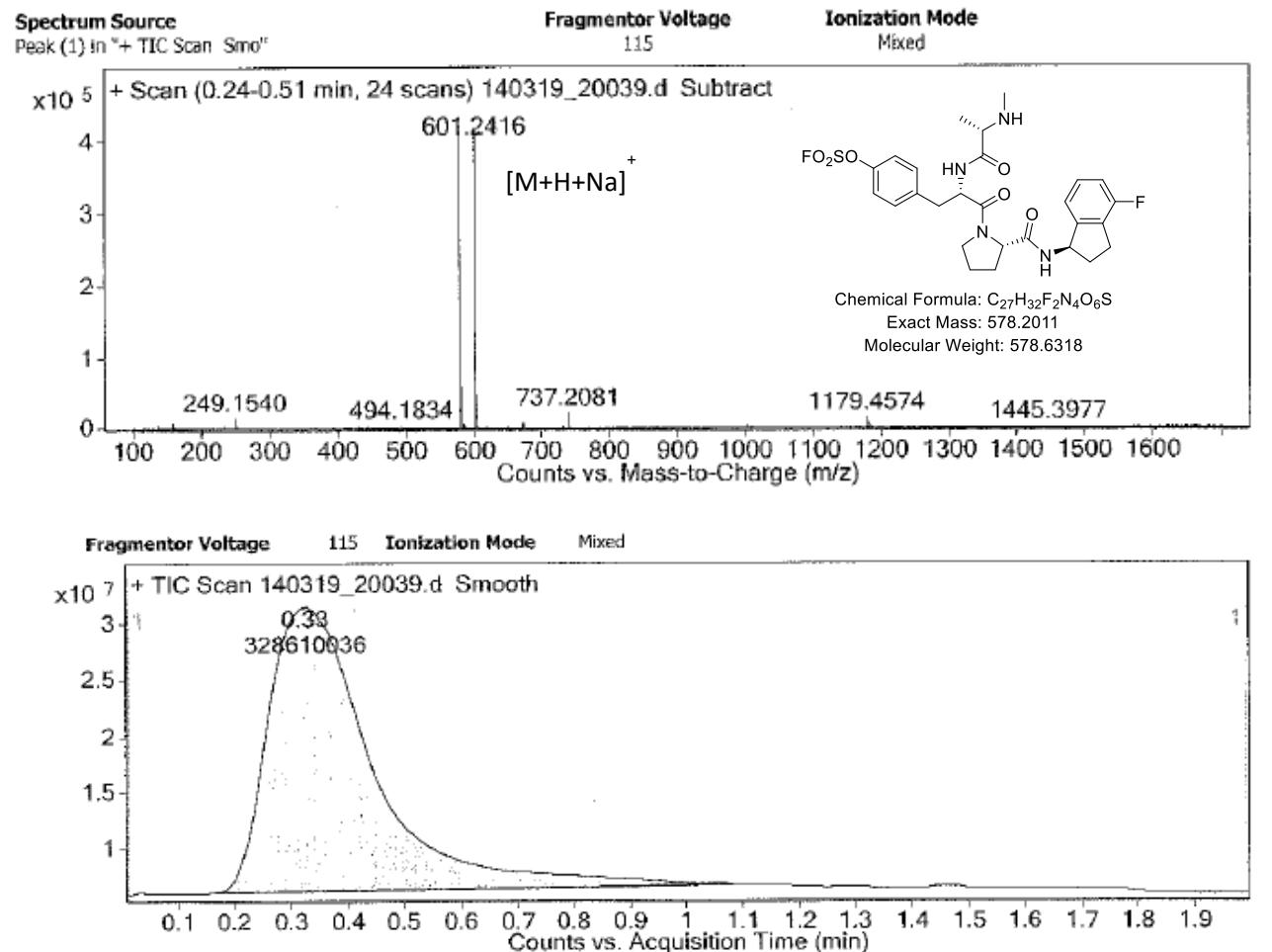
Mass Spectra:

NMR:



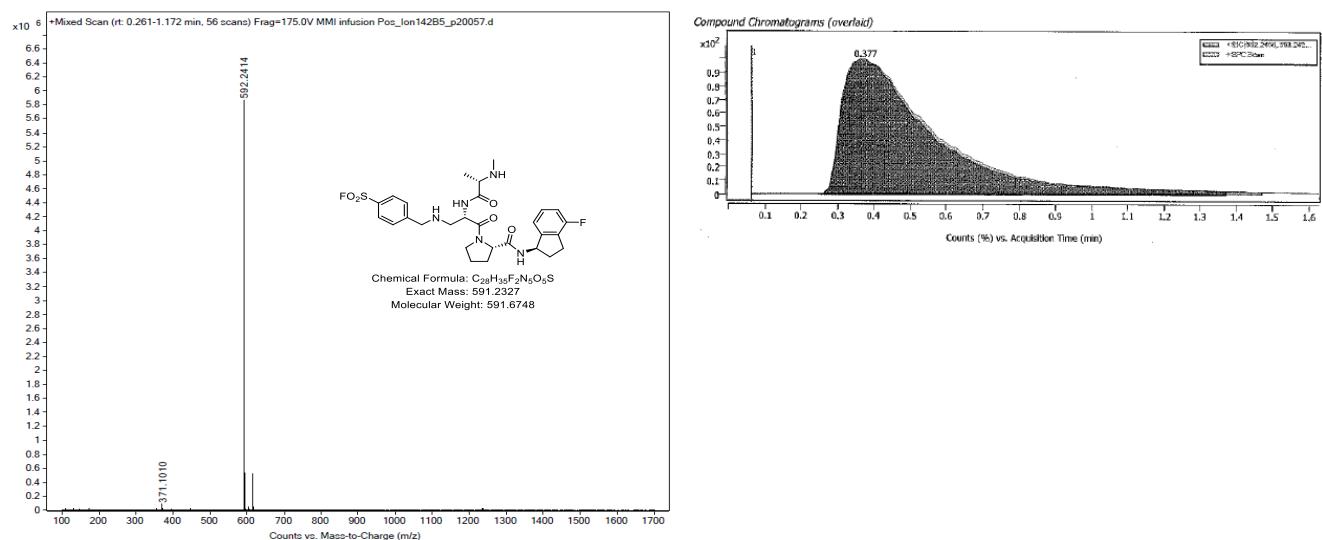
Compound 10

HPLC-MS



Compound 11

HPLC-MS



HEADER wtBIR3
COMPND wtBIR3
REMARK GENERATED BY SYBYL (TRIPOS, INC.) 30-MAR-19
SEQRES 1 A 109 ASN PHE PRO ASN SER THR ASN LEU PRO ARG ASN PRO SER
SEQRES 2 A 109 MET ALA ASP TYR GLU ALA ARG ILE PHE THR PHE GLY THR
SEQRES 3 A 109 TRP ILE TYR SER VAL ASN LYS GLU GLN LEU ALA ARG ALA
SEQRES 4 A 109 GLY PHE TYR ALA LEU GLY GLU GLY ASP LYS VAL LYS CYS
SEQRES 5 A 109 PHE HIS CYS GLY GLY GLY LEU THR ASP TRP TYR PRO SER
SEQRES 6 A 109 GLU ASP PRO TRP GLU GLN HIS ALA LYS TRP TYR PRO GLY
SEQRES 7 A 109 CYS LYS TYR LEU LEU GLU GLN LYS GLY GLN GLU TYR ILE
SEQRES 8 A 109 ASN ASN ILE HIS LEU THR HIS SER LEU GLU GLU CYS LEU
SEQRES 9 A 109 VAL ARG THR THR GLU
SEQRES 1 A 1 UNK
HET UNK A 3 60
HET ZN5 A 5 1
HET PHE A 2 14
ATOM N 1 N ASN A 1 99.391 49.454 -8.774 1.00 -0.99
ATOM C 2 CA ASN A 1 99.120 48.067 -8.405 1.00 0.25
ATOM C 3 C ASN A 1 98.508 48.043 -7.024 1.00 0.57
ATOM O 4 O ASN A 1 98.733 48.982 -6.275 1.00 -0.57
ATOM C 5 CB ASN A 1 100.438 47.246 -8.429 1.00 -0.10
ATOM C 6 CG ASN A 1 100.262 45.760 -8.216 1.00 0.57
ATOM O 7 OD1 ASN A 1 99.142 45.279 -8.150 1.00 -0.57
ATOM N 8 ND2 ASN A 1 101.373 44.998 -8.110 1.00 -0.80
ATOM H 9 HA ASN A 1 98.416 47.633 -9.136 1.00 0.08
ATOM H 10 HB2 ASN A 1 101.116 47.638 -7.654 1.00 0.08
ATOM H 11 HB3 ASN A 1 100.918 47.387 -9.410 1.00 0.08
ATOM H 12 HD22 ASN A 1 102.286 45.404 -8.170 1.00 0.37
ATOM H 13 HD21 ASN A 1 101.290 44.010 -7.972 1.00 0.37
ATOM H 14 H2 ASN A 1 98.755 49.946 -9.370 1.00 0.36
ATOM H 15 H1 ASN A 1 100.170 49.930 -8.362 1.00 0.36
ATOM N 16 N PHE A 2 97.742 46.987 -6.661 1.00 -0.73
ATOM C 17 CA PHE A 2 97.204 46.901 -5.303 1.00 0.28
ATOM C 18 C PHE A 2 98.350 46.464 -4.404 1.00 0.57
ATOM O 19 O PHE A 2 99.196 45.756 -4.926 1.00 -0.57

ATOM	20	CB	PHE	A	2	95.999	45.925	-5.199	1.00	-0.02
C										
ATOM	21	CG	PHE	A	2	94.689	46.540	-5.716	1.00	-0.14
C										
ATOM	22	CD1	PHE	A	2	94.456	46.649	-7.092	1.00	-0.15
C										
ATOM	23	CD2	PHE	A	2	93.709	46.983	-4.819	1.00	-0.15
C										
ATOM	24	CE1	PHE	A	2	93.249	47.171	-7.565	1.00	-0.15
C										
ATOM	25	CE2	PHE	A	2	92.494	47.487	-5.290	1.00	-0.15
C										
ATOM	26	CZ	PHE	A	2	92.261	47.578	-6.665	1.00	-0.15
C										
ATOM	27	HA	PHE	A	2	96.822	47.895	-5.035	1.00	0.08
H										
ATOM	28	HB2	PHE	A	2	95.868	45.614	-4.152	1.00	0.08
H										
ATOM	29	HB3	PHE	A	2	96.187	45.026	-5.800	1.00	0.08
H										
ATOM	30	HD2	PHE	A	2	93.883	46.938	-3.749	1.00	0.15
H										
ATOM	31	HE2	PHE	A	2	91.731	47.808	-4.587	1.00	0.15
H										
ATOM	32	HZ	PHE	A	2	91.316	47.965	-7.032	1.00	0.15
H										
ATOM	33	HE1	PHE	A	2	93.079	47.259	-8.634	1.00	0.15
H										
ATOM	34	HD1	PHE	A	2	95.208	46.326	-7.803	1.00	0.15
H										
ATOM	35	H	PHE	A	2	97.608	46.219	-7.288	1.00	0.37
H										
ATOM	36	N	PRO	A	3	98.473	46.826	-3.097	1.00	-0.66
N										
ATOM	37	CA	PRO	A	3	99.635	46.392	-2.323	1.00	0.28
C										
ATOM	38	C	PRO	A	3	99.875	44.904	-2.225	1.00	0.57
C										
ATOM	39	O	PRO	A	3	99.001	44.133	-2.583	1.00	-0.57
O										
ATOM	40	CB	PRO	A	3	99.253	46.907	-0.912	1.00	-0.16
C										
ATOM	41	CG	PRO	A	3	98.369	48.138	-1.203	1.00	-0.16
C										
ATOM	42	CD	PRO	A	3	97.519	47.698	-2.419	1.00	0.14
C										
ATOM	43	HA	PRO	A	3	100.525	46.920	-2.704	1.00	0.08
H										
ATOM	44	HD3	PRO	A	3	97.214	48.602	-2.966	1.00	0.08
H										
ATOM	45	HD2	PRO	A	3	96.634	47.122	-2.110	1.00	0.08
H										
ATOM	46	HG3	PRO	A	3	97.758	48.448	-0.340	1.00	0.08
H										

ATOM	47	HG2	PRO	A	3	99.028	48.974	-1.493	1.00	0.08
H										
ATOM	48	HB2	PRO	A	3	100.131	47.138	-0.286	1.00	0.08
H										
ATOM	49	HB3	PRO	A	3	98.633	46.161	-0.388	1.00	0.08
H										
ATOM	50	N	ASN	A	4	101.051	44.484	-1.700	1.00	-0.73
N										
ATOM	51	CA	ASN	A	4	101.268	43.061	-1.430	1.00	0.28
C										
ATOM	52	C	ASN	A	4	100.318	42.641	-0.331	1.00	0.57
C										
ATOM	53	O	ASN	A	4	99.761	43.528	0.294	1.00	-0.57
O										
ATOM	54	CB	ASN	A	4	102.737	42.781	-1.013	1.00	-0.10
C										
ATOM	55	CG	ASN	A	4	103.068	43.514	0.267	1.00	0.57
C										
ATOM	56	OD1	ASN	A	4	103.585	44.618	0.194	1.00	-0.57
O										
ATOM	57	ND2	ASN	A	4	102.774	42.938	1.454	1.00	-0.80
N										
ATOM	58	HA	ASN	A	4	101.044	42.483	-2.343	1.00	0.08
H										
ATOM	59	HB2	ASN	A	4	103.409	43.121	-1.817	1.00	0.08
H										
ATOM	60	HB3	ASN	A	4	102.902	41.701	-0.878	1.00	0.08
H										
ATOM	61	HD22	ASN	A	4	102.362	42.028	1.502	1.00	0.37
H										
ATOM	62	HD21	ASN	A	4	102.977	43.423	2.305	1.00	0.37
H										
ATOM	63	H	ASN	A	4	101.751	45.145	-1.421	1.00	0.37
H										
ATOM	64	N	SER	A	5	100.112	41.326	-0.084	1.00	-0.73
N										
ATOM	65	CA	SER	A	5	99.125	40.866	0.905	1.00	0.28
C										
ATOM	66	C	SER	A	5	97.721	41.167	0.423	1.00	0.57
C										
ATOM	67	O	SER	A	5	96.968	40.235	0.189	1.00	-0.57
O										
ATOM	68	CB	SER	A	5	99.345	41.326	2.375	1.00	0.12
C										
ATOM	69	OG	SER	A	5	99.118	42.724	2.616	1.00	-0.68
O										
ATOM	70	HA	SER	A	5	99.209	39.765	0.953	1.00	0.08
H										
ATOM	71	HB2	SER	A	5	100.354	41.039	2.716	1.00	0.08
H										
ATOM	72	HB3	SER	A	5	98.614	40.803	3.013	1.00	0.08
H										
ATOM	73	HG	SER	A	5	99.768	43.278	2.199	1.00	0.40
H										

ATOM	74	H	SER	A	5	100.607	40.638	-0.620	1.00	0.37
ATOM	75	N	THR	A	6	97.338	42.453	0.246	1.00	-0.73
ATOM	76	CA	THR	A	6	96.041	42.760	-0.356	1.00	0.28
ATOM	77	C	THR	A	6	95.906	41.949	-1.629	1.00	0.57
ATOM	78	O	THR	A	6	94.833	41.423	-1.880	1.00	-0.57
ATOM	79	CB	THR	A	6	95.881	44.282	-0.653	1.00	0.20
ATOM	80	OG1	THR	A	6	95.824	45.052	0.563	1.00	-0.68
ATOM	81	CG2	THR	A	6	94.561	44.585	-1.407	1.00	-0.24
ATOM	82	HA	THR	A	6	95.251	42.463	0.353	1.00	0.08
ATOM	83	HB	THR	A	6	96.722	44.625	-1.279	1.00	0.08
ATOM	84	HG1	THR	A	6	96.611	45.008	1.093	1.00	0.40
ATOM	85	HG23	THR	A	6	93.703	44.201	-0.835	1.00	0.08
ATOM	86	HG21	THR	A	6	94.562	44.130	-2.406	1.00	0.08
ATOM	87	HG22	THR	A	6	94.443	45.673	-1.524	1.00	0.08
ATOM	88	H	THR	A	6	97.948	43.204	0.487	1.00	0.37
ATOM	89	N	ASN	A	7	96.985	41.822	-2.437	1.00	-0.73
ATOM	90	CA	ASN	A	7	96.908	40.997	-3.643	1.00	0.28
ATOM	91	C	ASN	A	7	96.938	39.524	-3.311	1.00	0.57
ATOM	92	O	ASN	A	7	96.131	38.786	-3.853	1.00	-0.57
ATOM	93	CB	ASN	A	7	98.099	41.265	-4.605	1.00	-0.10
ATOM	94	CG	ASN	A	7	98.166	42.716	-5.004	1.00	0.57
ATOM	95	OD1	ASN	A	7	97.411	43.503	-4.460	1.00	-0.57
ATOM	96	ND2	ASN	A	7	99.061	43.097	-5.940	1.00	-0.80
ATOM	97	HA	ASN	A	7	95.977	41.231	-4.185	1.00	0.08
ATOM	98	HB2	ASN	A	7	97.988	40.649	-5.511	1.00	0.08
ATOM	99	HB3	ASN	A	7	99.051	41.001	-4.116	1.00	0.08
ATOM	100	HD22	ASN	A	7	99.674	42.432	-6.369	1.00	0.37

ATOM	101	HD21	ASN A	7	99.116	44.059	-6.210	1.00	0.37
H									
ATOM	102	H	ASN A	7	97.854	42.272	-2.219	1.00	0.37
H									
ATOM	103	N	LEU A	8	97.880	39.077	-2.451	1.00	-0.73
N									
ATOM	104	CA	LEU A	8	98.069	37.641	-2.248	1.00	0.28
C									
ATOM	105	C	LEU A	8	97.017	37.136	-1.284	1.00	0.57
C									
ATOM	106	O	LEU A	8	97.021	37.650	-0.177	1.00	-0.57
O									
ATOM	107	CB	LEU A	8	99.481	37.323	-1.676	1.00	-0.16
C									
ATOM	108	CG	LEU A	8	100.669	37.841	-2.546	1.00	-0.08
C									
ATOM	109	CD1	LEU A	8	102.012	37.532	-1.825	1.00	-0.24
C									
ATOM	110	CD2	LEU A	8	100.683	37.224	-3.973	1.00	-0.24
C									
ATOM	111	HA	LEU A	8	98.008	37.126	-3.214	1.00	0.08
H									
ATOM	112	HB2	LEU A	8	99.572	36.231	-1.551	1.00	0.08
H									
ATOM	113	HB3	LEU A	8	99.560	37.781	-0.677	1.00	0.08
H									
ATOM	114	HG	LEU A	8	100.605	38.937	-2.656	1.00	0.08
H									
ATOM	115	HD21	LEU A	8	100.637	36.126	-3.916	1.00	0.08
H									
ATOM	116	HD22	LEU A	8	101.604	37.506	-4.505	1.00	0.08
H									
ATOM	117	HD23	LEU A	8	99.836	37.587	-4.575	1.00	0.08
H									
ATOM	118	HD11	LEU A	8	102.143	36.446	-1.709	1.00	0.08
H									
ATOM	119	HD12	LEU A	8	102.031	37.997	-0.826	1.00	0.08
H									
ATOM	120	HD13	LEU A	8	102.864	37.928	-2.400	1.00	0.08
H									
ATOM	121	H	LEU A	8	98.463	39.718	-1.951	1.00	0.37
H									
ATOM	122	N	PRO A	9	96.113	36.165	-1.582	1.00	-0.66
N									
ATOM	123	CA	PRO A	9	95.213	35.690	-0.544	1.00	0.28
C									
ATOM	124	C	PRO A	9	95.934	35.189	0.682	1.00	0.57
C									
ATOM	125	O	PRO A	9	97.102	34.850	0.573	1.00	-0.57
O									
ATOM	126	CB	PRO A	9	94.570	34.474	-1.252	1.00	-0.16
C									
ATOM	127	CG	PRO A	9	94.627	34.843	-2.748	1.00	-0.16
C									

ATOM	128	CD	PRO	A	9	95.999	35.543	-2.896	1.00	0.14
C										
ATOM	129	HA	PRO	A	9	94.472	36.476	-0.323	1.00	0.08
H										
ATOM	130	HD3	PRO	A	9	95.960	36.243	-3.744	1.00	0.08
H										
ATOM	131	HD2	PRO	A	9	96.810	34.811	-3.036	1.00	0.08
H										
ATOM	132	HG3	PRO	A	9	94.508	33.973	-3.415	1.00	0.08
H										
ATOM	133	HG2	PRO	A	9	93.822	35.565	-2.960	1.00	0.08
H										
ATOM	134	HB2	PRO	A	9	93.557	34.268	-0.886	1.00	0.08
H										
ATOM	135	HB3	PRO	A	9	95.180	33.570	-1.100	1.00	0.08
H										
ATOM	136	N	ARG	A	10	95.244	35.108	1.841	1.00	-0.73
N										
ATOM	137	CA	ARG	A	10	95.838	34.442	2.998	1.00	0.28
C										
ATOM	138	C	ARG	A	10	95.703	32.942	2.844	1.00	0.57
C										
ATOM	139	O	ARG	A	10	96.538	32.243	3.398	1.00	-0.57
O										
ATOM	140	CB	ARG	A	10	95.177	34.896	4.326	1.00	-0.16
C										
ATOM	141	CG	ARG	A	10	95.448	36.402	4.602	1.00	-0.16
C										
ATOM	142	CD	ARG	A	10	94.815	36.844	5.948	1.00	0.17
C										
ATOM	143	NE	ARG	A	10	94.971	38.276	6.208	1.00	-0.84
N										
ATOM	144	CZ	ARG	A	10	94.502	38.873	7.285	1.00	1.20
C										
ATOM	145	NH1	ARG	A	10	93.862	38.230	8.236	1.00	-0.97
N										
ATOM	146	NH2	ARG	A	10	94.681	40.167	7.420	1.00	-0.97
N										
ATOM	147	HA	ARG	A	10	96.912	34.688	3.063	1.00	0.08
H										
ATOM	148	HB2	ARG	A	10	95.594	34.302	5.155	1.00	0.08
H										
ATOM	149	HB3	ARG	A	10	94.092	34.702	4.279	1.00	0.08
H										
ATOM	150	HG2	ARG	A	10	95.028	37.012	3.787	1.00	0.08
H										
ATOM	151	HG3	ARG	A	10	96.534	36.588	4.644	1.00	0.08
H										
ATOM	152	HD2	ARG	A	10	95.283	36.258	6.757	1.00	0.08
H										
ATOM	153	HD3	ARG	A	10	93.745	36.609	5.888	1.00	0.08
H										
ATOM	154	HE	ARG	A	10	95.471	38.835	5.499	1.00	0.45
H										

ATOM	155	HH12	ARG	A	10	93.697	37.217	8.189	1.00	0.45
H										
ATOM	156	HH11	ARG	A	10	93.506	38.729	9.065	1.00	0.45
H										
ATOM	157	HH22	ARG	A	10	95.176	40.716	6.702	1.00	0.45
H										
ATOM	158	HH21	ARG	A	10	94.328	40.670	8.249	1.00	0.45
H										
ATOM	159	H	ARG	A	10	94.292	35.417	1.897	1.00	0.37
H										
ATOM	160	N	ASN	A	11	94.685	32.423	2.110	1.00	-0.73
N										
ATOM	161	CA	ASN	A	11	94.513	30.976	1.973	1.00	0.28
C										
ATOM	162	C	ASN	A	11	94.218	30.642	0.523	1.00	0.57
C										
ATOM	163	O	ASN	A	11	93.068	30.372	0.214	1.00	-0.57
O										
ATOM	164	CB	ASN	A	11	93.373	30.570	2.944	1.00	-0.10
C										
ATOM	165	CG	ASN	A	11	93.142	29.080	3.012	1.00	0.57
C										
ATOM	166	OD1	ASN	A	11	93.663	28.350	2.185	1.00	-0.57
O										
ATOM	167	ND2	ASN	A	11	92.356	28.603	4.003	1.00	-0.80
N										
ATOM	168	HA	ASN	A	11	95.407	30.412	2.282	1.00	0.08
H										
ATOM	169	HB2	ASN	A	11	92.437	31.057	2.638	1.00	0.08
H										
ATOM	170	HB3	ASN	A	11	93.634	30.931	3.952	1.00	0.08
H										
ATOM	171	HD22	ASN	A	11	91.930	29.222	4.664	1.00	0.37
H										
ATOM	172	HD21	ASN	A	11	92.203	27.619	4.093	1.00	0.37
H										
ATOM	173	H	ASN	A	11	93.992	33.001	1.677	1.00	0.37
H										
ATOM	174	N	PRO	A	12	95.216	30.642	-0.399	1.00	-0.66
N										
ATOM	175	CA	PRO	A	12	94.941	30.301	-1.789	1.00	0.28
C										
ATOM	176	C	PRO	A	12	94.146	29.032	-1.997	1.00	0.57
C										
ATOM	177	O	PRO	A	12	93.348	29.000	-2.920	1.00	-0.57
O										
ATOM	178	CB	PRO	A	12	96.387	30.128	-2.315	1.00	-0.16
C										
ATOM	179	CG	PRO	A	12	97.205	31.131	-1.471	1.00	-0.16
C										
ATOM	180	CD	PRO	A	12	96.591	30.983	-0.058	1.00	0.14
C										
ATOM	181	HA	PRO	A	12	94.454	31.166	-2.269	1.00	0.08
H										

ATOM	182	HD3	PRO	A	12	96.699	31.916	0.515	1.00	0.08
H										
ATOM	183	HD2	PRO	A	12	97.064	30.146	0.481	1.00	0.08
H										
ATOM	184	HG3	PRO	A	12	98.289	30.932	-1.491	1.00	0.08
H										
ATOM	185	HG2	PRO	A	12	97.027	32.147	-1.859	1.00	0.08
H										
ATOM	186	HB2	PRO	A	12	96.469	30.306	-3.400	1.00	0.08
H										
ATOM	187	HB3	PRO	A	12	96.752	29.111	-2.093	1.00	0.08
H										
ATOM	188	N	SER	A	13	94.345	27.976	-1.174	1.00	-0.73
N										
ATOM	189	CA	SER	A	13	93.615	26.728	-1.407	1.00	0.28
C										
ATOM	190	C	SER	A	13	92.119	26.952	-1.388	1.00	0.57
C										
ATOM	191	O	SER	A	13	91.431	26.354	-2.201	1.00	-0.57
O										
ATOM	192	CB	SER	A	13	93.957	25.614	-0.380	1.00	0.12
C										
ATOM	193	OG	SER	A	13	93.449	25.903	0.932	1.00	-0.68
O										
ATOM	194	HA	SER	A	13	93.913	26.361	-2.405	1.00	0.08
H										
ATOM	195	HB2	SER	A	13	95.046	25.445	-0.345	1.00	0.08
H										
ATOM	196	HB3	SER	A	13	93.476	24.675	-0.696	1.00	0.08
H										
ATOM	197	HG	SER	A	13	93.844	26.677	1.317	1.00	0.40
H										
ATOM	198	H	SER	A	13	95.009	28.022	-0.425	1.00	0.37
H										
ATOM	199	N	MET	A	14	91.600	27.809	-0.477	1.00	-0.73
N										
ATOM	200	CA	MET	A	14	90.158	28.058	-0.423	1.00	0.28
C										
ATOM	201	C	MET	A	14	89.725	29.133	-1.402	1.00	0.57
C										
ATOM	202	O	MET	A	14	88.580	29.546	-1.323	1.00	-0.57
O										
ATOM	203	CB	MET	A	14	89.727	28.382	1.039	1.00	-0.16
C										
ATOM	204	CG	MET	A	14	90.005	27.201	2.003	1.00	0.07
C										
ATOM	205	SD	MET	A	14	88.953	25.769	1.596	1.00	-0.46
S										
ATOM	206	CE	MET	A	14	89.719	24.532	2.690	1.00	-0.01
C										
ATOM	207	HA	MET	A	14	89.606	27.155	-0.726	1.00	0.08
H										
ATOM	208	HB2	MET	A	14	88.656	28.631	1.093	1.00	0.08
H										

ATOM	209	HB3	MET	A	14	90.295	29.251	1.402	1.00	0.08
H										
ATOM	210	HG2	MET	A	14	89.783	27.499	3.040	1.00	0.08
H										
ATOM	211	HG3	MET	A	14	91.061	26.902	1.940	1.00	0.08
H										
ATOM	212	HE1	MET	A	14	89.225	23.562	2.542	1.00	0.08
H										
ATOM	213	HE2	MET	A	14	89.609	24.845	3.739	1.00	0.08
H										
ATOM	214	HE3	MET	A	14	90.787	24.428	2.449	1.00	0.08
H										
ATOM	215	LPD1	MET	A	14	88.302	25.879	1.753	1.00	0.00
LP										
ATOM	216	LPD2	MET	A	14	89.002	25.596	0.942	1.00	0.00
LP										
ATOM	217	H	MET	A	14	92.196	28.320	0.146	1.00	0.37
H										
ATOM	218	N	ALA	A	15	90.577	29.604	-2.343	1.00	-0.73
N										
ATOM	219	CA	ALA	A	15	90.131	30.609	-3.307	1.00	0.28
C										
ATOM	220	C	ALA	A	15	89.203	30.021	-4.343	1.00	0.57
C										
ATOM	221	O	ALA	A	15	88.358	30.754	-4.832	1.00	-0.57
O										
ATOM	222	CB	ALA	A	15	91.332	31.270	-4.032	1.00	-0.24
C										
ATOM	223	HA	ALA	A	15	89.579	31.398	-2.776	1.00	0.08
H										
ATOM	224	HB1	ALA	A	15	92.029	31.699	-3.296	1.00	0.08
H										
ATOM	225	HB2	ALA	A	15	90.982	32.076	-4.697	1.00	0.08
H										
ATOM	226	HB3	ALA	A	15	91.869	30.524	-4.637	1.00	0.08
H										
ATOM	227	H	ALA	A	15	91.510	29.264	-2.430	1.00	0.37
H										
ATOM	228	N	ASP	A	16	89.328	28.725	-4.709	1.00	-0.73
N										
ATOM	229	CA	ASP	A	16	88.433	28.182	-5.730	1.00	0.28
C										
ATOM	230	C	ASP	A	16	87.034	28.053	-5.167	1.00	0.57
C										
ATOM	231	O	ASP	A	16	86.903	27.757	-3.991	1.00	-0.57
O										
ATOM	232	CB	ASP	A	16	88.911	26.810	-6.269	1.00	-0.27
C										
ATOM	233	CG	ASP	A	16	90.277	26.955	-6.889	1.00	0.91
C										
ATOM	234	OD1	ASP	A	16	90.370	26.970	-8.146	1.00	-0.90
O										
ATOM	235	OD2	ASP	A	16	91.269	27.059	-6.117	1.00	-0.90
O										

ATOM	236	HA	ASP	A	16	88.433	28.878	-6.587	1.00	0.08
H										
ATOM	237	HB2	ASP	A	16	88.192	26.425	-7.011	1.00	0.08
H										
ATOM	238	HB3	ASP	A	16	88.971	26.086	-5.443	1.00	0.08
H										
ATOM	239	H	ASP	A	16	90.013	28.122	-4.295	1.00	0.37
H										
ATOM	240	N	TYR	A	17	85.980	28.271	-5.987	1.00	-0.73
N										
ATOM	241	CA	TYR	A	17	84.607	28.143	-5.490	1.00	0.28
C										
ATOM	242	C	TYR	A	17	84.322	26.703	-5.128	1.00	0.57
C										
ATOM	243	O	TYR	A	17	83.707	26.458	-4.101	1.00	-0.57
O										
ATOM	244	CB	TYR	A	17	83.601	28.626	-6.575	1.00	-0.02
C										
ATOM	245	CG	TYR	A	17	82.111	28.405	-6.250	1.00	-0.14
C										
ATOM	246	CD1	TYR	A	17	81.243	27.936	-7.245	1.00	-0.15
C										
ATOM	247	CD2	TYR	A	17	81.591	28.677	-4.980	1.00	-0.15
C										
ATOM	248	CE1	TYR	A	17	79.882	27.746	-6.986	1.00	-0.15
C										
ATOM	249	CE2	TYR	A	17	80.233	28.478	-4.719	1.00	-0.15
C										
ATOM	250	CZ	TYR	A	17	79.367	28.018	-5.714	1.00	0.08
C										
ATOM	251	OH	TYR	A	17	78.011	27.842	-5.418	1.00	-0.53
O										
ATOM	252	HA	TYR	A	17	84.516	28.772	-4.591	1.00	0.08
H										
ATOM	253	HB3	TYR	A	17	83.748	29.704	-6.749	1.00	0.08
H										
ATOM	254	HB2	TYR	A	17	83.839	28.095	-7.510	1.00	0.08
H										
ATOM	255	HD2	TYR	A	17	82.225	29.051	-4.185	1.00	0.15
H										
ATOM	256	HE2	TYR	A	17	79.839	28.684	-3.734	1.00	0.15
H										
ATOM	257	HE1	TYR	A	17	79.232	27.388	-7.779	1.00	0.15
H										
ATOM	258	HD1	TYR	A	17	81.616	27.716	-8.241	1.00	0.15
H										
ATOM	259	HH	TYR	A	17	77.465	27.680	-6.179	1.00	0.45
H										
ATOM	260	H	TYR	A	17	86.129	28.505	-6.950	1.00	0.37
H										
ATOM	261	N	GLU	A	18	84.769	25.738	-5.964	1.00	-0.73
N										
ATOM	262	CA	GLU	A	18	84.524	24.329	-5.659	1.00	0.28
C										

ATOM	263	C	GLU	A	18	85.146	23.968	-4.327	1.00	0.57
C										
ATOM	264	O	GLU	A	18	84.531	23.251	-3.553	1.00	-0.57
O										
ATOM	265	CB	GLU	A	18	85.103	23.386	-6.750	1.00	-0.16
C										
ATOM	266	CG	GLU	A	18	84.339	23.497	-8.097	1.00	-0.27
C										
ATOM	267	CD	GLU	A	18	84.930	22.532	-9.092	1.00	0.91
C										
ATOM	268	OE1	GLU	A	18	85.855	22.940	-9.846	1.00	-0.90
O										
ATOM	269	OE2	GLU	A	18	84.477	21.355	-9.125	1.00	-0.90
O										
ATOM	270	HA	GLU	A	18	83.435	24.170	-5.611	1.00	0.08
H										
ATOM	271	HB2	GLU	A	18	85.017	22.345	-6.403	1.00	0.08
H										
ATOM	272	HB3	GLU	A	18	86.172	23.607	-6.901	1.00	0.08
H										
ATOM	273	HG2	GLU	A	18	84.400	24.519	-8.501	1.00	0.08
H										
ATOM	274	HG3	GLU	A	18	83.274	23.256	-7.947	1.00	0.08
H										
ATOM	275	H	GLU	A	18	85.282	25.974	-6.790	1.00	0.37
H										
ATOM	276	N	ALA	A	19	86.374	24.452	-4.035	1.00	-0.73
N										
ATOM	277	CA	ALA	A	19	87.006	24.118	-2.759	1.00	0.28
C										
ATOM	278	C	ALA	A	19	86.112	24.475	-1.591	1.00	0.57
C										
ATOM	279	O	ALA	A	19	86.049	23.713	-0.639	1.00	-0.57
O										
ATOM	280	CB	ALA	A	19	88.350	24.870	-2.568	1.00	-0.24
C										
ATOM	281	HA	ALA	A	19	87.217	23.036	-2.752	1.00	0.08
H										
ATOM	282	HB1	ALA	A	19	89.057	24.595	-3.365	1.00	0.08
H										
ATOM	283	HB2	ALA	A	19	88.801	24.609	-1.598	1.00	0.08
H										
ATOM	284	HB3	ALA	A	19	88.189	25.958	-2.598	1.00	0.08
H										
ATOM	285	H	ALA	A	19	86.868	25.027	-4.687	1.00	0.37
H										
ATOM	286	N	ARG	A	20	85.432	25.643	-1.641	1.00	-0.73
N										
ATOM	287	CA	ARG	A	20	84.709	26.122	-0.464	1.00	0.28
C										
ATOM	288	C	ARG	A	20	83.418	25.361	-0.246	1.00	0.57
C										
ATOM	289	O	ARG	A	20	83.140	25.024	0.895	1.00	-0.57
O										

ATOM	290	CB	ARG	A	20	84.444	27.652	-0.539	1.00	-0.16
C										
ATOM	291	CG	ARG	A	20	85.771	28.458	-0.651	1.00	-0.16
C										
ATOM	292	CD	ARG	A	20	85.548	29.982	-0.454	1.00	0.17
C										
ATOM	293	NE	ARG	A	20	84.653	30.514	-1.483	1.00	-0.84
N										
ATOM	294	CZ	ARG	A	20	85.029	30.845	-2.702	1.00	1.20
C										
ATOM	295	NH1	ARG	A	20	86.260	30.712	-3.141	1.00	-0.97
N										
ATOM	296	NH2	ARG	A	20	84.130	31.332	-3.528	1.00	-0.97
N										
ATOM	297	HA	ARG	A	20	85.350	25.959	0.420	1.00	0.08
H										
ATOM	298	HB2	ARG	A	20	83.903	27.949	0.374	1.00	0.08
H										
ATOM	299	HB3	ARG	A	20	83.807	27.878	-1.407	1.00	0.08
H										
ATOM	300	HG2	ARG	A	20	86.225	28.283	-1.634	1.00	0.08
H										
ATOM	301	HG3	ARG	A	20	86.487	28.100	0.102	1.00	0.08
H										
ATOM	302	HD2	ARG	A	20	86.489	30.545	-0.394	1.00	0.08
H										
ATOM	303	HD3	ARG	A	20	85.083	30.124	0.531	1.00	0.08
H										
ATOM	304	HE	ARG	A	20	83.671	30.656	-1.209	1.00	0.45
H										
ATOM	305	HH12	ARG	A	20	87.010	30.334	-2.553	1.00	0.45
H										
ATOM	306	HH11	ARG	A	20	86.507	30.984	-4.104	1.00	0.45
H										
ATOM	307	HH22	ARG	A	20	83.149	31.455	-3.238	1.00	0.45
H										
ATOM	308	HH21	ARG	A	20	84.380	31.604	-4.491	1.00	0.45
H										
ATOM	309	H	ARG	A	20	85.435	26.205	-2.470	1.00	0.37
H										
ATOM	310	N	ILE	A	21	82.609	25.072	-1.293	1.00	-0.73
N										
ATOM	311	CA	ILE	A	21	81.361	24.337	-1.056	1.00	0.28
C										
ATOM	312	C	ILE	A	21	81.635	23.042	-0.320	1.00	0.57
C										
ATOM	313	O	ILE	A	21	80.813	22.650	0.493	1.00	-0.57
O										
ATOM	314	CB	ILE	A	21	80.477	24.045	-2.313	1.00	-0.08
C										
ATOM	315	CG1	ILE	A	21	81.196	23.106	-3.326	1.00	-0.16
C										
ATOM	316	CG2	ILE	A	21	79.989	25.368	-2.972	1.00	-0.24
C										

ATOM	317	CD1	ILE	A	21	80.337	22.708	-4.556	1.00	-0.24
C										
ATOM	318	HA	ILE	A	21	80.751	24.962	-0.383	1.00	0.08
H										
ATOM	319	HB	ILE	A	21	79.575	23.514	-1.960	1.00	0.08
H										
ATOM	320	HG12	ILE	A	21	81.485	22.171	-2.820	1.00	0.08
H										
ATOM	321	HG13	ILE	A	21	82.106	23.598	-3.686	1.00	0.08
H										
ATOM	322	HD11	ILE	A	21	79.371	22.293	-4.230	1.00	0.08
H										
ATOM	323	HD12	ILE	A	21	80.865	21.941	-5.146	1.00	0.08
H										
ATOM	324	HD13	ILE	A	21	80.156	23.569	-5.216	1.00	0.08
H										
ATOM	325	HG21	ILE	A	21	80.826	25.923	-3.419	1.00	0.08
H										
ATOM	326	HG22	ILE	A	21	79.505	26.003	-2.217	1.00	0.08
H										
ATOM	327	HG23	ILE	A	21	79.240	25.177	-3.754	1.00	0.08
H										
ATOM	328	H	ILE	A	21	82.851	25.364	-2.218	1.00	0.37
H										
ATOM	329	N	PHE	A	22	82.771	22.351	-0.581	1.00	-0.73
N										
ATOM	330	CA	PHE	A	22	83.002	21.069	0.082	1.00	0.28
C										
ATOM	331	C	PHE	A	22	83.195	21.261	1.568	1.00	0.57
C										
ATOM	332	O	PHE	A	22	82.651	20.476	2.330	1.00	-0.57
O										
ATOM	333	CB	PHE	A	22	84.234	20.317	-0.491	1.00	-0.02
C										
ATOM	334	CG	PHE	A	22	84.197	20.186	-2.024	1.00	-0.14
C										
ATOM	335	CD1	PHE	A	22	85.329	20.514	-2.780	1.00	-0.15
C										
ATOM	336	CD2	PHE	A	22	83.049	19.739	-2.689	1.00	-0.15
C										
ATOM	337	CE1	PHE	A	22	85.296	20.460	-4.176	1.00	-0.15
C										
ATOM	338	CE2	PHE	A	22	83.004	19.703	-4.085	1.00	-0.15
C										
ATOM	339	CZ	PHE	A	22	84.128	20.061	-4.832	1.00	-0.15
C										
ATOM	340	HA	PHE	A	22	82.106	20.443	-0.059	1.00	0.08
H										
ATOM	341	HB2	PHE	A	22	84.289	19.304	-0.060	1.00	0.08
H										
ATOM	342	HB3	PHE	A	22	85.137	20.866	-0.181	1.00	0.08
H										
ATOM	343	HD2	PHE	A	22	82.179	19.409	-2.133	1.00	0.15
H										

ATOM	344	HE2	PHE	A	22	82.094	19.394	-4.591	1.00	0.15
H										
ATOM	345	HZ	PHE	A	22	84.094	20.025	-5.916	1.00	0.15
H										
ATOM	346	HE1	PHE	A	22	86.179	20.727	-4.749	1.00	0.15
H										
ATOM	347	HD1	PHE	A	22	86.248	20.812	-2.287	1.00	0.15
H										
ATOM	348	H	PHE	A	22	83.455	22.691	-1.230	1.00	0.37
H										
ATOM	349	N	THR	A	23	83.962	22.289	2.004	1.00	-0.73
N										
ATOM	350	CA	THR	A	23	84.162	22.482	3.441	1.00	0.28
C										
ATOM	351	C	THR	A	23	82.816	22.510	4.124	1.00	0.57
C										
ATOM	352	O	THR	A	23	82.687	21.935	5.193	1.00	-0.57
O										
ATOM	353	CB	THR	A	23	84.933	23.770	3.845	1.00	0.20
C										
ATOM	354	OG1	THR	A	23	84.194	24.956	3.515	1.00	-0.68
O										
ATOM	355	CG2	THR	A	23	86.372	23.803	3.264	1.00	-0.24
C										
ATOM	356	HA	THR	A	23	84.730	21.611	3.812	1.00	0.08
H										
ATOM	357	HB	THR	A	23	85.023	23.770	4.945	1.00	0.08
H										
ATOM	358	HG1	THR	A	23	84.076	25.066	2.579	1.00	0.40
H										
ATOM	359	HG23	THR	A	23	86.369	23.938	2.174	1.00	0.08
H										
ATOM	360	HG21	THR	A	23	86.901	22.869	3.505	1.00	0.08
H										
ATOM	361	HG22	THR	A	23	86.931	24.638	3.710	1.00	0.08
H										
ATOM	362	H	THR	A	23	84.394	22.915	1.355	1.00	0.37
H										
ATOM	363	N	PHE	A	24	81.800	23.153	3.505	1.00	-0.73
N										
ATOM	364	CA	PHE	A	24	80.445	23.070	4.042	1.00	0.28
C										
ATOM	365	C	PHE	A	24	79.896	21.689	3.749	1.00	0.57
C										
ATOM	366	O	PHE	A	24	79.030	21.556	2.898	1.00	-0.57
O										
ATOM	367	CB	PHE	A	24	79.545	24.162	3.405	1.00	-0.02
C										
ATOM	368	CG	PHE	A	24	80.031	25.570	3.766	1.00	-0.14
C										
ATOM	369	CD1	PHE	A	24	80.542	26.437	2.796	1.00	-0.15
C										
ATOM	370	CD2	PHE	A	24	79.958	26.005	5.091	1.00	-0.15
C										

ATOM	371	CE1	PHE	A	24	81.009	27.702	3.158	1.00	-0.15
C										
ATOM	372	CE2	PHE	A	24	80.515	27.228	5.471	1.00	-0.15
C										
ATOM	373	CZ	PHE	A	24	81.064	28.073	4.505	1.00	-0.15
C										
ATOM	374	HA	PHE	A	24	80.454	23.218	5.134	1.00	0.08
H										
ATOM	375	HB2	PHE	A	24	78.515	24.042	3.769	1.00	0.08
H										
ATOM	376	HB3	PHE	A	24	79.540	24.038	2.312	1.00	0.08
H										
ATOM	377	HD2	PHE	A	24	79.470	25.383	5.828	1.00	0.15
H										
ATOM	378	HE2	PHE	A	24	80.518	27.517	6.516	1.00	0.15
H										
ATOM	379	HZ	PHE	A	24	81.526	29.010	4.800	1.00	0.15
H										
ATOM	380	HE1	PHE	A	24	81.328	28.391	2.388	1.00	0.15
H										
ATOM	381	HD1	PHE	A	24	80.578	26.133	1.758	1.00	0.15
H										
ATOM	382	H	PHE	A	24	81.944	23.634	2.638	1.00	0.37
H										
ATOM	383	N	GLY	A	25	80.385	20.639	4.448	1.00	-0.73
N										
ATOM	384	CA	GLY	A	25	79.863	19.296	4.217	1.00	0.20
C										
ATOM	385	C	GLY	A	25	78.609	19.140	5.041	1.00	0.57
C										
ATOM	386	O	GLY	A	25	77.525	19.218	4.484	1.00	-0.57
O										
ATOM	387	HA3	GLY	A	25	80.602	18.536	4.519	1.00	0.08
H										
ATOM	388	HA2	GLY	A	25	79.651	19.129	3.148	1.00	0.08
H										
ATOM	389	H	GLY	A	25	81.071	20.760	5.168	1.00	0.37
H										
ATOM	390	N	THR	A	26	78.751	18.934	6.373	1.00	-0.73
N										
ATOM	391	CA	THR	A	26	77.585	18.779	7.243	1.00	0.28
C										
ATOM	392	C	THR	A	26	77.245	20.146	7.793	1.00	0.57
C										
ATOM	393	O	THR	A	26	77.404	20.376	8.982	1.00	-0.57
O										
ATOM	394	CB	THR	A	26	77.915	17.723	8.337	1.00	0.20
C										
ATOM	395	OG1	THR	A	26	78.449	16.565	7.668	1.00	-0.68
O										
ATOM	396	CG2	THR	A	26	76.659	17.323	9.156	1.00	-0.24
C										
ATOM	397	HA	THR	A	26	76.720	18.394	6.677	1.00	0.08
H										

ATOM	398	HB	THR	A	26	78.687	18.132	9.012	1.00	0.08
H										
ATOM	399	HG1	THR	A	26	78.714	15.877	8.271	1.00	0.40
H										
ATOM	400	HG23	THR	A	26	75.912	16.849	8.502	1.00	0.08
H										
ATOM	401	HG21	THR	A	26	76.203	18.204	9.629	1.00	0.08
H										
ATOM	402	HG22	THR	A	26	76.933	16.608	9.948	1.00	0.08
H										
ATOM	403	H	THR	A	26	79.660	18.921	6.795	1.00	0.37
H										
ATOM	404	N	TRP	A	27	76.780	21.078	6.926	1.00	-0.73
N										
ATOM	405	CA	TRP	A	27	76.453	22.428	7.386	1.00	0.28
C										
ATOM	406	C	TRP	A	27	75.033	22.430	7.902	1.00	0.57
C										
ATOM	407	O	TRP	A	27	74.138	22.905	7.221	1.00	-0.57
O										
ATOM	408	CB	TRP	A	27	76.671	23.455	6.245	1.00	0.02
C										
ATOM	409	CG	TRP	A	27	76.440	24.864	6.728	1.00	-0.18
C										
ATOM	410	CD1	TRP	A	27	75.405	25.670	6.436	1.00	-0.30
C										
ATOM	411	CD2	TRP	A	27	77.354	25.639	7.644	1.00	0.00
C										
ATOM	412	NE1	TRP	A	27	75.560	26.817	7.046	1.00	0.03
N										
ATOM	413	CE2	TRP	A	27	76.695	26.846	7.772	1.00	-0.15
C										
ATOM	414	CE3	TRP	A	27	78.568	25.385	8.282	1.00	-0.15
C										
ATOM	415	CZ2	TRP	A	27	77.204	27.876	8.563	1.00	-0.15
C										
ATOM	416	CZ3	TRP	A	27	79.121	26.432	9.030	1.00	-0.15
C										
ATOM	417	CH2	TRP	A	27	78.444	27.653	9.176	1.00	-0.15
C										
ATOM	418	HA	TRP	A	27	77.128	22.730	8.204	1.00	0.08
H										
ATOM	419	HB2	TRP	A	27	76.008	23.230	5.395	1.00	0.08
H										
ATOM	420	HB3	TRP	A	27	77.713	23.371	5.903	1.00	0.08
H										
ATOM	421	HE1	TRP	A	27	74.893	27.602	6.981	1.00	0.27
H										
ATOM	422	HD1	TRP	A	27	74.565	25.409	5.792	1.00	0.15
H										
ATOM	423	HZ2	TRP	A	27	76.661	28.805	8.701	1.00	0.15
H										
ATOM	424	HH2	TRP	A	27	78.884	28.441	9.776	1.00	0.15
H										

ATOM	425	HZ3	TRP	A	27	80.089	26.295	9.504	1.00	0.15
H										
ATOM	426	HE3	TRP	A	27	79.063	24.424	8.196	1.00	0.15
H										
ATOM	427	H	TRP	A	27	76.623	20.851	5.963	1.00	0.37
H										
ATOM	428	N	ILE	A	28	74.817	21.903	9.130	1.00	-0.73
N										
ATOM	429	CA	ILE	A	28	73.476	21.911	9.718	1.00	0.28
C										
ATOM	430	C	ILE	A	28	72.901	23.309	9.817	1.00	0.57
C										
ATOM	431	O	ILE	A	28	71.687	23.434	9.871	1.00	-0.57
O										
ATOM	432	CB	ILE	A	28	73.427	21.295	11.156	1.00	-0.08
C										
ATOM	433	CG1	ILE	A	28	74.209	22.160	12.198	1.00	-0.16
C										
ATOM	434	CG2	ILE	A	28	73.902	19.813	11.157	1.00	-0.24
C										
ATOM	435	CD1	ILE	A	28	74.168	21.581	13.638	1.00	-0.24
C										
ATOM	436	HA	ILE	A	28	72.821	21.319	9.057	1.00	0.08
H										
ATOM	437	HB	ILE	A	28	72.366	21.286	11.463	1.00	0.08
H										
ATOM	438	HG12	ILE	A	28	73.766	23.167	12.249	1.00	0.08
H										
ATOM	439	HG13	ILE	A	28	75.262	22.272	11.898	1.00	0.08
H										
ATOM	440	HD11	ILE	A	28	73.127	21.396	13.947	1.00	0.08
H										
ATOM	441	HD12	ILE	A	28	74.618	22.294	14.346	1.00	0.08
H										
ATOM	442	HD13	ILE	A	28	74.734	20.640	13.705	1.00	0.08
H										
ATOM	443	HG21	ILE	A	28	74.998	19.753	11.119	1.00	0.08
H										
ATOM	444	HG22	ILE	A	28	73.488	19.269	10.293	1.00	0.08
H										
ATOM	445	HG23	ILE	A	28	73.564	19.294	12.067	1.00	0.08
H										
ATOM	446	H	ILE	A	28	75.579	21.514	9.647	1.00	0.37
H										
ATOM	447	N	TYR	A	29	73.740	24.367	9.892	1.00	-0.73
N										
ATOM	448	CA	TYR	A	29	73.234	25.672	10.314	1.00	0.28
C										
ATOM	449	C	TYR	A	29	72.303	26.298	9.303	1.00	0.57
C										
ATOM	450	O	TYR	A	29	72.271	25.874	8.159	1.00	-0.57
O										
ATOM	451	CB	TYR	A	29	74.396	26.615	10.723	1.00	-0.02
C										

ATOM	452	CG	TYR	A	29	75.209	25.908	11.817	1.00	-0.14
C										
ATOM	453	CD1	TYR	A	29	76.427	25.281	11.527	1.00	-0.15
C										
ATOM	454	CD2	TYR	A	29	74.716	25.869	13.126	1.00	-0.15
C										
ATOM	455	CE1	TYR	A	29	77.084	24.533	12.508	1.00	-0.15
C										
ATOM	456	CE2	TYR	A	29	75.385	25.141	14.113	1.00	-0.15
C										
ATOM	457	CZ	TYR	A	29	76.562	24.449	13.801	1.00	0.08
C										
ATOM	458	OH	TYR	A	29	77.224	23.674	14.757	1.00	-0.53
O										
ATOM	459	HA	TYR	A	29	72.634	25.498	11.224	1.00	0.08
H										
ATOM	460	HB3	TYR	A	29	75.011	26.824	9.839	1.00	0.08
H										
ATOM	461	HB2	TYR	A	29	74.027	27.578	11.108	1.00	0.08
H										
ATOM	462	HD2	TYR	A	29	73.806	26.402	13.380	1.00	0.15
H										
ATOM	463	HE2	TYR	A	29	74.981	25.118	15.120	1.00	0.15
H										
ATOM	464	HE1	TYR	A	29	78.003	24.012	12.264	1.00	0.15
H										
ATOM	465	HD1	TYR	A	29	76.866	25.365	10.540	1.00	0.15
H										
ATOM	466	HH	TYR	A	29	76.836	23.703	15.624	1.00	0.45
H										
ATOM	467	H	TYR	A	29	74.723	24.261	9.752	1.00	0.37
H										
ATOM	468	N	SER	A	30	71.520	27.305	9.754	1.00	-0.73
N										
ATOM	469	CA	SER	A	30	70.448	27.857	8.931	1.00	0.28
C										
ATOM	470	C	SER	A	30	70.938	28.472	7.642	1.00	0.57
C										
ATOM	471	O	SER	A	30	70.482	28.058	6.588	1.00	-0.57
O										
ATOM	472	CB	SER	A	30	69.722	28.974	9.723	1.00	0.12
C										
ATOM	473	OG	SER	A	30	70.721	29.921	10.141	1.00	-0.68
O										
ATOM	474	HA	SER	A	30	69.723	27.054	8.709	1.00	0.08
H										
ATOM	475	HB2	SER	A	30	69.227	28.535	10.606	1.00	0.08
H										
ATOM	476	HB3	SER	A	30	68.957	29.454	9.089	1.00	0.08
H										
ATOM	477	HG	SER	A	30	70.373	30.630	10.670	1.00	0.40
H										
ATOM	478	H	SER	A	30	71.610	27.643	10.693	1.00	0.37
H										

ATOM	479	N	VAL	A	31	71.833	29.485	7.709	1.00	-0.73
N										
ATOM	480	CA	VAL	A	31	72.143	30.253	6.503	1.00	0.28
C										
ATOM	481	C	VAL	A	31	72.612	29.333	5.399	1.00	0.57
C										
ATOM	482	O	VAL	A	31	73.172	28.288	5.692	1.00	-0.57
O										
ATOM	483	CB	VAL	A	31	73.124	31.451	6.681	1.00	-0.08
C										
ATOM	484	CG1	VAL	A	31	72.502	32.549	7.586	1.00	-0.24
C										
ATOM	485	CG2	VAL	A	31	74.507	30.989	7.214	1.00	-0.24
C										
ATOM	486	HA	VAL	A	31	71.180	30.682	6.175	1.00	0.08
H										
ATOM	487	HB	VAL	A	31	73.291	31.910	5.690	1.00	0.08
H										
ATOM	488	HG11	VAL	A	31	72.285	32.151	8.587	1.00	0.08
H										
ATOM	489	HG12	VAL	A	31	71.562	32.923	7.151	1.00	0.08
H										
ATOM	490	HG13	VAL	A	31	73.191	33.400	7.684	1.00	0.08
H										
ATOM	491	HG21	VAL	A	31	74.435	30.565	8.225	1.00	0.08
H										
ATOM	492	HG22	VAL	A	31	75.210	31.836	7.243	1.00	0.08
H										
ATOM	493	HG23	VAL	A	31	74.915	30.223	6.541	1.00	0.08
H										
ATOM	494	H	VAL	A	31	72.212	29.763	8.592	1.00	0.37
H										
ATOM	495	N	ASN	A	32	72.362	29.706	4.123	1.00	-0.73
N										
ATOM	496	CA	ASN	A	32	72.637	28.783	3.027	1.00	0.28
C										
ATOM	497	C	ASN	A	32	74.126	28.609	2.835	1.00	0.57
C										
ATOM	498	O	ASN	A	32	74.858	29.565	3.038	1.00	-0.57
O										
ATOM	499	CB	ASN	A	32	71.994	29.278	1.706	1.00	-0.10
C										
ATOM	500	CG	ASN	A	32	72.321	28.357	0.557	1.00	0.57
C										
ATOM	501	OD1	ASN	A	32	73.096	28.746	-0.301	1.00	-0.57
O										
ATOM	502	ND2	ASN	A	32	71.755	27.131	0.515	1.00	-0.80
N										
ATOM	503	HA	ASN	A	32	72.173	27.817	3.288	1.00	0.08
H										
ATOM	504	HB2	ASN	A	32	72.373	30.288	1.491	1.00	0.08
H										
ATOM	505	HB3	ASN	A	32	70.901	29.346	1.821	1.00	0.08
H										

ATOM	506	HD22	ASN	A	32	71.117	26.828	1.223	1.00	0.37
H										
ATOM	507	HD21	ASN	A	32	71.975	26.510	-0.239	1.00	0.37
H										
ATOM	508	H	ASN	A	32	71.950	30.595	3.911	1.00	0.37
H										
ATOM	509	N	LYS	A	33	74.581	27.393	2.446	1.00	-0.73
N										
ATOM	510	CA	LYS	A	33	76.010	27.162	2.247	1.00	0.28
C										
ATOM	511	C	LYS	A	33	76.488	27.707	0.923	1.00	0.57
C										
ATOM	512	O	LYS	A	33	77.598	28.210	0.879	1.00	-0.57
O										
ATOM	513	CB	LYS	A	33	76.428	25.672	2.379	1.00	-0.16
C										
ATOM	514	CG	LYS	A	33	75.870	24.706	1.294	1.00	-0.16
C										
ATOM	515	CD	LYS	A	33	76.361	23.255	1.556	1.00	-0.16
C										
ATOM	516	CE	LYS	A	33	75.765	22.229	0.556	1.00	0.34
C										
ATOM	517	NZ	LYS	A	33	76.244	20.858	0.852	1.00	-0.85
N										
ATOM	518	HA	LYS	A	33	76.549	27.694	3.050	1.00	0.08
H										
ATOM	519	HB2	LYS	A	33	76.133	25.316	3.380	1.00	0.08
H										
ATOM	520	HB3	LYS	A	33	77.526	25.651	2.307	1.00	0.08
H										
ATOM	521	HG2	LYS	A	33	76.213	25.024	0.297	1.00	0.08
H										
ATOM	522	HG3	LYS	A	33	74.770	24.706	1.299	1.00	0.08
H										
ATOM	523	HD2	LYS	A	33	76.090	22.951	2.581	1.00	0.08
H										
ATOM	524	HD3	LYS	A	33	77.456	23.222	1.463	1.00	0.08
H										
ATOM	525	HE2	LYS	A	33	76.062	22.506	-0.469	1.00	0.08
H										
ATOM	526	HE3	LYS	A	33	74.664	22.255	0.616	1.00	0.08
H										
ATOM	527	HZ1	LYS	A	33	75.832	20.139	0.158	1.00	0.45
H										
ATOM	528	HZ2	LYS	A	33	75.960	20.536	1.845	1.00	0.45
H										
ATOM	529	HZ3	LYS	A	33	77.322	20.783	0.784	1.00	0.45
H										
ATOM	530	H	LYS	A	33	73.946	26.639	2.280	1.00	0.37
H										
ATOM	531	N	GLU	A	34	75.694	27.622	-0.169	1.00	-0.73
N										
ATOM	532	CA	GLU	A	34	76.167	28.173	-1.436	1.00	0.28
C										

ATOM	533	C	GLU	A	34	76.345	29.664	-1.265	1.00	0.57
C										
ATOM	534	O	GLU	A	34	77.278	30.194	-1.843	1.00	-0.57
O										
ATOM	535	CB	GLU	A	34	75.255	27.898	-2.665	1.00	-0.16
C										
ATOM	536	CG	GLU	A	34	75.224	26.400	-3.080	1.00	-0.27
C										
ATOM	537	CD	GLU	A	34	74.586	25.486	-2.066	1.00	0.91
C										
ATOM	538	OE1	GLU	A	34	73.747	25.966	-1.256	1.00	-0.90
O										
ATOM	539	OE2	GLU	A	34	74.915	24.270	-2.073	1.00	-0.90
O										
ATOM	540	HA	GLU	A	34	77.151	27.726	-1.657	1.00	0.08
H										
ATOM	541	HB2	GLU	A	34	75.657	28.465	-3.522	1.00	0.08
H										
ATOM	542	HB3	GLU	A	34	74.234	28.263	-2.479	1.00	0.08
H										
ATOM	543	HG2	GLU	A	34	76.252	26.057	-3.284	1.00	0.08
H										
ATOM	544	HG3	GLU	A	34	74.644	26.299	-4.011	1.00	0.08
H										
ATOM	545	H	GLU	A	34	74.778	27.227	-0.120	1.00	0.37
H										
ATOM	546	N	GLN	A	35	75.492	30.373	-0.491	1.00	-0.73
N										
ATOM	547	CA	GLN	A	35	75.715	31.807	-0.299	1.00	0.28
C										
ATOM	548	C	GLN	A	35	77.030	32.011	0.419	1.00	0.57
C										
ATOM	549	O	GLN	A	35	77.820	32.829	-0.025	1.00	-0.57
O										
ATOM	550	CB	GLN	A	35	74.584	32.501	0.507	1.00	-0.16
C										
ATOM	551	CG	GLN	A	35	73.247	32.549	-0.283	1.00	-0.10
C										
ATOM	552	CD	GLN	A	35	72.122	33.169	0.512	1.00	0.57
C										
ATOM	553	OE1	GLN	A	35	72.324	33.572	1.647	1.00	-0.57
O										
ATOM	554	NE2	GLN	A	35	70.907	33.256	-0.074	1.00	-0.80
N										
ATOM	555	HA	GLN	A	35	75.770	32.297	-1.286	1.00	0.08
H										
ATOM	556	HB2	GLN	A	35	74.893	33.538	0.718	1.00	0.08
H										
ATOM	557	HB3	GLN	A	35	74.441	31.978	1.466	1.00	0.08
H										
ATOM	558	HG2	GLN	A	35	72.940	31.533	-0.569	1.00	0.08
H										
ATOM	559	HG3	GLN	A	35	73.387	33.138	-1.203	1.00	0.08
H										

ATOM	560	HE22	GLN	A	35	70.758	32.919	-1.005	1.00	0.37
H										
ATOM	561	HE21	GLN	A	35	70.140	33.661	0.426	1.00	0.37
H										
ATOM	562	H	GLN	A	35	74.728	29.931	-0.019	1.00	0.37
H										
ATOM	563	N	LEU	A	36	77.284	31.278	1.529	1.00	-0.73
N										
ATOM	564	CA	LEU	A	36	78.555	31.441	2.238	1.00	0.28
C										
ATOM	565	C	LEU	A	36	79.708	31.214	1.283	1.00	0.57
C										
ATOM	566	O	LEU	A	36	80.589	32.055	1.193	1.00	-0.57
O										
ATOM	567	CB	LEU	A	36	78.689	30.447	3.430	1.00	-0.16
C										
ATOM	568	CG	LEU	A	36	77.869	30.838	4.696	1.00	-0.08
C										
ATOM	569	CD1	LEU	A	36	77.765	29.621	5.657	1.00	-0.24
C										
ATOM	570	CD2	LEU	A	36	78.527	32.014	5.474	1.00	-0.24
C										
ATOM	571	HA	LEU	A	36	78.617	32.478	2.595	1.00	0.08
H										
ATOM	572	HB2	LEU	A	36	79.741	30.372	3.728	1.00	0.08
H										
ATOM	573	HB3	LEU	A	36	78.387	29.447	3.084	1.00	0.08
H										
ATOM	574	HG	LEU	A	36	76.848	31.127	4.396	1.00	0.08
H										
ATOM	575	HD21	LEU	A	36	79.517	31.713	5.844	1.00	0.08
H										
ATOM	576	HD22	LEU	A	36	77.899	32.283	6.336	1.00	0.08
H										
ATOM	577	HD23	LEU	A	36	78.656	32.913	4.861	1.00	0.08
H										
ATOM	578	HD11	LEU	A	36	78.767	29.246	5.902	1.00	0.08
H										
ATOM	579	HD12	LEU	A	36	77.183	28.803	5.209	1.00	0.08
H										
ATOM	580	HD13	LEU	A	36	77.281	29.918	6.596	1.00	0.08
H										
ATOM	581	H	LEU	A	36	76.611	30.622	1.874	1.00	0.37
H										
ATOM	582	N	ALA	A	37	79.714	30.073	0.561	1.00	-0.73
N										
ATOM	583	CA	ALA	A	37	80.817	29.781	-0.352	1.00	0.28
C										
ATOM	584	C	ALA	A	37	80.925	30.843	-1.421	1.00	0.57
C										
ATOM	585	O	ALA	A	37	82.004	31.381	-1.608	1.00	-0.57
O										
ATOM	586	CB	ALA	A	37	80.643	28.378	-0.984	1.00	-0.24
C										

ATOM	587	HA	ALA	A	37	81.756	29.767	0.220	1.00	0.08
H										
ATOM	588	HB1	ALA	A	37	80.745	27.600	-0.214	1.00	0.08
H										
ATOM	589	HB2	ALA	A	37	81.397	28.199	-1.764	1.00	0.08
H										
ATOM	590	HB3	ALA	A	37	79.641	28.299	-1.423	1.00	0.08
H										
ATOM	591	H	ALA	A	37	78.967	29.414	0.649	1.00	0.37
H										
ATOM	592	N	ARG	A	38	79.827	31.175	-2.134	1.00	-0.73
N										
ATOM	593	CA	ARG	A	38	79.904	32.219	-3.156	1.00	0.28
C										
ATOM	594	C	ARG	A	38	80.419	33.506	-2.547	1.00	0.57
C										
ATOM	595	O	ARG	A	38	81.101	34.234	-3.251	1.00	-0.57
O										
ATOM	596	CB	ARG	A	38	78.541	32.474	-3.858	1.00	-0.16
C										
ATOM	597	CG	ARG	A	38	78.152	31.305	-4.808	1.00	-0.16
C										
ATOM	598	CD	ARG	A	38	76.745	31.495	-5.439	1.00	0.17
C										
ATOM	599	NE	ARG	A	38	75.673	31.306	-4.459	1.00	-0.84
N										
ATOM	600	CZ	ARG	A	38	74.393	31.413	-4.746	1.00	1.20
C										
ATOM	601	NH1	ARG	A	38	73.955	31.722	-5.945	1.00	-0.97
N										
ATOM	602	NH2	ARG	A	38	73.514	31.199	-3.793	1.00	-0.97
N										
ATOM	603	HA	ARG	A	38	80.629	31.892	-3.921	1.00	0.08
H										
ATOM	604	HB2	ARG	A	38	78.620	33.383	-4.474	1.00	0.08
H										
ATOM	605	HB3	ARG	A	38	77.771	32.652	-3.091	1.00	0.08
H										
ATOM	606	HG2	ARG	A	38	78.158	30.349	-4.268	1.00	0.08
H										
ATOM	607	HG3	ARG	A	38	78.903	31.239	-5.614	1.00	0.08
H										
ATOM	608	HD2	ARG	A	38	76.626	30.738	-6.232	1.00	0.08
H										
ATOM	609	HD3	ARG	A	38	76.698	32.502	-5.884	1.00	0.08
H										
ATOM	610	HE	ARG	A	38	75.950	31.064	-3.498	1.00	0.45
H										
ATOM	611	HH12	ARG	A	38	74.597	31.897	-6.727	1.00	0.45
H										
ATOM	612	HH11	ARG	A	38	72.944	31.797	-6.134	1.00	0.45
H										
ATOM	613	HH22	ARG	A	38	73.813	30.943	-2.840	1.00	0.45
H										

ATOM	614	HH21	ARG	A	38	72.502	31.274	-3.973	1.00	0.45
H										
ATOM	615	H	ARG	A	38	78.953	30.729	-1.951	1.00	0.37
H										
ATOM	616	N	ALA	A	39	80.142	33.798	-1.252	1.00	-0.73
N										
ATOM	617	CA	ALA	A	39	80.715	34.984	-0.610	1.00	0.28
C										
ATOM	618	C	ALA	A	39	82.068	34.698	0.013	1.00	0.57
C										
ATOM	619	O	ALA	A	39	82.368	35.253	1.058	1.00	-0.57
O										
ATOM	620	CB	ALA	A	39	79.705	35.571	0.413	1.00	-0.24
C										
ATOM	621	HA	ALA	A	39	80.894	35.778	-1.349	1.00	0.08
H										
ATOM	622	HB1	ALA	A	39	78.742	35.770	-0.080	1.00	0.08
H										
ATOM	623	HB2	ALA	A	39	80.076	36.512	0.851	1.00	0.08
H										
ATOM	624	HB3	ALA	A	39	79.538	34.845	1.219	1.00	0.08
H										
ATOM	625	H	ALA	A	39	79.582	33.189	-0.691	1.00	0.37
H										
ATOM	626	N	GLY	A	40	82.920	33.850	-0.614	1.00	-0.73
N										
ATOM	627	CA	GLY	A	40	84.291	33.680	-0.137	1.00	0.20
C										
ATOM	628	C	GLY	A	40	84.457	32.926	1.163	1.00	0.57
C										
ATOM	629	O	GLY	A	40	85.604	32.678	1.501	1.00	-0.57
O										
ATOM	630	HA3	GLY	A	40	84.747	34.675	-0.014	1.00	0.08
H										
ATOM	631	HA2	GLY	A	40	84.878	33.155	-0.907	1.00	0.08
H										
ATOM	632	H	GLY	A	40	82.663	33.360	-1.446	1.00	0.37
H										
ATOM	633	N	PHE	A	41	83.394	32.555	1.919	1.00	-0.73
N										
ATOM	634	CA	PHE	A	41	83.609	31.928	3.225	1.00	0.28
C										
ATOM	635	C	PHE	A	41	83.758	30.432	3.108	1.00	0.57
C										
ATOM	636	O	PHE	A	41	83.248	29.876	2.152	1.00	-0.57
O										
ATOM	637	CB	PHE	A	41	82.478	32.257	4.231	1.00	-0.02
C										
ATOM	638	CG	PHE	A	41	82.389	33.767	4.489	1.00	-0.14
C										
ATOM	639	CD1	PHE	A	41	83.325	34.397	5.317	1.00	-0.15
C										
ATOM	640	CD2	PHE	A	41	81.369	34.526	3.907	1.00	-0.15
C										

ATOM	641	CE1	PHE	A	41	83.226	35.766	5.582	1.00	-0.15
C										
ATOM	642	CE2	PHE	A	41	81.266	35.894	4.169	1.00	-0.15
C										
ATOM	643	CZ	PHE	A	41	82.196	36.516	5.008	1.00	-0.15
C										
ATOM	644	HA	PHE	A	41	84.523	32.325	3.677	1.00	0.08
H										
ATOM	645	HB2	PHE	A	41	82.665	31.753	5.189	1.00	0.08
H										
ATOM	646	HB3	PHE	A	41	81.528	31.877	3.835	1.00	0.08
H										
ATOM	647	HD2	PHE	A	41	80.651	34.051	3.249	1.00	0.15
H										
ATOM	648	HE2	PHE	A	41	80.463	36.471	3.721	1.00	0.15
H										
ATOM	649	HZ	PHE	A	41	82.118	37.578	5.214	1.00	0.15
H										
ATOM	650	HE1	PHE	A	41	83.948	36.246	6.235	1.00	0.15
H										
ATOM	651	HD1	PHE	A	41	84.132	33.825	5.761	1.00	0.15
H										
ATOM	652	H	PHE	A	41	82.452	32.686	1.611	1.00	0.37
H										
ATOM	653	N	TYR	A	42	84.442	29.772	4.074	1.00	-0.73
N										
ATOM	654	CA	TYR	A	42	84.575	28.315	4.064	1.00	0.28
C										
ATOM	655	C	TYR	A	42	84.512	27.816	5.495	1.00	0.57
C										
ATOM	656	O	TYR	A	42	85.018	28.515	6.358	1.00	-0.57
O										
ATOM	657	CB	TYR	A	42	85.896	27.927	3.356	1.00	-0.02
C										
ATOM	658	CG	TYR	A	42	87.123	28.391	4.150	1.00	-0.14
C										
ATOM	659	CD1	TYR	A	42	87.714	27.542	5.092	1.00	-0.15
C										
ATOM	660	CD2	TYR	A	42	87.670	29.662	3.941	1.00	-0.15
C										
ATOM	661	CE1	TYR	A	42	88.830	27.954	5.824	1.00	-0.15
C										
ATOM	662	CE2	TYR	A	42	88.745	30.098	4.720	1.00	-0.15
C										
ATOM	663	CZ	TYR	A	42	89.332	29.250	5.663	1.00	0.08
C										
ATOM	664	OH	TYR	A	42	90.411	29.714	6.423	1.00	-0.53
O										
ATOM	665	HA	TYR	A	42	83.745	27.862	3.500	1.00	0.08
H										
ATOM	666	HB3	TYR	A	42	85.946	26.840	3.203	1.00	0.08
H										
ATOM	667	HB2	TYR	A	42	85.904	28.399	2.365	1.00	0.08
H										

ATOM	668	HD2	TYR	A	42	87.259	30.318	3.179	1.00	0.15
H										
ATOM	669	HE2	TYR	A	42	89.131	31.102	4.601	1.00	0.15
H										
ATOM	670	HE1	TYR	A	42	89.301	27.262	6.514	1.00	0.15
H										
ATOM	671	HD1	TYR	A	42	87.308	26.552	5.259	1.00	0.15
H										
ATOM	672	HH	TYR	A	42	90.662	29.136	7.134	1.00	0.45
H										
ATOM	673	H	TYR	A	42	84.896	30.273	4.807	1.00	0.37
H										
ATOM	674	N	ALA	A	43	83.890	26.647	5.785	1.00	-0.73
N										
ATOM	675	CA	ALA	A	43	83.721	26.236	7.181	1.00	0.28
C										
ATOM	676	C	ALA	A	43	85.036	25.833	7.808	1.00	0.57
C										
ATOM	677	O	ALA	A	43	85.907	25.394	7.076	1.00	-0.57
O										
ATOM	678	CB	ALA	A	43	82.756	25.030	7.333	1.00	-0.24
C										
ATOM	679	HA	ALA	A	43	83.283	27.084	7.732	1.00	0.08
H										
ATOM	680	HB1	ALA	A	43	81.788	25.250	6.869	1.00	0.08
H										
ATOM	681	HB2	ALA	A	43	82.577	24.803	8.394	1.00	0.08
H										
ATOM	682	HB3	ALA	A	43	83.180	24.140	6.845	1.00	0.08
H										
ATOM	683	H	ALA	A	43	83.507	26.066	5.065	1.00	0.37
H										
ATOM	684	N	LEU	A	44	85.179	25.954	9.152	1.00	-0.73
N										
ATOM	685	CA	LEU	A	44	86.381	25.468	9.833	1.00	0.28
C										
ATOM	686	C	LEU	A	44	86.168	24.123	10.497	1.00	0.57
C										
ATOM	687	O	LEU	A	44	87.138	23.593	11.017	1.00	-0.57
O										
ATOM	688	CB	LEU	A	44	86.825	26.472	10.936	1.00	-0.16
C										
ATOM	689	CG	LEU	A	44	87.016	27.932	10.429	1.00	-0.08
C										
ATOM	690	CD1	LEU	A	44	87.570	28.819	11.580	1.00	-0.24
C										
ATOM	691	CD2	LEU	A	44	87.967	27.988	9.202	1.00	-0.24
C										
ATOM	692	HA	LEU	A	44	87.218	25.332	9.129	1.00	0.08
H										
ATOM	693	HB2	LEU	A	44	87.774	26.121	11.373	1.00	0.08
H										
ATOM	694	HB3	LEU	A	44	86.065	26.473	11.734	1.00	0.08
H										

ATOM	695	HG	LEU	A	44	86.037	28.344	10.132	1.00	0.08
H										
ATOM	696	HD21	LEU	A	44	88.890	27.423	9.399	1.00	0.08
H										
ATOM	697	HD22	LEU	A	44	88.246	29.024	8.975	1.00	0.08
H										
ATOM	698	HD23	LEU	A	44	87.471	27.573	8.311	1.00	0.08
H										
ATOM	699	HD11	LEU	A	44	88.581	28.490	11.866	1.00	0.08
H										
ATOM	700	HD12	LEU	A	44	86.920	28.758	12.466	1.00	0.08
H										
ATOM	701	HD13	LEU	A	44	87.623	29.872	11.265	1.00	0.08
H										
ATOM	702	H	LEU	A	44	84.444	26.335	9.718	1.00	0.37
H										
ATOM	703	N	GLY	A	45	84.946	23.542	10.527	1.00	-0.73
N										
ATOM	704	CA	GLY	A	45	84.742	22.327	11.311	1.00	0.20
C										
ATOM	705	C	GLY	A	45	84.822	22.665	12.782	1.00	0.57
C										
ATOM	706	O	GLY	A	45	85.419	21.906	13.529	1.00	-0.57
O										
ATOM	707	HA3	GLY	A	45	85.497	21.571	11.040	1.00	0.08
H										
ATOM	708	HA2	GLY	A	45	83.748	21.893	11.116	1.00	0.08
H										
ATOM	709	H	GLY	A	45	84.148	23.943	10.079	1.00	0.37
H										
ATOM	710	N	GLU	A	46	84.217	23.800	13.205	1.00	-0.73
N										
ATOM	711	CA	GLU	A	46	84.249	24.201	14.612	1.00	0.28
C										
ATOM	712	C	GLU	A	46	82.905	24.815	14.935	1.00	0.57
C										
ATOM	713	O	GLU	A	46	82.823	26.011	15.169	1.00	-0.57
O										
ATOM	714	CB	GLU	A	46	85.392	25.223	14.846	1.00	-0.16
C										
ATOM	715	CG	GLU	A	46	86.802	24.636	14.588	1.00	-0.27
C										
ATOM	716	CD	GLU	A	46	87.836	25.691	14.893	1.00	0.91
C										
ATOM	717	OE1	GLU	A	46	88.459	25.625	15.988	1.00	-0.90
O										
ATOM	718	OE2	GLU	A	46	88.030	26.599	14.041	1.00	-0.90
O										
ATOM	719	HA	GLU	A	46	84.389	23.341	15.287	1.00	0.08
H										
ATOM	720	HB2	GLU	A	46	85.345	25.584	15.887	1.00	0.08
H										
ATOM	721	HB3	GLU	A	46	85.242	26.075	14.168	1.00	0.08
H										

ATOM	722	HG2	GLU	A	46	86.904	24.330	13.537	1.00	0.08
H										
ATOM	723	HG3	GLU	A	46	86.963	23.751	15.224	1.00	0.08
H										
ATOM	724	H	GLU	A	46	83.750	24.411	12.562	1.00	0.37
H										
ATOM	725	N	GLY	A	47	81.821	24.007	14.934	1.00	-0.73
N										
ATOM	726	CA	GLY	A	47	80.497	24.585	15.135	1.00	0.20
C										
ATOM	727	C	GLY	A	47	80.159	25.379	13.897	1.00	0.57
C										
ATOM	728	O	GLY	A	47	80.463	24.887	12.822	1.00	-0.57
O										
ATOM	729	HA3	GLY	A	47	80.493	25.209	16.043	1.00	0.08
H										
ATOM	730	HA2	GLY	A	47	79.744	23.793	15.266	1.00	0.08
H										
ATOM	731	H	GLY	A	47	81.900	23.027	14.736	1.00	0.37
H										
ATOM	732	N	ASP	A	48	79.549	26.585	14.011	1.00	-0.73
N										
ATOM	733	CA	ASP	A	48	79.233	27.376	12.820	1.00	0.28
C										
ATOM	734	C	ASP	A	48	80.284	28.435	12.572	1.00	0.57
C										
ATOM	735	O	ASP	A	48	79.927	29.486	12.061	1.00	-0.57
O										
ATOM	736	CB	ASP	A	48	77.819	28.007	12.957	1.00	-0.27
C										
ATOM	737	CG	ASP	A	48	77.780	29.136	13.952	1.00	0.91
C										
ATOM	738	OD1	ASP	A	48	78.536	29.079	14.959	1.00	-0.90
O										
ATOM	739	OD2	ASP	A	48	76.991	30.095	13.733	1.00	-0.90
O										
ATOM	740	HA	ASP	A	48	79.198	26.734	11.926	1.00	0.08
H										
ATOM	741	HB2	ASP	A	48	77.114	27.246	13.312	1.00	0.08
H										
ATOM	742	HB3	ASP	A	48	77.468	28.375	11.978	1.00	0.08
H										
ATOM	743	H	ASP	A	48	79.329	26.978	14.906	1.00	0.37
H										
ATOM	744	N	LYS	A	49	81.578	28.206	12.908	1.00	-0.73
N										
ATOM	745	CA	LYS	A	49	82.584	29.221	12.604	1.00	0.28
C										
ATOM	746	C	LYS	A	49	82.906	29.139	11.133	1.00	0.57
C										
ATOM	747	O	LYS	A	49	82.858	28.046	10.589	1.00	-0.57
O										
ATOM	748	CB	LYS	A	49	83.939	29.074	13.350	1.00	-0.16
C										

ATOM	749	CG	LYS	A	49	83.823	29.277	14.884	1.00	-0.16
C										
ATOM	750	CD	LYS	A	49	85.210	29.170	15.574	1.00	-0.16
C										
ATOM	751	CE	LYS	A	49	85.121	29.517	17.085	1.00	0.34
C										
ATOM	752	NZ	LYS	A	49	86.438	29.383	17.749	1.00	-0.85
N										
ATOM	753	HA	LYS	A	49	82.170	30.211	12.848	1.00	0.08
H										
ATOM	754	HB2	LYS	A	49	84.637	29.833	12.958	1.00	0.08
H										
ATOM	755	HB3	LYS	A	49	84.356	28.080	13.132	1.00	0.08
H										
ATOM	756	HG2	LYS	A	49	83.125	28.542	15.313	1.00	0.08
H										
ATOM	757	HG3	LYS	A	49	83.423	30.278	15.086	1.00	0.08
H										
ATOM	758	HD2	LYS	A	49	85.918	29.862	15.094	1.00	0.08
H										
ATOM	759	HD3	LYS	A	49	85.605	28.150	15.457	1.00	0.08
H										
ATOM	760	HE2	LYS	A	49	84.394	28.843	17.569	1.00	0.08
H										
ATOM	761	HE3	LYS	A	49	84.758	30.553	17.200	1.00	0.08
H										
ATOM	762	HZ1	LYS	A	49	86.375	29.632	18.800	1.00	0.45
H										
ATOM	763	HZ2	LYS	A	49	87.178	30.040	17.314	1.00	0.45
H										
ATOM	764	HZ3	LYS	A	49	86.819	28.373	17.683	1.00	0.45
H										
ATOM	765	H	LYS	A	49	81.884	27.341	13.306	1.00	0.37
H										
ATOM	766	N	VAL	A	50	83.251	30.281	10.494	1.00	-0.73
N										
ATOM	767	CA	VAL	A	50	83.656	30.265	9.090	1.00	0.28
C										
ATOM	768	C	VAL	A	50	84.738	31.300	8.914	1.00	0.57
C										
ATOM	769	O	VAL	A	50	84.945	32.073	9.836	1.00	-0.57
O										
ATOM	770	CB	VAL	A	50	82.459	30.572	8.144	1.00	-0.08
C										
ATOM	771	CG1	VAL	A	50	81.215	29.724	8.520	1.00	-0.24
C										
ATOM	772	CG2	VAL	A	50	82.096	32.083	8.160	1.00	-0.24
C										
ATOM	773	HA	VAL	A	50	84.089	29.286	8.830	1.00	0.08
H										
ATOM	774	HB	VAL	A	50	82.753	30.297	7.117	1.00	0.08
H										
ATOM	775	HG11	VAL	A	50	80.860	29.992	9.525	1.00	0.08
H										

ATOM	776	HG12	VAL	A	50	81.458	28.653	8.508	1.00	0.08
H										
ATOM	777	HG13	VAL	A	50	80.396	29.902	7.806	1.00	0.08
H										
ATOM	778	HG21	VAL	A	50	81.840	32.406	9.179	1.00	0.08
H										
ATOM	779	HG22	VAL	A	50	81.234	32.258	7.504	1.00	0.08
H										
ATOM	780	HG23	VAL	A	50	82.921	32.710	7.792	1.00	0.08
H										
ATOM	781	H	VAL	A	50	83.245	31.166	10.968	1.00	0.37
H										
ATOM	782	N	LYS	A	51	85.424	31.349	7.750	1.00	-0.73
N										
ATOM	783	CA	LYS	A	51	86.457	32.363	7.554	1.00	0.28
C										
ATOM	784	C	LYS	A	51	86.650	32.659	6.084	1.00	0.57
C										
ATOM	785	O	LYS	A	51	86.418	31.748	5.308	1.00	-0.57
O										
ATOM	786	CB	LYS	A	51	87.733	31.813	8.238	1.00	-0.16
C										
ATOM	787	CG	LYS	A	51	88.819	32.885	8.491	1.00	-0.16
C										
ATOM	788	CD	LYS	A	51	90.000	32.281	9.302	1.00	-0.16
C										
ATOM	789	CE	LYS	A	51	91.099	33.314	9.678	1.00	0.34
C										
ATOM	790	NZ	LYS	A	51	90.638	34.345	10.639	1.00	-0.85
N										
ATOM	791	HA	LYS	A	51	86.125	33.294	8.031	1.00	0.08
H										
ATOM	792	HB2	LYS	A	51	88.138	31.001	7.615	1.00	0.08
H										
ATOM	793	HB3	LYS	A	51	87.445	31.397	9.216	1.00	0.08
H										
ATOM	794	HG2	LYS	A	51	88.373	33.726	9.039	1.00	0.08
H										
ATOM	795	HG3	LYS	A	51	89.165	33.246	7.515	1.00	0.08
H										
ATOM	796	HD2	LYS	A	51	90.457	31.478	8.699	1.00	0.08
H										
ATOM	797	HD3	LYS	A	51	89.622	31.829	10.233	1.00	0.08
H										
ATOM	798	HE2	LYS	A	51	91.483	33.793	8.764	1.00	0.08
H										
ATOM	799	HE3	LYS	A	51	91.937	32.762	10.139	1.00	0.08
H										
ATOM	800	HZ1	LYS	A	51	91.463	34.965	10.967	1.00	0.45
H										
ATOM	801	HZ2	LYS	A	51	90.201	33.907	11.526	1.00	0.45
H										
ATOM	802	HZ3	LYS	A	51	89.916	35.032	10.223	1.00	0.45
H										

ATOM	803	H	LYS	A	51	85.277	30.664	7.039	1.00	0.37
H										
ATOM	804	N	CYS	A	52	87.037	33.894	5.673	1.00	-0.73
N										
ATOM	805	CA	CYS	A	52	87.147	34.189	4.243	1.00	0.28
C										
ATOM	806	C	CYS	A	52	88.482	33.727	3.720	1.00	0.57
C										
ATOM	807	O	CYS	A	52	89.457	33.819	4.449	1.00	-0.57
O										
ATOM	808	CB	CYS	A	52	86.929	35.678	3.876	1.00	-0.11
C										
ATOM	809	SG	CYS	A	52	86.688	35.874	2.077	1.00	-1.05
S										
ATOM	810	HA	CYS	A	52	86.343	33.658	3.725	1.00	0.08
H										
ATOM	811	HB2	CYS	A	52	87.801	36.278	4.164	1.00	0.08
H										
ATOM	812	HB3	CYS	A	52	86.033	36.051	4.393	1.00	0.08
H										
ATOM	813	HG	CYS	A	52	86.677	36.881	2.046	1.00	0.00
H										
ATOM	814	LPG1	CYS	A	52	87.202	35.612	1.719	1.00	0.00
LP										
ATOM	815	LPG2	CYS	A	52	86.103	35.604	1.865	1.00	0.00
LP										
ATOM	816	H	CYS	A	52	87.251	34.621	6.327	1.00	0.37
H										
ATOM	817	N	PHE	A	53	88.550	33.228	2.464	1.00	-0.73
N										
ATOM	818	CA	PHE	A	53	89.828	32.763	1.936	1.00	0.28
C										
ATOM	819	C	PHE	A	53	90.775	33.925	1.744	1.00	0.57
C										
ATOM	820	O	PHE	A	53	91.951	33.787	2.043	1.00	-0.57
O										
ATOM	821	CB	PHE	A	53	89.661	31.986	0.601	1.00	-0.02
C										
ATOM	822	CG	PHE	A	53	89.445	32.913	-0.603	1.00	-0.14
C										
ATOM	823	CD1	PHE	A	53	90.555	33.388	-1.309	1.00	-0.15
C										
ATOM	824	CD2	PHE	A	53	88.163	33.279	-1.027	1.00	-0.15
C										
ATOM	825	CE1	PHE	A	53	90.392	34.207	-2.429	1.00	-0.15
C										
ATOM	826	CE2	PHE	A	53	87.992	34.097	-2.147	1.00	-0.15
C										
ATOM	827	CZ	PHE	A	53	89.107	34.551	-2.856	1.00	-0.15
C										
ATOM	828	HA	PHE	A	53	90.251	32.061	2.671	1.00	0.08
H										
ATOM	829	HB2	PHE	A	53	88.828	31.273	0.691	1.00	0.08
H										

ATOM	830	HB3	PHE	A	53	90.576	31.407	0.406	1.00	0.08
H										
ATOM	831	HD2	PHE	A	53	87.293	32.925	-0.491	1.00	0.15
H										
ATOM	832	HE2	PHE	A	53	86.993	34.376	-2.466	1.00	0.15
H										
ATOM	833	HZ	PHE	A	53	88.981	35.168	-3.738	1.00	0.15
H										
ATOM	834	HE1	PHE	A	53	91.261	34.571	-2.967	1.00	0.15
H										
ATOM	835	HD1	PHE	A	53	91.551	33.109	-0.991	1.00	0.15
H										
ATOM	836	H	PHE	A	53	87.737	33.166	1.885	1.00	0.37
H										
ATOM	837	N	HIS	A	54	90.279	35.072	1.223	1.00	-0.73
N										
ATOM	838	CA	HIS	A	54	91.181	36.163	0.870	1.00	0.28
C										
ATOM	839	C	HIS	A	54	91.665	36.913	2.093	1.00	0.57
C										
ATOM	840	O	HIS	A	54	92.861	36.893	2.341	1.00	-0.57
O										
ATOM	841	CB	HIS	A	54	90.535	37.133	-0.154	1.00	0.01
C										
ATOM	842	CG	HIS	A	54	91.576	38.105	-0.642	1.00	0.18
C										
ATOM	843	ND1	HIS	A	54	92.217	37.973	-1.790	1.00	-0.70
N										
ATOM	844	CD2	HIS	A	54	92.002	39.207	0.007	1.00	0.20
C										
ATOM	845	CE1	HIS	A	54	93.075	38.937	-1.951	1.00	0.65
C										
ATOM	846	NE2	HIS	A	54	92.940	39.548	-1.016	1.00	-0.70
N										
ATOM	847	HA	HIS	A	54	92.049	35.724	0.351	1.00	0.08
H										
ATOM	848	HB2	HIS	A	54	89.694	37.678	0.295	1.00	0.08
H										
ATOM	849	HB3	HIS	A	54	90.139	36.561	-1.005	1.00	0.08
H										
ATOM	850	HD2	HIS	A	54	91.737	39.667	0.957	1.00	0.15
H										
ATOM	851	HE1	HIS	A	54	93.558	40.067	-1.339	1.00	0.45
H										
ATOM	852	HE2	HIS	A	54	93.682	38.963	-2.856	1.00	0.15
H										
ATOM	853	HD1	HIS	A	54	92.057	37.210	-2.465	1.00	0.00
H										
ATOM	854	H	HIS	A	54	89.304	35.182	1.030	1.00	0.37
H										
ATOM	855	N	CYS	A	55	90.772	37.591	2.855	1.00	-0.73
N										
ATOM	856	CA	CYS	A	55	91.222	38.439	3.965	1.00	0.28
C										

ATOM	857	C	CYS	A	55	91.260	37.726	5.298	1.00	0.57
C										
ATOM	858	O	CYS	A	55	91.664	38.353	6.265	1.00	-0.57
O										
ATOM	859	CB	CYS	A	55	90.319	39.696	4.100	1.00	-0.11
C										
ATOM	860	SG	CYS	A	55	88.648	39.211	4.652	1.00	-1.05
S										
ATOM	861	HA	CYS	A	55	92.241	38.809	3.762	1.00	0.08
H										
ATOM	862	HB2	CYS	A	55	90.250	40.214	3.132	1.00	0.08
H										
ATOM	863	HB3	CYS	A	55	90.744	40.395	4.839	1.00	0.08
H										
ATOM	864	HG	CYS	A	55	88.270	40.130	4.817	1.00	0.00
H										
ATOM	865	LPG1	CYS	A	55	88.307	38.877	4.170	1.00	0.00
LP										
ATOM	866	LPG2	CYS	A	55	88.665	38.837	5.219	1.00	0.00
LP										
ATOM	867	H	CYS	A	55	89.789	37.526	2.673	1.00	0.37
H										
ATOM	868	N	GLY	A	56	90.852	36.442	5.405	1.00	-0.73
N										
ATOM	869	CA	GLY	A	56	90.879	35.784	6.710	1.00	0.20
C										
ATOM	870	C	GLY	A	56	89.923	36.425	7.691	1.00	0.57
C										
ATOM	871	O	GLY	A	56	90.238	36.483	8.869	1.00	-0.57
O										
ATOM	872	HA3	GLY	A	56	91.895	35.816	7.126	1.00	0.08
H										
ATOM	873	HA2	GLY	A	56	90.622	34.725	6.589	1.00	0.08
H										
ATOM	874	H	GLY	A	56	90.517	35.920	4.618	1.00	0.37
H										
ATOM	875	N	GLY	A	57	88.747	36.907	7.229	1.00	-0.73
N										
ATOM	876	CA	GLY	A	57	87.788	37.545	8.126	1.00	0.20
C										
ATOM	877	C	GLY	A	57	86.943	36.486	8.793	1.00	0.57
C										
ATOM	878	O	GLY	A	57	86.239	35.796	8.074	1.00	-0.57
O										
ATOM	879	HA3	GLY	A	57	87.120	38.192	7.536	1.00	0.08
H										
ATOM	880	HA2	GLY	A	57	88.314	38.188	8.848	1.00	0.08
H										
ATOM	881	H	GLY	A	57	88.501	36.815	6.269	1.00	0.37
H										
ATOM	882	N	GLY	A	58	86.998	36.330	10.139	1.00	-0.73
N										
ATOM	883	CA	GLY	A	58	86.288	35.234	10.800	1.00	0.20
C										

ATOM	884	C	GLY	A	58	84.911	35.636	11.281	1.00	0.57
C										
ATOM	885	O	GLY	A	58	84.864	36.579	12.055	1.00	-0.57
O										
ATOM	886	HA3	GLY	A	58	86.868	34.932	11.687	1.00	0.08
H										
ATOM	887	HA2	GLY	A	58	86.243	34.351	10.152	1.00	0.08
H										
ATOM	888	H	GLY	A	58	87.540	36.949	10.713	1.00	0.37
H										
ATOM	889	N	LEU	A	59	83.815	34.939	10.872	1.00	-0.73
N										
ATOM	890	CA	LEU	A	59	82.459	35.231	11.366	1.00	0.28
C										
ATOM	891	C	LEU	A	59	81.910	34.034	12.122	1.00	0.57
C										
ATOM	892	O	LEU	A	59	82.430	32.944	11.946	1.00	-0.57
O										
ATOM	893	CB	LEU	A	59	81.494	35.547	10.182	1.00	-0.16
C										
ATOM	894	CG	LEU	A	59	81.342	37.062	9.858	1.00	-0.08
C										
ATOM	895	CD1	LEU	A	59	82.701	37.761	9.600	1.00	-0.24
C										
ATOM	896	CD2	LEU	A	59	80.430	37.243	8.613	1.00	-0.24
C										
ATOM	897	HA	LEU	A	59	82.461	36.072	12.075	1.00	0.08
H										
ATOM	898	HB2	LEU	A	59	80.483	35.170	10.404	1.00	0.08
H										
ATOM	899	HB3	LEU	A	59	81.847	35.013	9.287	1.00	0.08
H										
ATOM	900	HG	LEU	A	59	80.862	37.568	10.716	1.00	0.08
H										
ATOM	901	HD21	LEU	A	59	80.756	36.600	7.782	1.00	0.08
H										
ATOM	902	HD22	LEU	A	59	80.464	38.280	8.257	1.00	0.08
H										
ATOM	903	HD23	LEU	A	59	79.390	36.999	8.870	1.00	0.08
H										
ATOM	904	HD11	LEU	A	59	83.240	37.270	8.775	1.00	0.08
H										
ATOM	905	HD12	LEU	A	59	83.337	37.763	10.493	1.00	0.08
H										
ATOM	906	HD13	LEU	A	59	82.509	38.812	9.339	1.00	0.08
H										
ATOM	907	H	LEU	A	59	83.906	34.168	10.239	1.00	0.37
H										
ATOM	908	N	THR	A	60	80.858	34.226	12.963	1.00	-0.73
N										
ATOM	909	CA	THR	A	60	80.295	33.125	13.758	1.00	0.28
C										
ATOM	910	C	THR	A	60	78.901	33.489	14.228	1.00	0.57
C										

ATOM	911	O	THR	A	60	78.590	34.664	14.170	1.00	-0.57
O										
ATOM	912	CB	THR	A	60	81.197	32.902	15.007	1.00	0.20
C										
ATOM	913	OG1	THR	A	60	82.575	32.892	14.624	1.00	-0.68
O										
ATOM	914	CG2	THR	A	60	80.894	31.605	15.806	1.00	-0.24
C										
ATOM	915	HA	THR	A	60	80.242	32.212	13.142	1.00	0.08
H										
ATOM	916	HB	THR	A	60	81.093	33.767	15.682	1.00	0.08
H										
ATOM	917	HG1	THR	A	60	82.770	32.231	13.972	1.00	0.40
H										
ATOM	918	HG23	THR	A	60	80.868	30.732	15.136	1.00	0.08
H										
ATOM	919	HG21	THR	A	60	79.941	31.673	16.346	1.00	0.08
H										
ATOM	920	HG22	THR	A	60	81.684	31.449	16.557	1.00	0.08
H										
ATOM	921	H	THR	A	60	80.466	35.141	13.089	1.00	0.37
H										
ATOM	922	N	ASP	A	61	78.064	32.537	14.700	1.00	-0.73
N										
ATOM	923	CA	ASP	A	61	76.765	32.886	15.286	1.00	0.28
C										
ATOM	924	C	ASP	A	61	75.839	33.442	14.230	1.00	0.57
C										
ATOM	925	O	ASP	A	61	75.243	34.487	14.434	1.00	-0.57
O										
ATOM	926	CB	ASP	A	61	76.912	33.836	16.507	1.00	-0.27
C										
ATOM	927	CG	ASP	A	61	77.937	33.289	17.466	1.00	0.91
C										
ATOM	928	OD1	ASP	A	61	79.016	33.924	17.623	1.00	-0.90
O										
ATOM	929	OD2	ASP	A	61	77.671	32.215	18.070	1.00	-0.90
O										
ATOM	930	HA	ASP	A	61	76.280	31.966	15.659	1.00	0.08
H										
ATOM	931	HB2	ASP	A	61	75.947	33.927	17.031	1.00	0.08
H										
ATOM	932	HB3	ASP	A	61	77.208	34.847	16.188	1.00	0.08
H										
ATOM	933	H	ASP	A	61	78.322	31.573	14.660	1.00	0.37
H										
ATOM	934	N	TRP	A	62	75.705	32.736	13.086	1.00	-0.73
N										
ATOM	935	CA	TRP	A	62	74.867	33.246	12.002	1.00	0.28
C										
ATOM	936	C	TRP	A	62	73.412	33.335	12.403	1.00	0.57
C										
ATOM	937	O	TRP	A	62	73.025	32.645	13.332	1.00	-0.57
O										

ATOM	938	CB	TRP	A	62	74.988	32.347	10.744	1.00	0.02
C										
ATOM	939	CG	TRP	A	62	76.344	32.553	10.131	1.00	-0.18
C										
ATOM	940	CD1	TRP	A	62	77.469	31.844	10.322	1.00	-0.30
C										
ATOM	941	CD2	TRP	A	62	76.673	33.658	9.162	1.00	0.00
C										
ATOM	942	NE1	TRP	A	62	78.434	32.375	9.615	1.00	0.03
N										
ATOM	943	CE2	TRP	A	62	78.013	33.445	8.912	1.00	-0.15
C										
ATOM	944	CE3	TRP	A	62	75.954	34.693	8.567	1.00	-0.15
C										
ATOM	945	CZ2	TRP	A	62	78.727	34.267	8.042	1.00	-0.15
C										
ATOM	946	CZ3	TRP	A	62	76.647	35.495	7.653	1.00	-0.15
C										
ATOM	947	CH2	TRP	A	62	78.011	35.283	7.395	1.00	-0.15
C										
ATOM	948	HA	TRP	A	62	75.221	34.256	11.744	1.00	0.08
H										
ATOM	949	HB2	TRP	A	62	74.236	32.629	9.994	1.00	0.08
H										
ATOM	950	HB3	TRP	A	62	74.827	31.290	11.008	1.00	0.08
H										
ATOM	951	HE1	TRP	A	62	79.399	32.018	9.598	1.00	0.27
H										
ATOM	952	HD1	TRP	A	62	77.566	30.971	10.967	1.00	0.15
H										
ATOM	953	HZ2	TRP	A	62	79.786	34.128	7.869	1.00	0.15
H										
ATOM	954	HH2	TRP	A	62	78.533	35.915	6.686	1.00	0.15
H										
ATOM	955	HZ3	TRP	A	62	76.114	36.290	7.143	1.00	0.15
H										
ATOM	956	HE3	TRP	A	62	74.910	34.868	8.804	1.00	0.15
H										
ATOM	957	H	TRP	A	62	76.183	31.863	12.971	1.00	0.37
H										
ATOM	958	N	TYR	A	63	72.609	34.171	11.693	1.00	-0.73
N										
ATOM	959	CA	TYR	A	63	71.161	34.224	11.907	1.00	0.28
C										
ATOM	960	C	TYR	A	63	70.492	33.842	10.601	1.00	0.57
C										
ATOM	961	O	TYR	A	63	71.078	34.193	9.589	1.00	-0.57
O										
ATOM	962	CB	TYR	A	63	70.684	35.651	12.300	1.00	0.00
C										
ATOM	963	HA	TYR	A	63	70.871	33.536	12.710	1.00	0.08
H										
ATOM	964	HB3	TYR	A	63	71.112	36.386	11.600	1.00	0.00
H										

ATOM	965	HB2	TYR	A	63	69.586	35.691	12.200	1.00	0.00
H										
ATOM	966	H	TYR	A	63	72.979	34.740	10.954	1.00	0.37
H										
ATOM	967	N	PRO	A	64	69.312	33.168	10.524	1.00	-0.66
N										
ATOM	968	CA	PRO	A	64	68.734	32.866	9.219	1.00	0.28
C										
ATOM	969	C	PRO	A	64	68.628	34.061	8.299	1.00	0.57
C										
ATOM	970	O	PRO	A	64	68.887	33.928	7.113	1.00	-0.57
O										
ATOM	971	CB	PRO	A	64	67.312	32.404	9.634	1.00	-0.16
C										
ATOM	972	CG	PRO	A	64	67.494	31.824	11.055	1.00	-0.16
C										
ATOM	973	CD	PRO	A	64	68.561	32.741	11.700	1.00	0.14
C										
ATOM	974	HA	PRO	A	64	69.301	32.043	8.754	1.00	0.08
H										
ATOM	975	HD3	PRO	A	64	69.130	32.155	12.437	1.00	0.08
H										
ATOM	976	HD2	PRO	A	64	68.093	33.613	12.183	1.00	0.08
H										
ATOM	977	HG3	PRO	A	64	66.555	31.789	11.632	1.00	0.08
H										
ATOM	978	HG2	PRO	A	64	67.883	30.798	10.968	1.00	0.08
H										
ATOM	979	HB2	PRO	A	64	66.878	31.680	8.925	1.00	0.08
H										
ATOM	980	HB3	PRO	A	64	66.630	33.266	9.714	1.00	0.08
H										
ATOM	981	N	SER	A	65	68.223	35.232	8.840	1.00	-0.73
N										
ATOM	982	CA	SER	A	65	67.939	36.379	7.982	1.00	0.28
C										
ATOM	983	C	SER	A	65	69.169	36.873	7.262	1.00	0.57
C										
ATOM	984	O	SER	A	65	69.078	37.170	6.080	1.00	-0.57
O										
ATOM	985	CB	SER	A	65	67.398	37.558	8.832	1.00	0.12
C										
ATOM	986	OG	SER	A	65	68.381	37.885	9.830	1.00	-0.68
O										
ATOM	987	HA	SER	A	65	67.166	36.090	7.249	1.00	0.08
H										
ATOM	988	HB2	SER	A	65	66.453	37.258	9.316	1.00	0.08
H										
ATOM	989	HB3	SER	A	65	67.201	38.429	8.184	1.00	0.08
H										
ATOM	990	HG	SER	A	65	68.108	38.604	10.392	1.00	0.40
H										
ATOM	991	H	SER	A	65	68.067	35.321	9.826	1.00	0.37
H										

ATOM	992	N	GLU	A	66	70.319	37.001	7.962	1.00	-0.73
N										
ATOM	993	CA	GLU	A	66	71.457	37.689	7.357	1.00	0.28
C										
ATOM	994	C	GLU	A	66	71.894	37.064	6.050	1.00	0.57
C										
ATOM	995	O	GLU	A	66	71.664	35.882	5.850	1.00	-0.57
O										
ATOM	996	CB	GLU	A	66	72.691	37.773	8.297	1.00	-0.16
C										
ATOM	997	CG	GLU	A	66	72.474	38.776	9.463	1.00	-0.27
C										
ATOM	998	CD	GLU	A	66	73.723	38.947	10.288	1.00	0.91
C										
ATOM	999	OE1	GLU	A	66	74.616	38.060	10.223	1.00	-0.90
O										
ATOM	1000	OE2	GLU	A	66	73.825	39.976	11.010	1.00	-0.90
O										
ATOM	1001	HA	GLU	A	66	71.118	38.716	7.139	1.00	0.08
H										
ATOM	1002	HB2	GLU	A	66	73.564	38.118	7.720	1.00	0.08
H										
ATOM	1003	HB3	GLU	A	66	72.917	36.766	8.685	1.00	0.08
H										
ATOM	1004	HG2	GLU	A	66	71.661	38.437	10.122	1.00	0.08
H										
ATOM	1005	HG3	GLU	A	66	72.202	39.762	9.055	1.00	0.08
H										
ATOM	1006	H	GLU	A	66	70.374	36.707	8.918	1.00	0.37
H										
ATOM	1007	N	ASP	A	67	72.532	37.878	5.172	1.00	-0.73
N										
ATOM	1008	CA	ASP	A	67	73.042	37.394	3.891	1.00	0.28
C										
ATOM	1009	C	ASP	A	67	74.552	37.486	3.971	1.00	0.57
C										
ATOM	1010	O	ASP	A	67	75.012	38.599	4.172	1.00	-0.57
O										
ATOM	1011	CB	ASP	A	67	72.528	38.313	2.750	1.00	-0.27
C										
ATOM	1012	CG	ASP	A	67	73.155	38.008	1.412	1.00	0.91
C										
ATOM	1013	OD1	ASP	A	67	73.276	38.953	0.585	1.00	-0.90
O										
ATOM	1014	OD2	ASP	A	67	73.531	36.831	1.167	1.00	-0.90
O										
ATOM	1015	HA	ASP	A	67	72.667	36.387	3.660	1.00	0.08
H										
ATOM	1016	HB2	ASP	A	67	72.752	39.358	3.007	1.00	0.08
H										
ATOM	1017	HB3	ASP	A	67	71.435	38.216	2.661	1.00	0.08
H										
ATOM	1018	H	ASP	A	67	72.711	38.840	5.395	1.00	0.37
H										

ATOM	1019	N	PRO	A	68	75.364	36.407	3.836	1.00	-0.66
N										
ATOM	1020	CA	PRO	A	68	76.811	36.560	3.892	1.00	0.28
C										
ATOM	1021	C	PRO	A	68	77.411	37.762	3.204	1.00	0.57
C										
ATOM	1022	O	PRO	A	68	78.321	38.351	3.764	1.00	-0.57
O										
ATOM	1023	CB	PRO	A	68	77.225	35.226	3.233	1.00	-0.16
C										
ATOM	1024	CG	PRO	A	68	76.161	34.237	3.762	1.00	-0.16
C										
ATOM	1025	CD	PRO	A	68	74.850	35.053	3.676	1.00	0.14
C										
ATOM	1026	HA	PRO	A	68	77.101	36.571	4.949	1.00	0.08
H										
ATOM	1027	HD3	PRO	A	68	74.148	34.746	4.470	1.00	0.08
H										
ATOM	1028	HD2	PRO	A	68	74.388	34.937	2.686	1.00	0.08
H										
ATOM	1029	HG3	PRO	A	68	76.121	33.295	3.192	1.00	0.08
H										
ATOM	1030	HG2	PRO	A	68	76.377	34.009	4.819	1.00	0.08
H										
ATOM	1031	HB2	PRO	A	68	78.256	34.942	3.487	1.00	0.08
H										
ATOM	1032	HB3	PRO	A	68	77.128	35.299	2.137	1.00	0.08
H										
ATOM	1033	N	TRP	A	69	76.930	38.150	2.004	1.00	-0.73
N										
ATOM	1034	CA	TRP	A	69	77.517	39.312	1.337	1.00	0.28
C										
ATOM	1035	C	TRP	A	69	77.349	40.563	2.174	1.00	0.57
C										
ATOM	1036	O	TRP	A	69	78.303	41.310	2.320	1.00	-0.57
O										
ATOM	1037	CB	TRP	A	69	76.858	39.567	-0.040	1.00	0.02
C										
ATOM	1038	CG	TRP	A	69	77.124	38.441	-1.003	1.00	-0.18
C										
ATOM	1039	CD1	TRP	A	69	76.282	37.478	-1.413	1.00	-0.30
C										
ATOM	1040	CD2	TRP	A	69	78.429	38.213	-1.720	1.00	0.00
C										
ATOM	1041	NE1	TRP	A	69	76.886	36.716	-2.291	1.00	0.03
N										
ATOM	1042	CE2	TRP	A	69	78.146	37.130	-2.527	1.00	-0.15
C										
ATOM	1043	CE3	TRP	A	69	79.676	38.831	-1.711	1.00	-0.15
C										
ATOM	1044	CZ2	TRP	A	69	79.087	36.632	-3.428	1.00	-0.15
C										
ATOM	1045	CZ3	TRP	A	69	80.639	38.329	-2.597	1.00	-0.15
C										

ATOM	1046	CH2	TRP	A	69	80.339	37.261	-3.458	1.00	-0.15
C										
ATOM	1047	HA	TRP	A	69	78.592	39.118	1.180	1.00	0.08
H										
ATOM	1048	HB2	TRP	A	69	77.274	40.490	-0.472	1.00	0.08
H										
ATOM	1049	HB3	TRP	A	69	75.773	39.703	0.083	1.00	0.08
H										
ATOM	1050	HE1	TRP	A	69	76.446	35.907	-2.755	1.00	0.27
H										
ATOM	1051	HD1	TRP	A	69	75.254	37.357	-1.072	1.00	0.15
H										
ATOM	1052	HZ2	TRP	A	69	78.853	35.799	-4.080	1.00	0.15
H										
ATOM	1053	HH2	TRP	A	69	81.092	36.908	-4.155	1.00	0.15
H										
ATOM	1054	HZ3	TRP	A	69	81.629	38.772	-2.616	1.00	0.15
H										
ATOM	1055	HE3	TRP	A	69	79.875	39.660	-1.046	1.00	0.15
H										
ATOM	1056	H	TRP	A	69	76.179	37.654	1.565	1.00	0.37
H										
ATOM	1057	N	GLU	A	70	76.139	40.815	2.726	1.00	-0.73
N										
ATOM	1058	CA	GLU	A	70	75.931	42.034	3.510	1.00	0.28
C										
ATOM	1059	C	GLU	A	70	76.898	42.051	4.670	1.00	0.57
C										
ATOM	1060	O	GLU	A	70	77.553	43.059	4.889	1.00	-0.57
O										
ATOM	1061	CB	GLU	A	70	74.485	42.150	4.070	1.00	-0.16
C										
ATOM	1062	CG	GLU	A	70	73.432	42.366	2.950	1.00	-0.27
C										
ATOM	1063	CD	GLU	A	70	72.054	42.483	3.551	1.00	0.91
C										
ATOM	1064	OE1	GLU	A	70	71.577	41.479	4.147	1.00	-0.90
O										
ATOM	1065	OE2	GLU	A	70	71.435	43.576	3.437	1.00	-0.90
O										
ATOM	1066	HA	GLU	A	70	76.133	42.915	2.879	1.00	0.08
H										
ATOM	1067	HB2	GLU	A	70	74.436	43.012	4.757	1.00	0.08
H										
ATOM	1068	HB3	GLU	A	70	74.238	41.243	4.643	1.00	0.08
H										
ATOM	1069	HG2	GLU	A	70	73.433	41.534	2.232	1.00	0.08
H										
ATOM	1070	HG3	GLU	A	70	73.670	43.281	2.390	1.00	0.08
H										
ATOM	1071	H	GLU	A	70	75.383	40.169	2.612	1.00	0.37
H										
ATOM	1072	N	GLN	A	71	76.999	40.935	5.425	1.00	-0.73
N										

ATOM	1073	CA	GLN	A	71	77.917	40.914	6.560	1.00	0.28
C										
ATOM	1074	C	GLN	A	71	79.336	41.107	6.068	1.00	0.57
C										
ATOM	1075	O	GLN	A	71	80.096	41.802	6.723	1.00	-0.57
O										
ATOM	1076	CB	GLN	A	71	77.833	39.585	7.356	1.00	-0.16
C										
ATOM	1077	CG	GLN	A	71	76.475	39.358	8.068	1.00	-0.10
C										
ATOM	1078	CD	GLN	A	71	76.257	40.380	9.161	1.00	0.57
C										
ATOM	1079	OE1	GLN	A	71	76.724	40.161	10.268	1.00	-0.57
O										
ATOM	1080	NE2	GLN	A	71	75.562	41.506	8.886	1.00	-0.80
N										
ATOM	1081	HA	GLN	A	71	77.662	41.746	7.235	1.00	0.08
H										
ATOM	1082	HB2	GLN	A	71	78.592	39.608	8.148	1.00	0.08
H										
ATOM	1083	HB3	GLN	A	71	78.054	38.740	6.683	1.00	0.08
H										
ATOM	1084	HG2	GLN	A	71	76.491	38.358	8.528	1.00	0.08
H										
ATOM	1085	HG3	GLN	A	71	75.649	39.375	7.342	1.00	0.08
H										
ATOM	1086	HE22	GLN	A	71	75.182	41.678	7.976	1.00	0.37
H										
ATOM	1087	HE21	GLN	A	71	75.419	42.187	9.606	1.00	0.37
H										
ATOM	1088	H	GLN	A	71	76.474	40.112	5.201	1.00	0.37
H										
ATOM	1089	N	HIS	A	72	79.715	40.502	4.919	1.00	-0.73
N										
ATOM	1090	CA	HIS	A	72	81.093	40.618	4.445	1.00	0.28
C										
ATOM	1091	C	HIS	A	72	81.491	42.073	4.342	1.00	0.57
C										
ATOM	1092	O	HIS	A	72	82.548	42.431	4.838	1.00	-0.57
O										
ATOM	1093	CB	HIS	A	72	81.296	39.909	3.079	1.00	0.02
C										
ATOM	1094	CG	HIS	A	72	82.753	39.770	2.737	1.00	-0.33
C										
ATOM	1095	ND1	HIS	A	72	83.378	39.101	1.817	1.00	0.03
N										
ATOM	1096	CD2	HIS	A	72	83.913	40.265	3.246	1.00	0.08
C										
ATOM	1097	CE1	HIS	A	72	84.632	39.014	1.575	1.00	0.04
C										
ATOM	1098	NE2	HIS	A	72	85.068	39.773	2.496	1.00	-0.57
N										
ATOM	1099	HA	HIS	A	72	81.734	40.117	5.191	1.00	0.08
H										

ATOM	1100	HB2	HIS	A	72	80.785	40.449	2.269	1.00	0.08
H										
ATOM	1101	HB3	HIS	A	72	80.890	38.888	3.126	1.00	0.08
H										
ATOM	1102	HD2	HIS	A	72	83.984	39.620	2.416	1.00	0.27
H										
ATOM	1103	HE1	HIS	A	72	85.165	38.455	0.802	1.00	0.15
H										
ATOM	1104	H	HIS	A	72	79.072	39.942	4.397	1.00	0.37
H										
ATOM	1105	N	ALA	A	73	80.655	42.932	3.715	1.00	-0.73
N										
ATOM	1106	CA	ALA	A	73	80.975	44.359	3.675	1.00	0.28
C										
ATOM	1107	C	ALA	A	73	80.989	44.924	5.074	1.00	0.57
C										
ATOM	1108	O	ALA	A	73	81.903	45.664	5.400	1.00	-0.57
O										
ATOM	1109	CB	ALA	A	73	79.931	45.173	2.866	1.00	-0.24
C										
ATOM	1110	HA	ALA	A	73	81.972	44.505	3.229	1.00	0.08
H										
ATOM	1111	HB1	ALA	A	73	79.881	44.835	1.822	1.00	0.08
H										
ATOM	1112	HB2	ALA	A	73	80.193	46.242	2.879	1.00	0.08
H										
ATOM	1113	HB3	ALA	A	73	78.938	45.048	3.317	1.00	0.08
H										
ATOM	1114	H	ALA	A	73	79.796	42.614	3.306	1.00	0.37
H										
ATOM	1115	N	LYS	A	74	79.977	44.596	5.908	1.00	-0.73
N										
ATOM	1116	CA	LYS	A	74	79.907	45.208	7.231	1.00	0.28
C										
ATOM	1117	C	LYS	A	74	81.202	45.001	7.983	1.00	0.57
C										
ATOM	1118	O	LYS	A	74	81.606	45.915	8.684	1.00	-0.57
O										
ATOM	1119	CB	LYS	A	74	78.718	44.658	8.067	1.00	-0.16
C										
ATOM	1120	CG	LYS	A	74	78.472	45.497	9.352	1.00	-0.16
C										
ATOM	1121	CD	LYS	A	74	77.215	45.004	10.119	1.00	-0.16
C										
ATOM	1122	CE	LYS	A	74	76.911	45.902	11.349	1.00	0.34
C										
ATOM	1123	NZ	LYS	A	74	75.748	45.396	12.114	1.00	-0.85
N										
ATOM	1124	HA	LYS	A	74	79.744	46.287	7.069	1.00	0.08
H										
ATOM	1125	HB2	LYS	A	74	78.912	43.610	8.341	1.00	0.08
H										
ATOM	1126	HB3	LYS	A	74	77.805	44.694	7.449	1.00	0.08
H										

ATOM	1127	HG2	LYS	A	74	78.326	46.554	9.074	1.00	0.08
H										
ATOM	1128	HG3	LYS	A	74	79.350	45.431	10.015	1.00	0.08
H										
ATOM	1129	HD2	LYS	A	74	77.374	43.964	10.446	1.00	0.08
H										
ATOM	1130	HD3	LYS	A	74	76.340	45.020	9.447	1.00	0.08
H										
ATOM	1131	HE2	LYS	A	74	76.703	46.930	11.006	1.00	0.08
H										
ATOM	1132	HE3	LYS	A	74	77.796	45.941	12.007	1.00	0.08
H										
ATOM	1133	HZ1	LYS	A	74	75.538	46.023	12.970	1.00	0.45
H										
ATOM	1134	HZ2	LYS	A	74	75.913	44.394	12.488	1.00	0.45
H										
ATOM	1135	HZ3	LYS	A	74	74.851	45.373	11.509	1.00	0.45
H										
ATOM	1136	H	LYS	A	74	79.248	43.971	5.620	1.00	0.37
H										
ATOM	1137	N	TRP	A	75	81.863	43.824	7.856	1.00	-0.73
N										
ATOM	1138	CA	TRP	A	75	83.084	43.561	8.623	1.00	0.28
C										
ATOM	1139	C	TRP	A	75	84.365	43.649	7.823	1.00	0.57
C										
ATOM	1140	O	TRP	A	75	85.401	43.680	8.470	1.00	-0.57
O										
ATOM	1141	CB	TRP	A	75	82.926	42.191	9.334	1.00	0.02
C										
ATOM	1142	CG	TRP	A	75	81.658	42.284	10.140	1.00	-0.18
C										
ATOM	1143	CD1	TRP	A	75	80.506	41.627	9.934	1.00	-0.30
C										
ATOM	1144	CD2	TRP	A	75	81.444	43.183	11.330	1.00	0.00
C										
ATOM	1145	NE1	TRP	A	75	79.611	42.034	10.796	1.00	0.03
N										
ATOM	1146	CE2	TRP	A	75	80.110	42.976	11.621	1.00	-0.15
C										
ATOM	1147	CE3	TRP	A	75	82.243	44.050	12.076	1.00	-0.15
C										
ATOM	1148	CZ2	TRP	A	75	79.470	43.689	12.634	1.00	-0.15
C										
ATOM	1149	CZ3	TRP	A	75	81.617	44.749	13.115	1.00	-0.15
C										
ATOM	1150	CH2	TRP	A	75	80.251	44.576	13.386	1.00	-0.15
C										
ATOM	1151	HA	TRP	A	75	83.206	44.314	9.417	1.00	0.08
H										
ATOM	1152	HB2	TRP	A	75	83.779	41.975	9.997	1.00	0.08
H										
ATOM	1153	HB3	TRP	A	75	82.846	41.391	8.583	1.00	0.08
H										

ATOM	1154	HE1	TRP	A	75	78.642	41.683	10.834	1.00	0.27
H										
ATOM	1155	HD1	TRP	A	75	80.353	40.883	9.157	1.00	0.15
H										
ATOM	1156	HZ2	TRP	A	75	78.413	43.567	12.827	1.00	0.15
H										
ATOM	1157	HH2	TRP	A	75	79.789	45.139	14.191	1.00	0.15
H										
ATOM	1158	HZ3	TRP	A	75	82.200	45.435	13.722	1.00	0.15
H										
ATOM	1159	HE3	TRP	A	75	83.299	44.172	11.864	1.00	0.15
H										
ATOM	1160	H	TRP	A	75	81.514	43.096	7.262	1.00	0.37
H										
ATOM	1161	N	TYR	A	76	84.362	43.705	6.468	1.00	-0.73
N										
ATOM	1162	CA	TYR	A	76	85.623	43.840	5.734	1.00	0.28
C										
ATOM	1163	C	TYR	A	76	85.451	44.639	4.459	1.00	0.57
C										
ATOM	1164	O	TYR	A	76	85.563	44.061	3.389	1.00	-0.57
O										
ATOM	1165	CB	TYR	A	76	86.217	42.439	5.439	1.00	-0.02
C										
ATOM	1166	CG	TYR	A	76	86.347	41.657	6.750	1.00	-0.14
C										
ATOM	1167	CD1	TYR	A	76	85.321	40.797	7.152	1.00	-0.15
C										
ATOM	1168	CD2	TYR	A	76	87.477	41.805	7.561	1.00	-0.15
C										
ATOM	1169	CE1	TYR	A	76	85.427	40.100	8.357	1.00	-0.15
C										
ATOM	1170	CE2	TYR	A	76	87.551	41.151	8.794	1.00	-0.15
C										
ATOM	1171	CZ	TYR	A	76	86.516	40.310	9.211	1.00	0.08
C										
ATOM	1172	OH	TYR	A	76	86.590	39.690	10.463	1.00	-0.53
O										
ATOM	1173	HA	TYR	A	76	86.371	44.386	6.333	1.00	0.08
H										
ATOM	1174	HB3	TYR	A	76	85.567	41.891	4.740	1.00	0.08
H										
ATOM	1175	HB2	TYR	A	76	87.208	42.547	4.971	1.00	0.08
H										
ATOM	1176	HD2	TYR	A	76	88.299	42.436	7.239	1.00	0.15
H										
ATOM	1177	HE2	TYR	A	76	88.415	41.295	9.435	1.00	0.15
H										
ATOM	1178	HE1	TYR	A	76	84.660	39.390	8.622	1.00	0.15
H										
ATOM	1179	HD1	TYR	A	76	84.437	40.670	6.535	1.00	0.15
H										
ATOM	1180	HH	TYR	A	76	85.825	39.170	10.688	1.00	0.45
H										

ATOM	1181	H	TYR	A	76	83.517	43.648	5.936	1.00	0.37
H										
ATOM	1182	N	PRO	A	77	85.207	45.972	4.511	1.00	-0.66
N										
ATOM	1183	CA	PRO	A	77	85.222	46.760	3.287	1.00	0.28
C										
ATOM	1184	C	PRO	A	77	86.484	46.558	2.481	1.00	0.57
C										
ATOM	1185	O	PRO	A	77	86.410	46.497	1.264	1.00	-0.57
O										
ATOM	1186	CB	PRO	A	77	85.171	48.188	3.892	1.00	-0.16
C										
ATOM	1187	CG	PRO	A	77	84.378	47.990	5.200	1.00	-0.16
C										
ATOM	1188	CD	PRO	A	77	84.971	46.677	5.764	1.00	0.14
C										
ATOM	1189	HA	PRO	A	77	84.315	46.530	2.705	1.00	0.08
H										
ATOM	1190	HD3	PRO	A	77	84.264	46.186	6.449	1.00	0.08
H										
ATOM	1191	HD2	PRO	A	77	85.925	46.869	6.280	1.00	0.08
H										
ATOM	1192	HG3	PRO	A	77	84.462	48.838	5.899	1.00	0.08
H										
ATOM	1193	HG2	PRO	A	77	83.317	47.844	4.936	1.00	0.08
H										
ATOM	1194	HB2	PRO	A	77	84.713	48.935	3.227	1.00	0.08
H										
ATOM	1195	HB3	PRO	A	77	86.184	48.534	4.155	1.00	0.08
H										
ATOM	1196	N	GLY	A	78	87.660	46.457	3.144	1.00	-0.73
N										
ATOM	1197	CA	GLY	A	78	88.915	46.364	2.402	1.00	0.20
C										
ATOM	1198	C	GLY	A	78	89.164	45.026	1.746	1.00	0.57
C										
ATOM	1199	O	GLY	A	78	90.149	44.941	1.029	1.00	-0.57
O										
ATOM	1200	HA3	GLY	A	78	89.763	46.554	3.081	1.00	0.08
H										
ATOM	1201	HA2	GLY	A	78	88.937	47.147	1.627	1.00	0.08
H										
ATOM	1202	H	GLY	A	78	87.699	46.465	4.146	1.00	0.37
H										
ATOM	1203	N	CYS	A	79	88.343	43.969	1.956	1.00	-0.73
N										
ATOM	1204	CA	CYS	A	79	88.671	42.681	1.344	1.00	0.28
C										
ATOM	1205	C	CYS	A	79	88.749	42.843	-0.158	1.00	0.57
C										
ATOM	1206	O	CYS	A	79	87.849	43.448	-0.719	1.00	-0.57
O										
ATOM	1207	CB	CYS	A	79	87.656	41.565	1.697	1.00	-0.11
C										

ATOM	1208	SG	CYS	A	79	88.233	39.994	0.977	1.00	-1.05
S										
ATOM	1209	HA	CYS	A	79	89.647	42.374	1.755	1.00	0.08
H										
ATOM	1210	HB2	CYS	A	79	86.659	41.813	1.308	1.00	0.08
H										
ATOM	1211	HB3	CYS	A	79	87.588	41.452	2.788	1.00	0.08
H										
ATOM	1212	HG	CYS	A	79	87.543	39.380	1.377	1.00	0.00
H										
ATOM	1213	LPG1	CYS	A	79	88.208	39.999	0.299	1.00	0.00
LP										
ATOM	1214	LPG2	CYS	A	79	88.862	39.836	1.179	1.00	0.00
LP										
ATOM	1215	H	CYS	A	79	87.534	44.030	2.542	1.00	0.37
H										
ATOM	1216	N	LYS	A	80	89.810	42.328	-0.826	1.00	-0.73
N										
ATOM	1217	CA	LYS	A	80	89.934	42.530	-2.269	1.00	0.28
C										
ATOM	1218	C	LYS	A	80	88.900	41.683	-2.972	1.00	0.57
C										
ATOM	1219	O	LYS	A	80	88.209	42.197	-3.837	1.00	-0.57
O										
ATOM	1220	CB	LYS	A	80	91.355	42.173	-2.788	1.00	-0.16
C										
ATOM	1221	CG	LYS	A	80	91.557	42.595	-4.268	1.00	-0.16
C										
ATOM	1222	CD	LYS	A	80	92.965	42.202	-4.793	1.00	-0.16
C										
ATOM	1223	CE	LYS	A	80	93.177	42.674	-6.257	1.00	0.34
C										
ATOM	1224	NZ	LYS	A	80	94.509	42.277	-6.768	1.00	-0.85
N										
ATOM	1225	HA	LYS	A	80	89.759	43.598	-2.482	1.00	0.08
H										
ATOM	1226	HB2	LYS	A	80	91.514	41.089	-2.692	1.00	0.08
H										
ATOM	1227	HB3	LYS	A	80	92.104	42.688	-2.165	1.00	0.08
H										
ATOM	1228	HG2	LYS	A	80	91.424	43.686	-4.360	1.00	0.08
H										
ATOM	1229	HG3	LYS	A	80	90.798	42.100	-4.892	1.00	0.08
H										
ATOM	1230	HD2	LYS	A	80	93.083	41.107	-4.738	1.00	0.08
H										
ATOM	1231	HD3	LYS	A	80	93.737	42.662	-4.159	1.00	0.08
H										
ATOM	1232	HE2	LYS	A	80	93.080	43.772	-6.303	1.00	0.08
H										
ATOM	1233	HE3	LYS	A	80	92.393	42.234	-6.898	1.00	0.08
H										
ATOM	1234	HZ1	LYS	A	80	94.657	42.614	-7.786	1.00	0.45
H										

ATOM	1235	HZ2	LYS	A	80	94.638	41.204	-6.765	1.00	0.45
H										
ATOM	1236	HZ3	LYS	A	80	95.310	42.701	-6.179	1.00	0.45
H										
ATOM	1237	H	LYS	A	80	90.523	41.805	-0.355	1.00	0.37
H										
ATOM	1238	N	TYR	A	81	88.775	40.383	-2.617	1.00	-0.73
N										
ATOM	1239	CA	TYR	A	81	87.775	39.538	-3.270	1.00	0.28
C										
ATOM	1240	C	TYR	A	81	86.428	40.222	-3.268	1.00	0.57
C										
ATOM	1241	O	TYR	A	81	85.777	40.246	-4.299	1.00	-0.57
O										
ATOM	1242	CB	TYR	A	81	87.647	38.168	-2.552	1.00	-0.02
C										
ATOM	1243	CG	TYR	A	81	86.519	37.307	-3.142	1.00	-0.14
C										
ATOM	1244	CD1	TYR	A	81	86.688	36.677	-4.379	1.00	-0.15
C										
ATOM	1245	CD2	TYR	A	81	85.317	37.125	-2.449	1.00	-0.15
C										
ATOM	1246	CE1	TYR	A	81	85.738	35.761	-4.838	1.00	-0.15
C										
ATOM	1247	CE2	TYR	A	81	84.356	36.221	-2.913	1.00	-0.15
C										
ATOM	1248	CZ	TYR	A	81	84.580	35.508	-4.097	1.00	0.08
C										
ATOM	1249	OH	TYR	A	81	83.668	34.553	-4.558	1.00	-0.53
O										
ATOM	1250	HA	TYR	A	81	88.095	39.367	-4.311	1.00	0.08
H										
ATOM	1251	HB3	TYR	A	81	88.596	37.620	-2.656	1.00	0.08
H										
ATOM	1252	HB2	TYR	A	81	87.472	38.328	-1.477	1.00	0.08
H										
ATOM	1253	HD2	TYR	A	81	85.121	37.684	-1.541	1.00	0.15
H										
ATOM	1254	HE2	TYR	A	81	83.440	36.081	-2.349	1.00	0.15
H										
ATOM	1255	HE1	TYR	A	81	85.898	35.238	-5.776	1.00	0.15
H										
ATOM	1256	HD1	TYR	A	81	87.563	36.892	-4.985	1.00	0.15
H										
ATOM	1257	HH	TYR	A	81	82.931	34.405	-3.977	1.00	0.45
H										
ATOM	1258	H	TYR	A	81	89.370	39.980	-1.919	1.00	0.37
H										
ATOM	1259	N	LEU	A	82	85.992	40.791	-2.123	1.00	-0.73
N										
ATOM	1260	CA	LEU	A	82	84.683	41.439	-2.094	1.00	0.28
C										
ATOM	1261	C	LEU	A	82	84.660	42.586	-3.076	1.00	0.57
C										

ATOM	1262	O	LEU	A	82	83.729	42.674	-3.860	1.00	-0.57
O										
ATOM	1263	CB	LEU	A	82	84.350	41.980	-0.678	1.00	-0.16
C										
ATOM	1264	CG	LEU	A	82	82.944	42.636	-0.557	1.00	-0.08
C										
ATOM	1265	CD1	LEU	A	82	81.794	41.634	-0.846	1.00	-0.24
C										
ATOM	1266	CD2	LEU	A	82	82.779	43.207	0.876	1.00	-0.24
C										
ATOM	1267	HA	LEU	A	82	83.946	40.671	-2.379	1.00	0.08
H										
ATOM	1268	HB2	LEU	A	82	85.110	42.728	-0.404	1.00	0.08
H										
ATOM	1269	HB3	LEU	A	82	84.418	41.150	0.038	1.00	0.08
H										
ATOM	1270	HG	LEU	A	82	82.859	43.472	-1.271	1.00	0.08
H										
ATOM	1271	HD21	LEU	A	82	82.832	42.406	1.627	1.00	0.08
H										
ATOM	1272	HD22	LEU	A	82	81.799	43.694	0.951	1.00	0.08
H										
ATOM	1273	HD23	LEU	A	82	83.560	43.951	1.100	1.00	0.08
H										
ATOM	1274	HD11	LEU	A	82	81.924	40.734	-0.226	1.00	0.08
H										
ATOM	1275	HD12	LEU	A	82	81.774	41.343	-1.906	1.00	0.08
H										
ATOM	1276	HD13	LEU	A	82	80.818	42.087	-0.611	1.00	0.08
H										
ATOM	1277	H	LEU	A	82	86.548	40.771	-1.291	1.00	0.37
H										
ATOM	1278	N	LEU	A	83	85.680	43.475	-3.044	1.00	-0.73
N										
ATOM	1279	CA	LEU	A	83	85.701	44.605	-3.973	1.00	0.28
C										
ATOM	1280	C	LEU	A	83	85.559	44.099	-5.389	1.00	0.57
C										
ATOM	1281	O	LEU	A	83	84.782	44.656	-6.147	1.00	-0.57
O										
ATOM	1282	CB	LEU	A	83	87.024	45.411	-3.828	1.00	-0.16
C										
ATOM	1283	CG	LEU	A	83	87.211	46.557	-4.867	1.00	-0.08
C										
ATOM	1284	CD1	LEU	A	83	86.128	47.661	-4.719	1.00	-0.24
C										
ATOM	1285	CD2	LEU	A	83	88.627	47.181	-4.712	1.00	-0.24
C										
ATOM	1286	HA	LEU	A	83	84.844	45.253	-3.734	1.00	0.08
H										
ATOM	1287	HB2	LEU	A	83	87.864	44.711	-3.951	1.00	0.08
H										
ATOM	1288	HB3	LEU	A	83	87.078	45.826	-2.808	1.00	0.08
H										

ATOM	1289	HG	LEU	A	83	87.148	46.140	-5.887	1.00	0.08
H										
ATOM	1290	HD21	LEU	A	83	88.747	47.617	-3.708	1.00	0.08
H										
ATOM	1291	HD22	LEU	A	83	88.787	47.975	-5.459	1.00	0.08
H										
ATOM	1292	HD23	LEU	A	83	89.406	46.416	-4.858	1.00	0.08
H										
ATOM	1293	HD11	LEU	A	83	86.132	48.076	-3.700	1.00	0.08
H										
ATOM	1294	HD12	LEU	A	83	85.122	47.275	-4.939	1.00	0.08
H										
ATOM	1295	HD13	LEU	A	83	86.337	48.472	-5.431	1.00	0.08
H										
ATOM	1296	H	LEU	A	83	86.429	43.373	-2.386	1.00	0.37
H										
ATOM	1297	N	GLU	A	84	86.304	43.038	-5.765	1.00	-0.73
N										
ATOM	1298	CA	GLU	A	84	86.211	42.531	-7.132	1.00	0.28
C										
ATOM	1299	C	GLU	A	84	84.804	42.045	-7.401	1.00	0.57
C										
ATOM	1300	O	GLU	A	84	84.286	42.315	-8.474	1.00	-0.57
O										
ATOM	1301	CB	GLU	A	84	87.212	41.369	-7.384	1.00	-0.16
C										
ATOM	1302	CG	GLU	A	84	88.683	41.865	-7.368	1.00	-0.27
C										
ATOM	1303	CD	GLU	A	84	89.630	40.694	-7.449	1.00	0.91
C										
ATOM	1304	OE1	GLU	A	84	89.853	40.036	-6.396	1.00	-0.90
O										
ATOM	1305	OE2	GLU	A	84	90.156	40.421	-8.561	1.00	-0.90
O										
ATOM	1306	HA	GLU	A	84	86.447	43.351	-7.831	1.00	0.08
H										
ATOM	1307	HB2	GLU	A	84	87.011	40.916	-8.369	1.00	0.08
H										
ATOM	1308	HB3	GLU	A	84	87.066	40.591	-6.618	1.00	0.08
H										
ATOM	1309	HG2	GLU	A	84	88.896	42.426	-6.446	1.00	0.08
H										
ATOM	1310	HG3	GLU	A	84	88.856	42.547	-8.216	1.00	0.08
H										
ATOM	1311	H	GLU	A	84	86.906	42.580	-5.111	1.00	0.37
H										
ATOM	1312	N	GLN	A	85	84.172	41.322	-6.449	1.00	-0.73
N										
ATOM	1313	CA	GLN	A	85	82.854	40.750	-6.718	1.00	0.28
C										
ATOM	1314	C	GLN	A	85	81.773	41.809	-6.653	1.00	0.57
C										
ATOM	1315	O	GLN	A	85	81.160	42.073	-7.677	1.00	-0.57
O										

ATOM	1316	CB	GLN	A	85	82.529	39.564	-5.763	1.00	-0.16
C										
ATOM	1317	CG	GLN	A	85	83.487	38.360	-5.992	1.00	-0.10
C										
ATOM	1318	CD	GLN	A	85	83.332	37.726	-7.356	1.00	0.57
C										
ATOM	1319	OE1	GLN	A	85	82.237	37.741	-7.897	1.00	-0.57
O										
ATOM	1320	NE2	GLN	A	85	84.406	37.148	-7.939	1.00	-0.80
N										
ATOM	1321	HA	GLN	A	85	82.854	40.335	-7.740	1.00	0.08
H										
ATOM	1322	HB2	GLN	A	85	81.487	39.237	-5.916	1.00	0.08
H										
ATOM	1323	HB3	GLN	A	85	82.624	39.895	-4.717	1.00	0.08
H										
ATOM	1324	HG2	GLN	A	85	83.262	37.584	-5.248	1.00	0.08
H										
ATOM	1325	HG3	GLN	A	85	84.527	38.681	-5.841	1.00	0.08
H										
ATOM	1326	HE22	GLN	A	85	85.302	37.136	-7.495	1.00	0.37
H										
ATOM	1327	HE21	GLN	A	85	84.310	36.722	-8.840	1.00	0.37
H										
ATOM	1328	H	GLN	A	85	84.595	41.161	-5.556	1.00	0.37
H										
ATOM	1329	N	LYS	A	86	81.502	42.414	-5.473	1.00	-0.73
N										
ATOM	1330	CA	LYS	A	86	80.357	43.319	-5.340	1.00	0.28
C										
ATOM	1331	C	LYS	A	86	80.668	44.758	-5.693	1.00	0.57
C										
ATOM	1332	O	LYS	A	86	79.726	45.466	-6.018	1.00	-0.57
O										
ATOM	1333	CB	LYS	A	86	79.744	43.223	-3.916	1.00	-0.16
C										
ATOM	1334	CG	LYS	A	86	79.108	41.838	-3.599	1.00	-0.16
C										
ATOM	1335	CD	LYS	A	86	77.796	41.581	-4.398	1.00	-0.16
C										
ATOM	1336	CE	LYS	A	86	77.082	40.280	-3.947	1.00	0.34
C										
ATOM	1337	NZ	LYS	A	86	75.830	40.041	-4.700	1.00	-0.85
N										
ATOM	1338	HA	LYS	A	86	79.576	43.023	-6.056	1.00	0.08
H										
ATOM	1339	HB2	LYS	A	86	78.950	43.974	-3.823	1.00	0.08
H										
ATOM	1340	HB3	LYS	A	86	80.526	43.465	-3.177	1.00	0.08
H										
ATOM	1341	HG2	LYS	A	86	78.863	41.818	-2.524	1.00	0.08
H										
ATOM	1342	HG3	LYS	A	86	79.836	41.035	-3.797	1.00	0.08
H										

ATOM	1343	HD2	LYS	A	86	78.003	41.479	-5.473	1.00	0.08
H										
ATOM	1344	HD3	LYS	A	86	77.103	42.427	-4.254	1.00	0.08
H										
ATOM	1345	HE2	LYS	A	86	76.839	40.363	-2.878	1.00	0.08
H										
ATOM	1346	HE3	LYS	A	86	77.767	39.428	-4.091	1.00	0.08
H										
ATOM	1347	HZ1	LYS	A	86	75.341	39.135	-4.365	1.00	0.45
H										
ATOM	1348	HZ2	LYS	A	86	76.011	39.931	-5.760	1.00	0.45
H										
ATOM	1349	HZ3	LYS	A	86	75.123	40.849	-4.571	1.00	0.45
H										
ATOM	1350	H	LYS	A	86	82.068	42.240	-4.665	1.00	0.37
H										
ATOM	1351	N	GLY	A	87	81.936	45.231	-5.663	1.00	-0.73
N										
ATOM	1352	CA	GLY	A	87	82.220	46.590	-6.133	1.00	0.20
C										
ATOM	1353	C	GLY	A	87	82.194	47.614	-5.025	1.00	0.57
C										
ATOM	1354	O	GLY	A	87	81.948	47.264	-3.882	1.00	-0.57
O										
ATOM	1355	HA3	GLY	A	87	81.507	46.898	-6.915	1.00	0.08
H										
ATOM	1356	HA2	GLY	A	87	83.220	46.618	-6.592	1.00	0.08
H										
ATOM	1357	H	GLY	A	87	82.698	44.670	-5.337	1.00	0.37
H										
ATOM	1358	N	GLN	A	88	82.464	48.895	-5.375	1.00	-0.73
N										
ATOM	1359	CA	GLN	A	88	82.553	49.949	-4.365	1.00	0.28
C										
ATOM	1360	C	GLN	A	88	81.179	50.345	-3.876	1.00	0.57
C										
ATOM	1361	O	GLN	A	88	80.986	50.431	-2.674	1.00	-0.57
O										
ATOM	1362	CB	GLN	A	88	83.223	51.239	-4.922	1.00	-0.16
C										
ATOM	1363	CG	GLN	A	88	84.698	51.013	-5.343	1.00	-0.10
C										
ATOM	1364	CD	GLN	A	88	85.305	52.303	-5.843	1.00	0.57
C										
ATOM	1365	OE1	GLN	A	88	86.117	52.889	-5.144	1.00	-0.57
O										
ATOM	1366	NE2	GLN	A	88	84.924	52.775	-7.051	1.00	-0.80
N										
ATOM	1367	HA	GLN	A	88	83.158	49.587	-3.516	1.00	0.08
H										
ATOM	1368	HB2	GLN	A	88	83.210	52.019	-4.145	1.00	0.08
H										
ATOM	1369	HB3	GLN	A	88	82.646	51.614	-5.783	1.00	0.08
H										

ATOM	1370	HG2	GLN	A	88	84.760	50.263	-6.145	1.00	0.08
H										
ATOM	1371	HG3	GLN	A	88	85.273	50.643	-4.479	1.00	0.08
H										
ATOM	1372	HE22	GLN	A	88	84.261	52.283	-7.618	1.00	0.37
H										
ATOM	1373	HE21	GLN	A	88	85.311	53.632	-7.395	1.00	0.37
H										
ATOM	1374	H	GLN	A	88	82.605	49.138	-6.337	1.00	0.37
H										
ATOM	1375	N	GLU	A	89	80.220	50.622	-4.789	1.00	-0.73
N										
ATOM	1376	CA	GLU	A	89	78.933	51.160	-4.350	1.00	0.28
C										
ATOM	1377	C	GLU	A	89	78.299	50.207	-3.367	1.00	0.57
C										
ATOM	1378	O	GLU	A	89	77.807	50.655	-2.344	1.00	-0.57
O										
ATOM	1379	CB	GLU	A	89	77.939	51.418	-5.518	1.00	-0.16
C										
ATOM	1380	CG	GLU	A	89	78.421	52.521	-6.501	1.00	-0.27
C										
ATOM	1381	CD	GLU	A	89	78.662	53.825	-5.783	1.00	0.91
C										
ATOM	1382	OE1	GLU	A	89	77.659	54.494	-5.413	1.00	-0.90
O										
ATOM	1383	OE2	GLU	A	89	79.852	54.190	-5.579	1.00	-0.90
O										
ATOM	1384	HA	GLU	A	89	79.122	52.114	-3.829	1.00	0.08
H										
ATOM	1385	HB2	GLU	A	89	76.971	51.735	-5.092	1.00	0.08
H										
ATOM	1386	HB3	GLU	A	89	77.776	50.480	-6.072	1.00	0.08
H										
ATOM	1387	HG2	GLU	A	89	77.648	52.683	-7.270	1.00	0.08
H										
ATOM	1388	HG3	GLU	A	89	79.340	52.209	-7.020	1.00	0.08
H										
ATOM	1389	H	GLU	A	89	80.388	50.488	-5.766	1.00	0.37
H										
ATOM	1390	N	TYR	A	90	78.307	48.888	-3.655	1.00	-0.73
N										
ATOM	1391	CA	TYR	A	90	77.738	47.936	-2.704	1.00	0.28
C										
ATOM	1392	C	TYR	A	90	78.396	48.096	-1.354	1.00	0.57
C										
ATOM	1393	O	TYR	A	90	77.699	48.174	-0.355	1.00	-0.57
O										
ATOM	1394	CB	TYR	A	90	77.976	46.479	-3.173	1.00	-0.02
C										
ATOM	1395	CG	TYR	A	90	77.393	45.480	-2.162	1.00	-0.14
C										
ATOM	1396	CD1	TYR	A	90	76.025	45.190	-2.189	1.00	-0.15
C										

ATOM	1397	CD2	TYR	A	90	78.209	44.845	-1.219	1.00	-0.15
C										
ATOM	1398	CE1	TYR	A	90	75.487	44.230	-1.329	1.00	-0.15
C										
ATOM	1399	CE2	TYR	A	90	77.675	43.870	-0.370	1.00	-0.15
C										
ATOM	1400	CZ	TYR	A	90	76.317	43.544	-0.435	1.00	0.08
C										
ATOM	1401	OH	TYR	A	90	75.813	42.538	0.394	1.00	-0.53
O										
ATOM	1402	HA	TYR	A	90	76.653	48.119	-2.622	1.00	0.08
H										
ATOM	1403	HB3	TYR	A	90	77.498	46.321	-4.153	1.00	0.08
H										
ATOM	1404	HB2	TYR	A	90	79.057	46.313	-3.300	1.00	0.08
H										
ATOM	1405	HD2	TYR	A	90	79.261	45.101	-1.143	1.00	0.15
H										
ATOM	1406	HE2	TYR	A	90	78.315	43.359	0.341	1.00	0.15
H										
ATOM	1407	HE1	TYR	A	90	74.422	44.021	-1.364	1.00	0.15
H										
ATOM	1408	HD1	TYR	A	90	75.373	45.711	-2.883	1.00	0.15
H										
ATOM	1409	HH	TYR	A	90	74.928	42.267	0.181	1.00	0.45
H										
ATOM	1410	H	TYR	A	90	78.703	48.549	-4.511	1.00	0.37
H										
ATOM	1411	N	ILE	A	91	79.746	48.138	-1.310	1.00	-0.73
N										
ATOM	1412	CA	ILE	A	91	80.430	48.208	-0.020	1.00	0.28
C										
ATOM	1413	C	ILE	A	91	79.986	49.457	0.704	1.00	0.57
C										
ATOM	1414	O	ILE	A	91	79.522	49.358	1.830	1.00	-0.57
O										
ATOM	1415	CB	ILE	A	91	81.982	48.160	-0.182	1.00	-0.08
C										
ATOM	1416	CG1	ILE	A	91	82.427	46.721	-0.591	1.00	-0.16
C										
ATOM	1417	CG2	ILE	A	91	82.686	48.620	1.126	1.00	-0.24
C										
ATOM	1418	CD1	ILE	A	91	83.866	46.648	-1.168	1.00	-0.24
C										
ATOM	1419	HA	ILE	A	91	80.124	47.336	0.579	1.00	0.08
H										
ATOM	1420	HB	ILE	A	91	82.278	48.863	-0.978	1.00	0.08
H										
ATOM	1421	HG12	ILE	A	91	81.749	46.316	-1.359	1.00	0.08
H										
ATOM	1422	HG13	ILE	A	91	82.352	46.067	0.292	1.00	0.08
H										
ATOM	1423	HD11	ILE	A	91	83.947	47.257	-2.081	1.00	0.08
H										

ATOM	1424	HD12	ILE	A	91	84.114	45.606	-1.419	1.00	0.08
H										
ATOM	1425	HD13	ILE	A	91	84.617	46.999	-0.451	1.00	0.08
H										
ATOM	1426	HG21	ILE	A	91	82.370	47.987	1.970	1.00	0.08
H										
ATOM	1427	HG22	ILE	A	91	82.446	49.666	1.368	1.00	0.08
H										
ATOM	1428	HG23	ILE	A	91	83.777	48.560	1.022	1.00	0.08
H										
ATOM	1429	H	ILE	A	91	80.288	48.116	-2.152	1.00	0.37
H										
ATOM	1430	N	ASN	A	92	80.134	50.644	0.075	1.00	-0.73
N										
ATOM	1431	CA	ASN	A	92	79.794	51.879	0.775	1.00	0.28
C										
ATOM	1432	C	ASN	A	92	78.348	51.835	1.206	1.00	0.57
C										
ATOM	1433	O	ASN	A	92	78.078	52.118	2.360	1.00	-0.57
O										
ATOM	1434	CB	ASN	A	92	80.042	53.145	-0.086	1.00	-0.10
C										
ATOM	1435	CG	ASN	A	92	81.515	53.287	-0.391	1.00	0.57
C										
ATOM	1436	OD1	ASN	A	92	82.253	53.690	0.494	1.00	-0.57
O										
ATOM	1437	ND2	ASN	A	92	81.982	52.965	-1.617	1.00	-0.80
N										
ATOM	1438	HA	ASN	A	92	80.433	51.949	1.673	1.00	0.08
H										
ATOM	1439	HB2	ASN	A	92	79.724	54.035	0.478	1.00	0.08
H										
ATOM	1440	HB3	ASN	A	92	79.439	53.099	-1.006	1.00	0.08
H										
ATOM	1441	HD22	ASN	A	92	81.373	52.643	-2.342	1.00	0.37
H										
ATOM	1442	HD21	ASN	A	92	82.960	53.053	-1.809	1.00	0.37
H										
ATOM	1443	H	ASN	A	92	80.493	50.694	-0.857	1.00	0.37
H										
ATOM	1444	N	ASN	A	93	77.407	51.479	0.306	1.00	-0.73
N										
ATOM	1445	CA	ASN	A	93	75.992	51.464	0.681	1.00	0.28
C										
ATOM	1446	C	ASN	A	93	75.778	50.771	2.009	1.00	0.57
C										
ATOM	1447	O	ASN	A	93	75.024	51.281	2.823	1.00	-0.57
O										
ATOM	1448	CB	ASN	A	93	75.140	50.735	-0.396	1.00	-0.10
C										
ATOM	1449	CG	ASN	A	93	73.658	50.738	-0.100	1.00	0.57
C										
ATOM	1450	OD1	ASN	A	93	73.218	51.407	0.822	1.00	-0.57
O										

ATOM	1451	ND2	ASN	A	93	72.854	49.991	-0.889	1.00	-0.80
N										
ATOM	1452	HA	ASN	A	93	75.654	52.511	0.748	1.00	0.08
H										
ATOM	1453	HB2	ASN	A	93	75.487	49.694	-0.484	1.00	0.08
H										
ATOM	1454	HB3	ASN	A	93	75.282	51.232	-1.369	1.00	0.08
H										
ATOM	1455	HD22	ASN	A	93	73.227	49.453	-1.646	1.00	0.37
H										
ATOM	1456	HD21	ASN	A	93	71.867	49.974	-0.720	1.00	0.37
H										
ATOM	1457	H	ASN	A	93	77.664	51.255	-0.633	1.00	0.37
H										
ATOM	1458	N	ILE	A	94	76.426	49.609	2.252	1.00	-0.73
N										
ATOM	1459	CA	ILE	A	94	76.170	48.879	3.495	1.00	0.28
C										
ATOM	1460	C	ILE	A	94	76.659	49.703	4.667	1.00	0.57
C										
ATOM	1461	O	ILE	A	94	75.878	49.962	5.570	1.00	-0.57
O										
ATOM	1462	CB	ILE	A	94	76.787	47.445	3.492	1.00	-0.08
C										
ATOM	1463	CG1	ILE	A	94	76.197	46.527	2.370	1.00	-0.16
C										
ATOM	1464	CG2	ILE	A	94	76.672	46.782	4.895	1.00	-0.24
C										
ATOM	1465	CD1	ILE	A	94	74.711	46.115	2.545	1.00	-0.24
C										
ATOM	1466	HA	ILE	A	94	75.081	48.774	3.612	1.00	0.08
H										
ATOM	1467	HB	ILE	A	94	77.865	47.556	3.279	1.00	0.08
H										
ATOM	1468	HG12	ILE	A	94	76.787	45.598	2.315	1.00	0.08
H										
ATOM	1469	HG13	ILE	A	94	76.287	47.022	1.393	1.00	0.08
H										
ATOM	1470	HD11	ILE	A	94	74.569	45.522	3.461	1.00	0.08
H										
ATOM	1471	HD12	ILE	A	94	74.411	45.497	1.684	1.00	0.08
H										
ATOM	1472	HD13	ILE	A	94	74.039	46.984	2.574	1.00	0.08
H										
ATOM	1473	HG21	ILE	A	94	75.630	46.800	5.249	1.00	0.08
H										
ATOM	1474	HG22	ILE	A	94	77.294	47.313	5.633	1.00	0.08
H										
ATOM	1475	HG23	ILE	A	94	77.012	45.736	4.860	1.00	0.08
H										
ATOM	1476	H	ILE	A	94	77.087	49.245	1.593	1.00	0.37
H										
ATOM	1477	N	HIS	A	95	77.942	50.128	4.690	1.00	-0.73
N										

ATOM	1478	CA	HIS	A	95	78.424	50.906	5.834	1.00	0.28
C										
ATOM	1479	C	HIS	A	95	77.655	52.201	5.964	1.00	0.57
C										
ATOM	1480	O	HIS	A	95	77.227	52.524	7.060	1.00	-0.57
O										
ATOM	1481	CB	HIS	A	95	79.940	51.229	5.734	1.00	0.01
C										
ATOM	1482	CG	HIS	A	95	80.759	49.989	6.013	1.00	0.18
C										
ATOM	1483	ND1	HIS	A	95	80.784	49.718	7.452	1.00	-0.70
N										
ATOM	1484	CD2	HIS	A	95	81.076	49.352	7.095	1.00	0.20
C										
ATOM	1485	CE1	HIS	A	95	81.376	48.763	8.039	1.00	0.65
C										
ATOM	1486	NE2	HIS	A	95	81.850	48.236	7.041	1.00	-0.70
N										
ATOM	1487	HA	HIS	A	95	78.246	50.315	6.748	1.00	0.08
H										
ATOM	1488	HB2	HIS	A	95	80.211	52.024	6.449	1.00	0.08
H										
ATOM	1489	HB3	HIS	A	95	80.181	51.598	4.726	1.00	0.08
H										
ATOM	1490	HD2	HIS	A	95	80.422	50.163	7.947	1.00	0.45
H										
ATOM	1491	HE1	HIS	A	95	81.423	48.516	9.148	1.00	0.15
H										
ATOM	1492	HE2	HIS	A	95	82.329	47.466	7.534	1.00	0.45
H										
ATOM	1493	H	HIS	A	95	78.569	49.917	3.937	1.00	0.37
H										
ATOM	1494	N	LEU	A	96	77.472	52.958	4.862	1.00	-0.73
N										
ATOM	1495	CA	LEU	A	96	76.721	54.210	4.933	1.00	0.28
C										
ATOM	1496	C	LEU	A	96	75.361	53.957	5.545	1.00	0.57
C										
ATOM	1497	O	LEU	A	96	74.934	54.754	6.365	1.00	-0.57
O										
ATOM	1498	CB	LEU	A	96	76.491	54.847	3.531	1.00	-0.16
C										
ATOM	1499	CG	LEU	A	96	77.772	55.401	2.833	1.00	-0.08
C										
ATOM	1500	CD1	LEU	A	96	77.440	55.757	1.355	1.00	-0.24
C										
ATOM	1501	CD2	LEU	A	96	78.347	56.654	3.552	1.00	-0.24
C										
ATOM	1502	HA	LEU	A	96	77.266	54.907	5.586	1.00	0.08
H										
ATOM	1503	HB2	LEU	A	96	75.769	55.675	3.626	1.00	0.08
H										
ATOM	1504	HB3	LEU	A	96	76.028	54.075	2.895	1.00	0.08
H										

ATOM	1505	HG	LEU	A	96	78.560	54.631	2.822	1.00	0.08
H										
ATOM	1506	HD21	LEU	A	96	77.580	57.440	3.630	1.00	0.08
H										
ATOM	1507	HD22	LEU	A	96	79.200	57.060	2.987	1.00	0.08
H										
ATOM	1508	HD23	LEU	A	96	78.709	56.414	4.562	1.00	0.08
H										
ATOM	1509	HD11	LEU	A	96	76.639	56.511	1.314	1.00	0.08
H										
ATOM	1510	HD12	LEU	A	96	77.107	54.862	0.806	1.00	0.08
H										
ATOM	1511	HD13	LEU	A	96	78.324	56.163	0.840	1.00	0.08
H										
ATOM	1512	H	LEU	A	96	77.848	52.662	3.988	1.00	0.37
H										
ATOM	1513	N	THR	A	97	74.665	52.863	5.164	1.00	-0.73
N										
ATOM	1514	CA	THR	A	97	73.346	52.605	5.738	1.00	0.28
C										
ATOM	1515	C	THR	A	97	73.506	52.393	7.226	1.00	0.57
C										
ATOM	1516	O	THR	A	97	72.779	53.002	7.994	1.00	-0.57
O										
ATOM	1517	CB	THR	A	97	72.635	51.385	5.082	1.00	0.20
C										
ATOM	1518	OG1	THR	A	97	72.308	51.664	3.708	1.00	-0.68
O										
ATOM	1519	CG2	THR	A	97	71.304	51.051	5.806	1.00	-0.24
C										
ATOM	1520	HA	THR	A	97	72.709	53.489	5.563	1.00	0.08
H										
ATOM	1521	HB	THR	A	97	73.285	50.494	5.134	1.00	0.08
H										
ATOM	1522	HG1	THR	A	97	73.068	51.836	3.163	1.00	0.40
H										
ATOM	1523	HG23	THR	A	97	70.642	51.931	5.807	1.00	0.08
H										
ATOM	1524	HG21	THR	A	97	71.480	50.738	6.847	1.00	0.08
H										
ATOM	1525	HG22	THR	A	97	70.793	50.229	5.282	1.00	0.08
H										
ATOM	1526	H	THR	A	97	75.049	52.212	4.508	1.00	0.37
H										
ATOM	1527	N	HIS	A	98	74.456	51.532	7.654	1.00	-0.73
N										
ATOM	1528	CA	HIS	A	98	74.640	51.302	9.087	1.00	0.28
C										
ATOM	1529	C	HIS	A	98	74.941	52.604	9.797	1.00	0.57
C										
ATOM	1530	O	HIS	A	98	74.414	52.830	10.873	1.00	-0.57
O										
ATOM	1531	CB	HIS	A	98	75.786	50.285	9.340	1.00	0.01
C										

ATOM	1532	CG	HIS	A	98	75.882	49.937	10.807	1.00	0.18
C										
ATOM	1533	ND1	HIS	A	98	76.806	50.831	11.508	1.00	-0.70
N										
ATOM	1534	CD2	HIS	A	98	76.539	50.409	11.817	1.00	0.20
C										
ATOM	1535	CE1	HIS	A	98	77.112	50.792	12.739	1.00	0.65
C										
ATOM	1536	NE2	HIS	A	98	76.401	49.844	13.046	1.00	-0.70
N										
ATOM	1537	HA	HIS	A	98	73.705	50.875	9.487	1.00	0.08
H										
ATOM	1538	HB2	HIS	A	98	76.738	50.665	8.936	1.00	0.08
H										
ATOM	1539	HB3	HIS	A	98	75.553	49.348	8.812	1.00	0.08
H										
ATOM	1540	HD2	HIS	A	98	77.171	51.390	11.148	1.00	0.45
H										
ATOM	1541	HE1	HIS	A	98	77.827	51.448	13.331	1.00	0.15
H										
ATOM	1542	HE2	HIS	A	98	76.654	49.826	14.048	1.00	0.45
H										
ATOM	1543	H	HIS	A	98	75.041	51.046	7.002	1.00	0.37
H										
ATOM	1544	N	SER	A	99	75.786	53.480	9.209	1.00	-0.73
N										
ATOM	1545	CA	SER	A	99	76.088	54.758	9.850	1.00	0.28
C										
ATOM	1546	C	SER	A	99	74.843	55.615	9.899	1.00	0.57
C										
ATOM	1547	O	SER	A	99	74.641	56.307	10.883	1.00	-0.57
O										
ATOM	1548	CB	SER	A	99	77.203	55.537	9.102	1.00	0.12
C										
ATOM	1549	OG	SER	A	99	78.464	54.849	9.156	1.00	-0.68
O										
ATOM	1550	HA	SER	A	99	76.443	54.564	10.876	1.00	0.08
H										
ATOM	1551	HB2	SER	A	99	77.355	56.511	9.593	1.00	0.08
H										
ATOM	1552	HB3	SER	A	99	76.908	55.725	8.056	1.00	0.08
H										
ATOM	1553	HG	SER	A	99	78.450	54.001	8.724	1.00	0.40
H										
ATOM	1554	H	SER	A	99	76.184	53.281	8.315	1.00	0.37
H										
ATOM	1555	N	LEU	A	100	73.991	55.584	8.849	1.00	-0.73
N										
ATOM	1556	CA	LEU	A	100	72.758	56.372	8.882	1.00	0.28
C										
ATOM	1557	C	LEU	A	100	71.987	55.888	10.091	1.00	0.57
C										
ATOM	1558	O	LEU	A	100	71.599	56.696	10.919	1.00	-0.57
O										

ATOM	1559	CB	LEU	A	100	71.955	56.225	7.553	1.00	-0.16
C										
ATOM	1560	CG	LEU	A	100	70.931	57.362	7.254	1.00	-0.08
C										
ATOM	1561	CD1	LEU	A	100	70.232	57.087	5.892	1.00	-0.24
C										
ATOM	1562	CD2	LEU	A	100	69.861	57.520	8.368	1.00	-0.24
C										
ATOM	1563	HA	LEU	A	100	73.038	57.432	9.003	1.00	0.08
H										
ATOM	1564	HB2	LEU	A	100	71.446	55.250	7.533	1.00	0.08
H										
ATOM	1565	HB3	LEU	A	100	72.676	56.242	6.719	1.00	0.08
H										
ATOM	1566	HG	LEU	A	100	71.475	58.319	7.164	1.00	0.08
H										
ATOM	1567	HD21	LEU	A	100	69.413	56.544	8.607	1.00	0.08
H										
ATOM	1568	HD22	LEU	A	100	69.063	58.203	8.042	1.00	0.08
H										
ATOM	1569	HD23	LEU	A	100	70.309	57.952	9.273	1.00	0.08
H										
ATOM	1570	HD11	LEU	A	100	69.649	56.154	5.943	1.00	0.08
H										
ATOM	1571	HD12	LEU	A	100	70.974	56.992	5.084	1.00	0.08
H										
ATOM	1572	HD13	LEU	A	100	69.549	57.911	5.630	1.00	0.08
H										
ATOM	1573	H	LEU	A	100	74.181	55.008	8.054	1.00	0.37
H										
ATOM	1574	N	GLU	A	101	71.779	54.558	10.230	1.00	-0.73
N										
ATOM	1575	CA	GLU	A	101	71.056	54.050	11.394	1.00	0.28
C										
ATOM	1576	C	GLU	A	101	71.669	54.590	12.666	1.00	0.57
C										
ATOM	1577	O	GLU	A	101	70.917	55.000	13.536	1.00	-0.57
O										
ATOM	1578	CB	GLU	A	101	71.038	52.497	11.436	1.00	-0.16
C										
ATOM	1579	CG	GLU	A	101	70.250	51.954	12.658	1.00	-0.27
C										
ATOM	1580	CD	GLU	A	101	70.204	50.448	12.605	1.00	0.91
C										
ATOM	1581	OE1	GLU	A	101	71.238	49.811	12.944	1.00	-0.90
O										
ATOM	1582	OE2	GLU	A	101	69.140	49.890	12.223	1.00	-0.90
O										
ATOM	1583	HA	GLU	A	101	70.013	54.401	11.314	1.00	0.08
H										
ATOM	1584	HB2	GLU	A	101	72.068	52.113	11.478	1.00	0.08
H										
ATOM	1585	HB3	GLU	A	101	70.569	52.121	10.511	1.00	0.08
H										

ATOM	1586	HG2	GLU	A	101		69.227	52.363	12.657	1.00	0.08
H											
ATOM	1587	HG3	GLU	A	101		70.739	52.256	13.597	1.00	0.08
H											
ATOM	1588	H	GLU	A	101		72.113	53.905	9.548	1.00	0.37
H											
ATOM	1589	N	GLU	A	102		73.016	54.613	12.804	1.00	-0.73
N											
ATOM	1590	CA	GLU	A	102		73.600	55.157	14.029	1.00	0.28
C											
ATOM	1591	C	GLU	A	102		73.062	56.553	14.234	1.00	0.57
C											
ATOM	1592	O	GLU	A	102		72.574	56.832	15.317	1.00	-0.57
O											
ATOM	1593	CB	GLU	A	102		75.153	55.238	14.054	1.00	-0.16
C											
ATOM	1594	CG	GLU	A	102		75.835	53.845	14.062	1.00	-0.27
C											
ATOM	1595	CD	GLU	A	102		77.329	54.034	14.148	1.00	0.91
C											
ATOM	1596	OE1	GLU	A	102		77.874	53.998	15.284	1.00	-0.90
O											
ATOM	1597	OE2	GLU	A	102		77.970	54.223	13.078	1.00	-0.90
O											
ATOM	1598	HA	GLU	A	102		73.279	54.519	14.870	1.00	0.08
H											
ATOM	1599	HB2	GLU	A	102		75.460	55.770	14.971	1.00	0.08
H											
ATOM	1600	HB3	GLU	A	102		75.518	55.817	13.193	1.00	0.08
H											
ATOM	1601	HG2	GLU	A	102		75.591	53.283	13.149	1.00	0.08
H											
ATOM	1602	HG3	GLU	A	102		75.486	53.257	14.926	1.00	0.08
H											
ATOM	1603	H	GLU	A	102		73.619	54.272	12.082	1.00	0.37
H											
ATOM	1604	N	CYS	A	103		73.129	57.442	13.217	1.00	-0.73
N											
ATOM	1605	CA	CYS	A	103		72.625	58.802	13.406	1.00	0.28
C											
ATOM	1606	C	CYS	A	103		71.212	58.771	13.944	1.00	0.57
C											
ATOM	1607	O	CYS	A	103		70.910	59.522	14.858	1.00	-0.57
O											
ATOM	1608	CB	CYS	A	103		72.645	59.622	12.090	1.00	-0.11
C											
ATOM	1609	SG	CYS	A	103		72.079	61.321	12.440	1.00	-1.05
S											
ATOM	1610	HA	CYS	A	103		73.286	59.305	14.130	1.00	0.08
H											
ATOM	1611	HB2	CYS	A	103		71.978	59.174	11.339	1.00	0.08
H											
ATOM	1612	HB3	CYS	A	103		73.668	59.660	11.683	1.00	0.08
H											

ATOM	1613	HG	CYS	A	103	72.154	61.696	11.506	1.00	0.00
H										
ATOM	1614	LPG1	CYS	A	103	71.441	61.336	12.671	1.00	0.00
LP										
ATOM	1615	LPG2	CYS	A	103	72.486	61.642	12.878	1.00	0.00
LP										
ATOM	1616	H	CYS	A	103	73.528	57.189	12.333	1.00	0.37
H										
ATOM	1617	N	LEU	A	104	70.334	57.902	13.392	1.00	-0.73
N										
ATOM	1618	CA	LEU	A	104	68.956	57.854	13.875	1.00	0.28
C										
ATOM	1619	C	LEU	A	104	68.950	57.484	15.342	1.00	0.57
C										
ATOM	1620	O	LEU	A	104	68.225	58.102	16.105	1.00	-0.57
O										
ATOM	1621	CB	LEU	A	104	68.048	56.848	13.109	1.00	-0.16
C										
ATOM	1622	CG	LEU	A	104	67.975	57.062	11.566	1.00	-0.08
C										
ATOM	1623	CD1	LEU	A	104	66.940	56.081	10.946	1.00	-0.24
C										
ATOM	1624	CD2	LEU	A	104	67.625	58.525	11.179	1.00	-0.24
C										
ATOM	1625	HA	LEU	A	104	68.519	58.860	13.780	1.00	0.08
H										
ATOM	1626	HB2	LEU	A	104	67.030	56.931	13.526	1.00	0.08
H										
ATOM	1627	HB3	LEU	A	104	68.407	55.825	13.305	1.00	0.08
H										
ATOM	1628	HG	LEU	A	104	68.949	56.815	11.117	1.00	0.08
H										
ATOM	1629	HD21	LEU	A	104	66.713	58.852	11.702	1.00	0.08
H										
ATOM	1630	HD22	LEU	A	104	67.451	58.607	10.095	1.00	0.08
H										
ATOM	1631	HD23	LEU	A	104	68.450	59.209	11.433	1.00	0.08
H										
ATOM	1632	HD11	LEU	A	104	65.930	56.300	11.324	1.00	0.08
H										
ATOM	1633	HD12	LEU	A	104	67.194	55.040	11.201	1.00	0.08
H										
ATOM	1634	HD13	LEU	A	104	66.928	56.171	9.848	1.00	0.08
H										
ATOM	1635	H	LEU	A	104	70.623	57.278	12.666	1.00	0.37
H										
ATOM	1636	N	VAL	A	105	69.750	56.481	15.765	1.00	-0.73
N										
ATOM	1637	CA	VAL	A	105	69.773	56.114	17.182	1.00	0.28
C										
ATOM	1638	C	VAL	A	105	70.286	57.286	17.991	1.00	0.57
C										
ATOM	1639	O	VAL	A	105	69.741	57.559	19.049	1.00	-0.57
O										

ATOM	1640	CB	VAL	A	105	70.642	54.845	17.443	1.00	-0.08
C										
ATOM	1641	CG1	VAL	A	105	70.813	54.578	18.965	1.00	-0.24
C										
ATOM	1642	CG2	VAL	A	105	70.014	53.594	16.763	1.00	-0.24
C										
ATOM	1643	HA	VAL	A	105	68.741	55.891	17.503	1.00	0.08
H										
ATOM	1644	HB	VAL	A	105	71.646	55.010	17.017	1.00	0.08
H										
ATOM	1645	HG11	VAL	A	105	69.829	54.477	19.448	1.00	0.08
H										
ATOM	1646	HG12	VAL	A	105	71.363	55.397	19.455	1.00	0.08
H										
ATOM	1647	HG13	VAL	A	105	71.381	53.649	19.130	1.00	0.08
H										
ATOM	1648	HG21	VAL	A	105	69.031	53.372	17.207	1.00	0.08
H										
ATOM	1649	HG22	VAL	A	105	70.664	52.717	16.903	1.00	0.08
H										
ATOM	1650	HG23	VAL	A	105	69.876	53.742	15.683	1.00	0.08
H										
ATOM	1651	H	VAL	A	105	70.357	56.010	15.123	1.00	0.37
H										
ATOM	1652	N	ARG	A	106	71.337	57.991	17.516	1.00	-0.73
N										
ATOM	1653	CA	ARG	A	106	71.910	59.084	18.300	1.00	0.28
C										
ATOM	1654	C	ARG	A	106	70.900	60.185	18.534	1.00	0.57
C										
ATOM	1655	O	ARG	A	106	71.043	60.879	19.529	1.00	-0.57
O										
ATOM	1656	CB	ARG	A	106	73.178	59.684	17.629	1.00	-0.16
C										
ATOM	1657	CG	ARG	A	106	74.360	58.672	17.609	1.00	-0.16
C										
ATOM	1658	CD	ARG	A	106	75.574	59.217	16.807	1.00	0.17
C										
ATOM	1659	NE	ARG	A	106	76.647	58.223	16.700	1.00	-0.84
N										
ATOM	1660	CZ	ARG	A	106	77.760	58.427	16.026	1.00	1.20
C										
ATOM	1661	NH1	ARG	A	106	78.021	59.555	15.406	1.00	-0.97
N										
ATOM	1662	NH2	ARG	A	106	78.651	57.462	15.970	1.00	-0.97
N										
ATOM	1663	HA	ARG	A	106	72.206	58.678	19.281	1.00	0.08
H										
ATOM	1664	HB2	ARG	A	106	73.501	60.579	18.187	1.00	0.08
H										
ATOM	1665	HB3	ARG	A	106	72.918	59.999	16.607	1.00	0.08
H										
ATOM	1666	HG2	ARG	A	106	74.048	57.724	17.151	1.00	0.08
H										

ATOM	1667	HG3	ARG	A	106	74.677	58.456	18.643	1.00	0.08
H										
ATOM	1668	HD2	ARG	A	106	75.945	60.124	17.312	1.00	0.08
H										
ATOM	1669	HD3	ARG	A	106	75.223	59.473	15.795	1.00	0.08
H										
ATOM	1670	HE	ARG	A	106	76.504	57.317	17.173	1.00	0.45
H										
ATOM	1671	HH12	ARG	A	106	77.365	60.346	15.419	1.00	0.45
H										
ATOM	1672	HH11	ARG	A	106	78.903	59.680	14.886	1.00	0.45
H										
ATOM	1673	HH22	ARG	A	106	78.490	56.558	16.439	1.00	0.45
H										
ATOM	1674	HH21	ARG	A	106	79.535	57.583	15.454	1.00	0.45
H										
ATOM	1675	H	ARG	A	106	71.731	57.775	16.624	1.00	0.37
H										
ATOM	1676	N	THR	A	107	69.878	60.378	17.666	1.00	-0.73
N										
ATOM	1677	CA	THR	A	107	68.883	61.415	17.948	1.00	0.28
C										
ATOM	1678	C	THR	A	107	68.318	61.208	19.337	1.00	0.57
C										
ATOM	1679	O	THR	A	107	68.060	62.196	20.007	1.00	-0.57
O										
ATOM	1680	CB	THR	A	107	67.676	61.493	16.968	1.00	0.20
C										
ATOM	1681	OG1	THR	A	107	66.851	60.320	17.043	1.00	-0.68
O										
ATOM	1682	CG2	THR	A	107	68.098	61.804	15.507	1.00	-0.24
C										
ATOM	1683	HA	THR	A	107	69.406	62.386	17.917	1.00	0.08
H										
ATOM	1684	HB	THR	A	107	67.028	62.322	17.302	1.00	0.08
H										
ATOM	1685	HG1	THR	A	107	67.306	59.536	16.761	1.00	0.40
H										
ATOM	1686	HG23	THR	A	107	68.717	61.002	15.086	1.00	0.08
H										
ATOM	1687	HG21	THR	A	107	68.668	62.745	15.465	1.00	0.08
H										
ATOM	1688	HG22	THR	A	107	67.200	61.910	14.878	1.00	0.08
H										
ATOM	1689	H	THR	A	107	69.787	59.822	16.840	1.00	0.37
H										
ATOM	1690	N	THR	A	108	68.127	59.946	19.791	1.00	-0.73
N										
ATOM	1691	CA	THR	A	108	67.636	59.732	21.152	1.00	0.28
C										
ATOM	1692	C	THR	A	108	68.587	60.445	22.085	1.00	0.57
C										
ATOM	1693	O	THR	A	108	68.179	61.369	22.770	1.00	-0.57
O										

ATOM	1694	CB	THR	A	108	67.496	58.229	21.537	1.00	0.20
C										
ATOM	1695	OG1	THR	A	108	66.442	57.604	20.780	1.00	-0.68
O										
ATOM	1696	CG2	THR	A	108	67.141	58.060	23.038	1.00	-0.24
C										
ATOM	1697	HA	THR	A	108	66.634	60.185	21.234	1.00	0.08
H										
ATOM	1698	HB	THR	A	108	68.444	57.696	21.352	1.00	0.08
H										
ATOM	1699	HG1	THR	A	108	66.593	57.609	19.841	1.00	0.40
H										
ATOM	1700	HG23	THR	A	108	66.209	58.598	23.269	1.00	0.08
H										
ATOM	1701	HG21	THR	A	108	67.943	58.443	23.686	1.00	0.08
H										
ATOM	1702	HG22	THR	A	108	66.994	56.993	23.266	1.00	0.08
H										
ATOM	1703	H	THR	A	108	68.337	59.150	19.222	1.00	0.37
H										
ATOM	1704	N	GLU	A	109	69.871	60.029	22.103	1.00	-0.73
N										
ATOM	1705	CA	GLU	A	109	70.887	60.658	22.894	1.00	0.28
C										
ATOM	1706	C	GLU	A	109	71.333	59.534	22.048	1.00	0.45
C										
ATOM	1707	O	GLU	A	109	72.469	59.100	21.950	1.00	-0.57
O										
ATOM	1708	CB	GLU	A	109	70.940	60.359	24.412	1.00	-0.16
C										
ATOM	1709	CG	GLU	A	109	70.311	61.508	25.242	1.00	-0.27
C										
ATOM	1710	CD	GLU	A	109	70.494	61.257	26.717	1.00	0.91
C										
ATOM	1711	OE1	GLU	A	109	69.947	60.235	27.214	1.00	-0.90
O										
ATOM	1712	OE2	GLU	A	109	71.181	62.072	27.392	1.00	-0.90
O										
ATOM	1713	HA	GLU	A	109	71.234	61.638	22.529	1.00	0.08
H										
ATOM	1714	H	GLU	A	109	70.347	59.276	21.581	1.00	0.06
H										
ATOM	1715	HB2	GLU	A	109	72.000	60.256	24.696	1.00	0.08
H										
ATOM	1716	HB3	GLU	A	109	70.426	59.409	24.628	1.00	0.08
H										
ATOM	1717	HG2	GLU	A	109	69.232	61.583	25.040	1.00	0.08
H										
ATOM	1718	HG3	GLU	A	109	70.780	62.466	24.963	1.00	0.08
H										
TER	1719									
HETATM	1720	N	UNK	A	3	78.708	38.909	12.947	1.00	-0.73
N										

HETATM	1721	C	UNK	A	3	77.106	37.050	12.743	1.00	0.33
C										
HETATM	1722	O	UNK	A	3	87.229	36.670	15.943	1.00	-0.57
O										
HETATM	1723	H	UNK	A	3	76.843	36.150	13.318	1.00	0.00
H										
HETATM	1724	C	UNK	A	3	78.265	37.729	13.436	1.00	0.57
C										
HETATM	1725	H	UNK	A	3	78.312	39.294	12.110	1.00	0.37
H										
HETATM	1726	C	UNK	A	3	79.699	39.705	13.681	1.00	0.36
C										
HETATM	1727	C	UNK	A	3	79.201	39.986	15.130	1.00	0.30
C										
HETATM	1728	H2	UNK	A	3	79.592	39.214	15.810	1.00	0.00
H										
HETATM	1729	H1	UNK	A	3	79.561	40.961	15.495	1.00	0.00
H										
HETATM	1730	C	UNK	A	3	81.063	39.045	13.683	1.00	0.57
C										
HETATM	1731	N	UNK	A	3	82.205	39.702	14.021	1.00	-0.66
N										
HETATM	1732	C	UNK	A	3	82.246	41.119	14.364	1.00	0.30
C										
HETATM	1733	H2	UNK	A	3	82.135	41.245	15.453	1.00	0.00
H										
HETATM	1734	H1	UNK	A	3	81.555	41.789	13.837	1.00	0.00
H										
HETATM	1735	C	UNK	A	3	83.693	41.414	13.909	1.00	0.00
C										
HETATM	1736	H2	UNK	A	3	84.099	42.341	14.346	1.00	0.00
H										
HETATM	1737	H1	UNK	A	3	83.723	41.492	12.809	1.00	0.00
H										
HETATM	1738	C	UNK	A	3	84.460	40.144	14.341	1.00	0.00
C										
HETATM	1739	H2	UNK	A	3	85.429	40.033	13.827	1.00	0.00
H										
HETATM	1740	H1	UNK	A	3	84.644	40.219	15.426	1.00	0.00
H										
HETATM	1741	C	UNK	A	3	83.475	38.983	14.037	1.00	0.36
C										
HETATM	1742	H	UNK	A	3	83.665	38.554	13.042	1.00	0.00
H										
HETATM	1743	C	UNK	A	3	83.558	37.954	15.143	1.00	0.57
C										
HETATM	1744	N	UNK	A	3	84.734	37.306	15.326	1.00	-0.73
N										
HETATM	1745	H	UNK	A	3	85.490	37.420	14.677	1.00	0.37
H										
HETATM	1746	C	UNK	A	3	84.954	36.487	16.521	1.00	0.36
C										
HETATM	1747	C	UNK	A	3	84.330	35.072	16.405	1.00	0.14
C										

HETATM	1748	H2	UNK	A	3	83.299	35.161	16.028	1.00	0.00
H										
HETATM	1749	H1	UNK	A	3	84.272	34.602	17.399	1.00	0.00
H										
HETATM	1750	C	UNK	A	3	85.158	34.159	15.488	1.00	-0.14
C										
HETATM	1751	C	UNK	A	3	86.195	33.371	16.003	1.00	-0.15
C										
HETATM	1752	H	UNK	A	3	86.452	33.425	17.055	1.00	0.15
H										
HETATM	1753	C	UNK	A	3	86.908	32.506	15.168	1.00	-0.15
C										
HETATM	1754	H	UNK	A	3	87.738	31.929	15.564	1.00	0.15
H										
HETATM	1755	C	UNK	A	3	86.550	32.377	13.824	1.00	-0.15
C										
HETATM	1756	H	UNK	A	3	87.077	31.678	13.182	1.00	0.15
H										
HETATM	1757	C	UNK	A	3	85.509	33.153	13.309	1.00	-0.15
C										
HETATM	1758	H	UNK	A	3	85.200	33.019	12.280	1.00	0.15
H										
HETATM	1759	C	UNK	A	3	84.869	34.091	14.123	1.00	-0.15
C										
HETATM	1760	H	UNK	A	3	84.128	34.761	13.704	1.00	0.15
H										
HETATM	1761	C	UNK	A	3	86.432	36.372	16.819	1.00	0.57
C										
HETATM	1762	N	UNK	A	3	86.829	35.941	18.037	1.00	-0.80
N										
HETATM	1763	H1	UNK	A	3	86.166	35.701	18.746	1.00	0.37
H										
HETATM	1764	H2	UNK	A	3	87.806	35.856	18.239	1.00	0.37
H										
HETATM	1765	H	UNK	A	3	84.496	37.006	17.380	1.00	0.00
H										
HETATM	1766	O	UNK	A	3	82.580	37.773	15.852	1.00	-0.57
O										
HETATM	1767	O	UNK	A	3	81.104	37.867	13.365	1.00	-0.57
O										
HETATM	1768	H	UNK	A	3	79.766	40.661	13.143	1.00	0.00
H										
HETATM	1769	O	UNK	A	3	78.747	37.211	14.431	1.00	-0.57
O										
HETATM	1770	C	UNK	A	3	77.469	36.591	11.306	1.00	0.00
C										
HETATM	1771	H3	UNK	A	3	77.807	37.435	10.690	1.00	0.00
H										
HETATM	1772	H2	UNK	A	3	78.270	35.837	11.343	1.00	0.00
H										
HETATM	1773	H1	UNK	A	3	76.589	36.146	10.822	1.00	0.00
H										
HETATM	1774	N	UNK	A	3	75.946	37.974	12.781	1.00	-0.90
N										

HETATM	1775	H	UNK	A	3	75.927	38.615	11.909	1.00	0.36
H										
HETATM	1776	C	UNK	A	3	74.622	37.356	13.017	1.00	0.27
C										
HETATM	1777	H3	UNK	A	3	73.816	38.099	12.930	1.00	0.00
H										
HETATM	1778	H2	UNK	A	3	74.424	36.544	12.303	1.00	0.00
H										
HETATM	1779	H1	UNK	A	3	74.592	36.947	14.037	1.00	0.00
H										
TER	1780		UNK	A	3					
HETATM	1781	ZN	ZN5	A	5	85.502	38.521	5.164	1.00	2.00
ZN										
HETATM	1782	O	PHE	A	2	73.387	39.896	17.259	1.00	-0.65
O										
HETATM	1783	S	PHE	A	2	72.596	39.718	16.055	1.00	1.51
S										
HETATM	1784	O	PHE	A	2	71.478	40.610	15.822	1.00	-0.65
O										
HETATM	1785	O1	PHE	A	2	73.472	39.765	14.829	1.00	0.00
O										
HETATM	1786	C	PHE	A	2	74.859	39.853	14.981	1.00	0.00
C										
HETATM	1787	C	PHE	A	2	75.565	40.834	14.282	1.00	0.00
C										
HETATM	1788	H7	PHE	A	2	75.032	41.548	13.663	1.00	0.00
H										
HETATM	1789	C	PHE	A	2	76.958	40.896	14.371	1.00	0.00
C										
HETATM	1790	H6	PHE	A	2	77.495	41.657	13.824	1.00	0.00
H										
HETATM	1791	C	PHE	A	2	77.664	39.976	15.152	1.00	0.00
C										
HETATM	1792	C	PHE	A	2	76.948	39.044	15.913	1.00	0.00
C										
HETATM	1793	H5	PHE	A	2	77.467	38.369	16.587	1.00	0.00
H										
HETATM	1794	C	PHE	A	2	75.557	38.962	15.805	1.00	0.00
C										
HETATM	1795	H4	PHE	A	2	75.029	38.196	16.359	1.00	0.00
H										
HETATM	1796	N2	UNK	A	3	72.031	38.076	15.987	1.00	0.00
N										
HETATM	1797	H14	UNK	A	3	72.671	37.321	16.139	1.00	0.00
H										
HETATM	1798	C1	UNK	A	4	71.060	36.024	13.762	1.00	0.00
C										
HETATM	1799	H9	UNK	A	4	72.155	36.033	13.871	1.00	0.00
H										
HETATM	1800	H8	UNK	A	4	70.654	35.253	14.437	1.00	0.00
H										
HETATM	1801	C2	UNK	A	4	70.462	37.404	14.163	1.00	0.00
C										

HETATM	1802	H11	UNK	A	4	70.920	38.204	13.558	1.00	0.00
H										
HETATM	1803	H10	UNK	A	4	69.380	37.389	13.952	1.00	0.00
H										
HETATM	1804	C3	UNK	A	4	70.647	37.737	15.670	1.00	0.00
C										
HETATM	1805	H13	UNK	A	4	70.003	38.592	15.930	1.00	0.00
H										
HETATM	1806	H12	UNK	A	4	70.310	36.886	16.286	1.00	0.00
H										
CONECT	1	2	14		15					
CONECT	14	1								
CONECT	15	1								
CONECT	845	843	846	851	852					
CONECT	846	844	845	851						
CONECT	851	845	846							
CONECT	852	845								
CONECT	962	959	964	965	1798					
CONECT	1095	1094	1097	1102						
CONECT	1102	1095	1096							
CONECT	1483	1482	1485	1490						
CONECT	1490	1483	1484							
CONECT	1533	1532	1535	1540						
CONECT	1540	1533	1534							
CONECT	1706	1705	1707	1714						
CONECT	1714	1704	1706							
CONECT	1720	1724	1725	1726						
CONECT	1721	1723	1724	1770	1774					
CONECT	1722	1761								
CONECT	1723	1721								
CONECT	1724	1720	1721	1769						
CONECT	1725	1720								
CONECT	1726	1720	1727	1730	1768					
CONECT	1727	1726	1728	1729	1791					
CONECT	1728	1727								
CONECT	1729	1727								
CONECT	1730	1726	1731	1767						
CONECT	1731	1730	1732	1741						
CONECT	1732	1731	1733	1734	1735					
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CONECT	1735	1732	1736	1737	1738					
CONECT	1736	1735								
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CONECT	1744	1743	1745	1746						
CONECT	1745	1744								
CONECT	1746	1744	1747	1761	1765					
CONECT	1747	1746	1748	1749	1750					

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CONECT 1798 962 1799 1800 1801
CONECT 1799 1798
CONECT 1800 1798
CONECT 1801 1798 1802 1803 1804
CONECT 1802 1801
CONECT 1803 1801

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CONECT 1804 1796 1801 1805 1806
CONECT 1805 1804
CONECT 1806 1804
MASTER          0    0    0    0    0    0    0    0 1804    2   101   10
END
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HEADER LYS311TYR

COMPND LYS311TYR

REMARK GENERATED BY SYBYL (TRIPOS, INC.) 29-MAR-19

SEQRES 1 A 109 ASN PHE PRO ASN SER THR ASN LEU PRO ARG ASN PRO SER

SEQRES 2 A 109 MET ALA ASP TYR GLU ALA ARG ILE PHE THR PHE GLY THR

SEQRES 3 A 109 TRP ILE TYR SER VAL ASN LYS GLU GLN LEU ALA ARG ALA

SEQRES 4 A 109 GLY PHE TYR ALA LEU GLY GLU GLY ASP LYS VAL LYS CYS

SEQRES 5 A 109 PHE HIS CYS GLY GLY GLY LEU THR ASP TRP TYR PRO SER

SEQRES 6 A 109 GLU ASP PRO TRP GLU GLN HIS ALA LYS TRP TYR PRO GLY

SEQRES 7 A 109 CYS LYS TYR LEU LEU GLU GLN LYS GLY GLN GLU TYR ILE

SEQRES 8 A 109 ASN ASN ILE HIS LEU THR HIS SER LEU GLU GLU CYS LEU

SEQRES 9 A 109 VAL ARG THR THR GLU

HET ZN5 A 5 1

HET PHE A 111 14

ATOM									
N	1	N	ASN	A	1	99.267	49.599	-8.767	1.00 -0.99
C	2	CA	ASN	A	1	99.135	48.170	-8.501	1.00 0.25
C	3	C	ASN	A	1	98.729	48.000	-7.054	1.00 0.57
O	4	O	ASN	A	1	98.905	48.938	-6.293	1.00 -0.57
C	5	CB	ASN	A	1	100.464	47.448	-8.854	1.00 -0.10
C	6	CG	ASN	A	1	100.375	45.941	-8.921	1.00 0.57
O	7	OD1	ASN	A	1	99.349	45.372	-8.584	1.00 -0.57
N	8	ND2	ASN	A	1	101.455	45.263	-9.366	1.00 -0.80
H	9	HA	ASN	A	1	98.336	47.765	-9.146	1.00 0.08
H	10	HB2	ASN	A	1	101.237	47.732	-8.124	1.00 0.08
H	11	HB3	ASN	A	1	100.781	47.801	-9.849	1.00 0.08
H	12	HD22	ASN	A	1	102.290	45.743	-9.643	1.00 0.37
H	13	HD21	ASN	A	1	101.426	44.264	-9.429	1.00 0.37
H	14	H1	ASN	A	1	100.099	50.078	-8.484	1.00 0.36
H	15	H2	ASN	A	1	98.491	50.110	-9.142	1.00 0.36
N	16	N	PHE	A	2	98.169	46.835	-6.653	1.00 -0.73
C	17	CA	PHE	A	2	97.652	46.690	-5.291	1.00 0.28
C	18	C	PHE	A	2	98.813	46.266	-4.400	1.00 0.57
O	19	O	PHE	A	2	99.620	45.509	-4.916	1.00 -0.57
C	20	CB	PHE	A	2	96.461	45.692	-5.219	1.00 -0.02

ATOM	21	CG	PHE	A	2	95.128	46.250	-5.755	1.00	-0.14
C										
ATOM	22	CD1	PHE	A	2	95.029	46.791	-7.043	1.00	-0.15
C										
ATOM	23	CD2	PHE	A	2	93.978	46.210	-4.957	1.00	-0.15
C										
ATOM	24	CE1	PHE	A	2	93.818	47.312	-7.507	1.00	-0.15
C										
ATOM	25	CE2	PHE	A	2	92.762	46.721	-5.418	1.00	-0.15
C										
ATOM	26	CZ	PHE	A	2	92.681	47.279	-6.696	1.00	-0.15
C										
ATOM	27	HA	PHE	A	2	97.221	47.654	-4.998	1.00	0.08
H										
ATOM	28	HB2	PHE	A	2	96.333	45.396	-4.166	1.00	0.08
H										
ATOM	29	HB3	PHE	A	2	96.686	44.797	-5.812	1.00	0.08
H										
ATOM	30	HD2	PHE	A	2	94.012	45.777	-3.967	1.00	0.15
H										
ATOM	31	HE2	PHE	A	2	91.883	46.685	-4.784	1.00	0.15
H										
ATOM	32	HZ	PHE	A	2	91.741	47.684	-7.055	1.00	0.15
H										
ATOM	33	HE1	PHE	A	2	93.760	47.743	-8.502	1.00	0.15
H										
ATOM	34	HD1	PHE	A	2	95.887	46.812	-7.702	1.00	0.15
H										
ATOM	35	H	PHE	A	2	98.115	46.055	-7.277	1.00	0.37
H										
ATOM	36	N	PRO	A	3	99.000	46.683	-3.114	1.00	-0.66
N										
ATOM	37	CA	PRO	A	3	100.197	46.273	-2.374	1.00	0.28
C										
ATOM	38	C	PRO	A	3	100.334	44.809	-2.025	1.00	0.57
C										
ATOM	39	O	PRO	A	3	99.453	44.025	-2.333	1.00	-0.57
O										
ATOM	40	CB	PRO	A	3	99.994	47.030	-1.034	1.00	-0.16
C										
ATOM	41	CG	PRO	A	3	99.076	48.213	-1.404	1.00	-0.16
C										
ATOM	42	CD	PRO	A	3	98.093	47.601	-2.429	1.00	0.14
C										
ATOM	43	HA	PRO	A	3	101.091	46.648	-2.901	1.00	0.08
H										
ATOM	44	HD3	PRO	A	3	97.673	48.432	-3.011	1.00	0.08
H										
ATOM	45	HD2	PRO	A	3	97.287	47.033	-1.937	1.00	0.08
H										
ATOM	46	HG3	PRO	A	3	98.566	48.658	-0.533	1.00	0.08
H										
ATOM	47	HG2	PRO	A	3	99.690	48.988	-1.896	1.00	0.08
H										

ATOM	48	HB2	PRO	A	3	100.940	47.353	-0.567	1.00	0.08
H										
ATOM	49	HB3	PRO	A	3	99.444	46.404	-0.311	1.00	0.08
H										
ATOM	50	N	ASN	A	4	101.436	44.450	-1.325	1.00	-0.73
N										
ATOM	51	CA	ASN	A	4	101.560	43.105	-0.761	1.00	0.28
C										
ATOM	52	C	ASN	A	4	100.386	42.806	0.147	1.00	0.57
C										
ATOM	53	O	ASN	A	4	99.633	43.716	0.451	1.00	-0.57
O										
ATOM	54	CB	ASN	A	4	102.927	42.908	-0.037	1.00	-0.10
C										
ATOM	55	CG	ASN	A	4	103.326	44.071	0.843	1.00	0.57
C										
ATOM	56	OD1	ASN	A	4	104.320	44.719	0.551	1.00	-0.57
O										
ATOM	57	ND2	ASN	A	4	102.582	44.374	1.927	1.00	-0.80
N										
ATOM	58	HA	ASN	A	4	101.501	42.377	-1.587	1.00	0.08
H										
ATOM	59	HB2	ASN	A	4	103.704	42.785	-0.808	1.00	0.08
H										
ATOM	60	HB3	ASN	A	4	102.937	41.992	0.570	1.00	0.08
H										
ATOM	61	HD22	ASN	A	4	101.781	43.832	2.174	1.00	0.37
H										
ATOM	62	HD21	ASN	A	4	102.833	45.158	2.497	1.00	0.37
H										
ATOM	63	H	ASN	A	4	102.154	45.122	-1.145	1.00	0.37
H										
ATOM	64	N	SER	A	5	100.204	41.534	0.578	1.00	-0.73
N										
ATOM	65	CA	SER	A	5	99.021	41.149	1.352	1.00	0.28
C										
ATOM	66	C	SER	A	5	97.806	41.332	0.464	1.00	0.57
C										
ATOM	67	O	SER	A	5	97.490	40.406	-0.265	1.00	-0.57
O										
ATOM	68	CB	SER	A	5	98.906	41.788	2.770	1.00	0.12
C										
ATOM	69	OG	SER	A	5	98.622	43.199	2.774	1.00	-0.68
O										
ATOM	70	HA	SER	A	5	99.084	40.061	1.552	1.00	0.08
H										
ATOM	71	HB2	SER	A	5	99.826	41.589	3.347	1.00	0.08
H										
ATOM	72	HB3	SER	A	5	98.058	41.321	3.298	1.00	0.08
H										
ATOM	73	HG	SER	A	5	99.339	43.723	2.433	1.00	0.40
H										
ATOM	74	H	SER	A	5	100.848	40.811	0.317	1.00	0.37
H										

ATOM	75	N	THR	A	6	97.135	42.507	0.512	1.00	-0.73
ATOM	76	CA	THR	A	6	95.982	42.812	-0.340	1.00	0.28
ATOM	77	C	THR	A	6	95.819	41.931	-1.568	1.00	0.57
ATOM	78	O	THR	A	6	94.760	41.345	-1.728	1.00	-0.57
ATOM	79	CB	THR	A	6	95.998	44.306	-0.798	1.00	0.20
ATOM	80	OG1	THR	A	6	96.367	45.232	0.243	1.00	-0.68
ATOM	81	CG2	THR	A	6	94.587	44.750	-1.259	1.00	-0.24
ATOM	82	HA	THR	A	6	95.101	42.664	0.309	1.00	0.08
ATOM	83	HB	THR	A	6	96.694	44.436	-1.646	1.00	0.08
ATOM	84	HG1	THR	A	6	97.298	45.259	0.434	1.00	0.40
ATOM	85	HG23	THR	A	6	93.863	44.663	-0.434	1.00	0.08
ATOM	86	HG21	THR	A	6	94.247	44.129	-2.098	1.00	0.08
ATOM	87	HG22	THR	A	6	94.620	45.802	-1.579	1.00	0.08
ATOM	88	H	THR	A	6	97.376	43.176	1.209	1.00	0.37
ATOM	89	N	ASN	A	7	96.839	41.820	-2.455	1.00	-0.73
ATOM	90	CA	ASN	A	7	96.666	41.019	-3.670	1.00	0.28
ATOM	91	C	ASN	A	7	96.619	39.547	-3.341	1.00	0.57
ATOM	92	O	ASN	A	7	95.769	38.842	-3.859	1.00	-0.57
ATOM	93	CB	ASN	A	7	97.826	41.153	-4.700	1.00	-0.10
ATOM	94	CG	ASN	A	7	98.180	42.580	-5.020	1.00	0.57
ATOM	95	OD1	ASN	A	7	97.894	43.438	-4.203	1.00	-0.57
ATOM	96	ND2	ASN	A	7	98.818	42.861	-6.178	1.00	-0.80
ATOM	97	HA	ASN	A	7	95.733	41.334	-4.167	1.00	0.08
ATOM	98	HB2	ASN	A	7	97.549	40.616	-5.623	1.00	0.08
ATOM	99	HB3	ASN	A	7	98.747	40.701	-4.302	1.00	0.08
ATOM	100	HD22	ASN	A	7	99.048	42.139	-6.833	1.00	0.37
ATOM	101	HD21	ASN	A	7	99.076	43.805	-6.388	1.00	0.37

ATOM	102	H	ASN A	7	97.716	42.279	-2.298	1.00	0.37
H									
ATOM	103	N	LEU A	8	97.571	39.075	-2.506	1.00	-0.73
N									
ATOM	104	CA	LEU A	8	97.735	37.641	-2.288	1.00	0.28
C									
ATOM	105	C	LEU A	8	96.737	37.180	-1.251	1.00	0.57
C									
ATOM	106	O	LEU A	8	96.805	37.723	-0.160	1.00	-0.57
O									
ATOM	107	CB	LEU A	8	99.171	37.345	-1.761	1.00	-0.16
C									
ATOM	108	CG	LEU A	8	100.302	37.761	-2.755	1.00	-0.08
C									
ATOM	109	CD1	LEU A	8	101.657	37.892	-2.003	1.00	-0.24
C									
ATOM	110	CD2	LEU A	8	100.449	36.754	-3.931	1.00	-0.24
C									
ATOM	111	HA	LEU A	8	97.621	37.109	-3.241	1.00	0.08
H									
ATOM	112	HB2	LEU A	8	99.267	36.273	-1.524	1.00	0.08
H									
ATOM	113	HB3	LEU A	8	99.300	37.902	-0.818	1.00	0.08
H									
ATOM	114	HG	LEU A	8	100.079	38.752	-3.184	1.00	0.08
H									
ATOM	115	HD21	LEU A	8	100.682	35.749	-3.547	1.00	0.08
H									
ATOM	116	HD22	LEU A	8	101.265	37.066	-4.600	1.00	0.08
H									
ATOM	117	HD23	LEU A	8	99.531	36.694	-4.532	1.00	0.08
H									
ATOM	118	HD11	LEU A	8	101.926	36.935	-1.531	1.00	0.08
H									
ATOM	119	HD12	LEU A	8	101.592	38.664	-1.220	1.00	0.08
H									
ATOM	120	HD13	LEU A	8	102.461	38.182	-2.698	1.00	0.08
H									
ATOM	121	H	LEU A	8	98.187	39.706	-2.030	1.00	0.37
H									
ATOM	122	N	PRO A	9	95.816	36.206	-1.476	1.00	-0.66
N									
ATOM	123	CA	PRO A	9	95.015	35.713	-0.368	1.00	0.28
C									
ATOM	124	C	PRO A	9	95.822	35.236	0.812	1.00	0.57
C									
ATOM	125	O	PRO A	9	96.997	34.950	0.641	1.00	-0.57
O									
ATOM	126	CB	PRO A	9	94.384	34.464	-1.028	1.00	-0.16
C									
ATOM	127	CG	PRO A	9	94.235	34.889	-2.503	1.00	-0.16
C									
ATOM	128	CD	PRO A	9	95.576	35.611	-2.785	1.00	0.14
C									

ATOM	129	HA	PRO	A	9	94.265	36.476	-0.107	1.00	0.08
H										
ATOM	130	HD3	PRO	A	9	95.444	36.333	-3.604	1.00	0.08
H										
ATOM	131	HD2	PRO	A	9	96.374	34.890	-3.026	1.00	0.08
H										
ATOM	132	HG3	PRO	A	9	94.043	34.042	-3.183	1.00	0.08
H										
ATOM	133	HG2	PRO	A	9	93.401	35.607	-2.578	1.00	0.08
H										
ATOM	134	HB2	PRO	A	9	93.453	34.154	-0.538	1.00	0.08
H										
ATOM	135	HB3	PRO	A	9	95.082	33.613	-0.992	1.00	0.08
H										
ATOM	136	N	ARG	A	10	95.188	35.108	1.999	1.00	-0.73
N										
ATOM	137	CA	ARG	A	10	95.844	34.414	3.102	1.00	0.28
C										
ATOM	138	C	ARG	A	10	95.719	32.920	2.893	1.00	0.57
C										
ATOM	139	O	ARG	A	10	96.593	32.212	3.368	1.00	-0.57
O										
ATOM	140	CB	ARG	A	10	95.240	34.787	4.480	1.00	-0.16
C										
ATOM	141	CG	ARG	A	10	95.434	36.294	4.809	1.00	-0.16
C										
ATOM	142	CD	ARG	A	10	95.032	36.587	6.280	1.00	0.17
C										
ATOM	143	NE	ARG	A	10	95.074	38.009	6.620	1.00	-0.84
N										
ATOM	144	CZ	ARG	A	10	94.705	38.482	7.793	1.00	1.20
C										
ATOM	145	NH1	ARG	A	10	94.273	37.714	8.769	1.00	-0.97
N										
ATOM	146	NH2	ARG	A	10	94.770	39.777	8.002	1.00	-0.97
N										
ATOM	147	HA	ARG	A	10	96.916	34.677	3.126	1.00	0.08
H										
ATOM	148	HB2	ARG	A	10	95.745	34.183	5.252	1.00	0.08
H										
ATOM	149	HB3	ARG	A	10	94.167	34.531	4.496	1.00	0.08
H										
ATOM	150	HG2	ARG	A	10	94.817	36.902	4.128	1.00	0.08
H										
ATOM	151	HG3	ARG	A	10	96.489	36.583	4.672	1.00	0.08
H										
ATOM	152	HD2	ARG	A	10	95.710	36.030	6.948	1.00	0.08
H										
ATOM	153	HD3	ARG	A	10	94.008	36.214	6.403	1.00	0.08
H										
ATOM	154	HE	ARG	A	10	95.406	38.662	5.892	1.00	0.45
H										
ATOM	155	HH12	ARG	A	10	94.205	36.694	8.668	1.00	0.45
H										

ATOM	156	HH11	ARG	A	10	93.991	38.119	9.674	1.00	0.45
H										
ATOM	157	HH22	ARG	A	10	95.102	40.421	7.268	1.00	0.45
H										
ATOM	158	HH21	ARG	A	10	94.491	40.186	8.907	1.00	0.45
H										
ATOM	159	H	ARG	A	10	94.231	35.385	2.107	1.00	0.37
H										
ATOM	160	N	ASN	A	11	94.664	32.419	2.199	1.00	-0.73
N										
ATOM	161	CA	ASN	A	11	94.499	30.978	2.006	1.00	0.28
C										
ATOM	162	C	ASN	A	11	94.233	30.684	0.542	1.00	0.57
C										
ATOM	163	O	ASN	A	11	93.091	30.416	0.203	1.00	-0.57
O										
ATOM	164	CB	ASN	A	11	93.348	30.527	2.946	1.00	-0.10
C										
ATOM	165	CG	ASN	A	11	93.155	29.030	2.958	1.00	0.57
C										
ATOM	166	OD1	ASN	A	11	93.563	28.367	2.019	1.00	-0.57
O										
ATOM	167	ND2	ASN	A	11	92.530	28.467	4.017	1.00	-0.80
N										
ATOM	168	HA	ASN	A	11	95.389	30.405	2.311	1.00	0.08
H										
ATOM	169	HB2	ASN	A	11	92.406	31.002	2.640	1.00	0.08
H										
ATOM	170	HB3	ASN	A	11	93.588	30.871	3.966	1.00	0.08
H										
ATOM	171	HD22	ASN	A	11	92.196	29.027	4.774	1.00	0.37
H										
ATOM	172	HD21	ASN	A	11	92.408	27.475	4.058	1.00	0.37
H										
ATOM	173	H	ASN	A	11	93.939	33.002	1.830	1.00	0.37
H										
ATOM	174	N	PRO	A	12	95.248	30.710	-0.361	1.00	-0.66
N										
ATOM	175	CA	PRO	A	12	95.007	30.353	-1.753	1.00	0.28
C										
ATOM	176	C	PRO	A	12	94.270	29.049	-1.959	1.00	0.57
C										
ATOM	177	O	PRO	A	12	93.486	28.972	-2.892	1.00	-0.57
O										
ATOM	178	CB	PRO	A	12	96.467	30.236	-2.257	1.00	-0.16
C										
ATOM	179	CG	PRO	A	12	97.233	31.268	-1.399	1.00	-0.16
C										
ATOM	180	CD	PRO	A	12	96.607	31.088	0.004	1.00	0.14
C										
ATOM	181	HA	PRO	A	12	94.492	31.195	-2.246	1.00	0.08
H										
ATOM	182	HD3	PRO	A	12	96.679	32.022	0.580	1.00	0.08
H										

ATOM	183	HD2	PRO	A	12	97.098	30.263	0.545	1.00	0.08
H										
ATOM	184	HG3	PRO	A	12	98.324	31.115	-1.405	1.00	0.08
H										
ATOM	185	HG2	PRO	A	12	97.017	32.278	-1.785	1.00	0.08
H										
ATOM	186	HB2	PRO	A	12	96.561	30.418	-3.340	1.00	0.08
H										
ATOM	187	HB3	PRO	A	12	96.869	29.234	-2.030	1.00	0.08
H										
ATOM	188	N	SER	A	13	94.504	28.010	-1.122	1.00	-0.73
N										
ATOM	189	CA	SER	A	13	93.836	26.727	-1.353	1.00	0.28
C										
ATOM	190	C	SER	A	13	92.330	26.872	-1.343	1.00	0.57
C										
ATOM	191	O	SER	A	13	91.677	26.169	-2.098	1.00	-0.57
O										
ATOM	192	CB	SER	A	13	94.236	25.630	-0.329	1.00	0.12
C										
ATOM	193	OG	SER	A	13	93.695	25.879	0.978	1.00	-0.68
O										
ATOM	194	HA	SER	A	13	94.154	26.376	-2.350	1.00	0.08
H										
ATOM	195	HB2	SER	A	13	95.334	25.528	-0.284	1.00	0.08
H										
ATOM	196	HB3	SER	A	13	93.821	24.663	-0.656	1.00	0.08
H										
ATOM	197	HG	SER	A	13	94.034	26.676	1.369	1.00	0.40
H										
ATOM	198	H	SER	A	13	95.154	28.092	-0.365	1.00	0.37
H										
ATOM	199	N	MET	A	14	91.762	27.778	-0.511	1.00	-0.73
N										
ATOM	200	CA	MET	A	14	90.309	27.972	-0.491	1.00	0.28
C										
ATOM	201	C	MET	A	14	89.862	29.000	-1.512	1.00	0.57
C										
ATOM	202	O	MET	A	14	88.750	29.488	-1.390	1.00	-0.57
O										
ATOM	203	CB	MET	A	14	89.858	28.364	0.949	1.00	-0.16
C										
ATOM	204	CG	MET	A	14	90.153	27.242	1.975	1.00	0.07
C										
ATOM	205	SD	MET	A	14	89.058	25.812	1.701	1.00	-0.46
S										
ATOM	206	CE	MET	A	14	89.737	24.697	2.968	1.00	-0.01
C										
ATOM	207	HA	MET	A	14	89.786	27.039	-0.753	1.00	0.08
H										
ATOM	208	HB2	MET	A	14	88.782	28.593	0.987	1.00	0.08
H										
ATOM	209	HB3	MET	A	14	90.405	29.266	1.263	1.00	0.08
H										

ATOM	210	HG2	MET	A	14	89.977	27.612	2.996	1.00	0.08
H										
ATOM	211	HG3	MET	A	14	91.200	26.914	1.894	1.00	0.08
H										
ATOM	212	HE1	MET	A	14	89.243	23.719	2.893	1.00	0.08
H										
ATOM	213	HE2	MET	A	14	89.562	25.122	3.968	1.00	0.08
H										
ATOM	214	HE3	MET	A	14	90.818	24.563	2.813	1.00	0.08
H										
ATOM	215	LPD1	MET	A	14	88.407	25.964	1.816	1.00	0.00
LP										
ATOM	216	LPD2	MET	A	14	89.124	25.557	1.075	1.00	0.00
LP										
ATOM	217	H	MET	A	14	92.327	28.363	0.073	1.00	0.37
H										
ATOM	218	N	ALA	A	15	90.673	29.356	-2.536	1.00	-0.73
N										
ATOM	219	CA	ALA	A	15	90.249	30.380	-3.489	1.00	0.28
C										
ATOM	220	C	ALA	A	15	89.179	29.890	-4.436	1.00	0.57
C										
ATOM	221	O	ALA	A	15	88.431	30.728	-4.915	1.00	-0.57
O										
ATOM	222	CB	ALA	A	15	91.446	30.900	-4.328	1.00	-0.24
C										
ATOM	223	HA	ALA	A	15	89.839	31.235	-2.931	1.00	0.08
H										
ATOM	224	HB1	ALA	A	15	92.226	31.302	-3.663	1.00	0.08
H										
ATOM	225	HB2	ALA	A	15	91.121	31.703	-5.008	1.00	0.08
H										
ATOM	226	HB3	ALA	A	15	91.873	30.082	-4.929	1.00	0.08
H										
ATOM	227	H	ALA	A	15	91.565	28.932	-2.679	1.00	0.37
H										
ATOM	228	N	ASP	A	16	89.081	28.575	-4.742	1.00	-0.73
N										
ATOM	229	CA	ASP	A	16	88.105	28.131	-5.737	1.00	0.28
C										
ATOM	230	C	ASP	A	16	86.740	27.900	-5.119	1.00	0.57
C										
ATOM	231	O	ASP	A	16	86.676	27.422	-3.999	1.00	-0.57
O										
ATOM	232	CB	ASP	A	16	88.584	26.841	-6.452	1.00	-0.27
C										
ATOM	233	CG	ASP	A	16	89.909	27.079	-7.133	1.00	0.91
C										
ATOM	234	OD1	ASP	A	16	89.962	27.948	-8.045	1.00	-0.90
O										
ATOM	235	OD2	ASP	A	16	90.908	26.402	-6.766	1.00	-0.90
O										
ATOM	236	HA	ASP	A	16	88.030	28.902	-6.522	1.00	0.08
H										

ATOM	237	HB2	ASP	A	16	87.843	26.524	-7.205	1.00	0.08
H										
ATOM	238	HB3	ASP	A	16	88.694	26.032	-5.715	1.00	0.08
H										
ATOM	239	H	ASP	A	16	89.670	27.891	-4.309	1.00	0.37
H										
ATOM	240	N	TYR	A	17	85.641	28.223	-5.843	1.00	-0.73
N										
ATOM	241	CA	TYR	A	17	84.285	27.981	-5.333	1.00	0.28
C										
ATOM	242	C	TYR	A	17	84.141	26.510	-4.997	1.00	0.57
C										
ATOM	243	O	TYR	A	17	83.610	26.181	-3.948	1.00	-0.57
O										
ATOM	244	CB	TYR	A	17	83.270	28.417	-6.436	1.00	-0.02
C										
ATOM	245	CG	TYR	A	17	81.755	28.324	-6.174	1.00	-0.14
C										
ATOM	246	CD1	TYR	A	17	80.899	28.506	-7.268	1.00	-0.15
C										
ATOM	247	CD2	TYR	A	17	81.188	28.084	-4.918	1.00	-0.15
C										
ATOM	248	CE1	TYR	A	17	79.510	28.442	-7.125	1.00	-0.15
C										
ATOM	249	CE2	TYR	A	17	79.798	28.008	-4.775	1.00	-0.15
C										
ATOM	250	CZ	TYR	A	17	78.950	28.182	-5.870	1.00	0.08
C										
ATOM	251	OH	TYR	A	17	77.566	28.097	-5.686	1.00	-0.53
O										
ATOM	252	HA	TYR	A	17	84.139	28.595	-4.430	1.00	0.08
H										
ATOM	253	HB3	TYR	A	17	83.459	29.476	-6.674	1.00	0.08
H										
ATOM	254	HB2	TYR	A	17	83.479	27.818	-7.337	1.00	0.08
H										
ATOM	255	HD2	TYR	A	17	81.817	27.959	-4.048	1.00	0.15
H										
ATOM	256	HE2	TYR	A	17	79.353	27.816	-3.808	1.00	0.15
H										
ATOM	257	HE1	TYR	A	17	78.875	28.595	-7.992	1.00	0.15
H										
ATOM	258	HD1	TYR	A	17	81.315	28.705	-8.251	1.00	0.15
H										
ATOM	259	HH	TYR	A	17	77.055	28.272	-6.468	1.00	0.45
H										
ATOM	260	H	TYR	A	17	85.748	28.615	-6.759	1.00	0.37
H										
ATOM	261	N	GLU	A	18	84.629	25.609	-5.881	1.00	-0.73
N										
ATOM	262	CA	GLU	A	18	84.507	24.174	-5.623	1.00	0.28
C										
ATOM	263	C	GLU	A	18	85.147	23.824	-4.296	1.00	0.57
C										

ATOM	264	O	GLU	A	18	84.533	23.135	-3.497	1.00	-0.57
O										
ATOM	265	CB	GLU	A	18	85.155	23.320	-6.749	1.00	-0.16
C										
ATOM	266	CG	GLU	A	18	84.365	23.409	-8.082	1.00	-0.27
C										
ATOM	267	CD	GLU	A	18	85.046	22.572	-9.135	1.00	0.91
C										
ATOM	268	OE1	GLU	A	18	86.099	23.023	-9.661	1.00	-0.90
O										
ATOM	269	OE2	GLU	A	18	84.538	21.460	-9.446	1.00	-0.90
O										
ATOM	270	HA	GLU	A	18	83.439	23.916	-5.594	1.00	0.08
H										
ATOM	271	HB2	GLU	A	18	85.166	22.264	-6.440	1.00	0.08
H										
ATOM	272	HB3	GLU	A	18	86.198	23.641	-6.904	1.00	0.08
H										
ATOM	273	HG2	GLU	A	18	84.308	24.447	-8.443	1.00	0.08
H										
ATOM	274	HG3	GLU	A	18	83.334	23.047	-7.931	1.00	0.08
H										
ATOM	275	H	GLU	A	18	85.086	25.913	-6.718	1.00	0.37
H										
ATOM	276	N	ALA	A	19	86.390	24.295	-4.046	1.00	-0.73
N										
ATOM	277	CA	ALA	A	19	87.072	23.967	-2.795	1.00	0.28
C										
ATOM	278	C	ALA	A	19	86.227	24.328	-1.595	1.00	0.57
C										
ATOM	279	O	ALA	A	19	86.203	23.572	-0.635	1.00	-0.57
O										
ATOM	280	CB	ALA	A	19	88.420	24.729	-2.661	1.00	-0.24
C										
ATOM	281	HA	ALA	A	19	87.288	22.886	-2.791	1.00	0.08
H										
ATOM	282	HB1	ALA	A	19	89.087	24.474	-3.499	1.00	0.08
H										
ATOM	283	HB2	ALA	A	19	88.922	24.456	-1.719	1.00	0.08
H										
ATOM	284	HB3	ALA	A	19	88.252	25.816	-2.664	1.00	0.08
H										
ATOM	285	H	ALA	A	19	86.862	24.861	-4.721	1.00	0.37
H										
ATOM	286	N	ARG	A	20	85.543	25.494	-1.629	1.00	-0.73
N										
ATOM	287	CA	ARG	A	20	84.850	25.970	-0.434	1.00	0.28
C										
ATOM	288	C	ARG	A	20	83.596	25.160	-0.174	1.00	0.57
C										
ATOM	289	O	ARG	A	20	83.412	24.738	0.957	1.00	-0.57
O										
ATOM	290	CB	ARG	A	20	84.556	27.495	-0.518	1.00	-0.16
C										

ATOM	291	CG	ARG	A	20	85.865	28.324	-0.685	1.00	-0.16
C										
ATOM	292	CD	ARG	A	20	85.632	29.845	-0.484	1.00	0.17
C										
ATOM	293	NE	ARG	A	20	84.733	30.374	-1.512	1.00	-0.84
N										
ATOM	294	CZ	ARG	A	20	85.116	30.737	-2.720	1.00	1.20
C										
ATOM	295	NH1	ARG	A	20	86.352	30.634	-3.152	1.00	-0.97
N										
ATOM	296	NH2	ARG	A	20	84.216	31.230	-3.542	1.00	-0.97
N										
ATOM	297	HA	ARG	A	20	85.524	25.832	0.431	1.00	0.08
H										
ATOM	298	HB2	ARG	A	20	84.040	27.791	0.411	1.00	0.08
H										
ATOM	299	HB3	ARG	A	20	83.884	27.701	-1.365	1.00	0.08
H										
ATOM	300	HG2	ARG	A	20	86.287	28.164	-1.684	1.00	0.08
H										
ATOM	301	HG3	ARG	A	20	86.618	27.977	0.036	1.00	0.08
H										
ATOM	302	HD2	ARG	A	20	86.572	30.408	-0.422	1.00	0.08
H										
ATOM	303	HD3	ARG	A	20	85.170	29.985	0.503	1.00	0.08
H										
ATOM	304	HE	ARG	A	20	83.744	30.492	-1.243	1.00	0.45
H										
ATOM	305	HH12	ARG	A	20	87.103	30.249	-2.569	1.00	0.45
H										
ATOM	306	HH11	ARG	A	20	86.602	30.936	-4.105	1.00	0.45
H										
ATOM	307	HH22	ARG	A	20	83.231	31.332	-3.258	1.00	0.45
H										
ATOM	308	HH21	ARG	A	20	84.471	31.528	-4.496	1.00	0.45
H										
ATOM	309	H	ARG	A	20	85.518	26.053	-2.460	1.00	0.37
H										
ATOM	310	N	ILE	A	21	82.720	24.916	-1.178	1.00	-0.73
N										
ATOM	311	CA	ILE	A	21	81.501	24.144	-0.911	1.00	0.28
C										
ATOM	312	C	ILE	A	21	81.787	22.845	-0.188	1.00	0.57
C										
ATOM	313	O	ILE	A	21	80.975	22.460	0.640	1.00	-0.57
O										
ATOM	314	CB	ILE	A	21	80.564	23.863	-2.129	1.00	-0.08
C										
ATOM	315	CG1	ILE	A	21	81.334	23.216	-3.318	1.00	-0.16
C										
ATOM	316	CG2	ILE	A	21	79.831	25.168	-2.549	1.00	-0.24
C										
ATOM	317	CD1	ILE	A	21	80.422	22.576	-4.398	1.00	-0.24
C										

ATOM	318	HA	ILE	A	21	80.904	24.746	-0.213	1.00	0.08
H										
ATOM	319	HB	ILE	A	21	79.787	23.151	-1.800	1.00	0.08
H										
ATOM	320	HG12	ILE	A	21	81.994	22.418	-2.946	1.00	0.08
H										
ATOM	321	HG13	ILE	A	21	81.953	23.984	-3.798	1.00	0.08
H										
ATOM	322	HD11	ILE	A	21	79.791	21.793	-3.949	1.00	0.08
H										
ATOM	323	HD12	ILE	A	21	81.045	22.112	-5.180	1.00	0.08
H										
ATOM	324	HD13	ILE	A	21	79.775	23.321	-4.883	1.00	0.08
H										
ATOM	325	HG21	ILE	A	21	80.572	25.916	-2.859	1.00	0.08
H										
ATOM	326	HG22	ILE	A	21	79.248	25.579	-1.710	1.00	0.08
H										
ATOM	327	HG23	ILE	A	21	79.130	25.000	-3.379	1.00	0.08
H										
ATOM	328	H	ILE	A	21	82.887	25.292	-2.089	1.00	0.37
H										
ATOM	329	N	PHE	A	22	82.910	22.141	-0.461	1.00	-0.73
N										
ATOM	330	CA	PHE	A	22	83.127	20.860	0.209	1.00	0.28
C										
ATOM	331	C	PHE	A	22	83.331	21.060	1.694	1.00	0.57
C										
ATOM	332	O	PHE	A	22	82.863	20.230	2.458	1.00	-0.57
O										
ATOM	333	CB	PHE	A	22	84.320	20.072	-0.393	1.00	-0.02
C										
ATOM	334	CG	PHE	A	22	84.135	19.849	-1.905	1.00	-0.14
C										
ATOM	335	CD1	PHE	A	22	85.102	20.299	-2.812	1.00	-0.15
C										
ATOM	336	CD2	PHE	A	22	83.001	19.191	-2.397	1.00	-0.15
C										
ATOM	337	CE1	PHE	A	22	84.913	20.141	-4.188	1.00	-0.15
C										
ATOM	338	CE2	PHE	A	22	82.782	19.083	-3.773	1.00	-0.15
C										
ATOM	339	CZ	PHE	A	22	83.736	19.565	-4.673	1.00	-0.15
C										
ATOM	340	HA	PHE	A	22	82.214	20.255	0.086	1.00	0.08
H										
ATOM	341	HB2	PHE	A	22	84.405	19.087	0.093	1.00	0.08
H										
ATOM	342	HB3	PHE	A	22	85.245	20.634	-0.187	1.00	0.08
H										
ATOM	343	HD2	PHE	A	22	82.279	18.753	-1.716	1.00	0.15
H										
ATOM	344	HE2	PHE	A	22	81.872	18.622	-4.144	1.00	0.15
H										

ATOM	345	HZ	PHE	A	22	83.566	19.489	-5.742	1.00	0.15
H										
ATOM	346	HE1	PHE	A	22	85.685	20.464	-4.877	1.00	0.15
H										
ATOM	347	HD1	PHE	A	22	86.009	20.772	-2.454	1.00	0.15
H										
ATOM	348	H	PHE	A	22	83.598	22.476	-1.107	1.00	0.37
H										
ATOM	349	N	THR	A	23	84.011	22.145	2.132	1.00	-0.73
N										
ATOM	350	CA	THR	A	23	84.168	22.361	3.571	1.00	0.28
C										
ATOM	351	C	THR	A	23	82.806	22.384	4.227	1.00	0.57
C										
ATOM	352	O	THR	A	23	82.674	21.857	5.321	1.00	-0.57
O										
ATOM	353	CB	THR	A	23	84.919	23.661	3.977	1.00	0.20
C										
ATOM	354	OG1	THR	A	23	84.172	24.844	3.649	1.00	-0.68
O										
ATOM	355	CG2	THR	A	23	86.359	23.712	3.399	1.00	-0.24
C										
ATOM	356	HA	THR	A	23	84.737	21.503	3.970	1.00	0.08
H										
ATOM	357	HB	THR	A	23	85.005	23.662	5.077	1.00	0.08
H										
ATOM	358	HG1	THR	A	23	84.052	24.956	2.714	1.00	0.40
H										
ATOM	359	HG23	THR	A	23	86.356	23.872	2.311	1.00	0.08
H										
ATOM	360	HG21	THR	A	23	86.892	22.775	3.619	1.00	0.08
H										
ATOM	361	HG22	THR	A	23	86.912	24.538	3.866	1.00	0.08
H										
ATOM	362	H	THR	A	23	84.392	22.808	1.488	1.00	0.37
H										
ATOM	363	N	PHE	A	24	81.778	22.974	3.572	1.00	-0.73
N										
ATOM	364	CA	PHE	A	24	80.428	22.945	4.133	1.00	0.28
C										
ATOM	365	C	PHE	A	24	79.785	21.602	3.843	1.00	0.57
C										
ATOM	366	O	PHE	A	24	78.776	21.558	3.157	1.00	-0.57
O										
ATOM	367	CB	PHE	A	24	79.571	24.083	3.517	1.00	-0.02
C										
ATOM	368	CG	PHE	A	24	80.148	25.479	3.787	1.00	-0.14
C										
ATOM	369	CD1	PHE	A	24	80.824	26.186	2.790	1.00	-0.15
C										
ATOM	370	CD2	PHE	A	24	79.986	26.077	5.038	1.00	-0.15
C										
ATOM	371	CE1	PHE	A	24	81.260	27.491	3.016	1.00	-0.15
C										

ATOM	372	CE2	PHE	A	24	80.503	27.348	5.299	1.00	-0.15
C										
ATOM	373	CZ	PHE	A	24	81.150	28.061	4.287	1.00	-0.15
C										
ATOM	374	HA	PHE	A	24	80.455	23.098	5.225	1.00	0.08
H										
ATOM	375	HB2	PHE	A	24	78.558	24.044	3.942	1.00	0.08
H										
ATOM	376	HB3	PHE	A	24	79.495	23.927	2.431	1.00	0.08
H										
ATOM	377	HD2	PHE	A	24	79.454	25.546	5.811	1.00	0.15
H										
ATOM	378	HE2	PHE	A	24	80.400	27.776	6.289	1.00	0.15
H										
ATOM	379	HZ	PHE	A	24	81.562	29.045	4.486	1.00	0.15
H										
ATOM	380	HE1	PHE	A	24	81.682	28.051	2.194	1.00	0.15
H										
ATOM	381	HD1	PHE	A	24	81.013	25.730	1.831	1.00	0.15
H										
ATOM	382	H	PHE	A	24	81.914	23.392	2.673	1.00	0.37
H										
ATOM	383	N	GLY	A	25	80.337	20.476	4.351	1.00	-0.73
N										
ATOM	384	CA	GLY	A	25	79.716	19.181	4.087	1.00	0.20
C										
ATOM	385	C	GLY	A	25	78.554	19.010	5.034	1.00	0.57
C										
ATOM	386	O	GLY	A	25	77.416	19.141	4.611	1.00	-0.57
O										
ATOM	387	HA3	GLY	A	25	80.439	18.364	4.242	1.00	0.08
H										
ATOM	388	HA2	GLY	A	25	79.377	19.112	3.040	1.00	0.08
H										
ATOM	389	H	GLY	A	25	81.140	20.505	4.948	1.00	0.37
H										
ATOM	390	N	THR	A	26	78.837	18.729	6.328	1.00	-0.73
N										
ATOM	391	CA	THR	A	26	77.768	18.556	7.312	1.00	0.28
C										
ATOM	392	C	THR	A	26	77.370	19.935	7.788	1.00	0.57
C										
ATOM	393	O	THR	A	26	77.786	20.333	8.865	1.00	-0.57
O										
ATOM	394	CB	THR	A	26	78.273	17.637	8.460	1.00	0.20
C										
ATOM	395	OG1	THR	A	26	78.773	16.432	7.853	1.00	-0.68
O										
ATOM	396	CG2	THR	A	26	77.142	17.301	9.469	1.00	-0.24
C										
ATOM	397	HA	THR	A	26	76.902	18.051	6.852	1.00	0.08
H										
ATOM	398	HB	THR	A	26	79.102	18.139	8.991	1.00	0.08
H										

ATOM	399	HG1	THR	A	26	79.139	15.822	8.486	1.00	0.40
H										
ATOM	400	HG23	THR	A	26	76.330	16.758	8.961	1.00	0.08
H										
ATOM	401	HG21	THR	A	26	76.728	18.216	9.917	1.00	0.08
H										
ATOM	402	HG22	THR	A	26	77.534	16.666	10.279	1.00	0.08
H										
ATOM	403	H	THR	A	26	79.788	18.672	6.640	1.00	0.37
H										
ATOM	404	N	TRP	A	27	76.574	20.684	6.986	1.00	-0.73
N										
ATOM	405	CA	TRP	A	27	76.218	22.054	7.355	1.00	0.28
C										
ATOM	406	C	TRP	A	27	74.842	22.071	7.981	1.00	0.57
C										
ATOM	407	O	TRP	A	27	73.869	22.368	7.305	1.00	-0.57
O										
ATOM	408	CB	TRP	A	27	76.330	22.973	6.112	1.00	0.02
C										
ATOM	409	CG	TRP	A	27	76.248	24.424	6.514	1.00	-0.18
C										
ATOM	410	CD1	TRP	A	27	75.290	25.307	6.188	1.00	-0.30
C										
ATOM	411	CD2	TRP	A	27	77.252	25.158	7.368	1.00	0.00
C										
ATOM	412	NE1	TRP	A	27	75.573	26.469	6.715	1.00	0.03
N										
ATOM	413	CE2	TRP	A	27	76.722	26.432	7.420	1.00	-0.15
C										
ATOM	414	CE3	TRP	A	27	78.448	24.829	8.011	1.00	-0.15
C										
ATOM	415	CZ2	TRP	A	27	77.352	27.458	8.124	1.00	-0.15
C										
ATOM	416	CZ3	TRP	A	27	79.106	25.859	8.696	1.00	-0.15
C										
ATOM	417	CH2	TRP	A	27	78.578	27.158	8.732	1.00	-0.15
C										
ATOM	418	HA	TRP	A	27	76.928	22.453	8.093	1.00	0.08
H										
ATOM	419	HB2	TRP	A	27	75.550	22.723	5.377	1.00	0.08
H										
ATOM	420	HB3	TRP	A	27	77.310	22.807	5.641	1.00	0.08
H										
ATOM	421	HE1	TRP	A	27	74.989	27.311	6.603	1.00	0.27
H										
ATOM	422	HD1	TRP	A	27	74.414	25.090	5.576	1.00	0.15
H										
ATOM	423	HZ2	TRP	A	27	76.912	28.444	8.204	1.00	0.15
H										
ATOM	424	HH2	TRP	A	27	79.124	27.947	9.237	1.00	0.15
H										
ATOM	425	HZ3	TRP	A	27	80.041	25.648	9.206	1.00	0.15
H										

ATOM	426	HE3	TRP	A	27	78.860	23.827	7.972	1.00	0.15
H										
ATOM	427	H	TRP	A	27	76.212	20.320	6.125	1.00	0.37
H										
ATOM	428	N	ILE	A	28	74.756	21.763	9.296	1.00	-0.73
N										
ATOM	429	CA	ILE	A	28	73.466	21.797	9.987	1.00	0.28
C										
ATOM	430	C	ILE	A	28	72.864	23.187	10.047	1.00	0.57
C										
ATOM	431	O	ILE	A	28	71.691	23.281	10.373	1.00	-0.57
O										
ATOM	432	CB	ILE	A	28	73.547	21.238	11.448	1.00	-0.08
C										
ATOM	433	CG1	ILE	A	28	74.387	22.159	12.392	1.00	-0.16
C										
ATOM	434	CG2	ILE	A	28	74.055	19.767	11.458	1.00	-0.24
C										
ATOM	435	CD1	ILE	A	28	74.392	21.684	13.870	1.00	-0.24
C										
ATOM	436	HA	ILE	A	28	72.765	21.163	9.417	1.00	0.08
H										
ATOM	437	HB	ILE	A	28	72.515	21.220	11.842	1.00	0.08
H										
ATOM	438	HG12	ILE	A	28	73.969	23.179	12.381	1.00	0.08
H										
ATOM	439	HG13	ILE	A	28	75.431	22.223	12.050	1.00	0.08
H										
ATOM	440	HD11	ILE	A	28	73.363	21.541	14.232	1.00	0.08
H										
ATOM	441	HD12	ILE	A	28	74.880	22.437	14.508	1.00	0.08
H										
ATOM	442	HD13	ILE	A	28	74.946	20.740	13.984	1.00	0.08
H										
ATOM	443	HG21	ILE	A	28	75.138	19.718	11.275	1.00	0.08
H										
ATOM	444	HG22	ILE	A	28	73.544	19.176	10.683	1.00	0.08
H										
ATOM	445	HG23	ILE	A	28	73.851	19.286	12.426	1.00	0.08
H										
ATOM	446	H	ILE	A	28	75.582	21.529	9.808	1.00	0.37
H										
ATOM	447	N	TYR	A	29	73.622	24.279	9.788	1.00	-0.73
N										
ATOM	448	CA	TYR	A	29	73.122	25.612	10.127	1.00	0.28
C										
ATOM	449	C	TYR	A	29	72.112	26.162	9.149	1.00	0.57
C										
ATOM	450	O	TYR	A	29	72.001	25.671	8.038	1.00	-0.57
O										
ATOM	451	CB	TYR	A	29	74.304	26.595	10.342	1.00	-0.02
C										
ATOM	452	CG	TYR	A	29	75.120	26.035	11.514	1.00	-0.14
C										

ATOM	453	CD1	TYR	A	29	76.296	25.307	11.304	1.00	-0.15
C										
ATOM	454	CD2	TYR	A	29	74.660	26.239	12.819	1.00	-0.15
C										
ATOM	455	CE1	TYR	A	29	76.930	24.682	12.381	1.00	-0.15
C										
ATOM	456	CE2	TYR	A	29	75.302	25.626	13.897	1.00	-0.15
C										
ATOM	457	CZ	TYR	A	29	76.418	24.811	13.675	1.00	0.08
C										
ATOM	458	OH	TYR	A	29	77.026	24.119	14.725	1.00	-0.53
O										
ATOM	459	HA	TYR	A	29	72.599	25.529	11.096	1.00	0.08
H										
ATOM	460	HB3	TYR	A	29	74.903	26.667	9.424	1.00	0.08
H										
ATOM	461	HB2	TYR	A	29	73.958	27.610	10.592	1.00	0.08
H										
ATOM	462	HD2	TYR	A	29	73.796	26.871	13.001	1.00	0.15
H										
ATOM	463	HE2	TYR	A	29	74.924	25.787	14.902	1.00	0.15
H										
ATOM	464	HE1	TYR	A	29	77.822	24.088	12.212	1.00	0.15
H										
ATOM	465	HD1	TYR	A	29	76.717	25.217	10.309	1.00	0.15
H										
ATOM	466	HH	TYR	A	29	76.671	24.317	15.584	1.00	0.45
H										
ATOM	467	H	TYR	A	29	74.553	24.202	9.434	1.00	0.37
H										
ATOM	468	N	SER	A	30	71.362	27.196	9.601	1.00	-0.73
N										
ATOM	469	CA	SER	A	30	70.292	27.776	8.795	1.00	0.28
C										
ATOM	470	C	SER	A	30	70.853	28.460	7.571	1.00	0.57
C										
ATOM	471	O	SER	A	30	70.474	28.092	6.470	1.00	-0.57
O										
ATOM	472	CB	SER	A	30	69.551	28.823	9.667	1.00	0.12
C										
ATOM	473	OG	SER	A	30	70.566	29.671	10.238	1.00	-0.68
O										
ATOM	474	HA	SER	A	30	69.580	26.987	8.496	1.00	0.08
H										
ATOM	475	HB2	SER	A	30	69.006	28.304	10.474	1.00	0.08
H										
ATOM	476	HB3	SER	A	30	68.830	29.396	9.062	1.00	0.08
H										
ATOM	477	HG	SER	A	30	70.231	30.305	10.862	1.00	0.40
H										
ATOM	478	H	SER	A	30	71.515	27.577	10.516	1.00	0.37
H										
ATOM	479	N	VAL	A	31	71.742	29.466	7.752	1.00	-0.73
N										

ATOM	480	CA	VAL	A	31	72.258	30.214	6.604	1.00	0.28
C										
ATOM	481	C	VAL	A	31	72.710	29.286	5.497	1.00	0.57
C										
ATOM	482	O	VAL	A	31	73.134	28.177	5.781	1.00	-0.57
O										
ATOM	483	CB	VAL	A	31	73.385	31.246	6.920	1.00	-0.08
C										
ATOM	484	CG1	VAL	A	31	72.799	32.537	7.551	1.00	-0.24
C										
ATOM	485	CG2	VAL	A	31	74.491	30.646	7.833	1.00	-0.24
C										
ATOM	486	HA	VAL	A	31	71.391	30.770	6.208	1.00	0.08
H										
ATOM	487	HB	VAL	A	31	73.859	31.545	5.968	1.00	0.08
H										
ATOM	488	HG11	VAL	A	31	72.316	32.297	8.509	1.00	0.08
H										
ATOM	489	HG12	VAL	A	31	72.055	33.004	6.887	1.00	0.08
H										
ATOM	490	HG13	VAL	A	31	73.600	33.270	7.723	1.00	0.08
H										
ATOM	491	HG21	VAL	A	31	74.145	30.496	8.864	1.00	0.08
H										
ATOM	492	HG22	VAL	A	31	75.361	31.320	7.870	1.00	0.08
H										
ATOM	493	HG23	VAL	A	31	74.807	29.672	7.437	1.00	0.08
H										
ATOM	494	H	VAL	A	31	71.984	29.750	8.679	1.00	0.37
H										
ATOM	495	N	ASN	A	32	72.595	29.732	4.222	1.00	-0.73
N										
ATOM	496	CA	ASN	A	32	72.807	28.823	3.100	1.00	0.28
C										
ATOM	497	C	ASN	A	32	74.282	28.609	2.849	1.00	0.57
C										
ATOM	498	O	ASN	A	32	75.038	29.559	2.976	1.00	-0.57
O										
ATOM	499	CB	ASN	A	32	72.135	29.368	1.812	1.00	-0.10
C										
ATOM	500	CG	ASN	A	32	72.317	28.411	0.660	1.00	0.57
C										
ATOM	501	OD1	ASN	A	32	73.139	28.679	-0.201	1.00	-0.57
O										
ATOM	502	ND2	ASN	A	32	71.573	27.285	0.617	1.00	-0.80
N										
ATOM	503	HA	ASN	A	32	72.313	27.868	3.345	1.00	0.08
H										
ATOM	504	HB2	ASN	A	32	72.577	30.342	1.558	1.00	0.08
H										
ATOM	505	HB3	ASN	A	32	71.060	29.525	1.990	1.00	0.08
H										
ATOM	506	HD22	ASN	A	32	70.900	27.081	1.329	1.00	0.37
H										

ATOM	507	HD21	ASN	A	32	71.692	26.642	-0.141	1.00	0.37
H										
ATOM	508	H	ASN	A	32	72.325	30.677	4.024	1.00	0.37
H										
ATOM	509	N	LYS	A	33	74.701	27.371	2.490	1.00	-0.73
N										
ATOM	510	CA	LYS	A	33	76.116	27.099	2.240	1.00	0.28
C										
ATOM	511	C	LYS	A	33	76.557	27.568	0.875	1.00	0.57
C										
ATOM	512	O	LYS	A	33	77.685	28.020	0.756	1.00	-0.57
O										
ATOM	513	CB	LYS	A	33	76.516	25.610	2.436	1.00	-0.16
C										
ATOM	514	CG	LYS	A	33	75.848	24.584	1.477	1.00	-0.16
C										
ATOM	515	CD	LYS	A	33	76.357	23.147	1.780	1.00	-0.16
C										
ATOM	516	CE	LYS	A	33	75.573	22.056	1.004	1.00	0.34
C										
ATOM	517	NZ	LYS	A	33	76.061	20.703	1.360	1.00	-0.85
N										
ATOM	518	HA	LYS	A	33	76.703	27.658	2.987	1.00	0.08
H										
ATOM	519	HB2	LYS	A	33	76.292	25.331	3.478	1.00	0.08
H										
ATOM	520	HB3	LYS	A	33	77.604	25.553	2.284	1.00	0.08
H										
ATOM	521	HG2	LYS	A	33	76.082	24.836	0.431	1.00	0.08
H										
ATOM	522	HG3	LYS	A	33	74.756	24.593	1.601	1.00	0.08
H										
ATOM	523	HD2	LYS	A	33	76.261	22.941	2.857	1.00	0.08
H										
ATOM	524	HD3	LYS	A	33	77.419	23.076	1.503	1.00	0.08
H										
ATOM	525	HE2	LYS	A	33	75.692	22.222	-0.079	1.00	0.08
H										
ATOM	526	HE3	LYS	A	33	74.500	22.130	1.247	1.00	0.08
H										
ATOM	527	HZ1	LYS	A	33	75.517	19.935	0.827	1.00	0.45
H										
ATOM	528	HZ2	LYS	A	33	75.943	20.497	2.415	1.00	0.45
H										
ATOM	529	HZ3	LYS	A	33	77.108	20.578	1.119	1.00	0.45
H										
ATOM	530	H	LYS	A	33	74.043	26.628	2.380	1.00	0.37
H										
ATOM	531	N	GLU	A	34	75.708	27.471	-0.172	1.00	-0.73
N										
ATOM	532	CA	GLU	A	34	76.139	27.927	-1.491	1.00	0.28
C										
ATOM	533	C	GLU	A	34	76.364	29.424	-1.427	1.00	0.57
C										

ATOM	534	O	GLU	A	34	77.306	29.896	-2.043	1.00	-0.57
O										
ATOM	535	CB	GLU	A	34	75.145	27.579	-2.635	1.00	-0.16
C										
ATOM	536	CG	GLU	A	34	75.024	26.053	-2.909	1.00	-0.27
C										
ATOM	537	CD	GLU	A	34	74.367	25.262	-1.807	1.00	0.91
C										
ATOM	538	OE1	GLU	A	34	73.601	25.857	-1.001	1.00	-0.90
O										
ATOM	539	OE2	GLU	A	34	74.608	24.026	-1.741	1.00	-0.90
O										
ATOM	540	HA	GLU	A	34	77.100	27.440	-1.730	1.00	0.08
H										
ATOM	541	HB2	GLU	A	34	75.520	28.044	-3.561	1.00	0.08
H										
ATOM	542	HB3	GLU	A	34	74.153	28.006	-2.426	1.00	0.08
H										
ATOM	543	HG2	GLU	A	34	76.026	25.638	-3.109	1.00	0.08
H										
ATOM	544	HG3	GLU	A	34	74.410	25.903	-3.811	1.00	0.08
H										
ATOM	545	H	GLU	A	34	74.775	27.132	-0.053	1.00	0.37
H										
ATOM	546	N	GLN	A	35	75.529	30.190	-0.687	1.00	-0.73
N										
ATOM	547	CA	GLN	A	35	75.766	31.629	-0.567	1.00	0.28
C										
ATOM	548	C	GLN	A	35	77.059	31.866	0.182	1.00	0.57
C										
ATOM	549	O	GLN	A	35	77.877	32.637	-0.295	1.00	-0.57
O										
ATOM	550	CB	GLN	A	35	74.635	32.373	0.195	1.00	-0.16
C										
ATOM	551	CG	GLN	A	35	73.302	32.401	-0.599	1.00	-0.10
C										
ATOM	552	CD	GLN	A	35	72.161	33.003	0.187	1.00	0.57
C										
ATOM	553	OE1	GLN	A	35	72.343	33.392	1.331	1.00	-0.57
O										
ATOM	554	NE2	GLN	A	35	70.955	33.090	-0.417	1.00	-0.80
N										
ATOM	555	HA	GLN	A	35	75.838	32.064	-1.579	1.00	0.08
H										
ATOM	556	HB2	GLN	A	35	74.946	33.417	0.366	1.00	0.08
H										
ATOM	557	HB3	GLN	A	35	74.480	31.893	1.173	1.00	0.08
H										
ATOM	558	HG2	GLN	A	35	73.014	31.381	-0.893	1.00	0.08
H										
ATOM	559	HG3	GLN	A	35	73.447	33.005	-1.507	1.00	0.08
H										
ATOM	560	HE22	GLN	A	35	70.823	32.766	-1.355	1.00	0.37
H										

ATOM	561	HE21	GLN	A	35	70.178	33.483	0.076	1.00	0.37
H										
ATOM	562	H	GLN	A	35	74.763	29.786	-0.186	1.00	0.37
H										
ATOM	563	N	LEU	A	36	77.259	31.222	1.356	1.00	-0.73
N										
ATOM	564	CA	LEU	A	36	78.492	31.444	2.117	1.00	0.28
C										
ATOM	565	C	LEU	A	36	79.681	31.193	1.220	1.00	0.57
C										
ATOM	566	O	LEU	A	36	80.575	32.023	1.152	1.00	-0.57
O										
ATOM	567	CB	LEU	A	36	78.598	30.510	3.358	1.00	-0.16
C										
ATOM	568	CG	LEU	A	36	77.701	30.941	4.557	1.00	-0.08
C										
ATOM	569	CD1	LEU	A	36	77.493	29.742	5.521	1.00	-0.24
C										
ATOM	570	CD2	LEU	A	36	78.324	32.117	5.364	1.00	-0.24
C										
ATOM	571	HA	LEU	A	36	78.520	32.496	2.431	1.00	0.08
H										
ATOM	572	HB2	LEU	A	36	79.634	30.474	3.718	1.00	0.08
H										
ATOM	573	HB3	LEU	A	36	78.341	29.491	3.034	1.00	0.08
H										
ATOM	574	HG	LEU	A	36	76.711	31.249	4.181	1.00	0.08
H										
ATOM	575	HD21	LEU	A	36	79.271	31.804	5.828	1.00	0.08
H										
ATOM	576	HD22	LEU	A	36	77.636	32.434	6.163	1.00	0.08
H										
ATOM	577	HD23	LEU	A	36	78.532	32.990	4.734	1.00	0.08
H										
ATOM	578	HD11	LEU	A	36	78.461	29.344	5.859	1.00	0.08
H										
ATOM	579	HD12	LEU	A	36	76.925	28.931	5.044	1.00	0.08
H										
ATOM	580	HD13	LEU	A	36	76.933	30.077	6.400	1.00	0.08
H										
ATOM	581	H	LEU	A	36	76.569	30.594	1.721	1.00	0.37
H										
ATOM	582	N	ALA	A	37	79.694	30.042	0.517	1.00	-0.73
N										
ATOM	583	CA	ALA	A	37	80.812	29.738	-0.368	1.00	0.28
C										
ATOM	584	C	ALA	A	37	80.941	30.806	-1.431	1.00	0.57
C										
ATOM	585	O	ALA	A	37	82.041	31.293	-1.639	1.00	-0.57
O										
ATOM	586	CB	ALA	A	37	80.640	28.332	-0.990	1.00	-0.24
C										
ATOM	587	HA	ALA	A	37	81.736	29.724	0.228	1.00	0.08
H										

ATOM	588	HB1	ALA	A	37	80.628	27.560	-0.204	1.00	0.08
H										
ATOM	589	HB2	ALA	A	37	81.467	28.117	-1.678	1.00	0.08
H										
ATOM	590	HB3	ALA	A	37	79.688	28.286	-1.535	1.00	0.08
H										
ATOM	591	H	ALA	A	37	78.939	29.388	0.588	1.00	0.37
H										
ATOM	592	N	ARG	A	38	79.840	31.202	-2.109	1.00	-0.73
N										
ATOM	593	CA	ARG	A	38	79.947	32.256	-3.119	1.00	0.28
C										
ATOM	594	C	ARG	A	38	80.480	33.538	-2.518	1.00	0.57
C										
ATOM	595	O	ARG	A	38	81.160	34.254	-3.237	1.00	-0.57
O										
ATOM	596	CB	ARG	A	38	78.607	32.534	-3.855	1.00	-0.16
C										
ATOM	597	CG	ARG	A	38	78.309	31.428	-4.903	1.00	-0.16
C										
ATOM	598	CD	ARG	A	38	76.941	31.658	-5.603	1.00	0.17
C										
ATOM	599	NE	ARG	A	38	75.833	31.259	-4.724	1.00	-0.84
N										
ATOM	600	CZ	ARG	A	38	74.709	31.921	-4.523	1.00	1.20
C										
ATOM	601	NH1	ARG	A	38	74.413	33.090	-5.049	1.00	-0.97
N										
ATOM	602	NH2	ARG	A	38	73.805	31.370	-3.741	1.00	-0.97
N										
ATOM	603	HA	ARG	A	38	80.686	31.926	-3.868	1.00	0.08
H										
ATOM	604	HB2	ARG	A	38	78.681	33.495	-4.390	1.00	0.08
H										
ATOM	605	HB3	ARG	A	38	77.787	32.618	-3.125	1.00	0.08
H										
ATOM	606	HG2	ARG	A	38	78.333	30.441	-4.417	1.00	0.08
H										
ATOM	607	HG3	ARG	A	38	79.104	31.440	-5.670	1.00	0.08
H										
ATOM	608	HD2	ARG	A	38	76.878	30.989	-6.477	1.00	0.08
H										
ATOM	609	HD3	ARG	A	38	76.965	32.684	-5.988	1.00	0.08
H										
ATOM	610	HE	ARG	A	38	75.959	30.357	-4.240	1.00	0.45
H										
ATOM	611	HH12	ARG	A	38	75.053	33.587	-5.673	1.00	0.45
H										
ATOM	612	HH11	ARG	A	38	73.514	33.550	-4.841	1.00	0.45
H										
ATOM	613	HH22	ARG	A	38	73.967	30.457	-3.291	1.00	0.45
H										
ATOM	614	HH21	ARG	A	38	72.896	31.826	-3.570	1.00	0.45
H										

ATOM	615	H	ARG	A	38	78.946	30.795	-1.917	1.00	0.37
H										
ATOM	616	N	ALA	A	39	80.232	33.846	-1.222	1.00	-0.73
N										
ATOM	617	CA	ALA	A	39	80.854	35.020	-0.605	1.00	0.28
C										
ATOM	618	C	ALA	A	39	82.219	34.690	-0.034	1.00	0.57
C										
ATOM	619	O	ALA	A	39	82.567	35.206	1.017	1.00	-0.57
O										
ATOM	620	CB	ALA	A	39	79.899	35.652	0.442	1.00	-0.24
C										
ATOM	621	HA	ALA	A	39	81.035	35.804	-1.353	1.00	0.08
H										
ATOM	622	HB1	ALA	A	39	78.934	35.895	-0.029	1.00	0.08
H										
ATOM	623	HB2	ALA	A	39	80.323	36.574	0.870	1.00	0.08
H										
ATOM	624	HB3	ALA	A	39	79.723	34.932	1.252	1.00	0.08
H										
ATOM	625	H	ALA	A	39	79.673	33.251	-0.645	1.00	0.37
H										
ATOM	626	N	GLY	A	40	83.024	33.842	-0.718	1.00	-0.73
N										
ATOM	627	CA	GLY	A	40	84.401	33.609	-0.294	1.00	0.20
C										
ATOM	628	C	GLY	A	40	84.569	32.861	1.007	1.00	0.57
C										
ATOM	629	O	GLY	A	40	85.716	32.640	1.362	1.00	-0.57
O										
ATOM	630	HA3	GLY	A	40	84.912	34.581	-0.204	1.00	0.08
H										
ATOM	631	HA2	GLY	A	40	84.924	33.039	-1.077	1.00	0.08
H										
ATOM	632	H	GLY	A	40	82.733	33.388	-1.558	1.00	0.37
H										
ATOM	633	N	PHE	A	41	83.504	32.466	1.746	1.00	-0.73
N										
ATOM	634	CA	PHE	A	41	83.720	31.862	3.061	1.00	0.28
C										
ATOM	635	C	PHE	A	41	83.898	30.368	2.976	1.00	0.57
C										
ATOM	636	O	PHE	A	41	83.317	29.780	2.082	1.00	-0.57
O										
ATOM	637	CB	PHE	A	41	82.556	32.149	4.040	1.00	-0.02
C										
ATOM	638	CG	PHE	A	41	82.415	33.646	4.338	1.00	-0.14
C										
ATOM	639	CD1	PHE	A	41	83.395	34.310	5.085	1.00	-0.15
C										
ATOM	640	CD2	PHE	A	41	81.301	34.358	3.881	1.00	-0.15
C										
ATOM	641	CE1	PHE	A	41	83.266	35.671	5.369	1.00	-0.15
C										

ATOM	642	CE2	PHE	A	41	81.156	35.715	4.181	1.00	-0.15
C										
ATOM	643	CZ	PHE	A	41	82.146	36.373	4.914	1.00	-0.15
C										
ATOM	644	HA	PHE	A	41	84.615	32.291	3.520	1.00	0.08
H										
ATOM	645	HB2	PHE	A	41	82.746	31.641	4.992	1.00	0.08
H										
ATOM	646	HB3	PHE	A	41	81.629	31.737	3.623	1.00	0.08
H										
ATOM	647	HD2	PHE	A	41	80.542	33.855	3.295	1.00	0.15
H										
ATOM	648	HE2	PHE	A	41	80.276	36.254	3.846	1.00	0.15
H										
ATOM	649	HZ	PHE	A	41	82.047	37.428	5.134	1.00	0.15
H										
ATOM	650	HE1	PHE	A	41	84.032	36.183	5.944	1.00	0.15
H										
ATOM	651	HD1	PHE	A	41	84.260	33.771	5.454	1.00	0.15
H										
ATOM	652	H	PHE	A	41	82.563	32.567	1.425	1.00	0.37
H										
ATOM	653	N	TYR	A	42	84.671	29.750	3.901	1.00	-0.73
N										
ATOM	654	CA	TYR	A	42	84.775	28.293	3.973	1.00	0.28
C										
ATOM	655	C	TYR	A	42	84.684	27.881	5.429	1.00	0.57
C										
ATOM	656	O	TYR	A	42	85.190	28.620	6.259	1.00	-0.57
O										
ATOM	657	CB	TYR	A	42	86.093	27.836	3.304	1.00	-0.02
C										
ATOM	658	CG	TYR	A	42	87.323	28.316	4.085	1.00	-0.14
C										
ATOM	659	CD1	TYR	A	42	87.905	27.490	5.053	1.00	-0.15
C										
ATOM	660	CD2	TYR	A	42	87.881	29.575	3.838	1.00	-0.15
C										
ATOM	661	CE1	TYR	A	42	89.039	27.906	5.756	1.00	-0.15
C										
ATOM	662	CE2	TYR	A	42	88.966	30.022	4.598	1.00	-0.15
C										
ATOM	663	CZ	TYR	A	42	89.555	29.191	5.554	1.00	0.08
C										
ATOM	664	OH	TYR	A	42	90.649	29.658	6.287	1.00	-0.53
O										
ATOM	665	HA	TYR	A	42	83.944	27.822	3.426	1.00	0.08
H										
ATOM	666	HB3	TYR	A	42	86.110	26.741	3.208	1.00	0.08
H										
ATOM	667	HB2	TYR	A	42	86.125	28.258	2.293	1.00	0.08
H										
ATOM	668	HD2	TYR	A	42	87.473	30.212	3.059	1.00	0.15
H										

ATOM	669	HE2	TYR	A	42	89.357	31.021	4.453	1.00	0.15
H										
ATOM	670	HE1	TYR	A	42	89.514	27.225	6.455	1.00	0.15
H										
ATOM	671	HD1	TYR	A	42	87.481	26.516	5.263	1.00	0.15
H										
ATOM	672	HH	TYR	A	42	90.858	29.127	7.049	1.00	0.45
H										
ATOM	673	H	TYR	A	42	85.197	30.279	4.563	1.00	0.37
H										
ATOM	674	N	ALA	A	43	84.037	26.741	5.775	1.00	-0.73
N										
ATOM	675	CA	ALA	A	43	83.830	26.414	7.188	1.00	0.28
C										
ATOM	676	C	ALA	A	43	85.119	26.014	7.868	1.00	0.57
C										
ATOM	677	O	ALA	A	43	86.013	25.561	7.171	1.00	-0.57
O										
ATOM	678	CB	ALA	A	43	82.809	25.261	7.374	1.00	-0.24
C										
ATOM	679	HA	ALA	A	43	83.404	27.300	7.681	1.00	0.08
H										
ATOM	680	HB1	ALA	A	43	81.861	25.509	6.880	1.00	0.08
H										
ATOM	681	HB2	ALA	A	43	82.601	25.092	8.442	1.00	0.08
H										
ATOM	682	HB3	ALA	A	43	83.199	24.330	6.936	1.00	0.08
H										
ATOM	683	H	ALA	A	43	83.660	26.126	5.081	1.00	0.37
H										
ATOM	684	N	LEU	A	44	85.220	26.157	9.216	1.00	-0.73
N										
ATOM	685	CA	LEU	A	44	86.400	25.684	9.947	1.00	0.28
C										
ATOM	686	C	LEU	A	44	86.111	24.416	10.725	1.00	0.57
C										
ATOM	687	O	LEU	A	44	86.919	24.069	11.572	1.00	-0.57
O										
ATOM	688	CB	LEU	A	44	86.902	26.772	10.941	1.00	-0.16
C										
ATOM	689	CG	LEU	A	44	87.221	28.150	10.290	1.00	-0.08
C										
ATOM	690	CD1	LEU	A	44	87.794	29.103	11.377	1.00	-0.24
C										
ATOM	691	CD2	LEU	A	44	88.226	28.005	9.114	1.00	-0.24
C										
ATOM	692	HA	LEU	A	44	87.227	25.420	9.270	1.00	0.08
H										
ATOM	693	HB2	LEU	A	44	87.814	26.409	11.443	1.00	0.08
H										
ATOM	694	HB3	LEU	A	44	86.128	26.914	11.712	1.00	0.08
H										
ATOM	695	HG	LEU	A	44	86.287	28.595	9.903	1.00	0.08
H										

ATOM	696	HD21	LEU	A	44	89.096	27.405	9.420	1.00	0.08
H										
ATOM	697	HD22	LEU	A	44	88.592	28.984	8.776	1.00	0.08
H										
ATOM	698	HD23	LEU	A	44	87.737	27.520	8.256	1.00	0.08
H										
ATOM	699	HD11	LEU	A	44	88.755	28.723	11.756	1.00	0.08
H										
ATOM	700	HD12	LEU	A	44	87.096	29.188	12.224	1.00	0.08
H										
ATOM	701	HD13	LEU	A	44	87.961	30.110	10.969	1.00	0.08
H										
ATOM	702	H	LEU	A	44	84.467	26.543	9.754	1.00	0.37
H										
ATOM	703	N	GLY	A	45	84.992	23.693	10.487	1.00	-0.73
N										
ATOM	704	CA	GLY	A	45	84.707	22.514	11.304	1.00	0.20
C										
ATOM	705	C	GLY	A	45	84.640	22.864	12.773	1.00	0.57
C										
ATOM	706	O	GLY	A	45	85.071	22.060	13.585	1.00	-0.57
O										
ATOM	707	HA3	GLY	A	45	85.490	21.760	11.127	1.00	0.08
H										
ATOM	708	HA2	GLY	A	45	83.738	22.069	11.025	1.00	0.08
H										
ATOM	709	H	GLY	A	45	84.340	23.937	9.769	1.00	0.37
H										
ATOM	710	N	GLU	A	46	84.092	24.051	13.129	1.00	-0.73
N										
ATOM	711	CA	GLU	A	46	83.978	24.446	14.533	1.00	0.28
C										
ATOM	712	C	GLU	A	46	82.637	25.124	14.698	1.00	0.57
C										
ATOM	713	O	GLU	A	46	82.578	26.341	14.776	1.00	-0.57
O										
ATOM	714	CB	GLU	A	46	85.138	25.400	14.925	1.00	-0.16
C										
ATOM	715	CG	GLU	A	46	86.495	24.667	15.073	1.00	-0.27
C										
ATOM	716	CD	GLU	A	46	87.559	25.663	15.457	1.00	0.91
C										
ATOM	717	OE1	GLU	A	46	87.565	26.099	16.641	1.00	-0.90
O										
ATOM	718	OE2	GLU	A	46	88.393	26.023	14.583	1.00	-0.90
O										
ATOM	719	HA	GLU	A	46	83.989	23.581	15.216	1.00	0.08
H										
ATOM	720	HB2	GLU	A	46	84.901	25.875	15.892	1.00	0.08
H										
ATOM	721	HB3	GLU	A	46	85.231	26.182	14.158	1.00	0.08
H										
ATOM	722	HG2	GLU	A	46	86.766	24.174	14.128	1.00	0.08
H										

ATOM	723	HG3	GLU	A	46	86.426	23.894	15.855	1.00	0.08
H										
ATOM	724	H	GLU	A	46	83.762	24.697	12.436	1.00	0.37
H										
ATOM	725	N	GLY	A	47	81.537	24.340	14.743	1.00	-0.73
N										
ATOM	726	CA	GLY	A	47	80.221	24.955	14.866	1.00	0.20
C										
ATOM	727	C	GLY	A	47	79.938	25.704	13.588	1.00	0.57
C										
ATOM	728	O	GLY	A	47	80.296	25.181	12.544	1.00	-0.57
O										
ATOM	729	HA3	GLY	A	47	80.202	25.619	15.745	1.00	0.08
H										
ATOM	730	HA2	GLY	A	47	79.455	24.180	15.007	1.00	0.08
H										
ATOM	731	H	GLY	A	47	81.599	23.342	14.658	1.00	0.37
H										
ATOM	732	N	ASP	A	48	79.319	26.909	13.637	1.00	-0.73
N										
ATOM	733	CA	ASP	A	48	79.107	27.682	12.413	1.00	0.28
C										
ATOM	734	C	ASP	A	48	80.219	28.687	12.208	1.00	0.57
C										
ATOM	735	O	ASP	A	48	79.946	29.729	11.632	1.00	-0.57
O										
ATOM	736	CB	ASP	A	48	77.719	28.380	12.432	1.00	-0.27
C										
ATOM	737	CG	ASP	A	48	77.596	29.467	13.467	1.00	0.91
C										
ATOM	738	OD1	ASP	A	48	78.532	29.637	14.294	1.00	-0.90
O										
ATOM	739	OD2	ASP	A	48	76.548	30.167	13.463	1.00	-0.90
O										
ATOM	740	HA	ASP	A	48	79.103	27.015	11.537	1.00	0.08
H										
ATOM	741	HB2	ASP	A	48	76.956	27.629	12.665	1.00	0.08
H										
ATOM	742	HB3	ASP	A	48	77.491	28.804	11.440	1.00	0.08
H										
ATOM	743	H	ASP	A	48	79.039	27.321	14.506	1.00	0.37
H										
ATOM	744	N	LYS	A	49	81.474	28.424	12.651	1.00	-0.73
N										
ATOM	745	CA	LYS	A	49	82.539	29.383	12.375	1.00	0.28
C										
ATOM	746	C	LYS	A	49	82.887	29.282	10.912	1.00	0.57
C										
ATOM	747	O	LYS	A	49	82.832	28.183	10.381	1.00	-0.57
O										
ATOM	748	CB	LYS	A	49	83.870	29.164	13.146	1.00	-0.16
C										
ATOM	749	CG	LYS	A	49	83.771	29.505	14.657	1.00	-0.16
C										

ATOM	750	CD	LYS	A	49	85.152	29.389	15.357	1.00	-0.16
C										
ATOM	751	CE	LYS	A	49	85.098	29.929	16.812	1.00	0.34
C										
ATOM	752	NZ	LYS	A	49	86.420	29.831	17.472	1.00	-0.85
N										
ATOM	753	HA	LYS	A	49	82.166	30.391	12.606	1.00	0.08
H										
ATOM	754	HB2	LYS	A	49	84.636	29.824	12.704	1.00	0.08
H										
ATOM	755	HB3	LYS	A	49	84.199	28.122	13.012	1.00	0.08
H										
ATOM	756	HG2	LYS	A	49	83.031	28.856	15.150	1.00	0.08
H										
ATOM	757	HG3	LYS	A	49	83.437	30.543	14.763	1.00	0.08
H										
ATOM	758	HD2	LYS	A	49	85.902	29.968	14.797	1.00	0.08
H										
ATOM	759	HD3	LYS	A	49	85.477	28.338	15.367	1.00	0.08
H										
ATOM	760	HE2	LYS	A	49	84.351	29.353	17.384	1.00	0.08
H										
ATOM	761	HE3	LYS	A	49	84.779	30.986	16.798	1.00	0.08
H										
ATOM	762	HZ1	LYS	A	49	86.382	30.211	18.485	1.00	0.45
H										
ATOM	763	HZ2	LYS	A	49	87.175	30.403	16.951	1.00	0.45
H										
ATOM	764	HZ3	LYS	A	49	86.765	28.807	17.526	1.00	0.45
H										
ATOM	765	H	LYS	A	49	81.716	27.571	13.114	1.00	0.37
H										
ATOM	766	N	VAL	A	50	83.264	30.412	10.269	1.00	-0.73
N										
ATOM	767	CA	VAL	A	50	83.705	30.365	8.879	1.00	0.28
C										
ATOM	768	C	VAL	A	50	84.839	31.346	8.710	1.00	0.57
C										
ATOM	769	O	VAL	A	50	85.140	32.046	9.664	1.00	-0.57
O										
ATOM	770	CB	VAL	A	50	82.531	30.671	7.903	1.00	-0.08
C										
ATOM	771	CG1	VAL	A	50	81.251	29.871	8.263	1.00	-0.24
C										
ATOM	772	CG2	VAL	A	50	82.203	32.190	7.854	1.00	-0.24
C										
ATOM	773	HA	VAL	A	50	84.131	29.375	8.655	1.00	0.08
H										
ATOM	774	HB	VAL	A	50	82.841	30.340	6.899	1.00	0.08
H										
ATOM	775	HG11	VAL	A	50	80.859	30.185	9.241	1.00	0.08
H										
ATOM	776	HG12	VAL	A	50	81.465	28.794	8.296	1.00	0.08
H										

ATOM	777	HG13	VAL	A	50	80.467	30.045	7.511	1.00	0.08
H										
ATOM	778	HG21	VAL	A	50	81.893	32.547	8.847	1.00	0.08
H										
ATOM	779	HG22	VAL	A	50	81.387	32.372	7.141	1.00	0.08
H										
ATOM	780	HG23	VAL	A	50	83.068	32.786	7.527	1.00	0.08
H										
ATOM	781	H	VAL	A	50	83.261	31.304	10.727	1.00	0.37
H										
ATOM	782	N	LYS	A	51	85.474	31.418	7.518	1.00	-0.73
N										
ATOM	783	CA	LYS	A	51	86.562	32.375	7.324	1.00	0.28
C										
ATOM	784	C	LYS	A	51	86.748	32.698	5.859	1.00	0.57
C										
ATOM	785	O	LYS	A	51	86.577	31.785	5.068	1.00	-0.57
O										
ATOM	786	CB	LYS	A	51	87.840	31.766	7.954	1.00	-0.16
C										
ATOM	787	CG	LYS	A	51	88.813	32.837	8.509	1.00	-0.16
C										
ATOM	788	CD	LYS	A	51	90.133	32.175	8.991	1.00	-0.16
C										
ATOM	789	CE	LYS	A	51	91.151	33.181	9.599	1.00	0.34
C										
ATOM	790	NZ	LYS	A	51	90.663	33.842	10.832	1.00	-0.85
N										
ATOM	791	HA	LYS	A	51	86.285	33.307	7.828	1.00	0.08
H										
ATOM	792	HB2	LYS	A	51	88.334	31.119	7.213	1.00	0.08
H										
ATOM	793	HB3	LYS	A	51	87.543	31.138	8.806	1.00	0.08
H										
ATOM	794	HG2	LYS	A	51	88.317	33.359	9.342	1.00	0.08
H										
ATOM	795	HG3	LYS	A	51	89.018	33.570	7.720	1.00	0.08
H										
ATOM	796	HD2	LYS	A	51	90.611	31.681	8.128	1.00	0.08
H										
ATOM	797	HD3	LYS	A	51	89.907	31.402	9.742	1.00	0.08
H										
ATOM	798	HE2	LYS	A	51	91.412	33.939	8.844	1.00	0.08
H										
ATOM	799	HE3	LYS	A	51	92.073	32.622	9.839	1.00	0.08
H										
ATOM	800	HZ1	LYS	A	51	91.455	34.404	11.310	1.00	0.45
H										
ATOM	801	HZ2	LYS	A	51	90.306	33.124	11.558	1.00	0.45
H										
ATOM	802	HZ3	LYS	A	51	89.874	34.556	10.648	1.00	0.45
H										
ATOM	803	H	LYS	A	51	85.247	30.789	6.780	1.00	0.37
H										

ATOM	804	N	CYS	A	52	87.069	33.957	5.463	1.00	-0.73
N										
ATOM	805	CA	CYS	A	52	87.158	34.267	4.036	1.00	0.28
C										
ATOM	806	C	CYS	A	52	88.468	33.759	3.490	1.00	0.57
C										
ATOM	807	O	CYS	A	52	89.461	33.866	4.191	1.00	-0.57
O										
ATOM	808	CB	CYS	A	52	86.986	35.769	3.703	1.00	-0.11
C										
ATOM	809	SG	CYS	A	52	86.720	35.996	1.913	1.00	-1.05
S										
ATOM	810	HA	CYS	A	52	86.320	33.776	3.531	1.00	0.08
H										
ATOM	811	HB2	CYS	A	52	87.880	36.335	3.995	1.00	0.08
H										
ATOM	812	HB3	CYS	A	52	86.109	36.165	4.239	1.00	0.08
H										
ATOM	813	HG	CYS	A	52	86.754	37.003	1.893	1.00	0.00
H										
ATOM	814	LPG1	CYS	A	52	87.213	35.714	1.542	1.00	0.00
LP										
ATOM	815	LPG2	CYS	A	52	86.118	35.756	1.710	1.00	0.00
LP										
ATOM	816	H	CYS	A	52	87.245	34.690	6.121	1.00	0.37
H										
ATOM	817	N	PHE	A	53	88.509	33.210	2.255	1.00	-0.73
N										
ATOM	818	CA	PHE	A	53	89.787	32.750	1.717	1.00	0.28
C										
ATOM	819	C	PHE	A	53	90.715	33.926	1.532	1.00	0.57
C										
ATOM	820	O	PHE	A	53	91.900	33.800	1.802	1.00	-0.57
O										
ATOM	821	CB	PHE	A	53	89.647	31.979	0.376	1.00	-0.02
C										
ATOM	822	CG	PHE	A	53	89.396	32.894	-0.833	1.00	-0.14
C										
ATOM	823	CD1	PHE	A	53	90.476	33.404	-1.562	1.00	-0.15
C										
ATOM	824	CD2	PHE	A	53	88.097	33.214	-1.239	1.00	-0.15
C										
ATOM	825	CE1	PHE	A	53	90.263	34.220	-2.676	1.00	-0.15
C										
ATOM	826	CE2	PHE	A	53	87.875	34.029	-2.352	1.00	-0.15
C										
ATOM	827	CZ	PHE	A	53	88.961	34.522	-3.080	1.00	-0.15
C										
ATOM	828	HA	PHE	A	53	90.222	32.052	2.449	1.00	0.08
H										
ATOM	829	HB2	PHE	A	53	88.837	31.242	0.476	1.00	0.08
H										
ATOM	830	HB3	PHE	A	53	90.579	31.427	0.178	1.00	0.08
H										

ATOM	831	HD2	PHE	A	53	87.254	32.821	-0.690	1.00	0.15
H										
ATOM	832	HE2	PHE	A	53	86.861	34.274	-2.653	1.00	0.15
H										
ATOM	833	HZ	PHE	A	53	88.799	35.135	-3.959	1.00	0.15
H										
ATOM	834	HE1	PHE	A	53	91.108	34.616	-3.230	1.00	0.15
H										
ATOM	835	HD1	PHE	A	53	91.488	33.154	-1.272	1.00	0.15
H										
ATOM	836	H	PHE	A	53	87.685	33.124	1.694	1.00	0.37
H										
ATOM	837	N	HIS	A	54	90.183	35.073	1.050	1.00	-0.73
N										
ATOM	838	CA	HIS	A	54	91.054	36.185	0.694	1.00	0.28
C										
ATOM	839	C	HIS	A	54	91.653	36.862	1.911	1.00	0.57
C										
ATOM	840	O	HIS	A	54	92.841	36.685	2.127	1.00	-0.57
O										
ATOM	841	CB	HIS	A	54	90.352	37.175	-0.271	1.00	0.01
C										
ATOM	842	CG	HIS	A	54	91.385	38.103	-0.847	1.00	0.18
C										
ATOM	843	ND1	HIS	A	54	91.907	37.901	-2.043	1.00	-0.70
N										
ATOM	844	CD2	HIS	A	54	91.901	39.193	-0.248	1.00	0.20
C										
ATOM	845	CE1	HIS	A	54	92.786	38.830	-2.283	1.00	0.65
C										
ATOM	846	NE2	HIS	A	54	92.762	39.464	-1.356	1.00	-0.70
N										
ATOM	847	HA	HIS	A	54	91.872	35.761	0.094	1.00	0.08
H										
ATOM	848	HB2	HIS	A	54	89.561	37.736	0.241	1.00	0.08
H										
ATOM	849	HB3	HIS	A	54	89.886	36.613	-1.094	1.00	0.08
H										
ATOM	850	HD2	HIS	A	54	91.736	39.678	0.712	1.00	0.15
H										
ATOM	851	HE1	HIS	A	54	93.374	39.944	-1.742	1.00	0.45
H										
ATOM	852	HE2	HIS	A	54	93.300	38.798	-3.240	1.00	0.15
H										
ATOM	853	H	HIS	A	54	89.204	35.165	0.872	1.00	0.37
H										
ATOM	854	N	CYS	A	55	90.889	37.642	2.715	1.00	-0.73
N										
ATOM	855	CA	CYS	A	55	91.498	38.378	3.829	1.00	0.28
C										
ATOM	856	C	CYS	A	55	91.495	37.609	5.133	1.00	0.57
C										
ATOM	857	O	CYS	A	55	92.069	38.110	6.087	1.00	-0.57
O										

ATOM	858	CB	CYS	A	55	90.794	39.744	4.049	1.00	-0.11
C										
ATOM	859	SG	CYS	A	55	89.127	39.483	4.736	1.00	-1.05
S										
ATOM	860	HA	CYS	A	55	92.547	38.618	3.588	1.00	0.08
H										
ATOM	861	HB2	CYS	A	55	90.715	40.292	3.098	1.00	0.08
H										
ATOM	862	HB3	CYS	A	55	91.369	40.359	4.761	1.00	0.08
H										
ATOM	863	HG	CYS	A	55	88.891	40.444	4.928	1.00	0.00
H										
ATOM	864	LPG1	CYS	A	55	88.705	39.202	4.284	1.00	0.00
LP										
ATOM	865	LPG2	CYS	A	55	89.139	39.105	5.300	1.00	0.00
LP										
ATOM	866	H	CYS	A	55	89.902	37.725	2.573	1.00	0.37
H										
ATOM	867	N	GLY	A	56	90.866	36.415	5.228	1.00	-0.73
N										
ATOM	868	CA	GLY	A	56	90.832	35.708	6.508	1.00	0.20
C										
ATOM	869	C	GLY	A	56	89.923	36.376	7.516	1.00	0.57
C										
ATOM	870	O	GLY	A	56	90.220	36.325	8.699	1.00	-0.57
O										
ATOM	871	HA3	GLY	A	56	91.842	35.644	6.932	1.00	0.08
H										
ATOM	872	HA2	GLY	A	56	90.497	34.674	6.350	1.00	0.08
H										
ATOM	873	H	GLY	A	56	90.396	35.998	4.449	1.00	0.37
H										
ATOM	874	N	GLY	A	57	88.805	36.998	7.077	1.00	-0.73
N										
ATOM	875	CA	GLY	A	57	87.882	37.631	8.015	1.00	0.20
C										
ATOM	876	C	GLY	A	57	86.948	36.573	8.557	1.00	0.57
C										
ATOM	877	O	GLY	A	57	86.377	35.868	7.740	1.00	-0.57
O										
ATOM	878	HA3	GLY	A	57	87.289	38.387	7.479	1.00	0.08
H										
ATOM	879	HA2	GLY	A	57	88.435	38.155	8.810	1.00	0.08
H										
ATOM	880	H	GLY	A	57	88.563	36.999	6.110	1.00	0.37
H										
ATOM	881	N	GLY	A	58	86.787	36.437	9.898	1.00	-0.73
N										
ATOM	882	CA	GLY	A	58	86.015	35.326	10.462	1.00	0.20
C										
ATOM	883	C	GLY	A	58	84.668	35.751	11.001	1.00	0.57
C										
ATOM	884	O	GLY	A	58	84.666	36.722	11.738	1.00	-0.57
O										

ATOM	885	HA3	GLY	A	58	86.597	34.912	11.299	1.00	0.08
H										
ATOM	886	HA2	GLY	A	58	85.899	34.515	9.738	1.00	0.08
H										
ATOM	887	H	GLY	A	58	87.222	37.070	10.542	1.00	0.37
H										
ATOM	888	N	LEU	A	59	83.548	35.047	10.677	1.00	-0.73
N										
ATOM	889	CA	LEU	A	59	82.211	35.385	11.197	1.00	0.28
C										
ATOM	890	C	LEU	A	59	81.633	34.174	11.909	1.00	0.57
C										
ATOM	891	O	LEU	A	59	82.082	33.072	11.638	1.00	-0.57
O										
ATOM	892	CB	LEU	A	59	81.268	35.820	10.028	1.00	-0.16
C										
ATOM	893	CG	LEU	A	59	81.119	37.356	9.738	1.00	-0.08
C										
ATOM	894	CD1	LEU	A	59	82.299	38.219	10.247	1.00	-0.24
C										
ATOM	895	CD2	LEU	A	59	80.958	37.597	8.210	1.00	-0.24
C										
ATOM	896	HA	LEU	A	59	82.271	36.156	11.974	1.00	0.08
H										
ATOM	897	HB2	LEU	A	59	80.255	35.425	10.199	1.00	0.08
H										
ATOM	898	HB3	LEU	A	59	81.642	35.308	9.129	1.00	0.08
H										
ATOM	899	HG	LEU	A	59	80.218	37.747	10.241	1.00	0.08
H										
ATOM	900	HD21	LEU	A	59	81.858	37.252	7.679	1.00	0.08
H										
ATOM	901	HD22	LEU	A	59	80.817	38.664	7.976	1.00	0.08
H										
ATOM	902	HD23	LEU	A	59	80.088	37.045	7.832	1.00	0.08
H										
ATOM	903	HD11	LEU	A	59	83.223	37.708	9.972	1.00	0.08
H										
ATOM	904	HD12	LEU	A	59	82.260	38.359	11.333	1.00	0.08
H										
ATOM	905	HD13	LEU	A	59	82.294	39.221	9.800	1.00	0.08
H										
ATOM	906	H	LEU	A	59	83.603	34.250	10.071	1.00	0.37
H										
ATOM	907	N	THR	A	60	80.652	34.362	12.833	1.00	-0.73
N										
ATOM	908	CA	THR	A	60	80.148	33.253	13.656	1.00	0.28
C										
ATOM	909	C	THR	A	60	78.784	33.595	14.213	1.00	0.57
C										
ATOM	910	O	THR	A	60	78.452	34.763	14.145	1.00	-0.57
O										
ATOM	911	CB	THR	A	60	81.137	33.077	14.845	1.00	0.20
C										

ATOM	912	OG1	THR	A	60	82.481	33.099	14.359	1.00	-0.68
O										
ATOM	913	CG2	THR	A	60	80.927	31.788	15.684	1.00	-0.24
C										
ATOM	914	HA	THR	A	60	80.075	32.332	13.055	1.00	0.08
H										
ATOM	915	HB	THR	A	60	81.059	33.951	15.512	1.00	0.08
H										
ATOM	916	HG1	THR	A	60	82.642	32.440	13.697	1.00	0.40
H										
ATOM	917	HG23	THR	A	60	80.873	30.904	15.031	1.00	0.08
H										
ATOM	918	HG21	THR	A	60	80.014	31.847	16.292	1.00	0.08
H										
ATOM	919	HG22	THR	A	60	81.774	31.664	16.377	1.00	0.08
H										
ATOM	920	H	THR	A	60	80.305	35.282	13.029	1.00	0.37
H										
ATOM	921	N	ASP	A	61	77.991	32.651	14.766	1.00	-0.73
N										
ATOM	922	CA	ASP	A	61	76.715	33.013	15.393	1.00	0.28
C										
ATOM	923	C	ASP	A	61	75.779	33.593	14.360	1.00	0.57
C										
ATOM	924	O	ASP	A	61	75.158	34.616	14.597	1.00	-0.57
O										
ATOM	925	CB	ASP	A	61	76.916	33.963	16.606	1.00	-0.27
C										
ATOM	926	CG	ASP	A	61	77.964	33.402	17.531	1.00	0.91
C										
ATOM	927	OD1	ASP	A	61	79.008	34.077	17.745	1.00	-0.90
O										
ATOM	928	OD2	ASP	A	61	77.753	32.274	18.054	1.00	-0.90
O										
ATOM	929	HA	ASP	A	61	76.224	32.099	15.771	1.00	0.08
H										
ATOM	930	HB2	ASP	A	61	75.970	34.070	17.162	1.00	0.08
H										
ATOM	931	HB3	ASP	A	61	77.219	34.967	16.272	1.00	0.08
H										
ATOM	932	H	ASP	A	61	78.262	31.688	14.756	1.00	0.37
H										
ATOM	933	N	TRP	A	62	75.678	32.923	13.192	1.00	-0.73
N										
ATOM	934	CA	TRP	A	62	74.855	33.446	12.106	1.00	0.28
C										
ATOM	935	C	TRP	A	62	73.388	33.387	12.463	1.00	0.57
C										
ATOM	936	O	TRP	A	62	73.016	32.476	13.185	1.00	-0.57
O										
ATOM	937	CB	TRP	A	62	75.076	32.623	10.812	1.00	0.02
C										
ATOM	938	CG	TRP	A	62	76.447	32.848	10.232	1.00	-0.18
C										

ATOM	939	CD1	TRP	A	62	77.598	32.216	10.523	1.00	-0.30
C										
ATOM	940	CD2	TRP	A	62	76.768	33.863	9.166	1.00	0.00
C										
ATOM	941	NE1	TRP	A	62	78.559	32.692	9.773	1.00	0.03
N										
ATOM	942	CE2	TRP	A	62	78.111	33.645	8.933	1.00	-0.15
C										
ATOM	943	CE3	TRP	A	62	76.038	34.831	8.481	1.00	-0.15
C										
ATOM	944	CZ2	TRP	A	62	78.799	34.348	7.945	1.00	-0.15
C										
ATOM	945	CZ3	TRP	A	62	76.712	35.530	7.473	1.00	-0.15
C										
ATOM	946	CH2	TRP	A	62	78.066	35.279	7.199	1.00	-0.15
C										
ATOM	947	HA	TRP	A	62	75.147	34.489	11.914	1.00	0.08
H										
ATOM	948	HB2	TRP	A	62	74.332	32.917	10.059	1.00	0.08
H										
ATOM	949	HB3	TRP	A	62	74.932	31.553	11.029	1.00	0.08
H										
ATOM	950	HE1	TRP	A	62	79.537	32.370	9.814	1.00	0.27
H										
ATOM	951	HD1	TRP	A	62	77.722	31.426	11.261	1.00	0.15
H										
ATOM	952	HZ2	TRP	A	62	79.851	34.177	7.758	1.00	0.15
H										
ATOM	953	HH2	TRP	A	62	78.565	35.811	6.396	1.00	0.15
H										
ATOM	954	HZ3	TRP	A	62	76.167	36.275	6.904	1.00	0.15
H										
ATOM	955	HE3	TRP	A	62	75.002	35.031	8.721	1.00	0.15
H										
ATOM	956	H	TRP	A	62	76.162	32.058	13.064	1.00	0.37
H										
ATOM	957	N	TYR	A	63	72.556	34.336	11.959	1.00	-0.73
N										
ATOM	958	CA	TYR	A	63	71.109	34.281	12.183	1.00	0.28
C										
ATOM	959	C	TYR	A	63	70.479	33.800	10.887	1.00	0.57
C										
ATOM	960	O	TYR	A	63	71.116	34.044	9.874	1.00	-0.57
O										
ATOM	961	CB	TYR	A	63	70.538	35.686	12.520	1.00	0.00
C										
ATOM	962	CG	TYR	A	63	71.101	36.397	13.766	1.00	0.00
C										
ATOM	963	CD1	TYR	A	63	70.639	37.692	14.025	1.00	0.00
C										
ATOM	964	CD2	TYR	A	63	72.030	35.835	14.650	1.00	0.00
C										
ATOM	965	CE1	TYR	A	63	71.082	38.411	15.139	1.00	0.00
C										

ATOM	966	CE2	TYR	A	63	72.502	36.565	15.746	1.00	0.00
C										
ATOM	967	CZ	TYR	A	63	72.033	37.857	16.003	1.00	0.00
C										
ATOM	968	HB3	TYR	A	63	70.716	36.343	11.656	1.00	0.00
H										
ATOM	969	HB2	TYR	A	63	69.449	35.607	12.662	1.00	0.00
H										
ATOM	970	HD2	TYR	A	63	72.397	34.828	14.508	1.00	0.00
H										
ATOM	971	HE2	TYR	A	63	73.242	36.125	16.407	1.00	0.00
H										
ATOM	972	O2	TYR	A	63	72.515	38.555	17.121	1.00	0.00
O										
ATOM	973	HE1	TYR	A	63	70.666	39.393	15.316	1.00	0.00
H										
ATOM	974	HD1	TYR	A	63	69.919	38.147	13.352	1.00	0.00
H										
ATOM	975	HA	TYR	A	63	70.875	33.613	13.023	1.00	0.08
H										
ATOM	976	H	TYR	A	63	72.899	35.063	11.360	1.00	0.37
H										
ATOM	977	N	PRO	A	64	69.289	33.145	10.803	1.00	-0.66
N										
ATOM	978	CA	PRO	A	64	68.797	32.698	9.503	1.00	0.28
C										
ATOM	979	C	PRO	A	64	68.707	33.761	8.433	1.00	0.57
C										
ATOM	980	O	PRO	A	64	69.091	33.503	7.303	1.00	-0.57
O										
ATOM	981	CB	PRO	A	64	67.374	32.207	9.882	1.00	-0.16
C										
ATOM	982	CG	PRO	A	64	67.492	31.795	11.366	1.00	-0.16
C										
ATOM	983	CD	PRO	A	64	68.458	32.846	11.965	1.00	0.14
C										
ATOM	984	HA	PRO	A	64	69.423	31.862	9.154	1.00	0.08
H										
ATOM	985	HD3	PRO	A	64	68.982	32.407	12.827	1.00	0.08
H										
ATOM	986	HD2	PRO	A	64	67.904	33.747	12.271	1.00	0.08
H										
ATOM	987	HG3	PRO	A	64	66.520	31.765	11.885	1.00	0.08
H										
ATOM	988	HG2	PRO	A	64	67.943	30.792	11.421	1.00	0.08
H										
ATOM	989	HB2	PRO	A	64	67.019	31.390	9.234	1.00	0.08
H										
ATOM	990	HB3	PRO	A	64	66.649	33.035	9.824	1.00	0.08
H										
ATOM	991	N	SER	A	65	68.174	34.956	8.768	1.00	-0.73
N										
ATOM	992	CA	SER	A	65	67.877	35.944	7.731	1.00	0.28
C										

ATOM	993	C	SER	A	65	69.112	36.468	7.037	1.00	0.57
C										
ATOM	994	O	SER	A	65	69.015	36.820	5.871	1.00	-0.57
O										
ATOM	995	CB	SER	A	65	67.163	37.168	8.358	1.00	0.12
C										
ATOM	996	OG	SER	A	65	68.035	37.740	9.348	1.00	-0.68
O										
ATOM	997	HA	SER	A	65	67.204	35.483	6.987	1.00	0.08
H										
ATOM	998	HB2	SER	A	65	66.218	36.842	8.826	1.00	0.08
H										
ATOM	999	HB3	SER	A	65	66.930	37.910	7.575	1.00	0.08
H										
ATOM	1000	HG	SER	A	65	67.655	38.501	9.775	1.00	0.40
H										
ATOM	1001	H	SER	A	65	67.928	35.162	9.718	1.00	0.37
H										
ATOM	1002	N	GLU	A	66	70.266	36.566	7.734	1.00	-0.73
N										
ATOM	1003	CA	GLU	A	66	71.396	37.302	7.169	1.00	0.28
C										
ATOM	1004	C	GLU	A	66	71.824	36.817	5.800	1.00	0.57
C										
ATOM	1005	O	GLU	A	66	71.580	35.669	5.464	1.00	-0.57
O										
ATOM	1006	CB	GLU	A	66	72.636	37.286	8.104	1.00	-0.16
C										
ATOM	1007	CG	GLU	A	66	72.440	38.208	9.337	1.00	-0.27
C										
ATOM	1008	CD	GLU	A	66	73.662	38.220	10.215	1.00	0.91
C										
ATOM	1009	OE1	GLU	A	66	74.375	37.184	10.266	1.00	-0.90
O										
ATOM	1010	OE2	GLU	A	66	73.920	39.270	10.862	1.00	-0.90
O										
ATOM	1011	HA	GLU	A	66	71.055	38.345	7.057	1.00	0.08
H										
ATOM	1012	HB2	GLU	A	66	73.525	37.642	7.560	1.00	0.08
H										
ATOM	1013	HB3	GLU	A	66	72.822	36.246	8.415	1.00	0.08
H										
ATOM	1014	HG2	GLU	A	66	71.584	37.878	9.940	1.00	0.08
H										
ATOM	1015	HG3	GLU	A	66	72.245	39.237	8.997	1.00	0.08
H										
ATOM	1016	H	GLU	A	66	70.328	36.226	8.674	1.00	0.37
H										
ATOM	1017	N	ASP	A	67	72.475	37.719	5.022	1.00	-0.73
N										
ATOM	1018	CA	ASP	A	67	72.991	37.382	3.696	1.00	0.28
C										
ATOM	1019	C	ASP	A	67	74.501	37.411	3.812	1.00	0.57
C										

ATOM	1020	O	ASP	A	67	74.995	38.475	4.150	1.00	-0.57
O										
ATOM	1021	CB	ASP	A	67	72.528	38.457	2.673	1.00	-0.27
C										
ATOM	1022	CG	ASP	A	67	73.196	38.355	1.323	1.00	0.91
C										
ATOM	1023	OD1	ASP	A	67	72.953	39.260	0.480	1.00	-0.90
O										
ATOM	1024	OD2	ASP	A	67	73.967	37.387	1.082	1.00	-0.90
O										
ATOM	1025	HA	ASP	A	67	72.589	36.427	3.328	1.00	0.08
H										
ATOM	1026	HB2	ASP	A	67	72.752	39.452	3.081	1.00	0.08
H										
ATOM	1027	HB3	ASP	A	67	71.437	38.389	2.540	1.00	0.08
H										
ATOM	1028	H	ASP	A	67	72.666	38.645	5.357	1.00	0.37
H										
ATOM	1029	N	PRO	A	68	75.280	36.330	3.558	1.00	-0.66
N										
ATOM	1030	CA	PRO	A	68	76.729	36.431	3.648	1.00	0.28
C										
ATOM	1031	C	PRO	A	68	77.370	37.663	3.063	1.00	0.57
C										
ATOM	1032	O	PRO	A	68	78.238	38.224	3.711	1.00	-0.57
O										
ATOM	1033	CB	PRO	A	68	77.123	35.140	2.900	1.00	-0.16
C										
ATOM	1034	CG	PRO	A	68	76.009	34.159	3.325	1.00	-0.16
C										
ATOM	1035	CD	PRO	A	68	74.728	35.021	3.231	1.00	0.14
C										
ATOM	1036	HA	PRO	A	68	77.003	36.344	4.705	1.00	0.08
H										
ATOM	1037	HD3	PRO	A	68	73.970	34.657	3.946	1.00	0.08
H										
ATOM	1038	HD2	PRO	A	68	74.327	35.023	2.206	1.00	0.08
H										
ATOM	1039	HG3	PRO	A	68	75.970	33.250	2.707	1.00	0.08
H										
ATOM	1040	HG2	PRO	A	68	76.169	33.867	4.377	1.00	0.08
H										
ATOM	1041	HB2	PRO	A	68	78.135	34.811	3.172	1.00	0.08
H										
ATOM	1042	HB3	PRO	A	68	77.071	35.288	1.809	1.00	0.08
H										
ATOM	1043	N	TRP	A	69	76.973	38.103	1.852	1.00	-0.73
N										
ATOM	1044	CA	TRP	A	69	77.611	39.284	1.276	1.00	0.28
C										
ATOM	1045	C	TRP	A	69	77.422	40.497	2.160	1.00	0.57
C										
ATOM	1046	O	TRP	A	69	78.351	41.275	2.309	1.00	-0.57
O										

ATOM	1047	CB	TRP	A	69	77.022	39.615	-0.115	1.00	0.02
C										
ATOM	1048	CG	TRP	A	69	77.348	38.550	-1.129	1.00	-0.18
C										
ATOM	1049	CD1	TRP	A	69	76.522	37.639	-1.669	1.00	-0.30
C										
ATOM	1050	CD2	TRP	A	69	78.701	38.337	-1.758	1.00	0.00
C										
ATOM	1051	NE1	TRP	A	69	77.176	36.920	-2.547	1.00	0.03
N										
ATOM	1052	CE2	TRP	A	69	78.461	37.312	-2.651	1.00	-0.15
C										
ATOM	1053	CE3	TRP	A	69	79.957	38.917	-1.612	1.00	-0.15
C										
ATOM	1054	CZ2	TRP	A	69	79.462	36.832	-3.497	1.00	-0.15
C										
ATOM	1055	CZ3	TRP	A	69	80.979	38.437	-2.443	1.00	-0.15
C										
ATOM	1056	CH2	TRP	A	69	80.729	37.418	-3.377	1.00	-0.15
C										
ATOM	1057	HA	TRP	A	69	78.688	39.078	1.164	1.00	0.08
H										
ATOM	1058	HB2	TRP	A	69	77.453	40.565	-0.468	1.00	0.08
H										
ATOM	1059	HB3	TRP	A	69	75.931	39.737	-0.037	1.00	0.08
H										
ATOM	1060	HE1	TRP	A	69	76.758	36.155	-3.099	1.00	0.27
H										
ATOM	1061	HD1	TRP	A	69	75.468	37.524	-1.420	1.00	0.15
H										
ATOM	1062	HZ2	TRP	A	69	79.264	36.044	-4.216	1.00	0.15
H										
ATOM	1063	HH2	TRP	A	69	81.533	37.068	-4.014	1.00	0.15
H										
ATOM	1064	HZ3	TRP	A	69	81.978	38.855	-2.363	1.00	0.15
H										
ATOM	1065	HE3	TRP	A	69	80.122	39.700	-0.885	1.00	0.15
H										
ATOM	1066	H	TRP	A	69	76.249	37.633	1.345	1.00	0.37
H										
ATOM	1067	N	GLU	A	70	76.221	40.690	2.749	1.00	-0.73
N										
ATOM	1068	CA	GLU	A	70	75.993	41.879	3.572	1.00	0.28
C										
ATOM	1069	C	GLU	A	70	76.913	41.847	4.774	1.00	0.57
C										
ATOM	1070	O	GLU	A	70	77.565	42.844	5.045	1.00	-0.57
O										
ATOM	1071	CB	GLU	A	70	74.521	41.996	4.057	1.00	-0.16
C										
ATOM	1072	CG	GLU	A	70	73.539	42.250	2.882	1.00	-0.27
C										
ATOM	1073	CD	GLU	A	70	72.105	42.327	3.333	1.00	0.91
C										

ATOM	1074	OE1	GLU	A	70	71.766	41.746	4.398	1.00	-0.90
O										
ATOM	1075	OE2	GLU	A	70	71.293	42.972	2.620	1.00	-0.90
O										
ATOM	1076	HA	GLU	A	70	76.231	42.778	2.976	1.00	0.08
H										
ATOM	1077	HB2	GLU	A	70	74.441	42.836	4.767	1.00	0.08
H										
ATOM	1078	HB3	GLU	A	70	74.248	41.073	4.591	1.00	0.08
H										
ATOM	1079	HG2	GLU	A	70	73.615	41.460	2.126	1.00	0.08
H										
ATOM	1080	HG3	GLU	A	70	73.803	43.196	2.393	1.00	0.08
H										
ATOM	1081	H	GLU	A	70	75.482	40.027	2.636	1.00	0.37
H										
ATOM	1082	N	GLN	A	71	76.981	40.711	5.507	1.00	-0.73
N										
ATOM	1083	CA	GLN	A	71	77.861	40.652	6.674	1.00	0.28
C										
ATOM	1084	C	GLN	A	71	79.285	40.859	6.214	1.00	0.57
C										
ATOM	1085	O	GLN	A	71	80.020	41.602	6.844	1.00	-0.57
O										
ATOM	1086	CB	GLN	A	71	77.760	39.304	7.440	1.00	-0.16
C										
ATOM	1087	CG	GLN	A	71	76.365	39.052	8.074	1.00	-0.10
C										
ATOM	1088	CD	GLN	A	71	75.992	40.159	9.029	1.00	0.57
C										
ATOM	1089	OE1	GLN	A	71	76.505	40.166	10.137	1.00	-0.57
O										
ATOM	1090	NE2	GLN	A	71	75.122	41.112	8.632	1.00	-0.80
N										
ATOM	1091	HA	GLN	A	71	77.588	41.469	7.359	1.00	0.08
H										
ATOM	1092	HB2	GLN	A	71	78.490	39.303	8.262	1.00	0.08
H										
ATOM	1093	HB3	GLN	A	71	78.010	38.476	6.757	1.00	0.08
H										
ATOM	1094	HG2	GLN	A	71	76.390	38.108	8.640	1.00	0.08
H										
ATOM	1095	HG3	GLN	A	71	75.610	38.938	7.283	1.00	0.08
H										
ATOM	1096	HE22	GLN	A	71	74.716	41.102	7.721	1.00	0.37
H										
ATOM	1097	HE21	GLN	A	71	74.873	41.843	9.262	1.00	0.37
H										
ATOM	1098	H	GLN	A	71	76.457	39.899	5.244	1.00	0.37
H										
ATOM	1099	N	HIS	A	72	79.688	40.205	5.101	1.00	-0.73
N										
ATOM	1100	CA	HIS	A	72	81.064	40.326	4.611	1.00	0.28
C										

ATOM	1101	C	HIS	A	72	81.474	41.774	4.506	1.00	0.57
C										
ATOM	1102	O	HIS	A	72	82.544	42.124	4.979	1.00	-0.57
O										
ATOM	1103	CB	HIS	A	72	81.226	39.644	3.223	1.00	0.02
C										
ATOM	1104	CG	HIS	A	72	82.659	39.518	2.785	1.00	-0.33
C										
ATOM	1105	ND1	HIS	A	72	83.207	38.850	1.820	1.00	0.03
N										
ATOM	1106	CD2	HIS	A	72	83.850	40.014	3.200	1.00	0.08
C										
ATOM	1107	CE1	HIS	A	72	84.433	38.763	1.473	1.00	0.04
C										
ATOM	1108	NE2	HIS	A	72	84.942	39.526	2.357	1.00	-0.57
N										
ATOM	1109	HA	HIS	A	72	81.719	39.819	5.339	1.00	0.08
H										
ATOM	1110	HB2	HIS	A	72	80.674	40.200	2.449	1.00	0.08
H										
ATOM	1111	HB3	HIS	A	72	80.824	38.620	3.263	1.00	0.08
H										
ATOM	1112	HD2	HIS	A	72	83.873	39.371	2.363	1.00	0.27
H										
ATOM	1113	HE1	HIS	A	72	84.891	38.204	0.662	1.00	0.15
H										
ATOM	1114	H	HIS	A	72	79.060	39.595	4.616	1.00	0.37
H										
ATOM	1115	N	ALA	A	73	80.628	42.634	3.899	1.00	-0.73
N										
ATOM	1116	CA	ALA	A	73	80.980	44.049	3.795	1.00	0.28
C										
ATOM	1117	C	ALA	A	73	80.919	44.720	5.145	1.00	0.57
C										
ATOM	1118	O	ALA	A	73	81.843	45.449	5.471	1.00	-0.57
O										
ATOM	1119	CB	ALA	A	73	80.020	44.800	2.828	1.00	-0.24
C										
ATOM	1120	HA	ALA	A	73	82.013	44.151	3.422	1.00	0.08
H										
ATOM	1121	HB1	ALA	A	73	80.083	44.368	1.813	1.00	0.08
H										
ATOM	1122	HB2	ALA	A	73	80.285	45.873	2.776	1.00	0.08
H										
ATOM	1123	HB3	ALA	A	73	78.980	44.705	3.187	1.00	0.08
H										
ATOM	1124	H	ALA	A	73	79.748	42.326	3.529	1.00	0.37
H										
ATOM	1125	N	LYS	A	74	79.850	44.486	5.939	1.00	-0.73
N										
ATOM	1126	CA	LYS	A	74	79.745	45.170	7.227	1.00	0.28
C										
ATOM	1127	C	LYS	A	74	81.026	45.011	8.014	1.00	0.57
C										

ATOM	1128	O	LYS	A	74	81.477	45.987	8.592	1.00	-0.57
O										
ATOM	1129	CB	LYS	A	74	78.556	44.622	8.063	1.00	-0.16
C										
ATOM	1130	CG	LYS	A	74	78.366	45.408	9.388	1.00	-0.16
C										
ATOM	1131	CD	LYS	A	74	77.123	44.904	10.168	1.00	-0.16
C										
ATOM	1132	CE	LYS	A	74	76.891	45.727	11.464	1.00	0.34
C										
ATOM	1133	NZ	LYS	A	74	75.738	45.207	12.236	1.00	-0.85
N										
ATOM	1134	HA	LYS	A	74	79.567	46.239	7.016	1.00	0.08
H										
ATOM	1135	HB2	LYS	A	74	78.727	43.559	8.290	1.00	0.08
H										
ATOM	1136	HB3	LYS	A	74	77.635	44.704	7.463	1.00	0.08
H										
ATOM	1137	HG2	LYS	A	74	78.241	46.478	9.161	1.00	0.08
H										
ATOM	1138	HG3	LYS	A	74	79.257	45.291	10.025	1.00	0.08
H										
ATOM	1139	HD2	LYS	A	74	77.261	43.843	10.427	1.00	0.08
H										
ATOM	1140	HD3	LYS	A	74	76.226	44.986	9.532	1.00	0.08
H										
ATOM	1141	HE2	LYS	A	74	76.708	46.783	11.199	1.00	0.08
H										
ATOM	1142	HE3	LYS	A	74	77.798	45.691	12.090	1.00	0.08
H										
ATOM	1143	HZ1	LYS	A	74	75.590	45.768	13.150	1.00	0.45
H										
ATOM	1144	HZ2	LYS	A	74	75.869	44.170	12.519	1.00	0.45
H										
ATOM	1145	HZ3	LYS	A	74	74.818	45.271	11.669	1.00	0.45
H										
ATOM	1146	H	LYS	A	74	79.110	43.874	5.642	1.00	0.37
H										
ATOM	1147	N	TRP	A	75	81.615	43.793	8.045	1.00	-0.73
N										
ATOM	1148	CA	TRP	A	75	82.806	43.558	8.864	1.00	0.28
C										
ATOM	1149	C	TRP	A	75	84.108	43.669	8.107	1.00	0.57
C										
ATOM	1150	O	TRP	A	75	85.108	43.870	8.777	1.00	-0.57
O										
ATOM	1151	CB	TRP	A	75	82.669	42.171	9.541	1.00	0.02
C										
ATOM	1152	CG	TRP	A	75	81.407	42.231	10.362	1.00	-0.18
C										
ATOM	1153	CD1	TRP	A	75	80.241	41.603	10.141	1.00	-0.30
C										
ATOM	1154	CD2	TRP	A	75	81.225	43.065	11.604	1.00	0.00
C										

ATOM	1155	NE1	TRP	A	75	79.369	41.969	11.045	1.00	0.03
N										
ATOM	1156	CE2	TRP	A	75	79.897	42.852	11.917	1.00	-0.15
C										
ATOM	1157	CE3	TRP	A	75	82.049	43.885	12.375	1.00	-0.15
C										
ATOM	1158	CZ2	TRP	A	75	79.291	43.499	12.993	1.00	-0.15
C										
ATOM	1159	CZ3	TRP	A	75	81.460	44.514	13.479	1.00	-0.15
C										
ATOM	1160	CH2	TRP	A	75	80.102	44.327	13.781	1.00	-0.15
C										
ATOM	1161	HA	TRP	A	75	82.859	44.307	9.670	1.00	0.08
H										
ATOM	1162	HB2	TRP	A	75	83.529	41.953	10.194	1.00	0.08
H										
ATOM	1163	HB3	TRP	A	75	82.611	41.394	8.764	1.00	0.08
H										
ATOM	1164	HE1	TRP	A	75	78.396	41.627	11.082	1.00	0.27
H										
ATOM	1165	HD1	TRP	A	75	80.051	40.906	9.328	1.00	0.15
H										
ATOM	1166	HZ2	TRP	A	75	78.238	43.373	13.212	1.00	0.15
H										
ATOM	1167	HH2	TRP	A	75	79.669	44.832	14.639	1.00	0.15
H										
ATOM	1168	HZ3	TRP	A	75	82.065	45.156	14.112	1.00	0.15
H										
ATOM	1169	HE3	TRP	A	75	83.097	44.023	12.134	1.00	0.15
H										
ATOM	1170	H	TRP	A	75	81.232	43.026	7.526	1.00	0.37
H										
ATOM	1171	N	TYR	A	76	84.152	43.562	6.756	1.00	-0.73
N										
ATOM	1172	CA	TYR	A	76	85.427	43.678	6.046	1.00	0.28
C										
ATOM	1173	C	TYR	A	76	85.290	44.476	4.767	1.00	0.57
C										
ATOM	1174	O	TYR	A	76	85.438	43.900	3.701	1.00	-0.57
O										
ATOM	1175	CB	TYR	A	76	85.970	42.252	5.772	1.00	-0.02
C										
ATOM	1176	CG	TYR	A	76	86.001	41.448	7.077	1.00	-0.14
C										
ATOM	1177	CD1	TYR	A	76	85.110	40.390	7.279	1.00	-0.15
C										
ATOM	1178	CD2	TYR	A	76	86.921	41.766	8.083	1.00	-0.15
C										
ATOM	1179	CE1	TYR	A	76	85.185	39.623	8.443	1.00	-0.15
C										
ATOM	1180	CE2	TYR	A	76	86.914	41.069	9.295	1.00	-0.15
C										
ATOM	1181	CZ	TYR	A	76	86.039	39.998	9.488	1.00	0.08
C										

ATOM	1182	OH	TYR	A	76	86.040	39.319	10.710	1.00	-0.53
O										
ATOM	1183	HA	TYR	A	76	86.183	44.212	6.644	1.00	0.08
H										
ATOM	1184	HB3	TYR	A	76	85.328	41.746	5.034	1.00	0.08
H										
ATOM	1185	HB2	TYR	A	76	86.989	42.302	5.355	1.00	0.08
H										
ATOM	1186	HD2	TYR	A	76	87.643	42.562	7.929	1.00	0.15
H										
ATOM	1187	HE2	TYR	A	76	87.591	41.358	10.092	1.00	0.15
H										
ATOM	1188	HE1	TYR	A	76	84.583	38.730	8.510	1.00	0.15
H										
ATOM	1189	HD1	TYR	A	76	84.356	40.150	6.535	1.00	0.15
H										
ATOM	1190	HH	TYR	A	76	85.259	38.800	10.864	1.00	0.45
H										
ATOM	1191	H	TYR	A	76	83.333	43.375	6.214	1.00	0.37
H										
ATOM	1192	N	PRO	A	77	85.035	45.808	4.809	1.00	-0.66
N										
ATOM	1193	CA	PRO	A	77	85.037	46.585	3.577	1.00	0.28
C										
ATOM	1194	C	PRO	A	77	86.307	46.435	2.771	1.00	0.57
C										
ATOM	1195	O	PRO	A	77	86.235	46.371	1.554	1.00	-0.57
O										
ATOM	1196	CB	PRO	A	77	84.937	48.020	4.158	1.00	-0.16
C										
ATOM	1197	CG	PRO	A	77	84.166	47.821	5.479	1.00	-0.16
C										
ATOM	1198	CD	PRO	A	77	84.779	46.522	6.054	1.00	0.14
C										
ATOM	1199	HA	PRO	A	77	84.141	46.314	2.996	1.00	0.08
H										
ATOM	1200	HD3	PRO	A	77	84.070	46.035	6.738	1.00	0.08
H										
ATOM	1201	HD2	PRO	A	77	85.727	46.729	6.575	1.00	0.08
H										
ATOM	1202	HG3	PRO	A	77	84.248	48.679	6.166	1.00	0.08
H										
ATOM	1203	HG2	PRO	A	77	83.105	47.662	5.227	1.00	0.08
H										
ATOM	1204	HB2	PRO	A	77	84.444	48.732	3.478	1.00	0.08
H										
ATOM	1205	HB3	PRO	A	77	85.938	48.411	4.405	1.00	0.08
H										
ATOM	1206	N	GLY	A	78	87.488	46.394	3.430	1.00	-0.73
N										
ATOM	1207	CA	GLY	A	78	88.744	46.394	2.683	1.00	0.20
C										
ATOM	1208	C	GLY	A	78	89.041	45.116	1.934	1.00	0.57
C										

ATOM	1209	O	GLY	A	78	89.991	45.129	1.167	1.00	-0.57
O										
ATOM	1210	HA3	GLY	A	78	89.588	46.570	3.370	1.00	0.08
H										
ATOM	1211	HA2	GLY	A	78	88.730	47.230	1.964	1.00	0.08
H										
ATOM	1212	H	GLY	A	78	87.528	46.400	4.432	1.00	0.37
H										
ATOM	1213	N	CYS	A	79	88.292	44.004	2.125	1.00	-0.73
N										
ATOM	1214	CA	CYS	A	79	88.659	42.763	1.440	1.00	0.28
C										
ATOM	1215	C	CYS	A	79	88.699	42.981	-0.061	1.00	0.57
C										
ATOM	1216	O	CYS	A	79	87.833	43.680	-0.563	1.00	-0.57
O										
ATOM	1217	CB	CYS	A	79	87.697	41.605	1.811	1.00	-0.11
C										
ATOM	1218	SG	CYS	A	79	88.240	40.073	0.994	1.00	-1.05
S										
ATOM	1219	HA	CYS	A	79	89.661	42.481	1.804	1.00	0.08
H										
ATOM	1220	HB2	CYS	A	79	86.671	41.850	1.503	1.00	0.08
H										
ATOM	1221	HB3	CYS	A	79	87.700	41.447	2.900	1.00	0.08
H										
ATOM	1222	HG	CYS	A	79	87.523	39.457	1.342	1.00	0.00
H										
ATOM	1223	LPG1	CYS	A	79	88.227	40.124	0.317	1.00	0.00
LP										
ATOM	1224	LPG2	CYS	A	79	88.861	39.882	1.193	1.00	0.00
LP										
ATOM	1225	H	CYS	A	79	87.515	43.994	2.756	1.00	0.37
H										
ATOM	1226	N	LYS	A	80	89.696	42.418	-0.789	1.00	-0.73
N										
ATOM	1227	CA	LYS	A	80	89.815	42.679	-2.227	1.00	0.28
C										
ATOM	1228	C	LYS	A	80	88.864	41.793	-2.997	1.00	0.57
C										
ATOM	1229	O	LYS	A	80	88.132	42.310	-3.824	1.00	-0.57
O										
ATOM	1230	CB	LYS	A	80	91.264	42.445	-2.735	1.00	-0.16
C										
ATOM	1231	CG	LYS	A	80	91.432	42.798	-4.240	1.00	-0.16
C										
ATOM	1232	CD	LYS	A	80	92.859	42.461	-4.753	1.00	-0.16
C										
ATOM	1233	CE	LYS	A	80	93.014	42.792	-6.263	1.00	0.34
C										
ATOM	1234	NZ	LYS	A	80	94.356	42.415	-6.762	1.00	-0.85
N										
ATOM	1235	HA	LYS	A	80	89.576	43.740	-2.419	1.00	0.08
H										

ATOM	1236	HB2	LYS	A	80	91.524	41.388	-2.589	1.00	0.08
H										
ATOM	1237	HB3	LYS	A	80	91.957	43.055	-2.134	1.00	0.08
H										
ATOM	1238	HG2	LYS	A	80	91.223	43.869	-4.394	1.00	0.08
H										
ATOM	1239	HG3	LYS	A	80	90.712	42.214	-4.833	1.00	0.08
H										
ATOM	1240	HD2	LYS	A	80	93.057	41.388	-4.598	1.00	0.08
H										
ATOM	1241	HD3	LYS	A	80	93.605	43.035	-4.184	1.00	0.08
H										
ATOM	1242	HE2	LYS	A	80	92.852	43.872	-6.417	1.00	0.08
H										
ATOM	1243	HE3	LYS	A	80	92.247	42.247	-6.839	1.00	0.08
H										
ATOM	1244	HZ1	LYS	A	80	94.476	42.673	-7.806	1.00	0.45
H										
ATOM	1245	HZ2	LYS	A	80	94.536	41.352	-6.674	1.00	0.45
H										
ATOM	1246	HZ3	LYS	A	80	95.141	42.921	-6.220	1.00	0.45
H										
ATOM	1247	H	LYS	A	80	90.374	41.817	-0.362	1.00	0.37
H										
ATOM	1248	N	TYR	A	81	88.850	40.461	-2.758	1.00	-0.73
N										
ATOM	1249	CA	TYR	A	81	87.904	39.600	-3.472	1.00	0.28
C										
ATOM	1250	C	TYR	A	81	86.521	40.202	-3.402	1.00	0.57
C										
ATOM	1251	O	TYR	A	81	85.838	40.262	-4.412	1.00	-0.57
O										
ATOM	1252	CB	TYR	A	81	87.876	38.178	-2.854	1.00	-0.02
C										
ATOM	1253	CG	TYR	A	81	86.699	37.341	-3.378	1.00	-0.14
C										
ATOM	1254	CD1	TYR	A	81	86.737	36.783	-4.659	1.00	-0.15
C										
ATOM	1255	CD2	TYR	A	81	85.575	37.115	-2.574	1.00	-0.15
C										
ATOM	1256	CE1	TYR	A	81	85.736	35.898	-5.070	1.00	-0.15
C										
ATOM	1257	CE2	TYR	A	81	84.563	36.246	-2.989	1.00	-0.15
C										
ATOM	1258	CZ	TYR	A	81	84.659	35.602	-4.229	1.00	0.08
C										
ATOM	1259	OH	TYR	A	81	83.698	34.676	-4.646	1.00	-0.53
O										
ATOM	1260	HA	TYR	A	81	88.214	39.531	-4.528	1.00	0.08
H										
ATOM	1261	HB3	TYR	A	81	88.821	37.664	-3.092	1.00	0.08
H										
ATOM	1262	HB2	TYR	A	81	87.806	38.257	-1.758	1.00	0.08
H										

ATOM	1263	HD2	TYR	A	81	85.484	37.614	-1.617	1.00	0.15
H										
ATOM	1264	HE2	TYR	A	81	83.708	36.076	-2.343	1.00	0.15
H										
ATOM	1265	HE1	TYR	A	81	85.793	35.433	-6.048	1.00	0.15
H										
ATOM	1266	HD1	TYR	A	81	87.549	37.030	-5.335	1.00	0.15
H										
ATOM	1267	HH	TYR	A	81	83.032	34.483	-3.996	1.00	0.45
H										
ATOM	1268	H	TYR	A	81	89.480	40.051	-2.095	1.00	0.37
H										
ATOM	1269	N	LEU	A	82	86.103	40.674	-2.209	1.00	-0.73
N										
ATOM	1270	CA	LEU	A	82	84.803	41.330	-2.097	1.00	0.28
C										
ATOM	1271	C	LEU	A	82	84.732	42.488	-3.069	1.00	0.57
C										
ATOM	1272	O	LEU	A	82	83.754	42.597	-3.789	1.00	-0.57
O										
ATOM	1273	CB	LEU	A	82	84.607	41.864	-0.653	1.00	-0.16
C										
ATOM	1274	CG	LEU	A	82	83.267	42.608	-0.402	1.00	-0.08
C										
ATOM	1275	CD1	LEU	A	82	82.034	41.677	-0.536	1.00	-0.24
C										
ATOM	1276	CD2	LEU	A	82	83.303	43.245	1.012	1.00	-0.24
C										
ATOM	1277	HA	LEU	A	82	84.031	40.580	-2.332	1.00	0.08
H										
ATOM	1278	HB2	LEU	A	82	85.429	42.565	-0.445	1.00	0.08
H										
ATOM	1279	HB3	LEU	A	82	84.689	41.025	0.053	1.00	0.08
H										
ATOM	1280	HG	LEU	A	82	83.150	43.416	-1.140	1.00	0.08
H										
ATOM	1281	HD21	LEU	A	82	83.379	42.471	1.791	1.00	0.08
H										
ATOM	1282	HD22	LEU	A	82	82.378	43.809	1.162	1.00	0.08
H										
ATOM	1283	HD23	LEU	A	82	84.151	43.940	1.120	1.00	0.08
H										
ATOM	1284	HD11	LEU	A	82	82.149	40.802	0.121	1.00	0.08
H										
ATOM	1285	HD12	LEU	A	82	81.918	41.337	-1.575	1.00	0.08
H										
ATOM	1286	HD13	LEU	A	82	81.112	42.210	-0.254	1.00	0.08
H										
ATOM	1287	H	LEU	A	82	86.681	40.589	-1.396	1.00	0.37
H										
ATOM	1288	N	LEU	A	83	85.761	43.367	-3.100	1.00	-0.73
N										
ATOM	1289	CA	LEU	A	83	85.727	44.517	-4.006	1.00	0.28
C										

ATOM	1290	C	LEU	A	83	85.581	44.059	-5.439	1.00	0.57
C										
ATOM	1291	O	LEU	A	83	84.824	44.666	-6.179	1.00	-0.57
O										
ATOM	1292	CB	LEU	A	83	87.015	45.377	-3.855	1.00	-0.16
C										
ATOM	1293	CG	LEU	A	83	87.027	46.694	-4.687	1.00	-0.08
C										
ATOM	1294	CD1	LEU	A	83	85.993	47.727	-4.159	1.00	-0.24
C										
ATOM	1295	CD2	LEU	A	83	88.451	47.321	-4.652	1.00	-0.24
C										
ATOM	1296	HA	LEU	A	83	84.845	45.115	-3.743	1.00	0.08
H										
ATOM	1297	HB2	LEU	A	83	87.869	44.761	-4.175	1.00	0.08
H										
ATOM	1298	HB3	LEU	A	83	87.160	45.628	-2.791	1.00	0.08
H										
ATOM	1299	HG	LEU	A	83	86.791	46.465	-5.740	1.00	0.08
H										
ATOM	1300	HD21	LEU	A	83	88.745	47.549	-3.616	1.00	0.08
H										
ATOM	1301	HD22	LEU	A	83	88.481	48.253	-5.238	1.00	0.08
H										
ATOM	1302	HD23	LEU	A	83	89.191	46.627	-5.081	1.00	0.08
H										
ATOM	1303	HD11	LEU	A	83	86.179	47.952	-3.098	1.00	0.08
H										
ATOM	1304	HD12	LEU	A	83	84.960	47.370	-4.271	1.00	0.08
H										
ATOM	1305	HD13	LEU	A	83	86.083	48.659	-4.733	1.00	0.08
H										
ATOM	1306	H	LEU	A	83	86.556	43.245	-2.503	1.00	0.37
H										
ATOM	1307	N	GLU	A	84	86.292	42.989	-5.853	1.00	-0.73
N										
ATOM	1308	CA	GLU	A	84	86.174	42.530	-7.236	1.00	0.28
C										
ATOM	1309	C	GLU	A	84	84.752	42.095	-7.508	1.00	0.57
C										
ATOM	1310	O	GLU	A	84	84.230	42.406	-8.567	1.00	-0.57
O										
ATOM	1311	CB	GLU	A	84	87.113	41.329	-7.541	1.00	-0.16
C										
ATOM	1312	CG	GLU	A	84	88.613	41.722	-7.464	1.00	-0.27
C										
ATOM	1313	CD	GLU	A	84	89.506	40.534	-7.721	1.00	0.91
C										
ATOM	1314	OE1	GLU	A	84	89.289	39.472	-7.075	1.00	-0.90
O										
ATOM	1315	OE2	GLU	A	84	90.435	40.648	-8.566	1.00	-0.90
O										
ATOM	1316	HA	GLU	A	84	86.436	43.363	-7.911	1.00	0.08
H										

ATOM	1317	HB2	GLU	A	84	86.907	40.956	-8.559	1.00	0.08
H										
ATOM	1318	HB3	GLU	A	84	86.899	40.513	-6.832	1.00	0.08
H										
ATOM	1319	HG2	GLU	A	84	88.863	42.116	-6.470	1.00	0.08
H										
ATOM	1320	HG3	GLU	A	84	88.822	42.513	-8.203	1.00	0.08
H										
ATOM	1321	H	GLU	A	84	86.880	42.489	-5.218	1.00	0.37
H										
ATOM	1322	N	GLN	A	85	84.119	41.357	-6.569	1.00	-0.73
N										
ATOM	1323	CA	GLN	A	85	82.801	40.786	-6.844	1.00	0.28
C										
ATOM	1324	C	GLN	A	85	81.715	41.831	-6.704	1.00	0.57
C										
ATOM	1325	O	GLN	A	85	80.967	42.022	-7.651	1.00	-0.57
O										
ATOM	1326	CB	GLN	A	85	82.526	39.564	-5.921	1.00	-0.16
C										
ATOM	1327	CG	GLN	A	85	83.530	38.410	-6.206	1.00	-0.10
C										
ATOM	1328	CD	GLN	A	85	83.363	37.807	-7.581	1.00	0.57
C										
ATOM	1329	OE1	GLN	A	85	82.248	37.763	-8.078	1.00	-0.57
O										
ATOM	1330	NE2	GLN	A	85	84.447	37.320	-8.226	1.00	-0.80
N										
ATOM	1331	HA	GLN	A	85	82.783	40.414	-7.882	1.00	0.08
H										
ATOM	1332	HB2	GLN	A	85	81.495	39.204	-6.074	1.00	0.08
H										
ATOM	1333	HB3	GLN	A	85	82.616	39.870	-4.866	1.00	0.08
H										
ATOM	1334	HG2	GLN	A	85	83.362	37.602	-5.482	1.00	0.08
H										
ATOM	1335	HG3	GLN	A	85	84.560	38.767	-6.069	1.00	0.08
H										
ATOM	1336	HE22	GLN	A	85	85.360	37.355	-7.819	1.00	0.37
H										
ATOM	1337	HE21	GLN	A	85	84.341	36.914	-9.135	1.00	0.37
H										
ATOM	1338	H	GLN	A	85	84.546	41.179	-5.681	1.00	0.37
H										
ATOM	1339	N	LYS	A	86	81.603	42.503	-5.535	1.00	-0.73
N										
ATOM	1340	CA	LYS	A	86	80.497	43.435	-5.293	1.00	0.28
C										
ATOM	1341	C	LYS	A	86	80.812	44.882	-5.623	1.00	0.57
C										
ATOM	1342	O	LYS	A	86	79.869	45.655	-5.702	1.00	-0.57
O										
ATOM	1343	CB	LYS	A	86	79.991	43.274	-3.831	1.00	-0.16
C										

ATOM	1344	CG	LYS	A	86	79.219	41.943	-3.594	1.00	-0.16
C										
ATOM	1345	CD	LYS	A	86	77.767	41.993	-4.158	1.00	-0.16
C										
ATOM	1346	CE	LYS	A	86	76.992	40.674	-3.908	1.00	0.34
C										
ATOM	1347	NZ	LYS	A	86	75.598	40.750	-4.404	1.00	-0.85
N										
ATOM	1348	HA	LYS	A	86	79.662	43.194	-5.966	1.00	0.08
H										
ATOM	1349	HB2	LYS	A	86	79.307	44.093	-3.587	1.00	0.08
H										
ATOM	1350	HB3	LYS	A	86	80.851	43.351	-3.145	1.00	0.08
H										
ATOM	1351	HG2	LYS	A	86	79.150	41.769	-2.507	1.00	0.08
H										
ATOM	1352	HG3	LYS	A	86	79.779	41.103	-4.036	1.00	0.08
H										
ATOM	1353	HD2	LYS	A	86	77.762	42.170	-5.243	1.00	0.08
H										
ATOM	1354	HD3	LYS	A	86	77.218	42.817	-3.675	1.00	0.08
H										
ATOM	1355	HE2	LYS	A	86	76.965	40.488	-2.827	1.00	0.08
H										
ATOM	1356	HE3	LYS	A	86	77.520	39.834	-4.391	1.00	0.08
H										
ATOM	1357	HZ1	LYS	A	86	75.067	39.824	-4.224	1.00	0.45
H										
ATOM	1358	HZ2	LYS	A	86	75.557	40.941	-5.467	1.00	0.45
H										
ATOM	1359	HZ3	LYS	A	86	75.039	41.535	-3.909	1.00	0.45
H										
ATOM	1360	H	LYS	A	86	82.269	42.357	-4.804	1.00	0.37
H										
ATOM	1361	N	GLY	A	87	82.080	45.299	-5.848	1.00	-0.73
N										
ATOM	1362	CA	GLY	A	87	82.324	46.666	-6.320	1.00	0.20
C										
ATOM	1363	C	GLY	A	87	82.289	47.700	-5.219	1.00	0.57
C										
ATOM	1364	O	GLY	A	87	82.152	47.338	-4.061	1.00	-0.57
O										
ATOM	1365	HA3	GLY	A	87	81.582	46.934	-7.089	1.00	0.08
H										
ATOM	1366	HA2	GLY	A	87	83.317	46.728	-6.795	1.00	0.08
H										
ATOM	1367	H	GLY	A	87	82.862	44.684	-5.733	1.00	0.37
H										
ATOM	1368	N	GLN	A	88	82.432	48.999	-5.583	1.00	-0.73
N										
ATOM	1369	CA	GLN	A	88	82.502	50.059	-4.576	1.00	0.28
C										
ATOM	1370	C	GLN	A	88	81.135	50.380	-4.015	1.00	0.57
C										

ATOM	1371	O	GLN	A	88	80.994	50.458	-2.805	1.00	-0.57
O										
ATOM	1372	CB	GLN	A	88	83.045	51.399	-5.158	1.00	-0.16
C										
ATOM	1373	CG	GLN	A	88	84.492	51.298	-5.706	1.00	-0.10
C										
ATOM	1374	CD	GLN	A	88	85.036	52.667	-6.050	1.00	0.57
C										
ATOM	1375	OE1	GLN	A	88	85.982	53.104	-5.413	1.00	-0.57
O										
ATOM	1376	NE2	GLN	A	88	84.464	53.375	-7.049	1.00	-0.80
N										
ATOM	1377	HA	GLN	A	88	83.172	49.740	-3.760	1.00	0.08
H										
ATOM	1378	HB2	GLN	A	88	83.046	52.155	-4.358	1.00	0.08
H										
ATOM	1379	HB3	GLN	A	88	82.376	51.756	-5.956	1.00	0.08
H										
ATOM	1380	HG2	GLN	A	88	84.532	50.656	-6.599	1.00	0.08
H										
ATOM	1381	HG3	GLN	A	88	85.131	50.851	-4.931	1.00	0.08
H										
ATOM	1382	HE22	GLN	A	88	83.696	53.010	-7.577	1.00	0.37
H										
ATOM	1383	HE21	GLN	A	88	84.812	54.287	-7.270	1.00	0.37
H										
ATOM	1384	H	GLN	A	88	82.494	49.251	-6.551	1.00	0.37
H										
ATOM	1385	N	GLU	A	89	80.127	50.609	-4.889	1.00	-0.73
N										
ATOM	1386	CA	GLU	A	89	78.857	51.156	-4.413	1.00	0.28
C										
ATOM	1387	C	GLU	A	89	78.262	50.234	-3.378	1.00	0.57
C										
ATOM	1388	O	GLU	A	89	77.843	50.701	-2.331	1.00	-0.57
O										
ATOM	1389	CB	GLU	A	89	77.800	51.380	-5.534	1.00	-0.16
C										
ATOM	1390	CG	GLU	A	89	78.289	52.296	-6.691	1.00	-0.27
C										
ATOM	1391	CD	GLU	A	89	78.943	53.547	-6.165	1.00	0.91
C										
ATOM	1392	OE1	GLU	A	89	78.210	54.418	-5.622	1.00	-0.90
O										
ATOM	1393	OE2	GLU	A	89	80.193	53.669	-6.286	1.00	-0.90
O										
ATOM	1394	HA	GLU	A	89	79.070	52.126	-3.934	1.00	0.08
H										
ATOM	1395	HB2	GLU	A	89	76.912	51.844	-5.072	1.00	0.08
H										
ATOM	1396	HB3	GLU	A	89	77.491	50.411	-5.959	1.00	0.08
H										
ATOM	1397	HG2	GLU	A	89	77.428	52.582	-7.317	1.00	0.08
H										

ATOM	1398	HG3	GLU	A	89	78.994	51.758	-7.345	1.00	0.08
H										
ATOM	1399	H	GLU	A	89	80.255	50.457	-5.867	1.00	0.37
H										
ATOM	1400	N	TYR	A	90	78.223	48.915	-3.662	1.00	-0.73
N										
ATOM	1401	CA	TYR	A	90	77.658	47.975	-2.698	1.00	0.28
C										
ATOM	1402	C	TYR	A	90	78.317	48.140	-1.349	1.00	0.57
C										
ATOM	1403	O	TYR	A	90	77.619	48.222	-0.352	1.00	-0.57
O										
ATOM	1404	CB	TYR	A	90	77.910	46.518	-3.159	1.00	-0.02
C										
ATOM	1405	CG	TYR	A	90	77.325	45.501	-2.167	1.00	-0.14
C										
ATOM	1406	CD1	TYR	A	90	75.977	45.139	-2.263	1.00	-0.15
C										
ATOM	1407	CD2	TYR	A	90	78.120	44.919	-1.173	1.00	-0.15
C										
ATOM	1408	CE1	TYR	A	90	75.444	44.159	-1.422	1.00	-0.15
C										
ATOM	1409	CE2	TYR	A	90	77.590	43.929	-0.339	1.00	-0.15
C										
ATOM	1410	CZ	TYR	A	90	76.256	43.535	-0.467	1.00	0.08
C										
ATOM	1411	OH	TYR	A	90	75.757	42.526	0.360	1.00	-0.53
O										
ATOM	1412	HA	TYR	A	90	76.571	48.151	-2.619	1.00	0.08
H										
ATOM	1413	HB3	TYR	A	90	77.458	46.353	-4.150	1.00	0.08
H										
ATOM	1414	HB2	TYR	A	90	78.996	46.375	-3.262	1.00	0.08
H										
ATOM	1415	HD2	TYR	A	90	79.153	45.227	-1.048	1.00	0.15
H										
ATOM	1416	HE2	TYR	A	90	78.214	43.458	0.412	1.00	0.15
H										
ATOM	1417	HE1	TYR	A	90	74.398	43.887	-1.518	1.00	0.15
H										
ATOM	1418	HD1	TYR	A	90	75.337	45.618	-2.998	1.00	0.15
H										
ATOM	1419	HH	TYR	A	90	74.928	42.167	0.065	1.00	0.45
H										
ATOM	1420	H	TYR	A	90	78.570	48.567	-4.536	1.00	0.37
H										
ATOM	1421	N	ILE	A	91	79.667	48.176	-1.301	1.00	-0.73
N										
ATOM	1422	CA	ILE	A	91	80.344	48.170	-0.006	1.00	0.28
C										
ATOM	1423	C	ILE	A	91	79.998	49.447	0.716	1.00	0.57
C										
ATOM	1424	O	ILE	A	91	79.525	49.386	1.840	1.00	-0.57
O										

ATOM	1425	CB	ILE	A	91	81.890	48.017	-0.133	1.00	-0.08
C										
ATOM	1426	CG1	ILE	A	91	82.246	46.622	-0.733	1.00	-0.16
C										
ATOM	1427	CG2	ILE	A	91	82.571	48.229	1.250	1.00	-0.24
C										
ATOM	1428	CD1	ILE	A	91	83.760	46.461	-1.028	1.00	-0.24
C										
ATOM	1429	HA	ILE	A	91	79.966	47.316	0.582	1.00	0.08
H										
ATOM	1430	HB	ILE	A	91	82.264	48.798	-0.816	1.00	0.08
H										
ATOM	1431	HG12	ILE	A	91	81.708	46.469	-1.680	1.00	0.08
H										
ATOM	1432	HG13	ILE	A	91	81.917	45.831	-0.044	1.00	0.08
H										
ATOM	1433	HD11	ILE	A	91	84.142	47.329	-1.586	1.00	0.08
H										
ATOM	1434	HD12	ILE	A	91	83.934	45.564	-1.632	1.00	0.08
H										
ATOM	1435	HD13	ILE	A	91	84.338	46.344	-0.102	1.00	0.08
H										
ATOM	1436	HG21	ILE	A	91	82.220	47.467	1.962	1.00	0.08
H										
ATOM	1437	HG22	ILE	A	91	82.346	49.222	1.666	1.00	0.08
H										
ATOM	1438	HG23	ILE	A	91	83.664	48.165	1.163	1.00	0.08
H										
ATOM	1439	H	ILE	A	91	80.211	48.206	-2.141	1.00	0.37
H										
ATOM	1440	N	ASN	A	92	80.245	50.616	0.083	1.00	-0.73
N										
ATOM	1441	CA	ASN	A	92	79.995	51.871	0.781	1.00	0.28
C										
ATOM	1442	C	ASN	A	92	78.555	51.902	1.227	1.00	0.57
C										
ATOM	1443	O	ASN	A	92	78.316	52.202	2.384	1.00	-0.57
O										
ATOM	1444	CB	ASN	A	92	80.302	53.108	-0.104	1.00	-0.10
C										
ATOM	1445	CG	ASN	A	92	81.769	53.125	-0.471	1.00	0.57
C										
ATOM	1446	OD1	ASN	A	92	82.591	53.188	0.431	1.00	-0.57
O										
ATOM	1447	ND2	ASN	A	92	82.142	53.070	-1.769	1.00	-0.80
N										
ATOM	1448	HA	ASN	A	92	80.649	51.906	1.671	1.00	0.08
H										
ATOM	1449	HB2	ASN	A	92	80.075	54.028	0.459	1.00	0.08
H										
ATOM	1450	HB3	ASN	A	92	79.656	53.088	-0.996	1.00	0.08
H										
ATOM	1451	HD22	ASN	A	92	81.469	53.019	-2.509	1.00	0.37
H										

ATOM	1452	HD21	ASN	A	92	83.117	53.083	-1.998	1.00	0.37
H										
ATOM	1453	H	ASN	A	92	80.610	50.641	-0.850	1.00	0.37
H										
ATOM	1454	N	ASN	A	93	77.588	51.587	0.338	1.00	-0.73
N										
ATOM	1455	CA	ASN	A	93	76.182	51.663	0.727	1.00	0.28
C										
ATOM	1456	C	ASN	A	93	75.923	50.895	2.003	1.00	0.57
C										
ATOM	1457	O	ASN	A	93	75.202	51.396	2.851	1.00	-0.57
O										
ATOM	1458	CB	ASN	A	93	75.245	51.112	-0.380	1.00	-0.10
C										
ATOM	1459	CG	ASN	A	93	73.780	51.291	-0.054	1.00	0.57
C										
ATOM	1460	OD1	ASN	A	93	73.445	52.000	0.881	1.00	-0.57
O										
ATOM	1461	ND2	ASN	A	93	72.870	50.659	-0.827	1.00	-0.80
N										
ATOM	1462	HA	ASN	A	93	75.945	52.728	0.876	1.00	0.08
H										
ATOM	1463	HB2	ASN	A	93	75.460	50.044	-0.537	1.00	0.08
H										
ATOM	1464	HB3	ASN	A	93	75.437	51.649	-1.322	1.00	0.08
H										
ATOM	1465	HD22	ASN	A	93	73.156	50.085	-1.595	1.00	0.37
H										
ATOM	1466	HD21	ASN	A	93	71.892	50.764	-0.636	1.00	0.37
H										
ATOM	1467	H	ASN	A	93	77.822	51.331	-0.600	1.00	0.37
H										
ATOM	1468	N	ILE	A	94	76.493	49.679	2.166	1.00	-0.73
N										
ATOM	1469	CA	ILE	A	94	76.226	48.906	3.380	1.00	0.28
C										
ATOM	1470	C	ILE	A	94	76.666	49.723	4.577	1.00	0.57
C										
ATOM	1471	O	ILE	A	94	75.877	49.910	5.490	1.00	-0.57
O										
ATOM	1472	CB	ILE	A	94	76.898	47.495	3.370	1.00	-0.08
C										
ATOM	1473	CG1	ILE	A	94	76.305	46.551	2.273	1.00	-0.16
C										
ATOM	1474	CG2	ILE	A	94	76.856	46.827	4.775	1.00	-0.24
C										
ATOM	1475	CD1	ILE	A	94	74.894	45.977	2.569	1.00	-0.24
C										
ATOM	1476	HA	ILE	A	94	75.137	48.769	3.462	1.00	0.08
H										
ATOM	1477	HB	ILE	A	94	77.964	47.644	3.125	1.00	0.08
H										
ATOM	1478	HG12	ILE	A	94	76.983	45.694	2.123	1.00	0.08
H										

ATOM	1479	HG13	ILE	A	94	76.240	47.085	1.315	1.00	0.08
H										
ATOM	1480	HD11	ILE	A	94	74.914	45.307	3.442	1.00	0.08
H										
ATOM	1481	HD12	ILE	A	94	74.558	45.396	1.695	1.00	0.08
H										
ATOM	1482	HD13	ILE	A	94	74.154	46.771	2.746	1.00	0.08
H										
ATOM	1483	HG21	ILE	A	94	75.826	46.803	5.161	1.00	0.08
H										
ATOM	1484	HG22	ILE	A	94	77.478	47.384	5.494	1.00	0.08
H										
ATOM	1485	HG23	ILE	A	94	77.240	45.796	4.727	1.00	0.08
H										
ATOM	1486	H	ILE	A	94	77.105	49.306	1.468	1.00	0.37
H										
ATOM	1487	N	HIS	A	95	77.921	50.224	4.602	1.00	-0.73
N										
ATOM	1488	CA	HIS	A	95	78.362	51.011	5.755	1.00	0.28
C										
ATOM	1489	C	HIS	A	95	77.583	52.300	5.880	1.00	0.57
C										
ATOM	1490	O	HIS	A	95	77.235	52.655	6.995	1.00	-0.57
O										
ATOM	1491	CB	HIS	A	95	79.881	51.339	5.709	1.00	0.01
C										
ATOM	1492	CG	HIS	A	95	80.683	50.113	6.094	1.00	0.18
C										
ATOM	1493	ND1	HIS	A	95	80.629	49.914	7.541	1.00	-0.70
N										
ATOM	1494	CD2	HIS	A	95	80.939	49.531	7.218	1.00	0.20
C										
ATOM	1495	CE1	HIS	A	95	81.184	48.985	8.206	1.00	0.65
C										
ATOM	1496	NE2	HIS	A	95	81.710	48.412	7.261	1.00	-0.70
N										
ATOM	1497	HA	HIS	A	95	78.157	50.420	6.664	1.00	0.08
H										
ATOM	1498	HB2	HIS	A	95	80.120	52.167	6.397	1.00	0.08
H										
ATOM	1499	HB3	HIS	A	95	80.168	51.663	4.697	1.00	0.08
H										
ATOM	1500	HD2	HIS	A	95	80.245	50.384	7.995	1.00	0.45
H										
ATOM	1501	HE1	HIS	A	95	81.170	48.790	9.325	1.00	0.15
H										
ATOM	1502	HE2	HIS	A	95	82.158	47.664	7.815	1.00	0.45
H										
ATOM	1503	H	HIS	A	95	78.553	50.069	3.840	1.00	0.37
H										
ATOM	1504	N	LEU	A	96	77.297	53.024	4.776	1.00	-0.73
N										
ATOM	1505	CA	LEU	A	96	76.531	54.263	4.893	1.00	0.28
C										

ATOM	1506	C	LEU	A	96	75.200	53.959	5.539	1.00	0.57
C										
ATOM	1507	O	LEU	A	96	74.757	54.751	6.354	1.00	-0.57
O										
ATOM	1508	CB	LEU	A	96	76.247	54.954	3.528	1.00	-0.16
C										
ATOM	1509	CG	LEU	A	96	77.501	55.523	2.794	1.00	-0.08
C										
ATOM	1510	CD1	LEU	A	96	77.095	56.020	1.378	1.00	-0.24
C										
ATOM	1511	CD2	LEU	A	96	78.174	56.686	3.578	1.00	-0.24
C										
ATOM	1512	HA	LEU	A	96	77.078	54.951	5.554	1.00	0.08
H										
ATOM	1513	HB2	LEU	A	96	75.542	55.786	3.691	1.00	0.08
H										
ATOM	1514	HB3	LEU	A	96	75.744	54.215	2.886	1.00	0.08
H										
ATOM	1515	HG	LEU	A	96	78.251	54.726	2.663	1.00	0.08
H										
ATOM	1516	HD21	LEU	A	96	77.438	57.472	3.808	1.00	0.08
H										
ATOM	1517	HD22	LEU	A	96	78.982	57.133	2.979	1.00	0.08
H										
ATOM	1518	HD23	LEU	A	96	78.623	56.335	4.518	1.00	0.08
H										
ATOM	1519	HD11	LEU	A	96	76.356	56.833	1.455	1.00	0.08
H										
ATOM	1520	HD12	LEU	A	96	76.654	55.202	0.788	1.00	0.08
H										
ATOM	1521	HD13	LEU	A	96	77.973	56.396	0.830	1.00	0.08
H										
ATOM	1522	H	LEU	A	96	77.580	52.710	3.874	1.00	0.37
H										
ATOM	1523	N	THR	A	97	74.547	52.826	5.197	1.00	-0.73
N										
ATOM	1524	CA	THR	A	97	73.258	52.517	5.813	1.00	0.28
C										
ATOM	1525	C	THR	A	97	73.468	52.376	7.303	1.00	0.57
C										
ATOM	1526	O	THR	A	97	72.724	52.975	8.064	1.00	-0.57
O										
ATOM	1527	CB	THR	A	97	72.605	51.230	5.229	1.00	0.20
C										
ATOM	1528	OG1	THR	A	97	72.261	51.411	3.842	1.00	-0.68
O										
ATOM	1529	CG2	THR	A	97	71.294	50.875	5.979	1.00	-0.24
C										
ATOM	1530	HA	THR	A	97	72.570	53.356	5.616	1.00	0.08
H										
ATOM	1531	HB	THR	A	97	73.296	50.375	5.327	1.00	0.08
H										
ATOM	1532	HG1	THR	A	97	73.009	51.577	3.278	1.00	0.40
H										

ATOM	1533	HG23	THR	A	97	70.587	51.718	5.926	1.00	0.08
H										
ATOM	1534	HG21	THR	A	97	71.487	50.639	7.037	1.00	0.08
H										
ATOM	1535	HG22	THR	A	97	70.825	49.996	5.511	1.00	0.08
H										
ATOM	1536	H	THR	A	97	74.942	52.180	4.544	1.00	0.37
H										
ATOM	1537	N	HIS	A	98	74.475	51.588	7.743	1.00	-0.73
N										
ATOM	1538	CA	HIS	A	98	74.686	51.413	9.179	1.00	0.28
C										
ATOM	1539	C	HIS	A	98	74.996	52.742	9.833	1.00	0.57
C										
ATOM	1540	O	HIS	A	98	74.464	53.019	10.896	1.00	-0.57
O										
ATOM	1541	CB	HIS	A	98	75.837	50.414	9.468	1.00	0.01
C										
ATOM	1542	CG	HIS	A	98	75.876	50.098	10.948	1.00	0.18
C										
ATOM	1543	ND1	HIS	A	98	76.993	50.761	11.625	1.00	-0.70
N										
ATOM	1544	CD2	HIS	A	98	76.636	50.424	11.943	1.00	0.20
C										
ATOM	1545	CE1	HIS	A	98	77.291	50.679	12.855	1.00	0.65
C										
ATOM	1546	NE2	HIS	A	98	76.375	49.937	13.186	1.00	-0.70
N										
ATOM	1547	HA	HIS	A	98	73.757	51.000	9.609	1.00	0.08
H										
ATOM	1548	HB2	HIS	A	98	76.788	50.799	9.066	1.00	0.08
H										
ATOM	1549	HB3	HIS	A	98	75.620	49.465	8.955	1.00	0.08
H										
ATOM	1550	HD2	HIS	A	98	77.477	51.209	11.249	1.00	0.45
H										
ATOM	1551	HE1	HIS	A	98	78.146	51.157	13.431	1.00	0.15
H										
ATOM	1552	HE2	HIS	A	98	76.623	49.882	14.188	1.00	0.45
H										
ATOM	1553	H	HIS	A	98	75.080	51.115	7.099	1.00	0.37
H										
ATOM	1554	N	SER	A	99	75.850	53.585	9.213	1.00	-0.73
N										
ATOM	1555	CA	SER	A	99	76.158	54.887	9.802	1.00	0.28
C										
ATOM	1556	C	SER	A	99	74.899	55.722	9.881	1.00	0.57
C										
ATOM	1557	O	SER	A	99	74.716	56.431	10.858	1.00	-0.57
O										
ATOM	1558	CB	SER	A	99	77.214	55.672	8.976	1.00	0.12
C										
ATOM	1559	OG	SER	A	99	78.497	55.024	8.985	1.00	-0.68
O										

ATOM	1560	HA	SER	A	99	76.563	54.732	10.815	1.00	0.08
H										
ATOM	1561	HB2	SER	A	99	77.363	56.664	9.431	1.00	0.08
H										
ATOM	1562	HB3	SER	A	99	76.862	55.820	7.943	1.00	0.08
H										
ATOM	1563	HG	SER	A	99	78.491	54.166	8.574	1.00	0.40
H										
ATOM	1564	H	SER	A	99	76.252	53.343	8.332	1.00	0.37
H										
ATOM	1565	N	LEU	A	100	74.018	55.652	8.858	1.00	-0.73
N										
ATOM	1566	CA	LEU	A	100	72.783	56.435	8.895	1.00	0.28
C										
ATOM	1567	C	LEU	A	100	72.014	55.958	10.109	1.00	0.57
C										
ATOM	1568	O	LEU	A	100	71.605	56.770	10.923	1.00	-0.57
O										
ATOM	1569	CB	LEU	A	100	71.966	56.268	7.575	1.00	-0.16
C										
ATOM	1570	CG	LEU	A	100	70.976	57.427	7.249	1.00	-0.08
C										
ATOM	1571	CD1	LEU	A	100	70.173	57.081	5.963	1.00	-0.24
C										
ATOM	1572	CD2	LEU	A	100	70.002	57.725	8.417	1.00	-0.24
C										
ATOM	1573	HA	LEU	A	100	73.061	57.497	9.002	1.00	0.08
H										
ATOM	1574	HB2	LEU	A	100	71.430	55.307	7.596	1.00	0.08
H										
ATOM	1575	HB3	LEU	A	100	72.670	56.238	6.728	1.00	0.08
H										
ATOM	1576	HG	LEU	A	100	71.555	58.347	7.047	1.00	0.08
H										
ATOM	1577	HD21	LEU	A	100	69.546	56.790	8.776	1.00	0.08
H										
ATOM	1578	HD22	LEU	A	100	69.201	58.410	8.100	1.00	0.08
H										
ATOM	1579	HD23	LEU	A	100	70.544	58.214	9.239	1.00	0.08
H										
ATOM	1580	HD11	LEU	A	100	69.546	56.192	6.131	1.00	0.08
H										
ATOM	1581	HD12	LEU	A	100	70.854	56.876	5.122	1.00	0.08
H										
ATOM	1582	HD13	LEU	A	100	69.519	57.920	5.676	1.00	0.08
H										
ATOM	1583	H	LEU	A	100	74.191	55.052	8.077	1.00	0.37
H										
ATOM	1584	N	GLU	A	101	71.826	54.626	10.263	1.00	-0.73
N										
ATOM	1585	CA	GLU	A	101	71.099	54.119	11.426	1.00	0.28
C										
ATOM	1586	C	GLU	A	101	71.710	54.667	12.695	1.00	0.57
C										

ATOM	1587	O	GLU	A	101	70.962	55.117	13.548	1.00	-0.57
O										
ATOM	1588	CB	GLU	A	101	71.101	52.565	11.475	1.00	-0.16
C										
ATOM	1589	CG	GLU	A	101	70.347	52.017	12.717	1.00	-0.27
C										
ATOM	1590	CD	GLU	A	101	70.308	50.510	12.678	1.00	0.91
C										
ATOM	1591	OE1	GLU	A	101	71.403	49.887	12.743	1.00	-0.90
O										
ATOM	1592	OE2	GLU	A	101	69.190	49.936	12.582	1.00	-0.90
O										
ATOM	1593	HA	GLU	A	101	70.054	54.463	11.344	1.00	0.08
H										
ATOM	1594	HB2	GLU	A	101	72.137	52.195	11.499	1.00	0.08
H										
ATOM	1595	HB3	GLU	A	101	70.619	52.179	10.561	1.00	0.08
H										
ATOM	1596	HG2	GLU	A	101	69.323	52.423	12.739	1.00	0.08
H										
ATOM	1597	HG3	GLU	A	101	70.859	52.320	13.644	1.00	0.08
H										
ATOM	1598	H	GLU	A	101	72.176	53.971	9.592	1.00	0.37
H										
ATOM	1599	N	GLU	A	102	73.055	54.646	12.842	1.00	-0.73
N										
ATOM	1600	CA	GLU	A	102	73.656	55.173	14.065	1.00	0.28
C										
ATOM	1601	C	GLU	A	102	73.174	56.592	14.265	1.00	0.57
C										
ATOM	1602	O	GLU	A	102	72.707	56.907	15.347	1.00	-0.57
O										
ATOM	1603	CB	GLU	A	102	75.211	55.175	14.057	1.00	-0.16
C										
ATOM	1604	CG	GLU	A	102	75.818	53.748	14.106	1.00	-0.27
C										
ATOM	1605	CD	GLU	A	102	77.321	53.847	14.035	1.00	0.91
C										
ATOM	1606	OE1	GLU	A	102	77.961	54.017	15.108	1.00	-0.90
O										
ATOM	1607	OE2	GLU	A	102	77.876	53.760	12.906	1.00	-0.90
O										
ATOM	1608	HA	GLU	A	102	73.317	54.553	14.912	1.00	0.08
H										
ATOM	1609	HB2	GLU	A	102	75.572	55.729	14.941	1.00	0.08
H										
ATOM	1610	HB3	GLU	A	102	75.577	55.697	13.161	1.00	0.08
H										
ATOM	1611	HG2	GLU	A	102	75.458	53.133	13.268	1.00	0.08
H										
ATOM	1612	HG3	GLU	A	102	75.526	53.244	15.042	1.00	0.08
H										
ATOM	1613	H	GLU	A	102	73.647	54.284	12.121	1.00	0.37
H										

ATOM	1614	N	CYS	A	103	73.271	57.460	13.232	1.00	-0.73
N										
ATOM	1615	CA	CYS	A	103	72.849	58.850	13.403	1.00	0.28
C										
ATOM	1616	C	CYS	A	103	71.432	58.924	13.925	1.00	0.57
C										
ATOM	1617	O	CYS	A	103	71.171	59.713	14.820	1.00	-0.57
O										
ATOM	1618	CB	CYS	A	103	72.943	59.644	12.074	1.00	-0.11
C										
ATOM	1619	SG	CYS	A	103	72.496	61.386	12.384	1.00	-1.05
S										
ATOM	1620	HA	CYS	A	103	73.531	59.321	14.128	1.00	0.08
H										
ATOM	1621	HB2	CYS	A	103	72.258	59.227	11.321	1.00	0.08
H										
ATOM	1622	HB3	CYS	A	103	73.973	59.603	11.681	1.00	0.08
H										
ATOM	1623	HG	CYS	A	103	72.619	61.737	11.447	1.00	0.00
H										
ATOM	1624	LPG1	CYS	A	103	71.856	61.451	12.601	1.00	0.00
LP										
ATOM	1625	LPG2	CYS	A	103	72.916	61.684	12.827	1.00	0.00
LP										
ATOM	1626	H	CYS	A	103	73.646	57.172	12.349	1.00	0.37
H										
ATOM	1627	N	LEU	A	104	70.499	58.110	13.383	1.00	-0.73
N										
ATOM	1628	CA	LEU	A	104	69.120	58.169	13.865	1.00	0.28
C										
ATOM	1629	C	LEU	A	104	69.069	57.708	15.304	1.00	0.57
C										
ATOM	1630	O	LEU	A	104	68.386	58.337	16.096	1.00	-0.57
O										
ATOM	1631	CB	LEU	A	104	68.138	57.310	13.020	1.00	-0.16
C										
ATOM	1632	CG	LEU	A	104	68.011	57.763	11.534	1.00	-0.08
C										
ATOM	1633	CD1	LEU	A	104	67.145	56.741	10.744	1.00	-0.24
C										
ATOM	1634	CD2	LEU	A	104	67.410	59.190	11.378	1.00	-0.24
C										
ATOM	1635	HA	LEU	A	104	68.783	59.214	13.841	1.00	0.08
H										
ATOM	1636	HB2	LEU	A	104	67.140	57.345	13.486	1.00	0.08
H										
ATOM	1637	HB3	LEU	A	104	68.490	56.266	13.056	1.00	0.08
H										
ATOM	1638	HG	LEU	A	104	69.012	57.769	11.081	1.00	0.08
H										
ATOM	1639	HD21	LEU	A	104	66.446	59.259	11.905	1.00	0.08
H										
ATOM	1640	HD22	LEU	A	104	67.242	59.419	10.314	1.00	0.08
H										

ATOM	1641	HD23	LEU	A	104		68.086	59.963	11.771	1.00	0.08
H											
ATOM	1642	HD11	LEU	A	104		66.130	56.694	11.169	1.00	0.08
H											
ATOM	1643	HD12	LEU	A	104		67.593	55.737	10.790	1.00	0.08
H											
ATOM	1644	HD13	LEU	A	104		67.066	57.031	9.685	1.00	0.08
H											
ATOM	1645	H	LEU	A	104		70.746	57.447	12.675	1.00	0.37
H											
ATOM	1646	N	VAL	A	105		69.780	56.622	15.678	1.00	-0.73
N											
ATOM	1647	CA	VAL	A	105		69.745	56.175	17.072	1.00	0.28
C											
ATOM	1648	C	VAL	A	105		70.275	57.274	17.968	1.00	0.57
C											
ATOM	1649	O	VAL	A	105		69.740	57.452	19.051	1.00	-0.57
O											
ATOM	1650	CB	VAL	A	105		70.536	54.849	17.284	1.00	-0.08
C											
ATOM	1651	CG1	VAL	A	105		70.687	54.511	18.795	1.00	-0.24
C											
ATOM	1652	CG2	VAL	A	105		69.830	53.668	16.557	1.00	-0.24
C											
ATOM	1653	HA	VAL	A	105		68.693	55.990	17.348	1.00	0.08
H											
ATOM	1654	HB	VAL	A	105		71.549	54.974	16.865	1.00	0.08
H											
ATOM	1655	HG11	VAL	A	105		69.698	54.466	19.277	1.00	0.08
H											
ATOM	1656	HG12	VAL	A	105		71.298	55.267	19.313	1.00	0.08
H											
ATOM	1657	HG13	VAL	A	105		71.183	53.537	18.921	1.00	0.08
H											
ATOM	1658	HG21	VAL	A	105		68.844	53.478	17.008	1.00	0.08
H											
ATOM	1659	HG22	VAL	A	105		70.434	52.752	16.641	1.00	0.08
H											
ATOM	1660	HG23	VAL	A	105		69.681	53.879	15.489	1.00	0.08
H											
ATOM	1661	H	VAL	A	105		70.355	56.137	15.019	1.00	0.37
H											
ATOM	1662	N	ARG	A	106		71.314	58.031	17.546	1.00	-0.73
N											
ATOM	1663	CA	ARG	A	106		71.841	59.091	18.408	1.00	0.28
C											
ATOM	1664	C	ARG	A	106		70.776	60.122	18.718	1.00	0.57
C											
ATOM	1665	O	ARG	A	106		70.888	60.752	19.757	1.00	-0.57
O											
ATOM	1666	CB	ARG	A	106		73.091	59.784	17.794	1.00	-0.16
C											
ATOM	1667	CG	ARG	A	106		74.313	58.821	17.747	1.00	-0.16
C											

ATOM	1668	CD	ARG	A	106	75.512	59.427	16.966	1.00	0.17
C										
ATOM	1669	NE	ARG	A	106	76.607	58.463	16.829	1.00	-0.84
N										
ATOM	1670	CZ	ARG	A	106	77.692	58.689	16.118	1.00	1.20
C										
ATOM	1671	NH1	ARG	A	106	77.908	59.822	15.489	1.00	-0.97
N										
ATOM	1672	NH2	ARG	A	106	78.601	57.744	16.033	1.00	-0.97
N										
ATOM	1673	HA	ARG	A	106	72.145	58.632	19.363	1.00	0.08
H										
ATOM	1674	HB2	ARG	A	106	73.366	60.662	18.402	1.00	0.08
H										
ATOM	1675	HB3	ARG	A	106	72.836	60.140	16.783	1.00	0.08
H										
ATOM	1676	HG2	ARG	A	106	74.032	57.877	17.259	1.00	0.08
H										
ATOM	1677	HG3	ARG	A	106	74.633	58.583	18.775	1.00	0.08
H										
ATOM	1678	HD2	ARG	A	106	75.861	60.329	17.494	1.00	0.08
H										
ATOM	1679	HD3	ARG	A	106	75.147	59.705	15.965	1.00	0.08
H										
ATOM	1680	HE	ARG	A	106	76.501	57.554	17.307	1.00	0.45
H										
ATOM	1681	HH12	ARG	A	106	77.238	60.601	15.528	1.00	0.45
H										
ATOM	1682	HH11	ARG	A	106	78.768	59.964	14.938	1.00	0.45
H										
ATOM	1683	HH22	ARG	A	106	78.475	56.838	16.509	1.00	0.45
H										
ATOM	1684	HH21	ARG	A	106	79.464	57.884	15.487	1.00	0.45
H										
ATOM	1685	H	ARG	A	106	71.719	57.887	16.643	1.00	0.37
H										
ATOM	1686	N	THR	A	107	69.734	60.320	17.874	1.00	-0.73
N										
ATOM	1687	CA	THR	A	107	68.678	61.266	18.249	1.00	0.28
C										
ATOM	1688	C	THR	A	107	68.106	60.889	19.597	1.00	0.57
C										
ATOM	1689	O	THR	A	107	67.709	61.796	20.311	1.00	-0.57
O										
ATOM	1690	CB	THR	A	107	67.482	61.394	17.260	1.00	0.20
C										
ATOM	1691	OG1	THR	A	107	66.698	60.192	17.205	1.00	-0.68
O										
ATOM	1692	CG2	THR	A	107	67.913	61.868	15.846	1.00	-0.24
C										
ATOM	1693	HA	THR	A	107	69.148	62.262	18.328	1.00	0.08
H										
ATOM	1694	HB	THR	A	107	66.793	62.158	17.659	1.00	0.08
H										

ATOM	1695	HG1	THR	A	107	67.187	59.453	16.866	1.00	0.40
H										
ATOM	1696	HG23	THR	A	107	68.591	61.148	15.370	1.00	0.08
H										
ATOM	1697	HG21	THR	A	107	68.424	62.841	15.912	1.00	0.08
H										
ATOM	1698	HG22	THR	A	107	67.023	61.981	15.206	1.00	0.08
H										
ATOM	1699	H	THR	A	107	69.661	59.818	17.013	1.00	0.37
H										
ATOM	1700	N	THR	A	108	68.059	59.586	19.973	1.00	-0.73
N										
ATOM	1701	CA	THR	A	108	67.617	59.233	21.319	1.00	0.28
C										
ATOM	1702	C	THR	A	108	68.505	60.033	22.239	1.00	0.57
C										
ATOM	1703	O	THR	A	108	68.037	60.973	22.857	1.00	-0.57
O										
ATOM	1704	CB	THR	A	108	67.627	57.707	21.615	1.00	0.20
C										
ATOM	1705	OG1	THR	A	108	66.667	57.013	20.801	1.00	-0.68
O										
ATOM	1706	CG2	THR	A	108	67.271	57.417	23.093	1.00	-0.24
C										
ATOM	1707	HA	THR	A	108	66.578	59.569	21.440	1.00	0.08
H										
ATOM	1708	HB	THR	A	108	68.619	57.281	21.419	1.00	0.08
H										
ATOM	1709	HG1	THR	A	108	66.834	57.082	19.868	1.00	0.40
H										
ATOM	1710	HG23	THR	A	108	66.273	57.816	23.323	1.00	0.08
H										
ATOM	1711	HG21	THR	A	108	68.002	57.873	23.775	1.00	0.08
H										
ATOM	1712	HG22	THR	A	108	67.264	56.331	23.271	1.00	0.08
H										
ATOM	1713	H	THR	A	108	68.358	58.861	19.357	1.00	0.37
H										
ATOM	1714	N	GLU	A	109	69.806	59.706	22.309	1.00	-0.73
N										
ATOM	1715	CA	GLU	A	109	70.800	60.549	22.922	1.00	0.28
C										
ATOM	1716	C	GLU	A	109	71.272	59.228	22.446	1.00	0.45
C										
ATOM	1717	O	GLU	A	109	72.384	58.744	22.610	1.00	-0.57
O										
ATOM	1718	CB	GLU	A	109	70.744	60.790	24.446	1.00	-0.16
C										
ATOM	1719	CG	GLU	A	109	70.388	62.281	24.730	1.00	-0.27
C										
ATOM	1720	CD	GLU	A	109	70.412	62.638	26.196	1.00	0.91
C										
ATOM	1721	OE1	GLU	A	109	70.296	61.717	27.052	1.00	-0.90
O										

ATOM	1722	OE2	GLU	A	109		70.546	63.857	26.501	1.00	-0.90	
O												
ATOM	1723	HA	GLU	A	109		71.175	61.362	22.285	1.00	0.08	
H												
ATOM	1724	H	GLU	A	109		70.323	58.900	21.942	1.00	0.06	
H												
ATOM	1725	HB2	GLU	A	109		71.742	60.582	24.872	1.00	0.08	
H												
ATOM	1726	HB3	GLU	A	109		70.008	60.112	24.914	1.00	0.08	
H												
ATOM	1727	HG2	GLU	A	109		69.383	62.509	24.341	1.00	0.08	
H												
ATOM	1728	HG3	GLU	A	109		71.115	62.930	24.210	1.00	0.08	
H												
TER	1729		GLU	A	109							
HETATM	1730	ZN		ZN5	A	5		86.115	38.781	4.863	1.00	2.00
ZN												
HETATM	1731	C	PHE	A	2		74.891	39.978	15.521	1.00	0.00	
C												
HETATM	1732	C	PHE	A	2		75.641	39.143	16.358	1.00	0.00	
C												
HETATM	1733	C	PHE	A	2		77.037	39.161	16.301	1.00	0.00	
C												
HETATM	1734	C	PHE	A	2		77.702	39.929	15.338	1.00	0.00	
C												
HETATM	1735	C	PHE	A	2		76.940	40.669	14.428	1.00	0.00	
C												
HETATM	1736	C	PHE	A	2		75.548	40.713	14.532	1.00	0.00	
C												
HETATM	1737	H7	PHE	A	2		74.971	41.320	13.841	1.00	0.00	
H												
HETATM	1738	H6	PHE	A	2		77.427	41.211	13.629	1.00	0.00	
H												
HETATM	1739	H5	PHE	A	2		77.600	38.565	17.013	1.00	0.00	
H												
HETATM	1740	H4	PHE	A	2		75.152	38.470	17.054	1.00	0.00	
H												
HETATM	1741	O1	PHE	A	2		73.500	40.090	15.640	1.00	0.00	
O												
HETATM	1742	S	PHE	A	2		72.855	40.023	17.004	1.00	1.51	
S												
HETATM	1743	O	PHE	A	2		73.825	40.354	18.032	1.00	-0.65	
O												
HETATM	1744	O	PHE	A	2		71.628	40.794	16.975	1.00	-0.65	
O												
HETATM	1745	C	UNK	A	3		74.645	37.660	13.363	1.00	0.27	
C												
HETATM	1746	H1	UNK	A	3		74.776	37.362	14.413	1.00	0.00	
H												
HETATM	1747	H2	UNK	A	3		74.244	36.802	12.805	1.00	0.00	
H												
HETATM	1748	H3	UNK	A	3		73.911	38.479	13.329	1.00	0.00	
H												

HETATM	1749	N	UNK	A	3	75.952	38.095	12.820	1.00	-0.90
N										
HETATM	1750	C	UNK	A	3	77.045	37.092	12.839	1.00	0.33
C										
HETATM	1751	C	UNK	A	3	77.457	36.583	11.431	1.00	0.00
C										
HETATM	1752	H1	UNK	A	3	76.596	36.125	10.928	1.00	0.00
H										
HETATM	1753	H2	UNK	A	3	78.242	35.820	11.528	1.00	0.00
H										
HETATM	1754	H3	UNK	A	3	77.825	37.393	10.787	1.00	0.00
H										
HETATM	1755	H	UNK	A	3	76.699	36.214	13.401	1.00	0.00
H										
HETATM	1756	C	UNK	A	3	78.195	37.718	13.595	1.00	0.57
C										
HETATM	1757	O	UNK	A	3	78.554	37.234	14.657	1.00	-0.57
O										
HETATM	1758	N	UNK	A	3	78.764	38.828	13.077	1.00	-0.73
N										
HETATM	1759	C	UNK	A	3	79.756	39.596	13.837	1.00	0.36
C										
HETATM	1760	H	UNK	A	3	79.875	40.529	13.271	1.00	0.00
H										
HETATM	1761	C	UNK	A	3	81.100	38.895	13.903	1.00	0.57
C										
HETATM	1762	O	UNK	A	3	81.098	37.696	13.671	1.00	-0.57
O										
HETATM	1763	N	UNK	A	3	82.263	39.540	14.202	1.00	-0.66
N										
HETATM	1764	C	UNK	A	3	83.528	38.811	14.196	1.00	0.36
C										
HETATM	1765	C	UNK	A	3	83.693	37.816	15.320	1.00	0.57
C										
HETATM	1766	O	UNK	A	3	82.777	37.652	16.110	1.00	-0.57
O										
HETATM	1767	N	UNK	A	3	84.884	37.173	15.405	1.00	-0.73
N										
HETATM	1768	C	UNK	A	3	85.196	36.323	16.554	1.00	0.36
C										
HETATM	1769	H	UNK	A	3	84.788	36.792	17.465	1.00	0.00
H										
HETATM	1770	C	UNK	A	3	86.694	36.217	16.736	1.00	0.57
C										
HETATM	1771	N	UNK	A	3	87.187	35.728	17.896	1.00	-0.80
N										
HETATM	1772	H2	UNK	A	3	88.177	35.651	18.020	1.00	0.37
H										
HETATM	1773	H1	UNK	A	3	86.581	35.440	18.638	1.00	0.37
H										
HETATM	1774	O	UNK	A	3	87.420	36.576	15.822	1.00	-0.57
O										
HETATM	1775	C	UNK	A	3	84.586	34.908	16.392	1.00	0.14
C										

HETATM	1776	C	UNK	A	3	85.302	34.116	15.289	1.00	-0.14
C										
HETATM	1777	C	UNK	A	3	84.848	34.182	13.968	1.00	-0.15
C										
HETATM	1778	H	UNK	A	3	84.108	34.922	13.684	1.00	0.15
H										
HETATM	1779	C	UNK	A	3	85.333	33.278	13.019	1.00	-0.15
C										
HETATM	1780	H	UNK	A	3	84.860	33.199	12.049	1.00	0.15
H										
HETATM	1781	C	UNK	A	3	86.429	32.468	13.321	1.00	-0.15
C										
HETATM	1782	H	UNK	A	3	86.845	31.814	12.562	1.00	0.15
H										
HETATM	1783	C	UNK	A	3	86.986	32.508	14.601	1.00	-0.15
C										
HETATM	1784	H	UNK	A	3	87.867	31.915	14.827	1.00	0.15
H										
HETATM	1785	C	UNK	A	3	86.402	33.304	15.591	1.00	-0.15
C										
HETATM	1786	H	UNK	A	3	86.808	33.284	16.597	1.00	0.15
H										
HETATM	1787	H1	UNK	A	3	84.666	34.350	17.338	1.00	0.00
H										
HETATM	1788	H2	UNK	A	3	83.514	34.996	16.156	1.00	0.00
H										
HETATM	1789	H	UNK	A	3	85.583	37.287	14.695	1.00	0.37
H										
HETATM	1790	H	UNK	A	3	83.670	38.328	13.224	1.00	0.00
H										
HETATM	1791	C	UNK	A	3	84.544	39.972	14.364	1.00	0.00
C										
HETATM	1792	H1	UNK	A	3	84.808	40.099	15.427	1.00	0.00
H										
HETATM	1793	H2	UNK	A	3	85.471	39.824	13.785	1.00	0.00
H										
HETATM	1794	C	UNK	A	3	83.755	41.223	13.919	1.00	0.00
C										
HETATM	1795	H1	UNK	A	3	83.704	41.241	12.816	1.00	0.00
H										
HETATM	1796	H2	UNK	A	3	84.199	42.168	14.273	1.00	0.00
H										
HETATM	1797	C	UNK	A	3	82.343	40.967	14.492	1.00	0.30
C										
HETATM	1798	H1	UNK	A	3	81.627	41.636	14.004	1.00	0.00
H										
HETATM	1799	H2	UNK	A	3	82.317	41.126	15.581	1.00	0.00
H										
HETATM	1800	C	UNK	A	3	79.239	39.949	15.263	1.00	0.30
C										
HETATM	1801	H1	UNK	A	3	79.592	40.946	15.574	1.00	0.00
H										
HETATM	1802	H2	UNK	A	3	79.649	39.220	15.980	1.00	0.00
H										

HETATM	1803	H	UNK	A	3	78.463	39.181	12.188	1.00	0.37
H										
HETATM	1804	H	UNK	A	3	75.842	38.552	11.844	1.00	0.36
H										
CONECT	1	2	14	15						
CONECT	14	1								
CONECT	15	1								
CONECT	845	843	846	851	852					
CONECT	846	844	845	851						
CONECT	851	845	846							
CONECT	852	845								
CONECT	967	965	966	972						
CONECT	972	967	1742							
CONECT	1105	1104	1107	1112						
CONECT	1112	1105	1106							
CONECT	1493	1492	1495	1500						
CONECT	1500	1493	1494							
CONECT	1543	1542	1545	1550						
CONECT	1550	1543	1544							
CONECT	1716	1715	1717	1724						
CONECT	1724	1714	1716							
CONECT	1731	1732	1736	1741						
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HEADER Lys311His

COMPND Lys311His

REMARK GENERATED BY SYBYL (TRIPOS, INC.) 30-MAR-19

SEQRES 1 A 109 ASN PHE PRO ASN SER THR ASN LEU PRO ARG ASN PRO SER

SEQRES 2 A 109 MET ALA ASP TYR GLU ALA ARG ILE PHE THR PHE GLY THR

SEQRES 3 A 109 TRP ILE TYR SER VAL ASN LYS GLU GLN LEU ALA ARG ALA

SEQRES 4 A 109 GLY PHE TYR ALA LEU GLY GLU GLY ASP LYS VAL LYS CYS

SEQRES 5 A 109 PHE HIS CYS GLY GLY GLY LEU THR ASP TRP HIS PRO SER

SEQRES 6 A 109 GLU ASP PRO TRP GLU GLN HIS ALA LYS TRP TYR PRO GLY

SEQRES 7 A 109 CYS LYS TYR LEU LEU GLU GLN LYS GLY GLN GLU TYR ILE

SEQRES 8 A 109 ASN ASN ILE HIS LEU THR HIS SER LEU GLU GLU CYS LEU

SEQRES 9 A 109 VAL ARG THR THR GLU

SEQRES 1 A 1 UNK

HET UNK A 3 60

HET ZN5 A 5 1

HET PHE A 2 4

HET PHE A 113 10

	ATOM	N	ASN	A	1	99.173	50.912	-8.062	1.00	-0.36	
N	ATOM	2	CA	ASN	A	1	98.740	49.594	-7.611	1.00	0.12
C	ATOM	3	C	ASN	A	1	98.248	49.674	-6.183	1.00	0.20
O	ATOM	4	O	ASN	A	1	98.639	50.597	-5.487	1.00	-0.39
C	ATOM	5	CB	ASN	A	1	99.945	48.619	-7.697	1.00	0.07
C	ATOM	6	CG	ASN	A	1	99.614	47.182	-7.367	1.00	0.18
O	ATOM	7	OD1	ASN	A	1	98.449	46.827	-7.287	1.00	-0.40
N	ATOM	8	ND2	ASN	A	1	100.637	46.319	-7.177	1.00	-0.30
H	ATOM	9	HA	ASN	A	1	97.924	49.240	-8.264	1.00	0.08
H	ATOM	10	HB2	ASN	A	1	100.730	48.979	-7.013	1.00	0.05
H	ATOM	11	HB3	ASN	A	1	100.345	48.642	-8.723	1.00	0.05
H	ATOM	12	HD22	ASN	A	1	101.589	46.619	-7.251	1.00	0.18
H	ATOM	13	HD21	ASN	A	1	100.446	45.360	-6.960	1.00	0.18
H	ATOM	14	H2	ASN	A	1	99.096	51.155	-9.031	1.00	0.14
H	ATOM	15	H1	ASN	A	1	99.626	51.530	-7.417	1.00	0.14
N	ATOM	16	N	PHE	A	2	97.406	48.718	-5.724	1.00	-0.26
C	ATOM	17	CA	PHE	A	2	97.010	48.707	-4.317	1.00	0.14
C	ATOM	18	C	PHE	A	2	98.201	48.211	-3.521	1.00	0.21

ATOM	19	O	PHE	A	2	99.024	47.554	-4.139	1.00	-0.39
ATOM	20	CB	PHE	A	2	95.789	47.783	-4.062	1.00	0.02
ATOM	21	CG	PHE	A	2	94.515	48.360	-4.698	1.00	-0.04
ATOM	22	CD1	PHE	A	2	94.175	48.060	-6.023	1.00	-0.06
ATOM	23	CD2	PHE	A	2	93.675	49.193	-3.950	1.00	-0.06
ATOM	24	CE1	PHE	A	2	93.026	48.607	-6.601	1.00	-0.07
ATOM	25	CE2	PHE	A	2	92.513	49.724	-4.519	1.00	-0.07
ATOM	26	CZ	PHE	A	2	92.195	49.442	-5.850	1.00	-0.07
ATOM	27	HA	PHE	A	2	96.721	49.731	-4.038	1.00	0.08
ATOM	28	HB2	PHE	A	2	95.632	47.672	-2.982	1.00	0.05
ATOM	29	HB3	PHE	A	2	95.983	46.778	-4.460	1.00	0.05
ATOM	30	HD2	PHE	A	2	93.921	49.434	-2.921	1.00	0.06
ATOM	31	HE2	PHE	A	2	91.858	50.357	-3.928	1.00	0.06
ATOM	32	HZ	PHE	A	2	91.305	49.871	-6.301	1.00	0.06
ATOM	33	HE1	PHE	A	2	92.779	48.383	-7.634	1.00	0.06
ATOM	34	HD1	PHE	A	2	94.798	47.399	-6.614	1.00	0.06
ATOM	35	H	PHE	A	2	97.119	47.966	-6.317	1.00	0.19
ATOM	36	N	PRO	A	3	98.383	48.457	-2.198	1.00	-0.25
ATOM	37	CA	PRO	A	3	99.525	47.868	-1.507	1.00	0.13
ATOM	38	C	PRO	A	3	99.590	46.358	-1.545	1.00	0.20
ATOM	39	O	PRO	A	3	98.644	45.729	-1.993	1.00	-0.39
ATOM	40	CB	PRO	A	3	99.240	48.320	-0.053	1.00	-0.01
ATOM	41	CG	PRO	A	3	98.459	49.639	-0.232	1.00	-0.03
ATOM	42	CD	PRO	A	3	97.516	49.338	-1.422	1.00	0.04
ATOM	43	HA	PRO	A	3	100.452	48.326	-1.890	1.00	0.08
ATOM	44	HD3	PRO	A	3	97.237	50.284	-1.909	1.00	0.05
ATOM	45	HD2	PRO	A	3	96.617	48.804	-1.081	1.00	0.05

ATOM	46	HG3	PRO	A	3	97.919	49.952	0.676	1.00	0.03
H										
ATOM	47	HG2	PRO	A	3	99.172	50.432	-0.516	1.00	0.03
H										
ATOM	48	HB2	PRO	A	3	100.155	48.433	0.551	1.00	0.03
H										
ATOM	49	HB3	PRO	A	3	98.572	47.598	0.447	1.00	0.03
H										
ATOM	50	N	ASN	A	4	100.699	45.772	-1.033	1.00	-0.26
N										
ATOM	51	CA	ASN	A	4	100.735	44.325	-0.815	1.00	0.15
C										
ATOM	52	C	ASN	A	4	99.827	44.043	0.361	1.00	0.21
C										
ATOM	53	O	ASN	A	4	99.341	45.004	0.934	1.00	-0.39
O										
ATOM	54	CB	ASN	A	4	102.184	43.831	-0.555	1.00	0.08
C										
ATOM	55	CG	ASN	A	4	102.698	44.385	0.754	1.00	0.18
C										
ATOM	56	OD1	ASN	A	4	103.274	45.462	0.746	1.00	-0.40
O										
ATOM	57	ND2	ASN	A	4	102.499	43.685	1.894	1.00	-0.30
N										
ATOM	58	HA	ASN	A	4	100.344	43.804	-1.705	1.00	0.08
H										
ATOM	59	HB2	ASN	A	4	102.829	44.169	-1.382	1.00	0.06
H										
ATOM	60	HB3	ASN	A	4	102.224	42.731	-0.540	1.00	0.06
H										
ATOM	61	HD22	ASN	A	4	102.032	42.800	1.891	1.00	0.18
H										
ATOM	62	HD21	ASN	A	4	102.829	44.053	2.764	1.00	0.18
H										
ATOM	63	H	ASN	A	4	101.459	46.329	-0.693	1.00	0.19
H										
ATOM	64	N	SER	A	5	99.567	42.769	0.734	1.00	-0.26
N										
ATOM	65	CA	SER	A	5	98.562	42.454	1.757	1.00	0.15
C										
ATOM	66	C	SER	A	5	97.187	42.814	1.233	1.00	0.21
C										
ATOM	67	O	SER	A	5	96.386	41.918	1.015	1.00	-0.39
O										
ATOM	68	CB	SER	A	5	98.835	43.012	3.183	1.00	0.08
C										
ATOM	69	OG	SER	A	5	98.713	44.436	3.317	1.00	-0.39
O										
ATOM	70	HA	SER	A	5	98.567	41.356	1.891	1.00	0.08
H										
ATOM	71	HB2	SER	A	5	99.830	42.684	3.530	1.00	0.06
H										
ATOM	72	HB3	SER	A	5	98.081	42.592	3.870	1.00	0.06
H										

ATOM	73	HG	SER	A	5	99.397	44.908	2.854	1.00	0.21
ATOM	H									
ATOM	74	H	SER	A	5	100.025	42.014	0.266	1.00	0.19
ATOM	H									
ATOM	75	N	THR	A	6	96.887	44.113	0.999	1.00	-0.26
ATOM	N									
ATOM	76	CA	THR	A	6	95.625	44.478	0.358	1.00	0.16
ATOM	C									
ATOM	77	C	THR	A	6	95.484	43.657	-0.907	1.00	0.21
ATOM	C									
ATOM	78	O	THR	A	6	94.418	43.102	-1.119	1.00	-0.39
ATOM	O									
ATOM	79	CB	THR	A	6	95.540	46.002	0.043	1.00	0.09
ATOM	C									
ATOM	80	OG1	THR	A	6	95.468	46.783	1.251	1.00	-0.39
ATOM	O									
ATOM	81	CG2	THR	A	6	94.266	46.343	-0.771	1.00	-0.03
ATOM	C									
ATOM	82	HA	THR	A	6	94.804	44.230	1.050	1.00	0.08
ATOM	H									
ATOM	83	HB	THR	A	6	96.421	46.305	-0.548	1.00	0.06
ATOM	H									
ATOM	84	HG1	THR	A	6	96.232	46.704	1.811	1.00	0.21
ATOM	H									
ATOM	85	HG23	THR	A	6	93.370	45.974	-0.248	1.00	0.03
ATOM	H									
ATOM	86	HG21	THR	A	6	94.315	45.892	-1.773	1.00	0.03
ATOM	H									
ATOM	87	HG22	THR	A	6	94.175	47.434	-0.886	1.00	0.03
ATOM	H									
ATOM	88	H	THR	A	6	97.533	44.837	1.229	1.00	0.19
ATOM	H									
ATOM	89	N	ASN	A	7	96.536	43.546	-1.751	1.00	-0.26
ATOM	N									
ATOM	90	CA	ASN	A	7	96.442	42.665	-2.916	1.00	0.15
ATOM	C									
ATOM	91	C	ASN	A	7	96.539	41.214	-2.505	1.00	0.21
ATOM	C									
ATOM	92	O	ASN	A	7	95.693	40.430	-2.904	1.00	-0.39
ATOM	O									
ATOM	93	CB	ASN	A	7	97.582	42.887	-3.949	1.00	0.08
ATOM	C									
ATOM	94	CG	ASN	A	7	97.440	44.197	-4.681	1.00	0.18
ATOM	C									
ATOM	95	OD1	ASN	A	7	96.381	44.429	-5.242	1.00	-0.40
ATOM	O									
ATOM	96	ND2	ASN	A	7	98.474	45.063	-4.715	1.00	-0.30
ATOM	N									
ATOM	97	HA	ASN	A	7	95.477	42.829	-3.426	1.00	0.08
ATOM	H									
ATOM	98	HB2	ASN	A	7	97.535	42.101	-4.720	1.00	0.06
ATOM	H									
ATOM	99	HB3	ASN	A	7	98.560	42.802	-3.450	1.00	0.06
ATOM	H									

ATOM	100	HD22	ASN	A	7	99.343	44.875	-4.256	1.00	0.18
H										
ATOM	101	HD21	ASN	A	7	98.373	45.924	-5.212	1.00	0.18
H										
ATOM	102	H	ASN	A	7	97.400	44.021	-1.570	1.00	0.19
H										
ATOM	103	N	LEU	A	8	97.590	40.830	-1.746	1.00	-0.26
N										
ATOM	104	CA	LEU	A	8	97.860	39.407	-1.547	1.00	0.13
C										
ATOM	105	C	LEU	A	8	96.765	38.809	-0.691	1.00	0.21
C										
ATOM	106	O	LEU	A	8	96.621	39.306	0.414	1.00	-0.39
O										
ATOM	107	CB	LEU	A	8	99.231	39.131	-0.864	1.00	-0.01
C										
ATOM	108	CG	LEU	A	8	100.482	39.644	-1.646	1.00	-0.04
C										
ATOM	109	CD1	LEU	A	8	101.757	39.424	-0.783	1.00	-0.06
C										
ATOM	110	CD2	LEU	A	8	100.657	38.948	-3.026	1.00	-0.06
C										
ATOM	111	HA	LEU	A	8	97.905	38.931	-2.532	1.00	0.08
H										
ATOM	112	HB2	LEU	A	8	99.333	38.043	-0.711	1.00	0.03
H										
ATOM	113	HB3	LEU	A	8	99.212	39.603	0.130	1.00	0.03
H										
ATOM	114	HG	LEU	A	8	100.396	40.728	-1.832	1.00	0.03
H										
ATOM	115	HD21	LEU	A	8	100.645	37.854	-2.908	1.00	0.02
H										
ATOM	116	HD22	LEU	A	8	101.616	39.238	-3.481	1.00	0.02
H										
ATOM	117	HD23	LEU	A	8	99.863	39.240	-3.729	1.00	0.02
H										
ATOM	118	HD11	LEU	A	8	101.912	38.349	-0.599	1.00	0.02
H										
ATOM	119	HD12	LEU	A	8	101.668	39.935	0.188	1.00	0.02
H										
ATOM	120	HD13	LEU	A	8	102.648	39.822	-1.295	1.00	0.02
H										
ATOM	121	H	LEU	A	8	98.210	41.507	-1.354	1.00	0.19
H										
ATOM	122	N	PRO	A	9	95.981	37.771	-1.089	1.00	-0.25
N										
ATOM	123	CA	PRO	A	9	95.048	37.181	-0.144	1.00	0.13
C										
ATOM	124	C	PRO	A	9	95.724	36.755	1.137	1.00	0.20
C										
ATOM	125	O	PRO	A	9	96.870	36.339	1.069	1.00	-0.39
O										
ATOM	126	CB	PRO	A	9	94.611	35.922	-0.930	1.00	-0.01
C										

ATOM	127	CG	PRO	A	9	94.728	36.356	-2.406	1.00	-0.03
C										
ATOM	128	CD	PRO	A	9	96.034	37.186	-2.424	1.00	0.04
C										
ATOM	129	HA	PRO	A	9	94.205	37.875	0.008	1.00	0.08
H										
ATOM	130	HD3	PRO	A	9	95.994	37.905	-3.256	1.00	0.05
H										
ATOM	131	HD2	PRO	A	9	96.920	36.537	-2.515	1.00	0.05
H										
ATOM	132	HG3	PRO	A	9	94.744	35.506	-3.108	1.00	0.03
H										
ATOM	133	HG2	PRO	A	9	93.871	37.007	-2.649	1.00	0.03
H										
ATOM	134	HB2	PRO	A	9	93.605	35.580	-0.659	1.00	0.03
H										
ATOM	135	HB3	PRO	A	9	95.318	35.096	-0.757	1.00	0.03
H										
ATOM	136	N	ARG	A	10	95.034	36.828	2.297	1.00	-0.26
N										
ATOM	137	CA	ARG	A	10	95.596	36.256	3.519	1.00	0.13
C										
ATOM	138	C	ARG	A	10	95.437	34.750	3.506	1.00	0.20
C										
ATOM	139	O	ARG	A	10	96.129	34.110	4.282	1.00	-0.39
O										
ATOM	140	CB	ARG	A	10	94.957	36.898	4.781	1.00	-0.01
C										
ATOM	141	CG	ARG	A	10	95.368	38.395	4.888	1.00	-0.02
C										
ATOM	142	CD	ARG	A	10	94.670	39.110	6.075	1.00	0.06
C										
ATOM	143	NE	ARG	A	10	95.089	40.509	6.194	1.00	-0.27
N										
ATOM	144	CZ	ARG	A	10	94.619	41.335	7.106	1.00	0.29
C										
ATOM	145	NH1	ARG	A	10	93.723	40.976	7.997	1.00	-0.28
N										
ATOM	146	NH2	ARG	A	10	95.064	42.571	7.130	1.00	-0.28
N										
ATOM	147	HA	ARG	A	10	96.679	36.464	3.561	1.00	0.08
H										
ATOM	148	HB2	ARG	A	10	95.308	36.369	5.682	1.00	0.03
H										
ATOM	149	HB3	ARG	A	10	93.861	36.795	4.734	1.00	0.03
H										
ATOM	150	HG2	ARG	A	10	95.113	38.924	3.956	1.00	0.03
H										
ATOM	151	HG3	ARG	A	10	96.460	38.462	5.029	1.00	0.03
H										
ATOM	152	HD2	ARG	A	10	94.913	38.567	7.002	1.00	0.07
H										
ATOM	153	HD3	ARG	A	10	93.587	39.066	5.889	1.00	0.07
H										

ATOM	154	HE	ARG A	10	95.792	40.853	5.520	1.00	0.26
H									
ATOM	155	HH12	ARG A	10	93.339	40.024	8.027	1.00	0.26
H									
ATOM	156	HH11	ARG A	10	93.375	41.649	8.697	1.00	0.26
H									
ATOM	157	HH22	ARG A	10	95.769	42.899	6.452	1.00	0.26
H									
ATOM	158	HH21	ARG A	10	94.721	43.247	7.830	1.00	0.26
H									
ATOM	159	H	ARG A	10	94.101	37.188	2.323	1.00	0.19
H									
ATOM	160	N	ASN A	11	94.569	34.157	2.647	1.00	-0.26
N									
ATOM	161	CA	ASN A	11	94.458	32.699	2.579	1.00	0.15
C									
ATOM	162	C	ASN A	11	94.276	32.292	1.128	1.00	0.21
C									
ATOM	163	O	ASN A	11	93.149	32.027	0.740	1.00	-0.39
O									
ATOM	164	CB	ASN A	11	93.282	32.272	3.494	1.00	0.08
C									
ATOM	165	CG	ASN A	11	93.135	30.772	3.597	1.00	0.18
C									
ATOM	166	OD1	ASN A	11	93.685	30.054	2.777	1.00	-0.40
O									
ATOM	167	ND2	ASN A	11	92.389	30.272	4.605	1.00	-0.30
N									
ATOM	168	HA	ASN A	11	95.354	32.196	2.975	1.00	0.08
H									
ATOM	169	HB2	ASN A	11	92.347	32.698	3.110	1.00	0.06
H									
ATOM	170	HB3	ASN A	11	93.460	32.686	4.500	1.00	0.06
H									
ATOM	171	HD22	ASN A	11	91.942	30.880	5.261	1.00	0.18
H									
ATOM	172	HD21	ASN A	11	92.287	29.282	4.712	1.00	0.18
H									
ATOM	173	H	ASN A	11	93.959	34.683	2.053	1.00	0.19
H									
ATOM	174	N	PRO A	12	95.347	32.233	0.293	1.00	-0.25
N									
ATOM	175	CA	PRO A	12	95.183	31.842	-1.101	1.00	0.13
C									
ATOM	176	C	PRO A	12	94.361	30.595	-1.326	1.00	0.20
C									
ATOM	177	O	PRO A	12	93.595	30.574	-2.277	1.00	-0.39
O									
ATOM	178	CB	PRO A	12	96.664	31.618	-1.494	1.00	-0.01
C									
ATOM	179	CG	PRO A	12	97.428	32.643	-0.625	1.00	-0.03
C									
ATOM	180	CD	PRO A	12	96.696	32.565	0.736	1.00	0.04
C									

ATOM	181	HA	PRO	A	12	94.765	32.698	-1.655	1.00	0.08
H										
ATOM	182	HD3	PRO	A	12	96.769	33.518	1.283	1.00	0.05
H										
ATOM	183	HD2	PRO	A	12	97.106	31.741	1.342	1.00	0.05
H										
ATOM	184	HG3	PRO	A	12	98.505	32.426	-0.546	1.00	0.03
H										
ATOM	185	HG2	PRO	A	12	97.302	33.646	-1.065	1.00	0.03
H										
ATOM	186	HB2	PRO	A	12	96.843	31.746	-2.574	1.00	0.03
H										
ATOM	187	HB3	PRO	A	12	96.985	30.605	-1.199	1.00	0.03
H										
ATOM	188	N	SER	A	13	94.488	29.547	-0.480	1.00	-0.26
N										
ATOM	189	CA	SER	A	13	93.693	28.341	-0.711	1.00	0.15
C										
ATOM	190	C	SER	A	13	92.218	28.677	-0.701	1.00	0.21
C										
ATOM	191	O	SER	A	13	91.502	28.212	-1.574	1.00	-0.39
O										
ATOM	192	CB	SER	A	13	93.955	27.213	0.326	1.00	0.08
C										
ATOM	193	OG	SER	A	13	93.492	27.546	1.644	1.00	-0.39
O										
ATOM	194	HA	SER	A	13	93.970	27.947	-1.704	1.00	0.08
H										
ATOM	195	HB2	SER	A	13	95.027	26.956	0.348	1.00	0.06
H										
ATOM	196	HB3	SER	A	13	93.395	26.314	0.022	1.00	0.06
H										
ATOM	197	HG	SER	A	13	93.965	28.275	2.030	1.00	0.21
H										
ATOM	198	H	SER	A	13	95.124	29.577	0.292	1.00	0.19
H										
ATOM	199	N	MET	A	14	91.754	29.487	0.280	1.00	-0.26
N										
ATOM	200	CA	MET	A	14	90.334	29.829	0.353	1.00	0.13
C										
ATOM	201	C	MET	A	14	89.965	30.953	-0.589	1.00	0.20
C										
ATOM	202	O	MET	A	14	88.788	31.263	-0.665	1.00	-0.39
O										
ATOM	203	CB	MET	A	14	89.902	30.082	1.826	1.00	-0.00
C										
ATOM	204	CG	MET	A	14	90.059	28.796	2.677	1.00	-0.00
C										
ATOM	205	SD	MET	A	14	88.896	27.517	2.092	1.00	-0.16
S										
ATOM	206	CE	MET	A	14	89.851	26.012	2.463	1.00	-0.02
C										
ATOM	207	HA	MET	A	14	89.737	28.980	-0.014	1.00	0.08
H										

ATOM	208	HB2	MET	A	14	88.855	30.416	1.879	1.00	0.03
H										
ATOM	209	HB3	MET	A	14	90.532	30.868	2.267	1.00	0.03
H										
ATOM	210	HG2	MET	A	14	89.835	29.000	3.734	1.00	0.04
H										
ATOM	211	HG3	MET	A	14	91.091	28.425	2.606	1.00	0.04
H										
ATOM	212	HE1	MET	A	14	89.272	25.127	2.163	1.00	0.03
H										
ATOM	213	HE2	MET	A	14	90.061	25.964	3.541	1.00	0.03
H										
ATOM	214	HE3	MET	A	14	90.797	26.025	1.902	1.00	0.03
H										
ATOM	215	LPD1	MET	A	14	88.310	27.534	2.436	1.00	0.00
LP										
ATOM	216	LPD2	MET	A	14	88.770	27.577	1.428	1.00	0.00
LP										
ATOM	217	H	MET	A	14	92.376	29.896	0.948	1.00	0.19
H										
ATOM	218	N	ALA	A	15	90.898	31.565	-1.353	1.00	-0.26
N										
ATOM	219	CA	ALA	A	15	90.470	32.464	-2.424	1.00	0.13
C										
ATOM	220	C	ALA	A	15	89.669	31.699	-3.455	1.00	0.20
C										
ATOM	221	O	ALA	A	15	88.817	32.304	-4.087	1.00	-0.39
O										
ATOM	222	CB	ALA	A	15	91.674	33.152	-3.118	1.00	-0.02
C										
ATOM	223	HA	ALA	A	15	89.820	33.242	-1.997	1.00	0.08
H										
ATOM	224	HB1	ALA	A	15	92.293	33.677	-2.373	1.00	0.03
H										
ATOM	225	HB2	ALA	A	15	91.319	33.884	-3.860	1.00	0.03
H										
ATOM	226	HB3	ALA	A	15	92.296	32.405	-3.633	1.00	0.03
H										
ATOM	227	H	ALA	A	15	91.871	31.367	-1.263	1.00	0.19
H										
ATOM	228	N	ASP	A	16	89.908	30.381	-3.650	1.00	-0.26
N										
ATOM	229	CA	ASP	A	16	89.121	29.638	-4.633	1.00	0.14
C										
ATOM	230	C	ASP	A	16	87.701	29.469	-4.130	1.00	0.21
C										
ATOM	231	O	ASP	A	16	87.534	28.918	-3.055	1.00	-0.39
O										
ATOM	232	CB	ASP	A	16	89.723	28.237	-4.917	1.00	0.04
C										
ATOM	233	CG	ASP	A	16	91.130	28.380	-5.439	1.00	0.04
C										
ATOM	234	OD1	ASP	A	16	91.343	28.172	-6.664	1.00	-0.57
O										

ATOM	235	OD2	ASP	A	16	92.034	28.707	-4.622	1.00	-0.57
O										
ATOM	236	HA	ASP	A	16	89.147	30.190	-5.587	1.00	0.08
H										
ATOM	237	HB2	ASP	A	16	89.095	27.702	-5.649	1.00	0.05
H										
ATOM	238	HB3	ASP	A	16	89.750	27.643	-3.991	1.00	0.05
H										
ATOM	239	H	ASP	A	16	90.611	29.890	-3.132	1.00	0.19
H										
ATOM	240	N	TYR	A	17	86.670	29.918	-4.885	1.00	-0.26
N										
ATOM	241	CA	TYR	A	17	85.286	29.719	-4.450	1.00	0.14
C										
ATOM	242	C	TYR	A	17	84.998	28.259	-4.188	1.00	0.21
C										
ATOM	243	O	TYR	A	17	84.359	27.951	-3.193	1.00	-0.39
O										
ATOM	244	CB	TYR	A	17	84.299	30.195	-5.550	1.00	0.02
C										
ATOM	245	CG	TYR	A	17	82.850	29.854	-5.179	1.00	-0.05
C										
ATOM	246	CD1	TYR	A	17	82.178	28.781	-5.776	1.00	-0.07
C										
ATOM	247	CD2	TYR	A	17	82.181	30.633	-4.230	1.00	-0.07
C										
ATOM	248	CE1	TYR	A	17	80.825	28.551	-5.507	1.00	-0.04
C										
ATOM	249	CE2	TYR	A	17	80.835	30.394	-3.953	1.00	-0.04
C										
ATOM	250	CZ	TYR	A	17	80.138	29.374	-4.606	1.00	0.08
C										
ATOM	251	OH	TYR	A	17	78.776	29.198	-4.341	1.00	-0.34
O										
ATOM	252	HA	TYR	A	17	85.114	30.301	-3.529	1.00	0.08
H										
ATOM	253	HB3	TYR	A	17	84.391	31.285	-5.684	1.00	0.05
H										
ATOM	254	HB2	TYR	A	17	84.552	29.719	-6.511	1.00	0.05
H										
ATOM	255	HD2	TYR	A	17	82.703	31.426	-3.708	1.00	0.05
H										
ATOM	256	HE2	TYR	A	17	80.327	31.005	-3.224	1.00	0.05
H										
ATOM	257	HE1	TYR	A	17	80.315	27.732	-6.003	1.00	0.05
H										
ATOM	258	HD1	TYR	A	17	82.704	28.119	-6.457	1.00	0.05
H										
ATOM	259	HH	TYR	A	17	78.354	28.544	-4.886	1.00	0.25
H										
ATOM	260	H	TYR	A	17	86.834	30.389	-5.754	1.00	0.19
H										
ATOM	261	N	GLU	A	18	85.455	27.349	-5.078	1.00	-0.26
N										

ATOM	262	CA	GLU	A	18	85.169	25.928	-4.888	1.00	0.13
C										
ATOM	263	C	GLU	A	18	85.635	25.488	-3.517	1.00	0.20
C										
ATOM	264	O	GLU	A	18	84.904	24.789	-2.833	1.00	-0.39
O										
ATOM	265	CB	GLU	A	18	85.844	25.044	-5.973	1.00	-0.00
C										
ATOM	266	CG	GLU	A	18	85.163	25.198	-7.360	1.00	0.00
C										
ATOM	267	CD	GLU	A	18	85.818	24.277	-8.357	1.00	0.04
C										
ATOM	268	OE1	GLU	A	18	86.635	24.765	-9.184	1.00	-0.57
O										
ATOM	269	OE2	GLU	A	18	85.521	23.052	-8.317	1.00	-0.57
O										
ATOM	270	HA	GLU	A	18	84.080	25.783	-4.963	1.00	0.08
H										
ATOM	271	HB2	GLU	A	18	85.760	23.990	-5.672	1.00	0.03
H										
ATOM	272	HB3	GLU	A	18	86.915	25.292	-6.044	1.00	0.03
H										
ATOM	273	HG2	GLU	A	18	85.231	26.239	-7.713	1.00	0.04
H										
ATOM	274	HG3	GLU	A	18	84.095	24.935	-7.289	1.00	0.04
H										
ATOM	275	H	GLU	A	18	85.987	27.639	-5.876	1.00	0.19
H										
ATOM	276	N	ALA	A	19	86.853	25.897	-3.097	1.00	-0.26
N										
ATOM	277	CA	ALA	A	19	87.326	25.524	-1.766	1.00	0.13
C										
ATOM	278	C	ALA	A	19	86.385	26.043	-0.702	1.00	0.20
C										
ATOM	279	O	ALA	A	19	86.116	25.325	0.248	1.00	-0.39
O										
ATOM	280	CB	ALA	A	19	88.743	26.087	-1.481	1.00	-0.02
C										
ATOM	281	HA	ALA	A	19	87.378	24.425	-1.709	1.00	0.08
H										
ATOM	282	HB1	ALA	A	19	89.458	25.713	-2.230	1.00	0.03
H										
ATOM	283	HB2	ALA	A	19	89.087	25.772	-0.484	1.00	0.03
H										
ATOM	284	HB3	ALA	A	19	88.734	27.186	-1.516	1.00	0.03
H										
ATOM	285	H	ALA	A	19	87.438	26.463	-3.681	1.00	0.19
H										
ATOM	286	N	ARG	A	20	85.883	27.292	-0.835	1.00	-0.26
N										
ATOM	287	CA	ARG	A	20	85.075	27.869	0.237	1.00	0.13
C										
ATOM	288	C	ARG	A	20	83.804	27.069	0.436	1.00	0.20

ATOM	289	O	ARG	A	20	83.535	26.676	1.561	1.00	-0.39
O										
ATOM	290	CB	ARG	A	20	84.765	29.379	0.025	1.00	-0.01
C										
ATOM	291	CG	ARG	A	20	86.064	30.230	-0.060	1.00	-0.02
C										
ATOM	292	CD	ARG	A	20	85.813	31.748	0.144	1.00	0.06
C										
ATOM	293	NE	ARG	A	20	84.983	32.323	-0.915	1.00	-0.27
N										
ATOM	294	CZ	ARG	A	20	85.442	32.756	-2.072	1.00	0.29
C										
ATOM	295	NH1	ARG	A	20	86.697	32.638	-2.441	1.00	-0.28
N										
ATOM	296	NH2	ARG	A	20	84.607	33.339	-2.903	1.00	-0.28
N										
ATOM	297	HA	ARG	A	20	85.667	27.794	1.165	1.00	0.08
H										
ATOM	298	HB2	ARG	A	20	84.154	29.712	0.879	1.00	0.03
H										
ATOM	299	HB3	ARG	A	20	84.179	29.523	-0.894	1.00	0.03
H										
ATOM	300	HG2	ARG	A	20	86.539	30.077	-1.037	1.00	0.03
H										
ATOM	301	HG3	ARG	A	20	86.772	29.892	0.710	1.00	0.03
H										
ATOM	302	HD2	ARG	A	20	86.749	32.306	0.272	1.00	0.07
H										
ATOM	303	HD3	ARG	A	20	85.298	31.883	1.104	1.00	0.07
H										
ATOM	304	HE	ARG	A	20	83.981	32.437	-0.702	1.00	0.26
H										
ATOM	305	HH12	ARG	A	20	87.396	32.178	-1.849	1.00	0.26
H										
ATOM	306	HH11	ARG	A	20	87.015	32.997	-3.353	1.00	0.26
H										
ATOM	307	HH22	ARG	A	20	83.614	33.471	-2.658	1.00	0.26
H										
ATOM	308	HH21	ARG	A	20	84.923	33.690	-3.820	1.00	0.26
H										
ATOM	309	H	ARG	A	20	86.078	27.839	-1.649	1.00	0.19
H										
ATOM	310	N	ILE	A	21	83.004	26.800	-0.623	1.00	-0.26
N										
ATOM	311	CA	ILE	A	21	81.797	25.991	-0.427	1.00	0.13
C										
ATOM	312	C	ILE	A	21	82.145	24.654	0.196	1.00	0.20
C										
ATOM	313	O	ILE	A	21	81.361	24.169	0.997	1.00	-0.39
O										
ATOM	314	CB	ILE	A	21	80.900	25.766	-1.687	1.00	-0.00
C										
ATOM	315	CG1	ILE	A	21	81.669	25.057	-2.841	1.00	-0.05
C										

ATOM	316	CG2	ILE	A	21	80.258	27.103	-2.148	1.00	-0.06
C										
ATOM	317	CD1	ILE	A	21	80.783	24.653	-4.050	1.00	-0.06
C										
ATOM	318	HA	ILE	A	21	81.176	26.524	0.311	1.00	0.08
H										
ATOM	319	HB	ILE	A	21	80.070	25.103	-1.382	1.00	0.03
H										
ATOM	320	HG12	ILE	A	21	82.122	24.133	-2.456	1.00	0.03
H										
ATOM	321	HG13	ILE	A	21	82.472	25.710	-3.207	1.00	0.03
H										
ATOM	322	HD11	ILE	A	21	79.917	24.063	-3.713	1.00	0.02
H										
ATOM	323	HD12	ILE	A	21	81.371	24.040	-4.752	1.00	0.02
H										
ATOM	324	HD13	ILE	A	21	80.424	25.534	-4.600	1.00	0.02
H										
ATOM	325	HG21	ILE	A	21	81.034	27.794	-2.507	1.00	0.02
H										
ATOM	326	HG22	ILE	A	21	79.717	27.574	-1.314	1.00	0.02
H										
ATOM	327	HG23	ILE	A	21	79.528	26.941	-2.952	1.00	0.02
H										
ATOM	328	H	ILE	A	21	83.236	27.149	-1.531	1.00	0.19
H										
ATOM	329	N	PHE	A	22	83.298	24.030	-0.141	1.00	-0.26
N										
ATOM	330	CA	PHE	A	22	83.610	22.729	0.448	1.00	0.14
C										
ATOM	331	C	PHE	A	22	83.803	22.862	1.942	1.00	0.21
C										
ATOM	332	O	PHE	A	22	83.333	21.995	2.664	1.00	-0.39
O										
ATOM	333	CB	PHE	A	22	84.867	22.074	-0.189	1.00	0.02
C										
ATOM	334	CG	PHE	A	22	84.816	21.913	-1.722	1.00	-0.04
C										
ATOM	335	CD1	PHE	A	22	86.021	21.907	-2.437	1.00	-0.06
C										
ATOM	336	CD2	PHE	A	22	83.618	21.763	-2.433	1.00	-0.06
C										
ATOM	337	CE1	PHE	A	22	86.029	21.811	-3.831	1.00	-0.07
C										
ATOM	338	CE2	PHE	A	22	83.620	21.670	-3.828	1.00	-0.07
C										
ATOM	339	CZ	PHE	A	22	84.826	21.685	-4.530	1.00	-0.07
C										
ATOM	340	HA	PHE	A	22	82.749	22.057	0.308	1.00	0.08
H										
ATOM	341	HB2	PHE	A	22	85.018	21.074	0.246	1.00	0.05
H										
ATOM	342	HB3	PHE	A	22	85.735	22.696	0.079	1.00	0.05
H										

ATOM	343	HD2	PHE	A	22	82.664	21.708	-1.926	1.00	0.06
H										
ATOM	344	HE2	PHE	A	22	82.681	21.584	-4.367	1.00	0.06
H										
ATOM	345	HZ	PHE	A	22	84.828	21.597	-5.612	1.00	0.06
H										
ATOM	346	HE1	PHE	A	22	86.970	21.832	-4.372	1.00	0.06
H										
ATOM	347	HD1	PHE	A	22	86.967	21.973	-1.910	1.00	0.06
H										
ATOM	348	H	PHE	A	22	83.950	24.439	-0.783	1.00	0.19
H										
ATOM	349	N	THR	A	23	84.475	23.927	2.441	1.00	-0.26
N										
ATOM	350	CA	THR	A	23	84.615	24.064	3.891	1.00	0.16
C										
ATOM	351	C	THR	A	23	83.235	24.065	4.504	1.00	0.21
C										
ATOM	352	O	THR	A	23	83.048	23.428	5.528	1.00	-0.39
O										
ATOM	353	CB	THR	A	23	85.364	25.329	4.395	1.00	0.09
C										
ATOM	354	OG1	THR	A	23	84.625	26.529	4.123	1.00	-0.39
O										
ATOM	355	CG2	THR	A	23	86.812	25.410	3.848	1.00	-0.03
C										
ATOM	356	HA	THR	A	23	85.169	23.180	4.253	1.00	0.08
H										
ATOM	357	HB	THR	A	23	85.430	25.264	5.495	1.00	0.06
H										
ATOM	358	HG1	THR	A	23	84.528	26.696	3.193	1.00	0.21
H										
ATOM	359	HG23	THR	A	23	86.810	25.584	2.765	1.00	0.03
H										
ATOM	360	HG21	THR	A	23	87.358	24.476	4.056	1.00	0.03
H										
ATOM	361	HG22	THR	A	23	87.350	26.238	4.330	1.00	0.03
H										
ATOM	362	H	THR	A	23	84.853	24.627	1.834	1.00	0.19
H										
ATOM	363	N	PHE	A	24	82.255	24.758	3.879	1.00	-0.26
N										
ATOM	364	CA	PHE	A	24	80.879	24.675	4.358	1.00	0.14
C										
ATOM	365	C	PHE	A	24	80.312	23.324	3.973	1.00	0.21
C										
ATOM	366	O	PHE	A	24	79.493	23.249	3.071	1.00	-0.39
O										
ATOM	367	CB	PHE	A	24	80.008	25.813	3.761	1.00	0.02
C										
ATOM	368	CG	PHE	A	24	80.444	27.199	4.249	1.00	-0.04
C										
ATOM	369	CD1	PHE	A	24	80.933	28.163	3.363	1.00	-0.06
C										

ATOM	370	CD2	PHE	A	24	80.341	27.516	5.606	1.00	-0.06
C										
ATOM	371	CE1	PHE	A	24	81.334	29.415	3.836	1.00	-0.07
C										
ATOM	372	CE2	PHE	A	24	80.831	28.729	6.093	1.00	-0.07
C										
ATOM	373	CZ	PHE	A	24	81.357	29.674	5.209	1.00	-0.07
C										
ATOM	374	HA	PHE	A	24	80.853	24.757	5.457	1.00	0.08
H										
ATOM	375	HB2	PHE	A	24	78.968	25.662	4.077	1.00	0.05
H										
ATOM	376	HB3	PHE	A	24	80.045	25.770	2.662	1.00	0.05
H										
ATOM	377	HD2	PHE	A	24	79.879	26.815	6.287	1.00	0.06
H										
ATOM	378	HE2	PHE	A	24	80.798	28.932	7.156	1.00	0.06
H										
ATOM	379	HZ	PHE	A	24	81.775	30.602	5.588	1.00	0.06
H										
ATOM	380	HE1	PHE	A	24	81.623	30.181	3.129	1.00	0.06
H										
ATOM	381	HD1	PHE	A	24	81.002	27.950	2.304	1.00	0.06
H										
ATOM	382	H	PHE	A	24	82.440	25.285	3.047	1.00	0.19
H										
ATOM	383	N	GLY	A	25	80.732	22.233	4.654	1.00	-0.27
N										
ATOM	384	CA	GLY	A	25	80.171	20.923	4.347	1.00	0.12
C										
ATOM	385	C	GLY	A	25	78.824	20.809	5.018	1.00	0.20
C										
ATOM	386	O	GLY	A	25	77.824	20.719	4.323	1.00	-0.39
O										
ATOM	387	HA3	GLY	A	25	80.825	20.121	4.728	1.00	0.08
H										
ATOM	388	HA2	GLY	A	25	80.083	20.780	3.258	1.00	0.08
H										
ATOM	389	H	GLY	A	25	81.390	22.304	5.407	1.00	0.19
H										
ATOM	390	N	THR	A	26	78.802	20.814	6.374	1.00	-0.26
N										
ATOM	391	CA	THR	A	26	77.556	20.641	7.121	1.00	0.16
C										
ATOM	392	C	THR	A	26	77.229	21.956	7.796	1.00	0.21
C										
ATOM	393	O	THR	A	26	77.279	22.045	9.013	1.00	-0.39
O										
ATOM	394	CB	THR	A	26	77.764	19.456	8.107	1.00	0.09
C										
ATOM	395	OG1	THR	A	26	78.330	18.365	7.358	1.00	-0.39
O										
ATOM	396	CG2	THR	A	26	76.431	19.004	8.761	1.00	-0.03
C										

ATOM	397	HA	THR	A	26	76.715	20.374	6.461	1.00	0.08
H										
ATOM	398	HB	THR	A	26	78.482	19.761	8.889	1.00	0.06
H										
ATOM	399	HG1	THR	A	26	78.526	17.606	7.898	1.00	0.21
H										
ATOM	400	HG23	THR	A	26	75.744	18.616	7.994	1.00	0.03
H										
ATOM	401	HG21	THR	A	26	75.944	19.842	9.276	1.00	0.03
H										
ATOM	402	HG22	THR	A	26	76.620	18.206	9.497	1.00	0.03
H										
ATOM	403	H	THR	A	26	79.647	20.927	6.900	1.00	0.19
H										
ATOM	404	N	TRP	A	27	76.897	23.002	7.003	1.00	-0.26
N										
ATOM	405	CA	TRP	A	27	76.587	24.307	7.588	1.00	0.14
C										
ATOM	406	C	TRP	A	27	75.192	24.268	8.172	1.00	0.21
C										
ATOM	407	O	TRP	A	27	74.248	24.647	7.497	1.00	-0.39
O										
ATOM	408	CB	TRP	A	27	76.724	25.429	6.525	1.00	0.00
C										
ATOM	409	CG	TRP	A	27	76.526	26.797	7.126	1.00	-0.04
C										
ATOM	410	CD1	TRP	A	27	75.503	27.642	6.915	1.00	0.02
C										
ATOM	411	CD2	TRP	A	27	77.466	27.478	8.089	1.00	-0.02
C										
ATOM	412	NE1	TRP	A	27	75.689	28.735	7.610	1.00	-0.29
N										
ATOM	413	CE2	TRP	A	27	76.835	28.686	8.317	1.00	0.06
C										
ATOM	414	CE3	TRP	A	27	78.678	27.149	8.697	1.00	-0.07
C										
ATOM	415	CZ2	TRP	A	27	77.378	29.645	9.174	1.00	-0.04
C										
ATOM	416	CZ3	TRP	A	27	79.253	28.117	9.530	1.00	-0.08
C										
ATOM	417	CH2	TRP	A	27	78.608	29.340	9.770	1.00	-0.08
C										
ATOM	418	HA	TRP	A	27	77.316	24.535	8.383	1.00	0.08
H										
ATOM	419	HB2	TRP	A	27	76.002	25.259	5.711	1.00	0.04
H										
ATOM	420	HB3	TRP	A	27	77.736	25.389	6.101	1.00	0.04
H										
ATOM	421	HE1	TRP	A	27	75.039	29.537	7.614	1.00	0.22
H										
ATOM	422	HD1	TRP	A	27	74.650	27.446	6.265	1.00	0.08
H										
ATOM	423	HZ2	TRP	A	27	76.866	30.581	9.370	1.00	0.05
H										

ATOM	424	HH2	TRP	A	27	79.068	30.063	10.431	1.00	0.05
H										
ATOM	425	HZ3	TRP	A	27	80.212	27.916	9.997	1.00	0.05
H										
ATOM	426	HE3	TRP	A	27	79.155	26.189	8.536	1.00	0.05
H										
ATOM	427	H	TRP	A	27	76.842	22.891	6.008	1.00	0.19
H										
ATOM	428	N	ILE	A	28	75.043	23.815	9.439	1.00	-0.26
N										
ATOM	429	CA	ILE	A	28	73.717	23.766	10.059	1.00	0.13
C										
ATOM	430	C	ILE	A	28	73.161	25.141	10.371	1.00	0.20
C										
ATOM	431	O	ILE	A	28	71.993	25.208	10.720	1.00	-0.39
O										
ATOM	432	CB	ILE	A	28	73.690	22.919	11.376	1.00	-0.00
C										
ATOM	433	CG1	ILE	A	28	74.460	23.614	12.544	1.00	-0.05
C										
ATOM	434	CG2	ILE	A	28	74.204	21.474	11.122	1.00	-0.06
C										
ATOM	435	CD1	ILE	A	28	74.387	22.836	13.885	1.00	-0.06
C										
ATOM	436	HA	ILE	A	28	73.026	23.289	9.343	1.00	0.08
H										
ATOM	437	HB	ILE	A	28	72.632	22.833	11.685	1.00	0.03
H										
ATOM	438	HG12	ILE	A	28	74.031	24.613	12.725	1.00	0.03
H										
ATOM	439	HG13	ILE	A	28	75.520	23.745	12.282	1.00	0.03
H										
ATOM	440	HD11	ILE	A	28	73.340	22.622	14.149	1.00	0.02
H										
ATOM	441	HD12	ILE	A	28	74.833	23.435	14.695	1.00	0.02
H										
ATOM	442	HD13	ILE	A	28	74.943	21.888	13.827	1.00	0.02
H										
ATOM	443	HG21	ILE	A	28	75.300	21.460	11.035	1.00	0.02
H										
ATOM	444	HG22	ILE	A	28	73.770	21.067	10.196	1.00	0.02
H										
ATOM	445	HG23	ILE	A	28	73.917	20.802	11.944	1.00	0.02
H										
ATOM	446	H	ILE	A	28	75.844	23.532	9.966	1.00	0.19
H										
ATOM	447	N	TYR	A	29	73.950	26.239	10.301	1.00	-0.26
N										
ATOM	448	CA	TYR	A	29	73.498	27.507	10.878	1.00	0.14
C										
ATOM	449	C	TYR	A	29	72.631	28.294	9.922	1.00	0.21
C										
ATOM	450	O	TYR	A	29	72.526	27.928	8.762	1.00	-0.39
O										

ATOM	451	CB	TYR	A	29	74.719	28.305	11.407	1.00	0.02
C										
ATOM	452	CG	TYR	A	29	75.506	27.382	12.349	1.00	-0.05
C										
ATOM	453	CD1	TYR	A	29	76.663	26.726	11.915	1.00	-0.07
C										
ATOM	454	CD2	TYR	A	29	75.054	27.175	13.657	1.00	-0.07
C										
ATOM	455	CE1	TYR	A	29	77.315	25.818	12.753	1.00	-0.04
C										
ATOM	456	CE2	TYR	A	29	75.720	26.285	14.504	1.00	-0.04
C										
ATOM	457	CZ	TYR	A	29	76.849	25.591	14.050	1.00	0.08
C										
ATOM	458	OH	TYR	A	29	77.517	24.674	14.866	1.00	-0.34
O										
ATOM	459	HA	TYR	A	29	72.874	27.290	11.761	1.00	0.08
H										
ATOM	460	HB3	TYR	A	29	75.335	28.621	10.556	1.00	0.05
H										
ATOM	461	HB2	TYR	A	29	74.420	29.212	11.955	1.00	0.05
H										
ATOM	462	HD2	TYR	A	29	74.180	27.706	14.020	1.00	0.05
H										
ATOM	463	HE2	TYR	A	29	75.350	26.138	15.514	1.00	0.05
H										
ATOM	464	HE1	TYR	A	29	78.186	25.282	12.392	1.00	0.05
H										
ATOM	465	HD1	TYR	A	29	77.060	26.912	10.925	1.00	0.05
H										
ATOM	466	HH	TYR	A	29	77.177	24.618	15.752	1.00	0.25
H										
ATOM	467	H	TYR	A	29	74.868	26.206	9.907	1.00	0.19
H										
ATOM	468	N	SER	A	30	71.981	29.366	10.433	1.00	-0.26
N										
ATOM	469	CA	SER	A	30	70.937	30.055	9.677	1.00	0.15
C										
ATOM	470	C	SER	A	30	71.326	30.476	8.279	1.00	0.21
C										
ATOM	471	O	SER	A	30	70.764	29.943	7.334	1.00	-0.39
O										
ATOM	472	CB	SER	A	30	70.488	31.334	10.433	1.00	0.08
C										
ATOM	473	OG	SER	A	30	71.655	32.137	10.676	1.00	-0.39
O										
ATOM	474	HA	SER	A	30	70.068	29.378	9.615	1.00	0.08
H										
ATOM	475	HB2	SER	A	30	70.016	31.058	11.392	1.00	0.06
H										
ATOM	476	HB3	SER	A	30	69.755	31.889	9.825	1.00	0.06
H										
ATOM	477	HG	SER	A	30	71.458	32.939	11.147	1.00	0.21
H										

ATOM	478	H	SER	A	30	72.119	29.642	11.386	1.00	0.19
H										
ATOM	479	N	VAL	A	31	72.238	31.463	8.120	1.00	-0.26
N										
ATOM	480	CA	VAL	A	31	72.380	32.097	6.809	1.00	0.13
C										
ATOM	481	C	VAL	A	31	72.784	31.084	5.764	1.00	0.20
C										
ATOM	482	O	VAL	A	31	73.379	30.075	6.109	1.00	-0.39
O										
ATOM	483	CB	VAL	A	31	73.311	33.346	6.745	1.00	-0.01
C										
ATOM	484	CG1	VAL	A	31	72.818	34.484	7.684	1.00	-0.06
C										
ATOM	485	CG2	VAL	A	31	74.790	32.968	7.025	1.00	-0.06
C										
ATOM	486	HA	VAL	A	31	71.369	32.453	6.543	1.00	0.08
H										
ATOM	487	HB	VAL	A	31	73.272	33.748	5.717	1.00	0.03
H										
ATOM	488	HG11	VAL	A	31	72.913	34.206	8.743	1.00	0.02
H										
ATOM	489	HG12	VAL	A	31	71.762	34.722	7.483	1.00	0.02
H										
ATOM	490	HG13	VAL	A	31	73.406	35.398	7.510	1.00	0.02
H										
ATOM	491	HG21	VAL	A	31	74.918	32.557	8.036	1.00	0.02
H										
ATOM	492	HG22	VAL	A	31	75.433	33.854	6.921	1.00	0.02
H										
ATOM	493	HG23	VAL	A	31	75.128	32.214	6.300	1.00	0.02
H										
ATOM	494	H	VAL	A	31	72.739	31.826	8.906	1.00	0.19
H										
ATOM	495	N	ASN	A	32	72.455	31.348	4.478	1.00	-0.26
N										
ATOM	496	CA	ASN	A	32	72.770	30.385	3.427	1.00	0.15
C										
ATOM	497	C	ASN	A	32	74.268	30.242	3.283	1.00	0.21
C										
ATOM	498	O	ASN	A	32	74.969	31.218	3.500	1.00	-0.39
O										
ATOM	499	CB	ASN	A	32	72.155	30.831	2.075	1.00	0.08
C										
ATOM	500	CG	ASN	A	32	72.574	29.930	0.941	1.00	0.18
C										
ATOM	501	OD1	ASN	A	32	73.349	30.366	0.106	1.00	-0.40
O										
ATOM	502	ND2	ASN	A	32	72.087	28.671	0.886	1.00	-0.30
N										
ATOM	503	HA	ASN	A	32	72.324	29.418	3.712	1.00	0.08
H										
ATOM	504	HB2	ASN	A	32	72.491	31.857	1.864	1.00	0.06
H										

ATOM	505	HB3	ASN	A	32	71.056	30.845	2.146	1.00	0.06
H										
ATOM	506	HD22	ASN	A	32	71.449	28.331	1.578	1.00	0.18
H										
ATOM	507	HD21	ASN	A	32	72.367	28.064	0.141	1.00	0.18
H										
ATOM	508	H	ASN	A	32	71.980	32.195	4.229	1.00	0.19
H										
ATOM	509	N	LYS	A	33	74.772	29.036	2.922	1.00	-0.26
N										
ATOM	510	CA	LYS	A	33	76.215	28.849	2.780	1.00	0.13
C										
ATOM	511	C	LYS	A	33	76.729	29.414	1.480	1.00	0.20
C										
ATOM	512	O	LYS	A	33	77.833	29.935	1.480	1.00	-0.39
O										
ATOM	513	CB	LYS	A	33	76.698	27.382	2.943	1.00	-0.01
C										
ATOM	514	CG	LYS	A	33	76.171	26.373	1.882	1.00	-0.04
C										
ATOM	515	CD	LYS	A	33	76.816	24.976	2.098	1.00	-0.01
C										
ATOM	516	CE	LYS	A	33	76.218	23.876	1.182	1.00	-0.04
C										
ATOM	517	NZ	LYS	A	33	76.881	22.572	1.424	1.00	0.22
N										
ATOM	518	HA	LYS	A	33	76.702	29.410	3.593	1.00	0.08
H										
ATOM	519	HB2	LYS	A	33	76.411	27.035	3.948	1.00	0.03
H										
ATOM	520	HB3	LYS	A	33	77.797	27.400	2.883	1.00	0.03
H										
ATOM	521	HG2	LYS	A	33	76.420	26.725	0.870	1.00	0.03
H										
ATOM	522	HG3	LYS	A	33	75.078	26.269	1.956	1.00	0.03
H										
ATOM	523	HD2	LYS	A	33	76.691	24.664	3.148	1.00	0.03
H										
ATOM	524	HD3	LYS	A	33	77.891	25.046	1.877	1.00	0.03
H										
ATOM	525	HE2	LYS	A	33	76.350	24.168	0.127	1.00	0.08
H										
ATOM	526	HE3	LYS	A	33	75.136	23.783	1.381	1.00	0.08
H										
ATOM	527	HZ1	LYS	A	33	76.467	21.798	0.791	1.00	0.20
H										
ATOM	528	HZ2	LYS	A	33	76.764	22.241	2.447	1.00	0.20
H										
ATOM	529	HZ3	LYS	A	33	77.942	22.614	1.220	1.00	0.20
H										
ATOM	530	H	LYS	A	33	74.166	28.263	2.739	1.00	0.19
H										
ATOM	531	N	GLU	A	34	75.977	29.335	0.359	1.00	-0.26
N										

ATOM	532	CA	GLU	A	34	76.486	29.929	-0.872	1.00	0.13
C										
ATOM	533	C	GLU	A	34	76.632	31.415	-0.637	1.00	0.20
C										
ATOM	534	O	GLU	A	34	77.578	31.974	-1.164	1.00	-0.39
O										
ATOM	535	CB	GLU	A	34	75.646	29.663	-2.152	1.00	-0.00
C										
ATOM	536	CG	GLU	A	34	75.692	28.175	-2.604	1.00	0.00
C										
ATOM	537	CD	GLU	A	34	75.062	27.213	-1.631	1.00	0.04
C										
ATOM	538	OE1	GLU	A	34	74.145	27.629	-0.873	1.00	-0.57
O										
ATOM	539	OE2	GLU	A	34	75.479	26.023	-1.618	1.00	-0.57
O										
ATOM	540	HA	GLU	A	34	77.491	29.513	-1.059	1.00	0.08
H										
ATOM	541	HB2	GLU	A	34	76.071	30.266	-2.972	1.00	0.03
H										
ATOM	542	HB3	GLU	A	34	74.605	29.988	-2.009	1.00	0.03
H										
ATOM	543	HG2	GLU	A	34	76.740	27.879	-2.776	1.00	0.04
H										
ATOM	544	HG3	GLU	A	34	75.151	28.073	-3.558	1.00	0.04
H										
ATOM	545	H	GLU	A	34	75.067	28.922	0.363	1.00	0.19
H										
ATOM	546	N	GLN	A	35	75.757	32.097	0.137	1.00	-0.26
N										
ATOM	547	CA	GLN	A	35	76.004	33.515	0.411	1.00	0.13
C										
ATOM	548	C	GLN	A	35	77.342	33.666	1.103	1.00	0.20
C										
ATOM	549	O	GLN	A	35	78.113	34.523	0.702	1.00	-0.39
O										
ATOM	550	CB	GLN	A	35	74.924	34.183	1.303	1.00	0.00
C										
ATOM	551	CG	GLN	A	35	73.583	34.409	0.554	1.00	0.04
C										
ATOM	552	CD	GLN	A	35	72.533	35.034	1.444	1.00	0.17
C										
ATOM	553	OE1	GLN	A	35	72.740	35.153	2.642	1.00	-0.40
O										
ATOM	554	NE2	GLN	A	35	71.379	35.446	0.874	1.00	-0.30
N										
ATOM	555	HA	GLN	A	35	76.039	34.063	-0.545	1.00	0.08
H										
ATOM	556	HB2	GLN	A	35	75.293	35.174	1.610	1.00	0.03
H										
ATOM	557	HB3	GLN	A	35	74.765	33.573	2.207	1.00	0.03
H										
ATOM	558	HG2	GLN	A	35	73.195	33.453	0.176	1.00	0.05
H										

ATOM	559	HG3	GLN	A	35	73.757	35.074	-0.307	1.00	0.05
H										
ATOM	560	HE22	GLN	A	35	71.221	35.339	-0.108	1.00	0.18
H										
ATOM	561	HE21	GLN	A	35	70.667	35.865	1.439	1.00	0.18
H										
ATOM	562	H	GLN	A	35	74.965	31.649	0.554	1.00	0.19
H										
ATOM	563	N	LEU	A	36	77.636	32.852	2.144	1.00	-0.26
N										
ATOM	564	CA	LEU	A	36	78.915	32.993	2.842	1.00	0.13
C										
ATOM	565	C	LEU	A	36	80.056	32.810	1.863	1.00	0.20
C										
ATOM	566	O	LEU	A	36	80.920	33.670	1.784	1.00	-0.39
O										
ATOM	567	CB	LEU	A	36	79.063	31.984	4.020	1.00	-0.01
C										
ATOM	568	CG	LEU	A	36	78.171	32.317	5.253	1.00	-0.04
C										
ATOM	569	CD1	LEU	A	36	78.005	31.080	6.179	1.00	-0.06
C										
ATOM	570	CD2	LEU	A	36	78.768	33.472	6.105	1.00	-0.06
C										
ATOM	571	HA	LEU	A	36	78.978	34.019	3.230	1.00	0.08
H										
ATOM	572	HB2	LEU	A	36	80.106	31.968	4.356	1.00	0.03
H										
ATOM	573	HB3	LEU	A	36	78.825	30.977	3.646	1.00	0.03
H										
ATOM	574	HG	LEU	A	36	77.172	32.611	4.891	1.00	0.03
H										
ATOM	575	HD21	LEU	A	36	79.719	33.159	6.561	1.00	0.02
H										
ATOM	576	HD22	LEU	A	36	78.064	33.726	6.909	1.00	0.02
H										
ATOM	577	HD23	LEU	A	36	78.961	34.379	5.521	1.00	0.02
H										
ATOM	578	HD11	LEU	A	36	78.981	30.751	6.563	1.00	0.02
H										
ATOM	579	HD12	LEU	A	36	77.536	30.236	5.656	1.00	0.02
H										
ATOM	580	HD13	LEU	A	36	77.368	31.342	7.035	1.00	0.02
H										
ATOM	581	H	LEU	A	36	76.986	32.153	2.447	1.00	0.19
H										
ATOM	582	N	ALA	A	37	80.077	31.693	1.104	1.00	-0.26
N										
ATOM	583	CA	ALA	A	37	81.176	31.466	0.167	1.00	0.13
C										
ATOM	584	C	ALA	A	37	81.229	32.557	-0.878	1.00	0.20
C										
ATOM	585	O	ALA	A	37	82.298	33.093	-1.121	1.00	-0.39
O										

ATOM	586	CB	ALA	A	37	81.037	30.090	-0.529	1.00	-0.02
C										
ATOM	587	HA	ALA	A	37	82.121	31.460	0.733	1.00	0.08
H										
ATOM	588	HB1	ALA	A	37	81.123	29.280	0.210	1.00	0.03
H										
ATOM	589	HB2	ALA	A	37	81.824	29.960	-1.286	1.00	0.03
H										
ATOM	590	HB3	ALA	A	37	80.055	30.016	-1.017	1.00	0.03
H										
ATOM	591	H	ALA	A	37	79.349	31.010	1.176	1.00	0.19
H										
ATOM	592	N	ARG	A	38	80.089	32.907	-1.513	1.00	-0.26
N										
ATOM	593	CA	ARG	A	38	80.101	33.952	-2.536	1.00	0.13
C										
ATOM	594	C	ARG	A	38	80.613	35.242	-1.935	1.00	0.20
C										
ATOM	595	O	ARG	A	38	81.275	35.980	-2.648	1.00	-0.39
O										
ATOM	596	CB	ARG	A	38	78.704	34.188	-3.178	1.00	-0.01
C										
ATOM	597	CG	ARG	A	38	78.274	33.022	-4.115	1.00	-0.02
C										
ATOM	598	CD	ARG	A	38	76.858	33.227	-4.724	1.00	0.06
C										
ATOM	599	NE	ARG	A	38	75.797	33.053	-3.730	1.00	-0.27
N										
ATOM	600	CZ	ARG	A	38	74.512	33.088	-4.015	1.00	0.29
C										
ATOM	601	NH1	ARG	A	38	74.058	33.322	-5.225	1.00	-0.28
N										
ATOM	602	NH2	ARG	A	38	73.646	32.877	-3.050	1.00	-0.28
N										
ATOM	603	HA	ARG	A	38	80.802	33.648	-3.332	1.00	0.08
H										
ATOM	604	HB2	ARG	A	38	78.750	35.095	-3.798	1.00	0.03
H										
ATOM	605	HB3	ARG	A	38	77.968	34.366	-2.379	1.00	0.03
H										
ATOM	606	HG2	ARG	A	38	78.267	32.062	-3.580	1.00	0.03
H										
ATOM	607	HG3	ARG	A	38	79.009	32.944	-4.935	1.00	0.03
H										
ATOM	608	HD2	ARG	A	38	76.729	32.462	-5.509	1.00	0.07
H										
ATOM	609	HD3	ARG	A	38	76.804	34.229	-5.179	1.00	0.07
H										
ATOM	610	HE	ARG	A	38	76.085	32.873	-2.760	1.00	0.26
H										
ATOM	611	HH12	ARG	A	38	74.689	33.500	-6.016	1.00	0.26
H										
ATOM	612	HH11	ARG	A	38	73.044	33.339	-5.414	1.00	0.26
H										

ATOM	613	HH22	ARG	A	38	73.958	32.681	-2.087	1.00	0.26
H										
ATOM	614	HH21	ARG	A	38	72.631	32.896	-3.230	1.00	0.26
H										
ATOM	615	H	ARG	A	38	79.228	32.465	-1.278	1.00	0.19
H										
ATOM	616	N	ALA	A	39	80.347	35.528	-0.638	1.00	-0.26
N										
ATOM	617	CA	ALA	A	39	80.889	36.735	-0.011	1.00	0.13
C										
ATOM	618	C	ALA	A	39	82.256	36.512	0.606	1.00	0.20
C										
ATOM	619	O	ALA	A	39	82.601	37.212	1.545	1.00	-0.39
O										
ATOM	620	CB	ALA	A	39	79.877	37.283	1.025	1.00	-0.02
C										
ATOM	621	HA	ALA	A	39	81.021	37.531	-0.758	1.00	0.08
H										
ATOM	622	HB1	ALA	A	39	78.898	37.455	0.551	1.00	0.03
H										
ATOM	623	HB2	ALA	A	39	80.229	38.228	1.466	1.00	0.03
H										
ATOM	624	HB3	ALA	A	39	79.757	36.542	1.824	1.00	0.03
H										
ATOM	625	H	ALA	A	39	79.813	34.904	-0.067	1.00	0.19
H										
ATOM	626	N	GLY	A	40	83.075	35.569	0.086	1.00	-0.27
N										
ATOM	627	CA	GLY	A	40	84.462	35.472	0.529	1.00	0.12
C										
ATOM	628	C	GLY	A	40	84.661	34.927	1.925	1.00	0.20
C										
ATOM	629	O	GLY	A	40	85.687	35.265	2.493	1.00	-0.39
O										
ATOM	630	HA3	GLY	A	40	84.923	36.471	0.461	1.00	0.08
H										
ATOM	631	HA2	GLY	A	40	85.016	34.819	-0.160	1.00	0.08
H										
ATOM	632	H	GLY	A	40	82.784	34.960	-0.650	1.00	0.19
H										
ATOM	633	N	PHE	A	41	83.756	34.088	2.489	1.00	-0.26
N										
ATOM	634	CA	PHE	A	41	83.982	33.521	3.826	1.00	0.14
C										
ATOM	635	C	PHE	A	41	84.096	32.017	3.760	1.00	0.21
C										
ATOM	636	O	PHE	A	41	83.642	31.451	2.781	1.00	-0.39
O										
ATOM	637	CB	PHE	A	41	82.843	33.898	4.804	1.00	0.02
C										
ATOM	638	CG	PHE	A	41	82.786	35.418	4.996	1.00	-0.04
C										
ATOM	639	CD1	PHE	A	41	83.665	36.049	5.883	1.00	-0.06
C										

ATOM	640	CD2	PHE	A	41	81.854	36.186	4.290	1.00	-0.06
C										
ATOM	641	CE1	PHE	A	41	83.619	37.436	6.049	1.00	-0.07
C										
ATOM	642	CE2	PHE	A	41	81.780	37.568	4.485	1.00	-0.07
C										
ATOM	643	CZ	PHE	A	41	82.660	38.193	5.372	1.00	-0.07
C										
ATOM	644	HA	PHE	A	41	84.922	33.880	4.262	1.00	0.08
H										
ATOM	645	HB2	PHE	A	41	83.000	33.420	5.783	1.00	0.05
H										
ATOM	646	HB3	PHE	A	41	81.889	33.531	4.404	1.00	0.05
H										
ATOM	647	HD2	PHE	A	41	81.183	35.707	3.589	1.00	0.06
H										
ATOM	648	HE2	PHE	A	41	81.042	38.154	3.949	1.00	0.06
H										
ATOM	649	HZ	PHE	A	41	82.599	39.262	5.542	1.00	0.06
H										
ATOM	650	HE1	PHE	A	41	84.321	37.928	6.710	1.00	0.06
H										
ATOM	651	HD1	PHE	A	41	84.382	35.465	6.449	1.00	0.06
H										
ATOM	652	H	PHE	A	41	82.926	33.817	1.999	1.00	0.19
H										
ATOM	653	N	TYR	A	42	84.693	31.359	4.783	1.00	-0.26
N										
ATOM	654	CA	TYR	A	42	84.868	29.906	4.747	1.00	0.14
C										
ATOM	655	C	TYR	A	42	84.829	29.358	6.160	1.00	0.21
C										
ATOM	656	O	TYR	A	42	85.301	30.050	7.049	1.00	-0.39
O										
ATOM	657	CB	TYR	A	42	86.208	29.582	4.041	1.00	0.02
C										
ATOM	658	CG	TYR	A	42	87.394	30.025	4.906	1.00	-0.05
C										
ATOM	659	CD1	TYR	A	42	87.982	29.123	5.799	1.00	-0.07
C										
ATOM	660	CD2	TYR	A	42	87.901	31.325	4.813	1.00	-0.07
C										
ATOM	661	CE1	TYR	A	42	89.088	29.499	6.566	1.00	-0.04
C										
ATOM	662	CE2	TYR	A	42	88.954	31.725	5.642	1.00	-0.04
C										
ATOM	663	CZ	TYR	A	42	89.567	30.812	6.504	1.00	0.08
C										
ATOM	664	OH	TYR	A	42	90.650	31.230	7.283	1.00	-0.34
O										
ATOM	665	HA	TYR	A	42	84.054	29.444	4.168	1.00	0.08
H										
ATOM	666	HB3	TYR	A	42	86.286	28.504	3.839	1.00	0.05
H										

ATOM	667	HB2	TYR	A	42	86.238	30.102	3.073	1.00	0.05
H										
ATOM	668	HD2	TYR	A	42	87.479	32.029	4.102	1.00	0.05
H										
ATOM	669	HE2	TYR	A	42	89.301	32.750	5.625	1.00	0.05
H										
ATOM	670	HE1	TYR	A	42	89.568	28.765	7.205	1.00	0.05
H										
ATOM	671	HD1	TYR	A	42	87.584	28.121	5.902	1.00	0.05
H										
ATOM	672	HH	TYR	A	42	90.955	30.581	7.907	1.00	0.25
H										
ATOM	673	H	TYR	A	42	85.072	31.858	5.562	1.00	0.19
H										
ATOM	674	N	ALA	A	43	84.268	28.149	6.404	1.00	-0.26
N										
ATOM	675	CA	ALA	A	43	84.097	27.684	7.782	1.00	0.13
C										
ATOM	676	C	ALA	A	43	85.407	27.295	8.429	1.00	0.20
C										
ATOM	677	O	ALA	A	43	86.273	26.809	7.718	1.00	-0.39
O										
ATOM	678	CB	ALA	A	43	83.153	26.457	7.870	1.00	-0.02
C										
ATOM	679	HA	ALA	A	43	83.627	28.500	8.350	1.00	0.08
H										
ATOM	680	HB1	ALA	A	43	82.185	26.683	7.405	1.00	0.03
H										
ATOM	681	HB2	ALA	A	43	82.970	26.180	8.919	1.00	0.03
H										
ATOM	682	HB3	ALA	A	43	83.596	25.595	7.348	1.00	0.03
H										
ATOM	683	H	ALA	A	43	83.921	27.577	5.658	1.00	0.19
H										
ATOM	684	N	LEU	A	44	85.553	27.476	9.766	1.00	-0.26
N										
ATOM	685	CA	LEU	A	44	86.732	26.970	10.474	1.00	0.13
C										
ATOM	686	C	LEU	A	44	86.490	25.599	11.075	1.00	0.20
C										
ATOM	687	O	LEU	A	44	87.462	24.985	11.488	1.00	-0.39
O										
ATOM	688	CB	LEU	A	44	87.147	27.913	11.640	1.00	-0.01
C										
ATOM	689	CG	LEU	A	44	87.391	29.392	11.215	1.00	-0.04
C										
ATOM	690	CD1	LEU	A	44	87.926	30.213	12.422	1.00	-0.06
C										
ATOM	691	CD2	LEU	A	44	88.381	29.484	10.022	1.00	-0.06
C										
ATOM	692	HA	LEU	A	44	87.588	26.864	9.789	1.00	0.08
H										
ATOM	693	HB2	LEU	A	44	88.074	27.521	12.090	1.00	0.03
H										

ATOM	694	HB3	LEU	A	44	86.361	27.888	12.411	1.00	0.03
H										
ATOM	695	HG	LEU	A	44	86.432	29.842	10.910	1.00	0.03
H										
ATOM	696	HD21	LEU	A	44	89.277	28.874	10.212	1.00	0.02
H										
ATOM	697	HD22	LEU	A	44	88.707	30.520	9.863	1.00	0.02
H										
ATOM	698	HD23	LEU	A	44	87.896	29.139	9.097	1.00	0.02
H										
ATOM	699	HD11	LEU	A	44	88.922	29.851	12.720	1.00	0.02
H										
ATOM	700	HD12	LEU	A	44	87.251	30.124	13.286	1.00	0.02
H										
ATOM	701	HD13	LEU	A	44	88.008	31.279	12.159	1.00	0.02
H										
ATOM	702	H	LEU	A	44	84.829	27.900	10.315	1.00	0.19
H										
ATOM	703	N	GLY	A	45	85.238	25.091	11.165	1.00	-0.27
N										
ATOM	704	CA	GLY	A	45	85.015	23.828	11.866	1.00	0.12
C										
ATOM	705	C	GLY	A	45	85.113	24.065	13.354	1.00	0.20
C										
ATOM	706	O	GLY	A	45	85.768	23.291	14.035	1.00	-0.39
O										
ATOM	707	HA3	GLY	A	45	85.745	23.071	11.537	1.00	0.08
H										
ATOM	708	HA2	GLY	A	45	84.008	23.435	11.650	1.00	0.08
H										
ATOM	709	H	GLY	A	45	84.435	25.576	10.821	1.00	0.19
H										
ATOM	710	N	GLU	A	46	84.456	25.133	13.865	1.00	-0.26
N										
ATOM	711	CA	GLU	A	46	84.481	25.431	15.297	1.00	0.13
C										
ATOM	712	C	GLU	A	46	83.097	25.906	15.677	1.00	0.20
C										
ATOM	713	O	GLU	A	46	82.938	27.026	16.136	1.00	-0.39
O										
ATOM	714	CB	GLU	A	46	85.542	26.526	15.583	1.00	-0.00
C										
ATOM	715	CG	GLU	A	46	86.986	26.077	15.246	1.00	0.00
C										
ATOM	716	CD	GLU	A	46	87.945	27.182	15.615	1.00	0.04
C										
ATOM	717	OE1	GLU	A	46	88.241	27.330	16.832	1.00	-0.57
O										
ATOM	718	OE2	GLU	A	46	88.406	27.915	14.699	1.00	-0.57
O										
ATOM	719	HA	GLU	A	46	84.701	24.539	15.907	1.00	0.08
H										
ATOM	720	HB2	GLU	A	46	85.494	26.814	16.647	1.00	0.03
H										

ATOM	721	HB3	GLU	A	46	85.297	27.405	14.970	1.00	0.03
H										
ATOM	722	HG2	GLU	A	46	87.075	25.848	14.173	1.00	0.04
H										
ATOM	723	HG3	GLU	A	46	87.240	25.169	15.816	1.00	0.04
H										
ATOM	724	H	GLU	A	46	83.947	25.761	13.272	1.00	0.19
H										
ATOM	725	N	GLY	A	47	82.064	25.061	15.464	1.00	-0.27
N										
ATOM	726	CA	GLY	A	47	80.699	25.535	15.657	1.00	0.12
C										
ATOM	727	C	GLY	A	47	80.369	26.387	14.456	1.00	0.20
C										
ATOM	728	O	GLY	A	47	80.526	25.872	13.361	1.00	-0.39
O										
ATOM	729	HA3	GLY	A	47	80.604	26.083	16.608	1.00	0.08
H										
ATOM	730	HA2	GLY	A	47	80.000	24.685	15.694	1.00	0.08
H										
ATOM	731	H	GLY	A	47	82.210	24.141	15.093	1.00	0.19
H										
ATOM	732	N	ASP	A	48	79.933	27.661	14.619	1.00	-0.26
N										
ATOM	733	CA	ASP	A	48	79.595	28.494	13.463	1.00	0.14
C										
ATOM	734	C	ASP	A	48	80.633	29.568	13.229	1.00	0.21
C										
ATOM	735	O	ASP	A	48	80.261	30.618	12.728	1.00	-0.39
O										
ATOM	736	CB	ASP	A	48	78.190	29.125	13.671	1.00	0.04
C										
ATOM	737	CG	ASP	A	48	78.201	30.235	14.688	1.00	0.04
C										
ATOM	738	OD1	ASP	A	48	78.946	30.120	15.699	1.00	-0.57
O										
ATOM	739	OD2	ASP	A	48	77.463	31.237	14.483	1.00	-0.57
O										
ATOM	740	HA	ASP	A	48	79.541	27.896	12.538	1.00	0.08
H										
ATOM	741	HB2	ASP	A	48	77.502	28.356	14.042	1.00	0.05
H										
ATOM	742	HB3	ASP	A	48	77.798	29.511	12.715	1.00	0.05
H										
ATOM	743	H	ASP	A	48	79.841	28.072	15.528	1.00	0.19
H										
ATOM	744	N	LYS	A	49	81.929	29.357	13.566	1.00	-0.26
N										
ATOM	745	CA	LYS	A	49	82.906	30.406	13.286	1.00	0.13
C										
ATOM	746	C	LYS	A	49	83.245	30.349	11.817	1.00	0.20
C										
ATOM	747	O	LYS	A	49	83.249	29.261	11.263	1.00	-0.39
O										

ATOM	748	CB	LYS	A	49	84.267	30.313	14.027	1.00	-0.01
C										
ATOM	749	CG	LYS	A	49	84.148	30.334	15.573	1.00	-0.04
C										
ATOM	750	CD	LYS	A	49	85.558	30.352	16.227	1.00	-0.01
C										
ATOM	751	CE	LYS	A	49	85.481	30.279	17.774	1.00	-0.04
C										
ATOM	752	NZ	LYS	A	49	86.834	30.271	18.376	1.00	0.22
N										
ATOM	753	HA	LYS	A	49	82.459	31.378	13.548	1.00	0.08
H										
ATOM	754	HB2	LYS	A	49	84.894	31.165	13.713	1.00	0.03
H										
ATOM	755	HB3	LYS	A	49	84.770	29.387	13.712	1.00	0.03
H										
ATOM	756	HG2	LYS	A	49	83.588	29.451	15.910	1.00	0.03
H										
ATOM	757	HG3	LYS	A	49	83.597	31.228	15.897	1.00	0.03
H										
ATOM	758	HD2	LYS	A	49	86.081	31.277	15.939	1.00	0.03
H										
ATOM	759	HD3	LYS	A	49	86.154	29.502	15.861	1.00	0.03
H										
ATOM	760	HE2	LYS	A	49	84.943	29.362	18.069	1.00	0.08
H										
ATOM	761	HE3	LYS	A	49	84.912	31.147	18.150	1.00	0.08
H										
ATOM	762	HZ1	LYS	A	49	86.785	30.227	19.456	1.00	0.20
H										
ATOM	763	HZ2	LYS	A	49	87.393	31.161	18.121	1.00	0.20
H										
ATOM	764	HZ3	LYS	A	49	87.414	29.417	18.051	1.00	0.20
H										
ATOM	765	H	LYS	A	49	82.250	28.490	13.949	1.00	0.19
H										
ATOM	766	N	VAL	A	50	83.557	31.509	11.197	1.00	-0.26
N										
ATOM	767	CA	VAL	A	50	84.037	31.521	9.817	1.00	0.13
C										
ATOM	768	C	VAL	A	50	85.100	32.590	9.746	1.00	0.20
C										
ATOM	769	O	VAL	A	50	85.259	33.306	10.723	1.00	-0.39
O										
ATOM	770	CB	VAL	A	50	82.886	31.794	8.803	1.00	-0.01
C										
ATOM	771	CG1	VAL	A	50	81.627	30.956	9.153	1.00	-0.06
C										
ATOM	772	CG2	VAL	A	50	82.514	33.298	8.771	1.00	-0.06
C										
ATOM	773	HA	VAL	A	50	84.515	30.561	9.567	1.00	0.08
H										
ATOM	774	HB	VAL	A	50	83.217	31.517	7.787	1.00	0.03
H										

ATOM	775	HG11	VAL	A	50	81.250	31.225	10.149	1.00	0.02
H										
ATOM	776	HG12	VAL	A	50	81.860	29.884	9.156	1.00	0.02
H										
ATOM	777	HG13	VAL	A	50	80.825	31.137	8.421	1.00	0.02
H										
ATOM	778	HG21	VAL	A	50	82.233	33.614	9.783	1.00	0.02
H										
ATOM	779	HG22	VAL	A	50	81.666	33.459	8.092	1.00	0.02
H										
ATOM	780	HG23	VAL	A	50	83.346	33.926	8.419	1.00	0.02
H										
ATOM	781	H	VAL	A	50	83.490	32.388	11.677	1.00	0.19
H										
ATOM	782	N	LYS	A	51	85.821	32.735	8.614	1.00	-0.26
N										
ATOM	783	CA	LYS	A	51	86.802	33.813	8.512	1.00	0.13
C										
ATOM	784	C	LYS	A	51	86.899	34.267	7.077	1.00	0.20
C										
ATOM	785	O	LYS	A	51	86.617	33.454	6.212	1.00	-0.39
O										
ATOM	786	CB	LYS	A	51	88.134	33.276	9.087	1.00	-0.01
C										
ATOM	787	CG	LYS	A	51	89.249	34.343	9.242	1.00	-0.04
C										
ATOM	788	CD	LYS	A	51	90.465	33.745	10.004	1.00	-0.01
C										
ATOM	789	CE	LYS	A	51	91.580	34.782	10.322	1.00	-0.04
C										
ATOM	790	NZ	LYS	A	51	91.174	35.798	11.322	1.00	0.22
N										
ATOM	791	HA	LYS	A	51	86.455	34.674	9.102	1.00	0.08
H										
ATOM	792	HB2	LYS	A	51	88.487	32.461	8.438	1.00	0.03
H										
ATOM	793	HB3	LYS	A	51	87.909	32.863	10.083	1.00	0.03
H										
ATOM	794	HG2	LYS	A	51	88.844	35.194	9.802	1.00	0.03
H										
ATOM	795	HG3	LYS	A	51	89.560	34.697	8.247	1.00	0.03
H										
ATOM	796	HD2	LYS	A	51	90.894	32.938	9.388	1.00	0.03
H										
ATOM	797	HD3	LYS	A	51	90.132	33.301	10.956	1.00	0.03
H										
ATOM	798	HE2	LYS	A	51	91.905	35.272	9.391	1.00	0.08
H										
ATOM	799	HE3	LYS	A	51	92.448	34.231	10.726	1.00	0.08
H										
ATOM	800	HZ1	LYS	A	51	92.011	36.428	11.595	1.00	0.20
H										
ATOM	801	HZ2	LYS	A	51	90.808	35.348	12.235	1.00	0.20
H										

ATOM	802	HZ3	LYS	A	51	90.414	36.477	10.967	1.00	0.20
H										
ATOM	803	H	LYS	A	51	85.723	32.096	7.851	1.00	0.19
H										
ATOM	804	N	CYS	A	52	87.262	35.542	6.795	1.00	-0.26
N										
ATOM	805	CA	CYS	A	52	87.288	35.989	5.404	1.00	0.14
C										
ATOM	806	C	CYS	A	52	88.553	35.460	4.780	1.00	0.20
C										
ATOM	807	O	CYS	A	52	89.575	35.523	5.445	1.00	-0.39
O										
ATOM	808	CB	CYS	A	52	87.226	37.530	5.237	1.00	0.03
C										
ATOM	809	SG	CYS	A	52	86.423	38.015	3.672	1.00	-0.17
S										
ATOM	810	HA	CYS	A	52	86.397	35.587	4.906	1.00	0.08
H										
ATOM	811	HB2	CYS	A	52	88.237	37.955	5.269	1.00	0.04
H										
ATOM	812	HB3	CYS	A	52	86.632	37.978	6.046	1.00	0.04
H										
ATOM	813	HG	CYS	A	52	87.077	37.595	3.033	1.00	0.10
H										
ATOM	814	LPG1	CYS	A	52	85.801	37.751	3.611	1.00	0.00
LP										
ATOM	815	LPG2	CYS	A	52	86.392	38.690	3.599	1.00	0.00
LP										
ATOM	816	H	CYS	A	52	87.520	36.185	7.517	1.00	0.19
H										
ATOM	817	N	PHE	A	53	88.537	34.941	3.531	1.00	-0.26
N										
ATOM	818	CA	PHE	A	53	89.791	34.474	2.949	1.00	0.14
C										
ATOM	819	C	PHE	A	53	90.698	35.662	2.727	1.00	0.21
C										
ATOM	820	O	PHE	A	53	91.881	35.580	3.018	1.00	-0.39
O										
ATOM	821	CB	PHE	A	53	89.604	33.690	1.621	1.00	0.02
C										
ATOM	822	CG	PHE	A	53	89.444	34.612	0.406	1.00	-0.04
C										
ATOM	823	CD1	PHE	A	53	90.585	35.091	-0.247	1.00	-0.06
C										
ATOM	824	CD2	PHE	A	53	88.182	34.976	-0.071	1.00	-0.06
C										
ATOM	825	CE1	PHE	A	53	90.469	35.857	-1.409	1.00	-0.07
C										
ATOM	826	CE2	PHE	A	53	88.058	35.725	-1.244	1.00	-0.07
C										
ATOM	827	CZ	PHE	A	53	89.203	36.147	-1.925	1.00	-0.07
C										
ATOM	828	HA	PHE	A	53	90.257	33.785	3.670	1.00	0.08
H										

ATOM	829	HB2	PHE	A	53	88.754	32.998	1.710	1.00	0.05
H										
ATOM	830	HB3	PHE	A	53	90.502	33.085	1.425	1.00	0.05
H										
ATOM	831	HD2	PHE	A	53	87.300	34.673	0.473	1.00	0.06
H										
ATOM	832	HE2	PHE	A	53	87.073	35.977	-1.625	1.00	0.06
H										
ATOM	833	HZ	PHE	A	53	89.116	36.698	-2.854	1.00	0.06
H										
ATOM	834	HE1	PHE	A	53	91.358	36.224	-1.912	1.00	0.06
H										
ATOM	835	HD1	PHE	A	53	91.563	34.858	0.154	1.00	0.06
H										
ATOM	836	H	PHE	A	53	87.695	34.893	2.991	1.00	0.19
H										
ATOM	837	N	HIS	A	54	90.142	36.773	2.188	1.00	-0.26
N										
ATOM	838	CA	HIS	A	54	90.978	37.904	1.808	1.00	0.18
C										
ATOM	839	C	HIS	A	54	91.364	38.735	3.013	1.00	0.21
C										
ATOM	840	O	HIS	A	54	92.549	38.821	3.293	1.00	-0.39
O										
ATOM	841	CB	HIS	A	54	90.273	38.788	0.748	1.00	0.17
C										
ATOM	842	CG	HIS	A	54	91.247	39.821	0.249	1.00	0.33
C										
ATOM	843	ND1	HIS	A	54	91.911	39.709	-0.887	1.00	-0.06
N										
ATOM	844	CD2	HIS	A	54	91.580	40.966	0.877	1.00	0.28
C										
ATOM	845	CE1	HIS	A	54	92.686	40.737	-1.067	1.00	0.29
C										
ATOM	846	NE2	HIS	A	54	92.492	41.359	-0.150	1.00	-0.05
N										
ATOM	847	HA	HIS	A	54	91.882	37.510	1.314	1.00	0.09
H										
ATOM	848	HB2	HIS	A	54	89.385	39.275	1.173	1.00	0.11
H										
ATOM	849	HB3	HIS	A	54	89.931	38.167	-0.092	1.00	0.11
H										
ATOM	850	HD2	HIS	A	54	91.276	41.425	1.816	1.00	0.24
H										
ATOM	851	HE1	HIS	A	54	93.067	41.919	-0.481	1.00	0.98
H										
ATOM	852	HE2	HIS	A	54	93.297	40.788	-1.967	1.00	0.26
H										
ATOM	853	HD1	HIS	A	54	91.827	38.915	-1.542	1.00	0.30
H										
ATOM	854	H	HIS	A	54	89.161	36.832	2.002	1.00	0.19
H										
ATOM	855	N	CYS	A	55	90.397	39.364	3.730	1.00	-0.26
N										

ATOM	856	CA	CYS	A	55	90.751	40.258	4.837	1.00	0.14
C										
ATOM	857	C	CYS	A	55	90.978	39.536	6.146	1.00	0.20
C										
ATOM	858	O	CYS	A	55	91.156	40.221	7.142	1.00	-0.39
O										
ATOM	859	CB	CYS	A	55	89.720	41.411	5.021	1.00	0.03
C										
ATOM	860	SG	CYS	A	55	88.141	40.848	5.739	1.00	-0.17
S										
ATOM	861	HA	CYS	A	55	91.704	40.758	4.591	1.00	0.08
H										
ATOM	862	HB2	CYS	A	55	89.523	41.896	4.053	1.00	0.04
H										
ATOM	863	HB3	CYS	A	55	90.119	42.172	5.711	1.00	0.04
H										
ATOM	864	HG	CYS	A	55	87.734	40.441	4.913	1.00	0.10
H										
ATOM	865	LPG1	CYS	A	55	88.234	40.389	6.231	1.00	0.00
LP										
ATOM	866	LPG2	CYS	A	55	87.771	41.364	5.978	1.00	0.00
LP										
ATOM	867	H	CYS	A	55	89.429	39.230	3.521	1.00	0.19
H										
ATOM	868	N	GLY	A	56	90.996	38.182	6.198	1.00	-0.27
N										
ATOM	869	CA	GLY	A	56	91.296	37.499	7.456	1.00	0.12
C										
ATOM	870	C	GLY	A	56	90.494	38.026	8.624	1.00	0.20
C										
ATOM	871	O	GLY	A	56	91.014	38.057	9.728	1.00	-0.39
O										
ATOM	872	HA3	GLY	A	56	92.371	37.601	7.666	1.00	0.08
H										
ATOM	873	HA2	GLY	A	56	91.078	36.425	7.364	1.00	0.08
H										
ATOM	874	H	GLY	A	56	90.853	37.614	5.385	1.00	0.19
H										
ATOM	875	N	GLY	A	57	89.226	38.438	8.400	1.00	-0.27
N										
ATOM	876	CA	GLY	A	57	88.395	38.941	9.488	1.00	0.12
C										
ATOM	877	C	GLY	A	57	87.651	37.786	10.105	1.00	0.20
C										
ATOM	878	O	GLY	A	57	87.025	37.064	9.347	1.00	-0.39
O										
ATOM	879	HA3	GLY	A	57	87.641	39.624	9.074	1.00	0.08
H										
ATOM	880	HA2	GLY	A	57	88.995	39.508	10.217	1.00	0.08
H										
ATOM	881	H	GLY	A	57	88.815	38.373	7.494	1.00	0.19
H										
ATOM	882	N	GLY	A	58	87.693	37.588	11.444	1.00	-0.27
N										

ATOM	883	CA	GLY	A	58	86.980	36.466	12.052	1.00	0.12
C										
ATOM	884	C	GLY	A	58	85.546	36.855	12.324	1.00	0.20
C										
ATOM	885	O	GLY	A	58	85.373	37.831	13.037	1.00	-0.39
O										
ATOM	886	HA3	GLY	A	58	87.453	36.219	13.016	1.00	0.08
H										
ATOM	887	HA2	GLY	A	58	87.049	35.564	11.426	1.00	0.08
H										
ATOM	888	H	GLY	A	58	88.188	38.216	12.049	1.00	0.19
H										
ATOM	889	N	LEU	A	59	84.526	36.132	11.790	1.00	-0.26
N										
ATOM	890	CA	LEU	A	59	83.118	36.445	12.074	1.00	0.13
C										
ATOM	891	C	LEU	A	59	82.472	35.256	12.770	1.00	0.20
C										
ATOM	892	O	LEU	A	59	82.981	34.156	12.618	1.00	-0.39
O										
ATOM	893	CB	LEU	A	59	82.333	36.719	10.761	1.00	-0.01
C										
ATOM	894	CG	LEU	A	59	82.619	38.074	10.048	1.00	-0.04
C										
ATOM	895	CD1	LEU	A	59	84.113	38.245	9.663	1.00	-0.06
C										
ATOM	896	CD2	LEU	A	59	81.745	38.151	8.764	1.00	-0.06
C										
ATOM	897	HA	LEU	A	59	83.016	37.325	12.726	1.00	0.08
H										
ATOM	898	HB2	LEU	A	59	81.257	36.685	10.984	1.00	0.03
H										
ATOM	899	HB3	LEU	A	59	82.555	35.907	10.058	1.00	0.03
H										
ATOM	900	HG	LEU	A	59	82.331	38.909	10.713	1.00	0.03
H										
ATOM	901	HD21	LEU	A	59	81.936	37.285	8.114	1.00	0.02
H										
ATOM	902	HD22	LEU	A	59	81.968	39.064	8.195	1.00	0.02
H										
ATOM	903	HD23	LEU	A	59	80.678	38.154	9.028	1.00	0.02
H										
ATOM	904	HD11	LEU	A	59	84.483	37.333	9.172	1.00	0.02
H										
ATOM	905	HD12	LEU	A	59	84.724	38.458	10.548	1.00	0.02
H										
ATOM	906	HD13	LEU	A	59	84.247	39.094	8.976	1.00	0.02
H										
ATOM	907	H	LEU	A	59	84.705	35.341	11.202	1.00	0.19
H										
ATOM	908	N	THR	A	60	81.362	35.447	13.534	1.00	-0.26
N										
ATOM	909	CA	THR	A	60	80.742	34.343	14.286	1.00	0.16
C										

ATOM	910	C	THR	A	60	79.306	34.691	14.626	1.00	0.21
C										
ATOM	911	O	THR	A	60	78.949	35.834	14.411	1.00	-0.39
O										
ATOM	912	CB	THR	A	60	81.562	34.152	15.599	1.00	0.09
C										
ATOM	913	OG1	THR	A	60	82.960	34.059	15.304	1.00	-0.39
O										
ATOM	914	CG2	THR	A	60	81.173	32.918	16.457	1.00	-0.03
C										
ATOM	915	HA	THR	A	60	80.747	33.421	13.682	1.00	0.08
H										
ATOM	916	HB	THR	A	60	81.454	35.059	16.214	1.00	0.06
H										
ATOM	917	HG1	THR	A	60	83.172	33.332	14.732	1.00	0.21
H										
ATOM	918	HG23	THR	A	60	81.118	32.013	15.834	1.00	0.03
H										
ATOM	919	HG21	THR	A	60	80.215	33.063	16.973	1.00	0.03
H										
ATOM	920	HG22	THR	A	60	81.937	32.761	17.235	1.00	0.03
H										
ATOM	921	H	THR	A	60	80.973	36.364	13.644	1.00	0.19
H										
ATOM	922	N	ASP	A	61	78.466	33.771	15.155	1.00	-0.26
N										
ATOM	923	CA	ASP	A	61	77.147	34.156	15.673	1.00	0.14
C										
ATOM	924	C	ASP	A	61	76.245	34.602	14.549	1.00	0.21
C										
ATOM	925	O	ASP	A	61	75.673	35.679	14.618	1.00	-0.39
O										
ATOM	926	CB	ASP	A	61	77.241	35.224	16.799	1.00	0.04
C										
ATOM	927	CG	ASP	A	61	78.210	34.777	17.862	1.00	0.04
C										
ATOM	928	OD1	ASP	A	61	79.282	35.424	18.012	1.00	-0.57
O										
ATOM	929	OD2	ASP	A	61	77.905	33.770	18.556	1.00	-0.57
O										
ATOM	930	HA	ASP	A	61	76.660	33.271	16.120	1.00	0.08
H										
ATOM	931	HB2	ASP	A	61	76.251	35.369	17.260	1.00	0.05
H										
ATOM	932	HB3	ASP	A	61	77.559	36.198	16.396	1.00	0.05
H										
ATOM	933	H	ASP	A	61	78.733	32.809	15.207	1.00	0.19
H										
ATOM	934	N	TRP	A	62	76.106	33.766	13.497	1.00	-0.26
N										
ATOM	935	CA	TRP	A	62	75.292	34.171	12.356	1.00	0.14
C										
ATOM	936	C	TRP	A	62	73.842	34.283	12.755	1.00	0.21
C										

ATOM	937	O	TRP	A	62	73.401	33.474	13.555	1.00	-0.39
O										
ATOM	938	CB	TRP	A	62	75.463	33.209	11.153	1.00	0.00
C										
ATOM	939	CG	TRP	A	62	76.837	33.497	10.620	1.00	-0.04
C										
ATOM	940	CD1	TRP	A	62	77.997	32.902	10.940	1.00	0.02
C										
ATOM	941	CD2	TRP	A	62	77.152	34.593	9.637	1.00	-0.02
C										
ATOM	942	NE1	TRP	A	62	78.971	33.502	10.307	1.00	-0.29
N										
ATOM	943	CE2	TRP	A	62	78.526	34.513	9.535	1.00	0.06
C										
ATOM	944	CE3	TRP	A	62	76.401	35.536	8.937	1.00	-0.07
C										
ATOM	945	CZ2	TRP	A	62	79.245	35.399	8.734	1.00	-0.04
C										
ATOM	946	CZ3	TRP	A	62	77.109	36.413	8.105	1.00	-0.08
C										
ATOM	947	CH2	TRP	A	62	78.508	36.338	7.999	1.00	-0.08
C										
ATOM	948	HA	TRP	A	62	75.647	35.170	12.048	1.00	0.08
H										
ATOM	949	HB2	TRP	A	62	74.714	33.420	10.376	1.00	0.04
H										
ATOM	950	HB3	TRP	A	62	75.355	32.158	11.467	1.00	0.04
H										
ATOM	951	HE1	TRP	A	62	79.960	33.247	10.406	1.00	0.22
H										
ATOM	952	HD1	TRP	A	62	78.106	32.067	11.632	1.00	0.08
H										
ATOM	953	HZ2	TRP	A	62	80.325	35.364	8.682	1.00	0.05
H										
ATOM	954	HH2	TRP	A	62	79.036	37.016	7.339	1.00	0.05
H										
ATOM	955	HZ3	TRP	A	62	76.562	37.162	7.543	1.00	0.05
H										
ATOM	956	HE3	TRP	A	62	75.325	35.588	9.044	1.00	0.05
H										
ATOM	957	H	TRP	A	62	76.553	32.869	13.493	1.00	0.19
H										
ATOM	958	N	HIS	A	63	73.117	35.284	12.197	1.00	-0.26
N										
ATOM	959	CA	HIS	A	63	71.724	35.543	12.555	1.00	0.14
C										
ATOM	960	C	HIS	A	63	70.968	35.626	11.243	1.00	0.21
C										
ATOM	961	O	HIS	A	63	71.578	36.131	10.313	1.00	-0.39
O										
ATOM	962	CB	HIS	A	63	71.619	36.885	13.335	1.00	0.04
C										
ATOM	963	CG	HIS	A	63	72.193	36.883	14.738	1.00	0.09
C										

ATOM	964	CD2	HIS	A	63	72.397	35.797	15.511	1.00	-0.03
C										
ATOM	965	CE1	HIS	A	63	72.975	37.634	16.598	1.00	0.12
C										
ATOM	966	NE2	HIS	A	63	72.914	36.388	16.709	1.00	-0.35
N										
ATOM	967	HB2	HIS	A	63	70.560	37.172	13.424	1.00	0.05
H										
ATOM	968	HB3	HIS	A	63	72.130	37.662	12.745	1.00	0.05
H										
ATOM	969	HD2	HIS	A	63	72.228	34.737	15.345	1.00	0.03
H										
ATOM	970	HE1	HIS	A	63	73.332	38.292	17.390	1.00	0.11
H										
ATOM	971	N1	HIS	A	63	72.550	38.038	15.390	1.00	-0.08
N										
ATOM	972	HA	HIS	A	63	71.325	34.733	13.177	1.00	0.08
H										
ATOM	973	H	HIS	A	63	73.514	35.887	11.503	1.00	0.19
H										
ATOM	974	N	PRO	A	64	69.696	35.175	11.073	1.00	-0.25
N										
ATOM	975	CA	PRO	A	64	69.052	35.300	9.770	1.00	0.13
C										
ATOM	976	C	PRO	A	64	69.156	36.663	9.123	1.00	0.20
C										
ATOM	977	O	PRO	A	64	69.256	36.738	7.908	1.00	-0.39
O										
ATOM	978	CB	PRO	A	64	67.580	35.041	10.178	1.00	-0.01
C										
ATOM	979	CG	PRO	A	64	67.687	34.055	11.361	1.00	-0.03
C										
ATOM	980	CD	PRO	A	64	68.923	34.559	12.145	1.00	0.04
C										
ATOM	981	HA	PRO	A	64	69.427	34.501	9.109	1.00	0.08
H										
ATOM	982	HD3	PRO	A	64	69.405	33.699	12.636	1.00	0.05
H										
ATOM	983	HD2	PRO	A	64	68.644	35.321	12.890	1.00	0.05
H										
ATOM	984	HG3	PRO	A	64	66.775	34.015	11.979	1.00	0.03
H										
ATOM	985	HG2	PRO	A	64	67.881	33.048	10.957	1.00	0.03
H										
ATOM	986	HB2	PRO	A	64	66.970	34.654	9.346	1.00	0.03
H										
ATOM	987	HB3	PRO	A	64	67.116	35.969	10.554	1.00	0.03
H										
ATOM	988	N	SER	A	65	69.101	37.749	9.926	1.00	-0.26
N										
ATOM	989	CA	SER	A	65	68.942	39.083	9.353	1.00	0.15
C										
ATOM	990	C	SER	A	65	70.054	39.497	8.414	1.00	0.21
C										

ATOM	991	O	SER	A	65	69.780	39.728	7.246	1.00	-0.39
O										
ATOM	992	CB	SER	A	65	68.848	40.145	10.481	1.00	0.08
C										
ATOM	993	OG	SER	A	65	70.028	40.051	11.297	1.00	-0.39
O										
ATOM	994	HA	SER	A	65	67.986	39.100	8.801	1.00	0.08
H										
ATOM	995	HB2	SER	A	65	67.953	39.948	11.097	1.00	0.06
H										
ATOM	996	HB3	SER	A	65	68.758	41.153	10.042	1.00	0.06
H										
ATOM	997	HG	SER	A	65	70.030	40.676	12.015	1.00	0.21
H										
ATOM	998	H	SER	A	65	69.069	37.652	10.923	1.00	0.19
H										
ATOM	999	N	GLU	A	66	71.305	39.643	8.905	1.00	-0.26
N										
ATOM	1000	CA	GLU	A	66	72.320	40.321	8.096	1.00	0.13
C										
ATOM	1001	C	GLU	A	66	72.772	39.442	6.954	1.00	0.20
C										
ATOM	1002	O	GLU	A	66	72.685	38.232	7.087	1.00	-0.39
O										
ATOM	1003	CB	GLU	A	66	73.557	40.779	8.916	1.00	-0.00
C										
ATOM	1004	CG	GLU	A	66	73.169	41.763	10.055	1.00	0.00
C										
ATOM	1005	CD	GLU	A	66	74.385	42.262	10.790	1.00	0.04
C										
ATOM	1006	OE1	GLU	A	66	75.254	41.422	11.146	1.00	-0.57
O										
ATOM	1007	OE2	GLU	A	66	74.489	43.498	11.019	1.00	-0.57
O										
ATOM	1008	HA	GLU	A	66	71.859	41.230	7.674	1.00	0.08
H										
ATOM	1009	HB2	GLU	A	66	74.267	41.287	8.243	1.00	0.03
H										
ATOM	1010	HB3	GLU	A	66	74.059	39.891	9.330	1.00	0.03
H										
ATOM	1011	HG2	GLU	A	66	72.518	41.278	10.796	1.00	0.04
H										
ATOM	1012	HG3	GLU	A	66	72.622	42.619	9.626	1.00	0.04
H										
ATOM	1013	H	GLU	A	66	71.528	39.341	9.834	1.00	0.19
H										
ATOM	1014	N	ASP	A	67	73.255	40.044	5.837	1.00	-0.26
N										
ATOM	1015	CA	ASP	A	67	73.728	39.254	4.702	1.00	0.14
C										
ATOM	1016	C	ASP	A	67	75.241	39.215	4.757	1.00	0.21
C										
ATOM	1017	O	ASP	A	67	75.800	40.278	4.972	1.00	-0.39
O										

ATOM	1018	CB	ASP	A	67	73.285	39.895	3.360	1.00	0.04
C										
ATOM	1019	CG	ASP	A	67	73.688	39.019	2.201	1.00	0.04
C										
ATOM	1020	OD1	ASP	A	67	72.798	38.354	1.603	1.00	-0.57
O										
ATOM	1021	OD2	ASP	A	67	74.906	38.984	1.883	1.00	-0.57
O										
ATOM	1022	HA	ASP	A	67	73.251	38.263	4.714	1.00	0.08
H										
ATOM	1023	HB2	ASP	A	67	73.747	40.886	3.238	1.00	0.05
H										
ATOM	1024	HB3	ASP	A	67	72.191	40.032	3.366	1.00	0.05
H										
ATOM	1025	H	ASP	A	67	73.336	41.041	5.773	1.00	0.19
H										
ATOM	1026	N	PRO	A	68	75.958	38.077	4.569	1.00	-0.25
N										
ATOM	1027	CA	PRO	A	68	77.415	38.120	4.536	1.00	0.13
C										
ATOM	1028	C	PRO	A	68	78.049	39.256	3.763	1.00	0.20
C										
ATOM	1029	O	PRO	A	68	78.998	39.838	4.264	1.00	-0.39
O										
ATOM	1030	CB	PRO	A	68	77.683	36.747	3.880	1.00	-0.01
C										
ATOM	1031	CG	PRO	A	68	76.565	35.848	4.450	1.00	-0.03
C										
ATOM	1032	CD	PRO	A	68	75.325	36.772	4.421	1.00	0.04
C										
ATOM	1033	HA	PRO	A	68	77.779	38.129	5.574	1.00	0.08
H										
ATOM	1034	HD3	PRO	A	68	74.643	36.506	5.245	1.00	0.05
H										
ATOM	1035	HD2	PRO	A	68	74.803	36.714	3.454	1.00	0.05
H										
ATOM	1036	HG3	PRO	A	68	76.425	34.910	3.891	1.00	0.03
H										
ATOM	1037	HG2	PRO	A	68	76.808	35.601	5.494	1.00	0.03
H										
ATOM	1038	HB2	PRO	A	68	78.699	36.383	4.094	1.00	0.03
H										
ATOM	1039	HB3	PRO	A	68	77.536	36.809	2.791	1.00	0.03
H										
ATOM	1040	N	TRP	A	69	77.555	39.598	2.552	1.00	-0.26
N										
ATOM	1041	CA	TRP	A	69	78.146	40.715	1.814	1.00	0.14
C										
ATOM	1042	C	TRP	A	69	78.196	41.953	2.681	1.00	0.21
C										
ATOM	1043	O	TRP	A	69	79.232	42.599	2.730	1.00	-0.39
O										
ATOM	1044	CB	TRP	A	69	77.352	41.039	0.521	1.00	0.00
C										

ATOM	1045	CG	TRP	A	69	77.538	39.971	-0.524	1.00	-0.04
C										
ATOM	1046	CD1	TRP	A	69	76.650	39.062	-0.961	1.00	0.02
C										
ATOM	1047	CD2	TRP	A	69	78.806	39.751	-1.309	1.00	-0.02
C										
ATOM	1048	NE1	TRP	A	69	77.195	38.336	-1.905	1.00	-0.29
N										
ATOM	1049	CE2	TRP	A	69	78.459	38.723	-2.164	1.00	0.06
C										
ATOM	1050	CE3	TRP	A	69	80.070	40.335	-1.325	1.00	-0.07
C										
ATOM	1051	CZ2	TRP	A	69	79.348	38.249	-3.127	1.00	-0.04
C										
ATOM	1052	CZ3	TRP	A	69	80.986	39.845	-2.264	1.00	-0.08
C										
ATOM	1053	CH2	TRP	A	69	80.624	38.827	-3.161	1.00	-0.08
C										
ATOM	1054	HA	TRP	A	69	79.178	40.446	1.538	1.00	0.08
H										
ATOM	1055	HB2	TRP	A	69	77.722	41.981	0.085	1.00	0.04
H										
ATOM	1056	HB3	TRP	A	69	76.285	41.167	0.757	1.00	0.04
H										
ATOM	1057	HE1	TRP	A	69	76.712	37.571	-2.400	1.00	0.22
H										
ATOM	1058	HD1	TRP	A	69	75.630	38.947	-0.597	1.00	0.08
H										
ATOM	1059	HZ2	TRP	A	69	79.059	37.474	-3.825	1.00	0.05
H										
ATOM	1060	HH2	TRP	A	69	81.342	38.476	-3.894	1.00	0.05
H										
ATOM	1061	HZ3	TRP	A	69	81.989	40.258	-2.294	1.00	0.05
H										
ATOM	1062	HE3	TRP	A	69	80.319	41.133	-0.639	1.00	0.05
H										
ATOM	1063	H	TRP	A	69	76.785	39.100	2.151	1.00	0.19
H										
ATOM	1064	N	GLU	A	70	77.088	42.294	3.377	1.00	-0.26
N										
ATOM	1065	CA	GLU	A	70	77.110	43.472	4.243	1.00	0.13
C										
ATOM	1066	C	GLU	A	70	78.210	43.322	5.265	1.00	0.20
C										
ATOM	1067	O	GLU	A	70	78.911	44.289	5.508	1.00	-0.39
O										
ATOM	1068	CB	GLU	A	70	75.796	43.691	5.042	1.00	-0.00
C										
ATOM	1069	CG	GLU	A	70	74.599	44.072	4.136	1.00	0.00
C										
ATOM	1070	CD	GLU	A	70	73.370	44.242	4.992	1.00	0.04
C										
ATOM	1071	OE1	GLU	A	70	72.759	43.203	5.367	1.00	-0.57
O										

ATOM	1072	OE2	GLU	A	70	73.012	45.410	5.303	1.00	-0.57
O										
ATOM	1073	HA	GLU	A	70	77.312	44.366	3.631	1.00	0.08
H										
ATOM	1074	HB2	GLU	A	70	75.947	44.512	5.765	1.00	0.03
H										
ATOM	1075	HB3	GLU	A	70	75.553	42.780	5.610	1.00	0.03
H										
ATOM	1076	HG2	GLU	A	70	74.404	43.290	3.388	1.00	0.04
H										
ATOM	1077	HG3	GLU	A	70	74.820	45.006	3.599	1.00	0.04
H										
ATOM	1078	H	GLU	A	70	76.258	41.738	3.328	1.00	0.19
H										
ATOM	1079	N	GLN	A	71	78.364	42.129	5.880	1.00	-0.26
N										
ATOM	1080	CA	GLN	A	71	79.346	41.988	6.949	1.00	0.13
C										
ATOM	1081	C	GLN	A	71	80.727	42.350	6.450	1.00	0.20
C										
ATOM	1082	O	GLN	A	71	81.449	43.038	7.155	1.00	-0.39
O										
ATOM	1083	CB	GLN	A	71	79.357	40.566	7.572	1.00	0.00
C										
ATOM	1084	CG	GLN	A	71	78.012	40.145	8.228	1.00	0.04
C										
ATOM	1085	CD	GLN	A	71	77.612	41.145	9.286	1.00	0.17
C										
ATOM	1086	OE1	GLN	A	71	77.966	40.954	10.440	1.00	-0.40
O										
ATOM	1087	NE2	GLN	A	71	76.891	42.229	8.925	1.00	-0.30
N										
ATOM	1088	HA	GLN	A	71	79.093	42.708	7.740	1.00	0.08
H										
ATOM	1089	HB2	GLN	A	71	80.116	40.560	8.367	1.00	0.03
H										
ATOM	1090	HB3	GLN	A	71	79.647	39.826	6.810	1.00	0.03
H										
ATOM	1091	HG2	GLN	A	71	78.135	39.157	8.698	1.00	0.05
H										
ATOM	1092	HG3	GLN	A	71	77.209	40.042	7.483	1.00	0.05
H										
ATOM	1093	HE22	GLN	A	71	76.598	42.375	7.981	1.00	0.18
H										
ATOM	1094	HE21	GLN	A	71	76.649	42.911	9.614	1.00	0.18
H										
ATOM	1095	H	GLN	A	71	77.797	41.346	5.626	1.00	0.19
H										
ATOM	1096	N	HIS	A	72	81.114	41.904	5.234	1.00	-0.26
N										
ATOM	1097	CA	HIS	A	72	82.456	42.216	4.742	1.00	0.14
C										
ATOM	1098	C	HIS	A	72	82.657	43.719	4.710	1.00	0.21
C										

ATOM	1099	O	HIS	A	72	83.675	44.193	5.190	1.00	-0.39
O										
ATOM	1100	CB	HIS	A	72	82.708	41.552	3.360	1.00	0.05
C										
ATOM	1101	CG	HIS	A	72	84.177	41.544	3.019	1.00	0.11
C										
ATOM	1102	ND1	HIS	A	72	84.883	40.762	2.262	1.00	-0.13
N										
ATOM	1103	CD2	HIS	A	72	85.267	42.283	3.353	1.00	0.14
C										
ATOM	1104	CE1	HIS	A	72	86.135	40.768	1.998	1.00	0.12
C										
ATOM	1105	NE2	HIS	A	72	86.476	41.774	2.698	1.00	-0.31
N										
ATOM	1106	HA	HIS	A	72	83.172	41.783	5.461	1.00	0.08
H										
ATOM	1107	HB2	HIS	A	72	82.110	42.037	2.575	1.00	0.05
H										
ATOM	1108	HB3	HIS	A	72	82.388	40.498	3.393	1.00	0.05
H										
ATOM	1109	HD2	HIS	A	72	85.440	41.476	2.692	1.00	0.85
H										
ATOM	1110	HE1	HIS	A	72	86.709	40.089	1.356	1.00	0.12
H										
ATOM	1111	H	HIS	A	72	80.500	41.346	4.671	1.00	0.19
H										
ATOM	1112	N	ALA	A	73	81.688	44.492	4.166	1.00	-0.26
N										
ATOM	1113	CA	ALA	A	73	81.808	45.952	4.200	1.00	0.13
C										
ATOM	1114	C	ALA	A	73	81.805	46.459	5.623	1.00	0.20
C										
ATOM	1115	O	ALA	A	73	82.610	47.310	5.967	1.00	-0.39
O										
ATOM	1116	CB	ALA	A	73	80.597	46.655	3.527	1.00	-0.02
C										
ATOM	1117	HA	ALA	A	73	82.737	46.261	3.694	1.00	0.08
H										
ATOM	1118	HB1	ALA	A	73	80.500	46.385	2.468	1.00	0.03
H										
ATOM	1119	HB2	ALA	A	73	80.710	47.748	3.599	1.00	0.03
H										
ATOM	1120	HB3	ALA	A	73	79.661	46.374	4.030	1.00	0.03
H										
ATOM	1121	H	ALA	A	73	80.867	44.077	3.766	1.00	0.19
H										
ATOM	1122	N	LYS	A	74	80.864	45.953	6.448	1.00	-0.26
N										
ATOM	1123	CA	LYS	A	74	80.620	46.543	7.760	1.00	0.13
C										
ATOM	1124	C	LYS	A	74	81.872	46.499	8.598	1.00	0.20
C										
ATOM	1125	O	LYS	A	74	82.120	47.456	9.315	1.00	-0.39
O										

ATOM	1126	CB	LYS	A	74	79.469	45.787	8.481	1.00	-0.01
C										
ATOM	1127	CG	LYS	A	74	78.926	46.528	9.732	1.00	-0.04
C										
ATOM	1128	CD	LYS	A	74	77.694	45.770	10.301	1.00	-0.01
C										
ATOM	1129	CE	LYS	A	74	77.054	46.506	11.509	1.00	-0.04
C										
ATOM	1130	NZ	LYS	A	74	75.910	45.737	12.054	1.00	0.22
N										
ATOM	1131	HA	LYS	A	74	80.308	47.588	7.596	1.00	0.08
H										
ATOM	1132	HB2	LYS	A	74	79.819	44.784	8.768	1.00	0.03
H										
ATOM	1133	HB3	LYS	A	74	78.628	45.673	7.777	1.00	0.03
H										
ATOM	1134	HG2	LYS	A	74	78.622	47.549	9.451	1.00	0.03
H										
ATOM	1135	HG3	LYS	A	74	79.715	46.597	10.498	1.00	0.03
H										
ATOM	1136	HD2	LYS	A	74	78.007	44.761	10.608	1.00	0.03
H										
ATOM	1137	HD3	LYS	A	74	76.926	45.665	9.517	1.00	0.03
H										
ATOM	1138	HE2	LYS	A	74	76.707	47.502	11.184	1.00	0.08
H										
ATOM	1139	HE3	LYS	A	74	77.811	46.653	12.295	1.00	0.08
H										
ATOM	1140	HZ1	LYS	A	74	75.463	46.243	12.899	1.00	0.20
H										
ATOM	1141	HZ2	LYS	A	74	76.201	44.752	12.392	1.00	0.20
H										
ATOM	1142	HZ3	LYS	A	74	75.130	45.600	11.316	1.00	0.20
H										
ATOM	1143	H	LYS	A	74	80.281	45.202	6.143	1.00	0.19
H										
ATOM	1144	N	TRP	A	75	82.660	45.401	8.521	1.00	-0.26
N										
ATOM	1145	CA	TRP	A	75	83.843	45.265	9.371	1.00	0.14
C										
ATOM	1146	C	TRP	A	75	85.156	45.430	8.638	1.00	0.21
C										
ATOM	1147	O	TRP	A	75	86.155	45.513	9.336	1.00	-0.39
O										
ATOM	1148	CB	TRP	A	75	83.758	43.888	10.074	1.00	0.00
C										
ATOM	1149	CG	TRP	A	75	82.394	43.741	10.697	1.00	-0.04
C										
ATOM	1150	CD1	TRP	A	75	81.444	42.858	10.351	1.00	0.02
C										
ATOM	1151	CD2	TRP	A	75	81.830	44.573	11.820	1.00	-0.02
C										
ATOM	1152	NE1	TRP	A	75	80.377	43.054	11.079	1.00	-0.29
N										

ATOM	1153	CE2	TRP	A	75	80.554	44.061	11.957	1.00	0.06
C										
ATOM	1154	CE3	TRP	A	75	82.303	45.606	12.629	1.00	-0.07
C										
ATOM	1155	CZ2	TRP	A	75	79.659	44.570	12.896	1.00	-0.04
C										
ATOM	1156	CZ3	TRP	A	75	81.410	46.132	13.571	1.00	-0.08
C										
ATOM	1157	CH2	TRP	A	75	80.110	45.622	13.704	1.00	-0.08
C										
ATOM	1158	HA	TRP	A	75	83.845	46.030	10.163	1.00	0.08
H										
ATOM	1159	HB2	TRP	A	75	84.542	43.774	10.839	1.00	0.04
H										
ATOM	1160	HB3	TRP	A	75	83.881	43.100	9.318	1.00	0.04
H										
ATOM	1161	HE1	TRP	A	75	79.508	42.507	10.991	1.00	0.22
H										
ATOM	1162	HD1	TRP	A	75	81.551	42.102	9.576	1.00	0.08
H										
ATOM	1163	HZ2	TRP	A	75	78.660	44.165	12.996	1.00	0.05
H										
ATOM	1164	HH2	TRP	A	75	79.440	46.047	14.445	1.00	0.05
H										
ATOM	1165	HZ3	TRP	A	75	81.732	46.948	14.211	1.00	0.05
H										
ATOM	1166	HE3	TRP	A	75	83.316	45.982	12.537	1.00	0.05
H										
ATOM	1167	H	TRP	A	75	82.431	44.639	7.911	1.00	0.19
H										
ATOM	1168	N	TYR	A	76	85.219	45.489	7.283	1.00	-0.26
N										
ATOM	1169	CA	TYR	A	76	86.510	45.662	6.612	1.00	0.14
C										
ATOM	1170	C	TYR	A	76	86.404	46.512	5.362	1.00	0.21
C										
ATOM	1171	O	TYR	A	76	86.654	45.985	4.290	1.00	-0.39
O										
ATOM	1172	CB	TYR	A	76	87.093	44.255	6.304	1.00	0.02
C										
ATOM	1173	CG	TYR	A	76	87.223	43.463	7.611	1.00	-0.05
C										
ATOM	1174	CD1	TYR	A	76	86.239	42.542	7.987	1.00	-0.07
C										
ATOM	1175	CD2	TYR	A	76	88.324	43.668	8.449	1.00	-0.07
C										
ATOM	1176	CE1	TYR	A	76	86.312	41.900	9.226	1.00	-0.04
C										
ATOM	1177	CE2	TYR	A	76	88.399	43.019	9.685	1.00	-0.04
C										
ATOM	1178	CZ	TYR	A	76	87.383	42.151	10.092	1.00	0.08
C										
ATOM	1179	OH	TYR	A	76	87.458	41.547	11.352	1.00	-0.34
O										

ATOM	1180	HA	TYR	A	76	87.232	46.191	7.257	1.00	0.08
H										
ATOM	1181	HB3	TYR	A	76	86.431	43.724	5.602	1.00	0.05
H										
ATOM	1182	HB2	TYR	A	76	88.084	44.342	5.831	1.00	0.05
H										
ATOM	1183	HD2	TYR	A	76	89.122	44.337	8.146	1.00	0.05
H										
ATOM	1184	HE2	TYR	A	76	89.250	43.191	10.336	1.00	0.05
H										
ATOM	1185	HE1	TYR	A	76	85.530	41.204	9.512	1.00	0.05
H										
ATOM	1186	HD1	TYR	A	76	85.410	42.325	7.321	1.00	0.05
H										
ATOM	1187	HH	TYR	A	76	86.753	40.937	11.539	1.00	0.25
H										
ATOM	1188	H	TYR	A	76	84.409	45.391	6.704	1.00	0.19
H										
ATOM	1189	N	PRO	A	77	86.070	47.826	5.419	1.00	-0.25
N										
ATOM	1190	CA	PRO	A	77	86.148	48.649	4.218	1.00	0.13
C										
ATOM	1191	C	PRO	A	77	87.505	48.594	3.555	1.00	0.20
C										
ATOM	1192	O	PRO	A	77	87.563	48.513	2.338	1.00	-0.39
O										
ATOM	1193	CB	PRO	A	77	85.899	50.055	4.825	1.00	-0.01
C										
ATOM	1194	CG	PRO	A	77	85.011	49.751	6.049	1.00	-0.03
C										
ATOM	1195	CD	PRO	A	77	85.658	48.481	6.653	1.00	0.04
C										
ATOM	1196	HA	PRO	A	77	85.334	48.363	3.531	1.00	0.08
H										
ATOM	1197	HD3	PRO	A	77	84.927	47.924	7.256	1.00	0.05
H										
ATOM	1198	HD2	PRO	A	77	86.540	48.732	7.263	1.00	0.05
H										
ATOM	1199	HG3	PRO	A	77	84.945	50.587	6.765	1.00	0.03
H										
ATOM	1200	HG2	PRO	A	77	84.002	49.518	5.672	1.00	0.03
H										
ATOM	1201	HB2	PRO	A	77	85.433	50.757	4.117	1.00	0.03
H										
ATOM	1202	HB3	PRO	A	77	86.838	50.503	5.190	1.00	0.03
H										
ATOM	1203	N	GLY	A	78	88.605	48.652	4.344	1.00	-0.27
N										
ATOM	1204	CA	GLY	A	78	89.940	48.688	3.754	1.00	0.12
C										
ATOM	1205	C	GLY	A	78	90.334	47.308	3.291	1.00	0.20
C										
ATOM	1206	O	GLY	A	78	91.071	46.638	3.998	1.00	-0.39
O										

ATOM	1207	HA3	GLY	A	78	90.674	49.045	4.495	1.00	0.08
H										
ATOM	1208	HA2	GLY	A	78	89.970	49.394	2.909	1.00	0.08
H										
ATOM	1209	H	GLY	A	78	88.531	48.669	5.344	1.00	0.19
H										
ATOM	1210	N	CYS	A	79	89.843	46.866	2.109	1.00	-0.26
N										
ATOM	1211	CA	CYS	A	79	90.183	45.531	1.618	1.00	0.14
C										
ATOM	1212	C	CYS	A	79	89.951	45.456	0.124	1.00	0.20
C										
ATOM	1213	O	CYS	A	79	89.445	46.439	-0.395	1.00	-0.39
O										
ATOM	1214	CB	CYS	A	79	89.331	44.504	2.402	1.00	0.03
C										
ATOM	1215	SG	CYS	A	79	87.580	44.616	1.907	1.00	-0.17
S										
ATOM	1216	HA	CYS	A	79	91.255	45.335	1.792	1.00	0.08
H										
ATOM	1217	HB2	CYS	A	79	89.387	44.692	3.485	1.00	0.04
H										
ATOM	1218	HB3	CYS	A	79	89.717	43.495	2.220	1.00	0.04
H										
ATOM	1219	HG	CYS	A	79	87.681	44.351	0.941	1.00	0.10
H										
ATOM	1220	LPG1	CYS	A	79	87.188	44.182	2.252	1.00	0.00
LP										
ATOM	1221	LPG2	CYS	A	79	87.335	45.246	1.975	1.00	0.00
LP										
ATOM	1222	H	CYS	A	79	89.215	47.428	1.567	1.00	0.19
H										
ATOM	1223	N	LYS	A	80	90.305	44.347	-0.579	1.00	-0.26
N										
ATOM	1224	CA	LYS	A	80	90.205	44.324	-2.043	1.00	0.13
C										
ATOM	1225	C	LYS	A	80	89.138	43.391	-2.586	1.00	0.20
C										
ATOM	1226	O	LYS	A	80	88.314	43.861	-3.352	1.00	-0.39
O										
ATOM	1227	CB	LYS	A	80	91.583	43.996	-2.679	1.00	-0.01
C										
ATOM	1228	CG	LYS	A	80	91.616	44.410	-4.175	1.00	-0.04
C										
ATOM	1229	CD	LYS	A	80	92.983	44.128	-4.850	1.00	-0.01
C										
ATOM	1230	CE	LYS	A	80	92.951	44.576	-6.337	1.00	-0.04
C										
ATOM	1231	NZ	LYS	A	80	94.231	44.299	-7.027	1.00	0.22
N										
ATOM	1232	HA	LYS	A	80	89.966	45.338	-2.396	1.00	0.08
H										
ATOM	1233	HB2	LYS	A	80	91.807	42.925	-2.578	1.00	0.03
H										

ATOM	1234	HB3	LYS	A	80	92.355	44.560	-2.140	1.00	0.03
H										
ATOM	1235	HG2	LYS	A	80	91.398	45.486	-4.272	1.00	0.03
H										
ATOM	1236	HG3	LYS	A	80	90.835	43.846	-4.703	1.00	0.03
H										
ATOM	1237	HD2	LYS	A	80	93.204	43.049	-4.794	1.00	0.03
H										
ATOM	1238	HD3	LYS	A	80	93.776	44.677	-4.317	1.00	0.03
H										
ATOM	1239	HE2	LYS	A	80	92.735	45.657	-6.385	1.00	0.08
H										
ATOM	1240	HE3	LYS	A	80	92.137	44.048	-6.861	1.00	0.08
H										
ATOM	1241	HZ1	LYS	A	80	94.202	44.630	-8.057	1.00	0.20
H										
ATOM	1242	HZ2	LYS	A	80	94.458	43.241	-7.034	1.00	0.20
H										
ATOM	1243	HZ3	LYS	A	80	95.058	44.808	-6.553	1.00	0.20
H										
ATOM	1244	H	LYS	A	80	90.694	43.547	-0.121	1.00	0.19
H										
ATOM	1245	N	TYR	A	81	89.118	42.079	-2.251	1.00	-0.26
N										
ATOM	1246	CA	TYR	A	81	88.115	41.181	-2.838	1.00	0.14
C										
ATOM	1247	C	TYR	A	81	86.747	41.826	-2.880	1.00	0.21
C										
ATOM	1248	O	TYR	A	81	86.144	41.874	-3.939	1.00	-0.39
O										
ATOM	1249	CB	TYR	A	81	88.022	39.837	-2.065	1.00	0.02
C										
ATOM	1250	CG	TYR	A	81	86.856	38.965	-2.556	1.00	-0.05
C										
ATOM	1251	CD1	TYR	A	81	86.985	38.222	-3.733	1.00	-0.07
C										
ATOM	1252	CD2	TYR	A	81	85.659	38.888	-1.833	1.00	-0.07
C										
ATOM	1253	CE1	TYR	A	81	85.995	37.306	-4.100	1.00	-0.04
C										
ATOM	1254	CE2	TYR	A	81	84.652	37.997	-2.217	1.00	-0.04
C										
ATOM	1255	CZ	TYR	A	81	84.831	37.178	-3.339	1.00	0.08
C										
ATOM	1256	OH	TYR	A	81	83.869	36.237	-3.717	1.00	-0.34
O										
ATOM	1257	HA	TYR	A	81	88.428	40.958	-3.872	1.00	0.08
H										
ATOM	1258	HB3	TYR	A	81	88.966	39.283	-2.186	1.00	0.05
H										
ATOM	1259	HB2	TYR	A	81	87.892	40.029	-0.992	1.00	0.05
H										
ATOM	1260	HD2	TYR	A	81	85.503	39.520	-0.964	1.00	0.05
H										

ATOM	1261	HE2	TYR	A	81	83.735	37.947	-1.638	1.00	0.05
H										
ATOM	1262	HE1	TYR	A	81	86.129	36.688	-4.982	1.00	0.05
H										
ATOM	1263	HD1	TYR	A	81	87.860	38.348	-4.363	1.00	0.05
H										
ATOM	1264	HH	TYR	A	81	83.123	36.186	-3.131	1.00	0.25
H										
ATOM	1265	H	TYR	A	81	89.821	41.692	-1.653	1.00	0.19
H										
ATOM	1266	N	LEU	A	82	86.243	42.343	-1.739	1.00	-0.26
N										
ATOM	1267	CA	LEU	A	82	84.936	42.994	-1.748	1.00	0.13
C										
ATOM	1268	C	LEU	A	82	84.940	44.156	-2.715	1.00	0.20
C										
ATOM	1269	O	LEU	A	82	84.045	44.233	-3.540	1.00	-0.39
O										
ATOM	1270	CB	LEU	A	82	84.583	43.522	-0.333	1.00	-0.01
C										
ATOM	1271	CG	LEU	A	82	83.289	44.382	-0.268	1.00	-0.04
C										
ATOM	1272	CD1	LEU	A	82	82.023	43.547	-0.596	1.00	-0.06
C										
ATOM	1273	CD2	LEU	A	82	83.168	44.984	1.154	1.00	-0.06
C										
ATOM	1274	HA	LEU	A	82	84.191	42.242	-2.054	1.00	0.08
H										
ATOM	1275	HB2	LEU	A	82	85.416	44.151	0.010	1.00	0.03
H										
ATOM	1276	HB3	LEU	A	82	84.498	42.668	0.356	1.00	0.03
H										
ATOM	1277	HG	LEU	A	82	83.352	45.224	-0.979	1.00	0.03
H										
ATOM	1278	HD21	LEU	A	82	83.075	44.189	1.905	1.00	0.02
H										
ATOM	1279	HD22	LEU	A	82	82.276	45.620	1.195	1.00	0.02
H										
ATOM	1280	HD23	LEU	A	82	84.051	45.591	1.406	1.00	0.02
H										
ATOM	1281	HD11	LEU	A	82	81.967	42.690	0.089	1.00	0.02
H										
ATOM	1282	HD12	LEU	A	82	82.047	43.177	-1.631	1.00	0.02
H										
ATOM	1283	HD13	LEU	A	82	81.114	44.153	-0.472	1.00	0.02
H										
ATOM	1284	H	LEU	A	82	86.757	42.291	-0.884	1.00	0.19
H										
ATOM	1285	N	LEU	A	83	85.932	45.073	-2.621	1.00	-0.26
N										
ATOM	1286	CA	LEU	A	83	85.954	46.235	-3.512	1.00	0.13
C										
ATOM	1287	C	LEU	A	83	85.777	45.790	-4.945	1.00	0.20
C										

ATOM	1288	O	LEU	A	83	85.000	46.394	-5.667	1.00	-0.39
O										
ATOM	1289	CB	LEU	A	83	87.298	47.006	-3.367	1.00	-0.01
C										
ATOM	1290	CG	LEU	A	83	87.518	48.171	-4.374	1.00	-0.04
C										
ATOM	1291	CD1	LEU	A	83	86.459	49.291	-4.199	1.00	-0.06
C										
ATOM	1292	CD2	LEU	A	83	88.947	48.760	-4.191	1.00	-0.06
C										
ATOM	1293	HA	LEU	A	83	85.118	46.891	-3.218	1.00	0.08
H										
ATOM	1294	HB2	LEU	A	83	88.112	46.292	-3.541	1.00	0.03
H										
ATOM	1295	HB3	LEU	A	83	87.388	47.383	-2.335	1.00	0.03
H										
ATOM	1296	HG	LEU	A	83	87.450	47.785	-5.406	1.00	0.03
H										
ATOM	1297	HD21	LEU	A	83	89.075	49.152	-3.170	1.00	0.02
H										
ATOM	1298	HD22	LEU	A	83	89.120	49.580	-4.903	1.00	0.02
H										
ATOM	1299	HD23	LEU	A	83	89.714	47.988	-4.366	1.00	0.02
H										
ATOM	1300	HD11	LEU	A	83	86.478	49.683	-3.171	1.00	0.02
H										
ATOM	1301	HD12	LEU	A	83	85.447	48.929	-4.423	1.00	0.02
H										
ATOM	1302	HD13	LEU	A	83	86.687	50.110	-4.897	1.00	0.02
H										
ATOM	1303	H	LEU	A	83	86.651	44.979	-1.930	1.00	0.19
H										
ATOM	1304	N	GLU	A	84	86.487	44.726	-5.378	1.00	-0.26
N										
ATOM	1305	CA	GLU	A	84	86.343	44.262	-6.756	1.00	0.13
C										
ATOM	1306	C	GLU	A	84	84.934	43.761	-6.984	1.00	0.20
C										
ATOM	1307	O	GLU	A	84	84.360	44.061	-8.019	1.00	-0.39
O										
ATOM	1308	CB	GLU	A	84	87.340	43.114	-7.079	1.00	-0.00
C										
ATOM	1309	CG	GLU	A	84	88.806	43.624	-7.099	1.00	0.00
C										
ATOM	1310	CD	GLU	A	84	89.761	42.459	-7.146	1.00	0.04
C										
ATOM	1311	OE1	GLU	A	84	89.925	41.782	-6.095	1.00	-0.57
O										
ATOM	1312	OE2	GLU	A	84	90.356	42.208	-8.230	1.00	-0.57
O										
ATOM	1313	HA	GLU	A	84	86.545	45.102	-7.443	1.00	0.08
H										
ATOM	1314	HB2	GLU	A	84	87.109	42.679	-8.065	1.00	0.03
H										

ATOM	1315	HB3	GLU	A	84	87.228	42.318	-6.325	1.00	0.03
H										
ATOM	1316	HG2	GLU	A	84	89.017	44.220	-6.200	1.00	0.04
H										
ATOM	1317	HG3	GLU	A	84	88.960	44.280	-7.972	1.00	0.04
H										
ATOM	1318	H	GLU	A	84	87.093	44.231	-4.753	1.00	0.19
H										
ATOM	1319	N	GLN	A	85	84.368	42.982	-6.036	1.00	-0.26
N										
ATOM	1320	CA	GLN	A	85	83.055	42.381	-6.267	1.00	0.13
C										
ATOM	1321	C	GLN	A	85	81.964	43.432	-6.254	1.00	0.20
C										
ATOM	1322	O	GLN	A	85	81.291	43.575	-7.263	1.00	-0.39
O										
ATOM	1323	CB	GLN	A	85	82.746	41.257	-5.236	1.00	0.00
C										
ATOM	1324	CG	GLN	A	85	83.696	40.036	-5.410	1.00	0.04
C										
ATOM	1325	CD	GLN	A	85	83.451	39.259	-6.683	1.00	0.17
C										
ATOM	1326	OE1	GLN	A	85	82.363	39.331	-7.232	1.00	-0.40
O										
ATOM	1327	NE2	GLN	A	85	84.449	38.491	-7.176	1.00	-0.30
N										
ATOM	1328	HA	GLN	A	85	83.064	41.909	-7.264	1.00	0.08
H										
ATOM	1329	HB2	GLN	A	85	81.700	40.926	-5.340	1.00	0.03
H										
ATOM	1330	HB3	GLN	A	85	82.865	41.662	-4.220	1.00	0.03
H										
ATOM	1331	HG2	GLN	A	85	83.548	39.342	-4.570	1.00	0.05
H										
ATOM	1332	HG3	GLN	A	85	84.743	40.369	-5.384	1.00	0.05
H										
ATOM	1333	HE22	GLN	A	85	85.339	38.438	-6.723	1.00	0.18
H										
ATOM	1334	HE21	GLN	A	85	84.302	37.966	-8.015	1.00	0.18
H										
ATOM	1335	H	GLN	A	85	84.842	42.796	-5.174	1.00	0.19
H										
ATOM	1336	N	LYS	A	86	81.758	44.158	-5.129	1.00	-0.26
N										
ATOM	1337	CA	LYS	A	86	80.615	45.070	-5.015	1.00	0.13
C										
ATOM	1338	C	LYS	A	86	80.949	46.521	-5.299	1.00	0.20
C										
ATOM	1339	O	LYS	A	86	80.018	47.251	-5.603	1.00	-0.39
O										
ATOM	1340	CB	LYS	A	86	79.979	44.935	-3.605	1.00	-0.01
C										
ATOM	1341	CG	LYS	A	86	79.477	43.499	-3.279	1.00	-0.04
C										

ATOM	1342	CD	LYS	A	86	78.242	43.080	-4.128	1.00	-0.01
C										
ATOM	1343	CE	LYS	A	86	77.684	41.706	-3.673	1.00	-0.04
C										
ATOM	1344	NZ	LYS	A	86	76.495	41.297	-4.454	1.00	0.22
N										
ATOM	1345	HA	LYS	A	86	79.841	44.804	-5.751	1.00	0.08
H										
ATOM	1346	HB2	LYS	A	86	79.117	45.613	-3.532	1.00	0.03
H										
ATOM	1347	HB3	LYS	A	86	80.725	45.251	-2.857	1.00	0.03
H										
ATOM	1348	HG2	LYS	A	86	79.187	43.476	-2.215	1.00	0.03
H										
ATOM	1349	HG3	LYS	A	86	80.288	42.768	-3.424	1.00	0.03
H										
ATOM	1350	HD2	LYS	A	86	78.511	42.995	-5.191	1.00	0.03
H										
ATOM	1351	HD3	LYS	A	86	77.448	43.837	-4.027	1.00	0.03
H										
ATOM	1352	HE2	LYS	A	86	77.410	41.766	-2.608	1.00	0.08
H										
ATOM	1353	HE3	LYS	A	86	78.478	40.951	-3.795	1.00	0.08
H										
ATOM	1354	HZ1	LYS	A	86	76.124	40.336	-4.122	1.00	0.20
H										
ATOM	1355	HZ2	LYS	A	86	76.717	41.206	-5.508	1.00	0.20
H										
ATOM	1356	HZ3	LYS	A	86	75.684	42.005	-4.349	1.00	0.20
H										
ATOM	1357	H	LYS	A	86	82.367	44.061	-4.341	1.00	0.19
H										
ATOM	1358	N	GLY	A	87	82.221	46.980	-5.226	1.00	-0.27
N										
ATOM	1359	CA	GLY	A	87	82.532	48.363	-5.600	1.00	0.12
C										
ATOM	1360	C	GLY	A	87	82.616	49.282	-4.406	1.00	0.20
C										
ATOM	1361	O	GLY	A	87	82.367	48.848	-3.292	1.00	-0.39
O										
ATOM	1362	HA3	GLY	A	87	81.788	48.772	-6.301	1.00	0.08
H										
ATOM	1363	HA2	GLY	A	87	83.502	48.391	-6.121	1.00	0.08
H										
ATOM	1364	H	GLY	A	87	82.975	46.395	-4.924	1.00	0.19
H										
ATOM	1365	N	GLN	A	88	82.974	50.567	-4.646	1.00	-0.26
N										
ATOM	1366	CA	GLN	A	88	83.085	51.527	-3.549	1.00	0.13
C										
ATOM	1367	C	GLN	A	88	81.711	51.903	-3.054	1.00	0.20
C										
ATOM	1368	O	GLN	A	88	81.515	51.944	-1.852	1.00	-0.39
O										

ATOM	1369	CB	GLN	A	88	83.764	52.865	-3.960	1.00	0.00
C										
ATOM	1370	CG	GLN	A	88	85.236	52.677	-4.404	1.00	0.04
C										
ATOM	1371	CD	GLN	A	88	85.868	54.013	-4.719	1.00	0.17
C										
ATOM	1372	OE1	GLN	A	88	86.688	54.480	-3.944	1.00	-0.40
O										
ATOM	1373	NE2	GLN	A	88	85.501	54.654	-5.851	1.00	-0.30
N										
ATOM	1374	HA	GLN	A	88	83.671	51.075	-2.730	1.00	0.08
H										
ATOM	1375	HB2	GLN	A	88	83.754	53.550	-3.095	1.00	0.03
H										
ATOM	1376	HB3	GLN	A	88	83.190	53.338	-4.773	1.00	0.03
H										
ATOM	1377	HG2	GLN	A	88	85.284	52.046	-5.304	1.00	0.05
H										
ATOM	1378	HG3	GLN	A	88	85.802	52.183	-3.598	1.00	0.05
H										
ATOM	1379	HE22	GLN	A	88	84.831	54.257	-6.480	1.00	0.18
H										
ATOM	1380	HE21	GLN	A	88	85.906	55.542	-6.072	1.00	0.18
H										
ATOM	1381	H	GLN	A	88	83.140	50.885	-5.581	1.00	0.19
H										
ATOM	1382	N	GLU	A	89	80.754	52.210	-3.959	1.00	-0.26
N										
ATOM	1383	CA	GLU	A	89	79.467	52.726	-3.499	1.00	0.13
C										
ATOM	1384	C	GLU	A	89	78.813	51.740	-2.561	1.00	0.20
C										
ATOM	1385	O	GLU	A	89	78.157	52.179	-1.631	1.00	-0.39
O										
ATOM	1386	CB	GLU	A	89	78.483	53.072	-4.651	1.00	-0.00
C										
ATOM	1387	CG	GLU	A	89	79.022	54.172	-5.608	1.00	0.00
C										
ATOM	1388	CD	GLU	A	89	79.477	55.390	-4.844	1.00	0.04
C										
ATOM	1389	OE1	GLU	A	89	78.601	56.191	-4.421	1.00	-0.57
O										
ATOM	1390	OE2	GLU	A	89	80.714	55.552	-4.654	1.00	-0.57
O										
ATOM	1391	HA	GLU	A	89	79.668	53.644	-2.924	1.00	0.08
H										
ATOM	1392	HB2	GLU	A	89	77.542	53.434	-4.203	1.00	0.03
H										
ATOM	1393	HB3	GLU	A	89	78.258	52.159	-5.225	1.00	0.03
H										
ATOM	1394	HG2	GLU	A	89	78.223	54.468	-6.307	1.00	0.04
H										
ATOM	1395	HG3	GLU	A	89	79.857	53.788	-6.215	1.00	0.04
H										

ATOM	1396	H	GLU	A	89	80.923	52.116	-4.940	1.00	0.19
H										
ATOM	1397	N	TYR	A	90	78.975	50.415	-2.767	1.00	-0.26
N										
ATOM	1398	CA	TYR	A	90	78.415	49.464	-1.809	1.00	0.14
C										
ATOM	1399	C	TYR	A	90	79.092	49.647	-0.470	1.00	0.21
C										
ATOM	1400	O	TYR	A	90	78.401	49.788	0.526	1.00	-0.39
O										
ATOM	1401	CB	TYR	A	90	78.614	48.005	-2.287	1.00	0.02
C										
ATOM	1402	CG	TYR	A	90	78.016	47.011	-1.280	1.00	-0.05
C										
ATOM	1403	CD1	TYR	A	90	76.638	46.771	-1.280	1.00	-0.07
C										
ATOM	1404	CD2	TYR	A	90	78.828	46.332	-0.365	1.00	-0.07
C										
ATOM	1405	CE1	TYR	A	90	76.085	45.813	-0.426	1.00	-0.04
C										
ATOM	1406	CE2	TYR	A	90	78.278	45.361	0.478	1.00	-0.04
C										
ATOM	1407	CZ	TYR	A	90	76.909	45.080	0.436	1.00	0.08
C										
ATOM	1408	OH	TYR	A	90	76.389	44.074	1.255	1.00	-0.34
O										
ATOM	1409	HA	TYR	A	90	77.332	49.653	-1.710	1.00	0.08
H										
ATOM	1410	HB3	TYR	A	90	78.113	47.881	-3.261	1.00	0.05
H										
ATOM	1411	HB2	TYR	A	90	79.686	47.799	-2.434	1.00	0.05
H										
ATOM	1412	HD2	TYR	A	90	79.889	46.554	-0.306	1.00	0.05
H										
ATOM	1413	HE2	TYR	A	90	78.914	44.818	1.168	1.00	0.05
H										
ATOM	1414	HE1	TYR	A	90	75.013	45.644	-0.439	1.00	0.05
H										
ATOM	1415	HD1	TYR	A	90	75.989	47.328	-1.948	1.00	0.05
H										
ATOM	1416	HH	TYR	A	90	75.490	43.838	1.058	1.00	0.25
H										
ATOM	1417	H	TYR	A	90	79.496	50.070	-3.551	1.00	0.19
H										
ATOM	1418	N	ILE	A	91	80.445	49.652	-0.433	1.00	-0.26
N										
ATOM	1419	CA	ILE	A	91	81.146	49.824	0.841	1.00	0.13
C										
ATOM	1420	C	ILE	A	91	80.632	51.082	1.502	1.00	0.20
C										
ATOM	1421	O	ILE	A	91	80.274	51.052	2.670	1.00	-0.39
O										
ATOM	1422	CB	ILE	A	91	82.697	49.883	0.654	1.00	-0.00
C										

ATOM	1423	CG1	ILE	A	91	83.243	48.463	0.314	1.00	-0.05
C										
ATOM	1424	CG2	ILE	A	91	83.396	50.460	1.920	1.00	-0.06
C										
ATOM	1425	CD1	ILE	A	91	84.669	48.451	-0.304	1.00	-0.06
C										
ATOM	1426	HA	ILE	A	91	80.901	48.967	1.487	1.00	0.08
H										
ATOM	1427	HB	ILE	A	91	82.925	50.563	-0.182	1.00	0.03
H										
ATOM	1428	HG12	ILE	A	91	82.576	47.960	-0.405	1.00	0.03
H										
ATOM	1429	HG13	ILE	A	91	83.244	47.874	1.243	1.00	0.03
H										
ATOM	1430	HD11	ILE	A	91	84.687	49.047	-1.229	1.00	0.02
H										
ATOM	1431	HD12	ILE	A	91	84.959	47.417	-0.554	1.00	0.02
H										
ATOM	1432	HD13	ILE	A	91	85.422	48.850	0.390	1.00	0.02
H										
ATOM	1433	HG21	ILE	A	91	83.147	49.853	2.804	1.00	0.02
H										
ATOM	1434	HG22	ILE	A	91	83.085	51.499	2.112	1.00	0.02
H										
ATOM	1435	HG23	ILE	A	91	84.487	50.471	1.795	1.00	0.02
H										
ATOM	1436	H	ILE	A	91	80.977	49.559	-1.276	1.00	0.19
H										
ATOM	1437	N	ASN	A	92	80.599	52.201	0.747	1.00	-0.26
N										
ATOM	1438	CA	ASN	A	92	80.173	53.469	1.324	1.00	0.15
C										
ATOM	1439	C	ASN	A	92	78.758	53.339	1.832	1.00	0.21
C										
ATOM	1440	O	ASN	A	92	78.498	53.747	2.949	1.00	-0.39
O										
ATOM	1441	CB	ASN	A	92	80.234	54.617	0.278	1.00	0.08
C										
ATOM	1442	CG	ASN	A	92	81.584	54.736	-0.389	1.00	0.18
C										
ATOM	1443	OD1	ASN	A	92	82.520	54.062	0.014	1.00	-0.40
O										
ATOM	1444	ND2	ASN	A	92	81.710	55.594	-1.426	1.00	-0.30
N										
ATOM	1445	HA	ASN	A	92	80.854	53.718	2.157	1.00	0.08
H										
ATOM	1446	HB2	ASN	A	92	80.002	55.572	0.773	1.00	0.06
H										
ATOM	1447	HB3	ASN	A	92	79.477	54.440	-0.501	1.00	0.06
H										
ATOM	1448	HD22	ASN	A	92	80.932	56.138	-1.744	1.00	0.18
H										
ATOM	1449	HD21	ASN	A	92	82.592	55.692	-1.888	1.00	0.18
H										

ATOM	1450	H	ASN	A	92	80.878	52.179	-0.212	1.00	0.19
H										
ATOM	1451	N	ASN	A	93	77.826	52.778	1.032	1.00	-0.26
N										
ATOM	1452	CA	ASN	A	93	76.424	52.744	1.443	1.00	0.15
C										
ATOM	1453	C	ASN	A	93	76.266	52.101	2.801	1.00	0.21
C										
ATOM	1454	O	ASN	A	93	75.520	52.625	3.612	1.00	-0.39
O										
ATOM	1455	CB	ASN	A	93	75.553	51.953	0.427	1.00	0.08
C										
ATOM	1456	CG	ASN	A	93	74.082	51.950	0.773	1.00	0.18
C										
ATOM	1457	OD1	ASN	A	93	73.658	52.689	1.648	1.00	-0.40
O										
ATOM	1458	ND2	ASN	A	93	73.268	51.122	0.083	1.00	-0.30
N										
ATOM	1459	HA	ASN	A	93	76.062	53.786	1.478	1.00	0.08
H										
ATOM	1460	HB2	ASN	A	93	75.916	50.914	0.375	1.00	0.06
H										
ATOM	1461	HB3	ASN	A	93	75.656	52.407	-0.571	1.00	0.06
H										
ATOM	1462	HD22	ASN	A	93	73.626	50.526	-0.637	1.00	0.18
H										
ATOM	1463	HD21	ASN	A	93	72.288	51.101	0.289	1.00	0.18
H										
ATOM	1464	H	ASN	A	93	78.076	52.417	0.136	1.00	0.19
H										
ATOM	1465	N	ILE	A	94	76.947	50.965	3.070	1.00	-0.26
N										
ATOM	1466	CA	ILE	A	94	76.736	50.285	4.347	1.00	0.13
C										
ATOM	1467	C	ILE	A	94	77.188	51.196	5.468	1.00	0.20
C										
ATOM	1468	O	ILE	A	94	76.434	51.393	6.408	1.00	-0.39
O										
ATOM	1469	CB	ILE	A	94	77.427	48.886	4.419	1.00	-0.00
C										
ATOM	1470	CG1	ILE	A	94	77.022	47.934	3.244	1.00	-0.05
C										
ATOM	1471	CG2	ILE	A	94	77.163	48.213	5.799	1.00	-0.06
C										
ATOM	1472	CD1	ILE	A	94	75.504	47.894	2.921	1.00	-0.06
C										
ATOM	1473	HA	ILE	A	94	75.653	50.128	4.478	1.00	0.08
H										
ATOM	1474	HB	ILE	A	94	78.517	49.046	4.352	1.00	0.03
H										
ATOM	1475	HG12	ILE	A	94	77.340	46.908	3.482	1.00	0.03
H										
ATOM	1476	HG13	ILE	A	94	77.552	48.215	2.321	1.00	0.03
H										

ATOM	1477	HD11	ILE	A	94	74.916	47.652	3.819	1.00	0.02
H										
ATOM	1478	HD12	ILE	A	94	75.307	47.122	2.160	1.00	0.02
H										
ATOM	1479	HD13	ILE	A	94	75.160	48.856	2.513	1.00	0.02
H										
ATOM	1480	HG21	ILE	A	94	76.086	48.059	5.960	1.00	0.02
H										
ATOM	1481	HG22	ILE	A	94	77.551	48.834	6.621	1.00	0.02
H										
ATOM	1482	HG23	ILE	A	94	77.667	47.236	5.857	1.00	0.02
H										
ATOM	1483	H	ILE	A	94	77.595	50.587	2.408	1.00	0.19
H										
ATOM	1484	N	HIS	A	95	78.411	51.765	5.397	1.00	-0.26
N										
ATOM	1485	CA	HIS	A	95	78.882	52.621	6.488	1.00	0.16
C										
ATOM	1486	C	HIS	A	95	78.105	53.915	6.568	1.00	0.21
C										
ATOM	1487	O	HIS	A	95	77.767	54.323	7.667	1.00	-0.39
O										
ATOM	1488	CB	HIS	A	95	80.396	52.932	6.344	1.00	0.08
C										
ATOM	1489	CG	HIS	A	95	81.174	51.651	6.550	1.00	0.19
C										
ATOM	1490	ND1	HIS	A	95	81.270	51.346	7.980	1.00	-0.15
N										
ATOM	1491	CD2	HIS	A	95	81.522	50.975	7.599	1.00	0.33
C										
ATOM	1492	CE1	HIS	A	95	81.846	50.350	8.511	1.00	0.19
C										
ATOM	1493	NE2	HIS	A	95	82.231	49.823	7.476	1.00	-0.14
N										
ATOM	1494	HA	HIS	A	95	78.728	52.083	7.439	1.00	0.09
H										
ATOM	1495	HB2	HIS	A	95	80.706	53.701	7.070	1.00	0.07
H										
ATOM	1496	HB3	HIS	A	95	80.606	53.323	5.337	1.00	0.07
H										
ATOM	1497	HD2	HIS	A	95	80.962	51.799	8.504	1.00	0.90
H										
ATOM	1498	HE1	HIS	A	95	81.947	50.077	9.610	1.00	0.18
H										
ATOM	1499	HE2	HIS	A	95	82.695	49.016	7.924	1.00	0.28
H										
ATOM	1500	H	HIS	A	95	79.003	51.608	4.603	1.00	0.19
H										
ATOM	1501	N	LEU	A	96	77.812	54.580	5.431	1.00	-0.26
N										
ATOM	1502	CA	LEU	A	96	77.033	55.817	5.470	1.00	0.13
C										
ATOM	1503	C	LEU	A	96	75.676	55.531	6.071	1.00	0.20
C										

ATOM	1504	O	LEU	A	96	75.199	56.333	6.857	1.00	-0.39
O										
ATOM	1505	CB	LEU	A	96	76.810	56.434	4.059	1.00	-0.01
C										
ATOM	1506	CG	LEU	A	96	78.097	56.982	3.367	1.00	-0.04
C										
ATOM	1507	CD1	LEU	A	96	77.775	57.332	1.886	1.00	-0.06
C										
ATOM	1508	CD2	LEU	A	96	78.674	58.235	4.086	1.00	-0.06
C										
ATOM	1509	HA	LEU	A	96	77.549	56.539	6.119	1.00	0.08
H										
ATOM	1510	HB2	LEU	A	96	76.085	57.261	4.139	1.00	0.03
H										
ATOM	1511	HB3	LEU	A	96	76.354	55.653	3.429	1.00	0.03
H										
ATOM	1512	HG	LEU	A	96	78.883	56.209	3.365	1.00	0.03
H										
ATOM	1513	HD21	LEU	A	96	77.906	59.020	4.168	1.00	0.02
H										
ATOM	1514	HD22	LEU	A	96	79.525	58.641	3.518	1.00	0.02
H										
ATOM	1515	HD23	LEU	A	96	79.040	57.993	5.094	1.00	0.02
H										
ATOM	1516	HD11	LEU	A	96	76.986	58.098	1.837	1.00	0.02
H										
ATOM	1517	HD12	LEU	A	96	77.430	56.438	1.342	1.00	0.02
H										
ATOM	1518	HD13	LEU	A	96	78.668	57.720	1.372	1.00	0.02
H										
ATOM	1519	H	LEU	A	96	78.102	54.215	4.551	1.00	0.19
H										
ATOM	1520	N	THR	A	97	75.038	54.392	5.720	1.00	-0.26
N										
ATOM	1521	CA	THR	A	97	73.752	54.061	6.329	1.00	0.16
C										
ATOM	1522	C	THR	A	97	73.974	53.900	7.814	1.00	0.21
C										
ATOM	1523	O	THR	A	97	73.206	54.447	8.589	1.00	-0.39
O										
ATOM	1524	CB	THR	A	97	73.121	52.766	5.739	1.00	0.09
C										
ATOM	1525	OG1	THR	A	97	72.741	52.968	4.365	1.00	-0.39
O										
ATOM	1526	CG2	THR	A	97	71.839	52.359	6.511	1.00	-0.03
C										
ATOM	1527	HA	THR	A	97	73.049	54.892	6.148	1.00	0.08
H										
ATOM	1528	HB	THR	A	97	73.840	51.931	5.806	1.00	0.06
H										
ATOM	1529	HG1	THR	A	97	73.474	53.176	3.795	1.00	0.21
H										
ATOM	1530	HG23	THR	A	97	71.112	53.185	6.501	1.00	0.03
H										

ATOM	1531	HG21	THR	A	97	72.065	52.095	7.556	1.00	0.03
H										
ATOM	1532	HG22	THR	A	97	71.379	51.482	6.028	1.00	0.03
H										
ATOM	1533	H	THR	A	97	75.454	53.746	5.080	1.00	0.19
H										
ATOM	1534	N	HIS	A	98	75.023	53.155	8.230	1.00	-0.26
N										
ATOM	1535	CA	HIS	A	98	75.257	52.963	9.661	1.00	0.16
C										
ATOM	1536	C	HIS	A	98	75.539	54.297	10.322	1.00	0.21
C										
ATOM	1537	O	HIS	A	98	75.172	54.476	11.471	1.00	-0.39
O										
ATOM	1538	CB	HIS	A	98	76.421	51.968	9.930	1.00	0.08
C										
ATOM	1539	CG	HIS	A	98	76.258	51.269	11.259	1.00	0.19
C										
ATOM	1540	ND1	HIS	A	98	76.673	52.121	12.376	1.00	-0.15
N										
ATOM	1541	CD2	HIS	A	98	76.475	51.582	12.496	1.00	0.33
C										
ATOM	1542	CE1	HIS	A	98	76.656	51.814	13.607	1.00	0.19
C										
ATOM	1543	NE2	HIS	A	98	76.207	50.682	13.478	1.00	-0.14
N										
ATOM	1544	HA	HIS	A	98	74.335	52.526	10.079	1.00	0.09
H										
ATOM	1545	HB2	HIS	A	98	77.401	52.459	9.827	1.00	0.07
H										
ATOM	1546	HB3	HIS	A	98	76.376	51.148	9.197	1.00	0.07
H										
ATOM	1547	HD2	HIS	A	98	76.934	52.824	12.263	1.00	0.90
H										
ATOM	1548	HE1	HIS	A	98	76.968	52.419	14.517	1.00	0.18
H										
ATOM	1549	HE2	HIS	A	98	76.194	50.442	14.484	1.00	0.28
H										
ATOM	1550	H	HIS	A	98	75.648	52.735	7.571	1.00	0.19
H										
ATOM	1551	N	SER	A	99	76.186	55.256	9.621	1.00	-0.26
N										
ATOM	1552	CA	SER	A	99	76.423	56.571	10.212	1.00	0.15
C										
ATOM	1553	C	SER	A	99	75.115	57.321	10.324	1.00	0.21
C										
ATOM	1554	O	SER	A	99	74.920	58.012	11.311	1.00	-0.39
O										
ATOM	1555	CB	SER	A	99	77.411	57.427	9.373	1.00	0.08
C										
ATOM	1556	OG	SER	A	99	78.716	56.827	9.307	1.00	-0.39
O										
ATOM	1557	HA	SER	A	99	76.870	56.440	11.212	1.00	0.08
H										

ATOM	1558	HB2	SER	A	99	77.538	58.408	9.858	1.00	0.06
H										
ATOM	1559	HB3	SER	A	99	77.012	57.600	8.361	1.00	0.06
H										
ATOM	1560	HG	SER	A	99	78.720	55.984	8.867	1.00	0.21
H										
ATOM	1561	H	SER	A	99	76.472	55.100	8.678	1.00	0.19
H										
ATOM	1562	N	LEU	A	100	74.206	57.208	9.328	1.00	-0.26
N										
ATOM	1563	CA	LEU	A	100	72.928	57.917	9.412	1.00	0.13
C										
ATOM	1564	C	LEU	A	100	72.200	57.331	10.603	1.00	0.20
C										
ATOM	1565	O	LEU	A	100	71.782	58.076	11.474	1.00	-0.39
O										
ATOM	1566	CB	LEU	A	100	72.129	57.797	8.078	1.00	-0.01
C										
ATOM	1567	CG	LEU	A	100	71.060	58.908	7.838	1.00	-0.04
C										
ATOM	1568	CD1	LEU	A	100	70.375	58.686	6.460	1.00	-0.06
C										
ATOM	1569	CD2	LEU	A	100	69.985	58.961	8.957	1.00	-0.06
C										
ATOM	1570	HA	LEU	A	100	73.145	58.984	9.584	1.00	0.08
H										
ATOM	1571	HB2	LEU	A	100	71.664	56.801	8.011	1.00	0.03
H										
ATOM	1572	HB3	LEU	A	100	72.848	57.885	7.248	1.00	0.03
H										
ATOM	1573	HG	LEU	A	100	71.567	59.889	7.804	1.00	0.03
H										
ATOM	1574	HD21	LEU	A	100	69.567	57.960	9.138	1.00	0.02
H										
ATOM	1575	HD22	LEU	A	100	69.166	59.638	8.671	1.00	0.02
H										
ATOM	1576	HD23	LEU	A	100	70.419	59.351	9.887	1.00	0.02
H										
ATOM	1577	HD11	LEU	A	100	69.831	57.729	6.453	1.00	0.02
H										
ATOM	1578	HD12	LEU	A	100	71.122	58.670	5.651	1.00	0.02
H										
ATOM	1579	HD13	LEU	A	100	69.660	59.495	6.246	1.00	0.02
H										
ATOM	1580	H	LEU	A	100	74.386	56.624	8.536	1.00	0.19
H										
ATOM	1581	N	GLU	A	101	72.070	55.986	10.678	1.00	-0.26
N										
ATOM	1582	CA	GLU	A	101	71.473	55.357	11.858	1.00	0.13
C										
ATOM	1583	C	GLU	A	101	72.036	55.987	13.112	1.00	0.20
C										
ATOM	1584	O	GLU	A	101	71.267	56.379	13.976	1.00	-0.39
O										

ATOM	1585	CB	GLU	A	101	71.781	53.832	11.874	1.00	-0.00
C										
ATOM	1586	CG	GLU	A	101	71.325	53.115	13.172	1.00	0.00
C										
ATOM	1587	CD	GLU	A	101	71.803	51.684	13.133	1.00	0.04
C										
ATOM	1588	OE1	GLU	A	101	72.847	51.381	13.775	1.00	-0.57
O										
ATOM	1589	OE2	GLU	A	101	71.144	50.853	12.452	1.00	-0.57
O										
ATOM	1590	HA	GLU	A	101	70.381	55.504	11.825	1.00	0.08
H										
ATOM	1591	HB2	GLU	A	101	72.865	53.686	11.783	1.00	0.03
H										
ATOM	1592	HB3	GLU	A	101	71.303	53.354	11.003	1.00	0.03
H										
ATOM	1593	HG2	GLU	A	101	70.227	53.148	13.255	1.00	0.04
H										
ATOM	1594	HG3	GLU	A	101	71.751	53.601	14.064	1.00	0.04
H										
ATOM	1595	H	GLU	A	101	72.396	55.400	9.936	1.00	0.19
H										
ATOM	1596	N	GLU	A	102	73.380	56.093	13.229	1.00	-0.26
N										
ATOM	1597	CA	GLU	A	102	73.955	56.669	14.441	1.00	0.13
C										
ATOM	1598	C	GLU	A	102	73.464	58.086	14.600	1.00	0.20
C										
ATOM	1599	O	GLU	A	102	73.083	58.432	15.704	1.00	-0.39
O										
ATOM	1600	CB	GLU	A	102	75.507	56.642	14.453	1.00	-0.00
C										
ATOM	1601	CG	GLU	A	102	76.042	55.197	14.632	1.00	0.00
C										
ATOM	1602	CD	GLU	A	102	77.525	55.151	14.366	1.00	0.04
C										
ATOM	1603	OE1	GLU	A	102	78.312	55.381	15.324	1.00	-0.57
O										
ATOM	1604	OE2	GLU	A	102	77.914	54.881	13.197	1.00	-0.57
O										
ATOM	1605	HA	GLU	A	102	73.603	56.076	15.303	1.00	0.08
H										
ATOM	1606	HB2	GLU	A	102	75.881	57.253	15.289	1.00	0.03
H										
ATOM	1607	HB3	GLU	A	102	75.888	57.081	13.519	1.00	0.03
H										
ATOM	1608	HG2	GLU	A	102	75.530	54.511	13.944	1.00	0.04
H										
ATOM	1609	HG3	GLU	A	102	75.838	54.846	15.657	1.00	0.04
H										
ATOM	1610	H	GLU	A	102	73.989	55.794	12.493	1.00	0.19
H										
ATOM	1611	N	CYS	A	103	73.444	58.922	13.537	1.00	-0.26
N										

ATOM	1612	CA	CYS	A	103	72.932	60.282	13.696	1.00	0.14
C										
ATOM	1613	C	CYS	A	103	71.570	60.239	14.350	1.00	0.20
C										
ATOM	1614	O	CYS	A	103	71.348	60.976	15.297	1.00	-0.39
O										
ATOM	1615	CB	CYS	A	103	72.823	61.047	12.351	1.00	0.03
C										
ATOM	1616	SG	CYS	A	103	72.231	62.741	12.681	1.00	-0.17
S										
ATOM	1617	HA	CYS	A	103	73.636	60.837	14.335	1.00	0.08
H										
ATOM	1618	HB2	CYS	A	103	72.111	60.555	11.672	1.00	0.04
H										
ATOM	1619	HB3	CYS	A	103	73.808	61.094	11.860	1.00	0.04
H										
ATOM	1620	HG	CYS	A	103	72.211	63.078	11.731	1.00	0.10
H										
ATOM	1621	LPG1	CYS	A	103	71.615	62.746	12.968	1.00	0.00
LP										
ATOM	1622	LPG2	CYS	A	103	72.663	63.093	13.069	1.00	0.00
LP										
ATOM	1623	H	CYS	A	103	73.772	58.628	12.639	1.00	0.19
H										
ATOM	1624	N	LEU	A	104	70.651	59.373	13.863	1.00	-0.26
N										
ATOM	1625	CA	LEU	A	104	69.307	59.328	14.437	1.00	0.13
C										
ATOM	1626	C	LEU	A	104	69.393	59.002	15.912	1.00	0.20
C										
ATOM	1627	O	LEU	A	104	68.719	59.641	16.704	1.00	-0.39
O										
ATOM	1628	CB	LEU	A	104	68.366	58.282	13.770	1.00	-0.01
C										
ATOM	1629	CG	LEU	A	104	68.190	58.421	12.226	1.00	-0.04
C										
ATOM	1630	CD1	LEU	A	104	67.123	57.409	11.721	1.00	-0.06
C										
ATOM	1631	CD2	LEU	A	104	67.804	59.864	11.799	1.00	-0.06
C										
ATOM	1632	HA	LEU	A	104	68.856	60.328	14.337	1.00	0.08
H										
ATOM	1633	HB2	LEU	A	104	67.376	58.372	14.246	1.00	0.03
H										
ATOM	1634	HB3	LEU	A	104	68.749	57.271	13.984	1.00	0.03
H										
ATOM	1635	HG	LEU	A	104	69.132	58.151	11.722	1.00	0.03
H										
ATOM	1636	HD21	LEU	A	104	66.926	60.208	12.366	1.00	0.02
H										
ATOM	1637	HD22	LEU	A	104	67.560	59.898	10.727	1.00	0.02
H										
ATOM	1638	HD23	LEU	A	104	68.638	60.561	11.971	1.00	0.02
H										

ATOM	1639	HD11	LEU	A	104		66.138	57.642	12.154	1.00	0.02
H											
ATOM	1640	HD12	LEU	A	104		67.400	56.383	12.008	1.00	0.02
H											
ATOM	1641	HD13	LEU	A	104		67.040	57.448	10.624	1.00	0.02
H											
ATOM	1642	H	LEU	A	104		70.887	58.753	13.115	1.00	0.19
H											
ATOM	1643	N	VAL	A	105		70.217	58.007	16.306	1.00	-0.26
N											
ATOM	1644	CA	VAL	A	105		70.324	57.670	17.726	1.00	0.13
C											
ATOM	1645	C	VAL	A	105		70.902	58.855	18.473	1.00	0.20
C											
ATOM	1646	O	VAL	A	105		70.434	59.165	19.557	1.00	-0.39
O											
ATOM	1647	CB	VAL	A	105		71.201	56.400	17.955	1.00	-0.01
C											
ATOM	1648	CG1	VAL	A	105		71.446	56.148	19.469	1.00	-0.06
C											
ATOM	1649	CG2	VAL	A	105		70.539	55.142	17.320	1.00	-0.06
C											
ATOM	1650	HA	VAL	A	105		69.314	57.464	18.118	1.00	0.08
H											
ATOM	1651	HB	VAL	A	105		72.183	56.560	17.479	1.00	0.03
H											
ATOM	1652	HG11	VAL	A	105		70.487	56.047	20.000	1.00	0.02
H											
ATOM	1653	HG12	VAL	A	105		72.016	56.972	19.924	1.00	0.02
H											
ATOM	1654	HG13	VAL	A	105		72.024	55.222	19.615	1.00	0.02
H											
ATOM	1655	HG21	VAL	A	105		69.572	54.936	17.803	1.00	0.02
H											
ATOM	1656	HG22	VAL	A	105		71.188	54.262	17.452	1.00	0.02
H											
ATOM	1657	HG23	VAL	A	105		70.364	55.269	16.242	1.00	0.02
H											
ATOM	1658	H	VAL	A	105		70.784	57.522	15.638	1.00	0.19
H											
ATOM	1659	N	ARG	A	106		71.928	59.527	17.908	1.00	-0.26
N											
ATOM	1660	CA	ARG	A	106		72.588	60.624	18.615	1.00	0.13
C											
ATOM	1661	C	ARG	A	106		71.655	61.801	18.796	1.00	0.20
C											
ATOM	1662	O	ARG	A	106		71.860	62.541	19.745	1.00	-0.39
O											
ATOM	1663	CB	ARG	A	106		73.873	61.072	17.863	1.00	-0.01
C											
ATOM	1664	CG	ARG	A	106		74.967	59.964	17.888	1.00	-0.02
C											
ATOM	1665	CD	ARG	A	106		76.066	60.212	16.818	1.00	0.06
C											

ATOM	1666	NE	ARG	A	106	77.070	59.144	16.799	1.00	-0.27
N										
ATOM	1667	CZ	ARG	A	106	78.030	59.067	15.901	1.00	0.29
C										
ATOM	1668	NH1	ARG	A	106	78.200	59.967	14.958	1.00	-0.28
N										
ATOM	1669	NH2	ARG	A	106	78.856	58.045	15.943	1.00	-0.28
N										
ATOM	1670	HA	ARG	A	106	72.889	60.264	19.613	1.00	0.08
H										
ATOM	1671	HB2	ARG	A	106	74.285	61.983	18.328	1.00	0.03
H										
ATOM	1672	HB3	ARG	A	106	73.590	61.325	16.830	1.00	0.03
H										
ATOM	1673	HG2	ARG	A	106	74.528	58.973	17.695	1.00	0.03
H										
ATOM	1674	HG3	ARG	A	106	75.426	59.929	18.890	1.00	0.03
H										
ATOM	1675	HD2	ARG	A	106	76.548	61.182	17.022	1.00	0.07
H										
ATOM	1676	HD3	ARG	A	106	75.565	60.242	15.838	1.00	0.07
H										
ATOM	1677	HE	ARG	A	106	76.995	58.410	17.521	1.00	0.26
H										
ATOM	1678	HH12	ARG	A	106	77.594	60.793	14.881	1.00	0.26
H										
ATOM	1679	HH11	ARG	A	106	78.960	59.871	14.268	1.00	0.26
H										
ATOM	1680	HH22	ARG	A	106	78.760	57.310	16.661	1.00	0.26
H										
ATOM	1681	HH21	ARG	A	106	79.619	57.947	15.256	1.00	0.26
H										
ATOM	1682	H	ARG	A	106	72.244	59.285	16.994	1.00	0.19
H										
ATOM	1683	N	THR	A	107	70.629	62.012	17.937	1.00	-0.26
N										
ATOM	1684	CA	THR	A	107	69.697	63.109	18.199	1.00	0.16
C										
ATOM	1685	C	THR	A	107	69.087	62.931	19.573	1.00	0.21
C										
ATOM	1686	O	THR	A	107	68.860	63.929	20.240	1.00	-0.39
O										
ATOM	1687	CB	THR	A	107	68.517	63.266	17.195	1.00	0.09
C										
ATOM	1688	OG1	THR	A	107	67.615	62.149	17.248	1.00	-0.39
O										
ATOM	1689	CG2	THR	A	107	68.980	63.549	15.741	1.00	-0.03
C										
ATOM	1690	HA	THR	A	107	70.277	64.048	18.182	1.00	0.08
H										
ATOM	1691	HB	THR	A	107	67.919	64.135	17.519	1.00	0.06
H										
ATOM	1692	HG1	THR	A	107	68.019	61.339	16.964	1.00	0.21
H										

ATOM	1693	HG23	THR	A	107		69.519	62.692	15.317	1.00	0.03
H											
ATOM	1694	HG21	THR	A	107		69.640	64.430	15.711	1.00	0.03
H											
ATOM	1695	HG22	THR	A	107		68.103	63.746	15.105	1.00	0.03
H											
ATOM	1696	H	THR	A	107		70.483	61.422	17.143	1.00	0.19
H											
ATOM	1697	N	THR	A	108		68.813	61.679	20.015	1.00	-0.26
N											
ATOM	1698	CA	THR	A	108		68.206	61.486	21.332	1.00	0.16
C											
ATOM	1699	C	THR	A	108		69.066	62.171	22.366	1.00	0.23
C											
ATOM	1700	O	THR	A	108		68.571	63.002	23.111	1.00	-0.39
O											
ATOM	1701	CB	THR	A	108		68.025	59.988	21.722	1.00	0.09
C											
ATOM	1702	OG1	THR	A	108		67.059	59.343	20.871	1.00	-0.39
O											
ATOM	1703	CG2	THR	A	108		67.511	59.837	23.178	1.00	-0.03
C											
ATOM	1704	HA	THR	A	108		67.206	61.950	21.320	1.00	0.08
H											
ATOM	1705	HB	THR	A	108		68.991	59.461	21.653	1.00	0.06
H											
ATOM	1706	HG1	THR	A	108		67.309	59.319	19.954	1.00	0.21
H											
ATOM	1707	HG23	THR	A	108		66.565	60.385	23.306	1.00	0.03
H											
ATOM	1708	HG21	THR	A	108		68.243	60.216	23.908	1.00	0.03
H											
ATOM	1709	HG22	THR	A	108		67.331	58.773	23.398	1.00	0.03
H											
ATOM	1710	H	THR	A	108		69.015	60.877	19.453	1.00	0.19
H											
ATOM	1711	N	GLU	A	109		70.371	61.825	22.413	1.00	-0.12
N											
ATOM	1712	CA	GLU	A	109		71.289	62.365	23.371	1.00	0.17
C											
ATOM	1713	C	GLU	A	109		71.875	61.492	22.336	1.00	0.28
C											
ATOM	1714	O	GLU	A	109		73.060	61.249	22.174	1.00	-0.34
O											
ATOM	1715	CB	GLU	A	109		71.308	61.727	24.782	1.00	0.00
C											
ATOM	1716	CG	GLU	A	109		70.326	62.430	25.752	1.00	0.00
C											
ATOM	1717	CD	GLU	A	109		70.459	61.831	27.129	1.00	0.04
C											
ATOM	1718	OE1	GLU	A	109		69.825	60.770	27.381	1.00	-0.57
O											
ATOM	1719	OE2	GLU	A	109		71.200	62.412	27.968	1.00	-0.57
O											

ATOM	1720	HA	GLU	A	109		71.516	63.437	23.255	1.00	0.08
H											
ATOM	1721	H	GLU	A	109		70.928	61.194	21.814	1.00	0.90
H											
ATOM	1722	HB2	GLU	A	109		72.334	61.818	25.174	1.00	0.03
H											
ATOM	1723	HB3	GLU	A	109		71.054	60.657	24.717	1.00	0.03
H											
ATOM	1724	HG2	GLU	A	109		69.289	62.297	25.408	1.00	0.04
H											
ATOM	1725	HG3	GLU	A	109		70.542	63.510	25.788	1.00	0.04
H											
TER	1726		GLU	A	109						
HETATM	1727	N	UNK	A	3		78.915	40.029	13.124	1.00	-0.26
N											
HETATM	1728	C	UNK	A	3		77.543	38.049	12.597	1.00	0.10
C											
HETATM	1729	O	UNK	A	3		87.485	38.170	16.169	1.00	-0.39
O											
HETATM	1730	H	UNK	A	3		77.126	37.208	13.173	1.00	0.07
H											
HETATM	1731	C	UNK	A	3		78.494	38.800	13.497	1.00	0.20
C											
HETATM	1732	H	UNK	A	3		78.656	40.414	12.236	1.00	0.19
H											
HETATM	1733	C	UNK	A	3		79.739	40.838	14.026	1.00	0.14
C											
HETATM	1734	C	UNK	A	3		79.043	41.004	15.413	1.00	0.02
C											
HETATM	1735	H2	UNK	A	3		79.447	40.251	16.108	1.00	0.05
H											
HETATM	1736	H1	UNK	A	3		79.251	41.995	15.847	1.00	0.05
H											
HETATM	1737	C	UNK	A	3		81.134	40.238	14.091	1.00	0.21
C											
HETATM	1738	N	UNK	A	3		82.256	40.926	14.436	1.00	-0.25
N											
HETATM	1739	C	UNK	A	3		82.260	42.339	14.790	1.00	0.04
C											
HETATM	1740	H2	UNK	A	3		82.220	42.448	15.886	1.00	0.05
H											
HETATM	1741	H1	UNK	A	3		81.509	42.989	14.327	1.00	0.05
H											
HETATM	1742	C	UNK	A	3		83.660	42.684	14.234	1.00	-0.03
C											
HETATM	1743	H2	UNK	A	3		84.058	43.634	14.628	1.00	0.03
H											
HETATM	1744	H1	UNK	A	3		83.610	42.746	13.134	1.00	0.03
H											
HETATM	1745	C	UNK	A	3		84.510	41.453	14.620	1.00	-0.01
C											
HETATM	1746	H2	UNK	A	3		85.436	41.369	14.027	1.00	0.03
H											

HETATM	1747	H1	UNK	A	3	84.784	41.559	15.683	1.00	0.03
H										
HETATM	1748	C	UNK	A	3	83.550	40.247	14.420	1.00	0.13
C										
HETATM	1749	H	UNK	A	3	83.715	39.776	13.438	1.00	0.08
H										
HETATM	1750	C	UNK	A	3	83.726	39.281	15.570	1.00	0.20
C										
HETATM	1751	N	UNK	A	3	84.933	38.682	15.717	1.00	-0.26
N										
HETATM	1752	H	UNK	A	3	85.637	38.767	15.008	1.00	0.19
H										
HETATM	1753	C	UNK	A	3	85.277	37.996	16.966	1.00	0.14
C										
HETATM	1754	C	UNK	A	3	84.716	36.554	17.078	1.00	0.02
C										
HETATM	1755	H2	UNK	A	3	83.678	36.534	16.711	1.00	0.05
H										
HETATM	1756	H1	UNK	A	3	84.693	36.243	18.135	1.00	0.05
H										
HETATM	1757	C	UNK	A	3	85.580	35.543	16.307	1.00	-0.04
C										
HETATM	1758	C	UNK	A	3	86.640	34.872	16.928	1.00	-0.06
C										
HETATM	1759	H	UNK	A	3	86.883	35.075	17.966	1.00	0.06
H										
HETATM	1760	C	UNK	A	3	87.396	33.934	16.220	1.00	-0.07
C										
HETATM	1761	H	UNK	A	3	88.231	33.433	16.702	1.00	0.06
H										
HETATM	1762	C	UNK	A	3	87.078	33.634	14.892	1.00	-0.07
C										
HETATM	1763	H	UNK	A	3	87.657	32.897	14.345	1.00	0.06
H										
HETATM	1764	C	UNK	A	3	86.010	34.287	14.273	1.00	-0.07
C										
HETATM	1765	H	UNK	A	3	85.736	34.027	13.257	1.00	0.06
H										
HETATM	1766	C	UNK	A	3	85.301	35.272	14.966	1.00	-0.06
C										
HETATM	1767	H	UNK	A	3	84.516	35.829	14.472	1.00	0.06
H										
HETATM	1768	C	UNK	A	3	86.779	37.976	17.146	1.00	0.20
C										
HETATM	1769	N	UNK	A	3	87.295	37.743	18.373	1.00	-0.30
N										
HETATM	1770	H1	UNK	A	3	86.704	37.586	19.165	1.00	0.18
H										
HETATM	1771	H2	UNK	A	3	88.288	37.724	18.497	1.00	0.18
H										
HETATM	1772	H	UNK	A	3	84.866	38.597	17.796	1.00	0.08
H										
HETATM	1773	O	UNK	A	3	82.797	39.112	16.345	1.00	-0.39
O										

HETATM	1774	O	UNK	A	3	81.232	39.057	13.795	1.00	-0.39
O										
HETATM	1775	H	UNK	A	3	79.782	41.832	13.560	1.00	0.08
H										
HETATM	1776	O	UNK	A	3	78.853	38.285	14.543	1.00	-0.40
O										
HETATM	1777	C	UNK	A	3	78.338	37.473	11.403	1.00	-0.03
C										
HETATM	1778	H3	UNK	A	3	78.947	38.248	10.918	1.00	0.03
H										
HETATM	1779	H2	UNK	A	3	78.996	36.661	11.747	1.00	0.03
H										
HETATM	1780	H1	UNK	A	3	77.639	37.066	10.669	1.00	0.03
H										
HETATM	1781	N	UNK	A	3	76.417	38.920	12.175	1.00	-0.30
N										
HETATM	1782	H	UNK	A	3	76.704	39.561	11.352	1.00	0.12
H										
HETATM	1783	C	UNK	A	3	75.149	38.232	11.848	1.00	-0.01
C										
HETATM	1784	H3	UNK	A	3	74.367	38.968	11.613	1.00	0.04
H										
HETATM	1785	H2	UNK	A	3	74.810	37.642	12.713	1.00	0.04
H										
HETATM	1786	H1	UNK	A	3	75.272	37.571	10.978	1.00	0.04
H										
TER	1787		UNK	A	3					
HETATM	1788	ZN	ZN5	A	5	88.694	41.768	0.763	1.00	-6.00
ZN										
HETATM	1789	O	PHE	A	2	72.716	40.553	16.000	1.00	-0.11
O										
HETATM	1790	S	PHE	A	2	72.493	39.690	14.855	1.00	0.24
S										
HETATM	1791	O	PHE	A	2	71.289	39.868	14.066	1.00	-0.11
O										
HETATM	1792	O1	PHE	A	2	73.675	39.773	13.927	1.00	-0.15
O										
HETATM	1793	C	PHE	A	3	74.903	40.158	14.473	1.00	0.00
C										
HETATM	1794	C	PHE	A	3	75.435	41.418	14.179	1.00	0.00
C										
HETATM	1795	H7	PHE	A	3	74.829	42.151	13.658	1.00	0.00
H										
HETATM	1796	C	PHE	A	3	76.747	41.728	14.548	1.00	0.00
C										
HETATM	1797	H6	PHE	A	3	77.167	42.690	14.274	1.00	0.00
H										
HETATM	1798	C	PHE	A	3	77.522	40.801	15.254	1.00	0.00
C										
HETATM	1799	C	PHE	A	3	76.888	39.666	15.772	1.00	0.00
C										
HETATM	1800	H5	PHE	A	3	77.377	39.055	16.525	1.00	0.00
H										

HETATM 1801 C PHE A 3 75.627 39.292 15.296 1.00 0.00
 C
 HETATM 1802 H4 PHE A 3 75.225 38.324 15.559 1.00 0.00
 H
 CONECT 1 2 14 15
 CONECT 14 1
 CONECT 15 1
 CONECT 845 843 846 851 852
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CONECT 1799 1798 1800 1801
CONECT 1800 1799
CONECT 1801 1793 1799 1802
CONECT 1802 1801
MASTER          0      0      0      0      0      0      0      0 1800      2      90      10
END

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