

# Supplementary Information

## 1. The Coordinates of the Model

TITLE SWISS-MODEL SERVER (<http://swissmodel.expasy.org>)  
TITLE 2 Untitled Project  
EXPDTA THEORETICAL MODEL (SWISS-MODEL SERVER)  
AUTHOR SWISS-MODEL SERVER (SEE REFERENCE IN JRNL Records)  
REVSTAT 1 06-MAY-14 1MOD 1 03:24  
JRNL AUTH K.ARNOLD, L.BORDOLI, J.KOPP, T.SCHWEDE  
JRNL TITL SWISS-MODEL WORKSPACE: A WEB-BASED ENVIRONMENT FOR PROTEIN  
JRNL TITL 2 STRUCTURE HOMOMOLOGY MODELLING  
JRNL REF BIOINFORMATICS V. 22 195 2006  
JRNL REFN ISSN 1367-4803  
JRNL PMID 16301204  
JRNL DOI 10.1093/bioinformatics/bti770  
REMARK 1  
REMARK 1 REFERENCE 1  
REMARK 1 AUTH P.BENKERT, M.BIASINI, T.SCHWEDE  
REMARK 1 TITL TOWARD THE ESTIMATION OF THE ABSOLUTE QUALITY OF INDIVIDUAL  
REMARK 1 TITL 2 PROTEIN STRUCTURE MODELS  
REMARK 1 REF BIOINFORMATICS V. 3 343 2011  
REMARK 1 REFN ISSN 1367-4803  
REMARK 1 PMID 21134891  
REMARK 1 DOI 10.1093/bioinformatics/btq662  
REMARK 1  
REMARK 1 REFERENCE 2  
REMARK 1 AUTH F.KIEFER, K.ARNOLD, M.KUENZLI, L.BORDOLI, T.SCHWEDE  
REMARK 1 TITL THE SWISS-MODEL REPOSITORY AND ASSOCIATED RESOURCES  
REMARK 1 REF NUCLEIC.ACIDS.RES V. 37 D387 2009  
REMARK 1 REFN ISSN 0305-1048  
REMARK 1 PMID 18931379  
REMARK 1 DOI 10.1093/nar/gkn750  
REMARK 1  
REMARK 1  
REMARK 1 REFERENCE 3  
REMARK 1 AUTH T.SCHWEDE, J.KOPP, N.GUOX, M.C.PEITSCH  
REMARK 1 TITL SWISS\_MODEL: AN AUTOMATED PROTEIN HOMOMOLOGY-MODELING  
REMARK 1 TITL 2 SERVER  
REMARK 1 REF NUCLEIC.ACIDS.RES. V. 31 3381 2003  
REMARK 1 REFN ISSN 0305-1048  
REMARK 1 PMID 12824332  
REMARK 1 DOI 10.1093/nar/gkg520  
REMARK 1

REMARK 1 REFERENCE 4

REMARK 1 AUTH M.C.PEITSCH, N.GUEX

REMARK 1 TITL SWISS-MODEL AND THE SWISS-PDBVIEWER: AN ENVIRONMENT

REMARK 1 TITL 2 FOR COMPARATIVE PROTEIN MODELLING

REMARK 1 REF ELECTROPHORESIS V. 18 2714 1997

REMARK 1 REFN ISSN

REMARK 1 DOI 10.1002/elps.1150181505

REMARK 1 PMID 9504803

REMARK 1

REMARK 1 REFERENCE 5

REMARK 1 AUTH M.C.PEITSCH

REMARK 1 TITL PROTEIN MODELING BY E-MAIL

REMARK 1 REF BIO/TECHNOLOGY V. 13 658 1995

REMARK 1 REFN ISSN 1087-0156

REMARK 1 DOI 10.1038/nbt0795-658

REMARK 1

REMARK 1 DISCLAIMER

REMARK 1 The SWISS-MODEL SERVER produces theoretical models for proteins.

REMARK 1 The results of any theoretical modelling procedure is

REMARK 1 NON-EXPERIMENTAL and MUST be considered with care. These models may

REMARK 1 contain significant errors. This is especially true for automated

REMARK 1 modeling since there is no human intervention during model

REMARK 1 building. Please read the header section and the logfile carefully

REMARK 1 to know what templates and alignments were used during the model

REMARK 1 building process. All information by the SWISS-MODEL SERVER is

REMARK 1 provided "AS-IS", without any warranty, expressed or implied.

REMARK 2

REMARK 2 COPYRIGHT NOTICE

REMARK 2 This SWISS-MODEL protein model is copyright. It is produced by the

REMARK 2 SWISS-MODEL Server Group at Swiss Institute of Bioinformatics. There

REMARK 2 are no restrictions on the use of individual models for your or your

REMARK 2 employer's research projects. If you publish or patent any results

REMARK 2 obtained from this model, please cite the papers mentioned under

REMARK 2 JRNL.

REMARK 2

REMARK 2 FAIR USE NOTICE

REMARK 2 Downloading the entire data-base or substantial portions of it,

REMARK 2 systematic or automatic submission of data, mirroring the

REMARK 2 repository, or further redistribution of substantial portions data

REMARK 2 obtained from SWISS-MODEL is prohibited and requires written

REMARK 2 permission from the SWISS-MODEL Server Group at Swiss Institute of

REMARK 2 Bioinformatics.

REMARK 3

REMARK 3 MODEL INFORMATION

REMARK 3 ENGIN PROMOD

REMARK 3 VERSN 3.70

REMARK 3 OSTAT MONOMER

REMARK 3 OSRSN USER

REMARK 3 GMQE NA

REMARK 3 QMN4 -1.26

REMARK 3

REMARK 3 TEMPLATE 1

REMARK 3 PDBID 1s4v

REMARK 3 CHAIN A

REMARK 3 MMCIF A

REMARK 3 PDBV 04-04-2014

REMARK 3 SMTLE 1s4v.1.A

REMARK 3 SMTLV 09-04-14

REMARK 3 MTHD X-RAY DIFFRACTION 2.00 A

REMARK 3 FOUND HHblits

REMARK 3 GMQE 0.57

REMARK 3 SIM 0.49

REMARK 3 SID 58.80

REMARK 3 OSTAT monomer

REMARK 3 LIGND DVA-LEU-LYS-0QE

ATOM	1	N	ASP	A	124	22.257	29.647	22.354	1.00	0.44	N
ATOM	2	CA	ASP	A	124	21.712	30.942	22.801	1.00	0.44	C
ATOM	3	C	ASP	A	124	20.891	31.624	21.689	1.00	0.44	C
ATOM	4	O	ASP	A	124	21.441	32.240	20.778	1.00	0.44	O
ATOM	5	CB	ASP	A	124	22.842	31.865	23.284	1.00	0.44	C
ATOM	6	CG	ASP	A	124	22.338	33.236	23.763	1.00	0.44	C
ATOM	7	OD1	ASP	A	124	21.101	33.416	23.848	1.00	0.44	O
ATOM	8	OD2	ASP	A	124	23.207	34.066	24.098	1.00	0.44	O
ATOM	9	N	ALA	A	125	19.577	31.503	21.823	1.00	0.65	N
ATOM	10	CA	ALA	A	125	18.642	32.171	20.905	1.00	0.65	C
ATOM	11	C	ALA	A	125	17.996	33.346	21.643	1.00	0.65	C
ATOM	12	O	ALA	A	125	17.670	33.239	22.828	1.00	0.65	O
ATOM	13	CB	ALA	A	125	17.575	31.171	20.453	1.00	0.65	C
ATOM	14	N	ALA	A	126	17.848	34.455	20.924	1.00	0.74	N
ATOM	15	CA	ALA	A	126	17.194	35.663	21.462	1.00	0.74	C
ATOM	16	C	ALA	A	126	15.799	35.302	22.000	1.00	0.74	C
ATOM	17	O	ALA	A	126	15.167	34.346	21.547	1.00	0.74	O
ATOM	18	CB	ALA	A	126	17.073	36.718	20.356	1.00	0.74	C
ATOM	19	N	GLN	A	127	15.356	36.062	22.990	1.00	0.67	N

ATOM	20	CA	GLN	A	127	14.014	35.903	23.590	1.00	0.67	C
ATOM	21	C	GLN	A	127	12.905	35.954	22.524	1.00	0.67	C
ATOM	22	O	GLN	A	127	11.916	35.231	22.618	1.00	0.67	O
ATOM	23	CB	GLN	A	127	13.749	36.957	24.678	1.00	0.67	C
ATOM	24	CG	GLN	A	127	13.637	38.417	24.205	1.00	0.67	C
ATOM	25	CD	GLN	A	127	14.937	39.039	23.677	1.00	0.67	C
ATOM	26	OE1	GLN	A	127	16.041	38.520	23.747	1.00	0.67	O
ATOM	27	NE2	GLN	A	127	14.825	40.235	23.162	1.00	0.67	N
ATOM	28	N	SER	A	128	13.106	36.799	21.512	1.00	0.83	N
ATOM	29	CA	SER	A	128	12.147	36.959	20.407	1.00	0.83	C
ATOM	30	C	SER	A	128	12.827	37.501	19.151	1.00	0.83	C
ATOM	31	O	SER	A	128	13.841	38.198	19.215	1.00	0.83	O
ATOM	32	CB	SER	A	128	11.019	37.917	20.803	1.00	0.83	C
ATOM	33	OG	SER	A	128	11.525	39.232	21.051	1.00	0.83	O
ATOM	34	N	VAL	A	129	12.260	37.097	18.024	1.00	0.86	N
ATOM	35	CA	VAL	A	129	12.715	37.537	16.691	1.00	0.86	C
ATOM	36	C	VAL	A	129	11.475	37.853	15.849	1.00	0.86	C
ATOM	37	O	VAL	A	129	10.532	37.068	15.803	1.00	0.86	O
ATOM	38	CB	VAL	A	129	13.580	36.450	16.019	1.00	0.86	C
ATOM	39	CG1	VAL	A	129	14.044	36.870	14.622	1.00	0.86	C
ATOM	40	CG2	VAL	A	129	14.831	36.121	16.843	1.00	0.86	C
ATOM	41	N	ASP	A	130	11.512	39.013	15.208	1.00	0.86	N
ATOM	42	CA	ASP	A	130	10.466	39.432	14.269	1.00	0.86	C
ATOM	43	C	ASP	A	130	11.144	39.863	12.963	1.00	0.86	C
ATOM	44	O	ASP	A	130	11.522	41.024	12.809	1.00	0.86	O
ATOM	45	CB	ASP	A	130	9.650	40.572	14.895	1.00	0.86	C
ATOM	46	CG	ASP	A	130	8.446	40.985	14.041	1.00	0.86	C
ATOM	47	OD1	ASP	A	130	8.487	40.761	12.808	1.00	0.86	O
ATOM	48	OD2	ASP	A	130	7.506	41.549	14.629	1.00	0.86	O
ATOM	49	N	TRP	A	131	11.180	38.945	12.006	1.00	0.81	N
ATOM	50	CA	TRP	A	131	11.783	39.208	10.684	1.00	0.81	C
ATOM	51	C	TRP	A	131	11.112	40.331	9.886	1.00	0.81	C
ATOM	52	O	TRP	A	131	11.769	40.999	9.089	1.00	0.81	O
ATOM	53	CB	TRP	A	131	11.857	37.930	9.850	1.00	0.81	C
ATOM	54	CG	TRP	A	131	12.856	36.957	10.472	1.00	0.81	C
ATOM	55	CD1	TRP	A	131	12.581	35.780	11.029	1.00	0.81	C
ATOM	56	CD2	TRP	A	131	14.220	37.170	10.599	1.00	0.81	C
ATOM	57	NE1	TRP	A	131	13.703	35.242	11.505	1.00	0.81	N
ATOM	58	CE2	TRP	A	131	14.720	36.064	11.263	1.00	0.81	C
ATOM	59	CE3	TRP	A	131	15.062	38.208	10.220	1.00	0.81	C
ATOM	60	CZ2	TRP	A	131	16.073	35.996	11.557	1.00	0.81	C
ATOM	61	CZ3	TRP	A	131	16.419	38.130	10.502	1.00	0.81	C

ATOM	62	CH2TRP	A	131	16.926	37.023	11.173	1.00	0.81	C	
ATOM	63	N	ARG	A	132	9.843	40.603	10.184	1.00	0.73	N
ATOM	64	CA	ARG	A	132	9.118	41.740	9.575	1.00	0.73	C
ATOM	65	C	ARG	A	132	9.724	43.070	10.038	1.00	0.73	C
ATOM	66	O	ARG	A	132	10.152	43.874	9.218	1.00	0.73	O
ATOM	67	CB	ARG	A	132	7.647	41.759	9.969	1.00	0.73	C
ATOM	68	CG	ARG	A	132	6.907	40.483	9.579	1.00	0.73	C
ATOM	69	CD	ARG	A	132	5.500	40.527	10.159	1.00	0.73	C
ATOM	70	NE	ARG	A	132	5.571	40.621	11.624	1.00	0.73	N
ATOM	71	CZ	ARG	A	132	4.535	40.749	12.445	1.00	0.73	C
ATOM	72	NH1	ARG	A	132	3.287	40.754	11.997	1.00	0.73	N
ATOM	73	NH2	ARG	A	132	4.748	40.884	13.739	1.00	0.73	N
ATOM	74	N	ALA	A	133	9.920	43.166	11.353	1.00	0.78	N
ATOM	75	CA	ALA	A	133	10.572	44.317	12.008	1.00	0.78	C
ATOM	76	C	ALA	A	133	12.056	44.438	11.626	1.00	0.78	C
ATOM	77	O	ALA	A	133	12.580	45.543	11.527	1.00	0.78	O
ATOM	78	CB	ALA	A	133	10.439	44.187	13.527	1.00	0.78	C
ATOM	79	N	MET	A	134	12.690	43.293	11.374	1.00	0.73	N
ATOM	80	CA	MET	A	134	14.098	43.232	10.931	1.00	0.73	C
ATOM	81	C	MET	A	134	14.255	43.599	9.439	1.00	0.73	C
ATOM	82	O	MET	A	134	15.364	43.710	8.920	1.00	0.73	O
ATOM	83	CB	MET	A	134	14.668	41.844	11.251	1.00	0.73	C
ATOM	84	CG	MET	A	134	16.189	41.769	11.048	1.00	0.73	C
ATOM	85	SD	MET	A	134	17.141	42.965	12.054	1.00	0.73	S
ATOM	86	CE	MET	A	134	17.038	42.159	13.637	1.00	0.73	C
ATOM	87	N	GLYA	135	13.106	43.744	8.767	1.00	0.75	N	
ATOM	88	CA	GLYA	135	13.026	44.136	7.349	1.00	0.75	C	
ATOM	89	C	GLYA	135	13.404	43.016	6.374	1.00	0.75	C	
ATOM	90	O	GLYA	135	13.847	43.303	5.267	1.00	0.75	O	
ATOM	91	N	ALA	A	136	13.078	41.775	6.732	1.00	0.76	N
ATOM	92	CA	ALA	A	136	13.308	40.616	5.846	1.00	0.76	C
ATOM	93	C	ALA	A	136	12.011	39.992	5.298	1.00	0.76	C
ATOM	94	O	ALA	A	136	12.020	38.912	4.707	1.00	0.76	O
ATOM	95	CB	ALA	A	136	14.143	39.574	6.600	1.00	0.76	C
ATOM	96	N	VALA	137	10.894	40.702	5.453	1.00	0.75	N	
ATOM	97	CA	VALA	137	9.586	40.208	4.983	1.00	0.75	C	
ATOM	98	C	VALA	137	8.924	41.262	4.088	1.00	0.75	C	
ATOM	99	O	VALA	137	8.808	42.430	4.452	1.00	0.75	O	
ATOM	100	CB	VALA	137	8.677	39.836	6.173	1.00	0.75	C	
ATOM	101	CG1	VALA	137	7.369	39.193	5.706	1.00	0.75	C	
ATOM	102	CG2	VALA	137	9.358	38.856	7.132	1.00	0.75	C	
ATOM	103	N	THR	A	138	8.430	40.778	2.957	1.00	0.74	N

ATOM	104	CA	THR	A	138	7.672	41.611	2.001	1.00	0.74	C
ATOM	105	C	THR	A	138	6.199	41.716	2.430	1.00	0.74	C
ATOM	106	O	THR	A	138	5.777	41.057	3.381	1.00	0.74	O
ATOM	107	CB	THR	A	138	7.784	41.039	0.580	1.00	0.74	C
ATOM	108	OG1	THR	A	138	7.212	39.731	0.545	1.00	0.74	O
ATOM	109	CG2	THR	A	138	9.232	41.009	0.079	1.00	0.74	C
ATOM	110	N	GLYA	139	5.419	42.447	1.623	1.00	0.77	N	
ATOM	111	CA	GLYA	139	3.967	42.601	1.842	1.00	0.77	C	
ATOM	112	C	GLYA	139	3.250	41.245	1.781	1.00	0.77	C	
ATOM	113	O	GLYA	139	3.718	40.304	1.140	1.00	0.77	O	
ATOM	114	N	VALA	140	2.143	41.160	2.508	1.00	0.79	N	
ATOM	115	CA	VALA	140	1.275	39.966	2.498	1.00	0.79	C	
ATOM	116	C	VALA	140	0.636	39.855	1.106	1.00	0.79	C	
ATOM	117	O	VALA	140	0.066	40.812	0.582	1.00	0.79	O	
ATOM	118	CB	VALA	140	0.207	40.057	3.604	1.00	0.79	C	
ATOM	119	CG1	VALA	140	-0.750	38.858	3.593	1.00	0.79	C	
ATOM	120	CG2	VALA	140	0.866	40.124	4.984	1.00	0.79	C	
ATOM	121	N	LYS A	141	0.648	38.632	0.603	1.00	0.75	N	
ATOM	122	CA	LYS A	141	0.084	38.320	-0.718	1.00	0.75	C	
ATOM	123	C	LYS A	141	-1.206	37.507	-0.560	1.00	0.75	C	
ATOM	124	O	LYS A	141	-1.545	37.028	0.524	1.00	0.75	O	
ATOM	125	CB	LYS A	141	1.092	37.502	-1.524	1.00	0.75	C	
ATOM	126	CG	LYS A	141	2.512	38.069	-1.633	1.00	0.75	C	
ATOM	127	CD	LYS A	141	2.560	39.495	-2.192	1.00	0.75	C	
ATOM	128	CE	LYS A	141	3.989	39.900	-2.568	1.00	0.75	C	
ATOM	129	NZ	LYS A	141	4.920	39.775	-1.438	1.00	0.75	N	
ATOM	130	N	ASP A	142	-1.968	37.458	-1.645	1.00	0.78	N	
ATOM	131	CA	ASP A	142	-3.180	36.634	-1.709	1.00	0.78	C	
ATOM	132	C	ASP A	142	-3.062	35.701	-2.917	1.00	0.78	C	
ATOM	133	O	ASP A	142	-3.082	36.155	-4.061	1.00	0.78	O	
ATOM	134	CB	ASP A	142	-4.414	37.540	-1.816	1.00	0.78	C	
ATOM	135	CG	ASP A	142	-5.734	36.778	-1.648	1.00	0.78	C	
ATOM	136	OD1	ASP A	142	-5.771	35.583	-2.022	1.00	0.78	O	
ATOM	137	OD2	ASP A	142	-6.690	37.412	-1.160	1.00	0.78	O	
ATOM	138	N	GLN	A	143	-2.950	34.410	-2.629	1.00	0.75	N
ATOM	139	CA	GLN	A	143	-2.846	33.376	-3.676	1.00	0.75	C
ATOM	140	C	GLN	A	143	-4.072	33.304	-4.604	1.00	0.75	C
ATOM	141	O	GLN	A	143	-3.957	32.773	-5.700	1.00	0.75	O
ATOM	142	CB	GLN	A	143	-2.547	32.006	-3.061	1.00	0.75	C
ATOM	143	CG	GLN	A	143	-3.674	31.477	-2.171	1.00	0.75	C
ATOM	144	CD	GLN	A	143	-3.295	30.129	-1.567	1.00	0.75	C
ATOM	145	OE1	GLN	A	143	-2.627	30.026	-0.550	1.00	0.75	O

ATOM	146	NE2	GLN	A	143	-3.675	29.058	-2.223	1.00	0.75	N
ATOM	147	N	GLYA	A	144	-5.219	33.813	-4.137	1.00	0.77	N
ATOM	148	CA	GLYA	A	144	-6.491	33.799	-4.885	1.00	0.77	C
ATOM	149	C	GLYA	A	144	-6.995	32.365	-5.094	1.00	0.77	C
ATOM	150	O	GLYA	A	144	-6.676	31.456	-4.327	1.00	0.77	O
ATOM	151	N	ALA	A	145	-7.727	32.182	-6.190	1.00	0.77	N
ATOM	152	CA	ALA	A	145	-8.310	30.877	-6.562	1.00	0.77	C
ATOM	153	C	ALA	A	145	-7.325	29.983	-7.341	1.00	0.77	C
ATOM	154	O	ALA	A	145	-7.539	29.583	-8.486	1.00	0.77	O
ATOM	155	CB	ALA	A	145	-9.611	31.125	-7.333	1.00	0.77	C
ATOM	156	N	SERA	A	146	-6.221	29.675	-6.673	1.00	0.77	N
ATOM	157	CA	SERA	A	146	-5.180	28.785	-7.213	1.00	0.77	C
ATOM	158	C	SERA	A	146	-4.404	28.182	-6.042	1.00	0.77	C
ATOM	159	O	SERA	A	146	-3.971	28.878	-5.118	1.00	0.77	O
ATOM	160	CB	SERA	A	146	-4.226	29.558	-8.121	1.00	0.77	C
ATOM	161	OG	SERA	A	146	-3.573	30.517	-7.316	1.00	0.77	O
ATOM	162	N	GLYA	A	147	-4.401	26.848	-6.027	1.00	0.86	N
ATOM	163	CA	GLYA	A	147	-3.741	26.072	-4.958	1.00	0.86	C
ATOM	164	C	GLYA	A	147	-2.216	26.146	-5.079	1.00	0.86	C
ATOM	165	O	GLYA	A	147	-1.539	25.138	-5.268	1.00	0.86	O
ATOM	166	N	CYSA	A	148	-1.681	27.339	-4.854	1.00	0.87	N
ATOM	167	CA	CYSA	A	148	-0.228	27.567	-4.961	1.00	0.87	C
ATOM	168	C	CYSA	A	148	0.380	28.030	-3.630	1.00	0.87	C
ATOM	169	O	CYSA	A	148	1.467	28.605	-3.605	1.00	0.87	O
ATOM	170	CB	CYSA	A	148	0.020	28.610	-6.043	1.00	0.87	C
ATOM	171	SG	CYSA	A	148	-0.838	30.123	-5.517	1.00	0.87	S
ATOM	172	N	CYSA	A	149	-0.252	27.642	-2.524	1.00	0.85	N
ATOM	173	CA	CYSA	A	149	0.259	27.952	-1.172	1.00	0.85	C
ATOM	174	C	CYSA	A	149	1.715	27.492	-0.979	1.00	0.85	C
ATOM	175	O	CYSA	A	149	2.534	28.235	-0.444	1.00	0.85	O
ATOM	176	CB	CYSA	A	149	-0.620	27.298	-0.109	1.00	0.85	C
ATOM	177	SG	CYSA	A	149	-0.614	25.466	-0.135	1.00	0.85	S
ATOM	178	N	TRPA	A	150	2.055	26.365	-1.610	1.00	0.83	N
ATOM	179	CA	TRPA	A	150	3.429	25.822	-1.610	1.00	0.83	C
ATOM	180	C	TRPA	A	150	4.459	26.798	-2.202	1.00	0.83	C
ATOM	181	O	TRPA	A	150	5.540	26.976	-1.642	1.00	0.83	O
ATOM	182	CB	TRPA	A	150	3.480	24.490	-2.365	1.00	0.83	C
ATOM	183	CG	TRPA	A	150	3.076	24.627	-3.837	1.00	0.83	C
ATOM	184	CD1	TRPA	A	150	1.833	24.577	-4.308	1.00	0.83	C
ATOM	185	CD2	TRPA	A	150	3.924	24.839	-4.915	1.00	0.83	C
ATOM	186	NE1	TRPA	A	150	1.852	24.740	-5.631	1.00	0.83	N
ATOM	187	CE2	TRPA	A	150	3.110	24.904	-6.034	1.00	0.83	C

ATOM	188	CE3	TRP	A	150	5.304	24.970	-5.043	1.00	0.83	C
ATOM	189	CZ2	TRP	A	150	3.673	25.095	-7.287	1.00	0.83	C
ATOM	190	CZ3	TRP	A	150	5.867	25.151	-6.302	1.00	0.83	C
ATOM	191	CH2	TRP	A	150	5.051	25.211	-7.425	1.00	0.83	C
ATOM	192	N	ALA	A	151	4.053	27.500	-3.261	1.00	0.87	N
ATOM	193	CA	ALA	A	151	4.895	28.498	-3.947	1.00	0.87	C
ATOM	194	C	ALA	A	151	5.117	29.749	-3.082	1.00	0.87	C
ATOM	195	O	ALA	A	151	6.250	30.193	-2.906	1.00	0.87	O
ATOM	196	CB	ALA	A	151	4.260	28.884	-5.286	1.00	0.87	C
ATOM	197	N	PHE	A	152	4.041	30.202	-2.436	1.00	0.83	N
ATOM	198	CA	PHE	A	152	4.081	31.358	-1.514	1.00	0.83	C
ATOM	199	C	PHE	A	152	4.886	31.080	-0.238	1.00	0.83	C
ATOM	200	O	PHE	A	152	5.695	31.883	0.220	1.00	0.83	O
ATOM	201	CB	PHE	A	152	2.668	31.804	-1.141	1.00	0.83	C
ATOM	202	CG	PHE	A	152	2.014	32.580	-2.284	1.00	0.83	C
ATOM	203	CD1	PHE	A	152	1.379	31.905	-3.313	1.00	0.83	C
ATOM	204	CD2	PHE	A	152	2.058	33.969	-2.298	1.00	0.83	C
ATOM	205	CE1	PHE	A	152	0.808	32.625	-4.351	1.00	0.83	C
ATOM	206	CE2	PHE	A	152	1.470	34.672	-3.341	1.00	0.83	C
ATOM	207	CZ	PHE	A	152	0.840	34.001	-4.366	1.00	0.83	C
ATOM	208	N	SER	A	153	4.749	29.865	0.272	1.00	0.88	N
ATOM	209	CA	SER	A	153	5.545	29.433	1.433	1.00	0.88	C
ATOM	210	C	SER	A	153	7.047	29.450	1.115	1.00	0.88	C
ATOM	211	O	SER	A	153	7.834	30.035	1.857	1.00	0.88	O
ATOM	212	CB	SER	A	153	5.115	28.031	1.835	1.00	0.88	C
ATOM	213	OG	SER	A	153	5.991	27.526	2.841	1.00	0.88	O
ATOM	214	N	ALA	A	154	7.389	28.903	-0.051	1.00	0.88	N
ATOM	215	CA	ALA	A	154	8.783	28.827	-0.527	1.00	0.88	C
ATOM	216	C	ALA	A	154	9.408	30.214	-0.739	1.00	0.88	C
ATOM	217	O	ALA	A	154	10.479	30.503	-0.202	1.00	0.88	O
ATOM	218	CB	ALA	A	154	8.832	28.034	-1.834	1.00	0.88	C
ATOM	219	N	VAL	A	155	8.635	31.109	-1.355	1.00	0.84	N
ATOM	220	CA	VAL	A	155	9.096	32.477	-1.669	1.00	0.84	C
ATOM	221	C	VAL	A	155	9.401	33.285	-0.401	1.00	0.84	C
ATOM	222	O	VAL	A	155	10.372	34.033	-0.368	1.00	0.84	O
ATOM	223	CB	VAL	A	155	8.096	33.214	-2.580	1.00	0.84	C
ATOM	224	CG1	VAL	A	155	6.766	33.463	-1.889	1.00	0.84	C
ATOM	225	CG2	VAL	A	155	8.612	34.573	-3.049	1.00	0.84	C
ATOM	226	N	ALA	A	156	8.600	33.085	0.637	1.00	0.85	N
ATOM	227	CA	ALA	A	156	8.769	33.858	1.871	1.00	0.85	C
ATOM	228	C	ALA	A	156	10.110	33.555	2.547	1.00	0.85	C
ATOM	229	O	ALA	A	156	10.848	34.475	2.894	1.00	0.85	O



ATOM	230	CB	ALA	A	156	7.613	33.489	2.762	1.00	0.85	C
ATOM	231	N	ALA	A	157	10.495	32.280	2.485	1.00	0.87	N
ATOM	232	CA	ALA	A	157	11.790	31.807	3.002	1.00	0.87	C
ATOM	233	C	ALA	A	157	12.978	32.319	2.167	1.00	0.87	C
ATOM	234	O	ALA	A	157	13.973	32.784	2.722	1.00	0.87	O
ATOM	235	CB	ALA	A	157	11.778	30.281	3.033	1.00	0.87	C
ATOM	236	N	VALA	158	12.794	32.362	0.846	1.00	0.83	N	
ATOM	237	CA	VALA	158	13.850	32.821	-0.084	1.00	0.83	C	
ATOM	238	C	VALA	158	14.027	34.346	-0.003	1.00	0.83	C	
ATOM	239	O	VALA	158	15.149	34.837	0.107	1.00	0.83	O	
ATOM	240	CB	VALA	158	13.584	32.360	-1.530	1.00	0.83	C	
ATOM	241	CG1	VALA	158	14.708	32.796	-2.476	1.00	0.83	C	
ATOM	242	CG2	VALA	158	13.497	30.834	-1.617	1.00	0.83	C	
ATOM	243	N	GLU	A	159	12.908	35.067	0.028	1.00	0.76	N
ATOM	244	CA	GLU	A	159	12.926	36.537	0.181	1.00	0.76	C
ATOM	245	C	GLU	A	159	13.591	36.943	1.505	1.00	0.76	C
ATOM	246	O	GLU	A	159	14.406	37.865	1.529	1.00	0.76	O
ATOM	247	CB	GLU	A	159	11.512	37.115	0.168	1.00	0.76	C
ATOM	248	CG	GLU	A	159	10.804	36.924	-1.173	1.00	0.76	C
ATOM	249	CD	GLU	A	159	9.375	37.470	-1.153	1.00	0.76	C
ATOM	250	OE1	GLU	A	159	8.752	37.465	-0.069	1.00	0.76	O
ATOM	251	OE2	GLU	A	159	8.915	37.843	-2.256	1.00	0.76	O
ATOM	252	N	GLYA	160	13.354	36.095	2.518	1.00	0.89	N	
ATOM	253	CA	GLYA	160	13.894	36.257	3.880	1.00	0.89	C	
ATOM	254	C	GLYA	160	15.421	36.136	3.910	1.00	0.89	C	
ATOM	255	O	GLYA	160	16.125	37.125	4.124	1.00	0.89	O	
ATOM	256	N	LEUA	161	15.902	34.943	3.563	1.00	0.80	N	
ATOM	257	CA	LEUA	161	17.350	34.648	3.562	1.00	0.80	C	
ATOM	258	C	LEUA	161	18.137	35.603	2.650	1.00	0.80	C	
ATOM	259	O	LEUA	161	19.244	36.004	3.003	1.00	0.80	O	
ATOM	260	CB	LEUA	161	17.590	33.177	3.189	1.00	0.80	C	
ATOM	261	CG	LEUA	161	19.059	32.747	3.326	1.00	0.80	C	
ATOM	262	CD1	LEUA	161	19.134	31.244	3.557	1.00	0.80	C	
ATOM	263	CD2	LEUA	161	19.864	33.029	2.055	1.00	0.80	C	
ATOM	264	N	ASN	A	162	17.510	36.050	1.560	1.00	0.76	N
ATOM	265	CA	ASN	A	162	18.147	36.988	0.618	1.00	0.76	C
ATOM	266	C	ASN	A	162	18.435	38.342	1.282	1.00	0.76	C
ATOM	267	O	ASN	A	162	19.556	38.836	1.236	1.00	0.76	O
ATOM	268	CB	ASN	A	162	17.284	37.185	-0.630	1.00	0.76	C
ATOM	269	CG	ASN	A	162	17.978	38.122	-1.620	1.00	0.76	C
ATOM	270	OD1	ASN	A	162	19.063	37.861	-2.119	1.00	0.76	O
ATOM	271	ND2	ASN	A	162	17.393	39.281	-1.825	1.00	0.76	N

ATOM	272	N	LYS	A	163	17.445	38.860	2.000	1.00	0.73	N
ATOM	273	CA	LYS	A	163	17.589	40.135	2.723	1.00	0.73	C
ATOM	274	C	LYS	A	163	18.601	40.013	3.869	1.00	0.73	C
ATOM	275	O	LYS	A	163	19.399	40.913	4.098	1.00	0.73	O
ATOM	276	CB	LYS	A	163	16.226	40.567	3.271	1.00	0.73	C
ATOM	277	CG	LYS	A	163	16.278	41.889	4.047	1.00	0.73	C
ATOM	278	CD	LYS	A	163	16.704	43.006	3.111	1.00	0.73	C
ATOM	279	CE	LYS	A	163	16.732	44.425	3.656	1.00	0.73	C
ATOM	280	NZ	LYS	A	163	17.872	44.518	4.563	1.00	0.73	N
ATOM	281	N	ILE	A	164	18.577	38.873	4.549	1.00	0.74	N
ATOM	282	CA	ILE	A	164	19.515	38.590	5.655	1.00	0.74	C
ATOM	283	C	ILE	A	164	20.975	38.603	5.163	1.00	0.74	C
ATOM	284	O	ILE	A	164	21.868	39.053	5.879	1.00	0.74	O
ATOM	285	CB	ILE	A	164	19.147	37.256	6.337	1.00	0.74	C
ATOM	286	CG1	ILE	A	164	17.756	37.373	6.983	1.00	0.74	C
ATOM	287	CG2	ILE	A	164	20.208	36.820	7.366	1.00	0.74	C
ATOM	288	CD1	ILE	A	164	17.217	36.064	7.571	1.00	0.74	C
ATOM	289	N	ARG	A	165	21.185	38.102	3.951	1.00	0.72	N
ATOM	290	CA	ARG	A	165	22.544	37.953	3.401	1.00	0.72	C
ATOM	291	C	ARG	A	165	23.038	39.191	2.640	1.00	0.72	C
ATOM	292	O	ARG	A	165	24.202	39.567	2.757	1.00	0.72	O
ATOM	293	CB	ARG	A	165	22.638	36.697	2.527	1.00	0.72	C
ATOM	294	CG	ARG	A	165	21.718	36.760	1.309	1.00	0.72	C
ATOM	295	CD	ARG	A	165	21.918	35.566	0.403	1.00	0.72	C
ATOM	296	NE	ARG	A	165	21.026	35.664	-0.762	1.00	0.72	N
ATOM	297	CZ	ARG	A	165	20.964	34.745	-1.716	1.00	0.72	C
ATOM	298	NH1	ARG	A	165	21.740	33.667	-1.658	1.00	0.72	N
ATOM	299	NH2	ARG	A	165	20.140	34.910	-2.741	1.00	0.72	N
ATOM	300	N	THR	A	166	22.130	39.837	1.915	1.00	0.79	N
ATOM	301	CA	THR	A	166	22.501	40.940	1.004	1.00	0.79	C
ATOM	302	C	THR	A	166	22.089	42.309	1.556	1.00	0.79	C
ATOM	303	O	THR	A	166	22.485	43.346	1.024	1.00	0.79	O
ATOM	304	CB	THR	A	166	21.899	40.753	-0.399	1.00	0.79	C
ATOM	305	OG1	THR	A	166	20.482	40.950	-0.362	1.00	0.79	O
ATOM	306	CG2	THR	A	166	22.261	39.395	-1.017	1.00	0.79	C
ATOM	307	N	GLYA	A	167	21.199	42.282	2.554	1.00	0.77	N
ATOM	308	CA	GLYA	A	167	20.635	43.504	3.152	1.00	0.77	C
ATOM	309	C	GLYA	A	167	19.758	44.276	2.154	1.00	0.77	C
ATOM	310	O	GLYA	A	167	19.547	45.474	2.329	1.00	0.77	O
ATOM	311	N	ARG	A	168	19.207	43.558	1.172	1.00	0.64	N
ATOM	312	CA	ARG	A	168	18.267	44.109	0.177	1.00	0.64	C
ATOM	313	C	ARG	A	168	17.013	43.230	0.053	1.00	0.64	C

ATOM	314	O	ARG	A	168	17.098	42.027	-0.199	1.00	0.64	O
ATOM	315	CB	ARG	A	168	18.961	44.226	-1.181	1.00	0.64	C
ATOM	316	CG	ARG	A	168	18.084	44.952	-2.206	1.00	0.64	C
ATOM	317	CD	ARG	A	168	17.862	46.417	-1.816	1.00	0.64	C
ATOM	318	NE	ARG	A	168	16.984	47.062	-2.808	1.00	0.64	N
ATOM	319	CZ	ARG	A	168	15.650	47.022	-2.829	1.00	0.64	C
ATOM	320	NH1	ARG	A	168	14.976	46.383	-1.891	1.00	0.64	N
ATOM	321	NH2	ARG	A	168	14.971	47.634	-3.788	1.00	0.64	N
ATOM	322	N	LEUA	169	15.868	43.838	0.366	1.00	0.65	N	
ATOM	323	CA	LEUA	169	14.582	43.119	0.374	1.00	0.65	C	
ATOM	324	C	LEUA	169	13.979	43.112	-1.026	1.00	0.65	C	
ATOM	325	O	LEUA	169	13.479	44.117	-1.518	1.00	0.65	O	
ATOM	326	CB	LEUA	169	13.601	43.721	1.392	1.00	0.65	C	
ATOM	327	CG	LEUA	169	12.299	42.915	1.508	1.00	0.65	C	
ATOM	328	CD1	LEUA	169	12.546	41.484	2.001	1.00	0.65	C	
ATOM	329	CD2	LEUA	169	11.320	43.638	2.432	1.00	0.65	C	
ATOM	330	N	VALA	170	13.998	41.938	-1.633	1.00	0.67	N	
ATOM	331	CA	VALA	170	13.499	41.782	-3.010	1.00	0.67	C	
ATOM	332	C	VALA	170	12.285	40.847	-2.986	1.00	0.67	C	
ATOM	333	O	VALA	170	12.345	39.742	-2.444	1.00	0.67	O	
ATOM	334	CB	VALA	170	14.608	41.229	-3.928	1.00	0.67	C	
ATOM	335	CG1	VALA	170	14.140	41.133	-5.385	1.00	0.67	C	
ATOM	336	CG2	VALA	170	15.885	42.077	-3.876	1.00	0.67	C	
ATOM	337	N	SERA	171	11.202	41.315	-3.596	1.00	0.73	N	
ATOM	338	CA	SERA	171	10.010	40.477	-3.817	1.00	0.73	C	
ATOM	339	C	SERA	171	10.270	39.534	-4.998	1.00	0.73	C	
ATOM	340	O	SERA	171	10.656	39.963	-6.085	1.00	0.73	O	
ATOM	341	CB	SERA	171	8.789	41.357	-4.083	1.00	0.73	C	
ATOM	342	OG	SERA	171	7.624	40.541	-4.217	1.00	0.73	O	
ATOM	343	N	LEUA	172	10.001	38.258	-4.771	1.00	0.71	N	
ATOM	344	CA	LEUA	172	10.288	37.194	-5.746	1.00	0.71	C	
ATOM	345	C	LEUA	172	9.016	36.580	-6.342	1.00	0.71	C	
ATOM	346	O	LEUA	172	7.916	36.750	-5.819	1.00	0.71	O	
ATOM	347	CB	LEUA	172	11.188	36.149	-5.076	1.00	0.71	C	
ATOM	348	CG	LEUA	172	12.518	36.746	-4.600	1.00	0.71	C	
ATOM	349	CD1	LEUA	172	13.323	35.677	-3.872	1.00	0.71	C	
ATOM	350	CD2	LEUA	172	13.348	37.319	-5.754	1.00	0.71	C	
ATOM	351	N	SERA	173	9.212	35.884	-7.453	1.00	0.79	N	
ATOM	352	CA	SERA	173	8.128	35.341	-8.292	1.00	0.79	C	
ATOM	353	C	SERA	173	7.606	33.965	-7.850	1.00	0.79	C	
ATOM	354	O	SERA	173	8.185	32.917	-8.147	1.00	0.79	O	
ATOM	355	CB	SERA	173	8.598	35.284	-9.747	1.00	0.79	C	

ATOM	356	OG	SER	A	173	7.627	34.610	-10.554	1.00	0.79	O
ATOM	357	N	GLU	A	174	6.429	33.987	-7.233	1.00	0.80	N
ATOM	358	CA	GLU	A	174	5.654	32.749	-6.970	1.00	0.80	C
ATOM	359	C	GLU	A	174	5.159	32.130	-8.281	1.00	0.80	C
ATOM	360	O	GLU	A	174	5.145	30.910	-8.450	1.00	0.80	O
ATOM	361	CB	GLU	A	174	4.410	32.960	-6.101	1.00	0.80	C
ATOM	362	CG	GLU	A	174	4.729	33.422	-4.679	1.00	0.80	C
ATOM	363	CD	GLU	A	174	5.019	34.926	-4.525	1.00	0.80	C
ATOM	364	OE1	GLU	A	174	5.039	35.639	-5.552	1.00	0.80	O
ATOM	365	OE2	GLU	A	174	5.140	35.363	-3.365	1.00	0.80	O
ATOM	366	N	GLN	A	175	4.818	33.009	-9.221	1.00	0.78	N
ATOM	367	CA	GLN	A	175	4.307	32.606	-10.534	1.00	0.78	C
ATOM	368	C	GLN	A	175	5.287	31.736	-11.334	1.00	0.78	C
ATOM	369	O	GLN	A	175	4.867	30.798	-12.016	1.00	0.78	O
ATOM	370	CB	GLN	A	175	3.961	33.847	-11.347	1.00	0.78	C
ATOM	371	CG	GLN	A	175	3.150	33.378	-12.544	1.00	0.78	C
ATOM	372	CD	GLN	A	175	1.823	32.758	-12.084	1.00	0.78	C
ATOM	373	OE1	GLN	A	175	1.008	33.334	-11.370	1.00	0.78	O
ATOM	374	NE2	GLN	A	175	1.512	31.616	-12.654	1.00	0.78	N
ATOM	375	N	GLU	A	176	6.576	32.035	-11.193	1.00	0.78	N
ATOM	376	CA	GLU	A	176	7.625	31.262	-11.880	1.00	0.78	C
ATOM	377	C	GLU	A	176	7.588	29.805	-11.404	1.00	0.78	C
ATOM	378	O	GLU	A	176	7.580	28.893	-12.221	1.00	0.78	O
ATOM	379	CB	GLU	A	176	9.011	31.839	-11.602	1.00	0.78	C
ATOM	380	CG	GLU	A	176	10.075	31.124	-12.445	1.00	0.78	C
ATOM	381	CD	GLU	A	176	11.501	31.570	-12.118	1.00	0.78	C
ATOM	382	OE1	GLU	A	176	11.665	32.721	-11.649	1.00	0.78	O
ATOM	383	OE2	GLU	A	176	12.389	30.706	-12.259	1.00	0.78	O
ATOM	384	N	LEUA		177	7.439	29.624	-10.095	1.00	0.82	N
ATOM	385	CA	LEUA		177	7.284	28.286	-9.498	1.00	0.82	C
ATOM	386	C	LEUA		177	6.052	27.557	-10.035	1.00	0.82	C
ATOM	387	O	LEUA		177	6.189	26.471	-10.591	1.00	0.82	O
ATOM	388	CB	LEUA		177	7.191	28.370	-7.975	1.00	0.82	C
ATOM	389	CG	LEUA		177	8.490	28.854	-7.328	1.00	0.82	C
ATOM	390	CD1	LEUA		177	8.286	28.963	-5.817	1.00	0.82	C
ATOM	391	CD2	LEUA		177	9.655	27.905	-7.628	1.00	0.82	C
ATOM	392	N	VALA		178	4.923	28.262	-10.043	1.00	0.82	N
ATOM	393	CA	VALA		178	3.652	27.725	-10.574	1.00	0.82	C
ATOM	394	C	VALA		178	3.821	27.244	-12.026	1.00	0.82	C
ATOM	395	O	VALA		178	3.445	26.121	-12.349	1.00	0.82	O
ATOM	396	CB	VALA		178	2.526	28.774	-10.461	1.00	0.82	C
ATOM	397	CG1	VALA		178	1.213	28.323	-11.116	1.00	0.82	C

ATOM	398	CG2	VALA	178	2.239	29.094	-8.992	1.00	0.82	C
ATOM	399	N	ASP A	179	4.375	28.117	-12.862	1.00	0.80	N
ATOM	400	CA	ASP A	179	4.501	27.839	-14.304	1.00	0.80	C
ATOM	401	C	ASP A	179	5.628	26.872	-14.680	1.00	0.80	C
ATOM	402	O	ASP A	179	5.442	26.013	-15.537	1.00	0.80	O
ATOM	403	CB	ASP A	179	4.673	29.136	-15.094	1.00	0.80	C
ATOM	404	CG	ASP A	179	3.469	30.077	-14.995	1.00	0.80	C
ATOM	405	OD1	ASP A	179	2.404	29.654	-14.491	1.00	0.80	O
ATOM	406	OD2	ASP A	179	3.628	31.256	-15.375	1.00	0.80	O
ATOM	407	N	CYSA	180	6.769	27.028	-14.020	1.00	0.83	N
ATOM	408	CA	CYSA	180	8.017	26.366	-14.438	1.00	0.83	C
ATOM	409	C	CYSA	180	8.425	25.152	-13.597	1.00	0.83	C
ATOM	410	O	CYSA	180	8.994	24.201	-14.132	1.00	0.83	O
ATOM	411	CB	CYSA	180	9.150	27.393	-14.459	1.00	0.83	C
ATOM	412	SG	CYSA	180	8.888	28.758	-15.649	1.00	0.83	S
ATOM	413	N	ASP A	181	8.167	25.195	-12.292	1.00	0.80	N
ATOM	414	CA	ASP A	181	8.476	24.058	-11.409	1.00	0.80	C
ATOM	415	C	ASP A	181	7.411	22.953	-11.551	1.00	0.80	C
ATOM	416	O	ASP A	181	6.536	22.807	-10.700	1.00	0.80	O
ATOM	417	CB	ASP A	181	8.618	24.570	-9.969	1.00	0.80	C
ATOM	418	CG	ASP A	181	9.039	23.475	-8.988	1.00	0.80	C
ATOM	419	OD1	ASP A	181	9.582	22.453	-9.462	1.00	0.80	O
ATOM	420	OD2	ASP A	181	8.875	23.738	-7.780	1.00	0.80	O
ATOM	421	N	VALA	182	7.601	22.118	-12.570	1.00	0.73	N
ATOM	422	CA	VALA	182	6.614	21.079	-12.963	1.00	0.73	C
ATOM	423	C	VALA	182	7.114	19.622	-12.827	1.00	0.73	C
ATOM	424	O	VALA	182	6.410	18.665	-13.146	1.00	0.73	O
ATOM	425	CB	VALA	182	6.103	21.394	-14.389	1.00	0.73	C
ATOM	426	CG1	VALA	182	7.219	21.328	-15.439	1.00	0.73	C
ATOM	427	CG2	VALA	182	4.899	20.542	-14.817	1.00	0.73	C
ATOM	428	N	SERA	183	8.359	19.444	-12.406	1.00	0.67	N
ATOM	429	CA	SERA	183	8.921	18.084	-12.331	1.00	0.67	C
ATOM	430	C	SERA	183	9.145	17.646	-10.886	1.00	0.67	C
ATOM	431	O	SERA	183	9.117	18.458	-9.959	1.00	0.67	O
ATOM	432	CB	SERA	183	10.217	17.970	-13.135	1.00	0.67	C
ATOM	433	OG	SERA	183	10.619	16.596	-13.154	1.00	0.67	O
ATOM	434	N	GLYA	184	9.209	16.319	-10.731	1.00	0.67	N
ATOM	435	CA	GLYA	184	9.382	15.658	-9.426	1.00	0.67	C
ATOM	436	C	GLYA	184	8.067	15.650	-8.638	1.00	0.67	C
ATOM	437	O	GLYA	184	7.706	14.631	-8.058	1.00	0.67	O
ATOM	438	N	VALA	185	7.362	16.780	-8.666	1.00	0.68	N
ATOM	439	CA	VALA	185	6.057	16.927	-7.994	1.00	0.68	C

ATOM	440	C	VALA	185	5.140	17.999	-8.598	1.00	0.68	C	
ATOM	441	O	VALA	185	4.105	17.674	-9.175	1.00	0.68	O	
ATOM	442	CB	VALA	185	6.247	17.086	-6.464	1.00	0.68	C	
ATOM	443	CG1	VALA	185	7.024	18.321	-6.078	1.00	0.68	C	
ATOM	444	CG2	VALA	185	4.939	17.176	-5.681	1.00	0.68	C	
ATOM	445	N	ASP A	186	5.544	19.252	-8.389	1.00	0.76	N	
ATOM	446	CA	ASP A	186	4.646	20.396	-8.225	1.00	0.76	C	
ATOM	447	C	ASP A	186	3.746	20.538	-9.433	1.00	0.76	C	
ATOM	448	O	ASP A	186	4.167	20.325	-10.568	1.00	0.76	O	
ATOM	449	CB	ASP A	186	5.459	21.675	-8.008	1.00	0.76	C	
ATOM	450	CG	ASP A	186	6.290	21.594	-6.725	1.00	0.76	C	
ATOM	451	OD1	ASP A	186	5.753	21.105	-5.714	1.00	0.76	O	
ATOM	452	OD2	ASP A	186	7.501	21.836	-6.794	1.00	0.76	O	
ATOM	453	N	GLN	A	187	2.492	20.798	-9.127	1.00	0.74	N
ATOM	454	CA	GLN	A	187	1.554	20.917	-10.244	1.00	0.74	C
ATOM	455	C	GLN	A	187	0.789	22.264	-10.222	1.00	0.74	C
ATOM	456	O	GLN	A	187	-0.407	22.414	-10.468	1.00	0.74	O
ATOM	457	CB	GLN	A	187	0.736	19.623	-10.430	1.00	0.74	C
ATOM	458	CG	GLN	A	187	1.010	18.210	-9.898	1.00	0.74	C
ATOM	459	CD	GLN	A	187	-0.280	17.377	-9.718	1.00	0.74	C
ATOM	460	OE1	GLN	A	187	-1.382	17.606	-10.203	1.00	0.74	O
ATOM	461	NE2	GLN	A	187	-0.107	16.344	-8.933	1.00	0.74	N
ATOM	462	N	GLYA	188	1.567	23.316	-9.933	1.00	0.84	N	
ATOM	463	CA	GLYA	188	1.093	24.715	-10.005	1.00	0.84	C	
ATOM	464	C	GLYA	188	-0.109	24.966	-9.086	1.00	0.84	C	
ATOM	465	O	GLYA	188	-0.058	24.677	-7.890	1.00	0.84	O	
ATOM	466	N	CYSA	189	-1.209	25.395	-9.698	1.00	0.83	N	
ATOM	467	CA	CYSA	189	-2.479	25.659	-8.988	1.00	0.83	C	
ATOM	468	C	CYSA	189	-3.178	24.420	-8.410	1.00	0.83	C	
ATOM	469	O	CYSA	189	-4.204	24.554	-7.745	1.00	0.83	O	
ATOM	470	CB	CYSA	189	-3.478	26.385	-9.888	1.00	0.83	C	
ATOM	471	SG	CYSA	189	-2.865	27.977	-10.540	1.00	0.83	S	
ATOM	472	N	ASP A	190	-2.622	23.232	-8.616	1.00	0.84	N	
ATOM	473	CA	ASP A	190	-3.255	22.023	-8.043	1.00	0.84	C	
ATOM	474	C	ASP A	190	-2.455	21.433	-6.852	1.00	0.84	C	
ATOM	475	O	ASP A	190	-2.504	20.226	-6.601	1.00	0.84	O	
ATOM	476	CB	ASP A	190	-3.506	21.023	-9.193	1.00	0.84	C	
ATOM	477	CG	ASP A	190	-2.190	20.486	-9.757	1.00	0.84	C	
ATOM	478	OD1	ASP A	190	-1.254	20.541	-8.930	1.00	0.84	O	
ATOM	479	OD2	ASP A	190	-2.109	20.218	-10.970	1.00	0.84	O	
ATOM	480	N	GLYA	191	-1.518	22.238	-6.317	1.00	0.87	N	
ATOM	481	CA	GLYA	191	-0.679	21.818	-5.183	1.00	0.87	C	

ATOM	482	C	GLYA	191	0.775	21.509	-5.563	1.00	0.87	C	
ATOM	483	O	GLYA	191	1.152	21.361	-6.727	1.00	0.87	O	
ATOM	484	N	GLYA	192	1.584	21.482	-4.504	1.00	0.85	N	
ATOM	485	CA	GLYA	192	3.019	21.177	-4.590	1.00	0.85	C	
ATOM	486	C	GLYA	192	3.622	21.077	-3.186	1.00	0.85	C	
ATOM	487	O	GLYA	192	2.905	21.079	-2.186	1.00	0.85	O	
ATOM	488	N	LEUA	193	4.945	21.038	-3.145	1.00	0.84	N	
ATOM	489	CA	LEUA	193	5.713	20.909	-1.900	1.00	0.84	C	
ATOM	490	C	LEUA	193	6.867	21.917	-1.916	1.00	0.84	C	
ATOM	491	O	LEUA	193	7.579	22.035	-2.914	1.00	0.84	O	
ATOM	492	CB	LEUA	193	6.228	19.466	-1.814	1.00	0.84	C	
ATOM	493	CG	LEUA	193	6.780	19.098	-0.433	1.00	0.84	C	
ATOM	494	CD1	LEUA	193	5.690	19.160	0.643	1.00	0.84	C	
ATOM	495	CD2	LEUA	193	7.395	17.698	-0.482	1.00	0.84	C	
ATOM	496	N	MET	A	194	7.131	22.511	-0.755	1.00	0.84	N
ATOM	497	CA	MET	A	194	8.199	23.530	-0.631	1.00	0.84	C
ATOM	498	C	MET	A	194	9.598	22.977	-0.907	1.00	0.84	C
ATOM	499	O	MET	A	194	10.367	23.581	-1.650	1.00	0.84	O
ATOM	500	CB	MET	A	194	8.232	24.216	0.736	1.00	0.84	C
ATOM	501	CG	MET	A	194	6.997	25.082	0.952	1.00	0.84	C
ATOM	502	SD	MET	A	194	5.505	24.080	1.278	1.00	0.84	S
ATOM	503	CE	MET	A	194	5.729	23.719	3.007	1.00	0.84	C
ATOM	504	N	ASP A	195	9.859	21.763	-0.421	1.00	0.85	N	
ATOM	505	CA	ASP A	195	11.161	21.105	-0.645	1.00	0.85	C	
ATOM	506	C	ASP A	195	11.525	20.945	-2.120	1.00	0.85	C	
ATOM	507	O	ASP A	195	12.645	21.262	-2.505	1.00	0.85	O	
ATOM	508	CB	ASP A	195	11.258	19.743	0.045	1.00	0.85	C	
ATOM	509	CG	ASP A	195	11.468	19.877	1.554	1.00	0.85	C	
ATOM	510	OD1	ASP A	195	11.973	20.942	1.979	1.00	0.85	O	
ATOM	511	OD2	ASP A	195	11.104	18.910	2.250	1.00	0.85	O	
ATOM	512	N	ASN	A	196	10.544	20.580	-2.936	1.00	0.81	N
ATOM	513	CA	ASN	A	196	10.801	20.462	-4.380	1.00	0.81	C
ATOM	514	C	ASN	A	196	11.010	21.820	-5.059	1.00	0.81	C
ATOM	515	O	ASN	A	196	11.830	21.939	-5.966	1.00	0.81	O
ATOM	516	CB	ASN	A	196	9.626	19.784	-5.031	1.00	0.81	C
ATOM	517	CG	ASN	A	196	9.888	19.482	-6.508	1.00	0.81	C
ATOM	518	OD1	ASN	A	196	9.648	20.283	-7.396	1.00	0.81	O
ATOM	519	ND2	ASN	A	196	10.229	18.244	-6.783	1.00	0.81	N
ATOM	520	N	ALA	A	197	10.333	22.834	-4.524	1.00	0.86	N
ATOM	521	CA	ALA	A	197	10.454	24.221	-5.007	1.00	0.86	C
ATOM	522	C	ALA	A	197	11.846	24.803	-4.721	1.00	0.86	C
ATOM	523	O	ALA	A	197	12.437	25.455	-5.579	1.00	0.86	O

ATOM	524	CB	ALA	A	197	9.372	25.086	-4.361	1.00	0.86	C
ATOM	525	N	PHEA	198	12.403	24.459	-3.561	1.00	0.84	N	
ATOM	526	CA	PHEA	198	13.773	24.853	-3.187	1.00	0.84	C	
ATOM	527	C	PHEA	198	14.825	24.174	-4.073	1.00	0.84	C	
ATOM	528	O	PHEA	198	15.777	24.788	-4.543	1.00	0.84	O	
ATOM	529	CB	PHEA	198	14.065	24.487	-1.739	1.00	0.84	C	
ATOM	530	CG	PHEA	198	13.328	25.329	-0.703	1.00	0.84	C	
ATOM	531	CD1	PHEA	198	13.338	26.717	-0.778	1.00	0.84	C	
ATOM	532	CD2	PHEA	198	12.720	24.684	0.364	1.00	0.84	C	
ATOM	533	CE1	PHEA	198	12.740	27.463	0.227	1.00	0.84	C	
ATOM	534	CE2	PHEA	198	12.123	25.432	1.369	1.00	0.84	C	
ATOM	535	CZ	PHEA	198	12.136	26.820	1.301	1.00	0.84	C	
ATOM	536	N	GLN	A	199	14.558	22.914	-4.390	1.00	0.79	N
ATOM	537	CA	GLN	A	199	15.400	22.172	-5.347	1.00	0.79	C
ATOM	538	C	GLN	A	199	15.367	22.872	-6.714	1.00	0.79	C
ATOM	539	O	GLN	A	199	16.405	23.006	-7.356	1.00	0.79	O
ATOM	540	CB	GLN	A	199	14.916	20.733	-5.512	1.00	0.79	C
ATOM	541	CG	GLN	A	199	14.965	20.017	-4.172	1.00	0.79	C
ATOM	542	CD	GLN	A	199	14.555	18.556	-4.212	1.00	0.79	C
ATOM	543	OE1	GLN	A	199	15.074	17.748	-4.965	1.00	0.79	O
ATOM	544	NE2	GLN	A	199	13.634	18.194	-3.346	1.00	0.79	N
ATOM	545	N	PHEA	200	14.191	23.420	-7.033	1.00	0.80	N	
ATOM	546	CA	PHEA	200	13.945	24.136	-8.312	1.00	0.80	C	
ATOM	547	C	PHEA	200	14.807	25.348	-8.490	1.00	0.80	C	
ATOM	548	O	PHEA	200	15.578	25.504	-9.431	1.00	0.80	O	
ATOM	549	CB	PHEA	200	12.458	24.449	-8.533	1.00	0.80	C	
ATOM	550	CG	PHEA	200	12.244	25.203	-9.855	1.00	0.80	C	
ATOM	551	CD1	PHEA	200	12.080	24.660	-11.136	1.00	0.80	C	
ATOM	552	CD2	PHEA	200	12.181	26.572	-9.712	1.00	0.80	C	
ATOM	553	CE1	PHEA	200	11.828	25.454	-12.232	1.00	0.80	C	
ATOM	554	CE2	PHEA	200	11.939	27.378	-10.811	1.00	0.80	C	
ATOM	555	CZ	PHEA	200	11.755	26.823	-12.069	1.00	0.80	C	
ATOM	556	N	VALA	201	14.699	26.163	-7.464	1.00	0.82	N	
ATOM	557	CA	VALA	201	15.447	27.412	-7.411	1.00	0.82	C	
ATOM	558	C	VALA	201	16.961	27.145	-7.375	1.00	0.82	C	
ATOM	559	O	VALA	201	17.702	27.815	-8.090	1.00	0.82	O	
ATOM	560	CB	VALA	201	14.905	28.276	-6.262	1.00	0.82	C	
ATOM	561	CG1	VALA	201	14.928	27.562	-4.925	1.00	0.82	C	
ATOM	562	CG2	VALA	201	15.659	29.593	-6.114	1.00	0.82	C	
ATOM	563	N	ALA	A	202	17.372	26.098	-6.659	1.00	0.84	N
ATOM	564	CA	ALA	A	202	18.791	25.711	-6.566	1.00	0.84	C
ATOM	565	C	ALA	A	202	19.349	25.296	-7.936	1.00	0.84	C



ATOM	566	O	ALA	A	202	20.328	25.873	-8.405	1.00	0.84	O
ATOM	567	CB	ALA	A	202	18.956	24.568	-5.562	1.00	0.84	C
ATOM	568	N	ARG	A	203	18.580	24.464	-8.637	1.00	0.73	N
ATOM	569	CA	ARG	A	203	18.957	23.950	-9.968	1.00	0.73	C
ATOM	570	C	ARG	A	203	18.890	24.994	-11.092	1.00	0.73	C
ATOM	571	O	ARG	A	203	19.669	24.931	-12.040	1.00	0.73	O
ATOM	572	CB	ARG	A	203	18.140	22.704	-10.336	1.00	0.73	C
ATOM	573	CG	ARG	A	203	16.638	22.961	-10.487	1.00	0.73	C
ATOM	574	CD	ARG	A	203	15.900	21.703	-10.944	1.00	0.73	C
ATOM	575	NE	ARG	A	203	14.440	21.899	-11.001	1.00	0.73	N
ATOM	576	CZ	ARG	A	203	13.588	21.722	-9.991	1.00	0.73	C
ATOM	577	NH1	ARG	A	203	14.014	21.396	-8.781	1.00	0.73	N
ATOM	578	NH2	ARG	A	203	12.298	21.943	-10.103	1.00	0.73	N
ATOM	579	N	ARG	A	204	17.954	25.934	-10.974	1.00	0.71	N
ATOM	580	CA	ARG	A	204	17.791	27.012	-11.969	1.00	0.71	C
ATOM	581	C	ARG	A	204	18.864	28.099	-11.854	1.00	0.71	C
ATOM	582	O	ARG	A	204	19.012	28.935	-12.744	1.00	0.71	O
ATOM	583	CB	ARG	A	204	16.393	27.638	-11.888	1.00	0.71	C
ATOM	584	CG	ARG	A	204	15.276	26.661	-12.276	1.00	0.71	C
ATOM	585	CD	ARG	A	204	15.523	25.895	-13.580	1.00	0.71	C
ATOM	586	NE	ARG	A	204	15.845	26.813	-14.688	1.00	0.71	N
ATOM	587	CZ	ARG	A	204	15.789	26.501	-15.981	1.00	0.71	C
ATOM	588	NH1	ARG	A	204	15.381	25.299	-16.367	1.00	0.71	N
ATOM	589	NH2	ARG	A	204	16.182	27.370	-16.902	1.00	0.71	N
ATOM	590	N	GLYA	205	19.530	28.087	-10.693	1.00	0.76	N	
ATOM	591	CA	GLYA	205	20.526	29.103	-10.317	1.00	0.76	C	
ATOM	592	C	GLYA	205	19.840	30.364	-9.776	1.00	0.76	C	
ATOM	593	O	GLYA	205	20.426	31.445	-9.756	1.00	0.76	O	
ATOM	594	N	GLYA	206	18.621	30.158	-9.265	1.00	0.77	N	
ATOM	595	CA	GLYA	206	17.832	31.210	-8.624	1.00	0.77	C	
ATOM	596	C	GLYA	206	16.417	31.350	-9.186	1.00	0.77	C	
ATOM	597	O	GLYA	206	15.961	30.579	-10.027	1.00	0.77	O	
ATOM	598	N	LEUA	207	15.726	32.309	-8.593	1.00	0.74	N	
ATOM	599	CA	LEUA	207	14.340	32.657	-8.939	1.00	0.74	C	
ATOM	600	C	LEUA	207	14.296	34.156	-9.278	1.00	0.74	C	
ATOM	601	O	LEUA	207	15.001	34.964	-8.667	1.00	0.74	O	
ATOM	602	CB	LEUA	207	13.475	32.268	-7.730	1.00	0.74	C	
ATOM	603	CG	LEUA	207	11.965	32.354	-7.963	1.00	0.74	C	
ATOM	604	CD1	LEUA	207	11.213	31.483	-6.963	1.00	0.74	C	
ATOM	605	CD2	LEUA	207	11.499	33.756	-7.641	1.00	0.74	C	
ATOM	606	N	ALA	A	208	13.490	34.486	-10.282	1.00	0.70	N
ATOM	607	CA	ALA	A	208	13.334	35.868	-10.776	1.00	0.70	C

ATOM	608	C	ALA	A	208	12.445	36.727	-9.859	1.00	0.70	C
ATOM	609	O	ALA	A	208	11.705	36.241	-9.010	1.00	0.70	O
ATOM	610	CB	ALA	A	208	12.776	35.836	-12.202	1.00	0.70	C
ATOM	611	N	SERA	A	209	12.534	38.036	-10.027	1.00	0.69	N
ATOM	612	CA	SERA	A	209	11.716	38.974	-9.231	1.00	0.69	C
ATOM	613	C	SERA	A	209	10.221	38.883	-9.579	1.00	0.69	C
ATOM	614	O	SERA	A	209	9.835	38.513	-10.690	1.00	0.69	O
ATOM	615	CB	SERA	A	209	12.230	40.403	-9.422	1.00	0.69	C
ATOM	616	OG	SERA	A	209	11.455	41.313	-8.636	1.00	0.69	O
ATOM	617	N	GLU	A	210	9.404	39.317	-8.622	1.00	0.69	N
ATOM	618	CA	GLU	A	210	7.946	39.472	-8.791	1.00	0.69	C
ATOM	619	C	GLU	A	210	7.625	40.412	-9.963	1.00	0.69	C
ATOM	620	O	GLU	A	210	6.767	40.103	-10.780	1.00	0.69	O
ATOM	621	CB	GLU	A	210	7.361	40.061	-7.503	1.00	0.69	C
ATOM	622	CG	GLU	A	210	5.841	40.275	-7.549	1.00	0.69	C
ATOM	623	CD	GLU	A	210	5.045	38.983	-7.772	1.00	0.69	C
ATOM	624	OE1	GLU	A	210	5.513	37.906	-7.342	1.00	0.69	O
ATOM	625	OE2	GLU	A	210	3.953	39.096	-8.373	1.00	0.69	O
ATOM	626	N	SERA	A	211	8.357	41.519	-10.039	1.00	0.68	N
ATOM	627	CA	SERA	A	211	8.189	42.526	-11.108	1.00	0.68	C
ATOM	628	C	SERA	A	211	8.393	41.936	-12.512	1.00	0.68	C
ATOM	629	O	SERA	A	211	7.630	42.234	-13.425	1.00	0.68	O
ATOM	630	CB	SERA	A	211	9.175	43.682	-10.907	1.00	0.68	C
ATOM	631	OG	SERA	A	211	10.523	43.193	-10.890	1.00	0.68	O
ATOM	632	N	GLYA	A	212	9.385	41.038	-12.609	1.00	0.68	N
ATOM	633	CA	GLYA	A	212	9.749	40.364	-13.869	1.00	0.68	C
ATOM	634	C	GLYA	A	212	8.724	39.298	-14.273	1.00	0.68	C
ATOM	635	O	GLYA	A	212	8.420	39.128	-15.452	1.00	0.68	O
ATOM	636	N	TYR	A	213	8.245	38.572	-13.267	1.00	0.71	N
ATOM	637	CA	TYR	A	213	7.304	37.461	-13.464	1.00	0.71	C
ATOM	638	C	TYR	A	213	6.174	37.561	-12.415	1.00	0.71	C
ATOM	639	O	TYR	A	213	6.151	36.810	-11.436	1.00	0.71	O
ATOM	640	CB	TYR	A	213	8.126	36.172	-13.366	1.00	0.71	C
ATOM	641	CG	TYR	A	213	7.547	34.973	-14.120	1.00	0.71	C
ATOM	642	CD1	TYR	A	213	6.187	34.808	-14.366	1.00	0.71	C
ATOM	643	CD2	TYR	A	213	8.446	34.022	-14.579	1.00	0.71	C
ATOM	644	CE1	TYR	A	213	5.738	33.700	-15.071	1.00	0.71	C
ATOM	645	CE2	TYR	A	213	8.004	32.916	-15.289	1.00	0.71	C
ATOM	646	CZ	TYR	A	213	6.648	32.757	-15.536	1.00	0.71	C
ATOM	647	OH	TYR	A	213	6.219	31.685	-16.251	1.00	0.71	O
ATOM	648	N	PROA	A	214	5.235	38.493	-12.627	1.00	0.76	N
ATOM	649	CA	PROA	A	214	4.170	38.805	-11.656	1.00	0.76	C

ATOM	650	C	PROA	214	3.144	37.680	-11.527	1.00	0.76	C	
ATOM	651	O	PROA	214	2.902	36.946	-12.480	1.00	0.76	O	
ATOM	652	CB	PROA	214	3.546	40.100	-12.174	1.00	0.76	C	
ATOM	653	CG	PROA	214	3.741	40.006	-13.687	1.00	0.76	C	
ATOM	654	CD	PROA	214	5.111	39.346	-13.826	1.00	0.76	C	
ATOM	655	N	TYR	A	215	2.606	37.556	-10.321	1.00	0.75	N
ATOM	656	CA	TYR	A	215	1.592	36.551	-9.975	1.00	0.75	C
ATOM	657	C	TYR	A	215	0.234	36.948	-10.551	1.00	0.75	C
ATOM	658	O	TYR	A	215	-0.248	38.064	-10.362	1.00	0.75	O
ATOM	659	CB	TYR	A	215	1.492	36.442	-8.453	1.00	0.75	C
ATOM	660	CG	TYR	A	215	0.574	35.292	-8.047	1.00	0.75	C
ATOM	661	CD1	TYR	A	215	0.989	33.992	-8.304	1.00	0.75	C
ATOM	662	CD2	TYR	A	215	-0.630	35.554	-7.398	1.00	0.75	C
ATOM	663	CE1	TYR	A	215	0.198	32.936	-7.909	1.00	0.75	C
ATOM	664	CE2	TYR	A	215	-1.423	34.502	-6.988	1.00	0.75	C
ATOM	665	CZ	TYR	A	215	-0.989	33.221	-7.258	1.00	0.75	C
ATOM	666	OH	TYR	A	215	-1.807	32.206	-7.012	1.00	0.75	O
ATOM	667	N	GLN	A	216	-0.427	35.940	-11.079	1.00	0.70	N
ATOM	668	CA	GLN	A	216	-1.743	36.178	-11.690	1.00	0.70	C
ATOM	669	C	GLN	A	216	-2.776	35.092	-11.340	1.00	0.70	C
ATOM	670	O	GLN	A	216	-3.785	34.921	-12.021	1.00	0.70	O
ATOM	671	CB	GLN	A	216	-1.433	36.264	-13.170	1.00	0.70	C
ATOM	672	CG	GLN	A	216	-1.132	34.860	-13.709	1.00	0.70	C
ATOM	673	CD	GLN	A	216	0.306	34.541	-13.884	1.00	0.70	C
ATOM	674	OE1	GLN	A	216	1.174	35.240	-13.394	1.00	0.70	O
ATOM	675	NE2	GLN	A	216	0.558	33.393	-14.471	1.00	0.70	N
ATOM	676	N	CYSA	217	-2.380	34.271	-10.369	1.00	0.75	N	
ATOM	677	CA	CYSA	217	-3.216	33.200	-9.801	1.00	0.75	C	
ATOM	678	C	CYSA	217	-3.881	32.329	-10.886	1.00	0.75	C	
ATOM	679	O	CYSA	217	-5.097	32.303	-11.055	1.00	0.75	O	
ATOM	680	CB	CYSA	217	-4.244	33.860	-8.873	1.00	0.75	C	
ATOM	681	SG	CYSA	217	-5.446	32.660	-8.205	1.00	0.75	S	
ATOM	682	N	ARG	A	218	-3.040	31.616	-11.623	1.00	0.66	N
ATOM	683	CA	ARG	A	218	-3.486	30.718	-12.709	1.00	0.66	C
ATOM	684	C	ARG	A	218	-2.308	29.882	-13.217	1.00	0.66	C
ATOM	685	O	ARG	A	218	-1.145	30.235	-13.005	1.00	0.66	O
ATOM	686	CB	ARG	A	218	-4.140	31.487	-13.875	1.00	0.66	C
ATOM	687	CG	ARG	A	218	-3.176	32.405	-14.631	1.00	0.66	C
ATOM	688	CD	ARG	A	218	-3.861	33.122	-15.800	1.00	0.66	C
ATOM	689	NE	ARG	A	218	-2.935	34.017	-16.525	1.00	0.66	N
ATOM	690	CZ	ARG	A	218	-2.694	35.303	-16.246	1.00	0.66	C
ATOM	691	NH1	ARG	A	218	-3.333	35.887	-15.245	1.00	0.66	N

ATOM	692	NH2ARG	A	218	-1.671	35.944	-16.809	1.00	0.66	N
ATOM	693	N ASPA		219	-2.647	28.733	-13.794	1.00	0.75	N
ATOM	694	CA ASPA		219	-1.649	27.836	-14.405	1.00	0.75	C
ATOM	695	C ASPA		219	-1.208	28.351	-15.779	1.00	0.75	C
ATOM	696	O ASPA		219	-1.860	28.113	-16.794	1.00	0.75	O
ATOM	697	CB ASPA		219	-2.164	26.399	-14.537	1.00	0.75	C
ATOM	698	CG ASPA		219	-2.382	25.742	-13.179	1.00	0.75	C
ATOM	699	OD1ASP A		219	-1.367	25.467	-12.502	1.00	0.75	O
ATOM	700	OD2ASP A		219	-3.567	25.598	-12.817	1.00	0.75	O
ATOM	701	N GLYA		220	-0.141	29.147	-15.737	1.00	0.78	N
ATOM	702	CA GLYA		220	0.473	29.702	-16.950	1.00	0.78	C
ATOM	703	C GLYA		220	1.550	28.753	-17.511	1.00	0.78	C
ATOM	704	O GLYA		220	2.127	27.966	-16.755	1.00	0.78	O
ATOM	705	N PROA		221	1.815	28.834	-18.821	1.00	0.77	N
ATOM	706	CA PROA		221	2.940	28.122	-19.453	1.00	0.77	C
ATOM	707	C PROA		221	4.249	28.791	-19.013	1.00	0.77	C
ATOM	708	O PROA		221	4.326	30.019	-18.945	1.00	0.77	O
ATOM	709	CB PROA		221	2.689	28.294	-20.954	1.00	0.77	C
ATOM	710	CG PROA		221	1.980	29.645	-21.053	1.00	0.77	C
ATOM	711	CD PROA		221	1.087	29.654	-19.814	1.00	0.77	C
ATOM	712	N CYSA		222	5.238	27.977	-18.656	1.00	0.81	N
ATOM	713	CA CYSA		222	6.554	28.481	-18.215	1.00	0.81	C
ATOM	714	C CYSA		222	7.150	29.454	-19.243	1.00	0.81	C
ATOM	715	O CYSA		222	7.416	29.094	-20.390	1.00	0.81	O
ATOM	716	CB CYSA		222	7.517	27.313	-17.984	1.00	0.81	C
ATOM	717	SG CYSA		222	9.185	27.853	-17.453	1.00	0.81	S
ATOM	718	N ARG	A	223	7.274	30.705	-18.813	1.00	0.66	N
ATOM	719	CA ARG	A	223	7.853	31.764	-19.650	1.00	0.66	C
ATOM	720	C ARG	A	223	9.374	31.699	-19.489	1.00	0.66	C
ATOM	721	O ARG	A	223	9.952	32.316	-18.596	1.00	0.66	O
ATOM	722	CB ARG	A	223	7.277	33.123	-19.236	1.00	0.66	C
ATOM	723	CG ARG	A	223	7.769	34.246	-20.150	1.00	0.66	C
ATOM	724	CD ARG	A	223	7.125	35.576	-19.759	1.00	0.66	C
ATOM	725	NE ARG	A	223	7.633	36.651	-20.630	1.00	0.66	N
ATOM	726	CZ ARG	A	223	8.785	37.311	-20.489	1.00	0.66	C
ATOM	727	NH1ARG	A	223	9.621	37.035	-19.504	1.00	0.66	N
ATOM	728	NH2ARG	A	223	9.110	38.289	-21.321	1.00	0.66	N
ATOM	729	N SERA		224	9.991	30.956	-20.406	1.00	0.69	N
ATOM	730	CA SERA		224	11.449	30.703	-20.390	1.00	0.69	C
ATOM	731	C SERA		224	12.290	31.990	-20.348	1.00	0.69	C
ATOM	732	O SERA		224	13.286	32.062	-19.634	1.00	0.69	O
ATOM	733	CB SERA		224	11.860	29.879	-21.613	1.00	0.69	C

ATOM	734	OG	SER A	224	13.268	29.637	-21.582	1.00	0.69	O	
ATOM	735	N	SER A	225	11.796	33.033	-21.017	1.00	0.62	N	
ATOM	736	CA	SER A	225	12.483	34.342	-21.060	1.00	0.62	C	
ATOM	737	C	SER A	225	12.654	34.949	-19.657	1.00	0.62	C	
ATOM	738	O	SER A	225	13.735	35.415	-19.300	1.00	0.62	O	
ATOM	739	CB	SER A	225	11.715	35.325	-21.946	1.00	0.62	C	
ATOM	740	OG	SER A	225	12.458	36.541	-22.042	1.00	0.62	O	
ATOM	741	N	ALA	A	226	11.621	34.777	-18.830	1.00	0.70	N
ATOM	742	CA	ALA	A	226	11.606	35.222	-17.423	1.00	0.70	C
ATOM	743	C	ALA	A	226	12.324	34.231	-16.486	1.00	0.70	C
ATOM	744	O	ALA	A	226	11.836	33.857	-15.416	1.00	0.70	O
ATOM	745	CB	ALA	A	226	10.158	35.450	-16.989	1.00	0.70	C
ATOM	746	N	ALA	A	227	13.503	33.811	-16.933	1.00	0.68	N
ATOM	747	CA	ALA	A	227	14.364	32.919	-16.145	1.00	0.68	C
ATOM	748	C	ALA	A	227	15.281	33.792	-15.300	1.00	0.68	C
ATOM	749	O	ALA	A	227	15.378	33.478	-14.125	1.00	0.68	O
ATOM	750	CB	ALA	A	227	15.186	31.968	-17.013	1.00	0.68	C
ATOM	751	N	ALA	A	228	15.918	34.777	-15.961	1.00	0.56	N
ATOM	752	CA	ALA	A	228	16.615	35.955	-15.385	1.00	0.56	C
ATOM	753	C	ALA	A	228	16.574	35.979	-13.852	1.00	0.56	C
ATOM	754	O	ALA	A	228	15.801	36.698	-13.213	1.00	0.56	O
ATOM	755	CB	ALA	A	228	15.977	37.220	-15.981	1.00	0.56	C
ATOM	756	N	ALA	A	229	17.323	35.026	-13.289	1.00	0.66	N
ATOM	757	CA	ALA	A	229	17.266	34.757	-11.852	1.00	0.66	C
ATOM	758	C	ALA	A	229	17.813	35.993	-11.148	1.00	0.66	C
ATOM	759	O	ALA	A	229	18.689	36.678	-11.674	1.00	0.66	O
ATOM	760	CB	ALA	A	229	18.103	33.519	-11.519	1.00	0.66	C
ATOM	761	N	ALA	A	230	17.164	36.330	-10.049	1.00	0.66	N
ATOM	762	CA	ALA	A	230	17.549	37.520	-9.274	1.00	0.66	C
ATOM	763	C	ALA	A	230	18.168	37.131	-7.928	1.00	0.66	C
ATOM	764	O	ALA	A	230	19.019	37.840	-7.399	1.00	0.66	O
ATOM	765	CB	ALA	A	230	16.323	38.416	-9.074	1.00	0.66	C
ATOM	766	N	ALA	A	231	17.695	36.011	-7.385	1.00	0.78	N
ATOM	767	CA	ALA	A	231	18.174	35.483	-6.099	1.00	0.78	C
ATOM	768	C	ALA	A	231	18.423	33.980	-6.216	1.00	0.78	C
ATOM	769	O	ALA	A	231	17.514	33.243	-6.594	1.00	0.78	O
ATOM	770	CB	ALA	A	231	17.121	35.754	-5.020	1.00	0.78	C
ATOM	771	N	SER A	232	19.614	33.569	-5.804	1.00	0.76	N	
ATOM	772	CA	SER A	232	20.048	32.159	-5.852	1.00	0.76	C	
ATOM	773	C	SER A	232	20.173	31.574	-4.446	1.00	0.76	C	
ATOM	774	O	SER A	232	20.242	32.286	-3.463	1.00	0.76	O	
ATOM	775	CB	SER A	232	21.412	32.046	-6.537	1.00	0.76	C	

ATOM	776	OG	SER	A	232	22.386	32.782	-5.789	1.00	0.76	O
ATOM	777	N	ILE	A	233	20.034	30.269	-4.341	1.00	0.72	N
ATOM	778	CA	ILE	A	233	20.232	29.565	-3.061	1.00	0.72	C
ATOM	779	C	ILE	A	233	21.166	28.379	-3.337	1.00	0.72	C
ATOM	780	O	ILE	A	233	21.172	27.851	-4.449	1.00	0.72	O
ATOM	781	CB	ILE	A	233	18.885	29.131	-2.449	1.00	0.72	C
ATOM	782	CG1	ILE	A	233	18.186	28.060	-3.293	1.00	0.72	C
ATOM	783	CG2	ILE	A	233	17.967	30.345	-2.208	1.00	0.72	C
ATOM	784	CD1	ILE	A	233	17.144	27.326	-2.448	1.00	0.72	C
ATOM	785	N	ARG	A	234	21.901	27.944	-2.322	1.00	0.66	N
ATOM	786	CA	ARG	A	234	22.830	26.802	-2.478	1.00	0.66	C
ATOM	787	C	ARG	A	234	22.146	25.423	-2.370	1.00	0.66	C
ATOM	788	O	ARG	A	234	22.680	24.418	-2.834	1.00	0.66	O
ATOM	789	CB	ARG	A	234	24.089	26.923	-1.596	1.00	0.66	C
ATOM	790	CG	ARG	A	234	23.784	27.134	-0.112	1.00	0.66	C
ATOM	791	CD	ARG	A	234	24.913	26.895	0.900	1.00	0.66	C
ATOM	792	NE	ARG	A	234	24.422	26.917	2.302	1.00	0.66	N
ATOM	793	CZ	ARG	A	234	24.063	27.990	3.023	1.00	0.66	C
ATOM	794	NH1	ARG	A	234	24.117	29.189	2.498	1.00	0.66	N
ATOM	795	NH2	ARG	A	234	23.616	27.866	4.276	1.00	0.66	N
ATOM	796	N	GLYA	A	235	20.989	25.395	-1.695	1.00	0.80	N
ATOM	797	CA	GLYA	A	235	20.162	24.181	-1.511	1.00	0.80	C
ATOM	798	C	GLYA	A	235	19.068	24.449	-0.465	1.00	0.80	C
ATOM	799	O	GLYA	A	235	18.684	25.598	-0.236	1.00	0.80	O
ATOM	800	N	HIS	A	236	18.807	23.429	0.346	1.00	0.76	N
ATOM	801	CA	HIS	A	236	17.771	23.479	1.395	1.00	0.76	C
ATOM	802	C	HIS	A	236	17.900	22.272	2.328	1.00	0.76	C
ATOM	803	O	HIS	A	236	18.384	21.213	1.933	1.00	0.76	O
ATOM	804	CB	HIS	A	236	16.372	23.503	0.762	1.00	0.76	C
ATOM	805	CG	HIS	A	236	16.091	22.267	-0.097	1.00	0.76	C
ATOM	806	ND1	HIS	A	236	15.467	21.172	0.324	1.00	0.76	N
ATOM	807	CD2	HIS	A	236	16.536	22.050	-1.331	1.00	0.76	C
ATOM	808	CE1	HIS	A	236	15.525	20.266	-0.641	1.00	0.76	C
ATOM	809	NE2	HIS	A	236	16.190	20.813	-1.648	1.00	0.76	N
ATOM	810	N	GLU	A	237	17.475	22.489	3.564	1.00	0.77	N
ATOM	811	CA	GLU	A	237	17.490	21.456	4.610	1.00	0.77	C
ATOM	812	C	GLU	A	237	16.164	21.475	5.381	1.00	0.77	C
ATOM	813	O	GLU	A	237	15.481	22.500	5.433	1.00	0.77	O
ATOM	814	CB	GLU	A	237	18.690	21.696	5.540	1.00	0.77	C
ATOM	815	CG	GLU	A	237	18.867	20.606	6.608	1.00	0.77	C
ATOM	816	CD	GLU	A	237	19.109	19.221	5.995	1.00	0.77	C
ATOM	817	OE1	GLU	A	237	18.116	18.623	5.517	1.00	0.77	O

ATOM	818	OE2	GLU	A	237	20.284	18.805	6.003	1.00	0.77	O
ATOM	819	N	ASP	A	238	15.833	20.330	5.967	1.00	0.79	N
ATOM	820	CA	ASP	A	238	14.631	20.191	6.803	1.00	0.79	C
ATOM	821	C	ASP	A	238	15.022	20.278	8.284	1.00	0.79	C
ATOM	822	O	ASP	A	238	16.067	19.784	8.710	1.00	0.79	O
ATOM	823	CB	ASP	A	238	13.969	18.841	6.480	1.00	0.79	C
ATOM	824	CG	ASP	A	238	12.581	18.619	7.100	1.00	0.79	C
ATOM	825	OD1	ASP	A	238	12.315	19.153	8.179	1.00	0.79	O
ATOM	826	OD2	ASP	A	238	11.783	17.885	6.485	1.00	0.79	O
ATOM	827	N	VAL	A	239	14.142	20.924	9.039	1.00	0.80	N
ATOM	828	CA	VAL	A	239	14.193	20.930	10.511	1.00	0.80	C
ATOM	829	C	VAL	A	239	13.797	19.523	11.024	1.00	0.80	C
ATOM	830	O	VAL	A	239	12.809	18.948	10.573	1.00	0.80	O
ATOM	831	CB	VAL	A	239	13.229	22.000	11.059	1.00	0.80	C
ATOM	832	CG1	VAL	A	239	13.245	22.102	12.587	1.00	0.80	C
ATOM	833	CG2	VAL	A	239	13.509	23.383	10.464	1.00	0.80	C
ATOM	834	N	PRO	A	240	14.491	19.007	12.043	1.00	0.77	N
ATOM	835	CA	PRO	A	240	14.131	17.728	12.688	1.00	0.77	C
ATOM	836	C	PRO	A	240	12.636	17.754	13.035	1.00	0.77	C
ATOM	837	O	PRO	A	240	12.130	18.752	13.553	1.00	0.77	O
ATOM	838	CB	PRO	A	240	14.981	17.709	13.956	1.00	0.77	C
ATOM	839	CG	PRO	A	240	16.242	18.463	13.540	1.00	0.77	C
ATOM	840	CD	PRO	A	240	15.721	19.571	12.629	1.00	0.77	C
ATOM	841	N	ARG	A	241	11.937	16.716	12.587	1.00	0.68	N
ATOM	842	CA	ARG	A	241	10.469	16.657	12.704	1.00	0.68	C
ATOM	843	C	ARG	A	241	10.048	16.636	14.178	1.00	0.68	C
ATOM	844	O	ARG	A	241	10.748	16.092	15.033	1.00	0.68	O
ATOM	845	CB	ARG	A	241	9.941	15.411	11.988	1.00	0.68	C
ATOM	846	CG	ARG	A	241	8.412	15.326	12.046	1.00	0.68	C
ATOM	847	CD	ARG	A	241	7.881	14.055	11.393	1.00	0.68	C
ATOM	848	NE	ARG	A	241	8.061	14.159	9.937	1.00	0.68	N
ATOM	849	CZ	ARG	A	241	7.250	14.779	9.078	1.00	0.68	C
ATOM	850	NH1	ARG	A	241	6.127	15.355	9.479	1.00	0.68	N
ATOM	851	NH2	ARG	A	241	7.577	14.867	7.800	1.00	0.68	N
ATOM	852	N	ASN	A	242	8.895	17.246	14.430	1.00	0.72	N
ATOM	853	CA	ASN	A	242	8.234	17.188	15.751	1.00	0.72	C
ATOM	854	C	ASN	A	242	9.131	17.665	16.897	1.00	0.72	C
ATOM	855	O	ASN	A	242	9.254	17.029	17.946	1.00	0.72	O
ATOM	856	CB	ASN	A	242	7.726	15.766	16.049	1.00	0.72	C
ATOM	857	CG	ASN	A	242	6.718	15.342	14.996	1.00	0.72	C
ATOM	858	OD1	ASN	A	242	6.099	16.180	14.395	1.00	0.72	O
ATOM	859	ND2	ASN	A	242	6.627	14.047	14.748	1.00	0.72	N

ATOM	860	N	ASN	A	243	9.827	18.761	16.630	1.00	0.75	N
ATOM	861	CA	ASN	A	243	10.780	19.320	17.595	1.00	0.75	C
ATOM	862	C	ASN	A	243	10.737	20.846	17.513	1.00	0.75	C
ATOM	863	O	ASN	A	243	11.527	21.487	16.816	1.00	0.75	O
ATOM	864	CB	ASN	A	243	12.182	18.767	17.305	1.00	0.75	C
ATOM	865	CG	ASN	A	243	13.185	19.176	18.385	1.00	0.75	C
ATOM	866	OD1	ASN	A	243	13.023	20.147	19.118	1.00	0.75	O
ATOM	867	ND2	ASN	A	243	14.269	18.441	18.461	1.00	0.75	N
ATOM	868	N	GLU	A	244	9.847	21.421	18.313	1.00	0.76	N
ATOM	869	CA	GLU	A	244	9.672	22.886	18.339	1.00	0.76	C
ATOM	870	C	GLU	A	244	10.907	23.654	18.829	1.00	0.76	C
ATOM	871	O	GLU	A	244	11.116	24.790	18.416	1.00	0.76	O
ATOM	872	CB	GLU	A	244	8.433	23.308	19.128	1.00	0.76	C
ATOM	873	CG	GLU	A	244	7.163	22.949	18.354	1.00	0.76	C
ATOM	874	CD	GLU	A	244	5.934	23.598	18.990	1.00	0.76	C
ATOM	875	OE1	GLU	A	244	5.731	24.804	18.728	1.00	0.76	O
ATOM	876	OE2	GLU	A	244	5.243	22.921	19.782	1.00	0.76	O
ATOM	877	N	ALA	A	245	11.735	23.000	19.645	1.00	0.85	N
ATOM	878	CA	ALA	A	245	13.027	23.561	20.091	1.00	0.85	C
ATOM	879	C	ALA	A	245	14.013	23.710	18.919	1.00	0.85	C
ATOM	880	O	ALA	A	245	14.587	24.778	18.714	1.00	0.85	O
ATOM	881	CB	ALA	A	245	13.637	22.667	21.173	1.00	0.85	C
ATOM	882	N	ALA	A	246	14.039	22.692	18.058	1.00	0.88	N
ATOM	883	CA	ALA	A	246	14.855	22.696	16.827	1.00	0.88	C
ATOM	884	C	ALA	A	246	14.317	23.721	15.822	1.00	0.88	C
ATOM	885	O	ALA	A	246	15.068	24.498	15.232	1.00	0.88	O
ATOM	886	CB	ALA	A	246	14.853	21.310	16.183	1.00	0.88	C
ATOM	887	N	LEUA		247	12.991	23.818	15.791	1.00	0.86	N
ATOM	888	CA	LEUA		247	12.297	24.793	14.945	1.00	0.86	C
ATOM	889	C	LEUA		247	12.555	26.237	15.392	1.00	0.86	C
ATOM	890	O	LEUA		247	12.801	27.107	14.561	1.00	0.86	O
ATOM	891	CB	LEUA		247	10.807	24.479	14.951	1.00	0.86	C
ATOM	892	CG	LEUA		247	10.042	25.410	14.018	1.00	0.86	C
ATOM	893	CD1	LEUA		247	10.488	25.314	12.557	1.00	0.86	C
ATOM	894	CD2	LEUA		247	8.595	25.003	14.148	1.00	0.86	C
ATOM	895	N	ALA	A	248	12.650	26.420	16.705	1.00	0.89	N
ATOM	896	CA	ALA	A	248	12.929	27.729	17.324	1.00	0.89	C
ATOM	897	C	ALA	A	248	14.330	28.229	16.959	1.00	0.89	C
ATOM	898	O	ALA	A	248	14.477	29.347	16.470	1.00	0.89	O
ATOM	899	CB	ALA	A	248	12.782	27.629	18.843	1.00	0.89	C
ATOM	900	N	ALA	A	249	15.283	27.297	16.986	1.00	0.87	N
ATOM	901	CA	ALA	A	249	16.683	27.574	16.615	1.00	0.87	C



ATOM	902	C	ALA	A	249	16.815	27.938	15.128	1.00	0.87	C
ATOM	903	O	ALA	A	249	17.525	28.877	14.772	1.00	0.87	O
ATOM	904	CB	ALA	A	249	17.546	26.351	16.933	1.00	0.87	C
ATOM	905	N	ALA	A	250	16.004	27.277	14.301	1.00	0.90	N
ATOM	906	CA	ALA	A	250	15.969	27.506	12.844	1.00	0.90	C
ATOM	907	C	ALA	A	250	15.366	28.874	12.485	1.00	0.90	C
ATOM	908	O	ALA	A	250	15.957	29.638	11.722	1.00	0.90	O
ATOM	909	CB	ALA	A	250	15.173	26.386	12.173	1.00	0.90	C
ATOM	910	N	VALA	251	14.277	29.218	13.176	1.00	0.90	N	
ATOM	911	CA	VALA	251	13.557	30.495	12.976	1.00	0.90	C	
ATOM	912	C	VALA	251	14.401	31.689	13.448	1.00	0.90	C	
ATOM	913	O	VALA	251	14.337	32.764	12.852	1.00	0.90	O	
ATOM	914	CB	VALA	251	12.179	30.482	13.670	1.00	0.90	C	
ATOM	915	CG1	VALA	251	11.425	31.808	13.503	1.00	0.90	C	
ATOM	916	CG2	VALA	251	11.283	29.390	13.084	1.00	0.90	C	
ATOM	917	N	ALA	A	252	15.202	31.464	14.488	1.00	0.87	N
ATOM	918	CA	ALA	A	252	16.092	32.500	15.047	1.00	0.87	C
ATOM	919	C	ALA	A	252	17.077	33.024	13.993	1.00	0.87	C
ATOM	920	O	ALA	A	252	17.454	34.193	14.020	1.00	0.87	O
ATOM	921	CB	ALA	A	252	16.865	31.930	16.237	1.00	0.87	C
ATOM	922	N	HIS A	253	17.399	32.157	13.035	1.00	0.81	N	
ATOM	923	CA	HIS A	253	18.327	32.478	11.942	1.00	0.81	C	
ATOM	924	C	HIS A	253	17.636	33.144	10.741	1.00	0.81	C	
ATOM	925	O	HIS A	253	18.250	33.958	10.056	1.00	0.81	O	
ATOM	926	CB	HIS A	253	19.034	31.190	11.507	1.00	0.81	C	
ATOM	927	CG	HIS A	253	20.026	31.453	10.372	1.00	0.81	C	
ATOM	928	ND1	HIS A	253	19.714	31.543	9.082	1.00	0.81	N	
ATOM	929	CD2	HIS A	253	21.335	31.649	10.493	1.00	0.81	C	
ATOM	930	CE1	HIS A	253	20.827	31.790	8.402	1.00	0.81	C	
ATOM	931	NE2	HIS A	253	21.830	31.842	9.275	1.00	0.81	N	
ATOM	932	N	GLN	A	254	16.417	32.705	10.438	1.00	0.80	N
ATOM	933	CA	GLN	A	254	15.728	33.060	9.185	1.00	0.80	C
ATOM	934	C	GLN	A	254	14.259	32.605	9.227	1.00	0.80	C
ATOM	935	O	GLN	A	254	13.930	31.694	9.995	1.00	0.80	O
ATOM	936	CB	GLN	A	254	16.443	32.381	8.002	1.00	0.80	C
ATOM	937	CG	GLN	A	254	16.331	30.858	8.096	1.00	0.80	C
ATOM	938	CD	GLN	A	254	17.194	30.146	7.074	1.00	0.80	C
ATOM	939	OE1	GLN	A	254	17.042	30.264	5.870	1.00	0.80	O
ATOM	940	NE2	GLN	A	254	18.105	29.359	7.601	1.00	0.80	N
ATOM	941	N	PROA	255	13.413	33.191	8.369	1.00	0.91	N	
ATOM	942	CA	PROA	255	12.043	32.697	8.140	1.00	0.91	C	
ATOM	943	C	PROA	255	12.111	31.244	7.650	1.00	0.91	C	

ATOM	944	O	PROA	255	12.991	30.878	6.871	1.00	0.91	O	
ATOM	945	CB	PROA	255	11.496	33.597	7.032	1.00	0.91	C	
ATOM	946	CG	PROA	255	12.240	34.913	7.245	1.00	0.91	C	
ATOM	947	CD	PROA	255	13.640	34.462	7.654	1.00	0.91	C	
ATOM	948	N	VALA	256	11.199	30.427	8.158	1.00	0.87	N	
ATOM	949	CA	VALA	256	11.160	28.986	7.828	1.00	0.87	C	
ATOM	950	C	VALA	256	9.809	28.641	7.186	1.00	0.87	C	
ATOM	951	O	VALA	256	8.754	28.958	7.738	1.00	0.87	O	
ATOM	952	CB	VALA	256	11.424	28.140	9.095	1.00	0.87	C	
ATOM	953	CG1	VALA	256	11.356	26.631	8.830	1.00	0.87	C	
ATOM	954	CG2	VALA	256	12.804	28.444	9.688	1.00	0.87	C	
ATOM	955	N	SER A	257	9.888	27.842	6.127	1.00	0.88	N	
ATOM	956	CA	SER A	257	8.698	27.285	5.455	1.00	0.88	C	
ATOM	957	C	SER A	257	8.169	26.097	6.254	1.00	0.88	C	
ATOM	958	O	SER A	257	8.930	25.229	6.684	1.00	0.88	O	
ATOM	959	CB	SER A	257	9.036	26.785	4.052	1.00	0.88	C	
ATOM	960	OG	SER A	257	9.443	27.889	3.245	1.00	0.88	O	
ATOM	961	N	VALA	258	6.867	26.121	6.492	1.00	0.85	N	
ATOM	962	CA	VALA	258	6.193	25.062	7.265	1.00	0.85	C	
ATOM	963	C	VALA	258	4.862	24.673	6.597	1.00	0.85	C	
ATOM	964	O	VALA	258	4.237	25.468	5.889	1.00	0.85	O	
ATOM	965	CB	VALA	258	5.972	25.492	8.731	1.00	0.85	C	
ATOM	966	CG1	VALA	258	7.259	25.864	9.477	1.00	0.85	C	
ATOM	967	CG2	VALA	258	5.011	26.671	8.797	1.00	0.85	C	
ATOM	968	N	ALA	A	259	4.405	23.482	6.949	1.00	0.90	N
ATOM	969	CA	ALA	A	259	3.092	22.973	6.525	1.00	0.90	C
ATOM	970	C	ALA	A	259	2.216	22.779	7.764	1.00	0.90	C
ATOM	971	O	ALA	A	259	2.698	22.395	8.830	1.00	0.90	O
ATOM	972	CB	ALA	A	259	3.272	21.641	5.798	1.00	0.90	C
ATOM	973	N	ILE A	260	0.954	23.148	7.608	1.00	0.82	N	
ATOM	974	CA	ILE A	260	-0.040	23.068	8.691	1.00	0.82	C	
ATOM	975	C	ILE A	260	-1.359	22.483	8.172	1.00	0.82	C	
ATOM	976	O	ILE A	260	-1.591	22.362	6.964	1.00	0.82	O	
ATOM	977	CB	ILE A	260	-0.275	24.448	9.337	1.00	0.82	C	
ATOM	978	CG1	ILE A	260	-0.825	25.447	8.310	1.00	0.82	C	
ATOM	979	CG2	ILE A	260	0.997	24.948	10.038	1.00	0.82	C	
ATOM	980	CD1	ILE A	260	-1.509	26.644	8.972	1.00	0.82	C	
ATOM	981	N	ASN	A	261	-2.228	22.202	9.127	1.00	0.84	N
ATOM	982	CA	ASN	A	261	-3.607	21.797	8.854	1.00	0.84	C
ATOM	983	C	ASN	A	261	-4.483	23.042	9.039	1.00	0.84	C
ATOM	984	O	ASN	A	261	-4.803	23.437	10.162	1.00	0.84	O
ATOM	985	CB	ASN	A	261	-3.998	20.693	9.838	1.00	0.84	C

ATOM	986	CG	ASN	A	261	-5.361	20.107	9.475	1.00	0.84	C
ATOM	987	OD1	ASN	A	261	-6.182	20.734	8.831	1.00	0.84	O
ATOM	988	ND2	ASN	A	261	-5.620	18.908	9.943	1.00	0.84	N
ATOM	989	N	GLYA	262	-4.816	23.658	7.901	1.00	0.84	N	
ATOM	990	CA	GLYA	262	-5.630	24.888	7.892	1.00	0.84	C	
ATOM	991	C	GLYA	262	-7.017	24.638	7.290	1.00	0.84	C	
ATOM	992	O	GLYA	262	-7.690	25.569	6.859	1.00	0.84	O	
ATOM	993	N	GLU	A	263	-7.465	23.385	7.385	1.00	0.72	N
ATOM	994	CA	GLU	A	263	-8.776	22.977	6.841	1.00	0.72	C
ATOM	995	C	GLU	A	263	-9.953	23.237	7.789	1.00	0.72	C
ATOM	996	O	GLU	A	263	-11.087	22.906	7.467	1.00	0.72	O
ATOM	997	CB	GLU	A	263	-8.801	21.507	6.414	1.00	0.72	C
ATOM	998	CG	GLU	A	263	-8.689	20.515	7.578	1.00	0.72	C
ATOM	999	CD	GLU	A	263	-8.507	19.063	7.132	1.00	0.72	C
ATOM	1000	OE1	GLU	A	263	-9.089	18.718	6.085	1.00	0.72	O
ATOM	1001	OE2	GLU	A	263	-7.822	18.318	7.873	1.00	0.72	O
ATOM	1002	N	ASPA	264	-9.646	23.581	9.032	1.00	0.73	N	
ATOM	1003	CA	ASPA	264	-10.712	23.799	10.022	1.00	0.73	C	
ATOM	1004	C	ASPA	264	-11.210	25.251	10.057	1.00	0.73	C	
ATOM	1005	O	ASPA	264	-10.489	26.191	9.723	1.00	0.73	O	
ATOM	1006	CB	ASPA	264	-10.250	23.355	11.406	1.00	0.73	C	
ATOM	1007	CG	ASPA	264	-9.066	24.171	11.890	1.00	0.73	C	
ATOM	1008	OD1	ASPA	264	-8.944	25.366	11.579	1.00	0.73	O	
ATOM	1009	OD2	ASPA	264	-8.251	23.527	12.511	1.00	0.73	O	
ATOM	1010	N	MET	A	265	-12.370	25.385	10.682	1.00	0.69	N
ATOM	1011	CA	MET	A	265	-13.035	26.685	10.884	1.00	0.69	C
ATOM	1012	C	MET	A	265	-12.325	27.653	11.844	1.00	0.69	C
ATOM	1013	O	MET	A	265	-12.183	28.844	11.590	1.00	0.69	O
ATOM	1014	CB	MET	A	265	-14.496	26.497	11.286	1.00	0.69	C
ATOM	1015	CG	MET	A	265	-14.609	25.792	12.640	1.00	0.69	C
ATOM	1016	SD	MET	A	265	-16.327	25.555	13.201	1.00	0.69	S
ATOM	1017	CE	MET	A	265	-16.843	24.348	11.999	1.00	0.69	C
ATOM	1018	N	ALA	A	266	-11.800	27.094	12.926	1.00	0.78	N
ATOM	1019	CA	ALA	A	266	-11.118	27.897	13.954	1.00	0.78	C
ATOM	1020	C	ALA	A	266	-9.918	28.661	13.379	1.00	0.78	C
ATOM	1021	O	ALA	A	266	-9.828	29.877	13.523	1.00	0.78	O
ATOM	1022	CB	ALA	A	266	-10.677	26.981	15.091	1.00	0.78	C
ATOM	1023	N	PHEA	267	-9.131	27.962	12.560	1.00	0.75	N	
ATOM	1024	CA	PHEA	267	-7.967	28.563	11.890	1.00	0.75	C	
ATOM	1025	C	PHEA	267	-8.411	29.527	10.783	1.00	0.75	C	
ATOM	1026	O	PHEA	267	-7.904	30.639	10.699	1.00	0.75	O	
ATOM	1027	CB	PHEA	267	-7.063	27.478	11.299	1.00	0.75	C	

ATOM	1028	CG	PHEA	267	-5.825	28.053	10.624	1.00	0.75	C	
ATOM	1029	CD1	PHEA	267	-5.887	28.480	9.304	1.00	0.75	C	
ATOM	1030	CD2	PHEA	267	-4.677	28.227	11.379	1.00	0.75	C	
ATOM	1031	CE1	PHEA	267	-4.788	29.107	8.738	1.00	0.75	C	
ATOM	1032	CE2	PHEA	267	-3.578	28.854	10.811	1.00	0.75	C	
ATOM	1033	CZ	PHEA	267	-3.636	29.296	9.494	1.00	0.75	C	
ATOM	1034	N	ARG	A	268	-9.396	29.106	9.995	1.00	0.68	N
ATOM	1035	CA	ARG	A	268	-9.847	29.902	8.836	1.00	0.68	C
ATOM	1036	C	ARG	A	268	-10.483	31.253	9.208	1.00	0.68	C
ATOM	1037	O	ARG	A	268	-10.300	32.218	8.474	1.00	0.68	O
ATOM	1038	CB	ARG	A	268	-10.771	29.096	7.924	1.00	0.68	C
ATOM	1039	CG	ARG	A	268	-12.062	28.774	8.653	1.00	0.68	C
ATOM	1040	CD	ARG	A	268	-13.101	28.051	7.828	1.00	0.68	C
ATOM	1041	NE	ARG	A	268	-12.630	26.713	7.493	1.00	0.68	N
ATOM	1042	CZ	ARG	A	268	-13.291	25.905	6.678	1.00	0.68	C
ATOM	1043	NH1	ARG	A	268	-14.469	26.247	6.168	1.00	0.68	N
ATOM	1044	NH2	ARG	A	268	-12.729	24.784	6.284	1.00	0.68	N
ATOM	1045	N	PHEA	269	-11.119	31.323	10.379	1.00	0.66	N	
ATOM	1046	CA	PHEA	269	-11.782	32.559	10.838	1.00	0.66	C	
ATOM	1047	C	PHEA	269	-11.013	33.281	11.951	1.00	0.66	C	
ATOM	1048	O	PHEA	269	-11.525	34.214	12.574	1.00	0.66	O	
ATOM	1049	CB	PHEA	269	-13.210	32.263	11.313	1.00	0.66	C	
ATOM	1050	CG	PHEA	269	-14.150	31.902	10.163	1.00	0.66	C	
ATOM	1051	CD1	PHEA	269	-14.793	32.889	9.429	1.00	0.66	C	
ATOM	1052	CD2	PHEA	269	-14.371	30.573	9.852	1.00	0.66	C	
ATOM	1053	CE1	PHEA	269	-15.635	32.539	8.379	1.00	0.66	C	
ATOM	1054	CE2	PHEA	269	-15.210	30.222	8.804	1.00	0.66	C	
ATOM	1055	CZ	PHEA	269	-15.837	31.203	8.056	1.00	0.66	C	
ATOM	1056	N	TYR	A	270	-9.754	32.885	12.149	1.00	0.77	N
ATOM	1057	CA	TYR	A	270	-8.851	33.590	13.072	1.00	0.77	C
ATOM	1058	C	TYR	A	270	-8.795	35.073	12.675	1.00	0.77	C
ATOM	1059	O	TYR	A	270	-8.621	35.412	11.506	1.00	0.77	O
ATOM	1060	CB	TYR	A	270	-7.455	32.963	12.995	1.00	0.77	C
ATOM	1061	CG	TYR	A	270	-6.402	33.830	13.689	1.00	0.77	C
ATOM	1062	CD1	TYR	A	270	-6.177	33.728	15.054	1.00	0.77	C
ATOM	1063	CD2	TYR	A	270	-5.724	34.782	12.938	1.00	0.77	C
ATOM	1064	CE1	TYR	A	270	-5.253	34.565	15.668	1.00	0.77	C
ATOM	1065	CE2	TYR	A	270	-4.811	35.627	13.550	1.00	0.77	C
ATOM	1066	CZ	TYR	A	270	-4.566	35.508	14.909	1.00	0.77	C
ATOM	1067	OH	TYR	A	270	-3.581	36.260	15.462	1.00	0.77	O
ATOM	1068	N	ASPA	271	-8.876	35.914	13.697	1.00	0.79	N	
ATOM	1069	CA	ASPA	271	-8.845	37.372	13.488	1.00	0.79	C	

ATOM	1070	C	ASPA	271	-7.761	38.100	14.286	1.00	0.79	C	
ATOM	1071	O	ASPA	271	-7.092	38.981	13.754	1.00	0.79	O	
ATOM	1072	CB	ASPA	271	-10.226	37.987	13.744	1.00	0.79	C	
ATOM	1073	CG	ASPA	271	-11.289	37.525	12.736	1.00	0.79	C	
ATOM	1074	OD1	ASPA	271	-10.912	37.118	11.616	1.00	0.79	O	
ATOM	1075	OD2	ASPA	271	-12.477	37.670	13.095	1.00	0.79	O	
ATOM	1076	N	SERA	272	-7.592	37.711	15.550	1.00	0.87	N	
ATOM	1077	CA	SERA	272	-6.621	38.367	16.445	1.00	0.87	C	
ATOM	1078	C	SERA	272	-6.302	37.519	17.680	1.00	0.87	C	
ATOM	1079	O	SERA	272	-7.010	36.564	18.005	1.00	0.87	O	
ATOM	1080	CB	SERA	272	-7.159	39.737	16.881	1.00	0.87	C	
ATOM	1081	OG	SERA	272	-6.176	40.432	17.654	1.00	0.87	O	
ATOM	1082	N	GLYA	273	-5.170	37.881	18.287	1.00	0.92	N	
ATOM	1083	CA	GLYA	273	-4.626	37.242	19.496	1.00	0.92	C	
ATOM	1084	C	GLYA	273	-3.722	36.066	19.121	1.00	0.92	C	
ATOM	1085	O	GLYA	273	-3.337	35.881	17.967	1.00	0.92	O	
ATOM	1086	N	VALA	274	-3.459	35.240	20.119	1.00	0.88	N	
ATOM	1087	CA	VALA	274	-2.655	34.017	19.940	1.00	0.88	C	
ATOM	1088	C	VALA	274	-3.624	32.845	19.744	1.00	0.88	C	
ATOM	1089	O	VALA	274	-4.318	32.432	20.673	1.00	0.88	O	
ATOM	1090	CB	VALA	274	-1.722	33.784	21.145	1.00	0.88	C	
ATOM	1091	CG1	VALA	274	-0.913	32.492	20.986	1.00	0.88	C	
ATOM	1092	CG2	VALA	274	-0.746	34.951	21.332	1.00	0.88	C	
ATOM	1093	N	LEUA	275	-3.675	32.364	18.509	1.00	0.86	N	
ATOM	1094	CA	LEUA	275	-4.470	31.180	18.154	1.00	0.86	C	
ATOM	1095	C	LEUA	275	-3.914	29.972	18.922	1.00	0.86	C	
ATOM	1096	O	LEUA	275	-2.731	29.633	18.839	1.00	0.86	O	
ATOM	1097	CB	LEUA	275	-4.426	30.984	16.632	1.00	0.86	C	
ATOM	1098	CG	LEUA	275	-5.389	29.900	16.126	1.00	0.86	C	
ATOM	1099	CD1	LEUA	275	-5.738	30.164	14.663	1.00	0.86	C	
ATOM	1100	CD2	LEUA	275	-4.754	28.509	16.195	1.00	0.86	C	
ATOM	1101	N	GLYA	276	-4.845	29.341	19.637	1.00	0.87	N	
ATOM	1102	CA	GLYA	276	-4.558	28.167	20.480	1.00	0.87	C	
ATOM	1103	C	GLYA	276	-5.251	26.900	19.968	1.00	0.87	C	
ATOM	1104	O	GLYA	276	-5.182	25.841	20.559	1.00	0.87	O	
ATOM	1105	N	GLYA	277	-6.105	27.065	18.965	1.00	0.84	N	
ATOM	1106	CA	GLYA	277	-6.864	25.942	18.413	1.00	0.84	C	
ATOM	1107	C	GLYA	277	-8.278	26.394	18.037	1.00	0.84	C	
ATOM	1108	O	GLYA	277	-8.604	27.578	18.110	1.00	0.84	O	
ATOM	1109	N	ALA	A	278	-9.087	25.461	17.550	1.00	0.81	N
ATOM	1110	CA	ALA	A	278	-8.732	24.035	17.392	1.00	0.81	C
ATOM	1111	C	ALA	A	278	-8.414	23.698	15.933	1.00	0.81	C

ATOM	1112O	ALA	A	278	-9.039	24.231	15.014	1.00	0.81	O
ATOM	1113CB	ALA	A	278	-9.873	23.163	17.917	1.00	0.81	C
ATOM	1114N	CYSA	279	-7.435	22.808	15.786	1.00	0.85	N	
ATOM	1115CA	CYSA	279	-6.926	22.331	14.492	1.00	0.85	C	
ATOM	1116C	CYSA	279	-6.339	20.932	14.566	1.00	0.85	C	
ATOM	1117O	CYSA	279	-5.717	20.591	15.571	1.00	0.85	O	
ATOM	1118CB	CYSA	279	-5.871	23.285	13.918	1.00	0.85	C	
ATOM	1119SG	CYSA	279	-4.437	23.595	14.991	1.00	0.85	S	
ATOM	1120N	GLYA	280	-6.580	20.160	13.498	1.00	0.88	N	
ATOM	1121CA	GLYA	280	-5.980	18.823	13.369	1.00	0.88	C	
ATOM	1122C	GLYA	280	-4.495	18.933	12.994	1.00	0.88	C	
ATOM	1123O	GLYA	280	-3.914	20.015	12.939	1.00	0.88	O	
ATOM	1124N	THR	A	281	-3.949	17.794	12.589	1.00	0.88	N
ATOM	1125CA	THR	A	281	-2.538	17.712	12.151	1.00	0.88	C
ATOM	1126C	THR	A	281	-2.372	17.085	10.757	1.00	0.88	C
ATOM	1127O	THR	A	281	-1.284	16.675	10.362	1.00	0.88	O
ATOM	1128CB	THR	A	281	-1.702	16.926	13.173	1.00	0.88	C
ATOM	1129OG1	THR	A	281	-2.303	15.643	13.369	1.00	0.88	O
ATOM	1130CG2	THR	A	281	-1.556	17.678	14.502	1.00	0.88	C
ATOM	1131N	ASP A	282	-3.479	17.006	10.019	1.00	0.84	N	
ATOM	1132CA	ASP A	282	-3.470	16.571	8.617	1.00	0.84	C	
ATOM	1133C	ASP A	282	-3.057	17.755	7.732	1.00	0.84	C	
ATOM	1134O	ASP A	282	-3.860	18.634	7.422	1.00	0.84	O	
ATOM	1135CB	ASP A	282	-4.846	16.033	8.202	1.00	0.84	C	
ATOM	1136CG	ASP A	282	-4.802	15.329	6.838	1.00	0.84	C	
ATOM	1137OD1	ASP A	282	-3.731	15.360	6.192	1.00	0.84	O	
ATOM	1138OD2	ASP A	282	-5.847	14.743	6.490	1.00	0.84	O	
ATOM	1139N	LEUA	283	-1.781	17.756	7.383	1.00	0.84	N	
ATOM	1140CA	LEUA	283	-1.161	18.848	6.609	1.00	0.84	C	
ATOM	1141C	LEUA	283	-1.860	19.060	5.263	1.00	0.84	C	
ATOM	1142O	LEUA	283	-2.107	18.110	4.522	1.00	0.84	O	
ATOM	1143CB	LEUA	283	0.314	18.519	6.361	1.00	0.84	C	
ATOM	1144CG	LEUA	283	1.093	18.257	7.656	1.00	0.84	C	
ATOM	1145CD1	LEUA	283	2.515	17.811	7.318	1.00	0.84	C	
ATOM	1146CD2	LEUA	283	1.119	19.488	8.566	1.00	0.84	C	
ATOM	1147N	ASN	A	284	-2.186	20.318	5.000	1.00	0.83	N
ATOM	1148CA	ASN	A	284	-2.850	20.710	3.739	1.00	0.83	C
ATOM	1149C	ASN	A	284	-2.517	22.124	3.239	1.00	0.83	C
ATOM	1150O	ASN	A	284	-2.985	22.529	2.175	1.00	0.83	O
ATOM	1151CB	ASN	A	284	-4.369	20.556	3.879	1.00	0.83	C
ATOM	1152CG	ASN	A	284	-4.966	21.457	4.962	1.00	0.83	C
ATOM	1153OD1	ASN	A	284	-4.496	22.524	5.339	1.00	0.83	O

ATOM	1154ND2ASN	A	284	-6.033	20.989	5.535	1.00	0.83	N	
ATOM	1155N	HIS A	285	-1.812	22.896	4.062	1.00	0.82	N	
ATOM	1156CA	HIS A	285	-1.500	24.294	3.741	1.00	0.82	C	
ATOM	1157C	HIS A	285	-0.029	24.583	4.036	1.00	0.82	C	
ATOM	1158O	HIS A	285	0.498	24.185	5.075	1.00	0.82	O	
ATOM	1159CB	HIS A	285	-2.400	25.208	4.577	1.00	0.82	C	
ATOM	1160CG	HIS A	285	-2.402	26.642	4.044	1.00	0.82	C	
ATOM	1161ND1	HIS A	285	-2.327	27.007	2.767	1.00	0.82	N	
ATOM	1162CD2	HIS A	285	-2.523	27.739	4.785	1.00	0.82	C	
ATOM	1163CE1	HIS A	285	-2.411	28.337	2.723	1.00	0.82	C	
ATOM	1164NE2	HIS A	285	-2.526	28.788	3.967	1.00	0.82	N	
ATOM	1165N	ALA	A	286	0.570	25.339	3.133	1.00	0.88	N
ATOM	1166CA	ALA	A	286	1.978	25.739	3.237	1.00	0.88	C
ATOM	1167C	ALA	A	286	2.091	27.245	3.464	1.00	0.88	C
ATOM	1168O	ALA	A	286	1.558	28.051	2.700	1.00	0.88	O
ATOM	1169CB	ALA	A	286	2.631	25.381	1.914	1.00	0.88	C
ATOM	1170N	ILE A	287	2.730	27.575	4.574	1.00	0.80	N	
ATOM	1171CA	ILE A	287	2.940	28.971	5.014	1.00	0.80	C	
ATOM	1172C	ILE A	287	4.404	29.152	5.467	1.00	0.80	C	
ATOM	1173O	ILE A	287	5.225	28.248	5.327	1.00	0.80	O	
ATOM	1174CB	ILE A	287	1.922	29.277	6.127	1.00	0.80	C	
ATOM	1175CG1	ILE A	287	2.062	28.227	7.241	1.00	0.80	C	
ATOM	1176CG2	ILE A	287	0.492	29.330	5.567	1.00	0.80	C	
ATOM	1177CD1	ILE A	287	1.135	28.429	8.431	1.00	0.80	C	
ATOM	1178N	THR	A	288	4.685	30.228	6.192	1.00	0.87	N
ATOM	1179CA	THR	A	288	6.056	30.492	6.696	1.00	0.87	C
ATOM	1180C	THR	A	288	6.122	31.249	8.033	1.00	0.87	C
ATOM	1181O	THR	A	288	5.450	32.265	8.234	1.00	0.87	O
ATOM	1182CB	THR	A	288	6.836	31.309	5.669	1.00	0.87	C
ATOM	1183OG1	THR	A	288	8.184	31.440	6.130	1.00	0.87	O
ATOM	1184CG2	THR	A	288	6.165	32.675	5.468	1.00	0.87	C
ATOM	1185N	ALA	A	289	6.888	30.697	8.955	1.00	0.94	N
ATOM	1186CA	ALA	A	289	7.137	31.366	10.242	1.00	0.94	C
ATOM	1187C	ALA	A	289	8.143	32.496	10.006	1.00	0.94	C
ATOM	1188O	ALA	A	289	9.229	32.276	9.470	1.00	0.94	O
ATOM	1189CB	ALA	A	289	7.682	30.360	11.255	1.00	0.94	C
ATOM	1190N	VALA	290	7.750	33.696	10.401	1.00	0.87	N	
ATOM	1191CA	VALA	290	8.595	34.899	10.224	1.00	0.87	C	
ATOM	1192C	VALA	290	9.020	35.529	11.563	1.00	0.87	C	
ATOM	1193O	VALA	290	9.520	36.654	11.615	1.00	0.87	O	
ATOM	1194CB	VALA	290	7.913	35.934	9.305	1.00	0.87	C	
ATOM	1195CG1	VALA	290	7.661	35.397	7.896	1.00	0.87	C	

ATOM	1196CG2	VALA	290	6.562	36.374	9.840	1.00	0.87	C	
ATOM	1197N	GLYA	291	8.764	34.790	12.647	1.00	0.96	N	
ATOM	1198CA	GLYA	291	9.179	35.213	13.986	1.00	0.96	C	
ATOM	1199C	GLYA	291	8.590	34.335	15.085	1.00	0.96	C	
ATOM	1200O	GLYA	291	7.800	33.424	14.832	1.00	0.96	O	
ATOM	1201	N TYR	A	292	8.962	34.707	16.297	1.00	0.88	N
ATOM	1202	CA TYR	A	292	8.496	34.073	17.539	1.00	0.88	C
ATOM	1203	C TYR	A	292	8.719	35.058	18.691	1.00	0.88	C
ATOM	1204	O TYR	A	292	9.539	35.974	18.590	1.00	0.88	O
ATOM	1205	CB TYR	A	292	9.255	32.762	17.805	1.00	0.88	C
ATOM	1206	CG TYR	A	292	10.735	32.969	18.142	1.00	0.88	C
ATOM	1207	CD1 TYR	A	292	11.107	33.266	19.449	1.00	0.88	C
ATOM	1208	CD2 TYR	A	292	11.707	32.803	17.168	1.00	0.88	C
ATOM	1209	CE1 TYR	A	292	12.446	33.391	19.784	1.00	0.88	C
ATOM	1210	CE2 TYR	A	292	13.049	32.917	17.501	1.00	0.88	C
ATOM	1211	CZ TYR	A	292	13.418	33.211	18.808	1.00	0.88	C
ATOM	1212	OH TYR	A	292	14.731	33.320	19.130	1.00	0.88	O
ATOM	1213	N GLYA	293	8.008	34.786	19.783	1.00	0.89	N	
ATOM	1214	CA GLYA	293	8.151	35.568	21.018	1.00	0.89	C	
ATOM	1215	C GLYA	293	7.217	35.028	22.094	1.00	0.89	C	
ATOM	1216	O GLYA	293	6.751	33.888	22.036	1.00	0.89	O	
ATOM	1217	N THR	A	294	6.969	35.885	23.068	1.00	0.76	N
ATOM	1218	CA THR	A	294	6.100	35.556	24.209	1.00	0.76	C
ATOM	1219	C THR	A	294	5.296	36.811	24.545	1.00	0.76	C
ATOM	1220	O THR	A	294	5.862	37.894	24.688	1.00	0.76	O
ATOM	1221	CB THR	A	294	6.958	35.127	25.409	1.00	0.76	C
ATOM	1222	OG1 THR	A	294	7.796	34.034	25.025	1.00	0.76	O
ATOM	1223	CG2 THR	A	294	6.111	34.698	26.606	1.00	0.76	C
ATOM	1224	N ALA	A	295	3.979	36.648	24.595	1.00	0.72	N
ATOM	1225	CA ALA	A	295	3.080	37.749	24.993	1.00	0.72	C
ATOM	1226	C ALA	A	295	3.432	38.190	26.423	1.00	0.72	C
ATOM	1227	O ALA	A	295	4.012	37.416	27.183	1.00	0.72	O
ATOM	1228	CB ALA	A	295	1.625	37.279	24.914	1.00	0.72	C
ATOM	1229	N ALA	A	296	3.013	39.396	26.798	1.00	0.61	N
ATOM	1230	CA ALA	A	296	3.234	39.917	28.164	1.00	0.61	C
ATOM	1231	C ALA	A	296	2.671	38.973	29.241	1.00	0.61	C
ATOM	1232	O ALA	A	296	3.291	38.757	30.276	1.00	0.61	O
ATOM	1233	CB ALA	A	296	2.584	41.295	28.305	1.00	0.61	C
ATOM	1234	N ASPA	297	1.574	38.300	28.887	1.00	0.57	N	
ATOM	1235	CA ASPA	297	0.938	37.293	29.758	1.00	0.57	C	
ATOM	1236	C ASPA	297	1.661	35.938	29.836	1.00	0.57	C	
ATOM	1237	O ASPA	297	1.202	35.033	30.531	1.00	0.57	O	



ATOM	1238	CB	ASP	A	297	-0.543	37.130	29.400	1.00	0.57	C
ATOM	1239	CG	ASP	A	297	-1.368	38.374	29.759	1.00	0.57	C
ATOM	1240	OD1	ASP	A	297	-0.861	39.233	30.515	1.00	0.57	O
ATOM	1241	OD2	ASP	A	297	-2.492	38.461	29.221	1.00	0.57	O
ATOM	1242	N	GLY	A	298	2.732	35.804	29.047	1.00	0.67	N
ATOM	1243	CA	GLY	A	298	3.596	34.611	29.080	1.00	0.67	C
ATOM	1244	C	GLY	A	298	3.168	33.483	28.130	1.00	0.67	C
ATOM	1245	O	GLY	A	298	3.598	32.345	28.297	1.00	0.67	O
ATOM	1246	N	THR	A	299	2.442	33.832	27.071	1.00	0.73	N
ATOM	1247	CA	THR	A	299	2.039	32.853	26.040	1.00	0.73	C
ATOM	1248	C	THR	A	299	3.053	32.897	24.894	1.00	0.73	C
ATOM	1249	O	THR	A	299	3.149	33.901	24.184	1.00	0.73	O
ATOM	1250	CB	THR	A	299	0.632	33.146	25.491	1.00	0.73	C
ATOM	1251	OG1	THR	A	299	-0.295	33.240	26.576	1.00	0.73	O
ATOM	1252	CG2	THR	A	299	0.167	32.071	24.502	1.00	0.73	C
ATOM	1253	N	ARG	A	300	3.815	31.816	24.775	1.00	0.72	N
ATOM	1254	CA	ARG	A	300	4.763	31.643	23.657	1.00	0.72	C
ATOM	1255	C	ARG	A	300	3.996	31.465	22.342	1.00	0.72	C
ATOM	1256	O	ARG	A	300	2.956	30.806	22.300	1.00	0.72	O
ATOM	1257	CB	ARG	A	300	5.644	30.417	23.888	1.00	0.72	C
ATOM	1258	CG	ARG	A	300	6.523	30.583	25.132	1.00	0.72	C
ATOM	1259	CD	ARG	A	300	7.442	29.384	25.367	1.00	0.72	C
ATOM	1260	NE	ARG	A	300	6.642	28.186	25.640	1.00	0.72	N
ATOM	1261	CZ	ARG	A	300	6.426	27.190	24.785	1.00	0.72	C
ATOM	1262	NH1	ARG	A	300	6.945	27.220	23.557	1.00	0.72	N
ATOM	1263	NH2	ARG	A	300	5.697	26.210	25.197	1.00	0.72	N
ATOM	1264	N	TYR	A	301	4.509	32.090	21.293	1.00	0.84	N
ATOM	1265	CA	TYR	A	301	3.870	32.040	19.965	1.00	0.84	C
ATOM	1266	C	TYR	A	301	4.884	32.029	18.816	1.00	0.84	C
ATOM	1267	O	TYR	A	301	6.037	32.432	18.980	1.00	0.84	O
ATOM	1268	CB	TYR	A	301	2.886	33.210	19.805	1.00	0.84	C
ATOM	1269	CG	TYR	A	301	3.593	34.566	19.812	1.00	0.84	C
ATOM	1270	CD1	TYR	A	301	4.107	35.079	18.628	1.00	0.84	C
ATOM	1271	CD2	TYR	A	301	3.723	35.275	20.997	1.00	0.84	C
ATOM	1272	CE1	TYR	A	301	4.754	36.305	18.626	1.00	0.84	C
ATOM	1273	CE2	TYR	A	301	4.361	36.506	20.998	1.00	0.84	C
ATOM	1274	CZ	TYR	A	301	4.873	37.019	19.811	1.00	0.84	C
ATOM	1275	OH	TYR	A	301	5.484	38.230	19.805	1.00	0.84	O
ATOM	1276	N	TRP	A	302	4.370	31.623	17.665	1.00	0.90	N
ATOM	1277	CA	TRP	A	302	5.044	31.749	16.365	1.00	0.90	C
ATOM	1278	C	TRP	A	302	4.253	32.788	15.572	1.00	0.90	C
ATOM	1279	O	TRP	A	302	3.026	32.869	15.665	1.00	0.90	O

ATOM	1280	CB	TRP	A	302	4.989	30.450	15.557	1.00	0.90	C
ATOM	1281	CG	TRP	A	302	5.585	29.236	16.262	1.00	0.90	C
ATOM	1282	CD1	TRP	A	302	4.922	28.163	16.693	1.00	0.90	C
ATOM	1283	CD2	TRP	A	302	6.935	28.944	16.328	1.00	0.90	C
ATOM	1284	NE1	TRP	A	302	5.793	27.211	17.028	1.00	0.90	N
ATOM	1285	CE2	TRP	A	302	7.029	27.653	16.821	1.00	0.90	C
ATOM	1286	CE3	TRP	A	302	8.074	29.681	16.032	1.00	0.90	C
ATOM	1287	CZ2	TRP	A	302	8.277	27.091	17.046	1.00	0.90	C
ATOM	1288	CZ3	TRP	A	302	9.324	29.113	16.239	1.00	0.90	C
ATOM	1289	CH2	TRP	A	302	9.416	27.823	16.748	1.00	0.90	C
ATOM	1290	N	LEU	A	303	4.984	33.571	14.805	1.00	0.91	N
ATOM	1291	CA	LEU	A	303	4.355	34.560	13.933	1.00	0.91	C
ATOM	1292	C	LEU	A	303	4.455	34.060	12.503	1.00	0.91	C
ATOM	1293	O	LEU	A	303	5.541	33.895	11.950	1.00	0.91	O
ATOM	1294	CB	LEU	A	303	5.102	35.864	14.087	1.00	0.91	C
ATOM	1295	CG	LEU	A	303	4.228	36.994	13.590	1.00	0.91	C
ATOM	1296	CD1	LEU	A	303	4.670	38.132	14.470	1.00	0.91	C
ATOM	1297	CD2	LEU	A	303	4.454	37.353	12.127	1.00	0.91	C
ATOM	1298	N	MET	A	304	3.283	33.811	11.955	1.00	0.87	N
ATOM	1299	CA	MET	A	304	3.177	33.185	10.645	1.00	0.87	C
ATOM	1300	C	MET	A	304	2.593	34.146	9.608	1.00	0.87	C
ATOM	1301	O	MET	A	304	1.529	34.722	9.835	1.00	0.87	O
ATOM	1302	CB	MET	A	304	2.254	32.001	10.873	1.00	0.87	C
ATOM	1303	CG	MET	A	304	2.034	31.290	9.558	1.00	0.87	C
ATOM	1304	SD	MET	A	304	3.556	30.462	9.014	1.00	0.87	S
ATOM	1305	CE	MET	A	304	3.947	29.397	10.367	1.00	0.87	C
ATOM	1306	N	LYS	A	305	3.194	34.094	8.425	1.00	0.84	N
ATOM	1307	CA	LYS	A	305	2.721	34.843	7.250	1.00	0.84	C
ATOM	1308	C	LYS	A	305	1.875	33.916	6.369	1.00	0.84	C
ATOM	1309	O	LYS	A	305	2.363	32.898	5.870	1.00	0.84	O
ATOM	1310	CB	LYS	A	305	3.927	35.372	6.469	1.00	0.84	C
ATOM	1311	CG	LYS	A	305	3.512	36.291	5.318	1.00	0.84	C
ATOM	1312	CD	LYS	A	305	4.737	36.764	4.540	1.00	0.84	C
ATOM	1313	CE	LYS	A	305	4.323	37.722	3.425	1.00	0.84	C
ATOM	1314	NZ	LYS	A	305	5.486	38.185	2.658	1.00	0.84	N
ATOM	1315	N	ASN	A	306	0.591	34.247	6.299	1.00	0.86	N
ATOM	1316	CA	ASN	A	306	-0.354	33.502	5.453	1.00	0.86	C
ATOM	1317	C	ASN	A	306	-0.470	34.195	4.084	1.00	0.86	C
ATOM	1318	O	ASN	A	306	-0.052	35.337	3.899	1.00	0.86	O
ATOM	1319	CB	ASN	A	306	-1.715	33.429	6.152	1.00	0.86	C
ATOM	1320	CG	ASN	A	306	-2.580	32.264	5.655	1.00	0.86	C
ATOM	1321	OD1	ASN	A	306	-2.279	31.540	4.712	1.00	0.86	O

ATOM	1322	ND2ASN	A	306	-3.657	32.017	6.358	1.00	0.86	N
ATOM	1323	N SERA		307	-1.040	33.476	3.127	1.00	0.84	N
ATOM	1324	CA SERA		307	-1.199	33.957	1.740	1.00	0.84	C
ATOM	1325	C SERA		307	-2.675	34.135	1.344	1.00	0.84	C
ATOM	1326	O SERA		307	-3.068	33.932	0.192	1.00	0.84	O
ATOM	1327	CB SERA		307	-0.476	32.995	0.793	1.00	0.84	C
ATOM	1328	OG SERA		307	-0.988	31.678	1.002	1.00	0.84	O
ATOM	1329	N TRPA		308	-3.464	34.621	2.303	1.00	0.75	N
ATOM	1330	CA TRPA		308	-4.904	34.886	2.095	1.00	0.75	C
ATOM	1331	C TRPA		308	-5.253	36.380	2.136	1.00	0.75	C
ATOM	1332	O TRPA		308	-6.400	36.769	2.364	1.00	0.75	O
ATOM	1333	CB TRPA		308	-5.736	34.115	3.131	1.00	0.75	C
ATOM	1334	CG TRPA		308	-5.606	32.593	3.015	1.00	0.75	C
ATOM	1335	CD1 TRPA		308	-5.120	31.901	1.985	1.00	0.75	C
ATOM	1336	CD2 TRPA		308	-5.971	31.681	3.991	1.00	0.75	C
ATOM	1337	NE1 TRPA		308	-5.156	30.601	2.263	1.00	0.75	N
ATOM	1338	CE2 TRPA		308	-5.669	30.429	3.479	1.00	0.75	C
ATOM	1339	CE3 TRPA		308	-6.573	31.810	5.236	1.00	0.75	C
ATOM	1340	CZ2 TRPA		308	-5.971	29.293	4.218	1.00	0.75	C
ATOM	1341	CZ3 TRPA		308	-6.885	30.672	5.972	1.00	0.75	C
ATOM	1342	CH2 TRPA		308	-6.583	29.414	5.461	1.00	0.75	C
ATOM	1343	N GLYA		309	-4.249	37.203	1.802	1.00	0.82	N
ATOM	1344	CA GLYA		309	-4.409	38.666	1.768	1.00	0.82	C
ATOM	1345	C GLYA		309	-4.291	39.274	3.170	1.00	0.82	C
ATOM	1346	O GLYA		309	-4.491	38.617	4.190	1.00	0.82	O
ATOM	1347	N ALA	A	310	-4.018	40.573	3.165	1.00	0.81	N
ATOM	1348	CA ALA	A	310	-3.881	41.377	4.398	1.00	0.81	C
ATOM	1349	C ALA	A	310	-5.175	41.429	5.229	1.00	0.81	C
ATOM	1350	O ALA	A	310	-5.148	41.705	6.424	1.00	0.81	O
ATOM	1351	CB ALA	A	310	-3.441	42.796	4.034	1.00	0.81	C
ATOM	1352	N SERA		311	-6.296	41.174	4.553	1.00	0.78	N
ATOM	1353	CA SERA		311	-7.644	41.168	5.157	1.00	0.78	C
ATOM	1354	C SERA		311	-7.843	40.056	6.204	1.00	0.78	C
ATOM	1355	O SERA		311	-8.707	40.160	7.073	1.00	0.78	O
ATOM	1356	CB SERA		311	-8.701	41.038	4.056	1.00	0.78	C
ATOM	1357	OG SERA		311	-10.006	41.180	4.622	1.00	0.78	O
ATOM	1358	N TRPA		312	-7.043	38.995	6.103	1.00	0.78	N
ATOM	1359	CA TRPA		312	-7.153	37.836	7.006	1.00	0.78	C
ATOM	1360	C TRPA		312	-6.243	37.995	8.231	1.00	0.78	C
ATOM	1361	O TRPA		312	-5.128	38.504	8.135	1.00	0.78	O
ATOM	1362	CB TRPA		312	-6.790	36.568	6.231	1.00	0.78	C
ATOM	1363	CG TRPA		312	-6.940	35.314	7.095	1.00	0.78	C

ATOM	1364	CD1 TRP A	312	-8.057	34.615	7.272	1.00	0.78	C
ATOM	1365	CD2 TRP A	312	-5.947	34.715	7.856	1.00	0.78	C
ATOM	1366	NE1 TRP A	312	-7.817	33.597	8.096	1.00	0.78	N
ATOM	1367	CE2 TRP A	312	-6.540	33.625	8.471	1.00	0.78	C
ATOM	1368	CE3 TRP A	312	-4.599	34.993	8.053	1.00	0.78	C
ATOM	1369	CZ2 TRP A	312	-5.776	32.792	9.277	1.00	0.78	C
ATOM	1370	CZ3 TRP A	312	-3.836	34.155	8.856	1.00	0.78	C
ATOM	1371	CH2 TRP A	312	-4.426	33.052	9.463	1.00	0.78	C
ATOM	1372	N GLYA	313	-6.740	37.508	9.373	1.00	0.86	N
ATOM	1373	CA GLYA	313	-5.982	37.513	10.640	1.00	0.86	C
ATOM	1374	C GLYA	313	-5.512	38.923	11.022	1.00	0.86	C
ATOM	1375	O GLYA	313	-6.155	39.927	10.721	1.00	0.86	O
ATOM	1376	N GLU A	314	-4.322	38.975	11.605	1.00	0.82	N
ATOM	1377	CA GLU A	314	-3.685	40.245	12.002	1.00	0.82	C
ATOM	1378	C GLU A	314	-2.848	40.819	10.851	1.00	0.82	C
ATOM	1379	O GLU A	314	-1.674	40.480	10.678	1.00	0.82	O
ATOM	1380	CB GLU A	314	-2.801	40.033	13.228	1.00	0.82	C
ATOM	1381	CG GLU A	314	-3.592	39.487	14.416	1.00	0.82	C
ATOM	1382	CD GLU A	314	-2.719	39.327	15.661	1.00	0.82	C
ATOM	1383	OE1 GLU A	314	-1.496	39.096	15.524	1.00	0.82	O
ATOM	1384	OE2 GLU A	314	-3.301	39.431	16.762	1.00	0.82	O
ATOM	1385	N GLYA	315	-3.556	41.549	9.980	1.00	0.83	N
ATOM	1386	CA GLYA	315	-2.959	42.165	8.775	1.00	0.83	C
ATOM	1387	C GLYA	315	-2.303	41.150	7.821	1.00	0.83	C
ATOM	1388	O GLYA	315	-1.314	41.464	7.161	1.00	0.83	O
ATOM	1389	N GLYA	316	-2.798	39.908	7.862	1.00	0.86	N
ATOM	1390	CA GLYA	316	-2.307	38.817	6.994	1.00	0.86	C
ATOM	1391	C GLYA	316	-1.555	37.720	7.761	1.00	0.86	C
ATOM	1392	O GLYA	316	-1.289	36.641	7.229	1.00	0.86	O
ATOM	1393	N TYR A	317	-1.204	38.031	9.005	1.00	0.84	N
ATOM	1394	CA TYR A	317	-0.427	37.136	9.875	1.00	0.84	C
ATOM	1395	C TYR A	317	-1.312	36.529	10.965	1.00	0.84	C
ATOM	1396	O TYR A	317	-2.422	36.981	11.243	1.00	0.84	O
ATOM	1397	CB TYR A	317	0.721	37.902	10.541	1.00	0.84	C
ATOM	1398	CG TYR A	317	1.691	38.491	9.518	1.00	0.84	C
ATOM	1399	CD1 TYR A	317	1.442	39.754	8.999	1.00	0.84	C
ATOM	1400	CD2 TYR A	317	2.822	37.788	9.130	1.00	0.84	C
ATOM	1401	CE1 TYR A	317	2.325	40.313	8.089	1.00	0.84	C
ATOM	1402	CE2 TYR A	317	3.709	38.346	8.220	1.00	0.84	C
ATOM	1403	CZ TYR A	317	3.452	39.604	7.693	1.00	0.84	C
ATOM	1404	OH TYR A	317	4.297	40.149	6.785	1.00	0.84	O
ATOM	1405	N VALA	318	-0.804	35.435	11.507	1.00	0.88	N

ATOM	1406	CA	VALA	318	-1.421	34.728	12.638	1.00	0.88	C	
ATOM	1407	C	VALA	318	-0.331	34.386	13.659	1.00	0.88	C	
ATOM	1408	O	VALA	318	0.727	33.862	13.304	1.00	0.88	O	
ATOM	1409	CB	VALA	318	-2.185	33.484	12.132	1.00	0.88	C	
ATOM	1410	CG1	VALA	318	-1.298	32.451	11.426	1.00	0.88	C	
ATOM	1411	CG2	VALA	318	-2.971	32.799	13.252	1.00	0.88	C	
ATOM	1412	N	ARG	A	319	-0.650	34.648	14.915	1.00	0.87	N
ATOM	1413	CA	ARG	A	319	0.220	34.233	16.025	1.00	0.87	C
ATOM	1414	C	ARG	A	319	-0.341	32.944	16.603	1.00	0.87	C
ATOM	1415	O	ARG	A	319	-1.488	32.894	17.040	1.00	0.87	O
ATOM	1416	CB	ARG	A	319	0.294	35.290	17.121	1.00	0.87	C
ATOM	1417	CG	ARG	A	319	1.100	36.501	16.652	1.00	0.87	C
ATOM	1418	CD	ARG	A	319	1.187	37.559	17.750	1.00	0.87	C
ATOM	1419	NE	ARG	A	319	-0.147	38.120	18.031	1.00	0.87	N
ATOM	1420	CZ	ARG	A	319	-0.581	38.567	19.211	1.00	0.87	C
ATOM	1421	NH1	ARG	A	319	0.191	38.537	20.289	1.00	0.87	N
ATOM	1422	NH2	ARG	A	319	-1.798	39.080	19.315	1.00	0.87	N
ATOM	1423	N	ILE	A	320	0.422	31.886	16.425	1.00	0.85	N
ATOM	1424	CA	ILE	A	320	-0.017	30.554	16.864	1.00	0.85	C
ATOM	1425	C	ILE	A	320	0.796	30.159	18.098	1.00	0.85	C
ATOM	1426	O	ILE	A	320	2.007	30.374	18.149	1.00	0.85	O
ATOM	1427	CB	ILE	A	320	0.169	29.552	15.722	1.00	0.85	C
ATOM	1428	CG1	ILE	A	320	1.645	29.479	15.344	1.00	0.85	C
ATOM	1429	CG2	ILE	A	320	-0.708	29.925	14.510	1.00	0.85	C
ATOM	1430	CD1	ILE	A	320	1.858	28.283	14.459	1.00	0.85	C
ATOM	1431	N	ARG	A	321	0.120	29.561	19.064	1.00	0.80	N
ATOM	1432	CA	ARG	A	321	0.785	29.102	20.296	1.00	0.80	C
ATOM	1433	C	ARG	A	321	1.985	28.195	19.975	1.00	0.80	C
ATOM	1434	O	ARG	A	321	1.935	27.323	19.104	1.00	0.80	O
ATOM	1435	CB	ARG	A	321	-0.221	28.391	21.203	1.00	0.80	C
ATOM	1436	CG	ARG	A	321	-0.830	27.151	20.545	1.00	0.80	C
ATOM	1437	CD	ARG	A	321	-1.742	26.456	21.540	1.00	0.80	C
ATOM	1438	NE	ARG	A	321	-2.281	25.214	20.961	1.00	0.80	N
ATOM	1439	CZ	ARG	A	321	-3.164	24.420	21.571	1.00	0.80	C
ATOM	1440	NH1	ARG	A	321	-3.665	24.747	22.760	1.00	0.80	N
ATOM	1441	NH2	ARG	A	321	-3.675	23.371	20.933	1.00	0.80	N
ATOM	1442	N	ARG	A	322	3.076	28.483	20.659	1.00	0.79	N
ATOM	1443	CA	ARG	A	322	4.354	27.782	20.463	1.00	0.79	C
ATOM	1444	C	ARG	A	322	4.661	26.920	21.691	1.00	0.79	C
ATOM	1445	O	ARG	A	322	4.165	27.208	22.776	1.00	0.79	O
ATOM	1446	CB	ARG	A	322	5.426	28.843	20.216	1.00	0.79	C
ATOM	1447	CG	ARG	A	322	6.843	28.279	20.094	1.00	0.79	C

ATOM	1448	CD	ARG	A	322	7.824	29.345	19.608	1.00	0.79	C
ATOM	1449	NE	ARG	A	322	7.917	30.468	20.550	1.00	0.79	N
ATOM	1450	CZ	ARG	A	322	8.621	30.473	21.681	1.00	0.79	C
ATOM	1451	NH1	ARG	A	322	9.315	29.409	22.071	1.00	0.79	N
ATOM	1452	NH2	ARG	A	322	8.677	31.575	22.412	1.00	0.79	N
ATOM	1453	N	GLYA	323	5.360	25.807	21.410	1.00	0.80	N	
ATOM	1454	CA	GLYA	323	5.779	24.774	22.386	1.00	0.80	C	
ATOM	1455	C	GLYA	323	4.604	24.177	23.171	1.00	0.80	C	
ATOM	1456	O	GLYA	323	4.614	23.950	24.372	1.00	0.80	O	
ATOM	1457	N	VALA	324	3.667	23.693	22.393	1.00	0.75	N	
ATOM	1458	CA	VALA	324	2.491	23.038	22.978	1.00	0.75	C	
ATOM	1459	C	VALA	324	2.589	21.514	22.846	1.00	0.75	C	
ATOM	1460	O	VALA	324	2.460	20.770	23.813	1.00	0.75	O	
ATOM	1461	CB	VALA	324	1.202	23.657	22.406	1.00	0.75	C	
ATOM	1462	CG1	VALA	324	1.072	23.545	20.880	1.00	0.75	C	
ATOM	1463	CG2	VALA	324	-0.025	23.090	23.124	1.00	0.75	C	
ATOM	1464	N	ARG	A	325	2.761	21.081	21.607	1.00	0.68	N
ATOM	1465	CA	ARG	A	325	2.767	19.653	21.276	1.00	0.68	C
ATOM	1466	C	ARG	A	325	3.966	19.293	20.403	1.00	0.68	C
ATOM	1467	O	ARG	A	325	4.493	20.134	19.676	1.00	0.68	O
ATOM	1468	CB	ARG	A	325	1.435	19.240	20.637	1.00	0.68	C
ATOM	1469	CG	ARG	A	325	1.124	20.034	19.373	1.00	0.68	C
ATOM	1470	CD	ARG	A	325	-0.138	19.564	18.674	1.00	0.68	C
ATOM	1471	NE	ARG	A	325	-1.281	19.921	19.520	1.00	0.68	N
ATOM	1472	CZ	ARG	A	325	-2.536	19.561	19.284	1.00	0.68	C
ATOM	1473	NH1	ARG	A	325	-2.848	18.830	18.220	1.00	0.68	N
ATOM	1474	NH2	ARG	A	325	-3.489	19.921	20.129	1.00	0.68	N
ATOM	1475	N	GLYA	326	4.289	17.999	20.453	1.00	0.75	N	
ATOM	1476	CA	GLYA	326	5.398	17.406	19.677	1.00	0.75	C	
ATOM	1477	C	GLYA	326	5.276	17.679	18.171	1.00	0.75	C	
ATOM	1478	O	GLYA	326	6.210	18.173	17.553	1.00	0.75	O	
ATOM	1479	N	GLU	A	327	4.070	17.500	17.638	1.00	0.72	N
ATOM	1480	CA	GLU	A	327	3.749	17.854	16.236	1.00	0.72	C
ATOM	1481	C	GLU	A	327	3.628	19.373	16.031	1.00	0.72	C
ATOM	1482	O	GLU	A	327	3.736	19.883	14.916	1.00	0.72	O
ATOM	1483	CB	GLU	A	327	2.461	17.181	15.739	1.00	0.72	C
ATOM	1484	CG	GLU	A	327	2.537	15.648	15.751	1.00	0.72	C
ATOM	1485	CD	GLU	A	327	2.260	14.998	17.113	1.00	0.72	C
ATOM	1486	OE1	GLU	A	327	2.069	15.736	18.112	1.00	0.72	O
ATOM	1487	OE2	GLU	A	327	2.171	13.756	17.124	1.00	0.72	O
ATOM	1488	N	GLYA	328	3.397	20.088	17.136	1.00	0.83	N	
ATOM	1489	CA	GLYA	328	3.170	21.547	17.112	1.00	0.83	C	

ATOM	1490	C	GLYA	328	1.711	21.824	16.730	1.00	0.83	C	
ATOM	1491	O	GLYA	328	1.006	20.961	16.204	1.00	0.83	O	
ATOM	1492	N	VALA	329	1.250	23.018	17.077	1.00	0.86	N	
ATOM	1493	CA	VALA	329	-0.124	23.463	16.762	1.00	0.86	C	
ATOM	1494	C	VALA	329	-0.394	23.348	15.252	1.00	0.86	C	
ATOM	1495	O	VALA	329	0.412	23.789	14.431	1.00	0.86	O	
ATOM	1496	CB	VALA	329	-0.352	24.900	17.265	1.00	0.86	C	
ATOM	1497	CG1	VALA	329	0.586	25.914	16.609	1.00	0.86	C	
ATOM	1498	CG2	VALA	329	-1.813	25.332	17.100	1.00	0.86	C	
ATOM	1499	N	CYSA	330	-1.476	22.650	14.931	1.00	0.91	N	
ATOM	1500	CA	CYSA	330	-1.893	22.395	13.533	1.00	0.91	C	
ATOM	1501	C	CYSA	330	-0.800	21.643	12.747	1.00	0.91	C	
ATOM	1502	O	CYSA	330	-0.760	21.670	11.517	1.00	0.91	O	
ATOM	1503	CB	CYSA	330	-2.267	23.717	12.833	1.00	0.91	C	
ATOM	1504	SG	CYSA	330	-3.323	24.840	13.823	1.00	0.91	S	
ATOM	1505	N	GLYA	331	0.066	20.956	13.508	1.00	0.97	N	
ATOM	1506	CA	GLYA	331	1.201	20.181	12.977	1.00	0.97	C	
ATOM	1507	C	GLYA	331	2.273	21.054	12.313	1.00	0.97	C	
ATOM	1508	O	GLYA	331	3.023	20.568	11.470	1.00	0.97	O	
ATOM	1509	N	LEUA	332	2.455	22.268	12.835	1.00	0.87	N	
ATOM	1510	CA	LEUA	332	3.449	23.212	12.293	1.00	0.87	C	
ATOM	1511	C	LEUA	332	4.897	22.675	12.320	1.00	0.87	C	
ATOM	1512	O	LEUA	332	5.734	23.075	11.510	1.00	0.87	O	
ATOM	1513	CB	LEUA	332	3.313	24.566	13.002	1.00	0.87	C	
ATOM	1514	CG	LEUA	332	4.324	25.545	12.403	1.00	0.87	C	
ATOM	1515	CD1	LEUA	332	3.894	26.968	12.505	1.00	0.87	C	
ATOM	1516	CD2	LEUA	332	5.566	25.599	13.260	1.00	0.87	C	
ATOM	1517	N	ALA	A	333	5.191	21.811	13.286	1.00	0.83	N
ATOM	1518	CA	ALA	A	333	6.548	21.254	13.454	1.00	0.83	C
ATOM	1519	C	ALA	A	333	6.815	19.976	12.637	1.00	0.83	C
ATOM	1520	O	ALA	A	333	7.924	19.443	12.670	1.00	0.83	O
ATOM	1521	CB	ALA	A	333	6.800	21.004	14.942	1.00	0.83	C
ATOM	1522	N	LYS	A	334	5.799	19.497	11.919	1.00	0.76	N
ATOM	1523	CA	LYS	A	334	5.883	18.251	11.135	1.00	0.76	C
ATOM	1524	C	LYS	A	334	6.776	18.346	9.881	1.00	0.76	C
ATOM	1525	O	LYS	A	334	7.732	17.597	9.734	1.00	0.76	O
ATOM	1526	CB	LYS	A	334	4.474	17.804	10.735	1.00	0.76	C
ATOM	1527	CG	LYS	A	334	3.590	17.352	11.902	1.00	0.76	C
ATOM	1528	CD	LYS	A	334	4.062	16.066	12.578	1.00	0.76	C
ATOM	1529	CE	LYS	A	334	4.138	14.789	11.746	1.00	0.76	C
ATOM	1530	NZ	LYS	A	334	4.785	13.688	12.479	1.00	0.76	N
ATOM	1531	N	LEUA	335	6.569	19.384	9.074	1.00	0.82	N	

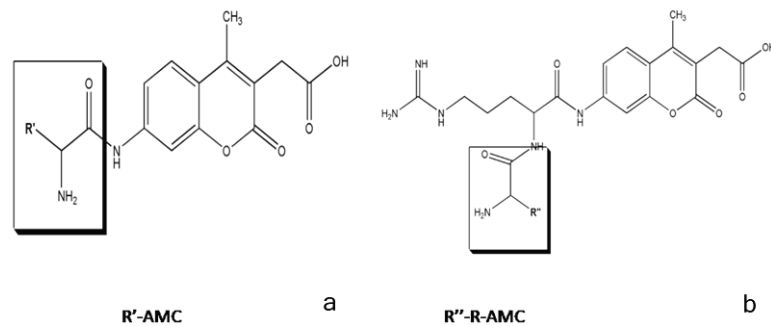
ATOM	1532	CA	LEUA	335	7.336	19.519	7.815	1.00	0.82	C	
ATOM	1533	C	LEUA	335	7.898	20.949	7.632	1.00	0.82	C	
ATOM	1534	O	LEUA	335	7.373	21.744	6.854	1.00	0.82	O	
ATOM	1535	CB	LEUA	335	6.450	19.025	6.660	1.00	0.82	C	
ATOM	1536	CG	LEUA	335	7.154	18.871	5.301	1.00	0.82	C	
ATOM	1537	CD1	LEUA	335	6.379	17.852	4.476	1.00	0.82	C	
ATOM	1538	CD2	LEUA	335	7.153	20.152	4.462	1.00	0.82	C	
ATOM	1539	N	PROA	336	8.846	21.347	8.483	1.00	0.87	N	
ATOM	1540	CA	PROA	336	9.509	22.647	8.320	1.00	0.87	C	
ATOM	1541	C	PROA	336	10.826	22.475	7.561	1.00	0.87	C	
ATOM	1542	O	PROA	336	11.562	21.513	7.754	1.00	0.87	O	
ATOM	1543	CB	PROA	336	9.718	23.122	9.753	1.00	0.87	C	
ATOM	1544	CG	PROA	336	9.955	21.835	10.541	1.00	0.87	C	
ATOM	1545	CD	PROA	336	9.084	20.807	9.838	1.00	0.87	C	
ATOM	1546	N	SERA	337	11.156	23.463	6.750	1.00	0.85	N	
ATOM	1547	CA	SERA	337	12.389	23.458	5.940	1.00	0.85	C	
ATOM	1548	C	SERA	337	12.735	24.881	5.512	1.00	0.85	C	
ATOM	1549	O	SERA	337	11.893	25.780	5.532	1.00	0.85	O	
ATOM	1550	CB	SERA	337	12.235	22.576	4.697	1.00	0.85	C	
ATOM	1551	OG	SERA	337	11.191	23.067	3.851	1.00	0.85	O	
ATOM	1552	N	TYR	A	338	14.011	25.067	5.213	1.00	0.79	N
ATOM	1553	CA	TYR	A	338	14.555	26.392	4.884	1.00	0.79	C
ATOM	1554	C	TYR	A	338	15.670	26.315	3.827	1.00	0.79	C
ATOM	1555	O	TYR	A	338	16.324	25.271	3.707	1.00	0.79	O
ATOM	1556	CB	TYR	A	338	15.057	27.074	6.167	1.00	0.79	C
ATOM	1557	CG	TYR	A	338	16.081	26.205	6.891	1.00	0.79	C
ATOM	1558	CD1	TYR	A	338	17.420	26.255	6.528	1.00	0.79	C
ATOM	1559	CD2	TYR	A	338	15.638	25.299	7.842	1.00	0.79	C
ATOM	1560	CE1	TYR	A	338	18.325	25.392	7.126	1.00	0.79	C
ATOM	1561	CE2	TYR	A	338	16.541	24.437	8.443	1.00	0.79	C
ATOM	1562	CZ	TYR	A	338	17.882	24.485	8.080	1.00	0.79	C
ATOM	1563	OH	TYR	A	338	18.763	23.620	8.642	1.00	0.79	O
ATOM	1564	N	PROA	339	15.823	27.397	3.050	1.00	0.78	N	
ATOM	1565	CA	PROA	339	16.882	27.532	2.041	1.00	0.78	C	
ATOM	1566	C	PROA	339	18.226	27.809	2.713	1.00	0.78	C	
ATOM	1567	O	PROA	339	18.318	28.268	3.848	1.00	0.78	O	
ATOM	1568	CB	PROA	339	16.439	28.722	1.187	1.00	0.78	C	
ATOM	1569	CG	PROA	339	15.733	29.627	2.194	1.00	0.78	C	
ATOM	1570	CD	PROA	339	14.999	28.625	3.081	1.00	0.78	C	
ATOM	1571	N	VALA	340	19.263	27.458	1.981	1.00	0.66	N	
ATOM	1572	CA	VALA	340	20.643	27.704	2.418	1.00	0.66	C	
ATOM	1573	C	VALA	340	21.285	28.738	1.460	1.00	0.66	C	



ATOM	1574	O	VALA	340	21.072	28.541	0.232	1.00	0.66	O
ATOM	1575	CB	VALA	340	21.394	26.361	2.579	1.00	0.66	C
ATOM	1576	CG1	VALA	340	20.800	25.435	3.638	1.00	0.66	C
ATOM	1577	CG2	VALA	340	21.404	25.497	1.341	1.00	0.66	C
ATOM	1578	OXT	VALA	340	21.586	29.837	1.931	1.00	0.66	O
TER	1579		VALA	340						
END										

## 2. The Structure of R'-7-Amido-4-methylcoumarin (R'-AMC) and R''-R-AMC

**Figure S1.** (a) the structure of R'-7-Amido-4-methylcoumarin (R'-AMC); (b) the structure of R''-R-AMC. (R', R'' refers to G, A, V, L, I, F, W, M, Y, S, T, N, Q, D, E, K, R, and H residues).



© 2014 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).